Table S1: Sampling Locations

# on Map	Locality	Site	Latitude	Longitude	Rock Type	Unit	Age (Ma)	Notes
1	Cape Lamb	Palagonite	-63.8924	302.4051	Palagonite	Sandwich Bluff Fm.	5.42 ± 0.08	
		Dike	-63.8924	302.4051	Basalt	Sandwich Bluff Fm.	5.42 ± 0.08	Part of a baked contact test, may not be in-place.
		Pillow	-63.8924	302.4051	Basalt	Sandwich Bluff Fm.	5.42 ± 0.08	
2	Cockburn Island	Flow 1	-64.1907	303.1657	Basalt	Uncorrelated	2.9 ± 0.4	
		Flow 2	-64.1907	303.1657	Basalt	Uncorrelated	2.9 ± 0.4	
3	Davies Dome	Flow 1	-63.8840	301.9172	Basalt	Kipling Mesa Fm.	5.36 ± 0.05	
		Flow 2	-63.8842	301.9178	Basalt	Kipling Mesa Fm.	5.36 ± 0.05	Polarity and age do not agree.
		Flow 3	-63.8893	301.9243	Basalt	Kipling Mesa Fm.	5.36 ± 0.05	
		Flow 4	-63.8893	301.9243	Basalt	Kipling Mesa Fm.	5.36 ± 0.05	
4	Humps Island	Volcanic Neck	-63.9860	302.5869	Diabase	Palisade Nunatak Fm.	--	Age unknown
5	Keltie Head	Flow 1	-63.8066	302.3662	Basalt	Keltie Head Fm.	0.99 ± 0.05	
		Flow 2	-63.8070	302.3661	Basalt	Keltie Head Fm.	0.99 ± 0.05	
6	Lachman Mesa	Flow 1	-63.8468	302.1662	Basalt	Johnson Mesa Fm.	5.04 ± 0.04	
		Flow 2	-63.8484	302.1679	Basalt	Johnson Mesa Fm.	5.04 ± 0.04	
7	The Naze	Flow 1	-63.9139	302.5267	Basalt	Uncorrelated	--	Age unknown
		Flow 2	-63.9139	302.5267	Basalt	Uncorrelated	--	Age unknown
		Flow 3	-63.9162	302.5256	Basalt	Uncorrelated	--	Age unknown
		Sill	-63.9151	302.5287	Diabase	Uncorrelated	--	Age unknown
		Dike	-63.9158	302.5272	Diabase	Uncorrelated	--	Age unknown
8	Seymour Island	Dike	-64.2907	303.2600	Diabase	Palisade Nunatak Fm.	6.8 ± 0.5	
9	Smellie Peak	Landslide Block	-63.9264	302.0972	Basalt	Lookalike Peaks Fm.	5.89 ± 0.09	Not in-place, used as a fold test. Age uncertain.
		Flow 1	-63.9303	302.0847	Basalt	Smellie Peak F.	5.14 ± 0.38	Tilted 160/18
		Flow 2	-63.9304	302.0847	Basalt	Smellie Peak F.	5.14 ± 0.38	Tilted 160/18
		Pillows	-63.9306	302.0823	Basalt	Smellie Peak F.	5.14 ± 0.38	Some samples were from brecciated pillows.
		Scoria Cone	-63.9303	302.0821	Basaltic Lapilli	Scoria Cone	5.91 ± 0.08	
10	Taylor Bluff	Dike	-63.9955	302.3382	Diabase	Taylor Bluff Fm.	1.94 ± 0.47	Intrudes Taylor Bluff Fm.
		Columns	-63.9950	302.3309	Basalt	Forster Cliffs Fm.	2.03 ± 0.13	Possibly 2.5 ± 0.07 Ma
		Tuff Cone	-63.9950	302.3309	Basaltic Lapilli	Tuff Cone	2.03 ± 0.13	

See Smellie (2021b) for a compilation of ages from the JRIVG and associated references.

Table S2: Mean Paleomagnetic Pole Positions

Pole Name	Lat	Lon	N	A95	R	K	A	S_F	ΔI	Notes
This Study	-87.7	272.6	19	7.0	18.2	23.8	34.9	15.85 ± 3.8/4.1	0.80 ± 3.6/2.8	Excludes transitional poles
All JRI	-88.1	269.5	32	5.8	30.5	20.0	37.6	17.69 ± 3.4/3.4	-0.45 ± 3.0/2.6	This study + Kristjánsson et al. (2005)
Antarctic Peninsula	-87.1	028.9	68	3.4	65.4	25.9	33.6	15.68 ± 1.9/1.9	0.46 ± 2.3/1.6	This study + Kristjánsson et al. (2005) + Olivia-Urcia et al. (2016) + Baraldo et al. (2003)
PSV10	-87.5	024.9	58	3.6	55.9	27.7	32.7	15.38 ± 1.8/2.0	0.49 ± 2.1/1.8	All AP sites that pass PSV10 data criteria

N = number of samples measured; a95 = 95% confidence interval; K = precision parameter; R = vector sum; A = Vandamme (1994) cutoff angle, S_F = VGP dispersion (with 95% bootstrap confidence intervals), ΔI = Inclination anomaly (with 95% bootstrap confidence intervals).

Table S3: Least-squares best fit directions

Location	Site	Sample	D	I	n	MAD	Max Step (T or ℃)	Min Step (T or ℃)
Cockburn Island	Flow 1	CKA1	342.4	24.9	5	6.8	2.21E-02	5.38E-02
Cockburn Island	Flow 1	CKA2	351	32.9	10	2.2	8.85E-02	1.99E-02
Cockburn Island	Flow 1	CKA3	339.4	70	6	3.8	2.04E-02	4.56E-02
Cockburn Island	Flow 2	CKA5	1.3	-68.2	18	6.5	8.85E-02	1.60E-03
Cockburn Island	Flow 2	CKA6	19.9	-58	18	6.3	8.85E-02	1.60E-03
Cockburn Island	Flow 2	CKA7	40	-61.5	17	4.6	7.50E-02	1.60E-03
Cockburn Island	Flow 2	CKA8	7	-58.3	18	6.2	8.85E-02	1.60E-03
Cockburn Island	Flow 2	CKA9	3.1	-68.8	18	4.6	8.85E-02	1.60E-03
Cockburn Island	Flow 2	CKA10	18.7	-49	14	9.1	8.85E-02	1.02E-02
Cockburn Island	Flow 2	CKA11	8.3	-58.6	18	6.3	8.85E-02	1.60E-03
Cockburn Island	Flow 2	CKA13	26.1	-58.9	16	6.4	6.35E-02	1.60E-03
Cockburn Island	Flow 2	CKA14	23.6	-70.5	18	2.2	8.85E-02	1.60E-03
Cockburn Island	Flow 2	CKA15	7	-60.4	16	5.4	6.35E-02	1.60E-03
Cape Lamb	Palagonite	CLC1	84.7	-51	11	12.9	9.00E-02	1.99E-02
Cape Lamb	Palagonite	CLC2	87.9	-56	10	6.8	9.00E-02	2.35E-02
Cape Lamb	Palagonite	CLC3	84	-54.5	12	5.5	9.00E-02	1.69E-02
Cape Lamb	Palagonite	CLC4	76.3	-42.4	9	2.9	9.00E-02	2.77E-02
Cape Lamb	Palagonite	CLC5	77.5	-47.6	11	3.5	9.00E-02	1.99E-02
Cape Lamb	Palagonite	CLC6	76.7	-53.5	12	4.6	9.00E-02	1.69E-02
Cape Lamb	Palagonite	CLC7	112	-65	11	8.2	9.00E-02	1.99E-02
Cape Lamb	Palagonite	CLC8	118	-63.6	18	5	9.00E-02	3.20E-03
Cape Lamb	Palagonite	CLC9	88.4	-43.9	19	11.6	9.00E-02	1.60E-03
Cape Lamb	Dike	CLD1	87.2	-54.2	7	8.2	2.86E-02	3.87E-02
Cape Lamb	Dike	CLD2	89.8	-21.9	6	12.8	8.85E-02	3.87E-02
Cape Lamb	Dike	CLD3	75.4	-29.7	7	10.2	5.46E-03	3.87E-02
Cape Lamb	Dike	CLD6	272.5	43.9	8	7.7	6.35E-02	1.99E-02
Cape Lamb	Dike	CLD7	248.6	49.5	16	10.7	6.35E-02	1.60E-03
Cape Lamb	Pillow	CLP1	60.8	-39.3	19	9.6	9.00E-02	1.60E-03
Cape Lamb	Pillow	CLP3	258.3	49.9	11	9.3	9.00E-02	1.99E-02
Cape Lamb	Pillow	CLP4	287.2	25.3	11	5	9.00E-02	1.99E-02
Cape Lamb	Pillow	CLP5	58.3	-49.8	15	3	9.00E-02	1.02E-02
Cape Lamb	Pillow	CLP6	87	-58.1	15	3.3	9.00E-02	1.02E-02
Cape Lamb	Pillow	CLP7	81.3	-54.5	15	5.6	9.00E-02	1.02E-02
Davies Dome	Flow 1	DAD1	16.9	-77.8	19	0.8	9.00E-02	1.60E-03
Davies Dome	Flow 1	DAD2	14.4	-74.9	19	0.6	9.00E-02	1.60E-03
Davies Dome	Flow 1	DAD3	25	-74.5	15	1.1	9.00E-02	1.02E-02
Davies Dome	Flow 1	DAD4	34.8	-73.7	15	1.4	9.00E-02	1.02E-02
Davies Dome	Flow 1	DAD5	22.6	-76.5	19	1.7	9.00E-02	1.60E-03
Davies Dome	Flow 1	DAD6	354.4	-77.8	19	0.7	9.00E-02	1.60E-03
Davies Dome	Flow 1	DAD7	3.9	-77.6	19	1.9	9.00E-02	1.60E-03
Davies Dome	Flow 1	DAD9	12	-76.8	19	1.2	9.00E-02	1.60E-03
Davies Dome	Flow 1	DAD10	354.7	-81.4	15	0.6	9.00E-02	1.02E-02
Davies Dome	Flow 1	DAD11	359.4	-75.3	19	3	9.00E-02	1.60E-03
Davies Dome	Flow 1	DAD12	7.5	-74.6	11	1.6	9.00E-02	1.99E-02
Davies Dome	Flow 2	DAD13	37.1	-74.1	11	2	9.00E-02	1.99E-02
Davies Dome	Flow 2	DAD16	346.5	-78	15	7.8	9.00E-02	1.02E-02
Davies Dome	Flow 2	DAD17	0.8	-78.3	11	1.6	9.00E-02	1.99E-02
Davies Dome	Flow 2	DAD18	32.2	-74.2	15	1.7	9.00E-02	1.02E-02
Davies Dome	Flow 2	DAD19	339.2	-78.7	12	9.6	3.31E-02	1.99E-02
Davies Dome	Flow 2	DAD20	352.8	-78	19	10.7	9.00E-02	1.60E-03
Davies Dome	Flow 2	DAD21	339.2	-79.9	19	12.7	9.00E-02	1.60E-03
Davies Dome	Flow 2	DAD23	358.3	-79.1	11	6	9.00E-02	1.99E-02
Davies Dome	Flow 2	DAD27	24.9	-78.5	15	9.3	9.00E-02	1.02E-02
Davies Dome	Flow 4	DVD1	276.6	-82.9	18	4.6	8.85E-02	1.60E-03

