

SAMPLE ID	LAB ID	SULFIDES		CARBONATES				SILICATES			
								Tectosilicates			
		Pyrite	Pyrrhotite	Calcite	Dolomite	Siderite	Kutnahorite	Qtz	Feldspars		
								Quartz	Albite	Anorthite	Orthoclase
12AR05 70-74	SEP4517-01	0.3	1.0	0.0	0.0	0.0	0.0	0.0	19.8	11.2	0.0
12AC22 4-8	SEP4517-02	0.2	1.3	0.0	0.0	0.0	0.0	1.9	24.9	10.0	0.0
12MM16 56.4-58.45	SEP4517-03	0.1	1.1	1.9	0.1	0.0	0.8	35.5	31.2	0.0	2.9
12AR01 65.15-67.05	SEP4517-04	0.6	6.8	2.3	0.5	0.0	0.0	9.3	24.5	6.7	0.0
12BA24 60-64	SEP4517-05	0.6	0.0	0.0	0.0	0.0	0.4	26.1	22.6	7.0	1.5
12AC25 8-12	SEP4517-06	0.8	1.3	1.2	0.0	0.0	0.0	3.1	23.2	9.2	0.0
12AR03 14.2-16.45	SEP4517-07	6.0	0.0	1.2	0.0	0.0	0.0	23.3	30.9	5.9	5.7
12AR06 47.95-49.2	SEP4517-08	1.9	1.3	0.0	0.0	0.0	0.0	6.1	11.6	12.5	0.0
12BA33 27.15-29.35	SEP4517-09	0.8	5.9	0.0	0.0	0.0	0.0	26.9	11.3	5.9	0.0
12BR05 40.95-42.9	SEP4517-10	0.1	0.0	1.2	0.0	0.0	1.6	33.9	26.4	4.1	1.5
12MM06 7.5-8.6	SEP4517-11	5.8	7.8	0.0	0.0	0.0	0.0	16.5	17.0	9.2	0.0
12MM13 48.45-50.5	SEP4517-12	0.0	2.5	1.1	0.0	0.0	0.0	7.5	19.3	7.2	0.0
12BA28 16.65-18.7	SEP4517-13	0.0	2.4	0.0	0.0	0.0	0.0	15.3	5.4	8.2	0.0
12MM28 28.35-30.4	SEP4517-14	1.0	1.8	2.5	0.0	0.0	0.0	4.1	8.4	13.7	0.0
12VR01 47-50.4	SEP4517-15	3.4	1.7	0.2	0.0	0.0	0.0	2.9	22.0	14.0	0.0
12VR03 57-61	SEP4517-16	0.3	0.0	0.0	0.0	0.0	1.1	31.6	28.7	3.2	0.4
12VR06 195.6-197.8	SEP4517-17	0.0	4.2	0.9	0.5	0.0	0.0	5.4	15.1	9.1	0.0
12VR05 33.2-35.4	SEP4517-18	3.4	10.9	0.6	0.0	0.0	0.0	31.5	8.7	4.7	0.0
12MM26 40-44	SEP4517-19	0.5	3.2	1.9	0.0	0.0	0.0	1.1	22.2	8.5	0.0
GTAC2 28-32	SEP4517-20	0.1	2.7	2.3	0.0	0.0	0.0	1.5	22.4	10.5	0.0
GTVR3 232-236	SEP4517-21	0.7	0.0	0.0	0.0	0.0	0.4	28.7	20.6	7.1	1.1
IAR02 72-76	SEP4517-22	0.1	2.0	3.9	0.6	0.0	0.0	1.2	20.2	11.0	0.0
IAR12 44-48	SEP4517-23	0.6	0.0	0.9	0.0	0.0	0.0	18.5	24.6	11.1	1.8
IAR07 4-8	SEP4517-24	0.2	1.9	1.3	0.0	0.0	0.0	0.6	18.4	11.3	0.0
12MM04 31.2-33.35	SEP4517-25	0.6	2.1	1.6	0.0	0.0	0.0	0.9	23.0	11.0	0.0
IAR11 48-52	SEP4517-26	0.6	0.0	4.2	0.0	0.0	0.0	43.8	15.5	5.6	2.3
IVR08 132-136	SEP4517-27	0.1	0.0	0.0	0.0	0.0	0.6	31.0	18.0	5.1	3.7
MAR_28 46-50	SEP4517-28	3.2	1.4	0.7	0.0	0.0	0.0	7.8	22.8	9.9	0.0
12AR04 43.2-49.15	SEP4517-29	0.4	1.5	1.0	0.0	0.0	0.0	2.4	23.0	11.7	0.0

SAMPLE ID	LAB ID	SULFIDES		CARBONATES				SILICATES			
