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Supplemental Material

Supplemental Material A. Referenced Ages and Sample Locations; (A.1) Compilation of rhyolite ages from this study and previous studies and additional age probability histograms (A.2) Compilation of basalt ages from previous studies (A.3) Compilation map from this study with all ages and sample locations (A.4) Coordinates for samples collected in this study.

Supplemental Material B. Sources of Pre-existing Geochemical Data; Data referenced in this study, shown in Figure 2.

Supplemental Material C. $^{40}Ar/^{39}Ar$ Ideograms and Plateaus; All primary age plots for samples dated in this study.

Supplemental Material D. Detailed $^{40}Ar/^{39}Ar$ Analysis Sample Preparation Procedures and Analytical Methods; Detailed sample preparation and analytical methods for all samples analyzed at Oregon State University and the New Mexico Institute of Technology.

Supplemental Material E. Full argon data files for $^{40}Ar/^{39}Ar$ of feldspar and groundmass conducted at Oregon State University.

Supplemental Material F. Full argon data files for $^{40}Ar/^{39}Ar$ of biotite conducted at Oregon State University.

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Appendix D. Detailed $^{40}Ar/^{39}Ar$ Sample Preparation Procedures and Analytical Methods

Preparation began by crushing rock samples into sand and gravel using PSU's Braun Chipmunk jaw crusher. Some samples were run through the crusher a second or third time to generate more sediment. See Table D.1 for information regarding the institute in which the age was determined and the year that it was analyzed.

TABLE D.1. SUMMARY OF WHEN AND WHERE $^{40}Ar/^{39}Ar$ AGES FROM THIS STUDY WERE DETERMINED

Sample ID	Unit	Age type*	Institute	Year analyzed
EJ-12-19	South of Drewsey	SCTF	OSU	2020
EJ-12-21B	Griffin Creek	SCTF	OSU	2020
MS-13-09	McEwen Butte	SCTF	NMT	2018
MS-13-10	Visher Creek	SCTF	OSU	2020
MS-17-DAM	Dam Rhyolite	SCTF	OSU	2020
VS17-001	Stockade Mountain	SCTF	NMT	2018
VS17-003	Star Mountain	SCTF	NMT	2018
VS17-020	Star Mountain	SCTF	OSU	2020
VS17-034	Stockade Mountain, south	SCTF	OSU	2018
VS17-035	Mustang Butte	IH	OSU	2020
VS17-043	Saddle Butte	SCTF	OSU	2018
VS17-045	Iron Point	SCTF	OSU	2018
VS17-046B	Dome N of Iron Point	SCTF	OSU	2018
VS17-054	Unidentified Flow #1	SCTF	OSU	2018
VS17-056	South Fork	SCTF	OSU	2018
VS17-065	Sacramento Butte	SCTF	OSU	2018
VS19-068	Birch Creek	SCTF	OSU	2020
VS19-079	Birch Creek	SCTF	OSU	2020
VS19-080	Dome E of South Fork	IH	OSU	2020
VS19-085	Circle Bar	SCTF	OSU	2020
VS19-089	Circle Bar	SCTF	OSU	2020
VS19-093	Unidentified Flow #2	SCTF	OSU	2020
VS19-098	Stockade Mountain, proper	SCTF	OSU	2020
VS19-101	Trd N of Stockade Mountain	SCTF	OSU	2020
VS19-104	Trd N of Stockade Mountain	SCTF	OSU	2020
VS19-106	Black Butte	SCTF	OSU	2020
VS19-109	North of Drewsey	SCTF	OSU	2020
VS19-116	Dry Creek	SCTF	OSU	2020
VS20-125A	Wagontire Mountain	SCTF	OSU	2020

*IH = Incremental heating; SCTF = Single crystal total fusion.

Sample preparation for those dated at New Mexico Bureau of Geology and Mineral Resources, Socorro, NM

At PSU, rock samples were sieved, and the largest sieve-fraction containing whole sanidine crystals was chosen to pick sanidine crystals from by hand. Commonly, this sieve-

fraction was bracketed by the 0.420 mm (#40) and 0.250 mm (#60) sieve sizes. Sanidine crystals with little to no attached matrix material or inclusions were chosen when hand-picking.

Samples were irradiated in a nuclear reactor with sanidine standards from Kuiper et al. (2008) Fish Canyon Tuff (28.201 ± 0.023 Ma, 1σ) flux monitor in order to make J-factor corrections. Single sanidine crystals were analyzed by laser step-heating at NM Tech using techniques described in McIntosh et al. (1990). Individual crystals from each sample were subject to at least two heating steps, A and B, and the B steps were used to determine the mean age in a relative probability plot. In rare cases two-three additional steps were conducted on individual crystals. Atmospheric argon (^{40}Ar and ^{36}Ar) inheritance was taken into account and excluded (McIntosh et al., 1990). Individual crystals are bombarded with multiple laser shots and the cumulative %^{39}Ar released is measured. When plotted as an ideogram, laser shots that continuously release the same %^{39}Ar will be considered when determining the ages. See The New Mexico Geochronology Research Lab webpage for details on the Argon method and the software used.

Sample preparation for those dated at Oregon State University, Corvallis, OR

Crushed rock samples were prepared further at OSU. Crushed material was sieved further to various fractions between 840–125 nm, targeting the fraction with the largest and cleanest sanidine crystals, avoiding altered feldspar crystals or crystals with melt inclusions. Sieved and washed fractions were run through a Frantz Isodynamic Magnetic Separator to concentrate the sanidine in the nonmagnetic fraction (2.0Å nonmagnetic). The nonmagnetic fraction was leached in mild (15%) hydrofluoric acid (HF) for up to 6 minutes to remove any adhering glass or groundmass. A few crystals from each separate were submerged in wintergreen oil (Methyl Salicilate) determined the presence and estimated abundance of plagioclase feldspar, potassium feldspar, and quartz, glass, and other crystals. If plagioclase and quartz needed to be removed from an individual HF treated separate, the material was then put through a heavy liquid separation using Lithium Heteropolytungstate (LST) using a density of 2.582 to float the K-feldspars and sink the plagioclase and quartz crystals . The sink and float separates were subsequently rinsed in cold water 10 to 15 times and then 3 times with Milli-Q (triple distilled) water to ensure all LST was removed from each fraction and then were dried overnight. The largest, least altered feldspar grains were then hand-picked for analysis to a purity of >99.9%.

Groundmass fractions were leached in five separate acid and water solutions in an ultrasonic bath, each for approximately one hour. Solutions, in order, included 1M hydrochloric acid, 6M hydrochloric acid, 1M nitric acid, 3M nitric acid, and milli-Q water (as described by Koppers et al. 2000). Samples were then rinsed three times with milli-Q water and dried overnight at 55°C.

OSU Argon Geochronology Laboratory $^{40}Ar/^{39}Ar$ Methods:

$^{40}Ar/^{39}Ar$ ages (Table 1) were obtained using incremental heating methods and analysed using a ThermoFisher Scientific ARGUS-VI mass spectrometer. Data collection was obtained using internal lab software ArArExperiments version 4.6.0.7. Compiled data were reduced using internal lab software ArArCalc software (v. 2.7.0). The samples were irradiated for 6 hours (Irradiations 21-OSU-05 in the CLICIT position in the Oregon State University's TRIGA nuclear reactor. Sample were irradiated with neutron flux monitor Fish Canyon Tuff sanidine (FCT-2-NM sanidine) with an age of 28.201 ± 0.023 Ma, 1σ flux monitor (Kuiper et al. 2008). Individual J-values for all samples were calculated by polynomial extrapolation of the measured flux gradient against irradiation height and typically give 0.06-0.12% uncertainties (1σ). $^{40}Ar/^{39}Ar$ incremental heating age determinations were performed on a multi-collector ARGUS-VI mass spectrometer at Oregon State University that currently contains 5 Faraday collectors fitted with two 10^{12} Ohm resistors: for masses ^{41}Ar and ^{40}Ar and three 10^{13} Ohm resistors: for argon masses ^{39}Ar, ^{38}Ar, and ^{37}Ar and 1 ion-counting CuBe electron multiplier (located in a position next to the lowest mass Faraday collector). This allows us to measure simultaneously all argon isotopes, with mass 36 on the multiplier and masses 37 through 40 on the four adjacent Faradays. This configuration provides the advantages of running in a full multi-collector mode while measuring the lowest peak (on mass 36) on the highly sensitive electron multiplier (which has an extremely low dark-noise and a very high peak/noise ratio). Irradiated samples were loaded into Cu or stainless steel-planchettes in an ultra-high vacuum sample chamber and incrementally heated using a scanning Synrad Firestar 20Watt defocused 30 W CO_2 laser beam in pre-set patterns across the sample, in order to release the argon evenly. Each heating step is 50 seconds. After heating, reactive gases were cleaned up using four SAES Zr-Al AP10 getters between 3 and 6 minutes; two operated at 450°C and two operated at room temperature (21°C). All ages were calculated using the corrected Steiger and Jäger (1977) decay constant of 5.530 ± 0.097 x 10^{-10} 1/yr (2σ) as reported by Min et al. (2000). For all other constants used in the age calculations we

refer to Table 2 in Koppers et al. (2003). Ideogram ages were calculated using ArArCalc software and are weighted mean ages with uncertainties at the 2-sigma level. Incremental heating plateau ages and isochron ages were calculated as weighted means with $1/\sigma^2$ as weighting factor (Taylor 1997) and as YORK2 least-square fits with correlated errors (York 1969) using the ArArCALC v2.6.2 software from Koppers (2002) available from the http://earthref.org/ArArCALC/ website.

Argon isotopic results were corrected for system blanks, radioactive decay, mass discrimination, reactor-induced interference reactions and atmospheric argon contamination. Decay constants reported by Min et al. (2000) are utilized for age calculation. Isotope interference corrections as determined using the ARGUS VI are: $(^{36}Ar/^{37}Ar)_{Ca} = 0.0002703 \pm 0.0000005$; $(^{39}Ar/^{37}Ar)_{Ca} = 0.0006425 \pm 0.0000059$; $(^{40}Ar/^{39}Ar)_{K} = 0.000607 \pm 0.000059$; $(^{38}Ar/^{39}Ar)_{K} = 0.012077 \pm 0.000011$. Ages for each sample were calculated assuming an atmospheric $^{40}Ar/^{36}Ar$ ratio of 298.56 ± 0.113 (Lee et al. 2006). Data reduction and age calculations were processed using Ar-ArCalc 2.7.0 (modified from Koppers, 2002). Plateau ages are defined as including >50% of the total ^{39}Ar released with at least three consecutive steps; mini-plateau ages are defined by < 50% of the total ^{39}Ar released and for a few samples (Schaen et al. 2020), the inverse isochron age was the best estimate of the age of the sample and the $^{40}Ar/^{39}Ar$ ratio for each step is in agreement with the mean at the 95% confidence level.

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Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F24130	17.0 %	✓	0.4611932	0.273	1.2689543	11.313	3.2593437	0.314	262.43720	0.043	818.4563	0.006	2.59379	±0.00382	7.54	±0.01	83.17	56.65	89	±20
20F24132	17.0 %		0.0134721	2.663	1.5969984	7.963	1.8087743	0.493	149.31668	0.044	596.8303	0.006	3.97042	±0.00379	11.53	±0.01	99.33	32.23	40	±6
20F24459	17.0 %	✓	0.0328186	1.137	0.0021988	6803.480	0.3036960	2.829	24.87826	0.060	74.2711	0.035	2.59092	±0.00979	7.53	±0.03	86.79	5.37	4865	±662010
20F24461	17.0 %		0.0066178	3.935	0.0608345	218.158	0.1588733	5.852	13.95966	0.079	57.2829	0.049	3.96167	±0.01350	11.51	±0.04	96.54	3.01	99	±431
20F24463	17.0 %	✓	0.0034404	7.738	0.0861276	165.152	0.1510478	6.019	12.65949	0.089	33.9664	0.066	2.60077	±0.01397	7.56	±0.04	96.93	2.73	63	±209
		Σ	0.5175421	0.273	2.8384607	10.973	5.6817351	0.364	463.25128	0.029	1580.8070	0.005								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Stack = **EJ-12-19 (N=2)**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C44-20)**
Position = **X: 0 | Y: 0 | Z/H: 53.43119 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.75262 ± 0.01482**
FCT-NM J-value = **0.00159193 ± 0.00000242**
Air Shot 40Ar/36Ar = **299.0300 ± 0.4007**
Air Shot MDF = **0.99960655 ± 0.00042394 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **40Ar 39Ar 38Ar 37Ar 36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			2.59386	±0.00345	**7.54**	**±0.02**	0.67	64.75	88	±21
				±0.13%		**±0.33%**	51%	3		
				Full External Error		±0.39	3.00	2σ Confidence Limit		
				Analytical Error		±0.01	1.0000	Error Magnification		
Total Fusion Age			3.07877	±0.00263	**8.95**	**±0.03**		5	70	±15
				±0.09%		**±0.32%**				
				Full External Error		±0.47				
				Analytical Error		±0.01				
Normal Isochron	**293.24**	**±9.35**	2.60262	±0.01550	**7.57**	**±0.05**	1.05	64.75		
		±3.19%		±0.60%		**±0.67%**	30%	3		
				Full External Error		±0.40	3.83	2σ Confidence Limit		
				Analytical Error		±0.04	1.0267	Error Magnification		
							1	Number of Iterations		
							0.0000044872	Convergence		
Inverse Isochron	**295.24**	**±9.19**	2.59923	±0.01525	**7.56**	**±0.05**	0.83	64.75		
		±3.11%		±0.59%		**±0.66%**	36%	3		
				Full External Error		±0.40	3.83	2σ Confidence Limit		
				Analytical Error		±0.04	1.0000	Error Magnification		
							3	Number of Iterations		
							0.0000034435	Convergence		
							14%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F24130	17.0 %	✓	0.4608495	1.2689543	0.0028009	262.43638	680.7058	7.54 ±0.01	83.17	56.65	89 ±20
20F24132	17.0 %		0.0130398	1.5969984	0.0027437	149.31565	592.8465	11.53 ±0.01	99.33	32.23	40 ±6
20F24459	17.0 %	✓	0.0328192	0.0021988	0.0000000	24.87826	64.4575	7.53 ±0.03	86.79	5.37	4865 ±662010
20F24461	17.0 %		0.0066014	0.0608345	0.0000000	13.95962	55.3035	11.51 ±0.04	96.54	3.01	99 ±431
20F24463	17.0 %	✓	0.0034637	0.0861276	0.0000000	12.65955	32.9246	7.56 ±0.04	96.93	2.73	63 ±209
		Σ	0.5167736	2.8384607	0.0055446	463.24945	1426.2379				

Information on Analysis

Project = **SWENTON (20-01)**
Stack = **EJ-12-19 (N=2)**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C44-20)**
J = **0.00159193 ±0.00000242**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	2.59386	±0.00345	**7.54**	**±0.02**	0.67	64.75	88 ±21
		±0.13%		**±0.33%**	51%	3	
			Full External Error	±0.39	3.00	2σ Confidence Limit	
			Analytical Error	±0.01	1.0000	Error Magnification	
Total Fusion Age	3.07877	±0.00263	**8.95**	**±0.03**		5	70 ±15
		±0.09%		**±0.32%**			
			Full External Error	±0.47			
			Analytical Error	±0.01			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F24130	17.0 %	✓	569.46	±3.15	1775.63	±9.71	0.9875
20F24132	17.0 %		11450.80	±633.16	45763.11	±2530.13	0.9999
20F24459	17.0 %	✓	758.04	±17.36	2262.58	±51.77	0.9982
20F24461	17.0 %		2114.65	±168.45	8676.11	±691.03	0.9997
20F24463	17.0 %	✓	3654.91	±567.71	9804.16	±1522.82	0.9999

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**293.24**	**±9.35**	2.60262	±0.01550	**7.57**	**±0.05**	1.05
		±3.19%		±0.60%		**±0.67%**	30%
					Full External Error	±0.40	
					Analytical Error	±0.04	

Statistics				
	2σ Confidence Limit	3.83	Convergence	0.000004487203
	Error Magnification	1.0267	Number of Iterations	1
	Number of Data Points	3	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F24130	17.0 %	✓	0.3207104	±0.0002796	0.00056318	±0.00000308	0.0030
20F24132	17.0 %		0.2502191	±0.0002209	0.00002185	±0.00000121	0.0003
20F24459	17.0 %	✓	0.3350335	±0.0004657	0.00044197	±0.00001011	0.0156
20F24461	17.0 %		0.2437323	±0.0004548	0.00011526	±0.00000918	0.0065
20F24463	17.0 %	✓	0.3727921	±0.0008272	0.00010200	±0.00001584	0.0051

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**295.24**	**±9.19**	2.59923	±0.01525	**7.56**	**±0.05**	0.83
		±3.11%		±0.59%		**±0.66%**	36%
					Full External Error	±0.40	
					Analytical Error	±0.04	

Statistics				
	2σ Confidence Limit	3.83	Convergence	0.0000034435
	Error Magnification	1.0000	Number of Iterations	3
	Number of Data Points	3	Calculated Line	Weighted York-2
	Spreading Factor	13.5%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F24130	17.0 %	✓	0.4608495	0.27	0.0000000	0.00	0.0003430	11.31	0.0000006	461.20	1.2689543	11.31	0.0868701	0.32	0.0000000	0.00	3.1694442	0.10	0.0002284	14.86	0.0028009	461.20	262.43638	0.04	0.0008153	11.35	680.7058	0.06	137.59124	0.29	0.0000000	0.00	0.1592989	9.65
20F24132	17.0 %		0.0130398	2.76	0.0000000	0.00	0.0004317	7.96	0.0000006	363.31	1.5969984	7.96	0.0024580	2.77	0.0000000	0.00	1.8032851	0.10	0.0002875	12.50	0.0027437	363.31	149.31565	0.04	0.0010261	8.02	592.8465	0.02	3.89315	2.77	0.0000000	0.00	0.0906346	9.65
20F24459	17.0 %	✓	0.0328192	1.14	0.0000000	0.00	0.0000006	#######	0.0000000	0.00	0.0021988	#######	0.0061864	1.15	0.0000000	0.00	0.3004547	0.11	0.0000004	#######	0.0000000	0.00	24.87826	0.06	0.0000014	#######	64.4575	0.18	9.79850	1.15	0.0000000	0.00	0.0151011	9.65
20F24461	17.0 %		0.0066014	3.98	0.0000000	0.00	0.0000164	218.16	0.0000000	0.00	0.0608345	218.16	0.0012444	3.99	0.0000000	0.00	0.1685903	0.12	0.0000110	218.37	0.0000000	0.00	13.95962	0.08	0.0000391	218.16	55.3035	0.15	1.97091	3.98	0.0000000	0.00	0.0084735	9.65
20F24463	17.0 %	✓	0.0034637	7.77	0.0000000	0.00	0.0000233	165.15	0.0000000	0.00	0.0861276	165.15	0.0006529	7.77	0.0000000	0.00	0.1528893	0.13	0.0000155	165.43	0.0000000	0.00	12.65955	0.09	0.0000553	165.15	32.9246	0.25	1.03412	7.77	0.0000000	0.00	0.0076843	9.65
		Σ	0.5167736	0.27	0.0000000	0.00	0.0007672	10.97	0.0000013	294.28	2.8384607	10.97	0.0974118	0.31	0.0000000	0.00	5.5946636	0.07	0.0005109	12.98	0.0055446	294.28	463.24945	0.03	0.0018237	10.99	1426.2379	0.03	154.28793	0.29	0.0000000	0.00	0.2811924	6.32
		Σ							0.5175421	0.27	2.8384607	10.97									5.6981310	0.29			463.25128	0.03							1580.8070	0.04

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F24130	17.0 %	✓	3.118675	0.001358	0.004835	0.000547	0.001757	0.000005	141.697	16.465344	1.00100119	2.897E-11
20F24132	17.0 %		3.997077	0.001763	0.010695	0.000852	0.000090	0.000002	141.708	16.469184	1.00100128	2.113E-11
20F24459	17.0 %	✓	2.985384	0.002074	0.000088	0.006013	0.001319	0.000015	144.182	17.293829	1.00101875	2.629E-12
20F24461	17.0 %		4.103457	0.003828	0.004358	0.009507	0.000474	0.000019	144.194	17.297862	1.00101883	2.028E-12
20F24463	17.0 %	✓	2.683079	0.002976	0.006803	0.011236	0.000272	0.000021	144.206	17.302134	1.00101892	1.202E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F24130	17.0 %	0.0058584 ±0.0001782	0.0131664 ±0.0064060	0.0083431 ±0.0069634	0.0062389 ±0.0068578	1.4278047 ±0.0157206
20F24132	17.0 %	0.0059666 ±0.0001760	0.0164692 ±0.0053243	0.0055182 ±0.0064858	0.0355104 ±0.0069041	1.4542840 ±0.0152029
20F24459	17.0 %	0.0045104 ±0.0001637	0.0092250 ±0.0063122	0.0016605 ±0.0057501	0.0093829 ±0.0056572	0.9709869 ±0.0161321
20F24461	17.0 %	0.0046140 ±0.0001708	0.0096651 ±0.0052944	0.0037516 ±0.0064257	0.0276413 ±0.0060133	1.0930571 ±0.0195060
20F24463	17.0 %	0.0043419 ±0.0001600	0.0147875 ±0.0059421	0.0049512 ±0.0067922	0.0040107 ±0.0059809	1.0273381 ±0.0141216

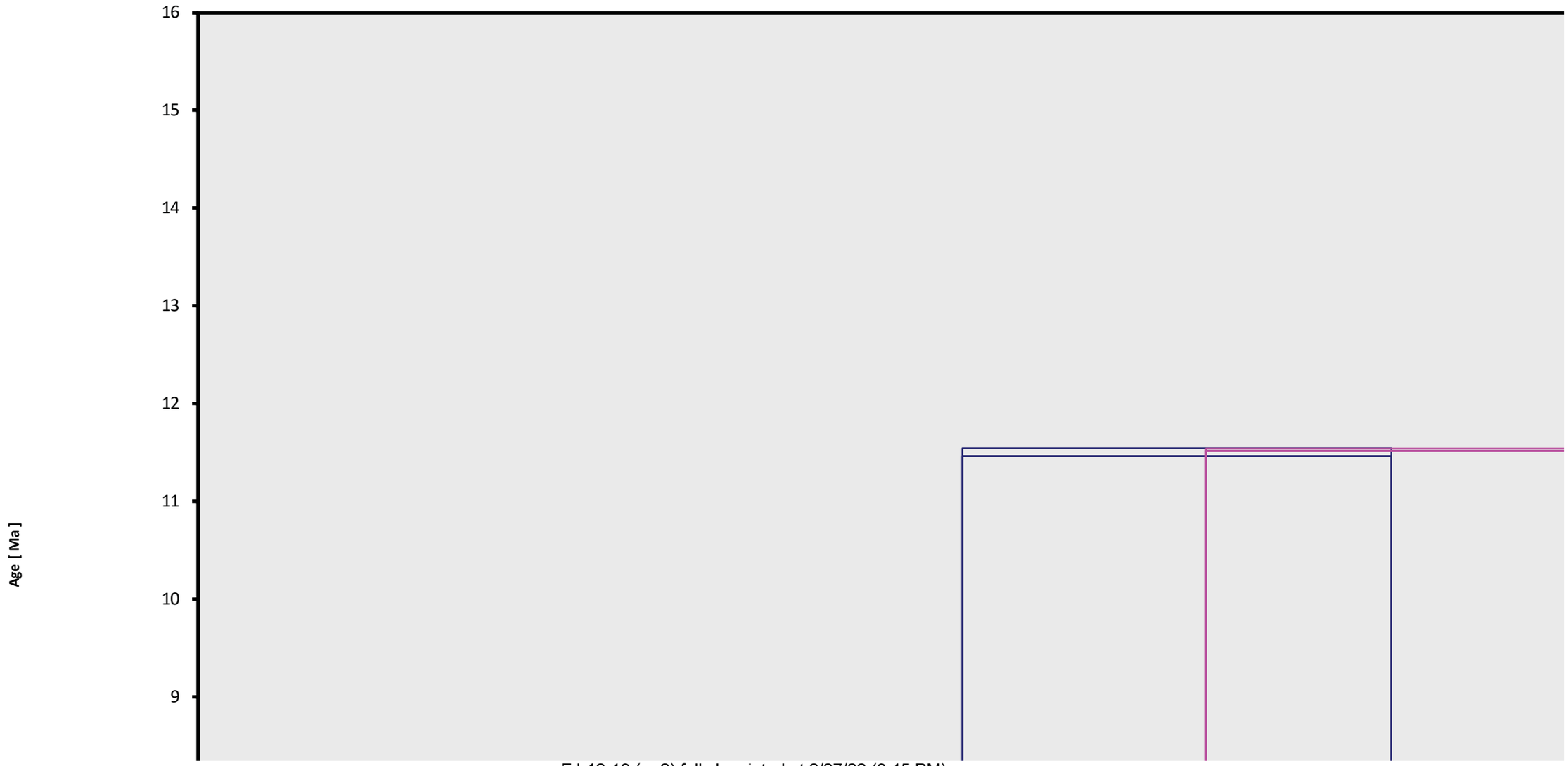
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F24130	17.0 %	0.4572808 ±0.0009495	0.9224	EXP 150 of 150	0.0638109 ±0.0058902	0.0118	EXP 148 of 150	3.2484363 ±0.0069457	0.9576	EXP 150 of 150	262.077997 ±0.021024	0.9999	EXP 150 of 150	819.884114 ±0.044124	1.0000	EXP 150 of 150
20F24132	17.0 %	0.0191532 ±0.0003031	0.9534	EXP 148 of 150	0.0803854 ±0.0055647	0.0028	EXP 150 of 150	1.8018330 ±0.0059212	0.9032	EXP 150 of 150	149.144252 ±0.014515	0.9999	EXP 148 of 150	598.284592 ±0.033488	1.0000	EXP 148 of 150
20F24459	17.0 %	0.0366519 ±0.0003221	0.5286	EXP 150 of 150	0.0093521 ±0.0059149	0.0001	EXP 150 of 150	0.3020426 ±0.0063776	0.2074	EXP 150 of 150	24.862611 ±0.008885	0.9987	EXP 150 of 150	75.242126 ±0.020509	0.9962	EXP 150 of 150
20F24461	17.0 %	0.0110953 ±0.0001891	0.9065	EXP 150 of 150	0.0061481 ±0.0055532	0.0035	EXP 150 of 150	0.1551255 ±0.0067182	0.0131	EXP 150 of 150	13.973253 ±0.007181	0.9972	EXP 150 of 150	58.375909 ±0.020134	0.9882	EXP 150 of 150
20F24463	17.0 %	0.0077113 ±0.0002058	0.9013	EXP 150 of 150	0.0197655 ±0.0056816	0.0008	EXP 149 of 150	0.1461002 ±0.0060414	0.0491	EXP 149 of 150	12.642742 ±0.007898	0.9958	EXP 149 of 150	34.993754 ±0.017449	0.7766	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F24130	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	53.43	Oregon\Swenton (20-01)	20F24126	01
20F24132	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	53.43	Oregon\Swenton (20-01)	20F24126	01
20F24459	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	53.43	Oregon\Swenton (20-01)	20F24459	02
20F24461	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	53.43	Oregon\Swenton (20-01)	20F24459	02
20F24463	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	53.43	Oregon\Swenton (20-01)	20F24459	02

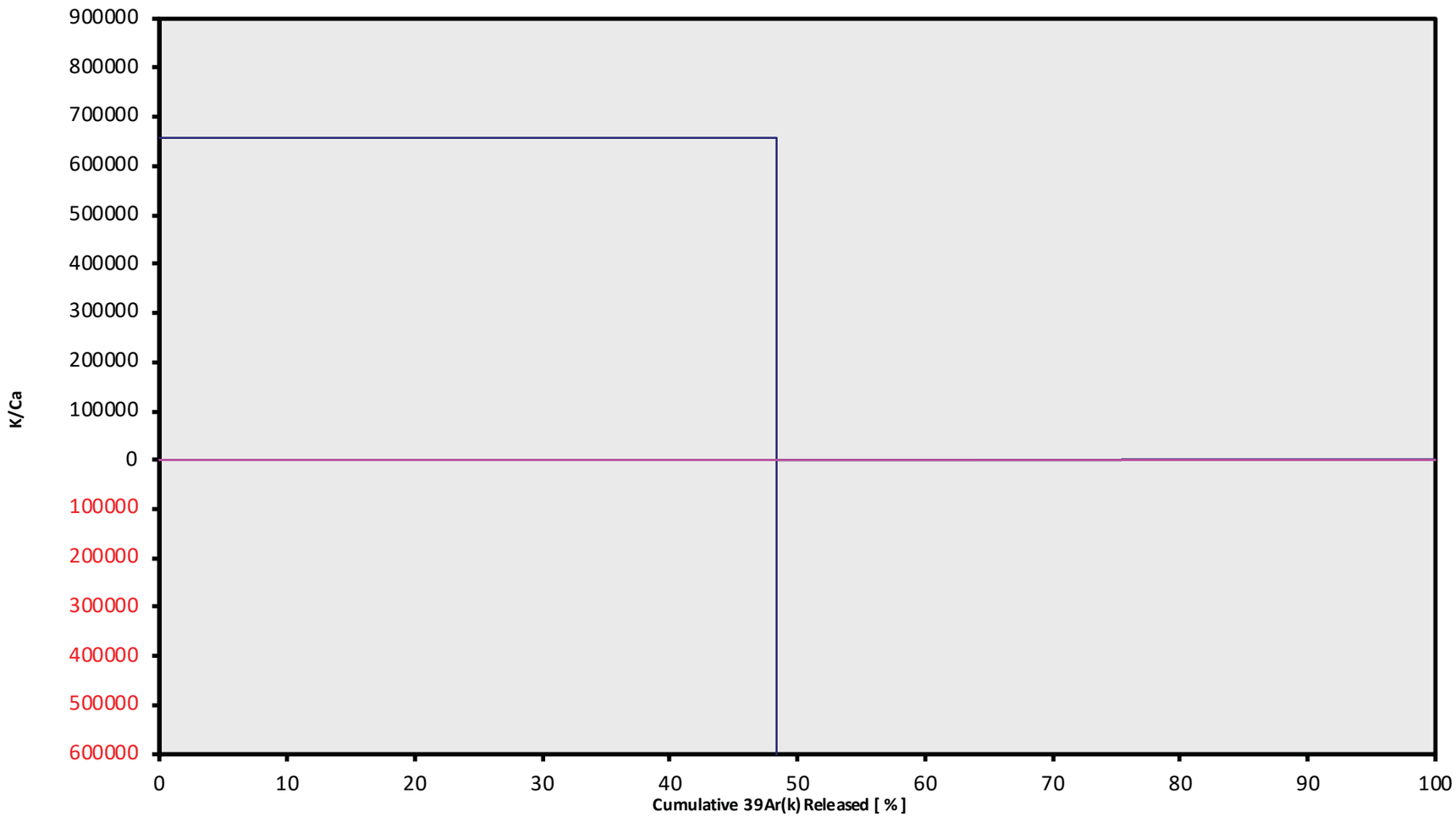
Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F24130	17.0 %	EJ-12-19	Sanidine	Rhyolite Dome	FCT-NM (1C44-20)	28.201	0.082	Kuiper et al (2008)	9.75262	0.152	0.00159193	0.152	299.03	0.134	0.9996066	0.042	1	3.54E-14	5	SEP	2020	7	14	1
20F24132	17.0 %	EJ-12-19	Sanidine	Rhyolite Dome	FCT-NM (1C44-20)	28.201	0.082	Kuiper et al (2008)	9.75262	0.152	0.00159193	0.152	299.03	0.134	0.9996066	0.042	1	3.54E-14	5	SEP	2020	7	31	1
20F24459	17.0 %	EJ-12-19	Sanidine	Rhyolite Dome	FCT-NM (1C44-20)	28.201	0.082	Kuiper et al (2008)	9.75262	0.152	0.00159193	0.152	298.546	0.134	1.0000117	0.042	1	3.54E-14	7	SEP	2020	18	53	1
20F24461	17.0 %	EJ-12-19	Sanidine	Rhyolite Dome	FCT-NM (1C44-20)	28.201	0.082	Kuiper et al (2008)	9.75262	0.152	0.00159193	0.152	298.546	0.134	1.0000117	0.042	1	3.54E-14	7	SEP	2020	19	10	1
20F24463	17.0 %	EJ-12-19	Sanidine	Rhyolite Dome	FCT-NM (1C44-20)	28.201	0.082	Kuiper et al (2008)	9.75262	0.152	0.00159193	0.152	298.546	0.134	1.0000117	0.042	1	3.54E-14	7	SEP	2020	19	28	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F24130	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24132	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24459	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24461	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24463	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

EJ-12-19 (N=2).AGE >>> EJ-12-19 >>> OREGON | SWENTON (20



EJ-12-19 (N=2).AGE >>> EJ-12-19 >>> OREGON | SWENTON (20-01) PROJECT



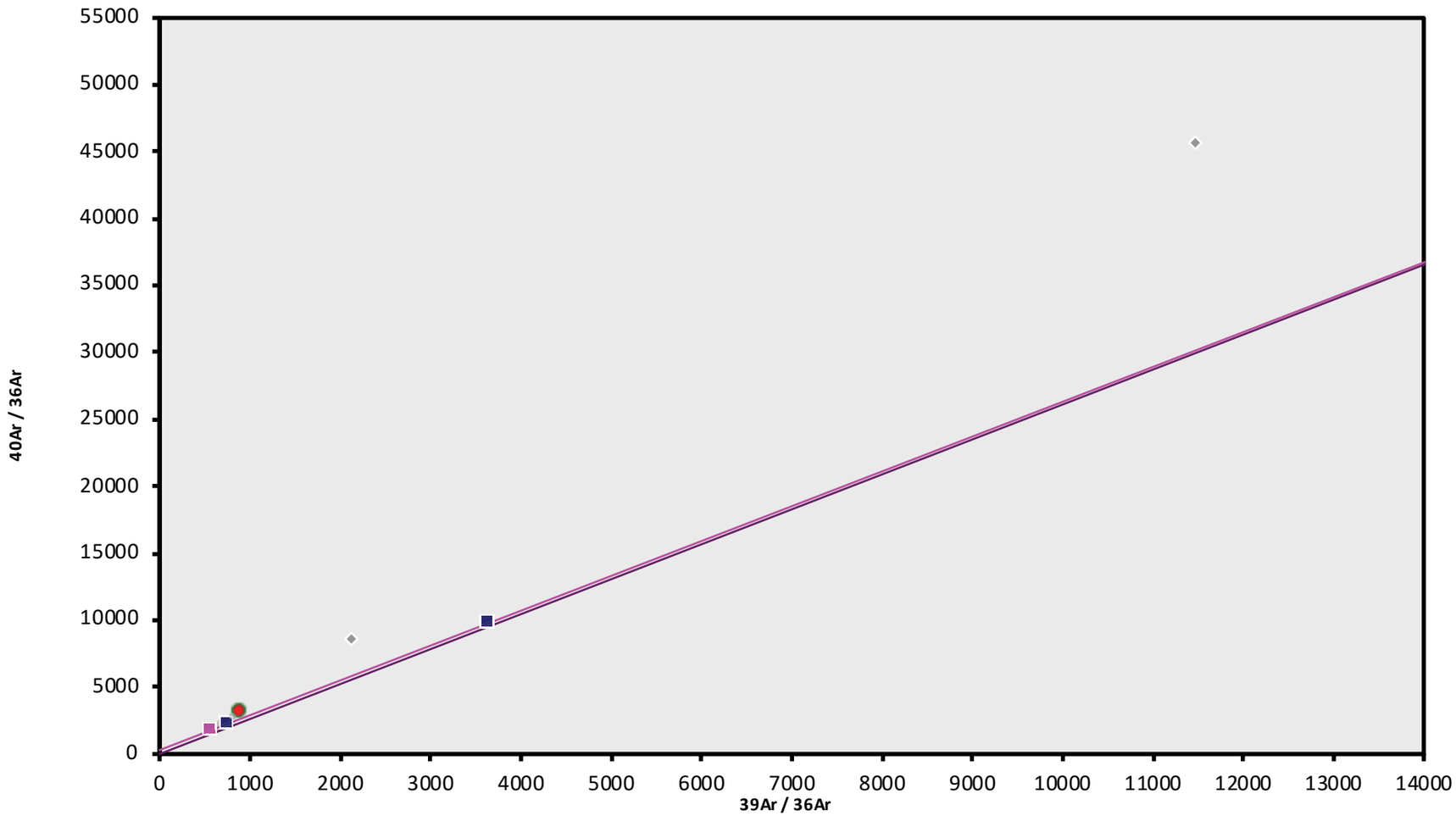
Ar-Ages in Ma

WEIGHTED PLATEAU
7.54 ± 0.02
TOTAL FUSION
8.95 ± 0.03
NORMAL ISOCHRON
7.57 ± 0.05
INVERSE ISOCHRON
7.56 ± 0.05

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

EJ-12-19 (N=2).AGE >>> EJ-12-19 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

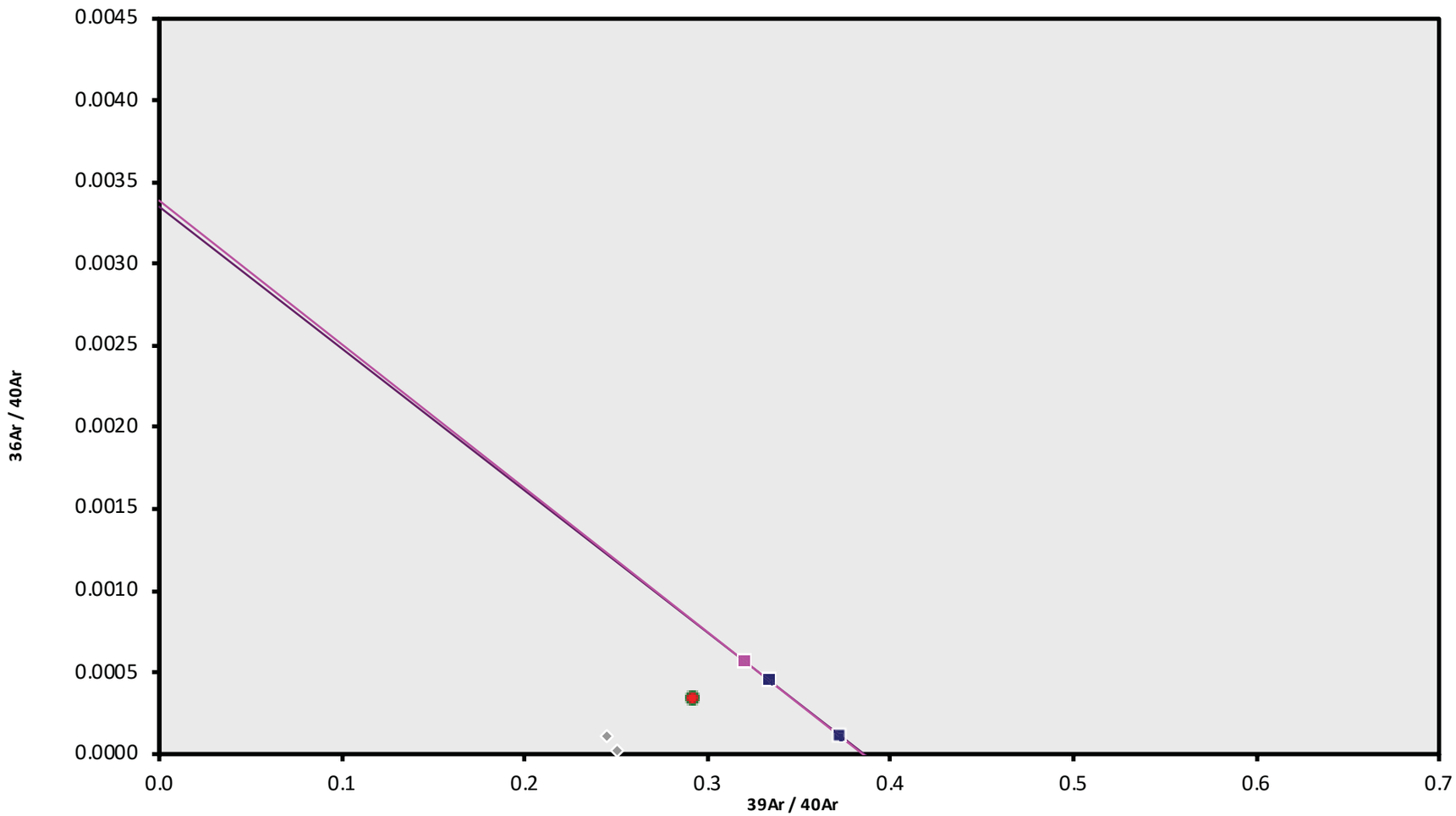
WEIGHTED PLATEAU
7.54 ± 0.02
TOTAL FUSION
8.95 ± 0.03
NORMAL ISOCHRON
7.57 ± 0.05
INVERSE ISOCHRON
7.56 ± 0.05

MSWD (PROBABILITY)
1.05 (30%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

EJ-12-19 (N=2).AGE >>> EJ-12-19 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
7.54 ± 0.02
TOTAL FUSION
8.95 ± 0.03
NORMAL ISOCHRON
7.57 ± 0.05
INVERSE ISOCHRON
7.56 ± 0.05

MSWD (PROBABILITY)
0.83 (36%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F24130	17.0 %	✓	0.4611932	0.273	1.2689543	11.313	3.2593437	0.314	262.43720	0.043	818.4563	0.006	2.59379	±0.00382	7.54	±0.01	83.17	63.74	89	±20
20F24132	17.0 %	✓	0.0134721	2.663	1.5969984	7.963	1.8087743	0.493	149.31668	0.044	596.8303	0.006	3.97042	±0.00379	11.53	±0.01	99.33	36.26	40	±6
		Σ	0.4746652	0.276	2.8659526	6.692	5.0681179	0.268	411.75387	0.032	1415.2866	0.004								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **EJ-12-19**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C44-20)**
Position = **X: 0 | Y: 0 | Z/H: 53.43119 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.75262 ± 0.01482**
FCT-NM J-value = **0.00159193 ± 0.00000242**
Air Shot 40Ar/36Ar = **299.0300 ± 0.4007**
Air Shot MDF = **0.99960655 ± 0.00042394 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau		3.28671	±1.37660	**9.55**	**±3.99**	>100	100.00	45	±28
Error Mean			±41.88%		**±41.78%**	0%	2		
			Full External Error		±4.02	3.83	2σ Confidence Limit		
			Analytical Error		±3.99	>10	Error Magnification		
Total Fusion Age		3.09301	±0.00284	**8.99**	**±0.03**		2	62	±8
			±0.09%		**±0.32%**				
			Full External Error		±0.47				
			Analytical Error		±0.01				
Normal Isochron									
Cannot Calculate									
Inverse Isochron									
Cannot Calculate									

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F24130	17.0 %	✓	0.4608495	1.2689543	0.0028009	262.43638	680.7058	7.54 ±0.01	83.17	63.74	89 ±20
20F24132	17.0 %	✓	0.0130398	1.5969984	0.0027437	149.31565	592.8465	11.53 ±0.01	99.33	36.26	40 ±6
		Σ	0.4738893	2.8659526	0.0055446	411.75203	1273.5523				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **EJ-12-19**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C44-20)**
J = **0.00159193 ± 0.00000242**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau	3.28671	±1.37660	**9.55**	**±3.99**	>100	100.00	45	±28
Error Mean		±41.88%		**±41.78%**	0%	2		
			Full External Error	±4.02	3.83	2σ Confidence Limit		
			Analytical Error	±3.99	>10	Error Magnification		
Total Fusion Age	3.09301	±0.00284	**8.99**	**±0.03**		2	62	±8
		±0.09%		**±0.32%**				
			Full External Error	±0.47				
			Analytical Error	±0.01				

Normal Isochron			39(k)/36(a) ±2σ	40(a+r)/36(a) ±2σ	r.i.
20F24130	17.0 %	✓	569.46 ±3.15	1775.63 ±9.71	0.9875
20F24132	17.0 %	✓	11450.80 ±633.16	45763.11 ±2530.13	0.9999

Results	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD
Normal Isochron				
Cannot Calculate				

Inverse Isochron			39(k)/40(a+r) ±2σ	36(a)/40(a+r) ±2σ	r.i.
20F24130	17.0 %	✓	0.3207104 ±0.0002796	0.00056318 ±0.00000308	0.0030
20F24132	17.0 %	✓	0.2502191 ±0.0002209	0.00002185 ±0.00000121	0.0003

Results	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD
Inverse Isochron				
Cannot Calculate				

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F24130	17.0%	✓	0.4608495	0.27	0.0000000	0.00	0.0003430	11.31	0.0000006	461.20	1.2689543	11.31	0.0868701	0.32	0.0000000	0.00	3.1694442	0.10	0.0002284	14.86	0.0028009	461.20	262.43638	0.04	0.0008153	11.35	680.7058	0.06	137.59124	0.29	0.0000000	0.00	0.1592989	9.65
20F24132	17.0%	✓	0.0130398	2.76	0.0000000	0.00	0.0004317	7.96	0.0000006	363.31	1.5969984	7.96	0.0024580	2.77	0.0000000	0.00	1.8032851	0.10	0.0002875	12.50	0.0027437	363.31	149.31565	0.04	0.0010261	8.02	592.8465	0.02	3.89315	2.77	0.0000000	0.00	0.0906346	9.65
		Σ	0.4738893	0.28	0.0000000	0.00	0.0007747	6.69	0.0000013	294.28	2.8659526	6.69	0.0893281	0.32	0.0000000	0.00	4.9727293	0.07	0.0005159	9.58	0.0055446	294.28	411.75203	0.03	0.0018414	6.72	1273.5523	0.03	141.48439	0.29	0.0000000	0.00	0.2499335	7.08
		Σ							0.4746652	0.28	2.8659526	6.69									5.0681179	0.33			411.75387	0.03							1415.2866	0.04

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F24130	17.0 %	✓	3.118675	0.001358	0.004835	0.000547	0.001757	0.000005	141.697	16.465344	1.00100119	2.897E-11
20F24132	17.0 %	✓	3.997077	0.001763	0.010695	0.000852	0.000090	0.000002	141.708	16.469184	1.00100128	2.113E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F24130	17.0 %	0.0058584 ±0.0001782	0.0131664 ±0.0064060	0.0083431 ±0.0069634	0.0062389 ±0.0068578	1.4278047 ±0.0157206
20F24132	17.0 %	0.0059666 ±0.0001760	0.0164692 ±0.0053243	0.0055182 ±0.0064858	0.0355104 ±0.0069041	1.4542840 ±0.0152029

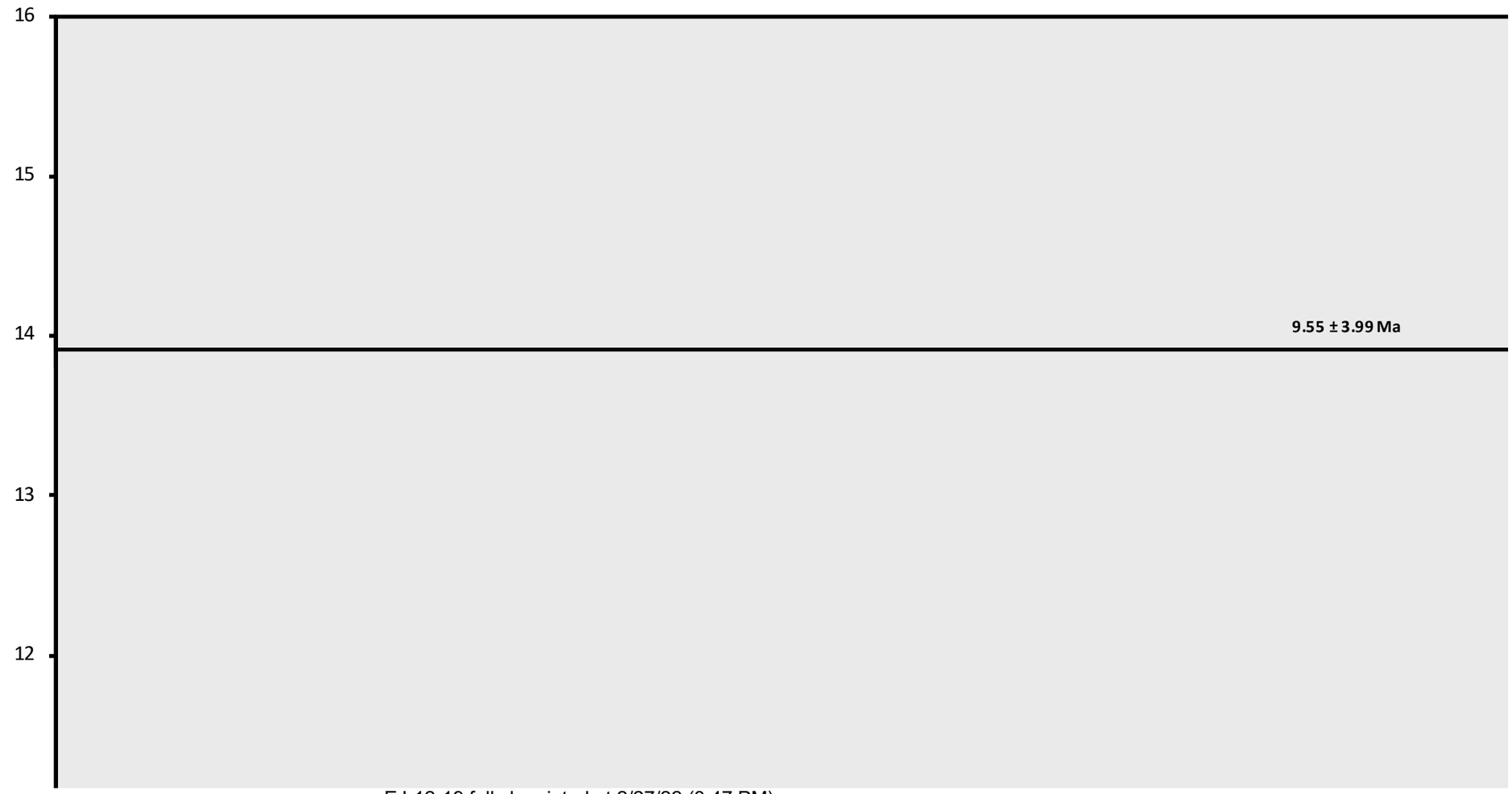
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F24130	17.0 %	0.4572808 ±0.0009495	0.9224	EXP 150 of 150	0.0638109 ±0.0058902	0.0118	EXP 148 of 150	3.2484363 ±0.0069457	0.9576	EXP 150 of 150	262.07800 ±0.02102	0.9999	EXP 150 of 150	819.88411 ±0.04412	1.0000	EXP 150 of 150
20F24132	17.0 %	0.0191532 ±0.0003031	0.9534	EXP 148 of 150	0.0803854 ±0.0055647	0.0028	EXP 150 of 150	1.8018330 ±0.0059212	0.9032	EXP 150 of 150	149.14425 ±0.01452	0.9999	EXP 148 of 150	598.28459 ±0.03349	1.0000	EXP 148 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F24130	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	53.43	Oregon\Swenton (20-01)	20F24126	01
20F24132	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	53.43	Oregon\Swenton (20-01)	20F24126	01

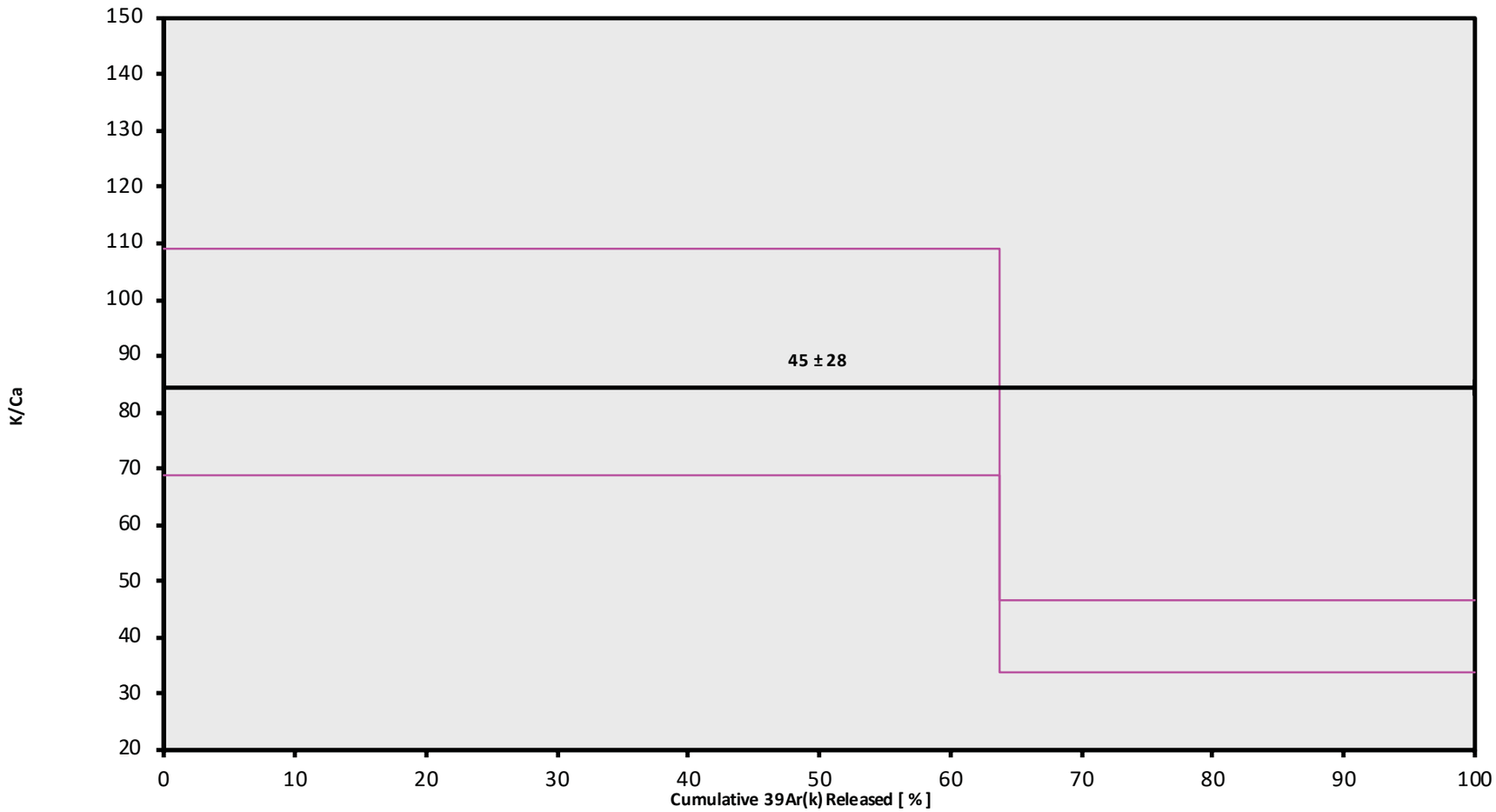
Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F24130	17.0 %	EJ-12-19	Sanidine	Rhyolite Dome	FCT-NM (1C44-20)	28.201	0.082	Kuiper et al (2008)	9.75262	0.152	0.00159193	0.152	299.03	0.134	0.9996066	0.042	1	3.54E-14	5	SEP	2020	7	14	1
20F24132	17.0 %	EJ-12-19	Sanidine	Rhyolite Dome	FCT-NM (1C44-20)	28.201	0.082	Kuiper et al (2008)	9.75262	0.152	0.00159193	0.152	299.03	0.134	0.9996066	0.042	1	3.54E-14	5	SEP	2020	7	31	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F24130	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24132	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F24126.AGE >>> EJ-12-19



20F24126.AGE >>> EJ-12-19 >>> OREGON | SWENTON (20-01) PROJECT



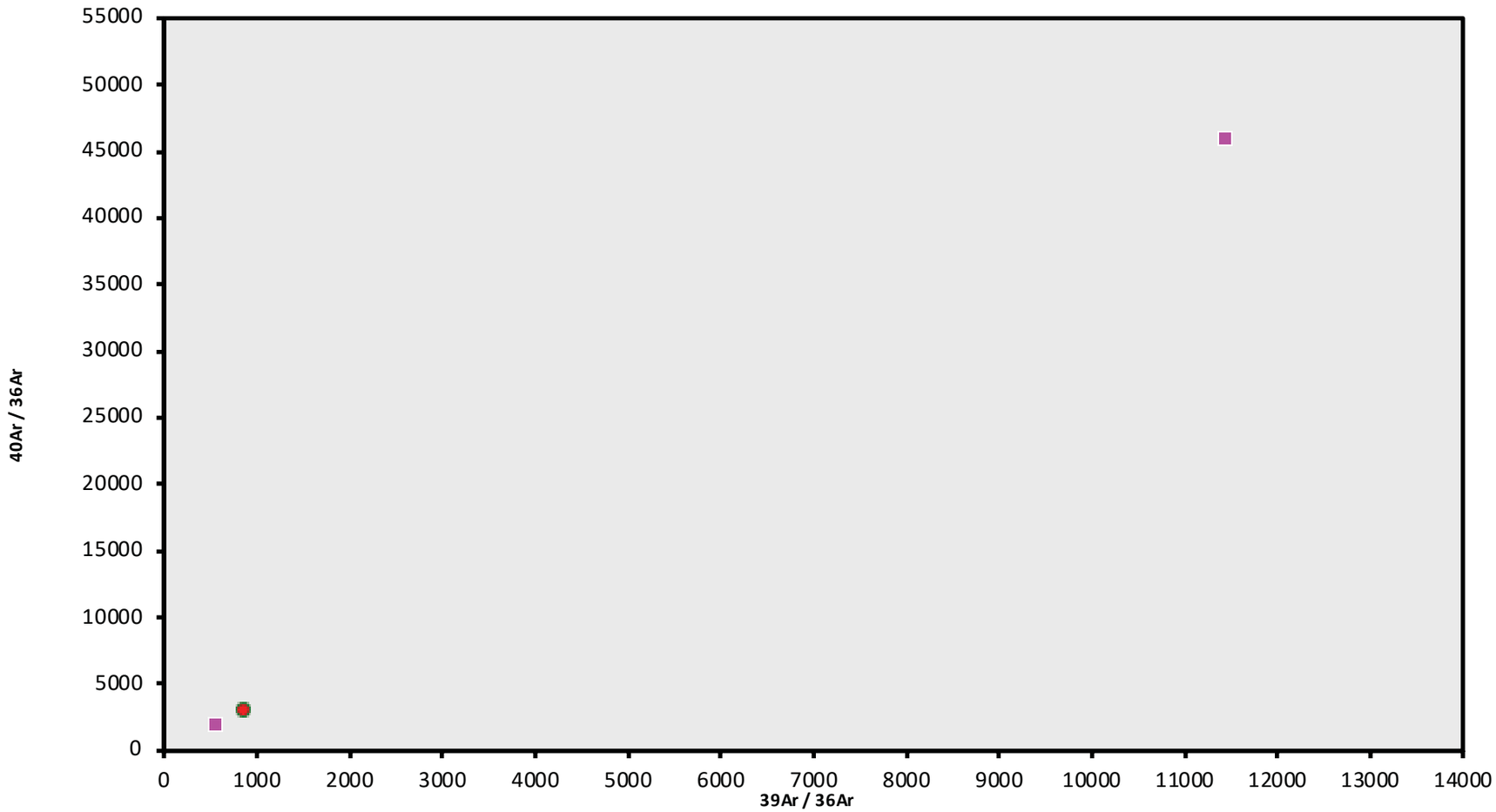
Ar-Ages in Ma

WEIGHTED PLATEAU
9.55 ± 3.99
TOTAL FUSION
8.99 ± 0.03

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F24126.AGE >>> EJ-12-19 >>> OREGON | SWENTON (20-01) PROJECT



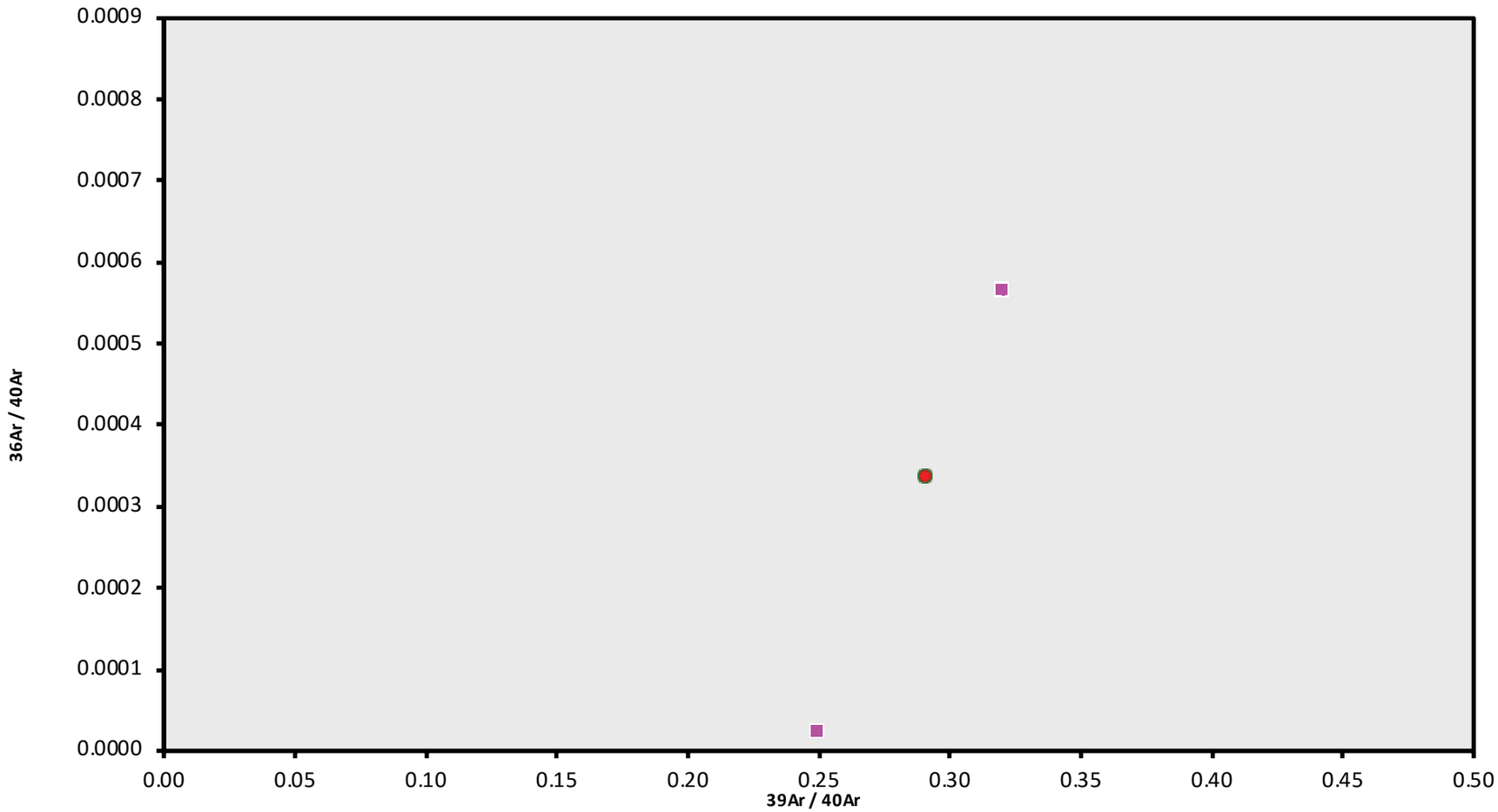
Ar-Ages in Ma

WEIGHTED PLATEAU
9.55 ± 3.99
TOTAL FUSION
8.99 ± 0.03

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F24126.AGE >>> EJ-12-19 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.55 ± 3.99
TOTAL FUSION
8.99 ± 0.03

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F24337	17.0 %		0.0186006	1.721	0.064409	220.183	0.051435	18.486	4.0044	0.224	24.9452	0.093	4.84337 ±0.05408	14.60 ±0.16	77.75	0.24	26.7 ±117.7
20F24338	17.0 %	✓	0.0581470	0.780	0.531155	26.202	1.276709	0.774	105.5244	0.043	361.5836	0.009	3.26184 ±0.00386	9.85 ±0.01	95.19	6.31	85.4 ±44.8
20F24340	17.0 %		0.1053241	0.493	7.412258	1.856	0.524254	1.786	41.5999	0.050	155.8732	0.017	3.00517 ±0.00830	9.07 ±0.02	80.19	2.49	2.4 ±0.1
20F24341	17.0 %	✓	0.0344916	1.193	0.377203	37.281	1.282768	0.774	105.6661	0.043	354.6516	0.010	3.25858 ±0.00370	9.84 ±0.01	97.09	6.32	120.5 ±89.8
20F24343	17.0 %	✓	0.0649170	0.737	0.781584	17.573	2.026419	0.483	165.7172	0.042	559.8108	0.007	3.26094 ±0.00328	9.84 ±0.01	96.53	9.91	91.2 ±32.0
20F24344	17.0 %	✓	0.0320788	1.109	0.608900	22.228	1.154901	0.768	93.7597	0.043	318.7894	0.011	3.29786 ±0.00373	9.96 ±0.01	96.99	5.61	66.2 ±29.4
20F24347	17.0 %		0.1494951	0.406	16.307940	0.948	0.135476	6.467	8.7186	0.118	84.5869	0.031	4.73863 ±0.04486	14.29 ±0.13	48.78	0.52	0.2 ±0.0
20F24349	17.0 %		0.0256808	1.260	0.529017	27.048	1.154261	0.820	95.1272	0.043	309.0884	0.010	3.16847 ±0.00347	9.57 ±0.01	97.51	5.69	77.3 ±41.8
20F24350	17.0 %		0.0258372	1.352	0.898134	15.495	0.334298	2.712	26.3300	0.058	71.4683	0.032	2.42358 ±0.00865	7.32 ±0.03	89.29	1.57	12.6 ±3.9
20F24352	17.0 %	✓	0.0198534	1.667	0.220125	63.082	1.212413	0.774	101.6022	0.043	337.0490	0.009	3.25857 ±0.00348	9.84 ±0.01	98.23	6.08	198.5 ±250.4
20F24353	17.0 %	✓	0.0075850	3.226	0.134349	106.430	0.489538	1.939	40.9388	0.049	135.7687	0.018	3.26073 ±0.00499	9.84 ±0.02	98.32	2.45	131.0 ±278.9
20F24356	17.0 %	✓	0.2013797	0.372	0.713071	19.025	1.653111	0.552	136.0656	0.043	503.8401	0.007	3.26087 ±0.00444	9.84 ±0.01	88.06	8.14	82.1 ±31.2
20F24358	17.0 %		0.0398977	0.992	1.393387	10.129	0.644600	1.437	54.1836	0.047	167.9892	0.015	2.88204 ±0.00524	8.70 ±0.02	92.96	3.24	16.7 ±3.4
20F24361	17.0 %	✓	0.0095261	2.885	0.117503	121.723	0.689135	1.265	56.4550	0.046	186.9650	0.015	3.26094 ±0.00433	9.84 ±0.01	98.47	3.38	206.6 ±503.0
20F24362	17.0 %	✓	0.0302967	1.194	0.313926	42.515	0.912083	0.975	75.6059	0.045	256.4587	0.013	3.27215 ±0.00420	9.88 ±0.01	96.46	4.52	103.6 ±88.1
20F24364	17.0 %	✓	0.0245758	1.372	0.218359	64.116	0.708279	1.263	59.7057	0.045	202.0395	0.014	3.26073 ±0.00461	9.84 ±0.01	96.36	3.57	117.6 ±150.8
20F24365	17.0 %	✓	0.0058795	4.434	0.309707	44.828	0.729863	1.285	60.5322	0.045	199.6113	0.015	3.26843 ±0.00404	9.87 ±0.01	99.11	3.62	84.0 ±75.3
20F24367	17.0 %		0.0138025	1.995	0.186143	72.687	0.430140	2.007	35.0124	0.052	120.8288	0.022	3.33317 ±0.00607	10.06 ±0.02	96.58	2.09	80.9 ±117.6
20F24368	17.0 %	✓	0.0239893	1.429	0.216345	63.884	0.397307	2.319	32.4681	0.052	113.8430	0.023	3.28566 ±0.00740	9.92 ±0.02	93.71	1.94	64.5 ±82.5
20F24370	17.0 %	✓	0.0128974	1.959	0.224694	64.252	0.405211	2.233	33.4278	0.054	112.8689	0.022	3.26125 ±0.00596	9.85 ±0.02	96.59	2.00	64.0 ±82.2
20F24371	17.0 %	✓	0.0257178	1.181	0.161872	88.513	0.386364	2.408	31.7607	0.053	111.0574	0.022	3.25476 ±0.00691	9.83 ±0.02	93.08	1.90	84.4 ±149.4
20F24373	17.0 %		0.0080461	3.413	0.300182	46.799	0.321053	2.911	27.3747	0.055	94.1031	0.025	3.35014 ±0.00728	10.11 ±0.02	97.46	1.64	39.2 ±36.7
20F24374	17.0 %	✓	0.0153798	1.782	0.524941	27.315	0.635422	1.443	54.4855	0.047	182.0347	0.016	3.25689 ±0.00442	9.83 ±0.01	97.48	3.26	44.6 ±24.4
20F24376	17.0 %		0.3426940	0.290	0.254669	54.564	0.906176	1.032	69.8926	0.045	335.8344	0.010	3.34082 ±0.00956	10.08 ±0.03	69.53	4.18	118.0 ±128.8
20F24377	17.0 %		0.0173458	1.702	19.422034	0.879	0.073626	12.627	6.7497	0.146	21.5545	0.111	2.66266 ±0.02854	8.04 ±0.09	83.23	0.40	0.1 ±0.0
20F24379	17.0 %		0.0402065	0.981	0.837769	15.872	1.136592	0.818	95.6154	0.043	344.0375	0.009	3.47271 ±0.00395	10.48 ±0.01	96.51	5.72	49.1 ±15.6
20F24380	17.0 %		0.0555021	0.816	0.421429	32.021	0.660189	1.380	54.0016	0.047	196.5777	0.015	3.33341 ±0.00604	10.06 ±0.02	91.57	3.23	55.1 ±35.3
		Σ	1.4091476	0.157	53.481103	1.371	20.331624	0.236	1672.3247	0.010	5863.2588	0.003					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **EJ-12-21B**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1D7-20)**
Position = **X: 0 | Y: 0 | Z/H: 7.233878 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.38852 ± 0.00676**
FCT-NM J-value = **0.00165367 ± 0.00000119**
Air Shot 40Ar/36Ar = **298.4230 ± 0.3700**
Air Shot MDF = **1.00011492 ± 0.00040531 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau		3.26528 ±0.00612	**9.86 ±0.02**	30.48	68.99	71.8 ±12.7
Error Mean		±0.19%	**±0.24%**	0%	15	
		Full External Error	±0.51	1.76	2σ Confidence Limit	
		Analytical Error	±0.02	5.5211	Error Magnification	
Total Fusion Age		3.25652 ±0.00106	**9.83 ±0.01**		27	13.4 ±0.4
		±0.03%	**±0.15%**			
		Full External Error	±0.51			
		Analytical Error	±0.00			
Normal Isochron	**296.36 ±18.10**	3.26548 ±0.00942	**9.86 ±0.03**	27.84	68.99	
Error Chron	**±6.11%**	±0.29%	**±0.32%**	0%	15	
		Full External Error	±0.51	1.78	2σ Confidence Limit	
		Analytical Error	±0.03	5.2767	Error Magnification	
				1	Number of Iterations	
				0.0000013022	Convergence	
Inverse Isochron	**298.44 ±19.86**	3.26539 ±0.01036	**9.86 ±0.03**	33.23	68.99	
Error Chron	**±6.66%**	±0.32%	**±0.35%**	0%	15	
		Full External Error	±0.51	1.78	2σ Confidence Limit	
		Analytical Error	±0.03	5.7647	Error Magnification	
				1	Number of Iterations	
				0.0000021204	Convergence	
				11%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F24337	17.0 %		0.0185832	0.064409	0.0000000	4.0044	19.3946	14.60 ±0.16	77.75	0.24	26.7 ±117.7
20F24338	17.0 %	✓	0.0580035	0.531155	0.0000000	105.5240	344.2021	9.85 ±0.01	95.19	6.31	85.4 ±44.8
20F24340	17.0 %		0.1033203	7.412258	0.0010989	41.5951	125.0007	9.07 ±0.02	80.19	2.49	2.4 ±0.1
20F24341	17.0 %	✓	0.0343896	0.377203	0.0000916	105.6658	344.3201	9.84 ±0.01	97.09	6.32	120.5 ±89.8
20F24343	17.0 %	✓	0.0647028	0.781584	0.0127214	165.7167	540.3925	9.84 ±0.01	96.53	9.91	91.2 ±32.0
20F24344	17.0 %	✓	0.0319104	0.608900	0.0164458	93.7593	309.2053	9.96 ±0.01	96.99	5.61	66.2 ±29.4
20F24347	17.0 %		0.1450870	16.307940	0.0000236	8.7081	41.2645	14.29 ±0.13	48.78	0.52	0.2 ±0.0
20F24349	17.0 %		0.0255377	0.529017	0.0005057	95.1268	301.4061	9.57 ±0.01	97.51	5.69	77.3 ±41.8
20F24350	17.0 %		0.0255918	0.898134	0.0113314	26.3295	63.8116	7.32 ±0.03	89.29	1.57	12.6 ±3.9
20F24352	17.0 %	✓	0.0197939	0.220125	0.0000000	101.6020	331.0777	9.84 ±0.01	98.23	6.08	198.5 ±250.4
20F24353	17.0 %	✓	0.0075487	0.134349	0.0000000	40.9387	133.4901	9.84 ±0.02	98.32	2.45	131.0 ±278.9
20F24356	17.0 %	✓	0.2011870	0.713071	0.0000000	136.0651	443.6911	9.84 ±0.01	88.06	8.14	82.1 ±31.2
20F24358	17.0 %		0.0395210	1.393387	0.0000000	54.1827	156.1569	8.70 ±0.02	92.96	3.24	16.7 ±3.4
20F24361	17.0 %	✓	0.0094931	0.117503	0.0055180	56.4550	184.0965	9.84 ±0.01	98.47	3.38	206.6 ±503.0
20F24362	17.0 %	✓	0.0302119	0.313926	0.0000000	75.6057	247.3928	9.88 ±0.01	96.46	4.52	103.6 ±88.1
20F24364	17.0 %	✓	0.0245167	0.218359	0.0000000	59.7056	194.6836	9.84 ±0.01	96.36	3.57	117.6 ±150.8
20F24365	17.0 %	✓	0.0057958	0.309707	0.0000000	60.5320	197.8442	9.87 ±0.01	99.11	3.62	84.0 ±75.3
20F24367	17.0 %		0.0137511	0.186143	0.0046711	35.0123	116.7020	10.06 ±0.02	96.58	2.09	80.9 ±117.6
20F24368	17.0 %	✓	0.0239307	0.216345	0.0006411	32.4680	106.6786	9.92 ±0.02	93.71	1.94	64.5 ±82.5
20F24370	17.0 %	✓	0.0128366	0.224694	0.0000000	33.4277	109.0161	9.85 ±0.02	96.59	2.00	64.0 ±82.2
20F24371	17.0 %	✓	0.0256741	0.161872	0.0000000	31.7606	103.3728	9.83 ±0.02	93.08	1.90	84.4 ±149.4
20F24373	17.0 %		0.0079650	0.300182	0.0000000	27.3745	91.7084	10.11 ±0.02	97.46	1.64	39.2 ±36.7
20F24374	17.0 %	✓	0.0152379	0.524941	0.0000000	54.4851	177.4522	9.83 ±0.01	97.48	3.26	44.6 ±24.4
20F24376	17.0 %		0.3426252	0.254669	0.0000000	69.8924	233.4978	10.08 ±0.03	69.53	4.18	118.0 ±128.8
20F24377	17.0 %		0.0120960	19.422034	0.0000000	6.7373	17.9390	8.04 ±0.09	83.23	0.40	0.1 ±0.0
20F24379	17.0 %		0.0399800	0.837769	0.0000000	95.6149	332.0430	10.48 ±0.01	96.51	5.72	49.1 ±15.6
20F24380	17.0 %		0.0553882	0.421429	0.0000000	54.0013	180.0082	10.06 ±0.02	91.57	3.23	55.1 ±35.3
		Σ	1.3946792	53.481103	0.0530485	1672.2904	5445.8483				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **EJ-12-21B**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1D7-20)**
J = **0.00165367 ± 0.00000119**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau	3.26528	±0.00612	**9.86**	**±0.02**	30.48	68.99	71.8	±12.7
Error Mean		±0.19%		**±0.24%**	0%	15		
			Full External Error	±0.51	1.76	2σ Confidence Limit		
			Analytical Error	±0.02	5.5211	Error Magnification		
Total Fusion Age	3.25652	±0.00106	**9.83**	**±0.01**		27	13.4	±0.4
		±0.03%		**±0.15%**				
			Full External Error	±0.51				
			Analytical Error	±0.00				

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F24337	17.0 %		215.48	±7.54	1342.22	±46.65	0.9904
20F24338	17.0 %	✓	1819.27	±28.58	6232.72	±97.77	0.9985
20F24340	17.0 %		402.58	±4.08	1508.40	±15.21	0.9946
20F24341	17.0 %	✓	3072.61	±73.86	10310.88	±247.72	0.9993
20F24343	17.0 %	✓	2561.20	±38.06	8650.48	±128.35	0.9984
20F24344	17.0 %	✓	2938.20	±65.88	9988.35	±223.81	0.9992
20F24347	17.0 %		60.02	±0.52	582.97	±4.91	0.9602
20F24349	17.0 %		3724.95	±95.10	12100.94	±308.79	0.9994
20F24350	17.0 %		1028.82	±28.28	2792.00	±76.69	0.9988
20F24352	17.0 %	✓	5133.01	±172.80	17024.84	±572.94	0.9997
20F24353	17.0 %	✓	5423.26	±355.99	17982.37	±1180.26	0.9999
20F24356	17.0 %	✓	676.31	±5.07	2503.93	±18.66	0.9933
20F24358	17.0 %		1370.98	±27.61	4249.80	±85.50	0.9988
20F24361	17.0 %	✓	5946.98	±347.77	19691.32	±1151.39	0.9999
20F24362	17.0 %	✓	2502.52	±60.25	8487.16	±204.19	0.9993
20F24364	17.0 %	✓	2435.30	±67.42	8239.41	±228.00	0.9994
20F24365	17.0 %	✓	10444.10	±949.35	34434.32	±3129.89	0.9999
20F24367	17.0 %		2546.15	±102.92	8785.31	±355.01	0.9996
20F24368	17.0 %	✓	1356.75	±39.13	4756.37	±137.10	0.9992
20F24370	17.0 %	✓	2604.08	±103.77	8791.13	±350.20	0.9996
20F24371	17.0 %	✓	1237.07	±29.54	4324.91	±103.19	0.9988
20F24373	17.0 %		3436.85	±239.24	11812.50	±822.20	0.9999
20F24374	17.0 %	✓	3575.62	±129.95	11943.97	±433.97	0.9996
20F24376	17.0 %		203.99	±1.20	980.06	±5.69	0.9877
20F24377	17.0 %		556.98	±27.59	1781.61	±88.17	0.9973
20F24379	17.0 %		2391.57	±47.44	8603.78	±170.52	0.9990
20F24380	17.0 %		974.96	±16.02	3548.50	±58.22	0.9982

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**296.36**	**±18.10**	3.26548	±0.00942	**9.86**	**±0.03**	27.84
Error Chron		**±6.11%**		±0.29%		**±0.32%**	0%
					Full External Error	±0.51	
					Analytical Error	±0.03	

Statistics				
	2σ Confidence Limit	1.78	Convergence	0.000001302234
	Error Magnification	5.2767	Number of Iterations	1
	Number of Data Points	15	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F24337	17.0 %		0.1605417	±0.0007783	0.00074503	±0.00002589	0.0204
20F24338	17.0 %	✓	0.2918902	±0.0002549	0.00016044	±0.00000252	0.0024
20F24340	17.0 %		0.2668957	±0.0002815	0.00066296	±0.00000669	0.0106
20F24341	17.0 %	✓	0.2979965	±0.0002617	0.00009698	±0.00000233	0.0019
20F24343	17.0 %	✓	0.2960759	±0.0002521	0.00011560	±0.00000172	0.0016
20F24344	17.0 %	✓	0.2941630	±0.0002629	0.00010012	±0.00000224	0.0024
20F24347	17.0 %		0.1029550	±0.0002508	0.00171535	±0.00001444	0.0187
20F24349	17.0 %		0.3078233	±0.0002718	0.00008264	±0.00000211	0.0020
20F24350	17.0 %		0.3684901	±0.0004894	0.00035817	±0.00000984	0.0113
20F24352	17.0 %	✓	0.3015010	±0.0002662	0.00005874	±0.00000198	0.0013
20F24353	17.0 %	✓	0.3015878	±0.0003179	0.00005561	±0.00000365	0.0019
20F24356	17.0 %	✓	0.2701004	±0.0002338	0.00039937	±0.00000298	0.0031
20F24358	17.0 %		0.3226000	±0.0003164	0.00023531	±0.00000473	0.0047
20F24361	17.0 %	✓	0.3020100	±0.0002945	0.00005078	±0.00000297	0.0017
20F24362	17.0 %	✓	0.2948591	±0.0002741	0.00011783	±0.00000283	0.0030
20F24364	17.0 %	✓	0.2955673	±0.0002805	0.00012137	±0.00000336	0.0029
20F24365	17.0 %	✓	0.3033049	±0.0002871	0.00002904	±0.00000264	0.0010
20F24367	17.0 %		0.2898187	±0.0003270	0.00011383	±0.00000460	0.0042
20F24368	17.0 %	✓	0.2852488	±0.0003242	0.00021024	±0.00000606	0.0066
20F24370	17.0 %	✓	0.2962170	±0.0003455	0.00011375	±0.00000453	0.0043
20F24371	17.0 %	✓	0.2860329	±0.0003290	0.00023122	±0.00000552	0.0068
20F24373	17.0 %		0.2909505	±0.0003499	0.00008466	±0.00000589	0.0030
20F24374	17.0 %	✓	0.2993662	±0.0002946	0.00008372	±0.00000304	0.0028
20F24376	17.0 %		0.2081421	±0.0001910	0.00102035	±0.00000593	0.0075
20F24377	17.0 %		0.3126280	±0.0011471	0.00056129	±0.00002778	0.0270
20F24379	17.0 %		0.2779669	±0.0002450	0.00011623	±0.00000230	0.0019
20F24380	17.0 %		0.2747529	±0.0002687	0.00028181	±0.00000462	0.0055

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**298.44**	**±19.86**	3.26539	±0.01036	**9.86**	**±0.03**	33.23
Error Chron		**±6.66%**		±0.32%		**±0.35%**	0%
					Full External Error	±0.51	
					Analytical Error	±0.03	

Statistics				
	2σ Confidence Limit	1.78	Convergence	0.0000021204
	Error Magnification	5.7647	Number of Iterations	1
	Number of Data Points	15	Calculated Line	Weighted York-2
	Spreading Factor	10.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F24337	17.0 %		0.0185832	1.74	0.0000000	0.00	0.0000174	220.18	0.0000000	0.00	0.064409	220.18	0.0035029	1.74	0.0000000	0.00	0.048361	0.24	0.0000116	220.39	0.0000000	0.00	4.0044	0.22	0.0000414	220.18	19.3946	0.51	5.54820	1.74	0.0000000	0.00	0.0024306	9.65
20F24338	17.0 %	✓	0.0580035	0.78	0.0000000	0.00	0.0001436	26.20	0.0000000	0.00	0.531155	26.20	0.0109337	0.80	0.0000000	0.00	1.274413	0.10	0.0000956	27.92	0.0000000	0.00	105.5240	0.04	0.0003413	26.22	344.2021	0.04	17.31751	0.79	0.0000000	0.00	0.0640531	9.65
20F24340	17.0 %		0.1033203	0.50	0.0000000	0.00	0.0020035	1.86	0.0000003	859.98	7.412258	1.86	0.0194759	0.53	0.0000000	0.00	0.502345	0.10	0.0013342	9.81	0.0010989	859.98	41.5951	0.05	0.0047624	2.07	125.0007	0.13	30.84730	0.51	0.0000000	0.00	0.0252483	9.65
20F24341	17.0 %	✓	0.0343896	1.20	0.0000000	0.00	0.0001020	37.28	0.0000000	#######	0.377203	37.28	0.0064824	1.21	0.0000000	0.00	1.276126	0.10	0.0000679	38.50	0.0000916	#######	105.6658	0.04	0.0002424	37.29	344.3201	0.04	10.26737	1.21	0.0000000	0.00	0.0641391	9.65
20F24343	17.0 %	✓	0.0647028	0.74	0.0000000	0.00	0.0002113	17.57	0.0000030	86.20	0.781584	17.57	0.0121965	0.76	0.0000000	0.00	2.001360	0.10	0.0001407	20.04	0.0127214	86.20	165.7167	0.04	0.0005022	17.60	540.3925	0.03	19.31767	0.75	0.0000000	0.00	0.1005900	9.65
20F24344	17.0 %	✓	0.0319104	1.12	0.0000000	0.00	0.0001646	22.23	0.0000038	56.59	0.608900	22.23	0.0060151	1.13	0.0000000	0.00	1.132331	0.10	0.0001096	24.22	0.0164458	56.60	93.7593	0.04	0.0003912	22.25	309.2053	0.04	9.52717	1.13	0.0000000	0.00	0.0569119	9.65
20F24347	17.0 %		0.1450870	0.42	0.0000000	0.00	0.0044080	0.96	0.0000000	#######	16.307940	0.95	0.0273489	0.45	0.0000000	0.00	0.105168	0.15	0.0029354	9.68	0.0000236	#######	8.7081	0.12	0.0104779	1.32	41.2645	0.46	43.31718	0.43	0.0000000	0.00	0.0052858	9.65
20F24349	17.0 %		0.0255377	1.28	0.0000000	0.00	0.0001430	27.05	0.0000001	#######	0.529017	27.05	0.0048139	1.29	0.0000000	0.00	1.148846	0.10	0.0000952	28.71	0.0005057	#######	95.1268	0.04	0.0003399	27.06	301.4061	0.03	7.62454	1.28	0.0000000	0.00	0.0577420	9.65
20F24350	17.0 %		0.0255918	1.37	0.0000000	0.00	0.0002428	15.50	0.0000026	80.34	0.898134	15.49	0.0048241	1.38	0.0000000	0.00	0.317981	0.11	0.0001617	18.24	0.0113314	80.35	26.3295	0.06	0.0005771	15.52	63.8116	0.17	7.64069	1.38	0.0000000	0.00	0.0159820	9.65
20F24352	17.0 %	✓	0.0197939	1.68	0.0000000	0.00	0.0000595	63.08	0.0000000	0.00	0.220125	63.08	0.0037311	1.69	0.0000000	0.00	1.227048	0.10	0.0000396	63.81	0.0000000	0.00	101.6020	0.04	0.0001414	63.09	331.0777	0.03	5.90966	1.69	0.0000000	0.00	0.0616724	9.65
20F24353	17.0 %	✓	0.0075487	3.28	0.0000000	0.00	0.0000363	106.43	0.0000000	0.00	0.134349	106.43	0.0014229	3.29	0.0000000	0.00	0.494416	0.10	0.0000242	106.86	0.0000000	0.00	40.9387	0.05	0.0000863	106.43	133.4901	0.06	2.25374	3.28	0.0000000	0.00	0.0248498	9.65
20F24356	17.0 %	✓	0.2011870	0.37	0.0000000	0.00	0.0001927	19.03	0.0000000	0.00	0.713071	19.02	0.0379237	0.41	0.0000000	0.00	1.643258	0.10	0.0001284	21.32	0.0000000	0.00	136.0651	0.04	0.0004581	19.05	443.6911	0.05	60.06638	0.39	0.0000000	0.00	0.0825915	9.65
20F24358	17.0 %		0.0395210	1.01	0.0000000	0.00	0.0003766	10.13	0.0000000	0.00	1.393387	10.13	0.0074497	1.02	0.0000000	0.00	0.654365	0.10	0.0002508	13.98	0.0000000	0.00	54.1827	0.05	0.0008953	10.17	156.1569	0.08	11.79940	1.01	0.0000000	0.00	0.0328889	9.65
20F24361	17.0 %	✓	0.0094931	2.92	0.0000000	0.00	0.0000318	121.72	0.0000013	160.91	0.117503	121.72	0.0017894	2.93	0.0000000	0.00	0.681807	0.10	0.0000212	122.10	0.0055180	160.92	56.4550	0.05	0.0000755	121.73	184.0965	0.05	2.83425	2.93	0.0000000	0.00	0.0342682	9.65
20F24362	17.0 %	✓	0.0302119	1.20	0.0000000	0.00	0.0000849	42.52	0.0000000	0.00	0.313926	42.52	0.0056949	1.21	0.0000000	0.00	0.913090	0.10	0.0000565	43.59	0.0000000	0.00	75.6057	0.04	0.0002017	42.52	247.3928	0.05	9.02005	1.21	0.0000000	0.00	0.0458926	9.65
20F24364	17.0 %	✓	0.0245167	1.38	0.0000000	0.00	0.0000590	64.12	0.0000000	0.00	0.218359	64.12	0.0046214	1.39	0.0000000	0.00	0.721064	0.10	0.0000393	64.84	0.0000000	0.00	59.7056	0.05	0.0001403	64.12	194.6836	0.05	7.31971	1.39	0.0000000	0.00	0.0362413	9.65
20F24365	17.0 %	✓	0.0057958	4.54	0.0000000	0.00	0.0000837	44.83	0.0000000	0.00	0.309707	44.83	0.0010925	4.55	0.0000000	0.00	0.731044	0.10	0.0000557	45.85	0.0000000	0.00	60.5320	0.04	0.0001990	44.84	197.8442	0.04	1.73040	4.55	0.0000000	0.00	0.0367429	9.65
20F24367	17.0 %		0.0137511	2.02	0.0000000	0.00	0.0000503	72.69	0.0000011	186.19	0.186143	72.69	0.0025921	2.03	0.0000000	0.00	0.422843	0.10	0.0000335	73.32	0.0046711	186.19	35.0123	0.05	0.0001196	72.69	116.7020	0.07	4.10552	2.02	0.0000000	0.00	0.0212525	9.65
20F24368	17.0 %	✓	0.0239307	1.44	0.0000000	0.00	0.0000585	63.88	0.0000001	#######	0.216345	63.88	0.0045109	1.45	0.0000000	0.00	0.392116	0.10	0.0000389	64.61	0.0006411	#######	32.4680	0.05	0.0001390	63.89	106.6786	0.10	7.14475	1.44	0.0000000	0.00	0.0197081	9.65
20F24370	17.0 %	✓	0.0128366	1.99	0.0000000	0.00	0.0000607	64.25	0.0000000	0.00	0.224694	64.25	0.0024197	2.00	0.0000000	0.00	0.403706	0.10	0.0000404	64.97	0.0000000	0.00	33.4277	0.05	0.0001444	64.26	109.0161	0.07	3.83251	1.99	0.0000000	0.00	0.0202906	9.65
20F24371	17.0 %	✓	0.0256741	1.19	0.0000000	0.00	0.0000438	88.51	0.0000000	0.00	0.161872	88.51	0.0048396	1.20	0.0000000	0.00	0.383572	0.10	0.0000291	89.03	0.0000000	0.00	31.7606	0.05	0.0001040	88.52	103.3728	0.09	7.66525	1.20	0.0000000	0.00	0.0192787	9.65
20F24373	17.0 %		0.0079650	3.48	0.0000000	0.00	0.0000811	46.80	0.0000000	0.00	0.300182	46.80	0.0015014	3.48	0.0000000	0.00	0.330602	0.11	0.0000540	47.78	0.0000000	0.00	27.3745	0.05	0.0001929	46.81	91.7084	0.09	2.37803	3.48	0.0000000	0.00	0.0166163	9.65
20F24374	17.0 %	✓	0.0152379	1.82	0.0000000	0.00	0.0001419	27.32	0.0000000	0.00	0.524941	27.32	0.0028724	1.82	0.0000000	0.00	0.658017	0.10	0.0000945	28.96	0.0000000	0.00	54.4851	0.05	0.0003373	27.33	177.4522	0.05	4.54944	1.82	0.0000000	0.00	0.0330725	9.65
20F24376	17.0 %		0.3426252	0.29	0.0000000	0.00	0.0000688	54.56	0.0000000	0.00	0.254669	54.56	0.0645848	0.33	0.0000000	0.00	0.844091	0.10	0.0000458	55.41	0.0000000	0.00	69.8924	0.04	0.0001636	54.57	233.4978	0.14	102.29417	0.31	0.0000000	0.00	0.0424247	9.65
20F24377	17.0 %		0.0120960	2.47	0.0000000	0.00	0.0052498	0.90	0.0000000	0.00	19.422034	0.88	0.0022801	2.48	0.0000000	0.00	0.081366	0.17	0.0034960	9.67	0.0000000	0.00	6.7373	0.15	0.0124787	1.27	17.9390	0.52	3.61139	2.47	0.0000000	0.00	0.0040895	9.65
20F24379	17.0 %		0.0399800	0.99	0.0000000	0.00	0.0002264	15.87	0.0000000	0.00	0.837769	15.87	0.0075362	1.00	0.0000000	0.00	1.154741	0.10	0.0001508	18.56	0.0000000	0.00	95.6149	0.04	0.0005383	15.90	332.0430	0.04	11.93644	1.00	0.0000000	0.00	0.0580382	9.65
20F24380	17.0 %		0.0553882	0.82	0.0000000	0.00	0.0001139	32.02	0.0000000	0.00	0.421429	32.02	0.0104407	0.84	0.0000000	0.00	0.652174	0.10	0.0000759	33.44	0.0000000	0.00	54.0013	0.05	0.0002708	32.03	180.0082	0.08	16.53670	0.83	0.0000000	0.00	0.0327788	9.65
		Σ	1.3946792	0.16	0.0000000	0.00	0.0144559	1.37	0.0000124	56.63	53.481103	1.37	0.2628970	0.17	0.0000000	0.00	20.196251	0.02	0.0096266	4.97	0.0530485	56.63	1672.2904	0.01	0.0343616	1.45	5445.8483	0.01	416.39544	0.16	0.0000000	0.00	1.0150803	2.20
		Σ							1.4091476	0.16	53.481103	1.37									20.521823	0.15			1672.3247	0.01							5863.2588	0.02

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F24337	17.0 %		6.229453	0.015098	0.016085	0.035416	0.004645	0.000081	143.507	17.064788	1.00101398	8.831E-13
20F24338	17.0 %	✓	3.426542	0.001495	0.005033	0.001319	0.000551	0.000004	143.512	17.066661	1.00101402	1.280E-11
20F24340	17.0 %		3.746961	0.001975	0.178180	0.003307	0.002532	0.000013	143.525	17.070875	1.00101411	5.518E-12
20F24341	17.0 %	✓	3.356343	0.001473	0.003570	0.001331	0.000326	0.000004	143.531	17.072748	1.00101415	1.255E-11
20F24343	17.0 %	✓	3.378109	0.001437	0.004716	0.000829	0.000392	0.000003	143.542	17.076730	1.00101423	1.982E-11
20F24344	17.0 %	✓	3.400069	0.001518	0.006494	0.001444	0.000342	0.000004	143.549	17.078838	1.00101428	1.129E-11
20F24347	17.0 %		9.701914	0.011801	1.870481	0.017869	0.017147	0.000073	143.567	17.084930	1.00101440	2.994E-12
20F24349	17.0 %		3.249213	0.001433	0.005561	0.001504	0.000270	0.000003	143.578	17.088914	1.00101449	1.094E-11
20F24350	17.0 %		2.714325	0.001801	0.034111	0.005285	0.000981	0.000013	143.584	17.090790	1.00101453	2.530E-12
20F24352	17.0 %	✓	3.317341	0.001463	0.002167	0.001367	0.000195	0.000003	143.596	17.094775	1.00101461	1.193E-11
20F24353	17.0 %	✓	3.316384	0.001747	0.003282	0.003493	0.000185	0.000006	143.602	17.096886	1.00101465	4.806E-12
20F24356	17.0 %	✓	3.702921	0.001602	0.005241	0.000997	0.001480	0.000006	143.620	17.102984	1.00101478	1.784E-11
20F24358	17.0 %		3.100370	0.001519	0.025716	0.002605	0.000736	0.000007	143.632	17.106973	1.00101486	5.947E-12
20F24361	17.0 %	✓	3.311751	0.001614	0.002081	0.002533	0.000169	0.000005	143.650	17.113075	1.00101499	6.619E-12
20F24362	17.0 %	✓	3.392048	0.001576	0.004152	0.001765	0.000401	0.000005	143.656	17.114953	1.00101503	9.079E-12
20F24364	17.0 %	✓	3.383924	0.001605	0.003657	0.002345	0.000412	0.000006	143.667	17.118944	1.00101511	7.152E-12
20F24365	17.0 %	✓	3.297608	0.001559	0.005116	0.002294	0.000097	0.000004	143.674	17.121058	1.00101516	7.066E-12
20F24367	17.0 %		3.451028	0.001946	0.005316	0.003864	0.000394	0.000008	143.685	17.125051	1.00101524	4.277E-12
20F24368	17.0 %	✓	3.506304	0.001992	0.006663	0.004257	0.000739	0.000011	143.692	17.127165	1.00101529	4.030E-12
20F24370	17.0 %	✓	3.376496	0.001968	0.006722	0.004319	0.000386	0.000008	143.703	17.131159	1.00101537	3.996E-12
20F24371	17.0 %	✓	3.496697	0.002010	0.005097	0.004511	0.000810	0.000010	143.709	17.133039	1.00101541	3.931E-12
20F24373	17.0 %		3.437593	0.002066	0.010966	0.005132	0.000294	0.000010	143.722	17.137270	1.00101550	3.331E-12
20F24374	17.0 %	✓	3.340977	0.001643	0.009635	0.002632	0.000282	0.000005	143.727	17.139150	1.00101554	6.444E-12
20F24376	17.0 %		4.805005	0.002203	0.003644	0.001988	0.004903	0.000014	143.739	17.143147	1.00101562	1.189E-11
20F24377	17.0 %		3.193382	0.005850	2.877448	0.025640	0.002570	0.000044	143.745	17.145264	1.00101566	7.630E-13
20F24379	17.0 %		3.598137	0.001585	0.008762	0.001391	0.000421	0.000004	143.757	17.149262	1.00101575	1.218E-11
20F24380	17.0 %		3.640222	0.001779	0.007804	0.002499	0.001028	0.000008	143.763	17.151379	1.00101579	6.959E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F24337	17.0 %	0.0046953 ±0.0001822	0.0128161 ±0.0062347	0.0024456 ±0.0071244	0.0126469 ±0.0060184	1.1465155 ±0.0162592
20F24338	17.0 %	0.0046953 ±0.0001822	0.0128161 ±0.0062347	0.0024456 ±0.0071244	0.0126469 ±0.0060184	1.1465155 ±0.0162592
20F24340	17.0 %	0.0051804 ±0.0001882	0.0257454 ±0.0054170	0.0134858 ±0.0066273	0.0158484 ±0.0066602	1.0369783 ±0.0157735
20F24341	17.0 %	0.0051804 ±0.0001882	0.0257454 ±0.0054170	0.0134858 ±0.0066273	0.0158484 ±0.0066602	1.0369783 ±0.0157735
20F24343	17.0 %	0.0042311 ±0.0001542	0.0192645 ±0.0057873	0.0145373 ±0.0061349	0.0140171 ±0.0061090	0.9661140 ±0.0161930
20F24344	17.0 %	0.0042311 ±0.0001542	0.0192645 ±0.0057873	0.0145373 ±0.0061349	0.0140171 ±0.0061090	0.9661140 ±0.0161930
20F24347	17.0 %	0.0039234 ±0.0001577	0.0197470 ±0.0058848	0.0036581 ±0.0063697	0.0064677 ±0.0059604	1.0321581 ±0.0151579
20F24349	17.0 %	0.0049542 ±0.0001470	0.0126457 ±0.0057735	0.0141630 ±0.0060484	0.0167842 ±0.0058851	1.0277911 ±0.0153487
20F24350	17.0 %	0.0049542 ±0.0001470	0.0126457 ±0.0057735	0.0141630 ±0.0060484	0.0167842 ±0.0058851	1.0277911 ±0.0153487
20F24352	17.0 %	0.0043921 ±0.0001502	0.0172070 ±0.0060374	0.0104461 ±0.0067478	0.0179329 ±0.0066231	1.0476278 ±0.0148815
20F24353	17.0 %	0.0043921 ±0.0001502	0.0172070 ±0.0060374	0.0104461 ±0.0067478	0.0179329 ±0.0066231	1.0476278 ±0.0148815
20F24356	17.0 %	0.0048215 ±0.0001345	0.0238864 ±0.0059427	0.0066199 ±0.0063572	0.0290622 ±0.0064256	1.0557522 ±0.0149447
20F24358	17.0 %	0.0040749 ±0.0001567	0.0270036 ±0.0055987	0.0013508 ±0.0064263	0.0009460 ±0.0061446	0.9584636 ±0.0141133
20F24361	17.0 %	0.0042311 ±0.0001542	0.0192645 ±0.0057873	0.0145373 ±0.0061349	0.0140171 ±0.0061090	0.9661140 ±0.0161930
20F24362	17.0 %	0.0042311 ±0.0001542	0.0192645 ±0.0057873	0.0145373 ±0.0061349	0.0140171 ±0.0061090	0.9661140 ±0.0161930
20F24364	17.0 %	0.0039234 ±0.0001577	0.0197470 ±0.0058848	0.0036581 ±0.0063697	0.0064677 ±0.0059604	1.0321581 ±0.0151579
20F24365	17.0 %	0.0039234 ±0.0001577	0.0197470 ±0.0058848	0.0036581 ±0.0063697	0.0064677 ±0.0059604	1.0321581 ±0.0151579
20F24367	17.0 %	0.0049542 ±0.0001470	0.0126457 ±0.0057735	0.0141630 ±0.0060484	0.0167842 ±0.0058851	1.0277911 ±0.0153487
20F24368	17.0 %	0.0049542 ±0.0001470	0.0126457 ±0.0057735	0.0141630 ±0.0060484	0.0167842 ±0.0058851	1.0277911 ±0.0153487
20F24370	17.0 %	0.0043921 ±0.0001502	0.0172070 ±0.0060374	0.0104461 ±0.0067478	0.0179329 ±0.0066231	1.0476278 ±0.0148815
20F24371	17.0 %	0.0043921 ±0.0001502	0.0172070 ±0.0060374	0.0104461 ±0.0067478	0.0179329 ±0.0066231	1.0476278 ±0.0148815
20F24373	17.0 %	0.0048215 ±0.0001345	0.0238864 ±0.0059427	0.0066199 ±0.0063572	0.0290622 ±0.0064256	1.0557522 ±0.0149447
20F24374	17.0 %	0.0048215 ±0.0001345	0.0238864 ±0.0059427	0.0066199 ±0.0063572	0.0290622 ±0.0064256	1.0557522 ±0.0149447
20F24376	17.0 %	0.0058533 ±0.0001652	0.0135420 ±0.0058628	0.0011246 ±0.0063730	0.0133599 ±0.0064014	1.4484951 ±0.0161359
20F24377	17.0 %	0.0058533 ±0.0001652	0.0135420 ±0.0058628	0.0011246 ±0.0063730	0.0133599 ±0.0064014	1.4484951 ±0.0161359
20F24379	17.0 %	0.0040749 ±0.0001567	0.0270036 ±0.0055987	0.0013508 ±0.0064263	0.0009460 ±0.0061446	0.9584636 ±0.0141133
20F24380	17.0 %	0.0040749 ±0.0001567	0.0270036 ±0.0055987	0.0013508 ±0.0064263	0.0009460 ±0.0061446	0.9584636 ±0.0141133

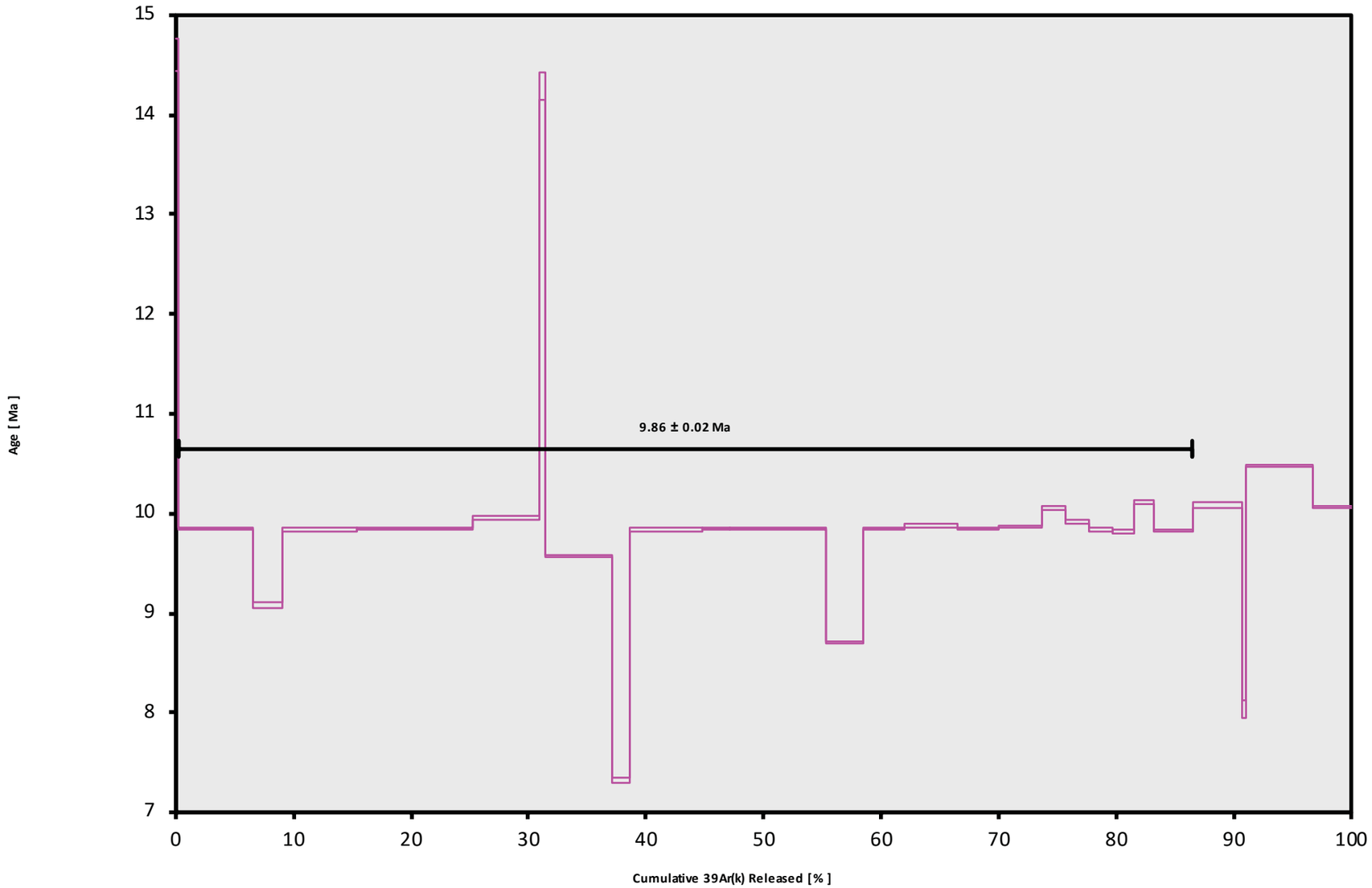
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F24337	17.0 %	0.0229002 ±0.0002532	0.7526	EXP 149 of 150	0.0090404 ±0.0054993	0.0117	EXP 150 of 150	0.0538925 ±0.0063002	0.0077	EXP 149 of 150	4.013448 ±0.006435	0.9495	EXP 150 of 150	26.09173 ±0.01647	0.9870	EXP 150 of 150
20F24338	17.0 %	0.0616052 ±0.0003939	0.4833	EXP 150 of 150	0.0183170 ±0.0052587	0.0204	EXP 147 of 150	1.2794475 ±0.0067767	0.8028	EXP 150 of 150	105.442195 ±0.013099	0.9999	EXP 148 of 150	362.73015 ±0.02793	0.9999	EXP 148 of 150
20F24340	17.0 %	0.1082636 ±0.0004418	0.4205	EXP 148 of 150	0.4086090 ±0.0056770	0.3854	EXP 150 of 150	0.5108883 ±0.0066038	0.3970	EXP 150 of 150	41.578383 ±0.010210	0.9994	EXP 147 of 150	156.91020 ±0.02080	0.9996	EXP 147 of 150
20F24341	17.0 %	0.0389382 ±0.0003517	0.7994	EXP 150 of 150	0.0036439 ±0.0062080	0.0015	EXP 150 of 150	1.2695769 ±0.0073221	0.7463	EXP 150 of 150	105.586957 ±0.012985	0.9999	EXP 146 of 150	355.68853 ±0.03125	0.9999	EXP 150 of 150
20F24343	17.0 %	0.0677670 ±0.0004302	0.6716	EXP 148 of 150	0.0265202 ±0.0055857	0.0001	EXP 149 of 150	2.0123474 ±0.0074476	0.8867	EXP 150 of 150	165.582290 ±0.017379	0.9999	EXP 150 of 150	560.77690 ±0.03565	0.9999	EXP 150 of 150
20F24344	17.0 %	0.0356274 ±0.0003079	0.8623	EXP 150 of 150	0.0164001 ±0.0054156	0.0234	EXP 149 of 150	1.1406295 ±0.0063413	0.7684	EXP 150 of 150	93.689437 ±0.013198	0.9998	EXP 150 of 150	319.75549 ±0.03034	0.9999	EXP 150 of 150
20F24347	17.0 %	0.1502378 ±0.0005221	0.7602	EXP 149 of 150	0.9351035 ±0.0055637	0.7665	EXP 150 of 150	0.1318488 ±0.0060180	0.0605	EXP 150 of 150	8.717213 ±0.007552	0.9907	EXP 150 of 150	85.61909 ±0.02138	0.9977	EXP 150 of 150
20F24349	17.0 %	0.0300886 ±0.0002775	0.8545	EXP 150 of 150	0.0183217 ±0.0060671	0.0000	EXP 150 of 150	1.1403635 ±0.0072166	0.7322	EXP 149 of 150	95.058427 ±0.012105	0.9999	EXP 149 of 150	310.11615 ±0.02839	0.9999	EXP 150 of 150
20F24350	17.0 %	0.0302417 ±0.0003060	0.6880	EXP 150 of 150	0.0399232 ±0.0057414	0.0053	EXP 150 of 150	0.3202118 ±0.0067518	0.1905	EXP 150 of 150	26.323155 ±0.009268	0.9987	EXP 150 of 150	72.49608 ±0.01699	0.9968	EXP 149 of 150
20F24352	17.0 %	0.0238230 ±0.0002852	0.8819	EXP 150 of 150	0.0043258 ±0.0054382	0.0000	EXP 148 of 150	1.2022454 ±0.0064565	0.7831	EXP 150 of 150	101.528747 ±0.013504	0.9998	EXP 149 of 150	338.09662 ±0.02824	0.9999	EXP 149 of 150
20F24353	17.0 %	0.0118157 ±0.0001861	0.9342	EXP 150 of 150	0.0093462 ±0.0057915	0.0052	EXP 150 of 150	0.4792048 ±0.0066658	0.3618	EXP 150 of 150	40.919892 ±0.009560	0.9995	EXP 149 of 150	136.81628 ±0.01961	0.9996	EXP 149 of 150
20F24356	17.0 %	0.2019167 ±0.0006458	0.6754	EXP 148 of 150	0.0178208 ±0.0052548	0.0002	EXP 150 of 150	1.6601112 ±0.0064132	0.8787	EXP 148 of 150	135.972290 ±0.017481	0.9998	EXP 150 of 150	504.89583 ±0.03110	1.0000	EXP 150 of 150
20F24358	17.0 %	0.0431237 ±0.0003484	0.5137	EXP 150 of 150	0.0544758 ±0.0060536	0.0209	EXP 150 of 150	0.6460986 ±0.0066574	0.5045	EXP 150 of 150	54.135825 ±0.010963	0.9996	EXP 150 of 150	168.94766 ±0.02095	0.9997	EXP 150 of 150
20F24361	17.0 %	0.0135545 ±0.0002199	0.9108	EXP 149 of 150	0.0123959 ±0.0060340	0.0007	EXP 150 of 150	0.6747563 ±0.0061695	0.5843	EXP 149 of 150	56.418287 ±0.011068	0.9996	EXP 149 of 150	187.93116 ±0.02365	0.9997	EXP 150 of 150
20F24362	17.0 %	0.0338832 ±0.0003149	0.7866	EXP 150 of 150	0.0009160 ±0.0052302	0.0017	EXP 150 of 150	0.8977549 ±0.0063939	0.6564	EXP 150 of 150	75.551876 ±0.012859	0.9997	EXP 150 of 150	257.42481 ±0.02878	0.9998	EXP 150 of 150
20F24364	17.0 %	0.0279763 ±0.0002871	0.8014	EXP 150 of 150	0.0069872 ±0.0056829	0.0020	EXP 150 of 150	0.7047838 ±0.0062575	0.5052	EXP 150 of 150	59.658458 ±0.010777	0.9997	EXP 150 of 150	203.07167 ±0.02302	0.9998	EXP 148 of 150
20F24365	17.0 %	0.0096778 ±0.0002004	0.9441	EXP 148 of 150	0.0016515 ±0.0055826	0.0012	EXP 149 of 150	0.7263725 ±0.0068599	0.5405	EXP 149 of 150	60.484167 ±0.010322	0.9997	EXP 149 of 150	200.64347 ±0.02476	0.9998	EXP 148 of 150
20F24367	17.0 %	0.0184630 ±0.0002248	0.8525	EXP 150 of 150	0.0017723 ±0.0053972	0.0082	EXP 150 of 150	0.4160759 ±0.0061514	0.3501	EXP 148 of 150	34.997698 ±0.009827	0.9992	EXP 150 of 150	121.85661 ±0.02124	0.9993	EXP 150 of 150
20F24368	17.0 %	0.0284331 ±0.0002992	0.7179	EXP 150 of 150	0.0000096 ±0.0056417	0.0081	EXP 149 of 150	0.3832349 ±0.0069473	0.1416	EXP 146 of 150	32.455675 ±0.008722	0.9993	EXP 149 of 150	114.87083 ±0.02149	0.9992	EXP 150 of 150
20F24370	17.0 %	0.0170150 ±0.0001954	0.9070	EXP 147 of 150	0.0040864 ±0.0058835	0.0134	EXP 149 of 150	0.3948580 ±0.0060250	0.2315	EXP 150 of 150	33.415686 ±0.009855	0.9992	EXP 150 of 150	113.91656 ±0.02032	0.9992	EXP 150 of 150
20F24371	17.0 %	0.0295627 ±0.0002533	0.7389	EXP 150 of 150	0.0077559 ±0.0057905	0.0050	EXP 150 of 150	0.3760071 ±0.0064002	0.2714	EXP 149 of 150	31.750009 ±0.008801	0.9993	EXP 148 of 150	112.10500 ±0.01870	0.9994	EXP 146 of 150
20F24373	17.0 %	0.0126964 ±0.0002323	0.8737	EXP 150 of 150	0.0063640 ±0.0056502	0.0000	EXP 150 of 150	0.3277465 ±0.0068468	0.2352	EXP 150 of 150	27.379125 ±0.007708	0.9992	EXP 150 of 150	95.15882 ±0.01827	0.9990	EXP 149 of 150
20F24374	17.0 %	0.0198741 ±0.0002308	0.8857	EXP 148 of 150	0.0067523 ±0.0058915	0.0248	EXP 150 of 150	0.6421879 ±0.0065917	0.4812	EXP 149 of 150	54.465499 ±0.010817	0.9996	EXP 150 of 150	183.09043 ±0.02441	0.9997	EXP 150 of 150
20F24376	17.0 %	0.3412562 ±0.0007904	0.9287	EXP 150 of 150	0.0013186 ±0.0056010	0.0003	EXP 149 of 150	0.9052596 ±0.0068070	0.6320	EXP 150 of 150	69.843068 ±0.011775	0.9997	EXP 150 of 150	337.28288 ±0.02911	0.9999	EXP 149 of 150
20F24377	17.0 %	0.0228300 ±0.0002356	0.7904	EXP 150 of 150	1.1196409 ±0.0064615	0.7583	EXP 150 of 150	0.0725183 ±0.0067717	0.0003	EXP 150 of 150	6.757028 ±0.006962	0.9859	EXP 150 of 150	23.00301 ±0.01758	0.9866	EXP 150 of 150
20F24379	17.0 %	0.0434260 ±0.0003471	0.7387	EXP 149 of 150	0.0218648 ±0.0053640	0.0134	EXP 150 of 150	1.1382043 ±0.0066556	0.7394	EXP 150 of 150	95.530321 ±0.012811	0.9998	EXP 150 of 150	344.99593 ±0.02775	0.9999	EXP 150 of 150
20F24380	17.0 %	0.0583962 ±0.0004051	0.3132	EXP 150 of 150	0.0024241 ±0.0055310	0.0001	EXP 150 of 150	0.6616919 ±0.0064407	0.5389	EXP 150 of 150	53.953908 ±0.010837	0.9996	EXP 150 of 150	197.53619 ±0.02537	0.9997	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F24337	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24338	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24340	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24341	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24343	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24344	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24347	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24349	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24350	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24352	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24353	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24356	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24358	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24361	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24362	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24364	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24365	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24367	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24368	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24370	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24371	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24373	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24374	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24376	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24377	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24379	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01
20F24380	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	7.23	Oregon\Swenton (20-01)	20F24333	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F24337	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	2	41	1
20F24338	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	2	49	1
20F24340	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	3	7	1
20F24341	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	3	15	1
20F24343	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	3	32	1
20F24344	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	3	41	1
20F24347	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	4	7	1
20F24349	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	4	24	1
20F24350	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	4	32	1
20F24352	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	4	49	1
20F24353	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	4	58	1
20F24356	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	5	24	1
20F24358	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	5	41	1
20F24361	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	6	7	1
20F24362	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	6	15	1
20F24364	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	6	32	1
20F24365	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	6	41	1
20F24367	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	6	58	1
20F24368	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	7	7	1
20F24370	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	7	24	1
20F24371	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	7	32	1
20F24373	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	7	50	1
20F24374	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	7	58	1
20F24376	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	8	15	1
20F24377	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	8	24	1
20F24379	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	8	41	1
20F24380	17.0 %	EJ-12-21B	Sanidine	Rhyolite Dome	FCT-NM (1D7-20)	28.201	0.082	Kuiper et al (2008)	9.38852	0.072	0.00165367	0.072	298.423	0.124	1.0001149	0.041	1	3.54E-14	7	SEP	2020	8	50	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F24337	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24338	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24340	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24341	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24343	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24344	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24347	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24349	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24350	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24352	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24353	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24356	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24358	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24361	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24362	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24364	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24365	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24367	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24368	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24370	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24371	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24373	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24374	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24376	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24377	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24379	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24380	17.0%	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F24333.AGE >>> EJ-12-21B >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.86 ± 0.02
TOTAL FUSION
9.83 ± 0.01
NORMAL ISOCHRON
9.86 ± 0.03
INVERSE ISOCHRON
9.86 ± 0.03

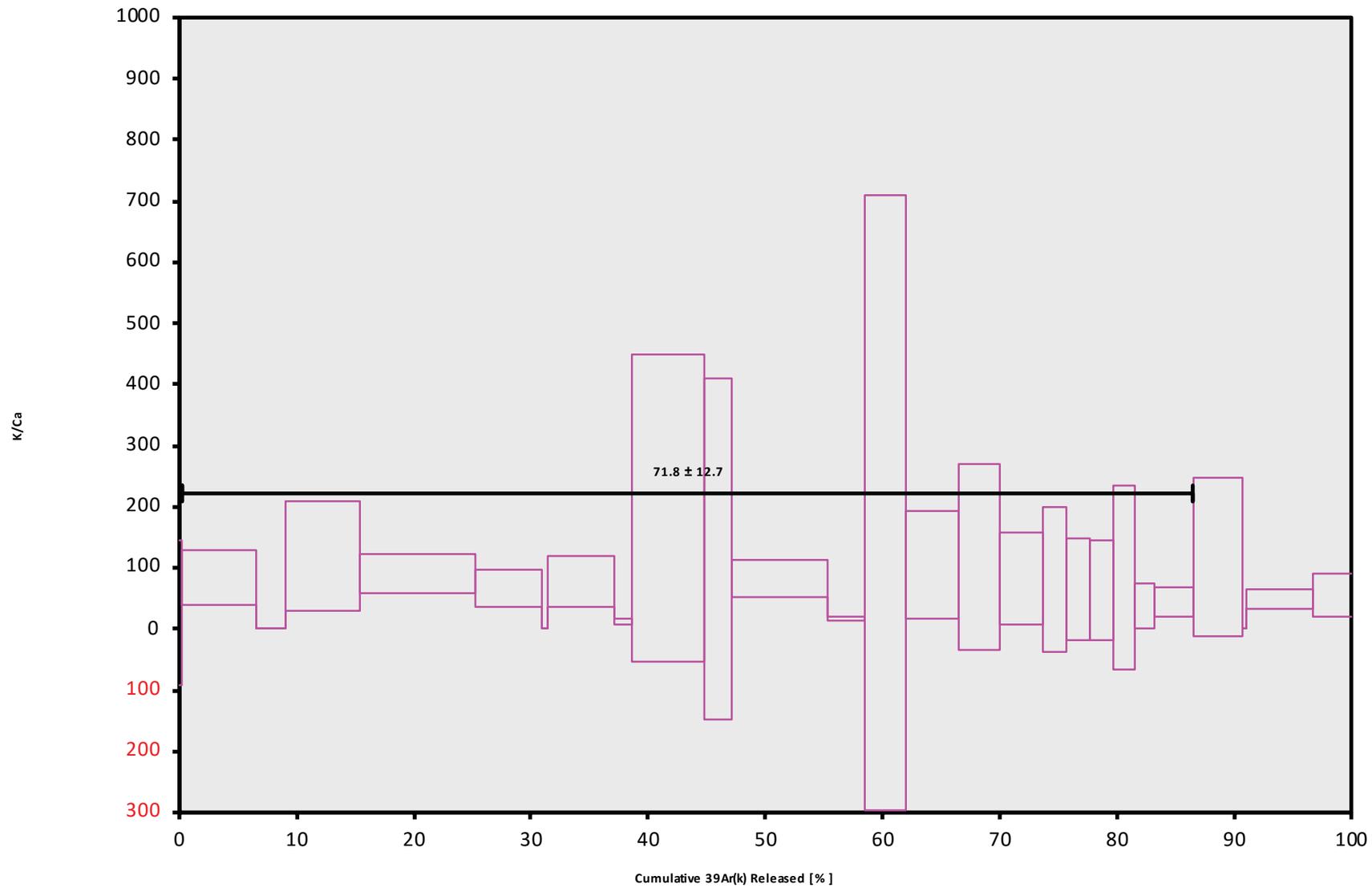
MSWD (PROBABILITY)
30.48 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D7-20)

20F24333.AGE >>> EJ-12-21B >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

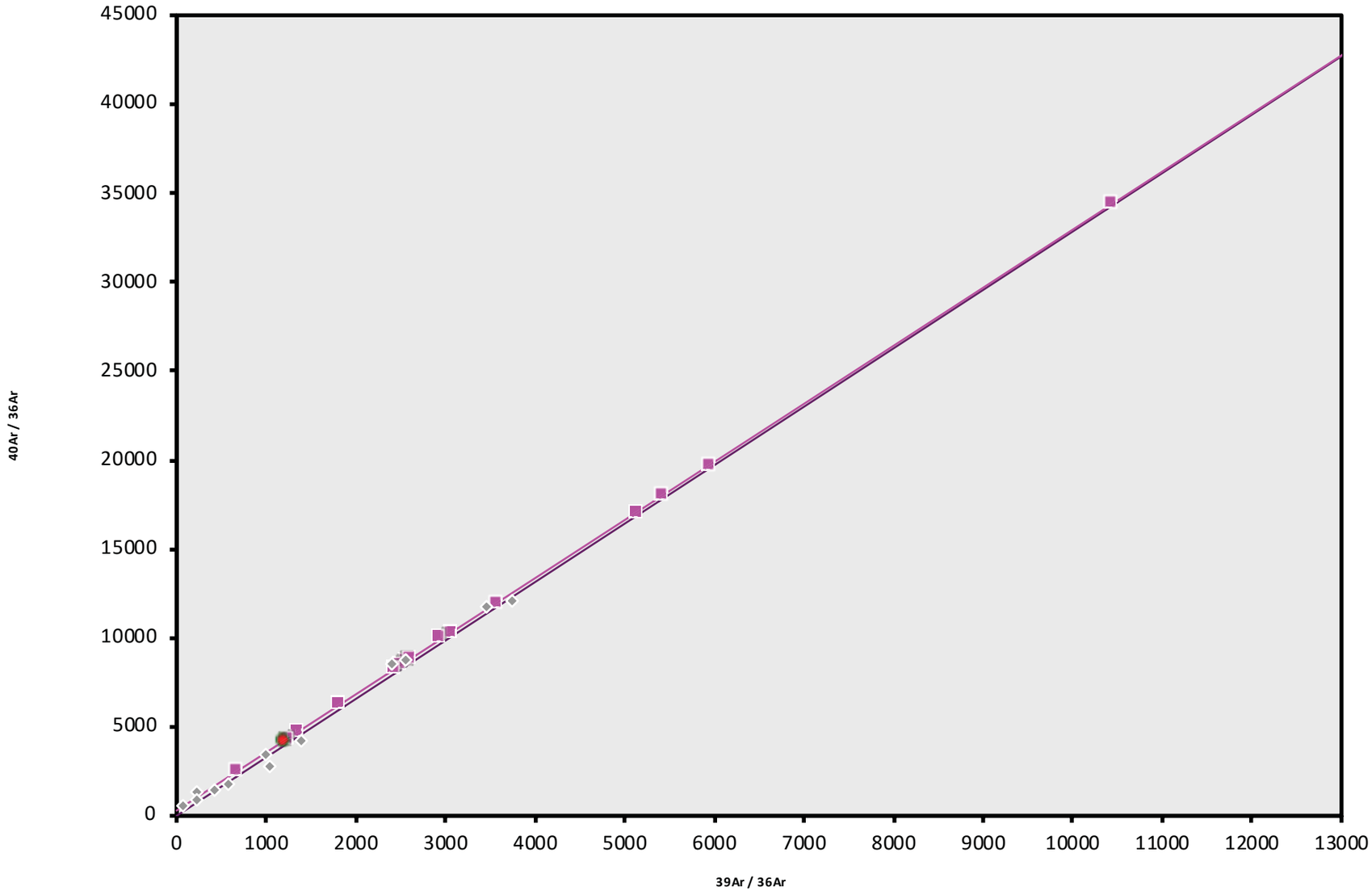
WEIGHTED PLATEAU
9.86 ± 0.02
TOTAL FUSION
9.83 ± 0.01
NORMAL ISOCHRON
9.86 ± 0.03
INVERSE ISOCHRON
9.86 ± 0.03

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D7-20)

20F24333.AGE >>> EJ-12-21B >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.86 ± 0.02
TOTAL FUSION
9.83 ± 0.01
NORMAL ISOCHRON
9.86 ± 0.03
INVERSE ISOCHRON
9.86 ± 0.03

MSWD (PROBABILITY)
27.84 (0%)

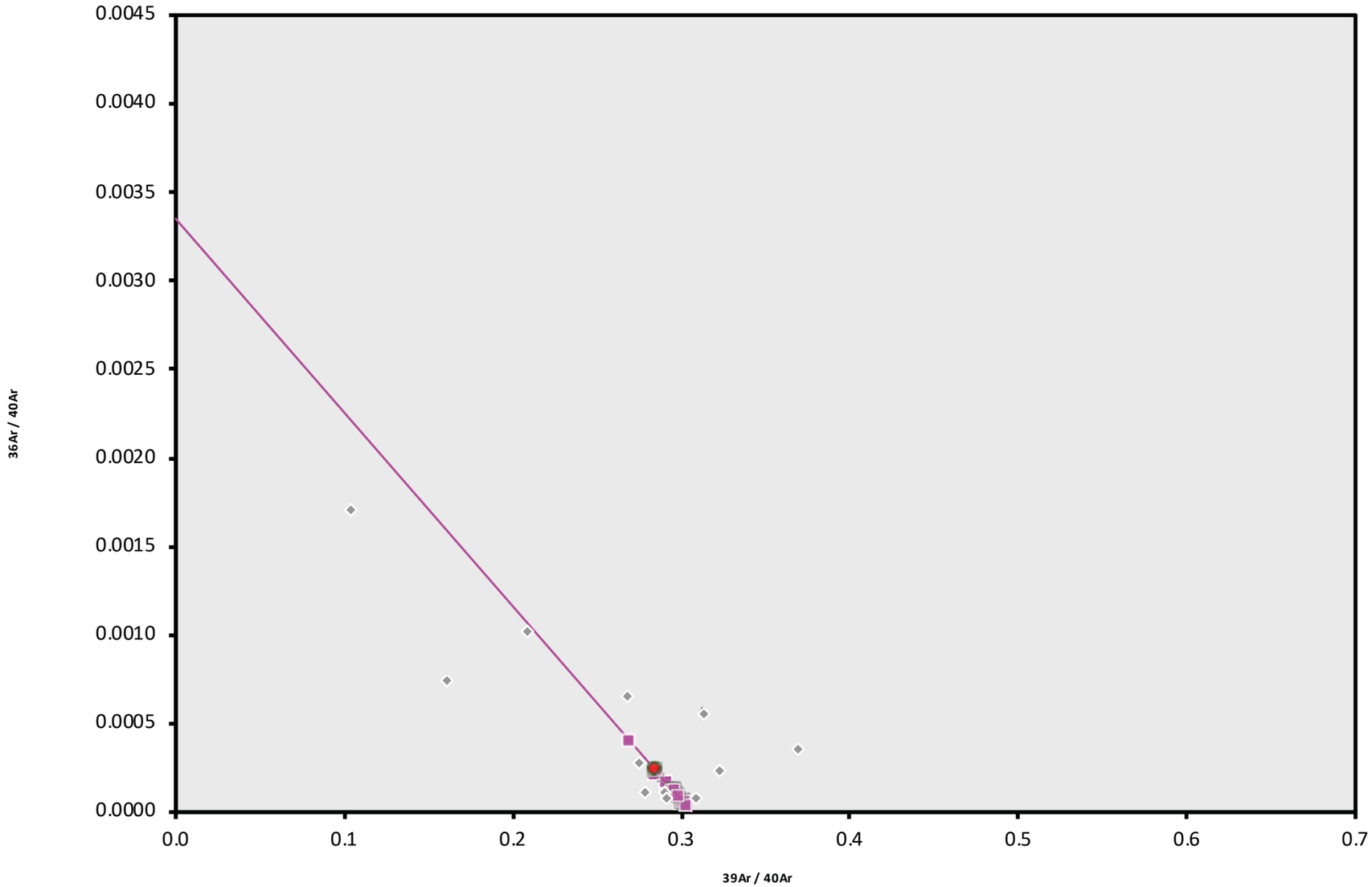
40AR/36AR INTERCEPT
296.4 ± 18.1

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D7-20)

20F24333.AGE >>> EJ-12-21B >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.86 ± 0.02
TOTAL FUSION
9.83 ± 0.01
NORMAL ISOCHRON
9.86 ± 0.03
INVERSE ISOCHRON
9.86 ± 0.03

MSWD (PROBABILITY)
33.23 (0%)

SPREADING FACTOR

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D7-20)

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F24408	17.0 %	✓	0.0667979	5.212872	0.0000000	522.2796	1986.145	11.47 ±0.01	98.99	6.02	43.1 ±2.4
20F24409	17.0 %	✓	0.0696440	4.404803	0.0000000	390.0447	1483.366	11.47 ±0.01	98.60	4.49	38.1 ±2.5
20F24411	17.0 %	✓	0.1600070	2.516951	0.0000000	226.0216	857.199	11.44 ±0.01	94.71	2.60	38.6 ±4.4
20F24412	17.0 %	✓	0.1235059	6.628888	0.0000000	622.0978	2365.990	11.48 ±0.01	98.45	7.17	40.4 ±1.8
20F24414	17.0 %	✓	0.1738437	2.821869	0.0000000	256.7186	975.847	11.47 ±0.01	94.94	2.96	39.1 ±3.8
20F24415	17.0 %	✓	0.0877170	5.207265	0.0000000	426.1318	1621.329	11.48 ±0.01	98.39	4.91	35.2 ±1.9
20F24417	17.0 %		0.5815648	3.446172	0.0000000	267.2334	1009.409	11.40 ±0.02	85.31	3.08	33.3 ±2.6
20F24418	17.0 %	✓	0.0201808	3.006477	0.0000000	214.2713	813.207	11.45 ±0.01	99.25	2.47	30.6 ±2.8
20F24420	17.0 %	✓	0.0254179	3.931605	0.0000000	351.3015	1335.846	11.47 ±0.01	99.42	4.05	38.4 ±2.8
20F24421	17.0 %	✓	0.0474947	2.478483	0.0000000	243.0396	923.804	11.47 ±0.01	98.47	2.80	42.2 ±4.8
20F24423	17.0 %	✓	0.0361800	5.621411	0.0000000	566.7324	2152.559	11.46 ±0.01	99.48	6.53	43.4 ±2.2
20F24424	17.0 %	✓	0.0522726	4.155443	0.0000000	382.2263	1452.462	11.47 ±0.01	98.92	4.40	39.6 ±2.5
20F24426	17.0 %	✓	0.1014715	3.216682	0.0000000	295.3559	1122.526	11.47 ±0.01	97.36	3.40	39.5 ±3.4
20F24427	17.0 %	✓	0.2536855	4.618584	0.0000000	465.6167	1769.035	11.46 ±0.01	95.88	5.36	43.3 ±2.6
20F24429	17.0 %	✓	0.3011303	3.544280	0.0000000	323.1390	1229.018	11.48 ±0.01	93.17	3.72	39.2 ±3.1
20F24430	17.0 %	✓	0.0332544	4.981806	0.0000000	481.2608	1828.136	11.46 ±0.01	99.44	5.54	41.5 ±2.4
20F24432	17.0 %	✓	0.0408903	4.672838	0.0000000	374.2993	1421.576	11.46 ±0.01	99.13	4.31	34.4 ±2.1
20F24433	17.0 %	✓	0.1553000	5.919705	0.0000000	510.1601	1939.494	11.47 ±0.01	97.65	5.88	37.1 ±1.7
20F24435	17.0 %	✓	0.0084563	1.761904	0.0005414	141.0744	535.281	11.45 ±0.01	99.51	1.63	34.4 ±5.3
20F24436	17.0 %	✓	0.0369522	1.556192	0.0000000	162.7708	617.416	11.45 ±0.01	98.23	1.88	45.0 ±7.6
20F24438	17.0 %	✓	0.1791718	3.975679	0.0000000	351.3020	1335.585	11.47 ±0.01	96.13	4.05	38.0 ±2.7
20F24439	17.0 %	✓	0.0326021	2.617545	0.0000000	250.8298	952.741	11.46 ±0.01	98.97	2.89	41.2 ±4.3
20F24441	17.0 %		0.5818004	2.207186	0.0085109	246.1031	857.079	10.51 ±0.02	83.14	2.84	47.9 ±5.8
20F24442	17.0 %		0.0569606	1.810127	0.0298137	147.7712	570.733	11.65 ±0.01	97.09	1.70	35.1 ±4.8
20F24444	17.0 %		0.0294478	0.693623	0.0000000	83.5536	274.806	9.93 ±0.01	96.88	0.96	51.8 ±20.5
20F24445	17.0 %	✓	0.0012844	0.318212	0.0000000	30.2598	114.869	11.45 ±0.02	100.32	0.35	40.9 ±38.8
20F24447	17.0 %	✓	0.0271532	1.233916	0.0000000	125.7368	476.347	11.43 ±0.01	98.31	1.45	43.8 ±9.6
20F24448	17.0 %	✓	0.0298482	1.046434	0.0000000	105.2364	398.853	11.44 ±0.01	97.80	1.21	43.2 ±11.1
20F24450	17.0 %	✓	0.0004772	0.056236	0.0000000	13.6129	51.856	11.49 ±0.04	99.71	0.16	104.1 ±545.0
20F24451	17.0 %	✓	0.0016990	1.023687	0.0000000	104.1103	395.110	11.45 ±0.01	100.11	1.20	43.7 ±11.4
		Σ	3.3102447	94.686873	0.0388660	8680.2914	32867.624				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **MS-13-10**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1D8-20)**
J = **0.00165353 ±0.00000119**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k)	±2σ	Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.79899	±0.00167	**11.46**	**±0.02**	5.46	91.42	38.8 ±1.3
Error Mean		±0.04%		**±0.15%**	0%	26	
			Full External Error	±0.60	1.57	2σ Confidence Limit	
			Analytical Error	±0.01	2.3371	Error Magnification	
Total Fusion Age	3.78647	±0.00073	**11.43**	**±0.02**		30	39.4 ±0.6
		±0.02%		**±0.14%**			
			Full External Error	±0.59			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F24408	17.0 %	✓	7818.80	±128.00	30032.19	±491.00	0.9986
20F24409	17.0 %	✓	5600.55	±88.23	21597.83	±339.77	0.9985
20F24411	17.0 %	✓	1412.57	±12.80	5655.82	±51.02	0.9954
20F24412	17.0 %	✓	5036.99	±52.52	19455.45	±202.16	0.9966
20F24414	17.0 %	✓	1476.72	±13.20	5911.92	±52.59	0.9952
20F24415	17.0 %	✓	4858.03	±66.75	18782.20	±257.59	0.9980
20F24417	17.0 %		459.51	±2.55	2034.24	±11.14	0.9877
20F24418	17.0 %	✓	10617.58	±383.95	40594.63	±1467.55	0.9997
20F24420	17.0 %	✓	13821.03	±487.86	52853.90	±1865.10	0.9997
20F24421	17.0 %	✓	5117.20	±104.12	19749.25	±401.46	0.9991
20F24423	17.0 %	✓	15664.25	±419.20	59794.41	±1599.38	0.9995
20F24424	17.0 %	✓	7312.17	±134.31	28084.86	±515.30	0.9989
20F24426	17.0 %	✓	2910.73	±34.51	11361.04	±134.33	0.9973
20F24427	17.0 %	✓	1835.41	±13.88	7271.90	±54.62	0.9935
20F24429	17.0 %	✓	1073.09	±7.03	4379.91	±28.43	0.9913
20F24430	17.0 %	✓	14472.09	±451.71	55272.78	±1724.55	0.9996
20F24432	17.0 %	✓	9153.74	±207.91	35064.18	±795.86	0.9993
20F24433	17.0 %	✓	3285.00	±31.63	12787.25	±122.65	0.9960
20F24435	17.0 %	✓	16682.81	±1493.60	63598.43	±5693.67	1.0000
20F24436	17.0 %	✓	4404.91	±98.30	17007.10	±379.26	0.9992
20F24438	17.0 %	✓	1960.70	±17.19	7752.78	±67.64	0.9951
20F24439	17.0 %	✓	7693.66	±207.34	29521.83	±795.20	0.9995
20F24441	17.0 %		423.00	±2.24	1771.71	±9.25	0.9863
20F24442	17.0 %		2594.27	±43.72	10318.34	±173.66	0.9986
20F24444	17.0 %		2837.34	±72.98	9630.53	±247.56	0.9993
20F24445	17.0 %	✓	23558.76	±10327.74	89133.08	±39074.26	1.0000
20F24447	17.0 %	✓	4630.64	±138.76	17841.49	±534.40	0.9996
20F24448	17.0 %	✓	3525.72	±90.84	13661.26	±351.78	0.9994
20F24450	17.0 %	✓	28524.81	±31616.42	108958.66	±120767.84	1.0000
20F24451	17.0 %	✓	61278.24	±20904.33	232258.94	±79232.08	1.0000

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**303.21**	**±7.65**	3.79726	±0.00260	**11.46**	**±0.02**	5.81
Error Chron		**±2.52%**		±0.07%		**±0.16%**	0%
					Full External Error	±0.59	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.58	Convergence	0.000000112183
	Error Magnification	2.4113	Number of Iterations	1
	Number of Data Points	26	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F24408	17.0 %	✓	0.2603473	±0.0002230	0.00003330	±0.00000054	0.0003
20F24409	17.0 %	✓	0.2593107	±0.0002234	0.00004630	±0.00000073	0.0005
20F24411	17.0 %	✓	0.2497558	±0.0002173	0.00017681	±0.00000159	0.0012
20F24412	17.0 %	✓	0.2588984	±0.0002220	0.00005140	±0.00000053	0.0005
20F24414	17.0 %	✓	0.2497871	±0.0002177	0.00016915	±0.00000150	0.0015
20F24415	17.0 %	✓	0.2586508	±0.0002224	0.00005324	±0.00000073	0.0006
20F24417	17.0 %		0.2258869	±0.0001960	0.00049158	±0.00000269	0.0016
20F24418	17.0 %	✓	0.2615513	±0.0002280	0.00002463	±0.00000089	0.0004
20F24420	17.0 %	✓	0.2614950	±0.0002260	0.00001892	±0.00000067	0.0002
20F24421	17.0 %	✓	0.2591085	±0.0002254	0.00005063	±0.00000103	0.0005
20F24423	17.0 %	✓	0.2619685	±0.0002247	0.00001672	±0.00000045	0.0003
20F24424	17.0 %	✓	0.2603600	±0.0002241	0.00003561	±0.00000065	0.0004
20F24426	17.0 %	✓	0.2562028	±0.0002219	0.00008802	±0.00000104	0.0009
20F24427	17.0 %	✓	0.2523976	±0.0002167	0.00013752	±0.00000103	0.0009
20F24429	17.0 %	✓	0.2450021	±0.0002114	0.00022832	±0.00000148	0.0016
20F24430	17.0 %	✓	0.2618303	±0.0002252	0.00001809	±0.00000056	0.0002
20F24432	17.0 %	✓	0.2610568	±0.0002251	0.00002852	±0.00000065	0.0003
20F24433	17.0 %	✓	0.2568962	±0.0002204	0.00007820	±0.00000075	0.0007
20F24435	17.0 %	✓	0.2623148	±0.0002333	0.00001572	±0.00000141	0.0002
20F24436	17.0 %	✓	0.2590040	±0.0002303	0.00005880	±0.00000131	0.0009
20F24438	17.0 %	✓	0.2529030	±0.0002189	0.00012899	±0.00000113	0.0010
20F24439	17.0 %	✓	0.2606093	±0.0002274	0.00003387	±0.00000091	0.0005
20F24441	17.0 %		0.2387539	±0.0002082	0.00056443	±0.00000295	0.0022
20F24442	17.0 %		0.2514232	±0.0002244	0.00009691	±0.00000163	0.0012
20F24444	17.0 %		0.2946195	±0.0002748	0.00010384	±0.00000267	0.0018
20F24445	17.0 %	✓	0.2643100	±0.0003225	0.00001122	±0.00000492	0.0004
20F24447	17.0 %	✓	0.2595433	±0.0002328	0.00005605	±0.00000168	0.0009
20F24448	17.0 %	✓	0.2580816	±0.0002347	0.00007320	±0.00000188	0.0013
20F24450	17.0 %	✓	0.2617948	±0.0004886	0.00000918	±0.00001017	0.0004
20F24451	17.0 %	✓	0.2638359	±0.0002388	0.00000431	±0.00000147	0.0001

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**300.98**	**±7.45**	3.79840	±0.00253	**11.46**	**±0.02**	5.60
Error Chron		**±2.48%**		±0.07%		**±0.16%**	0%
					Full External Error	±0.60	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.58	Convergence	0.0003187423
	Error Magnification	2.3669	Number of Iterations	2
	Number of Data Points	26	Calculated Line	Weighted York-2
	Spreading Factor	7.3%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F24408	17.0%	✓	0.0667979	0.82	0.0000000	0.00	0.0014090	2.76	0.0000000	0.00	5.212872	2.76	0.0125914	0.83	0.0000000	0.00	6.30757	0.10	0.0009383	10.02	0.0000000	0.00	522.2796	0.04	0.0033493	2.90	1986.145	0.01	19.94319	0.82	0.0000000	0.00	0.3170237	9.65
20F24409	17.0%	✓	0.0696440	0.79	0.0000000	0.00	0.0011906	3.35	0.0000000	0.00	4.404803	3.34	0.0131279	0.80	0.0000000	0.00	4.71057	0.10	0.0007929	10.19	0.0000000	0.00	390.0447	0.04	0.0028301	3.47	1483.366	0.01	20.79292	0.79	0.0000000	0.00	0.2367571	9.65
20F24411	17.0%	✓	0.1600070	0.45	0.0000000	0.00	0.0006803	5.67	0.0000000	0.00	2.516951	5.66	0.0301613	0.48	0.0000000	0.00	2.72966	0.10	0.0004531	11.17	0.0000000	0.00	226.0216	0.04	0.0016171	5.74	857.199	0.03	47.77170	0.46	0.0000000	0.00	0.1371951	9.65
20F24412	17.0%	✓	0.1235059	0.52	0.0000000	0.00	0.0017918	2.20	0.0000000	0.00	6.628888	2.19	0.0232809	0.54	0.0000000	0.00	7.51307	0.10	0.0011932	9.88	0.0000000	0.00	622.0978	0.04	0.0042591	2.37	2365.990	0.01	36.87393	0.53	0.0000000	0.00	0.3776134	9.65
20F24414	17.0%	✓	0.1738437	0.44	0.0000000	0.00	0.0007628	4.87	0.0000000	0.00	2.821869	4.87	0.0327695	0.47	0.0000000	0.00	3.10039	0.10	0.0005079	10.79	0.0000000	0.00	256.7186	0.04	0.0018131	4.95	975.847	0.02	51.90278	0.46	0.0000000	0.00	0.1558282	9.65
20F24415	17.0%	✓	0.0877170	0.69	0.0000000	0.00	0.0014075	2.70	0.0000000	0.00	5.207265	2.69	0.0165346	0.70	0.0000000	0.00	5.14639	0.10	0.0009373	10.00	0.0000000	0.00	426.1318	0.04	0.0033457	2.84	1621.329	0.01	26.18877	0.69	0.0000000	0.00	0.2586620	9.65
20F24417	17.0%		0.5815648	0.27	0.0000000	0.00	0.0009315	3.97	0.0000000	0.00	3.446172	3.97	0.1096250	0.32	0.0000000	0.00	3.22738	0.10	0.0006203	10.42	0.0000000	0.00	267.2334	0.04	0.0022142	4.08	1009.409	0.05	173.63197	0.29	0.0000000	0.00	0.1622107	9.65
20F24418	17.0%	✓	0.0201808	1.81	0.0000000	0.00	0.0008127	4.58	0.0000000	0.00	3.006477	4.58	0.0038041	1.81	0.0000000	0.00	2.58775	0.10	0.0005412	10.66	0.0000000	0.00	214.2713	0.04	0.0019317	4.67	813.207	0.01	6.02518	1.81	0.0000000	0.00	0.1300627	9.65
20F24420	17.0%	✓	0.0254179	1.76	0.0000000	0.00	0.0010627	3.68	0.0000000	0.00	3.931605	3.68	0.0047913	1.77	0.0000000	0.00	4.24267	0.10	0.0007077	10.31	0.0000000	0.00	351.3015	0.04	0.0025261	3.79	1335.846	0.01	7.58877	1.77	0.0000000	0.00	0.2132400	9.65
20F24421	17.0%	✓	0.0474947	1.02	0.0000000	0.00	0.0006699	5.75	0.0000000	0.00	2.478483	5.74	0.0089527	1.03	0.0000000	0.00	2.93519	0.10	0.0004461	11.21	0.0000000	0.00	243.0396	0.04	0.0015924	5.82	923.804	0.02	14.18000	1.02	0.0000000	0.00	0.1475250	9.65
20F24423	17.0%	✓	0.0361800	1.34	0.0000000	0.00	0.0015195	2.59	0.0000000	0.00	5.621411	2.58	0.0068199	1.35	0.0000000	0.00	6.84443	0.10	0.0010119	9.97	0.0000000	0.00	566.7324	0.04	0.0036118	2.74	2152.559	0.01	10.80190	1.34	0.0000000	0.00	0.3440066	9.65
20F24424	17.0%	✓	0.0522726	0.92	0.0000000	0.00	0.0011232	3.12	0.0000000	0.00	4.155443	3.11	0.0098534	0.93	0.0000000	0.00	4.61615	0.10	0.0007480	10.12	0.0000000	0.00	382.2263	0.04	0.0026699	3.24	1452.462	0.01	15.60651	0.92	0.0000000	0.00	0.2320114	9.65
20F24426	17.0%	✓	0.1014715	0.59	0.0000000	0.00	0.0008695	4.36	0.0000000	0.00	3.216682	4.36	0.0191274	0.61	0.0000000	0.00	3.56701	0.10	0.0005790	10.57	0.0000000	0.00	295.3559	0.04	0.0020667	4.46	1122.526	0.02	30.29532	0.60	0.0000000	0.00	0.1792810	9.65
20F24427	17.0%	✓	0.2536855	0.38	0.0000000	0.00	0.0012484	3.01	0.0000000	0.00	4.618584	3.00	0.0478197	0.41	0.0000000	0.00	5.62325	0.10	0.0008313	10.09	0.0000000	0.00	465.6167	0.04	0.0029674	3.14	1769.035	0.02	75.74035	0.39	0.0000000	0.00	0.2826293	9.65
20F24429	17.0%	✓	0.3011303	0.32	0.0000000	0.00	0.0009580	3.99	0.0000000	0.00	3.544280	3.99	0.0567631	0.36	0.0000000	0.00	3.90255	0.10	0.0006380	10.42	0.0000000	0.00	323.1390	0.04	0.0022772	4.09	1229.018	0.03	89.90545	0.34	0.0000000	0.00	0.1961454	9.65
20F24430	17.0%	✓	0.0332544	1.56	0.0000000	0.00	0.0013466	2.90	0.0000000	0.00	4.981806	2.89	0.0062685	1.57	0.0000000	0.00	5.81219	0.10	0.0008967	10.05	0.0000000	0.00	481.2608	0.04	0.0032008	3.03	1828.136	0.01	9.92844	1.56	0.0000000	0.00	0.2921253	9.65
20F24432	17.0%	✓	0.0408903	1.13	0.0000000	0.00	0.0012631	3.08	0.0000000	0.00	4.672838	3.07	0.0077078	1.15	0.0000000	0.00	4.52041	0.10	0.0008411	10.11	0.0000000	0.00	374.2993	0.04	0.0030023	3.21	1421.576	0.01	12.20821	1.14	0.0000000	0.00	0.2271997	9.65
20F24433	17.0%	✓	0.1553000	0.48	0.0000000	0.00	0.0016001	2.24	0.0000000	0.00	5.919705	2.23	0.0292741	0.51	0.0000000	0.00	6.16120	0.10	0.0010655	9.88	0.0000000	0.00	510.1601	0.04	0.0038034	2.41	1939.494	0.01	46.36638	0.49	0.0000000	0.00	0.3096672	9.65
20F24435	17.0%	✓	0.0084563	4.48	0.0000000	0.00	0.0004762	7.70	0.0000001	#######	1.761904	7.70	0.0015940	4.48	0.0000000	0.00	1.70376	0.10	0.0003171	12.33	0.0005414	#######	141.0744	0.04	0.0011320	7.75	535.281	0.02	2.52471	4.48	0.0000000	0.00	0.0856322	9.65
20F24436	17.0%	✓	0.0369522	1.11	0.0000000	0.00	0.0004206	8.40	0.0000000	0.00	1.556192	8.40	0.0069655	1.13	0.0000000	0.00	1.96578	0.10	0.0002801	12.78	0.0000000	0.00	162.7708	0.04	0.0009999	8.45	617.416	0.02	11.03243	1.12	0.0000000	0.00	0.0988019	9.65
20F24438	17.0%	✓	0.1791718	0.44	0.0000000	0.00	0.0010746	3.60	0.0000000	0.00	3.975679	3.59	0.0337739	0.46	0.0000000	0.00	4.24267	0.10	0.0007156	10.28	0.0000000	0.00	351.3020	0.04	0.0025544	3.71	1335.585	0.02	53.49352	0.45	0.0000000	0.00	0.2132403	9.65
20F24439	17.0%	✓	0.0326021	1.35	0.0000000	0.00	0.0007075	5.25	0.0000000	0.00	2.617545	5.25	0.0061455	1.36	0.0000000	0.00	3.02927	0.10	0.0004712	10.97	0.0000000	0.00	250.8298	0.04	0.0016818	5.33	952.741	0.01	9.73369	1.35	0.0000000	0.00	0.1522537	9.65
20F24441	17.0%		0.5818004	0.26	0.0000000	0.00	0.0005966	6.06	0.0000020	148.79	2.207186	6.06	0.1096694	0.31	0.0000000	0.00	2.97219	0.10	0.0003973	11.38	0.0085109	148.79	246.1031	0.04	0.0014181	6.13	857.079	0.06	173.70233	0.28	0.0000000	0.00	0.1493846	9.65
20F24442	17.0%		0.0569606	0.84	0.0000000	0.00	0.0004893	6.90	0.0000070	36.91	1.810127	6.90	0.0107371	0.86	0.0000000	0.00	1.78463	0.10	0.0003258	11.85	0.0298137	36.92	147.7712	0.04	0.0011630	6.96	570.733	0.03	17.00616	0.85	0.0000000	0.00	0.0896971	9.65
20F24444	17.0%		0.0294478	1.29	0.0000000	0.00	0.0001875	19.77	0.0000000	0.00	0.693623	19.77	0.0055509	1.30	0.0000000	0.00	1.00908	0.10	0.0001249	21.99	0.0000000	0.00	83.5536	0.05	0.0004457	19.79	274.806	0.04	8.79195	1.29	0.0000000	0.00	0.0507170	9.65
20F24445	17.0%	✓	0.0012844	21.92	0.0000000	0.00	0.0000860	47.44	0.0000000	0.00	0.318212	47.44	0.0002421	21.92	0.0000000	0.00	0.36545	0.11	0.0000573	48.41	0.0000000	0.00	30.2598	0.06	0.0002045	47.45	114.869	0.08	0.38348	21.92	0.0000000	0.00	0.0183677	9.65
20F24447	17.0%	✓	0.0271532	1.50	0.0000000	0.00	0.0003335	10.98	0.0000000	0.00	1.233916	10.98	0.0051184	1.51	0.0000000	0.00	1.51852	0.10	0.0002221	14.60	0.0000000	0.00	125.7368	0.04	0.0007928	11.01	476.347	0.03	8.10687	1.50	0.0000000	0.00	0.0763222	9.65
20F24448	17.0%	✓	0.0298482	1.29	0.0000000	0.00	0.0002829	12.87	0.0000000	0.00	1.046434	12.87	0.0056264	1.30	0.0000000	0.00	1.27094	0.10	0.0001884	16.07	0.0000000	0.00	105.2364	0.04	0.0006723	12.90	398.853	0.03	8.91148	1.29	0.0000000	0.00	0.0638785	9.65
20F24450	17.0%	✓	0.0004772	55.42	0.0000000	0.00	0.0000152	261.81	0.0000000	0.00	0.056236	261.81	0.0000900	55.42	0.0000000	0.00	0.16440	0.12	0.0000101	261.99	0.0000000	0.00	13.6129	0.08	0.0000361	261.82	51.856	0.16	0.14248	55.42	0.0000000	0.00	0.0082630	9.65
20F24451	17.0%	✓	0.0016990	17.06	0.0000000	0.00	0.0002767	13.01	0.0000000	0.00	1.023687	13.00	0.0003203	17.06	0.0000000	0.00	1.25734	0.10	0.0001843	16.18	0.0000000	0.00	104.1103	0.04	0.0006577	13.04	395.110	0.02	0.50725	17.06	0.0000000	0.00	0.0631950	9.65
		Σ	3.3102447	0.11	0.0000000	0.00	0.0255939	0.81	0.0000091	50.94	94.686873	0.81	0.6239811	0.12	0.0000000	0.00	104.83188	0.02	0.0170436	2.16	0.0388660	50.95	8680.2914	0.01	0.0608363	0.83	32867.624	0.00	988.30666	0.12	0.0000000	0.00	5.2689369	2.01
		Σ							3.3358477	0.11	94.686873	0.81									105.51177	0.03			8680.3522	0.01							33861.200	0.00

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F24408	17.0 %	✓	3.841605	0.001644	0.009981	0.000275	0.000131	0.000001	143.887	17.193543	1.00101667	7.103E-11
20F24409	17.0 %	✓	3.856956	0.001661	0.011293	0.000377	0.000182	0.000001	143.894	17.195665	1.00101671	5.326E-11
20F24411	17.0 %	✓	4.004489	0.001741	0.011136	0.000631	0.000711	0.000003	143.906	17.199675	1.00101680	3.204E-11
20F24412	17.0 %	✓	3.863099	0.001655	0.010656	0.000233	0.000201	0.000001	143.912	17.201799	1.00101684	8.507E-11
20F24414	17.0 %	✓	4.003989	0.001743	0.010992	0.000535	0.000680	0.000003	143.924	17.205811	1.00101692	3.639E-11
20F24415	17.0 %	✓	3.866793	0.001662	0.012220	0.000329	0.000209	0.000001	143.930	17.207935	1.00101697	5.833E-11
20F24417	17.0 %		4.427565	0.001920	0.012896	0.000512	0.002180	0.000006	143.942	17.211948	1.00101705	4.189E-11
20F24418	17.0 %	✓	3.823914	0.001666	0.014031	0.000642	0.000098	0.000002	143.947	17.213837	1.00101709	2.901E-11
20F24420	17.0 %	✓	3.824745	0.001652	0.011191	0.000411	0.000075	0.000001	143.959	17.217851	1.00101717	4.757E-11
20F24421	17.0 %	✓	3.859968	0.001678	0.010198	0.000586	0.000198	0.000002	143.965	17.219977	1.00101722	3.321E-11
20F24423	17.0 %	✓	3.817835	0.001637	0.009919	0.000256	0.000067	0.000001	143.977	17.223993	1.00101730	7.660E-11
20F24424	17.0 %	✓	3.841416	0.001652	0.010872	0.000338	0.000140	0.000001	143.983	17.226119	1.00101735	5.198E-11
20F24426	17.0 %	✓	3.903738	0.001690	0.010891	0.000475	0.000346	0.000002	143.995	17.230136	1.00101743	4.082E-11
20F24427	17.0 %	✓	3.962585	0.001700	0.009919	0.000298	0.000548	0.000002	144.001	17.232027	1.00101747	6.532E-11
20F24429	17.0 %	✓	4.082176	0.001760	0.010968	0.000437	0.000935	0.000003	144.013	17.236282	1.00101756	4.670E-11
20F24430	17.0 %	✓	3.819850	0.001642	0.010352	0.000299	0.000072	0.000001	144.019	17.238174	1.00101760	6.508E-11
20F24432	17.0 %	✓	3.831160	0.001651	0.012484	0.000384	0.000113	0.000001	144.031	17.242194	1.00101768	5.076E-11
20F24433	17.0 %	✓	3.893201	0.001669	0.011604	0.000259	0.000308	0.000001	144.037	17.244323	1.00101772	7.031E-11
20F24435	17.0 %	✓	3.812790	0.001695	0.012489	0.000961	0.000063	0.000003	144.049	17.248344	1.00101781	1.904E-11
20F24436	17.0 %	✓	3.861527	0.001716	0.009561	0.000803	0.000230	0.000003	144.055	17.250474	1.00101785	2.225E-11
20F24438	17.0 %	✓	3.954664	0.001710	0.011317	0.000406	0.000513	0.000002	144.067	17.254497	1.00101793	4.918E-11
20F24439	17.0 %	✓	3.837743	0.001673	0.010435	0.000547	0.000133	0.000002	144.072	17.256390	1.00101797	3.408E-11
20F24441	17.0 %		4.188997	0.001825	0.008968	0.000543	0.002366	0.000006	144.085	17.260651	1.00101806	3.649E-11
20F24442	17.0 %		3.977934	0.001774	0.012249	0.000845	0.000389	0.000003	144.090	17.262545	1.00101810	2.081E-11
20F24444	17.0 %		3.394797	0.001582	0.008301	0.001641	0.000355	0.000005	144.102	17.266571	1.00101818	1.004E-11
20F24445	17.0 %	✓	3.784018	0.002308	0.010516	0.004989	0.000040	0.000009	144.108	17.268703	1.00101823	4.053E-12
20F24447	17.0 %	✓	3.853505	0.001727	0.009813	0.001077	0.000219	0.000003	144.120	17.272730	1.00101831	1.715E-11
20F24448	17.0 %	✓	3.875326	0.001761	0.009944	0.001280	0.000286	0.000004	144.126	17.274863	1.00101836	1.444E-11
20F24450	17.0 %	✓	3.820382	0.003564	0.004131	0.010816	0.000036	0.000019	144.138	17.278891	1.00101844	1.841E-12
20F24451	17.0 %	✓	3.790818	0.001715	0.009833	0.001279	0.000014	0.000003	144.144	17.280787	1.00101848	1.397E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F24408	17.0 %	0.0053474 ±0.0001878	0.0162563 ±0.0057620	0.0027093 ±0.0061707	0.0419785 ±0.0065337	1.2895048 ±0.0146347
20F24409	17.0 %	0.0053474 ±0.0001878	0.0162563 ±0.0057620	0.0027093 ±0.0061707	0.0419785 ±0.0065337	1.2895048 ±0.0146347
20F24411	17.0 %	0.0049819 ±0.0002188	0.0100769 ±0.0060596	0.0037068 ±0.0059309	0.0430573 ±0.0056629	1.2543838 ±0.0144582
20F24412	17.0 %	0.0049819 ±0.0002188	0.0100769 ±0.0060596	0.0037068 ±0.0059309	0.0430573 ±0.0056629	1.2543838 ±0.0144582
20F24414	17.0 %	0.0070925 ±0.0002079	0.0250801 ±0.0055857	0.0022622 ±0.0065911	0.0363265 ±0.0059265	1.7478428 ±0.0152044
20F24415	17.0 %	0.0070925 ±0.0002079	0.0250801 ±0.0055857	0.0022622 ±0.0065911	0.0363265 ±0.0059265	1.7478428 ±0.0152044
20F24417	17.0 %	0.0049060 ±0.0001679	0.0171799 ±0.0048260	0.0066610 ±0.0062697	0.0194516 ±0.0063220	1.2099745 ±0.0166535
20F24418	17.0 %	0.0049060 ±0.0001679	0.0171799 ±0.0048260	0.0066610 ±0.0062697	0.0194516 ±0.0063220	1.2099745 ±0.0166535
20F24420	17.0 %	0.0071377 ±0.0001987	0.0125243 ±0.0058198	0.0145232 ±0.0061572	0.0077370 ±0.0055440	1.6840691 ±0.0154606
20F24421	17.0 %	0.0071377 ±0.0001987	0.0125243 ±0.0058198	0.0145232 ±0.0061572	0.0077370 ±0.0055440	1.6840691 ±0.0154606
20F24423	17.0 %	0.0049541 ±0.0001666	0.0153587 ±0.0056169	0.0033892 ±0.0068226	0.1218942 ±0.0062865	1.6739017 ±0.0130660
20F24424	17.0 %	0.0049541 ±0.0001666	0.0153587 ±0.0056169	0.0033892 ±0.0068226	0.1218942 ±0.0062865	1.6739017 ±0.0130660
20F24426	17.0 %	0.0048678 ±0.0001934	0.0172305 ±0.0054158	0.0035814 ±0.0066920	0.1282346 ±0.0067679	1.8435037 ±0.0160803
20F24427	17.0 %	0.0048678 ±0.0001934	0.0172305 ±0.0054158	0.0035814 ±0.0066920	0.1282346 ±0.0067679	1.8435037 ±0.0160803
20F24429	17.0 %	0.0054558 ±0.0002062	0.0175532 ±0.0057440	0.0032088 ±0.0070776	0.0387352 ±0.0066300	1.3811736 ±0.0155653
20F24430	17.0 %	0.0054558 ±0.0002062	0.0175532 ±0.0057440	0.0032088 ±0.0070776	0.0387352 ±0.0066300	1.3811736 ±0.0155653
20F24432	17.0 %	0.0047147 ±0.0001800	0.0165787 ±0.0055600	0.0073589 ±0.0069045	0.0224121 ±0.0061025	1.1291683 ±0.0149212
20F24433	17.0 %	0.0047147 ±0.0001800	0.0165787 ±0.0055600	0.0073589 ±0.0069045	0.0224121 ±0.0061025	1.1291683 ±0.0149212
20F24435	17.0 %	0.0049113 ±0.0001893	0.0204595 ±0.0051889	0.0129138 ±0.0067254	0.0238152 ±0.0062507	1.2162792 ±0.0154866
20F24436	17.0 %	0.0049113 ±0.0001893	0.0204595 ±0.0051889	0.0129138 ±0.0067254	0.0238152 ±0.0062507	1.2162792 ±0.0154866
20F24438	17.0 %	0.0056003 ±0.0001955	0.0146377 ±0.0058815	0.0001294 ±0.0064335	0.0367515 ±0.0062166	1.3645124 ±0.0162838
20F24439	17.0 %	0.0056003 ±0.0001955	0.0146377 ±0.0058815	0.0001294 ±0.0064335	0.0367515 ±0.0062166	1.3645124 ±0.0162838
20F24441	17.0 %	0.0043332 ±0.0001870	0.0163033 ±0.0051569	0.0112890 ±0.0071939	0.0041976 ±0.0059079	1.0517210 ±0.0159272
20F24442	17.0 %	0.0043332 ±0.0001870	0.0163033 ±0.0051569	0.0112890 ±0.0071939	0.0041976 ±0.0059079	1.0517210 ±0.0159272
20F24444	17.0 %	0.0060070 ±0.0001904	0.0166836 ±0.0059526	0.0028617 ±0.0065258	0.0702091 ±0.0064072	1.7609386 ±0.0153393
20F24445	17.0 %	0.0060070 ±0.0001904	0.0166836 ±0.0059526	0.0028617 ±0.0065258	0.0702091 ±0.0064072	1.7609386 ±0.0153393
20F24447	17.0 %	0.0043332 ±0.0001870	0.0163033 ±0.0051569	0.0112890 ±0.0071939	0.0041976 ±0.0059079	1.0517210 ±0.0159272
20F24448	17.0 %	0.0043332 ±0.0001870	0.0163033 ±0.0051569	0.0112890 ±0.0071939	0.0041976 ±0.0059079	1.0517210 ±0.0159272
20F24450	17.0 %	0.0060070 ±0.0001904	0.0166836 ±0.0059526	0.0028617 ±0.0065258	0.0702091 ±0.0064072	1.7609386 ±0.0153393
20F24451	17.0 %	0.0060070 ±0.0001904	0.0166836 ±0.0059526	0.0028617 ±0.0065258	0.0702091 ±0.0064072	1.7609386 ±0.0153393

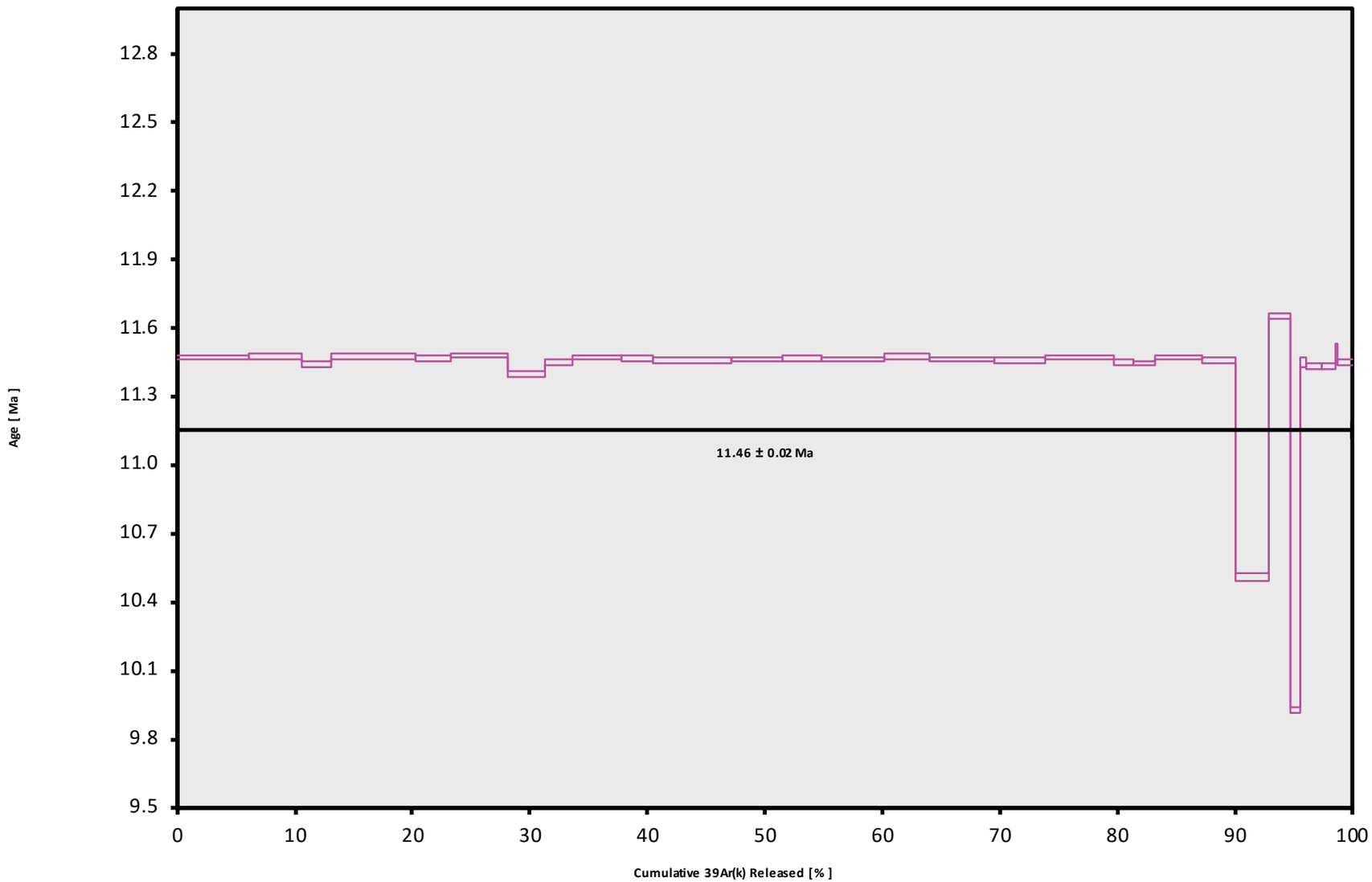
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F24408	17.0 %	0.0721466 ±0.0004862	0.9627	EXP 147 of 150	0.2869010 ±0.0059068	0.1412	EXP 149 of 150	6.2706153 ±0.0079035	0.9852	EXP 150 of 150	521.77704 ±0.02590	1.0000	EXP 150 of 150	2007.69444 ±0.06070	1.0000	EXP 150 of 150
20F24409	17.0 %	0.0747201 ±0.0004870	0.9444	EXP 150 of 150	0.2398757 ±0.0062327	0.1619	EXP 150 of 150	4.7030054 ±0.0067503	0.9802	EXP 145 of 150	389.68026 ±0.02472	1.0000	EXP 150 of 150	1505.68563 ±0.05565	1.0000	EXP 150 of 150
20F24411	17.0 %	0.1623528 ±0.0006156	0.0600	EXP 150 of 150	0.1362455 ±0.0056176	0.0620	EXP 150 of 150	2.7437549 ±0.0067416	0.9439	EXP 150 of 150	225.82913 ±0.01824	0.9999	EXP 150 of 150	906.36194 ±0.04016	1.0000	EXP 147 of 150
20F24412	17.0 %	0.1276936 ±0.0005498	0.9528	EXP 150 of 150	0.3752445 ±0.0056320	0.3245	EXP 150 of 150	7.4810996 ±0.0074123	0.9907	EXP 150 of 150	621.49236 ±0.03380	1.0000	EXP 150 of 150	2404.49607 ±0.07334	1.0000	EXP 150 of 150
20F24414	17.0 %	0.1780952 ±0.0006669	0.0865	EXP 149 of 150	0.1389101 ±0.0056577	0.0588	EXP 150 of 150	3.1119989 ±0.0069015	0.9547	EXP 149 of 150	256.48731 ±0.02107	0.9999	EXP 150 of 150	1029.65332 ±0.05145	1.0000	EXP 148 of 150
20F24415	17.0 %	0.0943775 ±0.0005296	0.9345	EXP 150 of 150	0.2774978 ±0.0057853	0.2242	EXP 149 of 150	5.1151725 ±0.0065509	0.9853	EXP 147 of 150	425.72428 ±0.02440	1.0000	EXP 150 of 150	1649.52424 ±0.06429	1.0000	EXP 150 of 150
20F24417	17.0 %	0.5753799 ±0.0012108	0.9197	EXP 150 of 150	0.1830198 ±0.0062577	0.1041	EXP 148 of 150	3.2951202 ±0.0062282	0.9649	EXP 150 of 150	266.97459 ±0.02079	0.9999	EXP 150 of 150	1184.41282 ±0.04648	1.0000	EXP 150 of 150
20F24418	17.0 %	0.0254662 ±0.0003113	0.9658	EXP 150 of 150	0.1574573 ±0.0063253	0.1618	EXP 146 of 150	2.5808302 ±0.0069602	0.9334	EXP 149 of 150	214.06781 ±0.01737	0.9999	EXP 149 of 150	820.57233 ±0.03911	1.0000	EXP 148 of 150
20F24420	17.0 %	0.0330717 ±0.0003873	0.9713	EXP 149 of 150	0.2157974 ±0.0059697	0.1336	EXP 150 of 150	4.2060160 ±0.0070659	0.9739	EXP 150 of 150	350.94300 ±0.02546	1.0000	EXP 150 of 150	1345.33209 ±0.04751	1.0000	EXP 149 of 150
20F24421	17.0 %	0.0543082 ±0.0004198	0.9286	EXP 150 of 150	0.1313919 ±0.0058398	0.0757	EXP 150 of 150	2.9107632 ±0.0065517	0.9552	EXP 150 of 150	242.79383 ±0.01998	0.9999	EXP 150 of 150	939.81537 ±0.03917	1.0000	EXP 147 of 150
20F24423	17.0 %	0.0418755 ±0.0004375	0.9817	EXP 150 of 150	0.3109794 ±0.0061158	0.2550	EXP 150 of 150	6.8105656 ±0.0072955	0.9894	EXP 150 of 150	566.26300 ±0.03000	1.0000	EXP 150 of 150	2165.37860 ±0.07477	1.0000	EXP 150 of 150
20F24424	17.0 %	0.0572479 ±0.0004287	0.9648	EXP 150 of 150	0.2258463 ±0.0048712	0.2243	EXP 148 of 150	4.5837150 ±0.0071021	0.9767	EXP 150 of 150	381.94965 ±0.02378	1.0000	EXP 150 of 150	1469.97466 ±0.05042	1.0000	EXP 150 of 150
20F24426	17.0 %	0.1050965 ±0.0005268	0.8447	EXP 150 of 150	0.1694400 ±0.0060217	0.0452	EXP 150 of 150	3.5437552 ±0.0061866	0.9723	EXP 145 of 150	295.17610 ±0.02146	1.0000	EXP 149 of 150	1154.84361 ±0.04836	1.0000	EXP 150 of 150
20F24427	17.0 %	0.2545401 ±0.0008078	0.3060	EXP 150 of 150	0.2507658 ±0.0058449	0.1986	EXP 150 of 150	5.6458563 ±0.0076173	0.9833	EXP 150 of 150	465.25903 ±0.02583	1.0000	EXP 150 of 150	1846.90103 ±0.06193	1.0000	EXP 150 of 150
20F24429	17.0 %	0.3013092 ±0.0007875	0.5379	EXP 150 of 150	0.1880552 ±0.0057839	0.1289	EXP 149 of 150	3.9356308 ±0.0063096	0.9766	EXP 148 of 150	322.84075 ±0.02000	1.0000	EXP 147 of 150	1320.50091 ±0.05704	1.0000	EXP 150 of 150
20F24430	17.0 %	0.0393427 ±0.0004592	0.9764	EXP 150 of 150	0.2714163 ±0.0059409	0.1676	EXP 150 of 150	5.7507298 ±0.0069074	0.9857	EXP 150 of 150	480.79741 ±0.02870	1.0000	EXP 150 of 150	1839.73744 ±0.06735	1.0000	EXP 150 of 150
20F24432	17.0 %	0.0459981 ±0.0004096	0.9656	EXP 150 of 150	0.2544059 ±0.0060875	0.1191	EXP 150 of 150	4.4847893 ±0.0061969	0.9822	EXP 150 of 150	373.93164 ±0.02492	1.0000	EXP 149 of 150	1435.14103 ±0.04960	1.0000	EXP 147 of 150
20F24433	17.0 %	0.1583766 ±0.0006561	0.8865	EXP 150 of 150	0.3266711 ±0.0050490	0.2543	EXP 145 of 150	6.1662378 ±0.0069632	0.9881	EXP 148 of 150	509.65060 ±0.02680	1.0000	EXP 150 of 150	1987.29966 ±0.06880	1.0000	EXP 147 of 150
20F24435	17.0 %	0.0136595 ±0.0003163	0.9563	EXP 150 of 150	0.0816794 ±0.0058880	0.0191	EXP 146 of 150	1.6931802 ±0.0067504	0.8631	EXP 149 of 150	140.95121 ±0.01516	0.9999	EXP 150 of 150	539.10775 ±0.03229	0.9999	EXP 150 of 150
20F24436	17.0 %	0.0415127 ±0.0003492	0.9262	EXP 150 of 150	0.0697430 ±0.0055091	0.0020	EXP 150 of 150	1.9500372 ±0.0073451	0.8754	EXP 150 of 150	162.62465 ±0.01799	0.9999	EXP 150 of 150	629.76398 ±0.03750	1.0000	EXP 150 of 150
20F24438	17.0 %	0.1821265 ±0.0006757	0.4322	EXP 150 of 150	0.2157532 ±0.0057360	0.1180	EXP 150 of 150	4.2279681 ±0.0069463	0.9756	EXP 148 of 150	350.97236 ±0.02587	1.0000	EXP 150 of 150	1390.65614 ±0.05427	1.0000	EXP 150 of 150
20F24439	17.0 %	0.0382224 ±0.0003773	0.9522	EXP 150 of 150	0.1370326 ±0.0053178	0.1211	EXP 149 of 150	3.0106838 ±0.0070411	0.9493	EXP 150 of 150	250.60476 ±0.02138	0.9999	EXP 149 of 150	963.99129 ±0.04611	1.0000	EXP 150 of 150
20F24441	17.0 %	0.5747119 ±0.0011124	0.9355	EXP 150 of 150	0.1115578 ±0.0057516	0.0497	EXP 150 of 150	3.0792688 ±0.0068040	0.9561	EXP 149 of 150	245.85022 ±0.02114	0.9999	EXP 150 of 150	1031.98282 ±0.04640	1.0000	EXP 150 of 150
20F24442	17.0 %	0.0606042 ±0.0004185	0.8546	EXP 150 of 150	0.0885448 ±0.0050530	0.0048	EXP 149 of 150	1.8140976 ±0.0068682	0.8817	EXP 150 of 150	147.62130 ±0.01710	0.9999	EXP 150 of 150	588.88034 ±0.03488	1.0000	EXP 150 of 150
20F24444	17.0 %	0.0350307 ±0.0003121	0.8631	EXP 150 of 150	0.0234838 ±0.0052525	0.0013	EXP 148 of 150	1.0041227 ±0.0070659	0.6706	EXP 150 of 150	83.53649 ±0.01216	0.9998	EXP 150 of 150	285.41002 ±0.02469	0.9999	EXP 150 of 150
20F24445	17.0 %	0.0048334 ±0.0001954	0.9547	EXP 149 of 150	0.0017416 ±0.0064008	0.0020	EXP 150 of 150	0.3614481 ±0.0064800	0.2096	EXP 149 of 150	30.29838 ±0.00917	0.9990	EXP 150 of 150	116.26518 ±0.02221	0.9985	EXP 150 of 150
20F24447	17.0 %	0.0312526 ±0.0003468	0.8970	EXP 150 of 150	0.0551268 ±0.0058976	0.0157	EXP 147 of 150	1.5118903 ±0.0064473	0.8432	EXP 150 of 150	125.60967 ±0.01452	0.9999	EXP 149 of 150	485.58208 ±0.03295	0.9999	EXP 150 of 150
20F24448	17.0 %	0.0338423 ±0.0003208	0.8907	EXP 150 of 150	0.0442662 ±0.0058383	0.0215	EXP 150 of 150	1.2552844 ±0.0061516	0.8095	EXP 147 of 150	105.13072 ±0.01354	0.9998	EXP 149 of 150	408.87980 ±0.03050	0.9999	EXP 150 of 150
20F24450	17.0 %	0.0064893 ±0.0001713	0.9524	EXP 150 of 150	0.0134293 ±0.0060959	0.0000	EXP 150 of 150	0.1519041 ±0.0067841	0.0155	EXP 149 of 150	13.66886 ±0.00712	0.9968	EXP 150 of 150	53.76762 ±0.01705	0.8929	EXP 150 of 150
20F24451	17.0 %	0.0046141 ±0.0002075	0.9687	EXP 150 of 150	0.0425488 ±0.0048827	0.0348	EXP 149 of 150	1.2461886 ±0.0070670	0.7714	EXP 149 of 150	104.07177 ±0.01202	0.9999	EXP 148 of 150	396.42669 ±0.03145	0.9999	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F24408	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24409	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24411	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24412	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24414	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24415	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24417	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24418	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24420	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24421	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24423	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24424	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24426	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24427	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24429	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24430	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24432	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24433	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24435	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24436	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24438	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24439	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24441	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24442	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24444	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24445	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24447	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24448	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24450	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01
20F24451	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	8.18	Oregon\Swenton (20-01)	20F24404	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F24408	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	11	49	1
20F24409	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	11	58	1
20F24411	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	12	15	1
20F24412	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	12	24	1
20F24414	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	12	41	1
20F24415	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	12	50	1
20F24417	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	13	7	1
20F24418	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	13	15	1
20F24420	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	13	32	1
20F24421	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	13	41	1
20F24423	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	13	58	1
20F24424	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	14	7	1
20F24426	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	14	24	1
20F24427	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	14	32	1
20F24429	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	14	50	1
20F24430	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	14	58	1
20F24432	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	15	15	1
20F24433	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	15	24	1
20F24435	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	15	41	1
20F24436	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	15	50	1
20F24438	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	16	7	1
20F24439	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	16	15	1
20F24441	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	16	33	1
20F24442	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	16	41	1
20F24444	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	16	58	1
20F24445	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	17	7	1
20F24447	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	17	24	1
20F24448	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	17	33	1
20F24450	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	17	50	1
20F24451	17.0 %	MS-13-10	Sanidine	Rhyolite Dome	FCT-NM (1D8-20)	28.201	0.082	Kuiper et al (2008)	9.38932	0.072	0.00165353	0.072	298.6	0.134	0.9999665	0.042	1	3.54E-14	7	SEP	2020	17	58	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F24408	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24409	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24411	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24412	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24414	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24415	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24417	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24418	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24420	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24421	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24423	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24424	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24426	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24427	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24429	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24430	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24432	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24433	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24435	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24436	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24438	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24439	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24441	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24442	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24444	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24445	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24447	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24448	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24450	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24451	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F24404.AGE >>> MS-13-10 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.46 ± 0.02
TOTAL FUSION
11.43 ± 0.02
NORMAL ISOCHRON
11.46 ± 0.02
INVERSE ISOCHRON
11.46 ± 0.02

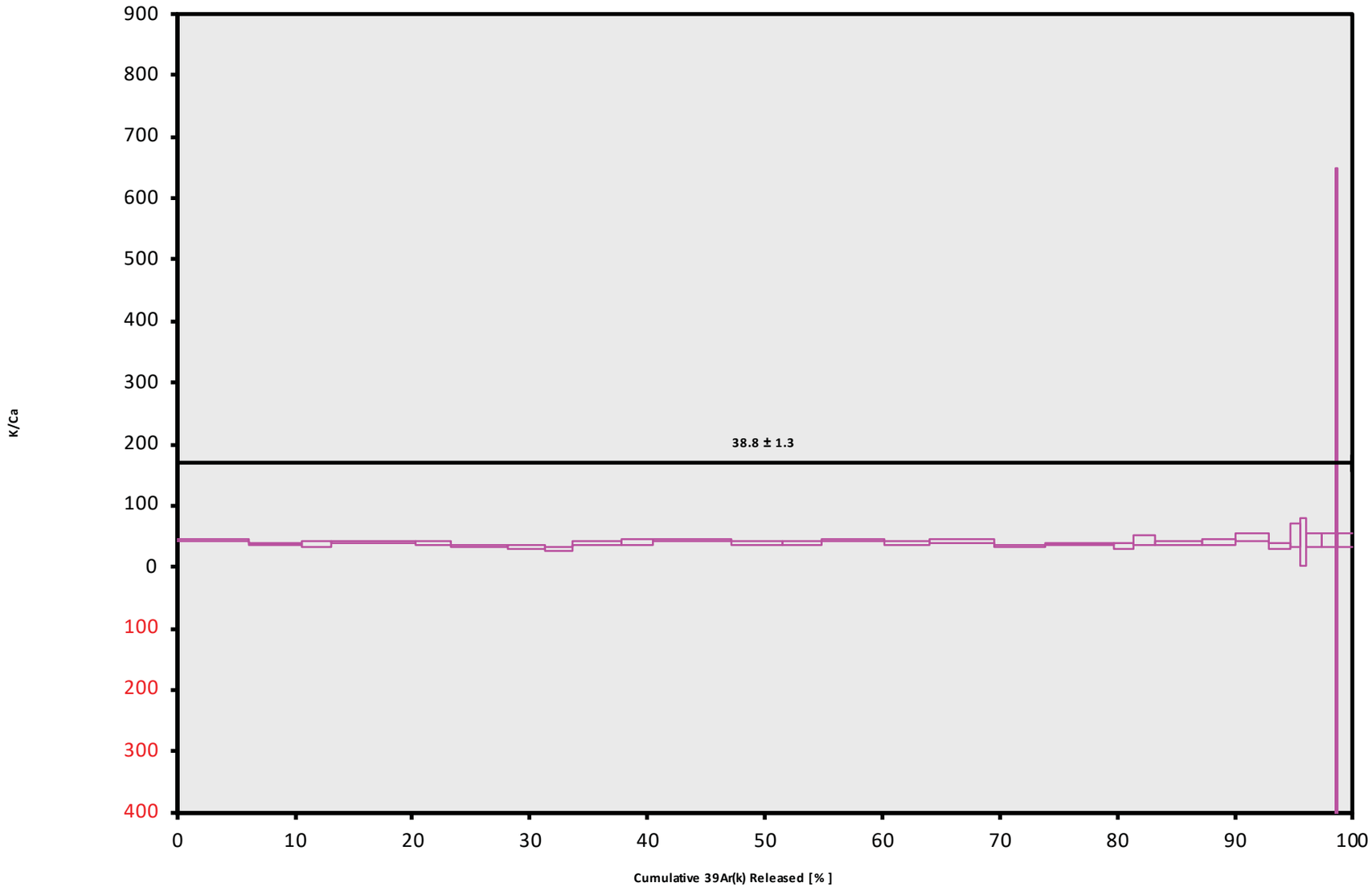
MSWD (PROBABILITY)
5.46 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D8-20)

20F24404.AGE >>> MS-13-10 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

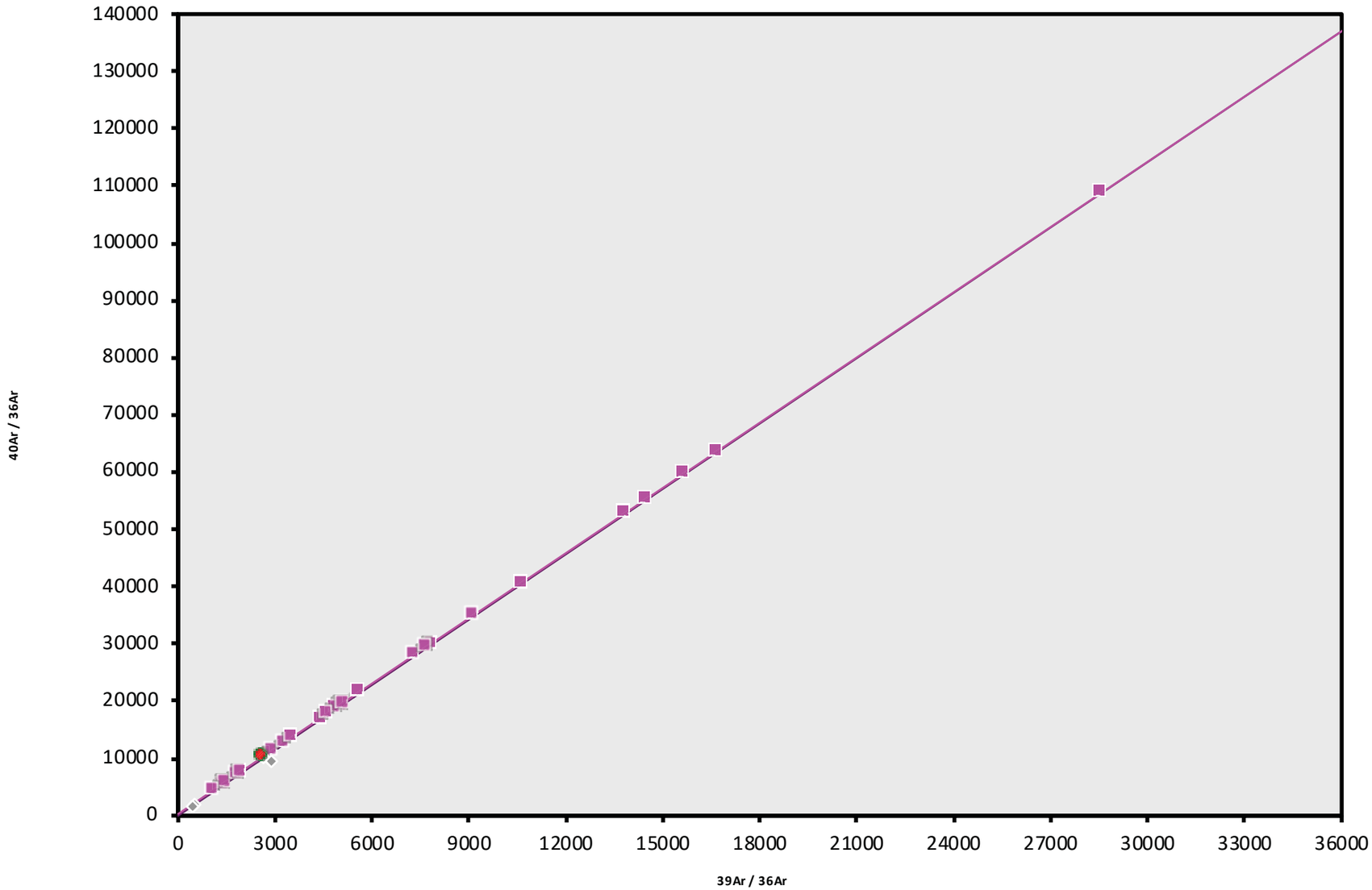
WEIGHTED PLATEAU
11.46 ± 0.02
TOTAL FUSION
11.43 ± 0.02
NORMAL ISOCHRON
11.46 ± 0.02
INVERSE ISOCHRON
11.46 ± 0.02

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D8-20)

20F24404.AGE >>> MS-13-10 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.46 ± 0.02
TOTAL FUSION
11.43 ± 0.02
NORMAL ISOCHRON
11.46 ± 0.02
INVERSE ISOCHRON
11.46 ± 0.02

MSWD (PROBABILITY)
5.81 (0%)

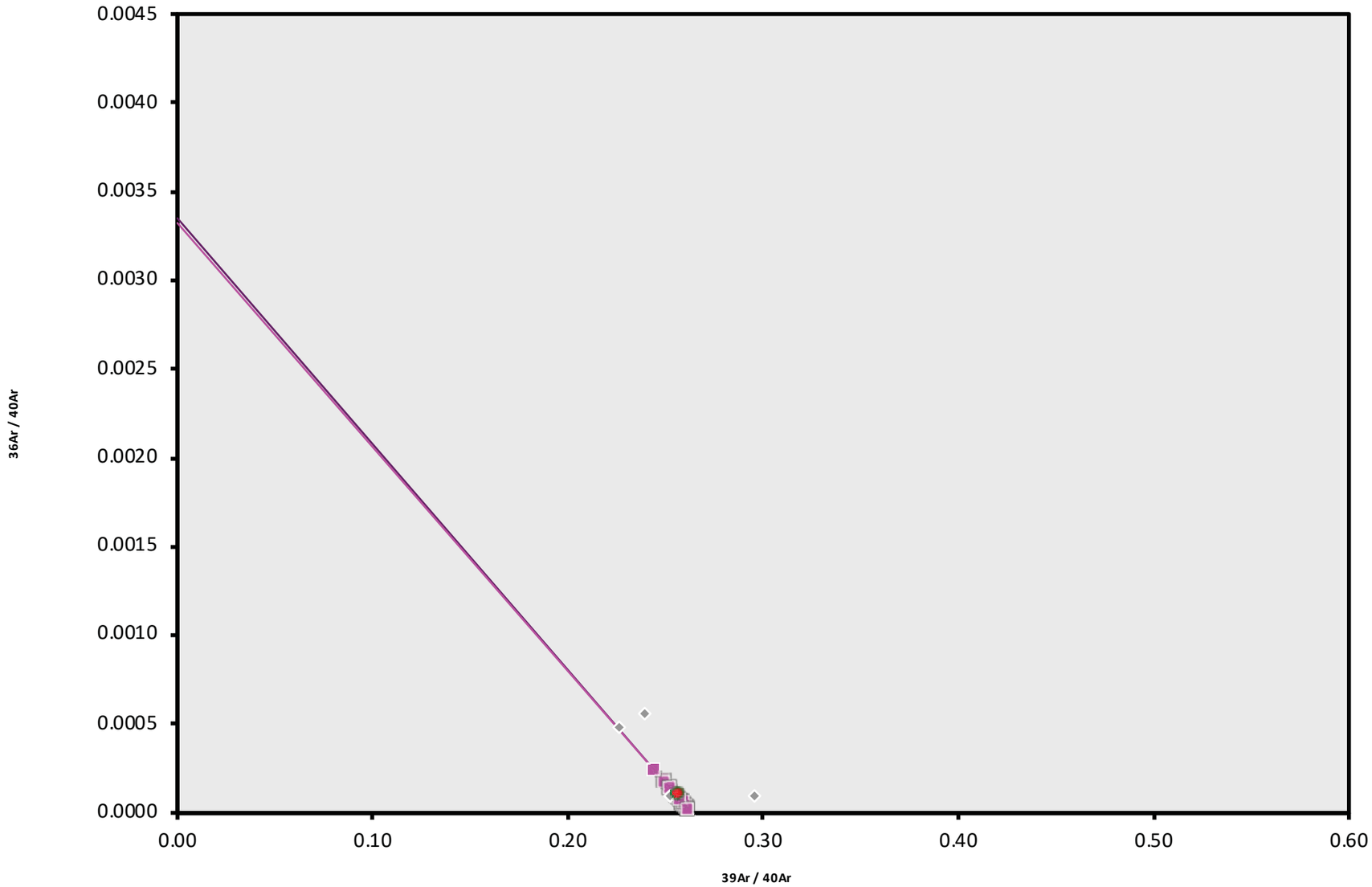
40AR/36AR INTERCEPT
303.2 ± 7.6

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D8-20)

20F24404.AGE >>> MS-13-10 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.46 ± 0.02
TOTAL FUSION
11.43 ± 0.02
NORMAL ISOCHRON
11.46 ± 0.02
INVERSE ISOCHRON
11.46 ± 0.02

MSWD (PROBABILITY)
5.60 (0%)

SPREADING FACTOR
7.3%

40AR/36AR INTERCEPT
301.0 ± 7.5

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D8-20)

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F15924	24.0 %	✓	0.0453675	0.969	59.5844	0.251	0.0946450	9.966	7.45147	0.137	44.5600	0.056	4.83180 ± 0.03874	14.57 ± 0.12	80.38	3.69	0.0535 ± 0.0003
21F15925	24.0 %	✓	0.0535597	0.917	113.8582	0.244	0.1881582	4.973	15.64200	0.078	82.8732	0.032	4.88549 ± 0.02094	14.74 ± 0.06	91.78	7.75	0.0588 ± 0.0003
21F15927	24.0 %	✓	0.0435287	1.040	126.0955	0.242	0.1377196	7.205	10.74281	0.101	53.7186	0.046	4.77332 ± 0.02815	14.40 ± 0.08	94.74	5.31	0.0364 ± 0.0002
21F15928	24.0 %	✓	0.0406770	1.009	83.7162	0.245	0.0991116	9.521	8.10179	0.123	46.1390	0.053	5.06281 ± 0.03391	15.27 ± 0.10	88.31	4.01	0.0413 ± 0.0002
21F15930	24.0 %	✓	0.0339200	1.200	70.2456	0.248	0.1201595	7.530	8.14760	0.124	43.4957	0.055	4.81739 ± 0.03313	14.53 ± 0.10	89.74	4.04	0.0496 ± 0.0003
21F15931	24.0 %	✓	0.0382056	1.113	112.1420	0.243	0.1377155	6.758	10.66079	0.102	54.4188	0.048	4.91613 ± 0.02696	14.83 ± 0.08	95.66	5.27	0.0406 ± 0.0002
21F15933	24.0 %	✓	0.0519260	0.882	77.5088	0.247	0.1150980	7.713	9.25761	0.116	53.6405	0.046	4.82057 ± 0.03254	14.54 ± 0.10	82.75	4.59	0.0511 ± 0.0003
21F15934	24.0 %	✓	0.0317227	1.317	66.2852	0.248	0.1093117	8.737	9.54732	0.110	50.1202	0.048	4.83891 ± 0.02898	14.60 ± 0.09	91.76	4.73	0.0617 ± 0.0003
21F15936	24.0 %	✓	0.0051531	6.467	16.8837	0.334	0.0100159	96.677	1.51789	0.614	7.6351	0.286	4.94893 ± 0.14856	14.93 ± 0.45	97.68	0.75	0.0384 ± 0.0005
21F15937	24.0 %	✓	0.0213071	1.841	55.2157	0.251	0.0477903	20.033	4.74342	0.196	25.2027	0.092	4.94789 ± 0.05464	14.92 ± 0.16	92.43	2.35	0.0367 ± 0.0002
21F15939	24.0 %	✓	0.0119592	3.076	31.9150	0.271	0.0682675	13.356	5.00191	0.187	25.2763	0.103	4.87379 ± 0.04900	14.70 ± 0.15	96.05	2.48	0.0671 ± 0.0004
21F15940	24.0 %	✓	0.0065255	5.659	21.5848	0.302	0.0249662	38.070	2.41241	0.393	11.8130	0.206	4.83842 ± 0.10176	14.59 ± 0.31	98.24	1.19	0.0478 ± 0.0005
21F15942	24.0 %	✓	0.0202744	2.022	64.5586	0.250	0.0674007	14.375	6.08655	0.159	30.4157	0.116	4.89139 ± 0.04525	14.75 ± 0.14	97.22	3.01	0.0403 ± 0.0002
21F15943	24.0 %	✓	0.0070801	5.070	16.6231	0.338	0.0126382	71.708	1.58268	0.585	8.6263	0.414	4.99557 ± 0.15543	15.07 ± 0.47	91.04	0.78	0.0407 ± 0.0006
21F15945	24.0 %	✓	0.0370706	1.268	78.0351	0.247	0.0878555	11.373	6.56849	0.139	36.9655	0.061	4.93856 ± 0.04616	14.89 ± 0.14	87.08	3.25	0.0359 ± 0.0002
21F15946	24.0 %	✓	0.0557289	0.870	101.0908	0.245	0.1227465	8.298	10.44370	0.096	60.5266	0.038	5.01409 ± 0.03029	15.12 ± 0.09	85.98	5.17	0.0441 ± 0.0002
21F15948	24.0 %	✓	0.0541664	0.906	113.4476	0.244	0.1463332	6.227	11.19461	0.094	62.0386	0.040	4.94665 ± 0.02877	14.92 ± 0.09	88.68	5.54	0.0422 ± 0.0002
21F15949	24.0 %	✓	0.0276444	1.371	81.2885	0.246	0.0866376	10.821	6.38400	0.158	32.8934	0.070	4.92691 ± 0.04021	14.86 ± 0.12	94.84	3.15	0.0335 ± 0.0002
21F15951	24.0 %	✓	0.0469337	1.078	110.9462	0.244	0.1514153	6.264	11.51941	0.097	61.4993	0.038	4.92947 ± 0.02876	14.87 ± 0.09	91.76	5.70	0.0444 ± 0.0002
21F15952	24.0 %	✓	0.0342574	1.343	81.5799	0.246	0.1134667	7.727	8.41382	0.120	44.5404	0.052	4.89044 ± 0.03568	14.75 ± 0.11	91.81	4.16	0.0441 ± 0.0002
21F15954	24.0 %	✓	0.0259130	1.498	57.6128	0.251	0.0616352	15.486	5.07735	0.183	28.4634	0.078	5.03401 ± 0.05068	15.18 ± 0.15	89.14	2.51	0.0376 ± 0.0002
21F15955	24.0 %	✓	0.0086825	3.879	17.5078	0.320	0.0225699	41.618	1.40007	0.641	8.1057	0.264	4.98663 ± 0.16164	15.04 ± 0.49	85.44	0.69	0.0341 ± 0.0005
21F15957	24.0 %	✓	0.0086226	4.168	11.6938	0.416	0.0338846	27.462	1.95656	0.461	10.7619	0.224	4.68453 ± 0.12101	14.13 ± 0.36	84.84	0.97	0.0717 ± 0.0009
21F15958	24.0 %	✓	0.0260448	1.685	54.1054	0.252	0.0558113	17.120	4.34389	0.207	24.8183	0.093	4.96761 ± 0.06549	14.98 ± 0.20	86.25	2.15	0.0342 ± 0.0002
21F15960	24.0 %	✓	0.0222891	1.715	35.7581	0.266	0.0462530	20.290	3.49695	0.249	20.2111	0.116	4.73235 ± 0.07138	14.28 ± 0.21	81.34	1.73	0.0418 ± 0.0003
21F15961	24.0 %	✓	0.0299813	1.266	69.6738	0.249	0.1054610	9.102	7.83398	0.125	40.2587	0.058	4.74060 ± 0.03232	14.30 ± 0.10	91.72	3.88	0.0481 ± 0.0003
21F15963	24.0 %	✓	0.0209928	2.089	48.1821	0.254	0.0514894	16.745	5.55688	0.173	29.5090	0.081	4.90893 ± 0.05131	14.81 ± 0.15	91.93	2.75	0.0493 ± 0.0003
21F15964	24.0 %	✓	0.0511929	0.907	72.9314	0.247	0.0845556	10.523	7.31610	0.134	44.2692	0.055	4.79641 ± 0.04122	14.47 ± 0.12	78.76	3.62	0.0429 ± 0.0002
21F15966	24.0 %	✓	0.0235315	1.749	44.8720	0.258	0.0638839	14.269	4.27835	0.216	24.5672	0.094	4.97947 ± 0.06298	15.02 ± 0.19	86.13	2.12	0.0407 ± 0.0003
21F15967	24.0 %	✓	0.0192198	1.981	51.5632	0.256	0.0781574	11.852	5.33272	0.174	27.0758	0.092	4.81088 ± 0.04728	14.51 ± 0.14	94.16	2.64	0.0442 ± 0.0003
		Σ	0.9034783	0.254	1946.5055	0.050	2.5451540	2.018	202.01316	0.027	1094.4391	0.012					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **MS-17-DAM**
Material = **Plagioclase**
Location = **Unknown**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X6-21)**
Position = **X: 0 | Y: 0 | Z/H: 5.216076 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.38444 ± 0.01060**
FCT-NM J-value = **0.00165439 ± 0.00000187**
Air Shot 40Ar/36Ar = **301.0220 ± 0.3823**
Air Shot MDF = **0.99795266 ± 0.00040754 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.50 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		4.88693 ± 0.03055	**14.74 ± 0.10**	18.53	100.00	0.0451 ± 0.0035
Error Mean		± 0.63%	**± 0.66%**	0%	30	
		Full External Error ± 0.77		1.53	2σ Confidence Limit	
		Analytical Error ± 0.09		4.3049	Error Magnification	
Total Fusion Age		4.88966 ± 0.00752	**14.75 ± 0.04**		30	0.0444 ± 0.0001
		± 0.15%	**± 0.27%**			
		Full External Error ± 0.77				
		Analytical Error ± 0.02				
Normal Isochron	**304.17 ± 32.51**	4.85425 ± 0.06624	**14.64 ± 0.20**	18.87	100.00	
No Convergence	**± 10.69%**	± 1.36%	**± 1.38%**	0%	30	
		Full External Error ± 0.79		1.53	2σ Confidence Limit	
		Analytical Error ± 0.20		4.3441	Error Magnification	
				100	Number of Iterations	
				0.0001672386	Convergence	
Inverse Isochron	**322.73 ± 34.88**	4.84375 ± 0.06858	**14.61 ± 0.21**	17.85	100.00	
Error Chron	**± 10.81%**	± 1.42%	**± 1.43%**	0%	30	
		Full External Error ± 0.79		1.53	2σ Confidence Limit	
		Analytical Error ± 0.21		4.2252	Error Magnification	
				4	Number of Iterations	
				0.0000060106	Convergence	
				19%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F15924	24.0 %	✓	0.0292619	59.5844	0.0000000	7.41319	35.81909	14.57 ± 0.12	80.38	3.69	0.0535 ± 0.0003
21F15925	24.0 %	✓	0.0227838	113.8582	0.0000000	15.56885	76.06138	14.74 ± 0.06	91.78	7.75	0.0588 ± 0.0003
21F15927	24.0 %	✓	0.0094451	126.0955	0.0000000	10.66180	50.89220	14.40 ± 0.08	94.74	5.31	0.0364 ± 0.0002
21F15928	24.0 %	✓	0.0180485	83.7162	0.0000000	8.04800	40.74551	15.27 ± 0.10	88.31	4.01	0.0413 ± 0.0002
21F15930	24.0 %	✓	0.0149318	70.2456	0.0068471	8.10247	39.03274	14.53 ± 0.10	89.74	4.04	0.0496 ± 0.0003
21F15931	24.0 %	✓	0.0078936	112.1420	0.0000000	10.58874	52.05563	14.83 ± 0.08	95.66	5.27	0.0406 ± 0.0002
21F15933	24.0 %	✓	0.0309754	77.5088	0.0000000	9.20781	44.38686	14.54 ± 0.10	82.75	4.59	0.0511 ± 0.0003
21F15934	24.0 %	✓	0.0138058	66.2852	0.0000000	9.50473	45.99256	14.60 ± 0.09	91.76	4.73	0.0617 ± 0.0003
21F15936	24.0 %	✓	0.0005895	16.8837	0.0000000	1.50704	7.45823	14.93 ± 0.45	97.68	0.75	0.0384 ± 0.0005
21F15937	24.0 %	✓	0.0063823	55.2157	0.0000000	4.70794	23.29438	14.92 ± 0.16	92.43	2.35	0.0367 ± 0.0002
21F15939	24.0 %	✓	0.0033324	31.9150	0.0017343	4.98141	24.27833	14.70 ± 0.15	96.05	2.48	0.0671 ± 0.0004
21F15940	24.0 %	✓	0.0006911	21.5848	0.0000000	2.39855	11.60518	14.59 ± 0.31	98.24	1.19	0.0478 ± 0.0005
21F15942	24.0 %	✓	0.0028243	64.5586	0.0000000	6.04507	29.56880	14.75 ± 0.14	97.22	3.01	0.0403 ± 0.0002
21F15943	24.0 %	✓	0.0025869	16.6231	0.0000000	1.57200	7.85302	15.07 ± 0.47	91.04	0.78	0.0407 ± 0.0006
21F15945	24.0 %	✓	0.0159777	78.0351	0.0000000	6.51835	32.19124	14.89 ± 0.14	87.08	3.25	0.0359 ± 0.0002
21F15946	24.0 %	✓	0.0284040	101.0908	0.0000000	10.37875	52.04002	15.12 ± 0.09	85.98	5.17	0.0441 ± 0.0002
21F15948	24.0 %	✓	0.0235015	113.4476	0.0000000	11.12172	55.01524	14.92 ± 0.09	88.68	5.54	0.0422 ± 0.0002
21F15949	24.0 %	✓	0.0056721	81.2885	0.0000000	6.33178	31.19608	14.86 ± 0.12	94.84	3.15	0.0335 ± 0.0002
21F15951	24.0 %	✓	0.0169449	110.9462	0.0000000	11.44813	56.43328	14.87 ± 0.09	91.76	5.70	0.0444 ± 0.0002
21F15952	24.0 %	✓	0.0122064	81.5799	0.0000000	8.36140	40.89097	14.75 ± 0.11	91.81	4.16	0.0441 ± 0.0002
21F15954	24.0 %	✓	0.0103403	57.6128	0.0000000	5.04033	25.37312	15.18 ± 0.15	89.14	2.51	0.0376 ± 0.0002
21F15955	24.0 %	✓	0.0039499	17.5078	0.0019011	1.38883	6.92556	15.04 ± 0.49	85.44	0.69	0.0341 ± 0.0005
21F15957	24.0 %	✓	0.0054609	11.6938	0.0072117	1.94905	9.13036	14.13 ± 0.36	84.84	0.97	0.0717 ± 0.0009
21F15958	24.0 %	✓	0.0114201	54.1054	0.0000000	4.30913	21.40607	14.98 ± 0.20	86.25	2.15	0.0342 ± 0.0002
21F15960	24.0 %	✓	0.0126236	35.7581	0.0000000	3.47397	16.44006	14.28 ± 0.21	81.34	1.73	0.0418 ± 0.0003
21F15961	24.0 %	✓	0.0111484	69.6738	0.0000000	7.78922	36.92552	14.30 ± 0.10	91.72	3.88	0.0481 ± 0.0003
21F15963	24.0 %	✓	0.0079692	48.1821	0.0000000	5.52592	27.12636	14.81 ± 0.15	91.93	2.75	0.0493 ± 0.0003
21F15964	24.0 %	✓	0.0314796	72.9314	0.0000000	7.26925	34.86629	14.47 ± 0.12	78.76	3.62	0.0429 ± 0.0002
21F15966	24.0 %	✓	0.0114023	44.8720	0.0023362	4.24952	21.16033	15.02 ± 0.19	86.13	2.12	0.0407 ± 0.0003
21F15967	24.0 %	✓	0.0052818	51.5632	0.0038773	5.29959	25.49567	14.51 ± 0.14	94.16	2.64	0.0442 ± 0.0003
		Σ	0.3773350	1946.5055	0.0239076	200.76253	981.66012				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **MS-17-DAM**
Material = **Plagioclase**
Location = **Unknown**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X6-21)**
J = **0.00165439 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	4.88693	± 0.03055	**14.74**	**± 0.10**	18.53	100.00	0.0451 ± 0.0035
Error Mean		± 0.63%		**± 0.66%**	0%	30	
			Full External Error	± 0.77	1.53	2σ Confidence Limit	
			Analytical Error	± 0.09	4.3049	Error Magnification	
Total Fusion Age	4.88966	± 0.00752	**14.75**	**± 0.04**		30	0.0444 ± 0.0001
		± 0.15%		**± 0.27%**			
			Full External Error	± 0.77			
			Analytical Error	± 0.02			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
21F15924	24.0 %	✓	253.34 ± 7.69	1522.65 ± 46.08	0.9952
21F15925	24.0 %	✓	683.33 ± 29.98	3636.96 ± 159.47	0.9992
21F15927	24.0 %	✓	1128.81 ± 110.93	5686.76 ± 558.77	0.9997
21F15928	24.0 %	✓	445.91 ± 20.58	2556.11 ± 117.83	0.9983
21F15930	24.0 %	✓	542.63 ± 29.90	2912.62 ± 160.34	0.9988
21F15931	24.0 %	✓	1341.44 ± 147.70	6893.24 ± 758.87	0.9998
21F15933	24.0 %	✓	297.26 ± 8.90	1731.53 ± 51.68	0.9965
21F15934	24.0 %	✓	688.46 ± 42.03	3629.96 ± 221.48	0.9992
21F15936	24.0 %	✓	2556.66 ± 2894.73	12951.28 ± 14663.14	0.9999
21F15937	24.0 %	✓	737.66 ± 91.32	3948.40 ± 488.58	0.9994
21F15939	24.0 %	✓	1494.86 ± 331.01	7584.19 ± 1679.19	0.9998
21F15940	24.0 %	✓	3470.77 ± 3715.14	17091.62 ± 18294.62	1.0000
21F15942	24.0 %	✓	2140.42 ± 626.59	10768.16 ± 3152.19	0.9999
21F15943	24.0 %	✓	607.68 ± 168.98	3334.25 ± 926.75	0.9987
21F15945	24.0 %	✓	407.96 ± 24.25	2313.32 ± 137.39	0.9987
21F15946	24.0 %	✓	365.40 ± 12.67	2130.70 ± 73.81	0.9982
21F15948	24.0 %	✓	473.23 ± 20.13	2639.49 ± 112.20	0.9988
21F15949	24.0 %	✓	1116.30 ± 151.44	5798.45 ± 786.48	0.9997
21F15951	24.0 %	✓	675.61 ± 40.97	3628.95 ± 219.99	0.9994
21F15952	24.0 %	✓	685.00 ± 52.20	3648.53 ± 277.92	0.9994
21F15954	24.0 %	✓	487.45 ± 36.91	2752.37 ± 208.23	0.9986
21F15955	24.0 %	✓	351.61 ± 60.21	2051.90 ± 350.52	0.9967
21F15957	24.0 %	✓	356.91 ± 47.13	1970.52 ± 259.74	0.9970
21F15958	24.0 %	✓	377.33 ± 29.20	2172.98 ± 167.96	0.9982
21F15960	24.0 %	✓	275.20 ± 16.78	1600.88 ± 97.35	0.9959
21F15961	24.0 %	✓	698.68 ± 48.15	3610.73 ± 248.72	0.9992
21F15963	24.0 %	✓	693.41 ± 76.66	3702.46 ± 409.18	0.9994
21F15964	24.0 %	✓	230.92 ± 6.90	1406.14 ± 41.85	0.9952
21F15966	24.0 %	✓	372.69 ± 27.07	2154.35 ± 156.25	0.9979
21F15967	24.0 %	✓	1003.37 ± 145.64	5125.66 ± 743.81	0.9996

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**304.17 ± 32.51**	4.85425 ± 0.06624	**14.64 ± 0.20**	18.87
No Convergence	**± 10.69%**	± 1.36%	**± 1.38%**	0%
			Full External Error ± 0.79	
			Analytical Error ± 0.20	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000167238621
	Error Magnification	4.3441	Number of Iterations	100
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
21F15924	24.0 %	✓	0.1663810 ± 0.0004966	0.00065675 ± 0.00001988	0.0140
21F15925	24.0 %	✓	0.1878850 ± 0.0003195	0.00027496 ± 0.00001206	0.0054
21F15927	24.0 %	✓	0.1984988 ± 0.0004447	0.00017585 ± 0.00001728	0.0038
21F15928	24.0 %	✓	0.1744480 ± 0.0004718	0.00039122 ± 0.00001803	0.0091
21F15930	24.0 %	✓	0.1863031 ± 0.0005079	0.00034333 ± 0.00001890	0.0082
21F15931	24.0 %	✓	0.1946019 ± 0.0004413	0.00014507 ± 0.00001597	0.0037
21F15933	24.0 %	✓	0.1716759 ± 0.0004323	0.00057752 ± 0.00001724	0.0112
21F15934	24.0 %	✓	0.1896607 ± 0.0004554	0.00027549 ± 0.00001681	0.0062
21F15936	24.0 %	✓	0.1974059 ± 0.0026913	0.00007721 ± 0.00008742	0.0021
21F15937	24.0 %	✓	0.1868240 ± 0.0008127	0.00025327 ± 0.00003134	0.0063
21F15939	24.0 %	✓	0.1971020 ± 0.0008458	0.00013185 ± 0.00002919	0.0045
21F15940	24.0 %	✓	0.2030686 ± 0.0018116	0.00005851 ± 0.00006263	0.0018
21F15942	24.0 %	✓	0.1987726 ± 0.0007852	0.00009287 ± 0.00002718	0.0046
21F15943	24.0 %	✓	0.1822530 ± 0.0026236	0.00029992 ± 0.00008336	0.0171
21F15945	24.0 %	✓	0.1763548 ± 0.0005405	0.00043228 ± 0.00002567	0.0081
21F15946	24.0 %	✓	0.1714921 ± 0.0003569	0.00046933 ± 0.00001626	0.0079
21F15948	24.0 %	✓	0.1792905 ± 0.0003679	0.00037886 ± 0.00001610	0.0073
21F15949	24.0 %	✓	0.1925164 ± 0.0006711	0.00017246 ± 0.00002339	0.0042
21F15951	24.0 %	✓	0.1861716 ± 0.0003894	0.00027556 ± 0.00001670	0.0045
21F15952	24.0 %	✓	0.1877477 ± 0.0004942	0.00027408 ± 0.00002088	0.0054
21F15954	24.0 %	✓	0.1771005 ± 0.0007076	0.00036332 ± 0.00002749	0.0080
21F15955	24.0 %	✓	0.1713573 ± 0.0023928	0.00048735 ± 0.00008325	0.0117
21F15957	24.0 %	✓	0.1811253 ± 0.0018644	0.00050748 ± 0.00006689	0.0148
21F15958	24.0 %	✓	0.1736455 ± 0.0007959	0.00046020 ± 0.00003557	0.0099
21F15960	24.0 %	✓	0.1719024 ± 0.0009491	0.00062466 ± 0.00003798	0.0161
21F15961	24.0 %	✓	0.1935017 ± 0.0005348	0.00027695 ± 0.00001908	0.0070
21F15963	24.0 %	✓	0.1872835 ± 0.0007208	0.00027009 ± 0.00002985	0.0062
21F15964	24.0 %	✓	0.1642217 ± 0.0004797	0.00071116 ± 0.00002116	0.0140
21F15966	24.0 %	✓	0.1729934 ± 0.0008215	0.00046418 ± 0.00003367	0.0103
21F15967	24.0 %	✓	0.1957548 ± 0.0007733	0.00019510 ± 0.00002831	0.0059

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**322.73 ± 34.88**	4.84375 ± 0.06858	**14.61 ± 0.21**	17.85
Error Chron	**± 10.81%**	± 1.42%	**± 1.43%**	0%
			Full External Error ± 0.79	
			Analytical Error ± 0.21	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0000060106
	Error Magnification	4.2252	Number of Iterations	4
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	18.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F15924	24.0 %	✓	0.0292619	1.51	0.0000000	0.00	0.0161057	0.30	0.0000000	0.00	59.5844	0.25	0.0055159	1.52	0.0000000	0.00	0.0895291	0.16	0.0107252	9.63	0.0000000	0.00	7.41319	0.14	0.0382830	0.95	35.81909	0.38	8.73642	1.52	0.0000000	0.00	0.0044998	9.65
21F15925	24.0 %	✓	0.0227838	2.19	0.0000000	0.00	0.0307759	0.30	0.0000000	0.00	113.8582	0.24	0.0042947	2.20	0.0000000	0.00	0.1880250	0.12	0.0204945	9.63	0.0000000	0.00	15.56885	0.08	0.0731539	0.95	76.06138	0.20	6.80233	2.19	0.0000000	0.00	0.0094503	9.65
21F15927	24.0 %	✓	0.0094451	4.91	0.0000000	0.00	0.0340836	0.30	0.0000000	0.00	126.0955	0.24	0.0017804	4.92	0.0000000	0.00	0.1287625	0.14	0.0226972	9.63	0.0000000	0.00	10.66180	0.10	0.0810164	0.95	50.89220	0.28	2.81994	4.91	0.0000000	0.00	0.0064717	9.65
21F15928	24.0 %	✓	0.0180485	2.30	0.0000000	0.00	0.0226285	0.30	0.0000000	0.00	83.7162	0.25	0.0034022	2.31	0.0000000	0.00	0.0971957	0.15	0.0150689	9.63	0.0000000	0.00	8.04800	0.12	0.0537877	0.95	40.74551	0.31	5.38857	2.31	0.0000000	0.00	0.0048851	9.65
21F15930	24.0 %	✓	0.0149318	2.75	0.0000000	0.00	0.0189874	0.30	0.0000008	133.42	70.2456	0.25	0.0028146	2.76	0.0000000	0.00	0.0978535	0.15	0.0126442	9.63	0.0068471	133.43	8.10247	0.12	0.0451328	0.95	39.03274	0.32	4.45804	2.75	0.0000000	0.00	0.0049182	9.65
21F15931	24.0 %	✓	0.0078936	5.50	0.0000000	0.00	0.0303120	0.30	0.0000000	0.00	112.1420	0.24	0.0014879	5.51	0.0000000	0.00	0.1278802	0.14	0.0201856	9.63	0.0000000	0.00	10.58874	0.10	0.0720512	0.95	52.05563	0.25	2.35671	5.51	0.0000000	0.00	0.0064274	9.65
21F15933	24.0 %	✓	0.0309754	1.49	0.0000000	0.00	0.0209506	0.30	0.0000000	0.00	77.5088	0.25	0.0058389	1.50	0.0000000	0.00	0.1112027	0.15	0.0139516	9.63	0.0000000	0.00	9.20781	0.12	0.0497994	0.95	44.38686	0.32	9.24800	1.50	0.0000000	0.00	0.0055891	9.65
21F15934	24.0 %	✓	0.0138058	3.05	0.0000000	0.00	0.0179169	0.30	0.0000000	0.00	66.2852	0.25	0.0026024	3.05	0.0000000	0.00	0.1147887	0.14	0.0119313	9.63	0.0000000	0.00	9.50473	0.11	0.0425882	0.95	45.99256	0.28	4.12185	3.05	0.0000000	0.00	0.0057694	9.65
21F15936	24.0 %	✓	0.0005895	56.61	0.0000000	0.00	0.0045637	0.37	0.0000000	0.00	16.8837	0.33	0.0001111	56.61	0.0000000	0.00	0.0182005	0.63	0.0030391	9.64	0.0000000	0.00	1.50704	0.62	0.0108478	0.98	7.45823	1.37	0.17599	56.61	0.0000000	0.00	0.0009148	9.67
21F15937	24.0 %	✓	0.0063823	6.19	0.0000000	0.00	0.0149248	0.30	0.0000000	0.00	55.2157	0.25	0.0012031	6.19	0.0000000	0.00	0.0568578	0.22	0.0099388	9.63	0.0000000	0.00	4.70794	0.20	0.0354761	0.95	23.29438	0.52	1.90550	6.19	0.0000000	0.00	0.0028577	9.65
21F15939	24.0 %	✓	0.0033324	11.07	0.0000000	0.00	0.0086266	0.32	0.0000002	526.86	31.9150	0.27	0.0006281	11.07	0.0000000	0.00	0.0601604	0.21	0.0057447	9.63	0.0017343	526.86	4.98141	0.19	0.0205054	0.96	24.27833	0.47	0.99491	11.07	0.0000000	0.00	0.0030237	9.65
21F15940	24.0 %	✓	0.0006911	53.52	0.0000000	0.00	0.0058344	0.35	0.0000000	0.00	21.5848	0.30	0.0001303	53.52	0.0000000	0.00	0.0289672	0.41	0.0038853	9.63	0.0000000	0.00	2.39855	0.40	0.0138683	0.97	11.60518	0.97	0.20633	53.52	0.0000000	0.00	0.0014559	9.66
21F15942	24.0 %	✓	0.0028243	14.64	0.0000000	0.00	0.0174502	0.30	0.0000000	0.00	64.5586	0.25	0.0005324	14.64	0.0000000	0.00	0.0730064	0.18	0.0116205	9.63	0.0000000	0.00	6.04507	0.16	0.0414789	0.95	29.56880	0.43	0.84321	14.64	0.0000000	0.00	0.0036694	9.65
21F15943	24.0 %	✓	0.0025869	13.89	0.0000000	0.00	0.0044932	0.38	0.0000000	0.00	16.6231	0.34	0.0004876	13.89	0.0000000	0.00	0.0189850	0.60	0.0029922	9.64	0.0000000	0.00	1.57200	0.59	0.0106803	0.98	7.85302	1.44	0.77234	13.89	0.0000000	0.00	0.0009542	9.67
21F15945	24.0 %	✓	0.0159777	2.97	0.0000000	0.00	0.0210929	0.30	0.0000000	0.00	78.0351	0.25	0.0030118	2.97	0.0000000	0.00	0.0787221	0.17	0.0140463	9.63	0.0000000	0.00	6.51835	0.14	0.0501376	0.95	32.19124	0.45	4.77031	2.97	0.0000000	0.00	0.0039566	9.65
21F15946	24.0 %	✓	0.0284040	1.73	0.0000000	0.00	0.0273249	0.30	0.0000000	0.00	101.0908	0.25	0.0053542	1.74	0.0000000	0.00	0.1253442	0.13	0.0181963	9.63	0.0000000	0.00	10.37875	0.10	0.0649509	0.95	52.04002	0.29	8.48030	1.73	0.0000000	0.00	0.0062999	9.65
21F15948	24.0 %	✓	0.0235015	2.13	0.0000000	0.00	0.0306649	0.30	0.0000000	0.00	113.4476	0.24	0.0044300	2.13	0.0000000	0.00	0.1343170	0.13	0.0204206	9.63	0.0000000	0.00	11.12172	0.09	0.0728901	0.95	55.01524	0.28	7.01660	2.13	0.0000000	0.00	0.0067509	9.65
21F15949	24.0 %	✓	0.0056721	6.78	0.0000000	0.00	0.0219723	0.30	0.0000000	0.00	81.2885	0.25	0.0010692	6.78	0.0000000	0.00	0.0764689	0.18	0.0146319	9.63	0.0000000	0.00	6.33178	0.16	0.0522279	0.95	31.19608	0.38	1.69347	6.78	0.0000000	0.00	0.0038434	9.65
21F15951	24.0 %	✓	0.0169449	3.03	0.0000000	0.00	0.0299888	0.30	0.0000000	0.00	110.9462	0.24	0.0031941	3.03	0.0000000	0.00	0.1382591	0.13	0.0199703	9.63	0.0000000	0.00	11.44813	0.10	0.0712830	0.95	56.43328	0.27	5.05908	3.03	0.0000000	0.00	0.0069490	9.65
21F15952	24.0 %	✓	0.0122064	3.81	0.0000000	0.00	0.0220510	0.30	0.0000000	0.00	81.5799	0.25	0.0023009	3.81	0.0000000	0.00	0.1009806	0.15	0.0146844	9.63	0.0000000	0.00	8.36140	0.12	0.0524151	0.95	40.89097	0.34	3.64433	3.81	0.0000000	0.00	0.0050754	9.65
21F15954	24.0 %	✓	0.0103403	3.78	0.0000000	0.00	0.0155727	0.30	0.0000000	0.00	57.6128	0.25	0.0019491	3.79	0.0000000	0.00	0.0608721	0.20	0.0103703	9.63	0.0000000	0.00	5.04033	0.18	0.0370162	0.95	25.37312	0.47	3.08719	3.78	0.0000000	0.00	0.0030595	9.65
21F15955	24.0 %	✓	0.0039499	8.54	0.0000000	0.00	0.0047324	0.36	0.0000002	494.42	17.5078	0.32	0.0007446	8.54	0.0000000	0.00	0.0167728	0.65	0.0031514	9.64	0.0019011	494.42	1.38883	0.65	0.0112488	0.97	6.92556	1.49	1.17929	8.54	0.0000000	0.00	0.0008430	9.67
21F15957	24.0 %	✓	0.0054609	6.59	0.0000000	0.00	0.0031608	0.45	0.0000009	129.08	11.6938	0.42	0.0010294	6.59	0.0000000	0.00	0.0235386	0.47	0.0021049	9.64	0.0072117	129.09	1.94905	0.46	0.0075133	1.01	9.13036	1.21	1.63040	6.59	0.0000000	0.00	0.0011831	9.66
21F15958	24.0 %	✓	0.0114201	3.86	0.0000000	0.00	0.0146247	0.30	0.0000000	0.00	54.1054	0.25	0.0021527	3.87	0.0000000	0.00	0.0520413	0.23	0.0097390	9.63	0.0000000	0.00	4.30913	0.21	0.0347627	0.95	21.40607	0.63	3.40958	3.86	0.0000000	0.00	0.0026156	9.65
21F15960	24.0 %	✓	0.0126236	3.04	0.0000000	0.00	0.0096654	0.32	0.0000000	0.00	35.7581	0.27	0.0023796	3.04	0.0000000	0.00	0.0419552	0.27	0.0064365	9.63	0.0000000	0.00	3.47397	0.25	0.0229746	0.96	16.44006	0.71	3.76892	3.04	0.0000000	0.00	0.0021087	9.65
21F15961	24.0 %	✓	0.0111484	3.44	0.0000000	0.00	0.0188328	0.30	0.0000000	0.00	69.6738	0.25	0.0021015	3.45	0.0000000	0.00	0.0940704	0.15	0.0125413	9.63	0.0000000	0.00	7.78922	0.13	0.0447654	0.95	36.92552	0.32	3.32848	3.45	0.0000000	0.00	0.0047281	9.65
21F15963	24.0 %	✓	0.0079692	5.53	0.0000000	0.00	0.0130236	0.31	0.0000000	0.00	48.1821	0.25	0.0015022	5.53	0.0000000	0.00	0.0667366	0.20	0.0086728	9.63	0.0000000	0.00	5.52592	0.17	0.0309570	0.95	27.12636	0.49	2.37929	5.53	0.0000000	0.00	0.0033542	9.65
21F15964	24.0 %	✓	0.0314796	1.49	0.0000000	0.00	0.0197133	0.30	0.0000000	0.00	72.9314	0.25	0.0059339	1.50	0.0000000	0.00	0.0877907	0.16	0.0131276	9.63	0.0000000	0.00	7.26925	0.14	0.0468584	0.95	34.86629	0.41	9.39854	1.49	0.0000000	0.00	0.0044124	9.65
21F15966	24.0 %	✓	0.0114023	3.63	0.0000000	0.00	0.0121289	0.31	0.0000003	391.70	44.8720	0.26	0.0021493	3.63	0.0000000	0.00	0.0513214	0.24	0.0080770	9.63	0.0023362	391.70	4.24952	0.22	0.0288303	0.96	21.16033	0.59	3.40428	3.63	0.0000000	0.00	0.0025795	9.65
21F15967	24.0 %	✓	0.0052818	7.26	0.0000000	0.00	0.0139375	0.31	0.0000005	240.10	51.5632	0.26	0.0009956	7.26	0.0000000	0.00	0.0640031	0.20	0.0092814	9.63	0.0038773	240.11	5.29959	0.17	0.0331294	0.95	25.49567	0.46	1.57693	7.26	0.0000000	0.00	0.0032169	9.65
		Σ	0.3773350	0.61	0.0000000	0.00	0.5261404	0.06	0.0000028	94.70	1946.5055	0.05	0.0711276	0.62	0.0000000	0.00	2.4246090	0.03	0.3503710	1.96	0.0239076	94.68	200.76253	0.03	1.2506298	0.19	981.66012	0.07	112.65713	0.62	0.0000000	0.00	0.1218629	1.98
		Σ							0.9034783	0.26	1946.5055	0.05									2.8700152	0.82			202.01316	0.03							1094.4391	0.09

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F15924	24.0 %	✓	5.980026	0.008879	7.996329	0.022848	0.006088	0.000060	72.878	4.228992	1.00051525	1.577E-12
21F15925	24.0 %	✓	5.298117	0.004481	7.279005	0.018625	0.003424	0.000032	72.884	4.229456	1.00051528	2.934E-12
21F15927	24.0 %	✓	5.000423	0.005554	11.737661	0.030840	0.004052	0.000042	72.896	4.230442	1.00051537	1.902E-12
21F15928	24.0 %	✓	5.694913	0.007649	10.333052	0.028377	0.005021	0.000051	72.902	4.230964	1.00051541	1.633E-12
21F15930	24.0 %	✓	5.338468	0.007237	8.621636	0.023874	0.004163	0.000050	72.914	4.231951	1.00051550	1.540E-12
21F15931	24.0 %	✓	5.104570	0.005746	10.519105	0.027732	0.003584	0.000040	72.920	4.232473	1.00051554	1.926E-12
21F15933	24.0 %	✓	5.794200	0.007254	8.372441	0.022829	0.005609	0.000050	72.932	4.233461	1.00051562	1.899E-12
21F15934	24.0 %	✓	5.249659	0.006275	6.942801	0.018842	0.003323	0.000044	72.938	4.233983	1.00051567	1.774E-12
21F15936	24.0 %	✓	5.030104	0.034084	11.123182	0.077788	0.003395	0.000221	72.950	4.234971	1.00051575	2.703E-13
21F15937	24.0 %	✓	5.313200	0.011479	11.640489	0.037078	0.004492	0.000083	72.956	4.235493	1.00051579	8.922E-13
21F15939	24.0 %	✓	5.053321	0.010806	6.380552	0.021033	0.002391	0.000074	72.968	4.236481	1.00051588	8.948E-13
21F15940	24.0 %	✓	4.896738	0.021741	8.947404	0.044378	0.002705	0.000153	72.974	4.237004	1.00051592	4.182E-13
21F15942	24.0 %	✓	4.997193	0.009820	10.606760	0.031383	0.003331	0.000068	72.986	4.237992	1.00051601	1.077E-12
21F15943	24.0 %	✓	5.450454	0.039051	10.503129	0.070975	0.004473	0.000228	72.992	4.238516	1.00051605	3.054E-13
21F15945	24.0 %	✓	5.627707	0.008558	11.880234	0.033723	0.005644	0.000072	73.004	4.239504	1.00051613	1.309E-12
21F15946	24.0 %	✓	5.795512	0.005987	9.679595	0.025507	0.005336	0.000047	73.010	4.239969	1.00051617	2.143E-12
21F15948	24.0 %	✓	5.541828	0.005644	10.134124	0.026494	0.004839	0.000044	73.022	4.241016	1.00051626	2.196E-12
21F15949	24.0 %	✓	5.152471	0.008910	12.733159	0.037238	0.004330	0.000060	73.028	4.241482	1.00051630	1.164E-12
21F15951	24.0 %	✓	5.338752	0.005544	9.631238	0.025281	0.004074	0.000044	73.040	4.242529	1.00051639	2.177E-12
21F15952	24.0 %	✓	5.293719	0.006924	9.695940	0.026551	0.004072	0.000055	73.046	4.242995	1.00051643	1.577E-12
21F15954	24.0 %	✓	5.605949	0.011123	11.347014	0.035249	0.005104	0.000077	73.058	4.244042	1.00051651	1.008E-12
21F15955	24.0 %	✓	5.789474	0.040140	12.504933	0.089629	0.006201	0.000244	73.064	4.244508	1.00051655	2.869E-13
21F15957	24.0 %	✓	5.500445	0.028219	5.976734	0.037136	0.004407	0.000185	73.076	4.245498	1.00051664	3.810E-13
21F15958	24.0 %	✓	5.713374	0.012999	12.455514	0.040653	0.005996	0.000102	73.082	4.246022	1.00051668	8.786E-13
21F15960	24.0 %	✓	5.779639	0.015865	10.225515	0.037216	0.006374	0.000110	73.094	4.247012	1.00051676	7.155E-13
21F15961	24.0 %	✓	5.138987	0.007062	8.893792	0.024751	0.003827	0.000049	73.100	4.247537	1.00051681	1.425E-12
21F15963	24.0 %	✓	5.310356	0.010168	8.670713	0.026671	0.003778	0.000079	73.112	4.248527	1.00051689	1.045E-12
21F15964	24.0 %	✓	6.050930	0.008782	9.968605	0.028064	0.006997	0.000064	73.118	4.249052	1.00051694	1.567E-12
21F15966	24.0 %	✓	5.742216	0.013552	10.488165	0.035351	0.005500	0.000097	73.130	4.250043	1.00051702	8.697E-13
21F15967	24.0 %	✓	5.077299	0.009975	9.669220	0.029872	0.003604	0.000072	73.136	4.250567	1.00051706	9.585E-13

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
21F15924	24.0 %	0.0137114 ± 0.0002020	0.0157879 ± 0.0060458	0.0088546 ± 0.0068163	0.0211712 ± 0.0063572	3.4943604 ± 0.0138976
21F15925	24.0 %	0.0137114 ± 0.0002020	0.0157879 ± 0.0060458	0.0088546 ± 0.0068163	0.0211712 ± 0.0063572	3.4943604 ± 0.0138976
21F15927	24.0 %	0.0125397 ± 0.0002037	0.0026001 ± 0.0057992	0.0033326 ± 0.0065048	0.0148767 ± 0.0058737	2.9404176 ± 0.0169544
21F15928	24.0 %	0.0125397 ± 0.0002037	0.0026001 ± 0.0057992	0.0033326 ± 0.0065048	0.0148767 ± 0.0058737	2.9404176 ± 0.0169544
21F15930	24.0 %	0.0120960 ± 0.0002084	0.0118281 ± 0.0061700	0.0001810 ± 0.0063607	0.0028231 ± 0.0066004	2.8954460 ± 0.0153499
21F15931	24.0 %	0.0120960 ± 0.0002084	0.0118281 ± 0.0061700	0.0001810 ± 0.0063607	0.0028231 ± 0.0066004	2.8954460 ± 0.0153499
21F15933	24.0 %	0.0118419 ± 0.0002082	0.0107122 ± 0.0060176	0.0061090 ± 0.0069373	0.0077970 ± 0.0064879	2.9131916 ± 0.0161729
21F15934	24.0 %	0.0118419 ± 0.0002082	0.0107122 ± 0.0060176	0.0061090 ± 0.0069373	0.0077970 ± 0.0064879	2.9131916 ± 0.0161729
21F15936	24.0 %	0.0128173 ± 0.0002105	0.0216152 ± 0.0063873	0.0087798 ± 0.0069034	0.0266635 ± 0.0064584	2.9344727 ± 0.0154446
21F15937	24.0 %	0.0128173 ± 0.0002105	0.0216152 ± 0.0063873	0.0087798 ± 0.0069034	0.0266635 ± 0.0064584	2.9344727 ± 0.0154446
21F15939	24.0 %	0.0140347 ± 0.0002191	0.0116480 ± 0.0061227	0.0007790 ± 0.0066763	0.0094411 ± 0.0062313	3.2454984 ± 0.0165704
21F15940	24.0 %	0.0140347 ± 0.0002191	0.0116480 ± 0.0061227	0.0007790 ± 0.0066763	0.0094411 ± 0.0062313	3.2454984 ± 0.0165704
21F15942	24.0 %	0.0122170 ± 0.0002231	0.0144978 ± 0.0065694	0.0066429 ± 0.0062554	0.0161749 ± 0.0063794	2.7978724 ± 0.0302161
21F15943	24.0 %	0.0122170 ± 0.0002231	0.0144978 ± 0.0065694	0.0066429 ± 0.0062554	0.0161749 ± 0.0063794	2.7978724 ± 0.0302161
21F15945	24.0 %	0.0128655 ± 0.0002326	0.0087694 ± 0.0064036	0.0050850 ± 0.0072661	0.0243713 ± 0.0057803	2.9875087 ± 0.0132021
21F15946	24.0 %	0.0128655 ± 0.0002326	0.0087694 ± 0.0064036	0.0050850 ± 0.0072661	0.0243713 ± 0.0057803	2.9875087 ± 0.0132021
21F15948	24.0 %	0.0139882 ± 0.0001938	0.0085792 ± 0.0064076	0.0006297 ± 0.0062294	0.0179120 ± 0.0066110	3.4076925 ± 0.0158190
21F15949	24.0 %	0.0139882 ± 0.0001938	0.0085792 ± 0.0064076	0.0006297 ± 0.0062294	0.0179120 ± 0.0066110	3.4076925 ± 0.0158190
21F15951	24.0 %	0.0123651 ± 0.0002055	0.0181067 ± 0.0057402	0.0001232 ± 0.0063942	0.0169554 ± 0.0058904	2.9203370 ± 0.0157904
21F15952	24.0 %	0.0123651 ± 0.0002055	0.0181067 ± 0.0057402	0.0001232 ± 0.0063942	0.0169554 ± 0.0058904	2.9203370 ± 0.0157904
21F15954	24.0 %	0.0126987 ± 0.0002140	0.0127255 ± 0.0062886	0.0069412 ± 0.0063259	0.0223097 ± 0.0057708	2.8876617 ± 0.0138144
21F15955	24.0 %	0.0126987 ± 0.0002140	0.0127255 ± 0.0062886	0.0069412 ± 0.0063259	0.0223097 ± 0.0057708	2.8876617 ± 0.0138144
21F15957	24.0 %	0.0123827 ± 0.0002366	0.0207211 ± 0.0067506	0.0021534 ± 0.0067432	0.0123874 ± 0.0060861	2.9518062 ± 0.0159317
21F15958	24.0 %	0.0123827 ± 0.0002366	0.0207211 ± 0.0067506	0.0021534 ± 0.0067432	0.0123874 ± 0.0060861	2.9518062 ± 0.0159317
21F15960	24.0 %	0.0121200 ± 0.0002055	0.0075423 ± 0.0065566	0.0054337 ± 0.0070981	0.0184012 ± 0.0059207	2.9230246 ± 0.0158341
21F15961	24.0 %	0.0121200 ± 0.0002055	0.0075423 ± 0.0065566	0.0054337 ± 0.0070981	0.0184012 ± 0.0059207	2.9230246 ± 0.0158341
21F15963	24.0 %	0.0129592 ± 0.0002390	0.0083650 ± 0.0059641	0.0081974 ± 0.0062722	0.0056588 ± 0.0061150	2.9496692 ± 0.0151158
21F15964	24.0 %	0.0129592 ± 0.0002390	0.0083650 ± 0.0059641	0.0081974 ± 0.0062722	0.0056588 ± 0.0061150	2.9496692 ± 0.0151158
21F15966	24.0 %	0.0128455 ± 0.0002376	0.0112636 ± 0.0061660	0.0011056 ± 0.0062934	0.0153073 ± 0.0059582	2.9822199 ± 0.0153260
21F15967	24.0 %	0.0128455 ± 0.0002376	0.0112636 ± 0.0061660	0.0011056 ± 0.0062934	0.0153073 ± 0.0059582	2.9822199 ± 0.0153260

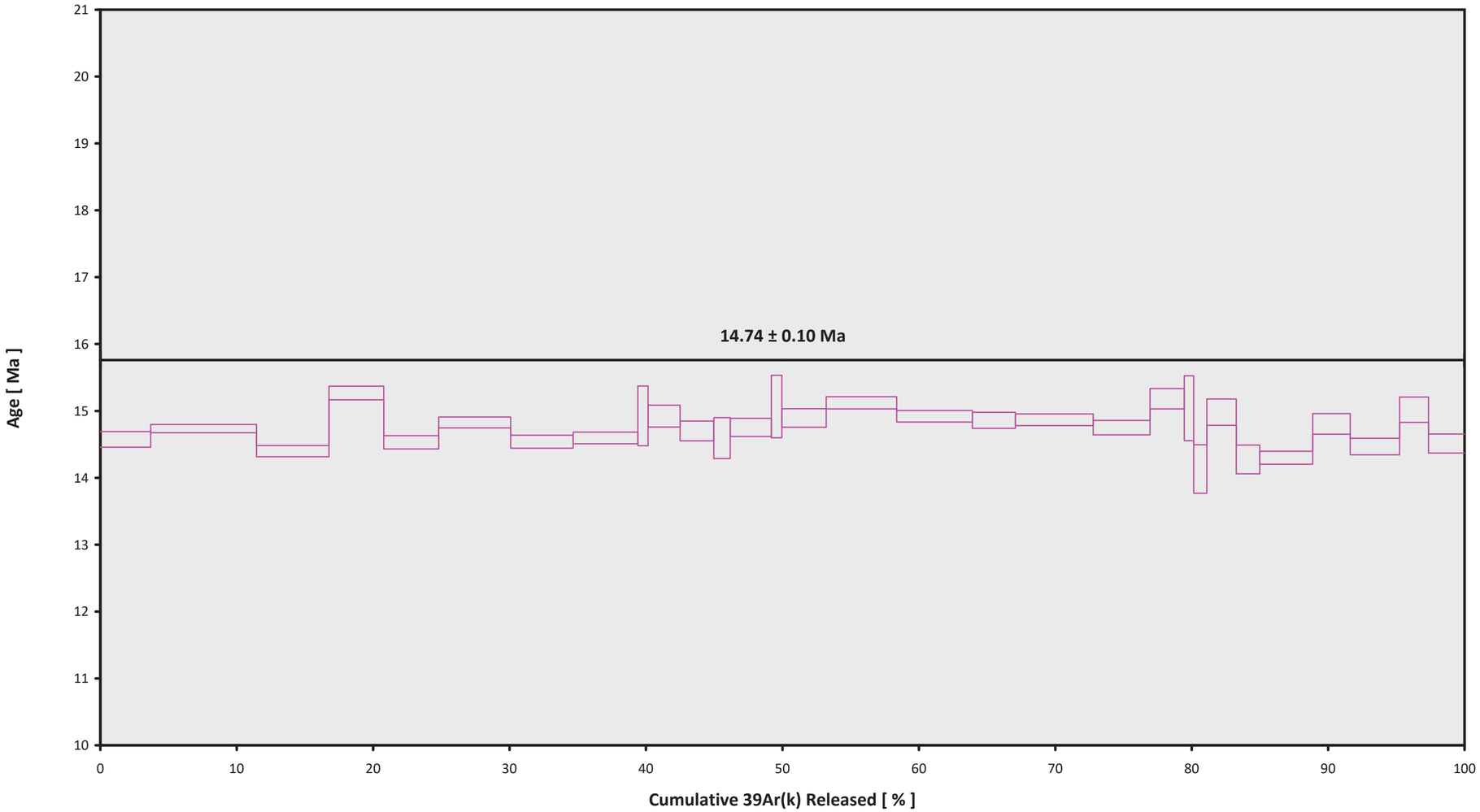
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F15924	24.0 %	0.0565365 ± 0.0003558	0.1860	EXP 148 of 150	14.018892 ± 0.008021	0.9966	EXP 150 of 150	0.1031121 ± 0.0064639	0.0323	EXP 149 of 150	7.4535904 ± 0.0073989	0.9913	EXP 150 of 150	48.054375 ± 0.020831	0.9848	EXP 150 of 150
21F15925	24.0 %	0.0642695 ± 0.0004088	0.1089	EXP 150 of 150	26.770987 ± 0.009261	0.9988	EXP 148 of 150	0.1962425 ± 0.0063517	0.0444	EXP 148 of 150	15.6231724 ± 0.0082966	0.9977	EXP 150 of 150	86.367526 ± 0.022256	0.9984	EXP 150 of 150
21F15927	24.0 %	0.0536291 ± 0.0003698	0.2959	EXP 149 of 150	29.626495 ± 0.008322	0.9992	EXP 150 of 150	0.1404884 ± 0.0074380	0.0307	EXP 150 of 150	10.7302171 ± 0.0079949	0.9952	EXP 150 of 150	56.659031 ± 0.017882	0.9946	EXP 149 of 150
21F15928	24.0 %	0.0509372 ± 0.0003234	0.4699	EXP 147 of 150	19.667799 ± 0.008150	0.9982	EXP 150 of 150	0.1020385 ± 0.0067821	0.0124	EXP 150 of 150	8.0959434 ± 0.0073397	0.9928	EXP 148 of 150	49.079390 ± 0.017858	0.9891	EXP 149 of 150
21F15930	24.0 %	0.0441151 ± 0.0003184	0.5099	EXP 149 of 150	16.508907 ± 0.007948	0.9976	EXP 150 of 150	0.1198486 ± 0.0063826	0.0574	EXP 150 of 150	8.1295859 ± 0.0068230	0.9939	EXP 148 of 150	46.391153 ± 0.018580	0.9832	EXP 150 of 150
21F15931	24.0 %	0.0481605 ± 0.0003378	0.4289	EXP 150 of 150	26.344950 ± 0.008161	0.9990	EXP 150 of 150	0.1373327 ± 0.0067415	0.0425	EXP 150 of 150	10.6363505 ± 0.0073863	0.9958	EXP 150 of 150	57.314208 ± 0.021337	0.9932	EXP 150 of 150
21F15933	24.0 %	0.0608579 ± 0.0003700	0.1794	EXP 147 of 150	18.207042 ± 0.008179	0.9979	EXP 150 of 150	0.1207358 ± 0.0054806	0.0353	EXP 146 of 150	9.2417305 ± 0.0077082	0.9939	EXP 150 of 150	56.553645 ± 0.018580	0.9947	EXP 149 of 150
21F15934	24.0 %	0.0417868 ± 0.0003312	0.5869	EXP 150 of 150	15.570206 ± 0.007720	0.9974	EXP 149 of 150	0.1149732 ± 0.0065064	0.0205	EXP 149 of 150	9.5306998 ± 0.0071991	0.9951	EXP 150 of 150	53.033376 ± 0.017571	0.9926	EXP 150 of 150
21F15936	24.0 %	0.0176816 ± 0.0002336	0.8738	EXP 150 of 150	3.983908 ± 0.006616	0.9697	EXP 150 of 150	0.0187547 ± 0.0067334	0.0001	EXP 150 of 150	1.5406689 ± 0.0066665	0.7725	EXP 149 of 150	10.569606 ± 0.015404	0.9956	EXP 150 of 150
21F15937	24.0 %	0.0329303 ± 0.0003028	0.7338	EXP 150 of 150	12.978092 ± 0.007193	0.9968	EXP 148 of 150	0.0563745 ± 0.0065763	0.0054	EXP 149 of 150	4.7579493 ± 0.0063393	0.9830	EXP 150 of 150	28.137206 ± 0.017230	0.8965	EXP 150 of 150
21F15939	24.0 %	0.0253237 ± 0.0002687	0.8328	EXP 146 of 150	7.498809 ± 0.007176	0.9903	EXP 149 of 150	0.0687670 ± 0.0061546	0.0079	EXP 150 of 150	4.9985574 ± 0.0066603	0.9828	EXP 150 of 150	28.521760 ± 0.020143	0.8321	EXP 150 of 150
21F15940	24.0 %	0.0201944 ± 0.0002710	0.8165	EXP 150 of 150	5.074768 ± 0.006965	0.9802	EXP 150 of 150	0.0256430 ± 0.0067104	0.0047	EXP 150 of 150	2.4156841 ± 0.0070569	0.9055	EXP 150 of 150	15.058458 ± 0.017805	0.9903	EXP 150 of 150
21F15942	24.0 %	0.0313553 ± 0.0003147	0.6915	EXP 150 of 150	15.154370 ± 0.007828	0.9972	EXP 150 of 150	0.0737676 ± 0.0073465	0.0000	EXP 149 of 150	6.0871576 ± 0.0068012	0.9888	EXP 150 of 150	33.213551 ± 0.017977	0.3653	EXP 150 of 150
21F15943	24.0 %	0.0189004 ± 0.0002548	0.8768	EXP 149 of 150	3.912356 ± 0.006558	0.9712	EXP 146 of 150	0.0192294 ± 0.0065061	0.0003	EXP 147 of 150	1.5948054 ± 0.0066457	0.7743	EXP 150 of 150	11.424193 ± 0.018986	0.9946	EXP 150 of 150
21F15945	24.0 %	0.0478586 ± 0.0003736	0.3797	EXP 150 of 150	18.302548 ± 0.008474	0.9977	EXP 148 of 150	0.0925808 ± 0.0067979	0.0381	EXP 150 of 150	6.5760529 ± 0.0065536	0.9911	EXP 149 of 150	39.953017 ± 0.018103	0.9446	EXP 150 of 150
21F15946	24.0 %	0.0654712 ± 0.0003848	0.0948	EXP 150 of 150	23.704894 ± 0.009751	0.9982	EXP 150 of 150	0.1273290 ± 0.0070779	0.0018	EXP 150 of 150	10.4413587 ± 0.0069980	0.9962	EXP 149 of 150	63.514129 ± 0.018597	0.9967	EXP 148 of 150
21F15948	24.0 %	0.0651190 ± 0.0004126	0.0723	EXP 150 of 150	26.594607 ± 0.009229	0.9987	EXP 150 of 150	0.1451043 ± 0.0065973	0.0434	EXP 150 of 150	11.1838805 ± 0.0067158	0.9969	EXP 150 of 150	65.446284 ± 0.018991	0.9970	EXP 150 of 150
21F15949	24.0 %	0.0400834 ± 0.0002976	0.6569	EXP 149 of 150	19.056169 ± 0.007663	0.9983	EXP 150 of 150	0.0856531 ± 0.0069540	0.0250	EXP 150 of 150	6.3855842 ± 0.0071350	0.9889	EXP 149 of 150	36.301090 ± 0.016747	0.8568	EXP 150 of 150
21F15951	24.0 %	0.0566686 ± 0.0004248	0.2399	EXP 150 of 150	26.008687 ± 0.009186	0.9987	EXP 150 of 150	0.1509187 ± 0.0069512	0.0713	EXP 149 of 150	11.5068984 ± 0.0081891	0.9956	EXP 150 of 150	64.419642 ± 0.016906	0.9975	EXP 148 of 150
21F15952	24.0 %	0.0447027 ± 0.0003790	0.4495	EXP 150 of 150	19.127141 ± 0.008261	0.9980	EXP 150 of 150	0.1131254 ± 0.0059456	0.0675	EXP 150 of 150	8.4092449 ± 0.0074239	0.9932	EXP 150 of 150	47.460719 ± 0.016883	0.9877	EXP 148 of 150
21F15954	24.0 %	0.0371595 ± 0.0002947	0.6658	EXP 148 of 150	13.504446 ± 0.007588	0.9966	EXP 150 of 150	0.0683240 ± 0.0070952	0.0134	EXP 150 of 150	5.0866699 ± 0.0069258	0.9828	EXP 150 of 150	31.351034 ± 0.017230	0.1506	EXP 146 of 150
21F15955	24.0 %	0.0208947 ± 0.0002347	0.8516	EXP 150 of 150	4.112248 ± 0.005990	0.9761	EXP 147 of 150	0.0294187 ± 0.0068914	0.0044	EXP 150 of 150	1.4188015 ± 0.0068213	0.7189	EXP 150 of 150	10.993354 ± 0.016341	0.9946	EXP 150 of 150
21F15957	24.0 %	0.0205220 ± 0.0002428	0.8542	EXP 150 of 150	2.758235 ± 0.006389	0.9432	EXP 150 of 150	0.0358993 ± 0.0063569	0.0078	EXP 150 of 150	1.9639397 ± 0.0065901	0.8718	EXP 149 of 150	13.713748 ± 0.018116	0.9911	EXP 150 of 150
21F15958	24.0 %	0.0369679 ± 0.0003378	0.5915	EXP 148 of 150	12.685175 ± 0.006712	0.9970	EXP 150 of 150	0.0577363 ± 0.0067140	0.0000	EXP 148 of 150	4.3451625 ± 0.0063740	0.9786	EXP 149 of 150	27.770074 ± 0.016856	0.8941	EXP 150 of 150
21F15960	24.0 %	0.0331599 ± 0.0002946	0.7058	EXP 149 of 150	8.375490 ± 0.006806	0.9931	EXP 148 of 150	0.0514973 ± 0.0060799	0.0067	EXP 148 of 150	3.5063997 ± 0.0061779	0.9709	EXP 146 of 150	23.134114 ± 0.017344	0.9617	EXP 149 of 150
21F15961	24.0 %	0.0404211 ± 0.0002899	0.5929	EXP 149 of 150	16.310285 ± 0.008023	0.9974	EXP 150 of 150	0.1104629 ± 0.0064030	0.0554	EXP 150 of 150	7.8323370 ± 0.0070492	0.9930	EXP 149 of 150	43.181757 ± 0.017060	0.9809	EXP 150 of 150
21F15963	24.0 %	0.0327756 ± 0.0003364	0.6663	EXP 150 of 150	11.279706 ± 0.006992	0.9958	EXP 149 of 150	0.0594761 ± 0.0058637	0.0028	EXP 146 of 150	5.5483176 ± 0.0070662	0.9854	EXP 150 of 150	32.458673 ± 0.018547	0.3143	EXP 150 of 150
21F15964	24.0 %	0.0612832 ± 0.0003587	0.1014	EXP 150 of 150	17.067245 ± 0.007858	0.9977	EXP 150 of 150	0.0924069 ± 0.0062597	0.0020	EXP 147 of 150	7.3030413 ± 0.0070522	0.9915	EXP 150 of 150	47.218908 ± 0.019166	0.9867	EXP 150 of 150
21F15966	24.0 %	0.0350583 ± 0.0003053	0.6989	EXP 149 of 150	10.504525 ± 0.007735	0.9941	EXP 150 of 150	0.0647280 ± 0.0065422	0.0096	EXP 149 of 150	4.2827057 ± 0.0068366	0.9761	EXP 150 of 150	27.549412 ± 0.017349	0.8411	EXP 150 of 150
21F15967	24.0 %	0.0309882 ± 0.0002681	0.7337	EXP 149 of 150	12.067771 ± 0.008365	0.9949	EXP 150 of 150	0.0789431 ± 0.0067453	0.0111	EXP 150 of 150	5.3343794 ± 0.0067063	0.9857	EXP 150 of 150	30.058031 ± 0.019685	0.5273	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F15924	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15925	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15927	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15928	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15930	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15931	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15933	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15934	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15936	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15937	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15939	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15940	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15942	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15943	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15945	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15946	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15948	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15949	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15951	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15952	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15954	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15955	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15957	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15958	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15960	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15961	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15963	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15964	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15966	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01
21F15967	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	5.22	Oregon\Swenton (20-01)	21F15920	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F15924	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	12	36	1
21F15925	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	12	44	1
21F15927	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	13	1	1
21F15928	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	13	10	1
21F15930	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	13	27	1
21F15931	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	13	36	1
21F15933	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	13	53	1
21F15934	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	14	2	1
21F15936	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	14	19	1
21F15937	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	14	28	1
21F15939	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	14	45	1
21F15940	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	14	54	1
21F15942	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	15	11	1
21F15943	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	15	20	1
21F15945	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	15	37	1
21F15946	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	15	45	1
21F15948	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	16	3	1
21F15949	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	16	11	1
21F15951	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	16	29	1
21F15952	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	16	37	1
21F15954	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	16	55	1
21F15955	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	17	3	1
21F15957	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	17	20	1
21F15958	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	17	29	1
21F15960	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	17	46	1
21F15961	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	17	55	1
21F15963	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	18	12	1
21F15964	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	18	21	1
21F15966	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	18	38	1
21F15967	24.0 %	MS-17-DAM	Plagioclase	Unknown	FCT-NM (4X6-21)	28.201	0.082	Kuiper et al (2008)	9.38444	0.113	0.00165439	0.113	301.022	0.127	0.99795266	0.041	1	3.54E-14	28	AUG	2021	18	47	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F15924	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15925	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15927	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15928	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15930	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15931	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15933	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15934	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15936	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15937	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15939	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15940	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15942	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15943	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15945	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15946	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15948	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15949	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15951	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15952	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15954	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15955	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15957	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15958	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15960	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15961	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15963	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15964	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15966	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15967	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F15920.AGE >>> MS-17-DAM >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.74 ± 0.10
TOTAL FUSION
14.75 ± 0.04
NORMAL ISOCHRON
14.64 ± 0.20
INVERSE ISOCHRON
14.61 ± 0.21

MSWD (PROBABILITY)
18.53 (0%)

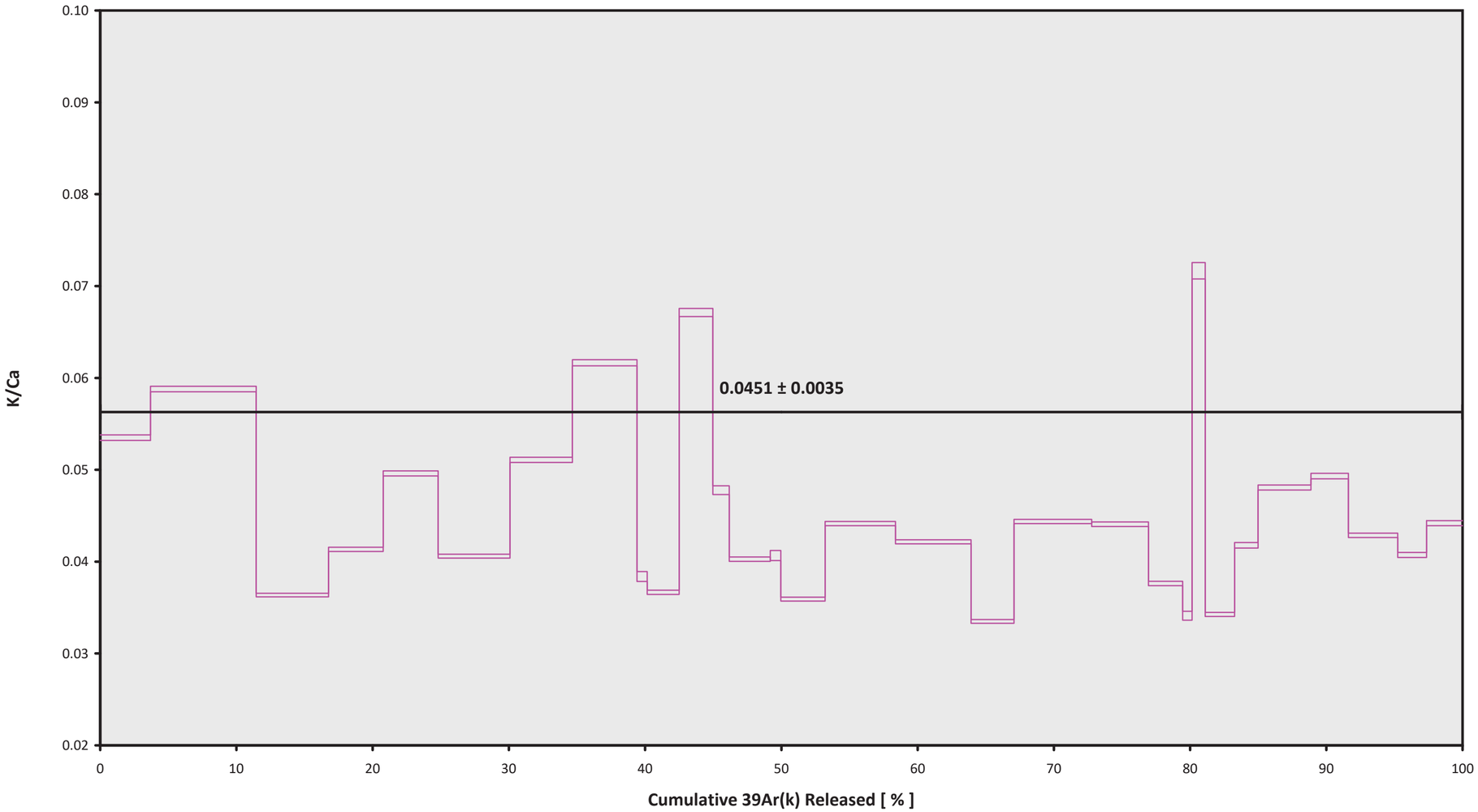
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Plagioclase
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X6-21)
J = 0.00165439 ± 0.00000187

21F15920.AGE >>> MS-17-DAM >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.74 ± 0.10
TOTAL FUSION
14.75 ± 0.04
NORMAL ISOCHRON
14.64 ± 0.20
INVERSE ISOCHRON
14.61 ± 0.21