Davies Dome	Flow 4	DVD2	312.8	-82.1	22	13.2	8.85E-02	0.00E+00
Davies Dome	Flow 4	DVD3	311.7	-82.3	18	7.1	8.85E-02	1.60E-03
Davies Dome	Flow 4	DVD4	315.1	-79.7	18	5.1	8.85E-02	1.60E-03
Davies Dome	Flow 4	DVD5	309.4	-84.4	10	2	8.85E-02	1.99E-02
Davies Dome	Flow 4	DVD6	309.3	-84.9	18	10.8	8.85E-02	1.60E-03
Davies Dome	Flow 3	DVD8	353.9	-88	10	2	8.85E-02	1.99E-02
Davies Dome	Flow 3	DVD9	322.6	-84.2	10	11.2	8.85E-02	1.99E-02
Davies Dome	Flow 3	DVD10	290	-85.7	18	7.4	8.85E-02	1.60E-03
Humps Island	Volcanic Neck	HIA21	184.7	-18.7	10	1.7	8.85E-02	1.99E-02
Humps Island	Volcanic Neck	HIA22	359.1	-32.6	7	6.9	6.52E-03	3.87E-02
Humps Island	Volcanic Neck	HIA23	340.8	-56.9	12	13	8.85E-02	5.30E-03
Humps Island	Volcanic Neck	HIA24	319.2	-73.2	7	6.7	2.71E-02	3.87E-02
Humps Island	Volcanic Neck	HIA25	3.4	-58.8	10	8.5	8.85E-02	1.99E-02
Humps Island	Volcanic Neck	HIA26	320.8	-62.6	10	8.9	8.85E-02	1.99E-02
Humps Island	Volcanic Neck	HIA27	246.9	-67.8	7	11.3	8.85E-02	3.27E-02
Humps Island	Volcanic Neck	HIA28	349.1	-28.2	18	13	8.85E-02	1.60E-03
Humps Island	Volcanic Neck	HIA29	357.5	-74.7	18	6.4	8.85E-02	1.60E-03
Keltie Head	Flow 1	KLH1	2	-71.3	18	2.5	8.85E-02	1.60E-03
Keltie Head	Flow 1	KLH3	0.1	-74.4	18	5.4	8.85E-02	1.60E-03
Keltie Head	Flow 1	KLH4	352.5	-75.6	18	3.3	8.85E-02	1.60E-03
Keltie Head	Flow 1	KLH5	347.5	-74.5	18	3.4	8.85E-02	1.60E-03
Keltie Head	Flow 1	KLH6	342.3	-72.2	18	1.1	8.85E-02	1.60E-03
Keltie Head	Flow 1	KLH8	7.4	-77	18	1.9	8.85E-02	1.60E-03
Keltie Head	Flow 1	KLH9	5.5	-70.6	19	2.6	6.20E-03	1.60E-03
Keltie Head	Flow 1	KLH10	349	-72	19	2.5	9.45E-03	1.60E-03
Keltie Head	Flow 1	KLH11	356.6	-70.2	15	3.3	9.85E-03	1.02E-02
Keltie Head	Flow 2	KLH13	356.8	-66.1	18	2.9	8.85E-02	1.60E-03
Keltie Head	Flow 2	KLH14	15.9	-69.2	18	4.2	8.85E-02	1.60E-03
Keltie Head	Flow 2	KLH15	10.6	-71.2	18	2.4	8.85E-02	1.60E-03
Keltie Head	Flow 2	KLH16	7.7	-67.3	18	2.3	8.85E-02	1.60E-03
Keltie Head	Flow 2	KLH17	354	-67.3	14	4.6	8.85E-02	1.02E-02
Keltie Head	Flow 2	KLH18	359.7	-66.8	18	2.6	8.85E-02	1.60E-03
Keltie Head	Flow 2	KLH19	26.9	-78.1	10	1.8	8.85E-02	1.99E-02
Keltie Head	Flow 2	KLH20	26.6	-75.4	14	1.4	8.85E-02	1.02E-02
Lachman Mesa	Flow 1	LCH1	72.9	-77.8	15	5.1	4.78E-03	1.02E-02
Lachman Mesa	Flow 1	LCH2	54.6	-78.4	14	3.5	8.85E-02	1.02E-02
Lachman Mesa	Flow 1	LCH3	65.4	-79.2	11	2.1	5.76E-03	1.99E-02
Lachman Mesa	Flow 1	LCH4	79.6	-76.8	14	11.1	8.85E-02	1.02E-02
Lachman Mesa	Flow 1	LCH5	5.7	-64.4	10	3.8	8.85E-02	1.99E-02
Lachman Mesa	Flow 1	LCH6	13.7	-75.9	10	6	8.85E-02	1.99E-02
Lachman Mesa	Flow 1	LCH7	13.5	-74	10	0.9	8.85E-02	1.99E-02
Lachman Mesa	Flow 1	LCH8	24	-73.4	11	0.7	2.98E-03	1.99E-02
Lachman Mesa	Flow 1	LCH9	10.7	-66.2	10	3.4	8.85E-02	1.99E-02
Lachman Mesa	Flow 1	LCH10	17	-65.5	19	7.5	1.31E-03	1.60E-03
Lachman Mesa	Flow 1	LCH11	24.6	-66.5	19	6.4	2.03E-03	1.60E-03
Lachman Mesa	Flow 1	LCH12	10.5	-62.8	19	7.1	1.50E-03	1.60E-03
Lachman Mesa	Flow 2	LCH13	25.7	-69.6	14	1.7	8.85E-02	1.02E-02
Lachman Mesa	Flow 2	LCH14	22.9	-71.4	14	4.3	8.85E-02	1.02E-02
Lachman Mesa	Flow 2	LCH15	29.5	-75.4	18	5	8.85E-02	1.60E-03
Lachman Mesa	Flow 2	LCH16	24.7	-72.8	4	0.4	6.35E-02	3.87E-02
Lachman Mesa	Flow 2	LCH17	359.1	-81.5	16	7.4	6.35E-02	1.60E-03
Lachman Mesa	Flow 2	LCH18	358.4	-77.1	16	3.2	6.35E-02	1.60E-03
Lachman Mesa	Flow 2	LCH19	35.1	-79.6	18	3.7	8.85E-02	1.60E-03
Lachman Mesa	Flow 2	LCH20	9.7	-78.5	18	4.4	8.85E-02	1.60E-03
The Naze	Flow 1	NAZ1	152.6	80.4	15	2.4	1.36E-02	1.02E-02
The Naze	Flow 1	NAZ2	196.4	82.8	14	9	8.85E-02	1.02E-02