								Tectosilicates			
		Pyrite	Pyrrhotite	Calcite	Dolomite	Siderite	Kutnahorite	Qtz	Feldspars		
								Quartz	Albite	Anorthite	Orthoclase
12AC07 7.3-10.4	SEP4526-01	11.0	0.0	1.6	0.0	0.0	0.0	24.7	16.4	4.2	0.0
12AR04 16-20	SEP4526-02	0.3	0.3	0.0	0.0	0.0	0.0	34.4	23.9	4.5	1.7
IAR14 10-12	SEP4526-03	0.0	0.6	0.0	0.0	0.0	0.0	30.5	22.7	0.0	0.0
12AC34 30.05-32.25	SEP4526-04	1.6	1.9	0.0	0.0	0.0	0.0	17.5	7.2	6.2	0.0
12BA24 16-20	SEP4526-05	0.4	0.5	0.0	0.0	0.0	0.0	31.8	28.0	3.5	0.0
12BA07 19-23	SEP4526-06	0.5	2.4	2.6	0.0	0.0	0.0	1.7	17.6	12.4	0.0
12BA15 34.4-36.4	SEP4526-07	0.2	2.1	0.0	0.0	0.0	0.0	28.7	1.7	3.1	0.0
12BR06 21.2-22.75	SEP4526-08	0.5	1.5	0.5	0.0	0.0	0.0	2.3	2.4	16.5	0.0
12MM19 91.5-93.7	SEP4526-09	0.4	1.0	0.9	0.0	0.0	0.0	32.4	28.8	5.6	0.0
12MM24 68.1-70	SEP4526-10	0.4	7.6	0.2	0.0	0.0	0.0	12.0	11.4	11.7	0.0
12MM33 127.55-129.75	SEP4526-11	0.5	11.7	0.0	0.0	0.0	0.0	30.8	23.0	10.8	0.0
GTVR3 216-220	SEP4526-12	0.5	0.4	0.0	0.0	0.0	0.0	31.2	28.3	2.4	0.0
12VR03 140.2-142.35	SEP4526-13	5.7	0.0	0.0	0.0	7.5	0.0	21.4	2.2	3.5	0.0
12VR12 24-28	SEP4526-14	0.0	0.5	0.0	0.0	0.0	0.0	32.8	14.9	3.5	0.0
12VR15 9-13	SEP4526-15	0.0	0.0	0.0	0.0	0.0	0.0	35.0	2.3	4.0	5.9
IAR03 64-68	SEP4526-16	0.0	1.8	2.1	0.0	0.0	0.0	4.7	14.6	11.3	0.9
GTVR2 96-100	SEP4526-17	1.8	3.8	0.8	0.0	0.0	0.0	22.7	28.6	7.4	0.0
12AC01 8-12	SEP4526-18	0.0	0.0	0.0	0.0	0.0	0.0	1.9	11.3	5.4	0.0
IBA14 2-6	SEP4526-19	1.3	0.0	0.0	0.0	0.0	0.0	2.7	37.0	4.7	0.0
IVR09 84-88	SEP4526-20	1.9	7.0	0.0	0.0	0.0	0.0	21.9	36.7	8.0	0.0
12VR12 68-72	SEP4526-21	0.6	0.4	0.0	0.0	0.0	0.0	29.2	29.6	3.1	0.0

SAMPLE ID	SILICATES										
	Inosilicates					Phyllosilicates					
	Amphiboles			Pyroxenes		Chlorite	Micas		Clays		Serpentine
	Actinolite	Cummingtonite		Diopside	Hedenbergite		Muscovite	Biotite	Kaolinite	Montmorillonite	
12AR05 70-74	40.9	0.0	0.0	9.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0
12AC22 4-8	46.1	0.0	0.0	4.5	0.0	3.9	0.0	0.0	0.0	0.0	0.0
12MM16 56.4-58.45	0.0	0.0	0.0	0.0	0.0	6.5	11.1	3.6	0.0	0.0	0.0
12AR01 65.15-67.05	35.5	0.0	0.0	4.2	0.0	2.0	0.0	0.0	0.0	0.0	0.0
12BA24 60-64	0.0	0.0	0.0	0.0	0.0	10.2	19.9	6.7	0.0	0.0	0.0
12AC25 8-12	44.3	0.0	0.0	6.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0
12AR03 14.2-16.45	7.2	0.0	0.0	0.0	0.0	6.6	4.0	7.9	0.0	0.0	0.0
