

AM-94-560

H<sub>2</sub>O loss from hydrous melts during fluid-absent piston cylinder experiments

Alberto E. Patino Douce, James S. Beard

For deposit: Tables 2 and 3

American Mineralogist, 79, 5-6, 585-588.

Table 2

Spot analyses, Amphibole Gneiss, 10 kb

	Spot	Si	Al	Ti	Fe	Mg	Mn	Ca	Na	K	P	O	corr. O	total
10kb, 950oC, 15 Days	1	31.96	7.57	0.34	2.14	0.46	0.12	2.41	1.56	1.85	0.19	48.32	50.98	99.55
O Corr. factor = 1.055	2	32.36	7.66	0.36	2.43	0.46	0.16	2.30	1.85	1.90	0.56	49.25	51.96	102.01
	3	31.74	7.61	0.28	2.22	0.40	0.12	2.31	1.38	1.97	0.34	47.36	49.96	98.35
	4	32.09	7.50	0.27	2.10	0.46	0.12	2.34	1.79	1.93	0.18	48.30	50.96	99.74
	5	31.80	7.46	0.32	2.19	0.46	0.20	2.27	1.80	1.86	0.15	47.48	50.09	98.60
	Ave	31.99	7.56	0.31	2.22	0.45	0.14	2.33	1.68	1.90	0.28	48.14	50.79	99.65
2 S. D.	rel.err.%	1.40	1.90	21.30	10.50	10.80	44.40	3.90	21.30	4.70	109.40	2.80		
	Oxides	68.44	14.28	0.52	2.85	0.75	0.19	3.25	2.26	2.29	0.28			
		Excess O = 4.54		H2O* = 5.11		New total = 100.22								
10kb, 975oC, 11 days	1	31.45	7.88	0.41	2.41	0.47	0.14	2.76	1.48	1.55	0.28	49.17	49.88	98.71
O Corr. factor = 1.043	2	31.07	7.82	0.38	2.32	0.49	0.08	2.80	1.69	1.59	0.18	48.89	49.59	98.01
	3	31.24	7.89	0.38	2.40	0.48	0.05	2.73	1.55	1.60	0.17	50.03	50.75	99.24
	4	31.52	7.70	0.41	2.33	0.52	0.14	2.72	1.44	1.63	0.14	49.87	50.59	99.14
	5	31.50	7.72	0.35	2.24	0.53	0.06	2.76	1.32	1.65	0.21	49.97	50.69	99.03
	6	31.47	7.76	0.43	2.23	0.55	0.06	2.75	1.45	1.61	0.31	50.35	51.07	99.69
	ave	31.38	7.80	0.39	2.32	0.51	0.09	2.75	1.49	1.61	0.22	49.71	50.43	98.97
2 S. D.	rel.err.%	1.00	1.90	13.30	6.00	11.30	85.10	1.90	15.20	3.90	56.50	2.10		
	Oxides	67.12	14.73	0.66	2.99	0.84	0.11	3.85	2.01	1.93	0.22			
		Excess O = 4.52		H2O* = 5.09		New Total = 99.53								
10kb, 1000oC, 5 days	1	31.38	7.28	0.74	2.87	0.61	0.15	2.64	1.90	2.70	0.23	46.71	50.35	100.85
O Corr. Factor = 1.078	2	31.07	7.49	0.70	2.96	0.76	0.11	2.60	1.88	2.75	0.28	46.05	49.64	100.24
	3	32.49	6.43	0.74	2.61	0.56	0.07	2.32	1.71	2.39	0.33	46.95	50.61	100.26
	ave	31.65	7.07	0.73	2.81	0.64	0.11	2.52	1.83	2.61	0.28	46.57	50.20	100.45
2S. D.	rel.err.%	3.90	13.00	5.20	10.50	26.40	59.40	11.30	9.30	12.20	29.20	1.60		
	Oxides	67.70	13.35	1.21	3.62	1.07	0.14	3.53	2.47	3.15	0.28			
		Excess O = 3.94		H2O* = 4.44		New Total = 100.95								

Table For Data Repository