The Naze	Flow 1	NAZ3	153.6	74.3	18	2.7	2.61E-02	3.20E-03
The Naze	Flow 1	NAZ4	156.8	69.9	19	6.2	1.76E-02	1.60E-03
The Naze	Flow 1	NAZ5	145	75.5	18	3.5	1.77E-02	3.20E-03
The Naze	Flow 1	NAZ6	177.4	68.8	19	5.6	6.71E-03	1.60E-03
The Naze	Flow 1	NAZ7	149	78.2	15	4.8	1.15E-03	1.02E-02
The Naze	Flow 1	NAZ8	169.7	76.4	19	3.4	1.10E-02	1.60E-03
The Naze	Flow 1	NAZ9	179.2	72.8	18	1.9	8.85E-02	1.60E-03
The Naze	Flow 2	NAZ10	143	76.1	14	6.2	8.85E-02	1.02E-02
The Naze	Flow 2	NAZ11	142.8	77.1	14	10.1	8.85E-02	1.02E-02
The Naze	Flow 2	NAZ12	153.4	74.8	4	0.8	6.35E-02	3.87E-02
The Naze	Flow 2	NAZ13	166.5	73.5	4	0.9	6.35E-02	3.87E-02
The Naze	Flow 2	NAZ14	155.2	75.3	18	3.4	8.85E-02	1.60E-03
The Naze	Flow 2	NAZ15	160.6	76.9	18	1.5	8.85E-02	1.60E-03
The Naze	Flow 2	NAZ16	150.5	76	18	7.6	8.85E-02	1.60E-03
The Naze	Flow 2	NAZ17	153.4	80.8	18	12.3	8.85E-02	1.60E-03
The Naze	Flow 2	NAZ18	171.2	81	18	10.5	8.85E-02	1.60E-03
The Naze	Sill	NS11	171.2	86.2	19	2.3	7.64E-03	1.60E-03
The Naze	Sill	NS12	140.8	78.1	19	3.4	1.39E-02	1.60E-03
The Naze	Sill	NS13	145.9	84.5	19	9.7	1.53E-02	1.60E-03
The Naze	Sill	NS14	18.5	87.9	14	1.1	8.85E-02	1.02E-02
The Naze	Sill	NS15	343.9	89.1	11	1	1.18E-02	1.99E-02
The Naze	Sill	NS16	10	84.8	19	2.4	1.30E-02	1.60E-03
The Naze	Sill	NS17	117.1	79.5	19	4.4	1.65E-02	1.60E-03
~~The Naze~~	~~Sill~~	~~NS18~~	~~19.2~~	~~-30.8~~	~~19~~	~~3.9~~	~~1.76E-03~~	~~1.60E-03~~
The Naze	Flow 3	NCM1	209.9	77.5	11	13.4	9.00E-02	1.99E-02
The Naze	Flow 3	NCM2	177	71	12	3	1.58E-02	1.99E-02
The Naze	Flow 3	NVA1	165.3	79.8	19	4.2	2.61E-03	1.60E-03
The Naze	Flow 3	NVA2	170.5	79.8	18	3.6	1.55E-02	3.20E-03
The Naze	Flow 3	NVA3	200.6	72.4	19	3.3	1.63E-02	1.60E-03
The Naze	Flow 3	NVA4	188.2	73.7	15	6.8	1.44E-02	1.02E-02
~~The Naze~~	~~Flow 3~~	~~NVA5~~	~~159.9~~	~~-28.2~~	~~17~~	~~3.9~~	~~8.85E-02~~	~~3.20E-03~~
The Naze	Flow 3	NVA6	176.4	69.9	19	2.1	2.05E-02	1.60E-03
The Naze	Dike	NVD1	230.6	82	11	1.9	9.00E-02	1.99E-02
The Naze	Dike	NVD2	331.2	83.8	15	2.7	9.00E-02	1.02E-02
Seymour Island	Dike	SEA1	209.9	71.2	7	7.6	9.00E-02	3.87E-02
Seymour Island	Dike	SEA2	157.9	75.2	11	5.8	9.00E-02	1.99E-02
~~Seymour Island~~	~~Dike~~	~~SEA3~~	~~94.9~~	~~66~~	~~13~~	~~16.2~~	~~7.50E-02~~	~~1.02E-02~~
Seymour Island	Dike	SEA5	190.7	73.5	12	4	1.78E-02	1.99E-02
Seymour Island	Dike	SEA6	162.6	69.8	13	4.1	2.13E-02	1.69E-02
Seymour Island	Dike	SEA7	202.6	70.8	8	1.3	1.82E-02	3.87E-02
Seymour Island	Dike	SEA8	187.5	76.8	10	7.8	9.00E-02	2.35E-02
Seymour Island	Dike	SEA10	142.6	66.9	15	6.7	2.36E-02	1.21E-02
Seymour Island	Dike	SEA11	169.3	58.6	12	9	2.27E-02	1.99E-02
Smellie Peak	Landslide Block	SMD1	56.4	35.8	19	4.6	3.48E-03	1.60E-03
Smellie Peak	Landslide Block	SMD2	56.8	40.8	19	2.8	3.58E-03	1.60E-03
Smellie Peak	Landslide Block	SMD3	56.1	40	10	1.4	8.85E-02	1.99E-02
Smellie Peak	Landslide Block	SMD4	54.8	38.5	19	4.5	3.82E-03	1.60E-03
Smellie Peak	Landslide Block	SMD5	54.9	40.9	19	3.8	3.41E-03	1.60E-03
Smellie Peak	Landslide Block	SMD6	58.8	39.6	11	1.5	2.94E-03	1.99E-02
Smellie Peak	Landslide Block	SMD7	56.1	39.2	18	2.8	8.85E-02	1.60E-03
Smellie Peak	Landslide Block	SMD8	56.8	38.7	15	2.2	4.59E-03	1.02E-02
Smellie Peak	Landslide Block	SMD9	57	39.3	15	2.5	4.24E-03	1.02E-02
Smellie Peak	Landslide Block	SMD10	55.2	38.5	19	2.9	4.11E-03	1.60E-03
Smellie Peak	Landslide Block	SMD11	53.8	39.5	15	1.2	3.95E-03	1.02E-02
Smellie Peak	Landslide Block	SMD12	53.4	38.9	19	2.6	4.15E-03	1.60E-03
~~Smellie Peak~~	~~Landslide Block~~	~~SMD13~~	~~31.4~~	~~65~~	~~10~~	~~5.1~~	~~8.85E-02~~	~~1.99E-02~~

Smellie Peak	Landslide Block	SMD14	55.2	41.8	19	2.2	5.14E-03	1.60E-03
Smellie Peak	Landslide Block	SMD15	56.3	38.2	19	4.9	3.78E-03	1.60E-03
Smellie Peak	Flow 1	SML1.2	7.8	82.6	17	6.5	9.00E-02	5.30E-03
Smellie Peak	Flow 1	SML2	0.3	81.5	17	6	9.00E-02	5.30E-03
Smellie Peak	Flow 1	SML3	9.9	55.6	15	1.9	9.00E-02	1.02E-02
Smellie Peak	Flow 1	SML4.2	349.1	75.3	19	14.6	9.00E-02	1.60E-03
Smellie Peak	Flow 1	SML5.2	4.7	78.7	15	11.8	9.00E-02	1.02E-02
Smellie Peak	Flow 1	SML6	6.5	79.0	15	6.8	9.00E-02	1.02E-02
Smellie Peak	Flow 1	SML7	347	83.1	16	4.9	9.00E-02	7.30E-03
Smellie Peak	Flow 1	SML8.2	13.7	83.4	17	6.3	9.00E-02	5.30E-03
Smellie Peak	Flow 1	SML9	359.9	82	15	3.7	9.00E-02	1.02E-02
Smellie Peak	Flow 2	SML10.2	326.3	79.7	15	11.3	9.00E-02	1.02E-02
Smellie Peak	Flow 2	SML11.2	324.6	76.6	15	11.1	9.00E-02	1.02E-02
Smellie Peak	Flow 2	SML12.2	309.1	83.6	15	15	9.00E-02	1.02E-02
Smellie Peak	Flow 2	SML13.2	297.7	82.2	15	5.6	9.00E-02	1.02E-02
Smellie Peak	Flow 2	SML14.2	357.7	86	19	10.2	9.00E-02	1.60E-03
Smellie Peak	Flow 2	SML15.2	336.6	83.8	19	9	9.00E-02	1.60E-03
Smellie Peak	Pillow Breccia	SML16	2.4	-27.2	11	12.1	9.00E-02	1.99E-02
Smellie Peak	Pillow Breccia	SML17	298.3	-15.2	11	2.1	9.00E-02	1.99E-02
Smellie Peak	Pillow Breccia	SML18	310.3	-12.9	6	9.6	3.00E-02	5.38E-02
Smellie Peak	Pillow Breccia	SML19.2	335.2	42.7	15	5.2	9.00E-02	1.02E-02
Smellie Peak	Pillows	SML20	308.4	80.9	15	4.8	9.00E-02	1.02E-02
Smellie Peak	Pillows	SML21.2	269.4	77.5	15	1.9	9.00E-02	1.02E-02
Smellie Peak	Pillows	SML22	276	74.5	15	3.9	9.00E-02	1.02E-02
Smellie Peak	Pillows	SML23.2	291.2	76.9	11	0.8	9.00E-02	1.99E-02
Smellie Peak	Pillows	SML24.2	268.2	78.5	11	14.2	9.00E-02	1.99E-02
Smellie Peak	Pillows	SML25.2	215.5	59.2	8	13.3	3.25E-02	3.87E-02
Smellie Peak	Pillows	SML26.2	229	77.9	7	4.7	9.00E-02	3.87E-02
Smellie Peak	Pillow Breccia	SML27	30.6	70.4	11	7.9	9.00E-02	1.99E-02
Smellie Peak	Scoria Cone	SML28.1	214.5	70.8	19	6.6	9.00E-02	1.60E-03
Smellie Peak	Scoria Cone	SML29.2	154.9	57.5	12	1.4	1.45E-02	1.99E-02
Smellie Peak	Scoria Cone	SML30.2	214.5	64.8	11	4	9.00E-02	1.99E-02
Smellie Peak	Scoria Cone	SML31.2	193.9	65.7	15	3.7	9.00E-02	1.02E-02
Smellie Peak	Scoria Cone	SML32.2	146.4	60.2	15	4.1	9.00E-02	1.02E-02
Smellie Peak	Scoria Cone	SML33.2	179.4	65.9	19	2.1	9.00E-02	1.60E-03
Smellie Peak	Scoria Cone	SML34.2	143.5	60.8	15	4.2	9.00E-02	1.02E-02
Smellie Peak	Scoria Cone	SML36.2	146.5	59.3	16	1.5	9.43E-03	1.02E-02
Smellie Peak	Scoria Cone	SML37.2	140.5	78.3	16	5.9	1.01E-02	1.02E-02
Smellie Peak	Scoria Cone	SML38.2	187.1	51	12	1.2	1.70E-02	1.99E-02
Taylor Bluff	Dike	TBA1.3	200.7	66.6	18	0.8	8.85E-02	1.60E-03
Taylor Bluff	Dike	TBA2.1	200.4	72.4	18	0.5	8.85E-02	1.60E-03
Taylor Bluff	Dike	TBA3.1	202	72	14	1.2	8.85E-02	1.02E-02
Taylor Bluff	Dike	TBA4.1	199.9	73.6	18	0.4	8.85E-02	1.60E-03
Taylor Bluff	Dike	TBA5.3	190.1	71.5	14	4.4	8.85E-02	1.02E-02
Taylor Bluff	Dike	TBA6.1	207.8	75.1	10	1.6	8.85E-02	1.99E-02
Taylor Bluff	Dike	TBA7.1	180.2	73.2	14	0.3	8.85E-02	1.02E-02
Taylor Bluff	Dike	TBA8.3	201.1	73.2	18	2.2	8.85E-02	1.60E-03
Taylor Bluff	Dike	TBA9.3	190.6	68.2	10	2.8	8.85E-02	1.99E-02
Taylor Bluff	Dike	TBA10.3	194.2	68.1	14	0.9	8.85E-02	1.02E-02
Taylor Bluff	Dike	TBA11.3	205.8	71.2	18	6.8	8.85E-02	1.60E-03
Taylor Bluff	Dike	TBA12.3	205.5	65.7	14	1.6	8.85E-02	1.02E-02
Taylor Bluff	Columns	TBA13	357.7	18	14	8.7	8.85E-02	1.02E-02
Taylor Bluff	Columns	TBA14	346.6	22.3	10	1.1	8.85E-02	1.99E-02
Taylor Bluff	Columns	TBA15	339.5	6	14	4.1	8.85E-02	1.02E-02
Taylor Bluff	Columns	TBA16	345.4	50.8	14	6.4	8.85E-02	1.02E-02
Taylor Bluff	Columns	TBA17	352	-14.9	14	5.6	8.85E-02	1.02E-02

