

Table A3

LA-ICP-MS analytical data (ppm) for pyrite in the Qiucun deposit.

Spot No.	Generation	Au	Co	Ni	Cu	Zn	As	Se	Ag	Sb	Te	Hg	Tl	Bi	Pb
NFJ-196-1	Py _{1a}	0.55	131	368	138	3.8	615	0.91	40	125	1.3	bdl	1.6	31	1861
NFJ-196-2	Py _{1a}	0.40	10	116	80	5.0	425	1.4	49	141	bdl	bdl	3.2	3.3	1823
NFJ-196-3	Py _{1a}	0.91	46	127	61	bdl	963	0.54	15	66	bdl	bdl	0.57	11	768
NFJ-196-4	Py _{1a}	0.20	4.5	33	29	bdl	168	2.2	14	40	bdl	bdl	0.60	1.1	501
NFJ-196-6	Py _{1a}	bdl	7.6	3.7	8.2	bdl	262	3.7	13	8.8	bdl	bdl	0.44	0.71	776
NFJ-196-7	Py _{1a}	0.12	bdl	0.81	484	180	106	1.5	11	1.6	bdl	bdl	bdl	0.18	396
NFJ-199-1	Py _{1a}	bdl	87	53	3.3	bdl	114	0.61	4.8	2.6	bdl	bdl	bdl	0.78	26
NFJ-199-2	Py _{1a}	bdl	234	131	2.8	bdl	124	3.0	2.6	0.84	bdl	0.16	bdl	0.27	8.5
NFJ-199-3	Py _{1a}	0.18	590	355	50	3.8	102	0.57	28	34	bdl	bdl	bdl	7.8	501
NFJ-199-4	Py _{1a}	bdl	337	215	27	4.3	125	1.3	16	22	bdl	bdl	0.14	4.5	297
NFJ-200-1	Py _{1a}	0.14	6.0	7.6	161	bdl	17	7.1	9.4	3.3	3.4	0.10	0.06	0.18	631
NFJ-200-2	Py _{1a}	0.93	109	88	16	bdl	890	3.4	1.2	2.4	bdl	0.07	bdl	bdl	17
NFJ-200-3	Py _{1a}	bdl	bdl	1.9	1.9	bdl	1180	3.2	1.0	bdl	bdl	0.09	bdl	bdl	5.3
NFJ-200-5	Py _{1a}	0.31	6.6	14	942	6.2	24	8.0	27	4.6	5.3	bdl	0.04	0.31	3969
NFJ-207-1	Py _{1a}	1.8	120	12	349	47	2702	3.4	65	29	9.1	0.19	0.20	0.12	975
NFJ-207-2	Py _{1a}	0.62	25	8.6	4.0	bdl	2356	2.2	2.2	1.8	bdl	0.42	0.04	bdl	5.1
NFJ-207-4	Py _{1a}	0.47	7.1	5.4	510	32	5649	1.2	60	94	bdl	0.96	2.1	bdl	81
NFJ-207-5	Py _{1a}	0.26	3.0	1.2	5.1	bdl	1787	3.8	1.7	1.6	bdl	bdl	bdl	bdl	7.4
NFJ-207-7	Py _{1a}	bdl	3.2	1.1	bdl	bdl	5.9	5.9	0.02	bdl	2.5	bdl	bdl	bdl	0.53
NFJ-211-10	Py _{1a}	0.56	59	48	185	bdl	696	2.6	16	21	bdl	bdl	0.10	bdl	29
QC-10-1	Py _{1a}	2.5	49	13	88	156	2704	2.5	34	9.0	1.2	bdl	0.03	0.07	172