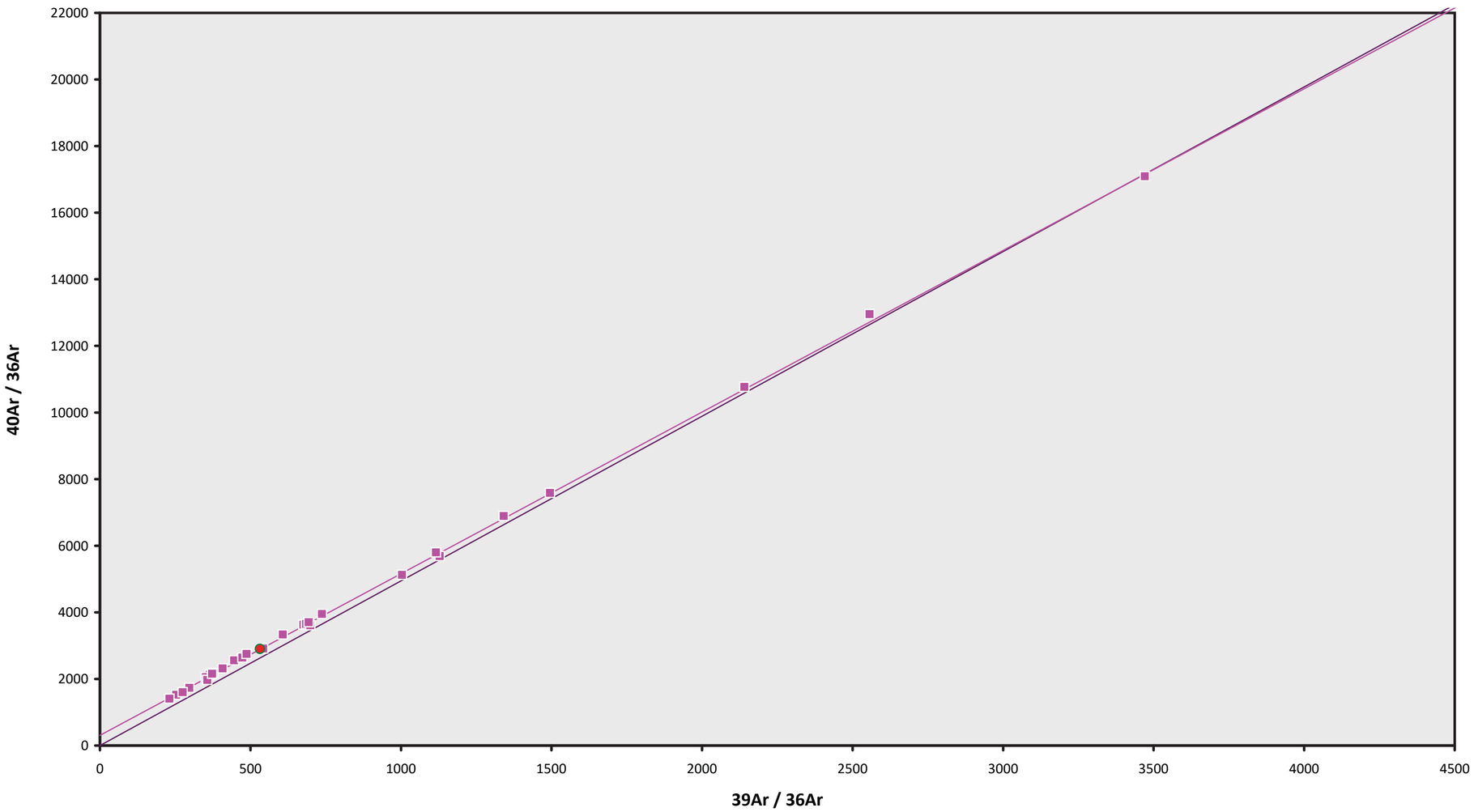
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Plagioclase
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X6-21)
J = 0.00165439 ± 0.00000187

21F15920.AGE >>> MS-17-DAM >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.74 ± 0.10
TOTAL FUSION
14.75 ± 0.04
NORMAL ISOCHRON
14.64 ± 0.20
INVERSE ISOCHRON
14.61 ± 0.21

MSWD (PROBABILITY)
18.87 (0%)

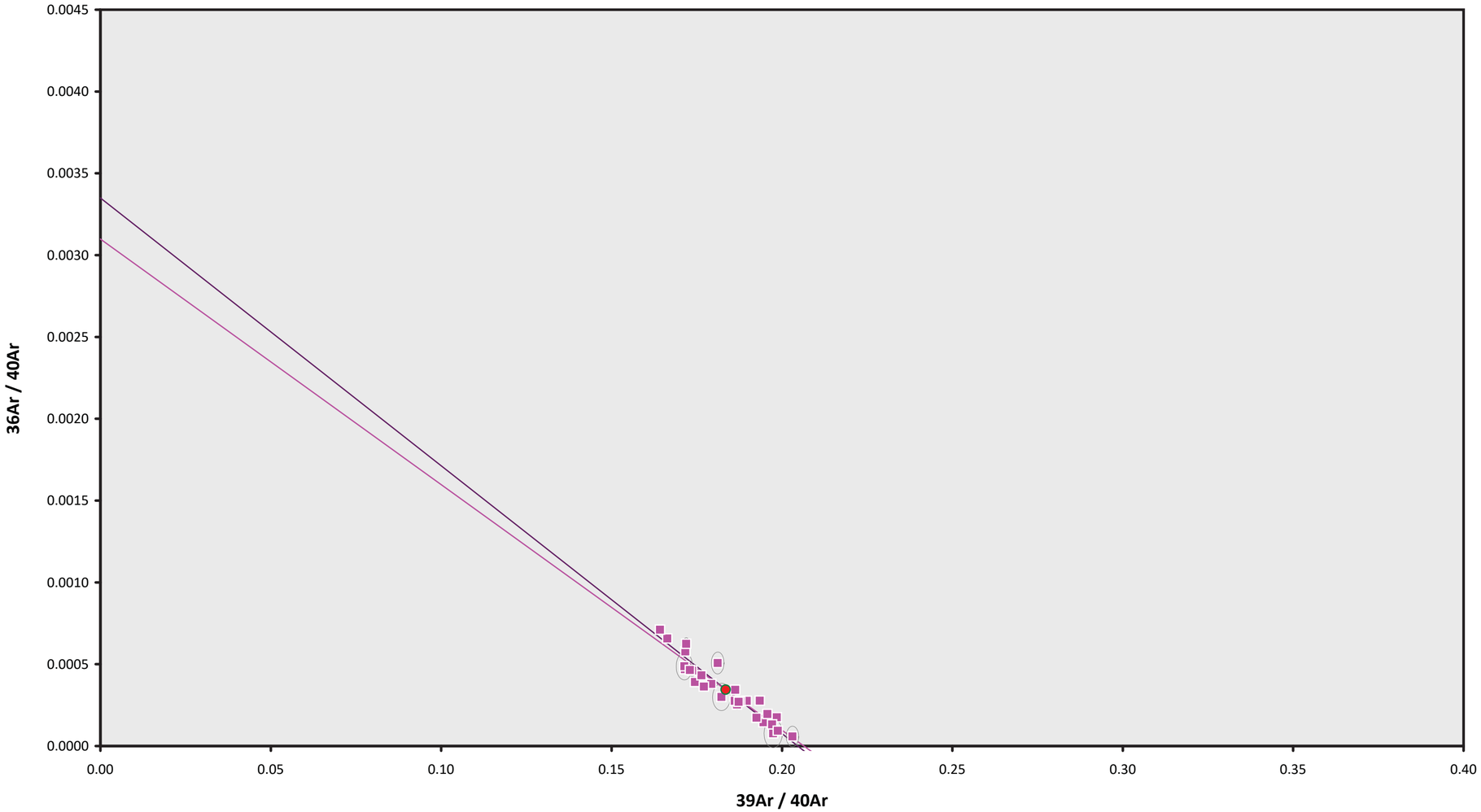
CALCULATED 40AR/36AR INTERCEPT
304.2 ± 32.5

Sample Info

Plagioclase
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X6-21)
J = 0.00165439 ± 0.00000187

21F15920.AGE >>> MS-17-DAM >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.74 ± 0.10
TOTAL FUSION
14.75 ± 0.04
NORMAL ISOCHRON
14.64 ± 0.20
INVERSE ISOCHRON
14.61 ± 0.21

MSWD (PROBABILITY)
17.85 (0%)

SPREADING FACTOR
18.8%

CALCULATED 40AR/36AR INTERCEPT
322.7 ± 34.9

Sample Info

Plagioclase
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X6-21)
J = 0.00165439 ± 0.00000187

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F24286	17.0 %	✓	0.0230199	1.626	1.462794	9.709	1.461404	0.604	120.9127	0.044	432.265	0.007	3.51857	±0.00367	10.62	±0.01	98.42	1.59	35.5	±6.9
20F24287	17.0 %	✓	0.0277737	1.358	1.495212	9.206	1.357217	0.640	112.0671	0.045	403.034	0.009	3.52287	±0.00379	10.63	±0.01	97.96	1.47	32.2	±5.9
20F24289	17.0 %	✓	0.0185476	1.863	1.553220	8.781	1.639902	0.599	137.3038	0.044	490.114	0.007	3.52956	±0.00349	10.65	±0.01	98.88	1.80	38.0	±6.7
20F24290	17.0 %	✓	0.0050839	5.583	1.408857	10.426	1.384101	0.740	116.5006	0.044	411.488	0.008	3.51943	±0.00350	10.62	±0.01	99.64	1.53	35.6	±7.4
20F24292	17.0 %	✓	0.2326881	0.393	4.981026	2.764	4.707401	0.218	388.0984	0.043	1438.484	0.004	3.52795	±0.00336	10.65	±0.01	95.18	5.09	33.5	±1.9
20F24293	17.0 %	✓	0.0268332	1.511	2.341853	5.503	2.291372	0.403	191.5683	0.043	683.397	0.006	3.52597	±0.00335	10.64	±0.01	98.84	2.51	35.2	±3.9
20F24295	17.0 %	✓	0.0409183	1.170	4.538481	3.089	4.316415	0.234	360.5545	0.043	1283.418	0.004	3.52612	±0.00314	10.64	±0.01	99.06	4.73	34.2	±2.1
20F24296	17.0 %	✓	0.0697821	0.774	5.845746	2.368	5.551346	0.193	461.6372	0.043	1649.104	0.003	3.52761	±0.00310	10.65	±0.01	98.75	6.06	34.0	±1.6
20F24298	17.0 %	✓	0.2770930	0.356	2.296558	6.371	1.837425	0.530	148.3955	0.044	605.777	0.007	3.52536	±0.00520	10.64	±0.02	86.36	1.95	27.8	±3.5
20F24299	17.0 %	✓	0.0930120	0.642	2.814862	4.942	2.405226	0.396	201.2519	0.043	736.605	0.005	3.52268	±0.00356	10.63	±0.01	96.24	2.64	30.7	±3.0
20F24301	17.0 %	✓	0.0371750	1.170	3.279652	4.099	3.313231	0.307	274.6696	0.043	978.465	0.005	3.52231	±0.00318	10.63	±0.01	98.88	3.60	36.0	±3.0
20F24302	17.0 %	✓	0.0175036	2.313	5.609185	2.573	5.664793	0.202	473.3489	0.043	1674.156	0.003	3.52617	±0.00306	10.64	±0.01	99.70	6.21	36.3	±1.9
20F24304	17.0 %	✓	0.0451334	0.987	3.538153	3.838	3.815411	0.254	318.8521	0.043	1136.740	0.005	3.52315	±0.00316	10.63	±0.01	98.82	4.18	38.8	±3.0
20F24305	17.0 %	✓	0.0694340	0.806	4.409396	3.186	3.873157	0.265	322.4940	0.043	1157.011	0.004	3.52395	±0.00321	10.64	±0.01	98.22	4.23	31.4	±2.0
20F24307	17.0 %	✓	0.0598264	0.826	2.289311	5.841	2.108063	0.467	174.0853	0.043	631.676	0.006	3.52642	±0.00354	10.64	±0.01	97.18	2.28	32.7	±3.8
20F24308	17.0 %	✓	0.1331305	0.471	5.647425	2.315	5.823810	0.197	483.1660	0.043	1745.394	0.003	3.53051	±0.00312	10.66	±0.01	97.73	6.34	36.8	±1.7
20F24310	17.0 %	✓	0.2082419	0.369	3.474462	4.031	3.155899	0.311	260.8182	0.043	981.758	0.005	3.52627	±0.00355	10.64	±0.01	93.68	3.42	32.3	±2.6
20F24311	17.0 %	✓	0.0354853	1.143	3.067103	4.697	2.731771	0.360	228.7048	0.043	816.544	0.006	3.52448	±0.00325	10.64	±0.01	98.72	3.00	32.1	±3.0
20F24313	17.0 %	✓	0.0297852	1.252	3.620590	3.659	3.535666	0.296	293.5113	0.043	1042.684	0.005	3.52257	±0.00314	10.63	±0.01	99.16	3.85	34.9	±2.6
20F24314	17.0 %	✓	0.0442960	1.057	4.479564	3.092	4.345635	0.246	362.5498	0.043	1291.717	0.004	3.52681	±0.00313	10.65	±0.01	98.99	4.76	34.8	±2.2
20F24316	17.0 %	✓	0.0674820	0.765	2.737584	5.166	2.582516	0.349	216.2809	0.043	782.754	0.005	3.52644	±0.00338	10.64	±0.01	97.44	2.84	34.0	±3.5
20F24317	17.0 %	✓	0.0235122	1.603	3.273806	4.272	3.367462	0.295	280.9889	0.043	997.666	0.005	3.52593	±0.00316	10.64	±0.01	99.31	3.69	36.9	±3.2
20F24319	17.0 %	✓	0.0207880	1.969	2.511964	5.519	2.424481	0.399	203.4429	0.043	723.265	0.006	3.52503	±0.00330	10.64	±0.01	99.15	2.67	34.8	±3.8
20F24320	17.0 %	✓	0.0231650	1.654	2.142778	6.326	1.990448	0.483	165.7067	0.044	590.915	0.007	3.52476	±0.00341	10.64	±0.01	98.84	2.17	33.3	±4.2
20F24322	17.0 %	✓	0.0165458	1.953	1.879372	7.638	1.828457	0.530	151.1237	0.044	537.479	0.007	3.52429	±0.00338	10.64	±0.01	99.09	1.98	34.6	±5.3
20F24323	17.0 %	✓	0.1570404	0.439	3.092923	4.738	2.832529	0.331	231.9215	0.043	863.386	0.006	3.52109	±0.00357	10.63	±0.01	94.58	3.04	32.2	±3.1
20F24325	17.0 %	✓	0.0474389	0.978	3.331854	3.963	2.836989	0.351	235.8191	0.043	843.993	0.005	3.51949	±0.00327	10.62	±0.01	98.34	3.09	30.4	±2.4
20F24326	17.0 %	✓	0.0583778	0.913	3.781329	3.479	3.551585	0.283	295.9358	0.043	1060.252	0.004	3.52427	±0.00325	10.64	±0.01	98.37	3.88	33.7	±2.3
20F24328	17.0 %	✓	0.0586793	0.828	2.572170	5.246	2.431386	0.383	201.8941	0.043	728.169	0.006	3.52036	±0.00341	10.63	±0.01	97.61	2.65	33.8	±3.5
20F24329	17.0 %	✓	0.0783620	0.620	2.953712	4.575	2.497712	0.391	207.6999	0.043	754.599	0.006	3.52105	±0.00338	10.63	±0.01	96.91	2.73	30.2	±2.8
		Σ	2.0461546	0.140	96.430940	0.786	91.662813	0.059	7621.3035	0.008	27472.308	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS17-020**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1D6-20)**
Position = **X: 0 | Y: 0 | Z/H: 6.368684 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.38823 ± 0.00676**
FCT-NM J-value = **0.00165372 ± 0.00000119**
Air Shot 40Ar/36Ar = **298.4040 ± 0.3969**
Air Shot MDF = **1.00013086 ± 0.00042285 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			3.52448	±0.00107	**10.64**	**±0.02**	3.08	100.00	33.9	±0.8
Error Mean				±0.03%		**±0.15%**	0%	30		
				Full External Error		±0.55	1.53	2σ Confidence Limit		
				Analytical Error		±0.00	1.7538	Error Magnification		
Total Fusion Age			3.52496	±0.00064	**10.64**	**±0.02**		30	34.0	±0.5
				±0.02%		**±0.14%**				
				Full External Error		±0.55				
				Analytical Error		±0.00				
Normal Isochron	**300.15**	**±4.20**	3.52372	±0.00153	**10.64**	**±0.02**	3.30	100.00		
Error Chron		**±1.40%**		±0.04%		**±0.15%**	0%	30		
				Full External Error		±0.55	1.53	2σ Confidence Limit		
				Analytical Error		±0.00	1.8153	Error Magnification		
							1	Number of Iterations		
							0.0000003150	Convergence		
Inverse Isochron	**299.00**	**±4.13**	3.52437	±0.00150	**10.64**	**±0.02**	3.19	100.00		
Error Chron		**±1.38%**		±0.04%		**±0.15%**	0%	30		
				Full External Error		±0.55	1.53	2σ Confidence Limit		
				Analytical Error		±0.00	1.7859	Error Magnification		
							2	Number of Iterations		
							0.0000251317	Convergence		
							13%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F24286	17.0 %	✓	0.0226245	1.462794	0.0000000	120.9118	425.437	10.62 ±0.01	98.42	1.59	35.5 ±6.9
20F24287	17.0 %	✓	0.0273696	1.495212	0.0000000	112.0662	394.795	10.63 ±0.01	97.96	1.47	32.2 ±5.9
20F24289	17.0 %	✓	0.0181278	1.553220	0.0000000	137.3028	484.618	10.65 ±0.01	98.88	1.80	38.0 ±6.7
20F24290	17.0 %	✓	0.0047031	1.408857	0.0000000	116.4997	410.013	10.62 ±0.01	99.64	1.53	35.6 ±7.4
20F24292	17.0 %	✓	0.2313417	4.981026	0.0000000	388.0952	1369.179	10.65 ±0.01	95.18	5.09	33.5 ±1.9
20F24293	17.0 %	✓	0.0262002	2.341853	0.0000000	191.5668	675.459	10.64 ±0.01	98.84	2.51	35.2 ±3.9
20F24295	17.0 %	✓	0.0396915	4.538481	0.0000000	360.5516	1271.349	10.64 ±0.01	99.06	4.73	34.2 ±2.1
20F24296	17.0 %	✓	0.0682020	5.845746	0.0000000	461.6334	1628.461	10.65 ±0.01	98.75	6.06	34.0 ±1.6
20F24298	17.0 %	✓	0.2764723	2.296558	0.0000000	148.3941	523.143	10.64 ±0.02	86.36	1.95	27.8 ±3.5
20F24299	17.0 %	✓	0.0922512	2.814862	0.0000000	201.2501	708.940	10.63 ±0.01	96.24	2.64	30.7 ±3.0
20F24301	17.0 %	✓	0.0362885	3.279652	0.0000000	274.6675	967.463	10.63 ±0.01	98.88	3.60	36.0 ±3.0
20F24302	17.0 %	✓	0.0159874	5.609185	0.0000000	473.3453	1669.096	10.64 ±0.01	99.70	6.21	36.3 ±1.9
20F24304	17.0 %	✓	0.0441771	3.538153	0.0000000	318.8498	1123.357	10.63 ±0.01	98.82	4.18	38.8 ±3.0
20F24305	17.0 %	✓	0.0682421	4.409396	0.0000000	322.4912	1136.441	10.64 ±0.01	98.22	4.23	31.4 ±2.0
20F24307	17.0 %	✓	0.0592076	2.289311	0.0000000	174.0838	613.893	10.64 ±0.01	97.18	2.28	32.7 ±3.8
20F24308	17.0 %	✓	0.1316040	5.647425	0.0000000	483.1624	1705.809	10.66 ±0.01	97.73	6.34	36.8 ±1.7
20F24310	17.0 %	✓	0.2073028	3.474462	0.0000000	260.8160	919.708	10.64 ±0.01	93.68	3.42	32.3 ±2.6
20F24311	17.0 %	✓	0.0346562	3.067103	0.0000000	228.7028	806.058	10.64 ±0.01	98.72	3.00	32.1 ±3.0
20F24313	17.0 %	✓	0.0288066	3.620590	0.0000000	293.5090	1033.906	10.63 ±0.01	99.16	3.85	34.9 ±2.6
20F24314	17.0 %	✓	0.0430852	4.479564	0.0000000	362.5469	1278.633	10.65 ±0.01	98.99	4.76	34.8 ±2.2
20F24316	17.0 %	✓	0.0667420	2.737584	0.0000000	216.2792	762.696	10.64 ±0.01	97.44	2.84	34.0 ±3.5
20F24317	17.0 %	✓	0.0226273	3.273806	0.0000000	280.9868	990.740	10.64 ±0.01	99.31	3.69	36.9 ±3.2
20F24319	17.0 %	✓	0.0201090	2.511964	0.0000000	203.4413	717.137	10.64 ±0.01	99.15	2.67	34.8 ±3.8
20F24320	17.0 %	✓	0.0225859	2.142778	0.0000000	165.7053	584.072	10.64 ±0.01	98.84	2.17	33.3 ±4.2
20F24322	17.0 %	✓	0.0160378	1.879372	0.0000000	151.1225	532.599	10.64 ±0.01	99.09	1.98	34.6 ±5.3
20F24323	17.0 %	✓	0.1562040	3.092923	0.0016368	231.9195	816.609	10.63 ±0.01	94.58	3.04	32.2 ±3.1
20F24325	17.0 %	✓	0.0465383	3.331854	0.0000000	235.8169	829.955	10.62 ±0.01	98.34	3.09	30.4 ±2.4
20F24326	17.0 %	✓	0.0573557	3.781329	0.0000000	295.9334	1042.948	10.64 ±0.01	98.37	3.88	33.7 ±2.3
20F24328	17.0 %	✓	0.0579840	2.572170	0.0000000	201.8925	710.734	10.63 ±0.01	97.61	2.65	33.8 ±3.5
20F24329	17.0 %	✓	0.0775636	2.953712	0.0000000	207.6980	731.316	10.63 ±0.01	96.91	2.73	30.2 ±2.8
		Σ	2.0200890	96.430940	0.0016368	7621.2416	26864.564				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS17-020**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1D6-20)**
J = **0.00165372 ±0.00000119**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau	3.52448	±0.00107	**10.64**	**±0.02**	3.08	100.00	33.9	±0.8
Error Mean		±0.03%		**±0.15%**	0%	30		
			Full External Error	±0.55	1.53	2σ Confidence Limit		
			Analytical Error	±0.00	1.7538	Error Magnification		
Total Fusion Age	3.52496	±0.00064	**10.64**	**±0.02**		30	34.0	±0.5
		±0.02%		**±0.14%**				
			Full External Error	±0.55				
			Analytical Error	±0.00				

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F24286	17.0 %	✓	5344.28	±177.83	19102.80	±635.41	0.9996
20F24287	17.0 %	✓	4094.56	±113.48	14723.15	±407.84	0.9995
20F24289	17.0 %	✓	7574.16	±290.39	27031.96	±1036.12	0.9997
20F24290	17.0 %	✓	24770.88	±3019.14	87477.98	±10661.77	1.0000
20F24292	17.0 %	✓	1677.58	±13.34	6216.99	±49.14	0.9942
20F24293	17.0 %	✓	7311.65	±227.22	26079.21	±810.12	0.9996
20F24295	17.0 %	✓	9083.85	±219.90	32329.31	±782.14	0.9994
20F24296	17.0 %	✓	6768.62	±107.64	24175.60	±383.90	0.9986
20F24298	17.0 %	✓	536.74	±3.86	2190.77	±15.66	0.9924
20F24299	17.0 %	✓	2181.55	±28.34	7983.45	±103.49	0.9977
20F24301	17.0 %	✓	7568.99	±182.25	26958.87	±648.73	0.9994
20F24302	17.0 %	✓	29607.41	±1506.92	104699.30	±5328.13	0.9999
20F24304	17.0 %	✓	7217.54	±146.19	25727.06	±520.63	0.9991
20F24305	17.0 %	✓	4725.69	±77.83	16951.64	±278.80	0.9986
20F24307	17.0 %	✓	2940.23	±49.27	10667.04	±178.51	0.9986
20F24308	17.0 %	✓	3671.33	±35.17	13260.23	±126.52	0.9960
20F24310	17.0 %	✓	1258.14	±9.40	4735.10	±35.15	0.9933
20F24311	17.0 %	✓	6599.18	±155.34	23557.24	±554.14	0.9993
20F24313	17.0 %	✓	10188.95	±265.15	36189.85	±941.29	0.9994
20F24314	17.0 %	✓	8414.65	±183.61	29975.42	±653.59	0.9992
20F24316	17.0 %	✓	3240.53	±50.31	11726.09	±181.79	0.9984
20F24317	17.0 %	✓	12418.04	±415.84	44083.70	±1475.73	0.9997
20F24319	17.0 %	✓	10116.91	±413.77	35961.01	±1470.44	0.9998
20F24320	17.0 %	✓	7336.69	±250.21	26158.63	±891.82	0.9997
20F24322	17.0 %	✓	9422.92	±382.46	33507.65	±1359.72	0.9998
20F24323	17.0 %	✓	1484.72	±13.19	5526.39	±48.88	0.9952
20F24325	17.0 %	✓	5067.15	±101.43	18132.35	±362.64	0.9991
20F24326	17.0 %	✓	5159.62	±96.23	18482.44	±344.34	0.9989
20F24328	17.0 %	✓	3481.86	±58.61	12555.97	±211.06	0.9986
20F24329	17.0 %	✓	2677.78	±33.71	9727.16	±122.18	0.9976

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**300.15**	**±4.20**	3.52372	±0.00153	**10.64**	**±0.02**	3.30
Error Chron		**±1.40%**		±0.04%		**±0.15%**	0%
					Full External Error	±0.55	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000000314971
	Error Magnification	1.8153	Number of Iterations	1
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F24286	17.0 %	✓	0.2797642	±0.0002515	0.00005235	±0.00000174	0.0008
20F24287	17.0 %	✓	0.2781033	±0.0002526	0.00006792	±0.00000188	0.0013
20F24289	17.0 %	✓	0.2801926	±0.0002496	0.00003699	±0.00000142	0.0006
20F24290	17.0 %	✓	0.2831670	±0.0002554	0.00001143	±0.00000139	0.0002
20F24292	17.0 %	✓	0.2698387	±0.0002317	0.00016085	±0.00000127	0.0011
20F24293	17.0 %	✓	0.2803631	±0.0002463	0.00003834	±0.00000119	0.0006
20F24295	17.0 %	✓	0.2809787	±0.0002417	0.00003093	±0.00000075	0.0004
20F24296	17.0 %	✓	0.2799774	±0.0002392	0.00004136	±0.00000066	0.0004
20F24298	17.0 %	✓	0.2450014	±0.0002175	0.00045646	±0.00000326	0.0031
20F24299	17.0 %	✓	0.2732585	±0.0002380	0.00012526	±0.00000162	0.0012
20F24301	17.0 %	✓	0.2807606	±0.0002422	0.00003709	±0.00000089	0.0006
20F24302	17.0 %	✓	0.2827852	±0.0002419	0.00000955	±0.00000049	0.0001
20F24304	17.0 %	✓	0.2805427	±0.0002422	0.00003887	±0.00000079	0.0006
20F24305	17.0 %	✓	0.2787749	±0.0002397	0.00005899	±0.00000097	0.0006
20F24307	17.0 %	✓	0.2756366	±0.0002421	0.00009375	±0.00000157	0.0011
20F24308	17.0 %	✓	0.2768679	±0.0002366	0.00007541	±0.00000072	0.0006
20F24310	17.0 %	✓	0.2657050	±0.0002290	0.00021119	±0.00000157	0.0017
20F24311	17.0 %	✓	0.2801338	±0.0002441	0.00004245	±0.00000100	0.0007
20F24313	17.0 %	✓	0.2815417	±0.0002433	0.00002763	±0.00000072	0.0004
20F24314	17.0 %	✓	0.2807184	±0.0002410	0.00003336	±0.00000073	0.0004
20F24316	17.0 %	✓	0.2763518	±0.0002395	0.00008528	±0.00000132	0.0010
20F24317	17.0 %	✓	0.2816922	±0.0002437	0.00002268	±0.00000076	0.0004
20F24319	17.0 %	✓	0.2813300	±0.0002447	0.00002781	±0.00000114	0.0004
20F24320	17.0 %	✓	0.2804691	±0.0002479	0.00003823	±0.00000130	0.0007
20F24322	17.0 %	✓	0.2812168	±0.0002495	0.00002984	±0.00000121	0.0006
20F24323	17.0 %	✓	0.2686601	±0.0002334	0.00018095	±0.00000160	0.0018
20F24325	17.0 %	✓	0.2794537	±0.0002421	0.00005515	±0.00000110	0.0008
20F24326	17.0 %	✓	0.2791634	±0.0002423	0.00005411	±0.00000101	0.0006
20F24328	17.0 %	✓	0.2773073	±0.0002432	0.00007964	±0.00000134	0.0010
20F24329	17.0 %	✓	0.2752887	±0.0002398	0.00010280	±0.00000129	0.0014

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**299.00**	**±4.13**	3.52437	±0.00150	**10.64**	**±0.02**	3.19
Error Chron		**±1.38%**		±0.04%		**±0.15%**	0%
					Full External Error	±0.55	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0000251317
	Error Magnification	1.7859	Number of Iterations	2
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	13.5%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F24286	17.0 %	✓	0.0226245	1.66	0.0000000	0.00	0.0003954	9.71	0.0000000	0.00	1.462794	9.71	0.0042647	1.67	0.0000000	0.00	1.460252	0.10	0.0002633	13.67	0.0000000	0.00	120.9118	0.04	0.0009398	9.75
20F24287	17.0 %	✓	0.0273696	1.38	0.0000000	0.00	0.0004042	9.21	0.0000000	0.00	1.495212	9.21	0.0051592	1.39	0.0000000	0.00	1.353423	0.10	0.0002691	13.32	0.0000000	0.00	112.0662	0.04	0.0009607	9.25
20F24289	17.0 %	✓	0.0181278	1.92	0.0000000	0.00	0.0004198	8.78	0.0000000	0.00	1.553220	8.78	0.0034171	1.92	0.0000000	0.00	1.658206	0.10	0.0002796	13.03	0.0000000	0.00	137.3028	0.04	0.0009979	8.83
20F24290	17.0 %	✓	0.0047031	6.09	0.0000000	0.00	0.0003808	10.43	0.0000000	0.00	1.408857	10.43	0.0008865	6.10	0.0000000	0.00	1.406967	0.10	0.0002536	14.19	0.0000000	0.00	116.4997	0.04	0.0009052	10.47
20F24292	17.0 %	✓	0.2313417	0.40	0.0000000	0.00	0.0013464	2.77	0.0000000	0.00	4.981026	2.76	0.0436079	0.43	0.0000000	0.00	4.687025	0.10	0.0008966	10.02	0.0000000	0.00	388.0952	0.04	0.0032003	2.91
20F24293	17.0 %	✓	0.0262002	1.55	0.0000000	0.00	0.0006330	5.51	0.0000000	0.00	2.341853	5.50	0.0049387	1.56	0.0000000	0.00	2.313552	0.10	0.0004215	11.09	0.0000000	0.00	191.5668	0.04	0.0015046	5.58
20F24295	17.0 %	✓	0.0396915	1.21	0.0000000	0.00	0.0012268	3.09	0.0000000	0.00	4.538481	3.09	0.0074818	1.22	0.0000000	0.00	4.354381	0.10	0.0008169	10.11	0.0000000	0.00	360.5516	0.04	0.0029160	3.22
20F24296	17.0 %	✓	0.0682020	0.79	0.0000000	0.00	0.0015801	2.37	0.0000000	0.00	5.845746	2.37	0.0128561	0.81	0.0000000	0.00	5.575147	0.10	0.0010522	9.92	0.0000000	0.00	461.6334	0.04	0.0037559	2.54
20F24298	17.0 %	✓	0.2764723	0.36	0.0000000	0.00	0.0006208	6.37	0.0000000	0.00	2.296558	6.37	0.0521150	0.39	0.0000000	0.00	1.792155	0.10	0.0004134	11.55	0.0000000	0.00	148.3941	0.04	0.0014755	6.44
20F24299	17.0 %	✓	0.0922512	0.65	0.0000000	0.00	0.0007609	4.95	0.0000000	0.00	2.814862	4.94	0.0173893	0.67	0.0000000	0.00	2.430497	0.10	0.0005067	10.82	0.0000000	0.00	201.2501	0.04	0.0018085	5.03
20F24301	17.0 %	✓	0.0362885	1.20	0.0000000	0.00	0.0008865	4.10	0.0000000	0.00	3.279652	4.10	0.0068404	1.21	0.0000000	0.00	3.317160	0.10	0.0005903	10.47	0.0000000	0.00	274.6675	0.04	0.0021072	4.20
20F24302	17.0 %	✓	0.0159874	2.54	0.0000000	0.00	0.0015162	2.58	0.0000000	0.00	5.609185	2.57	0.0030136	2.55	0.0000000	0.00	5.716591	0.10	0.0010097	9.97	0.0000000	0.00	473.3453	0.04	0.0036039	2.73
20F24304	17.0 %	✓	0.0441771	1.01	0.0000000	0.00	0.0009564	3.84	0.0000000	0.00	3.538153	3.84	0.0083274	1.02	0.0000000	0.00	3.850749	0.10	0.0006369	10.37	0.0000000	0.00	318.8498	0.04	0.0022733	3.95
20F24305	17.0 %	✓	0.0682421	0.82	0.0000000	0.00	0.0011919	3.19	0.0000000	0.00	4.409396	3.19	0.0128636	0.84	0.0000000	0.00	3.894726	0.10	0.0007937	10.14	0.0000000	0.00	322.4912	0.04	0.0028330	3.32
20F24307	17.0 %	✓	0.0592076	0.84	0.0000000	0.00	0.0006188	5.84	0.0000000	0.00	2.289311	5.84	0.0111606	0.85	0.0000000	0.00	2.102410	0.10	0.0004121	11.26	0.0000000	0.00	174.0838	0.04	0.0014709	5.91
20F24308	17.0 %	✓	0.1316040	0.48	0.0000000	0.00	0.0015265	2.32	0.0000000	0.00	5.647425	2.32	0.0248074	0.50	0.0000000	0.00	5.835152	0.10	0.0010165	9.90	0.0000000	0.00	483.1624	0.04	0.0036285	2.49
20F24310	17.0 %	✓	0.2073028	0.37	0.0000000	0.00	0.0009391	4.03	0.0000000	0.00	3.474462	4.03	0.0390766	0.40	0.0000000	0.00	3.149875	0.10	0.0006254	10.44	0.0000000	0.00	260.8160	0.04	0.0022323	4.13
20F24311	17.0 %	✓	0.0346562	1.18	0.0000000	0.00	0.0008290	4.70	0.0000000	0.00	3.067103	4.70	0.0065327	1.19	0.0000000	0.00	2.762044	0.10	0.0005521	10.71	0.0000000	0.00	228.7028	0.04	0.0019706	4.79
20F24313	17.0 %	✓	0.0288066	1.30	0.0000000	0.00	0.0009786	3.66	0.0000000	0.00	3.620590	3.66	0.0054300	1.31	0.0000000	0.00	3.544708	0.10	0.0006517	10.30	0.0000000	0.00	293.5090	0.04	0.0023262	3.77
20F24314	17.0 %	✓	0.0430852	1.09	0.0000000	0.00	0.0012108	3.10	0.0000000	0.00	4.479564	3.09	0.0081216	1.10	0.0000000	0.00	4.378479	0.10	0.0008063	10.11	0.0000000	0.00	362.5469	0.04	0.0028781	3.23
20F24316	17.0 %	✓	0.0667420	0.78	0.0000000	0.00	0.0007400	5.17	0.0000000	0.00	2.737584	5.17	0.0125809	0.79	0.0000000	0.00	2.612004	0.10	0.0004928	10.93	0.0000000	0.00	216.2792	0.04	0.0017589	5.25
20F24317	17.0 %	✓	0.0226273	1.67	0.0000000	0.00	0.0008849	4.28	0.0000000	0.00	3.273806	4.27	0.0042652	1.68	0.0000000	0.00	3.393478	0.10	0.0005893	10.53	0.0000000	0.00	280.9868	0.04	0.0021034	4.37
20F24319	17.0 %	✓	0.0201090	2.04	0.0000000	0.00	0.0006790	5.52	0.0000000	0.00	2.511964	5.52	0.0037906	2.05	0.0000000	0.00	2.456960	0.10	0.0004522	11.10	0.0000000	0.00	203.4413	0.04	0.0016139	5.59
20F24320	17.0 %	✓	0.0225859	1.70	0.0000000	0.00	0.0005792	6.33	0.0000000	0.00	2.142778	6.33	0.0042574	1.71	0.0000000	0.00	2.001223	0.10	0.0003857	11.52	0.0000000	0.00	165.7053	0.04	0.0013767	6.39
20F24322	17.0 %	✓	0.0160378	2.03	0.0000000	0.00	0.0005080	7.64	0.0000000	0.00	1.879372	7.64	0.0030231	2.04	0.0000000	0.00	1.825106	0.10	0.0003383	12.29	0.0000000	0.00	151.1225	0.04	0.0012075	7.69
20F24323	17.0 %	✓	0.1562040	0.44	0.0000000	0.00	0.0008360	4.74	0.0000004	711.93	3.092923	4.74	0.0294445	0.47	0.0000000	0.00	2.800891	0.10	0.0005567	10.73	0.0016368	711.93	231.9195	0.04	0.0019872	4.83
20F24325	17.0 %	✓	0.0465383	1.00	0.0000000	0.00	0.0009006	3.97	0.0000000	0.00	3.331854	3.96	0.0087725	1.01	0.0000000	0.00	2.847961	0.10	0.0005997	10.41	0.0000000	0.00	235.8169	0.04	0.0021407	4.07
20F24326	17.0 %	✓	0.0573557	0.93	0.0000000	0.00	0.0010221	3.48	0.0000000	0.00	3.781329	3.48	0.0108115	0.94	0.0000000	0.00	3.573987	0.10	0.0006806	10.24	0.0000000	0.00	295.9334	0.04	0.0024295	3.60
20F24328	17.0 %	✓	0.0579840	0.84	0.0000000	0.00	0.0006953	5.25	0.0000000	0.00	2.572170	5.25	0.0109300	0.86	0.0000000	0.00	2.438256	0.10	0.0004630	10.97	0.0000000	0.00	201.8925	0.04	0.0016526	5.33
20F24329	17.0 %	✓	0.0775636	0.63	0.0000000	0.00	0.0007984	4.58	0.0000000	0.00	2.953712	4.58	0.0146207	0.65	0.0000000	0.00	2.508369	0.10	0.0005317	10.66	0.0000000	0.00	207.6980	0.04	0.0018978	4.67
		Σ	2.0200890	0.14	0.0000000	0.00	0.0260653	0.79	0.0000004	711.93	96.430940	0.79	0.3807868	0.15	0.0000000	0.00	92.041734	0.02	0.0173576	2.04	0.0016368	711.93	7621.2416	0.01	0.0619569	0.81
		Σ							2.0461546	0.14	96.430940	0.79									92.441516	0.02			7621.3035	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
425.437	0.03	6.75478	1.67	0.0000000	0.00	0.0733935	9.65
394.795	0.03	8.17145	1.39	0.0000000	0.00	0.0680242	9.65
484.618	0.02	5.41224	1.92	0.0000000	0.00	0.0833428	9.65
410.013	0.02	1.40415	6.09	0.0000000	0.00	0.0707153	9.65
1369.179	0.02	69.06939	0.41	0.0000000	0.00	0.2355738	9.65
675.459	0.02	7.82233	1.56	0.0000000	0.00	0.1162810	9.65
1271.349	0.01	11.85029	1.21	0.0000000	0.00	0.2188548	9.65
1628.461	0.01	20.36239	0.80	0.0000000	0.00	0.2802115	9.65
523.143	0.06	82.54356	0.37	0.0000000	0.00	0.0900752	9.65
708.940	0.03	27.54251	0.66	0.0000000	0.00	0.1221588	9.65
967.463	0.01	10.83430	1.21	0.0000000	0.00	0.1667232	9.65
1669.096	0.01	4.77320	2.55	0.0000000	0.00	0.2873206	9.65
1123.357	0.01	13.18951	1.02	0.0000000	0.00	0.1935418	9.65
1136.441	0.02	20.37436	0.83	0.0000000	0.00	0.1957522	9.65
613.893	0.03	17.67702	0.84	0.0000000	0.00	0.1056689	9.65
1705.809	0.01	39.29170	0.49	0.0000000	0.00	0.2932796	9.65
919.708	0.03	61.89231	0.39	0.0000000	0.00	0.1583153	9.65
806.058	0.02	10.34697	1.18	0.0000000	0.00	0.1388226	9.65
1033.906	0.01	8.60050	1.30	0.0000000	0.00	0.1781600	9.65
1278.633	0.01	12.86351	1.10	0.0000000	0.00	0.2200660	9.65
762.696	0.02	19.92649	0.78	0.0000000	0.00	0.1312815	9.65
990.740	0.01	6.75561	1.68	0.0000000	0.00	0.1705590	9.65
717.137	0.02	6.00375	2.05	0.0000000	0.00	0.1234888	9.65
584.072	0.02	6.74323	1.71	0.0000000	0.00	0.1005831	9.65
532.599	0.02	4.78823	2.03	0.0000000	0.00	0.0917313	9.65
816.609	0.03	46.63627	0.45	0.0000000	0.00	0.1407751	9.65
829.955	0.02	13.89449	1.01	0.0000000	0.00	0.1431409	9.65
1042.948	0.02	17.12411	0.94	0.0000000	0.00	0.1796316	9.65
710.734	0.02	17.31172	0.85	0.0000000	0.00	0.1225487	9.65
731.316	0.02	23.15738	0.64	0.0000000	0.00	0.1260727	9.65
26864.564	0.00	603.11777	0.14	0.0000000	0.00	4.6260936	1.90
						27472.308	0.00

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F24286	17.0 %	✓	3.575018	0.001606	0.012098	0.001175	0.000190	0.000003	143.213	16.965829	1.00101190	1.530E-11
20F24287	17.0 %	✓	3.596362	0.001632	0.013342	0.001228	0.000248	0.000003	143.218	16.967691	1.00101194	1.427E-11
20F24289	17.0 %	✓	3.569555	0.001589	0.011312	0.000993	0.000135	0.000003	143.230	16.971648	1.00101202	1.735E-11
20F24290	17.0 %	✓	3.532065	0.001592	0.012093	0.001261	0.000044	0.000002	143.236	16.973744	1.00101207	1.457E-11
20F24292	17.0 %	✓	3.706494	0.001590	0.012834	0.000355	0.000600	0.000002	143.248	16.977702	1.00101215	5.092E-11
20F24293	17.0 %	✓	3.567382	0.001566	0.012225	0.000673	0.000140	0.000002	143.254	16.979798	1.00101220	2.419E-11
20F24295	17.0 %	✓	3.559567	0.001530	0.012588	0.000389	0.000113	0.000001	143.266	16.983758	1.00101228	4.543E-11
20F24296	17.0 %	✓	3.572295	0.001525	0.012663	0.000300	0.000151	0.000001	143.272	16.985855	1.00101232	5.838E-11
20F24298	17.0 %	✓	4.082176	0.001811	0.015476	0.000986	0.001867	0.000007	143.284	16.989816	1.00101241	2.144E-11
20F24299	17.0 %	✓	3.660112	0.001593	0.013987	0.000691	0.000462	0.000003	143.290	16.991680	1.00101245	2.608E-11
20F24301	17.0 %	✓	3.562332	0.001535	0.011940	0.000490	0.000135	0.000002	143.302	16.995876	1.00101253	3.464E-11
20F24302	17.0 %	✓	3.536834	0.001512	0.011850	0.000305	0.000037	0.000001	143.308	16.997741	1.00101257	5.927E-11
20F24304	17.0 %	✓	3.565101	0.001538	0.011097	0.000426	0.000142	0.000001	143.319	17.001705	1.00101266	4.024E-11
20F24305	17.0 %	✓	3.587699	0.001541	0.013673	0.000436	0.000215	0.000002	143.326	17.003804	1.00101270	4.096E-11
20F24307	17.0 %	✓	3.628541	0.001593	0.013151	0.000768	0.000344	0.000003	143.338	17.007770	1.00101278	2.236E-11
20F24308	17.0 %	✓	3.612410	0.001542	0.011688	0.000271	0.000276	0.000001	143.344	17.009869	1.00101283	6.179E-11
20F24310	17.0 %	✓	3.764147	0.001621	0.013321	0.000537	0.000798	0.000003	143.356	17.013836	1.00101291	3.475E-11
20F24311	17.0 %	✓	3.570298	0.001554	0.013411	0.000630	0.000155	0.000002	143.361	17.015703	1.00101295	2.891E-11
20F24313	17.0 %	✓	3.552450	0.001534	0.012335	0.000451	0.000101	0.000001	143.374	17.019905	1.00101304	3.691E-11
20F24314	17.0 %	✓	3.562867	0.001528	0.012356	0.000382	0.000122	0.000001	143.379	17.021773	1.00101308	4.573E-11
20F24316	17.0 %	✓	3.619154	0.001567	0.012658	0.000654	0.000312	0.000002	143.391	17.025743	1.00101316	2.771E-11
20F24317	17.0 %	✓	3.550554	0.001535	0.011651	0.000498	0.000084	0.000001	143.397	17.027845	1.00101321	3.532E-11
20F24319	17.0 %	✓	3.555124	0.001545	0.012347	0.000681	0.000102	0.000002	143.409	17.031816	1.00101329	2.560E-11
20F24320	17.0 %	✓	3.566032	0.001575	0.012931	0.000818	0.000140	0.000002	143.415	17.033918	1.00101333	2.092E-11
20F24322	17.0 %	✓	3.556553	0.001577	0.012436	0.000950	0.000109	0.000002	143.427	17.037891	1.00101342	1.903E-11
20F24323	17.0 %	✓	3.722750	0.001616	0.013336	0.000632	0.000677	0.000003	143.433	17.039761	1.00101346	3.056E-11
20F24325	17.0 %	✓	3.578984	0.001549	0.014129	0.000560	0.000201	0.000002	143.445	17.043968	1.00101354	2.988E-11
20F24326	17.0 %	✓	3.582709	0.001554	0.012778	0.000445	0.000197	0.000002	143.451	17.045839	1.00101358	3.753E-11
20F24328	17.0 %	✓	3.606685	0.001580	0.012740	0.000668	0.000291	0.000002	143.463	17.049814	1.00101367	2.578E-11
20F24329	17.0 %	✓	3.633124	0.001581	0.014221	0.000651	0.000377	0.000002	143.469	17.051919	1.00101371	2.671E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F24286	17.0 %	0.0048836 ±0.0001655	0.0166955 ±0.0056699	0.0130446 ±0.0059990	0.0117567 ±0.0059625	1.1358385 ±0.0143854
20F24287	17.0 %	0.0048836 ±0.0001655	0.0166955 ±0.0056699	0.0130446 ±0.0059990	0.0117567 ±0.0059625	1.1358385 ±0.0143854
20F24289	17.0 %	0.0042902 ±0.0001713	0.0108213 ±0.0063331	0.0046667 ±0.0070578	0.0154560 ±0.0060302	1.0464985 ±0.0133807
20F24290	17.0 %	0.0042902 ±0.0001713	0.0108213 ±0.0063331	0.0046667 ±0.0070578	0.0154560 ±0.0060302	1.0464985 ±0.0133807
20F24292	17.0 %	0.0048089 ±0.0001808	0.0173500 ±0.0051946	0.0033348 ±0.0061597	0.0126184 ±0.0062108	1.1251013 ±0.0166916
20F24293	17.0 %	0.0048089 ±0.0001808	0.0173500 ±0.0051946	0.0033348 ±0.0061597	0.0126184 ±0.0062108	1.1251013 ±0.0166916
20F24295	17.0 %	0.0049572 ±0.0002012	0.0220738 ±0.0055653	0.0019191 ±0.0062480	0.0181786 ±0.0066141	1.3059480 ±0.0150989
20F24296	17.0 %	0.0049572 ±0.0002012	0.0220738 ±0.0055653	0.0019191 ±0.0062480	0.0181786 ±0.0066141	1.3059480 ±0.0150989
20F24298	17.0 %	0.0050059 ±0.0001927	0.0263298 ±0.0060384	0.0021185 ±0.0065963	0.0022155 ±0.0069621	1.3802350 ±0.0143886
20F24299	17.0 %	0.0050059 ±0.0001927	0.0263298 ±0.0060384	0.0021185 ±0.0065963	0.0022155 ±0.0069621	1.3802350 ±0.0143886
20F24301	17.0 %	0.0057185 ±0.0001958	0.0248092 ±0.0056690	0.0023563 ±0.0073447	0.0024665 ±0.0057189	1.3395780 ±0.0151789
20F24302	17.0 %	0.0057185 ±0.0001958	0.0248092 ±0.0056690	0.0023563 ±0.0073447	0.0024665 ±0.0057189	1.3395780 ±0.0151789
20F24304	17.0 %	0.0048463 ±0.0001801	0.0223537 ±0.0056008	0.0028397 ±0.0067761	0.0423431 ±0.0053067	1.1331357 ±0.0156730
20F24305	17.0 %	0.0048463 ±0.0001801	0.0223537 ±0.0056008	0.0028397 ±0.0067761	0.0423431 ±0.0053067	1.1331357 ±0.0156730
20F24307	17.0 %	0.0045977 ±0.0001899	0.0269164 ±0.0051902	0.0045099 ±0.0071738	0.0320697 ±0.0056996	1.2305650 ±0.0157432
20F24308	17.0 %	0.0045977 ±0.0001899	0.0269164 ±0.0051902	0.0045099 ±0.0071738	0.0320697 ±0.0056996	1.2305650 ±0.0157432
20F24310	17.0 %	0.0046957 ±0.0001674	0.0192955 ±0.0060491	0.0008065 ±0.0066872	0.0276775 ±0.0060932	1.1658365 ±0.0163853
20F24311	17.0 %	0.0046957 ±0.0001674	0.0192955 ±0.0060491	0.0008065 ±0.0066872	0.0276775 ±0.0060932	1.1658365 ±0.0163853
20F24313	17.0 %	0.0045856 ±0.0001697	0.0153874 ±0.0054870	0.0031551 ±0.0069495	0.0087141 ±0.0066455	1.2359304 ±0.0149786
20F24314	17.0 %	0.0045856 ±0.0001697	0.0153874 ±0.0054870	0.0031551 ±0.0069495	0.0087141 ±0.0066455	1.2359304 ±0.0149786
20F24316	17.0 %	0.0051441 ±0.0001934	0.0134587 ±0.0058961	0.0052615 ±0.0062972	0.0024443 ±0.0061879	1.0906231 ±0.0150606
20F24317	17.0 %	0.0051441 ±0.0001934	0.0134587 ±0.0058961	0.0052615 ±0.0062972	0.0024443 ±0.0061879	1.0906231 ±0.0150606
20F24319	17.0 %	0.0051732 ±0.0001874	0.0159184 ±0.0060112	0.0008706 ±0.0067352	0.0078633 ±0.0062046	1.1422116 ±0.0157104
20F24320	17.0 %	0.0051732 ±0.0001874	0.0159184 ±0.0060112	0.0008706 ±0.0067352	0.0078633 ±0.0062046	1.1422116 ±0.0157104
20F24322	17.0 %	0.0047695 ±0.0001641	0.0188486 ±0.0058376	0.0043023 ±0.0064031	0.0289257 ±0.0066698	1.1846417 ±0.0153505
20F24323	17.0 %	0.0047695 ±0.0001641	0.0188486 ±0.0058376	0.0043023 ±0.0064031	0.0289257 ±0.0066698	1.1846417 ±0.0153505
20F24325	17.0 %	0.0057592 ±0.0001763	0.0242837 ±0.0050851	0.0050236 ±0.0068205	0.0101996 ±0.0064959	1.4341824 ±0.0159791
20F24326	17.0 %	0.0057592 ±0.0001763	0.0242837 ±0.0050851	0.0050236 ±0.0068205	0.0101996 ±0.0064959	1.4341824 ±0.0159791
20F24328	17.0 %	0.0048690 ±0.0001682	0.0162178 ±0.0055640	0.0046317 ±0.0066691	0.0101369 ±0.0059834	1.0333706 ±0.0175067
20F24329	17.0 %	0.0048690 ±0.0001682	0.0162178 ±0.0055640	0.0046317 ±0.0066691	0.0101369 ±0.0059834	1.0333706 ±0.0175067

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F24286	17.0 %	0.0274979 ±0.0003262	0.9005	EXP 149 of 150	0.0695583 ±0.0061518	0.0108	EXP 149 of 150	1.4487414 ±0.0063614	0.8451	EXP 150 of 150	120.81804 ±0.01516	0.9999	EXP 150 of 150	433.40097 ±0.02882
20F24287	17.0 %	0.0321679 ±0.0003284	0.8836	EXP 150 of 150	0.0714602 ±0.0057946	0.0157	EXP 150 of 150	1.3445278 ±0.0061722	0.8296	EXP 149 of 150	111.98022 ±0.01471	0.9998	EXP 150 of 150	404.16984 ±0.03262
20F24289	17.0 %	0.0225110 ±0.0002913	0.9333	EXP 150 of 150	0.0807331 ±0.0049363	0.0670	EXP 147 of 150	1.6449982 ±0.0067046	0.8630	EXP 150 of 150	137.19840 ±0.01558	0.9999	EXP 148 of 150	491.16008 ±0.03242
20F24290	17.0 %	0.0092846 ±0.0002199	0.9669	EXP 150 of 150	0.0722134 ±0.0058925	0.0151	EXP 149 of 150	1.3891300 ±0.0073392	0.7944	EXP 150 of 150	116.41347 ±0.01483	0.9999	EXP 149 of 150	412.53413 ±0.02929
20F24292	17.0 %	0.2333962 ±0.0007897	0.0022	EXP 150 of 150	0.2761513 ±0.0061055	0.1259	EXP 150 of 150	4.7119675 ±0.0071842	0.9792	EXP 149 of 150	387.76921 ±0.02459	1.0000	EXP 149 of 150	1439.60932 ±0.05582
20F24293	17.0 %	0.0311692 ±0.0003521	0.9379	EXP 150 of 150	0.1206240 ±0.0055065	0.0498	EXP 150 of 150	2.2953069 ±0.0065960	0.9228	EXP 150 of 150	191.41218 ±0.01892	0.9999	EXP 150 of 150	684.52223 ±0.03874
20F24295	17.0 %	0.0451543 ±0.0004195	0.9551	EXP 150 of 150	0.2452558 ±0.0059945	0.1615	EXP 150 of 150	4.3156258 ±0.0070745	0.9751	EXP 150 of 150	360.25508 ±0.02374	1.0000	EXP 150 of 150	1284.72374 ±0.05355
20F24296	17.0 %	0.0735095 ±0.0004772	0.9585	EXP 150 of 150	0.3222149 ±0.0057777	0.2503	EXP 150 of 150	5.5508796 ±0.0073254	0.9839	EXP 150 of 150	461.24871 ±0.02438	1.0000	EXP 150 of 150	1650.40998 ±0.05355
20F24298	17.0 %	0.2772155 ±0.0008316	0.7842	EXP 150 of 150	0.1088958 ±0.0061171	0.0547	EXP 150 of 150	1.8400244 ±0.0069966	0.8761	EXP 150 of 150	148.26702 ±0.01601	0.9999	EXP 150 of 150	607.15691 ±0.03933
20F24299	17.0 %	0.0963787 ±0.0005317	0.6682	EXP 150 of 150	0.1393963 ±0.0054889	0.0984	EXP 148 of 150	2.4079740 ±0.0065746	0.9288	EXP 148 of 150	201.07683 ±0.01698	0.9999	EXP 150 of 150	737.98483 ±0.03774
20F24301	17.0 %	0.0422383 ±0.0003749	0.9510	EXP 146 of 150	0.1682339 ±0.0054604	0.1280	EXP 150 of 150	3.3164544 ±0.0064651	0.9648	EXP 150 of 150	274.43010 ±0.01800	1.0000	EXP 150 of 150	979.80408 ±0.05028
20F24302	17.0 %	0.0229136 ±0.0003450	0.9855	EXP 148 of 150	0.3053160 ±0.0061699	0.1533	EXP 150 of 150	5.6686314 ±0.0073661	0.9839	EXP 150 of 150	472.93432 ±0.02750	1.0000	EXP 150 of 150	1675.49588 ±0.05173
20F24304	17.0 %	0.0491844 ±0.0003918	0.9513	EXP 147 of 150	0.1858336 ±0.0056297	0.1075	EXP 150 of 150	3.8192488 ±0.0061078	0.9760	EXP 149 of 150	318.61348 ±0.02324	1.0000	EXP 150 of 150	1137.87322 ±0.05253
20F24305	17.0 %	0.0730566 ±0.0005068	0.9136	EXP 150 of 150	0.2370661 ±0.0059779	0.1403	EXP 150 of 150	3.8770103 ±0.0070010	0.9704	EXP 150 of 150	322.25219 ±0.02114	1.0000	EXP 148 of 150	1158.14456 ±0.04810
20F24307	17.0 %	0.0633697 ±0.0004355	0.8215	EXP 149 of 150	0.1077403 ±0.0058811	0.0376	EXP 147 of 150	2.1041047 ±0.0065053	0.9201	EXP 150 of 150	173.96393 ±0.01713	0.9999	EXP 147 of 150	632.90617 ±0.03537
20F24308	17.0 %	0.1353820 ±0.0005425	0.8998	EXP 149 of 150	0.3052225 ±0.0054964	0.2297	EXP 145 of 150	5.8208245 ±0.0074477	0.9845	EXP 150 of 150	482.77224 ±0.02641	1.0000	EXP 150 of 150	1746.62429 ±0.05384
20F24310	17.0 %	0.2092677 ±0.0006500	0.0928	EXP 150 of 150	0.1849985 ±0.0055202	0.1109	EXP 150 of 150	3.1575313 ±0.0066931	0.9578	EXP 150 of 150	260.61603 ±0.01711	1.0000	EXP 146 of 150	982.92415 ±0.04580
20F24311	17.0 %	0.0395556 ±0.0003569	0.9497	EXP 150 of 150	0.1610264 ±0.0058797	0.0585	EXP 149 of 150	2.7332923 ±0.0068312	0.9410	EXP 150 of 150	228.53085 ±0.01984	0.9999	EXP 150 of 150	817.71010 ±0.04332
20F24313	17.0 %	0.0338459 ±0.0003209	0.9701	EXP 148 of 150	0.1974228 ±0.0054510	0.1678	EXP 150 of 150	3.5334365 ±0.0072213	0.9613	EXP 150 of 150	293.26131 ±0.02198	0.9999	EXP 148 of 150	1043.92040 ±0.04688
20F24314	17.0 %	0.0481009 ±0.0004212	0.9598	EXP 150 of 150	0.2478825 ±0.0059076	0.1801	EXP 150 of 150	4.3436175 ±0.0072521	0.9730	EXP 150 of 150	362.23886 ±0.02270	1.0000	EXP 148 of 150	1292.95250 ±0.04934
20F24316	17.0 %	0.0714368 ±0.0004549	0.8357	EXP 149 of 150	0.1473952 ±0.0058165	0.0777	EXP 150 of 150	2.5884535 ±0.0060715	0.9490	EXP 150 of 150	216.08782 ±0.01610	1.0000	EXP 145 of 150	783.84464 ±0.04001
20F24317	17.0 %	0.0282419 ±0.0003133	0.9719	EXP 147 of 150	0.1788785 ±0.0056637	0.0785	EXP 149 of 150	3.3736044 ±0.0071318	0.9574	EXP 150 of 150	280.73871 ±0.02125	0.9999	EXP 149 of 150	998.75696 ±0.04791
20F24319	17.0 %	0.0255949 ±0.0003542	0.9443	EXP 150 of 150	0.1316260 ±0.0054562	0.0942	EXP 150 of 150	2.4259860 ±0.0066433	0.9329	EXP 150 of 150	203.27134 ±0.01646	0.9999	EXP 150 of 150	724.40679 ±0.03839
20F24320	17.0 %	0.0279300 ±0.0003243	0.9404	EXP 148 of 150	0.1099257 ±0.0051917	0.0685	EXP 146 of 150	1.9918395 ±0.0066619	0.8974	EXP 150 of 150	165.56844 ±0.01711	0.9999	EXP 149 of 150	592.05768 ±0.03765
20F24322	17.0 %	0.0210237 ±0.0002703	0.9537	EXP 150 of 150	0.0915001 ±0.0060620	0.0451	EXP 150 of 150	1.8246336 ±0.0071129	0.8633	EXP 149 of 150	151.01934 ±0.01631	0.9999	EXP 146 of 150	538.66410 ±0.03421
20F24323	17.0 %	0.1590423 ±0.0006035	0.0207	EXP 150 of 150	0.1627347 ±0.0062728	0.0642	EXP 147 of 150	2.8289684 ±0.0064137	0.9564	EXP 149 of 150	231.74584 ±0.01849	0.9999	EXP 148 of 150	864.57024 ±0.04595
20F24325	17.0 %	0.0523621 ±0.0004129	0.9127	EXP 150 of 150	0.1712787 ±0.0057893	0.1796	EXP 148 of 150	2.8327081 ±0.0068527	0.9467	EXP 149 of 150	235.62128 ±0.01749	1.0000	EXP 148 of 150	845.42696 ±0.04340
20F24326	17.0 %	0.0631081 ±0.0004835	0.9072	EXP 150 of 150	0.1976362 ±0.0057310	0.1543	EXP 150 of 150	3.5474910 ±0.0067591	0.9655	EXP 148 of 150	295.68497 ±0.02556	0.9999	EXP 150 of 150	1061.68610 ±0.04428
20F24328	17.0 %	0.0625141 ±0.0004360	0.8577	EXP 150 of 150	0.1347034 ±0.0055969	0.0307	EXP 150 of 150	2.4273901 ±0.0061524	0.9426	EXP 150 of 150	201.72618 ±0.01984	0.9999	EXP 150 of 150	729.20194 ±0.03847
20F24329	17.0 %	0.0818499 ±0.0004272	0.7893	EXP 150 of 150	0.1570688 ±0.0055998	0.0726	EXP 149 of 150	2.4937336 ±0.0068303	0.9322	EXP 150 of 150	207.52680 ±0.01732	0.9999	EXP 150 of 150	755.63282 ±0.04163

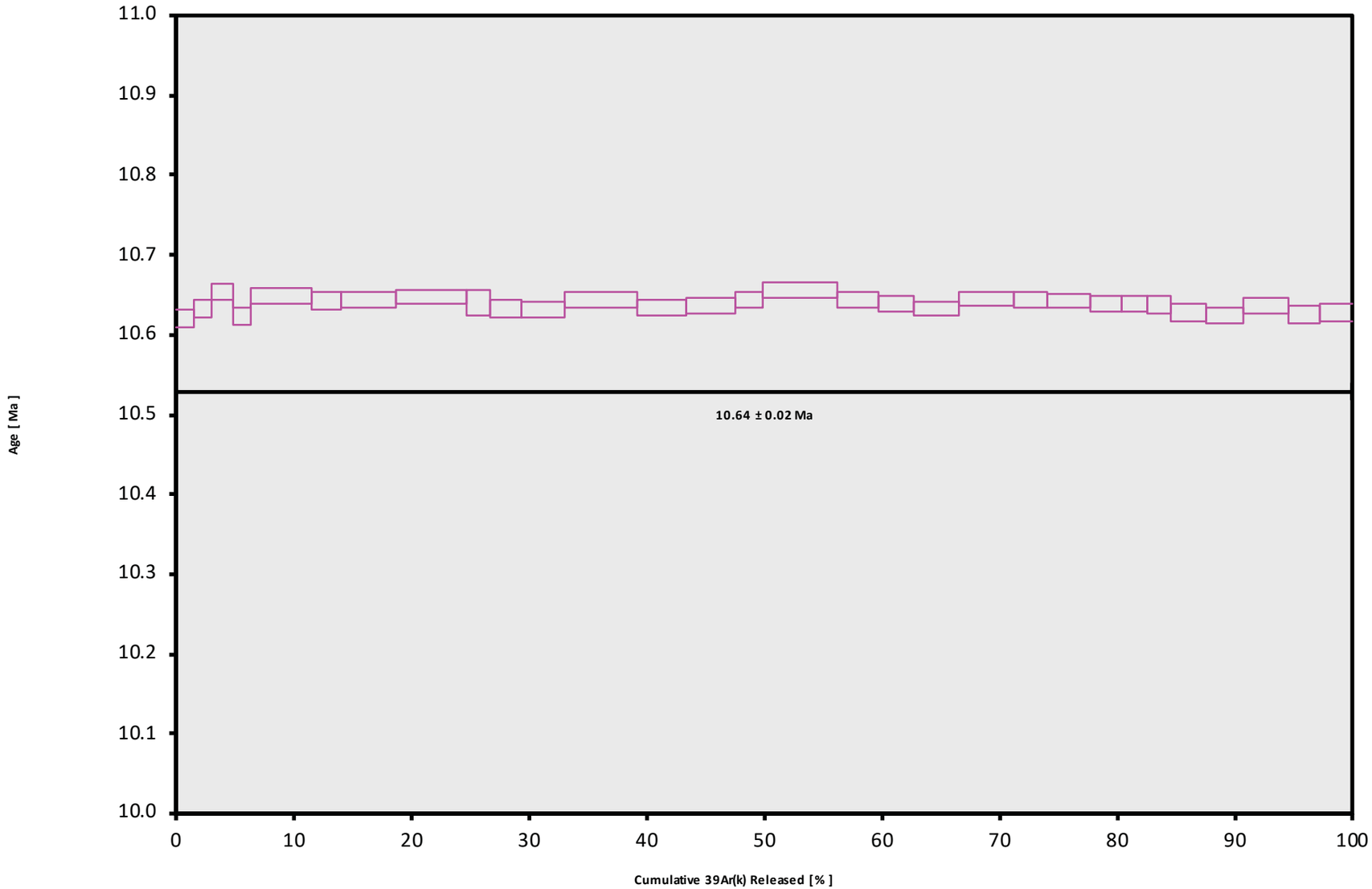
r2	Regression (type,n)
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 149 of 150
0.9999	EXP 147 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 146 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 148 of 150
1.0000	EXP 147 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 147 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F24286	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24287	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24289	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24290	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24292	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24293	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24295	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24296	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24298	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24299	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24301	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24302	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24304	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24305	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24307	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24308	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24310	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24311	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24313	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24314	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24316	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24317	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24319	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24320	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24322	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24323	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24325	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24326	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24328	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01
20F24329	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	6.37	Oregon\Swenton (20-01)	20F24282	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F24286	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	19	37	1
20F24287	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	19	45	1
20F24289	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	20	2	1
20F24290	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	20	11	1
20F24292	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	20	28	1
20F24293	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	20	37	1
20F24295	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	20	54	1
20F24296	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	21	3	1
20F24298	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	21	20	1
20F24299	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	21	28	1
20F24301	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	21	46	1
20F24302	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	21	54	1
20F24304	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	22	11	1
20F24305	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	22	20	1
20F24307	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	22	37	1
20F24308	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	22	46	1
20F24310	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	23	3	1
20F24311	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	23	11	1
20F24313	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	23	29	1
20F24314	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	23	37	1
20F24316	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	6	SEP	2020	23	54	1
20F24317	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	0	3	1
20F24319	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	0	20	1
20F24320	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	0	29	1
20F24322	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	0	46	1
20F24323	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	0	54	1
20F24325	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	1	12	1
20F24326	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	1	20	1
20F24328	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	1	37	1
20F24329	17.0 %	VS17-020	Sanidine	Rhyolite Dome	FCT-NM (1D6-20)	28.201	0.082	Kuiper et al (2008)	9.38823	0.072	0.00165372	0.072	298.404	0.133	1.0001309	0.042	1	3.54E-14	7	SEP	2020	1	46	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F24286	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24287	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24289	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24290	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24292	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24293	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24295	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24296	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24298	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24299	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24301	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24302	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24304	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24305	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24307	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24308	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24310	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24311	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24313	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24314	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24316	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24317	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24319	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24320	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24322	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24323	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24325	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24326	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24328	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24329	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F24282.AGE >>> VS17-020 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.64 ± 0.02
TOTAL FUSION
10.64 ± 0.02
NORMAL ISOCHRON
10.64 ± 0.02
INVERSE ISOCHRON
10.64 ± 0.02

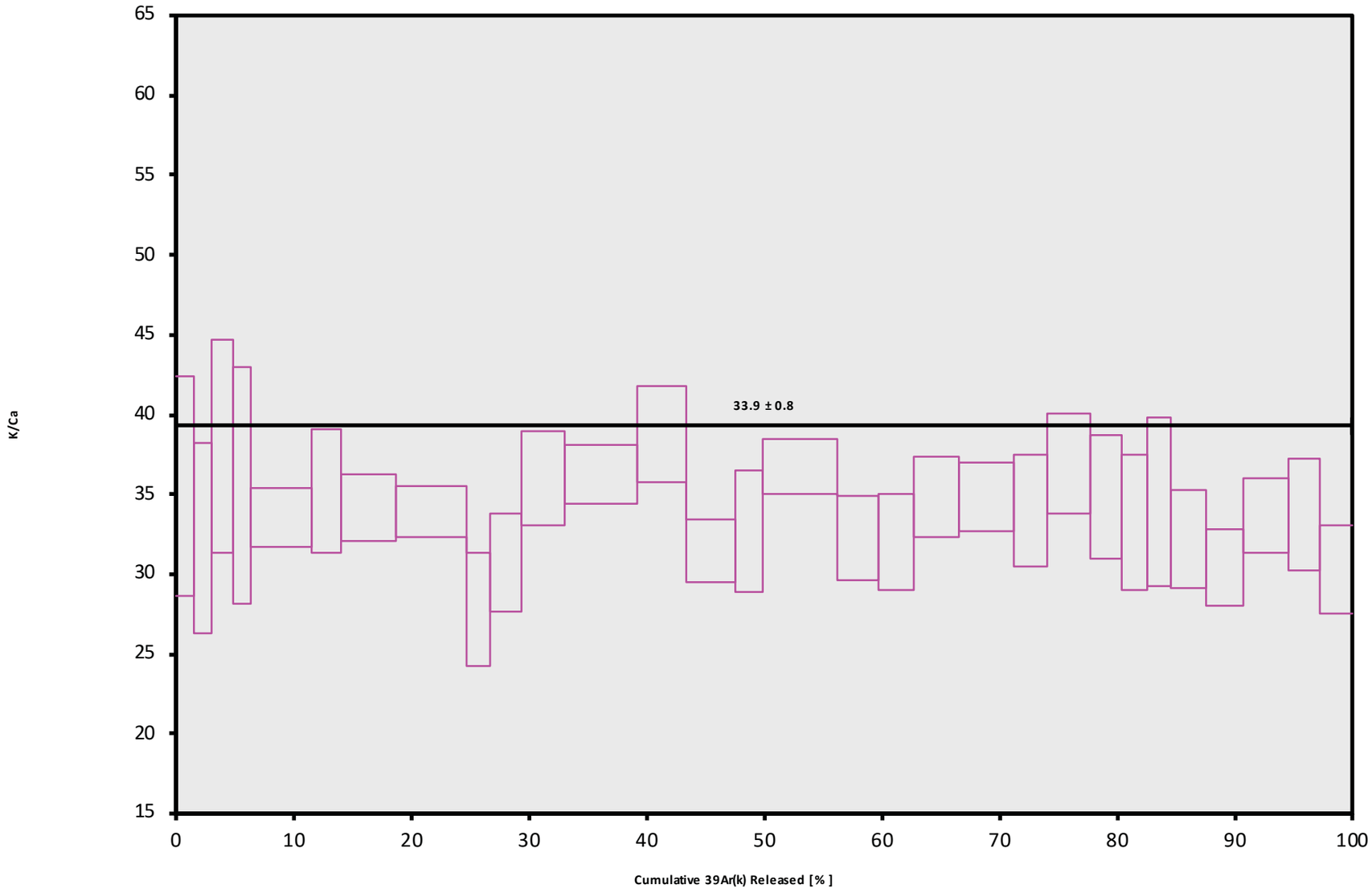
MSWD (PROBABILITY)
3.08 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D6-20)

20F24282.AGE >>> VS17-020 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

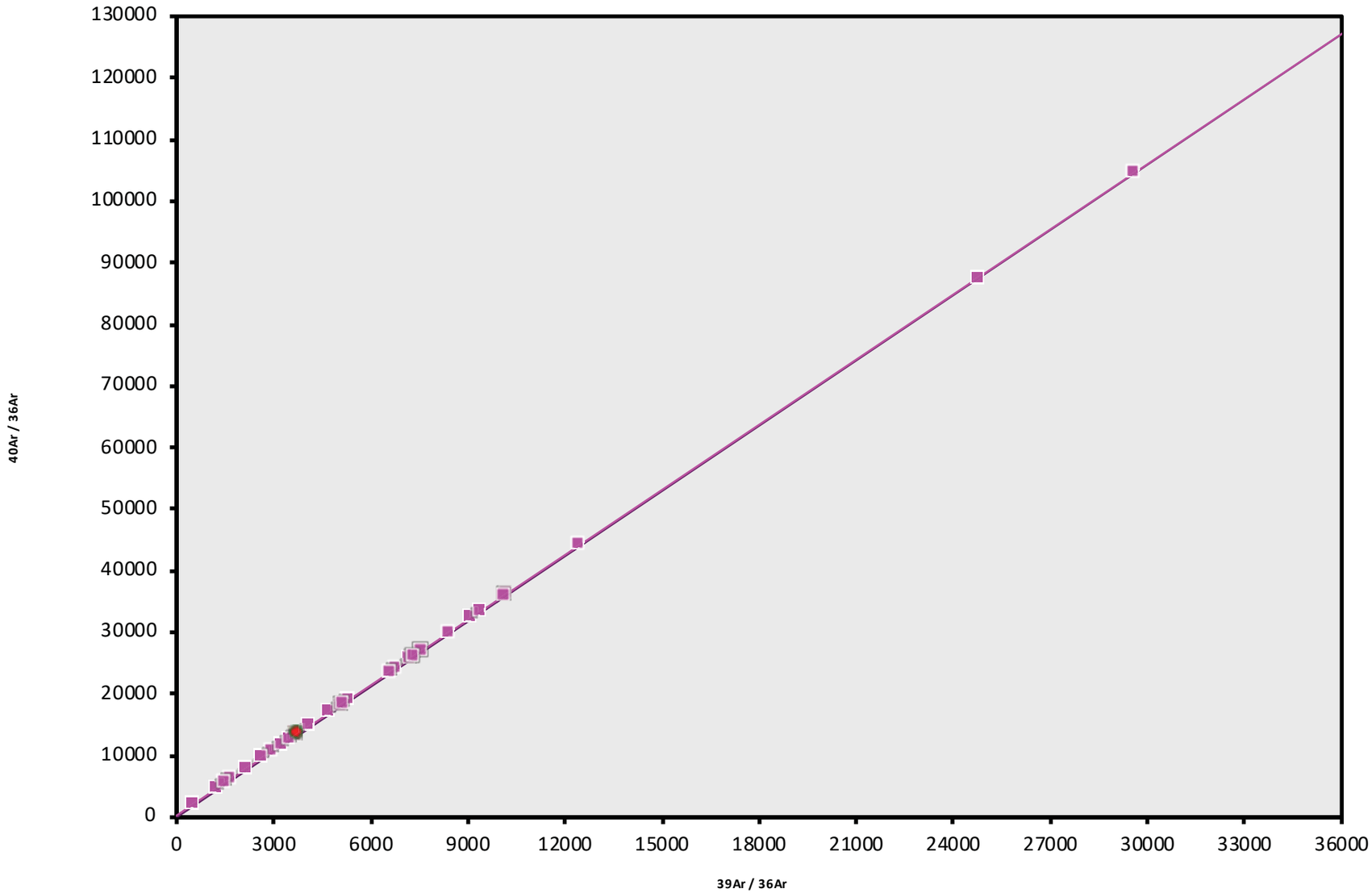
WEIGHTED PLATEAU
10.64 ± 0.02
TOTAL FUSION
10.64 ± 0.02
NORMAL ISOCHRON
10.64 ± 0.02
INVERSE ISOCHRON
10.64 ± 0.02

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D6-20)

20F24282.AGE >>> VS17-020 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.64 ± 0.02
TOTAL FUSION
10.64 ± 0.02
NORMAL ISOCHRON
10.64 ± 0.02
INVERSE ISOCHRON
10.64 ± 0.02

MSWD (PROBABILITY)
3.30 (0%)

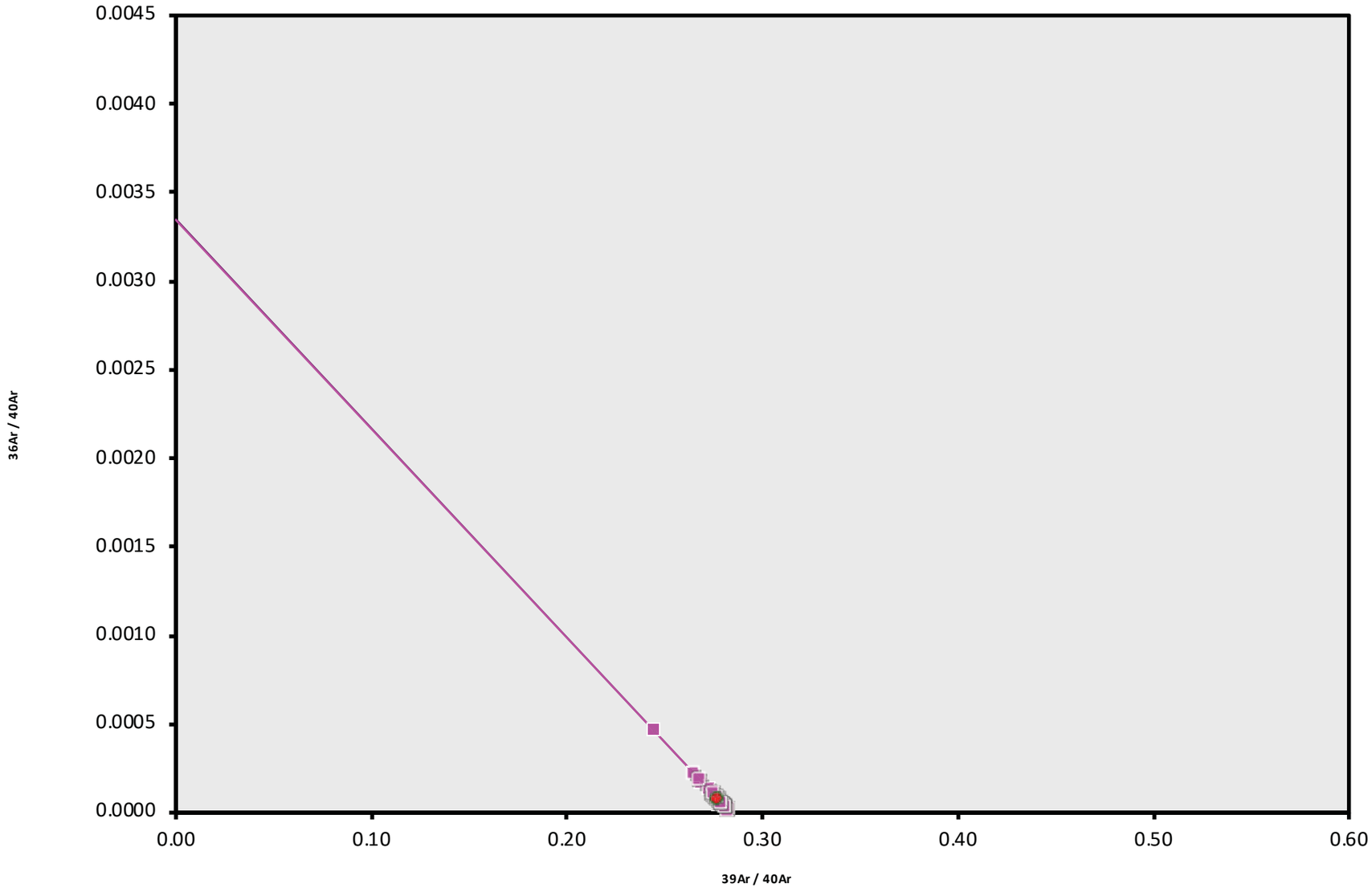
40AR/36AR INTERCEPT

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D6-20)

20F24282.AGE >>> VS17-020 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.64 ± 0.02
TOTAL FUSION
10.64 ± 0.02
NORMAL ISOCHRON
10.64 ± 0.02
INVERSE ISOCHRON
10.64 ± 0.02

MSWD (PROBABILITY)
3.19 (0%)

SPREADING FACTOR

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1D6-20)

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ
20F11214	17.0 %	✓	0.0020133	15.681	2.539589	0.741	1.607633	0.561	133.4125	0.046	510.316	0.007
20F11215	17.0 %	✓	0.0035204	9.307	3.326039	0.572	2.179655	0.432	181.7418	0.045	695.027	0.007
20F11217	17.0 %	✓	0.0019041	16.203	1.930523	1.027	1.224887	0.716	101.6490	0.046	388.565	0.009
20F11218	17.0 %	✓	0.0149933	2.488	4.205297	0.475	2.599408	0.353	216.7358	0.045	832.231	0.006
20F11220	17.0 %	✓	0.0106758	3.244	3.130859	0.589	2.083842	0.479	172.6764	0.045	662.071	0.006
20F11221	17.0 %	✓	0.0021255	14.857	3.279011	0.590	2.000140	0.516	167.1042	0.045	639.102	0.007
20F11223	17.0 %	✓	0.0059948	5.324	3.518068	0.520	2.104615	0.392	173.8787	0.045	665.455	0.006
20F11224	17.0 %	✓	0.0019416	15.068	2.447618	0.753	1.619552	0.545	134.5533	0.046	513.936	0.007
20F11226	17.0 %	✓	0.0053823	5.783	2.745080	0.735	1.819540	0.527	153.1529	0.045	586.124	0.007
20F11227	17.0 %	✓	0.0074307	4.287	2.675158	0.813	1.458098	0.643	121.0852	0.046	463.794	0.008
20F11229	17.0 %	✓	0.0042278	7.667	2.421681	0.811	1.593704	0.627	132.9591	0.046	509.289	0.007
20F11230	17.0 %	✓	0.0051373	6.533	2.745718	0.687	1.683590	0.620	141.1313	0.045	540.649	0.007
20F11232	17.0 %	✓	0.0025263	11.166	2.408487	0.869	1.445887	0.643	120.2064	0.046	459.640	0.008
20F11233	17.0 %	✓	0.0011593	27.098	2.752988	0.708	1.763232	0.533	145.2889	0.045	555.314	0.007
20F11235	17.0 %	✓	0.0027194	10.340	2.591380	0.752	1.525240	0.603	128.6386	0.046	492.020	0.007
20F11236	17.0 %	✓	0.0043984	7.601	2.307777	0.868	1.350080	0.713	111.9623	0.046	428.989	0.008
20F11238	17.0 %	✓	0.0053641	6.149	2.915322	0.626	1.710566	0.567	142.8220	0.045	547.204	0.007
20F11239	17.0 %	✓	0.0007483	37.237	1.994216	0.910	1.221432	0.803	101.8465	0.046	389.028	0.009
20F11241	17.0 %	✓	0.0004940	61.440	1.328208	1.481	0.838939	1.149	69.7040	0.047	266.011	0.012
20F11242	17.0 %	✓	0.0006503	46.051	1.364430	1.452	0.925031	1.073	77.4970	0.047	296.450	0.011
20F11244	17.0 %	✓	0.0011285	27.444	1.671069	1.161	0.986516	1.008	82.3248	0.047	315.027	0.010
20F11245	17.0 %	✓	0.0018025	17.612	2.125244	0.915	1.392119	0.619	116.5905	0.046	445.827	0.008
20F11247	17.0 %	✓	0.0056060	5.969	1.949754	1.015	1.223411	0.681	101.7322	0.047	390.766	0.008
20F11248	17.0 %	✓	0.0002810	104.850	1.714107	1.127	1.271091	0.718	106.8046	0.046	408.283	0.008
20F11250	17.0 %	✓	0.0075517	4.014	2.089010	0.948	1.277422	0.730	106.7628	0.046	410.146	0.009
20F11251	17.0 %	✓	0.0001855	163.306	2.234553	0.885	1.302627	0.695	109.2710	0.046	417.038	0.009
20F11253	17.0 %	✓	0.0000345	811.320	1.360354	1.389	0.830652	1.050	70.2256	0.048	267.876	0.012
20F11254	17.0 %		0.0002640	108.808	1.251884	1.514	0.830434	1.155	71.3709	0.048	273.435	0.012
20F11256	17.0 %	✓	0.0030663	10.276	1.978262	0.955	1.274372	0.806	105.9486	0.046	405.320	0.008
20F11257	17.0 %	✓	0.0054871	5.843	2.898345	0.669	1.806635	0.565	151.3519	0.045	579.527	0.006
		Σ	0.1072843	1.599	71.900030	0.148	44.950349	0.115	3750.4287	0.009	14354.463	0.001

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-034**
Material = **Sanidine**
Location = **Stockade Mountain**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C28-20)**
Position = **X: 0 | Y: 0 | Z/H: 37.95312 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.48785 ± 0.01547**
FCT-NM J-value = **0.00163636 ± 0.00000267**
Air Shot 40Ar/36Ar = **298.3680 ± 0.4207**
Air Shot MDF = **1.00016108 ± 0.00043886 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a)	± 2σ
Age Plateau		
Error Mean		
Total Fusion Age		
Normal Isochron	**320.97**	**± 50.47**
Error Chron		**± 15.72%**
Inverse Isochron	**301.71**	**± 48.20**
Error Chron		**± 15.98%**

40(r)/39(k)	±2σ	Age (Ma)	±2σ	40Ar(r) (%)	39Ar(k) (%)	K/Ca	±2σ
3.82157	±0.00382	11.41	±0.01	99.91	3.56	22.6	±0.3
3.81939	±0.00364	11.40	±0.01	99.87	4.85	23.5	±0.3
3.81799	±0.00403	11.40	±0.01	99.88	2.71	22.6	±0.5
3.82019	±0.00360	11.41	±0.01	99.49	5.78	22.2	±0.2
3.81661	±0.00367	11.40	±0.01	99.54	4.60	23.7	±0.3
3.82180	±0.00366	11.41	±0.01	99.93	4.46	21.9	±0.3
3.81791	±0.00363	11.40	±0.01	99.76	4.64	21.3	±0.2
3.81617	±0.00377	11.40	±0.01	99.91	3.59	23.6	±0.4
3.81744	±0.00371	11.40	±0.01	99.75	4.08	24.0	±0.4
3.81322	±0.00389	11.39	±0.01	99.55	3.23	19.5	±0.3
3.82183	±0.00382	11.41	±0.01	99.77	3.55	23.6	±0.4
3.82097	±0.00378	11.41	±0.01	99.74	3.76	22.1	±0.3
3.81854	±0.00380	11.40	±0.01	99.86	3.21	21.5	±0.4
3.82073	±0.00372	11.41	±0.01	99.96	3.87	22.7	±0.3
3.81958	±0.00377	11.41	±0.01	99.86	3.43	21.3	±0.3
3.82093	±0.00400	11.41	±0.01	99.72	2.99	20.9	±0.4
3.82125	±0.00377	11.41	±0.01	99.73	3.81	21.1	±0.3
3.81858	±0.00393	11.40	±0.01	99.97	2.72	22.0	±0.4
3.81515	±0.00455	11.39	±0.01	99.97	1.86	22.6	±0.7
3.82366	±0.00436	11.42	±0.01	99.96	2.07	24.4	±0.7
3.82363	±0.00431	11.42	±0.01	99.92	2.20	21.2	±0.5
3.82017	±0.00390	11.41	±0.01	99.90	3.11	23.6	±0.4
3.82566	±0.00412	11.42	±0.01	99.60	2.71	22.4	±0.5
3.82423	±0.00396	11.42	±0.01	100.04	2.85	26.8	±0.6
3.82156	±0.00396	11.41	±0.01	99.48	2.85	22.0	±0.4
3.81815	±0.00396	11.40	±0.01	100.04	2.91	21.0	±0.4
3.81565	±0.00446	11.39	±0.01	100.03	1.87	22.2	±0.6
3.83314	±0.00449	11.45	±0.01	100.05	1.90	24.5	±0.7
3.81793	±0.00401	11.40	±0.01	99.80	2.82	23.0	±0.4
3.81917	±0.00370	11.40	±0.01	99.74	4.04	22.5	±0.3

40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
3.81963	±0.00103	**11.41**	**±0.04**	2.02	98.10	22.2	±0.4
	±0.03%		**±0.33%**	0%	29		
		Full External Error	±0.59	1.53	2σ Confidence Limit		
		Analytical Error	±0.00	1.4223	Error Magnification		
3.81987	±0.00072	**11.41**	**±0.04**		30	22.4	±0.1
	±0.02%		**±0.33%**				
		Full External Error	±0.59				
		Analytical Error	±0.00				
3.81824	±0.00166	**11.40**	**±0.04**	1.69	98.10		
	±0.04%		**±0.33%**	1%	29		
		Full External Error	±0.59	1.54	2σ Confidence Limit		
		Analytical Error	±0.00	1.3007	Error Magnification		
				1	Number of Iterations		
				0.0000000009	Convergence		
3.81956	±0.00155	**11.41**	**±0.04**	2.10	98.10		
	±0.04%		**±0.33%**	0%	29		
		Full External Error	±0.59	1.54	2σ Confidence Limit		
		Analytical Error	±0.00	1.4479	Error Magnification		
				3	Number of Iterations		
				0.0000006450	Convergence		
				1%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F11214	17.0 %	✓	0.0013269	2.539589	0.0000000	133.4109	509.839	11.41 ±0.01	99.91	3.56	22.6 ±0.3
20F11215	17.0 %	✓	0.0026214	3.326039	0.0000000	181.7396	694.135	11.40 ±0.01	99.87	4.85	23.5 ±0.3
20F11217	17.0 %	✓	0.0013823	1.930523	0.0000000	101.6478	388.091	11.40 ±0.01	99.88	2.71	22.6 ±0.5
20F11218	17.0 %	✓	0.0138566	4.205297	0.0000000	216.7331	827.962	11.41 ±0.01	99.49	5.78	22.2 ±0.2
20F11220	17.0 %	✓	0.0098295	3.130859	0.0000000	172.6744	659.031	11.40 ±0.01	99.54	4.60	23.7 ±0.3
20F11221	17.0 %	✓	0.0012392	3.279011	0.0000000	167.1021	638.631	11.41 ±0.01	99.93	4.46	21.9 ±0.3
20F11223	17.0 %	✓	0.0050437	3.518068	0.0031259	173.8764	663.844	11.40 ±0.01	99.76	4.64	21.3 ±0.2
20F11224	17.0 %	✓	0.0012800	2.447618	0.0000000	134.5518	513.472	11.40 ±0.01	99.91	3.59	23.6 ±0.4
20F11226	17.0 %	✓	0.0046403	2.745080	0.0000000	153.1511	584.646	11.40 ±0.01	99.75	4.08	24.0 ±0.4
20F11227	17.0 %	✓	0.0067076	2.675158	0.0000000	121.0835	461.718	11.39 ±0.01	99.55	3.23	19.5 ±0.3
20F11229	17.0 %	✓	0.0035732	2.421681	0.0000000	132.9576	508.141	11.41 ±0.01	99.77	3.55	23.6 ±0.4
20F11230	17.0 %	✓	0.0043952	2.745718	0.0000000	141.1295	539.251	11.41 ±0.01	99.74	3.76	22.1 ±0.3
20F11232	17.0 %	✓	0.0018753	2.408487	0.0000000	120.2048	459.008	11.40 ±0.01	99.86	3.21	21.5 ±0.4
20F11233	17.0 %	✓	0.0004146	2.752988	0.0080260	145.2871	555.103	11.41 ±0.01	99.96	3.87	22.7 ±0.3
20F11235	17.0 %	✓	0.0020190	2.591380	0.0000000	128.6370	491.339	11.41 ±0.01	99.86	3.43	21.3 ±0.3
20F11236	17.0 %	✓	0.0037746	2.307777	0.0000000	111.9608	427.794	11.41 ±0.01	99.72	2.99	20.9 ±0.4
20F11238	17.0 %	✓	0.0045761	2.915322	0.0000000	142.8201	545.751	11.41 ±0.01	99.73	3.81	21.1 ±0.3
20F11239	17.0 %	✓	0.0002092	1.994216	0.0000000	101.8452	388.904	11.40 ±0.01	99.97	2.72	22.0 ±0.4
20F11241	17.0 %	✓	0.0001350	1.328208	0.0000000	69.7032	265.928	11.39 ±0.01	99.97	1.86	22.6 ±0.7
20F11242	17.0 %	✓	0.0002815	1.364430	0.0000000	77.4961	296.319	11.42 ±0.01	99.96	2.07	24.4 ±0.7
20F11244	17.0 %	✓	0.0006768	1.671069	0.0000000	82.3237	314.775	11.42 ±0.01	99.92	2.20	21.2 ±0.5
20F11245	17.0 %	✓	0.0012281	2.125244	0.0000000	116.5891	445.390	11.41 ±0.01	99.90	3.11	23.6 ±0.4
20F11247	17.0 %	✓	0.0050790	1.949754	0.0000000	101.7309	389.188	11.42 ±0.01	99.60	2.71	22.4 ±0.5
20F11248	17.0 %	✓	0.0007444	1.714107	0.0000000	106.8035	408.441	11.42 ±0.01	100.04	2.85	26.8 ±0.6
20F11250	17.0 %	✓	0.0069871	2.089010	0.0000000	106.7614	407.995	11.41 ±0.01	99.48	2.85	22.0 ±0.4
20F11251	17.0 %	✓	0.0007895	2.234553	0.0000000	109.2696	417.207	11.40 ±0.01	100.04	2.91	21.0 ±0.4
20F11253	17.0 %	✓	0.0004022	1.360354	0.0000000	70.2247	267.953	11.39 ±0.01	100.03	1.87	22.2 ±0.6
20F11254	17.0 %		0.0006024	1.251884	0.0000000	71.3701	273.572	11.45 ±0.01	100.05	1.90	24.5 ±0.7
20F11256	17.0 %	✓	0.0025316	1.978262	0.0000000	105.9473	404.500	11.40 ±0.01	99.80	2.82	23.0 ±0.4
20F11257	17.0 %	✓	0.0047037	2.898345	0.0000000	151.3500	578.031	11.40 ±0.01	99.74	4.04	22.5 ±0.3
		Σ	0.0878490	71.900030	0.0111519	3750.3825	14325.959				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-034**
Material = **Sanidine**
Location = **Stockade Mountain**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C28-20)**
J = **0.00163636 ± 0.00000267**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.81963	±0.00103	**11.41**	**±0.04**	2.02	98.10	22.2 ±0.4
Error Mean		±0.03%		**±0.33%**	0%	29	
			Full External Error	±0.59	1.53	2σ Confidence Limit	
			Analytical Error	±0.00	1.4223	Error Magnification	
Total Fusion Age	3.81987	±0.00072	**11.41**	**±0.04**		30	22.4 ±0.1
		±0.02%		**±0.33%**			
			Full External Error	±0.59			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F11214	17.0 %	✓	100545.14	±47853.48	384538.80	±183017.15	1.0000
20F11215	17.0 %	✓	69329.36	±17332.63	265094.42	±66274.28	1.0000
20F11217	17.0 %	✓	73537.17	±32832.73	281063.01	±125488.22	1.0000
20F11218	17.0 %	✓	15641.17	±842.25	60050.85	±3233.21	0.9999
20F11220	17.0 %	✓	17566.91	±1237.94	67344.64	±4745.39	0.9999
20F11221	17.0 %	✓	134850.35	±68740.38	515669.83	±262863.88	1.0000
20F11223	17.0 %	✓	34473.98	±4363.82	131917.05	±16698.03	1.0000
20F11224	17.0 %	✓	105121.70	±48062.86	401460.87	±183552.19	1.0000
20F11226	17.0 %	✓	33004.41	±4428.15	126291.05	±16943.89	1.0000
20F11227	17.0 %	✓	18051.67	±1715.12	69133.47	±6568.21	1.0000
20F11229	17.0 %	✓	37209.20	±6751.73	142505.86	±25857.81	1.0000
20F11230	17.0 %	✓	32110.16	±4904.69	122990.44	±18785.94	1.0000
20F11232	17.0 %	✓	64098.83	±19288.08	245062.82	±73741.90	1.0000
20F11233	17.0 %	✓	350442.61	±531159.66	1339244.32	±2029868.56	1.0000
20F11235	17.0 %	✓	63713.94	±17750.83	243659.05	±67883.54	1.0000
20F11236	17.0 %	✓	29661.46	±5255.31	113632.93	±20132.79	1.0000
20F11238	17.0 %	✓	31210.01	±4499.88	119559.70	±17237.86	1.0000
20F11239	17.0 %	✓	486790.86	±1296785.81	1859149.45	±4952678.29	1.0000
20F11241	17.0 %	✓	516220.88	±2321301.67	1969761.13	±8857467.52	1.0000
20F11242	17.0 %	✓	275290.92	±585821.53	1052916.39	±2240615.19	1.0000
20F11244	17.0 %	✓	121640.69	±111342.25	465407.65	±426004.71	1.0000
20F11245	17.0 %	✓	94936.50	±49089.22	362971.66	±187683.05	1.0000
20F11247	17.0 %	✓	20029.60	±2639.80	76925.05	±10138.07	1.0000
20F11248	17.0 %	✓	143484.96	±113618.35	548420.50	±434265.67	1.0000
20F11250	17.0 %	✓	15279.81	±1326.08	58691.23	±5093.33	0.9999
20F11251	17.0 %	✓	138398.95	±106236.64	528128.85	±405397.56	1.0000
20F11253	17.0 %	✓	174607.91	±242950.51	665944.76	±926599.35	1.0000
20F11254	17.0 %		118484.60	±113013.25	453869.36	±432910.47	1.0000
20F11256	17.0 %	✓	41850.08	±10419.14	160079.30	±39853.63	1.0000
20F11257	17.0 %	✓	32176.65	±4387.13	123186.62	±16795.54	1.0000

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**320.97**	**±50.47**	3.81824	±0.00166	**11.40**	**±0.04**	1.69
Error Chron		**±15.72%**		±0.04%		**±0.33%**	1%
					Full External Error	±0.59	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.54	Convergence	0.000000000929
	Error Magnification	1.3007	Number of Iterations	1
	Number of Data Points	29	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F11214	17.0 %	✓	0.2614694	±0.0002424	0.00000260	±0.00000124	0.0001
20F11215	17.0 %	✓	0.2615271	±0.0002382	0.00000377	±0.00000094	0.0001
20F11217	17.0 %	✓	0.2616394	±0.0002468	0.00000356	±0.00000159	0.0001
20F11218	17.0 %	✓	0.2604653	±0.0002350	0.00001665	±0.00000090	0.0003
20F11220	17.0 %	✓	0.2608509	±0.0002369	0.00001485	±0.00000105	0.0003
20F11221	17.0 %	✓	0.2615052	±0.0002379	0.00000194	±0.00000099	0.0000
20F11223	17.0 %	✓	0.2613307	±0.0002372	0.00000758	±0.00000096	0.0001
20F11224	17.0 %	✓	0.2618479	±0.0002429	0.00000249	±0.00000114	0.0001
20F11226	17.0 %	✓	0.2613361	±0.0002403	0.00000792	±0.00000106	0.0001
20F11227	17.0 %	✓	0.2611133	±0.0002433	0.00001446	±0.00000137	0.0003
20F11229	17.0 %	✓	0.2611065	±0.0002416	0.00000702	±0.00000127	0.0001
20F11230	17.0 %	✓	0.2610785	±0.0002395	0.00000813	±0.00000124	0.0001
20F11232	17.0 %	✓	0.2615608	±0.0002422	0.00000408	±0.00000123	0.0001
20F11233	17.0 %	✓	0.2616719	±0.0002389	0.00000075	±0.00000113	0.0000
20F11235	17.0 %	✓	0.2614881	±0.0002423	0.00000410	±0.00000114	0.0001
20F11236	17.0 %	✓	0.2610287	±0.0002443	0.00000880	±0.00000156	0.0002
20F11238	17.0 %	✓	0.2610413	±0.0002397	0.00000836	±0.00000121	0.0002
20F11239	17.0 %	✓	0.2618352	±0.0002447	0.00000054	±0.00000143	0.0000
20F11241	17.0 %	✓	0.2620728	±0.0002568	0.00000051	±0.00000228	0.0000
20F11242	17.0 %	✓	0.2614556	±0.0002532	0.00000095	±0.00000202	0.0000
20F11244	17.0 %	✓	0.2613638	±0.0002515	0.00000215	±0.00000197	0.0000
20F11245	17.0 %	✓	0.2615535	±0.0002430	0.00000276	±0.00000142	0.0001
20F11247	17.0 %	✓	0.2603782	±0.0002463	0.00001300	±0.00000171	0.0002
20F11248	17.0 %	✓	0.2616331	±0.0002466	0.00000182	±0.00000144	0.0000
20F11250	17.0 %	✓	0.2603423	±0.0002437	0.00001704	±0.00000148	0.0004
20F11251	17.0 %	✓	0.2620553	±0.0002468	0.00000189	±0.00000145	0.0000
20F11253	17.0 %	✓	0.2621958	±0.0002592	0.00000150	±0.00000209	0.0000
20F11254	17.0 %		0.2610544	±0.0002579	0.00000220	±0.00000210	0.0001
20F11256	17.0 %	✓	0.2614334	±0.0002460	0.00000625	±0.00000156	0.0001
20F11257	17.0 %	✓	0.2612025	±0.0002379	0.00000812	±0.00000111	0.0001

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**301.71**	**±48.20**	3.81956	±0.00155	**11.41**	**±0.04**	2.10
Error Chron		**±15.98%**		±0.04%		**±0.33%**	0%
					Full External Error	±0.59	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.54	Convergence	0.0000006450
	Error Magnification	1.4479	Number of Iterations	3
	Number of Data Points	29	Calculated Line	Weighted York-2
	Spreading Factor	0.7%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F11214	17.0 %	✓	0.0013269	23.80	0.0000000	0.00	0.0006865	0.76	0.0000000	0.00	2.539589	0.74	0.0002501	23.80	0.0000000	0.00	1.611203	0.10	0.0004571	9.66	0.0000000	0.00	133.4109	0.05	0.0016317	1.18
20F11215	17.0 %	✓	0.0026214	12.50	0.0000000	0.00	0.0008990	0.60	0.0000000	0.00	3.326039	0.57	0.0004941	12.50	0.0000000	0.00	2.194870	0.10	0.0005987	9.65	0.0000000	0.00	181.7396	0.05	0.0021370	1.08
20F11217	17.0 %	✓	0.0013823	22.32	0.0000000	0.00	0.0005218	1.04	0.0000000	0.00	1.930523	1.03	0.0002606	22.32	0.0000000	0.00	1.227600	0.10	0.0003475	9.68	0.0000000	0.00	101.6478	0.05	0.0012404	1.38
20F11218	17.0 %	✓	0.0138566	2.69	0.0000000	0.00	0.0011367	0.50	0.0000000	0.00	4.205297	0.48	0.0026120	2.70	0.0000000	0.00	2.617485	0.10	0.0007570	9.64	0.0000000	0.00	216.7331	0.04	0.0027019	1.04
20F11220	17.0 %	✓	0.0098295	3.52	0.0000000	0.00	0.0008463	0.61	0.0000000	0.00	3.130859	0.59	0.0018529	3.53	0.0000000	0.00	2.085389	0.10	0.0005636	9.65	0.0000000	0.00	172.6744	0.04	0.0020116	1.09
20F11221	17.0 %	✓	0.0012392	25.49	0.0000000	0.00	0.0008863	0.61	0.0000000	0.00	3.279011	0.59	0.0002336	25.49	0.0000000	0.00	2.018092	0.10	0.0005902	9.65	0.0000000	0.00	167.1021	0.04	0.0021068	1.09
20F11223	17.0 %	✓	0.0050437	6.33	0.0000000	0.00	0.0009509	0.55	0.0000002	311.46	3.518068	0.52	0.0009507	6.33	0.0000000	0.00	2.099905	0.10	0.0006333	9.64	0.0031259	311.46	173.8764	0.04	0.0022604	1.06
20F11224	17.0 %	✓	0.0012800	22.86	0.0000000	0.00	0.0006616	0.77	0.0000000	0.00	2.447618	0.75	0.0002413	22.86	0.0000000	0.00	1.624982	0.10	0.0004406	9.66	0.0000000	0.00	134.5518	0.05	0.0015726	1.19
20F11226	17.0 %	✓	0.0046403	6.71	0.0000000	0.00	0.0007420	0.75	0.0000000	0.00	2.745080	0.74	0.0008747	6.71	0.0000000	0.00	1.849606	0.10	0.0004941	9.66	0.0000000	0.00	153.1511	0.05	0.0017637	1.18
20F11227	17.0 %	✓	0.0067076	4.75	0.0000000	0.00	0.0007231	0.83	0.0000000	0.00	2.675158	0.81	0.0012644	4.75	0.0000000	0.00	1.462326	0.10	0.0004815	9.66	0.0000000	0.00	121.0835	0.05	0.0017188	1.23
20F11229	17.0 %	✓	0.0035732	9.07	0.0000000	0.00	0.0006546	0.83	0.0000000	0.00	2.421681	0.81	0.0006736	9.07	0.0000000	0.00	1.605728	0.10	0.0004359	9.66	0.0000000	0.00	132.9576	0.05	0.0015559	1.23
20F11230	17.0 %	✓	0.0043952	7.64	0.0000000	0.00	0.0007422	0.71	0.0000000	0.00	2.745718	0.69	0.0008285	7.64	0.0000000	0.00	1.704421	0.10	0.0004942	9.65	0.0000000	0.00	141.1295	0.05	0.0017641	1.15
20F11232	17.0 %	✓	0.0018753	15.05	0.0000000	0.00	0.0006510	0.89	0.0000000	0.00	2.408487	0.87	0.0003535	15.05	0.0000000	0.00	1.451714	0.10	0.0004335	9.67	0.0000000	0.00	120.2048	0.05	0.0015475	1.27
20F11233	17.0 %	✓	0.0004146	75.78	0.0000000	0.00	0.0007441	0.73	0.0000005	128.95	2.752988	0.71	0.0000781	75.78	0.0000000	0.00	1.754633	0.10	0.0004955	9.66	0.0080260	128.96	145.2871	0.05	0.0017688	1.16
20F11235	17.0 %	✓	0.0020190	13.93	0.0000000	0.00	0.0007005	0.77	0.0000000	0.00	2.591380	0.75	0.0003806	13.93	0.0000000	0.00	1.553549	0.10	0.0004664	9.66	0.0000000	0.00	128.6370	0.05	0.0016650	1.19
20F11236	17.0 %	✓	0.0037746	8.86	0.0000000	0.00	0.0006238	0.88	0.0000000	0.00	2.307777	0.87	0.0007115	8.86	0.0000000	0.00	1.352151	0.10	0.0004154	9.67	0.0000000	0.00	111.9608	0.05	0.0014827	1.26
20F11238	17.0 %	✓	0.0045761	7.21	0.0000000	0.00	0.0007880	0.65	0.0000000	0.00	2.915322	0.63	0.0008626	7.21	0.0000000	0.00	1.724838	0.10	0.0005248	9.65	0.0000000	0.00	142.8201	0.05	0.0018731	1.11
20F11239	17.0 %	✓	0.0002092	133.20	0.0000000	0.00	0.0005390	0.93	0.0000000	0.00	1.994216	0.91	0.0000394	133.20	0.0000000	0.00	1.229984	0.10	0.0003590	9.67	0.0000000	0.00	101.8452	0.05	0.0012813	1.29
20F11241	17.0 %	✓	0.0001350	224.84	0.0000000	0.00	0.0003590	1.49	0.0000000	0.00	1.328208	1.48	0.0000255	224.84	0.0000000	0.00	0.841805	0.10	0.0002391	9.74	0.0000000	0.00	69.7032	0.05	0.0008534	1.74
20F11242	17.0 %	✓	0.0002815	106.40	0.0000000	0.00	0.0003688	1.46	0.0000000	0.00	1.364430	1.45	0.0000531	106.40	0.0000000	0.00	0.935921	0.10	0.0002456	9.74	0.0000000	0.00	77.4961	0.05	0.0008766	1.72
20F11244	17.0 %	✓	0.0006768	45.77	0.0000000	0.00	0.0004517	1.17	0.0000000	0.00	1.671069	1.16	0.0001276	45.77	0.0000000	0.00	0.994223	0.10	0.0003008	9.70	0.0000000	0.00	82.3237	0.05	0.0010737	1.48
20F11245	17.0 %	✓	0.0012281	25.85	0.0000000	0.00	0.0005745	0.93	0.0000000	0.00	2.125244	0.92	0.0002315	25.85	0.0000000	0.00	1.408046	0.10	0.0003825	9.67	0.0000000	0.00	116.5891	0.05	0.0013655	1.30
20F11247	17.0 %	✓	0.0050790	6.59	0.0000000	0.00	0.0005270	1.03	0.0000000	0.00	1.949754	1.01	0.0009574	6.59	0.0000000	0.00	1.228605	0.10	0.0003510	9.68	0.0000000	0.00	101.7309	0.05	0.0012527	1.37
20F11248	17.0 %	✓	0.0007444	39.59	0.0000000	0.00	0.0004633	1.14	0.0000000	0.00	1.714107	1.13	0.0001403	39.59	0.0000000	0.00	1.289866	0.10	0.0003085	9.70	0.0000000	0.00	106.8035	0.05	0.0011013	1.45
20F11250	17.0 %	✓	0.0069871	4.34	0.0000000	0.00	0.0005647	0.96	0.0000000	0.00	2.089010	0.95	0.0013171	4.34	0.0000000	0.00	1.289358	0.10	0.0003760	9.68	0.0000000	0.00	106.7614	0.05	0.0013422	1.32
20F11251	17.0 %	✓	0.0007895	38.38	0.0000000	0.00	0.0006040	0.90	0.0000000	0.00	2.234553	0.88	0.0001488	38.38	0.0000000	0.00	1.319649	0.10	0.0004022	9.67	0.0000000	0.00	109.2696	0.05	0.0014357	1.28
20F11253	17.0 %	✓	0.0004022	69.57	0.0000000	0.00	0.0003677	1.40	0.0000000	0.00	1.360354	1.39	0.0000758	69.57	0.0000000	0.00	0.848104	0.10	0.0002449	9.73	0.0000000	0.00	70.2247	0.05	0.0008740	1.67
20F11254	17.0 %		0.0006024	47.69	0.0000000	0.00	0.0003384	1.52	0.0000000	0.00	1.251884	1.51	0.0001135	47.69	0.0000000	0.00	0.861937	0.10	0.0002253	9.75	0.0000000	0.00	71.3701	0.05	0.0008043	1.77
20F11256	17.0 %	✓	0.0025316	12.45	0.0000000	0.00	0.0005347	0.97	0.0000000	0.00	1.978262	0.95	0.0004772	12.45	0.0000000	0.00	1.279526	0.10	0.0003561	9.68	0.0000000	0.00	105.9473	0.05	0.0012710	1.33
20F11257	17.0 %	✓	0.0047037	6.82	0.0000000	0.00	0.0007834	0.69	0.0000000	0.00	2.898345	0.67	0.0008867	6.82	0.0000000	0.00	1.827854	0.10	0.0005217	9.65	0.0000000	0.00	151.3500	0.05	0.0018622	1.14
		Σ	0.0878490	1.95	0.0000000	0.00	0.0194346	0.15	0.0000008	127.38	71.900030	0.15	0.0165595	1.95	0.0000000	0.00	45.293369	0.02	0.0129420	1.84	0.0111519	127.42	3750.3825	0.01	0.0461958	0.23
		Σ							0.1072843	1.60	71.900030	0.15									45.334022	0.04			3750.4287	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
509.839	0.02	0.396152	23.80	0.0000000	0.00	0.0809804	9.65
694.135	0.02	0.782644	12.50	0.0000000	0.00	0.1103160	9.65
388.091	0.03	0.412689	22.32	0.0000000	0.00	0.0617002	9.65
827.962	0.01	4.137020	2.69	0.0000000	0.00	0.1315570	9.65
659.031	0.02	2.934704	3.52	0.0000000	0.00	0.1048134	9.65
638.631	0.02	0.369966	25.49	0.0000000	0.00	0.1014310	9.65
663.844	0.02	1.505847	6.33	0.0000000	0.00	0.1055430	9.65
513.472	0.02	0.382145	22.86	0.0000000	0.00	0.0816729	9.65
584.646	0.02	1.385415	6.71	0.0000000	0.00	0.0929627	9.65
461.718	0.02	2.002624	4.75	0.0000000	0.00	0.0734977	9.65
508.141	0.02	1.066828	9.07	0.0000000	0.00	0.0807052	9.65
539.251	0.02	1.312221	7.64	0.0000000	0.00	0.0856656	9.65
459.008	0.02	0.559891	15.05	0.0000000	0.00	0.0729643	9.65
555.103	0.02	0.123778	75.78	0.0000000	0.00	0.0881893	9.65
491.339	0.02	0.602786	13.93	0.0000000	0.00	0.0780826	9.65
427.794	0.02	1.126951	8.86	0.0000000	0.00	0.0679602	9.65
545.751	0.02	1.366240	7.21	0.0000000	0.00	0.0866918	9.65
388.904	0.02	0.062464	133.20	0.0000000	0.00	0.0618200	9.65
265.928	0.04	0.040313	224.84	0.0000000	0.00	0.0423098	9.65
296.319	0.03	0.084047	106.40	0.0000000	0.00	0.0470401	9.65
314.775	0.03	0.202059	45.77	0.0000000	0.00	0.0499705	9.65
445.390	0.02	0.366654	25.85	0.0000000	0.00	0.0707696	9.65
389.188	0.03	1.516395	6.59	0.0000000	0.00	0.0617507	9.65
408.441	0.02	0.222234	39.59	0.0000000	0.00	0.0648297	9.65
407.995	0.02	2.086066	4.34	0.0000000	0.00	0.0648042	9.65
417.207	0.02	0.235721	38.38	0.0000000	0.00	0.0663267	9.65
267.953	0.03	0.120076	69.57	0.0000000	0.00	0.0426264	9.65
273.572	0.03	0.179840	47.69	0.0000000	0.00	0.0433217	9.65
404.500	0.02	0.755832	12.45	0.0000000	0.00	0.0643100	9.65
578.031	0.02	1.404343	6.82	0.0000000	0.00	0.0918695	9.65
14325.959	0.00	26.228200	1.95	0.0000000	0.00	2.2764822	1.83
						14354.463	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F11214	17.0 %	✓	3.825099	0.001772	0.019036	0.000141	0.000015	0.000002	41.650	2.282197	1.00029481	1.807E-11
20F11215	17.0 %	✓	3.824258	0.001741	0.018301	0.000105	0.000019	0.000002	41.656	2.282448	1.00029485	2.460E-11
20F11217	17.0 %	✓	3.822614	0.001802	0.018992	0.000195	0.000019	0.000003	41.667	2.282980	1.00029493	1.376E-11
20F11218	17.0 %	✓	3.839841	0.001731	0.019403	0.000093	0.000069	0.000002	41.674	2.283262	1.00029497	2.946E-11
20F11220	17.0 %	✓	3.834170	0.001740	0.018131	0.000107	0.000062	0.000002	41.685	2.283795	1.00029506	2.344E-11
20F11221	17.0 %	✓	3.824574	0.001739	0.019623	0.000116	0.000013	0.000002	41.692	2.284076	1.00029510	2.262E-11
20F11223	17.0 %	✓	3.827126	0.001736	0.020233	0.000106	0.000034	0.000002	41.703	2.284609	1.00029519	2.356E-11
20F11224	17.0 %	✓	3.819573	0.001771	0.018191	0.000137	0.000014	0.000002	41.709	2.284860	1.00029522	1.819E-11
20F11226	17.0 %	✓	3.827053	0.001758	0.017924	0.000132	0.000035	0.000002	41.722	2.285424	1.00029531	2.075E-11
20F11227	17.0 %	✓	3.830308	0.001784	0.022093	0.000180	0.000061	0.000003	41.727	2.285675	1.00029535	1.642E-11
20F11229	17.0 %	✓	3.830417	0.001771	0.018214	0.000148	0.000032	0.000002	41.739	2.286208	1.00029544	1.803E-11
20F11230	17.0 %	✓	3.830824	0.001756	0.019455	0.000134	0.000036	0.000002	41.745	2.286490	1.00029548	1.914E-11
20F11232	17.0 %	✓	3.823760	0.001769	0.020036	0.000174	0.000021	0.000002	41.757	2.287023	1.00029556	1.627E-11
20F11233	17.0 %	✓	3.822140	0.001744	0.018948	0.000134	0.000008	0.000002	41.763	2.287306	1.00029561	1.966E-11
20F11235	17.0 %	✓	3.824823	0.001771	0.020145	0.000152	0.000021	0.000002	41.775	2.287839	1.00029569	1.742E-11
20F11236	17.0 %	✓	3.831553	0.001792	0.020612	0.000179	0.000039	0.000003	41.781	2.288090	1.00029573	1.519E-11
20F11238	17.0 %	✓	3.831369	0.001758	0.020412	0.000128	0.000038	0.000002	41.793	2.288655	1.00029582	1.937E-11
20F11239	17.0 %	✓	3.819754	0.001784	0.019581	0.000178	0.000007	0.000003	41.799	2.288906	1.00029586	1.377E-11
20F11241	17.0 %	✓	3.816293	0.001869	0.019055	0.000282	0.000007	0.000004	41.810	2.289440	1.00029594	9.417E-12
20F11242	17.0 %	✓	3.825304	0.001852	0.017606	0.000256	0.000008	0.000004	41.817	2.289723	1.00029598	1.049E-11
20F11244	17.0 %	✓	3.826642	0.001840	0.020299	0.000236	0.000014	0.000004	41.828	2.290257	1.00029607	1.115E-11
20F11245	17.0 %	✓	3.823872	0.001776	0.018228	0.000167	0.000015	0.000003	41.835	2.290540	1.00029611	1.578E-11
20F11247	17.0 %	✓	3.841127	0.001816	0.019166	0.000195	0.000055	0.000003	41.847	2.291074	1.00029619	1.383E-11
20F11248	17.0 %	✓	3.822714	0.001801	0.016049	0.000181	0.000003	0.000003	41.852	2.291325	1.00029623	1.445E-11
20F11250	17.0 %	✓	3.841655	0.001797	0.019567	0.000186	0.000071	0.000003	41.865	2.291891	1.00029632	1.452E-11
20F11251	17.0 %	✓	3.816546	0.001796	0.020450	0.000181	0.000002	0.000003	41.870	2.292142	1.00029636	1.476E-11
20F11253	17.0 %	✓	3.814503	0.001885	0.019371	0.000269	0.000000	0.000004	41.882	2.292677	1.00029644	9.483E-12
20F11254	17.0 %		3.831183	0.001892	0.017541	0.000266	0.000004	0.000004	41.888	2.292960	1.00029649	9.680E-12
20F11256	17.0 %	✓	3.825627	0.001799	0.018672	0.000178	0.000029	0.000003	41.900	2.293495	1.00029657	1.435E-11
20F11257	17.0 %	✓	3.829007	0.001743	0.019150	0.000128	0.000036	0.000002	41.906	2.293778	1.00029662	2.052E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F11214	17.0 %	0.0058587 ±0.0001948	0.0133668 ±0.0052622	0.0290378 ±0.0066178	0.0095120 ±0.0063314	1.2690356 ±0.0157909
20F11215	17.0 %	0.0058587 ±0.0001948	0.0133668 ±0.0052622	0.0290378 ±0.0066178	0.0095120 ±0.0063314	1.2690356 ±0.0157909
20F11217	17.0 %	0.0057134 ±0.0002000	0.0217302 ±0.0056815	0.0192728 ±0.0058370	0.0225714 ±0.0057953	1.2851859 ±0.0181202
20F11218	17.0 %	0.0057134 ±0.0002000	0.0217302 ±0.0056815	0.0192728 ±0.0058370	0.0225714 ±0.0057953	1.2851859 ±0.0181202
20F11220	17.0 %	0.0058679 ±0.0001924	0.0261521 ±0.0055487	0.0229776 ±0.0073771	0.0073626 ±0.0054474	1.2833353 ±0.0158265
20F11221	17.0 %	0.0058679 ±0.0001924	0.0261521 ±0.0055487	0.0229776 ±0.0073771	0.0073626 ±0.0054474	1.2833353 ±0.0158265
20F11223	17.0 %	0.0056621 ±0.0001717	0.0224048 ±0.0050035	0.0315670 ±0.0058440	0.0169103 ±0.0062419	1.3724688 ±0.0149818
20F11224	17.0 %	0.0056621 ±0.0001717	0.0224048 ±0.0050035	0.0315670 ±0.0058440	0.0169103 ±0.0062419	1.3724688 ±0.0149818
20F11226	17.0 %	0.0055766 ±0.0001745	0.0263730 ±0.0066329	0.0254430 ±0.0066434	0.0285015 ±0.0060589	1.3277378 ±0.0144853
20F11227	17.0 %	0.0055766 ±0.0001745	0.0263730 ±0.0066329	0.0254430 ±0.0066434	0.0285015 ±0.0060589	1.3277378 ±0.0144853
20F11229	17.0 %	0.0053401 ±0.0001849	0.0227005 ±0.0055640	0.0237092 ±0.0074681	0.0181863 ±0.0062950	1.2947334 ±0.0155867
20F11230	17.0 %	0.0053401 ±0.0001849	0.0227005 ±0.0055640	0.0237092 ±0.0074681	0.0181863 ±0.0062950	1.2947334 ±0.0155867
20F11232	17.0 %	0.0059461 ±0.0001730	0.0286535 ±0.0061361	0.0346977 ±0.0065438	0.0135416 ±0.0060794	1.3089550 ±0.0143137
20F11233	17.0 %	0.0059461 ±0.0001730	0.0286535 ±0.0061361	0.0346977 ±0.0065438	0.0135416 ±0.0060794	1.3089550 ±0.0143137
20F11235	17.0 %	0.0057386 ±0.0001698	0.0231653 ±0.0056225	0.0262293 ±0.0065894	0.0117845 ±0.0066250	1.2545105 ±0.0156271
20F11236	17.0 %	0.0057386 ±0.0001698	0.0231653 ±0.0056225	0.0262293 ±0.0065894	0.0117845 ±0.0066250	1.2545105 ±0.0156271
20F11238	17.0 %	0.0063334 ±0.0001649	0.0203706 ±0.0055212	0.0129147 ±0.0066817	0.0079568 ±0.0057206	1.4607849 ±0.0156443
20F11239	17.0 %	0.0063334 ±0.0001649	0.0203706 ±0.0055212	0.0129147 ±0.0066817	0.0079568 ±0.0057206	1.4607849 ±0.0156443
20F11241	17.0 %	0.0055036 ±0.0001860	0.0252188 ±0.0058883	0.0224767 ±0.0070869	0.0159234 ±0.0062692	1.2180405 ±0.0152834
20F11242	17.0 %	0.0055036 ±0.0001860	0.0252188 ±0.0058883	0.0224767 ±0.0070869	0.0159234 ±0.0062692	1.2180405 ±0.0152834
20F11244	17.0 %	0.0060163 ±0.0001693	0.0274667 ±0.0062097	0.0275750 ±0.0062748	0.0134865 ±0.0064826	1.3584527 ±0.0164564
20F11245	17.0 %	0.0060163 ±0.0001693	0.0274667 ±0.0062097	0.0275750 ±0.0062748	0.0134865 ±0.0064826	1.3584527 ±0.0164564
20F11247	17.0 %	0.0060774 ±0.0001791	0.0305595 ±0.0059444	0.0176568 ±0.0059191	0.0044205 ±0.0067199	1.2961162 ±0.0142317
20F11248	17.0 %	0.0060774 ±0.0001791	0.0305595 ±0.0059444	0.0176568 ±0.0059191	0.0044205 ±0.0067199	1.2961162 ±0.0142317
20F11250	17.0 %	0.0060163 ±0.0001693	0.0274667 ±0.0062097	0.0275750 ±0.0062748	0.0134865 ±0.0064826	1.3584527 ±0.0164564
20F11251	17.0 %	0.0060163 ±0.0001693	0.0274667 ±0.0062097	0.0275750 ±0.0062748	0.0134865 ±0.0064826	1.3584527 ±0.0164564
20F11253	17.0 %	0.0060774 ±0.0001791	0.0305595 ±0.0059444	0.0176568 ±0.0059191	0.0044205 ±0.0067199	1.2961162 ±0.0142317
20F11254	17.0 %	0.0060774 ±0.0001791	0.0305595 ±0.0059444	0.0176568 ±0.0059191	0.0044205 ±0.0067199	1.2961162 ±0.0142317
20F11256	17.0 %	0.0054460 ±0.0001849	0.0202064 ±0.0053504	0.0265649 ±0.0075278	0.0145359 ±0.0065282	1.1690005 ±0.0134993
20F11257	17.0 %	0.0054460 ±0.0001849	0.0202064 ±0.0053504	0.0265649 ±0.0075278	0.0145359 ±0.0065282	1.1690005 ±0.0134993

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F11214	17.0 %	0.0077237 ±0.0002182	0.9814	EXP 149 of 150	1.0999525 ±0.0060477	0.8077	EXP 149 of 150	1.5791135 ±0.0059729	0.8832	EXP 146 of 150	133.38510 ±0.01641	0.9999	EXP 150 of 150	511.58502 ±0.03445
20F11215	17.0 %	0.0091197 ±0.0002327	0.9800	EXP 150 of 150	1.4445610 ±0.0059445	0.8665	EXP 150 of 150	2.1513195 ±0.0064227	0.9265	EXP 148 of 150	181.70791 ±0.01813	0.9999	EXP 149 of 150	696.29653 ±0.04249
20F11217	17.0 %	0.0074773 ±0.0002041	0.9709	EXP 147 of 150	0.8242931 ±0.0064068	0.6677	EXP 150 of 150	1.2060083 ±0.0064634	0.8135	EXP 148 of 150	101.61279 ±0.01373	0.9998	EXP 150 of 150	389.85008 ±0.03193
20F11218	17.0 %	0.0196022 ±0.0002807	0.9709	EXP 147 of 150	1.8209518 ±0.0058140	0.9208	EXP 150 of 150	2.5809723 ±0.0066962	0.9377	EXP 150 of 150	216.68410 ±0.01880	0.9999	EXP 150 of 150	833.51611 ±0.04309
20F11220	17.0 %	0.0157573 ±0.0002560	0.9696	EXP 150 of 150	1.3454116 ±0.0053432	0.8754	EXP 149 of 150	2.0615354 ±0.0064615	0.9196	EXP 150 of 150	172.64589 ±0.01661	0.9999	EXP 149 of 150	663.35418 ±0.03808
20F11221	17.0 %	0.0078368 ±0.0002203	0.9793	EXP 150 of 150	1.4101365 ±0.0058735	0.8683	EXP 150 of 150	1.9778064 ±0.0070060	0.8947	EXP 149 of 150	167.07439 ±0.01635	0.9999	EXP 147 of 150	640.38575 ±0.03884
20F11223	17.0 %	0.0112153 ±0.0002405	0.9733	EXP 149 of 150	1.5182377 ±0.0056274	0.8873	EXP 146 of 150	2.0737260 ±0.0055176	0.9372	EXP 150 of 150	173.83838 ±0.01627	0.9999	EXP 148 of 150	666.82797 ±0.03849
20F11224	17.0 %	0.0074606 ±0.0002097	0.9760	EXP 147 of 150	1.0493454 ±0.0060376	0.7943	EXP 150 of 150	1.5885071 ±0.0064663	0.8695	EXP 148 of 150	134.51834 ±0.01683	0.9999	EXP 150 of 150	515.30871 ±0.03419
20F11226	17.0 %	0.0105625 ±0.0002293	0.9723	EXP 150 of 150	1.1753316 ±0.0054321	0.8657	EXP 148 of 150	1.7946829 ±0.0067251	0.8839	EXP 149 of 150	153.10378 ±0.01771	0.9999	EXP 150 of 150	587.45188 ±0.03576
20F11227	17.0 %	0.0124599 ±0.0002377	0.9633	EXP 149 of 150	1.1445935 ±0.0065160	0.7712	EXP 150 of 150	1.4331242 ±0.0064869	0.8404	EXP 150 of 150	121.04046 ±0.01564	0.9998	EXP 150 of 150	465.12158 ±0.03234
20F11229	17.0 %	0.0092564 ±0.0002365	0.9673	EXP 150 of 150	1.0370674 ±0.0062792	0.7603	EXP 149 of 150	1.5705085 ±0.0064833	0.8597	EXP 148 of 150	132.92303 ±0.01603	0.9999	EXP 150 of 150	510.58362 ±0.03356
20F11230	17.0 %	0.0100989 ±0.0002498	0.9636	EXP 149 of 150	1.1787231 ±0.0057198	0.8313	EXP 149 of 150	1.6604228 ±0.0071518	0.8519	EXP 150 of 150	141.09409 ±0.01546	0.9999	EXP 150 of 150	541.94389 ±0.03192
20F11232	17.0 %	0.0082863 ±0.0001958	0.9746	EXP 149 of 150	1.0249645 ±0.0065335	0.7437	EXP 150 of 150	1.4116549 ±0.0064794	0.8272	EXP 150 of 150	120.17666 ±0.01418	0.9999	EXP 150 of 150	460.94939 ±0.03185
20F11233	17.0 %	0.0070199 ±0.0002340	0.9711	EXP 150 of 150	1.1755215 ±0.0055288	0.8516	EXP 150 of 150	1.7291025 ±0.0065711	0.8896	EXP 150 of 150	145.25576 ±0.01441	0.9999	EXP 150 of 150	556.62342 ±0.03545
20F11235	17.0 %	0.0082577 ±0.0001975	0.9767	EXP 149 of 150	1.1100571 ±0.0060798	0.8004	EXP 149 of 150	1.4995024 ±0.0062845	0.8589	EXP 148 of 150	128.60948 ±0.01543	0.9999	EXP 149 of 150	493.27450 ±0.03309
20F11236	17.0 %	0.0098130 ±0.0002589	0.9552	EXP 150 of 150	0.9859255 ±0.0064736	0.7103	EXP 150 of 150	1.3242853 ±0.0069292	0.8056	EXP 150 of 150	111.93539 ±0.01476	0.9998	EXP 150 of 150	430.24389 ±0.02946
20F11238	17.0 %	0.0113024 ±0.0002571	0.9603	EXP 150 of 150	1.2540586 ±0.0052981	0.8680	EXP 150 of 150	1.6982025 ±0.0068624	0.8681	EXP 150 of 150	142.79474 ±0.01583	0.9999	EXP 150 of 150	548.66444 ±0.03486
20F11239	17.0 %	0.0070265 ±0.0001986	0.9711	EXP 150 of 150	0.8513023 ±0.0054829	0.7309	EXP 149 of 150	1.2089105 ±0.0070998	0.7545	EXP 149 of 150	101.82475 ±0.01277	0.9999	EXP 150 of 150	390.48925 ±0.02985
20F11241	17.0 %	0.0059612 ±0.0002108	0.9588	EXP 150 of 150	0.5552064 ±0.0061811	0.5137	EXP 150 of 150	0.8167327 ±0.0064968	0.6817	EXP 148 of 150	69.67871 ±0.01090	0.9998	EXP 147 of 150	267.22914 ±0.02926
20F11242	17.0 %	0.0061060 ±0.0002058	0.9609	EXP 150 of 150	0.5709617 ±0.0062564	0.4666	EXP 150 of 150	0.9028519 ±0.0069088	0.6045	EXP 150 of 150	77.47060 ±0.01182	0.9998	EXP 150 of 150	297.66765 ±0.02967
20F11244	17.0 %	0.0070616 ±0.0002316	0.9527	EXP 150 of 150	0.7025283 ±0.0056176	0.6551	EXP 150 of 150	0.9592586 ±0.0076719	0.6191	EXP 150 of 150	82.30013 ±0.01238	0.9998	EXP 149 of 150	316.38583 ±0.02799
20F11245	17.0 %	0.0076860 ±0.0002404	0.9618	EXP 150 of 150	0.9008165 ±0.0055633	0.7443	EXP 148 of 150	1.3649922 ±0.0057847	0.8558	EXP 146 of 150	116.56120 ±0.01399	0.9999	EXP 150 of 150	447.18549 ±0.03132
20F11247	17.0 %	0.0112705 ±0.0002529	0.9495	EXP 150 of 150	0.8208730 ±0.0060876	0.7005	EXP 147 of 150	1.2061479 ±0.0057765	0.8333	EXP 150 of 150	101.71401 ±0.01486	0.9998	EXP 147 of 150	392.06245 ±0.02647
20F11248	17.0 %	0.0058171 ±0.0002060	0.9698	EXP 150 of 150	0.7178870 ±0.0058370	0.6545	EXP 150 of 150	1.2538438 ±0.0068666	0.7891	EXP 150 of 150	106.78573 ±0.01494	0.9998	EXP 150 of 150	409.57960 ±0.02998
20F11250	17.0 %	0.0130117 ±0.0002237	0.9560	EXP 150 of 150	0.8844519 ±0.0057910	0.7368	EXP 150 of 150	1.2502581 ±0.0068139	0.7849	EXP 150 of 150	106.73481 ±0.01330	0.9999	EXP 150 of 150	411.50414 ±0.03234
20F11251	17.0 %	0.0058444 ±0.0002239	0.9657	EXP 150 of 150	0.9478789 ±0.0057346	0.7858	EXP 149 of 150	1.2754714 ±0.0064330	0.8078	EXP 150 of 150	109.24275 ±0.01499	0.9998	EXP 148 of 150	418.39639 ±0.03169
20F11253	17.0 %	0.0060454 ±0.0001873	0.9664	EXP 150 of 150	0.5630743 ±0.0056161	0.5796	EXP 150 of 150	0.8132631 ±0.0063725	0.6063	EXP 148 of 150	70.21162 ±0.01191	0.9997	EXP 150 of 150	269.17176 ±0.02882
20F11254	17.0 %	0.0058329 ±0.0001968	0.9620	EXP 150 of 150	0.5156723 ±0.0056644	0.5126	EXP 150 of 150	0.8130450 ±0.0075206	0.5405	EXP 150 of 150	71.35684 ±0.01229	0.9997	EXP 150 of 150	274.73123 ±0.02837
20F11256	17.0 %	0.0082865 ±0.0002258	0.9596	EXP 150 of 150	0.8427633 ±0.0060759	0.6620	EXP 150 of 150	1.2482175 ±0.0069093	0.7770	EXP 149 of 150	105.91966 ±0.01460	0.9998	EXP 150 of 150	406.48871 ±0.02990
20F11257	17.0 %	0.0105290 ±0.0002322	0.9693	EXP 150 of 150	1.2439716 ±0.0061538	0.8335	EXP 149 of 150	1.7806517 ±0.0067097	0.8736	EXP 150 of 150	151.31680 ±0.01463	0.9999	EXP 147 of 150	580.69645 ±0.03505

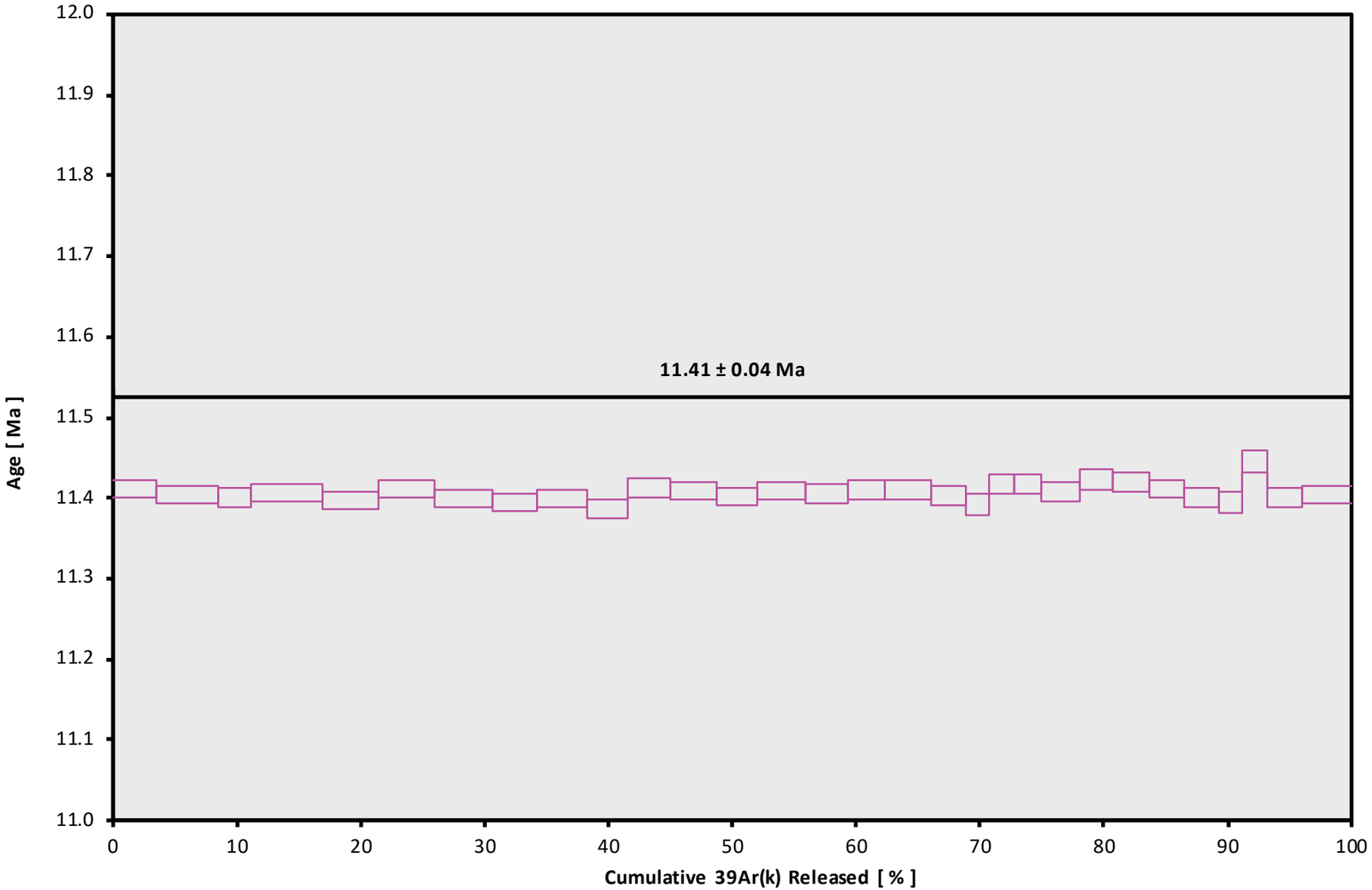
r2	Regression (type,n)
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 148 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 148 of 150
1.0000	EXP 150 of 150
0.9999	EXP 148 of 150
1.0000	EXP 147 of 150
0.9999	EXP 150 of 150
0.9999	EXP 149 of 150
1.0000	EXP 150 of 150
0.9999	EXP 148 of 150
0.9998	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 147 of 150
0.9999	EXP 147 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
0.9998	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F11214	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11215	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11217	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11218	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11220	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11221	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11223	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11224	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11226	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11227	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11229	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11230	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11232	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11233	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11235	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11236	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11238	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11239	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11241	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11242	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11244	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11245	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11247	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11248	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11250	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11251	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11253	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11254	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11256	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01
20F11257	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.95	Oregon\Swenton (18-58)	20F11209	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F11214	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	6	7	1
20F11215	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	6	15	1
20F11217	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	6	32	1
20F11218	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	6	41	1
20F11220	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	6	58	1
20F11221	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	7	7	1
20F11223	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	7	24	1
20F11224	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	7	32	1
20F11226	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	7	50	1
20F11227	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	7	58	1
20F11229	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	8	15	1
20F11230	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	8	24	1
20F11232	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	8	41	1
20F11233	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	8	50	1
20F11235	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	9	7	1
20F11236	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	9	15	1
20F11238	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	9	33	1
20F11239	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	9	41	1
20F11241	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	9	58	1
20F11242	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	10	7	1
20F11244	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	10	24	1
20F11245	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	10	33	1
20F11247	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	10	50	1
20F11248	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	10	58	1
20F11250	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	11	16	1
20F11251	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	11	24	1
20F11253	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	11	41	1
20F11254	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	11	50	1
20F11256	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	12	7	1
20F11257	17.0 %	VS17-034	Sanidine	Stockade Mountain	FCT-NM (1C28-20)	28.201	0.082	Kuiper et al (2008)	9.48785	0.163	0.00163636	0.163	298.368	0.141	1.0001611	0.044	1	3.54E-14	28	MAY	2020	12	16	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F11214	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11215	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11217	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11218	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11220	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11221	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11223	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11224	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11226	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11227	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11229	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11230	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11232	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11233	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11235	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11236	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11238	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11239	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11241	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11242	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11244	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11245	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11247	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11248	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11250	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11251	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11253	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11254	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11256	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11257	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F11209.AGE >>> VS17-034 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.41 ± 0.04
TOTAL FUSION
11.41 ± 0.04
NORMAL ISOCHRON
11.40 ± 0.04
INVERSE ISOCHRON
11.41 ± 0.04

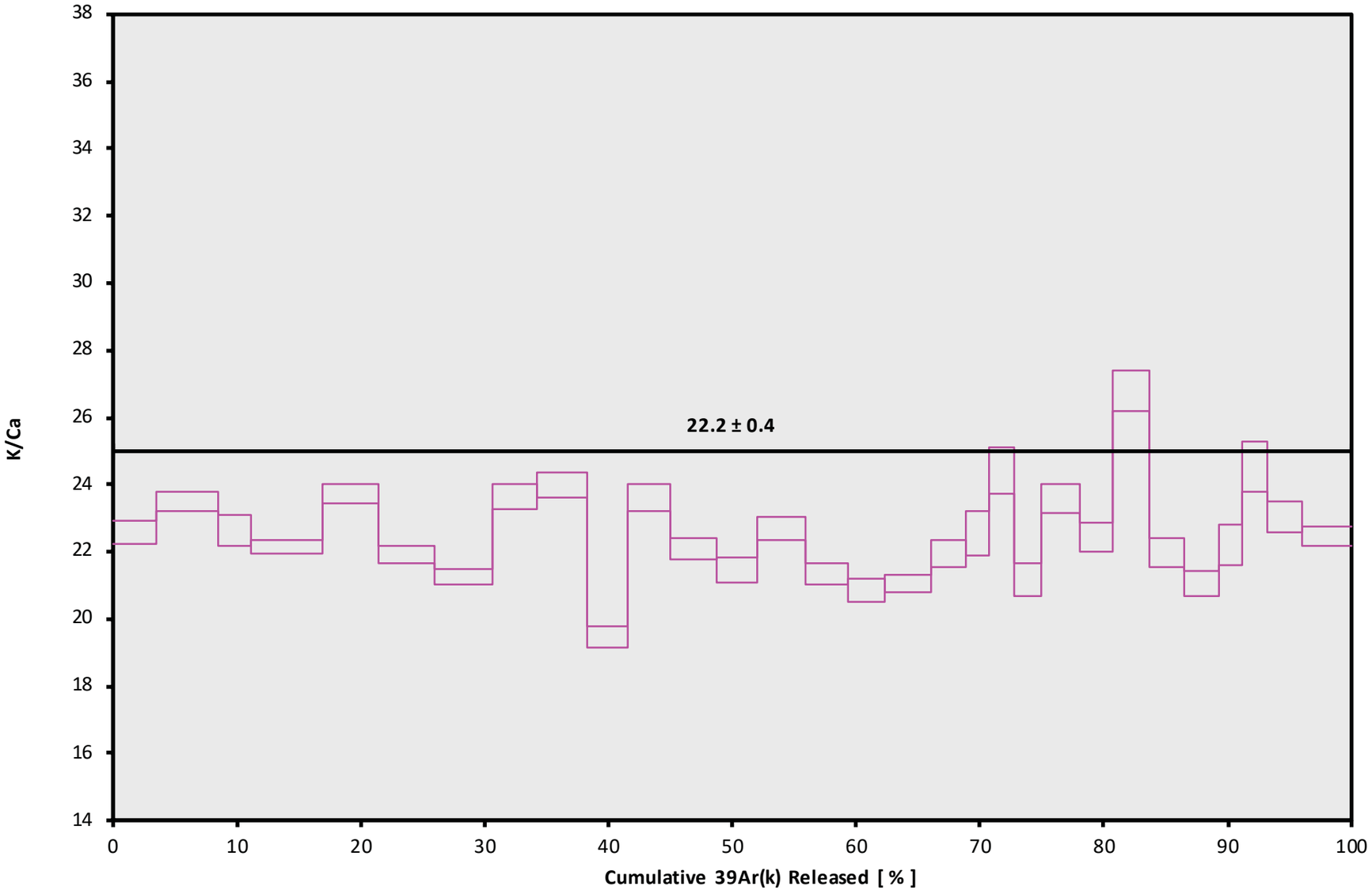
MSWD (PROBABILITY)
2.02 (0%)

Sample Info

Sanidine
Stockade Mountain
Dan Miggins

IRR = 20-OSU-01 (1C28-

20F11209.AGE >>> VS17-034 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

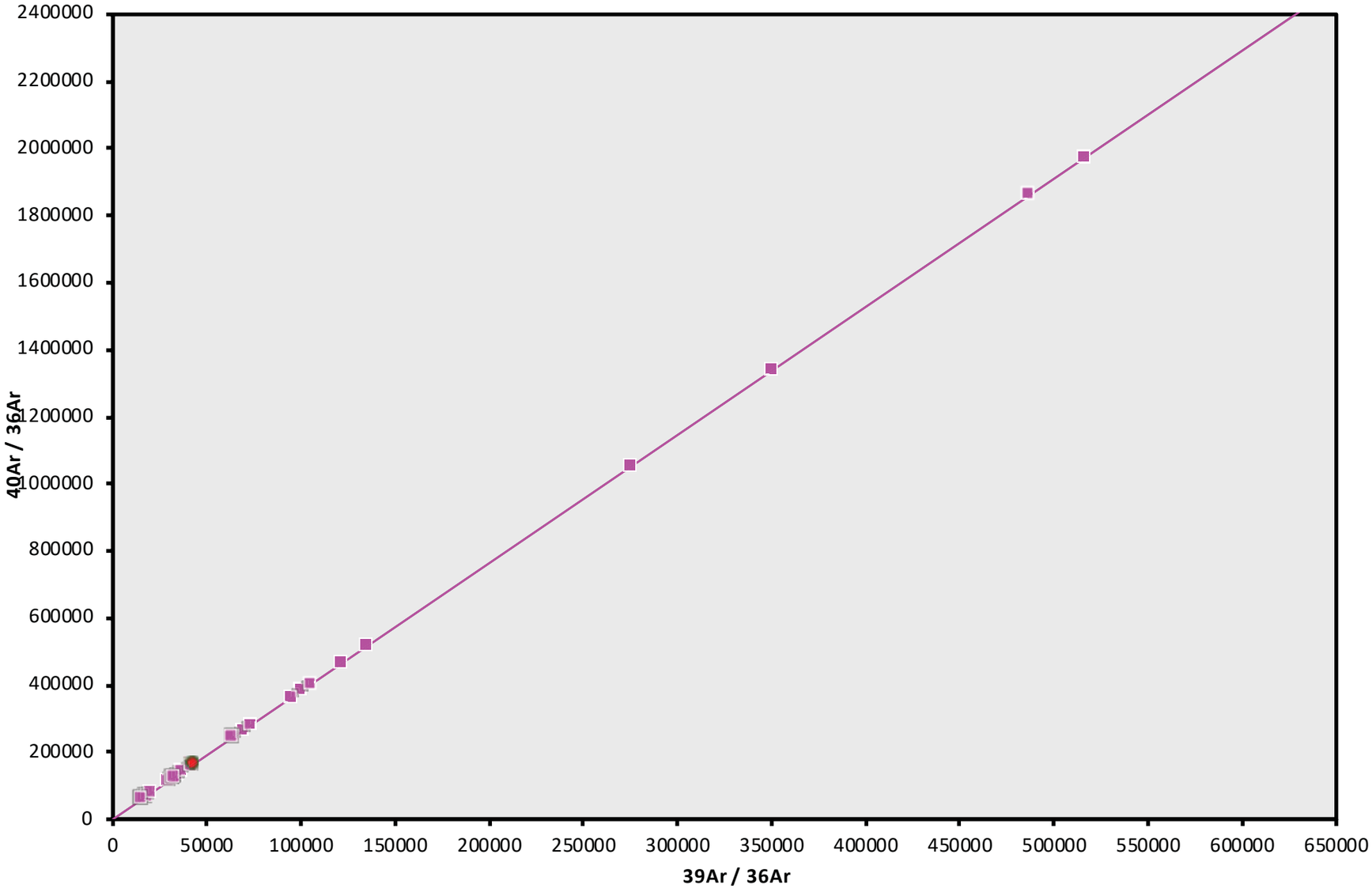
WEIGHTED PLATEAU
11.41 ± 0.04
TOTAL FUSION
11.41 ± 0.04
NORMAL ISOCHRON
11.40 ± 0.04
INVERSE ISOCHRON
11.41 ± 0.04

Sample Info

Sanidine
Stockade Mountain
Dan Miggins

IRR = 20-OSU-01 (1C28-

20F11209.AGE >>> VS17-034 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.41 ± 0.04
TOTAL FUSION
11.41 ± 0.04
NORMAL ISOCHRON
11.40 ± 0.04
INVERSE ISOCHRON
11.41 ± 0.04

MSWD (PROBABILITY)
1.69 (1%)

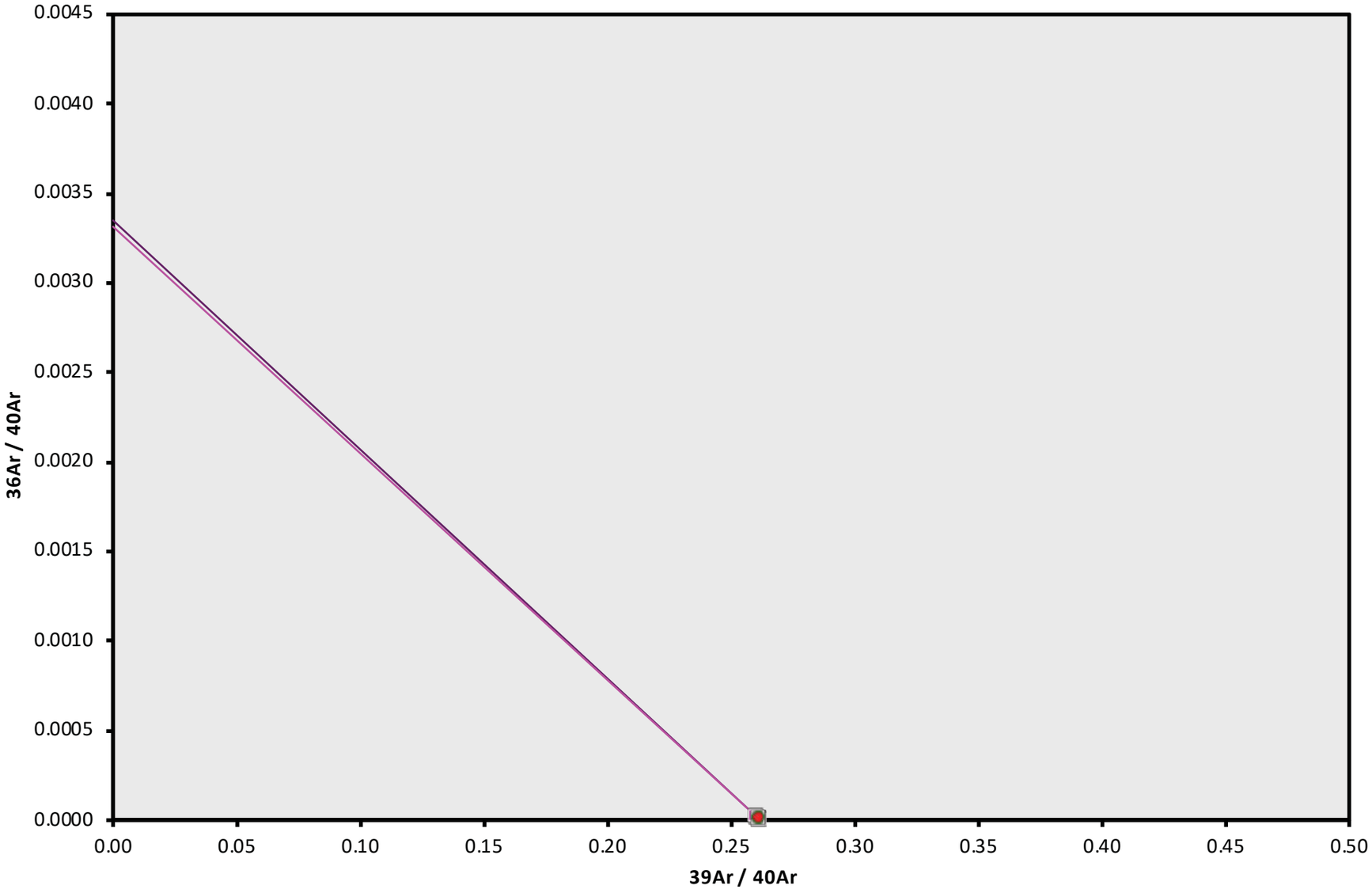
40AR/36AR INTERCEPT

Sample Info

Sanidine
Stockade Mountain
Dan Miggins

IRR = 20-OSU-01 (1C28-

20F11209.AGE >>> VS17-034 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.41 ± 0.04
TOTAL FUSION
11.41 ± 0.04
NORMAL ISOCHRON
11.40 ± 0.04
INVERSE ISOCHRON
11.41 ± 0.04

MSWD (PROBABILITY)
2.10 (0%)

SPREADING FACTOR

Sample Info

Sanidine
Stockade Mountain
Dan Miggins

IRR = 20-OSU-01 (1C28-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F25145	0.3 %		0.711000	0.311	0.322839	58.541	0.135235	6.714	1.2722	0.659	214.864	0.215	4.30643	±1.46002	12.87	±4.35	2.55	0.06	1.7	±2.0
20F25147	0.4 %		0.403930	0.465	0.056026	338.231	0.084992	10.801	0.4406	1.951	121.781	0.380	6.39276	±3.50295	19.08	±10.40	2.31	0.02	3.4	±22.9
20F25148	0.5 %		0.590793	0.353	0.017667	1063.713	0.131267	6.845	1.6380	0.528	180.813	0.256	4.15569	±1.05423	12.42	±3.14	3.76	0.08	39.9	±848.2
20F25150	0.6 %		0.468416	0.410	0.044707	439.480	0.114740	7.906	1.3427	0.620	142.867	0.324	3.65568	±1.18396	10.93	±3.53	3.44	0.07	12.9	±113.5
20F25151	0.7 %		0.872582	0.284	0.147713	129.561	0.230936	4.064	4.6391	0.196	271.799	0.170	3.19180	±0.44813	9.55	±1.34	5.45	0.23	13.5	±35.0
20F25153	0.9 %		0.526321	0.376	0.081931	241.405	0.139353	6.144	2.8252	0.314	164.824	0.281	3.47311	±0.58252	10.39	±1.74	5.95	0.14	14.8	±71.6
20F25154	1.1 %		0.301597	0.594	0.071577	275.506	0.082991	10.990	1.0828	0.785	93.060	0.497	3.90223	±1.34858	11.67	±4.02	4.54	0.05	6.5	±35.8
20F25155	1.3 %		0.671461	0.323	0.571481	32.843	0.224927	4.353	6.9464	0.142	221.879	0.208	3.47769	±0.26112	10.40	±0.78	10.89	0.34	5.2	±3.4
20F25157	1.5 %		0.846769	0.281	0.402579	48.000	0.297411	3.066	10.6360	0.098	288.147	0.161	3.64570	±0.18999	10.90	±0.57	13.46	0.52	11.4	±10.9
20F25158	1.8 %		0.959817	0.264	0.614175	32.086	0.414391	2.196	18.1395	0.068	348.534	0.133	3.63185	±0.11976	10.86	±0.36	18.90	0.90	12.7	±8.1
20F25159	2.2 %		0.702623	0.299	0.799904	24.000	0.430097	2.210	23.5646	0.059	291.464	0.159	3.58895	±0.07675	10.73	±0.23	29.02	1.16	12.7	±6.1
20F25161	2.6 %		1.033369	0.251	1.745812	10.756	0.804406	1.076	50.4838	0.044	489.749	0.095	3.67451	±0.04473	10.99	±0.13	37.88	2.49	12.4	±2.7
20F25162	3.1 %		0.810234	0.291	2.183943	9.065	0.861335	1.126	58.2552	0.044	451.132	0.103	3.65010	±0.03423	10.92	±0.10	47.13	2.88	11.5	±2.1
20F25163	3.6 %		0.840776	0.294	3.862846	4.733	1.410098	0.610	102.8227	0.041	623.548	0.074	3.65843	±0.02022	10.94	±0.06	60.33	5.07	11.4	±1.1
20F25165	4.1 %		0.402917	0.458	3.734729	5.140	1.370053	0.659	107.6707	0.041	513.106	0.090	3.66558	±0.01448	10.96	±0.04	76.92	5.31	12.4	±1.3
20F25166	4.7 %		0.351275	0.519	4.180142	4.632	1.487481	0.628	118.0713	0.040	535.932	0.086	3.66509	±0.01298	10.96	±0.04	80.74	5.83	12.1	±1.1
20F25167	5.3 %		0.352827	0.521	5.123318	3.719	1.926533	0.520	154.6976	0.040	667.529	0.069	3.64542	±0.01013	10.90	±0.03	84.48	7.64	13.0	±1.0
20F25169	6.0 %	✓	0.350563	0.517	5.803412	3.268	2.192351	0.430	177.1032	0.040	745.817	0.062	3.63028	±0.00888	10.86	±0.03	86.20	8.74	13.1	±0.9
20F25170	6.8 %	✓	0.321872	0.558	5.187935	3.727	2.043188	0.432	164.4758	0.040	689.538	0.067	3.61793	±0.00939	10.82	±0.03	86.30	8.12	13.6	±1.0
20F25171	7.5 %	✓	0.302454	0.597	4.644937	4.060	1.933538	0.500	152.9740	0.040	643.320	0.072	3.62498	±0.01002	10.84	±0.03	86.20	7.55	14.2	±1.1
20F25173	8.3 %	✓	0.305517	0.585	4.359699	4.457	1.819515	0.508	142.9515	0.040	607.246	0.076	3.62036	±0.01062	10.83	±0.03	85.22	7.06	14.1	±1.3
20F25174	9.1 %	✓	0.286444	0.615	3.525053	5.405	1.499980	0.610	117.4472	0.041	509.234	0.091	3.61939	±0.01263	10.83	±0.04	83.47	5.80	14.3	±1.5
20F25175	10.1 %	✓	1.405015	0.227	3.315528	5.619	1.618532	0.581	109.5990	0.041	806.870	0.057	3.58816	±0.02575	10.73	±0.08	48.74	5.41	14.2	±1.6
20F25177	11.2 %	✓	0.333610	0.537	2.965577	6.652	1.276841	0.721	97.5481	0.041	452.417	0.102	3.63251	±0.01539	10.86	±0.05	78.32	4.81	14.1	±1.9
20F25178	12.4 %	✓	0.315076	0.562	2.261983	8.882	1.044765	0.886	79.3220	0.043	381.512	0.121	3.64151	±0.01862	10.89	±0.06	75.71	3.92	15.1	±2.7
20F25179	13.6 %	✓	0.330270	0.547	1.863910	10.638	0.903408	1.005	66.4458	0.044	338.622	0.137	3.63399	±0.02246	10.87	±0.07	71.31	3.28	15.3	±3.3
20F25181	14.9 %	✓	0.369678	0.496	1.885019	9.834	0.802151	1.210	59.0820	0.045	322.256	0.144	3.61353	±0.02567	10.81	±0.08	66.25	2.92	13.5	±2.7
20F25182	16.2 %	✓	0.375479	0.495	1.568814	12.443	0.701568	1.312	49.7489	0.045	290.382	0.159	3.61601	±0.03067	10.82	±0.09	61.95	2.46	13.6	±3.4
20F25183	17.6 %	✓	0.366214	0.507	1.291321	14.631	0.633224	1.500	44.2773	0.046	268.257	0.172	3.62438	±0.03432	10.84	±0.10	59.82	2.19	14.7	±4.3
20F25185	19.0 %	✓	0.388750	0.485	1.200754	16.786	0.557602	1.709	38.5908	0.048	255.205	0.181	3.64809	±0.03993	10.91	±0.12	55.16	1.90	13.8	±4.6
20F25186	20.5 %	✓	0.327837	0.541	1.096784	16.945	0.463217	1.952	31.9984	0.051	211.960	0.218	3.60874	±0.04582	10.79	±0.14	54.48	1.58	12.5	±4.3
20F25188	22.3 %	✓	0.321814	0.560	0.863572	22.999	0.429258	2.250	29.9714	0.054	203.816	0.227	3.63966	±0.04928	10.89	±0.15	53.52	1.48	14.9	±6.9
		Σ	16.947299	0.069	65.652535	1.659	28.065386	0.187	2026.0637	0.010	12347.481	0.021								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-035**
Material = **Groundmass**
Location = **Mustang Butte**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C27-20)**
Position = **X: 0 | Y: 0 | Z/H: 37.09883 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.47349 ± 0.01478**
FCT-NM J-value = **0.00163884 ± 0.00000256**
Air Shot 40Ar/36Ar = **298.5400 ± 0.3403**
Air Shot MDF = **1.00001677 ± 0.00038630 (LIN)**
Experiment Type = **Incremental Heating**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **6.12 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Plateau Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **294.53 ± 0.66**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

Results	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			3.62403	±0.00485	**10.84**	**±0.04**	1.52	67.20	13.8	±0.4
				±0.13%		**±0.34%**	10%	15		
				Full External Error		±0.56	1.76	2σ Confidence Limit		
				Analytical Error		±0.01	1.2321	Error Magnification		
Total Fusion Age			3.63275	±0.00485	**10.87**	**±0.04**		32	13.3	±0.4
				±0.13%		**±0.34%**				
				Full External Error		±0.57				
				Analytical Error		±0.01				
Normal Isochron	**293.01**	**±1.94**	3.62806	±0.00796	**10.85**	**±0.04**	1.80	67.20		
Error Chron		**±0.66%**		±0.22%		**±0.38%**	4%	15		
				Full External Error		±0.56	1.78	2σ Confidence Limit		
				Analytical Error		±0.02	1.3419	Error Magnification		
							36	Number of Iterations		
							0.0000362606	Convergence		
Inverse Isochron	**292.92**	**±1.95**	3.62869	±0.00799	**10.85**	**±0.04**	1.81	67.20		
Error Chron		**±0.66%**		±0.22%		**±0.38%**	4%	15		
				Full External Error		±0.56	1.78	2σ Confidence Limit		
				Analytical Error		±0.02	1.3447	Error Magnification		
							4	Number of Iterations		
							0.0000844962	Convergence		
							37%	Spreading Factor		

Notes
Subatmospheric Initial 40Ar/36Ar = 294.53 ± 0.23 (%SD).

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F25145	0.3 %		0.710913	0.322839	0.0000000	1.2720	5.4777	12.87 ±4.35	2.55	0.06	1.7 ±2.0
20F25147	0.4 %		0.403914	0.056026	0.0035239	0.4405	2.8162	19.08 ±10.40	2.31	0.02	3.4 ±22.9
20F25148	0.5 %		0.590788	0.017667	0.0001185	1.6380	6.8071	12.42 ±3.14	3.76	0.08	39.9 ±848.2
20F25150	0.6 %		0.468402	0.044707	0.0102235	1.3426	4.9083	10.93 ±3.53	3.44	0.07	12.9 ±113.5
20F25151	0.7 %		0.872539	0.147713	0.0104103	4.6390	14.8069	9.55 ±1.34	5.45	0.23	13.5 ±35.0
20F25153	0.9 %		0.526297	0.081931	0.0060123	2.8251	9.8119	10.39 ±1.74	5.95	0.14	14.8 ±71.6
20F25154	1.1 %		0.301613	0.071577	0.0130723	1.0829	4.2255	11.67 ±4.02	4.54	0.05	6.5 ±35.8
20F25155	1.3 %		0.671303	0.571481	0.0143960	6.9461	24.1562	10.40 ±0.78	10.89	0.34	5.2 ±3.4
20F25157	1.5 %		0.846658	0.402579	0.0092959	10.6357	38.7746	10.90 ±0.57	13.46	0.52	11.4 ±10.9
20F25158	1.8 %		0.959647	0.614175	0.0143209	18.1391	65.8785	10.86 ±0.36	18.90	0.90	12.7 ±8.1
20F25159	2.2 %		0.702404	0.799904	0.0129663	23.5641	84.5703	10.73 ±0.23	29.02	1.16	12.7 ±6.1
20F25161	2.6 %		1.032897	1.745812	0.0000000	50.4826	185.4992	10.99 ±0.13	37.88	2.49	12.4 ±2.7
20F25162	3.1 %		0.809642	2.183943	0.0047928	58.2538	212.6322	10.92 ±0.10	47.13	2.88	11.5 ±2.1
20F25163	3.6 %		0.839729	3.862846	0.0093544	102.8202	376.1605	10.94 ±0.06	60.33	5.07	11.4 ±1.1
20F25165	4.1 %		0.401908	3.734729	0.0000000	107.6683	394.6670	10.96 ±0.04	76.92	5.31	12.4 ±1.3
20F25166	4.7 %		0.350145	4.180142	0.0000000	118.0686	432.7320	10.96 ±0.04	80.74	5.83	12.1 ±1.1
20F25167	5.3 %		0.351443	5.123318	0.0000000	154.6943	563.9252	10.90 ±0.03	84.48	7.64	13.0 ±1.0
20F25169	6.0 %	✓	0.348994	5.803412	0.0000000	177.0995	642.9205	10.86 ±0.03	86.20	8.74	13.1 ±0.9
20F25170	6.8 %	✓	0.320470	5.187935	0.0000000	164.4724	595.0504	10.82 ±0.03	86.30	8.12	13.6 ±1.0
20F25171	7.5 %	✓	0.301191	4.644937	0.0284966	152.9710	554.5175	10.84 ±0.03	86.20	7.55	14.2 ±1.1
20F25173	8.3 %	✓	0.304329	4.359699	0.0349731	142.9487	517.5255	10.83 ±0.03	85.22	7.06	14.1 ±1.3
20F25174	9.1 %	✓	0.285484	3.525053	0.0271491	117.4449	425.0788	10.83 ±0.04	83.47	5.80	14.3 ±1.5
20F25175	10.1 %	✓	1.404111	3.315528	0.0296594	109.5968	393.2507	10.73 ±0.08	48.74	5.41	14.2 ±1.6
20F25177	11.2 %	✓	0.332799	2.965577	0.0355086	97.5462	354.3381	10.86 ±0.05	78.32	4.81	14.1 ±1.9
20F25178	12.4 %	✓	0.314457	2.261983	0.0271284	79.3206	288.8463	10.89 ±0.06	75.71	3.92	15.1 ±2.7
20F25179	13.6 %	✓	0.329756	1.863910	0.0384616	66.4446	241.4588	10.87 ±0.07	71.31	3.28	15.3 ±3.3
20F25181	14.9 %	✓	0.369164	1.885019	0.0187053	59.0808	213.4905	10.81 ±0.08	66.25	2.92	13.5 ±2.7
20F25182	16.2 %	✓	0.375047	1.568814	0.0297833	49.7479	179.8890	10.82 ±0.09	61.95	2.46	13.6 ±3.4
20F25183	17.6 %	✓	0.365857	1.291321	0.0293010	44.2765	160.4745	10.84 ±0.10	59.82	2.19	14.7 ±4.3
20F25185	19.0 %	✓	0.388420	1.200754	0.0181166	38.5900	140.7800	10.91 ±0.12	55.16	1.90	13.8 ±4.6
20F25186	20.5 %	✓	0.327537	1.096784	0.0148435	31.9977	115.4714	10.79 ±0.14	54.48	1.58	12.5 ±4.3
20F25188	22.3 %	✓	0.321579	0.863572	0.0065275	29.9708	109.0835	10.89 ±0.15	53.52	1.48	14.9 ±6.9
		Σ	16.929437	65.652535	0.4471411	2026.0216	7360.0245				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-035**
Material = **Groundmass**
Location = **Mustang Butte**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C27-20)**
J = **0.00163884 ±0.00000256**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k)	±2σ	Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.62403	±0.00485	**10.84**	**±0.04**	1.52	67.20	13.8 ±0.4
		±0.13%		**±0.34%**	10%	15	
			Full External Error	±0.56	1.76	2σ Confidence Limit	
			Analytical Error	±0.01	1.2321	Error Magnification	
Total Fusion Age	3.63275	±0.00485	**10.87**	**±0.04**		32	13.3 ±0.4
		±0.13%		**±0.34%**			
			Full External Error	±0.57			
			Analytical Error	±0.01			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F25145	0.3 %		1.79	±0.03	302.24	±2.29	0.3512
20F25147	0.4 %		1.09	±0.04	301.50	±3.62	0.1799
20F25148	0.5 %		2.77	±0.04	306.05	±2.67	0.4496
20F25150	0.6 %		2.87	±0.04	305.01	±3.19	0.4332
20F25151	0.7 %		5.32	±0.04	311.50	±2.06	0.7057
20F25153	0.9 %		5.37	±0.05	313.17	±2.94	0.6156
20F25154	1.1 %		3.59	±0.07	308.54	±4.78	0.4625
20F25155	1.3 %		10.35	±0.07	330.51	±2.54	0.7694
20F25157	1.5 %		12.56	±0.07	340.33	±2.20	0.8192
20F25158	1.8 %		18.90	±0.10	363.18	±2.15	0.8652
20F25159	2.2 %		33.55	±0.20	414.93	±2.81	0.8672
20F25161	2.6 %		48.87	±0.25	474.12	±2.55	0.9217
20F25162	3.1 %		71.95	±0.42	557.15	±3.44	0.9326
20F25163	3.6 %		122.44	±0.73	742.48	±4.52	0.9605
20F25165	4.1 %		267.89	±2.47	1276.51	±11.96	0.9773
20F25166	4.7 %		337.20	±3.52	1530.39	±16.16	0.9835
20F25167	5.3 %		440.17	±4.62	1899.13	±20.05	0.9884
20F25169	6.0 %	✓	507.46	±5.29	2136.74	±22.35	0.9900
20F25170	6.8 %	✓	513.22	±5.77	2151.34	±24.29	0.9904
20F25171	7.5 %	✓	507.89	±6.11	2135.61	±25.82	0.9907
20F25173	8.3 %	✓	469.72	±5.54	1995.07	±23.66	0.9894
20F25174	9.1 %	✓	411.39	±5.09	1783.51	±22.26	0.9872
20F25175	10.1 %	✓	78.05	±0.36	574.60	±2.69	0.9539
20F25177	11.2 %	✓	293.11	±3.17	1359.25	±14.91	0.9796
20F25178	12.4 %	✓	252.25	±2.85	1213.08	±13.99	0.9748
20F25179	13.6 %	✓	201.50	±2.22	1026.76	±11.61	0.9672
20F25181	14.9 %	✓	160.04	±1.60	872.84	±9.03	0.9568
20F25182	16.2 %	✓	132.64	±1.32	774.17	±8.06	0.9480
20F25183	17.6 %	✓	121.02	±1.23	733.16	±7.86	0.9430
20F25185	19.0 %	✓	99.35	±0.97	656.97	±6.81	0.9322
20F25186	20.5 %	✓	97.69	±1.06	647.08	±7.56	0.9233
20F25188	22.3 %	✓	93.20	±1.05	633.74	±7.67	0.9226

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**293.01**	**±1.94**	3.62806	±0.00796	**10.85**	**±0.04**	1.80
Error Chron		**±0.66%**		±0.22%		**±0.38%**	4%
					Full External Error	±0.56	
					Analytical Error	±0.02	

Statistics				
	2σ Confidence Limit	1.78	Convergence	0.000036260561
	Error Magnification	1.3419	Number of Iterations	36
	Number of Data Points	15	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F25145	0.3 %		0.0059199	±0.0000821	0.00330868	±0.00002505	0.1766
20F25147	0.4 %		0.0036174	±0.0001438	0.00331672	±0.00003985	0.1207
20F25148	0.5 %		0.0090592	±0.0001063	0.00326742	±0.00002848	0.2560
20F25150	0.6 %		0.0093979	±0.0001315	0.00327859	±0.00003427	0.2864
20F25151	0.7 %		0.0170681	±0.0000885	0.00321027	±0.00002124	0.3377
20F25153	0.9 %		0.0171403	±0.0001444	0.00319312	±0.00002999	0.3980
20F25154	1.1 %		0.0116361	±0.0002163	0.00324107	±0.00005019	0.3431
20F25155	1.3 %		0.0313062	±0.0001581	0.00302559	±0.00002329	0.4470
20F25157	1.5 %		0.0369116	±0.0001391	0.00293835	±0.00001901	0.4234
20F25158	1.8 %		0.0520456	±0.0001555	0.00275347	±0.00001630	0.3988
20F25159	2.2 %		0.0808514	±0.0002737	0.00241004	±0.00001635	0.4395
20F25161	2.6 %		0.1030850	±0.0002154	0.00210917	±0.00001133	0.3187
20F25162	3.1 %		0.1291384	±0.0002885	0.00179483	±0.00001109	0.3054
20F25163	3.6 %		0.1649118	±0.0002799	0.00134683	±0.00000819	0.2140
20F25165	4.1 %		0.2098630	±0.0004163	0.00078338	±0.00000734	0.1754
20F25166	4.7 %		0.2203347	±0.0004206	0.00065343	±0.00000690	0.1483
20F25167	5.3 %		0.2317742	±0.0003714	0.00052656	±0.00000556	0.1140
20F25169	6.0 %	✓	0.2374912	±0.0003506	0.00046800	±0.00000490	0.1002
20F25170	6.8 %	✓	0.2385600	±0.0003730	0.00046483	±0.00000525	0.1025
20F25171	7.5 %	✓	0.2378180	±0.0003921	0.00046825	±0.00000566	0.1042
20F25173	8.3 %	✓	0.2354384	±0.0004056	0.00050123	±0.00000594	0.1140
20F25174	9.1 %	✓	0.2306630	±0.0004601	0.00056069	±0.00000700	0.1329
20F25175	10.1 %	✓	0.1358408	±0.0001923	0.00174034	±0.00000816	0.1990
20F25177	11.2 %	✓	0.2156397	±0.0004756	0.00073570	±0.00000807	0.1732
20F25178	12.4 %	✓	0.2079376	±0.0005347	0.00082434	±0.00000950	0.1986
20F25179	13.6 %	✓	0.1962439	±0.0005633	0.00097393	±0.00001101	0.2305
20F25181	14.9 %	✓	0.1833553	±0.0005517	0.00114569	±0.00001185	0.2652
20F25182	16.2 %	✓	0.1713368	±0.0005679	0.00129170	±0.00001344	0.2945
20F25183	17.6 %	✓	0.1650688	±0.0005893	0.00136397	±0.00001462	0.3108
20F25185	19.0 %	✓	0.1512259	±0.0005675	0.00152213	±0.00001578	0.3378
20F25186	20.5 %	✓	0.1509746	±0.0006771	0.00154542	±0.00001804	0.3640
20F25188	22.3 %	✓	0.1470613	±0.0006865	0.00157793	±0.00001910	0.3649

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**292.92**	**±1.95**	3.62869	±0.00799	**10.85**	**±0.04**	1.81
Error Chron		**±0.66%**		±0.22%		**±0.38%**	4%
					Full External Error	±0.56	
					Analytical Error	±0.02	

Statistics				
	2σ Confidence Limit	1.78	Convergence	0.0000844962
	Error Magnification	1.3447	Number of Iterations	4
	Number of Data Points	15	Calculated Line	Weighted York-2
	Spreading Factor	37.3%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F25145	0.3 %		0.710913	0.31	0.0000000	0.00	0.0000873	58.54	0.0000000	0.00	0.322839	58.54	0.1340071	0.35	0.0000000	0.00	0.015362	0.67	0.0000581	59.33	0.0000000	0.00	1.2720	0.66	0.0002074	58.55
20F25147	0.4 %		0.403914	0.47	0.0000000	0.00	0.0000151	338.23	0.0000009	260.76	0.056026	338.23	0.0761378	0.49	0.0000000	0.00	0.005320	1.95	0.0000101	338.37	0.0035239	260.76	0.4405	1.95	0.0000360	338.23
20F25148	0.5 %		0.590788	0.35	0.0000000	0.00	0.0000048	#######	0.0000000	#######	0.017667	#######	0.1113635	0.39	0.0000000	0.00	0.019782	0.54	0.0000032	#######	0.0001185	#######	1.6380	0.53	0.0000114	#######
20F25150	0.6 %		0.468402	0.41	0.0000000	0.00	0.0000121	439.48	0.0000026	88.83	0.044707	439.48	0.0882937	0.44	0.0000000	0.00	0.016215	0.63	0.0000080	439.59	0.0102235	88.84	1.3426	0.62	0.0000287	439.48
20F25151	0.7 %		0.872539	0.28	0.0000000	0.00	0.0000399	129.56	0.0000027	90.35	0.147713	129.56	0.1644736	0.33	0.0000000	0.00	0.056026	0.22	0.0000266	129.92	0.0104103	90.35	4.6390	0.20	0.0000949	129.56
20F25153	0.9 %		0.526297	0.38	0.0000000	0.00	0.0000221	241.41	0.0000016	142.61	0.081931	241.41	0.0992070	0.41	0.0000000	0.00	0.034119	0.33	0.0000147	241.60	0.0060123	142.61	2.8251	0.31	0.0000526	241.41
20F25154	1.1 %		0.301613	0.59	0.0000000	0.00	0.0000193	275.51	0.0000034	69.84	0.071577	275.51	0.0568541	0.61	0.0000000	0.00	0.013078	0.79	0.0000129	275.67	0.0130723	69.85	1.0829	0.79	0.0000460	275.51
20F25155	1.3 %		0.671303	0.32	0.0000000	0.00	0.0001545	32.84	0.0000037	68.15	0.571481	32.84	0.1265405	0.36	0.0000000	0.00	0.083888	0.17	0.0001029	34.23	0.0143960	68.15	6.9461	0.14	0.0003672	32.86
20F25157	1.5 %		0.846658	0.28	0.0000000	0.00	0.0001088	48.00	0.0000024	98.39	0.402579	48.00	0.1595950	0.32	0.0000000	0.00	0.128448	0.13	0.0000725	48.96	0.0092959	98.40	10.6357	0.10	0.0002587	48.01
20F25158	1.8 %		0.959647	0.26	0.0000000	0.00	0.0001660	32.09	0.0000037	63.89	0.614175	32.09	0.1808934	0.31	0.0000000	0.00	0.219066	0.11	0.0001106	33.50	0.0143209	63.90	18.1391	0.07	0.0003946	32.10
20F25159	2.2 %		0.702404	0.30	0.0000000	0.00	0.0002162	24.00	0.0000034	73.70	0.799904	24.00	0.1324031	0.34	0.0000000	0.00	0.284584	0.11	0.0001440	25.86	0.0129663	73.71	23.5641	0.06	0.0005139	24.02
20F25161	2.6 %		1.032897	0.25	0.0000000	0.00	0.0004719	10.76	0.0000000	0.00	1.745812	10.76	0.1947012	0.30	0.0000000	0.00	0.609679	0.10	0.0003142	14.44	0.0000000	0.00	50.4826	0.04	0.0011217	10.80
20F25162	3.1 %		0.809642	0.29	0.0000000	0.00	0.0005903	9.07	0.0000012	206.39	2.183943	9.06	0.1526176	0.33	0.0000000	0.00	0.703532	0.10	0.0003931	13.23	0.0047928	206.39	58.2538	0.04	0.0014032	9.11
20F25163	3.6 %		0.839729	0.29	0.0000000	0.00	0.0010441	4.74	0.0000024	98.32	3.862846	4.73	0.1582890	0.34	0.0000000	0.00	1.241760	0.10	0.0006953	10.73	0.0093544	98.32	102.8202	0.04	0.0024819	4.82
20F25165	4.1 %		0.401908	0.46	0.0000000	0.00	0.0010095	5.14	0.0000000	0.00	3.734729	5.14	0.0757596	0.49	0.0000000	0.00	1.300310	0.10	0.0006723	10.92	0.0000000	0.00	107.6683	0.04	0.0023996	5.22
20F25166	4.7 %		0.350145	0.52	0.0000000	0.00	0.0011299	4.64	0.0000000	0.00	4.180142	4.63	0.0660024	0.54	0.0000000	0.00	1.425915	0.10	0.0007524	10.69	0.0000000	0.00	118.0686	0.04	0.0026857	4.72
20F25167	5.3 %		0.351443	0.52	0.0000000	0.00	0.0013848	3.72	0.0000000	0.00	5.123318	3.72	0.0662469	0.55	0.0000000	0.00	1.868243	0.10	0.0009222	10.32	0.0000000	0.00	154.6943	0.04	0.0032917	3.83
20F25169	6.0 %	✓	0.348994	0.52	0.0000000	0.00	0.0015687	3.27	0.0000000	0.00	5.803412	3.27	0.0657853	0.54	0.0000000	0.00	2.138830	0.10	0.0010446	10.17	0.0000000	0.00	177.0995	0.04	0.0037287	3.39
20F25170	6.8 %	✓	0.320470	0.56	0.0000000	0.00	0.0014023	3.73	0.0000000	0.00	5.187935	3.73	0.0604086	0.58	0.0000000	0.00	1.986334	0.10	0.0009338	10.33	0.0000000	0.00	164.4724	0.04	0.0033332	3.84
20F25171	7.5 %	✓	0.301191	0.60	0.0000000	0.00	0.0012555	4.06	0.0000074	37.67	4.644937	4.06	0.0567745	0.62	0.0000000	0.00	1.847431	0.10	0.0008361	10.45	0.0284966	37.68	152.9710	0.04	0.0029844	4.16
20F25173	8.3 %	✓	0.304329	0.59	0.0000000	0.00	0.0011784	4.46	0.0000091	29.24	4.359699	4.46	0.0573661	0.61	0.0000000	0.00	1.726391	0.10	0.0007847	10.61	0.0349731	29.26	142.9487	0.04	0.0028011	4.55
20F25174	9.1 %	✓	0.285484	0.62	0.0000000	0.00	0.0009528	5.41	0.0000070	36.19	3.525053	5.41	0.0538137	0.64	0.0000000	0.00	1.418382	0.10	0.0006345	11.04	0.0271491	36.20	117.4449	0.04	0.0022648	5.48
20F25175	10.1 %	✓	1.404111	0.23	0.0000000	0.00	0.0008962	5.62	0.0000077	34.00	3.315528	5.62	0.2646750	0.28	0.0000000	0.00	1.323601	0.10	0.0005968	11.15	0.0296594	34.01	109.5968	0.04	0.0021302	5.69
20F25177	11.2 %	✓	0.332799	0.54	0.0000000	0.00	0.0008016	6.65	0.0000092	27.30	2.965577	6.65	0.0627327	0.56	0.0000000	0.00	1.178066	0.10	0.0005338	11.70	0.0355086	27.32	97.5462	0.04	0.0019054	6.72
20F25178	12.4 %	✓	0.314457	0.56	0.0000000	0.00	0.0006114	8.88	0.0000070	35.33	2.261983	8.88	0.0592752	0.59	0.0000000	0.00	0.957954	0.10	0.0004072	13.10	0.0271284	35.34	79.3206	0.04	0.0014533	8.93
20F25179	13.6 %	✓	0.329756	0.55	0.0000000	0.00	0.0005038	10.64	0.0000100	24.27	1.863910	10.64	0.0621590	0.57	0.0000000	0.00	0.802452	0.10	0.0003355	14.35	0.0384616	24.28	66.4446	0.04	0.0011976	10.68
20F25181	14.9 %	✓	0.369164	0.50	0.0000000	0.00	0.0005095	9.84	0.0000049	52.86	1.885019	9.83	0.0695874	0.52	0.0000000	0.00	0.713519	0.10	0.0003393	13.76	0.0187053	52.87	59.0808	0.04	0.0012111	9.88
20F25182	16.2 %	✓	0.375047	0.50	0.0000000	0.00	0.0004241	12.44	0.0000077	31.41	1.568814	12.44	0.0706964	0.52	0.0000000	0.00	0.600806	0.10	0.0002824	15.73	0.0297833	31.42	49.7479	0.05	0.0010080	12.48
20F25183	17.6 %	✓	0.365857	0.51	0.0000000	0.00	0.0003490	14.63	0.0000076	32.81	1.291321	14.63	0.0689640	0.53	0.0000000	0.00	0.534727	0.10	0.0002324	17.52	0.0293010	32.82	44.2765	0.05	0.0008297	14.66
20F25185	19.0 %	✓	0.388420	0.49	0.0000000	0.00	0.0003246	16.79	0.0000047	53.09	1.200754	16.79	0.0732172	0.51	0.0000000	0.00	0.466052	0.10	0.0002161	19.35	0.0181166	53.10	38.5900	0.05	0.0007715	16.81
20F25186	20.5 %	✓	0.327537	0.54	0.0000000	0.00	0.0002965	16.95	0.0000039	61.37	1.096784	16.94	0.0617407	0.56	0.0000000	0.00	0.386436	0.10	0.0001974	19.49	0.0148435	61.38	31.9977	0.05	0.0007047	16.97
20F25188	22.3 %	✓	0.321579	0.56	0.0000000	0.00	0.0002334	23.00	0.0000017	148.84	0.863572	23.00	0.0606176	0.58	0.0000000	0.00	0.361957	0.11	0.0001554	24.93	0.0065275	148.84	29.9708	0.05	0.0005548	23.02
		Σ	16.929437	0.07	0.0000000	0.00	0.0177459	1.66	0.0001160	10.65	65.652535	1.66	3.1911988	0.08	0.0000000	0.00	24.468262	0.02	0.0118175	2.79	0.4471411	10.66	2026.0216	0.01	0.0421818	1.67
		Σ							16.947299	0.07	65.652535	1.66									28.118420	0.17			2026.0637	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
5.4777	16.94	209.3852	0.38	0.0000000	0.00	0.0007721	9.67
2.8162	27.33	118.9648	0.52	0.0000000	0.00	0.0002674	9.85
6.8071	12.67	174.0047	0.42	0.0000000	0.00	0.0009943	9.66
4.9083	16.18	137.9583	0.47	0.0000000	0.00	0.0008150	9.67
14.8069	7.02	256.9890	0.36	0.0000000	0.00	0.0028159	9.65
9.8119	8.38	155.0102	0.44	0.0000000	0.00	0.0017148	9.66
4.2255	17.26	88.8341	0.64	0.0000000	0.00	0.0006573	9.68
24.1562	3.75	197.7187	0.39	0.0000000	0.00	0.0042163	9.65
38.7746	2.60	249.3661	0.36	0.0000000	0.00	0.0064559	9.65
65.8785	1.65	282.6448	0.35	0.0000000	0.00	0.0110104	9.65
84.5703	1.07	206.8790	0.37	0.0000000	0.00	0.0143034	9.65
185.4992	0.61	304.2193	0.34	0.0000000	0.00	0.0306430	9.65
212.6322	0.47	238.4640	0.37	0.0000000	0.00	0.0353601	9.65
376.1605	0.27	247.3255	0.37	0.0000000	0.00	0.0624119	9.65
394.6670	0.19	118.3739	0.51	0.0000000	0.00	0.0653547	9.65
432.7320	0.17	103.1282	0.57	0.0000000	0.00	0.0716676	9.65
563.9252	0.13	103.5104	0.57	0.0000000	0.00	0.0938995	9.65
642.9205	0.12	102.7892	0.57	0.0000000	0.00	0.1074994	9.65
595.0504	0.12	94.3880	0.60	0.0000000	0.00	0.0998348	9.65
554.5175	0.13	88.7098	0.64	0.0000000	0.00	0.0928534	9.65
517.5255	0.14	89.6341	0.63	0.0000000	0.00	0.0867699	9.65
425.0788	0.17	84.0835	0.66	0.0000000	0.00	0.0712891	9.65
393.2507	0.36	413.5529	0.32	0.0000000	0.00	0.0665253	9.65
354.3381	0.21	98.0194	0.58	0.0000000	0.00	0.0592106	9.65
288.8463	0.25	92.6171	0.61	0.0000000	0.00	0.0481476	9.65
241.4588	0.31	97.1230	0.59	0.0000000	0.00	0.0403319	9.65
213.4905	0.35	108.7299	0.55	0.0000000	0.00	0.0358621	9.65
179.8890	0.42	110.4626	0.54	0.0000000	0.00	0.0301970	9.65
160.4745	0.47	107.7558	0.56	0.0000000	0.00	0.0268758	9.65
140.7800	0.55	114.4014	0.54	0.0000000	0.00	0.0234242	9.65
115.4714	0.63	96.4694	0.59	0.0000000	0.00	0.0194226	9.65
109.0835	0.67	94.7145	0.60	0.0000000	0.00	0.0181923	9.65
7360.0245	0.07	4986.2270	0.08	0.0000000	0.00	1.2297951	2.27
						12347.481	0.05

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F25145	0.3 %		168.893864	1.171183	0.253768	0.148567	0.558883	0.004074	159.456	23.383902	1.00112664	7.606E-12
20F25147	0.4 %		276.421040	5.494206	0.127169	0.430132	0.916847	0.018390	159.474	23.392243	1.00112677	4.311E-12
20F25148	0.5 %		110.385044	0.647815	0.010785	0.114727	0.360675	0.002291	159.483	23.396414	1.00112683	6.401E-12
20F25150	0.6 %		106.405525	0.744635	0.033297	0.146335	0.348870	0.002595	159.501	23.404760	1.00112696	5.058E-12
20F25151	0.7 %		58.588233	0.151966	0.031841	0.041253	0.188092	0.000648	159.510	23.408934	1.00112702	9.622E-12
20F25153	0.9 %		58.341460	0.245771	0.029001	0.070009	0.186298	0.000913	159.528	23.417284	1.00112715	5.835E-12
20F25154	1.1 %		85.943587	0.798773	0.066103	0.182120	0.278533	0.002742	159.537	23.421460	1.00112721	3.294E-12
20F25155	1.3 %		31.941479	0.080645	0.082270	0.027020	0.096663	0.000342	159.547	23.425958	1.00112728	7.855E-12
20F25157	1.5 %		27.091732	0.051029	0.037851	0.018169	0.079614	0.000237	159.565	23.434314	1.00112741	1.020E-11
20F25158	1.8 %		19.214106	0.028709	0.033858	0.010864	0.052913	0.000145	159.574	23.438493	1.00112747	1.234E-11
20F25159	2.2 %		12.368701	0.020936	0.033945	0.008147	0.029817	0.000091	159.583	23.442673	1.00112754	1.032E-11
20F25161	2.6 %		9.701121	0.010137	0.034582	0.003720	0.020469	0.000052	159.601	23.451035	1.00112766	1.734E-11
20F25162	3.1 %		7.744049	0.008651	0.037489	0.003398	0.013908	0.000041	159.610	23.455217	1.00112773	1.597E-11
20F25163	3.6 %		6.064308	0.005145	0.037568	0.001778	0.008177	0.000024	159.619	23.459400	1.00112779	2.207E-11
20F25165	4.1 %		4.765514	0.004726	0.034687	0.001783	0.003742	0.000017	159.638	23.468089	1.00112792	1.816E-11
20F25166	4.7 %		4.539054	0.004331	0.035404	0.001640	0.002975	0.000015	159.647	23.472275	1.00112799	1.897E-11
20F25167	5.3 %		4.315060	0.003456	0.033118	0.001232	0.002281	0.000012	159.656	23.476460	1.00112805	2.363E-11
20F25169	6.0 %	✓	4.211201	0.003108	0.032769	0.001071	0.001979	0.000010	159.674	23.484834	1.00112818	2.640E-11
20F25170	6.8 %	✓	4.192339	0.003277	0.031542	0.001176	0.001957	0.000011	159.683	23.489022	1.00112824	2.441E-11
20F25171	7.5 %	✓	4.205421	0.003466	0.030364	0.001233	0.001977	0.000012	159.692	23.493211	1.00112831	2.277E-11
20F25173	8.3 %	✓	4.247920	0.003658	0.030498	0.001359	0.002137	0.000013	159.710	23.501591	1.00112843	2.150E-11
20F25174	9.1 %	✓	4.335852	0.004323	0.030014	0.001622	0.002439	0.000015	159.719	23.505782	1.00112850	1.803E-11
20F25175	10.1 %	✓	7.362022	0.005210	0.030251	0.001700	0.012820	0.000030	159.728	23.509974	1.00112856	2.856E-11
20F25177	11.2 %	✓	4.637881	0.005113	0.030401	0.002022	0.003420	0.000018	159.747	23.518683	1.00112869	1.602E-11
20F25178	12.4 %	✓	4.809655	0.006183	0.028516	0.002533	0.003972	0.000022	159.756	23.522877	1.00112876	1.351E-11
20F25179	13.6 %	✓	5.096214	0.007314	0.028052	0.002984	0.004971	0.000027	159.765	23.527072	1.00112882	1.199E-11
20F25181	14.9 %	✓	5.454386	0.008204	0.031905	0.003138	0.006257	0.000031	159.783	23.535464	1.00112895	1.141E-11
20F25182	16.2 %	✓	5.836947	0.009672	0.031535	0.003924	0.007547	0.000037	159.792	23.539661	1.00112901	1.028E-11
20F25183	17.6 %	✓	6.058574	0.010814	0.029164	0.004267	0.008271	0.000042	159.801	23.543859	1.00112908	9.496E-12
20F25185	19.0 %	✓	6.613099	0.012408	0.031115	0.005223	0.010074	0.000049	159.819	23.552257	1.00112921	9.034E-12
20F25186	20.5 %	✓	6.624093	0.014852	0.034276	0.005808	0.010245	0.000056	159.829	23.556780	1.00112927	7.503E-12
20F25188	22.3 %	✓	6.800366	0.015872	0.028813	0.006627	0.010737	0.000060	159.847	23.565183	1.00112940	7.215E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F25145	0.3 %	0.0212720 ±0.0014440	0.0217541 ±0.0057432	0.0005233 ±0.0064824	0.0091651 ±0.0061163	6.1511061 ±0.4619046
20F25147	0.4 %	0.0235307 ±0.0014440	0.0189728 ±0.0057432	0.0039238 ±0.0064824	0.0139181 ±0.0061163	6.9043300 ±0.4619046
20F25148	0.5 %	0.0242694 ±0.0014440	0.0178544 ±0.0057432	0.0050654 ±0.0064824	0.0150868 ±0.0061163	7.1467753 ±0.4619046
20F25150	0.6 %	0.0251014 ±0.0014440	0.0161133 ±0.0057432	0.0064450 ±0.0064824	0.0155667 ±0.0061163	7.4113613 ±0.4619046
20F25151	0.7 %	0.0252450 ±0.0014440	0.0154714 ±0.0057432	0.0067617 ±0.0064824	0.0150828 ±0.0061163	7.4513299 ±0.4619046
20F25153	0.9 %	0.0251039 ±0.0014440	0.0145977 ±0.0057432	0.0068296 ±0.0064824	0.0131327 ±0.0061163	7.3877286 ±0.4619046
20F25154	1.1 %	0.0248621 ±0.0014440	0.0143475 ±0.0057432	0.0066464 ±0.0064824	0.0118344 ±0.0061163	7.2992193 ±0.4619046
20F25155	1.3 %	0.0245040 ±0.0014440	0.0142033 ±0.0057432	0.0063328 ±0.0064824	0.0103107 ±0.0061163	7.1721765 ±0.4619046
20F25157	1.5 %	0.0236451 ±0.0014440	0.0142432 ±0.0057432	0.0055421 ±0.0064824	0.0074147 ±0.0061163	6.8750641 ±0.4619046
20F25158	1.8 %	0.0231543 ±0.0014440	0.0143952 ±0.0057432	0.0050938 ±0.0064824	0.0060543 ±0.0061163	6.7082198 ±0.4619046
20F25159	2.2 %	0.0226421 ±0.0014440	0.0146238 ±0.0057432	0.0046385 ±0.0064824	0.0048204 ±0.0061163	6.5359481 ±0.4619046
20F25161	2.6 %	0.0216045 ±0.0014440	0.0152770 ±0.0057432	0.0037776 ±0.0064824	0.0028988 ±0.0061163	6.1926487 ±0.4619046
20F25162	3.1 %	0.0211014 ±0.0014440	0.0156851 ±0.0057432	0.0034022 ±0.0064824	0.0022793 ±0.0061163	6.0292311 ±0.4619046
20F25163	3.6 %	0.0206216 ±0.0014440	0.0161366 ±0.0057432	0.0030798 ±0.0064824	0.0019224 ±0.0061163	5.8756064 ±0.4619046
20F25165	4.1 %	0.0197325 ±0.0014440	0.0171789 ±0.0057432	0.0026189 ±0.0064824	0.0020941 ±0.0061163	5.5988069 ±0.4619046
20F25166	4.7 %	0.0193689 ±0.0014440	0.0177147 ±0.0057432	0.0025104 ±0.0064824	0.0026353 ±0.0061163	5.4899451 ±0.4619046
20F25167	5.3 %	0.0190531 ±0.0014440	0.0182622 ±0.0057432	0.0024801 ±0.0064824	0.0034765 ±0.0061163	5.3987955 ±0.4619046
20F25169	6.0 %	0.0185751 ±0.0014440	0.0193624 ±0.0057432	0.0026544 ±0.0064824	0.0060260 ±0.0061163	5.2722581 ±0.4619046
20F25170	6.8 %	0.0184148 ±0.0014440	0.0199005 ±0.0057432	0.0028536 ±0.0064824	0.0077029 ±0.0061163	5.2370301 ±0.4619046
20F25171	7.5 %	0.0183061 ±0.0014440	0.0204210 ±0.0057432	0.0031203 ±0.0064824	0.0096165 ±0.0061163	5.2198336 ±0.4619046
20F25173	8.3 %	0.0182330 ±0.0014440	0.0213815 ±0.0057432	0.0038211 ±0.0064824	0.0140229 ±0.0061163	5.2347815 ±0.4619046
20F25174	9.1 %	0.0182603 ±0.0014440	0.0218077 ±0.0057432	0.0042321 ±0.0064824	0.0164347 ±0.0061163	5.2633958 ±0.4619046
20F25175	10.1 %	0.0183226 ±0.0014440	0.0221890 ±0.0057432	0.0046646 ±0.0064824	0.0189214 ±0.0061163	5.3029817 ±0.4619046
20F25177	11.2 %	0.0185302 ±0.0014440	0.0228092 ±0.0057432	0.0055551 ±0.0064824	0.0240755 ±0.0061163	5.4070456 ±0.4619046
20F25178	12.4 %	0.0186486 ±0.0014440	0.0230118 ±0.0057432	0.0059375 ±0.0064824	0.0264153 ±0.0061163	5.4600850 ±0.4619046
20F25179	13.6 %	0.0187640 ±0.0014440	0.0231436 ±0.0057432	0.0062583 ±0.0064824	0.0285634 ±0.0061163	5.5093066 ±0.4619046
20F25181	14.9 %	0.0189350 ±0.0014440	0.0231707 ±0.0057432	0.0066090 ±0.0064824	0.0319541 ±0.0061163	5.5766414 ±0.4619046
20F25182	16.2 %	0.0189617 ±0.0014440	0.0230541 ±0.0057432	0.0065804 ±0.0064824	0.0330162 ±0.0061163	5.5837743 ±0.4619046
20F25183	17.6 %	0.0189280 ±0.0014440	0.0228433 ±0.0057432	0.0063732 ±0.0064824	0.0335255 ±0.0061163	5.5651285 ±0.4619046
20F25185	19.0 %	0.0186076 ±0.0014440	0.0221164 ±0.0057432	0.0052816 ±0.0064824	0.0324562 ±0.0061163	5.4234668 ±0.4619046
20F25186	20.5 %	0.0182515 ±0.0014440	0.0215443 ±0.0057432	0.0042342 ±0.0064824	0.0304683 ±0.0061163	5.2730119 ±0.4619046
20F25188	22.3 %	0.0171377 ±0.0014440	0.0201191 ±0.0057432	0.0012194 ±0.0064824	0.0235059 ±0.0061163	4.8139518 ±0.4619046

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F25145	0.3 %	0.7099945 ±0.0011745	0.9749	EXP 147 of 150	0.0079474 ±0.0056868	0.0087	EXP 149 of 150	0.1347160 ±0.0063572	0.0020	EXP 148 of 150	1.279936 ±0.005702	0.2479	EXP 150 of 150	221.01475 ±0.02554
20F25147	0.4 %	0.4148045 ±0.0009313	0.9468	EXP 150 of 150	0.0165776 ±0.0057137	0.0035	EXP 146 of 150	0.0810712 ±0.0064999	0.0133	EXP 148 of 150	0.453994 ±0.006023	0.1956	EXP 150 of 150	128.68561 ±0.02059
20F25148	0.5 %	0.5965507 ±0.0010996	0.9658	EXP 150 of 150	0.0170993 ±0.0056159	0.0002	EXP 149 of 150	0.1262064 ±0.0062212	0.0140	EXP 148 of 150	1.651289 ±0.006072	0.6732	EXP 147 of 150	187.95956 ±0.02622
20F25150	0.6 %	0.4788409 ±0.0009433	0.9594	EXP 149 of 150	0.0142030 ±0.0061234	0.0000	EXP 150 of 150	0.1082992 ±0.0063452	0.0272	EXP 150 of 150	1.356747 ±0.005619	0.5589	EXP 150 of 150	150.27879 ±0.02222
20F25151	0.7 %	0.8704861 ±0.0013990	0.9767	EXP 148 of 150	0.0091609 ±0.0058189	0.0000	EXP 150 of 150	0.2241822 ±0.0067836	0.0996	EXP 150 of 150	4.649072 ±0.006454	0.9742	EXP 150 of 150	279.24999 ±0.02643
20F25153	0.9 %	0.5349333 ±0.0009887	0.9663	EXP 148 of 150	0.0110988 ±0.0061936	0.0000	EXP 149 of 150	0.1325279 ±0.0055919	0.0245	EXP 147 of 150	2.835157 ±0.006328	0.9214	EXP 149 of 150	172.21158 ±0.02249
20F25154	1.1 %	0.3170092 ±0.0008478	0.9228	EXP 150 of 150	0.0174037 ±0.0061573	0.0001	EXP 150 of 150	0.0763475 ±0.0064163	0.0291	EXP 150 of 150	1.093440 ±0.005881	0.4212	EXP 149 of 150	100.35951 ±0.02155
20F25155	1.3 %	0.6749259 ±0.0011548	0.9721	EXP 150 of 150	0.0101931 ±0.0055859	0.0535	EXP 150 of 150	0.2186017 ±0.0073376	0.0990	EXP 150 of 150	6.949034 ±0.007290	0.9875	EXP 149 of 150	229.05138 ±0.02334
20F25157	1.5 %	0.8438824 ±0.0012702	0.9781	EXP 145 of 150	0.0029367 ±0.0059172	0.0006	EXP 150 of 150	0.2918790 ±0.0064092	0.1691	EXP 149 of 150	10.631599 ±0.007421	0.9949	EXP 149 of 150	295.02228 ±0.02902
20F25158	1.8 %	0.9528970 ±0.0013789	0.9800	EXP 149 of 150	0.0118098 ±0.0061399	0.0011	EXP 150 of 150	0.4093110 ±0.0063817	0.3133	EXP 149 of 150	18.125430 ±0.008222	0.9980	EXP 150 of 150	355.24251 ±0.03032
20F25159	2.2 %	0.7032502 ±0.0009831	0.9809	EXP 150 of 150	0.0194996 ±0.0058361	0.0049	EXP 150 of 150	0.4254729 ±0.0069465	0.3026	EXP 150 of 150	23.543280 ±0.008359	0.9988	EXP 150 of 150	297.99952 ±0.03084
20F25161	2.6 %	1.0225952 ±0.0013610	0.9829	EXP 147 of 150	0.0591717 ±0.0055699	0.0024	EXP 150 of 150	0.8006558 ±0.0057050	0.5946	EXP 150 of 150	50.430639 ±0.009300	0.9997	EXP 149 of 150	495.94172 ±0.03409
20F25162	3.1 %	0.8059483 ±0.0012917	0.9745	EXP 150 of 150	0.0774308 ±0.0061702	0.0243	EXP 150 of 150	0.8579619 ±0.0071798	0.5727	EXP 150 of 150	58.192880 ±0.010769	0.9997	EXP 150 of 150	457.16074 ±0.03363
20F25163	3.6 %	0.8350535 ±0.0014451	0.9695	EXP 148 of 150	0.1485326 ±0.0052115	0.0827	EXP 150 of 150	1.4070656 ±0.0055415	0.8688	EXP 149 of 150	102.710488 ±0.012809	0.9999	EXP 150 of 150	629.42403 ±0.03536
20F25165	4.1 %	0.4100253 ±0.0008662	0.9346	EXP 150 of 150	0.1419699 ±0.0057773	0.0712	EXP 150 of 150	1.3674803 ±0.0062039	0.8321	EXP 149 of 150	107.553286 ±0.014037	0.9998	EXP 150 of 150	518.70504 ±0.03332
20F25166	4.7 %	0.3596374 ±0.0008704	0.9106	EXP 148 of 150	0.1603828 ±0.0058639	0.1314	EXP 150 of 150	1.4850203 ±0.0066345	0.8378	EXP 150 of 150	117.942864 ±0.012937	0.9999	EXP 149 of 150	541.42186 ±0.03471
20F25167	5.3 %	0.3608254 ±0.0008995	0.8943	EXP 150 of 150	0.1999809 ±0.0056455	0.1675	EXP 150 of 150	1.9241178 ±0.0074934	0.8729	EXP 150 of 150	154.529370 ±0.014998	0.9999	EXP 149 of 150	672.92829 ±0.03686
20F25169	6.0 %	0.3581535 ±0.0008486	0.9006	EXP 149 of 150	0.2277632 ±0.0055586	0.1615	EXP 150 of 150	2.1897700 ±0.0066168	0.9230	EXP 150 of 150	176.912619 ±0.015905	0.9999	EXP 147 of 150	751.08939 ±0.04129
20F25170	6.8 %	0.3302019 ±0.0008414	0.8789	EXP 149 of 150	0.2009770 ±0.0058063	0.1010	EXP 150 of 150	2.0404033 ±0.0057657	0.9257	EXP 150 of 150	164.300857 ±0.015400	0.9999	EXP 150 of 150	694.77524 ±0.03994
20F25171	7.5 %	0.3112832 ±0.0008801	0.8451	EXP 150 of 150	0.1773029 ±0.0055325	0.0928	EXP 150 of 150	1.9304828 ±0.0070265	0.8991	EXP 150 of 150	152.813776 ±0.015515	0.9999	EXP 148 of 150	648.53993 ±0.03637
20F25173	8.3 %	0.3141771 ±0.0008412	0.8728	EXP 150 of 150	0.1641344 ±0.0058849	0.1115	EXP 150 of 150	1.8157552 ±0.0064472	0.8911	EXP 148 of 150	142.806769 ±0.013590	0.9999	EXP 149 of 150	612.48119 ±0.03577
20F25174	9.1 %	0.2957287 ±0.0008027	0.8820	EXP 150 of 150	0.1281652 ±0.0056786	0.0950	EXP 150 of 150	1.4957977 ±0.0063434	0.8608	EXP 150 of 150	117.333189 ±0.014837	0.9999	EXP 150 of 150	514.49701 ±0.03210
20F25175	10.1 %	1.3793144 ±0.0017495	0.9844	EXP 150 of 150	0.1188445 ±0.0054199	0.0842	EXP 149 of 150	1.6139220 ±0.0066994	0.8587	EXP 149 of 150	109.496183 ±0.015052	0.9998	EXP 150 of 150	812.17304 ±0.04005
20F25177	11.2 %	0.3416874 ±0.0008256	0.9174	EXP 148 of 150	0.1032916 ±0.0060852	0.0364	EXP 150 of 150	1.2713286 ±0.0064642	0.8049	EXP 147 of 150	97.463865 ±0.012262	0.9999	EXP 149 of 150	457.82371 ±0.03103
20F25178	12.4 %	0.3238520 ±0.0007985	0.9056	EXP 148 of 150	0.0731540 ±0.0063066	0.0254	EXP 150 of 150	1.0388627 ±0.0065578	0.7349	EXP 150 of 150	79.260322 ±0.012823	0.9998	EXP 150 of 150	386.97160 ±0.02976
20F25179	13.6 %	0.3386854 ±0.0008588	0.9034	EXP 150 of 150	0.0560844 ±0.0061575	0.0043	EXP 149 of 150	0.8971799 ±0.0063252	0.7035	EXP 149 of 150	66.400577 ±0.012094	0.9997	EXP 150 of 150	344.13146 ±0.03120
20F25181	14.9 %	0.3770302 ±0.0008745	0.9379	EXP 148 of 150	0.0569261 ±0.0053781	0.0567	EXP 147 of 150	0.7955690 ±0.0071956	0.5611	EXP 150 of 150	59.048347 ±0.011818	0.9996	EXP 149 of 150	327.83282 ±0.02959
20F25182	16.2 %	0.3826757 ±0.0009147	0.9355	EXP 150 of 150	0.0435948 ±0.0059749	0.0335	EXP 150 of 150	0.6950107 ±0.0065152	0.5381	EXP 150 of 150	49.726663 ±0.010282	0.9996	EXP 148 of 150	295.96556 ±0.02690
20F25183	17.6 %	0.3736670 ±0.0009209	0.9264	EXP 150 of 150	0.0320070 ±0.0055998	0.0092	EXP 149 of 150	0.6268722 ±0.0069222	0.4563	EXP 150 of 150	44.261614 ±0.009321	0.9996	EXP 149 of 150	273.82234 ±0.02518
20F25185	19.0 %	0.3951766 ±0.0009559	0.9316	EXP 150 of 150	0.0288687 ±0.0063406	0.0166	EXP 150 of 150	0.5523390 ±0.0069704	0.3959	EXP 148 of 150	38.580388 ±0.009530	0.9994	EXP 149 of 150	260.62834 ±0.02481
20F25186	20.5 %	0.3358164 ±0.0007897	0.9386	EXP 149 of 150	0.0250172 ±0.0054051	0.0134	EXP 149 of 150	0.4589988 ±0.0062951	0.3028	EXP 149 of 150	31.993288 ±0.008939	0.9993	EXP 149 of 150	217.23324 ±0.02552
20F25188	22.3 %	0.3288681 ±0.0008566	0.9191	EXP 150 of 150	0.0165288 ±0.0061667	0.0077	EXP 149 of 150	0.4280529 ±0.0071546	0.2667	EXP 150 of 150	29.961562 ±0.009632	0.9990	EXP 150 of 150	208.63020 ±0.02703

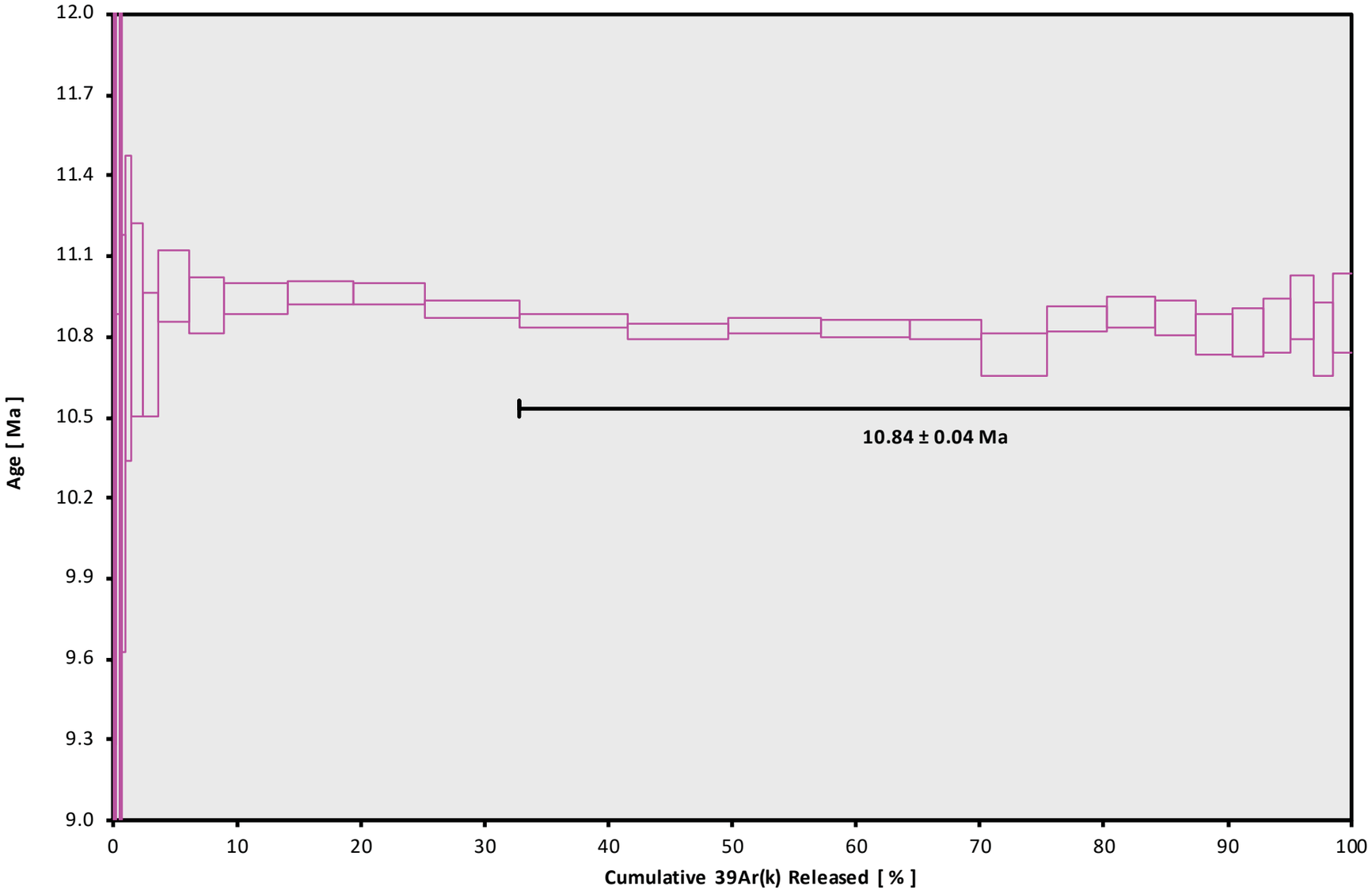
r2	Regression (type,n)
0.9998	EXP 150 of 150
0.9995	EXP 148 of 150
0.9997	EXP 150 of 150
0.9996	EXP 150 of 150
0.9999	EXP 150 of 150
0.9997	EXP 150 of 150
0.9990	EXP 150 of 150
0.9999	EXP 149 of 150
0.9999	EXP 149 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 149 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 147 of 150
1.0000	EXP 148 of 150
0.9999	EXP 150 of 150
0.9999	EXP 149 of 150
0.9999	EXP 150 of 150
0.9999	EXP 149 of 150
0.9999	EXP 150 of 150
0.9999	EXP 148 of 150
0.9999	EXP 150 of 150
0.9998	EXP 147 of 150
0.9998	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F25145	0.3 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25147	0.4 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25148	0.5 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25150	0.6 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25151	0.7 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25153	0.9 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25154	1.1 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25155	1.3 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25157	1.5 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25158	1.8 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25159	2.2 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25161	2.6 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25162	3.1 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25163	3.6 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25165	4.1 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25166	4.7 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25167	5.3 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25169	6.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25170	6.8 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25171	7.5 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25173	8.3 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25174	9.1 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25175	10.1 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25177	11.2 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25178	12.4 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25179	13.6 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25181	14.9 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25182	16.2 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25183	17.6 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25185	19.0 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25186	20.5 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01
20F25188	22.3 %	Dan Miggins	20-OSU-01	0.00	0.00	37.10	Oregon\Swenton (18-58)	20F25141	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F25145	0.3 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	1	28	1
20F25147	0.4 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	1	54	1
20F25148	0.5 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	2	7	1
20F25150	0.6 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	2	33	1
20F25151	0.7 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	2	46	1
20F25153	0.9 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	3	12	1
20F25154	1.1 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	3	25	1
20F25155	1.3 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	3	39	1
20F25157	1.5 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	4	5	1
20F25158	1.8 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	4	18	1
20F25159	2.2 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	4	31	1
20F25161	2.6 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	4	57	1
20F25162	3.1 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	5	10	1
20F25163	3.6 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	5	23	1
20F25165	4.1 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	5	50	1
20F25166	4.7 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	6	3	1
20F25167	5.3 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	6	16	1
20F25169	6.0 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	6	42	1
20F25170	6.8 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	6	55	1
20F25171	7.5 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	7	8	1
20F25173	8.3 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	7	34	1
20F25174	9.1 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	7	47	1
20F25175	10.1 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	8	0	1
20F25177	11.2 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	8	27	1
20F25178	12.4 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	8	40	1
20F25179	13.6 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	8	53	1
20F25181	14.9 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	9	19	1
20F25182	16.2 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	9	32	1
20F25183	17.6 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	9	45	1
20F25185	19.0 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	10	11	1
20F25186	20.5 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	10	25	1
20F25188	22.3 %	VS17-035	Groundmass	Mustang Butte	FCT-NM (1C27-20)	28.201	0.082	Kuiper et al (2008)	9.47349	0.156	0.00163884	0.156	298.54	0.114	1.0000168	0.039	1	3.54E-14	23	SEP	2020	10	51	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F25145	0.3 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25147	0.4 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25148	0.5 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25150	0.6 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25151	0.7 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25153	0.9 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25154	1.1 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25155	1.3 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25157	1.5 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25158	1.8 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25159	2.2 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25161	2.6 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25162	3.1 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25163	3.6 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25165	4.1 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25166	4.7 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25167	5.3 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25169	6.0 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25170	6.8 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25171	7.5 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25173	8.3 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25174	9.1 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25175	10.1 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25177	11.2 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25178	12.4 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25179	13.6 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25181	14.9 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25182	16.2 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25183	17.6 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25185	19.0 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25186	20.5 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25188	22.3 %	294.53	0.225	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F25141.AGE >>> VS17-035 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.84 ± 0.04
TOTAL FUSION
10.87 ± 0.04
NORMAL ISOCHRON
10.85 ± 0.04
INVERSE ISOCHRON
10.85 ± 0.04

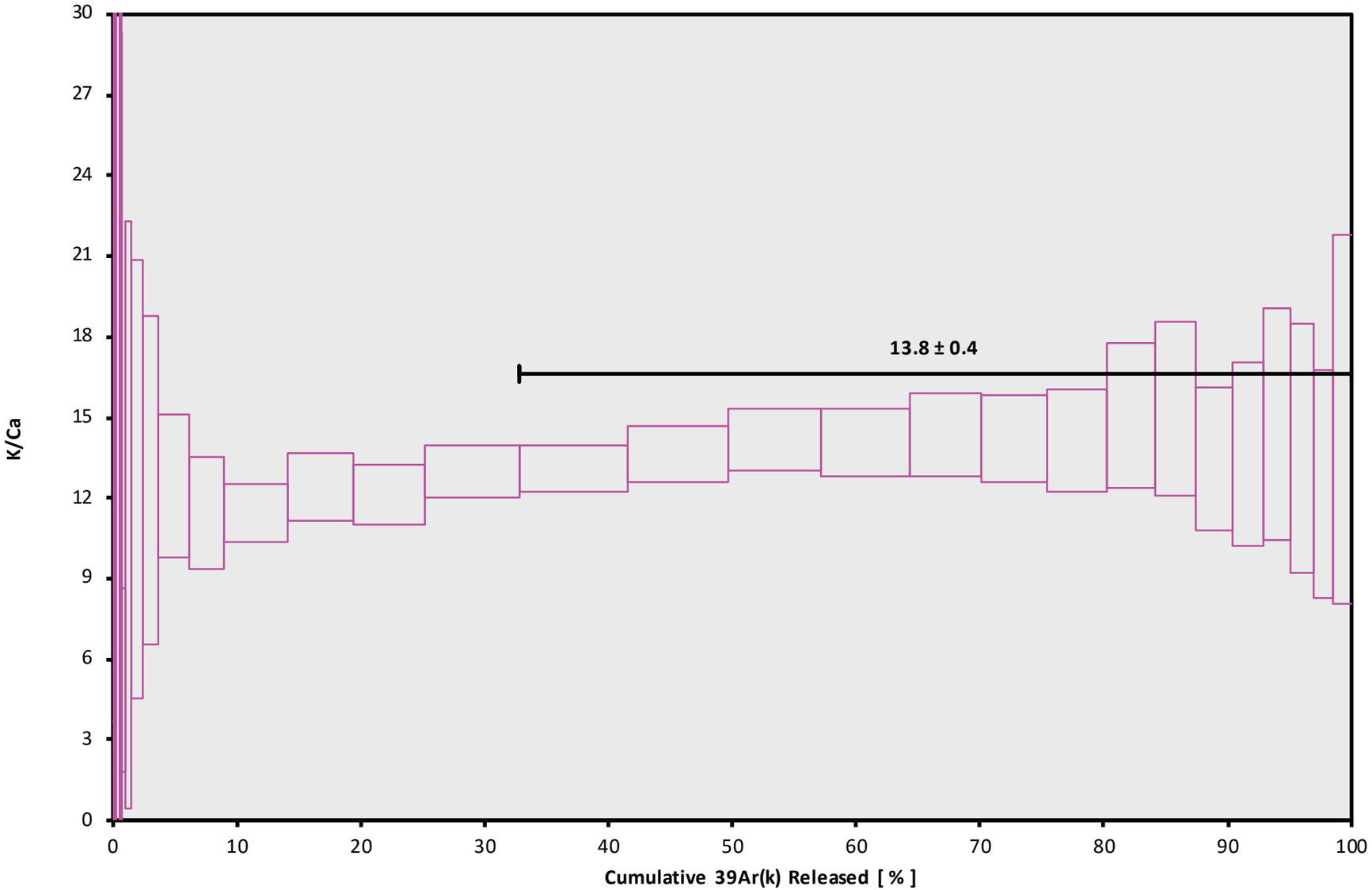
MSWD (PROBABILITY)
1.52 (10%)

Sample Info

Groundmass
Mustang Butte
Dan Miggins

IRR = 20-OSU-01 (1C27-

20F25141.AGE >>> VS17-035 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

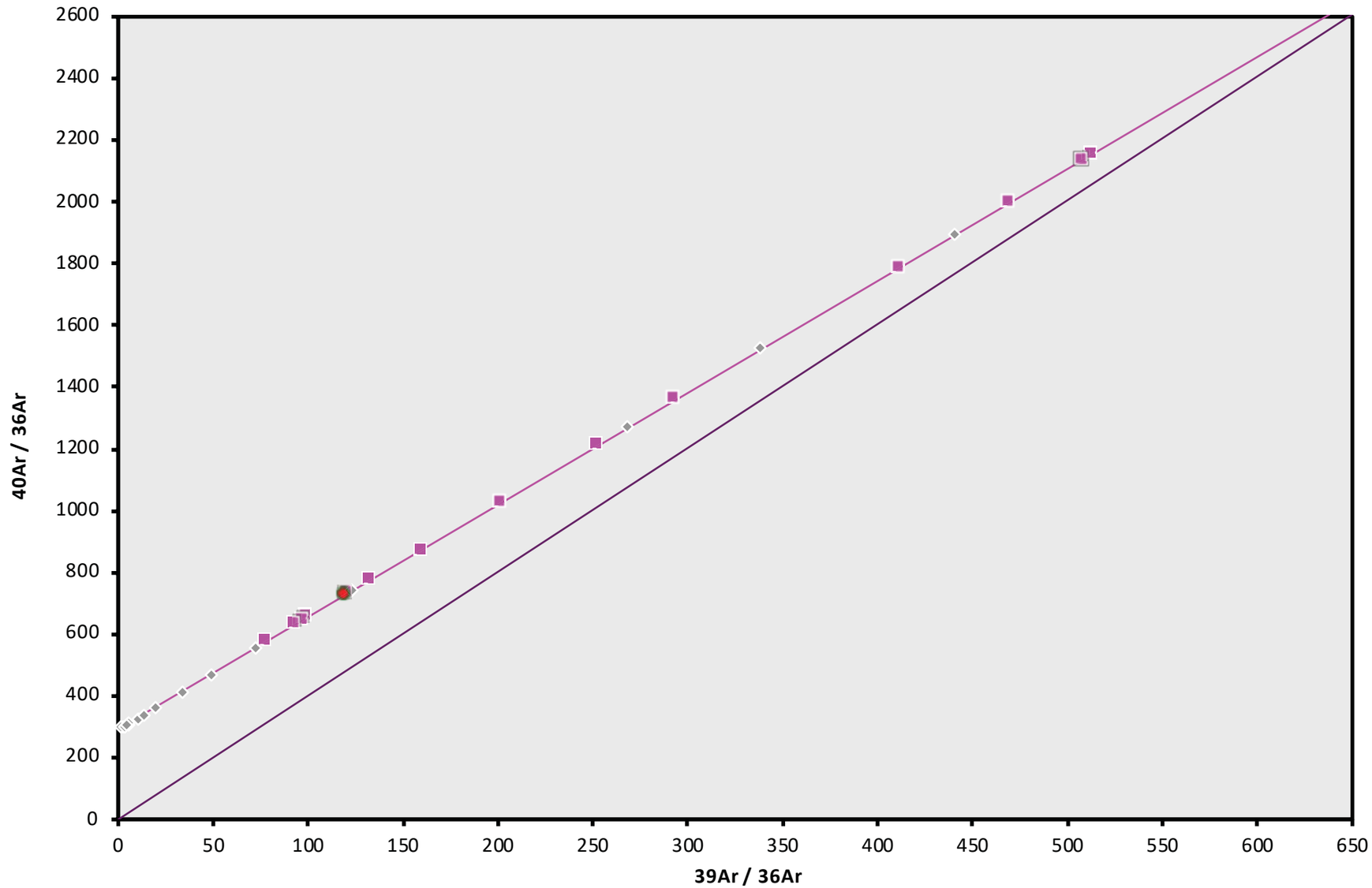
WEIGHTED PLATEAU
10.84 ± 0.04
TOTAL FUSION
10.87 ± 0.04
NORMAL ISOCHRON
10.85 ± 0.04
INVERSE ISOCHRON
10.85 ± 0.04

Sample Info

Groundmass
Mustang Butte
Dan Miggins

IRR = 20-OSU-01 (1C27-

20F25141.AGE >>> VS17-035 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.84 ± 0.04
TOTAL FUSION
10.87 ± 0.04
NORMAL ISOCHRON
10.85 ± 0.04
INVERSE ISOCHRON
10.85 ± 0.04

MSWD (PROBABILITY)
1.80 (4%)

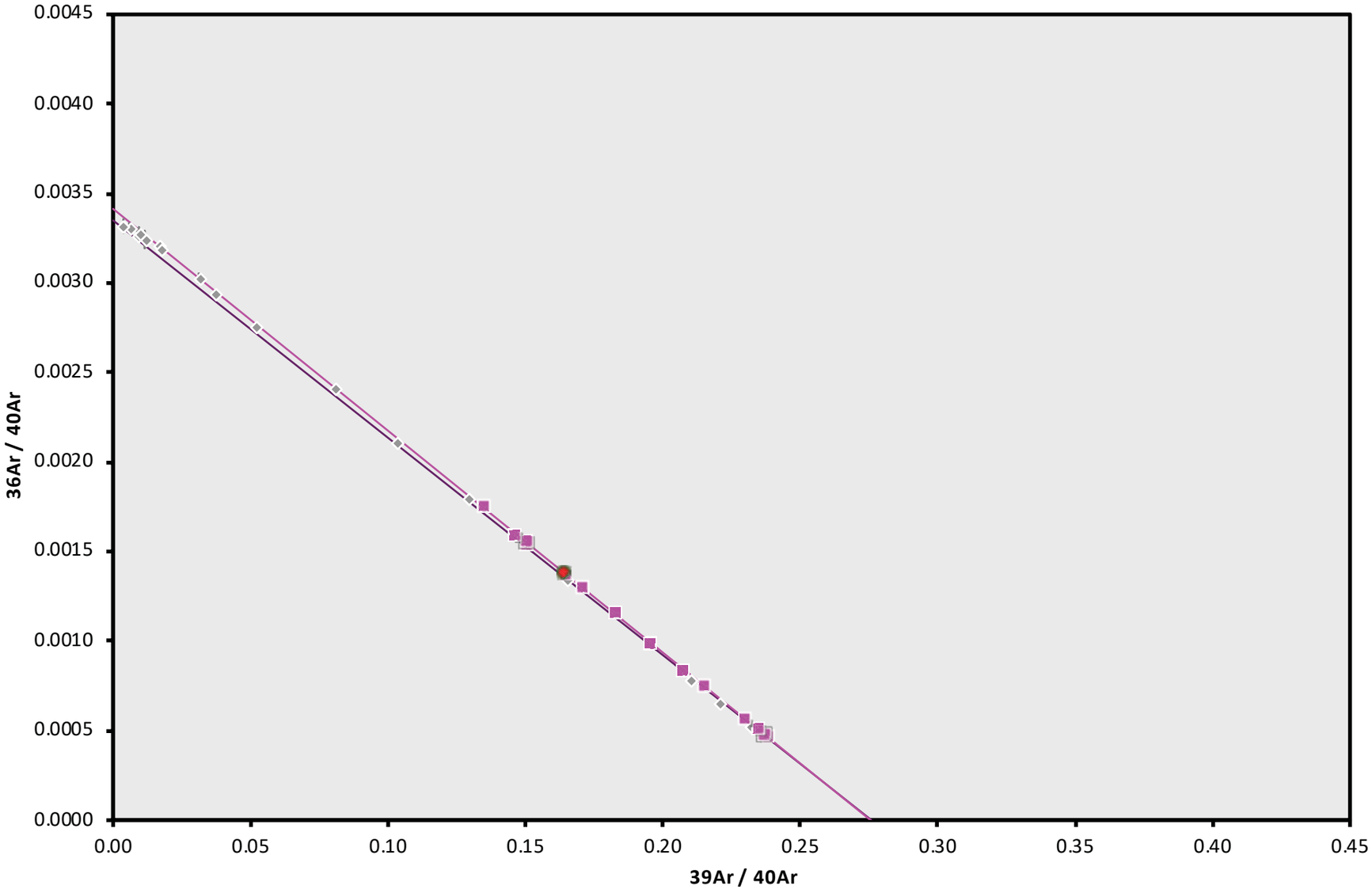
40AR/36AR INTERCEPT

Sample Info

Groundmass
Mustang Butte
Dan Miggins

IRR = 20-OSU-01 (1C27-

20F25141.AGE >>> VS17-035 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.84 ± 0.04
TOTAL FUSION
10.87 ± 0.04
NORMAL ISOCHRON
10.85 ± 0.04
INVERSE ISOCHRON
10.85 ± 0.04

MSWD (PROBABILITY)
1.81 (4%)

SPREADING FACTOR

Sample Info

Groundmass
Mustang Butte
Dan Miggins

IRR = 20-OSU-01 (1C27-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 1σ		Age ± 1σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 1σ	
20F04431	17.0 %	✓	0.0003426	82.390	3.27928	5.099	1.300810	0.788	109.2713	0.043	410.560	0.008	3.75820	±0.00182	10.94	±0.01	100.02	1.76	14.3	±0.7
20F04432	17.0 %	✓	0.0007503	36.942	2.72977	5.915	1.405026	0.676	116.4163	0.043	437.168	0.008	3.75463	±0.00179	10.93	±0.01	99.98	1.88	18.3	±1.1
20F04434	17.0 %	✓	0.0004930	61.445	3.28525	4.621	1.442052	0.644	122.0645	0.042	458.572	0.008	3.75722	±0.00178	10.94	±0.01	100.01	1.97	16.0	±0.7
20F04435	17.0 %	✓	0.0827056	0.685	6.35378	2.579	4.308721	0.243	358.3429	0.041	1372.209	0.005	3.76128	±0.00163	10.95	±0.00	98.22	5.78	24.3	±0.6
20F04437	17.0 %	✓	0.0067676	5.811	4.08259	3.856	4.873069	0.214	405.9137	0.041	1526.383	0.004	3.75561	±0.00157	10.94	±0.00	99.87	6.55	42.8	±1.6
20F04438	17.0 %	✓	0.0042024	9.158	4.73900	3.463	2.540686	0.382	211.3105	0.042	794.873	0.005	3.75695	±0.00168	10.94	±0.00	99.87	3.41	19.2	±0.7
20F04440	17.0 %	✓	0.0844900	0.670	3.93080	4.045	3.846666	0.246	319.2776	0.041	1225.432	0.004	3.75955	±0.00165	10.95	±0.00	97.95	5.15	34.9	±1.4
20F04441	17.0 %	✓	0.0103142	3.776	3.66671	4.384	2.012419	0.475	167.2534	0.042	631.238	0.006	3.75694	±0.00175	10.94	±0.01	99.54	2.70	19.6	±0.9
20F04443	17.0 %	✓	0.0101695	3.841	6.61604	2.485	4.309139	0.240	360.2169	0.041	1355.474	0.004	3.75543	±0.00159	10.94	±0.00	99.80	5.81	23.4	±0.6
20F04444	17.0 %	✓	0.0021097	16.831	2.67609	5.698	1.451804	0.607	121.4938	0.042	457.266	0.008	3.75974	±0.00185	10.95	±0.01	99.89	1.96	19.5	±1.1
20F04446	17.0 %	✓	0.0018883	19.353	3.72248	3.907	2.779461	0.364	232.2951	0.042	871.700	0.005	3.75571	±0.00164	10.94	±0.00	100.08	3.75	26.8	±1.0
20F04447	17.0 %	✓	0.0014495	22.385	5.01878	2.837	2.233235	0.452	187.3131	0.042	702.114	0.006	3.75227	±0.00166	10.93	±0.00	100.10	3.02	16.0	±0.5
20F04449	17.0 %	✓	0.0082707	4.234	5.40170	2.975	2.502046	0.407	208.3284	0.042	783.095	0.005	3.74864	±0.00165	10.92	±0.00	99.72	3.36	16.6	±0.5
20F04450	17.0 %	✓	0.0031201	11.221	2.94104	5.425	2.739817	0.362	228.2316	0.042	857.671	0.006	3.75428	±0.00164	10.93	±0.00	99.90	3.68	33.4	±1.8
20F04452	17.0 %	✓	0.0372850	1.231	8.30250	1.800	4.420278	0.230	368.3283	0.041	1395.988	0.004	3.76111	±0.00160	10.95	±0.00	99.23	5.94	19.1	±0.3
20F04453	17.0 %	✓	0.0126340	3.065	5.51398	2.815	2.914037	0.322	242.4273	0.041	913.545	0.005	3.75405	±0.00164	10.93	±0.00	99.62	3.91	18.9	±0.5
20F04455	17.0 %	✓	0.0454645	1.038	4.23325	3.667	4.064944	0.239	336.6026	0.041	1278.188	0.004	3.75743	±0.00161	10.94	±0.00	98.95	5.43	34.2	±1.3
20F04456	17.0 %	✓	0.0087694	4.095	3.71893	4.121	2.038529	0.478	170.5727	0.042	641.484	0.006	3.74662	±0.00171	10.91	±0.00	99.62	2.75	19.7	±0.8
20F04458	17.0 %	✓	0.0015357	21.342	5.87182	2.619	2.473894	0.357	206.5853	0.042	776.010	0.006	3.75590	±0.00165	10.94	±0.00	99.99	3.33	15.1	±0.4
20F04459	17.0 %	✓	0.0037063	9.051	4.22948	3.814	1.663409	0.556	136.4749	0.042	513.805	0.008	3.75870	±0.00178	10.95	±0.01	99.84	2.20	13.9	±0.5
20F04461	17.0 %	✓	0.0126627	3.175	5.22100	3.048	2.887969	0.334	238.8849	0.042	900.561	0.005	3.75524	±0.00165	10.94	±0.00	99.61	3.86	19.7	±0.6
20F04462	17.0 %	✓	0.1307038	0.504	4.78733	3.175	2.614345	0.359	218.6635	0.041	859.200	0.005	3.75208	±0.00182	10.93	±0.01	95.49	3.53	19.6	±0.6
20F04464	17.0 %	✓	0.0016630	20.290	1.47388	10.907	1.654528	0.610	138.6093	0.042	520.949	0.007	3.75509	±0.00176	10.94	±0.01	99.91	2.24	40.4	±4.4
20F04465	17.0 %	✓	0.0037865	9.113	5.44492	3.098	2.098965	0.466	173.8847	0.042	652.126	0.006	3.74583	±0.00170	10.91	±0.00	99.88	2.81	13.7	±0.4
20F04467	17.0 %	✓	0.0563837	0.798	4.47122	3.450	2.583762	0.351	215.2645	0.042	824.939	0.005	3.75513	±0.00170	10.94	±0.00	97.99	3.47	20.7	±0.7
20F04468	17.0 %	✓	0.0719855	0.728	2.07571	7.447	0.973083	0.895	77.8941	0.044	314.218	0.010	3.75962	±0.00266	10.95	±0.01	93.20	1.26	16.1	±1.2
20F04470	17.0 %	✓	0.0021317	14.817	2.77339	5.319	1.490664	0.645	125.7095	0.043	472.039	0.007	3.75116	±0.00179	10.92	±0.01	99.90	2.03	19.5	±1.0
20F04471	17.0 %	✓	0.0009377	31.445	2.82940	5.362	1.384667	0.673	115.8962	0.043	435.567	0.008	3.76209	±0.00181	10.96	±0.01	100.10	1.87	17.6	±0.9
20F04473	17.0 %	✓	0.0022552	14.874	3.17489	4.922	1.284810	0.784	108.7293	0.043	408.280	0.008	3.75064	±0.00189	10.92	±0.01	99.88	1.75	14.7	±0.7
20F04474	17.0 %	✓	0.0020651	15.125	3.59793	4.602	2.081164	0.463	173.7046	0.042	651.105	0.006	3.74591	±0.00168	10.91	±0.00	99.93	2.80	20.8	±1.0
		Σ	0.6024925	0.361	126.16292	0.682	74.373999	0.071	6195.9609	0.008	23441.759	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-043**
Material = **Sanidine**
Location = **Saddle Butte**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C34-19)**
Position = **X: 0 | Y: 0 | Z/H: 42.59121 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.72951 ± 0.02364**
FCT-NM J-value = **0.00159571 ± 0.00000388**
Air Shot 40Ar/36Ar = **299.2170 ± 0.3740**
Air Shot MDF = **0.99945036 ± 0.00040615 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ± 1σ		40(r)/39(k) ± 1σ		Age ± 1σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 1σ	
Age Plateau			3.75503	±0.00080	**10.94**	**±0.03**	6.52	100.00	18.3	±0.8
Error Mean				±0.02%		**±0.24%**	0%	30		
				Full External Error		±0.29	1.26	1σ Confidence Limit		
				Analytical Error		±0.00	2.5543	Error Magnification		
Total Fusion Age			3.75545	±0.00033	**10.94**	**±0.03**		30	21.1	±0.1
				±0.01%		**±0.24%**				
				Full External Error		±0.29				
				Analytical Error		±0.00				
Normal Isochron	**302.52**	**±4.99**	3.75485	±0.00091	**10.93**	**±0.03**	5.99	100.00		
Error Chron		**±1.65%**		±0.02%		**±0.24%**	0%	30		
				Full External Error		±0.29	1.27	1σ Confidence Limit		
				Analytical Error		±0.00	2.4485	Error Magnification		
							1	Number of Iterations		
							0.0000000001	Convergence		
Inverse Isochron	**303.47**	**±5.14**	3.75467	±0.00090	**10.93**	**±0.03**	6.54	100.00		
Error Chron		**±1.69%**		±0.02%		**±0.24%**	0%	30		
				Full External Error		±0.29	1.27	1σ Confidence Limit		
				Analytical Error		±0.00	2.5575	Error Magnification		
							2	Number of Iterations		
							0.0006935997	Convergence		
							7%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 1σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 1σ
20F04431	17.0 %	✓	0.0005438	3.27928	0.0000000	109.2692	410.656	10.94 ±0.01	100.02	1.76	14.3 ±0.7
20F04432	17.0 %	✓	0.0000124	2.72977	0.0000000	116.4145	437.093	10.93 ±0.01	99.98	1.88	18.3 ±1.1
20F04434	17.0 %	✓	0.0003950	3.28525	0.0000000	122.0624	458.616	10.94 ±0.01	100.01	1.97	16.0 ±0.7
20F04435	17.0 %	✓	0.0809882	6.35378	0.0000000	358.3388	1347.811	10.95 ±0.00	98.22	5.78	24.3 ±0.6
20F04437	17.0 %	✓	0.0056641	4.08259	0.0000000	405.9111	1524.445	10.94 ±0.00	99.87	6.55	42.8 ±1.6
20F04438	17.0 %	✓	0.0029214	4.73900	0.0000000	211.3075	793.873	10.94 ±0.00	99.87	3.41	19.2 ±0.7
20F04440	17.0 %	✓	0.0834275	3.93080	0.0000000	319.2751	1200.331	10.95 ±0.00	97.95	5.15	34.9 ±1.4
20F04441	17.0 %	✓	0.0093231	3.66671	0.0000000	167.2511	628.353	10.94 ±0.01	99.54	2.70	19.6 ±0.9
20F04443	17.0 %	✓	0.0083812	6.61604	0.0000000	360.2126	1352.753	10.94 ±0.00	99.80	5.81	23.4 ±0.6
20F04444	17.0 %	✓	0.0013864	2.67609	0.0000000	121.4921	456.778	10.95 ±0.01	99.89	1.96	19.5 ±1.1
20F04446	17.0 %	✓	0.0028945	3.72248	0.0000000	232.2928	872.424	10.94 ±0.00	100.08	3.75	26.8 ±1.0
20F04447	17.0 %	✓	0.0028061	5.01878	0.0000000	187.3099	702.838	10.93 ±0.00	100.10	3.02	16.0 ±0.5
20F04449	17.0 %	✓	0.0068107	5.40170	0.0000000	208.3250	780.935	10.92 ±0.00	99.72	3.36	16.6 ±0.5
20F04450	17.0 %	✓	0.0023252	2.94104	0.0000000	228.2297	856.838	10.93 ±0.00	99.90	3.68	33.4 ±1.8
20F04452	17.0 %	✓	0.0350409	8.30250	0.0000000	368.3229	1385.303	10.95 ±0.00	99.23	5.94	19.1 ±0.3
20F04453	17.0 %	✓	0.0111436	5.51398	0.0000000	242.4238	910.071	10.93 ±0.00	99.62	3.91	18.9 ±0.5
20F04455	17.0 %	✓	0.0443202	4.23325	0.0000000	336.5999	1264.752	10.94 ±0.00	98.95	5.43	34.2 ±1.3
20F04456	17.0 %	✓	0.0077642	3.71893	0.0000000	170.5703	639.063	10.91 ±0.00	99.62	2.75	19.7 ±0.8
20F04458	17.0 %	✓	0.0000515	5.87182	0.0000000	206.5816	775.900	10.94 ±0.00	99.99	3.33	15.1 ±0.4
20F04459	17.0 %	✓	0.0025597	4.22948	0.0139905	136.4722	512.958	10.95 ±0.01	99.84	2.20	13.9 ±0.5
20F04461	17.0 %	✓	0.0112514	5.22100	0.0000000	238.8815	897.056	10.94 ±0.00	99.61	3.86	19.7 ±0.6
20F04462	17.0 %	✓	0.1294097	4.78733	0.0000000	218.6605	820.431	10.93 ±0.01	95.49	3.53	19.6 ±0.6
20F04464	17.0 %	✓	0.0012646	1.47388	0.0000000	138.6083	520.487	10.94 ±0.01	99.91	2.24	40.4 ±4.4
20F04465	17.0 %	✓	0.0023147	5.44492	0.0000000	173.8812	651.329	10.91 ±0.00	99.88	2.81	13.7 ±0.4
20F04467	17.0 %	✓	0.0551752	4.47122	0.0000000	215.2616	808.336	10.94 ±0.00	97.99	3.47	20.7 ±0.7
20F04468	17.0 %	✓	0.0714199	2.07571	0.0185355	77.8928	292.847	10.95 ±0.01	93.20	1.26	16.1 ±1.2
20F04470	17.0 %	✓	0.0013820	2.77339	0.0000000	125.7077	471.550	10.92 ±0.01	99.90	2.03	19.5 ±1.0
20F04471	17.0 %	✓	0.0017025	2.82940	0.0000000	115.8943	436.005	10.96 ±0.01	100.10	1.87	17.6 ±0.9
20F04473	17.0 %	✓	0.0013970	3.17489	0.0000000	108.7273	407.797	10.92 ±0.01	99.88	1.75	14.7 ±0.7
20F04474	17.0 %	✓	0.0010926	3.59793	0.0000000	173.7023	650.674	10.91 ±0.00	99.93	2.80	20.8 ±1.0
		Σ	0.5683828	126.16292	0.0325260	6195.8799	23268.301				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-043**
Material = **Sanidine**
Location = **Saddle Butte**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C34-19)**
J = **0.00159571 ± 0.00000388**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 1σ		Age ± 1σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 1σ
Age Plateau	3.75503	±0.00080	**10.94**	**±0.03**	6.52	100.00	18.3 ±0.8
Error Mean		±0.02%		**±0.24%**	0%	30	
			Full External Error	±0.29	1.26	1σ Confidence Limit	
			Analytical Error	±0.00	2.5543	Error Magnification	
Total Fusion Age	3.75545	±0.00033	**10.94**	**±0.03**		30	21.1 ±0.1
		±0.01%		**±0.24%**			
			Full External Error	±0.29			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	± 1σ	40(a+r)/36(a)	± 1σ	r.i.
20F04431	17.0 %	✓	200941.72	±105636.36	754881.57	±396845.98	1.0000
20F04432	17.0 %	✓	9351455.82	################	35111536.85	################	1.0000
20F04434	17.0 %	✓	308991.18	±239093.94	1160649.96	±898097.91	1.0000
20F04435	17.0 %	✓	4424.58	±31.12	16940.64	±118.95	0.9983
20F04437	17.0 %	✓	71663.54	±5005.00	269439.10	±18817.37	1.0000
20F04438	17.0 %	✓	72329.71	±9592.02	272037.98	±36076.21	1.0000
20F04440	17.0 %	✓	3826.98	±26.10	14686.28	±99.98	0.9982
20F04441	17.0 %	✓	17939.38	±754.08	67695.80	±2845.43	0.9999
20F04443	17.0 %	✓	42978.63	±2016.05	161701.75	±7584.84	1.0000
20F04444	17.0 %	✓	87631.28	±22595.29	329769.10	±85029.22	1.0000
20F04446	17.0 %	✓	80253.29	±10190.91	301109.31	±38235.95	1.0000
20F04447	17.0 %	✓	66751.26	±7772.78	250170.28	±29130.64	1.0000
20F04449	17.0 %	✓	30588.05	±1584.86	114962.15	±5956.35	1.0000
20F04450	17.0 %	✓	98156.39	±14891.98	368805.27	±55953.78	1.0000
20F04452	17.0 %	✓	10511.24	±138.24	39832.49	±523.60	0.9995
20F04453	17.0 %	✓	21754.56	±760.57	81966.24	±2865.45	0.9999
20F04455	17.0 %	✓	7594.72	±81.22	28835.22	±308.16	0.9993
20F04456	17.0 %	✓	21968.76	±1022.86	82607.23	±3846.01	1.0000
20F04458	17.0 %	✓	4014799.62	±25778808.21	15078895.81	±96820762.86	1.0000
20F04459	17.0 %	✓	53314.65	±7046.13	200692.47	±26523.63	1.0000
20F04461	17.0 %	✓	21231.18	±763.04	80026.63	±2875.93	0.9999
20F04462	17.0 %	✓	1689.68	±8.65	6638.35	±33.88	0.9967
20F04464	17.0 %	✓	109605.35	±29486.55	411876.86	±110804.95	1.0000
20F04465	17.0 %	✓	75119.26	±11295.99	281682.44	±42357.57	1.0000
20F04467	17.0 %	✓	3901.42	±31.98	14948.92	±122.39	0.9987
20F04468	17.0 %	✓	1090.63	±8.04	4398.92	±32.37	0.9981
20F04470	17.0 %	✓	90958.57	±20953.32	341499.02	±78667.96	1.0000
20F04471	17.0 %	✓	68074.53	±11903.72	255803.75	±44730.47	1.0000
20F04473	17.0 %	✓	77826.59	±18834.22	292197.78	±70712.44	1.0000
20F04474	17.0 %	✓	158987.23	±45915.43	595850.93	±172081.28	1.0000

Results	40(a)/36(a)	± 1σ	40(r)/39(k)	± 1σ	Age (Ma)	± 1σ	MSWD
Normal Isochron	**302.52**	**±4.99**	3.75485	±0.00091	**10.93**	**±0.03**	5.99
Error Chron		**±1.65%**		±0.02%		**±0.24%**	0%
					Full External Error	±0.29	
					Analytical Error	±0.00	

Statistics				
	1σ Confidence Limit	1.27	Convergence	0.000000000080
	Error Magnification	2.4485	Number of Iterations	1
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	± 1σ	36(a)/40(a+r)	± 1σ	r.i.
20F04431	17.0 %	✓	0.2661897	±0.0001163	0.00000132	±0.00000070	0.0000
20F04432	17.0 %	✓	0.2663357	±0.0001162	0.00000003	±0.00000064	0.0000
20F04434	17.0 %	✓	0.2662225	±0.0001147	0.00000086	±0.00000067	0.0000
20F04435	17.0 %	✓	0.2611816	±0.0001080	0.00005903	±0.00000041	0.0008
20F04437	17.0 %	✓	0.2659730	±0.0001096	0.00000371	±0.00000026	0.0001
20F04438	17.0 %	✓	0.2658809	±0.0001120	0.00000368	±0.00000049	0.0001
20F04440	17.0 %	✓	0.2605819	±0.0001079	0.00006809	±0.00000046	0.0007
20F04441	17.0 %	✓	0.2649999	±0.0001133	0.00001477	±0.00000062	0.0002
20F04443	17.0 %	✓	0.2657895	±0.0001103	0.00000618	±0.00000029	0.0001
20F04444	17.0 %	✓	0.2657353	±0.0001148	0.00000303	±0.00000078	0.0001
20F04446	17.0 %	✓	0.2665254	±0.0001118	0.00000332	±0.00000042	0.0001
20F04447	17.0 %	✓	0.2668233	±0.0001122	0.00000400	±0.00000047	0.0001
20F04449	17.0 %	✓	0.2660706	±0.0001118	0.00000870	±0.00000045	0.0001
20F04450	17.0 %	✓	0.2661469	±0.0001118	0.00000271	±0.00000041	0.0001
20F04452	17.0 %	✓	0.2638862	±0.0001091	0.00002511	±0.00000033	0.0003
20F04453	17.0 %	✓	0.2654088	±0.0001110	0.00001220	±0.00000043	0.0002
20F04455	17.0 %	✓	0.2633835	±0.0001090	0.00003468	±0.00000037	0.0005
20F04456	17.0 %	✓	0.2659424	±0.0001131	0.00001211	±0.00000056	0.0002
20F04458	17.0 %	✓	0.2662529	±0.0001121	0.00000007	±0.00000043	0.0000
20F04459	17.0 %	✓	0.2656535	±0.0001146	0.00000498	±0.00000066	0.0001
20F04461	17.0 %	✓	0.2653014	±0.0001111	0.00001250	±0.00000045	0.0002
20F04462	17.0 %	✓	0.2545323	±0.0001064	0.00015064	±0.00000077	0.0012
20F04464	17.0 %	✓	0.2661119	±0.0001138	0.00000243	±0.00000065	0.0000
20F04465	17.0 %	✓	0.2666807	±0.0001135	0.00000355	±0.00000053	0.0001
20F04467	17.0 %	✓	0.2609837	±0.0001097	0.00006689	±0.00000055	0.0008
20F04468	17.0 %	✓	0.2479317	±0.0001130	0.00022733	±0.00000167	0.0031
20F04470	17.0 %	✓	0.2663509	±0.0001155	0.00000293	±0.00000067	0.0001
20F04471	17.0 %	✓	0.2661202	±0.0001158	0.00000391	±0.00000068	0.0001
20F04473	17.0 %	✓	0.2663490	±0.0001166	0.00000342	±0.00000083	0.0001
20F04474	17.0 %	✓	0.2668238	±0.0001134	0.00000168	±0.00000048	0.0000

Results	40(a)/36(a)	± 1σ	40(r)/39(k)	± 1σ	Age (Ma)	± 1σ	MSWD
Inverse Isochron	**303.47**	**±5.14**	3.75467	±0.00090	**10.93**	**±0.03**	6.54
Error Chron		**±1.69%**		±0.02%		**±0.24%**	0%
					Full External Error	±0.29	
					Analytical Error	±0.00	

Statistics				
	1σ Confidence Limit	1.27	Convergence	0.0006935997
	Error Magnification	2.5575	Number of Iterations	2
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	7.1%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F04431	17.0 %	✓	0.0005438	52.57	0.0000000	0.00	0.0008864	5.10	0.0000000	0.00	3.27928	5.10	0.0001025	52.57	0.0000000	0.00	1.319644	0.10	0.0005903	10.90	0.0000000	0.00	109.2692	0.04	0.0021069	5.18
20F04432	17.0 %	✓	0.0000124	#######	0.0000000	0.00	0.0007379	5.92	0.0000000	0.00	2.72977	5.91	0.0000023	#######	0.0000000	0.00	1.405938	0.10	0.0004914	11.30	0.0000000	0.00	116.4145	0.04	0.0017539	5.99
20F04434	17.0 %	✓	0.0003950	77.38	0.0000000	0.00	0.0008880	4.62	0.0000000	0.00	3.28525	4.62	0.0000745	77.38	0.0000000	0.00	1.474148	0.10	0.0005913	10.68	0.0000000	0.00	122.0624	0.04	0.0021108	4.71
20F04435	17.0 %	✓	0.0809882	0.70	0.0000000	0.00	0.0017174	2.58	0.0000000	0.00	6.35378	2.58	0.0152663	0.72	0.0000000	0.00	4.327658	0.10	0.0011437	9.97	0.0000000	0.00	358.3388	0.04	0.0040823	2.74
20F04437	17.0 %	✓	0.0056641	6.98	0.0000000	0.00	0.0011035	3.86	0.0000000	0.00	4.08259	3.86	0.0010677	6.99	0.0000000	0.00	4.902188	0.10	0.0007349	10.37	0.0000000	0.00	405.9111	0.04	0.0026231	3.96
20F04438	17.0 %	✓	0.0029214	13.26	0.0000000	0.00	0.0012810	3.47	0.0000000	0.00	4.73900	3.46	0.0005507	13.26	0.0000000	0.00	2.551960	0.10	0.0008530	10.23	0.0000000	0.00	211.3075	0.04	0.0030448	3.58
20F04440	17.0 %	✓	0.0834275	0.68	0.0000000	0.00	0.0010625	4.05	0.0000000	0.00	3.93080	4.05	0.0157261	0.70	0.0000000	0.00	3.855885	0.10	0.0007075	10.45	0.0000000	0.00	319.2751	0.04	0.0025255	4.15
20F04441	17.0 %	✓	0.0093231	4.20	0.0000000	0.00	0.0009911	4.39	0.0000000	0.00	3.66671	4.38	0.0017574	4.21	0.0000000	0.00	2.019891	0.10	0.0006600	10.58	0.0000000	0.00	167.2511	0.04	0.0023559	4.48
20F04443	17.0 %	✓	0.0083812	4.69	0.0000000	0.00	0.0017883	2.49	0.0000000	0.00	6.61604	2.48	0.0015799	4.69	0.0000000	0.00	4.350288	0.10	0.0011909	9.95	0.0000000	0.00	360.2126	0.04	0.0042508	2.65
20F04444	17.0 %	✓	0.0013864	25.78	0.0000000	0.00	0.0007233	5.70	0.0000000	0.00	2.67609	5.70	0.0002613	25.78	0.0000000	0.00	1.467260	0.10	0.0004817	11.19	0.0000000	0.00	121.4921	0.04	0.0017194	5.77
20F04446	17.0 %	✓	0.0028945	12.70	0.0000000	0.00	0.0010062	3.91	0.0000000	0.00	3.72248	3.91	0.0005456	12.70	0.0000000	0.00	2.805400	0.10	0.0006700	10.39	0.0000000	0.00	232.2928	0.04	0.0023917	4.01
20F04447	17.0 %	✓	0.0028061	11.64	0.0000000	0.00	0.0013566	2.84	0.0000000	0.00	5.01878	2.84	0.0005289	11.65	0.0000000	0.00	2.262142	0.10	0.0009034	10.04	0.0000000	0.00	187.3099	0.04	0.0032246	2.98
20F04449	17.0 %	✓	0.0068107	5.18	0.0000000	0.00	0.0014601	2.98	0.0000000	0.00	5.40170	2.98	0.0012838	5.18	0.0000000	0.00	2.515941	0.10	0.0009723	10.08	0.0000000	0.00	208.3250	0.04	0.0034706	3.11
20F04450	17.0 %	✓	0.0023252	15.17	0.0000000	0.00	0.0007950	5.43	0.0000000	0.00	2.94104	5.43	0.0004383	15.17	0.0000000	0.00	2.756330	0.10	0.0005294	11.05	0.0000000	0.00	228.2297	0.04	0.0018896	5.50
20F04452	17.0 %	✓	0.0350409	1.31	0.0000000	0.00	0.0022442	1.81	0.0000000	0.00	8.30250	1.80	0.0066052	1.32	0.0000000	0.00	4.448236	0.10	0.0014944	9.80	0.0000000	0.00	368.3229	0.04	0.0053344	2.02
20F04453	17.0 %	✓	0.0111436	3.50	0.0000000	0.00	0.0014904	2.82	0.0000000	0.00	5.51398	2.82	0.0021006	3.50	0.0000000	0.00	2.927752	0.10	0.0009925	10.03	0.0000000	0.00	242.4238	0.04	0.0035427	2.96
20F04455	17.0 %	✓	0.0443202	1.07	0.0000000	0.00	0.0011442	3.67	0.0000000	0.00	4.23325	3.67	0.0083544	1.08	0.0000000	0.00	4.065117	0.10	0.0007620	10.30	0.0000000	0.00	336.5999	0.04	0.0027199	3.78
20F04456	17.0 %	✓	0.0077642	4.66	0.0000000	0.00	0.0010052	4.12	0.0000000	0.00	3.71893	4.12	0.0014636	4.66	0.0000000	0.00	2.059978	0.10	0.0006694	10.47	0.0000000	0.00	170.5703	0.04	0.0023894	4.22
20F04458	17.0 %	✓	0.0000515	642.09	0.0000000	0.00	0.0015872	2.62	0.0000000	0.00	5.87182	2.62	0.0000097	642.09	0.0000000	0.00	2.494885	0.10	0.0010569	9.98	0.0000000	0.00	206.5816	0.04	0.0037726	2.78
20F04459	17.0 %	✓	0.0025597	13.22	0.0000000	0.00	0.0011432	3.82	0.0000034	72.28	4.22948	3.81	0.0004825	13.22	0.0000000	0.00	1.648174	0.10	0.0007613	10.36	0.0139905	72.28	136.4722	0.04	0.0027174	3.92
20F04461	17.0 %	✓	0.0112514	3.59	0.0000000	0.00	0.0014112	3.05	0.0000000	0.00	5.22100	3.05	0.0021209	3.60	0.0000000	0.00	2.884972	0.10	0.0009398	10.10	0.0000000	0.00	238.8815	0.04	0.0033545	3.18
20F04462	17.0 %	✓	0.1294097	0.51	0.0000000	0.00	0.0012940	3.18	0.0000000	0.00	4.78733	3.18	0.0243937	0.53	0.0000000	0.00	2.640762	0.10	0.0008617	10.14	0.0000000	0.00	218.6605	0.04	0.0030759	3.31
20F04464	17.0 %	✓	0.0012646	26.90	0.0000000	0.00	0.0003984	10.91	0.0000000	0.00	1.47388	10.91	0.0002384	26.90	0.0000000	0.00	1.673973	0.10	0.0002653	14.55	0.0000000	0.00	138.6083	0.04	0.0009470	10.95
20F04465	17.0 %	✓	0.0023147	15.04	0.0000000	0.00	0.0014718	3.10	0.0000000	0.00	5.44492	3.10	0.0004363	15.04	0.0000000	0.00	2.099964	0.10	0.0009801	10.12	0.0000000	0.00	173.8812	0.04	0.0034984	3.23
20F04467	17.0 %	✓	0.0551752	0.82	0.0000000	0.00	0.0012086	3.45	0.0000000	0.00	4.47122	3.45	0.0104005	0.83	0.0000000	0.00	2.599715	0.10	0.0008048	10.23	0.0000000	0.00	215.2616	0.04	0.0028728	3.57
20F04468	17.0 %	✓	0.0714199	0.74	0.0000000	0.00	0.0005611	7.45	0.0000045	48.67	2.07571	7.45	0.0134627	0.75	0.0000000	0.00	0.940711	0.10	0.0003736	12.17	0.0185355	48.68	77.8928	0.04	0.0013336	7.50
20F04470	17.0 %	✓	0.0013820	23.04	0.0000000	0.00	0.0007496	5.32	0.0000000	0.00	2.77339	5.32	0.0002605	23.04	0.0000000	0.00	1.518172	0.10	0.0004992	11.00	0.0000000	0.00	125.7077	0.04	0.0017819	5.40
20F04471	17.0 %	✓	0.0017025	17.49	0.0000000	0.00	0.0007648	5.36	0.0000000	0.00	2.82940	5.36	0.0003209	17.49	0.0000000	0.00	1.399656	0.10	0.0005093	11.02	0.0000000	0.00	115.8943	0.04	0.0018179	5.44
20F04473	17.0 %	✓	0.0013970	24.20	0.0000000	0.00	0.0008582	4.92	0.0000000	0.00	3.17489	4.92	0.0002633	24.20	0.0000000	0.00	1.313100	0.10	0.0005715	10.81	0.0000000	0.00	108.7273	0.04	0.0020399	5.01
20F04474	17.0 %	✓	0.0010926	28.88	0.0000000	0.00	0.0009725	4.60	0.0000000	0.00	3.59793	4.60	0.0002059	28.88	0.0000000	0.00	2.097803	0.10	0.0006476	10.67	0.0000000	0.00	173.7023	0.04	0.0023117	4.69
		Σ	0.5683828	0.39	0.0000000	0.00	0.0341018	0.68	0.0000078	41.66	126.16292	0.68	0.1071402	0.39	0.0000000	0.00	74.827641	0.02	0.0227093	1.98	0.0325260	41.67	6195.8799	0.01	0.0810597	0.70
		Σ							0.6024925	0.37	126.16292	0.68									74.990017	0.03			6195.9609	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
410.656	0.02	0.16235	52.57	0.0000000	0.00	0.0663264	9.65
437.093	0.02	0.00372	#######	0.0000000	0.00	0.0706636	9.65
458.616	0.02	0.11794	77.38	0.0000000	0.00	0.0740919	9.65
1347.811	0.01	24.17983	0.71	0.0000000	0.00	0.2175117	9.65
1524.445	0.01	1.69108	6.98	0.0000000	0.00	0.2463880	9.65
793.873	0.02	0.87223	13.26	0.0000000	0.00	0.1282636	9.65
1200.331	0.01	24.90810	0.69	0.0000000	0.00	0.1938000	9.65
628.353	0.02	2.78351	4.20	0.0000000	0.00	0.1015214	9.65
1352.753	0.01	2.50229	4.69	0.0000000	0.00	0.2186491	9.65
456.778	0.02	0.41392	25.78	0.0000000	0.00	0.0737457	9.65
872.424	0.01	0.86418	12.70	0.0000000	0.00	0.1410017	9.65
702.838	0.02	0.83779	11.64	0.0000000	0.00	0.1136971	9.65
780.935	0.01	2.03339	5.18	0.0000000	0.00	0.1264533	9.65
856.838	0.01	0.69420	15.17	0.0000000	0.00	0.1385354	9.65
1385.303	0.01	10.46180	1.32	0.0000000	0.00	0.2235720	9.65
910.071	0.01	3.32703	3.50	0.0000000	0.00	0.1471512	9.65
1264.752	0.01	13.23225	1.07	0.0000000	0.00	0.2043161	9.65
639.063	0.02	2.31809	4.66	0.0000000	0.00	0.1035362	9.65
775.900	0.01	0.01536	642.09	0.0000000	0.00	0.1253950	9.65
512.958	0.02	0.76424	13.22	0.0000000	0.00	0.0828386	9.65
897.056	0.01	3.35923	3.60	0.0000000	0.00	0.1450011	9.65
820.431	0.03	38.63657	0.52	0.0000000	0.00	0.1327269	9.65
520.487	0.02	0.37756	26.90	0.0000000	0.00	0.0841353	9.65
651.329	0.02	0.69109	15.04	0.0000000	0.00	0.1055459	9.65
808.336	0.02	16.47310	0.83	0.0000000	0.00	0.1306638	9.65
292.847	0.06	21.32313	0.74	0.0000000	0.00	0.0472809	9.65
471.550	0.02	0.41262	23.04	0.0000000	0.00	0.0763046	9.65
436.005	0.02	0.50829	17.49	0.0000000	0.00	0.0703479	9.65
407.797	0.03	0.41710	24.20	0.0000000	0.00	0.0659975	9.65
650.674	0.02	0.32619	28.88	0.0000000	0.00	0.1054373	9.65
23268.301	0.00	169.69637	0.39	0.0000000	0.00	3.7608991	1.92
						23441.759	0.00