Taylor Bluff	Columns	TBA18.1	337.4	-6	14	2.1	8.85E-02	1.02E-02
Taylor Bluff	Columns	TBA19.1	0.7	-31.6	14	4.4	8.85E-02	1.02E-02
Taylor Bluff	Columns	TBA20.1	3.4	-10.4	14	3.1	8.85E-02	1.02E-02
Taylor Bluff	Columns	TBA21	352.4	-6.3	16	7	6.35E-02	1.60E-03
Taylor Bluff	Columns	TBA22	349.3	-7.3	16	10.4	6.35E-02	1.60E-03
Taylor Bluff	Columns	TBA23	344.5	-78.4	10	2.4	8.85E-02	1.99E-02
Taylor Bluff	Columns	TBA24	357.2	-52.7	10	4	8.85E-02	1.99E-02
Taylor Bluff	Columns	TBA25.1	355	-33.5	14	12	8.85E-02	1.02E-02
Taylor Bluff	Tuff Cone	TBA26	325.4	24.4	10	1.6	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA27.1	333.5	17.4	10	3	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA28.1	339.8	9.6	10	6.8	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA29.1	339	13.1	10	1.9	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA30.1	332.2	18.6	10	3.4	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA31.1	327.5	17.9	10	10.7	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA32	341.6	10.7	10	13	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA33.1	337.6	7.2	14	7.5	8.85E-02	1.02E-02
Taylor Bluff	Tuff Cone	TBA34.1	336	6.8	18	9.2	8.85E-02	1.60E-03
~~Taylor Bluff~~	~~Tuff Cone~~	~~TBA35~~	~~123.6~~	~~-63.1~~	~~14~~	~~4.8~~	~~8.85E-02~~	~~1.02E-02~~
Taylor Bluff	Tuff Cone	TBA36	342.2	1.6	18	11.6	8.85E-02	1.60E-03
Taylor Bluff	Tuff Cone	TBA37	340.4	20	10	7.8	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA38	330.9	12.9	10	4.5	8.85E-02	1.99E-02
Taylor Bluff	Tuff Cone	TBA39	331.7	21	14	4.6	8.85E-02	1.02E-02
Taylor Bluff	Tuff Cone	TBA40	332.3	16	18	9.5	8.85E-02	1.60E-03
Taylor Bluff	Tuff Cone	TBA41	336.4	18.7	14	2.6	8.85E-02	1.02E-02
Taylor Bluff	Tuff Cone	TBA42	331.7	30.6	18	8.4	8.85E-02	1.60E-03
Overprints								
Cockburn Island	Flow 1	CKA1	39.6	-56.6	17	5.3	3.87E-02	0.00E+00
Cockburn Island	Flow 1	CKA2	113	39	7	2.3	7.30E-03	77
Cockburn Island	Flow 1	CKA3	2.3	-52.3	17	30.4	3.87E-02	0.00E+00
Cape Lamb	Palagonite	CLC1	281.6	-51.8	12	17.3	1.69E-02	0.00E+00
Cape Lamb	Palagonite	CLC3	52.2	-73.9	7	4.4	1.43E-02	1.60E-03
Cape Lamb	Palagonite	CLC4	26	-80.4	9	4.8	1.99E-02	1.60E-03
Cape Lamb	Palagonite	CLC5	35.2	-55.3	8	5.6	1.69E-02	1.60E-03
Cape Lamb	Palagonite	CLC6	196.2	-33.7	7	19.5	1.43E-02	1.60E-03
Cape Lamb	Pillow	CLP4	320	-46.8	12	12.7	1.69E-02	0.00E+00
Humps Island	Volcanic Neck	HIA23	322.8	42.6	7	14.3	3.20E-03	0.00E+00
Humps Island	Volcanic Neck	HIA24	292.1	-25.2	13	5.2	1.69E-02	0.00E+00
Humps Island	Volcanic Neck	HIA25	40.7	1.8	8	8.3	1.69E-02	1.60E-03
Humps Island	Volcanic Neck	HIA27	242.2	46.2	16	4.4	2.77E-02	0.00E+00
The Naze	Flow 1	NAZ6	31.4	4.9	5	15	1.60E-03	0.00E+00
The Naze	Flow 1	NAZ7	43.9	-13.7	6	12	3.20E-03	0.00E+00
The Naze	Flow 1	NAZ8	27.2	-8.7	5	13.4	1.60E-03	0.00E+00
The Naze	Flow 1	NAZ9	35.8	12	5	10.2	1.60E-03	0.00E+00
The Naze	Flow 3	NVA2	111.7	-10.6	4	10.1	1.60E-03	77
The Naze	Flow 3	NVA3	249.4	-8.5	5	10.7	1.60E-03	0.00E+00
~~The Naze~~	~~Flow 3~~	~~NVA5~~	~~121.9~~	~~36.5~~	~~5~~	~~6.1~~	~~1.60E-03~~	~~0.00E+00~~
Seymour Island	Dike	SEA3	48.7	-12.5	12	17.1	1.69E-02	0.00E+00
Seymour Island	Dike	SEA8	76.6	-13.1	12	19.4	1.99E-02	77
Smellie Peak	Flow 1	SML1.2	66.5	-17.1	6	12.2	3.20E-03	0.00E+00
Smellie Peak	Flow 1	SML2	31.6	-23.3	6	4.3	3.20E-03	0.00E+00
Smellie Peak	Flow 1	SML3	23.3	-44.5	5	8.3	3.20E-03	77
Smellie Peak	Flow 1	SML5.2	77.6	-24.3	8	31.1	7.30E-03	0.00E+00
Smellie Peak	Flow 1	SML6	51.8	-18.9	7	15.4	5.30E-03	0.00E+00
Smellie Peak	Flow 1	SML7	66.5	-23.1	6	16.4	3.20E-03	0.00E+00
Smellie Peak	Flow 1	SML8.2	43	-26.6	6	4.5	3.20E-03	0.00E+00

Smellie Peak	Flow 1	SML9	66.2	-15.2	6	30.4	3.20E-03	0.00E+00
Smellie Peak	Flow 2	SML10.2	32.7	-18.5	7	29.6	5.30E-03	0.00E+00
Smellie Peak	Flow 2	SML12.2	33.8	-7.8	4	18.9	7.30E-03	1.60E-03
Smellie Peak	Pillow Breccia	SML18	287.7	65.3	9	3.1	1.99E-02	1.60E-03
Smellie Peak	Pillow Breccia	SML19.2	2.4	-41.6	5	7.6	1.02E-02	1.60E-03
Smellie Peak	Pillows	SML21.2	5.3	-64.2	4	3.4	7.30E-03	1.60E-03
Smellie Peak	Pillows	SML22	39.1	-57.2	4	8.9	7.30E-03	1.60E-03
Smellie Peak	Pillows	SML25.2	7.1	-64.3	13	11.5	1.99E-02	0.00E+00

D = declination

I = Inclination

n = number of measurements used

MAD = maximum angle of deviation (Kirschvink, 1980)

Table S4: Thellier-Thellier Paleointensity Selection Criteria

Statistic	Cutoff
f_{VDS}	>0.3
MAD	<11
β	<0.14
DANG	<13
Z	<3
DRATS	<17

Definitions:

f_{VDS} = NRM fraction (vector difference sum) (Tauxe and Staudigel, 2004)

