



Figure S1. Cueva de la Cocina map (modified from García-Puchol et al., 2018. [25]).

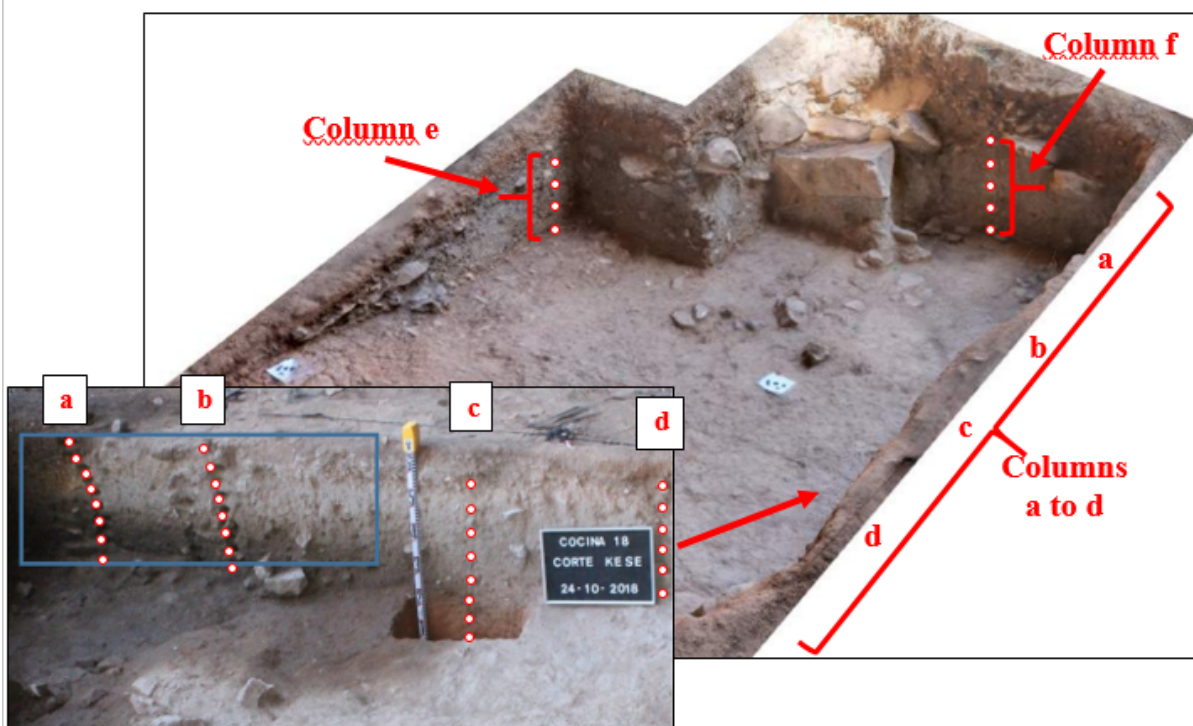


Figure S2. 3D model of area S4 and localisation of sampling points (modified from García-Puchol et al., 2018. [25] and Gallelo et al., 2021. [14]).

Table S1. Major elements, Zr and soil organic matter (SOM) amounts, and pH.

