

EXP#23F01525 > BHM066 > POLENZ (22-26)
W CASCADES > DESCHUTES FALLS CO. PARK
22-OSU-05 (5C33-22) > Incremental Heating > Groundmass > Dan Miggins

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

Project = **POLENZ (22-26)**
Sample = **BHM066**
Material = **Groundmass**
Location = **Deschutes Falls Co. Park**
Region = **W Cascades**
Analyst = **Dan Miggins**
Irradiation = **22-OSU-05 (5C33-22)**
Position = **X: 999 | Y: 999 | Z/H: 51.64827 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.85268 ± 0.00946**
FCT-NM J-value = **0.00157576 ± 0.00000151**
Air Shot 40Ar/36Ar = **305.1260 ± 0.4699**
Air Shot MDF = **0.99461330 ± 0.00045516 (LIN)**
Experiment Type = **Incremental Heating**
Extraction Method = **Bulk Laser Heating**
Heating = **50 sec**
Isolation = **6.00 min**
Instrument = **ARGUS-VI-F**
Preferred Age = **Mini Plateau**
Age Classification = **Eruption Age**
IGSN = **T16N R03E**
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) = **268.55 ± 3.16**
Trapped 38/36(a) = **0.1885 ± 0.0003**
Standard MDF 40/36(a) = **298.56 ± 0.31**
Standard MDF Reference = **Lee et al 2006**

Sub-atmospheric 40/36 = 268.55 ± 1.18 (%SD).

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%n)	K/Ca ± 2σ
Age Plateau		13.64101 ± 0.01850 ± 0.14%	38.93 ± 0.09 ± 0.23%	1.56 10%	29.06 12	0.199 ± 0.015
			Full External Error ± 2.01 Analytical Error ± 0.05	1.85 1.2473	2σ Confidence Limit Error Magnification	
Total Fusion Age		13.75482 ± 0.01227 ± 0.09%	39.25 ± 0.08 ± 0.21%		26	0.313 ± 0.000
			Full External Error ± 2.03 Analytical Error ± 0.03			
Normal Isochron Error Chron	260.06 ± 4.13 ± 1.59%	13.69003 ± 0.02867 ± 0.21%	39.07 ± 0.11 ± 0.28%	2.02 3%	29.06 12	
			Full External Error ± 2.02 Analytical Error ± 0.08	1.89 1.4218	2σ Confidence Limit Error Magnification	
Inverse Isochron Error Chron	260.46 ± 4.13 ± 1.59%	13.68741 ± 0.02865 ± 0.21%	39.06 ± 0.11 ± 0.28%	2.03 3%	29.06 12	
			Full External Error ± 2.02 Analytical Error ± 0.08	1.89 1.4260	2σ Confidence Limit Error Magnification Spreading Factor	

