

Table 3. Quantitative mineralogy (wt.%) by XRD analyses for mudstone samples from the Mason River Formation. All samples were pulverized using the McCrone micronizing mill.

<i>Mineral Groups</i>	<i>Silicates</i>				<i>Phyllosilicates</i>					<i>Sulphates</i>				<i>GoF</i>	<i>%XL</i>
<b>Sample ID</b>	<b>Qtz</b>	<b>Crs</b>	<b>Pl</b>	<b>Kfs</b>	<b>Ms</b>	<b>Chl</b>	<b>Kln</b>	<b>Sm</b>	<b>ML</b>	<b>Alg</b>	<b>Gp</b>	<b>Jrs</b>	<b>Jrs-H</b>		
GTA 18-194	26		12		17	7	7	11		12	2		6	3.59	43%
GTA 18-201	24	2	13	4	12	8	13	7	m	13		4		3.05	38%
GTA 18-210	25	2	13	5	11	9	10	8	m	15	tr	2		2.92	38%
GTA 18-218	20	2	12	4	14	9	12	7	m	15	2	3		2.97	39%
GTA 18-226	31	1	12	5	13	11	10	7	m	10		tr		2.94	42%
GTA 18-234	23	2	12	5	13	9	14	6	m	13	1	2		2.85	42%
GTA 18-242	28	1	10	5	13	9	12	7	m	13	1	1		3.01	42%
GTA 18-250	28	1	13	5	13	9	11	6	m	13		1		2.95	42%
GTA 18-258	32	1	12	5	12	6	8	5	tr	12	4	3		2.75	40%
GTA 18-266	32	tr	4	2	43	10	1		tr		2	6		2.32	61%
GTA 18-274	44		4	tr	42	9	1							2.46	70%

Qtz: quartz, Crs: cristobalite, Pl: plagioclase, Kfs: K-feldspar, Ms: muscovite, Chl: chlorite, Kln: kaolinite, Sm: smectite, ML: mixed-layer clay minerals, Alg: alunogen, Gp: gypsum, Jrs: jarosite, Jrs-H: hydronium jarosite, GoF: goodness of fit, %XL: percent crystallinity, tr: trace; m: minor