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F04431	17.0 %	✓	3.757254	0.001640	0.030010	0.001530	0.000003	0.000003	147.912	18.616265	1.00104510	1.453E-11
20F04432	17.0 %	✓	3.755210	0.001637	0.023448	0.001387	0.000006	0.000002	147.919	18.618564	1.00104514	1.548E-11
20F04434	17.0 %	✓	3.756798	0.001617	0.026914	0.001244	0.000004	0.000002	147.931	18.622906	1.00104523	1.623E-11
20F04435	17.0 %	✓	3.829318	0.001582	0.017731	0.000457	0.000231	0.000002	147.937	18.625205	1.00104527	4.858E-11
20F04437	17.0 %	✓	3.760362	0.001548	0.010058	0.000388	0.000017	0.000001	147.949	18.629549	1.00104535	5.403E-11
20F04438	17.0 %	✓	3.761635	0.001584	0.022427	0.000777	0.000020	0.000002	147.954	18.631593	1.00104539	2.814E-11
20F04440	17.0 %	✓	3.838141	0.001588	0.012312	0.000498	0.000265	0.000002	147.967	18.636194	1.00104548	4.338E-11
20F04441	17.0 %	✓	3.774140	0.001612	0.021923	0.000961	0.000062	0.000002	147.972	18.638239	1.00104552	2.235E-11
20F04443	17.0 %	✓	3.762938	0.001561	0.018367	0.000456	0.000028	0.000001	147.984	18.642585	1.00104560	4.798E-11
20F04444	17.0 %	✓	3.763697	0.001624	0.022027	0.001255	0.000017	0.000003	147.990	18.644887	1.00104565	1.619E-11
20F04446	17.0 %	✓	3.752556	0.001572	0.016025	0.000626	0.000008	0.000002	148.002	18.649235	1.00104573	3.086E-11
20F04447	17.0 %	✓	3.748341	0.001576	0.026794	0.000760	0.000008	0.000002	148.008	18.651538	1.00104578	2.485E-11
20F04449	17.0 %	✓	3.758945	0.001578	0.025929	0.000772	0.000040	0.000002	148.020	18.655887	1.00104586	2.772E-11
20F04450	17.0 %	✓	3.757899	0.001577	0.012886	0.000699	0.000014	0.000002	148.026	18.657935	1.00104590	3.036E-11
20F04452	17.0 %	✓	3.790065	0.001566	0.022541	0.000406	0.000101	0.000001	148.037	18.662286	1.00104598	4.942E-11
20F04453	17.0 %	✓	3.768325	0.001575	0.022745	0.000640	0.000052	0.000002	148.044	18.664590	1.00104603	3.234E-11
20F04455	17.0 %	✓	3.797321	0.001571	0.012576	0.000461	0.000135	0.000001	148.056	18.668943	1.00104611	4.525E-11
20F04456	17.0 %	✓	3.760768	0.001598	0.021803	0.000898	0.000051	0.000002	148.062	18.671247	1.00104615	2.271E-11
20F04458	17.0 %	✓	3.756366	0.001581	0.028423	0.000744	0.000007	0.000002	148.074	18.675602	1.00104624	2.747E-11
20F04459	17.0 %	✓	3.764835	0.001624	0.030991	0.001182	0.000027	0.000002	148.079	18.677651	1.00104628	1.819E-11
20F04461	17.0 %	✓	3.769852	0.001577	0.021856	0.000666	0.000053	0.000002	148.091	18.682007	1.00104636	3.188E-11
20F04462	17.0 %	✓	3.929326	0.001642	0.021894	0.000695	0.000598	0.000003	148.097	18.684313	1.00104640	3.042E-11
20F04464	17.0 %	✓	3.758399	0.001606	0.010633	0.001160	0.000012	0.000002	148.109	18.688671	1.00104649	1.844E-11
20F04465	17.0 %	✓	3.750335	0.001596	0.031313	0.000970	0.000022	0.000002	148.115	18.690978	1.00104653	2.309E-11
20F04467	17.0 %	✓	3.832213	0.001609	0.020771	0.000717	0.000262	0.000002	148.127	18.695337	1.00104661	2.920E-11
20F04468	17.0 %	✓	4.033907	0.001837	0.026648	0.001984	0.000924	0.000007	148.133	18.697389	1.00104665	1.112E-11
20F04470	17.0 %	✓	3.754999	0.001627	0.022062	0.001174	0.000017	0.000003	148.145	18.702006	1.00104674	1.671E-11
20F04471	17.0 %	✓	3.758249	0.001634	0.024413	0.001309	0.000008	0.000003	148.151	18.704058	1.00104678	1.542E-11
20F04473	17.0 %	✓	3.755009	0.001643	0.029200	0.001437	0.000021	0.000003	148.162	18.708420	1.00104686	1.445E-11
20F04474	17.0 %	✓	3.748348	0.001592	0.020713	0.000953	0.000012	0.000002	148.169	18.710730	1.00104691	2.305E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F04431	17.0 %	0.0082615 ±0.0001838	0.0119219 ±0.0064912	0.0271200 ±0.0070737	0.0269037 ±0.0061260	1.7849515 ±0.0148690
20F04432	17.0 %	0.0082615 ±0.0001838	0.0119219 ±0.0064912	0.0271200 ±0.0070737	0.0269037 ±0.0061260	1.7849515 ±0.0148690
20F04434	17.0 %	0.0079127 ±0.0001825	0.0185896 ±0.0056776	0.0220903 ±0.0065362	0.0242702 ±0.0068134	1.8001332 ±0.0135494
20F04435	17.0 %	0.0079127 ±0.0001825	0.0185896 ±0.0056776	0.0220903 ±0.0065362	0.0242702 ±0.0068134	1.8001332 ±0.0135494
20F04437	17.0 %	0.0094350 ±0.0002088	0.0111017 ±0.0058589	0.0271783 ±0.0068953	0.0253770 ±0.0063857	2.2817775 ±0.0161449
20F04438	17.0 %	0.0094350 ±0.0002088	0.0111017 ±0.0058589	0.0271783 ±0.0068953	0.0253770 ±0.0063857	2.2817775 ±0.0161449
20F04440	17.0 %	0.0090639 ±0.0001956	0.0123496 ±0.0063474	0.0309249 ±0.0064320	0.0185552 ±0.0064289	1.8779467 ±0.0158840
20F04441	17.0 %	0.0090639 ±0.0001956	0.0123496 ±0.0063474	0.0309249 ±0.0064320	0.0185552 ±0.0064289	1.8779467 ±0.0158840
20F04443	17.0 %	0.0103729 ±0.0002116	0.0115412 ±0.0054458	0.0254050 ±0.0065809	0.0316952 ±0.0058502	2.3605335 ±0.0154295
20F04444	17.0 %	0.0103729 ±0.0002116	0.0115412 ±0.0054458	0.0254050 ±0.0065809	0.0316952 ±0.0058502	2.3605335 ±0.0154295
20F04446	17.0 %	0.0116291 ±0.0001963	0.0100266 ±0.0050926	0.0306649 ±0.0069950	0.0216093 ±0.0067940	2.7067820 ±0.0144854
20F04447	17.0 %	0.0116291 ±0.0001963	0.0100266 ±0.0050926	0.0306649 ±0.0069950	0.0216093 ±0.0067940	2.7067820 ±0.0144854
20F04449	17.0 %	0.0083811 ±0.0001968	0.0155902 ±0.0059536	0.0290019 ±0.0071127	0.0252514 ±0.0061039	1.8341722 ±0.0163388
20F04450	17.0 %	0.0083811 ±0.0001968	0.0155902 ±0.0059536	0.0290019 ±0.0071127	0.0252514 ±0.0061039	1.8341722 ±0.0163388
20F04452	17.0 %	0.0080874 ±0.0001886	0.0145347 ±0.0055343	0.0337260 ±0.0060963	0.0320035 ±0.0063164	1.8207018 ±0.0139993
20F04453	17.0 %	0.0080874 ±0.0001886	0.0145347 ±0.0055343	0.0337260 ±0.0060963	0.0320035 ±0.0063164	1.8207018 ±0.0139993
20F04455	17.0 %	0.0079727 ±0.0001974	0.0100392 ±0.0056290	0.0343233 ±0.0063698	0.0120379 ±0.0058032	1.7620744 ±0.0160601
20F04456	17.0 %	0.0079727 ±0.0001974	0.0100392 ±0.0056290	0.0343233 ±0.0063698	0.0120379 ±0.0058032	1.7620744 ±0.0160601
20F04458	17.0 %	0.0088311 ±0.0001993	0.0267463 ±0.0058292	0.0380297 ±0.0062221	0.0221915 ±0.0060833	1.9072360 ±0.0155861
20F04459	17.0 %	0.0088311 ±0.0001993	0.0267463 ±0.0058292	0.0380297 ±0.0062221	0.0221915 ±0.0060833	1.9072360 ±0.0155861
20F04461	17.0 %	0.0102397 ±0.0002046	0.0164139 ±0.0055060	0.0268292 ±0.0066757	0.0318284 ±0.0060034	2.4194750 ±0.0155269
20F04462	17.0 %	0.0102397 ±0.0002046	0.0164139 ±0.0055060	0.0268292 ±0.0066757	0.0318284 ±0.0060034	2.4194750 ±0.0155269
20F04464	17.0 %	0.0089344 ±0.0001944	0.0207179 ±0.0062014	0.0230651 ±0.0070794	0.0363257 ±0.0060079	1.8701054 ±0.0157713
20F04465	17.0 %	0.0089344 ±0.0001944	0.0207179 ±0.0062014	0.0230651 ±0.0070794	0.0363257 ±0.0060079	1.8701054 ±0.0157713
20F04467	17.0 %	0.0088311 ±0.0001993	0.0267463 ±0.0058292	0.0380297 ±0.0062221	0.0221915 ±0.0060833	1.9072360 ±0.0155861
20F04468	17.0 %	0.0088311 ±0.0001993	0.0267463 ±0.0058292	0.0380297 ±0.0062221	0.0221915 ±0.0060833	1.9072360 ±0.0155861
20F04470	17.0 %	0.0102397 ±0.0002046	0.0164139 ±0.0055060	0.0268292 ±0.0066757	0.0318284 ±0.0060034	2.4194750 ±0.0155269
20F04471	17.0 %	0.0102397 ±0.0002046	0.0164139 ±0.0055060	0.0268292 ±0.0066757	0.0318284 ±0.0060034	2.4194750 ±0.0155269
20F04473	17.0 %	0.0089344 ±0.0001944	0.0207179 ±0.0062014	0.0230651 ±0.0070794	0.0363257 ±0.0060079	1.8701054 ±0.0157713
20F04474	17.0 %	0.0089344 ±0.0001944	0.0207179 ±0.0062014	0.0230651 ±0.0070794	0.0363257 ±0.0060079	1.8701054 ±0.0157713

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F04431	17.0 %	0.0086013 ±0.0002111	0.9720	EXP 150 of 150	0.1639392 ±0.0061391	0.0996	EXP 150 of 150	1.2722608 ±0.0073233	0.7647	EXP 150 of 150	109.07043 ±0.01400	0.9999	EXP 149 of 150	412.34491 ±0.02943
20F04432	17.0 %	0.0090056 ±0.0002044	0.9782	EXP 150 of 150	0.1344521 ±0.0056934	0.0855	EXP 150 of 150	1.3763622 ±0.0062156	0.8399	EXP 149 of 150	116.20401 ±0.01465	0.9999	EXP 150 of 150	438.95248 ±0.03322
20F04434	17.0 %	0.0084016 ±0.0002386	0.9714	EXP 149 of 150	0.1575289 ±0.0057791	0.0586	EXP 150 of 150	1.4183771 ±0.0064732	0.8311	EXP 150 of 150	121.84589 ±0.01314	0.9999	EXP 150 of 150	460.37182 ±0.03307
20F04435	17.0 %	0.0899342 ±0.0005147	0.9327	EXP 150 of 150	0.3219875 ±0.0065352	0.1950	EXP 150 of 150	4.2818947 ±0.0073673	0.9731	EXP 150 of 150	357.74809 ±0.02183	1.0000	EXP 150 of 150	1374.00897 ±0.06109
20F04437	17.0 %	0.0161467 ±0.0003292	0.9874	EXP 150 of 150	0.2076834 ±0.0059954	0.1565	EXP 150 of 150	4.8405346 ±0.0067535	0.9822	EXP 149 of 150	405.24202 ±0.02285	1.0000	EXP 149 of 150	1528.66440 ±0.05591
20F04438	17.0 %	0.0136026 ±0.0003194	0.9755	EXP 149 of 150	0.2428327 ±0.0064635	0.1296	EXP 150 of 150	2.5107157 ±0.0065110	0.9397	EXP 150 of 150	210.94867 ±0.01992	0.9999	EXP 150 of 150	797.15487 ±0.04011
20F04440	17.0 %	0.0928550 ±0.0005085	0.9180	EXP 150 of 150	0.1982260 ±0.0056055	0.1166	EXP 150 of 150	3.8115132 ±0.0061808	0.9759	EXP 149 of 150	318.75062 ±0.02146	1.0000	EXP 150 of 150	1227.31037 ±0.04779
20F04441	17.0 %	0.0192928 ±0.0003326	0.9621	EXP 150 of 150	0.1840572 ±0.0057535	0.1237	EXP 150 of 150	1.9792821 ±0.0068701	0.8886	EXP 150 of 150	166.96851 ±0.01889	0.9999	EXP 150 of 150	633.11571 ±0.03485
20F04443	17.0 %	0.0204582 ±0.0003240	0.9858	EXP 149 of 150	0.3427629 ±0.0067418	0.2518	EXP 150 of 150	4.2789978 ±0.0071537	0.9740	EXP 149 of 150	359.61154 ±0.02622	1.0000	EXP 150 of 150	1357.83447 ±0.05816
20F04444	17.0 %	0.0124652 ±0.0002814	0.9683	EXP 150 of 150	0.1317520 ±0.0060503	0.0658	EXP 150 of 150	1.4248033 ±0.0057244	0.8775	EXP 149 of 150	121.26865 ±0.01372	0.9999	EXP 150 of 150	459.62654 ±0.03375
20F04446	17.0 %	0.0097564 ±0.0003047	0.9788	EXP 150 of 150	0.1892499 ±0.0058243	0.1307	EXP 150 of 150	2.7457412 ±0.0069274	0.9427	EXP 150 of 150	231.90357 ±0.02001	0.9999	EXP 150 of 150	874.40725 ±0.04317
20F04447	17.0 %	0.0101916 ±0.0002550	0.9831	EXP 148 of 150	0.2586117 ±0.0055485	0.2194	EXP 149 of 150	2.2001151 ±0.0070317	0.9081	EXP 149 of 150	186.99320 ±0.01646	0.9999	EXP 150 of 150	704.82036 ±0.03647
20F04449	17.0 %	0.0165834 ±0.0002858	0.9778	EXP 149 of 150	0.2734771 ±0.0060777	0.2155	EXP 150 of 150	2.4702942 ±0.0069884	0.9318	EXP 149 of 150	207.97137 ±0.01872	0.9999	EXP 150 of 150	784.92929 ±0.03796
20F04450	17.0 %	0.0114754 ±0.0002860	0.9815	EXP 149 of 150	0.1417795 ±0.0060806	0.0454	EXP 150 of 150	2.7078040 ±0.0065115	0.9474	EXP 146 of 150	227.84281 ±0.01950	0.9999	EXP 149 of 150	859.50539 ±0.04860
20F04452	17.0 %	0.0450640 ±0.0004097	0.9737	EXP 150 of 150	0.4296139 ±0.0054319	0.4193	EXP 150 of 150	4.3816941 ±0.0072983	0.9751	EXP 150 of 150	367.70957 ±0.02455	1.0000	EXP 150 of 150	1397.80866 ±0.05114
20F04453	17.0 %	0.0206169 ±0.0003340	0.9767	EXP 150 of 150	0.2804034 ±0.0060543	0.2050	EXP 149 of 150	2.8771082 ±0.0067311	0.9525	EXP 150 of 150	242.00916 ±0.01942	0.9999	EXP 150 of 150	915.36573 ±0.04747
20F04455	17.0 %	0.0530611 ±0.0004178	0.9665	EXP 148 of 150	0.2163408 ±0.0060200	0.1406	EXP 150 of 150	4.0261533 ±0.0065626	0.9765	EXP 149 of 150	336.05433 ±0.02208	1.0000	EXP 150 of 150	1279.95018 ±0.05393
20F04456	17.0 %	0.0166696 ±0.0002961	0.9736	EXP 150 of 150	0.1888125 ±0.0058911	0.1109	EXP 150 of 150	2.0019647 ±0.0071806	0.8893	EXP 150 of 150	170.28893 ±0.01808	0.9999	EXP 150 of 150	643.24636 ±0.03484
20F04458	17.0 %	0.0103541 ±0.0002568	0.9834	EXP 149 of 150	0.2871471 ±0.0056320	0.2436	EXP 149 of 150	2.4331448 ±0.0059245	0.9465	EXP 146 of 150	206.23402 ±0.01874	0.9999	EXP 150 of 150	777.91737 ±0.04253
20F04459	17.0 %	0.0125068 ±0.0002663	0.9723	EXP 150 of 150	0.1993269 ±0.0062775	0.1110	EXP 150 of 150	1.6235506 ±0.0067031	0.8678	EXP 150 of 150	136.23525 ±0.01573	0.9999	EXP 150 of 150	515.71254 ±0.03699
20F04461	17.0 %	0.0227977 ±0.0003416	0.9719	EXP 150 of 150	0.2625925 ±0.0063645	0.1519	EXP 150 of 150	2.8579653 ±0.0065512	0.9533	EXP 150 of 150	238.47242 ±0.02062	0.9999	EXP 149 of 150	902.98002 ±0.04135
20F04462	17.0 %	0.1398623 ±0.0005840	0.6328	EXP 148 of 150	0.2393862 ±0.0058657	0.1807	EXP 150 of 150	2.5846424 ±0.0062364	0.9448	EXP 149 of 150	218.28332 ±0.01810	0.9999	EXP 149 of 150	861.61993 ±0.03938
20F04464	17.0 %	0.0105837 ±0.0002724	0.9705	EXP 150 of 150	0.0580172 ±0.0059306	0.0158	EXP 150 of 150	1.6296447 ±0.0070556	0.8550	EXP 148 of 150	138.35210 ±0.01441	0.9999	EXP 150 of 150	522.81905 ±0.03423
20F04465	17.0 %	0.0126896 ±0.0002816	0.9751	EXP 150 of 150	0.2701149 ±0.0064107	0.1489	EXP 150 of 150	2.0735931 ±0.0065150	0.9227	EXP 147 of 150	173.57133 ±0.01856	0.9999	EXP 150 of 150	653.99607 ±0.03734
20F04467	17.0 %	0.0647484 ±0.0003886	0.9315	EXP 150 of 150	0.2120221 ±0.0057280	0.2227	EXP 150 of 150	2.5428926 ±0.0062510	0.9460	EXP 150 of 150	214.89930 ±0.01966	0.9999	EXP 150 of 150	826.84671 ±0.03981
20F04468	17.0 %	0.0802211 ±0.0004654	0.5525	EXP 150 of 150	0.0840869 ±0.0058231	0.0264	EXP 150 of 150	0.9339835 ±0.0060259	0.7433	EXP 150 of 150	77.74777 ±0.01271	0.9998	EXP 150 of 150	316.12476 ±0.02741
20F04470	17.0 %	0.0123538 ±0.0002371	0.9745	EXP 147 of 150	0.1316354 ±0.0055927	0.0824	EXP 150 of 150	1.4621962 ±0.0068058	0.8278	EXP 150 of 150	125.47729 ±0.01563	0.9999	EXP 150 of 150	474.45840 ±0.03140
20F04471	17.0 %	0.0093098 ±0.0002089	0.9792	EXP 150 of 150	0.1346091 ±0.0059007	0.1019	EXP 149 of 150	1.3563161 ±0.0063967	0.8360	EXP 150 of 150	115.67963 ±0.01457	0.9999	EXP 148 of 150	437.98614 ±0.03004
20F04473	17.0 %	0.0111710 ±0.0002699	0.9611	EXP 150 of 150	0.1487065 ±0.0055257	0.0812	EXP 149 of 150	1.2603328 ±0.0070778	0.7546	EXP 149 of 150	108.51973 ±0.01425	0.9998	EXP 150 of 150	410.14976 ±0.02930
20F04474	17.0 %	0.0109824 ±0.0002411	0.9803	EXP 148 of 150	0.1712580 ±0.0062361	0.0866	EXP 150 of 150	2.0558117 ±0.0062929	0.9124	EXP 149 of 150	173.39143 ±0.01870	0.9999	EXP 150 of 150	652.97546 ±0.03271

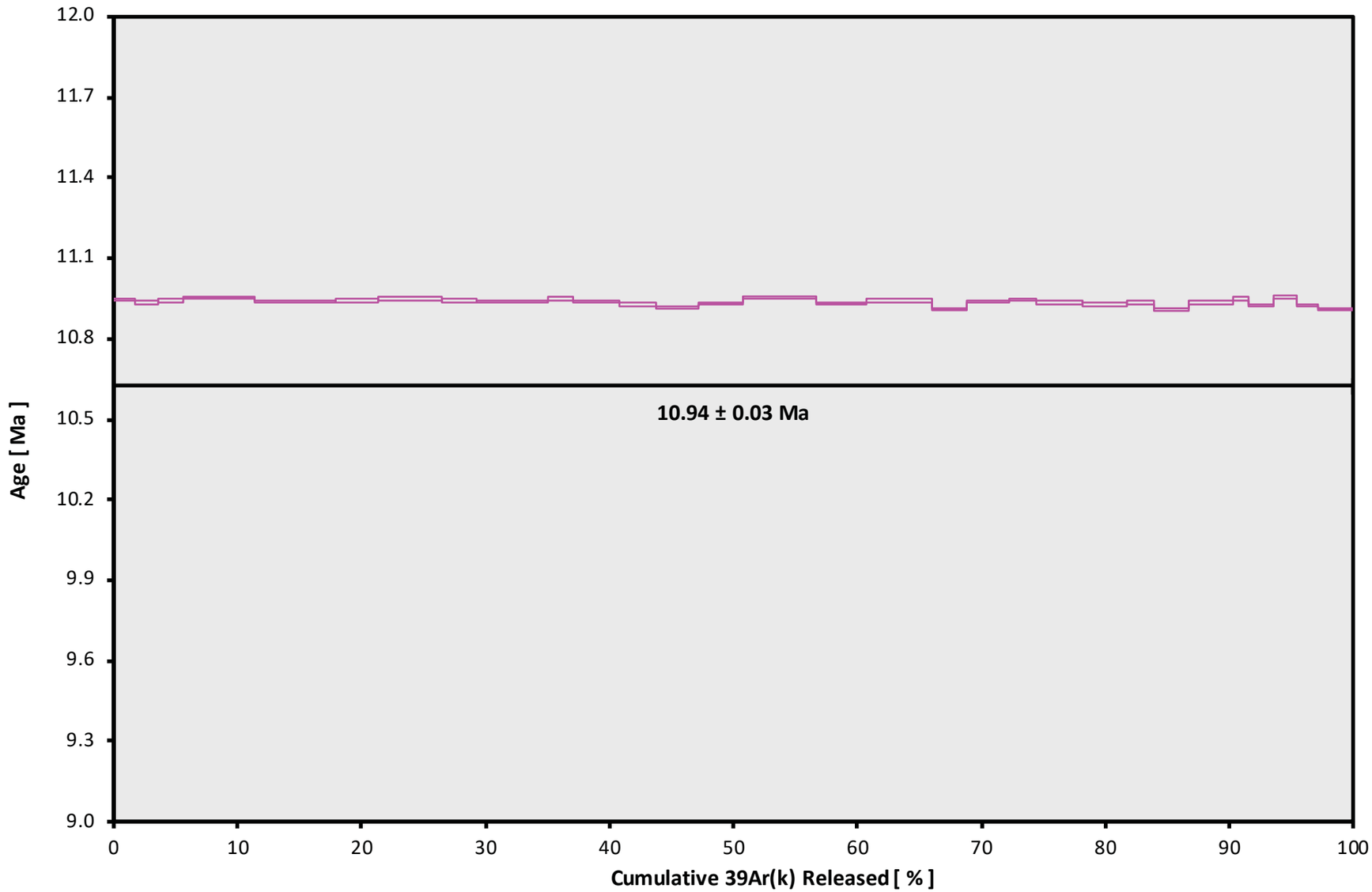
r2	Regression (type,n)
0.9999	EXP 149 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 148 of 150
1.0000	EXP 148 of 150
0.9999	EXP 145 of 150
0.9999	EXP 148 of 150
1.0000	EXP 147 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F04431	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04432	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04434	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04435	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04437	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04438	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04440	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04441	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04443	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04444	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04446	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04447	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04449	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04450	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04452	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04453	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04455	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04456	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04458	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04459	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04461	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04462	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04464	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04465	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04467	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04468	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04470	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04471	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04473	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01
20F04474	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	42.59	Oregon\Swenton (18-58)	20F04426	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F04431	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	13	16	1
20F04432	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	13	25	1
20F04434	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	13	42	1
20F04435	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	13	51	1
20F04437	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	14	8	1
20F04438	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	14	16	1
20F04440	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	14	34	1
20F04441	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	14	42	1
20F04443	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	14	59	1
20F04444	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	15	8	1
20F04446	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	15	25	1
20F04447	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	15	34	1
20F04449	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	15	51	1
20F04450	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	15	59	1
20F04452	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	16	16	1
20F04453	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	16	25	1
20F04455	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	16	42	1
20F04456	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	16	51	1
20F04458	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	17	8	1
20F04459	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	17	16	1
20F04461	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	17	33	1
20F04462	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	17	42	1
20F04464	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	17	59	1
20F04465	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	18	8	1
20F04467	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	18	25	1
20F04468	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	18	33	1
20F04470	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	18	51	1
20F04471	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	18	59	1
20F04473	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	19	16	1
20F04474	17.0 %	VS17-043	Sanidine	Saddle Butte	FCT-NM (2C34-19)	28.201	0.082	Kuiper et al (2008)	9.72951	0.243	0.00159571	0.243	299.217	0.125	0.9994504	0.041	1	3.54E-14	31	MAR	2020	19	25	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F04431	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04432	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04434	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04435	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04437	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04438	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04440	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04441	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04443	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04444	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04446	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04447	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04449	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04450	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04452	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04453	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04455	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04456	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04458	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04459	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04461	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04462	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04464	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04465	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04467	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04468	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04470	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04471	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04473	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04474	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F04426.AGE >>> VS17-043 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.94 ± 0.03
TOTAL FUSION
10.94 ± 0.03
NORMAL ISOCHRON
10.93 ± 0.03
INVERSE ISOCHRON
10.93 ± 0.03

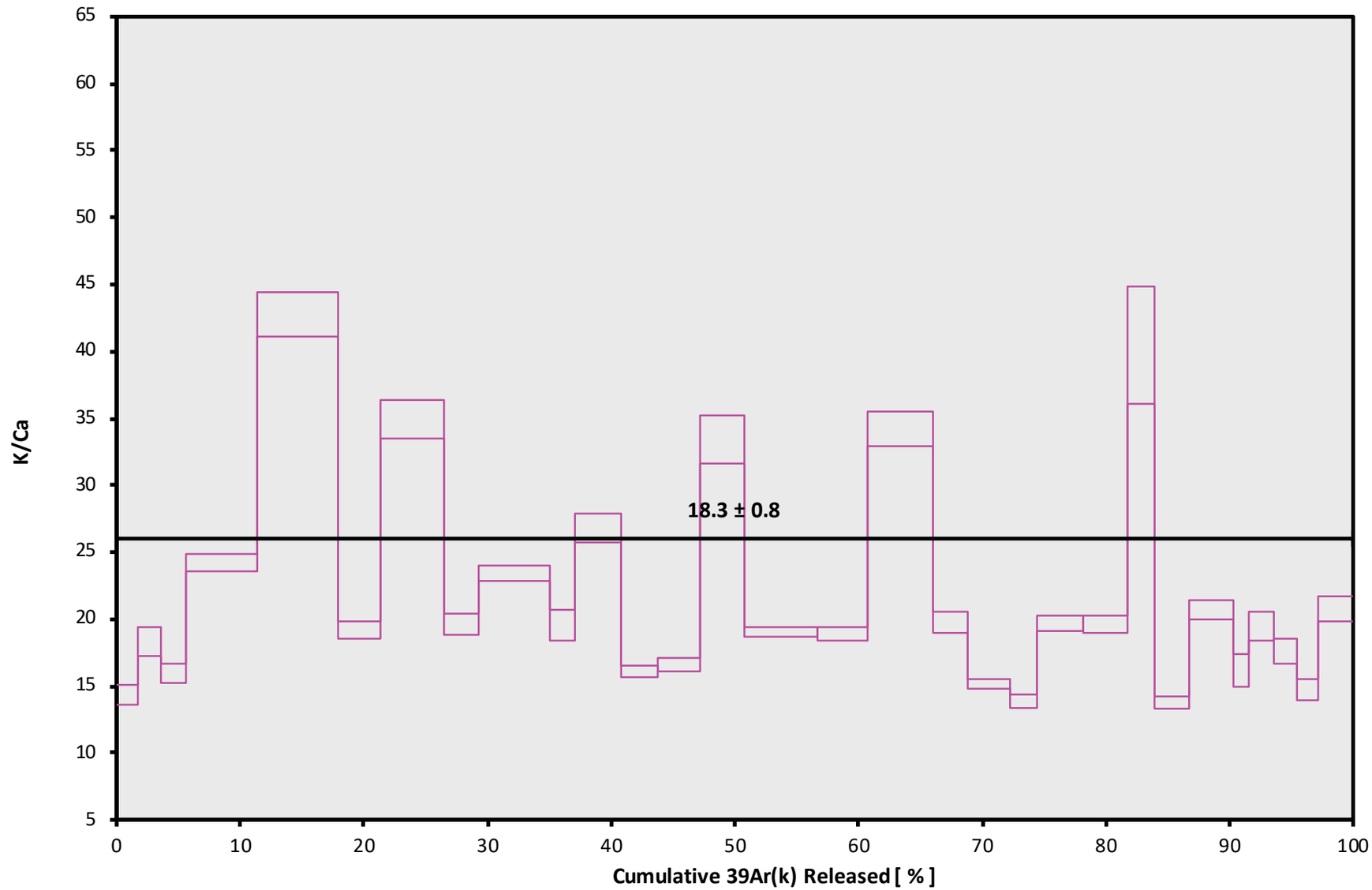
MSWD (PROBABILITY)
6.52 (0%)

Sample Info

Sanidine
Saddle Butte
Dan Miggins

IRR = 19-OSU-02 (2C34-

20F04426.AGE >>> VS17-043 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

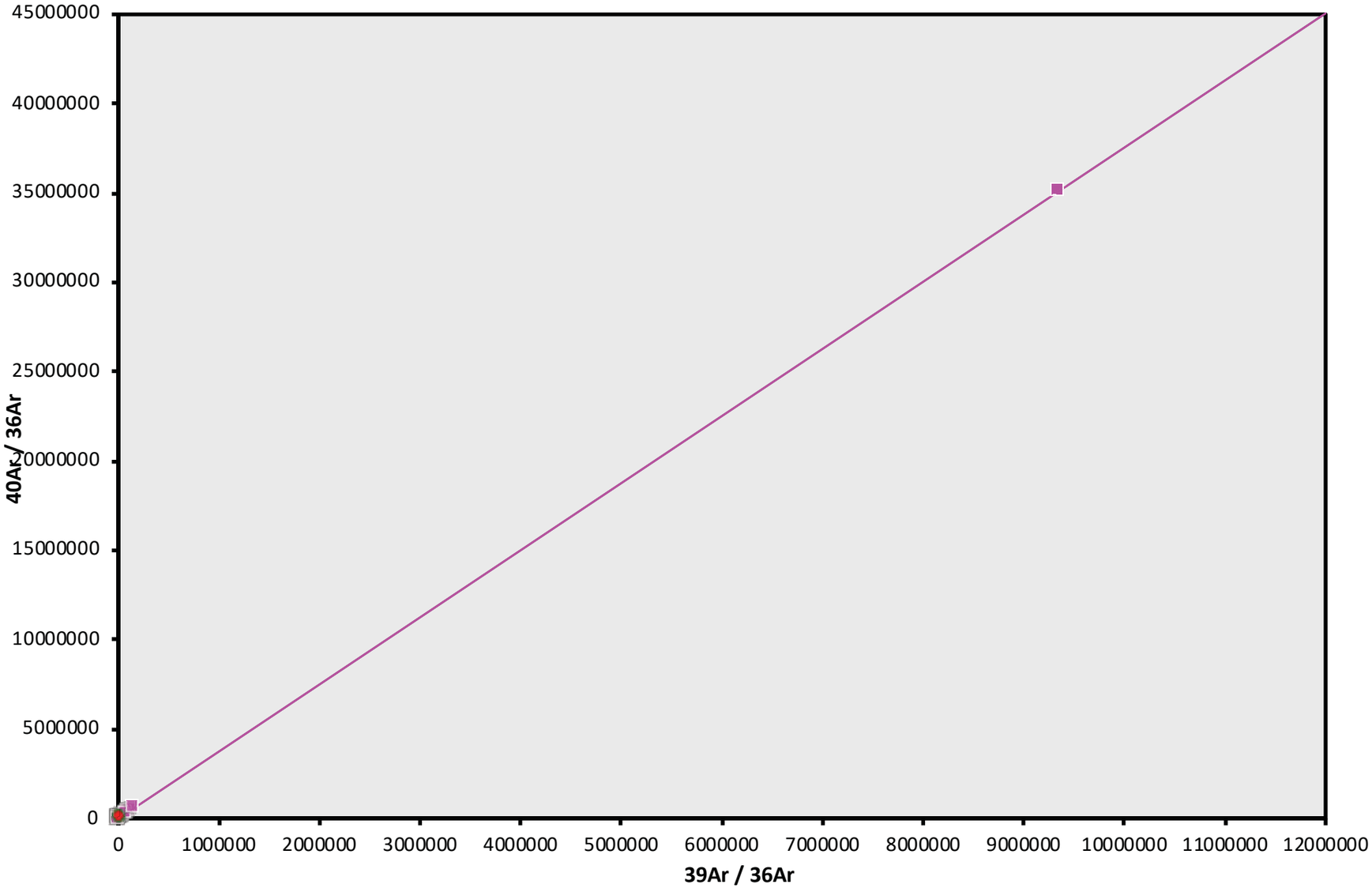
WEIGHTED PLATEAU
10.94 ± 0.03
TOTAL FUSION
10.94 ± 0.03
NORMAL ISOCHRON
10.93 ± 0.03
INVERSE ISOCHRON
10.93 ± 0.03

Sample Info

Sanidine
Saddle Butte
Dan Miggins

IRR = 19-OSU-02 (2C34-

20F04426.AGE >>> VS17-043 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.94 ± 0.03
TOTAL FUSION
10.94 ± 0.03
NORMAL ISOCHRON
10.93 ± 0.03
INVERSE ISOCHRON
10.93 ± 0.03

MSWD (PROBABILITY)
5.99 (0%)

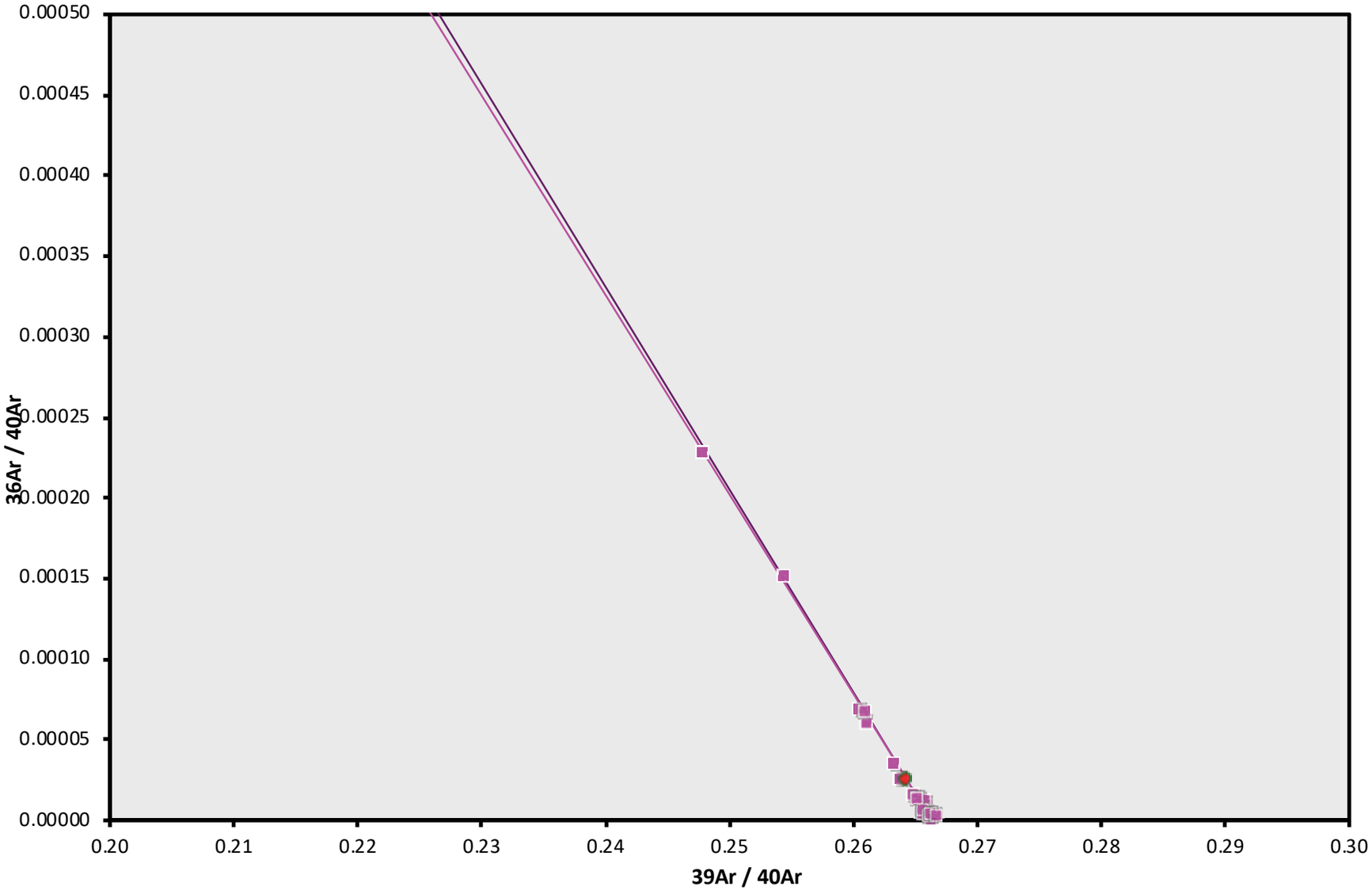
40AR/36AR INTERCEPT

Sample Info

Sanidine
Saddle Butte
Dan Miggins

IRR = 19-OSU-02 (2C34-19)

20F04426.AGE >>> VS17-043 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.94 ± 0.03
TOTAL FUSION
10.94 ± 0.03
NORMAL ISOCHRON
10.93 ± 0.03
INVERSE ISOCHRON
10.93 ± 0.03

MSWD (PROBABILITY)
6.54 (0%)

SPREADING FACTOR

Sample Info

Sanidine
Saddle Butte
Dan Miggins

IRR = 19-OSU-02 (2C34-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F04482	17.0 %	✓	0.0956277	0.596	1.525865	10.398	1.401668	0.645	114.8803	0.042	497.951	0.008	4.08649 ±0.00465	11.84 ±0.01	94.28	2.73	32.4 ±6.7
20F04483	17.0 %	✓	0.0032742	9.775	1.968544	7.921	1.626116	0.544	134.5017	0.042	550.143	0.006	4.08357 ±0.00377	11.84 ±0.01	99.84	3.20	29.4 ±4.7
20F04485	17.0 %	✓	0.0040821	7.099	0.904327	17.762	0.937066	0.955	77.2185	0.044	316.811	0.011	4.08737 ±0.00435	11.85 ±0.01	99.62	1.84	36.7 ±13.0
20F04486	17.0 %	✓	0.0020377	14.348	1.986377	7.835	1.612337	0.576	135.1343	0.042	553.256	0.006	4.09024 ±0.00372	11.86 ±0.01	99.90	3.21	29.3 ±4.6
20F04488	17.0 %	✓	0.0758877	0.746	2.244290	7.254	1.907930	0.493	159.6338	0.042	674.930	0.005	4.08662 ±0.00407	11.84 ±0.01	96.66	3.80	30.6 ±4.4
20F04489	17.0 %	✓	0.0021846	14.755	1.914488	8.079	1.546782	0.633	129.7476	0.042	530.267	0.006	4.08251 ±0.00381	11.83 ±0.01	99.89	3.08	29.1 ±4.7
20F04491	17.0 %	✓	0.0043901	7.646	2.445187	6.310	1.710064	0.571	144.1174	0.042	590.133	0.007	4.08652 ±0.00378	11.84 ±0.01	99.80	3.43	25.3 ±3.2
20F04492	17.0 %	✓	0.0082659	4.489	3.465628	4.367	2.680311	0.359	224.9449	0.042	921.285	0.005	4.08531 ±0.00357	11.84 ±0.01	99.75	5.35	27.9 ±2.4
20F04494	17.0 %	✓	0.0275589	1.583	3.373769	4.661	2.591037	0.395	216.8939	0.042	894.536	0.005	4.08705 ±0.00363	11.85 ±0.01	99.10	5.16	27.6 ±2.6
20F04495	17.0 %	✓	0.1197521	0.534	4.341814	3.389	3.771631	0.270	311.9342	0.041	1311.330	0.004	4.08980 ±0.00361	11.85 ±0.01	97.29	7.42	30.9 ±2.1
20F04497	17.0 %	✓	0.0073066	4.345	1.331611	12.322	0.941798	1.022	79.1985	0.044	325.948	0.009	4.08884 ±0.00442	11.85 ±0.01	99.35	1.88	25.6 ±6.3
20F04498	17.0 %	✓	0.0066869	5.035	1.616149	10.033	1.166075	0.813	97.6111	0.043	400.691	0.008	4.08529 ±0.00416	11.84 ±0.01	99.52	2.32	26.0 ±5.2
20F04500	17.0 %	✓	0.0075007	4.409	1.093585	13.396	0.976012	0.982	81.5285	0.044	335.704	0.010	4.09067 ±0.00440	11.86 ±0.01	99.34	1.94	32.1 ±8.6
20F04501	17.0 %	✓	0.0016638	19.597	2.248050	6.944	1.972583	0.424	164.9049	0.042	673.966	0.006	4.08452 ±0.00366	11.84 ±0.01	99.94	3.92	31.5 ±4.4
20F04503	17.0 %	✓	0.0094290	3.842	2.048896	6.916	1.710218	0.557	142.7037	0.042	585.917	0.007	4.08669 ±0.00382	11.85 ±0.01	99.53	3.39	29.9 ±4.1
20F04504	17.0 %	✓	0.0408864	1.089	2.984992	4.857	2.488652	0.384	207.1400	0.041	859.090	0.005	4.08905 ±0.00366	11.85 ±0.01	98.59	4.92	29.8 ±2.9
20F04506	17.0 %	✓	0.0009154	35.234	1.671486	8.761	1.623839	0.594	135.0821	0.042	552.335	0.006	4.08728 ±0.00379	11.85 ±0.01	99.96	3.21	34.8 ±6.1
20F04507	17.0 %	✓	0.1109097	0.499	1.956345	7.755	1.678596	0.555	137.7159	0.043	595.676	0.006	4.08553 ±0.00430	11.84 ±0.01	94.45	3.27	30.3 ±4.7
20F04509	17.0 %	✓	0.0091703	3.872	2.961277	5.184	2.394117	0.410	201.4920	0.042	825.659	0.005	4.08476 ±0.00361	11.84 ±0.01	99.68	4.79	29.3 ±3.0
20F04510	17.0 %	✓	0.0052167	6.267	2.530886	5.869	1.897726	0.512	157.8580	0.042	645.624	0.006	4.08076 ±0.00369	11.83 ±0.01	99.78	3.75	26.8 ±3.1
20F04512	17.0 %	✓	0.0152961	2.394	1.255845	12.508	1.126952	0.873	93.9732	0.044	388.477	0.009	4.08582 ±0.00434	11.84 ±0.01	98.84	2.23	32.2 ±8.0
20F04513	17.0 %		0.0000381	780.219	0.303875	47.018	0.196086	4.545	17.4446	0.071	71.892	0.033	4.12135 ±0.01213	11.95 ±0.04	100.00	0.41	24.7 ±23.2
20F04515	17.0 %	✓	0.0045042	6.886	1.639066	10.310	1.380142	0.658	115.6007	0.043	473.344	0.008	4.08358 ±0.00392	11.84 ±0.01	99.73	2.75	30.3 ±6.3
20F04516	17.0 %	✓	0.0019684	15.865	1.172588	13.395	1.010063	0.879	85.4019	0.044	349.943	0.008	4.09126 ±0.00425	11.86 ±0.01	99.84	2.03	31.3 ±8.4
20F04518	17.0 %	✓	0.0105637	3.404	2.480259	5.827	2.298648	0.392	193.1628	0.042	791.829	0.006	4.08342 ±0.00362	11.84 ±0.01	99.61	4.59	33.5 ±3.9
20F04519	17.0 %		0.7481121	0.235	3.068628	4.857	2.895421	0.333	228.8089	0.041	1163.679	0.005	4.11015 ±0.00609	11.91 ±0.02	80.82	5.44	32.1 ±3.1
20F04521	17.0 %	✓	0.0125820	2.855	1.880404	7.483	1.352005	0.726	111.9733	0.043	460.641	0.007	4.08109 ±0.00403	11.83 ±0.01	99.20	2.66	25.6 ±3.8
20F04522	17.0 %	✓	0.0018376	18.689	1.511791	9.180	1.218597	0.765	102.6971	0.043	420.588	0.008	4.09069 ±0.00412	11.86 ±0.01	99.88	2.44	29.2 ±5.4
20F04524	17.0 %	✓	0.0113811	3.326	1.918264	7.992	1.654049	0.584	136.0851	0.042	558.872	0.006	4.08239 ±0.00386	11.83 ±0.01	99.41	3.24	30.5 ±4.9
20F04525	17.0 %	✓	0.0011195	26.727	1.127067	14.165	0.813135	1.093	66.9139	0.045	273.609	0.011	4.08479 ±0.00466	11.84 ±0.01	99.90	1.59	25.5 ±7.2
		Σ	1.3501494	0.201	60.971353	1.375	50.579658	0.102	4206.3027	0.008	17594.125	0.001					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-045**
Material = **Sanidine**
Location = **Iron Point**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C36-19)**
Position = **X: 0 | Y: 0 | Z/H: 44.78697 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.77337 ± 0.02365**
FCT-NM J-value = **0.00158855 ± 0.00000384**
Air Shot 40Ar/36Ar = **299.1950 ± 0.3740**
Air Shot MDF = **0.99946872 ± 0.00040618 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau		4.08604 ±0.00110	**11.84 ±0.06**	2.19	94.15	29.1 ±0.9
Error Mean		±0.03%	**±0.48%**	0%	28	
		Full External Error	±0.62	1.54	2σ Confidence Limit	
		Analytical Error	±0.00	1.4802	Error Magnification	
Total Fusion Age		4.08757 ±0.00080	**11.85 ±0.06**		30	29.7 ±0.8
		±0.02%	**±0.48%**			
		Full External Error	±0.62			
		Analytical Error	±0.00			
Normal Isochron	**297.82 ±5.86**	4.08687 ±0.00138	**11.85 ±0.06**	2.48	94.15	
Error Chron	**±1.97%**	±0.03%	**±0.48%**	0%	28	
		Full External Error	±0.62	1.55	2σ Confidence Limit	
		Analytical Error	±0.00	1.5737	Error Magnification	
				1	Number of Iterations	
				0.0000000084	Convergence	
Inverse Isochron	**300.48 ±5.57**	4.08581 ±0.00131	**11.84 ±0.06**	2.24	94.15	
Error Chron	**±1.85%**	±0.03%	**±0.48%**	0%	28	
		Full External Error	±0.62	1.55	2σ Confidence Limit	
		Analytical Error	±0.00	1.4952	Error Magnification	
				2	Number of Iterations	
				0.0006992924	Convergence	
				6%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F04482	17.0 %	✓	0.0952153	1.525865	0.0000000	114.8793	469.453	11.84 ±0.01	94.28	2.73	32.4 ±6.7
20F04483	17.0 %	✓	0.0027419	1.968544	0.0008832	134.5004	549.242	11.84 ±0.01	99.84	3.20	29.4 ±4.7
20F04485	17.0 %	✓	0.0038368	0.904327	0.0036199	77.2179	315.618	11.85 ±0.01	99.62	1.84	36.7 ±13.0
20F04486	17.0 %	✓	0.0015008	1.986377	0.0000000	135.1330	552.726	11.86 ±0.01	99.90	3.21	29.3 ±4.6
20F04488	17.0 %	✓	0.0752810	2.244290	0.0000000	159.6324	652.357	11.84 ±0.01	96.66	3.80	30.6 ±4.4
20F04489	17.0 %	✓	0.0016671	1.914488	0.0000000	129.7463	529.691	11.83 ±0.01	99.89	3.08	29.1 ±4.7
20F04491	17.0 %	✓	0.0037292	2.445187	0.0000000	144.1158	588.932	11.84 ±0.01	99.80	3.43	25.3 ±3.2
20F04492	17.0 %	✓	0.0073291	3.465628	0.0000000	224.9427	918.960	11.84 ±0.01	99.75	5.35	27.9 ±2.4
20F04494	17.0 %	✓	0.0266470	3.373769	0.0000000	216.8917	886.448	11.85 ±0.01	99.10	5.16	27.6 ±2.6
20F04495	17.0 %	✓	0.1185785	4.341814	0.0000000	311.9314	1275.738	11.85 ±0.01	97.29	7.42	30.9 ±2.1
20F04497	17.0 %	✓	0.0069467	1.331611	0.0000000	79.1976	323.826	11.85 ±0.01	99.35	1.88	25.6 ±6.3
20F04498	17.0 %	✓	0.0062500	1.616149	0.0000000	97.6100	398.765	11.84 ±0.01	99.52	2.32	26.0 ±5.2
20F04500	17.0 %	✓	0.0072052	1.093585	0.0000000	81.5278	333.504	11.86 ±0.01	99.34	1.94	32.1 ±8.6
20F04501	17.0 %	✓	0.0010562	2.248050	0.0000000	164.9034	673.551	11.84 ±0.01	99.94	3.92	31.5 ±4.4
20F04503	17.0 %	✓	0.0088751	2.048896	0.0000000	142.7024	583.180	11.85 ±0.01	99.53	3.39	29.9 ±4.1
20F04504	17.0 %	✓	0.0400795	2.984992	0.0000000	207.1381	846.998	11.85 ±0.01	98.59	4.92	29.8 ±2.9
20F04506	17.0 %	✓	0.0004636	1.671486	0.0000000	135.0810	552.115	11.85 ±0.01	99.96	3.21	34.8 ±6.1
20F04507	17.0 %	✓	0.1103809	1.956345	0.0000000	137.7146	562.637	11.84 ±0.01	94.45	3.27	30.3 ±4.7
20F04509	17.0 %	✓	0.0083699	2.961277	0.0000000	201.4901	823.038	11.84 ±0.01	99.68	4.79	29.3 ±3.0
20F04510	17.0 %	✓	0.0045326	2.530886	0.0000000	157.8564	644.175	11.83 ±0.01	99.78	3.75	26.8 ±3.1
20F04512	17.0 %	✓	0.0149566	1.255845	0.0000000	93.9724	383.954	11.84 ±0.01	98.84	2.23	32.2 ±8.0
20F04513	17.0 %		0.0000440	0.303875	0.0000000	17.4444	71.895	11.95 ±0.04	100.00	0.41	24.7 ±23.2
20F04515	17.0 %	✓	0.0040612	1.639066	0.0000000	115.5997	472.061	11.84 ±0.01	99.73	2.75	30.3 ±6.3
20F04516	17.0 %	✓	0.0016515	1.172588	0.0000000	85.4011	349.398	11.86 ±0.01	99.84	2.03	31.3 ±8.4
20F04518	17.0 %	✓	0.0098933	2.480259	0.0000000	193.1612	788.758	11.84 ±0.01	99.61	4.59	33.5 ±3.9
20F04519	17.0 %		0.7472827	3.068628	0.0000000	228.8069	940.431	11.91 ±0.02	80.82	5.44	32.1 ±3.1
20F04521	17.0 %	✓	0.0120738	1.880404	0.0000000	111.9721	456.969	11.83 ±0.01	99.20	2.66	25.6 ±3.8
20F04522	17.0 %	✓	0.0014289	1.511791	0.0000000	102.6962	420.099	11.86 ±0.01	99.88	2.44	29.2 ±5.4
20F04524	17.0 %	✓	0.0108607	1.918264	0.0081714	136.0839	555.547	11.83 ±0.01	99.41	3.24	30.5 ±4.9
20F04525	17.0 %	✓	0.0008137	1.127067	0.0046692	66.9131	273.326	11.84 ±0.01	99.90	1.59	25.5 ±7.2
		Σ	1.3336646	60.971353	0.0173438	4206.2635	17193.393				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-045**
Material = **Sanidine**
Location = **Iron Point**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C36-19)**
J = **0.00158855 ± 0.00000384**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	4.08604	±0.00110	**11.84**	**±0.06**	2.19	94.15	29.1 ±0.9
Error Mean		±0.03%		**±0.48%**	0%	28	
			Full External Error	±0.62	1.54	2σ Confidence Limit	
			Analytical Error	±0.00	1.4802	Error Magnification	
Total Fusion Age	4.08757	±0.00080	**11.85**	**±0.06**		30	29.7 ±0.8
		±0.02%		**±0.48%**			
			Full External Error	±0.62			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F04482	17.0 %	✓	1206.52	±14.52	5229.00	±62.77	0.9974
20F04483	17.0 %	✓	49054.23	±11550.67	200615.15	±47238.03	1.0000
20F04485	17.0 %	✓	20125.79	±3074.23	82560.18	±12610.94	1.0000
20F04486	17.0 %	✓	90043.45	±35445.26	368597.46	±145096.65	1.0000
20F04488	17.0 %	✓	2120.49	±32.04	8964.18	±135.25	0.9984
20F04489	17.0 %	✓	77825.66	±30347.21	318022.75	±124008.98	1.0000
20F04491	17.0 %	✓	38645.14	±7010.16	158222.69	±28700.99	1.0000
20F04492	17.0 %	✓	30691.60	±3126.92	125683.18	±12804.43	1.0000
20F04494	17.0 %	✓	8139.45	±267.83	33564.95	±1104.10	0.9997
20F04495	17.0 %	✓	2630.59	±28.49	11057.16	±119.39	0.9971
20F04497	17.0 %	✓	11400.82	±1052.13	46914.66	±4329.36	1.0000
20F04498	17.0 %	✓	15617.54	±1696.83	64100.78	±6964.26	1.0000
20F04500	17.0 %	✓	11315.21	±1046.14	46585.39	±4306.82	1.0000
20F04501	17.0 %	✓	156132.05	±97203.97	638022.65	±397216.86	1.0000
20F04503	17.0 %	✓	16078.89	±1319.85	66007.96	±5418.06	0.9999
20F04504	17.0 %	✓	5168.18	±115.37	21431.50	±478.11	0.9993
20F04506	17.0 %	✓	291394.84	±408508.31	1191312.23	±1670108.00	1.0000
20F04507	17.0 %	✓	1247.63	±12.59	5395.79	±54.28	0.9964
20F04509	17.0 %	✓	24073.30	±2056.67	98632.16	±8426.13	1.0000
20F04510	17.0 %	✓	34826.70	±5061.71	142418.15	±20698.69	1.0000
20F04512	17.0 %	✓	6282.99	±309.82	25969.70	±1280.41	0.9998
20F04513	17.0 %		396177.00	±5394994.70	1632485.53	±22230595.60	1.0000
20F04515	17.0 %	✓	28464.57	±4394.75	116536.02	±17992.16	1.0000
20F04516	17.0 %	✓	51712.33	±19737.27	211866.91	±80863.95	1.0000
20F04518	17.0 %	✓	19524.42	±1427.74	80024.97	±5851.53	0.9999
20F04519	17.0 %		306.19	±1.47	1557.03	±7.34	0.9847
20F04521	17.0 %	✓	9274.01	±554.96	38146.64	±2282.50	0.9999
20F04522	17.0 %	✓	71869.71	±34751.79	294295.58	±142303.12	1.0000
20F04524	17.0 %	✓	12529.97	±878.64	51450.73	±3607.63	0.9999
20F04525	17.0 %	✓	82228.88	±61098.07	336186.04	±249794.29	1.0000

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**297.82**	**±5.86**	4.08687	±0.00138	**11.85**	**±0.06**	2.48
Error Chron		**±1.97%**		±0.03%		**±0.48%**	0%
					Full External Error	±0.62	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.000000008387
	Error Magnification	1.5737	Number of Iterations	1
	Number of Data Points	28	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F04482	17.0 %	✓	0.2307366	±0.0001995	0.00019124	±0.00000230	0.0025
20F04483	17.0 %	✓	0.2445191	±0.0002090	0.00000498	±0.00000117	0.0001
20F04485	17.0 %	✓	0.2437711	±0.0002213	0.00001211	±0.00000185	0.0003
20F04486	17.0 %	✓	0.2442867	±0.0002083	0.00000271	±0.00000107	0.0001
20F04488	17.0 %	✓	0.2365510	±0.0002000	0.00011156	±0.00000168	0.0010
20F04489	17.0 %	✓	0.2447173	±0.0002099	0.00000314	±0.00000123	0.0001
20F04491	17.0 %	✓	0.2442453	±0.0002097	0.00000632	±0.00000115	0.0001
20F04492	17.0 %	✓	0.2441982	±0.0002047	0.00000796	±0.00000081	0.0001
20F04494	17.0 %	✓	0.2424986	±0.0002030	0.00002979	±0.00000098	0.0004
20F04495	17.0 %	✓	0.2379084	±0.0001970	0.00009044	±0.00000098	0.0009
20F04497	17.0 %	✓	0.2430119	±0.0002195	0.00002132	±0.00000197	0.0004
20F04498	17.0 %	✓	0.2436405	±0.0002146	0.00001560	±0.00000169	0.0003
20F04500	17.0 %	✓	0.2428919	±0.0002171	0.00002147	±0.00000198	0.0005
20F04501	17.0 %	✓	0.2447124	±0.0002071	0.00000157	±0.00000098	0.0000
20F04503	17.0 %	✓	0.2435901	±0.0002086	0.00001515	±0.00000124	0.0003
20F04504	17.0 %	✓	0.2411487	±0.0002017	0.00004666	±0.00000104	0.0006
20F04506	17.0 %	✓	0.2445999	±0.0002100	0.00000084	±0.00000118	0.0000
20F04507	17.0 %	✓	0.2312230	±0.0001991	0.00018533	±0.00000186	0.0018
20F04509	17.0 %	✓	0.2440715	±0.0002060	0.00001014	±0.00000087	0.0002
20F04510	17.0 %	✓	0.2445384	±0.0002084	0.00000702	±0.00000102	0.0001
20F04512	17.0 %	✓	0.2419354	±0.0002162	0.00003851	±0.00000190	0.0007
20F04513	17.0 %		0.2426833	±0.0003810	0.00000061	±0.00000834	0.0000
20F04515	17.0 %	✓	0.2442556	±0.0002134	0.00000858	±0.00000132	0.0002
20F04516	17.0 %	✓	0.2440793	±0.0002171	0.00000472	±0.00000180	0.0001
20F04518	17.0 %	✓	0.2439791	±0.0002057	0.00001250	±0.00000091	0.0002
20F04519	17.0 %		0.1966472	±0.0001641	0.00064225	±0.00000303	0.0022
20F04521	17.0 %	✓	0.2431146	±0.0002105	0.00002621	±0.00000157	0.0004
20F04522	17.0 %	✓	0.2442093	±0.0002150	0.00000340	±0.00000164	0.0001
20F04524	17.0 %	✓	0.2435334	±0.0002074	0.00001944	±0.00000136	0.0003
20F04525	17.0 %	✓	0.2445934	±0.0002273	0.00000297	±0.00000221	0.0001

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**300.48**	**±5.57**	4.08581	±0.00131	**11.84**	**±0.06**	2.24
Error Chron		**±1.85%**		±0.03%		**±0.48%**	0%
					Full External Error	±0.62	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.0006992924
	Error Magnification	1.4952	Number of Iterations	2
	Number of Data Points	28	Calculated Line	Weighted York-2
	Spreading Factor	5.7%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F04482	17.0 %	✓	0.0952153	0.60	0.0000000	0.00	0.0004124	10.40	0.0000000	0.00	1.525865	10.40	0.0179481	0.62	0.0000000	0.00	1.387397	0.10	0.0002747	14.17	0.0000000	0.00	114.8793	0.04	0.0009804	10.44
20F04483	17.0 %	✓	0.0027419	11.77	0.0000000	0.00	0.0005321	7.92	0.0000002	#######	1.968544	7.92	0.0005168	11.77	0.0000000	0.00	1.624361	0.10	0.0003543	12.47	0.0008832	#######	134.5004	0.04	0.0012648	7.97
20F04485	17.0 %	✓	0.0038368	7.64	0.0000000	0.00	0.0002444	17.76	0.0000009	255.18	0.904327	17.76	0.0007232	7.64	0.0000000	0.00	0.932560	0.10	0.0001628	20.20	0.0036199	255.18	77.2179	0.04	0.0005810	17.79
20F04486	17.0 %	✓	0.0015008	19.68	0.0000000	0.00	0.0005369	7.84	0.0000000	0.00	1.986377	7.83	0.0002829	19.68	0.0000000	0.00	1.632001	0.10	0.0003575	12.41	0.0000000	0.00	135.1330	0.04	0.0012762	7.89
20F04488	17.0 %	✓	0.0752810	0.75	0.0000000	0.00	0.0006066	7.26	0.0000000	0.00	2.244290	7.25	0.0141905	0.77	0.0000000	0.00	1.927880	0.10	0.0004040	12.06	0.0000000	0.00	159.6324	0.04	0.0014420	7.31
20F04489	17.0 %	✓	0.0016671	19.50	0.0000000	0.00	0.0005175	8.08	0.0000000	0.00	1.914488	8.08	0.0003143	19.50	0.0000000	0.00	1.566946	0.10	0.0003446	12.57	0.0000000	0.00	129.7463	0.04	0.0012301	8.13
20F04491	17.0 %	✓	0.0037292	9.07	0.0000000	0.00	0.0006609	6.31	0.0000000	0.00	2.445187	6.31	0.0007030	9.07	0.0000000	0.00	1.740487	0.10	0.0004401	11.51	0.0000000	0.00	144.1158	0.04	0.0015710	6.38
20F04492	17.0 %	✓	0.0073291	5.09	0.0000000	0.00	0.0009368	4.37	0.0000000	0.00	3.465628	4.37	0.0013815	5.10	0.0000000	0.00	2.716633	0.10	0.0006238	10.57	0.0000000	0.00	224.9427	0.04	0.0022267	4.46
20F04494	17.0 %	✓	0.0266470	1.64	0.0000000	0.00	0.0009119	4.66	0.0000000	0.00	3.373769	4.66	0.0050230	1.65	0.0000000	0.00	2.619401	0.10	0.0006073	10.70	0.0000000	0.00	216.8917	0.04	0.0021676	4.75
20F04495	17.0 %	✓	0.1185785	0.54	0.0000000	0.00	0.0011736	3.39	0.0000000	0.00	4.341814	3.39	0.0223520	0.56	0.0000000	0.00	3.767196	0.10	0.0007815	10.21	0.0000000	0.00	311.9314	0.04	0.0027896	3.51
20F04497	17.0 %	✓	0.0069467	4.61	0.0000000	0.00	0.0003599	12.32	0.0000000	0.00	1.331611	12.32	0.0013094	4.62	0.0000000	0.00	0.956470	0.10	0.0002397	15.64	0.0000000	0.00	79.1976	0.04	0.0008556	12.36
20F04498	17.0 %	✓	0.0062500	5.43	0.0000000	0.00	0.0004368	10.03	0.0000000	0.00	1.616149	10.03	0.0011781	5.43	0.0000000	0.00	1.178837	0.10	0.0002909	13.91	0.0000000	0.00	97.6100	0.04	0.0010384	10.08
20F04500	17.0 %	✓	0.0072052	4.62	0.0000000	0.00	0.0002956	13.40	0.0000000	0.00	1.093585	13.40	0.0013582	4.63	0.0000000	0.00	0.984611	0.10	0.0001968	16.50	0.0000000	0.00	81.5278	0.04	0.0007026	13.43
20F04501	17.0 %	✓	0.0010562	31.13	0.0000000	0.00	0.0006076	6.95	0.0000000	0.00	2.248050	6.94	0.0001991	31.13	0.0000000	0.00	1.991539	0.10	0.0004046	11.87	0.0000000	0.00	164.9034	0.04	0.0014444	7.00
20F04503	17.0 %	✓	0.0088751	4.10	0.0000000	0.00	0.0005538	6.92	0.0000000	0.00	2.048896	6.92	0.0016730	4.11	0.0000000	0.00	1.723417	0.10	0.0003688	11.86	0.0000000	0.00	142.7024	0.04	0.0013164	6.98
20F04504	17.0 %	✓	0.0400795	1.12	0.0000000	0.00	0.0008068	4.86	0.0000000	0.00	2.984992	4.86	0.0075550	1.13	0.0000000	0.00	2.501607	0.10	0.0005373	10.79	0.0000000	0.00	207.1381	0.04	0.0019179	4.94
20F04506	17.0 %	✓	0.0004636	70.10	0.0000000	0.00	0.0004518	8.76	0.0000000	0.00	1.671486	8.76	0.0000874	70.10	0.0000000	0.00	1.631374	0.10	0.0003009	13.02	0.0000000	0.00	135.0810	0.04	0.0010739	8.81
20F04507	17.0 %	✓	0.1103809	0.50	0.0000000	0.00	0.0005288	7.76	0.0000000	0.00	1.956345	7.75	0.0208068	0.53	0.0000000	0.00	1.663179	0.10	0.0003521	12.36	0.0000000	0.00	137.7146	0.04	0.0012570	7.81
20F04509	17.0 %	✓	0.0083699	4.27	0.0000000	0.00	0.0008004	5.19	0.0000000	0.00	2.961277	5.18	0.0015777	4.27	0.0000000	0.00	2.433395	0.10	0.0005330	10.94	0.0000000	0.00	201.4901	0.04	0.0019026	5.26
20F04510	17.0 %	✓	0.0045326	7.27	0.0000000	0.00	0.0006841	5.87	0.0000000	0.00	2.530886	5.87	0.0008544	7.27	0.0000000	0.00	1.906432	0.10	0.0004556	11.28	0.0000000	0.00	157.8564	0.04	0.0016261	5.94
20F04512	17.0 %	✓	0.0149566	2.47	0.0000000	0.00	0.0003395	12.51	0.0000000	0.00	1.255845	12.51	0.0028193	2.47	0.0000000	0.00	1.134905	0.10	0.0002261	15.79	0.0000000	0.00	93.9724	0.04	0.0008069	12.54
20F04513	17.0 %		0.0000440	680.88	0.0000000	0.00	0.0000821	47.02	0.0000000	0.00	0.303875	47.02	0.0000083	680.88	0.0000000	0.00	0.210676	0.11	0.0000547	47.99	0.0000000	0.00	17.4444	0.07	0.0001952	47.03
20F04515	17.0 %	✓	0.0040612	7.72	0.0000000	0.00	0.0004430	10.31	0.0000000	0.00	1.639066	10.31	0.0007655	7.72	0.0000000	0.00	1.396097	0.10	0.0002950	14.11	0.0000000	0.00	115.5997	0.04	0.0010531	10.35
20F04516	17.0 %	✓	0.0016515	19.08	0.0000000	0.00	0.0003170	13.40	0.0000000	0.00	1.172588	13.40	0.0003113	19.08	0.0000000	0.00	1.031389	0.10	0.0002111	16.50	0.0000000	0.00	85.4011	0.04	0.0007534	13.43
20F04518	17.0 %	✓	0.0098933	3.66	0.0000000	0.00	0.0006704	5.83	0.0000000	0.00	2.480259	5.83	0.0018649	3.66	0.0000000	0.00	2.332808	0.10	0.0004464	11.26	0.0000000	0.00	193.1612	0.04	0.0015936	5.90
20F04519	17.0 %		0.7472827	0.24	0.0000000	0.00	0.0008295	4.86	0.0000000	0.00	3.068628	4.86	0.1408628	0.28	0.0000000	0.00	2.763301	0.10	0.0005524	10.79	0.0000000	0.00	228.8069	0.04	0.0019716	4.94
20F04521	17.0 %	✓	0.0120738	2.99	0.0000000	0.00	0.0005083	7.48	0.0000000	0.00	1.880404	7.48	0.0022759	3.00	0.0000000	0.00	1.352287	0.10	0.0003385	12.20	0.0000000	0.00	111.9721	0.04	0.0012082	7.54
20F04522	17.0 %	✓	0.0014289	24.18	0.0000000	0.00	0.0004086	9.18	0.0000000	0.00	1.511791	9.18	0.0002694	24.18	0.0000000	0.00	1.240262	0.10	0.0002721	13.30	0.0000000	0.00	102.6962	0.04	0.0009713	9.23
20F04524	17.0 %	✓	0.0108607	3.51	0.0000000	0.00	0.0005185	7.99	0.0000020	128.16	1.918264	7.99	0.0020472	3.51	0.0000000	0.00	1.643485	0.10	0.0003453	12.51	0.0081714	128.16	136.0839	0.04	0.0012325	8.04
20F04525	17.0 %	✓	0.0008137	37.15	0.0000000	0.00	0.0003046	14.17	0.0000011	195.18	1.127067	14.16	0.0001534	37.15	0.0000000	0.00	0.808110	0.10	0.0002029	17.13	0.0046692	195.18	66.9131	0.05	0.0007241	14.19
		Σ	1.3336646	0.20	0.0000000	0.00	0.0164806	1.38	0.0000042	111.19	60.971353	1.37	0.2513958	0.22	0.0000000	0.00	50.799045	0.02	0.0109748	2.35	0.0173438	111.24	4206.2635	0.01	0.0391741	1.39
		Σ							1.3501494	0.20	60.971353	1.37									51.078759	0.04			4206.3027	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
469.453	0.04	28.42748	0.61	0.0000000	0.00	0.0697317	9.65
549.242	0.02	0.81861	11.77	0.0000000	0.00	0.0816417	9.65
315.618	0.03	1.14550	7.64	0.0000000	0.00	0.0468713	9.65
552.726	0.02	0.44806	19.68	0.0000000	0.00	0.0820257	9.65
652.357	0.03	22.47590	0.76	0.0000000	0.00	0.0968969	9.65
529.691	0.02	0.49774	19.50	0.0000000	0.00	0.0787560	9.65
588.932	0.02	1.11339	9.07	0.0000000	0.00	0.0874783	9.65
918.960	0.01	2.18818	5.09	0.0000000	0.00	0.1365402	9.65
886.448	0.02	7.95572	1.65	0.0000000	0.00	0.1316533	9.65
1275.738	0.02	35.40279	0.55	0.0000000	0.00	0.1893424	9.65
323.826	0.03	2.07399	4.62	0.0000000	0.00	0.0480730	9.65
398.765	0.03	1.86601	5.43	0.0000000	0.00	0.0592493	9.65
333.504	0.03	2.15117	4.62	0.0000000	0.00	0.0494874	9.65
673.551	0.02	0.31533	31.13	0.0000000	0.00	0.1000964	9.65
583.180	0.02	2.64976	4.11	0.0000000	0.00	0.0866203	9.65
846.998	0.02	11.96614	1.12	0.0000000	0.00	0.1257328	9.65
552.115	0.02	0.13840	70.10	0.0000000	0.00	0.0819942	9.65
562.637	0.03	32.95533	0.51	0.0000000	0.00	0.0835928	9.65
823.038	0.01	2.49890	4.27	0.0000000	0.00	0.1223045	9.65
644.175	0.02	1.35326	7.27	0.0000000	0.00	0.0958188	9.65
383.954	0.03	4.46546	2.47	0.0000000	0.00	0.0570413	9.65
71.895	0.13	0.01315	680.88	0.0000000	0.00	0.0105888	9.65
472.061	0.02	1.21250	7.72	0.0000000	0.00	0.0701690	9.65
349.398	0.03	0.49306	19.08	0.0000000	0.00	0.0518385	9.65
788.758	0.01	2.95375	3.66	0.0000000	0.00	0.1172489	9.65
940.431	0.06	223.10872	0.26	0.0000000	0.00	0.1388858	9.65
456.969	0.02	3.60474	2.99	0.0000000	0.00	0.0679671	9.65
420.099	0.03	0.42662	24.18	0.0000000	0.00	0.0623366	9.65
555.547	0.02	3.24256	3.51	0.0000000	0.00	0.0826029	9.65
273.326	0.03	0.24295	37.15	0.0000000	0.00	0.0406163	9.65
17193.393	0.01	398.17892	0.21	0.0000000	0.00	2.5532020	1.91
						17594.125	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F04482	17.0 %	✓	4.334517	0.001873	0.013282	0.001381	0.000832	0.000005	148.206	18.724594	1.00104717	1.763E-11
20F04483	17.0 %	✓	4.090229	0.001747	0.014636	0.001159	0.000024	0.000002	148.213	18.726905	1.00104722	1.948E-11
20F04485	17.0 %	✓	4.102785	0.001861	0.011711	0.002080	0.000053	0.000004	148.224	18.731273	1.00104730	1.122E-11
20F04486	17.0 %	✓	4.094119	0.001745	0.014699	0.001152	0.000015	0.000002	148.230	18.733328	1.00104734	1.959E-11
20F04488	17.0 %	✓	4.227987	0.001786	0.014059	0.001020	0.000475	0.000004	148.242	18.737954	1.00104743	2.389E-11
20F04489	17.0 %	✓	4.086916	0.001752	0.014755	0.001192	0.000017	0.000002	148.248	18.740010	1.00104747	1.877E-11
20F04491	17.0 %	✓	4.094808	0.001757	0.016967	0.001071	0.000030	0.000002	148.260	18.744381	1.00104755	2.089E-11
20F04492	17.0 %	✓	4.095601	0.001716	0.015407	0.000673	0.000037	0.000002	148.266	18.746695	1.00104760	3.261E-11
20F04494	17.0 %	✓	4.124301	0.001725	0.015555	0.000725	0.000127	0.000002	148.278	18.751067	1.00104768	3.167E-11
20F04495	17.0 %	✓	4.203868	0.001739	0.013919	0.000472	0.000384	0.000002	148.283	18.753125	1.00104772	4.642E-11
20F04497	17.0 %	✓	4.115588	0.001858	0.016814	0.002072	0.000092	0.000004	148.296	18.757755	1.00104781	1.154E-11
20F04498	17.0 %	✓	4.104972	0.001807	0.016557	0.001661	0.000069	0.000003	148.301	18.759814	1.00104785	1.418E-11
20F04500	17.0 %	✓	4.117630	0.001839	0.013414	0.001797	0.000092	0.000004	148.313	18.764189	1.00104793	1.188E-11
20F04501	17.0 %	✓	4.087001	0.001728	0.013632	0.000947	0.000010	0.000002	148.319	18.766505	1.00104797	2.386E-11
20F04503	17.0 %	✓	4.105826	0.001757	0.014358	0.000993	0.000066	0.000003	148.331	18.770882	1.00104806	2.074E-11
20F04504	17.0 %	✓	4.147388	0.001734	0.014411	0.000700	0.000197	0.000002	148.338	18.773199	1.00104810	3.041E-11
20F04506	17.0 %	✓	4.088884	0.001754	0.012374	0.001084	0.000007	0.000002	148.349	18.777577	1.00104818	1.955E-11
20F04507	17.0 %	✓	4.325396	0.001861	0.014206	0.001102	0.000805	0.000004	148.355	18.779638	1.00104822	2.109E-11
20F04509	17.0 %	✓	4.097728	0.001728	0.014697	0.000762	0.000046	0.000002	148.367	18.784018	1.00104831	2.923E-11
20F04510	17.0 %	✓	4.089902	0.001742	0.016033	0.000941	0.000033	0.000002	148.373	18.786337	1.00104835	2.286E-11
20F04512	17.0 %	✓	4.133907	0.001847	0.013364	0.001672	0.000163	0.000004	148.385	18.790718	1.00104843	1.375E-11
20F04513	17.0 %		4.121157	0.003234	0.017419	0.008190	0.000002	0.000017	148.391	18.793038	1.00104848	2.545E-12
20F04515	17.0 %	✓	4.094642	0.001788	0.014179	0.001462	0.000039	0.000003	148.403	18.797420	1.00104856	1.676E-11
20F04516	17.0 %	✓	4.097600	0.001822	0.013730	0.001839	0.000023	0.000004	148.408	18.799483	1.00104860	1.239E-11
20F04518	17.0 %	✓	4.099284	0.001727	0.012840	0.000748	0.000055	0.000002	148.420	18.803868	1.00104868	2.803E-11
20F04519	17.0 %		5.085813	0.002122	0.013411	0.000651	0.003270	0.000008	148.426	18.806189	1.00104873	4.119E-11
20F04521	17.0 %	✓	4.113849	0.001780	0.016793	0.001257	0.000112	0.000003	148.438	18.810575	1.00104881	1.631E-11
20F04522	17.0 %	✓	4.095417	0.001802	0.014721	0.001351	0.000018	0.000003	148.444	18.812897	1.00104886	1.489E-11
20F04524	17.0 %	✓	4.106783	0.001748	0.014096	0.001127	0.000084	0.000003	148.456	18.817284	1.00104894	1.978E-11
20F04525	17.0 %	✓	4.088981	0.001899	0.016844	0.002386	0.000017	0.000004	148.462	18.819349	1.00104898	9.686E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F04482	17.0 %	0.0085016 ±0.0002023	0.0154307 ±0.0056048	0.0403541 ±0.0063134	0.0368303 ±0.0064913	1.8828286 ±0.0167112
20F04483	17.0 %	0.0085016 ±0.0002023	0.0154307 ±0.0056048	0.0403541 ±0.0063134	0.0368303 ±0.0064913	1.8828286 ±0.0167112
20F04485	17.0 %	0.0083274 ±0.0001881	0.0189372 ±0.0058064	0.0229525 ±0.0062710	0.0241591 ±0.0062483	1.7029834 ±0.0147727
20F04486	17.0 %	0.0083274 ±0.0001881	0.0189372 ±0.0058064	0.0229525 ±0.0062710	0.0241591 ±0.0062483	1.7029834 ±0.0147727
20F04488	17.0 %	0.0077547 ±0.0002030	0.0232046 ±0.0059552	0.0268381 ±0.0066595	0.0412310 ±0.0066753	1.7142423 ±0.0153272
20F04489	17.0 %	0.0077547 ±0.0002030	0.0232046 ±0.0059552	0.0268381 ±0.0066595	0.0412310 ±0.0066753	1.7142423 ±0.0153272
20F04491	17.0 %	0.0078394 ±0.0001982	0.0304056 ±0.0054485	0.0213575 ±0.0067757	0.0257111 ±0.0069047	1.6905907 ±0.0161828
20F04492	17.0 %	0.0078394 ±0.0001982	0.0304056 ±0.0054485	0.0213575 ±0.0067757	0.0257111 ±0.0069047	1.6905907 ±0.0161828
20F04494	17.0 %	0.0080653 ±0.0002074	0.0220934 ±0.0054640	0.0235441 ±0.0070310	0.0324036 ±0.0061288	1.7203603 ±0.0148430
20F04495	17.0 %	0.0080653 ±0.0002074	0.0220934 ±0.0054640	0.0235441 ±0.0070310	0.0324036 ±0.0061288	1.7203603 ±0.0148430
20F04497	17.0 %	0.0079929 ±0.0001956	0.0252054 ±0.0065781	0.0268394 ±0.0065046	0.0392143 ±0.0068244	1.7193953 ±0.0120479
20F04498	17.0 %	0.0079929 ±0.0001956	0.0252054 ±0.0065781	0.0268394 ±0.0065046	0.0392143 ±0.0068244	1.7193953 ±0.0120479
20F04500	17.0 %	0.0079915 ±0.0002156	0.0138073 ±0.0053243	0.0258571 ±0.0061989	0.0317705 ±0.0054618	1.7205272 ±0.0145351
20F04501	17.0 %	0.0079915 ±0.0002156	0.0138073 ±0.0053243	0.0258571 ±0.0061989	0.0317705 ±0.0054618	1.7205272 ±0.0145351
20F04503	17.0 %	0.0092291 ±0.0001958	0.0260762 ±0.0049413	0.0310967 ±0.0069209	0.0220995 ±0.0063188	1.9636181 ±0.0156632
20F04504	17.0 %	0.0092291 ±0.0001958	0.0260762 ±0.0049413	0.0310967 ±0.0069209	0.0220995 ±0.0063188	1.9636181 ±0.0156632
20F04506	17.0 %	0.0085028 ±0.0002117	0.0151678 ±0.0055751	0.0346209 ±0.0064369	0.0340894 ±0.0060917	1.8393669 ±0.0150068
20F04507	17.0 %	0.0085028 ±0.0002117	0.0151678 ±0.0055751	0.0346209 ±0.0064369	0.0340894 ±0.0060917	1.8393669 ±0.0150068
20F04509	17.0 %	0.0078394 ±0.0001982	0.0304056 ±0.0054485	0.0213575 ±0.0067757	0.0257111 ±0.0069047	1.6905907 ±0.0161828
20F04510	17.0 %	0.0078394 ±0.0001982	0.0304056 ±0.0054485	0.0213575 ±0.0067757	0.0257111 ±0.0069047	1.6905907 ±0.0161828
20F04512	17.0 %	0.0080653 ±0.0002074	0.0220934 ±0.0054640	0.0235441 ±0.0070310	0.0324036 ±0.0061288	1.7203603 ±0.0148430
20F04513	17.0 %	0.0080653 ±0.0002074	0.0220934 ±0.0054640	0.0235441 ±0.0070310	0.0324036 ±0.0061288	1.7203603 ±0.0148430
20F04515	17.0 %	0.0079929 ±0.0001956	0.0252054 ±0.0065781	0.0268394 ±0.0065046	0.0392143 ±0.0068244	1.7193953 ±0.0120479
20F04516	17.0 %	0.0079929 ±0.0001956	0.0252054 ±0.0065781	0.0268394 ±0.0065046	0.0392143 ±0.0068244	1.7193953 ±0.0120479
20F04518	17.0 %	0.0079915 ±0.0002156	0.0138073 ±0.0053243	0.0258571 ±0.0061989	0.0317705 ±0.0054618	1.7205272 ±0.0145351
20F04519	17.0 %	0.0079915 ±0.0002156	0.0138073 ±0.0053243	0.0258571 ±0.0061989	0.0317705 ±0.0054618	1.7205272 ±0.0145351
20F04521	17.0 %	0.0092291 ±0.0001958	0.0260762 ±0.0049413	0.0310967 ±0.0069209	0.0220995 ±0.0063188	1.9636181 ±0.0156632
20F04522	17.0 %	0.0092291 ±0.0001958	0.0260762 ±0.0049413	0.0310967 ±0.0069209	0.0220995 ±0.0063188	1.9636181 ±0.0156632
20F04524	17.0 %	0.0085028 ±0.0002117	0.0151678 ±0.0055751	0.0346209 ±0.0064369	0.0340894 ±0.0060917	1.8393669 ±0.0150068
20F04525	17.0 %	0.0085028 ±0.0002117	0.0151678 ±0.0055751	0.0346209 ±0.0064369	0.0340894 ±0.0060917	1.8393669 ±0.0150068

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F04482	17.0 %	0.1032805 ±0.0005042	0.3097	EXP 150 of 150	0.0659295 ±0.0063272	0.0268	EXP 150 of 150	1.3598248 ±0.0063631	0.8292	EXP 150 of 150	114.662425 ±0.012913	0.9999	EXP 150 of 150	499.83337 ±0.03552
20F04483	17.0 %	0.0117467 ±0.0002442	0.9729	EXP 147 of 150	0.0895205 ±0.0061227	0.0621	EXP 150 of 150	1.5840341 ±0.0060322	0.8812	EXP 150 of 150	134.252879 ±0.014475	0.9999	EXP 148 of 150	552.02540 ±0.03043
20F04485	17.0 %	0.0123732 ±0.0002170	0.9658	EXP 149 of 150	0.0292649 ±0.0062883	0.0039	EXP 150 of 150	0.9131184 ±0.0063204	0.7241	EXP 150 of 150	77.072624 ±0.011774	0.9998	EXP 149 of 150	318.51380 ±0.03042
20F04486	17.0 %	0.0103470 ±0.0002204	0.9808	EXP 148 of 150	0.0869285 ±0.0059052	0.0443	EXP 150 of 150	1.5876719 ±0.0067036	0.8499	EXP 150 of 150	134.897132 ±0.014084	0.9999	EXP 149 of 150	554.95876 ±0.03167
20F04488	17.0 %	0.0829688 ±0.0005087	0.7801	EXP 150 of 150	0.0963771 ±0.0062851	0.0162	EXP 149 of 150	1.8790649 ±0.0064376	0.8957	EXP 150 of 150	159.340997 ±0.015290	0.9999	EXP 150 of 150	676.64402 ±0.03366
20F04489	17.0 %	0.0099200 ±0.0002467	0.9743	EXP 149 of 150	0.0787932 ±0.0056787	0.0277	EXP 148 of 150	1.5183009 ±0.0070568	0.8325	EXP 150 of 150	129.501842 ±0.014486	0.9999	EXP 150 of 150	531.98167 ±0.03008
20F04491	17.0 %	0.0121905 ±0.0002671	0.9709	EXP 150 of 150	0.0998359 ±0.0061254	0.0353	EXP 150 of 150	1.6868897 ±0.0068856	0.8587	EXP 149 of 150	143.864524 ±0.016283	0.9999	EXP 150 of 150	591.82355 ±0.03537
20F04492	17.0 %	0.0160319 ±0.0003095	0.9779	EXP 150 of 150	0.1541663 ±0.0058845	0.1186	EXP 150 of 150	2.6561063 ±0.0064460	0.9474	EXP 147 of 150	224.564664 ±0.019196	0.9999	EXP 150 of 150	922.97536 ±0.04527
20F04494	17.0 %	0.0353795 ±0.0003767	0.9529	EXP 150 of 150	0.1575444 ±0.0062961	0.0784	EXP 150 of 150	2.5647404 ±0.0071339	0.9290	EXP 147 of 150	216.519598 ±0.018232	0.9999	EXP 150 of 150	896.25611 ±0.04293
20F04495	17.0 %	0.1267544 ±0.0005663	0.8708	EXP 148 of 150	0.2090630 ±0.0055213	0.1503	EXP 150 of 150	3.7440804 ±0.0066776	0.9706	EXP 150 of 150	311.410106 ±0.020794	1.0000	EXP 150 of 150	1313.05067 ±0.05257
20F04497	17.0 %	0.0152346 ±0.0002461	0.9603	EXP 146 of 150	0.0456715 ±0.0057361	0.0102	EXP 150 of 150	0.9139582 ±0.0070458	0.6477	EXP 149 of 150	79.034418 ±0.012093	0.9998	EXP 149 of 150	327.66768 ±0.02739
20F04498	17.0 %	0.0146204 ±0.0002701	0.9613	EXP 150 of 150	0.0608070 ±0.0055731	0.0232	EXP 150 of 150	1.1379967 ±0.0068187	0.7693	EXP 150 of 150	97.417990 ±0.012898	0.9998	EXP 150 of 150	402.41013 ±0.03058
20F04500	17.0 %	0.0154257 ±0.0002466	0.9578	EXP 149 of 150	0.0443804 ±0.0056873	0.0151	EXP 149 of 150	0.9491179 ±0.0072594	0.6446	EXP 150 of 150	81.368212 ±0.011727	0.9998	EXP 147 of 150	337.42477 ±0.02967
20F04501	17.0 %	0.0096406 ±0.0002408	0.9809	EXP 149 of 150	0.1057926 ±0.0063520	0.0344	EXP 150 of 150	1.9446302 ±0.0053621	0.9344	EXP 145 of 150	164.613139 ±0.016045	0.9999	EXP 148 of 150	675.68698 ±0.03806
20F04503	17.0 %	0.0185743 ±0.0003005	0.9634	EXP 150 of 150	0.0829029 ±0.0056718	0.0157	EXP 150 of 150	1.6773046 ±0.0063893	0.8766	EXP 149 of 150	142.456593 ±0.015597	0.9999	EXP 150 of 150	587.88016 ±0.03629
20F04504	17.0 %	0.0497525 ±0.0003900	0.9433	EXP 150 of 150	0.1326736 ±0.0058780	0.0693	EXP 149 of 150	2.4549117 ±0.0062644	0.9440	EXP 148 of 150	206.791326 ±0.016637	0.9999	EXP 150 of 150	861.05374 ±0.04283
20F04506	17.0 %	0.0094100 ±0.0002395	0.9768	EXP 149 of 150	0.0737055 ±0.0054213	0.0076	EXP 150 of 150	1.5874931 ±0.0070510	0.8424	EXP 150 of 150	134.835034 ±0.015674	0.9999	EXP 150 of 150	554.17445 ±0.03110
20F04507	17.0 %	0.1184280 ±0.0004736	0.3929	EXP 150 of 150	0.0888402 ±0.0058107	0.0401	EXP 150 of 150	1.6421923 ±0.0065827	0.8732	EXP 150 of 150	137.464624 ±0.016817	0.9999	EXP 150 of 150	597.51507 ±0.03309
20F04509	17.0 %	0.0169283 ±0.0002905	0.9755	EXP 147 of 150	0.1269922 ±0.0060338	0.0415	EXP 150 of 150	2.3702157 ±0.0068089	0.9306	EXP 150 of 150	201.148521 ±0.019533	0.9999	EXP 150 of 150	827.34991 ±0.03961
20F04510	17.0 %	0.0130098 ±0.0002562	0.9782	EXP 150 of 150	0.1040995 ±0.0056816	0.0706	EXP 150 of 150	1.8743523 ±0.0067680	0.8936	EXP 150 of 150	157.583397 ±0.016815	0.9999	EXP 150 of 150	647.31455 ±0.03449
20F04512	17.0 %	0.0232256 ±0.0002969	0.9412	EXP 150 of 150	0.0446335 ±0.0063023	0.0019	EXP 150 of 150	1.1022103 ±0.0068020	0.7450	EXP 150 of 150	93.792646 ±0.014141	0.9998	EXP 150 of 150	390.19701 ±0.03138
20F04513	17.0 %	0.0081030 ±0.0002093	0.9487	EXP 149 of 150	0.0059496 ±0.0052684	0.0078	EXP 149 of 150	0.1723333 ±0.0054578	0.1354	EXP 144 of 150	17.384691 ±0.008149	0.9978	EXP 149 of 150	73.61232 ±0.01845
20F04515	17.0 %	0.0124571 ±0.0002370	0.9718	EXP 148 of 150	0.0618521 ±0.0060951	0.0070	EXP 150 of 150	1.3518365 ±0.0062285	0.8348	EXP 144 of 150	115.379171 ±0.015005	0.9998	EXP 150 of 150	475.06291 ±0.03353
20F04516	17.0 %	0.0099438 ±0.0002398	0.9654	EXP 148 of 150	0.0370687 ±0.0051224	0.0008	EXP 150 of 150	0.9821506 ±0.0059785	0.7410	EXP 148 of 150	85.227956 ±0.011966	0.9998	EXP 150 of 150	351.66208 ±0.02657
20F04518	17.0 %	0.0184615 ±0.0002833	0.9752	EXP 149 of 150	0.1178843 ±0.0054962	0.0621	EXP 150 of 150	2.2703494 ±0.0062687	0.9340	EXP 150 of 150	192.826393 ±0.018363	0.9999	EXP 150 of 150	793.54987 ±0.04123
20F04519	17.0 %	0.7494632 ±0.0012435	0.9533	EXP 150 of 150	0.1491042 ±0.0058106	0.0795	EXP 150 of 150	2.8664878 ±0.0069926	0.9475	EXP 150 of 150	228.416184 ±0.018858	0.9999	EXP 149 of 150	1165.39951 ±0.05091
20F04521	17.0 %	0.0216994 ±0.0002966	0.9513	EXP 150 of 150	0.0737299 ±0.0055829	0.0277	EXP 150 of 150	1.3194718 ±0.0068565	0.7847	EXP 148 of 150	111.774611 ±0.013192	0.9999	EXP 149 of 150	462.60501 ±0.03041
20F04522	17.0 %	0.0110503 ±0.0002784	0.9615	EXP 150 of 150	0.0541552 ±0.0054508	0.0190	EXP 149 of 150	1.1862060 ±0.0061477	0.7714	EXP 150 of 150	102.513039 ±0.014070	0.9998	EXP 149 of 150	422.55124 ±0.02966
20F04524	17.0 %	0.0197829 ±0.0003091	0.9559	EXP 150 of 150	0.0866116 ±0.0059059	0.0432	EXP 150 of 150	1.6176709 ±0.0070568	0.8523	EXP 150 of 150	135.836344 ±0.013892	0.9999	EXP 150 of 150	560.71145 ±0.03265
20F04525	17.0 %	0.0096124 ±0.0002076	0.9706	EXP 148 of 150	0.0446257 ±0.0063707	0.0287	EXP 149 of 150	0.7776507 ±0.0060840	0.6452	EXP 147 of 150	66.774212 ±0.011712	0.9997	EXP 150 of 150	275.44887 ±0.02614

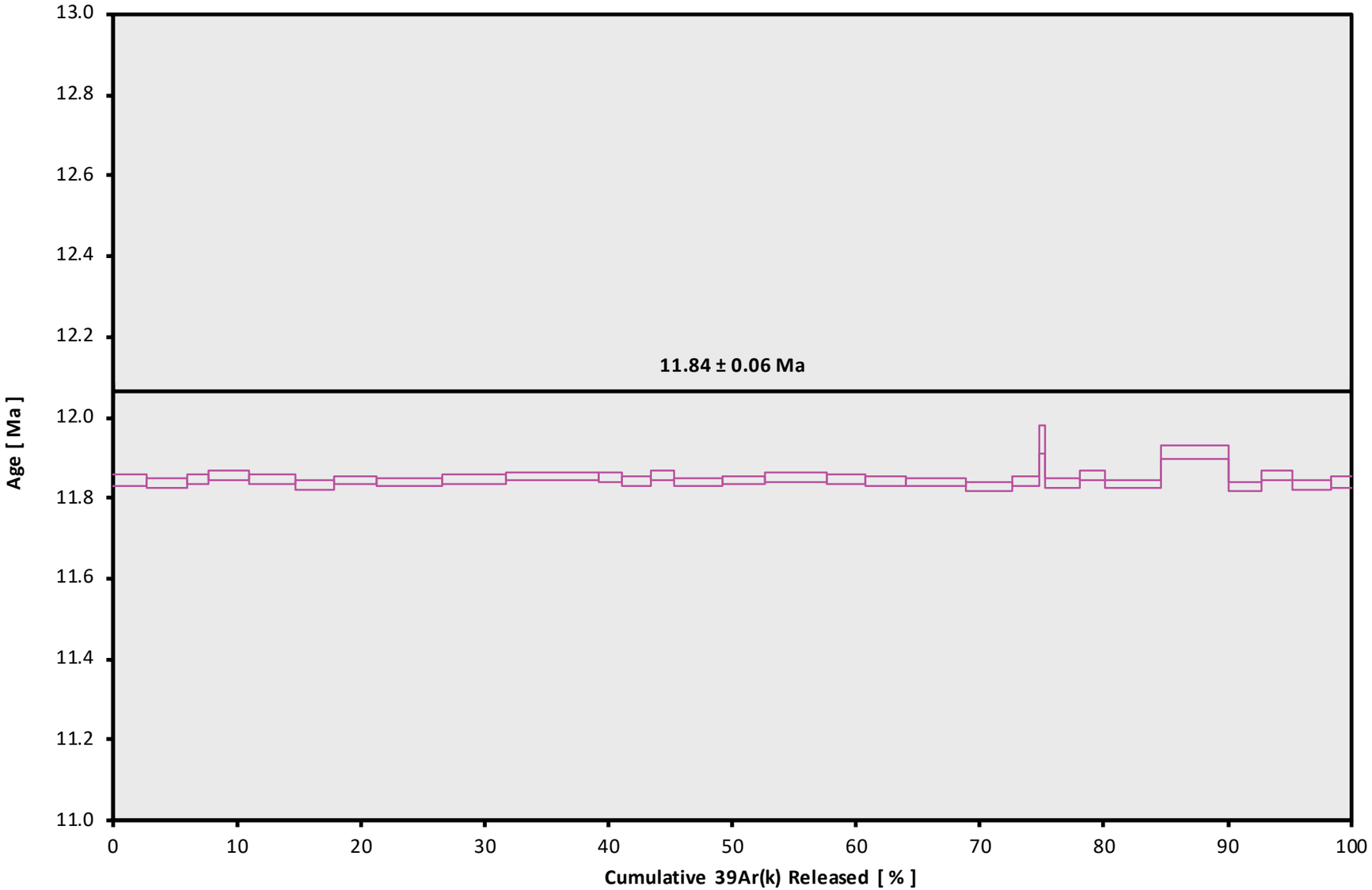
r2	Regression (type,n)
0.9999	EXP 147 of 150
1.0000	EXP 148 of 150
0.9999	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 147 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
0.9999	EXP 150 of 150
0.9980	EXP 150 of 150
0.9999	EXP 148 of 150
0.9999	EXP 149 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
0.9999	EXP 149 of 150
1.0000	EXP 150 of 150
0.9999	EXP 146 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F04482	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04483	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04485	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04486	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04488	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04489	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04491	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04492	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04494	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04495	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04497	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04498	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04500	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04501	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04503	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04504	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04506	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04507	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04509	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04510	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04512	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04513	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04515	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04516	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04518	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04519	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04521	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04522	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04524	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01
20F04525	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	44.79	Oregon\Swenton (18-58)	20F04478	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F04482	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	20	19	1
20F04483	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	20	28	1
20F04485	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	20	45	1
20F04486	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	20	53	1
20F04488	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	21	11	1
20F04489	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	21	19	1
20F04491	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	21	36	1
20F04492	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	21	45	1
20F04494	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	22	2	1
20F04495	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	22	10	1
20F04497	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	22	28	1
20F04498	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	22	36	1
20F04500	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	22	53	1
20F04501	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	23	2	1
20F04503	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	23	19	1
20F04504	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	23	28	1
20F04506	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	23	45	1
20F04507	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	31	MAR	2020	23	53	1
20F04509	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	0	10	1
20F04510	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	0	19	1
20F04512	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	0	36	1
20F04513	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	0	45	1
20F04515	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	1	2	1
20F04516	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	1	10	1
20F04518	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	1	27	1
20F04519	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	1	36	1
20F04521	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	1	53	1
20F04522	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	2	2	1
20F04524	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	2	19	1
20F04525	17.0 %	VS17-045	Sanidine	Iron Point	FCT-NM (2C36-19)	28.201	0.082	Kuiper et al (2008)	9.77337	0.242	0.00158855	0.242	299.195	0.125	0.9994687	0.041	1	3.54E-14	1	APR	2020	2	27	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F04482	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04483	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04485	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04486	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04488	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04489	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04491	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04492	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04494	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04495	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04497	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04498	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04500	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04501	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04503	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04504	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04506	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04507	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04509	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04510	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04512	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04513	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04515	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04516	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04518	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04519	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04521	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04522	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04524	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04525	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F04478.AGE >>> VS17-045 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.84 ± 0.06
TOTAL FUSION
11.85 ± 0.06
NORMAL ISOCHRON
11.85 ± 0.06
INVERSE ISOCHRON
11.84 ± 0.06

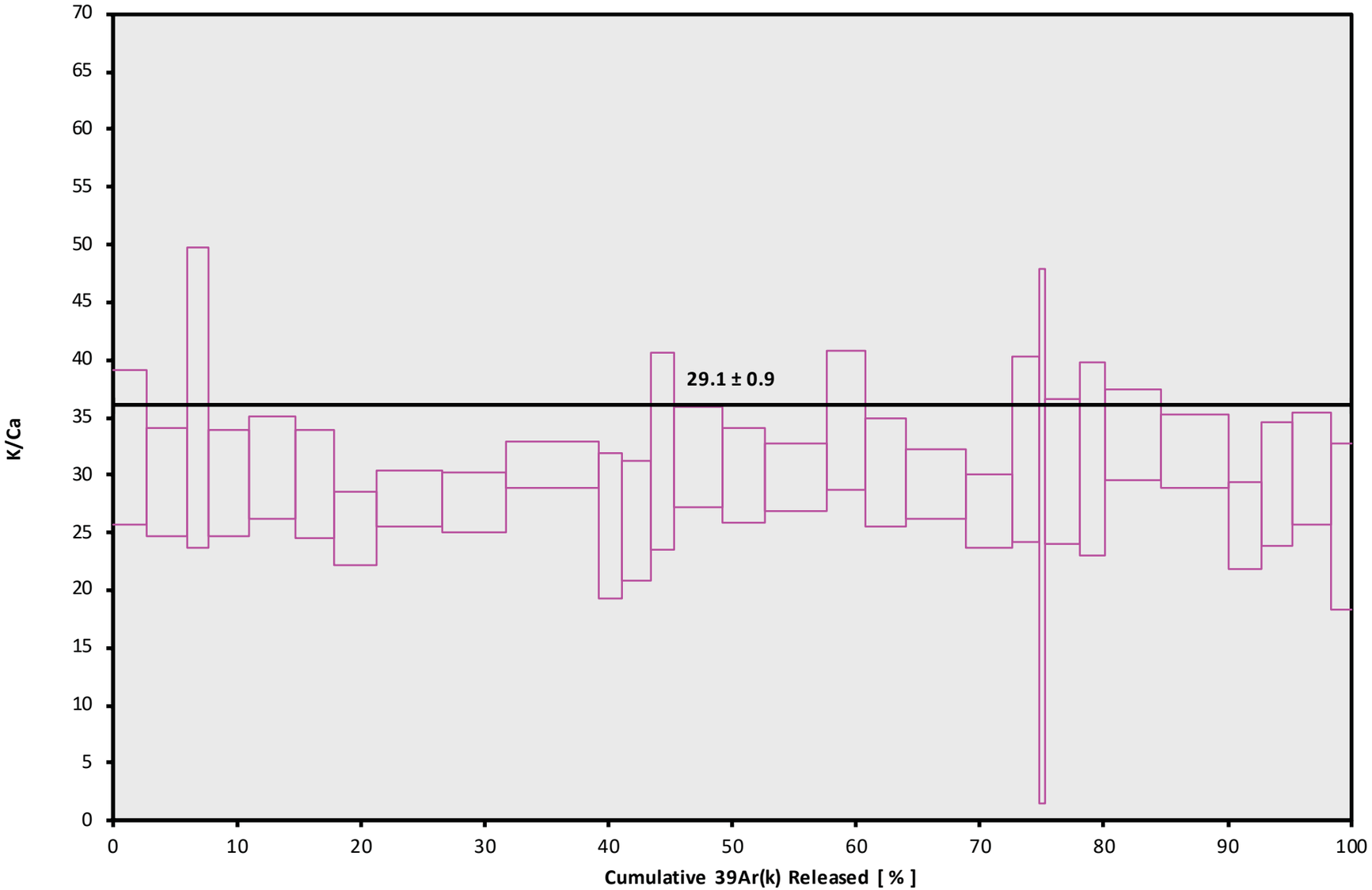
MSWD (PROBABILITY)
2.19 (0%)

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 19-OSU-02 (2C36-

20F04478.AGE >>> VS17-045 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

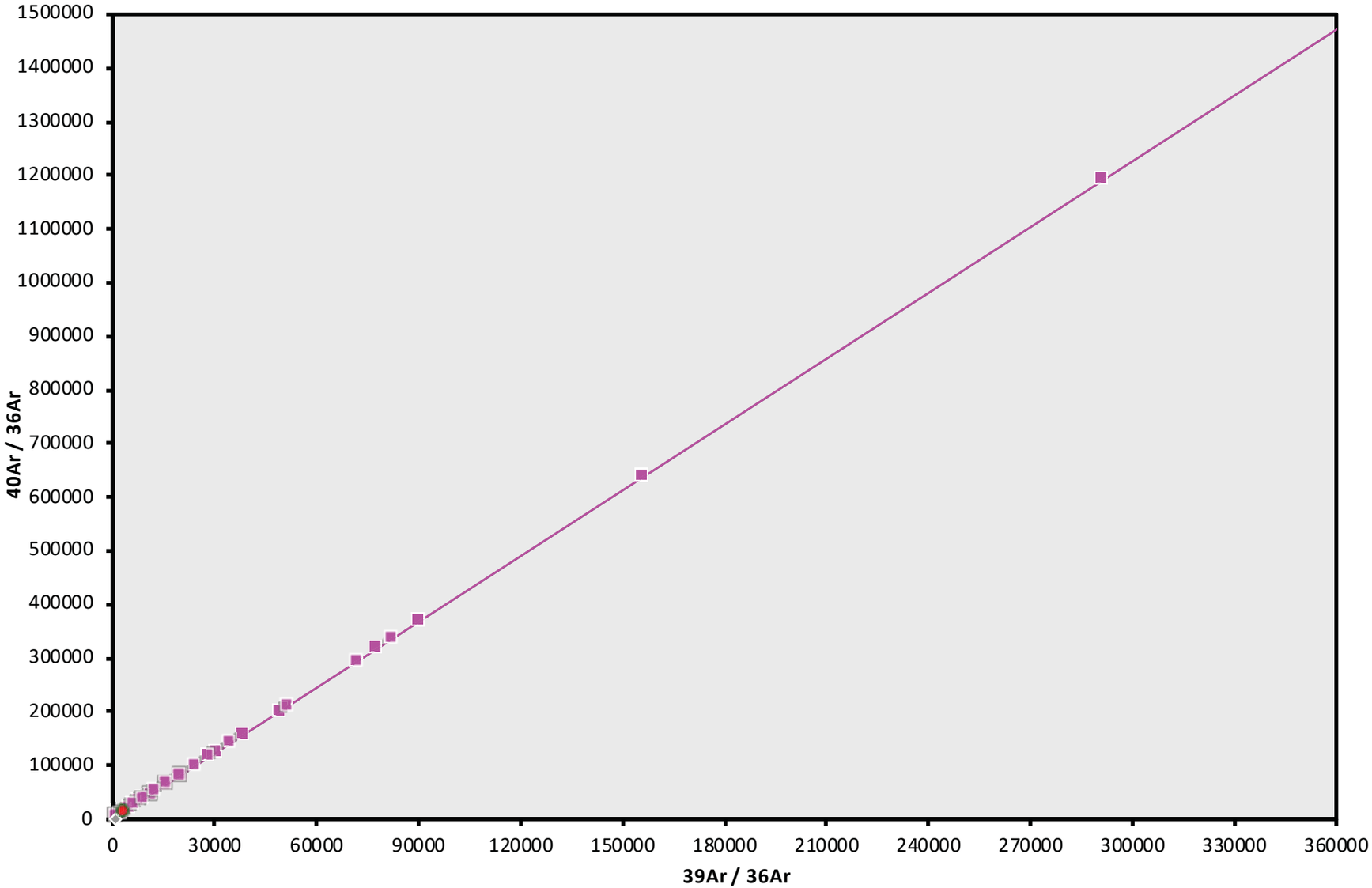
WEIGHTED PLATEAU
11.84 ± 0.06
TOTAL FUSION
11.85 ± 0.06
NORMAL ISOCHRON
11.85 ± 0.06
INVERSE ISOCHRON
11.84 ± 0.06

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 19-OSU-02 (2C36-

20F04478.AGE >>> VS17-045 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.84 ± 0.06
TOTAL FUSION
11.85 ± 0.06
NORMAL ISOCHRON
11.85 ± 0.06
INVERSE ISOCHRON
11.84 ± 0.06

MSWD (PROBABILITY)
2.48 (0%)

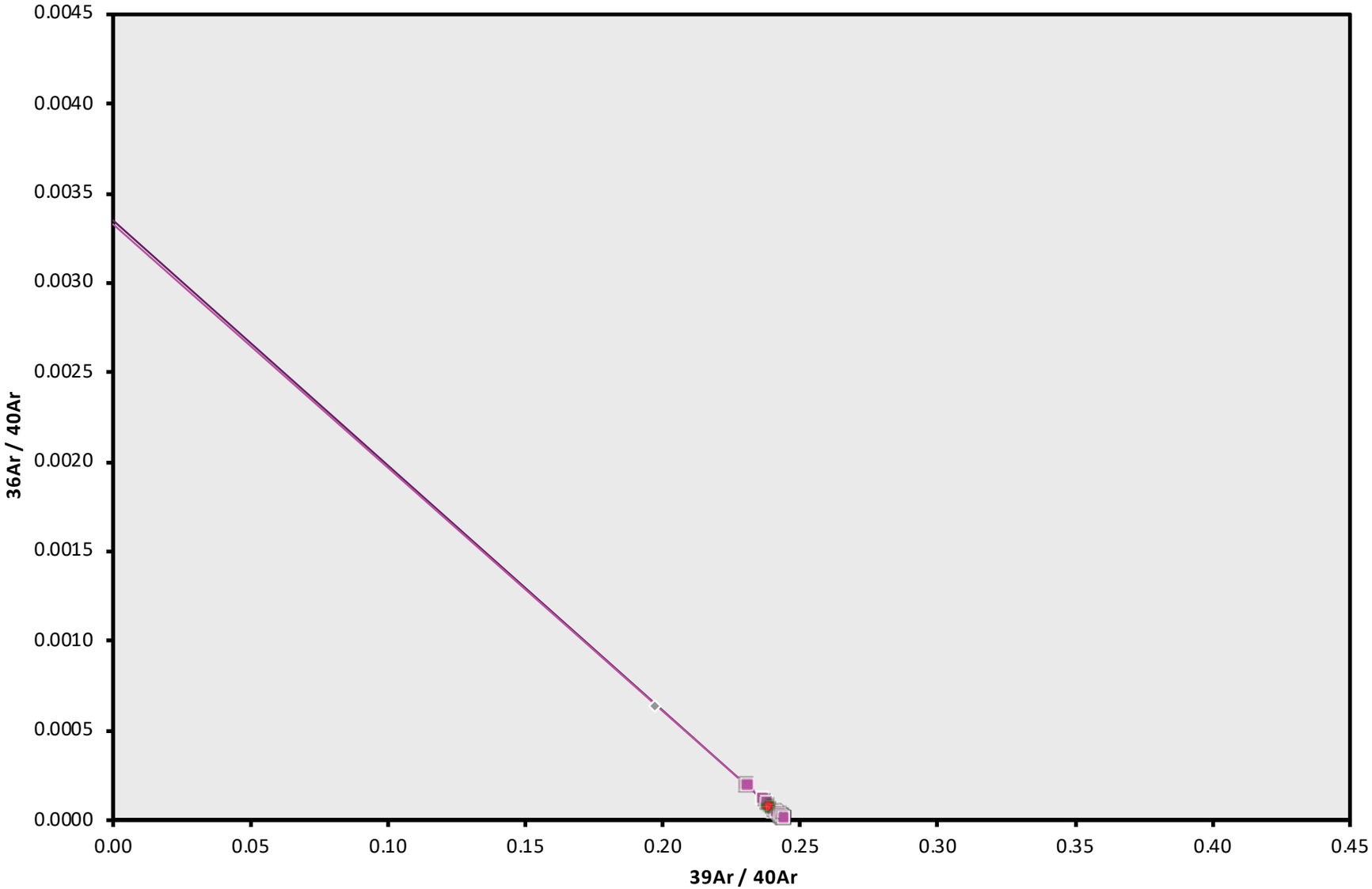
40AR/36AR INTERCEPT

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 19-OSU-02 (2C36-

20F04478.AGE >>> VS17-045 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.84 ± 0.06
TOTAL FUSION
11.85 ± 0.06
NORMAL ISOCHRON
11.85 ± 0.06
INVERSE ISOCHRON
11.84 ± 0.06

MSWD (PROBABILITY)
2.24 (0%)

SPREADING FACTOR

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 19-OSU-02 (2C36-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	40Ar(r) (%)	39Ar(k) (%)	K/Ca	±2σ
20F11338	17.0 %		0.0889287	0.632	118.81047	0.178	0.75291	1.267	60.548	0.047	232.448	0.012	3.56279	±0.00663	10.61	±0.02	92.69	0.54	0.2	±0.0
20F11339	17.0 %	✓	0.0300446	1.809	7.88467	0.305	9.14888	0.143	764.261	0.043	2724.738	0.003	3.55371	±0.00311	10.58	±0.01	99.68	6.85	41.7	±0.3
20F11341	17.0 %	✓	0.0014707	26.797	4.84910	0.446	5.79458	0.185	483.332	0.043	1716.287	0.004	3.55027	±0.00313	10.57	±0.01	99.98	4.33	42.9	±0.4
20F11342	17.0 %	✓	0.0082962	5.080	6.95865	0.333	6.08629	0.180	506.994	0.043	1803.066	0.003	3.55203	±0.00313	10.58	±0.01	99.88	4.54	31.3	±0.2
20F11344	17.0 %	✓	0.0032749	12.245	3.38679	0.571	4.63392	0.232	386.983	0.043	1375.212	0.004	3.55127	±0.00316	10.57	±0.01	99.93	3.47	49.1	±0.6
20F11345	17.0 %	✓	0.0120493	3.361	4.77913	0.423	5.41805	0.204	450.597	0.043	1602.224	0.004	3.54807	±0.00314	10.56	±0.01	99.78	4.04	40.5	±0.3
20F11347	17.0 %	✓	0.0192543	2.413	6.40707	0.361	6.39230	0.172	533.468	0.043	1900.210	0.003	3.55161	±0.00314	10.58	±0.01	99.71	4.78	35.8	±0.3
20F11348	17.0 %		0.0470791	1.028	86.75036	0.179	0.37843	2.509	32.073	0.055	123.086	0.022	3.62344	±0.01010	10.79	±0.03	94.25	0.29	0.2	±0.0
20F11350	17.0 %	✓	0.1384191	0.508	7.80555	0.298	8.36458	0.142	695.742	0.043	2512.503	0.003	3.55218	±0.00314	10.58	±0.01	98.36	6.23	38.3	±0.2
20F11351	17.0 %	✓	0.0057871	7.246	6.21769	0.353	5.96154	0.189	498.082	0.043	1771.119	0.004	3.55284	±0.00313	10.58	±0.01	99.91	4.46	34.4	±0.2
20F11353	17.0 %	✓	0.2685988	0.347	3.75757	0.521	4.72664	0.208	389.756	0.043	1463.651	0.004	3.54974	±0.00344	10.57	±0.01	94.53	3.49	44.6	±0.5
20F11354	17.0 %	✓	0.0095692	4.332	4.74528	0.404	5.54702	0.191	462.920	0.043	1648.577	0.004	3.55533	±0.00314	10.59	±0.01	99.83	4.15	41.9	±0.3
20F11356	17.0 %	✓	0.0005869	65.330	5.75131	0.349	6.35408	0.174	531.574	0.043	1887.445	0.003	3.55063	±0.00312	10.57	±0.01	100.00	4.76	39.7	±0.3
20F11357	17.0 %	✓	0.0024425	15.614	4.64461	0.425	5.28710	0.204	440.009	0.043	1564.218	0.004	3.55358	±0.00315	10.58	±0.01	99.96	3.94	40.7	±0.3
20F11359	17.0 %	✓	0.0182855	2.100	3.07700	0.623	3.03809	0.317	253.273	0.044	903.915	0.005	3.54779	±0.00325	10.56	±0.01	99.41	2.27	35.4	±0.4
20F11360	17.0 %	✓	0.0067188	5.429	2.87146	0.684	3.85245	0.259	323.513	0.043	1150.679	0.004	3.55076	±0.00318	10.57	±0.01	99.83	2.90	48.4	±0.7
20F11362	17.0 %	✓	0.0088077	4.064	3.65055	0.544	4.17365	0.250	348.735	0.043	1240.553	0.004	3.55002	±0.00316	10.57	±0.01	99.79	3.12	41.1	±0.4
20F11363	17.0 %	✓	0.0192769	2.135	4.33062	0.489	5.41260	0.192	452.069	0.043	1610.687	0.004	3.55038	±0.00314	10.57	±0.01	99.65	4.05	44.9	±0.4
20F11365	17.0 %	✓	0.0125134	3.395	4.06843	0.518	4.50979	0.233	376.156	0.044	1338.632	0.004	3.54907	±0.00318	10.57	±0.01	99.73	3.37	39.8	±0.4
20F11366	17.0 %	✓	0.0650040	0.893	5.47804	0.393	6.00215	0.182	500.162	0.043	1796.215	0.004	3.55277	±0.00317	10.58	±0.01	98.93	4.48	39.3	±0.3
20F11368	17.0 %	✓	0.0144609	2.839	4.25227	0.538	5.42764	0.198	454.345	0.043	1617.255	0.004	3.55020	±0.00314	10.57	±0.01	99.74	4.07	45.9	±0.5
20F11369	17.0 %	✓	0.0032912	10.246	2.60106	0.825	3.45560	0.286	289.905	0.044	1030.597	0.004	3.55169	±0.00320	10.58	±0.01	99.91	2.60	47.9	±0.8
20F11371	17.0 %	✓	0.0079876	5.204	3.33960	0.624	3.70717	0.249	306.401	0.043	1090.616	0.004	3.55195	±0.00321	10.58	±0.01	99.79	2.74	39.5	±0.5
20F11372	17.0 %	✓	0.0128208	3.200	3.78811	0.554	4.94416	0.212	411.863	0.043	1465.442	0.004	3.54895	±0.00316	10.57	±0.01	99.74	3.69	46.8	±0.5
20F11374	17.0 %	✓	0.0157751	2.619	1.30129	1.432	1.72418	0.558	143.665	0.044	514.975	0.007	3.55191	±0.00361	10.58	±0.01	99.09	1.29	47.5	±1.4
20F11375	17.0 %	✓	0.0052465	7.285	3.01036	0.651	3.20588	0.317	266.789	0.044	947.971	0.005	3.54772	±0.00325	10.56	±0.01	99.84	2.39	38.1	±0.5
20F11377	17.0 %	✓	0.0026471	13.430	2.91606	0.681	3.12159	0.295	261.488	0.044	928.452	0.005	3.54794	±0.00323	10.56	±0.01	99.92	2.34	38.6	±0.5
20F11378	17.0 %	✓	0.0012807	27.882	2.02788	0.998	2.50734	0.388	209.876	0.044	745.473	0.005	3.55035	±0.00330	10.57	±0.01	99.95	1.88	44.5	±0.9
20F11380	17.0 %	✓	0.0013320	25.826	1.22778	1.553	1.60470	0.575	134.297	0.045	476.628	0.007	3.54625	±0.00356	10.56	±0.01	99.92	1.20	47.0	±1.5
20F11381	17.0 %	✓	0.0047394	7.119	2.12577	0.912	2.34267	0.425	196.218	0.044	697.886	0.006	3.54977	±0.00331	10.57	±0.01	99.80	1.76	39.7	±0.7
		Σ	0.8359891	0.299	322.81452	0.088	133.87599	0.043	11165.093	0.009	39880.759	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-046B**
Material = **Sanidine**
Location = **Iron Point**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C31-20)**
Position = **X: 0 | Y: 0 | Z/H: 40.32546 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.51702 ± 0.01494**
FCT-NM J-value = **0.00163134 ± 0.00000256**
Air Shot 40Ar/36Ar = **298.6220 ± 0.4091**
Air Shot MDF = **0.99994803 ± 0.00043047 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau			3.55072	±0.00078	**10.57**	**±0.03**	1.66	99.17	39.1	±1.7
Error Mean				±0.02%		**±0.31%**	2%	28		
				Full External Error		±0.55	1.54	2σ Confidence Limit		
				Analytical Error		±0.00	1.2887	Error Magnification		
Total Fusion Age			3.55135	±0.00063	**10.57**	**±0.03**		30	14.9	±0.0
				±0.02%		**±0.31%**				
				Full External Error		±0.55				
				Analytical Error		±0.00				
Normal Isochron	**299.46**	**±6.50**	3.55031	±0.00087	**10.57**	**±0.03**	1.71	99.17		
Error Chron		**±2.17%**		±0.02%		**±0.31%**	1%	28		
				Full External Error		±0.55	1.55	2σ Confidence Limit		
				Analytical Error		±0.00	1.3066	Error Magnification		
							1	Number of Iterations		
							0.0000000002	Convergence		
Inverse Isochron	**298.27**	**±6.52**	3.55074	±0.00087	**10.57**	**±0.03**	1.72	99.17		
Error Chron		**±2.18%**		±0.02%		**±0.31%**	1%	28		
				Full External Error		±0.55	1.55	2σ Confidence Limit		
				Analytical Error		±0.00	1.3133	Error Magnification		
							2	Number of Iterations		
							0.0000011009	Convergence		
							5%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F11338	17.0 %		0.0568143	118.81047	0.0000000	60.472	215.449	10.61 ±0.02	92.69	0.54	0.2 ±0.0
20F11339	17.0 %	✓	0.0279134	7.88467	0.0000000	764.256	2715.940	10.58 ±0.01	99.68	6.85	41.7 ±0.3
20F11341	17.0 %	✓	0.0001600	4.84910	0.0000000	483.328	1715.946	10.57 ±0.01	99.98	4.33	42.9 ±0.4
20F11342	17.0 %	✓	0.0064153	6.95865	0.0000000	506.990	1800.842	10.58 ±0.01	99.88	4.54	31.3 ±0.2
20F11344	17.0 %	✓	0.0023595	3.38679	0.0000000	386.981	1374.272	10.57 ±0.01	99.93	3.47	49.1 ±0.6
20F11345	17.0 %	✓	0.0107575	4.77913	0.0000000	450.594	1598.739	10.56 ±0.01	99.78	4.04	40.5 ±0.3
20F11347	17.0 %	✓	0.0175225	6.40707	0.0000000	533.463	1894.654	10.58 ±0.01	99.71	4.78	35.8 ±0.3
20F11348	17.0 %		0.0236305	86.75036	0.0000000	32.017	116.011	10.79 ±0.03	94.25	0.29	0.2 ±0.0
20F11350	17.0 %	✓	0.1363092	7.80555	0.0000000	695.737	2471.385	10.58 ±0.01	98.36	6.23	38.3 ±0.2
20F11351	17.0 %	✓	0.0041065	6.21769	0.0000000	498.078	1769.590	10.58 ±0.01	99.91	4.46	34.4 ±0.2
20F11353	17.0 %	✓	0.2675831	3.75757	0.0000000	389.754	1383.525	10.57 ±0.01	94.53	3.49	44.6 ±0.5
20F11354	17.0 %	✓	0.0082865	4.74528	0.0000000	462.917	1645.822	10.59 ±0.01	99.83	4.15	41.9 ±0.3
20F11356	17.0 %	✓	0.0009677	5.75131	0.0000000	531.571	1887.411	10.57 ±0.01	100.00	4.76	39.7 ±0.3
20F11357	17.0 %	✓	0.0011871	4.64461	0.0000000	440.006	1563.596	10.58 ±0.01	99.96	3.94	40.7 ±0.3
20F11359	17.0 %	✓	0.0174538	3.07700	0.0000000	253.271	898.550	10.56 ±0.01	99.41	2.27	35.4 ±0.4
20F11360	17.0 %	✓	0.0059427	2.87146	0.0000000	323.511	1148.709	10.57 ±0.01	99.83	2.90	48.4 ±0.7
20F11362	17.0 %	✓	0.0078210	3.65055	0.0000000	348.732	1238.007	10.57 ±0.01	99.79	3.12	41.1 ±0.4
20F11363	17.0 %	✓	0.0181063	4.33062	0.0000000	452.066	1605.007	10.57 ±0.01	99.65	4.05	44.9 ±0.4
20F11365	17.0 %	✓	0.0114137	4.06843	0.0000000	376.153	1334.996	10.57 ±0.01	99.73	3.37	39.8 ±0.4
20F11366	17.0 %	✓	0.0635233	5.47804	0.0000000	500.158	1776.946	10.58 ±0.01	98.93	4.48	39.3 ±0.3
20F11368	17.0 %	✓	0.0133115	4.25227	0.0000000	454.342	1613.005	10.57 ±0.01	99.74	4.07	45.9 ±0.5
20F11369	17.0 %	✓	0.0025881	2.60106	0.0000000	289.904	1029.648	10.58 ±0.01	99.91	2.60	47.9 ±0.8
20F11371	17.0 %	✓	0.0070845	3.33960	0.0048461	306.399	1088.315	10.58 ±0.01	99.79	2.74	39.5 ±0.5
20F11372	17.0 %	✓	0.0117968	3.78811	0.0000000	411.860	1461.670	10.57 ±0.01	99.74	3.69	46.8 ±0.5
20F11374	17.0 %	✓	0.0154233	1.30129	0.0000000	143.664	510.283	10.58 ±0.01	99.09	1.29	47.5 ±1.4
20F11375	17.0 %	✓	0.0044328	3.01036	0.0000000	266.787	946.486	10.56 ±0.01	99.84	2.39	38.1 ±0.5
20F11377	17.0 %	✓	0.0018589	2.91606	0.0000000	261.486	927.738	10.56 ±0.01	99.92	2.34	38.6 ±0.5
20F11378	17.0 %	✓	0.0007325	2.02788	0.0000000	209.874	745.127	10.57 ±0.01	99.95	1.88	44.5 ±0.9
20F11380	17.0 %	✓	0.0010002	1.22778	0.0000000	134.296	476.248	10.56 ±0.01	99.92	1.20	47.0 ±1.5
20F11381	17.0 %	✓	0.0041648	2.12577	0.0000000	196.217	696.523	10.57 ±0.01	99.80	1.76	39.7 ±0.7
		Σ	0.7487320	322.81452	0.0048461	11164.885	39650.440				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-046B**
Material = **Sanidine**
Location = **Iron Point**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C31-20)**
J = **0.00163134 ± 0.00000256**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.55072	±0.00078	**10.57**	**±0.03**	1.66	99.17	39.1 ±1.7
Error Mean		±0.02%		**±0.31%**	2%	28	
			Full External Error	±0.55	1.54	2σ Confidence Limit	
			Analytical Error	±0.00	1.2887	Error Magnification	
Total Fusion Age	3.55135	±0.00063	**10.57**	**±0.03**		30	14.9 ±0.0
		±0.02%		**±0.31%**			
			Full External Error	±0.55			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F11338	17.0 %		1064.38	±21.30	4090.72	±81.76	0.9988
20F11339	17.0 %	✓	27379.55	±1066.75	97597.43	±3801.60	0.9998
20F11341	17.0 %	✓	3020979.29	±14885099.25	10725585.10	±52847563.95	1.0000
20F11342	17.0 %	✓	79027.94	±10384.20	281008.24	±36923.42	1.0000
20F11344	17.0 %	✓	164010.59	±55756.37	582744.46	±198106.78	1.0000
20F11345	17.0 %	✓	41886.53	±3154.13	148914.84	±11212.82	0.9999
20F11347	17.0 %	✓	30444.46	±1614.55	108425.44	±5749.34	0.9999
20F11348	17.0 %		1354.90	±55.92	5207.95	±214.89	0.9996
20F11350	17.0 %	✓	5104.11	±52.81	18429.28	±190.03	0.9965
20F11351	17.0 %	✓	121290.10	±24773.91	431222.76	±88077.93	1.0000
20F11353	17.0 %	✓	1456.57	±10.23	5469.01	±38.14	0.9923
20F11354	17.0 %	✓	55863.91	±5589.51	198913.30	±19901.69	1.0000
20F11356	17.0 %	✓	549330.40	±435381.42	1950170.82	±1545641.11	1.0000
20F11357	17.0 %	✓	370662.14	±238187.84	1317475.25	±846610.08	1.0000
20F11359	17.0 %	✓	14510.94	±638.67	51780.30	±2278.55	0.9998
20F11360	17.0 %	✓	54438.41	±6683.33	193596.27	±23766.95	1.0000
20F11362	17.0 %	✓	44589.40	±4082.35	158591.74	±14519.10	1.0000
20F11363	17.0 %	✓	24967.32	±1135.18	88942.01	±4043.15	0.9998
20F11365	17.0 %	✓	32956.31	±2453.47	117262.89	±8729.18	0.9999
20F11366	17.0 %	✓	7873.61	±143.99	28271.68	±516.46	0.9989
20F11368	17.0 %	✓	34131.52	±2105.69	121472.19	±7493.28	0.9999
20F11369	17.0 %	✓	112014.58	±29194.43	398139.80	±103766.85	1.0000
20F11371	17.0 %	✓	43249.08	±5075.71	153917.14	±18063.22	1.0000
20F11372	17.0 %	✓	34912.79	±2428.43	124202.14	±8638.47	0.9999
20F11374	17.0 %	✓	9314.75	±499.12	33383.74	±1788.58	0.9999
20F11375	17.0 %	✓	60184.62	±10380.23	213816.91	±36877.21	1.0000
20F11377	17.0 %	✓	140670.65	±53811.13	499389.60	±191032.39	1.0000
20F11378	17.0 %	✓	286502.23	±279350.70	1017481.21	±992082.93	1.0000
20F11380	17.0 %	✓	134272.14	±92376.72	476460.47	±327795.62	1.0000
20F11381	17.0 %	✓	47113.08	±7634.38	167539.03	±27148.28	1.0000

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**299.46**	**±6.50**	3.55031	±0.00087	**10.57**	**±0.03**	1.71
Error Chron		**±2.17%**		±0.02%		**±0.31%**	1%
					Full External Error	±0.55	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.000000000194
	Error Magnification	1.3066	Number of Iterations	1
	Number of Data Points	28	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F11338	17.0 %		0.2601937	±0.0002541	0.00024446	±0.00000489	0.0029
20F11339	17.0 %	✓	0.2805356	±0.0002429	0.00001025	±0.00000040	0.0001
20F11341	17.0 %	✓	0.2816610	±0.0002450	0.00000009	±0.00000046	0.0000
20F11342	17.0 %	✓	0.2812300	±0.0002448	0.00000356	±0.00000047	0.0000
20F11344	17.0 %	✓	0.2814451	±0.0002459	0.00000172	±0.00000058	0.0000
20F11345	17.0 %	✓	0.2812784	±0.0002451	0.00000672	±0.00000051	0.0001
20F11347	17.0 %	✓	0.2807871	±0.0002446	0.00000922	±0.00000049	0.0001
20F11348	17.0 %		0.2601595	±0.0003110	0.00019201	±0.00000792	0.0041
20F11350	17.0 %	✓	0.2769565	±0.0002400	0.00005426	±0.00000056	0.0004
20F11351	17.0 %	✓	0.2812702	±0.0002449	0.00000232	±0.00000047	0.0000
20F11353	17.0 %	✓	0.2663319	±0.0002325	0.00018285	±0.00000128	0.0012
20F11354	17.0 %	✓	0.2808455	±0.0002445	0.00000503	±0.00000050	0.0001
20F11356	17.0 %	✓	0.2816832	±0.0002451	0.00000051	±0.00000041	0.0000
20F11357	17.0 %	✓	0.2813428	±0.0002457	0.00000076	±0.00000049	0.0000
20F11359	17.0 %	✓	0.2802406	±0.0002468	0.00001931	±0.00000085	0.0003
20F11360	17.0 %	✓	0.2811955	±0.0002458	0.00000517	±0.00000063	0.0001
20F11362	17.0 %	✓	0.2811584	±0.0002458	0.00000631	±0.00000058	0.0001
20F11363	17.0 %	✓	0.2807145	±0.0002444	0.00001124	±0.00000051	0.0002
20F11365	17.0 %	✓	0.2810464	±0.0002457	0.00000853	±0.00000063	0.0001
20F11366	17.0 %	✓	0.2784982	±0.0002421	0.00003537	±0.00000065	0.0004
20F11368	17.0 %	✓	0.2809822	±0.0002452	0.00000823	±0.00000051	0.0001
20F11369	17.0 %	✓	0.2813448	±0.0002473	0.00000251	±0.00000065	0.0000
20F11371	17.0 %	✓	0.2809894	±0.0002456	0.00000650	±0.00000076	0.0001
20F11372	17.0 %	✓	0.2810965	±0.0002455	0.00000805	±0.00000056	0.0001
20F11374	17.0 %	✓	0.2790207	±0.0002497	0.00002995	±0.00000160	0.0004
20F11375	17.0 %	✓	0.2814774	±0.0002483	0.00000468	±0.00000081	0.0001
20F11377	17.0 %	✓	0.2816852	±0.0002479	0.00000200	±0.00000077	0.0000
20F11378	17.0 %	✓	0.2815799	±0.0002493	0.00000098	±0.00000096	0.0000
20F11380	17.0 %	✓	0.2818117	±0.0002551	0.00000210	±0.00000144	0.0000
20F11381	17.0 %	✓	0.2812066	±0.0002492	0.00000597	±0.00000097	0.0001

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**298.27**	**±6.52**	3.55074	±0.00087	**10.57**	**±0.03**	1.72
Error Chron		**±2.18%**		±0.02%		**±0.31%**	1%
					Full External Error	±0.55	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.0000011009
	Error Magnification	1.3133	Number of Iterations	2
	Number of Data Points	28	Calculated Line	Weighted York-2
	Spreading Factor	5.5%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F11338	17.0 %		0.0568143	1.00	0.0000000	0.00	0.0321145	0.25	0.0000000	0.00	118.81047	0.18	0.0107095	1.01	0.0000000	0.00	0.73032	0.10	0.0213859	9.63	0.0000000	0.00	60.472	0.05	0.0763357	0.94
20F11339	17.0 %	✓	0.0279134	1.95	0.0000000	0.00	0.0021312	0.35	0.0000000	0.00	7.88467	0.30	0.0052617	1.95	0.0000000	0.00	9.22992	0.10	0.0014192	9.63	0.0000000	0.00	764.256	0.04	0.0050659	0.97
20F11341	17.0 %	✓	0.0001600	246.36	0.0000000	0.00	0.0013107	0.48	0.0000000	0.00	4.84910	0.45	0.0000302	246.36	0.0000000	0.00	5.83716	0.10	0.0008728	9.64	0.0000000	0.00	483.328	0.04	0.0031155	1.02
20F11342	17.0 %	✓	0.0064153	6.57	0.0000000	0.00	0.0018809	0.37	0.0000000	0.00	6.95865	0.33	0.0012093	6.57	0.0000000	0.00	6.12291	0.10	0.0012526	9.64	0.0000000	0.00	506.990	0.04	0.0044709	0.98
20F11344	17.0 %	✓	0.0023595	17.00	0.0000000	0.00	0.0009154	0.60	0.0000000	0.00	3.38679	0.57	0.0004448	17.00	0.0000000	0.00	4.67356	0.10	0.0006096	9.65	0.0000000	0.00	386.981	0.04	0.0021760	1.08
20F11345	17.0 %	✓	0.0107575	3.76	0.0000000	0.00	0.0012918	0.46	0.0000000	0.00	4.77913	0.42	0.0020278	3.77	0.0000000	0.00	5.44183	0.10	0.0008602	9.64	0.0000000	0.00	450.594	0.04	0.0030706	1.01
20F11347	17.0 %	✓	0.0175225	2.65	0.0000000	0.00	0.0017318	0.40	0.0000000	0.00	6.40707	0.36	0.0033030	2.66	0.0000000	0.00	6.44264	0.10	0.0011533	9.64	0.0000000	0.00	533.463	0.04	0.0041165	0.99
20F11348	17.0 %		0.0236305	2.06	0.0000000	0.00	0.0234486	0.25	0.0000000	0.00	86.75036	0.18	0.0044544	2.07	0.0000000	0.00	0.38667	0.11	0.0156151	9.63	0.0000000	0.00	32.017	0.06	0.0557371	0.94
20F11350	17.0 %	✓	0.1363092	0.52	0.0000000	0.00	0.0021098	0.34	0.0000000	0.00	7.80555	0.30	0.0256943	0.54	0.0000000	0.00	8.40242	0.10	0.0014050	9.63	0.0000000	0.00	695.737	0.04	0.0050151	0.97
20F11351	17.0 %	✓	0.0041065	10.21	0.0000000	0.00	0.0016806	0.39	0.0000000	0.00	6.21769	0.35	0.0007741	10.21	0.0000000	0.00	6.01529	0.10	0.0011192	9.64	0.0000000	0.00	498.078	0.04	0.0039949	0.99
20F11353	17.0 %	✓	0.2675831	0.35	0.0000000	0.00	0.0010157	0.55	0.0000000	0.00	3.75757	0.52	0.0504394	0.38	0.0000000	0.00	4.70706	0.10	0.0006764	9.64	0.0000000	0.00	389.754	0.04	0.0024142	1.06
20F11354	17.0 %	✓	0.0082865	5.00	0.0000000	0.00	0.0012826	0.44	0.0000000	0.00	4.74528	0.40	0.0015620	5.01	0.0000000	0.00	5.59064	0.10	0.0008541	9.64	0.0000000	0.00	462.917	0.04	0.0030488	1.00
20F11356	17.0 %	✓	0.0009677	39.63	0.0000000	0.00	0.0015546	0.39	0.0000000	0.00	5.75131	0.35	0.0001824	39.63	0.0000000	0.00	6.41978	0.10	0.0010352	9.64	0.0000000	0.00	531.571	0.04	0.0036952	0.98
20F11357	17.0 %	✓	0.0011871	32.13	0.0000000	0.00	0.0012554	0.46	0.0000000	0.00	4.64461	0.43	0.0002238	32.13	0.0000000	0.00	5.31396	0.10	0.0008360	9.64	0.0000000	0.00	440.006	0.04	0.0029842	1.01
20F11359	17.0 %	✓	0.0174538	2.20	0.0000000	0.00	0.0008317	0.65	0.0000000	0.00	3.07700	0.62	0.0032900	2.21	0.0000000	0.00	3.05875	0.10	0.0005539	9.65	0.0000000	0.00	253.271	0.04	0.0019770	1.11
20F11360	17.0 %	✓	0.0059427	6.14	0.0000000	0.00	0.0007762	0.70	0.0000000	0.00	2.87146	0.68	0.0011202	6.14	0.0000000	0.00	3.90704	0.10	0.0005169	9.65	0.0000000	0.00	323.511	0.04	0.0018449	1.15
20F11362	17.0 %	✓	0.0078210	4.58	0.0000000	0.00	0.0009867	0.57	0.0000000	0.00	3.65055	0.54	0.0014743	4.58	0.0000000	0.00	4.21164	0.10	0.0006571	9.65	0.0000000	0.00	348.732	0.04	0.0023455	1.07
20F11363	17.0 %	✓	0.0181063	2.27	0.0000000	0.00	0.0011706	0.52	0.0000000	0.00	4.33062	0.49	0.0034130	2.28	0.0000000	0.00	5.45960	0.10	0.0007795	9.64	0.0000000	0.00	452.066	0.04	0.0027824	1.04
20F11365	17.0 %	✓	0.0114137	3.72	0.0000000	0.00	0.0010997	0.54	0.0000000	0.00	4.06843	0.52	0.0021515	3.73	0.0000000	0.00	4.54280	0.10	0.0007323	9.64	0.0000000	0.00	376.153	0.04	0.0026140	1.06
20F11366	17.0 %	✓	0.0635233	0.91	0.0000000	0.00	0.0014807	0.43	0.0000000	0.00	5.47804	0.39	0.0119741	0.93	0.0000000	0.00	6.04041	0.10	0.0009860	9.64	0.0000000	0.00	500.158	0.04	0.0035196	1.00
20F11368	17.0 %	✓	0.0133115	3.08	0.0000000	0.00	0.0011494	0.56	0.0000000	0.00	4.25227	0.54	0.0025092	3.09	0.0000000	0.00	5.48709	0.10	0.0007654	9.65	0.0000000	0.00	454.342	0.04	0.0027321	1.07
20F11369	17.0 %	✓	0.0025881	13.03	0.0000000	0.00	0.0007031	0.84	0.0000000	0.00	2.60106	0.83	0.0004879	13.03	0.0000000	0.00	3.50117	0.10	0.0004682	9.67	0.0000000	0.00	289.904	0.04	0.0016712	1.24
20F11371	17.0 %	✓	0.0070845	5.87	0.0000000	0.00	0.0009027	0.65	0.0000003	267.87	3.33960	0.62	0.0013354	5.87	0.0000000	0.00	3.70038	0.10	0.0006011	9.65	0.0048461	267.88	306.399	0.04	0.0021457	1.11
20F11372	17.0 %	✓	0.0117968	3.48	0.0000000	0.00	0.0010239	0.58	0.0000000	0.00	3.78811	0.55	0.0022237	3.48	0.0000000	0.00	4.97404	0.10	0.0006819	9.65	0.0000000	0.00	411.860	0.04	0.0024339	1.07
20F11374	17.0 %	✓	0.0154233	2.68	0.0000000	0.00	0.0003517	1.44	0.0000000	0.00	1.30129	1.43	0.0029073	2.68	0.0000000	0.00	1.73503	0.10	0.0002342	9.74	0.0000000	0.00	143.664	0.04	0.0008361	1.70
20F11375	17.0 %	✓	0.0044328	8.62	0.0000000	0.00	0.0008137	0.67	0.0000000	0.00	3.01036	0.65	0.0008356	8.63	0.0000000	0.00	3.22198	0.10	0.0005419	9.65	0.0000000	0.00	266.787	0.04	0.0019342	1.13
20F11377	17.0 %	✓	0.0018589	19.13	0.0000000	0.00	0.0007882	0.70	0.0000000	0.00	2.91606	0.68	0.0003504	19.13	0.0000000	0.00	3.15797	0.10	0.0005249	9.65	0.0000000	0.00	261.486	0.04	0.0018736	1.14
20F11378	17.0 %	✓	0.0007325	48.75	0.0000000	0.00	0.0005481	1.01	0.0000000	0.00	2.02788	1.00	0.0001381	48.75	0.0000000	0.00	2.53465	0.10	0.0003650	9.68	0.0000000	0.00	209.874	0.04	0.0013029	1.36
20F11380	17.0 %	✓	0.0010002	34.40	0.0000000	0.00	0.0003319	1.56	0.0000000	0.00	1.22778	1.55	0.0001885	34.40	0.0000000	0.00	1.62190	0.10	0.0002210	9.75	0.0000000	0.00	134.296	0.04	0.0007888	1.80
20F11381	17.0 %	✓	0.0041648	8.10	0.0000000	0.00	0.0005746	0.93	0.0000000	0.00	2.12577	0.91	0.0007851	8.10	0.0000000	0.00	2.36971	0.10	0.0003826	9.67	0.0000000	0.00	196.217	0.04	0.0013658	1.30
		Σ	0.7487320	0.33	0.0000000	0.00	0.0872568	0.12	0.0000003	267.87	322.81452	0.09	0.1411360	0.34	0.0000000	0.00	134.83832	0.02	0.0581066	4.45	0.0048461	267.88	11164.885	0.01	0.2074083	0.43
		Σ							0.8359891	0.30	322.81452	0.09									135.04241	0.02			11165.093	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
215.449	0.08	16.96247	1.00	0.0000000	0.00	0.0367065	9.65
2715.940	0.01	8.33382	1.95	0.0000000	0.00	0.4639032	9.65
1715.946	0.01	0.04777	246.36	0.0000000	0.00	0.2933804	9.65
1800.842	0.01	1.91536	6.57	0.0000000	0.00	0.3077426	9.65
1374.272	0.01	0.70445	17.00	0.0000000	0.00	0.2348972	9.65
1598.739	0.01	3.21176	3.77	0.0000000	0.00	0.2735106	9.65
1894.654	0.01	5.23152	2.65	0.0000000	0.00	0.3238123	9.65
116.011	0.13	7.05513	2.07	0.0000000	0.00	0.0194343	9.65
2471.385	0.01	40.69648	0.53	0.0000000	0.00	0.4223125	9.65
1769.590	0.01	1.22604	10.21	0.0000000	0.00	0.3023332	9.65
1383.525	0.02	79.88962	0.36	0.0000000	0.00	0.2365807	9.65
1645.822	0.01	2.47402	5.00	0.0000000	0.00	0.2809904	9.65
1887.411	0.01	0.28891	39.63	0.0000000	0.00	0.3226634	9.65
1563.596	0.01	0.35442	32.13	0.0000000	0.00	0.2670838	9.65
898.550	0.01	5.21100	2.20	0.0000000	0.00	0.1537353	9.65
1148.709	0.01	1.77425	6.14	0.0000000	0.00	0.1963710	9.65
1238.007	0.01	2.33503	4.58	0.0000000	0.00	0.2116806	9.65
1605.007	0.01	5.40582	2.28	0.0000000	0.00	0.2744042	9.65
1334.996	0.01	3.40767	3.72	0.0000000	0.00	0.2283251	9.65
1776.946	0.01	18.96553	0.92	0.0000000	0.00	0.3035959	9.65
1613.005	0.01	3.97429	3.09	0.0000000	0.00	0.2757857	9.65
1029.648	0.01	0.77270	13.03	0.0000000	0.00	0.1759715	9.65
1088.315	0.01	2.11516	5.87	0.0000000	0.00	0.1859843	9.65
1461.670	0.01	3.52206	3.48	0.0000000	0.00	0.2499992	9.65
510.283	0.03	4.60479	2.68	0.0000000	0.00	0.0872043	9.65
946.486	0.01	1.32346	8.62	0.0000000	0.00	0.1619396	9.65
927.738	0.01	0.55498	19.13	0.0000000	0.00	0.1587223	9.65
745.127	0.02	0.21871	48.75	0.0000000	0.00	0.1273937	9.65
476.248	0.02	0.29861	34.40	0.0000000	0.00	0.0815179	9.65
696.523	0.02	1.24344	8.10	0.0000000	0.00	0.1191035	9.65
39650.440	0.00	223.54141	0.34	0.0000000	0.00	6.7770853	1.93
						39880.759	0.00

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F11338	17.0 %		3.839051	0.001871	1.962243	0.003619	0.001469	0.000009	42.333	2.313210	1.00029963	8.229E-12
20F11339	17.0 %	✓	3.565194	0.001542	0.010317	0.000032	0.000039	0.000001	42.340	2.313495	1.00029967	9.646E-11
20F11341	17.0 %	✓	3.550951	0.001544	0.010033	0.000045	0.000003	0.000001	42.351	2.314035	1.00029976	6.076E-11
20F11342	17.0 %	✓	3.556385	0.001547	0.013725	0.000046	0.000016	0.000001	42.358	2.314320	1.00029980	6.383E-11
20F11344	17.0 %	✓	3.553677	0.001551	0.008752	0.000050	0.000008	0.000001	42.369	2.314860	1.00029989	4.868E-11
20F11345	17.0 %	✓	3.555779	0.001548	0.010606	0.000045	0.000027	0.000001	42.375	2.315114	1.00029992	5.672E-11
20F11347	17.0 %	✓	3.561997	0.001551	0.012010	0.000044	0.000036	0.000001	42.387	2.315686	1.00030001	6.727E-11
20F11348	17.0 %		3.837721	0.002289	2.704807	0.005058	0.001468	0.000015	42.393	2.315940	1.00030005	4.357E-12
20F11350	17.0 %	✓	3.611256	0.001563	0.011219	0.000034	0.000199	0.000001	42.405	2.316480	1.00030014	8.894E-11
20F11351	17.0 %	✓	3.555879	0.001547	0.012483	0.000044	0.000012	0.000001	42.411	2.316766	1.00030018	6.270E-11
20F11353	17.0 %	✓	3.755297	0.001638	0.009641	0.000050	0.000689	0.000002	42.423	2.317306	1.00030026	5.181E-11
20F11354	17.0 %	✓	3.561260	0.001549	0.010251	0.000042	0.000021	0.000001	42.429	2.317592	1.00030031	5.836E-11
20F11356	17.0 %	✓	3.550670	0.001544	0.010819	0.000038	0.000001	0.000001	42.441	2.318133	1.00030039	6.682E-11
20F11357	17.0 %	✓	3.554966	0.001551	0.010556	0.000045	0.000006	0.000001	42.447	2.318387	1.00030043	5.537E-11
20F11359	17.0 %	✓	3.568942	0.001571	0.012149	0.000076	0.000072	0.000002	42.459	2.318960	1.00030052	3.200E-11
20F11360	17.0 %	✓	3.556831	0.001553	0.008876	0.000061	0.000021	0.000001	42.465	2.319214	1.00030056	4.073E-11
20F11362	17.0 %	✓	3.557297	0.001554	0.010468	0.000057	0.000025	0.000001	42.476	2.319755	1.00030064	4.392E-11
20F11363	17.0 %	✓	3.562923	0.001550	0.009580	0.000047	0.000043	0.000001	42.483	2.320041	1.00030068	5.702E-11
20F11365	17.0 %	✓	3.558713	0.001554	0.010816	0.000056	0.000033	0.000001	42.494	2.320583	1.00030077	4.739E-11
20F11366	17.0 %	✓	3.591269	0.001560	0.010953	0.000043	0.000130	0.000001	42.501	2.320869	1.00030081	6.359E-11
20F11368	17.0 %	✓	3.559530	0.001552	0.009359	0.000050	0.000032	0.000001	42.512	2.321410	1.00030090	5.725E-11
20F11369	17.0 %	✓	3.554944	0.001562	0.008972	0.000074	0.000011	0.000001	42.519	2.321697	1.00030094	3.648E-11
20F11371	17.0 %	✓	3.559435	0.001554	0.010899	0.000068	0.000026	0.000001	42.531	2.322238	1.00030102	3.861E-11
20F11372	17.0 %	✓	3.558083	0.001553	0.009198	0.000051	0.000031	0.000001	42.536	2.322493	1.00030106	5.188E-11
20F11374	17.0 %	✓	3.584550	0.001603	0.009058	0.000130	0.000110	0.000003	42.549	2.323067	1.00030115	1.823E-11
20F11375	17.0 %	✓	3.553265	0.001566	0.011284	0.000074	0.000020	0.000001	42.554	2.323322	1.00030119	3.356E-11
20F11377	17.0 %	✓	3.550644	0.001561	0.011152	0.000076	0.000010	0.000001	42.566	2.323863	1.00030127	3.287E-11
20F11378	17.0 %	✓	3.551975	0.001571	0.009662	0.000096	0.000006	0.000002	42.572	2.324150	1.00030132	2.639E-11
20F11380	17.0 %	✓	3.549055	0.001605	0.009142	0.000142	0.000010	0.000003	42.584	2.324692	1.00030140	1.687E-11
20F11381	17.0 %	✓	3.556687	0.001575	0.010834	0.000099	0.000024	0.000002	42.590	2.324979	1.00030144	2.471E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F11338	17.0 %	0.0064383 ±0.0001892	0.0331547 ±0.0058948	0.0265788 ±0.0066233	0.0082065 ±0.0059324	1.4123157 ±0.0155657
20F11339	17.0 %	0.0064383 ±0.0001892	0.0331547 ±0.0058948	0.0265788 ±0.0066233	0.0082065 ±0.0059324	1.4123157 ±0.0155657
20F11341	17.0 %	0.0063048 ±0.0002151	0.0251713 ±0.0054895	0.0256647 ±0.0068081	0.0166453 ±0.0068936	1.6225761 ±0.0156470
20F11342	17.0 %	0.0063048 ±0.0002151	0.0251713 ±0.0054895	0.0256647 ±0.0068081	0.0166453 ±0.0068936	1.6225761 ±0.0156470
20F11344	17.0 %	0.0058303 ±0.0001946	0.0184897 ±0.0055149	0.0263775 ±0.0065532	0.0256362 ±0.0066824	1.2961516 ±0.0153474
20F11345	17.0 %	0.0058303 ±0.0001946	0.0184897 ±0.0055149	0.0263775 ±0.0065532	0.0256362 ±0.0066824	1.2961516 ±0.0153474
20F11347	17.0 %	0.0069721 ±0.0001660	0.0234230 ±0.0056069	0.0139791 ±0.0066561	0.0098897 ±0.0060074	1.7577421 ±0.0153499
20F11348	17.0 %	0.0069721 ±0.0001660	0.0234230 ±0.0056069	0.0139791 ±0.0066561	0.0098897 ±0.0060074	1.7577421 ±0.0153499
20F11350	17.0 %	0.0059624 ±0.0002059	0.0261377 ±0.0054471	0.0240068 ±0.0064889	0.0160527 ±0.0060499	1.4157352 ±0.0161936
20F11351	17.0 %	0.0059624 ±0.0002059	0.0261377 ±0.0054471	0.0240068 ±0.0064889	0.0160527 ±0.0060499	1.4157352 ±0.0161936
20F11353	17.0 %	0.0056411 ±0.0001817	0.0273798 ±0.0049515	0.0181069 ±0.0062728	0.0065697 ±0.0056735	1.4022974 ±0.0157306
20F11354	17.0 %	0.0056411 ±0.0001817	0.0273798 ±0.0049515	0.0181069 ±0.0062728	0.0065697 ±0.0056735	1.4022974 ±0.0157306
20F11356	17.0 %	0.0065810 ±0.0002083	0.0294938 ±0.0051087	0.0259434 ±0.0063858	0.0121206 ±0.0065087	1.6220587 ±0.0161641
20F11357	17.0 %	0.0065810 ±0.0002083	0.0294938 ±0.0051087	0.0259434 ±0.0063858	0.0121206 ±0.0065087	1.6220587 ±0.0161641
20F11359	17.0 %	0.0050894 ±0.0001831	0.0269596 ±0.0056186	0.0188827 ±0.0064277	0.0055805 ±0.0064888	1.3295655 ±0.0145840
20F11360	17.0 %	0.0050894 ±0.0001831	0.0269596 ±0.0056186	0.0188827 ±0.0064277	0.0055805 ±0.0064888	1.3295655 ±0.0145840
20F11362	17.0 %	0.0054899 ±0.0001840	0.0331284 ±0.0053710	0.0181156 ±0.0063821	0.0047226 ±0.0059850	1.4023421 ±0.0149015
20F11363	17.0 %	0.0054899 ±0.0001840	0.0331284 ±0.0053710	0.0181156 ±0.0063821	0.0047226 ±0.0059850	1.4023421 ±0.0149015
20F11365	17.0 %	0.0056109 ±0.0001991	0.0217536 ±0.0056416	0.0250492 ±0.0064577	0.0232887 ±0.0060565	1.3635741 ±0.0169926
20F11366	17.0 %	0.0056109 ±0.0001991	0.0217536 ±0.0056416	0.0250492 ±0.0064577	0.0232887 ±0.0060565	1.3635741 ±0.0169926
20F11368	17.0 %	0.0053968 ±0.0001903	0.0197455 ±0.0066206	0.0156887 ±0.0068733	0.0062701 ±0.0060372	1.3988291 ±0.0149789
20F11369	17.0 %	0.0053968 ±0.0001903	0.0197455 ±0.0066206	0.0156887 ±0.0068733	0.0062701 ±0.0060372	1.3988291 ±0.0149789
20F11371	17.0 %	0.0058129 ±0.0001988	0.0276097 ±0.0061286	0.0374986 ±0.0059836	0.0083452 ±0.0061609	1.4124535 ±0.0160906
20F11372	17.0 %	0.0058129 ±0.0001988	0.0276097 ±0.0061286	0.0374986 ±0.0059836	0.0083452 ±0.0061609	1.4124535 ±0.0160906
20F11374	17.0 %	0.0059064 ±0.0001946	0.0261588 ±0.0058497	0.0190510 ±0.0064712	0.0088035 ±0.0061130	1.3422703 ±0.0152556
20F11375	17.0 %	0.0059064 ±0.0001946	0.0261588 ±0.0058497	0.0190510 ±0.0064712	0.0088035 ±0.0061130	1.3422703 ±0.0152556
20F11377	17.0 %	0.0063002 ±0.0001895	0.0314772 ±0.0056489	0.0199642 ±0.0062994	0.0163678 ±0.0063427	1.4723398 ±0.0157755
20F11378	17.0 %	0.0063002 ±0.0001895	0.0314772 ±0.0056489	0.0199642 ±0.0062994	0.0163678 ±0.0063427	1.4723398 ±0.0157755
20F11380	17.0 %	0.0059064 ±0.0001946	0.0261588 ±0.0058497	0.0190510 ±0.0064712	0.0088035 ±0.0061130	1.3422703 ±0.0152556
20F11381	17.0 %	0.0059064 ±0.0001946	0.0261588 ±0.0058497	0.0190510 ±0.0064712	0.0088035 ±0.0061130	1.3422703 ±0.0152556

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F11338	17.0 %	0.0889512 ±0.0004649	0.0297	EXP 150 of 150	51.3205916 ±0.0129324	0.9994	EXP 150 of 150	0.7262556 ±0.0068333	0.5655	EXP 150 of 150	60.53523 ±0.01037	0.9997	EXP 146 of 150	233.86035 ±0.02251
20F11339	17.0 %	0.0343153 ±0.0004651	0.9853	EXP 150 of 150	3.3744346 ±0.0060766	0.9705	EXP 150 of 150	9.1213464 ±0.0081472	0.9926	EXP 150 of 150	764.00041 ±0.03185	1.0000	EXP 146 of 150	2726.15026 ±0.06843
20F11341	17.0 %	0.0076694 ±0.0002957	0.9903	EXP 149 of 150	2.0700216 ±0.0066021	0.9151	EXP 150 of 150	5.7683145 ±0.0066044	0.9880	EXP 150 of 150	483.14503 ±0.02504	1.0000	EXP 150 of 150	1717.90935 ±0.06340
20F11342	17.0 %	0.0140025 ±0.0003262	0.9891	EXP 149 of 150	2.9811380 ±0.0064821	0.9594	EXP 150 of 150	6.0599976 ±0.0067747	0.9883	EXP 150 of 150	506.79908 ±0.02889	1.0000	EXP 150 of 150	1804.68810 ±0.05629
20F11344	17.0 %	0.0088690 ±0.0003171	0.9844	EXP 150 of 150	1.4443451 ±0.0057137	0.8598	EXP 150 of 150	4.6070645 ±0.0075306	0.9752	EXP 150 of 150	386.82100 ±0.02375	1.0000	EXP 150 of 150	1376.50789 ±0.05700
20F11345	17.0 %	0.0170103 ±0.0003208	0.9872	EXP 149 of 150	2.0455045 ±0.0056951	0.9341	EXP 149 of 150	5.3911080 ±0.0075644	0.9816	EXP 150 of 150	450.41307 ±0.02636	1.0000	EXP 150 of 150	1603.52018 ±0.05504
20F11347	17.0 %	0.0248373 ±0.0003966	0.9829	EXP 150 of 150	2.7429585 ±0.0066889	0.9479	EXP 150 of 150	6.3776569 ±0.0068258	0.9892	EXP 150 of 150	533.26995 ±0.03208	1.0000	EXP 150 of 150	1901.96752 ±0.06218
20F11348	17.0 %	0.0506547 ±0.0004105	0.7103	EXP 150 of 150	37.4286963 ±0.0094394	0.9994	EXP 150 of 150	0.3644151 ±0.0067622	0.2675	EXP 150 of 150	32.05150 ±0.00940	0.9991	EXP 150 of 150	124.84371 ±0.02288
20F11350	17.0 %	0.1343951 ±0.0005779	0.9497	EXP 148 of 150	3.3429107 ±0.0060165	0.9706	EXP 149 of 150	8.3397030 ±0.0068328	0.9938	EXP 150 of 150	695.51348 ±0.03141	1.0000	EXP 148 of 150	2513.91911 ±0.06437
20F11351	17.0 %	0.0113320 ±0.0003300	0.9893	EXP 150 of 150	2.6572224 ±0.0061445	0.9522	EXP 149 of 150	5.9369184 ±0.0076671	0.9842	EXP 150 of 150	497.92258 ±0.02756	1.0000	EXP 150 of 150	1772.53451 ±0.06448
20F11353	17.0 %	0.2548615 ±0.0007297	0.0103	EXP 149 of 150	1.5938933 ±0.0062269	0.8827	EXP 150 of 150	4.7080381 ±0.0064136	0.9824	EXP 150 of 150	389.61267 ±0.02412	1.0000	EXP 150 of 150	1465.05347 ±0.05698
20F11354	17.0 %	0.0145198 ±0.0003386	0.9870	EXP 150 of 150	2.0198039 ±0.0055473	0.9341	EXP 150 of 150	5.5283367 ±0.0070741	0.9848	EXP 150 of 150	462.75014 ±0.02567	1.0000	EXP 150 of 150	1649.97969 ±0.05813
20F11356	17.0 %	0.0071256 ±0.0002884	0.9923	EXP 149 of 150	2.4511276 ±0.0054401	0.9575	EXP 150 of 150	6.3274791 ±0.0071307	0.9880	EXP 150 of 150	531.37511 ±0.02934	1.0000	EXP 150 of 150	1889.06717 ±0.06342
20F11357	17.0 %	0.0088473 ±0.0002861	0.9909	EXP 148 of 150	1.9735743 ±0.0058284	0.9241	EXP 149 of 150	5.2606042 ±0.0073761	0.9817	EXP 149 of 150	439.84215 ±0.02828	1.0000	EXP 150 of 150	1565.83993 ±0.05847
20F11359	17.0 %	0.0220556 ±0.0003042	0.9726	EXP 149 of 150	1.2997221 ±0.0055886	0.8567	EXP 148 of 150	3.0188908 ±0.0066707	0.9571	EXP 149 of 150	253.18893 ±0.01924	0.9999	EXP 149 of 150	905.24461 ±0.04373
20F11360	17.0 %	0.0113235 ±0.0002844	0.9843	EXP 150 of 150	1.2109671 ±0.0059383	0.8159	EXP 150 of 150	3.8331706 ±0.0068982	0.9690	EXP 149 of 150	323.40416 ±0.02026	1.0000	EXP 146 of 150	1152.00901 ±0.04681
20F11362	17.0 %	0.0136622 ±0.0002762	0.9864	EXP 148 of 150	1.5403055 ±0.0060647	0.8774	EXP 149 of 150	4.1550999 ±0.0074301	0.9713	EXP 150 of 150	348.60722 ±0.02220	1.0000	EXP 149 of 150	1241.95576 ±0.05174
20F11363	17.0 %	0.0233761 ±0.0003332	0.9852	EXP 149 of 150	1.8331940 ±0.0065963	0.8932	EXP 150 of 150	5.3939187 ±0.0067205	0.9850	EXP 149 of 150	451.90503 ±0.02480	1.0000	EXP 148 of 150	1612.08967 ±0.05941
20F11365	17.0 %	0.0172215 ±0.0003395	0.9810	EXP 150 of 150	1.7311674 ±0.0064003	0.8969	EXP 150 of 150	4.4842749 ±0.0072992	0.9757	EXP 150 of 150	376.00013 ±0.02481	1.0000	EXP 150 of 150	1339.99508 ±0.05040
20F11366	17.0 %	0.0659251 ±0.0004893	0.9669	EXP 150 of 150	2.3382195 ±0.0060581	0.9407	EXP 148 of 150	5.9764750 ±0.0071566	0.9866	EXP 150 of 150	499.96195 ±0.02530	1.0000	EXP 150 of 150	1797.57846 ±0.06215
20F11368	17.0 %	0.0188144 ±0.0003291	0.9865	EXP 150 of 150	1.8117297 ±0.0065356	0.8961	EXP 150 of 150	5.4113876 ±0.0068299	0.9850	EXP 149 of 150	454.17848 ±0.02840	1.0000	EXP 150 of 150	1618.65357 ±0.05865
20F11369	17.0 %	0.0084505 ±0.0002483	0.9880	EXP 150 of 150	1.1004084 ±0.0061427	0.7971	EXP 149 of 150	3.4395502 ±0.0064449	0.9662	EXP 149 of 150	289.79675 ±0.02226	0.9999	EXP 150 of 150	1031.99570 ±0.04375
20F11371	17.0 %	0.0132242 ±0.0003302	0.9779	EXP 150 of 150	1.4102599 ±0.0060331	0.8615	EXP 150 of 150	3.6692818 ±0.0062807	0.9730	EXP 150 of 150	306.28490 ±0.01901	1.0000	EXP 149 of 150	1092.02818 ±0.04374
20F11372	17.0 %	0.0177087 ±0.0003239	0.9858	EXP 150 of 150	1.6031915 ±0.0059874	0.8797	EXP 150 of 150	4.9061440 ±0.0075044	0.9781	EXP 150 of 150	411.70906 ±0.02636	1.0000	EXP 150 of 150	1466.85406 ±0.05406
20F11374	17.0 %	0.0205433 ±0.0003293	0.9442	EXP 150 of 150	0.5339142 ±0.0053947	0.5716	EXP 150 of 150	1.7049501 ±0.0069523	0.8599	EXP 149 of 150	143.60570 ±0.01369	0.9999	EXP 148 of 150	516.31739 ±0.03100
20F11375	17.0 %	0.0107744 ±0.0002964	0.9794	EXP 150 of 150	1.2693521 ±0.0056336	0.8492	EXP 150 of 150	3.1864969 ±0.0073475	0.9534	EXP 150 of 150	266.68581 ±0.02209	0.9999	EXP 150 of 150	949.31339 ±0.04321
20F11377	17.0 %	0.0087563 ±0.0002699	0.9823	EXP 150 of 150	1.2231597 ±0.0060072	0.8265	EXP 150 of 150	3.1013046 ±0.0061493	0.9657	EXP 146 of 150	261.37961 ±0.01900	1.0000	EXP 150 of 150	929.92418 ±0.04699
20F11378	17.0 %	0.0074885 ±0.0002718	0.9773	EXP 149 of 150	0.8409134 ±0.0064406	0.6429	EXP 150 of 150	2.4871164 ±0.0070948	0.9268	EXP 150 of 150	209.78506 ±0.01772	0.9999	EXP 150 of 150	746.94502 ±0.03779
20F11380	17.0 %	0.0071423 ±0.0002530	0.9678	EXP 150 of 150	0.5019065 ±0.0056700	0.5129	EXP 147 of 150	1.5854816 ±0.0064298	0.8588	EXP 150 of 150	134.24093 ±0.01491	0.9999	EXP 149 of 150	477.97026 ±0.03189
20F11381	17.0 %	0.0103039 ±0.0002451	0.9783	EXP 148 of 150	0.8880159 ±0.0057143	0.7635	EXP 149 of 150	2.3233787 ±0.0072826	0.9165	EXP 150 of 150	196.13983 ±0.01627	0.9999	EXP 150 of 150	699.22799 ±0.03853

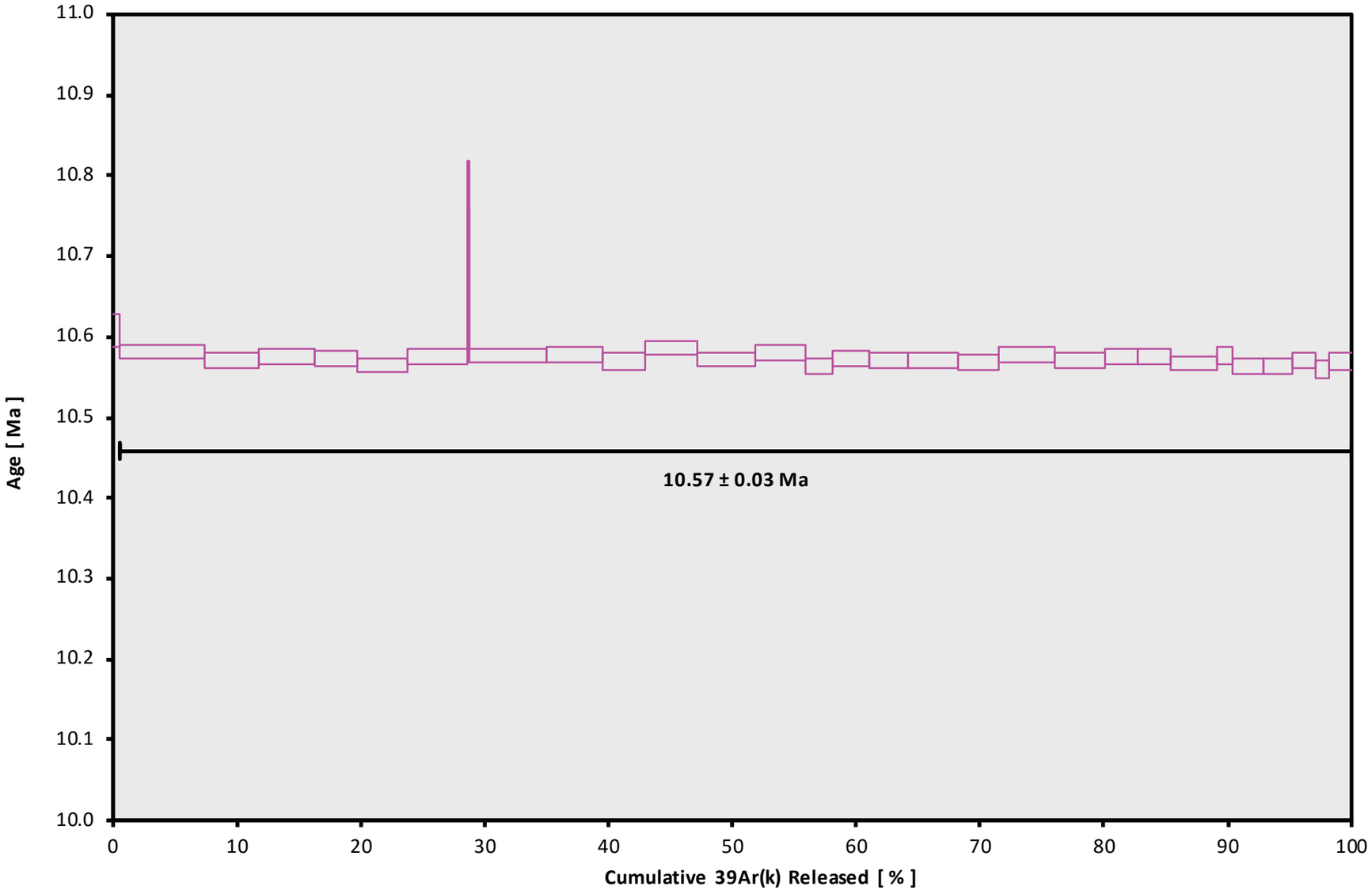
r2	Regression (type,n)
0.9999	EXP 150 of 150
1.0000	EXP 147 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
0.9985	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 147 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 149 of 150
1.0000	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F11338	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11339	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11341	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11342	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11344	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11345	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11347	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11348	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11350	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11351	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11353	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11354	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11356	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11357	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11359	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11360	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11362	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11363	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11365	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11366	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11368	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11369	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11371	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11372	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11374	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11375	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11377	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11378	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11380	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01
20F11381	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	40.33	Oregon\Swenton (18-58)	20F11333	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F11338	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	22	31	1
20F11339	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	22	40	1
20F11341	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	22	57	1
20F11342	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	23	6	1
20F11344	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	23	23	1
20F11345	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	23	31	1
20F11347	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	23	49	1
20F11348	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	28	MAY	2020	23	57	1
20F11350	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	0	14	1
20F11351	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	0	23	1
20F11353	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	0	40	1
20F11354	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	0	49	1
20F11356	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	1	6	1
20F11357	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	1	14	1
20F11359	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	1	32	1
20F11360	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	1	40	1
20F11362	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	1	57	1
20F11363	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	2	6	1
20F11365	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	2	23	1
20F11366	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	2	32	1
20F11368	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	2	49	1
20F11369	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	2	58	1
20F11371	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	3	15	1
20F11372	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	3	23	1
20F11374	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	3	41	1
20F11375	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	3	49	1
20F11377	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	4	6	1
20F11378	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	4	15	1
20F11380	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	4	32	1
20F11381	17.0 %	VS17-046b	Sanidine	Iron Point	FCT-NM (1C31-20)	28.201	0.082	Kuiper et al (2008)	9.51702	0.157	0.00163134	0.157	298.622	0.137	0.999948	0.043	1	3.54E-14	29	MAY	2020	4	41	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F11338	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11339	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11341	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11342	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11344	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11345	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11347	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11348	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11350	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11351	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11353	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11354	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11356	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11357	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11359	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11360	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11362	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11363	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11365	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11366	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11368	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11369	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11371	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11372	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11374	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11375	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11377	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11378	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11380	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F11381	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F11333.AGE >>> VS17-046B >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.57 ± 0.03
TOTAL FUSION
10.57 ± 0.03
NORMAL ISOCHRON
10.57 ± 0.03
INVERSE ISOCHRON
10.57 ± 0.03

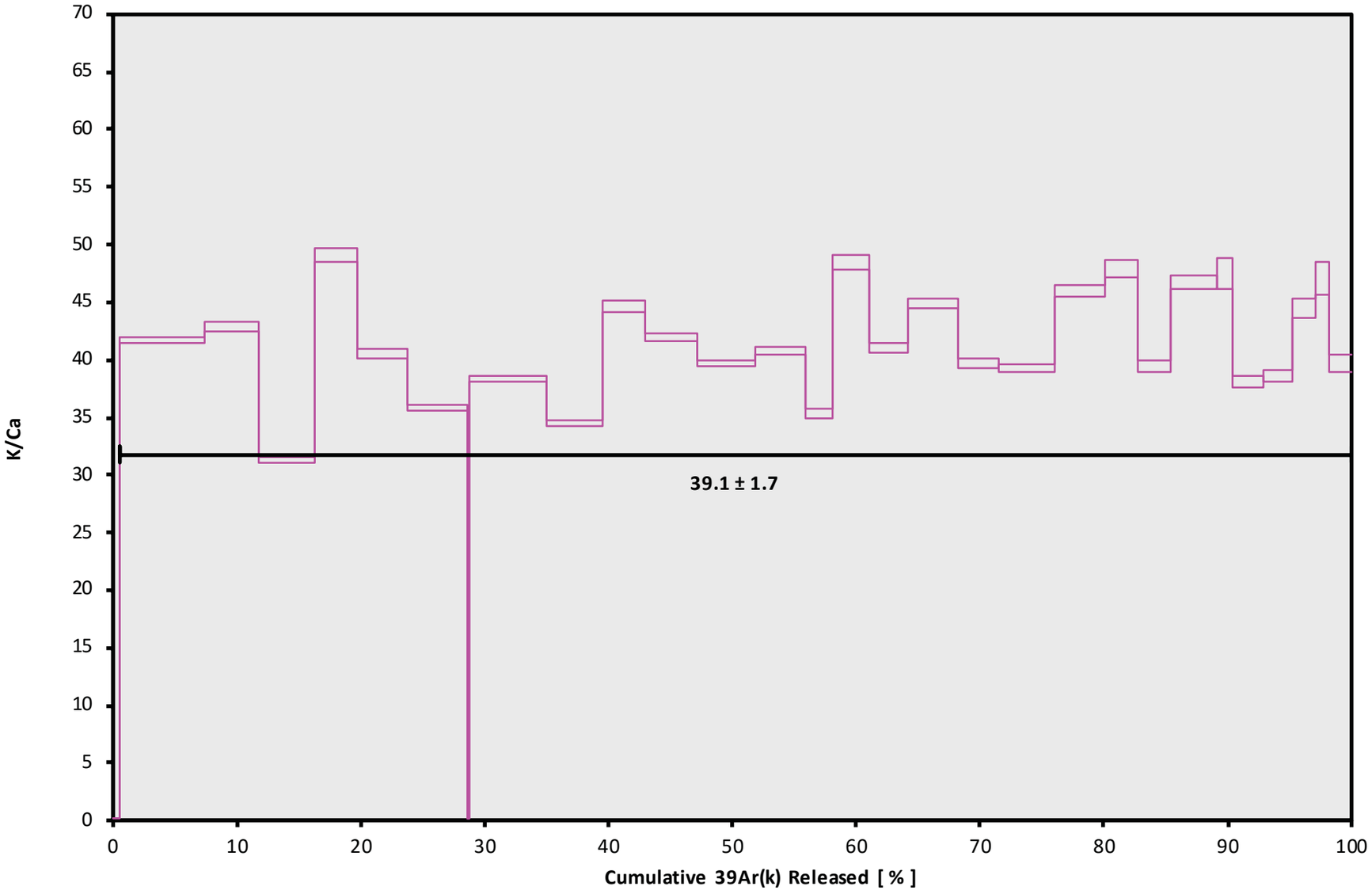
MSWD (PROBABILITY)
1.66 (2%)

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 20-OSU-01 (1C31-

20F11333.AGE >>> VS17-046B >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

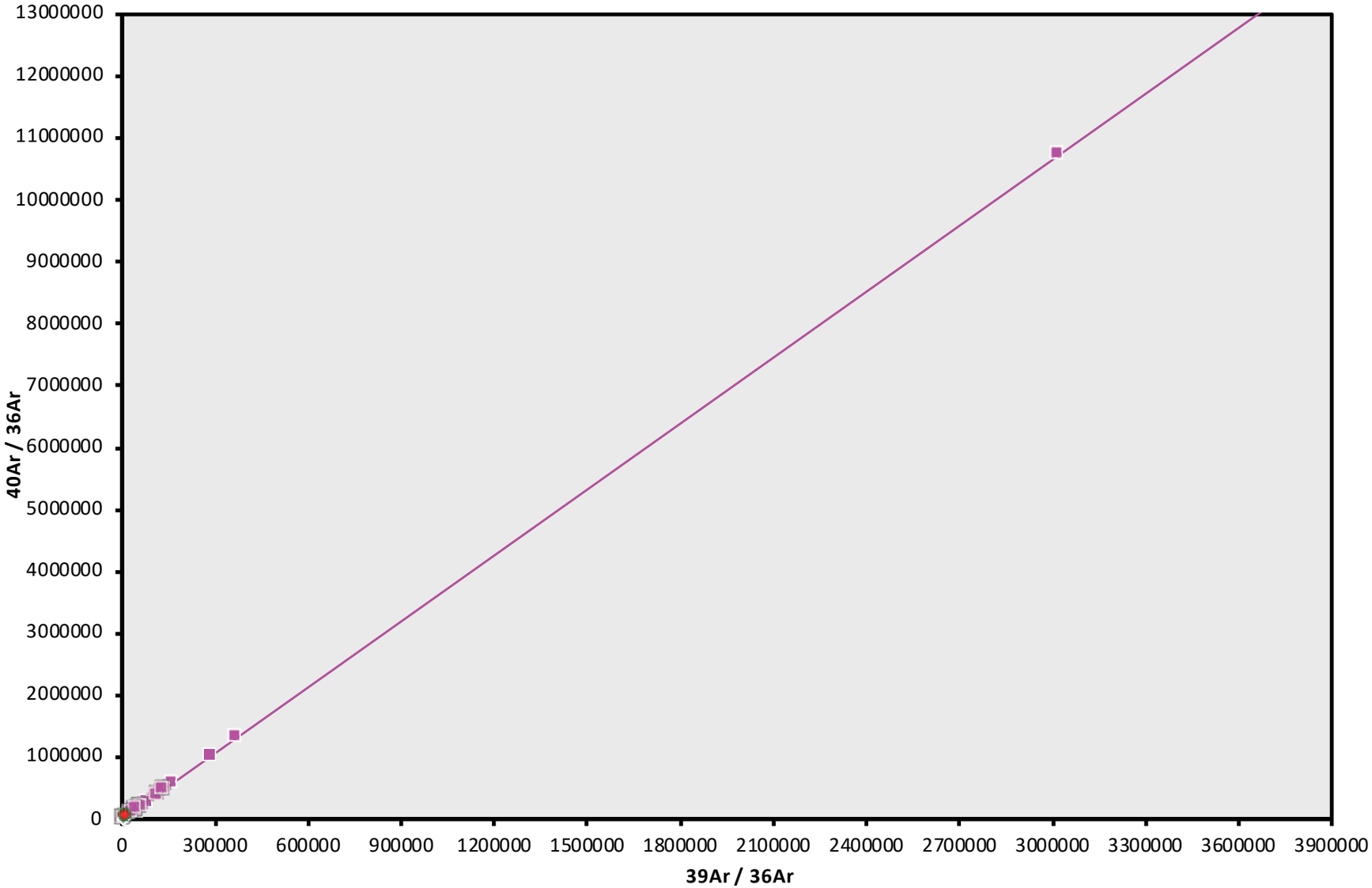
WEIGHTED PLATEAU
10.57 ± 0.03
TOTAL FUSION
10.57 ± 0.03
NORMAL ISOCHRON
10.57 ± 0.03
INVERSE ISOCHRON
10.57 ± 0.03

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 20-OSU-01 (1C31-

20F11333.AGE >>> VS17-046B >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.57 ± 0.03
TOTAL FUSION
10.57 ± 0.03
NORMAL ISOCHRON
10.57 ± 0.03
INVERSE ISOCHRON
10.57 ± 0.03

MSWD (PROBABILITY)
1.71 (1%)

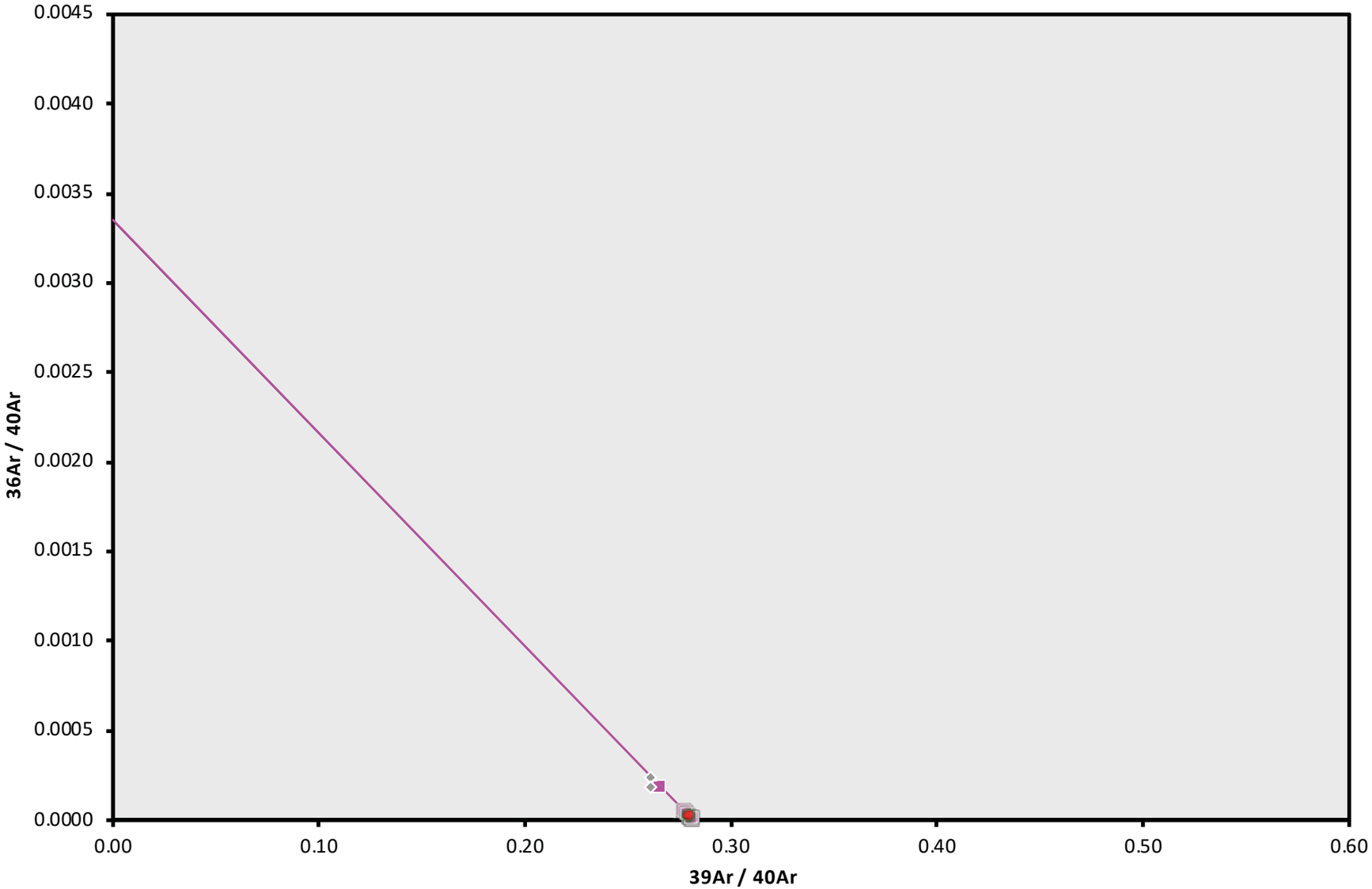
40AR/36AR INTERCEPT

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 20-OSU-01 (1C31-20)

20F11333.AGE >>> VS17-046B >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.57 ± 0.03
TOTAL FUSION
10.57 ± 0.03
NORMAL ISOCHRON
10.57 ± 0.03
INVERSE ISOCHRON
10.57 ± 0.03

MSWD (PROBABILITY)
1.72 (1%)

SPREADING FACTOR

Sample Info

Sanidine
Iron Point
Dan Miggins

IRR = 20-OSU-01 (1C31-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F04675	17.0 %	✓	0.0075502	4.979	5.98455	2.778	3.078305	0.323	257.9304	0.043	923.238	0.005	3.57199 ±0.00319	10.21 ±0.01	99.79	3.51	18.5 ±1.0
20F04676	17.0 %	✓	0.0183237	2.315	7.63644	2.267	4.478071	0.228	373.0338	0.042	1338.281	0.004	3.57399 ±0.00311	10.21 ±0.01	99.62	5.07	21.0 ±1.0
20F04678	17.0 %	✓	0.1014361	0.643	4.36576	3.849	2.189386	0.438	181.0729	0.043	677.731	0.006	3.57700 ±0.00380	10.22 ±0.01	95.57	2.46	17.8 ±1.4
20F04679	17.0 %	✓	0.0211551	2.078	9.77867	1.679	4.707814	0.221	393.3790	0.042	1414.479	0.004	3.58112 ±0.00310	10.23 ±0.01	99.59	5.35	17.3 ±0.6
20F04681	17.0 %	✓	0.0049499	8.443	5.84679	2.840	3.933387	0.261	326.9181	0.042	1168.386	0.004	3.57030 ±0.00314	10.20 ±0.01	99.90	4.45	24.0 ±1.4
20F04682	17.0 %		0.2201945	0.399	3.02130	5.530	1.604460	0.584	130.5821	0.043	535.895	0.007	3.60176 ±0.00523	10.29 ±0.01	87.76	1.78	18.6 ±2.1
20F04684	17.0 %	✓	0.0104399	3.830	4.76352	3.513	2.646429	0.386	218.6347	0.043	782.821	0.006	3.56745 ±0.00326	10.19 ±0.01	99.63	2.97	19.7 ±1.4
20F04685	17.0 %	✓	0.0152784	2.345	6.87265	2.461	4.109411	0.263	340.4867	0.042	1220.677	0.005	3.57277 ±0.00310	10.21 ±0.01	99.65	4.63	21.3 ±1.0
20F04687	17.0 %		0.0051816	6.651	4.42221	3.427	2.648660	0.337	220.1014	0.043	790.671	0.006	3.58634 ±0.00323	10.25 ±0.01	99.83	2.99	21.4 ±1.5
20F04688	17.0 %	✓	0.0072797	4.982	4.36724	3.592	2.407590	0.387	199.5184	0.043	714.631	0.006	3.57210 ±0.00327	10.21 ±0.01	99.73	2.71	19.6 ±1.4
20F04690	17.0 %	✓	0.0154496	2.455	4.99644	3.421	2.586511	0.380	214.4397	0.043	769.406	0.006	3.56780 ±0.00326	10.19 ±0.01	99.44	2.92	18.5 ±1.3
20F04691	17.0 %	✓	0.0284499	1.439	5.72986	2.858	3.117058	0.333	260.3843	0.042	938.397	0.004	3.57249 ±0.00319	10.21 ±0.01	99.13	3.54	19.5 ±1.1
20F04693	17.0 %	✓	0.0075615	5.030	2.71492	5.867	1.851594	0.463	152.5465	0.043	547.440	0.007	3.57475 ±0.00347	10.21 ±0.01	99.61	2.07	24.2 ±2.8
20F04694	17.0 %	✓	0.1438126	0.512	7.82064	2.099	4.567299	0.223	381.1142	0.042	1405.456	0.004	3.57619 ±0.00325	10.22 ±0.01	96.97	5.18	21.0 ±0.9
20F04696	17.0 %	✓	0.0987147	0.566	4.84097	3.334	3.572346	0.292	297.4563	0.042	1092.618	0.005	3.57487 ±0.00326	10.21 ±0.01	97.32	4.05	26.4 ±1.8
20F04697	17.0 %	✓	0.0257844	1.616	4.87823	3.442	2.620096	0.391	217.1781	0.043	782.963	0.005	3.57098 ±0.00329	10.20 ±0.01	99.05	2.95	19.1 ±1.3
20F04699	17.0 %	✓	0.0427923	1.086	8.17898	1.989	3.684330	0.270	305.4203	0.042	1105.810	0.005	3.58040 ±0.00319	10.23 ±0.01	98.89	4.15	16.1 ±0.6
20F04700	17.0 %	✓	0.0101280	3.655	3.71631	4.249	2.020839	0.475	168.3433	0.043	603.347	0.007	3.56729 ±0.00338	10.19 ±0.01	99.53	2.29	19.5 ±1.7
20F04702	17.0 %	✓	0.0111226	3.521	6.09849	2.362	2.855384	0.358	238.1215	0.043	852.960	0.005	3.56961 ±0.00322	10.20 ±0.01	99.65	3.24	16.8 ±0.8
20F04703	17.0 %	✓	0.0400347	1.205	6.22223	2.378	3.635466	0.274	302.0255	0.042	1092.430	0.004	3.57854 ±0.00320	10.22 ±0.01	98.94	4.11	20.9 ±1.0
20F04705	17.0 %	✓	0.0943883	0.621	3.01284	5.479	1.562789	0.637	129.0931	0.044	490.008	0.007	3.57881 ±0.00420	10.22 ±0.01	94.28	1.76	18.4 ±2.0
20F04706	17.0 %	✓	0.0455509	0.962	6.04058	2.583	3.627762	0.284	301.8695	0.042	1092.718	0.004	3.57584 ±0.00317	10.22 ±0.01	98.78	4.11	21.5 ±1.1
20F04708	17.0 %		1.0341736	0.230	3.69524	4.221	2.231353	0.448	170.7514	0.043	958.540	0.005	3.80659 ±0.00971	10.87 ±0.03	67.81	2.32	19.9 ±1.7
20F04709	17.0 %	✓	0.0499555	1.130	6.66890	2.534	3.797659	0.274	314.5215	0.042	1139.393	0.004	3.57636 ±0.00324	10.22 ±0.01	98.72	4.28	20.3 ±1.0
20F04711	17.0 %	✓	0.0345559	1.416	7.70665	2.123	4.116471	0.241	341.3824	0.042	1228.731	0.004	3.57033 ±0.00316	10.20 ±0.01	99.19	4.64	19.0 ±0.8
20F04712	17.0 %	✓	0.0177236	2.358	3.09495	5.231	1.822555	0.531	151.0141	0.043	544.541	0.007	3.57195 ±0.00355	10.21 ±0.01	99.06	2.05	21.0 ±2.2
20F04714	17.0 %	✓	0.0120066	3.044	4.50864	3.400	2.245243	0.468	186.7136	0.043	669.388	0.006	3.56731 ±0.00332	10.19 ±0.01	99.50	2.54	17.8 ±1.2
20F04715	17.0 %	✓	0.0126109	2.888	2.71047	5.559	1.394830	0.694	117.6730	0.044	423.975	0.008	3.57230 ±0.00368	10.21 ±0.01	99.15	1.60	18.7 ±2.1
20F04717	17.0 %		0.0065338	5.444	5.55709	2.924	3.369447	0.305	281.3415	0.042	1010.988	0.005	3.58756 ±0.00315	10.25 ±0.01	99.83	3.83	21.8 ±1.3
20F04718	17.0 %		0.4426798	0.279	3.53751	4.508	2.228542	0.430	179.7164	0.043	780.261	0.005	3.60723 ±0.00537	10.31 ±0.02	83.08	2.44	21.8 ±2.0
		Σ	2.5858181	0.142	158.78908	0.558	88.711086	0.062	7352.7635	0.008	27096.182	0.001					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-054**
Material = **Sanidine**
Location = **Unidentified flow**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C41-19)**
Position = **X: 0 | Y: 0 | Z/H: 50.97527 mm**
FCT-NM Age = **28.201 ±0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.91958 ±0.01359**
FCT-NM J-value = **0.00156514 ±0.00000214**
Air Shot 40Ar/36Ar = **299.5190 ±0.3924**
Air Shot MDF = **0.99919852 ±0.00041736 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ±0.107 E-10 1/a**
Decay 39Ar = **2.940 ±0.016 E-07 1/h**
Decay 37Ar = **8.230 ±0.012 E-04 1/h**
Decay 36Cl = **2.257 ±0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ±0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ±0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ±0.31**
Atmospheric 38/36(a) = **0.1885 ±0.0003**
Production 39/37(ca) = **0.0006425 ±0.0000059**
Production 38/37(ca) = **0.0001800 ±0.0000173**
Production 36/37(ca) = **0.0002703 ±0.0000005**
Production 40/39(k) = **0.000607 ±0.000059**
Production 38/39(k) = **0.012077 ±0.000011**
Production 36/38(cl) = **262.80 ±1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ±0.0100 E-04**
Atomic Weight K = **39.0983 ±0.0001 g**

Results

	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau		3.57325 ±0.00162	**10.21 ±0.03**	6.02	86.64	19.1 ±0.9
Error Mean		±0.05%	**±0.28%**	0%	25	
		Full External Error	±0.53	1.58	2σ Confidence Limit	
		Analytical Error	±0.00	2.4545	Error Magnification	
Total Fusion Age		3.58136 ±0.00067	**10.23 ±0.03**		30	19.9 ±0.2
		±0.02%	**±0.27%**			
		Full External Error	±0.53			
		Analytical Error	±0.00			
Normal Isochron	**314.61 ±10.24**	3.57037 ±0.00201	**10.20 ±0.03**	5.31	86.64	
Error Chron	**±3.26%**	±0.06%	**±0.28%**	0%	25	
		Full External Error	±0.53	1.59	2σ Confidence Limit	
		Analytical Error	±0.01	2.3042	Error Magnification	
				1	Number of Iterations	
				0.0000001018	Convergence	
Inverse Isochron	**310.33 ±9.96**	3.57176 ±0.00196	**10.20 ±0.03**	5.06	86.64	
Error Chron	**±3.21%**	±0.05%	**±0.28%**	0%	25	
		Full External Error	±0.53	1.59	2σ Confidence Limit	
		Analytical Error	±0.01	2.2487	Error Magnification	
				2	Number of Iterations	
				0.0004740987	Convergence	
				6%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F04675	17.0 %	✓	0.0059326	5.98455	0.0000000	257.9266	921.310	10.21 ±0.01	99.79	3.51	18.5 ±1.0
20F04676	17.0 %	✓	0.0162595	7.63644	0.0000000	373.0288	1333.201	10.21 ±0.01	99.62	5.07	21.0 ±1.0
20F04678	17.0 %	✓	0.1002561	4.36576	0.0000000	181.0701	647.689	10.22 ±0.01	95.57	2.46	17.8 ±1.4
20F04679	17.0 %	✓	0.0185119	9.77867	0.0000000	393.3727	1408.714	10.23 ±0.01	99.59	5.35	17.3 ±0.6
20F04681	17.0 %	✓	0.0033695	5.84679	0.0000000	326.9143	1167.181	10.20 ±0.01	99.90	4.45	24.0 ±1.4
20F04682	17.0 %		0.2193779	3.02130	0.0000000	130.5801	470.318	10.29 ±0.01	87.76	1.78	18.6 ±2.1
20F04684	17.0 %	✓	0.0091515	4.76352	0.0034325	218.6316	779.956	10.19 ±0.01	99.63	2.97	19.7 ±1.4
20F04685	17.0 %	✓	0.0134207	6.87265	0.0000000	340.4823	1216.464	10.21 ±0.01	99.65	4.63	21.3 ±1.0
20F04687	17.0 %		0.0039863	4.42221	0.0000000	220.0985	789.348	10.25 ±0.01	99.83	2.99	21.4 ±1.5
20F04688	17.0 %	✓	0.0060992	4.36724	0.0000000	199.5156	712.689	10.21 ±0.01	99.73	2.71	19.6 ±1.4
20F04690	17.0 %	✓	0.0140990	4.99644	0.0000000	214.4365	765.067	10.19 ±0.01	99.44	2.92	18.5 ±1.3
20F04691	17.0 %	✓	0.0269012	5.72986	0.0000000	260.3806	930.207	10.21 ±0.01	99.13	3.54	19.5 ±1.1
20F04693	17.0 %	✓	0.0068259	2.71492	0.0075357	152.5448	545.310	10.21 ±0.01	99.61	2.07	24.2 ±2.8
20F04694	17.0 %	✓	0.1416987	7.82064	0.0000000	381.1091	1362.919	10.22 ±0.01	96.97	5.18	21.0 ±0.9
20F04696	17.0 %	✓	0.0974062	4.84097	0.0000000	297.4532	1063.356	10.21 ±0.01	97.32	4.05	26.4 ±1.8
20F04697	17.0 %	✓	0.0244658	4.87823	0.0000000	217.1750	775.527	10.20 ±0.01	99.05	2.95	19.1 ±1.3
20F04699	17.0 %	✓	0.0405815	8.17898	0.0000000	305.4150	1093.508	10.23 ±0.01	98.89	4.15	16.1 ±0.6
20F04700	17.0 %	✓	0.0091235	3.71631	0.0000000	168.3409	600.521	10.19 ±0.01	99.53	2.29	19.5 ±1.7
20F04702	17.0 %	✓	0.0094741	6.09849	0.0000000	238.1176	849.987	10.20 ±0.01	99.65	3.24	16.8 ±0.8
20F04703	17.0 %	✓	0.0383528	6.22223	0.0000000	302.0215	1080.796	10.22 ±0.01	98.94	4.11	20.9 ±1.0
20F04705	17.0 %	✓	0.0935739	3.01284	0.0000000	129.0911	461.992	10.22 ±0.01	94.28	1.76	18.4 ±2.0
20F04706	17.0 %	✓	0.0439181	6.04058	0.0000000	301.8656	1079.422	10.22 ±0.01	98.78	4.11	21.5 ±1.1
20F04708	17.0 %		1.0331748	3.69524	0.0000000	170.7491	649.971	10.87 ±0.03	67.81	2.32	19.9 ±1.7
20F04709	17.0 %	✓	0.0481529	6.66890	0.0000000	314.5172	1124.826	10.22 ±0.01	98.72	4.28	20.3 ±1.0
20F04711	17.0 %	✓	0.0324728	7.70665	0.0000000	341.3774	1218.829	10.20 ±0.01	99.19	4.64	19.0 ±0.8
20F04712	17.0 %	✓	0.0168871	3.09495	0.0000000	151.0121	539.407	10.21 ±0.01	99.06	2.05	21.0 ±2.2
20F04714	17.0 %	✓	0.0107879	4.50864	0.0000000	186.7107	666.054	10.19 ±0.01	99.50	2.54	17.8 ±1.2
20F04715	17.0 %	✓	0.0118783	2.71047	0.0000000	117.6713	420.357	10.21 ±0.01	99.15	1.60	18.7 ±2.1
20F04717	17.0 %		0.0050317	5.55709	0.0000000	281.3379	1009.315	10.25 ±0.01	99.83	3.83	21.8 ±1.3
20F04718	17.0 %		0.4417236	3.53751	0.0000000	179.7142	648.271	10.31 ±0.02	83.08	2.44	21.8 ±2.0
		Σ	2.5428948	158.78908	0.0109682	7352.6615	26332.512				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-054**
Material = **Sanidine**
Location = **Unidentified flow**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C41-19)**
J = **0.00156514 ±0.00000214**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.57325	±0.00162	**10.21**	**±0.03**	6.02	86.64	19.1 ±0.9
Error Mean		±0.05%		**±0.28%**	0%	25	
			Full External Error	±0.53	1.58	2σ Confidence Limit	
			Analytical Error	±0.00	2.4545	Error Magnification	
Total Fusion Age	3.58136	±0.00067	**10.23**	**±0.03**		30	19.9 ±0.2
		±0.02%		**±0.27%**			
			Full External Error	±0.53			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F04675	17.0 %	✓	43476.36	±5548.96	155595.54	±19858.48	1.0000
20F04676	17.0 %	✓	22942.15	±1204.73	82293.54	±4320.83	0.9999
20F04678	17.0 %	✓	1806.08	±23.63	6758.90	±88.23	0.9978
20F04679	17.0 %	✓	21249.72	±1014.40	76396.30	±3646.39	0.9998
20F04681	17.0 %	✓	97021.35	±24206.12	346693.61	±86497.02	1.0000
20F04682	17.0 %		595.23	±4.81	2442.43	±19.62	0.9941
20F04684	17.0 %	✓	23890.23	±2100.94	85525.63	±7520.88	1.0000
20F04685	17.0 %	✓	25369.90	±1365.49	90939.30	±4894.04	0.9999
20F04687	17.0 %		55214.22	±9614.05	198315.39	±34530.82	1.0000
20F04688	17.0 %	✓	32711.64	±3916.71	117147.72	±14026.27	1.0000
20F04690	17.0 %	✓	15209.32	±824.41	54562.39	±2957.16	0.9999
20F04691	17.0 %	✓	9679.16	±296.46	34877.25	±1067.83	0.9996
20F04693	17.0 %	✓	22348.07	±2506.51	80187.39	±8993.37	1.0000
20F04694	17.0 %	✓	2689.57	±28.07	9916.99	±103.18	0.9967
20F04696	17.0 %	✓	3053.74	±35.26	11215.28	±129.17	0.9973
20F04697	17.0 %	✓	8876.68	±304.29	31996.98	±1096.53	0.9997
20F04699	17.0 %	✓	7525.97	±173.21	27244.53	±626.61	0.9993
20F04700	17.0 %	✓	18451.44	±1507.31	66120.19	±5401.12	0.9999
20F04702	17.0 %	✓	25133.42	±2088.38	90015.08	±7479.13	0.9999
20F04703	17.0 %	✓	7874.82	±198.88	28478.93	±718.83	0.9994
20F04705	17.0 %	✓	1379.56	±17.37	5235.75	±65.78	0.9975
20F04706	17.0 %	✓	6873.37	±137.97	24876.60	±498.90	0.9991
20F04708	17.0 %		165.27	±0.77	927.66	±4.27	0.9827
20F04709	17.0 %	✓	6531.64	±153.77	23658.03	±556.61	0.9993
20F04711	17.0 %	✓	10512.73	±318.19	37832.44	±1144.63	0.9996
20F04712	17.0 %	✓	8942.47	±445.10	32240.60	±1604.50	0.9998
20F04714	17.0 %	✓	17307.43	±1180.15	62039.46	±4229.99	0.9999
20F04715	17.0 %	✓	9906.42	±611.31	35687.22	±2202.01	0.9999
20F04717	17.0 %		55913.21	±7966.03	200890.29	±28620.62	1.0000
20F04718	17.0 %		406.85	±2.30	1766.15	±9.87	0.9883

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**314.61**	**±10.24**	3.57037	±0.00201	**10.20**	**±0.03**	5.31
Error Chron		**±3.26%**		±0.06%		**±0.28%**	0%
					Full External Error	±0.53	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.59	Convergence	0.000000101775
	Error Magnification	2.3042	Number of Iterations	1
	Number of Data Points	25	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F04675	17.0 %	✓	0.2794191	±0.0002396	0.00000643	±0.00000082	0.0001
20F04676	17.0 %	✓	0.2787844	±0.0002368	0.00001215	±0.00000064	0.0002
20F04678	17.0 %	✓	0.2672144	±0.0002321	0.00014795	±0.00000193	0.0014
20F04679	17.0 %	✓	0.2781512	±0.0002351	0.00001309	±0.00000062	0.0002
20F04681	17.0 %	✓	0.2798475	±0.0002383	0.00000288	±0.00000072	0.0000
20F04682	17.0 %		0.2437034	±0.0002139	0.00040943	±0.00000329	0.0033
20F04684	17.0 %	✓	0.2793341	±0.0002406	0.00001169	±0.00000103	0.0002
20F04685	17.0 %	✓	0.2789762	±0.0002372	0.00001100	±0.00000059	0.0002
20F04687	17.0 %		0.2784162	±0.0002402	0.00000504	±0.00000088	0.0001
20F04688	17.0 %	✓	0.2792341	±0.0002407	0.00000854	±0.00000102	0.0002
20F04690	17.0 %	✓	0.2787510	±0.0002404	0.00001833	±0.00000099	0.0003
20F04691	17.0 %	✓	0.2775207	±0.0002370	0.00002867	±0.00000088	0.0003
20F04693	17.0 %	✓	0.2786980	±0.0002438	0.00001247	±0.00000140	0.0002
20F04694	17.0 %	✓	0.2712088	±0.0002300	0.00010084	±0.00000105	0.0008
20F04696	17.0 %	✓	0.2722839	±0.0002324	0.00008916	±0.00000103	0.0010
20F04697	17.0 %	✓	0.2774223	±0.0002394	0.00003125	±0.00000107	0.0004
20F04699	17.0 %	✓	0.2762377	±0.0002360	0.00003670	±0.00000084	0.0005
20F04700	17.0 %	✓	0.2790590	±0.0002430	0.00001512	±0.00000124	0.0003
20F04702	17.0 %	✓	0.2792134	±0.0002395	0.00001111	±0.00000092	0.0002
20F04703	17.0 %	✓	0.2765139	±0.0002360	0.00003511	±0.00000089	0.0004
20F04705	17.0 %	✓	0.2634890	±0.0002331	0.00019099	±0.00000240	0.0019
20F04706	17.0 %	✓	0.2762985	±0.0002352	0.00004020	±0.00000081	0.0005
20F04708	17.0 %		0.1781538	±0.0001544	0.00107798	±0.00000496	0.0025
20F04709	17.0 %	✓	0.2760855	±0.0002356	0.00004227	±0.00000099	0.0004
20F04711	17.0 %	✓	0.2778761	±0.0002365	0.00002643	±0.00000080	0.0003
20F04712	17.0 %	✓	0.2773667	±0.0002432	0.00003102	±0.00000154	0.0005
20F04714	17.0 %	✓	0.2789745	±0.0002429	0.00001612	±0.00000110	0.0003
20F04715	17.0 %	✓	0.2775900	±0.0002470	0.00002802	±0.00000173	0.0005
20F04717	17.0 %		0.2783271	±0.0002368	0.00000498	±0.00000071	0.0001
20F04718	17.0 %		0.2303580	±0.0001984	0.00056620	±0.00000316	0.0024

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**310.33**	**±9.96**	3.57176	±0.00196	**10.20**	**±0.03**	5.06
Error Chron		**±3.21%**		±0.05%		**±0.28%**	0%
					Full External Error	±0.53	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.59	Convergence	0.0004740987
	Error Magnification	2.2487	Number of Iterations	2
	Number of Data Points	25	Calculated Line	Weighted York-2
	Spreading Factor	5.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F04675	17.0 %	✓	0.0059326	6.38	0.0000000	0.00	0.0016176	2.78	0.0000000	0.00	5.98455	2.78	0.0011183	6.38	0.0000000	0.00	3.114979	0.10	0.0010772	10.02	0.0000000	0.00	257.9266	0.04	0.0038451	2.93
20F04676	17.0 %	✓	0.0162595	2.63	0.0000000	0.00	0.0020641	2.27	0.0000000	0.00	7.63644	2.27	0.0030649	2.63	0.0000000	0.00	4.505069	0.10	0.0013746	9.89	0.0000000	0.00	373.0288	0.04	0.0049064	2.45
20F04678	17.0 %	✓	0.1002561	0.65	0.0000000	0.00	0.0011801	3.85	0.0000000	0.00	4.36576	3.85	0.0188983	0.67	0.0000000	0.00	2.186784	0.10	0.0007858	10.37	0.0000000	0.00	181.0701	0.04	0.0028050	3.96
20F04679	17.0 %	✓	0.0185119	2.39	0.0000000	0.00	0.0026432	1.69	0.0000000	0.00	9.77867	1.68	0.0034895	2.39	0.0000000	0.00	4.750762	0.10	0.0017602	9.78	0.0000000	0.00	393.3727	0.04	0.0062828	1.91
20F04681	17.0 %	✓	0.0033695	12.47	0.0000000	0.00	0.0015804	2.85	0.0000000	0.00	5.84679	2.84	0.0006352	12.48	0.0000000	0.00	3.948144	0.10	0.0010524	10.04	0.0000000	0.00	326.9143	0.04	0.0037566	2.99
20F04682	17.0 %		0.2193779	0.40	0.0000000	0.00	0.0008167	5.53	0.0000000	0.00	3.02130	5.53	0.0413527	0.43	0.0000000	0.00	1.577016	0.10	0.0005438	11.10	0.0000000	0.00	130.5801	0.04	0.0019412	5.61
20F04684	17.0 %	✓	0.0091515	4.40	0.0000000	0.00	0.0012876	3.52	0.0000008	353.10	4.76352	3.51	0.0017251	4.40	0.0000000	0.00	2.640414	0.10	0.0008574	10.25	0.0034325	353.10	218.6316	0.04	0.0030606	3.63
20F04685	17.0 %	✓	0.0134207	2.69	0.0000000	0.00	0.0018577	2.47	0.0000000	0.00	6.87265	2.46	0.0025298	2.70	0.0000000	0.00	4.112005	0.10	0.0012371	9.94	0.0000000	0.00	340.4823	0.04	0.0044157	2.63
20F04687	17.0 %		0.0039863	8.71	0.0000000	0.00	0.0011953	3.43	0.0000000	0.00	4.42221	3.43	0.0007514	8.71	0.0000000	0.00	2.658130	0.10	0.0007960	10.22	0.0000000	0.00	220.0985	0.04	0.0028413	3.55
20F04688	17.0 %	✓	0.0060992	5.99	0.0000000	0.00	0.0011805	3.60	0.0000000	0.00	4.36724	3.59	0.0011497	5.99	0.0000000	0.00	2.409550	0.10	0.0007861	10.28	0.0000000	0.00	199.5156	0.04	0.0028060	3.71
20F04690	17.0 %	✓	0.0140990	2.71	0.0000000	0.00	0.0013505	3.43	0.0000000	0.00	4.99644	3.42	0.0026577	2.71	0.0000000	0.00	2.589749	0.10	0.0008994	10.22	0.0000000	0.00	214.4365	0.04	0.0032102	3.54
20F04691	17.0 %	✓	0.0269012	1.53	0.0000000	0.00	0.0015488	2.86	0.0000000	0.00	5.72986	2.86	0.0050709	1.54	0.0000000	0.00	3.144617	0.10	0.0010314	10.05	0.0000000	0.00	260.3806	0.04	0.0036814	3.00
20F04693	17.0 %	✓	0.0068259	5.61	0.0000000	0.00	0.0007338	5.87	0.0000018	128.68	2.71492	5.87	0.0012867	5.61	0.0000000	0.00	1.842283	0.10	0.0004887	11.28	0.0075357	128.68	152.5448	0.04	0.0017443	5.94
20F04694	17.0 %	✓	0.1416987	0.52	0.0000000	0.00	0.0021139	2.11	0.0000000	0.00	7.82064	2.10	0.0267102	0.54	0.0000000	0.00	4.602655	0.10	0.0014077	9.86	0.0000000	0.00	381.1091	0.04	0.0050248	2.29
20F04696	17.0 %	✓	0.0974062	0.58	0.0000000	0.00	0.0013085	3.34	0.0000000	0.00	4.84097	3.33	0.0183611	0.60	0.0000000	0.00	3.592342	0.10	0.0008714	10.19	0.0000000	0.00	297.4532	0.04	0.0031103	3.46
20F04697	17.0 %	✓	0.0244658	1.71	0.0000000	0.00	0.0013186	3.45	0.0000000	0.00	4.87823	3.44	0.0046118	1.72	0.0000000	0.00	2.622822	0.10	0.0008781	10.23	0.0000000	0.00	217.1750	0.04	0.0031343	3.56
20F04699	17.0 %	✓	0.0405815	1.15	0.0000000	0.00	0.0022108	2.00	0.0000000	0.00	8.17898	1.99	0.0076496	1.16	0.0000000	0.00	3.688497	0.10	0.0014722	9.83	0.0000000	0.00	305.4150	0.04	0.0052550	2.19
20F04700	17.0 %	✓	0.0091235	4.08	0.0000000	0.00	0.0010045	4.25	0.0000000	0.00	3.71631	4.25	0.0017198	4.09	0.0000000	0.00	2.033053	0.10	0.0006689	10.53	0.0000000	0.00	168.3409	0.04	0.0023877	4.35
20F04702	17.0 %	✓	0.0094741	4.15	0.0000000	0.00	0.0016484	2.37	0.0000000	0.00	6.09849	2.36	0.0017859	4.16	0.0000000	0.00	2.875746	0.10	0.0010977	9.92	0.0000000	0.00	238.1176	0.04	0.0039183	2.53
20F04703	17.0 %	✓	0.0383528	1.26	0.0000000	0.00	0.0016819	2.38	0.0000000	0.00	6.22223	2.38	0.0072295	1.27	0.0000000	0.00	3.647513	0.10	0.0011200	9.92	0.0000000	0.00	302.0215	0.04	0.0039978	2.55
20F04705	17.0 %	✓	0.0935739	0.63	0.0000000	0.00	0.0008144	5.48	0.0000000	0.00	3.01284	5.48	0.0176387	0.65	0.0000000	0.00	1.559033	0.10	0.0005423	11.08	0.0000000	0.00	129.0911	0.04	0.0019358	5.56
20F04706	17.0 %	✓	0.0439181	1.00	0.0000000	0.00	0.0016328	2.59	0.0000000	0.00	6.04058	2.58	0.0082786	1.02	0.0000000	0.00	3.645631	0.10	0.0010873	9.97	0.0000000	0.00	301.8656	0.04	0.0038811	2.74
20F04708	17.0 %		1.0331748	0.23	0.0000000	0.00	0.0009988	4.22	0.0000000	0.00	3.69524	4.22	0.1947534	0.28	0.0000000	0.00	2.062136	0.10	0.0006651	10.51	0.0000000	0.00	170.7491	0.04	0.0023742	4.32
20F04709	17.0 %	✓	0.0481529	1.18	0.0000000	0.00	0.0018026	2.54	0.0000000	0.00	6.66890	2.53	0.0090768	1.19	0.0000000	0.00	3.798424	0.10	0.0012004	9.96	0.0000000	0.00	314.5172	0.04	0.0042848	2.70
20F04711	17.0 %	✓	0.0324728	1.51	0.0000000	0.00	0.0020831	2.13	0.0000000	0.00	7.70665	2.12	0.0061211	1.52	0.0000000	0.00	4.122815	0.10	0.0013872	9.86	0.0000000	0.00	341.3774	0.04	0.0049515	2.31
20F04712	17.0 %	✓	0.0168871	2.49	0.0000000	0.00	0.0008366	5.23	0.0000000	0.00	3.09495	5.23	0.0031832	2.49	0.0000000	0.00	1.823773	0.10	0.0005571	10.96	0.0000000	0.00	151.0121	0.04	0.0019885	5.31
20F04714	17.0 %	✓	0.0107879	3.41	0.0000000	0.00	0.0012187	3.40	0.0000000	0.00	4.50864	3.40	0.0020335	3.41	0.0000000	0.00	2.254905	0.10	0.0008116	10.21	0.0000000	0.00	186.7107	0.04	0.0028968	3.52
20F04715	17.0 %	✓	0.0118783	3.09	0.0000000	0.00	0.0007326	5.56	0.0000000	0.00	2.71047	5.56	0.0022391	3.09	0.0000000	0.00	1.421116	0.10	0.0004879	11.12	0.0000000	0.00	117.6713	0.04	0.0017415	5.63
20F04717	17.0 %		0.0050317	7.12	0.0000000	0.00	0.0015021	2.93	0.0000000	0.00	5.55709	2.92	0.0009485	7.13	0.0000000	0.00	3.397718	0.10	0.0010003	10.06	0.0000000	0.00	281.3379	0.04	0.0035704	3.07
20F04718	17.0 %		0.4417236	0.28	0.0000000	0.00	0.0009562	4.51	0.0000000	0.00	3.53751	4.51	0.0832649	0.32	0.0000000	0.00	2.170408	0.10	0.0006368	10.63	0.0000000	0.00	179.7142	0.04	0.0022728	4.60
		Σ	2.5428948	0.14	0.0000000	0.00	0.0429207	0.56	0.0000027	141.50	158.78908	0.56	0.4793357	0.16	0.0000000	0.00	88.798092	0.02	0.0285820	1.94	0.0109682	141.52	7352.6615	0.01	0.1020220	0.59
		Σ							2.5858181	0.14	158.78908	0.56									89.316978	0.03			7352.7635	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
921.310	0.01	1.77123	6.38	0.0000000	0.00	0.1565614	9.65
1333.201	0.01	4.85445	2.63	0.0000000	0.00	0.2264285	9.65
647.689	0.03	29.93245	0.66	0.0000000	0.00	0.1099095	9.65
1408.714	0.01	5.52691	2.39	0.0000000	0.00	0.2387772	9.65
1167.181	0.01	1.00600	12.47	0.0000000	0.00	0.1984370	9.65
470.318	0.06	65.49746	0.41	0.0000000	0.00	0.0792621	9.65
779.956	0.02	2.73227	4.40	0.0000000	0.00	0.1327094	9.65
1216.464	0.01	4.00689	2.69	0.0000000	0.00	0.2066728	9.65
789.348	0.01	1.19014	8.71	0.0000000	0.00	0.1335998	9.65
712.689	0.02	1.82098	5.99	0.0000000	0.00	0.1211060	9.65
765.067	0.02	4.20940	2.71	0.0000000	0.00	0.1301629	9.65
930.207	0.01	8.03161	1.53	0.0000000	0.00	0.1580510	9.65
545.310	0.02	2.03793	5.61	0.0000000	0.00	0.0925947	9.65
1362.919	0.02	42.30555	0.53	0.0000000	0.00	0.2313333	9.65
1063.356	0.02	29.08159	0.59	0.0000000	0.00	0.1805541	9.65
775.527	0.02	7.30451	1.72	0.0000000	0.00	0.1318252	9.65
1093.508	0.01	12.11602	1.15	0.0000000	0.00	0.1853869	9.65
600.521	0.02	2.72390	4.09	0.0000000	0.00	0.1021829	9.65
849.987	0.01	2.82860	4.16	0.0000000	0.00	0.1445374	9.65
1080.796	0.01	11.45061	1.27	0.0000000	0.00	0.1833270	9.65
461.992	0.04	27.93744	0.64	0.0000000	0.00	0.0783583	9.65
1079.422	0.01	13.11220	1.01	0.0000000	0.00	0.1832324	9.65
649.971	0.12	308.46466	0.25	0.0000000	0.00	0.1036447	9.65
1124.826	0.02	14.37652	1.18	0.0000000	0.00	0.1909120	9.65
1218.829	0.01	9.69507	1.52	0.0000000	0.00	0.2072161	9.65
539.407	0.02	5.04180	2.49	0.0000000	0.00	0.0916643	9.65
666.054	0.02	3.22083	3.41	0.0000000	0.00	0.1133334	9.65
420.357	0.03	3.54638	3.09	0.0000000	0.00	0.0714265	9.65
1009.315	0.01	1.50226	7.12	0.0000000	0.00	0.1707721	9.65
648.271	0.06	131.88099	0.30	0.0000000	0.00	0.1090865	9.65
26332.512	0.00	759.20666	0.15	0.0000000	0.00	4.4630655	1.85
						27096.182	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F04675	17.0 %	✓	3.579408	0.001534	0.023202	0.000645	0.000029	0.000001	149.300	19.133516	1.00105490	3.268E-11
20F04676	17.0 %	✓	3.587561	0.001522	0.020471	0.000464	0.000049	0.000001	149.306	19.135879	1.00105494	4.738E-11
20F04678	17.0 %	✓	3.742862	0.001624	0.024111	0.000928	0.000560	0.000004	149.318	19.140341	1.00105503	2.399E-11
20F04679	17.0 %	✓	3.595716	0.001518	0.024858	0.000418	0.000054	0.000001	149.324	19.142442	1.00105507	5.007E-11
20F04681	17.0 %	✓	3.573940	0.001520	0.017885	0.000508	0.000015	0.000001	149.335	19.146906	1.00105515	4.136E-11
20F04682	17.0 %		4.103894	0.001800	0.023137	0.001280	0.001686	0.000007	149.342	19.149270	1.00105519	1.897E-11
20F04684	17.0 %	✓	3.580499	0.001541	0.021788	0.000765	0.000048	0.000002	149.353	19.153736	1.00105528	2.771E-11
20F04685	17.0 %	✓	3.585095	0.001523	0.020185	0.000497	0.000045	0.000001	149.360	19.156100	1.00105532	4.321E-11
20F04687	17.0 %		3.592306	0.001548	0.020092	0.000689	0.000024	0.000002	149.372	19.160568	1.00105540	2.799E-11
20F04688	17.0 %	✓	3.581781	0.001543	0.021889	0.000786	0.000036	0.000002	149.377	19.162670	1.00105544	2.530E-11
20F04690	17.0 %	✓	3.587985	0.001546	0.023300	0.000797	0.000072	0.000002	149.389	19.167139	1.00105553	2.724E-11
20F04691	17.0 %	✓	3.603891	0.001538	0.022005	0.000629	0.000109	0.000002	149.395	19.169506	1.00105557	3.322E-11
20F04693	17.0 %	✓	3.588679	0.001568	0.017797	0.001044	0.000050	0.000002	149.407	19.173976	1.00105565	1.938E-11
20F04694	17.0 %	✓	3.687755	0.001562	0.020520	0.000431	0.000377	0.000002	149.413	19.176343	1.00105570	4.975E-11
20F04696	17.0 %	✓	3.673205	0.001566	0.016275	0.000543	0.000332	0.000002	149.425	19.180815	1.00105578	3.868E-11
20F04697	17.0 %	✓	3.605167	0.001555	0.022462	0.000773	0.000119	0.000002	149.431	19.182920	1.00105582	2.772E-11
20F04699	17.0 %	✓	3.620616	0.001545	0.026779	0.000533	0.000140	0.000002	149.442	19.187394	1.00105590	3.915E-11
20F04700	17.0 %	✓	3.584028	0.001560	0.022076	0.000938	0.000060	0.000002	149.449	19.189763	1.00105595	2.136E-11
20F04702	17.0 %	✓	3.582038	0.001535	0.025611	0.000605	0.000047	0.000002	149.460	19.194238	1.00105603	3.019E-11
20F04703	17.0 %	✓	3.617014	0.001543	0.020602	0.000490	0.000133	0.000002	149.467	19.196608	1.00105608	3.867E-11
20F04705	17.0 %	✓	3.795775	0.001678	0.023339	0.001279	0.000731	0.000005	149.478	19.201085	1.00105616	1.735E-11
20F04706	17.0 %	✓	3.619835	0.001540	0.020011	0.000517	0.000151	0.000001	149.484	19.203192	1.00105620	3.868E-11
20F04708	17.0 %		5.613655	0.002432	0.021641	0.000914	0.006057	0.000014	149.496	19.207670	1.00105628	3.393E-11
20F04709	17.0 %	✓	3.622624	0.001544	0.021203	0.000537	0.000159	0.000002	149.502	19.210041	1.00105633	4.033E-11
20F04711	17.0 %	✓	3.599281	0.001531	0.022575	0.000479	0.000101	0.000001	149.514	19.214521	1.00105641	4.350E-11
20F04712	17.0 %	✓	3.605895	0.001580	0.020494	0.001072	0.000117	0.000003	149.520	19.216894	1.00105645	1.928E-11
20F04714	17.0 %	✓	3.585108	0.001560	0.024147	0.000821	0.000064	0.000002	149.532	19.221375	1.00105654	2.370E-11
20F04715	17.0 %	✓	3.602989	0.001602	0.023034	0.001280	0.000107	0.000003	149.537	19.223485	1.00105658	1.501E-11
20F04717	17.0 %		3.593457	0.001527	0.019752	0.000578	0.000023	0.000001	149.549	19.227968	1.00105666	3.579E-11
20F04718	17.0 %		4.341621	0.001869	0.019684	0.000887	0.002463	0.000007	149.556	19.230341	1.00105670	2.762E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F04675	17.0 %	0.0082560 ±0.0002132	0.0182160 ±0.0058158	0.0250322 ±0.0063285	0.0182614 ±0.0060590	1.8559243 ±0.0144511
20F04676	17.0 %	0.0082560 ±0.0002132	0.0182160 ±0.0058158	0.0250322 ±0.0063285	0.0182614 ±0.0060590	1.8559243 ±0.0144511
20F04678	17.0 %	0.0093439 ±0.0002130	0.0266407 ±0.0063551	0.0264448 ±0.0067738	0.0320430 ±0.0064493	2.0789356 ±0.0141546
20F04679	17.0 %	0.0093439 ±0.0002130	0.0266407 ±0.0063551	0.0264448 ±0.0067738	0.0320430 ±0.0064493	2.0789356 ±0.0141546
20F04681	17.0 %	0.0087636 ±0.0002127	0.0180412 ±0.0062252	0.0197213 ±0.0066337	0.0364482 ±0.0057582	1.9421855 ±0.0184844
20F04682	17.0 %	0.0087636 ±0.0002127	0.0180412 ±0.0062252	0.0197213 ±0.0066337	0.0364482 ±0.0057582	1.9421855 ±0.0184844
20F04684	17.0 %	0.0101212 ±0.0002046	0.0240188 ±0.0058338	0.0296031 ±0.0069206	0.0227988 ±0.0061820	2.3224270 ±0.0148785
20F04685	17.0 %	0.0101212 ±0.0002046	0.0240188 ±0.0058338	0.0296031 ±0.0069206	0.0227988 ±0.0061820	2.3224270 ±0.0148785
20F04687	17.0 %	0.0087198 ±0.0002138	0.0181344 ±0.0053474	0.0242898 ±0.0059149	0.0335654 ±0.0055865	2.0431649 ±0.0170057
20F04688	17.0 %	0.0087198 ±0.0002138	0.0181344 ±0.0053474	0.0242898 ±0.0059149	0.0335654 ±0.0055865	2.0431649 ±0.0170057
20F04690	17.0 %	0.0081205 ±0.0002195	0.0289185 ±0.0059188	0.0325244 ±0.0069070	0.0162451 ±0.0059076	1.9119177 ±0.0150384
20F04691	17.0 %	0.0081205 ±0.0002195	0.0289185 ±0.0059188	0.0325244 ±0.0069070	0.0162451 ±0.0059076	1.9119177 ±0.0150384
20F04693	17.0 %	0.0084937 ±0.0002343	0.0197069 ±0.0060746	0.0329717 ±0.0058537	0.0209575 ±0.0062061	1.8022086 ±0.0169155
20F04694	17.0 %	0.0084937 ±0.0002343	0.0197069 ±0.0060746	0.0329717 ±0.0058537	0.0209575 ±0.0062061	1.8022086 ±0.0169155
20F04696	17.0 %	0.0080794 ±0.0002009	0.0215094 ±0.0059495	0.0254868 ±0.0072803	0.0314479 ±0.0062802	1.8272827 ±0.0141948
20F04697	17.0 %	0.0080794 ±0.0002009	0.0215094 ±0.0059495	0.0254868 ±0.0072803	0.0314479 ±0.0062802	1.8272827 ±0.0141948
20F04699	17.0 %	0.0079788 ±0.0002296	0.0193282 ±0.0057596	0.0333070 ±0.0065939	0.0219644 ±0.0057136	1.9006610 ±0.0171464
20F04700	17.0 %	0.0079788 ±0.0002296	0.0193282 ±0.0057596	0.0333070 ±0.0065939	0.0219644 ±0.0057136	1.9006610 ±0.0171464
20F04702	17.0 %	0.0083410 ±0.0002129	0.0286656 ±0.0050146	0.0211627 ±0.0071230	0.0196064 ±0.0059428	1.9413996 ±0.0144667
20F04703	17.0 %	0.0083410 ±0.0002129	0.0286656 ±0.0050146	0.0211627 ±0.0071230	0.0196064 ±0.0059428	1.9413996 ±0.0144667
20F04705	17.0 %	0.0083041 ±0.0002157	0.0239205 ±0.0059078	0.0215575 ±0.0068008	0.0424219 ±0.0056691	1.7794634 ±0.0145548
20F04706	17.0 %	0.0083041 ±0.0002157	0.0239205 ±0.0059078	0.0215575 ±0.0068008	0.0424219 ±0.0056691	1.7794634 ±0.0145548
20F04708	17.0 %	0.0173752 ±0.0002446	0.0151125 ±0.0058255	0.0182970 ±0.0070569	0.0336623 ±0.0058177	4.5181339 ±0.0142883
20F04709	17.0 %	0.0173752 ±0.0002446	0.0151125 ±0.0058255	0.0182970 ±0.0070569	0.0336623 ±0.0058177	4.5181339 ±0.0142883
20F04711	17.0 %	0.0079788 ±0.0002296	0.0193282 ±0.0057596	0.0333070 ±0.0065939	0.0219644 ±0.0057136	1.9006610 ±0.0171464
20F04712	17.0 %	0.0079788 ±0.0002296	0.0193282 ±0.0057596	0.0333070 ±0.0065939	0.0219644 ±0.0057136	1.9006610 ±0.0171464
20F04714	17.0 %	0.0083410 ±0.0002129	0.0286656 ±0.0050146	0.0211627 ±0.0071230	0.0196064 ±0.0059428	1.9413996 ±0.0144667
20F04715	17.0 %	0.0083410 ±0.0002129	0.0286656 ±0.0050146	0.0211627 ±0.0071230	0.0196064 ±0.0059428	1.9413996 ±0.0144667
20F04717	17.0 %	0.0083041 ±0.0002157	0.0239205 ±0.0059078	0.0215575 ±0.0068008	0.0424219 ±0.0056691	1.7794634 ±0.0145548
20F04718	17.0 %	0.0083041 ±0.0002157	0.0239205 ±0.0059078	0.0215575 ±0.0068008	0.0424219 ±0.0056691	1.7794634 ±0.0145548

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F04675	17.0 %	0.0157287 ±0.0003046	0.9795	EXP 150 of 150	0.2938115 ±0.0062790	0.2114	EXP 150 of 150	3.0483397 ±0.0072158	0.9505	EXP 150 of 150	257.43423 ±0.02081	0.9999	EXP 150 of 150	925.09399 ±0.04531
20F04676	17.0 %	0.0263915 ±0.0003605	0.9820	EXP 147 of 150	0.3798897 ±0.0066775	0.3127	EXP 150 of 150	4.4458623 ±0.0070943	0.9766	EXP 149 of 150	372.32429 ±0.02375	1.0000	EXP 148 of 150	1340.13731 ±0.05627
20F04678	17.0 %	0.1097388 ±0.0005863	0.7088	EXP 150 of 150	0.2009038 ±0.0059435	0.1137	EXP 150 of 150	2.1594324 ±0.0065056	0.9192	EXP 148 of 150	180.70533 ±0.01766	0.9999	EXP 148 of 150	679.80983 ±0.03878
20F04679	17.0 %	0.0302818 ±0.0003777	0.9822	EXP 150 of 150	0.4829698 ±0.0052742	0.5071	EXP 148 of 150	4.6738236 ±0.0068144	0.9802	EXP 149 of 150	392.61802 ±0.02137	1.0000	EXP 150 of 150	1416.55825 ±0.04850
20F04681	17.0 %	0.0136627 ±0.0003546	0.9825	EXP 150 of 150	0.2865906 ±0.0058581	0.2642	EXP 149 of 150	3.9073613 ±0.0070915	0.9699	EXP 150 of 150	326.27582 ±0.02274	1.0000	EXP 149 of 150	1170.32788 ±0.04867
20F04682	17.0 %	0.2266978 ±0.0007615	0.3872	EXP 150 of 150	0.1393565 ±0.0060440	0.0974	EXP 150 of 150	1.5821669 ±0.0064606	0.8718	EXP 150 of 150	130.30361 ±0.01372	0.9999	EXP 149 of 150	537.83711 ±0.03541
20F04684	17.0 %	0.0204540 ±0.0003383	0.9704	EXP 150 of 150	0.2240832 ±0.0063814	0.1219	EXP 148 of 150	2.6125845 ±0.0071767	0.9342	EXP 150 of 150	218.20669 ±0.01831	0.9999	EXP 150 of 150	785.14367 ±0.04445
20F04685	17.0 %	0.0252428 ±0.0002884	0.9884	EXP 147 of 150	0.3338903 ±0.0064075	0.1837	EXP 150 of 150	4.0732222 ±0.0075076	0.9703	EXP 148 of 150	339.83290 ±0.02237	1.0000	EXP 150 of 150	1222.99972 ±0.05305
20F04687	17.0 %	0.0138482 ±0.0002656	0.9840	EXP 149 of 150	0.2121089 ±0.0057139	0.1670	EXP 150 of 150	2.6201247 ±0.0062957	0.9486	EXP 150 of 150	219.65987 ±0.01974	0.9999	EXP 150 of 150	792.71454 ±0.04158
20F04688	17.0 %	0.0159247 ±0.0002881	0.9779	EXP 149 of 150	0.2092220 ±0.0060915	0.1614	EXP 150 of 150	2.3794413 ±0.0068918	0.9287	EXP 150 of 150	199.11503 ±0.01691	0.9999	EXP 149 of 150	716.67441 ±0.04010
20F04690	17.0 %	0.0234115 ±0.0003034	0.9739	EXP 149 of 150	0.2311331 ±0.0065437	0.1672	EXP 150 of 150	2.5498413 ±0.0066392	0.9411	EXP 150 of 150	214.02599 ±0.01914	0.9999	EXP 150 of 150	771.31832 ±0.03966
20F04691	17.0 %	0.0362784 ±0.0003373	0.9735	EXP 149 of 150	0.2692688 ±0.0059898	0.1547	EXP 150 of 150	3.0795375 ±0.0072532	0.9496	EXP 150 of 150	259.88544 ±0.01965	0.9999	EXP 150 of 150	940.30857 ±0.03898
20F04693	17.0 %	0.0159777 ±0.0002943	0.9681	EXP 149 of 150	0.1215473 ±0.0056022	0.0689	EXP 149 of 150	1.8156550 ±0.0060403	0.9073	EXP 149 of 150	152.24279 ±0.01547	0.9999	EXP 150 of 150	549.24263 ±0.03545
20F04694	17.0 %	0.1508301 ±0.0006471	0.8452	EXP 150 of 150	0.3871417 ±0.0057304	0.3286	EXP 150 of 150	4.5270071 ±0.0073797	0.9751	EXP 150 of 150	380.38675 ±0.02353	1.0000	EXP 149 of 150	1407.25775 ±0.05259
20F04696	17.0 %	0.1057808 ±0.0004891	0.9040	EXP 150 of 150	0.2302706 ±0.0058184	0.1371	EXP 150 of 150	3.5411334 ±0.0068276	0.9653	EXP 149 of 150	296.87342 ±0.02169	1.0000	EXP 150 of 150	1094.44525 ±0.04913
20F04697	17.0 %	0.0335991 ±0.0003577	0.9656	EXP 149 of 150	0.2321809 ±0.0062926	0.1447	EXP 150 of 150	2.5904099 ±0.0068365	0.9374	EXP 149 of 150	216.74408 ±0.01978	0.9999	EXP 150 of 150	784.79078 ±0.03995
20F04699	17.0 %	0.0503318 ±0.0003920	0.9643	EXP 150 of 150	0.4059169 ±0.0059010	0.3514	EXP 150 of 150	3.6451186 ±0.0067589	0.9695	EXP 150 of 150	304.83211 ±0.02272	0.9999	EXP 150 of 150	1107.71026 ±0.05158
20F04700	17.0 %	0.0180028 ±0.0002850	0.9760	EXP 149 of 150	0.1738678 ±0.0057861	0.0418	EXP 148 of 150	1.9842931 ±0.0067376	0.9026	EXP 150 of 150	168.00926 ±0.01651	0.9999	EXP 150 of 150	605.24780 ±0.03776
20F04702	17.0 %	0.0193494 ±0.0003234	0.9746	EXP 150 of 150	0.2882966 ±0.0053809	0.2602	EXP 149 of 150	2.8296447 ±0.0069195	0.9479	EXP 148 of 150	237.66038 ±0.01925	0.9999	EXP 150 of 150	854.90162 ±0.04102
20F04703	17.0 %	0.0479647 ±0.0004222	0.9611	EXP 149 of 150	0.2946880 ±0.0056540	0.1947	EXP 149 of 150	3.6084766 ±0.0062436	0.9730	EXP 150 of 150	301.44588 ±0.02293	0.9999	EXP 150 of 150	1094.37162 ±0.04540
20F04705	17.0 %	0.1017235 ±0.0005153	0.5904	EXP 150 of 150	0.1326128 ±0.0061780	0.0318	EXP 150 of 150	1.5387272 ±0.0071202	0.8341	EXP 150 of 150	128.81128 ±0.01551	0.9999	EXP 150 of 150	491.78767 ±0.03199
20F04706	17.0 %	0.0533874 ±0.0003688	0.9704	EXP 148 of 150	0.2898855 ±0.0053769	0.2912	EXP 150 of 150	3.6003904 ±0.0070957	0.9641	EXP 150 of 150	301.26732 ±0.02104	1.0000	EXP 150 of 150	1094.49710 ±0.04443
20F04708	17.0 %	1.0409329 ±0.0015931	0.9688	EXP 150 of 150	0.1768092 ±0.0055660	0.1271	EXP 148 of 150	2.2094798 ±0.0068223	0.9161	EXP 150 of 150	170.40115 ±0.01730	0.9999	EXP 150 of 150	963.05774 ±0.04425
20F04709	17.0 %	0.0668178 ±0.0004956	0.9468	EXP 150 of 150	0.3312108 ±0.0063858	0.3013	EXP 150 of 150	3.7732760 ±0.0069425	0.9705	EXP 150 of 150	313.90462 ±0.02362	0.9999	EXP 150 of 150	1143.91126 ±0.04801
20F04711	17.0 %	0.0421799 ±0.0004224	0.9694	EXP 149 of 150	0.3807934 ±0.0059878	0.3648	EXP 150 of 150	4.0765664 ±0.0065471	0.9758	EXP 149 of 150	340.72735 ±0.02351	1.0000	EXP 150 of 150	1230.63158 ±0.05151
20F04712	17.0 %	0.0255205 ±0.0003428	0.9576	EXP 150 of 150	0.1413388 ±0.0060790	0.0904	EXP 150 of 150	1.7863266 ±0.0068875	0.8752	EXP 150 of 150	150.71208 ±0.01648	0.9999	EXP 150 of 150	546.44153 ±0.03303
20F04714	17.0 %	0.0202243 ±0.0002917	0.9746	EXP 149 of 150	0.2053353 ±0.0060902	0.1764	EXP 149 of 150	2.2204820 ±0.0074596	0.9058	EXP 148 of 150	186.34772 ±0.01896	0.9999	EXP 147 of 150	671.32977 ±0.04007
20F04715	17.0 %	0.0208225 ±0.0002901	0.9583	EXP 150 of 150	0.1119936 ±0.0059672	0.0097	EXP 150 of 150	1.3714313 ±0.0064190	0.8277	EXP 146 of 150	117.43519 ±0.01406	0.9999	EXP 149 of 150	425.91603 ±0.03222
20F04717	17.0 %	0.0147708 ±0.0002780	0.9863	EXP 150 of 150	0.2643965 ±0.0058795	0.1829	EXP 148 of 150	3.3424893 ±0.0071325	0.9569	EXP 147 of 150	280.77728 ±0.01835	1.0000	EXP 148 of 150	1012.76792 ±0.04456
20F04718	17.0 %	0.4464397 ±0.0009521	0.8967	EXP 149 of 150	0.1595923 ±0.0057333	0.1089	EXP 150 of 150	2.2034129 ±0.0064620	0.9249	EXP 149 of 150	179.34071 ±0.01575	0.9999	EXP 150 of 150	782.04012 ±0.03836

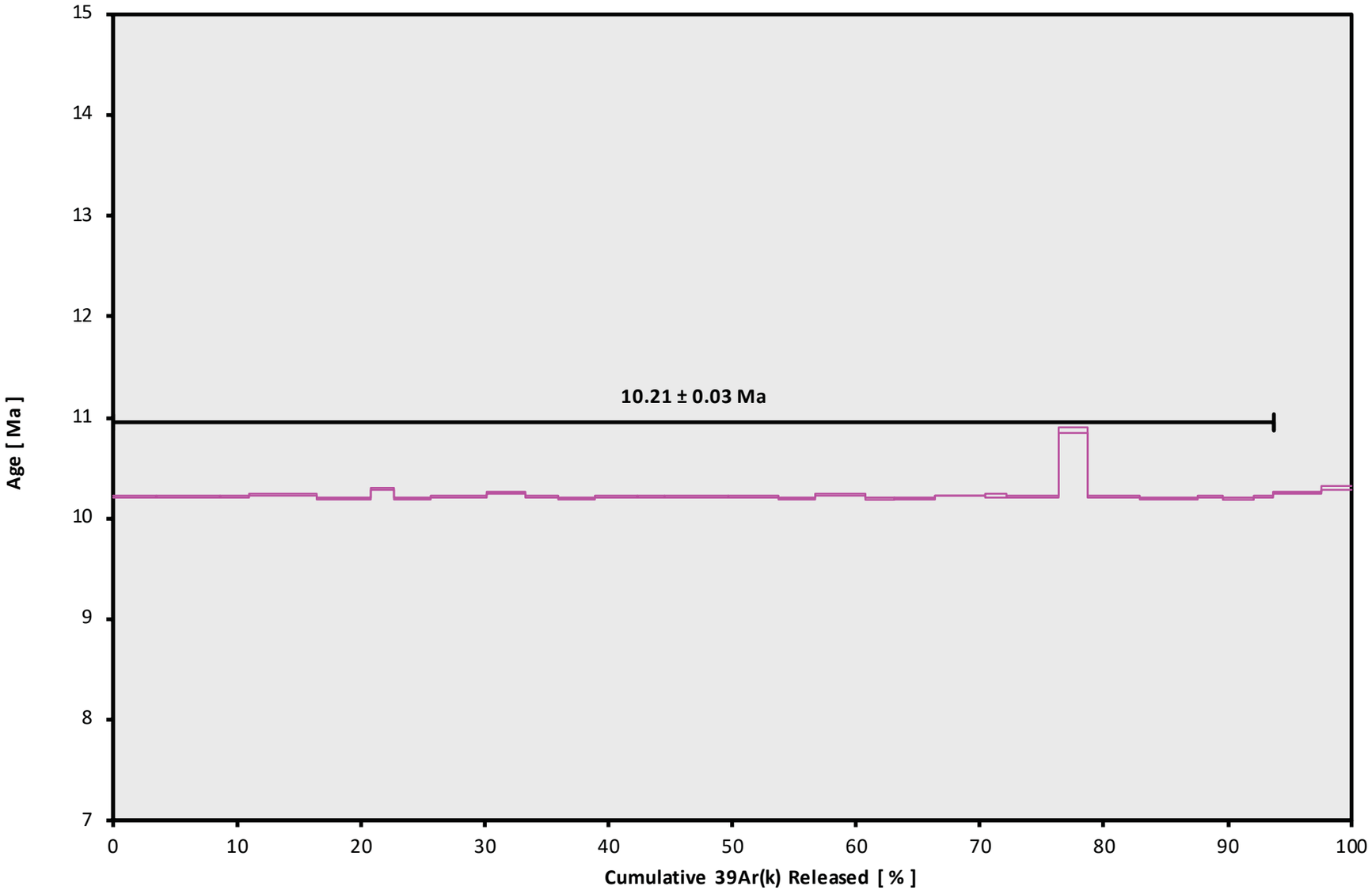
r2	Regression (type,n)
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 146 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F04675	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04676	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04678	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04679	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04681	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04682	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04684	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04685	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04687	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04688	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04690	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04691	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04693	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04694	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04696	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04697	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04699	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04700	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04702	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04703	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04705	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04706	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04708	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04709	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04711	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04712	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04714	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04715	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04717	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01
20F04718	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	50.98	Oregon\Swenton (18-58)	20F04671	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F04675	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	1	APR	2020	22	34	1
20F04676	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	1	APR	2020	22	43	1
20F04678	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	1	APR	2020	23	0	1
20F04679	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	1	APR	2020	23	8	1
20F04681	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	1	APR	2020	23	25	1
20F04682	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	1	APR	2020	23	34	1
20F04684	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	1	APR	2020	23	51	1
20F04685	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	0	0	1
20F04687	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	0	17	1
20F04688	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	0	25	1
20F04690	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	0	42	1
20F04691	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	0	51	1
20F04693	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	1	8	1
20F04694	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	1	17	1
20F04696	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	1	34	1
20F04697	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	1	42	1
20F04699	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	1	59	1
20F04700	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	2	8	1
20F04702	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	2	25	1
20F04703	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	2	34	1
20F04705	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	2	51	1
20F04706	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	2	59	1
20F04708	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	3	16	1
20F04709	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	3	25	1
20F04711	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	3	42	1
20F04712	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	3	51	1
20F04714	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	4	8	1
20F04715	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	4	16	1
20F04717	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	4	33	1
20F04718	17.0 %	VS17-054	Sanidine	Unidentified flow	FCT-NM (2C41-19)	28.201	0.082	Kuiper et al (2008)	9.91958	0.137	0.00156514	0.137	299.519	0.131	0.9991985	0.042	1	3.54E-14	2	APR	2020	4	42	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F04675	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04676	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04678	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04679	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04681	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04682	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04684	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04685	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04687	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04688	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04690	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04691	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04693	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04694	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04696	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04697	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04699	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04700	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04702	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04703	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04705	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04706	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04708	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04709	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04711	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04712	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04714	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04715	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04717	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04718	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F04671.AGE >>> VS17-054 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.21 ± 0.03
TOTAL FUSION
10.23 ± 0.03
NORMAL ISOCHRON
10.20 ± 0.03
INVERSE ISOCHRON
10.20 ± 0.03

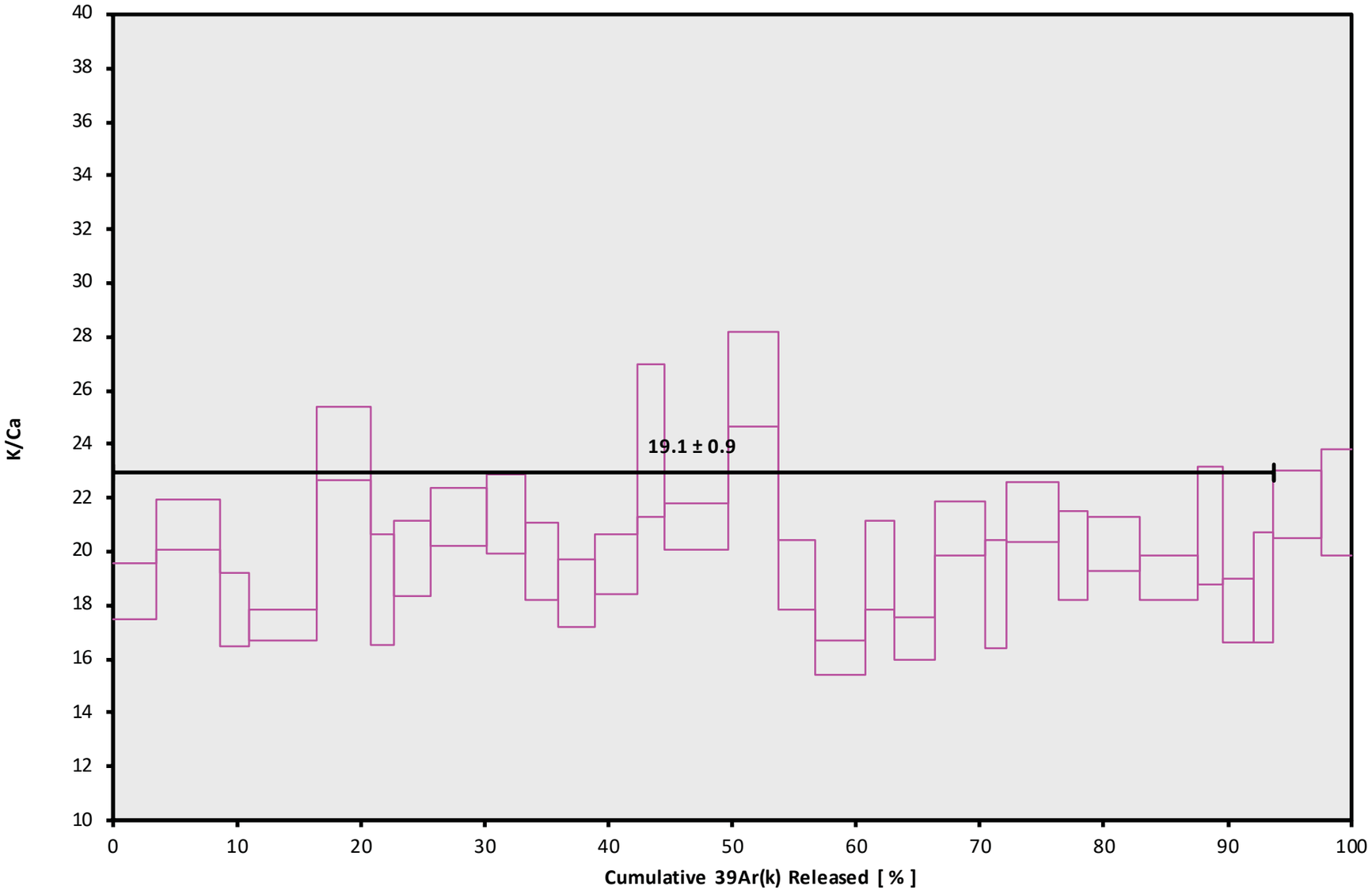
MSWD (PROBABILITY)
6.02 (0%)

Sample Info

Sanidine
Unidentified flow
Dan Miggins

IRR = 19-OSU-02 (2C41-

20F04671.AGE >>> VS17-054 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

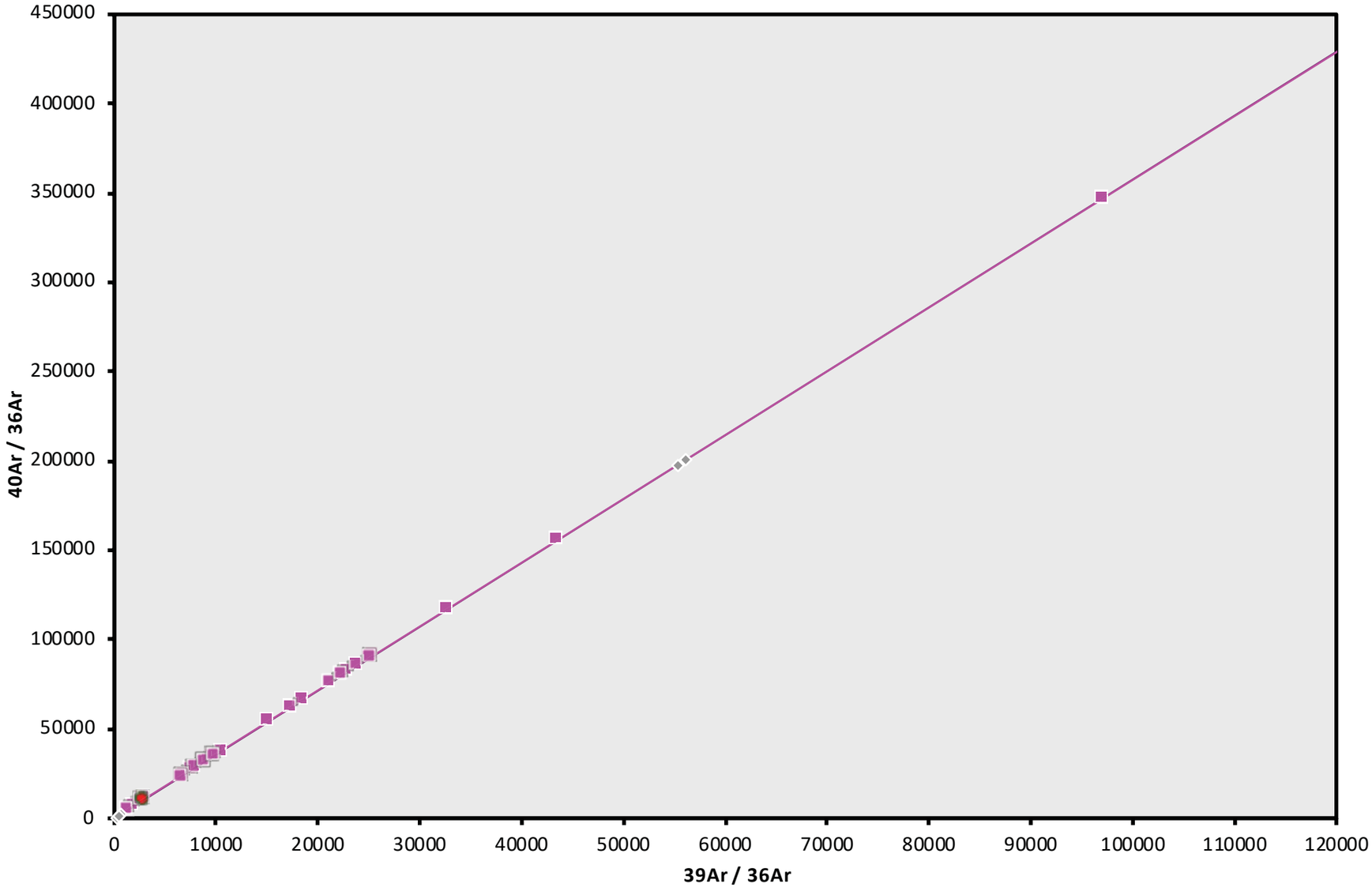
WEIGHTED PLATEAU
10.21 ± 0.03
TOTAL FUSION
10.23 ± 0.03
NORMAL ISOCHRON
10.20 ± 0.03
INVERSE ISOCHRON
10.20 ± 0.03

Sample Info

Sanidine
Unidentified flow
Dan Miggins

IRR = 19-OSU-02 (2C41-

20F04671.AGE >>> VS17-054 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.21 ± 0.03
TOTAL FUSION
10.23 ± 0.03
NORMAL ISOCHRON
10.20 ± 0.03
INVERSE ISOCHRON
10.20 ± 0.03

MSWD (PROBABILITY)
5.31 (0%)

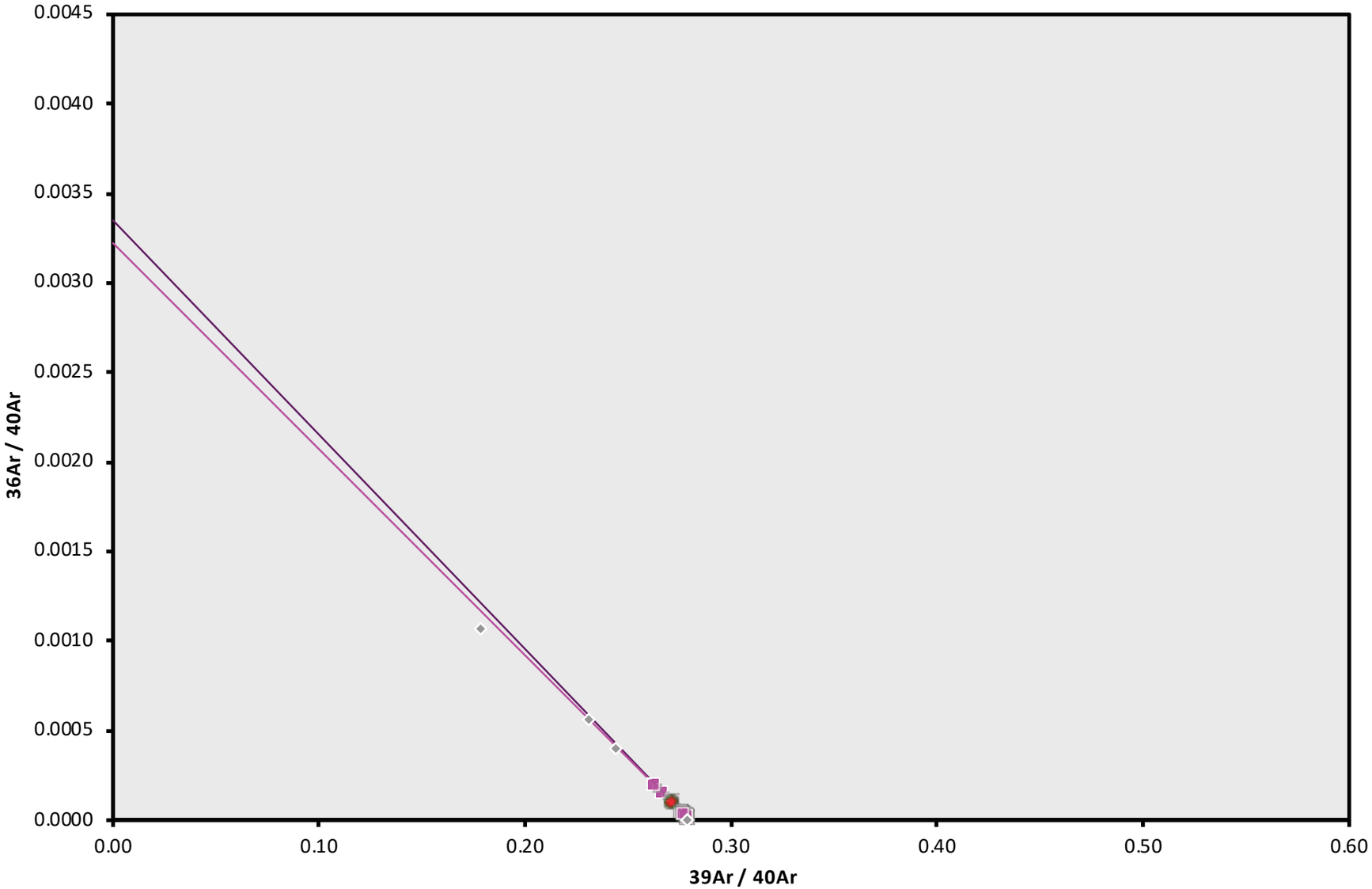
40AR/36AR INTERCEPT

Sample Info

Sanidine
Unidentified flow
Dan Miggins

IRR = 19-OSU-02 (2C41-

20F04671.AGE >>> VS17-054 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.21 ± 0.03
TOTAL FUSION
10.23 ± 0.03
NORMAL ISOCHRON
10.20 ± 0.03
INVERSE ISOCHRON
10.20 ± 0.03

MSWD (PROBABILITY)
5.06 (0%)

SPREADING FACTOR

Sample Info

Sanidine
Unidentified flow
Dan Miggins

IRR = 19-OSU-02 (2C41-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F04553	17.0 %	✓	0.0046009	8.215	1.44391	10.887	5.12418	0.196	427.5475	0.041	1532.503	0.004	3.58066	±0.00388	10.35	±0.01	99.90	4.88	127.3	±27.7
20F04554	17.0 %	✓	0.0000649	641.196	1.34619	11.943	4.88268	0.185	405.8073	0.041	1453.981	0.004	3.58267	±0.00304	10.36	±0.01	99.99	4.63	129.6	±31.0
20F04556	17.0 %	✓	0.0012778	29.965	0.96359	16.506	3.16561	0.332	264.3856	0.041	947.995	0.005	3.58383	±0.00327	10.36	±0.01	99.95	3.01	118.0	±38.9
20F04557	17.0 %	✓	0.0038023	12.176	2.63110	5.834	7.87472	0.154	656.4936	0.041	2353.352	0.003	3.58263	±0.00320	10.36	±0.01	99.94	7.49	107.3	±12.5
20F04559	17.0 %	✓	0.0017341	23.993	2.76681	5.647	6.44504	0.174	537.4985	0.041	1927.807	0.003	3.58545	±0.00303	10.36	±0.01	99.97	6.13	83.5	±9.4
20F04560	17.0 %	✓	0.0010188	38.882	0.98698	16.451	4.07745	0.251	340.7566	0.041	1220.862	0.004	3.58340	±0.00320	10.36	±0.01	100.02	3.89	148.5	±48.8
20F04562	17.0 %		0.0118416	3.017	37.88106	0.608	0.23035	4.225	18.7285	0.066	67.186	0.035	3.56402	±0.02524	10.30	±0.07	99.22	0.21	0.2	±0.0
20F04563	17.0 %		0.3075667	0.318	0.48302	31.165	1.80640	0.531	146.5133	0.042	631.560	0.006	3.63937	±0.52246	10.52	±1.51	84.43	1.67	130.4	±81.3
20F04565	17.0 %	✓	0.0208357	1.792	1.08080	14.756	3.85973	0.268	320.6553	0.041	1156.162	0.005	3.58455	±0.01625	10.36	±0.05	99.42	3.66	127.6	±37.6
20F04566	17.0 %		0.0261945	1.507	85.05703	0.480	0.52553	1.752	42.5105	0.049	152.089	0.018	3.55757	±0.02013	10.28	±0.06	99.31	0.48	0.2	±0.0
20F04568	17.0 %	✓	0.0037551	10.924	1.46205	10.643	5.47623	0.190	457.7129	0.041	1642.402	0.003	3.58533	±0.00352	10.36	±0.01	99.92	5.22	134.6	±28.7
20F04569	17.0 %	✓	0.0011524	37.656	1.57659	9.473	6.01254	0.179	501.7792	0.041	1795.669	0.004	3.57754	±0.00302	10.34	±0.01	99.97	5.72	136.9	±25.9
20F04571	17.0 %	✓	0.0002453	149.442	0.92691	15.945	4.42582	0.229	369.1479	0.041	1323.623	0.004	3.58502	±0.00303	10.36	±0.01	99.98	4.21	171.3	±54.6
20F04572	17.0 %	✓	0.0054171	7.168	1.55597	9.464	4.44080	0.223	369.0678	0.041	1324.931	0.004	3.58501	±0.00454	10.36	±0.01	99.86	4.21	102.0	±19.3
20F04574	17.0 %	✓	0.0063264	6.267	1.49531	10.870	4.93375	0.210	411.0919	0.041	1473.495	0.004	3.57914	±0.00469	10.35	±0.01	99.85	4.69	118.2	±25.7
20F04575	17.0 %	✓	0.0012803	31.337	1.20226	13.951	4.02171	0.249	333.3457	0.041	1194.806	0.004	3.58277	±0.00316	10.36	±0.01	99.96	3.80	119.2	±33.3
20F04577	17.0 %	✓	0.0015856	21.312	0.61216	25.938	2.95082	0.348	245.4092	0.041	878.919	0.005	3.57899	±0.00343	10.35	±0.01	99.93	2.80	172.4	±89.4
20F04578	17.0 %	✓	0.0000832	381.126	0.87074	17.841	2.88394	0.350	239.7315	0.042	858.922	0.005	3.58246	±0.00313	10.36	±0.01	99.99	2.73	118.4	±42.2
20F04580	17.0 %		0.0085719	3.856	30.24294	0.677	0.33277	2.683	26.2553	0.058	93.902	0.028	3.57373	±0.01010	10.33	±0.03	99.85	0.30	0.4	±0.0
20F04581	17.0 %		0.0126457	2.666	42.05491	0.570	0.41174	2.141	34.0885	0.052	122.084	0.022	3.57163	±0.01205	10.32	±0.03	99.65	0.39	0.3	±0.0
20F04583	17.0 %	✓	0.0053610	7.683	1.17714	13.195	3.84816	0.243	323.7949	0.041	1162.078	0.005	3.58336	±0.00496	10.36	±0.01	99.84	3.69	118.3	±31.2
20F04584	17.0 %	✓	0.0018855	19.995	1.03484	14.697	4.71678	0.211	397.3655	0.041	1424.938	0.004	3.58407	±0.00319	10.36	±0.01	99.95	4.53	165.1	±48.5
20F04586	17.0 %	✓	0.0013363	29.711	1.43333	11.641	4.69884	0.210	394.2509	0.041	1412.098	0.004	3.58036	±0.00309	10.35	±0.01	99.96	4.50	118.3	±27.5
20F04587	17.0 %		0.0110397	3.297	31.17320	0.705	0.21426	4.372	18.4566	0.068	66.515	0.041	3.56187	±0.03797	10.30	±0.11	98.73	0.21	0.3	±0.0
20F04589	17.0 %	✓	0.0005692	62.223	1.32931	11.089	5.21130	0.200	435.1235	0.041	1559.027	0.004	3.58303	±0.00305	10.36	±0.01	100.00	4.96	140.8	±31.2
20F04590	17.0 %	✓	0.0024239	15.460	1.24654	12.507	4.20297	0.236	351.3639	0.041	1260.920	0.004	3.58615	±0.00339	10.37	±0.01	99.93	4.01	121.2	±30.3
20F04592	17.0 %	✓	0.0007877	38.242	0.56857	28.272	2.72035	0.371	228.2831	0.041	817.170	0.005	3.58035	±0.00328	10.35	±0.01	100.02	2.60	172.6	±97.6
20F04593	17.0 %	✓	0.0004466	67.562	0.49925	30.100	1.60503	0.602	133.8127	0.042	478.832	0.007	3.57703	±0.00345	10.34	±0.01	99.96	1.53	115.3	±69.4
20F04595	17.0 %	✓	0.0005337	66.589	1.05117	14.066	3.78274	0.271	316.2372	0.041	1132.279	0.005	3.57962	±0.00307	10.35	±0.01	99.98	3.61	129.4	±36.4
20F04596	17.0 %		0.0089043	3.509	28.94630	0.690	0.26729	3.590	22.1341	0.061	79.280	0.032	3.56860	±0.01602	10.32	±0.05	99.55	0.25	0.3	±0.0
		Σ	0.4484071	0.502	285.09998	0.349	105.14952	0.052	8769.3488	0.009	31545.390	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-056**
Material = **Sanidine**
Location = **South Fork**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C37-19)**
Position = **X: 0 | Y: 0 | Z/H: 46.23625 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.80392 ± 0.02363**
FCT-NM J-value = **0.00158360 ± 0.00000382**
Air Shot 40Ar/36Ar = **299.1640 ± 0.3740**
Air Shot MDF = **0.99949461 ± 0.00040622 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **319.60 ± 124.49**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			3.58224	±0.00109	**10.35**	**±0.05**	2.36	96.48	109.3	±9.1
Error Mean				±0.03%		**±0.48%**	0%	23		
				Full External Error		±0.54	1.60	2σ Confidence Limit		
				Analytical Error		±0.00	1.5360	Error Magnification		
Total Fusion Age			3.58317	±0.00878	**10.36**	**±0.06**		30	13.2	±0.1
				±0.25%		**±0.54%**				
				Full External Error		±0.54				
				Analytical Error		±0.03				
Normal Isochron	**274.73**	**±80.84**	3.58501	±0.00140	**10.36**	**±0.05**	2.58	96.48		
Error Chron		**±29.43%**		±0.04%		**±0.48%**	0%	23		
				Full External Error		±0.54	1.62	2σ Confidence Limit		
				Analytical Error		±0.00	1.6053	Error Magnification		
							1	Number of Iterations		
							0.0000000000	Convergence		
Inverse Isochron	**363.79**	**±73.96**	3.58210	±0.00121	**10.35**	**±0.05**	2.84	96.48		
Error Chron		**±20.33%**		±0.03%		**±0.48%**	0%	23		
				Full External Error		±0.54	1.62	2σ Confidence Limit		
				Analytical Error		±0.00	1.6866	Error Magnification		
							3	Number of Iterations		
							0.0001133455	Convergence		
							1%	Spreading Factor		

Notes
Excess Initial 40Ar/36Ar = 319.60 ± 38.95 (%SD).