MAD = maximum angle of deviation (Kirschvink, 1980)

β = ratio of the standard error to absolute value of the slope (Coe et al., 1978)

DANG = deviation of the angle (Pick and Tauxe 1993)

Z = zig-zag parameter (Yu and Tauxe, 2005)

DRATS = difference ratio sum (Tauxe and Staudigel, 2004)

Table S5: Pseudo-Thellier Paleointensity Selection Criteria

Statistic	Plot	de Groot Cutoff	Paterson Cutoff
b	$ARM_{remaining}$/NRM	--	--
	NRM/$ARM_{acquired}$	--	--
	$ARM_{remaining}$/$ARM_{acquired}$	--	0.85-1.15
r^2	$ARM_{remaining}$/NRM	>0.99	>0.995
	NRM/$ARM_{acquired}$	>0.99	>0.995
	$ARM_{remaining}$/$ARM_{acquired}$	--	>0.995
n	$ARM_{remaining}$/NRM	≥6	≥6
	NRM/$ARM_{acquired}$	≥6	≥6
	$ARM_{remaining}$/$ARM_{acquired}$	≥6	≥6
f	$ARM_{remaining}$/NRM	--	--
	NRM/$ARM_{acquired}$	--	>0.45
	$ARM_{remaining}$/$ARM_{acquired}$	--	--
f_{resid}	$ARM_{remaining}$/NRM	--	<0.15
	NRM/$ARM_{acquired}$	--	--
	$ARM_{remaining}$/$ARM_{acquired}$	--	--
β	$ARM_{remaining}$/NRM	--	<0.1
	NRM/$ARM_{acquired}$	--	<0.1
	$ARM_{remaining}$/$ARM_{acquired}$	--	<0.1
k	$ARM_{remaining}$/NRM	--	<0.2
	NRM/$ARM_{acquired}$	--	<0.2
	$ARM_{remaining}$/$ARM_{acquired}$	--	<0.2
$B_{1/2}$ARM	--	23-63 mT	--

Definitions:

b = slope of the best-fit line

r^2 = correlation coefficient

n = number of measurements used

f = NRM fraction (Coe et al., 1978)

f_{resid} = residual fraction (Paterson et al., 2016)

β = ratio of the standard error to absolute value of the slope (Coe et al., 1978)

k = curvature of a best-fit circle (Paterson, 2011)

$B_{1/2}$ ARM = magnitude of AF for which half the maximum ARM is imparted (de Groot et al., 2013)

Table S6: Tsunakawa-Shaw Selection Criteria

Statistic	Plot	Cutoff
b	NRM/TRM1*	--
	TRM1/TRM2*	0.95-1.05
f	NRM/TRM1*	>30
	TRM1/TRM2*	>30
r^2	NRM/TRM1*	>0.995
	TRM1/TRM2*	>0.995
n	NRM/TRM1*	≥6
	TRM1/TRM2*	≥6

Definitions:

b = slope of the best-fit line

f = NRM or TRM1 fraction (Coe et al., 1978)

r^2 = correlation coefficient

n = number of measurements used

Table S7: Other Antarctic Peninsula Poles

Location	Unit	Age (Ma)	n/N	D	I	a95	K	VGP Lat	VGP Lon	VGP dm	VGP dp	Polarity
Kristjánsson et al. (2005) (James Ross Island)												
Lachman Crags, main delta	Johnson Mesa Fm.	5.04 ± 0.04	4/4	345.1	-73.9	8.4	121	82	234.4	13.7	15.1	Normal
Lachman Crags, upper delta	Lachman Crags Fm.	3.95 ± 0.05	3/3	154.3	62.9	5.4	527	-65.7	73.3	6.7	8.5	Reversed
Davis Dome, main delta	Kipling Mesa Fm.	5.36 ± 0.05	4/4	307.6	-78.6	5.8	254	68.9	177.5	10.4	11.0	Normal
Davis Dome, upper delta	Patalamon Mesa Fm.	4.78 ± 0.07	4/4	181.7	86.4	5.8	248	-71.1	301.2	11.5	11.5	Reversed
Bibby Point	Palisade Nunatak Fm.	Unknown	4/4	2.6	-72.7	5.1	329	84.8	315.7	8.1	9.1	Normal
Bibby Point	Palisade Nunatak Fm.	Unknown	4/4	4.6	-74.9	1.9	2392	87	348.5	3.2	3.5	Normal
Stoneley Point	Palisade Nunatak Fm.	Unknown	4/4	16.8	-79.3	3.2	819	81.4	78.6	5.8	6.1	Normal
Brandy Bay	Palisade Nunatak Fm.	Unknown	4/4	11.5	79.9	19.4	23	-44.5	307.4	35.5	37.1	Transitional
Brandy Bay	Palisade Nunatak Fm.	Unknown	4/4	168	69	2.4	1525	-77	87.7	3.5	4.1	Reversed
San Carlos Point	Kipling Mesa Fm.?	5.36 ± 0.05	4/4	305.3	82.4	6.9	180	-53.3	281.5	13.1	13.5	Reversed
Smellie Peak, summit	Smellie Peak Fm.	5.14 ± 0.38	4/4	289.5	85.7	9.4	117	-60	285.8	18.5	18.6	Reversed
Smellie peak, delta	Lookalike Peaks Fm.	5.89 ± 0.09	4/4	193.7	71.2	5.6	271	-79.3	168.2	8.5	9.8	Reversed
S. of S.C. Point	Kipling Mesa Fm.?	5.36 ± 0.05	4/4	289.2	-55.8	10.1	83	*40.4*	210.2	10.4	14.5	Transitional
Stickle Ridge, lower delta	Lookalike Peaks Fm.	6.16 ± 0.08	4/4	191.1	55.1	6.8	184	-60.9	140.8	6.9	9.7	Reversed
Stickle Ridge, lower delta	Lookalike Peaks Fm.	6.16 ± 0.08	4/5	200.8	66	4.7	385	-70.7	167.7	6.3	7.7	Reversed
Olivia-Urcia et al. 2016 (Deception Island)												
PC1	S2	<100 Ka	8/8	346	−70	4	170	-78.4	74.1	5.9	-6.9	Normal
PC2	S2	<100 Ka	8/8	306	−83	3	229	-68.2	330.7	5.7	-5.9	Normal
PC3	S2	<100 Ka	8/8	351	−69	5	91	-78.5	90.8	7.2	-8.5	Normal
CL1	S2	<100 Ka	6/8	3	−56	5	148	-63.5	124.8	5.2	-7.2	Normal

BA3	S1	<100 Ka	8/8	351	−72	5	103	-82.5	78.3	7.8	-8.8	Normal
FU3	S1	<100 Ka	7/8	321	−73	7	67	-70.8	24.7	11.1	-12.5	Normal
FU5	S1	<100 Ka	5/8	323	−76	4	307	-73.6	10.9	6.8	-7.4	Normal
TE1	S1	<100 Ka	6/7	341	−80	6	97	-79.4	335.4	11.0	-11.5	Normal
BA8	S1	<100 Ka	8/8	352	−67	4	142	-76.0	97.5	5.5	-6.6	Normal
BA5	S1	<100 Ka	6/8	331	−72	2	916	-74.5	38.6	3.1	-3.5	Normal
FU7	S1	<100 Ka	8/8	1	−68	3	228	-78.1	122.4	4.2	-5.0	Normal
FU8	S1	<100 Ka	5/8	320	−76	8	79	-72.3	9.7	13.6	-14.8	Normal
BALL5	S1	<100 Ka	8/8	328	−74	4	147	-74.7	25.3	6.5	-7.2	Normal
PEN1	S1	<100 Ka	8/8	337	−75	4	167	-79.3	25.1	6.7	-7.3	Normal
CO1	S1	<100 Ka	8/8	338	−75	3	277	-79.8	25.9	5.0	-5.5	Normal
MU3	F2	<100 Ka	6/8	312	−83	5	164	-69.6	330.0	9.6	-9.8	Normal
FU2	F1	<100 Ka	8/8	336	−85	5	91	-71.6	312.2	9.8	-9.9	Normal
FU1	F1	<100 Ka	7/7	331	−74	8	49	-76.0	27.7	13.0	-14.4	Normal
FU4	F1	<100 Ka	6/7	232	−80	11	15	-48.3	322.6	20.2	-21.1	Transitional
FU6	F1	<100 Ka	7/7	351	−33	38	52	-44.6	107.3	24.4	-43.1	Transitional
Baraldo et al. (2003) (Deception Island)												
DI 10	BSF	<100 Ka	5	355.3	−79.2	6.4	142	-83.5	314.4	11.6	-12.2	Normal
DI 13	BSF	<100 Ka	6	341.7	−79.6	3.3	408	-80.0	338.0	6.0	-6.3	Normal
DI 08	YTF	<100 Ka	3	19.3	−69.3	9	190	-75.8	173.5	13.1	-15.4	Normal
DI 09	YTF	<100 Ka	6	24.3	−70.6	7.4	82	-75.2	187.4	11.1	-12.8	Normal
DI 11	YTF	<100 Ka	5	348.2	−75.3	11.1	49	-84.5	30.8	18.6	-20.3	Normal
DI 12	YTF	<100 Ka	5	346.8	−76.3	4.8	252	-84.0	13.3	8.2	-8.9	Normal
DI 15	YTF	<100 Ka	6	355.2	−73.2	4.7	202	-85.3	87.4	7.5	-8.4	Normal
DI 20	YTF	<100 Ka	5	11.9	−72.4	6.8	128	-82.1	172.5	10.7	-12.0	Normal
DI 23	YTF	<100 Ka	5	358.7	−74.7	7.7	98	-88.3	98.4	12.7	-14.0	Normal
DI 07	YSF	<100 Ka	4	310.3	−74.8	5.6	268	-67.4	10.5	9.3	-10.2	Normal
DI 06	EPE	<100 Ka	4	4.3	−85.5	7.3	159	-71.9	297.2	14.3	-14.5	Normal
DI 19	EPE	<100 Ka	8	312.9	−55.1	6.9	65	-50.4	50.3	7.0	-9.8	Transitional
DI 25	EPE	<100 Ka	6	331.1	−80.2	10.3	43	-76.4	341.4	19.0	-19.8	Normal
DI 27	EPE	<100 Ka	6	350.1	−73.9	3.4	377	-84.4	56.9	5.5	-6.1	Normal
DI 29	EPE	<100 Ka	5	55.7	−87.4	2.5	939	-65.5	289.0	5.0	-5.0	Normal
DI 30	EPE	<100 Ka	6	338.5	−60.7	9.1	55	-65.3	78.5	10.6	-13.9	Normal
DI 35	TE	<100 Ka	4	343.5	−71.8	13.4	48	-79.6	59.1	20.7	-23.6	Normal
DI 03	TE	<100 Ka	6	344.3	−72.0	3.6	354	-80.2	59.6	5.6	-6.3	Normal
DI 04	TE	<100 Ka	6	8	−68.2	3.6	351	-77.6	143.3	5.1	-6.1	Normal
DI 31	TE	<100 Ka	7	308.6	−62.0	10.9	32	-54.8	38.7	13.1	-16.9	Transitional
DI 01	1842	1842 C.E.	3	10.6	−56.1	9.1	184	-62.9	138.3	9.4	-13.1	Normal

