

**APPENDIX 1A**

**Bulk chemical composition of selected ore, concentrate and waste samples (ACME Lab.)**

Element	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	MnO	Cr <sub>2</sub> O <sub>3</sub>	S	Ba	Ni	Sr
unit	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm
MLD	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	0.02	5	20	2
W-15	49.6	16.1	4.22	1.71	11.4	5.69	1.61	0.58	0.30	0.14	≤0.02	0.10	213	≤20	370
W-18	12.4	2.83	74.0	0.91	1.37	0.76	0.27	0.18	0.15	0.06	≤0.02	4.19	20	30	36
W-25	55.2	11.7	14.0	2.66	10.6	1.65	0.35	0.68	0.18	0.18	≤0.02	1.70	36	36	385
W-31	40.3	8.66	29.0	6.02	11.2	1.39	1.29	0.68	0.16	0.25	0.056	0.41	40	≤20	27
W-31a	18.4	3.68	2.74	0.43	43.7	0.03	0.02	0.03	0.05	0.30	≤0.02	≤0.02	6	≤20	100
average	35.2	8.6	24.8	2.35	16.6	1.90	0.71	0.43	0.17	0.19	---	1.28	63	---	184
W-36	10.3	2.03	49.0	0.54	3.40	0.33	0.35	0.15	≤0.01	0.04	0.007	8.33	59	76	74
W-37	11.4	2.55	80.1	0.70	1.30	0.56	0.45	0.28	≤0.01	0.06	0.010	3.62	51	92	40
W-39	48.7	12.1	17.6	3.24	5.81	2.53	2.61	0.65	0.26	0.14	0.010	0.66	346	26	155
W-40	50.0	11.8	17.4	3.09	6.48	2.53	2.42	0.65	0.31	0.15	0.011	0.60	291	≤20	159
W-44	48.4	10.4	22.7	2.31	8.11	2.14	1.38	0.65	0.39	0.16	0.009	0.77	166	≤20	173
average	49.0	11.4	19.2	2.88	6.80	2.40	2.14	0.65	0.32	0.15	0.010	0.68	268	--	162

Element	Zr	Y	Nb	Sc	Mo	Cu	Pb	Zn	Cd	Co	As	Sb	Se	Te
unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MLD	5	3	5	1	0.01	0.01	0.01	0.1	0.01	0.01	0.1	0.02	0.1	0.02
W-15	205	17	18	9	0.02	186	1.76	32.5	0.06	12.2	2.3	0.09	≤0.1	0.05
W-18	18	10	5	5	0.61	≥10000	5.46	88.3	0.41	99.2	4.9	0.19	2.0	3.60
W-25	270	66	227	22	0.78	2935	7.61	34.1	0.11	66.1	5.4	0.27	0.6	0.28
W-31	111	52	50	16	0.26	3067	3.11	57.7	0.03	29.1	8.9	0.30	≤0.1	0.15
W-31a	15	11	≤5	1	0.15	38.6	3.70	33.3	0.07	2.30	7.4	0.43	≤0.1	≤0.02
average	124	31	61	11	0.40	3245	4.32	4.33	0.14	41.7	5.78	0.26	0.9	0.82
W-36	38	17	8	5	6.09	≥10000	40.8	580	3.31	183	5.1	0.24	7.3	4.91
W-37	48	15	11	3	1.46	998	3.56	28.0	0.10	135	4.5	0.23	1.1	0.64
W-39	99	49	33	13	0.61	555	4.97	64.3	0.14	46.6	3.7	0.12	≤0.1	1.04
W-40	121	55	37	13	0.70	386	4.20	52.2	0.14	36.9	5.3	0.15	≤0.1	0.86
W-44	207	99	35	13	1.17	335	5.31	42.3	0.06	30.9	14.3	0.51	≤0.1	0.38
average	142	67.6	35	13	0.83	425	4.83	52.9	0.11	38.1	7.77	0.26	---	0.76

Element	U	Th	Au	Ag	Bi	V	W	Σ
unit	ppm	ppm	ppb	ppb	ppm	ppm	ppm	%
MLD	0.05	0.1	0.2	2	0.02	2	0.05	
W-15	1.17	2.2	3.1	8	0.07	51	0.11	99.94
W-18	56.51	2.9	2358	1840	2.58	123	0.07	94.90
W-25	8.35	1.4	28.6	139	0.31	50	0.19	99.57
W-31	16.31	0.9	16.9	113	0.56	74	0.07	99.48
W-31a	0.98	0.5	1.60	14	0.08	≤2	0.22	99.98
average	16.6	1.58	482	422	0.72	60	0.13	98.77
W-36	20.56	2.2	6490	30910	5.39	62	0.45	78.77
W-37	22.70	2.9	148	230	1.28	219	0.93	99.55
W-39	32.6	12.2	68.8	136	1.74	89	1.02	99.5
W-40	30.6	8.7	67.3	86	1.32	83	1.39	99.4
W-44	62.4	11.3	167	86	1.68	85	5.99	98.7
average	41.9	10.7	101	102	1.58	86	2.80	99.2