

## APPENDIX 2

**Correlation of elements with mineral content, as imaged by Pearson  $r^2$  values, systems with  $r^2 < 0.30$  are not listed**

	quartz	illite	chlorite group	K feldspar	plagioclase	hematite	goethite	gypsum
Al		<b>.78<sup>1</sup></b>			.61			
As							<b>.76</b>	
Ba	<u>.71<sup>2</sup></u>							
Ca				<u>.59</u>				
Cu					.53			
Co	<u>.59</u>	.56					<b>.87</b>	
Cr	<u>.66</u>	.54						
Fe		<b>.75</b>			.61	.74		
K		<b>.86</b>			.60			
Mg		<b>.78</b>			.63			
Mn		.65			.51			
Na			<b>.93</b>	<u>.58</u>	<b>.80</b>	<b>.96</b>	<b>.93</b>	
Nb	<u>.50</u>	.69			.51			
Ni	<u>.67</u>	.55						
P	<u>.61</u>	.					<b>.85</b>	
Sb	<b>.79</b>	<b>.80</b>	<u>.66</u>					
Sc		.64						
Sr	<u>.61</u>	.46					<b>.89</b>	
Th		.59			.51			
Ti		.71						
V		.61						
Y		.56			.51			
Zn	<b>.94</b>					<u>.67</u>		
C								.55
H			<u>.71</u>		<u>.65</u>			
N		<u>.63</u>	<u>.67</u>		<b>.80</b>			
S <sup>3</sup>								<b>.96</b>

<sup>1</sup> – values of  $r^2 \geq 0.75$  are given in bold; <sup>2</sup> – negative trends are underlined; <sup>3</sup> – ICP basis