

**Bulk rocks (%)**

GI/GS	age [xr b2k]	Vermiculite	Palygorskite	Biotite	Phlogopite	Illite	Illite-Smect ML	Muscovite	Chlorite	Albite	Quartz	Plagioclase	Orthoclase	Microcline	Amphibole	Diopside	Augite	Hedenbergite	Calcite	Ankerite	Gypsum	Rhodochrosite	Magnetite	Hematite	Rutile	Sum
Gi1	9670			3	2	28	14	21	1	2	9				9	3	3						1		1	97
Gi10	41485	3		5		39	5	14	1	3	18					4	3	2		1			1	1		100
Gi11	42570			4		45	8	7	1	5	17					4	3	2					1	3	1	101
<b>Gi12</b>	45826	3		6		34	15			2	14					8	9	4			2		1	3		101
Gi13	48785			6		42	15		3	2	17					4	7	4								100
Gi14	51811			4		45	9	12	1	1	17					5	5									99
Gi15	55543																									0
Gi16	57538																									0
Gi2	23340	2		3		29	9	5	2	6	22	6	2	8		3	2		1					1		101
Gi3	27677	3		3		27	17	10	2	2	21	4				3	3	3		1			1	1	1	102
Gi4	28583			3		34	5	25	2	1	17	3				3	3	2					1	1		100
Gi5	31974			2		33	11	7	1	5	15	5		5	2	4	3		2	1			1	1		98
Gi6	33550			8		24	14	11	2	5	16	4				4	5	2					1	2	1	99
Gi7	35036	2		1		35	9	13	1	4	17	4		5		2	3	1						1		98
Gi8	37027			4		40	6	12	1	3	18	4				4	3	2					1	1		99
Gi9	39920			6		34	8	22	1	4	15					3	4	2					1	1		101
GS10	40286	3		5		34	8	14	1	4	18	4				3	3	2					1	1		101
GS11	41853	3		7		47	6	7	1	4	10	5				3	3	2		1			1	1		101
GS12	43500			3		25	17	28	1	2	12	3				3	4	2					1			101
GS13	48229			5		39	6	18	4	1	17	3			2	2	2	1								100
GS14	49400			3		37	7	20	1	1	16		3			3	3	2					2	1	1	100
GS15	54220			5		46	7		3		22					3	3	2		1	1	3	1	3		100
GS16	55909			3		48	8		3		13					8	7	5					2	3		100
GS2	15551	1		1		19	11	36	1	2	16	3	2	4		2	1									99
GS3	24854			10		24	12	6	2	5	20	7		11		3	3						1	1		105
GS4	28100			3		30	11	7	1	2	20	7	3	6		3	3	2					1	1		100
GS5	29387	1	11	6		22	10	5	1	2	18	5	2	6	2	2	3		1				1	1	1	99
GS6	33091	3		3		36	7	8	2	5	24	3				3	3	2					1	1		101
GS7	34094			8		26	7	7	2	6	20	4		6	3	4	3	2					1	1		100
GS8	35920			4		37	9	18	1	1	13				3	4	3	2					1	3	1	100
GS9	38672	3		6		46	7	7	2	4	14					3	3	2		1			1	1		100

**Coarse fraction (>2µm)**

GI/GS	age [xr b2k]	Illite	Muscovite	Biotite	Chlorite	Quartz	Albite	Microcline	Plagioclase	Augite	Diopside	Hedenbergite	Hematite	Magnetite	Rhodochrosite	Sum
Gi3	27677	40	11	3	1	17	6	6	7	2	3		1	1		98
GS4	28100	32	22	2	2	21	5	7	3	2	2		2	1		101
Gi8	37027	36	14	3	1	15	2	7	5	2	4	5	3	1		98
GS9	38672	38	12	2	1	19	4	7	5	4	4		2	1		99
Gi9	39920	38	12	5	1	17	4	6	4	3	4	4	1	1		100
GS10	40286	38	9	3	2	23	2	10	5	3	3		1			99
Gi13	48785	no significant reflections														
GS14	49400	46	5	6	2	19	6		7		3		1	1	2	98

**Fine fraction (<2µm)**

GI/GS	age [xr b2k]	I-S ML	Illite	Palygorskite	Vermiculite	Chlorite	Quartz	Hematite	Magnetite	Sum
Gi3	27677	31	45	0	1	3	12	5	3	100
GS4	28100	25	47	2	5	4	12	3	2	100
Gi8	37027	29	40	0	11	4	8	5	2	99
GS9	38672	23	46	0	9	4	12	4	3	101
Gi9	39920	24	44	3	9	4	9	5	2	100
GS10	40286	20	44	1	10	7	12	4	1	99
Gi13	48785	31	39	0	4	10	9	5	2	100
GS14	49400	24	40	0	4	16	9	6	2	101

XRD data from the various sie fractions

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