Sample	Al	Si	P	K	Ca	Ti	Fe	Zr	SOM	pH	Sample	Al	Si	P	K	Ca	Ti	Fe	Zr	SOM	pH
S4a1	4.11	13.82	0.34	0.70	28.83	0.16	1.66	113	3.4	8.1	S4c5	4.77	16.38	0.18	1.00	23.15	0.20	2.09	163	1.9	8.0
S4a2	4.30	13.12	0.34	0.63	27.90	0.15	1.52	111	2.9	8.2	S4c6	4.20	14.90	0.31	0.88	28.12	0.18	1.72	134	2.1	7.9
S4a3	2.60	13.94	0.53	0.61	27.63	0.13	1.40	103	3.0	8.2	S4c7	4.96	16.71	0.28	1.05	28.33	0.18	1.81	137	1.7	8.1
S4a4	3.43	15.88	0.65	0.66	28.41	0.14	1.38	111	2.9	8.2	S4c8	3.27	15.28	0.29	0.96	27.54	0.15	1.70	128	1.3	8.2
S4a5	1.69	18.15	0.83	0.76	26.43	0.15	1.40	105	2.7	8.2	S4d1	3.98	16.16	0.19	0.96	25.67	0.19	1.89	141	2.5	8.1
S4a6	3.65	23.35	0.99	1.00	20.34	0.16	1.59	139	2.3	8.2	S4d2	3.66	17.02	0.18	1.04	27.31	0.18	1.88	160	2.3	8.1
S4a7	2.77	24.67	0.86	1.04	19.24	0.18	1.68	126	2.4	8.2	S4d3	3.39	16.18	0.20	1.03	27.61	0.17	1.83	150	2.1	8.1
S4a8	4.79	26.85	0.76	1.14	16.82	0.22	1.99	162	3.1	8.2	S4d4	2.96	15.84	0.17	0.96	26.33	0.17	1.81	153	1.7	8.2
S4b1	3.88	13.81	0.25	0.67	27.65	0.15	1.71	118	3.2	8.3	S4d5	4.07	16.57	0.24	1.07	25.70	0.16	1.82	139	1.5	8.2
S4b2	3.65	14.76	0.23	0.75	27.23	0.16	1.69	149	2.9	8.2	S4d6	4.18	17.61	0.28	1.23	28.13	0.17	1.76	131	1.1	8.2
S4b3	3.89	16.19	0.22	0.79	28.09	0.17	1.72	136	2.5	8.3	S4e1	4.25	23.85	0.20	1.24	18.67	0.28	2.72	189	1.4	8.1
S4b4	2.59	13.31	0.28	0.66	28.31	0.16	1.55	103	1.7	8.2	S4e2	4.03	22.57	0.26	1.17	20.46	0.26	2.47	188	1.9	8.1
S4b5	4.22	13.87	0.35	0.69	29.44	0.16	1.46	114	1.7	8.3	S4e3	3.47	22.20	0.42	1.10	21.25	0.24	2.30	187	2.9	8.1
S4b6	3.88	13.29	0.37	0.64	31.07	0.14	1.43	110	1.7	8.2	S4e4	3.33	22.23	0.42	1.06	20.24	0.24	2.23	166	3.5	8.0
S4b7	3.21	14.61	0.40	0.67	30.18	0.14	1.37	100	1.8	8.0	S4f1	4.20	23.01	0.35	1.15	18.88	0.26	2.55	183	1.9	8.2
S4b8	3.79	25.34	0.22	1.16	17.19	0.28	2.55	177	4.4	7.7	S4f2	3.20	21.24	0.51	1.04	19.23	0.25	2.35	186	2.4	8.3
S4c1	10.68	27.77	0.02	1.58	9.26	0.35	3.18	230	0.3	8.2	S4f3	2.95	21.82	0.61	0.95	19.11	0.22	2.12	178	2.9	7.9
S4c2	10.19	26.40	0.09	1.50	14.10	0.28	3.00	185	0.6	8.2	S4f4	2.68	22.60	0.57	0.94	20.04	0.24	2.12	162	3.6	7.8
S4c3	5.51	18.39	0.10	1.12	20.59	0.23	2.34	179	1.3	8.3	S4f5	3.51	24.38	0.42	1.11	17.82	0.27	2.39	157	4.4	7.9
S4c4	4.55	15.84	0.18	0.87	25.93	0.18	1.84	126	1.9	8.2											

Note: Elemental and SOM concentrations are expressed as mass percentage, except for Zr which is expressed as mg kg⁻¹.