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F04553	17.0 %	✓	0.0042106	1.44391	0.0000000	427.5466	1530.898	10.35 ±0.01	99.90	4.88	127.3 ±27.7
20F04554	17.0 %	✓	0.0004287	1.34619	0.0000000	405.8065	1453.872	10.36 ±0.01	99.99	4.63	129.6 ±31.0
20F04556	17.0 %	✓	0.0010173	0.96359	0.0000000	264.3850	947.510	10.36 ±0.01	99.95	3.01	118.0 ±38.9
20F04557	17.0 %	✓	0.0030911	2.63110	0.0000000	656.4919	2351.966	10.36 ±0.01	99.94	7.49	107.3 ±12.5
20F04559	17.0 %	✓	0.0009862	2.76681	0.0000000	537.4968	1927.166	10.36 ±0.01	99.97	6.13	83.5 ±9.4
20F04560	17.0 %	✓	0.0012855	0.98698	0.0000000	340.7559	1221.067	10.36 ±0.01	100.02	3.89	148.5 ±48.8
20F04562	17.0 %		0.0016024	37.88106	0.0000000	18.7042	66.662	10.30 ±0.07	99.22	0.21	0.2 ±0.0
20F04563	17.0 %		0.3074362	0.48302	0.0000000	146.5129	533.215	10.52 ±1.51	84.43	1.67	130.4 ±81.3
20F04565	17.0 %	✓	0.0205435	1.08080	0.0000000	320.6546	1149.401	10.36 ±0.05	99.42	3.66	127.6 ±37.6
20F04566	17.0 %		0.0032036	85.05703	0.0000000	42.4558	151.040	10.28 ±0.06	99.31	0.48	0.2 ±0.0
20F04568	17.0 %	✓	0.0033599	1.46205	0.0000000	457.7120	1641.050	10.36 ±0.01	99.92	5.22	134.6 ±28.7
20F04569	17.0 %	✓	0.0007262	1.57659	0.0000000	501.7782	1795.132	10.34 ±0.01	99.97	5.72	136.9 ±25.9
20F04571	17.0 %	✓	0.0000052	0.92691	0.0000000	369.1473	1323.400	10.36 ±0.01	99.98	4.21	171.3 ±54.6
20F04572	17.0 %	✓	0.0049965	1.55597	0.0000000	369.0668	1323.110	10.36 ±0.01	99.86	4.21	102.0 ±19.3
20F04574	17.0 %	✓	0.0059222	1.49531	0.0000000	411.0909	1471.353	10.35 ±0.01	99.85	4.69	118.2 ±25.7
20F04575	17.0 %	✓	0.0009554	1.20226	0.0000000	333.3449	1194.298	10.36 ±0.01	99.96	3.80	119.2 ±33.3
20F04577	17.0 %	✓	0.0014201	0.61216	0.0000000	245.4088	878.317	10.35 ±0.01	99.93	2.80	172.4 ±89.4
20F04578	17.0 %	✓	0.0001522	0.87074	0.0000000	239.7309	858.825	10.36 ±0.01	99.99	2.73	118.4 ±42.2
20F04580	17.0 %		0.0003947	30.24294	0.0103967	26.2359	93.760	10.33 ±0.03	99.85	0.30	0.4 ±0.0
20F04581	17.0 %		0.0012782	42.05491	0.0000000	34.0615	121.655	10.32 ±0.03	99.65	0.39	0.3 ±0.0
20F04583	17.0 %	✓	0.0050428	1.17714	0.0000000	323.7941	1160.270	10.36 ±0.01	99.84	3.69	118.3 ±31.2
20F04584	17.0 %	✓	0.0016057	1.03484	0.0000000	397.3648	1424.184	10.36 ±0.01	99.95	4.53	165.1 ±48.5
20F04586	17.0 %	✓	0.0009489	1.43333	0.0000000	394.2500	1411.556	10.35 ±0.01	99.96	4.50	118.3 ±27.5
20F04587	17.0 %		0.0026136	31.17320	0.0000000	18.4365	65.669	10.30 ±0.11	98.73	0.21	0.3 ±0.0
20F04589	17.0 %	✓	0.0009286	1.32931	0.0000000	435.1227	1559.060	10.36 ±0.01	100.00	4.96	140.8 ±31.2
20F04590	17.0 %	✓	0.0020870	1.24654	0.0000000	351.3631	1260.040	10.37 ±0.01	99.93	4.01	121.2 ±30.3
20F04592	17.0 %	✓	0.0009414	0.56857	0.0000000	228.2827	817.332	10.35 ±0.01	100.02	2.60	172.6 ±97.6
20F04593	17.0 %	✓	0.0003117	0.49925	0.0000000	133.8124	478.651	10.34 ±0.01	99.96	1.53	115.3 ±69.4
20F04595	17.0 %	✓	0.0002496	1.05117	0.0000000	316.2365	1132.007	10.35 ±0.01	99.98	3.61	129.4 ±36.4
20F04596	17.0 %		0.0010802	28.94630	0.0000000	22.1155	78.921	10.32 ±0.05	99.55	0.25	0.3 ±0.0
		Σ	0.3713420	285.09998	0.0103967	8769.1656	31421.386				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-056**
Material = **Sanidine**
Location = **South Fork**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C37-19)**
J = **0.00158360 ± 0.00000382**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.58224	±0.00109	**10.35**	**±0.05**	2.36	96.48	109.3 ±9.1
Error Mean		±0.03%		**±0.48%**	0%	23	
			Full External Error	±0.54	1.60	2σ Confidence Limit	
			Analytical Error	±0.00	1.5360	Error Magnification	
Total Fusion Age	3.58317	±0.00878	**10.36**	**±0.06**		30	13.2 ±0.1
		±0.25%		**±0.54%**			
			Full External Error	±0.54			
			Analytical Error	±0.03			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F04553	17.0 %	✓	101540.28	±18344.22	363900.54	±65741.43	1.0000
20F04554	17.0 %	✓	946531.33	±1846211.40	3390793.22	±6613748.93	1.0000
20F04556	17.0 %	✓	259889.49	±196857.61	931718.18	±705745.00	1.0000
20F04557	17.0 %	✓	212379.65	±63872.11	761196.75	±228925.27	1.0000
20F04559	17.0 %	✓	544998.50	±462197.26	1954382.75	±1657453.97	1.0000
20F04560	17.0 %	✓	265069.66	±164352.11	949532.34	±588741.49	1.0000
20F04562	17.0 %		11672.83	±5290.51	41921.84	±19000.29	1.0000
20F04563	17.0 %		476.56	±3.07	2053.99	±13.10	0.9912
20F04565	17.0 %	✓	15608.56	±571.34	56269.20	±2059.18	0.9997
20F04566	17.0 %		13252.62	±3406.04	47466.74	±12199.30	1.0000
20F04568	17.0 %	✓	136227.41	±33439.21	488740.31	±119968.50	1.0000
20F04569	17.0 %	✓	690936.72	±829270.45	2472174.44	±2967132.40	1.0000
20F04571	17.0 %	✓	70842351.90	################	253970896.69	################	1.0000
20F04572	17.0 %	✓	73864.40	±11540.67	265124.52	±41422.82	1.0000
20F04574	17.0 %	✓	69414.94	±9350.96	248765.58	±33510.86	1.0000
20F04575	17.0 %	✓	348923.77	±294937.46	1250433.54	±1056963.01	1.0000
20F04577	17.0 %	✓	172807.45	±82901.76	618796.45	±296857.81	1.0000
20F04578	17.0 %	✓	1575044.91	±6616444.09	5642208.13	±23701771.15	1.0000
20F04580	17.0 %		66472.71	±112980.01	237875.05	±404303.07	1.0000
20F04581	17.0 %		26647.14	±14336.91	95493.35	±51378.02	1.0000
20F04583	17.0 %	✓	64208.79	±10543.31	230402.63	±37832.43	1.0000
20F04584	17.0 %	✓	247465.91	±116891.66	887255.06	±419098.36	1.0000
20F04586	17.0 %	✓	415480.66	±349927.19	1487888.89	±1253133.01	1.0000
20F04587	17.0 %		7054.09	±1992.33	25445.36	±7186.63	1.0000
20F04589	17.0 %	✓	468602.67	±359754.11	1678699.88	±1288765.25	1.0000
20F04590	17.0 %	✓	168360.42	±60844.29	604085.11	±218311.61	1.0000
20F04592	17.0 %	✓	242493.97	±156799.17	867893.87	±561188.93	1.0000
20F04593	17.0 %	✓	429349.02	±838857.96	1536114.29	±3001244.97	1.0000
20F04595	17.0 %	✓	1267086.82	±3631332.51	4536010.05	±12999709.11	1.0000
20F04596	17.0 %		20474.30	±12032.05	73384.22	±43125.35	1.0000

Results		40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron		**274.73**	**±80.84**	3.58501	±0.00140	**10.36**	**±0.05**	2.58
Error Chron			**±29.43%**		±0.04%		**±0.48%**	0%
						Full External Error	±0.54	
						Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.62	Convergence	0.000000000001
	Error Magnification	1.6053	Number of Iterations	1
	Number of Data Points	23	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F04553	17.0 %	✓	0.2790331	±0.0002300	0.00000275	±0.00000050	0.0000
20F04554	17.0 %	✓	0.2791475	±0.0002302	0.00000029	±0.00000058	0.0000
20F04556	17.0 %	✓	0.2789357	±0.0002325	0.00000107	±0.00000081	0.0000
20F04557	17.0 %	✓	0.2790076	±0.0002288	0.00000131	±0.00000040	0.0000
20F04559	17.0 %	✓	0.2788597	±0.0002296	0.00000051	±0.00000043	0.0000
20F04560	17.0 %	✓	0.2791581	±0.0002310	0.00000105	±0.00000065	0.0000
20F04562	17.0 %		0.2784428	±0.0004150	0.00002385	±0.00001081	0.0007
20F04563	17.0 %		0.2320184	±0.0001972	0.00048686	±0.00000311	0.0026
20F04565	17.0 %	✓	0.2773908	±0.0002316	0.00001777	±0.00000065	0.0003
20F04566	17.0 %		0.2791980	±0.0002903	0.00002107	±0.00000541	0.0005
20F04568	17.0 %	✓	0.2787317	±0.0002299	0.00000205	±0.00000050	0.0000
20F04569	17.0 %	✓	0.2794854	±0.0002302	0.00000040	±0.00000049	0.0000
20F04571	17.0 %	✓	0.2789389	±0.0002303	0.00000000	±0.00000056	0.0000
20F04572	17.0 %	✓	0.2786027	±0.0002302	0.00000377	±0.00000059	0.0001
20F04574	17.0 %	✓	0.2790376	±0.0002304	0.00000402	±0.00000054	0.0001
20F04575	17.0 %	✓	0.2790422	±0.0002318	0.00000080	±0.00000068	0.0000
20F04577	17.0 %	✓	0.2792638	±0.0002331	0.00000162	±0.00000078	0.0000
20F04578	17.0 %	✓	0.2791540	±0.0002346	0.00000018	±0.00000074	0.0000
20F04580	17.0 %		0.2794438	±0.0003598	0.00000420	±0.00000715	0.0001
20F04581	17.0 %		0.2790471	±0.0003151	0.00001047	±0.00000563	0.0003
20F04583	17.0 %	✓	0.2786808	±0.0002315	0.00000434	±0.00000071	0.0001
20F04584	17.0 %	✓	0.2789118	±0.0002304	0.00000113	±0.00000053	0.0000
20F04586	17.0 %	✓	0.2792417	±0.0002310	0.00000067	±0.00000057	0.0000
20F04587	17.0 %		0.2772249	±0.0004406	0.00003930	±0.00001110	0.0015
20F04589	17.0 %	✓	0.2791462	±0.0002302	0.00000060	±0.00000046	0.0000
20F04590	17.0 %	✓	0.2787031	±0.0002311	0.00000166	±0.00000060	0.0000
20F04592	17.0 %	✓	0.2794051	±0.0002339	0.00000115	±0.00000075	0.0000
20F04593	17.0 %	✓	0.2795033	±0.0002398	0.00000065	±0.00000127	0.0000
20F04595	17.0 %	✓	0.2793395	±0.0002320	0.00000022	±0.00000063	0.0000
20F04596	17.0 %		0.2790014	±0.0003870	0.00001363	±0.00000801	0.0005

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**363.79**	**±73.96**	3.58210	±0.00121	**10.35**	**±0.05**	2.84
Error Chron		**±20.33%**		±0.03%		**±0.48%**	0%
					Full External Error	±0.54	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.62	Convergence	0.0001133455
	Error Magnification	1.6866	Number of Iterations	3
	Number of Data Points	23	Calculated Line	Weighted York-2
	Spreading Factor	0.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ
20F04553	17.0 %	✓	0.0042106	9.03	0.0000000	0.00	0.0003903	10.89	0.0000000	0.00	1.44391	10.89	0.0007937	9.03	0.0000000	0.00	5.16348	0.10	0.0002599	14.54	0.0000000	0.00	427.5466	0.04	0.0009277	10.93
20F04554	17.0 %	✓	0.0004287	97.53	0.0000000	0.00	0.0003639	11.94	0.0000000	0.00	1.34619	11.94	0.0000808	97.53	0.0000000	0.00	4.90092	0.10	0.0002423	15.34	0.0000000	0.00	405.8065	0.04	0.0008649	11.98
20F04556	17.0 %	✓	0.0010173	37.87	0.0000000	0.00	0.0002605	16.51	0.0000000	0.00	0.96359	16.51	0.0001918	37.87	0.0000000	0.00	3.19298	0.10	0.0001734	19.11	0.0000000	0.00	264.3850	0.04	0.0006191	16.53
20F04557	17.0 %	✓	0.0030911	15.04	0.0000000	0.00	0.0007112	5.84	0.0000000	0.00	2.63110	5.83	0.0005827	15.04	0.0000000	0.00	7.92845	0.10	0.0004736	11.26	0.0000000	0.00	656.4919	0.04	0.0016905	5.91
20F04559	17.0 %	✓	0.0009862	42.40	0.0000000	0.00	0.0007479	5.65	0.0000000	0.00	2.76681	5.65	0.0001859	42.40	0.0000000	0.00	6.49135	0.10	0.0004980	11.16	0.0000000	0.00	537.4968	0.04	0.0017777	5.72
20F04560	17.0 %	✓	0.0012855	31.00	0.0000000	0.00	0.0002668	16.45	0.0000000	0.00	0.98698	16.45	0.0002423	31.00	0.0000000	0.00	4.11531	0.10	0.0001777	19.06	0.0000000	0.00	340.7559	0.04	0.0006341	16.48
20F04562	17.0 %		0.0016024	22.66	0.0000000	0.00	0.0102392	0.63	0.0000000	0.00	37.88106	0.61	0.0003020	22.66	0.0000000	0.00	0.22589	0.11	0.0068186	9.65	0.0000000	0.00	18.7042	0.07	0.0243386	1.10
20F04563	17.0 %		0.3074362	0.32	0.0000000	0.00	0.0001306	31.17	0.0000000	0.00	0.48302	31.16	0.0579517	0.36	0.0000000	0.00	1.76944	0.10	0.0000869	32.62	0.0000000	0.00	146.5129	0.04	0.0003103	31.18
20F04565	17.0 %	✓	0.0205435	1.83	0.0000000	0.00	0.0002921	14.76	0.0000000	0.00	1.08080	14.76	0.0038725	1.84	0.0000000	0.00	3.87255	0.10	0.0001945	17.62	0.0000000	0.00	320.6546	0.04	0.0006944	14.78
20F04566	17.0 %		0.0032036	12.85	0.0000000	0.00	0.0229909	0.51	0.0000000	0.00	85.05703	0.48	0.0006039	12.85	0.0000000	0.00	0.51274	0.10	0.0153103	9.64	0.0000000	0.00	42.4558	0.05	0.0546491	1.04
20F04568	17.0 %	✓	0.0033599	12.27	0.0000000	0.00	0.0003952	10.64	0.0000000	0.00	1.46205	10.64	0.0006333	12.27	0.0000000	0.00	5.52779	0.10	0.0002632	14.35	0.0000000	0.00	457.7120	0.04	0.0009394	10.68
20F04569	17.0 %	✓	0.0007262	60.01	0.0000000	0.00	0.0004262	9.47	0.0000000	0.00	1.57659	9.47	0.0001369	60.01	0.0000000	0.00	6.05998	0.10	0.0002838	13.51	0.0000000	0.00	501.7782	0.04	0.0010130	9.52
20F04571	17.0 %	✓	0.0000052	#######	0.0000000	0.00	0.0002505	15.95	0.0000000	0.00	0.92691	15.94	0.0000010	#######	0.0000000	0.00	4.45819	0.10	0.0001668	18.63	0.0000000	0.00	369.1473	0.04	0.0005955	15.97
20F04572	17.0 %	✓	0.0049965	7.81	0.0000000	0.00	0.0004206	9.47	0.0000000	0.00	1.55597	9.46	0.0009418	7.81	0.0000000	0.00	4.45722	0.10	0.0002801	13.50	0.0000000	0.00	369.0668	0.04	0.0009997	9.51
20F04574	17.0 %	✓	0.0059222	6.74	0.0000000	0.00	0.0004042	10.87	0.0000000	0.00	1.49531	10.87	0.0011163	6.74	0.0000000	0.00	4.96475	0.10	0.0002692	14.52	0.0000000	0.00	411.0909	0.04	0.0009607	10.91
20F04575	17.0 %	✓	0.0009554	42.26	0.0000000	0.00	0.0003250	13.95	0.0000000	0.00	1.20226	13.95	0.0001801	42.26	0.0000000	0.00	4.02581	0.10	0.0002164	16.95	0.0000000	0.00	333.3449	0.04	0.0007725	13.98
20F04577	17.0 %	✓	0.0014201	23.99	0.0000000	0.00	0.0001655	25.94	0.0000000	0.00	0.61216	25.94	0.0002677	23.99	0.0000000	0.00	2.96380	0.10	0.0001102	27.67	0.0000000	0.00	245.4088	0.04	0.0003933	25.95
20F04578	17.0 %	✓	0.0001522	210.04	0.0000000	0.00	0.0002354	17.84	0.0000000	0.00	0.87074	17.84	0.0000287	210.04	0.0000000	0.00	2.89523	0.10	0.0001567	20.27	0.0000000	0.00	239.7309	0.04	0.0005594	17.86
20F04580	17.0 %		0.0003947	84.98	0.0000000	0.00	0.0081747	0.70	0.0000025	86.37	30.24294	0.68	0.0000744	84.98	0.0000000	0.00	0.31685	0.11	0.0054437	9.65	0.0103967	86.38	26.2359	0.06	0.0194311	1.14
20F04581	17.0 %		0.0012782	26.90	0.0000000	0.00	0.0113674	0.59	0.0000000	0.00	42.05491	0.57	0.0002409	26.90	0.0000000	0.00	0.41136	0.10	0.0075699	9.65	0.0000000	0.00	34.0615	0.05	0.0270203	1.08
20F04583	17.0 %	✓	0.0050428	8.21	0.0000000	0.00	0.0003182	13.20	0.0000000	0.00	1.17714	13.19	0.0009506	8.21	0.0000000	0.00	3.91046	0.10	0.0002119	16.34	0.0000000	0.00	323.7941	0.04	0.0007563	13.23
20F04584	17.0 %	✓	0.0016057	23.62	0.0000000	0.00	0.0002797	14.70	0.0000000	0.00	1.03484	14.70	0.0003027	23.62	0.0000000	0.00	4.79897	0.10	0.0001863	17.57	0.0000000	0.00	397.3648	0.04	0.0006649	14.73
20F04586	17.0 %	✓	0.0009489	42.11	0.0000000	0.00	0.0003874	11.64	0.0000000	0.00	1.43333	11.64	0.0001789	42.11	0.0000000	0.00	4.76136	0.10	0.0002580	15.11	0.0000000	0.00	394.2500	0.04	0.0009209	11.68
20F04587	17.0 %		0.0026136	14.12	0.0000000	0.00	0.0084261	0.72	0.0000000	0.00	31.17320	0.70	0.0004927	14.12	0.0000000	0.00	0.22266	0.11	0.0056112	9.66	0.0000000	0.00	18.4365	0.07	0.0200288	1.16
20F04589	17.0 %	✓	0.0009286	38.39	0.0000000	0.00	0.0003593	11.09	0.0000000	0.00	1.32931	11.09	0.0001750	38.39	0.0000000	0.00	5.25498	0.10	0.0002393	14.69	0.0000000	0.00	435.1227	0.04	0.0008541	11.13
20F04590	17.0 %	✓	0.0020870	18.07	0.0000000	0.00	0.0003369	12.51	0.0000000	0.00	1.24654	12.51	0.0003934	18.07	0.0000000	0.00	4.24341	0.10	0.0002244	15.78	0.0000000	0.00	351.3631	0.04	0.0008009	12.54
20F04592	17.0 %	✓	0.0009414	32.33	0.0000000	0.00	0.0001537	28.27	0.0000000	0.00	0.56857	28.27	0.0001775	32.33	0.0000000	0.00	2.75697	0.10	0.0001023	29.87	0.0000000	0.00	228.2827	0.04	0.0003653	28.29
20F04593	17.0 %	✓	0.0003117	97.69	0.0000000	0.00	0.0001349	30.10	0.0000000	0.00	0.49925	30.10	0.0000587	97.69	0.0000000	0.00	1.61605	0.10	0.0000899	31.60	0.0000000	0.00	133.8124	0.04	0.0003208	30.11
20F04595	17.0 %	✓	0.0002496	143.29	0.0000000	0.00	0.0002841	14.07	0.0000000	0.00	1.05117	14.07	0.0000470	143.29	0.0000000	0.00	3.81919	0.10	0.0001892	17.05	0.0000000	0.00	316.2365	0.04	0.0006754	14.10
20F04596	17.0 %		0.0010802	29.38	0.0000000	0.00	0.0078242	0.71	0.0000000	0.00	28.94630	0.69	0.0002036	29.38	0.0000000	0.00	0.26709	0.11	0.0052103	9.65	0.0000000	0.00	22.1155	0.06	0.0185980	1.15
		Σ	0.3713420	0.61	0.0000000	0.00	0.0770625	0.36	0.0000025	86.37	285.09998	0.35	0.0699980	0.62	0.0000000	0.00	105.90521	0.02	0.0513180	3.90	0.0103967	86.38	8769.1656	0.01	0.1831767	0.51
		Σ							0.4484071	0.51	285.09998	0.35									106.03693	0.02			8769.3488	0.01

40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
1530.898	0.04	1.34571	39.98	0.0000000	0.00	0.2595208	9.65
1453.872	0.01	0.13702	105.02	0.0000000	0.00	0.2463245	9.65
947.510	0.02	0.32513	54.33	0.0000000	0.00	0.1604817	9.65
2351.966	0.02	0.98792	41.75	0.0000000	0.00	0.3984906	9.65
1927.166	0.01	0.31520	57.58	0.0000000	0.00	0.3262605	9.65
1221.067	0.02	0.41086	49.78	0.0000000	0.00	0.2068389	9.65
66.662	0.35	0.51212	45.06	0.0000000	0.00	0.0113534	9.65
533.215	7.18	98.25660	38.95	0.0000000	0.00	0.0889334	9.65
1149.401	0.22	6.56571	38.99	0.0000000	0.00	0.1946373	9.65
151.040	0.28	1.02386	41.02	0.0000000	0.00	0.0257707	9.65
1641.050	0.03	1.07383	40.84	0.0000000	0.00	0.2778312	9.65
1795.132	0.01	0.23210	71.54	0.0000000	0.00	0.3045794	9.65
1323.400	0.01	0.00167	#######	0.0000000	0.00	0.2240724	9.65
1323.110	0.05	1.59690	39.73	0.0000000	0.00	0.2240236	9.65
1471.353	0.05	1.89274	39.53	0.0000000	0.00	0.2495322	9.65
1194.298	0.02	0.30533	57.48	0.0000000	0.00	0.2023404	9.65
878.317	0.02	0.45387	45.74	0.0000000	0.00	0.1489631	9.65
858.825	0.01	0.04864	213.62	0.0000000	0.00	0.1455167	9.65
93.760	0.13	0.12614	93.48	0.0000000	0.00	0.0159252	9.65
121.655	0.16	0.40853	47.34	0.0000000	0.00	0.0206753	9.65
1160.270	0.06	1.61169	39.81	0.0000000	0.00	0.1965430	9.65
1424.184	0.02	0.51319	45.55	0.0000000	0.00	0.2412004	9.65
1411.556	0.01	0.30327	57.36	0.0000000	0.00	0.2393097	9.65
65.669	0.53	0.83530	41.43	0.0000000	0.00	0.0111910	9.65
1559.060	0.01	0.29677	54.69	0.0000000	0.00	0.2641195	9.65
1260.040	0.02	0.66700	42.94	0.0000000	0.00	0.2132774	9.65
817.332	0.02	0.30087	50.62	0.0000000	0.00	0.1385676	9.65
478.651	0.02	0.09961	105.17	0.0000000	0.00	0.0812241	9.65
1132.007	0.01	0.07977	148.49	0.0000000	0.00	0.1919556	9.65
78.921	0.22	0.34522	48.79	0.0000000	0.00	0.0134241	9.65
31421.386	0.12	118.68091	32.35	0.0000000	0.00	5.3228835	2.03
						31545.390	0.17

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F04553	17.0 %	✓	3.584404	0.001476	0.003377	0.000368	0.000011	0.000001	148.606	18.873119	1.00105000	5.425E-11
20F04554	17.0 %	✓	3.582935	0.001476	0.003317	0.000396	0.000000	0.000001	148.613	18.875449	1.00105004	5.147E-11
20F04556	17.0 %	✓	3.585654	0.001493	0.003645	0.000602	0.000005	0.000001	148.624	18.879851	1.00105013	3.356E-11
20F04557	17.0 %	✓	3.584730	0.001469	0.004008	0.000234	0.000006	0.000001	148.631	18.882182	1.00105017	8.331E-11
20F04559	17.0 %	✓	3.586628	0.001475	0.005148	0.000291	0.000003	0.000001	148.642	18.886585	1.00105025	6.824E-11
20F04560	17.0 %	✓	3.582800	0.001481	0.002896	0.000477	0.000003	0.000001	148.648	18.888658	1.00105029	4.322E-11
20F04562	17.0 %		3.587341	0.002669	2.022641	0.012375	0.000632	0.000019	148.660	18.893063	1.00105038	2.378E-12
20F04563	17.0 %		4.310601	0.001831	0.003297	0.001027	0.002099	0.000007	148.666	18.895395	1.00105042	2.236E-11
20F04565	17.0 %	✓	3.605622	0.001504	0.003371	0.000497	0.000065	0.000001	148.678	18.899802	1.00105050	4.093E-11
20F04566	17.0 %		3.577689	0.001856	2.000850	0.009650	0.000616	0.000009	148.684	18.902135	1.00105055	5.384E-12
20F04568	17.0 %	✓	3.588279	0.001479	0.003194	0.000340	0.000008	0.000001	148.696	18.906544	1.00105063	5.814E-11
20F04569	17.0 %	✓	3.578604	0.001472	0.003142	0.000298	0.000002	0.000001	148.701	18.908618	1.00105067	6.357E-11
20F04571	17.0 %	✓	3.585616	0.001479	0.002511	0.000400	0.000001	0.000001	148.714	18.913287	1.00105076	4.686E-11
20F04572	17.0 %	✓	3.589938	0.001482	0.004216	0.000399	0.000015	0.000001	148.719	18.915363	1.00105080	4.690E-11
20F04574	17.0 %	✓	3.584346	0.001479	0.003637	0.000395	0.000015	0.000001	148.731	18.919774	1.00105088	5.216E-11
20F04575	17.0 %	✓	3.584286	0.001488	0.003607	0.000503	0.000004	0.000001	148.738	18.922110	1.00105093	4.230E-11
20F04577	17.0 %	✓	3.581445	0.001494	0.002494	0.000647	0.000006	0.000001	148.749	18.926523	1.00105101	3.111E-11
20F04578	17.0 %	✓	3.582851	0.001504	0.003632	0.000648	0.000000	0.000001	148.755	18.928600	1.00105105	3.041E-11
20F04580	17.0 %		3.576495	0.002300	1.151879	0.007824	0.000326	0.000013	148.767	18.933274	1.00105114	3.324E-12
20F04581	17.0 %		3.581390	0.002020	1.233697	0.007056	0.000371	0.000010	148.773	18.935352	1.00105118	4.322E-12
20F04583	17.0 %	✓	3.588933	0.001490	0.003635	0.000480	0.000017	0.000001	148.785	18.939768	1.00105126	4.114E-11
20F04584	17.0 %	✓	3.585964	0.001480	0.002604	0.000383	0.000005	0.000001	148.791	18.942106	1.00105130	5.044E-11
20F04586	17.0 %	✓	3.581725	0.001480	0.003636	0.000423	0.000003	0.000001	148.803	18.946523	1.00105139	4.999E-11
20F04587	17.0 %		3.603872	0.002860	1.689005	0.011955	0.000598	0.000020	148.809	18.948862	1.00105143	2.355E-12
20F04589	17.0 %	✓	3.582952	0.001476	0.003055	0.000339	0.000001	0.000001	148.821	18.953282	1.00105151	5.519E-11
20F04590	17.0 %	✓	3.588646	0.001487	0.003548	0.000444	0.000007	0.000001	148.826	18.955361	1.00105155	4.464E-11
20F04592	17.0 %	✓	3.579634	0.001497	0.002491	0.000704	0.000003	0.000001	148.838	18.959782	1.00105164	2.893E-11
20F04593	17.0 %	✓	3.578374	0.001534	0.003731	0.001123	0.000003	0.000002	148.844	18.962123	1.00105168	1.695E-11
20F04595	17.0 %	✓	3.580472	0.001486	0.003324	0.000468	0.000002	0.000001	148.856	18.966545	1.00105176	4.008E-11
20F04596	17.0 %		3.581806	0.002481	1.307772	0.009062	0.000402	0.000014	148.863	18.968886	1.00105181	2.807E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F04553	17.0 %	0.0087714 ±0.0002114	0.0206285 ±0.0057326	0.0239100 ±0.0058391	0.0239108 ±0.0058858	1.9020590 ±0.0163051
20F04554	17.0 %	0.0087714 ±0.0002114	0.0206285 ±0.0057326	0.0239100 ±0.0058391	0.0239108 ±0.0058858	1.9020590 ±0.0163051
20F04556	17.0 %	0.0084081 ±0.0002447	0.0251650 ±0.0060028	0.0376834 ±0.0070076	0.0246815 ±0.0070432	1.8912407 ±0.0140482
20F04557	17.0 %	0.0084081 ±0.0002447	0.0251650 ±0.0060028	0.0376834 ±0.0070076	0.0246815 ±0.0070432	1.8912407 ±0.0140482
20F04559	17.0 %	0.0091984 ±0.0002150	0.0161057 ±0.0061818	0.0316205 ±0.0069214	0.0331454 ±0.0064616	2.0088794 ±0.0161622
20F04560	17.0 %	0.0091984 ±0.0002150	0.0161057 ±0.0061818	0.0316205 ±0.0069214	0.0331454 ±0.0064616	2.0088794 ±0.0161622
20F04562	17.0 %	0.0079837 ±0.0002293	0.0174128 ±0.0060932	0.0334806 ±0.0067602	0.0305408 ±0.0059141	1.8201870 ±0.0153176
20F04563	17.0 %	0.0079837 ±0.0002293	0.0174128 ±0.0060932	0.0334806 ±0.0067602	0.0305408 ±0.0059141	1.8201870 ±0.0153176
20F04565	17.0 %	0.0082046 ±0.0001717	0.0184466 ±0.0057959	0.0381680 ±0.0062391	0.0250381 ±0.0063386	1.7857412 ±0.0164023
20F04566	17.0 %	0.0082046 ±0.0001717	0.0184466 ±0.0057959	0.0381680 ±0.0062391	0.0250381 ±0.0063386	1.7857412 ±0.0164023
20F04568	17.0 %	0.0082284 ±0.0002104	0.0131238 ±0.0058562	0.0327522 ±0.0064603	0.0096365 ±0.0065007	1.8445215 ±0.0171797
20F04569	17.0 %	0.0082284 ±0.0002104	0.0131238 ±0.0058562	0.0327522 ±0.0064603	0.0096365 ±0.0065007	1.8445215 ±0.0171797
20F04571	17.0 %	0.0090509 ±0.0001976	0.0186084 ±0.0054726	0.0338337 ±0.0063922	0.0301977 ±0.0060934	1.9003823 ±0.0164582
20F04572	17.0 %	0.0090509 ±0.0001976	0.0186084 ±0.0054726	0.0338337 ±0.0063922	0.0301977 ±0.0060934	1.9003823 ±0.0164582
20F04574	17.0 %	0.0095814 ±0.0002050	0.0227890 ±0.0062316	0.0295193 ±0.0065516	0.0349604 ±0.0060084	2.1342499 ±0.0149476
20F04575	17.0 %	0.0095814 ±0.0002050	0.0227890 ±0.0062316	0.0295193 ±0.0065516	0.0349604 ±0.0060084	2.1342499 ±0.0149476
20F04577	17.0 %	0.0082707 ±0.0001953	0.0101976 ±0.0059265	0.0280210 ±0.0071063	0.0282756 ±0.0058181	1.8696614 ±0.0151070
20F04578	17.0 %	0.0082707 ±0.0001953	0.0101976 ±0.0059265	0.0280210 ±0.0071063	0.0282756 ±0.0058181	1.8696614 ±0.0151070
20F04580	17.0 %	0.0085888 ±0.0002006	0.0226839 ±0.0058091	0.0386901 ±0.0062714	0.0209170 ±0.0066879	1.7625777 ±0.0157672
20F04581	17.0 %	0.0085888 ±0.0002006	0.0226839 ±0.0058091	0.0386901 ±0.0062714	0.0209170 ±0.0066879	1.7625777 ±0.0157672
20F04583	17.0 %	0.0080749 ±0.0002172	0.0126059 ±0.0054315	0.0187037 ±0.0059111	0.0113316 ±0.0069315	1.8954294 ±0.0152045
20F04584	17.0 %	0.0080749 ±0.0002172	0.0126059 ±0.0054315	0.0187037 ±0.0059111	0.0113316 ±0.0069315	1.8954294 ±0.0152045
20F04586	17.0 %	0.0076684 ±0.0002226	0.0241580 ±0.0061455	0.0227453 ±0.0065899	0.0419193 ±0.0067573	1.7495180 ±0.0168379
20F04587	17.0 %	0.0076684 ±0.0002226	0.0241580 ±0.0061455	0.0227453 ±0.0065899	0.0419193 ±0.0067573	1.7495180 ±0.0168379
20F04589	17.0 %	0.0086362 ±0.0002057	0.0097656 ±0.0055931	0.0219420 ±0.0065927	0.0284193 ±0.0056760	1.8496345 ±0.0164834
20F04590	17.0 %	0.0086362 ±0.0002057	0.0097656 ±0.0055931	0.0219420 ±0.0065927	0.0284193 ±0.0056760	1.8496345 ±0.0164834
20F04592	17.0 %	0.0085538 ±0.0001827	0.0138786 ±0.0054164	0.0264302 ±0.0067063	0.0302996 ±0.0063676	2.0027230 ±0.0156116
20F04593	17.0 %	0.0085538 ±0.0001827	0.0138786 ±0.0054164	0.0264302 ±0.0067063	0.0302996 ±0.0063676	2.0027230 ±0.0156116
20F04595	17.0 %	0.0085538 ±0.0001827	0.0138786 ±0.0054164	0.0264302 ±0.0067063	0.0302996 ±0.0063676	2.0027230 ±0.0156116
20F04596	17.0 %	0.0085538 ±0.0001827	0.0138786 ±0.0054164	0.0264302 ±0.0067063	0.0302996 ±0.0063676	2.0027230 ±0.0156116

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]
20F04553	17.0 %	0.0133296 ±0.0003090	0.9896	EXP 147 of 150	0.0557617 ±0.0060164	0.0283	EXP 150 of 150	5.0950909 ±0.0070399	0.9827	EXP 148 of 150	426.859749 ±0.024645	1.0000	EXP 147 of 150	1534.405223 ±0.057067
20F04554	17.0 %	0.0087072 ±0.0003536	0.9870	EXP 150 of 150	0.0505829 ±0.0062745	0.0194	EXP 150 of 150	4.8538398 ±0.0056024	0.9879	EXP 148 of 150	405.153272 ±0.024393	1.0000	EXP 150 of 150	1455.883484 ±0.051537
20F04556	17.0 %	0.0096739 ±0.0002898	0.9840	EXP 150 of 150	0.0257955 ±0.0058882	0.0044	EXP 150 of 150	3.1247283 ±0.0073815	0.9495	EXP 150 of 150	263.950369 ±0.019680	0.9999	EXP 150 of 150	949.886553 ±0.045864
20F04557	17.0 %	0.0121750 ±0.0003879	0.9925	EXP 150 of 150	0.1139673 ±0.0054306	0.1021	EXP 148 of 150	7.8290801 ±0.0075482	0.9914	EXP 150 of 150	655.449414 ±0.031217	1.0000	EXP 150 of 150	2355.243606 ±0.068591
20F04559	17.0 %	0.0109164 ±0.0003517	0.9919	EXP 148 of 150	0.1301684 ±0.0054417	0.0539	EXP 150 of 150	6.4069059 ±0.0071046	0.9886	EXP 150 of 150	536.630634 ±0.031292	1.0000	EXP 150 of 150	1929.816375 ±0.059926
20F04560	17.0 %	0.0081891 ±0.0003283	0.9878	EXP 150 of 150	0.0360679 ±0.0059501	0.0009	EXP 150 of 150	4.0417050 ±0.0067458	0.9743	EXP 149 of 150	340.194205 ±0.021315	1.0000	EXP 150 of 150	1222.871366 ±0.051990
20F04562	17.0 %	0.0197153 ±0.0002690	0.9198	EXP 150 of 150	1.9845763 ±0.0058673	0.9285	EXP 149 of 150	0.1966353 ±0.0069844	0.0826	EXP 150 of 150	18.668882 ±0.007668	0.9983	EXP 150 of 150	69.005734 ±0.017647
20F04563	17.0 %	0.3126926 ±0.0008021	0.7898	EXP 149 of 150	0.0081114 ±0.0051122	0.0015	EXP 150 of 150	1.7710939 ±0.0066383	0.8778	EXP 149 of 150	146.255147 ±0.015274	0.9999	EXP 150 of 150	633.380344 ±0.033140
20F04565	17.0 %	0.0288466 ±0.0003260	0.9823	EXP 148 of 150	0.0386528 ±0.0061104	0.0035	EXP 150 of 150	3.8176588 ±0.0076188	0.9634	EXP 150 of 150	320.132156 ±0.026351	0.9999	EXP 150 of 150	1157.947323 ±0.052220
20F04566	17.0 %	0.0341557 ±0.0003488	0.8773	EXP 150 of 150	4.4746042 ±0.0066789	0.9797	EXP 150 of 150	0.4868330 ±0.0067485	0.3754	EXP 147 of 150	42.419386 ±0.009378	0.9995	EXP 150 of 150	153.874947 ±0.022483
20F04568	17.0 %	0.0119486 ±0.0003477	0.9889	EXP 150 of 150	0.0640896 ±0.0057550	0.0466	EXP 147 of 150	5.4379480 ±0.0068413	0.9855	EXP 150 of 150	456.992246 ±0.028520	1.0000	EXP 149 of 150	1644.246289 ±0.053548
20F04569	17.0 %	0.0093700 ±0.0003749	0.9902	EXP 150 of 150	0.0701293 ±0.0052699	0.0557	EXP 149 of 150	5.9737077 ±0.0070698	0.9871	EXP 148 of 150	500.990060 ±0.028707	1.0000	EXP 150 of 150	1797.513474 ±0.061639
20F04571	17.0 %	0.0092939 ±0.0003048	0.9895	EXP 150 of 150	0.0303258 ±0.0055572	0.0090	EXP 150 of 150	4.3875179 ±0.0069648	0.9770	EXP 150 of 150	368.544178 ±0.022585	1.0000	EXP 147 of 150	1325.522957 ±0.049937
20F04572	17.0 %	0.0144177 ±0.0003300	0.9881	EXP 149 of 150	0.0635269 ±0.0055086	0.0377	EXP 150 of 150	4.4024785 ±0.0066171	0.9795	EXP 148 of 150	368.464262 ±0.023032	1.0000	EXP 150 of 150	1326.831152 ±0.051891
20F04574	17.0 %	0.0158490 ±0.0003349	0.9889	EXP 150 of 150	0.0561256 ±0.0058847	0.0117	EXP 150 of 150	4.8992471 ±0.0069356	0.9818	EXP 150 of 150	410.418242 ±0.025776	1.0000	EXP 150 of 150	1475.629703 ±0.055227
20F04575	17.0 %	0.0108498 ±0.0003406	0.9860	EXP 150 of 150	0.0406520 ±0.0062790	0.0105	EXP 150 of 150	3.9881252 ±0.0067983	0.9748	EXP 150 of 150	332.792790 ±0.024938	0.9999	EXP 150 of 150	1196.940354 ±0.047977
20F04577	17.0 %	0.0098416 ±0.0002719	0.9860	EXP 148 of 150	0.0220975 ±0.0059182	0.0102	EXP 150 of 150	2.9198211 ±0.0069908	0.9499	EXP 150 of 150	244.999561 ±0.019309	0.9999	EXP 150 of 150	880.789021 ±0.042077
20F04578	17.0 %	0.0083531 ±0.0002458	0.9884	EXP 150 of 150	0.0357339 ±0.0056555	0.0083	EXP 149 of 150	2.8530073 ±0.0067723	0.9502	EXP 150 of 150	239.330728 ±0.021781	0.9999	EXP 150 of 150	860.791898 ±0.043384
20F04580	17.0 %	0.0170810 ±0.0002584	0.9271	EXP 149 of 150	1.5722411 ±0.0058317	0.8900	EXP 149 of 150	0.2937392 ±0.0063341	0.2491	EXP 150 of 150	26.193603 ±0.008457	0.9990	EXP 149 of 150	95.664594 ±0.021320
20F04581	17.0 %	0.0211170 ±0.0002663	0.9187	EXP 148 of 150	2.1949270 ±0.0056149	0.9455	EXP 149 of 150	0.3726312 ±0.0061708	0.2393	EXP 150 of 150	34.014633 ±0.008745	0.9994	EXP 150 of 150	123.846881 ±0.021906
20F04583	17.0 %	0.0133861 ±0.0003453	0.9817	EXP 149 of 150	0.0494519 ±0.0061215	0.0326	EXP 149 of 150	3.8255672 ±0.0064972	0.9729	EXP 149 of 150	323.280340 ±0.023183	1.0000	EXP 146 of 150	1163.973549 ±0.050909
20F04584	17.0 %	0.0099428 ±0.0003038	0.9900	EXP 149 of 150	0.0419430 ±0.0058919	0.0037	EXP 150 of 150	4.6933082 ±0.0070072	0.9790	EXP 148 of 150	396.736599 ±0.024500	1.0000	EXP 150 of 150	1426.833590 ±0.055572
20F04586	17.0 %	0.0089923 ±0.0003243	0.9891	EXP 149 of 150	0.0513787 ±0.0062800	0.0202	EXP 150 of 150	4.6713418 ±0.0062831	0.9830	EXP 147 of 150	393.596242 ±0.025728	1.0000	EXP 149 of 150	1413.847928 ±0.054954
20F04587	17.0 %	0.0186055 ±0.0002832	0.9190	EXP 150 of 150	1.6184740 ±0.0066634	0.8691	EXP 150 of 150	0.1912952 ±0.0066411	0.1102	EXP 146 of 150	18.385947 ±0.007506	0.9982	EXP 149 of 150	68.264564 ±0.021125
20F04589	17.0 %	0.0080723 ±0.0002843	0.9923	EXP 149 of 150	0.0602644 ±0.0053783	0.0353	EXP 150 of 150	5.1840893 ±0.0068968	0.9839	EXP 150 of 150	434.418819 ±0.026297	1.0000	EXP 150 of 150	1560.876565 ±0.054693
20F04590	17.0 %	0.0110376 ±0.0003090	0.9889	EXP 150 of 150	0.0558968 ±0.0060061	0.0111	EXP 150 of 150	4.1767811 ±0.0065326	0.9769	EXP 149 of 150	350.789308 ±0.024707	1.0000	EXP 150 of 150	1262.770112 ±0.050683
20F04592	17.0 %	0.0077734 ±0.0002360	0.9884	EXP 147 of 150	0.0160640 ±0.0065043	0.0010	EXP 150 of 150	2.6911749 ±0.0072059	0.9336	EXP 150 of 150	227.897950 ±0.018514	0.9999	EXP 150 of 150	819.172687 ±0.041327
20F04593	17.0 %	0.0089962 ±0.0002366	0.9813	EXP 150 of 150	0.0124104 ±0.0057677	0.0161	EXP 150 of 150	1.5769737 ±0.0068183	0.8434	EXP 150 of 150	133.574378 ±0.014299	0.9999	EXP 149 of 150	480.834509 ±0.031839
20F04595	17.0 %	0.0090825 ±0.0003010	0.9864	EXP 149 of 150	0.0414597 ±0.0055852	0.0293	EXP 150 of 150	3.7524835 ±0.0071050	0.9666	EXP 150 of 150	315.715317 ±0.022001	1.0000	EXP 150 of 150	1134.281389 ±0.053264
20F04596	17.0 %	0.0173754 ±0.0002495	0.9430	EXP 148 of 150	1.5097994 ±0.0060585	0.8747	EXP 150 of 150	0.2405872 ±0.0068451	0.1486	EXP 150 of 150	22.069345 ±0.007971	0.9987	EXP 148 of 150	81.282606 ±0.019971

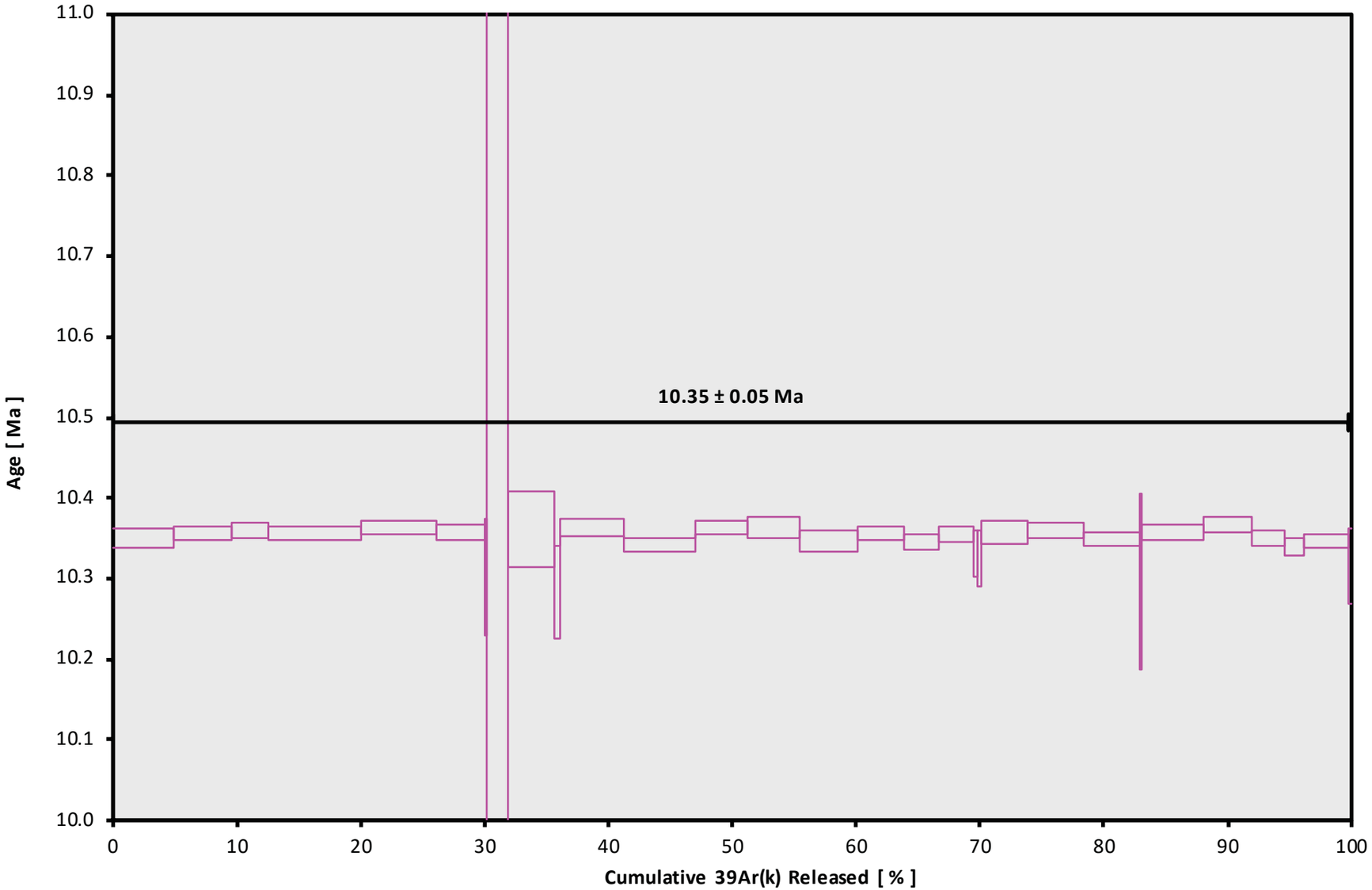
r2	Regression (type,n)
1.0000	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 150 of 150
0.9961	EXP 149 of 150
1.0000	EXP 149 of 150
1.0000	EXP 149 of 150
0.9996	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 147 of 150
1.0000	EXP 150 of 150
1.0000	EXP 146 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9986	EXP 150 of 150
0.9994	EXP 147 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9913	EXP 150 of 150
1.0000	EXP 148 of 150
1.0000	EXP 150 of 150
1.0000	EXP 150 of 150
0.9999	EXP 150 of 150
1.0000	EXP 150 of 150
0.9973	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F04553	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04554	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04556	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04557	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04559	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04560	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04562	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04563	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04565	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04566	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04568	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04569	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04571	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04572	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04574	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04575	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04577	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04578	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04580	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04581	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04583	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04584	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04586	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04587	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04589	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04590	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04592	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04593	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04595	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01
20F04596	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	46.24	Oregon\Swenton (18-58)	20F04549	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F04553	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	5	55	1
20F04554	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	6	4	1
20F04556	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	6	21	1
20F04557	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	6	30	1
20F04559	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	6	47	1
20F04560	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	6	55	1
20F04562	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	7	12	1
20F04563	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	7	21	1
20F04565	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	7	38	1
20F04566	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	7	47	1
20F04568	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	8	4	1
20F04569	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	8	12	1
20F04571	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	8	30	1
20F04572	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	8	38	1
20F04574	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	8	55	1
20F04575	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	9	4	1
20F04577	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	9	21	1
20F04578	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	9	29	1
20F04580	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	9	47	1
20F04581	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	9	55	1
20F04583	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	10	12	1
20F04584	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	10	21	1
20F04586	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	10	38	1
20F04587	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	10	47	1
20F04589	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	11	4	1
20F04590	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	11	12	1
20F04592	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	11	29	1
20F04593	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	11	38	1
20F04595	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	11	55	1
20F04596	17.0 %	VS17-056	Sanidine	South Fork	FCT-NM (2C37-19)	28.201	0.082	Kuiper et al (2008)	9.80392	0.241	0.00158360	0.241	299.164	0.125	0.9994946	0.041	1	3.54E-14	1	APR	2020	12	4	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F04553	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04554	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04556	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04557	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04559	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04560	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04562	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04563	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04565	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04566	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04568	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04569	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04571	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04572	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04574	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04575	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04577	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04578	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04580	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04581	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04583	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04584	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04586	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04587	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04589	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04590	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04592	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04593	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04595	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04596	17.0 %	319.6	38.951	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F04549.AGE >>> VS17-056 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.35 ± 0.05
TOTAL FUSION
10.36 ± 0.06
NORMAL ISOCHRON
10.36 ± 0.05
INVERSE ISOCHRON
10.35 ± 0.05

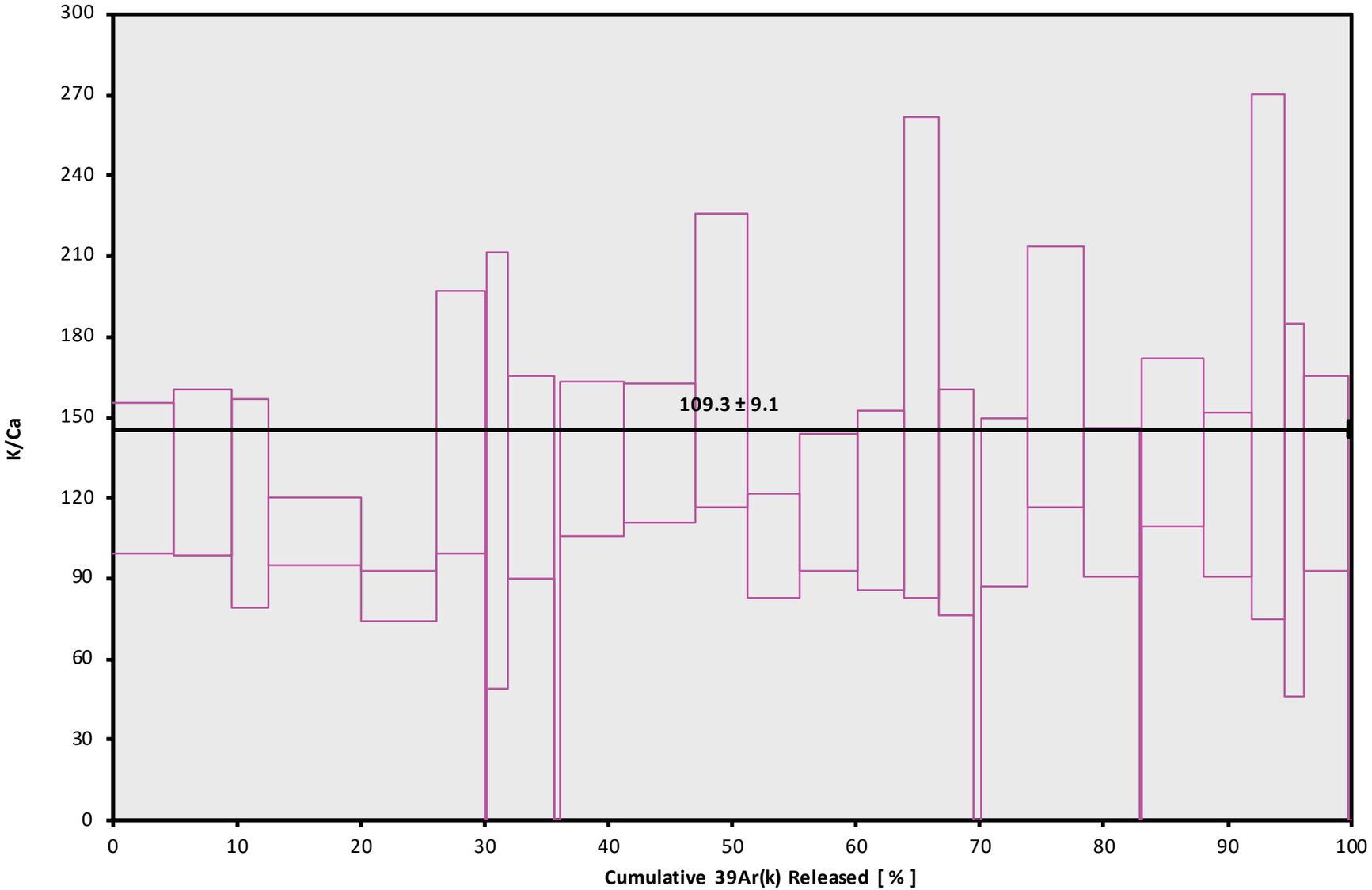
MSWD (PROBABILITY)
2.36 (0%)

Sample Info

Sanidine
South Fork
Dan Miggins

IRR = 19-OSU-02 (2C37-

20F04549.AGE >>> VS17-056 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

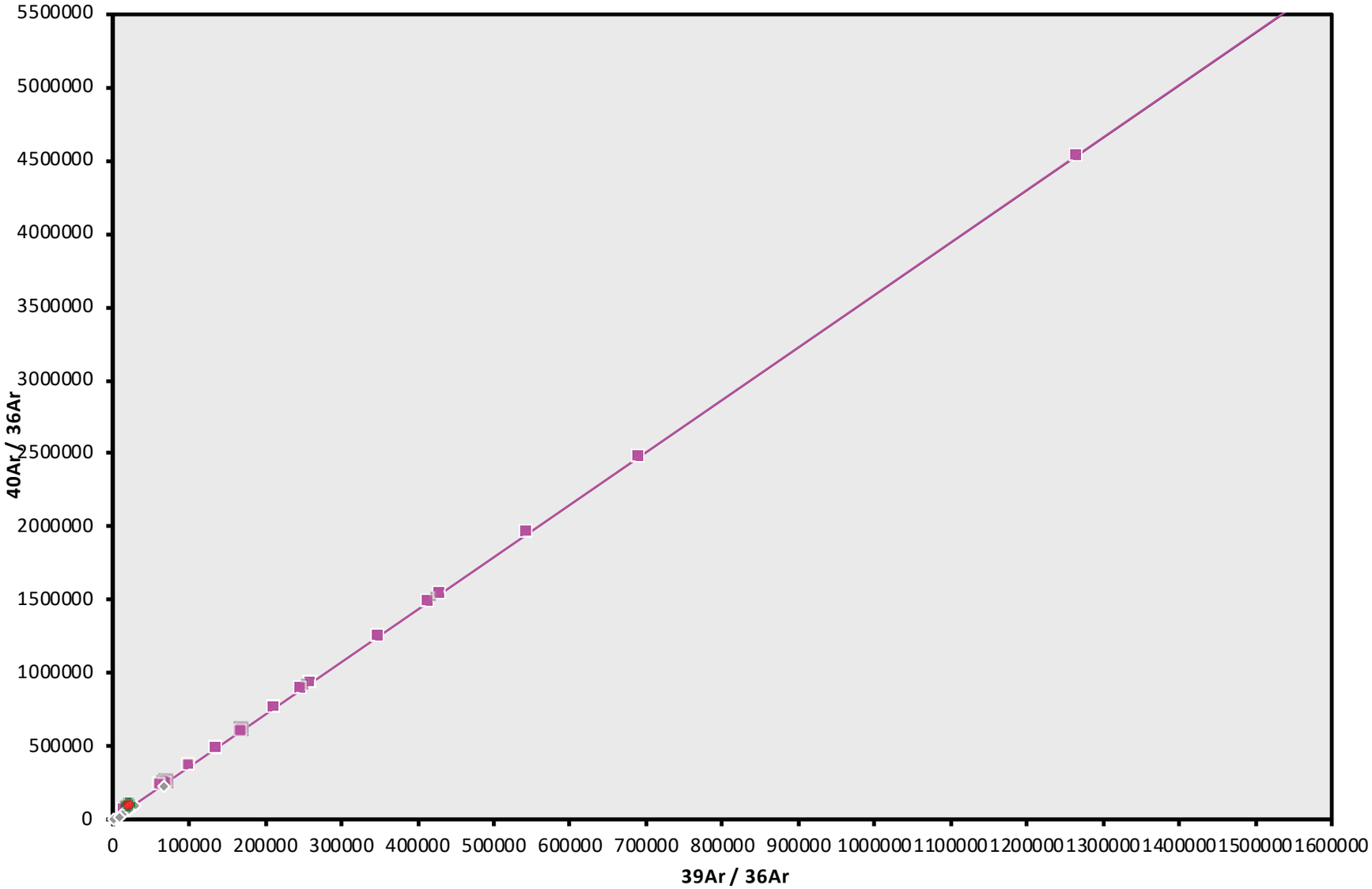
WEIGHTED PLATEAU
10.35 ± 0.05
TOTAL FUSION
10.36 ± 0.06
NORMAL ISOCHRON
10.36 ± 0.05
INVERSE ISOCHRON
10.35 ± 0.05

Sample Info

Sanidine
South Fork
Dan Miggins

IRR = 19-OSU-02 (2C37-

20F04549.AGE >>> VS17-056 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.35 ± 0.05
TOTAL FUSION
10.36 ± 0.06
NORMAL ISOCHRON
10.36 ± 0.05
INVERSE ISOCHRON
10.35 ± 0.05

MSWD (PROBABILITY)
2.58 (0%)

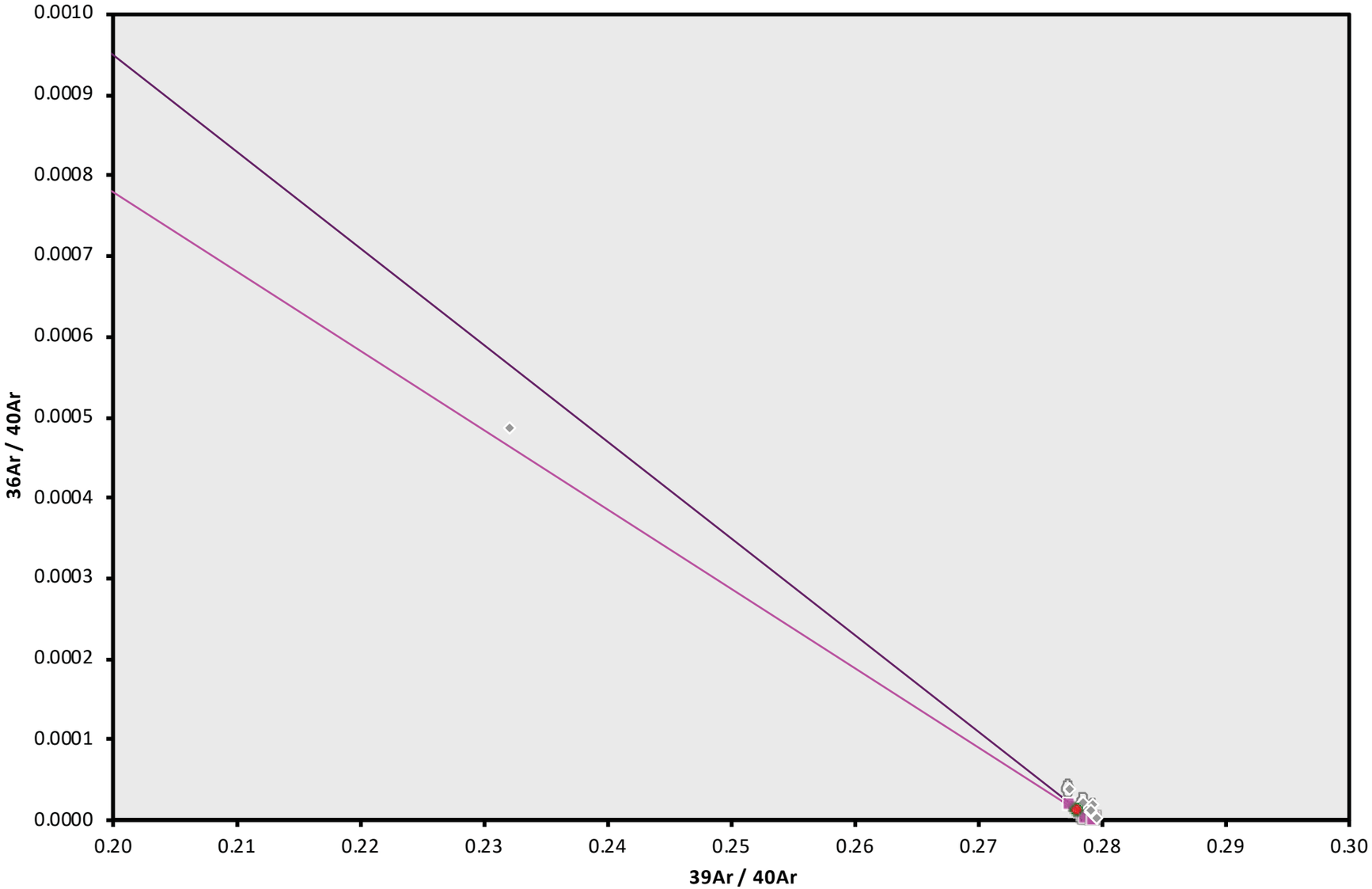
40AR/36AR INTERCEPT

Sample Info

Sanidine
South Fork
Dan Miggins

IRR = 19-OSU-02 (2C37-

20F04549.AGE >>> VS17-056 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.35 ± 0.05
TOTAL FUSION
10.36 ± 0.06
NORMAL ISOCHRON
10.36 ± 0.05
INVERSE ISOCHRON
10.35 ± 0.05

MSWD (PROBABILITY)
2.84 (0%)

SPREADING FACTOR

Sample Info

Sanidine
South Fork
Dan Miggins

IRR = 19-OSU-02 (2C37-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F04604	17.0 %	✓	0.0062541	6.272	3.16730	4.638	2.633679	0.369	219.2315	0.042	905.004	0.005	4.12015 ±0.00364	11.87 ±0.01	99.81	2.75	29.8 ±2.8
20F04605	17.0 %		5.8326759	0.174	4.00075	3.867	4.816372	0.226	306.7342	0.042	2995.098	0.002	4.08772 ±0.02332	11.77 ±0.07	41.86	3.85	33.0 ±2.5
20F04607	17.0 %	✓	0.1217749	0.592	6.23678	2.506	5.120201	0.202	424.3418	0.042	1781.733	0.003	4.11376 ±0.00359	11.85 ±0.01	97.97	5.33	29.3 ±1.5
20F04608	17.0 %	✓	0.0294963	1.651	5.77047	2.774	4.730328	0.214	392.8164	0.042	1626.763	0.004	4.11948 ±0.00352	11.86 ±0.01	99.47	4.93	29.3 ±1.6
20F04610	17.0 %	✓	0.0264239	1.807	4.92636	3.260	4.548860	0.218	377.7594	0.042	1563.936	0.003	4.11963 ±0.00353	11.87 ±0.01	99.51	4.74	33.0 ±2.2
20F04611	17.0 %	✓	0.0027070	14.183	3.98328	4.046	3.539289	0.262	295.8564	0.042	1219.258	0.004	4.11890 ±0.00355	11.86 ±0.01	99.95	3.71	31.9 ±2.6
20F04613	17.0 %	✓	0.0243288	1.760	4.89577	3.294	3.805587	0.253	314.1571	0.042	1300.333	0.004	4.11669 ±0.00355	11.86 ±0.01	99.46	3.94	27.6 ±1.8
20F04614	17.0 %	✓	0.0553837	0.996	7.78216	2.103	5.865828	0.184	489.9141	0.042	2032.251	0.003	4.11514 ±0.00350	11.85 ±0.01	99.20	6.15	27.1 ±1.1
20F04616	17.0 %	✓	0.0197151	2.165	3.37180	4.650	3.102813	0.341	258.5390	0.042	1068.139	0.005	4.10916 ±0.00361	11.84 ±0.01	99.46	3.25	33.0 ±3.1
20F04617	17.0 %	✓	0.0056815	6.159	2.67491	5.979	2.593395	0.390	215.8330	0.042	889.046	0.005	4.11171 ±0.00363	11.84 ±0.01	99.82	2.71	34.7 ±4.1
20F04619	17.0 %	✓	0.2071740	0.396	5.06344	2.878	4.168996	0.246	346.2063	0.042	1487.232	0.004	4.11775 ±0.00375	11.86 ±0.01	95.85	4.35	29.4 ±1.7
20F04620	17.0 %	✓	0.0072833	5.445	3.31275	4.737	2.821916	0.352	234.4810	0.042	966.634	0.005	4.11374 ±0.00363	11.85 ±0.01	99.79	2.94	30.4 ±2.9
20F04622	17.0 %	✓	0.0133277	2.967	5.53988	2.999	4.114799	0.242	341.7343	0.042	1408.722	0.004	4.11137 ±0.00352	11.84 ±0.01	99.73	4.29	26.5 ±1.6
20F04623	17.0 %	✓	0.0032697	11.862	5.01443	3.209	4.232787	0.219	353.8476	0.042	1456.982	0.004	4.11536 ±0.00351	11.85 ±0.01	99.95	4.44	30.3 ±1.9
20F04625	17.0 %	✓	0.0108005	3.545	2.26202	7.388	1.667112	0.542	140.0233	0.043	579.516	0.007	4.11642 ±0.00393	11.86 ±0.01	99.46	1.76	26.6 ±3.9
20F04626	17.0 %	✓	0.0505467	0.852	3.26106	5.090	2.352578	0.410	194.8832	0.042	816.134	0.006	4.11116 ±0.00375	11.84 ±0.01	98.17	2.45	25.7 ±2.6
20F04628	17.0 %	✓	0.0019698	19.129	3.41152	4.796	2.650336	0.336	220.5484	0.042	907.475	0.005	4.11265 ±0.00365	11.85 ±0.01	99.95	2.77	27.8 ±2.7
20F04629	17.0 %	✓	0.0040007	9.045	2.27772	7.462	1.946264	0.434	163.2119	0.042	673.354	0.006	4.11888 ±0.00378	11.86 ±0.01	99.84	2.05	30.8 ±4.6
20F04631	17.0 %	✓	0.0205989	1.970	2.66851	5.816	2.433718	0.413	200.8196	0.042	831.715	0.005	4.11148 ±0.00371	11.84 ±0.01	99.27	2.52	32.4 ±3.8
20F04632	17.0 %	✓	0.0208986	1.902	2.57270	5.924	2.349642	0.439	196.5378	0.042	814.933	0.006	4.11518 ±0.00372	11.85 ±0.01	99.25	2.47	32.8 ±3.9
20F04634	17.0 %	✓	0.0020034	15.469	1.83642	9.024	1.510250	0.640	125.9688	0.043	517.805	0.007	4.11594 ±0.00389	11.85 ±0.01	100.13	1.58	29.5 ±5.3
20F04635	17.0 %	✓	0.0053572	6.916	2.21205	7.171	1.829209	0.534	153.1958	0.043	632.199	0.006	4.11690 ±0.00384	11.86 ±0.01	99.76	1.92	29.8 ±4.3
20F04637	17.0 %	✓	0.0177183	2.340	3.97284	3.883	3.415994	0.286	284.5572	0.042	1174.229	0.004	4.10848 ±0.00356	11.83 ±0.01	99.56	3.57	30.8 ±2.4
20F04638	17.0 %		0.3529049	0.295	3.47640	4.168	3.060205	0.303	250.2170	0.042	1148.820	0.005	4.17076 ±0.00440	12.01 ±0.01	90.84	3.14	30.9 ±2.6
20F04640	17.0 %	✓	0.0773488	0.731	3.61370	4.300	2.940629	0.322	243.3310	0.042	1024.902	0.004	4.11769 ±0.00376	11.86 ±0.01	97.76	3.05	29.0 ±2.5
20F04641	17.0 %	✓	0.0125021	3.017	3.24288	4.888	2.783450	0.319	232.2014	0.042	959.072	0.005	4.11483 ±0.00362	11.85 ±0.01	99.62	2.92	30.8 ±3.0
20F04643	17.0 %	✓	0.0109944	4.256	4.49269	3.896	3.184765	0.314	265.5819	0.042	1096.505	0.005	4.11713 ±0.00364	11.86 ±0.01	99.72	3.33	25.4 ±2.0
20F04644	17.0 %	✓	0.0230176	1.968	4.45639	3.787	3.365668	0.288	279.6102	0.042	1156.163	0.004	4.11105 ±0.00359	11.84 ±0.01	99.42	3.51	27.0 ±2.0
20F04646	17.0 %	✓	0.4635907	0.275	3.52566	4.697	2.699830	0.335	218.9315	0.042	1040.242	0.004	4.11998 ±0.00510	11.87 ±0.01	86.71	2.75	26.7 ±2.5
20F04647	17.0 %	✓	0.0180171	2.590	3.85617	4.104	2.667503	0.322	224.4819	0.042	930.049	0.005	4.11995 ±0.00371	11.87 ±0.01	99.44	2.82	25.0 ±2.1
		Σ	7.4437587	0.142	116.87881	0.749	96.952004	0.055	7965.5529	0.008	35004.246	0.001					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (18-58)**
Sample = **VS17-065**
Material = **Sanidine**
Location = **Sacramento Butte**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C38-19)**
Position = **X: 0 | Y: 0 | Z/H: 47.67272 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.83531 ± 0.02360**
FCT-NM J-value = **0.00157855 ± 0.00000379**
Air Shot 40Ar/36Ar = **299.2090 ± 0.3830**
Air Shot MDF = **0.99945704 ± 0.00041195 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau		4.11527 ±0.00131	**11.85 ±0.06**	3.55	93.01	28.6 ±0.9
Error Mean		±0.03%	**±0.48%**	0%	28	
		Full External Error	±0.62	1.54	2σ Confidence Limit	
		Analytical Error	±0.00	1.8829	Error Magnification	
Total Fusion Age		4.11607 ±0.00113	**11.86 ±0.06**		30	29.3 ±0.4
		±0.03%	**±0.48%**			
		Full External Error	±0.62			
		Analytical Error	±0.00			
Normal Isochron	**300.24 ±4.26**	4.11536 ±0.00144	**11.85 ±0.06**	3.54	93.01	
Error Chron	**±1.42%**	±0.04%	**±0.48%**	0%	28	
		Full External Error	±0.62	1.55	2σ Confidence Limit	
		Analytical Error	±0.00	1.8803	Error Magnification	
				1	Number of Iterations	
				0.0000000107	Convergence	
Inverse Isochron	**300.77 ±4.26**	4.11498 ±0.00143	**11.85 ±0.06**	3.54	93.01	
Error Chron	**±1.42%**	±0.03%	**±0.48%**	0%	28	
		Full External Error	±0.62	1.55	2σ Confidence Limit	
		Analytical Error	±0.00	1.8823	Error Magnification	
				2	Number of Iterations	
				0.0000025084	Convergence	
				14%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F04604	17.0 %	✓	0.0053980	3.16730	0.0000000	219.2294	903.259	11.87 ±0.01	99.81	2.75	29.8 ±2.8
20F04605	17.0 %		5.8315916	4.00075	0.0119995	306.7316	1253.831	11.77 ±0.07	41.86	3.85	33.0 ±2.5
20F04607	17.0 %	✓	0.1200891	6.23678	0.0000000	424.3377	1745.622	11.85 ±0.01	97.97	5.33	29.3 ±1.5
20F04608	17.0 %	✓	0.0279365	5.77047	0.0000000	392.8127	1618.184	11.86 ±0.01	99.47	4.93	29.3 ±1.6
20F04610	17.0 %	✓	0.0250923	4.92636	0.0000000	377.7562	1556.215	11.87 ±0.01	99.51	4.74	33.0 ±2.2
20F04611	17.0 %	✓	0.0016303	3.98328	0.0000000	295.8539	1218.592	11.86 ±0.01	99.95	3.71	31.9 ±2.6
20F04613	17.0 %	✓	0.0230039	4.89577	0.0063330	314.1539	1293.274	11.86 ±0.01	99.46	3.94	27.6 ±1.8
20F04614	17.0 %	✓	0.0532801	7.78216	0.0000000	489.9091	2016.046	11.85 ±0.01	99.20	6.15	27.1 ±1.1
20F04616	17.0 %	✓	0.0188037	3.37180	0.0000000	258.5369	1062.368	11.84 ±0.01	99.46	3.25	33.0 ±3.1
20F04617	17.0 %	✓	0.0049584	2.67491	0.0000000	215.8313	887.435	11.84 ±0.01	99.82	2.71	34.7 ±4.1
20F04619	17.0 %	✓	0.2058053	5.06344	0.0000000	346.2030	1425.577	11.86 ±0.01	95.85	4.35	29.4 ±1.7
20F04620	17.0 %	✓	0.0063878	3.31275	0.0000000	234.4789	964.584	11.85 ±0.01	99.79	2.94	30.4 ±2.9
20F04622	17.0 %	✓	0.0118303	5.53988	0.0000000	341.7308	1404.983	11.84 ±0.01	99.73	4.29	26.5 ±1.6
20F04623	17.0 %	✓	0.0019143	5.01443	0.0000000	353.8443	1456.196	11.85 ±0.01	99.95	4.44	30.3 ±1.9
20F04625	17.0 %	✓	0.0101891	2.26202	0.0000000	140.0219	576.389	11.86 ±0.01	99.46	1.76	26.6 ±3.9
20F04626	17.0 %	✓	0.0496652	3.26106	0.0000000	194.8811	801.188	11.84 ±0.01	98.17	2.45	25.7 ±2.6
20F04628	17.0 %	✓	0.0010477	3.41152	0.0000000	220.5462	907.028	11.85 ±0.01	99.95	2.77	27.8 ±2.7
20F04629	17.0 %	✓	0.0033850	2.27772	0.0000000	163.2105	672.245	11.86 ±0.01	99.84	2.05	30.8 ±4.6
20F04631	17.0 %	✓	0.0198765	2.66851	0.0042135	200.8178	825.659	11.84 ±0.01	99.27	2.52	32.4 ±3.8
20F04632	17.0 %	✓	0.0202032	2.57270	0.0000000	196.5361	808.782	11.85 ±0.01	99.25	2.47	32.8 ±3.9
20F04634	17.0 %	✓	0.0024998	1.83642	0.0000000	125.9676	518.475	11.85 ±0.01	100.13	1.58	29.5 ±5.3
20F04635	17.0 %	✓	0.0047592	2.21205	0.0000000	153.1944	630.686	11.86 ±0.01	99.76	1.92	29.8 ±4.3
20F04637	17.0 %	✓	0.0166444	3.97284	0.0000000	284.5546	1169.087	11.83 ±0.01	99.56	3.57	30.8 ±2.4
20F04638	17.0 %		0.3519653	3.47640	0.0000000	250.2148	1043.586	12.01 ±0.01	90.84	3.14	30.9 ±2.6
20F04640	17.0 %	✓	0.0763720	3.61370	0.0000000	243.3287	1001.953	11.86 ±0.01	97.76	3.05	29.0 ±2.5
20F04641	17.0 %	✓	0.0116255	3.24288	0.0000000	232.1993	955.460	11.85 ±0.01	99.62	2.92	30.8 ±3.0
20F04643	17.0 %	✓	0.0097800	4.49269	0.0000000	265.5790	1093.424	11.86 ±0.01	99.72	3.33	25.4 ±2.0
20F04644	17.0 %	✓	0.0218131	4.45639	0.0000000	279.6073	1149.481	11.84 ±0.01	99.42	3.51	27.0 ±2.0
20F04646	17.0 %	✓	0.4626377	3.52566	0.0000000	218.9292	901.984	11.87 ±0.01	86.71	2.75	26.7 ±2.5
20F04647	17.0 %	✓	0.0169748	3.85617	0.0000000	224.4794	924.845	11.87 ±0.01	99.44	2.82	25.0 ±2.1
		Σ	7.4121609	116.87881	0.0225461	7965.4778	32786.436				

Information on Analysis

Project = **SWENTON (18-58)**
Sample = **VS17-065**
Material = **Sanidine**
Location = **Sacramento Butte**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **19-OSU-02 (2C38-19)**
J = **0.00157855 ± 0.00000379**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	4.11527	±0.00131	**11.85**	**±0.06**	3.55	93.01	28.6 ±0.9
Error Mean		±0.03%		**±0.48%**	0%	28	
			Full External Error	±0.62	1.54	2σ Confidence Limit	
			Analytical Error	±0.00	1.8829	Error Magnification	
Total Fusion Age	4.11607	±0.00113	**11.86**	**±0.06**		30	29.3 ±0.4
		±0.03%		**±0.48%**			
			Full External Error	±0.62			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F04604	17.0 %	✓	40613.09	±5932.37	167630.69	±24485.47	1.0000
20F04605	17.0 %		52.60	±0.19	513.57	±1.79	0.9725
20F04607	17.0 %	✓	3533.52	±42.62	14834.61	±178.51	0.9976
20F04608	17.0 %	✓	14060.90	±492.28	58222.16	±2037.81	0.9997
20F04610	17.0 %	✓	15054.68	±575.52	62318.24	±2381.76	0.9998
20F04611	17.0 %	✓	181472.03	±86022.45	747763.38	±354458.70	1.0000
20F04613	17.0 %	✓	13656.56	±511.26	56518.35	±2115.35	0.9997
20F04614	17.0 %	✓	9194.97	±191.21	38137.16	±792.45	0.9992
20F04616	17.0 %	✓	13749.24	±627.52	56796.32	±2591.76	0.9998
20F04617	17.0 %	✓	43528.04	±6190.04	179273.06	±25493.65	1.0000
20F04619	17.0 %	✓	1682.19	±13.48	7225.38	±57.60	0.9945
20F04620	17.0 %	✓	36707.19	±4583.62	151302.28	±18892.68	1.0000
20F04622	17.0 %	✓	28886.05	±1943.97	119059.90	±8011.87	0.9999
20F04623	17.0 %	✓	184844.55	±75370.32	760999.78	±310296.85	1.0000
20F04625	17.0 %	✓	13742.33	±1040.01	56867.74	±4303.44	0.9999
20F04626	17.0 %	✓	3923.89	±68.50	16430.33	±286.51	0.9988
20F04628	17.0 %	✓	210509.89	±152464.42	866051.10	±627247.94	1.0000
20F04629	17.0 %	✓	48216.00	±10391.54	198894.59	±42865.57	1.0000
20F04631	17.0 %	✓	10103.26	±414.82	41837.95	±1717.42	0.9998
20F04632	17.0 %	✓	9727.95	±384.94	40330.85	±1595.54	0.9998
20F04634	17.0 %	✓	50391.94	±12624.68	207111.45	±51887.29	1.0000
20F04635	17.0 %	✓	32188.81	±5045.48	132816.58	±20818.21	1.0000
20F04637	17.0 %	✓	17096.08	±856.26	70537.44	±3532.38	0.9999
20F04638	17.0 %		710.91	±4.25	3263.58	±19.31	0.9899
20F04640	17.0 %	✓	3186.10	±47.38	13417.93	±199.21	0.9984
20F04641	17.0 %	✓	19973.27	±1304.42	82485.10	±5386.52	0.9999
20F04643	17.0 %	✓	27155.20	±2611.75	112100.09	±10781.23	1.0000
20F04644	17.0 %	✓	12818.33	±535.29	52995.42	±2212.65	0.9998
20F04646	17.0 %	✓	473.22	±2.64	2248.21	±12.42	0.9885
20F04647	17.0 %	✓	13224.26	±730.14	54781.90	±3024.28	0.9999

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**300.24**	**±4.26**	4.11536	±0.00144	**11.85**	**±0.06**	3.54
Error Chron		**±1.42%**		±0.04%		**±0.48%**	0%
					Full External Error	±0.62	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.000000010735
	Error Magnification	1.8803	Number of Iterations	1
	Number of Data Points	28	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F04604	17.0 %	✓	0.2422772	±0.0002043	0.00000597	±0.00000087	0.0001
20F04605	17.0 %		0.1024176	±0.0000857	0.00194717	±0.00000680	0.0008
20F04607	17.0 %	✓	0.2381945	±0.0001992	0.00006741	±0.00000081	0.0005
20F04608	17.0 %	✓	0.2415044	±0.0002019	0.00001718	±0.00000060	0.0002
20F04610	17.0 %	✓	0.2415774	±0.0002020	0.00001605	±0.00000061	0.0002
20F04611	17.0 %	✓	0.2426864	±0.0002042	0.00000134	±0.00000063	0.0000
20F04613	17.0 %	✓	0.2416305	±0.0002030	0.00001769	±0.00000066	0.0002
20F04614	17.0 %	✓	0.2411025	±0.0002011	0.00002622	±0.00000054	0.0003
20F04616	17.0 %	✓	0.2420797	±0.0002048	0.00001761	±0.00000080	0.0003
20F04617	17.0 %	✓	0.2428030	±0.0002066	0.00000558	±0.00000079	0.0001
20F04619	17.0 %	✓	0.2328163	±0.0001952	0.00013840	±0.00000110	0.0011
20F04620	17.0 %	✓	0.2426083	±0.0002057	0.00000661	±0.00000083	0.0001
20F04622	17.0 %	✓	0.2426178	±0.0002034	0.00000840	±0.00000057	0.0001
20F04623	17.0 %	✓	0.2428970	±0.0002034	0.00000131	±0.00000054	0.0000
20F04625	17.0 %	✓	0.2416543	±0.0002095	0.00001758	±0.00000133	0.0003
20F04626	17.0 %	✓	0.2388201	±0.0002034	0.00006086	±0.00000106	0.0009
20F04628	17.0 %	✓	0.2430687	±0.0002068	0.00000115	±0.00000084	0.0000
20F04629	17.0 %	✓	0.2424198	±0.0002081	0.00000503	±0.00000108	0.0001
20F04631	17.0 %	✓	0.2414856	±0.0002056	0.00002390	±0.00000098	0.0003
20F04632	17.0 %	✓	0.2412037	±0.0002059	0.00002479	±0.00000098	0.0004
20F04634	17.0 %	✓	0.2433083	±0.0002126	0.00000483	±0.00000121	0.0001
20F04635	17.0 %	✓	0.2423554	±0.0002091	0.00000753	±0.00000118	0.0001
20F04637	17.0 %	✓	0.2423688	±0.0002034	0.00001418	±0.00000071	0.0002
20F04638	17.0 %		0.2178303	±0.0001841	0.00030641	±0.00000181	0.0019
20F04640	17.0 %	✓	0.2374507	±0.0002010	0.00007453	±0.00000111	0.0006
20F04641	17.0 %	✓	0.2421439	±0.0002051	0.00001212	±0.00000079	0.0002
20F04643	17.0 %	✓	0.2422407	±0.0002049	0.00000892	±0.00000086	0.0001
20F04644	17.0 %	✓	0.2418762	±0.0002035	0.00001887	±0.00000079	0.0002
20F04646	17.0 %	✓	0.2104868	±0.0001777	0.00044480	±0.00000246	0.0018
20F04647	17.0 %	✓	0.2413984	±0.0002048	0.00001825	±0.00000101	0.0003

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**300.77**	**±4.26**	4.11498	±0.00143	**11.85**	**±0.06**	3.54
Error Chron		**±1.42%**		±0.03%		**±0.48%**	0%
					Full External Error	±0.62	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.0000025084
	Error Magnification	1.8823	Number of Iterations	2
	Number of Data Points	28	Calculated Line	Weighted York-2
	Spreading Factor	13.5%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F04604	17.0%	✓	0.0053980	7.30	0.0000000	0.00	0.0008561	4.64	0.0000000	0.00	3.16730	4.64	0.0010175	7.31	0.0000000	0.00	2.647634	0.10	0.0005701	10.69	0.0000000	0.00	219.2294	0.04	0.0020350	4.73	903.259	0.01	1.6116	7.30	0.0000000	0.00	0.1330723	9.65
20F04605	17.0%		5.8315916	0.17	0.0000000	0.00	0.0010814	3.87	0.0000029	126.22	4.00075	3.87	1.0992550	0.24	0.0000000	0.00	3.704398	0.10	0.0007201	10.38	0.0119995	126.23	306.7316	0.04	0.0025705	3.98	1253.831	0.28	1741.0800	0.20	0.0000000	0.00	0.1861861	9.65
20F04607	17.0%	✓	0.1200891	0.60	0.0000000	0.00	0.0016858	2.51	0.0000000	0.00	6.23678	2.51	0.0226368	0.62	0.0000000	0.00	5.124727	0.10	0.0011226	9.95	0.0000000	0.00	424.3377	0.04	0.0040071	2.67	1745.622	0.01	35.8538	0.61	0.0000000	0.00	0.2575730	9.65
20F04608	17.0%	✓	0.0279365	1.75	0.0000000	0.00	0.0015598	2.78	0.0000000	0.00	5.77047	2.77	0.0052660	1.76	0.0000000	0.00	4.743999	0.10	0.0010387	10.02	0.0000000	0.00	392.8127	0.04	0.0037075	2.92	1618.184	0.01	8.3407	1.75	0.0000000	0.00	0.2384373	9.65
20F04610	17.0%	✓	0.0250923	1.91	0.0000000	0.00	0.0013316	3.26	0.0000000	0.00	4.92636	3.26	0.0047299	1.92	0.0000000	0.00	4.562162	0.10	0.0008867	10.17	0.0000000	0.00	377.7562	0.04	0.0031652	3.39	1556.215	0.01	7.4916	1.91	0.0000000	0.00	0.2292980	9.65
20F04611	17.0%	✓	0.0016303	23.70	0.0000000	0.00	0.0010767	4.05	0.0000000	0.00	3.98328	4.05	0.0003073	23.70	0.0000000	0.00	3.573027	0.10	0.0007170	10.45	0.0000000	0.00	295.8539	0.04	0.0025593	4.15	1218.592	0.01	0.4867	23.70	0.0000000	0.00	0.1795833	9.65
20F04613	17.0%	✓	0.0230039	1.87	0.0000000	0.00	0.0013233	3.30	0.0000015	211.98	4.89577	3.29	0.0043362	1.88	0.0000000	0.00	3.794037	0.10	0.0008812	10.18	0.0063330	211.99	314.1539	0.04	0.0031455	3.42	1293.274	0.01	6.8680	1.87	0.0000000	0.00	0.1906914	9.65
20F04614	17.0%	✓	0.0532801	1.04	0.0000000	0.00	0.0021035	2.11	0.0000000	0.00	7.78216	2.10	0.0100433	1.05	0.0000000	0.00	5.916632	0.10	0.0014008	9.86	0.0000000	0.00	489.9091	0.04	0.0050000	2.30	2016.046	0.01	15.9073	1.04	0.0000000	0.00	0.2973748	9.65
20F04616	17.0%	✓	0.0188037	2.28	0.0000000	0.00	0.0009114	4.65	0.0000000	0.00	3.37180	4.65	0.0035445	2.29	0.0000000	0.00	3.122350	0.10	0.0006069	10.69	0.0000000	0.00	258.5369	0.04	0.0021664	4.74	1062.368	0.01	5.6140	2.28	0.0000000	0.00	0.1569319	9.65
20F04617	17.0%	✓	0.0049584	7.11	0.0000000	0.00	0.0007230	5.98	0.0000000	0.00	2.67491	5.98	0.0009347	7.11	0.0000000	0.00	2.606594	0.10	0.0004815	11.33	0.0000000	0.00	215.8313	0.04	0.0017186	6.05	887.435	0.01	1.4804	7.11	0.0000000	0.00	0.1310096	9.65
20F04619	17.0%	✓	0.2058053	0.40	0.0000000	0.00	0.0013686	2.88	0.0000000	0.00	5.06344	2.88	0.0387943	0.43	0.0000000	0.00	4.181094	0.10	0.0009114	10.05	0.0000000	0.00	346.2030	0.04	0.0032533	3.02	1425.577	0.02	61.4452	0.41	0.0000000	0.00	0.2101452	9.65
20F04620	17.0%	✓	0.0063878	6.24	0.0000000	0.00	0.0008954	4.74	0.0000000	0.00	3.31275	4.74	0.0012041	6.25	0.0000000	0.00	2.831801	0.10	0.0005963	10.73	0.0000000	0.00	234.4789	0.04	0.0021284	4.83	964.584	0.01	1.9071	6.24	0.0000000	0.00	0.1423287	9.65
20F04622	17.0%	✓	0.0118303	3.36	0.0000000	0.00	0.0014974	3.00	0.0000000	0.00	5.53988	3.00	0.0022300	3.37	0.0000000	0.00	4.127083	0.10	0.0009972	10.09	0.0000000	0.00	341.7308	0.04	0.0035594	3.14	1404.983	0.01	3.5321	3.37	0.0000000	0.00	0.2074306	9.65
20F04623	17.0%	✓	0.0019143	20.39	0.0000000	0.00	0.0013554	3.21	0.0000000	0.00	5.01443	3.21	0.0003608	20.39	0.0000000	0.00	4.273378	0.10	0.0009026	10.15	0.0000000	0.00	353.8443	0.04	0.0032218	3.34	1456.196	0.01	0.5715	20.39	0.0000000	0.00	0.2147835	9.65
20F04625	17.0%	✓	0.0101891	3.78	0.0000000	0.00	0.0006114	7.39	0.0000000	0.00	2.26202	7.39	0.0019206	3.79	0.0000000	0.00	1.691044	0.10	0.0004072	12.14	0.0000000	0.00	140.0219	0.04	0.0014533	7.45	576.389	0.02	3.0421	3.79	0.0000000	0.00	0.0849933	9.65
20F04626	17.0%	✓	0.0496652	0.87	0.0000000	0.00	0.0008815	5.09	0.0000000	0.00	3.26106	5.09	0.0093619	0.89	0.0000000	0.00	2.353579	0.10	0.0005870	10.89	0.0000000	0.00	194.8811	0.04	0.0020952	5.17	801.188	0.02	14.8280	0.88	0.0000000	0.00	0.1182928	9.65
20F04628	17.0%	✓	0.0010477	36.21	0.0000000	0.00	0.0009221	4.80	0.0000000	0.00	3.41152	4.80	0.0001975	36.21	0.0000000	0.00	2.663536	0.10	0.0006141	10.76	0.0000000	0.00	220.5462	0.04	0.0021919	4.88	907.028	0.01	0.3128	36.21	0.0000000	0.00	0.1338715	9.65
20F04629	17.0%	✓	0.0033850	10.78	0.0000000	0.00	0.0006157	7.46	0.0000000	0.00	2.27772	7.46	0.0006381	10.78	0.0000000	0.00	1.971093	0.10	0.0004100	12.18	0.0000000	0.00	163.2105	0.04	0.0014634	7.52	672.245	0.02	1.0106	10.78	0.0000000	0.00	0.0990688	9.65
20F04631	17.0%	✓	0.0198765	2.05	0.0000000	0.00	0.0007213	5.82	0.0000010	277.30	2.66851	5.82	0.0037467	2.06	0.0000000	0.00	2.425277	0.10	0.0004803	11.25	0.0042135	277.30	200.8178	0.04	0.0017145	5.89	825.659	0.02	5.9343	2.06	0.0000000	0.00	0.1218964	9.65
20F04632	17.0%	✓	0.0202032	1.98	0.0000000	0.00	0.0006954	5.93	0.0000000	0.00	2.57270	5.92	0.0038083	1.98	0.0000000	0.00	2.373567	0.10	0.0004631	11.31	0.0000000	0.00	196.5361	0.04	0.0016530	5.99	808.782	0.02	6.0319	1.98	0.0000000	0.00	0.1192974	9.65
20F04634	17.0%	✓	0.0024998	12.53	0.0000000	0.00	0.0004964	9.03	0.0000000	0.00	1.83642	9.02	0.0004712	12.53	0.0000000	0.00	1.521311	0.10	0.0003306	13.20	0.0000000	0.00	125.9676	0.04	0.0011799	9.07	518.475	0.02	0.7463	12.53	0.0000000	0.00	0.0764623	9.65
20F04635	17.0%	✓	0.0047592	7.84	0.0000000	0.00	0.0005979	7.17	0.0000000	0.00	2.21205	7.17	0.0008971	7.84	0.0000000	0.00	1.850129	0.10	0.0003982	12.01	0.0000000	0.00	153.1944	0.04	0.0014212	7.23	630.686	0.02	1.4209	7.84	0.0000000	0.00	0.0929890	9.65
20F04637	17.0%	✓	0.0166444	2.50	0.0000000	0.00	0.0010739	3.89	0.0000000	0.00	3.97284	3.88	0.0031375	2.51	0.0000000	0.00	3.436566	0.10	0.0007151	10.38	0.0000000	0.00	284.5546	0.04	0.0025525	3.99	1169.087	0.01	4.9694	2.51	0.0000000	0.00	0.1727247	9.65
20F04638	17.0%		0.3519653	0.30	0.0000000	0.00	0.0009397	4.17	0.0000000	0.00	3.47640	4.17	0.0663455	0.34	0.0000000	0.00	3.021844	0.10	0.0006258	10.49	0.0000000	0.00	250.2148	0.04	0.0022336	4.27	1043.586	0.03	105.0828	0.31	0.0000000	0.00	0.1518804	9.65
20F04640	17.0%	✓	0.0763720	0.74	0.0000000	0.00	0.0009768	4.30	0.0000000	0.00	3.61370	4.30	0.0143961	0.76	0.0000000	0.00	2.938680	0.10	0.0006505	10.55	0.0000000	0.00	243.3287	0.04	0.0023218	4.40	1001.953	0.02	22.8016	0.75	0.0000000	0.00	0.1477005	9.65
20F04641	17.0%	✓	0.0116255	3.27	0.0000000	0.00	0.0008765	4.89	0.0000000	0.00	3.24288	4.89	0.0021914	3.27	0.0000000	0.00	2.804271	0.10	0.0005837	10.80	0.0000000	0.00	232.1993	0.04	0.0020835	4.97	955.460	0.01	3.4709	3.27	0.0000000	0.00	0.1409450	9.65
20F04643	17.0%	✓	0.0097800	4.81	0.0000000	0.00	0.0012144	3.90	0.0000000	0.00	4.49269	3.90	0.0018435	4.81	0.0000000	0.00	3.207397	0.10	0.0008087	10.39	0.0000000	0.00	265.5790	0.04	0.0028866	4.00	1093.424	0.01	2.9199	4.81	0.0000000	0.00	0.1612064	9.65
20F04644	17.0%	✓	0.0218131	2.09	0.0000000	0.00	0.0012046	3.79	0.0000000	0.00	4.45639	3.79	0.0041118	2.09	0.0000000	0.00	3.376818	0.10	0.0008021	10.35	0.0000000	0.00	279.6073	0.04	0.0028632	3.90	1149.481	0.01	6.5125	2.09	0.0000000	0.00	0.1697217	9.65
20F04646	17.0%	✓	0.4626377	0.28	0.0000000	0.00	0.0009530	4.70	0.0000000	0.00	3.52566	4.70	0.0872072	0.32	0.0000000	0.00	2.644008	0.10	0.0006346	10.71	0.0000000	0.00	218.9292	0.04	0.0022652	4.79	901.984	0.05	138.1251	0.30	0.0000000	0.00	0.1328901	9.65
20F04647	17.0%	✓	0.0169748	2.76	0.0000000	0.00	0.0010423	4.11	0.0000000	0.00	3.85617	4.10	0.0031998	2.76	0.0000000	0.00	2.711038	0.10	0.0006941	10.47	0.0000000	0.00	224.4794	0.04	0.0024776	4.21	924.845	0.02	5.0680	2.76	0.0000000	0.00	0.1362590	9.65
		Σ	7.4121609	0.14	0.0000000	0.00	0.0315923	0.75	0.0000055	103.66	116.87881	0.75	1.3971923	0.19	0.0000000	0.00	96.199075	0.02	0.0210382	2.00	0.0225461	103.66	7965.4778	0.01	0.0750946	0.77	32786.436	0.01	2212.9748	0.16	0.0000000	0.00	4.8350450	1.85
		Σ							7.4437587	0.14	116.87881	0.75									97.639852	0.03			7965.5529	0.01							35004.246	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F04604	17.0 %	✓	4.128073	0.001740	0.014447	0.000670	0.000029	0.000002	148.900	18.982942	1.00105207	3.204E-11
20F04605	17.0 %		9.764473	0.004084	0.013043	0.000504	0.019015	0.000034	148.906	18.985025	1.00105211	1.060E-10
20F04607	17.0 %	✓	4.198817	0.001754	0.014698	0.000368	0.000287	0.000002	148.918	18.989713	1.00105220	6.307E-11
20F04608	17.0 %	✓	4.141280	0.001730	0.014690	0.000408	0.000075	0.000001	148.924	18.991797	1.00105224	5.759E-11
20F04610	17.0 %	✓	4.140033	0.001730	0.013041	0.000425	0.000070	0.000001	148.935	18.996226	1.00105232	5.536E-11
20F04611	17.0 %	✓	4.121115	0.001733	0.013464	0.000545	0.000009	0.000001	148.942	18.998571	1.00105237	4.316E-11
20F04613	17.0 %	✓	4.139117	0.001737	0.015584	0.000513	0.000077	0.000001	148.953	19.003002	1.00105245	4.603E-11
20F04614	17.0 %	✓	4.148178	0.001729	0.015885	0.000334	0.000113	0.000001	148.959	19.005087	1.00105249	7.194E-11
20F04616	17.0 %	✓	4.131443	0.001746	0.013042	0.000606	0.000076	0.000002	148.972	19.009780	1.00105258	3.781E-11
20F04617	17.0 %	✓	4.119139	0.001752	0.012393	0.000741	0.000026	0.000002	148.977	19.011866	1.00105262	3.147E-11
20F04619	17.0 %	✓	4.295798	0.001800	0.014625	0.000421	0.000598	0.000002	148.989	19.016300	1.00105270	5.265E-11
20F04620	17.0 %	✓	4.122440	0.001747	0.014128	0.000669	0.000031	0.000002	148.995	19.018648	1.00105275	3.422E-11
20F04622	17.0 %	✓	4.122273	0.001727	0.016211	0.000486	0.000039	0.000001	149.007	19.023083	1.00105283	4.987E-11
20F04623	17.0 %	✓	4.117541	0.001723	0.014171	0.000455	0.000009	0.000001	149.013	19.025171	1.00105287	5.158E-11
20F04625	17.0 %	✓	4.138708	0.001793	0.016155	0.001194	0.000077	0.000003	149.025	19.029869	1.00105296	2.051E-11
20F04626	17.0 %	✓	4.187814	0.001783	0.016733	0.000852	0.000259	0.000002	149.031	19.031957	1.00105300	2.889E-11
20F04628	17.0 %	✓	4.114630	0.001749	0.015468	0.000742	0.000009	0.000002	149.042	19.036396	1.00105308	3.212E-11
20F04629	17.0 %	✓	4.125645	0.001770	0.013956	0.001041	0.000025	0.000002	149.049	19.038746	1.00105312	2.384E-11
20F04631	17.0 %	✓	4.141606	0.001762	0.013288	0.000773	0.000103	0.000002	149.060	19.043186	1.00105321	2.944E-11
20F04632	17.0 %	✓	4.146446	0.001769	0.013090	0.000775	0.000106	0.000002	149.066	19.045276	1.00105325	2.885E-11
20F04634	17.0 %	✓	4.110580	0.001795	0.014578	0.001316	0.000016	0.000002	149.078	19.049978	1.00105333	1.833E-11
20F04635	17.0 %	✓	4.126741	0.001779	0.014439	0.001035	0.000035	0.000002	149.084	19.052069	1.00105337	2.238E-11
20F04637	17.0 %	✓	4.126513	0.001731	0.013961	0.000542	0.000062	0.000001	149.096	19.056512	1.00105346	4.157E-11
20F04638	17.0 %		4.591295	0.001940	0.013894	0.000579	0.001410	0.000004	149.102	19.058865	1.00105350	4.067E-11
20F04640	17.0 %	✓	4.211967	0.001782	0.014851	0.000639	0.000318	0.000002	149.114	19.063309	1.00105358	3.628E-11
20F04641	17.0 %	✓	4.130345	0.001748	0.013966	0.000683	0.000054	0.000002	149.119	19.065401	1.00105362	3.395E-11
20F04643	17.0 %	✓	4.128688	0.001745	0.016916	0.000659	0.000041	0.000002	149.132	19.070109	1.00105371	3.882E-11
20F04644	17.0 %	✓	4.134910	0.001738	0.015938	0.000604	0.000082	0.000002	149.138	19.072202	1.00105375	4.093E-11
20F04646	17.0 %	✓	4.751449	0.002005	0.016104	0.000756	0.002118	0.000006	149.149	19.076650	1.00105383	3.682E-11
20F04647	17.0 %	✓	4.143091	0.001756	0.017178	0.000705	0.000080	0.000002	149.156	19.079005	1.00105388	3.292E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F04604	17.0 %	0.0082555 ±0.0002412	0.0087804 ±0.0058447	0.0335695 ±0.0069739	0.0262853 ±0.0057382	1.7590893 ±0.0158175
20F04605	17.0 %	0.0082555 ±0.0002412	0.0087804 ±0.0058447	0.0335695 ±0.0069739	0.0262853 ±0.0057382	1.7590893 ±0.0158175
20F04607	17.0 %	0.0092769 ±0.0002055	0.0182696 ±0.0054686	0.0349370 ±0.0063400	0.0398796 ±0.0063600	2.0624442 ±0.0135483
20F04608	17.0 %	0.0092769 ±0.0002055	0.0182696 ±0.0054686	0.0349370 ±0.0063400	0.0398796 ±0.0063600	2.0624442 ±0.0135483
20F04610	17.0 %	0.0077885 ±0.0002166	0.0155095 ±0.0055972	0.0301341 ±0.0062528	0.0316052 ±0.0061219	1.8136221 ±0.0157398
20F04611	17.0 %	0.0077885 ±0.0002166	0.0155095 ±0.0055972	0.0301341 ±0.0062528	0.0316052 ±0.0061219	1.8136221 ±0.0157398
20F04613	17.0 %	0.0078894 ±0.0002137	0.0276688 ±0.0059697	0.0460922 ±0.0060876	0.0373850 ±0.0061178	1.7331891 ±0.0155729
20F04614	17.0 %	0.0078894 ±0.0002137	0.0276688 ±0.0059697	0.0460922 ±0.0060876	0.0373850 ±0.0061178	1.7331891 ±0.0155729
20F04616	17.0 %	0.0084357 ±0.0002192	0.0075816 ±0.0056430	0.0337361 ±0.0072884	0.0344972 ±0.0069147	1.6963201 ±0.0150854
20F04617	17.0 %	0.0084357 ±0.0002192	0.0075816 ±0.0056430	0.0337361 ±0.0072884	0.0344972 ±0.0069147	1.6963201 ±0.0150854
20F04619	17.0 %	0.0081292 ±0.0002203	0.0149361 ±0.0055656	0.0299831 ±0.0066187	0.0293970 ±0.0065897	1.7190901 ±0.0144188
20F04620	17.0 %	0.0081292 ±0.0002203	0.0149361 ±0.0055656	0.0299831 ±0.0066187	0.0293970 ±0.0065897	1.7190901 ±0.0144188
20F04622	17.0 %	0.0088273 ±0.0002006	0.0178928 ±0.0060298	0.0370138 ±0.0059782	0.0336064 ±0.0056078	1.8034939 ±0.0159967
20F04623	17.0 %	0.0088273 ±0.0002006	0.0178928 ±0.0060298	0.0370138 ±0.0059782	0.0336064 ±0.0056078	1.8034939 ±0.0159967
20F04625	17.0 %	0.0082205 ±0.0002239	0.0241443 ±0.0063947	0.0331129 ±0.0061801	0.0381719 ±0.0061618	1.8006311 ±0.0151886
20F04626	17.0 %	0.0082205 ±0.0002239	0.0241443 ±0.0063947	0.0331129 ±0.0061801	0.0381719 ±0.0061618	1.8006311 ±0.0151886
20F04628	17.0 %	0.0084106 ±0.0002268	0.0219932 ±0.0062037	0.0228143 ±0.0054838	0.0125926 ±0.0071398	1.7849584 ±0.0154439
20F04629	17.0 %	0.0084106 ±0.0002268	0.0219932 ±0.0062037	0.0228143 ±0.0054838	0.0125926 ±0.0071398	1.7849584 ±0.0154439
20F04631	17.0 %	0.0084357 ±0.0002192	0.0075816 ±0.0056430	0.0337361 ±0.0072884	0.0344972 ±0.0069147	1.6963201 ±0.0150854
20F04632	17.0 %	0.0084357 ±0.0002192	0.0075816 ±0.0056430	0.0337361 ±0.0072884	0.0344972 ±0.0069147	1.6963201 ±0.0150854
20F04634	17.0 %	0.0104151 ±0.0002065	0.0192112 ±0.0055853	0.0188040 ±0.0067824	0.0249802 ±0.0057106	2.5052954 ±0.0161436
20F04635	17.0 %	0.0104151 ±0.0002065	0.0192112 ±0.0055853	0.0188040 ±0.0067824	0.0249802 ±0.0057106	2.5052954 ±0.0161436
20F04637	17.0 %	0.0081292 ±0.0002203	0.0149361 ±0.0055656	0.0299831 ±0.0066187	0.0293970 ±0.0065897	1.7190901 ±0.0144188
20F04638	17.0 %	0.0081292 ±0.0002203	0.0149361 ±0.0055656	0.0299831 ±0.0066187	0.0293970 ±0.0065897	1.7190901 ±0.0144188
20F04640	17.0 %	0.0088273 ±0.0002006	0.0178928 ±0.0060298	0.0370138 ±0.0059782	0.0336064 ±0.0056078	1.8034939 ±0.0159967
20F04641	17.0 %	0.0088273 ±0.0002006	0.0178928 ±0.0060298	0.0370138 ±0.0059782	0.0336064 ±0.0056078	1.8034939 ±0.0159967
20F04643	17.0 %	0.0082205 ±0.0002239	0.0241443 ±0.0063947	0.0331129 ±0.0061801	0.0381719 ±0.0061618	1.8006311 ±0.0151886
20F04644	17.0 %	0.0082205 ±0.0002239	0.0241443 ±0.0063947	0.0331129 ±0.0061801	0.0381719 ±0.0061618	1.8006311 ±0.0151886
20F04646	17.0 %	0.0084106 ±0.0002268	0.0219932 ±0.0062037	0.0228143 ±0.0054838	0.0125926 ±0.0071398	1.7849584 ±0.0154439
20F04647	17.0 %	0.0084106 ±0.0002268	0.0219932 ±0.0062037	0.0228143 ±0.0054838	0.0125926 ±0.0071398	1.7849584 ±0.0154439

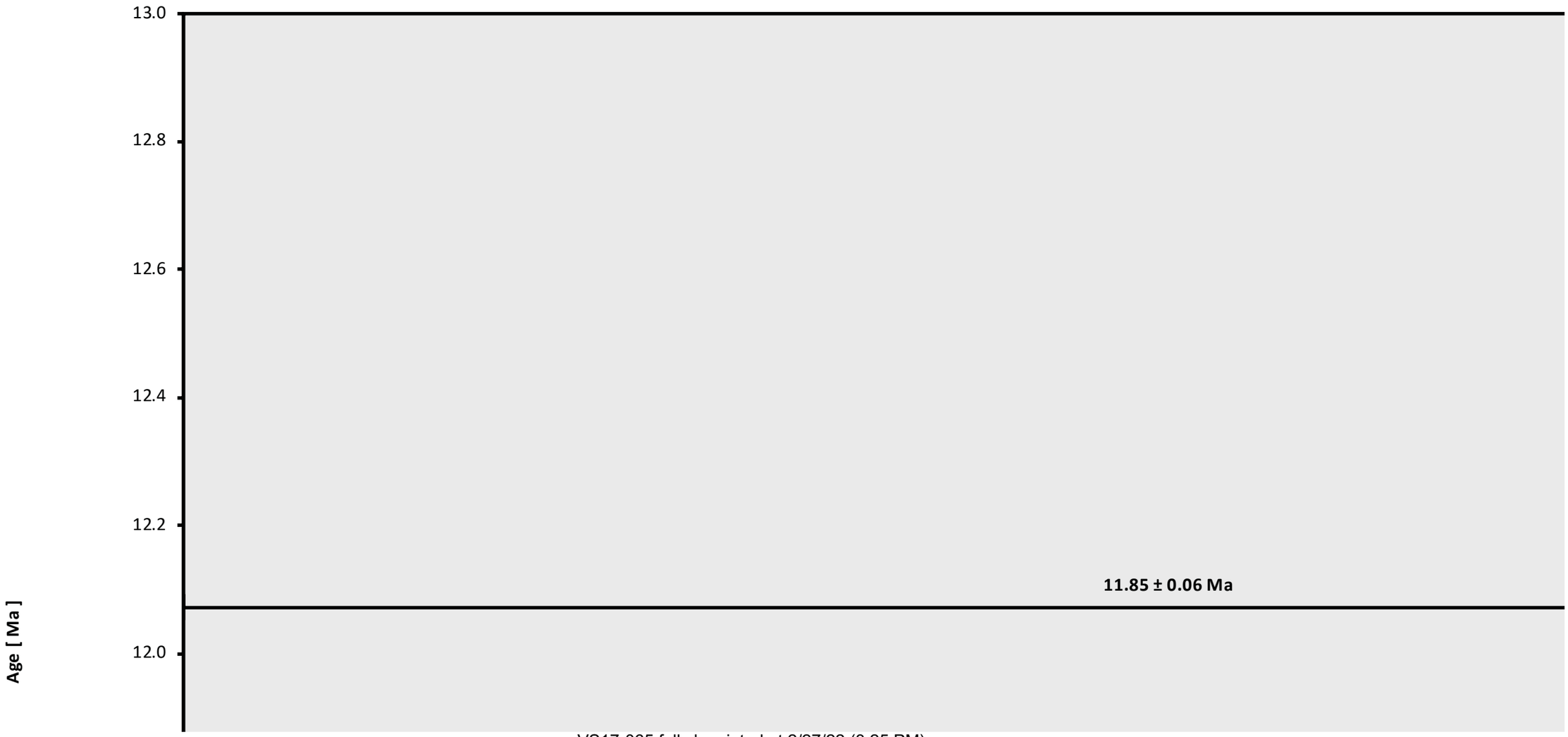
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F04604	17.0 %	0.0144336 ±0.0003030	0.9772	EXP 150 of 150	0.1577982 ±0.0049998	0.0812	EXP 149 of 150	2.5972497 ±0.0064075	0.9442	EXP 150 of 150	218.85611 ±0.01577	1.0000	EXP 145 of 150	906.76260 ±0.04212	1.0000	EXP 150 of 150
20F04605	17.0 %	5.7700920 ±0.0032754	0.9968	EXP 150 of 150	0.2016088 ±0.0055844	0.1189	EXP 149 of 150	4.7775734 ±0.0073615	0.9777	EXP 149 of 150	306.21946 ±0.02100	1.0000	EXP 150 of 150	2996.85672 ±0.07026	1.0000	EXP 150 of 150
20F04607	17.0 %	0.1295728 ±0.0006527	0.9249	EXP 150 of 150	0.3096256 ±0.0059620	0.2256	EXP 150 of 150	5.0797045 ±0.0069885	0.9828	EXP 149 of 150	423.62614 ±0.02720	1.0000	EXP 150 of 150	1783.79561 ±0.05433	1.0000	EXP 149 of 150
20F04608	17.0 %	0.0384149 ±0.0004323	0.9814	EXP 150 of 150	0.2850764 ±0.0062554	0.2126	EXP 150 of 150	4.6902555 ±0.0068484	0.9801	EXP 148 of 150	392.15098 ±0.02395	1.0000	EXP 150 of 150	1628.82519 ±0.05669	1.0000	EXP 150 of 150
20F04610	17.0 %	0.0338915 ±0.0004168	0.9807	EXP 149 of 150	0.2434026 ±0.0062161	0.0991	EXP 150 of 150	4.5137875 ±0.0066793	0.9795	EXP 150 of 150	377.12615 ±0.02371	1.0000	EXP 148 of 150	1565.74990 ±0.04915	1.0000	EXP 147 of 150
20F04611	17.0 %	0.0104626 ±0.0003113	0.9882	EXP 149 of 150	0.1938114 ±0.0062895	0.0674	EXP 150 of 150	3.5053123 ±0.0062032	0.9715	EXP 149 of 150	295.35365 ±0.02164	1.0000	EXP 146 of 150	1221.07196 ±0.04868	1.0000	EXP 150 of 150
20F04613	17.0 %	0.0319226 ±0.0003630	0.9802	EXP 148 of 150	0.2295437 ±0.0059048	0.1925	EXP 145 of 150	3.7553634 ±0.0067762	0.9705	EXP 150 of 150	313.61933 ±0.02183	1.0000	EXP 150 of 150	1302.06594 ±0.05134	1.0000	EXP 150 of 150
20F04614	17.0 %	0.0626004 ±0.0004932	0.9801	EXP 150 of 150	0.3811431 ±0.0059216	0.3648	EXP 150 of 150	5.8133671 ±0.0074789	0.9844	EXP 150 of 150	489.09640 ±0.02764	1.0000	EXP 149 of 150	2033.98409 ±0.06688	1.0000	EXP 150 of 150
20F04616	17.0 %	0.0279114 ±0.0003589	0.9768	EXP 150 of 150	0.1695018 ±0.0059460	0.0744	EXP 150 of 150	3.0657080 ±0.0072040	0.9515	EXP 150 of 150	258.09274 ±0.02071	0.9999	EXP 150 of 150	1069.83558 ±0.04839	1.0000	EXP 150 of 150
20F04617	17.0 %	0.0140482 ±0.0002671	0.9864	EXP 149 of 150	0.1328863 ±0.0061892	0.0364	EXP 150 of 150	2.5568432 ±0.0066463	0.9417	EXP 150 of 150	215.45471 ±0.01946	0.9999	EXP 150 of 150	890.74251 ±0.04110	1.0000	EXP 148 of 150
20F04619	17.0 %	0.2127870 ±0.0007019	0.5612	EXP 150 of 150	0.2508991 ±0.0051182	0.2647	EXP 147 of 150	4.1344870 ±0.0070280	0.9729	EXP 150 of 150	345.62540 ±0.02284	1.0000	EXP 150 of 150	1488.95150 ±0.05850	1.0000	EXP 147 of 150
20F04620	17.0 %	0.0153240 ±0.0003237	0.9820	EXP 150 of 150	0.1589648 ±0.0060245	0.0526	EXP 150 of 150	2.7888687 ±0.0070004	0.9443	EXP 149 of 150	234.07806 ±0.01976	0.9999	EXP 150 of 150	968.35285 ±0.04512	1.0000	EXP 150 of 150
20F04622	17.0 %	0.0219932 ±0.0003346	0.9861	EXP 148 of 150	0.2728525 ±0.0061696	0.1993	EXP 149 of 150	4.0733171 ±0.0072013	0.9712	EXP 150 of 150	341.15633 ±0.02296	1.0000	EXP 150 of 150	1410.52566 ±0.05214	1.0000	EXP 149 of 150
20F04623	17.0 %	0.0120573 ±0.0003264	0.9893	EXP 150 of 150	0.2452469 ±0.0057980	0.1929	EXP 150 of 150	4.1911773 ±0.0061705	0.9797	EXP 148 of 150	353.25023 ±0.02231	1.0000	EXP 150 of 150	1458.78539 ±0.05480	1.0000	EXP 149 of 150
20F04625	17.0 %	0.0188898 ±0.0003043	0.9677	EXP 150 of 150	0.0945291 ±0.0059763	0.0803	EXP 150 of 150	1.6321892 ±0.0064222	0.8754	EXP 147 of 150	139.76208 ±0.01507	0.9999	EXP 148 of 150	581.31628 ±0.03746	1.0000	EXP 148 of 150
20F04626	17.0 %	0.0581532 ±0.0003523	0.9530	EXP 147 of 150	0.1469237 ±0.0058608	0.0657	EXP 150 of 150	2.3169113 ±0.0071240	0.9174	EXP 149 of 150	194.53449 ±0.01709	0.9999	EXP 149 of 150	817.93502 ±0.04394	1.0000	EXP 150 of 150
20F04628	17.0 %	0.0103565 ±0.0002952	0.9822	EXP 149 of 150	0.1569256 ±0.0058766	0.0940	EXP 150 of 150	2.6246444 ±0.0066595	0.9416	EXP 150 of 150	220.18439 ±0.01933	0.9999	EXP 150 of 150	909.25994 ±0.04407	1.0000	EXP 149 of 150
20F04629	17.0 %	0.0123626 ±0.0002763	0.9799	EXP 148 of 150	0.0974483 ±0.0063785	0.0193	EXP 150 of 150	1.9213369 ±0.0062031	0.9093	EXP 149 of 150	162.93928 ±0.01541	0.9999	EXP 148 of 150	675.13942 ±0.03908	1.0000	EXP 150 of 150
20F04631	17.0 %	0.0287844 ±0.0003340	0.9685	EXP 149 of 150	0.1323200 ±0.0058301	0.1018	EXP 150 of 150	2.3973391 ±0.0065932	0.9341	EXP 150 of 150	200.46506 ±0.01792	0.9999	EXP 148 of 150	833.41173 ±0.03974	1.0000	EXP 149 of 150
20F04632	17.0 %	0.0290805 ±0.0003240	0.9730	EXP 149 of 150	0.1272823 ±0.0056240	0.0469	EXP 150 of 150	2.3133552 ±0.0070359	0.9185	EXP 150 of 150	196.19011 ±0.01773	0.9999	EXP 150 of 150	816.62960 ±0.04417	1.0000	EXP 149 of 150
20F04634	17.0 %	0.0084360 ±0.0002260	0.9805	EXP 150 of 150	0.0770323 ±0.0066378	0.0230	EXP 150 of 150	1.4898065 ±0.0067628	0.8344	EXP 150 of 150	125.74308 ±0.01502	0.9999	EXP 150 of 150	520.31019 ±0.03307	1.0000	EXP 149 of 150
20F04635	17.0 %	0.0157072 ±0.0003021	0.9710	EXP 149 of 150	0.0967056 ±0.0061352	0.0306	EXP 147 of 150	1.8084189 ±0.0068413	0.8772	EXP 150 of 150	152.92672 ±0.01636	0.9999	EXP 148 of 150	634.70479 ±0.03541	1.0000	EXP 148 of 150
20F04637	17.0 %	0.0256323 ±0.0003442	0.9785	EXP 149 of 150	0.1932015 ±0.0057892	0.1118	EXP 150 of 150	3.3823018 ±0.0065834	0.9658	EXP 149 of 150	284.07428 ±0.01829	1.0000	EXP 150 of 150	1175.94795 ±0.05012	1.0000	EXP 149 of 150
20F04638	17.0 %	0.3567480 ±0.0008229	0.6538	EXP 150 of 150	0.1671708 ±0.0050975	0.0853	EXP 150 of 150	3.0268997 ±0.0059768	0.9651	EXP 150 of 150	249.78887 ±0.01996	0.9999	EXP 150 of 150	1150.53948 ±0.05134	1.0000	EXP 150 of 150
20F04640	17.0 %	0.0852367 ±0.0005058	0.9086	EXP 149 of 150	0.1713619 ±0.0054019	0.0663	EXP 149 of 150	2.9004222 ±0.0069144	0.9509	EXP 150 of 150	242.90957 ±0.02085	0.9999	EXP 150 of 150	1026.70565 ±0.04049	1.0000	EXP 150 of 150
20F04641	17.0 %	0.0211775 ±0.0003133	0.9813	EXP 149 of 150	0.1519228 ±0.0056566	0.0810	EXP 150 of 150	2.7434140 ±0.0061520	0.9555	EXP 150 of 150	231.79769 ±0.01943	0.9999	EXP 150 of 150	960.87538 ±0.04344	1.0000	EXP 150 of 150
20F04643	17.0 %	0.0190813 ±0.0004040	0.9722	EXP 150 of 150	0.2110604 ±0.0064815	0.1337	EXP 150 of 150	3.1481947 ±0.0074163	0.9503	EXP 150 of 150	265.12037 ±0.02121	0.9999	EXP 150 of 150	1098.30540 ±0.05119	1.0000	EXP 148 of 150
20F04644	17.0 %	0.0309585 ±0.0003857	0.9754	EXP 150 of 150	0.2091344 ±0.0060101	0.1074	EXP 149 of 150	3.3289005 ±0.0069021	0.9599	EXP 150 of 150	279.12634 ±0.02024	1.0000	EXP 150 of 150	1157.96380 ±0.04522	1.0000	EXP 150 of 150
20F04646	17.0 %	0.4663709 ±0.0009848	0.8738	EXP 150 of 150	0.1625218 ±0.0059962	0.0729	EXP 150 of 150	2.6740843 ±0.0068156	0.9409	EXP 149 of 150	218.56992 ±0.01673	0.9999	EXP 150 of 150	1042.02676 ±0.04298	1.0000	EXP 149 of 150
20F04647	17.0 %	0.0262089 ±0.0004002	0.9657	EXP 150 of 150	0.1797938 ±0.0054143	0.1651	EXP 148 of 150	2.6417920 ±0.0062116	0.9513	EXP 150 of 150	224.11147 ±0.01828	0.9999	EXP 150 of 150	931.83402 ±0.04628	1.0000	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F04604	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04605	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04607	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04608	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04610	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04611	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04613	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04614	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04616	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04617	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04619	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04620	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04622	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04623	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04625	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04626	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04628	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04629	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04631	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04632	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04634	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04635	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04637	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04638	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04640	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04641	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04643	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04644	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04646	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01
20F04647	17.0 %	Dan Miggins	19-OSU-02	0.00	0.00	47.67	Oregon\Swenton (18-58)	20F04600	01

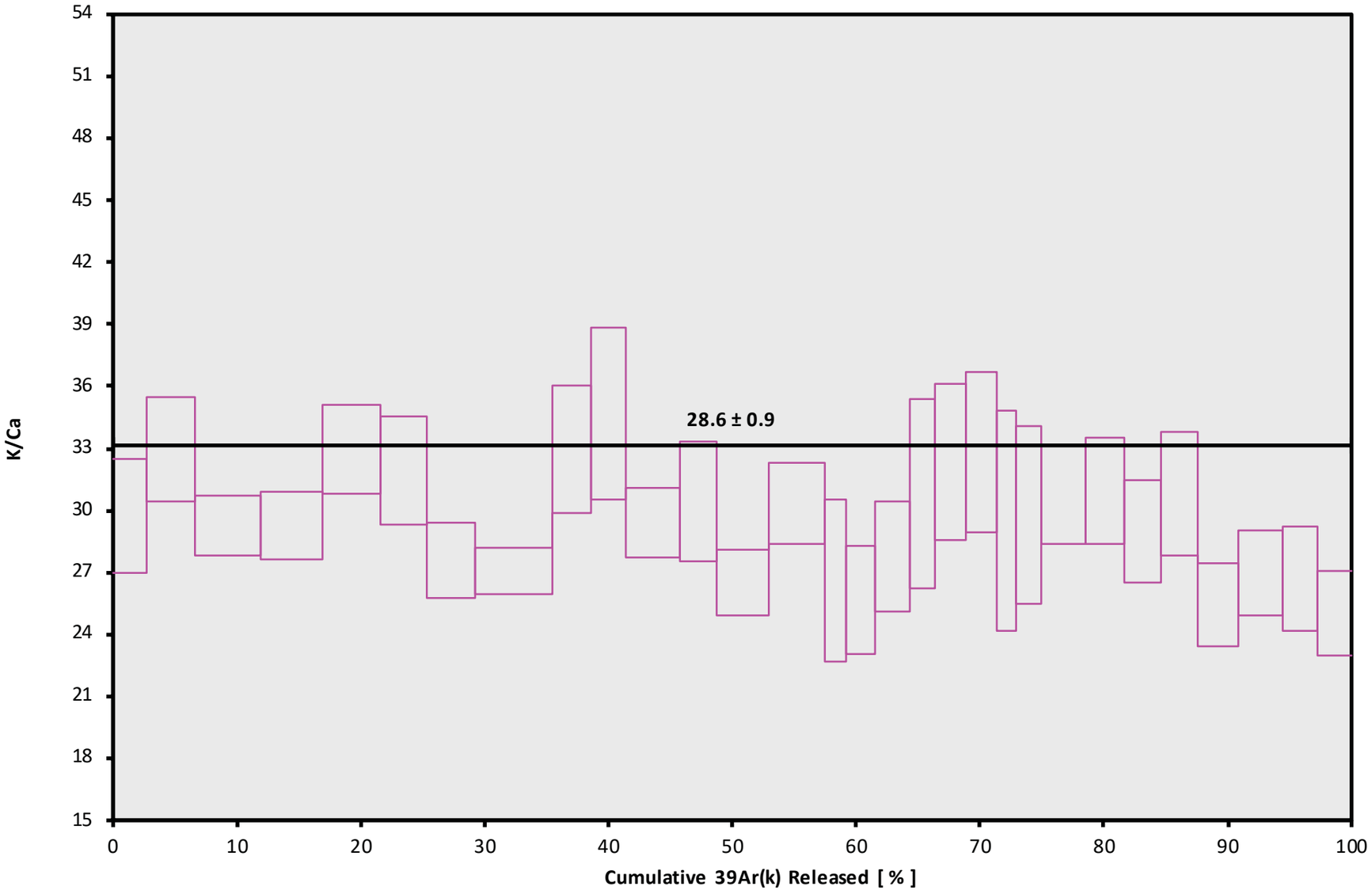
Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F04604	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	12	58	1
20F04605	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	13	6	1
20F04607	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	13	24	1
20F04608	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	13	32	1
20F04610	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	13	49	1
20F04611	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	13	58	1
20F04613	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	14	15	1
20F04614	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	14	23	1
20F04616	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	14	41	1
20F04617	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	14	49	1
20F04619	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	15	6	1
20F04620	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	15	15	1
20F04622	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	15	32	1
20F04623	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	15	40	1
20F04625	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	15	58	1
20F04626	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	16	6	1
20F04628	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	16	23	1
20F04629	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	16	32	1
20F04631	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	16	49	1
20F04632	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	16	57	1
20F04634	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	17	15	1
20F04635	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	17	23	1
20F04637	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	17	40	1
20F04638	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	17	49	1
20F04640	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	18	6	1
20F04641	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	18	14	1
20F04643	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	18	32	1
20F04644	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	18	40	1
20F04646	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	18	57	1
20F04647	17.0 %	VS17-065	Sanidine	Sacramento Butte	FCT-NM (2C38-19)	28.201	0.082	Kuiper et al (2008)	9.83531	0.24	0.00157855	0.240	299.209	0.128	0.999457	0.041	1	3.54E-14	1	APR	2020	19	6	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F04604	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04605	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04607	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04608	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04610	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04611	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04613	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04614	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04616	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04617	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04619	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04620	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04622	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04623	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04625	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04626	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04628	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04629	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04631	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04632	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04634	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04635	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04637	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04638	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04640	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04641	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04643	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04644	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04646	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F04647	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F04600.AGE >>> VS17-065 >>> OREGON | S



20F04600.AGE >>> VS17-065 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

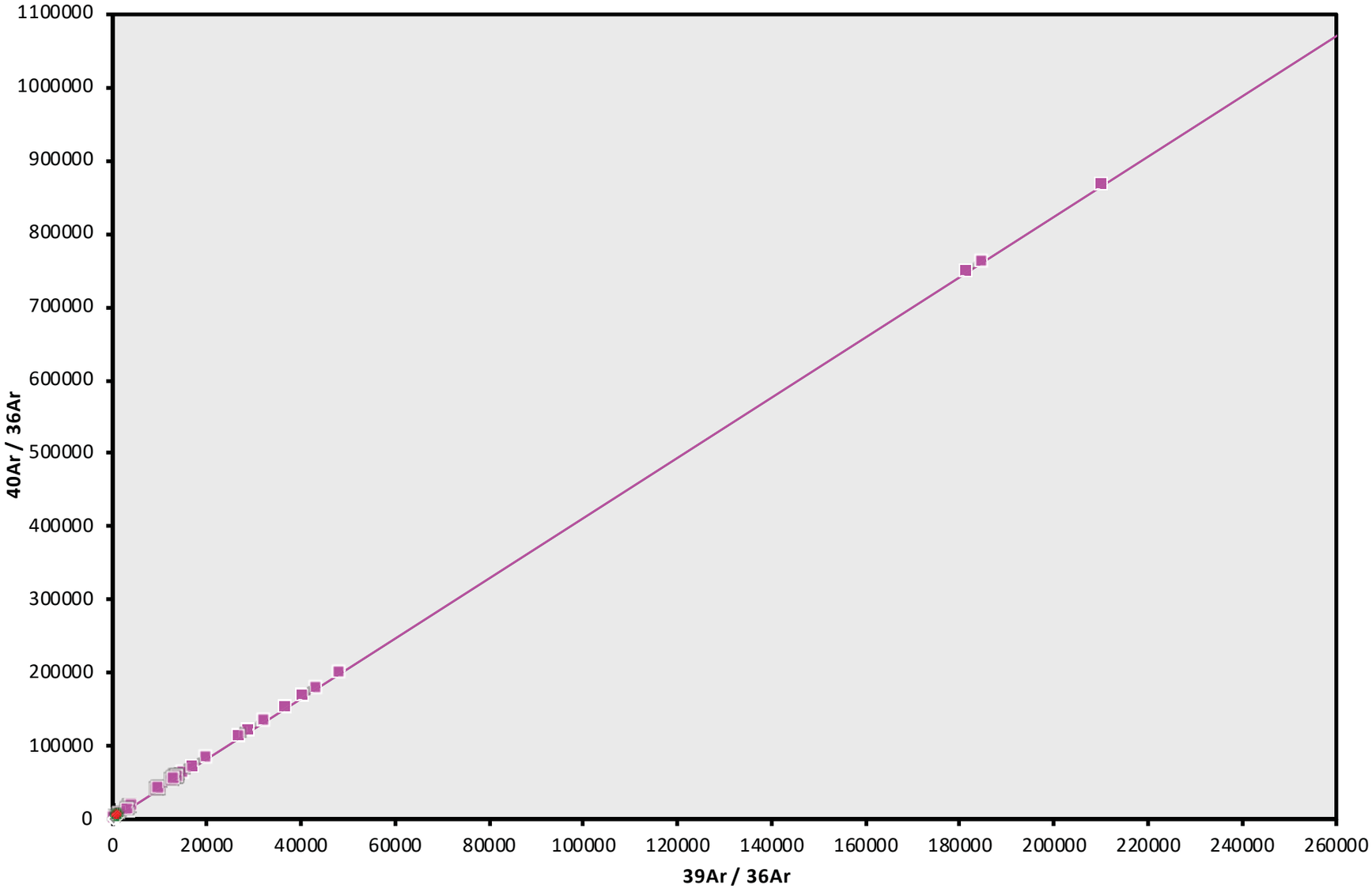
WEIGHTED PLATEAU
11.85 ± 0.06
TOTAL FUSION
11.86 ± 0.06
NORMAL ISOCHRON
11.85 ± 0.06
INVERSE ISOCHRON
11.85 ± 0.06

Sample Info

Sanidine
Sacramento Butte
Dan Miggins

IRR = 19-OSU-02 (2C38-

20F04600.AGE >>> VS17-065 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.85 ± 0.06
TOTAL FUSION
11.86 ± 0.06
NORMAL ISOCHRON
11.85 ± 0.06
INVERSE ISOCHRON
11.85 ± 0.06

MSWD (PROBABILITY)
3.54 (0%)

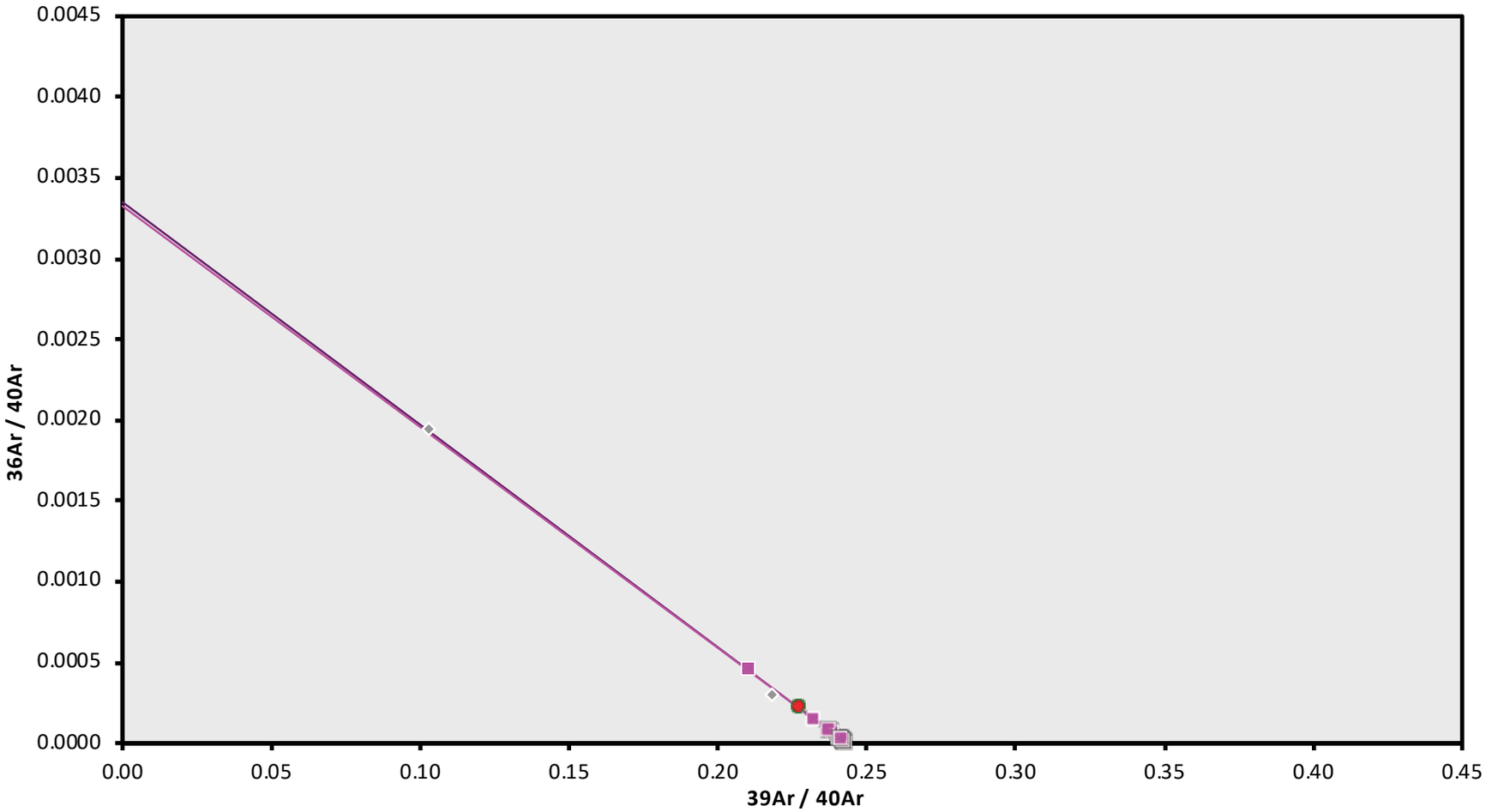
40AR/36AR INTERCEPT

Sample Info

Sanidine
Sacramento Butte
Dan Miggins

IRR = 19-OSU-02 (2C38-

20F04600.AGE >>> VS17-065 >>> OREGON | SWENTON (18-58) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.85 ± 0.06
TOTAL FUSION
11.86 ± 0.06
NORMAL ISOCHRON
11.85 ± 0.06
INVERSE ISOCHRON
11.85 ± 0.06

MSWD (PROBABILITY)
3.54 (0%)

Sample Info

Sanidine
Sacramento Butte
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16520	24.0 %	✓	1.3208952	0.199	36.99690	0.280	0.3735336	2.448	10.676214	0.101	447.5471	0.008	5.27202 ± 0.16615	15.90 ± 0.50	12.55	11.60	0.124 ± 0.001
21F16521	24.0 %	✓	0.0533965	0.941	12.71010	0.428	0.0692686	12.900	4.679951	0.203	38.7044	0.060	5.09126 ± 0.06856	15.35 ± 0.21	61.45	5.09	0.158 ± 0.001
21F16523	24.0 %	✓	0.0992250	0.588	11.73851	0.450	0.0775344	12.500	3.422645	0.246	46.6006	0.053	5.24782 ± 0.10764	15.82 ± 0.32	38.46	3.72	0.125 ± 0.001
21F16524	24.0 %	✓	0.1062773	0.572	7.13980	0.665	0.0500793	18.578	0.821112	1.100	35.3777	0.070	5.17311 ± 0.47023	15.60 ± 1.41	11.94	0.89	0.049 ± 0.001
21F16526	24.0 %	✓	0.0784983	0.710	11.33092	0.460	0.0657898	14.313	4.552850	0.208	46.0554	0.052	5.17661 ± 0.07776	15.61 ± 0.23	51.09	4.95	0.173 ± 0.002
21F16527	24.0 %	✓	0.0157174	2.694	10.71397	0.470	0.0401060	22.440	4.267578	0.228	25.6674	0.096	5.12519 ± 0.06488	15.46 ± 0.19	85.08	4.64	0.171 ± 0.002
21F16529	24.0 %	✓	0.0193977	2.240	6.74443	0.716	0.0537270	16.581	2.706621	0.320	18.7601	0.122	5.00021 ± 0.10275	15.08 ± 0.31	72.03	2.94	0.172 ± 0.003
21F16530	24.0 %	✓	0.0335481	1.472	10.61820	0.508	0.0588343	15.948	2.701014	0.345	22.8447	0.101	5.07931 ± 0.11647	15.32 ± 0.35	59.90	2.93	0.109 ± 0.001
21F16532	24.0 %	✓	0.0031585	12.433	3.27739	1.274	0.0015416	563.336	1.252477	0.689	7.4116	0.328	5.38421 ± 0.20552	16.23 ± 0.62	90.83	1.36	0.164 ± 0.005
21F16533	24.0 %	✓	0.0041233	9.555	4.96211	0.910	0.0250378	37.140	1.842835	0.510	10.4601	0.228	5.23383 ± 0.14110	15.78 ± 0.42	92.05	2.00	0.159 ± 0.003
21F16535	24.0 %	✓	0.0187361	2.235	10.37833	0.478	0.0261603	36.657	1.940185	0.467	14.7530	0.163	5.16960 ± 0.14047	15.59 ± 0.42	67.75	2.11	0.080 ± 0.001
21F16536	24.0 %	✓	0.0161816	2.457	6.36927	0.702	0.0187747	50.119	2.122894	0.450	15.0710	0.166	5.07480 ± 0.12343	15.30 ± 0.37	71.35	2.31	0.143 ± 0.002
21F16538	24.0 %	✓	0.0390437	1.311	3.55289	1.318	0.0282244	33.320	1.233257	0.668	18.3278	0.126	5.65170 ± 0.26307	17.04 ± 0.79	37.96	1.34	0.149 ± 0.004
21F16539	24.0 %	✓	0.2535279	0.400	24.63768	0.321	0.1243808	7.198	5.952420	0.159	104.7802	0.023	5.23392 ± 0.10698	15.78 ± 0.32	29.65	6.46	0.104 ± 0.001
21F16541	24.0 %	✓	0.0688030	0.844	25.79929	0.311	0.1367841	7.006	9.491495	0.096	67.2313	0.036	5.14685 ± 0.03851	15.52 ± 0.12	72.53	10.32	0.158 ± 0.001
21F16542	24.0 %	✓	0.0208864	2.104	3.62716	1.296	0.0349446	27.035	1.665243	0.486	14.6747	0.155	5.25041 ± 0.16834	15.83 ± 0.51	59.50	1.81	0.197 ± 0.005
21F16544	24.0 %	✓	0.0325660	1.345	9.88889	0.501	0.0245760	37.890	2.789090	0.301	23.3426	0.099	5.18052 ± 0.10068	15.62 ± 0.30	61.76	3.03	0.121 ± 0.001
21F16545	24.0 %	✓	0.0415884	1.215	10.56073	0.451	0.0457576	20.498	3.950279	0.216	32.0614	0.077	5.19707 ± 0.08102	15.67 ± 0.24	63.92	4.29	0.161 ± 0.002
21F16547	24.0 %	✓	0.0033527	12.105	3.35449	1.252	0.0201536	48.089	1.356397	0.709	7.6901	0.290	5.13878 ± 0.19610	15.50 ± 0.59	90.49	1.47	0.174 ± 0.005
21F16548	24.0 %	✓	0.0541048	1.022	5.17633	0.858	0.0294342	32.353	2.595762	0.363	28.1752	0.082	4.79772 ± 0.13384	14.47 ± 0.40	44.14	2.82	0.215 ± 0.004
21F16550	24.0 %	✓	0.0085512	4.650	4.51447	0.988	0.0172009	53.765	1.899054	0.490	12.1549	0.195	5.25541 ± 0.13780	15.85 ± 0.41	81.98	2.06	0.181 ± 0.004
21F16551	24.0 %	✓	0.0291710	1.417	7.63639	0.620	0.0352529	27.943	3.449569	0.289	25.3682	0.092	5.01445 ± 0.07865	15.12 ± 0.24	68.09	3.75	0.194 ± 0.003
21F16553	24.0 %	✓	0.0002594	142.681	2.41116	1.820	0.0047292	198.378	0.889583	0.948	4.5894	0.498	5.29936 ± 0.27349	15.98 ± 0.82	102.54	0.97	0.158 ± 0.007
21F16554	24.0 %	✓	0.0072576	5.326	7.04098	0.725	0.0450725	21.879	2.757362	0.323	15.8877	0.158	5.19021 ± 0.09223	15.65 ± 0.28	89.93	3.00	0.168 ± 0.003
21F16556	24.0 %	✓	0.0002236	172.921	1.60071	2.594	0.0066506	140.866	0.599331	1.608	2.9079	0.862	4.96391 ± 0.42619	14.97 ± 1.28	102.13	0.65	0.161 ± 0.010
21F16557	24.0 %	✓	0.0155437	2.689	8.61607	0.606	0.0247606	40.189	2.436689	0.370	16.6305	0.143	5.21711 ± 0.11154	15.73 ± 0.33	76.27	2.65	0.121 ± 0.002
21F16559	24.0 %	✓	0.0031579	12.140	5.82804	0.802	0.0138658	67.164	1.646620	0.495	8.9684	0.255	5.17073 ± 0.15116	15.59 ± 0.45	94.72	1.79	0.121 ± 0.002
21F16560	24.0 %	✓	0.0177830	2.357	11.80919	0.441	0.0253269	38.566	2.332907	0.364	16.2398	0.143	5.10986 ± 0.11578	15.41 ± 0.35	73.17	2.53	0.085 ± 0.001
21F16562	24.0 %	✓	0.0119878	3.465	9.38500	0.559	0.0562796	16.641	3.649552	0.278	21.7065	0.114	5.18261 ± 0.07524	15.63 ± 0.23	86.99	3.97	0.167 ± 0.002
21F16563	24.0 %	✓	0.0061839	6.217	6.91577	0.712	0.0123704	74.968	2.348337	0.429	13.3538	0.178	5.14707 ± 0.10943	15.52 ± 0.33	90.34	2.55	0.146 ± 0.002
		Σ	2.3831472	0.155	285.33518	0.103	1.5461520	3.325	92.029323	0.055	1163.3434	0.011					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-068**
Material = **Plagioclase**
Location = **Birch Creek**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X5-21)**
Position = **X: 0 | Y: 0 | Z/H: 4.13743 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.38445 ± 0.01060**
FCT-NM J-value = **0.00165439 ± 0.00000187**
Air Shot 40Ar/36Ar = **300.9620 ± 0.3190**
Air Shot MDF = **0.99800215 ± 0.00036876 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.50 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		5.14665 ± 0.03275	**15.52 ± 0.10**	3.28	100.00	0.147 ± 0.013
Error Mean		± 0.64%	**± 0.67%**	0%	30	
		Full External Error ± 0.81		1.53	2σ Confidence Limit	
		Analytical Error ± 0.10		1.8106	Error Magnification	
Total Fusion Age		5.16959 ± 0.02654	**15.59 ± 0.09**		30	0.138 ± 0.000
		± 0.51%	**± 0.56%**			
		Full External Error ± 0.81				
		Analytical Error ± 0.08				
Normal Isochron	**300.10 ± 2.01**	5.11614 ± 0.04025	**15.43 ± 0.13**	3.41	100.00	
Error Chron	**± 0.67%**	± 0.79%	**± 0.82%**	0%	30	
		Full External Error ± 0.81		1.53	2σ Confidence Limit	
		Analytical Error ± 0.12		1.8470	Error Magnification	
				69	Number of Iterations	
				0.0000510326	Convergence	
Inverse Isochron	**299.76 ± 1.96**	5.13480 ± 0.03880	**15.48 ± 0.12**	3.26	100.00	
Error Chron	**± 0.65%**	± 0.76%	**± 0.79%**	0%	30	
		Full External Error ± 0.81		1.53	2σ Confidence Limit	
		Analytical Error ± 0.12		1.8060	Error Magnification	
				3	Number of Iterations	
				0.0000035663	Convergence	
				94%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16520	24.0 %	✓	1.3108950	36.99690	0.0000000	10.652444	56.15988	15.90 ± 0.50	12.55	11.60	0.124 ± 0.001
21F16521	24.0 %	✓	0.0499608	12.71010	0.0011420	4.671785	23.78528	15.35 ± 0.21	61.45	5.09	0.158 ± 0.001
21F16523	24.0 %	✓	0.0960500	11.73851	0.0160718	3.415103	17.92186	15.82 ± 0.32	38.46	3.72	0.125 ± 0.001
21F16524	24.0 %	✓	0.1043449	7.13980	0.0192640	0.816524	4.22397	15.60 ± 1.41	11.94	0.89	0.049 ± 0.001
21F16526	24.0 %	✓	0.0754356	11.33092	0.0000000	4.545570	23.53065	15.61 ± 0.23	51.09	4.95	0.173 ± 0.002
21F16527	24.0 %	✓	0.0128214	10.71397	0.0000000	4.260695	21.83687	15.46 ± 0.19	85.08	4.64	0.171 ± 0.002
21F16529	24.0 %	✓	0.0175725	6.74443	0.0165650	2.702288	13.51200	15.08 ± 0.31	72.03	2.94	0.172 ± 0.003
21F16530	24.0 %	✓	0.0306755	10.61820	0.0186029	2.694192	13.68463	15.32 ± 0.35	59.90	2.93	0.109 ± 0.001
21F16532	24.0 %	✓	0.0022727	3.27739	0.0000000	1.250372	6.73226	16.23 ± 0.62	90.83	1.36	0.164 ± 0.005
21F16533	24.0 %	✓	0.0027818	4.96211	0.0014028	1.839647	9.62840	15.78 ± 0.42	92.05	2.00	0.159 ± 0.003
21F16535	24.0 %	✓	0.0159309	10.37833	0.0000000	1.933517	9.99551	15.59 ± 0.42	67.75	2.11	0.080 ± 0.001
21F16536	24.0 %	✓	0.0144600	6.36927	0.0000000	2.118802	10.75250	15.30 ± 0.37	71.35	2.31	0.143 ± 0.002
21F16538	24.0 %	✓	0.0380827	3.55289	0.0055398	1.230974	6.95710	17.04 ± 0.79	37.96	1.34	0.149 ± 0.004
21F16539	24.0 %	✓	0.2468681	24.63768	0.0017152	5.936590	31.07166	15.78 ± 0.32	29.65	6.46	0.104 ± 0.001
21F16541	24.0 %	✓	0.0618287	25.79929	0.0060569	9.474919	48.76594	15.52 ± 0.12	72.53	10.32	0.158 ± 0.001
21F16542	24.0 %	✓	0.0199046	3.62716	0.0104567	1.662913	8.73098	15.83 ± 0.51	59.50	1.81	0.197 ± 0.005
21F16544	24.0 %	✓	0.0298930	9.88889	0.0000000	2.782737	14.41603	15.62 ± 0.30	61.76	3.03	0.121 ± 0.001
21F16545	24.0 %	✓	0.0387339	10.56073	0.0000000	3.943494	20.49459	15.67 ± 0.24	63.92	4.29	0.161 ± 0.002
21F16547	24.0 %	✓	0.0024456	3.35449	0.0027336	1.354242	6.95915	15.50 ± 0.59	90.49	1.47	0.174 ± 0.005
21F16548	24.0 %	✓	0.0527057	5.17633	0.0000000	2.592436	12.43778	14.47 ± 0.40	44.14	2.82	0.215 ± 0.004
21F16550	24.0 %	✓	0.0073310	4.51447	0.0000000	1.896153	9.96505	15.85 ± 0.41	81.98	2.06	0.181 ± 0.004
21F16551	24.0 %	✓	0.0271069	7.63639	0.0000000	3.444663	17.27309	15.12 ± 0.24	68.09	3.75	0.194 ± 0.003
21F16553	24.0 %	✓	0.0003923	2.41116	0.0000000	0.888034	4.70601	15.98 ± 0.82	102.54	0.97	0.158 ± 0.007
21F16554	24.0 %	✓	0.0053532	7.04098	0.0095500	2.752838	14.28780	15.65 ± 0.28	89.93	3.00	0.168 ± 0.003
21F16556	24.0 %	✓	0.0002090	1.60071	0.0000000	0.598303	2.96992	14.97 ± 1.28	102.13	0.65	0.161 ± 0.010
21F16557	24.0 %	✓	0.0132148	8.61607	0.0000000	2.431153	12.68358	15.73 ± 0.33	76.27	2.65	0.121 ± 0.002
21F16559	24.0 %	✓	0.0015826	5.82804	0.0000000	1.642875	8.49486	15.59 ± 0.45	94.72	1.79	0.121 ± 0.002
21F16560	24.0 %	✓	0.0145910	11.80919	0.0000000	2.325319	11.88206	15.41 ± 0.35	73.17	2.53	0.085 ± 0.001
21F16562	24.0 %	✓	0.0094499	9.38500	0.0088062	3.643522	18.88297	15.63 ± 0.23	86.99	3.97	0.167 ± 0.002
21F16563	24.0 %	✓	0.0043145	6.91577	0.0000000	2.343894	12.06418	15.52 ± 0.33	90.34	2.55	0.146 ± 0.002
		Σ	2.3060057	285.33518	0.1179069	91.845995	474.80658				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-068**
Material = **Plagioclase**
Location = **Birch Creek**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X5-21)**
J = **0.00165439 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	5.14665	± 0.03275	**15.52**	**± 0.10**	3.28	100.00	0.147 ± 0.013
Error Mean		± 0.64%		**± 0.67%**	0%	30	
			Full External Error	± 0.81	1.53	2σ Confidence Limit	
			Analytical Error	± 0.10	1.8106	Error Magnification	
Total Fusion Age	5.16959	± 0.02654	**15.59**	**± 0.09**		30	0.138 ± 0.000
		± 0.51%		**± 0.56%**			
			Full External Error	± 0.81			
			Analytical Error	± 0.08			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
21F16520	24.0 %	✓	8.13 ± 0.04	341.40 ± 1.37	0.8912
21F16521	24.0 %	✓	93.51 ± 1.92	774.64 ± 15.61	0.9784
21F16523	24.0 %	✓	35.56 ± 0.47	485.15 ± 5.92	0.9231
21F16524	24.0 %	✓	7.83 ± 0.20	339.04 ± 3.98	0.4628
21F16526	24.0 %	✓	60.26 ± 0.93	610.49 ± 9.05	0.9603
21F16527	24.0 %	✓	332.31 ± 22.01	2001.72 ± 132.34	0.9972
21F16529	24.0 %	✓	153.78 ± 7.67	1067.49 ± 52.87	0.9905
21F16530	24.0 %	✓	87.83 ± 2.89	744.67 ± 24.03	0.9758
21F16532	24.0 %	✓	550.18 ± 190.36	3260.83 ± 1127.55	0.9990
21F16533	24.0 %	✓	661.31 ± 187.53	3759.74 ± 1065.62	0.9992
21F16535	24.0 %	✓	121.37 ± 6.48	925.99 ± 48.80	0.9826
21F16536	24.0 %	✓	146.53 ± 8.17	1042.16 ± 57.43	0.9850
21F16538	24.0 %	✓	32.32 ± 0.97	481.24 ± 13.00	0.8914
21F16539	24.0 %	✓	24.05 ± 0.21	424.42 ± 3.50	0.9306
21F16541	24.0 %	✓	153.24 ± 2.90	1087.29 ± 20.45	0.9941
21F16542	24.0 %	✓	83.54 ± 3.78	737.20 ± 32.65	0.9742
21F16544	24.0 %	✓	93.09 ± 2.79	780.81 ± 22.94	0.9772
21F16545	24.0 %	✓	101.81 ± 2.69	827.67 ± 21.65	0.9848
21F16547	24.0 %	✓	553.75 ± 184.03	3144.17 ± 1044.11	0.9989
21F16548	24.0 %	✓	49.19 ± 1.09	534.55 ± 11.25	0.9420
21F16550	24.0 %	✓	258.65 ± 28.19	1657.87 ± 180.05	0.9953
21F16551	24.0 %	✓	127.08 ± 3.95	935.78 ± 28.60	0.9807
21F16553	24.0 %	✓	2263.56 ± 4273.68	11696.87 ± 22083.26	0.9999
21F16554	24.0 %	✓	514.24 ± 74.40	2967.57 ± 428.99	0.9988
21F16556	24.0 %	✓	2862.03 ± 10593.02	13908.30 ± 51476.38	1.0000
21F16557	24.0 %	✓	183.97 ± 11.72	1258.36 ± 79.72	0.9922
21F16559	24.0 %	✓	1038.08 ± 503.34	5666.21 ± 2746.97	0.9997
21F16560	24.0 %	✓	159.37 ± 9.23	1112.90 ± 64.05	0.9908
21F16562	24.0 %	✓	385.56 ± 33.98	2296.78 ± 202.10	0.9977
21F16563	24.0 %	✓	543.25 ± 96.99	3094.72 ± 551.99	0.9986

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**300.10 ± 2.01**	5.11614 ± 0.04025	**15.43 ± 0.13**	3.41
Error Chron	**± 0.67%**	± 0.79%	**± 0.82%**	0%
			Full External Error ± 0.81	
			Analytical Error ± 0.12	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000051032599
	Error Magnification	1.8470	Number of Iterations	69
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
21F16520	24.0 %	✓	0.0238022 ± 0.0000484	0.00292911 ± 0.00001173	0.0032
21F16521	24.0 %	✓	0.1207130 ± 0.0005127	0.00129092 ± 0.00002602	0.0168
21F16523	24.0 %	✓	0.0732878 ± 0.0003696	0.00206122 ± 0.00002513	0.0181
21F16524	24.0 %	✓	0.0230805 ± 0.0005119	0.00294950 ± 0.00003465	0.0076
21F16526	24.0 %	✓	0.0987037 ± 0.0004231	0.00163803 ± 0.00002428	0.0170
21F16527	24.0 %	✓	0.1660131 ± 0.0008217	0.00049957 ± 0.00003303	0.0112
21F16529	24.0 %	✓	0.1440571 ± 0.0009888	0.00093678 ± 0.00004640	0.0177
21F16530	24.0 %	✓	0.1179433 ± 0.0008497	0.00134288 ± 0.00004334	0.0175
21F16532	24.0 %	✓	0.1687231 ± 0.0025795	0.00030667 ± 0.00010604	0.0082
21F16533	24.0 %	✓	0.1758923 ± 0.0019697	0.00026598 ± 0.00007539	0.0066
21F16535	24.0 %	✓	0.1310697 ± 0.0013009	0.00107992 ± 0.00005691	0.0202
21F16536	24.0 %	✓	0.1406002 ± 0.0013516	0.00095954 ± 0.00005288	0.0209
21F16538	24.0 %	✓	0.0671670 ± 0.0009144	0.00207795 ± 0.00005613	0.0174
21F16539	24.0 %	✓	0.0566595 ± 0.0001831	0.00235614 ± 0.00001941	0.0081
21F16541	24.0 %	✓	0.1409423 ± 0.0002901	0.00091972 ± 0.00001730	0.0137
21F16542	24.0 %	✓	0.1133260 ± 0.0011567	0.00135648 ± 0.00006008	0.0211
21F16544	24.0 %	✓	0.1192215 ± 0.0007578	0.00128071 ± 0.00003763	0.0210
21F16545	24.0 %	✓	0.1230075 ± 0.0005661	0.00120821 ± 0.00003160	0.0199
21F16547	24.0 %	✓	0.1761202 ± 0.0027011	0.00031805 ± 0.00010562	0.0066
21F16548	24.0 %	✓	0.0920166 ± 0.0006857	0.00187075 ± 0.00003937	0.0174
21F16550	24.0 %	✓	0.1560133 ± 0.0016483	0.00060318 ± 0.00006551	0.0132
21F16551	24.0 %	✓	0.1357977 ± 0.0008241	0.00106863 ± 0.00003266	0.0181
21F16553	24.0 %	✓	0.1935186 ± 0.0041512	0.00008549 ± 0.00016141	0.0025
21F16554	24.0 %	✓	0.1732864 ± 0.0012492	0.00033698 ± 0.00004871	0.0096
21F16556	24.0 %	✓	0.2057786 ± 0.0075170	0.00007190 ± 0.00026611	0.0022
21F16557	24.0 %	✓	0.1461996 ± 0.0011630	0.00079468 ± 0.00005034	0.0162
21F16559	24.0 %	✓	0.1832060 ± 0.0020450	0.00017648 ± 0.00008556	0.0048
21F16560	24.0 %	✓	0.1431992 ± 0.0011240	0.00089855 ± 0.00005171	0.0182
21F16562	24.0 %	✓	0.1678708 ± 0.0010109	0.00043539 ± 0.00003831	0.0098
21F16563	24.0 %	✓	0.1755419 ± 0.0016333	0.00032313 ± 0.00005764	0.0077

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**299.76 ± 1.96**	5.13480 ± 0.03880	**15.48 ± 0.12**	3.26
Error Chron	**± 0.65%**	± 0.76%	**± 0.79%**	0%
			Full External Error ± 0.81	
			Analytical Error ± 0.12	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0000035663
	Error Magnification	1.8060	Number of Iterations	3
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	93.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F16520	24.0 %	✓	1.3108950	0.20	0.0000000	0.00	0.0100003	0.33	0.0000000	0.00	36.99690	0.28	0.2471037	0.26	0.0000000	0.00	0.1286496	0.14	0.0066594	9.63	0.0000000	0.00	10.652444	0.10	0.0237705	0.96	56.15988	1.57	391.38080	0.23	0.0000000	0.00	0.0064660	9.65
21F16521	24.0 %	✓	0.0499608	1.01	0.0000000	0.00	0.0034355	0.46	0.0000001	782.91	12.71010	0.43	0.0094176	1.02	0.0000000	0.00	0.0564211	0.22	0.0022878	9.64	0.0011420	782.91	4.671785	0.20	0.0081662	1.01	23.78528	0.64	14.91629	1.01	0.0000000	0.00	0.0028358	9.65
21F16523	24.0 %	✓	0.0960500	0.61	0.0000000	0.00	0.0031729	0.48	0.0000021	60.34	11.73851	0.45	0.0181054	0.63	0.0000000	0.00	0.0412442	0.26	0.0021129	9.64	0.0160718	60.35	3.415103	0.25	0.0075420	1.02	17.92186	1.00	28.67668	0.62	0.0000000	0.00	0.0020730	9.65
21F16524	24.0 %	✓	0.1043449	0.58	0.0000000	0.00	0.0019299	0.69	0.0000025	48.32	7.13980	0.66	0.0196690	0.60	0.0000000	0.00	0.0098612	1.11	0.0012852	9.65	0.0192640	48.33	0.816524	1.11	0.0045873	1.13	4.22397	4.41	31.15320	0.59	0.0000000	0.00	0.0004956	9.71
21F16526	24.0 %	✓	0.0754356	0.74	0.0000000	0.00	0.0030627	0.49	0.0000000	0.00	11.33092	0.46	0.0142196	0.76	0.0000000	0.00	0.0548968	0.23	0.0020396	9.64	0.0000000	0.00	4.545570	0.21	0.0072801	1.03	23.53065	0.72	22.52204	0.75	0.0000000	0.00	0.0027592	9.65
21F16527	24.0 %	✓	0.0128214	3.30	0.0000000	0.00	0.0028960	0.50	0.0000000	0.00	10.71397	0.47	0.0024168	3.31	0.0000000	0.00	0.0514564	0.25	0.0019285	9.64	0.0000000	0.00	4.260695	0.23	0.0068837	1.03	21.83687	0.59	3.82795	3.31	0.0000000	0.00	0.0025862	9.65
21F16529	24.0 %	✓	0.0175725	2.47	0.0000000	0.00	0.0018230	0.74	0.0000022	53.80	6.74443	0.72	0.0033124	2.48	0.0000000	0.00	0.0326355	0.33	0.0012140	9.66	0.0165650	53.81	2.702288	0.32	0.0043333	1.17	13.51200	0.98	5.24644	2.48	0.0000000	0.00	0.0016403	9.66
21F16530	24.0 %	✓	0.0306755	1.61	0.0000000	0.00	0.0028701	0.54	0.0000024	50.47	10.61820	0.51	0.0057823	1.62	0.0000000	0.00	0.0325378	0.36	0.0019113	9.64	0.0186029	50.48	2.694192	0.35	0.0068222	1.05	13.68463	1.09	9.15849	1.61	0.0000000	0.00	0.0016354	9.66
21F16532	24.0 %	✓	0.0022727	17.29	0.0000000	0.00	0.0008859	1.29	0.0000000	0.00	3.27739	1.27	0.0004284	17.29	0.0000000	0.00	0.0151007	0.70	0.0005899	9.71	0.0000000	0.00	1.250372	0.69	0.0021057	1.57	6.73226	1.78	0.67853	17.29	0.0000000	0.00	0.0007590	9.67
21F16533	24.0 %	✓	0.0027818	14.17	0.0000000	0.00	0.0013413	0.93	0.0000002	663.01	4.96211	0.91	0.0005244	14.17	0.0000000	0.00	0.0222174	0.52	0.0008932	9.67	0.0014028	663.01	1.839647	0.51	0.0031882	1.29	9.62840	1.25	0.83054	14.17	0.0000000	0.00	0.0011167	9.66
21F16535	24.0 %	✓	0.0159309	2.63	0.0000000	0.00	0.0028053	0.51	0.0000000	0.00	10.37833	0.48	0.0030030	2.63	0.0000000	0.00	0.0233511	0.48	0.0018681	9.64	0.0000000	0.00	1.933517	0.47	0.0066681	1.04	9.99551	1.28	4.75632	2.63	0.0000000	0.00	0.0011736	9.66
21F16536	24.0 %	✓	0.0144600	2.75	0.0000000	0.00	0.0017216	0.72	0.0000000	0.00	6.36927	0.70	0.0027257	2.75	0.0000000	0.00	0.0255888	0.46	0.0011465	9.66	0.0000000	0.00	2.118802	0.45	0.0040923	1.16	10.75250	1.13	4.31718	2.75	0.0000000	0.00	0.0012861	9.66
21F16538	24.0 %	✓	0.0380827	1.34	0.0000000	0.00	0.0009603	1.33	0.0000007	169.79	3.55289	1.32	0.0071786	1.35	0.0000000	0.00	0.0148665	0.67	0.0006395	9.72	0.0055398	169.80	1.230974	0.67	0.0022827	1.61	6.95710	2.23	11.36996	1.35	0.0000000	0.00	0.0007472	9.67
21F16539	24.0 %	✓	0.2468681	0.41	0.0000000	0.00	0.0066596	0.36	0.0000002	522.92	24.63768	0.32	0.0465346	0.44	0.0000000	0.00	0.0716962	0.18	0.0044348	9.64	0.0017152	522.92	5.936590	0.16	0.0158297	0.97	31.07166	1.01	73.70495	0.42	0.0000000	0.00	0.0036035	9.65
21F16541	24.0 %	✓	0.0618287	0.94	0.0000000	0.00	0.0069735	0.35	0.0000008	158.50	25.79929	0.31	0.0116547	0.95	0.0000000	0.00	0.1144286	0.13	0.0046439	9.64	0.0060569	158.51	9.474919	0.10	0.0165760	0.97	48.76594	0.36	18.45956	0.95	0.0000000	0.00	0.0057513	9.65
21F16542	24.0 %	✓	0.0199046	2.21	0.0000000	0.00	0.0009804	1.31	0.0000014	90.37	3.62716	1.30	0.0037520	2.21	0.0000000	0.00	0.0200830	0.49	0.0006529	9.72	0.0104567	90.37	1.662913	0.49	0.0023304	1.59	8.73098	1.53	5.94272	2.21	0.0000000	0.00	0.0010094	9.66
21F16544	24.0 %	✓	0.0298930	1.47	0.0000000	0.00	0.0026730	0.53	0.0000000	0.00	9.88889	0.50	0.0056348	1.47	0.0000000	0.00	0.0336071	0.32	0.0017800	9.64	0.0000000	0.00	2.782737	0.30	0.0063536	1.05	14.41603	0.92	8.92486	1.47	0.0000000	0.00	0.0016891	9.65
21F16545	24.0 %	✓	0.0387339	1.31	0.0000000	0.00	0.0028546	0.48	0.0000000	0.00	10.56073	0.45	0.0073013	1.32	0.0000000	0.00	0.0476256	0.23	0.0019009	9.64	0.0000000	0.00	3.943494	0.22	0.0067853	1.02	20.49459	0.75	11.56438	1.31	0.0000000	0.00	0.0023937	9.65
21F16547	24.0 %	✓	0.0024456	16.60	0.0000000	0.00	0.0009067	1.26	0.0000004	354.59	3.35449	1.25	0.0004610	16.60	0.0000000	0.00	0.0163552	0.72	0.0006038	9.71	0.0027336	354.59	1.354242	0.71	0.0021553	1.55	6.95915	1.77	0.73015	16.60	0.0000000	0.00	0.0008220	9.68
21F16548	24.0 %	✓	0.0527057	1.05	0.0000000	0.00	0.0013992	0.87	0.0000000	0.00	5.17633	0.86	0.0099350	1.06	0.0000000	0.00	0.0313089	0.37	0.0009317	9.67	0.0000000	0.00	2.592436	0.36	0.0033258	1.26	12.43778	1.35	15.73581	1.05	0.0000000	0.00	0.0015736	9.66
21F16550	24.0 %	✓	0.0073310	5.43	0.0000000	0.00	0.0012203	1.00	0.0000000	0.00	4.51447	0.99	0.0013819	5.43	0.0000000	0.00	0.0228998	0.50	0.0008126	9.68	0.0000000	0.00	1.896153	0.49	0.0029005	1.35	9.96505	1.22	2.18874	5.43	0.0000000	0.00	0.0011510	9.66
21F16551	24.0 %	✓	0.0271069	1.53	0.0000000	0.00	0.0020641	0.64	0.0000000	0.00	7.63639	0.62	0.0051097	1.53	0.0000000	0.00	0.0416012	0.30	0.0013746	9.65	0.0000000	0.00	3.444663	0.29	0.0049064	1.11	17.27309	0.73	8.09304	1.53	0.0000000	0.00	0.0020909	9.65
21F16553	24.0 %	✓	0.0003923	94.40	0.0000000	0.00	0.0006517	1.83	0.0000000	0.00	2.41116	1.82	0.0000740	94.40	0.0000000	0.00	0.0107248	0.95	0.0004340	9.80	0.0000000	0.00	0.888034	0.95	0.0015492	2.04	4.70601	2.40	0.11713	94.40	0.0000000	0.00	0.0005390	9.70
21F16554	24.0 %	✓	0.0053532	7.23	0.0000000	0.00	0.0019032	0.74	0.0000012	103.29	7.04098	0.73	0.0010091	7.23	0.0000000	0.00	0.0332460	0.34	0.0012674	9.66	0.0095500	103.30	2.752838	0.32	0.0045238	1.17	14.28780	0.83	1.59826	7.23	0.0000000	0.00	0.0016710	9.66
21F16556	24.0 %	✓	0.0002090	185.05	0.0000000	0.00	0.0004327	2.60	0.0000000	0.00	1.60071	2.59	0.0000394	185.05	0.0000000	0.00	0.0072257	1.61	0.0002881	9.97	0.0000000	0.00	0.598303	1.61	0.0010285	2.75	2.96992	3.98	0.06241	185.05	0.0000000	0.00	0.0003632	9.78
21F16557	24.0 %	✓	0.0132148	3.16	0.0000000	0.00	0.0023289	0.63	0.0000000	0.00	8.61607	0.61	0.0024910	3.17	0.0000000	0.00	0.0293610	0.38	0.0015509	9.65	0.0000000	0.00	2.431153	0.37	0.0055358	1.10	12.68358	1.00	3.94541	3.17	0.0000000	0.00	0.0014757	9.66
21F16559	24.0 %	✓	0.0015826	24.24	0.0000000	0.00	0.0015753	0.82	0.0000000	0.00	5.82804	0.80	0.0002983	24.24	0.0000000	0.00	0.0198410	0.50	0.0010490	9.66	0.0000000	0.00	1.642875	0.50	0.0037445	1.22	8.49486	1.37	0.47250	24.24	0.0000000	0.00	0.0009972	9.66
21F16560	24.0 %	✓	0.0145910	2.87	0.0000000	0.00	0.0031920	0.47	0.0000000	0.00	11.80919	0.44	0.0027504	2.88	0.0000000	0.00	0.0280829	0.38	0.0021257	9.64	0.0000000	0.00	2.325319	0.37	0.0075874	1.02	11.88206	1.07	4.35629	2.88	0.0000000	0.00	0.0014115	9.66
21F16562	24.0 %	✓	0.0094499	4.40	0.0000000	0.00	0.0025368	0.58	0.0000012	106.39	9.38500	0.56	0.0017813	4.40	0.0000000	0.00	0.0440028	0.29	0.0016893	9.65	0.0088062	106.40	3.643522	0.28	0.0060299	1.08	18.88297	0.67	2.82136	4.40	0.0000000	0.00	0.0022116	9.65
21F16563	24.0 %	✓	0.0043145	8.92	0.0000000	0.00	0.0018693	0.73	0.0000000	0.00	6.91577	0.71	0.0008133	8.92	0.0000000	0.00	0.0283072	0.44	0.0012448	9.66	0.0000000	0.00	2.343894	0.43	0.0044434	1.16	12.06418	0.97	1.28815	8.92	0.0000000	0.00	0.0014227	9.66
		Σ	2.3060057	0.16	0.0000000	0.00	0.0771261	0.11	0.0000154	28.69	285.33518	0.10	0.4346821	0.19	0.0000000	0.00	1.1092241	0.06	0.0513603	2.23	0.1179069	28.69	91.845995	0.05	0.1833279	0.24	474.80658	0.25	688.48106	0.17	0.0000000	0.00	0.0557505	2.19
		Σ							2.3831472	0.16	285.33518	0.10									1.7131734	1.98			92.029323	0.05							1163.3434	0.14

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F16520	24.0 %	✓	41.920024	0.042537	3.465358	0.010333	0.123723	0.000276	80.242	4.891023	1.00056723	1.584E-11
21F16521	24.0 %	✓	8.270259	0.017535	2.715863	0.012865	0.011410	0.000110	80.248	4.891626	1.00056727	1.370E-12
21F16523	24.0 %	✓	13.615381	0.034257	3.429661	0.017589	0.028991	0.000185	80.260	4.892767	1.00056736	1.650E-12
21F16524	24.0 %	✓	43.085082	0.475091	8.695287	0.111781	0.129431	0.001605	80.266	4.893371	1.00056740	1.252E-12
21F16526	24.0 %	✓	10.115740	0.021648	2.488754	0.012568	0.017242	0.000128	80.278	4.894512	1.00056748	1.630E-12
21F16527	24.0 %	✓	6.014512	0.014863	2.510550	0.013103	0.003683	0.000100	80.283	4.895049	1.00056752	9.086E-13
21F16529	24.0 %	✓	6.931184	0.023753	2.491826	0.019542	0.007167	0.000162	80.296	4.896258	1.00056761	6.641E-13
21F16530	24.0 %	✓	8.457842	0.030394	3.931189	0.024154	0.012421	0.000188	80.301	4.896796	1.00056765	8.087E-13
21F16532	24.0 %	✓	5.917512	0.045171	2.616724	0.037902	0.002522	0.000314	80.314	4.898005	1.00056774	2.624E-13
21F16533	24.0 %	✓	5.676067	0.031735	2.692653	0.028084	0.002237	0.000214	80.319	4.898542	1.00056778	3.703E-13
21F16535	24.0 %	✓	7.603912	0.037618	5.349142	0.035761	0.009657	0.000220	80.331	4.899685	1.00056786	5.223E-13
21F16536	24.0 %	✓	7.099259	0.034065	3.000277	0.025029	0.007622	0.000190	80.338	4.900289	1.00056790	5.335E-13
21F16538	24.0 %	✓	14.861302	0.100979	2.880901	0.042570	0.031659	0.000466	80.349	4.901432	1.00056799	6.488E-13
21F16539	24.0 %	✓	17.602961	0.028365	4.139103	0.014840	0.042592	0.000184	80.356	4.902037	1.00056803	3.709E-12
21F16541	24.0 %	✓	7.083316	0.007277	2.718148	0.008849	0.007249	0.000062	80.367	4.903181	1.00056812	2.380E-12
21F16542	24.0 %	✓	8.812354	0.044916	2.178156	0.030139	0.012543	0.000271	80.374	4.903786	1.00056816	5.195E-13
21F16544	24.0 %	✓	8.369244	0.026542	3.545561	0.020718	0.011676	0.000161	80.385	4.904930	1.00056824	8.263E-13
21F16545	24.0 %	✓	8.116229	0.018646	2.673415	0.013375	0.010528	0.000130	80.392	4.905535	1.00056829	1.135E-12
21F16547	24.0 %	✓	5.669524	0.043416	2.473091	0.035574	0.002472	0.000300	80.403	4.906679	1.00056837	2.722E-13
21F16548	24.0 %	✓	10.854292	0.040391	1.994147	0.018582	0.020844	0.000226	80.410	4.907285	1.00056841	9.974E-13
21F16550	24.0 %	✓	6.400525	0.033767	2.377219	0.026222	0.004503	0.000211	80.422	4.908429	1.00056850	4.303E-13
21F16551	24.0 %	✓	7.354025	0.022284	2.213723	0.015146	0.008456	0.000122	80.428	4.909035	1.00056854	8.980E-13
21F16553	24.0 %	✓	5.159068	0.055257	2.710440	0.055615	0.000292	0.000416	80.440	4.910180	1.00056863	1.625E-13
21F16554	24.0 %	✓	5.761932	0.020741	2.553522	0.020271	0.002632	0.000140	80.445	4.910719	1.00056866	5.624E-13
21F16556	24.0 %	✓	4.851858	0.088497	2.670820	0.081508	0.000373	0.000645	80.458	4.911932	1.00056875	1.029E-13
21F16557	24.0 %	✓	6.825028	0.027091	3.535974	0.025124	0.006379	0.000173	80.463	4.912471	1.00056879	5.887E-13
21F16559	24.0 %	✓	5.446529	0.030342	3.539395	0.033373	0.001918	0.000233	80.476	4.913684	1.00056888	3.175E-13
21F16560	24.0 %	✓	6.961173	0.027242	5.062005	0.028952	0.007623	0.000182	80.481	4.914223	1.00056892	5.749E-13
21F16562	24.0 %	✓	5.947727	0.017883	2.571550	0.016059	0.003285	0.000114	80.494	4.915436	1.00056901	7.684E-13
21F16563	24.0 %	✓	5.686472	0.026411	2.944964	0.024486	0.002633	0.000164	80.499	4.915976	1.00056905	4.727E-13

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
21F16520	24.0 %	0.0219855 ± 0.0002336	0.0033187 ± 0.0059031	0.0093643 ± 0.0061788	0.0078443 ± 0.0062584	6.0298711 ± 0.0135734
21F16521	24.0 %	0.0219855 ± 0.0002336	0.0033187 ± 0.0059031	0.0093643 ± 0.0061788	0.0078443 ± 0.0062584	6.0298711 ± 0.0135734
21F16523	24.0 %	0.0229067 ± 0.0002440	0.0127457 ± 0.0060241	0.0003138 ± 0.0066561	0.0140618 ± 0.0058699	6.0192530 ± 0.0158156
21F16524	24.0 %	0.0229067 ± 0.0002440	0.0127457 ± 0.0060241	0.0003138 ± 0.0066561	0.0140618 ± 0.0058699	6.0192530 ± 0.0158156
21F16526	24.0 %	0.0230801 ± 0.0002599	0.0069100 ± 0.0058823	0.0131448 ± 0.0064389	0.0167144 ± 0.0063288	6.0887304 ± 0.0165889
21F16527	24.0 %	0.0230801 ± 0.0002599	0.0069100 ± 0.0058823	0.0131448 ± 0.0064389	0.0167144 ± 0.0063288	6.0887304 ± 0.0165889
21F16529	24.0 %	0.0221333 ± 0.0002470	0.0023810 ± 0.0067025	0.0119240 ± 0.0064974	0.0136304 ± 0.0057565	5.7796054 ± 0.0149648
21F16530	24.0 %	0.0221333 ± 0.0002470	0.0023810 ± 0.0067025	0.0119240 ± 0.0064974	0.0136304 ± 0.0057565	5.7796054 ± 0.0149648
21F16532	24.0 %	0.0233334 ± 0.0002608	0.0171704 ± 0.0059394	0.0147168 ± 0.0061005	0.0021691 ± 0.0056511	5.8440543 ± 0.0182567
21F16533	24.0 %	0.0233334 ± 0.0002608	0.0171704 ± 0.0059394	0.0147168 ± 0.0061005	0.0021691 ± 0.0056511	5.8440543 ± 0.0182567
21F16535	24.0 %	0.0222944 ± 0.0002359	0.0076680 ± 0.0059114	0.0142546 ± 0.0065033	0.0141937 ± 0.0066188	5.7030002 ± 0.0175303
21F16536	24.0 %	0.0222944 ± 0.0002359	0.0076680 ± 0.0059114	0.0142546 ± 0.0065033	0.0141937 ± 0.0066188	5.7030002 ± 0.0175303
21F16538	24.0 %	0.0225071 ± 0.0002605	0.0015833 ± 0.0068213	0.0075699 ± 0.0064588	0.0051854 ± 0.0057317	5.5772442 ± 0.0156160
21F16539	24.0 %	0.0225071 ± 0.0002605	0.0015833 ± 0.0068213	0.0075699 ± 0.0064588	0.0051854 ± 0.0057317	5.5772442 ± 0.0156160
21F16541	24.0 %	0.0218937 ± 0.0002623	0.0121322 ± 0.0067530	0.0030927 ± 0.0066653	0.0005460 ± 0.0054443	5.6467874 ± 0.0156996
21F16542	24.0 %	0.0218937 ± 0.0002623	0.0121322 ± 0.0067530	0.0030927 ± 0.0066653	0.0005460 ± 0.0054443	5.6467874 ± 0.0156996
21F16544	24.0 %	0.0212441 ± 0.0002297	0.0218611 ± 0.0058020	0.0143581 ± 0.0062403	0.0080505 ± 0.0057803	5.4900993 ± 0.0160233
21F16545	24.0 %	0.0212441 ± 0.0002297	0.0218611 ± 0.0058020	0.0143581 ± 0.0062403	0.0080505 ± 0.0057803	5.4900993 ± 0.0160233
21F16547	24.0 %	0.0213743 ± 0.0002771	0.0175906 ± 0.0057466	0.0094539 ± 0.0070656	0.0084116 ± 0.0062746	5.5350766 ± 0.0166269
21F16548	24.0 %	0.0213743 ± 0.0002771	0.0175906 ± 0.0057466	0.0094539 ± 0.0070656	0.0084116 ± 0.0062746	5.5350766 ± 0.0166269
21F16550	24.0 %	0.0210529 ± 0.0002570	0.0119879 ± 0.0065126	0.0127801 ± 0.0067141	0.0131838 ± 0.0069954	5.5039092 ± 0.0157443
21F16551	24.0 %	0.0210529 ± 0.0002570	0.0119879 ± 0.0065126	0.0127801 ± 0.0067141	0.0131838 ± 0.0069954	5.5039092 ± 0.0157443
21F16553	24.0 %	0.0215988 ± 0.0002439	0.0030762 ± 0.0065386	0.0074880 ± 0.0067618	0.0042605 ± 0.0055587	5.4207741 ± 0.0160349
21F16554	24.0 %	0.0215988 ± 0.0002439	0.0030762 ± 0.0065386	0.0074880 ± 0.0067618	0.0042605 ± 0.0055587	5.4207741 ± 0.0160349
21F16556	24.0 %	0.0201610 ± 0.0002472	0.0075492 ± 0.0063540	0.0090353 ± 0.0067668	0.0046219 ± 0.0068501	5.2894187 ± 0.0177158
21F16557	24.0 %	0.0201610 ± 0.0002472	0.0075492 ± 0.0063540	0.0090353 ± 0.0067668	0.0046219 ± 0.0068501	5.2894187 ± 0.0177158
21F16559	24.0 %	0.0215988 ± 0.0002439	0.0030762 ± 0.0065386	0.0074880 ± 0.0067618	0.0042605 ± 0.0055587	5.4207741 ± 0.0160349
21F16560	24.0 %	0.0215988 ± 0.0002439	0.0030762 ± 0.0065386	0.0074880 ± 0.0067618	0.0042605 ± 0.0055587	5.4207741 ± 0.0160349
21F16562	24.0 %	0.0201610 ± 0.0002472	0.0075492 ± 0.0063540	0.0090353 ± 0.0067668	0.0046219 ± 0.0068501	5.2894187 ± 0.0177158
21F16563	24.0 %	0.0201610 ± 0.0002472	0.0075492 ± 0.0063540	0.0090353 ± 0.0067668	0.0046219 ± 0.0068501	5.2894187 ± 0.0177158

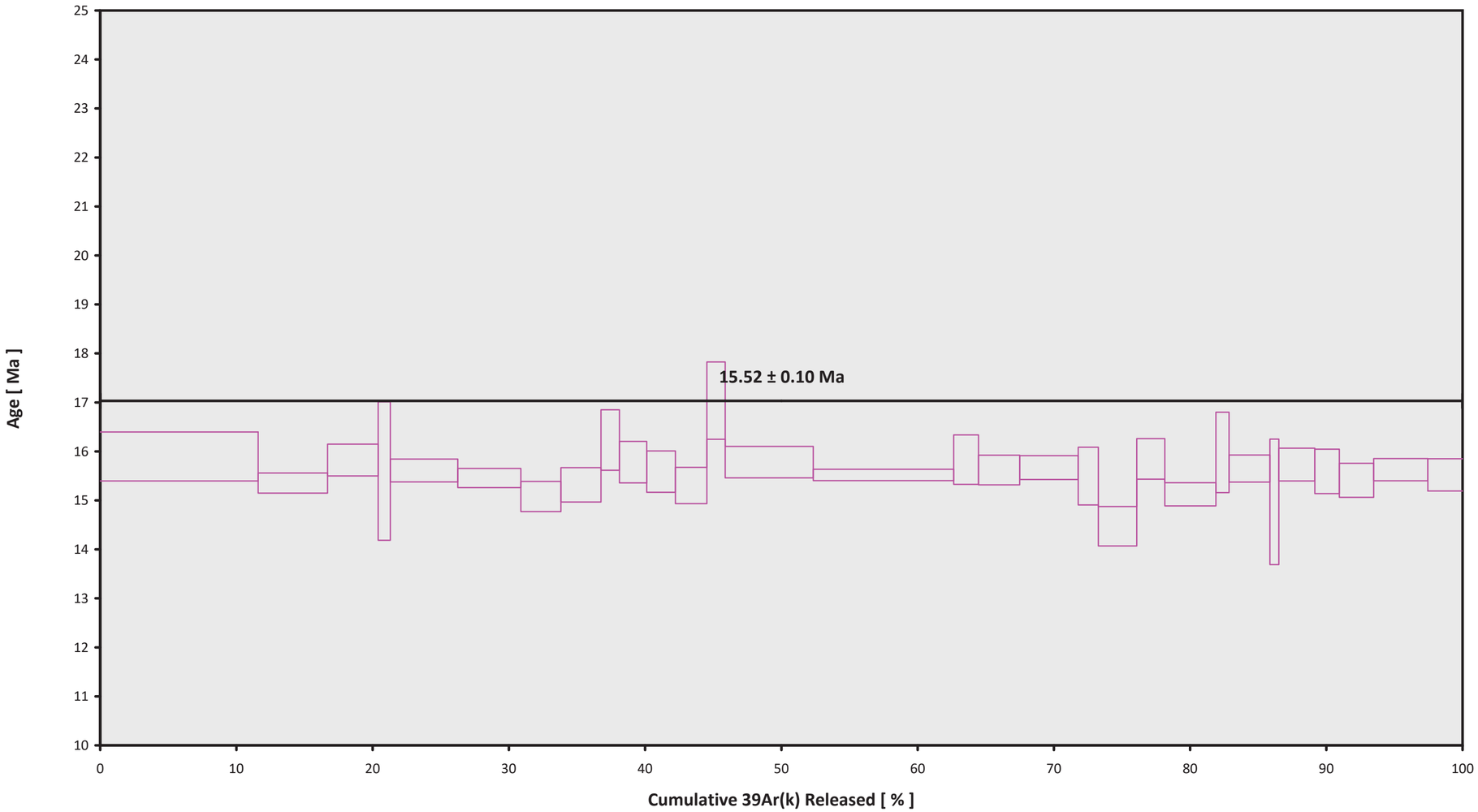
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F16520	24.0 %	1.2641019 ± 0.0016196	0.9864	EXP 149 of 150	7.5222949 ± 0.0069869	0.9910	EXP 150 of 150	0.3814056 ± 0.0066871	0.2244	EXP 149 of 150	10.6567297 ± 0.0078380	0.9951	EXP 150 of 150	453.577021 ± 0.033385	0.9999	EXP 149 of 150
21F16521	24.0 %	0.0721974 ± 0.0004038	0.1628	EXP 150 of 150	2.5861074 ± 0.0066804	0.9266	EXP 150 of 150	0.0783561 ± 0.0064053	0.0031	EXP 150 of 150	4.6758155 ± 0.0069286	0.9791	EXP 150 of 150	44.734279 ± 0.018800	0.8118	EXP 149 of 150
21F16523	24.0 %	0.1162139 ± 0.0004712	0.4374	EXP 149 of 150	2.3975433 ± 0.0065216	0.9294	EXP 150 of 150	0.0775385 ± 0.0069914	0.0192	EXP 150 of 150	3.4279450 ± 0.0058736	0.9706	EXP 150 of 150	52.619866 ± 0.018790	0.9834	EXP 150 of 150
21F16524	24.0 %	0.1228455 ± 0.0004956	0.4669	EXP 147 of 150	1.4630899 ± 0.0065702	0.8138	EXP 150 of 150	0.0501931 ± 0.0064474	0.0190	EXP 150 of 150	0.8330716 ± 0.0068323	0.2549	EXP 150 of 150	41.396922 ± 0.019272	0.8252	EXP 150 of 150
21F16526	24.0 %	0.0968968 ± 0.0004418	0.3071	EXP 149 of 150	2.3080809 ± 0.0066153	0.9204	EXP 150 of 150	0.0786718 ± 0.0068196	0.0040	EXP 149 of 150	4.5579088 ± 0.0067835	0.9793	EXP 150 of 150	52.144176 ± 0.017248	0.9905	EXP 150 of 150
21F16527	24.0 %	0.0378601 ± 0.0003008	0.6483	EXP 150 of 150	2.1825468 ± 0.0062833	0.9179	EXP 150 of 150	0.0530905 ± 0.0062364	0.0077	EXP 149 of 150	4.2733674 ± 0.0071831	0.9748	EXP 150 of 150	31.756133 ± 0.018052	0.7050	EXP 149 of 150
21F16529	24.0 %	0.0403741 ± 0.0003243	0.5940	EXP 149 of 150	1.3716032 ± 0.0062603	0.8234	EXP 150 of 150	0.0415884 ± 0.0060426	0.0009	EXP 147 of 150	2.7133219 ± 0.0063664	0.9479	EXP 149 of 150	24.539693 ± 0.017438	0.9717	EXP 150 of 150
21F16530	24.0 %	0.0536805 ± 0.0003904	0.3075	EXP 150 of 150	2.1578003 ± 0.0067431	0.9050	EXP 150 of 150	0.0466753 ± 0.0067174	0.0031	EXP 149 of 150	2.7077292 ± 0.0072274	0.9288	EXP 150 of 150	28.624355 ± 0.017501	0.9054	EXP 150 of 150
21F16532	24.0 %	0.0263036 ± 0.0002614	0.8028	EXP 150 of 150	0.6822930 ± 0.0058050	0.5747	EXP 150 of 150	0.0162522 ± 0.0061319	0.0000	EXP 150 of 150	1.2514398 ± 0.0064786	0.7134	EXP 146 of 150	13.255605 ± 0.016087	0.9936	EXP 150 of 150
21F16533	24.0 %	0.0272108 ± 0.0002631	0.7649	EXP 150 of 150	1.0240858 ± 0.0064905	0.6895	EXP 150 of 150	0.0396545 ± 0.0069688	0.0132	EXP 150 of 150	1.8402856 ± 0.0074552	0.8520	EXP 148 of 150	16.304107 ± 0.015425	0.9912	EXP 150 of 150
21F16535	24.0 %	0.0399131 ± 0.0003141	0.5987	EXP 150 of 150	2.1131533 ± 0.0061681	0.9132	EXP 150 of 150	0.0403104 ± 0.0069951	0.0001	EXP 149 of 150	1.9494114 ± 0.0061184	0.9062	EXP 148 of 150	20.455998 ± 0.016382	0.9825	EXP 149 of 150
21F16536	24.0 %	0.0375110 ± 0.0002890	0.5721	EXP 147 of 150	1.2996634 ± 0.0060607	0.8051	EXP 150 of 150	0.0329543 ± 0.0067485	0.0091	EXP 150 of 150	2.1316520 ± 0.0068112	0.9033	EXP 150 of 150	20.773974 ± 0.017948	0.9741	EXP 150 of 150
21F16538	24.0 %	0.0592223 ± 0.0004011	0.1388	EXP 149 of 150	0.7221133 ± 0.0063533	0.5222	EXP 145 of 150	0.0356815 ± 0.0067840	0.0097	EXP 150 of 150	1.2352848 ± 0.0058637	0.7836	EXP 150 of 150	23.905051 ± 0.017122	0.9575	EXP 150 of 150
21F16539	24.0 %	0.2609145 ± 0.0008474	0.8735	EXP 150 of 150	4.9975121 ± 0.0071449	0.9787	EXP 150 of 150	0.1314538 ± 0.0061470	0.0482	EXP 150 of 150	5.9423634 ± 0.0072100	0.9870	EXP 149 of 150	110.357456 ± 0.018631	0.9995	EXP 147 of 150
21F16541	24.0 %	0.0865933 ± 0.0004691	0.0323	EXP 150 of 150	5.2423877 ± 0.0066250	0.9834	EXP 147 of 150	0.1393303 ± 0.0068318	0.0000	EXP 148 of 150	9.4677370 ± 0.0063914	0.9960	EXP 150 of 150	72.878044 ± 0.018834	0.9970	EXP 150 of 150
21F16542	24.0 %	0.0415345 ± 0.0003180	0.5390	EXP 150 of 150	0.7473705 ± 0.0064561	0.5335	EXP 150 of 150	0.0378977 ± 0.0066418	0.0038	EXP 150 of 150	1.6615253 ± 0.0059217	0.8660	EXP 149 of 150	20.321503 ± 0.016366	0.9810	EXP 149 of 150
21F16544	24.0 %	0.0518678 ± 0.0003387	0.3526	EXP 148 of 150	2.0259074 ± 0.0064249	0.9041	EXP 150 of 150	0.0388360 ± 0.0068613	0.0045	EXP 150 of 150	2.7899984 ± 0.0059838	0.9574	EXP 147 of 150	28.832677 ± 0.016620	0.4475	EXP 149 of 150
21F16545	24.0 %	0.0603522 ± 0.0004120	0.0348	EXP 150 of 150	2.1617967 ± 0.0054946	0.9294	EXP 147 of 150	0.0599329 ± 0.0069518	0.0014	EXP 150 of 150	3.9482133 ± 0.0060917	0.9782	EXP 147 of 150	37.551465 ± 0.018961	0.9447	EXP 150 of 150
21F16547	24.0 %	0.0245270 ± 0.0002624	0.7904	EXP 150 of 150	0.6971574 ± 0.0060303	0.5375	EXP 150 of 150	0.0295270 ± 0.0065768	0.0002	EXP 150 of 150	1.3613348 ± 0.0072361	0.7356	EXP 150 of 150	13.225200 ± 0.014820	0.9928	EXP 150 of 150
21F16548	24.0 %	0.0722523 ± 0.0004332	0.0500	EXP 150 of 150	1.0661036 ± 0.0063963	0.7264	EXP 148 of 150	0.0387705 ± 0.0063275	0.0002	EXP 150 of 150	2.5975261 ± 0.0069268	0.9337	EXP 150 of 150	33.710237 ± 0.016239	0.8864	EXP 150 of 150
21F16550	24.0 %	0.0290942 ± 0.0002713	0.7438	EXP 149 of 150	0.9262210 ± 0.0058167	0.7248	EXP 150 of 150	0.0299122 ± 0.0063059	0.0051	EXP 150 of 150	1.9073739 ± 0.0060670	0.9057	EXP 150 of 150	17.658850 ± 0.017700	0.9794	EXP 150 of 150
21F16551	24.0 %	0.0484842 ± 0.0002886	0.3732	EXP 147 of 150	1.5582568 ± 0.0058506	0.8702	EXP 150 of 150	0.0478921 ± 0.0071543	0.0000	EXP 150 of 150	3.4539183 ± 0.0069453	0.9640	EXP 148 of 150	30.872126 ± 0.017071	0.3362	EXP 150 of 150
21F16553	24.0 %	0.0218428 ± 0.0002483	0.8309	EXP 148 of 150	0.4911909 ± 0.0058830	0.3782	EXP 149 of 150	0.0121982 ± 0.0064491	0.0028	EXP 150 of 150	0.8915652 ± 0.0063070	0.5845	EXP 148 of 150	10.010194 ± 0.016292	0.9941	EXP 147 of 150
21F16554	24.0 %	0.0284236 ± 0.0002693	0.7279	EXP 150 of 150	1.4282942 ± 0.0071421	0.7827	EXP 150 of 150	0.0523804 ± 0.0071240	0.0032	EXP 149 of 150	2.7545602 ± 0.0068627	0.9409	EXP 150 of 150	21.308506 ± 0.019404	0.9573	EXP 150 of 150
21F16556	24.0 %	0.0203713 ± 0.0002667	0.8094	EXP 150 of 150	0.3314802 ± 0.0054375	0.2485	EXP 150 of 150	0.0156593 ± 0.0064247	0.0024	EXP 150 of 150	0.6024183 ± 0.0067361	0.2544	EXP 150 of 150	8.197290 ± 0.017725	0.9936	EXP 150 of 150
21F16557	24.0 %	0.0347777 ± 0.0003047	0.6166	EXP 150 of 150	1.7509703 ± 0.0072031	0.8413	EXP 150 of 150	0.0336970 ± 0.0072417	0.0008	EXP 150 of 150	2.4350701 ± 0.0057703	0.9476	EXP 149 of 150	21.919891 ± 0.015822	0.9541	EXP 150 of 150
21F16559	24.0 %	0.0245684 ± 0.0002654	0.7782	EXP 150 of 150	1.1820610 ± 0.0061512	0.7701	EXP 149 of 150	0.0212984 ± 0.0063495	0.0002	EXP 149 of 150	1.6466628 ± 0.0059036	0.8805	EXP 150 of 150	14.389137 ± 0.016358	0.9890	EXP 150 of 150
21F16560	24.0 %	0.0383213 ± 0.0003085	0.4931	EXP 148 of 150	2.3917572 ± 0.0056213	0.9440	EXP 150 of 150	0.0327137 ± 0.0069944	0.0005	EXP 150 of 150	2.3311916 ± 0.0063382	0.9303	EXP 150 of 150	21.660541 ± 0.016855	0.9491	EXP 150 of 150
21F16562	24.0 %	0.0314338 ± 0.0003019	0.6623	EXP 150 of 150	1.9054148 ± 0.0070071	0.8745	EXP 150 of 150	0.0650900 ± 0.0064201	0.0330	EXP 149 of 150	3.6448252 ± 0.0073360	0.9649	EXP 150 of 150	26.995955 ± 0.017301	0.5427	EXP 150 of 150
21F16563	24.0 %	0.0259761 ± 0.0002637	0.7773	EXP 149 of 150	1.4059244 ± 0.0068044	0.7780	EXP 150 of 150	0.0213563 ± 0.0062872	0.0102	EXP 150 of 150	2.3469438 ± 0.0072951	0.9159	EXP 150 of 150	18.643174 ± 0.015933	0.9758	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F16520	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16521	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16523	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16524	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16526	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16527	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16529	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16530	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16532	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16533	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16535	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16536	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16538	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16539	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16541	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16542	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16544	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16545	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16547	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16548	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16550	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16551	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16553	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16554	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16556	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16557	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16559	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16560	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16562	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01
21F16563	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	4.14	Oregon\Swenton (20-01)	21F16516	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F16520	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	21	19	1
21F16521	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	21	28	1
21F16523	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	21	45	1
21F16524	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	21	54	1
21F16526	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	22	11	1
21F16527	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	22	19	1
21F16529	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	22	37	1
21F16530	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	22	45	1
21F16532	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	23	3	1
21F16533	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	23	11	1
21F16535	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	23	28	1
21F16536	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	23	37	1
21F16538	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	4	SEP	2021	23	54	1
21F16539	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	0	3	1
21F16541	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	0	20	1
21F16542	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	0	29	1
21F16544	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	0	46	1
21F16545	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	0	55	1
21F16547	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	1	12	1
21F16548	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	1	21	1
21F16550	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	1	38	1
21F16551	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	1	47	1
21F16553	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	2	4	1
21F16554	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	2	12	1
21F16556	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	2	30	1
21F16557	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	2	38	1
21F16559	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	2	56	1
21F16560	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	3	4	1
21F16562	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	3	22	1
21F16563	24.0 %	VS19-068	Plagioclase	Birch Creek	FCT-NM (4X5-21)	28.201	0.082	Kuiper et al (2008)	9.38445	0.113	0.00165439	0.113	300.962	0.106	0.99800215	0.037	1	3.54E-14	5	SEP	2021	3	30	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F16520	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16521	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16523	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16524	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16526	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16527	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16529	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16530	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16532	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16533	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16535	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16536	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16538	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16539	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16541	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16542	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16544	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16545	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16547	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16548	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16550	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16551	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16553	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16554	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16556	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16557	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16559	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16560	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16562	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16563	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F16516.AGE >>> VS19-068 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
15.52 ± 0.10
TOTAL FUSION
15.59 ± 0.09
NORMAL ISOCHRON
15.43 ± 0.13
INVERSE ISOCHRON
15.48 ± 0.12

MSWD (PROBABILITY)
3.28 (0%)

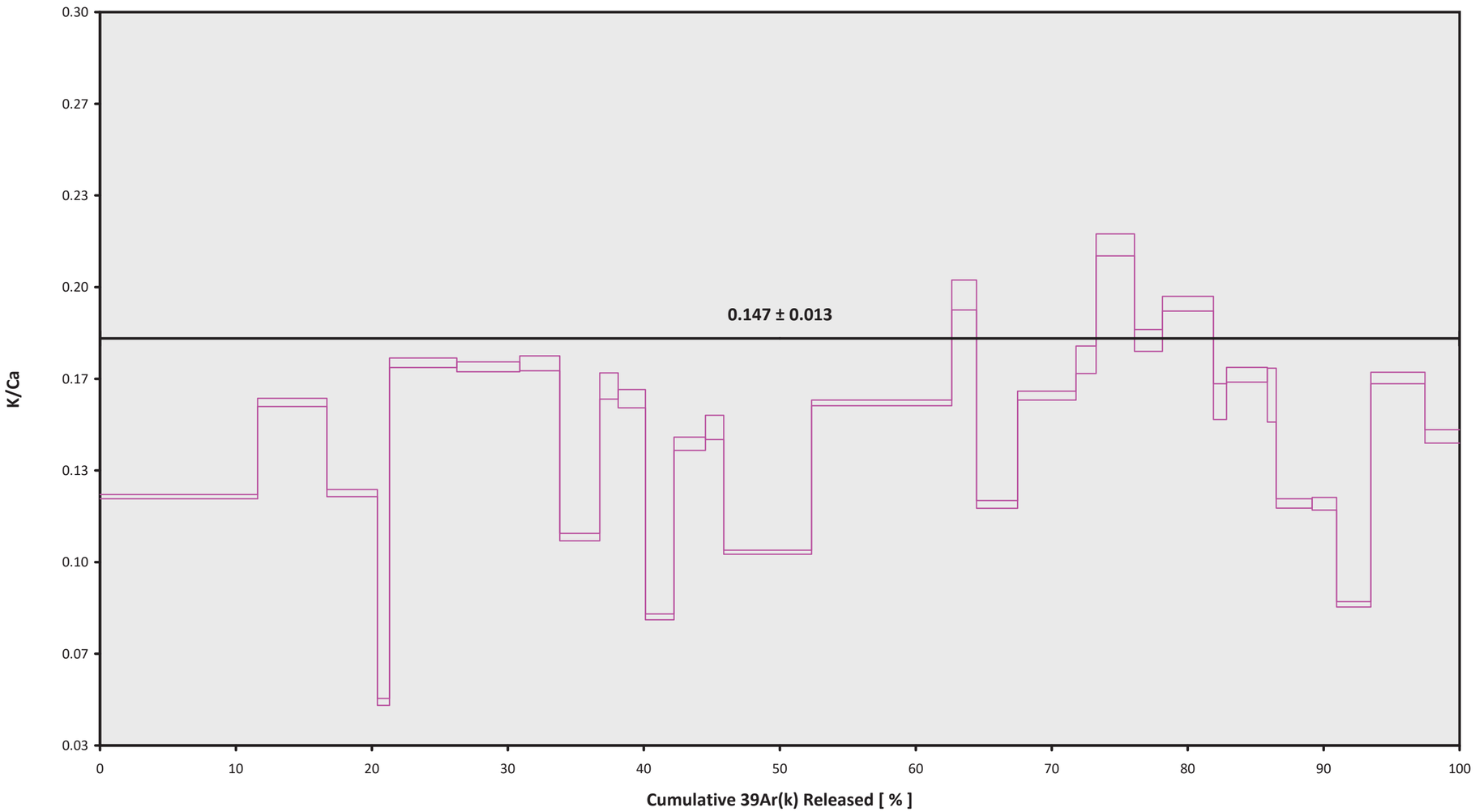
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Plagioclase
Birch Creek
Dan Miggins

IRR = 21-OSU-04 (4X5-21)
J = 0.00165439 ± 0.00000187

21F16516.AGE >>> VS19-068 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
15.52 ± 0.10
TOTAL FUSION
15.59 ± 0.09
NORMAL ISOCHRON
15.43 ± 0.13
INVERSE ISOCHRON
15.48 ± 0.12

ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

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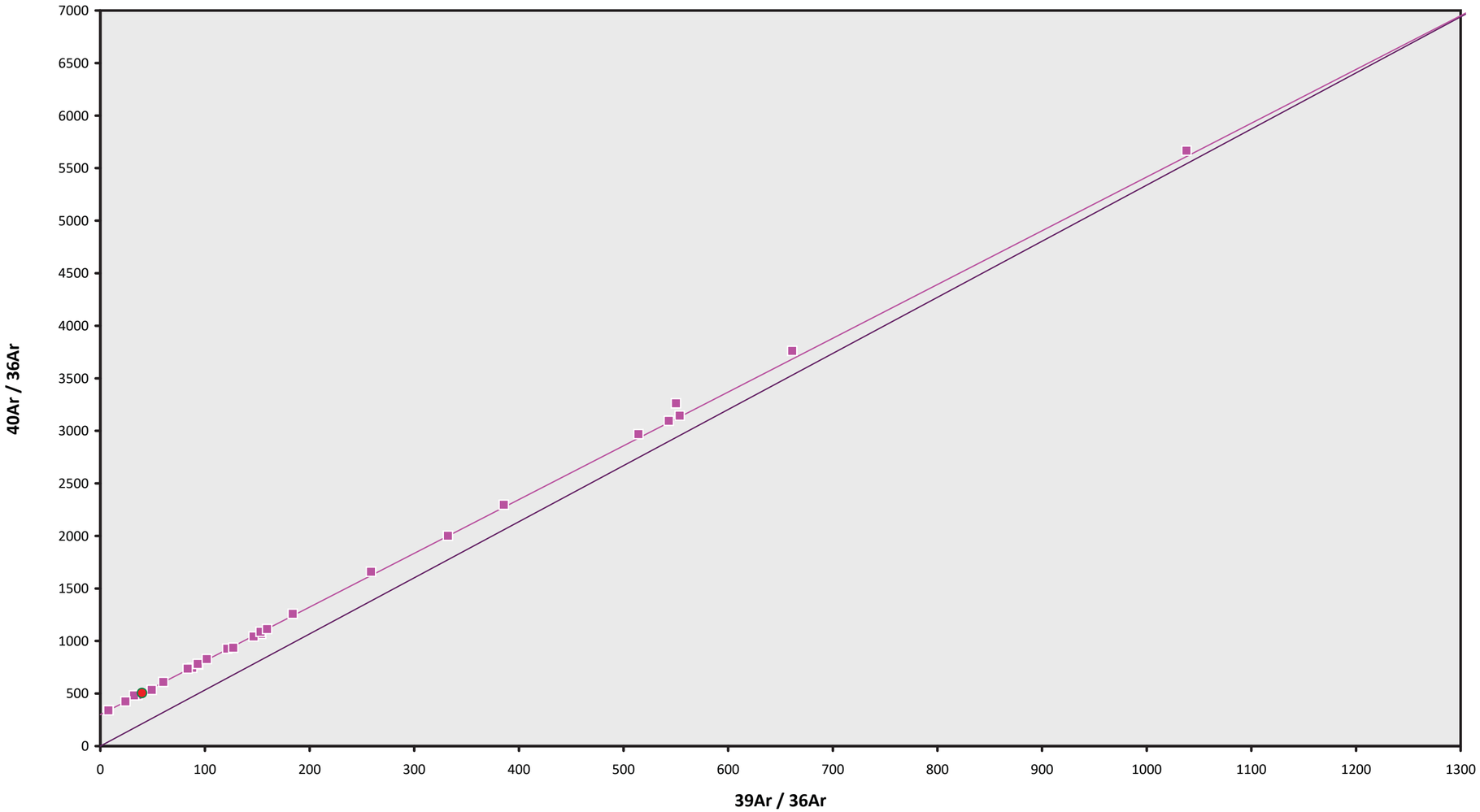
21F16516.AGE >>> VS19-068 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
15.52 ± 0.10
TOTAL FUSION
15.59 ± 0.09
NORMAL ISOCHRON
15.43 ± 0.13
INVERSE ISOCHRON
15.48 ± 0.12

MSWD (PROBABILITY)
3.41 (0%)

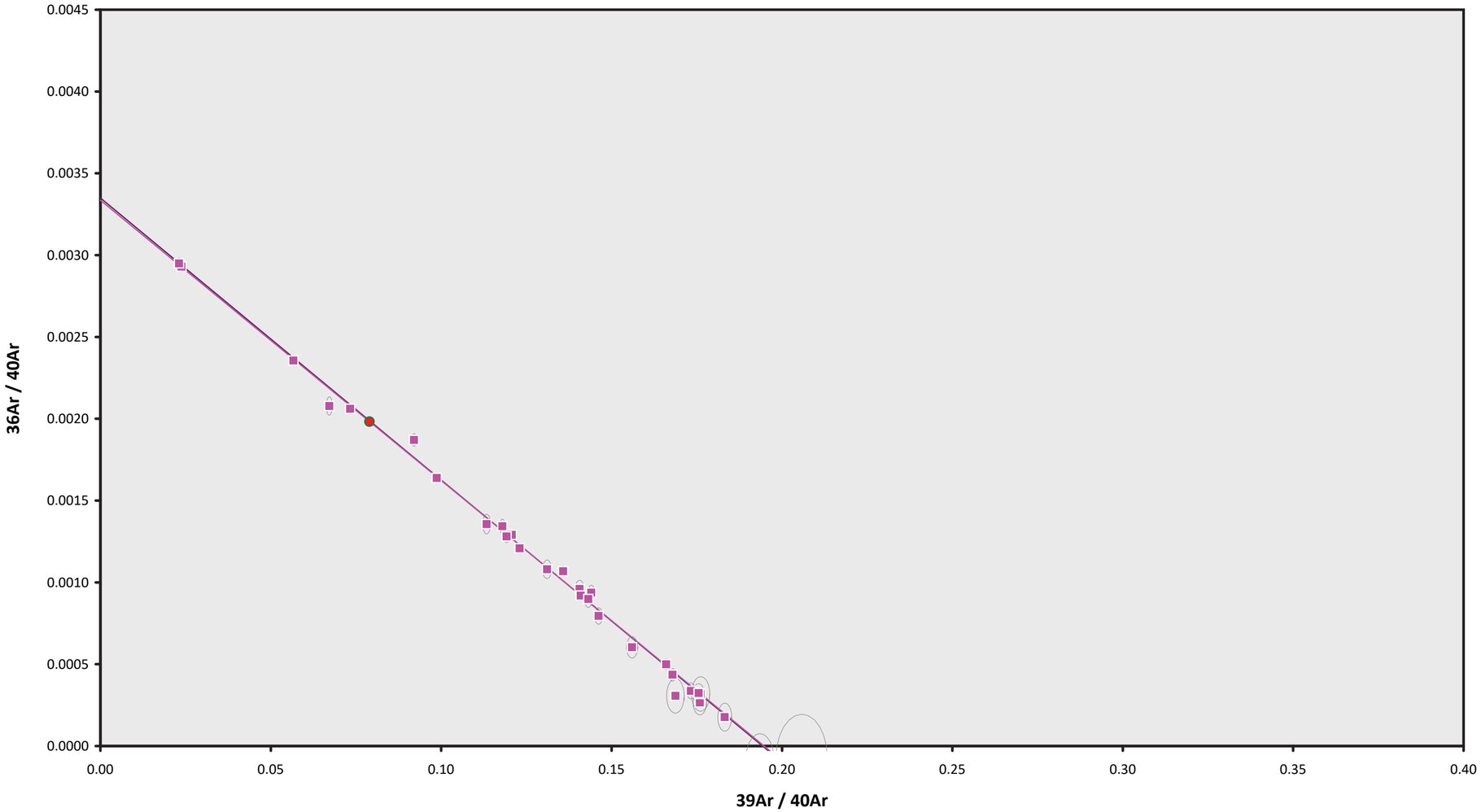
CALCULATED 40AR/36AR INTERCEPT
300.1 ± 2.0

Sample Info

Plagioclase
Birch Creek
Dan Miggins

IRR = 21-OSU-04 (4X5-21)
J = 0.00165439 ± 0.00000187

21F16516.AGE >>> VS19-068 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
15.52 ± 0.10
TOTAL FUSION
15.59 ± 0.09
NORMAL ISOCHRON
15.43 ± 0.13
INVERSE ISOCHRON
15.48 ± 0.12

MSWD (PROBABILITY)
3.26 (0%)

SPREADING FACTOR
93.8%

CALCULATED 40AR/36AR INTERCEPT
299.8 ± 2.0

Sample Info

Plagioclase
Birch Creek
Dan Miggins

IRR = 21-OSU-04 (4X5-21)
J = 0.00165439 ± 0.00000187

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F24164	17.0 %	✓	0.521207	0.266	72.4419	0.462	0.581295	1.568	41.17488	0.051	355.7293	0.009	5.00723	±0.02224	15.09	±0.07	57.89	5.36	0.244	±0.002
20F24165	17.0 %	✓	0.637690	0.246	68.9269	0.470	0.575199	1.649	37.77056	0.051	377.2885	0.009	5.10094	±0.02739	15.37	±0.08	51.01	4.91	0.235	±0.002
20F24167	17.0 %	✓	0.337490	0.305	51.8176	0.503	0.381310	2.492	26.99294	0.053	235.4243	0.012	5.14950	±0.02479	15.51	±0.07	58.97	3.51	0.224	±0.002
20F24168	17.0 %	✓	0.428699	0.263	60.1557	0.487	0.456183	2.098	31.23229	0.053	283.6110	0.011	5.14381	±0.02387	15.50	±0.07	56.58	4.06	0.223	±0.002
20F24170	17.0 %	✓	0.116434	0.511	27.4371	0.692	0.188455	4.854	13.17474	0.081	99.2599	0.026	5.06979	±0.02905	15.28	±0.09	67.20	1.71	0.206	±0.003
20F24171	17.0 %	✓	0.468517	0.249	57.4766	0.494	0.469294	1.852	30.80039	0.052	288.7469	0.012	4.98924	±0.02511	15.03	±0.08	53.16	4.01	0.230	±0.002
20F24173	17.0 %	✓	0.326995	0.311	42.0694	0.538	0.331739	2.876	22.24874	0.060	205.2186	0.014	4.99388	±0.02952	15.05	±0.09	54.08	2.89	0.227	±0.002
20F24174	17.0 %	✓	0.945604	0.214	82.5862	0.457	0.688783	1.346	41.67810	0.050	482.6430	0.007	4.97208	±0.03257	14.98	±0.10	42.88	5.42	0.217	±0.002
20F24176	17.0 %	✓	0.499533	0.272	52.6299	0.489	0.424004	2.046	27.50950	0.057	266.9211	0.011	4.44069	±0.03198	13.39	±0.10	45.71	3.58	0.224	±0.002
20F24177	17.0 %	✓	0.305859	0.304	58.4114	0.484	0.416384	2.178	29.04632	0.054	232.3475	0.012	5.02353	±0.02101	15.14	±0.06	62.72	3.78	0.214	±0.002
20F24179	17.0 %	✓	0.790486	0.226	82.3201	0.454	0.762307	1.214	48.61493	0.047	479.6543	0.008	5.15344	±0.02466	15.53	±0.07	52.18	6.33	0.254	±0.002
20F24180	17.0 %	✓	0.531674	0.252	51.9433	0.505	0.425708	2.349	27.56584	0.055	295.1072	0.011	5.10473	±0.03194	15.38	±0.10	47.63	3.59	0.228	±0.002
20F24182	17.0 %	✓	0.338497	0.308	54.0030	0.493	0.411438	2.276	28.50081	0.054	235.6857	0.012	4.88177	±0.02370	14.71	±0.07	58.96	3.71	0.227	±0.002
20F24183	17.0 %	✓	0.175392	0.432	45.3275	0.519	0.319830	2.779	21.86041	0.063	147.9314	0.018	4.54450	±0.02219	13.70	±0.07	67.07	2.84	0.207	±0.002
20F24185	17.0 %	✓	0.659323	0.237	49.9105	0.512	0.476157	2.017	27.46746	0.055	331.9975	0.009	5.07236	±0.03760	15.28	±0.11	41.92	3.57	0.236	±0.002
20F24186	17.0 %	✓	0.335041	0.300	48.7565	0.503	0.346699	2.801	22.63330	0.063	209.6903	0.013	5.02530	±0.02888	15.14	±0.09	54.17	2.94	0.199	±0.002
20F24188	17.0 %	✓	0.216840	0.385	51.2773	0.498	0.314174	2.805	22.67714	0.061	173.2004	0.016	4.97192	±0.02372	14.98	±0.07	65.00	2.95	0.190	±0.002
20F24189	17.0 %	✓	0.196082	0.392	38.4134	0.561	0.263124	3.167	18.94554	0.068	148.0732	0.020	4.89509	±0.02615	14.75	±0.08	62.55	2.46	0.212	±0.002
20F24191	17.0 %	✓	0.316097	0.305	49.6245	0.498	0.396067	2.309	27.52260	0.055	227.0627	0.013	4.97175	±0.02284	14.98	±0.07	60.19	3.58	0.238	±0.002
20F24192	17.0 %	✓	0.223621	0.344	17.5805	0.859	0.177731	5.038	11.07833	0.093	116.0715	0.021	4.58291	±0.04437	13.81	±0.13	43.70	1.44	0.271	±0.005
20F24194	17.0 %	✓	0.174972	0.414	36.3093	0.591	0.259883	3.607	18.63017	0.070	143.7533	0.018	5.07516	±0.02518	15.29	±0.08	65.69	2.42	0.220	±0.003
20F24195	17.0 %	✓	0.141354	0.485	26.9452	0.685	0.222533	4.130	16.28844	0.073	117.3723	0.023	4.75285	±0.02688	14.32	±0.08	65.89	2.12	0.260	±0.004
20F24197	17.0 %	✓	0.210076	0.368	49.3736	0.508	0.338628	2.416	25.56216	0.056	186.2855	0.014	4.99537	±0.01969	15.05	±0.06	68.46	3.33	0.222	±0.002
20F24198	17.0 %	✓	0.278639	0.335	36.4033	0.548	0.295317	3.057	20.77534	0.062	183.3101	0.015	4.96555	±0.02885	14.96	±0.09	56.21	2.70	0.245	±0.003
20F24200	17.0 %	✓	0.145491	0.439	28.6107	0.642	0.202716	4.607	14.20361	0.079	114.2932	0.022	5.15718	±0.02907	15.54	±0.09	64.01	1.85	0.213	±0.003
20F24201	17.0 %	✓	0.457570	0.262	61.3982	0.476	0.355077	2.645	21.21002	0.063	226.6291	0.013	4.48545	±0.03678	13.52	±0.11	41.90	2.76	0.148	±0.001
20F24203	17.0 %	✓	0.223444	0.369	36.2711	0.539	0.234952	4.143	18.62778	0.065	158.7680	0.018	5.10481	±0.02844	15.38	±0.09	59.82	2.42	0.221	±0.002
20F24204	17.0 %	✓	0.349526	0.305	51.6580	0.486	0.305850	3.094	21.63825	0.060	207.4862	0.014	4.96585	±0.03173	14.96	±0.10	51.71	2.81	0.180	±0.002
20F24206	17.0 %	✓	0.229459	0.345	32.0082	0.593	0.282827	3.365	18.74378	0.065	158.0265	0.016	4.91858	±0.02724	14.82	±0.08	58.28	2.44	0.252	±0.003
20F24207	17.0 %	✓	0.496764	0.292	56.0524	0.494	0.524485	1.732	34.52651	0.051	308.7138	0.010	4.78112	±0.02712	14.41	±0.08	53.42	4.49	0.265	±0.003
		Σ	11.078374	0.056	1478.1393	0.096	11.428150	0.442	768.70087	0.011	6996.3023	0.002								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-079**
Material = **Plagioclase**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1D3-20)**
Position = **X: 0 | Y: 0 | Z/H: 2.086571 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.39301 ± 0.00676**
FCT-NM J-value = **0.00165288 ± 0.00000119**
Air Shot 40Ar/36Ar = **298.2190 ± 0.3668**
Air Shot MDF = **1.00028623 ± 0.00040367 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			4.95836	±0.06606	**14.94**	**±0.20**	>100	100.00	0.216	±0.011
Error Mean				±1.33%		**±1.33%**	0%	30		
				Full External Error		±0.80	1.53	2σ Confidence Limit		
				Analytical Error		±0.20	>10	Error Magnification		
Total Fusion Age			4.95938	±0.00526	**14.94**	**±0.03**		30	0.223	±0.000
				±0.11%		**±0.18%**				
				Full External Error		±0.78				
				Analytical Error		±0.02				
Normal Isochron	**306.03**	**±18.34**	4.83961	±0.24144	**14.58**	**±0.73**	>100	100.00		
Error Chron		**±5.99%**		±4.99%		**±4.97%**	0%	30		
				Full External Error		±1.05	1.53	2σ Confidence Limit		
				Analytical Error		±0.72	>10	Error Magnification		
							24	Number of Iterations		
							0.0000391312	Convergence		
Inverse Isochron	**304.27**	**±17.59**	4.88926	±0.22356	**14.73**	**±0.67**	>100	100.00		
Error Chron		**±5.78%**		±4.57%		**±4.56%**	0%	30		
				Full External Error		±1.02	1.53	2σ Confidence Limit		
				Analytical Error		±0.67	>10	Error Magnification		
							3	Number of Iterations		
							0.0002024400	Convergence		
							32%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F24164	17.0 %	✓	0.501626	72.4419	0.0000000	41.12834	205.9389	15.09 ±0.07	57.89	5.36	0.244 ±0.002
20F24165	17.0 %	✓	0.619059	68.9269	0.0000000	37.72628	192.4394	15.37 ±0.08	51.01	4.91	0.235 ±0.002
20F24167	17.0 %	✓	0.323483	51.8176	0.0000000	26.95965	138.8288	15.51 ±0.07	58.97	3.51	0.224 ±0.002
20F24168	17.0 %	✓	0.412439	60.1557	0.0000000	31.19364	160.4542	15.50 ±0.07	56.58	4.06	0.223 ±0.002
20F24170	17.0 %	✓	0.109017	27.4371	0.0040680	13.15712	66.7038	15.28 ±0.09	67.20	1.71	0.206 ±0.003
20F24171	17.0 %	✓	0.452980	57.4766	0.0020315	30.76346	153.4864	15.03 ±0.08	53.16	4.01	0.230 ±0.002
20F24173	17.0 %	✓	0.315624	42.0694	0.0000000	22.22171	110.9725	15.05 ±0.09	54.08	2.89	0.227 ±0.002
20F24174	17.0 %	✓	0.923281	82.5862	0.0000000	41.62504	206.9631	14.98 ±0.10	42.88	5.42	0.217 ±0.002
20F24176	17.0 %	✓	0.485307	52.6299	0.0000000	27.47568	122.0111	13.39 ±0.10	45.71	3.58	0.224 ±0.002
20F24177	17.0 %	✓	0.290071	58.4114	0.0008524	29.00879	145.7264	15.14 ±0.06	62.72	3.78	0.214 ±0.002
20F24179	17.0 %	✓	0.768232	82.3201	0.0161941	48.56204	250.2616	15.53 ±0.07	52.18	6.33	0.254 ±0.002
20F24180	17.0 %	✓	0.517633	51.9433	0.0000000	27.53247	140.5459	15.38 ±0.10	47.63	3.59	0.228 ±0.002
20F24182	17.0 %	✓	0.323900	54.0030	0.0000000	28.46611	138.9650	14.71 ±0.07	58.96	3.71	0.227 ±0.002
20F24183	17.0 %	✓	0.163136	45.3275	0.0172637	21.83128	99.2123	13.70 ±0.07	67.07	2.84	0.207 ±0.002
20F24185	17.0 %	✓	0.645829	49.9105	0.0140970	27.43539	139.1622	15.28 ±0.11	41.92	3.57	0.236 ±0.002
20F24186	17.0 %	✓	0.321861	48.7565	0.0042877	22.60198	113.5817	15.14 ±0.09	54.17	2.94	0.199 ±0.002
20F24188	17.0 %	✓	0.202980	51.2773	0.0000000	22.64419	112.5851	14.98 ±0.07	65.00	2.95	0.190 ±0.002
20F24189	17.0 %	✓	0.185699	38.4134	0.0000000	18.92086	92.6194	14.75 ±0.08	62.55	2.46	0.212 ±0.002
20F24191	17.0 %	✓	0.302683	49.6245	0.0000000	27.49072	136.6769	14.98 ±0.07	60.19	3.58	0.238 ±0.002
20F24192	17.0 %	✓	0.218869	17.5805	0.0000000	11.06704	50.7192	13.81 ±0.13	43.70	1.44	0.271 ±0.005
20F24194	17.0 %	✓	0.165157	36.3093	0.0000000	18.60684	94.4327	15.29 ±0.08	65.69	2.42	0.220 ±0.003
20F24195	17.0 %	✓	0.134071	26.9452	0.0000000	16.27113	77.3343	14.32 ±0.08	65.89	2.12	0.260 ±0.004
20F24197	17.0 %	✓	0.196731	49.3736	0.0000000	25.53044	127.5340	15.05 ±0.06	68.46	3.33	0.222 ±0.002
20F24198	17.0 %	✓	0.268799	36.4033	0.0000000	20.75195	103.0448	14.96 ±0.09	56.21	2.70	0.245 ±0.003
20F24200	17.0 %	✓	0.137758	28.6107	0.0002841	14.18523	73.1557	15.54 ±0.09	64.01	1.85	0.213 ±0.003
20F24201	17.0 %	✓	0.440973	61.3982	0.0052255	21.17057	94.9595	13.52 ±0.11	41.90	2.76	0.148 ±0.001
20F24203	17.0 %	✓	0.213640	36.2711	0.0000000	18.60447	94.9724	15.38 ±0.09	59.82	2.42	0.221 ±0.002
20F24204	17.0 %	✓	0.335563	51.6580	0.0000000	21.60506	107.2875	14.96 ±0.10	51.71	2.81	0.180 ±0.002
20F24206	17.0 %	✓	0.220805	32.0082	0.0093237	18.72322	92.0915	14.82 ±0.08	58.28	2.44	0.252 ±0.003
20F24207	17.0 %	✓	0.481611	56.0524	0.0070705	34.49050	164.9031	14.41 ±0.08	53.42	4.49	0.265 ±0.003
		Σ	10.678814	1478.1393	0.0806982	767.75117	3807.5695				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-079**
Material = **Plagioclase**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1D3-20)**
J = **0.00165288 ±0.00000119**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	4.95836	±0.06606	**14.94**	**±0.20**	>100	100.00	0.216 ±0.011
Error Mean		±1.33%		**±1.33%**	0%	30	
			Full External Error	±0.80	1.53	2σ Confidence Limit	
			Analytical Error	±0.20	>10	Error Magnification	
Total Fusion Age	4.95938	±0.00526	**14.94**	**±0.03**		30	0.223 ±0.000
		±0.11%		**±0.18%**			
			Full External Error	±0.78			
			Analytical Error	±0.02			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F24164	17.0 %	✓	81.99	±0.46	709.10	±3.94	0.9829
20F24165	17.0 %	✓	60.94	±0.31	609.42	±3.09	0.9800
20F24167	17.0 %	✓	83.34	±0.54	727.73	±4.65	0.9856
20F24168	17.0 %	✓	75.63	±0.42	687.60	±3.77	0.9807
20F24170	17.0 %	✓	120.69	±1.34	910.43	±9.99	0.9882
20F24171	17.0 %	✓	67.91	±0.36	637.40	±3.29	0.9795
20F24173	17.0 %	✓	70.41	±0.46	650.16	±4.20	0.9820
20F24174	17.0 %	✓	45.08	±0.20	522.72	±2.29	0.9743
20F24176	17.0 %	✓	56.62	±0.32	549.97	±3.08	0.9791
20F24177	17.0 %	✓	100.01	±0.65	800.94	±5.16	0.9855
20F24179	17.0 %	✓	63.21	±0.30	624.32	±2.91	0.9794
20F24180	17.0 %	✓	53.19	±0.28	570.08	±2.96	0.9771
20F24182	17.0 %	✓	87.89	±0.57	727.60	±4.69	0.9855
20F24183	17.0 %	✓	133.82	±1.26	906.72	±8.45	0.9902
20F24185	17.0 %	✓	42.48	±0.21	514.04	±2.50	0.9744
20F24186	17.0 %	✓	70.22	±0.45	651.45	±4.09	0.9796
20F24188	17.0 %	✓	111.56	±0.93	853.22	±7.05	0.9883
20F24189	17.0 %	✓	101.89	±0.86	797.32	±6.63	0.9858
20F24191	17.0 %	✓	90.82	±0.59	750.11	±4.79	0.9845
20F24192	17.0 %	✓	50.56	±0.37	530.29	±3.74	0.9646
20F24194	17.0 %	✓	112.66	±1.00	870.33	±7.67	0.9867
20F24195	17.0 %	✓	121.36	±1.26	875.38	±8.99	0.9889
20F24197	17.0 %	✓	129.77	±1.03	946.83	±7.47	0.9894
20F24198	17.0 %	✓	77.20	±0.54	681.91	±4.74	0.9834
20F24200	17.0 %	✓	102.97	±0.97	829.61	±7.73	0.9846
20F24201	17.0 %	✓	48.01	±0.27	513.90	±2.80	0.9727
20F24203	17.0 %	✓	87.08	±0.68	743.10	±5.76	0.9849
20F24204	17.0 %	✓	64.38	±0.42	618.28	±3.94	0.9817
20F24206	17.0 %	✓	84.80	±0.62	715.63	±5.15	0.9829
20F24207	17.0 %	✓	71.61	±0.44	640.96	±3.87	0.9852

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**306.03**	**±18.34**	4.83961	±0.24144	**14.58**	**±0.73**	>100
Error Chron		**±5.99%**		±4.99%		**±4.97%**	0%
					Full External Error	±1.05	
					Analytical Error	±0.72	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000039131241
	Error Magnification	>10	Number of Iterations	24
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F24164	17.0 %	✓	0.1156250	±0.0001201	0.00141023	±0.00000783	0.0062
20F24165	17.0 %	✓	0.0999993	±0.0001029	0.00164091	±0.00000832	0.0058
20F24167	17.0 %	✓	0.1145231	±0.0001257	0.00137414	±0.00000879	0.0085
20F24168	17.0 %	✓	0.1099947	±0.0001202	0.00145434	±0.00000798	0.0082
20F24170	17.0 %	✓	0.1325628	±0.0002251	0.00109839	±0.00001205	0.0147
20F24171	17.0 %	✓	0.1065482	±0.0001132	0.00156888	±0.00000811	0.0099
20F24173	17.0 %	✓	0.1082902	±0.0001345	0.00153809	±0.00000994	0.0102
20F24174	17.0 %	✓	0.0862485	±0.0000874	0.00191307	±0.00000839	0.0048
20F24176	17.0 %	✓	0.1029420	±0.0001197	0.00181828	±0.00001019	0.0074
20F24177	17.0 %	✓	0.1248603	±0.0001385	0.00124853	±0.00000805	0.0078
20F24179	17.0 %	✓	0.1012501	±0.0000974	0.00160173	±0.00000748	0.0057
20F24180	17.0 %	✓	0.0933018	±0.0001053	0.00175415	±0.00000910	0.0089
20F24182	17.0 %	✓	0.1207888	±0.0001339	0.00137439	±0.00000887	0.0083
20F24183	17.0 %	✓	0.1475902	±0.0001938	0.00110288	±0.00001028	0.0105
20F24185	17.0 %	✓	0.0826415	±0.0000924	0.00194538	±0.00000945	0.0063
20F24186	17.0 %	✓	0.1077945	±0.0001385	0.00153504	±0.00000963	0.0090
20F24188	17.0 %	✓	0.1307502	±0.0001662	0.00117203	±0.00000968	0.0100
20F24189	17.0 %	✓	0.1277903	±0.0001809	0.00125420	±0.00001043	0.0132
20F24191	17.0 %	✓	0.1210799	±0.0001377	0.00133314	±0.00000852	0.0094
20F24192	17.0 %	✓	0.0953522	±0.0001829	0.00188575	±0.00001329	0.0137
20F24194	17.0 %	✓	0.1294461	±0.0001877	0.00114898	±0.00001013	0.0101
20F24195	17.0 %	✓	0.1386400	±0.0002133	0.00114236	±0.00001173	0.0129
20F24197	17.0 %	✓	0.1370615	±0.0001585	0.00105616	±0.00000833	0.0088
20F24198	17.0 %	✓	0.1132146	±0.0001448	0.00146646	±0.00001020	0.0104
20F24200	17.0 %	✓	0.1241220	±0.0002048	0.00120539	±0.00001123	0.0130
20F24201	17.0 %	✓	0.0934203	±0.0001212	0.00194590	±0.00001060	0.0100
20F24203	17.0 %	✓	0.1171886	±0.0001591	0.00134571	±0.00001043	0.0117
20F24204	17.0 %	✓	0.1041343	±0.0001283	0.00161738	±0.00001030	0.0107
20F24206	17.0 %	✓	0.1184900	±0.0001594	0.00139737	±0.00001005	0.0107
20F24207	17.0 %	✓	0.1117308	±0.0001173	0.00156016	±0.00000942	0.0061

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**304.27**	**±17.59**	4.88926	±0.22356	**14.73**	**±0.67**	>100
Error Chron		**±5.78%**		±4.57%		**±4.56%**	0%
					Full External Error	±1.02	
					Analytical Error	±0.67	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0002024400
	Error Magnification	>10	Number of Iterations	3
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	31.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F24164	17.0%	✓	0.501626	0.28	0.0000000	0.00	0.0195811	0.49	0.0000000	0.00	72.4419	0.46	0.0945565	0.32	0.0000000	0.00	0.4967069	0.10	0.0130395	9.64	0.0000000	0.00	41.12834	0.05	0.0465439	1.03	205.9389	0.22	149.7655	0.30	0.0000000	0.00	0.0249649	9.65
20F24165	17.0%	✓	0.619059	0.25	0.0000000	0.00	0.0186309	0.50	0.0000000	0.00	68.9269	0.47	0.1166926	0.30	0.0000000	0.00	0.4556203	0.10	0.0124068	9.64	0.0000000	0.00	37.72628	0.05	0.0442855	1.03	192.4394	0.26	184.8262	0.27	0.0000000	0.00	0.0228999	9.65
20F24167	17.0%	✓	0.323483	0.32	0.0000000	0.00	0.0140063	0.53	0.0000000	0.00	51.8176	0.50	0.0609766	0.36	0.0000000	0.00	0.3255916	0.10	0.0093272	9.64	0.0000000	0.00	26.95965	0.05	0.0332928	1.05	138.8288	0.23	96.5792	0.34	0.0000000	0.00	0.0163645	9.65
20F24168	17.0%	✓	0.412439	0.27	0.0000000	0.00	0.0162601	0.52	0.0000000	0.00	60.1557	0.49	0.0777448	0.32	0.0000000	0.00	0.3767255	0.10	0.0108280	9.64	0.0000000	0.00	31.19364	0.05	0.0386501	1.04	160.4542	0.23	123.1379	0.29	0.0000000	0.00	0.0189345	9.65
20F24170	17.0%	✓	0.109017	0.55	0.0000000	0.00	0.0074163	0.71	0.0000009	225.48	27.4371	0.69	0.0205497	0.57	0.0000000	0.00	0.1588985	0.12	0.0049387	9.65	0.0040680	225.48	13.15712	0.08	0.0176284	1.15	66.7038	0.27	32.5481	0.56	0.0000000	0.00	0.0079864	9.65
20F24171	17.0%	✓	0.452980	0.26	0.0000000	0.00	0.0155359	0.52	0.0000005	433.76	57.4766	0.49	0.0853868	0.30	0.0000000	0.00	0.3715303	0.10	0.0103458	9.64	0.0020315	433.76	30.76346	0.05	0.0369287	1.04	153.4864	0.25	135.2418	0.28	0.0000000	0.00	0.0186734	9.65
20F24173	17.0%	✓	0.315624	0.32	0.0000000	0.00	0.0113714	0.56	0.0000000	0.00	42.0694	0.54	0.0594951	0.36	0.0000000	0.00	0.2683716	0.11	0.0075725	9.65	0.0000000	0.00	22.22171	0.06	0.0270296	1.07	110.9725	0.29	94.2326	0.34	0.0000000	0.00	0.0134886	9.65
20F24174	17.0%	✓	0.923281	0.22	0.0000000	0.00	0.0223231	0.49	0.0000000	0.00	82.5862	0.46	0.1740384	0.27	0.0000000	0.00	0.5027055	0.10	0.0148655	9.64	0.0000000	0.00	41.62504	0.05	0.0530617	1.03	206.9631	0.32	275.6546	0.24	0.0000000	0.00	0.0252664	9.65
20F24176	17.0%	✓	0.485307	0.28	0.0000000	0.00	0.0142259	0.52	0.0000000	0.00	52.6299	0.49	0.0914804	0.32	0.0000000	0.00	0.3318238	0.11	0.0094734	9.64	0.0000000	0.00	27.47568	0.06	0.0338147	1.04	122.0111	0.36	144.8933	0.30	0.0000000	0.00	0.0166777	9.65
20F24177	17.0%	✓	0.290071	0.32	0.0000000	0.00	0.0157886	0.51	0.0000002	#######	58.4114	0.48	0.0546783	0.36	0.0000000	0.00	0.3503391	0.11	0.0105140	9.64	0.0008524	#######	29.00879	0.05	0.0375293	1.04	145.7264	0.20	86.6035	0.34	0.0000000	0.00	0.0176083	9.65
20F24179	17.0%	✓	0.768232	0.23	0.0000000	0.00	0.0222511	0.48	0.0000037	58.76	82.3201	0.45	0.1448117	0.28	0.0000000	0.00	0.5864838	0.10	0.0148176	9.64	0.0161941	58.77	48.56204	0.05	0.0528906	1.03	250.2616	0.23	229.3632	0.26	0.0000000	0.00	0.0294772	9.65
20F24180	17.0%	✓	0.517633	0.26	0.0000000	0.00	0.0140403	0.53	0.0000000	0.00	51.9433	0.50	0.0975739	0.30	0.0000000	0.00	0.3325096	0.11	0.0093498	9.64	0.0000000	0.00	27.53247	0.06	0.0333736	1.05	140.5459	0.31	154.5446	0.28	0.0000000	0.00	0.0167122	9.65
20F24182	17.0%	✓	0.323900	0.32	0.0000000	0.00	0.0145970	0.52	0.0000000	0.00	54.0030	0.49	0.0610551	0.36	0.0000000	0.00	0.3437853	0.10	0.0097205	9.64	0.0000000	0.00	28.46611	0.05	0.0346969	1.04	138.9650	0.24	96.7034	0.34	0.0000000	0.00	0.0172789	9.65
20F24183	17.0%	✓	0.163136	0.47	0.0000000	0.00	0.0122520	0.55	0.0000040	51.88	45.3275	0.52	0.0307511	0.49	0.0000000	0.00	0.2636564	0.11	0.0081590	9.64	0.0172637	51.89	21.83128	0.06	0.0291229	1.06	99.2123	0.24	48.7059	0.48	0.0000000	0.00	0.0132516	9.65
20F24185	17.0%	✓	0.645829	0.24	0.0000000	0.00	0.0134908	0.54	0.0000033	68.82	49.9105	0.51	0.1217387	0.29	0.0000000	0.00	0.3313372	0.11	0.0089839	9.64	0.0140970	68.83	27.43539	0.06	0.0320675	1.05	139.1622	0.37	192.8186	0.26	0.0000000	0.00	0.0166533	9.65
20F24186	17.0%	✓	0.321861	0.31	0.0000000	0.00	0.0131789	0.53	0.0000010	228.09	48.7565	0.50	0.0606708	0.35	0.0000000	0.00	0.2729641	0.11	0.0087762	9.64	0.0042877	228.09	22.60198	0.06	0.0313260	1.05	113.5817	0.28	96.0949	0.33	0.0000000	0.00	0.0137194	9.65
20F24188	17.0%	✓	0.202980	0.41	0.0000000	0.00	0.0138603	0.53	0.0000000	0.00	51.2773	0.50	0.0382617	0.44	0.0000000	0.00	0.2734739	0.11	0.0092299	9.64	0.0000000	0.00	22.64419	0.06	0.0329457	1.05	112.5851	0.23	60.6016	0.43	0.0000000	0.00	0.0137450	9.65
20F24189	17.0%	✓	0.185699	0.42	0.0000000	0.00	0.0103831	0.59	0.0000000	0.00	38.4134	0.56	0.0350043	0.44	0.0000000	0.00	0.2285073	0.11	0.0069144	9.65	0.0000000	0.00	18.92086	0.07	0.0246806	1.08	92.6194	0.26	55.4423	0.43	0.0000000	0.00	0.0114850	9.65
20F24191	17.0%	✓	0.302683	0.32	0.0000000	0.00	0.0134135	0.53	0.0000000	0.00	49.6245	0.50	0.0570558	0.36	0.0000000	0.00	0.3320054	0.11	0.0089324	9.64	0.0000000	0.00	27.49072	0.06	0.0318838	1.05	136.6769	0.22	90.3691	0.34	0.0000000	0.00	0.0166869	9.65
20F24192	17.0%	✓	0.218869	0.35	0.0000000	0.00	0.0047520	0.88	0.0000000	0.00	17.5805	0.86	0.0412569	0.39	0.0000000	0.00	0.1336566	0.13	0.0031645	9.67	0.0000000	0.00	11.06704	0.09	0.0112955	1.26	50.7192	0.48	65.3456	0.37	0.0000000	0.00	0.0067177	9.65
20F24194	17.0%	✓	0.165157	0.44	0.0000000	0.00	0.0098144	0.61	0.0000000	0.00	36.3093	0.59	0.0311322	0.47	0.0000000	0.00	0.2247148	0.11	0.0065357	9.65	0.0000000	0.00	18.60684	0.07	0.0233287	1.09	94.4327	0.24	49.3094	0.45	0.0000000	0.00	0.0112944	9.65
20F24195	17.0%	✓	0.134071	0.51	0.0000000	0.00	0.0072833	0.71	0.0000000	0.00	26.9452	0.68	0.0252723	0.54	0.0000000	0.00	0.1965064	0.12	0.0048501	9.65	0.0000000	0.00	16.27113	0.07	0.0173123	1.15	77.3343	0.27	40.0281	0.52	0.0000000	0.00	0.0098766	9.65
20F24197	17.0%	✓	0.196731	0.39	0.0000000	0.00	0.0133457	0.54	0.0000000	0.00	49.3736	0.51	0.0370837	0.43	0.0000000	0.00	0.3083311	0.11	0.0088873	9.64	0.0000000	0.00	25.53044	0.06	0.0317226	1.05	127.5340	0.19	58.7359	0.41	0.0000000	0.00	0.0154970	9.65
20F24198	17.0%	✓	0.268799	0.35	0.0000000	0.00	0.0098398	0.57	0.0000000	0.00	36.4033	0.55	0.0506686	0.38	0.0000000	0.00	0.2506213	0.11	0.0065526	9.65	0.0000000	0.00	20.75195	0.06	0.0233891	1.07	103.0448	0.28	80.2526	0.36	0.0000000	0.00	0.0125964	9.65
20F24200	17.0%	✓	0.137758	0.47	0.0000000	0.00	0.0077335	0.66	0.0000001	#######	28.6107	0.64	0.0259673	0.49	0.0000000	0.00	0.1713150	0.12	0.0051499	9.65	0.0002841	#######	14.18523	0.08	0.0183823	1.12	73.1557	0.27	41.1289	0.48	0.0000000	0.00	0.0086104	9.65
20F24201	17.0%	✓	0.440973	0.27	0.0000000	0.00	0.0165959	0.51	0.0000012	181.54	61.3982	0.48	0.0831233	0.32	0.0000000	0.00	0.2556769	0.11	0.0110517	9.64	0.0052255	181.55	21.17057	0.06	0.0394483	1.04	94.9595	0.41	131.6568	0.29	0.0000000	0.00	0.0128505	9.65
20F24203	17.0%	✓	0.213640	0.39	0.0000000	0.00	0.0098041	0.57	0.0000000	0.00	36.2711	0.54	0.0402711	0.42	0.0000000	0.00	0.2246862	0.11	0.0065288	9.65	0.0000000	0.00	18.60447	0.07	0.0233042	1.07	94.9724	0.27	63.7843	0.40	0.0000000	0.00	0.0112929	9.65
20F24204	17.0%	✓	0.335563	0.32	0.0000000	0.00	0.0139632	0.51	0.0000000	0.00	51.6580	0.49	0.0632536	0.36	0.0000000	0.00	0.2609244	0.11	0.0092984	9.64	0.0000000	0.00	21.60506	0.06	0.0331903	1.04	107.2875	0.31	100.1856	0.33	0.0000000	0.00	0.0131143	9.65
20F24206	17.0%	✓	0.220805	0.36	0.0000000	0.00	0.0086518	0.62	0.0000022	102.48	32.0082	0.59	0.0416218	0.39	0.0000000	0.00	0.2261203	0.11	0.0057615	9.65	0.0093237	102.48	18.72322	0.07	0.0205652	1.09	92.0915	0.27	65.9236	0.37	0.0000000	0.00	0.0113650	9.65
20F24207	17.0%	✓	0.481611	0.30	0.0000000	0.00	0.0151510	0.52	0.0000016	130.34	56.0524	0.49	0.0907837	0.34	0.0000000	0.00	0.4165418	0.10	0.0100894	9.64	0.0070705	130.34	34.49050	0.05	0.0360137	1.04	164.9031	0.28	143.7898	0.32	0.0000000	0.00	0.0209357	9.65
		Σ	10.678814	0.06	0.0000000	0.00	0.3995411	0.10	0.0000187	38.40	1478.1393	0.10	2.0129565	0.07	0.0000000	0.00	9.2721308	0.02	0.2660651	1.84	0.0806982	38.41	767.75117	0.01	0.9497045	0.20	3807.5695	0.05	3188.2668	0.06	0.0000000	0.00	0.4660250	1.86
		Σ							11.078374	0.06	1478.1393	0.10									11.631851	0.27			768.70087	0.01							6996.3023	0.04

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F24164	17.0 %	✓	8.639475	0.004479	1.759372	0.008186	0.012658	0.000034	142.240	16.643137	1.00100503	1.259E-11
20F24165	17.0 %	✓	9.988956	0.005131	1.824883	0.008624	0.016883	0.000042	142.247	16.645192	1.00100508	1.336E-11
20F24167	17.0 %	✓	8.721700	0.004778	1.919673	0.009714	0.012503	0.000039	142.258	16.649074	1.00100516	8.334E-12
20F24168	17.0 %	✓	9.080701	0.004955	1.926075	0.009428	0.013726	0.000037	142.264	16.650901	1.00100520	1.004E-11
20F24170	17.0 %	✓	7.534105	0.006387	2.082555	0.014502	0.008838	0.000046	142.276	16.654784	1.00100528	3.514E-12
20F24171	17.0 %	✓	9.374780	0.004972	1.866099	0.009274	0.015211	0.000039	142.282	16.656840	1.00100533	1.022E-11
20F24173	17.0 %	✓	9.223832	0.005718	1.890868	0.010239	0.014697	0.000047	142.294	16.660725	1.00100541	7.265E-12
20F24174	17.0 %	✓	11.580255	0.005858	1.981526	0.009111	0.022688	0.000050	142.300	16.662782	1.00100546	1.709E-11
20F24176	17.0 %	✓	9.702870	0.005633	1.913154	0.009412	0.018159	0.000050	142.312	16.666668	1.00100554	9.449E-12
20F24177	17.0 %	✓	7.999207	0.004428	2.010974	0.009800	0.010530	0.000033	142.317	16.668496	1.00100558	8.225E-12
20F24179	17.0 %	✓	9.866399	0.004739	1.693308	0.007727	0.016260	0.000038	142.330	16.672612	1.00100567	1.698E-11
20F24180	17.0 %	✓	10.705539	0.006032	1.884335	0.009570	0.019287	0.000050	142.335	16.674442	1.00100571	1.045E-11
20F24182	17.0 %	✓	8.269439	0.004577	1.894787	0.009402	0.011877	0.000037	142.347	16.678331	1.00100579	8.343E-12
20F24183	17.0 %	✓	6.767095	0.004437	2.073500	0.010845	0.008023	0.000035	142.353	16.680390	1.00100583	5.237E-12
20F24185	17.0 %	✓	12.086939	0.006749	1.817079	0.009350	0.024004	0.000059	142.365	16.684280	1.00100592	1.175E-11
20F24186	17.0 %	✓	9.264682	0.005942	2.154193	0.010913	0.014803	0.000045	142.372	16.686340	1.00100596	7.423E-12
20F24188	17.0 %	✓	7.637668	0.004846	2.261191	0.011339	0.009562	0.000037	142.383	16.690231	1.00100604	6.131E-12
20F24189	17.0 %	✓	7.815729	0.005524	2.027568	0.011451	0.010350	0.000041	142.390	16.692292	1.00100609	5.242E-12
20F24191	17.0 %	✓	8.250044	0.004684	1.803046	0.009029	0.011485	0.000036	142.401	16.696184	1.00100617	8.038E-12
20F24192	17.0 %	✓	10.477348	0.010039	1.586929	0.013714	0.020185	0.000072	142.407	16.698017	1.00100621	4.109E-12
20F24194	17.0 %	✓	7.716158	0.005587	1.948951	0.011595	0.009392	0.000039	142.419	16.701911	1.00100629	5.089E-12
20F24195	17.0 %	✓	7.205865	0.005538	1.654251	0.011390	0.008678	0.000043	142.425	16.703973	1.00100634	4.155E-12
20F24197	17.0 %	✓	7.287546	0.004207	1.931513	0.009869	0.008218	0.000031	142.437	16.707868	1.00100642	6.595E-12
20F24198	17.0 %	✓	8.823444	0.005636	1.752235	0.009659	0.013412	0.000046	142.443	16.709931	1.00100647	6.489E-12
20F24200	17.0 %	✓	8.046770	0.006631	2.014322	0.013030	0.010243	0.000046	142.455	16.713828	1.00100655	4.046E-12
20F24201	17.0 %	✓	10.685003	0.006915	2.894772	0.013897	0.021573	0.000058	142.461	16.715891	1.00100659	8.023E-12
20F24203	17.0 %	✓	8.523186	0.005777	1.947153	0.010573	0.011995	0.000045	142.473	16.719790	1.00100668	5.620E-12
20F24204	17.0 %	✓	9.588858	0.005895	2.387345	0.011690	0.016153	0.000050	142.478	16.721625	1.00100672	7.345E-12
20F24206	17.0 %	✓	8.430876	0.005665	1.707668	0.010183	0.012242	0.000043	142.491	16.725754	1.00100680	5.594E-12
20F24207	17.0 %	✓	8.941354	0.004687	1.623459	0.008060	0.014388	0.000043	142.497	16.727589	1.00100684	1.093E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F24164	17.0 %	0.0049879 ±0.0001585	0.0153285 ±0.0058027	0.0022616 ±0.0069006	0.0151427 ±0.0060337	1.1412177 ±0.0155735
20F24165	17.0 %	0.0049879 ±0.0001585	0.0153285 ±0.0058027	0.0022616 ±0.0069006	0.0151427 ±0.0060337	1.1412177 ±0.0155735
20F24167	17.0 %	0.0053330 ±0.0001651	0.0185990 ±0.0055850	0.0019630 ±0.0063171	0.0111615 ±0.0059170	1.1146935 ±0.0152629
20F24168	17.0 %	0.0053330 ±0.0001651	0.0185990 ±0.0055850	0.0019630 ±0.0063171	0.0111615 ±0.0059170	1.1146935 ±0.0152629
20F24170	17.0 %	0.0052561 ±0.0001666	0.0059928 ±0.0058221	0.0070978 ±0.0065721	0.0203970 ±0.0055482	1.0965964 ±0.0146692
20F24171	17.0 %	0.0052561 ±0.0001666	0.0059928 ±0.0058221	0.0070978 ±0.0065721	0.0203970 ±0.0055482	1.0965964 ±0.0146692
20F24173	17.0 %	0.0050033 ±0.0001764	0.0165005 ±0.0058366	0.0064121 ±0.0063595	0.0058059 ±0.0062200	1.1188482 ±0.0154292
20F24174	17.0 %	0.0050033 ±0.0001764	0.0165005 ±0.0058366	0.0064121 ±0.0063595	0.0058059 ±0.0062200	1.1188482 ±0.0154292
20F24176	17.0 %	0.0051653 ±0.0001621	0.0169131 ±0.0056205	0.0081547 ±0.0061900	0.0108189 ±0.0058093	1.0839408 ±0.0146272
20F24177	17.0 %	0.0051653 ±0.0001621	0.0169131 ±0.0056205	0.0081547 ±0.0061900	0.0108189 ±0.0058093	1.0839408 ±0.0146272
20F24179	17.0 %	0.0045944 ±0.0001711	0.0091529 ±0.0062311	0.0028668 ±0.0070391	0.0062738 ±0.0067121	1.1515991 ±0.0164315
20F24180	17.0 %	0.0045944 ±0.0001711	0.0091529 ±0.0062311	0.0028668 ±0.0070391	0.0062738 ±0.0067121	1.1515991 ±0.0164315
20F24182	17.0 %	0.0045887 ±0.0001598	0.0161792 ±0.0058218	0.0108477 ±0.0066531	0.0133057 ±0.0063960	1.0885180 ±0.0156315
20F24183	17.0 %	0.0045887 ±0.0001598	0.0161792 ±0.0058218	0.0108477 ±0.0066531	0.0133057 ±0.0063960	1.0885180 ±0.0156315
20F24185	17.0 %	0.0049430 ±0.0001758	0.0108947 ±0.0055007	0.0106508 ±0.0069052	0.0213879 ±0.0060775	1.1536108 ±0.0150534
20F24186	17.0 %	0.0049430 ±0.0001758	0.0108947 ±0.0055007	0.0106508 ±0.0069052	0.0213879 ±0.0060775	1.1536108 ±0.0150534
20F24188	17.0 %	0.0054718 ±0.0001749	0.0110942 ±0.0057758	0.0013647 ±0.0058918	0.0000070 ±0.0059845	1.2280419 ±0.0167770
20F24189	17.0 %	0.0054718 ±0.0001749	0.0110942 ±0.0057758	0.0013647 ±0.0058918	0.0000070 ±0.0059845	1.2280419 ±0.0167770
20F24191	17.0 %	0.0047325 ±0.0001701	0.0104340 ±0.0053813	0.0072828 ±0.0069656	0.0057140 ±0.0058724	1.1138849 ±0.0154554
20F24192	17.0 %	0.0047325 ±0.0001701	0.0104340 ±0.0053813	0.0072828 ±0.0069656	0.0057140 ±0.0058724	1.1138849 ±0.0154554
20F24194	17.0 %	0.0047154 ±0.0001569	0.0141410 ±0.0064471	0.0050197 ±0.0067074	0.0152762 ±0.0057786	1.0760924 ±0.0155802
20F24195	17.0 %	0.0047154 ±0.0001569	0.0141410 ±0.0064471	0.0050197 ±0.0067074	0.0152762 ±0.0057786	1.0760924 ±0.0155802
20F24197	17.0 %	0.0042621 ±0.0001545	0.0170323 ±0.0052701	0.0082646 ±0.0062515	0.0162429 ±0.0050709	1.0653615 ±0.0151573
20F24198	17.0 %	0.0042621 ±0.0001545	0.0170323 ±0.0052701	0.0082646 ±0.0062515	0.0162429 ±0.0050709	1.0653615 ±0.0151573
20F24200	17.0 %	0.0049814 ±0.0001538	0.0167270 ±0.0056931	0.0147786 ±0.0064946	0.0264942 ±0.0059645	1.0972295 ±0.0163941
20F24201	17.0 %	0.0049814 ±0.0001538	0.0167270 ±0.0056931	0.0147786 ±0.0064946	0.0264942 ±0.0059645	1.0972295 ±0.0163941
20F24203	17.0 %	0.0042621 ±0.0001545	0.0170323 ±0.0052701	0.0082646 ±0.0062515	0.0162429 ±0.0050709	1.0653615 ±0.0151573
20F24204	17.0 %	0.0042621 ±0.0001545	0.0170323 ±0.0052701	0.0082646 ±0.0062515	0.0162429 ±0.0050709	1.0653615 ±0.0151573
20F24206	17.0 %	0.0049814 ±0.0001538	0.0167270 ±0.0056931	0.0147786 ±0.0064946	0.0264942 ±0.0059645	1.0972295 ±0.0163941
20F24207	17.0 %	0.0049814 ±0.0001538	0.0167270 ±0.0056931	0.0147786 ±0.0064946	0.0264942 ±0.0059645	1.0972295 ±0.0163941

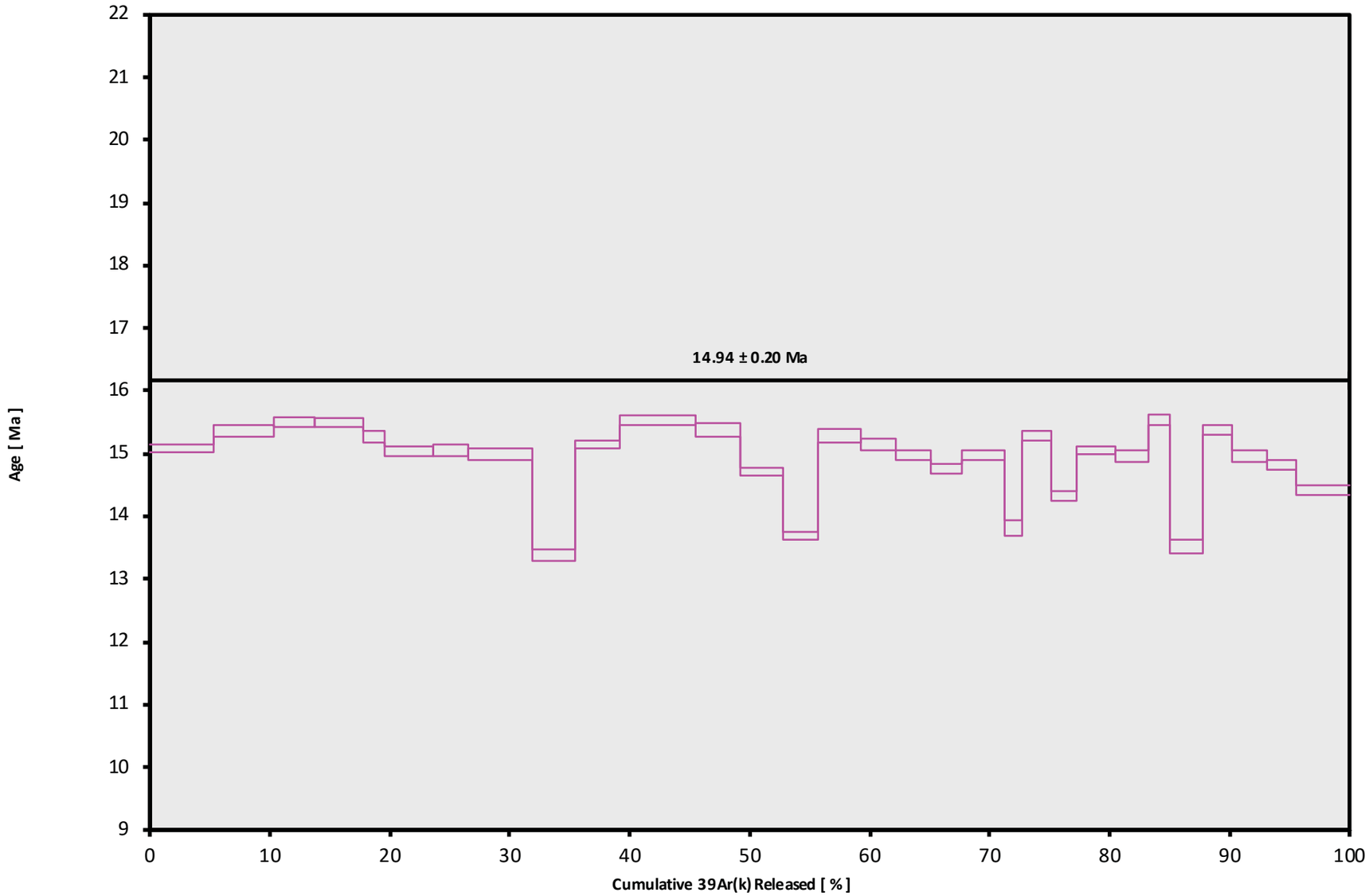
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F24164	17.0 %	0.5169099 ±0.0010748	0.9516	EXP 150 of 150	4.3410648 ±0.0061405	0.9827	EXP 149 of 150	0.5838892 ±0.0059444	0.5473	EXP 146 of 150	41.160433 ±0.011360	0.9993	EXP 150 of 150	356.87055 ±0.02959	0.9999	EXP 150 of 150
20F24165	17.0 %	0.6313173 ±0.0011498	0.9630	EXP 150 of 150	4.1291702 ±0.0065362	0.9771	EXP 149 of 150	0.5777903 ±0.0065017	0.4716	EXP 150 of 150	37.758562 ±0.009880	0.9994	EXP 149 of 150	378.42971 ±0.02885	0.9999	EXP 149 of 150
20F24167	17.0 %	0.3368104 ±0.0008442	0.9198	EXP 150 of 150	3.0964125 ±0.0065891	0.9607	EXP 150 of 150	0.3834916 ±0.0071003	0.2469	EXP 149 of 150	26.984698 ±0.007377	0.9993	EXP 148 of 150	236.53901 ±0.02436	0.9998	EXP 150 of 150
20F24168	17.0 %	0.4263954 ±0.0008592	0.9536	EXP 150 of 150	3.5972595 ±0.0069129	0.9669	EXP 150 of 150	0.4584072 ±0.0071881	0.2901	EXP 150 of 150	31.220997 ±0.009223	0.9992	EXP 149 of 150	284.72574 ±0.02739	0.9999	EXP 149 of 150
20F24170	17.0 %	0.1196161 ±0.0005290	0.5580	EXP 150 of 150	1.6428219 ±0.0069437	0.8676	EXP 149 of 150	0.1814649 ±0.0063693	0.0856	EXP 150 of 150	13.185670 ±0.007335	0.9971	EXP 146 of 150	100.35650 ±0.02142	0.9989	EXP 150 of 150
20F24171	17.0 %	0.4654262 ±0.0008580	0.9605	EXP 149 of 150	3.4475949 ±0.0068651	0.9669	EXP 150 of 150	0.4624652 ±0.0056810	0.4365	EXP 148 of 150	30.798642 ±0.008314	0.9993	EXP 150 of 150	289.84346 ±0.03025	0.9998	EXP 150 of 150
20F24173	17.0 %	0.3261730 ±0.0008363	0.9121	EXP 150 of 150	2.5107298 ±0.0061820	0.9490	EXP 150 of 150	0.3255168 ±0.0071148	0.1325	EXP 150 of 150	22.238545 ±0.007809	0.9988	EXP 149 of 150	206.33746 ±0.02494	0.9998	EXP 150 of 150
20F24174	17.0 %	0.9337613 ±0.0012932	0.9808	EXP 150 of 150	4.9440792 ±0.0067692	0.9834	EXP 150 of 150	0.6827648 ±0.0067319	0.5278	EXP 150 of 150	41.653934 ±0.010696	0.9994	EXP 150 of 150	483.76183 ±0.03180	0.9999	EXP 148 of 150
20F24176	17.0 %	0.4957992 ±0.0010606	0.9505	EXP 148 of 150	3.1435883 ±0.0055367	0.9719	EXP 150 of 150	0.4160919 ±0.0060730	0.2416	EXP 146 of 150	27.500531 ±0.009447	0.9989	EXP 150 of 150	268.00500 ±0.02530	0.9999	EXP 146 of 150
20F24177	17.0 %	0.3055758 ±0.0007582	0.9119	EXP 150 of 150	3.4903900 ±0.0063155	0.9735	EXP 150 of 150	0.4084675 ±0.0066256	0.2604	EXP 150 of 150	29.036246 ±0.008717	0.9991	EXP 149 of 150	233.43145 ±0.02321	0.9999	EXP 145 of 150
20F24179	17.0 %	0.7809986 ±0.0012219	0.9726	EXP 149 of 150	4.9325227 ±0.0057650	0.9881	EXP 150 of 150	0.7598766 ±0.0059826	0.6486	EXP 149 of 150	48.586238 ±0.010072	0.9996	EXP 150 of 150	480.80590 ±0.03450	0.9999	EXP 148 of 150
20F24180	17.0 %	0.5267964 ±0.0009967	0.9572	EXP 150 of 150	3.1086618 ±0.0061145	0.9669	EXP 150 of 150	0.4230845 ±0.0071022	0.2070	EXP 150 of 150	27.552285 ±0.007933	0.9992	EXP 149 of 150	296.25876 ±0.02927	0.9999	EXP 149 of 150
20F24182	17.0 %	0.3370551 ±0.0008568	0.9119	EXP 150 of 150	3.2245091 ±0.0060188	0.9698	EXP 150 of 150	0.4008261 ±0.0065903	0.2430	EXP 150 of 150	28.493613 ±0.007997	0.9993	EXP 145 of 150	236.77422 ±0.02404	0.9998	EXP 150 of 150
20F24183	17.0 %	0.1768561 ±0.0006709	0.7275	EXP 150 of 150	2.7035661 ±0.0059094	0.9585	EXP 148 of 150	0.3091656 ±0.0058978	0.3134	EXP 148 of 150	21.857985 ±0.008451	0.9985	EXP 150 of 150	149.01997 ±0.02143	0.9996	EXP 150 of 150
20F24185	17.0 %	0.6525202 ±0.0011161	0.9683	EXP 149 of 150	2.9831419 ±0.0067899	0.9544	EXP 149 of 150	0.4657786 ±0.0066747	0.3824	EXP 150 of 150	27.469084 ±0.008325	0.9991	EXP 150 of 150	333.15111 ±0.02670	0.9999	EXP 147 of 150
20F24186	17.0 %	0.3340154 ±0.0008151	0.9183	EXP 148 of 150	2.9135514 ±0.0059006	0.9650	EXP 150 of 150	0.3362464 ±0.0068288	0.1965	EXP 150 of 150	22.638404 ±0.009016	0.9984	EXP 150 of 150	210.84394 ±0.02376	0.9998	EXP 150 of 150
20F24188	17.0 %	0.2184487 ±0.0007237	0.8152	EXP 148 of 150	3.0638369 ±0.0058164	0.9685	EXP 150 of 150	0.3129890 ±0.0065560	0.1582	EXP 150 of 150	22.660824 ±0.008613	0.9986	EXP 150 of 150	174.42849 ±0.02237	0.9997	EXP 149 of 150
20F24189	17.0 %	0.1980609 ±0.0006661	0.8133	EXP 150 of 150	2.2921441 ±0.0063002	0.9344	EXP 150 of 150	0.2619101 ±0.0058944	0.1265	EXP 147 of 150	18.931917 ±0.008438	0.9980	EXP 150 of 150	149.30129 ±0.02386	0.9995	EXP 150 of 150
20F24191	17.0 %	0.3151980 ±0.0007850	0.9141	EXP 150 of 150	2.9643221 ±0.0058243	0.9669	EXP 150 of 150	0.3890106 ±0.0059265	0.3120	EXP 148 of 150	27.508506 ±0.008584	0.9991	EXP 149 of 150	228.17657 ±0.02527	0.9998	EXP 150 of 150
20F24192	17.0 %	0.2243700 ±0.0006447	0.8622	EXP 150 of 150	1.0433199 ±0.0057773	0.7931	EXP 150 of 150	0.1705496 ±0.0056338	0.0462	EXP 147 of 150	11.076072 ±0.007245	0.9958	EXP 145 of 150	117.18542 ±0.01956	0.9994	EXP 150 of 150
20F24194	17.0 %	0.1765700 ±0.0006369	0.7771	EXP 150 of 150	2.1616836 ±0.0063265	0.9295	EXP 150 of 150	0.2550116 ±0.0065516	0.1483	EXP 150 of 150	18.632036 ±0.008993	0.9977	EXP 150 of 150	144.82943 ±0.02063	0.9996	EXP 150 of 150
20F24195	17.0 %	0.1435511 ±0.0006158	0.6544	EXP 150 of 150	1.6003413 ±0.0058773	0.8970	EXP 150 of 150	0.2176402 ±0.0062870	0.0999	EXP 150 of 150	16.291988 ±0.008162	0.9975	EXP 150 of 150	118.44838 ±0.02138	0.9992	EXP 148 of 150
20F24197	17.0 %	0.2105961 ±0.0006641	0.8121	EXP 149 of 150	2.9406152 ±0.0065761	0.9568	EXP 150 of 150	0.3470868 ±0.0052798	0.4044	EXP 149 of 150	25.560001 ±0.008534	0.9989	EXP 150 of 150	187.35082 ±0.02154	0.9998	EXP 147 of 150
20F24198	17.0 %	0.2779371 ±0.0007875	0.8848	EXP 150 of 150	2.1633770 ±0.0055527	0.9429	EXP 150 of 150	0.3037511 ±0.0065159	0.2013	EXP 149 of 150	20.776624 ±0.008380	0.9984	EXP 150 of 150	184.37542 ±0.02340	0.9997	EXP 150 of 150
20F24200	17.0 %	0.1478806 ±0.0005635	0.7120	EXP 150 of 150	1.6965361 ±0.0060554	0.9034	EXP 146 of 150	0.1880538 ±0.0067160	0.0640	EXP 150 of 150	14.219878 ±0.007646	0.9971	EXP 150 of 150	115.39044 ±0.01960	0.9994	EXP 150 of 150
20F24201	17.0 %	0.4543997 ±0.0009131	0.9553	EXP 150 of 150	3.6594637 ±0.0058914	0.9774	EXP 150 of 150	0.3405021 ±0.0067868	0.1828	EXP 148 of 150	21.221234 ±0.008473	0.9984	EXP 150 of 150	227.72631 ±0.02523	0.9998	EXP 150 of 150
20F24203	17.0 %	0.2237255 ±0.0007126	0.8447	EXP 150 of 150	2.1541805 ±0.0050841	0.9531	EXP 150 of 150	0.2433506 ±0.0074668	0.0574	EXP 150 of 150	18.630601 ±0.008163	0.9981	EXP 150 of 150	159.83334 ±0.02330	0.9996	EXP 150 of 150
20F24204	17.0 %	0.3475613 ±0.0008745	0.9220	EXP 150 of 150	3.0749090 ±0.0053845	0.9741	EXP 149 of 150	0.3142898 ±0.0071071	0.1187	EXP 150 of 150	21.638911 ±0.008084	0.9986	EXP 150 of 150	208.55152 ±0.02589	0.9998	EXP 149 of 150
20F24206	17.0 %	0.2303528 ±0.0006697	0.8745	EXP 150 of 150	1.8986185 ±0.0056197	0.9218	EXP 149 of 150	0.2682106 ±0.0069586	0.1554	EXP 150 of 150	18.756772 ±0.007540	0.9985	EXP 148 of 150	159.12373 ±0.01938	0.9997	EXP 148 of 150
20F24207	17.0 %	0.4928953 ±0.0011789	0.9362	EXP 149 of 150	3.3370410 ±0.0065505	0.9669	EXP 150 of 150	0.5100070 ±0.0063476	0.4240	EXP 150 of 150	34.528132 ±0.009325	0.9993	EXP 150 of 150	309.81100 ±0.02547	0.9999	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F24164	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24165	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24167	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24168	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24170	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24171	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24173	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24174	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24176	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24177	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24179	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24180	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24182	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24183	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24185	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24186	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24188	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24189	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24191	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24192	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24194	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24195	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24197	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24198	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24200	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24201	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24203	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24204	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24206	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01
20F24207	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	2.09	Oregon\Swenton (20-01)	20F24159	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F24164	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	20	17	1
20F24165	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	20	26	1
20F24167	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	20	43	1
20F24168	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	20	51	1
20F24170	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	21	8	1
20F24171	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	21	17	1
20F24173	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	21	34	1
20F24174	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	21	43	1
20F24176	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	22	0	1
20F24177	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	22	8	1
20F24179	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	22	26	1
20F24180	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	22	34	1
20F24182	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	22	51	1
20F24183	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	23	0	1
20F24185	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	23	17	1
20F24186	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	23	26	1
20F24188	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	23	43	1
20F24189	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	5	SEP	2020	23	52	1
20F24191	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	0	9	1
20F24192	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	0	17	1
20F24194	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	0	34	1
20F24195	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	0	43	1
20F24197	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	1	0	1
20F24198	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	1	9	1
20F24200	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	1	26	1
20F24201	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	1	35	1
20F24203	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	1	52	1
20F24204	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	2	0	1
20F24206	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	2	18	1
20F24207	17.0 %	VS19-079	Plagioclase	Rhyolite Dome	FCT-NM (1D3-20)	28.201	0.082	Kuiper et al (2008)	9.39301	0.072	0.00165288	0.072	298.219	0.123	1.0002862	0.040	1	3.54E-14	6	SEP	2020	2	26	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F24164	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24165	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24167	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24168	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24170	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24171	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24173	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24174	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24176	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24177	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24179	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24180	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24182	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24183	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24185	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24186	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24188	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24189	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24191	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24192	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24194	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24195	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24197	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24198	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24200	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24201	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24203	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24204	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24206	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24207	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F24159.AGE >>> VS19-079 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

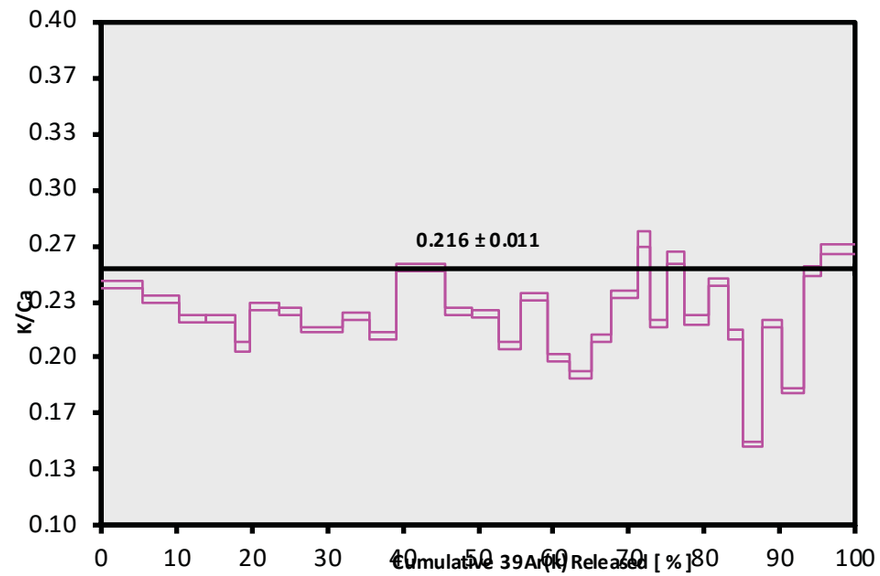
WEIGHTED PLATEAU
14.94 ± 0.20
TOTAL FUSION
14.94 ± 0.03
NORMAL ISOCHRON
14.58 ± 0.73
INVERSE ISOCHRON
14.73 ± 0.67

MSWD (PROBABILITY)
> 100 (0%)

Sample Info

Plagioclase
Rhyolite Dome
Dan Miggins

20F24159.AGE >>> VS19-079 >>> OREGON

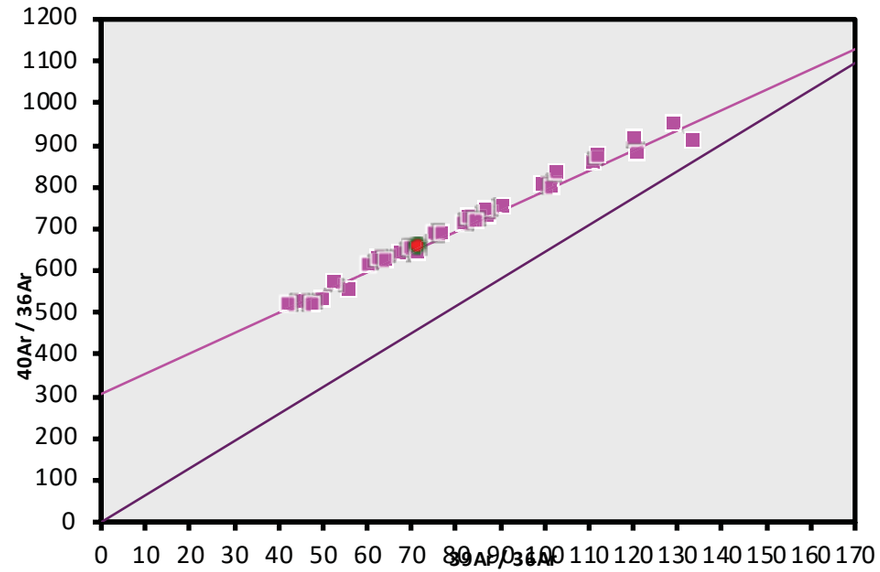


Ar-Ages in Ma

WEIGHTED PLATEAU
14.94 ± 0.20
TOTAL

Sample Info

20F24159.AGE >>> VS19-079 >>> OREGON

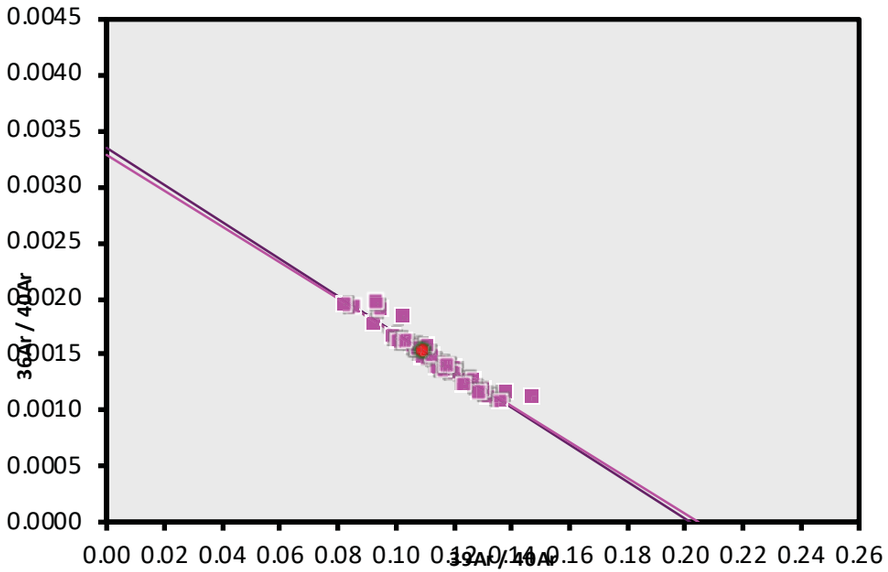


Ar-Ages in Ma

WEIGHTED PLATEAU
14.94 ± 0.20
TOTAL

Sample Info

20F24159.AGE >>> VS19-079 >>> OREGON



Ar-Ages in Ma

WEIGHTED PLATEAU
14.94 ± 0.20
TOTAL

Sample Info

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k)	±2σ	Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca	±2σ
20F25072	0.3 %		0.3884801	0.284	0.354894	54.174	0.327433	2.770	16.7499	0.080	131.104	0.130	0.12585	±0.17172	0.37	±0.51	1.61	0.57	20.3	±22.0
20F25074	0.4 %		0.2936740	0.318	0.177134	108.335	0.298318	2.968	14.9794	0.091	101.144	0.168	0.24174	±0.14713	0.72	±0.44	3.58	0.51	36.4	±78.8
20F25075	0.5 %		0.1369406	0.512	0.515605	38.441	0.173723	4.877	9.0525	0.133	48.675	0.349	0.35772	±0.12494	1.06	±0.37	6.65	0.31	7.5	±5.8
20F25077	0.6 %		0.2982775	0.330	0.459885	42.985	0.398241	2.291	21.3619	0.069	108.477	0.157	0.44232	±0.10504	1.32	±0.31	8.71	0.73	20.0	±17.2
20F25078	0.7 %		0.2950622	0.342	0.920480	20.812	0.532512	1.662	29.7705	0.057	120.121	0.142	0.74570	±0.07478	2.22	±0.22	18.48	1.02	13.9	±5.8
20F25080	0.9 %		0.1898588	0.428	0.795093	24.743	0.439674	1.939	23.9436	0.063	85.686	0.198	0.94793	±0.06229	2.82	±0.19	26.49	0.82	12.9	±6.4
20F25081	1.1 %		0.1046630	0.622	0.557269	35.027	0.287729	3.232	15.6624	0.084	54.660	0.311	1.27356	±0.05910	3.78	±0.18	36.49	0.54	12.1	±8.5
20F25083	1.3 %		0.1301807	0.530	0.702365	27.677	0.382122	2.471	21.8098	0.070	76.253	0.223	1.51658	±0.04986	4.51	±0.15	43.38	0.75	13.4	±7.4
20F25084	1.5 %		0.2629129	0.338	1.699553	11.354	0.882949	1.053	50.3617	0.047	187.889	0.091	1.99981	±0.03948	5.94	±0.12	53.60	1.72	12.7	±2.9
20F25086	1.8 %		0.3417432	0.315	2.114513	9.498	1.133984	0.813	68.8027	0.044	305.206	0.056	2.78882	±0.03716	8.28	±0.11	62.87	2.35	14.0	±2.7
20F25087	2.2 %		0.1964820	0.429	1.896073	10.366	1.041319	0.876	67.3339	0.045	303.517	0.056	3.54073	±0.02309	10.50	±0.07	78.55	2.30	15.3	±3.2
20F25089	2.6 %		0.1798910	0.459	2.565991	7.727	1.372997	0.690	96.6408	0.042	481.793	0.036	4.36918	±0.01524	12.95	±0.05	87.64	3.30	16.2	±2.5
20F25090	3.1 %		0.1623180	0.469	3.936814	4.807	2.073110	0.425	162.4022	0.041	907.531	0.019	5.25792	±0.00908	15.57	±0.03	94.09	5.55	17.7	±1.7
20F25091	3.6 %		0.1199571	0.598	3.948812	5.016	2.229134	0.427	187.6309	0.040	1113.461	0.016	5.72334	±0.00718	16.94	±0.02	96.44	6.41	20.4	±2.0
20F25093	4.1 %		0.1095997	0.613	4.426290	4.339	2.455658	0.371	214.4801	0.040	1303.429	0.014	5.90876	±0.00652	17.49	±0.02	97.23	7.33	20.8	±1.8
20F25094	4.7 %		0.0660188	0.905	4.305171	4.366	2.380309	0.384	211.4433	0.040	1278.686	0.014	5.94502	±0.00582	17.60	±0.02	98.31	7.23	21.1	±1.8
20F25095	5.3 %		0.0676174	0.833	4.990607	3.966	2.746968	0.349	243.0247	0.040	1465.681	0.012	5.93991	±0.00555	17.58	±0.02	98.49	8.31	20.9	±1.7
20F25097	6.0 %		0.0634653	0.915	5.180419	3.662	2.863608	0.353	254.5061	0.040	1525.015	0.012	5.91053	±0.00542	17.50	±0.02	98.64	8.70	21.1	±1.5
20F25098	6.8 %		0.0609635	0.958	4.330158	4.272	2.457870	0.374	219.6937	0.040	1305.288	0.014	5.85047	±0.00560	17.32	±0.02	98.47	7.51	21.8	±1.9
20F25099	7.5 %		0.0553059	1.091	4.136538	4.712	2.181093	0.446	189.7211	0.040	1118.243	0.016	5.79876	±0.00581	17.17	±0.02	98.38	6.49	19.7	±1.9
20F25101	8.3 %		0.0552521	1.055	3.902040	5.117	1.913802	0.488	168.4332	0.041	986.541	0.018	5.74977	±0.00605	17.02	±0.02	98.17	5.76	18.6	±1.9
20F25102	9.1 %		0.0540198	1.056	2.822501	6.399	1.486626	0.616	127.8434	0.041	746.699	0.023	5.70185	±0.00685	16.88	±0.02	97.62	4.37	19.5	±2.5
20F25103	10.1 %	✓	0.0739636	0.857	2.251149	8.427	1.316939	0.733	111.8169	0.042	658.987	0.026	5.67504	±0.00825	16.80	±0.02	96.29	3.82	21.4	±3.6
20F25105	11.2 %	✓	0.0746026	0.776	1.879675	10.095	1.073414	0.825	92.2263	0.043	548.202	0.032	5.67674	±0.00937	16.81	±0.03	95.50	3.15	21.1	±4.3
20F25106	12.4 %	✓	0.0929584	0.674	1.640676	11.710	0.859126	1.078	72.5945	0.044	442.312	0.039	5.66913	±0.01273	16.79	±0.04	93.04	2.48	19.0	±4.5
20F25107	13.6 %	✓	0.1133745	0.625	1.280314	15.261	0.672215	1.367	57.4488	0.046	363.599	0.047	5.67513	±0.01804	16.80	±0.05	89.67	1.96	19.3	±5.9
20F25109	14.9 %	✓	0.1282800	0.531	1.038424	18.070	0.555731	1.670	45.5925	0.048	302.164	0.057	5.69455	±0.02417	16.86	±0.07	85.92	1.56	18.9	±6.8
20F25110	16.2 %	✓	0.1353440	0.513	0.579414	31.461	0.433156	2.201	36.3231	0.052	252.193	0.068	5.70641	±0.03139	16.90	±0.09	82.19	1.24	27.0	±17.0
20F25111	17.6 %	✓	0.1410021	0.534	0.696171	27.479	0.359770	2.494	29.6730	0.057	215.806	0.079	5.69620	±0.03998	16.86	±0.12	78.32	1.01	18.3	±10.1
20F25113	19.0 %	✓	0.1413271	0.509	0.528756	35.845	0.309941	2.805	24.3281	0.063	185.075	0.092	5.67954	±0.04835	16.82	±0.14	74.66	0.83	19.8	±14.2
20F25114	20.5 %	✓	0.1343343	0.554	0.498771	37.806	0.253850	3.567	20.5350	0.070	161.786	0.105	5.70760	±0.05549	16.90	±0.16	72.44	0.70	17.7	±13.4
20F25116	22.3 %	✓	0.1331552	0.514	0.466162	40.565	0.252250	3.477	18.7800	0.075	151.393	0.113	5.70826	±0.05941	16.90	±0.18	70.81	0.64	17.3	±14.1
		Σ	4.8010255	0.089	65.597718	1.660	36.145570	0.144	2924.9663	0.010	17036.615	0.006								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-080**
Material = **Groundmass**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C34-20)**
Position = **X: 0 | Y: 0 | Z/H: 42.99641 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.55461 ± 0.01481**
FCT-NM J-value = **0.00162492 ± 0.00000252**
Air Shot 40Ar/36Ar = **298.2690 ± 0.3460**
Air Shot MDF = **1.00024422 ± 0.00039037 (LIN)**
Experiment Type = **Incremental Heating**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **6.12 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Mini Plateau**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **332.12 ± 3.55**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau			5.67714	±0.00546	**16.81**	**±0.05**	1.19	17.41	20.2	±2.0
				±0.10%		**±0.32%**	30%	10		
				Full External Error		±0.87	1.94	2σ Confidence Limit		
				Analytical Error		±0.02	1.0892	Error Magnification		
Total Fusion Age			5.28094	±0.00285	**15.64**	**±0.05**		32	19.2	±0.6
				±0.05%		**±0.31%**				
				Full External Error		±0.81				
				Analytical Error		±0.01				
Normal Isochron	**337.20**	**±3.20**	5.67107	±0.00701	**16.79**	**±0.06**	1.64	17.41		
		±0.95%		±0.12%		**±0.33%**	11%	10		
				Full External Error		±0.87	2.00	2σ Confidence Limit		
				Analytical Error		±0.02	1.2807	Error Magnification		
							1	Number of Iterations		
							0.0000072996	Convergence		
Inverse Isochron	**337.58**	**±3.18**	5.67009	±0.00698	**16.79**	**±0.06**	1.62	17.41		
		±0.94%		±0.12%		**±0.33%**	11%	10		
				Full External Error		±0.87	2.00	2σ Confidence Limit		
				Analytical Error		±0.02	1.2726	Error Magnification		
							3	Number of Iterations		
							0.0002202229	Convergence		
							26%	Spreading Factor		

Notes
Excess Initial 40Ar/36Ar = 332.12 ± 1.07 (%SD).