12AR06 47.95-49.2	38.1	0.0	1.2	2.9	0.0	4.3	1.5	3.6	0.0	0.0	0.0
12BA33 27.15-29.35	16.7	8.2	0.0	4.2	0.0	9.3	0.0	0.0	0.0	0.0	0.0
12BR05 40.95-42.9	4.4	0.0	0.0	0.0	0.0	4.4	9.7	8.8	0.0	0.0	0.0
12MM06 7.5-8.6	25.8	0.0	0.0	7.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0
12MM13 48.45-50.5	37.4	0.0	0.0	2.2	0.0	9.3	3.0	0.0	0.0	0.0	0.0
12BA28 16.65-18.7	33.0	8.4	0.0	5.1	0.0	9.1	0.0	0.0	0.0	0.0	0.0
12MM28 28.35-30.4	52.1	0.0	0.0	1.8	0.0	4.6	2.9	0.0	0.0	0.0	0.0
12VR01 47-50.4	31.2	0.0	0.0	5.4	0.0	4.0	2.6	4.0	0.0	0.0	0.0
12VR03 57-61	0.0	0.0	0.0	0.0	0.0	5.0	11.2	11.3	0.0	0.0	0.0
12VR06 195.6-197.8	48.7	0.0	1.1	1.3	0.0	2.1	0.0	0.0	0.0	0.0	0.0
12VR05 33.2-35.4	3.1	0.0	0.0	2.3	0.0	8.5	0.0	0.0	0.0	0.0	0.0
12MM26 40-44	45.3	0.0	0.8	6.6	0.0	3.4	0.0	0.0	0.0	0.0	0.0
GTAC2 28-32	50.0	0.0	0.0	6.1	0.0	2.9	0.0	0.0	0.0	0.0	0.0
GTVR3 232-236	0.0	0.0	0.0	0.0	0.0	3.6	11.4	11.6	0.0	0.0	0.0
IAR02 72-76	43.3	0.0	0.0	8.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0
IAR12 44-48	9.0	0.0	0.0	0.0	0.0	5.4	9.4	7.5	0.0	0.0	0.0
IAR07 4-8	48.6	0.0	0.0	5.9	0.0	2.0	0.0	3.5	0.0	0.0	0.0
12MM04 31.2-33.35	49.5	0.0	0.0	3.9	0.0	5.0	0.0	0.0	0.0	0.0	0.0
IAR11 48-52	6.9	0.0	0.0	0.0	0.0	10.4	4.5	2.0	0.0	0.0	0.0
IVR08 132-136	0.0	0.0	0.0	0.0	0.0	3.9	13.3	10.5	0.0	0.0	0.0
MAR_28 46-50	34.2	0.0	1.5	2.5	0.0	4.7	1.1	4.6	0.0	0.0	0.0
12AR04 43.2-49.15	47.1	0.0	0.0	4.1	0.0	4.7	0.0	0.0	0.0	0.0	0.0

SAMPLE ID	SILICATES										
	Inosilicates					Phyllosilicates					
	Amphiboles			Pyroxenes		Chlorite	Micas		Clays		Serpentine
	Actinolite	Cummingtonite		Diopside	Hedenbergite		Muscovite	Biotite	Kaolinite	Montmorillonite	
12AC07 7.3-10.4	17.2	0.0	0.0	0.8	0.0	14.7	0.0	4.7	0.0	0.0	0.0
12AR04 16-20	0.0	0.0	0.0	0.0	2.0	3.9	12.3	9.9	0.0	0.0	0.0
IAR14 10-12	0.0	0.0	0.0	0.4	1.1	3.7	11.3	20.4	3.0	2.7	0.0
12AC34 30.05-32.25	29.9	9.9	0.0	2.8	0.0	10.1	0.0	0.0	0.0	0.0	0.0
12BA24 16-20	0.0	0.0	0.0	2.0	2.4	7.9	9.9	8.3	0.0	0.0	0.0
12BA07 19-23	45.6	0.0	0.0	3.8	0.0	3.6	0.0	0.0	0.0	0.0	0.0
12BA15 34.4-36.4	23.3	8.4	0.0	1.2	1.0	15.1	0.0	0.0	0.0	0.0	0.0
12BR06 21.2-22.75	60.3	0.0	0.0	0.5	0.0	7.0	0.8	3.1	0.0	0.0	0.0
12MM19 91.5-93.7	0.0	0.0	0.0	2.4	0.0	3.9	6.7	11.1	0.0	0.0	0.0
12MM24 68.1-70	32.4	8.5	0.0	1.1	0.2	4.3	0.0	0.0	0.0	0.0	0.0
