

APPENDIX TABLE: Major- and Trace-element analyses of Stratigraphic Sections

ABERT RIM POWERLINE ROAD SECTION:

SAMPLE	SiO[2]	Al[2]O[3]	FeO	CaO	MgO	K[2]O	Na[2]O	MnO	TiO[2]	P[2]O[5]	Sc	V	Cr	Co	Ni	Cu	Zn	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Nd	Sm	Yb	Hf	Pb	Th	U	
CR6-618	48.19	15.29	13.21	8.91	5.006	1.194	3.34	0.203	2.739	0.496	30.4	356.4	43.4	36.3	67.5	265.8	110.2	20.9	467.4	41	210.9	11.5	1.6	422.9	11.5	55	34.9	5.7	4.7	5.8	2.6	3.6	1.4	
CR6-618A	48.32	14.85	13.37	8.9	4.966	1.217	3.31	0.202	2.814	0.529	31.9	366.1	44.5	37.2	69.5	287.3	112.1	21	458.8	43.8	221.7	11.8	1.5	422.4	18	59.4	37.4	8.8	5.7	6.6	1.9	0.7	0.8	
CR6-618B	49.07	16.48	11.86	9.32	4.344	1.166	3.38	0.185	2.52	0.476	29.7	372.5	36.9	39.2	64.3	174.1	107.7	18.9	509.8	38.6	200	10.7	1.8	440.5	16.1	50.4	33.1	6.5	5.6	6.8	2	1.8	1.8	
CR6-618C	48	14.67	13.78	8.86	4.622	1.181	3.2	0.203	2.865	0.525	34.4	416.9	44.4	41.1	67.6	241.7	124.5	19.4	444.2	43.4	220.5	12.2	1.8	474.6	17.2	61.6	36.9	10.5	5.1	5.6	4	2.2	2	
CR6-619	48.57	16.41	10.62	10.58	6.855	0.736	2.93	0.19	1.51	0.268	27.7	254.1	175.6	43.4	131.5	139.5	79.3	5.8	527	22	103.7	5.7	1.6	295.4	10.4	30.1	18.5	4.6	4	3.8	-0.3	1.8	1.7	
CR6-620	48.65	16.42	10.7	10.74	6.92	0.639	2.87	0.185	1.522	0.272	28.3	249.2	180.8	45.3	122.5	121.2	82.5	5.7	526.2	23.8	101.1	5.4	1.5	269.9	10.4	25.9	17.1	3.6	3.2	3.2	-1.5	1.5	1.4	
CR6-621	48.32	16.39	10.75	10.72	7.064	0.641	2.89	0.174	1.512	0.268	28.1	237.2	183.7	42.3	128.6	158	79.2	5.2	536	22.1	108.6	5.5	2.2	268.3	6.8	25.6	15.8	2.8	3.8	4.5	4.2	-0.1	1.9	1.7
CR6-622	48.43	16.86	11.73	9.65	5.299	0.876	3.31	0.179	2.162	0.392	27.7	310.9	87.5	42.8	99.9	206.5	99.6	11.9	543.8	31	159.5	8.7	1.9	337.5	10.9	35.7	24.7	5.2	2.6	4.9	0.4	2.5	2.2	
CR6-623	48.72	17.77	11.51	9.91	5.371	0.844	3.28	0.191	1.74	0.322	26.6	275.3	39.6	39.2	67.1	161.8	77	13	564.3	24.2	112.1	5.5	1.8	360.5	17	29.8	19.5	1.3	3.9	3.6	-1.8	1.8	1	
CR6-624	47.2	17.38	11.11	10.86	5.282	0.809	3.18	0.18	1.663	0.305	35.1	188.2	32.6	20	55.7	139.6	67.8	11.5	509.2	21.3	99	5.6	3.7	191.4	5.7	20.6	13.9	4.6	3.4	4	-0.5	4.4	1.7	
CR6-625	48.56	15.78	12.91	8.62	4.659	1.367	3.5	0.197	2.818	0.538	25.4	332.5	23.6	29.6	58.6	263.5	105.9	23.3	525.7	42	221.8	12.1	1.6	433.6	19.9	62.2	38.6	8.8	7.6	7.4	2.1	2.2	1.6	
CR6-626	48.27	15.46	13.21	8.57	4.805	1.301	3.46	0.201	2.864	0.526	26.3	343.3	25	27.7	57.8	280.5	106.1	20	513.5	41.5	221.1	11.8	1.6	424.9	29.2	58	37.2	7.1	6.2	6.7	1.5	1.9	0.6	
CR6-627	47.88	14.81	13.66	8.36	4.896	1.327	3.4	0.198	2.979	0.552	29.5	368	30.4	32.8	62.4	315	114.9	19.4	485.5	42.6	233.5	12.6	1.8	441.1	18.9	67	39.8	8.6	4.1	7	2.7	1.5	1.3	
CR6-628	48.25	15.13	13.36	8.42	4.862	1.368	3.5	0.204	2.925	0.591	28.4	381.9	32.6	36.3	62.2	305.1	114	20.2	481.7	43.2	230.1	12.6	1.8	449.1	26	60.6	36.8	10.7	5.9	6.7	3	1.8	1.9	
CR6-629	48.18	14.76	13.33	8.73	4.833	1.274	3.31	0.199	2.87	0.539	33.5	429	43.4	43.9	63.9	268	122.4	22.5	457	43	225.6	12.8	1.5	490.2	19.7	58.9	36.9	8.6	5.2	6.9	2.7	4.2	1.5	
CR6-630	48.14	15	13.47	8.74	5.172	1.205	3.28	0.201	2.791	0.508	29	383.3	47.6	35.5	68	272.4	115	20.7	462.5	41.2	215.9	11.8	1.8	438	16.6	61.4	36.5	10	6.4	6	3.1	2.7	1.6	
CR6-631	48.03	14.75	13.69	8.67	5.154	1.259	3.35	0.203	2.872	0.511	31.7	337.7	45.5	35.3	70.1	303.9	114.5	21.8	459.4	42.4	225.4	11.8	1.4	470.6	14.8	57.6	36	10.9	5	5.8	3	0.3	-0.1	
CR6-632	47.51	16.99	11.32	10.07	6.044	0.592	2.97	0.2	1.655	0.258	25	302.4	63.6	53	156.3	155.3	93.3	7.1	467.9	25.5	119.5	5.5	2	366.9	10.4	20	15.8	5	3.4	4.3	1.1	2.3	1.6	

ADEL SECTION:

SAMPLE	SiO[2]	Al[2]O[3]	FeO	CaO	MgO	K[2]O	Na[2]O	MnO	TiO[2]	P[2]O[5]	Sc	V	Cr	Co	Ni	Cu	Zn	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Nd	Sm	Yb	Hf	Pb	Th	U
CR04-553	45.16	14.91	10.53	9.95	9.41	0.82	1.97	0.155	1.918	0.178	23.3	285	331.2	60	189.8	76.4	79.1	7.4	469.6	19.6	97	6.2	-0.2	210	7.6	25	14.4	2.6	4.8	5	-2.4	1.5	1
CR04-554	45.48	14.51	11.18	9.94	10.09	0.58	2.08	0.166	2.079	0.186	25.8	260.7	336	61.5	210.3	152.1	83	4.9	385.1	20.8	98.2	6.7	0.1	171.4	3.3	28.2	15.9	4.6	5.7	4.1	-2.3	0.8	-0.4
CR04-555	46.14	14.66	11.33	10.75	10.27	0.45	2.17	0.168	1.98	0.186	27.8	276	382.2	64	208.6	103.5	85.6	4.1	394.9	20.1	91.7	6.8	0.2	183.1	3.7	27.2	17.2	3.7	3.5	3	-1.7	1.1	0.1
CR04-556	45.87	15.22	12.15	9.96	8.73	0.62	2.31	0.187	1.877	0.245	27.1	292	226.4	61.2	172.2	141.1	87.7	4.5	568.9	24.3	120.3	5.6	0.1	187.4	12.2	27.7	16	4.2	5.5	4.6	-3.9	3.2	-0.9
CR04-557	45.49	13.15	11.49	10.1	11.61	0.41	1.93	0.187	1.427	0.182	29.3	232.6	387	72	276.9	118	82	4.6	310.3	21.3	91.7	5.6	-0.1	139.6	6.1	25.6	15	3.3	4.6	4.3	-0.6	2.3	-0.5
CR04-558	46.39	14.2	10.9	10.86	9.67	0.42	2.11	0.18	1.485	0.188	33.8	269.3	326.2	58	181.5	132.7	77.3	4.5	331.3	22.3	93.6	5.7	0.1	157.6	9.5	25.3	18.3	6.9	6.3	3.1	-0.9	4.4	-1
CR04-559	46.83	15.13	10.41	12	7.03	0.44	2.27	0.161	1.603	0.2	33.1	280	273.6	49.3	109.8	165.2	79.7	6.8	358.5	24.9	103	5.8	1.3	171.1	11.1	31.8	19.3	4.5	6.3	3.9	-1.4	2.9	-1.2
CR04-565A	46.28	14.2	10.73	10.97	9.37	0.4	2.05	0.177	1.447	0.185	33.6	274.6	303.4	60.9	186.5	133.2	77.7	7.3	340	22.3	94.2	5.8	0.5	185.9	10.7	24.2	16.8	1.7	2.6	3.9	-1.1	2.6	0.3
CR04-565B	47.85	14.84	11.17	11.53	8.73	0.45	2.36	0.177	1.608	0.201	35.6	297	278.3	55.7	145.8	135.5	78.3	5	365	23.9	100.7	6	0.5	182	9.5	25.4	16.7	4.1	3.6	4.3	-0.7	3.6	-0.5
CR04-566	47.02	15.45	11.14	10.28	8.19	0.53	2.44	0.175	1.745	0.226	28.7	293.9	131.1	57.9	157	127.5	80.9	5.6	400	24.2	112.8	6.6	0.5	216.6	6.2	25.1	20.7	4.6	2.5	3.8	-1	3.2	-0.4
CR04-567	48.61	16.09	10.47	10.23	7.38	0.72	2.82	0.159	1.556	0.28	26.6	268.4	167.9	47.6	110.6	108.4	78.7	7.2	477.8	23.4	105	6.6	0.5	281.1	15.7	29.4	17.1	-2.5	3.4	4.3	-2.2	3.2	0.6
CR04-568	47.2	16.47	11.59	9.64	6.9	0.66	2.94	0.172	1.805	0.256	28.2	279.6	118.9	50.5	106.6	175.4	83.5	8.3	481.4	24.8	117.8	6.3	0.3	275.5	7.2	27.6	18.2	3.3	5	4.1	-2.2	3.7	-0.7
CR04-569	46.51	15.92	10.35	9.93	8.77	0.44	2.28	0.189	1.41	0.193	26.5	258	227.2	55.4	163.9	93.8	72.6	8.5	349.2	22.8	93.2	4	1.2	173.4	-0.8	16.9	10.5	6.5	4.7	3.8	-1.6	2.1	-0.3
CR04-570	47.34	16.15	10.05	10.06	8.13	0.58	2.44	0.158	1.456	0.225	27.1	240.3	191.1	53.2	141	118.2	71	7.2	398.5	20.9	98.3	6.4	0.5	332.1	7.7	17.5	13.1	4.5	4.6	4.3	-1.4	4.8	-0.2
CR04-571	46.81	15.76	10.92	10.09	8.5	0.52	2.57	0.166	1.568	0.214	31.3	286.2	267.7	59.7	193.9	140.7	77.5	5.7	407.6	23	98.3	4.8	0.2	254	5.8	24.6	17.2	4	4.7	3.7	-2.1	2.6	-2.1

BLACK CANYON RESERVOIR SECTION:

SAMPLE	SiO[2]	Al[2]O[3]	FeO	CaO	MgO	K[2]O	Na[2]O	MnO	TiO[2]	P[2]O[5]	Sc	V	Cr	Co	Ni	Cu	Zn	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Nd	Sm	Yb	Hf	Pb	Th	U
CR03-475	46.78	16.07	10.19	9.82	5.82	0.45	2.78	0.188	2.078	0.309	26.3	297.8	89.1	53.1	116.1	48.4	112.1	5.8	465.3	29.1	162.1	11.6	1.8	320.2	14.6	38.4	25	5.6	3.6	3.8	6.6	1.2	3.1
CR03-475A	49.55	16.2	10.22	8.82	4.89	1.09	3.4	0.171	1.818	0.476	24.9	251.2	75.4	46.5	68.8	84.2	93.7	16.7	479.2	31.2	158.4	12.4	0.6	452.9	18.9	51.3	27	4.7	1.7	3.4	5.6	3.7	2.4
CR03-476	47.3	16.21	10.27	9.81	5.65	0.56	2.86	0.143	2.13	0.32	25.5	293.2	81.4	53.9	122.2	45.6	113.6	7	466.1	29.5	164.7	11.8	2.1	298.4	12.3	42.3	23.7	6.5	2.2	3.7	5.5	3.3	2.6
CR03-477	48.86	15.84	11.06	9.65	5.82	0.75	3.04	0.191	2.068	0.336	28.7	287.1	57.2	54.9	80.6	30.3	110.9	15.9	512.6	28	154.3	10.8	1.2	300.4	13.4	44.6	24.3	5.8	1	2.8	3.5	3	1.9
CR03-478	48.08	15.61	11.36	9.72	5.78	0.64	2.98	0.154	2.087	0.35	24.8	250.2	49.4	53.8	105.7	44	107.6	11.6	501.1	28.5	151.7	10.8	1	228.5	10.4	41.7	22.8	6	-0.5	2.3	3.4	3	1.8
CR03-479	47.29	15.55	10.91	9.37	6.63	0.59	2.88	0.169	2.046	0.333	22.8	265.4	51	54.6	107.6	42.9	111.1	11.7	459.1	27.9	145.9	10.7	2.1	230.5	14.4	39.4	21.4	3.9	1.4	2.3	5.8	2	2.5
CR03-480	50.92	15.82	9.92	9.08	5.48	0.82	3.15	0.186	1.559	0.266	28	272.7	68.2	50.3	91.6	126.6	87.7	12.9	404.3	27.7	142.8	11	0.7	374.1	11.8	34.2	20	4.1	2.7	3.2	5	3.8	2.5
CR03-481	48.58	16.13	9.67	9.53	5.14	0.47	2.92	0.147	1.574	0.265	30.1	284.8	69.2	52.4	101.9	123	91.5	6.8	432.4	28.3	144.7	11	1.5	387.3	17.2	39.1	20.7	2.7	2.4	3.1	7.1	3.1	3.5
CR03-482	48.69	16.45	9.74	10.65	5.11	0.5	2.96	0.19	1.724	0.294	33.2	332.6	177.3	52.7	119.3	127.7	97.2	4.3	447.5	28.7	129.7	8.5	0.5	284.8	12	30.1	19.1	5.1	1.4	2.5	3.8	1.5	1.7
CR03-483	47.08	15.45	10.64	9.76	6.39	0.51	2.69	0.158	1.656	0.274	32.9	282.9	168.5	51.4	121.1	97	92.6	8.1	403.4	27.8	123.2	7.9	1.7	247.5	18.1	31.7	18.7	2.9	3	1.7	6.5	1.1	3.5
CR03-484	47.55	15.58	10.53	9.58	6.31	0.97	2.67	0.182	1.689	0.282	30.9	301	180.5	54.7	116.8	125.3	95.1	11.2	478.7	28.2	127.5	8.5	0.5	610.8	8	29.6	17.8	3.8	1.8	3.3	1.6	4.6	-0.1
CR03-485	47.21	15.48	12.47	8.12	4.47	1.05	3.17	0.188	2.936	0.51	22.4	263.3	28	50.7	111.7	80.1	114.6	23.4	479.9	35.8	237.5	16.9	0.9	370.3	24	59.9	35.6	10.4	1.2	4.4	4.7	3.1	0.4
CR03-486	47.74	17.07	11.34	8.98	3.77	0.86	3.44	0.205	2.705	0.473	19.2	250.5	15.8	51.2	90.1	87.5	105.9	10.1	540.1	35.1	222.3	15.6	0.7	396.7	15.6	59.4	38.1	6.4	2	6.6	2.7	3.5	0.4
CR03-487	49.03	20.2	7.77	10.47	3.92	0.52	3.21	0.119	1.341	0.236	21.4	215.3	62.9	39.7	78.8	77.3	61.5	4	506.6	21.7	112	7.8	0.5	243.1	6.9	25.5	15.3	3.9	2.7	3.4	2.4	5.4	1.9
CR03-488	46.96	18.53	10.05	9.04	4.65	1.09	2.91	0.175	1.749	0.29	23.7	247.2	26.4	48.2	88.5	86.3	86	14.3	566.9	27	138.4	7.8	-0.1	804.7	14.3	32.5	19.8	4.8	0.5	3.7	2.6	3.4	0.5
CR03-489	48.75	17.87	10.14	9.67	4.77	0.58	3.2	0.164	1.695	0.293	24.7	244.3	39.2	48.1	85.2	126.3	83.9	7.8	443.8	27.2	137.4	8.6	1	297.8	11.3	27.9	18.3	4	2.4	2.9	3.7	3.5	1.3
CR03-490	48.32	19.7	8.21	10.36	3.82	0.36	3.22	0.149	1.444	0.246	22.6	206	51.6	41	75.2	92.8	67.7	1.7	492	23.7	119.9	7.4	0.3	262.5	12.6	33.1	19	0.6	0.9	3.4	2.5	3.5	1.3
CR03-491	51.19	16.67	9.24	8.31	3.13	1.42	3.65	0.18	1.898	0.543	26.4	248.7	44.7	40.3	56	123.9	88.1	34.7	516	33.3	180.8	14.9	0.8	544.9	22	54.4	30.3	5.2	1.4	4.5	5.4	4.5	1.1
CR03-492	47.41	17.42	10.25	9.59	3.87	0.62	3.17	0.121	1.829	0.442	29.6	268.5	70.6	44.2	67.4	104.1	98.8	5.3	531.9	30.8	157.4	11.7	-0.1	454	18.5	50.2	26.9	6.8	2.1	4.8	3.5	3.7	0.2
CR03-493	48.58	17.2	9.79	9.23	4.45	0.84	3.17	0.151	1.694	0.411	27.1	235.7	66.8	45	82	96.9	89.2	10.5	487.3	28.8	142.1	10.8	0.8	379	22.3	46.4	25.6	7	1.6	3.4	3	2.9	-0.1
CR03-494	47.18	15.87	10.82	9.12	5.82	0.66	2.88	0.166	1.876	0.271	27.2	275.4	69.8	59.4	158.1	55.7	108.7	12.2	477.8	27.5	146.5	10.4	1.1	249.2	15.5	33.4	20.5	3.7	-0.4	3.5	2.9	2.6	0.1
CR03-495	45.12	15.87	11.16	9.39	4.57	0.31	2.57	0.163	1.963	0.293	28.6	338.4	62	39.4	102	130.4	86.2	372.1	136.1	39.2	136.1	8.1	0.6	435.1	12.6	33.1	21.6	4.3	1.2	5.5	4.8	2.6	0.1
CR03-496	45.65	15.56	12.44	10.02	4.88	0.3	2.86	0.177	2.118	0.323	35.7	370.7	202.1	58.5	131.1	181.9	113.2	6.9	417.7	33.3	152.7	8.3	1.3	265.3	13.1	35.1	22.6	4.8	0.7	2.7	7.4	6.6	3.8
CR03-497	45.71	15.34	12.36	10.04	4.95	0.3	2.74	0.157	2.254	0.329	34.9	348	180.1	53.5	117.8	208.5	112.8	6.3	409.5	33.8	155.3	8.4	1.2	215.4	11.4	36.1	25.3	6.5	2	3.1	6.5	0.2	4.1
CR03-498	45.78	15.45	12.01	9.86	5.55	0.27	2.75	0.163	2.151	0.316	30	290	167.9	53.4	133.5	169.3	108	4.1	403.6	33.2	150.2	8.4	1	192.8	11.5	36.3	21.2	3.7	3	3.1	6	0.6	2.6
CR03-499	46.33	15.66	11.46	9.38	5.93	0.43	2.66	0.183	1.913	0.283	29.6	308.5	186.2	58.3	147.3	188	102.3	5.8	395.1	29.7	133.8	7.5	1.4	279.4	8	29.9	18.8	5.9	3.6	2.3	5.8	0.8	2.4
CR03-500	45.02	15.52	11.17	8.73	6.66	0.85	2.15	0.226	1.853	0.275	24.6	268.5	191.1	58.9	153.6	93.2	92.4	25.8	406.8	29.4	130.9	7.1	0.9	2229.1	8.3	24.5	14.2	2.1	1	2	5.3	0	2.1
CR03-501	45.76	15.97	11.59	9.61	4.98	0.43	2.61	0.163	1.888	0.281	36.1	362.7	205.7	62.3	136.9	232.7	113.8	7.4	412.9	30.2	134.1	7.1	1	336	10	38.3	20.2	6.2	1.9	1.3	6.7	0.6	3.4
CR03-502	48.01	16.83	9.83	9.84	5.09	0.63	2.97	0.126	1.919	0.287	26.1	279.5	72.6	51.6	147.8	52.5	107.4	10.7	505	27.7	153.7	11.2	1.6	309.6	14.1	40.4	24.1	5.1	2.7	2.9	6.5	2.1	3.8
CR03-503	46.17	16.21	12.14	10.12	4.16	0.4	2.88	0.131	2.128	0.314	33	337.4	192.6	55.9	136.9	190	110.1	7.7	428.9	32.6	148.8	8.1	1.4	269	15.5	39.8	24.7	7.5	3.2	3.5	5.5	1.9	2.8
CR03-504	48.3	16.87	10.91	9.34	4.02	0.79	3.28	0.171	2.163	0.399	34.5	342	32.3	44	66.1	83.2	99.1	10.5	472.8	33.9	159.4	9.2	0.6	366.7	12.5	39.7	23.4	3.5	2.2	2.6	4	1.3	2
CR03-505	46.58	16.08	11.04	8.76	5.76	0.75	2.91	0.262	2.143	0.45	25.7	308	53.8	47.4	98.8	115.1	97	10	446.7	33.6	152.3	9.2	1.7	359.3	16.3	38.9	24.9	5.7	2.7	3.7	6.4	1.5	2
CR03-506	48.54	16.3	11	9.11	3.77	0.86	3.27	0.188	2.217	0.461	27.4	315.9	37.7	43.2	55.1	140.1	96.1	13.1	455.1	37	186.3	12.2	0.8	477.4	21.6	53.1	32.1	8.1	2	3.4	4.6	2.5	2.1
CR03-507	50.63	15.77	10.82	8.24	3.16	1.54	3.55	0.172	2.3	0.538	34.9	324.8	17.2	34.6	34.5	149.5	95.3	37.5	463.3	40	204.3	12.8	0.3	525.5	24.7	53.1	32.3	6.7	3	4	6.6	3	3.1
CR03-508	50.12	17.35	9.83	9.29	3.47	0.82	3.54	0.234	1.871	0.426	27.4	288	20.2	39.6	41.1	118.4	90	12.7	519.2	33.7	170.2	9.3	0.4	473.1	14.7	40.8	22.7	6.7	4.1	5.4	5.4	3.3	1.5
CR03-509	47.97	14.87	12.84	8.96	3.97	0.81	3.15	0.24	2.854	0.658	37.9	446	-16.1	43.3	45	199.3	142.4	8.5	484.4	47	255.7	17.3	-0.2	575.4	22.3	67.3	42.7	9.4	4.4	5.8	5.5	3.2	1.5