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F25072	0.3 %		0.3883708	0.354894	0.0518756	16.7497	2.108	0.37 ±0.51	1.61	0.57	20.3 ±22.0
20F25074	0.4 %		0.2936101	0.177134	0.0620355	14.9793	3.621	0.72 ±0.44	3.58	0.51	36.4 ±78.8
20F25075	0.5 %		0.1367913	0.515605	0.0385213	9.0522	3.238	1.06 ±0.37	6.65	0.31	7.5 ±5.8
20F25077	0.6 %		0.2981315	0.459885	0.0839757	21.3616	9.449	1.32 ±0.31	8.71	0.73	20.0 ±17.2
20F25078	0.7 %		0.2947831	0.920480	0.1172483	29.7700	22.200	2.22 ±0.22	18.48	1.02	13.9 ±5.8
20F25080	0.9 %		0.1896143	0.795093	0.1146287	23.9431	22.696	2.82 ±0.19	26.49	0.82	12.9 ±6.4
20F25081	1.1 %		0.1044921	0.557269	0.0787815	15.6621	19.947	3.78 ±0.18	36.49	0.54	12.1 ±8.5
20F25083	1.3 %		0.1299666	0.702365	0.0941047	21.8094	33.076	4.51 ±0.15	43.38	0.75	13.4 ±7.4
20F25084	1.5 %		0.2623954	1.699553	0.2249759	50.3606	100.712	5.94 ±0.12	53.60	1.72	12.7 ±2.9
20F25086	1.8 %		0.3411101	2.114513	0.2383905	68.8013	191.875	8.28 ±0.11	62.87	2.35	14.0 ±2.7
20F25087	2.2 %		0.1959202	1.896073	0.1908693	67.3327	238.407	10.50 ±0.07	78.55	2.30	15.3 ±3.2
20F25089	2.6 %		0.1791531	2.565991	0.1716530	96.6392	422.234	12.95 ±0.05	87.64	3.30	16.2 ±2.5
20F25090	3.1 %		0.1612330	3.936814	0.0807078	162.3997	853.884	15.57 ±0.03	94.09	5.55	17.7 ±1.7
20F25091	3.6 %		0.1188897	3.948812	0.0000000	187.6284	1073.861	16.94 ±0.02	96.44	6.41	20.4 ±2.0
20F25093	4.1 %		0.1084032	4.426290	0.0000000	214.4773	1267.295	17.49 ±0.02	97.23	7.33	20.8 ±1.8
20F25094	4.7 %		0.0648551	4.305171	0.0000000	211.4405	1257.018	17.60 ±0.02	98.31	7.23	21.1 ±1.8
20F25095	5.3 %		0.0662684	4.990607	0.0000000	243.0215	1443.525	17.58 ±0.02	98.49	8.31	20.9 ±1.7
20F25097	6.0 %		0.0620650	5.180419	0.0000000	254.5028	1504.247	17.50 ±0.02	98.64	8.70	21.1 ±1.5
20F25098	6.8 %		0.0597930	4.330158	0.0000000	219.6910	1285.296	17.32 ±0.02	98.47	7.51	21.8 ±1.9
20F25099	7.5 %		0.0541878	4.136538	0.0000000	189.7184	1100.131	17.17 ±0.02	98.38	6.49	19.7 ±1.9
20F25101	8.3 %		0.0541974	3.902040	0.0000000	168.4307	968.439	17.02 ±0.02	98.17	5.76	18.6 ±1.9
20F25102	9.1 %		0.0532569	2.822501	0.0000000	127.8416	728.934	16.88 ±0.02	97.62	4.37	19.5 ±2.5
20F25103	10.1 %	✓	0.0733551	2.251149	0.0000000	111.8154	634.557	16.80 ±0.02	96.29	3.82	21.4 ±3.6
20F25105	11.2 %	✓	0.0740945	1.879675	0.0000000	92.2251	523.538	16.81 ±0.03	95.50	3.15	21.1 ±4.3
20F25106	12.4 %	✓	0.0925149	1.640676	0.0000000	72.5934	411.542	16.79 ±0.04	93.04	2.48	19.0 ±4.5
20F25107	13.6 %	✓	0.1130284	1.280314	0.0000000	57.4480	326.025	16.80 ±0.05	89.67	1.96	19.3 ±5.9
20F25109	14.9 %	✓	0.1279993	1.038424	0.0000000	45.5919	259.625	16.86 ±0.07	85.92	1.56	18.9 ±6.8
20F25110	16.2 %	✓	0.1351874	0.579414	0.0000000	36.3228	207.273	16.90 ±0.09	82.19	1.24	27.0 ±17.0
20F25111	17.6 %	✓	0.1408139	0.696171	0.0000000	29.6725	169.021	16.86 ±0.12	78.32	1.01	18.3 ±10.1
20F25113	19.0 %	✓	0.1411842	0.528756	0.0000000	24.3277	138.170	16.82 ±0.14	74.66	0.83	19.8 ±14.2
20F25114	20.5 %	✓	0.1341995	0.498771	0.0000000	20.5347	117.204	16.90 ±0.16	72.44	0.70	17.7 ±13.4
20F25116	22.3 %	✓	0.1330291	0.466162	0.0002872	18.7797	107.200	16.90 ±0.18	70.81	0.64	17.3 ±14.1
		Σ	4.7828946	65.597718	1.5480552	2924.9241	15446.345				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-080**
Material = **Groundmass**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C34-20)**
J = **0.00162492 ±0.00000252**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	5.67714	±0.00546 ±0.10%	**16.81**	**±0.05** **±0.32%**	1.19 30%	17.41 10	20.2 ±2.0
			Full External Error	±0.87	1.94	2σ Confidence Limit	
			Analytical Error	±0.02	1.0892	Error Magnification	
Total Fusion Age	5.28094	±0.00285 ±0.05%	**15.64**	**±0.05** **±0.31%**		32	19.2 ±0.6
			Full External Error	±0.81			
			Analytical Error	±0.01			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F25072	0.3 %		43.13	±0.25	337.55	±2.11	0.8753
20F25074	0.4 %		51.02	±0.34	344.45	±2.48	0.8503
20F25075	0.5 %		66.18	±0.70	355.79	±4.42	0.8011
20F25077	0.6 %		71.65	±0.48	363.81	±2.66	0.8845
20F25078	0.7 %		100.99	±0.70	407.43	±3.02	0.9113
20F25080	0.9 %		126.27	±1.10	451.82	±4.27	0.8981
20F25081	1.1 %		149.89	±1.89	523.01	±7.31	0.8871
20F25083	1.3 %		167.81	±1.80	586.61	±6.77	0.9142
20F25084	1.5 %		191.93	±1.31	715.94	±5.03	0.9568
20F25086	1.8 %		201.70	±1.29	894.62	±5.74	0.9750
20F25087	2.2 %		343.67	±2.98	1548.98	±13.47	0.9863
20F25089	2.6 %		539.42	±5.01	2688.95	±24.92	0.9929
20F25090	3.1 %		1007.24	±9.57	5628.08	±53.33	0.9955
20F25091	3.6 %		1578.17	±19.13	9364.53	±113.28	0.9975
20F25093	4.1 %		1978.51	±24.64	12022.69	±149.44	0.9977
20F25094	4.7 %		3260.20	±60.31	19714.05	±364.38	0.9989
20F25095	5.3 %		3667.23	±62.66	22115.12	±377.50	0.9988
20F25097	6.0 %		4100.58	±77.10	24568.75	±461.54	0.9990
20F25098	6.8 %		3674.19	±72.11	21827.87	±428.09	0.9991
20F25099	7.5 %		3501.13	±78.34	20634.32	±461.43	0.9993
20F25101	8.3 %		3107.73	±67.20	18200.86	±393.32	0.9992
20F25102	9.1 %		2400.47	±51.67	14019.24	±301.62	0.9990
20F25103	10.1 %	✓	1524.30	±26.45	8982.59	±155.78	0.9984
20F25105	11.2 %	✓	1244.70	±19.55	7397.93	±116.15	0.9977
20F25106	12.4 %	✓	784.67	±10.68	4780.50	±65.04	0.9963
20F25107	13.6 %	✓	508.26	±6.40	3216.57	±40.54	0.9946
20F25109	14.9 %	✓	356.19	±3.82	2360.45	±25.35	0.9903
20F25110	16.2 %	✓	268.68	±2.78	1865.34	±19.37	0.9865
20F25111	17.6 %	✓	210.72	±2.27	1532.43	±16.60	0.9836
20F25113	19.0 %	✓	172.31	±1.77	1310.77	±13.61	0.9766
20F25114	20.5 %	✓	153.02	±1.72	1205.47	±13.65	0.9750
20F25116	22.3 %	✓	141.17	±1.47	1137.96	±12.02	0.9667

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**337.20**	**±3.20**	5.67107	±0.00701	**16.79**	**±0.06**	1.64
		±0.95%		±0.12%		**±0.33%**	11%
					Full External Error	±0.87	
					Analytical Error	±0.02	

Statistics				
	2σ Confidence Limit	2.00	Convergence	0.000007299635
	Error Magnification	1.2807	Number of Iterations	1
	Number of Data Points	10	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F25072	0.3 %		0.1277687	±0.0003902	0.00296255	±0.00001852	0.3542
20F25074	0.4 %		0.1481122	±0.0005671	0.00290315	±0.00002094	0.4103
20F25075	0.5 %		0.1859944	±0.0013893	0.00281063	±0.00003494	0.5246
20F25077	0.6 %		0.1969464	±0.0006752	0.00274866	±0.00002013	0.3933
20F25078	0.7 %		0.2478703	±0.0007583	0.00245442	±0.00001821	0.3556
20F25080	0.9 %		0.2794766	±0.0011635	0.00221328	±0.00002093	0.4002
20F25081	1.1 %		0.2865859	±0.0018495	0.00191200	±0.00002671	0.4303
20F25083	1.3 %		0.2860613	±0.0013389	0.00170470	±0.00001967	0.3692
20F25084	1.5 %		0.2680772	±0.0005488	0.00139677	±0.00000981	0.2299
20F25086	1.8 %		0.2254568	±0.0003226	0.00111779	±0.00000718	0.1371
20F25087	2.2 %		0.2218714	±0.0003191	0.00064559	±0.00000561	0.1019
20F25089	2.6 %		0.2006067	±0.0002223	0.00037189	±0.00000345	0.0499
20F25090	3.1 %		0.1789661	±0.0001611	0.00017768	±0.00000168	0.0176
20F25091	3.6 %		0.1685265	±0.0001458	0.00010679	±0.00000129	0.0095
20F25093	4.1 %		0.1645650	±0.0001397	0.00008318	±0.00000103	0.0072
20F25094	4.7 %		0.1653743	±0.0001404	0.00005073	±0.00000094	0.0049
20F25095	5.3 %		0.1658246	±0.0001385	0.00004522	±0.00000077	0.0041
20F25097	6.0 %		0.1669024	±0.0001383	0.00004070	±0.00000076	0.0035
20F25098	6.8 %		0.1683256	±0.0001420	0.00004581	±0.00000090	0.0045
20F25099	7.5 %		0.1696751	±0.0001463	0.00004846	±0.00000108	0.0052
20F25101	8.3 %		0.1707463	±0.0001512	0.00005494	±0.00000119	0.0065
20F25102	9.1 %		0.1712268	±0.0001614	0.00007133	±0.00000153	0.0107
20F25103	10.1 %	✓	0.1696952	±0.0001672	0.00011133	±0.00000193	0.0162
20F25105	11.2 %	✓	0.1682491	±0.0001787	0.00013517	±0.00000212	0.0240
20F25106	12.4 %	✓	0.1641391	±0.0001917	0.00020918	±0.00000285	0.0380
20F25107	13.6 %	✓	0.1580134	±0.0002073	0.00031089	±0.00000392	0.0540
20F25109	14.9 %	✓	0.1508983	±0.0002250	0.00042365	±0.00000455	0.0805
20F25110	16.2 %	✓	0.1440402	±0.0002458	0.00053609	±0.00000557	0.1042
20F25111	17.6 %	✓	0.1375078	±0.0002691	0.00065256	±0.00000707	0.1183
20F25113	19.0 %	✓	0.1314584	±0.0002941	0.00076291	±0.00000792	0.1470
20F25114	20.5 %	✓	0.1269343	±0.0003204	0.00082955	±0.00000939	0.1553
20F25116	22.3 %	✓	0.1240560	±0.0003366	0.00087877	±0.00000929	0.1776

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**337.58**	**±3.18** **±0.94%**	5.67009	±0.00698 ±0.12%	**16.79**	**±0.06** **±0.33%**	1.62 11%
					Full External Error	±0.87	
					Analytical Error	±0.02	

Statistics				
	2σ Confidence Limit	2.00	Convergence	0.0002202229
	Error Magnification	1.2726	Number of Iterations	3
	Number of Data Points	10	Calculated Line	Weighted York-2
	Spreading Factor	25.9%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F25072	0.3 %		0.3883708	0.28	0.0000000	0.00	0.0000959	54.17	0.0000134	17.56	0.354894	54.17	0.0732079	0.33	0.0000000	0.00	0.202286	0.12	0.0000639	55.02	0.0518756	17.58	16.7497	0.08	0.0002280	54.18	2.108	68.23	128.9857	1.11	0.0000000	0.00	0.0101670	9.65
20F25074	0.4 %		0.2936101	0.32	0.0000000	0.00	0.0000479	108.34	0.0000160	14.34	0.177134	108.34	0.0553455	0.36	0.0000000	0.00	0.180905	0.13	0.0000319	108.76	0.0620355	14.37	14.9793	0.09	0.0001138	108.34	3.621	30.43	97.5138	1.12	0.0000000	0.00	0.0090924	9.65
20F25075	0.5 %		0.1367913	0.51	0.0000000	0.00	0.0001394	38.44	0.0000099	22.04	0.515605	38.44	0.0257852	0.54	0.0000000	0.00	0.109324	0.16	0.0000928	39.63	0.0385213	22.06	9.0522	0.13	0.0003313	38.45	3.238	17.46	45.4311	1.19	0.0000000	0.00	0.0054947	9.65
20F25077	0.6 %		0.2981315	0.33	0.0000000	0.00	0.0001243	42.99	0.0000217	10.95	0.459885	42.99	0.0561978	0.37	0.0000000	0.00	0.257984	0.11	0.0000828	44.05	0.0839757	10.99	21.3616	0.07	0.0002955	43.00	9.449	11.87	99.0154	1.12	0.0000000	0.00	0.0129665	9.65
20F25078	0.7 %		0.2947831	0.34	0.0000000	0.00	0.0002488	20.81	0.0000303	7.67	0.920480	20.81	0.0555666	0.38	0.0000000	0.00	0.359532	0.11	0.0001657	22.93	0.1172483	7.72	29.7700	0.06	0.0005914	20.83	22.200	5.01	97.9034	1.12	0.0000000	0.00	0.0180704	9.65
20F25080	0.9 %		0.1896143	0.43	0.0000000	0.00	0.0002149	24.74	0.0000296	7.54	0.795093	24.74	0.0357423	0.46	0.0000000	0.00	0.289160	0.11	0.0001431	26.55	0.1146287	7.59	23.9431	0.06	0.0005108	24.76	22.696	3.29	62.9747	1.15	0.0000000	0.00	0.0145334	9.65
20F25081	1.1 %		0.1044921	0.63	0.0000000	0.00	0.0001506	35.03	0.0000203	11.87	0.557269	35.03	0.0196968	0.65	0.0000000	0.00	0.189151	0.12	0.0001003	36.33	0.0787815	11.90	15.6621	0.08	0.0003580	35.04	19.947	2.32	34.7039	1.24	0.0000000	0.00	0.0095069	9.65
20F25083	1.3 %		0.1299666	0.53	0.0000000	0.00	0.0001898	27.68	0.0000243	10.12	0.702365	27.68	0.0244987	0.56	0.0000000	0.00	0.263392	0.11	0.0001264	29.30	0.0941047	10.16	21.8094	0.07	0.0004513	27.69	33.076	1.64	43.1645	1.19	0.0000000	0.00	0.0132383	9.65
20F25084	1.5 %		0.2623954	0.34	0.0000000	0.00	0.0004594	11.36	0.0000581	4.31	1.699553	11.35	0.0494615	0.37	0.0000000	0.00	0.608205	0.10	0.0003059	14.89	0.2249759	4.41	50.3606	0.05	0.0010920	11.39	100.712	0.99	87.1468	1.12	0.0000000	0.00	0.0305689	9.65
20F25086	1.8 %		0.3411101	0.32	0.0000000	0.00	0.0005716	9.50	0.0000616	4.10	2.114513	9.50	0.0642993	0.35	0.0000000	0.00	0.830914	0.10	0.0003806	13.53	0.2383905	4.20	68.8013	0.04	0.0013586	9.54	191.875	0.66	113.2895	1.12	0.0000000	0.00	0.0417624	9.65
20F25087	2.2 %		0.1959202	0.43	0.0000000	0.00	0.0005125	10.37	0.0000493	5.01	1.896073	10.37	0.0369310	0.46	0.0000000	0.00	0.813177	0.10	0.0003413	14.15	0.1908693	5.10	67.3327	0.04	0.0012182	10.41	238.407	0.32	65.0690	1.15	0.0000000	0.00	0.0408709	9.65
20F25089	2.6 %		0.1791531	0.46	0.0000000	0.00	0.0006936	7.73	0.0000443	5.88	2.565991	7.73	0.0337704	0.49	0.0000000	0.00	1.167112	0.10	0.0004619	12.35	0.1716530	5.95	96.6392	0.04	0.0016486	7.78	422.234	0.17	59.5003	1.17	0.0000000	0.00	0.0586600	9.65
20F25090	3.1 %		0.1612330	0.47	0.0000000	0.00	0.0010641	4.81	0.0000208	12.56	3.936814	4.81	0.0303924	0.50	0.0000000	0.00	1.961301	0.10	0.0007086	10.76	0.0807078	12.59	162.3997	0.04	0.0025294	4.89	853.884	0.08	53.5487	1.17	0.0000000	0.00	0.0985766	9.65
20F25091	3.6 %		0.1188897	0.60	0.0000000	0.00	0.0010674	5.02	0.0000000	0.00	3.948812	5.02	0.0224107	0.63	0.0000000	0.00	2.265988	0.10	0.0007108	10.86	0.0000000	0.00	187.6284	0.04	0.0025371	5.10	1073.861	0.05	39.4857	1.23	0.0000000	0.00	0.1138904	9.65
20F25093	4.1 %		0.1084032	0.62	0.0000000	0.00	0.0011964	4.34	0.0000000	0.00	4.426290	4.34	0.0204340	0.64	0.0000000	0.00	2.590242	0.10	0.0007967	10.56	0.0000000	0.00	214.4773	0.04	0.0028439	4.44	1267.295	0.04	36.0029	1.24	0.0000000	0.00	0.1301877	9.65
20F25094	4.7 %		0.0648551	0.92	0.0000000	0.00	0.0011637	4.37	0.0000000	0.00	4.305171	4.37	0.0122252	0.94	0.0000000	0.00	2.553567	0.10	0.0007749	10.57	0.0000000	0.00	211.4405	0.04	0.0027661	4.46	1257.018	0.03	21.5397	1.41	0.0000000	0.00	0.1283444	9.65
20F25095	5.3 %		0.0662684	0.85	0.0000000	0.00	0.0013490	3.97	0.0000000	0.00	4.990607	3.97	0.0124916	0.87	0.0000000	0.00	2.934971	0.10	0.0008983	10.41	0.0000000	0.00	243.0215	0.04	0.0032065	4.07	1443.525	0.02	22.0091	1.37	0.0000000	0.00	0.1475141	9.65
20F25097	6.0 %		0.0620650	0.94	0.0000000	0.00	0.0014003	3.67	0.0000000	0.00	5.180419	3.66	0.0116993	0.95	0.0000000	0.00	3.073630	0.10	0.0009325	10.30	0.0000000	0.00	254.5028	0.04	0.0033284	3.78	1504.247	0.02	20.6130	1.42	0.0000000	0.00	0.1544832	9.65
20F25098	6.8 %		0.0597930	0.98	0.0000000	0.00	0.0011704	4.28	0.0000000	0.00	4.330158	4.27	0.0112710	0.99	0.0000000	0.00	2.653208	0.10	0.0007794	10.54	0.0000000	0.00	219.6910	0.04	0.0027821	4.37	1285.296	0.03	19.8585	1.45	0.0000000	0.00	0.1333524	9.65
20F25099	7.5 %		0.0541878	1.12	0.0000000	0.00	0.0011181	4.72	0.0000000	0.00	4.136538	4.71	0.0102144	1.13	0.0000000	0.00	2.291230	0.10	0.0007446	10.72	0.0000000	0.00	189.7184	0.04	0.0026577	4.80	1100.131	0.03	17.9968	1.55	0.0000000	0.00	0.1151591	9.65
20F25101	8.3 %		0.0541974	1.08	0.0000000	0.00	0.0010547	5.12	0.0000000	0.00	3.902040	5.12	0.0102162	1.09	0.0000000	0.00	2.034138	0.10	0.0007024	10.90	0.0000000	0.00	168.4307	0.04	0.0025071	5.20	968.439	0.03	18.0000	1.52	0.0000000	0.00	0.1022374	9.65
20F25102	9.1 %		0.0532569	1.08	0.0000000	0.00	0.0007629	6.40	0.0000000	0.00	2.822501	6.40	0.0100389	1.09	0.0000000	0.00	1.543943	0.10	0.0005081	11.56	0.0000000	0.00	127.8416	0.04	0.0018135	6.47	728.934	0.04	17.6877	1.52	0.0000000	0.00	0.0775998	9.65
20F25103	10.1 %	✓	0.0733551	0.87	0.0000000	0.00	0.0006085	8.43	0.0000000	0.00	2.251149	8.43	0.0138274	0.88	0.0000000	0.00	1.350395	0.10	0.0004052	12.80	0.0000000	0.00	111.8154	0.04	0.0014464	8.48	634.557	0.06	24.3627	1.38	0.0000000	0.00	0.0678720	9.65
20F25105	11.2 %	✓	0.0740945	0.78	0.0000000	0.00	0.0005081	10.10	0.0000000	0.00	1.879675	10.10	0.0139668	0.80	0.0000000	0.00	1.113802	0.10	0.0003383	13.95	0.0000000	0.00	92.2251	0.04	0.0012077	10.14	523.538	0.07	24.6083	1.33	0.0000000	0.00	0.0559806	9.65
20F25106	12.4 %	✓	0.0925149	0.68	0.0000000	0.00	0.0004435	11.71	0.0000000	0.00	1.640676	11.71	0.0174391	0.70	0.0000000	0.00	0.876711	0.10	0.0002953	15.16	0.0000000	0.00	72.5934	0.04	0.0010541	11.75	411.542	0.10	30.7261	1.27	0.0000000	0.00	0.0440642	9.65
20F25107	13.6 %	✓	0.1130284	0.63	0.0000000	0.00	0.0003461	15.26	0.0000000	0.00	1.280314	15.26	0.0213059	0.65	0.0000000	0.00	0.693799	0.10	0.0002305	18.05	0.0000000	0.00	57.4480	0.05	0.0008226	15.29	326.025	0.15	37.5390	1.24	0.0000000	0.00	0.0348709	9.65
20F25109	14.9 %	✓	0.1279993	0.53	0.0000000	0.00	0.0002807	18.07	0.0000000	0.00	1.038424	18.07	0.0241279	0.56	0.0000000	0.00	0.550613	0.10	0.0001869	20.48	0.0000000	0.00	45.5919	0.05	0.0006672	18.09	259.625	0.21	42.5111	1.20	0.0000000	0.00	0.0276743	9.65
20F25110	16.2 %	✓	0.1351874	0.51	0.0000000	0.00	0.0001566	31.46	0.0000000	0.00	0.579414	31.46	0.0254828	0.54	0.0000000	0.00	0.438670	0.10	0.0001043	32.90	0.0000000	0.00	36.3228	0.05	0.0003723	31.47	207.273	0.27	44.8984	1.19	0.0000000	0.00	0.0220479	9.65
20F25111	17.6 %	✓	0.1408139	0.54	0.0000000	0.00	0.0001882	27.48	0.0000000	0.00	0.696171	27.48	0.0265434	0.56	0.0000000	0.00	0.358355	0.11	0.0001253	29.12	0.0000000	0.00	29.6725	0.06	0.0004473	27.49	169.021	0.35	46.7671	1.20	0.0000000	0.00	0.0180112	9.65
20F25113	19.0 %	✓	0.1411842	0.51	0.0000000	0.00	0.0001429	35.85	0.0000000	0.00	0.528756	35.85	0.0266132	0.54	0.0000000	0.00	0.293806	0.11	0.0000952	37.12	0.0000000	0.00	24.3277	0.06	0.0003397	35.86	138.170	0.42	46.8901	1.19	0.0000000	0.00	0.0147669	9.65
20F25114	20.5 %	✓	0.1341995	0.56	0.0000000	0.00	0.0001348	37.81	0.0000000	0.00	0.498771	37.81	0.0252966	0.58	0.0000000	0.00	0.247997	0.11	0.0000898	39.01	0.0000000	0.00	20.5347	0.07	0.0003205	37.82	117.204	0.48	44.5703	1.21	0.0000000	0.00	0.0124645	9.65
20F25116	22.3 %	✓	0.1330291	0.52	0.0000000	0.00	0.0001260	40.56	0.0000001	#######	0.466162	40.56	0.0250760	0.54	0.0000000	0.00	0.226803	0.12	0.0000839	41.69	0.0002872	#######	18.7797	0.08	0.0002995	40.58	107.200	0.51	44.1816	1.19	0.0000000	0.00	0.0113993	9.65
		Σ	4.7828946	0.09	0.0000000	0.00	0.0177311	1.66	0.0003998	2.25	65.597718	1.66	0.9015756	0.09	0.0000000	0.00	35.324309	0.02	0.0118076	2.72	1.5480552	2.27	2924.9241	0.01	0.0421465	1.67	15446.345	0.03	1588.4950	0.24	0.0000000	0.00	1.7754289	2.25
		Σ							4.8010255	0.09	65.597718	1.66									37.785747	0.10			2924.9663	0.01							17036.615	0.03

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F25072	0.3 %		7.827142	0.011950	0.021188	0.011478	0.023193	0.000068	158.915	23.135051	1.00112281	4.641E-12
20F25074	0.4 %		6.752193	0.012925	0.011825	0.012811	0.019605	0.000065	158.933	23.143303	1.00112294	3.580E-12
20F25075	0.5 %		5.376916	0.020080	0.056957	0.021895	0.015127	0.000080	158.942	23.147431	1.00112300	1.723E-12
20F25077	0.6 %		5.078061	0.008703	0.021528	0.009254	0.013963	0.000047	158.960	23.156005	1.00112314	3.840E-12
20F25078	0.7 %		4.034894	0.006170	0.030919	0.006435	0.009911	0.000034	158.969	23.160134	1.00112320	4.252E-12
20F25080	0.9 %		3.578648	0.007448	0.033207	0.008216	0.007929	0.000034	158.988	23.168395	1.00112333	3.033E-12
20F25081	1.1 %		3.489882	0.011259	0.035580	0.012463	0.006682	0.000042	158.997	23.172527	1.00112339	1.935E-12
20F25083	1.3 %		3.496289	0.008180	0.032204	0.008913	0.005969	0.000032	159.015	23.180793	1.00112352	2.699E-12
20F25084	1.5 %		3.730795	0.003818	0.033747	0.003832	0.005220	0.000018	159.024	23.184927	1.00112358	6.651E-12
20F25086	1.8 %		4.435960	0.003172	0.030733	0.002919	0.004967	0.000016	159.042	23.193197	1.00112371	1.080E-11
20F25087	2.2 %		4.507640	0.003241	0.028159	0.002919	0.002918	0.000013	159.051	23.197651	1.00112378	1.074E-11
20F25089	2.6 %		4.985399	0.002761	0.026552	0.002052	0.001861	0.000009	159.069	23.205925	1.00112391	1.706E-11
20F25090	3.1 %		5.588171	0.002514	0.024241	0.001165	0.000999	0.000005	159.078	23.210064	1.00112397	3.213E-11
20F25091	3.6 %		5.934312	0.002566	0.021046	0.001056	0.000639	0.000004	159.088	23.214203	1.00112403	3.942E-11
20F25093	4.1 %		6.077154	0.002578	0.020637	0.000895	0.000511	0.000003	159.106	23.222483	1.00112416	4.614E-11
20F25094	4.7 %		6.047418	0.002566	0.020361	0.000889	0.000312	0.000003	159.115	23.226625	1.00112423	4.527E-11
20F25095	5.3 %		6.030997	0.002517	0.020535	0.000814	0.000278	0.000002	159.124	23.230767	1.00112429	5.189E-11
20F25097	6.0 %		5.992055	0.002481	0.020355	0.000745	0.000249	0.000002	159.142	23.239053	1.00112442	5.399E-11
20F25098	6.8 %		5.941398	0.002505	0.019710	0.000842	0.000277	0.000003	159.151	23.243516	1.00112449	4.621E-11
20F25099	7.5 %		5.894141	0.002540	0.021803	0.001027	0.000292	0.000003	159.160	23.247661	1.00112455	3.959E-11
20F25101	8.3 %		5.857164	0.002592	0.023167	0.001185	0.000328	0.000003	159.178	23.255954	1.00112468	3.492E-11
20F25102	9.1 %		5.840733	0.002752	0.022078	0.001413	0.000423	0.000004	159.188	23.260101	1.00112474	2.643E-11
20F25103	10.1 %	✓	5.893450	0.002903	0.020132	0.001697	0.000661	0.000006	159.197	23.264249	1.00112480	2.333E-11
20F25105	11.2 %	✓	5.944099	0.003156	0.020381	0.002058	0.000809	0.000006	159.215	23.272547	1.00112493	1.941E-11
20F25106	12.4 %	✓	6.092913	0.003558	0.022601	0.002647	0.001281	0.000009	159.224	23.276697	1.00112500	1.566E-11
20F25107	13.6 %	✓	6.329092	0.004151	0.022286	0.003401	0.001973	0.000012	159.233	23.280848	1.00112506	1.287E-11
20F25109	14.9 %	✓	6.627490	0.004940	0.022776	0.004116	0.002814	0.000015	159.251	23.289472	1.00112519	1.070E-11
20F25110	16.2 %	✓	6.943044	0.005924	0.015952	0.005019	0.003726	0.000019	159.260	23.293625	1.00112526	8.928E-12
20F25111	17.6 %	✓	7.272811	0.007115	0.023461	0.006447	0.004752	0.000026	159.269	23.297779	1.00112532	7.640E-12
20F25113	19.0 %	✓	7.607472	0.008508	0.021734	0.007791	0.005809	0.000030	159.287	23.306090	1.00112545	6.552E-12
20F25114	20.5 %	✓	7.878573	0.009944	0.024289	0.009183	0.006542	0.000037	159.297	23.310246	1.00112551	5.727E-12
20F25116	22.3 %	✓	8.061357	0.010937	0.024822	0.010069	0.007090	0.000037	159.315	23.318561	1.00112564	5.359E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F25072	0.3 %	0.0150312 ±0.0003363	0.0144755 ±0.0059028	0.0088138 ±0.0063558	0.0074910 ±0.0087883	4.1589343 ±0.1690325
20F25074	0.4 %	0.0163180 ±0.0003363	0.0164461 ±0.0059028	0.0063473 ±0.0063558	0.0089351 ±0.0087883	4.5302760 ±0.1690325
20F25075	0.5 %	0.0168752 ±0.0003363	0.0171325 ±0.0059028	0.0054368 ±0.0063558	0.0092749 ±0.0087883	4.6913522 ±0.1690325
20F25077	0.6 %	0.0178571 ±0.0003363	0.0180141 ±0.0059028	0.0041023 ±0.0063558	0.0094049 ±0.0087883	4.9769667 ±0.1690325
20F25078	0.7 %	0.0182489 ±0.0003363	0.0182106 ±0.0059028	0.0036809 ±0.0063558	0.0092739 ±0.0087883	5.0922590 ±0.1690325
20F25080	0.9 %	0.0188835 ±0.0003363	0.0182373 ±0.0059028	0.0031654 ±0.0063558	0.0088148 ±0.0087883	5.2827219 ±0.1690325
20F25081	1.1 %	0.0191301 ±0.0003363	0.0180966 ±0.0059028	0.0030343 ±0.0063558	0.0085493 ±0.0087883	5.3591539 ±0.1690325
20F25083	1.3 %	0.0194913 ±0.0003363	0.0175754 ±0.0059028	0.0029416 ±0.0063558	0.0080817 ±0.0087883	5.4775570 ±0.1690325
20F25084	1.5 %	0.0196101 ±0.0003363	0.0172206 ±0.0059028	0.0029504 ±0.0063558	0.0079251 ±0.0087883	5.5207769 ±0.1690325
20F25086	1.8 %	0.0197350 ±0.0003363	0.0163827 ±0.0059028	0.0030138 ±0.0063558	0.0078592 ±0.0087883	5.5783594 ±0.1690325
20F25087	2.2 %	0.0197451 ±0.0003363	0.0158857 ±0.0059028	0.0030482 ±0.0063558	0.0079922 ±0.0087883	5.5948198 ±0.1690325
20F25089	2.6 %	0.0196699 ±0.0003363	0.0149312 ±0.0059028	0.0030653 ±0.0063558	0.0086042 ±0.0087883	5.6015775 ±0.1690325
20F25090	3.1 %	0.0195917 ±0.0003363	0.0144578 ±0.0059028	0.0030361 ±0.0063558	0.0090995 ±0.0087883	5.5945947 ±0.1690325
20F25091	3.6 %	0.0194897 ±0.0003363	0.0139985 ±0.0059028	0.0029743 ±0.0063558	0.0097237 ±0.0087883	5.5815160 ±0.1690325
20F25093	4.1 %	0.0192252 ±0.0003363	0.0131537 ±0.0059028	0.0027375 ±0.0063558	0.0113501 ±0.0087883	5.5394937 ±0.1690325
20F25094	4.7 %	0.0190682 ±0.0003363	0.0127825 ±0.0059028	0.0025580 ±0.0063558	0.0123408 ±0.0087883	5.5117562 ±0.1690325
20F25095	5.3 %	0.0188985 ±0.0003363	0.0124540 ±0.0059028	0.0023370 ±0.0063558	0.0134375 ±0.0087883	5.4803349 ±0.1690325
20F25097	6.0 %	0.0185326 ±0.0003363	0.0119476 ±0.0059028	0.0017751 ±0.0063558	0.0158944 ±0.0087883	5.4088304 ±0.1690325
20F25098	6.8 %	0.0183279 ±0.0003363	0.0117690 ±0.0059028	0.0014126 ±0.0063558	0.0173244 ±0.0087883	5.3668827 ±0.1690325
20F25099	7.5 %	0.0181372 ±0.0003363	0.0116681 ±0.0059028	0.0010447 ±0.0063558	0.0186901 ±0.0087883	5.3266071 ±0.1690325
20F25101	8.3 %	0.0177678 ±0.0003363	0.0116668 ±0.0059028	0.0002437 ±0.0063558	0.0214287 ±0.0087883	5.2446304 ±0.1690325
20F25102	9.1 %	0.0175955 ±0.0003363	0.0117717 ±0.0059028	0.0001736 ±0.0063558	0.0227444 ±0.0087883	5.2041011 ±0.1690325
20F25103	10.1 %	0.0174361 ±0.0003363	0.0119495 ±0.0059028	0.0005894 ±0.0063558	0.0239814 ±0.0087883	5.1646557 ±0.1690325
20F25105	11.2 %	0.0171697 ±0.0003363	0.0125276 ±0.0059028	0.0013719 ±0.0063558	0.0260739 ±0.0087883	5.0913368 ±0.1690325
20F25106	12.4 %	0.0170699 ±0.0003363	0.0129287 ±0.0059028	0.0017127 ±0.0063558	0.0268494 ±0.0087883	5.0586182 ±0.1690325
20F25107	13.6 %	0.0169973 ±0.0003363	0.0134038 ±0.0059028	0.0020007 ±0.0063558	0.0273865 ±0.0087883	5.0292933 ±0.1690325
20F25109	14.9 %	0.0169496 ±0.0003363	0.0146219 ±0.0059028	0.0023591 ±0.0063558	0.0275324 ±0.0087883	4.9817136 ±0.1690325
20F25110	16.2 %	0.0169844 ±0.0003363	0.0153157 ±0.0059028	0.0023789 ±0.0063558	0.0270285 ±0.0087883	4.9664105 ±0.1690325
20F25111	17.6 %	0.0170620 ±0.0003363	0.0160755 ±0.0059028	0.0022728 ±0.0063558	0.0260766 ±0.0087883	4.9568206 ±0.1690325
20F25113	19.0 %	0.0173620 ±0.0003363	0.0177792 ±0.0059028	0.0015975 ±0.0063558	0.0225916 ±0.0087883	4.9570321 ±0.1690325
20F25114	20.5 %	0.0175927 ±0.0003363	0.0187146 ±0.0059028	0.0009824 ±0.0063558	0.0199329 ±0.0087883	4.9679543 ±0.1690325
20F25116	22.3 %	0.0182367 ±0.0003363	0.0207268 ±0.0059028	0.0009269 ±0.0063558	0.0124476 ±0.0087883	5.0142177 ±0.1690325

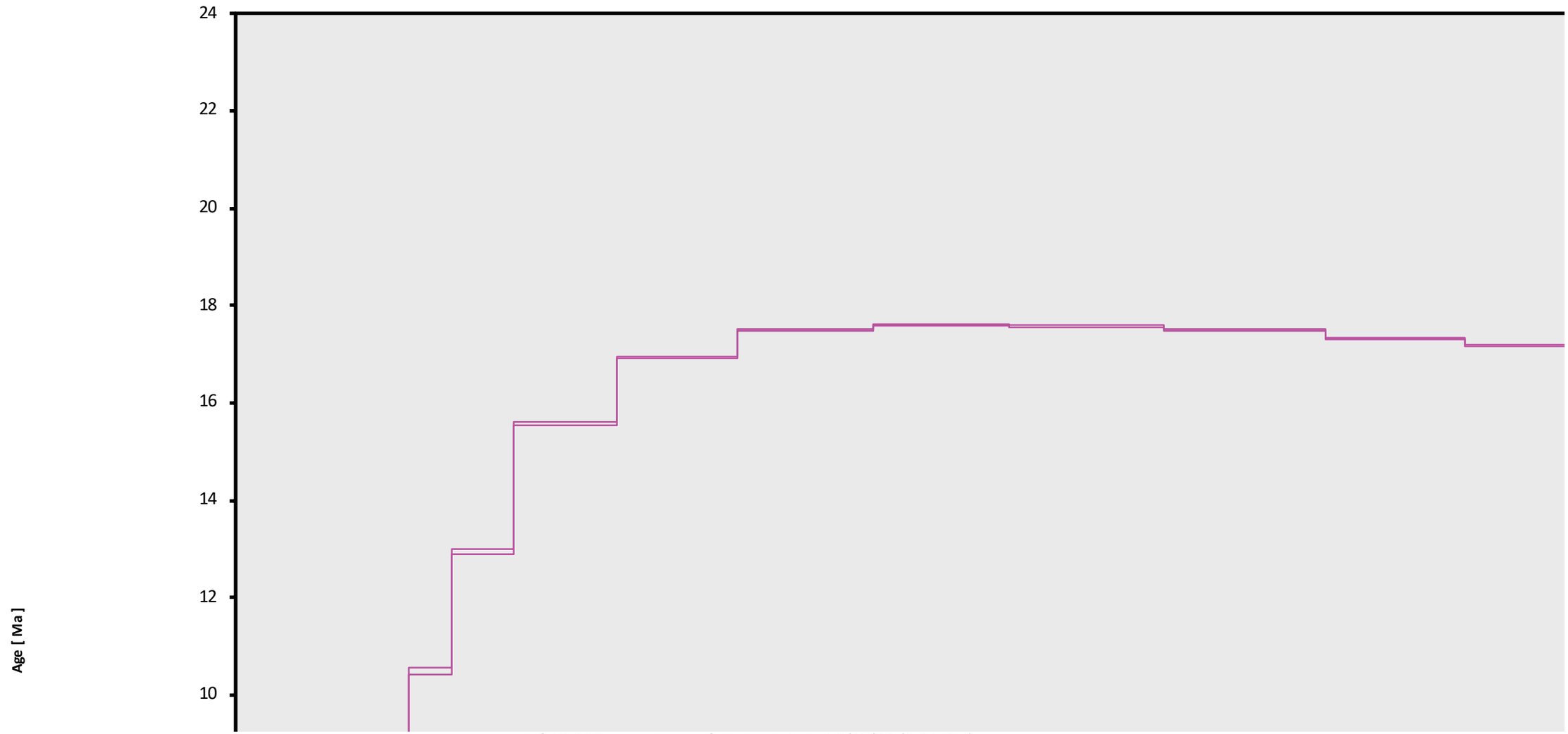
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F25072	0.3 %	0.3915881 ±0.0008278	0.9549	EXP 150 of 150	0.0008758 ±0.0058579	0.0023	EXP 150 of 150	0.3187792 ±0.0064707	0.1584	EXP 150 of 150	16.742674 ±0.007728	0.9980	EXP 150 of 150	135.26271 ±0.02192	0.9996	EXP 150 of 150
20F25074	0.4 %	0.3009785 ±0.0007151	0.9353	EXP 145 of 150	0.0087867 ±0.0058317	0.0014	EXP 150 of 150	0.2921164 ±0.0061669	0.2465	EXP 150 of 150	14.975199 ±0.008678	0.9968	EXP 150 of 150	105.67420 ±0.01984	0.9994	EXP 150 of 150
20F25075	0.5 %	0.1496127 ±0.0005536	0.8134	EXP 150 of 150	0.0051586 ±0.0062108	0.0220	EXP 148 of 150	0.1683710 ±0.0056064	0.1058	EXP 150 of 150	9.053874 ±0.007428	0.9934	EXP 150 of 150	53.36615 ±0.01656	0.9967	EXP 148 of 150
20F25077	0.6 %	0.3069799 ±0.0007713	0.9296	EXP 150 of 150	0.0018607 ±0.0061754	0.0022	EXP 150 of 150	0.3943329 ±0.0065458	0.3370	EXP 148 of 150	21.352569 ±0.008221	0.9986	EXP 150 of 150	113.45413 ±0.02158	0.9994	EXP 150 of 150
20F25078	0.7 %	0.3042551 ±0.0008026	0.9085	EXP 150 of 150	0.0215626 ±0.0057998	0.0048	EXP 150 of 150	0.5290916 ±0.0061520	0.4157	EXP 150 of 150	29.753670 ±0.008585	0.9992	EXP 150 of 150	125.21327 ±0.02283	0.9994	EXP 149 of 150
20F25080	0.9 %	0.2029152 ±0.0006512	0.8661	EXP 150 of 150	0.0161058 ±0.0061105	0.0106	EXP 150 of 150	0.4367237 ±0.0056767	0.4333	EXP 148 of 150	23.931352 ±0.007869	0.9990	EXP 149 of 150	90.96834 ±0.01811	0.9991	EXP 150 of 150
20F25081	1.1 %	0.1205808 ±0.0005102	0.6522	EXP 149 of 150	0.0059697 ±0.0060169	0.0060	EXP 150 of 150	0.2848357 ±0.0067921	0.1830	EXP 150 of 150	15.657219 ±0.007747	0.9977	EXP 150 of 150	60.01919 ±0.01990	0.9958	EXP 150 of 150
20F25083	1.3 %	0.1456765 ±0.0005431	0.7654	EXP 150 of 150	0.0127462 ±0.0059635	0.0050	EXP 150 of 150	0.3793669 ±0.0069848	0.2212	EXP 149 of 150	21.798755 ±0.009148	0.9984	EXP 150 of 150	81.73106 ±0.02016	0.9985	EXP 150 of 150
20F25084	1.5 %	0.2744537 ±0.0006867	0.9178	EXP 147 of 150	0.0561372 ±0.0058665	0.0209	EXP 149 of 150	0.8804293 ±0.0067552	0.6668	EXP 149 of 150	50.325370 ±0.009916	0.9996	EXP 150 of 150	193.40997 ±0.02437	0.9998	EXP 150 of 150
20F25086	1.8 %	0.3509894 ±0.0008426	0.9239	EXP 150 of 150	0.0748535 ±0.0063299	0.0421	EXP 149 of 150	1.1315239 ±0.0066194	0.7574	EXP 150 of 150	68.750062 ±0.011651	0.9997	EXP 150 of 150	310.78427 ±0.02714	0.9999	EXP 149 of 150
20F25087	2.2 %	0.2101967 ±0.0006830	0.7433	EXP 150 of 150	0.0659096 ±0.0060749	0.0279	EXP 150 of 150	1.0387789 ±0.0065051	0.7342	EXP 150 of 150	67.282722 ±0.011627	0.9997	EXP 150 of 150	309.11190 ±0.02721	0.9999	EXP 150 of 150
20F25089	2.6 %	0.1940397 ±0.0006739	0.6113	EXP 150 of 150	0.0957245 ±0.0061650	0.0307	EXP 150 of 150	1.3706020 ±0.0069412	0.7995	EXP 149 of 150	96.564480 ±0.013208	0.9998	EXP 150 of 150	487.39474 ±0.03380	0.9999	EXP 150 of 150
20F25090	3.1 %	0.1769278 ±0.0006097	0.1754	EXP 146 of 150	0.1552830 ±0.0055773	0.0935	EXP 150 of 150	2.0710859 ±0.0059019	0.9270	EXP 150 of 150	162.268501 ±0.016481	0.9999	EXP 150 of 150	913.12582 ±0.04708	1.0000	EXP 150 of 150
20F25091	3.6 %	0.1357650 ±0.0005804	0.3527	EXP 150 of 150	0.1562293 ±0.0061185	0.0415	EXP 150 of 150	2.2272481 ±0.0068854	0.9185	EXP 150 of 150	187.475689 ±0.017025	0.9999	EXP 141 of 150	1119.04217 ±0.04520	1.0000	EXP 147 of 150
20F25093	4.1 %	0.1254610 ±0.0005322	0.6739	EXP 149 of 150	0.1775894 ±0.0057328	0.1490	EXP 150 of 150	2.4541201 ±0.0062635	0.9449	EXP 150 of 150	214.302826 ±0.018878	0.9999	EXP 149 of 150	1308.96800 ±0.05770	1.0000	EXP 150 of 150
20F25094	4.7 %	0.0830608 ±0.0004604	0.8723	EXP 150 of 150	0.1727081 ±0.0054766	0.1356	EXP 150 of 150	2.3789133 ±0.0063026	0.9353	EXP 150 of 150	211.269666 ±0.018193	0.9999	EXP 150 of 150	1284.19779 ±0.05268	1.0000	EXP 150 of 150
20F25095	5.3 %	0.0844405 ±0.0004175	0.9254	EXP 149 of 150	0.2025306 ±0.0060700	0.0982	EXP 150 of 150	2.7459727 ±0.0068526	0.9470	EXP 147 of 150	242.824417 ±0.019817	0.9999	EXP 150 of 150	1471.16173 ±0.05000	1.0000	EXP 150 of 150
20F25097	6.0 %	0.0800500 ±0.0004410	0.9227	EXP 150 of 150	0.2111342 ±0.0055512	0.1311	EXP 146 of 150	2.8632316 ±0.0075587	0.9351	EXP 150 of 150	254.298138 ±0.017605	1.0000	EXP 150 of 150	1530.42357 ±0.05741	1.0000	EXP 148 of 150
20F25098	6.8 %	0.0774202 ±0.0004461	0.9029	EXP 150 of 150	0.1746626 ±0.0052769	0.0565	EXP 150 of 150	2.4576572 ±0.0063568	0.9387	EXP 149 of 150	219.517799 ±0.016962	0.9999	EXP 147 of 150	1310.65490 ±0.05336	1.0000	EXP 150 of 150
20F25099	7.5 %	0.0717457 ±0.0004713	0.8797	EXP 150 of 150	0.1663956 ±0.0059054	0.1408	EXP 150 of 150	2.1811131 ±0.0071624	0.9042	EXP 150 of 150	189.572864 ±0.015627	0.9999	EXP 150 of 150	1123.56944 ±0.05263	1.0000	EXP 148 of 150
20F25101	8.3 %	0.0713241 ±0.0004465	0.8411	EXP 150 of 150	0.1562427 ±0.0061931	0.1259	EXP 150 of 150	1.9144931 ±0.0066773	0.8894	EXP 148 of 150	168.306440 ±0.017031	0.9999	EXP 150 of 150	991.78559 ±0.04180	1.0000	EXP 150 of 150
20F25102	9.1 %	0.0699574 ±0.0004316	0.7859	EXP 150 of 150	0.1096622 ±0.0050223	0.0815	EXP 150 of 150	1.4875255 ±0.0065003	0.8415	EXP 148 of 150	127.753633 ±0.013566	0.9999	EXP 149 of 150	751.90321 ±0.04069	1.0000	EXP 150 of 150
20F25103	10.1 %	0.0891296 ±0.0005018	0.4138	EXP 150 of 150	0.0848856 ±0.0056164	0.0077	EXP 149 of 150	1.3181711 ±0.0072000	0.7692	EXP 150 of 150	111.742442 ±0.014051	0.9999	EXP 149 of 150	664.15180 ±0.03691	1.0000	EXP 150 of 150
20F25105	11.2 %	0.0894826 ±0.0004348	0.2814	EXP 150 of 150	0.0682994 ±0.0056209	0.0067	EXP 150 of 150	1.0753099 ±0.0061086	0.7693	EXP 150 of 150	92.171166 ±0.013403	0.9998	EXP 149 of 150	553.29338 ±0.03781	0.9999	EXP 150 of 150
20F25106	12.4 %	0.1071753 ±0.0004854	0.0309	EXP 149 of 150	0.0576087 ±0.0057689	0.0336	EXP 149 of 150	0.8612587 ±0.0067097	0.6102	EXP 150 of 150	72.557406 ±0.011185	0.9998	EXP 150 of 150	447.37031 ±0.03013	0.9999	EXP 150 of 150
20F25107	13.6 %	0.1268921 ±0.0005735	0.2997	EXP 150 of 150	0.0416307 ±0.0059693	0.0140	EXP 150 of 150	0.6745440 ±0.0066193	0.5202	EXP 150 of 150	57.425620 ±0.010248	0.9997	EXP 150 of 150	368.62806 ±0.03051	0.9999	EXP 150 of 150
20F25109	14.9 %	0.1412924 ±0.0005345	0.5385	EXP 150 of 150	0.0299984 ±0.0054887	0.0183	EXP 150 of 150	0.5583614 ±0.0067586	0.4221	EXP 147 of 150	45.579915 ±0.009610	0.9996	EXP 149 of 150	307.14571 ±0.02875	0.9999	EXP 150 of 150
20F25110	16.2 %	0.1481744 ±0.0005458	0.6192	EXP 150 of 150	0.0095769 ±0.0051453	0.0036	EXP 150 of 150	0.4357463 ±0.0071021	0.2789	EXP 150 of 150	36.318184 ±0.008587	0.9995	EXP 149 of 150	257.15954 ±0.02799	0.9998	EXP 150 of 150
20F25111	17.6 %	0.1537364 ±0.0006113	0.6592	EXP 150 of 150	0.0138278 ±0.0057148	0.0055	EXP 150 of 150	0.3622187 ±0.0063311	0.2387	EXP 150 of 150	29.672906 ±0.008931	0.9991	EXP 149 of 150	220.76263 ±0.02482	0.9998	EXP 150 of 150
20F25113	19.0 %	0.1543516 ±0.0005726	0.7365	EXP 150 of 150	0.0049248 ±0.0056016	0.0027	EXP 148 of 150	0.3116900 ±0.0059336	0.2883	EXP 150 of 150	24.329221 ±0.008226	0.9989	EXP 149 of 150	190.03203 ±0.02590	0.9997	EXP 150 of 150
20F25114	20.5 %	0.1478041 ±0.0006059	0.6899	EXP 148 of 150	0.0026982 ±0.0055390	0.0049	EXP 150 of 150	0.2549561 ±0.0064525	0.1142	EXP 148 of 150	20.536823 ±0.007897	0.9986	EXP 150 of 150	166.75427 ±0.02166	0.9997	EXP 150 of 150
20F25116	22.3 %	0.1473050 ±0.0005357	0.7591	EXP 147 of 150	0.0007212 ±0.0055682	0.0006	EXP 150 of 150	0.2514464 ±0.0060485	0.2516	EXP 150 of 150	18.775952 ±0.008315	0.9981	EXP 150 of 150	156.40689 ±0.02468	0.9996	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F25072	0.3 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25074	0.4 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25075	0.5 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25077	0.6 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25078	0.7 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25080	0.9 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25081	1.1 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25083	1.3 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25084	1.5 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25086	1.8 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25087	2.2 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25089	2.6 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25090	3.1 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25091	3.6 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25093	4.1 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25094	4.7 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25095	5.3 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25097	6.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25098	6.8 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25099	7.5 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25101	8.3 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25102	9.1 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25103	10.1 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25105	11.2 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25106	12.4 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25107	13.6 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25109	14.9 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25110	16.2 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25111	17.6 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25113	19.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25114	20.5 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01
20F25116	22.3 %	Dan Miggins	20-OSU-01	0.00	0.00	43.00	Oregon\Swenton (20-01)	20F25068	01

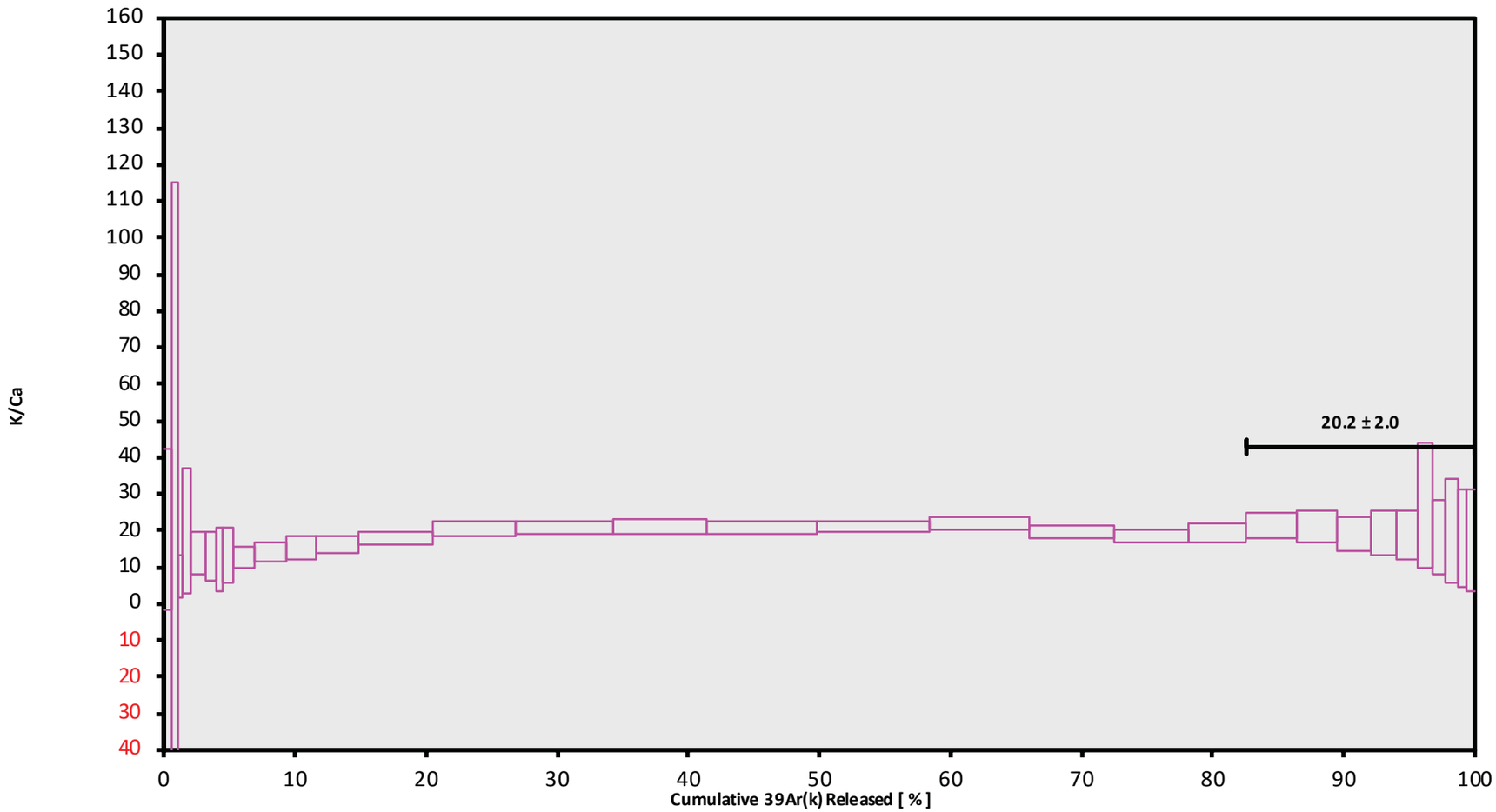
Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F25072	0.3 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	12	28	1
20F25074	0.4 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	12	54	1
20F25075	0.5 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	13	7	1
20F25077	0.6 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	13	34	1
20F25078	0.7 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	13	47	1
20F25080	0.9 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	14	13	1
20F25081	1.1 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	14	26	1
20F25083	1.3 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	14	52	1
20F25084	1.5 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	15	5	1
20F25086	1.8 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	15	31	1
20F25087	2.2 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	15	45	1
20F25089	2.6 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	16	11	1
20F25090	3.1 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	16	24	1
20F25091	3.6 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	16	37	1
20F25093	4.1 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	17	3	1
20F25094	4.7 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	17	16	1
20F25095	5.3 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	17	29	1
20F25097	6.0 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	17	55	1
20F25098	6.8 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	18	9	1
20F25099	7.5 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	18	22	1
20F25101	8.3 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	18	48	1
20F25102	9.1 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	19	1	1
20F25103	10.1 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	19	14	1
20F25105	11.2 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	19	40	1
20F25106	12.4 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	19	53	1
20F25107	13.6 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	20	6	1
20F25109	14.9 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	20	33	1
20F25110	16.2 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	20	46	1
20F25111	17.6 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	20	59	1
20F25113	19.0 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	21	25	1
20F25114	20.5 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	21	38	1
20F25116	22.3 %	VS19-080	Groundmass	Rhyolite Dome	FCT-NM (1C34-20)	28.201	0.082	Kuiper et al (2008)	9.55461	0.155	0.00162492	0.155	298.269	0.116	1.0002442	0.039	1	3.54E-14	22	SEP	2020	22	4	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F25072	0.3 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25074	0.4 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25075	0.5 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25077	0.6 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25078	0.7 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25080	0.9 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25081	1.1 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25083	1.3 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25084	1.5 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25086	1.8 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25087	2.2 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25089	2.6 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25090	3.1 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25091	3.6 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25093	4.1 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25094	4.7 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25095	5.3 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25097	6.0 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25098	6.8 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25099	7.5 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25101	8.3 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25102	9.1 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25103	10.1 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25105	11.2 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25106	12.4 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25107	13.6 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25109	14.9 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25110	16.2 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25111	17.6 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25113	19.0 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25114	20.5 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F25116	22.3 %	332.12	1.07	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F25068.AGE >>> VS19-080 >>> OREGON | SW



20F25068.AGE >>> VS19-080 >>> OREGON | SWENTON (20-01) PROJECT



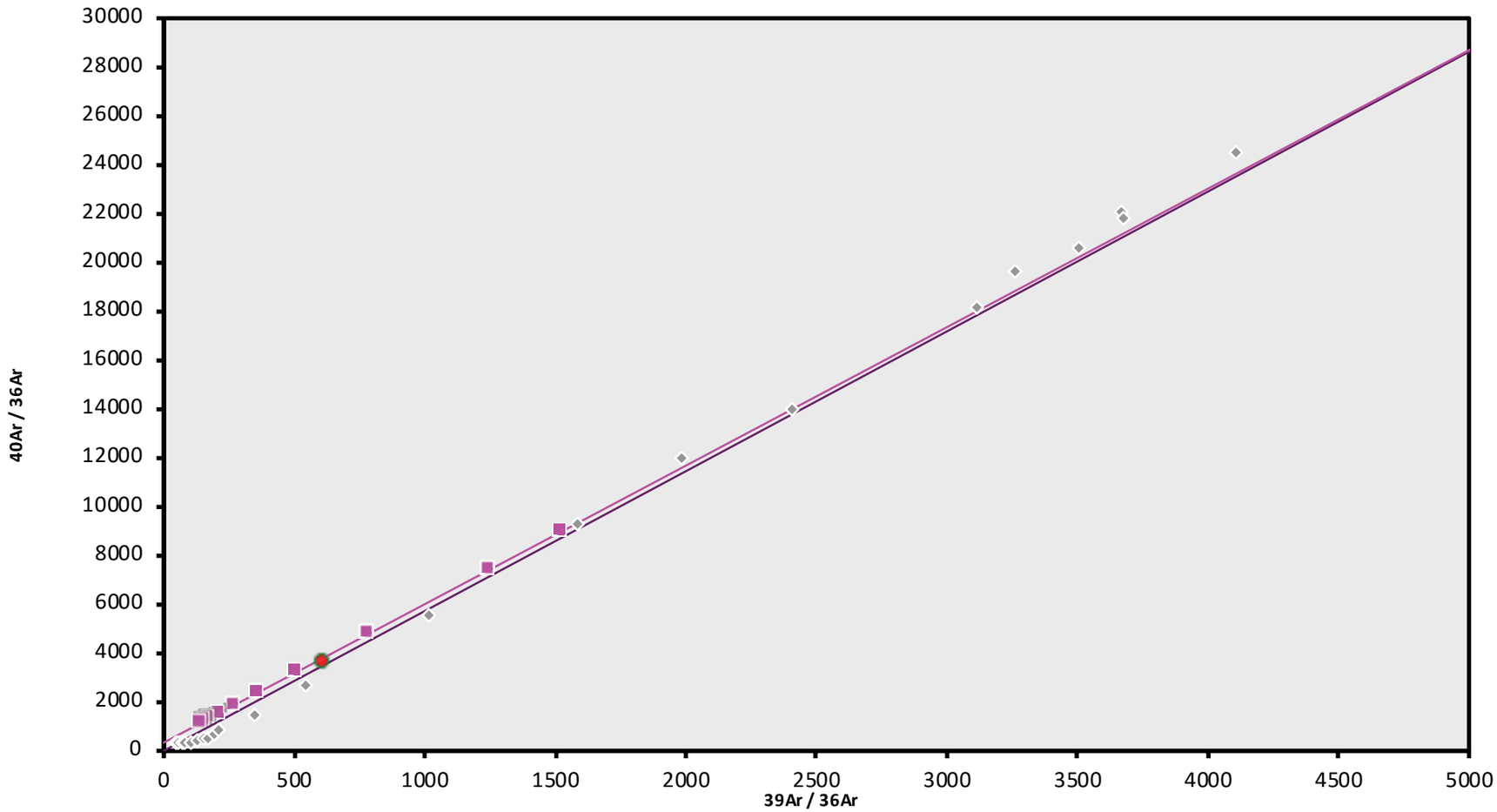
Ar-Ages in Ma

WEIGHTED PLATEAU
16.81 ± 0.05
TOTAL FUSION
15.64 ± 0.05
NORMAL ISOCHRON
16.79 ± 0.06
INVERSE ISOCHRON
16.79 ± 0.06

Sample Info

Groundmass
Rhyolite Dome
Dan Miggins

20F25068.AGE >>> VS19-080 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

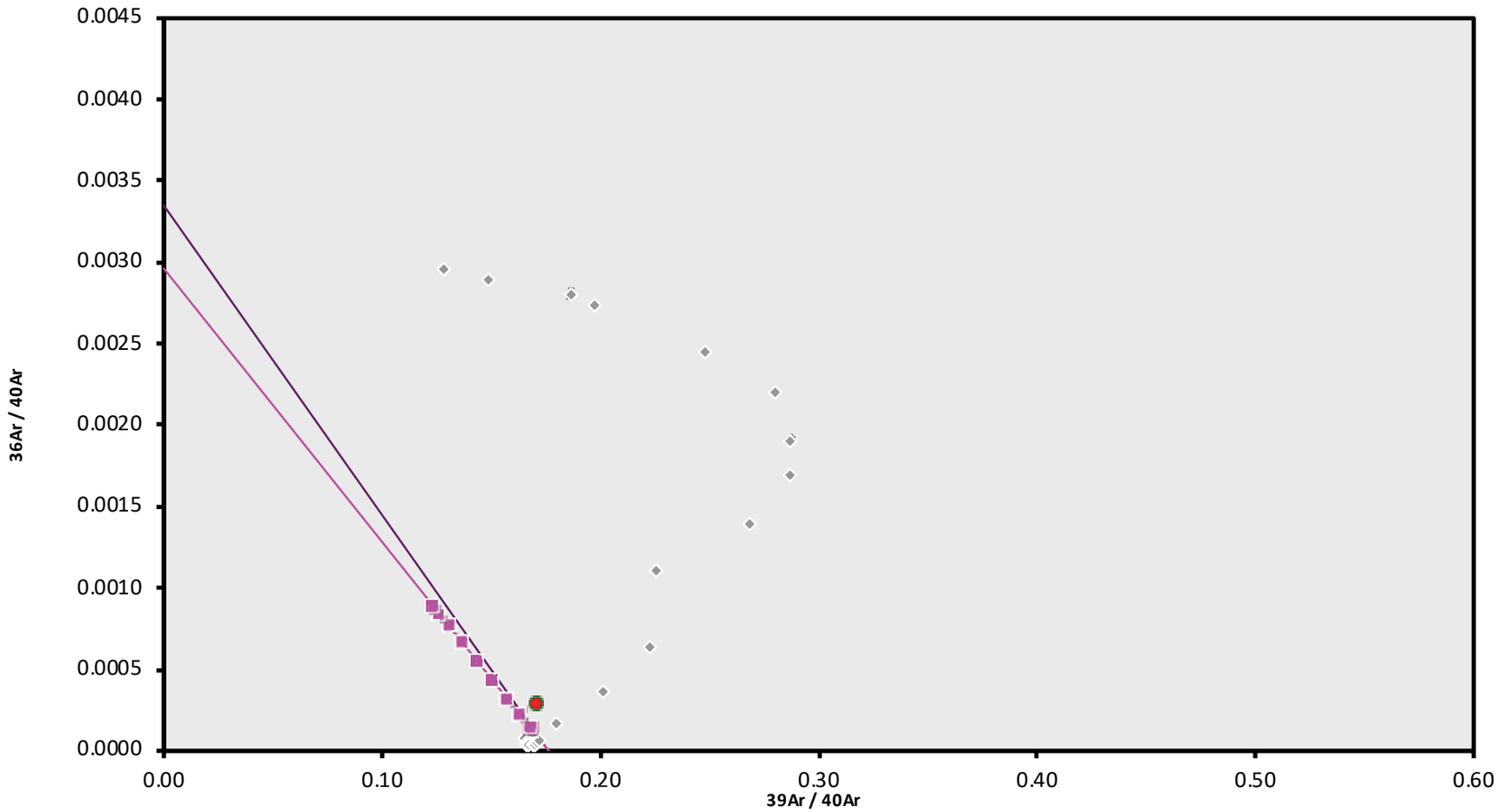
WEIGHTED PLATEAU
16.81 ± 0.05
TOTAL FUSION
15.64 ± 0.05
NORMAL ISOCHRON
16.79 ± 0.06
INVERSE ISOCHRON
16.79 ± 0.06

MSWD (PROBABILITY)
1.64 (11%)

Sample Info

Groundmass
Rhyolite Dome
Dan Miggins

20F25068.AGE >>> VS19-080 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
16.81 ± 0.05
TOTAL FUSION
15.64 ± 0.05
NORMAL ISOCHRON
16.79 ± 0.06
INVERSE ISOCHRON
16.79 ± 0.06

MSWD (PROBABILITY)
1.62 (11%)

Sample Info

Groundmass
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16571	24.0 %		0.0063089	5.949	11.82750	0.445	0.073166	12.580	4.3157	0.212	15.8115	0.137	3.45406 ± 0.05501	10.41 ± 0.17	94.11	0.27	0.16 ± 0.00
21F16572	24.0 %		0.0473488	1.160	14.76716	0.395	0.136738	6.556	4.9948	0.182	29.5634	0.088	3.33344 ± 0.06798	10.04 ± 0.20	56.21	0.31	0.15 ± 0.00
21F16574	24.0 %		0.0102948	3.825	14.01672	0.415	0.074916	12.381	5.2600	0.184	20.0304	0.115	3.44413 ± 0.04740	10.38 ± 0.14	90.29	0.33	0.16 ± 0.00
21F16575	24.0 %		0.0212315	2.097	20.38681	0.337	0.088346	10.371	6.8821	0.144	28.2408	0.077	3.42743 ± 0.04052	10.33 ± 0.12	83.37	0.43	0.14 ± 0.00
21F16577	24.0 %		0.0120319	3.392	7.16811	0.704	0.043329	21.413	2.4511	0.378	11.0210	0.217	3.27248 ± 0.10458	9.86 ± 0.31	72.64	0.15	0.15 ± 0.00
21F16578	24.0 %		0.0105422	3.978	23.76191	0.317	0.125970	8.106	7.8896	0.121	28.7724	0.086	3.49730 ± 0.03356	10.54 ± 0.10	95.71	0.49	0.14 ± 0.00
21F16580	24.0 %	✓	0.0148360	2.549	2.08362	2.146	0.649702	1.518	52.0821	0.045	195.0182	0.015	3.66212 ± 0.00554	11.03 ± 0.02	97.80	3.26	10.75 ± 0.46
21F16581	24.0 %	✓	0.0149799	2.714	1.33545	3.307	2.128665	0.472	176.2751	0.039	621.8095	0.006	3.50214 ± 0.00311	10.55 ± 0.01	99.28	11.05	56.76 ± 3.75
21F16583	24.0 %	✓	0.0729859	0.812	0.77442	5.825	1.615059	0.584	129.8906	0.040	476.6796	0.007	3.50199 ± 0.00397	10.55 ± 0.01	95.43	8.14	72.12 ± 8.40
21F16584	24.0 %		0.0338966	1.405	20.87160	0.343	0.107198	8.642	6.9724	0.143	33.2811	0.078	3.56974 ± 0.04290	10.75 ± 0.13	74.64	0.44	0.14 ± 0.00
21F16586	24.0 %		0.0137150	3.267	29.33878	0.302	0.151724	6.192	10.3902	0.102	38.3651	0.062	3.53208 ± 0.02723	10.64 ± 0.08	95.48	0.65	0.15 ± 0.00
21F16587	24.0 %	✓	0.0145216	2.713	9.40101	0.521	1.514937	0.622	126.4214	0.040	445.9495	0.008	3.49875 ± 0.00342	10.54 ± 0.01	99.18	7.92	5.78 ± 0.06
21F16589	24.0 %		0.1954415	0.384	15.23535	0.364	0.081920	11.753	3.5276	0.271	68.7575	0.034	3.30717 ± 0.13362	9.97 ± 0.40	16.92	0.22	0.10 ± 0.00
21F16590	24.0 %		0.0113015	3.390	23.56512	0.315	0.100263	9.726	6.7959	0.138	25.2138	0.093	3.50073 ± 0.03584	10.55 ± 0.11	94.15	0.42	0.12 ± 0.00
21F16592	24.0 %		0.0074729	5.304	12.69306	0.439	0.054195	16.592	4.3833	0.220	16.4051	0.145	3.47319 ± 0.05732	10.46 ± 0.17	92.63	0.27	0.15 ± 0.00
21F16593	24.0 %	✓	0.0061441	6.290	5.96068	0.794	0.218743	4.209	16.0024	0.075	57.2036	0.042	3.49040 ± 0.01565	10.52 ± 0.05	97.62	1.00	1.15 ± 0.02
21F16595	24.0 %	✓	0.0142509	49.430	0.49551	9.264	0.971761	0.944	78.9578	0.045	279.7111	0.010	3.48857 ± 0.05337	10.51 ± 0.16	98.48	4.95	68.52 ± 12.70
21F16596	24.0 %	✓	0.0229204	30.748	1.35854	3.272	2.331013	0.388	193.3683	0.040	682.8311	0.006	3.49583 ± 0.02194	10.53 ± 0.07	99.00	12.12	61.20 ± 4.01
21F16598	24.0 %	✓	0.0084418	4.800	1.36617	3.174	2.222836	0.447	182.9757	0.040	642.1144	0.006	3.49553 ± 0.00310	10.53 ± 0.01	99.61	11.47	57.59 ± 3.66
21F16599	24.0 %		0.0202567	2.094	40.14255	0.283	0.176119	4.897	14.2686	0.079	52.6236	0.041	3.49698 ± 0.01894	10.54 ± 0.06	94.65	0.89	0.15 ± 0.00
21F16601	24.0 %	✓	0.0014728	28.348	1.06653	4.121	1.616481	0.603	128.8781	0.040	451.8105	0.008	3.50240 ± 0.00347	10.55 ± 0.01	99.90	8.08	51.96 ± 4.28
21F16602	24.0 %		0.0122605	3.311	12.90751	0.423	0.092455	10.437	5.1419	0.181	20.6078	0.112	3.50375 ± 0.04975	10.56 ± 0.15	87.28	0.32	0.17 ± 0.00
21F16604	24.0 %		0.0176983	2.551	19.56105	0.351	0.133856	6.897	6.3370	0.154	25.3700	0.097	3.42526 ± 0.04465	10.32 ± 0.13	85.39	0.40	0.14 ± 0.00
21F16605	24.0 %		0.0230955	1.867	15.69611	0.375	0.058032	15.559	5.3075	0.185	24.0833	0.098	3.48309 ± 0.05115	10.49 ± 0.15	76.61	0.33	0.15 ± 0.00
21F16607	24.0 %	✓	0.0029899	12.887	0.48679	9.188	0.946344	0.932	77.7458	0.042	272.9217	0.011	3.49887 ± 0.00423	10.54 ± 0.01	99.67	4.87	68.68 ± 12.62
21F16608	24.0 %	✓	0.0054021	6.838	0.39091	11.049	0.759923	1.269	62.1413	0.043	219.4106	0.015	3.50480 ± 0.00477	10.56 ± 0.01	99.26	3.89	68.36 ± 15.11
21F16610	24.0 %	✓	0.0213499	1.905	2.77124	1.601	1.697648	0.580	139.2381	0.040	493.9007	0.008	3.50244 ± 0.00333	10.55 ± 0.01	98.74	8.73	21.60 ± 0.69
21F16611	24.0 %		0.0063082	5.411	13.00353	0.419	0.058828	15.639	4.4253	0.217	15.9295	0.142	3.41710 ± 0.04959	10.30 ± 0.15	94.75	0.28	0.15 ± 0.00
21F16613	24.0 %		0.0251707	1.652	11.78858	0.495	0.070789	13.040	3.7510	0.252	19.6427	0.111	3.49348 ± 0.06978	10.53 ± 0.21	66.58	0.23	0.14 ± 0.00
21F16614	24.0 %	✓	0.0111113	3.480	1.02303	4.103	1.575049	0.594	128.6824	0.040	453.5821	0.007	3.49910 ± 0.00336	10.54 ± 0.01	99.27	8.07	54.09 ± 4.44
		Σ	0.6857820	1.492	335.24535	0.096	19.876006	0.259	1595.7530	0.012	5766.6618	0.003					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-085**
Material = **Sanidine**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X12-21)**
Position = **X: 0 | Y: 0 | Z/H: 12.29555 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.40558 ± 0.01063**
FCT-NM J-value = **0.00165067 ± 0.00000187**
Air Shot 40Ar/36Ar = **300.9210 ± 0.3370**
Air Shot MDF = **0.99803599 ± 0.00037959 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.50 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		3.50725 ± 0.01901	**10.57 ± 0.06**	> 100	93.55	46.04 ± 14.55
Error Mean		± 0.54%	**± 0.59%**	0%	13	
		Full External Error	± 0.55	1.82	2σ Confidence Limit	
		Analytical Error	± 0.06	> 10	Error Magnification	
Total Fusion Age		3.50228 ± 0.00392	**10.55 ± 0.03**		30	2.05 ± 0.00
		± 0.11%	**± 0.25%**			
		Full External Error	± 0.55			
		Analytical Error	± 0.01			
Normal Isochron	**305.74 ± 60.57**	3.50163 ± 0.01120	**10.55 ± 0.04**	55.52	93.55	
Error Chron	**± 19.81%**	± 0.32%	**± 0.39%**	0%	13	
		Full External Error	± 0.55	1.85	2σ Confidence Limit	
		Analytical Error	± 0.03	7.4512	Error Magnification	
				1	Number of Iterations	
				0.0000000473	Convergence	
Inverse Isochron	**439.56 ± 149.03**	3.48924 ± 0.02500	**10.51 ± 0.08**	> 100	93.55	
Error Chron	**± 33.90%**	± 0.72%	**± 0.75%**	0%	13	
		Full External Error	± 0.55	1.85	2σ Confidence Limit	
		Analytical Error	± 0.08	> 10	Error Magnification	
				5	Number of Iterations	
				0.0001447408	Convergence	
				6%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16571	24.0 %		0.0031095	11.82750	0.0184220	4.3081	14.8805	10.41 ± 0.17	94.11	0.27	0.16 ± 0.00
21F16572	24.0 %		0.0433486	14.76716	0.0657014	4.9853	16.6182	10.04 ± 0.20	56.21	0.31	0.15 ± 0.00
21F16574	24.0 %		0.0065051	14.01672	0.0077506	5.2510	18.0851	10.38 ± 0.14	90.29	0.33	0.16 ± 0.00
21F16575	24.0 %		0.0157210	20.38681	0.0000000	6.8690	23.5430	10.33 ± 0.12	83.37	0.43	0.14 ± 0.00
21F16577	24.0 %		0.0100930	7.16811	0.0105900	2.4465	8.0061	9.86 ± 0.31	72.64	0.15	0.15 ± 0.00
21F16578	24.0 %		0.0041159	23.76191	0.0258197	7.8743	27.5387	10.54 ± 0.10	95.71	0.49	0.14 ± 0.00
21F16580	24.0 %	✓	0.0142705	2.08362	0.0176576	52.0808	190.7260	11.03 ± 0.02	97.80	3.26	10.75 ± 0.46
21F16581	24.0 %	✓	0.0146189	1.33545	0.0000000	176.2743	617.3379	10.55 ± 0.01	99.28	11.05	56.76 ± 3.75
21F16583	24.0 %	✓	0.0727723	0.77442	0.0325194	129.8901	454.8739	10.55 ± 0.01	95.43	8.14	72.12 ± 8.40
21F16584	24.0 %		0.0282531	20.87160	0.0140718	6.9590	24.8417	10.75 ± 0.13	74.64	0.44	0.14 ± 0.00
21F16586	24.0 %		0.0057821	29.33878	0.0200983	10.3714	36.6325	10.64 ± 0.08	95.48	0.65	0.15 ± 0.00
21F16587	24.0 %	✓	0.0119805	9.40101	0.0000000	126.4153	442.2958	10.54 ± 0.01	99.18	7.92	5.78 ± 0.06
21F16589	24.0 %		0.1913233	15.23535	0.0006291	3.5178	11.6339	9.97 ± 0.40	16.92	0.22	0.10 ± 0.00
21F16590	24.0 %		0.0049301	23.56512	0.0132004	6.7808	23.7377	10.55 ± 0.11	94.15	0.42	0.12 ± 0.00
21F16592	24.0 %		0.0040420	12.69306	0.0000000	4.3751	15.1957	10.46 ± 0.17	92.63	0.27	0.15 ± 0.00
21F16593	24.0 %	✓	0.0045299	5.96068	0.0236012	15.9986	55.8415	10.52 ± 0.05	97.62	1.00	1.15 ± 0.02
21F16595	24.0 %	✓	0.0141149	0.49551	0.0154414	78.9575	275.4490	10.51 ± 0.16	98.48	4.95	68.52 ± 12.70
21F16596	24.0 %	✓	0.0225532	1.35854	0.0000000	193.3674	675.9803	10.53 ± 0.07	99.00	12.12	61.20 ± 4.01
21F16598	24.0 %	✓	0.0080710	1.36617	0.0112817	182.9748	639.5936	10.53 ± 0.01	99.61	11.47	57.59 ± 3.66
21F16599	24.0 %		0.0094061	40.14255	0.0000000	14.2428	49.8067	10.54 ± 0.06	94.65	0.89	0.15 ± 0.00
21F16601	24.0 %	✓	0.0011767	1.06653	0.0596147	128.8774	451.3810	10.55 ± 0.01	99.90	8.08	51.96 ± 4.28
21F16602	24.0 %		0.0087681	12.90751	0.0264802	5.1336	17.9869	10.56 ± 0.15	87.28	0.32	0.17 ± 0.00
21F16604	24.0 %		0.0124042	19.56105	0.0516167	6.3244	21.6628	10.32 ± 0.13	85.39	0.40	0.14 ± 0.00
21F16605	24.0 %		0.0188529	15.69611	0.0000000	5.2974	18.4513	10.49 ± 0.15	76.61	0.33	0.15 ± 0.00
21F16607	24.0 %	✓	0.0028574	0.48679	0.0067846	77.7455	272.0214	10.54 ± 0.01	99.67	4.87	68.68 ± 12.62
21F16608	24.0 %	✓	0.0052954	0.39091	0.0083769	62.1411	217.7919	10.56 ± 0.01	99.26	3.89	68.36 ± 15.11
21F16610	24.0 %	✓	0.0205993	2.77124	0.0117099	139.2363	487.6661	10.55 ± 0.01	98.74	8.73	21.60 ± 0.69
21F16611	24.0 %		0.0027930	13.00353	0.0026183	4.4169	15.0930	10.30 ± 0.15	94.75	0.28	0.15 ± 0.00
21F16613	24.0 %		0.0219817	11.78858	0.0193138	3.7434	13.0775	10.53 ± 0.21	66.58	0.23	0.14 ± 0.00
21F16614	24.0 %	✓	0.0108323	1.02303	0.0187335	128.6817	450.2699	10.54 ± 0.01	99.27	8.07	54.09 ± 4.44
		Σ	0.5951020	335.24535	0.4820332	1595.5376	5588.0196				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-085**
Material = **Sanidine**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X12-21)**
J = **0.00165067 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	3.50725	± 0.01901	**10.57**	**± 0.06**	> 100	93.55	46.04 ± 14.55
Error Mean		± 0.54%		**± 0.59%**	0%	13	
			Full External Error	± 0.55	1.82	2σ Confidence Limit	
			Analytical Error	± 0.06	> 10	Error Magnification	
Total Fusion Age	3.50228	± 0.00392	**10.55**	**± 0.03**		30	2.05 ± 0.00
		± 0.11%		**± 0.25%**			
			Full External Error	± 0.55			
			Analytical Error	± 0.01			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
21F16571	24.0 %		1385.48 ± 334.78	5084.09 ± 1228.38	0.9998
21F16572	24.0 %		115.00 ± 2.95	681.92 ± 17.34	0.9875
21F16574	24.0 %		807.22 ± 97.87	3078.72 ± 373.16	0.9994
21F16575	24.0 %		436.93 ± 24.81	1796.12 ± 101.90	0.9983
21F16577	24.0 %		242.40 ± 19.70	1091.80 ± 88.47	0.9942
21F16578	24.0 %		1913.12 ± 390.43	6989.33 ± 1426.33	0.9999
21F16580	24.0 %	✓	3649.55 ± 193.55	13663.65 ± 724.54	0.9998
21F16581	24.0 %	✓	12057.97 ± 670.99	42527.32 ± 2366.28	0.9999
21F16583	24.0 %	✓	1784.88 ± 29.11	6549.21 ± 106.67	0.9987
21F16584	24.0 %		246.31 ± 8.34	1177.81 ± 39.78	0.9953
21F16586	24.0 %		1793.69 ± 278.58	6634.01 ± 1030.28	0.9999
21F16587	24.0 %	✓	10551.73 ± 694.56	37216.45 ± 2449.56	0.9999
21F16589	24.0 %		18.39 ± 0.18	359.37 ± 2.83	0.8190
21F16590	24.0 %		1375.39 ± 214.18	5113.42 ± 796.21	0.9998
21F16592	24.0 %		1082.42 ± 212.53	4058.00 ± 796.66	0.9996
21F16593	24.0 %	✓	3531.80 ± 602.99	12625.94 ± 2155.59	0.9999
21F16595	24.0 %	✓	5593.91 ± 5583.45	19813.34 ± 19776.27	1.0000
21F16596	24.0 %	✓	8573.85 ± 5358.50	30271.33 ± 18918.99	1.0000
21F16598	24.0 %	✓	22670.58 ± 2277.35	79544.20 ± 7990.29	1.0000
21F16599	24.0 %		1514.20 ± 137.08	5593.68 ± 506.32	0.9998
21F16601	24.0 %	✓	109523.99 ± 77752.90	383895.90 ± 272533.92	1.0000
21F16602	24.0 %		585.48 ± 54.30	2349.95 ± 217.84	0.9989
21F16604	24.0 %		509.86 ± 37.18	2044.97 ± 149.05	0.9988
21F16605	24.0 %		280.99 ± 12.90	1277.26 ± 58.52	0.9958
21F16607	24.0 %	✓	27208.30 ± 7341.50	95496.82 ± 25767.40	1.0000
21F16608	24.0 %	✓	11735.01 ± 1638.06	41427.39 ± 5782.66	1.0000
21F16610	24.0 %	✓	6759.28 ± 267.11	23972.49 ± 947.16	0.9998
21F16611	24.0 %		1581.40 ± 387.00	5702.36 ± 1395.36	0.9998
21F16613	24.0 %		170.30 ± 6.51	893.49 ± 33.90	0.9895
21F16614	24.0 %	✓	11879.41 ± 848.62	41865.78 ± 2990.55	0.9999

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**305.74 ± 60.57**	3.50163 ± 0.01120	**10.55 ± 0.04**	55.52
Error Chron	**± 19.81%**	± 0.32%	**± 0.39%**	0%
			Full External Error ± 0.55	
			Analytical Error ± 0.03	

Statistics				
	2σ Confidence Limit	1.85	Convergence	0.000000047268
	Error Magnification	7.4512	Number of Iterations	1
	Number of Data Points	13	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
21F16571	24.0 %		0.2725132 ± 0.0013752	0.00019669 ± 0.00004752	0.0062
21F16572	24.0 %		0.1686480 ± 0.0006821	0.00146644 ± 0.00003728	0.0301
21F16574	24.0 %		0.2621927 ± 0.0011368	0.00032481 ± 0.00003937	0.0100
21F16575	24.0 %		0.2432655 ± 0.0007951	0.00055676 ± 0.00003159	0.0129
21F16577	24.0 %		0.2220156 ± 0.0019382	0.00091592 ± 0.00007422	0.0266
21F16578	24.0 %		0.2737206 ± 0.0008150	0.00014308 ± 0.00002920	0.0049
21F16580	24.0 %	✓	0.2670992 ± 0.0002510	0.00007319 ± 0.00000388	0.0017
21F16581	24.0 %	✓	0.2835347 ± 0.0002253	0.00002351 ± 0.00000131	0.0004
21F16583	24.0 %	✓	0.2725343 ± 0.0002223	0.00015269 ± 0.00000249	0.0017
21F16584	24.0 %		0.2091227 ± 0.0006840	0.00084903 ± 0.00002868	0.0222
21F16586	24.0 %		0.2703780 ± 0.0006473	0.00015074 ± 0.00002341	0.0041
21F16587	24.0 %	✓	0.2835233 ± 0.0002323	0.00002687 ± 0.00000177	0.0005
21F16589	24.0 %		0.0511636 ± 0.0002801	0.00278267 ± 0.00002190	0.0105
21F16590	24.0 %		0.2689758 ± 0.0008988	0.00019556 ± 0.00003045	0.0067
21F16592	24.0 %		0.2667368 ± 0.0014099	0.00024643 ± 0.00004838	0.0081
21F16593	24.0 %	✓	0.2797256 ± 0.0004827	0.00007920 ± 0.00001352	0.0024
21F16595	24.0 %	✓	0.2823307 ± 0.0002618	0.00005047 ± 0.00005038	0.0000
21F16596	24.0 %	✓	0.2832335 ± 0.0002267	0.00003303 ± 0.00002065	0.0000
21F16598	24.0 %	✓	0.2850061 ± 0.0002287	0.00001257 ± 0.00000126	0.0002
21F16599	24.0 %		0.2706981 ± 0.0004835	0.00017877 ± 0.00001618	0.0042
21F16601	24.0 %	✓	0.2852961 ± 0.0002344	0.00000260 ± 0.00000185	0.0000
21F16602	24.0 %		0.2491472 ± 0.0010593	0.00042554 ± 0.00003945	0.0126
21F16604	24.0 %		0.2493248 ± 0.0009067	0.00048901 ± 0.00003564	0.0141
21F16605	24.0 %		0.2199914 ± 0.0009227	0.00078292 ± 0.00003587	0.0200
21F16607	24.0 %	✓	0.2849131 ± 0.0002462	0.00001047 ± 0.00000283	0.0002
21F16608	24.0 %	✓	0.2832670 ± 0.0002569	0.00002414 ± 0.00000337	0.0007
21F16610	24.0 %	✓	0.2819597 ± 0.0002285	0.00004171 ± 0.00000165	0.0008
21F16611	24.0 %		0.2773241 ± 0.0014396	0.00017537 ± 0.00004291	0.0064
21F16613	24.0 %		0.1905976 ± 0.0010523	0.00111921 ± 0.00004246	0.0234
21F16614	24.0 %	✓	0.2837499 ± 0.0002306	0.00002389 ± 0.00000171	0.0004

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**439.56 ± 149.03**	3.48924 ± 0.02500	**10.51 ± 0.08**	> 100
Error Chron	**± 33.90%**	± 0.72%	**± 0.75%**	0%
			Full External Error ± 0.55	
			Analytical Error ± 0.08	

Statistics				
	2σ Confidence Limit	1.85	Convergence	0.0001447408
	Error Magnification	> 10	Number of Iterations	5
	Number of Data Points	13	Calculated Line	Weighted York-2
	Spreading Factor	6.3%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F16571	24.0 %		0.0031095	12.08	0.0000000	0.00	0.0031970	0.48	0.0000024	50.00	11.82750	0.45	0.0005861	12.08	0.0000000	0.00	0.052029	0.23	0.0021290	9.64	0.0184220	50.01	4.3081	0.21	0.0075992	1.02	14.8805	0.77	0.92837	12.08	0.0000000	0.00	0.0026150	9.65
21F16572	24.0 %		0.0433486	1.27	0.0000000	0.00	0.0039916	0.43	0.0000086	13.69	14.76716	0.40	0.0081712	1.28	0.0000000	0.00	0.060207	0.20	0.0026581	9.64	0.0657014	13.72	4.9853	0.18	0.0094879	1.00	16.6182	1.00	12.94217	1.27	0.0000000	0.00	0.0030261	9.65
21F16574	24.0 %		0.0065051	6.06	0.0000000	0.00	0.0037887	0.45	0.0000010	119.75	14.01672	0.41	0.0012262	6.06	0.0000000	0.00	0.063416	0.20	0.0025230	9.64	0.0077506	119.76	5.2510	0.18	0.0090057	1.01	18.0851	0.66	1.94215	6.06	0.0000000	0.00	0.0031874	9.65
21F16575	24.0 %		0.0157210	2.84	0.0000000	0.00	0.0055106	0.38	0.0000000	0.00	20.38681	0.34	0.0029634	2.84	0.0000000	0.00	0.082957	0.17	0.0036696	9.64	0.0000000	0.00	6.8690	0.14	0.0130985	0.98	23.5430	0.57	4.69365	2.84	0.0000000	0.00	0.0041695	9.65
21F16577	24.0 %		0.0100930	4.05	0.0000000	0.00	0.0019375	0.72	0.0000014	87.64	7.16811	0.70	0.0019025	4.05	0.0000000	0.00	0.029546	0.39	0.0012903	9.66	0.0105900	87.65	2.4465	0.38	0.0046055	1.16	8.0061	1.55	3.01336	4.05	0.0000000	0.00	0.0014850	9.66
21F16578	24.0 %		0.0041159	10.20	0.0000000	0.00	0.0064228	0.36	0.0000034	39.61	23.76191	0.32	0.0007759	10.20	0.0000000	0.00	0.095098	0.15	0.0042771	9.64	0.0258197	39.62	7.8743	0.12	0.0152670	0.97	27.5387	0.46	1.22885	10.20	0.0000000	0.00	0.0047797	9.65
21F16580	24.0 %	✓	0.0142705	2.65	0.0000000	0.00	0.0005632	2.15	0.0000023	56.57	2.08362	2.15	0.0026900	2.66	0.0000000	0.00	0.628980	0.10	0.0003751	9.87	0.0176576	56.57	52.0808	0.04	0.0013387	2.34	190.7260	0.06	4.26059	2.65	0.0000000	0.00	0.0316130	9.65
21F16581	24.0 %	✓	0.0146189	2.78	0.0000000	0.00	0.0003610	3.31	0.0000000	0.00	1.33545	3.31	0.0027557	2.79	0.0000000	0.00	2.128864	0.10	0.0002404	10.18	0.0000000	0.00	176.2743	0.04	0.0008580	3.43	617.3379	0.02	4.36462	2.78	0.0000000	0.00	0.1069985	9.65
21F16583	24.0 %	✓	0.0727723	0.81	0.0000000	0.00	0.0002093	5.83	0.0000043	31.39	0.77442	5.82	0.0137176	0.83	0.0000000	0.00	1.568682	0.10	0.0001394	11.25	0.0325194	31.40	129.8901	0.04	0.0004976	5.90	454.8739	0.04	21.72690	0.82	0.0000000	0.00	0.0788433	9.65
21F16584	24.0 %		0.0282531	1.69	0.0000000	0.00	0.0056416	0.38	0.0000018	65.92	20.87160	0.34	0.0053257	1.69	0.0000000	0.00	0.084043	0.17	0.0037569	9.64	0.0140718	65.93	6.9590	0.14	0.0134100	0.98	24.8417	0.58	8.43525	1.69	0.0000000	0.00	0.0042241	9.65
21F16586	24.0 %		0.0057821	7.76	0.0000000	0.00	0.0079303	0.35	0.0000026	46.86	29.33878	0.30	0.0010899	7.77	0.0000000	0.00	0.125255	0.14	0.0052810	9.63	0.0200983	46.87	10.3714	0.10	0.0188502	0.97	36.6325	0.37	1.72632	7.77	0.0000000	0.00	0.0062954	9.65
21F16587	24.0 %	✓	0.0119805	3.29	0.0000000	0.00	0.0025411	0.55	0.0000000	0.00	9.40101	0.52	0.0022583	3.29	0.0000000	0.00	1.526718	0.10	0.0016922	9.64	0.0000000	0.00	126.4153	0.04	0.0060401	1.06	442.2958	0.03	3.57691	3.29	0.0000000	0.00	0.0767341	9.65
21F16589	24.0 %		0.1913233	0.39	0.0000000	0.00	0.0041181	0.40	0.0000001	######	15.23535	0.36	0.0360644	0.42	0.0000000	0.00	0.042484	0.29	0.0027424	9.64	0.0006291	######	3.5178	0.27	0.0097887	0.99	11.6339	2.00	57.12149	0.41	0.0000000	0.00	0.0021353	9.65
21F16590	24.0 %		0.0049301	7.78	0.0000000	0.00	0.0063697	0.36	0.0000017	73.97	23.56512	0.32	0.0009293	7.79	0.0000000	0.00	0.081892	0.17	0.0042417	9.64	0.0132004	73.98	6.7808	0.14	0.0151406	0.97	23.7377	0.49	1.47193	7.79	0.0000000	0.00	0.0041159	9.65
21F16592	24.0 %		0.0040420	9.81	0.0000000	0.00	0.0034309	0.47	0.0000000	0.00	12.69306	0.44	0.0007619	9.82	0.0000000	0.00	0.052839	0.24	0.0022848	9.64	0.0000000	0.00	4.3751	0.22	0.0081553	1.02	15.1957	0.80	1.20678	9.82	0.0000000	0.00	0.0026557	9.65
21F16593	24.0 %	✓	0.0045299	8.54	0.0000000	0.00	0.0016112	0.81	0.0000031	39.09	5.96068	0.79	0.0008539	8.54	0.0000000	0.00	0.193215	0.12	0.0010729	9.66	0.0236012	39.10	15.9986	0.08	0.0038297	1.22	55.8415	0.21	1.35244	8.54	0.0000000	0.00	0.0097111	9.65
21F16595	24.0 %	✓	0.0141149	49.91	0.0000000	0.00	0.0001339	9.27	0.0000020	61.97	0.49551	9.26	0.0026607	49.91	0.0000000	0.00	0.953570	0.10	0.0000892	13.36	0.0154414	61.98	78.9575	0.05	0.0003184	9.31	275.4490	0.76	4.21414	49.91	0.0000000	0.00	0.0479272	9.65
21F16596	24.0 %	✓	0.0225532	31.25	0.0000000	0.00	0.0003672	3.28	0.0000000	0.00	1.35854	3.27	0.0042513	31.25	0.0000000	0.00	2.335298	0.10	0.0002445	10.17	0.0000000	0.00	193.3674	0.04	0.0008729	3.40	675.9803	0.31	6.73347	31.25	0.0000000	0.00	0.1173740	9.65
21F16598	24.0 %	✓	0.0080710	5.02	0.0000000	0.00	0.0003693	3.18	0.0000015	100.44	1.36617	3.17	0.0015214	5.03	0.0000000	0.00	2.209787	0.10	0.0002459	10.14	0.0112817	100.45	182.9748	0.04	0.0008778	3.30	639.5936	0.02	2.40969	5.02	0.0000000	0.00	0.1110657	9.65
21F16599	24.0 %		0.0094061	4.53	0.0000000	0.00	0.0108505	0.33	0.0000000	0.00	40.14255	0.28	0.0017731	4.53	0.0000000	0.00	0.172010	0.12	0.0072257	9.63	0.0000000	0.00	14.2428	0.08	0.0257916	0.96	49.8067	0.26	2.80830	4.53	0.0000000	0.00	0.0086454	9.65
21F16601	24.0 %	✓	0.0011767	35.50	0.0000000	0.00	0.0002883	4.12	0.0000078	17.63	1.06653	4.12	0.0002218	35.50	0.0000000	0.00	1.556453	0.10	0.0001920	10.47	0.0596147	17.65	128.8774	0.04	0.0006852	4.22	451.3810	0.03	0.35132	35.50	0.0000000	0.00	0.0782286	9.65
21F16602	24.0 %		0.0087681	4.63	0.0000000	0.00	0.0034889	0.46	0.0000035	36.47	12.90751	0.42	0.0016528	4.64	0.0000000	0.00	0.061998	0.20	0.0023234	9.64	0.0264802	36.48	5.1336	0.18	0.0082931	1.01	17.9869	0.69	2.61781	4.63	0.0000000	0.00	0.0031161	9.65
21F16604	24.0 %		0.0124042	3.64	0.0000000	0.00	0.0052874	0.39	0.0000068	17.93	19.56105	0.35	0.0023382	3.65	0.0000000	0.00	0.076380	0.18	0.0035210	9.64	0.0516167	17.96	6.3244	0.15	0.0125680	0.98	21.6628	0.63	3.70340	3.64	0.0000000	0.00	0.0038389	9.65
21F16605	24.0 %		0.0188529	2.29	0.0000000	0.00	0.0042427	0.41	0.0000000	0.00	15.69611	0.38	0.0035538	2.29	0.0000000	0.00	0.063977	0.21	0.0028253	9.64	0.0000000	0.00	5.2974	0.19	0.0100847	0.99	18.4513	0.71	5.62871	2.29	0.0000000	0.00	0.0032155	9.65
21F16607	24.0 %	✓	0.0028574	13.49	0.0000000	0.00	0.0001316	9.19	0.0000009	134.37	0.48679	9.19	0.0005386	13.49	0.0000000	0.00	0.938933	0.10	0.0000876	13.31	0.0067846	134.37	77.7455	0.04	0.0003128	9.23	272.0214	0.04	0.85311	13.49	0.0000000	0.00	0.0471915	9.65
21F16608	24.0 %	✓	0.0052954	6.98	0.0000000	0.00	0.0001057	11.05	0.0000011	117.26	0.39091	11.05	0.0009982	6.98	0.0000000	0.00	0.750478	0.10	0.0000704	14.66	0.0083769	117.26	62.1411	0.04	0.0002512	11.09	217.7919	0.05	1.58098	6.98	0.0000000	0.00	0.0377196	9.65
21F16610	24.0 %	✓	0.0205993	1.98	0.0000000	0.00	0.0007491	1.61	0.0000015	91.22	2.77124	1.60	0.0038830	1.98	0.0000000	0.00	1.681557	0.10	0.0004988	9.76	0.0117099	91.22	139.2363	0.04	0.0017805	1.85	487.6661	0.03	6.15012	1.98	0.0000000	0.00	0.0845164	9.65
21F16611	24.0 %		0.0027930	12.23	0.0000000	0.00	0.0035149	0.45	0.0000003	351.58	13.00353	0.42	0.0005265	12.24	0.0000000	0.00	0.053343	0.24	0.0023406	9.64	0.0026183	351.58	4.4169	0.22	0.0083548	1.01	15.0930	0.69	0.83389	12.23	0.0000000	0.00	0.0026811	9.65
21F16613	24.0 %		0.0219817	1.89	0.0000000	0.00	0.0031865	0.52	0.0000025	47.83	11.78858	0.49	0.0041436	1.90	0.0000000	0.00	0.045209	0.27	0.0021219	9.64	0.0193138	47.84	3.7434	0.25	0.0075742	1.04	13.0775	0.97	6.56286	1.90	0.0000000	0.00	0.0022723	9.65
21F16614	24.0 %	✓	0.0108323	3.57	0.0000000	0.00	0.0002765	4.11	0.0000025	53.97	1.02303	4.10	0.0020419	3.58	0.0000000	0.00	1.554089	0.10	0.0001841	10.47	0.0187335	53.98	128.6817	0.04	0.0006573	4.21	450.2699	0.03	3.23410	3.57	0.0000000	0.00	0.0781098	9.65
		Σ	0.5951020	1.72	0.0000000	0.00	0.0906168	0.10	0.0000631	9.67	335.24535	0.10	0.1121767	1.72	0.0000000	0.00	19.269307	0.03	0.0603442	2.35	0.4820332	9.67	1595.5376	0.01	0.2153951	0.24	5588.0196	0.05	177.67366	1.72	0.0000000	0.00	0.9684913	2.75
		Σ							0.6857820	1.49	335.24535	0.10									19.923862	0.24			1595.7530	0.01							5766.6618	0.07

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F16571	24.0 %		3.663692	0.009232	2.740555	0.013508	0.001462	0.000087	80.538	4.919753	1.00056932	5.597E-13
21F16572	24.0 %		5.918854	0.011951	2.956517	0.012866	0.009480	0.000111	80.544	4.920361	1.00056937	1.047E-12
21F16574	24.0 %		3.808064	0.008245	2.664777	0.012086	0.001957	0.000075	80.556	4.921508	1.00056945	7.091E-13
21F16575	24.0 %		4.103517	0.006695	2.962293	0.010850	0.003085	0.000065	80.563	4.922116	1.00056949	9.997E-13
21F16577	24.0 %		4.496330	0.019598	2.924445	0.023382	0.004909	0.000168	80.574	4.923264	1.00056958	3.901E-13
21F16578	24.0 %		3.646896	0.005421	3.011819	0.010233	0.001336	0.000053	80.581	4.923872	1.00056962	1.019E-12
21F16580	24.0 %	✓	3.744438	0.001758	0.040006	0.000859	0.000285	0.000007	80.592	4.925020	1.00056970	6.904E-12
21F16581	24.0 %	✓	3.527495	0.001400	0.007576	0.000251	0.000085	0.000002	80.599	4.925628	1.00056975	2.201E-11
21F16583	24.0 %	✓	3.669856	0.001495	0.005962	0.000347	0.000562	0.000005	80.610	4.926777	1.00056983	1.687E-11
21F16584	24.0 %		4.773290	0.007794	2.993474	0.011119	0.004862	0.000069	80.616	4.927317	1.00056987	1.178E-12
21F16586	24.0 %		3.692422	0.004413	2.823689	0.009015	0.001320	0.000043	80.628	4.928534	1.00056996	1.358E-12
21F16587	24.0 %	✓	3.527485	0.001444	0.074363	0.000388	0.000115	0.000003	80.634	4.929075	1.00057000	1.579E-11
21F16589	24.0 %		19.491528	0.053206	4.318951	0.019608	0.055404	0.000260	80.647	4.930292	1.00057009	2.434E-12
21F16590	24.0 %		3.710130	0.006188	3.467538	0.011937	0.001663	0.000056	80.652	4.930833	1.00057013	8.926E-13
21F16592	24.0 %		3.742644	0.009877	2.895776	0.014233	0.001705	0.000091	80.665	4.932051	1.00057021	5.807E-13
21F16593	24.0 %	✓	3.574683	0.003083	0.372486	0.002971	0.000384	0.000024	80.670	4.932592	1.00057025	2.025E-12
21F16595	24.0 %	✓	3.542538	0.001641	0.006276	0.000581	0.000180	0.000089	80.682	4.933742	1.00057034	9.902E-12
21F16596	24.0 %	✓	3.531247	0.001412	0.007026	0.000230	0.000119	0.000036	80.688	4.934351	1.00057038	2.417E-11
21F16598	24.0 %	✓	3.509287	0.001407	0.007466	0.000237	0.000046	0.000002	80.700	4.935502	1.00057046	2.273E-11
21F16599	24.0 %		3.688080	0.003288	2.813356	0.008256	0.001420	0.000030	80.706	4.936111	1.00057051	1.863E-12
21F16601	24.0 %	✓	3.505719	0.001439	0.008275	0.000341	0.000011	0.000003	80.718	4.937262	1.00057059	1.599E-11
21F16602	24.0 %		4.007824	0.008509	2.510265	0.011538	0.002384	0.000079	80.724	4.937872	1.00057064	7.295E-13
21F16604	24.0 %		4.003484	0.007269	3.086806	0.011838	0.002793	0.000071	80.736	4.939024	1.00057072	8.981E-13
21F16605	24.0 %		4.537601	0.009501	2.957350	0.012371	0.004351	0.000082	80.742	4.939633	1.00057076	8.525E-13
21F16607	24.0 %	✓	3.510435	0.001515	0.006261	0.000575	0.000038	0.000005	80.754	4.940785	1.00057085	9.661E-12
21F16608	24.0 %	✓	3.530831	0.001600	0.006291	0.000695	0.000087	0.000006	80.760	4.941395	1.00057089	7.767E-12
21F16610	24.0 %	✓	3.547167	0.001436	0.019903	0.000319	0.000153	0.000003	80.772	4.942548	1.00057097	1.748E-11
21F16611	24.0 %		3.599688	0.009330	2.938480	0.013850	0.001426	0.000077	80.778	4.943158	1.00057102	5.639E-13
21F16613	24.0 %		5.236667	0.014431	3.142797	0.017450	0.006710	0.000112	80.790	4.944311	1.00057110	6.954E-13
21F16614	24.0 %	✓	3.524820	0.001431	0.007950	0.000326	0.000086	0.000003	80.796	4.944853	1.00057114	1.606E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
21F16571	24.0 %	0.0190067 ± 0.0002501	0.0087637 ± 0.0064337	0.0072290 ± 0.0060995	0.0052949 ± 0.0062938	4.8948436 ± 0.0154858
21F16572	24.0 %	0.0190067 ± 0.0002501	0.0087637 ± 0.0064337	0.0072290 ± 0.0060995	0.0052949 ± 0.0062938	4.8948436 ± 0.0154858
21F16574	24.0 %	0.0177724 ± 0.0002386	0.0046789 ± 0.0065460	0.0039434 ± 0.0063278	0.0004877 ± 0.0061157	4.8015017 ± 0.0146129
21F16575	24.0 %	0.0177724 ± 0.0002386	0.0046789 ± 0.0065460	0.0039434 ± 0.0063278	0.0004877 ± 0.0061157	4.8015017 ± 0.0146129
21F16577	24.0 %	0.0182021 ± 0.0002326	0.0052618 ± 0.0066615	0.0008394 ± 0.0065497	0.0035539 ± 0.0063084	4.7105503 ± 0.0167816
21F16578	24.0 %	0.0182021 ± 0.0002326	0.0052618 ± 0.0066615	0.0008394 ± 0.0065497	0.0035539 ± 0.0063084	4.7105503 ± 0.0167816
21F16580	24.0 %	0.0180196 ± 0.0002098	0.0146412 ± 0.0061833	0.0148811 ± 0.0067448	0.0106482 ± 0.0058929	4.7124002 ± 0.0146437
21F16581	24.0 %	0.0180196 ± 0.0002098	0.0146412 ± 0.0061833	0.0148811 ± 0.0067448	0.0106482 ± 0.0058929	4.7124002 ± 0.0146437
21F16583	24.0 %	0.0178667 ± 0.0002512	0.0051829 ± 0.0064491	0.0140195 ± 0.0063212	0.0154655 ± 0.0063658	4.6288150 ± 0.0158715
21F16584	24.0 %	0.0178667 ± 0.0002512	0.0051829 ± 0.0064491	0.0140195 ± 0.0063212	0.0154655 ± 0.0063658	4.6288150 ± 0.0158715
21F16586	24.0 %	0.0179443 ± 0.0002427	0.0151410 ± 0.0062219	0.0084416 ± 0.0066129	0.0130703 ± 0.0064780	4.6904255 ± 0.0166356
21F16587	24.0 %	0.0179443 ± 0.0002427	0.0151410 ± 0.0062219	0.0084416 ± 0.0066129	0.0130703 ± 0.0064780	4.6904255 ± 0.0166356
21F16589	24.0 %	0.0170288 ± 0.0002290	0.0008567 ± 0.0056965	0.0029321 ± 0.0068620	0.0128309 ± 0.0059990	4.5271378 ± 0.0141939
21F16590	24.0 %	0.0170288 ± 0.0002290	0.0008567 ± 0.0056965	0.0029321 ± 0.0068620	0.0128309 ± 0.0059990	4.5271378 ± 0.0141939
21F16592	24.0 %	0.0174731 ± 0.0002374	0.0009485 ± 0.0064763	0.0028195 ± 0.0066945	0.0116797 ± 0.0067125	4.5693981 ± 0.0159552
21F16593	24.0 %	0.0174731 ± 0.0002374	0.0009485 ± 0.0064763	0.0028195 ± 0.0066945	0.0116797 ± 0.0067125	4.5693981 ± 0.0159552
21F16595	24.0 %	0.0095007 ± 0.0066198	0.0071958 ± 0.0070605	0.0118752 ± 0.0060883	0.0223547 ± 0.0152731	2.7445671 ± 0.0145789
21F16596	24.0 %	0.0095007 ± 0.0066198	0.0071958 ± 0.0070605	0.0118752 ± 0.0060883	0.0223547 ± 0.0152731	2.7445671 ± 0.0145789
21F16598	24.0 %	0.0178558 ± 0.0002439	0.0154859 ± 0.0063063	0.0003306 ± 0.0064849	0.0045402 ± 0.0061374	4.7285728 ± 0.0142126
21F16599	24.0 %	0.0178558 ± 0.0002439	0.0154859 ± 0.0063063	0.0003306 ± 0.0064849	0.0045402 ± 0.0061374	4.7285728 ± 0.0142126
21F16601	24.0 %	0.0180658 ± 0.0002463	0.0076704 ± 0.0062361	0.0001700 ± 0.0063772	0.0215470 ± 0.0060685	4.6839398 ± 0.0158848
21F16602	24.0 %	0.0180658 ± 0.0002463	0.0076704 ± 0.0062361	0.0001700 ± 0.0063772	0.0215470 ± 0.0060685	4.6839398 ± 0.0158848
21F16604	24.0 %	0.0178667 ± 0.0002512	0.0051829 ± 0.0064491	0.0140195 ± 0.0063212	0.0154655 ± 0.0063658	4.6288150 ± 0.0158715
21F16605	24.0 %	0.0178667 ± 0.0002512	0.0051829 ± 0.0064491	0.0140195 ± 0.0063212	0.0154655 ± 0.0063658	4.6288150 ± 0.0158715
21F16607	24.0 %	0.0179443 ± 0.0002427	0.0151410 ± 0.0062219	0.0084416 ± 0.0066129	0.0130703 ± 0.0064780	4.6904255 ± 0.0166356
21F16608	24.0 %	0.0179443 ± 0.0002427	0.0151410 ± 0.0062219	0.0084416 ± 0.0066129	0.0130703 ± 0.0064780	4.6904255 ± 0.0166356
21F16610	24.0 %	0.0170288 ± 0.0002290	0.0008567 ± 0.0056965	0.0029321 ± 0.0068620	0.0128309 ± 0.0059990	4.5271378 ± 0.0141939
21F16611	24.0 %	0.0170288 ± 0.0002290	0.0008567 ± 0.0056965	0.0029321 ± 0.0068620	0.0128309 ± 0.0059990	4.5271378 ± 0.0141939
21F16613	24.0 %	0.0174731 ± 0.0002374	0.0009485 ± 0.0064763	0.0028195 ± 0.0066945	0.0116797 ± 0.0067125	4.5693981 ± 0.0159552
21F16614	24.0 %	0.0174731 ± 0.0002374	0.0009485 ± 0.0064763	0.0028195 ± 0.0066945	0.0116797 ± 0.0067125	4.5693981 ± 0.0159552

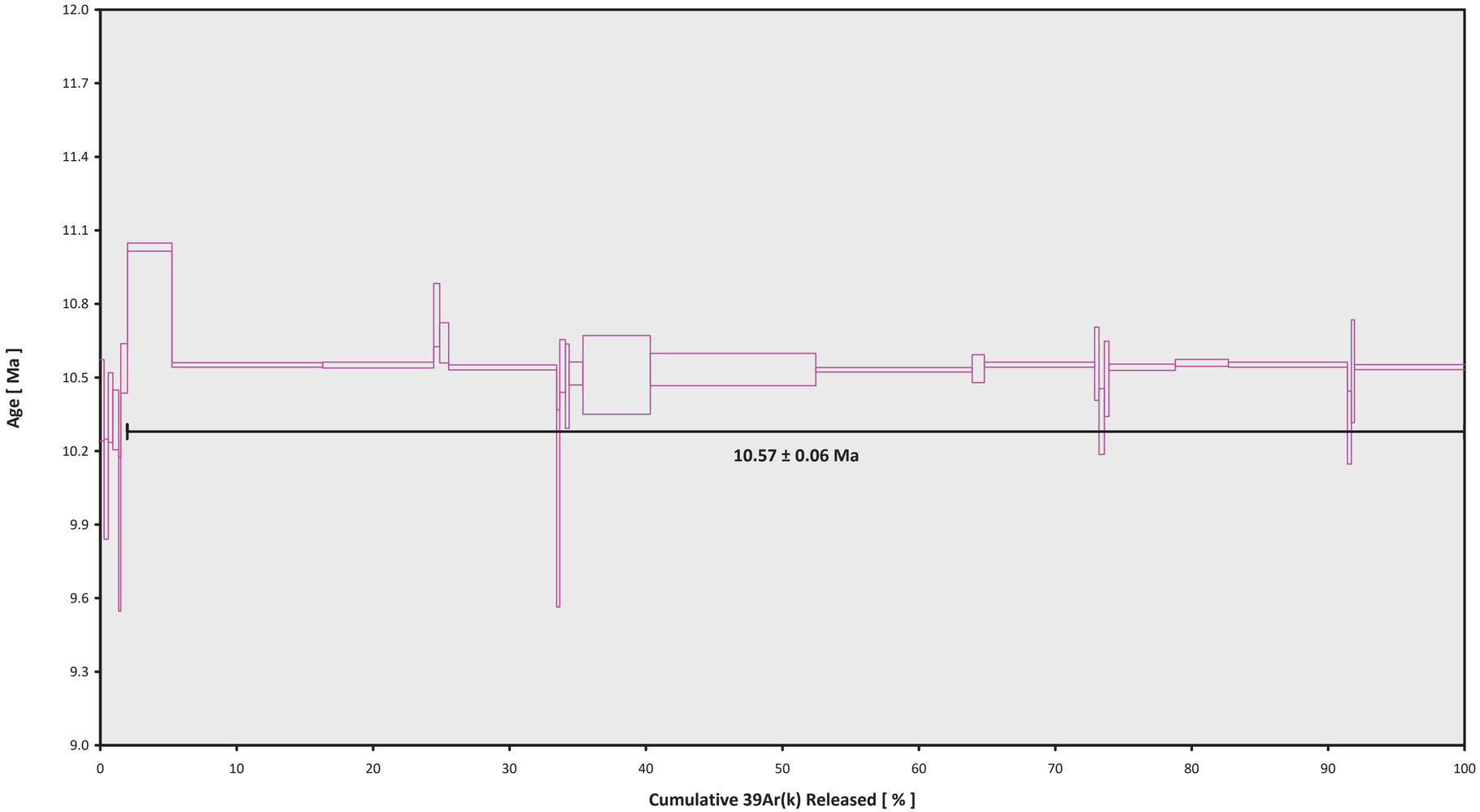
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F16571	24.0 %	0.0249402 ± 0.0002489	0.8208	EXP 150 of 150	2.3987034 ± 0.0058908	0.9366	EXP 148 of 150	0.0801081 ± 0.0068448	0.0699	EXP 149 of 150	4.31012 ± 0.00637	0.9806	EXP 147 of 150	20.70636 ± 0.01513	0.9817	EXP 149 of 150
21F16572	24.0 %	0.0635383 ± 0.0004470	0.5043	EXP 150 of 150	2.9923414 ± 0.0063179	0.9537	EXP 150 of 150	0.1434301 ± 0.0065205	0.1538	EXP 150 of 150	4.98745 ± 0.00623	0.9840	EXP 149 of 150	34.45823 ± 0.02087	0.9794	EXP 150 of 150
21F16574	24.0 %	0.0274546 ± 0.0002828	0.7736	EXP 149 of 150	2.8359765 ± 0.0065523	0.9449	EXP 150 of 150	0.0785652 ± 0.0067317	0.0200	EXP 149 of 150	5.24719 ± 0.00717	0.9838	EXP 150 of 150	24.83191 ± 0.01776	0.8722	EXP 150 of 150
21F16575	24.0 %	0.0377406 ± 0.0003428	0.5165	EXP 150 of 150	4.1221906 ± 0.0062738	0.9753	EXP 148 of 150	0.0919420 ± 0.0065762	0.0058	EXP 150 of 150	6.86519 ± 0.00728	0.9903	EXP 150 of 150	33.04234 ± 0.01625	0.7323	EXP 147 of 150
21F16577	24.0 %	0.0295182 ± 0.0003048	0.7137	EXP 149 of 150	1.4526637 ± 0.0067794	0.7883	EXP 150 of 150	0.0423196 ± 0.0065198	0.0003	EXP 147 of 150	2.44846 ± 0.00670	0.9306	EXP 149 of 150	15.73152 ± 0.01699	0.9892	EXP 149 of 150
21F16578	24.0 %	0.0281170 ± 0.0003181	0.7208	EXP 150 of 150	4.8027278 ± 0.0061566	0.9832	EXP 148 of 150	0.1246363 ± 0.0077803	0.0638	EXP 150 of 150	7.87316 ± 0.00647	0.9943	EXP 150 of 150	33.48293 ± 0.01835	0.5334	EXP 150 of 150
21F16580	24.0 %	0.0319728 ± 0.0002864	0.8358	EXP 149 of 150	0.4352196 ± 0.0064878	0.2693	EXP 150 of 150	0.6620317 ± 0.0071245	0.5202	EXP 150 of 150	51.96108 ± 0.01068	0.9997	EXP 150 of 150	199.73064 ± 0.02430	0.9998	EXP 149 of 150
21F16581	24.0 %	0.0321081 ± 0.0003189	0.9024	EXP 150 of 150	0.2841691 ± 0.0063839	0.1254	EXP 150 of 150	2.1351861 ± 0.0072068	0.9088	EXP 150 of 150	175.84005 ± 0.01604	0.9999	EXP 147 of 150	626.52192 ± 0.03674	1.0000	EXP 149 of 150
21F16583	24.0 %	0.0865099 ± 0.0004862	0.5121	EXP 150 of 150	0.1614441 ± 0.0064100	0.0326	EXP 150 of 150	1.6227354 ± 0.0068348	0.8780	EXP 149 of 150	129.57759 ± 0.01536	0.9999	EXP 149 of 150	481.30844 ± 0.03131	1.0000	EXP 150 of 150
21F16584	24.0 %	0.0497464 ± 0.0003675	0.5930	EXP 150 of 150	4.2161572 ± 0.0071548	0.9703	EXP 150 of 150	0.1207963 ± 0.0067219	0.0779	EXP 150 of 150	6.97020 ± 0.00720	0.9893	EXP 150 of 150	37.90995 ± 0.02064	0.8431	EXP 150 of 150
21F16586	24.0 %	0.0308434 ± 0.0003440	0.7321	EXP 150 of 150	5.9329586 ± 0.0073235	0.9839	EXP 150 of 150	0.1595700 ± 0.0066193	0.0763	EXP 150 of 150	10.37703 ± 0.00740	0.9955	EXP 150 of 150	43.05553 ± 0.01695	0.9543	EXP 149 of 150
21F16587	24.0 %	0.0316019 ± 0.0002793	0.8542	EXP 147 of 150	1.9111763 ± 0.0059455	0.9100	EXP 150 of 150	1.5174286 ± 0.0065646	0.8634	EXP 150 of 150	126.11474 ± 0.01499	0.9999	EXP 150 of 150	450.63988 ± 0.03226	0.9999	EXP 150 of 150
21F16589	24.0 %	0.2008415 ± 0.0006052	0.8712	EXP 147 of 150	3.0711149 ± 0.0055992	0.9668	EXP 149 of 150	0.0845304 ± 0.0066998	0.0233	EXP 149 of 150	3.53147 ± 0.00729	0.9557	EXP 150 of 150	73.28464 ± 0.01831	0.9983	EXP 149 of 150
21F16590	24.0 %	0.0276578 ± 0.0002777	0.7723	EXP 150 of 150	4.7501620 ± 0.0067020	0.9788	EXP 149 of 150	0.1028013 ± 0.0068740	0.0645	EXP 150 of 150	6.79157 ± 0.00672	0.9914	EXP 150 of 150	29.74090 ± 0.01881	0.4745	EXP 150 of 150
21F16592	24.0 %	0.0245014 ± 0.0002873	0.7555	EXP 150 of 150	2.5574959 ± 0.0064611	0.9350	EXP 150 of 150	0.0568019 ± 0.0059500	0.0027	EXP 150 of 150	4.38389 ± 0.00671	0.9787	EXP 147 of 150	20.97453 ± 0.01769	0.9712	EXP 149 of 150
21F16593	24.0 %	0.0232517 ± 0.0002751	0.8572	EXP 150 of 150	1.2003688 ± 0.0062979	0.7623	EXP 150 of 150	0.2207035 ± 0.0062662	0.1757	EXP 150 of 150	15.97364 ± 0.00793	0.9980	EXP 150 of 150	61.77301 ± 0.01793	0.9962	EXP 149 of 150
21F16595	24.0 %	0.0229036 ± 0.0002647	0.8963	EXP 150 of 150	0.1070386 ± 0.0059696	0.0018	EXP 150 of 150	0.9560695 ± 0.0067747	0.7230	EXP 150 of 150	78.78049 ± 0.01172	0.9998	EXP 150 of 150	282.45567 ± 0.02507	0.9999	EXP 149 of 150
21F16596	24.0 %	0.0310573 ± 0.0003343	0.8756	EXP 150 of 150	0.2808994 ± 0.0054633	0.1592	EXP 150 of 150	2.3099830 ± 0.0063945	0.9399	EXP 148 of 150	192.90158 ± 0.01543	1.0000	EXP 146 of 150	685.57571 ± 0.03478	1.0000	EXP 148 of 150
21F16598	24.0 %	0.0257953 ± 0.0002926	0.9308	EXP 150 of 150	0.2906622 ± 0.0060023	0.1666	EXP 150 of 150	2.2137756 ± 0.0072902	0.9132	EXP 150 of 150	182.51747 ± 0.01967	0.9999	EXP 150 of 150	646.84293 ± 0.03714	1.0000	EXP 150 of 150
21F16599	24.0 %	0.0369072 ± 0.0003144	0.6830	EXP 149 of 150	8.1000634 ± 0.0074886	0.9911	EXP 150 of 150	0.1750970 ± 0.0056315	0.0564	EXP 149 of 150	14.23702 ± 0.00772	0.9974	EXP 150 of 150	57.35218 ± 0.01641	0.9945	EXP 148 of 150
21F16601	24.0 %	0.0194510 ± 0.0003058	0.9509	EXP 150 of 150	0.2224160 ± 0.0062538	0.0663	EXP 150 of 150	1.6099629 ± 0.0072206	0.8643	EXP 150 of 150	128.57370 ± 0.01596	0.9999	EXP 150 of 150	456.49448 ± 0.03331	0.9999	EXP 150 of 150
21F16602	24.0 %	0.0295968 ± 0.0002913	0.8224	EXP 150 of 150	2.6062733 ± 0.0061380	0.9477	EXP 149 of 150	0.0919218 ± 0.0071905	0.0711	EXP 150 of 150	5.15043 ± 0.00672	0.9814	EXP 150 of 150	25.29173 ± 0.01662	0.9899	EXP 149 of 150
21F16604	24.0 %	0.0345120 ± 0.0003413	0.8650	EXP 149 of 150	3.9423911 ± 0.0069720	0.9679	EXP 150 of 150	0.1473497 ± 0.0066779	0.1578	EXP 150 of 150	6.33642 ± 0.00694	0.9876	EXP 150 of 150	29.99884 ± 0.01868	0.9939	EXP 150 of 150
21F16605	24.0 %	0.0395880 ± 0.0003166	0.5605	EXP 150 of 150	3.1640730 ± 0.0058066	0.9646	EXP 150 of 150	0.0718235 ± 0.0063972	0.0002	EXP 148 of 150	5.30953 ± 0.00717	0.9830	EXP 148 of 150	28.71208 ± 0.01745	0.8877	EXP 150 of 150
21F16607	24.0 %	0.0207563 ± 0.0002691	0.9161	EXP 150 of 150	0.1130854 ± 0.0064969	0.0021	EXP 150 of 150	0.9510686 ± 0.0057340	0.7475	EXP 148 of 150	77.56224 ± 0.01191	0.9998	EXP 150 of 150	277.61212 ± 0.02438	0.9999	EXP 148 of 150
21F16608	24.0 %	0.0230250 ± 0.0002485	0.8881	EXP 148 of 150	0.0937843 ± 0.0060623	0.0221	EXP 150 of 150	0.7653805 ± 0.0069447	0.6411	EXP 149 of 150	61.99721 ± 0.01053	0.9998	EXP 149 of 150	224.10101 ± 0.02749	0.9998	EXP 150 of 150
21F16610	24.0 %	0.0371083 ± 0.0003049	0.8615	EXP 148 of 150	0.5565347 ± 0.0067233	0.3783	EXP 150 of 150	1.6939132 ± 0.0068834	0.8761	EXP 149 of 150	138.89866 ± 0.01515	0.9999	EXP 147 of 150	498.42786 ± 0.03568	0.9999	EXP 150 of 150
21F16611	24.0 %	0.0229616 ± 0.0002248	0.8566	EXP 148 of 150	2.6142784 ± 0.0065339	0.9379	EXP 150 of 150	0.0615294 ± 0.0060740	0.0033	EXP 150 of 150	4.42689 ± 0.00726	0.9714	EXP 150 of 150	20.45668 ± 0.01765	0.9827	EXP 150 of 150
21F16613	24.0 %	0.0411461 ± 0.0003088	0.7606	EXP 150 of 150	2.3692963 ± 0.0076664	0.9004	EXP 148 of 150	0.0733300 ± 0.0063025	0.0029	EXP 149 of 150	3.75318 ± 0.00649	0.9651	EXP 150 of 150	24.21206 ± 0.01477	0.9931	EXP 148 of 150
21F16614	24.0 %	0.0279233 ± 0.0002751	0.9063	EXP 148 of 150	0.2047229 ± 0.0053858	0.0945	EXP 150 of 150	1.5716823 ± 0.0063661	0.8767	EXP 150 of 150	128.36849 ± 0.01448	0.9999	EXP 147 of 150	458.15154 ± 0.02867	1.0000	EXP 148 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F16571	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16572	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16574	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16575	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16577	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16578	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16580	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16581	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16583	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16584	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16586	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16587	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16589	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16590	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16592	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16593	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16595	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16596	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16598	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16599	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16601	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16602	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16604	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16605	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16607	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16608	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16610	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16611	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16613	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01
21F16614	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	12.30	Oregon\Swenton (20-01)	21F16567	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F16571	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	4	26	1
21F16572	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	4	35	1
21F16574	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	4	52	1
21F16575	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	5	1	1
21F16577	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	5	18	1
21F16578	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	5	27	1
21F16580	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	5	44	1
21F16581	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	5	53	1
21F16583	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	6	10	1
21F16584	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	6	18	1
21F16586	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	6	36	1
21F16587	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	6	44	1
21F16589	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	7	2	1
21F16590	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	7	10	1
21F16592	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	7	28	1
21F16593	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	7	36	1
21F16595	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	7	53	1
21F16596	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	8	2	1
21F16598	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	8	19	1
21F16599	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	8	28	1
21F16601	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	8	45	1
21F16602	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	8	54	1
21F16604	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	9	11	1
21F16605	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	9	20	1
21F16607	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	9	37	1
21F16608	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	9	46	1
21F16610	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	10	3	1
21F16611	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	10	12	1
21F16613	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	10	29	1
21F16614	24.0 %	VS19-085	Sanidine	Circle Bar	FCT-NM (4X12-21)	28.201	0.082	Kuiper et al (2008)	9.40558	0.113	0.00165067	0.113	300.921	0.112	0.99803599	0.038	1	3.54E-14	5	SEP	2021	10	37	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F16571	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16572	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16574	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16575	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16577	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16578	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16580	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16581	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16583	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16584	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16586	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16587	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16589	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16590	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16592	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16593	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16595	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16596	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16598	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16599	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16601	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16602	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16604	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16605	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16607	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16608	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16610	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16611	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16613	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16614	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F16567.AGE >>> VS19-085 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.57 ± 0.06
TOTAL FUSION
10.55 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.04
INVERSE ISOCHRON
10.51 ± 0.08

MSWD (PROBABILITY)
> 100 (0%)

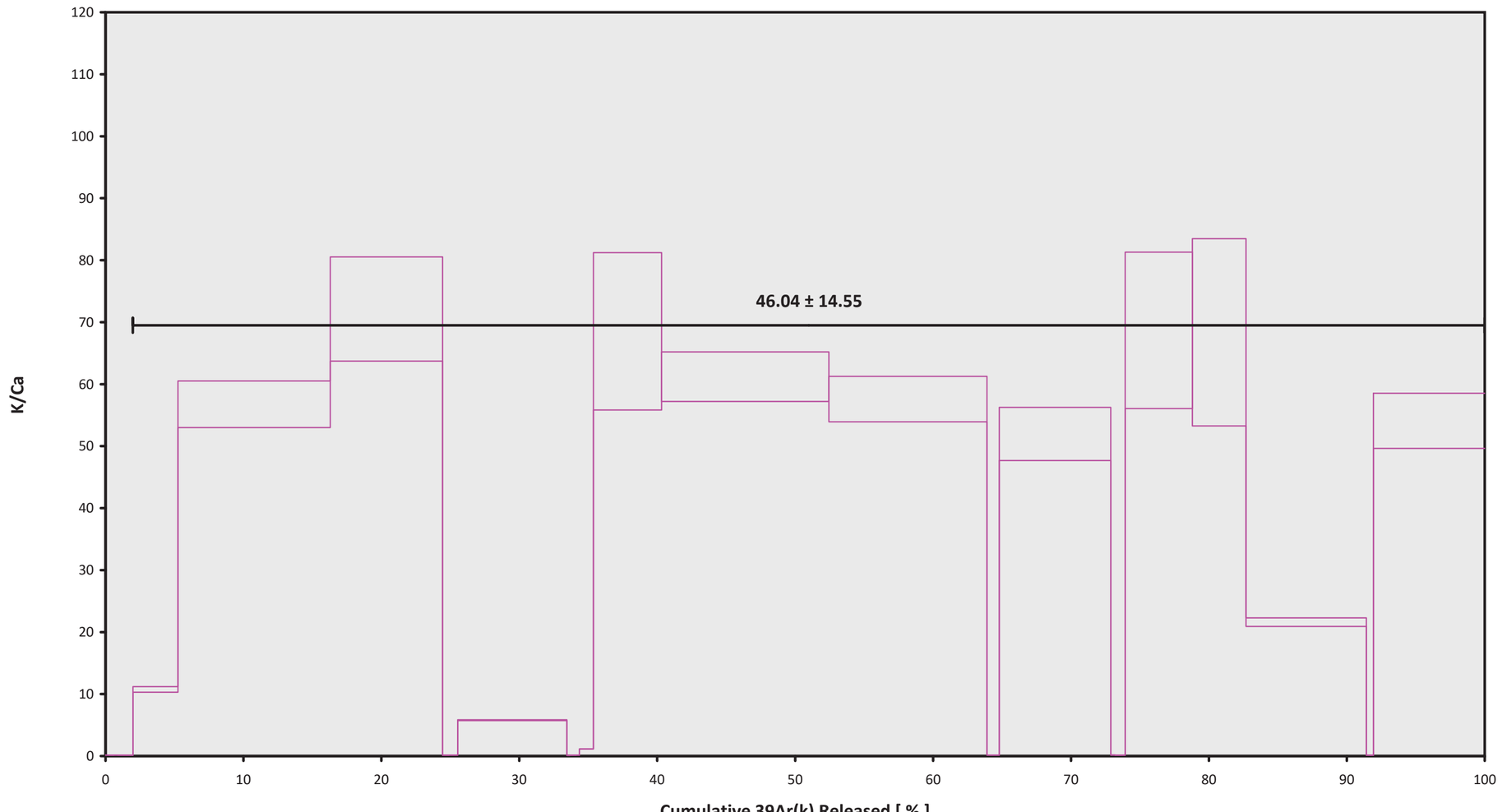
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X12-21)
J = 0.00165067 ± 0.00000187

21F16567.AGE >>> VS19-085 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.57 ± 0.06
TOTAL FUSION
10.55 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.04
INVERSE ISOCHRON
10.51 ± 0.08

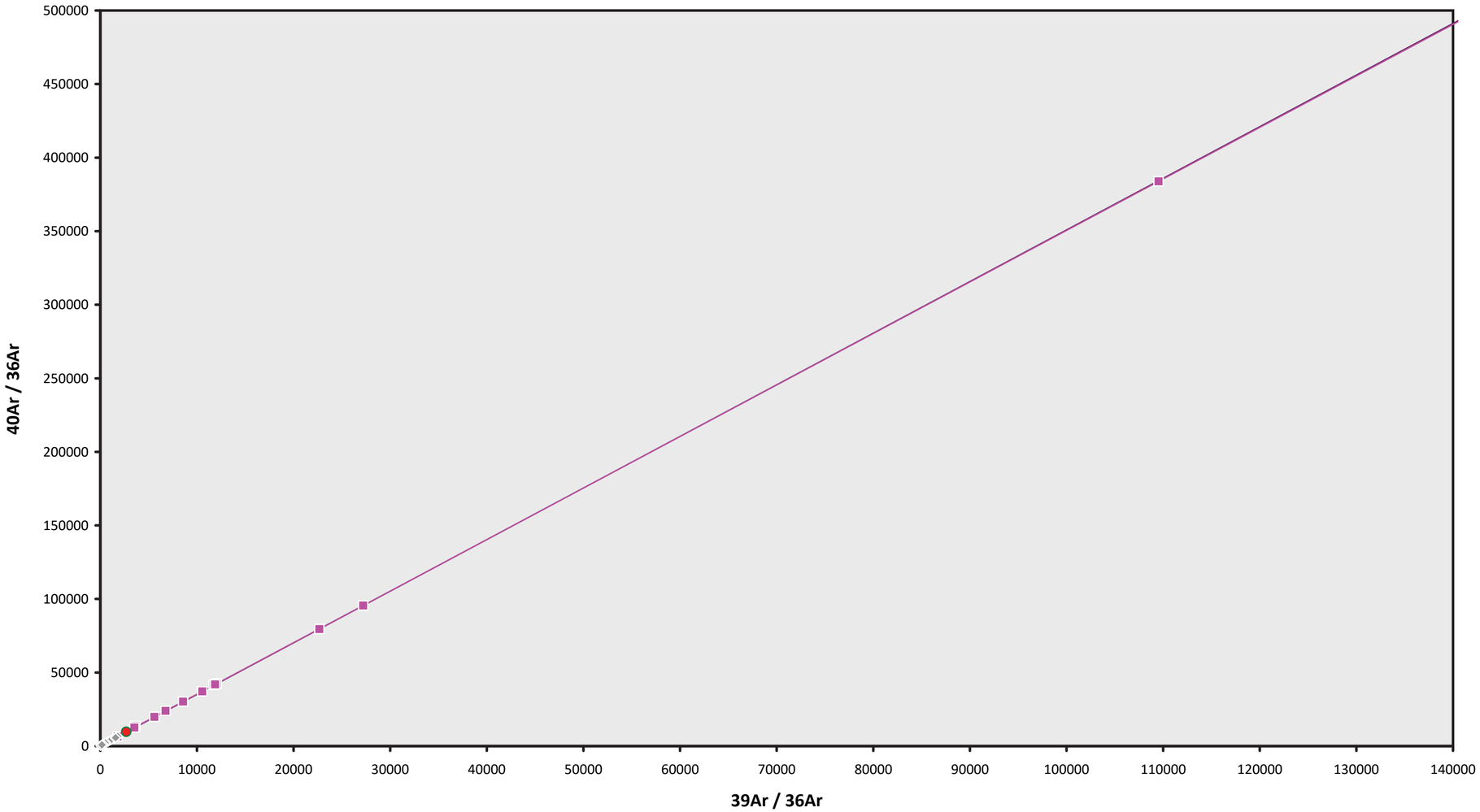
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X12-21)
J = 0.00165067 ± 0.00000187

21F16567.AGE >>> VS19-085 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.57 ± 0.06
TOTAL FUSION
10.55 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.04
INVERSE ISOCHRON
10.51 ± 0.08

MSWD (PROBABILITY)
55.52 (0%)

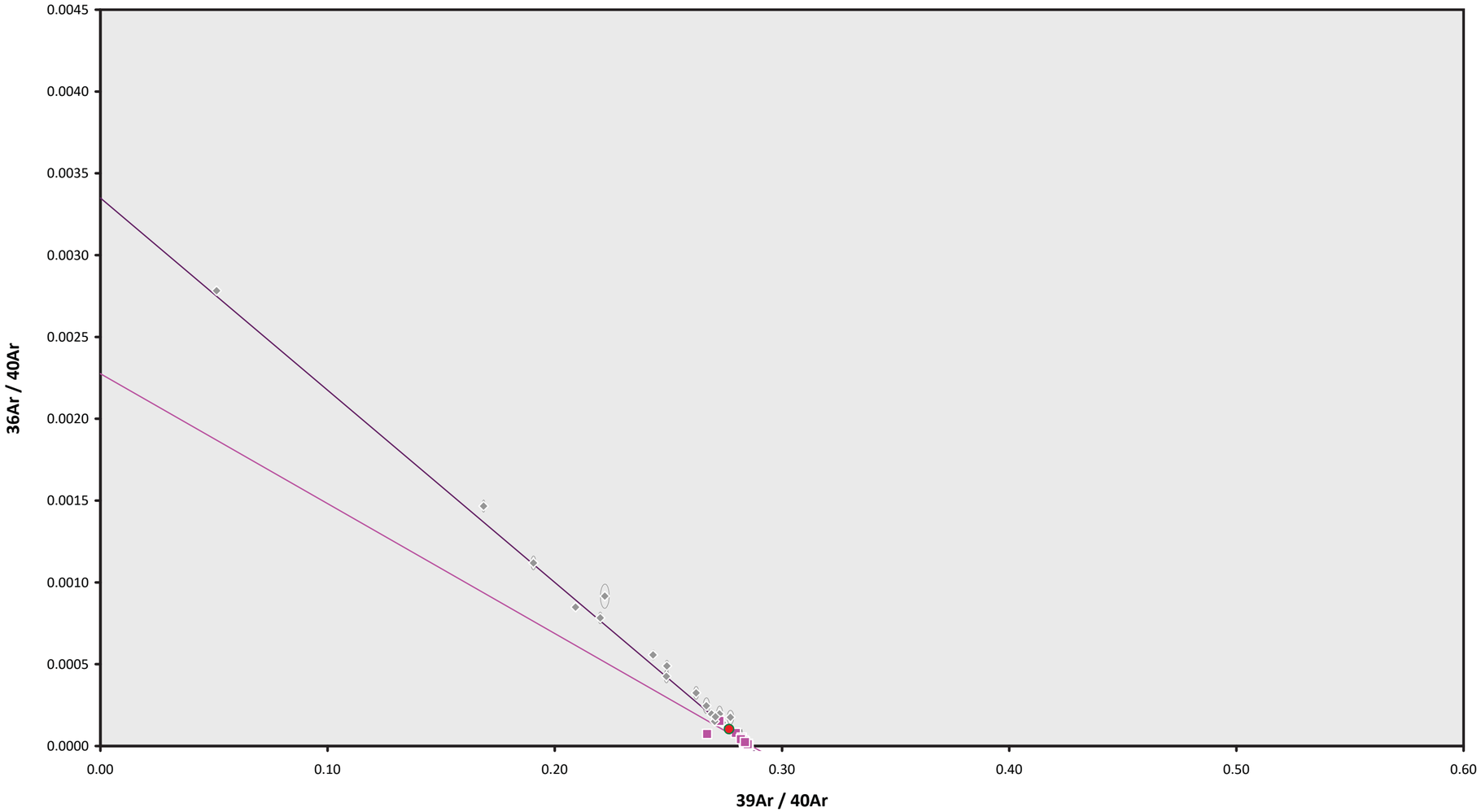
CALCULATED 40AR/36AR INTERCEPT
305.7 ± 60.6

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X12-21)
J = 0.00165067 ± 0.00000187

21F16567.AGE >>> VS19-085 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.57 ± 0.06
TOTAL FUSION
10.55 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.04
INVERSE ISOCHRON
10.51 ± 0.08

MSWD (PROBABILITY)
> 100 (0%)

SPREADING FACTOR
6.3%

CALCULATED 40AR/36AR INTERCEPT
439.6 ± 149.0

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X12-21)
J = 0.00165067 ± 0.00000187

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16639	24.0 %	✓	0.0226764	1.929	0.499143	9.131	0.589405	1.624	47.6858	0.045	173.8788	0.016	3.50463 ± 0.00645	10.52 ± 0.02	96.11	3.26	41.1 ± 7.5
21F16640	24.0 %	✓	0.0205423	1.990	0.554332	8.697	1.153635	0.890	94.6392	0.039	338.4117	0.009	3.51089 ± 0.00384	10.54 ± 0.01	98.18	6.47	73.4 ± 12.8
21F16642	24.0 %	✓	0.0133097	3.175	0.397532	11.310	0.700647	1.439	58.6272	0.042	209.2574	0.014	3.50147 ± 0.00532	10.51 ± 0.02	98.10	4.01	63.4 ± 14.3
21F16643	24.0 %	✓	0.0159823	2.528	0.220028	19.669	0.401577	2.441	33.1517	0.051	121.5825	0.020	3.52347 ± 0.00826	10.58 ± 0.02	96.07	2.27	64.8 ± 25.5
21F16645	24.0 %	✓	0.0071283	5.505	0.288866	15.790	0.432205	2.281	36.9455	0.049	131.6708	0.020	3.50636 ± 0.00735	10.53 ± 0.02	98.38	2.53	55.0 ± 17.4
21F16646	24.0 %		0.0269826	1.612	0.150550	30.019	0.167852	5.846	14.2592	0.083	57.7262	0.042	3.48365 ± 0.01946	10.46 ± 0.06	86.05	0.98	40.7 ± 24.5
21F16648	24.0 %		0.0550249	0.927	0.467649	9.821	0.456826	1.882	37.3886	0.048	146.2838	0.019	3.47356 ± 0.00899	10.43 ± 0.03	88.78	2.56	34.4 ± 6.8
21F16649	24.0 %	✓	0.0295439	1.579	0.658343	7.010	0.507428	1.709	41.5717	0.047	154.8894	0.018	3.51437 ± 0.00759	10.55 ± 0.02	94.32	2.84	27.2 ± 3.8
21F16651	24.0 %	✓	0.0056435	6.662	0.194339	22.695	0.398201	2.220	32.6299	0.051	116.3382	0.023	3.51365 ± 0.00794	10.55 ± 0.02	98.55	2.23	72.2 ± 32.8
21F16652	24.0 %	✓	0.0056891	6.614	0.339805	12.835	0.304713	3.175	25.8413	0.057	92.3240	0.031	3.50748 ± 0.00982	10.53 ± 0.03	98.17	1.77	32.7 ± 8.4
21F16654	24.0 %	✓	0.0138984	2.946	0.287114	14.950	0.430122	2.178	35.6845	0.049	129.5347	0.021	3.51378 ± 0.00782	10.55 ± 0.02	96.80	2.44	53.4 ± 16.0
21F16655	24.0 %	✓	0.0304792	1.386	0.876362	4.851	1.381405	0.702	113.8959	0.039	409.1309	0.008	3.51228 ± 0.00358	10.55 ± 0.01	97.78	7.79	55.9 ± 5.4
21F16657	24.0 %	✓	0.0138396	2.822	0.347459	12.478	0.352828	2.625	30.0620	0.056	109.8371	0.023	3.51659 ± 0.00886	10.56 ± 0.03	96.25	2.06	37.2 ± 9.3
21F16658	24.0 %	✓	0.0877465	0.629	0.931733	4.582	0.880063	1.095	73.3397	0.041	282.9221	0.012	3.50093 ± 0.00547	10.51 ± 0.02	90.75	5.02	33.8 ± 3.1
21F16660	24.0 %	✓	0.0081418	4.509	0.404674	10.759	0.572833	1.668	47.5553	0.044	169.6254	0.017	3.51589 ± 0.00569	10.56 ± 0.02	98.57	3.25	50.5 ± 10.9
21F16661	24.0 %	✓	0.0169910	2.267	0.449033	9.084	0.468035	2.124	39.0937	0.046	142.2256	0.020	3.50866 ± 0.00687	10.54 ± 0.02	96.44	2.67	37.4 ± 6.8
21F16663	24.0 %	✓	0.0131452	3.225	0.349588	13.451	0.613392	1.522	51.7143	0.044	185.9814	0.015	3.52039 ± 0.00591	10.57 ± 0.02	97.89	3.54	63.6 ± 17.1
21F16664	24.0 %	✓	0.0128962	3.209	0.338729	13.005	0.450462	2.102	37.5844	0.046	136.3506	0.020	3.52555 ± 0.00748	10.59 ± 0.02	97.18	2.57	47.7 ± 12.4
21F16666	24.0 %	✓	0.0168101	2.399	0.511772	8.542	0.686151	1.423	58.1356	0.044	209.1354	0.013	3.51117 ± 0.00525	10.54 ± 0.02	97.60	3.98	48.8 ± 8.3
21F16667	24.0 %		0.0150278	2.507	0.256870	17.686	0.190409	5.079	15.8048	0.076	60.7421	0.038	3.56014 ± 0.01553	10.69 ± 0.05	92.63	1.08	26.5 ± 9.4
21F16669	24.0 %	✓	0.0202939	1.974	0.526684	8.459	1.030936	0.905	85.8135	0.041	307.6310	0.010	3.51417 ± 0.00406	10.55 ± 0.01	98.03	5.87	70.1 ± 11.9
21F16670	24.0 %	✓	0.0165551	2.407	0.354793	12.285	0.603739	1.517	50.8737	0.044	183.2131	0.015	3.50415 ± 0.00570	10.52 ± 0.02	97.30	3.48	61.7 ± 15.1
21F16672	24.0 %	✓	0.0154030	2.612	0.399915	11.298	0.503962	1.868	41.2249	0.047	149.3710	0.017	3.51197 ± 0.00681	10.55 ± 0.02	96.93	2.82	44.3 ± 10.0
21F16673	24.0 %		0.0235980	1.799	0.272960	15.749	0.319037	2.978	26.2211	0.055	99.8486	0.026	3.53951 ± 0.01063	10.63 ± 0.03	92.95	1.79	41.3 ± 13.0
21F16675	24.0 %	✓	0.0136063	2.918	0.387742	10.962	0.813829	1.075	69.7485	0.040	249.3585	0.012	3.51672 ± 0.00452	10.56 ± 0.01	98.37	4.77	77.3 ± 17.0
21F16676	24.0 %	✓	0.0172511	2.446	0.167588	24.673	0.265981	3.541	23.1655	0.060	86.4971	0.031	3.51154 ± 0.01189	10.54 ± 0.04	94.04	1.58	59.4 ± 29.3
21F16678	24.0 %	✓	0.0359495	1.309	0.311068	14.191	0.315810	2.890	25.5097	0.057	100.2681	0.025	3.51024 ± 0.01193	10.54 ± 0.04	89.31	1.74	35.3 ± 10.0
21F16679	24.0 %	✓	0.0056468	6.646	0.386367	10.966	0.501159	1.941	42.1224	0.046	149.8961	0.018	3.51872 ± 0.00636	10.57 ± 0.02	98.88	2.88	46.9 ± 10.3
21F16681	24.0 %	✓	0.0486469	0.991	0.478723	8.638	0.497084	1.897	41.0103	0.045	158.4820	0.017	3.51065 ± 0.00786	10.54 ± 0.02	90.84	2.80	36.8 ± 6.4
21F16682	24.0 %		0.0830171	0.702	2.284730	1.883	1.583796	0.608	131.0746	0.038	948.4734	0.005	7.04792 ± 0.00608	21.10 ± 0.02	97.40	8.96	24.7 ± 0.9
		Σ	0.7114664	0.329	14.094491	1.711	17.573522	0.296	1462.3742	0.009	5810.8869	0.003					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-089**
Material = **Sanidine**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X16-21)**
Position = **X: 0 | Y: 0 | Z/H: 17.07699 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.43768 ± 0.01057**
FCT-NM J-value = **0.00164505 ± 0.00000184**
Air Shot 40Ar/36Ar = **301.4920 ± 0.3166**
Air Shot MDF = **0.99756562 ± 0.00036635 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.50 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β⁺) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β⁻) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		3.51193 ± 0.00235	**10.54 ± 0.02**	3.84	84.63	51.6 ± 5.7
Error Mean		± 0.07%	**± 0.23%**	0%	25	
		Full External Error ± 0.55		1.58	2σ Confidence Limit	
		Analytical Error ± 0.01		1.9605	Error Magnification	
Total Fusion Age		3.82854 ± 0.00120	**11.49 ± 0.03**		30	44.6 ± 1.5
		± 0.03%	**± 0.23%**			
		Full External Error ± 0.60				
		Analytical Error ± 0.00				
Normal Isochron	**290.11 ± 8.13**	3.51493 ± 0.00373	**10.55 ± 0.03**	3.81	84.63	
Error Chron	**± 2.80%**	± 0.11%	**± 0.25%**	0%	25	
		Full External Error ± 0.55		1.59	2σ Confidence Limit	
		Analytical Error ± 0.01		1.9522	Error Magnification	
				1	Number of Iterations	
				0.0000011803	Convergence	
Inverse Isochron	**292.48 ± 8.01**	3.51413 ± 0.00368	**10.55 ± 0.03**	3.67	84.63	
Error Chron	**± 2.74%**	± 0.10%	**± 0.25%**	0%	25	
		Full External Error ± 0.55		1.59	2σ Confidence Limit	
		Analytical Error ± 0.01		1.9152	Error Magnification	
				3	Number of Iterations	
				0.0000110836	Convergence	
				9%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16639	24.0 %	✓	0.0225402	0.499143	0.0091683	47.6855	167.1203	10.52 ± 0.02	96.11	3.26	41.1 ± 7.5
21F16640	24.0 %	✓	0.0203915	0.554332	0.0067390	94.6388	332.2662	10.54 ± 0.01	98.18	6.47	73.4 ± 12.8
21F16642	24.0 %	✓	0.0132023	0.397532	0.0000000	58.6269	205.2802	10.51 ± 0.02	98.10	4.01	63.4 ± 14.3
21F16643	24.0 %	✓	0.0159229	0.220028	0.0000000	33.1515	116.8084	10.58 ± 0.02	96.07	2.27	64.8 ± 25.5
21F16645	24.0 %	✓	0.0070503	0.288866	0.0000000	36.9453	129.5434	10.53 ± 0.02	98.38	2.53	55.0 ± 17.4
21F16646	24.0 %		0.0269419	0.150550	0.0000000	14.2591	49.6738	10.46 ± 0.06	86.05	0.98	40.7 ± 24.5
21F16648	24.0 %		0.0548985	0.467649	0.0000000	37.3883	129.8706	10.43 ± 0.03	88.78	2.56	34.4 ± 6.8
21F16649	24.0 %	✓	0.0293659	0.658343	0.0000000	41.5713	146.0966	10.55 ± 0.02	94.32	2.84	27.2 ± 3.8
21F16651	24.0 %	✓	0.0055905	0.194339	0.0030434	32.6297	114.6493	10.55 ± 0.02	98.55	2.23	72.2 ± 32.8
21F16652	24.0 %	✓	0.0055973	0.339805	0.0000000	25.8411	90.6372	10.53 ± 0.03	98.17	1.77	32.7 ± 8.4
21F16654	24.0 %	✓	0.0138208	0.287114	0.0000000	35.6843	125.3867	10.55 ± 0.02	96.80	2.44	53.4 ± 16.0
21F16655	24.0 %	✓	0.0302423	0.876362	0.0000333	113.8953	400.0326	10.55 ± 0.01	97.78	7.79	55.9 ± 5.4
21F16657	24.0 %	✓	0.0137457	0.347459	0.0000000	30.0618	105.7149	10.56 ± 0.03	96.25	2.06	37.2 ± 9.3
21F16658	24.0 %	✓	0.0874947	0.931733	0.0000000	73.3391	256.7551	10.51 ± 0.02	90.75	5.02	33.8 ± 3.1
21F16660	24.0 %	✓	0.0080324	0.404674	0.0000000	47.5551	167.1983	10.56 ± 0.02	98.57	3.25	50.5 ± 10.9
21F16661	24.0 %	✓	0.0168697	0.449033	0.0000000	39.0934	137.1653	10.54 ± 0.02	96.44	2.67	37.4 ± 6.8
21F16663	24.0 %	✓	0.0130507	0.349588	0.0000000	51.7140	182.0536	10.57 ± 0.02	97.89	3.54	63.6 ± 17.1
21F16664	24.0 %	✓	0.0128046	0.338729	0.0000000	37.5841	132.5048	10.59 ± 0.02	97.18	2.57	47.7 ± 12.4
21F16666	24.0 %	✓	0.0166718	0.511772	0.0000000	58.1353	204.1226	10.54 ± 0.02	97.60	3.98	48.8 ± 8.3
21F16667	24.0 %		0.0149584	0.256870	0.0000000	15.8046	56.2666	10.69 ± 0.05	92.63	1.08	26.5 ± 9.4
21F16669	24.0 %	✓	0.0201516	0.526684	0.0000000	85.8132	301.5624	10.55 ± 0.01	98.03	5.87	70.1 ± 11.9
21F16670	24.0 %	✓	0.0164592	0.354793	0.0000000	50.8735	178.2681	10.52 ± 0.02	97.30	3.48	61.7 ± 15.1
21F16672	24.0 %	✓	0.0152945	0.399915	0.0031376	41.2246	144.7796	10.55 ± 0.02	96.93	2.82	44.3 ± 10.0
21F16673	24.0 %		0.0235242	0.272960	0.0000000	26.2210	92.8093	10.63 ± 0.03	92.95	1.79	41.3 ± 13.0
21F16675	24.0 %	✓	0.0135015	0.387742	0.0000000	69.7483	245.2852	10.56 ± 0.01	98.37	4.77	77.3 ± 17.0
21F16676	24.0 %	✓	0.0172058	0.167588	0.0000000	23.1654	81.3460	10.54 ± 0.04	94.04	1.58	59.4 ± 29.3
21F16678	24.0 %	✓	0.0358653	0.311068	0.0009145	25.5095	89.5446	10.54 ± 0.04	89.31	1.74	35.3 ± 10.0
21F16679	24.0 %	✓	0.0055423	0.386367	0.0000000	42.1221	148.2158	10.57 ± 0.02	98.88	2.88	46.9 ± 10.3
21F16681	24.0 %	✓	0.0485175	0.478723	0.0000000	41.0100	143.9718	10.54 ± 0.02	90.84	2.80	36.8 ± 6.4
21F16682	24.0 %		0.0823995	2.284730	0.0000000	131.0731	923.7926	21.10 ± 0.02	97.40	8.96	24.7 ± 0.9
		Σ	0.7076536	14.094491	0.0230361	1462.3651	5598.7222				

Information on Analysis
Project = **SWENTON (20-01)**
Sample = **VS19-089**
Material = **Sanidine**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X16-21)**
J = **0.00164505 ± 0.00000184**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	3.51193	± 0.00235	**10.54**	**± 0.02**	3.84	84.63	51.6 ± 5.7
Error Mean		± 0.07%		**± 0.23%**	0%	25	
			Full External Error	± 0.55	1.58	2σ Confidence Limit	
			Analytical Error	± 0.01	1.9605	Error Magnification	
Total Fusion Age	3.82854	± 0.00120	**11.49**	**± 0.03**		30	44.6 ± 1.5
		± 0.03%		**± 0.23%**			
			Full External Error	± 0.60			
			Analytical Error	± 0.00			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
21F16639	24.0 %	✓	2115.57 ± 82.18	7712.87 ± 299.52	0.9997
21F16640	24.0 %	✓	4641.08 ± 186.18	16592.88 ± 665.53	0.9998
21F16642	24.0 %	✓	4440.67 ± 284.41	15847.42 ± 1014.89	0.9999
21F16643	24.0 %	✓	2082.01 ± 105.74	7634.45 ± 387.66	0.9998
21F16645	24.0 %	✓	5240.27 ± 583.68	18672.82 ± 2079.77	1.0000
21F16646	24.0 %		529.25 ± 17.12	2142.30 ± 69.23	0.9983
21F16648	24.0 %		681.04 ± 12.68	2664.21 ± 49.54	0.9984
21F16649	24.0 %	✓	1415.63 ± 45.01	5273.60 ± 167.62	0.9995
21F16651	24.0 %	✓	5836.61 ± 785.48	20806.34 ± 2800.00	1.0000
21F16652	24.0 %	✓	4616.75 ± 621.05	16491.73 ± 2218.43	1.0000
21F16654	24.0 %	✓	2581.93 ± 153.06	9370.87 ± 555.46	0.9998
21F16655	24.0 %	✓	3766.09 ± 105.31	13526.14 ± 378.08	0.9996
21F16657	24.0 %	✓	2187.00 ± 124.35	7989.34 ± 454.18	0.9998
21F16658	24.0 %	✓	838.21 ± 10.60	3233.08 ± 40.79	0.9977
21F16660	24.0 %	✓	5920.37 ± 541.44	21113.93 ± 1930.87	0.9999
21F16661	24.0 %	✓	2317.38 ± 105.87	8429.44 ± 385.04	0.9998
21F16663	24.0 %	✓	3962.55 ± 257.60	14248.27 ± 926.19	0.9999
21F16664	24.0 %	✓	2935.21 ± 189.82	10646.78 ± 688.46	0.9999
21F16666	24.0 %	✓	3487.04 ± 168.82	12542.14 ± 607.13	0.9998
21F16667	24.0 %		1056.57 ± 53.27	4060.10 ± 204.61	0.9994
21F16669	24.0 %	✓	4258.38 ± 169.42	15263.27 ± 607.13	0.9998
21F16670	24.0 %	✓	3090.88 ± 149.75	11129.47 ± 539.15	0.9998
21F16672	24.0 %	✓	2695.39 ± 141.91	9764.69 ± 514.03	0.9998
21F16673	24.0 %		1114.64 ± 40.25	4243.83 ± 153.21	0.9994
21F16675	24.0 %	✓	5165.96 ± 304.00	18465.80 ± 1086.54	0.9999
21F16676	24.0 %	✓	1346.37 ± 66.09	5026.39 ± 246.67	0.9996
21F16678	24.0 %	✓	711.26 ± 18.69	2795.26 ± 73.38	0.9989
21F16679	24.0 %	✓	7600.05 ± 1029.69	27041.00 ± 3663.58	1.0000
21F16681	24.0 %	✓	845.26 ± 16.83	3265.98 ± 64.96	0.9988
21F16682	24.0 %		1590.70 ± 22.53	11509.71 ± 162.76	0.9985

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**290.11 ± 8.13**	3.51493 ± 0.00373	**10.55 ± 0.03**	3.81
Error Chron	**± 2.80%**	± 0.11%	**± 0.25%**	0%
			Full External Error ± 0.55	
			Analytical Error ± 0.01	

Statistics				
	2σ Confidence Limit	1.59	Convergence	0.000001180339
	Error Magnification	1.9522	Number of Iterations	1
	Number of Data Points	25	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
21F16639	24.0 %	✓	0.2742913 ± 0.0002641	0.00012965 ± 0.00000503	0.0029
21F16640	24.0 %	✓	0.2797033 ± 0.0002264	0.00006027 ± 0.00000242	0.0011
21F16642	24.0 %	✓	0.2802140 ± 0.0002498	0.00006310 ± 0.00000404	0.0014
21F16643	24.0 %	✓	0.2727122 ± 0.0002987	0.00013099 ± 0.00000665	0.0030
21F16645	24.0 %	✓	0.2806362 ± 0.0002953	0.00005355 ± 0.00000596	0.0013
21F16646	24.0 %		0.2470499 ± 0.0004611	0.00046679 ± 0.00001508	0.0116
21F16648	24.0 %		0.2556271 ± 0.0002664	0.00037535 ± 0.00000698	0.0078
21F16649	24.0 %	✓	0.2684370 ± 0.0002684	0.00018962 ± 0.00000603	0.0042
21F16651	24.0 %	✓	0.2805207 ± 0.0003150	0.00004806 ± 0.00000647	0.0014
21F16652	24.0 %	✓	0.2799434 ± 0.0003623	0.00006064 ± 0.00000816	0.0022
21F16654	24.0 %	✓	0.2755268 ± 0.0002928	0.00010671 ± 0.00000633	0.0028
21F16655	24.0 %	✓	0.2784306 ± 0.0002226	0.00007393 ± 0.00000207	0.0012
21F16657	24.0 %	✓	0.2737395 ± 0.0003301	0.00012517 ± 0.00000712	0.0031
21F16658	24.0 %	✓	0.2592610 ± 0.0002222	0.00030930 ± 0.00000390	0.0054
21F16660	24.0 %	✓	0.2804012 ± 0.0002654	0.00004736 ± 0.00000433	0.0013
21F16661	24.0 %	✓	0.2749146 ± 0.0002751	0.00011863 ± 0.00000542	0.0034
21F16663	24.0 %	✓	0.2781072 ± 0.0002607	0.00007018 ± 0.00000456	0.0015
21F16664	24.0 %	✓	0.2756897 ± 0.0002774	0.00009393 ± 0.00000607	0.0025
21F16666	24.0 %	✓	0.2780260 ± 0.0002539	0.00007973 ± 0.00000386	0.0016
21F16667	24.0 %		0.2602329 ± 0.0004436	0.00024630 ± 0.00001241	0.0067
21F16669	24.0 %	✓	0.2789956 ± 0.0002339	0.00006552 ± 0.00000261	0.0012
21F16670	24.0 %	✓	0.2777206 ± 0.0002572	0.00008985 ± 0.00000435	0.0020
21F16672	24.0 %	✓	0.2760343 ± 0.0002754	0.00010241 ± 0.00000539	0.0023
21F16673	24.0 %		0.2626492 ± 0.0003211	0.00023564 ± 0.00000851	0.0064
21F16675	24.0 %	✓	0.2797582 ± 0.0002359	0.00005415 ± 0.00000319	0.0012
21F16676	24.0 %	✓	0.2678603 ± 0.0003598	0.00019895 ± 0.00000976	0.0057
21F16678	24.0 %	✓	0.2544526 ± 0.0003190	0.00035775 ± 0.00000939	0.0076
21F16679	24.0 %	✓	0.2810567 ± 0.0002777	0.00003698 ± 0.00000501	0.0009
21F16681	24.0 %	✓	0.2588080 ± 0.0002506	0.00030619 ± 0.00000609	0.0057
21F16682	24.0 %		0.1382054 ± 0.0001070	0.00008688 ± 0.00000123	0.0009

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**292.48 ± 8.01**	3.51413 ± 0.00368	**10.55 ± 0.03**	3.67
Error Chron	**± 2.74%**	± 0.10%	**± 0.25%**	0%
			Full External Error ± 0.55	
			Analytical Error ± 0.01	

Statistics				
	2σ Confidence Limit	1.59	Convergence	0.0000110836
	Error Magnification	1.9152	Number of Iterations	3
	Number of Data Points	25	Calculated Line	Weighted York-2
	Spreading Factor	9.3%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F16639	24.0 %	✓	0.0225402	1.94	0.0000000	0.00	0.0001349	9.13	0.0000012	105.60	0.499143	9.13	0.0042488	1.95	0.0000000	0.00	0.575898	0.10	0.0000898	13.27	0.0091683	105.61	47.6855	0.05	0.0003207	9.18	167.1203	0.08	6.72961	1.94	0.0000000	0.00	0.0289451	9.65
21F16640	24.0 %	✓	0.0203915	2.01	0.0000000	0.00	0.0001498	8.70	0.0000009	158.06	0.554332	8.70	0.0038438	2.01	0.0000000	0.00	1.142953	0.10	0.0000998	12.98	0.0067390	158.07	94.6388	0.04	0.0003562	8.75	332.2662	0.04	6.08810	2.01	0.0000000	0.00	0.0574458	9.65
21F16642	24.0 %	✓	0.0132023	3.20	0.0000000	0.00	0.0001075	11.31	0.0000000	0.00	0.397532	11.31	0.0024886	3.21	0.0000000	0.00	0.708037	0.10	0.0000716	14.85	0.0000000	0.00	58.6269	0.04	0.0002554	11.35	205.2802	0.06	3.94167	3.20	0.0000000	0.00	0.0355865	9.65
21F16643	24.0 %	✓	0.0159229	2.54	0.0000000	0.00	0.0000595	19.67	0.0000000	0.00	0.220028	19.67	0.0030015	2.54	0.0000000	0.00	0.400371	0.10	0.0000396	21.90	0.0000000	0.00	33.1515	0.05	0.0001414	19.69	116.8084	0.11	4.75393	2.54	0.0000000	0.00	0.0201230	9.65
21F16645	24.0 %	✓	0.0070503	5.57	0.0000000	0.00	0.0000781	15.79	0.0000000	0.00	0.288866	15.79	0.0013290	5.57	0.0000000	0.00	0.446188	0.10	0.0000520	18.49	0.0000000	0.00	36.9453	0.05	0.0001856	15.82	129.5434	0.09	2.10493	5.57	0.0000000	0.00	0.0224258	9.65
21F16646	24.0 %		0.0269419	1.62	0.0000000	0.00	0.0000407	30.02	0.0000000	0.00	0.150550	30.02	0.0050786	1.62	0.0000000	0.00	0.172207	0.12	0.0000271	31.53	0.0000000	0.00	14.2591	0.08	0.0000967	30.03	49.6738	0.27	8.04378	1.62	0.0000000	0.00	0.0086553	9.65
21F16648	24.0 %		0.0548985	0.93	0.0000000	0.00	0.0001264	9.82	0.0000000	0.00	0.467649	9.82	0.0103484	0.94	0.0000000	0.00	0.451539	0.10	0.0000842	13.75	0.0000000	0.00	37.3883	0.05	0.0003005	9.86	129.8706	0.12	16.39050	0.94	0.0000000	0.00	0.0226947	9.65
21F16649	24.0 %	✓	0.0293659	1.59	0.0000000	0.00	0.0001780	7.01	0.0000000	0.00	0.658343	7.01	0.0055355	1.60	0.0000000	0.00	0.502056	0.10	0.0001185	11.91	0.0000000	0.00	41.5713	0.05	0.0004230	7.07	146.0966	0.10	8.76749	1.59	0.0000000	0.00	0.0252338	9.65
21F16651	24.0 %	✓	0.0055905	6.73	0.0000000	0.00	0.0000525	22.70	0.0000004	292.32	0.194339	22.70	0.0010538	6.73	0.0000000	0.00	0.394069	0.10	0.0000350	24.65	0.0030434	292.32	32.6297	0.05	0.0001249	22.71	114.6493	0.10	1.66911	6.73	0.0000000	0.00	0.0198062	9.65
21F16652	24.0 %	✓	0.0055973	6.73	0.0000000	0.00	0.0000918	12.84	0.0000000	0.00	0.339805	12.83	0.0010551	6.73	0.0000000	0.00	0.312083	0.11	0.0000612	16.05	0.0000000	0.00	25.8411	0.06	0.0002183	12.87	90.6372	0.13	1.67112	6.73	0.0000000	0.00	0.0156856	9.65
21F16654	24.0 %	✓	0.0138208	2.96	0.0000000	0.00	0.0000776	14.95	0.0000000	0.00	0.287114	14.95	0.0026052	2.97	0.0000000	0.00	0.430960	0.10	0.0000517	17.78	0.0000000	0.00	35.6843	0.05	0.0001845	14.98	125.3867	0.10	4.12634	2.97	0.0000000	0.00	0.0216604	9.65
21F16655	24.0 %	✓	0.0302423	1.40	0.0000000	0.00	0.0002369	4.85	0.0000000	######	0.876362	4.85	0.0057007	1.41	0.0000000	0.00	1.375514	0.10	0.0001577	10.78	0.0000333	######	113.8953	0.04	0.0005631	4.94	400.0326	0.03	9.02914	1.40	0.0000000	0.00	0.0691344	9.65
21F16657	24.0 %	✓	0.0137457	2.84	0.0000000	0.00	0.0000939	12.48	0.0000000	0.00	0.347459	12.48	0.0025911	2.85	0.0000000	0.00	0.363056	0.11	0.0000625	15.76	0.0000000	0.00	30.0618	0.06	0.0002232	12.51	105.7149	0.11	4.10391	2.84	0.0000000	0.00	0.0182475	9.65
21F16658	24.0 %	✓	0.0874947	0.63	0.0000000	0.00	0.0002518	4.59	0.0000000	0.00	0.931733	4.58	0.0164927	0.65	0.0000000	0.00	0.885717	0.10	0.0001677	10.66	0.0000000	0.00	73.3391	0.04	0.0005986	4.67	256.7551	0.07	26.12241	0.64	0.0000000	0.00	0.0445169	9.65
21F16660	24.0 %	✓	0.0080324	4.57	0.0000000	0.00	0.0001094	10.76	0.0000000	0.00	0.404674	10.76	0.0015141	4.58	0.0000000	0.00	0.574322	0.10	0.0000728	14.44	0.0000000	0.00	47.5551	0.04	0.0002600	10.80	167.1983	0.07	2.39817	4.57	0.0000000	0.00	0.0288659	9.65
21F16661	24.0 %	✓	0.0168697	2.28	0.0000000	0.00	0.0001214	9.09	0.0000000	0.00	0.449033	9.08	0.0031799	2.29	0.0000000	0.00	0.472131	0.10	0.0000808	13.24	0.0000000	0.00	39.0934	0.05	0.0002885	9.13	137.1653	0.09	5.03661	2.29	0.0000000	0.00	0.0237297	9.65
21F16663	24.0 %	✓	0.0130507	3.25	0.0000000	0.00	0.0000945	13.45	0.0000000	0.00	0.349588	13.45	0.0024601	3.25	0.0000000	0.00	0.624550	0.10	0.0000629	16.54	0.0000000	0.00	51.7140	0.04	0.0002246	13.48	182.0536	0.07	3.89642	3.25	0.0000000	0.00	0.0313904	9.65
21F16664	24.0 %	✓	0.0128046	3.23	0.0000000	0.00	0.0000916	13.01	0.0000000	0.00	0.338729	13.01	0.0024137	3.24	0.0000000	0.00	0.453904	0.10	0.0000610	16.18	0.0000000	0.00	37.5841	0.05	0.0002176	13.04	132.5048	0.10	3.82294	3.23	0.0000000	0.00	0.0228136	9.65
21F16666	24.0 %	✓	0.0166718	2.42	0.0000000	0.00	0.0001383	8.54	0.0000000	0.00	0.511772	8.54	0.0031426	2.43	0.0000000	0.00	0.702100	0.10	0.0000921	12.87	0.0000000	0.00	58.1353	0.04	0.0003288	8.59	204.1226	0.06	4.97754	2.42	0.0000000	0.00	0.0352881	9.65
21F16667	24.0 %		0.0149584	2.52	0.0000000	0.00	0.0000694	17.69	0.0000000	0.00	0.256870	17.69	0.0028197	2.52	0.0000000	0.00	0.190872	0.12	0.0000462	20.14	0.0000000	0.00	15.8046	0.08	0.0001650	17.71	56.2666	0.20	4.46597	2.52	0.0000000	0.00	0.0095934	9.65
21F16669	24.0 %	✓	0.0201516	1.99	0.0000000	0.00	0.0001424	8.46	0.0000000	0.00	0.526684	8.46	0.0037986	2.00	0.0000000	0.00	1.036365	0.10	0.0000948	12.82	0.0000000	0.00	85.8132	0.04	0.0003384	8.51	301.5624	0.04	6.01645	1.99	0.0000000	0.00	0.0520886	9.65
21F16670	24.0 %	✓	0.0164592	2.42	0.0000000	0.00	0.0000959	12.29	0.0000000	0.00	0.354793	12.29	0.0031026	2.43	0.0000000	0.00	0.614399	0.10	0.0000639	15.61	0.0000000	0.00	50.8735	0.04	0.0002280	12.32	178.2681	0.07	4.91406	2.42	0.0000000	0.00	0.0308802	9.65
21F16672	24.0 %	✓	0.0152945	2.63	0.0000000	0.00	0.0001081	11.30	0.0000004	302.65	0.399915	11.30	0.0028830	2.64	0.0000000	0.00	0.497869	0.10	0.0000720	14.85	0.0031376	302.65	41.2246	0.05	0.0002569	11.34	144.7796	0.09	4.56632	2.63	0.0000000	0.00	0.0250233	9.65
21F16673	24.0 %		0.0235242	1.80	0.0000000	0.00	0.0000738	15.75	0.0000000	0.00	0.272960	15.75	0.0044343	1.81	0.0000000	0.00	0.316671	0.11	0.0000491	18.46	0.0000000	0.00	26.2210	0.06	0.0001754	15.78	92.8093	0.14	7.02338	1.81	0.0000000	0.00	0.0159161	9.65
21F16675	24.0 %	✓	0.0135015	2.94	0.0000000	0.00	0.0001048	10.96	0.0000000	0.00	0.387742	10.96	0.0025450	2.95	0.0000000	0.00	0.842350	0.10	0.0000698	14.59	0.0000000	0.00	69.7483	0.04	0.0002491	11.00	245.2852	0.05	4.03101	2.94	0.0000000	0.00	0.0423372	9.65
21F16676	24.0 %	✓	0.0172058	2.45	0.0000000	0.00	0.0000453	24.67	0.0000000	0.00	0.167588	24.67	0.0032433	2.46	0.0000000	0.00	0.279768	0.11	0.0000302	26.49	0.0000000	0.00	23.1654	0.06	0.0001077	24.69	81.3460	0.16	5.13696	2.46	0.0000000	0.00	0.0140614	9.65
21F16678	24.0 %	✓	0.0358653	1.31	0.0000000	0.00	0.0000841	14.19	0.0000001	######	0.311068	14.19	0.0067606	1.32	0.0000000	0.00	0.308079	0.11	0.0000560	17.15	0.0009145	######	25.5095	0.06	0.0001999	14.22	89.5446	0.16	10.70793	1.32	0.0000000	0.00	0.0154843	9.65
21F16679	24.0 %	✓	0.0055423	6.77	0.0000000	0.00	0.0001044	10.97	0.0000000	0.00	0.386367	10.97	0.0010447	6.78	0.0000000	0.00	0.508709	0.10	0.0000695	14.59	0.0000000	0.00	42.1221	0.05	0.0002482	11.00	148.2158	0.08	1.65472	6.77	0.0000000	0.00	0.0255681	9.65
21F16681	24.0 %	✓	0.0485175	0.99	0.0000000	0.00	0.0001294	8.64	0.0000000	0.00	0.478723	8.64	0.0091455	1.01	0.0000000	0.00	0.495277	0.10	0.0000862	12.94	0.0000000	0.00	41.0100	0.05	0.0003076	8.69	143.9718	0.10	14.48537	1.00	0.0000000	0.00	0.0248931	9.65
21F16682	24.0 %		0.0823995	0.71	0.0000000	0.00	0.0006176	1.89	0.0000000	0.00	2.284730	1.88	0.0155323	0.72	0.0000000	0.00	1.582970	0.10	0.0004113	9.81	0.0000000	0.00	131.0731	0.04	0.0014679	2.10	923.7926	0.02	24.60119	0.71	0.0000000	0.00	0.0795614	9.65
		Σ	0.7076536	0.33	0.0000000	0.00	0.0038097	1.71	0.0000030	103.33	14.094491	1.71	0.1333927	0.33	0.0000000	0.00	17.660984	0.02	0.0025370	2.84	0.0230361	103.27	1462.3651	0.01	0.0090557	1.72	5598.7222	0.01	211.27707	0.33	0.0000000	0.00	0.8876556	2.02
		Σ							0.7114664	0.33	14.094491	1.71									17.819949	0.14			1462.3742	0.01							5810.8869	0.02

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F16639	24.0 %	✓	3.646342	0.001754	0.010467	0.000956	0.000476	0.000009	80.913	4.956261	1.00057196	6.155E-12
21F16640	24.0 %	✓	3.575810	0.001446	0.005857	0.000509	0.000217	0.000004	80.919	4.956873	1.00057201	1.198E-11
21F16642	24.0 %	✓	3.569292	0.001590	0.006781	0.000767	0.000227	0.000007	80.931	4.958029	1.00057209	7.408E-12
21F16643	24.0 %	✓	3.667461	0.002008	0.006637	0.001305	0.000482	0.000012	80.937	4.958641	1.00057214	4.304E-12
21F16645	24.0 %	✓	3.563922	0.001874	0.007819	0.001235	0.000193	0.000011	80.949	4.959798	1.00057222	4.661E-12
21F16646	24.0 %		4.048345	0.003777	0.010558	0.003169	0.001892	0.000031	80.955	4.960410	1.00057226	2.044E-12
21F16648	24.0 %		3.912524	0.002038	0.012508	0.001228	0.001472	0.000014	80.967	4.961567	1.00057235	5.178E-12
21F16649	24.0 %	✓	3.725838	0.001861	0.015836	0.001110	0.000711	0.000011	80.973	4.962179	1.00057239	5.483E-12
21F16651	24.0 %	✓	3.565392	0.002001	0.005956	0.001352	0.000173	0.000012	80.985	4.963337	1.00057247	4.118E-12
21F16652	24.0 %	✓	3.572727	0.002311	0.013150	0.001688	0.000220	0.000015	80.991	4.963949	1.00057252	3.268E-12
21F16654	24.0 %	✓	3.630000	0.001928	0.008046	0.001203	0.000389	0.000011	81.003	4.965107	1.00057260	4.586E-12
21F16655	24.0 %	✓	3.592149	0.001435	0.007694	0.000373	0.000268	0.000004	81.008	4.965652	1.00057264	1.448E-11
21F16657	24.0 %	✓	3.653688	0.002202	0.011558	0.001442	0.000460	0.000013	81.021	4.966878	1.00057273	3.888E-12
21F16658	24.0 %	✓	3.857692	0.001652	0.012704	0.000582	0.001196	0.000008	81.026	4.967423	1.00057277	1.002E-11
21F16660	24.0 %	✓	3.566907	0.001687	0.008510	0.000916	0.000171	0.000008	81.039	4.968650	1.00057286	6.005E-12
21F16661	24.0 %	✓	3.638074	0.001819	0.011486	0.001043	0.000435	0.000010	81.044	4.969195	1.00057290	5.035E-12
21F16663	24.0 %	✓	3.596327	0.001685	0.006760	0.000909	0.000254	0.000008	81.056	4.970354	1.00057298	6.584E-12
21F16664	24.0 %	✓	3.627853	0.001824	0.009013	0.001172	0.000343	0.000011	81.063	4.970967	1.00057302	4.827E-12
21F16666	24.0 %	✓	3.597373	0.001642	0.008803	0.000752	0.000289	0.000007	81.074	4.972127	1.00057311	7.403E-12
21F16667	24.0 %		3.843279	0.003275	0.016253	0.002874	0.000951	0.000024	81.081	4.972741	1.00057315	2.150E-12
21F16669	24.0 %	✓	3.584879	0.001501	0.006138	0.000519	0.000236	0.000005	81.092	4.973900	1.00057323	1.089E-11
21F16670	24.0 %	✓	3.601332	0.001667	0.006974	0.000857	0.000325	0.000008	81.099	4.974514	1.00057328	6.486E-12
21F16672	24.0 %	✓	3.623323	0.001807	0.009701	0.001096	0.000374	0.000010	81.110	4.975674	1.00057336	5.288E-12
21F16673	24.0 %		3.807941	0.002327	0.010410	0.001639	0.000900	0.000016	81.117	4.976289	1.00057341	3.535E-12
21F16675	24.0 %	✓	3.575109	0.001506	0.005559	0.000609	0.000195	0.000006	81.128	4.977449	1.00057349	8.827E-12
21F16676	24.0 %	✓	3.733879	0.002507	0.007234	0.001785	0.000745	0.000018	81.135	4.978064	1.00057353	3.062E-12
21F16678	24.0 %	✓	3.930582	0.002463	0.012194	0.001730	0.001409	0.000018	81.147	4.979225	1.00057362	3.549E-12
21F16679	24.0 %	✓	3.558587	0.001757	0.009173	0.001006	0.000134	0.000009	81.153	4.979839	1.00057366	5.306E-12
21F16681	24.0 %	✓	3.864447	0.001870	0.011673	0.001008	0.001186	0.000012	81.165	4.981001	1.00057374	5.610E-12
21F16682	24.0 %		7.236133	0.002799	0.017431	0.000328	0.000633	0.000004	81.170	4.981547	1.00057378	3.358E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
21F16639	24.0 %	0.0174322 ± 0.0002352	0.0208924 ± 0.0066213	0.0029772 ± 0.0069785	0.0134597 ± 0.0066694	4.5964677 ± 0.0155172
21F16640	24.0 %	0.0174322 ± 0.0002352	0.0208924 ± 0.0066213	0.0029772 ± 0.0069785	0.0134597 ± 0.0066694	4.5964677 ± 0.0155172
21F16642	24.0 %	0.0178024 ± 0.0002455	0.0120751 ± 0.0066021	0.0000054 ± 0.0076364	0.0145555 ± 0.0061069	4.5733981 ± 0.0155887
21F16643	24.0 %	0.0178024 ± 0.0002455	0.0120751 ± 0.0066021	0.0000054 ± 0.0076364	0.0145555 ± 0.0061069	4.5733981 ± 0.0155887
21F16645	24.0 %	0.0176873 ± 0.0002348	0.0091430 ± 0.0065051	0.0067711 ± 0.0070120	0.0079418 ± 0.0059536	4.4768122 ± 0.0154574
21F16646	24.0 %	0.0176873 ± 0.0002348	0.0091430 ± 0.0065051	0.0067711 ± 0.0070120	0.0079418 ± 0.0059536	4.4768122 ± 0.0154574
21F16648	24.0 %	0.0164753 ± 0.0002642	0.0052086 ± 0.0066287	0.0032874 ± 0.0060701	0.0080440 ± 0.0056629	4.4268513 ± 0.0171726
21F16649	24.0 %	0.0164753 ± 0.0002642	0.0052086 ± 0.0066287	0.0032874 ± 0.0060701	0.0080440 ± 0.0056629	4.4268513 ± 0.0171726
21F16651	24.0 %	0.0177520 ± 0.0002294	0.0096736 ± 0.0059334	0.0044975 ± 0.0062090	0.0177153 ± 0.0059851	4.5053179 ± 0.0155887
21F16652	24.0 %	0.0177520 ± 0.0002294	0.0096736 ± 0.0059334	0.0044975 ± 0.0062090	0.0177153 ± 0.0059851	4.5053179 ± 0.0155887
21F16654	24.0 %	0.0171826 ± 0.0002316	0.0147335 ± 0.0057372	0.0041780 ± 0.0068318	0.0224009 ± 0.0058114	4.3840524 ± 0.0155898
21F16655	24.0 %	0.0171826 ± 0.0002316	0.0147335 ± 0.0057372	0.0041780 ± 0.0068318	0.0224009 ± 0.0058114	4.3840524 ± 0.0155898
21F16657	24.0 %	0.0170813 ± 0.0002428	0.0156326 ± 0.0059359	0.0212537 ± 0.0067475	0.0155755 ± 0.0063571	4.3652366 ± 0.0159060
21F16658	24.0 %	0.0170813 ± 0.0002428	0.0156326 ± 0.0059359	0.0212537 ± 0.0067475	0.0155755 ± 0.0063571	4.3652366 ± 0.0159060
21F16660	24.0 %	0.0165665 ± 0.0002264	0.0155369 ± 0.0056448	0.0048451 ± 0.0069604	0.0208008 ± 0.0058246	4.2763367 ± 0.0163256
21F16661	24.0 %	0.0165665 ± 0.0002264	0.0155369 ± 0.0056448	0.0048451 ± 0.0069604	0.0208008 ± 0.0058246	4.2763367 ± 0.0163256
21F16663	24.0 %	0.0171742 ± 0.0002516	0.0069772 ± 0.0067206	0.0093437 ± 0.0067632	0.0151476 ± 0.0056979	4.2768163 ± 0.0164104
21F16664	24.0 %	0.0171742 ± 0.0002516	0.0069772 ± 0.0067206	0.0093437 ± 0.0067632	0.0151476 ± 0.0056979	4.2768163 ± 0.0164104
21F16666	24.0 %	0.0166166 ± 0.0002394	0.0137336 ± 0.0062699	0.0115876 ± 0.0066063	0.0147162 ± 0.0070790	4.2642141 ± 0.0128038
21F16667	24.0 %	0.0166166 ± 0.0002394	0.0137336 ± 0.0062699	0.0115876 ± 0.0066063	0.0147162 ± 0.0070790	4.2642141 ± 0.0128038
21F16669	24.0 %	0.0165267 ± 0.0002024	0.0139484 ± 0.0064758	0.0098235 ± 0.0064766	0.0085574 ± 0.0064366	4.2619404 ± 0.0162475
21F16670	24.0 %	0.0165267 ± 0.0002024	0.0139484 ± 0.0064758	0.0098235 ± 0.0064766	0.0085574 ± 0.0064366	4.2619404 ± 0.0162475
21F16672	24.0 %	0.0166072 ± 0.0002386	0.0016151 ± 0.0060982	0.0064543 ± 0.0065619	0.0118670 ± 0.0062666	4.1761764 ± 0.0149155
21F16673	24.0 %	0.0166072 ± 0.0002386	0.0016151 ± 0.0060982	0.0064543 ± 0.0065619	0.0118670 ± 0.0062666	4.1761764 ± 0.0149155
21F16675	24.0 %	0.0166626 ± 0.0002457	0.0242586 ± 0.0056104	0.0172443 ± 0.0062270	0.0201246 ± 0.0057501	4.0519643 ± 0.0151222
21F16676	24.0 %	0.0166626 ± 0.0002457	0.0242586 ± 0.0056104	0.0172443 ± 0.0062270	0.0201246 ± 0.0057501	4.0519643 ± 0.0151222
21F16678	24.0 %	0.0166072 ± 0.0002386	0.0016151 ± 0.0060982	0.0064543 ± 0.0065619	0.0118670 ± 0.0062666	4.1761764 ± 0.0149155
21F16679	24.0 %	0.0166072 ± 0.0002386	0.0016151 ± 0.0060982	0.0064543 ± 0.0065619	0.0118670 ± 0.0062666	4.1761764 ± 0.0149155
21F16681	24.0 %	0.0166626 ± 0.0002457	0.0242586 ± 0.0056104	0.0172443 ± 0.0062270	0.0201246 ± 0.0057501	4.0519643 ± 0.0151222
21F16682	24.0 %	0.0166626 ± 0.0002457	0.0242586 ± 0.0056104	0.0172443 ± 0.0062270	0.0201246 ± 0.0057501	4.0519643 ± 0.0151222

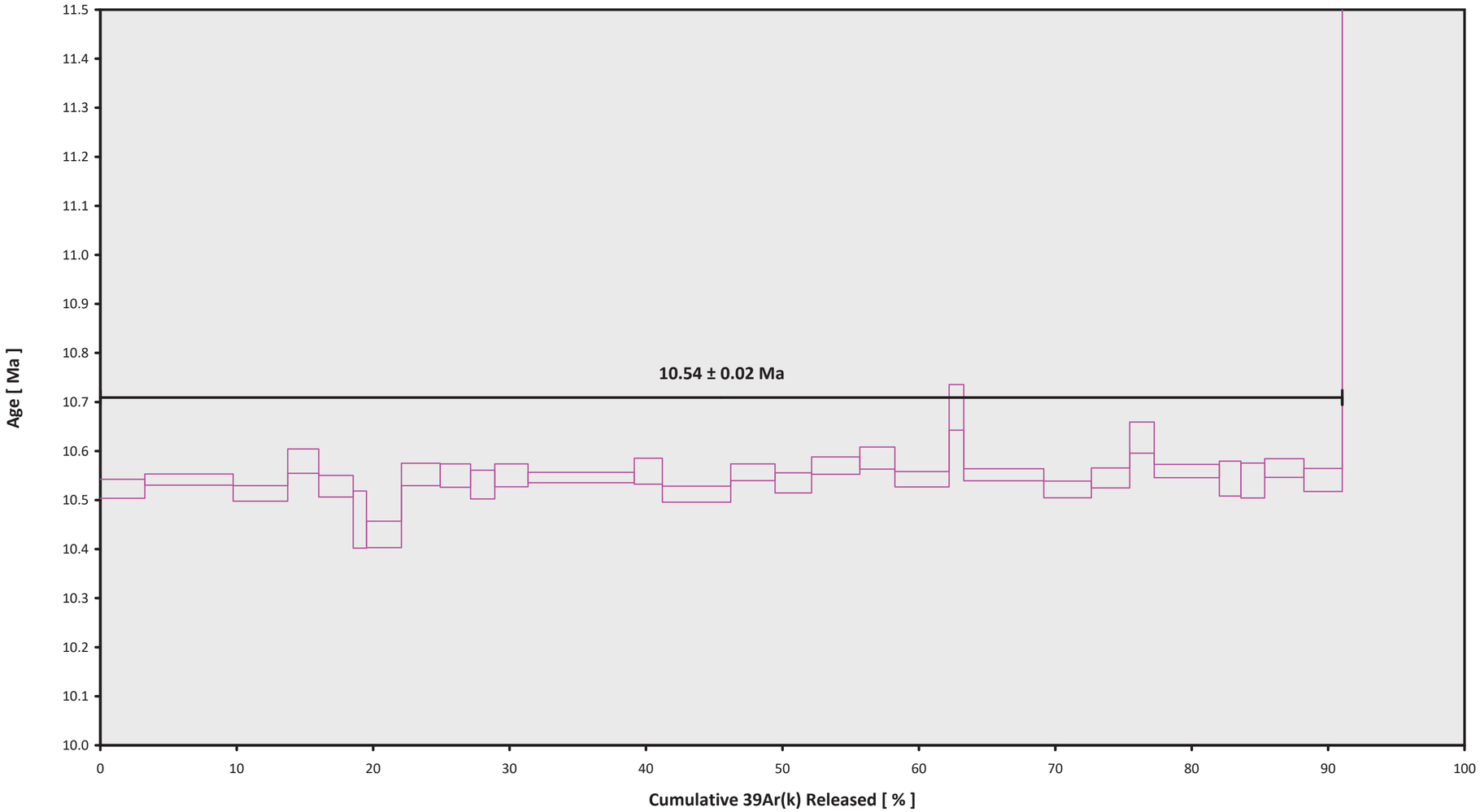
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F16639	24.0 %	0.0386932 ± 0.0003346	0.7407	EXP 150 of 150	0.1208675 ± 0.0062785	0.0035	EXP 150 of 150	0.5895130 ± 0.0064724	0.5190	EXP 150 of 150	47.55624 ± 0.01067	0.9996	EXP 148 of 150	178.47530 ± 0.02402	0.9997	EXP 150 of 150
21F16640	24.0 %	0.0366923 ± 0.0003012	0.8591	EXP 150 of 150	0.1319078 ± 0.0070214	0.0193	EXP 148 of 150	1.1509969 ± 0.0074215	0.7293	EXP 150 of 150	94.36871 ± 0.01169	0.9999	EXP 149 of 150	343.00818 ± 0.02763	0.9999	EXP 146 of 150
21F16642	24.0 %	0.0302814 ± 0.0003104	0.8266	EXP 150 of 150	0.0916698 ± 0.0061163	0.0190	EXP 149 of 150	0.6972413 ± 0.0064897	0.5728	EXP 149 of 150	58.46582 ± 0.01076	0.9997	EXP 150 of 150	213.83083 ± 0.02453	0.9998	EXP 149 of 150
21F16643	24.0 %	0.0327872 ± 0.0002877	0.8165	EXP 149 of 150	0.0561242 ± 0.0056095	0.0037	EXP 148 of 150	0.3996270 ± 0.0060639	0.3209	EXP 150 of 150	33.06677 ± 0.00992	0.9993	EXP 150 of 150	126.15586 ± 0.01906	0.9996	EXP 148 of 150
21F16645	24.0 %	0.0243707 ± 0.0002831	0.8697	EXP 148 of 150	0.0669597 ± 0.0064035	0.0002	EXP 150 of 150	0.4368719 ± 0.0068551	0.2829	EXP 149 of 150	36.84256 ± 0.01026	0.9994	EXP 150 of 150	136.14756 ± 0.02070	0.9996	EXP 150 of 150
21F16646	24.0 %	0.0429858 ± 0.0003314	0.6094	EXP 150 of 150	0.0392720 ± 0.0062832	0.0038	EXP 150 of 150	0.1738056 ± 0.0067937	0.0480	EXP 150 of 150	14.22438 ± 0.00883	0.9967	EXP 150 of 150	62.20306 ± 0.01854	0.9956	EXP 148 of 150
21F16648	24.0 %	0.0680659 ± 0.0003913	0.1241	EXP 149 of 150	0.0987756 ± 0.0063599	0.0301	EXP 150 of 150	0.4513149 ± 0.0060182	0.3493	EXP 150 of 150	37.28448 ± 0.01031	0.9994	EXP 150 of 150	150.71068 ± 0.02248	0.9997	EXP 148 of 150
21F16649	24.0 %	0.0441752 ± 0.0003461	0.6603	EXP 148 of 150	0.1369132 ± 0.0064175	0.0268	EXP 150 of 150	0.5016701 ± 0.0061239	0.3810	EXP 150 of 150	41.45500 ± 0.01043	0.9995	EXP 150 of 150	159.31622 ± 0.02242	0.9997	EXP 150 of 150
21F16651	24.0 %	0.0230432 ± 0.0002675	0.8605	EXP 150 of 150	0.0485429 ± 0.0065271	0.0023	EXP 150 of 150	0.4007606 ± 0.0062275	0.3695	EXP 149 of 150	32.54967 ± 0.00997	0.9992	EXP 150 of 150	120.84355 ± 0.02169	0.9994	EXP 150 of 150
21F16652	24.0 %	0.0230860 ± 0.0002679	0.8413	EXP 150 of 150	0.0776290 ± 0.0063901	0.0299	EXP 150 of 150	0.3077273 ± 0.0073562	0.1044	EXP 150 of 150	25.78151 ± 0.00944	0.9989	EXP 150 of 150	96.82934 ± 0.02392	0.9987	EXP 150 of 150
21F16654	24.0 %	0.0302135 ± 0.0003056	0.7850	EXP 150 of 150	0.0721382 ± 0.0063807	0.0097	EXP 150 of 150	0.4322057 ± 0.0063355	0.3215	EXP 150 of 150	35.59983 ± 0.00987	0.9994	EXP 149 of 150	133.91879 ± 0.02229	0.9996	EXP 147 of 150
21F16655	24.0 %	0.0457594 ± 0.0003186	0.7987	EXP 149 of 150	0.1899314 ± 0.0062535	0.0507	EXP 150 of 150	1.3788587 ± 0.0067439	0.8322	EXP 150 of 150	113.57651 ± 0.01436	0.9999	EXP 150 of 150	413.51491 ± 0.02921	0.9999	EXP 149 of 150
21F16657	24.0 %	0.0300571 ± 0.0002734	0.8350	EXP 147 of 150	0.0850775 ± 0.0063106	0.0033	EXP 150 of 150	0.3723644 ± 0.0062709	0.3136	EXP 150 of 150	29.98734 ± 0.01085	0.9989	EXP 150 of 150	114.20231 ± 0.01959	0.9995	EXP 149 of 150
21F16658	24.0 %	0.0993511 ± 0.0004402	0.0444	EXP 144 of 150	0.2018333 ± 0.0061101	0.1042	EXP 148 of 150	0.8970328 ± 0.0067847	0.6394	EXP 150 of 150	73.13523 ± 0.01202	0.9998	EXP 150 of 150	287.28731 ± 0.02997	0.9999	EXP 150 of 150
21F16660	24.0 %	0.0242001 ± 0.0002590	0.8750	EXP 150 of 150	0.0963885 ± 0.0066154	0.0065	EXP 150 of 150	0.5748892 ± 0.0064659	0.4947	EXP 149 of 150	47.43341 ± 0.01017	0.9996	EXP 150 of 150	173.90172 ± 0.02333	0.9998	EXP 149 of 150
21F16661	24.0 %	0.0324970 ± 0.0002803	0.7987	EXP 150 of 150	0.1052413 ± 0.0058724	0.0530	EXP 148 of 150	0.4706021 ± 0.0070209	0.3015	EXP 150 of 150	38.99715 ± 0.00912	0.9996	EXP 150 of 150	146.50198 ± 0.02264	0.9996	EXP 150 of 150
21F16663	24.0 %	0.0294989 ± 0.0003072	0.7980	EXP 150 of 150	0.0767990 ± 0.0065582	0.0002	EXP 150 of 150	0.6197497 ± 0.0063560	0.4614	EXP 150 of 150	51.57421 ± 0.01156	0.9996	EXP 150 of 150	190.25822 ± 0.02265	0.9998	EXP 149 of 150
21F16664	24.0 %	0.0292654 ± 0.0002948	0.7971	EXP 150 of 150	0.0746219 ± 0.0056742	0.0130	EXP 148 of 150	0.4576130 ± 0.0065494	0.3842	EXP 149 of 150	37.48672 ± 0.00885	0.9995	EXP 150 of 150	140.62738 ± 0.02160	0.9996	EXP 150 of 150
21F16666	24.0 %	0.0323776 ± 0.0002918	0.8138	EXP 150 of 150	0.1159111 ± 0.0060669	0.0168	EXP 150 of 150	0.6943986 ± 0.0071042	0.4756	EXP 150 of 150	57.97585 ± 0.01184	0.9997	EXP 150 of 150	213.39965 ± 0.02434	0.9998	EXP 148 of 150
21F16667	24.0 %	0.0307065 ± 0.0002588	0.7862	EXP 148 of 150	0.0650126 ± 0.0065513	0.0047	EXP 150 of 150	0.2010698 ± 0.0069974	0.1081	EXP 150 of 150	15.77205 ± 0.00783	0.9979	EXP 149 of 150	65.00635 ± 0.01910	0.9965	EXP 150 of 150
21F16669	24.0 %	0.0355540 ± 0.0003151	0.7869	EXP 150 of 150	0.1190656 ± 0.0060876	0.0049	EXP 150 of 150	1.0357415 ± 0.0066036	0.7437	EXP 150 of 150	85.56451 ± 0.01367	0.9998	EXP 150 of 150	311.89293 ± 0.02592	0.9999	EXP 150 of 150
21F16670	24.0 %	0.0320486 ± 0.0003132	0.7748	EXP 150 of 150	0.0847504 ± 0.0058042	0.0004	EXP 149 of 150	0.6106239 ± 0.0063976	0.4740	EXP 150 of 150	50.72957 ± 0.01033	0.9997	EXP 149 of 150	187.47501 ± 0.02198	0.9998	EXP 149 of 150
21F16672	24.0 %	0.0310488 ± 0.0002914	0.7754	EXP 150 of 150	0.0814031 ± 0.0066354	0.0062	EXP 150 of 150	0.5079631 ± 0.0066767	0.4482	EXP 148 of 150	41.11299 ± 0.01013	0.9995	EXP 149 of 150	153.54714 ± 0.02129	0.9997	EXP 150 of 150
21F16673	24.0 %	0.0387322 ± 0.0003168	0.6801	EXP 149 of 150	0.0560673 ± 0.0060277	0.0006	EXP 150 of 150	0.3239382 ± 0.0068025	0.1882	EXP 150 of 150	26.15431 ± 0.00874	0.9991	EXP 147 of 150	104.02475 ± 0.02178	0.9992	EXP 150 of 150
21F16675	24.0 %	0.0294197 ± 0.0002791	0.8535	EXP 150 of 150	0.1015902 ± 0.0063516	0.0059	EXP 149 of 150	0.8271119 ± 0.0060543	0.6665	EXP 150 of 150	69.55928 ± 0.01027	0.9998	EXP 147 of 150	253.41049 ± 0.02598	0.9999	EXP 150 of 150
21F16676	24.0 %	0.0328370 ± 0.0003092	0.7494	EXP 150 of 150	0.0576785 ± 0.0060422	0.0201	EXP 148 of 150	0.2819301 ± 0.0070027	0.1154	EXP 150 of 150	23.11606 ± 0.00927	0.9987	EXP 150 of 150	90.54901 ± 0.02167	0.9986	EXP 150 of 150
21F16678	24.0 %	0.0503128 ± 0.0003677	0.5010	EXP 150 of 150	0.0636327 ± 0.0063438	0.0014	EXP 150 of 150	0.3207266 ± 0.0062740	0.2389	EXP 148 of 150	25.44502 ± 0.00936	0.9989	EXP 150 of 150	104.44423 ± 0.02008	0.9992	EXP 150 of 150
21F16679	24.0 %	0.0219015 ± 0.0002585	0.8744	EXP 150 of 150	0.0786357 ± 0.0058398	0.0026	EXP 149 of 150	0.5051741 ± 0.0071043	0.3199	EXP 149 of 150	42.00780 ± 0.00992	0.9996	EXP 148 of 150	154.07226 ± 0.02196	0.9997	EXP 150 of 150
21F16681	24.0 %	0.0622732 ± 0.0003736	0.3025	EXP 148 of 150	0.1196675 ± 0.0060323	0.0510	EXP 150 of 150	0.5119080 ± 0.0070124	0.3968	EXP 150 of 150	40.90731 ± 0.00938	0.9996	EXP 150 of 150	162.53400 ± 0.02138	0.9998	EXP 149 of 150
21F16682	24.0 %	0.0944982 ± 0.0004740	0.4255	EXP 149 of 150	0.4795527 ± 0.0063752	0.2889	EXP 150 of 150	1.5933307 ± 0.0071879	0.8467	EXP 150 of 150	130.70128 ± 0.01366	0.9999	EXP 149 of 150	952.52534 ± 0.04455	1.0000	EXP 148 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F16639	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16640	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16642	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16643	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16645	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16646	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16648	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16649	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16651	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16652	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16654	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16655	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16657	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16658	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16660	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16661	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16663	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16664	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16666	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16667	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16669	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16670	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16672	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16673	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16675	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16676	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16678	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16679	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16681	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01
21F16682	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	17.08	Oregon\Swenton (20-01)	21F16635	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F16639	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	13	25	1
21F16640	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	13	34	1
21F16642	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	13	51	1
21F16643	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	14	0	1
21F16645	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	14	17	1
21F16646	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	14	26	1
21F16648	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	14	43	1
21F16649	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	14	52	1
21F16651	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	15	9	1
21F16652	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	15	18	1
21F16654	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	15	35	1
21F16655	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	15	43	1
21F16657	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	16	1	1
21F16658	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	16	9	1
21F16660	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	16	27	1
21F16661	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	16	35	1
21F16663	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	16	52	1
21F16664	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	17	1	1
21F16666	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	17	18	1
21F16667	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	17	27	1
21F16669	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	17	44	1
21F16670	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	17	53	1
21F16672	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	18	10	1
21F16673	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	18	19	1
21F16675	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	18	36	1
21F16676	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	18	45	1
21F16678	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	19	2	1
21F16679	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	19	11	1
21F16681	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	19	28	1
21F16682	24.0 %	VS19-089	Sanidine	Circle Bar	FCT-NM (4X16-21)	28.201	0.082	Kuiper et al (2008)	9.43768	0.112	0.00164505	0.112	301.492	0.105	0.99756562	0.037	1	3.54E-14	5	SEP	2021	19	36	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F16639	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16640	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16642	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16643	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16645	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16646	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16648	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16649	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16651	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16652	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16654	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16655	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16657	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16658	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16660	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16661	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16663	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16664	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16666	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16667	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16669	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16670	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16672	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16673	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16675	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16676	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16678	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16679	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16681	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16682	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F16635.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.54 ± 0.02
TOTAL FUSION
11.49 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.03
INVERSE ISOCHRON
10.55 ± 0.03

MSWD (PROBABILITY)
3.84 (0%)

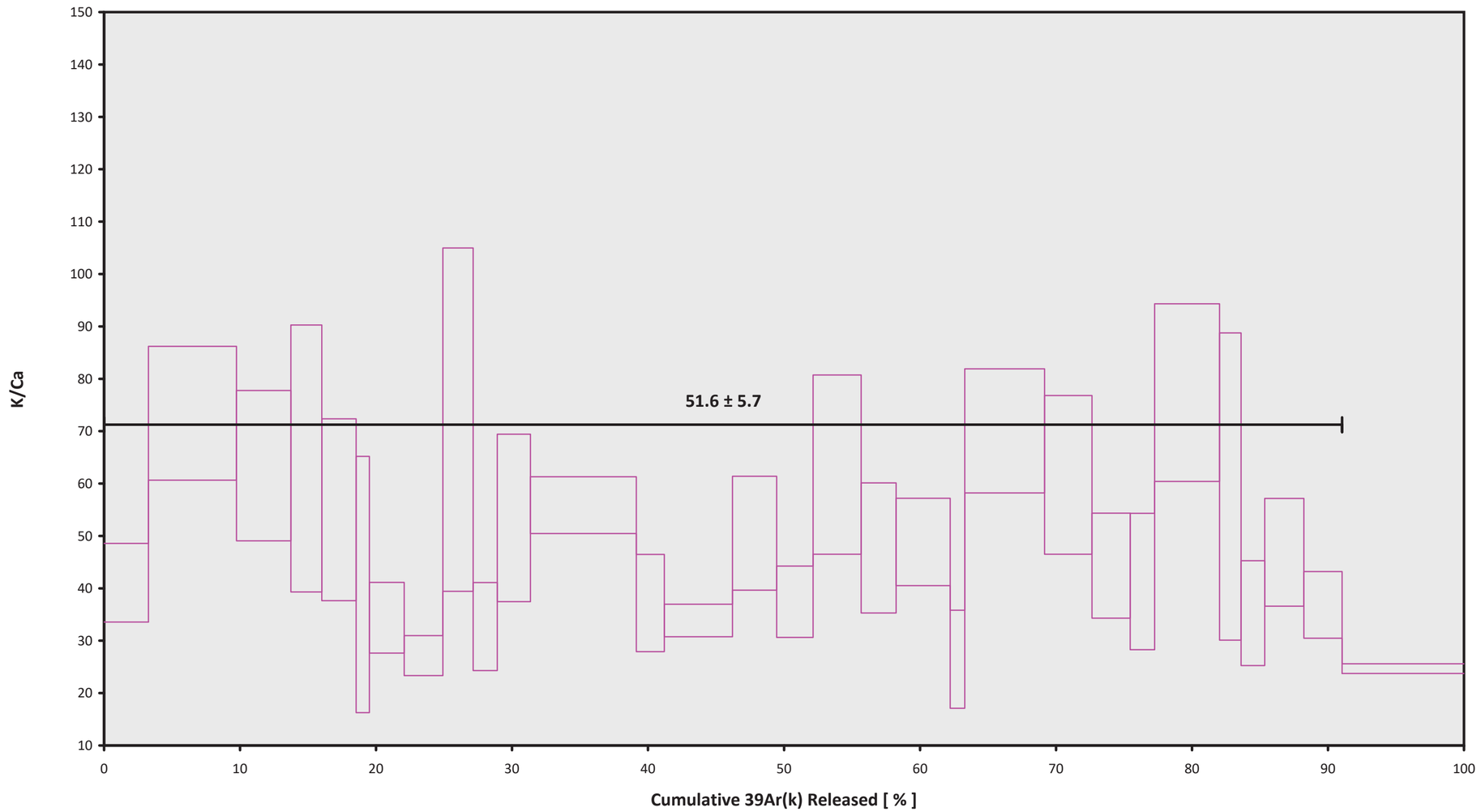
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X16-21)
J = 0.00164505 ± 0.00000184

21F16635.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.54 ± 0.02
TOTAL FUSION
11.49 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.03
INVERSE ISOCHRON
10.55 ± 0.03

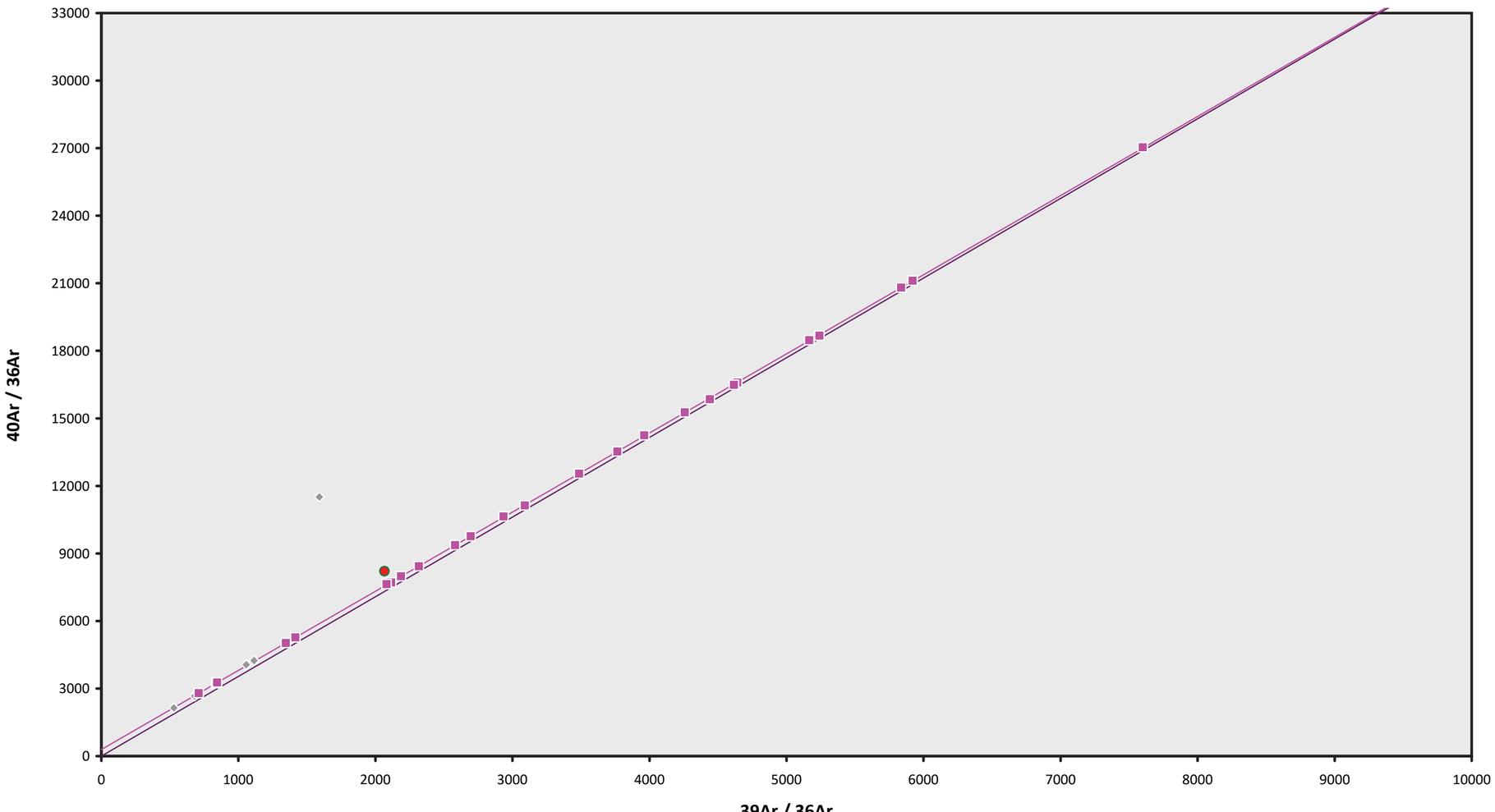
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X16-21)
J = 0.00164505 ± 0.00000184

21F16635.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.54 ± 0.02
TOTAL FUSION
11.49 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.03
INVERSE ISOCHRON
10.55 ± 0.03

MSWD (PROBABILITY)
3.81 (0%)

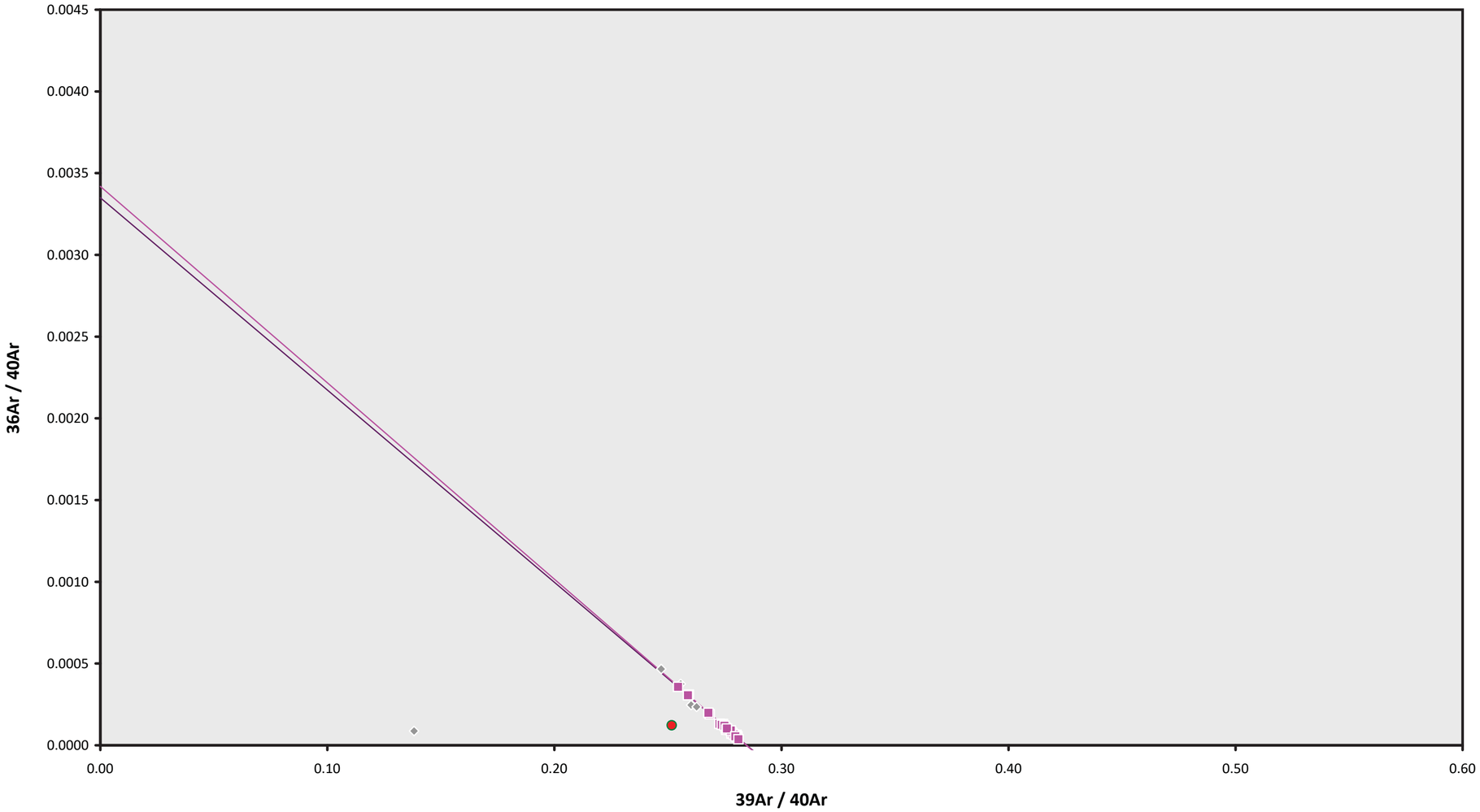
CALCULATED 40AR/36AR INTERCEPT
290.1 ± 8.1

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X16-21)
J = 0.00164505 ± 0.00000184

21F16635.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.54 ± 0.02
TOTAL FUSION
11.49 ± 0.03
NORMAL ISOCHRON
10.55 ± 0.03
INVERSE ISOCHRON
10.55 ± 0.03

MSWD (PROBABILITY)
3.67 (0%)

SPREADING FACTOR
9.3%

CALCULATED 40AR/36AR INTERCEPT
292.5 ± 8.0

Sample Info

Sanidine
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X16-21)
J = 0.00164505 ± 0.00000184

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F15806	24.0 %	✓	0.0283538	1.372	0.4117324	9.945	1.007813	1.035	84.0212	0.042	278.5864	0.012	3.21471 ± 0.00395	9.70 ± 0.01	96.95	6.09	88 ± 17
21F15808	24.0 %	✓	0.0186562	2.024	0.3144997	12.075	0.632423	1.398	51.7802	0.046	172.0692	0.017	3.21540 ± 0.00539	9.71 ± 0.02	96.76	3.75	71 ± 17
21F15809	24.0 %	✓	0.0621997	0.797	0.1283894	30.598	0.282090	3.272	21.9064	0.060	88.8564	0.028	3.20835 ± 0.01435	9.69 ± 0.04	79.10	1.59	73 ± 45
21F15811	24.0 %	✓	0.0041022	8.345	0.2928270	12.758	0.661306	1.415	53.8502	0.044	174.6352	0.018	3.22009 ± 0.00489	9.72 ± 0.01	99.29	3.90	79 ± 20
21F15812	24.0 %	✓	0.0131028	2.737	0.5814726	6.419	1.171769	0.766	94.0194	0.041	306.4802	0.011	3.21806 ± 0.00357	9.71 ± 0.01	98.72	6.81	70 ± 9
21F15814	24.0 %	✓	0.0217964	1.702	0.3133892	12.243	0.797756	1.119	65.5118	0.043	216.8083	0.014	3.20991 ± 0.00446	9.69 ± 0.01	96.99	4.75	90 ± 22
21F15815	24.0 %	✓	0.0128377	2.742	0.4058012	9.277	0.951978	0.938	78.0546	0.041	254.7370	0.013	3.21430 ± 0.00389	9.70 ± 0.01	98.49	5.66	83 ± 15
21F15817	24.0 %	✓	0.0242457	1.659	0.4465677	8.511	0.858573	1.160	71.6648	0.042	238.1723	0.012	3.22232 ± 0.00440	9.73 ± 0.01	96.96	5.19	69 ± 12
21F15820	24.0 %	✓	0.0219161	1.817	0.1951080	20.243	0.415380	2.183	35.4709	0.051	120.5813	0.023	3.21482 ± 0.00764	9.70 ± 0.02	94.57	2.57	78 ± 32
21F15821	24.0 %	✓	0.0095521	3.862	0.2043341	18.960	0.448345	2.128	38.2610	0.051	126.4704	0.023	3.23076 ± 0.00679	9.75 ± 0.02	97.74	2.77	81 ± 31
21F15823	24.0 %		0.1137762	0.498	0.3927751	9.119	0.360875	2.422	25.6883	0.059	128.5231	0.019	3.68153 ± 0.01426	11.11 ± 0.04	73.58	1.86	28 ± 5
21F15824	24.0 %	✓	0.1391882	0.527	0.2731465	13.518	0.760738	1.198	58.3659	0.044	229.0119	0.012	3.21154 ± 0.00821	9.70 ± 0.02	81.85	4.23	92 ± 25
21F15826	24.0 %	✓	0.0139833	2.755	0.1794876	19.280	0.387226	2.434	32.5007	0.050	108.5801	0.023	3.21225 ± 0.00795	9.70 ± 0.02	96.15	2.36	78 ± 30
21F15827	24.0 %	✓	0.0157541	2.458	0.1644289	21.387	0.513899	1.830	41.6135	0.047	138.6752	0.017	3.21916 ± 0.00644	9.72 ± 0.02	96.60	3.02	109 ± 47
21F15829	24.0 %	✓	0.4338434	0.280	0.2664684	12.367	0.840311	1.015	62.6308	0.044	330.6816	0.010	3.21148 ± 0.01270	9.69 ± 0.04	60.82	4.54	101 ± 25
21F15830	24.0 %	✓	0.0975537	0.615	1.2572323	2.905	0.457452	1.988	37.7135	0.051	149.8224	0.019	3.20251 ± 0.01028	9.67 ± 0.03	80.61	2.73	13 ± 1
21F15832	24.0 %	✓	0.5324388	0.263	0.5732327	6.517	1.052988	0.926	79.9099	0.042	417.9878	0.008	3.24142 ± 0.01160	9.79 ± 0.03	61.97	5.79	60 ± 8
21F15833	24.0 %	✓	0.0195907	2.016	0.3470952	10.123	0.532266	1.822	43.7526	0.047	146.4765	0.018	3.21420 ± 0.00630	9.70 ± 0.02	96.01	3.17	54 ± 11
21F15835	24.0 %	✓	0.0049834	6.366	0.2173907	16.946	0.227086	4.239	19.4173	0.064	63.5948	0.039	3.19885 ± 0.01088	9.66 ± 0.03	97.67	1.41	38 ± 13
21F15836	24.0 %	✓	0.1384521	0.503	0.5851895	6.094	0.924342	1.005	73.5735	0.043	277.3759	0.013	3.20827 ± 0.00647	9.69 ± 0.02	85.10	5.33	54 ± 7
21F15838	24.0 %	✓	0.0729518	0.796	0.2233734	16.111	0.420069	2.195	33.6438	0.051	129.7680	0.021	3.20968 ± 0.01101	9.69 ± 0.03	83.21	2.44	65 ± 21
21F15841	24.0 %	✓	0.0452175	1.009	0.3305228	11.406	0.818456	1.098	68.0366	0.043	232.3866	0.012	3.21698 ± 0.00495	9.71 ± 0.01	94.18	4.93	89 ± 20
21F15842	24.0 %	✓	0.0594727	0.802	0.1727858	20.606	0.581766	1.446	46.8182	0.047	168.2159	0.017	3.21340 ± 0.00695	9.70 ± 0.02	89.44	3.39	117 ± 48
21F15844	24.0 %	✓	0.0961858	0.567	0.3333186	11.478	0.520628	1.840	42.4506	0.047	165.0518	0.017	3.21165 ± 0.00848	9.70 ± 0.03	82.60	3.08	55 ± 13
21F15845	24.0 %	✓	0.3135992	0.356	0.2841589	13.087	0.511652	1.928	37.3164	0.049	212.0190	0.014	3.17265 ± 0.01894	9.58 ± 0.06	55.84	2.70	56 ± 15
21F15847	24.0 %	✓	0.0575830	0.890	0.4511621	7.676	0.674232	1.457	54.8708	0.044	193.3096	0.014	3.20975 ± 0.00635	9.69 ± 0.02	91.11	3.98	52 ± 8
21F15848	24.0 %	✓	0.0189390	2.093	0.2160970	16.619	0.330615	2.773	27.1562	0.055	92.9291	0.028	3.21386 ± 0.00961	9.70 ± 0.03	93.92	1.97	54 ± 18
		Σ	2.3902756	0.132	9.5619868	2.010	17.142033	0.282	1379.9987	0.009	5161.8058	0.003					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-093**
Material = **Sanidine**
Location = **Unidentified flow #2**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X2-21)**
Position = **X: 0 | Y: 0 | Z/H: 1.277199 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.38912 ± 0.01061**
FCT-NM J-value = **0.00165356 ± 0.00000187**
Air Shot 40Ar/36Ar = **301.2520 ± 0.3374**
Air Shot MDF = **0.99776310 ± 0.00037917 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **50 sec**
Isolation = **1.50 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		3.21540 ± 0.00257	**9.71 ± 0.02**	4.56	98.14	72 ± 9
Error Mean		± 0.08%	**± 0.24%**	0%	26	
		Full External Error ± 0.50		1.57	2σ Confidence Limit	
		Analytical Error ± 0.01		2.1345	Error Magnification	
Total Fusion Age		3.22328 ± 0.00155	**9.73 ± 0.02**		27	62 ± 2
		± 0.05%	**± 0.23%**			
		Full External Error ± 0.51				
		Analytical Error ± 0.00				
Normal Isochron	**296.34 ± 2.38**	3.21925 ± 0.00339	**9.72 ± 0.02**	5.97	98.14	
Error Chron	**± 0.80%**	± 0.11%	**± 0.25%**	0%	26	
		Full External Error ± 0.51		1.58	2σ Confidence Limit	
		Analytical Error ± 0.01		2.4429	Error Magnification	
				1	Number of Iterations	
				0.0000020168	Convergence	
Inverse Isochron	**297.68 ± 2.14**	3.21607 ± 0.00310	**9.71 ± 0.02**	4.83	98.14	
Error Chron	**± 0.72%**	± 0.10%	**± 0.25%**	0%	26	
		Full External Error ± 0.50		1.58	2σ Confidence Limit	
		Analytical Error ± 0.01		2.1971	Error Magnification	
				2	Number of Iterations	
				0.0006653000	Convergence	
				43%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F15806	24.0 %	✓	0.0282425	0.4117324	0.0000000	84.0209	270.1034	9.70 ± 0.01	96.95	6.09	88 ± 17
21F15808	24.0 %	✓	0.0185708	0.3144997	0.0035190	51.7800	166.4933	9.71 ± 0.02	96.76	3.75	71 ± 17
21F15809	24.0 %	✓	0.0621643	0.1283894	0.0057856	21.9064	70.2833	9.69 ± 0.04	79.10	1.59	73 ± 45
21F15811	24.0 %	✓	0.0040219	0.2928270	0.0101493	53.8500	173.4018	9.72 ± 0.01	99.29	3.90	79 ± 20
21F15812	24.0 %	✓	0.0129417	0.5814726	0.0337565	94.0190	302.5592	9.71 ± 0.01	98.72	6.81	70 ± 9
21F15814	24.0 %	✓	0.0217114	0.3133892	0.0024236	65.5116	210.2864	9.69 ± 0.01	96.99	4.75	90 ± 22
21F15815	24.0 %	✓	0.0127272	0.4058012	0.0068443	78.0543	250.8897	9.70 ± 0.01	98.49	5.66	83 ± 15
21F15817	24.0 %	✓	0.0241249	0.4465677	0.0000000	71.6645	230.9260	9.73 ± 0.01	96.96	5.19	69 ± 12
21F15820	24.0 %	✓	0.0218633	0.1951080	0.0000000	35.4708	114.0323	9.70 ± 0.02	94.57	2.57	78 ± 32
21F15821	24.0 %	✓	0.0094969	0.2043341	0.0000000	38.2609	123.6118	9.75 ± 0.02	97.74	2.77	81 ± 31
21F15823	24.0 %		0.1136666	0.3927751	0.0291436	25.6880	94.5712	11.11 ± 0.04	73.58	1.86	28 ± 5
21F15824	24.0 %	✓	0.1391109	0.2731465	0.0295837	58.3657	187.4435	9.70 ± 0.02	81.85	4.23	92 ± 25
21F15826	24.0 %	✓	0.0139348	0.1794876	0.0000000	32.5006	104.4000	9.70 ± 0.02	96.15	2.36	78 ± 30
21F15827	24.0 %	✓	0.0157087	0.1644289	0.0083435	41.6133	133.9600	9.72 ± 0.02	96.60	3.02	109 ± 47
21F15829	24.0 %	✓	0.4337712	0.2664684	0.0021071	62.6306	201.1369	9.69 ± 0.04	60.82	4.54	101 ± 25
21F15830	24.0 %	✓	0.0972139	1.2572323	0.0000000	37.7127	120.7754	9.67 ± 0.03	80.61	2.73	13 ± 1
21F15832	24.0 %	✓	0.5322839	0.5732327	0.0000000	79.9095	259.0206	9.79 ± 0.03	61.97	5.79	60 ± 8
21F15833	24.0 %	✓	0.0194969	0.3470952	0.0001312	43.7524	140.6289	9.70 ± 0.02	96.01	3.17	54 ± 11
21F15835	24.0 %	✓	0.0049247	0.2173907	0.0000000	19.4172	62.1127	9.66 ± 0.03	97.67	1.41	38 ± 13
21F15836	24.0 %	✓	0.1382928	0.5851895	0.0096264	73.5731	236.0425	9.69 ± 0.02	85.10	5.33	54 ± 7
21F15838	24.0 %	✓	0.0728914	0.2233734	0.0000000	33.6436	107.9852	9.69 ± 0.03	83.21	2.44	65 ± 21
21F15841	24.0 %	✓	0.0451281	0.3305228	0.0000000	68.0364	218.8718	9.71 ± 0.01	94.18	4.93	89 ± 20
21F15842	24.0 %	✓	0.0594254	0.1727858	0.0051117	46.8181	150.4454	9.70 ± 0.02	89.44	3.39	117 ± 48
21F15844	24.0 %	✓	0.0960957	0.3333186	0.0000000	42.4504	136.3357	9.70 ± 0.03	82.60	3.08	55 ± 13
21F15845	24.0 %	✓	0.3135221	0.2841589	0.0018338	37.3162	118.3911	9.58 ± 0.06	55.84	2.70	56 ± 15
21F15847	24.0 %	✓	0.0574609	0.4511621	0.0006480	54.8705	176.1207	9.69 ± 0.02	91.11	3.98	52 ± 8
21F15848	24.0 %	✓	0.0188806	0.2160970	0.0000000	27.1560	87.2756	9.70 ± 0.03	93.92	1.97	54 ± 18
		Σ	2.3876735	9.5619868	0.1490073	1379.9926	4448.1044				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-093**
Material = **Sanidine**
Location = **Unidentified flow #2**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X2-21)**
J = **0.00165356 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	3.21540	± 0.00257	**9.71**	**± 0.02**	4.56	98.14	72 ± 9
Error Mean		± 0.08%		**± 0.24%**	0%	26	
			Full External Error	± 0.50	1.57	2σ Confidence Limit	
			Analytical Error	± 0.01	2.1345	Error Magnification	
Total Fusion Age	3.22328	± 0.00155	**9.73**	**± 0.02**		27	62 ± 2
		± 0.05%		**± 0.23%**			
			Full External Error	± 0.51			
			Analytical Error	± 0.00			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
21F15806	24.0 %	✓	2974.99 ± 82.05	9862.29 ± 271.90	0.9995
21F15808	24.0 %	✓	2788.25 ± 113.48	9263.88 ± 376.95	0.9997
21F15809	24.0 %	✓	352.39 ± 5.64	1429.17 ± 22.82	0.9965
21F15811	24.0 %	✓	13389.26 ± 2280.42	43413.16 ± 7393.93	1.0000
21F15812	24.0 %	✓	7264.81 ± 402.88	23677.17 ± 1312.92	0.9999
21F15814	24.0 %	✓	3017.39 ± 103.18	9984.11 ± 341.33	0.9997
21F15815	24.0 %	✓	6132.87 ± 339.41	20011.43 ± 1107.37	0.9999
21F15817	24.0 %	✓	2970.56 ± 99.12	9870.64 ± 329.27	0.9997
21F15820	24.0 %	✓	1622.39 ± 59.16	5514.25 ± 201.01	0.9995
21F15821	24.0 %	✓	4028.77 ± 313.15	13314.56 ± 1034.84	0.9999
21F15823	24.0 %		225.99 ± 2.27	1130.56 ± 11.28	0.9924
21F15824	24.0 %	✓	419.56 ± 4.44	1646.00 ± 17.38	0.9963
21F15826	24.0 %	✓	2332.34 ± 129.00	7790.62 ± 430.84	0.9998
21F15827	24.0 %	✓	2649.06 ± 130.69	8826.31 ± 435.37	0.9998
21F15829	24.0 %	✓	144.39 ± 0.82	762.25 ± 4.27	0.9873
21F15830	24.0 %	✓	387.94 ± 4.80	1540.93 ± 19.02	0.9961
21F15832	24.0 %	✓	150.13 ± 0.80	785.18 ± 4.13	0.9870
21F15833	24.0 %	✓	2244.07 ± 90.97	7511.44 ± 304.42	0.9997
21F15835	24.0 %	✓	3942.83 ± 508.26	12911.11 ± 1664.28	0.9999
21F15836	24.0 %	✓	532.01 ± 5.38	2005.39 ± 20.22	0.9961
21F15838	24.0 %	✓	461.56 ± 7.37	1780.01 ± 28.38	0.9976
21F15841	24.0 %	✓	1507.63 ± 30.51	5148.57 ± 104.09	0.9990
21F15842	24.0 %	✓	787.85 ± 12.67	2830.23 ± 45.45	0.9981
21F15844	24.0 %	✓	441.75 ± 5.03	1717.31 ± 19.51	0.9961
21F15845	24.0 %	✓	119.02 ± 0.86	676.18 ± 4.82	0.9898
21F15847	24.0 %	✓	954.92 ± 17.05	3363.61 ± 59.99	0.9987
21F15848	24.0 %	✓	1438.30 ± 60.43	4921.06 ± 206.71	0.9996

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**296.34 ± 2.38**	3.21925 ± 0.00339	**9.72 ± 0.02**	5.97
Error Chron	**± 0.80%**	± 0.11%	**± 0.25%**	0%
			Full External Error ± 0.51	
			Analytical Error ± 0.01	