12MM33 127.55-129.75	0.0	0.0	0.0	2.0	0.0	3.8	8.7	6.6	0.0	0.0	0.0
GTVR3 216-220	0.0	0.0	0.0	2.3	1.4	4.4	12.7	10.9	0.0	0.0	0.0
12VR03 140.2-142.35	9.8	4.3	0.0	4.3	1.7	12.8	0.0	0.0	0.0	0.0	0.0
12VR12 24-28	0.0	0.0	0.0	2.1	2.5	6.7	17.9	7.4	4.5	1.9	0.0
12VR15 9-13	0.0	0.0	0.0	1.2	0.0	0.0	21.9	5.0	15.9	2.8	0.0
IAR03 64-68	48.9	0.0	0.0	5.2	0.0	2.9	0.0	0.0	0.0	0.0	0.0
GTVR2 96-100	7.8	0.0	0.0	1.8	0.0	9.8	7.8	1.8	0.0	0.0	0.0
12AC01 8-12	31.9	0.0	0.0	0.5	0.0	0.0	7.7	0.0	10.7	0.0	0.3
IBA14 2-6	39.5	0.0	0.0	2.5	0.0	6.0	0.0	0.0	0.0	0.0	0.0
IVR09 84-88	5.5	0.0	0.0	2.2	0.0	6.7	2.4	6.3	0.0	0.0	0.0
12VR12 68-72	0.0	0.0	0.0	2.7	0.0	4.1	11.3	11.1	0.0	0.0	0.0

SAMPLE ID	SILICATES				PHOSPHATES		SULFATES	OXIDES			
	Garnet group		Neso	Soro							
			Olivines								
	Almandine	Grossular	Forsterite	Epidote	Fluorapatite	Hydroxylapatite	Jarosite	Magnetite	Goethite	Rutile	Ilmenite
12AR05 70-74	0.0	0.0	0.0	8.2	5.5	0.0	0.0	0.0	0.0	0.3	0.0
12AC22 4-8	0.0	0.0	0.0	4.7	2.2	0.0	0.0	0.0	0.0	0.2	0.0
12MM16 56.4-58.45	1.9	0.0	0.0	2.5	0.2	0.0	0.0	0.0	0.0	0.7	0.0
12AR01 65.15-67.05	0.0	3.8	0.0	2.3	1.3	0.0	0.0	0.0	0.0	0.3	0.0
12BA24 60-64	2.7	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0
12AC25 8-12	0.0	3.4	0.0	2.0	2.6	0.0	0.0	0.0	0.0	0.3	0.0
12AR03 14.2-16.45	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.4	0.0
12AR06 47.95-49.2	0.0	0.0	0.0	10.6	4.1	0.0	0.0	0.0	0.0	0.2	0.0
12BA33 27.15-29.35	7.7	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.5	0.0
12BR05 40.95-42.9	2.4	0.0	0.0	0.8	0.4	0.0	0.0	0.0	0.0	0.4	0.0
12MM06 7.5-8.6	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0
12MM13 48.45-50.5	0.0	0.0	0.0	10.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0
12BA28 16.65-18.7	6.2	0.0	0.0	2.6	0.0	2.0	0.0	0.0	0.0	0.4	2.0
12MM28 28.35-30.4	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
12VR01 47-50.4	0.0	0.0	0.0	7.5	0.0	0.0	0.8	0.0	0.0	0.3	0.0
12VR03 57-61	5.1	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.7	0.0
12VR06 195.6-197.8	0.0	4.1	0.0	2.3	3.3	0.0	1.2	0.0	0.0	0.5	0.0
12VR05 33.2-35.4	22.6	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.4	0.0
12MM26 40-44	0.0	0.0	0.0	4.2	2.1	0.0	0.0	0.0	0.0	0.2	0.0
GTAC2 28-32	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0
