

### APPENDIX 3

#### Correlation matrix of major elements for 15 Ajali sandstone samples

	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub> total	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	LOI
<b>SiO<sub>2</sub></b>	1.000										
<b>Al<sub>2</sub>O<sub>3</sub></b>	<b>-.998</b>	1.000									
<b>Fe<sub>2</sub>O<sub>3</sub>total</b>	<b>-.650</b>	<b>.622</b>	1.000								
<b>MnO</b>	-.013	-.001	.594	1.000							
<b>MgO</b>	<b>-.934</b>	<b>.945</b>	.511	.063	1.000						
<b>CaO</b>	-.431	.444	.335	.530	.577	1.000					
<b>Na<sub>2</sub>O</b>	-.099	.135	.111	.368	.290	.586	1.000				
<b>K<sub>2</sub>O</b>	<b>-.843</b>	<b>.859</b>	.450	.118	<b>.975</b>	<b>.631</b>	.416	1.000			
<b>TiO<sub>2</sub></b>	<b>-.995</b>	<b>.994</b>	<b>.625</b>	-.007	<b>.921</b>	.428	.101	<b>.822</b>	1.000		
<b>P<sub>2</sub>O<sub>5</sub></b>	<b>-.977</b>	<b>.971</b>	<b>.660</b>	-.054	<b>.848</b>	.312	.001	<b>.722</b>	<b>.980</b>	1.000	
<b>LOI</b>	<b>-.998</b>	<b>1.000</b>	<b>.613</b>	-.020	<b>.939</b>	.429	.119	<b>.849</b>	<b>.996</b>	<b>.975</b>	1.000