Statistics				
	2σ Confidence Limit	1.58	Convergence	0.000002016767
	Error Magnification	2.4429	Number of Iterations	1
	Number of Data Points	26	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
21F15806	24.0 %	✓	0.3016526 ± 0.0002631	0.00010140 ± 0.00000280	0.0024
21F15808	24.0 %	✓	0.3009805 ± 0.0002956	0.00010795 ± 0.00000439	0.0030
21F15809	24.0 %	✓	0.2465735 ± 0.0003281	0.00069971 ± 0.00001117	0.0151
21F15811	24.0 %	✓	0.3084147 ± 0.0002942	0.00002303 ± 0.00000392	0.0008
21F15812	24.0 %	✓	0.3068275 ± 0.0002613	0.00004223 ± 0.00000234	0.0011
21F15814	24.0 %	✓	0.3022189 ± 0.0002727	0.00010016 ± 0.00000342	0.0025
21F15815	24.0 %	✓	0.3064683 ± 0.0002666	0.00004997 ± 0.00000277	0.0014
21F15817	24.0 %	✓	0.3009485 ± 0.0002646	0.00010131 ± 0.00000338	0.0022
21F15820	24.0 %	✓	0.2942177 ± 0.0003289	0.00018135 ± 0.00000661	0.0051
21F15821	24.0 %	✓	0.3025837 ± 0.0003359	0.00007511 ± 0.00000584	0.0024
21F15823	24.0 %		0.1998953 ± 0.0002475	0.00088451 ± 0.00000882	0.0121
21F15824	24.0 %	✓	0.2548982 ± 0.0002323	0.00060753 ± 0.00000641	0.0063
21F15826	24.0 %	✓	0.2993778 ± 0.0003329	0.00012836 ± 0.00000710	0.0036
21F15827	24.0 %	✓	0.3001324 ± 0.0003019	0.00011330 ± 0.00000559	0.0025
21F15829	24.0 %	✓	0.1894203 ± 0.0001702	0.00131190 ± 0.00000734	0.0080
21F15830	24.0 %	✓	0.2517543 ± 0.0002742	0.00064896 ± 0.00000801	0.0107
21F15832	24.0 %	✓	0.1911989 ± 0.0001636	0.00127359 ± 0.00000670	0.0061
21F15833	24.0 %	✓	0.2987530 ± 0.0003006	0.00013313 ± 0.00000540	0.0033
21F15835	24.0 %	✓	0.3053831 ± 0.0004558	0.00007745 ± 0.00000998	0.0032
21F15836	24.0 %	✓	0.2652896 ± 0.0002373	0.00049866 ± 0.00000503	0.0071
21F15838	24.0 %	✓	0.2593004 ± 0.0002847	0.00056179 ± 0.00000896	0.0098
21F15841	24.0 %	✓	0.2928246 ± 0.0002611	0.00019423 ± 0.00000393	0.0034
21F15842	24.0 %	✓	0.2783684 ± 0.0002787	0.00035333 ± 0.00000567	0.0075
21F15844	24.0 %	✓	0.2572344 ± 0.0002601	0.00058231 ± 0.00000661	0.0106
21F15845	24.0 %	✓	0.1760229 ± 0.0001800	0.00147890 ± 0.00001054	0.0107
21F15847	24.0 %	✓	0.2838968 ± 0.0002603	0.00029730 ± 0.00000530	0.0051
21F15848	24.0 %	✓	0.2922748 ± 0.0003601	0.00020321 ± 0.00000854	0.0061

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**297.68 ± 2.14**	3.21607 ± 0.00310	**9.71 ± 0.02**	4.83
Error Chron	**± 0.72%**	± 0.10%	**± 0.25%**	0%
			Full External Error ± 0.50	
			Analytical Error ± 0.01	

Statistics				
	2σ Confidence Limit	1.58	Convergence	0.0006653000
	Error Magnification	2.1971	Number of Iterations	2
	Number of Data Points	26	Calculated Line	Weighted York-2
	Spreading Factor	42.6%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F15806	24.0 %	✓	0.0282425	1.38	0.0000000	0.00	0.0001113	9.95	0.0000000	0.00	0.4117324	9.94	0.0053237	1.39	0.0000000	0.00	1.014721	0.10	0.0000741	13.84	0.0000000	0.00	84.0209	0.04	0.0002645	9.99	270.1034	0.04	8.43207	1.38	0.0000000	0.00	0.0510007	9.65
21F15808	24.0 %	✓	0.0185708	2.03	0.0000000	0.00	0.0000850	12.08	0.0000004	255.14	0.3144997	12.08	0.0035006	2.04	0.0000000	0.00	0.625347	0.10	0.0000566	15.45	0.0035190	255.14	51.7800	0.05	0.0002021	12.11	166.4933	0.07	5.54450	2.04	0.0000000	0.00	0.0314305	9.65
21F15809	24.0 %	✓	0.0621643	0.80	0.0000000	0.00	0.0000347	30.60	0.0000007	159.98	0.1283894	30.60	0.0117180	0.81	0.0000000	0.00	0.264563	0.11	0.0000231	32.08	0.0057856	159.98	21.9064	0.06	0.0000825	30.61	70.2833	0.22	18.55978	0.80	0.0000000	0.00	0.0132972	9.65
21F15811	24.0 %	✓	0.0040219	8.52	0.0000000	0.00	0.0000792	12.76	0.0000012	93.55	0.2928270	12.76	0.0007581	8.52	0.0000000	0.00	0.650346	0.10	0.0000527	15.98	0.0101493	93.55	53.8500	0.04	0.0001881	12.79	173.4018	0.06	1.20077	8.52	0.0000000	0.00	0.0326869	9.65
21F15812	24.0 %	✓	0.0129417	2.77	0.0000000	0.00	0.0001572	6.42	0.0000039	27.91	0.5814726	6.42	0.0024395	2.78	0.0000000	0.00	1.135468	0.10	0.0001047	11.57	0.0337565	27.93	94.0190	0.04	0.0003736	6.48	302.5592	0.04	3.86388	2.77	0.0000000	0.00	0.0570696	9.65
21F15814	24.0 %	✓	0.0217114	1.71	0.0000000	0.00	0.0000847	12.24	0.0000003	376.96	0.3133892	12.24	0.0040926	1.72	0.0000000	0.00	0.791183	0.10	0.0000564	15.58	0.0024236	376.96	65.5116	0.04	0.0002014	12.28	210.2864	0.05	6.48214	1.71	0.0000000	0.00	0.0397655	9.65
21F15815	24.0 %	✓	0.0127272	2.77	0.0000000	0.00	0.0001097	9.28	0.0000008	134.90	0.4058012	9.28	0.0023991	2.77	0.0000000	0.00	0.942662	0.10	0.0000730	13.37	0.0068443	134.90	78.0543	0.04	0.0002607	9.32	250.8897	0.04	3.79983	2.77	0.0000000	0.00	0.0473790	9.65
21F15817	24.0 %	✓	0.0241249	1.67	0.0000000	0.00	0.0001207	8.51	0.0000000	0.00	0.4465677	8.51	0.0045476	1.68	0.0000000	0.00	0.865492	0.10	0.0000804	12.85	0.0000000	0.00	71.6645	0.04	0.0002869	8.56	230.9260	0.05	7.20274	1.67	0.0000000	0.00	0.0435003	9.65
21F15820	24.0 %	✓	0.0218633	1.82	0.0000000	0.00	0.0000527	20.24	0.0000000	0.00	0.1951080	20.24	0.0041212	1.83	0.0000000	0.00	0.428381	0.10	0.0000351	22.42	0.0000000	0.00	35.4708	0.05	0.0001254	20.26	114.0323	0.11	6.52752	1.83	0.0000000	0.00	0.0215308	9.65
21F15821	24.0 %	✓	0.0094969	3.89	0.0000000	0.00	0.0000552	18.96	0.0000000	0.00	0.2043341	18.96	0.0017902	3.89	0.0000000	0.00	0.462076	0.10	0.0000368	21.27	0.0000000	0.00	38.2609	0.05	0.0001313	18.98	123.6118	0.09	2.83540	3.89	0.0000000	0.00	0.0232243	9.65
21F15823	24.0 %		0.1136666	0.50	0.0000000	0.00	0.0001062	9.12	0.0000034	30.14	0.3927751	9.12	0.0214262	0.52	0.0000000	0.00	0.310234	0.11	0.0000707	13.26	0.0291436	30.15	25.6880	0.06	0.0002524	9.17	94.5712	0.18	33.93630	0.51	0.0000000	0.00	0.0155926	9.65
21F15824	24.0 %	✓	0.1391109	0.53	0.0000000	0.00	0.0000738	13.52	0.0000035	31.41	0.2731465	13.52	0.0262224	0.55	0.0000000	0.00	0.704882	0.10	0.0000492	16.60	0.0295837	31.42	58.3657	0.04	0.0001755	13.55	187.4435	0.12	41.53295	0.54	0.0000000	0.00	0.0354280	9.65
21F15826	24.0 %	✓	0.0139348	2.77	0.0000000	0.00	0.0000485	19.28	0.0000000	0.00	0.1794876	19.28	0.0026267	2.77	0.0000000	0.00	0.392509	0.10	0.0000323	21.55	0.0000000	0.00	32.5006	0.05	0.0001153	19.30	104.4000	0.11	4.16036	2.77	0.0000000	0.00	0.0197278	9.65
21F15827	24.0 %	✓	0.0157087	2.47	0.0000000	0.00	0.0000444	21.39	0.0000010	113.73	0.1644289	21.39	0.0029611	2.47	0.0000000	0.00	0.502564	0.10	0.0000296	23.46	0.0083435	113.73	41.6133	0.05	0.0001056	21.41	133.9600	0.09	4.69000	2.47	0.0000000	0.00	0.0252593	9.65
21F15829	24.0 %	✓	0.4337712	0.28	0.0000000	0.00	0.0000720	12.37	0.0000002	415.43	0.2664684	12.37	0.0817659	0.32	0.0000000	0.00	0.756390	0.10	0.0000480	15.67	0.0021071	415.43	62.6306	0.04	0.0001712	12.40	201.1369	0.19	129.50671	0.30	0.0000000	0.00	0.0380168	9.65
21F15830	24.0 %	✓	0.0972139	0.62	0.0000000	0.00	0.0003398	2.91	0.0000000	0.00	1.2572323	2.90	0.0183248	0.64	0.0000000	0.00	0.455456	0.10	0.0002263	10.06	0.0000000	0.00	37.7127	0.05	0.0008078	3.05	120.7754	0.15	29.02418	0.63	0.0000000	0.00	0.0228916	9.65
21F15832	24.0 %	✓	0.5322839	0.26	0.0000000	0.00	0.0001549	6.52	0.0000000	0.00	0.5732327	6.52	0.1003355	0.31	0.0000000	0.00	0.965067	0.10	0.0001032	11.63	0.0000000	0.00	79.9095	0.04	0.0003683	6.58	259.0206	0.17	158.91868	0.28	0.0000000	0.00	0.0485051	9.65
21F15833	24.0 %	✓	0.0194969	2.03	0.0000000	0.00	0.0000938	10.12	0.0000000	######	0.3470952	10.12	0.0036752	2.03	0.0000000	0.00	0.528397	0.10	0.0000625	13.97	0.0001312	######	43.7524	0.05	0.0002230	10.17	140.6289	0.09	5.82100	2.03	0.0000000	0.00	0.0265577	9.65
21F15835	24.0 %	✓	0.0049247	6.45	0.0000000	0.00	0.0000588	16.95	0.0000000	0.00	0.2173907	16.95	0.0009283	6.45	0.0000000	0.00	0.234501	0.11	0.0000391	19.49	0.0000000	0.00	19.4172	0.06	0.0001397	16.97	62.1127	0.16	1.47031	6.45	0.0000000	0.00	0.0117862	9.65
21F15836	24.0 %	✓	0.1382928	0.50	0.0000000	0.00	0.0001582	6.10	0.0000011	99.23	0.5851895	6.09	0.0260682	0.53	0.0000000	0.00	0.888542	0.10	0.0001053	11.40	0.0096264	99.23	73.5731	0.04	0.0003760	6.16	236.0425	0.09	41.28870	0.51	0.0000000	0.00	0.0446589	9.65
21F15838	24.0 %	✓	0.0728914	0.80	0.0000000	0.00	0.0000604	16.11	0.0000000	0.00	0.2233734	16.11	0.0137400	0.81	0.0000000	0.00	0.406314	0.10	0.0000402	18.77	0.0000000	0.00	33.6436	0.05	0.0001435	16.14	107.9852	0.16	21.76246	0.80	0.0000000	0.00	0.0204217	9.65
21F15841	24.0 %	✓	0.0451281	1.01	0.0000000	0.00	0.0000893	11.41	0.0000000	0.00	0.3305228	11.41	0.0085066	1.02	0.0000000	0.00	0.821676	0.10	0.0000595	14.93	0.0000000	0.00	68.0364	0.04	0.0002124	11.44	218.8718	0.06	13.47345	1.02	0.0000000	0.00	0.0412981	9.65
21F15842	24.0 %	✓	0.0594254	0.80	0.0000000	0.00	0.0000467	20.61	0.0000006	166.85	0.1727858	20.61	0.0112017	0.82	0.0000000	0.00	0.565422	0.10	0.0000311	22.74	0.0051117	166.85	46.8181	0.05	0.0001110	20.63	150.4454	0.10	17.74205	0.81	0.0000000	0.00	0.0284186	9.65
21F15844	24.0 %	✓	0.0960957	0.57	0.0000000	0.00	0.0000901	11.48	0.0000000	0.00	0.3333186	11.48	0.0181140	0.59	0.0000000	0.00	0.512673	0.10	0.0000600	14.98	0.0000000	0.00	42.4504	0.05	0.0002142	11.51	136.3357	0.12	28.69033	0.58	0.0000000	0.00	0.0257674	9.65
21F15845	24.0 %	✓	0.3135221	0.36	0.0000000	0.00	0.0000768	13.09	0.0000002	541.82	0.2841589	13.09	0.0590989	0.39	0.0000000	0.00	0.450668	0.10	0.0000511	16.25	0.0018338	541.82	37.3162	0.05	0.0001826	13.12	118.3911	0.29	93.60517	0.37	0.0000000	0.00	0.0226509	9.65
21F15847	24.0 %	✓	0.0574609	0.89	0.0000000	0.00	0.0001219	7.68	0.0000001	######	0.4511621	7.68	0.0108314	0.91	0.0000000	0.00	0.662671	0.10	0.0000812	12.32	0.0006480	######	54.8705	0.04	0.0002899	7.73	176.1207	0.09	17.15554	0.90	0.0000000	0.00	0.0333064	9.65
21F15848	24.0 %	✓	0.0188806	2.10	0.0000000	0.00	0.0000584	16.62	0.0000000	0.00	0.2160970	16.62	0.0035590	2.11	0.0000000	0.00	0.327963	0.11	0.0000389	19.21	0.0000000	0.00	27.1560	0.05	0.0001388	16.64	87.2756	0.14	5.63699	2.10	0.0000000	0.00	0.0164837	9.65
		Σ	2.3876735	0.13	0.0000000	0.00	0.0025846	2.01	0.0000174	24.22	9.5619868	2.01	0.4500765	0.14	0.0000000	0.00	16.666171	0.02	0.0017212	2.96	0.1490073	24.22	1379.9926	0.01	0.0061436	2.02	4448.1044	0.02	712.86381	0.14	0.0000000	0.00	0.8376555	1.99
		Σ							2.3902756	0.13	9.5619868	2.01									17.266976	0.21			1379.9987	0.01							5161.8058	0.03

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F15806	24.0 %	✓	3.315668	0.001445	0.004900	0.000487	0.000337	0.000005	71.922	4.149808	1.00050849	9.862E-12
21F15808	24.0 %	✓	3.323069	0.001631	0.006074	0.000733	0.000360	0.000007	71.933	4.150775	1.00050857	6.091E-12
21F15809	24.0 %	✓	4.056178	0.002698	0.005861	0.001793	0.002839	0.000023	71.940	4.151288	1.00050862	3.146E-12
21F15811	24.0 %	✓	3.242984	0.001546	0.005438	0.000694	0.000076	0.000006	71.951	4.152256	1.00050870	6.182E-12
21F15812	24.0 %	✓	3.259754	0.001387	0.006185	0.000397	0.000139	0.000004	71.958	4.152769	1.00050874	1.085E-11
21F15814	24.0 %	✓	3.309456	0.001492	0.004784	0.000586	0.000333	0.000006	71.969	4.153737	1.00050883	7.675E-12
21F15815	24.0 %	✓	3.263576	0.001418	0.005199	0.000482	0.000164	0.000005	71.976	4.154250	1.00050887	9.018E-12
21F15817	24.0 %	✓	3.323422	0.001460	0.006231	0.000530	0.000338	0.000006	71.988	4.155219	1.00050896	8.431E-12
21F15820	24.0 %	✓	3.399439	0.001899	0.005501	0.001113	0.000618	0.000011	72.006	4.156701	1.00050908	4.269E-12
21F15821	24.0 %	✓	3.305466	0.001834	0.005341	0.001013	0.000250	0.000010	72.012	4.157214	1.00050913	4.477E-12
21F15823	24.0 %		5.003176	0.003097	0.015290	0.001394	0.004429	0.000022	72.024	4.158184	1.00050921	4.550E-12
21F15824	24.0 %	✓	3.923730	0.001787	0.004680	0.000633	0.002385	0.000013	72.029	4.158640	1.00050925	8.107E-12
21F15826	24.0 %	✓	3.340857	0.001857	0.005523	0.001065	0.000430	0.000012	72.042	4.159667	1.00050934	3.844E-12
21F15827	24.0 %	✓	3.332461	0.001675	0.003951	0.000845	0.000379	0.000009	72.047	4.160123	1.00050938	4.909E-12
21F15829	24.0 %	✓	5.279859	0.002372	0.004255	0.000526	0.006927	0.000020	72.059	4.161094	1.00050946	1.171E-11
21F15830	24.0 %	✓	3.972649	0.002162	0.033336	0.000968	0.002587	0.000016	72.065	4.161607	1.00050950	5.304E-12
21F15832	24.0 %	✓	5.230739	0.002237	0.007173	0.000468	0.006663	0.000018	72.077	4.162578	1.00050959	1.480E-11
21F15833	24.0 %	✓	3.347837	0.001683	0.007933	0.000803	0.000448	0.000009	72.083	4.163092	1.00050963	5.185E-12
21F15835	24.0 %	✓	3.275159	0.002444	0.011196	0.001897	0.000257	0.000016	72.095	4.164063	1.00050972	2.251E-12
21F15836	24.0 %	✓	3.770053	0.001685	0.007954	0.000485	0.001882	0.000010	72.101	4.164577	1.00050976	9.819E-12
21F15838	24.0 %	✓	3.857121	0.002117	0.006639	0.001070	0.002168	0.000017	72.113	4.165548	1.00050984	4.594E-12
21F15841	24.0 %	✓	3.415609	0.001522	0.004858	0.000554	0.000665	0.000007	72.131	4.167034	1.00050997	8.226E-12
21F15842	24.0 %	✓	3.592961	0.001798	0.003691	0.000760	0.001270	0.000010	72.138	4.167548	1.00051001	5.955E-12
21F15844	24.0 %	✓	3.888093	0.001965	0.007852	0.000901	0.002266	0.000013	72.149	4.168520	1.00051010	5.843E-12
21F15845	24.0 %	✓	5.681658	0.002904	0.007615	0.000997	0.008404	0.000030	72.155	4.168977	1.00051014	7.505E-12
21F15847	24.0 %	✓	3.522995	0.001614	0.008222	0.000631	0.001049	0.000009	72.167	4.170007	1.00051022	6.843E-12
21F15848	24.0 %	✓	3.422027	0.002107	0.007958	0.001322	0.000697	0.000015	72.173	4.170465	1.00051026	3.290E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
21F15806	24.0 %	0.0126733 ± 0.0002114	0.0173671 ± 0.0072912	0.0011867 ± 0.0074696	0.0067293 ± 0.0063916	2.8988645 ± 0.0151592
21F15808	24.0 %	0.0122284 ± 0.0002168	0.0177626 ± 0.0068761	0.0055221 ± 0.0057490	0.0193725 ± 0.0063652	2.8902090 ± 0.0158785
21F15809	24.0 %	0.0122284 ± 0.0002168	0.0177626 ± 0.0068761	0.0055221 ± 0.0057490	0.0193725 ± 0.0063652	2.8902090 ± 0.0158785
21F15811	24.0 %	0.0128954 ± 0.0002063	0.0127994 ± 0.0066716	0.0041024 ± 0.0057092	0.0225183 ± 0.0066676	2.8584739 ± 0.0157845
21F15812	24.0 %	0.0128954 ± 0.0002063	0.0127994 ± 0.0066716	0.0041024 ± 0.0057092	0.0225183 ± 0.0066676	2.8584739 ± 0.0157845
21F15814	24.0 %	0.0116365 ± 0.0001790	0.0184561 ± 0.0064046	0.0054275 ± 0.0061947	0.0135287 ± 0.0059371	2.8991892 ± 0.0160273
21F15815	24.0 %	0.0116365 ± 0.0001790	0.0184561 ± 0.0064046	0.0054275 ± 0.0061947	0.0135287 ± 0.0059371	2.8991892 ± 0.0160273
21F15817	24.0 %	0.0123277 ± 0.0002121	0.0029678 ± 0.0071197	0.0054016 ± 0.0067521	0.0296065 ± 0.0061425	2.8542987 ± 0.0162693
21F15820	24.0 %	0.0124867 ± 0.0002207	0.0151341 ± 0.0065489	0.0087100 ± 0.0061465	0.0159628 ± 0.0067913	2.9057910 ± 0.0171238
21F15821	24.0 %	0.0124867 ± 0.0002207	0.0151341 ± 0.0065489	0.0087100 ± 0.0061465	0.0159628 ± 0.0067913	2.9057910 ± 0.0171238
21F15823	24.0 %	0.0118695 ± 0.0002246	0.0204448 ± 0.0060515	0.0178488 ± 0.0058368	0.0122943 ± 0.0062510	2.7979612 ± 0.0140135
21F15824	24.0 %	0.0118695 ± 0.0002246	0.0204448 ± 0.0060515	0.0178488 ± 0.0058368	0.0122943 ± 0.0062510	2.7979612 ± 0.0140135
21F15826	24.0 %	0.0122434 ± 0.0002215	0.0180149 ± 0.0057859	0.0043268 ± 0.0066275	0.0149852 ± 0.0056571	2.8161019 ± 0.0153396
21F15827	24.0 %	0.0122434 ± 0.0002215	0.0180149 ± 0.0057859	0.0043268 ± 0.0066275	0.0149852 ± 0.0056571	2.8161019 ± 0.0153396
21F15829	24.0 %	0.0122833 ± 0.0002156	0.0285178 ± 0.0055671	0.0138770 ± 0.0056546	0.0255390 ± 0.0073276	2.9123363 ± 0.0164266
21F15830	24.0 %	0.0122833 ± 0.0002156	0.0285178 ± 0.0055671	0.0138770 ± 0.0056546	0.0255390 ± 0.0073276	2.9123363 ± 0.0164266
21F15832	24.0 %	0.0122579 ± 0.0002044	0.0047972 ± 0.0065771	0.0048011 ± 0.0068738	0.0245757 ± 0.0064053	2.8980925 ± 0.0155808
21F15833	24.0 %	0.0122579 ± 0.0002044	0.0047972 ± 0.0065771	0.0048011 ± 0.0068738	0.0245757 ± 0.0064053	2.8980925 ± 0.0155808
21F15835	24.0 %	0.0119125 ± 0.0002235	0.0082952 ± 0.0059331	0.0046814 ± 0.0062699	0.0288078 ± 0.0059998	2.8572980 ± 0.0163427
21F15836	24.0 %	0.0119125 ± 0.0002235	0.0082952 ± 0.0059331	0.0046814 ± 0.0062699	0.0288078 ± 0.0059998	2.8572980 ± 0.0163427
21F15838	24.0 %	0.0122434 ± 0.0002215	0.0180149 ± 0.0057859	0.0043268 ± 0.0066275	0.0149852 ± 0.0056571	2.8161019 ± 0.0153396
21F15841	24.0 %	0.0122833 ± 0.0002156	0.0285178 ± 0.0055671	0.0138770 ± 0.0056546	0.0255390 ± 0.0073276	2.9123363 ± 0.0164266
21F15842	24.0 %	0.0122833 ± 0.0002156	0.0285178 ± 0.0055671	0.0138770 ± 0.0056546	0.0255390 ± 0.0073276	2.9123363 ± 0.0164266
21F15844	24.0 %	0.0122579 ± 0.0002044	0.0047972 ± 0.0065771	0.0048011 ± 0.0068738	0.0245757 ± 0.0064053	2.8980925 ± 0.0155808
21F15845	24.0 %	0.0122579 ± 0.0002044	0.0047972 ± 0.0065771	0.0048011 ± 0.0068738	0.0245757 ± 0.0064053	2.8980925 ± 0.0155808
21F15847	24.0 %	0.0119125 ± 0.0002235	0.0082952 ± 0.0059331	0.0046814 ± 0.0062699	0.0288078 ± 0.0059998	2.8572980 ± 0.0163427
21F15848	24.0 %	0.0119125 ± 0.0002235	0.0082952 ± 0.0059331	0.0046814 ± 0.0062699	0.0288078 ± 0.0059998	2.8572980 ± 0.0163427

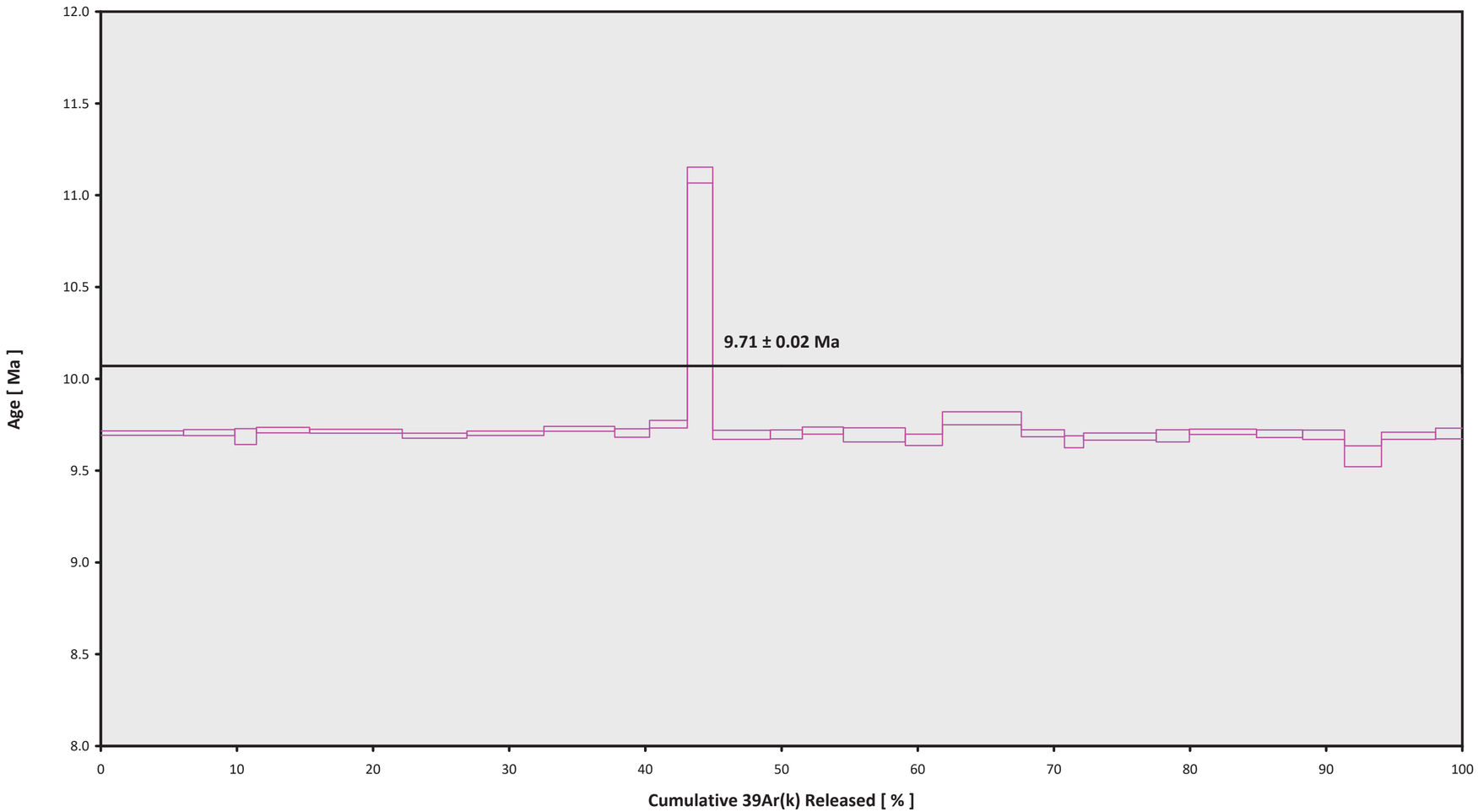
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F15806	24.0 %	0.0393537 ± 0.0002962	0.7263	EXP 150 of 150	0.1159195 ± 0.0065456	0.0253	EXP 150 of 150	1.0021184 ± 0.0071790	0.6814	EXP 146 of 150	83.797740 ± 0.013616	0.9998	EXP 150 of 150	281.485295 ± 0.029043	0.9999	EXP 149 of 150
21F15808	24.0 %	0.0297837 ± 0.0002803	0.7975	EXP 150 of 150	0.0930238 ± 0.0059399	0.0043	EXP 150 of 150	0.6240724 ± 0.0066497	0.4681	EXP 149 of 150	51.657719 ± 0.011778	0.9996	EXP 150 of 150	174.959413 ± 0.025041	0.9997	EXP 150 of 150
21F15809	24.0 %	0.0707574 ± 0.0004033	0.0000	EXP 150 of 150	0.0484830 ± 0.0064085	0.0003	EXP 150 of 150	0.2753059 ± 0.0071648	0.1419	EXP 150 of 150	21.865793 ± 0.007987	0.9989	EXP 149 of 150	91.746624 ± 0.019498	0.9991	EXP 145 of 150
21F15811	24.0 %	0.0167555 ± 0.0002474	0.8965	EXP 150 of 150	0.0828492 ± 0.0059441	0.0001	EXP 148 of 150	0.6542459 ± 0.0073417	0.5025	EXP 150 of 150	53.725144 ± 0.010126	0.9997	EXP 150 of 150	177.493690 ± 0.027135	0.9997	EXP 150 of 150
21F15812	24.0 %	0.0252249 ± 0.0002665	0.8696	EXP 150 of 150	0.1518816 ± 0.0059239	0.0824	EXP 149 of 150	1.1624250 ± 0.0068237	0.7899	EXP 150 of 150	93.784332 ± 0.013233	0.9998	EXP 148 of 150	309.338662 ± 0.029744	0.9999	EXP 149 of 150
21F15814	24.0 %	0.0321465 ± 0.0002980	0.7829	EXP 150 of 150	0.0933981 ± 0.0065672	0.0297	EXP 150 of 150	0.7887598 ± 0.0063396	0.6308	EXP 148 of 150	65.345788 ± 0.011715	0.9997	EXP 150 of 150	219.707513 ± 0.025230	0.9998	EXP 150 of 150
21F15815	24.0 %	0.0237166 ± 0.0002780	0.8652	EXP 150 of 150	0.1154850 ± 0.0063214	0.0261	EXP 150 of 150	0.9422925 ± 0.0063415	0.7156	EXP 148 of 150	77.854208 ± 0.011621	0.9998	EXP 150 of 150	257.636143 ± 0.028930	0.9999	EXP 148 of 150
21F15817	24.0 %	0.0351425 ± 0.0003115	0.7946	EXP 150 of 150	0.1097192 ± 0.0056393	0.0006	EXP 150 of 150	0.8601346 ± 0.0072303	0.6214	EXP 150 of 150	71.498008 ± 0.011539	0.9998	EXP 146 of 150	241.026550 ± 0.024863	0.9999	EXP 150 of 150
21F15820	24.0 %	0.0331094 ± 0.0003013	0.7581	EXP 147 of 150	0.0617578 ± 0.0067954	0.0005	EXP 150 of 150	0.4222316 ± 0.0066028	0.3146	EXP 148 of 150	35.389712 ± 0.009992	0.9994	EXP 150 of 150	123.487105 ± 0.021345	0.9995	EXP 146 of 150
21F15821	24.0 %	0.0214751 ± 0.0002676	0.8656	EXP 149 of 150	0.0639565 ± 0.0065408	0.0035	EXP 150 of 150	0.4550500 ± 0.0072331	0.2675	EXP 150 of 150	38.172108 ± 0.010889	0.9993	EXP 150 of 150	129.376204 ± 0.022763	0.9995	EXP 150 of 150
21F15823	24.0 %	0.1189312 ± 0.0004549	0.5630	EXP 146 of 150	0.1142702 ± 0.0060442	0.0636	EXP 150 of 150	0.3414120 ± 0.0064462	0.3639	EXP 147 of 150	25.630193 ± 0.009670	0.9989	EXP 150 of 150	131.321030 ± 0.020444	0.9996	EXP 149 of 150
21F15824	24.0 %	0.1428435 ± 0.0006218	0.5690	EXP 150 of 150	0.0856864 ± 0.0064142	0.0231	EXP 150 of 150	0.7394860 ± 0.0069197	0.6055	EXP 150 of 150	58.218202 ± 0.011214	0.9997	EXP 150 of 150	231.809845 ± 0.024164	0.9999	EXP 150 of 150
21F15826	24.0 %	0.0254014 ± 0.0002862	0.7882	EXP 150 of 150	0.0608753 ± 0.0058990	0.0014	EXP 148 of 150	0.3898204 ± 0.0066368	0.2460	EXP 150 of 150	32.426588 ± 0.009137	0.9994	EXP 150 of 150	111.396183 ± 0.020341	0.9994	EXP 149 of 150
21F15827	24.0 %	0.0270678 ± 0.0002885	0.8156	EXP 150 of 150	0.0572751 ± 0.0060845	0.0008	EXP 150 of 150	0.5159266 ± 0.0066022	0.4324	EXP 149 of 150	41.514393 ± 0.010134	0.9995	EXP 150 of 150	141.491320 ± 0.018785	0.9997	EXP 150 of 150
21F15829	24.0 %	0.4205235 ± 0.0009315	0.9466	EXP 150 of 150	0.0921268 ± 0.0055555	0.0269	EXP 150 of 150	0.8504288 ± 0.0063036	0.7263	EXP 145 of 150	62.484649 ± 0.011561	0.9997	EXP 150 of 150	333.593920 ± 0.028462	0.9999	EXP 150 of 150
21F15830	24.0 %	0.1040799 ± 0.0005023	0.2587	EXP 150 of 150	0.3285960 ± 0.0066695	0.1010	EXP 150 of 150	0.4692831 ± 0.0070604	0.3237	EXP 149 of 150	37.635659 ± 0.010557	0.9994	EXP 149 of 150	152.734758 ± 0.023046	0.9997	EXP 150 of 150
21F15832	24.0 %	0.5132749 ± 0.0010515	0.9569	EXP 149 of 150	0.1415854 ± 0.0060092	0.0554	EXP 150 of 150	1.0530794 ± 0.0068045	0.7198	EXP 150 of 150	79.715446 ± 0.012818	0.9998	EXP 147 of 150	420.885863 ± 0.030677	0.9999	EXP 150 of 150
21F15833	24.0 %	0.0306925 ± 0.0003091	0.7798	EXP 150 of 150	0.0876129 ± 0.0051955	0.0017	EXP 149 of 150	0.5346864 ± 0.0067686	0.4367	EXP 150 of 150	43.657240 ± 0.010092	0.9996	EXP 148 of 150	149.374587 ± 0.021975	0.9997	EXP 148 of 150
21F15835	24.0 %	0.0166019 ± 0.0001978	0.9202	EXP 148 of 150	0.0601518 ± 0.0064808	0.0039	EXP 150 of 150	0.2307512 ± 0.0072439	0.0593	EXP 150 of 150	19.392911 ± 0.007860	0.9987	EXP 149 of 150	66.452130 ± 0.018647	0.9971	EXP 145 of 150
21F15836	24.0 %	0.1421939 ± 0.0005835	0.5663	EXP 149 of 150	0.1478696 ± 0.0060864	0.0586	EXP 150 of 150	0.9248889 ± 0.0067601	0.6969	EXP 150 of 150	73.400613 ± 0.013433	0.9997	EXP 150 of 150	280.233166 ± 0.030725	0.9999	EXP 150 of 150
21F15838	24.0 %	0.0808899 ± 0.0004884	0.0001	EXP 149 of 150	0.0712796 ± 0.0063363	0.0066	EXP 150 of 150	0.4225167 ± 0.0063437	0.3291	EXP 149 of 150	33.566523 ± 0.009846	0.9993	EXP 150 of 150	132.584151 ± 0.022005	0.9996	EXP 148 of 150
21F15841	24.0 %	0.0548323 ± 0.0003653	0.4477	EXP 150 of 150	0.1073048 ± 0.0070524	0.0108	EXP 150 of 150	0.8286719 ± 0.0069076	0.6131	EXP 150 of 150	67.875678 ± 0.011372	0.9998	EXP 148 of 150	235.298922 ± 0.023040	0.9999	EXP 146 of 150
21F15842	24.0 %	0.0682463 ± 0.0003841	0.1366	EXP 150 of 150	0.0696998 ± 0.0064037	0.0152	EXP 150 of 150	0.5930411 ± 0.0061590	0.5698	EXP 147 of 150	46.715384 ± 0.010638	0.9996	EXP 150 of 150	171.128228 ± 0.024039	0.9997	EXP 150 of 150
21F15844	24.0 %	0.1027672 ± 0.0004500	0.2992	EXP 148 of 150	0.0842223 ± 0.0063098	0.0155	EXP 149 of 150	0.5231004 ± 0.0065975	0.4490	EXP 150 of 150	42.358775 ± 0.010236	0.9995	EXP 150 of 150	167.949844 ± 0.024056	0.9997	EXP 148 of 150
21F15845	24.0 %	0.3073500 ± 0.0009267	0.8974	EXP 150 of 150	0.0725008 ± 0.0059343	0.0000	EXP 149 of 150	0.5141642 ± 0.0070015	0.3416	EXP 150 of 150	37.238666 ± 0.009725	0.9995	EXP 149 of 150	214.917043 ± 0.025149	0.9998	EXP 150 of 150
21F15847	24.0 %	0.0660972 ± 0.0004189	0.1557	EXP 150 of 150	0.1157624 ± 0.0057259	0.0274	EXP 150 of 150	0.6758974 ± 0.0074866	0.4849	EXP 150 of 150	54.749192 ± 0.010023	0.9997	EXP 149 of 150	196.166858 ± 0.022320	0.9998	EXP 149 of 150
21F15848	24.0 %	0.0297338 ± 0.0002974	0.7611	EXP 148 of 150	0.0597641 ± 0.0061599	0.0001	EXP 149 of 150	0.3338172 ± 0.0066292	0.1786	EXP 150 of 150	27.110518 ± 0.008883	0.9991	EXP 150 of 150	95.786405 ± 0.020297	0.9990	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F15806	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15808	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15809	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15811	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15812	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15814	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15815	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15817	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15820	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15821	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15823	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15824	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15826	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15827	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15829	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15830	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15832	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15833	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15835	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15836	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15838	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15841	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15842	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15844	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15845	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15847	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01
21F15848	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	1.28	Oregon\Swenton (20-01)	21F15801	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F15806	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	13	38	1
21F15808	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	13	55	1
21F15809	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	14	4	1
21F15811	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	14	21	1
21F15812	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	14	30	1
21F15814	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	14	47	1
21F15815	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	14	56	1
21F15817	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	15	13	1
21F15820	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	15	39	1
21F15821	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	15	48	1
21F15823	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	16	5	1
21F15824	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	16	13	1
21F15826	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	16	31	1
21F15827	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	16	39	1
21F15829	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	16	56	1
21F15830	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	17	5	1
21F15832	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	17	22	1
21F15833	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	17	31	1
21F15835	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	17	48	1
21F15836	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	17	57	1
21F15838	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	18	14	1
21F15841	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	18	40	1
21F15842	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	18	49	1
21F15844	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	19	6	1
21F15845	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	19	14	1
21F15847	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	19	32	1
21F15848	24.0 %	VS19-093	Sanidine	Unidentified flow #2	FCT-NM (4X2-21)	28.201	0.082	Kuiper et al (2008)	9.38912	0.113	0.00165356	0.113	301.252	0.112	0.9977631	0.038	1	3.54E-14	27	AUG	2021	19	40	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F15806	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15808	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15809	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15811	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15812	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15814	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15815	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15817	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15820	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15821	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15823	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15824	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15826	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15827	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15829	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15830	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15832	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15833	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15835	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15836	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15838	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15841	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15842	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15844	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15845	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15847	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15848	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F15801.AGE >>> VS19-093 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.71 ± 0.02
TOTAL FUSION
9.73 ± 0.02
NORMAL ISOCHRON
9.72 ± 0.02
INVERSE ISOCHRON
9.71 ± 0.02

MSWD (PROBABILITY)
4.56 (0%)

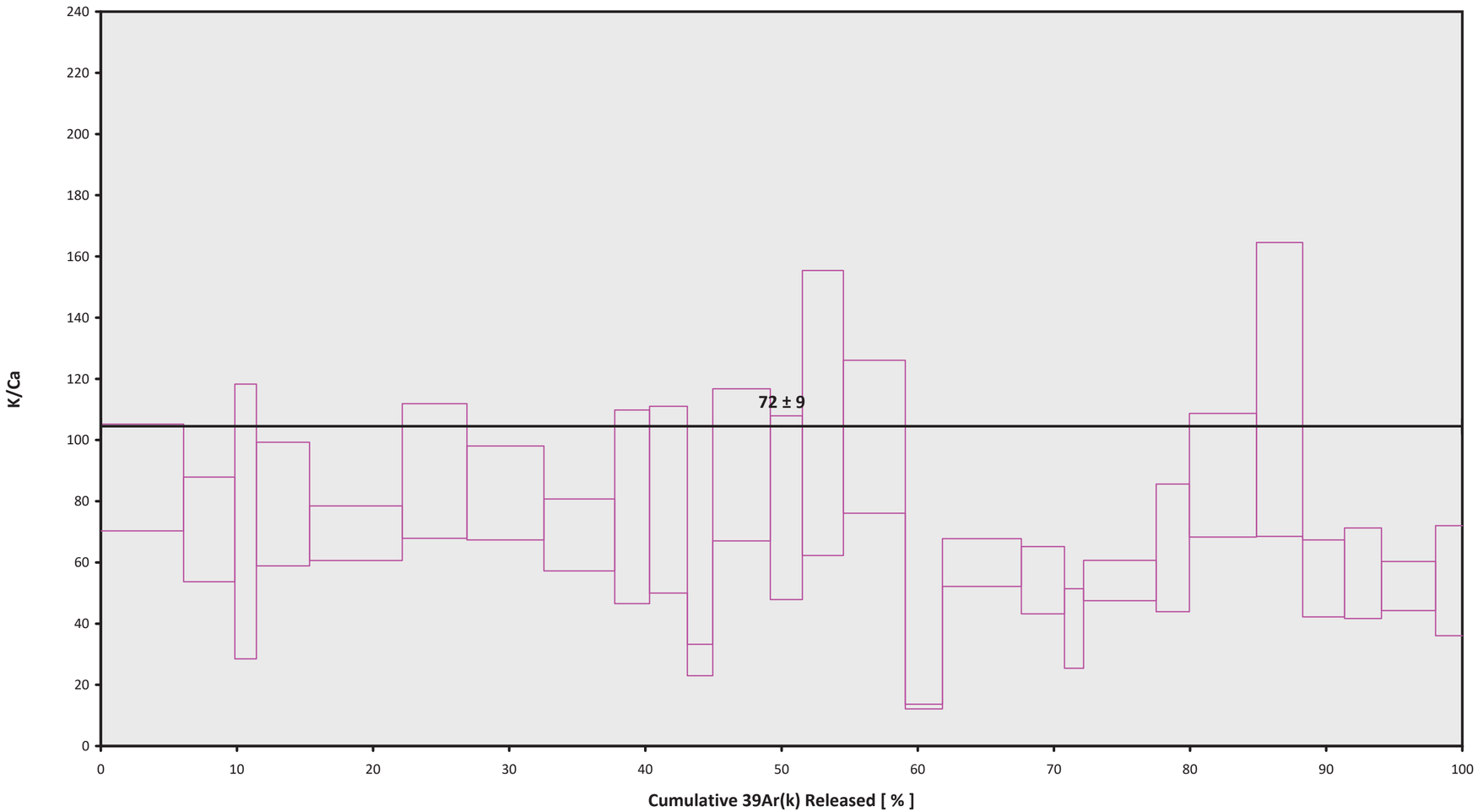
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
Unidentified flow #2
Dan Miggins

IRR = 21-OSU-04 (4X2-21)
J = 0.00165356 ± 0.00000187

21F15801.AGE >>> VS19-093 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.71 ± 0.02
TOTAL FUSION
9.73 ± 0.02
NORMAL ISOCHRON
9.72 ± 0.02
INVERSE ISOCHRON
9.71 ± 0.02

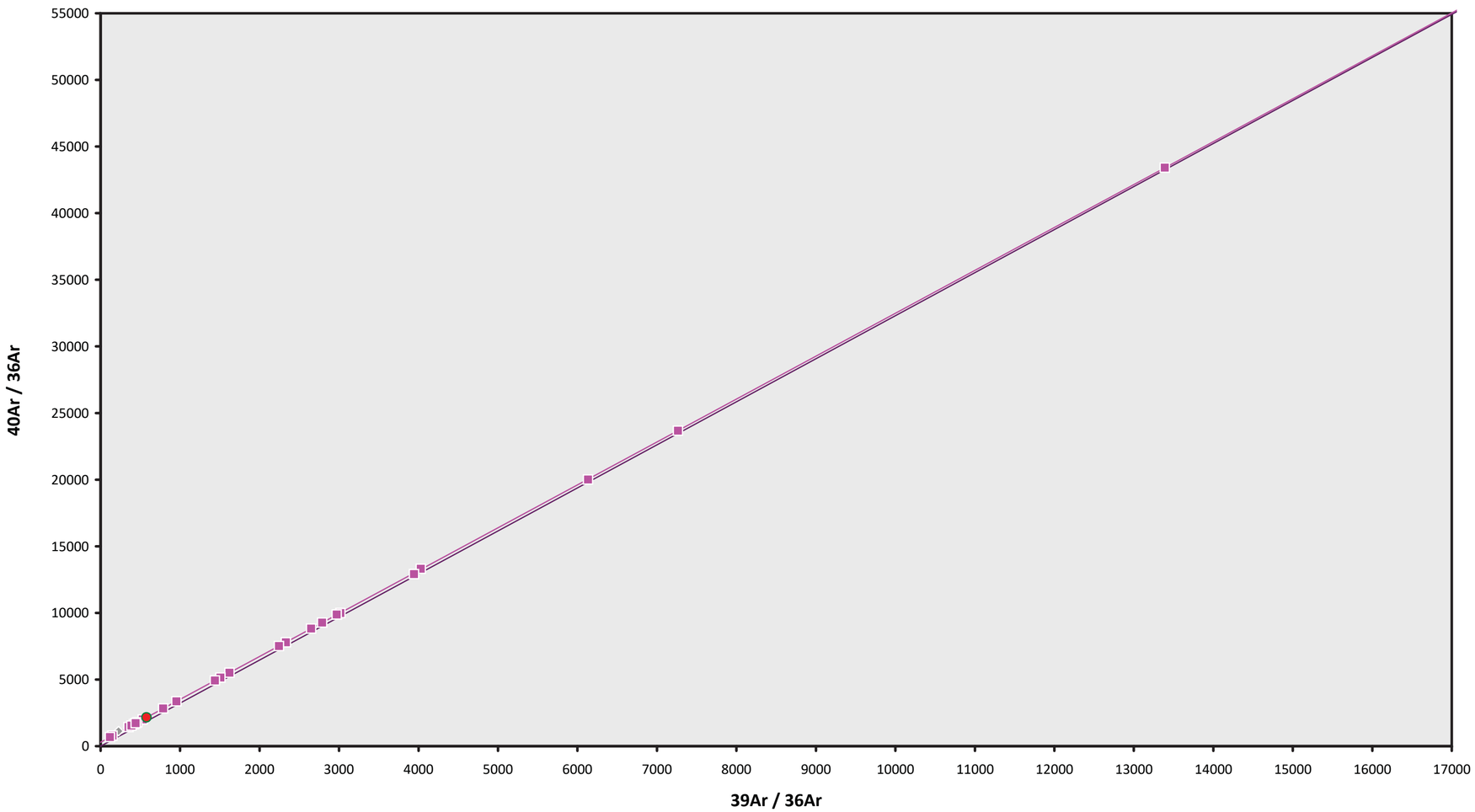
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
Unidentified flow #2
Dan Miggins

IRR = 21-OSU-04 (4X2-21)
J = 0.00165356 ± 0.00000187

21F15801.AGE >>> VS19-093 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.71 ± 0.02
TOTAL FUSION
9.73 ± 0.02
NORMAL ISOCHRON
9.72 ± 0.02
INVERSE ISOCHRON
9.71 ± 0.02

MSWD (PROBABILITY)
5.97 (0%)

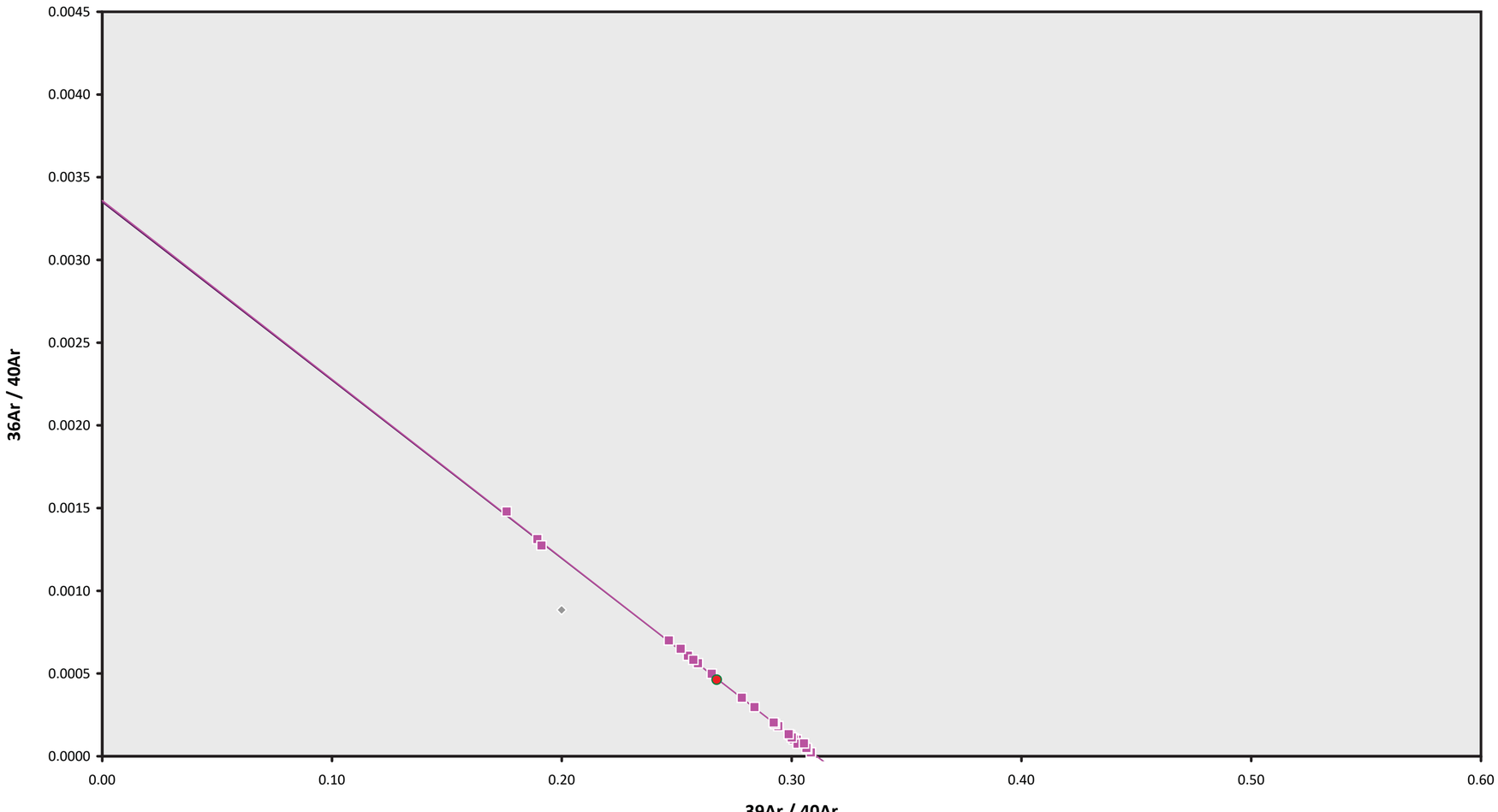
CALCULATED 40AR/36AR INTERCEPT
296.3 ± 2.4

Sample Info

Sanidine
Unidentified flow #2
Dan Miggins

IRR = 21-OSU-04 (4X2-21)
J = 0.00165356 ± 0.00000187

21F15801.AGE >>> VS19-093 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
9.71 ± 0.02
TOTAL FUSION
9.73 ± 0.02
NORMAL ISOCHRON
9.72 ± 0.02
INVERSE ISOCHRON
9.71 ± 0.02

MSWD (PROBABILITY)
4.83 (0%)

SPREADING FACTOR
42.6%

CALCULATED 40AR/36AR INTERCEPT
297.7 ± 2.1

Sample Info

Sanidine
Unidentified flow #2
Dan Miggins

IRR = 21-OSU-04 (4X2-21)
J = 0.00165356 ± 0.00000187

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F23287	17.0 %	✓	0.0108654	2.620	27.585117	0.576	0.657114	1.385	53.2868	0.048	203.8853	0.015	3.80776	±0.00503	11.18	±0.01	99.49	2.46	0.8	±0.0
20F23288	17.0 %	✓	0.0263828	1.372	22.976442	0.662	0.825030	1.061	67.8136	0.045	264.6369	0.011	3.81383	±0.00478	11.20	±0.01	97.71	3.14	1.3	±0.0
20F23290	17.0 %	✓	0.0234407	1.528	1.357462	8.263	1.653127	0.601	136.8625	0.042	529.1595	0.007	3.81544	±0.00363	11.20	±0.01	98.68	6.33	43.4	±7.2
20F23291	17.0 %	✓	0.1579356	0.418	2.546925	4.400	2.010223	0.487	164.4563	0.042	674.6102	0.007	3.81602	±0.00408	11.20	±0.01	93.03	7.61	27.8	±2.4
20F23293	17.0 %	✓	0.0665074	0.800	2.186415	5.263	2.494878	0.373	206.0037	0.041	805.4246	0.006	3.81364	±0.00355	11.20	±0.01	97.54	9.53	40.5	±4.3
20F23294	17.0 %	✓	0.0164626	1.873	21.667255	0.695	0.630692	1.495	51.7936	0.047	200.5997	0.013	3.81234	±0.00517	11.19	±0.02	98.41	2.39	1.0	±0.0
20F23296	17.0 %	✓	0.0091403	3.490	1.436147	7.992	1.019932	0.969	84.0593	0.043	323.1864	0.010	3.81310	±0.00409	11.19	±0.01	99.18	3.89	25.2	±4.0
20F23297	17.0 %	✓	0.0149397	2.227	1.541279	7.149	1.943212	0.521	161.5341	0.042	621.1320	0.007	3.81778	±0.00348	11.21	±0.01	99.29	7.47	45.1	±6.4
20F23299	17.0 %	✓	0.0042570	6.049	0.398734	28.016	0.609157	1.506	51.2554	0.047	197.4704	0.013	3.82792	±0.00478	11.24	±0.01	99.36	2.37	55.3	±31.0
20F23300	17.0 %	✓	0.0168061	2.053	1.130183	10.529	1.019803	0.894	84.0532	0.044	325.7851	0.010	3.81676	±0.00422	11.20	±0.01	98.47	3.89	32.0	±6.7
20F23302	17.0 %	✓	0.0161825	1.937	0.972457	11.099	1.310836	0.719	109.9172	0.043	424.6115	0.009	3.81919	±0.00374	11.21	±0.01	98.86	5.08	48.6	±10.8
20F23303	17.0 %	✓	0.0040463	7.369	0.941625	12.196	0.998258	0.888	83.6030	0.043	320.4832	0.010	3.81927	±0.00401	11.21	±0.01	99.63	3.87	38.2	±9.3
20F23305	17.0 %	✓	0.0104781	3.096	0.984156	11.988	1.035066	0.900	86.9414	0.044	335.3400	0.010	3.82143	±0.00413	11.22	±0.01	99.08	4.02	38.0	±9.1
20F23306	17.0 %	✓	0.0263820	1.426	1.159099	10.114	1.105540	0.802	91.1662	0.044	356.2495	0.009	3.82175	±0.00421	11.22	±0.01	97.80	4.22	33.8	±6.8
20F23308	17.0 %	✓	0.0124386	2.376	1.542287	7.584	1.099720	0.871	90.7691	0.043	350.6236	0.009	3.82270	±0.00390	11.22	±0.01	98.96	4.20	25.3	±3.8
20F23309	17.0 %	✓	0.0085903	3.774	1.562298	7.421	1.963525	0.505	163.4669	0.042	626.3168	0.006	3.81596	±0.00344	11.20	±0.01	99.59	7.56	45.0	±6.7
20F23311	17.0 %		0.0023279	12.110	0.599730	19.998	0.667640	1.409	55.7125	0.047	214.1908	0.014	3.83239	±0.00483	11.25	±0.01	99.68	2.58	39.9	±16.0
20F23312	17.0 %	✓	0.0037178	7.967	0.982183	11.504	1.050769	0.876	87.6252	0.043	335.6133	0.011	3.81776	±0.00397	11.21	±0.01	99.68	4.05	38.4	±8.8
20F23314	17.0 %	✓	0.0046941	6.142	1.382693	8.714	0.670767	1.440	56.4377	0.047	216.7595	0.014	3.81728	±0.00486	11.21	±0.01	99.39	2.61	17.6	±3.1
20F23315	17.0 %		0.0215424	1.610	0.109546	105.311	0.367871	2.549	30.8500	0.055	124.7668	0.020	3.83551	±0.00813	11.26	±0.02	94.84	1.43	121.1	±255.1
20F23317	17.0 %	✓	0.1120140	0.525	1.233948	9.539	1.258322	0.736	101.8232	0.043	422.3482	0.008	3.81982	±0.00489	11.21	±0.01	92.09	4.71	35.5	±6.8
20F23318	17.0 %		0.0012815	19.803	0.149640	74.793	0.170773	4.912	14.4968	0.080	53.8663	0.045	3.74239	±0.01257	10.99	±0.04	100.72	0.67	41.7	±62.3
20F23320	17.0 %	✓	0.0011476	21.683	0.286381	38.707	0.317377	2.761	27.2797	0.057	104.3501	0.024	3.81290	±0.00727	11.19	±0.02	99.68	1.26	41.0	±31.7
20F23321	17.0 %		0.0004151	57.406	0.107324	101.625	0.099337	8.844	8.7993	0.115	33.0228	0.067	3.76739	±0.01912	11.06	±0.06	100.39	0.41	35.3	±71.7
20F23323	17.0 %		0.0047915	5.832	0.455400	22.499	0.413750	2.080	34.6964	0.052	132.5873	0.021	3.78061	±0.00644	11.10	±0.02	98.93	1.60	32.8	±14.7
20F23324	17.0 %		0.0001212	197.783	0.161416	65.204	0.100969	8.894	9.3191	0.111	35.7461	0.068	3.84050	±0.01840	11.27	±0.05	100.12	0.43	24.8	±32.4
20F23326	17.0 %	✓	0.0027815	9.127	0.248166	43.816	0.341805	2.511	28.3922	0.054	109.3539	0.025	3.82241	±0.00705	11.22	±0.02	99.24	1.31	49.2	±43.1
20F23327	17.0 %	✓	0.0002042	120.671	0.310517	35.248	0.239400	3.719	19.7394	0.066	75.4183	0.035	3.82449	±0.00945	11.23	±0.03	100.10	0.91	27.3	±19.3
		Σ	0.5758501	0.317	96.014823	0.652	26.074891	0.188	2162.1536	0.010	8417.5379	0.002								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-098**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C39-20)**
Position = **X: 0 | Y: 0 | Z/H: 48.54616 mm**
FCT-NM Age = **28.201 ±0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.65100 ±0.01477**
FCT-NM J-value = **0.00160869 ±0.00000246**
Air Shot 40Ar/36Ar = **298.8040 ±0.3705**
Air Shot MDF = **0.99979559 ±0.00040479 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ±0.107 E-10 1/a**
Decay 39Ar = **2.940 ±0.016 E-07 1/h**
Decay 37Ar = **8.230 ±0.012 E-04 1/h**
Decay 36Cl = **2.257 ±0.015 E-06 1/a**
Decay 40K(EC,β⁺) = **0.580 ±0.014 E-10 1/a**
Decay 40K(β⁻) = **4.884 ±0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ±0.31**
Atmospheric 38/36(a) = **0.1885 ±0.0003**
Production 39/37(ca) = **0.0006425 ±0.0000059**
Production 38/37(ca) = **0.0001800 ±0.0000173**
Production 36/37(ca) = **0.0002703 ±0.0000005**
Production 40/39(k) = **0.000607 ±0.000059**
Production 38/39(k) = **0.012077 ±0.000011**
Production 36/38(cl) = **262.80 ±1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ±0.0100 E-04**
Atomic Weight K = **39.0983 ±0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			3.81749	±0.00175	**11.21**	**±0.03**	3.60	92.88	1.0	±0.1
Error Mean				±0.05%		**±0.31%**	0%	22		
				Full External Error		±0.58	1.62	2σ Confidence Limit		
				Analytical Error		±0.01	1.8963	Error Magnification		
Total Fusion Age			3.81670	±0.00092	**11.20**	**±0.03**		28	9.7	±0.1
				±0.02%		**±0.31%**				
				Full External Error		±0.58				
				Analytical Error		±0.00				
Normal Isochron	**288.82**	**±10.01**	3.82227	±0.00327	**11.22**	**±0.04**	8.55	92.88		
Error Chron		**±3.46%**		±0.09%		**±0.32%**	0%	22		
				Full External Error		±0.58	1.63	2σ Confidence Limit		
				Analytical Error		±0.01	2.9241	Error Magnification		
							1	Number of Iterations		
							0.0000001332	Convergence		
Inverse Isochron	**298.26**	**±6.78**	3.81756	±0.00231	**11.21**	**±0.03**	3.78	92.88		
Error Chron		**±2.27%**		±0.06%		**±0.31%**	0%	22		
				Full External Error		±0.58	1.63	2σ Confidence Limit		
				Analytical Error		±0.01	1.9439	Error Magnification		
							2	Number of Iterations		
							0.0003792871	Convergence		
							8%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F23287	17.0 %	✓	0.0034074	27.585117	0.0081760	53.2691	202.8356	11.18 ±0.01	99.49	2.46	0.8 ±0.0
20F23288	17.0 %	✓	0.0201723	22.976442	0.0000000	67.7988	258.5731	11.20 ±0.01	97.71	3.14	1.3 ±0.0
20F23290	17.0 %	✓	0.0230738	1.357462	0.0000000	136.8616	522.1875	11.20 ±0.01	98.68	6.33	43.4 ±7.2
20F23291	17.0 %	✓	0.1572472	2.546925	0.0000000	164.4546	627.5627	11.20 ±0.01	93.03	7.61	27.8 ±2.4
20F23293	17.0 %	✓	0.0659164	2.186415	0.0000000	206.0023	785.6196	11.20 ±0.01	97.54	9.53	40.5 ±4.3
20F23294	17.0 %	✓	0.0106059	21.667255	0.0000000	51.7797	197.4018	11.19 ±0.02	98.41	2.39	1.0 ±0.0
20F23296	17.0 %	✓	0.0087515	1.436147	0.0028516	84.0583	320.5225	11.19 ±0.01	99.18	3.89	25.2 ±4.0
20F23297	17.0 %	✓	0.0145231	1.541279	0.0000000	161.5331	616.6979	11.21 ±0.01	99.29	7.47	45.1 ±6.4
20F23299	17.0 %	✓	0.0041492	0.398734	0.0000000	51.2551	196.2005	11.24 ±0.01	99.36	2.37	55.3 ±31.0
20F23300	17.0 %	✓	0.0165004	1.130183	0.0013877	84.0525	320.8078	11.20 ±0.01	98.47	3.89	32.0 ±6.7
20F23302	17.0 %	✓	0.0159196	0.972457	0.0000000	109.9165	419.7918	11.21 ±0.01	98.86	5.08	48.6 ±10.8
20F23303	17.0 %	✓	0.0037918	0.941625	0.0000000	83.6024	319.3004	11.21 ±0.01	99.63	3.87	38.2 ±9.3
20F23305	17.0 %	✓	0.0102120	0.984156	0.0000000	86.9407	332.2383	11.22 ±0.01	99.08	4.02	38.0 ±9.1
20F23306	17.0 %	✓	0.0260687	1.159099	0.0000000	91.1654	348.4111	11.22 ±0.01	97.80	4.22	33.8 ±6.8
20F23308	17.0 %	✓	0.0120215	1.542287	0.0009698	90.7681	346.9793	11.22 ±0.01	98.96	4.20	25.3 ±3.8
20F23309	17.0 %	✓	0.0081680	1.562298	0.0000000	163.4659	623.7789	11.20 ±0.01	99.59	7.56	45.0 ±6.7
20F23311	17.0 %		0.0021657	0.599730	0.0000000	55.7121	213.5104	11.25 ±0.01	99.68	2.58	39.9 ±16.0
20F23312	17.0 %	✓	0.0034523	0.982183	0.0000000	87.6246	334.5294	11.21 ±0.01	99.68	4.05	38.4 ±8.8
20F23314	17.0 %	✓	0.0043204	1.382693	0.0000000	56.4368	215.4353	11.21 ±0.01	99.39	2.61	17.6 ±3.1
20F23315	17.0 %		0.0215128	0.109546	0.0000000	30.8499	118.3252	11.26 ±0.02	94.84	1.43	121.1 ±255.1
20F23317	17.0 %	✓	0.1116789	1.233948	0.0073392	101.8224	388.9435	11.21 ±0.01	92.09	4.71	35.5 ±6.8
20F23318	17.0 %		0.0013220	0.149640	0.0000000	14.4967	54.2522	10.99 ±0.04	100.72	0.67	41.7 ±62.3
20F23320	17.0 %	✓	0.0010702	0.286381	0.0000000	27.2795	104.0140	11.19 ±0.02	99.68	1.26	41.0 ±31.7
20F23321	17.0 %		0.0004442	0.107324	0.0000000	8.7992	33.1501	11.06 ±0.06	100.39	0.41	35.3 ±71.7
20F23323	17.0 %		0.0046684	0.455400	0.0000000	34.6961	131.1724	11.10 ±0.02	98.93	1.60	32.8 ±14.7
20F23324	17.0 %		0.0001648	0.161416	0.0000000	9.3190	35.7897	11.27 ±0.05	100.12	0.43	24.8 ±32.4
20F23326	17.0 %	✓	0.0027144	0.248166	0.0000000	28.3921	108.5263	11.22 ±0.02	99.24	1.31	49.2 ±43.1
20F23327	17.0 %	✓	0.0002884	0.310517	0.0010079	19.7392	75.4924	11.23 ±0.03	100.10	0.91	27.3 ±19.3
		Σ	0.5498926	96.014823	0.0217323	2162.0919	8252.0495				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-098**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C39-20)**
J = **0.00160869 ±0.00000246**
FCT-NM = **28.201 ±0.023 Ma**

Results	40(r)/39(k)	±2σ	Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.81749	±0.00175	**11.21**	**±0.03**	3.60	92.88	1.0 ±0.1
Error Mean		±0.05%		**±0.31%**	0%	22	
			Full External Error	±0.58	1.62	2σ Confidence Limit	
			Analytical Error	±0.01	1.8963	Error Magnification	
Total Fusion Age	3.81670	±0.00092	**11.20**	**±0.03**		28	9.7 ±0.1
		±0.02%		**±0.31%**			
			Full External Error	±0.58			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F23287	17.0 %	✓	15633.37	±2644.48	59826.63	±10119.89	1.0000
20F23288	17.0 %	✓	3360.98	±121.45	13116.77	±473.84	0.9997
20F23290	17.0 %	✓	5931.47	±184.90	22929.75	±714.53	0.9996
20F23291	17.0 %	✓	1045.84	±8.83	4289.49	±36.03	0.9949
20F23293	17.0 %	✓	3125.20	±50.58	12216.98	±197.47	0.9987
20F23294	17.0 %	✓	4882.14	±286.48	18910.93	±1109.56	0.9999
20F23296	17.0 %	✓	9605.07	±703.61	36923.59	±2704.61	0.9999
20F23297	17.0 %	✓	11122.51	±511.71	42761.84	±1967.03	0.9998
20F23299	17.0 %	✓	12352.93	±1543.80	47584.56	±5946.70	1.0000
20F23300	17.0 %	✓	5093.98	±214.03	19741.04	±829.29	0.9998
20F23302	17.0 %	✓	6904.47	±273.08	26668.04	±1054.50	0.9998
20F23303	17.0 %	✓	22048.48	±3486.25	84507.76	±13361.97	1.0000
20F23305	17.0 %	✓	8513.55	±543.64	32832.54	±2096.35	0.9999
20F23306	17.0 %	✓	3497.13	±101.34	13663.69	±395.76	0.9995
20F23308	17.0 %	✓	7550.45	±373.41	29161.69	±1441.98	0.9998
20F23309	17.0 %	✓	20013.01	±1596.26	76667.36	±6114.74	0.9999
20F23311	17.0 %		25724.23	±6741.01	98883.73	±25912.23	1.0000
20F23312	17.0 %	✓	25381.35	±4378.25	97198.34	±16766.40	1.0000
20F23314	17.0 %	✓	13062.93	±1754.74	50163.46	±6738.29	1.0000
20F23315	17.0 %		1434.03	±46.45	5798.78	±187.74	0.9993
20F23317	17.0 %	✓	911.74	±9.64	3781.26	±39.86	0.9965
20F23318	17.0 %		10966.05	±4240.23	40740.64	±15753.03	1.0000
20F23320	17.0 %	✓	25489.21	±11938.72	97486.43	±45660.91	1.0000
20F23321	17.0 %		19811.26	±21422.06	74338.22	±80382.31	1.0000
20F23323	17.0 %		7432.10	±894.14	28396.40	±3416.21	1.0000
20F23324	17.0 %		56543.26	±165609.53	216856.03	±635149.44	1.0000
20F23326	17.0 %	✓	10459.84	±1969.53	40280.40	±7584.46	1.0000
20F23327	17.0 %	✓	68445.25	±117831.01	261469.61	±450129.43	1.0000

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**288.82**	**±10.01**	3.82227	±0.00327	**11.22**	**±0.04**	8.55
Error Chron		**±3.46%**		±0.09%		**±0.32%**	0%
					Full External Error	±0.58	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.63	Convergence	0.000000133216
	Error Magnification	2.9241	Number of Iterations	1
	Number of Data Points	22	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F23287	17.0 %	✓	0.2613112	±0.0002641	0.00001671	±0.00000283	0.0005
20F23288	17.0 %	✓	0.2562356	±0.0002375	0.00007624	±0.00000275	0.0014
20F23290	17.0 %	✓	0.2586802	±0.0002217	0.00004361	±0.00000136	0.0008
20F23291	17.0 %	✓	0.2438133	±0.0002067	0.00023313	±0.00000196	0.0026
20F23293	17.0 %	✓	0.2558083	±0.0002137	0.00008185	±0.00000132	0.0010
20F23294	17.0 %	✓	0.2581648	±0.0002520	0.00005288	±0.00000310	0.0012
20F23296	17.0 %	✓	0.2601336	±0.0002320	0.00002708	±0.00000198	0.0007
20F23297	17.0 %	✓	0.2601036	±0.0002214	0.00002339	±0.00000108	0.0005
20F23299	17.0 %	✓	0.2595995	±0.0002514	0.00002102	±0.00000263	0.0006
20F23300	17.0 %	✓	0.2580401	±0.0002315	0.00005066	±0.00000213	0.0012
20F23302	17.0 %	✓	0.2589045	±0.0002251	0.00003750	±0.00000148	0.0009
20F23303	17.0 %	✓	0.2609048	±0.0002319	0.00001183	±0.00000187	0.0003
20F23305	17.0 %	✓	0.2593023	±0.0002355	0.00003046	±0.00000194	0.0007
20F23306	17.0 %	✓	0.2559431	±0.0002278	0.00007319	±0.00000212	0.0013
20F23308	17.0 %	✓	0.2589168	±0.0002287	0.00003429	±0.00000170	0.0008
20F23309	17.0 %	✓	0.2610369	±0.0002206	0.00001304	±0.00000104	0.0002
20F23311	17.0 %		0.2601462	±0.0002550	0.00001011	±0.00000265	0.0003
20F23312	17.0 %	✓	0.2611294	±0.0002336	0.00001029	±0.00000177	0.0003
20F23314	17.0 %	✓	0.2604073	±0.0002570	0.00001993	±0.00000268	0.0006
20F23315	17.0 %		0.2472980	±0.0002905	0.00017245	±0.00000558	0.0042
20F23317	17.0 %	✓	0.2411216	±0.0002133	0.00026446	±0.00000279	0.0030
20F23318	17.0 %		0.2691673	±0.0004955	0.00002455	±0.00000949	0.0011
20F23320	17.0 %	✓	0.2614642	±0.0003265	0.00001026	±0.00000480	0.0004
20F23321	17.0 %		0.2665017	±0.0007081	0.00001345	±0.00001455	0.0006
20F23323	17.0 %		0.2617268	±0.0002942	0.00003522	±0.00000424	0.0013
20F23324	17.0 %		0.2607410	±0.0006765	0.00000461	±0.00001351	0.0002
20F23326	17.0 %	✓	0.2596758	±0.0003093	0.00002483	±0.00000467	0.0011
20F23327	17.0 %	✓	0.2617713	±0.0003924	0.00000382	±0.00000658	0.0002

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**298.26**	**±6.78**	3.81756	±0.00231	**11.21**	**±0.03**	3.78
Error Chron		**±2.27%**		±0.06%		**±0.31%**	0%
					Full External Error	±0.58	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.63	Convergence	0.0003792871
	Error Magnification	1.9439	Number of Iterations	2
	Number of Data Points	22	Calculated Line	Weighted York-2
	Spreading Factor	7.9%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F23287	17.0%	✓	0.0034074	8.46	0.0000000	0.00	0.0074563	0.60	0.0000018	113.19	27.585117	0.58	0.0006423	8.46	0.0000000	0.00	0.643330	0.10	0.0049653	9.65	0.0081760	113.19	53.2691	0.05	0.0177234	1.09	202.8356	0.04	1.01731	8.46	0.0000000	0.00	0.0323343	9.65
20F23288	17.0%	✓	0.0201723	1.81	0.0000000	0.00	0.0062105	0.68	0.0000000	0.00	22.976442	0.66	0.0038025	1.81	0.0000000	0.00	0.818807	0.10	0.0041358	9.65	0.0000000	0.00	67.7988	0.05	0.0147624	1.13	258.5731	0.04	6.02265	1.81	0.0000000	0.00	0.0411539	9.65
20F23290	17.0%	✓	0.0230738	1.56	0.0000000	0.00	0.0003669	8.26	0.0000000	0.00	1.357462	8.26	0.0043494	1.57	0.0000000	0.00	1.652878	0.10	0.0002443	12.69	0.0000000	0.00	136.8616	0.04	0.0008722	8.31	522.1875	0.02	6.88891	1.56	0.0000000	0.00	0.0830750	9.65
20F23291	17.0%	✓	0.1572472	0.42	0.0000000	0.00	0.0006884	4.40	0.0000000	0.00	2.546925	4.40	0.0296411	0.45	0.0000000	0.00	1.986119	0.10	0.0004584	10.59	0.0000000	0.00	164.4546	0.04	0.0016364	4.50	627.5627	0.03	46.94772	0.43	0.0000000	0.00	0.0998240	9.65
20F23293	17.0%	✓	0.0659164	0.81	0.0000000	0.00	0.0005910	5.27	0.0000000	0.00	2.186415	5.26	0.0124252	0.82	0.0000000	0.00	2.487890	0.10	0.0003936	10.97	0.0000000	0.00	206.0023	0.04	0.0014048	5.34	785.6196	0.02	19.68001	0.81	0.0000000	0.00	0.1250434	9.65
20F23294	17.0%	✓	0.0106059	2.93	0.0000000	0.00	0.0058567	0.72	0.0000000	0.00	21.667255	0.69	0.0019992	2.94	0.0000000	0.00	0.625343	0.10	0.0039001	9.66	0.0000000	0.00	51.7797	0.05	0.0139212	1.15	197.4018	0.05	3.16651	2.94	0.0000000	0.00	0.0314303	9.65
20F23296	17.0%	✓	0.0087515	3.66	0.0000000	0.00	0.0003882	7.99	0.0000006	357.49	1.436147	7.99	0.0016497	3.67	0.0000000	0.00	1.015173	0.10	0.0002585	12.51	0.0028516	357.49	84.0583	0.04	0.0009227	8.04	320.5225	0.03	2.61284	3.66	0.0000000	0.00	0.0510234	9.65
20F23297	17.0%	✓	0.0145231	2.30	0.0000000	0.00	0.0004166	7.15	0.0000000	0.00	1.541279	7.15	0.0027376	2.31	0.0000000	0.00	1.950836	0.10	0.0002774	11.99	0.0000000	0.00	161.5331	0.04	0.0009903	7.21	616.6979	0.02	4.33601	2.30	0.0000000	0.00	0.0980506	9.65
20F23299	17.0%	✓	0.0041492	6.25	0.0000000	0.00	0.0001078	28.02	0.0000000	0.00	0.398734	28.02	0.0007821	6.25	0.0000000	0.00	0.619008	0.10	0.0000718	29.62	0.0000000	0.00	51.2551	0.05	0.0002562	28.03	196.2005	0.04	1.23879	6.25	0.0000000	0.00	0.0311119	9.65
20F23300	17.0%	✓	0.0165004	2.10	0.0000000	0.00	0.0003055	10.53	0.0000003	681.58	1.130183	10.53	0.0031103	2.11	0.0000000	0.00	1.015102	0.10	0.0002034	14.27	0.0013877	681.58	84.0525	0.04	0.0007261	10.57	320.8078	0.03	4.92635	2.10	0.0000000	0.00	0.0510199	9.65
20F23302	17.0%	✓	0.0159196	1.98	0.0000000	0.00	0.0002629	11.10	0.0000000	0.00	0.972457	11.10	0.0030008	1.98	0.0000000	0.00	1.327462	0.10	0.0001750	14.69	0.0000000	0.00	109.9165	0.04	0.0006248	11.14	419.7918	0.02	4.75296	1.98	0.0000000	0.00	0.0667193	9.65
20F23303	17.0%	✓	0.0037918	7.91	0.0000000	0.00	0.0002545	12.20	0.0000000	0.00	0.941625	12.20	0.0007147	7.91	0.0000000	0.00	1.009666	0.10	0.0001695	15.54	0.0000000	0.00	83.6024	0.04	0.0006050	12.23	319.3004	0.03	1.13207	7.91	0.0000000	0.00	0.0507466	9.65
20F23305	17.0%	✓	0.0102120	3.19	0.0000000	0.00	0.0002660	11.99	0.0000000	0.00	0.984156	11.99	0.0019250	3.20	0.0000000	0.00	1.049983	0.10	0.0001771	15.38	0.0000000	0.00	86.9407	0.04	0.0006323	12.02	332.2383	0.03	3.04891	3.19	0.0000000	0.00	0.0527730	9.65
20F23306	17.0%	✓	0.0260687	1.45	0.0000000	0.00	0.0003133	10.12	0.0000000	0.00	1.159099	10.11	0.0049139	1.46	0.0000000	0.00	1.101005	0.10	0.0002086	13.97	0.0000000	0.00	91.1654	0.04	0.0007447	10.16	348.4111	0.03	7.78306	1.45	0.0000000	0.00	0.0553374	9.65
20F23308	17.0%	✓	0.0120215	2.47	0.0000000	0.00	0.0004169	7.59	0.0000002	#######	1.542287	7.58	0.0022661	2.48	0.0000000	0.00	1.096206	0.10	0.0002776	12.26	0.0009698	#######	90.7681	0.04	0.0009909	7.64	346.9793	0.03	3.58915	2.47	0.0000000	0.00	0.0550962	9.65
20F23309	17.0%	✓	0.0081680	3.99	0.0000000	0.00	0.0004223	7.42	0.0000000	0.00	1.562298	7.42	0.0015397	3.99	0.0000000	0.00	1.974178	0.10	0.0002812	12.16	0.0000000	0.00	163.4659	0.04	0.0010038	7.48	623.7789	0.02	2.43863	3.99	0.0000000	0.00	0.0992238	9.65
20F23311	17.0%		0.0021657	13.10	0.0000000	0.00	0.0001621	20.00	0.0000000	0.00	0.599730	20.00	0.0004082	13.10	0.0000000	0.00	0.672835	0.10	0.0001080	22.20	0.0000000	0.00	55.7121	0.05	0.0003853	20.02	213.5104	0.04	0.64661	13.10	0.0000000	0.00	0.0338173	9.65
20F23312	17.0%	✓	0.0034523	8.62	0.0000000	0.00	0.0002655	11.50	0.0000000	0.00	0.982183	11.50	0.0006508	8.63	0.0000000	0.00	1.058242	0.10	0.0001768	15.00	0.0000000	0.00	87.6246	0.04	0.0006311	11.54	334.5294	0.03	1.03073	8.63	0.0000000	0.00	0.0531881	9.65
20F23314	17.0%	✓	0.0043204	6.72	0.0000000	0.00	0.0003737	8.72	0.0000000	0.00	1.382693	8.71	0.0008144	6.72	0.0000000	0.00	0.681587	0.10	0.0002489	12.99	0.0000000	0.00	56.4368	0.05	0.0008884	8.76	215.4353	0.04	1.28989	6.72	0.0000000	0.00	0.0342572	9.65
20F23315	17.0%		0.0215128	1.62	0.0000000	0.00	0.0000296	105.31	0.0000000	0.00	0.109546	105.31	0.0040552	1.63	0.0000000	0.00	0.372575	0.11	0.0000197	105.75	0.0000000	0.00	30.8499	0.06	0.0000704	105.32	118.3252	0.09	6.42286	1.62	0.0000000	0.00	0.0187259	9.65
20F23317	17.0%	✓	0.1116789	0.53	0.0000000	0.00	0.0003335	9.54	0.0000016	132.95	1.233948	9.54	0.0210515	0.55	0.0000000	0.00	1.229709	0.10	0.0002221	13.55	0.0073392	132.96	101.8224	0.04	0.0007928	9.58	388.9435	0.05	33.34285	0.54	0.0000000	0.00	0.0618062	9.65
20F23318	17.0%		0.0013220	19.33	0.0000000	0.00	0.0000404	74.79	0.0000000	0.00	0.149640	74.79	0.0002492	19.33	0.0000000	0.00	0.175076	0.12	0.0000269	75.41	0.0000000	0.00	14.4967	0.08	0.0000961	74.80	54.2522	0.15	0.39468	19.33	0.0000000	0.00	0.0087995	9.65
20F23320	17.0%	✓	0.0010702	23.42	0.0000000	0.00	0.0000774	38.71	0.0000000	0.00	0.286381	38.71	0.0002017	23.42	0.0000000	0.00	0.329454	0.11	0.0000515	39.89	0.0000000	0.00	27.2795	0.06	0.0001840	38.72	104.0140	0.08	0.31953	23.42	0.0000000	0.00	0.0165587	9.65
20F23321	17.0%		0.0004442	54.07	0.0000000	0.00	0.0000290	101.62	0.0000000	0.00	0.107324	101.62	0.0000837	54.07	0.0000000	0.00	0.106268	0.15	0.0000193	102.08	0.0000000	0.00	8.7992	0.11	0.0000690	101.63	33.1501	0.23	0.13261	54.07	0.0000000	0.00	0.0053411	9.65
20F23323	17.0%		0.0046684	6.02	0.0000000	0.00	0.0001231	22.50	0.0000000	0.00	0.455400	22.50	0.0008800	6.02	0.0000000	0.00	0.419025	0.10	0.0000820	24.47	0.0000000	0.00	34.6961	0.05	0.0002926	22.52	131.1724	0.07	1.39380	6.02	0.0000000	0.00	0.0210605	9.65
20F23324	17.0%		0.0001648	146.44	0.0000000	0.00	0.0000436	65.20	0.0000000	0.00	0.161416	65.20	0.0000311	146.45	0.0000000	0.00	0.112546	0.14	0.0000291	65.91	0.0000000	0.00	9.3190	0.11	0.0001037	65.21	35.7897	0.21	0.04921	146.44	0.0000000	0.00	0.0056566	9.65
20F23326	17.0%	✓	0.0027144	9.41	0.0000000	0.00	0.0000671	43.82	0.0000000	0.00	0.248166	43.82	0.0005117	9.42	0.0000000	0.00	0.342891	0.11	0.0000447	44.86	0.0000000	0.00	28.3921	0.05	0.0001594	43.83	108.5263	0.07	0.81041	9.42	0.0000000	0.00	0.0172340	9.65
20F23327	17.0%	✓	0.0002884	86.08	0.0000000	0.00	0.0000839	35.25	0.0000002	885.43	0.310517	35.25	0.0000544	86.08	0.0000000	0.00	0.238390	0.11	0.0000559	36.54	0.0010079	885.43	19.7392	0.07	0.0001995	35.26	75.4924	0.10	0.08610	86.08	0.0000000	0.00	0.0119817	9.65
		Σ	0.5498926	0.33	0.0000000	0.00	0.0259528	0.66	0.0000047	108.21	96.014823	0.65	0.1036548	0.34	0.0000000	0.00	26.111584	0.02	0.0172827	4.30	0.0217323	108.20	2162.0919	0.01	0.0616895	0.77	8252.0495	0.01	164.17594	0.34	0.0000000	0.00	1.3123898	2.19
		Σ							0.5758501	0.32	96.014823	0.65									26.254254	0.09			2162.1536	0.01							8417.5379	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F23287	17.0 %	✓	3.826188	0.001932	0.517673	0.002993	0.000204	0.000005	132.603	13.758242	1.00093697	7.218E-12
20F23288	17.0 %	✓	3.902416	0.001807	0.338818	0.002248	0.000389	0.000005	132.609	13.759940	1.00093701	9.368E-12
20F23290	17.0 %	✓	3.866359	0.001656	0.009918	0.000820	0.000171	0.000003	132.621	13.763149	1.00093709	1.873E-11
20F23291	17.0 %	✓	4.102065	0.001738	0.015487	0.000681	0.000960	0.000004	132.627	13.764849	1.00093714	2.388E-11
20F23293	17.0 %	✓	3.909758	0.001632	0.010613	0.000559	0.000323	0.000003	132.639	13.768059	1.00093722	2.851E-11
20F23294	17.0 %	✓	3.873061	0.001889	0.418339	0.002912	0.000318	0.000006	132.644	13.769570	1.00093726	7.101E-12
20F23296	17.0 %	✓	3.844744	0.001713	0.017085	0.001365	0.000109	0.000004	132.657	13.772970	1.00093735	1.144E-11
20F23297	17.0 %	✓	3.845206	0.001635	0.009542	0.000682	0.000092	0.000002	132.662	13.774481	1.00093739	2.199E-11
20F23299	17.0 %	✓	3.852675	0.001865	0.007779	0.002179	0.000083	0.000005	132.674	13.777693	1.00093747	6.990E-12
20F23300	17.0 %	✓	3.875940	0.001737	0.013446	0.001416	0.000200	0.000004	132.681	13.779394	1.00093752	1.153E-11
20F23302	17.0 %	✓	3.863014	0.001678	0.008847	0.000982	0.000147	0.000003	132.692	13.782608	1.00093760	1.503E-11
20F23303	17.0 %	✓	3.833394	0.001703	0.011263	0.001374	0.000048	0.000004	132.699	13.784309	1.00093764	1.135E-11
20F23305	17.0 %	✓	3.857082	0.001750	0.011320	0.001357	0.000121	0.000004	132.710	13.787524	1.00093773	1.187E-11
20F23306	17.0 %	✓	3.907694	0.001738	0.012714	0.001286	0.000289	0.000004	132.716	13.789037	1.00093777	1.261E-11
20F23308	17.0 %	✓	3.862809	0.001705	0.016991	0.001289	0.000137	0.000003	132.728	13.792442	1.00093785	1.241E-11
20F23309	17.0 %	✓	3.831459	0.001618	0.009557	0.000709	0.000053	0.000002	132.734	13.793956	1.00093789	2.217E-11
20F23311	17.0 %		3.844573	0.001883	0.010765	0.002153	0.000042	0.000005	132.746	13.797173	1.00093798	7.582E-12
20F23312	17.0 %	✓	3.830098	0.001712	0.011209	0.001289	0.000042	0.000003	132.752	13.798876	1.00093802	1.188E-11
20F23314	17.0 %	✓	3.840685	0.001894	0.024499	0.002135	0.000083	0.000005	132.764	13.802094	1.00093810	7.673E-12
20F23315	17.0 %		4.044302	0.002375	0.003551	0.003740	0.000698	0.000011	132.770	13.803798	1.00093815	4.417E-12
20F23317	17.0 %	✓	4.147859	0.001834	0.012119	0.001156	0.001100	0.000006	132.782	13.807017	1.00093823	1.495E-11
20F23318	17.0 %		3.715744	0.003419	0.010322	0.007720	0.000088	0.000018	132.787	13.808532	1.00093827	1.907E-12
20F23320	17.0 %	✓	3.825196	0.002388	0.010498	0.004063	0.000042	0.000009	132.800	13.811942	1.00093836	3.694E-12
20F23321	17.0 %		3.752899	0.004985	0.012197	0.012395	0.000047	0.000027	132.806	13.813458	1.00093840	1.169E-12
20F23323	17.0 %		3.821353	0.002147	0.013125	0.002953	0.000138	0.000008	132.817	13.816679	1.00093848	4.694E-12
20F23324	17.0 %		3.835788	0.004976	0.017321	0.011294	0.000013	0.000026	132.824	13.818385	1.00093853	1.265E-12
20F23326	17.0 %	✓	3.851541	0.002293	0.008741	0.003830	0.000098	0.000009	132.835	13.821608	1.00093861	3.871E-12
20F23327	17.0 %	✓	3.820696	0.002863	0.015731	0.005545	0.000010	0.000012	132.842	13.823314	1.00093865	2.670E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F23287	17.0 %	0.0055970 ±0.0001413	0.0140901 ±0.0063522	0.0079799 ±0.0063323	0.0020901 ±0.0061668	1.2854783 ±0.0145410
20F23288	17.0 %	0.0055970 ±0.0001413	0.0140901 ±0.0063522	0.0079799 ±0.0063323	0.0020901 ±0.0061668	1.2854783 ±0.0145410
20F23290	17.0 %	0.0052875 ±0.0001756	0.0148049 ±0.0057042	0.0039646 ±0.0071390	0.0163281 ±0.0062373	1.2087316 ±0.0145901
20F23291	17.0 %	0.0052875 ±0.0001756	0.0148049 ±0.0057042	0.0039646 ±0.0071390	0.0163281 ±0.0062373	1.2087316 ±0.0145901
20F23293	17.0 %	0.0048404 ±0.0001572	0.0164848 ±0.0063887	0.0047603 ±0.0062126	0.0301092 ±0.0060639	1.2169126 ±0.0145742
20F23294	17.0 %	0.0048404 ±0.0001572	0.0164848 ±0.0063887	0.0047603 ±0.0062126	0.0301092 ±0.0060639	1.2169126 ±0.0145742
20F23296	17.0 %	0.0052698 ±0.0001812	0.0178532 ±0.0054567	0.0031523 ±0.0070642	0.0116009 ±0.0061112	1.2052097 ±0.0152348
20F23297	17.0 %	0.0052698 ±0.0001812	0.0178532 ±0.0054567	0.0031523 ±0.0070642	0.0116009 ±0.0061112	1.2052097 ±0.0152348
20F23299	17.0 %	0.0054104 ±0.0001626	0.0130999 ±0.0059433	0.0020840 ±0.0062719	0.0116737 ±0.0061942	1.1947590 ±0.0134638
20F23300	17.0 %	0.0054104 ±0.0001626	0.0130999 ±0.0059433	0.0020840 ±0.0062719	0.0116737 ±0.0061942	1.1947590 ±0.0134638
20F23302	17.0 %	0.0056867 ±0.0001716	0.0186735 ±0.0059188	0.0014050 ±0.0066328	0.0115543 ±0.0062186	1.2043904 ±0.0156275
20F23303	17.0 %	0.0056867 ±0.0001716	0.0186735 ±0.0059188	0.0014050 ±0.0066328	0.0115543 ±0.0062186	1.2043904 ±0.0156275
20F23305	17.0 %	0.0053859 ±0.0001649	0.0202405 ±0.0059934	0.0035606 ±0.0066216	0.0009505 ±0.0068065	1.2519705 ±0.0156240
20F23306	17.0 %	0.0053859 ±0.0001649	0.0202405 ±0.0059934	0.0035606 ±0.0066216	0.0009505 ±0.0068065	1.2519705 ±0.0156240
20F23308	17.0 %	0.0056294 ±0.0001741	0.0206661 ±0.0061029	0.0025737 ±0.0067609	0.0279561 ±0.0068768	1.2195166 ±0.0144809
20F23309	17.0 %	0.0056294 ±0.0001741	0.0206661 ±0.0061029	0.0025737 ±0.0067609	0.0279561 ±0.0068768	1.2195166 ±0.0144809
20F23311	17.0 %	0.0054080 ±0.0001780	0.0186282 ±0.0063945	0.0135442 ±0.0064634	0.0023236 ±0.0064038	1.1997371 ±0.0146268
20F23312	17.0 %	0.0054080 ±0.0001780	0.0186282 ±0.0063945	0.0135442 ±0.0064634	0.0023236 ±0.0064038	1.1997371 ±0.0146268
20F23314	17.0 %	0.0051162 ±0.0001711	0.0080993 ±0.0062236	0.0053282 ±0.0067611	0.0257678 ±0.0064371	1.1714540 ±0.0160537
20F23315	17.0 %	0.0051162 ±0.0001711	0.0080993 ±0.0062236	0.0053282 ±0.0067611	0.0257678 ±0.0064371	1.1714540 ±0.0160537
20F23317	17.0 %	0.0057534 ±0.0001752	0.0244957 ±0.0058018	0.0013321 ±0.0060452	0.0059215 ±0.0069752	1.2944419 ±0.0160473
20F23318	17.0 %	0.0057534 ±0.0001752	0.0244957 ±0.0058018	0.0013321 ±0.0060452	0.0059215 ±0.0069752	1.2944419 ±0.0160473
20F23320	17.0 %	0.0050757 ±0.0001637	0.0204407 ±0.0052681	0.0022107 ±0.0062994	0.0144317 ±0.0065113	1.1237927 ±0.0157028
20F23321	17.0 %	0.0050757 ±0.0001637	0.0204407 ±0.0052681	0.0022107 ±0.0062994	0.0144317 ±0.0065113	1.1237927 ±0.0157028
20F23323	17.0 %	0.0050757 ±0.0001637	0.0204407 ±0.0052681	0.0022107 ±0.0062994	0.0144317 ±0.0065113	1.1237927 ±0.0157028
20F23324	17.0 %	0.0050757 ±0.0001637	0.0204407 ±0.0052681	0.0022107 ±0.0062994	0.0144317 ±0.0065113	1.1237927 ±0.0157028
20F23326	17.0 %	0.0053543 ±0.0001702	0.0179733 ±0.0054678	0.0064197 ±0.0062656	0.0193615 ±0.0060560	1.1395294 ±0.0180469
20F23327	17.0 %	0.0053543 ±0.0001702	0.0179733 ±0.0054678	0.0064197 ±0.0062656	0.0193615 ±0.0060560	1.1395294 ±0.0180469

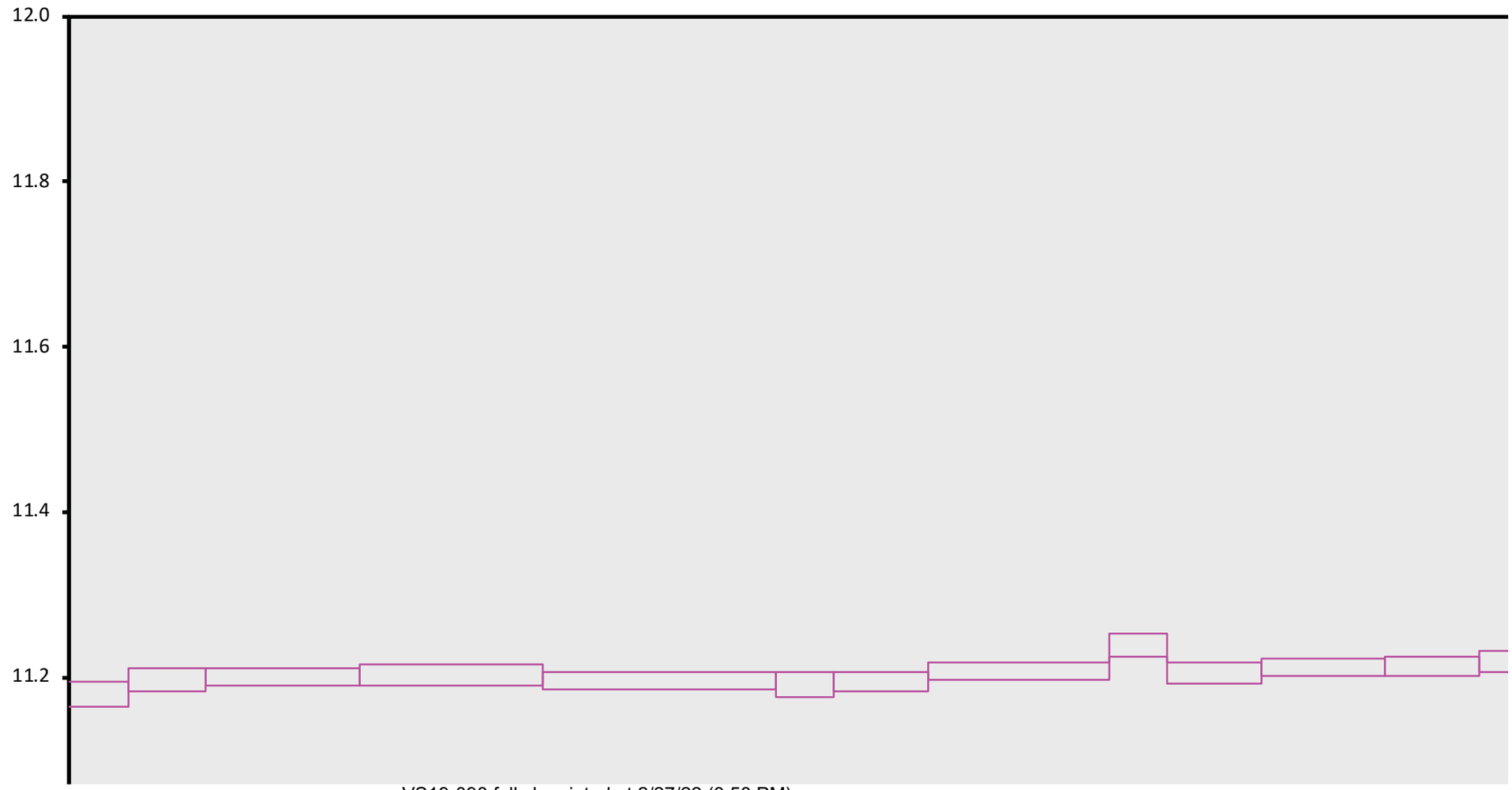
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F23287	17.0 %	0.0163235 ±0.0002423	0.9418	EXP 149 of 150	1.9896707 ±0.0055299	0.9342	EXP 149 of 150	0.6488656 ±0.0065087	0.5138	EXP 150 of 150	53.223950 ±0.012732	0.9995	EXP 150 of 150	205.170745 ±0.025764	0.9997	EXP 150 of 150
20F23288	17.0 %	0.0316426 ±0.0003254	0.8579	EXP 150 of 150	1.6546942 ±0.0062038	0.8902	EXP 149 of 150	0.8167131 ±0.0059983	0.6735	EXP 150 of 150	67.734201 ±0.011921	0.9997	EXP 150 of 150	265.922341 ±0.024846	0.9999	EXP 148 of 150
20F23290	17.0 %	0.0284286 ±0.0003047	0.9310	EXP 148 of 150	0.0837649 ±0.0058005	0.0333	EXP 150 of 150	1.6484866 ±0.0067747	0.8645	EXP 150 of 150	136.722772 ±0.015606	0.9999	EXP 150 of 150	530.368192 ±0.034579	0.9999	EXP 150 of 150
20F23291	17.0 %	0.1612042 ±0.0005741	0.0172	EXP 149 of 150	0.1701129 ±0.0057560	0.1356	EXP 150 of 150	2.0054367 ±0.0064943	0.9060	EXP 150 of 150	164.285102 ±0.016656	0.9999	EXP 150 of 150	675.818954 ±0.042895	0.9999	EXP 150 of 150
20F23293	17.0 %	0.0704977 ±0.0004895	0.8266	EXP 150 of 150	0.1422214 ±0.0053452	0.1030	EXP 150 of 150	2.4890979 ±0.0066137	0.9369	EXP 150 of 150	205.798939 ±0.016997	0.9999	EXP 149 of 150	806.641545 ±0.043191	1.0000	EXP 150 of 150
20F23294	17.0 %	0.0210926 ±0.0002593	0.9191	EXP 150 of 150	1.5561124 ±0.0063300	0.8725	EXP 150 of 150	0.6256741 ±0.0070699	0.4251	EXP 150 of 150	51.764646 ±0.010790	0.9996	EXP 150 of 150	201.816660 ±0.022005	0.9997	EXP 148 of 150
20F23296	17.0 %	0.0142932 ±0.0002571	0.9410	EXP 150 of 150	0.0863559 ±0.0062781	0.0255	EXP 150 of 150	1.0163632 ±0.0068542	0.6794	EXP 150 of 150	83.975015 ±0.011621	0.9998	EXP 148 of 150	324.391564 ±0.030005	0.9999	EXP 150 of 150
20F23297	17.0 %	0.0200185 ±0.0002729	0.9625	EXP 147 of 150	0.0939721 ±0.0058259	0.0235	EXP 150 of 150	1.9392655 ±0.0070855	0.8838	EXP 150 of 150	161.361513 ±0.017542	0.9999	EXP 150 of 150	622.337164 ±0.037649	1.0000	EXP 150 of 150
20F23299	17.0 %	0.0096130 ±0.0001953	0.9572	EXP 147 of 150	0.0158230 ±0.0055065	0.0018	EXP 149 of 150	0.6068240 ±0.0066688	0.4256	EXP 149 of 150	51.208611 ±0.010190	0.9996	EXP 150 of 150	198.665139 ±0.021656	0.9998	EXP 150 of 150
20F23300	17.0 %	0.0220017 ±0.0002981	0.9185	EXP 150 of 150	0.0688696 ±0.0062500	0.0685	EXP 149 of 150	1.0173023 ±0.0065641	0.7284	EXP 150 of 150	83.969016 ±0.012206	0.9998	EXP 144 of 150	326.979894 ±0.031405	0.9999	EXP 150 of 150
20F23302	17.0 %	0.0216623 ±0.0002561	0.9446	EXP 150 of 150	0.0518401 ±0.0051126	0.0004	EXP 145 of 150	1.3088953 ±0.0066124	0.7980	EXP 150 of 150	109.803356 ±0.013250	0.9999	EXP 150 of 150	425.815904 ±0.033472	0.9999	EXP 149 of 150
20F23303	17.0 %	0.0096813 ±0.0002391	0.9562	EXP 150 of 150	0.0495961 ±0.0058501	0.0016	EXP 150 of 150	0.9964450 ±0.0058135	0.7306	EXP 145 of 150	83.519179 ±0.011336	0.9998	EXP 148 of 150	321.687584 ±0.028071	0.9999	EXP 147 of 150
20F23305	17.0 %	0.0157300 ±0.0002741	0.9366	EXP 149 of 150	0.0510960 ±0.0060934	0.0145	EXP 150 of 150	1.0310821 ±0.0064945	0.7096	EXP 150 of 150	86.841231 ±0.014253	0.9998	EXP 149 of 150	336.591923 ±0.028796	0.9999	EXP 150 of 150
20F23306	17.0 %	0.0314306 ±0.0003301	0.8844	EXP 149 of 150	0.0637675 ±0.0060138	0.0007	EXP 150 of 150	1.1015273 ±0.0058277	0.7851	EXP 147 of 150	91.061237 ±0.013140	0.9998	EXP 150 of 150	357.501507 ±0.028087	0.9999	EXP 149 of 150
20F23308	17.0 %	0.0179090 ±0.0002333	0.9446	EXP 147 of 150	0.0910866 ±0.0058647	0.0510	EXP 150 of 150	1.0966963 ±0.0067160	0.7249	EXP 150 of 150	90.693469 ±0.011774	0.9998	EXP 150 of 150	351.843102 ±0.029875	0.9999	EXP 149 of 150
20F23309	17.0 %	0.0141098 ±0.0002682	0.9646	EXP 149 of 150	0.0925241 ±0.0057540	0.0069	EXP 150 of 150	1.9601484 ±0.0070699	0.8944	EXP 148 of 150	163.308373 ±0.015970	0.9999	EXP 150 of 150	627.536283 ±0.035382	1.0000	EXP 150 of 150
20F23311	17.0 %	0.0077061 ±0.0002139	0.9505	EXP 150 of 150	0.0248128 ±0.0058780	0.0092	EXP 150 of 150	0.6538228 ±0.0068097	0.4694	EXP 150 of 150	55.646632 ±0.011555	0.9996	EXP 150 of 150	215.390575 ±0.026699	0.9997	EXP 150 of 150
20F23312	17.0 %	0.0090783 ±0.0002319	0.9569	EXP 150 of 150	0.0525067 ±0.0050986	0.0436	EXP 147 of 150	1.0367954 ±0.0064910	0.7088	EXP 150 of 150	87.522940 ±0.012238	0.9998	EXP 147 of 150	336.813004 ±0.033020	0.9999	EXP 150 of 150
20F23314	17.0 %	0.0097503 ±0.0002274	0.9397	EXP 150 of 150	0.0920193 ±0.0061011	0.0166	EXP 150 of 150	0.6758207 ±0.0068740	0.5126	EXP 150 of 150	56.399079 ±0.012079	0.9996	EXP 150 of 150	217.930915 ±0.026910	0.9997	EXP 150 of 150
20F23315	17.0 %	0.0263832 ±0.0002946	0.8098	EXP 150 of 150	0.0001682 ±0.0055702	0.0002	EXP 150 of 150	0.3730489 ±0.0064845	0.2851	EXP 150 of 150	30.840579 ±0.009643	0.9991	EXP 149 of 150	125.938214 ±0.019043	0.9994	EXP 149 of 150
20F23317	17.0 %	0.1163355 ±0.0005234	0.0010	EXP 150 of 150	0.0648207 ±0.0062296	0.0128	EXP 150 of 150	1.2564751 ±0.0069426	0.7829	EXP 150 of 150	101.712885 ±0.014600	0.9998	EXP 150 of 150	423.642607 ±0.031009	0.9999	EXP 150 of 150
20F23318	17.0 %	0.0044883 ±0.0001791	0.9479	EXP 149 of 150	0.0136656 ±0.0056524	0.0000	EXP 150 of 150	0.1693707 ±0.0058096	0.0954	EXP 149 of 150	14.486150 ±0.007237	0.9973	EXP 150 of 150	55.160729 ±0.018102	0.9603	EXP 149 of 150
20F23320	17.0 %	0.0062087 ±0.0001832	0.9472	EXP 150 of 150	0.0002809 ±0.0060476	0.0082	EXP 150 of 150	0.3150365 ±0.0060820	0.1595	EXP 149 of 150	27.262977 ±0.009035	0.9989	EXP 150 of 150	105.473925 ±0.019959	0.9989	EXP 147 of 150
20F23321	17.0 %	0.0046659 ±0.0001690	0.9454	EXP 148 of 150	0.0126759 ±0.0058747	0.0004	EXP 149 of 150	0.0970854 ±0.0061186	0.0137	EXP 150 of 150	8.803670 ±0.006834	0.9933	EXP 147 of 150	34.146602 ±0.015551	0.9617	EXP 146 of 150
20F23323	17.0 %	0.0098060 ±0.0002219	0.9183	EXP 150 of 150	0.0124994 ±0.0052112	0.0088	EXP 149 of 150	0.4113697 ±0.0058458	0.2963	EXP 149 of 150	34.671247 ±0.009388	0.9993	EXP 149 of 150	133.711051 ±0.022791	0.9993	EXP 150 of 150
20F23324	17.0 %	0.0049561 ±0.0001708	0.9434	EXP 150 of 150	0.0087666 ±0.0054943	0.0001	EXP 149 of 150	0.0987168 ±0.0063949	0.0065	EXP 150 of 150	9.322901 ±0.007025	0.9936	EXP 148 of 150	36.869909 ±0.018482	0.8528	EXP 150 of 150
20F23326	17.0 %	0.0081002 ±0.0001839	0.9427	EXP 147 of 150	0.0000294 ±0.0056493	0.0000	EXP 150 of 150	0.3352458 ±0.0058546	0.2729	EXP 150 of 150	28.379196 ±0.008212	0.9992	EXP 149 of 150	110.493439 ±0.020298	0.9991	EXP 150 of 150
20F23327	17.0 %	0.0051527 ±0.0001739	0.9439	EXP 150 of 150	0.0044762 ±0.0057192	0.0141	EXP 150 of 150	0.2328823 ±0.0063177	0.1284	EXP 148 of 150	19.736240 ±0.008383	0.9982	EXP 150 of 150	76.557829 ±0.019353	0.9970	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F23287	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23288	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23290	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23291	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23293	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23294	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23296	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23297	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23299	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23300	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23302	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23303	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23305	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23306	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23308	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23309	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23311	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23312	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23314	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23315	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23317	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23318	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23320	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23321	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23323	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23324	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23326	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01
20F23327	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	48.55	Oregon\Swenton (20-01)	20F23283	01

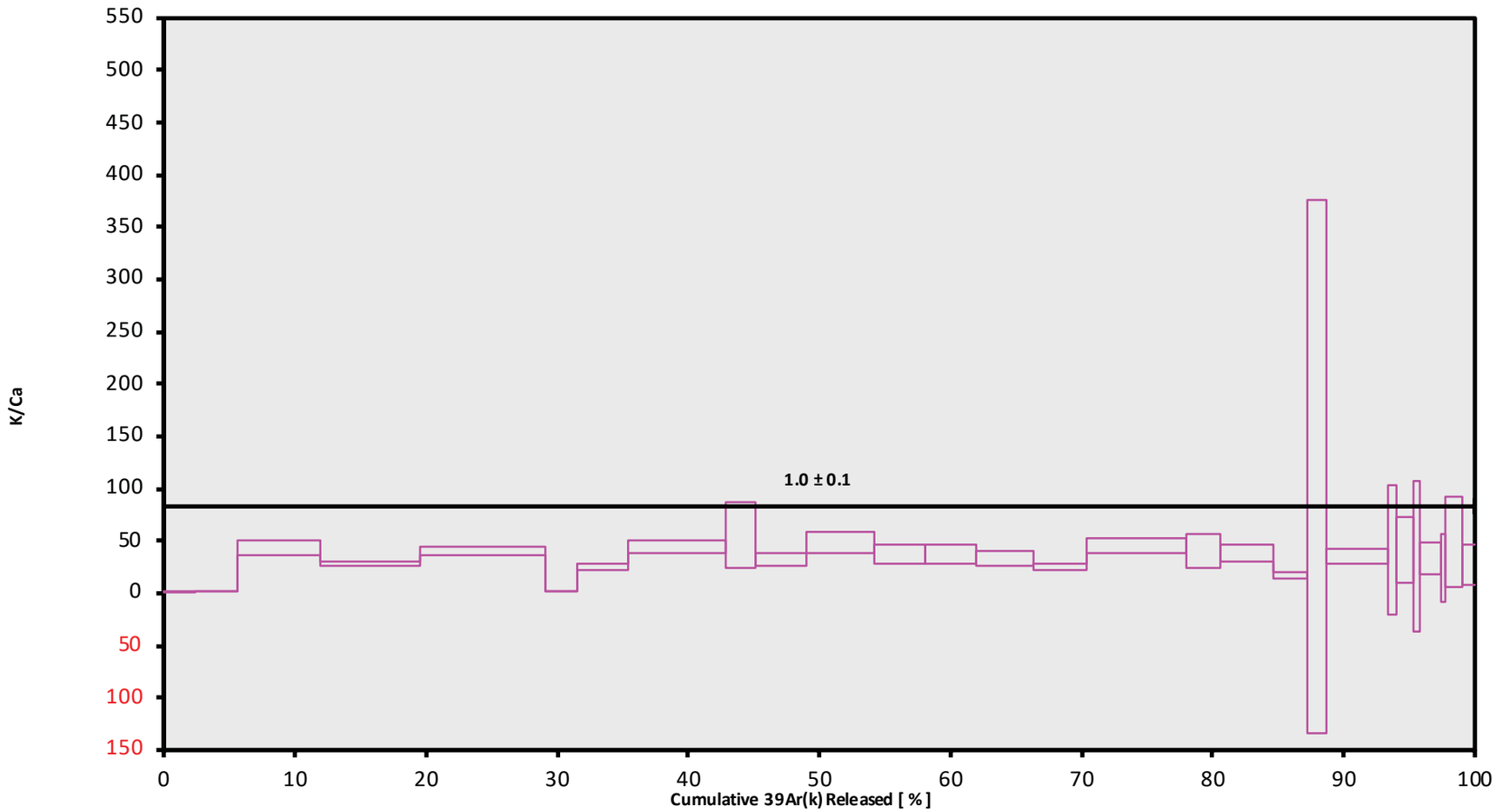
Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F23287	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	4	59	1
20F23288	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	5	8	1
20F23290	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	5	25	1
20F23291	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	5	34	1
20F23293	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	5	51	1
20F23294	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	5	59	1
20F23296	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	6	17	1
20F23297	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	6	25	1
20F23299	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	6	42	1
20F23300	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	6	51	1
20F23302	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	7	8	1
20F23303	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	7	17	1
20F23305	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	7	34	1
20F23306	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	7	42	1
20F23308	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	8	0	1
20F23309	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	8	8	1
20F23311	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	8	25	1
20F23312	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	8	34	1
20F23314	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	8	51	1
20F23315	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	9	0	1
20F23317	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	9	17	1
20F23318	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	9	25	1
20F23320	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	9	43	1
20F23321	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	9	51	1
20F23323	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	10	8	1
20F23324	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	10	17	1
20F23326	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	10	34	1
20F23327	17.0 %	VS19-098	Sanidine	Rhyolite Dome	FCT-NM (1C39-20)	28.201	0.082	Kuiper et al (2008)	9.651	0.153	0.00160869	0.153	298.804	0.124	0.9997956	0.040	1	3.54E-14	27	AUG	2020	10	43	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F23287	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23288	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23290	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23291	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23293	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23294	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23296	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23297	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23299	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23300	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23302	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23303	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23305	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23306	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23308	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23309	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23311	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23312	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23314	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23315	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23317	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23318	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23320	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23321	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23323	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23324	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23326	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23327	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F23283.AGE >>> VS19-098 >>>



20F23283.AGE >>> VS19-098 >>> OREGON | SWENTON (20-01) PROJECT



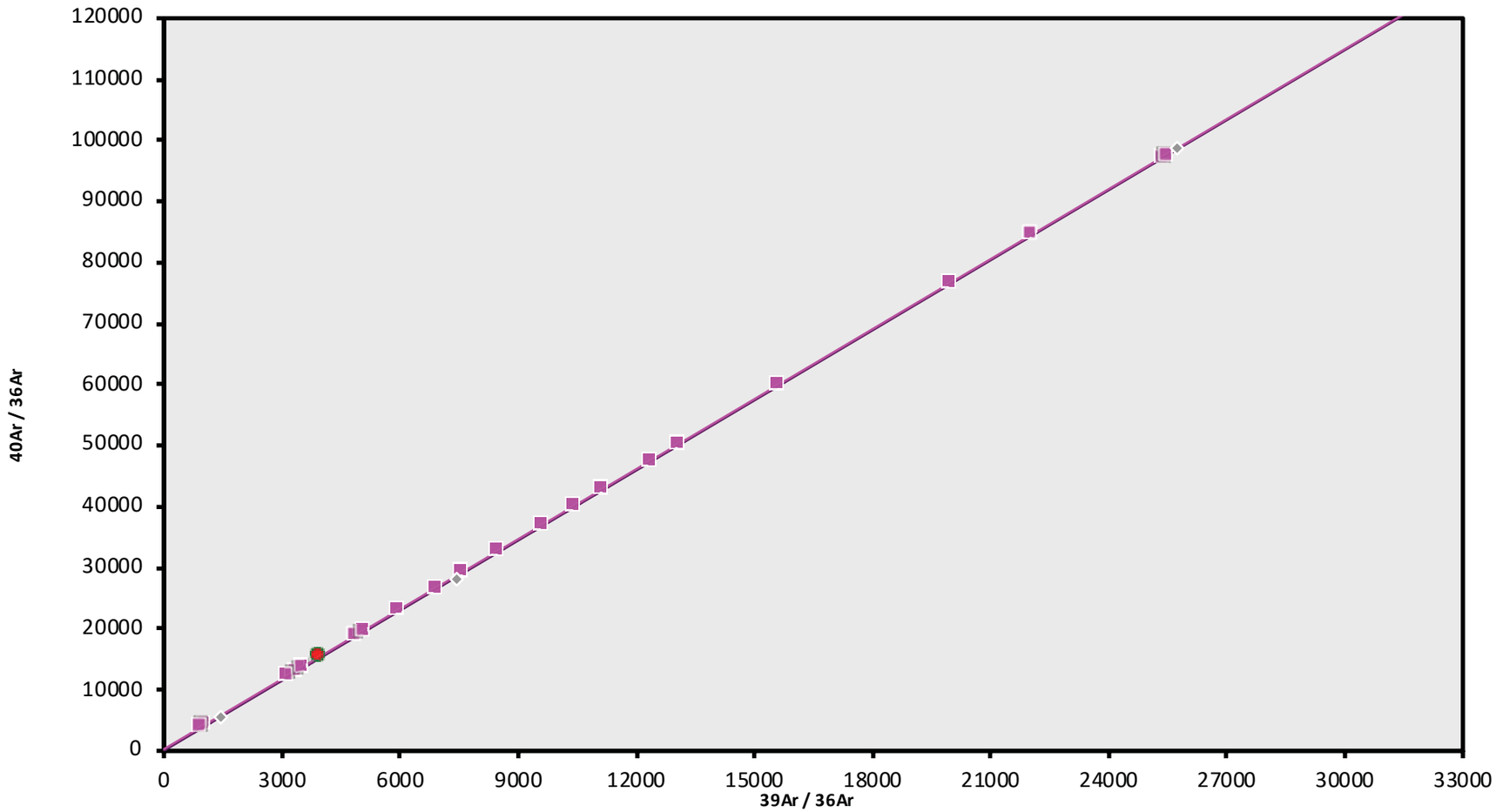
Ar-Ages in Ma

WEIGHTED PLATEAU
11.21 ± 0.03
TOTAL FUSION
11.20 ± 0.03
NORMAL ISOCHRON
11.22 ± 0.04
INVERSE ISOCHRON
11.21 ± 0.03

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23283.AGE >>> VS19-098 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

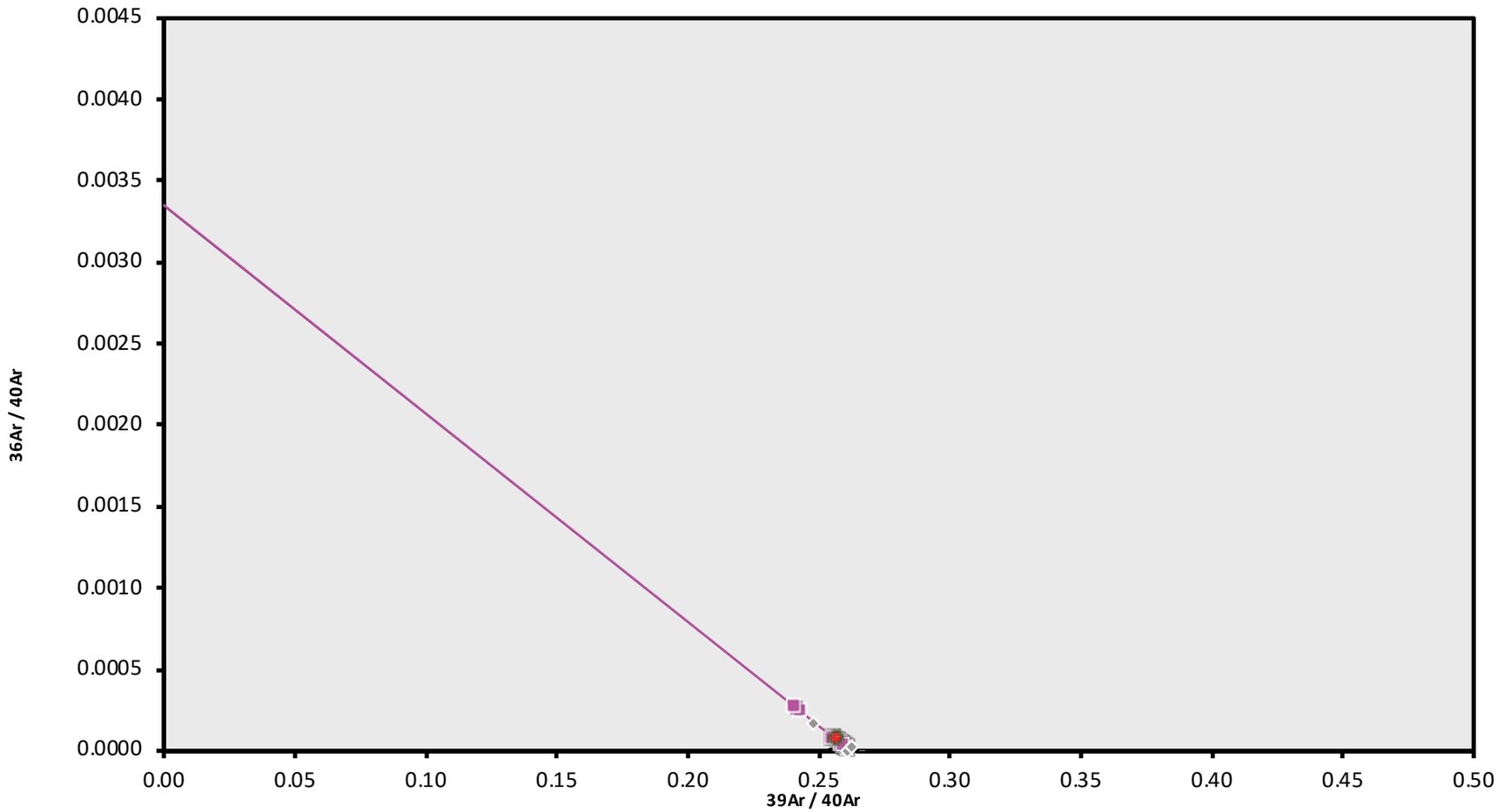
WEIGHTED PLATEAU
11.21 ± 0.03
TOTAL FUSION
11.20 ± 0.03
NORMAL ISOCHRON
11.22 ± 0.04
INVERSE ISOCHRON
11.21 ± 0.03

MSWD (PROBABILITY)
8.55 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23283.AGE >>> VS19-098 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.21 ± 0.03
TOTAL FUSION
11.20 ± 0.03
NORMAL ISOCHRON
11.22 ± 0.04
INVERSE ISOCHRON
11.21 ± 0.03

MSWD (PROBABILITY)
3.78 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (ka)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F23838	17.0 %	✓	0.0141783	2.892	5.68191	2.306	6.25123	0.157	519.413	0.041	1973.593	0.003	3.79181	±0.00318	11104.8	±9.3	99.79	5.00	39.3	±1.8
20F23839	17.0 %	✓	0.0443579	1.104	5.65809	2.467	5.90620	0.186	489.735	0.041	1865.191	0.004	3.78188	±0.00319	11075.8	±9.3	99.30	4.72	37.2	±1.8
20F23841	17.0 %	✓	0.0161380	2.596	4.31282	3.014	4.58892	0.204	380.854	0.041	1445.250	0.004	3.78244	±0.00322	11077.4	±9.4	99.67	3.67	38.0	±2.3
20F23842	17.0 %	✓	0.0199549	2.082	2.65714	4.875	3.22499	0.292	267.780	0.042	1018.256	0.005	3.78055	±0.00331	11071.9	±9.7	99.42	2.58	43.3	±4.2
20F23844	17.0 %	✓	0.0244132	2.011	5.64612	2.214	6.94917	0.155	577.992	0.041	2195.067	0.003	3.78534	±0.00317	11085.9	±9.3	99.67	5.57	44.0	±1.9
20F23845	17.0 %	✓	0.0275887	1.719	7.97883	1.621	7.92015	0.151	660.096	0.041	2512.403	0.003	3.79404	±0.00316	11111.3	±9.2	99.68	6.36	35.6	±1.2
20F23847	17.0 %	✓	0.0423221	1.246	5.12525	2.692	5.94841	0.173	494.670	0.041	1887.004	0.004	3.78938	±0.00320	11097.7	±9.4	99.34	4.77	41.5	±2.2
20F23848	17.0 %	✓	0.0114788	3.465	2.05764	6.653	2.62166	0.338	216.186	0.042	820.343	0.005	3.77895	±0.00338	11067.2	±9.9	99.59	2.08	45.2	±6.0
20F23850	17.0 %	✓	0.0213731	1.826	3.53269	3.288	3.64551	0.263	302.561	0.042	1150.983	0.004	3.78340	±0.00326	11080.2	±9.5	99.45	2.91	36.8	±2.4
20F23851	17.0 %	✓	0.0121880	3.135	3.22155	3.736	3.64661	0.266	302.660	0.041	1148.034	0.004	3.78141	±0.00324	11074.4	±9.5	99.69	2.92	40.4	±3.0
20F23853	17.0 %	✓	0.0307316	1.312	4.39408	2.810	4.91782	0.211	408.318	0.041	1555.910	0.004	3.78835	±0.00321	11094.7	±9.4	99.42	3.93	40.0	±2.2
20F23854	17.0 %	✓	0.0241360	1.626	3.31226	3.912	3.38058	0.296	281.124	0.042	1072.839	0.005	3.79099	±0.00329	11102.4	±9.6	99.34	2.71	36.5	±2.9
20F23856	17.0 %	✓	0.0200215	1.965	4.16698	2.932	5.15095	0.189	428.321	0.041	1626.230	0.004	3.78300	±0.00319	11079.0	±9.3	99.64	4.13	44.2	±2.6
20F23857	17.0 %	✓	0.0127340	3.063	2.70000	4.852	3.04611	0.322	253.084	0.042	960.289	0.006	3.77961	±0.00331	11069.1	±9.7	99.61	2.44	40.3	±3.9
20F23859	17.0 %	✓	0.0098863	3.817	2.71252	4.958	3.06039	0.317	254.347	0.042	964.653	0.004	3.78134	±0.00330	11074.2	±9.6	99.70	2.45	40.3	±4.0
20F23860	17.0 %	✓	0.0159485	2.385	3.44828	4.014	4.00431	0.241	331.639	0.041	1261.495	0.004	3.78972	±0.00324	11098.7	±9.4	99.63	3.19	41.4	±3.3
20F23862	17.0 %	✓	0.0079172	4.635	3.64174	3.687	3.37099	0.304	280.803	0.042	1064.570	0.005	3.78322	±0.00328	11079.7	±9.6	99.79	2.71	33.2	±2.4
20F23863	17.0 %	✓	0.0130951	2.843	3.06461	4.142	3.42830	0.292	283.480	0.042	1077.075	0.005	3.78598	±0.00327	11087.8	±9.6	99.64	2.73	39.8	±3.3
20F23865	17.0 %	✓	0.0146785	2.484	3.17593	4.025	3.37320	0.280	277.932	0.042	1054.125	0.005	3.77732	±0.00327	11062.5	±9.6	99.59	2.68	37.6	±3.0
20F23866	17.0 %	✓	0.0196058	1.990	3.22818	3.977	3.14753	0.299	261.801	0.042	994.685	0.005	3.77746	±0.00330	11062.9	±9.6	99.42	2.52	34.9	±2.8
20F23868	17.0 %	✓	0.0096468	4.169	3.29633	4.131	3.70742	0.272	309.196	0.042	1171.594	0.004	3.78013	±0.00325	11070.7	±9.5	99.76	2.98	40.3	±3.3
20F23869	17.0 %	✓	0.0168288	2.395	2.39909	5.394	2.57752	0.386	214.861	0.042	816.010	0.005	3.77478	±0.00339	11055.1	±9.9	99.39	2.07	38.5	±4.2
20F23871	17.0 %	✓	0.0289999	1.448	3.66207	3.184	4.27638	0.239	354.241	0.041	1348.729	0.004	3.78318	±0.00323	11079.6	±9.4	99.36	3.41	41.6	±2.6
20F23872	17.0 %	✓	0.0418621	1.089	3.04310	4.079	3.57419	0.269	296.123	0.042	1131.697	0.004	3.77976	±0.00330	11069.6	±9.6	98.90	2.85	41.8	±3.4
20F23874	17.0 %	✓	0.0341395	1.317	0.73142	18.976	0.98418	0.988	81.327	0.043	318.387	0.010	3.78969	±0.00475	11098.6	±13.9	96.80	0.78	47.8	±18.1
20F23875	17.0 %	✓	0.0139413	2.782	2.75674	4.652	2.96991	0.318	246.030	0.042	934.828	0.005	3.78305	±0.00332	11079.2	±9.7	99.56	2.37	38.4	±3.6
20F23877	17.0 %	✓	0.0084238	3.809	3.70650	3.322	3.58754	0.262	297.545	0.042	1128.918	0.004	3.78608	±0.00323	11088.1	±9.4	99.79	2.87	34.5	±2.3
20F23878	17.0 %	✓	0.0318068	1.386	4.74680	2.561	5.01191	0.201	417.495	0.041	1590.303	0.003	3.78675	±0.00321	11090.0	±9.4	99.41	4.02	37.8	±1.9
20F23880	17.0 %	✓	0.0158283	2.650	4.81623	2.809	5.56391	0.194	461.358	0.041	1751.224	0.003	3.78582	±0.00319	11087.3	±9.3	99.74	4.44	41.2	±2.3
20F23881	17.0 %	✓	0.0224985	1.938	5.22206	2.543	5.16067	0.204	429.616	0.041	1635.465	0.003	3.79157	±0.00320	11104.1	±9.4	99.60	4.14	35.4	±1.8
		Σ	0.6267232	0.362	114.09697	0.621	124.99664	0.044	10380.589	0.008	39475.151	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-101**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C40-20)**
Position = **X: 0 | Y: 0 | Z/H: 49.45701 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.67461 ± 0.01490**
FCT-NM J-value = **0.00160477 ± 0.00000247**
Air Shot 40Ar/36Ar = **298.0960 ± 0.3756**
Air Shot MDF = **1.00038964 ± 0.00040961 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (ka)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			3.78425	±0.00177	**11082.7**	**±34.4**	8.72	100.00	38.4	±1.1
Error Mean				±0.05%		**±0.31%**	0%	30		
					Full External Error	±576.3	1.53	2σ Confidence Limit		
					Analytical Error	±5.2	2.9531	Error Magnification		
Total Fusion Age			3.78507	±0.00062	**11085.1**	**±34.1**		30	39.1	±0.5
				±0.02%		**±0.31%**				
					Full External Error	±576.4				
					Analytical Error	±1.8				
Normal Isochron	**275.91**	**±37.64**	3.78660	±0.00298	**11089.6**	**±35.1**	10.36	100.00		
Error Chron		**±13.64%**		±0.08%		**±0.32%**	0%	30		
					Full External Error	±576.7	1.53	2σ Confidence Limit		
					Analytical Error	±8.7	3.2190	Error Magnification		
							1	Number of Iterations		
							0.0000006809	Convergence		
Inverse Isochron	**303.66**	**±33.70**	3.78395	±0.00279	**11081.8**	**±35.0**	9.01	100.00		
Error Chron		**±11.10%**		±0.07%		**±0.32%**	0%	30		
					Full External Error	±576.3	1.53	2σ Confidence Limit		
					Analytical Error	±8.2	3.0018	Error Magnification		
							4	Number of Iterations		
							0.0000314010	Convergence		
							3%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (ka)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F23838	17.0 %	✓	0.0126424	5.68191	0.0000000	519.409	1969.503	11104.8	±9.3	99.79	5.00	39.3	±1.8
20F23839	17.0 %	✓	0.0428285	5.65809	0.0000000	489.731	1852.107	11075.8	±9.3	99.30	4.72	37.2	±1.8
20F23841	17.0 %	✓	0.0149723	4.31282	0.0000000	380.852	1440.548	11077.4	±9.4	99.67	3.67	38.0	±2.3
20F23842	17.0 %	✓	0.0192367	2.65714	0.0000000	267.778	1012.350	11071.9	±9.7	99.42	2.58	43.3	±4.2
20F23844	17.0 %	✓	0.0228870	5.64612	0.0000000	577.989	2187.883	11085.9	±9.3	99.67	5.57	44.0	±1.9
20F23845	17.0 %	✓	0.0254320	7.97883	0.0000000	660.091	2504.410	11111.3	±9.2	99.68	6.36	35.6	±1.2
20F23847	17.0 %	✓	0.0409367	5.12525	0.0000000	494.666	1874.481	11097.7	±9.4	99.34	4.77	41.5	±2.2
20F23848	17.0 %	✓	0.0109207	2.05764	0.0083657	216.185	816.951	11067.2	±9.9	99.59	2.08	45.2	±6.0
20F23850	17.0 %	✓	0.0204182	3.53269	0.0000000	302.559	1144.704	11080.2	±9.5	99.45	2.91	36.8	±2.4
20F23851	17.0 %	✓	0.0113172	3.22155	0.0000000	302.658	1144.472	11074.4	±9.5	99.69	2.92	40.4	±3.0
20F23853	17.0 %	✓	0.0295439	4.39408	0.0000000	408.315	1546.842	11094.7	±9.4	99.42	3.93	40.0	±2.2
20F23854	17.0 %	✓	0.0232407	3.31226	0.0000000	281.122	1065.729	11102.4	±9.6	99.34	2.71	36.5	±2.9
20F23856	17.0 %	✓	0.0188952	4.16698	0.0000000	428.319	1620.329	11079.0	±9.3	99.64	4.13	44.2	±2.6
20F23857	17.0 %	✓	0.0120042	2.70000	0.0000000	253.082	956.552	11069.1	±9.7	99.61	2.44	40.3	±3.9
20F23859	17.0 %	✓	0.0091531	2.71252	0.0000000	254.345	961.766	11074.2	±9.6	99.70	2.45	40.3	±4.0
20F23860	17.0 %	✓	0.0150164	3.44828	0.0000000	331.637	1256.810	11098.7	±9.4	99.63	3.19	41.4	±3.3
20F23862	17.0 %	✓	0.0069328	3.64174	0.0000000	280.800	1062.329	11079.7	±9.6	99.79	2.71	33.2	±2.4
20F23863	17.0 %	✓	0.0122663	3.06461	0.0018780	283.478	1073.240	11087.8	±9.6	99.64	2.73	39.8	±3.3
20F23865	17.0 %	✓	0.0138170	3.17593	0.0134655	277.930	1049.831	11062.5	±9.6	99.59	2.68	37.6	±3.0
20F23866	17.0 %	✓	0.0187332	3.22818	0.0000000	261.799	988.933	11062.9	±9.6	99.42	2.52	34.9	±2.8
20F23868	17.0 %	✓	0.0087558	3.29633	0.0000000	309.194	1168.792	11070.7	±9.5	99.76	2.98	40.3	±3.3
20F23869	17.0 %	✓	0.0161803	2.39909	0.0000000	214.860	811.049	11055.1	±9.9	99.39	2.07	38.5	±4.2
20F23871	17.0 %	✓	0.0280101	3.66207	0.0000000	354.239	1340.151	11079.6	±9.4	99.36	3.41	41.6	±2.6
20F23872	17.0 %	✓	0.0410395	3.04310	0.0000000	296.121	1119.265	11069.6	±9.6	98.90	2.85	41.8	±3.4
20F23874	17.0 %	✓	0.0339418	0.73142	0.0000000	81.327	308.204	11098.6	±13.9	96.80	0.78	47.8	±18.1
20F23875	17.0 %	✓	0.0131961	2.75674	0.0000000	246.028	930.739	11079.2	±9.7	99.56	2.37	38.4	±3.6
20F23877	17.0 %	✓	0.0074219	3.70650	0.0000000	297.543	1126.522	11088.1	±9.4	99.79	2.87	34.5	±2.3
20F23878	17.0 %	✓	0.0305237	4.74680	0.0000000	417.491	1580.937	11090.0	±9.4	99.41	4.02	37.8	±1.9
20F23880	17.0 %	✓	0.0145265	4.81623	0.0000000	461.355	1746.606	11087.3	±9.3	99.74	4.44	41.2	±2.3
20F23881	17.0 %	✓	0.0210870	5.22206	0.0000000	429.613	1628.908	11104.1	±9.4	99.60	4.14	35.4	±1.8
		Σ	0.5958774	114.09697	0.0237092	10380.516	39290.944						

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-101**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C40-20)**
J = **0.00160477 ± 0.00000247**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age ±2σ (ka)		MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau	3.78425	±0.00177	**11082.7**	**±34.4**	8.72	100.00	38.4	±1.1
Error Mean		±0.05%		**±0.31%**	0%	30		
			Full External Error	±576.3	1.53	2σ Confidence Limit		
			Analytical Error	±5.2	2.9531	Error Magnification		
Total Fusion Age	3.78507	±0.00062	**11085.1**	**±34.1**		30	39.1	±0.5
		±0.02%		**±0.31%**				
			Full External Error	±576.4				
			Analytical Error	±1.8				

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F23838	17.0 %	✓	41084.56	±2675.21	156083.52	±10162.52	0.9999
20F23839	17.0 %	✓	11434.71	±262.47	43543.31	±998.86	0.9993
20F23841	17.0 %	✓	25437.13	±1428.81	96513.00	±5420.58	0.9999
20F23842	17.0 %	✓	13920.17	±603.52	52924.51	±2294.17	0.9998
20F23844	17.0 %	✓	25254.01	±1086.05	95893.51	±4123.15	0.9998
20F23845	17.0 %	✓	25955.07	±970.99	98773.11	±3694.24	0.9998
20F23847	17.0 %	✓	12083.68	±312.32	46088.26	±1190.60	0.9995
20F23848	17.0 %	✓	19795.78	±1448.21	75105.84	±5494.20	0.9999
20F23850	17.0 %	✓	14818.07	±568.51	56361.33	±2161.85	0.9998
20F23851	17.0 %	✓	26743.16	±1812.25	101425.31	±6872.59	0.9999
20F23853	17.0 %	✓	13820.64	±378.82	52655.99	±1442.63	0.9995
20F23854	17.0 %	✓	12096.13	±410.34	46154.82	±1565.25	0.9997
20F23856	17.0 %	✓	22668.16	±947.53	86052.17	±3596.27	0.9998
20F23857	17.0 %	✓	21082.76	±1375.98	79983.09	±5219.75	0.9999
20F23859	17.0 %	✓	27787.83	±2301.79	105373.89	±8728.14	0.9999
20F23860	17.0 %	✓	22084.93	±1124.32	83994.19	±4275.51	0.9999
20F23862	17.0 %	✓	40502.89	±4308.51	153529.84	±16331.32	1.0000
20F23863	17.0 %	✓	23110.35	±1408.81	87793.89	±5351.44	0.9999
20F23865	17.0 %	✓	20115.05	±1066.54	76279.60	±4044.02	0.9999
20F23866	17.0 %	✓	13975.09	±584.62	53088.86	±2220.44	0.9998
20F23868	17.0 %	✓	35313.11	±3258.01	133786.79	±12342.77	1.0000
20F23869	17.0 %	✓	13279.11	±664.11	50424.31	±2521.44	0.9999
20F23871	17.0 %	✓	12646.84	±380.42	48143.88	±1447.65	0.9996
20F23872	17.0 %	✓	7215.51	±160.80	27571.42	±614.02	0.9993
20F23874	17.0 %	✓	2396.07	±63.75	9378.91	±249.42	0.9994
20F23875	17.0 %	✓	18644.00	±1100.50	70829.84	±4180.45	0.9999
20F23877	17.0 %	✓	40089.72	±3485.53	152081.54	±13221.87	1.0000
20F23878	17.0 %	✓	13677.61	±396.41	52092.29	±1509.13	0.9996
20F23880	17.0 %	✓	31759.59	±1841.24	120534.54	±6987.20	0.9999
20F23881	17.0 %	✓	20373.37	±845.36	77545.63	±3217.00	0.9998

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (ka)	±2σ	MSWD
Normal Isochron	**275.91**	**±37.64**	3.78660	±0.00298	**11089.6**	**±35.1**	10.36
Error Chron		**±13.64%**		±0.08%		**±0.32%**	0%
					Full External Error	±576.7	
					Analytical Error	±8.7	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000000680891
	Error Magnification	3.2190	Number of Iterations	1
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F23838	17.0 %	✓	0.2632217	±0.0002181	0.00000641	±0.00000042	0.0001
20F23839	17.0 %	✓	0.2626055	±0.0002176	0.00002297	±0.00000053	0.0004
20F23841	17.0 %	✓	0.2635617	±0.0002195	0.00001036	±0.00000058	0.0001
20F23842	17.0 %	✓	0.2630193	±0.0002209	0.00001889	±0.00000082	0.0003
20F23844	17.0 %	✓	0.2633547	±0.0002177	0.00001043	±0.00000045	0.0001
20F23845	17.0 %	✓	0.2627747	±0.0002170	0.00001012	±0.00000038	0.0001
20F23847	17.0 %	✓	0.2621856	±0.0002172	0.00002170	±0.00000056	0.0003
20F23848	17.0 %	✓	0.2635717	±0.0002228	0.00001331	±0.00000097	0.0002
20F23850	17.0 %	✓	0.2629121	±0.0002202	0.00001774	±0.00000068	0.0003
20F23851	17.0 %	✓	0.2636735	±0.0002200	0.00000986	±0.00000067	0.0001
20F23853	17.0 %	✓	0.2624704	±0.0002182	0.00001899	±0.00000052	0.0003
20F23854	17.0 %	✓	0.2620772	±0.0002198	0.00002167	±0.00000073	0.0004
20F23856	17.0 %	✓	0.2634235	±0.0002189	0.00001162	±0.00000049	0.0002
20F23857	17.0 %	✓	0.2635903	±0.0002218	0.00001250	±0.00000082	0.0002
20F23859	17.0 %	✓	0.2637070	±0.0002219	0.00000949	±0.00000079	0.0001
20F23860	17.0 %	✓	0.2629340	±0.0002194	0.00001191	±0.00000061	0.0002
20F23862	17.0 %	✓	0.2638112	±0.0002217	0.00000651	±0.00000069	0.0001
20F23863	17.0 %	✓	0.2632341	±0.0002210	0.00001139	±0.00000069	0.0002
20F23865	17.0 %	✓	0.2637016	±0.0002218	0.00001311	±0.00000070	0.0002
20F23866	17.0 %	✓	0.2632395	±0.0002212	0.00001884	±0.00000079	0.0003
20F23868	17.0 %	✓	0.2639507	±0.0002206	0.00000747	±0.00000069	0.0001
20F23869	17.0 %	✓	0.2633474	±0.0002229	0.00001983	±0.00000099	0.0003
20F23871	17.0 %	✓	0.2626883	±0.0002186	0.00002077	±0.00000062	0.0003
20F23872	17.0 %	✓	0.2617024	±0.0002191	0.00003627	±0.00000081	0.0004
20F23874	17.0 %	✓	0.2554741	±0.0002283	0.00010662	±0.00000284	0.0018
20F23875	17.0 %	✓	0.2632224	±0.0002211	0.00001412	±0.00000083	0.0002
20F23877	17.0 %	✓	0.2636067	±0.0002204	0.00000658	±0.00000057	0.0001
20F23878	17.0 %	✓	0.2625650	±0.0002181	0.00001920	±0.00000056	0.0002
20F23880	17.0 %	✓	0.2634895	±0.0002184	0.00000830	±0.00000048	0.0001
20F23881	17.0 %	✓	0.2627275	±0.0002179	0.00001290	±0.00000053	0.0002

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (ka)	±2σ	MSWD
Inverse Isochron	**303.66**	**±33.70**	3.78395	±0.00279	**11081.8**	**±35.0**	9.01
Error Chron		**±11.10%**		±0.07%		**±0.32%**	0%
					Full External Error	±576.3	
					Analytical Error	±8.2	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0000314010
	Error Magnification	3.0018	Number of Iterations	4
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	3.2%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F23838	17.0%	✓	0.0126424	3.26	0.0000000	0.00	0.0015358	2.31	0.0000000	0.00	5.68191	2.31	0.0023831	3.26	0.0000000	0.00	6.27291	0.10	0.0010227	9.90	0.0000000	0.00	519.409	0.04	0.0036506	2.48	1969.503	0.01	3.77453	3.26	0.0000000	0.00	0.3152815	9.65
20F23839	17.0%	✓	0.0428285	1.15	0.0000000	0.00	0.0015294	2.47	0.0000000	0.00	5.65809	2.47	0.0080732	1.16	0.0000000	0.00	5.91449	0.10	0.0010185	9.94	0.0000000	0.00	489.731	0.04	0.0036353	2.63	1852.107	0.01	12.78687	1.15	0.0000000	0.00	0.2972670	9.65
20F23841	17.0%	✓	0.0149723	2.81	0.0000000	0.00	0.0011658	3.02	0.0000000	0.00	4.31282	3.01	0.0028223	2.81	0.0000000	0.00	4.59954	0.10	0.0007763	10.09	0.0000000	0.00	380.852	0.04	0.0027710	3.15	1440.548	0.01	4.47012	2.81	0.0000000	0.00	0.2311769	9.65
20F23842	17.0%	✓	0.0192367	2.17	0.0000000	0.00	0.0007182	4.88	0.0000000	0.00	2.65714	4.87	0.0036261	2.17	0.0000000	0.00	3.23396	0.10	0.0004783	10.79	0.0000000	0.00	267.778	0.04	0.0017072	4.96	1012.350	0.01	5.74331	2.17	0.0000000	0.00	0.1625413	9.65
20F23844	17.0%	✓	0.0228870	2.15	0.0000000	0.00	0.0015261	2.22	0.0000000	0.00	5.64612	2.21	0.0043142	2.16	0.0000000	0.00	6.98037	0.10	0.0010163	9.88	0.0000000	0.00	577.989	0.04	0.0036276	2.40	2187.883	0.01	6.83315	2.15	0.0000000	0.00	0.3508392	9.65
20F23845	17.0%	✓	0.0254320	1.87	0.0000000	0.00	0.0021567	1.63	0.0000000	0.00	7.97883	1.62	0.0047939	1.88	0.0000000	0.00	7.97192	0.10	0.0014362	9.77	0.0000000	0.00	660.091	0.04	0.0051264	1.86	2504.410	0.01	7.59299	1.87	0.0000000	0.00	0.4006750	9.65
20F23847	17.0%	✓	0.0409367	1.29	0.0000000	0.00	0.0013854	2.70	0.0000000	0.00	5.12525	2.69	0.0077166	1.30	0.0000000	0.00	5.97409	0.10	0.0009225	10.00	0.0000000	0.00	494.666	0.04	0.0032930	2.84	1874.481	0.01	12.22207	1.30	0.0000000	0.00	0.3002626	9.65
20F23848	17.0%	✓	0.0109207	3.66	0.0000000	0.00	0.0005562	6.66	0.0000019	130.90	2.05764	6.65	0.0020586	3.66	0.0000000	0.00	2.61086	0.10	0.0003704	11.70	0.0083657	130.91	216.185	0.04	0.0013220	6.72	816.951	0.02	3.26050	3.66	0.0000000	0.00	0.1312241	9.65
20F23850	17.0%	✓	0.0204182	1.92	0.0000000	0.00	0.0009549	3.29	0.0000000	0.00	3.53269	3.29	0.0038488	1.92	0.0000000	0.00	3.65401	0.10	0.0006359	10.18	0.0000000	0.00	302.559	0.04	0.0022698	3.41	1144.704	0.01	6.09607	1.92	0.0000000	0.00	0.1836534	9.65
20F23851	17.0%	✓	0.0113172	3.39	0.0000000	0.00	0.0008708	3.74	0.0000000	0.00	3.22155	3.74	0.0021333	3.39	0.0000000	0.00	3.65520	0.10	0.0005799	10.33	0.0000000	0.00	302.658	0.04	0.0020698	3.85	1144.472	0.01	3.37886	3.39	0.0000000	0.00	0.1837133	9.65
20F23853	17.0%	✓	0.0295439	1.37	0.0000000	0.00	0.0011877	2.81	0.0000000	0.00	4.39408	2.81	0.0055690	1.38	0.0000000	0.00	4.93122	0.10	0.0007909	10.03	0.0000000	0.00	408.315	0.04	0.0028232	2.96	1546.842	0.01	8.82062	1.37	0.0000000	0.00	0.2478474	9.65
20F23854	17.0%	✓	0.0232407	1.70	0.0000000	0.00	0.0008953	3.92	0.0000000	0.00	3.31226	3.91	0.0043809	1.70	0.0000000	0.00	3.39511	0.10	0.0005962	10.39	0.0000000	0.00	281.122	0.04	0.0021281	4.02	1065.729	0.01	6.93873	1.70	0.0000000	0.00	0.1706410	9.65
20F23856	17.0%	✓	0.0188952	2.09	0.0000000	0.00	0.0011263	2.94	0.0000000	0.00	4.16698	2.93	0.0035617	2.10	0.0000000	0.00	5.17281	0.10	0.0007501	10.07	0.0000000	0.00	428.319	0.04	0.0026773	3.07	1620.329	0.01	5.64134	2.09	0.0000000	0.00	0.2599895	9.65
20F23857	17.0%	✓	0.0120042	3.26	0.0000000	0.00	0.0007298	4.86	0.0000000	0.00	2.70000	4.85	0.0022628	3.27	0.0000000	0.00	3.05648	0.10	0.0004860	10.78	0.0000000	0.00	253.082	0.04	0.0017347	4.94	956.552	0.01	3.58398	3.26	0.0000000	0.00	0.1536210	9.65
20F23859	17.0%	✓	0.0091531	4.14	0.0000000	0.00	0.0007332	4.96	0.0000000	0.00	2.71252	4.96	0.0017254	4.14	0.0000000	0.00	3.07173	0.10	0.0004883	10.83	0.0000000	0.00	254.345	0.04	0.0017428	5.04	961.766	0.01	2.73275	4.14	0.0000000	0.00	0.1543875	9.65
20F23860	17.0%	✓	0.0150164	2.55	0.0000000	0.00	0.0009321	4.02	0.0000000	0.00	3.44828	4.01	0.0028306	2.55	0.0000000	0.00	4.00518	0.10	0.0006207	10.43	0.0000000	0.00	331.637	0.04	0.0022155	4.12	1256.810	0.01	4.48331	2.55	0.0000000	0.00	0.2013037	9.65
20F23862	17.0%	✓	0.0069328	5.32	0.0000000	0.00	0.0009844	3.69	0.0000000	0.00	3.64174	3.69	0.0013068	5.32	0.0000000	0.00	3.39123	0.10	0.0006555	10.31	0.0000000	0.00	280.800	0.04	0.0023398	3.80	1062.329	0.01	2.06987	5.32	0.0000000	0.00	0.1704459	9.65
20F23863	17.0%	✓	0.0122663	3.05	0.0000000	0.00	0.0008284	4.15	0.0000004	696.70	3.06461	4.14	0.0023122	3.05	0.0000000	0.00	3.42356	0.10	0.0005516	10.48	0.0018780	696.70	283.478	0.04	0.0019690	4.24	1073.240	0.01	3.66221	3.05	0.0000000	0.00	0.1720709	9.65
20F23865	17.0%	✓	0.0138170	2.65	0.0000000	0.00	0.0008585	4.03	0.0000031	93.28	3.17593	4.02	0.0026045	2.66	0.0000000	0.00	3.35656	0.10	0.0005717	10.44	0.0134655	93.29	277.930	0.04	0.0020405	4.13	1049.831	0.01	4.12521	2.65	0.0000000	0.00	0.1687034	9.65
20F23866	17.0%	✓	0.0187332	2.09	0.0000000	0.00	0.0008726	3.98	0.0000000	0.00	3.22818	3.98	0.0035312	2.10	0.0000000	0.00	3.16174	0.10	0.0005811	10.42	0.0000000	0.00	261.799	0.04	0.0020741	4.08	988.933	0.01	5.59300	2.09	0.0000000	0.00	0.1589118	9.65
20F23868	17.0%	✓	0.0087558	4.61	0.0000000	0.00	0.0008910	4.13	0.0000000	0.00	3.29633	4.13	0.0016505	4.62	0.0000000	0.00	3.73413	0.10	0.0005933	10.48	0.0000000	0.00	309.194	0.04	0.0021179	4.23	1168.792	0.01	2.61412	4.61	0.0000000	0.00	0.1876805	9.65
20F23869	17.0%	✓	0.0161803	2.50	0.0000000	0.00	0.0006485	5.40	0.0000000	0.00	2.39909	5.39	0.0030500	2.51	0.0000000	0.00	2.59486	0.10	0.0004318	11.04	0.0000000	0.00	214.860	0.04	0.0015414	5.47	811.049	0.02	4.83079	2.50	0.0000000	0.00	0.1304199	9.65
20F23871	17.0%	✓	0.0280101	1.50	0.0000000	0.00	0.0009899	3.19	0.0000000	0.00	3.66207	3.18	0.0052799	1.51	0.0000000	0.00	4.27814	0.10	0.0006592	10.14	0.0000000	0.00	354.239	0.04	0.0023529	3.31	1340.151	0.01	8.36269	1.51	0.0000000	0.00	0.2150229	9.65
20F23872	17.0%	✓	0.0410395	1.11	0.0000000	0.00	0.0008225	4.08	0.0000000	0.00	3.04310	4.08	0.0077359	1.12	0.0000000	0.00	3.57625	0.10	0.0005478	10.46	0.0000000	0.00	296.121	0.04	0.0019552	4.18	1119.265	0.01	12.25276	1.12	0.0000000	0.00	0.1797454	9.65
20F23874	17.0%	✓	0.0339418	1.33	0.0000000	0.00	0.0001977	18.98	0.0000000	0.00	0.73142	18.98	0.0063980	1.34	0.0000000	0.00	0.98219	0.10	0.0001317	21.28	0.0000000	0.00	81.327	0.04	0.0004699	19.00	308.204	0.05	10.13367	1.33	0.0000000	0.00	0.0493654	9.65
20F23875	17.0%	✓	0.0131961	2.95	0.0000000	0.00	0.0007451	4.66	0.0000000	0.00	2.75674	4.65	0.0024875	2.96	0.0000000	0.00	2.97129	0.10	0.0004962	10.69	0.0000000	0.00	246.028	0.04	0.0017712	4.74	930.739	0.01	3.93983	2.95	0.0000000	0.00	0.1493393	9.65
20F23877	17.0%	✓	0.0074219	4.35	0.0000000	0.00	0.0010019	3.33	0.0000000	0.00	3.70650	3.32	0.0013990	4.35	0.0000000	0.00	3.59342	0.10	0.0006672	10.19	0.0000000	0.00	297.543	0.04	0.0023814	3.45	1126.522	0.01	2.21589	4.35	0.0000000	0.00	0.1806085	9.65
20F23878	17.0%	✓	0.0305237	1.45	0.0000000	0.00	0.0012831	2.57	0.0000000	0.00	4.74680	2.56	0.0057537	1.46	0.0000000	0.00	5.04204	0.10	0.0008544	9.96	0.0000000	0.00	417.491	0.04	0.0030498	2.72	1580.937	0.01	9.11316	1.45	0.0000000	0.00	0.2534173	9.65
20F23880	17.0%	✓	0.0145265	2.90	0.0000000	0.00	0.0013018	2.81	0.0000000	0.00	4.81623	2.81	0.0027382	2.90	0.0000000	0.00	5.57179	0.10	0.0008669	10.03	0.0000000	0.00	461.355	0.04	0.0030944	2.96	1746.606	0.01	4.33703	2.90	0.0000000	0.00	0.2800426	9.65
20F23881	17.0%	✓	0.0210870	2.07	0.0000000	0.00	0.0014115	2.55	0.0000000	0.00	5.22206	2.54	0.0039749	2.08	0.0000000	0.00	5.18844	0.10	0.0009400	9.96	0.0000000	0.00	429.613	0.04	0.0033552	2.70	1628.908	0.01	6.29573	2.08	0.0000000	0.00	0.2607751	9.65
		Σ	0.5958774	0.38	0.0000000	0.00	0.0308404	0.62	0.0000054	89.37	114.09697	0.62	0.1123229	0.38	0.0000000	0.00	125.36549	0.02	0.0205375	1.97	0.0237092	89.36	10380.516	0.01	0.0733073	0.65	39290.944	0.00	177.90516	0.38	0.0000000	0.00	6.3009733	1.87
		Σ							0.6267232	0.36	114.09697	0.62									125.52206	0.03			10380.589	0.01							39475.151	0.00

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F23838	17.0 %	✓	3.799660	0.001573	0.010939	0.000252	0.000027	0.000001	139.984	15.917713	1.00098910	6.987E-11
20F23839	17.0 %	✓	3.808572	0.001577	0.011553	0.000285	0.000091	0.000001	139.990	15.919460	1.00098914	6.603E-11
20F23841	17.0 %	✓	3.794757	0.001579	0.011324	0.000341	0.000042	0.000001	140.001	15.923172	1.00098922	5.116E-11
20F23842	17.0 %	✓	3.802585	0.001595	0.009923	0.000484	0.000075	0.000002	140.008	15.925138	1.00098926	3.605E-11
20F23844	17.0 %	✓	3.797743	0.001569	0.009769	0.000216	0.000042	0.000001	140.019	15.928852	1.00098935	7.771E-11
20F23845	17.0 %	✓	3.806119	0.001571	0.012087	0.000196	0.000042	0.000001	140.026	15.930818	1.00098939	8.894E-11
20F23847	17.0 %	✓	3.814673	0.001579	0.010361	0.000279	0.000086	0.000001	140.037	15.934534	1.00098948	6.680E-11
20F23848	17.0 %	✓	3.794617	0.001603	0.009518	0.000633	0.000053	0.000002	140.043	15.936282	1.00098952	2.904E-11
20F23850	17.0 %	✓	3.804132	0.001592	0.011676	0.000384	0.000071	0.000001	140.056	15.940217	1.00098960	4.074E-11
20F23851	17.0 %	✓	3.793150	0.001581	0.010644	0.000398	0.000040	0.000001	140.061	15.941967	1.00098964	4.064E-11
20F23853	17.0 %	✓	3.810535	0.001583	0.010761	0.000302	0.000075	0.000001	140.073	15.945685	1.00098973	5.508E-11
20F23854	17.0 %	✓	3.816247	0.001599	0.011782	0.000461	0.000086	0.000001	140.079	15.947653	1.00098977	3.798E-11
20F23856	17.0 %	✓	3.796752	0.001577	0.009729	0.000285	0.000047	0.000001	140.091	15.951372	1.00098985	5.757E-11
20F23857	17.0 %	✓	3.794348	0.001595	0.010668	0.000518	0.000050	0.000002	140.097	15.953342	1.00098990	3.399E-11
20F23859	17.0 %	✓	3.792669	0.001594	0.010665	0.000529	0.000039	0.000001	140.109	15.957062	1.00098998	3.415E-11
20F23860	17.0 %	✓	3.803817	0.001586	0.010398	0.000417	0.000048	0.000001	140.115	15.958813	1.00099002	4.466E-11
20F23862	17.0 %	✓	3.791165	0.001592	0.012969	0.000478	0.000028	0.000001	140.127	15.962754	1.00099011	3.769E-11
20F23863	17.0 %	✓	3.799480	0.001594	0.010811	0.000448	0.000046	0.000001	140.133	15.964506	1.00099015	3.813E-11
20F23865	17.0 %	✓	3.792744	0.001594	0.011427	0.000460	0.000053	0.000001	140.144	15.968229	1.00099023	3.732E-11
20F23866	17.0 %	✓	3.799398	0.001595	0.012331	0.000490	0.000075	0.000001	140.151	15.970200	1.00099028	3.521E-11
20F23868	17.0 %	✓	3.789168	0.001582	0.010661	0.000440	0.000031	0.000001	140.162	15.973925	1.00099036	4.147E-11
20F23869	17.0 %	✓	3.797846	0.001606	0.011166	0.000602	0.000078	0.000002	140.169	15.975897	1.00099040	2.889E-11
20F23871	17.0 %	✓	3.807374	0.001583	0.010338	0.000329	0.000082	0.000001	140.181	15.979623	1.00099049	4.774E-11
20F23872	17.0 %	✓	3.821716	0.001599	0.010276	0.000419	0.000141	0.000002	140.186	15.981376	1.00099053	4.006E-11
20F23874	17.0 %	✓	3.914876	0.001748	0.008994	0.001707	0.000420	0.000006	140.199	15.985322	1.00099061	1.127E-11
20F23875	17.0 %	✓	3.799648	0.001595	0.011205	0.000521	0.000057	0.000002	140.204	15.987077	1.00099065	3.309E-11
20F23877	17.0 %	✓	3.794107	0.001585	0.012457	0.000414	0.000028	0.000001	140.216	15.990805	1.00099074	3.996E-11
20F23878	17.0 %	✓	3.809159	0.001581	0.011370	0.000291	0.000076	0.000001	140.222	15.992779	1.00099078	5.630E-11
20F23880	17.0 %	✓	3.795799	0.001572	0.010439	0.000293	0.000034	0.000001	140.234	15.996509	1.00099086	6.199E-11
20F23881	17.0 %	✓	3.806802	0.001577	0.012155	0.000309	0.000052	0.000001	140.240	15.998484	1.00099091	5.790E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F23838	17.0 %	0.0097682 ±0.0002100	0.0118539 ±0.0062157	0.0028835 ±0.0065829	0.0228777 ±0.0062635	2.8800734 ±0.0154705
20F23839	17.0 %	0.0097682 ±0.0002100	0.0118539 ±0.0062157	0.0028835 ±0.0065829	0.0228777 ±0.0062635	2.8800734 ±0.0154705
20F23841	17.0 %	0.0091081 ±0.0002118	0.0124661 ±0.0056267	0.0021175 ±0.0061117	0.0169947 ±0.0063801	2.5822923 ±0.0145498
20F23842	17.0 %	0.0091081 ±0.0002118	0.0124661 ±0.0056267	0.0021175 ±0.0061117	0.0169947 ±0.0063801	2.5822923 ±0.0145498
20F23844	17.0 %	0.0098492 ±0.0001938	0.0136896 ±0.0054201	0.0037189 ±0.0062091	0.0285802 ±0.0057627	2.8325583 ±0.0152377
20F23845	17.0 %	0.0098492 ±0.0001938	0.0136896 ±0.0054201	0.0037189 ±0.0062091	0.0285802 ±0.0057627	2.8325583 ±0.0152377
20F23847	17.0 %	0.0101792 ±0.0002315	0.0096326 ±0.0060641	0.0069297 ±0.0059244	0.0339563 ±0.0065349	2.7299084 ±0.0156565
20F23848	17.0 %	0.0101792 ±0.0002315	0.0096326 ±0.0060641	0.0069297 ±0.0059244	0.0339563 ±0.0065349	2.7299084 ±0.0156565
20F23850	17.0 %	0.0095503 ±0.0002015	0.0191755 ±0.0050800	0.0063207 ±0.0061530	0.0204852 ±0.0060358	2.7300362 ±0.0149319
20F23851	17.0 %	0.0095503 ±0.0002015	0.0191755 ±0.0050800	0.0063207 ±0.0061530	0.0204852 ±0.0060358	2.7300362 ±0.0149319
20F23853	17.0 %	0.0095153 ±0.0001809	0.0176994 ±0.0053300	0.0142902 ±0.0066322	0.0176536 ±0.0061921	2.6479196 ±0.0151455
20F23854	17.0 %	0.0095153 ±0.0001809	0.0176994 ±0.0053300	0.0142902 ±0.0066322	0.0176536 ±0.0061921	2.6479196 ±0.0151455
20F23856	17.0 %	0.0096826 ±0.0002129	0.0064094 ±0.0055051	0.0100809 ±0.0062956	0.0147859 ±0.0067669	2.7844193 ±0.0171487
20F23857	17.0 %	0.0096826 ±0.0002129	0.0064094 ±0.0055051	0.0100809 ±0.0062956	0.0147859 ±0.0067669	2.7844193 ±0.0171487
20F23859	17.0 %	0.0104756 ±0.0001964	0.0145798 ±0.0059536	0.0094567 ±0.0061279	0.0258600 ±0.0059342	2.8115001 ±0.0160306
20F23860	17.0 %	0.0104756 ±0.0001964	0.0145798 ±0.0059536	0.0094567 ±0.0061279	0.0258600 ±0.0059342	2.8115001 ±0.0160306
20F23862	17.0 %	0.0093615 ±0.0002025	0.0142351 ±0.0059241	0.0077267 ±0.0068047	0.0178800 ±0.0064924	2.7520340 ±0.0168734
20F23863	17.0 %	0.0093615 ±0.0002025	0.0142351 ±0.0059241	0.0077267 ±0.0068047	0.0178800 ±0.0064924	2.7520340 ±0.0168734
20F23865	17.0 %	0.0093274 ±0.0001940	0.0210136 ±0.0057631	0.0121897 ±0.0059389	0.0300676 ±0.0060912	2.6328064 ±0.0131392
20F23866	17.0 %	0.0093274 ±0.0001940	0.0210136 ±0.0057631	0.0121897 ±0.0059389	0.0300676 ±0.0060912	2.6328064 ±0.0131392
20F23868	17.0 %	0.0095059 ±0.0002215	0.0206399 ±0.0059679	0.0014774 ±0.0072988	0.0046339 ±0.0064302	2.6022774 ±0.0140365
20F23869	17.0 %	0.0095059 ±0.0002215	0.0206399 ±0.0059679	0.0014774 ±0.0072988	0.0046339 ±0.0064302	2.6022774 ±0.0140365
20F23871	17.0 %	0.0094059 ±0.0001871	0.0086405 ±0.0051128	0.0083312 ±0.0061715	0.0268890 ±0.0056512	2.6218878 ±0.0158483
20F23872	17.0 %	0.0094059 ±0.0001871	0.0086405 ±0.0051128	0.0083312 ±0.0061715	0.0268890 ±0.0056512	2.6218878 ±0.0158483
20F23874	17.0 %	0.0101100 ±0.0002237	0.0177083 ±0.0060112	0.0054347 ±0.0067030	0.0158394 ±0.0055603	2.6352158 ±0.0157220
20F23875	17.0 %	0.0101100 ±0.0002237	0.0177083 ±0.0060112	0.0054347 ±0.0067030	0.0158394 ±0.0055603	2.6352158 ±0.0157220
20F23877	17.0 %	0.0094059 ±0.0001871	0.0086405 ±0.0051128	0.0083312 ±0.0061715	0.0268890 ±0.0056512	2.6218878 ±0.0158483
20F23878	17.0 %	0.0094059 ±0.0001871	0.0086405 ±0.0051128	0.0083312 ±0.0061715	0.0268890 ±0.0056512	2.6218878 ±0.0158483
20F23880	17.0 %	0.0101100 ±0.0002237	0.0177083 ±0.0060112	0.0054347 ±0.0067030	0.0158394 ±0.0055603	2.6352158 ±0.0157220
20F23881	17.0 %	0.0101100 ±0.0002237	0.0177083 ±0.0060112	0.0054347 ±0.0067030	0.0158394 ±0.0055603	2.6352158 ±0.0157220

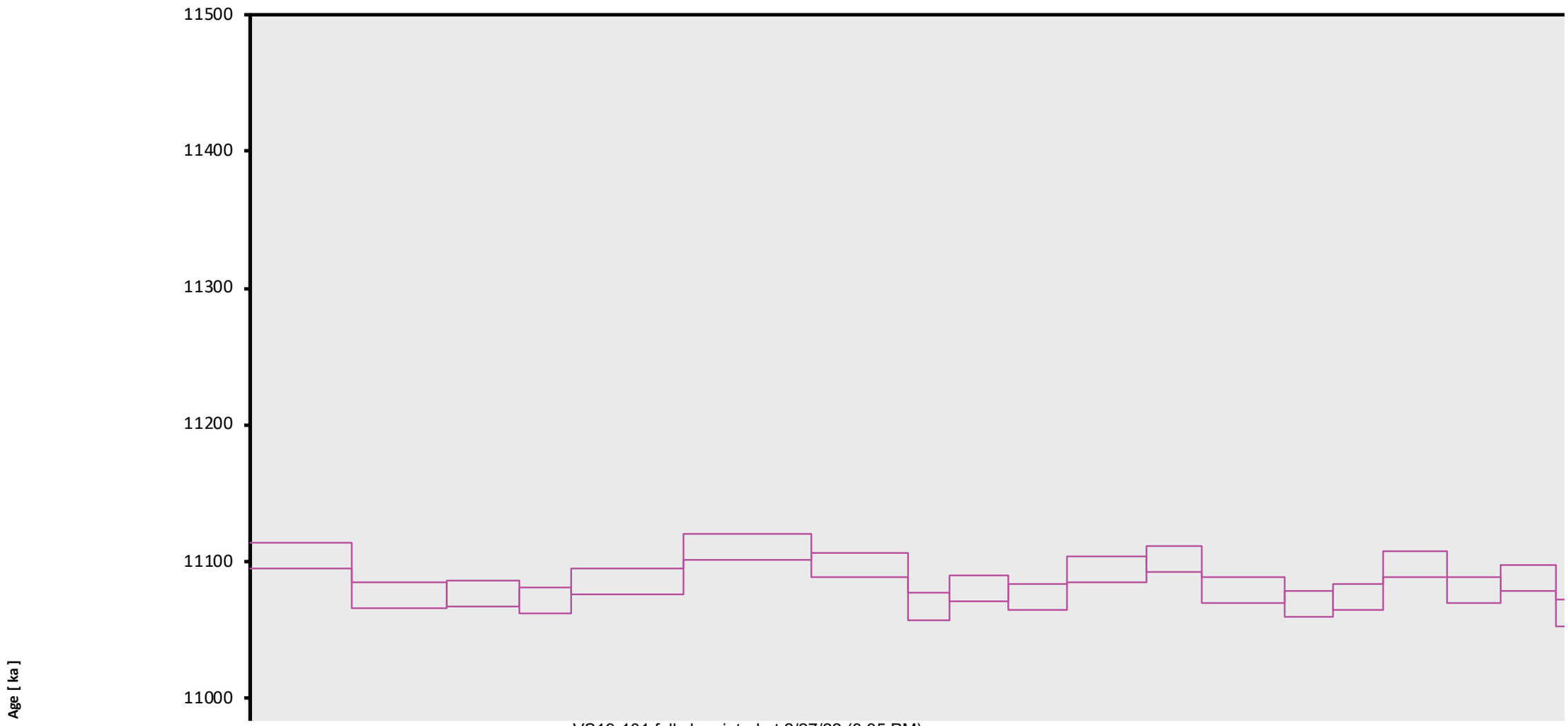
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F23838	17.0 %	0.0237189 ±0.0003438	0.9845	EXP 150 of 150	0.3455181 ±0.0052063	0.3567	EXP 148 of 150	6.2589882 ±0.0051928	0.9936	EXP 150 of 150	519.12454 ±0.02979	1.0000	EXP 150 of 150	1976.4732 ±0.0572	1.0000	EXP 148 of 150
20F23839	17.0 %	0.0534140 ±0.0004279	0.9710	EXP 148 of 150	0.3439805 ±0.0060232	0.2318	EXP 150 of 150	5.9136887 ±0.0073793	0.9857	EXP 150 of 150	489.46429 ±0.02529	1.0000	EXP 150 of 150	1868.0713 ±0.0706	1.0000	EXP 150 of 150
20F23841	17.0 %	0.0249871 ±0.0003527	0.9760	EXP 150 of 150	0.2587016 ±0.0058197	0.1686	EXP 150 of 150	4.5946097 ±0.0060585	0.9841	EXP 150 of 150	380.64286 ±0.02529	1.0000	EXP 150 of 150	1447.8319 ±0.0519	1.0000	EXP 150 of 150
20F23842	17.0 %	0.0287427 ±0.0003482	0.9593	EXP 150 of 150	0.1545808 ±0.0058462	0.1160	EXP 149 of 150	3.2296169 ±0.0066532	0.9624	EXP 150 of 150	267.63624 ±0.02038	0.9999	EXP 150 of 150	1020.8381 ±0.0502	1.0000	EXP 150 of 150
20F23844	17.0 %	0.0338704 ±0.0004407	0.9805	EXP 150 of 150	0.3411830 ±0.0054951	0.2665	EXP 150 of 150	6.9583004 ±0.0067370	0.9914	EXP 147 of 150	577.67433 ±0.02914	1.0000	EXP 150 of 150	2197.8993 ±0.0670	1.0000	EXP 150 of 150
20F23845	17.0 %	0.0369950 ±0.0004222	0.9865	EXP 147 of 150	0.4877374 ±0.0056913	0.3680	EXP 149 of 150	7.9300371 ±0.0079451	0.9906	EXP 150 of 150	659.72838 ±0.03286	1.0000	EXP 149 of 150	2515.2358 ±0.0658	1.0000	EXP 150 of 150
20F23847	17.0 %	0.0518219 ±0.0004595	0.9712	EXP 150 of 150	0.3123871 ±0.0060484	0.2156	EXP 150 of 150	5.9599748 ±0.0068337	0.9875	EXP 150 of 150	494.40694 ±0.02552	1.0000	EXP 149 of 150	1889.7336 ±0.0694	1.0000	EXP 149 of 150
20F23848	17.0 %	0.0214738 ±0.0003150	0.9662	EXP 150 of 150	0.1196346 ±0.0060753	0.0652	EXP 150 of 150	2.6306288 ±0.0062436	0.9496	EXP 149 of 150	216.09019 ±0.01888	0.9999	EXP 149 of 150	823.0729 ±0.0409	1.0000	EXP 150 of 150
20F23850	17.0 %	0.0305803 ±0.0003251	0.9725	EXP 150 of 150	0.2027041 ±0.0051557	0.1316	EXP 148 of 150	3.6420286 ±0.0067490	0.9677	EXP 150 of 150	302.40027 ±0.02314	0.9999	EXP 150 of 150	1153.7133 ±0.0481	1.0000	EXP 149 of 150
20F23851	17.0 %	0.0215426 ±0.0003167	0.9776	EXP 150 of 150	0.1831401 ±0.0055331	0.0691	EXP 150 of 150	3.6431324 ±0.0068735	0.9667	EXP 150 of 150	302.49871 ±0.02070	1.0000	EXP 150 of 150	1150.7644 ±0.0444	1.0000	EXP 148 of 150
20F23853	17.0 %	0.0397536 ±0.0003498	0.9788	EXP 149 of 150	0.2581874 ±0.0055108	0.2416	EXP 149 of 150	4.9073566 ±0.0069065	0.9816	EXP 150 of 150	408.09065 ±0.02504	1.0000	EXP 150 of 150	1558.5581 ±0.0590	1.0000	EXP 147 of 150
20F23854	17.0 %	0.0332638 ±0.0003390	0.9714	EXP 150 of 150	0.1902387 ±0.0060831	0.0554	EXP 150 of 150	3.3689238 ±0.0069746	0.9595	EXP 150 of 150	280.97295 ±0.02052	1.0000	EXP 149 of 150	1075.4868 ±0.0545	1.0000	EXP 150 of 150
20F23856	17.0 %	0.0293827 ±0.0003217	0.9856	EXP 149 of 150	0.2551258 ±0.0052253	0.1941	EXP 149 of 150	5.1448862 ±0.0061218	0.9870	EXP 150 of 150	428.07902 ±0.02550	1.0000	EXP 150 of 150	1629.0146 ±0.0635	1.0000	EXP 150 of 150
20F23857	17.0 %	0.0222122 ±0.0003187	0.9732	EXP 150 of 150	0.1630316 ±0.0060660	0.0595	EXP 150 of 150	3.0384020 ±0.0071088	0.9486	EXP 150 of 150	252.94701 ±0.01953	0.9999	EXP 149 of 150	963.0739 ±0.0505	1.0000	EXP 150 of 150
20F23859	17.0 %	0.0202032 ±0.0003147	0.9723	EXP 148 of 150	0.1556072 ±0.0059373	0.0628	EXP 150 of 150	3.0533179 ±0.0070925	0.9498	EXP 150 of 150	254.21998 ±0.02151	0.9999	EXP 150 of 150	967.4648 ±0.0400	1.0000	EXP 150 of 150
20F23860	17.0 %	0.0261681 ±0.0003175	0.9793	EXP 150 of 150	0.2017461 ±0.0062568	0.1163	EXP 149 of 150	3.9979692 ±0.0066819	0.9751	EXP 147 of 150	331.46594 ±0.02234	1.0000	EXP 150 of 150	1264.3066 ±0.0526	1.0000	EXP 149 of 150
20F23862	17.0 %	0.0171516 ±0.0002986	0.9778	EXP 150 of 150	0.2141710 ±0.0059108	0.1407	EXP 150 of 150	3.3658943 ±0.0071648	0.9581	EXP 150 of 150	280.65203 ±0.02144	0.9999	EXP 150 of 150	1067.3218 ±0.0556	1.0000	EXP 149 of 150
20F23863	17.0 %	0.0222464 ±0.0003045	0.9775	EXP 149 of 150	0.1779532 ±0.0052572	0.0924	EXP 150 of 150	3.4232448 ±0.0068010	0.9640	EXP 150 of 150	283.32714 ±0.02207	0.9999	EXP 150 of 150	1079.8268 ±0.0489	1.0000	EXP 149 of 150
20F23865	17.0 %	0.0237703 ±0.0003008	0.9748	EXP 149 of 150	0.1781093 ±0.0055081	0.0751	EXP 150 of 150	3.3636391 ±0.0068286	0.9619	EXP 150 of 150	277.79500 ±0.02264	0.9999	EXP 150 of 150	1056.7575 ±0.0505	1.0000	EXP 150 of 150
20F23866	17.0 %	0.0286185 ±0.0003298	0.9667	EXP 150 of 150	0.1813600 ±0.0055549	0.1086	EXP 150 of 150	3.1377963 ±0.0068296	0.9575	EXP 148 of 150	261.67352 ±0.02053	0.9999	EXP 150 of 150	997.3181 ±0.0481	1.0000	EXP 148 of 150
20F23868	17.0 %	0.0189978 ±0.0003276	0.9758	EXP 150 of 150	0.1859581 ±0.0060394	0.1321	EXP 150 of 150	3.7117901 ±0.0062900	0.9731	EXP 149 of 150	309.01450 ±0.02189	1.0000	EXP 150 of 150	1174.1965 ±0.0481	1.0000	EXP 150 of 150
20F23869	17.0 %	0.0260645 ±0.0003278	0.9617	EXP 150 of 150	0.1297049 ±0.0054549	0.0717	EXP 149 of 150	2.5810039 ±0.0064185	0.9420	EXP 149 of 150	214.73684 ±0.01924	0.9999	EXP 150 of 150	818.6125 ±0.0420	1.0000	EXP 148 of 150
20F23871	17.0 %	0.0379403 ±0.0003654	0.9695	EXP 150 of 150	0.2207983 ±0.0051306	0.1154	EXP 149 of 150	4.2713767 ±0.0073864	0.9728	EXP 150 of 150	354.05512 ±0.02229	1.0000	EXP 148 of 150	1351.3504 ±0.0513	1.0000	EXP 150 of 150
20F23872	17.0 %	0.0505959 ±0.0004019	0.9512	EXP 148 of 150	0.1819970 ±0.0058040	0.0903	EXP 149 of 150	3.5686401 ±0.0068021	0.9656	EXP 150 of 150	295.97171 ±0.02273	0.9999	EXP 150 of 150	1134.3192 ±0.0449	1.0000	EXP 150 of 150
20F23874	17.0 %	0.0437014 ±0.0003778	0.7656	EXP 150 of 150	0.0281009 ±0.0062761	0.0022	EXP 150 of 150	0.9795088 ±0.0070113	0.6847	EXP 149 of 150	81.29435 ±0.01063	0.9998	EXP 150 of 150	321.0219 ±0.0286	0.9999	EXP 147 of 150
20F23875	17.0 %	0.0238274 ±0.0003084	0.9687	EXP 150 of 150	0.1549283 ±0.0052773	0.0797	EXP 150 of 150	2.9667863 ±0.0062200	0.9599	EXP 149 of 150	245.89820 ±0.01908	0.9999	EXP 150 of 150	937.4636 ±0.0453	1.0000	EXP 150 of 150
20F23877	17.0 %	0.0176945 ±0.0002540	0.9848	EXP 149 of 150	0.2234196 ±0.0056872	0.1484	EXP 146 of 150	3.5820048 ±0.0064859	0.9698	EXP 150 of 150	297.39321 ±0.02161	1.0000	EXP 150 of 150	1131.5401 ±0.0448	1.0000	EXP 149 of 150
20F23878	17.0 %	0.0407021 ±0.0003880	0.9753	EXP 150 of 150	0.2885151 ±0.0054991	0.2480	EXP 149 of 150	5.0074858 ±0.0068174	0.9832	EXP 150 of 150	417.27038 ±0.02609	1.0000	EXP 149 of 150	1592.9251 ±0.0528	1.0000	EXP 150 of 150
20F23880	17.0 %	0.0256842 ±0.0003459	0.9853	EXP 148 of 150	0.2837235 ±0.0058313	0.1848	EXP 149 of 150	5.5628100 ±0.0071156	0.9846	EXP 150 of 150	461.09670 ±0.02608	1.0000	EXP 149 of 150	1753.8587 ±0.0584	1.0000	EXP 150 of 150
20F23881	17.0 %	0.0322473 ±0.0003642	0.9820	EXP 149 of 150	0.3090824 ±0.0055746	0.2959	EXP 148 of 150	5.1592512 ±0.0069404	0.9836	EXP 149 of 150	429.37386 ±0.02506	1.0000	EXP 150 of 150	1638.0997 ±0.0519	1.0000	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F23838	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23839	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23841	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23842	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23844	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23845	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23847	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23848	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23850	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23851	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23853	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23854	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23856	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23857	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23859	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23860	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23862	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23863	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23865	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23866	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23868	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23869	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23871	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23872	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23874	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23875	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23877	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23878	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23880	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01
20F23881	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	49.46	Oregon\Swenton (20-01)	20F23834	01

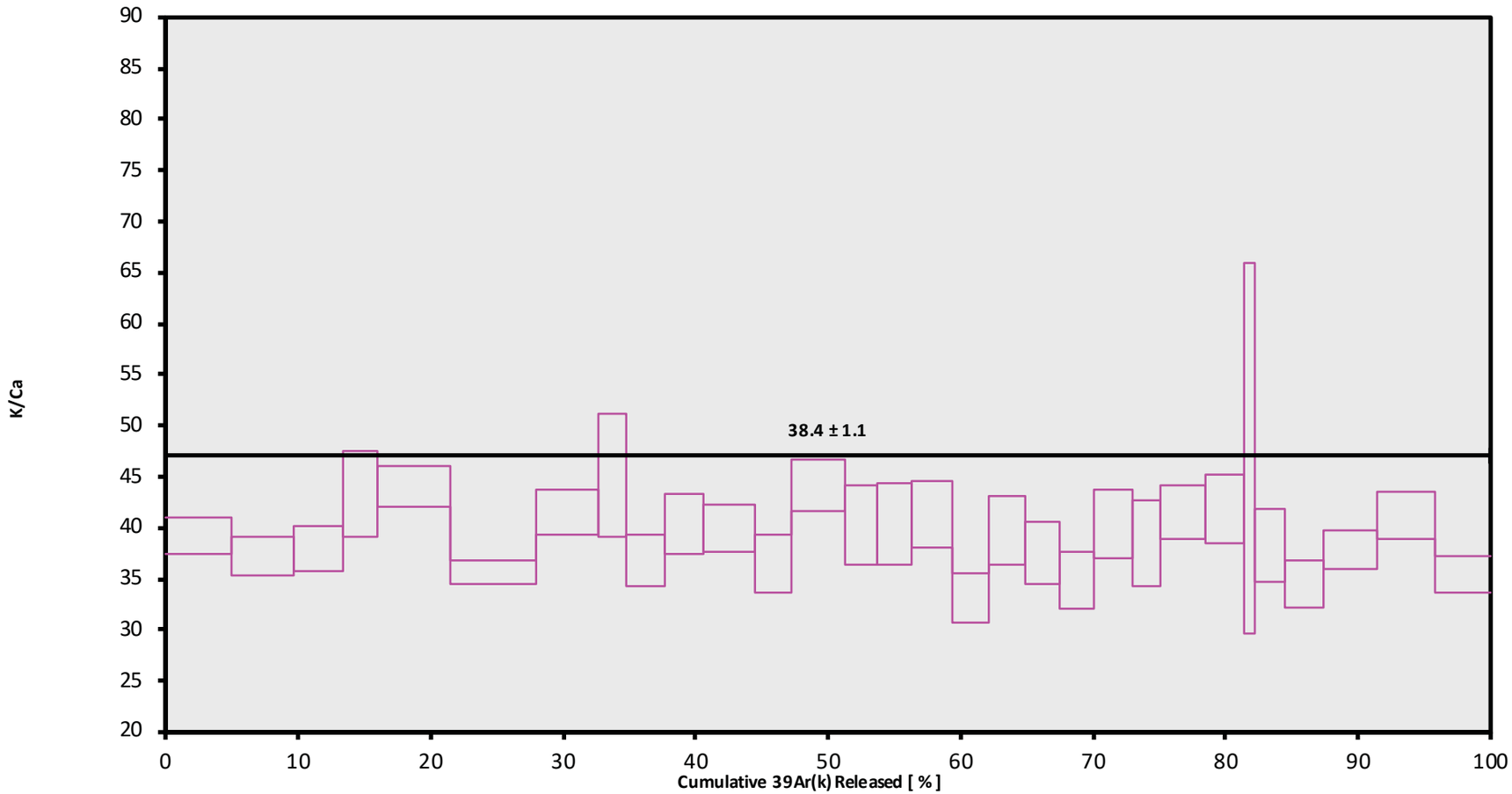
Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F23838	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	14	8	1
20F23839	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	14	16	1
20F23841	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	14	33	1
20F23842	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	14	42	1
20F23844	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	14	59	1
20F23845	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	15	8	1
20F23847	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	15	25	1
20F23848	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	15	33	1
20F23850	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	15	51	1
20F23851	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	15	59	1
20F23853	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	16	16	1
20F23854	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	16	25	1
20F23856	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	16	42	1
20F23857	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	16	51	1
20F23859	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	17	8	1
20F23860	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	17	16	1
20F23862	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	17	34	1
20F23863	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	17	42	1
20F23865	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	17	59	1
20F23866	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	18	8	1
20F23868	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	18	25	1
20F23869	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	18	34	1
20F23871	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	18	51	1
20F23872	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	18	59	1
20F23874	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	19	17	1
20F23875	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	19	25	1
20F23877	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	19	42	1
20F23878	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	19	51	1
20F23880	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	20	8	1
20F23881	17.0 %	VS19-101	Sanidine	Rhyolite Dome	FCT-NM (1C40-20)	28.201	0.082	Kuiper et al (2008)	9.67461	0.154	0.00160477	0.154	298.096	0.126	1.0003896	0.041	1	3.54E-14	3	SEP	2020	20	17	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F23838	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23839	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23841	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23842	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23844	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23845	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23847	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23848	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23850	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23851	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23853	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23854	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23856	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23857	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23859	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23860	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23862	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23863	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23865	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23866	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23868	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23869	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23871	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23872	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23874	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23875	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23877	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23878	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23880	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23881	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F23834.AGE >>> VS19-101 >>> OREGC



20F23834.AGE >>> VS19-101 >>> OREGON | SWENTON (20-01) PROJECT



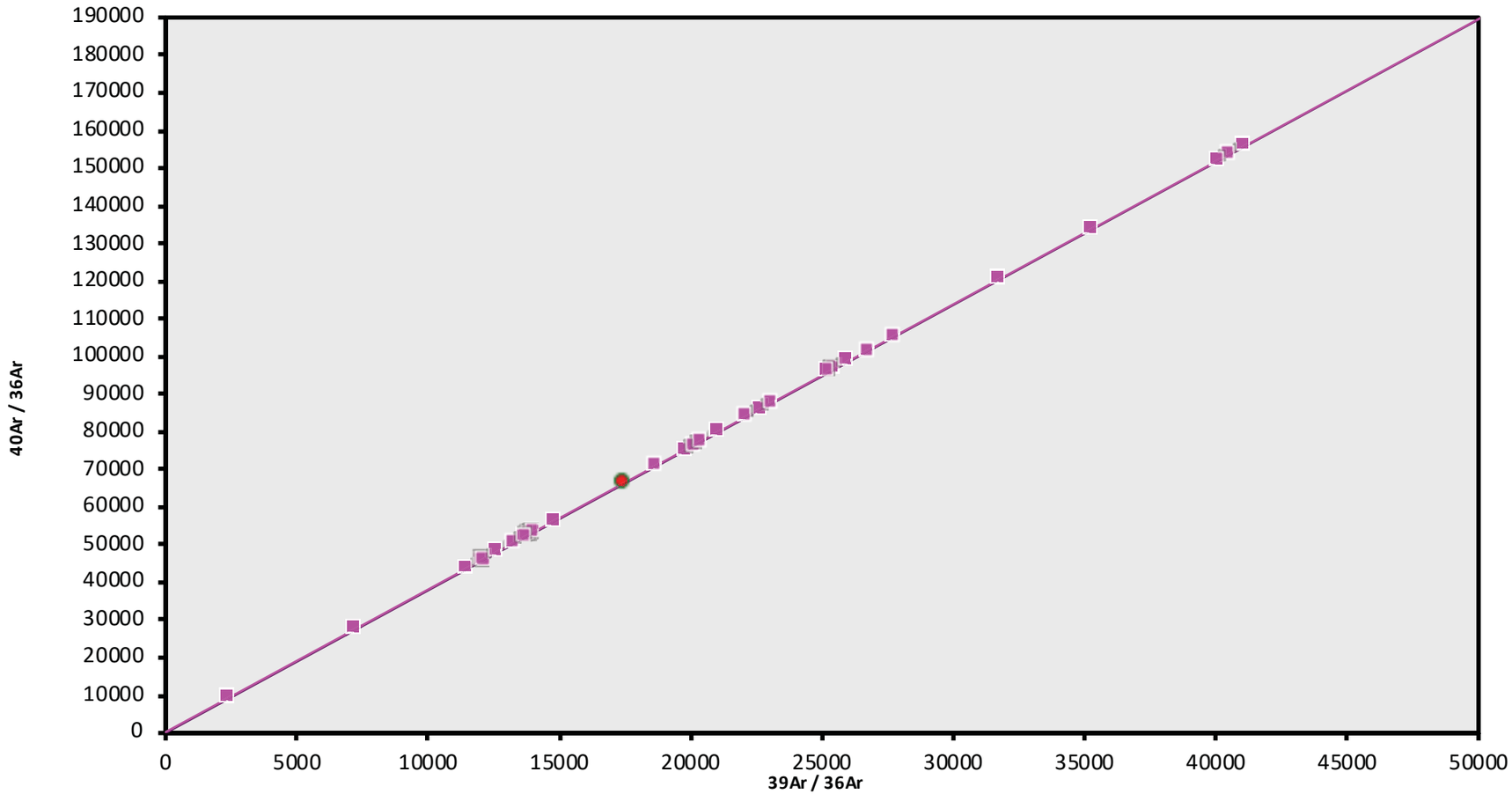
Ar-Ages in ka

WEIGHTED PLATEAU
11082.7 ± 34.4
TOTAL FUSION
11085.1 ± 34.1
NORMAL ISOCHRON
11089.6 ± 35.1
INVERSE ISOCHRON
11081.8 ± 35.0

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23834.AGE >>> VS19-101 >>> OREGON | SWENTON (20-01) PROJECT



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MSWD (PROBABILITY)

Sample Info

Sanidine
Rhyolite Dome
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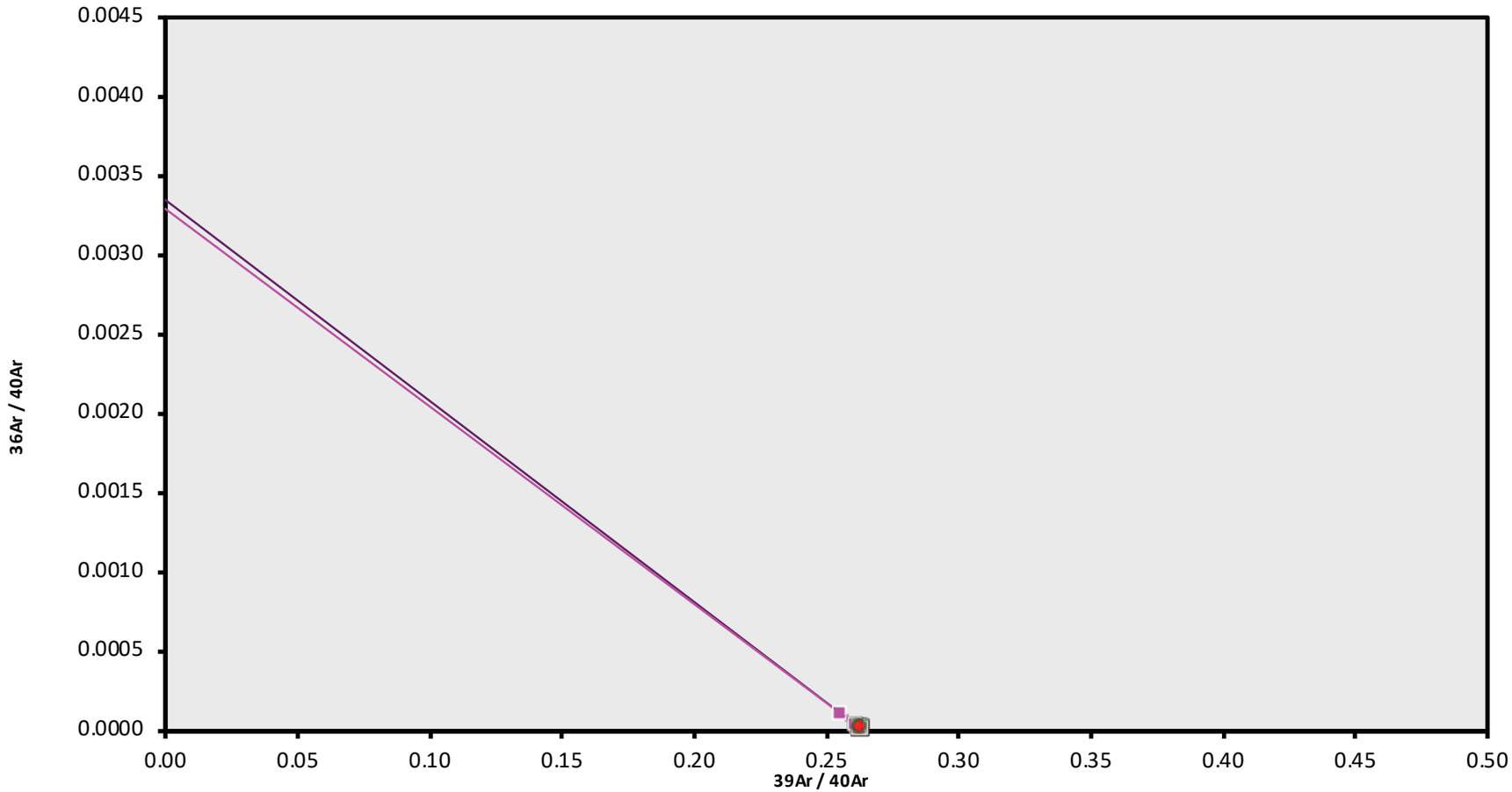
20F23834.AGE >>> VS19-101 >>> OREGON | SWENTON (20-01) PROJECT



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TOTAL FUSION
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NORMAL ISOCHRON
11089.6 ± 35.1
INVERSE ISOCHRON
11081.8 ± 35.0

MSWD (PROBABILITY)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F23094	17.0 %	✓	0.0777978	0.707	4.576763	2.514	5.567282	0.175	461.7284	0.039	1813.254	0.004	3.87701	±0.00314	11.48	±0.01	98.72	6.88	43.4	±2.2
20F23095	17.0 %	✓	0.0653624	0.765	6.691701	1.739	4.559642	0.219	376.8635	0.039	1480.404	0.004	3.87731	±0.00317	11.48	±0.01	98.70	5.62	24.2	±0.8
20F23097	17.0 %	✓	0.0703291	0.748	4.119058	2.738	4.463344	0.235	369.7538	0.039	1453.611	0.004	3.87483	±0.00318	11.47	±0.01	98.56	5.51	38.6	±2.1
20F23098	17.0 %	✓	0.0681758	0.732	3.461288	3.058	3.571366	0.262	293.9522	0.040	1160.053	0.004	3.87753	±0.00327	11.48	±0.01	98.25	4.38	36.5	±2.2
20F23100	17.0 %	✓	0.0307469	1.241	2.403077	4.329	3.166062	0.319	262.7441	0.040	1025.797	0.005	3.86938	±0.00321	11.45	±0.01	99.11	3.92	47.0	±4.1
20F23101	17.0 %	✓	0.0376366	1.139	4.454078	2.434	5.249865	0.215	436.2474	0.039	1702.224	0.003	3.87645	±0.00311	11.48	±0.01	99.35	6.50	42.1	±2.1
20F23103	17.0 %	✓	0.8423462	0.226	2.503610	4.550	3.199069	0.303	253.6029	0.040	1232.552	0.004	3.86871	±0.00583	11.45	±0.02	79.60	3.78	43.6	±4.0
20F23104	17.0 %	✓	0.0242341	1.628	2.221701	5.236	2.173359	0.432	180.3738	0.040	704.101	0.006	3.86387	±0.00340	11.44	±0.01	98.98	2.69	34.9	±3.7
20F23106	17.0 %	✓	0.0047923	6.289	1.963720	5.736	2.368969	0.421	195.5992	0.040	759.253	0.007	3.87459	±0.00328	11.47	±0.01	99.82	2.92	42.8	±4.9
20F23107	17.0 %	✓	0.1109652	0.560	3.674943	3.076	4.175281	0.247	342.3764	0.039	1360.185	0.004	3.87630	±0.00326	11.47	±0.01	97.57	5.10	40.1	±2.5
20F23109	17.0 %	✓	0.0146588	2.451	3.144421	3.542	4.059439	0.256	336.5453	0.040	1308.512	0.004	3.87524	±0.00315	11.47	±0.01	99.67	5.02	46.0	±3.3
20F23110	17.0 %	✓	0.0644180	0.786	3.142744	3.685	3.644168	0.258	303.3761	0.039	1195.916	0.004	3.87888	±0.00324	11.48	±0.01	98.40	4.52	41.5	±3.1
20F23112	17.0 %	✓	0.0038715	7.909	2.353062	4.881	2.170197	0.429	181.8043	0.040	705.145	0.006	3.87270	±0.00329	11.46	±0.01	99.85	2.71	33.2	±3.2
20F23113	17.0 %	✓	0.0202654	1.663	1.819743	5.737	1.624311	0.547	133.7483	0.041	523.191	0.007	3.86705	±0.00353	11.45	±0.01	98.86	1.99	31.6	±3.6
20F23115	17.0 %	✓	0.0015935	20.358	0.977498	11.188	1.248989	0.712	103.8267	0.041	402.738	0.008	3.87454	±0.00377	11.47	±0.01	99.89	1.55	45.7	±10.2
20F23116	17.0 %	✓	0.0120903	3.217	2.520106	4.481	2.917240	0.306	245.2162	0.039	954.199	0.005	3.87679	±0.00323	11.48	±0.01	99.63	3.66	41.8	±3.7
20F23118	17.0 %		1.7982289	0.189	2.261438	4.924	2.283152	0.411	158.5601	0.040	1148.127	0.004	3.85558	±0.01492	11.41	±0.04	53.25	2.36	30.1	±3.0
20F23119	17.0 %	✓	0.0208545	1.734	2.370143	4.861	2.322310	0.404	190.3038	0.040	742.921	0.006	3.87158	±0.00335	11.46	±0.01	99.17	2.84	34.5	±3.4
20F23121	17.0 %	✓	0.0065730	4.734	1.581968	6.721	1.879247	0.517	155.9754	0.041	604.962	0.007	3.86623	±0.00340	11.45	±0.01	99.68	2.33	42.4	±5.7
20F23122	17.0 %	✓	0.0087537	3.156	1.506002	7.214	1.600312	0.627	133.9538	0.041	521.281	0.007	3.87232	±0.00343	11.46	±0.01	99.51	2.00	38.2	±5.5
20F23124	17.0 %	✓	0.0054915	5.915	1.909986	5.786	2.036990	0.459	167.9953	0.040	652.420	0.006	3.87415	±0.00337	11.47	±0.01	99.76	2.50	37.8	±4.4
20F23125	17.0 %	✓	0.0021513	14.593	1.056935	10.870	1.171761	0.765	96.8959	0.042	375.723	0.009	3.87127	±0.00383	11.46	±0.01	99.84	1.44	39.4	±8.6
20F23127	17.0 %	✓	0.0195910	1.838	1.794390	6.336	1.798111	0.510	150.2263	0.040	588.073	0.006	3.87603	±0.00348	11.47	±0.01	99.01	2.24	36.0	±4.6
20F23128	17.0 %	✓	0.0130059	2.765	2.622478	4.385	2.920939	0.336	243.1300	0.040	946.018	0.005	3.87532	±0.00324	11.47	±0.01	99.60	3.62	39.9	±3.5
20F23130	17.0 %	✓	0.0173615	2.025	1.224939	8.893	1.288796	0.740	106.2066	0.041	416.863	0.008	3.87657	±0.00379	11.48	±0.01	98.76	1.58	37.3	±6.6
20F23131	17.0 %	✓	0.0004396	61.939	1.884485	5.420	1.675277	0.581	138.5376	0.041	537.304	0.007	3.87798	±0.00343	11.48	±0.01	99.99	2.07	31.6	±3.4
20F23133	17.0 %	✓	0.0100866	3.204	1.017429	11.396	1.234862	0.747	102.5866	0.041	400.159	0.009	3.87155	±0.00379	11.46	±0.01	99.25	1.53	43.4	±9.9
20F23134	17.0 %	✓	0.0281107	1.506	2.229740	4.818	2.306053	0.421	190.1484	0.040	745.030	0.006	3.87438	±0.00340	11.47	±0.01	98.88	2.83	36.7	±3.5
20F23136	17.0 %	✓	0.0075125	4.046	1.460846	7.668	1.596263	0.566	131.9079	0.041	513.352	0.008	3.87506	±0.00351	11.47	±0.01	99.57	1.97	38.8	±6.0
20F23137	17.0 %	✓	0.0564933	0.861	3.210784	3.552	3.183141	0.290	264.0977	0.039	1040.565	0.005	3.87661	±0.00328	11.48	±0.01	98.39	3.94	35.4	±2.5
		Σ	3.4439380	0.129	76.159079	0.802	81.455799	0.065	6708.2838	0.008	27013.933	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-104**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C35-20)**
Position = **X: 0 | Y: 0 | Z/H: 43.98167 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.57019 ± 0.01483**
FCT-NM J-value = **0.00162228 ± 0.00000251**
Air Shot 40Ar/36Ar = **298.2180 ± 0.3430**
Air Shot MDF = **1.00028707 ± 0.00038858 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			3.87404	±0.00138	**11.47**	**±0.04**	4.77	97.64	33.7	±2.9
Error Mean				±0.04%		**±0.31%**	0%	29		
				Full External Error		±0.60	1.53	2σ Confidence Limit		
				Analytical Error		±0.00	2.1830	Error Magnification		
Total Fusion Age			3.87401	±0.00076	**11.47**	**±0.04**		30	37.9	±0.6
				±0.02%		**±0.31%**				
				Full External Error		±0.60				
				Analytical Error		±0.00				
Normal Isochron	**293.89**	**±5.31**	3.87793	±0.00211	**11.48**	**±0.04**	10.21	97.64		
Error Chron		**±1.81%**		±0.05%		**±0.31%**	0%	29		
				Full External Error		±0.60	1.54	2σ Confidence Limit		
				Analytical Error		±0.01	3.1961	Error Magnification		
							1	Number of Iterations		
							0.0000000012	Convergence		
Inverse Isochron	**297.44**	**±3.69**	3.87421	±0.00150	**11.47**	**±0.04**	4.89	97.64		
Error Chron		**±1.24%**		±0.04%		**±0.31%**	0%	29		
				Full External Error		±0.60	1.54	2σ Confidence Limit		
				Analytical Error		±0.00	2.2109	Error Magnification		
							2	Number of Iterations		
							0.0001164731	Convergence		
							20%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F23094	17.0 %	✓	0.0765607	4.576763	0.0000000	461.7254	1790.116	11.48 ±0.01	98.72	6.88	43.4 ±2.2
20F23095	17.0 %	✓	0.0635536	6.691701	0.0000000	376.8592	1461.200	11.48 ±0.01	98.70	5.62	24.2 ±0.8
20F23097	17.0 %	✓	0.0692157	4.119058	0.0000000	369.7511	1432.721	11.47 ±0.01	98.56	5.51	38.6 ±2.1
20F23098	17.0 %	✓	0.0672385	3.461288	0.0080347	293.9500	1139.800	11.48 ±0.01	98.25	4.38	36.5 ±2.2
20F23100	17.0 %	✓	0.0300974	2.403077	0.0000000	262.7426	1016.652	11.45 ±0.01	99.11	3.92	47.0 ±4.1
20F23101	17.0 %	✓	0.0364327	4.454078	0.0000000	436.2446	1691.082	11.48 ±0.01	99.35	6.50	42.1 ±2.1
20F23103	17.0 %	✓	0.8416695	2.503610	0.0000000	253.6013	981.109	11.45 ±0.02	79.60	3.78	43.6 ±4.0
20F23104	17.0 %	✓	0.0236336	2.221701	0.0000000	180.3723	696.936	11.44 ±0.01	98.98	2.69	34.9 ±3.7
20F23106	17.0 %	✓	0.0042603	1.963720	0.0055760	195.5979	757.863	11.47 ±0.01	99.82	2.92	42.8 ±4.9
20F23107	17.0 %	✓	0.1099678	3.674943	0.0190398	342.3740	1327.145	11.47 ±0.01	97.57	5.10	40.1 ±2.5
20F23109	17.0 %	✓	0.0138089	3.144421	0.0000000	336.5433	1304.185	11.47 ±0.01	99.67	5.02	46.0 ±3.3
20F23110	17.0 %	✓	0.0635685	3.142744	0.0000000	303.3741	1176.753	11.48 ±0.01	98.40	4.52	41.5 ±3.1
20F23112	17.0 %	✓	0.0032355	2.353062	0.0000000	181.8028	704.068	11.46 ±0.01	99.85	2.71	33.2 ±3.2
20F23113	17.0 %	✓	0.0197725	1.819743	0.0049924	133.7471	517.206	11.45 ±0.01	98.86	1.99	31.6 ±3.6
20F23115	17.0 %	✓	0.0013293	0.977498	0.0000000	103.8261	402.278	11.47 ±0.01	99.89	1.55	45.7 ±10.2
20F23116	17.0 %	✓	0.0114091	2.520106	0.0000000	245.2146	950.644	11.48 ±0.01	99.63	3.66	41.8 ±3.7
20F23118	17.0 %		1.7976114	2.261438	0.0289825	158.5586	611.336	11.41 ±0.04	53.25	2.36	30.1 ±3.0
20F23119	17.0 %	✓	0.0202096	2.370143	0.0197928	190.3023	736.771	11.46 ±0.01	99.17	2.84	34.5 ±3.4
20F23121	17.0 %	✓	0.0061454	1.581968	0.0000000	155.9744	603.033	11.45 ±0.01	99.68	2.33	42.4 ±5.7
20F23122	17.0 %	✓	0.0083466	1.506002	0.0000000	133.9528	518.708	11.46 ±0.01	99.51	2.00	38.2 ±5.5
20F23124	17.0 %	✓	0.0049738	1.909986	0.0068449	167.9941	650.833	11.47 ±0.01	99.76	2.50	37.8 ±4.4
20F23125	17.0 %	✓	0.0018654	1.056935	0.0010160	96.8952	375.107	11.46 ±0.01	99.84	1.44	39.4 ±8.6
20F23127	17.0 %	✓	0.0191060	1.794390	0.0000000	150.2251	582.278	11.47 ±0.01	99.01	2.24	36.0 ±4.6
20F23128	17.0 %	✓	0.0122970	2.622478	0.0000000	243.1283	942.199	11.47 ±0.01	99.60	3.62	39.9 ±3.5
20F23130	17.0 %	✓	0.0170299	1.224939	0.0027181	106.2058	411.714	11.48 ±0.01	98.76	1.58	37.3 ±6.6
20F23131	17.0 %	✓	0.0000701	1.884485	0.0018477	138.5364	537.241	11.48 ±0.01	99.99	2.07	31.6 ±3.4
20F23133	17.0 %	✓	0.0098116	1.017429	0.0000000	102.5860	397.167	11.46 ±0.01	99.25	1.53	43.4 ±9.9
20F23134	17.0 %	✓	0.0275071	2.229740	0.0040619	190.1469	736.702	11.47 ±0.01	98.88	2.83	36.7 ±3.5
20F23136	17.0 %	✓	0.0071173	1.460846	0.0016186	131.9069	511.147	11.47 ±0.01	99.57	1.97	38.8 ±6.0
20F23137	17.0 %	✓	0.0556255	3.210784	0.0000000	264.0956	1023.797	11.48 ±0.01	98.39	3.94	35.4 ±2.5
		Σ	3.4233298	76.159079	0.1045253	6708.2349	25987.792				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-104**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C35-20)**
J = **0.00162228 ± 0.00000251**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.87404	±0.00138	**11.47**	**±0.04**	4.77	97.64	33.7 ±2.9
Error Mean		±0.04%		**±0.31%**	0%	29	
			Full External Error	±0.60	1.53	2σ Confidence Limit	
			Analytical Error	±0.00	2.1830	Error Magnification	
Total Fusion Age	3.87401	±0.00076	**11.47**	**±0.04**		30	37.9 ±0.6
		±0.02%		**±0.31%**			
			Full External Error	±0.60			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F23094	17.0 %	✓	6030.84	±86.87	23680.21	±340.60	0.9985
20F23095	17.0 %	✓	5929.78	±93.59	23290.17	±367.16	0.9987
20F23097	17.0 %	✓	5342.01	±81.46	20997.93	±319.77	0.9987
20F23098	17.0 %	✓	4371.75	±65.06	17250.14	±256.34	0.9986
20F23100	17.0 %	✓	8729.76	±222.01	34077.34	±866.23	0.9995
20F23101	17.0 %	✓	11973.98	±282.53	46715.15	±1101.65	0.9994
20F23103	17.0 %	✓	301.31	±1.38	1464.23	±6.63	0.9848
20F23104	17.0 %	✓	7632.04	±255.74	29787.77	±997.86	0.9997
20F23106	17.0 %	✓	45911.77	±6529.73	178188.05	±25342.11	1.0000
20F23107	17.0 %	✓	3113.40	±35.32	12367.05	±139.96	0.9976
20F23109	17.0 %	✓	24371.56	±1273.02	94744.14	±4948.27	0.9999
20F23110	17.0 %	✓	4772.39	±76.27	18810.12	±300.25	0.9988
20F23112	17.0 %	✓	56190.15	±10689.76	217906.34	±41454.73	1.0000
20F23113	17.0 %	✓	6764.31	±231.48	26456.44	±905.10	0.9997
20F23115	17.0 %	✓	78106.27	±38280.92	302924.59	±148467.17	1.0000
20F23116	17.0 %	✓	21492.95	±1469.88	83622.13	±5718.46	0.9999
20F23118	17.0 %		88.21	±0.34	638.64	±2.41	0.9775
20F23119	17.0 %	✓	9416.44	±338.29	36755.10	±1320.14	0.9997
20F23121	17.0 %	✓	25380.78	±2581.04	98426.49	±10008.96	1.0000
20F23122	17.0 %	✓	16048.83	±1068.50	62444.75	±4157.13	0.9999
20F23124	17.0 %	✓	33775.96	±4430.52	131151.55	±17203.32	1.0000
20F23125	17.0 %	✓	51942.79	±17569.38	201383.12	±68116.61	1.0000
20F23127	17.0 %	✓	7862.74	±297.53	30774.79	±1164.26	0.9998
20F23128	17.0 %	✓	19771.28	±1160.68	76918.52	±4515.14	0.9999
20F23130	17.0 %	✓	6236.45	±258.51	24474.55	±1014.32	0.9998
20F23131	17.0 %	✓	1975170.69	±15415788.52	7659368.09	±59779743.82	1.0000
20F23133	17.0 %	✓	10455.59	±692.11	40777.97	±2699.11	0.9999
20F23134	17.0 %	✓	6912.65	±213.39	27080.78	±835.69	0.9997
20F23136	17.0 %	✓	18533.39	±1591.07	72116.57	±6190.84	1.0000
20F23137	17.0 %	✓	4747.75	±83.31	18703.74	±327.87	0.9990

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**293.89**	**±5.31**	3.87793	±0.00211	**11.48**	**±0.04**	10.21
Error Chron		**±1.81%**		±0.05%		**±0.31%**	0%
					Full External Error	±0.60	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.54	Convergence	0.000000001152
	Error Magnification	3.1961	Number of Iterations	1
	Number of Data Points	29	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F23094	17.0 %	✓	0.2546785	±0.0002010	0.00004223	±0.00000061	0.0005
20F23095	17.0 %	✓	0.2546045	±0.0002017	0.00004294	±0.00000068	0.0005
20F23097	17.0 %	✓	0.2544066	±0.0002013	0.00004762	±0.00000073	0.0006
20F23098	17.0 %	✓	0.2534326	±0.0002026	0.00005797	±0.00000086	0.0007
20F23100	17.0 %	✓	0.2561748	±0.0002047	0.00002935	±0.00000075	0.0005
20F23101	17.0 %	✓	0.2563190	±0.0002019	0.00002141	±0.00000050	0.0003
20F23103	17.0 %	✓	0.2057788	±0.0001644	0.00068295	±0.00000309	0.0019
20F23104	17.0 %	✓	0.2562137	±0.0002076	0.00003357	±0.00000112	0.0005
20F23106	17.0 %	✓	0.2576591	±0.0002090	0.00000561	±0.00000080	0.0002
20F23107	17.0 %	✓	0.2517498	±0.0001993	0.00008086	±0.00000092	0.0008
20F23109	17.0 %	✓	0.2572355	±0.0002048	0.00001055	±0.00000055	0.0002
20F23110	17.0 %	✓	0.2537142	±0.0002016	0.00005316	±0.00000085	0.0007
20F23112	17.0 %	✓	0.2578638	±0.0002087	0.00000459	±0.00000087	0.0001
20F23113	17.0 %	✓	0.2556771	±0.0002110	0.00003780	±0.00000129	0.0008
20F23115	17.0 %	✓	0.2578406	±0.0002175	0.00000330	±0.00000162	0.0001
20F23116	17.0 %	✓	0.2570247	±0.0002044	0.00001196	±0.00000082	0.0002
20F23118	17.0 %		0.1381136	±0.0001125	0.00156582	±0.00000591	0.0025
20F23119	17.0 %	✓	0.2561942	±0.0002083	0.00002721	±0.00000098	0.0005
20F23121	17.0 %	✓	0.2578653	±0.0002122	0.00001016	±0.00000103	0.0002
20F23122	17.0 %	✓	0.2570085	±0.0002122	0.00001601	±0.00000107	0.0004
20F23124	17.0 %	✓	0.2575338	±0.0002100	0.00000762	±0.00000100	0.0002
20F23125	17.0 %	✓	0.2579302	±0.0002196	0.00000497	±0.00000168	0.0001
20F23127	17.0 %	✓	0.2554927	±0.0002089	0.00003249	±0.00000123	0.0005
20F23128	17.0 %	✓	0.2570419	±0.0002067	0.00001300	±0.00000076	0.0002
20F23130	17.0 %	✓	0.2548134	±0.0002118	0.00004086	±0.00000169	0.0007
20F23131	17.0 %	✓	0.2578765	±0.0002139	0.00000013	±0.00000102	0.0000
20F23133	17.0 %	✓	0.2564030	±0.0002176	0.00002452	±0.00000162	0.0006
20F23134	17.0 %	✓	0.2552602	±0.0002060	0.00003693	±0.00000114	0.0006
20F23136	17.0 %	✓	0.2569921	±0.0002137	0.00001387	±0.00000119	0.0003
20F23137	17.0 %	✓	0.2538394	±0.0002018	0.00005347	±0.00000094	0.0007

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**297.44**	**±3.69**	3.87421	±0.00150	**11.47**	**±0.04**	4.89
Error Chron		**±1.24%**		±0.04%		**±0.31%**	0%
					Full External Error	±0.60	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.54	Convergence	0.0001164731
	Error Magnification	2.2109	Number of Iterations	2
	Number of Data Points	29	Calculated Line	Weighted York-2
	Spreading Factor	20.2%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F23094	17.0%	✓	0.0765607	0.72	0.0000000	0.00	0.0012371	2.52	0.0000000	0.00	4.576763	2.51	0.0144317	0.74	0.0000000	0.00	5.576258	0.10	0.0008238	9.95	0.0000000	0.00	461.7254	0.04	0.0029406	2.68	1790.116	0.01	22.8580	0.73	0.0000000	0.00	0.2802673	9.65
20F23095	17.0%	✓	0.0635536	0.79	0.0000000	0.00	0.0018088	1.75	0.0000000	0.00	6.691701	1.74	0.0119799	0.80	0.0000000	0.00	4.551329	0.10	0.0012045	9.79	0.0000000	0.00	376.8592	0.04	0.0042994	1.97	1461.200	0.01	18.9746	0.80	0.0000000	0.00	0.2287536	9.65
20F23097	17.0%	✓	0.0692157	0.76	0.0000000	0.00	0.0011134	2.74	0.0000000	0.00	4.119058	2.74	0.0130472	0.78	0.0000000	0.00	4.465484	0.10	0.0007414	10.01	0.0000000	0.00	369.7511	0.04	0.0026465	2.89	1432.721	0.01	20.6650	0.77	0.0000000	0.00	0.2244389	9.65
20F23098	17.0%	✓	0.0672385	0.74	0.0000000	0.00	0.0009356	3.06	0.0000017	159.21	3.461288	3.06	0.0126745	0.76	0.0000000	0.00	3.550034	0.10	0.0006230	10.10	0.0080347	159.21	293.9500	0.04	0.0022239	3.19	1139.800	0.01	20.0747	0.75	0.0000000	0.00	0.1784276	9.65
20F23100	17.0%	✓	0.0300974	1.27	0.0000000	0.00	0.0006496	4.33	0.0000000	0.00	2.403077	4.33	0.0056734	1.28	0.0000000	0.00	3.173142	0.10	0.0004326	10.56	0.0000000	0.00	262.7426	0.04	0.0015440	4.43	1016.652	0.01	8.9859	1.28	0.0000000	0.00	0.1594847	9.65
20F23101	17.0%	✓	0.0364327	1.18	0.0000000	0.00	0.0012039	2.44	0.0000000	0.00	4.454078	2.43	0.0068676	1.19	0.0000000	0.00	5.268526	0.10	0.0008017	9.93	0.0000000	0.00	436.2446	0.04	0.0028617	2.60	1691.082	0.01	10.8774	1.18	0.0000000	0.00	0.2648005	9.65
20F23103	17.0%	✓	0.8416695	0.23	0.0000000	0.00	0.0006767	4.55	0.0000000	0.00	2.503610	4.55	0.1586547	0.28	0.0000000	0.00	3.062743	0.10	0.0004506	10.65	0.0000000	0.00	253.6013	0.04	0.0016086	4.64	981.109	0.06	251.2889	0.25	0.0000000	0.00	0.1539360	9.65
20F23104	17.0%	✓	0.0236336	1.67	0.0000000	0.00	0.0006005	5.24	0.0000000	0.00	2.221701	5.24	0.0044549	1.68	0.0000000	0.00	2.178357	0.10	0.0003999	10.96	0.0000000	0.00	180.3723	0.04	0.0014274	5.32	696.936	0.02	7.0560	1.68	0.0000000	0.00	0.1094860	9.65
20F23106	17.0%	✓	0.0042603	7.11	0.0000000	0.00	0.0005308	5.74	0.0000012	207.04	1.963720	5.74	0.0008031	7.11	0.0000000	0.00	2.362236	0.10	0.0003535	11.21	0.0055760	207.04	195.5979	0.04	0.0012617	5.81	757.863	0.01	1.2720	7.11	0.0000000	0.00	0.1187280	9.65
20F23107	17.0%	✓	0.1099678	0.57	0.0000000	0.00	0.0009933	3.08	0.0000041	76.22	3.674943	3.08	0.0207289	0.59	0.0000000	0.00	4.134851	0.10	0.0006615	10.11	0.0190398	76.23	342.3740	0.04	0.0023612	3.21	1327.145	0.01	32.8320	0.58	0.0000000	0.00	0.2078210	9.65
20F23109	17.0%	✓	0.0138089	2.61	0.0000000	0.00	0.0008499	3.55	0.0000000	0.00	3.144421	3.54	0.0026030	2.62	0.0000000	0.00	4.064434	0.10	0.0005660	10.26	0.0000000	0.00	336.5433	0.04	0.0020203	3.66	1304.185	0.01	4.1228	2.61	0.0000000	0.00	0.2042818	9.65
20F23110	17.0%	✓	0.0635685	0.80	0.0000000	0.00	0.0008495	3.69	0.0000000	0.00	3.142744	3.69	0.0119827	0.81	0.0000000	0.00	3.663849	0.10	0.0005657	10.31	0.0000000	0.00	303.3741	0.04	0.0020192	3.80	1176.753	0.01	18.9790	0.80	0.0000000	0.00	0.1841481	9.65
20F23112	17.0%	✓	0.0032355	9.51	0.0000000	0.00	0.0006360	4.88	0.0000000	0.00	2.353062	4.88	0.0006099	9.51	0.0000000	0.00	2.195632	0.10	0.0004236	10.80	0.0000000	0.00	181.8028	0.04	0.0015118	4.97	704.068	0.01	0.9660	9.51	0.0000000	0.00	0.1103543	9.65
20F23113	17.0%	✓	0.0197725	1.71	0.0000000	0.00	0.0004919	5.74	0.0000011	195.14	1.819743	5.74	0.0037271	1.72	0.0000000	0.00	1.615264	0.10	0.0003276	11.21	0.0049924	195.14	133.7471	0.04	0.0011692	5.81	517.206	0.02	5.9033	1.71	0.0000000	0.00	0.0811845	9.65
20F23115	17.0%	✓	0.0013293	24.51	0.0000000	0.00	0.0002642	11.19	0.0000000	0.00	0.977498	11.19	0.0002506	24.51	0.0000000	0.00	1.253908	0.10	0.0001759	14.76	0.0000000	0.00	103.8261	0.04	0.0006280	11.23	402.278	0.03	0.3969	24.51	0.0000000	0.00	0.0630224	9.65
20F23116	17.0%	✓	0.0114091	3.42	0.0000000	0.00	0.0006812	4.48	0.0000000	0.00	2.520106	4.48	0.0021506	3.42	0.0000000	0.00	2.961457	0.10	0.0004536	10.62	0.0000000	0.00	245.2146	0.04	0.0016192	4.57	950.644	0.01	3.4063	3.42	0.0000000	0.00	0.1488453	9.65
20F23118	17.0%		1.7976114	0.19	0.0000000	0.00	0.0006113	4.93	0.0000062	36.95	2.261438	4.92	0.3388498	0.25	0.0000000	0.00	1.914912	0.10	0.0004071	10.82	0.0289825	36.96	158.5586	0.04	0.0014530	5.01	611.336	0.19	536.6949	0.22	0.0000000	0.00	0.0962451	9.65
20F23119	17.0%	✓	0.0202096	1.80	0.0000000	0.00	0.0006406	4.86	0.0000042	55.44	2.370143	4.86	0.0038095	1.80	0.0000000	0.00	2.298281	0.10	0.0004266	10.79	0.0197928	55.45	190.3023	0.04	0.0015228	4.95	736.771	0.02	6.0338	1.80	0.0000000	0.00	0.1155135	9.65
20F23121	17.0%	✓	0.0061454	5.08	0.0000000	0.00	0.0004276	6.72	0.0000000	0.00	1.581968	6.72	0.0011584	5.09	0.0000000	0.00	1.883702	0.10	0.0002848	11.74	0.0000000	0.00	155.9744	0.04	0.0010164	6.78	603.033	0.02	1.8348	5.09	0.0000000	0.00	0.0946764	9.65
20F23122	17.0%	✓	0.0083466	3.33	0.0000000	0.00	0.0004071	7.22	0.0000000	0.00	1.506002	7.21	0.0015733	3.33	0.0000000	0.00	1.617749	0.10	0.0002711	12.03	0.0000000	0.00	133.9528	0.04	0.0009676	7.27	518.708	0.02	2.4920	3.33	0.0000000	0.00	0.0813094	9.65
20F23124	17.0%	✓	0.0049738	6.56	0.0000000	0.00	0.0005163	5.79	0.0000015	154.96	1.909986	5.79	0.0009376	6.56	0.0000000	0.00	2.028864	0.10	0.0003438	11.23	0.0068449	154.97	167.9941	0.04	0.0012272	5.86	650.833	0.02	1.4850	6.56	0.0000000	0.00	0.1019724	9.65
20F23125	17.0%	✓	0.0018654	16.91	0.0000000	0.00	0.0002857	10.87	0.0000002	926.24	1.056935	10.87	0.0003516	16.91	0.0000000	0.00	1.170203	0.10	0.0001902	14.52	0.0010160	926.24	96.8952	0.04	0.0006791	10.91	375.107	0.03	0.5569	16.91	0.0000000	0.00	0.0588154	9.65
20F23127	17.0%	✓	0.0191060	1.89	0.0000000	0.00	0.0004850	6.34	0.0000000	0.00	1.794390	6.34	0.0036015	1.90	0.0000000	0.00	1.814269	0.10	0.0003230	11.53	0.0000000	0.00	150.2251	0.04	0.0011529	6.40	582.278	0.02	5.7043	1.89	0.0000000	0.00	0.0911867	9.65
20F23128	17.0%	✓	0.0122970	2.94	0.0000000	0.00	0.0007089	4.39	0.0000000	0.00	2.622478	4.38	0.0023180	2.94	0.0000000	0.00	2.936260	0.10	0.0004720	10.58	0.0000000	0.00	243.1283	0.04	0.0016849	4.48	942.199	0.01	3.6714	2.94	0.0000000	0.00	0.1475789	9.65
20F23130	17.0%	✓	0.0170299	2.07	0.0000000	0.00	0.0003311	8.89	0.0000006	369.74	1.224939	8.89	0.0032101	2.08	0.0000000	0.00	1.282647	0.10	0.0002205	13.11	0.0027181	369.75	106.2058	0.04	0.0007870	8.94	411.714	0.03	5.0844	2.07	0.0000000	0.00	0.0644669	9.65
20F23131	17.0%	✓	0.0000701	390.24	0.0000000	0.00	0.0005094	5.42	0.0000004	572.16	1.884485	5.42	0.0000132	390.24	0.0000000	0.00	1.673104	0.10	0.0003392	11.05	0.0018477	572.16	138.5364	0.04	0.0012108	5.50	537.241	0.02	0.0209	390.24	0.0000000	0.00	0.0840916	9.65
20F23133	17.0%	✓	0.0098116	3.31	0.0000000	0.00	0.0002750	11.40	0.0000000	0.00	1.017429	11.40	0.0018495	3.31	0.0000000	0.00	1.238931	0.10	0.0001831	14.92	0.0000000	0.00	102.5860	0.04	0.0006537	11.43	397.167	0.03	2.9293	3.31	0.0000000	0.00	0.0622697	9.65
20F23134	17.0%	✓	0.0275071	1.54	0.0000000	0.00	0.0006027	4.82	0.0000009	276.35	2.229740	4.82	0.0051851	1.55	0.0000000	0.00	2.296405	0.10	0.0004014	10.77	0.0040619	276.35	190.1469	0.04	0.0014326	4.90	736.702	0.02	8.2125	1.55	0.0000000	0.00	0.1154192	9.65
20F23136	17.0%	✓	0.0071173	4.29	0.0000000	0.00	0.0003949	7.67	0.0000003	608.62	1.460846	7.67	0.0013416	4.30	0.0000000	0.00	1.593040	0.10	0.0002630	12.31	0.0016186	608.62	131.9069	0.04	0.0009386	7.72	511.147	0.02	2.1249	4.29	0.0000000	0.00	0.0800675	9.65
20F23137	17.0%	✓	0.0556255	0.88	0.0000000	0.00	0.0008679	3.56	0.0000000	0.00	3.210784	3.55	0.0104854	0.89	0.0000000	0.00	3.189483	0.10	0.0005779	10.26	0.0000000	0.00	264.0956	0.04	0.0020629	3.67	1023.797	0.02	16.6075	0.88	0.0000000	0.00	0.1603060	9.65
		Σ	3.4233298	0.13	0.0000000	0.00	0.0205858	0.80	0.0000223	36.74	76.159079	0.80	0.6452977	0.16	0.0000000	0.00	81.015353	0.02	0.0137086	2.11	0.1045253	36.74	6708.2349	0.01	0.0489322	0.82	25987.792	0.01	1022.0694	0.14	0.0000000	0.00	4.0718986	1.93
		Σ							3.4439380	0.13	76.159079	0.80									81.778884	0.05			6708.2838	0.01							27013.933	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F23094	17.0 %	✓	3.927101	0.001549	0.009912	0.000249	0.000168	0.000001	131.329	13.416452	1.00092797	6.419E-11
20F23095	17.0 %	✓	3.928222	0.001555	0.017756	0.000309	0.000173	0.000001	131.335	13.418108	1.00092802	5.241E-11
20F23097	17.0 %	✓	3.931294	0.001554	0.011140	0.000305	0.000190	0.000001	131.347	13.421237	1.00092810	5.146E-11
20F23098	17.0 %	✓	3.946400	0.001576	0.011775	0.000360	0.000232	0.000002	131.353	13.422894	1.00092814	4.107E-11
20F23100	17.0 %	✓	3.904168	0.001559	0.009146	0.000396	0.000117	0.000001	131.365	13.426025	1.00092823	3.631E-11
20F23101	17.0 %	✓	3.901970	0.001536	0.010210	0.000249	0.000086	0.000001	131.371	13.427498	1.00092827	6.026E-11
20F23103	17.0 %	✓	4.860163	0.001941	0.009872	0.000449	0.003322	0.000008	131.383	13.430814	1.00092835	4.363E-11
20F23104	17.0 %	✓	3.903568	0.001581	0.012317	0.000645	0.000134	0.000002	131.389	13.432287	1.00092839	2.493E-11
20F23106	17.0 %	✓	3.881679	0.001573	0.010040	0.000576	0.000025	0.000002	131.401	13.435420	1.00092848	2.688E-11
20F23107	17.0 %	✓	3.972777	0.001572	0.010734	0.000330	0.000324	0.000002	131.407	13.437079	1.00092852	4.815E-11
20F23109	17.0 %	✓	3.888071	0.001547	0.009343	0.000331	0.000044	0.000001	131.419	13.440212	1.00092860	4.632E-11
20F23110	17.0 %	✓	3.942024	0.001565	0.010359	0.000382	0.000212	0.000002	131.425	13.441872	1.00092865	4.234E-11
20F23112	17.0 %	✓	3.878591	0.001569	0.012943	0.000632	0.000021	0.000002	131.437	13.445006	1.00092873	2.496E-11
20F23113	17.0 %	✓	3.911756	0.001613	0.013606	0.000781	0.000152	0.000003	131.442	13.446482	1.00092877	1.852E-11
20F23115	17.0 %	✓	3.878948	0.001635	0.009415	0.001053	0.000015	0.000003	131.454	13.449618	1.00092885	1.426E-11
20F23116	17.0 %	✓	3.891258	0.001546	0.010277	0.000461	0.000049	0.000002	131.460	13.451278	1.00092890	3.378E-11
20F23118	17.0 %		7.240959	0.002948	0.014262	0.000702	0.011341	0.000022	131.472	13.454415	1.00092898	4.064E-11
20F23119	17.0 %	✓	3.903865	0.001586	0.012455	0.000605	0.000110	0.000002	131.478	13.456076	1.00092903	2.630E-11
20F23121	17.0 %	✓	3.878575	0.001595	0.010142	0.000682	0.000042	0.000002	131.490	13.459214	1.00092911	2.142E-11
20F23122	17.0 %	✓	3.891500	0.001606	0.011243	0.000811	0.000065	0.000002	131.496	13.460691	1.00092915	1.845E-11
20F23124	17.0 %	✓	3.883564	0.001582	0.011369	0.000658	0.000033	0.000002	131.508	13.464015	1.00092924	2.310E-11
20F23125	17.0 %	✓	3.877597	0.001650	0.010908	0.001186	0.000022	0.000003	131.514	13.465493	1.00092928	1.330E-11
20F23127	17.0 %	✓	3.914582	0.001599	0.011945	0.000757	0.000130	0.000002	131.526	13.468633	1.00092936	2.082E-11
20F23128	17.0 %	✓	3.890997	0.001564	0.010786	0.000473	0.000053	0.000001	131.532	13.470296	1.00092940	3.349E-11
20F23130	17.0 %	✓	3.925018	0.001630	0.011534	0.001026	0.000163	0.000003	131.544	13.473437	1.00092949	1.476E-11
20F23131	17.0 %	✓	3.878399	0.001607	0.013603	0.000737	0.000003	0.000002	131.550	13.475101	1.00092953	1.902E-11
20F23133	17.0 %	✓	3.900692	0.001654	0.009918	0.001130	0.000098	0.000003	131.562	13.478243	1.00092961	1.417E-11
20F23134	17.0 %	✓	3.918149	0.001580	0.011726	0.000565	0.000148	0.000002	131.567	13.479722	1.00092965	2.637E-11
20F23136	17.0 %	✓	3.891749	0.001617	0.011075	0.000849	0.000057	0.000002	131.580	13.483051	1.00092974	1.817E-11
20F23137	17.0 %	✓	3.940074	0.001565	0.012158	0.000432	0.000214	0.000002	131.585	13.484530	1.00092978	3.684E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F23094	17.0 %	0.0055835 ±0.0001832	0.0177515 ±0.0058280	0.0090420 ±0.0056997	0.0185922 ±0.0063965	1.3180716 ±0.0159731
20F23095	17.0 %	0.0055835 ±0.0001832	0.0177515 ±0.0058280	0.0090420 ±0.0056997	0.0185922 ±0.0063965	1.3180716 ±0.0159731
20F23097	17.0 %	0.0055118 ±0.0001855	0.0172075 ±0.0055553	0.0258646 ±0.0066346	0.0193315 ±0.0060141	1.2538637 ±0.0163726
20F23098	17.0 %	0.0055118 ±0.0001855	0.0172075 ±0.0055553	0.0258646 ±0.0066346	0.0193315 ±0.0060141	1.2538637 ±0.0163726
20F23100	17.0 %	0.0056606 ±0.0001575	0.0174556 ±0.0056472	0.0012928 ±0.0071288	0.0042017 ±0.0057033	1.3436973 ±0.0164411
20F23101	17.0 %	0.0056606 ±0.0001575	0.0174556 ±0.0056472	0.0012928 ±0.0071288	0.0042017 ±0.0057033	1.3436973 ±0.0164411
20F23103	17.0 %	0.0054718 ±0.0001807	0.0143838 ±0.0063463	0.0040747 ±0.0066952	0.0151647 ±0.0064977	1.2582580 ±0.0160883
20F23104	17.0 %	0.0054718 ±0.0001807	0.0143838 ±0.0063463	0.0040747 ±0.0066952	0.0151647 ±0.0064977	1.2582580 ±0.0160883
20F23106	17.0 %	0.0060966 ±0.0001832	0.0158122 ±0.0056449	0.0149540 ±0.0070443	0.0175900 ±0.0056784	1.4512126 ±0.0165181
20F23107	17.0 %	0.0060966 ±0.0001832	0.0158122 ±0.0056449	0.0149540 ±0.0070443	0.0175900 ±0.0056784	1.4512126 ±0.0165181
20F23109	17.0 %	0.0066243 ±0.0001890	0.0092569 ±0.0056754	0.0146243 ±0.0068190	0.0170324 ±0.0063203	1.6838238 ±0.0162640
20F23110	17.0 %	0.0066243 ±0.0001890	0.0092569 ±0.0056754	0.0146243 ±0.0068190	0.0170324 ±0.0063203	1.6838238 ±0.0162640
20F23112	17.0 %	0.0058018 ±0.0001669	0.0207325 ±0.0059706	0.0052663 ±0.0058655	0.0016764 ±0.0062627	1.4459369 ±0.0163464
20F23113	17.0 %	0.0058018 ±0.0001669	0.0207325 ±0.0059706	0.0052663 ±0.0058655	0.0016764 ±0.0062627	1.4459369 ±0.0163464
20F23115	17.0 %	0.0074447 ±0.0002027	0.0113442 ±0.0058487	0.0000776 ±0.0060667	0.0116670 ±0.0062354	1.7683319 ±0.0145563
20F23116	17.0 %	0.0074447 ±0.0002027	0.0113442 ±0.0058487	0.0000776 ±0.0060667	0.0116670 ±0.0062354	1.7683319 ±0.0145563
20F23118	17.0 %	0.0055118 ±0.0001855	0.0172075 ±0.0055553	0.0258646 ±0.0066346	0.0193315 ±0.0060141	1.2538637 ±0.0163726
20F23119	17.0 %	0.0055118 ±0.0001855	0.0172075 ±0.0055553	0.0258646 ±0.0066346	0.0193315 ±0.0060141	1.2538637 ±0.0163726
20F23121	17.0 %	0.0056606 ±0.0001575	0.0174556 ±0.0056472	0.0012928 ±0.0071288	0.0042017 ±0.0057033	1.3436973 ±0.0164411
20F23122	17.0 %	0.0056606 ±0.0001575	0.0174556 ±0.0056472	0.0012928 ±0.0071288	0.0042017 ±0.0057033	1.3436973 ±0.0164411
20F23124	17.0 %	0.0077611 ±0.0002026	0.0161180 ±0.0056662	0.0044382 ±0.0066870	0.0254343 ±0.0064443	2.0096964 ±0.0149974
20F23125	17.0 %	0.0077611 ±0.0002026	0.0161180 ±0.0056662	0.0044382 ±0.0066870	0.0254343 ±0.0064443	2.0096964 ±0.0149974
20F23127	17.0 %	0.0054718 ±0.0001807	0.0143838 ±0.0063463	0.0040747 ±0.0066952	0.0151647 ±0.0064977	1.2582580 ±0.0160883
20F23128	17.0 %	0.0054718 ±0.0001807	0.0143838 ±0.0063463	0.0040747 ±0.0066952	0.0151647 ±0.0064977	1.2582580 ±0.0160883
20F23130	17.0 %	0.0060966 ±0.0001832	0.0158122 ±0.0056449	0.0149540 ±0.0070443	0.0175900 ±0.0056784	1.4512126 ±0.0165181
20F23131	17.0 %	0.0060966 ±0.0001832	0.0158122 ±0.0056449	0.0149540 ±0.0070443	0.0175900 ±0.0056784	1.4512126 ±0.0165181
20F23133	17.0 %	0.0066243 ±0.0001890	0.0092569 ±0.0056754	0.0146243 ±0.0068190	0.0170324 ±0.0063203	1.6838238 ±0.0162640
20F23134	17.0 %	0.0066243 ±0.0001890	0.0092569 ±0.0056754	0.0146243 ±0.0068190	0.0170324 ±0.0063203	1.6838238 ±0.0162640
20F23136	17.0 %	0.0058018 ±0.0001669	0.0207325 ±0.0059706	0.0052663 ±0.0058655	0.0016764 ±0.0062627	1.4459369 ±0.0163464
20F23137	17.0 %	0.0058018 ±0.0001669	0.0207325 ±0.0059706	0.0052663 ±0.0058655	0.0016764 ±0.0062627	1.4459369 ±0.0163464

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F23094	17.0 %	0.0825105 ±0.0004977	0.9450	EXP 150 of 150	0.3236725 ±0.0061576	0.2193	EXP 150 of 150	5.5614360 ±0.0065900	0.9870	EXP 149 of 150	461.45106 ±0.02814	1.0000	EXP 150 of 150	1814.5719 ±0.0626	1.0000	EXP 150 of 150
20F23095	17.0 %	0.0702143 ±0.0004481	0.9484	EXP 150 of 150	0.4813841 ±0.0061313	0.4689	EXP 150 of 150	4.5532178 ±0.0074287	0.9754	EXP 149 of 150	376.64060 ±0.02542	1.0000	EXP 150 of 150	1481.7217 ±0.0534	1.0000	EXP 150 of 150
20F23097	17.0 %	0.0750537 ±0.0004739	0.9343	EXP 149 of 150	0.2899623 ±0.0062023	0.1681	EXP 150 of 150	4.4400416 ±0.0073593	0.9753	EXP 149 of 150	369.53608 ±0.02385	1.0000	EXP 149 of 150	1454.8647 ±0.0546	1.0000	EXP 150 of 150
20F23098	17.0 %	0.0729245 ±0.0004448	0.9247	EXP 148 of 150	0.2408787 ±0.0055163	0.1973	EXP 150 of 150	3.5475516 ±0.0059726	0.9740	EXP 149 of 150	293.78310 ±0.02431	0.9999	EXP 150 of 150	1161.3068 ±0.0486	1.0000	EXP 150 of 150
20F23100	17.0 %	0.0360633 ±0.0003395	0.9618	EXP 150 of 150	0.1616848 ±0.0052695	0.0491	EXP 150 of 150	3.1665867 ±0.0067197	0.9574	EXP 149 of 150	262.57987 ±0.02113	0.9999	EXP 150 of 150	1027.1409 ±0.0440	1.0000	EXP 150 of 150
20F23101	17.0 %	0.0428760 ±0.0003891	0.9774	EXP 149 of 150	0.3145428 ±0.0056328	0.2551	EXP 147 of 150	5.2515862 ±0.0077509	0.9793	EXP 150 of 150	435.97193 ±0.02515	1.0000	EXP 149 of 150	1703.5682 ±0.0522	1.0000	EXP 147 of 150
20F23103	17.0 %	0.8383889 ±0.0013589	0.9642	EXP 150 of 150	0.1721844 ±0.0055905	0.0702	EXP 150 of 150	3.2049805 ±0.0065454	0.9604	EXP 150 of 150	253.45548 ±0.02101	0.9999	EXP 150 of 150	1233.8099 ±0.0459	1.0000	EXP 150 of 150
20F23104	17.0 %	0.0294347 ±0.0003438	0.9462	EXP 150 of 150	0.1511585 ±0.0058695	0.0694	EXP 150 of 150	2.1786813 ±0.0063643	0.9234	EXP 150 of 150	180.27325 ±0.01703	0.9999	EXP 150 of 150	705.3594 ±0.0377	1.0000	EXP 150 of 150
20F23106	17.0 %	0.0108353 ±0.0002349	0.9809	EXP 147 of 150	0.1304734 ±0.0061814	0.0395	EXP 150 of 150	2.3553748 ±0.0068301	0.9241	EXP 150 of 150	195.49134 ±0.01837	0.9999	EXP 150 of 150	760.7045 ±0.0465	1.0000	EXP 150 of 150
20F23107	17.0 %	0.1158196 ±0.0005613	0.8437	EXP 150 of 150	0.2579156 ±0.0061557	0.1444	EXP 150 of 150	4.1627238 ±0.0068356	0.9754	EXP 150 of 150	342.17435 ±0.02230	1.0000	EXP 148 of 150	1361.6361 ±0.0528	1.0000	EXP 149 of 150
20F23109	17.0 %	0.0211190 ±0.0003000	0.9825	EXP 148 of 150	0.2249005 ±0.0059774	0.1279	EXP 149 of 150	4.0471453 ±0.0072003	0.9707	EXP 150 of 150	336.34648 ±0.02611	0.9999	EXP 150 of 150	1310.1962 ±0.0486	1.0000	EXP 150 of 150
20F23110	17.0 %	0.0703212 ±0.0004530	0.9292	EXP 149 of 150	0.2247467 ±0.0064286	0.1320	EXP 150 of 150	3.6316355 ±0.0058393	0.9757	EXP 150 of 150	303.19850 ±0.02112	1.0000	EXP 150 of 150	1197.5998 ±0.0498	1.0000	EXP 150 of 150
20F23112	17.0 %	0.0096300 ±0.0002525	0.9761	EXP 148 of 150	0.1544318 ±0.0060809	0.0551	EXP 150 of 150	2.1661762 ±0.0070366	0.9080	EXP 150 of 150	181.68932 ±0.01640	0.9999	EXP 149 of 150	706.5905 ±0.0408	1.0000	EXP 150 of 150
20F23113	17.0 %	0.0258404 ±0.0002868	0.9563	EXP 150 of 150	0.1147161 ±0.0049451	0.0279	EXP 149 of 150	1.6199770 ±0.0065707	0.8723	EXP 150 of 150	133.66413 ±0.01469	0.9999	EXP 149 of 150	524.6365 ±0.0351	0.9999	EXP 150 of 150
20F23115	17.0 %	0.0090203 ±0.0002486	0.9622	EXP 150 of 150	0.0613968 ±0.0056522	0.0151	EXP 150 of 150	1.2497841 ±0.0064419	0.8057	EXP 150 of 150	103.77174 ±0.01366	0.9998	EXP 149 of 150	404.5067 ±0.0287	0.9999	EXP 150 of 150
20F23116	17.0 %	0.0193996 ±0.0003263	0.9719	EXP 149 of 150	0.1761676 ±0.0059879	0.0759	EXP 150 of 150	2.9189921 ±0.0061378	0.9614	EXP 150 of 150	245.07049 ±0.01629	1.0000	EXP 150 of 150	955.9677 ±0.0449	1.0000	EXP 149 of 150
20F23118	17.0 %	1.7836114 ±0.0018978	0.9885	EXP 150 of 150	0.1510185 ±0.0061100	0.1150	EXP 149 of 150	2.2585975 ±0.0064095	0.9275	EXP 150 of 150	158.47761 ±0.01740	0.9999	EXP 150 of 150	1149.3807 ±0.0469	1.0000	EXP 149 of 150
20F23119	17.0 %	0.0261329 ±0.0003039	0.9624	EXP 149 of 150	0.1590832 ±0.0064890	0.0157	EXP 150 of 150	2.2977786 ±0.0064085	0.9334	EXP 150 of 150	190.20102 ±0.01941	0.9999	EXP 150 of 150	744.1744 ±0.0389	1.0000	EXP 148 of 150
20F23121	17.0 %	0.0121600 ±0.0002641	0.9677	EXP 149 of 150	0.1001834 ±0.0055154	0.0628	EXP 148 of 150	1.8790327 ±0.0064556	0.8998	EXP 149 of 150	155.87945 ±0.01741	0.9999	EXP 150 of 150	606.3059 ±0.0391	0.9999	EXP 148 of 150
20F23122	17.0 %	0.0143163 ±0.0002228	0.9734	EXP 146 of 150	0.0945221 ±0.0057603	0.0154	EXP 150 of 150	1.5999384 ±0.0069652	0.8299	EXP 149 of 150	133.87202 ±0.01528	0.9999	EXP 150 of 150	522.6250 ±0.0331	0.9999	EXP 150 of 150
20F23124	17.0 %	0.0131912 ±0.0002491	0.9710	EXP 150 of 150	0.1258626 ±0.0059221	0.0460	EXP 150 of 150	2.0425980 ±0.0063617	0.9174	EXP 148 of 150	167.91284 ±0.01710	0.9999	EXP 149 of 150	654.4301 ±0.0375	1.0000	EXP 150 of 150
20F23125	17.0 %	0.0098884 ±0.0002352	0.9617	EXP 150 of 150	0.0624416 ±0.0063811	0.0070	EXP 150 of 150	1.1768722 ±0.0059004	0.8004	EXP 148 of 150	96.85910 ±0.01321	0.9998	EXP 150 of 150	377.7330 ±0.0291	0.9999	EXP 149 of 150
20F23127	17.0 %	0.0248435 ±0.0003053	0.9448	EXP 150 of 150	0.1189581 ±0.0055518	0.0632	EXP 149 of 150	1.8032176 ±0.0061209	0.9048	EXP 149 of 150	150.14498 ±0.01560	0.9999	EXP 150 of 150	589.3315 ±0.0329	1.0000	EXP 150 of 150
20F23128	17.0 %	0.0183321 ±0.0003055	0.9721	EXP 149 of 150	0.1804696 ±0.0056693	0.0476	EXP 149 of 150	2.9266909 ±0.0068066	0.9519	EXP 150 of 150	242.98897 ±0.02132	0.9999	EXP 150 of 150	947.2762 ±0.0466	1.0000	EXP 150 of 150
20F23130	17.0 %	0.0232638 ±0.0002943	0.9209	EXP 150 of 150	0.0751811 ±0.0057870	0.0038	EXP 150 of 150	1.2745819 ±0.0063644	0.8087	EXP 150 of 150	106.15594 ±0.01215	0.9999	EXP 149 of 150	418.3139 ±0.0283	0.9999	EXP 147 of 150
20F23131	17.0 %	0.0065313 ±0.0001973	0.9812	EXP 147 of 150	0.1241575 ±0.0050398	0.1070	EXP 148 of 150	1.6612849 ±0.0066055	0.8706	EXP 150 of 150	138.46616 ±0.01710	0.9999	EXP 150 of 150	538.7552 ±0.0319	1.0000	EXP 150 of 150
20F23133	17.0 %	0.0165980 ±0.0002572	0.9453	EXP 150 of 150	0.0662947 ±0.0064678	0.0096	EXP 150 of 150	1.2209470 ±0.0061430	0.8007	EXP 150 of 150	102.53773 ±0.01357	0.9998	EXP 150 of 150	401.8426 ±0.0323	0.9999	EXP 150 of 150
20F23134	17.0 %	0.0344203 ±0.0003711	0.9279	EXP 150 of 150	0.1562997 ±0.0055666	0.0612	EXP 149 of 150	2.2927526 ±0.0066700	0.9277	EXP 149 of 150	190.04324 ±0.01630	0.9999	EXP 150 of 150	746.7135 ±0.0428	1.0000	EXP 149 of 150
20F23136	17.0 %	0.0132302 ±0.0002497	0.9651	EXP 149 of 150	0.0877075 ±0.0057722	0.0143	EXP 150 of 150	1.5919133 ±0.0067705	0.8471	EXP 150 of 150	131.82479 ±0.01577	0.9999	EXP 150 of 150	514.7983 ±0.0350	0.9999	EXP 150 of 150
20F23137	17.0 %	0.0616627 ±0.0004429	0.9167	EXP 149 of 150	0.2175809 ±0.0059277	0.1350	EXP 150 of 150	3.1797017 ±0.0066973	0.9573	EXP 148 of 150	263.92965 ±0.01828	1.0000	EXP 149 of 150	1042.0105 ±0.0447	1.0000	EXP 150 of 150

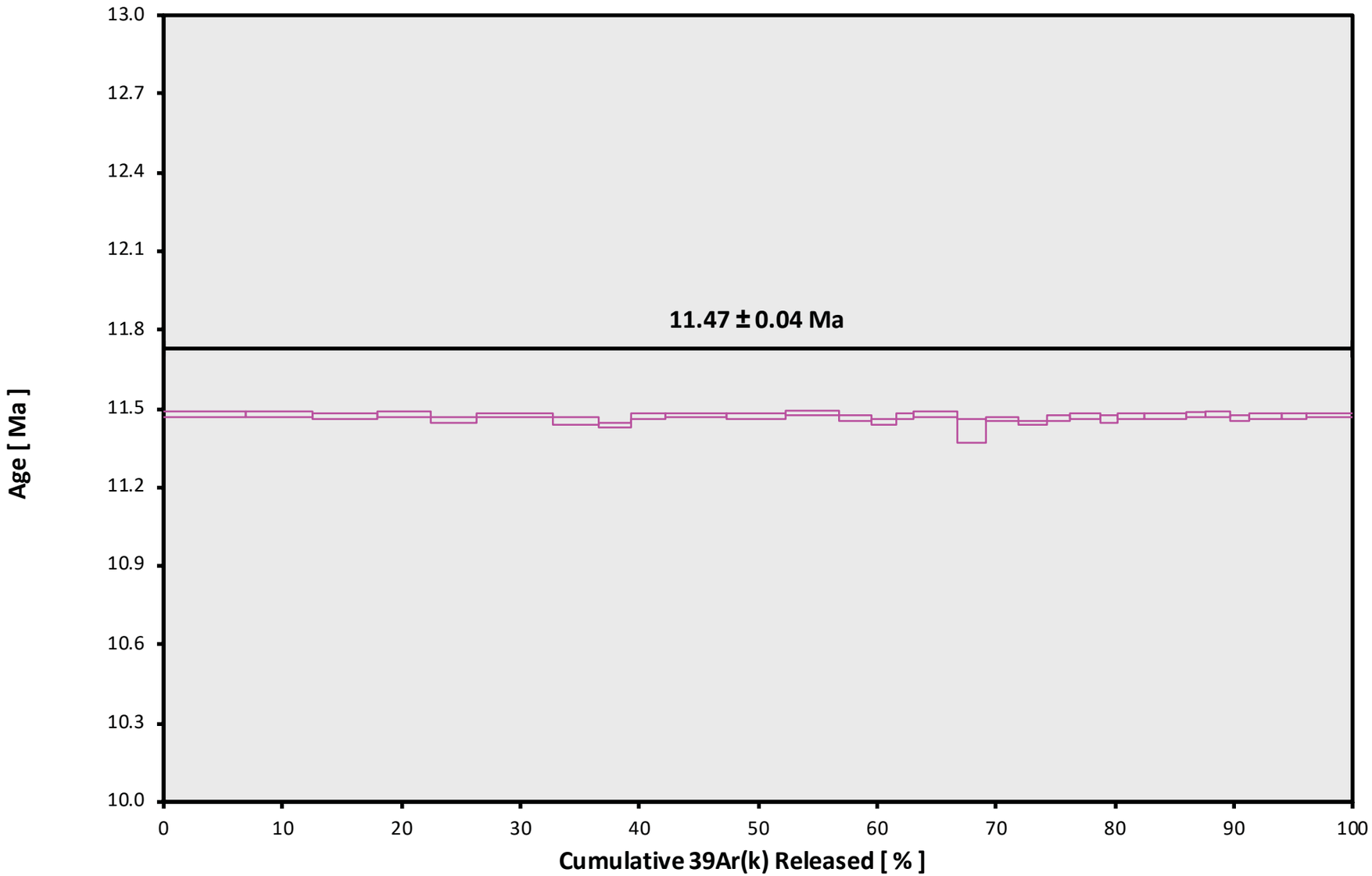
Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F23094	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23095	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23097	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23098	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23100	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23101	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23103	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23104	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23106	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23107	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23109	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23110	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23112	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23113	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23115	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23116	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23118	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23119	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23121	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23122	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23124	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23125	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23127	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23128	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23130	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23131	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23133	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23134	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23136	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01
20F23137	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	43.98	Oregon\Swenton (20-01)	20F23090	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F23094	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	22	25	1
20F23095	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	22	34	1
20F23097	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	22	51	1
20F23098	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	23	0	1
20F23100	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	23	17	1
20F23101	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	23	25	1
20F23103	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	23	43	1
20F23104	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	25	AUG	2020	23	51	1
20F23106	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	0	8	1
20F23107	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	0	17	1
20F23109	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	0	34	1
20F23110	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	0	43	1
20F23112	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	1	0	1
20F23113	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	1	8	1
20F23115	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	1	25	1
20F23116	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	1	34	1
20F23118	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	1	51	1
20F23119	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	2	0	1
20F23121	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	2	17	1
20F23122	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	2	25	1
20F23124	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	2	43	1
20F23125	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	2	51	1
20F23127	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	3	8	1
20F23128	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	3	17	1
20F23130	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	3	34	1
20F23131	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	3	43	1
20F23133	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	4	0	1
20F23134	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	4	8	1
20F23136	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	4	26	1
20F23137	17.0 %	VS19-104	Sanidine	Rhyolite Dome	FCT-NM (1C35-20)	28.201	0.082	Kuiper et al (2008)	9.57019	0.155	0.00162228	0.155	298.218	0.115	1.0002871	0.039	1	3.54E-14	26	AUG	2020	4	34	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F23094	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23095	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23097	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23098	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23100	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23101	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23103	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23104	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23106	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23107	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23109	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23110	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23112	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23113	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23115	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23116	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23118	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23119	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23121	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23122	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23124	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23125	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23127	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23128	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23130	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23131	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23133	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23134	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23136	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23137	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

20F23090.AGE >>> VS19-1

20F23090.AGE >>> VS19-104 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.47 ± 0.04
TOTAL FUSION
11.47 ± 0.04
NORMAL ISOCHRON
11.48 ± 0.04
INVERSE ISOCHRON
11.47 ± 0.04

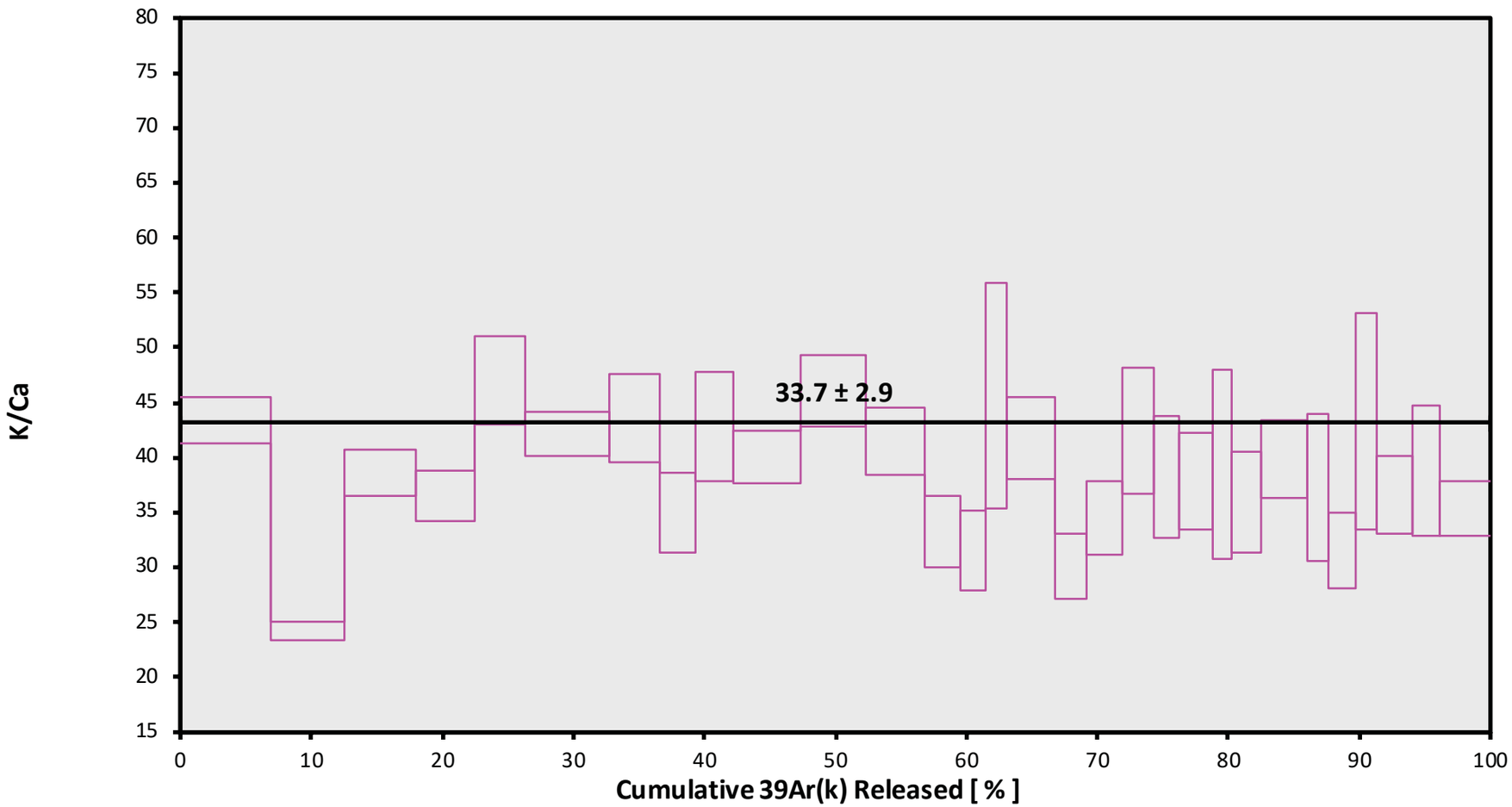
MSWD (PROBABILITY)
4.77 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1C35-20)
J = 0.00162228 ± 0.00000251

20F23090.AGE >>> VS19-104 >>> OREGON | SWENTON (20-01) PROJECT



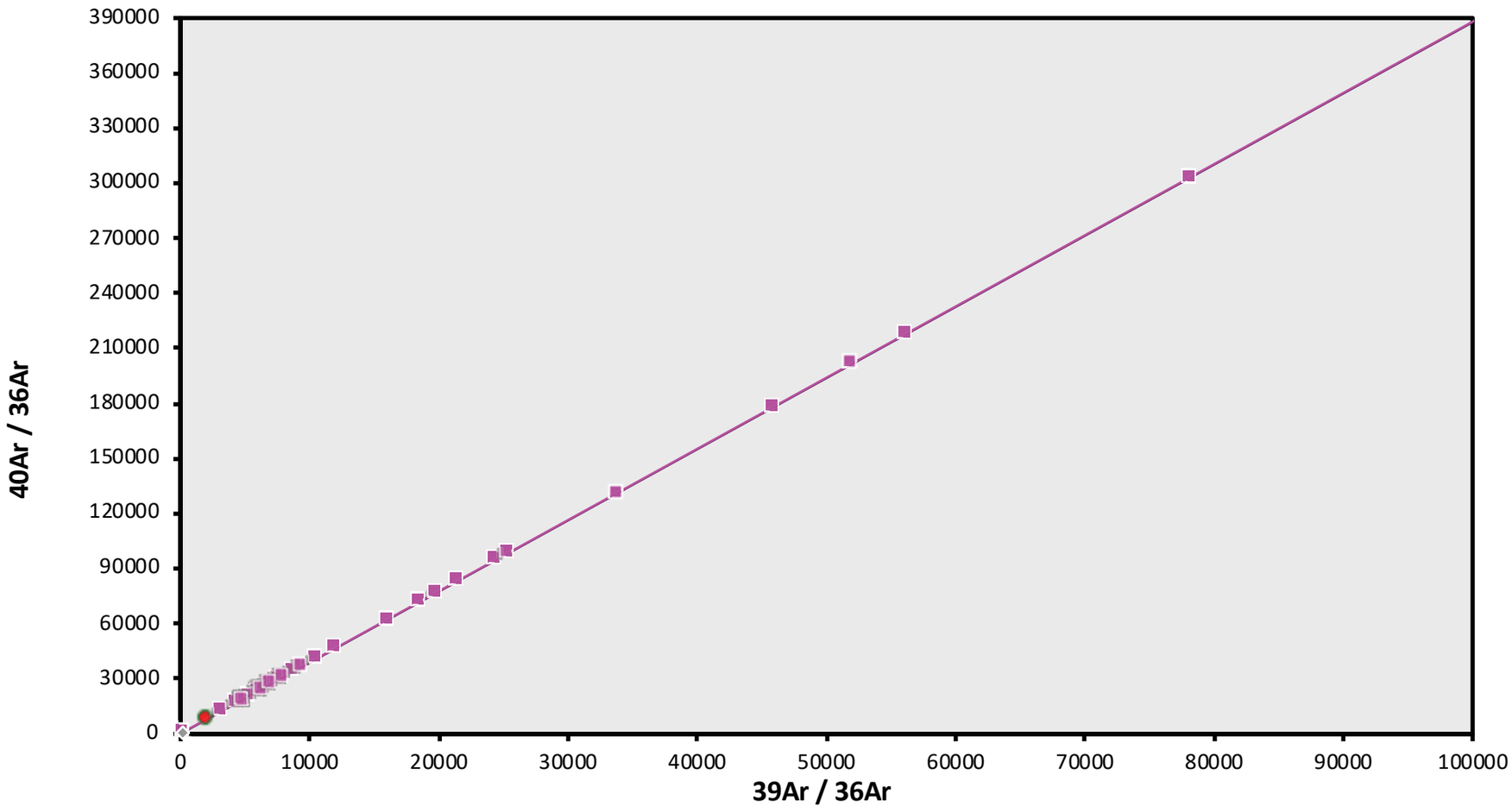
Ar-Ages in Ma

WEIGHTED PLATEAU
11.47 ± 0.04
TOTAL FUSION
11.47 ± 0.04
NORMAL ISOCHRON
11.48 ± 0.04
INVERSE ISOCHRON
11.47 ± 0.04

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23090.AGE >>> VS19-104 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