QC-10-3	Py _{1a}	1.5	17	101	909	267	814	0.99	158	18	1.2	bdl	bdl	0.05	892
QC-10-6	Py _{1a}	1.4	bdl	6.7	572	199	204	1.2	115	49	1.2	bdl	0.04	0.07	371
QC-11-1	Py _{1a}	bdl	57	84	3.1	bdl	15	5.5	0.45	1.5	0.72	0.02	bdl	2.4	34
QC-11-2	Py _{1a}	bdl	26	7.3	11	bdl	89	5.6	1.7	2.5	6.7	bdl	0.04	5.0	56
QC-11-3	Py _{1a}	0.15	181	47	19	bdl	73	3.7	2.8	3.4	5.2	0.01	bdl	8.1	98
QC-12-1	Py _{1a}	0.80	1.9	2.7	bdl	bdl	2240	2.3	0.25	bdl	bdl	bdl	bdl	bdl	bdl
QC-15-1	Py _{1a}	12	94	84	1088	19	2637	2.3	197	293	11	0.04	0.52	1.2	bdl
QC-17-2	Py _{1a}	0.29	27	19	4.8	bdl	788	3.9	2.6	25	bdl	0.13	0.06	bdl	bdl
QC-17-3	Py _{1a}	bdl	65	37	20	bdl	499	bdl	7.1	11	bdl	bdl	0.08	2.3	bdl
QC-17-5	Py _{1a}	bdl	87	87	311	bdl	240	0.64	3.5	2.9	bdl	0.12	bdl	0.42	30
QC-19-4	Py _{1a}	0.65	bdl	5.6	207	527	25	1.3	38	5.3	8.1	bdl	bdl	0.55	3496
NFJ-196-5	Py _{1b}	3.7	1.5	24	1052	261	2123	5.8	57	21	bdl	bdl	bdl	1.7	1941
NFJ-196-8	Py _{1b}	0.23	62	11	15	bdl	2777	9.5	8.6	2.4	bdl	bdl	0.06	0.31	406
NFJ-200-4	Py _{1b}	11	7.4	8.8	171	bdl	13456	4.8	36	48	bdl	0.13	0.55	0.07	121
NFJ-200-6	Py _{1b}	0.90	12	14	20	bdl	1557	3.2	5.5	12	bdl	0.18	0.26	bdl	72
NFJ-207-3	Py _{1b}	64	5.2	2.2	205	bdl	23099	4.1	15	16	bdl	0.27	0.33	bdl	13
NFJ-207-6	Py _{1b}	20	8.7	0.84	91	bdl	15934	3.3	2.6	2.6	bdl	bdl	bdl	bdl	4.5
NFJ-207-8	Py _{1b}	3.1	132	30	46	bdl	5186	3.2	17	9.5	0.64	0.12	0.06	0.10	29
NFJ-207-9	Py _{1b}	0.31	bdl	bdl	48	bdl	32787	0.74	16	53	bdl	bdl	0.82	bdl	23
NFJ-207-10	Py _{1b}	0.47	67	41	69	12	30147	1.5	52	86	bdl	bdl	2.9	0.09	188
NFJ-211-7	Py _{1b}	1.4	23	12	37	bdl	3846	4.2	4.8	13	bdl	bdl	0.04	bdl	45
NFJ-211-9	Py _{1b}	2.7	212	151	113	bdl	2945	5.9	21	16	bdl	0.08	0.27	bdl	65
QC-10-2	Py _{1b}	6.0	57	9.0	136	bdl	6828	3.3	6.3	6.0	bdl	bdl	bdl	0.06	36

