

SAMPLE	MAJOR ELEMENTS, WT. % OXIDES																
	SiO2	Al2O3	TiO2	CaO	Na2O	K2O	MnO	Fe2O3	FeO	MgO	P2O5	H2O	CO2	LOI	TOTAL	K2O + Na2O	Mg#
GM 016A	65.22	12.85	0.41	0.32	3.70	4.30	0.12	10.50	nd	1.32	0.149	nd	nd	1.68	101.24	8.00	20.00
GM 109A	55.35	13.41	2.04	5.20	2.98	2.45	0.18	11.09	nd	3.46	0.791	nd	nd	2.37	99.44	5.43	38.00
K007	72.15	11.28	0.41	0.14	0.39	8.71	0.04	5.61	nd	0.40	0.05	nd	nd	0.69	100.20	9.10	12.37
K028	59.12	12.44	1.44	3.47	2.67	3.62	0.22	12.68	nd	1.79	0.40	nd	nd	2.01	100.07	6.29	22.12
K041	72.31	12.52	0.43	0.26	1.93	6.11	0.06	4.83	nd	0.66	0.04	nd	nd	1.37	100.81	8.04	21.59
K048	48.03	16.04	1.68	11.29	2.52	0.24	0.15	11.89	nd	7.68	0.17	nd	nd	0.90	100.65	2.76	56.35
K050B	61.39	13.84	1.69	4.46	3.44	2.88	0.10	9.01	nd	2.53	0.36	nd	nd	1.71	101.62	6.32	35.99
K051	49.20	13.60	2.20	8.29	2.65	0.80	0.28	14.55	nd	4.63	0.44	nd	nd	4.61	101.38	3.45	38.9
K066	51.58	13.18	2.34	7.45	2.92	1.09	0.21	13.58	nd	4.66	0.50	nd	nd	3.40	101.05	4.01	40.71
KC-9	46.98	16.06	1.81	9.59	2.64	0.50	0.17	5.28	6.63	6.32	0.250	2.79	0.16	nd	99.23	3.14	49.85
KC-40	66.5	12.1	1.02	0.98	3.2	5.18	0.07	6.99	nd	2.02	0.13	nd	nd	1.54	99.9	8.38	36.62
KC-51	75.80	10.40	0.37	0.91	2.39	4.32	0.09	3.16	nd	0.76	0.040	nd	nd	1.70	100.30	6.71	32.20
KC-54	61.1	12.5	1.6	2.13	3.85	3.57	0.14	10.3	nd	2.12	0.45	nd	nd	2.16	100.1	7.42	29.16
KC-1	64.32	12.64	1.11	2.40	3.78	4.12	0.12	5.89	2.72	0.90	0.310	1.74	0.01	0.76	100.06	7.90	23.41
KC-2	59.26	12.39	1.78	3.98	3.78	3.24	1.31	6.10	4.77	1.10	0.46	1.90	nd	nd	99.07	7.02	16.18
KC-16	71.52	11.56	0.38	0.22	3.00	7.04	0.12	3.62	0.97	0.46	0.000	1.18	nd	nd	100.08	10.04	16.24
KC-17	69.88	12.77	0.48	0.94	4.53	3.45	0.67	4.32	2.66	0.67	0.110	0.74	0.10	nd	99.74	7.98	15.42
KC-18	70.80	12.15	0.54	0.90	4.00	4.92	0.14	4.12	1.10	0.28	0.080	1.83	nd	nd	99.67	8.92	9.41
MI-2	62.60	12.01	1.09	2.22	4.04	4.15	0.12	8.18	2.02	1.40	0.280	1.72	0.64	1.77	99.87	8.19	21.18
SAMPLE	SELECT MINOR ELEMENTS, Parts Per Million																
	Sc	V	Cr	Co	Ni	Cu	Zn	Rb	Sr	Y	Zr	Nb	Ba	Hf	Pb	Th	U
K007	10	6	1	1	0	50	67	158	37	54	578	31	2041	16	25	13	2
K028	30	4	0	10	0	80	194	101	171	82	557	37	906	16	29	11	3
K041	8	12	2	1	0	16	118	171	100	56	502	31	1577	15	27	12	3
K048	43	268	259	47	116	181	85	3	296	22	90	8	131	3	4	1	0
K050B	22	166	6	23	11	38	104	93	366	29	224	13	897	7	14	7	2
K051	33	203	43	41	57	139	132	15	362	38	173	12	376	5	7	3	1
K066	34	174	31	33	28	1018	175	24	415	40	303	15	406	8	9	5	1
KC-9	28.0	nd	205	48.3	180	nd	nd	10.5	288.4	nd	118	7	nd	3.65	v	1.45	nd
KC-40	nd	nd	17	13	<50	16	80	130	<100	71	460	35	930	13	<2	11	3
KC-51	nd	8	<10	1.5	4	71	140	90	280	90	740	40	2000	17	10	13	3.1
KC-54	nd	40	<10	15	4	210	250	120	200	50	510	20	890	13	6	11	3
MI-2	18.4		11	6.32			120							19		11.6	
SAMPLE	RARE EARTH ELEMENTS, Parts Per Million																
	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu			
K007	89.63	177.87	20.21	88.49	15.91	3.92	12.57	1.89	10.31	2.39	6.16	1.06	6.83	1.02			
K028	69.54	156.87	17.38	81.08	17.15	4.02	16.45	2.64	14.56	3.30	7.85	1.28	7.81	1.14			
K041	75.27	172.97	17.97	79.90	15.49	3.22	12.78	1.97	10.63	2.39	5.82	0.96	5.94	0.87			
K048	11.18	25.38	3.50	17.25	4.34	1.56	4.59	0.76	4.28	0.96	2.24	0.35	2.04	0.29			
K050B	42.95	92.96	10.72	46.45	8.81	2.18	7.37	1.07	5.56	1.21	2.87	0.45	2.70	0.39			
K051	26.66	58.99	7.64	36.12	8.20	2.46	8.17	1.31	7.20	1.61	3.79	0.59	3.50	0.51			
K066	34.91	78.80	9.91	46.34	10.07	3.33	9.48	1.46	7.80	1.72	4.00	0.62	3.68	0.54			
KC-9	15.2	33.5	nd	nd	4.80	1.58	nd	0.83	nd	nd	nd	nd	nd	2.35	0.36		
KC-40	72.7	135	nd	62	11.7	2.45	nd	1.9	nd	nd	nd	nd	nd	6.41	0.94		
KC-51	99.4	177	nd	74	12.6	3.05	nd	2	nd	nd	nd	nd	nd	6.55	0.99		
KC-54	76.6	149	nd	67	13.4	3.44	nd	2	nd	nd	nd	nd	nd	6.53	0.94		
MI-2	81.5	183			17.9	3.88		3.04					9	1.3			
not determined																	
K.XXX and GM.XXX SERIES provided by Rick Knurr, 2011, University of Minnesota Department of Geology and Geophysics Analytical Geochemistry Lab																	
Instrument : Thermo Scientific iCAP 6500 dual view ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometer)																	
K - xx series Provided by John Green, UMD Geology Department. Analyses completed by NASA - Johnson Space Center, 1979, Method Instrumental Neutron Activation Analysis																	