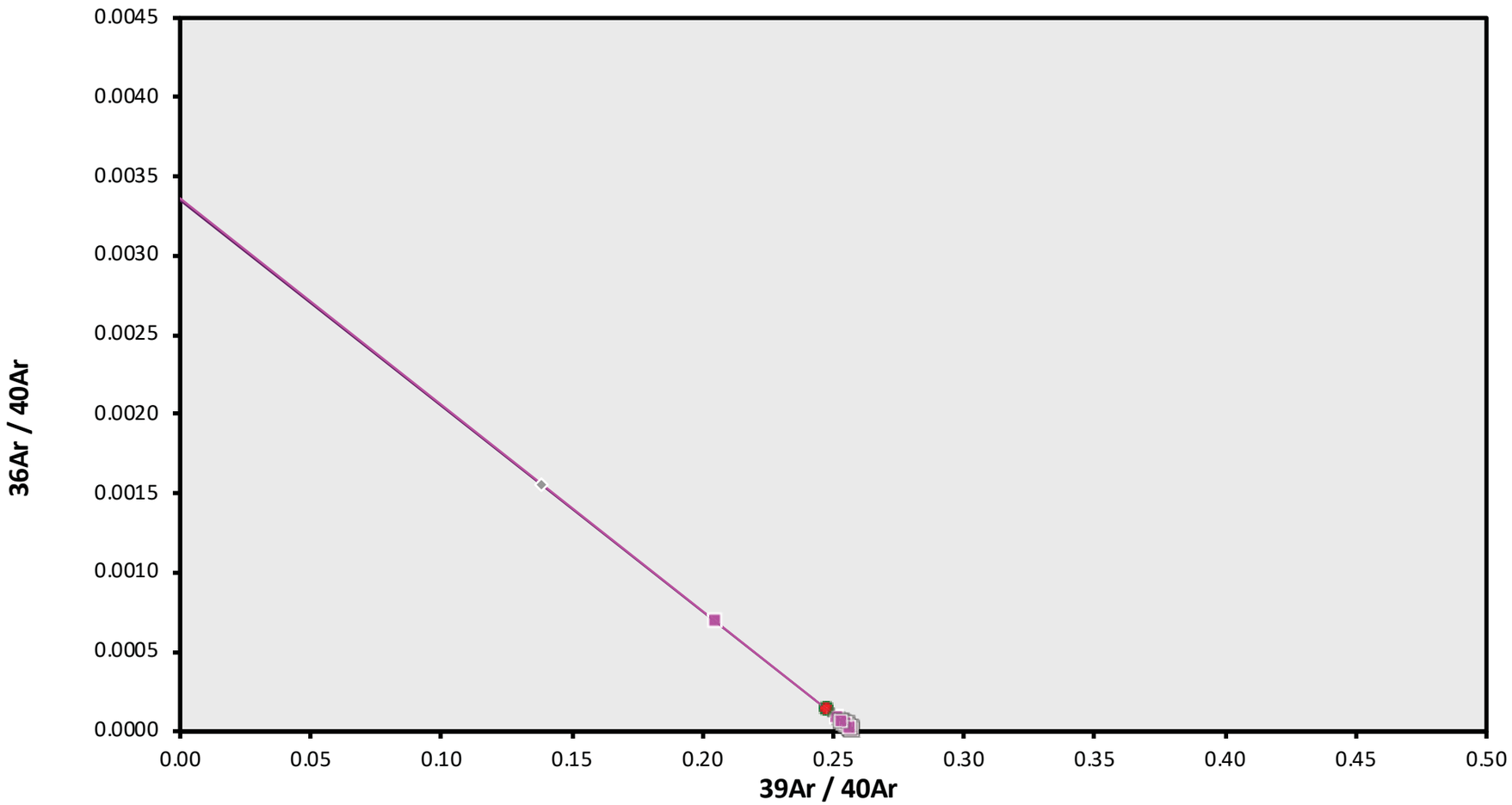
WEIGHTED PLATEAU
11.47 ± 0.04
TOTAL FUSION
11.47 ± 0.04
NORMAL ISOCHRON
11.48 ± 0.04
INVERSE ISOCHRON
11.47 ± 0.04

MSWD (PROBABILITY)
10.21 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23090.AGE >>> VS19-104 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.47 ± 0.04
TOTAL FUSION
11.47 ± 0.04
NORMAL ISOCHRON
11.48 ± 0.04
INVERSE ISOCHRON
11.47 ± 0.04

MSWD (PROBABILITY)
4.89 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F23165	17.0 %	✓	0.0767796	0.716	7.640362	1.509	7.398923	0.152	613.4413	0.040	2402.956	0.003	3.88023	±0.00314	11.46	±0.01	99.06	8.50	34.5	±1.0
20F23166	17.0 %	✓	0.0039248	8.685	4.963005	2.261	4.364411	0.238	360.8331	0.040	1398.480	0.004	3.87299	±0.00315	11.44	±0.01	99.93	5.00	31.3	±1.4
20F23168	17.0 %	✓	0.0135916	2.485	2.231934	4.532	2.002979	0.491	166.2921	0.041	648.643	0.006	3.87673	±0.00342	11.45	±0.01	99.39	2.30	32.0	±2.9
20F23169	17.0 %	✓	0.0102108	3.315	4.264474	2.282	3.360213	0.282	280.4190	0.040	1089.562	0.005	3.87527	±0.00321	11.45	±0.01	99.74	3.89	28.3	±1.3
20F23171	17.0 %	✓	0.0283416	1.644	8.696311	1.434	7.841836	0.144	654.1777	0.040	2546.988	0.003	3.88098	±0.00311	11.47	±0.01	99.68	9.07	32.3	±0.9
20F23172	17.0 %	✓	0.0060657	5.511	4.212345	2.776	4.326467	0.234	361.2038	0.040	1402.656	0.004	3.87863	±0.00315	11.46	±0.01	99.88	5.01	36.9	±2.0
20F23174	17.0 %	✓	0.0023257	13.399	2.263033	4.779	2.291673	0.386	189.8257	0.041	736.722	0.006	3.87777	±0.00333	11.46	±0.01	99.91	2.63	36.1	±3.4
20F23175	17.0 %	✓	0.0087310	4.075	3.567495	3.058	3.328590	0.283	277.0051	0.040	1076.733	0.004	3.87810	±0.00323	11.46	±0.01	99.77	3.84	33.4	±2.0
20F23177	17.0 %	✓	0.0057224	5.939	1.767901	6.399	2.041799	0.440	169.2536	0.041	657.088	0.006	3.87244	±0.00340	11.44	±0.01	99.75	2.35	41.2	±5.3
20F23178	17.0 %	✓	0.0693653	0.738	2.372091	4.786	2.256965	0.439	185.4696	0.041	739.688	0.006	3.87699	±0.00360	11.45	±0.01	97.21	2.57	33.6	±3.2
20F23180	17.0 %	✓	0.0082561	4.373	2.060290	5.534	2.346891	0.371	195.7705	0.041	761.741	0.007	3.87867	±0.00340	11.46	±0.01	99.68	2.71	40.9	±4.5
20F23181	17.0 %	✓	0.0991277	0.581	2.755693	3.910	2.081280	0.439	171.3254	0.041	693.073	0.006	3.87335	±0.00378	11.44	±0.01	95.75	2.37	26.7	±2.1
20F23183	17.0 %	✓	0.0017008	18.470	2.336398	4.602	2.363532	0.393	197.0016	0.040	764.459	0.005	3.87827	±0.00331	11.46	±0.01	99.94	2.73	36.3	±3.3
20F23184	17.0 %	✓	0.0025318	12.558	2.250552	4.761	2.350792	0.364	196.2388	0.040	761.894	0.006	3.87898	±0.00332	11.46	±0.01	99.91	2.72	37.5	±3.6
20F23186	17.0 %	✓	0.0016060	17.683	1.215580	9.236	1.204918	0.799	99.2133	0.042	384.559	0.008	3.87167	±0.00373	11.44	±0.01	99.89	1.38	35.1	±6.5
20F23187	17.0 %		0.0008565	35.231	2.315389	4.915	2.250425	0.438	185.8658	0.040	722.466	0.006	3.88609	±0.00333	11.48	±0.01	99.97	2.58	34.5	±3.4
20F23189	17.0 %	✓	0.0045542	7.674	4.076470	2.681	3.546873	0.277	294.7000	0.040	1145.109	0.004	3.88161	±0.00320	11.47	±0.01	99.89	4.08	31.1	±1.7
20F23190	17.0 %	✓	0.0022958	15.788	4.424435	2.411	4.705870	0.230	391.7638	0.040	1521.082	0.004	3.88123	±0.00315	11.47	±0.01	99.96	5.43	38.1	±1.8
20F23192	17.0 %	✓	0.0035625	8.014	2.078651	5.612	2.044111	0.464	168.1653	0.041	651.318	0.006	3.86718	±0.00337	11.43	±0.01	99.85	2.33	34.8	±3.9
20F23193	17.0 %	✓	0.0034936	8.632	2.442491	4.989	2.336682	0.407	193.4333	0.041	749.666	0.005	3.87063	±0.00332	11.44	±0.01	99.87	2.68	34.1	±3.4
20F23195	17.0 %	✓	0.0070195	4.647	4.787033	2.375	3.673426	0.286	304.9290	0.040	1182.482	0.004	3.87172	±0.00318	11.44	±0.01	99.84	4.23	27.4	±1.3
20F23196	17.0 %	✓	0.0384140	1.145	3.135946	3.793	2.979064	0.338	245.5265	0.040	962.206	0.006	3.87270	±0.00334	11.44	±0.01	98.82	3.40	33.7	±2.6
20F23198	17.0 %	✓	0.0125107	2.975	1.965464	5.361	2.050970	0.470	169.6030	0.040	661.827	0.006	3.88055	±0.00343	11.46	±0.01	99.44	2.35	37.1	±4.0
20F23199	17.0 %	✓	0.0022788	13.848	1.613983	7.046	1.760396	0.535	146.3581	0.041	567.882	0.007	3.87575	±0.00347	11.45	±0.01	99.89	2.03	39.0	±5.5
20F23201	17.0 %	✓	0.0037925	7.866	2.072707	5.224	2.122492	0.426	175.5977	0.041	681.359	0.006	3.87415	±0.00333	11.45	±0.01	99.84	2.43	36.4	±3.8
20F23202	17.0 %	✓	0.0055065	5.740	1.769622	6.472	1.797673	0.521	150.6859	0.041	585.334	0.006	3.87393	±0.00343	11.45	±0.01	99.73	2.09	36.6	±4.7
20F23204	17.0 %	✓	0.0100667	3.203	1.732631	6.036	1.524081	0.571	126.9810	0.041	495.329	0.007	3.87767	±0.00360	11.46	±0.01	99.41	1.76	31.5	±3.8
20F23205	17.0 %	✓	0.0028906	9.686	2.043582	5.099	1.661529	0.557	138.1197	0.041	536.679	0.008	3.87998	±0.00345	11.46	±0.01	99.85	1.91	29.1	±3.0
20F23207	17.0 %		0.0313253	1.227	2.068036	5.258	1.826832	0.511	150.8836	0.041	589.125	0.007	3.84305	±0.00354	11.35	±0.01	98.43	2.09	31.4	±3.3
20F23208	17.0 %	✓	0.0043081	7.794	3.404704	3.231	3.046301	0.298	254.4150	0.040	986.597	0.005	3.87336	±0.00322	11.44	±0.01	99.88	3.53	32.1	±2.1
		Σ	0.4711563	0.425	92.528609	0.658	86.887993	0.061	7214.4980	0.008	28103.704	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-106**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C36-20)**
Position = **X: 0 | Y: 0 | Z/H: 45.11772 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.58908 ± 0.01477**
FCT-NM J-value = **0.00161908 ± 0.00000249**
Air Shot 40Ar/36Ar = **298.6900 ± 0.3525**
Air Shot MDF = **0.99989105 ± 0.00039356 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			3.87622	±0.00142	**11.45**	**±0.04**	5.08	95.33	32.4	±1.3
Error Mean				±0.04%		**±0.31%**	0%	28		
				Full External Error		±0.60	1.54	2σ Confidence Limit		
				Analytical Error		±0.00	2.2542	Error Magnification		
Total Fusion Age			3.87641	±0.00067	**11.45**	**±0.04**		30	33.5	±0.4
				±0.02%		**±0.31%**				
				Full External Error		±0.60				
				Analytical Error		±0.00				
Normal Isochron	**281.92**	**±17.44**	3.88019	±0.00220	**11.46**	**±0.04**	9.57	95.33		
Error Chron		**±6.19%**		±0.06%		**±0.31%**	0%	28		
				Full External Error		±0.60	1.55	2σ Confidence Limit		
				Analytical Error		±0.01	3.0929	Error Magnification		
							1	Number of Iterations		
							0.0000000324	Convergence		
Inverse Isochron	**296.70**	**±12.95**	3.87634	±0.00164	**11.45**	**±0.04**	5.26	95.33		
Error Chron		**±4.37%**		±0.04%		**±0.31%**	0%	28		
				Full External Error		±0.60	1.55	2σ Confidence Limit		
				Analytical Error		±0.00	2.2931	Error Magnification		
							2	Number of Iterations		
							0.0002169258	Convergence		
							4%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F23165	17.0 %	✓	0.0747145	7.640362	0.0000000	613.4364	2380.277	11.46 ±0.01	99.06	8.50	34.5 ±1.0
20F23166	17.0 %	✓	0.0025822	4.963005	0.0052890	360.8299	1397.490	11.44 ±0.01	99.93	5.00	31.3 ±1.4
20F23168	17.0 %	✓	0.0129884	2.231934	0.0000000	166.2907	644.665	11.45 ±0.01	99.39	2.30	32.0 ±2.9
20F23169	17.0 %	✓	0.0090581	4.264474	0.0000000	280.4163	1086.688	11.45 ±0.01	99.74	3.89	28.3 ±1.3
20F23171	17.0 %	✓	0.0259909	8.696311	0.0000000	654.1721	2538.831	11.47 ±0.01	99.68	9.07	32.3 ±0.9
20F23172	17.0 %	✓	0.0049271	4.212345	0.0000000	361.2011	1400.966	11.46 ±0.01	99.88	5.01	36.9 ±2.0
20F23174	17.0 %	✓	0.0017140	2.263033	0.0000000	189.8242	736.095	11.46 ±0.01	99.91	2.63	36.1 ±3.4
20F23175	17.0 %	✓	0.0077667	3.567495	0.0000000	277.0028	1074.246	11.46 ±0.01	99.77	3.84	33.4 ±2.0
20F23177	17.0 %	✓	0.0052445	1.767901	0.0000000	169.2524	655.419	11.44 ±0.01	99.75	2.35	41.2 ±5.3
20F23178	17.0 %	✓	0.0687234	2.372091	0.0036861	185.4680	719.057	11.45 ±0.01	97.21	2.57	33.6 ±3.2
20F23180	17.0 %	✓	0.0076992	2.060290	0.0000000	195.7692	759.324	11.46 ±0.01	99.68	2.71	40.9 ±4.5
20F23181	17.0 %	✓	0.0983828	2.755693	0.0000000	171.3236	663.596	11.44 ±0.01	95.75	2.37	26.7 ±2.1
20F23183	17.0 %	✓	0.0010693	2.336398	0.0000000	197.0001	764.020	11.46 ±0.01	99.94	2.73	36.3 ±3.3
20F23184	17.0 %	✓	0.0019235	2.250552	0.0000000	196.2373	761.201	11.46 ±0.01	99.91	2.72	37.5 ±3.6
20F23186	17.0 %	✓	0.0012760	1.215580	0.0062691	99.2125	384.118	11.44 ±0.01	99.89	1.38	35.1 ±6.5
20F23187	17.0 %		0.0002295	2.315389	0.0052821	185.8643	722.285	11.48 ±0.01	99.97	2.58	34.5 ±3.4
20F23189	17.0 %	✓	0.0034524	4.076470	0.0000000	294.6974	1143.900	11.47 ±0.01	99.89	4.08	31.1 ±1.7
20F23190	17.0 %	✓	0.0010999	4.424435	0.0000000	391.7609	1520.516	11.47 ±0.01	99.96	5.43	38.1 ±1.8
20F23192	17.0 %	✓	0.0029980	2.078651	0.0122549	168.1640	650.321	11.43 ±0.01	99.85	2.33	34.8 ±3.9
20F23193	17.0 %	✓	0.0028334	2.442491	0.0000000	193.4317	748.703	11.44 ±0.01	99.87	2.68	34.1 ±3.4
20F23195	17.0 %	✓	0.0057255	4.787033	0.0000000	304.9259	1180.587	11.44 ±0.01	99.84	4.23	27.4 ±1.3
20F23196	17.0 %	✓	0.0375650	3.135946	0.0062192	245.5245	950.842	11.44 ±0.01	98.82	3.40	33.7 ±2.6
20F23198	17.0 %	✓	0.0119794	1.965464	0.0000773	169.6018	658.148	11.46 ±0.01	99.44	2.35	37.1 ±4.0
20F23199	17.0 %	✓	0.0018425	1.613983	0.0000000	146.3570	567.243	11.45 ±0.01	99.89	2.03	39.0 ±5.5
20F23201	17.0 %	✓	0.0032321	2.072707	0.0008324	175.5964	680.287	11.45 ±0.01	99.84	2.43	36.4 ±3.8
20F23202	17.0 %	✓	0.0050282	1.769622	0.0000000	150.6847	583.741	11.45 ±0.01	99.73	2.09	36.6 ±4.7
20F23204	17.0 %	✓	0.0095984	1.732631	0.0000000	126.9799	492.387	11.46 ±0.01	99.41	1.76	31.5 ±3.8
20F23205	17.0 %	✓	0.0023382	2.043582	0.0000000	138.1183	535.897	11.46 ±0.01	99.85	1.91	29.1 ±3.0
20F23207	17.0 %		0.0307663	2.068036	0.0000000	150.8822	579.848	11.35 ±0.01	98.43	2.09	31.4 ±3.3
20F23208	17.0 %	✓	0.0033878	3.404704	0.0000000	254.4128	985.432	11.44 ±0.01	99.88	3.53	32.1 ±2.1
		Σ	0.4461373	92.528609	0.0399101	7214.4386	27966.126				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-106**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C36-20)**
J = **0.00161908 ± 0.00000249**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	3.87622	±0.00142	**11.45**	**±0.04**	5.08	95.33	32.4 ±1.3
Error Mean		±0.04%		**±0.31%**	0%	28	
			Full External Error	±0.60	1.54	2σ Confidence Limit	
			Analytical Error	±0.00	2.2542	Error Magnification	
Total Fusion Age	3.87641	±0.00067	**11.45**	**±0.04**		30	33.5 ±0.4
		±0.02%		**±0.31%**			
			Full External Error	±0.60			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F23165	17.0 %	✓	8210.41	±121.27	32156.88	±474.27	0.9985
20F23166	17.0 %	✓	139738.81	±37040.09	541505.42	±143534.36	1.0000
20F23168	17.0 %	✓	12803.06	±668.08	49932.61	±2605.23	0.9999
20F23169	17.0 %	✓	30957.46	±2320.47	120266.97	±9014.33	0.9999
20F23171	17.0 %	✓	25169.23	±904.75	97979.93	±3521.22	0.9998
20F23172	17.0 %	✓	73309.02	±9991.78	284637.15	±38794.48	1.0000
20F23174	17.0 %	✓	110749.42	±40448.46	429759.42	±156958.50	1.0000
20F23175	17.0 %	✓	35665.58	±3278.68	138613.36	±12742.04	1.0000
20F23177	17.0 %	✓	32272.21	±4199.27	125270.64	±16299.93	1.0000
20F23178	17.0 %	✓	2698.76	±40.35	10761.63	±160.66	0.9985
20F23180	17.0 %	✓	25427.17	±2393.52	98922.10	±9311.43	1.0000
20F23181	17.0 %	✓	1741.40	±20.48	7043.60	±82.63	0.9976
20F23183	17.0 %	✓	184230.72	±108708.72	714795.59	±421777.87	1.0000
20F23184	17.0 %	✓	102021.10	±33866.11	396036.38	±131464.68	1.0000
20F23186	17.0 %	✓	77749.96	±34804.27	301320.45	±134883.92	1.0000
20F23187	17.0 %		809700.57	±2139965.13	3146865.56	±8316879.76	1.0000
20F23189	17.0 %	✓	85360.85	±17343.90	331635.80	±67382.37	1.0000
20F23190	17.0 %	✓	356174.01	±235495.05	1382693.23	±914208.13	1.0000
20F23192	17.0 %	✓	56092.45	±10749.07	217218.36	±41625.45	1.0000
20F23193	17.0 %	✓	68267.62	±14618.35	264537.39	±56645.76	1.0000
20F23195	17.0 %	✓	53257.23	±6095.59	206495.56	±23633.99	1.0000
20F23196	17.0 %	✓	6535.98	±153.58	25610.43	±601.44	0.9994
20F23198	17.0 %	✓	14157.77	±882.28	55238.43	±3442.07	0.9999
20F23199	17.0 %	✓	79432.17	±27336.94	308157.54	±106053.51	1.0000
20F23201	17.0 %	✓	54329.68	±10077.49	210780.06	±39096.75	1.0000
20F23202	17.0 %	✓	29968.01	±3785.62	116392.38	±14702.61	1.0000
20F23204	17.0 %	✓	13229.31	±892.43	51597.50	±3480.45	0.9999
20F23205	17.0 %	✓	59069.57	±14217.70	229487.45	±55235.98	1.0000
20F23207	17.0 %		4904.14	±122.93	19145.42	±479.64	0.9994
20F23208	17.0 %	✓	75095.99	±14943.67	291172.11	±57941.13	1.0000

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**281.92**	**±17.44**	3.88019	±0.00220	**11.46**	**±0.04**	9.57
Error Chron		**±6.19%**		±0.06%		**±0.31%**	0%
					Full External Error	±0.60	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.000000032361
	Error Magnification	3.0929	Number of Iterations	1
	Number of Data Points	28	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F23165	17.0 %	✓	0.2553236	±0.0002036	0.00003110	±0.00000046	0.0004
20F23166	17.0 %	✓	0.2580562	±0.0002067	0.00000185	±0.00000049	0.0000
20F23168	17.0 %	✓	0.2564067	±0.0002117	0.00002003	±0.00000104	0.0003
20F23169	17.0 %	✓	0.2574062	±0.0002076	0.00000831	±0.00000062	0.0002
20F23171	17.0 %	✓	0.2568815	±0.0002042	0.00001021	±0.00000037	0.0002
20F23172	17.0 %	✓	0.2575525	±0.0002062	0.00000351	±0.00000048	0.0001
20F23174	17.0 %	✓	0.2577010	±0.0002114	0.00000233	±0.00000085	0.0000
20F23175	17.0 %	✓	0.2573026	±0.0002083	0.00000721	±0.00000066	0.0001
20F23177	17.0 %	✓	0.2576199	±0.0002117	0.00000798	±0.00000104	0.0001
20F23178	17.0 %	✓	0.2507765	±0.0002063	0.00009292	±0.00000139	0.0013
20F23180	17.0 %	✓	0.2570423	±0.0002128	0.00001011	±0.00000095	0.0003
20F23181	17.0 %	✓	0.2472313	±0.0002026	0.00014197	±0.00000167	0.0015
20F23183	17.0 %	✓	0.2577390	±0.0002103	0.00000140	±0.00000083	0.0000
20F23184	17.0 %	✓	0.2576054	±0.0002107	0.00000253	±0.00000084	0.0001
20F23186	17.0 %	✓	0.2580308	±0.0002209	0.00000332	±0.00000149	0.0001
20F23187	17.0 %		0.2573038	±0.0002106	0.00000032	±0.00000084	0.0000
20F23189	17.0 %	✓	0.2573933	±0.0002070	0.00000302	±0.00000061	0.0000
20F23190	17.0 %	✓	0.2575944	±0.0002060	0.00000072	±0.00000048	0.0000
20F23192	17.0 %	✓	0.2582307	±0.0002146	0.00000460	±0.00000088	0.0001
20F23193	17.0 %	✓	0.2580642	±0.0002121	0.00000378	±0.00000081	0.0001
20F23195	17.0 %	✓	0.2579098	±0.0002077	0.00000484	±0.00000055	0.0001
20F23196	17.0 %	✓	0.2552078	±0.0002079	0.00003905	±0.00000092	0.0007
20F23198	17.0 %	✓	0.2563028	±0.0002095	0.00001810	±0.00000113	0.0003
20F23199	17.0 %	✓	0.2577648	±0.0002141	0.00000325	±0.00000112	0.0001
20F23201	17.0 %	✓	0.2577553	±0.0002111	0.00000474	±0.00000088	0.0001
20F23202	17.0 %	✓	0.2574740	±0.0002122	0.00000859	±0.00000109	0.0002
20F23204	17.0 %	✓	0.2563943	±0.0002158	0.00001938	±0.00000131	0.0004
20F23205	17.0 %	✓	0.2573978	±0.0002140	0.00000436	±0.00000105	0.0001
20F23207	17.0 %		0.2561524	±0.0002130	0.00005223	±0.00000131	0.0009
20F23208	17.0 %	✓	0.2579093	±0.0002080	0.00000343	±0.00000068	0.0001

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**296.70**	**±12.95**	3.87634	±0.00164	**11.45**	**±0.04**	5.26
Error Chron		**±4.37%**		±0.04%		**±0.31%**	0%
					Full External Error	±0.60	
					Analytical Error	±0.00	

Statistics				
	2σ Confidence Limit	1.55	Convergence	0.0002169258
	Error Magnification	2.2931	Number of Iterations	2
	Number of Data Points	28	Calculated Line	Weighted York-2
	Spreading Factor	4.3%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F23165	17.0%	✓	0.0747145	0.74	0.0000000	0.00	0.0020652	1.52	0.0000000	0.00	7.640362	1.51	0.0140837	0.75	0.0000000	0.00	7.408472	0.10	0.0013753	9.75	0.0000000	0.00	613.4364	0.04	0.0049089	1.77	2380.277	0.01	22.30675	0.74	0.0000000	0.00	0.3723559	9.65
20F23166	17.0%	✓	0.0025822	13.25	0.0000000	0.00	0.0013415	2.27	0.0000011	282.31	4.963005	2.26	0.0004867	13.25	0.0000000	0.00	4.357742	0.10	0.0008933	9.89	0.0052890	282.31	360.8299	0.04	0.0031887	2.44	1397.490	0.01	0.77093	13.25	0.0000000	0.00	0.2190237	9.65
20F23168	17.0%	✓	0.0129884	2.61	0.0000000	0.00	0.0006033	4.54	0.0000000	0.00	2.231934	4.53	0.0024483	2.61	0.0000000	0.00	2.008292	0.10	0.0004017	10.64	0.0000000	0.00	166.2907	0.04	0.0014340	4.62	644.665	0.02	3.87780	2.61	0.0000000	0.00	0.1009384	9.65
20F23169	17.0%	✓	0.0090581	3.75	0.0000000	0.00	0.0011527	2.29	0.0000000	0.00	4.264474	2.28	0.0017075	3.75	0.0000000	0.00	3.386587	0.10	0.0007676	9.90	0.0000000	0.00	280.4163	0.04	0.0027399	2.46	1086.688	0.01	2.70439	3.75	0.0000000	0.00	0.1702127	9.65
20F23171	17.0%	✓	0.0259909	1.80	0.0000000	0.00	0.0023506	1.44	0.0000000	0.00	8.696311	1.43	0.0048993	1.80	0.0000000	0.00	7.900436	0.10	0.0015653	9.74	0.0000000	0.00	654.1721	0.04	0.0055874	1.70	2538.831	0.01	7.75986	1.80	0.0000000	0.00	0.3970825	9.65
20F23172	17.0%	✓	0.0049271	6.81	0.0000000	0.00	0.0011386	2.78	0.0000000	0.00	4.212345	2.78	0.0009288	6.82	0.0000000	0.00	4.362226	0.10	0.0007582	10.02	0.0000000	0.00	361.2011	0.04	0.0027064	2.92	1400.966	0.01	1.47104	6.82	0.0000000	0.00	0.2192491	9.65
20F23174	17.0%	✓	0.0017140	18.26	0.0000000	0.00	0.0006117	4.78	0.0000000	0.00	2.263033	4.78	0.0003231	18.26	0.0000000	0.00	2.292507	0.10	0.0004073	10.75	0.0000000	0.00	189.8242	0.04	0.0014540	4.87	736.095	0.01	0.51173	18.26	0.0000000	0.00	0.1152233	9.65
20F23175	17.0%	✓	0.0077667	4.60	0.0000000	0.00	0.0009643	3.06	0.0000000	0.00	3.567495	3.06	0.0014640	4.60	0.0000000	0.00	3.345363	0.10	0.0006421	10.10	0.0000000	0.00	277.0028	0.04	0.0022921	3.19	1074.246	0.01	2.31882	4.60	0.0000000	0.00	0.1681407	9.65
20F23177	17.0%	✓	0.0052445	6.51	0.0000000	0.00	0.0004779	6.40	0.0000000	0.00	1.767901	6.40	0.0009886	6.51	0.0000000	0.00	2.044062	0.10	0.0003182	11.56	0.0000000	0.00	169.2524	0.04	0.0011359	6.46	655.419	0.02	1.56581	6.51	0.0000000	0.00	0.1027362	9.65
20F23178	17.0%	✓	0.0687234	0.75	0.0000000	0.00	0.0006412	4.79	0.0000008	307.76	2.372091	4.79	0.0129544	0.76	0.0000000	0.00	2.239898	0.10	0.0004270	10.75	0.0036861	307.76	185.4680	0.04	0.0015241	4.87	719.057	0.02	20.51805	0.75	0.0000000	0.00	0.1125791	9.65
20F23180	17.0%	✓	0.0076992	4.71	0.0000000	0.00	0.0005569	5.54	0.0000000	0.00	2.060290	5.53	0.0014513	4.71	0.0000000	0.00	2.364305	0.10	0.0003709	11.11	0.0000000	0.00	195.7692	0.04	0.0013237	5.61	759.324	0.02	2.29868	4.71	0.0000000	0.00	0.1188319	9.65
20F23181	17.0%	✓	0.0983828	0.59	0.0000000	0.00	0.0007449	3.91	0.0000000	0.00	2.755693	3.91	0.0185452	0.61	0.0000000	0.00	2.069075	0.10	0.0004960	10.39	0.0000000	0.00	171.3236	0.04	0.0017705	4.02	663.596	0.03	29.37317	0.60	0.0000000	0.00	0.1039934	9.65
20F23183	17.0%	✓	0.0010693	29.50	0.0000000	0.00	0.0006315	4.61	0.0000000	0.00	2.336398	4.60	0.0002016	29.50	0.0000000	0.00	2.379170	0.10	0.0004206	10.67	0.0000000	0.00	197.0001	0.04	0.0015011	4.69	764.020	0.01	0.31925	29.50	0.0000000	0.00	0.1195791	9.65
20F23184	17.0%	✓	0.0019235	16.60	0.0000000	0.00	0.0006083	4.76	0.0000000	0.00	2.250552	4.76	0.0003626	16.60	0.0000000	0.00	2.369958	0.10	0.0004051	10.74	0.0000000	0.00	196.2373	0.04	0.0014460	4.85	761.201	0.01	0.57428	16.60	0.0000000	0.00	0.1191161	9.65
20F23186	17.0%	✓	0.0012760	22.38	0.0000000	0.00	0.0003286	9.24	0.0000013	160.55	1.215580	9.24	0.0002405	22.38	0.0000000	0.00	1.198189	0.10	0.0002188	13.34	0.0062691	160.56	99.2125	0.04	0.0007810	9.28	384.118	0.02	0.38098	22.38	0.0000000	0.00	0.0602220	9.65
20F23187	17.0%		0.0002295	132.15	0.0000000	0.00	0.0006258	4.92	0.0000011	213.88	2.315389	4.92	0.0000433	132.15	0.0000000	0.00	2.244683	0.10	0.0004168	10.81	0.0052821	213.88	185.8643	0.04	0.0014876	5.00	722.285	0.01	0.06853	132.15	0.0000000	0.00	0.1128196	9.65
20F23189	17.0%	✓	0.0034524	10.16	0.0000000	0.00	0.0011019	2.69	0.0000000	0.00	4.076470	2.68	0.0006508	10.16	0.0000000	0.00	3.559061	0.10	0.0007338	10.00	0.0000000	0.00	294.6974	0.04	0.0026191	2.83	1143.900	0.01	1.03074	10.16	0.0000000	0.00	0.1788813	9.65
20F23190	17.0%	✓	0.0010999	33.06	0.0000000	0.00	0.0011959	2.42	0.0000000	0.00	4.424435	2.41	0.0002073	33.06	0.0000000	0.00	4.731297	0.10	0.0007964	9.93	0.0000000	0.00	391.7609	0.04	0.0028427	2.58	1520.516	0.01	0.32839	33.06	0.0000000	0.00	0.2377989	9.65
20F23192	17.0%	✓	0.0029980	9.58	0.0000000	0.00	0.0005619	5.61	0.0000026	87.58	2.078651	5.61	0.0005651	9.58	0.0000000	0.00	2.030916	0.10	0.0003742	11.15	0.0122549	87.58	168.1640	0.04	0.0013355	5.69	650.321	0.01	0.89508	9.58	0.0000000	0.00	0.1020755	9.65
20F23193	17.0%	✓	0.0028334	10.71	0.0000000	0.00	0.0006602	4.99	0.0000000	0.00	2.442491	4.99	0.0005341	10.71	0.0000000	0.00	2.336075	0.10	0.0004396	10.85	0.0000000	0.00	193.4317	0.04	0.0015693	5.07	748.703	0.01	0.84595	10.71	0.0000000	0.00	0.1174130	9.65
20F23195	17.0%	✓	0.0057255	5.72	0.0000000	0.00	0.0012939	2.38	0.0000000	0.00	4.787033	2.38	0.0010793	5.72	0.0000000	0.00	3.682590	0.10	0.0008617	9.92	0.0000000	0.00	304.9259	0.04	0.0030757	2.55	1180.587	0.01	1.70941	5.72	0.0000000	0.00	0.1850900	9.65
20F23196	17.0%	✓	0.0375650	1.17	0.0000000	0.00	0.0008476	3.80	0.0000013	200.04	3.135946	3.79	0.0070810	1.18	0.0000000	0.00	2.965199	0.10	0.0005645	10.35	0.0062192	200.04	245.5245	0.04	0.0020148	3.90	950.842	0.02	11.21542	1.18	0.0000000	0.00	0.1490333	9.65
20F23198	17.0%	✓	0.0119794	3.12	0.0000000	0.00	0.0005313	5.36	0.0000000	#######	1.965464	5.36	0.0022581	3.12	0.0000000	0.00	2.048281	0.10	0.0003538	11.02	0.0000773	#######	169.6018	0.04	0.0012628	5.44	658.148	0.02	3.57657	3.12	0.0000000	0.00	0.1029483	9.65
20F23199	17.0%	✓	0.0018425	17.21	0.0000000	0.00	0.0004363	7.05	0.0000000	0.00	1.613983	7.05	0.0003473	17.21	0.0000000	0.00	1.767554	0.10	0.0002905	11.93	0.0000000	0.00	146.3570	0.04	0.0010370	7.11	567.243	0.02	0.55011	17.21	0.0000000	0.00	0.0888387	9.65
20F23201	17.0%	✓	0.0032321	9.27	0.0000000	0.00	0.0005603	5.23	0.0000002	#######	2.072707	5.22	0.0006092	9.28	0.0000000	0.00	2.120677	0.10	0.0003731	10.96	0.0008324	#######	175.5964	0.04	0.0013317	5.30	680.287	0.01	0.96496	9.27	0.0000000	0.00	0.1065870	9.65
20F23202	17.0%	✓	0.0050282	6.32	0.0000000	0.00	0.0004783	6.47	0.0000000	0.00	1.769622	6.47	0.0009478	6.32	0.0000000	0.00	1.819820	0.10	0.0003185	11.60	0.0000000	0.00	150.6847	0.04	0.0011370	6.54	583.741	0.02	1.50122	6.32	0.0000000	0.00	0.0914656	9.65
20F23204	17.0%	✓	0.0095984	3.37	0.0000000	0.00	0.0004683	6.04	0.0000000	0.00	1.732631	6.04	0.0018093	3.38	0.0000000	0.00	1.533536	0.10	0.0003119	11.37	0.0000000	0.00	126.9799	0.04	0.0011132	6.11	492.387	0.02	2.86569	3.37	0.0000000	0.00	0.0770768	9.65
20F23205	17.0%	✓	0.0023382	12.03	0.0000000	0.00	0.0005524	5.10	0.0000000	0.00	2.043582	5.10	0.0004408	12.04	0.0000000	0.00	1.668055	0.10	0.0003678	10.90	0.0000000	0.00	138.1183	0.04	0.0013130	5.18	535.897	0.02	0.69810	12.04	0.0000000	0.00	0.0838378	9.65
20F23207	17.0%		0.0307663	1.25	0.0000000	0.00	0.0005590	5.26	0.0000000	0.00	2.068036	5.26	0.0057994	1.26	0.0000000	0.00	1.822205	0.10	0.0003722	10.97	0.0000000	0.00	150.8822	0.04	0.0013287	5.34	579.848	0.02	9.18558	1.26	0.0000000	0.00	0.0915855	9.65
20F23208	17.0%	✓	0.0033878	9.95	0.0000000	0.00	0.0009203	3.24	0.0000000	0.00	3.404704	3.23	0.0006386	9.95	0.0000000	0.00	3.072544	0.10	0.0006128	10.16	0.0000000	0.00	254.4128	0.04	0.0021875	3.36	985.432	0.01	1.01147	9.95	0.0000000	0.00	0.1544286	9.65
		Σ	0.4461373	0.45	0.0000000	0.00	0.0250105	0.66	0.0000086	82.26	92.528609	0.66	0.0840969	0.45	0.0000000	0.00	87.128775	0.02	0.0166551	2.11	0.0399101	82.26	7214.4386	0.01	0.0594496	0.69	27966.126	0.00	133.19875	0.45	0.0000000	0.00	4.3791642	1.99
		Σ							0.4711563	0.43	92.528609	0.66									87.269437	0.04			7214.4980	0.01							28103.704	0.00

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F23165	17.0 %	✓	3.917174	0.001560	0.012455	0.000188	0.000125	0.000001	131.921	13.574164	1.00093215	8.506E-11
20F23166	17.0 %	✓	3.875698	0.001551	0.013754	0.000311	0.000011	0.000001	131.926	13.575654	1.00093219	4.951E-11
20F23168	17.0 %	✓	3.900627	0.001609	0.013422	0.000608	0.000082	0.000002	131.939	13.579006	1.00093228	2.296E-11
20F23169	17.0 %	✓	3.885480	0.001566	0.015208	0.000347	0.000036	0.000001	131.944	13.580496	1.00093232	3.857E-11
20F23171	17.0 %	✓	3.893420	0.001547	0.013294	0.000191	0.000043	0.000001	131.956	13.583663	1.00093240	9.016E-11
20F23172	17.0 %	✓	3.883281	0.001553	0.011662	0.000324	0.000017	0.000001	131.963	13.585340	1.00093244	4.965E-11
20F23174	17.0 %	✓	3.881044	0.001591	0.011922	0.000570	0.000012	0.000002	131.974	13.588508	1.00093253	2.608E-11
20F23175	17.0 %	✓	3.887049	0.001572	0.012879	0.000394	0.000032	0.000001	131.981	13.590186	1.00093257	3.812E-11
20F23177	17.0 %	✓	3.882268	0.001594	0.010445	0.000668	0.000034	0.000002	131.992	13.593355	1.00093265	2.326E-11
20F23178	17.0 %	✓	3.988189	0.001640	0.012790	0.000612	0.000374	0.000003	131.998	13.594847	1.00093269	2.618E-11
20F23180	17.0 %	✓	3.890991	0.001609	0.010524	0.000582	0.000042	0.000002	132.010	13.598204	1.00093278	2.697E-11
20F23181	17.0 %	✓	4.045360	0.001656	0.016085	0.000629	0.000579	0.000003	132.016	13.599696	1.00093282	2.453E-11
20F23183	17.0 %	✓	3.880471	0.001582	0.011860	0.000546	0.000009	0.000002	132.028	13.602868	1.00093290	2.706E-11
20F23184	17.0 %	✓	3.882485	0.001587	0.011468	0.000546	0.000013	0.000002	132.034	13.604547	1.00093295	2.697E-11
20F23186	17.0 %	✓	3.876082	0.001658	0.012252	0.001132	0.000016	0.000003	132.046	13.607720	1.00093303	1.361E-11
20F23187	17.0 %		3.887032	0.001590	0.012457	0.000612	0.000005	0.000002	132.052	13.609400	1.00093308	2.558E-11
20F23189	17.0 %	✓	3.885677	0.001561	0.013833	0.000371	0.000015	0.000001	132.064	13.612574	1.00093316	4.054E-11
20F23190	17.0 %	✓	3.882651	0.001552	0.011294	0.000272	0.000006	0.000001	132.070	13.614254	1.00093320	5.385E-11
20F23192	17.0 %	✓	3.873083	0.001608	0.012361	0.000694	0.000021	0.000002	132.082	13.617429	1.00093329	2.306E-11
20F23193	17.0 %	✓	3.875581	0.001591	0.012627	0.000630	0.000018	0.000002	132.088	13.618924	1.00093333	2.654E-11
20F23195	17.0 %	✓	3.877892	0.001560	0.015699	0.000373	0.000023	0.000001	132.100	13.622287	1.00093341	4.186E-11
20F23196	17.0 %	✓	3.918950	0.001596	0.012772	0.000484	0.000156	0.000002	132.106	13.623782	1.00093345	3.406E-11
20F23198	17.0 %	✓	3.902213	0.001594	0.011589	0.000621	0.000074	0.000002	132.117	13.626959	1.00093354	2.343E-11
20F23199	17.0 %	✓	3.880085	0.001611	0.011028	0.000777	0.000016	0.000002	132.124	13.628641	1.00093358	2.010E-11
20F23201	17.0 %	✓	3.880226	0.001588	0.011804	0.000617	0.000022	0.000002	132.135	13.631820	1.00093367	2.412E-11
20F23202	17.0 %	✓	3.884466	0.001600	0.011744	0.000760	0.000037	0.000002	132.142	13.633503	1.00093371	2.072E-11
20F23204	17.0 %	✓	3.900815	0.001640	0.013645	0.000824	0.000079	0.000003	132.153	13.636682	1.00093379	1.753E-11
20F23205	17.0 %	✓	3.885606	0.001614	0.014796	0.000754	0.000021	0.000002	132.159	13.638178	1.00093383	1.900E-11
20F23207	17.0 %		3.904499	0.001622	0.013706	0.000721	0.000208	0.000003	132.172	13.641546	1.00093392	2.086E-11
20F23208	17.0 %	✓	3.877906	0.001563	0.013382	0.000432	0.000017	0.000001	132.177	13.643043	1.00093396	3.493E-11

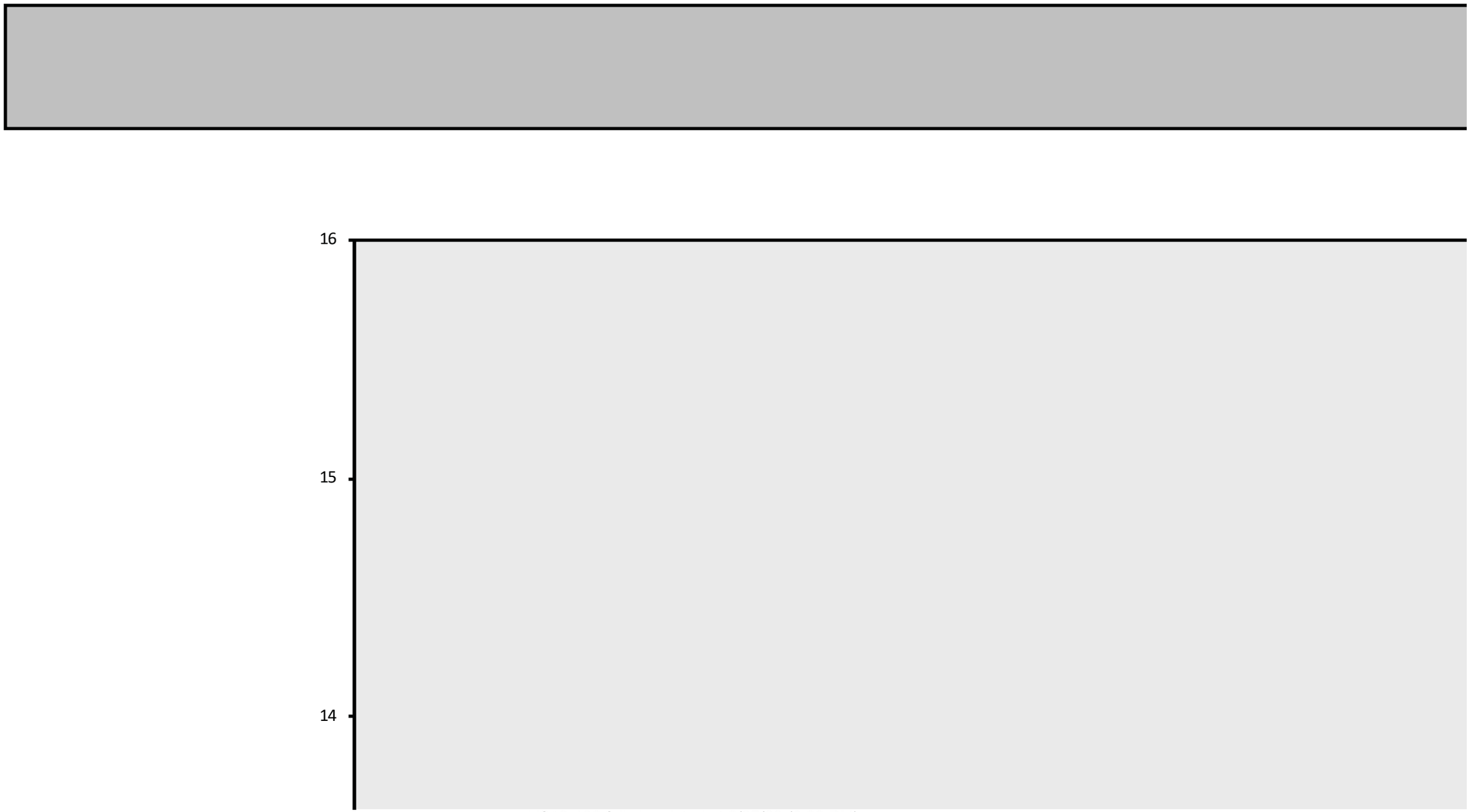
Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F23165	17.0 %	0.0049577 ±0.0001525	0.0190628 ±0.0057099	0.0050611 ±0.0060415	0.0053899 ±0.0063920	1.0622959 ±0.0159360
20F23166	17.0 %	0.0049577 ±0.0001525	0.0190628 ±0.0057099	0.0050611 ±0.0060415	0.0053899 ±0.0063920	1.0622959 ±0.0159360
20F23168	17.0 %	0.0049353 ±0.0001728	0.0187193 ±0.0049059	0.0034804 ±0.0065799	0.0228026 ±0.0068289	1.2461289 ±0.0146260
20F23169	17.0 %	0.0049353 ±0.0001728	0.0187193 ±0.0049059	0.0034804 ±0.0065799	0.0228026 ±0.0068289	1.2461289 ±0.0146260
20F23171	17.0 %	0.0047869 ±0.0001591	0.0159552 ±0.0062612	0.0047600 ±0.0063968	0.0142429 ±0.0055573	1.1733794 ±0.0148657
20F23172	17.0 %	0.0047869 ±0.0001591	0.0159552 ±0.0062612	0.0047600 ±0.0063968	0.0142429 ±0.0055573	1.1733794 ±0.0148657
20F23174	17.0 %	0.0056974 ±0.0001906	0.0199548 ±0.0056440	0.0030888 ±0.0063381	0.0135679 ±0.0059324	1.2841166 ±0.0145871
20F23175	17.0 %	0.0056974 ±0.0001906	0.0199548 ±0.0056440	0.0030888 ±0.0063381	0.0135679 ±0.0059324	1.2841166 ±0.0145871
20F23177	17.0 %	0.0052600 ±0.0002047	0.0072505 ±0.0058155	0.0082500 ±0.0065995	0.0090584 ±0.0058438	1.2607616 ±0.0158945
20F23178	17.0 %	0.0052600 ±0.0002047	0.0072505 ±0.0058155	0.0082500 ±0.0065995	0.0090584 ±0.0058438	1.2607616 ±0.0158945
20F23180	17.0 %	0.0053317 ±0.0001791	0.0098547 ±0.0056389	0.0082100 ±0.0058486	0.0163436 ±0.0061365	1.3746370 ±0.0161937
20F23181	17.0 %	0.0053317 ±0.0001791	0.0098547 ±0.0056389	0.0082100 ±0.0058486	0.0163436 ±0.0061365	1.3746370 ±0.0161937
20F23183	17.0 %	0.0052246 ±0.0001898	0.0061001 ±0.0054010	0.0062736 ±0.0059725	0.0185320 ±0.0059007	1.3854690 ±0.0135899
20F23184	17.0 %	0.0052246 ±0.0001898	0.0061001 ±0.0054010	0.0062736 ±0.0059725	0.0185320 ±0.0059007	1.3854690 ±0.0135899
20F23186	17.0 %	0.0054951 ±0.0001705	0.0162769 ±0.0057524	0.0102517 ±0.0067267	0.0087138 ±0.0071164	1.4399476 ±0.0155770
20F23187	17.0 %	0.0054951 ±0.0001705	0.0162769 ±0.0057524	0.0102517 ±0.0067267	0.0087138 ±0.0071164	1.4399476 ±0.0155770
20F23189	17.0 %	0.0055012 ±0.0001702	0.0196483 ±0.0057325	0.0041500 ±0.0067207	0.0343538 ±0.0064644	1.3541323 ±0.0167183
20F23190	17.0 %	0.0055012 ±0.0001702	0.0196483 ±0.0057325	0.0041500 ±0.0067207	0.0343538 ±0.0064644	1.3541323 ±0.0167183
20F23192	17.0 %	0.0058001 ±0.0001693	0.0156243 ±0.0063079	0.0134628 ±0.0064607	0.0314019 ±0.0059966	1.3130733 ±0.0140494
20F23193	17.0 %	0.0058001 ±0.0001693	0.0156243 ±0.0063079	0.0134628 ±0.0064607	0.0314019 ±0.0059966	1.3130733 ±0.0140494
20F23195	17.0 %	0.0059619 ±0.0001756	0.0223642 ±0.0062425	0.0033937 ±0.0064395	0.0138375 ±0.0064573	1.3785594 ±0.0178873
20F23196	17.0 %	0.0059619 ±0.0001756	0.0223642 ±0.0062425	0.0033937 ±0.0064395	0.0138375 ±0.0064573	1.3785594 ±0.0178873
20F23198	17.0 %	0.0057775 ±0.0001930	0.0148617 ±0.0053399	0.0057575 ±0.0067662	0.0185390 ±0.0060172	1.3139672 ±0.0150837
20F23199	17.0 %	0.0057775 ±0.0001930	0.0148617 ±0.0053399	0.0057575 ±0.0067662	0.0185390 ±0.0060172	1.3139672 ±0.0150837
20F23201	17.0 %	0.0055425 ±0.0001818	0.0208672 ±0.0059799	0.0008918 ±0.0056692	0.0053499 ±0.0058219	1.3566927 ±0.0149648
20F23202	17.0 %	0.0055425 ±0.0001818	0.0208672 ±0.0059799	0.0008918 ±0.0056692	0.0053499 ±0.0058219	1.3566927 ±0.0149648
20F23204	17.0 %	0.0062712 ±0.0001745	0.0254550 ±0.0056063	0.0060333 ±0.0063853	0.0176937 ±0.0063280	1.5564721 ±0.0161125
20F23205	17.0 %	0.0062712 ±0.0001745	0.0254550 ±0.0056063	0.0060333 ±0.0063853	0.0176937 ±0.0063280	1.5564721 ±0.0161125
20F23207	17.0 %	0.0062712 ±0.0001745	0.0254550 ±0.0056063	0.0060333 ±0.0063853	0.0176937 ±0.0063280	1.5564721 ±0.0161125
20F23208	17.0 %	0.0062712 ±0.0001745	0.0254550 ±0.0056063	0.0060333 ±0.0063853	0.0176937 ±0.0063280	1.5564721 ±0.0161125

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F23165	17.0 %	0.0806750 ±0.0005068	0.9658	EXP 150 of 150	0.5436141 ±0.0058843	0.4667	EXP 150 of 150	7.3922498 ±0.0075104	0.9903	EXP 150 of 150	612.80880 ±0.03544	1.0000	EXP 150 of 150	2404.01878 ±0.07010	1.0000	EXP 149 of 150
20F23166	17.0 %	0.0088282 ±0.0002995	0.9857	EXP 150 of 150	0.3463992 ±0.0057967	0.3088	EXP 146 of 150	4.3583995 ±0.0077453	0.9720	EXP 150 of 150	360.46320 ±0.02281	1.0000	EXP 149 of 150	1399.54234 ±0.05245	1.0000	EXP 150 of 150
20F23168	17.0 %	0.0183389 ±0.0002840	0.9591	EXP 150 of 150	0.1455936 ±0.0055662	0.1116	EXP 148 of 150	1.9990625 ±0.0071286	0.8907	EXP 150 of 150	166.14194 ±0.01706	0.9999	EXP 150 of 150	649.88953 ±0.03560	1.0000	EXP 148 of 150
20F23169	17.0 %	0.0150049 ±0.0002851	0.9787	EXP 149 of 150	0.2951929 ±0.0050739	0.2541	EXP 150 of 150	3.3560005 ±0.0062884	0.9680	EXP 147 of 150	280.15014 ±0.02050	1.0000	EXP 149 of 150	1090.80856 ±0.04757	1.0000	EXP 150 of 150
20F23171	17.0 %	0.0327363 ±0.0004287	0.9861	EXP 150 of 150	0.6240395 ±0.0062265	0.4989	EXP 150 of 150	7.8353678 ±0.0069751	0.9926	EXP 149 of 150	653.51145 ±0.03245	1.0000	EXP 150 of 150	2548.16173 ±0.07451	1.0000	EXP 150 of 150
20F23172	17.0 %	0.0107687 ±0.0002885	0.9887	EXP 145 of 150	0.2940091 ±0.0057777	0.2116	EXP 150 of 150	4.3207643 ±0.0070522	0.9747	EXP 150 of 150	360.84231 ±0.02191	1.0000	EXP 148 of 150	1403.82926 ±0.05648	1.0000	EXP 150 of 150
20F23174	17.0 %	0.0079909 ±0.0002411	0.9796	EXP 150 of 150	0.1465311 ±0.0055690	0.0958	EXP 149 of 150	2.2880846 ±0.0058857	0.9410	EXP 150 of 150	189.64179 ±0.01860	0.9999	EXP 149 of 150	738.00597 ±0.03822	1.0000	EXP 150 of 150
20F23175	17.0 %	0.0143076 ±0.0002942	0.9800	EXP 150 of 150	0.2424648 ±0.0056117	0.1814	EXP 150 of 150	3.3247762 ±0.0064695	0.9664	EXP 149 of 150	276.73048 ±0.02298	0.9999	EXP 150 of 150	1078.01662 ±0.04375	1.0000	EXP 150 of 150
20F23177	17.0 %	0.0109032 ±0.0002652	0.9696	EXP 150 of 150	0.1227633 ±0.0059272	0.0297	EXP 150 of 150	2.0331045 ±0.0058793	0.9260	EXP 147 of 150	169.08654 ±0.01646	0.9999	EXP 150 of 150	658.34854 ±0.03605	1.0000	EXP 150 of 150
20F23178	17.0 %	0.0736656 ±0.0004489	0.8139	EXP 150 of 150	0.1671771 ±0.0059502	0.0921	EXP 149 of 150	2.2482233 ±0.0071736	0.9122	EXP 150 of 150	185.28565 ±0.01839	0.9999	EXP 149 of 150	740.94852 ±0.04275	1.0000	EXP 150 of 150
20F23180	17.0 %	0.0134735 ±0.0003074	0.9725	EXP 150 of 150	0.1416077 ±0.0061742	0.0287	EXP 150 of 150	2.3381693 ±0.0061715	0.9394	EXP 147 of 150	195.58315 ±0.01992	0.9999	EXP 150 of 150	763.11590 ±0.05320	0.9999	EXP 149 of 150
20F23181	17.0 %	0.1030878 ±0.0005170	0.6267	EXP 149 of 150	0.1927081 ±0.0055044	0.0441	EXP 149 of 150	2.0726167 ±0.0068128	0.9074	EXP 150 of 150	171.16345 ±0.01574	0.9999	EXP 150 of 150	694.44758 ±0.03763	1.0000	EXP 149 of 150
20F23183	17.0 %	0.0069019 ±0.0002448	0.9795	EXP 149 of 150	0.1656016 ±0.0057287	0.1146	EXP 146 of 150	2.3567436 ±0.0068740	0.9250	EXP 150 of 150	196.81513 ±0.01769	0.9999	EXP 150 of 150	765.84454 ±0.03824	1.0000	EXP 150 of 150
20F23184	17.0 %	0.0077214 ±0.0002495	0.9805	EXP 150 of 150	0.1592723 ±0.0056929	0.0670	EXP 150 of 150	2.3440058 ±0.0058476	0.9417	EXP 147 of 150	196.05310 ±0.01765	0.9999	EXP 149 of 150	763.27967 ±0.04390	1.0000	EXP 150 of 150
20F23186	17.0 %	0.0070789 ±0.0002222	0.9657	EXP 150 of 150	0.0730242 ±0.0058998	0.0250	EXP 150 of 150	1.1944036 ±0.0068110	0.7570	EXP 150 of 150	99.11874 ±0.01271	0.9998	EXP 150 of 150	385.99882 ±0.02838	0.9999	EXP 150 of 150
20F23187	17.0 %	0.0063398 ±0.0002439	0.9796	EXP 150 of 150	0.1537992 ±0.0060291	0.0440	EXP 150 of 150	2.2396830 ±0.0069803	0.9095	EXP 150 of 150	185.68102 ±0.01679	0.9999	EXP 150 of 150	723.90607 ±0.03837	1.0000	EXP 147 of 150
20F23189	17.0 %	0.0099925 ±0.0002996	0.9804	EXP 150 of 150	0.2797175 ±0.0054951	0.1636	EXP 150 of 150	3.5419501 ±0.0065754	0.9678	EXP 150 of 150	294.42764 ±0.02058	1.0000	EXP 149 of 150	1146.46330 ±0.04404	1.0000	EXP 149 of 150
20F23190	17.0 %	0.0077653 ±0.0003143	0.9869	EXP 150 of 150	0.3052311 ±0.0051826	0.2336	EXP 145 of 150	4.7006951 ±0.0076239	0.9755	EXP 150 of 150	391.39032 ±0.02409	1.0000	EXP 150 of 150	1522.43619 ±0.05251	1.0000	EXP 149 of 150
20F23192	17.0 %	0.0093133 ±0.0002249	0.9784	EXP 149 of 150	0.1369723 ±0.0057601	0.0781	EXP 149 of 150	2.0302024 ±0.0067649	0.9021	EXP 150 of 150	168.02165 ±0.01903	0.9999	EXP 150 of 150	652.63126 ±0.03809	1.0000	EXP 150 of 150
20F23193	17.0 %	0.0092454 ±0.0002444	0.9794	EXP 150 of 150	0.1636626 ±0.0063030	0.0967	EXP 150 of 150	2.3227098 ±0.0067430	0.9232	EXP 150 of 150	193.26330 ±0.01986	0.9999	EXP 150 of 150	750.97934 ±0.03652	1.0000	EXP 150 of 150
20F23195	17.0 %	0.0128843 ±0.0002693	0.9848	EXP 150 of 150	0.3289330 ±0.0053626	0.3360	EXP 150 of 150	3.6692319 ±0.0077602	0.9610	EXP 150 of 150	304.62535 ±0.02197	1.0000	EXP 150 of 150	1183.86030 ±0.04752	1.0000	EXP 149 of 150
20F23196	17.0 %	0.0438444 ±0.0003922	0.9431	EXP 150 of 150	0.2077425 ±0.0060315	0.0978	EXP 150 of 150	2.9750209 ±0.0073837	0.9449	EXP 150 of 150	245.28466 ±0.02111	0.9999	EXP 149 of 150	963.58462 ±0.05233	1.0000	EXP 150 of 150
20F23198	17.0 %	0.0181151 ±0.0003115	0.9533	EXP 150 of 150	0.1293248 ±0.0055609	0.0930	EXP 150 of 150	2.0447655 ±0.0066757	0.9085	EXP 150 of 150	169.44496 ±0.01459	0.9999	EXP 148 of 150	663.14109 ±0.03798	1.0000	EXP 149 of 150
20F23199	17.0 %	0.0080248 ±0.0002441	0.9738	EXP 149 of 150	0.1035255 ±0.0063913	0.0117	EXP 150 of 150	1.7542548 ±0.0063950	0.8880	EXP 150 of 150	146.22418 ±0.01554	0.9999	EXP 150 of 150	569.19562 ±0.03704	0.9999	EXP 150 of 150
20F23201	17.0 %	0.0092825 ±0.0002312	0.9786	EXP 149 of 150	0.1311324 ±0.0051892	0.0162	EXP 149 of 150	2.1211377 ±0.0068467	0.9155	EXP 150 of 150	175.42016 ±0.01638	0.9999	EXP 149 of 150	682.71544 ±0.03648	1.0000	EXP 149 of 150
20F23202	17.0 %	0.0109728 ±0.0002530	0.9718	EXP 150 of 150	0.1088900 ±0.0058737	0.0090	EXP 149 of 150	1.7963895 ±0.0073246	0.8603	EXP 150 of 150	150.53429 ±0.01482	0.9999	EXP 150 of 150	586.69080 ±0.03393	1.0000	EXP 149 of 150
20F23204	17.0 %	0.0161986 ±0.0002654	0.9544	EXP 149 of 150	0.1015602 ±0.0052057	0.0875	EXP 149 of 150	1.5177153 ±0.0057973	0.8704	EXP 150 of 150	126.86646 ±0.01544	0.9999	EXP 150 of 150	496.88594 ±0.03172	0.9999	EXP 150 of 150
20F23205	17.0 %	0.0091218 ±0.0002139	0.9773	EXP 148 of 150	0.1243388 ±0.0051532	0.0591	EXP 148 of 150	1.6551340 ±0.0065589	0.8732	EXP 150 of 150	137.99348 ±0.01412	0.9999	EXP 148 of 150	538.23509 ±0.03708	0.9999	EXP 149 of 150
20F23207	17.0 %	0.0371630 ±0.0003328	0.9211	EXP 150 of 150	0.1260939 ±0.0056316	0.0705	EXP 150 of 150	1.8204011 ±0.0066558	0.8891	EXP 150 of 150	150.74408 ±0.01639	0.9999	EXP 150 of 150	590.68119 ±0.03709	0.9999	EXP 149 of 150
20F23208	17.0 %	0.0105197 ±0.0002813	0.9787	EXP 150 of 150	0.2240197 ±0.0057098	0.1724	EXP 150 of 150	3.0396045 ±0.0059992	0.9655	EXP 150 of 150	254.16766 ±0.01803	1.0000	EXP 150 of 150	988.15392 ±0.04521	1.0000	EXP 147 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F23165	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23166	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23168	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23169	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23171	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23172	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23174	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23175	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23177	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23178	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23180	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23181	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23183	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23184	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23186	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23187	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23189	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23190	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23192	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23193	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23195	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23196	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23198	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23199	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23201	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23202	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23204	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23205	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23207	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01
20F23208	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	45.12	Oregon\Swenton (20-01)	20F23161	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F23165	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	12	37	1
20F23166	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	12	45	1
20F23168	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	13	3	1
20F23169	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	13	11	1
20F23171	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	13	28	1
20F23172	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	13	37	1
20F23174	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	13	54	1
20F23175	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	14	3	1
20F23177	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	14	20	1
20F23178	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	14	28	1
20F23180	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	14	46	1
20F23181	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	14	54	1
20F23183	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	15	11	1
20F23184	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	15	20	1
20F23186	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	15	37	1
20F23187	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	15	46	1
20F23189	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	16	3	1
20F23190	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	16	12	1
20F23192	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	16	29	1
20F23193	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	16	37	1
20F23195	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	16	55	1
20F23196	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	17	3	1
20F23198	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	17	20	1
20F23199	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	17	29	1
20F23201	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	17	46	1
20F23202	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	17	55	1
20F23204	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	18	12	1
20F23205	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	18	20	1
20F23207	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	18	38	1
20F23208	17.0 %	VS19-106	Sanidine	Rhyolite Dome	FCT-NM (1C36-20)	28.201	0.082	Kuiper et al (2008)	9.58908	0.154	0.00161908	0.154	298.69	0.118	0.9998911	0.039	1	3.54E-14	26	AUG	2020	18	46	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F23165	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23166	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23168	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23169	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23171	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23172	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23174	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23175	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23177	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23178	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23180	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23181	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23183	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23184	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23186	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23187	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23189	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23190	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23192	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23193	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23195	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23196	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23198	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23199	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23201	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23202	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23204	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23205	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23207	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23208	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0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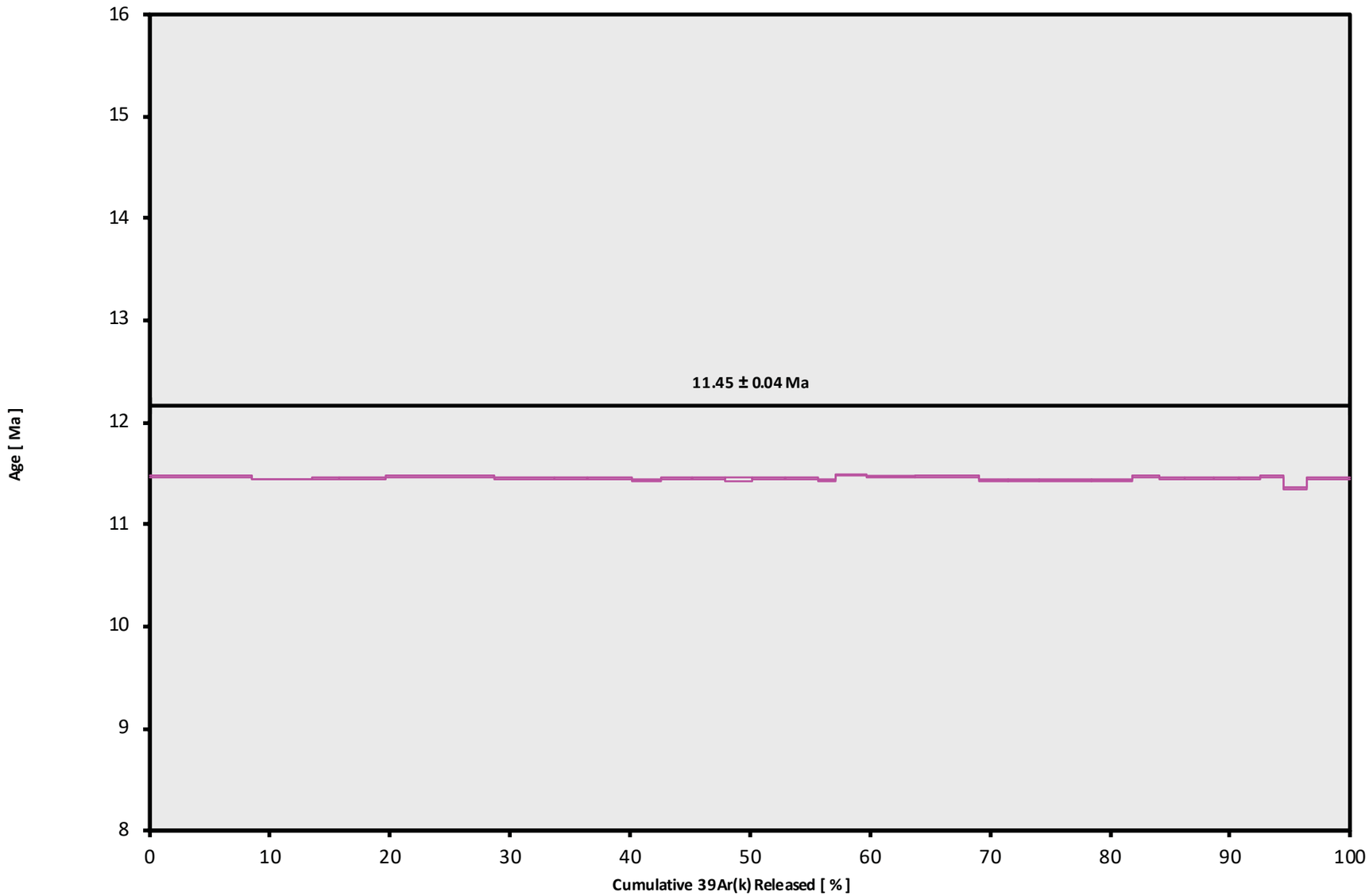


Ar-Ages in Ma

WEIGHTED PLATEAU
11.45 ± 0.04
TOTAL FUSION
11.45 ± 0.04
NORMAL ISOCHRON
11.46 ± 0.04
INVERSE ISOCHRON
11.45 ± 0.04

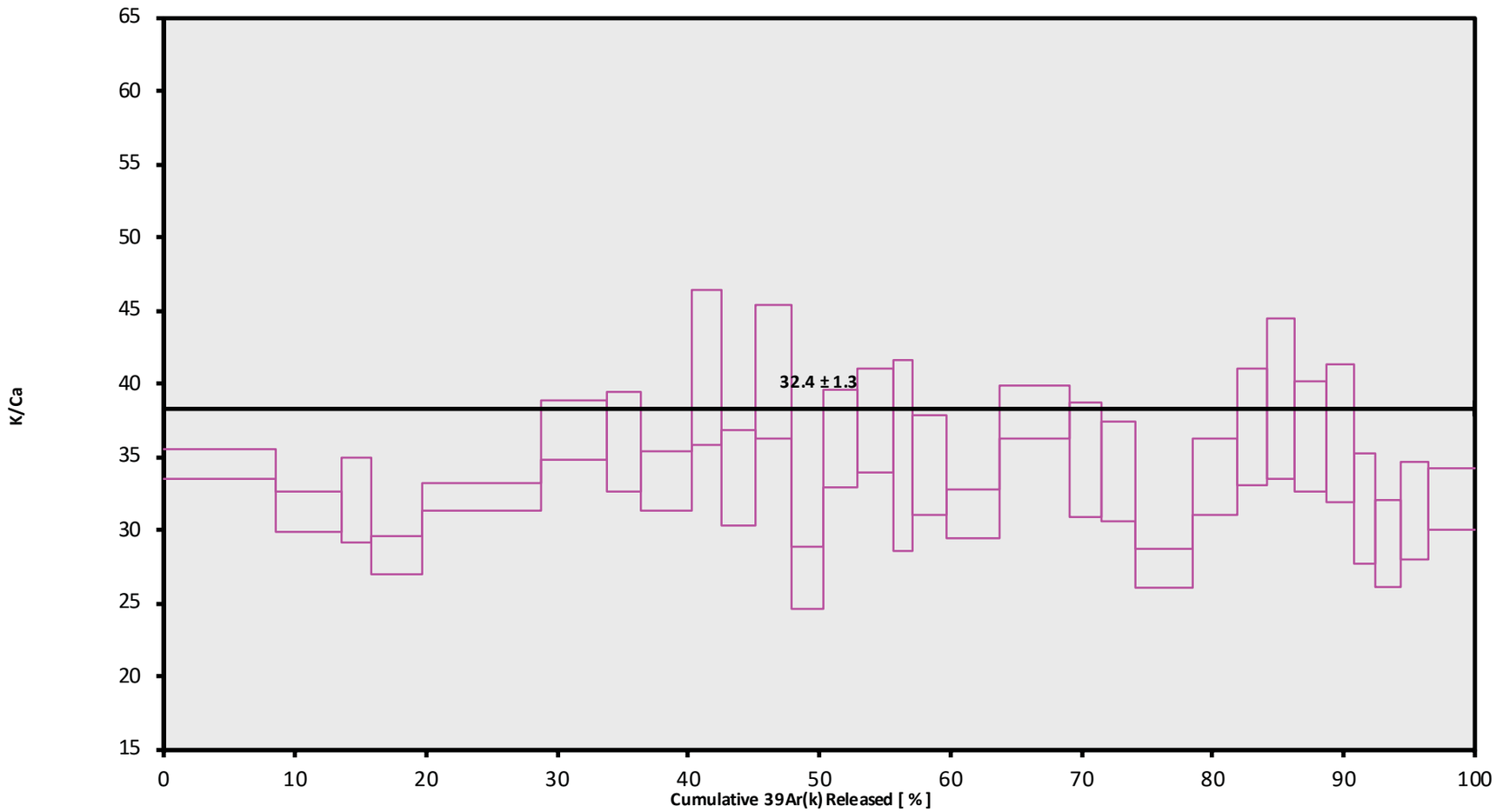
MSWD (PROBABILITY)
5.08 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

IRR = 20-OSU-01 (1C36-20)
J = 0.00161908 ± 0.00000249

20F23161.AGE >>> VS19-106 >>> OREGON | SWENTON (20-01) PROJECT



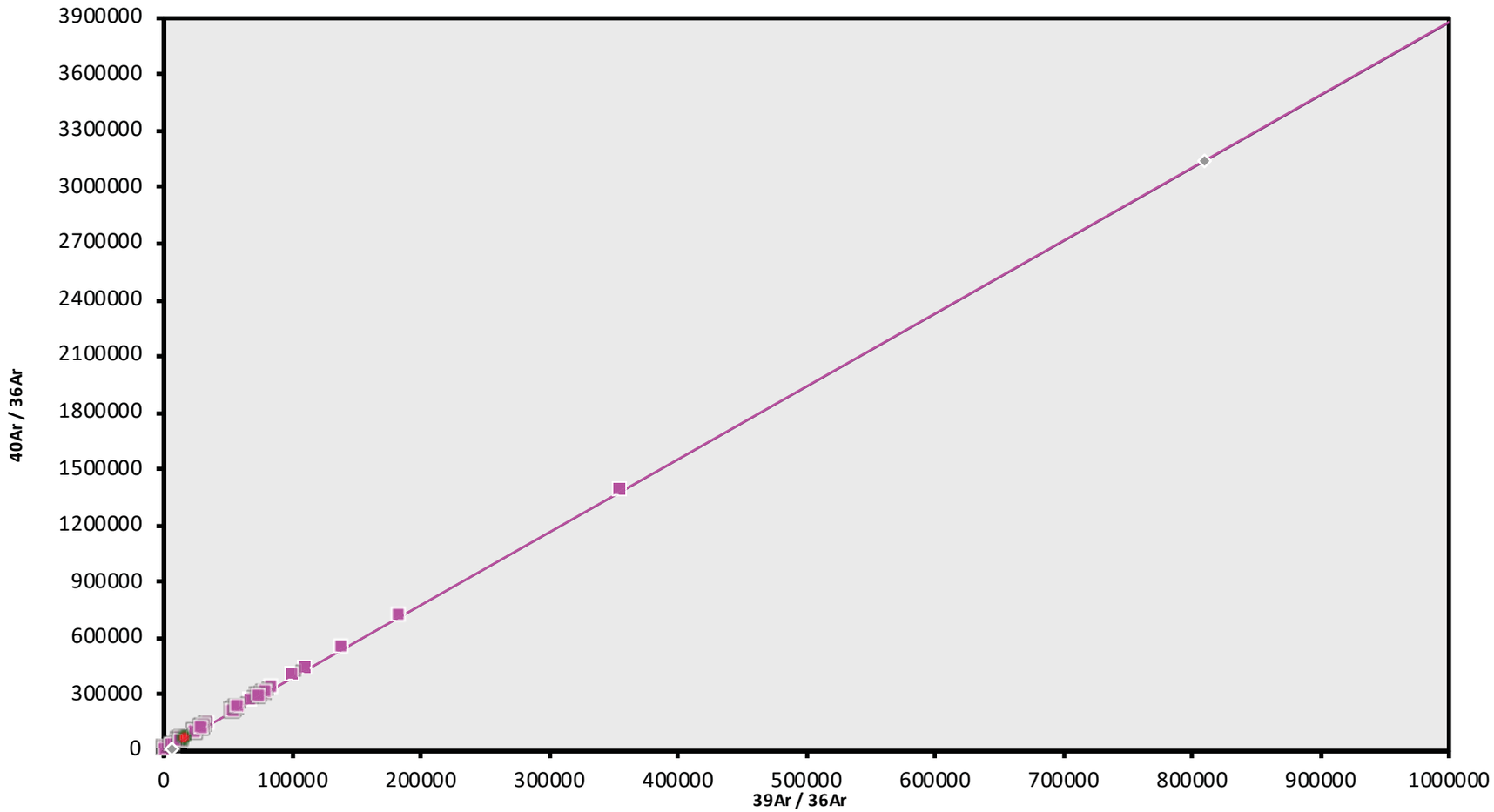
Ar-Ages in Ma

WEIGHTED PLATEAU
11.45 ± 0.04
TOTAL FUSION
11.45 ± 0.04
NORMAL ISOCHRON
11.46 ± 0.04
INVERSE ISOCHRON
11.45 ± 0.04

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23161.AGE >>> VS19-106 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

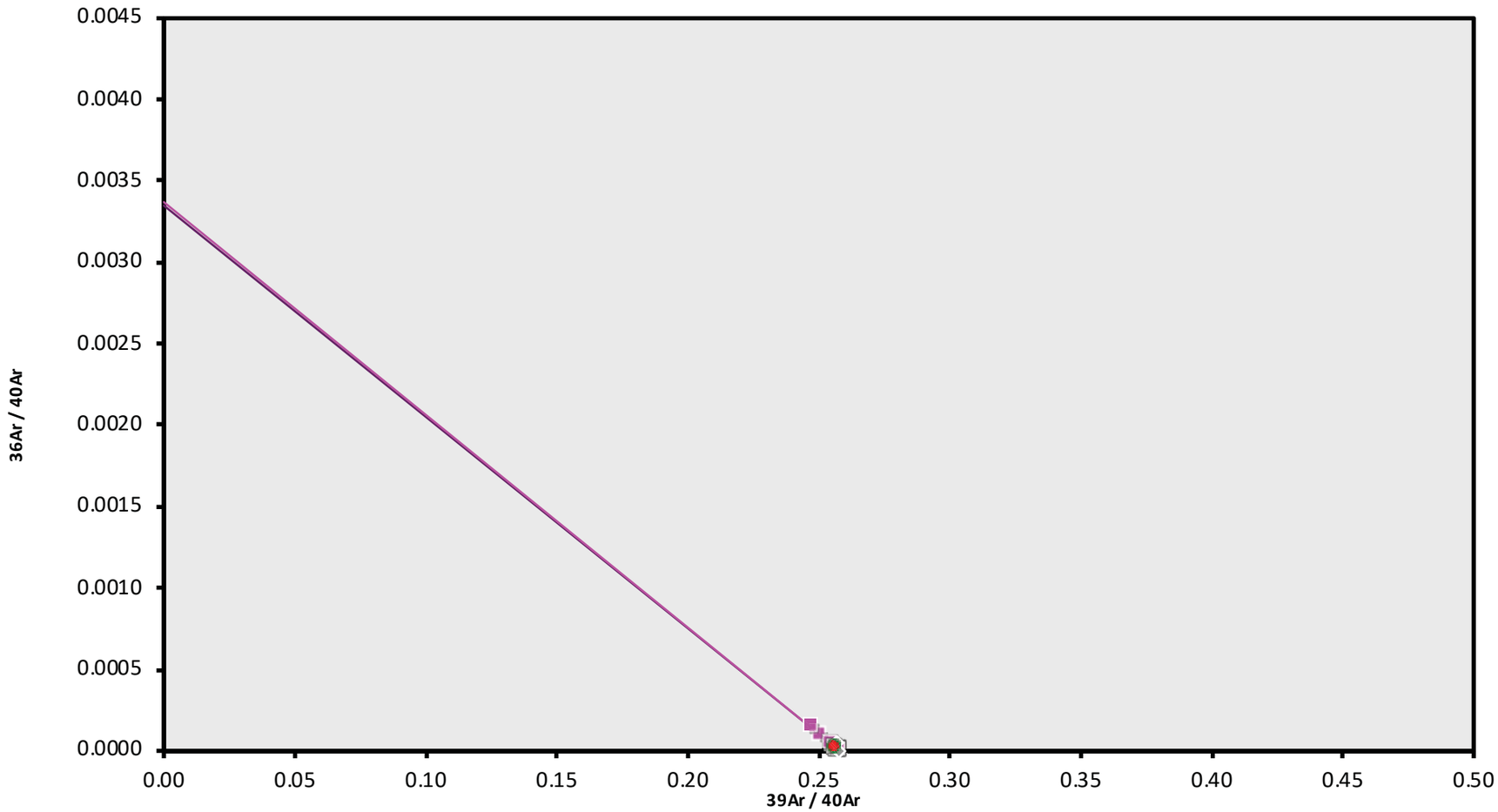
WEIGHTED PLATEAU
11.45 ± 0.04
TOTAL FUSION
11.45 ± 0.04
NORMAL ISOCHRON
11.46 ± 0.04
INVERSE ISOCHRON
11.45 ± 0.04

MSWD (PROBABILITY)
9.57 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23161.AGE >>> VS19-106 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
11.45 ± 0.04
TOTAL FUSION
11.45 ± 0.04
NORMAL ISOCHRON
11.46 ± 0.04
INVERSE ISOCHRON
11.45 ± 0.04

MSWD (PROBABILITY)
5.26 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F15873	24.0 %	✓	0.546992	0.247	2.26490	1.539	4.04089	0.258	327.935	0.037	972.822	0.005	2.46848 ± 0.00325	7.46 ± 0.01	83.21	3.02	62.3 ± 1.9
21F15874	24.0 %	✓	4.443138	0.162	4.57906	0.867	9.05979	0.136	682.647	0.037	3000.690	0.003	2.45238 ± 0.00770	7.41 ± 0.02	55.79	6.30	64.1 ± 1.1
21F15876	24.0 %	✓	3.226798	0.165	3.92866	0.943	8.14965	0.147	627.243	0.037	2506.739	0.003	2.46043 ± 0.00628	7.43 ± 0.02	61.57	5.78	68.7 ± 1.3
21F15877	24.0 %		2.038624	0.182	66.57671	0.242	0.96438	0.987	48.171	0.044	713.533	0.006	2.29024 ± 0.05290	6.92 ± 0.16	15.45	0.44	0.3 ± 0.0
21F15879	24.0 %	✓	1.648891	0.191	2.26363	1.605	5.02184	0.195	393.355	0.037	1458.657	0.004	2.45659 ± 0.00575	7.42 ± 0.02	66.25	3.63	74.7 ± 2.4
21F15880	24.0 %	✓	1.267613	0.201	3.70684	0.963	8.13738	0.137	658.840	0.037	2002.701	0.003	2.46516 ± 0.00318	7.45 ± 0.01	81.10	6.08	76.4 ± 1.5
21F15882	24.0 %	✓	1.262803	0.196	2.08366	1.731	3.63636	0.275	280.350	0.037	1067.876	0.004	2.46426 ± 0.00627	7.45 ± 0.02	64.69	2.59	57.9 ± 2.0
21F15883	24.0 %	✓	0.754429	0.230	2.20560	1.676	4.86988	0.199	393.160	0.037	1196.327	0.004	2.46980 ± 0.00344	7.46 ± 0.01	81.17	3.63	76.6 ± 2.6
21F15885	24.0 %	✓	3.159250	0.166	4.04051	0.910	8.39908	0.141	647.530	0.037	2533.752	0.003	2.45620 ± 0.00600	7.42 ± 0.02	62.77	5.97	68.9 ± 1.3
21F15886	24.0 %	✓	0.749083	0.230	2.71457	1.401	5.85959	0.195	473.833	0.037	1394.937	0.004	2.47181 ± 0.00301	7.47 ± 0.01	83.96	4.37	75.1 ± 2.1
21F15888	24.0 %	✓	0.993441	0.212	3.65581	0.997	7.73168	0.154	626.770	0.037	1846.487	0.003	2.47269 ± 0.00289	7.47 ± 0.01	83.93	5.78	73.7 ± 1.5
21F15889	24.0 %	✓	3.171848	0.168	3.19797	1.123	6.84257	0.161	518.700	0.037	2223.711	0.003	2.46129 ± 0.00744	7.44 ± 0.02	57.41	4.78	69.7 ± 1.6
21F15891	24.0 %		0.185621	0.422	34.98902	0.259	0.34485	2.682	24.729	0.059	112.357	0.022	2.41822 ± 0.01978	7.31 ± 0.06	53.18	0.23	0.3 ± 0.0
21F15892	24.0 %	✓	0.120946	0.528	19.15855	0.307	0.23744	3.856	17.023	0.068	76.496	0.034	2.46447 ± 0.02327	7.45 ± 0.07	54.80	0.16	0.4 ± 0.0
21F15894	24.0 %	✓	0.508611	0.247	1.31273	2.745	2.76463	0.350	222.047	0.038	698.831	0.006	2.46323 ± 0.00413	7.44 ± 0.01	78.27	2.05	72.7 ± 4.0
21F15895	24.0 %	✓	1.374401	0.198	3.66676	0.970	5.81045	0.191	460.892	0.037	1548.025	0.004	2.46849 ± 0.00439	7.46 ± 0.01	73.49	4.25	54.0 ± 1.0
21F15897	24.0 %		0.164518	0.498	20.78107	0.305	0.20659	4.379	14.606	0.082	82.157	0.028	2.37829 ± 0.03461	7.19 ± 0.10	42.24	0.13	0.3 ± 0.0
21F15898	24.0 %		0.435371	0.277	29.77942	0.264	0.36201	2.710	23.368	0.060	187.923	0.015	2.58373 ± 0.03316	7.81 ± 0.10	32.10	0.22	0.3 ± 0.0
21F15900	24.0 %	✓	0.029484	1.540	0.76970	4.966	1.72150	0.544	141.468	0.038	358.894	0.010	2.47455 ± 0.00275	7.48 ± 0.01	97.54	1.30	79.0 ± 7.9
21F15901	24.0 %	✓	0.018955	2.160	32.77031	0.261	0.22986	4.159	18.986	0.067	50.123	0.050	2.48336 ± 0.01360	7.50 ± 0.04	93.96	0.17	0.2 ± 0.0
21F15903	24.0 %		0.400205	0.295	15.92111	0.338	0.22087	4.456	11.503	0.097	145.755	0.018	2.39697 ± 0.06539	7.24 ± 0.20	18.90	0.11	0.3 ± 0.0
21F15904	24.0 %		0.058094	0.923	15.30602	0.339	0.14137	6.877	10.387	0.104	41.361	0.056	2.43276 ± 0.03178	7.35 ± 0.10	61.04	0.10	0.3 ± 0.0
21F15906	24.0 %	✓	1.958013	0.179	3.89607	1.024	7.99231	0.147	633.849	0.037	2148.605	0.003	2.46739 ± 0.00424	7.46 ± 0.01	72.79	5.85	70.0 ± 1.4
21F15907	24.0 %	✓	3.228289	0.167	4.08723	0.968	8.38992	0.143	644.630	0.037	2550.473	0.003	2.46122 ± 0.00615	7.44 ± 0.02	62.21	5.94	67.8 ± 1.3
21F15909	24.0 %	✓	0.420001	0.284	2.17443	1.723	4.42997	0.221	360.321	0.037	1016.860	0.005	2.47398 ± 0.00281	7.47 ± 0.01	87.66	3.32	71.3 ± 2.5
21F15910	24.0 %	✓	0.147314	0.486	1.16949	3.129	2.73596	0.365	224.766	0.038	600.244	0.006	2.47467 ± 0.00272	7.48 ± 0.01	92.67	2.07	82.6 ± 5.2
21F15912	24.0 %	✓	0.278745	0.336	0.96935	3.807	2.13474	0.471	173.392	0.038	511.810	0.007	2.47164 ± 0.00389	7.47 ± 0.01	83.73	1.60	76.9 ± 5.9
21F15913	24.0 %	✓	5.353521	0.160	3.80702	1.030	8.64293	0.143	632.759	0.037	3145.515	0.003	2.44500 ± 0.00980	7.39 ± 0.03	49.18	5.84	71.5 ± 1.5
21F15915	24.0 %	✓	0.541153	0.268	4.63579	0.845	8.40527	0.143	690.293	0.037	1869.843	0.004	2.47466 ± 0.00228	7.48 ± 0.01	91.36	6.37	64.0 ± 1.1
21F15916	24.0 %	✓	2.066454	0.184	6.91121	0.631	10.71276	0.118	860.073	0.037	2739.312	0.003	2.46769 ± 0.00354	7.46 ± 0.01	77.48	7.93	53.5 ± 0.7
		Σ	40.552604	0.045	303.32320	0.100	138.19651	0.042	10843.623	0.008	38802.814	0.001					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-109**
Material = **Sanidine**
Location = **N of Drewsey**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X3-21)**
Position = **X: 0 | Y: 0 | Z/H: 2.219184 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.38682 ± 0.01061**
FCT-NM J-value = **0.00165397 ± 0.00000187**
Air Shot 40Ar/36Ar = **301.1360 ± 0.3132**
Air Shot MDF = **0.99785867 ± 0.00036502 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.50 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		2.46985 ± 0.00232	**7.46 ± 0.02**	8.60	98.78	63.8 ± 8.5
Error Mean		± 0.09%	**± 0.24%**	0%	24	
		Full External Error	± 0.39	1.59	2σ Confidence Limit	
		Analytical Error	± 0.01	2.9319	Error Magnification	
Total Fusion Age		2.46355 ± 0.00125	**7.44 ± 0.02**		30	15.4 ± 0.0
		± 0.05%	**± 0.23%**			
		Full External Error	± 0.39			
		Analytical Error	± 0.00			
Normal Isochron	**295.12 ± 0.67**	2.47630 ± 0.00170	**7.48 ± 0.02**	1.93	98.78	
Error Chron	**± 0.23%**	± 0.07%	**± 0.24%**	1%	24	
		Full External Error	± 0.39	1.60	2σ Confidence Limit	
		Analytical Error	± 0.01	1.3885	Error Magnification	
				1	Number of Iterations	
				0.0000000451	Convergence	
Inverse Isochron	**295.12 ± 0.67**	2.47633 ± 0.00170	**7.48 ± 0.02**	1.93	98.78	
Error Chron	**± 0.23%**	± 0.07%	**± 0.24%**	1%	24	
		Full External Error	± 0.39	1.60	2σ Confidence Limit	
		Analytical Error	± 0.01	1.3885	Error Magnification	
				2	Number of Iterations	
				0.0000096194	Convergence	
				48%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F15873	24.0 %	✓	0.546380	2.26490	0.0000000	327.933	809.496	7.46 ± 0.01	83.21	3.02	62.3 ± 1.9
21F15874	24.0 %	✓	4.441901	4.57906	0.0000000	682.644	1674.102	7.41 ± 0.02	55.79	6.30	64.1 ± 1.1
21F15876	24.0 %	✓	3.225736	3.92866	0.0000000	627.240	1543.282	7.43 ± 0.02	61.57	5.78	68.7 ± 1.3
21F15877	24.0 %		2.020628	66.57671	0.0000000	48.128	110.225	6.92 ± 0.16	15.45	0.44	0.3 ± 0.0
21F15879	24.0 %	✓	1.648279	2.26363	0.0000000	393.354	966.308	7.42 ± 0.02	66.25	3.63	74.7 ± 2.4
21F15880	24.0 %	✓	1.266611	3.70684	0.0000000	658.837	1624.142	7.45 ± 0.01	81.10	6.08	76.4 ± 1.5
21F15882	24.0 %	✓	1.262238	2.08366	0.0122872	280.348	690.852	7.45 ± 0.02	64.69	2.59	57.9 ± 2.0
21F15883	24.0 %	✓	0.753832	2.20560	0.0000000	393.158	971.024	7.46 ± 0.01	81.17	3.63	76.6 ± 2.6
21F15885	24.0 %	✓	3.158158	4.04051	0.0000000	647.527	1590.459	7.42 ± 0.02	62.77	5.97	68.9 ± 1.3
21F15886	24.0 %	✓	0.748349	2.71457	0.0000000	473.831	1171.222	7.47 ± 0.01	83.96	4.37	75.1 ± 2.1
21F15888	24.0 %	✓	0.992453	3.65581	0.0000000	626.768	1549.800	7.47 ± 0.01	83.93	5.78	73.7 ± 1.5
21F15889	24.0 %	✓	3.170983	3.19797	0.0000000	518.698	1276.667	7.44 ± 0.02	57.41	4.78	69.7 ± 1.6
21F15891	24.0 %		0.176162	34.98902	0.0069632	24.707	59.747	7.31 ± 0.06	53.18	0.23	0.3 ± 0.0
21F15892	24.0 %	✓	0.115767	19.15855	0.0067280	17.011	41.922	7.45 ± 0.07	54.80	0.16	0.4 ± 0.0
21F15894	24.0 %	✓	0.508256	1.31273	0.0000000	222.046	546.951	7.44 ± 0.01	78.27	2.05	72.7 ± 4.0
21F15895	24.0 %	✓	1.373409	3.66676	0.0000000	460.889	1137.701	7.46 ± 0.01	73.49	4.25	54.0 ± 1.0
21F15897	24.0 %		0.158901	20.78107	0.0000000	14.593	34.706	7.19 ± 0.10	42.24	0.13	0.3 ± 0.0
21F15898	24.0 %		0.427322	29.77942	0.0000000	23.349	60.327	7.81 ± 0.10	32.10	0.22	0.3 ± 0.0
21F15900	24.0 %	✓	0.029275	0.76970	0.0073460	141.467	350.068	7.48 ± 0.01	97.54	1.30	79.0 ± 7.9
21F15901	24.0 %	✓	0.010097	32.77031	0.0000000	18.965	47.097	7.50 ± 0.04	93.96	0.17	0.2 ± 0.0
21F15903	24.0 %		0.395901	15.92111	0.0045774	11.493	27.548	7.24 ± 0.20	18.90	0.11	0.3 ± 0.0
21F15904	24.0 %		0.053957	15.30602	0.0031219	10.377	25.245	7.35 ± 0.10	61.04	0.10	0.3 ± 0.0
21F15906	24.0 %	✓	1.956960	3.89607	0.0000000	633.847	1563.950	7.46 ± 0.01	72.79	5.85	70.0 ± 1.4
21F15907	24.0 %	✓	3.227184	4.08723	0.0000000	644.628	1586.573	7.44 ± 0.02	62.21	5.94	67.8 ± 1.3
21F15909	24.0 %	✓	0.419413	2.17443	0.0000000	360.319	891.421	7.47 ± 0.01	87.66	3.32	71.3 ± 2.5
21F15910	24.0 %	✓	0.146998	1.16949	0.0000000	224.765	556.220	7.48 ± 0.01	92.67	2.07	82.6 ± 5.2
21F15912	24.0 %	✓	0.278483	0.96935	0.0000000	173.391	428.561	7.47 ± 0.01	83.73	1.60	76.9 ± 5.9
21F15913	24.0 %	✓	5.352492	3.80702	0.0000000	632.756	1547.090	7.39 ± 0.03	49.18	5.84	71.5 ± 1.5
21F15915	24.0 %	✓	0.539900	4.63579	0.0000000	690.290	1708.232	7.48 ± 0.01	91.36	6.37	64.0 ± 1.1
21F15916	24.0 %	✓	2.064586	6.91121	0.0000000	860.069	2122.387	7.46 ± 0.01	77.48	7.93	53.5 ± 0.7
		Σ	40.470611	303.32320	0.0410237	10843.429	26713.327				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-109**
Material = **Sanidine**
Location = **N of Drewsey**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X3-21)**
J = **0.00165397 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	2.46985	± 0.00232	**7.46**	**± 0.02**	8.60	98.78	63.8 ± 8.5
Error Mean		± 0.09%		**± 0.24%**	0%	24	
			Full External Error	± 0.39	1.59	2σ Confidence Limit	
			Analytical Error	± 0.01	2.9319	Error Magnification	
Total Fusion Age	2.46355	± 0.00125	**7.44**	**± 0.02**		30	15.4 ± 0.0
		± 0.05%		**± 0.23%**			
			Full External Error	± 0.39			
			Analytical Error	± 0.00			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
21F15873	24.0 %	✓	600.19 ± 3.00	1780.12 ± 8.79	0.9886
21F15874	24.0 %	✓	153.68 ± 0.51	675.45 ± 2.19	0.9748
21F15876	24.0 %	✓	194.45 ± 0.66	776.99 ± 2.57	0.9759
21F15877	24.0 %		23.82 ± 0.09	353.11 ± 1.30	0.9723
21F15879	24.0 %	✓	238.65 ± 0.93	884.81 ± 3.38	0.9812
21F15880	24.0 %	✓	520.16 ± 2.13	1580.83 ± 6.37	0.9835
21F15882	24.0 %	✓	222.10 ± 0.89	845.88 ± 3.32	0.9820
21F15883	24.0 %	✓	521.55 ± 2.43	1586.68 ± 7.31	0.9870
21F15885	24.0 %	✓	205.03 ± 0.70	802.16 ± 2.67	0.9760
21F15886	24.0 %	✓	633.17 ± 2.95	1863.63 ± 8.58	0.9872
21F15888	24.0 %	✓	631.53 ± 2.72	1860.15 ± 7.89	0.9850
21F15889	24.0 %	✓	163.58 ± 0.56	701.17 ± 2.35	0.9763
21F15891	24.0 %		140.25 ± 1.26	637.72 ± 5.69	0.9900
21F15892	24.0 %	✓	146.94 ± 1.63	660.69 ± 7.31	0.9906
21F15894	24.0 %	✓	436.88 ± 2.19	1374.69 ± 6.80	0.9882
21F15895	24.0 %	✓	335.58 ± 1.35	1126.94 ± 4.46	0.9828
21F15897	24.0 %		91.84 ± 0.96	516.98 ± 5.35	0.9862
21F15898	24.0 %		54.64 ± 0.32	439.74 ± 2.49	0.9771
21F15900	24.0 %	✓	4832.30 ± 150.03	12256.35 ± 380.42	0.9997
21F15901	24.0 %	✓	1878.28 ± 152.69	4963.00 ± 403.43	0.9998
21F15903	24.0 %		29.03 ± 0.18	368.14 ± 2.20	0.9492
21F15904	24.0 %		192.32 ± 3.85	766.44 ± 15.27	0.9930
21F15906	24.0 %	✓	323.89 ± 1.18	1097.73 ± 3.93	0.9792
21F15907	24.0 %	✓	199.75 ± 0.68	790.19 ± 2.63	0.9762
21F15909	24.0 %	✓	859.10 ± 4.92	2423.96 ± 13.78	0.9915
21F15910	24.0 %	✓	1529.04 ± 14.95	4082.43 ± 39.79	0.9969
21F15912	24.0 %	✓	622.63 ± 4.21	1837.47 ± 12.36	0.9934
21F15913	24.0 %	✓	118.22 ± 0.39	587.60 ± 1.88	0.9742
21F15915	24.0 %	✓	1278.55 ± 6.93	3462.54 ± 18.58	0.9905
21F15916	24.0 %	✓	416.58 ± 1.56	1326.56 ± 4.88	0.9804

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**295.12 ± 0.67**	2.47630 ± 0.00170	**7.48 ± 0.02**	1.93
Error Chron	**± 0.23%**	± 0.07%	**± 0.24%**	1%
			Full External Error ± 0.39	
			Analytical Error ± 0.01	

Statistics				
	2σ Confidence Limit	1.60	Convergence	0.000000045067
	Error Magnification	1.3885	Number of Iterations	1
	Number of Data Points	24	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
21F15873	24.0 %	✓	0.3371635 ± 0.0002531	0.00056176 ± 0.00000277	0.0031
21F15874	24.0 %	✓	0.2275270 ± 0.0001685	0.00148050 ± 0.00000479	0.0015
21F15876	24.0 %	✓	0.2502596 ± 0.0001854	0.00128702 ± 0.00000426	0.0022
21F15877	24.0 %		0.0674532 ± 0.0000595	0.00283198 ± 0.00001039	0.0040
21F15879	24.0 %	✓	0.2697124 ± 0.0002028	0.00113018 ± 0.00000432	0.0027
21F15880	24.0 %	✓	0.3290399 ± 0.0002435	0.00063258 ± 0.00000255	0.0016
21F15882	24.0 %	✓	0.2625708 ± 0.0001982	0.00118220 ± 0.00000465	0.0029
21F15883	24.0 %	✓	0.3287036 ± 0.0002461	0.00063025 ± 0.00000290	0.0025
21F15885	24.0 %	✓	0.2556004 ± 0.0001895	0.00124663 ± 0.00000415	0.0021
21F15886	24.0 %	✓	0.3397493 ± 0.0002530	0.00053659 ± 0.00000247	0.0021
21F15888	24.0 %	✓	0.3395080 ± 0.0002520	0.00053759 ± 0.00000228	0.0019
21F15889	24.0 %	✓	0.2332907 ± 0.0001735	0.00142619 ± 0.00000479	0.0020
21F15891	24.0 %		0.2199266 ± 0.0002789	0.00156809 ± 0.00001398	0.0172
21F15892	24.0 %	✓	0.2224033 ± 0.0003386	0.00151358 ± 0.00001674	0.0277
21F15894	24.0 %	✓	0.3178007 ± 0.0002436	0.00072744 ± 0.00000360	0.0044
21F15895	24.0 %	✓	0.2977811 ± 0.0002217	0.00088736 ± 0.00000351	0.0023
21F15897	24.0 %		0.1776432 ± 0.0003071	0.00193433 ± 0.00002000	0.0181
21F15898	24.0 %		0.1242569 ± 0.0001527	0.00227409 ± 0.00001288	0.0130
21F15900	24.0 %	✓	0.3942693 ± 0.0003131	0.00008159 ± 0.00000253	0.0016
21F15901	24.0 %	✓	0.3784569 ± 0.0006295	0.00020149 ± 0.00001638	0.0073
21F15903	24.0 %		0.0788532 ± 0.0001560	0.00271634 ± 0.00001626	0.0114
21F15904	24.0 %		0.2509325 ± 0.0005931	0.00130473 ± 0.00002600	0.0269
21F15906	24.0 %	✓	0.2950567 ± 0.0002188	0.00091097 ± 0.00000326	0.0020
21F15907	24.0 %	✓	0.2527871 ± 0.0001873	0.00126552 ± 0.00000422	0.0018
21F15909	24.0 %	✓	0.3544214 ± 0.0002651	0.00041255 ± 0.00000235	0.0025
21F15910	24.0 %	✓	0.3745417 ± 0.0002868	0.00024495 ± 0.00000239	0.0022
21F15912	24.0 %	✓	0.3388499 ± 0.0002623	0.00054423 ± 0.00000366	0.0041
21F15913	24.0 %	✓	0.2011860 ± 0.0001489	0.00170183 ± 0.00000544	0.0017
21F15915	24.0 %	✓	0.3692525 ± 0.0002746	0.00028881 ± 0.00000155	0.0018
21F15916	24.0 %	✓	0.3140324 ± 0.0002318	0.00075383 ± 0.00000277	0.0017

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**295.12 ± 0.67**	2.47633 ± 0.00170	**7.48 ± 0.02**	1.93
Error Chron	**± 0.23%**	± 0.07%	**± 0.24%**	1%
			Full External Error ± 0.39	
			Analytical Error ± 0.01	

Statistics				
	2σ Confidence Limit	1.60	Convergence	0.0000096194
	Error Magnification	1.3885	Number of Iterations	2
	Number of Data Points	24	Calculated Line	Weighted York-2
	Spreading Factor	47.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F15873	24.0 %	✓	0.546380	0.25	0.0000000	0.00	0.0006122	1.55	0.0000000	0.00	2.26490	1.54	0.1029926	0.29	0.0000000	0.00	3.96045	0.10	0.0004077	9.75	0.0000000	0.00	327.933	0.04	0.0014552	1.79	809.496	0.05	163.127	0.27	0.0000000	0.00	0.1990554	9.65
21F15874	24.0 %	✓	4.441901	0.16	0.0000000	0.00	0.0012377	0.88	0.0000000	0.00	4.57906	0.87	0.8372982	0.23	0.0000000	0.00	8.24429	0.10	0.0008242	9.67	0.0000000	0.00	682.644	0.04	0.0029420	1.26	1674.102	0.15	1326.174	0.19	0.0000000	0.00	0.4143648	9.65
21F15876	24.0 %	✓	3.225736	0.17	0.0000000	0.00	0.0010619	0.96	0.0000000	0.00	3.92866	0.94	0.6080512	0.23	0.0000000	0.00	7.57518	0.10	0.0007072	9.68	0.0000000	0.00	627.240	0.04	0.0025242	1.32	1543.282	0.12	963.076	0.20	0.0000000	0.00	0.3807347	9.65
21F15877	24.0 %		2.020628	0.18	0.0000000	0.00	0.0179957	0.30	0.0000000	0.00	66.57671	0.24	0.3808884	0.24	0.0000000	0.00	0.58124	0.10	0.0119838	9.63	0.0000000	0.00	48.128	0.04	0.0427755	0.95	110.225	1.15	603.279	0.21	0.0000000	0.00	0.0292138	9.65
21F15879	24.0 %	✓	1.648279	0.19	0.0000000	0.00	0.0006119	1.61	0.0000000	0.00	2.26363	1.60	0.3107006	0.25	0.0000000	0.00	4.75053	0.10	0.0004075	9.76	0.0000000	0.00	393.354	0.04	0.0014544	1.85	966.308	0.11	492.110	0.22	0.0000000	0.00	0.2387656	9.65
21F15880	24.0 %	✓	1.266611	0.20	0.0000000	0.00	0.0010020	0.98	0.0000000	0.00	3.70684	0.96	0.2387562	0.26	0.0000000	0.00	7.95678	0.10	0.0006672	9.68	0.0000000	0.00	658.837	0.04	0.0023816	1.33	1624.142	0.05	378.159	0.23	0.0000000	0.00	0.3999141	9.65
21F15882	24.0 %	✓	1.262238	0.20	0.0000000	0.00	0.0005632	1.74	0.0000014	107.25	2.08366	1.73	0.2379319	0.25	0.0000000	0.00	3.38577	0.10	0.0003751	9.78	0.0122872	107.25	280.348	0.04	0.0013388	1.96	690.852	0.12	376.854	0.22	0.0000000	0.00	0.1701715	9.65
21F15883	24.0 %	✓	0.753832	0.23	0.0000000	0.00	0.0005962	1.68	0.0000000	0.00	2.20560	1.68	0.1420974	0.28	0.0000000	0.00	4.74817	0.10	0.0003970	9.77	0.0000000	0.00	393.158	0.04	0.0014171	1.91	971.024	0.06	225.064	0.25	0.0000000	0.00	0.2386472	9.65
21F15885	24.0 %	✓	3.158158	0.17	0.0000000	0.00	0.0010922	0.93	0.0000000	0.00	4.04051	0.91	0.5953127	0.23	0.0000000	0.00	7.82019	0.10	0.0007273	9.67	0.0000000	0.00	647.527	0.04	0.0025960	1.29	1590.459	0.12	942.900	0.20	0.0000000	0.00	0.3930492	9.65
21F15886	24.0 %	✓	0.748349	0.23	0.0000000	0.00	0.0007337	1.41	0.0000000	0.00	2.71457	1.40	0.1410638	0.28	0.0000000	0.00	5.72246	0.10	0.0004886	9.73	0.0000000	0.00	473.831	0.04	0.0017441	1.68	1171.222	0.05	223.427	0.25	0.0000000	0.00	0.2876154	9.65
21F15888	24.0 %	✓	0.992453	0.21	0.0000000	0.00	0.0009882	1.01	0.0000000	0.00	3.65581	1.00	0.1870773	0.27	0.0000000	0.00	7.56948	0.10	0.0006580	9.68	0.0000000	0.00	626.768	0.04	0.0023489	1.36	1549.800	0.05	296.307	0.24	0.0000000	0.00	0.3804482	9.65
21F15889	24.0 %	✓	3.170983	0.17	0.0000000	0.00	0.0008644	1.14	0.0000000	0.00	3.19797	1.12	0.5977304	0.23	0.0000000	0.00	6.26431	0.10	0.0005756	9.70	0.0000000	0.00	518.698	0.04	0.0020547	1.45	1276.667	0.15	946.729	0.20	0.0000000	0.00	0.3148495	9.65
21F15891	24.0 %		0.176162	0.45	0.0000000	0.00	0.0094575	0.31	0.0000008	133.64	34.98902	0.26	0.0332066	0.47	0.0000000	0.00	0.29839	0.11	0.0062980	9.63	0.0069632	133.64	24.707	0.06	0.0224804	0.96	59.747	0.40	52.595	0.46	0.0000000	0.00	0.0149971	9.65
21F15892	24.0 %	✓	0.115767	0.55	0.0000000	0.00	0.0051786	0.35	0.0000008	136.44	19.15855	0.31	0.0218221	0.57	0.0000000	0.00	0.20544	0.11	0.0034485	9.63	0.0067280	136.44	17.011	0.07	0.0123094	0.97	41.922	0.47	34.563	0.56	0.0000000	0.00	0.0103255	9.65
21F15894	24.0 %	✓	0.508256	0.25	0.0000000	0.00	0.0003548	2.75	0.0000000	0.00	1.31273	2.74	0.0958062	0.29	0.0000000	0.00	2.68165	0.10	0.0002363	10.01	0.0000000	0.00	222.046	0.04	0.0008434	2.89	546.951	0.07	151.745	0.27	0.0000000	0.00	0.1347819	9.65
21F15895	24.0 %	✓	1.373409	0.20	0.0000000	0.00	0.0009911	0.98	0.0000000	0.00	3.66676	0.97	0.2588877	0.25	0.0000000	0.00	5.56616	0.10	0.0006600	9.68	0.0000000	0.00	460.889	0.04	0.0023559	1.34	1137.701	0.08	410.045	0.22	0.0000000	0.00	0.2797599	9.65
21F15897	24.0 %		0.158901	0.52	0.0000000	0.00	0.0056171	0.35	0.0000000	0.00	20.78107	0.31	0.0299528	0.54	0.0000000	0.00	0.17624	0.12	0.0037406	9.63	0.0000000	0.00	14.593	0.08	0.0133518	0.97	34.706	0.72	47.441	0.53	0.0000000	0.00	0.0088580	9.65
21F15898	24.0 %		0.427322	0.28	0.0000000	0.00	0.0080494	0.31	0.0000000	0.00	29.77942	0.26	0.0805502	0.32	0.0000000	0.00	0.28199	0.11	0.0053603	9.63	0.0000000	0.00	23.349	0.06	0.0191333	0.96	60.327	0.64	127.581	0.30	0.0000000	0.00	0.0141728	9.65
21F15900	24.0 %	✓	0.029275	1.55	0.0000000	0.00	0.0002080	4.97	0.0000009	139.66	0.76970	4.97	0.0055184	1.56	0.0000000	0.00	1.70850	0.10	0.0001385	10.84	0.0073460	139.66	141.467	0.04	0.0004945	5.05	350.068	0.04	8.740	1.56	0.0000000	0.00	0.0858705	9.65
21F15901	24.0 %	✓	0.010097	4.06	0.0000000	0.00	0.0088578	0.31	0.0000000	0.00	32.77031	0.26	0.0019033	4.07	0.0000000	0.00	0.22904	0.11	0.0058987	9.63	0.0000000	0.00	18.965	0.07	0.0210549	0.96	47.097	0.27	3.015	4.07	0.0000000	0.00	0.0115118	9.65
21F15903	24.0 %		0.395901	0.30	0.0000000	0.00	0.0043035	0.38	0.0000005	215.37	15.92111	0.34	0.0746273	0.34	0.0000000	0.00	0.13880	0.13	0.0028658	9.64	0.0045774	215.37	11.493	0.10	0.0102293	0.98	27.548	1.36	118.200	0.32	0.0000000	0.00	0.0069761	9.65
21F15904	24.0 %		0.053957	0.99	0.0000000	0.00	0.0041372	0.38	0.0000004	311.74	15.30602	0.34	0.0101708	1.01	0.0000000	0.00	0.12533	0.14	0.0027551	9.64	0.0031219	311.74	10.377	0.10	0.0098341	0.98	25.245	0.64	16.109	1.00	0.0000000	0.00	0.0062990	9.65
21F15906	24.0 %	✓	1.956960	0.18	0.0000000	0.00	0.0010531	1.04	0.0000000	0.00	3.89607	1.02	0.3688870	0.24	0.0000000	0.00	7.65496	0.10	0.0007013	9.68	0.0000000	0.00	633.847	0.04	0.0025032	1.38	1563.950	0.08	584.270	0.21	0.0000000	0.00	0.3847449	9.65
21F15907	24.0 %	✓	3.227184	0.17	0.0000000	0.00	0.0011048	0.98	0.0000000	0.00	4.08723	0.97	0.6083242	0.23	0.0000000	0.00	7.78517	0.10	0.0007357	9.68	0.0000000	0.00	644.628	0.04	0.0026260	1.34	1586.573	0.12	963.508	0.20	0.0000000	0.00	0.3912890	9.65
21F15909	24.0 %	✓	0.419413	0.28	0.0000000	0.00	0.0005877	1.73	0.0000000	0.00	2.17443	1.72	0.0790593	0.33	0.0000000	0.00	4.35158	0.10	0.0003914	9.78	0.0000000	0.00	360.319	0.04	0.0013971	1.95	891.421	0.04	125.220	0.30	0.0000000	0.00	0.2187139	9.65
21F15910	24.0 %	✓	0.146998	0.49	0.0000000	0.00	0.0003161	3.13	0.0000000	0.00	1.16949	3.13	0.0277090	0.51	0.0000000	0.00	2.71449	0.10	0.0002105	10.13	0.0000000	0.00	224.765	0.04	0.0007514	3.26	556.220	0.04	43.888	0.50	0.0000000	0.00	0.1364326	9.65
21F15912	24.0 %	✓	0.278483	0.34	0.0000000	0.00	0.0002620	3.81	0.0000000	0.00	0.96935	3.81	0.0524940	0.37	0.0000000	0.00	2.09404	0.10	0.0001745	10.36	0.0000000	0.00	173.391	0.04	0.0006228	3.92	428.561	0.07	83.144	0.35	0.0000000	0.00	0.1052484	9.65
21F15913	24.0 %	✓	5.352492	0.16	0.0000000	0.00	0.0010290	1.04	0.0000000	0.00	3.80702	1.03	1.0089448	0.23	0.0000000	0.00	7.64180	0.10	0.0006853	9.68	0.0000000	0.00	632.756	0.04	0.0024460	1.38	1547.090	0.20	1598.040	0.19	0.0000000	0.00	0.3840831	9.65
21F15915	24.0 %	✓	0.539900	0.27	0.0000000	0.00	0.0012531	0.86	0.0000000	0.00	4.63579	0.85	0.1017712	0.31	0.0000000	0.00	8.33663	0.10	0.0008344	9.67	0.0000000	0.00	690.290	0.04	0.0029785	1.25	1708.232	0.03	161.193	0.29	0.0000000	0.00	0.4190058	9.65
21F15916	24.0 %	✓	2.064586	0.18	0.0000000	0.00	0.0018681	0.65	0.0000000	0.00	6.91121	0.63	0.3891745	0.24	0.0000000	0.00	10.38705	0.10	0.0012440	9.65	0.0000000	0.00	860.069	0.04	0.0044404	1.12	2122.387	0.06	616.403	0.21	0.0000000	0.00	0.5220616	9.65
		Σ	40.470611	0.05	0.0000000	0.00	0.0819883	0.11	0.0000048	61.76	303.32320	0.10	7.6287101	0.06	0.0000000	0.00	130.95609	0.02	0.0545982	3.04	0.0410237	61.75	10843.429	0.01	0.1948852	0.31	26713.327	0.02	12082.906	0.05	0.0000000	0.00	6.5819611	2.18
		Σ							40.552604	0.04	303.32320	0.10									138.68042	0.03			10843.623	0.01							38802.814	0.02

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F15873	24.0 %	✓	2.966514	0.001112	0.006907	0.000106	0.001668	0.000004	72.290	4.180086	1.00051109	3.444E-11
21F15874	24.0 %	✓	4.395671	0.001626	0.006708	0.000058	0.006509	0.000011	72.296	4.180602	1.00051113	1.062E-10
21F15876	24.0 %	✓	3.996442	0.001479	0.006263	0.000059	0.005144	0.000009	72.308	4.181577	1.00051122	8.874E-11
21F15877	24.0 %		14.812537	0.006522	1.382095	0.003392	0.042321	0.000079	72.314	4.182093	1.00051126	2.526E-11
21F15879	24.0 %	✓	3.708247	0.001393	0.005755	0.000092	0.004192	0.000008	72.326	4.183069	1.00051134	5.164E-11
21F15880	24.0 %	✓	3.039741	0.001123	0.005626	0.000054	0.001924	0.000004	72.332	4.183585	1.00051139	7.090E-11
21F15882	24.0 %	✓	3.809086	0.001436	0.007432	0.000129	0.004504	0.000009	72.344	4.184561	1.00051147	3.780E-11
21F15883	24.0 %	✓	3.042851	0.001138	0.005610	0.000094	0.001919	0.000004	72.350	4.185077	1.00051151	4.235E-11
21F15885	24.0 %	✓	3.912948	0.001449	0.006240	0.000057	0.004879	0.000008	72.362	4.186053	1.00051160	8.969E-11
21F15886	24.0 %	✓	2.943943	0.001094	0.005729	0.000080	0.001581	0.000004	72.367	4.186513	1.00051164	4.938E-11
21F15888	24.0 %	✓	2.946035	0.001092	0.005833	0.000058	0.001585	0.000003	72.380	4.187546	1.00051173	6.537E-11
21F15889	24.0 %	✓	4.287088	0.001593	0.006165	0.000069	0.006115	0.000011	72.385	4.188006	1.00051176	7.872E-11
21F15891	24.0 %		4.543445	0.002878	1.414875	0.003760	0.007506	0.000032	72.398	4.189040	1.00051185	3.977E-12
21F15892	24.0 %	✓	4.493692	0.003418	1.125452	0.003537	0.007105	0.000038	72.403	4.189500	1.00051189	2.708E-12
21F15894	24.0 %	✓	3.147221	0.001205	0.005912	0.000162	0.002291	0.000006	72.416	4.190534	1.00051198	2.474E-11
21F15895	24.0 %	✓	3.358761	0.001249	0.007956	0.000077	0.002982	0.000006	72.422	4.190994	1.00051202	5.480E-11
21F15897	24.0 %		5.624722	0.004857	1.422742	0.004497	0.011263	0.000057	72.433	4.191972	1.00051210	2.908E-12
21F15898	24.0 %		8.041862	0.004937	1.274363	0.003452	0.018631	0.000053	72.440	4.192489	1.00051215	6.652E-12
21F15900	24.0 %	✓	2.536936	0.001006	0.005441	0.000270	0.000208	0.000003	72.451	4.193467	1.00051223	1.270E-11
21F15901	24.0 %	✓	2.639985	0.002193	1.726020	0.004643	0.000998	0.000022	72.458	4.193985	1.00051227	1.774E-12
21F15903	24.0 %		12.671128	0.012519	1.384096	0.004867	0.034792	0.000108	72.469	4.194963	1.00051236	5.160E-12
21F15904	24.0 %		3.981968	0.004702	1.473571	0.005221	0.005593	0.000052	72.476	4.195481	1.00051240	1.464E-12
21F15906	24.0 %	✓	3.389773	0.001255	0.006147	0.000063	0.003089	0.000006	72.488	4.196459	1.00051249	7.606E-11
21F15907	24.0 %	✓	3.956488	0.001464	0.006340	0.000061	0.005008	0.000009	72.494	4.196977	1.00051253	9.029E-11
21F15909	24.0 %	✓	2.822096	0.001054	0.006035	0.000104	0.001166	0.000003	72.506	4.197956	1.00051261	3.600E-11
21F15910	24.0 %	✓	2.670527	0.001021	0.005203	0.000163	0.000655	0.000003	72.512	4.198474	1.00051266	2.125E-11
21F15912	24.0 %	✓	2.951756	0.001141	0.005591	0.000213	0.001608	0.000005	72.524	4.199453	1.00051274	1.812E-11
21F15913	24.0 %	✓	4.971112	0.001839	0.006017	0.000062	0.008461	0.000014	72.529	4.199914	1.00051278	1.114E-10
21F15915	24.0 %	✓	2.708769	0.001005	0.006716	0.000057	0.000784	0.000002	72.542	4.200951	1.00051287	6.619E-11
21F15916	24.0 %	✓	3.184976	0.001174	0.008036	0.000051	0.002403	0.000005	72.547	4.201412	1.00051291	9.697E-11

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
21F15873	24.0 %	0.0134508 ± 0.0002172	0.0092752 ± 0.0060467	0.0051530 ± 0.0068555	0.0463854 ± 0.0065422	3.3013001 ± 0.0155666
21F15874	24.0 %	0.0134508 ± 0.0002172	0.0092752 ± 0.0060467	0.0051530 ± 0.0068555	0.0463854 ± 0.0065422	3.3013001 ± 0.0155666
21F15876	24.0 %	0.0125086 ± 0.0002213	0.0001708 ± 0.0061454	0.0026064 ± 0.0073329	0.0308702 ± 0.0063805	3.0577586 ± 0.0142440
21F15877	24.0 %	0.0125086 ± 0.0002213	0.0001708 ± 0.0061454	0.0026064 ± 0.0073329	0.0308702 ± 0.0063805	3.0577586 ± 0.0142440
21F15879	24.0 %	0.0141810 ± 0.0002467	0.0097890 ± 0.0058773	0.0083303 ± 0.0061826	0.0382295 ± 0.0056746	3.7340987 ± 0.0137007
21F15880	24.0 %	0.0141810 ± 0.0002467	0.0097890 ± 0.0058773	0.0083303 ± 0.0061826	0.0382295 ± 0.0056746	3.7340987 ± 0.0137007
21F15882	24.0 %	0.0131614 ± 0.0002440	0.0085397 ± 0.0061518	0.0096079 ± 0.0062298	0.0218308 ± 0.0071161	3.1504942 ± 0.0146220
21F15883	24.0 %	0.0131614 ± 0.0002440	0.0085397 ± 0.0061518	0.0096079 ± 0.0062298	0.0218308 ± 0.0071161	3.1504942 ± 0.0146220
21F15885	24.0 %	0.0123861 ± 0.0002369	0.0016758 ± 0.0061345	0.0015914 ± 0.0069343	0.0087413 ± 0.0065883	3.0472570 ± 0.0156322
21F15886	24.0 %	0.0123861 ± 0.0002369	0.0016758 ± 0.0061345	0.0015914 ± 0.0069343	0.0087413 ± 0.0065883	3.0472570 ± 0.0156322
21F15888	24.0 %	0.0131647 ± 0.0002291	0.0027006 ± 0.0061793	0.0005079 ± 0.0068751	0.0455638 ± 0.0059007	3.1483747 ± 0.0166887
21F15889	24.0 %	0.0131647 ± 0.0002291	0.0027006 ± 0.0061793	0.0005079 ± 0.0068751	0.0455638 ± 0.0059007	3.1483747 ± 0.0166887
21F15891	24.0 %	0.0129207 ± 0.0002068	0.0128787 ± 0.0061691	0.0070846 ± 0.0065374	0.0268478 ± 0.0064942	3.0011787 ± 0.0171183
21F15892	24.0 %	0.0129207 ± 0.0002068	0.0128787 ± 0.0061691	0.0070846 ± 0.0065374	0.0268478 ± 0.0064942	3.0011787 ± 0.0171183
21F15894	24.0 %	0.0122617 ± 0.0002071	0.0101160 ± 0.0061452	0.0079621 ± 0.0068195	0.0206806 ± 0.0061815	2.9530318 ± 0.0175666
21F15895	24.0 %	0.0122617 ± 0.0002071	0.0101160 ± 0.0061452	0.0079621 ± 0.0068195	0.0206806 ± 0.0061815	2.9530318 ± 0.0175666
21F15897	24.0 %	0.0132109 ± 0.0002202	0.0092317 ± 0.0059773	0.0037977 ± 0.0064178	0.0143241 ± 0.0067693	3.0177929 ± 0.0144234
21F15898	24.0 %	0.0132109 ± 0.0002202	0.0092317 ± 0.0059773	0.0037977 ± 0.0064178	0.0143241 ± 0.0067693	3.0177929 ± 0.0144234
21F15900	24.0 %	0.0136079 ± 0.0002697	0.0122431 ± 0.0062819	0.0030392 ± 0.0064067	0.0302113 ± 0.0061792	3.1726764 ± 0.0173741
21F15901	24.0 %	0.0136079 ± 0.0002697	0.0122431 ± 0.0062819	0.0030392 ± 0.0064067	0.0302113 ± 0.0061792	3.1726764 ± 0.0173741
21F15903	24.0 %	0.0122365 ± 0.0002299	0.0135272 ± 0.0061796	0.0046220 ± 0.0072022	0.0157988 ± 0.0067784	3.0517934 ± 0.0132767
21F15904	24.0 %	0.0122365 ± 0.0002299	0.0135272 ± 0.0061796	0.0046220 ± 0.0072022	0.0157988 ± 0.0067784	3.0517934 ± 0.0132767
21F15906	24.0 %	0.0137178 ± 0.0002693	0.0177182 ± 0.0066559	0.0067391 ± 0.0069212	0.0451158 ± 0.0058058	3.2322581 ± 0.0146655
21F15907	24.0 %	0.0137178 ± 0.0002693	0.0177182 ± 0.0066559	0.0067391 ± 0.0069212	0.0451158 ± 0.0058058	3.2322581 ± 0.0146655
21F15909	24.0 %	0.0136079 ± 0.0002697	0.0122431 ± 0.0062819	0.0030392 ± 0.0064067	0.0302113 ± 0.0061792	3.1726764 ± 0.0173741
21F15910	24.0 %	0.0136079 ± 0.0002697	0.0122431 ± 0.0062819	0.0030392 ± 0.0064067	0.0302113 ± 0.0061792	3.1726764 ± 0.0173741
21F15912	24.0 %	0.0122365 ± 0.0002299	0.0135272 ± 0.0061796	0.0046220 ± 0.0072022	0.0157988 ± 0.0067784	3.0517934 ± 0.0132767
21F15913	24.0 %	0.0122365 ± 0.0002299	0.0135272 ± 0.0061796	0.0046220 ± 0.0072022	0.0157988 ± 0.0067784	3.0517934 ± 0.0132767
21F15915	24.0 %	0.0137178 ± 0.0002693	0.0177182 ± 0.0066559	0.0067391 ± 0.0069212	0.0451158 ± 0.0058058	3.2322581 ± 0.0146655
21F15916	24.0 %	0.0137178 ± 0.0002693	0.0177182 ± 0.0066559	0.0067391 ± 0.0069212	0.0451158 ± 0.0058058	3.2322581 ± 0.0146655

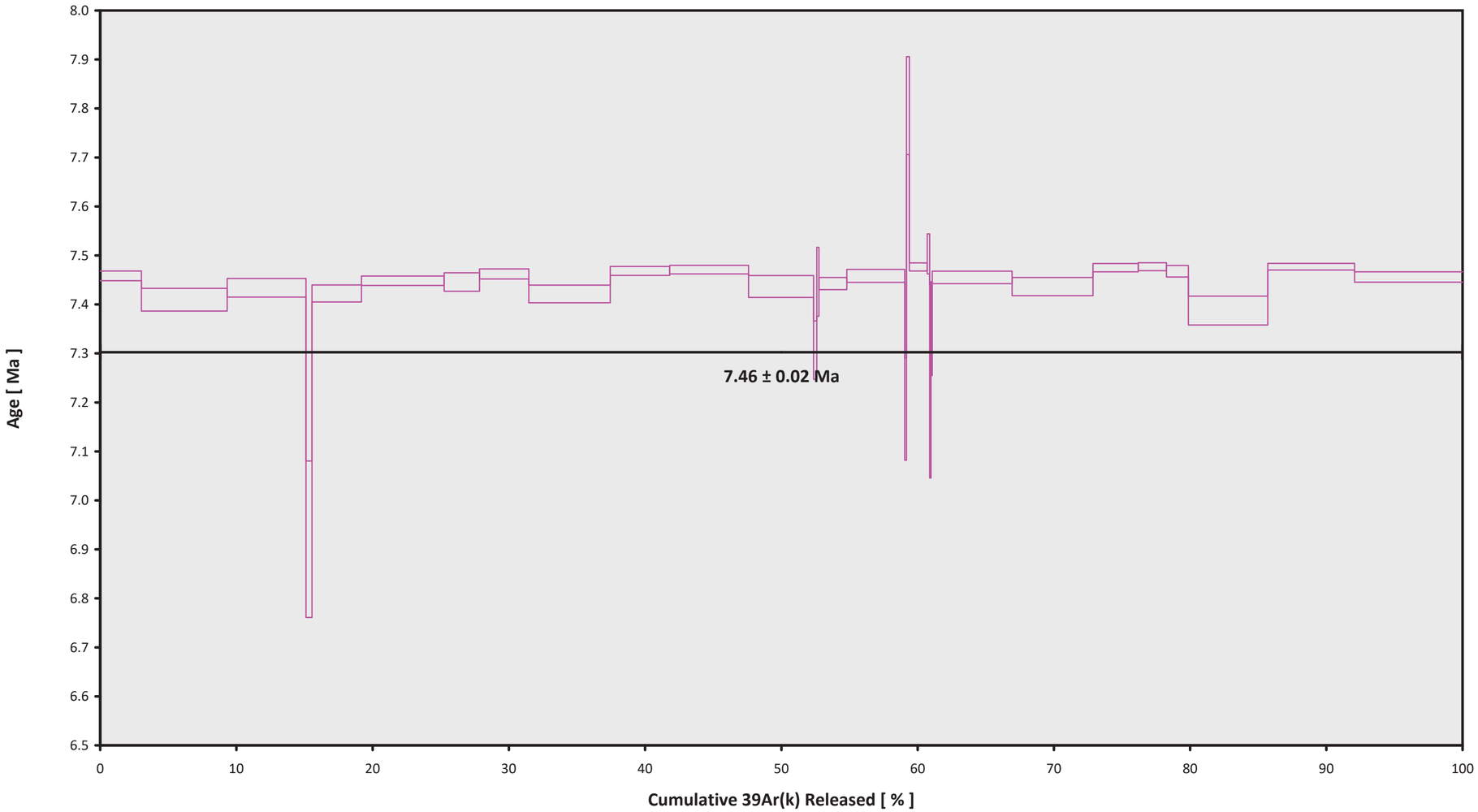
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F15873	24.0 %	0.5285370 ± 0.0009955	0.9579	EXP 150 of 150	0.5476300 ± 0.0055265	0.3970	EXP 149 of 150	4.028737 ± 0.007227	0.9725	EXP 150 of 150	327.11291 ± 0.02141	1.0000	EXP 150 of 150	976.1236 ± 0.0462	1.0000	EXP 150 of 150
21F15874	24.0 %	4.1974225 ± 0.0028187	0.9963	EXP 149 of 150	1.0975598 ± 0.0067818	0.6708	EXP 150 of 150	9.026150 ± 0.007697	0.9940	EXP 150 of 150	680.88618 ± 0.03591	1.0000	EXP 150 of 150	3003.9916 ± 0.0776	1.0000	EXP 147 of 150
21F15876	24.0 %	3.0510884 ± 0.0022950	0.9954	EXP 148 of 150	0.9333188 ± 0.0059191	0.6455	EXP 149 of 150	8.117362 ± 0.007309	0.9933	EXP 150 of 150	625.61310 ± 0.03073	1.0000	EXP 148 of 150	2509.7965 ± 0.0832	1.0000	EXP 150 of 150
21F15877	24.0 %	1.9322202 ± 0.0020353	0.9909	EXP 150 of 150	15.8171826 ± 0.0084580	0.9971	EXP 148 of 150	0.962852 ± 0.005970	0.6822	EXP 149 of 150	48.07422 ± 0.00957	0.9997	EXP 147 of 150	716.5905 ± 0.0381	1.0000	EXP 148 of 150
21F15879	24.0 %	1.5668926 ± 0.0018779	0.9871	EXP 150 of 150	0.5474593 ± 0.0061927	0.4125	EXP 150 of 150	5.008668 ± 0.006620	0.9857	EXP 150 of 150	392.35193 ± 0.03013	1.0000	EXP 150 of 150	1462.3915 ± 0.0578	1.0000	EXP 150 of 150
21F15880	24.0 %	1.2078549 ± 0.0016193	0.9810	EXP 150 of 150	0.8901496 ± 0.0057549	0.6486	EXP 148 of 150	8.110865 ± 0.007046	0.9935	EXP 149 of 150	657.13365 ± 0.03197	1.0000	EXP 150 of 150	2006.4356 ± 0.0559	1.0000	EXP 149 of 150
21F15882	24.0 %	1.2023053 ± 0.0015281	0.9857	EXP 148 of 150	0.5032855 ± 0.0058466	0.3622	EXP 150 of 150	3.611184 ± 0.007308	0.9662	EXP 149 of 150	279.62945 ± 0.02221	1.0000	EXP 148 of 150	1071.0269 ± 0.0448	1.0000	EXP 149 of 150
21F15883	24.0 %	0.7235845 ± 0.0012328	0.9658	EXP 150 of 150	0.5321747 ± 0.0061424	0.2632	EXP 149 of 150	4.839422 ± 0.006438	0.9851	EXP 145 of 150	392.14085 ± 0.02599	1.0000	EXP 150 of 150	1199.4772 ± 0.0478	1.0000	EXP 148 of 150
21F15885	24.0 %	2.9873580 ± 0.0022901	0.9950	EXP 150 of 150	0.9573645 ± 0.0057991	0.6926	EXP 148 of 150	8.364708 ± 0.007337	0.9936	EXP 150 of 150	645.82453 ± 0.03316	1.0000	EXP 149 of 150	2536.7991 ± 0.0825	1.0000	EXP 150 of 150
21F15886	24.0 %	0.7177754 ± 0.0012250	0.9631	EXP 150 of 150	0.6425737 ± 0.0064498	0.4206	EXP 150 of 150	5.836087 ± 0.007959	0.9845	EXP 150 of 150	472.58707 ± 0.02727	1.0000	EXP 150 of 150	1397.9841 ± 0.0493	1.0000	EXP 147 of 150
21F15888	24.0 %	0.9486586 ± 0.0014085	0.9749	EXP 149 of 150	0.8701207 ± 0.0057088	0.6114	EXP 150 of 150	7.698063 ± 0.007836	0.9914	EXP 150 of 150	625.15658 ± 0.03304	1.0000	EXP 149 of 150	1849.6358 ± 0.0596	1.0000	EXP 150 of 150
21F15889	24.0 %	2.9999998 ± 0.0023941	0.9947	EXP 150 of 150	0.7614042 ± 0.0055964	0.6133	EXP 148 of 150	6.812767 ± 0.006968	0.9911	EXP 150 of 150	517.37194 ± 0.03070	1.0000	EXP 149 of 150	2226.8594 ± 0.0704	1.0000	EXP 148 of 150
21F15891	24.0 %	0.1877140 ± 0.0006605	0.7433	EXP 150 of 150	8.3118150 ± 0.0071837	0.9922	EXP 150 of 150	0.336292 ± 0.006483	0.1980	EXP 150 of 150	24.69078 ± 0.00956	0.9986	EXP 150 of 150	115.3579 ± 0.0178	0.9991	EXP 150 of 150
21F15892	24.0 %	0.1268122 ± 0.0005393	0.3161	EXP 150 of 150	4.5565366 ± 0.0066838	0.9779	EXP 150 of 150	0.229335 ± 0.006352	0.0812	EXP 150 of 150	17.00475 ± 0.00726	0.9983	EXP 150 of 150	79.4972 ± 0.0197	0.9945	EXP 150 of 150
21F15894	24.0 %	0.4912053 ± 0.0009288	0.9549	EXP 150 of 150	0.3213665 ± 0.0058911	0.1099	EXP 150 of 150	2.760754 ± 0.006495	0.9537	EXP 150 of 150	221.47959 ± 0.02056	0.9999	EXP 150 of 150	701.7835 ± 0.0392	1.0000	EXP 150 of 150
21F15895	24.0 %	1.3064940 ± 0.0016983	0.9839	EXP 150 of 150	0.8794177 ± 0.0054021	0.6716	EXP 149 of 150	5.793534 ± 0.007615	0.9855	EXP 150 of 150	459.69207 ± 0.02676	1.0000	EXP 148 of 150	1550.9784 ± 0.0555	1.0000	EXP 150 of 150
21F15897	24.0 %	0.1681326 ± 0.0007042	0.6419	EXP 150 of 150	4.9347830 ± 0.0076961	0.9746	EXP 150 of 150	0.209507 ± 0.006320	0.1045	EXP 150 of 150	14.58200 ± 0.00818	0.9970	EXP 150 of 150	85.1745 ± 0.0184	0.9973	EXP 148 of 150
21F15898	24.0 %	0.4231873 ± 0.0009392	0.9466	EXP 147 of 150	7.0667099 ± 0.0065272	0.9913	EXP 146 of 150	0.364260 ± 0.007359	0.2122	EXP 150 of 150	23.32053 ± 0.00862	0.9988	EXP 150 of 150	190.9407 ± 0.0242	0.9997	EXP 150 of 150
21F15900	24.0 %	0.0413723 ± 0.0003294	0.8446	EXP 150 of 150	0.1946127 ± 0.0065108	0.0230	EXP 150 of 150	1.717169 ± 0.006648	0.8846	EXP 149 of 150	141.12317 ± 0.01597	0.9999	EXP 148 of 150	362.0668 ± 0.0295	0.9999	EXP 148 of 150
21F15901	24.0 %	0.0314571 ± 0.0002742	0.8365	EXP 147 of 150	7.7757671 ± 0.0065963	0.9925	EXP 149 of 150	0.231910 ± 0.007039	0.0731	EXP 150 of 150	18.96599 ± 0.00857	0.9982	EXP 150 of 150	53.2956 ± 0.0177	0.9252	EXP 150 of 150
21F15903	24.0 %	0.3890974 ± 0.0009378	0.9313	EXP 150 of 150	3.7844747 ± 0.0068738	0.9674	EXP 150 of 150	0.215300 ± 0.006642	0.0589	EXP 150 of 150	11.48824 ± 0.00778	0.9957	EXP 150 of 150	148.8065 ± 0.0233	0.9996	EXP 149 of 150
21F15904	24.0 %	0.0669420 ± 0.0004425	0.1299	EXP 150 of 150	3.6383406 ± 0.0064349	0.9681	EXP 150 of 150	0.136146 ± 0.006467	0.0336	EXP 150 of 150	10.37531 ± 0.00744	0.9952	EXP 150 of 150	44.4126 ± 0.0191	0.3250	EXP 150 of 150
21F15906	24.0 %	1.8575211 ± 0.0018597	0.9907	EXP 150 of 150	0.9401805 ± 0.0063562	0.6051	EXP 149 of 150	7.964825 ± 0.007371	0.9929	EXP 150 of 150	632.21554 ± 0.03326	1.0000	EXP 150 of 150	2151.8368 ± 0.0668	1.0000	EXP 150 of 150
21F15907	24.0 %	3.0537021 ± 0.0023634	0.9950	EXP 150 of 150	0.9853232 ± 0.0061873	0.6657	EXP 149 of 150	8.360734 ± 0.007584	0.9931	EXP 147 of 150	642.96827 ± 0.03370	1.0000	EXP 149 of 150	2553.7048 ± 0.0740	1.0000	EXP 148 of 150
21F15909	24.0 %	0.4091100 ± 0.0009213	0.9117	EXP 150 of 150	0.5268944 ± 0.0061395	0.3856	EXP 149 of 150	4.414041 ± 0.006575	0.9817	EXP 150 of 150	359.39678 ± 0.02137	1.0000	EXP 150 of 150	1020.0327 ± 0.0453	1.0000	EXP 150 of 150
21F15910	24.0 %	0.1523289 ± 0.0005836	0.2877	EXP 150 of 150	0.2890072 ± 0.0059260	0.1220	EXP 149 of 150	2.727284 ± 0.007349	0.9419	EXP 150 of 150	224.20115 ± 0.02055	0.9999	EXP 150 of 150	603.4171 ± 0.0315	1.0000	EXP 149 of 150
21F15912	24.0 %	0.2747223 ± 0.0007587	0.8576	EXP 150 of 150	0.2428742 ± 0.0061455	0.0797	EXP 150 of 150	2.120980 ± 0.006777	0.9214	EXP 150 of 150	172.94822 ± 0.01697	0.9999	EXP 149 of 150	514.8616 ± 0.0333	1.0000	EXP 150 of 150
21F15913	24.0 %	5.0534889 ± 0.0031307	0.9969	EXP 150 of 150	0.9141649 ± 0.0065927	0.5677	EXP 150 of 150	8.601295 ± 0.007731	0.9932	EXP 150 of 150	631.09865 ± 0.03201	1.0000	EXP 150 of 150	3148.5664 ± 0.0914	1.0000	EXP 148 of 150
21F15915	24.0 %	0.5233057 ± 0.0011073	0.9232	EXP 149 of 150	1.1141499 ± 0.0059232	0.7099	EXP 145 of 150	8.376016 ± 0.007606	0.9932	EXP 146 of 150	688.50929 ± 0.03813	1.0000	EXP 150 of 150	1873.0753 ± 0.0667	1.0000	EXP 150 of 150
21F15916	24.0 %	1.9596365 ± 0.0021241	0.9889	EXP 150 of 150	1.6521383 ± 0.0069032	0.8403	EXP 150 of 150	10.673631 ± 0.007046	0.9964	EXP 148 of 150	857.83999 ± 0.03517	1.0000	EXP 150 of 150	2742.5438 ± 0.0777	1.0000	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F15873	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15874	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15876	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15877	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15879	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15880	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15882	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15883	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15885	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15886	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15888	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15889	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15891	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15892	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15894	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15895	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15897	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15898	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15900	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15901	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15903	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15904	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15906	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15907	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15909	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15910	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15912	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15913	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15915	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01
21F15916	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	2.22	Oregon\Swenton (20-01)	21F15869	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F15873	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	22	28	1
21F15874	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	22	37	1
21F15876	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	22	54	1
21F15877	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	23	3	1
21F15879	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	23	20	1
21F15880	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	23	29	1
21F15882	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	23	46	1
21F15883	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	27	AUG	2021	23	55	1
21F15885	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	0	12	1
21F15886	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	0	20	1
21F15888	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	0	38	1
21F15889	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	0	46	1
21F15891	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	1	4	1
21F15892	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	1	12	1
21F15894	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	1	30	1
21F15895	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	1	38	1
21F15897	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	1	55	1
21F15898	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	2	4	1
21F15900	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	2	21	1
21F15901	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	2	30	1
21F15903	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	2	47	1
21F15904	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	2	56	1
21F15906	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	3	13	1
21F15907	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	3	22	1
21F15909	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	3	39	1
21F15910	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	3	48	1
21F15912	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	4	5	1
21F15913	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	4	13	1
21F15915	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	4	31	1
21F15916	24.0 %	VS19-109	Sanidine	N of Drewsey	FCT-NM (4X3-21)	28.201	0.082	Kuiper et al (2008)	9.38682	0.113	0.00165397	0.113	301.136	0.104	0.99785867	0.037	1	3.54E-14	28	AUG	2021	4	39	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F15873	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15874	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15876	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15877	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15879	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15880	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15882	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15883	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15885	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15886	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15888	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15889	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15891	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15892	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15894	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15895	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15897	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15898	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15900	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15901	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15903	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15904	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15906	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15907	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15909	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15910	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15912	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15913	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15915	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F15916	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F15869.AGE >>> VS19-109 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
7.46 ± 0.02
TOTAL FUSION
7.44 ± 0.02
NORMAL ISOCHRON
7.48 ± 0.02
INVERSE ISOCHRON
7.48 ± 0.02

MSWD (PROBABILITY)
8.60 (0%)

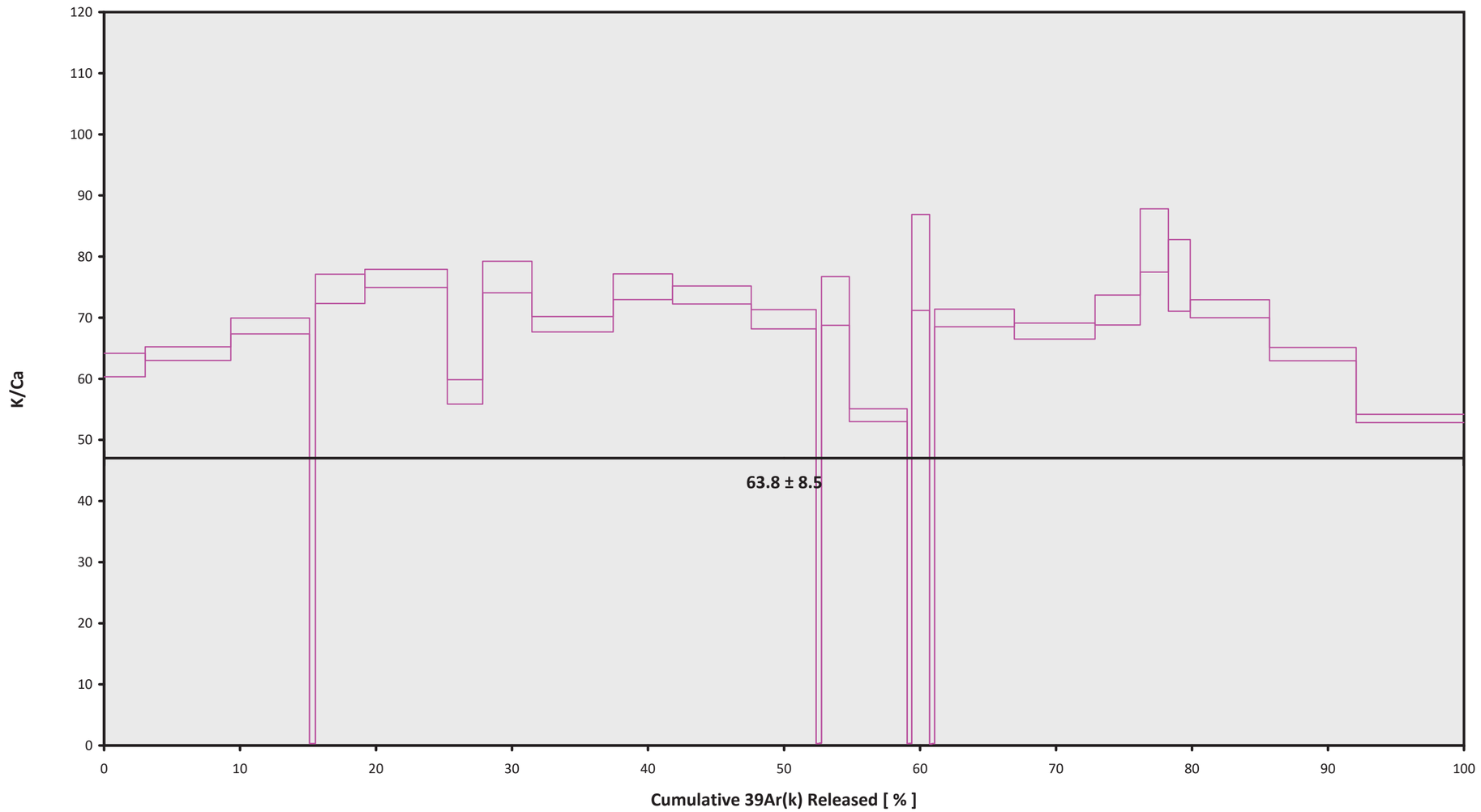
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
N of Drewsey
Dan Miggins

IRR = 21-OSU-04 (4X3-21)
J = 0.00165397 ± 0.00000187

21F15869.AGE >>> VS19-109 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
7.46 ± 0.02
TOTAL FUSION
7.44 ± 0.02
NORMAL ISOCHRON
7.48 ± 0.02
INVERSE ISOCHRON
7.48 ± 0.02

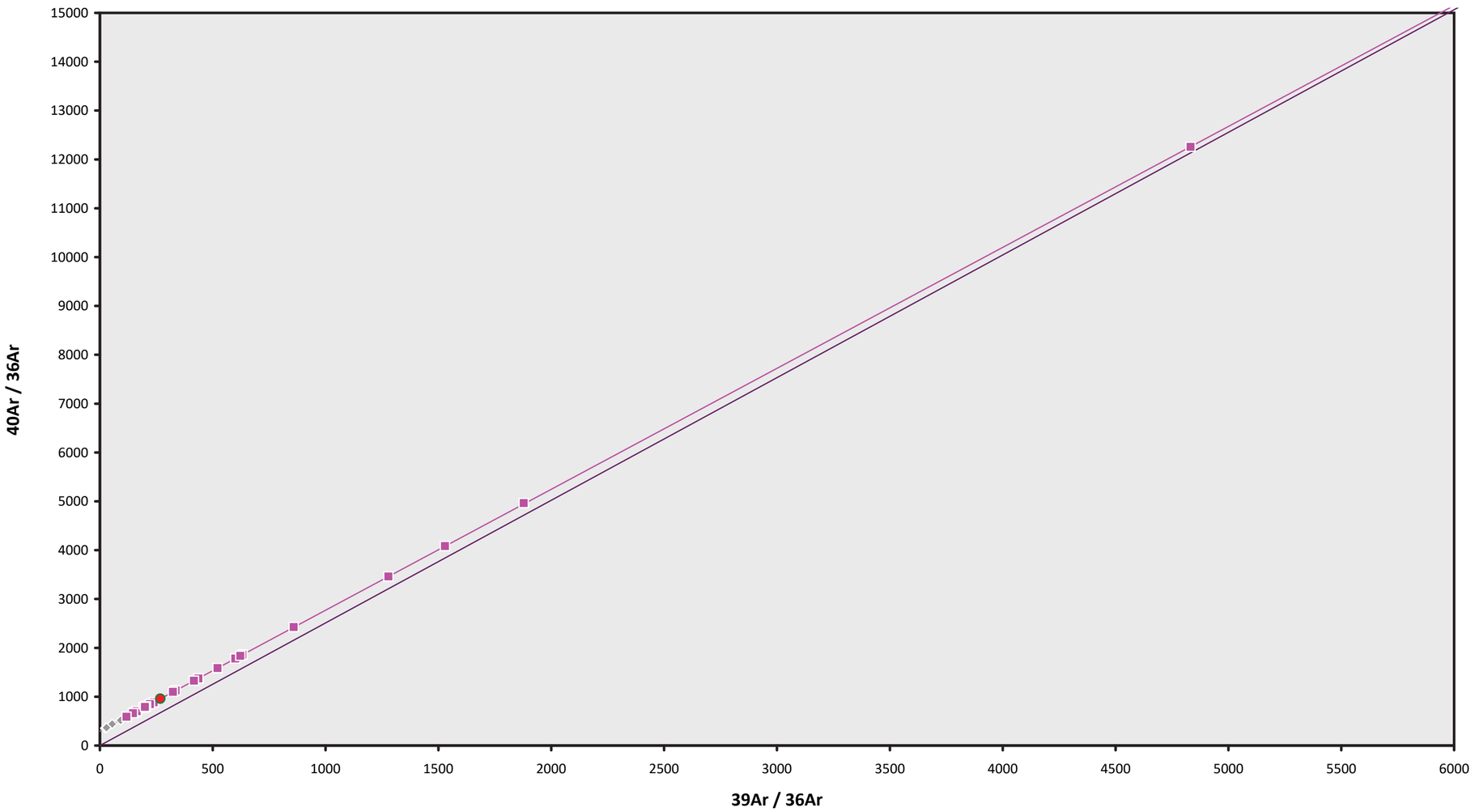
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Sanidine
N of Drewsey
Dan Miggins

IRR = 21-OSU-04 (4X3-21)
J = 0.00165397 ± 0.00000187

21F15869.AGE >>> VS19-109 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
7.46 ± 0.02
TOTAL FUSION
7.44 ± 0.02
NORMAL ISOCHRON
7.48 ± 0.02
INVERSE ISOCHRON
7.48 ± 0.02

MSWD (PROBABILITY)
1.93 (1%)

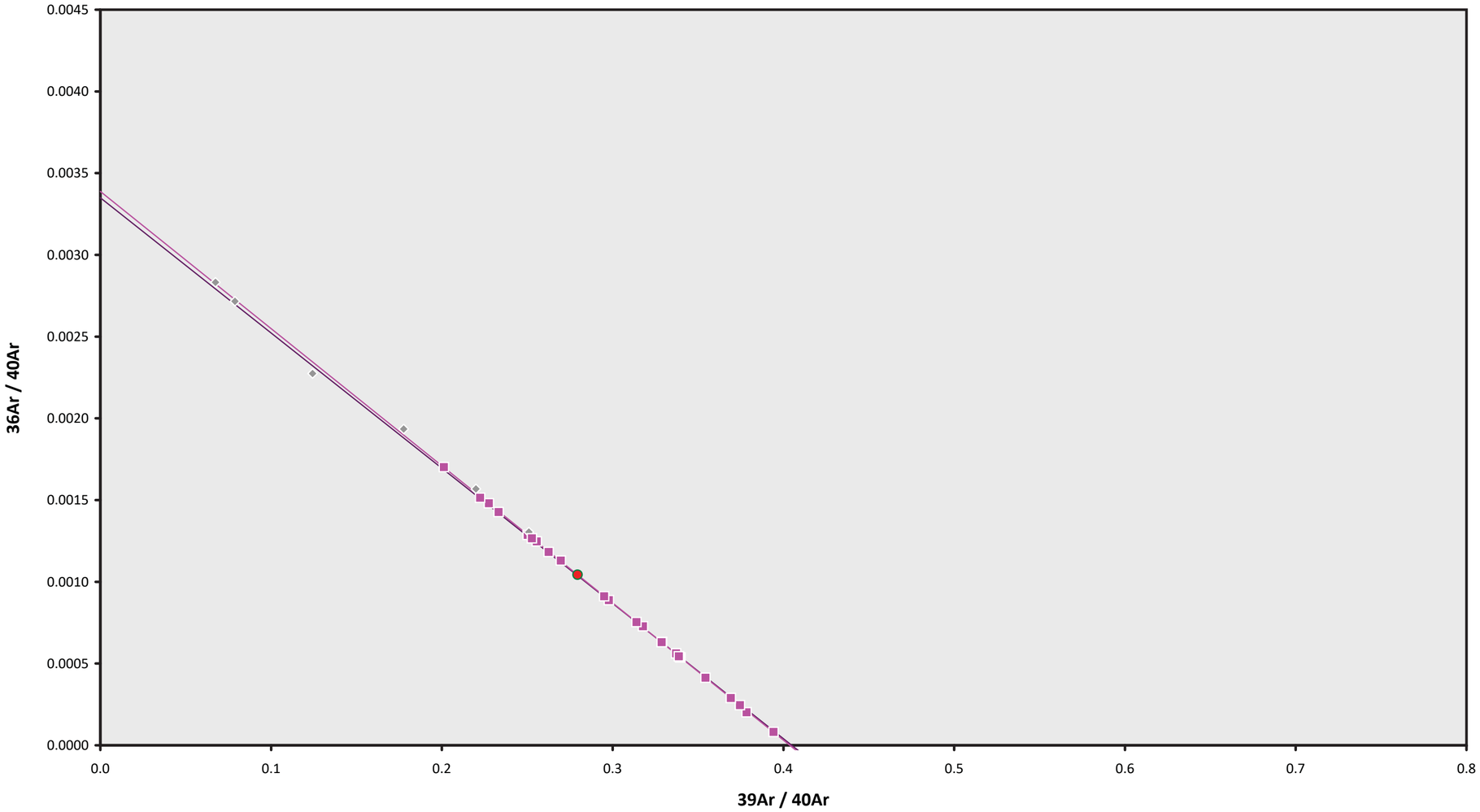
CALCULATED 40AR/36AR INTERCEPT
295.1 ± 0.7

Sample Info

Sanidine
N of Drewsey
Dan Miggins

IRR = 21-OSU-04 (4X3-21)
J = 0.00165397 ± 0.00000187

21F15869.AGE >>> VS19-109 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
7.46 ± 0.02
TOTAL FUSION
7.44 ± 0.02
NORMAL ISOCHRON
7.48 ± 0.02
INVERSE ISOCHRON
7.48 ± 0.02

MSWD (PROBABILITY)
1.93 (1%)

SPREADING FACTOR
47.8%

CALCULATED 40AR/36AR INTERCEPT
295.1 ± 0.7

Sample Info

Sanidine
N of Drewsey
Dan Miggins

IRR = 21-OSU-04 (4X3-21)
J = 0.00165397 ± 0.00000187

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
20F23960	17.0 %	✓	0.0564699	0.801	3.940927	3.255	1.243371	0.790	102.9121	0.042	545.7866	0.006	5.14221	±0.00515	14.78	±0.01	96.96	7.87	11.23	±0.73
20F23961	17.0 %	✓	0.0181028	1.882	2.589120	5.108	0.637699	1.417	53.6282	0.046	281.0518	0.011	5.14341	±0.00616	14.79	±0.02	98.14	4.10	8.91	±0.91
20F23963	17.0 %	✓	0.0122589	2.455	2.957115	4.293	0.193151	4.832	15.8560	0.077	84.7641	0.030	5.13009	±0.01424	14.75	±0.04	95.95	1.21	2.31	±0.20
20F23964	17.0 %	✓	0.0227873	1.463	1.412280	8.827	0.095905	9.560	7.8316	0.124	46.9570	0.049	5.14167	±0.02920	14.78	±0.08	85.74	0.60	2.38	±0.42
20F23966	17.0 %	✓	0.0360246	1.118	3.508731	4.230	0.897049	0.972	74.4664	0.044	393.3963	0.008	5.14178	±0.00569	14.78	±0.02	97.33	5.69	9.13	±0.77
20F23967	17.0 %	✓	0.0295175	1.354	8.159497	1.784	1.020570	0.885	85.7730	0.043	448.9368	0.008	5.13865	±0.00530	14.77	±0.02	98.17	6.56	4.52	±0.16
20F23969	17.0 %	✓	0.0318134	1.260	4.111927	3.079	1.157922	0.803	94.8718	0.044	497.0719	0.008	5.14233	±0.00525	14.78	±0.02	98.14	7.25	9.92	±0.61
20F23970	17.0 %	✓	0.0314984	1.131	5.514927	2.326	0.462323	1.898	37.7189	0.050	202.7727	0.014	5.13825	±0.00782	14.77	±0.02	95.57	2.88	2.94	±0.14
20F23972	17.0 %		0.0674122	0.742	6.283266	2.188	0.465850	1.972	37.6324	0.050	228.6715	0.013	5.55510	±0.00990	15.96	±0.03	91.41	2.88	2.58	±0.11
20F23973	17.0 %	✓	0.0048126	5.757	5.326926	2.412	0.328890	2.911	27.4980	0.057	141.9076	0.018	5.12406	±0.00858	14.73	±0.02	99.28	2.10	2.22	±0.11
20F23975	17.0 %	✓	0.0568254	0.746	2.128018	6.236	0.428364	2.193	34.3079	0.051	193.9975	0.014	5.16469	±0.00929	14.85	±0.03	91.33	2.62	6.93	±0.86
20F23976	17.0 %	✓	0.0270738	1.358	7.797399	1.821	0.202350	4.718	16.0410	0.073	90.3021	0.026	5.16579	±0.01599	14.85	±0.05	91.74	1.23	0.88	±0.03
20F23978	17.0 %	✓	0.0162058	2.114	5.577081	2.465	0.285383	3.215	23.9105	0.061	127.0956	0.022	5.13210	±0.01088	14.75	±0.03	96.54	1.83	1.84	±0.09
20F23979	17.0 %	✓	0.0181341	1.863	1.919665	6.750	0.157607	5.506	13.7438	0.084	76.3068	0.034	5.16927	±0.01752	14.86	±0.05	93.10	1.05	3.08	±0.42
20F23981	17.0 %	✓	0.0190673	1.764	1.198046	11.599	0.125655	7.243	9.8241	0.106	56.1752	0.046	5.14830	±0.02391	14.80	±0.07	90.03	0.75	3.53	±0.82
20F23982	17.0 %	✓	0.0341136	1.044	2.313624	5.281	0.706149	1.338	58.6818	0.046	311.4403	0.011	5.13642	±0.00609	14.77	±0.02	96.78	4.49	10.91	±1.15
20F23984	17.0 %	✓	0.0234820	1.579	3.466316	3.753	0.675356	1.229	56.2291	0.046	295.6157	0.010	5.13724	±0.00625	14.77	±0.02	97.71	4.30	6.97	±0.52
20F23985	17.0 %	✓	0.0191991	1.940	2.541941	5.110	0.889201	0.957	73.6698	0.044	384.2519	0.009	5.14035	±0.00554	14.78	±0.02	98.55	5.63	12.46	±1.27
20F23987	17.0 %	✓	0.0397371	0.939	3.133545	4.315	0.830399	1.148	66.9784	0.046	356.0635	0.009	5.14230	±0.00584	14.78	±0.02	96.73	5.12	9.19	±0.79
20F23988	17.0 %	✓	0.0318090	1.237	3.544799	4.058	0.863529	1.073	70.1562	0.045	370.1724	0.008	5.14469	±0.00580	14.79	±0.02	97.50	5.36	8.51	±0.69
20F23990	17.0 %	✓	0.0060866	4.758	1.380803	9.609	0.442275	2.008	37.3471	0.049	194.0145	0.015	5.14874	±0.00701	14.80	±0.02	99.11	2.86	11.63	±2.24
20F23991	17.0 %	✓	0.0095333	3.253	3.719013	3.486	0.571126	1.608	47.7487	0.048	247.8999	0.012	5.13809	±0.00642	14.77	±0.02	98.96	3.65	5.52	±0.38
20F23993	17.0 %	✓	0.0372720	1.089	2.691962	4.940	0.654806	1.523	53.3620	0.047	284.9975	0.011	5.13593	±0.00676	14.76	±0.02	96.16	4.08	8.52	±0.84
20F23994	17.0 %	✓	0.0304157	1.272	2.571735	5.236	0.715162	1.337	57.2210	0.046	303.6844	0.010	5.15171	±0.00633	14.81	±0.02	97.07	4.38	9.57	±1.00
20F23996	17.0 %	✓	0.0100080	2.858	1.962912	6.314	0.655084	1.323	53.0316	0.046	275.5090	0.011	5.14136	±0.00587	14.78	±0.02	98.96	4.06	11.62	±1.47
20F23997	17.0 %	✓	0.0180201	1.609	1.130865	10.804	0.381773	2.282	31.0234	0.053	164.2695	0.016	5.12407	±0.00799	14.73	±0.02	96.77	2.37	11.80	±2.55
20F23999	17.0 %	✓	0.0262540	1.350	0.602618	20.939	0.227259	3.601	17.4666	0.069	97.4852	0.025	5.13480	±0.01441	14.76	±0.04	92.00	1.34	12.46	±5.22
20F24000	17.0 %	✓	0.0074251	4.062	2.382256	5.538	0.610193	1.459	48.8321	0.047	253.4473	0.013	5.14830	±0.00624	14.80	±0.02	99.19	3.73	8.81	±0.98
		Σ	0.7413597	0.259	93.867313	0.747	15.924402	0.303	1307.7634	0.010	6954.0448	0.002								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-116**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C47-20)**
Position = **X: 0 | Y: 0 | Z/H: 57.20731 mm**
FCT-NM Age = **28.201 ±0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.84623 ±0.01487**
FCT-NM J-value = **0.00157680 ±0.00000238**
Air Shot 40Ar/36Ar = **298.3780 ±0.3670**
Air Shot MDF = **1.00015269 ±0.00040345 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.62 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ±0.107 E-10 1/a**
Decay 39Ar = **2.940 ±0.016 E-07 1/h**
Decay 37Ar = **8.230 ±0.012 E-04 1/h**
Decay 36Cl = **2.257 ±0.015 E-06 1/a**
Decay 40K(EC,β⁺) = **0.580 ±0.014 E-10 1/a**
Decay 40K(β⁻) = **4.884 ±0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ±0.31**
Atmospheric 38/36(a) = **0.1885 ±0.0003**
Production 39/37(ca) = **0.0006425 ±0.0000059**
Production 38/37(ca) = **0.0001800 ±0.0000173**
Production 36/37(ca) = **0.0002703 ±0.0000005**
Production 40/39(k) = **0.000607 ±0.000059**
Production 38/39(k) = **0.012077 ±0.000011**
Production 36/38(cl) = **262.80 ±1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ±0.0100 E-04**
Atomic Weight K = **39.0983 ±0.0001 g**

Results

Results	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			5.14141	±0.00290	**14.78**	**±0.05**	4.55	97.12	1.45	±0.52
Error Mean				±0.06%		**±0.31%**	0%	27		
				Full External Error		±0.77	1.55	2σ Confidence Limit		
				Analytical Error		±0.01	2.1333	Error Magnification		
Total Fusion Age			5.15369	±0.00137	**14.82**	**±0.04**		28	5.99	±0.09
				±0.03%		**±0.30%**				
				Full External Error		±0.77				
				Analytical Error		±0.00				
Normal Isochron	**305.88**	**±8.87**	5.13762	±0.00499	**14.77**	**±0.05**	4.35	97.12		
Error Chron		**±2.90%**		±0.10%		**±0.32%**	0%	27		
				Full External Error		±0.77	1.57	2σ Confidence Limit		
				Analytical Error		±0.01	2.0846	Error Magnification		
							1	Number of Iterations		
							0.0000003454	Convergence		
Inverse Isochron	**306.38**	**±8.67**	5.13783	±0.00487	**14.77**	**±0.05**	4.19	97.12		
Error Chron		**±2.83%**		±0.09%		**±0.32%**	0%	27		
				Full External Error		±0.77	1.57	2σ Confidence Limit		
				Analytical Error		±0.01	2.0463	Error Magnification		
							3	Number of Iterations		
							0.0000234004	Convergence		
							14%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
20F23960	17.0 %	✓	0.0554046	3.940927	0.0000000	102.9095	529.1825	14.78 ±0.01	96.96	7.87	11.23 ±0.73
20F23961	17.0 %	✓	0.0174030	2.589120	0.0000000	53.6265	275.8234	14.79 ±0.02	98.14	4.10	8.91 ±0.91
20F23963	17.0 %	✓	0.0114596	2.957115	0.0000000	15.8541	81.3331	14.75 ±0.04	95.95	1.21	2.31 ±0.20
20F23964	17.0 %	✓	0.0224055	1.412280	0.0000000	7.8307	40.2629	14.78 ±0.08	85.74	0.60	2.38 ±0.42
20F23966	17.0 %	✓	0.0350762	3.508731	0.0000000	74.4642	382.8787	14.78 ±0.02	97.33	5.69	9.13 ±0.77
20F23967	17.0 %	✓	0.0273120	8.159497	0.0000000	85.7678	440.7305	14.77 ±0.02	98.17	6.56	4.52 ±0.16
20F23969	17.0 %	✓	0.0307007	4.111927	0.0056601	94.8691	487.8483	14.78 ±0.02	98.14	7.25	9.92 ±0.61
20F23970	17.0 %	✓	0.0300077	5.514927	0.0001863	37.7153	193.7908	14.77 ±0.02	95.57	2.88	2.94 ±0.14
20F23972	17.0 %		0.0657139	6.283266	0.0000000	37.6283	209.0291	15.96 ±0.03	91.41	2.88	2.58 ±0.11
20F23973	17.0 %	✓	0.0033727	5.326926	0.0000000	27.4946	140.8840	14.73 ±0.02	99.28	2.10	2.22 ±0.11
20F23975	17.0 %	✓	0.0562495	2.128018	0.0030581	34.3066	177.1828	14.85 ±0.03	91.33	2.62	6.93 ±0.86
20F23976	17.0 %	✓	0.0249656	7.797399	0.0025738	16.0360	82.8386	14.85 ±0.05	91.74	1.23	0.88 ±0.03
20F23978	17.0 %	✓	0.0146983	5.577081	0.0000000	23.9069	122.6928	14.75 ±0.03	96.54	1.83	1.84 ±0.09
20F23979	17.0 %	✓	0.0176152	1.919665	0.0000000	13.7426	71.0393	14.86 ±0.05	93.10	1.05	3.08 ±0.42
20F23981	17.0 %	✓	0.0187427	1.198046	0.0032700	9.8233	50.5734	14.80 ±0.07	90.03	0.75	3.53 ±0.82
20F23982	17.0 %	✓	0.0334883	2.313624	0.0000000	58.6803	301.4065	14.77 ±0.02	96.78	4.49	10.91 ±1.15
20F23984	17.0 %	✓	0.0225450	3.466316	0.0000000	56.2268	288.8505	14.77 ±0.02	97.71	4.30	6.97 ±0.52
20F23985	17.0 %	✓	0.0185120	2.541941	0.0000000	73.6681	378.6803	14.78 ±0.02	98.55	5.63	12.46 ±1.27
20F23987	17.0 %	✓	0.0388870	3.133545	0.0136308	66.9764	344.4127	14.78 ±0.02	96.73	5.12	9.19 ±0.79
20F23988	17.0 %	✓	0.0308486	3.544799	0.0098276	70.1539	360.9197	14.79 ±0.02	97.50	5.36	8.51 ±0.69
20F23990	17.0 %	✓	0.0057133	1.380803	0.0000000	37.3462	192.2860	14.80 ±0.02	99.11	2.86	11.63 ±2.24
20F23991	17.0 %	✓	0.0085281	3.719013	0.0000000	47.7463	245.3248	14.77 ±0.02	98.96	3.65	5.52 ±0.38
20F23993	17.0 %	✓	0.0365437	2.691962	0.0030011	53.3602	274.0546	14.76 ±0.02	96.16	4.08	8.52 ±0.84
20F23994	17.0 %	✓	0.0297164	2.571735	0.0180598	57.2193	294.7776	14.81 ±0.02	97.07	4.38	9.57 ±1.00
20F23996	17.0 %	✓	0.0094745	1.962912	0.0124971	53.0304	272.6481	14.78 ±0.02	98.96	4.06	11.62 ±1.47
20F23997	17.0 %	✓	0.0177136	1.130865	0.0035704	31.0226	158.9621	14.73 ±0.02	96.77	2.37	11.80 ±2.55
20F23999	17.0 %	✓	0.0260885	0.602618	0.0112930	17.4662	89.6856	14.76 ±0.04	92.00	1.34	12.46 ±5.22
20F24000	17.0 %	✓	0.0067769	2.382256	0.0187600	48.8305	251.3944	14.80 ±0.02	99.19	3.73	8.81 ±0.98
		Σ	0.7159632	93.867313	0.1053880	1307.7031	6739.4930				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-116**
Material = **Sanidine**
Location = **Rhyolite Dome**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **20-OSU-01 (1C47-20)**
J = **0.00157680 ± 0.00000238**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	5.14141	±0.00290	**14.78**	**±0.05**	4.55	97.12	1.45 ±0.52
Error Mean		±0.06%		**±0.31%**	0%	27	
			Full External Error	±0.77	1.55	2σ Confidence Limit	
			Analytical Error	±0.01	2.1333	Error Magnification	
Total Fusion Age	5.15369	±0.00137	**14.82**	**±0.04**		28	5.99 ±0.09
		±0.03%		**±0.30%**			
			Full External Error	±0.77			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
20F23960	17.0 %	✓	1857.42	±30.46	9849.79	±161.34	0.9986
20F23961	17.0 %	✓	3081.46	±121.36	16147.75	±635.82	0.9997
20F23963	17.0 %	✓	1383.48	±73.18	7395.92	±391.08	0.9995
20F23964	17.0 %	✓	349.50	±10.49	2095.57	±62.70	0.9960
20F23966	17.0 %	✓	2122.93	±49.02	11214.18	±258.74	0.9992
20F23967	17.0 %	✓	3140.29	±92.40	16435.42	±483.42	0.9996
20F23969	17.0 %	✓	3090.13	±81.01	16189.04	±424.19	0.9994
20F23970	17.0 %	✓	1256.86	±30.02	6756.60	±161.23	0.9990
20F23972	17.0 %		572.61	±8.76	3479.46	±53.11	0.9977
20F23973	17.0 %	✓	8152.13	±1349.99	42070.56	±6966.73	1.0000
20F23975	17.0 %	✓	609.90	±9.25	3448.50	±52.17	0.9975
20F23976	17.0 %	✓	642.32	±19.05	3616.67	±107.14	0.9986
20F23978	17.0 %	✓	1626.51	±76.29	8645.98	±405.43	0.9996
20F23979	17.0 %	✓	780.16	±30.11	4331.40	±167.03	0.9989
20F23981	17.0 %	✓	524.11	±18.96	2996.86	±108.24	0.9979
20F23982	17.0 %	✓	1752.26	±37.45	9298.92	±198.56	0.9990
20F23984	17.0 %	✓	2493.98	±82.42	13110.72	±433.13	0.9996
20F23985	17.0 %	✓	3979.49	±160.88	20754.53	±838.84	0.9998
20F23987	17.0 %	✓	1722.33	±33.25	9155.31	±176.53	0.9988
20F23988	17.0 %	✓	2274.14	±58.35	11998.28	±307.66	0.9994
20F23990	17.0 %	✓	6536.67	±667.79	33954.19	±3468.61	1.0000
20F23991	17.0 %	✓	5598.73	±409.76	29065.31	±2127.09	0.9999
20F23993	17.0 %	✓	1460.18	±32.60	7797.92	±173.98	0.9991
20F23994	17.0 %	✓	1925.51	±50.38	10218.24	±267.22	0.9994
20F23996	17.0 %	✓	5597.15	±340.32	29075.50	±1767.69	0.9999
20F23997	17.0 %	✓	1751.34	±57.73	9272.56	±305.52	0.9994
20F23999	17.0 %	✓	669.50	±18.30	3736.30	±102.02	0.9985
20F24000	17.0 %	✓	7205.47	±645.93	37394.48	±3352.02	0.9999

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**305.88**	**±8.87**	5.13762	±0.00499	**14.77**	**±0.05**	4.35
Error Chron		**±2.90%**		±0.10%		**±0.32%**	0%
					Full External Error	±0.77	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.57	Convergence	0.000000345385
	Error Magnification	2.0846	Number of Iterations	1
	Number of Data Points	27	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
20F23960	17.0 %	✓	0.1885743	±0.0001618	0.00010152	±0.00000166	0.0011
20F23961	17.0 %	✓	0.1908287	±0.0001789	0.00006193	±0.00000244	0.0013
20F23963	17.0 %	✓	0.1870596	±0.0003082	0.00013521	±0.00000715	0.0042
20F23964	17.0 %	✓	0.1667800	±0.0004447	0.00047720	±0.00001428	0.0121
20F23966	17.0 %	✓	0.1893071	±0.0001715	0.00008917	±0.00000206	0.0014
20F23967	17.0 %	✓	0.1910686	±0.0001671	0.00006084	±0.00000179	0.0010
20F23969	17.0 %	✓	0.1908780	±0.0001703	0.00006177	±0.00000162	0.0012
20F23970	17.0 %	✓	0.1860190	±0.0001936	0.00014800	±0.00000353	0.0033
20F23972	17.0 %		0.1645683	±0.0001707	0.00028740	±0.00000439	0.0041
20F23973	17.0 %	✓	0.1937727	±0.0002296	0.00002377	±0.00000394	0.0006
20F23975	17.0 %	✓	0.1768591	±0.0001878	0.00028998	±0.00000439	0.0050
20F23976	17.0 %	✓	0.1776008	±0.0002746	0.00027650	±0.00000819	0.0061
20F23978	17.0 %	✓	0.1881234	±0.0002427	0.00011566	±0.00000542	0.0031
20F23979	17.0 %	✓	0.1801165	±0.0003246	0.00023087	±0.00000890	0.0065
20F23981	17.0 %	✓	0.1748880	±0.0004050	0.00033368	±0.00001205	0.0100
20F23982	17.0 %	✓	0.1884374	±0.0001784	0.00010754	±0.00000230	0.0023
20F23984	17.0 %	✓	0.1902245	±0.0001788	0.00007627	±0.00000252	0.0013
20F23985	17.0 %	✓	0.1917406	±0.0001726	0.00004818	±0.00000195	0.0009
20F23987	17.0 %	✓	0.1881240	±0.0001745	0.00010923	±0.00000211	0.0018
20F23988	17.0 %	✓	0.1895386	±0.0001736	0.00008335	±0.00000214	0.0012
20F23990	17.0 %	✓	0.1925143	±0.0001954	0.00002945	±0.00000301	0.0008
20F23991	17.0 %	✓	0.1926257	±0.0001908	0.00003441	±0.00000252	0.0008
20F23993	17.0 %	✓	0.1872518	±0.0001808	0.00012824	±0.00000286	0.0024
20F23994	17.0 %	✓	0.1884385	±0.0001771	0.00009786	±0.00000256	0.0016
20F23996	17.0 %	✓	0.1925039	±0.0001829	0.00003439	±0.00000209	0.0009
20F23997	17.0 %	✓	0.1888738	±0.0002082	0.00010785	±0.00000355	0.0028
20F23999	17.0 %	✓	0.1791874	±0.0002646	0.00026764	±0.00000731	0.0063
20F24000	17.0 %	✓	0.1926879	±0.0001874	0.00002674	±0.00000240	0.0007

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**306.38**	**±8.67**	5.13783	±0.00487	**14.77**	**±0.05**	4.19
Error Chron		**±2.83%**		±0.09%		**±0.32%**	0%
					Full External Error	±0.77	
					Analytical Error	±0.01	

Statistics				
	2σ Confidence Limit	1.57	Convergence	0.0000234004
	Error Magnification	2.0463	Number of Iterations	3
	Number of Data Points	27	Calculated Line	Weighted York-2
	Spreading Factor	13.9%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
20F23960	17.0%	✓	0.0554046	0.82	0.0000000	0.00	0.0010652	3.26	0.0000000	0.00	3.940927	3.26	0.0104438	0.83	0.0000000	0.00	1.242838	0.10	0.0007094	10.17	0.0000000	0.00	102.9095	0.04	0.0025320	3.38	529.1825	0.03	16.54161	0.83	0.0000000	0.00	0.0624661	9.65
20F23961	17.0%	✓	0.0174030	1.97	0.0000000	0.00	0.0006998	5.11	0.0000000	0.00	2.589120	5.11	0.0032805	1.98	0.0000000	0.00	0.647648	0.10	0.0004660	10.90	0.0000000	0.00	53.6265	0.05	0.0016635	5.19	275.8234	0.04	5.19584	1.97	0.0000000	0.00	0.0325513	9.65
20F23963	17.0%	✓	0.0114596	2.64	0.0000000	0.00	0.0007993	4.30	0.0000000	0.00	2.957115	4.29	0.0021601	2.65	0.0000000	0.00	0.191470	0.12	0.0005323	10.54	0.0000000	0.00	15.8541	0.08	0.0018999	4.39	81.3331	0.12	3.42139	2.65	0.0000000	0.00	0.0096235	9.65
20F23964	17.0%	✓	0.0224055	1.50	0.0000000	0.00	0.0003817	8.83	0.0000000	0.00	1.412280	8.83	0.0042234	1.50	0.0000000	0.00	0.094571	0.15	0.0002542	13.06	0.0000000	0.00	7.8307	0.12	0.0009074	8.87	40.2629	0.26	6.68939	1.50	0.0000000	0.00	0.0047532	9.65
20F23966	17.0%	✓	0.0350762	1.15	0.0000000	0.00	0.0009484	4.23	0.0000000	0.00	3.508731	4.23	0.0066119	1.16	0.0000000	0.00	0.899304	0.10	0.0006316	10.52	0.0000000	0.00	74.4642	0.04	0.0022544	4.33	382.8787	0.03	10.47235	1.16	0.0000000	0.00	0.0451998	9.65
20F23967	17.0%	✓	0.0273120	1.47	0.0000000	0.00	0.0022055	1.79	0.0000000	0.00	8.159497	1.78	0.0051483	1.48	0.0000000	0.00	1.035818	0.10	0.0014687	9.79	0.0000000	0.00	85.7678	0.04	0.0052425	2.01	440.7305	0.03	8.15428	1.47	0.0000000	0.00	0.0520610	9.65
20F23969	17.0%	✓	0.0307007	1.31	0.0000000	0.00	0.0011115	3.08	0.0000013	171.78	4.111927	3.08	0.0057871	1.32	0.0000000	0.00	1.145734	0.10	0.0007401	10.11	0.0056601	171.79	94.8691	0.04	0.0026419	3.21	487.8483	0.03	9.16599	1.31	0.0000000	0.00	0.0575856	9.65
20F23970	17.0%	✓	0.0300077	1.19	0.0000000	0.00	0.0014907	2.33	0.0000000	#######	5.514927	2.33	0.0056564	1.20	0.0000000	0.00	0.455488	0.10	0.0009927	9.91	0.0001863	#######	37.7153	0.05	0.0035433	2.50	193.7908	0.06	8.95909	1.20	0.0000000	0.00	0.0228932	9.65
20F23972	17.0%		0.0657139	0.76	0.0000000	0.00	0.0016984	2.19	0.0000000	0.00	6.283266	2.19	0.0123871	0.78	0.0000000	0.00	0.454437	0.10	0.0011310	9.88	0.0000000	0.00	37.6283	0.05	0.0040370	2.37	209.0291	0.07	19.61953	0.77	0.0000000	0.00	0.0228404	9.65
20F23973	17.0%	✓	0.0033727	8.28	0.0000000	0.00	0.0014399	2.42	0.0000000	0.00	5.326926	2.41	0.0006358	8.28	0.0000000	0.00	0.332052	0.11	0.0009588	9.93	0.0000000	0.00	27.4946	0.06	0.0034226	2.58	140.8840	0.06	1.00695	8.28	0.0000000	0.00	0.0166892	9.65
20F23975	17.0%	✓	0.0562495	0.76	0.0000000	0.00	0.0005752	6.24	0.0000007	309.10	2.128018	6.24	0.0106030	0.77	0.0000000	0.00	0.414320	0.10	0.0003830	11.47	0.0030581	309.10	34.3066	0.05	0.0013673	6.30	177.1828	0.07	16.79386	0.76	0.0000000	0.00	0.0208241	9.65
20F23976	17.0%	✓	0.0249656	1.48	0.0000000	0.00	0.0021076	1.83	0.0000006	371.54	7.797399	1.82	0.0047060	1.49	0.0000000	0.00	0.193667	0.12	0.0014035	9.80	0.0025738	371.54	16.0360	0.07	0.0050098	2.04	82.8386	0.14	7.45373	1.48	0.0000000	0.00	0.0097338	9.65
20F23978	17.0%	✓	0.0146983	2.34	0.0000000	0.00	0.0015075	2.47	0.0000000	0.00	5.577081	2.47	0.0027706	2.35	0.0000000	0.00	0.288724	0.11	0.0010039	9.94	0.0000000	0.00	23.9069	0.06	0.0035833	2.63	122.6928	0.09	4.38832	2.35	0.0000000	0.00	0.0145115	9.65
20F23979	17.0%	✓	0.0176152	1.93	0.0000000	0.00	0.0005189	6.75	0.0000000	0.00	1.919665	6.75	0.0033205	1.93	0.0000000	0.00	0.165970	0.12	0.0003455	11.76	0.0000000	0.00	13.7426	0.08	0.0012334	6.81	71.0393	0.15	5.25919	1.93	0.0000000	0.00	0.0083418	9.65
20F23981	17.0%	✓	0.0187427	1.81	0.0000000	0.00	0.0003238	11.60	0.0000007	278.50	1.198046	11.60	0.0035330	1.81	0.0000000	0.00	0.118636	0.14	0.0002156	15.08	0.0032700	278.50	9.8233	0.11	0.0007697	11.64	50.5734	0.21	5.59582	1.81	0.0000000	0.00	0.0059628	9.65
20F23982	17.0%	✓	0.0334883	1.07	0.0000000	0.00	0.0006254	5.28	0.0000000	0.00	2.313624	5.28	0.0063125	1.08	0.0000000	0.00	0.708682	0.10	0.0004165	10.98	0.0000000	0.00	58.6803	0.05	0.0014865	5.36	301.4065	0.04	9.99825	1.07	0.0000000	0.00	0.0356189	9.65
20F23984	17.0%	✓	0.0225450	1.65	0.0000000	0.00	0.0009369	3.76	0.0000000	0.00	3.466316	3.75	0.0042497	1.66	0.0000000	0.00	0.679052	0.10	0.0006239	10.34	0.0000000	0.00	56.2268	0.05	0.0022271	3.86	288.8505	0.04	6.73104	1.66	0.0000000	0.00	0.0341297	9.65
20F23985	17.0%	✓	0.0185120	2.02	0.0000000	0.00	0.0006871	5.11	0.0000000	0.00	2.541941	5.11	0.0034895	2.03	0.0000000	0.00	0.889690	0.10	0.0004575	10.90	0.0000000	0.00	73.6681	0.04	0.0016332	5.19	378.6803	0.03	5.52693	2.02	0.0000000	0.00	0.0447166	9.65
20F23987	17.0%	✓	0.0388870	0.96	0.0000000	0.00	0.0008470	4.32	0.0000031	71.48	3.133545	4.32	0.0073302	0.98	0.0000000	0.00	0.808874	0.10	0.0005640	10.55	0.0136308	71.49	66.9764	0.05	0.0020133	4.41	344.4127	0.03	11.61011	0.97	0.0000000	0.00	0.0406547	9.65
20F23988	17.0%	✓	0.0308486	1.28	0.0000000	0.00	0.0009582	4.06	0.0000022	96.67	3.544799	4.06	0.0058150	1.29	0.0000000	0.00	0.847249	0.10	0.0006381	10.45	0.0098276	96.67	70.1539	0.04	0.0022775	4.16	360.9197	0.03	9.21015	1.29	0.0000000	0.00	0.0425834	9.65
20F23990	17.0%	✓	0.0057133	5.11	0.0000000	0.00	0.0003732	9.61	0.0000000	0.00	1.380803	9.61	0.0010770	5.11	0.0000000	0.00	0.451030	0.10	0.0002485	13.60	0.0000000	0.00	37.3462	0.05	0.0008872	9.65	192.2860	0.05	1.70577	5.11	0.0000000	0.00	0.0226691	9.65
20F23991	17.0%	✓	0.0085281	3.66	0.0000000	0.00	0.0010052	3.49	0.0000000	0.00	3.719013	3.49	0.0016075	3.66	0.0000000	0.00	0.576632	0.10	0.0006694	10.24	0.0000000	0.00	47.7463	0.05	0.0023895	3.61	245.3248	0.04	2.54614	3.66	0.0000000	0.00	0.0289820	9.65
20F23993	17.0%	✓	0.0365437	1.12	0.0000000	0.00	0.0007276	4.94	0.0000007	336.62	2.691962	4.94	0.0068885	1.13	0.0000000	0.00	0.644432	0.10	0.0004846	10.82	0.0030011	336.62	53.3602	0.05	0.0017296	5.02	274.0546	0.05	10.91049	1.12	0.0000000	0.00	0.0323897	9.65
20F23994	17.0%	✓	0.0297164	1.31	0.0000000	0.00	0.0006951	5.24	0.0000041	53.81	2.571735	5.24	0.0056015	1.32	0.0000000	0.00	0.691038	0.10	0.0004629	10.96	0.0180598	53.82	57.2193	0.05	0.0016523	5.32	294.7776	0.04	8.87214	1.31	0.0000000	0.00	0.0347321	9.65
20F23996	17.0%	✓	0.0094745	3.04	0.0000000	0.00	0.0005306	6.32	0.0000029	70.53	1.962912	6.31	0.0017859	3.04	0.0000000	0.00	0.640448	0.10	0.0003533	11.52	0.0124971	70.53	53.0304	0.05	0.0012612	6.38	272.6481	0.03	2.82872	3.04	0.0000000	0.00	0.0321894	9.65
20F23997	17.0%	✓	0.0177136	1.65	0.0000000	0.00	0.0003057	10.81	0.0000008	245.47	1.130865	10.80	0.0033390	1.66	0.0000000	0.00	0.374661	0.10	0.0002036	14.47	0.0035704	245.48	31.0226	0.05	0.0007266	10.84	158.9621	0.06	5.28858	1.65	0.0000000	0.00	0.0188307	9.65
20F23999	17.0%	✓	0.0260885	1.37	0.0000000	0.00	0.0001629	20.94	0.0000026	72.65	0.602618	20.94	0.0049177	1.37	0.0000000	0.00	0.210939	0.11	0.0001085	23.05	0.0112930	72.66	17.4662	0.07	0.0003872	20.96	89.6856	0.12	7.78899	1.37	0.0000000	0.00	0.0106020	9.65
20F24000	17.0%	✓	0.0067769	4.48	0.0000000	0.00	0.0006439	5.54	0.0000043	48.12	2.382256	5.54	0.0012774	4.48	0.0000000	0.00	0.589726	0.10	0.0004288	11.11	0.0187600	48.13	48.8305	0.05	0.0015306	5.61	251.3944	0.04	2.02330	4.48	0.0000000	0.00	0.0296401	9.65
		Σ	0.7159632	0.27	0.0000000	0.00	0.0253723	0.75	0.0000241	31.77	93.867313	0.75	0.1349591	0.27	0.0000000	0.00	15.793130	0.02	0.0168961	2.22	0.1053880	31.78	1307.7031	0.01	0.0603097	0.77	6739.4930	0.01	213.75797	0.27	0.0000000	0.00	0.7937758	2.08
		Σ							0.7413597	0.26	93.867313	0.75									16.050373	0.21			1307.7634	0.01							6954.0448	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
20F23960	17.0 %	✓	5.303426	0.002275	0.038294	0.001247	0.000549	0.000004	140.744	16.158376	1.00099446	1.932E-11
20F23961	17.0 %	✓	5.240746	0.002455	0.048279	0.002466	0.000338	0.000006	140.749	16.160149	1.00099450	9.949E-12
20F23963	17.0 %	✓	5.345856	0.004403	0.186498	0.008008	0.000773	0.000019	140.761	16.163918	1.00099459	3.001E-12
20F23964	17.0 %	✓	5.995835	0.007992	0.180331	0.015919	0.002910	0.000043	140.767	16.165913	1.00099463	1.662E-12
20F23966	17.0 %	✓	5.282868	0.002392	0.047118	0.001993	0.000484	0.000005	140.779	16.169683	1.00099471	1.393E-11
20F23967	17.0 %	✓	5.234009	0.002288	0.095129	0.001698	0.000344	0.000005	140.785	16.171680	1.00099476	1.589E-11
20F23969	17.0 %	✓	5.239409	0.002336	0.043342	0.001335	0.000335	0.000004	140.797	16.175451	1.00099484	1.760E-11
20F23970	17.0 %	✓	5.375897	0.002797	0.146211	0.003401	0.000835	0.000009	140.803	16.177226	1.00099488	7.178E-12
20F23972	17.0 %		6.076459	0.003150	0.166964	0.003654	0.001791	0.000013	140.815	16.180999	1.00099496	8.095E-12
20F23973	17.0 %	✓	5.160649	0.003056	0.193720	0.004675	0.000175	0.000010	140.821	16.182996	1.00099501	5.024E-12
20F23975	17.0 %	✓	5.654599	0.003001	0.062027	0.003868	0.001656	0.000012	140.833	16.186770	1.00099509	6.868E-12
20F23976	17.0 %	✓	5.629455	0.004351	0.486092	0.008861	0.001688	0.000023	140.839	16.188769	1.00099514	3.197E-12
20F23978	17.0 %	✓	5.315471	0.003428	0.233248	0.005752	0.000678	0.000014	140.851	16.192544	1.00099522	4.499E-12
20F23979	17.0 %	✓	5.552072	0.005002	0.139675	0.009429	0.001319	0.000025	140.857	16.194543	1.00099526	2.701E-12
20F23981	17.0 %	✓	5.718103	0.006619	0.121950	0.014146	0.001941	0.000034	140.869	16.198320	1.00099535	1.989E-12
20F23982	17.0 %	✓	5.307276	0.002511	0.039427	0.002082	0.000581	0.000006	140.874	16.200098	1.00099539	1.102E-11
20F23984	17.0 %	✓	5.257346	0.002470	0.061646	0.002314	0.000418	0.000007	140.886	16.203876	1.00099547	1.046E-11
20F23985	17.0 %	✓	5.215871	0.002347	0.034505	0.001763	0.000261	0.000005	140.892	16.205876	1.00099551	1.360E-11
20F23987	17.0 %	✓	5.316090	0.002465	0.046784	0.002019	0.000593	0.000006	140.904	16.209656	1.00099560	1.260E-11
20F23988	17.0 %	✓	5.276406	0.002415	0.050527	0.002050	0.000453	0.000006	140.910	16.211657	1.00099564	1.310E-11
20F23990	17.0 %	✓	5.194902	0.002636	0.036972	0.003553	0.000163	0.000008	140.922	16.215437	1.00099572	6.868E-12
20F23991	17.0 %	✓	5.191762	0.002570	0.077887	0.002715	0.000200	0.000006	140.928	16.217439	1.00099577	8.776E-12
20F23993	17.0 %	✓	5.340835	0.002578	0.050447	0.002492	0.000698	0.000008	140.940	16.221221	1.00099585	1.009E-11
20F23994	17.0 %	✓	5.307224	0.002493	0.044944	0.002353	0.000532	0.000007	140.946	16.223002	1.00099589	1.075E-11
20F23996	17.0 %	✓	5.195184	0.002467	0.037014	0.002337	0.000189	0.000005	140.958	16.226785	1.00099597	9.753E-12
20F23997	17.0 %	✓	5.295023	0.002918	0.036452	0.003938	0.000581	0.000009	140.964	16.228788	1.00099602	5.815E-12
20F23999	17.0 %	✓	5.581232	0.004120	0.034501	0.007224	0.001503	0.000020	140.976	16.232573	1.00099610	3.451E-12
20F24000	17.0 %	✓	5.190183	0.002523	0.048785	0.002702	0.000152	0.000006	140.982	16.234577	1.00099615	8.972E-12

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
20F23960	17.0 %	0.0071097 ±0.0001570	0.0117407 ±0.0055518	0.0015100 ±0.0067853	0.0246467 ±0.0061481	1.7450609 ±0.0151006
20F23961	17.0 %	0.0071097 ±0.0001570	0.0117407 ±0.0055518	0.0015100 ±0.0067853	0.0246467 ±0.0061481	1.7450609 ±0.0151006
20F23963	17.0 %	0.0074530 ±0.0001856	0.0112002 ±0.0055091	0.0011416 ±0.0066555	0.0172414 ±0.0063042	1.9734134 ±0.0150890
20F23964	17.0 %	0.0074530 ±0.0001856	0.0112002 ±0.0055091	0.0011416 ±0.0066555	0.0172414 ±0.0063042	1.9734134 ±0.0150890
20F23966	17.0 %	0.0073014 ±0.0001648	0.0087043 ±0.0066552	0.0045039 ±0.0061885	0.0067557 ±0.0061159	1.9326962 ±0.0160760
20F23967	17.0 %	0.0073014 ±0.0001648	0.0087043 ±0.0066552	0.0045039 ±0.0061885	0.0067557 ±0.0061159	1.9326962 ±0.0160760
20F23969	17.0 %	0.0072379 ±0.0001650	0.0197641 ±0.0054731	0.0093332 ±0.0062746	0.0099131 ±0.0064957	1.9146434 ±0.0155588
20F23970	17.0 %	0.0072379 ±0.0001650	0.0197641 ±0.0054731	0.0093332 ±0.0062746	0.0099131 ±0.0064957	1.9146434 ±0.0155588
20F23972	17.0 %	0.0074158 ±0.0001815	0.0144355 ±0.0054717	0.0033690 ±0.0067965	0.0155658 ±0.0053840	1.9546178 ±0.0141321
20F23973	17.0 %	0.0074158 ±0.0001815	0.0144355 ±0.0054717	0.0033690 ±0.0067965	0.0155658 ±0.0053840	1.9546178 ±0.0141321
20F23975	17.0 %	0.0093798 ±0.0001980	0.0182055 ±0.0060462	0.0078119 ±0.0067136	0.0266434 ±0.0059231	2.4131093 ±0.0134838
20F23976	17.0 %	0.0093798 ±0.0001980	0.0182055 ±0.0060462	0.0078119 ±0.0067136	0.0266434 ±0.0059231	2.4131093 ±0.0134838
20F23978	17.0 %	0.0078038 ±0.0001930	0.0134445 ±0.0059628	0.0059576 ±0.0064240	0.0202121 ±0.0059175	1.9691656 ±0.0156148
20F23979	17.0 %	0.0078038 ±0.0001930	0.0134445 ±0.0059628	0.0059576 ±0.0064240	0.0202121 ±0.0059175	1.9691656 ±0.0156148
20F23981	17.0 %	0.0078172 ±0.0001648	0.0094250 ±0.0055317	0.0065479 ±0.0063318	0.0044926 ±0.0067816	2.0275945 ±0.0159283
20F23982	17.0 %	0.0078172 ±0.0001648	0.0094250 ±0.0055317	0.0065479 ±0.0063318	0.0044926 ±0.0067816	2.0275945 ±0.0159283
20F23984	17.0 %	0.0090647 ±0.0002044	0.0128511 ±0.0057994	0.0058775 ±0.0054205	0.0124329 ±0.0062607	2.4387636 ±0.0144216
20F23985	17.0 %	0.0090647 ±0.0002044	0.0128511 ±0.0057994	0.0058775 ±0.0054205	0.0124329 ±0.0062607	2.4387636 ±0.0144216
20F23987	17.0 %	0.0080958 ±0.0001943	0.0123074 ±0.0063599	0.0104671 ±0.0064176	0.0224966 ±0.0065931	1.9464685 ±0.0152888
20F23988	17.0 %	0.0080958 ±0.0001943	0.0123074 ±0.0063599	0.0104671 ±0.0064176	0.0224966 ±0.0065931	1.9464685 ±0.0152888
20F23990	17.0 %	0.0075745 ±0.0001826	0.0221178 ±0.0053336	0.0026041 ±0.0064322	0.0187951 ±0.0062570	1.9312263 ±0.0161392
20F23991	17.0 %	0.0075745 ±0.0001826	0.0221178 ±0.0053336	0.0026041 ±0.0064322	0.0187951 ±0.0062570	1.9312263 ±0.0161392
20F23993	17.0 %	0.0079588 ±0.0001825	0.0253152 ±0.0059623	0.0127556 ±0.0071486	0.0116612 ±0.0064328	2.0292830 ±0.0146528
20F23994	17.0 %	0.0079588 ±0.0001825	0.0253152 ±0.0059623	0.0127556 ±0.0071486	0.0116612 ±0.0064328	2.0292830 ±0.0146528
20F23996	17.0 %	0.0072947 ±0.0001644	0.0219731 ±0.0054335	0.0185371 ±0.0055677	0.0131501 ±0.0057760	1.9940168 ±0.0151744
20F23997	17.0 %	0.0072947 ±0.0001644	0.0219731 ±0.0054335	0.0185371 ±0.0055677	0.0131501 ±0.0057760	1.9940168 ±0.0151744
20F23999	17.0 %	0.0072947 ±0.0001644	0.0219731 ±0.0054335	0.0185371 ±0.0055677	0.0131501 ±0.0057760	1.9940168 ±0.0151744
20F24000	17.0 %	0.0072947 ±0.0001644	0.0219731 ±0.0054335	0.0185371 ±0.0055677	0.0131501 ±0.0057760	1.9940168 ±0.0151744

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
20F23960	17.0 %	0.0625286 ±0.0004056	0.6364	EXP 150 of 150	0.2322646 ±0.0055893	0.2033	EXP 150 of 150	1.2452606 ±0.0070396	0.7643	EXP 150 of 150	102.850144 ±0.012355	0.9999	EXP 150 of 150	547.53161 ±0.03036	1.0000	EXP 150 of 150
20F23961	17.0 %	0.0248756 ±0.0002938	0.8595	EXP 150 of 150	0.1485490 ±0.0059810	0.0461	EXP 149 of 150	0.6394032 ±0.0059527	0.5599	EXP 150 of 150	53.607742 ±0.009644	0.9997	EXP 149 of 150	282.79687 ±0.02654	0.9999	EXP 149 of 150
20F23963	17.0 %	0.0194837 ±0.0002290	0.8537	EXP 148 of 150	0.1718289 ±0.0055506	0.1434	EXP 150 of 150	0.1943520 ±0.0065453	0.1016	EXP 150 of 150	15.859935 ±0.008182	0.9974	EXP 150 of 150	86.73749 ±0.02065	0.9984	EXP 150 of 150
20F23964	17.0 %	0.0298161 ±0.0002669	0.6252	EXP 150 of 150	0.0762014 ±0.0053883	0.0124	EXP 148 of 150	0.0970756 ±0.0063089	0.0468	EXP 150 of 150	7.842259 ±0.006656	0.9924	EXP 149 of 150	48.93044 ±0.01749	0.9871	EXP 149 of 150
20F23966	17.0 %	0.0426555 ±0.0003546	0.7529	EXP 150 of 150	0.2083894 ±0.0062633	0.0801	EXP 150 of 150	0.9018270 ±0.0061030	0.7025	EXP 149 of 150	74.410519 ±0.012635	0.9997	EXP 147 of 150	395.32899 ±0.02931	0.9999	EXP 150 of 150
20F23967	17.0 %	0.0362695 ±0.0003529	0.8355	EXP 148 of 150	0.4960812 ±0.0056957	0.4364	EXP 150 of 150	1.0253852 ±0.0065248	0.7058	EXP 150 of 150	85.707604 ±0.011336	0.9998	EXP 150 of 150	450.86952 ±0.03211	0.9999	EXP 150 of 150
20F23969	17.0 %	0.0384592 ±0.0003534	0.8444	EXP 150 of 150	0.2345600 ±0.0054987	0.1887	EXP 150 of 150	1.1489420 ±0.0068044	0.7461	EXP 149 of 150	94.801828 ±0.015007	0.9998	EXP 150 of 150	498.98656 ±0.03830	0.9999	EXP 150 of 150
20F23970	17.0 %	0.0381500 ±0.0003043	0.7399	EXP 150 of 150	0.3212986 ±0.0055626	0.2849	EXP 150 of 150	0.4531314 ±0.0061247	0.3528	EXP 149 of 150	37.697034 ±0.009131	0.9995	EXP 148 of 150	204.68739 ±0.02426	0.9998	EXP 149 of 150
20F23972	17.0 %	0.0735734 ±0.0004433	0.0567	EXP 150 of 150	0.3740535 ±0.0062998	0.2987	EXP 150 of 150	0.4693609 ±0.0061754	0.3890	EXP 150 of 150	37.616244 ±0.009954	0.9993	EXP 150 of 150	230.62609 ±0.02524	0.9998	EXP 150 of 150
20F23973	17.0 %	0.0121388 ±0.0002024	0.9189	EXP 149 of 150	0.3148832 ±0.0055944	0.2521	EXP 148 of 150	0.3323592 ±0.0067410	0.1615	EXP 150 of 150	27.490437 ±0.009490	0.9989	EXP 149 of 150	143.86224 ±0.02054	0.9996	EXP 149 of 150
20F23975	17.0 %	0.0651476 ±0.0003546	0.1601	EXP 147 of 150	0.1133211 ±0.0055154	0.0178	EXP 150 of 150	0.4206833 ±0.0065660	0.3306	EXP 150 of 150	34.305684 ±0.009046	0.9994	EXP 150 of 150	196.41064 ±0.02393	0.9998	EXP 150 of 150
20F23976	17.0 %	0.0359497 ±0.0002986	0.6255	EXP 150 of 150	0.4636697 ±0.0060377	0.4268	EXP 149 of 150	0.1945999 ±0.0067909	0.0955	EXP 150 of 150	16.054143 ±0.007665	0.9977	EXP 150 of 150	92.71522 ±0.01968	0.9987	EXP 150 of 150
20F23978	17.0 %	0.0237080 ±0.0002741	0.8256	EXP 149 of 150	0.3311358 ±0.0058783	0.2624	EXP 149 of 150	0.2795122 ±0.0065513	0.1231	EXP 150 of 150	23.910595 ±0.009122	0.9986	EXP 150 of 150	129.06480 ±0.02253	0.9994	EXP 150 of 150
20F23979	17.0 %	0.0256004 ±0.0002680	0.7839	EXP 150 of 150	0.1051475 ±0.0053181	0.0313	EXP 148 of 150	0.1516980 ±0.0058378	0.0331	EXP 148 of 150	13.752487 ±0.008131	0.9965	EXP 150 of 150	78.27600 ±0.02040	0.9977	EXP 150 of 150
20F23981	17.0 %	0.0265296 ±0.0002843	0.6498	EXP 149 of 150	0.0645699 ±0.0065552	0.0000	EXP 150 of 150	0.1191455 ±0.0065398	0.0298	EXP 150 of 150	9.820319 ±0.006888	0.9950	EXP 150 of 150	58.20281 ±0.02009	0.9936	EXP 150 of 150
20F23982	17.0 %	0.0412960 ±0.0003033	0.7628	EXP 149 of 150	0.1334557 ±0.0050979	0.0739	EXP 149 of 150	0.6998167 ±0.0069904	0.5038	EXP 150 of 150	58.636842 ±0.011239	0.9997	EXP 148 of 150	313.46792 ±0.02962	0.9999	EXP 150 of 150
20F23984	17.0 %	0.0321097 ±0.0002987	0.8155	EXP 150 of 150	0.2011657 ±0.0054848	0.1481	EXP 150 of 150	0.6696847 ±0.0062615	0.5512	EXP 150 of 150	56.194142 ±0.010706	0.9997	EXP 148 of 150	298.05445 ±0.02552	0.9999	EXP 150 of 150
20F23985	17.0 %	0.0279065 ±0.0003015	0.8790	EXP 150 of 150	0.1440736 ±0.0054990	0.0611	EXP 150 of 150	0.8835953 ±0.0065196	0.6478	EXP 150 of 150	73.620140 ±0.011679	0.9998	EXP 149 of 150	386.69069 ±0.03086	0.9999	EXP 150 of 150
20F23987	17.0 %	0.0470934 ±0.0003039	0.7708	EXP 149 of 150	0.1810945 ±0.0053442	0.1120	EXP 150 of 150	0.8201859 ±0.0070184	0.5978	EXP 150 of 150	66.944524 ±0.012594	0.9997	EXP 150 of 150	358.00992 ±0.02731	0.9999	EXP 150 of 150
20F23988	17.0 %	0.0393128 ±0.0003300	0.8230	EXP 149 of 150	0.2064500 ±0.0061251	0.1475	EXP 150 of 150	0.8533257 ±0.0066470	0.6287	EXP 150 of 150	70.119567 ±0.012436	0.9997	EXP 150 of 150	372.11890 ±0.02701	0.9999	EXP 150 of 150
20F23990	17.0 %	0.0135478 ±0.0002176	0.9163	EXP 150 of 150	0.0630747 ±0.0061996	0.0277	EXP 150 of 150	0.4398061 ±0.0061188	0.3477	EXP 149 of 150	37.334425 ±0.007984	0.9996	EXP 148 of 150	195.94571 ±0.02334	0.9998	EXP 148 of 150
20F23991	17.0 %	0.0169304 ±0.0002430	0.9086	EXP 150 of 150	0.2073089 ±0.0058823	0.1430	EXP 150 of 150	0.5686966 ±0.0065443	0.3670	EXP 150 of 150	47.727275 ±0.010907	0.9995	EXP 150 of 150	249.83115 ±0.02381	0.9999	EXP 150 of 150
20F23993	17.0 %	0.0445372 ±0.0003493	0.6644	EXP 146 of 150	0.1407138 ±0.0055888	0.0503	EXP 150 of 150	0.6422501 ±0.0069394	0.4792	EXP 149 of 150	53.328666 ±0.011140	0.9996	EXP 150 of 150	287.02676 ±0.02851	0.9999	EXP 150 of 150
20F23994	17.0 %	0.0378084 ±0.0003294	0.7516	EXP 150 of 150	0.1332813 ±0.0057419	0.0549	EXP 150 of 150	0.7026246 ±0.0063278	0.5995	EXP 150 of 150	57.184405 ±0.010907	0.9997	EXP 150 of 150	305.71372 ±0.02567	0.9999	EXP 149 of 150
20F23996	17.0 %	0.0171164 ±0.0002270	0.9312	EXP 150 of 150	0.0990496 ±0.0053489	0.0196	EXP 150 of 150	0.6367470 ±0.0066241	0.5179	EXP 148 of 150	53.000079 ±0.010465	0.9996	EXP 149 of 150	277.50302 ±0.02666	0.9999	EXP 150 of 150
20F23997	17.0 %	0.0249795 ±0.0002305	0.8860	EXP 148 of 150	0.0477414 ±0.0052077	0.0306	EXP 150 of 150	0.3633530 ±0.0066992	0.2431	EXP 150 of 150	31.010378 ±0.008830	0.9992	EXP 150 of 150	166.26350 ±0.02151	0.9997	EXP 149 of 150
20F23999	17.0 %	0.0330601 ±0.0003038	0.6136	EXP 149 of 150	0.0151679 ±0.0055619	0.0002	EXP 150 of 150	0.2087910 ±0.0059997	0.1449	EXP 150 of 150	17.465030 ±0.007998	0.9979	EXP 150 of 150	99.47917 ±0.01926	0.9991	EXP 148 of 150
20F24000	17.0 %	0.0145816 ±0.0002459	0.9048	EXP 150 of 150	0.1248336 ±0.0060170	0.0326	EXP 150 of 150	0.5918418 ±0.0069346	0.4738	EXP 149 of 150	48.804049 ±0.010260	0.9996	EXP 149 of 150	255.44132 ±0.02816	0.9998	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
20F23960	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23961	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23963	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23964	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23966	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23967	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23969	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23970	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23972	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23973	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23975	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23976	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23978	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23979	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23981	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23982	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23984	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23985	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23987	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23988	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23990	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23991	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23993	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23994	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23996	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23997	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F23999	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01
20F24000	17.0 %	Dan Miggins	20-OSU-01	0.00	0.00	57.21	Oregon\Swenton (20-01)	20F23956	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
20F23960	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	8	22	1
20F23961	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	8	30	1
20F23963	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	8	47	1
20F23964	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	8	56	1
20F23966	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	9	13	1
20F23967	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	9	22	1
20F23969	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	9	39	1
20F23970	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	9	47	1
20F23972	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	10	4	1
20F23973	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	10	13	1
20F23975	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	10	30	1
20F23976	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	10	39	1
20F23978	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	10	56	1
20F23979	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	11	5	1
20F23981	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	11	22	1
20F23982	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	11	30	1
20F23984	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	11	47	1
20F23985	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	11	56	1
20F23987	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	12	13	1
20F23988	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	12	22	1
20F23990	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	12	39	1
20F23991	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	12	48	1
20F23993	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	13	5	1
20F23994	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	13	13	1
20F23996	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	13	30	1
20F23997	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	13	39	1
20F23999	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	13	56	1
20F24000	17.0 %	VS19-116	Sanidine	Rhyolite Dome	FCT-NM (1C47-20)	28.201	0.082	Kuiper et al (2008)	9.84623	0.151	0.00157680	0.151	298.378	0.123	1.0001527	0.040	1	3.54E-14	4	SEP	2020	14	5	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
20F23960	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23961	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23963	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23964	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23966	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23967	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23969	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23970	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23972	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23973	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23975	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23976	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23978	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23979	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23981	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23982	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23984	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23985	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23987	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23988	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23990	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23991	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23993	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23994	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23996	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23997	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F23999	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
20F24000	17.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

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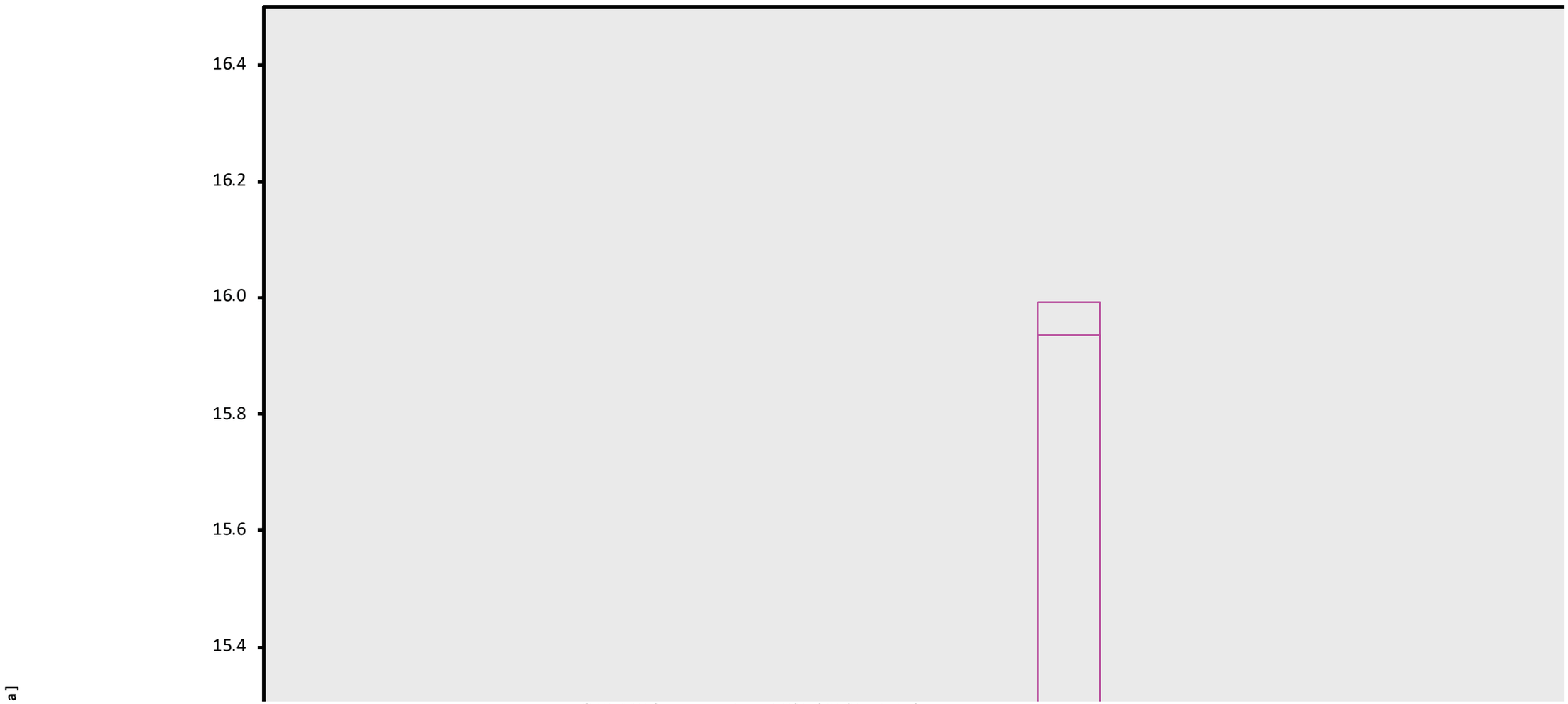
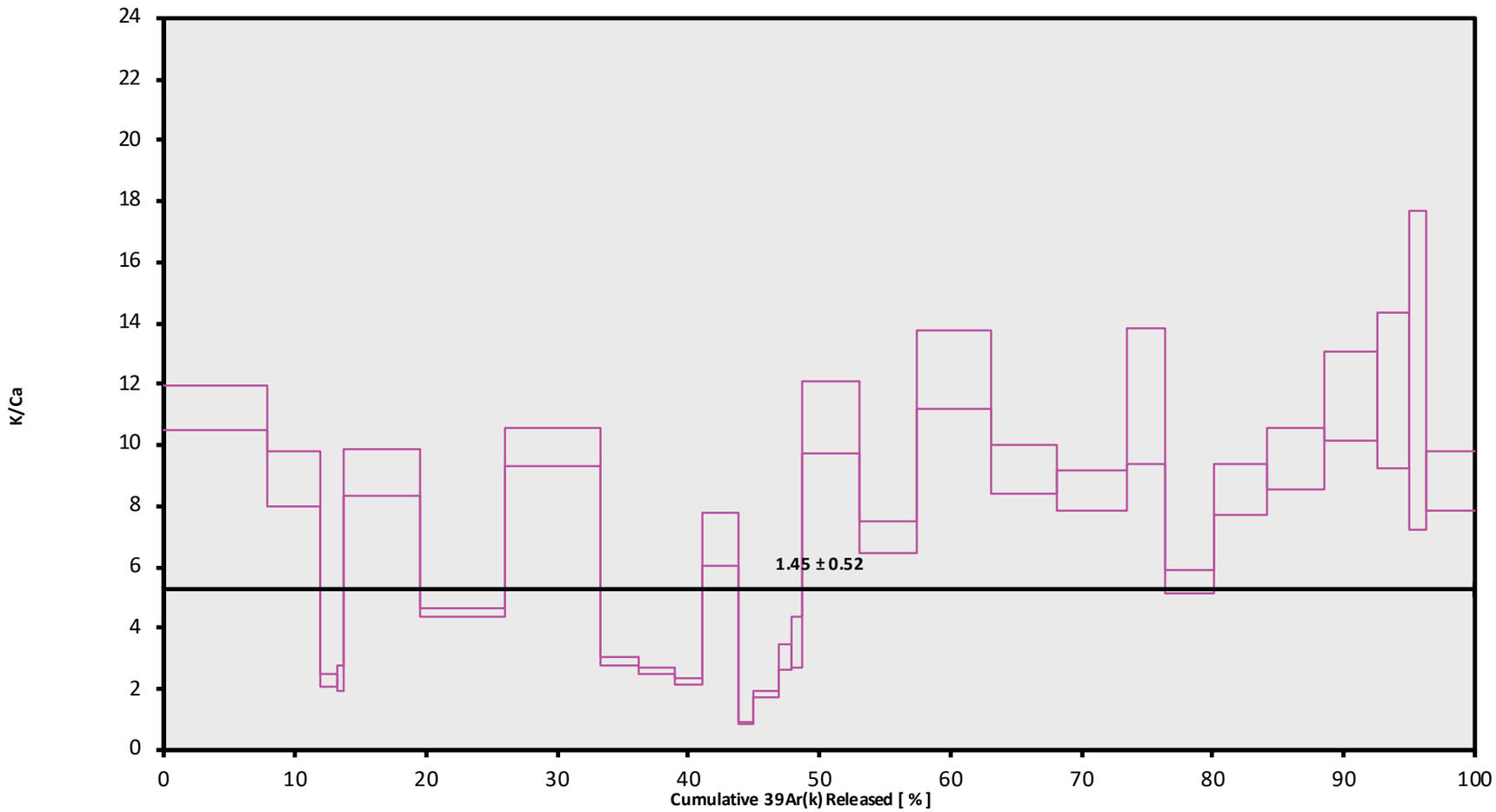


20F23956.AGE >>> VS19-116 >>> OREGON | SWENTON (20-01) PROJECT



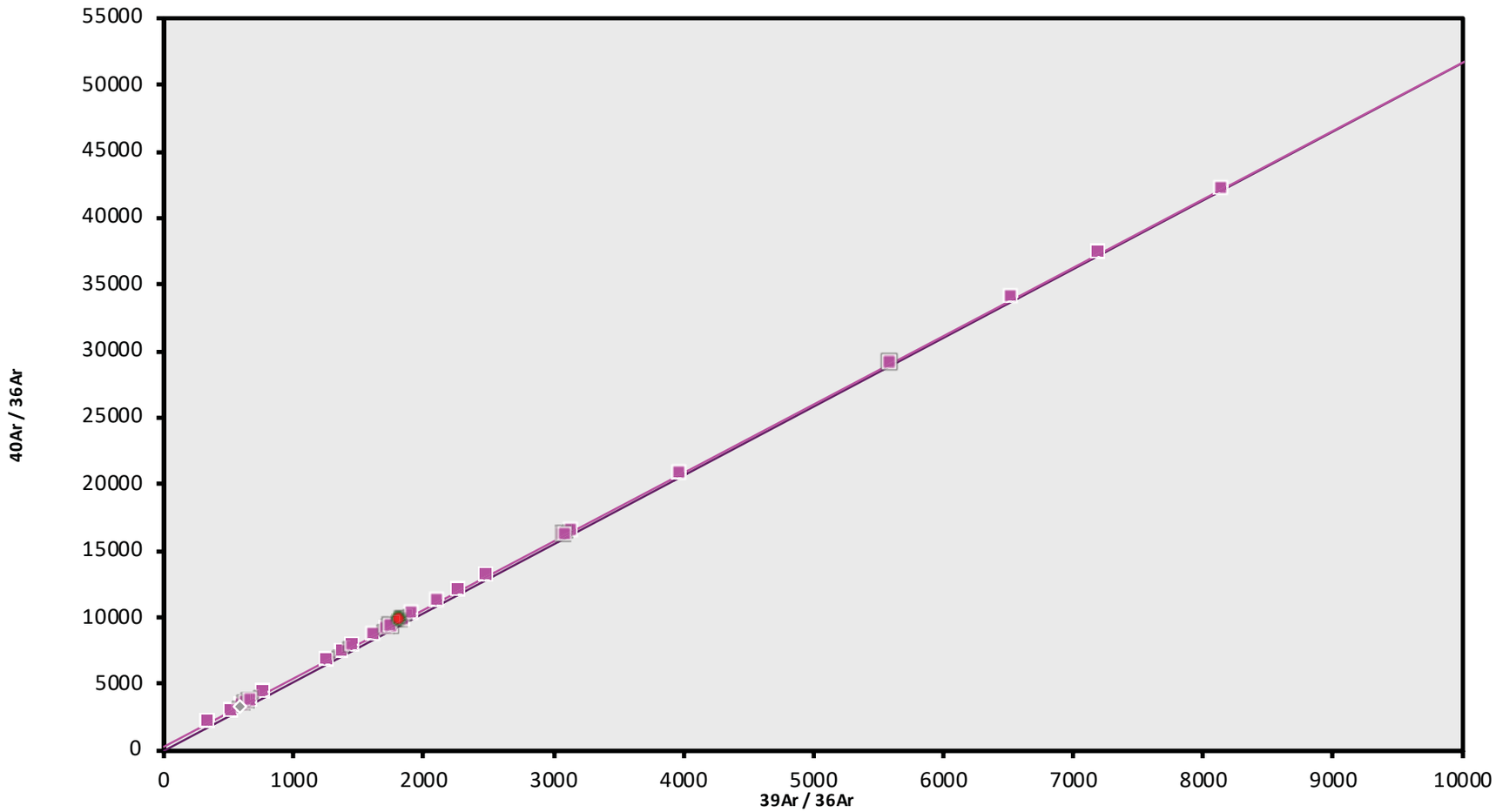
Ar-Ages in Ma

WEIGHTED PLATEAU
14.78 ± 0.05
TOTAL FUSION
14.82 ± 0.04
NORMAL ISOCHRON
14.77 ± 0.05
INVERSE ISOCHRON
14.77 ± 0.05

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23956.AGE >>> VS19-116 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

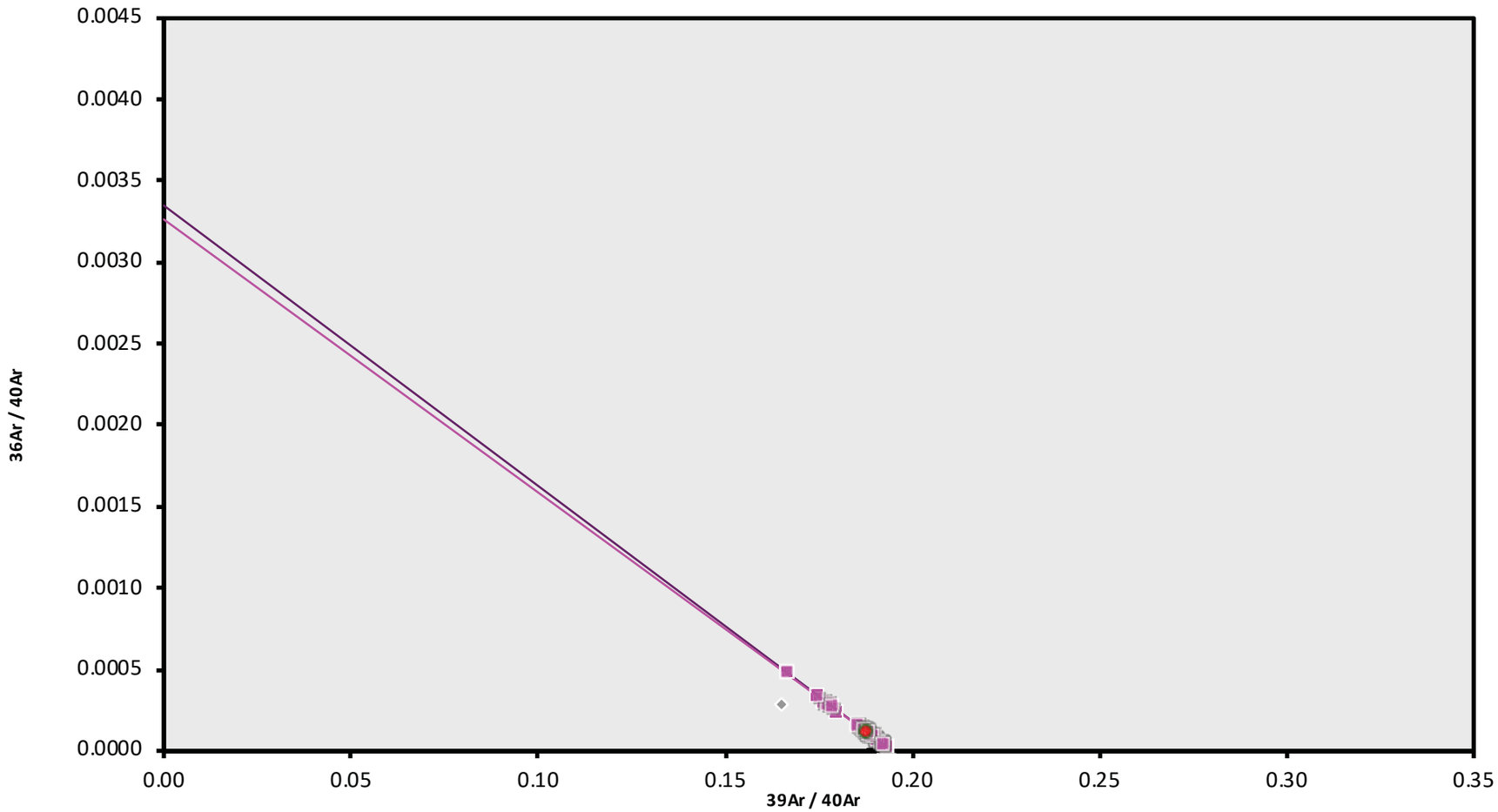
WEIGHTED PLATEAU
14.78 ± 0.05
TOTAL FUSION
14.82 ± 0.04
NORMAL ISOCHRON
14.77 ± 0.05
INVERSE ISOCHRON
14.77 ± 0.05

MSWD (PROBABILITY)
4.35 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

20F23956.AGE >>> VS19-116 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.78 ± 0.05
TOTAL FUSION
14.82 ± 0.04
NORMAL ISOCHRON
14.77 ± 0.05
INVERSE ISOCHRON
14.77 ± 0.05

MSWD (PROBABILITY)
4.19 (0%)

Sample Info

Sanidine
Rhyolite Dome
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16196	24.0 %	✓	0.0000785	401.164	3.00850	1.336	0.0286017	34.680	1.319801	0.704	6.24296	0.337	4.90334 ± 0.16186	14.69 ± 0.48	103.51	2.22	0.188 ± 0.006
21F16197	24.0 %	✓	0.0010953	30.924	3.07314	1.302	0.0086615	115.909	1.152027	0.768	5.54050	0.386	4.74831 ± 0.19412	14.23 ± 0.58	98.56	1.94	0.161 ± 0.005
21F16199	24.0 %	✓	0.0004042	79.074	4.14350	0.981	0.0019521	485.582	1.410606	0.653	6.45949	0.353	4.91048 ± 0.15354	14.71 ± 0.46	107.03	2.37	0.146 ± 0.003
21F16200	24.0 %	✓	0.0013743	26.194	3.83768	1.055	0.0433400	21.576	2.633780	0.369	13.06129	0.169	4.92510 ± 0.09102	14.76 ± 0.27	99.22	4.43	0.295 ± 0.007
21F16202	24.0 %	✓	0.0023414	14.354	7.74228	0.545	0.0435866	21.359	3.008953	0.301	14.58739	0.147	4.83078 ± 0.07431	14.47 ± 0.22	99.48	5.06	0.167 ± 0.002
21F16203	24.0 %	✓	0.0059407	5.958	3.36471	1.164	0.0027746	334.350	0.754920	1.180	5.33483	0.432	5.09095 ± 0.31176	15.25 ± 0.93	71.83	1.27	0.096 ± 0.003
21F16205	24.0 %	✓	0.0027432	12.976	0.68753	6.228	0.0154638	57.634	0.333778	2.828	2.55516	0.960	5.37426 ± 0.72202	16.10 ± 2.15	70.11	0.56	0.208 ± 0.029
21F16206	24.0 %	✓	0.0001506	231.235	3.33234	1.191	0.0155919	57.193	1.600404	0.594	7.57579	0.313	4.87953 ± 0.14561	14.62 ± 0.43	102.94	2.69	0.206 ± 0.005
21F16208	24.0 %	✓	0.0047179	7.131	8.76302	0.529	0.0325245	27.562	1.956804	0.469	10.00573	0.231	4.76811 ± 0.11485	14.29 ± 0.34	92.98	3.29	0.096 ± 0.001
21F16209	24.0 %	✓	0.0040554	7.589	10.50998	0.448	0.0453355	19.766	4.161089	0.229	20.25836	0.111	4.78854 ± 0.05060	14.35 ± 0.15	98.20	7.00	0.170 ± 0.002
21F16211	24.0 %	✓	0.0057265	5.741	13.41213	0.395	0.0572769	16.669	6.310736	0.153	32.42597	0.074	5.04510 ± 0.03564	15.11 ± 0.11	98.05	10.62	0.202 ± 0.002
21F16212	24.0 %	✓	0.0034879	10.346	8.25018	0.544	0.0742631	13.088	4.853220	0.196	23.84424	0.096	4.84048 ± 0.04928	14.50 ± 0.15	98.41	8.17	0.253 ± 0.003
21F16214	24.0 %	✓	0.0038591	9.190	12.26690	0.395	0.0898588	10.893	5.515555	0.180	27.14893	0.082	4.89937 ± 0.04309	14.68 ± 0.13	99.39	9.28	0.193 ± 0.002
21F16215	24.0 %	✓	0.0058279	5.712	9.08537	0.487	0.0502379	18.256	2.882767	0.341	15.23052	0.152	4.94363 ± 0.07864	14.81 ± 0.23	93.38	4.85	0.136 ± 0.002
21F16217	24.0 %	✓	0.0003452	97.127	2.05085	2.066	0.0272434	35.264	0.453568	1.929	2.07968	1.014	4.73596 ± 0.48835	14.19 ± 1.46	102.99	0.76	0.095 ± 0.005
21F16218	24.0 %	✓	0.0005319	62.001	1.06081	3.693	0.0045109	195.493	0.351612	2.579	1.94774	1.122	5.34107 ± 0.63789	16.00 ± 1.90	96.23	0.59	0.142 ± 0.013
21F16220	24.0 %	✓	0.0000828	361.019	0.23558	15.336	0.0054395	170.482	0.131196	6.537	0.38507	5.878	2.89426 ± 1.45637	8.69 ± 4.36	98.50	0.22	0.239 ± 0.080
21F16221	24.0 %	✓	0.0021172	14.575	1.34042	3.051	0.0060626	151.893	0.672968	1.399	3.48310	0.617	4.40220 ± 0.30752	13.20 ± 0.92	84.95	1.13	0.216 ± 0.014
21F16223	24.0 %	✓	0.0066048	5.168	0.32861	12.879	0.0022680	387.227	0.145570	6.066	2.83794	0.718	6.13969 ± 1.61357	18.38 ± 4.81	31.45	0.24	0.190 ± 0.054
21F16224	24.0 %	✓	0.0104603	3.397	4.38999	0.942	0.0309368	28.523	1.329889	0.728	9.02958	0.250	4.71752 ± 0.17747	14.14 ± 0.53	69.33	2.24	0.130 ± 0.003
21F16226	24.0 %	✓	0.0047825	7.064	5.39958	0.782	0.0417997	21.085	2.294781	0.406	12.91303	0.177	5.20225 ± 0.09975	15.58 ± 0.30	92.31	3.86	0.182 ± 0.003
21F16227	24.0 %	✓	0.0020944	16.597	4.14123	1.006	0.0471077	18.767	2.088774	0.447	10.77589	0.186	5.02576 ± 0.11093	15.06 ± 0.33	97.29	3.52	0.217 ± 0.005
21F16229	24.0 %	✓	0.0049418	6.920	7.32474	0.549	0.0772556	11.442	3.065690	0.292	15.58091	0.149	4.80112 ± 0.07401	14.39 ± 0.22	94.32	5.16	0.180 ± 0.002
21F16230	24.0 %	✓	0.0028532	11.543	2.01351	2.059	0.0018671	484.079	0.999427	0.884	5.22427	0.433	4.54278 ± 0.21770	13.61 ± 0.65	86.79	1.68	0.213 ± 0.010
21F16232	24.0 %	✓	0.0051644	6.005	17.66819	0.324	0.0445168	20.991	5.888753	0.154	29.82315	0.083	5.05386 ± 0.03618	15.14 ± 0.11	99.60	9.90	0.143 ± 0.001
21F16233	24.0 %	✓	0.0580618	0.867	5.64214	0.748	0.0209237	45.635	1.917619	0.447	26.26923	0.089	4.90517 ± 0.16592	14.70 ± 0.50	35.74	3.23	0.146 ± 0.003
21F16235	24.0 %	✓	0.0090875	3.894	0.15773	26.286	0.0143493	65.427	0.096547	8.255	3.22771	0.632	5.47089 ± 2.40933	16.38 ± 7.18	16.35	0.16	0.263 ± 0.145
21F16236	24.0 %	✓	0.0025162	13.473	0.10448	37.432	0.0236521	41.804	0.060684	13.329	0.83706	2.397	1.56785 ± 3.43183	4.71 ± 10.30	11.35	0.10	0.249 ± 0.198
21F16238	24.0 %	✓	0.0085584	4.032	0.90400	4.360	0.0394374	24.170	0.284989	2.907	3.66703	0.626	4.16961 ± 0.78150	12.50 ± 2.33	32.34	0.48	0.135 ± 0.014
21F16239	24.0 %	✓	0.0010396	30.725	3.15347	1.226	0.0117586	77.326	1.380278	0.617	6.66832	0.346	4.79707 ± 0.15431	14.37 ± 0.46	99.15	2.32	0.188 ± 0.005
21F16240	24.0 %	✓	0.0050189	6.609	0.91751	4.304	0.0200976	46.421	0.384991	2.184	3.02664	0.737	4.16893 ± 0.55907	12.50 ± 1.67	52.95	0.65	0.180 ± 0.017
		Σ	0.1652555	1.155	148.31011	0.160	0.8036170	6.431	59.441774	0.085	328.04751	0.038					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS20-125A**
Material = **Plagioclase (albite?)**
Location = **Unknown**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X17-21)**
Position = **X: 0 | Y: 0 | Z/H: 18.24258 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.44728 ± 0.01058**
FCT-NM J-value = **0.00164338 ± 0.00000184**
Air Shot 40Ar/36Ar = **300.3510 ± 0.3754**
Air Shot MDF = **0.99850732 ± 0.00040462 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **1.50 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β⁺) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β⁻) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		4.93533 ± 0.04608	**14.79 ± 0.14**	8.74	100.00	0.181 ± 0.018
Error Mean		± 0.93%	**± 0.96%**	0%	31	
		Full External Error ± 0.78		1.52	2σ Confidence Limit	
		Analytical Error ± 0.14		2.9569	Error Magnification	
Total Fusion Age		4.89752 ± 0.02138	**14.67 ± 0.07**		31	0.172 ± 0.001
		± 0.44%	**± 0.49%**			
		Full External Error ± 0.76				
		Analytical Error ± 0.06				
Normal Isochron	**298.58 ± 10.59**	4.81539 ± 0.04439	**14.43 ± 0.14**	4.16	100.00	
Error Chron	**± 3.55%**	± 0.92%	**± 0.94%**	0%	31	
		Full External Error ± 0.76		1.53	2σ Confidence Limit	
		Analytical Error ± 0.13		2.0392	Error Magnification	
				1	Number of Iterations	
				0.0000011908	Convergence	
Inverse Isochron	**299.65 ± 15.52**	4.93666 ± 0.04783	**14.79 ± 0.15**	8.94	100.00	
Error Chron	**± 5.18%**	± 0.97%	**± 0.99%**	0%	31	
		Full External Error ± 0.78		1.53	2σ Confidence Limit	
		Analytical Error ± 0.14		2.9901	Error Magnification	
				3	Number of Iterations	
				0.0000016456	Convergence	
				153%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
21F16196	24.0 %	✓	0.0007362	3.00850	0.0122831	1.317868	6.46196	14.69 ± 0.48	103.51	2.22	0.188 ± 0.006
21F16197	24.0 %	✓	0.0002646	3.07314	0.0000000	1.150053	5.46081	14.23 ± 0.58	98.56	1.94	0.161 ± 0.005
21F16199	24.0 %	✓	0.0015242	4.14350	0.0000000	1.407944	6.91369	14.71 ± 0.46	107.03	2.37	0.146 ± 0.003
21F16200	24.0 %	✓	0.0003356	3.83768	0.0108076	2.631314	12.95949	14.76 ± 0.27	99.22	4.43	0.295 ± 0.007
21F16202	24.0 %	✓	0.0002479	7.74228	0.0058672	3.003978	14.51155	14.47 ± 0.22	99.48	5.06	0.167 ± 0.002
21F16203	24.0 %	✓	0.0050312	3.36471	0.0000000	0.752759	3.83225	15.25 ± 0.93	71.83	1.27	0.096 ± 0.003
21F16205	24.0 %	✓	0.0025573	0.68753	0.0000000	0.333337	1.79144	16.10 ± 2.15	70.11	0.56	0.208 ± 0.029
21F16206	24.0 %	✓	0.0007501	3.33234	0.0000000	1.598263	7.79877	14.62 ± 0.43	102.94	2.69	0.206 ± 0.005
21F16208	24.0 %	✓	0.0023484	8.76302	0.0069402	1.951173	9.30341	14.29 ± 0.34	92.98	3.29	0.096 ± 0.001
21F16209	24.0 %	✓	0.0012146	10.50998	0.0000000	4.154336	19.89321	14.35 ± 0.15	98.20	7.00	0.170 ± 0.002
21F16211	24.0 %	✓	0.0021012	13.41213	0.0000000	6.302118	31.79482	15.11 ± 0.11	98.05	10.62	0.202 ± 0.002
21F16212	24.0 %	✓	0.0012561	8.25018	0.0139929	4.847919	23.46626	14.50 ± 0.15	98.41	8.17	0.253 ± 0.003
21F16214	24.0 %	✓	0.0005408	12.26690	0.0210326	5.507673	26.98413	14.68 ± 0.13	99.39	9.28	0.193 ± 0.002
21F16215	24.0 %	✓	0.0033705	9.08537	0.0132225	2.876930	14.22248	14.81 ± 0.23	93.38	4.85	0.136 ± 0.002
21F16217	24.0 %	✓	0.0002091	2.05085	0.0000000	0.452250	2.14184	14.19 ± 1.46	102.99	0.76	0.095 ± 0.005
21F16218	24.0 %	✓	0.0002451	1.06081	0.0000000	0.350930	1.87434	16.00 ± 1.90	96.23	0.59	0.142 ± 0.013
21F16220	24.0 %	✓	0.0000191	0.23558	0.0000000	0.131045	0.37928	8.69 ± 4.36	98.50	0.22	0.239 ± 0.080
21F16221	24.0 %	✓	0.0017549	1.34042	0.0000000	0.672107	2.95875	13.20 ± 0.92	84.95	1.13	0.216 ± 0.014
21F16223	24.0 %	✓	0.0065159	0.32861	0.0000000	0.145359	0.89246	18.38 ± 4.81	31.45	0.24	0.190 ± 0.054
21F16224	24.0 %	✓	0.0092722	4.38999	0.0123718	1.327068	6.26047	14.14 ± 0.53	69.33	2.24	0.130 ± 0.003
21F16226	24.0 %	✓	0.0033215	5.39958	0.0125295	2.291312	11.91998	15.58 ± 0.30	92.31	3.86	0.182 ± 0.003
21F16227	24.0 %	✓	0.0009724	4.14123	0.0209850	2.086113	10.48430	15.06 ± 0.33	97.29	3.52	0.217 ± 0.005
21F16229	24.0 %	✓	0.0029572	7.32474	0.0384122	3.060983	14.69616	14.39 ± 0.22	94.32	5.16	0.180 ± 0.002
21F16230	24.0 %	✓	0.0023090	2.01351	0.0000000	0.998133	4.53430	13.61 ± 0.65	86.79	1.68	0.213 ± 0.010
21F16232	24.0 %	✓	0.0003887	17.66819	0.0000000	5.877401	29.70353	15.14 ± 0.11	99.60	9.90	0.143 ± 0.001
21F16233	24.0 %	✓	0.0565367	5.64214	0.0000000	1.913994	9.38846	14.70 ± 0.50	35.74	3.23	0.146 ± 0.003
21F16235	24.0 %	✓	0.0090434	0.15773	0.0114514	0.096446	0.52765	16.38 ± 7.18	16.35	0.16	0.263 ± 0.145
21F16236	24.0 %	✓	0.0024852	0.10448	0.0224328	0.060617	0.09504	4.71 ± 10.30	11.35	0.10	0.249 ± 0.198
21F16238	24.0 %	✓	0.0083098	0.90400	0.0342735	0.284409	1.18587	12.50 ± 2.33	32.34	0.48	0.135 ± 0.014
21F16239	24.0 %	✓	0.0001872	3.15347	0.0000000	1.378252	6.61158	14.37 ± 0.46	99.15	2.32	0.188 ± 0.005
21F16240	24.0 %	✓	0.0047691	0.91751	0.0143911	0.384401	1.60254	12.50 ± 1.67	52.95	0.65	0.180 ± 0.017
		Σ	0.1251362	148.31011	0.2509935	59.346485	290.65082				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS20-125A**
Material = **Plagioclase (albite?)**
Location = **Unknown**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X17-21)**
J = **0.00164338 ± 0.00000184**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	4.93533	± 0.04608	**14.79**	**± 0.14**	8.74	100.00	0.181 ± 0.018
Error Mean		± 0.93%		**± 0.96%**	0%	31	
			Full External Error	± 0.78	1.52	2σ Confidence Limit	
			Analytical Error	± 0.14	2.9569	Error Magnification	
Total Fusion Age	4.89752	± 0.02138	**14.67**	**± 0.07**		31	0.172 ± 0.001
		± 0.44%		**± 0.49%**			
			Full External Error	± 0.76			
			Analytical Error	± 0.06			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
21F16196	24.0 %	✓	1790.12 ± 1533.03	8478.99 ± 7260.54	0.9998
21F16197	24.0 %	✓	4346.51 ± 11133.85	20937.14 ± 53631.03	1.0000
21F16199	24.0 %	✓	923.75 ± 387.82	4237.50 ± 1778.43	0.9994
21F16200	24.0 %	✓	7840.70 ± 16828.81	38914.80 ± 83524.06	1.0000
21F16202	24.0 %	✓	12117.06 ± 32874.33	58833.39 ± 159618.32	1.0000
21F16203	24.0 %	✓	149.62 ± 21.36	1060.25 ± 149.53	0.9843
21F16205	24.0 %	✓	130.34 ± 37.05	999.07 ± 278.92	0.9776
21F16206	24.0 %	✓	2130.69 ± 1979.67	10098.20 ± 9381.89	0.9999
21F16208	24.0 %	✓	830.85 ± 238.36	4260.16 ± 1221.66	0.9993
21F16209	24.0 %	✓	3420.39 ± 1735.23	16677.23 ± 8460.44	0.9999
21F16211	24.0 %	✓	2999.33 ± 939.66	15430.49 ± 4834.02	0.9999
21F16212	24.0 %	✓	3859.37 ± 2218.89	18979.75 ± 10911.94	1.0000
21F16214	24.0 %	✓	10184.82 ± 13370.41	50197.76 ± 65898.34	1.0000
21F16215	24.0 %	✓	853.56 ± 168.82	4518.26 ± 893.22	0.9993
21F16217	24.0 %	✓	2162.59 ± 6939.42	9943.37 ± 31905.10	0.9999
21F16218	24.0 %	✓	1431.58 ± 3854.37	7944.73 ± 21387.09	0.9998
21F16220	24.0 %	✓	6845.54 ± 213959.45	20111.35 ± 628585.42	1.0000
21F16221	24.0 %	✓	382.99 ± 135.21	1984.56 ± 698.82	0.9962
21F16223	24.0 %	✓	22.31 ± 3.58	435.53 ± 46.08	0.6472
21F16224	24.0 %	✓	143.12 ± 11.17	973.75 ± 74.83	0.9803
21F16226	24.0 %	✓	689.85 ± 140.54	3887.33 ± 791.42	0.9991
21F16227	24.0 %	✓	2145.24 ± 1534.64	11080.00 ± 7925.78	0.9999
21F16229	24.0 %	✓	1035.11 ± 239.61	5268.24 ± 1219.23	0.9996
21F16230	24.0 %	✓	432.29 ± 123.63	2262.34 ± 646.08	0.9976
21F16232	24.0 %	✓	15121.18 ± 24167.78	76718.80 ± 122617.49	1.0000
21F16233	24.0 %	✓	33.85 ± 0.67	464.62 ± 8.32	0.8888
21F16235	24.0 %	✓	10.66 ± 1.95	356.91 ± 28.31	0.4226
21F16236	24.0 %	✓	24.39 ± 9.31	336.80 ± 93.34	0.7042
21F16238	24.0 %	✓	34.23 ± 3.47	441.27 ± 37.08	0.8097
21F16239	24.0 %	✓	7361.15 ± 25130.55	35610.56 ± 121571.84	1.0000
21F16240	24.0 %	✓	80.60 ± 11.76	634.58 ± 88.81	0.9487

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**298.58 ± 10.59**	4.81539 ± 0.04439	**14.43 ± 0.14**	4.16
Error Chron	**± 3.55%**	± 0.92%	**± 0.94%**	0%
			Full External Error ± 0.76	
			Analytical Error ± 0.13	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000001190764
	Error Magnification	2.0392	Number of Iterations	1
	Number of Data Points	31	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
21F16196	24.0 %	✓	0.2111238 ± 0.0033005	0.00011794 ± 0.00010099	0.0034
21F16197	24.0 %	✓	0.2075981 ± 0.0035746	0.00004776 ± 0.00012234	0.0014
21F16199	24.0 %	✓	0.2179941 ± 0.0032416	0.00023599 ± 0.00009904	0.0080
21F16200	24.0 %	✓	0.2014837 ± 0.0016372	0.00002570 ± 0.00005515	0.0007
21F16202	24.0 %	✓	0.2059555 ± 0.0013824	0.00001700 ± 0.00004611	0.0005
21F16203	24.0 %	✓	0.1411146 ± 0.0035560	0.00094317 ± 0.00013302	0.0210
21F16205	24.0 %	✓	0.1304665 ± 0.0078020	0.00100094 ± 0.00027944	0.0221
21F16206	24.0 %	✓	0.2109969 ± 0.0028382	0.00009903 ± 0.00009200	0.0031
21F16208	24.0 %	✓	0.1950287 ± 0.0020443	0.00023473 ± 0.00006731	0.0071
21F16209	24.0 %	✓	0.2050933 ± 0.0010452	0.00005996 ± 0.00003042	0.0019
21F16211	24.0 %	✓	0.1943770 ± 0.0006621	0.00006481 ± 0.00002030	0.0021
21F16212	24.0 %	✓	0.2033413 ± 0.0008891	0.00005269 ± 0.00003029	0.0015
21F16214	24.0 %	✓	0.2028939 ± 0.0008019	0.00001992 ± 0.00002615	0.0005
21F16215	24.0 %	✓	0.1889141 ± 0.0014141	0.00022132 ± 0.00004375	0.0063
21F16217	24.0 %	✓	0.2174905 ± 0.0094995	0.00010057 ± 0.00032270	0.0029
21F16218	24.0 %	✓	0.1801924 ± 0.0101539	0.00012587 ± 0.00033884	0.0033
21F16220	24.0 %	✓	0.3403819 ± 0.0598881	0.00004972 ± 0.00155411	0.0025
21F16221	24.0 %	✓	0.1929852 ± 0.0059089	0.00050389 ± 0.00017744	0.0141
21F16223	24.0 %	✓	0.0512214 ± 0.0062662	0.00229608 ± 0.00024292	0.0159
21F16224	24.0 %	✓	0.1469820 ± 0.0022662	0.00102696 ± 0.00007891	0.0211
21F16226	24.0 %	✓	0.1774609 ± 0.0015743	0.00025725 ± 0.00005237	0.0069
21F16227	24.0 %	✓	0.1936135 ± 0.0018774	0.00009025 ± 0.00006456	0.0020
21F16229	24.0 %	✓	0.1964807 ± 0.0012919	0.00018982 ± 0.00004393	0.0059
21F16230	24.0 %	✓	0.1910791 ± 0.0037659	0.00044202 ± 0.00012623	0.0133
21F16232	24.0 %	✓	0.1970987 ± 0.0006892	0.00001303 ± 0.00002083	0.0005
21F16233	24.0 %	✓	0.0728639 ± 0.0006657	0.00215230 ± 0.00003852	0.0193
21F16235	24.0 %	✓	0.0298812 ± 0.0049532	0.00280186 ± 0.00022223	0.0122
21F16236	24.0 %	✓	0.0724196 ± 0.0196365	0.00296911 ± 0.00082285	0.0306
21F16238	24.0 %	✓	0.0775620 ± 0.0046214	0.00226620 ± 0.00019043	0.0313
21F16239	24.0 %	✓	0.2067126 ± 0.0029286	0.00002808 ± 0.00009587	0.0010
21F16240	24.0 %	✓	0.1270157 ± 0.0058628	0.00157583 ± 0.00022055	0.0337

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**299.65 ± 15.52**	4.93666 ± 0.04783	**14.79 ± 0.15**	8.94
Error Chron	**± 5.18%**	± 0.97%	**± 0.99%**	0%
			Full External Error ± 0.78	
			Analytical Error ± 0.14	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0000016456
	Error Magnification	2.9901	Number of Iterations	3
	Number of Data Points	31	Calculated Line	Weighted York-2
	Spreading Factor	153.3%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F16196	24.0 %	✓	0.0007362	42.81	0.0000000	0.00	0.0008132	1.35	0.0000015	80.77	3.00850	1.34	0.0001388	42.81	0.0000000	0.00	0.0159159	0.71	0.0005415	9.72	0.0122831	80.77	1.317868	0.71	0.0019330	1.62	6.46196	1.49	0.219797	42.81	0.0000000	0.00	0.0007999	9.68
21F16197	24.0 %	✓	0.0002646	128.08	0.0000000	0.00	0.0008307	1.31	0.0000000	0.00	3.07314	1.30	0.0000499	128.08	0.0000000	0.00	0.0138892	0.77	0.0005532	9.72	0.0000000	0.00	1.150053	0.77	0.0019745	1.59	5.46081	1.89	0.078997	128.08	0.0000000	0.00	0.0006981	9.68
21F16199	24.0 %	✓	0.0015242	20.98	0.0000000	0.00	0.0011200	1.00	0.0000000	0.00	4.14350	0.98	0.0002873	20.98	0.0000000	0.00	0.0170037	0.66	0.0007458	9.68	0.0000000	0.00	1.407944	0.65	0.0026622	1.35	6.91369	1.42	0.455054	20.98	0.0000000	0.00	0.0008546	9.67
21F16200	24.0 %	✓	0.0003356	107.32	0.0000000	0.00	0.0010373	1.07	0.0000013	86.55	3.83768	1.06	0.0000633	107.32	0.0000000	0.00	0.0317784	0.38	0.0006908	9.69	0.0108076	86.55	2.631314	0.37	0.0024657	1.40	12.95949	0.85	0.100196	107.32	0.0000000	0.00	0.0015972	9.66
21F16202	24.0 %	✓	0.0002479	135.65	0.0000000	0.00	0.0020927	0.57	0.0000007	158.72	7.74228	0.55	0.0000467	135.65	0.0000000	0.00	0.0362790	0.31	0.0013936	9.65	0.0058672	158.72	3.003978	0.30	0.0049744	1.07	14.51155	0.71	0.074017	135.65	0.0000000	0.00	0.0018234	9.65
21F16203	24.0 %	✓	0.0050312	7.04	0.0000000	0.00	0.0009095	1.18	0.0000000	0.00	3.36471	1.16	0.0009484	7.04	0.0000000	0.00	0.0090911	1.19	0.0006056	9.70	0.0000000	0.00	0.752759	1.18	0.0021618	1.48	3.83225	2.82	1.502125	7.04	0.0000000	0.00	0.0004569	9.72
21F16205	24.0 %	✓	0.0025573	13.93	0.0000000	0.00	0.0001858	6.23	0.0000000	0.00	0.68753	6.23	0.0004821	13.93	0.0000000	0.00	0.0040257	2.83	0.0001238	11.47	0.0000000	0.00	0.333337	2.83	0.0004417	6.30	1.79144	6.09	0.763522	13.93	0.0000000	0.00	0.0002023	10.06
21F16206	24.0 %	✓	0.0007501	46.45	0.0000000	0.00	0.0009007	1.20	0.0000000	0.00	3.33234	1.19	0.0001414	46.45	0.0000000	0.00	0.0193022	0.60	0.0005998	9.70	0.0000000	0.00	1.598263	0.60	0.0021410	1.50	7.79877	1.37	0.223954	46.45	0.0000000	0.00	0.0009701	9.67
21F16208	24.0 %	✓	0.0023484	14.34	0.0000000	0.00	0.0023686	0.56	0.0000009	129.21	8.76302	0.53	0.0004427	14.34	0.0000000	0.00	0.0235643	0.48	0.0015773	9.64	0.0069402	129.21	1.951173	0.47	0.0056302	1.06	9.30341	1.11	0.701136	14.34	0.0000000	0.00	0.0011844	9.66
21F16209	24.0 %	✓	0.0012146	25.37	0.0000000	0.00	0.0028408	0.48	0.0000000	0.00	10.50998	0.45	0.0002289	25.37	0.0000000	0.00	0.0501719	0.25	0.0018918	9.64	0.0000000	0.00	4.154336	0.23	0.0067527	1.02	19.89321	0.48	0.362625	25.37	0.0000000	0.00	0.0025217	9.65
21F16211	24.0 %	✓	0.0021012	15.66	0.0000000	0.00	0.0036253	0.43	0.0000000	0.00	13.41213	0.40	0.0003961	15.66	0.0000000	0.00	0.0761107	0.18	0.0024142	9.64	0.0000000	0.00	6.302118	0.15	0.0086173	1.00	31.79482	0.32	0.627327	15.66	0.0000000	0.00	0.0038254	9.65
21F16212	24.0 %	✓	0.0012561	28.75	0.0000000	0.00	0.0022300	0.57	0.0000017	69.49	8.25018	0.54	0.0002368	28.75	0.0000000	0.00	0.0585483	0.22	0.0014850	9.65	0.0139929	69.50	4.847919	0.20	0.0053007	1.07	23.46626	0.47	0.375034	28.75	0.0000000	0.00	0.0029427	9.65
21F16214	24.0 %	✓	0.0005408	65.64	0.0000000	0.00	0.0033157	0.43	0.0000026	46.57	12.26690	0.39	0.0001019	65.64	0.0000000	0.00	0.0665162	0.20	0.0022080	9.64	0.0210326	46.58	5.507673	0.18	0.0078815	1.00	26.98413	0.40	0.161453	65.64	0.0000000	0.00	0.0033432	9.65
21F16215	24.0 %	✓	0.0033705	9.88	0.0000000	0.00	0.0024558	0.52	0.0000016	69.39	9.08537	0.49	0.0006353	9.88	0.0000000	0.00	0.0347447	0.35	0.0016354	9.64	0.0132225	69.40	2.876930	0.34	0.0058373	1.04	14.22248	0.72	1.006294	9.88	0.0000000	0.00	0.0017463	9.66
21F16217	24.0 %	✓	0.0002091	160.43	0.0000000	0.00	0.0005543	2.07	0.0000000	0.00	2.05085	2.07	0.0000394	160.43	0.0000000	0.00	0.0054618	1.94	0.0003692	9.85	0.0000000	0.00	0.452250	1.93	0.0013177	2.26	2.14184	4.78	0.062436	160.43	0.0000000	0.00	0.0002745	9.84
21F16218	24.0 %	✓	0.0002451	134.59	0.0000000	0.00	0.0002867	3.70	0.0000000	0.00	1.06081	3.69	0.0000462	134.59	0.0000000	0.00	0.0042382	2.59	0.0001909	10.31	0.0000000	0.00	0.350930	2.58	0.0006816	3.81	1.87434	5.38	0.073187	134.59	0.0000000	0.00	0.0002130	9.99
21F16220	24.0 %	✓	0.0000191	######	0.0000000	0.00	0.0000637	15.34	0.0000000	0.00	0.23558	15.34	0.0000036	######	0.0000000	0.00	0.0015826	6.55	0.0000424	18.11	0.0000000	0.00	0.131045	6.54	0.0001514	15.36	0.37928	24.29	0.005715	######	0.0000000	0.00	0.0000795	11.66
21F16221	24.0 %	✓	0.0017549	17.60	0.0000000	0.00	0.0003623	3.06	0.0000000	0.00	1.34042	3.05	0.0003308	17.60	0.0000000	0.00	0.0081170	1.40	0.0002413	10.10	0.0000000	0.00	0.672107	1.40	0.0008612	3.19	2.95875	3.20	0.523941	17.60	0.0000000	0.00	0.0004080	9.75
21F16223	24.0 %	✓	0.0065159	5.24	0.0000000	0.00	0.0000888	12.88	0.0000000	0.00	0.32861	12.88	0.0012283	5.24	0.0000000	0.00	0.0017555	6.08	0.0000592	16.08	0.0000000	0.00	0.145359	6.07	0.0002111	12.91	0.89246	11.65	1.945396	5.24	0.0000000	0.00	0.0000882	11.40
21F16224	24.0 %	✓	0.0092722	3.83	0.0000000	0.00	0.0011866	0.96	0.0000015	71.34	4.38999	0.94	0.0017478	3.84	0.0000000	0.00	0.0160270	0.73	0.0007902	9.68	0.0123718	71.35	1.327068	0.73	0.0028206	1.32	6.26047	1.73	2.768304	3.84	0.0000000	0.00	0.0008055	9.68
21F16226	24.0 %	✓	0.0033215	10.18	0.0000000	0.00	0.0014595	0.80	0.0000015	70.36	5.39958	0.78	0.0006261	10.18	0.0000000	0.00	0.0276722	0.42	0.0009719	9.66	0.0125295	70.37	2.291312	0.41	0.0034692	1.21	11.91998	0.87	0.991659	10.18	0.0000000	0.00	0.0013908	9.66
21F16227	24.0 %	✓	0.0009724	35.77	0.0000000	0.00	0.0011194	1.02	0.0000026	42.15	4.14123	1.01	0.0001833	35.77	0.0000000	0.00	0.0251940	0.46	0.0007454	9.68	0.0209850	42.16	2.086113	0.45	0.0026607	1.36	10.48430	1.01	0.290332	35.77	0.0000000	0.00	0.0012663	9.66
21F16229	24.0 %	✓	0.0029572	11.57	0.0000000	0.00	0.0019799	0.58	0.0000047	23.04	7.32474	0.55	0.0005574	11.57	0.0000000	0.00	0.0369675	0.31	0.0013185	9.65	0.0384122	23.06	3.060983	0.29	0.0047061	1.07	14.69616	0.71	0.882891	11.57	0.0000000	0.00	0.0018580	9.65
21F16230	24.0 %	✓	0.0023090	14.27	0.0000000	0.00	0.0005443	2.07	0.0000000	0.00	2.01351	2.06	0.0004352	14.27	0.0000000	0.00	0.0120545	0.89	0.0003624	9.85	0.0000000	0.00	0.998133	0.89	0.0012937	2.26	4.53430	2.23	0.689365	14.27	0.0000000	0.00	0.0006059	9.69
21F16232	24.0 %	✓	0.0003887	79.91	0.0000000	0.00	0.0047757	0.37	0.0000000	0.00	17.66819	0.32	0.0000733	79.91	0.0000000	0.00	0.0709814	0.18	0.0031803	9.64	0.0000000	0.00	5.877401	0.15	0.0113518	0.98	29.70353	0.32	0.116046	79.91	0.0000000	0.00	0.0035676	9.65
21F16233	24.0 %	✓	0.0565367	0.89	0.0000000	0.00	0.0015251	0.77	0.0000000	0.00	5.64214	0.75	0.0106572	0.90	0.0000000	0.00	0.0231153	0.46	0.0010156	9.66	0.0000000	0.00	1.913994	0.45	0.0036251	1.19	9.38846	1.63	16.879609	0.90	0.0000000	0.00	0.0011618	9.66
21F16235	24.0 %	✓	0.0090434	3.91	0.0000000	0.00	0.0000426	26.29	0.0000014	82.00	0.15773	26.29	0.0017047	3.92	0.0000000	0.00	0.0011648	8.26	0.0000284	27.99	0.0114514	82.00	0.096446	8.26	0.0001013	26.30	0.52765	20.41	2.700004	3.92	0.0000000	0.00	0.0000585	12.71
21F16236	24.0 %	✓	0.0024852	13.65	0.0000000	0.00	0.0000282	37.43	0.0000028	44.09	0.10448	37.43	0.0004685	13.65	0.0000000	0.00	0.0007321	13.34	0.0000188	38.65	0.0224328	44.10	0.060617	13.34	0.0000671	37.44	0.09504	108.63	0.741984	13.65	0.0000000	0.00	0.0000368	16.47
21F16238	24.0 %	✓	0.0083098	4.15	0.0000000	0.00	0.0002444	4.36	0.0000042	27.83	0.90400	4.36	0.0015664	4.16	0.0000000	0.00	0.0034348	2.91	0.0001627	10.57	0.0342735	27.85	0.284409	2.91	0.0005808	4.46	1.18587	8.91	2.480982	4.16	0.0000000	0.00	0.0001726	10.08
21F16239	24.0 %	✓	0.0001872	170.70	0.0000000	0.00	0.0008524	1.24	0.0000000	0.00	3.15347	1.23	0.0000353	170.70	0.0000000	0.00	0.0166452	0.62	0.0005676	9.71	0.0000000	0.00	1.378252	0.62	0.0020261	1.53	6.61158	1.48	0.055900	170.70	0.0000000	0.00	0.0008366	9.67
21F16240	24.0 %	✓	0.0047691	6.96	0.0000000	0.00	0.0002480	4.31	0.0000018	64.84	0.91751	4.30	0.0008990	6.96	0.0000000	0.00	0.0046424	2.19	0.0001652	10.55	0.0143911	64.85	0.384401	2.19	0.0005895	4.40	1.60254	6.34	1.423867	6.96	0.0000000	0.00	0.0002333	9.89
		Σ	0.1251362	1.53	0.0000000	0.00	0.0400882	0.17	0.0000310	14.38	148.31011	0.16	0.0235882	1.53	0.0000000	0.00	0.7167275	0.09	0.0266958	2.34	0.2509935	14.39	59.346485	0.09	0.0952892	0.27	290.65082	0.20	37.360667	1.53	0.0000000	0.00	0.0360233	2.36
		Σ							0.1652555	1.16	148.31011	0.16									1.0180050	3.55			59.441774	0.09							328.04751	0.25