Table A3 (Cont.)

Spot No.	Generation	Au	Co	Ni	Cu	Zn	As	Se	Ag	Sb	Te	Hg	Tl	Bi	Pb
QC-10-12	Py _{1b}	0.72	bdl	1.4	734	3.3	16333	bdl	483	7915	bdl	23	620	bdl	7.7
QC-10-13	Py _{1b}	0.52	bdl	bdl	10	3.7	15554	bdl	73	6612	bdl	18	514	bdl	1.6
QC-12-2	Py _{1b}	11	bdl	2.8	41	bdl	5451	3.7	5.3	3.0	bdl	0.05	bdl	bdl	8.6
QC-12-3	Py _{1b}	4.3	16	45	30	bdl	13053	1.0	24	917	bdl	0.07	96	bdl	105
QC-12-4	Py _{1b}	bdl	2.2	4.1	13	bdl	6308	0.86	13	391	bdl	0.08	29	bdl	171
QC-12-5	Py _{1b}	0.26	1.9	3.8	26	2.3	12701	bdl	17	569	bdl	0.24	40	bdl	184
QC-12-6	Py _{1b}	bdl	bdl	4.7	0.43	bdl	12532	bdl	0.67	330	bdl	0.23	8.8	bdl	71
QC-12-7	Py _{1b}	30	12	16	806	23	6502	2.0	144	372	5.4	bdl	0.56	3.5	2137
QC-15-3	Py _{1b}	51	68	63	659	19	10542	2.5	195	317	5.5	0.04	1.3	1.6	1031
QC-17-1	Py _{1b}	0.43	79	53	105	3.5	2159	bdl	16	73	bdl	bdl	0.87	18	748
QC-17-4	Py _{1b}	0.84	30	27	6.1	bdl	1136	2.4	2.4	26	bdl	0.09	0.04	bdl	53
QC-17-6	Py _{1b}	6.3	bdl	bdl	53	bdl	6959	0.84	1.1	bdl	bdl	0.09	bdl	bdl	0.59
QC-17-7	Py _{1b}	0.70	26	22	3.6	bdl	1112	1.9	0.79	12	bdl	bdl	bdl	bdl	21
NFJ-185-1	Py _{2a}	1.6	bdl	bdl	493	27	784	4.4	216	285	bdl	0.17	0.72	bdl	558
NFJ-185-3	Py _{2a}	0.18	bdl	3.2	5.8	bdl	567	2.1	24	2.9	bdl	bdl	bdl	bdl	6.6
NFJ-185-5	Py _{2a}	7.5	0.99	107	121	bdl	8325	3.2	417	181	bdl	0.13	9.0	bdl	275
NFJ-185-6	Py _{2a}	9.3	6.3	102	115	bdl	4289	7.5	1069	79	bdl	0.15	0.80	bdl	199
NFJ-185-7	Py _{2a}	10	5.6	54	194	bdl	6441	12	1621	43	bdl	0.17	0.37	bdl	62
NFJ-185-8	Py _{2a}	8.8	3.6	44	132	bdl	3242	9.5	1525	47	bdl	bdl	0.84	bdl	89
NFJ-211-5	Py _{2a}	0.23	66	97	19	bdl	854	2.3	5.7	13	bdl	0.19	0.34	bdl	61
NFJ-211-6	Py _{2a}	0.67	6.2	4.8	30	bdl	2879	2.8	9.7	8.9	bdl	bdl	0.16	bdl	25
QC-10-4	Py _{2a}	9.8	60	12	62	bdl	6930	4.3	7.0	17	bdl	bdl	bdl	0.06	93
QC-10-5	Py _{2a}	0.54	2.3	0.92	11	bdl	1490	3.7	3.3	16	1.7	bdl	bdl	0.17	110
QC-10-7	Py _{2a}	6.8	25	4.0	58	bdl	6033	5.3	8.8	7.1	bdl	bdl	bdl	bdl	29
QC-10-8	Py _{2a}	4.1	73	17	88	7.7	2702	4.4	3.1	2.9	0.85	bdl	bdl	bdl	15
QC-10-9	Py _{2a}	1.7	bdl	bdl	262	bdl	3228	0.52	33	35	bdl	bdl	0.95	bdl	0.73
QC-10-14	Py _{2a}	0.45	bdl	bdl	4.9	bdl	2155	bdl	16	239	bdl	0.03	9.8	bdl	14
QC-10-15	Py _{2a}	0.82	bdl	23	199	4.1	17469	bdl	150	4771	3.6	39	504	bdl	161
QC-10-16	Py _{2a}	2.3	14	61	147	5.7	13733	0.54	145	2466	0.75	20	233	0.07	139
QC-10-17	Py _{2a}	0.74	28	53	36	2.4	16741	bdl	42	3356	1.4	24	336	0.12	123
QC-15-2	Py _{2a}	0.50	8.1	36	49	bdl	1530	2.8	39	135	1.6	0.19	13	0.35	302
QC-15-4	Py _{2a}	0.16	bdl	bdl	6.7	2.5	3125	bdl	40	144	bdl	0.02	6.7	bdl	9.0
QC-15-5	Py _{2a}	3.3	3.3	72	353	42	16507	bdl	95	2262	3.5	0.07	278	bdl	169
QC-15-6	Py _{2a}	0.49	bdl	0.66	2.5	3.4	6384	bdl	50	1830	bdl	1.2	23	bdl	11
QC-15-8	Py _{2a}	bdl	bdl	bdl	bdl	bdl	140	bdl	0.00	2.8	bdl	bdl	bdl	bdl	bdl
QC-15-9	Py _{2a}	bdl	bdl	bdl	bdl	bdl	109	bdl	0.04	3.4	bdl	0.08	0.08	bdl	bdl
QC-15-10	Py _{2a}	bdl	bdl	bdl	bdl	bdl	204	0.53	0.16	17	bdl	0.06	0.26	bdl	bdl
QC-15-11	Py _{2a}	0.60	bdl	45	118	4.7	17281	bdl	149	4051	bdl	96	410	bdl	bdl
QC-15-12	Py _{2a}	4.5	40	66	27	bdl	4017	1.7	20	139	1.2	bdl	5.0	0.12	116
QC-15-13	Py _{2a}	5.1	17	34	30	bdl	4497	0.88	17	164	bdl	0.47	7.8	0.10	69
QC-15-14	Py _{2a}	1.9	27	63	15	bdl	1756	bdl	11	76	2.5	0.16	3.5	0.05	46
QC-15-15	Py _{2a}	1.7	2.8	5.9	5.1	bdl	2162	bdl	4.0	52	bdl	0.08	1.5	bdl	21
QC-15-16	Py _{2a}	0.79	6.8	20	6.2	2.7	975	1.1	4.8	52	bdl	0.11	1.8	bdl	36
QC-15-17	Py _{2a}	4.6	22	44	21	bdl	3397	1.0	14	102	0.84	0.51	5.2	0.06	54
QC-15-18	Py _{2a}	3.2	27	74	16	bdl	3199	bdl	11	75	bdl	0.30	2.5	bdl	64