CP-30	48.07	15.98	12.44	8.69	4.31	1.24	3.52	0.197	2.779	0.518	31.9	450.9	29.1	51.7	54.1	201.8	123.1	16.2	549.9	39.8	220.5	14.1 0.5<LL	581.9	26	41.9	28.3	11.7 <LL	10.2	13.4	13.2	2.3	
CP-30	48.28	15.22	13.11	7.94	4.31	1.39	3.58	0.207	2.966	0.525	30.9	457.8	30.9	50.8	59.3	260.7	126.4	25.4	519.3	40.1	228.5	15.1 0.5	537.9	30.9	58	30.8	7 <LL	10.5	12.8	13.3	2	
CP-31	48.01	15.34	12.95	9.98	4.28	1.33	3.54	0.207	2.884	0.502	31.5	439.1	35.1	49.5	59.1	266.8	123.7	25.7	534.4	39.5	216.4	14.3 0.5<LL	513.3	27.9	50.2	29.3 4.7<LL	<LL	10	13.2	13	2.7	
CP-32	46.99	16.49	11.49	10.55	7.47	0.38	2.77	0.185	1.613	0.195	32.1	325	157.9	57.1	155.7	168.8	87.6	2.4	419.2	25.9	107.8	6.2 <LL	156.1	9.5	16.6 5.0<LL	1.4<LL	<LL	4.7	10.3	7.7	2.5	
CP-33	47.83	16.62	11.45	10.46	7.62	0.43	2.8	0.182	1.633	0.199	34.3	322.6	158.3	59.6	162.9	133.5	90.7	5.5	412	25.9	112.9	5.7 0.1<LL	170.3	12.9	21.3 4.8<LL	2.1<LL	<LL	5.1	9.5	6.6	1.4	
CP-34	47.92	16.59	11.52	10.44	7.65	0.46	2.81	0.183	1.633	0.199	29.1	283.5	127.5	47.4	147.7	146.1	86.4	6.1	419	25.7	113.5	5.7 <LL	148.7	10.5	26.1	6 <LL	<LL	4.5	9.7	6.6 0.7<LL		
CP-35	47.04	16.35	11.41	10.21	7.48	0.44	2.79	0.182	1.633	0.195	34.3	323.7	135.2	65	155.8	148.8	94.3	4.3	411	26.4	115.8	6.2 <LL	187.2	17.3	26	8.9 1.6<LL	<LL	3.9	9.4	5.8 0.6<LL		
CP-36	47.21	16.24	11.59	10.36	7.56	0.43	2.61	0.183	1.642	0.183	35.8	330.9	110.1	66.5	160.4	147.3	93.7	7.7	354.8	26.4	117.7	7.9 <LL	186.2	14.4	36.4	14.4 3.7<LL	<LL	<LL	9.1	7	0.2<LL	
CP-37	47.25	16.23	11.54	10.37	7.07	0.46	2.61	0.184	1.644	0.183	34.3	331.2	112.5	65	154.4	195.2	93.8	8.7	363.7	26.9	122	7.6 0.0<LL	186.1	17.3	21.5 1.3<LL	0.9<LL	<LL	7.2	10.2	7.4	1.1	
CP-39	47.09	16.11	11.61	10.22	7.54	0.45	2.64	0.184	1.666	0.204	33.6	317.7	103.7	64.3	160.5	157.8	92.6	7.6	350.8	27	120.5	7.1 <LL	158.7	13.6	27.3	9.1 <LL	<LL	4.2	9.6	6.2	1.2	
CP-39 (JAI)	47.24	16.13	11.63	10.34	7.72	0.45	2.64	0.184	1.681	0.191	34.6	322.9	105.3	71.7	154.5	129.7	90.9	7.3	350.2	26	120.4	7.3 <LL	151.7	15.2	32.6	14.6 1.0<LL	<LL	5.8	9.1	3.8	1.5	
CP-40	47.53	15.12	12.26	9.87	7.14	0.65	2.82	0.191	2.047	0.252	32.2	311	188.2	62.8	131.8	176.4	93.5	12.2	348.3	32.9	156.5	10.2 <LL	187.9	16.8	32.7	12.6 4.3<LL	<LL	6.7	11.4	8	1.4	
CP-41	47.75	15.38	11.92	9.83	7.18	0.7	2.73	0.187	1.907	0.244	35.1	346.5	216.9	65.7	147.7	147.9	99.8	14.1	341.4	31.1	149.5	9.5 0.2<LL	242.1	20.5	33.7	12.7 2.2<LL	<LL	5.8	9.7	5.9	1.3	
CP-42	47.53	14.14	13.47	8.36	4.86	1.42	3.35	0.212	3	0.564	32	457.4	36.6	66	63.6	261.4	124	25.5	475.1	43.4	239.8	15.4 0.4<LL	525.4	28.5	57.6	31.2 0.6<LL	<LL	9.2	11.4	12.8	1.6	
CP-43	47.87	15.3	12.6	8.8	4.39	1.22	3.41	0.2	2.873	0.516	35.6	467.6	31.6	53.1	59.1	247	131.3	16.9	517.4	40.9	216.4	13.8 0.5	559	30.6	61.8	34.7	8.4 <LL	3.7	10.7	9.6	2.4	
CP-44	47.83	14.48	11.7	8.23	4.17	1.42	3.48	0.208	2.918	0.559	30	370.7	29.9	41	48.8	285.4	117	25.7	509.1	45.2	236.8	14.7 0.6	515.9	29.6	59.6	30.9 4.1<LL	<LL	10	11.8	11.8	1.3	
CP-45	49.36	17.43	10.49	8.85	3.71	1.3	3.69	0.17	2.434	0.497	24	282.3	19.6	19.4	49.1	209.8	91.2	22.1	612.6	36.2	211.2	12.9 0.5	477.4	27.1	49.5	26.9 2.5<LL	<LL	8.7	12.6	11	1.7	
CP-46	48.18	16.62	11.9	8.83	3.68	1.27	3.59	0.182	2.611	0.542	26	290.5	13.4	36.2	50.6	263.9	99.8	17.9	584	41	232.4	14.7 0.4<LL	536.8	31.1	50.4	28.3 3.5<LL	<LL	9.5	12.3	12.5	2	
CP-47	49.47	17.3	10.74	8.8	3.82	1.36	3.68	0.175	2.499	0.5	25.5	342.4	17.2	39.4	51.2	204.7	105.5	23.9	580.2	36.7	211.5	13.1 0.1<LL	487.8	29.3	48.5	24.5 2.8<LL	<LL	8.5	11.1	11.7	1.8	