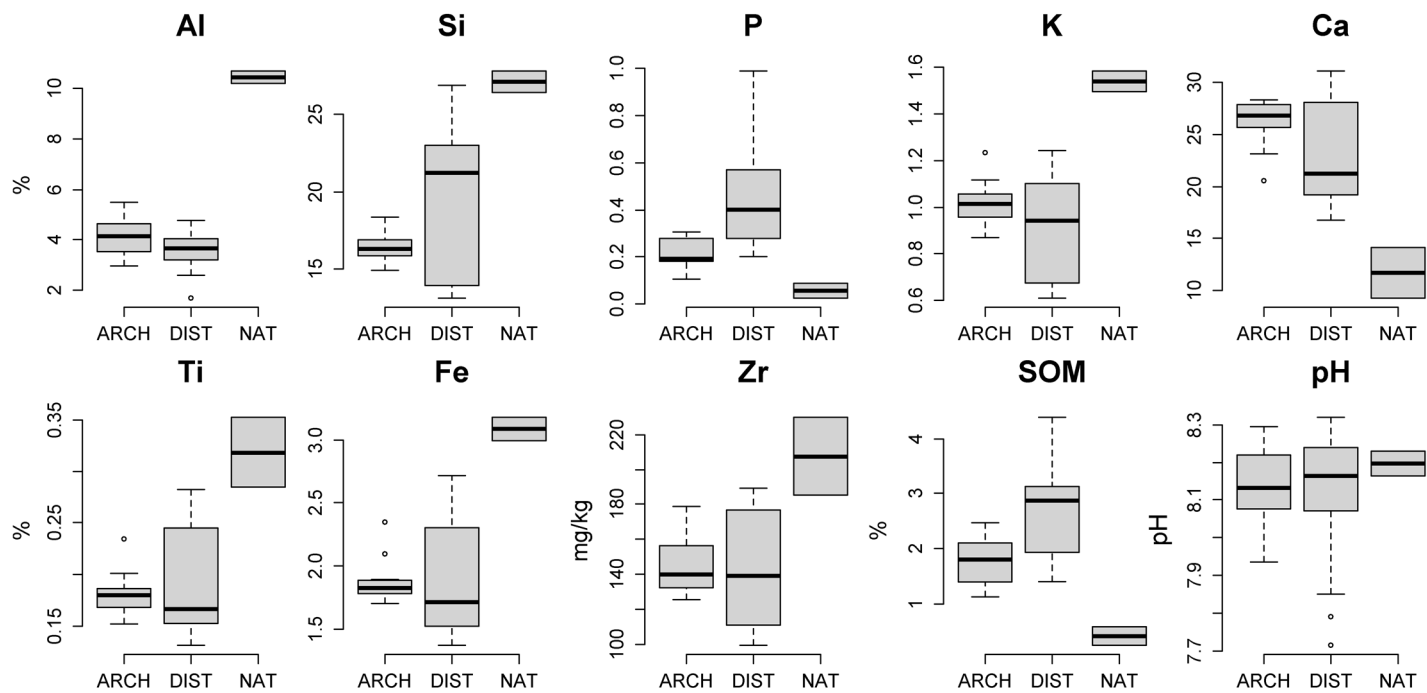


Figure S3. Boxplots for pXRF results, SOM amount and pH.

Table S2. Trace elements concentrations for *acqua regia* digestion expressed as mg/kg.