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F16196	24.0 %	✓	4.730227	0.036929	2.279510	0.034421	0.000059	0.000239	75.935	4.492208	1.00053683	2.210E-13
21F16197	24.0 %	✓	4.809351	0.041348	2.667596	0.040333	0.000951	0.000294	75.942	4.492763	1.00053687	1.961E-13
21F16199	24.0 %	✓	4.579229	0.033996	2.937389	0.034632	0.000287	0.000227	75.953	4.493810	1.00053695	2.287E-13
21F16200	24.0 %	✓	4.959141	0.020132	1.457101	0.016292	0.000522	0.000137	75.960	4.494365	1.00053700	4.624E-13
21F16202	24.0 %	✓	4.847997	0.016248	2.573081	0.016028	0.000778	0.000112	75.972	4.495413	1.00053708	5.164E-13
21F16203	24.0 %	✓	7.066751	0.088813	4.457036	0.073883	0.007869	0.000478	75.978	4.495968	1.00053713	1.889E-13
21F16205	24.0 %	✓	7.655265	0.228622	2.059827	0.140885	0.008219	0.001091	75.990	4.497017	1.00053721	9.045E-14
21F16206	24.0 %	✓	4.733672	0.031803	2.082187	0.027711	0.000094	0.000218	75.995	4.497510	1.00053725	2.682E-13
21F16208	24.0 %	✓	5.113302	0.026736	4.478230	0.031681	0.002411	0.000172	76.008	4.498621	1.00053734	3.542E-13
21F16209	24.0 %	✓	4.868524	0.012389	2.525777	0.012703	0.000975	0.000074	76.013	4.499115	1.00053738	7.171E-13
21F16211	24.0 %	✓	5.138224	0.008741	2.125288	0.009003	0.000907	0.000052	76.026	4.500225	1.00053746	1.148E-12
21F16212	24.0 %	✓	4.913076	0.010731	1.699939	0.009839	0.000719	0.000074	76.031	4.500719	1.00053750	8.441E-13
21F16214	24.0 %	✓	4.922248	0.009715	2.224056	0.009649	0.000700	0.000064	76.044	4.501831	1.00053759	9.611E-13
21F16215	24.0 %	✓	5.283299	0.019740	3.151613	0.018751	0.002022	0.000116	76.049	4.502325	1.00053763	5.392E-13
21F16217	24.0 %	✓	4.585149	0.099903	4.521603	0.127811	0.000761	0.000739	76.061	4.503375	1.00053771	7.362E-14
21F16218	24.0 %	✓	5.539471	0.155817	3.017001	0.135916	0.001513	0.000939	76.067	4.503931	1.00053776	6.895E-14
21F16220	24.0 %	✓	2.935094	0.258017	1.795652	0.299355	0.000631	0.002279	76.079	4.504981	1.00053784	1.363E-14
21F16221	24.0 %	✓	5.175721	0.079150	1.991800	0.066856	0.003146	0.000461	76.085	4.505537	1.00053789	1.233E-13
21F16223	24.0 %	✓	19.495374	1.190776	2.257416	0.321356	0.045372	0.003615	76.097	4.506588	1.00053797	1.005E-13
21F16224	24.0 %	✓	6.789729	0.052243	3.301019	0.039294	0.007866	0.000273	76.103	4.507144	1.00053801	3.196E-13
21F16226	24.0 %	✓	5.627130	0.024927	2.352980	0.020736	0.002084	0.000147	76.115	4.508195	1.00053810	4.571E-13
21F16227	24.0 %	✓	5.158956	0.024985	1.982615	0.021829	0.001003	0.000166	76.122	4.508752	1.00053814	3.815E-13
21F16229	24.0 %	✓	5.082352	0.016688	2.389264	0.014872	0.001612	0.000112	76.133	4.509804	1.00053822	5.516E-13
21F16230	24.0 %	✓	5.227267	0.051455	2.014670	0.045144	0.002855	0.000331	76.140	4.510360	1.00053827	1.849E-13
21F16232	24.0 %	✓	5.064425	0.008841	3.000328	0.010754	0.000877	0.000053	76.151	4.511412	1.00053835	1.056E-12
21F16233	24.0 %	✓	13.698878	0.062467	2.942266	0.025632	0.030278	0.000295	76.158	4.511969	1.00053840	9.299E-13
21F16235	24.0 %	✓	33.431337	2.767961	1.633692	0.450116	0.094124	0.008591	76.169	4.513021	1.00053848	1.143E-13
21F16236	24.0 %	✓	13.793753	1.868066	1.721698	0.684109	0.041464	0.007858	76.176	4.513579	1.00053852	2.963E-14
21F16238	24.0 %	✓	12.867241	0.382584	3.172050	0.166213	0.030031	0.001493	76.188	4.514631	1.00053861	1.298E-13
21F16239	24.0 %	✓	4.831139	0.034184	2.284660	0.031361	0.000753	0.000231	76.194	4.515188	1.00053865	2.361E-13
21F16240	24.0 %	✓	7.861596	0.181186	2.383209	0.115028	0.013036	0.000907	76.199	4.515684	1.00053869	1.071E-13

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
21F16196	24.0 %	0.0139332 ± 0.0002087	0.0053940 ± 0.0056652	0.0014530 ± 0.0074761	0.0149131 ± 0.0062550	3.4950640 ± 0.0141416
21F16197	24.0 %	0.0139332 ± 0.0002087	0.0053940 ± 0.0056652	0.0014530 ± 0.0074761	0.0149131 ± 0.0062550	3.4950640 ± 0.0141416
21F16199	24.0 %	0.0142314 ± 0.0001998	0.0087335 ± 0.0060126	0.0124766 ± 0.0069185	0.0140220 ± 0.0062401	3.5112436 ± 0.0163886
21F16200	24.0 %	0.0142314 ± 0.0001998	0.0087335 ± 0.0060126	0.0124766 ± 0.0069185	0.0140220 ± 0.0062401	3.5112436 ± 0.0163886
21F16202	24.0 %	0.0125617 ± 0.0002230	0.0055997 ± 0.0057946	0.0085047 ± 0.0059513	0.0020052 ± 0.0057537	3.0871593 ± 0.0150623
21F16203	24.0 %	0.0125617 ± 0.0002230	0.0055997 ± 0.0057946	0.0085047 ± 0.0059513	0.0020052 ± 0.0057537	3.0871593 ± 0.0150623
21F16205	24.0 %	0.0140812 ± 0.0002483	0.0080332 ± 0.0062634	0.0124033 ± 0.0058820	0.0128097 ± 0.0071638	3.4266825 ± 0.0167527
21F16206	24.0 %	0.0140812 ± 0.0002483	0.0080332 ± 0.0062634	0.0124033 ± 0.0058820	0.0128097 ± 0.0071638	3.4266825 ± 0.0167527
21F16208	24.0 %	0.0117928 ± 0.0001996	0.0160674 ± 0.0055730	0.0030610 ± 0.0064820	0.0040664 ± 0.0064094	3.0099278 ± 0.0154140
21F16209	24.0 %	0.0117928 ± 0.0001996	0.0160674 ± 0.0055730	0.0030610 ± 0.0064820	0.0040664 ± 0.0064094	3.0099278 ± 0.0154140
21F16211	24.0 %	0.0127633 ± 0.0002166	0.0117740 ± 0.0062619	0.0160563 ± 0.0068650	0.0053785 ± 0.0063492	3.0223031 ± 0.0151756
21F16212	24.0 %	0.0127633 ± 0.0002166	0.0117740 ± 0.0062619	0.0160563 ± 0.0068650	0.0053785 ± 0.0063492	3.0223031 ± 0.0151756
21F16214	24.0 %	0.0129137 ± 0.0002094	0.0047145 ± 0.0060148	0.0046078 ± 0.0064349	0.0099525 ± 0.0063005	3.0961287 ± 0.0160227
21F16215	24.0 %	0.0129137 ± 0.0002094	0.0047145 ± 0.0060148	0.0046078 ± 0.0064349	0.0099525 ± 0.0063005	3.0961287 ± 0.0160227
21F16217	24.0 %	0.0132993 ± 0.0002133	0.0125132 ± 0.0062408	0.0201319 ± 0.0065026	0.0216858 ± 0.0061142	3.2729559 ± 0.0154243
21F16218	24.0 %	0.0132993 ± 0.0002133	0.0125132 ± 0.0062408	0.0201319 ± 0.0065026	0.0216858 ± 0.0061142	3.2729559 ± 0.0154243
21F16220	24.0 %	0.0125515 ± 0.0001996	0.0219586 ± 0.0060500	0.0127218 ± 0.0063769	0.0117605 ± 0.0063736	3.2174346 ± 0.0163153
21F16221	24.0 %	0.0125515 ± 0.0001996	0.0219586 ± 0.0060500	0.0127218 ± 0.0063769	0.0117605 ± 0.0063736	3.2174346 ± 0.0163153
21F16223	24.0 %	0.0129682 ± 0.0002091	0.0101892 ± 0.0065307	0.0152272 ± 0.0060822	0.0100827 ± 0.0062997	2.9879397 ± 0.0149203
21F16224	24.0 %	0.0129682 ± 0.0002091	0.0101892 ± 0.0065307	0.0152272 ± 0.0060822	0.0100827 ± 0.0062997	2.9879397 ± 0.0149203
21F16226	24.0 %	0.0127009 ± 0.0002286	0.0085172 ± 0.0062291	0.0057053 ± 0.0058899	0.0129901 ± 0.0062676	3.0512978 ± 0.0142797
21F16227	24.0 %	0.0127009 ± 0.0002286	0.0085172 ± 0.0062291	0.0057053 ± 0.0058899	0.0129901 ± 0.0062676	3.0512978 ± 0.0142797
21F16229	24.0 %	0.0121539 ± 0.0002118	0.0032294 ± 0.0056261	0.0003475 ± 0.0061207	0.0133537 ± 0.0062555	2.9874287 ± 0.0148420
21F16230	24.0 %	0.0121539 ± 0.0002118	0.0032294 ± 0.0056261	0.0003475 ± 0.0061207	0.0133537 ± 0.0062555	2.9874287 ± 0.0148420
21F16232	24.0 %	0.0127153 ± 0.0002115	0.0218959 ± 0.0060628	0.0237705 ± 0.0066888	0.0263115 ± 0.0062714	3.1030361 ± 0.0156214
21F16233	24.0 %	0.0127153 ± 0.0002115	0.0218959 ± 0.0060628	0.0237705 ± 0.0066888	0.0263115 ± 0.0062714	3.1030361 ± 0.0156214
21F16235	24.0 %	0.0124172 ± 0.0002284	0.0168379 ± 0.0067470	0.0032039 ± 0.0070104	0.0191522 ± 0.0052939	2.9317715 ± 0.0131527
21F16236	24.0 %	0.0124172 ± 0.0002284	0.0168379 ± 0.0067470	0.0032039 ± 0.0070104	0.0191522 ± 0.0052939	2.9317715 ± 0.0131527
21F16238	24.0 %	0.0120816 ± 0.0001917	0.0003331 ± 0.0063422	0.0023645 ± 0.0064537	0.0067529 ± 0.0057880	3.0869594 ± 0.0170794
21F16239	24.0 %	0.0120816 ± 0.0001917	0.0003331 ± 0.0063422	0.0023645 ± 0.0064537	0.0067529 ± 0.0057880	3.0869594 ± 0.0170794
21F16240	24.0 %	0.0120816 ± 0.0001917	0.0003331 ± 0.0063422	0.0023645 ± 0.0064537	0.0067529 ± 0.0057880	3.0869594 ± 0.0170794

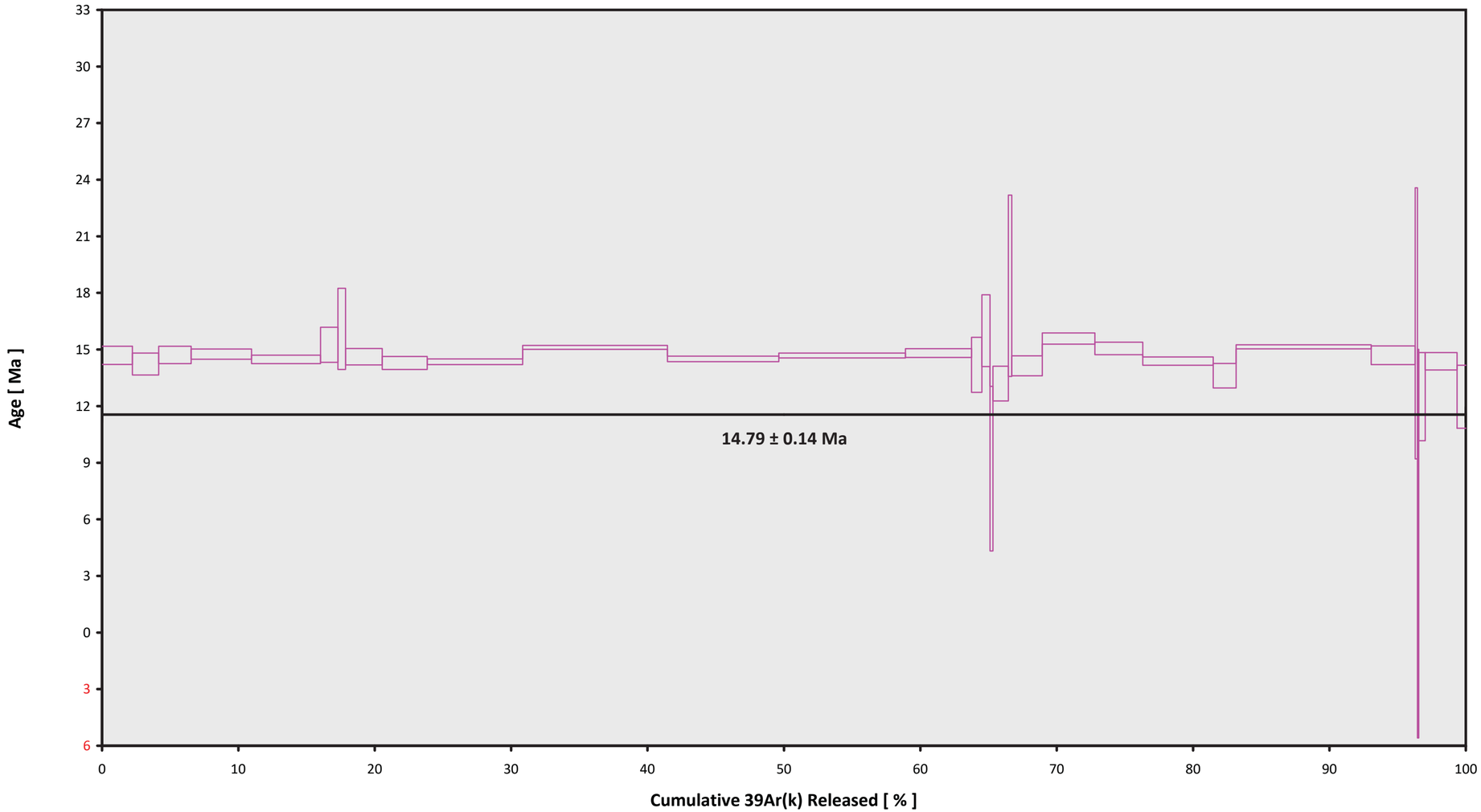
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F16196	24.0 %	0.0140074 ± 0.0002121	0.8926	EXP 150 of 150	0.6721146 ± 0.0066724	0.4598	EXP 150 of 150	0.0299694 ± 0.0064736	0.0049	EXP 150 of 150	1.3320408 ± 0.0068245	0.7653	EXP 150 of 150	9.7380224 ± 0.0156138	0.9935	EXP 150 of 150
21F16197	24.0 %	0.0149680 ± 0.0002426	0.8499	EXP 150 of 150	0.6863562 ± 0.0066117	0.5319	EXP 150 of 150	0.0100887 ± 0.0066557	0.0024	EXP 150 of 150	1.1646066 ± 0.0062182	0.7409	EXP 150 of 150	9.0355661 ± 0.0160433	0.9936	EXP 150 of 150
21F16199	24.0 %	0.0138496 ± 0.0002264	0.8782	EXP 150 of 150	0.9266561 ± 0.0063136	0.6804	EXP 150 of 150	0.0105303 ± 0.0064385	0.0059	EXP 150 of 150	1.4217703 ± 0.0067329	0.7907	EXP 150 of 150	9.9707298 ± 0.0158088	0.9928	EXP 150 of 150
21F16200	24.0 %	0.0155298 ± 0.0002752	0.8121	EXP 150 of 150	0.8588033 ± 0.0063193	0.6691	EXP 150 of 150	0.0556872 ± 0.0062494	0.0384	EXP 149 of 150	2.6424664 ± 0.0073512	0.9349	EXP 150 of 150	16.5725292 ± 0.0148019	0.9852	EXP 149 of 150
21F16202	24.0 %	0.0147738 ± 0.0002260	0.8841	EXP 150 of 150	1.7201606 ± 0.0059903	0.8944	EXP 148 of 150	0.0519612 ± 0.0071228	0.0364	EXP 148 of 150	3.0048625 ± 0.0068730	0.9533	EXP 150 of 150	17.6745533 ± 0.0152464	0.9828	EXP 150 of 150
21F16203	24.0 %	0.0181744 ± 0.0002490	0.8288	EXP 150 of 150	0.7506364 ± 0.0061829	0.5414	EXP 149 of 150	0.0112710 ± 0.0070801	0.0089	EXP 150 of 150	0.7553962 ± 0.0067738	0.4250	EXP 150 of 150	8.4219930 ± 0.0174085	0.9927	EXP 150 of 150
21F16205	24.0 %	0.0166729 ± 0.0002267	0.8556	EXP 150 of 150	0.1602344 ± 0.0071042	0.0073	EXP 150 of 150	0.0030143 ± 0.0066604	0.0475	EXP 150 of 150	0.3459118 ± 0.0061158	0.0005	EXP 149 of 150	5.9818439 ± 0.0179101	0.9940	EXP 150 of 150
21F16206	24.0 %	0.0142235 ± 0.0002159	0.8812	EXP 148 of 150	0.7456501 ± 0.0058811	0.6121	EXP 150 of 150	0.0279487 ± 0.0066671	0.0022	EXP 149 of 150	1.6099711 ± 0.0061971	0.8695	EXP 150 of 150	11.0024691 ± 0.0167887	0.9918	EXP 150 of 150
21F16208	24.0 %	0.0162502 ± 0.0002473	0.8608	EXP 146 of 150	1.9552910 ± 0.0071674	0.8839	EXP 150 of 150	0.0354884 ± 0.0061535	0.0107	EXP 150 of 150	1.9569054 ± 0.0065023	0.8924	EXP 149 of 150	13.0156560 ± 0.0171678	0.9904	EXP 150 of 150
21F16209	24.0 %	0.0156243 ± 0.0002114	0.8857	EXP 149 of 150	2.3416334 ± 0.0066606	0.9209	EXP 149 of 150	0.0482612 ± 0.0061485	0.0074	EXP 149 of 150	4.1567245 ± 0.0068173	0.9766	EXP 150 of 150	23.2682883 ± 0.0164015	0.8999	EXP 150 of 150
21F16211	24.0 %	0.0181736 ± 0.0002224	0.8688	EXP 150 of 150	2.9787715 ± 0.0066628	0.9495	EXP 150 of 150	0.0731623 ± 0.0065936	0.0009	EXP 150 of 150	6.3033274 ± 0.0067860	0.9902	EXP 149 of 150	35.4482751 ± 0.0187440	0.9534	EXP 150 of 150
21F16212	24.0 %	0.0160586 ± 0.0002632	0.9001	EXP 150 of 150	1.8366571 ± 0.0062581	0.8843	EXP 149 of 150	0.0900977 ± 0.0068396	0.0723	EXP 149 of 150	4.8487650 ± 0.0068023	0.9817	EXP 150 of 150	26.8665410 ± 0.0170431	0.9717	EXP 150 of 150
21F16214	24.0 %	0.0165597 ± 0.0002615	0.8436	EXP 150 of 150	2.7173999 ± 0.0058007	0.9537	EXP 147 of 150	0.0849828 ± 0.0073363	0.0330	EXP 150 of 150	5.5143311 ± 0.0072798	0.9848	EXP 147 of 150	30.2450585 ± 0.0154605	0.0261	EXP 149 of 150
21F16215	24.0 %	0.0184198 ± 0.0002345	0.8433	EXP 149 of 150	2.0136192 ± 0.0059183	0.9126	EXP 150 of 150	0.0454801 ± 0.0064966	0.0093	EXP 150 of 150	2.8868781 ± 0.0074372	0.9390	EXP 150 of 150	18.3266481 ± 0.0167582	0.9727	EXP 150 of 150
21F16217	24.0 %	0.0136254 ± 0.0002342	0.8734	EXP 148 of 150	0.4658805 ± 0.0068971	0.2386	EXP 150 of 150	0.0070302 ± 0.0070329	0.0287	EXP 150 of 150	0.4743344 ± 0.0062288	0.2274	EXP 150 of 150	5.3526314 ± 0.0143718	0.9963	EXP 148 of 150
21F16218	24.0 %	0.0138018 ± 0.0002271	0.8732	EXP 150 of 150	0.2469907 ± 0.0059766	0.2004	EXP 149 of 150	0.0156345 ± 0.0059176	0.0021	EXP 149 of 150	0.3725852 ± 0.0066721	0.0467	EXP 150 of 150	5.2207000 ± 0.0154833	0.9957	EXP 150 of 150
21F16220	24.0 %	0.0126298 ± 0.0001999	0.8949	EXP 150 of 150	0.0740185 ± 0.0052080	0.0169	EXP 147 of 150	0.0072985 ± 0.0066947	0.0075	EXP 150 of 150	0.1426907 ± 0.0057122	0.0098	EXP 149 of 150	3.6025072 ± 0.0156859	0.9960	EXP 150 of 150
21F16221	24.0 %	0.0145518 ± 0.0002125	0.8794	EXP 150 of 150	0.3181329 ± 0.0066715	0.1287	EXP 150 of 150	0.0066773 ± 0.0066052	0.0116	EXP 150 of 150	0.6833650 ± 0.0069021	0.3381	EXP 150 of 150	6.7005303 ± 0.0139668	0.9959	EXP 150 of 150
21F16223	24.0 %	0.0192083 ± 0.0002453	0.8207	EXP 150 of 150	0.0827813 ± 0.0066873	0.0130	EXP 150 of 150	0.0174884 ± 0.0062991	0.0001	EXP 148 of 150	0.1553578 ± 0.0061612	0.0647	EXP 150 of 150	5.8258841 ± 0.0138663	0.9963	EXP 150 of 150
21F16224	24.0 %	0.0228510 ± 0.0002622	0.8377	EXP 150 of 150	0.9798402 ± 0.0059196	0.6944	EXP 149 of 150	0.0460717 ± 0.0063566	0.0194	EXP 149 of 150	1.3372759 ± 0.0073000	0.6593	EXP 150 of 150	12.0175228 ± 0.0169562	0.9945	EXP 150 of 150
21F16226	24.0 %	0.0172194 ± 0.0002227	0.8712	EXP 150 of 150	1.2008858 ± 0.0062830	0.7767	EXP 149 of 150	0.0359696 ± 0.0065209	0.0000	EXP 150 of 150	2.3031205 ± 0.0068067	0.9190	EXP 150 of 150	15.9643313 ± 0.0178599	0.9789	EXP 150 of 150
21F16227	24.0 %	0.0146797 ± 0.0002358	0.8689	EXP 150 of 150	0.9228981 ± 0.0063811	0.6364	EXP 150 of 150	0.0412618 ± 0.0065571	0.0328	EXP 148 of 150	2.0975306 ± 0.0068474	0.8916	EXP 150 of 150	13.8271912 ± 0.0140689	0.9924	EXP 149 of 150
21F16229	24.0 %	0.0168229 ± 0.0002439	0.8621	EXP 149 of 150	1.6201486 ± 0.0055929	0.8813	EXP 148 of 150	0.0766775 ± 0.0063409	0.1355	EXP 148 of 150	3.0728293 ± 0.0062760	0.9623	EXP 149 of 150	18.5683409 ± 0.0179112	0.9780	EXP 150 of 150
21F16230	24.0 %	0.0148496 ± 0.0002279	0.8702	EXP 150 of 150	0.4476531 ± 0.0071329	0.1030	EXP 149 of 150	0.0022090 ± 0.0066135	0.0098	EXP 149 of 150	1.0107546 ± 0.0061989	0.5970	EXP 149 of 150	8.2116980 ± 0.0170890	0.9932	EXP 150 of 150
21F16232	24.0 %	0.0175946 ± 0.0002026	0.8835	EXP 145 of 150	3.9207168 ± 0.0054359	0.9792	EXP 149 of 150	0.0681544 ± 0.0064851	0.0006	EXP 150 of 150	5.9031273 ± 0.0060452	0.9911	EXP 149 of 150	32.9261830 ± 0.0191506	0.9038	EXP 150 of 150
21F16233	24.0 %	0.0675713 ± 0.0004164	0.0122	EXP 150 of 150	1.2667882 ± 0.0063530	0.7925	EXP 150 of 150	0.0446317 ± 0.0067743	0.0452	EXP 150 of 150	1.9400433 ± 0.0057740	0.9205	EXP 147 of 150	29.3722642 ± 0.0173075	0.6384	EXP 150 of 150
21F16235	24.0 %	0.0210029 ± 0.0002438	0.8294	EXP 149 of 150	0.0516313 ± 0.0061739	0.0029	EXP 150 of 150	0.0111026 ± 0.0062024	0.0005	EXP 150 of 150	0.1155039 ± 0.0059365	0.0245	EXP 149 of 150	6.1594804 ± 0.0156061	0.9951	EXP 150 of 150
21F16236	24.0 %	0.0147945 ± 0.0002245	0.8628	EXP 150 of 150	0.0398822 ± 0.0053742	0.0019	EXP 150 of 150	0.0203777 ± 0.0069308	0.0186	EXP 149 of 150	0.0797131 ± 0.0060938	0.0804	EXP 148 of 150	3.7688302 ± 0.0151525	0.9962	EXP 150 of 150
21F16238	24.0 %	0.0201675 ± 0.0002634	0.7960	EXP 150 of 150	0.1990096 ± 0.0059216	0.1175	EXP 150 of 150	0.0369552 ± 0.0069760	0.0284	EXP 150 of 150	0.2911646 ± 0.0059017	0.0036	EXP 150 of 150	6.7539869 ± 0.0153261	0.9952	EXP 149 of 150
21F16239	24.0 %	0.0130638 ± 0.0002331	0.8654	EXP 150 of 150	0.6949570 ± 0.0054317	0.5802	EXP 147 of 150	0.0093590 ± 0.0063663	0.0001	EXP 147 of 150	1.3842330 ± 0.0061975	0.8122	EXP 150 of 150	9.7552758 ± 0.0155578	0.9931	EXP 150 of 150
21F16240	24.0 %	0.0168234 ± 0.0002478	0.8302	EXP 149 of 150	0.2019421 ± 0.0059442	0.1206	EXP 146 of 150	0.0176731 ± 0.0066985	0.0000	EXP 150 of 150	0.3909631 ± 0.0060709	0.0826	EXP 149 of 150	6.1136003 ± 0.0143691	0.9957	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F16196	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16197	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16199	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16200	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16202	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16203	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16205	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16206	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16208	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16209	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16211	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16212	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16214	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16215	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16217	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16218	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16220	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16221	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16223	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16224	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16226	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16227	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16229	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16230	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16232	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16233	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16235	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16236	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16238	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16239	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01
21F16240	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	18.24	Oregon\Swenton (20-01)	21F16192	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F16196	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	13	58	1
21F16197	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	14	7	1
21F16199	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	14	24	1
21F16200	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	14	33	1
21F16202	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	14	50	1
21F16203	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	14	59	1
21F16205	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	15	16	1
21F16206	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	15	24	1
21F16208	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	15	42	1
21F16209	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	15	50	1
21F16211	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	16	8	1
21F16212	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	16	16	1
21F16214	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	16	34	1
21F16215	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	16	42	1
21F16217	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	16	59	1
21F16218	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	17	8	1
21F16220	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	17	25	1
21F16221	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	17	34	1
21F16223	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	17	51	1
21F16224	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	18	0	1
21F16226	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	18	17	1
21F16227	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	18	26	1
21F16229	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	18	43	1
21F16230	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	18	52	1
21F16232	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	19	9	1
21F16233	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	19	18	1
21F16235	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	19	35	1
21F16236	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	19	44	1
21F16238	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	20	1	1
21F16239	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	20	10	1
21F16240	24.0 %	VS20-125A	Plagioclase (albite?)	Unknown	FCT-NM (4X17-21)	28.201	0.082	Kuiper et al (2008)	9.44728	0.112	0.00164338	0.112	300.351	0.125	0.99850732	0.041	1	3.54E-14	31	AUG	2021	20	18	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F16196	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16197	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16199	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16200	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16202	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16203	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16205	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16206	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16208	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16209	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16211	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16212	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16214	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16215	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16217	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16218	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16220	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16221	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16223	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16224	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16226	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16227	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16229	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16230	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16232	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16233	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16235	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16236	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16238	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16239	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16240	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.0006425	0.92	0.00018	9.63	0.0002703	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F16192.AGE >>> VS20-125A >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.79 ± 0.14
TOTAL FUSION
14.67 ± 0.07
NORMAL ISOCHRON
14.43 ± 0.14
INVERSE ISOCHRON
14.79 ± 0.15

MSWD (PROBABILITY)
8.74 (0%)

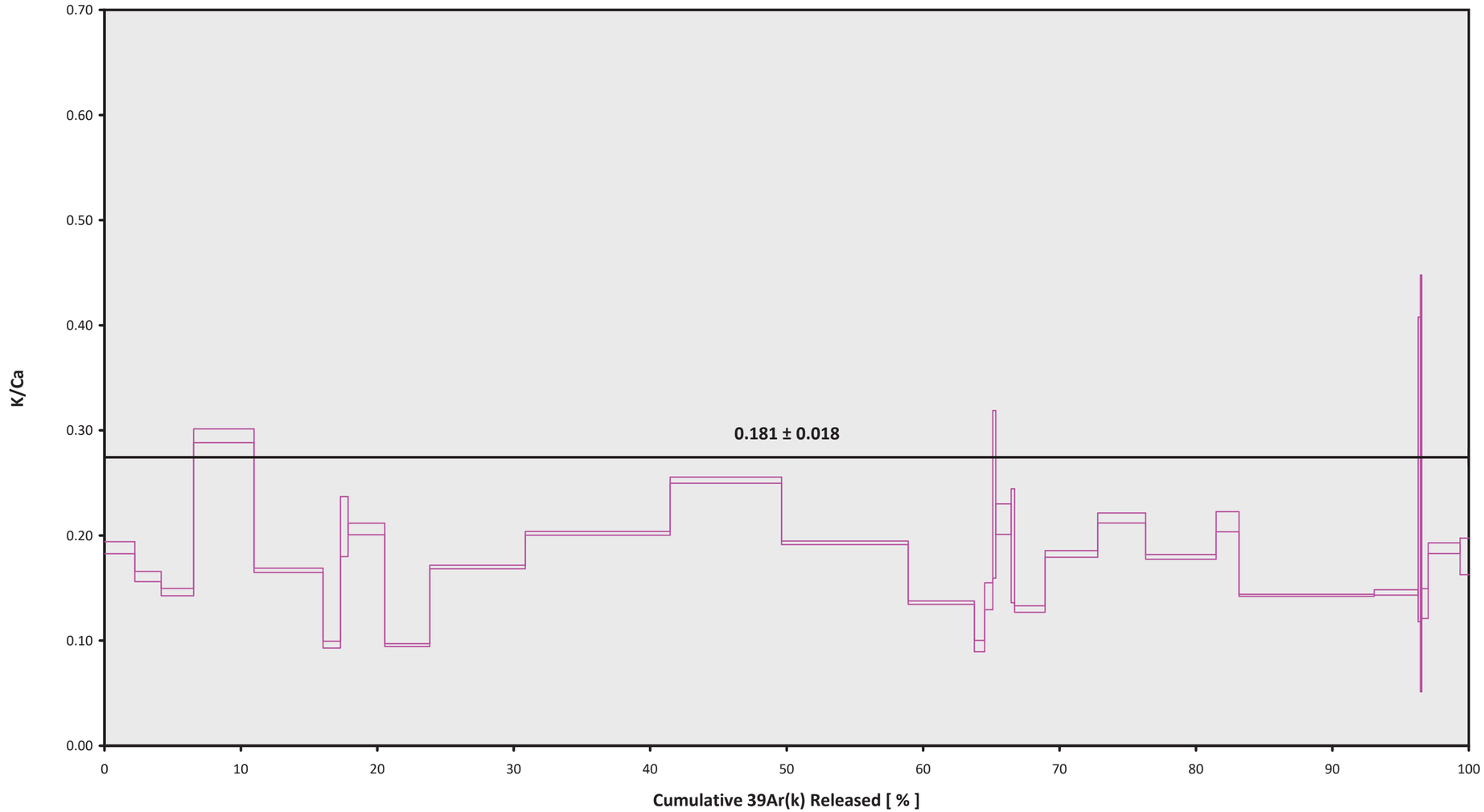
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Plagioclase (albite?)
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X17-21)
J = 0.00164338 ± 0.00000184

21F16192.AGE >>> VS20-125A >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.79 ± 0.14
TOTAL FUSION
14.67 ± 0.07
NORMAL ISOCHRON
14.43 ± 0.14
INVERSE ISOCHRON
14.79 ± 0.15

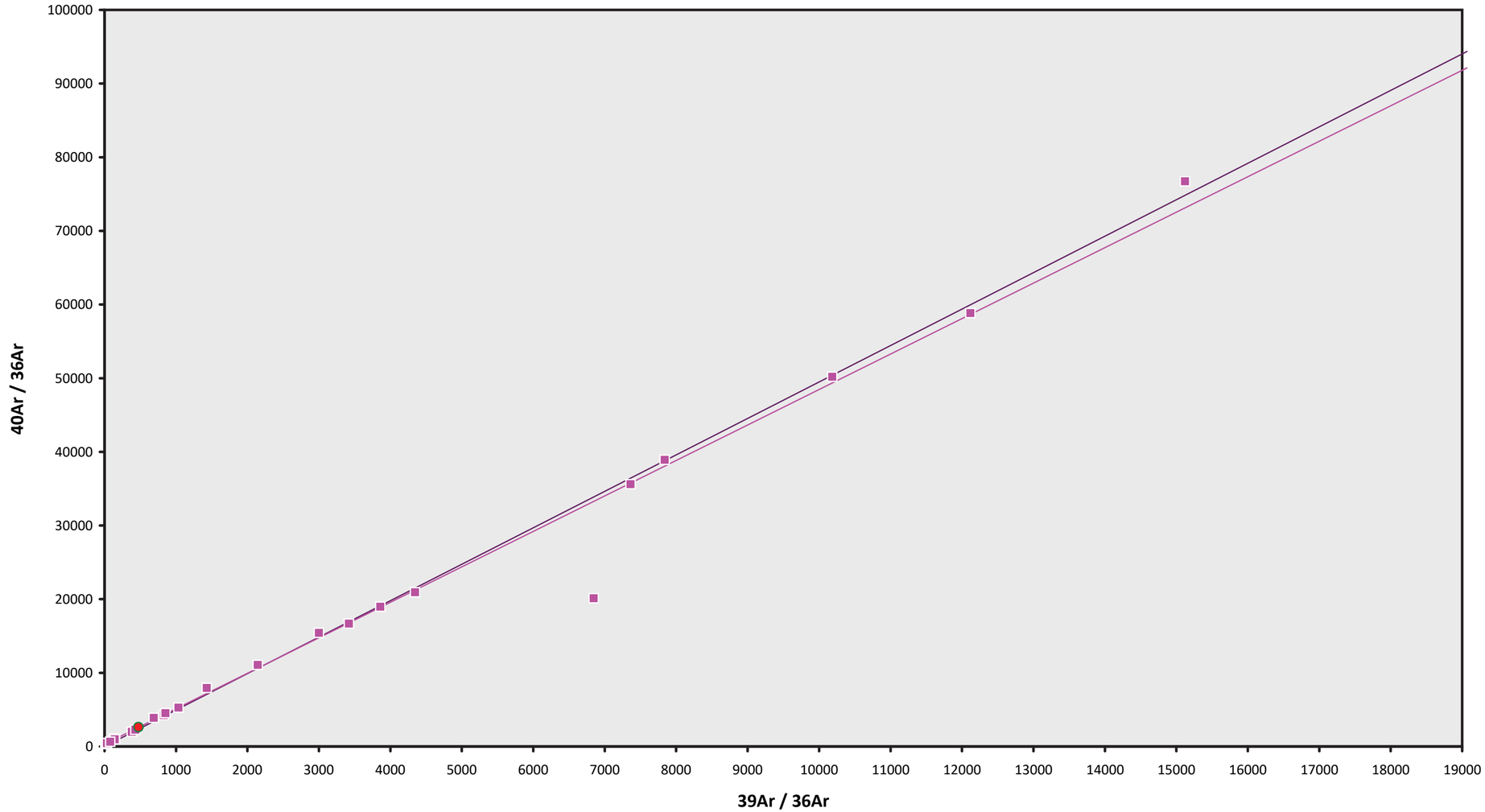
ASSUMED TRAPPED 40AR/36AR RATIO
Standard 40/36 = 298.56 ± 0.104 %SD

Sample Info

Plagioclase (albite?)
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X17-21)
J = 0.00164338 ± 0.00000184

21F16192.AGE >>> VS20-125A >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.79 ± 0.14
TOTAL FUSION
14.67 ± 0.07
NORMAL ISOCHRON
14.43 ± 0.14
INVERSE ISOCHRON
14.79 ± 0.15

MSWD (PROBABILITY)
4.16 (0%)

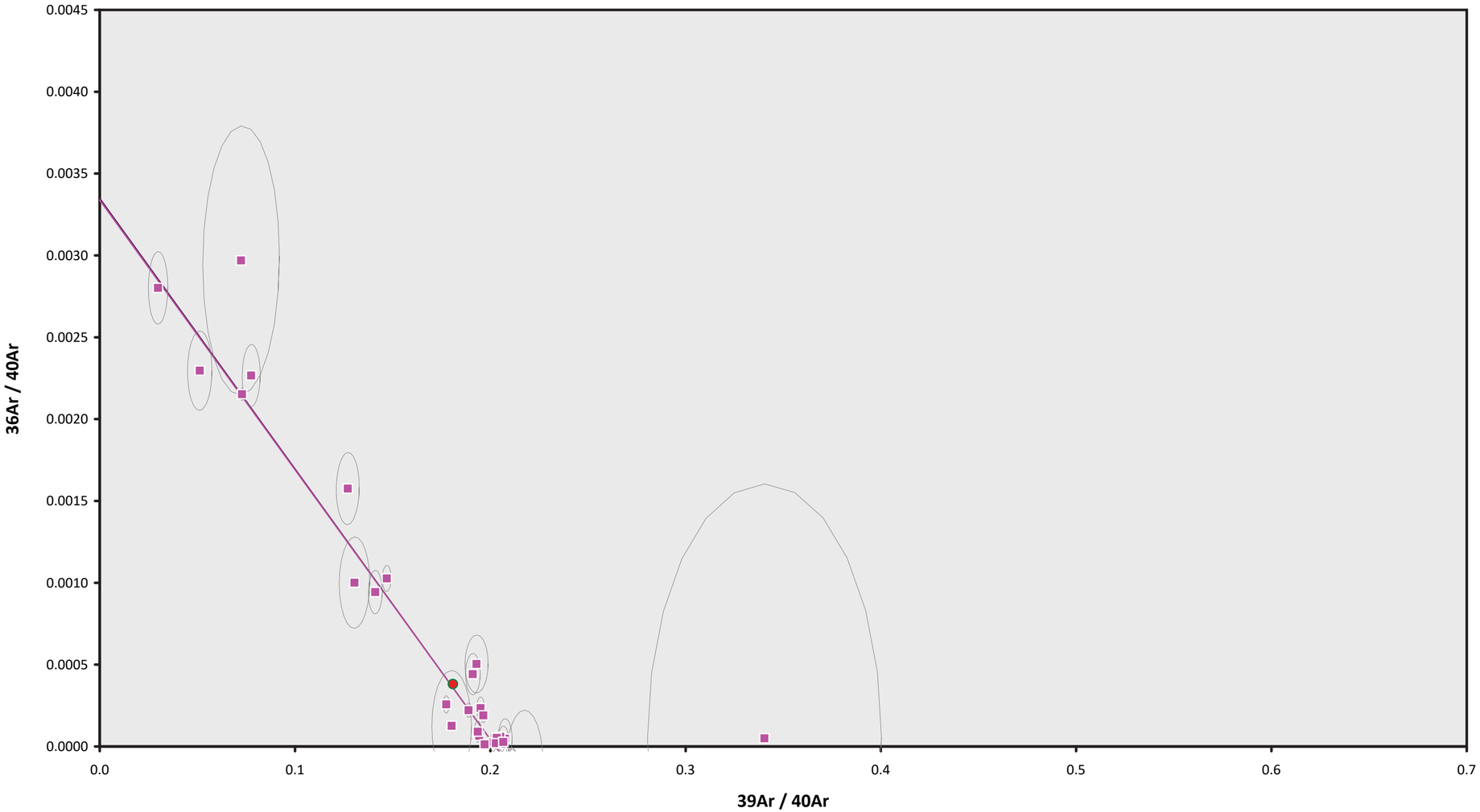
CALCULATED 40AR/36AR INTERCEPT
298.6 ± 10.6

Sample Info

Plagioclase (albite?)
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X17-21)
J = 0.00164338 ± 0.00000184

21F16192.AGE >>> VS20-125A >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
14.79 ± 0.14
TOTAL FUSION
14.67 ± 0.07
NORMAL ISOCHRON
14.43 ± 0.14
INVERSE ISOCHRON
14.79 ± 0.15

MSWD (PROBABILITY)
8.94 (0%)

SPREADING FACTOR
153.3%

CALCULATED 40AR/36AR INTERCEPT
299.6 ± 15.5

Sample Info

Plagioclase (albite?)
Unknown
Dan Miggins

IRR = 21-OSU-04 (4X17-21)
J = 0.00164338 ± 0.00000184

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ		Age ±2σ (Ma)		40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ	
21F16043	24.0 %	✓	0.3028587	0.342	2.62949	1.498	1.303458	0.719	96.5576	0.041	597.482	0.007	5.25309	±0.00798	15.82	±0.02	84.89	2.37	15.8	±0.5
21F16044	24.0 %	✓	0.6189534	0.263	3.81934	1.114	1.566435	0.564	111.8017	0.040	768.906	0.005	5.22683	±0.01028	15.74	±0.03	76.00	2.74	12.6	±0.3
21F16046	24.0 %	✓	0.7092925	0.246	43.25225	0.259	7.602973	0.147	572.3616	0.038	3226.375	0.003	5.27275	±0.00449	15.88	±0.01	93.53	14.02	5.7	±0.0
21F16047	24.0 %	✓	0.2431854	0.349	6.44847	0.655	1.936230	0.489	146.9826	0.039	846.270	0.005	5.26676	±0.00552	15.86	±0.02	91.47	3.60	9.8	±0.1
21F16049	24.0 %	✓	0.2518303	0.403	3.47194	1.057	2.663376	0.358	207.8559	0.039	1160.730	0.004	5.22339	±0.00507	15.73	±0.02	93.54	5.09	25.7	±0.5
21F16050	24.0 %	✓	0.3087339	0.326	4.50880	0.942	1.575520	0.614	117.9301	0.040	704.311	0.006	5.19330	±0.00679	15.64	±0.02	86.95	2.89	11.2	±0.2
21F16052	24.0 %	✓	0.4676313	0.282	12.07062	0.423	2.719131	0.379	201.0286	0.039	1191.165	0.004	5.23532	±0.00585	15.77	±0.02	88.35	4.92	7.2	±0.1
21F16053	24.0 %	✓	0.3785367	0.310	8.59127	0.540	2.224581	0.469	169.1095	0.039	997.995	0.004	5.23686	±0.00601	15.77	±0.02	88.74	4.14	8.5	±0.1
21F16055	24.0 %	✓	0.1115737	0.610	3.71146	1.116	1.546740	0.598	116.2011	0.040	644.411	0.007	5.26110	±0.00558	15.85	±0.02	94.87	2.85	13.5	±0.3
21F16056	24.0 %	✓	0.5265250	0.277	13.91647	0.386	2.418541	0.390	181.3366	0.039	1108.281	0.004	5.25071	±0.00658	15.81	±0.02	85.91	4.44	5.6	±0.0
21F16058	24.0 %	✓	0.2484564	0.369	4.94078	0.833	1.157823	0.819	85.6723	0.041	520.332	0.007	5.21194	±0.00796	15.70	±0.02	85.81	2.10	7.5	±0.1
21F16059	24.0 %	✓	0.1465247	0.497	3.45426	1.172	1.401193	0.717	105.1456	0.040	596.694	0.006	5.26106	±0.00601	15.85	±0.02	92.71	2.58	13.1	±0.3
21F16061	24.0 %	✓	0.2086665	0.419	1.22369	2.814	0.902783	1.097	66.3146	0.042	409.191	0.008	5.23197	±0.00929	15.76	±0.03	84.79	1.62	23.3	±1.3
21F16062	24.0 %	✓	0.2665338	0.379	12.40880	0.382	2.576754	0.396	194.2731	0.039	1105.502	0.005	5.28564	±0.00524	15.92	±0.02	92.88	4.76	6.7	±0.1
21F16064	24.0 %	✓	0.2791852	0.359	7.82495	0.532	2.227325	0.440	169.0483	0.039	976.248	0.005	5.28521	±0.00558	15.92	±0.02	91.52	4.14	9.3	±0.1
21F16065	24.0 %	✓	0.4228484	0.287	12.41376	0.392	2.324570	0.417	174.0462	0.039	1034.591	0.005	5.22440	±0.00607	15.74	±0.02	87.88	4.26	6.0	±0.0
21F16067	24.0 %	✓	0.1809003	0.452	3.19254	1.302	1.381217	0.637	105.6538	0.040	605.929	0.006	5.22581	±0.00638	15.74	±0.02	91.12	2.59	14.2	±0.4
21F16068	24.0 %	✓	0.1526087	0.484	6.13614	0.647	0.849714	1.035	65.6362	0.042	391.949	0.009	5.28464	±0.00826	15.92	±0.02	88.49	1.61	4.6	±0.1
21F16070	24.0 %	✓	0.1578013	0.488	3.73718	1.077	1.219789	0.700	90.5011	0.041	524.113	0.008	5.27356	±0.00681	15.88	±0.02	91.06	2.22	10.4	±0.2
21F16071	24.0 %	✓	0.2403176	0.395	5.25250	0.782	1.738412	0.536	131.7168	0.040	765.198	0.006	5.26747	±0.00615	15.86	±0.02	90.67	3.23	10.8	±0.2
21F16073	24.0 %	✓	0.1245959	0.518	3.15290	1.252	1.738054	0.572	132.5361	0.040	733.469	0.005	5.25485	±0.00515	15.83	±0.02	94.95	3.25	18.1	±0.5
21F16074	24.0 %	✓	0.0233397	2.006	0.13744	27.884	0.250549	3.802	18.5799	0.067	104.656	0.026	5.25780	±0.01691	15.84	±0.05	93.34	0.46	58.1	±32.4
21F16076	24.0 %	✓	0.0713421	0.815	2.06389	1.797	0.828038	1.198	62.7390	0.044	352.042	0.009	5.27390	±0.00730	15.88	±0.02	93.99	1.54	13.1	±0.5
21F16077	24.0 %	✓	0.2390472	0.382	4.81952	0.853	0.553864	1.767	38.2208	0.047	273.710	0.011	5.30402	±0.01569	15.97	±0.05	74.06	0.94	3.4	±0.1
21F16079	24.0 %	✓	0.2567129	0.361	5.18533	0.733	2.157250	0.447	165.1465	0.039	947.040	0.005	5.27251	±0.00544	15.88	±0.02	91.94	4.05	13.7	±0.2
21F16080	24.0 %	✓	0.1697881	0.501	4.38794	0.898	1.439698	0.678	107.2891	0.040	607.176	0.007	5.18964	±0.00642	15.63	±0.02	91.70	2.63	10.5	±0.2
21F16082	24.0 %	✓	0.2429688	0.394	13.69060	0.382	1.649356	0.583	123.2083	0.040	716.840	0.006	5.23811	±0.00639	15.78	±0.02	90.02	3.02	3.9	±0.0
21F16083	24.0 %	✓	0.2576989	0.360	8.91182	0.494	1.530891	0.643	115.0625	0.040	682.581	0.006	5.26952	±0.00656	15.87	±0.02	88.82	2.82	5.6	±0.1
21F16085	24.0 %	✓	0.1268441	0.528	14.47091	0.374	1.145856	0.802	87.4084	0.041	499.187	0.008	5.29105	±0.00645	15.94	±0.02	92.64	2.14	2.6	±0.0
21F16086	24.0 %	✓	0.1070128	0.608	5.64726	0.782	1.622565	0.564	123.0863	0.040	683.740	0.006	5.29868	±0.00538	15.96	±0.02	95.38	3.02	9.4	±0.1
		Σ	7.8423143	0.069	225.47229	0.114	54.252686	0.097	4082.4501	0.009	23776.115	0.001								

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-079**
Material = **Biotite**
Location = **Birch Creek**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X10-21)**
Position = **X: 0 | Y: 0 | Z/H: 10.05296 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.39513 ± 0.01062**
FCT-NM J-value = **0.00165250 ± 0.00000187**
Air Shot 40Ar/36Ar = **301.8500 ± 0.3351**
Air Shot MDF = **0.99727161 ± 0.00037661 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **3.00 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ		40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ	
Age Plateau			5.25528	±0.01037	**15.83**	**±0.05**	80.21	100.00	12.0	±3.8
Error Mean				±0.20%		**±0.30%**	0%	30		
				Full External Error		±0.82	1.53	2σ Confidence Limit		
				Analytical Error		±0.03	8.9559	Error Magnification		
Total Fusion Age			5.25452	±0.00124	**15.83**	**±0.04**		30	7.8	±0.0
				±0.02%		**±0.23%**				
				Full External Error		±0.82				
				Analytical Error		±0.00				
Normal Isochron	**287.32**	**±12.29**	5.27399	±0.02442	**15.88**	**±0.08**	81.50	100.00		
Error Chron		**±4.28%**		±0.46%		**±0.51%**	0%	30		
				Full External Error		±0.83	1.53	2σ Confidence Limit		
				Analytical Error		±0.07	9.0279	Error Magnification		
							90	Number of Iterations		
							0.0000522985	Convergence		
Inverse Isochron	**289.00**	**±12.00**	5.27242	±0.02384	**15.88**	**±0.08**	78.85	100.00		
Error Chron		**±4.15%**		±0.45%		**±0.50%**	0%	30		
				Full External Error		±0.83	1.53	2σ Confidence Limit		
				Analytical Error		±0.07	8.8799	Error Magnification		
							3	Number of Iterations		
							0.0003199855	Convergence		
							22%	Spreading Factor		

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
21F16043	24.0 %	✓	0.3021384	2.62949	0.0799261	96.5559	507.217	15.82 ±0.02	84.89	2.37	15.8 ±0.5
21F16044	24.0 %	✓	0.6179091	3.81934	0.0990718	111.7992	584.355	15.74 ±0.03	76.00	2.74	12.6 ±0.3
21F16046	24.0 %	✓	0.6975353	43.25225	0.5516270	572.3338	3017.772	15.88 ±0.01	93.53	14.02	5.7 ±0.0
21F16047	24.0 %	✓	0.2414286	6.44847	0.1145014	146.9784	774.100	15.86 ±0.02	91.47	3.60	9.8 ±0.1
21F16049	24.0 %	✓	0.2508792	3.47194	0.1052110	207.8537	1085.702	15.73 ±0.02	93.54	5.09	25.7 ±0.5
21F16050	24.0 %	✓	0.3075041	4.50880	0.0925375	117.9272	612.431	15.64 ±0.02	86.95	2.89	11.2 ±0.2
21F16052	24.0 %	✓	0.4643444	12.07062	0.2017005	201.0209	1052.409	15.77 ±0.02	88.35	4.92	7.2 ±0.1
21F16053	24.0 %	✓	0.3762013	8.59127	0.1098525	169.1039	885.574	15.77 ±0.02	88.74	4.14	8.5 ±0.1
21F16055	24.0 %	✓	0.1105559	3.71146	0.1219005	116.1987	611.333	15.85 ±0.02	94.87	2.85	13.5 ±0.3
21F16056	24.0 %	✓	0.5227480	13.91647	0.1276036	181.3277	952.099	15.81 ±0.02	85.91	4.44	5.6 ±0.0
21F16058	24.0 %	✓	0.2471118	4.94078	0.0757266	85.6692	446.502	15.70 ±0.02	85.81	2.10	7.5 ±0.1
21F16059	24.0 %	✓	0.1455787	3.45426	0.1033129	105.1434	553.166	15.85 ±0.02	92.71	2.58	13.1 ±0.3
21F16061	24.0 %	✓	0.2083282	1.22369	0.0624215	66.3138	346.952	15.76 ±0.03	84.79	1.62	23.3 ±1.3
21F16062	24.0 %	✓	0.2631582	12.40880	0.1787743	194.2652	1026.816	15.92 ±0.02	92.88	4.76	6.7 ±0.1
21F16064	24.0 %	✓	0.2770543	7.82495	0.1321564	169.0432	893.428	15.92 ±0.02	91.52	4.14	9.3 ±0.1
21F16065	24.0 %	✓	0.4194760	12.41376	0.1414051	174.0382	909.246	15.74 ±0.02	87.88	4.26	6.0 ±0.0
21F16067	24.0 %	✓	0.1800289	3.19254	0.0707513	105.6517	552.115	15.74 ±0.02	91.12	2.59	14.2 ±0.4
21F16068	24.0 %	✓	0.1509468	6.13614	0.0275154	65.6323	346.843	15.92 ±0.02	88.49	1.61	4.6 ±0.1
21F16070	24.0 %	✓	0.1567795	3.73718	0.0966103	90.4987	477.250	15.88 ±0.02	91.06	2.22	10.4 ±0.2
21F16071	24.0 %	✓	0.2388856	5.25250	0.1017334	131.7134	693.796	15.86 ±0.02	90.67	3.23	10.8 ±0.2
21F16073	24.0 %	✓	0.1237300	3.15290	0.1135486	132.5341	696.447	15.83 ±0.02	94.95	3.25	18.1 ±0.5
21F16074	24.0 %	✓	0.0233000	0.13744	0.0217444	18.5798	97.689	15.84 ±0.05	93.34	0.46	58.1 ±32.4
21F16076	24.0 %	✓	0.0707774	2.06389	0.0566419	62.7377	330.872	15.88 ±0.02	93.99	1.54	13.1 ±0.5
21F16077	24.0 %	✓	0.2377389	4.81952	0.0466281	38.2177	202.707	15.97 ±0.05	74.06	0.94	3.4 ±0.1
21F16079	24.0 %	✓	0.2552977	5.18533	0.1137589	165.1432	870.719	15.88 ±0.02	91.94	4.05	13.7 ±0.2
21F16080	24.0 %	✓	0.1685887	4.38794	0.1114324	107.2863	556.777	15.63 ±0.02	91.70	2.63	10.5 ±0.2
21F16082	24.0 %	✓	0.2392545	13.69060	0.1139120	123.1995	645.333	15.78 ±0.02	90.02	3.02	3.9 ±0.0
21F16083	24.0 %	✓	0.2552790	8.91182	0.0916259	115.0568	606.295	15.87 ±0.02	88.82	2.82	5.6 ±0.1
21F16085	24.0 %	✓	0.1229249	14.47091	0.0645613	87.3991	462.433	15.94 ±0.02	92.64	2.14	2.6 ±0.0
21F16086	24.0 %	✓	0.1054725	5.64726	0.1151974	123.0827	652.176	15.96 ±0.02	95.38	3.02	9.4 ±0.1
		Σ	7.7809558	225.47229	3.4433902	4082.3052	21450.555				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-079**
Material = **Biotite**
Location = **Birch Creek**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X10-21)**
J = **0.00165250 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ±2σ		Age ±2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau	5.25528	±0.01037	**15.83**	**±0.05**	80.21	100.00	12.0 ±3.8
Error Mean		±0.20%		**±0.30%**	0%	30	
			Full External Error	±0.82	1.53	2σ Confidence Limit	
			Analytical Error	±0.03	8.9559	Error Magnification	
Total Fusion Age	5.25452	±0.00124	**15.83**	**±0.04**		30	7.8 ±0.0
		±0.02%		**±0.23%**			
			Full External Error	±0.82			
			Analytical Error	±0.00			

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
21F16043	24.0 %	✓	319.57	±2.21	1977.32	±13.57	0.9929
21F16044	24.0 %	✓	180.93	±0.97	1244.26	±6.57	0.9886
21F16046	24.0 %	✓	820.51	±4.15	4624.90	±23.11	0.9885
21F16047	24.0 %	✓	608.79	±4.31	3504.89	±24.65	0.9937
21F16049	24.0 %	✓	828.50	±6.73	4626.15	±37.43	0.9954
21F16050	24.0 %	✓	383.50	±2.53	2290.18	±14.99	0.9926
21F16052	24.0 %	✓	432.91	±2.48	2565.00	±14.59	0.9907
21F16053	24.0 %	✓	449.50	±2.83	2652.55	±16.56	0.9921
21F16055	24.0 %	✓	1051.04	±12.98	5828.19	±71.80	0.9978
21F16056	24.0 %	✓	346.87	±1.95	2119.90	±11.81	0.9902
21F16058	24.0 %	✓	346.68	±2.59	2105.44	±15.62	0.9937
21F16059	24.0 %	✓	722.24	±7.24	4098.34	±40.98	0.9967
21F16061	24.0 %	✓	318.31	±2.68	1963.97	±16.48	0.9948
21F16062	24.0 %	✓	738.21	±5.69	4200.46	±32.24	0.9948
21F16064	24.0 %	✓	610.14	±4.44	3523.30	±25.49	0.9941
21F16065	24.0 %	✓	414.89	±2.43	2466.14	±14.29	0.9908
21F16067	24.0 %	✓	586.86	±5.35	3365.38	±30.57	0.9960
21F16068	24.0 %	✓	434.80	±4.27	2596.34	±25.41	0.9961
21F16070	24.0 %	✓	577.24	±5.69	3342.65	±32.82	0.9964
21F16071	24.0 %	✓	551.37	±4.41	3202.86	±25.47	0.9949
21F16073	24.0 %	✓	1071.16	±11.20	5927.33	±61.82	0.9971
21F16074	24.0 %	✓	797.42	±32.08	4491.22	±180.60	0.9994
21F16076	24.0 %	✓	886.41	±14.58	4973.39	±81.71	0.9985
21F16077	24.0 %	✓	160.75	±1.24	1151.21	±8.85	0.9922
21F16079	24.0 %	✓	646.87	±4.72	3709.16	±26.92	0.9941
21F16080	24.0 %	✓	636.38	±6.44	3601.14	±36.34	0.9968
21F16082	24.0 %	✓	514.93	±4.14	2995.83	±23.96	0.9950
21F16083	24.0 %	✓	450.71	±3.29	2673.59	±19.41	0.9939
21F16085	24.0 %	✓	711.00	±7.78	4060.48	±44.30	0.9970
21F16086	24.0 %	✓	1166.96	±14.42	6481.93	±79.94	0.9978

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**287.32**	**±12.29**	5.27399	±0.02442	**15.88**	**±0.08**	81.50
Error Chron		**±4.28%**		±0.46%		**±0.51%**	0%
					Full External Error	±0.83	
					Analytical Error	±0.07	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000052298471
	Error Magnification	9.0279	Number of Iterations	90
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
21F16043	24.0 %	✓	0.1616205	±0.0001330	0.00050574	±0.00000347	0.0032
21F16044	24.0 %	✓	0.1454132	±0.0001171	0.00080369	±0.00000424	0.0027
21F16046	24.0 %	✓	0.1774113	±0.0001357	0.00021622	±0.00000108	0.0010
21F16047	24.0 %	✓	0.1736963	±0.0001379	0.00028532	±0.00000201	0.0021
21F16049	24.0 %	✓	0.1790909	±0.0001399	0.00021616	±0.00000175	0.0013
21F16050	24.0 %	✓	0.1674533	±0.0001344	0.00043665	±0.00000286	0.0026
21F16052	24.0 %	✓	0.1687772	±0.0001320	0.00038986	±0.00000222	0.0018
21F16053	24.0 %	✓	0.1694610	±0.0001335	0.00037700	±0.00000235	0.0017
21F16055	24.0 %	✓	0.1803374	±0.0001476	0.00017158	±0.00000211	0.0018
21F16056	24.0 %	✓	0.1636279	±0.0001283	0.00047172	±0.00000263	0.0018
21F16058	24.0 %	✓	0.1646597	±0.0001381	0.00047496	±0.00000352	0.0034
21F16059	24.0 %	✓	0.1762288	±0.0001431	0.00024400	±0.00000244	0.0020
21F16061	24.0 %	✓	0.1620768	±0.0001392	0.00050917	±0.00000427	0.0039
21F16062	24.0 %	✓	0.1757444	±0.0001376	0.00023807	±0.00000183	0.0015
21F16064	24.0 %	✓	0.1731742	±0.0001372	0.00028382	±0.00000205	0.0021
21F16065	24.0 %	✓	0.1682366	±0.0001332	0.00040549	±0.00000235	0.0022
21F16067	24.0 %	✓	0.1743817	±0.0001421	0.00029714	±0.00000270	0.0020
21F16068	24.0 %	✓	0.1674679	±0.0001446	0.00038516	±0.00000377	0.0039
21F16070	24.0 %	✓	0.1726882	±0.0001440	0.00029916	±0.00000294	0.0029
21F16071	24.0 %	✓	0.1721478	±0.0001382	0.00031222	±0.00000248	0.0021
21F16073	24.0 %	✓	0.1807148	±0.0001447	0.00016871	±0.00000176	0.0015
21F16074	24.0 %	✓	0.1775501	±0.0002566	0.00022266	±0.00000895	0.0047
21F16076	24.0 %	✓	0.1782301	±0.0001589	0.00020107	±0.00000330	0.0024
21F16077	24.0 %	✓	0.1396402	±0.0001352	0.00086865	±0.00000668	0.0069
21F16079	24.0 %	✓	0.1743966	±0.0001379	0.00026960	±0.00000196	0.0018
21F16080	24.0 %	✓	0.1767162	±0.0001433	0.00027769	±0.00000280	0.0025
21F16082	24.0 %	✓	0.1718827	±0.0001385	0.00033380	±0.00000267	0.0027
21F16083	24.0 %	✓	0.1685787	±0.0001355	0.00037403	±0.00000272	0.0023
21F16085	24.0 %	✓	0.1751016	±0.0001473	0.00024628	±0.00000269	0.0026
21F16086	24.0 %	✓	0.1800334	±0.0001467	0.00015427	±0.00000190	0.0013

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**289.00**	**±12.00**	5.27242	±0.02384	**15.88**	**±0.08**	78.85
Error Chron		**±4.15%**		±0.45%		**±0.50%**	0%
					Full External Error	±0.83	
					Analytical Error	±0.07	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0003199855
	Error Magnification	8.8799	Number of Iterations	3
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	21.7%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F16043	24.0 %	✓	0.3021384	0.34	0.0000000	0.00	0.0007108	1.51	0.0000096	12.35	2.62949	1.50	0.0569531	0.38	0.0000000	0.00	1.166105	0.10	0.0004733	9.75	0.0799261	12.38	96.5559	0.04	0.0016894	1.76	507.217	0.06	90.2064	0.36	0.0000000	0.00	0.0586094	9.65
21F16044	24.0 %	✓	0.6179091	0.26	0.0000000	0.00	0.0010324	1.13	0.0000119	9.66	3.81934	1.11	0.1164759	0.31	0.0000000	0.00	1.350199	0.10	0.0006875	9.69	0.0990718	9.70	111.7992	0.04	0.0024539	1.45	584.355	0.09	184.4829	0.28	0.0000000	0.00	0.0678621	9.65
21F16046	24.0 %	✓	0.6975353	0.25	0.0000000	0.00	0.0116911	0.31	0.0000661	3.91	43.25225	0.26	0.1314854	0.30	0.0000000	0.00	6.912075	0.10	0.0077854	9.63	0.5516270	4.02	572.3338	0.04	0.0277896	0.96	3017.772	0.02	208.2561	0.27	0.0000000	0.00	0.3474066	9.65
21F16047	24.0 %	✓	0.2414286	0.35	0.0000000	0.00	0.0017430	0.68	0.0000137	9.22	6.44847	0.66	0.0455093	0.39	0.0000000	0.00	1.775058	0.10	0.0011607	9.65	0.1145014	9.27	146.9784	0.04	0.0041431	1.13	774.100	0.03	72.0809	0.37	0.0000000	0.00	0.0892159	9.65
21F16049	24.0 %	✓	0.2508792	0.40	0.0000000	0.00	0.0009385	1.07	0.0000126	10.91	3.47194	1.06	0.0472907	0.43	0.0000000	0.00	2.510249	0.10	0.0006249	9.69	0.1052110	10.95	207.8537	0.04	0.0022307	1.40	1085.702	0.03	74.9025	0.42	0.0000000	0.00	0.1261672	9.65
21F16050	24.0 %	✓	0.3075041	0.33	0.0000000	0.00	0.0012187	0.96	0.0000111	11.22	4.50880	0.94	0.0579645	0.36	0.0000000	0.00	1.424206	0.10	0.0008116	9.68	0.0925375	11.26	117.9272	0.04	0.0028969	1.32	612.431	0.05	91.8084	0.34	0.0000000	0.00	0.0715818	9.65
21F16052	24.0 %	✓	0.4643444	0.28	0.0000000	0.00	0.0032627	0.46	0.0000242	6.06	12.07062	0.42	0.0875289	0.33	0.0000000	0.00	2.427729	0.10	0.0021727	9.64	0.2017005	6.13	201.0209	0.04	0.0077554	1.01	1052.409	0.04	138.6347	0.30	0.0000000	0.00	0.1220197	9.65
21F16053	24.0 %	✓	0.3762013	0.31	0.0000000	0.00	0.0023222	0.57	0.0000132	10.65	8.59127	0.54	0.0709139	0.35	0.0000000	0.00	2.042268	0.10	0.0015464	9.65	0.1098525	10.69	169.1039	0.04	0.0055199	1.07	885.574	0.04	112.3187	0.33	0.0000000	0.00	0.1026461	9.65
21F16055	24.0 %	✓	0.1105559	0.62	0.0000000	0.00	0.0010032	1.13	0.0000146	8.19	3.71146	1.12	0.0208398	0.64	0.0000000	0.00	1.403331	0.10	0.0006681	9.69	0.1219005	8.24	116.1987	0.04	0.0023846	1.45	611.333	0.03	33.0076	0.62	0.0000000	0.00	0.0705326	9.65
21F16056	24.0 %	✓	0.5227480	0.28	0.0000000	0.00	0.0037616	0.42	0.0000153	8.66	13.91647	0.39	0.0985380	0.32	0.0000000	0.00	2.189895	0.10	0.0025050	9.64	0.1276036	8.71	181.3277	0.04	0.0089413	1.00	952.099	0.05	156.0716	0.30	0.0000000	0.00	0.1100659	9.65
21F16058	24.0 %	✓	0.2471118	0.37	0.0000000	0.00	0.0013355	0.85	0.0000091	13.04	4.94078	0.83	0.0465806	0.40	0.0000000	0.00	1.034627	0.10	0.0008893	9.67	0.0757266	13.07	85.6692	0.04	0.0031744	1.24	446.502	0.06	73.7777	0.39	0.0000000	0.00	0.0520012	9.65
21F16059	24.0 %	✓	0.1455787	0.50	0.0000000	0.00	0.0009337	1.18	0.0000124	10.26	3.45426	1.17	0.0274416	0.52	0.0000000	0.00	1.269817	0.10	0.0006218	9.70	0.1033129	10.30	105.1434	0.04	0.0022194	1.49	553.166	0.04	43.4640	0.51	0.0000000	0.00	0.0638221	9.65
21F16061	24.0 %	✓	0.2083282	0.42	0.0000000	0.00	0.0003308	2.82	0.0000075	16.24	1.22369	2.81	0.0392699	0.45	0.0000000	0.00	0.800872	0.10	0.0002203	10.03	0.0624215	16.26	66.3138	0.04	0.0007862	2.96	346.952	0.08	62.1985	0.43	0.0000000	0.00	0.0402525	9.65
21F16062	24.0 %	✓	0.2631582	0.38	0.0000000	0.00	0.0033541	0.42	0.0000215	6.69	12.40880	0.38	0.0496053	0.42	0.0000000	0.00	2.346140	0.10	0.0022336	9.64	0.1787743	6.75	194.2652	0.04	0.0079727	1.00	1026.816	0.03	78.5685	0.40	0.0000000	0.00	0.1179189	9.65
21F16064	24.0 %	✓	0.2770543	0.36	0.0000000	0.00	0.0021151	0.56	0.0000159	8.44	7.82495	0.53	0.0522247	0.40	0.0000000	0.00	2.041535	0.10	0.0014085	9.64	0.1321564	8.49	169.0432	0.04	0.0050275	1.06	893.428	0.04	82.7173	0.38	0.0000000	0.00	0.1026092	9.65
21F16065	24.0 %	✓	0.4194760	0.29	0.0000000	0.00	0.0033554	0.43	0.0000170	7.91	12.41376	0.39	0.0790712	0.33	0.0000000	0.00	2.101860	0.10	0.0022345	9.64	0.1414051	7.96	174.0382	0.04	0.0079758	1.00	909.246	0.04	125.2388	0.31	0.0000000	0.00	0.1056412	9.65
21F16067	24.0 %	✓	0.1800289	0.45	0.0000000	0.00	0.0008629	1.31	0.0000085	13.29	3.19254	1.30	0.0339354	0.48	0.0000000	0.00	1.275956	0.10	0.0005747	9.72	0.0707513	13.32	105.6517	0.04	0.0020512	1.59	552.115	0.05	53.7494	0.47	0.0000000	0.00	0.0641306	9.65
21F16068	24.0 %	✓	0.1509468	0.49	0.0000000	0.00	0.0016586	0.67	0.0000033	32.82	6.13614	0.65	0.0284535	0.51	0.0000000	0.00	0.792641	0.10	0.0011045	9.65	0.0275154	32.83	65.6323	0.04	0.0039425	1.12	346.843	0.07	45.0667	0.50	0.0000000	0.00	0.0398388	9.65
21F16070	24.0 %	✓	0.1567795	0.49	0.0000000	0.00	0.0010102	1.09	0.0000116	9.35	3.73718	1.08	0.0295529	0.52	0.0000000	0.00	1.092953	0.10	0.0006727	9.69	0.0966103	9.40	90.4987	0.04	0.0024011	1.42	477.250	0.05	46.8081	0.50	0.0000000	0.00	0.0549327	9.65
21F16071	24.0 %	✓	0.2388856	0.40	0.0000000	0.00	0.0014197	0.80	0.0000122	10.04	5.25250	0.78	0.0450299	0.43	0.0000000	0.00	1.590703	0.10	0.0009454	9.66	0.1017334	10.08	131.7134	0.04	0.0033747	1.21	693.796	0.04	71.3217	0.41	0.0000000	0.00	0.0799500	9.65
21F16073	24.0 %	✓	0.1237300	0.52	0.0000000	0.00	0.0008522	1.26	0.0000136	9.51	3.15290	1.25	0.0233231	0.55	0.0000000	0.00	1.600615	0.10	0.0005675	9.71	0.1135486	9.55	132.5341	0.04	0.0020257	1.55	696.447	0.03	36.9408	0.53	0.0000000	0.00	0.0804482	9.65
21F16074	24.0 %	✓	0.0233000	2.01	0.0000000	0.00	0.0000372	27.88	0.0000026	43.91	0.13744	27.88	0.0043920	2.02	0.0000000	0.00	0.224388	0.11	0.0000247	29.50	0.0217444	43.92	18.5798	0.07	0.0000883	27.90	97.689	0.15	6.9564	2.01	0.0000000	0.00	0.0112779	9.65
21F16076	24.0 %	✓	0.0707774	0.82	0.0000000	0.00	0.0005579	1.81	0.0000068	17.87	2.06389	1.80	0.0133415	0.84	0.0000000	0.00	0.757683	0.10	0.0003715	9.80	0.0566419	17.89	62.7377	0.04	0.0013261	2.02	330.872	0.05	21.1313	0.83	0.0000000	0.00	0.0380818	9.65
21F16077	24.0 %	✓	0.2377389	0.38	0.0000000	0.00	0.0013027	0.87	0.0000056	21.18	4.81952	0.85	0.0448138	0.42	0.0000000	0.00	0.461555	0.10	0.0008675	9.67	0.0466281	21.20	38.2177	0.05	0.0030965	1.25	202.707	0.14	70.9793	0.40	0.0000000	0.00	0.0231981	9.65
21F16079	24.0 %	✓	0.2552977	0.36	0.0000000	0.00	0.0014016	0.75	0.0000137	9.62	5.18533	0.73	0.0481236	0.40	0.0000000	0.00	1.994434	0.10	0.0009334	9.66	0.1137589	9.67	165.1432	0.04	0.0033316	1.18	870.719	0.03	76.2217	0.38	0.0000000	0.00	0.1002419	9.65
21F16080	24.0 %	✓	0.1685887	0.50	0.0000000	0.00	0.0011861	0.91	0.0000134	9.31	4.38794	0.90	0.0317790	0.53	0.0000000	0.00	1.295696	0.10	0.0007898	9.67	0.1114324	9.35	107.2863	0.04	0.0028193	1.29	556.777	0.05	50.3338	0.52	0.0000000	0.00	0.0651228	9.65
21F16082	24.0 %	✓	0.2392545	0.40	0.0000000	0.00	0.0037006	0.42	0.0000137	9.14	13.69060	0.38	0.0450995	0.43	0.0000000	0.00	1.487881	0.10	0.0024643	9.64	0.1139120	9.19	123.1995	0.04	0.0087962	1.00	645.333	0.05	71.4318	0.41	0.0000000	0.00	0.0747821	9.65
21F16083	24.0 %	✓	0.2552790	0.36	0.0000000	0.00	0.0024089	0.52	0.0000110	11.46	8.91182	0.49	0.0481201	0.40	0.0000000	0.00	1.389541	0.10	0.0016041	9.64	0.0916259	11.50	115.0568	0.04	0.0057258	1.04	606.295	0.05	76.2161	0.38	0.0000000	0.00	0.0698395	9.65
21F16085	24.0 %	✓	0.1229249	0.55	0.0000000	0.00	0.0039115	0.41	0.0000078	14.87	14.47091	0.37	0.0231713	0.57	0.0000000	0.00	1.055519	0.10	0.0026048	9.64	0.0645613	14.90	87.3991	0.04	0.0092976	0.99	462.433	0.04	36.7004	0.56	0.0000000	0.00	0.0530512	9.65
21F16086	24.0 %	✓	0.1054725	0.62	0.0000000	0.00	0.0015265	0.80	0.0000139	8.65	5.64726	0.78	0.0198816	0.64	0.0000000	0.00	1.486469	0.10	0.0010165	9.66	0.1151974	8.70	123.0827	0.04	0.0036284	1.21	652.176	0.03	31.4899	0.63	0.0000000	0.00	0.0747112	9.65
		Σ	7.7809558	0.07	0.0000000	0.00	0.0609452	0.12	0.0004133	1.75	225.47229	0.11	1.4667102	0.08	0.0000000	0.00	49.302000	0.02	0.0405850	2.52	3.4433902	1.76	4082.3052	0.01	0.1448659	0.27	21450.555	0.01	2323.0822	0.07	0.0000000	0.00	2.4779593	2.14
		Σ							7.8423143	0.07	225.47229	0.11									54.252686	0.11			4082.4501	0.01							23776.115	0.01

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F16043	24.0 %	✓	6.187833	0.002545	0.027232	0.000408	0.003137	0.000011	73.788	4.305609	1.00052166	2.115E-11
21F16044	24.0 %	✓	6.877411	0.002768	0.034162	0.000381	0.005536	0.000015	73.794	4.306200	1.00052171	2.722E-11
21F16046	24.0 %	✓	5.636953	0.002154	0.075568	0.000198	0.001239	0.000003	73.808	4.307382	1.00052181	1.142E-10
21F16047	24.0 %	✓	5.757620	0.002285	0.043872	0.000288	0.001655	0.000006	73.815	4.307972	1.00052186	2.996E-11
21F16049	24.0 %	✓	5.584303	0.002180	0.016704	0.000177	0.001212	0.000005	73.830	4.309213	1.00052196	4.109E-11
21F16050	24.0 %	✓	5.972274	0.002396	0.038233	0.000360	0.002618	0.000009	73.837	4.309805	1.00052201	2.493E-11
21F16052	24.0 %	✓	5.925351	0.002316	0.060044	0.000255	0.002326	0.000007	73.851	4.310987	1.00052211	4.217E-11
21F16053	24.0 %	✓	5.901476	0.002323	0.050803	0.000275	0.002238	0.000007	73.858	4.311578	1.00052216	3.533E-11
21F16055	24.0 %	✓	5.545655	0.002268	0.031940	0.000357	0.000960	0.000006	73.872	4.312761	1.00052226	2.281E-11
21F16056	24.0 %	✓	6.111732	0.002395	0.076744	0.000298	0.002904	0.000008	73.879	4.313412	1.00052231	3.923E-11
21F16058	24.0 %	✓	6.073514	0.002545	0.057671	0.000481	0.002900	0.000011	73.893	4.314596	1.00052241	1.842E-11
21F16059	24.0 %	✓	5.674930	0.002304	0.032852	0.000385	0.001394	0.000007	73.900	4.315188	1.00052246	2.112E-11
21F16061	24.0 %	✓	6.170446	0.002649	0.018453	0.000519	0.003147	0.000013	73.914	4.316371	1.00052255	1.449E-11
21F16062	24.0 %	✓	5.690454	0.002226	0.063873	0.000246	0.001372	0.000005	73.921	4.316964	1.00052260	3.913E-11
21F16064	24.0 %	✓	5.774968	0.002287	0.046288	0.000247	0.001652	0.000006	73.935	4.318207	1.00052271	3.456E-11
21F16065	24.0 %	✓	5.944344	0.002353	0.071325	0.000281	0.002430	0.000007	73.942	4.318800	1.00052276	3.662E-11
21F16067	24.0 %	✓	5.735042	0.002335	0.030217	0.000394	0.001712	0.000008	73.956	4.319985	1.00052285	2.145E-11
21F16068	24.0 %	✓	5.971543	0.002578	0.093487	0.000606	0.002325	0.000011	73.963	4.320577	1.00052290	1.388E-11
21F16070	24.0 %	✓	5.791237	0.002414	0.041294	0.000445	0.001744	0.000009	73.977	4.321763	1.00052300	1.855E-11
21F16071	24.0 %	✓	5.809419	0.002330	0.039877	0.000312	0.001825	0.000007	73.985	4.322415	1.00052305	2.709E-11
21F16073	24.0 %	✓	5.534103	0.002215	0.023789	0.000298	0.000940	0.000005	73.999	4.323601	1.00052315	2.596E-11
21F16074	24.0 %	✓	5.632792	0.004070	0.007397	0.002063	0.001256	0.000025	74.006	4.324194	1.00052320	3.705E-12
21F16076	24.0 %	✓	5.611212	0.002501	0.032897	0.000591	0.001137	0.000009	74.019	4.325380	1.00052330	1.246E-11
21F16077	24.0 %	✓	7.161289	0.003465	0.126097	0.001077	0.006254	0.000024	74.026	4.325974	1.00052335	9.689E-12
21F16079	24.0 %	✓	5.734547	0.002267	0.031398	0.000231	0.001554	0.000006	74.041	4.327220	1.00052345	3.353E-11
21F16080	24.0 %	✓	5.659251	0.002294	0.040898	0.000368	0.001583	0.000008	74.048	4.327813	1.00052350	2.149E-11
21F16082	24.0 %	✓	5.818112	0.002343	0.111117	0.000427	0.001972	0.000008	74.062	4.329001	1.00052360	2.538E-11
21F16083	24.0 %	✓	5.932258	0.002384	0.077452	0.000384	0.002240	0.000008	74.069	4.329595	1.00052365	2.416E-11
21F16085	24.0 %	✓	5.710971	0.002401	0.165555	0.000623	0.001451	0.000008	74.083	4.330783	1.00052375	1.767E-11
21F16086	24.0 %	✓	5.554968	0.002262	0.045880	0.000359	0.000869	0.000005	74.090	4.331377	1.00052380	2.420E-11

Procedure Blanks		**36Ar ± 1σ (SE) [fA]**	**37Ar ± 1σ (SE) [fA]**	**38Ar ± 1σ (SE) [fA]**	**39Ar ± 1σ (SE) [fA]**	**40Ar ± 1σ (SE) [fA]**
21F16043	24.0 %	0.0248109 ±0.0002480	0.0155757 ±0.0064985	0.0013220 ±0.0059824	0.0100610 ±0.0061171	6.4373683 ±0.0170472
21F16044	24.0 %	0.0248109 ±0.0002480	0.0155757 ±0.0064985	0.0013220 ±0.0059824	0.0100610 ±0.0061171	6.4373683 ±0.0170472
21F16046	24.0 %	0.0261629 ±0.0002736	0.0105953 ±0.0065289	0.0059296 ±0.0064466	0.0240101 ±0.0056295	6.7038504 ±0.0158334
21F16047	24.0 %	0.0261629 ±0.0002736	0.0105953 ±0.0065289	0.0059296 ±0.0064466	0.0240101 ±0.0056295	6.7038504 ±0.0158334
21F16049	24.0 %	0.0242328 ±0.0002785	0.0158726 ±0.0063863	0.0185066 ±0.0060029	0.0405977 ±0.0059619	6.5829056 ±0.0140250
21F16050	24.0 %	0.0242328 ±0.0002785	0.0158726 ±0.0063863	0.0185066 ±0.0060029	0.0405977 ±0.0059619	6.5829056 ±0.0140250
21F16052	24.0 %	0.0250242 ±0.0002681	0.0099739 ±0.0064289	0.0072558 ±0.0067895	0.0271810 ±0.0061059	6.6232466 ±0.0156330
21F16053	24.0 %	0.0250242 ±0.0002681	0.0099739 ±0.0064289	0.0072558 ±0.0067895	0.0271810 ±0.0061059	6.6232466 ±0.0156330
21F16055	24.0 %	0.0250556 ±0.0002862	0.0090514 ±0.0067136	0.0013345 ±0.0056850	0.0330117 ±0.0066321	6.9422266 ±0.0160274
21F16056	24.0 %	0.0250556 ±0.0002862	0.0090514 ±0.0067136	0.0013345 ±0.0056850	0.0330117 ±0.0066321	6.9422266 ±0.0160274
21F16058	24.0 %	0.0236281 ±0.0002967	0.0128128 ±0.0066570	0.0049284 ±0.0069893	0.0587778 ±0.0060006	6.5211164 ±0.0166045
21F16059	24.0 %	0.0236281 ±0.0002967	0.0128128 ±0.0066570	0.0049284 ±0.0069893	0.0587778 ±0.0060006	6.5211164 ±0.0166045
21F16061	24.0 %	0.0237544 ±0.0002687	0.0141280 ±0.0051112	0.0101092 ±0.0070038	0.0294037 ±0.0062165	6.3616634 ±0.0160964
21F16062	24.0 %	0.0237544 ±0.0002687	0.0141280 ±0.0051112	0.0101092 ±0.0070038	0.0294037 ±0.0062165	6.3616634 ±0.0160964
21F16064	24.0 %	0.0243342 ±0.0002453	0.0043712 ±0.0065052	0.0094690 ±0.0063211	0.0602146 ±0.0065987	6.6634169 ±0.0146654
21F16065	24.0 %	0.0243342 ±0.0002453	0.0043712 ±0.0065052	0.0094690 ±0.0063211	0.0602146 ±0.0065987	6.6634169 ±0.0146654
21F16067	24.0 %	0.0254155 ±0.0002716	0.0067071 ±0.0060493	0.0058487 ±0.0053804	0.0282056 ±0.0061620	6.5965956 ±0.0132137
21F16068	24.0 %	0.0254155 ±0.0002716	0.0067071 ±0.0060493	0.0058487 ±0.0053804	0.0282056 ±0.0061620	6.5965956 ±0.0132137
21F16070	24.0 %	0.0233486 ±0.0002810	0.0038244 ±0.0064503	0.0011080 ±0.0063140	0.0290426 ±0.0065464	6.3074472 ±0.0165039
21F16071	24.0 %	0.0233486 ±0.0002810	0.0038244 ±0.0064503	0.0011080 ±0.0063140	0.0290426 ±0.0065464	6.3074472 ±0.0165039
21F16073	24.0 %	0.0242664 ±0.0002636	0.0128077 ±0.0060350	0.0045999 ±0.0069190	0.0344165 ±0.0063961	6.6223375 ±0.0157273
21F16074	24.0 %	0.0242664 ±0.0002636	0.0128077 ±0.0060350	0.0045999 ±0.0069190	0.0344165 ±0.0063961	6.6223375 ±0.0157273
21F16076	24.0 %	0.0237327 ±0.0002806	0.0087664 ±0.0060774	0.0008674 ±0.0072814	0.0149165 ±0.0066932	6.4593529 ±0.0151561
21F16077	24.0 %	0.0237327 ±0.0002806	0.0087664 ±0.0060774	0.0008674 ±0.0072814	0.0149165 ±0.0066932	6.4593529 ±0.0151561
21F16079	24.0 %	0.0265814 ±0.0002775	0.0136304 ±0.0059038	0.0009544 ±0.0067363	0.0143263 ±0.0069248	6.9177815 ±0.0158139
21F16080	24.0 %	0.0265814 ±0.0002775	0.0136304 ±0.0059038	0.0009544 ±0.0067363	0.0143263 ±0.0069248	6.9177815 ±0.0158139
21F16082	24.0 %	0.0247965 ±0.0002884	0.0101639 ±0.0062152	0.0133314 ±0.0068320	0.0473879 ±0.0055818	6.4847018 ±0.0148029
21F16083	24.0 %	0.0247965 ±0.0002884	0.0101639 ±0.0062152	0.0133314 ±0.0068320	0.0473879 ±0.0055818	6.4847018 ±0.0148029
21F16085	24.0 %	0.0249134 ±0.0002654	0.0139900 ±0.0067753	0.0125398 ±0.0063175	0.0397597 ±0.0064297	6.6984479 ±0.0158295
21F16086	24.0 %	0.0249134 ±0.0002654	0.0139900 ±0.0067753	0.0125398 ±0.0063175	0.0397597 ±0.0064297	6.6984479 ±0.0158295

Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F16043	24.0 %	0.3100770 ±0.0008388	0.8970	EXP 150 of 150	0.6212962 ±0.0061678	0.4841	EXP 150 of 150	1.2976683 ±0.0070735	0.8186	EXP 150 of 150	96.25447 ±0.01314	0.9999	EXP 148 of 150	603.91941 ±0.03595	1.0000	EXP 150 of 150
21F16044	24.0 %	0.6078103 ±0.0012293	0.9585	EXP 150 of 150	0.8952659 ±0.0070356	0.5888	EXP 150 of 150	1.5592105 ±0.0063242	0.8793	EXP 150 of 150	111.44917 ±0.01327	0.9999	EXP 150 of 150	775.34363 ±0.03659	1.0000	EXP 150 of 150
21F16046	24.0 %	0.6942538 ±0.0012591	0.9460	EXP 150 of 150	9.9699496 ±0.0080208	0.9931	EXP 150 of 150	7.5555631 ±0.0070638	0.9928	EXP 150 of 150	570.52930 ±0.03160	1.0000	EXP 150 of 150	3233.07908 ±0.09120	1.0000	EXP 150 of 150
21F16047	24.0 %	0.2552221 ±0.0006654	0.8420	EXP 150 of 150	1.4952291 ±0.0062935	0.8153	EXP 149 of 150	1.9197365 ±0.0067157	0.8981	EXP 150 of 150	146.52987 ±0.01539	0.9999	EXP 150 of 150	852.97367 ±0.04241	1.0000	EXP 150 of 150
21F16049	24.0 %	0.2614347 ±0.0008402	0.7687	EXP 150 of 150	0.8149895 ±0.0051858	0.6437	EXP 146 of 150	2.6673512 ±0.0070522	0.9419	EXP 148 of 150	207.22235 ±0.01802	0.9999	EXP 150 of 150	1167.31320 ±0.04968	1.0000	EXP 150 of 150
21F16050	24.0 %	0.3150328 ±0.0007902	0.9032	EXP 149 of 150	1.0534955 ±0.0069748	0.6565	EXP 150 of 150	1.5854307 ±0.0074309	0.8375	EXP 150 of 150	117.58815 ±0.01345	0.9999	EXP 148 of 150	710.89354 ±0.03768	1.0000	EXP 150 of 150
21F16052	24.0 %	0.4654915 ±0.0010127	0.9324	EXP 147 of 150	2.7870550 ±0.0072948	0.9301	EXP 150 of 150	2.7115521 ±0.0074094	0.9423	EXP 150 of 150	200.40378 ±0.01777	0.9999	EXP 149 of 150	1197.78850 ±0.04918	1.0000	EXP 149 of 150
21F16053	24.0 %	0.3815723 ±0.0009259	0.9136	EXP 149 of 150	1.9862935 ±0.0070987	0.8819	EXP 150 of 150	2.2197001 ±0.0076527	0.9002	EXP 150 of 150	168.58813 ±0.01647	0.9999	EXP 150 of 150	1004.61869 ±0.04182	1.0000	EXP 149 of 150
21F16055	24.0 %	0.1301481 ±0.0005512	0.1220	EXP 150 of 150	0.8625930 ±0.0064451	0.5641	EXP 150 of 150	1.5396355 ±0.0071332	0.8281	EXP 150 of 150	115.85715 ±0.01529	0.9999	EXP 149 of 150	651.35322 ±0.04030	1.0000	EXP 149 of 150
21F16056	24.0 %	0.5209955 ±0.0011095	0.9450	EXP 150 of 150	3.2090077 ±0.0070312	0.9490	EXP 150 of 150	2.4066807 ±0.0072457	0.9310	EXP 150 of 150	180.78145 ±0.01643	0.9999	EXP 149 of 150	1115.22326 ±0.04536	1.0000	EXP 150 of 150
21F16058	24.0 %	0.2576522 ±0.0007280	0.8636	EXP 149 of 150	1.1485841 ±0.0061617	0.7408	EXP 149 of 150	1.1465778 ±0.0062667	0.7782	EXP 150 of 150	85.45321 ±0.01305	0.9998	EXP 150 of 150	526.85331 ±0.03390	1.0000	EXP 150 of 150
21F16059	24.0 %	0.1616415 ±0.0005811	0.5434	EXP 150 of 150	0.8067600 ±0.0062186	0.5680	EXP 150 of 150	1.3886202 ±0.0070539	0.8193	EXP 150 of 150	104.86333 ±0.01308	0.9999	EXP 150 of 150	603.21522 ±0.03331	1.0000	EXP 144 of 150
21F16061	24.0 %	0.2202998 ±0.0007183	0.7924	EXP 150 of 150	0.2953103 ±0.0060022	0.1785	EXP 149 of 150	0.8877487 ±0.0068884	0.6628	EXP 150 of 150	66.12886 ±0.01077	0.9998	EXP 150 of 150	415.55224 ±0.02990	0.9999	EXP 150 of 150
21F16062	24.0 %	0.2748057 ±0.0008285	0.7669	EXP 150 of 150	2.8650614 ±0.0068306	0.9386	EXP 150 of 150	2.5525861 ±0.0070878	0.9340	EXP 150 of 150	193.67231 ±0.01708	0.9999	EXP 150 of 150	1111.86395 ±0.04895	1.0000	EXP 150 of 150
21F16064	24.0 %	0.2873021 ±0.0008189	0.8299	EXP 150 of 150	1.8016443 ±0.0055394	0.9086	EXP 149 of 150	2.2246421 ±0.0072144	0.9202	EXP 150 of 150	168.56007 ±0.01714	0.9999	EXP 150 of 150	982.91175 ±0.05021	1.0000	EXP 150 of 150
21F16065	24.0 %	0.4226201 ±0.0009397	0.9269	EXP 149 of 150	2.8552326 ±0.0060270	0.9537	EXP 150 of 150	2.3213570 ±0.0070708	0.9279	EXP 150 of 150	173.54178 ±0.01792	0.9999	EXP 150 of 150	1041.25396 ±0.04939	1.0000	EXP 150 of 150
21F16067	24.0 %	0.1958077 ±0.0006723	0.6857	EXP 150 of 150	0.7396835 ±0.0071744	0.4140	EXP 150 of 150	1.3795305 ±0.0068199	0.8209	EXP 150 of 150	105.33922 ±0.01364	0.9999	EXP 150 of 150	612.52551 ±0.03343	1.0000	EXP 145 of 150
21F16068	24.0 %	0.1691594 ±0.0006020	0.6567	EXP 150 of 150	1.4153119 ±0.0059231	0.8333	EXP 149 of 150	0.8509270 ±0.0068711	0.5996	EXP 149 of 150	65.45146 ±0.01079	0.9998	EXP 149 of 150	398.54597 ±0.03296	0.9999	EXP 150 of 150
21F16070	24.0 %	0.1719835 ±0.0006286	0.6254	EXP 149 of 150	0.8614923 ±0.0062871	0.5962	EXP 150 of 150	1.2142420 ±0.0055958	0.8563	EXP 144 of 150	90.23654 ±0.01295	0.9998	EXP 149 of 150	530.42087 ±0.03662	1.0000	EXP 150 of 150
21F16071	24.0 %	0.2497065 ±0.0007765	0.7995	EXP 150 of 150	1.2090691 ±0.0062508	0.7624	EXP 150 of 150	1.7300351 ±0.0066569	0.8766	EXP 149 of 150	131.31847 ±0.01506	0.9999	EXP 149 of 150	771.50538 ±0.03999	1.0000	EXP 150 of 150
21F16073	24.0 %	0.1416247 ±0.0005176	0.2029	EXP 146 of 150	0.7360771 ±0.0065272	0.5250	EXP 150 of 150	1.7331713 ±0.0069433	0.8758	EXP 150 of 150	132.14054 ±0.01497	0.9999	EXP 148 of 150	740.09098 ±0.03652	1.0000	EXP 146 of 150
21F16074	24.0 %	0.0462503 ±0.0003521	0.5434	EXP 150 of 150	0.0443327 ±0.0063910	0.0016	EXP 150 of 150	0.2537821 ±0.0064690	0.1492	EXP 150 of 150	18.55399 ±0.00813	0.9984	EXP 148 of 150	111.27883 ±0.02226	0.9991	EXP 149 of 150
21F16076	24.0 %	0.0909306 ±0.0004588	0.0050	EXP 150 of 150	0.4820254 ±0.0058417	0.3724	EXP 149 of 150	0.8226528 ±0.0066250	0.5877	EXP 150 of 150	62.55035 ±0.01197	0.9997	EXP 150 of 150	358.50117 ±0.02874	0.9999	EXP 150 of 150
21F16077	24.0 %	0.2488940 ±0.0007377	0.8775	EXP 150 of 150	1.1137490 ±0.0067025	0.6655	EXP 150 of 150	0.5499750 ±0.0064445	0.4527	EXP 148 of 150	38.11166 ±0.00839	0.9996	EXP 149 of 150	280.16930 ±0.02687	0.9999	EXP 149 of 150
21F16079	24.0 %	0.2683823 ±0.0007407	0.8357	EXP 149 of 150	1.2021408 ±0.0057488	0.7919	EXP 149 of 150	2.1464350 ±0.0066341	0.9247	EXP 150 of 150	164.62497 ±0.01645	0.9999	EXP 149 of 150	953.95825 ±0.04380	1.0000	EXP 150 of 150
21F16080	24.0 %	0.1865068 ±0.0007110	0.5645	EXP 150 of 150	1.0192367 ±0.0064044	0.6472	EXP 149 of 150	1.4327972 ±0.0069105	0.8382	EXP 150 of 150	106.95527 ±0.01229	0.9999	EXP 150 of 150	614.09364 ±0.03948	1.0000	EXP 150 of 150
21F16082	24.0 %	0.2536516 ±0.0007792	0.7966	EXP 150 of 150	3.1468468 ±0.0070098	0.9483	EXP 150 of 150	1.6536892 ±0.0065801	0.8739	EXP 149 of 150	122.85589 ±0.01447	0.9999	EXP 150 of 150	723.32450 ±0.04401	1.0000	EXP 150 of 150
21F16083	24.0 %	0.2675261 ±0.0007363	0.8635	EXP 150 of 150	2.0516897 ±0.0062678	0.9085	EXP 149 of 150	1.5358701 ±0.0069103	0.8413	EXP 150 of 150	114.73651 ±0.01345	0.9999	EXP 149 of 150	689.06523 ±0.03601	1.0000	EXP 147 of 150
21F16085	24.0 %	0.1443894 ±0.0005432	0.4123	EXP 150 of 150	3.3280869 ±0.0067282	0.9580	EXP 148 of 150	1.1521445 ±0.0065516	0.7842	EXP 150 of 150	87.16449 ±0.01328	0.9998	EXP 150 of 150	505.88524 ±0.03511	0.9999	EXP 150 of 150
21F16086	24.0 %	0.1257100 ±0.0005302	0.0560	EXP 147 of 150	1.3071362 ±0.0068378	0.7561	EXP 150 of 150	1.6262521 ±0.0064295	0.8827	EXP 150 of 150	122.72660 ±0.01639	0.9999	EXP 149 of 150	690.43874 ±0.03456	1.0000	EXP 149 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F16043	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16044	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16046	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16047	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16049	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16050	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16052	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16053	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16055	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16056	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16058	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16059	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16061	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16062	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16064	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16065	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16067	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16068	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16070	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16071	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16073	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16074	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16076	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16077	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16079	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16080	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16082	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16083	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16085	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01
21F16086	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	10.05	Oregon\Swenton (20-01)	21F16039	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F16043	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	10	25	1
21F16044	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	10	35	1
21F16046	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	10	55	1
21F16047	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	11	5	1
21F16049	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	11	26	1
21F16050	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	11	36	1
21F16052	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	11	56	1
21F16053	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	12	6	1
21F16055	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	12	26	1
21F16056	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	12	37	1
21F16058	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	12	57	1
21F16059	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	13	7	1
21F16061	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	13	27	1
21F16062	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	13	37	1
21F16064	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	13	58	1
21F16065	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	14	8	1
21F16067	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	14	28	1
21F16068	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	14	38	1
21F16070	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	14	58	1
21F16071	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	15	9	1
21F16073	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	15	29	1
21F16074	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	15	39	1
21F16076	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	15	59	1
21F16077	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	16	9	1
21F16079	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	16	30	1
21F16080	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	16	40	1
21F16082	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	17	0	1
21F16083	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	17	10	1
21F16085	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	17	30	1
21F16086	24.0 %	VS19-079	Biotite	Birch Creek	FCT-NM (4X10-21)	28.201	0.082	Kuiper et al (2008)	9.39513	0.113	0.00165250	0.113	301.85	0.111	0.9972716	0.038	1	3.54E-14	29	AUG	2021	17	40	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F16043	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16044	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16046	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16047	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16049	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16050	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16052	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16053	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16055	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16056	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16058	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16059	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16061	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16062	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16064	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16065	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16067	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16068	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16070	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16071	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16073	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16074	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16076	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16077	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16079	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16080	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16082	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16083	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16085	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16086	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

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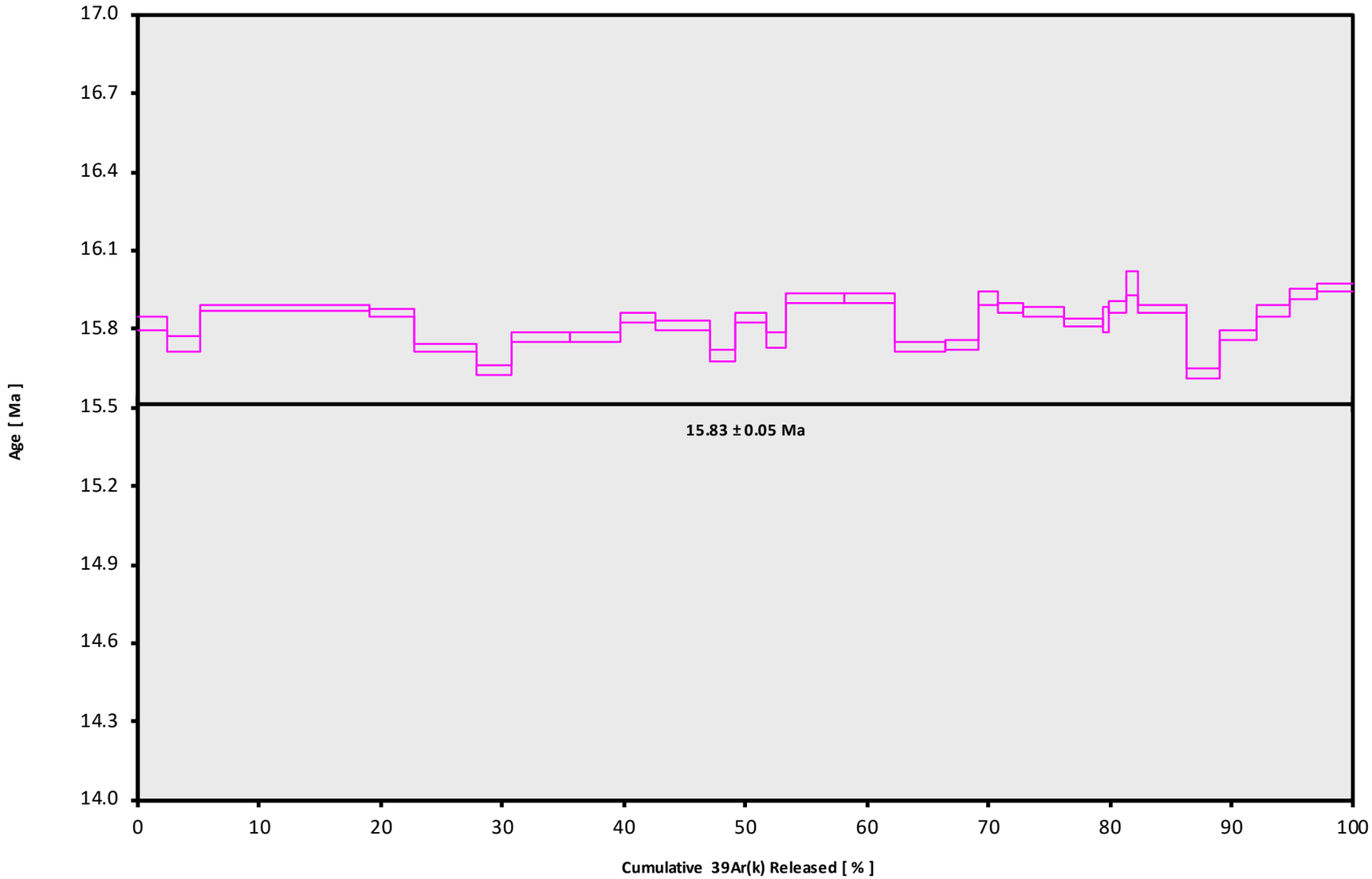


Ar-Ages in Ma

WEIGHTED PLATEAU
15.83 ± 0.05
TOTAL FUSION
15.83 ± 0.04
NORMAL ISOCHRON
15.88 ± 0.08
INVERSE ISOCHRON
15.88 ± 0.08

MSWD (PROBABILITY)
80.21 (0%)

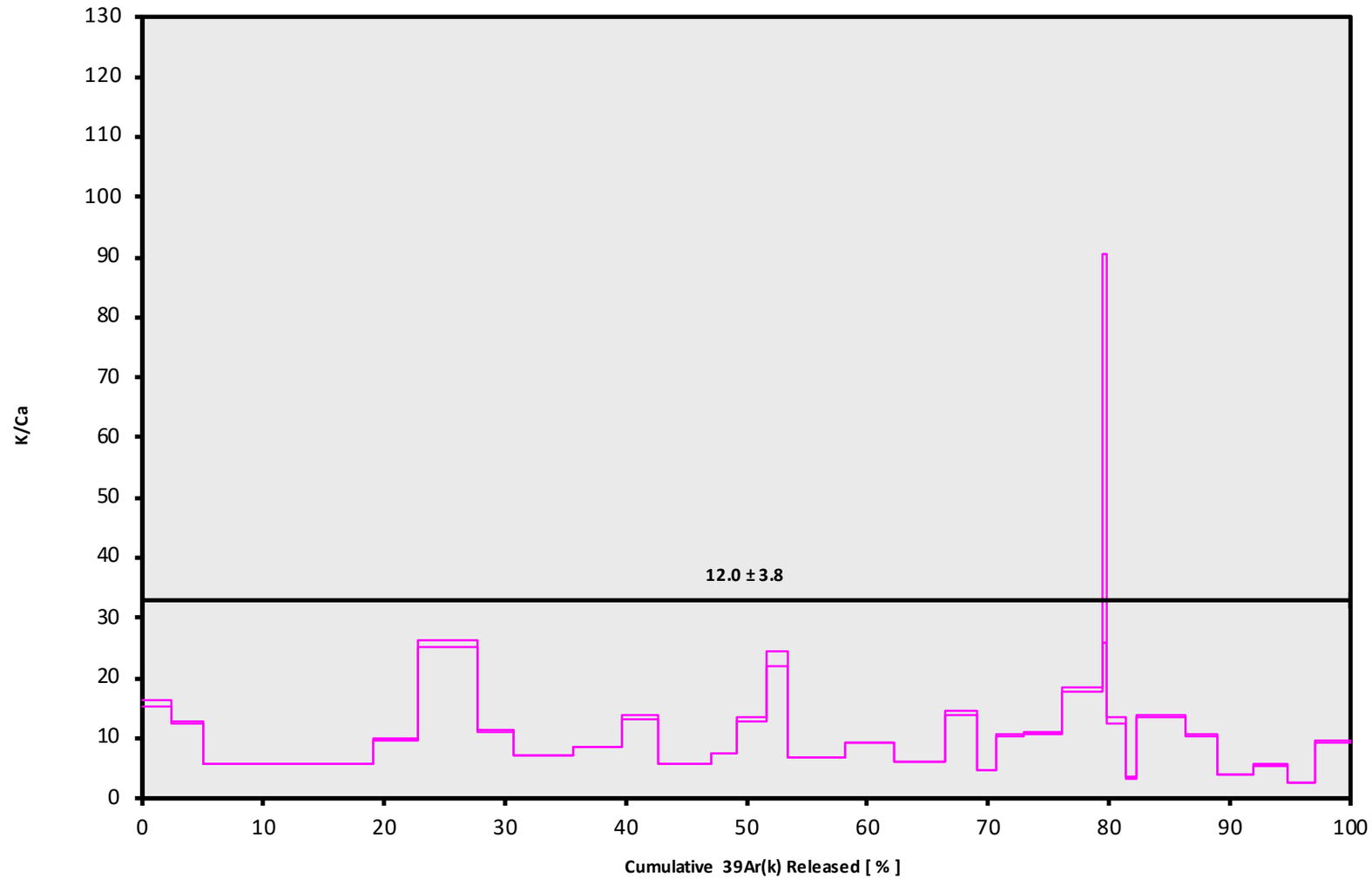
ASSUMED TRAPPED

Sample Info

Biotite
Birch Creek
Dan Miggins

IRR = 21-OSU-04 (4X10-21)

21F16039.AGE >>> VS19-079 >>> OREGON | SWENTON (20-01) PROJECT



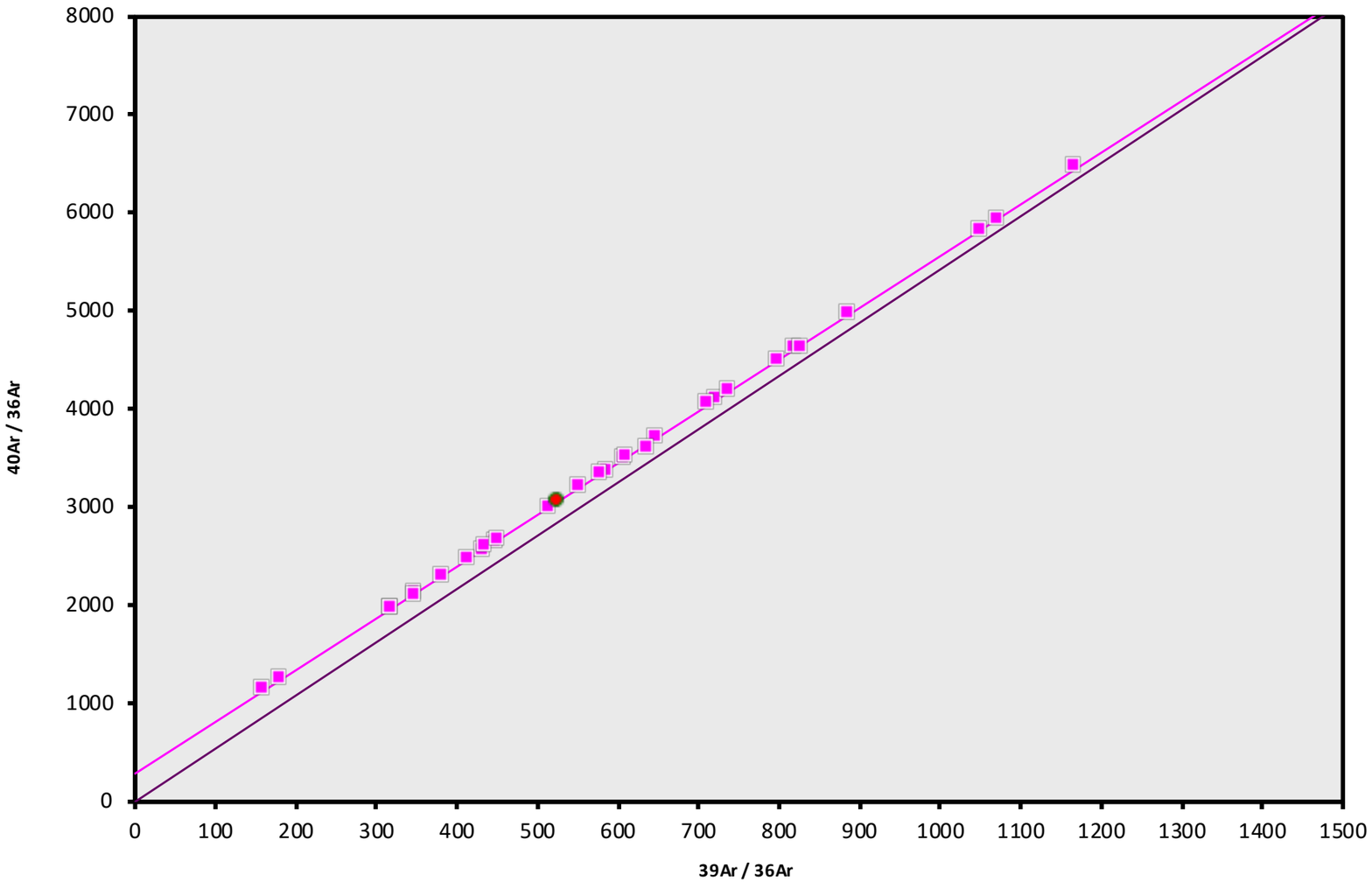
Ar-Ages in Ma

WEIGHTED PLATEAU
15.83 ± 0.05
TOTAL FUSION
15.83 ± 0.04
NORMAL ISOCHRON
15.88 ± 0.08
INVERSE ISOCHRON
15.88 ± 0.08

Sample Info

Biotite
Birch Creek
Dan Miggins

21F16039.AGE >>> VS19-079 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

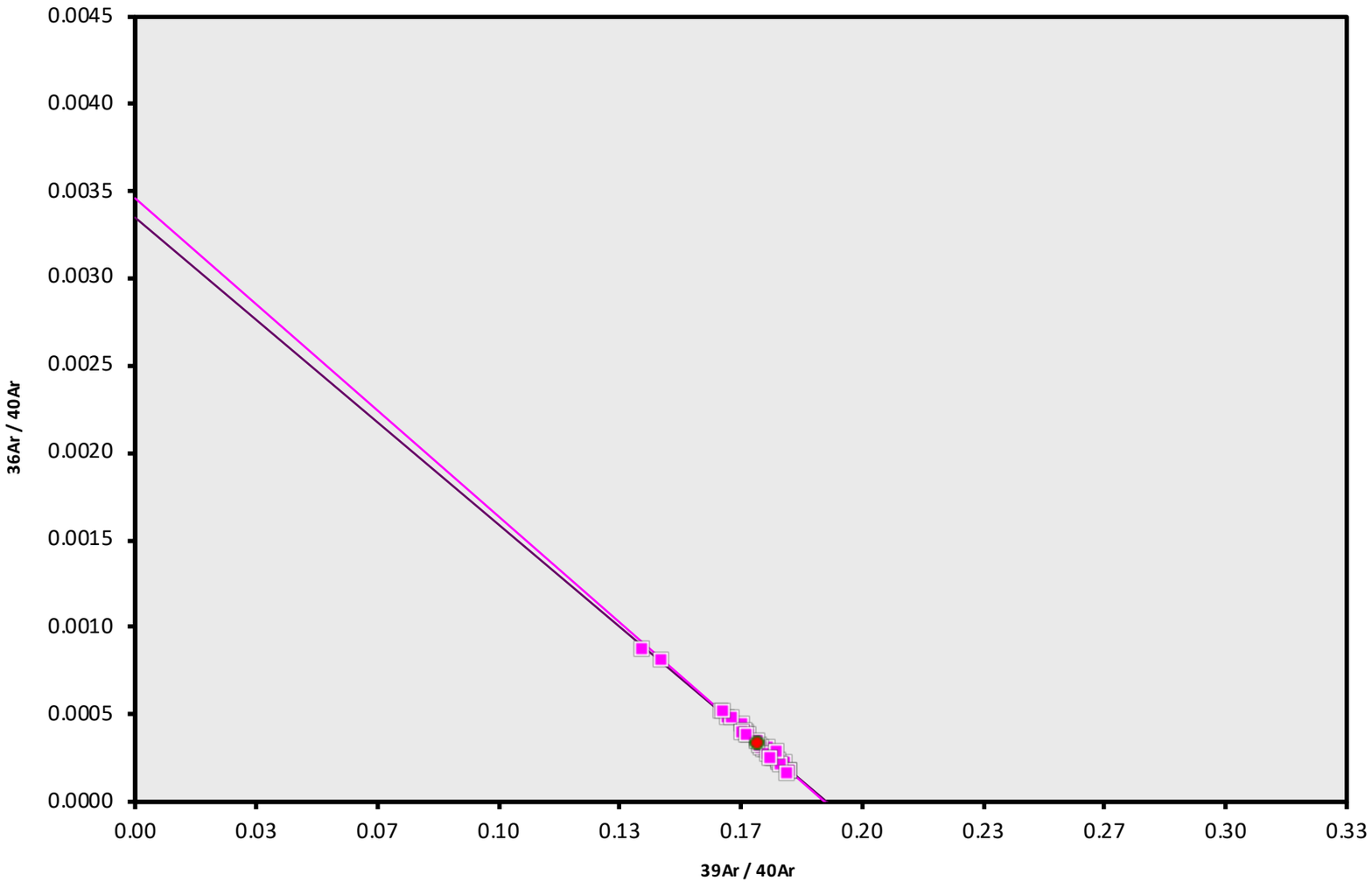
WEIGHTED PLATEAU
15.83 ± 0.05
TOTAL FUSION
15.83 ± 0.04
NORMAL ISOCHRON
15.88 ± 0.08
INVERSE ISOCHRON
15.88 ± 0.08

MSWD (PROBABILITY)
81.50 (0%)

Sample Info

Biotite
Birch Creek
Dan Miggins

21F16039.AGE >>> VS19-079 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
15.83 ± 0.05
TOTAL FUSION
15.83 ± 0.04
NORMAL ISOCHRON
15.88 ± 0.08
INVERSE ISOCHRON
15.88 ± 0.08

MSWD (PROBABILITY)
78.85 (0%)

Sample Info

Biotite
Birch Creek
Dan Miggins

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
21F16452	24.0 %	✓	0.3234530	0.354	0.702143	6.268	1.019009	0.872	75.2127	0.043	365.164	0.009	3.57131 ±0.01001	10.77 ±0.03	73.56	3.14	46.1 ±5.8
21F16453	24.0 %	✓	0.2571236	0.378	0.329005	13.432	1.265284	0.753	98.0182	0.042	427.059	0.008	3.57343 ±0.00687	10.77 ±0.02	82.02	4.10	128.1 ±34.4
21F16455	24.0 %	✓	0.9551961	0.209	1.089195	3.897	1.606515	0.618	114.1820	0.042	691.930	0.006	3.56247 ±0.01207	10.74 ±0.04	58.79	4.77	45.1 ±3.5
21F16456	24.0 %	✓	1.0422621	0.219	4.752525	0.897	2.849727	0.344	207.2837	0.040	1051.759	0.005	3.57412 ±0.00785	10.77 ±0.02	70.44	8.66	18.8 ±0.3
21F16458	24.0 %	✓	0.2975793	0.388	1.377072	3.087	0.979181	0.989	74.7034	0.043	356.305	0.009	3.58123 ±0.01007	10.80 ±0.03	75.08	3.12	23.3 ±1.4
21F16459	24.0 %	✓	0.2145918	0.442	0.594267	7.147	0.760916	1.285	57.1742	0.046	267.347	0.011	3.55569 ±0.01074	10.72 ±0.03	76.04	2.39	41.4 ±5.9
21F16461	24.0 %	✓	0.1461244	0.518	0.753640	5.901	0.879624	0.995	66.4470	0.044	281.081	0.011	3.57395 ±0.00768	10.77 ±0.02	84.49	2.78	37.9 ±4.5
21F16462	24.0 %	✓	0.0988378	0.743	1.002675	4.414	0.658995	1.238	49.4503	0.046	205.884	0.014	3.56783 ±0.00961	10.75 ±0.03	85.69	2.07	21.2 ±1.9
21F16464	24.0 %	✓	0.1242639	0.593	0.122736	36.122	0.483434	1.998	36.4943	0.052	165.964	0.017	3.53075 ±0.01287	10.64 ±0.04	77.64	1.52	127.9 ±92.4
21F16465	24.0 %	✓	0.3663458	0.312	3.030541	1.556	1.496184	0.646	112.8317	0.041	508.895	0.007	3.54248 ±0.00705	10.68 ±0.02	78.54	4.71	16.0 ±0.5
21F16467	24.0 %	✓	0.3569765	0.328	3.242973	1.290	1.422102	0.617	105.7403	0.042	483.681	0.007	3.56827 ±0.00758	10.76 ±0.02	78.01	4.42	14.0 ±0.4
21F16468	24.0 %	✓	0.2833396	0.348	3.181934	1.362	1.519316	0.584	114.9531	0.042	495.885	0.008	3.57962 ±0.00615	10.79 ±0.02	82.98	4.80	15.5 ±0.4
21F16470	24.0 %	✓	0.4340836	0.286	3.941175	1.121	1.115026	0.773	82.3016	0.043	422.086	0.009	3.55721 ±0.01011	10.72 ±0.03	69.36	3.44	9.0 ±0.2
21F16471	24.0 %	✓	0.0730472	0.980	0.208959	21.085	0.473043	1.954	36.1280	0.050	150.527	0.018	3.56272 ±0.01251	10.74 ±0.04	85.51	1.51	74.3 ±31.4
21F16473	24.0 %	✓	0.1327737	0.644	0.191858	20.798	0.740897	1.234	57.4313	0.045	244.687	0.012	3.56996 ±0.00961	10.76 ±0.03	83.79	2.40	128.7 ±53.5
21F16474	24.0 %	✓	0.5494369	0.271	3.407259	1.247	1.474240	0.608	106.3628	0.042	542.819	0.007	3.56329 ±0.00946	10.74 ±0.03	69.82	4.44	13.4 ±0.3
21F16476	24.0 %	✓	0.3217640	0.344	2.094346	2.168	1.079258	0.874	79.8952	0.043	380.806	0.008	3.56552 ±0.00919	10.75 ±0.03	74.81	3.34	16.4 ±0.7
21F16477	24.0 %	✓	0.1063397	0.634	0.138780	30.825	0.255010	3.591	17.7302	0.070	94.888	0.028	3.56120 ±0.02373	10.74 ±0.07	66.54	0.74	54.9 ±33.9
21F16479	24.0 %	✓	0.2041106	2.811	0.377961	12.156	0.942333	0.981	69.9214	0.048	310.580	0.011	3.57018 ±0.04915	10.76 ±0.15	80.38	2.92	79.5 ±19.3
21F16480	24.0 %	✓	0.5816333	1.007	0.847542	4.933	1.250251	0.738	88.2128	0.045	487.915	0.008	3.56277 ±0.04000	10.74 ±0.12	64.41	3.69	44.8 ±4.4
21F16482	24.0 %	✓	0.1122672	0.675	0.313286	12.885	0.782900	1.196	60.6928	0.046	249.578	0.012	3.55973 ±0.00829	10.73 ±0.02	86.57	2.54	83.3 ±21.5
21F16483	24.0 %	✓	0.4410105	0.285	0.100141	39.206	0.553526	1.718	37.7585	0.051	266.578	0.011	3.57258 ±0.02155	10.77 ±0.06	50.60	1.58	162.1 ±127.1
21F16485	24.0 %	✓	0.2032942	0.453	1.420862	3.061	1.200338	0.768	90.7119	0.042	384.785	0.010	3.57346 ±0.00696	10.77 ±0.02	84.24	3.79	27.5 ±1.7
21F16486	24.0 %	✓	0.3479440	0.334	0.311763	13.926	0.930050	1.013	67.8370	0.045	344.026	0.009	3.53981 ±0.01121	10.67 ±0.03	69.80	2.83	93.6 ±26.1
21F16488	24.0 %	✓	0.2030495	0.444	0.546255	7.369	1.692331	0.550	132.3159	0.041	534.263	0.007	3.57937 ±0.00516	10.79 ±0.02	88.65	5.53	104.2 ±15.4
21F16489	24.0 %	✓	0.0947575	0.711	0.049331	83.743	0.377772	2.433	28.3865	0.056	130.182	0.021	3.58901 ±0.01500	10.82 ±0.05	78.26	1.19	247.4 ±414.4
21F16491	24.0 %	✓	0.5163440	0.257	0.318279	14.277	0.606924	1.521	39.5152	0.049	295.821	0.011	3.58509 ±0.02196	10.81 ±0.07	47.89	1.65	53.4 ±15.2
21F16492	24.0 %	✓	0.1822501	0.444	6.121463	0.778	2.434189	0.402	188.9093	0.041	730.187	0.006	3.57935 ±0.00394	10.79 ±0.01	92.60	7.89	13.3 ±0.2
21F16494	24.0 %	✓	0.0487809	1.273	0.074390	56.824	0.354514	2.460	26.8538	0.056	110.633	0.024	3.57713 ±0.01456	10.78 ±0.04	86.83	1.12	155.2 ±176.4
21F16495	24.0 %	✓	0.1601474	0.504	0.502772	8.913	0.931260	1.024	69.7902	0.044	296.884	0.011	3.56886 ±0.00777	10.76 ±0.02	83.89	2.92	59.7 ±10.6
		Σ	9.1791281	0.110	41.145125	0.577	32.134150	0.158	2393.2449	0.009	11278.199	0.002					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-085**
Material = **Biotite**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X11-21)**
Position = **X: 0 | Y: 0 | Z/H: 11.20754 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.40011 ± 0.01062**
FCT-NM J-value = **0.00165163 ± 0.00000187**
Air Shot 40Ar/36Ar = **299.9130 ± 0.3569**
Air Shot MDF = **0.99887072 ± 0.00039383 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **3.00 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau		3.57004 ±0.00434	**10.76 ±0.03**	7.52	100.00	65.2 ±20.8
Error Mean		±0.12%	**±0.26%**	0%	30	
		Full External Error	±0.56	1.53	2σ Confidence Limit	
		Analytical Error	±0.01	2.7418	Error Magnification	
Total Fusion Age		3.56825 ±0.00266	**10.76 ±0.03**		30	25.0 ±0.3
		±0.07%	**±0.24%**			
		Full External Error	±0.56			
		Analytical Error	±0.01			
Normal Isochron	**296.19 ±2.31**	3.57686 ±0.00797	**10.78 ±0.03**	7.68	100.00	
Error Chron	**±0.78%**	±0.22%	**±0.32%**	0%	30	
		Full External Error	±0.56	1.53	2σ Confidence Limit	
		Analytical Error	±0.02	2.7705	Error Magnification	
				40	Number of Iterations	
				0.0000354605	Convergence	
Inverse Isochron	**296.56 ±2.27**	3.57574 ±0.00783	**10.78 ±0.03**	7.45	100.00	
Error Chron	**±0.77%**	±0.22%	**±0.31%**	0%	30	
		Full External Error	±0.56	1.53	2σ Confidence Limit	
		Analytical Error	±0.02	2.7291	Error Magnification	
				3	Number of Iterations	
				0.0000175313	Convergence	
				45%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
21F16452	24.0 %	✓	0.3232568	0.702143	0.0496103	75.2122	268.6063	10.77 ±0.03	73.56	3.14	46.1 ±5.8
21F16453	24.0 %	✓	0.2570304	0.329005	0.0330123	98.0179	350.2607	10.77 ±0.02	82.02	4.10	128.1 ±34.4
21F16455	24.0 %	✓	0.9548955	1.089195	0.0473541	114.1813	406.7668	10.74 ±0.04	58.79	4.77	45.1 ±3.5
21F16456	24.0 %	✓	1.0409581	4.752525	0.1493235	207.2806	740.8452	10.77 ±0.02	70.44	8.66	18.8 ±0.3
21F16458	24.0 %	✓	0.2972044	1.377072	0.0207284	74.7025	267.5266	10.80 ±0.03	75.08	3.12	23.3 ±1.4
21F16459	24.0 %	✓	0.2144273	0.594267	0.0299012	57.1739	203.2925	10.72 ±0.03	76.04	2.39	41.4 ±5.9
21F16461	24.0 %	✓	0.1459143	0.753640	0.0495091	66.4465	237.4764	10.77 ±0.02	84.49	2.78	37.9 ±4.5
21F16462	24.0 %	✓	0.0985611	1.002675	0.0430326	49.4496	176.4276	10.75 ±0.03	85.69	2.07	21.2 ±1.9
21F16464	24.0 %	✓	0.1242283	0.122736	0.0192537	36.4942	128.8521	10.64 ±0.04	77.64	1.52	127.9 ±92.4
21F16465	24.0 %	✓	0.3655184	3.030541	0.0640935	112.8297	399.6970	10.68 ±0.02	78.54	4.71	16.0 ±0.5
21F16467	24.0 %	✓	0.3560898	3.242973	0.0773948	105.7382	377.3024	10.76 ±0.02	78.01	4.42	14.0 ±0.4
21F16468	24.0 %	✓	0.2824695	3.181934	0.0772342	114.9511	411.4815	10.79 ±0.02	82.98	4.80	15.5 ±0.4
21F16470	24.0 %	✓	0.4330133	3.941175	0.0387677	82.2991	292.7554	10.72 ±0.03	69.36	3.44	9.0 ±0.2
21F16471	24.0 %	✓	0.0729878	0.208959	0.0229313	36.1279	128.7136	10.74 ±0.04	85.51	1.51	74.3 ±31.4
21F16473	24.0 %	✓	0.1327190	0.191858	0.0222487	57.4312	205.0272	10.76 ±0.03	83.79	2.40	128.7 ±53.5
21F16474	24.0 %	✓	0.5485048	3.407259	0.0857164	106.3606	378.9933	10.74 ±0.03	69.82	4.44	13.4 ±0.3
21F16476	24.0 %	✓	0.3211909	2.094346	0.0534591	79.8938	284.8632	10.75 ±0.03	74.81	3.34	16.4 ±0.7
21F16477	24.0 %	✓	0.1062995	0.138780	0.0208211	17.7301	63.1405	10.74 ±0.07	66.54	0.74	54.9 ±33.9
21F16479	24.0 %	✓	0.2040007	0.377961	0.0593735	69.9211	249.6314	10.76 ±0.15	80.38	2.92	79.5 ±19.3
21F16480	24.0 %	✓	0.5813945	0.847542	0.0751665	88.2122	314.2800	10.74 ±0.12	64.41	3.69	44.8 ±4.4
21F16482	24.0 %	✓	0.1121788	0.313286	0.0287140	60.6926	216.0490	10.73 ±0.02	86.57	2.54	83.3 ±21.5
21F16483	24.0 %	✓	0.4409816	0.100141	0.0143742	37.7585	134.8952	10.77 ±0.06	50.60	1.58	162.1 ±127.1
21F16485	24.0 %	✓	0.2029016	1.420862	0.0663185	90.7110	324.1519	10.77 ±0.02	84.24	3.79	27.5 ±1.7
21F16486	24.0 %	✓	0.3478539	0.311763	0.0451586	67.8368	240.1297	10.67 ±0.03	69.80	2.83	93.6 ±26.1
21F16488	24.0 %	✓	0.2028945	0.546255	0.0560118	132.3156	473.6061	10.79 ±0.02	88.65	5.53	104.2 ±15.4
21F16489	24.0 %	✓	0.0947419	0.049331	0.0170809	28.3864	101.8791	10.82 ±0.05	78.26	1.19	247.4 ±414.4
21F16491	24.0 %	✓	0.5162537	0.318279	0.0323300	39.5150	141.6647	10.81 ±0.07	47.89	1.65	53.4 ±15.2
21F16492	24.0 %	✓	0.1805801	6.121463	0.1176382	188.9053	676.1587	10.79 ±0.01	92.60	7.89	13.3 ±0.2
21F16494	24.0 %	✓	0.0487581	0.074390	0.0209974	26.8537	96.0592	10.78 ±0.04	86.83	1.12	155.2 ±176.4
21F16495	24.0 %	✓	0.1600039	0.502772	0.0581564	69.7898	249.0704	10.76 ±0.02	83.89	2.92	59.7 ±10.6
		Σ	9.1678123	41.145125	1.4957121	2393.2185	8539.6038				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-085**
Material = **Biotite**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X11-21)**
J = **0.00165163 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau	3.57004	±0.00434	**10.76**	**±0.03**	7.52	100.00	65.2	±20.8
Error Mean		±0.12%		**±0.26%**	0%	30		
			Full External Error	±0.56	1.53	2σ Confidence Limit		
			Analytical Error	±0.01	2.7418	Error Magnification		
Total Fusion Age	3.56825	±0.00266	**10.76**	**±0.03**		30	25.0	±0.3
		±0.07%		**±0.24%**				
			Full External Error	±0.56				
			Analytical Error	±0.01				

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
21F16452	24.0 %	✓	232.67	±1.66	1129.50	±8.01	0.9923
21F16453	24.0 %	✓	381.35	±2.90	1661.28	±12.56	0.9937
21F16455	24.0 %	✓	119.57	±0.51	724.54	±3.04	0.9803
21F16456	24.0 %	✓	199.12	±0.89	1010.26	±4.44	0.9832
21F16458	24.0 %	✓	251.35	±1.96	1198.70	±9.31	0.9936
21F16459	24.0 %	✓	266.64	±2.37	1246.63	±11.03	0.9944
21F16461	24.0 %	✓	455.38	±4.74	1926.07	±20.00	0.9962
21F16462	24.0 %	✓	501.72	±7.50	2088.59	±31.15	0.9979
21F16464	24.0 %	✓	293.77	±3.50	1335.78	±15.85	0.9958
21F16465	24.0 %	✓	308.68	±1.95	1392.07	±8.70	0.9911
21F16467	24.0 %	✓	296.94	±1.97	1358.13	±8.93	0.9917
21F16468	24.0 %	✓	406.95	±2.86	1755.29	±12.24	0.9927
21F16470	24.0 %	✓	190.06	±1.10	974.65	±5.60	0.9886
21F16471	24.0 %	✓	494.99	±9.73	2062.06	±40.47	0.9986
21F16473	24.0 %	✓	432.73	±5.59	1843.38	±23.74	0.9974
21F16474	24.0 %	✓	193.91	±1.07	989.52	±5.37	0.9879
21F16476	24.0 %	✓	248.74	±1.73	1185.46	±8.16	0.9921
21F16477	24.0 %	✓	166.79	±2.13	892.55	±11.33	0.9930
21F16479	24.0 %	✓	342.75	±19.28	1522.24	±85.62	0.9998
21F16480	24.0 %	✓	151.73	±3.06	839.12	±16.91	0.9990
21F16482	24.0 %	✓	541.03	±7.33	2224.50	±30.06	0.9975
21F16483	24.0 %	✓	85.62	±0.50	604.46	±3.45	0.9838
21F16485	24.0 %	✓	447.07	±4.08	1896.14	±17.23	0.9955
21F16486	24.0 %	✓	195.02	±1.31	988.88	±6.61	0.9907
21F16488	24.0 %	✓	652.14	±5.82	2632.81	±23.40	0.9956
21F16489	24.0 %	✓	299.62	±4.27	1373.89	±19.55	0.9965
21F16491	24.0 %	✓	76.54	±0.40	572.97	±2.95	0.9811
21F16492	24.0 %	✓	1046.10	±9.41	4042.93	±36.21	0.9958
21F16494	24.0 %	✓	550.75	±14.04	2268.68	±57.81	0.9988
21F16495	24.0 %	✓	436.18	±4.42	1855.21	±18.74	0.9961

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**296.19**	**±2.31**	3.57686	±0.00797	**10.78**	**±0.03**	7.68
Error Chron		**±0.78%**		±0.22%		**±0.32%**	0%
					Full External Error	±0.56	
					Analytical Error	±0.02	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000035460515
	Error Magnification	2.7705	Number of Iterations	40
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
21F16452	24.0 %	✓	0.2059944	±0.0001827	0.00088535	±0.00000628	0.0052
21F16453	24.0 %	✓	0.2295504	±0.0001959	0.00060195	±0.00000455	0.0043
21F16455	24.0 %	✓	0.1650351	±0.0001394	0.00138019	±0.00000578	0.0041
21F16456	24.0 %	✓	0.1971034	±0.0001605	0.00098985	±0.00000435	0.0024
21F16458	24.0 %	✓	0.2096853	±0.0001845	0.00083423	±0.00000648	0.0046
21F16459	24.0 %	✓	0.2138845	±0.0002018	0.00080216	±0.00000710	0.0059
21F16461	24.0 %	✓	0.2364304	±0.0002144	0.00051919	±0.00000539	0.0055
21F16462	24.0 %	✓	0.2402169	±0.0002299	0.00047879	±0.00000714	0.0052
21F16464	24.0 %	✓	0.2199219	±0.0002397	0.00074863	±0.00000888	0.0090
21F16465	24.0 %	✓	0.2217451	±0.0001866	0.00071836	±0.00000449	0.0039
21F16467	24.0 %	✓	0.2186405	±0.0001859	0.00073631	±0.00000484	0.0039
21F16468	24.0 %	✓	0.2318423	±0.0001963	0.00056971	±0.00000397	0.0043
21F16470	24.0 %	✓	0.1950049	±0.0001707	0.00102601	±0.00000589	0.0060
21F16471	24.0 %	✓	0.2400446	±0.0002536	0.00048495	±0.00000952	0.0064
21F16473	24.0 %	✓	0.2347466	±0.0002183	0.00054248	±0.00000699	0.0051
21F16474	24.0 %	✓	0.1959644	±0.0001671	0.00101059	±0.00000549	0.0039
21F16476	24.0 %	✓	0.2098284	±0.0001826	0.00084356	±0.00000581	0.0048
21F16477	24.0 %	✓	0.1868741	±0.0002813	0.00112039	±0.00001423	0.0164
21F16479	24.0 %	✓	0.2251614	±0.0002214	0.00065693	±0.00003695	0.0009
21F16480	24.0 %	✓	0.1808142	±0.0001644	0.00119172	±0.00002401	0.0015
21F16482	24.0 %	✓	0.2432168	±0.0002320	0.00044954	±0.00000608	0.0047
21F16483	24.0 %	✓	0.1416537	±0.0001472	0.00165438	±0.00000945	0.0084
21F16485	24.0 %	✓	0.2357783	±0.0002038	0.00052739	±0.00000479	0.0051
21F16486	24.0 %	✓	0.1972086	±0.0001804	0.00101125	±0.00000676	0.0057
21F16488	24.0 %	✓	0.2476974	±0.0002082	0.00037982	±0.00000338	0.0028
21F16489	24.0 %	✓	0.2180799	±0.0002604	0.00072786	±0.00001036	0.0100
21F16491	24.0 %	✓	0.1335880	±0.0001353	0.00174529	±0.00000897	0.0091
21F16492	24.0 %	✓	0.2587486	±0.0002120	0.00024735	±0.00000222	0.0020
21F16494	24.0 %	✓	0.2427643	±0.0002968	0.00044079	±0.00001123	0.0072
21F16495	24.0 %	✓	0.2351084	±0.0002109	0.00053902	±0.00000545	0.0052

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**296.56**	**±2.27**	3.57574	±0.00783	**10.78**	**±0.03**	7.45
Error Chron		**±0.77%**		±0.22%		**±0.31%**	0%
					Full External Error	±0.56	
					Analytical Error	±0.02	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0000175313
	Error Magnification	2.7291	Number of Iterations	3
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	44.8%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F16452	24.0 %	✓	0.3232568	0.35	0.0000000	0.00	0.0001898	6.27	0.0000064	18.55	0.702143	6.27	0.0609339	0.39	0.0000000	0.00	0.908338	0.10	0.0001264	11.49	0.0496103	18.57	75.2122	0.04	0.0004511	6.34	268.6063	0.13	96.5115	0.37	0.0000000	0.00	0.0456538	9.65
21F16453	24.0 %	✓	0.2570304	0.38	0.0000000	0.00	0.0000889	13.43	0.0000043	30.29	0.329005	13.43	0.0484502	0.41	0.0000000	0.00	1.183763	0.10	0.0000592	16.53	0.0330123	30.30	98.0179	0.04	0.0002114	13.46	350.2607	0.09	76.7390	0.39	0.0000000	0.00	0.0594969	9.65
21F16455	24.0 %	✓	0.9548955	0.21	0.0000000	0.00	0.0002944	3.90	0.0000061	22.35	1.089195	3.90	0.1799978	0.26	0.0000000	0.00	1.378967	0.10	0.0001961	10.39	0.0473541	22.37	114.1813	0.04	0.0006998	4.00	406.7668	0.16	285.0936	0.23	0.0000000	0.00	0.0693080	9.65
21F16456	24.0 %	✓	1.0409581	0.22	0.0000000	0.00	0.0012846	0.91	0.0000194	7.95	4.752525	0.90	0.1962206	0.27	0.0000000	0.00	2.503328	0.10	0.0008555	9.67	0.1493235	8.00	207.2806	0.04	0.0030535	1.29	740.8452	0.10	310.7885	0.24	0.0000000	0.00	0.1258193	9.65
21F16458	24.0 %	✓	0.2972044	0.39	0.0000000	0.00	0.0003722	3.09	0.0000027	48.06	1.377072	3.09	0.0560230	0.42	0.0000000	0.00	0.902182	0.10	0.0002479	10.11	0.0207284	48.06	74.7025	0.04	0.0008848	3.22	267.5266	0.13	88.7333	0.40	0.0000000	0.00	0.0453444	9.65
21F16459	24.0 %	✓	0.2144273	0.44	0.0000000	0.00	0.0001606	7.15	0.0000039	33.25	0.594267	7.15	0.0404195	0.47	0.0000000	0.00	0.690489	0.10	0.0001070	11.99	0.0299012	33.26	57.1739	0.05	0.0003818	7.21	203.2925	0.14	64.0194	0.45	0.0000000	0.00	0.0347045	9.65
21F16461	24.0 %	✓	0.1459143	0.52	0.0000000	0.00	0.0002037	5.90	0.0000064	18.18	0.753640	5.90	0.0275048	0.54	0.0000000	0.00	0.802475	0.10	0.0001357	11.29	0.0495091	18.21	66.4465	0.04	0.0004842	5.97	237.4764	0.10	43.5642	0.53	0.0000000	0.00	0.0403330	9.65
21F16462	24.0 %	✓	0.0985611	0.75	0.0000000	0.00	0.0002710	4.42	0.0000056	19.32	1.002675	4.41	0.0185788	0.76	0.0000000	0.00	0.597203	0.10	0.0001805	10.59	0.0430326	19.35	49.4496	0.05	0.0006442	4.51	176.4276	0.13	29.4264	0.75	0.0000000	0.00	0.0300159	9.65
21F16464	24.0 %	✓	0.1242283	0.59	0.0000000	0.00	0.0000332	36.12	0.0000025	50.54	0.122736	36.12	0.0234170	0.61	0.0000000	0.00	0.440741	0.10	0.0000221	37.38	0.0192537	50.55	36.4942	0.05	0.0000789	36.13	128.8521	0.17	37.0896	0.60	0.0000000	0.00	0.0221520	9.65
21F16465	24.0 %	✓	0.3655184	0.31	0.0000000	0.00	0.0008192	1.57	0.0000083	16.07	3.030541	1.56	0.0689002	0.35	0.0000000	0.00	1.362645	0.10	0.0005455	9.75	0.0640935	16.10	112.8297	0.04	0.0019471	1.81	399.6970	0.09	109.1292	0.33	0.0000000	0.00	0.0684877	9.65
21F16467	24.0 %	✓	0.3560898	0.33	0.0000000	0.00	0.0008766	1.30	0.0000100	12.14	3.242973	1.29	0.0671229	0.37	0.0000000	0.00	1.277000	0.10	0.0005837	9.72	0.0773948	12.18	105.7382	0.04	0.0020836	1.58	377.3024	0.10	106.3142	0.34	0.0000000	0.00	0.0641831	9.65
21F16468	24.0 %	✓	0.2824695	0.35	0.0000000	0.00	0.0008601	1.37	0.0000100	12.41	3.181934	1.36	0.0532455	0.38	0.0000000	0.00	1.388264	0.10	0.0005727	9.73	0.0772342	12.45	114.9511	0.04	0.0020444	1.64	411.4815	0.08	84.3341	0.36	0.0000000	0.00	0.0697753	9.65
21F16470	24.0 %	✓	0.4330133	0.29	0.0000000	0.00	0.0010653	1.13	0.0000050	23.22	3.941175	1.12	0.0816230	0.33	0.0000000	0.00	0.993926	0.10	0.0007094	9.70	0.0387677	23.24	82.2991	0.04	0.0025322	1.45	292.7554	0.14	129.2804	0.31	0.0000000	0.00	0.0499555	9.65
21F16471	24.0 %	✓	0.0729878	0.98	0.0000000	0.00	0.0000565	21.09	0.0000030	40.61	0.208959	21.08	0.0137582	0.99	0.0000000	0.00	0.436316	0.10	0.0000376	23.18	0.0229313	40.62	36.1279	0.05	0.0001343	21.10	128.7136	0.17	21.7912	0.99	0.0000000	0.00	0.0219296	9.65
21F16473	24.0 %	✓	0.1327190	0.64	0.0000000	0.00	0.0000519	20.80	0.0000029	41.87	0.191858	20.80	0.0250175	0.66	0.0000000	0.00	0.693596	0.10	0.0000345	22.92	0.0222487	41.88	57.4312	0.04	0.0001233	20.82	205.0272	0.13	39.6246	0.65	0.0000000	0.00	0.0348607	9.65
21F16474	24.0 %	✓	0.5485048	0.27	0.0000000	0.00	0.0009210	1.26	0.0000111	11.21	3.407259	1.25	0.1033932	0.31	0.0000000	0.00	1.284517	0.10	0.0006133	9.71	0.0857164	11.25	106.3606	0.04	0.0021892	1.55	378.9933	0.13	163.7616	0.29	0.0000000	0.00	0.0645609	9.65
21F16476	24.0 %	✓	0.3211909	0.34	0.0000000	0.00	0.0005661	2.17	0.0000069	18.28	2.094346	2.17	0.0605445	0.38	0.0000000	0.00	0.964878	0.10	0.0003770	9.87	0.0534591	18.30	79.8938	0.04	0.0013456	2.36	284.8632	0.12	95.8948	0.36	0.0000000	0.00	0.0484955	9.65
21F16477	24.0 %	✓	0.1062995	0.63	0.0000000	0.00	0.0000375	30.83	0.0000027	44.09	0.138780	30.83	0.0200375	0.65	0.0000000	0.00	0.214126	0.11	0.0000250	32.29	0.0208211	44.10	17.7301	0.07	0.0000892	30.84	63.1405	0.33	31.7368	0.64	0.0000000	0.00	0.0107622	9.65
21F16479	24.0 %	✓	0.2040007	2.81	0.0000000	0.00	0.0001022	12.16	0.0000077	16.13	0.377961	12.16	0.0384541	2.82	0.0000000	0.00	0.844437	0.10	0.0000680	15.51	0.0593735	16.15	69.9211	0.05	0.0002428	12.19	249.6314	0.69	60.9065	2.81	0.0000000	0.00	0.0424421	9.65
21F16480	24.0 %	✓	0.5813945	1.01	0.0000000	0.00	0.0002291	4.94	0.0000098	12.95	0.847542	4.93	0.1095929	1.02	0.0000000	0.00	1.065339	0.10	0.0001526	10.82	0.0751665	12.99	88.2122	0.04	0.0005445	5.02	314.2800	0.56	173.5811	1.01	0.0000000	0.00	0.0535448	9.65
21F16482	24.0 %	✓	0.1121788	0.68	0.0000000	0.00	0.0000847	12.89	0.0000037	33.27	0.313286	12.89	0.0211457	0.69	0.0000000	0.00	0.732984	0.10	0.0000564	16.09	0.0287140	33.28	60.6926	0.05	0.0002013	12.92	216.0490	0.11	33.4921	0.68	0.0000000	0.00	0.0368404	9.65
21F16483	24.0 %	✓	0.4409816	0.29	0.0000000	0.00	0.0000271	39.21	0.0000019	66.75	0.100141	39.21	0.0831250	0.33	0.0000000	0.00	0.456009	0.10	0.0000180	40.37	0.0143742	66.75	37.7585	0.05	0.0000643	39.22	134.8952	0.30	131.6595	0.30	0.0000000	0.00	0.0229194	9.65
21F16485	24.0 %	✓	0.2029016	0.45	0.0000000	0.00	0.0003841	3.07	0.0000086	14.56	1.420862	3.06	0.0382469	0.48	0.0000000	0.00	1.095517	0.10	0.0002558	10.10	0.0663185	14.59	90.7110	0.04	0.0009129	3.20	324.1519	0.09	60.5783	0.47	0.0000000	0.00	0.0550616	9.65
21F16486	24.0 %	✓	0.3478539	0.33	0.0000000	0.00	0.0000843	13.93	0.0000059	21.43	0.311763	13.93	0.0655705	0.37	0.0000000	0.00	0.819265	0.10	0.0000561	16.93	0.0451586	21.45	67.8368	0.04	0.0002003	13.96	240.1297	0.15	103.8552	0.35	0.0000000	0.00	0.0411769	9.65
21F16488	24.0 %	✓	0.2028945	0.44	0.0000000	0.00	0.0001477	7.37	0.0000073	18.13	0.546255	7.37	0.0382456	0.47	0.0000000	0.00	1.597975	0.10	0.0000983	12.13	0.0560118	18.15	132.3156	0.04	0.0003510	7.43	473.6061	0.06	60.5762	0.46	0.0000000	0.00	0.0803156	9.65
21F16489	24.0 %	✓	0.0947419	0.71	0.0000000	0.00	0.0000133	83.74	0.0000022	54.08	0.049331	83.74	0.0178588	0.73	0.0000000	0.00	0.342823	0.11	0.0000089	84.29	0.0170809	54.09	28.3864	0.06	0.0000317	83.75	101.8791	0.20	28.2861	0.72	0.0000000	0.00	0.0172306	9.65
21F16491	24.0 %	✓	0.5162537	0.26	0.0000000	0.00	0.0000860	14.28	0.0000042	28.87	0.318279	14.28	0.0973138	0.30	0.0000000	0.00	0.477223	0.10	0.0000573	17.22	0.0323300	28.88	39.5150	0.05	0.0002045	14.31	141.6647	0.30	154.1327	0.28	0.0000000	0.00	0.0239856	9.65
21F16492	24.0 %	✓	0.1805801	0.45	0.0000000	0.00	0.0016546	0.80	0.0000153	9.69	6.121463	0.78	0.0340394	0.48	0.0000000	0.00	2.281410	0.10	0.0011019	9.66	0.1176382	9.74	188.9053	0.04	0.0039330	1.20	676.1587	0.04	53.9140	0.46	0.0000000	0.00	0.1146655	9.65
21F16494	24.0 %	✓	0.0487581	1.27	0.0000000	0.00	0.0000201	56.82	0.0000027	41.74	0.074390	56.82	0.0091909	1.28	0.0000000	0.00	0.324312	0.11	0.0000134	57.63	0.0209974	41.75	26.8537	0.06	0.0000478	56.83	96.0592	0.20	14.5572	1.28	0.0000000	0.00	0.0163002	9.65
21F16495	24.0 %	✓	0.1600039	0.51	0.0000000	0.00	0.0001359	8.91	0.0000076	16.85	0.502772	8.91	0.0301607	0.53	0.0000000	0.00	0.842852	0.10	0.0000905	13.12	0.0581564	16.88	69.7898	0.04	0.0003230	8.96	249.0704	0.10	47.7708	0.52	0.0000000	0.00	0.0423624	9.65
		Σ	9.1678123	0.11	0.0000000	0.00	0.0111215	0.58	0.0001942	3.56	41.145125	0.58	1.7281326	0.12	0.0000000	0.00	28.902900	0.02	0.0074061	2.74	1.4957121	3.56	2393.2185	0.01	0.0264357	0.63	8539.6038	0.04	2737.1420	0.11	0.0000000	0.00	1.4526836	2.00
		Σ							9.1791281	0.11	41.145125	0.58									32.134150	0.17			2393.2449	0.01							11278.199	0.04

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F16452	24.0 %	✓	4.855079	0.002152	0.009335	0.000585	0.004301	0.000015	79.822	4.850602	1.00056426	1.293E-11
21F16453	24.0 %	✓	4.356940	0.001858	0.003357	0.000451	0.002623	0.000010	79.828	4.851267	1.00056431	1.512E-11
21F16455	24.0 %	✓	6.059887	0.002559	0.009539	0.000372	0.008366	0.000018	79.842	4.852598	1.00056441	2.449E-11
21F16456	24.0 %	✓	5.074010	0.002065	0.022928	0.000206	0.005028	0.000011	79.850	4.853331	1.00056446	3.723E-11
21F16458	24.0 %	✓	4.769602	0.002097	0.018434	0.000569	0.003983	0.000016	79.864	4.854662	1.00056456	1.261E-11
21F16459	24.0 %	✓	4.675997	0.002205	0.010394	0.000743	0.003753	0.000017	79.871	4.855328	1.00056461	9.464E-12
21F16461	24.0 %	✓	4.230150	0.001917	0.011342	0.000669	0.002199	0.000011	79.885	4.856660	1.00056471	9.950E-12
21F16462	24.0 %	✓	4.163458	0.001992	0.020276	0.000895	0.001999	0.000015	79.892	4.857327	1.00056476	7.288E-12
21F16464	24.0 %	✓	4.547665	0.002478	0.003363	0.001215	0.003405	0.000020	79.906	4.858659	1.00056486	5.875E-12
21F16465	24.0 %	✓	4.510211	0.001897	0.026859	0.000418	0.003247	0.000010	79.913	4.859326	1.00056490	1.801E-11
21F16467	24.0 %	✓	4.574234	0.001944	0.030669	0.000396	0.003376	0.000011	79.927	4.860726	1.00056501	1.712E-11
21F16468	24.0 %	✓	4.313806	0.001825	0.027680	0.000377	0.002465	0.000009	79.934	4.861392	1.00056506	1.755E-11
21F16470	24.0 %	✓	5.128525	0.002243	0.047887	0.000537	0.005274	0.000015	79.948	4.862726	1.00056515	1.494E-11
21F16471	24.0 %	✓	4.166484	0.002200	0.005784	0.001220	0.002022	0.000020	79.955	4.863393	1.00056520	5.329E-12
21F16473	24.0 %	✓	4.260510	0.001980	0.003341	0.000695	0.002312	0.000015	79.969	4.864728	1.00056530	8.662E-12
21F16474	24.0 %	✓	5.103471	0.002175	0.032034	0.000400	0.005166	0.000014	79.976	4.865395	1.00056535	1.922E-11
21F16476	24.0 %	✓	4.766327	0.002072	0.026214	0.000568	0.004027	0.000014	79.990	4.866797	1.00056545	1.348E-11
21F16477	24.0 %	✓	5.351777	0.004028	0.007827	0.002413	0.005998	0.000038	79.997	4.867464	1.00056550	3.359E-12
21F16479	24.0 %	✓	4.441850	0.002183	0.005406	0.000657	0.002919	0.000082	80.011	4.868800	1.00056560	1.099E-11
21F16480	24.0 %	✓	5.531111	0.002515	0.009608	0.000474	0.006594	0.000066	80.018	4.869468	1.00056565	1.727E-11
21F16482	24.0 %	✓	4.112152	0.001960	0.005162	0.000665	0.001850	0.000013	80.032	4.870804	1.00056575	8.835E-12
21F16483	24.0 %	✓	7.060063	0.003668	0.002652	0.001040	0.011680	0.000034	80.039	4.871472	1.00056580	9.437E-12
21F16485	24.0 %	✓	4.241837	0.001832	0.015663	0.000479	0.002241	0.000010	80.053	4.872875	1.00056590	1.362E-11
21F16486	24.0 %	✓	5.071364	0.002319	0.004596	0.000640	0.005129	0.000017	80.060	4.873544	1.00056595	1.218E-11
21F16488	24.0 %	✓	4.037780	0.001696	0.004128	0.000304	0.001535	0.000007	80.074	4.874881	1.00056605	1.891E-11
21F16489	24.0 %	✓	4.586077	0.002738	0.001738	0.001455	0.003338	0.000024	80.081	4.875550	1.00056610	4.608E-12
21F16491	24.0 %	✓	7.486269	0.003792	0.008055	0.001150	0.013067	0.000034	80.095	4.876887	1.00056619	1.047E-11
21F16492	24.0 %	✓	3.865281	0.001583	0.032404	0.000252	0.000965	0.000004	80.102	4.877556	1.00056624	2.585E-11
21F16494	24.0 %	✓	4.119822	0.002518	0.002770	0.001574	0.001817	0.000023	80.117	4.878961	1.00056635	3.916E-12
21F16495	24.0 %	✓	4.253945	0.001907	0.007204	0.000642	0.002295	0.000012	80.124	4.879631	1.00056639	1.051E-11

Procedure Blanks		**36Ar ± 1σ (SE) [fA]**	**37Ar ± 1σ (SE) [fA]**	**38Ar ± 1σ (SE) [fA]**	**39Ar ± 1σ (SE) [fA]**	**40Ar ± 1σ (SE) [fA]**
21F16452	24.0 %	0.0483459 ±0.0003560	0.0080232 ±0.0064848	0.0145805 ±0.0060664	0.0310880 ±0.0063874	13.567482 ±0.014611
21F16453	24.0 %	0.0483459 ±0.0003560	0.0080232 ±0.0064848	0.0145805 ±0.0060664	0.0310880 ±0.0063874	13.567482 ±0.014611
21F16455	24.0 %	0.0478615 ±0.0003603	0.0103765 ±0.0058010	0.0121016 ±0.0068540	0.0109162 ±0.0063589	13.278057 ±0.014397
21F16456	24.0 %	0.0478615 ±0.0003603	0.0103765 ±0.0058010	0.0121016 ±0.0068540	0.0109162 ±0.0063589	13.278057 ±0.014397
21F16458	24.0 %	0.0465714 ±0.0003079	0.0086221 ±0.0062726	0.0172318 ±0.0071120	0.0096377 ±0.0059505	12.815420 ±0.014711
21F16459	24.0 %	0.0465714 ±0.0003079	0.0086221 ±0.0062726	0.0172318 ±0.0071120	0.0096377 ±0.0059505	12.815420 ±0.014711
21F16461	24.0 %	0.0448276 ±0.0003462	0.0037583 ±0.0064903	0.0060590 ±0.0056772	0.0174137 ±0.0065147	12.317084 ±0.015329
21F16462	24.0 %	0.0448276 ±0.0003462	0.0037583 ±0.0064903	0.0060590 ±0.0056772	0.0174137 ±0.0065147	12.317084 ±0.015329
21F16464	24.0 %	0.0442277 ±0.0003644	0.0140105 ±0.0067991	0.0204935 ±0.0069407	0.0169800 ±0.0067762	12.241237 ±0.017455
21F16465	24.0 %	0.0442277 ±0.0003644	0.0140105 ±0.0067991	0.0204935 ±0.0069407	0.0169800 ±0.0067762	12.241237 ±0.017455
21F16467	24.0 %	0.0443483 ±0.0003096	0.0204198 ±0.0058933	0.0058653 ±0.0056979	0.0310368 ±0.0065371	12.287171 ±0.016059
21F16468	24.0 %	0.0443483 ±0.0003096	0.0204198 ±0.0058933	0.0058653 ±0.0056979	0.0310368 ±0.0065371	12.287171 ±0.016059
21F16470	24.0 %	0.0445357 ±0.0003405	0.0119307 ±0.0066167	0.0089566 ±0.0059312	0.0062280 ±0.0056299	12.306920 ±0.015825
21F16471	24.0 %	0.0445357 ±0.0003405	0.0119307 ±0.0066167	0.0089566 ±0.0059312	0.0062280 ±0.0056299	12.306920 ±0.015825
21F16473	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16474	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16476	24.0 %	0.0448073 ±0.0003422	0.0149212 ±0.0063927	0.0011525 ±0.0063880	0.0178939 ±0.0059547	12.443301 ±0.015840
21F16477	24.0 %	0.0448073 ±0.0003422	0.0149212 ±0.0063927	0.0011525 ±0.0063880	0.0178939 ±0.0059547	12.443301 ±0.015840
21F16479	24.0 %	0.0155940 ±0.0053539	0.0150612 ±0.0066515	0.0096008 ±0.0063919	0.0312462 ±0.0139956	2.852007 ±0.016934
21F16480	24.0 %	0.0155940 ±0.0053539	0.0150612 ±0.0066515	0.0096008 ±0.0063919	0.0312462 ±0.0139956	2.852007 ±0.016934
21F16482	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16483	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16485	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16486	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16488	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16489	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16491	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16492	24.0 %	0.0443015 ±0.0003534	0.0115740 ±0.0058438	0.0092715 ±0.0065606	0.0194441 ±0.0067669	12.413941 ±0.014562
21F16494	24.0 %	0.0448073 ±0.0003422	0.0149212 ±0.0063927	0.0011525 ±0.0063880	0.0178939 ±0.0059547	12.443300 ±0.015840
21F16495	24.0 %	0.0448073 ±0.0003422	0.0149212 ±0.0063927	0.0011525 ±0.0063880	0.0178939 ±0.0059547	12.443300 ±0.015840

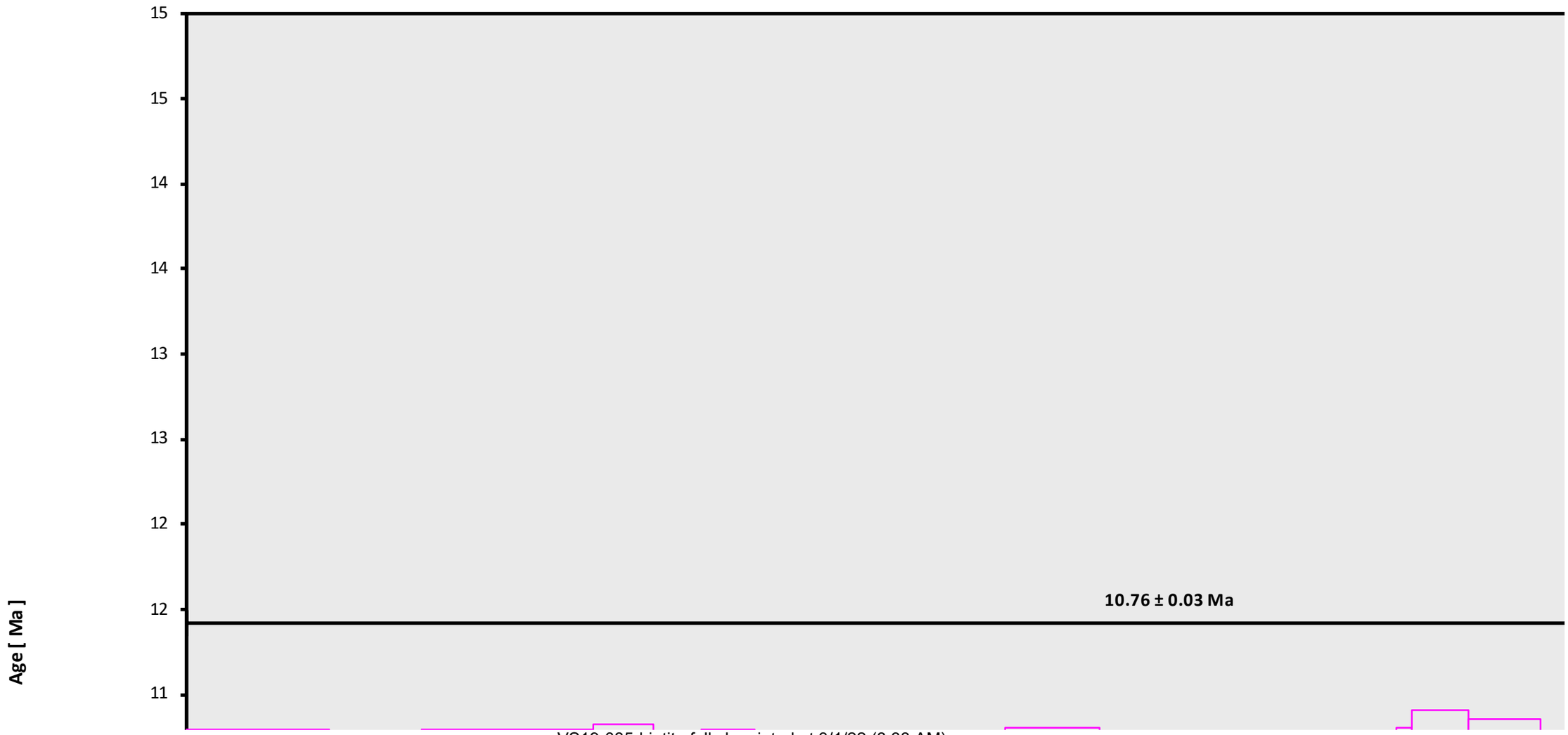
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F16452	24.0 %	0.3532943 ±0.0008986	0.9232	EXP 150 of 150	0.1522874 ±0.0062916	0.0680	EXP 150 of 150	1.0312881 ±0.0064097	0.7371	EXP 150 of 150	75.116631 ±0.012196	0.9998	EXP 150 of 150	378.73102 ±0.02936	0.9999	EXP 150 of 150
21F16453	24.0 %	0.2907595 ±0.0007516	0.9093	EXP 148 of 150	0.0756121 ±0.0063507	0.0000	EXP 146 of 150	1.2770077 ±0.0072578	0.7891	EXP 149 of 150	97.883543 ±0.012384	0.9999	EXP 147 of 150	440.62667 ±0.03203	0.9999	EXP 150 of 150
21F16455	24.0 %	0.9484112 ±0.0011835	0.9861	EXP 147 of 150	0.2340732 ±0.0064834	0.0429	EXP 150 of 150	1.6149887 ±0.0070297	0.8406	EXP 150 of 150	113.999837 ±0.014772	0.9999	EXP 150 of 150	705.20775 ±0.03860	1.0000	EXP 149 of 150
21F16456	24.0 %	1.0304962 ±0.0014502	0.9819	EXP 150 of 150	0.9862935 ±0.0060676	0.6735	EXP 150 of 150	2.8553939 ±0.0066118	0.9596	EXP 147 of 150	206.944139 ±0.018247	0.9999	EXP 150 of 150	1065.03751 ±0.04546	1.0000	EXP 150 of 150
21F16458	24.0 %	0.3271263 ±0.0009437	0.9075	EXP 149 of 150	0.2913222 ±0.0060226	0.0848	EXP 150 of 150	0.9942018 ±0.0064995	0.7354	EXP 148 of 150	74.586701 ±0.011649	0.9998	EXP 150 of 150	369.12073 ±0.02755	0.9999	EXP 148 of 150
21F16459	24.0 %	0.2488865 ±0.0007763	0.8662	EXP 150 of 150	0.1306029 ±0.0060472	0.0741	EXP 150 of 150	0.7764300 ±0.0066490	0.5771	EXP 150 of 150	57.087215 ±0.012027	0.9996	EXP 150 of 150	280.16204 ±0.02568	0.9999	EXP 149 of 150
21F16461	24.0 %	0.1825923 ±0.0005853	0.7954	EXP 150 of 150	0.1584099 ±0.0064039	0.0525	EXP 148 of 150	0.8836971 ±0.0065960	0.6891	EXP 150 of 150	66.352079 ±0.011144	0.9998	EXP 149 of 150	293.39795 ±0.02772	0.9999	EXP 150 of 150
21F16462	24.0 %	0.1380109 ±0.0005816	0.5607	EXP 150 of 150	0.2094854 ±0.0063291	0.0862	EXP 150 of 150	0.6635657 ±0.0058138	0.6045	EXP 150 of 150	49.384056 ±0.009636	0.9997	EXP 150 of 150	218.20115 ±0.02341	0.9999	EXP 149 of 150
21F16464	24.0 %	0.1613826 ±0.0005616	0.8126	EXP 149 of 150	0.0391862 ±0.0060387	0.0009	EXP 150 of 150	0.5028353 ±0.0066782	0.3847	EXP 150 of 150	36.449566 ±0.010206	0.9994	EXP 150 of 150	178.20508 ±0.02216	0.9998	EXP 150 of 150
21F16465	24.0 %	0.3896151 ±0.0008537	0.9442	EXP 149 of 150	0.6355553 ±0.0066937	0.4763	EXP 150 of 150	1.5132989 ±0.0065964	0.8656	EXP 150 of 150	112.657862 ±0.013023	0.9999	EXP 149 of 150	521.13592 ±0.03153	1.0000	EXP 150 of 150
21F16467	24.0 %	0.3809023 ±0.0009157	0.9374	EXP 150 of 150	0.6853417 ±0.0059958	0.5222	EXP 146 of 150	1.4247556 ±0.0065429	0.8558	EXP 147 of 150	105.592490 ±0.013636	0.9999	EXP 149 of 150	495.96795 ±0.03110	1.0000	EXP 149 of 150
21F16468	24.0 %	0.3114781 ±0.0007669	0.9114	EXP 147 of 150	0.6727370 ±0.0064387	0.4869	EXP 150 of 150	1.5217508 ±0.0066715	0.8651	EXP 150 of 150	114.789726 ±0.013944	0.9999	EXP 148 of 150	508.17256 ±0.03535	1.0000	EXP 150 of 150
21F16470	24.0 %	0.4537856 ±0.0009160	0.9556	EXP 150 of 150	0.8196756 ±0.0058320	0.6016	EXP 150 of 150	1.1214648 ±0.0061614	0.7836	EXP 147 of 150	82.168635 ±0.012835	0.9998	EXP 150 of 150	434.39274 ±0.03255	0.9999	EXP 150 of 150
21F16471	24.0 %	0.1134039 ±0.0005726	0.3253	EXP 150 of 150	0.0547510 ±0.0061419	0.0007	EXP 150 of 150	0.4809319 ±0.0070493	0.3659	EXP 150 of 150	36.073131 ±0.009298	0.9995	EXP 150 of 150	162.83370 ±0.02235	0.9997	EXP 148 of 150
21F16473	24.0 %	0.1694792 ±0.0006964	0.6763	EXP 150 of 150	0.0508791 ±0.0057152	0.0000	EXP 149 of 150	0.7484954 ±0.0063135	0.5219	EXP 150 of 150	57.353594 ±0.010296	0.9997	EXP 150 of 150	257.10056 ±0.02614	0.9999	EXP 148 of 150
21F16474	24.0 %	0.5623053 ±0.0010838	0.9624	EXP 150 of 150	0.7095096 ±0.0062029	0.5482	EXP 149 of 150	1.4801825 ±0.0059691	0.8695	EXP 146 of 150	106.202345 ±0.014379	0.9999	EXP 150 of 150	555.23343 ±0.03297	1.0000	EXP 148 of 150
21F16476	24.0 %	0.3481633 ±0.0008597	0.9269	EXP 149 of 150	0.4437989 ±0.0066619	0.3067	EXP 150 of 150	1.0779734 ±0.0068596	0.7260	EXP 150 of 150	79.777903 ±0.011704	0.9998	EXP 150 of 150	393.24975 ±0.02790	0.9999	EXP 147 of 150
21F16477	24.0 %	0.1450634 ±0.0005116	0.7432	EXP 150 of 150	0.0433364 ±0.0059874	0.0003	EXP 150 of 150	0.2555865 ±0.0065295	0.1256	EXP 150 of 150	17.718086 ±0.008302	0.9981	EXP 150 of 150	107.33129 ±0.02133	0.9993	EXP 150 of 150
21F16479	24.0 %	0.2080276 ±0.0007046	0.7923	EXP 150 of 150	0.0924277 ±0.0066456	0.0084	EXP 150 of 150	0.9306044 ±0.0066030	0.6562	EXP 150 of 150	69.834331 ±0.012879	0.9997	EXP 150 of 150	313.43227 ±0.03035	0.9999	EXP 150 of 150
21F16480	24.0 %	0.5639524 ±0.0010401	0.9649	EXP 150 of 150	0.1885246 ±0.0053652	0.0432	EXP 147 of 150	1.2378270 ±0.0065512	0.7959	EXP 150 of 150	88.094789 ±0.012350	0.9998	EXP 150 of 150	490.76668 ±0.03677	0.9999	EXP 150 of 150
21F16482	24.0 %	0.1501459 ±0.0005980	0.6056	EXP 149 of 150	0.0756755 ±0.0058350	0.0005	EXP 149 of 150	0.7904040 ±0.0066254	0.5754	EXP 149 of 150	60.609546 ±0.012847	0.9996	EXP 150 of 150	261.99188 ±0.02683	0.9999	EXP 150 of 150
21F16483	24.0 %	0.4600820 ±0.0009226	0.9593	EXP 147 of 150	0.0320610 ±0.0055104	0.0003	EXP 149 of 150	0.5615477 ±0.0068418	0.4186	EXP 150 of 150	37.714089 ±0.010006	0.9994	EXP 150 of 150	278.99156 ±0.02591	0.9999	EXP 148 of 150
21F16485	24.0 %	0.2359653 ±0.0007337	0.8253	EXP 150 of 150	0.3021734 ±0.0066641	0.1615	EXP 150 of 150	1.2068989 ±0.0063776	0.8083	EXP 150 of 150	90.577875 ±0.011564	0.9999	EXP 145 of 150	397.19915 ±0.03515	0.9999	EXP 150 of 150
21F16486	24.0 %	0.3723397 ±0.0008977	0.9365	EXP 150 of 150	0.0753281 ±0.0066824	0.0014	EXP 150 of 150	0.9372214 ±0.0066979	0.6720	EXP 150 of 150	67.741647 ±0.012782	0.9997	EXP 149 of 150	356.44002 ±0.02844	0.9999	EXP 150 of 150
21F16488	24.0 %	0.2357345 ±0.0007114	0.8199	EXP 149 of 150	0.1232500 ±0.0057877	0.0350	EXP 149 of 150	1.6977809 ±0.0064340	0.8873	EXP 149 of 150	132.111469 ±0.015578	0.9999	EXP 150 of 150	546.67650 ±0.03512	1.0000	EXP 150 of 150
21F16489	24.0 %	0.1336379 ±0.0005084	0.6526	EXP 148 of 150	0.0216577 ±0.0060957	0.0003	EXP 150 of 150	0.3861899 ±0.0064016	0.2706	EXP 150 of 150	28.357867 ±0.009052	0.9992	EXP 150 of 150	142.59644 ±0.02252	0.9996	EXP 150 of 150
21F16491	24.0 %	0.5311056 ±0.0009193	0.9709	EXP 150 of 150	0.0766159 ±0.0072145	0.0001	EXP 150 of 150	0.6148246 ±0.0064460	0.5165	EXP 150 of 150	39.467770 ±0.009694	0.9995	EXP 150 of 150	308.23536 ±0.02869	0.9999	EXP 150 of 150
21F16492	24.0 %	0.2161251 ±0.0006185	0.7774	EXP 148 of 150	1.2623550 ±0.0070959	0.7428	EXP 149 of 150	2.4379636 ±0.0069565	0.9373	EXP 147 of 150	188.608993 ±0.016942	0.9999	EXP 147 of 150	742.60136 ±0.04004	1.0000	EXP 150 of 150
21F16494	24.0 %	0.0907975 ±0.0004694	0.1256	EXP 150 of 150	0.0301168 ±0.0058044	0.0000	EXP 150 of 150	0.3548660 ±0.0059021	0.3209	EXP 147 of 150	26.826212 ±0.009027	0.9991	EXP 150 of 150	123.07604 ±0.02083	0.9995	EXP 147 of 150
21F16495	24.0 %	0.1957927 ±0.0006373	0.8075	EXP 145 of 150	0.1176075 ±0.0065439	0.0027	EXP 149 of 150	0.9303092 ±0.0070179	0.6769	EXP 150 of 150	69.689940 ±0.011471	0.9998	EXP 148 of 150	309.32681 ±0.02781	0.9999	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F16452	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16453	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16455	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16456	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16458	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16459	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16461	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16462	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16464	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16465	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16467	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16468	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16470	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16471	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16473	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16474	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16476	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16477	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16479	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16480	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16482	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16483	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16485	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16486	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16488	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16489	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16491	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16492	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16494	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01
21F16495	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	11.21	Oregon\Swenton (20-01)	21F16448	01

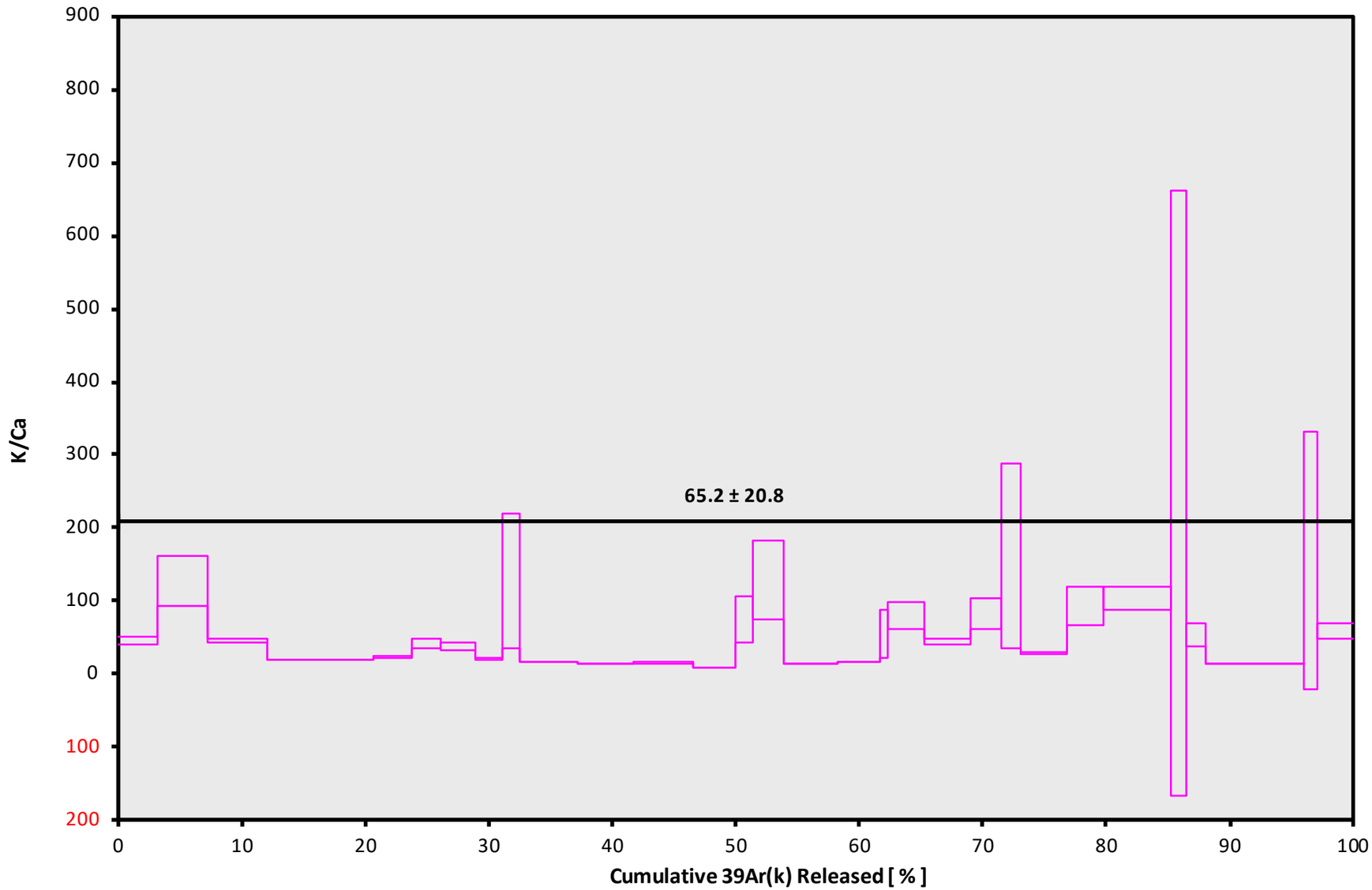
Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F16452	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	11	14	1
21F16453	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	11	24	1
21F16455	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	11	44	1
21F16456	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	11	55	1
21F16458	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	12	15	1
21F16459	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	12	25	1
21F16461	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	12	45	1
21F16462	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	12	55	1
21F16464	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	13	15	1
21F16465	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	13	25	1
21F16467	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	13	46	1
21F16468	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	13	56	1
21F16470	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	14	16	1
21F16471	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	14	26	1
21F16473	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	14	46	1
21F16474	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	14	56	1
21F16476	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	15	17	1
21F16477	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	15	27	1
21F16479	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	15	47	1
21F16480	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	15	57	1
21F16482	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	16	17	1
21F16483	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	16	27	1
21F16485	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	16	48	1
21F16486	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	16	58	1
21F16488	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	17	18	1
21F16489	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	17	28	1
21F16491	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	17	48	1
21F16492	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	17	58	1
21F16494	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	18	19	1
21F16495	24.0 %	VS19-085	Biotite	Circle Bar	FCT-NM (4X11-21)	28.201	0.082	Kuiper et al (2008)	9.40011	0.113	0.00165163	0.113	299.913	0.119	0.9988707	0.039	1	3.54E-14	4	SEP	2021	18	29	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F16452	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16453	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16455	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16456	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16458	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16459	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16461	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16462	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16464	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16465	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16467	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16468	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16470	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16471	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16473	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16474	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16476	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16477	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16479	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16480	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16482	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16483	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16485	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16486	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16488	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16489	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16491	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16492	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16494	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16495	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F16448.AGE >>> VS19-085 >>> OREGON | S



21F16448.AGE >>> VS19-085 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.76 ± 0.03
TOTAL FUSION
10.76 ± 0.03
NORMAL ISOCHRON
10.78 ± 0.03
INVERSE ISOCHRON
10.78 ± 0.03

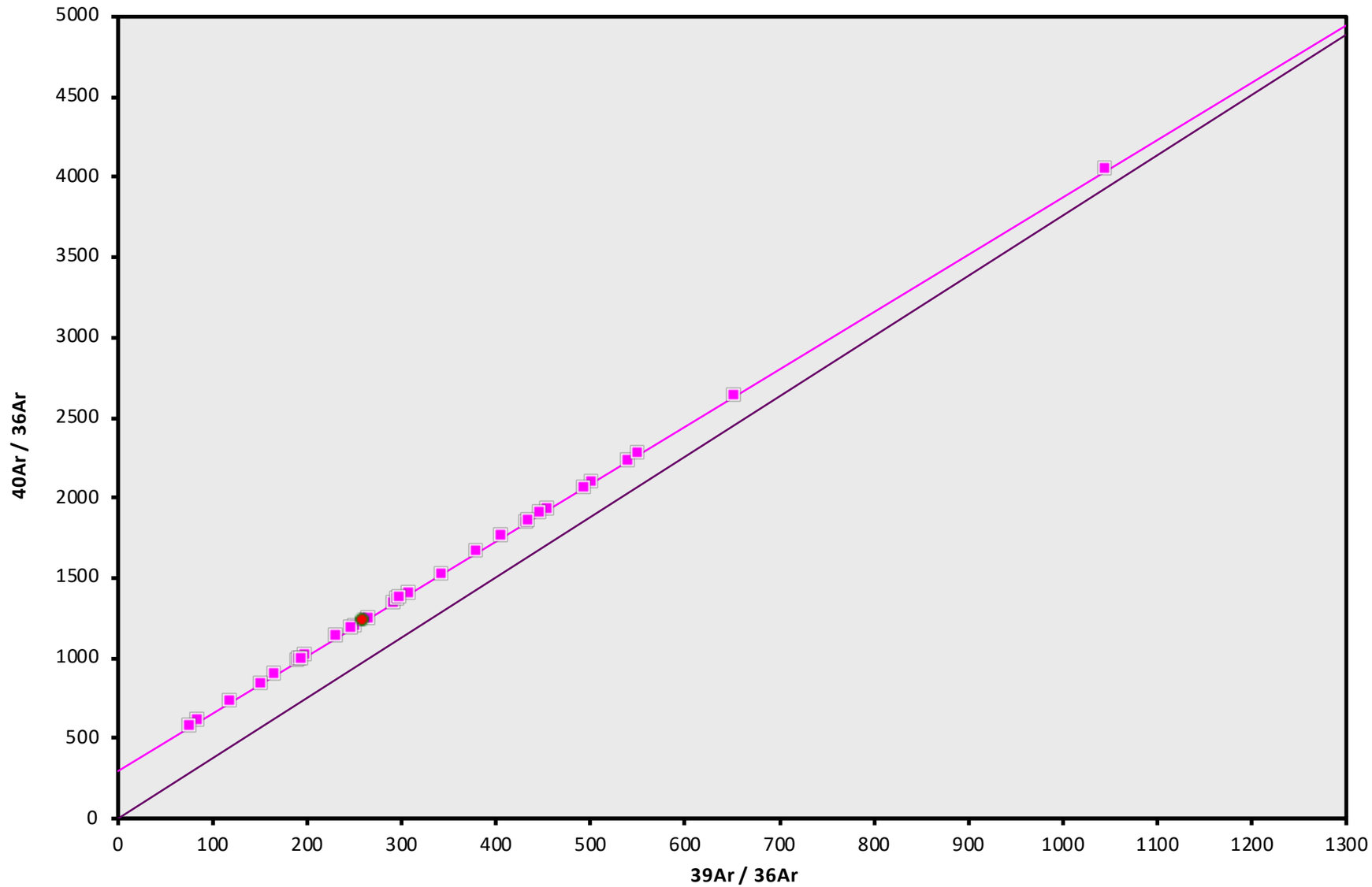
ASSUMED TRAPPED

Sample Info

Biotite
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X11-

21F16448.AGE >>> VS19-085 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.76 ± 0.03
TOTAL FUSION
10.76 ± 0.03
NORMAL ISOCHRON
10.78 ± 0.03
INVERSE ISOCHRON
10.78 ± 0.03

MSWD (PROBABILITY)
7.68 (0%)

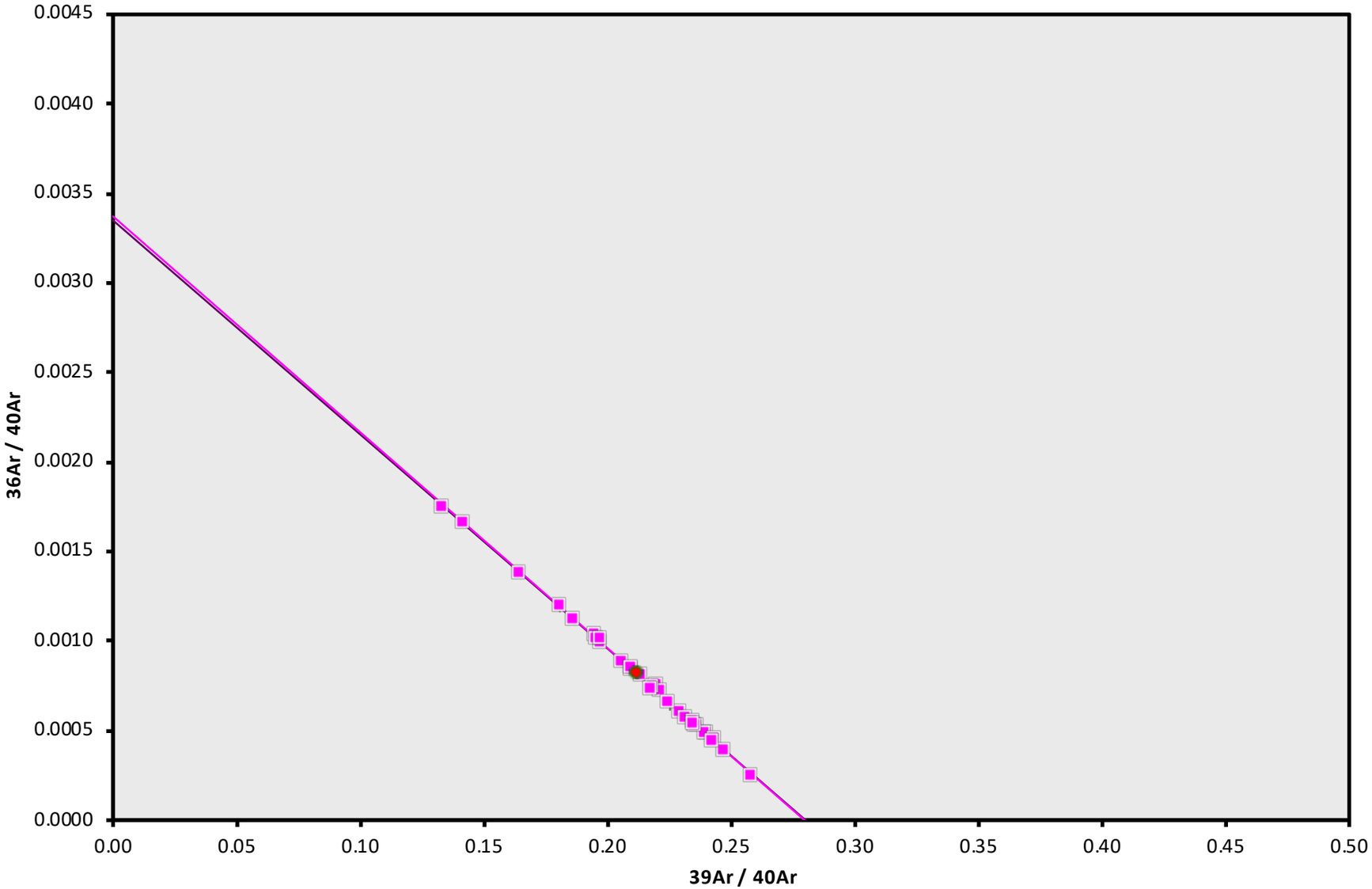
CALCULATED 40AR/36AR

Sample Info

Biotite
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X11-

21F16448.AGE >>> VS19-085 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.76 ± 0.03
TOTAL FUSION
10.76 ± 0.03
NORMAL ISOCHRON
10.78 ± 0.03
INVERSE ISOCHRON
10.78 ± 0.03

MSWD (PROBABILITY)
7.45 (0%)

SPREADING FACTOR

Sample Info

Biotite
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X11-

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
21F16395	24.0 %	✓	0.2773557	0.380	0.695314	6.114	0.2689238	3.620	16.68311	0.073	142.2688	0.018	3.56706 ±0.03953	10.76 ±0.12	41.83	2.90	10.3 ±1.3
21F16396	24.0 %	✓	0.5777108	0.260	0.258324	16.408	0.3273427	2.838	17.50557	0.074	233.1439	0.013	3.46596 ±0.05549	10.46 ±0.17	26.02	3.04	29.1 ±9.6
21F16398	24.0 %	✓	0.3399260	0.349	3.993043	1.123	0.4605538	2.045	30.84800	0.055	210.8278	0.015	3.55462 ±0.02437	10.73 ±0.07	52.01	5.37	3.3 ±0.1
21F16399	24.0 %	✓	0.5054299	0.286	7.507925	0.630	0.6410632	1.322	43.38437	0.047	308.4465	0.011	3.64517 ±0.02153	11.00 ±0.06	51.27	7.55	2.5 ±0.0
21F16401	24.0 %	✓	0.2053206	0.414	4.160702	1.084	0.3344145	2.818	22.56751	0.063	142.6062	0.018	3.61751 ±0.02373	10.91 ±0.07	57.24	3.92	2.3 ±0.1
21F16402	24.0 %	✓	0.1634304	0.468	0.198075	22.050	0.2201089	4.419	13.94717	0.083	97.8790	0.027	3.52000 ±0.03428	10.62 ±0.10	50.16	2.43	30.3 ±13.4
21F16404	24.0 %	✓	0.4922457	0.277	0.102847	41.330	0.2188464	4.507	11.10770	0.101	186.6864	0.015	3.57620 ±0.07868	10.79 ±0.24	21.28	1.93	46.4 ±38.4
21F16405	24.0 %	✓	0.1971700	0.447	1.867709	2.296	0.3042058	3.235	22.40389	0.061	138.4961	0.020	3.56056 ±0.02463	10.74 ±0.07	57.59	3.90	5.2 ±0.2
21F16407	24.0 %	✓	0.2899294	0.357	2.737575	1.611	0.2559090	3.699	15.82138	0.073	143.0597	0.020	3.58479 ±0.04124	10.82 ±0.12	39.64	2.75	2.5 ±0.1
21F16408	24.0 %	✓	0.2158989	0.433	0.216155	20.978	0.3746991	2.619	27.82350	0.056	163.0357	0.018	3.54298 ±0.02113	10.69 ±0.06	60.46	4.84	55.3 ±23.2
21F16410	24.0 %	✓	1.9887548	0.194	0.535455	8.463	0.6264524	1.356	18.32241	0.070	654.8576	0.006	3.33631 ±0.14268	10.07 ±0.43	9.33	3.19	14.7 ±2.5
21F16411	24.0 %	✓	0.1695724	0.449	0.332550	12.901	0.1895620	4.760	12.62407	0.087	93.9927	0.028	3.43671 ±0.03769	10.37 ±0.11	46.16	2.20	16.3 ±4.2
21F16413	24.0 %	✓	0.1895634	0.414	1.169768	3.748	0.3068004	2.959	21.17713	0.066	131.3134	0.024	3.53221 ±0.02349	10.66 ±0.07	56.96	3.68	7.8 ±0.6
21F16414	24.0 %	✓	0.2279024	0.392	2.231710	2.000	0.2835558	3.164	17.54559	0.070	129.2657	0.022	3.49938 ±0.03200	10.56 ±0.10	47.49	3.05	3.4 ±0.1
21F16416	24.0 %	✓	0.1594358	0.495	0.708846	6.054	0.1481356	6.506	8.00648	0.127	75.6263	0.032	3.50715 ±0.06109	10.58 ±0.18	37.13	1.39	4.9 ±0.6
21F16417	24.0 %	✓	0.2137469	0.372	0.871938	4.904	0.3809163	2.496	26.00771	0.056	155.5815	0.018	3.53060 ±0.01950	10.65 ±0.06	59.02	4.52	12.8 ±1.3
21F16419	24.0 %	✓	0.1180516	0.619	0.239230	16.958	0.2276718	4.142	14.91745	0.076	87.3426	0.029	3.49315 ±0.03035	10.54 ±0.09	59.66	2.59	26.8 ±9.1
21F16420	24.0 %	✓	0.5807750	0.260	0.215727	18.842	0.2388326	3.892	10.49188	0.104	208.8051	0.014	3.37600 ±0.09300	10.19 ±0.28	16.96	1.82	20.9 ±7.9
21F16422	24.0 %	✓	0.3820800	0.333	0.278559	15.381	0.3931251	2.546	25.53187	0.061	204.3150	0.013	3.53477 ±0.03151	10.67 ±0.09	44.17	4.44	39.4 ±12.1
21F16423	24.0 %	✓	0.1609412	0.461	0.114305	36.154	0.1762469	6.028	13.51113	0.084	95.9280	0.025	3.54365 ±0.03434	10.69 ±0.10	49.91	2.35	50.8 ±36.8
21F16425	24.0 %	✓	0.3900339	0.295	0.039231	109.458	0.2697001	3.338	15.81129	0.081	171.2754	0.018	3.46719 ±0.04658	10.46 ±0.14	32.01	2.75	173.3 ±379.4
21F16426	24.0 %	✓	0.3108168	0.329	0.451851	9.442	0.3290810	2.877	24.42004	0.061	176.9599	0.017	3.44738 ±0.02666	10.40 ±0.08	47.57	4.25	23.2 ±4.4
21F16428	24.0 %	✓	0.0873776	0.702	0.852428	5.402	0.2057197	4.916	15.82638	0.073	81.4129	0.032	3.49963 ±0.02418	10.56 ±0.07	68.03	2.75	8.0 ±0.9
21F16429	24.0 %	✓	0.0596374	0.950	0.048068	94.202	0.2042616	4.962	18.93325	0.068	84.7997	0.030	3.53806 ±0.01881	10.68 ±0.06	78.99	3.29	169.4 ±319.1
21F16431	24.0 %	✓	0.0689374	0.818	0.096257	45.077	0.1491868	6.471	10.46261	0.097	57.3924	0.041	3.51848 ±0.03348	10.62 ±0.10	64.14	1.82	46.7 ±42.1
21F16432	24.0 %	✓	0.1543262	0.469	0.005546	811.097	0.3104324	3.207	25.99771	0.056	138.1670	0.019	3.54170 ±0.01759	10.69 ±0.05	66.64	4.52	2015.6 ±32697.3
21F16434	24.0 %	✓	0.4156565	0.305	0.354668	11.142	0.3261060	2.741	19.02676	0.067	189.0648	0.016	3.41545 ±0.04243	10.31 ±0.13	34.37	3.31	23.1 ±5.1
21F16435	24.0 %	✓	0.1330580	0.480	0.081798	51.522	0.2196458	4.284	20.90740	0.066	113.3475	0.024	3.52104 ±0.01940	10.62 ±0.06	64.95	3.64	109.9 ±113.3
21F16437	24.0 %	✓	0.1629634	0.484	0.161657	28.017	0.1513776	6.400	9.15632	0.105	80.7456	0.032	3.50572 ±0.05344	10.58 ±0.16	39.75	1.59	24.4 ±13.6
21F16438	24.0 %	✓	0.2729043	0.349	0.115542	36.128	0.2650999	3.549	24.16016	0.060	166.0066	0.016	3.49845 ±0.02502	10.56 ±0.08	50.92	4.20	89.9 ±65.0
		Σ	9.5109526	0.069	30.642806	0.777	8.8079769	0.591	574.92984	0.013	4862.6495	0.003					

Information on Analysis and Constants Used in Calculations

Project = **SWENTON (20-01)**
Sample = **VS19-089**
Material = **Biotite**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X9-21)**
Position = **X: 0 | Y: 0 | Z/H: 8.889026 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.39104 ± 0.01061**
FCT-NM J-value = **0.00165322 ± 0.00000187**
Air Shot 40Ar/36Ar = **300.4600 ± 0.3606**
Air Shot MDF = **0.99841705 ± 0.00039499 (LIN)**
Experiment Type = **Total Fusion**
Extraction Method = **Single Crystal Laser Heating**
Heating = **62 sec**
Isolation = **3.00 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Ideogram Age**
Age Classification = **Eruption Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K = **5.463 ± 0.107 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 E-10 1/a**
Atmospheric 40/36(a) = **298.56 ± 0.31**
Atmospheric 38/36(a) = **0.1885 ± 0.0003**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
Production 36/38(cl) = **262.80 ± 1.71**
Scaling Ratio K/Ca = **0.430**
Abundance Ratio 40K/K = **1.1700 ± 0.0100 E-04**
Atomic Weight K = **39.0983 ± 0.0001 g**

Results

	40(a)/36(a) ±2σ	40(r)/39(k) ±2σ	Age ±2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ±2σ
Age Plateau		3.53318 ±0.01781	**10.66 ±0.06**	11.81	100.00	102.3 ±133.0
Error Mean		±0.50%	**±0.55%**	0%	30	
		Full External Error	±0.56	1.53	2σ Confidence Limit	
		Analytical Error	±0.05	3.4372	Error Magnification	
Total Fusion Age		3.52263 ±0.00744	**10.63 ±0.03**		30	8.1 ±0.1
		±0.21%	**±0.31%**			
		Full External Error	±0.55			
		Analytical Error	±0.02			
Normal Isochron	**296.75 ±2.46**	3.55008 ±0.03079	**10.71 ±0.10**	12.33	100.00	
Error Chron	**±0.83%**	±0.87%	**±0.89%**	0%	30	
		Full External Error	±0.56	1.53	2σ Confidence Limit	
		Analytical Error	±0.09	3.5114	Error Magnification	
				21	Number of Iterations	
				0.0000340935	Convergence	
Inverse Isochron	**296.79 ±2.49**	3.55157 ±0.03115	**10.72 ±0.10**	12.58	100.00	
Error Chron	**±0.84%**	±0.88%	**±0.90%**	0%	30	
		Full External Error	±0.56	1.53	2σ Confidence Limit	
		Analytical Error	±0.09	3.5462	Error Magnification	
				2	Number of Iterations	
				0.0000742807	Convergence	
				69%	Spreading Factor	

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ±2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ±2σ
21F16395	24.0 %	✓	0.2771658	0.695314	0.0150763	16.68267	59.5080	10.76 ±0.12	41.83	2.90	10.3 ±1.3
21F16396	24.0 %	✓	0.5776400	0.258324	0.0069982	17.50541	60.6731	10.46 ±0.17	26.02	3.04	29.1 ±9.6
21F16398	24.0 %	✓	0.3388436	3.993043	0.0234428	30.84543	109.6439	10.73 ±0.07	52.01	5.37	3.3 ±0.1
21F16399	24.0 %	✓	0.5033979	7.507925	0.0209264	43.37955	158.1257	11.00 ±0.06	51.27	7.55	2.5 ±0.0
21F16401	24.0 %	✓	0.2041931	4.160702	0.0226597	22.56483	81.6286	10.91 ±0.07	57.24	3.92	2.3 ±0.1
21F16402	24.0 %	✓	0.1633742	0.198075	0.0208388	13.94704	49.0936	10.62 ±0.10	50.16	2.43	30.3 ±13.4
21F16404	24.0 %	✓	0.4922179	0.102847	0.0000000	11.10764	39.7231	10.79 ±0.24	21.28	1.93	46.4 ±38.4
21F16405	24.0 %	✓	0.1966652	1.867709	0.0000000	22.40269	79.7661	10.74 ±0.07	57.59	3.90	5.2 ±0.2
21F16407	24.0 %	✓	0.2891882	2.737575	0.0098507	15.81962	56.7100	10.82 ±0.12	39.64	2.75	2.5 ±0.1
21F16408	24.0 %	✓	0.2158404	0.216155	0.0000000	27.82336	98.5775	10.69 ±0.06	60.46	4.84	55.3 ±23.2
21F16410	24.0 %	✓	1.9886062	0.535455	0.0302281	18.32207	61.1282	10.07 ±0.43	9.33	3.19	14.7 ±2.5
21F16411	24.0 %	✓	0.1694818	0.332550	0.0050965	12.62385	43.3845	10.37 ±0.11	46.16	2.20	16.3 ±4.2
21F16413	24.0 %	✓	0.1892453	1.169768	0.0151700	21.17638	74.7994	10.66 ±0.07	56.96	3.68	7.8 ±0.6
21F16414	24.0 %	✓	0.2272955	2.231710	0.0284281	17.54416	61.3937	10.56 ±0.10	47.49	3.05	3.4 ±0.1
21F16416	24.0 %	✓	0.1592414	0.708846	0.0213023	8.00602	28.0783	10.58 ±0.18	37.13	1.39	4.9 ±0.6
21F16417	24.0 %	✓	0.2135078	0.871938	0.0264247	26.00715	91.8208	10.65 ±0.06	59.02	4.52	12.8 ±1.3
21F16419	24.0 %	✓	0.1179837	0.239230	0.0252326	14.91730	52.1083	10.54 ±0.09	59.66	2.59	26.8 ±9.1
21F16420	24.0 %	✓	0.5807164	0.215727	0.0026199	10.49175	35.4201	10.19 ±0.28	16.96	1.82	20.9 ±7.9
21F16422	24.0 %	✓	0.3820030	0.278559	0.0127212	25.53169	90.2486	10.67 ±0.09	44.17	4.44	39.4 ±12.1
21F16423	24.0 %	✓	0.1609103	0.114305	0.0000000	13.51105	47.8784	10.69 ±0.10	49.91	2.35	50.8 ±36.8
21F16425	24.0 %	✓	0.3900226	0.039231	0.0052211	15.81127	54.8206	10.46 ±0.14	32.01	2.75	173.3 ±379.4
21F16426	24.0 %	✓	0.3106946	0.451851	0.0000000	24.41975	84.1841	10.40 ±0.08	47.57	4.25	23.2 ±4.4
21F16428	24.0 %	✓	0.0871472	0.852428	0.0000000	15.82584	55.3846	10.56 ±0.07	68.03	2.75	8.0 ±0.9
21F16429	24.0 %	✓	0.0596245	0.048068	0.0000000	18.93322	66.9868	10.68 ±0.06	78.99	3.29	169.4 ±319.1
21F16431	24.0 %	✓	0.0689101	0.096257	0.0098237	10.46255	36.8122	10.62 ±0.10	64.14	1.82	46.7 ±42.1
21F16432	24.0 %	✓	0.1543247	0.005546	0.0000000	25.99770	92.0760	10.69 ±0.05	66.64	4.52	2015.6 ±32697.3
21F16434	24.0 %	✓	0.4155584	0.354668	0.0179259	19.02653	64.9842	10.31 ±0.13	34.37	3.31	23.1 ±5.1
21F16435	24.0 %	✓	0.1330359	0.081798	0.0000000	20.90735	73.6156	10.62 ±0.06	64.95	3.64	109.9 ±113.3
21F16437	24.0 %	✓	0.1629184	0.161657	0.0100588	9.15622	32.0991	10.58 ±0.16	39.75	1.59	24.4 ±13.6
21F16438	24.0 %	✓	0.2728731	0.115542	0.0000000	24.16008	84.5229	10.56 ±0.08	50.92	4.20	89.9 ±65.0
		Σ	9.5026272	30.642806	0.3300459	574.91015	2025.1962				

Information on Analysis

Project = **SWENTON (20-01)**
Sample = **VS19-089**
Material = **Biotite**
Location = **Circle Bar**
Region = **Eastern Oregon**
Analyst = **Dan Miggins**
Irradiation = **21-OSU-04 (4X9-21)**
J = **0.00165322 ± 0.00000187**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD	39Ar(k) (%,n)	K/Ca	±2σ
Age Plateau	3.53318	±0.01781	**10.66**	**±0.06**	11.81	100.00	102.3	±133.0
Error Mean		±0.50%		**±0.55%**	0%	30		
			Full External Error	±0.56	1.53	2σ Confidence Limit		
			Analytical Error	±0.05	3.4372	Error Magnification		
Total Fusion Age	3.52263	±0.00744	**10.63**	**±0.03**		30	8.1	±0.1
		±0.21%		**±0.31%**				
			Full External Error	±0.55				
			Analytical Error	±0.02				

Normal Isochron			39(k)/36(a)	±2σ	40(a+r)/36(a)	±2σ	r.i.
21F16395	24.0 %	✓	60.19	±0.47	513.26	±3.90	0.9811
21F16396	24.0 %	✓	30.31	±0.16	403.60	±2.10	0.9609
21F16398	24.0 %	✓	91.03	±0.65	622.14	±4.36	0.9871
21F16399	24.0 %	✓	86.17	±0.50	612.68	±3.53	0.9861
21F16401	24.0 %	✓	110.51	±0.93	698.32	±5.82	0.9879
21F16402	24.0 %	✓	85.37	±0.81	599.06	±5.62	0.9829
21F16404	24.0 %	✓	22.57	±0.13	379.26	±2.10	0.9382
21F16405	24.0 %	✓	113.91	±1.03	704.15	±6.32	0.9898
21F16407	24.0 %	✓	54.70	±0.40	494.66	±3.55	0.9781
21F16408	24.0 %	✓	128.91	±1.13	755.27	±6.55	0.9908
21F16410	24.0 %	✓	9.21	±0.04	329.30	±1.28	0.9407
21F16411	24.0 %	✓	74.49	±0.68	554.54	±4.99	0.9797
21F16413	24.0 %	✓	111.90	±0.94	693.81	±5.77	0.9858
21F16414	24.0 %	✓	77.19	±0.62	568.67	±4.48	0.9829
21F16416	24.0 %	✓	50.28	±0.51	474.89	±4.72	0.9667
21F16417	24.0 %	✓	121.81	±0.92	728.62	±5.44	0.9878
21F16419	24.0 %	✓	126.44	±1.58	740.22	±9.19	0.9915
21F16420	24.0 %	✓	18.07	±0.10	359.55	±1.87	0.9275
21F16422	24.0 %	✓	66.84	±0.45	534.81	±3.56	0.9831
21F16423	24.0 %	✓	83.97	±0.79	596.11	±5.51	0.9822
21F16425	24.0 %	✓	40.54	±0.25	439.12	±2.60	0.9625
21F16426	24.0 %	✓	78.60	±0.53	569.51	±3.75	0.9821
21F16428	24.0 %	✓	181.60	±2.57	934.09	±13.17	0.9937
21F16429	24.0 %	✓	317.54	±6.05	1422.04	±27.06	0.9970
21F16431	24.0 %	✓	151.83	±2.50	832.77	±13.66	0.9918
21F16432	24.0 %	✓	168.46	±1.59	895.20	±8.40	0.9921
21F16434	24.0 %	✓	45.79	±0.29	454.94	±2.78	0.9752
21F16435	24.0 %	✓	157.16	±1.52	851.91	±8.18	0.9893
21F16437	24.0 %	✓	56.20	±0.56	495.59	±4.81	0.9752
21F16438	24.0 %	✓	88.54	±0.63	608.31	±4.25	0.9844

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Normal Isochron	**296.75**	**±2.46**	3.55008	±0.03079	**10.71**	**±0.10**	12.33
Error Chron		**±0.83%**		±0.87%		**±0.89%**	0%
					Full External Error	±0.56	
					Analytical Error	±0.09	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.000034093514
	Error Magnification	3.5114	Number of Iterations	21
	Number of Data Points	30	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r)	±2σ	36(a)/40(a+r)	±2σ	r.i.
21F16395	24.0 %	✓	0.1172700	±0.0001755	0.00194832	±0.00001482	0.0117
21F16396	24.0 %	✓	0.0750876	±0.0001123	0.00247772	±0.00001289	0.0092
21F16398	24.0 %	✓	0.1463193	±0.0001660	0.00160735	±0.00001127	0.0115
21F16399	24.0 %	✓	0.1406508	±0.0001363	0.00163218	±0.00000940	0.0089
21F16401	24.0 %	✓	0.1582470	±0.0002064	0.00143200	±0.00001193	0.0126
21F16402	24.0 %	✓	0.1425049	±0.0002499	0.00166929	±0.00001566	0.0183
21F16404	24.0 %	✓	0.0595011	±0.0001213	0.00263670	±0.00001461	0.0077
21F16405	24.0 %	✓	0.1617727	±0.0002088	0.00142015	±0.00001274	0.0141
21F16407	24.0 %	✓	0.1105880	±0.0001684	0.00202159	±0.00001452	0.0152
21F16408	24.0 %	✓	0.1706758	±0.0002015	0.00132402	±0.00001148	0.0133
21F16410	24.0 %	✓	0.0279792	±0.0000391	0.00303675	±0.00001178	0.0026
21F16411	24.0 %	✓	0.1343177	±0.0002465	0.00180329	±0.00001624	0.0190
21F16413	24.0 %	✓	0.1612817	±0.0002274	0.00144131	±0.00001198	0.0196
21F16414	24.0 %	✓	0.1357329	±0.0001997	0.00175850	±0.00001384	0.0165
21F16416	24.0 %	✓	0.1058698	±0.0002770	0.00210577	±0.00002091	0.0158
21F16417	24.0 %	✓	0.1671779	±0.0001966	0.00137246	±0.00001025	0.0149
21F16419	24.0 %	✓	0.1708083	±0.0002782	0.00135095	±0.00001677	0.0162
21F16420	24.0 %	✓	0.0502481	±0.0001052	0.00278123	±0.00001449	0.0075
21F16422	24.0 %	✓	0.1249719	±0.0001547	0.00186982	±0.00001245	0.0081
21F16423	24.0 %	✓	0.1408579	±0.0002480	0.00167755	±0.00001550	0.0158
21F16425	24.0 %	✓	0.0923201	±0.0001532	0.00227729	±0.00001346	0.0128
21F16426	24.0 %	✓	0.1380075	±0.0001740	0.00175588	±0.00001157	0.0140
21F16428	24.0 %	✓	0.1944128	±0.0003089	0.00107056	±0.00001509	0.0183
21F16429	24.0 %	✓	0.2233000	±0.0003312	0.00070322	±0.00001338	0.0129
21F16431	24.0 %	✓	0.1823188	±0.0003841	0.00120082	±0.00001969	0.0191
21F16432	24.0 %	✓	0.1881830	±0.0002223	0.00111707	±0.00001048	0.0135
21F16434	24.0 %	✓	0.1006411	±0.0001393	0.00219810	±0.00001344	0.0121
21F16435	24.0 %	✓	0.1844743	±0.0002603	0.00117383	±0.00001128	0.0170
21F16437	24.0 %	✓	0.1134037	±0.0002489	0.00201781	±0.00001959	0.0193
21F16438	24.0 %	✓	0.1455498	±0.0001813	0.00164389	±0.00001149	0.0115

Results	40(a)/36(a)	±2σ	40(r)/39(k)	±2σ	Age (Ma)	±2σ	MSWD
Inverse Isochron	**296.79**	**±2.49**	3.55157	±0.03115	**10.72**	**±0.10**	12.58
Error Chron		**±0.84%**		±0.88%		**±0.90%**	0%
					Full External Error	±0.56	
					Analytical Error	±0.09	

Statistics				
	2σ Confidence Limit	1.53	Convergence	0.0000742807
	Error Magnification	3.5462	Number of Iterations	2
	Number of Data Points	30	Calculated Line	Weighted York-2
	Spreading Factor	69.4%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
21F16395	24.0 %	✓	0.2771658	0.38	0.0000000	0.00	0.0001879	6.12	0.0000019	64.71	0.695314	6.11	0.0522458	0.41	0.0000000	0.00	0.2014766	0.12	0.0001252	11.41	0.0150763	64.72	16.68267	0.07	0.0004467	6.18	59.5080	0.55	82.7506	0.39	0.0000000	0.00	0.0101264	9.65
21F16396	24.0 %	✓	0.5776400	0.26	0.0000000	0.00	0.0000698	16.41	0.0000009	133.17	0.258324	16.41	0.1088851	0.30	0.0000000	0.00	0.2114128	0.12	0.0000465	19.03	0.0069982	133.17	17.50541	0.07	0.0001660	16.43	60.6731	0.80	172.4602	0.28	0.0000000	0.00	0.0106258	9.65
21F16398	24.0 %	✓	0.3388436	0.35	0.0000000	0.00	0.0010793	1.14	0.0000030	40.44	3.993043	1.12	0.0638720	0.38	0.0000000	0.00	0.3725203	0.11	0.0007187	9.70	0.0234428	40.45	30.84543	0.05	0.0025655	1.45	109.6439	0.34	101.1652	0.37	0.0000000	0.00	0.0187232	9.65
21F16399	24.0 %	✓	0.5033979	0.29	0.0000000	0.00	0.0020294	0.65	0.0000027	41.10	7.507925	0.63	0.0948905	0.33	0.0000000	0.00	0.5238948	0.10	0.0013514	9.65	0.0209264	41.11	43.37955	0.05	0.0048238	1.12	158.1257	0.29	150.2945	0.31	0.0000000	0.00	0.0263314	9.65
21F16401	24.0 %	✓	0.2041931	0.42	0.0000000	0.00	0.0011246	1.10	0.0000029	41.74	4.160702	1.08	0.0384904	0.45	0.0000000	0.00	0.2725155	0.11	0.0007489	9.69	0.0226597	41.75	22.56483	0.06	0.0026733	1.42	81.6286	0.32	60.9639	0.43	0.0000000	0.00	0.0136969	9.65
21F16402	24.0 %	✓	0.1633742	0.47	0.0000000	0.00	0.0000535	22.05	0.0000027	46.75	0.198075	22.05	0.0307960	0.49	0.0000000	0.00	0.1684384	0.12	0.0000357	24.06	0.0208388	46.76	13.94704	0.08	0.0001273	22.07	49.0936	0.48	48.7770	0.48	0.0000000	0.00	0.0084659	9.65
21F16404	24.0 %	✓	0.4922179	0.28	0.0000000	0.00	0.0000278	41.33	0.0000000	0.00	0.102847	41.33	0.0927831	0.32	0.0000000	0.00	0.1341470	0.14	0.0000185	42.44	0.0000000	0.00	11.10764	0.10	0.0000661	41.34	39.7231	1.10	146.9566	0.30	0.0000000	0.00	0.0067423	9.65
21F16405	24.0 %	✓	0.1966652	0.45	0.0000000	0.00	0.0005048	2.30	0.0000000	0.00	1.867709	2.30	0.0370714	0.48	0.0000000	0.00	0.2705572	0.11	0.0003362	9.90	0.0000000	0.00	22.40269	0.06	0.0012000	2.47	79.7661	0.34	58.7164	0.46	0.0000000	0.00	0.0135984	9.65
21F16407	24.0 %	✓	0.2891882	0.36	0.0000000	0.00	0.0007400	1.62	0.0000013	96.29	2.737575	1.61	0.0545120	0.39	0.0000000	0.00	0.1910536	0.12	0.0004928	9.76	0.0098507	96.29	15.81962	0.07	0.0017589	1.85	56.7100	0.57	86.3400	0.37	0.0000000	0.00	0.0096025	9.65
21F16408	24.0 %	✓	0.2158404	0.43	0.0000000	0.00	0.0000584	20.98	0.0000000	0.00	0.216155	20.98	0.0406859	0.46	0.0000000	0.00	0.3360227	0.11	0.0000389	23.08	0.0000000	0.00	27.82336	0.06	0.0001389	21.00	98.5775	0.29	64.4413	0.45	0.0000000	0.00	0.0168888	9.65
21F16410	24.0 %	✓	1.9886062	0.19	0.0000000	0.00	0.0001447	8.46	0.0000039	28.44	0.535455	8.46	0.3748523	0.25	0.0000000	0.00	0.2212756	0.11	0.0000964	12.82	0.0302281	28.46	18.32207	0.07	0.0003440	8.51	61.1282	2.14	593.7183	0.22	0.0000000	0.00	0.0111215	9.65
21F16411	24.0 %	✓	0.1694818	0.45	0.0000000	0.00	0.0000899	12.90	0.0000007	177.27	0.332550	12.90	0.0319473	0.48	0.0000000	0.00	0.1524583	0.13	0.0000599	16.10	0.0050965	177.27	12.62385	0.09	0.0002137	12.93	43.3845	0.54	50.6005	0.46	0.0000000	0.00	0.0076627	9.65
21F16413	24.0 %	✓	0.1892453	0.41	0.0000000	0.00	0.0003162	3.75	0.0000020	60.03	1.169768	3.75	0.0356727	0.44	0.0000000	0.00	0.2557471	0.11	0.0002106	10.33	0.0151700	60.04	21.17638	0.07	0.0007516	3.86	74.7994	0.33	56.5011	0.43	0.0000000	0.00	0.0128541	9.65
21F16414	24.0 %	✓	0.2272955	0.39	0.0000000	0.00	0.0006032	2.01	0.0000037	31.65	2.231710	2.00	0.0428452	0.42	0.0000000	0.00	0.2118808	0.11	0.0004017	9.84	0.0284281	31.66	17.54416	0.07	0.0014339	2.20	61.3937	0.45	67.8613	0.41	0.0000000	0.00	0.0106493	9.65
21F16416	24.0 %	✓	0.1592414	0.50	0.0000000	0.00	0.0001916	6.06	0.0000028	45.29	0.708846	6.05	0.0300170	0.52	0.0000000	0.00	0.0966887	0.16	0.0001276	11.38	0.0213023	45.30	8.00602	0.13	0.0004554	6.12	28.0783	0.86	47.5431	0.51	0.0000000	0.00	0.0048597	9.65
21F16417	24.0 %	✓	0.2135078	0.37	0.0000000	0.00	0.0002357	4.91	0.0000034	36.14	0.871938	4.90	0.0402462	0.41	0.0000000	0.00	0.3140884	0.11	0.0001569	10.81	0.0264247	36.16	26.00715	0.06	0.0005602	4.99	91.8208	0.27	63.7449	0.39	0.0000000	0.00	0.0157863	9.65
21F16419	24.0 %	✓	0.1179837	0.62	0.0000000	0.00	0.0000647	16.96	0.0000033	37.45	0.239230	16.96	0.0222399	0.64	0.0000000	0.00	0.1801562	0.12	0.0000431	19.50	0.0252326	37.46	14.91730	0.08	0.0001537	16.98	52.1083	0.43	35.2252	0.63	0.0000000	0.00	0.0090548	9.65
21F16420	24.0 %	✓	0.5807164	0.26	0.0000000	0.00	0.0000583	18.84	0.0000003	355.40	0.215727	18.84	0.1094650	0.30	0.0000000	0.00	0.1267088	0.14	0.0000388	21.16	0.0026199	355.40	10.49175	0.10	0.0001386	18.86	35.4201	1.37	173.3787	0.28	0.0000000	0.00	0.0063685	9.65
21F16422	24.0 %	✓	0.3820030	0.33	0.0000000	0.00	0.0000753	15.38	0.0000016	78.99	0.278559	15.38	0.0720076	0.37	0.0000000	0.00	0.3083462	0.11	0.0000501	18.15	0.0127212	78.99	25.53169	0.06	0.0001790	15.41	90.2486	0.44	114.0508	0.35	0.0000000	0.00	0.0154977	9.65
21F16423	24.0 %	✓	0.1609103	0.46	0.0000000	0.00	0.0000309	36.15	0.0000000	0.00	0.114305	36.15	0.0303316	0.49	0.0000000	0.00	0.1631730	0.12	0.0000206	37.41	0.0000000	0.00	13.51105	0.08	0.0000734	36.17	47.8784	0.48	48.0414	0.47	0.0000000	0.00	0.0082012	9.65
21F16425	24.0 %	✓	0.3900226	0.30	0.0000000	0.00	0.0000106	109.46	0.0000007	172.82	0.039231	109.46	0.0735193	0.34	0.0000000	0.00	0.1909527	0.12	0.0000071	109.88	0.0052211	172.83	15.81127	0.08	0.0000252	109.46	54.8206	0.67	116.4451	0.31	0.0000000	0.00	0.0095974	9.65
21F16426	24.0 %	✓	0.3106946	0.33	0.0000000	0.00	0.0001221	9.44	0.0000000	0.00	0.451851	9.44	0.0585659	0.37	0.0000000	0.00	0.2949173	0.11	0.0000813	13.49	0.0000000	0.00	24.41975	0.06	0.0002903	9.49	84.1841	0.38	92.7610	0.35	0.0000000	0.00	0.0148228	9.65
21F16428	24.0 %	✓	0.0871472	0.70	0.0000000	0.00	0.0002304	5.41	0.0000000	0.00	0.852428	5.40	0.0164272	0.72	0.0000000	0.00	0.1911286	0.12	0.0001534	11.04	0.0000000	0.00	15.82584	0.07	0.0005477	5.48	55.3846	0.34	26.0187	0.71	0.0000000	0.00	0.0096063	9.65
21F16429	24.0 %	✓	0.0596245	0.95	0.0000000	0.00	0.0000130	94.20	0.0000000	0.00	0.048068	94.20	0.0112392	0.96	0.0000000	0.00	0.2286564	0.11	0.0000087	94.69	0.0000000	0.00	18.93322	0.07	0.0000309	94.21	66.9868	0.26	17.8015	0.96	0.0000000	0.00	0.0114925	9.65
21F16431	24.0 %	✓	0.0689101	0.82	0.0000000	0.00	0.0000260	45.08	0.0000013	98.34	0.096257	45.08	0.0129896	0.83	0.0000000	0.00	0.1263562	0.13	0.0000173	46.09	0.0098237	98.35	10.46255	0.10	0.0000618	45.09	36.8122	0.47	20.5738	0.83	0.0000000	0.00	0.0063508	9.65
21F16432	24.0 %	✓	0.1543247	0.47	0.0000000	0.00	0.0000015	811.10	0.0000000	0.00	0.005546	811.10	0.0290902	0.49	0.0000000	0.00	0.3139743	0.11	0.0000010	811.15	0.0000000	0.00	25.99770	0.06	0.0000036	811.10	92.0760	0.24	46.0752	0.48	0.0000000	0.00	0.0157806	9.65
21F16434	24.0 %	✓	0.4155584	0.31	0.0000000	0.00	0.0000959	11.14	0.0000023	50.05	0.354668	11.14	0.0783328	0.34	0.0000000	0.00	0.2297834	0.11	0.0000638	14.73	0.0179259	50.06	19.02653	0.07	0.0002279	11.18	64.9842	0.62	124.0691	0.32	0.0000000	0.00	0.0115491	9.65
21F16435	24.0 %	✓	0.1330359	0.48	0.0000000	0.00	0.0000221	51.52	0.0000000	0.00	0.081798	51.52	0.0250773	0.51	0.0000000	0.00	0.2524981	0.11	0.0000147	52.41	0.0000000	0.00	20.90735	0.07	0.0000526	51.53	73.6156	0.27	39.7192	0.49	0.0000000	0.00	0.0126908	9.65
21F16437	24.0 %	✓	0.1629184	0.48	0.0000000	0.00	0.0000437	28.02	0.0000013	96.38	0.161657	28.02	0.0307101	0.51	0.0000000	0.00	0.1105796	0.14	0.0000291	29.63	0.0100588	96.39	9.15622	0.10	0.0001039	28.03	32.0991	0.75	48.6409	0.50	0.0000000	0.00	0.0055578	9.65
21F16438	24.0 %	✓	0.2728731	0.35	0.0000000	0.00	0.0000312	36.13	0.0000000	0.00	0.115542	36.13	0.0514366	0.38	0.0000000	0.00	0.2917813	0.11	0.0000208	37.39	0.0000000	0.00	24.16008	0.06	0.0000742	36.14	84.5229	0.35	81.4690	0.36	0.0000000	0.00	0.0146652	9.65
		Σ	9.5026272	0.07	0.0000000	0.00	0.0082828	0.78	0.0000426	12.68	30.642806	0.78	1.7912452	0.08	0.0000000	0.00	6.9431899	0.02	0.0055157	3.39	0.3300459	12.68	574.91015	0.01	0.0196880	0.84	2025.1962	0.10	2837.1044	0.07	0.0000000	0.00	0.3489705	1.89
		Σ							9.5109526	0.07	30.642806	0.78									9.0699967	0.46			574.92984	0.01							4862.6495	0.06

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
21F16395	24.0 %	✓	8.527712	0.006382	0.041678	0.002548	0.016625	0.000064	79.368	4.807349	1.00056106	5.036E-12
21F16396	24.0 %	✓	13.318265	0.009963	0.014757	0.002421	0.033002	0.000089	79.375	4.808009	1.00056111	8.253E-12
21F16398	24.0 %	✓	6.834408	0.003876	0.129443	0.001456	0.011019	0.000039	79.389	4.809328	1.00056121	7.463E-12
21F16399	24.0 %	✓	7.109622	0.003444	0.173056	0.001093	0.011650	0.000034	79.396	4.809987	1.00056126	1.092E-11
21F16401	24.0 %	✓	6.319093	0.004119	0.184367	0.002002	0.009098	0.000038	79.410	4.811373	1.00056136	5.048E-12
21F16402	24.0 %	✓	7.017845	0.006152	0.014202	0.003132	0.011718	0.000056	79.417	4.812033	1.00056141	3.465E-12
21F16404	24.0 %	✓	16.806930	0.017128	0.009259	0.003827	0.044316	0.000130	79.431	4.813353	1.00056151	6.609E-12
21F16405	24.0 %	✓	6.181787	0.003988	0.083365	0.001915	0.008801	0.000040	79.438	4.814014	1.00056156	4.903E-12
21F16407	24.0 %	✓	9.042174	0.006884	0.173030	0.002790	0.018325	0.000067	79.451	4.815269	1.00056165	5.064E-12
21F16408	24.0 %	✓	5.859641	0.003458	0.007769	0.001630	0.007760	0.000034	79.457	4.815797	1.00056169	5.771E-12
21F16410	24.0 %	✓	35.740794	0.024957	0.029224	0.002473	0.108542	0.000223	79.469	4.816986	1.00056178	2.318E-11
21F16411	24.0 %	✓	7.445516	0.006832	0.026343	0.003398	0.013432	0.000061	79.475	4.817515	1.00056182	3.327E-12
21F16413	24.0 %	✓	6.200717	0.004370	0.055237	0.002071	0.008951	0.000038	79.487	4.818638	1.00056190	4.648E-12
21F16414	24.0 %	✓	7.367417	0.005420	0.127195	0.002545	0.012989	0.000052	79.493	4.819233	1.00056194	4.576E-12
21F16416	24.0 %	✓	9.445635	0.012357	0.088534	0.005361	0.019913	0.000102	79.505	4.820357	1.00056203	2.677E-12
21F16417	24.0 %	✓	5.982128	0.003517	0.033526	0.001644	0.008219	0.000031	79.511	4.820952	1.00056207	5.508E-12
21F16419	24.0 %	✓	5.855062	0.004768	0.016037	0.002720	0.007914	0.000049	79.523	4.822076	1.00056215	3.092E-12
21F16420	24.0 %	✓	19.901587	0.020827	0.020561	0.003874	0.055355	0.000155	79.529	4.822672	1.00056220	7.392E-12
21F16422	24.0 %	✓	8.002352	0.004952	0.010910	0.001678	0.014965	0.000051	79.541	4.823796	1.00056228	7.233E-12
21F16423	24.0 %	✓	7.099924	0.006251	0.008460	0.003059	0.011912	0.000056	79.547	4.824326	1.00056232	3.396E-12
21F16425	24.0 %	✓	10.832469	0.008988	0.002481	0.002716	0.024668	0.000075	79.559	4.825517	1.00056241	6.063E-12
21F16426	24.0 %	✓	7.246505	0.004568	0.018503	0.001747	0.012728	0.000043	79.565	4.826047	1.00056245	6.264E-12
21F16428	24.0 %	✓	5.144124	0.004086	0.053861	0.002910	0.005521	0.000039	79.576	4.827172	1.00056253	2.882E-12
21F16429	24.0 %	✓	4.478879	0.003321	0.002539	0.002392	0.003150	0.000030	79.583	4.827768	1.00056258	3.002E-12
21F16431	24.0 %	✓	5.485473	0.005777	0.009200	0.004147	0.006589	0.000054	79.594	4.828894	1.00056266	2.032E-12
21F16432	24.0 %	✓	5.314583	0.003139	0.000213	0.001730	0.005936	0.000028	79.601	4.829490	1.00056270	4.891E-12
21F16434	24.0 %	✓	9.936786	0.006878	0.018640	0.002077	0.021846	0.000068	79.613	4.830616	1.00056279	6.693E-12
21F16435	24.0 %	✓	5.421404	0.003824	0.003912	0.002016	0.006364	0.000031	79.619	4.831213	1.00056283	4.013E-12
21F16437	24.0 %	✓	8.818563	0.009676	0.017655	0.004947	0.017798	0.000088	79.631	4.832339	1.00056291	2.858E-12
21F16438	24.0 %	✓	6.871089	0.004278	0.004782	0.001728	0.011296	0.000040	79.636	4.832870	1.00056295	5.877E-12

Procedure Blanks		**36Ar ± 1σ (SE) [fA]**	**37Ar ± 1σ (SE) [fA]**	**38Ar ± 1σ (SE) [fA]**	**39Ar ± 1σ (SE) [fA]**	**40Ar ± 1σ (SE) [fA]**
21F16395	24.0 %	0.0524306 ±0.0003470	0.0109008 ±0.0060712	0.0112282 ±0.0068608	0.0112798 ±0.0063151	14.8355912 ±0.0144156
21F16396	24.0 %	0.0524306 ±0.0003470	0.0109008 ±0.0060712	0.0112282 ±0.0068608	0.0112798 ±0.0063151	14.8355912 ±0.0144156
21F16398	24.0 %	0.0533536 ±0.0003379	0.0045847 ±0.0063848	0.0097879 ±0.0062650	0.0197317 ±0.0063279	15.0154229 ±0.0177376
21F16399	24.0 %	0.0533536 ±0.0003379	0.0045847 ±0.0063848	0.0097879 ±0.0062650	0.0197317 ±0.0063279	15.0154229 ±0.0177376
21F16401	24.0 %	0.0273093 ±0.0002718	0.0108630 ±0.0063708	0.0008736 ±0.0067681	0.0060936 ±0.0065253	7.2673527 ±0.0163979
21F16402	24.0 %	0.0273093 ±0.0002718	0.0108630 ±0.0063708	0.0008736 ±0.0067681	0.0060936 ±0.0065253	7.2673527 ±0.0163979
21F16404	24.0 %	0.0282935 ±0.0002661	0.0075649 ±0.0066543	0.0195850 ±0.0070850	0.0204999 ±0.0061313	7.5674460 ±0.0147262
21F16405	24.0 %	0.0282935 ±0.0002661	0.0075649 ±0.0066543	0.0195850 ±0.0070850	0.0204999 ±0.0061313	7.5674460 ±0.0147262
21F16407	24.0 %	0.0279169 ±0.0002546	0.0118424 ±0.0064183	0.0104093 ±0.0066915	0.0131708 ±0.0062887	7.3052134 ±0.0164829
21F16408	24.0 %	0.0279169 ±0.0002546	0.0118424 ±0.0064183	0.0104093 ±0.0066915	0.0131708 ±0.0062887	7.3052134 ±0.0164829
21F16410	24.0 %	0.0293456 ±0.0002773	0.0065291 ±0.0063152	0.0012771 ±0.0058109	0.0080341 ±0.0058990	8.0292772 ±0.0154157
21F16411	24.0 %	0.0293456 ±0.0002773	0.0065291 ±0.0063152	0.0012771 ±0.0058109	0.0080341 ±0.0058990	8.0292772 ±0.0154157
21F16413	24.0 %	0.0275715 ±0.0002685	0.0033541 ±0.0066149	0.0087306 ±0.0061169	0.0050214 ±0.0067733	7.5563009 ±0.0158982
21F16414	24.0 %	0.0275715 ±0.0002685	0.0033541 ±0.0066149	0.0087306 ±0.0061169	0.0050214 ±0.0067733	7.5563009 ±0.0158982
21F16416	24.0 %	0.0259386 ±0.0002665	0.0082097 ±0.0067850	0.0010863 ±0.0066970	0.0076948 ±0.0063181	7.0846431 ±0.0149966
21F16417	24.0 %	0.0259386 ±0.0002665	0.0082097 ±0.0067850	0.0010863 ±0.0066970	0.0076948 ±0.0063181	7.0846431 ±0.0149966
21F16419	24.0 %	0.0260053 ±0.0003200	0.0108187 ±0.0060438	0.0116765 ±0.0067167	0.0087442 ±0.0067463	7.0434396 ±0.0151111
21F16420	24.0 %	0.0260053 ±0.0003200	0.0108187 ±0.0060438	0.0116765 ±0.0067167	0.0087442 ±0.0067463	7.0434396 ±0.0151111
21F16422	24.0 %	0.0262419 ±0.0003030	0.0099977 ±0.0067916	0.0106295 ±0.0074390	0.0129102 ±0.0064142	6.9805238 ±0.0144096
21F16423	24.0 %	0.0262419 ±0.0003030	0.0099977 ±0.0067916	0.0106295 ±0.0074390	0.0129102 ±0.0064142	6.9805238 ±0.0144096
21F16425	24.0 %	0.0261516 ±0.0002709	0.0151676 ±0.0061612	0.0235526 ±0.0061361	0.0199608 ±0.0069849	7.1464852 ±0.0165387
21F16426	24.0 %	0.0261516 ±0.0002709	0.0151676 ±0.0061612	0.0235526 ±0.0061361	0.0199608 ±0.0069849	7.1464852 ±0.0165387
21F16428	24.0 %	0.0307826 ±0.0002803	0.0139419 ±0.0060847	0.0294078 ±0.0071753	0.0175133 ±0.0060360	8.4618252 ±0.0161461
21F16429	24.0 %	0.0307826 ±0.0002803	0.0139419 ±0.0060847	0.0294078 ±0.0071753	0.0175133 ±0.0060360	8.4618252 ±0.0161461
21F16431	24.0 %	0.0262419 ±0.0003030	0.0099977 ±0.0067916	0.0106295 ±0.0074390	0.0129102 ±0.0064142	6.9805238 ±0.0144096
21F16432	24.0 %	0.0262419 ±0.0003030	0.0099977 ±0.0067916	0.0106295 ±0.0074390	0.0129102 ±0.0064142	6.9805238 ±0.0144096
21F16434	24.0 %	0.0261516 ±0.0002709	0.0151676 ±0.0061612	0.0235526 ±0.0061361	0.0199608 ±0.0069849	7.1464852 ±0.0165387
21F16435	24.0 %	0.0261516 ±0.0002709	0.0151676 ±0.0061612	0.0235526 ±0.0061361	0.0199608 ±0.0069849	7.1464852 ±0.0165387
21F16437	24.0 %	0.0307826 ±0.0002803	0.0139419 ±0.0060847	0.0294078 ±0.0071753	0.0175133 ±0.0060360	8.4618252 ±0.0161461
21F16438	24.0 %	0.0307826 ±0.0002803	0.0139419 ±0.0060847	0.0294078 ±0.0071753	0.0175133 ±0.0060360	8.4618252 ±0.0161461

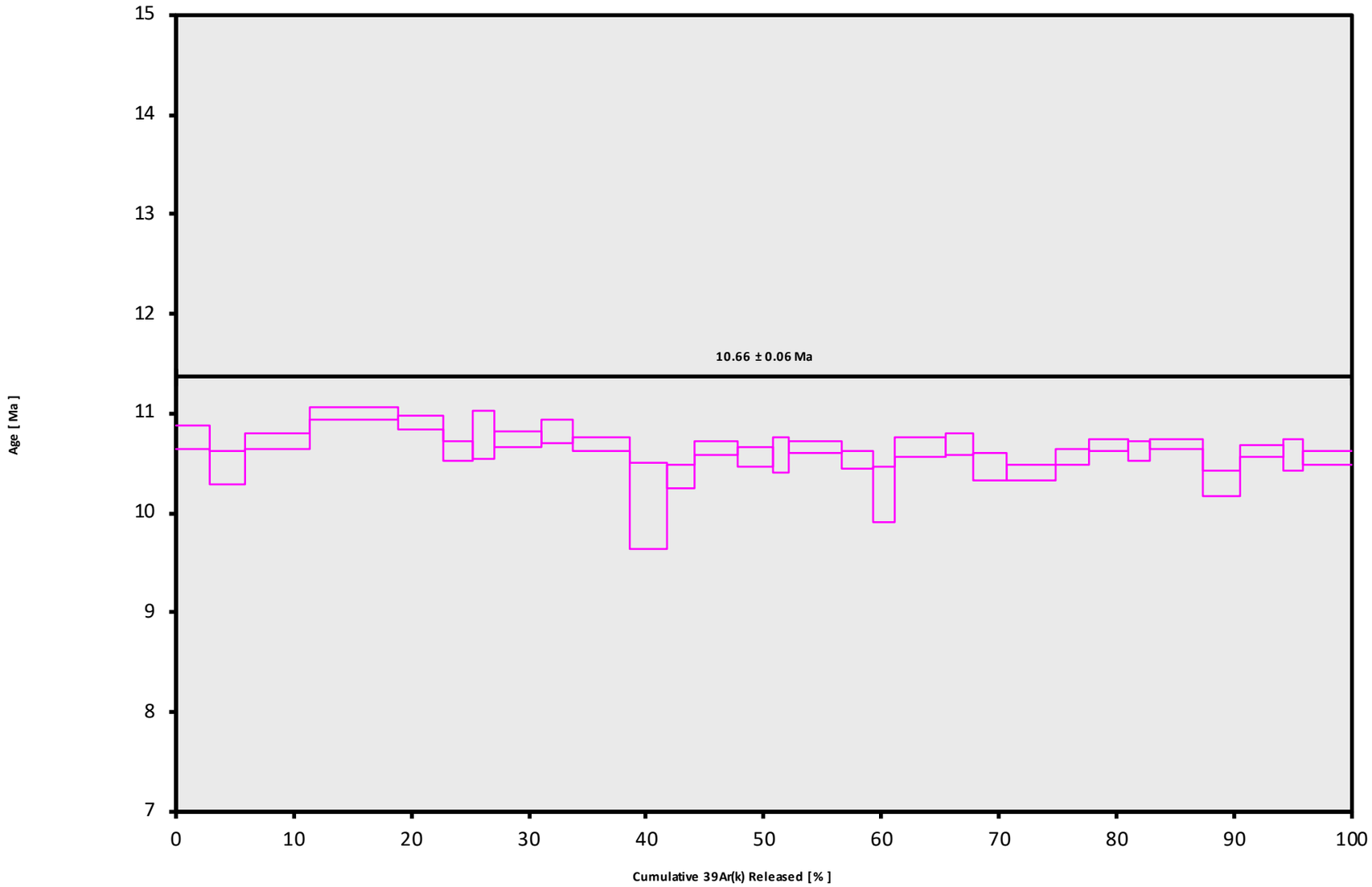
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
21F16395	24.0 %	0.3135729 ±0.0008307	0.9168	EXP 149 of 150	0.1548507 ±0.0063609	0.0126	EXP 150 of 150	0.2793007 ±0.0068603	0.1906	EXP 150 of 150	16.658696 ±0.007931	0.9981	EXP 150 of 150	157.10438 ±0.02157	0.9997	EXP 150 of 150
21F16396	24.0 %	0.5963699 ±0.0010628	0.9698	EXP 150 of 150	0.0643739 ±0.0063327	0.0049	EXP 150 of 150	0.3375347 ±0.0062160	0.2655	EXP 150 of 150	17.479396 ±0.008824	0.9979	EXP 150 of 150	247.97947 ±0.02758	0.9999	EXP 150 of 150
21F16398	24.0 %	0.3734083 ±0.0009364	0.9331	EXP 150 of 150	0.8309182 ±0.0064019	0.5783	EXP 150 of 150	0.4688839 ±0.0069837	0.3997	EXP 150 of 150	30.801717 ±0.009763	0.9992	EXP 149 of 150	225.84323 ±0.02650	0.9998	EXP 149 of 150
21F16399	24.0 %	0.5292374 ±0.0010831	0.9608	EXP 150 of 150	1.5580863 ±0.0062789	0.8606	EXP 148 of 150	0.6488218 ±0.0056429	0.5495	EXP 147 of 150	43.311263 ±0.009189	0.9996	EXP 149 of 150	323.46190 ±0.02938	0.9999	EXP 150 of 150
21F16401	24.0 %	0.2206274 ±0.0006870	0.8592	EXP 149 of 150	0.8715263 ±0.0064544	0.5961	EXP 150 of 150	0.3342295 ±0.0065087	0.2544	EXP 149 of 150	22.525304 ±0.008752	0.9988	EXP 149 of 150	149.87353 ±0.02058	0.9997	EXP 150 of 150
21F16402	24.0 %	0.1811860 ±0.0006208	0.8026	EXP 150 of 150	0.0518302 ±0.0064033	0.0003	EXP 150 of 150	0.2202857 ±0.0069407	0.1511	EXP 150 of 150	13.923411 ±0.007845	0.9974	EXP 150 of 150	105.14640 ±0.02122	0.9993	EXP 150 of 150
21F16404	24.0 %	0.4917638 ±0.0010153	0.9581	EXP 150 of 150	0.0288306 ±0.0057416	0.0026	EXP 150 of 150	0.2377386 ±0.0068138	0.0961	EXP 149 of 150	11.104432 ±0.008256	0.9953	EXP 150 of 150	194.25386 ±0.02333	0.9998	EXP 150 of 150
21F16405	24.0 %	0.2139375 ±0.0007282	0.8466	EXP 150 of 150	0.3936986 ±0.0057763	0.2564	EXP 150 of 150	0.3228278 ±0.0067828	0.1901	EXP 148 of 150	22.376436 ±0.008500	0.9988	EXP 150 of 150	146.06351 ±0.02369	0.9996	EXP 150 of 150
21F16407	24.0 %	0.3008978 ±0.0008365	0.9068	EXP 150 of 150	0.5776663 ±0.0063090	0.3714	EXP 149 of 150	0.2655083 ±0.0066499	0.1872	EXP 150 of 150	15.800689 ±0.007463	0.9982	EXP 148 of 150	150.36489 ±0.02404	0.9996	EXP 150 of 150
21F16408	24.0 %	0.2311949 ±0.0007786	0.8368	EXP 150 of 150	0.0565142 ±0.0068277	0.0001	EXP 150 of 150	0.3839224 ±0.0071279	0.2557	EXP 149 of 150	27.777116 ±0.009085	0.9991	EXP 150 of 150	170.34092 ±0.02516	0.9997	EXP 150 of 150
21F16410	24.0 %	1.9018429 ±0.0020609	0.9907	EXP 150 of 150	0.1171617 ±0.0069064	0.0217	EXP 150 of 150	0.6231924 ±0.0061366	0.5053	EXP 149 of 150	18.291228 ±0.008654	0.9981	EXP 150 of 150	662.88686 ±0.03555	1.0000	EXP 150 of 150
21F16411	24.0 %	0.1890052 ±0.0006106	0.8339	EXP 150 of 150	0.0752312 ±0.0062162	0.0038	EXP 150 of 150	0.1876849 ±0.0068634	0.0427	EXP 148 of 150	12.605080 ±0.007849	0.9967	EXP 150 of 150	102.02198 ±0.02136	0.9991	EXP 150 of 150
21F16413	24.0 %	0.2060536 ±0.0006276	0.8644	EXP 147 of 150	0.2382537 ±0.0061554	0.1501	EXP 150 of 150	0.3145598 ±0.0066634	0.1981	EXP 147 of 150	21.136817 ±0.008984	0.9985	EXP 150 of 150	138.86967 ±0.02711	0.9994	EXP 150 of 150
21F16414	24.0 %	0.2421513 ±0.0007205	0.8779	EXP 149 of 150	0.4575340 ±0.0063107	0.2855	EXP 150 of 150	0.2913888 ±0.0065187	0.2833	EXP 148 of 150	17.513056 ±0.007590	0.9985	EXP 149 of 150	136.82201 ±0.02335	0.9995	EXP 150 of 150
21F16416	24.0 %	0.1760542 ±0.0006511	0.7821	EXP 150 of 150	0.1545650 ±0.0056867	0.0301	EXP 150 of 150	0.1465804 ±0.0068882	0.0277	EXP 150 of 150	7.997033 ±0.007268	0.9930	EXP 150 of 150	82.71091 ±0.01904	0.9987	EXP 149 of 150
21F16417	24.0 %	0.2271905 ±0.0006232	0.8970	EXP 149 of 150	0.1882163 ±0.0056271	0.0793	EXP 149 of 150	0.3786243 ±0.0067002	0.3305	EXP 150 of 150	25.959733 ±0.008119	0.9992	EXP 150 of 150	162.66613 ±0.02378	0.9997	EXP 150 of 150
21F16419	24.0 %	0.1371559 ±0.0005836	0.6543	EXP 150 of 150	0.0601949 ±0.0057939	0.0001	EXP 149 of 150	0.2386276 ±0.0065748	0.1666	EXP 148 of 150	14.894260 ±0.006982	0.9982	EXP 149 of 150	94.38604 ±0.01988	0.9992	EXP 148 of 150
21F16420	24.0 %	0.5728297 ±0.0010793	0.9685	EXP 150 of 150	0.0553385 ±0.0058157	0.0350	EXP 150 of 150	0.2497531 ±0.0063797	0.2133	EXP 149 of 150	10.478166 ±0.007430	0.9958	EXP 150 of 150	215.84858 ±0.02570	0.9998	EXP 150 of 150
21F16422	24.0 %	0.3859864 ±0.0010070	0.9289	EXP 150 of 150	0.0674708 ±0.0056566	0.0039	EXP 150 of 150	0.4025102 ±0.0066388	0.1708	EXP 150 of 150	25.490112 ±0.009768	0.9988	EXP 150 of 150	211.29549 ±0.02202	0.9999	EXP 148 of 150
21F16423	24.0 %	0.1777749 ±0.0005818	0.8129	EXP 150 of 150	0.0335787 ±0.0051531	0.0430	EXP 148 of 150	0.1863186 ±0.0075356	0.0896	EXP 149 of 150	13.495108 ±0.007730	0.9974	EXP 150 of 150	102.90849 ±0.01956	0.9994	EXP 150 of 150
21F16425	24.0 %	0.3933851 ±0.0008721	0.9535	EXP 147 of 150	0.0232590 ±0.0063624	0.0077	EXP 150 of 150	0.2923990 ±0.0065443	0.1736	EXP 147 of 150	15.797402 ±0.008714	0.9975	EXP 150 of 150	178.42184 ±0.02549	0.9997	EXP 150 of 150
21F16426	24.0 %	0.3187989 ±0.0007980	0.9297	EXP 150 of 150	0.1083513 ±0.0062762	0.0819	EXP 150 of 150	0.3515920 ±0.0071666	0.2364	EXP 150 of 150	24.387714 ±0.008794	0.9990	EXP 150 of 150	184.10643 ±0.02525	0.9998	EXP 150 of 150
21F16428	24.0 %	0.1130523 ±0.0004880	0.5298	EXP 149 of 150	0.1896941 ±0.0072750	0.0282	EXP 150 of 150	0.2344764 ±0.0070788	0.0778	EXP 150 of 150	15.810010 ±0.007519	0.9982	EXP 150 of 150	89.87471 ±0.02044	0.9990	EXP 149 of 150
21F16429	24.0 %	0.0869337 ±0.0004453	0.1489	EXP 150 of 150	0.0238513 ±0.0070792	0.0012	EXP 150 of 150	0.2330229 ±0.0071120	0.0874	EXP 150 of 150	18.910218 ±0.008471	0.9984	EXP 146 of 150	93.26155 ±0.01978	0.9992	EXP 150 of 150
21F16431	24.0 %	0.0911494 ±0.0004240	0.3041	EXP 150 of 150	0.0298367 ±0.0058177	0.0156	EXP 149 of 150	0.1593440 ±0.0061027	0.0802	EXP 150 of 150	10.453115 ±0.006696	0.9967	EXP 150 of 150	64.37289 ±0.01827	0.9977	EXP 149 of 150
21F16432	24.0 %	0.1715466 ±0.0005645	0.7879	EXP 150 of 150	0.0111407 ±0.0063099	0.0002	EXP 149 of 150	0.3200793 ±0.0065626	0.1019	EXP 150 of 150	25.954946 ±0.007973	0.9993	EXP 148 of 150	145.14749 ±0.02246	0.9997	EXP 150 of 150
21F16434	24.0 %	0.4175100 ±0.0009834	0.9468	EXP 150 of 150	0.0882403 ±0.0053188	0.0452	EXP 148 of 150	0.3486264 ±0.0064578	0.3517	EXP 150 of 150	19.005975 ±0.007650	0.9987	EXP 149 of 150	196.21132 ±0.02528	0.9998	EXP 150 of 150
21F16435	24.0 %	0.1514314 ±0.0004979	0.7861	EXP 148 of 150	0.0320186 ±0.0061168	0.0173	EXP 150 of 150	0.2425032 ±0.0070909	0.0134	EXP 150 of 150	20.882592 ±0.008655	0.9987	EXP 148 of 150	120.49397 ±0.02155	0.9995	EXP 150 of 150
21F16437	24.0 %	0.1842195 ±0.0006432	0.8243	EXP 150 of 150	0.0472365 ±0.0070700	0.0275	EXP 150 of 150	0.1803063 ±0.0064617	0.2035	EXP 149 of 150	9.154223 ±0.006518	0.9959	EXP 150 of 150	89.20740 ±0.02019	0.9990	EXP 150 of 150
21F16438	24.0 %	0.2877336 ±0.0007480	0.9230	EXP 148 of 150	0.0377361 ±0.0060721	0.0153	EXP 150 of 150	0.2936686 ±0.0060362	0.0070	EXP 149 of 150	24.125926 ±0.009151	0.9989	EXP 150 of 150	174.46840 ±0.02068	0.9998	EXP 148 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
21F16395	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16396	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16398	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16399	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16401	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16402	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16404	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16405	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16407	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16408	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16410	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16411	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16413	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16414	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16416	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16417	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16419	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16420	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16422	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16423	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16425	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16426	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16428	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16429	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16431	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16432	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16434	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16435	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16437	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01
21F16438	24.0 %	Dan Miggins	21-OSU-04	0.00	0.00	8.89	Oregon\Swenton (20-01)	21F16391	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
21F16395	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	0	21	1
21F16396	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	0	31	1
21F16398	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	0	51	1
21F16399	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	1	1	1
21F16401	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	1	22	1
21F16402	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	1	32	1
21F16404	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	1	52	1
21F16405	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	2	2	1
21F16407	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	2	21	1
21F16408	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	2	29	1
21F16410	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	2	47	1
21F16411	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	2	55	1
21F16413	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	3	12	1
21F16414	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	3	21	1
21F16416	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	3	38	1
21F16417	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	3	47	1
21F16419	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	4	4	1
21F16420	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	4	13	1
21F16422	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	4	30	1
21F16423	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	4	38	1
21F16425	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	4	56	1
21F16426	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	5	4	1
21F16428	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	5	21	1
21F16429	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	5	30	1
21F16431	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	5	47	1
21F16432	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	5	56	1
21F16434	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	6	13	1
21F16435	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	6	22	1
21F16437	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	6	39	1
21F16438	24.0 %	VS19-089	Biotite	Circle Bar	FCT-NM (4X9-21)	28.201	0.082	Kuiper et al (2008)	9.39104	0.113	0.00165322	0.113	300.46	0.12	0.998417	0.040	1	3.54E-14	4	SEP	2021	6	47	1

Irradiation Constants		40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
21F16395	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16396	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16398	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16399	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16401	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16402	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16404	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16405	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16407	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16408	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16410	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16411	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16413	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16414	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16416	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16417	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16419	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16420	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16422	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16423	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16425	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16426	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16428	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16429	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16431	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16432	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16434	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16435	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16437	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0
21F16438	24.0 %	298.56	0.104	0.018	35	0.1885	0.159	1.493	3	0.000643	0.92	0.00018	9.63	0.00027	0.17	0.000607	9.65	0.012077	0.09	0	0	0.43	0	0	0	0	0

21F16391.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.66 ± 0.06
TOTAL FUSION
10.63 ± 0.03
NORMAL ISOCHRON
10.71 ± 0.10
INVERSE ISOCHRON
10.72 ± 0.10

MSWD (PROBABILITY)
11.81 (0%)

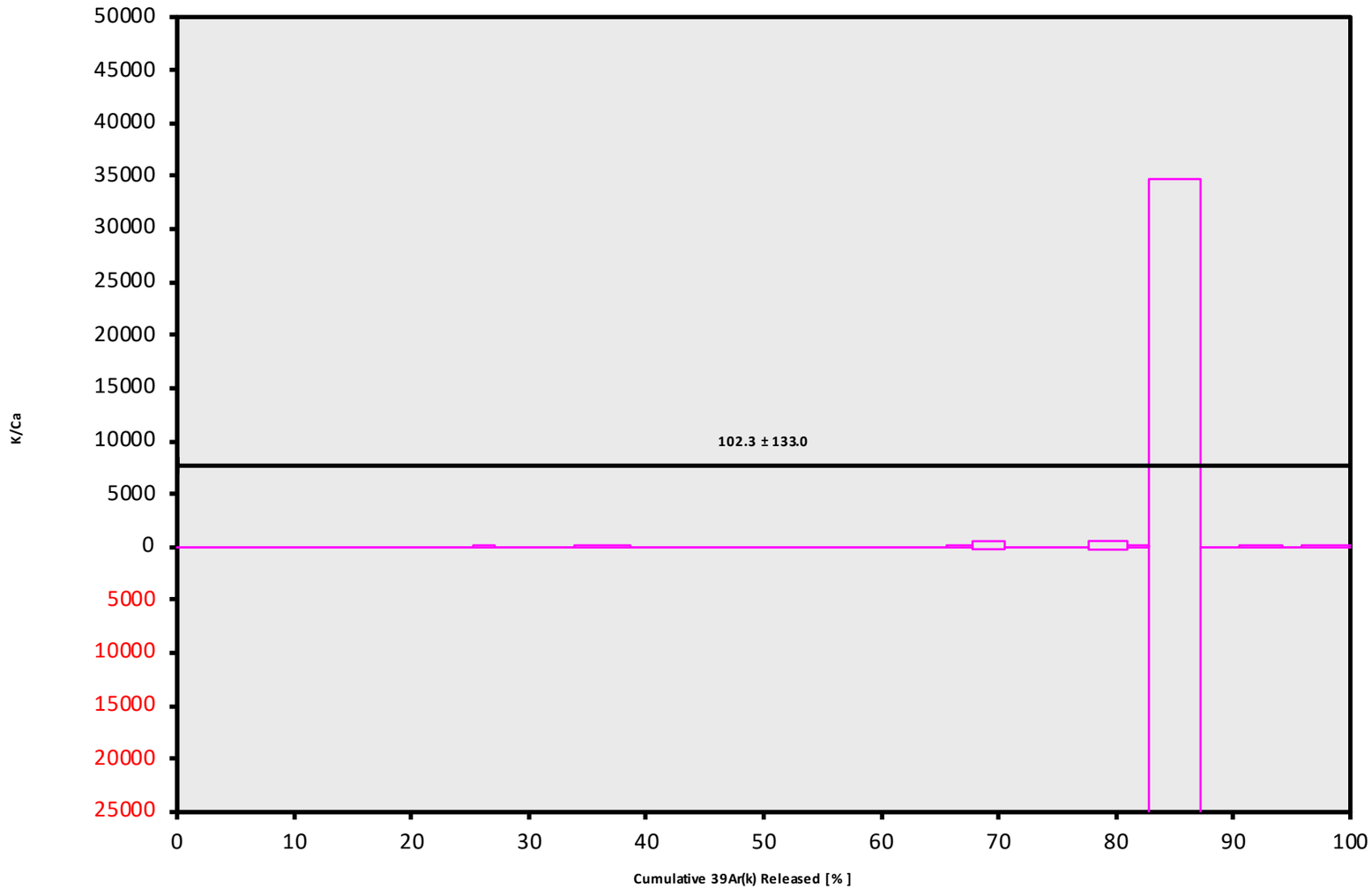
ASSUMED TRAPPED

Sample Info

Biotite
Circle Bar
Dan Miggins

IRR = 21-OSU-04 (4X9-21)

21F16391.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



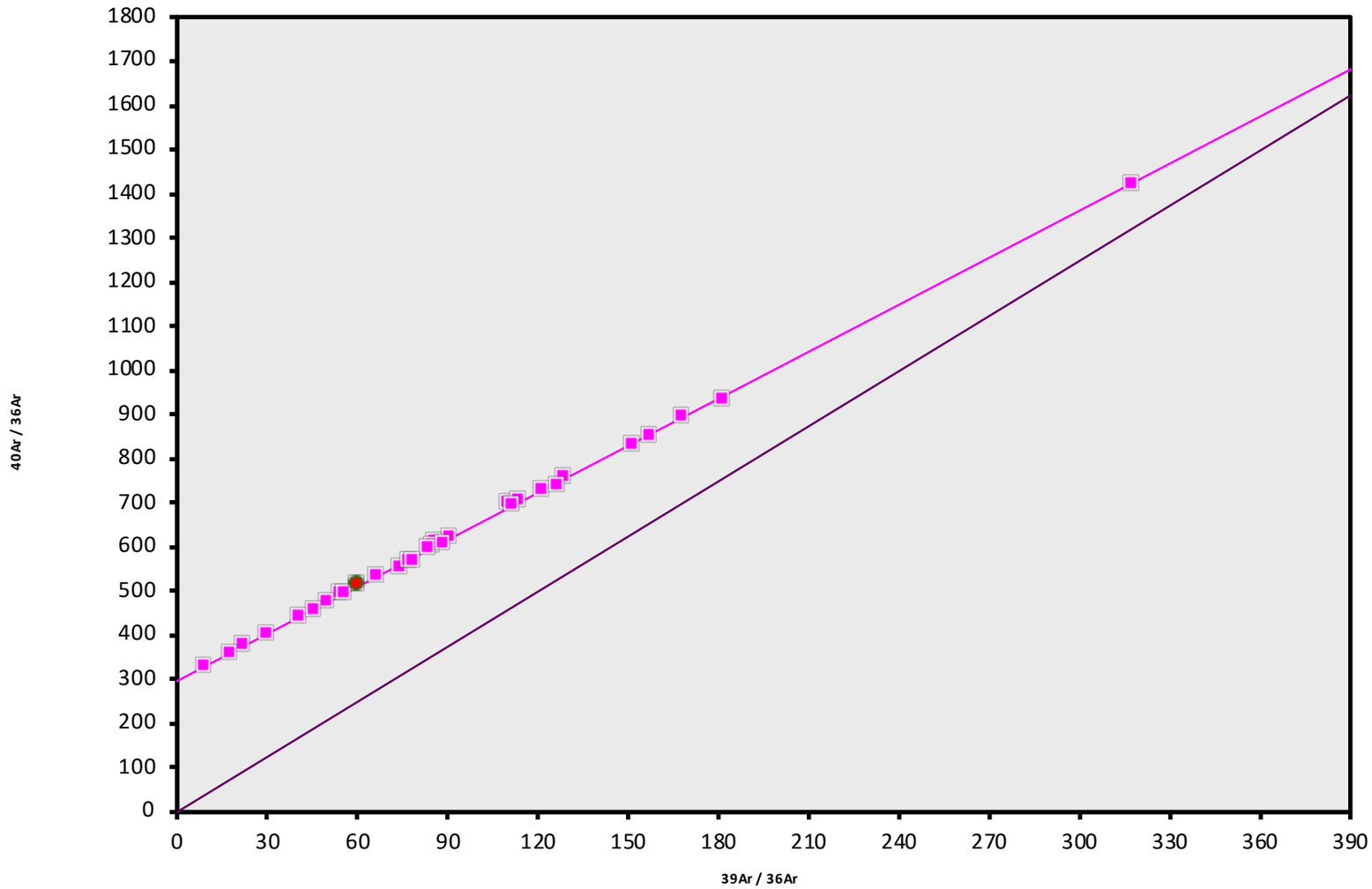
Ar-Ages in Ma

WEIGHTED PLATEAU
10.66 ± 0.06
TOTAL FUSION
10.63 ± 0.03
NORMAL ISOCHRON
10.71 ± 0.10
INVERSE ISOCHRON
10.72 ± 0.10

Sample Info

Biotite
Circle Bar
Dan Miggins

21F16391.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

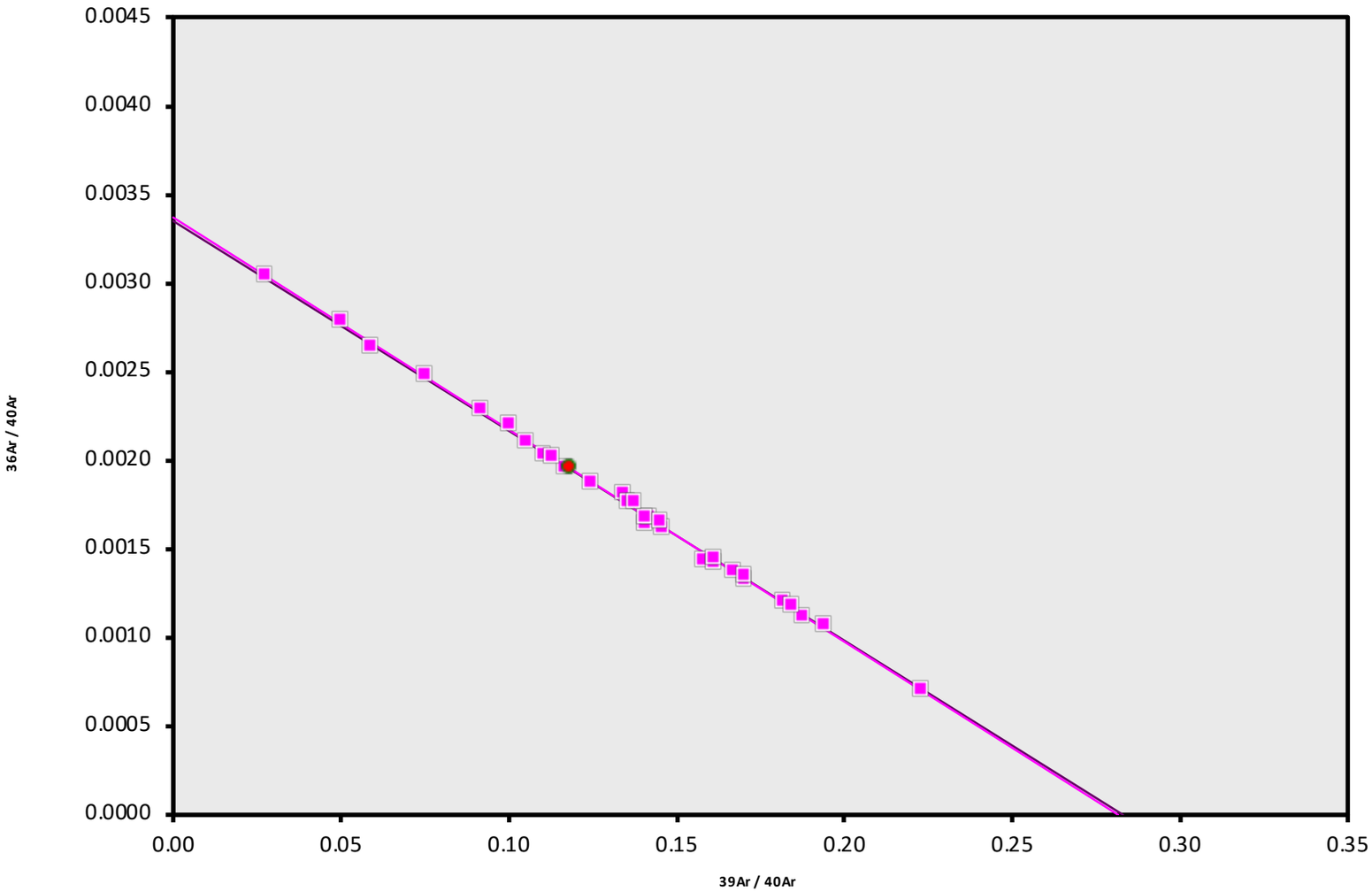
WEIGHTED PLATEAU
10.66 ± 0.06
TOTAL FUSION
10.63 ± 0.03
NORMAL ISOCHRON
10.71 ± 0.10
INVERSE ISOCHRON
10.72 ± 0.10

MSWD (PROBABILITY)
12.33 (0%)

Sample Info

Biotite
Circle Bar
Dan Miggins

21F16391.AGE >>> VS19-089 >>> OREGON | SWENTON (20-01) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
10.66 ± 0.06
TOTAL FUSION
10.63 ± 0.03
NORMAL ISOCHRON
10.71 ± 0.10
INVERSE ISOCHRON
10.72 ± 0.10

MSWD (PROBABILITY)
12.58 (0%)

Sample Info

Biotite
Circle Bar
Dan Miggins