CP-48	55.74	14.86	8.39	5.83	2.59	2.94	3.27	0.137	1.89	0.443	19.1	229.5	8.5	46.2	23.9	139.3	100.1	87.5	425.1	34.8	266.6	18.4 1.9	806.2	36.7	64.3	29.4	6 <LL	6.8	16.9	15.6	4.8	
CP-49	47.24	16.01	10.81	10.33	7.6	0.49	2.79	0.176	1.678	0.223	31.7	293.4	251.2	58.2	172.6	178.1	90.5	4.5	421.6	26.7	126.7	7.6 0.1<LL	254.8	18.4	30.7	9.9 <LL	<LL	2.6<LL	9.1	6.8	2.5	
CP-50	48.53	17.88	10.12	10	4.55	0.87	3.18	0.159	1.843	0.314	24.3	256.8	41.4	42.7	56.6	176.2	80.1	12.7	585.4	26.6	148.1	9.1 0.2<LL	336.2	18.3	32.4	13.3 0.7<LL	<LL	5.6	9.7	8.4	2.9	
CP-51	49.17	17.85	10.32	9.12	4.27	1.14	3.48	0.158	1.864	0.349	24.4	257.1	70.5	31.2	91.3	163	83.4	23.1	502.4	30.5	169.9	8.6 0.4<LL	401.2	20.6	32.3	17 4.2<LL	<LL	4.9	10.9	10.3	3.4	
CP-52	49.26	16.7	10.97	8.96	4.76	1.27	3.43	0.171	1.94	0.359	27.6	287	83	54.6	81.8	219.1	89.7	28.1	455.4	32.7	179.6	9.1 0.3<LL	446.4	24.7	41.2	18.6 <LL	<LL	5.1	11.5	10.3	3.5	
CP-53	49.62	13.41	12.07	8.1	4.3	1.78	3.1	0.189	2.501	0.465	32.9	409.2	64.5	65.8	49.2	199.5	119.4	43	394	39.5	241.3	15 1.3	629.4	28.7	53.7	30 2.6<LL	<LL	6.1	12.2	11.3	2.6	
CP-54	50.19	15.47	10.73	8.64	4.04	1.58	3.26	0.167	2.15	0.404	27.4	318.2	54.1	33.6	51.8	177.5	94.2	36.4	458.8	33.9	207.9	12.4 0.7	518.2	23.8	47.6	25.4 0.4<LL	<LL	6.7	11.6	11.4	3.3	
CP-55	48.64	19.58	9.15	10.85	5.43	0.78	3.03	0.164	1.904	0.257	27.7	296	69.8	60.2	113.4	140.4	87.3	14.3	460.2	26.7	152.3	9.9 0.2<LL	252.7	16.8	30.2	12.2 2.9<LL	<LL	3.7	9.2	7.5	2.5	
CP-56	48.69	19.58	9.11	10.71	4.96	0.58	3.1	0.139	1.552	0.212	25	260.3	81.9	39.6	102.9	129.4	75.7	9.3	475	22.5	121.5	6.6 0.0<LL	211.9	12.6	21.5	7.9 1.7<LL	<LL	2.8<LL	9.3	7.1	2.6	
CP-57	49.12	15.43	10.42	10.61	7.1	0.69	2.51	0.172	1.55	0.192	32.6	293.3	196.1	62.6	122.2	124	83.1	12.1	383.5	24.5	114.4	6 0.2<LL	259.3	10.9	22.4	9.6 <LL	<LL	0.7<LL	8.9	6.3	3.6	
CP-58	47.93	19.88	9.45	10.52	4.08	0.6	3.22	0.141	1.707	0.258	22.9	247.2	50.5	37.7	65.5	141.9	76.9	8.7	533.7	23.4	128.7	6.8 0.1<LL	243.3	15.4	26.9	11.6 0.9<LL	<LL	3.4	8.9	7.4	2.6	
CP-60	48.74	19	9.49	9.9	3.91	0.92	3.41	0.145	1.757	0.321	22.6	227.8	61.8	38.5	66.7	151.8	74.2	17.9	553.2	26.8	149.3	8 0.2<LL	306.6	17.2	34.1	13.6 0.4<LL	<LL	4.2	9.6	8.1	2.5	
CP-61	47.74	19.65	9.64	10.46	4.55	0.53	3.15	0.143	1.882	0.239	25.9	309.2	116.6	52.1	109.5	153.9	84.5	7.2	498.6	23.8	134.5	9.8 0.4<LL	221.4	19.6	29.2	11.5 4.8<LL	<LL	2.1<LL	8.2	7.7	1.1	
CP-62	49.88	16.01	9.37	10.06	7.64	0.84	2.71	0.156	1.315	0.229	28.5	250.8	264.1	57.7	131.8	104.2	76.2	13.1	512.7	20.8	107.5	6.4 0.2<LL	321.8	13.7	34.3	10.1 4.3<LL	<LL	1.3<LL	8.8	6.1	1.6	
CP-63	49.72	15.68	9.7	10.07	6.87	0.94	2.75	0.164	1.486	0.247	27.9	263.3	188.7	44.7	112.8	112.2	80.5	15.8	509.2	23	122.6	8 0.3<LL	344.5	12.1	35.9	10.7	5.1 <LL	1.8<LL	9	6.9	1.2	
CP-64	49.5	15.13	10.23	10.1	5.89	0.94	2.77	0.173	1.7	0.291	30.5	308.6	182.2	54.9	77.6	147.2	89.9	16	508.9	27.2	140	8.9 <LL	430.3	19.3	40.8	17	5.4 <LL	1.0<LL	9.1	8.8	1.4	
CP-65	49.24	15.35	9.92	10.08	6.9	0.92	2.69	0.163	1.489	0.244	32.6	302.2	220.7	60.9	119.8	119.9	92.2	16.1	500.1	22.5	124	7.7 0.2<LL	360.9	18.4	27	10.2	9.8 <LL	0.7<LL	9.5	6.1	2.3	
CP-66	70.39	12.29	4.24	0.46	0.09	5	4.06	0.131	0.422	0.084	6 <LL		4.9	25.3 2.0<LL	9.8	141.9	160.8	35.2	108.5	350.3	19.6	3.2	797	66.6	105.3	79.2	23.7	7.9	5.6	20.9	19.5	8.4
CP-67	73.55	10.61	3.58	0.38	0.08	4.57	4.24	0.092	0.305	0.027 <LL	5.2<LL		4.8	11.1 <LL	5.3	150.7	126.7	17	39.2	466.4	23.6	1.3										