Sample	Ba	Bi	Cd	Co	Cr	Cu	Li	Mn	Mo	Ni	Pb	Sr	Tl	V	Zn
S4a1	109	0.076	0.329	7.24	22.3	55.7	9.74	300	1.75	26.5	9.02	195	0.244	29.8	55.6
S4a2	97.9	0.014	0.308	6.76	19.7	47.0	9.04	297	1.20	24.6	7.40	190	0.193	21.2	50.9
S4a3	130	0.059	0.443	6.23	19.3	67.0	9.03	358	1.76	26.5	7.66	192	0.243	24.1	78.0
S4a4	143	0.037	0.502	5.78	19.1	74.0	8.50	376	1.74	27.4	7.25	184	0.233	23.6	97.3
S4a5	205	0.057	0.705	7.17	20.9	84.5	9.35	560	2.83	29.2	8.20	196	0.279	27.8	161
S4a6	291	0.068	0.781	8.18	20.4	63.7	7.99	784	2.52	27.6	8.28	182	0.250	24.2	228
S4a7	296	0.096	0.820	8.47	21.0	62.7	9.11	812	2.49	27.3	10.6	170	0.289	25.0	250
S4a8	245	0.122	0.930	8.78	24.7	58.2	10.9	839	2.28	27.5	13.7	153	0.292	29.0	252
S4b1	72.0	0.040	0.216	8.30	19.6	41.2	7.37	284	1.26	27.8	8.68	171	0.180	32.3	44.3
S4b2	76.8	0.046	0.234	9.27	21.3	46.6	8.07	336	1.18	30.7	9.35	181	0.187	33.6	44.1
S4b3	72.5	0.096	0.216	8.50	21.3	46.5	8.23	319	1.84	28.2	9.22	160	0.182	36.7	39.1
S4b4	79.6	0.118	0.234	7.41	21.2	44.8	7.89	324	1.44	25.8	9.41	178	0.207	38.0	43.6
S4b5	82.9	0.095	0.250	6.49	19.7	43.3	7.48	310	1.25	23.6	8.50	174	0.197	31.5	44.7
S4b6	94.4	0.090	0.284	6.53	21.2	43.9	7.89	372	1.20	24.3	8.45	187	0.205	29.6	50.7
S4b7	113	0.094	0.402	6.79	21.5	55.2	7.48	434	1.55	24.8	8.21	179	0.200	31.5	75.5
S4b8	90.4	0.191	0.417	7.87	28.2	29.1	9.73	505	3.05	26.2	27.7	127	0.243	46.3	90.7
S4c1	48.4	0.235	0.198	10.9	31.7	11.6	11.3	408	2.81	26.6	14.3	65	0.236	59.3	35.4
S4c2	52.3	0.159	0.201	10.5	26.9	13.7	8.63	404	1.36	25.3	13.6	85	0.192	51.9	31.4
S4c3	61.9	0.115	0.219	9.04	24.7	20.1	8.18	398	2.26	25.8	12.2	125	0.201	46.2	38.6
S4c4	74.0	0.121	0.230	8.57	23.7	25.6	8.12	369	1.62	27.3	11.0	171	0.195	41.4	50.4
