

Sample No.	Sample as received					Sample from densimetric separation (heavy fraction)						
	Chemical analysis		Mineralogical analysis				Chemical analysis		Mineralogical analysis			
	Compound	(wt. %)	Predominant (> 30%)	Major (> 10%)	Minor (> 5%)	Lesser (> 3%)	Compound	(wt. %)	Predominant (> 30%)	Major (> 10%)	Minor (> 5%)	Lesser (> 3%)
E-1	SiO <sub>2</sub>	38.19	Quartz	Albite Goethite Microcline Muscovite	Fluor-apatite Gibbsite Goethite Hematite	Kaolinite Dolomite	NOT AVAILABLE*					
	Fe <sub>2</sub> O <sub>3</sub>	31.89										
	Al <sub>2</sub> O <sub>3</sub>	19.84										
	K <sub>2</sub> O	2.98										
	CaO	2.60										
	P <sub>2</sub> O <sub>5</sub>	2.50										
	TiO <sub>2</sub>	0.70										
	SO <sub>3</sub>	0.66										
	MnO	0.37										
	BaO	0.27										
E-2	SiO <sub>2</sub>	25.93	Hematite Microcline Quartz	Fluor-apatite Goethite	Albite Gibbsite	Kaolinite Dolomite Muscovite	SiO <sub>2</sub>	18.66	Quartz	Hematite	Fluor-apatite Goethite Microcline	Albite Kaolinite Dolomite Gibbsite Muscovite
	Fe <sub>2</sub> O <sub>3</sub>	53.00					Fe <sub>2</sub> O <sub>3</sub>	54.28				
	Al <sub>2</sub> O <sub>3</sub>	10.70					Al <sub>2</sub> O <sub>3</sub>	9.41				
	K <sub>2</sub> O	2.32					K <sub>2</sub> O	1.06				
	CaO	3.45					CaO	8.22				
	P <sub>2</sub> O <sub>5</sub>	3.60					P <sub>2</sub> O <sub>5</sub>	8.29				
	TiO <sub>2</sub>	0.33					TiO <sub>2</sub>	0.89				
	SO <sub>3</sub>	0.73					SO <sub>3</sub>	0.69				
	MnO	0.07					MnO	0.19				
	BaO	0.01					BaO	0.05				
E-3	SiO <sub>2</sub>	26.00	Goethite Quartz	Fluor-apatite Hematite Microcline	Albite	Kaolinite Dolomite Gibbsite Muscovite	SiO <sub>2</sub>	17.67	Goethite Quartz	Fluor-apatite Hematite Microcline	Gibbsite	Albite Kaolinite Diopside Dolomite Muscovite
	Fe <sub>2</sub> O <sub>3</sub>	45.00					Fe <sub>2</sub> O <sub>3</sub>	54.83				
	Al <sub>2</sub> O <sub>3</sub>	13.70					Al <sub>2</sub> O <sub>3</sub>	10.95				
	K <sub>2</sub> O	1.24					K <sub>2</sub> O	0.92				
	CaO	6.50					CaO	7.84				
	P <sub>2</sub> O <sub>5</sub>	5.90					P <sub>2</sub> O <sub>5</sub>	7.61				
	TiO <sub>2</sub>	0.70					TiO <sub>2</sub>	1.09				
	SO <sub>3</sub>	0.57					SO <sub>3</sub>	0.42				
	MnO	0.24					MnO	0.23				
	BaO	0.10					BaO	< 0.01				

\* - mass of heavy fraction from densimetric separation did not enable chemical and mineralogical analyses to be done

Table 1 – Chemistry and mineralogy of original samples and heavy fraction.