

**Supplemental Table 3. Corrected Group Mean Values and Concentration Values for Obsidian Standards**

**Measured by pXRF. All Values are in ppm.**

<b>Group</b>		<b>K</b>	<b>Ca</b>	<b>Ti</b>	<b>Mn</b>	<b>Fe</b>	<b>Zn</b>	<b>Rb</b>	<b>Sr</b>	<b>Zr</b>	<b>Nb</b>
Group 1	mean	29407	7154	678	623	5334	39	139	155	104	15
n = 2049	1-σ	6894	3166	117	36	297	73	16	18	13	7
Group 2	mean	31588	8146	688	504	5640	32	103	189	102	11
n = 113	1-σ	11580	1735	65	28	263	13	8	15	9	4
Group 3	mean	33806	8054	1096	450	8201	28	90	153	149	11
n = 30	1-σ	7906	2535	66	21	276	5	10	15	13	5
Group 4	mean	34836	3547	1105	1142	15528	180	186	<LOD	881	81
n = 16	1-σ	5381	4085	138	89	863	21	17	--	49	6
Group 5	mean	41422	1884	655	349	7803	50	152	<LOD	195	37
n = 1	1-σ	--	--	--	--	--	--	--	--	--	--
Group 6	mean	36187	7783	868	394	8127	40	116	128	130	13
n = 8	1-σ	10841	937	135	37	636	6	16	17	17	6
Group 7	mean	35870	8327	733	375	6500	39	136	92	136	26
n = 3	1-σ	1247	3363	19	5	111	7	13	7	15	6
Group 8	mean	37832	3381	723	245	8257	34	120	29	168	16
n = 6	1-σ	780	1144	37	10	86	2	6	2	7	2
Group 9	mean	32992	7372	660	281	11052	53	133	129	171	20
n = 1	1-σ	--	--	--	--	--	--	--	--	--	--
Group 10	mean	35052	1746	500	254	13586	112	141	<LOD	559	29
n = 1	1-σ	--	--	--	--	--	--	--	--	--	--
Group 11	mean	36570	4561	332	172	6549	34	126	14	102	9
n = 3	1-σ	2048	2431	38	4	121	1	12	1	8	3
Group 12	mean	50130	6990	1022	161	9154	31	248	34	193	19
n = 2	1-σ	6502	3103	19	8	33	1	8	1	8	4
Group 13	mean	40600	5296	961	439	18580	183	140	18	734	56
n = 3	1-σ	859	336	59	17	293	23	9	5	48	8
Pachuca	mean	33376	593	874	991	13660	212	217	<LOD	965	75
n = 57	1-σ	790	130	76	36	314	7	5	--	14	3
Glass											
Buttes	mean	30168	5134	572	277	4767	32	101	71	95	9
n = 57	1-σ	655	140	97	26	127	3	3	2	3	1
ANU2000	mean	30049	5975	1288	430	13333	54	143	63	304	31
n = 57	1-σ	759	168	127	20	134	4	4	2	6	2
ANU9000	mean	27471	5960	1234	399	7736	15	48	199	123	<LOD
n = 57	1-σ	654	180	77	20	134	3	2	3	3	--