COTTONWOOD CREEK SECTION:

SAMPLE	SiO[2]	Al[2]O[3]	FeO	CaO	MgO	K[2]O	Na[2]O	MnO	TiO[2]	P[2]O[5]	Sc	V	Cr	Co	Ni	Cu	Zn	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Nd	Sm	Yb	Hf	Pb	Th	U	
CR03-443	55.61	13.52	10.9	6.53	2.95	1.91	3.35	0.188	2.129	0.712	26.5	303.3	18.2	55	24.9	44.1	150.9	39.4	514	41.3	266.3	15.5	1.6	1039.4	35.5	88.7	44.3	8	1.9	5.5	8.5	4.5	3	
CR03-444	48.27	15.16	11.33	10.68	7.74	0.49	2.66	0.173	1.931	0.285	27.8	259.3	186.1	61.7	116	36	101.9	6.5	451.6	25.4	135.2	10.6	1.3	180.5	13.3	39.4	21.3	3.9	0.3	3.7	3.5	2.2	1.4	
CR03-445	47.07	15.95	11.08	9.43	7.8	0.52	2.74	0.162	1.918	0.28	22.6	248	116.1	55.5	123.8	44.8	103.1	5.2	488.8	25.3	128.8	10.5	1.1	158.4	12.4	38	20.2	4	-0.8	2.1	2.4	2.2	2.6	
CR03-446	47.52	15.87	11.4	10.5	5.69	0.47	2.88	0.179	1.886	0.275	24.8	245.9	107.3	54.3	115.4	43.9	106.1	4.4	590.1	25.1	131.4	10.9	0.9	179.4	5	34.9	21.4	5.4	0.8	3.1	4	2	2.1	
CR03-447	46.12	14.89	11.84	8.24	3.36	1.36	3.37	0.184	2.564	0.612	20.6	269.2	77.3	49.4	93.3	78	124	28.8	550.5	37.7	248.3	18.3	0.6	172.4	23.6	77.3	42.5	8.9	1.2	4.8	3.6	2.5	2.5	
CR03-448	45.18	10.81	10.57	5.94	10.57	5.94	10.57	5.94	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27	6.93	14.27
CR03-449	46.78	16.44	11.12	9.76	3.6	0.83	3.19	0.175	2.142	0.361	20.8	258.9	86.7	57.3	90.1	57.7	112.9	15.3	553.3	30.2	183.6	12.4	1	394.2	15.1	51.6	31.2	5.2	2.7	4.1	4.3	1.9	0.9	
CR03-450	47.23	16.54	11.99	9.68	2.24	0.82	3.21	0.223	2.179	0.371	23.1	277	59	57.2	69.5	63.1	122.9	15.9	557.9	30.9	186.8	12.7	0.9	418.6	15.1	53.1	29.4	7.8	2.7	4.3	3.7	1.9	0.9	
CR03-451	48.38	15.05	12	9.02	5.52	0.95	3.03	0.176	2.274	0.391	25	251.9	108.3	49.2	100.4	73.5	118.6	19.1	466.9	32.1	189.1	12.3	1.1	350	27.5	50.2	27.4	4.7	2.3	3.8	4.4	2.3	0	
CR03-452	46.54	15.61	11.27	9.24	7.26	1.11	2.5	0.171	1.984	0.309	25.3	265.8	129.7	56.2	139.6	59.6	106.5	66.6	608.8	28.3	144.7	10	0.2	2653.7	13	25	15.1	3.6	2.1	3.4	1.9	2.2	0.3	
CR03-453	46.97	15.18	11.82	9.16	6.88	0.63	2.82	0.172	2.121	0.301	26.3	259.4	116.2	56.2	171.5	83.6	114.3	13.5	444.9	29.4	158.9	9.9	1.9	222.7	14.6	47.4	24.7	5.9	2.8	3.2	6.2	1.5	1.1	
CR03-454	48.65	15.93	11.9	8.69	5.37	0.97	3.22	0.16	2.386	0.399	23.5	251	64.5	46.6	93.1	90.2	117.5	19.7	469.3	33.4	201.2	14.5	1	341.7	22.7	54.1	32	6.4	1	4.4	4.5	2.1	0.1	
CR03-455	50.99	15.03	10.63	8.38	4.81	1.27	2.89	0.159	2.074	0.353	23.1	239.9	55.9	43.4	46.5	38.6	120.7	31.5	467.2	34.1	222.3	14.9	1.4	555.8	24.9	61.5	32.6	6.9	3.1	4.9	7.3	3.1	1.2	
CR03-456	49.43	15.96	10.63	9.48	5.16	0.96	2.87	0.171	1.949	0.317	28.5	291.9	94.9	58	67.7	47.4	117.5	18.9	470.3	29.2	163.1	11	1.7	368	13.2	40.1	22.9	5.7	1.4	4.4	4.1	2.6	0	