GTVR3 232-236	4.3	0.0	5.2	4.6	0.0	0.0	0.0	0.3	0.0	0.4	0.0
IAR02 72-76	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0
IAR12 44-48	0.0	0.0	2.4	7.6	1.0	0.0	0.0	0.0	0.0	0.2	0.0
IAR07 4-8	0.0	0.0	0.0	5.5	0.0	0.0	0.4	0.0	0.0	0.2	0.0
12MM04 31.2-33.35	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0
IAR11 48-52	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.4	0.0
IVR08 132-136	5.4	0.0	2.5	5.2	0.0	0.0	0.0	0.4	0.0	0.3	0.0
MAR_28 46-50	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0
12AR04 43.2-49.15	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.2	0.0

SAMPLE ID	SILICATES				PHOSPHATES		SULFATES	OXIDES			
	Garnet group		Neso	Soro							
			Olivines								
	Almandine	Grossular	Forsterite	Epidote	Fluorapatite	Hydroxylapatite	Jarosite	Magnetite	Goethite	Rutile	Ilmenite
12AC07 7.3-10.4	0.0	0.0	0.0	0.6	0.0	0.0	3.1	0.0	0.0	0.9	0.0
12AR04 16-20	5.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IAR14 10-12	1.7	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12AC34 30.05-32.25	9.6	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	2.6
12BA24 16-20	2.7	0.0	0.0	0.8	0.7	0.0	0.2	0.0	0.0	0.4	0.4
12BA07 19-23	0.0	0.0	0.0	8.2	0.9	0.0	0.2	0.0	0.0	0.2	0.3
12BA15 34.4-36.4	14.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.7
12BR06 21.2-22.75	0.0	0.0	0.0	4.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
12MM19 91.5-93.7	4.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12MM24 68.1-70	9.2	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12MM33 127.55-129.75	0.0	0.0	0.0	1.9	0.0	0.0	0.3	0.0	0.0	0.0	0.0
GTVR3 216-220	2.6	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12VR03 140.2-142.35	22.9	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12VR12 24-28	0.6	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12VR15 9-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0
IAR03 64-68	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0
GTVR2 96-100	0.0	0.0	0.0	5.3	0.0	0.0	0.1	0.0	0.0	0.5	0.0
12AC01 8-12	0.0	0.0	0.0	16.3	0.0	0.0	0.0	0.0	13.9	0.2	0.0
IBA14 2-6	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
IVR09 84-88	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.5	0.0
12VR12 68-72	4.6	0.0	0.0	2.8	0.0	0.0	0.4	0.0	0.0	0.1	0.0