n = number of samples used; N = number of samples measured; D = declination; I = inclination; a95 = 95% confidence interval; K = precision parameter; dm/dp = 95% confidence interval (elliptical).

**Transitional poles determined by Vandamme (1994) cutoff angle.*

Table S8: Thellier-Thellier Paleointensity Results

Locality	Site	Sample	f_{VDS}	MAD	β	DANG	Z	DRATS	n	Intensity (μT)
Davies Dome	Flow 1	DAD6.3	0.43	6.8	0.054	4.0	0.07	11.9	6	29.3
Davies Dome	Flow 1	DAD7.3	0.52	3.4	0.136	1.0	0.53	9.9	9	20.7
Davies Dome	Flow 2	DAD16.3	0.42	5.2	0.137	2.7	0.32	-10.7	6	40.7
Keltie Head	Flow 1	KLH1.1	0.40	10.3	0.075	3.3	0.17	9.1	5	47.8
Lachman Mesa	Flow 1	LCH10.1	0.49	6.9	0.094	0.9	0.15	-16.5	6	19.1
Lachman Mesa	Flow 1	LCH11.1	0.49	5.7	0.077	0.7	0.14	3.1	6	23.3
Lachman Mesa	Flow 2	LCH16.1	0.52	8.4	0.084	1.4	0.16	16.5	7	13.7
The Naze	Flow 2	NAZ15.3	0.47	1.1	0.114	1.1	0.29	14.4	7	22.5
The Naze	Flow 2	NAZ18.3	0.45	2.8	0.099	2.3	0.19	5.1	6	19.1

9/102 Samples passed the selection criteria of Lawrence et al. (2009)

See Table S2 for explanation of selection criteria

Duplicates

The Naze		NAZ15.4	0.42	2.5	0.0439	1.622	0.06	12.24	7	16.3

Definitions:

f_{VDS} = NRM fraction (vector difference sum) (Tauxe and Staudigel, 2004)

MAD = maximum angle of deviation (Kirschvink, 1980)

β = ratio of the standard error to absolute value of the slope (Coe et al., 1978)

DANG = deviation of the angle (Pick and Tauxe 1993)

Z = zig-zag parameter (Yu and Tauxe, 2005)

DRATS = difference ratio sum (Tauxe and Staudigel, 2004)

Table S9: Pseudo-Thellier Results					Demag Demag					ARM ARM				Pseudo Arai					de Groot	Paterson	de Groot	Paterson
Locality	**Site**	**Sample**	**n**	**$B_{1/2}$ARM**	**Slope**	**r^2**	**f**	**β**	**k**	**Slope**	**r^2**	**β**	**k**	**Slope**	**r^2**	**f**	**β**	**k**	**Intensity**	**Intensity**	**Cutoff**	**Cutoff**
Davies Dome	Flow 4	DVD4	9	218.3	0.12	0.998	0.01	0.0	0.15	0.91	0.999	0.0	0.07	-7.78	0.997	0.60	0.0	0.09	72.0	94.9	FAIL	PASS
Humps Island	Neck	HIA21	6	247.3	0.38	0.993	0.72	0.0		1.20	1.000	0.0		-3.12	0.992	0.37	0.0		37.7	38.1	PASS	FAIL
Humps Island	Neck	HIA24	6	247.1	10.85	0.999	1.02	0.0		1.06	0.997	0.0		-0.10	0.998	0.13	0.0		15.4	1.2	PASS	FAIL
Humps Island	Neck	HIA26	9	299.1	16.31	0.994	2.14	0.0		1.20	0.994	0.0		-0.07	0.993	0.23	0.0		15.2	0.9	PASS	FAIL
Humps Island	Neck	HIA28	7	275.8	8.87	0.991	0.65	0.0		1.01	0.999	0.0		-0.11	0.994	0.20	0.0		15.5	1.4	PASS	FAIL
Keltie Head	Flow 1	KLH4	11	121.9	0.17	0.998	0.01	0.0	0.14	0.92	0.999	0.0	0.15	-5.34	0.998	0.60	0.0	0.05	54.0	65.1	FAIL	PASS
Keltie Head	Flow 1	KLH5	11	125.1	0.17	0.998	0.02	0.0	0.11	0.94	0.998	0.0	0.18	-5.53	0.998	0.58	0.0	0.02	55.4	67.5	FAIL	PASS
Keltie Head	Flow 1	KLH6	11	122.6	0.18	0.998	0.03	0.0	0.16	0.97	0.999	0.0	0.15	-5.28	0.999	0.64	0.0	0.04	53.6	64.4	FAIL	PASS
Lachman Mesa	Flow 1	LCH2	6	278.8	0.16	0.991	0.37	0.0		0.96	0.999	0.0		-6.14	0.995	0.48	0.0		59.9	74.9	PASS	FAIL
Lachman Mesa	Flow 1	LCH3	6	284.2	0.18	0.994	0.32	0.0		0.95	0.997	0.0		-5.30	0.999	0.48	0.0		53.7	64.6	PASS	FAIL
Lachman Mesa	Flow 1	LCH5	8	361.6	0.38	0.996	0.13	0.0	0.21	1.02	0.996	0.0	0.20	-2.66	0.999	0.75	0.0	0.02	34.3	32.5	PASS	FAIL
Lachman Mesa	Flow 1	LCH6	12	378.3	0.43	0.991	0.17	0.0		1.05	0.992	0.0		-2.48	0.999	0.82	0.0		32.9	30.2	PASS	FAIL
Lachman Mesa	Flow 1	LCH7	12	393.0	0.48	0.990	0.20	0.0		1.05	0.996	0.0		-2.20	0.998	0.73	0.0		30.9	26.9	PASS	FAIL
Lachman Mesa	Flow 1	LCH8	12	391.7	0.47	0.991	0.18	0.0		1.05	0.998	0.0		-2.20	0.997	0.75	0.0		30.9	26.8	PASS	FAIL
Lachman Mesa	Flow 1	LCH9	9	392.8	0.41	0.991	0.23	0.0		1.08	0.987	0.0		-2.64	0.998	0.67	0.0		34.1	32.1	PASS	FAIL
Lachman Mesa	Flow 1	LCH10	7	296.8	0.25	0.995	0.15	0.0		0.98	0.994	0.0		-3.94	1.000	0.62	0.0		43.7	48.0	PASS	FAIL
Lachman Mesa	Flow 1	LCH11	6	310.0	0.27	0.998	0.15	0.0	0.14	0.99	0.996	0.0	0.30	-3.62	0.998	0.58	0.0	0.14	41.4	44.2	PASS	FAIL
Lachman Mesa	Flow 1	LCH12	12	409.5	0.47	0.991	0.20	0.0		1.09	0.993	0.0		-2.33	0.999	0.75	0.0		31.8	28.4	PASS	FAIL
Lachman Mesa	Flow 2	LCH14	6	265.3	0.22	0.995	0.21	0.0		0.93	0.999	0.0		-4.25	0.998	0.51	0.0		46.0	51.8	PASS	FAIL
Lachman Mesa	Flow 2	LCH15	6	262.1	0.30	0.992	0.17	0.0		0.89	0.995	0.0		-2.97	0.998	0.52	0.0		36.6	36.3	PASS	FAIL
Lachman Mesa	Flow 2	LCH18	6	285.7	0.34	0.990	0.34	0.0		1.02	0.998	0.0		-2.95	0.996	0.49	0.0		36.4	36.0	PASS	FAIL
Lachman Mesa	Flow 2	LCH19	6	234.0	0.12	0.996	0.14	0.0		0.86	0.997	0.0		-7.18	0.992	0.48	0.0		67.6	87.5	PASS	FAIL
Lachman Mesa	Flow 2	LCH20	6	230.9	0.26	0.995	1.18	0.0		1.05	0.997	0.0		-3.96	0.999	0.32	0.0		43.9	48.3	PASS	FAIL
The Naze	Flow 3	NCM2	13	362.4	1.02	0.990	0.23	0.0		1.05	0.998	0.0		-1.02	0.996	0.77	0.0		22.2	12.4	PASS	FAIL
Seymour Island	Dike	SEA1	6	315.3	1.50	0.994	0.41	0.0		0.94	0.999	0.0		-0.62	0.996	0.35	0.0		19.3	7.6	PASS	FAIL
Seymour Island	Dike	SEA2	7	355.3	1.21	0.990	0.10	0.0	0.00	0.95	0.997	0.0	0.08	-0.79	0.997	0.78	0.0	0.06	20.5	9.6	PASS	FAIL
Seymour Island	Dike	SEA6	6	284.4	1.70	0.993	0.25	0.0		0.90	0.997	0.0		-0.53	0.998	0.57	0.0		18.6	6.5	PASS	FAIL
Smellie Peak	Slide Block	SMD3	6	233.2	0.31	0.991	1.12	0.0		1.06	0.999	0.0		-3.41	0.994	0.31	0.0		39.8	41.6	PASS	FAIL
Smellie Peak	Flow 1	SML4	6	245.1	0.82	0.993	0.28	0.0		0.95	0.997	0.0		-1.15	0.998	0.51	0.0		23.1	14.0	PASS	FAIL
Smellie Peak	Flow 2	SML15	7	232.0	1.22	0.991	0.91	0.0		1.07	0.999	0.0		-0.87	0.995	0.35	0.0		21.1	10.6	PASS	FAIL
Smellie Peak	Pillows	SML17	6	293.3	0.66	0.991	0.16	0.0		1.03	0.998	0.0		-1.56	0.996	0.58	0.0		26.1	19.0	PASS	FAIL
Smellie Peak	Pillows	SML18	13	206.4	1.85	0.996	0.07	0.0	0.19	0.98	0.999	0.0	0.06	-0.53	0.998	0.85	0.0	0.13	18.5	6.4	FAIL	PASS
Smellie Peak	Pillows	SML19	12	301.5	17.41	0.996	0.22	0.0	0.19	1.02	1.000	0.0	0.01	-0.06	0.996	0.75	0.0	0.18	15.1	0.7	PASS	FAIL
Smellie Peak	Pillows	SML20	6	330.2	1.07	0.997	0.28	0.0	0.18	1.01	0.999	0.0	0.17	-0.94	0.997	0.48	0.0	0.03	21.6	11.5	PASS	FAIL
Smellie Peak	Pillows	SML21	6	272.0	0.96	0.992	0.38	0.0		1.00	0.998	0.0		-1.03	0.994	0.50	0.0		22.3	12.6	PASS	FAIL
Smellie Peak	Pillows	SML22	6	300.1	2.42	0.993	0.49	0.0		0.94	0.997	0.0		-0.39	0.996	0.52	0.0		17.5	4.7	PASS	FAIL
Smellie Peak	Pillows	SML24	7	304.0	2.81	0.991	1.31	0.0		1.03	0.999	0.0		-0.37	0.992	0.34	0.0		17.4	4.5	PASS	FAIL
Smellie Peak	Pillows	SML27	6	232.0	1.72	0.993	1.06	0.0		0.97	1.000	0.0		-0.56	0.994	0.33	0.0		18.8	6.9	PASS	FAIL
Smellie Peak	Scoria Cone	SML28	7	318.7	0.29	0.997	0.15	0.0	0.18	1.04	0.996	0.0	0.22	-3.53	0.999	0.66	0.0	0.04	40.7	43.1	PASS	FAIL
Smellie Peak	Scoria Cone	SML29	10	316.6	0.39	0.990	0.17	0.0		0.99	0.995	0.0		-2.57	0.998	0.83	0.0		33.6	31.3	PASS	FAIL
Smellie Peak	Scoria Cone	SML30	12	311.6	0.41	0.990	0.09	0.0		0.98	0.993	0.0		-2.38	0.998	0.96	0.0		32.2	29.0	PASS	FAIL
Smellie Peak	Scoria Cone	SML31	8	355.6	0.25	0.993	0.05	0.0	0.29	0.89	0.992	0.0	0.26	-3.53	1.000	0.79	0.0	0.05	40.7	43.1	PASS	FAIL
Smellie Peak	Scoria Cone	SML32	9	326.2	0.34	0.997	0.12	0.0	0.19	1.10	0.998	0.0	0.17	-3.26	0.999	0.71	0.0	0.01	38.7	39.8	PASS	PASS
Smellie Peak	Scoria Cone	SML33	7	299.2	0.20	0.997	0.11	0.0	0.20	0.96	0.996	0.0	0.28	-4.71	0.999	0.62	0.0	0.06	49.3	57.4	PASS	FAIL
Smellie Peak	Scoria Cone	SML34	7	373.7	0.24	0.993	0.17	0.0		0.99	0.995	0.0		-4.08	0.999	0.68	0.0		44.7	49.7	PASS	FAIL
Smellie Peak	Scoria Cone	SML36	7	322.2	0.24	0.994	0.35	0.0		1.12	0.998	0.0		-4.69	0.998	0.53	0.0		49.3	57.2	PASS	FAIL
Smellie Peak	Scoria Cone	SML37	11	313.6	0.24	0.996	0.08	0.0	0.19	1.08	0.997	0.0	0.17	-4.50	0.998	0.82	0.0	0.01	47.8	54.8	PASS	PASS