	48.95	16.65	11.62	8.76	4	1.34	3.44	0.195	2.631	0.512	26.2	402.1	23.4	45.8	51.7	235.7	112.8	22.8	561.7	36.3	213.2	13 <LL	502.7	27	45.3	32.5 <LL	<LL	5.9	11	9.6	1.7
PJ-16x2	48.47	16.25	12.03	8.58	4.29	1.28	3.47	0.206	2.665	0.502	26.8	394.3	27.6	52.1	58.2	242.1	110.3	21	560	36.2	214.5	13.6 0.4<LL	478.5	23.2	40.2	30.6 <LL	<LL	6.5	11.4	9.8	1.2
PJ-17	49.31	17.36	11.3	8.96	4	1.26	3.61	0.179	2.524	0.477	26	379.3	25.4	42.5	54	240.2	105	21.4	589.9	34.9	204.4	12.5 0.2<LL	468.9	25.2	51	30.7 <LL	<LL	6.7	10.9	9.1	2.2
PJ-18	49.55	17.56	11.28	8.98	4.08	1.26	3.6	0.174	2.48	0.466	25.5	372.2	25.1	40.3	53.4	230.2	104.6	20.7	595.9	33.6	198.7	11.6 0.3<LL	459.2	21.9	48.3	27.8 <LL	<LL	5.6	10.6	8.5	1
PJ-19	48.83	16.69	11.88	8.83	4.41	1.24	3.5	0.181	2.595	0.47	26	376.9	33.9	39.4	57.6	245.1	104.9	20.7	555.4	35.7	204.8	12.4 <LL	449.4	23.9	49	29.9 <LL	<LL	6.4	11.7	9.6	1.1
PJ-20	48.36	15.03	13.16	8.37	4.42	1.44	3.32	0.214	2.907	0.546	31.7	456.5	41.3	54.6	65.7	299.1	127.1	26.3	487.5	40.4	233.3	14.4 0.5	527.6	28.3	58.5	35.3 <LL	<LL	6.5	10.6	9.2	1.8
PJ-21	48.17	14.73	13.16	8.33	4.47	1.38	3.44	0.216	2.928	0.549	31	447.8	36.1	50.3	64.3	297.3	119.7	22.1	474.3	41.4	226	14.5 0.2<LL	519.1	27.2	54.2	33.9 1.3<LL	<LL	7.4	11.6	9.9	1.3
PJ-21x2	48.03	15.1	12.98	8.27	4.6	1.36	3.43	0.207	2.829	0.522	29.8	425.3	38	45.7	65.9	253.2	113.4	23.4	492.6	39.8	205.8	14.5 0.1<LL	485.8	21.4	44.6	31.2 <LL	<LL	6.7	12.1	10.1 0.7<LL	
PJ-22	48.88	16.27	12.01	8.83	4.48	1.24	3.42	0.185	2.621	0.492	27.3	405.1	38.1	47.7	62.6	237.2	111.1	19.5	527.8	36.9	208.3	12.9 0.1<LL	484.8	28.5	53.2	31.2 <LL	<LL	6.3	11	8.8 0.8<LL	
PJ-23	47.64	14.69	12.96	8.47	4.76	1.36	3.17	0.199	2.832	0.527	32.4	453.2	40.6	59.6	63.9	227.5	124	25.1	481.1	40.2	230.4	14.2 0.5	499.7	27.2	54	34.2 <LL	<LL	7	11.8	9.4	2.4
PJ-24	47.42	14.34	13.66	8.45	4.74	1.32	3.21	0.202	2.619	0.482	29.2	404	38.5	49.3	62.4	169.8	110.4	19.1	520.1	35.7	209.1	14.2 <LL	471.7	22.4	43.4	33.1 <LL	<LL	7.1	11.1	8.7	1.5
PJ-25	47.82	14.34	13.66	8.4	4.74	1.32	3.26	0.214	2.995	0.565	34.9	485.3	43.2	62.7	65	291.3	132.3	21.9	450.8	43	245.8	14.9 <LL	537.8	30.1	59.3	37.5 <LL	<LL	8	12.1	9.9	1.8
PJ-26	48.73	16.45	11.84	8.94	4.1	1.36	3.21	0.183	2.547	0.489	30	377.2	42.2	50.2	60.2	203.3	113.3	22.7	523.5	35.4	205.3	12.6 0.0<LL	457.6	28.4	53.5	32.1 <LL	<LL	6.9	10.6	11.7	2.2
PJ-27	51.02	14.46	11.91	7.47	3.71	1.95	3.93	0.243	2.506	0.747	37.6	321.4 <LL	43.3	11.7	32.2	117	36	482.5	40	225.5	13.2 0.7	887.1	35	63.1	35.2 <LL	<LL	4.3	10.1	11.6	1.6	
PJ-28	50.96	14.54	11.98	7.63	3.92	1.95	4.04	0.229	2.511	0.749	37.6	304.9 <LL	35.4	8.6	23.5	108.5	34.2	485.6	41.5	223.5	14 0.6	798.4	33.3	57.8	36.1 <LL	<LL	3.8	11.5	12.7	1.5	
PJ-29	46.68	17.14	11.35	9.49	4.69	0.97	3.4	0.189	2.184	0.37	23.9	327.8	49.9	49.1	108.1	226.4	99.6	14.9	592.2	28.3	151.9	9.8 0.5	386.6	22.5	35.5	21.9 <LL	<LL	4.8	10.2	9.1 0.3<LL	
PJ-30	47.76	17.35	11.53	9.73	4.65	0.68	3.07	0.284	1.709	0.254	30.2	313.2	73.3	65.7	182.3	159.4	99.5	11	483.7	26	126.6	6.6 0.5<LL	373.5	17.4	26.1	14.3 <LL	<LL	3	9.4	7.4	1.4
PJ-31	46.85	16.47	11.13	9.77	5.96	0.67	2.96	0.194	1.677	0.245	30.2	295	72	59.5	160.7	154	97.9	11	462.4	25.8	127.1	6.7 0.1<LL	313.3	19.6	22.8	14.6 <LL	<LL	4.6	9.2	8.2 0.9<LL	
PJ-32	47.55	17.16	11.3	9.57	5.12	0.67	3.06	0.298	1.657	0.24	28.8	297	68.2	66.9	171.3	176.1	100.7	9.8	480.3	25.7	130.7	6.8 1	377.2	18.8	36.3	14.4 7.3 <LL	1.6<LL	8.8	6.8 0.9<LL		
PJ-33	47.88	17.41	11.2	9.71	6	0.57	3.03	0.178	1.639	0.239	28.2	308.5	70.2	63.8	160.5	158	95.4	5.7	483	24.1	120	6.2 0.0<LL	277.4	16.8	29.2	15.6 <LL	<LL	6.8	9.8	5.9	2.1
PJ-34	48.72	15.29	12.93	7.68	3.93	1.55	3.59	0.225	2.756	0.527	26.3	402.7	5.5	48.1	58.5	213.1	120.5	33.9	512.5	37.5	230.6	13.5 0.2<LL	616.7	35.1	61.5	37.3 <LL	<LL	9.7	13	10.3	2.9
PJ-35	48.57	15.1	13.09	7.61	4.15	1.54	3.56	0.197	2.798	0.536	28	420.7 2.0<LL	46.4	54.7	280.4	119.1	29.7	506.9	38.6	230.2	14 0.7	623.1	30.5	51.9	34.3 <LL	<LL	8.2	12.8	10.4	1.6	
PJ-36	48.2	16.18	12.18	8.74	5.29	0.89	3.4	0.2	2.133	0.331	27.6	329.9	69.4	54.4	119.8	164.4	110.3	12.7	555.6	29.9	155.1	9 0.0<LL	426.7	18.7	28.7	20.8 <LL	<LL	3	11.1	8.5 0.6<LL	
PJ-37	52.36	13.69	12.08	7.1	3.73	1.85	3.32	0.198	2.534	0.538	32.3	349.8	18.1	43.4	29.2	191.9	126.4	45.6	444.4	39.2	203.5	11.8 1	694.9	27	43.1	30.7 <LL	<LL	6	13.7	11	2.1
PJ-38	52.53	13.8	12.16	7.16	3.62	1.7	3.44	0.204	2.56	0.539	32.9	338.6	22.2	43.7	30.1	169.6	123.5	40.3	451.3	38.5	203.7	11.6 0.7	700.1	24.6	51.2	32.5 <LL	<LL	5.4	14.6	10.6	2.3
PJ-39	52.08	13.85	12.08	7.36	3.78	1.8	3.31	0.194	2.478	0.506	31	343.1	21.8	48.2	31.4	139.8	120.1	40.8	449.7	37	197.6	11.1 0.5	671.6	23.6	43.1	30.1 <LL	<LL	5.9	14.3	9.5	1.4
PJ-40	47.47	17.34	7.95	13.26	9.52	0.25	2	0.159	0.644	0.129	41.6	237.5	284.9	49.5	167.1	106	49.1	2.3	183	17.3	43.7	4.2 0.3<LL	128.1	5.5 4.3<LL	<LL	<LL	<LL	<LL	9.8 1.4<LL		1

REYNOLDS SECTION:

