

Table 6. Quantitative mineralogy (wt.%) by XRD analyses for klinker samples from the Smoking Hills area, NWT. Note: samples in grey were freeze-dried prior to analyses; all samples were pulverized using the McCrone micronizing mill.

<i>Mineral Groups</i>	<i>Silicates</i>						<i>Phyllosilicates</i>			<i>Elemental</i>	<i>Sulphates</i>								<i>Oxides</i>		<i>GoF</i>	<i>%XL</i>	
	Qtz	Crs	Pl	Hul-Ca	Hul-K	Ind	Ms	Sm	ML	S	Alu	Alg	Brt	Bsn	Gp	Jrs	Jrs-K	Jrs-N	Tmg	F-Hdr	Hem		
GQA 18-7	15										13	9		2	5	42				2	12	2.23	40%
GQA 18-8	21				9						34					36						3.36	44%
GQA 18-9	27	24	5			5					17			tr	13						9	2.98	50%
GQA 18-10	13	11												5	50						21	1.97	40%
GQA 18-11	3	20									10		1	13	47						6	2.29	36%
GQA 18-12	38	7	11			23									3						18	2.34	43%
GQA 18-13	8	27									5			1	22	23					14	1.87	48%
GQA 18-15	1													77	22							3.27	83%
GQA 18-16	22		1				1				34			7	23						12	3.06	38%
GQA 18-17	12		15				7					21		7	18				16		4	2.87	42%
GQA 18-18	29	1									10		1	3		56						2.29	63%
GQA 18-19	18		2		5									4		64					7	1.76	52%
GQA 18-20	19				11		12	tr	tr					7		47					4	2.57	41%
GQA 18-21	22			tr										4	74							2.08	38%
GQA 18-23														100								1.99	95%
GQA 18-24	24		5		3		8		tr			tr		12	40						8	2.19	43%
GQA 18-25	15		tr	23			7					tr		4	46			5				2.93	45%
Klinker 1	17										57					10					16	1.78	45%
Klinker 2										100												1.75	90%

Qtz: quartz, Crs: cristobalite, Pl: plagioclase, Kfs: K-feldspar, Hul-Ca: heulandite-Ca, Hul-K: heulandite-K, Ind: indialite, Ms: muscovite, Sm: smectite, ML: mixed-layer clay minerals, S: elemental S, Alu: alunite, Alg: alunogen, Brt: barite, Bsn: bassanite, Gp: gypsum, Jrs: jarosite, Jrs-H: hydronium jarosite, Jrs-N: natrojarosite, Tmg: tamarugite, F-Hdr: ferrihydrate, Hem: hematite, GoF: goodness of fit, %XL: percent crystallinity, tr: trace