

Supplementary Table 1. Geochemical composition of the studied rock samples from the Jbel Houanite deposit

Samples	Lithology	X	Y	Fe (%)	Mg (%)	Ca (%)	K (%)	S (%)	Mn (ppm)	Ba (ppm)	Sr (ppm)	Rb (ppm)	Cs (ppm)	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	W (ppm)	As (ppm)	Sb (ppm)	Bi (ppm)	Te (ppm)
S1	Quartz veins	-2.46058	32.56626	2.52	0.33	0.05	0.11	-0.01	791	30	14.5	6.6	0.58	8.45	0.6	592	3.1	21	2.07	0.1	4	1.62	0.03	0.05
S2	Quartz veins	-2.46060	32.56630	4.67	0.17	0.44	1.26	0.22	1240	1800	4620	65.7	2.06	8.5	0.55	27.9	2.5	3	0.48	0.5	1.6	1.89	0.16	0.05
S3	Shear zones	-2.46060	32.56616	23.7	0.03	2.74	0.01	0.24	7080	1140	4960	1.1	0.06	5	0.11	16.6	4.6	40290	0.49	5.4	1.6	2.13	0.09	0.07
S4	Shear zones	2.46067	32.56616	0.35	0.04	0.17	-0.01	0.12	228	1800	1290	0.2	-0.05	20	0.83	29.2	5200	2	0.23	0.1	0.4	70000	0.01	0.05
S5	Shear zones	-2.46075	32.56622	8.54	0.14	12.45	0.03	0.02	12350	1210	103.5	1.6	0.79	7.5	2.54	981	9.7	21	2.83	0.1	213	1.19	0.02	0.05
S6	Quartz veins	-2.46085	32.56697	2.77	0.82	13.95	0.14	0.01	2930	480	387	3.2	0.14	8.23	2.52	92.7	14.9	16	2.16	0.3	11	0.74	0.01	0.05
S7	Quartz veins	-2.46126	32.56652	10.25	0.24	19.6	0.06	-0.01	22400	420	242	3.5	1.05	2.68	0.67	41.2	14500	32451	1.93	0.1	-5	0.28	0.01	0.05
S8	Shear zones	-2.46085	32.56605	37.1	0.16	0.82	0.06	0.13	25600	5250	851	4.4	0.96	8.01	3.18	10.1	2.6	27	2.95	0.3	7.6	50000	0.14	0.05
S9	Shear zones	-2.45865	32.56539	4.27	0.02	0.12	0.01	0.17	7510	1730	3170	0.9	0.14	7.94	4.49	12.5	5.8	8	1.63	0.1	1.1	53	0.04	0.05
S10	Silicified zones	-2.45663	32.56630	6.68	0.02	2.1	0.03	0.19	967	3060	709	1.2	0.05	11.55	14.77	8520	57.9	4	37.3	0.8	88.3	9.62	228	1.24
S11	Silicified zones	-2.45641	32.56783	0.76	0.06	0.42	4.86	0.01	184	670	93	160	5.69	7.65	4.43	27.9	60.4	4	1.21	2.5	1.2	0.14	0.82	0.05
S12	Silicified zones	-2.45586	32.56595	0.97	0.02	0.04	0.06	0.01	114	140	6.6	3.9	0.47	7.72	5.65	38	3.3	2	1.75	0.1	0.9	0.2	0.96	0.08
S13	Fractured schists	-2.46129	32.56825	0.44	0.02	0.24	5.94	-0.01	138	840	188	177.5	16.5	7.93	6.06	6.7	68	2	1.43	0.2	0.7	0.23	0.05	0.05
S14	Fractured schists	-2.46103	32.56599	1.68	0.06	0.18	0.37	-0.01	181	170	123.5	12.9	1.28	4	1.14	27.9	22100	58	2.38	0.4	6.9	56000	0.15	0.05
S15	Quartz veins	-2.45867	32.56593	1.0	1.17	5.84	0.06	-0.03	1060	60	35.5	2.9	0.21	8.05	6.93	38.4	41.9	31	1.32	0.2	2.5	0.55	0.94	0.05
S16	Quartz veins	-2.45826	32.56616	0.77	0.03	0.2	0.02	-0.01	142	20	2.1	1.6	0.11	4.3	0.71	13.1	12.5	4	1.94	0.1	2.9	210000	0.14	0.05
S17	Quartz veins	-2.45725	32.56629	3.08	0.15	0.19	0.85	-0.01	338	150	136.5	33.8	2.07	8.17	8.22	13.1	10.8	93	2.05	1.3	14.4	0.52	0.23	0.05
S18	Quartz veins	-2.44799	32.56693	2.96	0.2	1.02	1.05	0.01	599	140	114	38.1	2.13	8.56	8.86	11.8	6.7	119	1.64	1.2	18.8	470	0.17	0.05
S19	Shear zones	-2.44919	32.56884	5.04	6.44	18.9	0.01	0.01	2680	180	127	0.3	-0.05	8.9	8.94	48	23.8	39	1.75	5.8	51	1.15	0.1	0.05
S20	Shear zones	-2.44977	32.56971	3.14	0.62	0.29	3.19	-0.01	469	370	52.6	197.5	29.3	9	9.8	4.3	15.6	70	1.14	3.8	0.9	0.17	0.41	0.05
S21	Quartz veins	-2.44500	32.57532	7.67	1.23	11.65	0.95	1.18	933	1400	201	35.6	1.66	7	0.2	17.7	15.2	74	2.99	1.4	20	3.3	0.05	0.05
S22	Quartz veins	-2.44494	32.57545	4.76	0.54	20.8	2.51	0.07	3000	680	83	131.5	5.13	9.34	10.85	606	87	33	4.45	1.1	135	421	0.13	0.05
S23	Quartz veins	-2.44472	32.57565	0.75	0.02	0.23	0.04	-0.01	569	50	12.4	1.9	0.1	9.35	10.59	4.7	2	2	2.58	0.1	2.3	300	0.01	0.05
S24	Quartz veins	-2.44443	32.57570	20.8	0.05	0.29	0.1	0.02	43700	350	248	1	0.09	9.66	12.26	8.3	4.3	57	9.94	0.1	1.9	29	0.01	0.05
S25	Metasedimentary rocks	-2.43964	32.57545	3.5	0.17	0.48	2.18	0.12	800	530	133.5	119	4.78	12.45	11.87	38.3	5720	206	1.32	0.8	54.8	220000	0.57	0.13
S26	Metasedimentary rocks	-2.43972	32.57545	3.42	2.31	15.1	0.93	0.02	900	330	198.5	53.1	2.54	4.4	0.95	34	42.5	74	1.87	0.9	18	85.9	0.24	0.06
S27	Metasedimentary rocks	-2.44019	32.57535	8.79	0.18	1.73	0.25	0.33	13900	530	141	17.9	2.85	13.55	12.91	37.4	5430	199	9.51	0.2	57.4	390000	0.3	0.19
S28	Quartz veins	-2.43979	32.57528	0.82	0.04	0.47	0.44	0.05	199	130	72.6	28.5	1.18	25	17.61	75	18400	103	1.44	0.1	39.4	40000	1.04	0.18
S29	Quartz veins	-2.43831	32.57548	1.9	0.04	0.14	0.76	0.45	878	200	48.5	39.8	1.31	2.81	0.37	31.3	3130	1909	2.3	0.4	48.6	450000	0.78	0.08
S30	Quartz veins	-2.43973	32.57539	3.06	0.86	0.08	0.08	0.01	630	100	6.9	5.8	0.64	10.72	15.64	54.1	14.7	116	3.27	5.5	5.5	3.56	3.05	0.1