Smellie Peak	Scoria Cone	SML38	6	266.1	0.19	0.997	0.18	0.0	0.24	1.01	0.999	0.0	0.12	-5.24	0.998	0.56	0.0	0.12	53.3	63.9	PASS	FAIL
Taylor Bluff	Dike	TBA1	17	31.5	0.18	0.995	0.00	0.0	0.14	0.97	0.998	0.0	0.16	-5.39	0.997	0.93	0.0	0.01	54.4	65.7	FAIL	PASS
Taylor Bluff	Dike	TBA2	16	107.6	0.18	0.998	0.00	0.0	0.11	0.97	0.998	0.0	0.16	-5.35	0.998	0.84	0.0	0.04	54.1	65.3	FAIL	PASS
Taylor Bluff	Dike	TBA3	17	92.9	0.19	0.996	0.01	0.0	0.08	0.98	0.999	0.0	0.11	-5.08	0.996	0.94	0.0	0.03	52.1	62.0	FAIL	PASS
Taylor Bluff	Dike	TBA4	17	92.0	0.19	0.995	0.00	0.0	0.13	0.97	0.998	0.0	0.14	-5.23	0.996	0.95	0.0	0.01	53.2	63.8	FAIL	PASS
Taylor Bluff	Dike	TBA11	6	234.7	0.27	0.992	0.90	0.0		1.07	0.999	0.0		-3.89	0.994	0.41	0.0		43.3	47.4	PASS	FAIL
Taylor Bluff	Columns	TBA13	14	314.7	2.22	0.996	0.08	0.0	0.14	1.01	0.998	0.0	0.12	-0.45	0.998	0.94	0.0	0.02	18.0	5.5	PASS	PASS
Taylor Bluff	Columns	TBA14	13	299.4	2.87	0.996	0.06	0.0	0.11	0.99	0.996	0.0	0.17	-0.35	0.998	0.95	0.0	0.05	17.2	4.2	PASS	PASS
Taylor Bluff	Columns	TBA15	17	208.7	3.29	0.997	0.01	0.0	0.12	1.00	0.997	0.0	0.11	-0.30	0.997	0.98	0.0	0.00	16.9	3.7	FAIL	PASS
Taylor Bluff	Columns	TBA16	15	22.7	2.98	0.997	0.02	0.0	0.15	0.96	0.995	0.0	0.09	-0.32	0.996	0.75	0.0	0.10	17.0	3.9	FAIL	PASS
Taylor Bluff	Columns	TBA19	15	22.7	1.07	0.998	0.03	0.0	0.08	1.06	0.996	0.0	0.09	-0.99	0.996	0.78	0.0	0.14	21.9	12.0	FAIL	PASS
Taylor Bluff	Columns	TBA20	16	236.9	3.34	0.995	0.03	0.0	0.15	1.02	0.997	0.0	0.13	-0.30	0.995	0.99	0.0	0.02	16.9	3.7	PASS	PASS
Taylor Bluff	Tuff Cone	TBA26	6	422.2	0.65	0.998	0.06	0.0	0.08	1.14	0.999	0.0	0.17	-1.74	0.997	0.54	0.0	0.26	27.5	21.2	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA27	7	523.5	1.73	0.998	0.28	0.0		1.09	0.982	0.0		-0.63	0.991	0.60	0.0		19.3	7.7	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA28	16	356.8	2.61	0.990	0.19	0.0	0.20	1.06	0.996	0.0	0.12	-0.41	0.998	0.81	0.0	0.09	17.7	4.9	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA29	17	348.1	2.60	0.993	0.20	0.0		1.06	0.996	0.0		-0.41	0.999	0.81	0.0		17.7	5.0	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA30	17	354.7	2.65	0.992	0.20	0.0	0.15	1.08	0.996	0.0	0.01	-0.41	0.998	0.82	0.0	0.16	17.7	5.0	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA34	15	342.1	2.73	0.991	0.25	0.0		1.05	0.995	0.0		-0.38	0.996	0.77	0.0		17.5	4.7	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA35	9	365.4	1.20	0.992	0.60	0.0	0.12	1.09	0.999	0.0	0.18	-0.90	0.992	0.84	0.0	0.03	21.3	11.0	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA36	10	372.6	2.30	0.991	0.20	0.0	0.15	1.02	0.998	0.0	0.10	-0.44	0.997	0.73	0.0	0.06	17.9	5.4	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA37	17	371.2	2.74	0.993	0.29	0.0		1.07	0.994	0.0		-0.39	0.996	0.74	0.0		17.5	4.7	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA38	11	440.4	1.91	0.995	0.23	0.0	0.14	1.05	0.997	0.0	0.19	-0.54	0.996	0.72	0.0	0.04	18.7	6.6	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA40	9	484.7	1.34	0.996	0.11	0.0	0.15	1.00	0.995	0.0	0.22	-0.75	0.998	0.75	0.0	0.07	20.2	9.2	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA41	11	439.5	1.96	0.997	0.34	0.0	0.11	1.10	0.998	0.0	0.18	-0.56	0.998	0.58	0.0	0.07	18.8	6.9	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA42	12	467.1	2.58	0.990	0.86	0.0		1.30	0.983	0.0		-0.51	0.995	0.41	0.0		18.4	6.2	PASS	FAIL