SAMPLE	SiO[2]	Al[2]O[3]	FeO	CaO	MgO	K[2]O	Na[2]O	MnO	TiO[2]	P[2]O[5]	Sc	V	Cr	Co	Ni	Cu	Zn	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Nd	Sm	Yb	Hf	Pb	Th	U
CR423	47.47	15.18	11.13	9.78	9.3	0.35	2.5	0.159	1.86	0.224	25.1	257.3	194	57.7	206.9	67.9	106.2	4	404	23.9	116.9	9	1.3	112.5	10.1	24	18.7	2.9	-1.5	2.2	2.9	0.7	0.7
CR424	47.25	16.2	11.63	10.38	4.34	0.39	2.68	0.107	1.931	0.219	32.8	306.8	217.4	57.1	213.3	74	105.2	3.8	474.4	28.1	126.9	8.9	0.3	176.4	12.9	32.9	20.9	3.5	2.2	2.6	1.5	1.2	0.3
CR425	49.17	14.06	10.68	9.55	8.18	0.39	2.44	0.158	1.738	0.233	27.6	276.1	445.2	60.4	218.5	101.7	108.2	6.2	412.2	23.2	140.1	10.4	1.2	292.6	16.8	35	21.1	4.1	1.5	3	3.7	4.2	0.3
CR426	49.97	14.16	10.64	9.49	8.84	0.55	2.45	0.153	1.734	0.24	26.1	250.3	450.9	55.3	219.7	64.5	102.4	9.3	402.3	22.9	135.4	10.1	1	253.5	14.2	33.2	18.9	3.7	-0.3	2.8	3.5	3.3	0.3
CR427	47.83	16.18	11.09	10.62	7.38	0.35	2.86	0.156	1.938	0.293	30.1	297.9	117.8	56.4	167.6	69.2	108.4	3.9	519.7	25.2	132.8	11.8	0.6	202.8	11.4	36.4	22.4	5.4	-3.8	2.6	1.2	4.6	0
CR428	48.95	14.06	10.37	9.24	9.45	0.29	2.19	0.132	1.605	0.217	26.3	245.2	488.7	57.4	259.6	99	101.3	1.4	382.7	21	124	9.4	0.4	221.2	5.4	34	16.3	4.6	0.5	3.5	2.9	2.7	-0.1
CR429	48.76	15.86	10.52	9.15	7.11	0.78	2.82	0.149	1.856	0.304	22.4	257.8	67.1	53.3	87	40.5	104.4	14.1	476.3	25.5	151.4	12.2	0.9	296.1	12.5	43.1	25.8	4.8	-1.4	3.7	3.8	5.2	1
CR430	47.51	15.45	11.3	10.26	8.77	0.41	2.65	0.172	1.777	0.245	27.5	281.2	212.5	56.6	226.1	102.4	97.4	3.2	436.5	23.3	114.6	9.4	0.7	142.6	11.7	35.8	18.2	4	-0.1	3.6	1.7	0.3	0
CR431	49.69	14.03	10.7	9.79	8.91	0.17	2.26	0.187	1.691	0.226	24.4	240.3	441	53.3	256.1	109.3	98.3	0.3	408.7	22	130.1	9.4	1	174.4	11.8	33.7	18.8	3.7	-2.7	3	2.5	0.4	-1.3
CR432	50.19	13.99	10.81	9.31	9.54	0.54	2.45	0.164	1.744	0.236	25.4	255.7	500.3	53.3	236.7	98.4	103.6	9.7	389.6	22.8	135.9	9.9	1.1	261.4	12.3	40	20.2	4.4	-2.4	3.6	3.4	0.2	0.2
CR433	50.05	14.23	10.53	9.33	9.24	0.52	2.43	0.154	1.736	0.231	25.9	247.2	436.7	53.5	226.3	87.5	101.4	8.8	392	22.1	131.3	10.1	0.8	242.3	15.4	42.2	22.7	4.3	4	2.6	3.3	3.1	0.2
CR434	48.5	15.57	10.95	9.25	6.75	0.78	2.79	0.161	1.87	0.301	22.3	246.9	63	49.6	84.1	38.2	103	13	478.3	25.8	152.8	11.8	1	292	17.6	51.9	24.3	3.4	-0.9	4.2	2.8	1	0
CR435	48.71	15.28	10.48	10.29	8.66	0.48	2.52	0.146	1.763	0.258	26.1	257	224	52.3	138.2	46	97.4	8.1	428.1	22.8	122.9	11	1.7	169.7	13.7	35.1	19	4.7	0.3	3.3	4.4	-0.4	0.1
CR436	48.77	15.85	10.77	9.82	7.82	0.58	2.75	0.146	1.857	0.3	24.2	251.7	160	49.8	123.4	56.8	97.5	3.8	471.4	24.5	135.8	12	0.1	214.6	15.9	37.7	20.8	4.5	-2.3	4.2	0.7	2.1	1
CR437	47.9	15.76	11.32	10.12	8.98	0.41	2.72	0.174	1.783	0.25	26.2	264.5	176.5	52.9	206.5	95.3	99.2	3.7	455.1	23.4	113.4	9.3	1.6	127.4	2.2	25.8	15.6	4.6	-3.2	3.5	2.4	0.8	0.8
CR438	66.8	13.55	5.94	3.32	0.86	3.36	3	0.07	0.945	0.223	16.5	53.3	-7.8	27	3	12.9	131.3	127.9	299.4	45.4	322.1	21.4	1.1	1842.6	49.9	101.9	48.8	8.3	4.2	8.7	23	9.8	3.6



SAMPLE	SiO2[2]	Al2O3[3]	FeO	CaO	MgO	K2O[2]	Na2O[2]	MnO	TiO2[2]	P2O5[5]	Sc	V	Cr	Co	Ni	Cu	Zn	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Nd	Sm	Yb	Hf	Pb	Th	U
CR7-104	48.91	16.12	11.42	10	7.06	0.51	3.09	0.183	1.797	0.289		34	291	201		136	98	96	7	391	27	125	9.4		286	16	44				0	4	
CR7-106	50.27	18.58	9.75	10.33	5.18	0.63	3.26	0.156	1.392	0.234		30	243	159		98	146	78	10	449	22	111	6.7		280	0	37				3	1	
CR7-107	50.69	17.52	10.45	9.24	4.57	1.04	3.43	0.167	1.731	0.369		31	283	61		52	94	88	19	461	29	147	13.4		438	11	45				2	7	
CR7-108	49.94	16.22	11.42	10.48	5.7	0.47	3.04	0.178	2.167	0.266		29	321	191		60	124	101	7	383	34	143	11		304	15	22				2	2	
CR7-109	50.06	13.85	12.95	8.86	5.24	1.11	3.12	0.216	2.715	0.83		33	392	57		31	67	111	20	390	38	145	9		608	29	22				4		
CR7-110	51.92	14.63	11.23	8.92	5.38	1.12	3.42	0.171	2.026	0.354		34	327	142		35	135	104	24	383	31	153	8.9		526	24	44				4	2	
CR7-111	49.78	16.51	9.93	9.96	9.75	0.25	2.37	0.984	1.930	0.964		30	347	100		120	67	3	188	21	56	2	17.1		52	2	42				4	3	
CR7-112	16.48	9.9	10.29	9.9	9.11	0.23	2.28	0.181	0.979	0.115		39	239	289		173	103	71	185	1	85	22	0.4		88	0	0				0	0	
CR7-113	47.36	17.33	10.62	10.47	7.82	0.2	2.39	0.194	1.007	0.12		35	250	302		171	111	72	2	202	23	57	2.5		123	9	14				0	1	
CR7-114	55.66	14.16	10.31	8.18	4.56	1.37	3.36	0.255	1.458	0.239		33	327	43		20	173	89	22	226	36	122	12.2		434	13	22				3	2	
CR7-115	50.63	16.5	11.1	8.58	4.1	1.26	3.37	0.158	2.667	0.388		26	256	71		52	124	114	33	412	36	201	16.3		474	13	51				7	3	
CR7-116	55.92	14.09	10.5	7.47	3.88	1.79	3.26	0.18	1.98	0.312		32	294	23		10	47	113	50	346	34	179	12.7		629	11	57				4	7	
CR7-117	56.02	14.36	9.67	7.88	4.1	1.58	3.45	0.232	1.992	0.352		27	312	25		10	63	109	43	355	35	183	14.5		741	22	45				3	4	
CR7-118	52.68	13.39	13.71	7.43	3.65	1.56	3.68	0.205	2.53	0.408		33	432	52		1	200	125	33	370	41	180	11.2		671	21	37				4	3	
CR7-119	49.82	15.82	11.63	9.67	6.05	0.68	3.17	0.177	2.181	0.373		28	288	71		66	21	112	12	461	30	171	15.4		371	19	46				0	5	
CR7-120	50.69	14.2	12.34	9.92	5.62	0.7	3.14	0.185	2.347	0.312		34	320	100		24	40	114	14	411	31	169	13.9		369	20	41				1	4	
CR7-121	48.82	16.38	12.29	9.1	5.8	0.85	3.21	0.173	2.335	0.322		30	261	89		99	88	107	17	413	30	172	13.7		399	0	54				3	1	
CR7-122	50.38	17.2	11.12	9.02	4.39	0.97	3.43	0.155	2.264	0.325		27	237	93		76	133	103	23	450	31	168	12.3		439	11	39				1	1	

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