

EXP#24G01532 > EVM075 > POLENZ (23-28)
WESTERN CASCADES > 1265 M SSW OF ALDER DAM
23-OSU-06 (6A32-23) > Incremental Heating > Groundmass > Dan Miggins

**Information on Analysis
and Constants Used in Calculations**

Project = POLENZ (23-28)
Sample = EVM075
Material = Groundmass
Location = 1265 m SSW of Alder dam
Region = Western Cascades
Analyst = Dan Miggins
Irradiation = 23-OSU-06 (6A32-23)
Position = X: 0 | Y: 0 | Z/H: 50.1871 mm
FCT-NM Age = 28.201 ± 0.023 Ma
FCT-NM Reference = Kuiper et al (2008)
FCT-NM 40Ar/39Ar Ratio = 9.87601 ± 0.01136
FCT-NM J-value = 0.00157204 ± 0.00000181
Air Shot 40Ar/36Ar = 298.2130 ± 0.4175
Air Shot MDF = 1.00029128 ± 0.00043708 (LIN)
Experiment Type = Incremental Heating
Extraction Method = Bulk Laser Heating
Heating = 50 sec
Isolation = 3.00 min
Instrument = ARGUS-VI-G
Preferred Age = Total Fusion
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(total) = 5.463 ± 0.107 E-10 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
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
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
Trapped 40/36(a) = 298.56 ± 0.31
Trapped 38/36(a) = 0.1885 ± 0.0003
Standard MDF 40/36(a) = 298.56 ± 0.31
Standard MDF Reference = Lee et al 2006

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau						
Cannot Calculate						
Total Fusion Age		13.51400 ± 0.00444 ± 0.03%	38.48 ± 0.09 ± 0.23%		32	0.494 ± 0.000
			Full External Error ± 1.99 Analytical Error ± 0.01			
Normal Isochron						
Cannot Calculate						
Inverse Isochron						
Cannot Calculate						