S4c5	66.4	0.068	0.210	8.99	23.9	22.2	7.87	366	1.36	26.0	11.5	146	0.201	44.2	43.4
S4c6	84.4	0.085	0.241	8.75	22.7	29.5	7.74	394	1.61	26.8	10.2	183	0.211	41.2	47.1
S4c7	79.7	0.094	0.267	6.81	21.9	30.0	7.09	393	1.39	23.7	10.1	195	0.197	34.9	50.1
S4c8	91.7	0.097	0.336	5.56	22.0	26.6	7.10	430	1.59	22.6	10.1	204	0.216	33.4	62.4
S4d1	83.3	0.182	0.261	8.07	23.0	25.1	7.62	443	2.16	26.3	10.4	176	0.196	42.2	48.4
S4d2	79.3	0.165	0.224	7.66	20.3	22.9	7.52	373	2.03	25.0	9.70	172	0.180	35.1	45.4
S4d3	82.3	0.171	0.249	8.39	21.2	26.6	7.82	381	1.97	25.5	9.98	184	0.202	35.0	48.1
S4d4	78.2	0.169	0.239	9.06	20.5	28.0	7.51	385	1.81	23.2	9.56	187	0.202	36.3	48.4
S4d5	79.3	0.180	0.246	6.68	20.9	26.2	7.80	435	1.77	21.5	10.1	190	0.207	39.2	46.4
S4d6	85.9	0.214	0.303	5.29	20.2	21.7	9.21	390	2.45	22.3	10.1	227	0.225	39.2	61.4
S4e1	77.8	0.270	0.312	9.86	27.3	28.2	10.9	384	3.23	27.9	13.8	139	0.277	56.3	52.4
S4e2	90.8	0.230	0.355	9.40	25.9	35.7	9.77	418	2.40	27.8	13.4	155	0.251	45.0	65.0
S4e3	106	0.106	0.469	8.57	22.9	44.4	8.13	497	1.64	26.5	12.6	165	0.243	31.7	97.0
S4e4	115	0.225	0.568	8.86	26.0	53.0	9.80	636	2.45	26.8	13.9	162	0.275	43.9	133
S4f1	94	0.176	0.421	8.66	24.4	40.2	8.59	418	2.28	26.7	12.6	142	0.271	39.3	71.2
S4f2	113	0.106	0.569	8.83	22.8	54.2	7.79	503	5.16	28.6	12.2	149	0.282	32.5	113
S4f3	140	0.255	0.785	9.13	24.2	66.5	8.02	664	2.13	30.6	13.3	156	0.312	33.6	169
S4f4	144	0.139	0.892	9.72	26.5	72.2	8.82	808	2.10	31.5	14.4	160	0.320	35.4	212
S4f5	110	0.123	0.744	9.05	26.8	58.7	8.27	769	1.88	27.7	16.9	139	0.283	29.3	175
Mean	109	0.13	0.4	8.1	23	42	8.5	458	2.0	26	11	167	0.23	36	86
St. Dev.	58	0.06	0.2	1.3	3	18	1.1	157	0.7	2	4	31	0.04	9	63