Table A3 (Cont.)

Spot No.	Generation	Au	Co	Ni	Cu	Zn	As	Se	Ag	Sb	Te	Hg	Tl	Bi	Pb
QC-19-2	Py _{2a}	16	2.3	7.3	658	43	3121	3.3	139	285	2.0	bdl	0.55	0.30	1055
QC-19-8	Py _{2a}	2.2	7.7	17	277	4.0	2240	3.5	72	149	32	0.03	0.47	2.4	4229
QC-19-10	Py _{2a}	3.1	33	35	241	bdl	2622	0.96	27	77	0.98	bdl	0.35	bdl	148
QC-19-7	Py _{2a}	0.49	bdl	8.9	1362	66	385	1.7	136	9.8	45	bdl	bdl	0.68	4733
NFJ-185-2	Py _{2b}	39	bdl	7.9	458	15	13261	3.8	119	124	bdl	0.03	0.51	bdl	84
NFJ-185-4	Py _{2b}	2.3	bdl	5.0	56	bdl	9541	4.5	1626	974	bdl	3.4	6.3	bdl	211
NFJ-211-1	Py _{2b}	3.2	106	55	558	2.6	15654	2.4	134	102	1.1	bdl	1.3	bdl	50
NFJ-211-2	Py _{2b}	2.8	63	45	276	bdl	9231	3.7	40	36	bdl	bdl	1.2	bdl	50
NFJ-211-3	Py _{2b}	2.6	54	34	61	bdl	6066	2.0	8.1	19	bdl	0.21	0.46	bdl	47
NFJ-211-4	Py _{2b}	7.0	15	6.7	344	20	6183	3.0	60	77	0.66	0.06	0.27	bdl	99
NFJ-211-8	Py _{2b}	14	14	11	518	8.5	11021	6.4	134	80	bdl	0.03	0.52	bdl	29
NFJ-211-10	Py _{2b}	18	19	11	47	bdl	10143	7.1	6.8	14	bdl	0.02	0.30	bdl	33
NFJ-211-11	Py _{2b}	47	15	2.5	186	bdl	14763	3.7	12	8.8	bdl	0.71	0.11	bdl	15
QC-10-10	Py _{2b}	1.5	7.6	17	36	2.6	12395	bdl	69	2176	bdl	0.63	188	bdl	63
QC-10-11	Py _{2b}	2.2	bdl	bdl	2.6	4.7	5851	bdl	33	1521	bdl	0.32	12	bdl	5.2
QC-10-18	Py _{2b}	50	2.6	2.2	579	8.5	13084	2.4	75	84	3.3	bdl	0.11	0.41	329
QC-10-19	Py _{2b}	83	bdl	bdl	247	bdl	16515	3.1	13	29	0.78	0.06	bdl	0.11	90
QC-10-20	Py _{2b}	65	bdl	1.6	488	15	15755	1.7	49	68	1.4	0.05	0.16	0.25	229
QC-19-1	Py _{2b}	45	bdl	3.4	318	5.8	15078	2.7	94	75	5.5	bdl	0.42	0.35	389
QC-19-3	Py _{2b}	135	bdl	bdl	328	bdl	18239	3.3	22	68	1.1	bdl	bdl	0.19	243
QC-19-5	Py _{2b}	138	3.2	0.85	290	bdl	21879	3.7	17	16	0.92	bdl	bdl	bdl	43
QC-19-6	Py _{2b}	64	2.8	1.7	176	bdl	14726	4.3	10	7.7	bdl	bdl	0.04	bdl	14
QC-19-9	Py _{2b}	31	4.8	2.6	192	bdl	10095	2.4	22	48	2.6	0.36	0.22	0.09	205

Note: bdl = below minimum limit of detection.