60/200 Pass de Groot et al. (2013) selection criteria
17/200 Pass Paterson et al. (2016) selection criteria
5/200 Pass both sets of selection criteria
See Table S3 for explanation of selection criteria

Duplicate Samples

Lachman Mesa	Flow 1	LCH5	13	361.6	0.394	0.991	0.10	0.0		1.03	0.996	0.0		-2.60	0.998	0.91	0.0		33.9	31.8	PASS	FAIL
Lachman Mesa	Flow 1	LCH11	9	310.0	0.305	0.991	0.16	0.0		1.05	0.996	0.0		-3.42	0.997	0.74	0.0		39.9	41.7	PASS	FAIL
Smellie Peak	Pillows	SML19	13	301.5	17.761	0.995	0.21	0.0		1.02	1.000	0.0		-0.06	0.994	0.76	0.0		15.1	0.7	PASS	FAIL
Smellie Peak	Pillows	SML20	10	330.2	1.1305	0.992	0.20	0.0		1.02	0.999	0.0		-0.89	0.995	0.71	0.0		21.2	10.9	PASS	FAIL
Smellie Peak	Scoria Cone	SML28	13	318.7	0.3017	0.991	0.09	0.0		1.03	0.995	0.0		-3.42	0.999	0.96	0.0		39.9	41.7	PASS	FAIL
Smellie Peak	Scoria Cone	SML32	19	326.2	0.3375	0.990	0.06	0.0	0.19	1.04	0.992	0.0	0.17	-3.06	0.998	0.99	0.0	0.01	37.2	37.4	PASS	FAIL
Smellie Peak	Scoria Cone	SML33	12	299.2	0.2229	0.991	0.08	0.0		1.01	0.995	0.0		-4.50	0.998	0.91	0.0		47.9	54.9	PASS	FAIL
Smellie Peak	Scoria Cone	SML37	19	313.6	0.2447	0.991	0.05	0.0		1.04	0.992	0.0		-4.23	0.997	1.00	0.0		45.9	51.6	PASS	FAIL
Smellie Peak	Scoria Cone	SML38	7	266.1	0.1876	0.996	0.14	0.0	0.25	0.98	0.997	0.0	0.2	-5.24	0.999	0.65	0.0	0.06	53.3	63.9	PASS	FAIL
Taylor Bluff	Columns	TBA13	16	314.7	2.2016	0.991	0.06	0.0		0.99	0.994	0.0		-0.45	0.997	1.01	0.0		18.0	5.4	PASS	FAIL
Taylor Bluff	Columns	TBA14	15	299.4	2.8639	0.991	0.05	0.0		0.97	0.991	0.0		-0.34	0.997	1.03	0.0		17.2	4.1	PASS	FAIL
Taylor Bluff	Columns	TBA20	17	236.9	3.4205	0.991	0.03	0.0		1.02	0.997	0.0		-0.30	0.993	1.00	0.0		16.8	3.6	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA26	8	422.2	0.6666	0.999	0.07	0.0		1.04	0.993	0.0		-1.56	0.990	0.71	0.0		26.1	19.0	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA38	14	440.4	1.9691	0.990	0.24	0.0		1.08	0.994	0.0		-0.55	0.996	0.73	0.0		18.7	6.7	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA40	19	484.7	1.3295	0.991	0.07	0.0		1.05	0.977	0.0		-0.79	0.991	1.00	0.0		20.5	9.7	PASS	FAIL
Taylor Bluff	Tuff Cone	TBA41	14	439.5	1.9255	0.991	0.25	0.0		1.08	0.994	0.0		-0.56	0.998	0.70	0.0		18.8	6.9	PASS	FAIL

Definitions:
b = slope of the best-fit line

r^2 = correlation coefficient
n = number of measurements used
f = NRM fraction (Coe et al., 1978)
f_{resid} = residual fraction (Paterson et al., 2016)
β = ratio of the standard error to absolute value of the slope (Coe et al., 1978)
k = curvature of a best-fit circle (Paterson, 2011)
$B_{1/2}$ARM = magnitude of AF for which half the

Table S10: Tsunakawa-Shaw Paleointensity Results

Location	Site	Sample	n	f_N	r_N	f_T	r_T	b_T	Intensity (μT)
Davies Dome	Flow 2	DAD16	18	97.0	0.997	88.9	0.996	1.019	37.6
Davies Dome	Flow 2	DAD17	15	89.8	0.996	83.8	0.996	1.011	49.2
Davies Dome	Flow 4	DVD3	14	73.4	0.995	95.1	0.998	0.961	76.4
Davies Dome	Flow 4	DVD4	14	79.0	0.997	95.2	0.998	0.958	68.3
Davies Dome	Flow 4	DVD5	7	40.9	0.995	54.8	0.999	0.984	98.2
Davies Dome	Flow 4	DVD6	12	77.8	0.996	94.8	0.999	1.002	88.3
Davies Dome	Flow 3	DVD8	14	66.6	0.996	94.7	0.998	0.986	62.6
Davies Dome	Flow 3	DVD9	10	60.2	0.995	61.4	0.998	1.007	84.7
Davies Dome	Flow 3	DVD10	13	67.3	0.995	53.9	0.998	1.003	55.1
Keltie Head	Flow 1	KLH4	14	69.6	0.998	85.7	0.996	0.965	64.1
Keltie Head	Flow 1	KLH5	14	67.7	0.998	84.3	0.996	0.953	65.2
Keltie Head	Flow 1	KLH6	13	75.4	0.998	67.5	0.996	1.038	64.5
Keltie Head	Flow 1	KLH8	15	80.0	0.997	89.6	0.996	1.022	75.5
Keltie Head	Flow 1	KLH9	13	62.0	0.996	85.6	0.999	1.034	68.3
Keltie Head	Flow 1	KLH10	11	52.3	0.997	69.5	0.998	1.049	66.4
Keltie Head	Flow 1	KLH11	11	#####	0.999	75.7	0.997	1.046	66.4
Keltie Head	Flow 2	KLH13	8	38.0	0.995	71.5	0.998	1.023	75.5
Keltie Head	Flow 2	KLH14	8	35.8	0.996	69.1	0.998	1.001	72.5
Keltie Head	Flow 2	KLH15	8	34.7	0.995	68.0	0.999	1.006	71.2
Keltie Head	Flow 2	KLH20	7	35.4	0.996	47.6	0.999	0.962	88.1
Lachman Mesa	Flow 1	LCH4	8	45.2	0.995	63.4	1.000	0.951	52.9
Lachman Mesa	Flow 1	LCH5	16	60.5	0.998	78.3	1.000	0.953	33.7
Lachman Mesa	Flow 1	LCH6	19	84.1	0.999	98.9	1.000	0.955	32.8
Lachman Mesa	Flow 1	LCH7	17	77.5	0.998	98.5	1.000	0.951	30.2
Lachman Mesa	Flow 1	LCH8	16	75.1	0.997	97.8	1.000	0.951	30.5
Lachman Mesa	Flow 1	LCH9	19	83.0	0.999	98.8	1.000	0.961	34.9
Lachman Mesa	Flow 1	LCH10	19	82.6	0.996	98.9	1.000	0.989	40.7
Lachman Mesa	Flow 1	LCH11	18	82.1	0.998	94.7	1.000	1.033	39.8
Lachman Mesa	Flow 1	LCH12	19	80.1	0.996	98.6	1.000	0.982	34.3
Lachman Mesa	Flow 2	LCH13	6	42.7	0.997	40.0	1.000	0.987	64.3
Lachman Mesa	Flow 2	LCH14	8	55.4	0.996	55.8	1.000	0.975	55.4

Lachman Mesa	Flow 2	LCH15	9	61.6	0.997	69.7	1.000	0.995	37.0
Lachman Mesa	Flow 2	LCH16	12	67.4	0.995	84.4	1.000	1.016	34.1
Lachman Mesa	Flow 2	LCH17	19	82.5	0.997	99.1	1.000	1.013	28.8
Lachman Mesa	Flow 2	LCH18	9	57.7	0.996	72.5	1.000	0.968	35.6
Smellie Peak	Pillows	SML20	6	47.6	0.995	30.1	0.999	0.955	8.7
Smellie Peak	Scoria Cone	SML31	7	66.0	0.997	38.1	1.000	1.003	49.0
Taylor Bluff	Columns	TBA22	10	53.5	0.997	55.5	0.999	1.041	7.1

38/191 Samples passed the selection criteria of Yamamoto and Yamaoka (2016).

See Table S4 for explanation of selection criteria

Definitions:

b = slope of the best-fit line

f = NRM or TRM1 fraction (Coe et al., 1978)

r^2 = correlation coefficient

n = number of measurements used