Table S3. Trace elements concentrations for total digestion expressed as mg/kg.

Sample	Ba	Bi	Cd	Co	Cr	Cu	Li	Mn	Mo	Ni	Pb	Sr	Tl	V	Zn
S4a1	124	0.130	0.273	4.84	20.3	37.6	11.2	191	2.44	16.1	6.20	149	0.317	24.7	28.9
S4a2	105	0.081	0.250	4.92	20.5	37.9	10.9	194	1.78	16.3	5.97	139	0.315	24.7	28.7
S4a3	232	0.104	0.498	5.29	24.2	53.4	13.6	301	2.03	22.2	7.62	197	0.354	28.9	48.7
S4a4	237	0.094	0.879	4.66	23.1	57.2	12.7	304	2.08	21.9	7.03	191	0.336	26.4	54.7
S4a5	288	0.082	0.772	5.54	24.1	65.2	12.2	440	2.89	23.4	7.41	195	0.358	27.4	106
S4a6	386	0.092	0.896	6.70	24.4	53.0	10.8	666	3.05	23.5	7.61	190	0.347	27.6	171
S4a7	376	0.095	0.864	6.82	24.9	54.3	11.6	690	3.01	23.8	7.66	192	0.342	28.7	175
S4a8	337	0.151	0.975	7.69	32.9	49.5	19.9	780	2.80	25.5	13.0	166	0.466	37.4	197
S4b1	172	0.295	0.308	6.74	30.6	32.8	20.4	243	2.57	24.8	10.0	177	0.454	40.6	29.7
S4b2	166	0.180	0.283	6.80	29.2	34.7	20.1	253	2.08	24.5	9.71	169	0.428	39.0	26.5
S4b3	171	0.159	0.284	6.38	31.9	34.5	19.4	243	1.67	23.8	9.91	165	0.418	38.8	27.1
S4b4	107	0.096	0.209	5.05	20.3	29.8	12.8	209	1.73	15.6	6.10	143	0.292	29.0	25.3
S4b5	191	0.152	0.306	5.37	28.3	33.3	18.3	254	1.40	21.0	9.22	174	0.399	35.2	31.9
S4b6	186	0.132	0.340	5.07	27.4	33.4	16.7	272	1.35	20.8	8.64	162	0.378	33.1	33.7
S4b7	206	0.118	0.452	5.30	26.9	38.5	16.2	326	1.50	20.4	8.30	168	0.363	32.0	50.4
S4b8	222	0.202	0.507	6.84	42.4	22.0	28.1	419	3.64	24.5	24.6	137	0.572	53.7	68.8
S4c1	203	0.250	0.313	9.16	51.3	11.7	36.4	372	4.58	28.8	16.6	91	0.667	73.8	38.4
S4c2	236	0.267	0.333	9.62	53.1	14.5	33.9	366	4.55	29.3	18.0	109	0.723	75.2	40.1
S4c3	247	0.214	0.350	8.12	42.7	18.8	24.3	334	4.62	27.4	16.7	124	0.663	60.7	39.3
S4c4	210	0.147	0.289	6.34	31.5	18.6	18.6	266	1.88	22.6	12.5	152	0.481	44.5	29.7
S4c5	206	0.164	0.288	7.70	36.7	19.0	23.0	305	2.32	24.6	13.5	136	0.545	52.5	25.5
S4c6	118	0.099	0.217	6.00	22.1	21.0	15.0	264	1.86	16.7	6.97	164	0.320	32.9	27.7
S4c7	200	0.145	0.332	5.72	33.3	25.2	18.6	306	1.54	21.8	12.2	171	0.509	43.0	39.3
S4c8	241	0.175	0.493	4.95	34.4	22.9	19.1	349	1.72	21.2	12.3	183	0.519	43.5	43.0
S4d1	237	0.142	0.348	7.10	34.4	20.9	19.9	590	1.97	25.1	12.5	166	0.542	47.4	35.1
S4d2	222	0.145	0.328	6.72	33.2	20.7	18.4	312	1.76	24.5	12.8	149	0.501	43.8	36.0
S4d3	234	0.151	0.337	7.70	34.5	23.3	19.3	337	1.70	26.1	13.3	155	0.521	44.7	39.2
S4d4	217	0.209	0.317	9.53	40.6	29.7	25.1	406	1.57	28.4	15.1	159	0.625	53.6	49.7
S4d5	192	0.191	0.306	6.79	38.8	26.5	22.6	427	1.60	25.0	14.7	156	0.590	52.6	36.8
S4d6	182	0.195	0.327	5.28	37.1	20.8	23.5	366	1.94	22.7	12.9	164	0.578	48.5	36.8
S4e1	242	0.234	0.403	9.82	58.5	28.0	39.1	396	3.95	35.9	17.7	142	0.735	72.3	50.7
S4e2	150	0.124	0.321	7.50	31.9	28.4	22.2	313	2.24	21.3	9.92	140	0.416	40.4	50.6
S4e3	243	0.179	0.522	8.74	47.6	44.4	33.2	514	2.64	30.6	16.0	158	0.641	58.0	87.3
S4e4	219	0.184	0.581	8.23	34.3	44.5	34.3	578	2.52	24.9	10.9	169	0.436	50.4	140
S4f1	226	0.166	0.505	9.08	38.6	39.0	40.5	444	3.13	27.7	12.4	168	0.528	62.7	101
S4f2	229	0.140	0.636	8.83	39.8	50.5	36.4	529	2.78	27.8	11.8	170	0.518	56.6	136
S4f3	206	0.123	0.568	7.90	35.7	45.3	32.7	473	2.47	24.8	10.7	152	0.479	50.6	121
S4f4	209	0.131	0.848	8.76	33.2	58.5	33.5	723	2.33	27.3	12.0	172	0.495	45.9	226
S4f5	220	0.151	0.792	8.70	37.2	53.5	34.8	723	2.42	26.9	15.2	157	0.505	48.4	209
<i>Mean</i>	215	0.16	0.5	7.0	34	35	23	397	2.4	24	12	160	0.48	44	70
<i>St. Dev.</i>	60	0.05	0.2	1.6	9	14	9	159	0.9	4	4	22	0.12	14	58

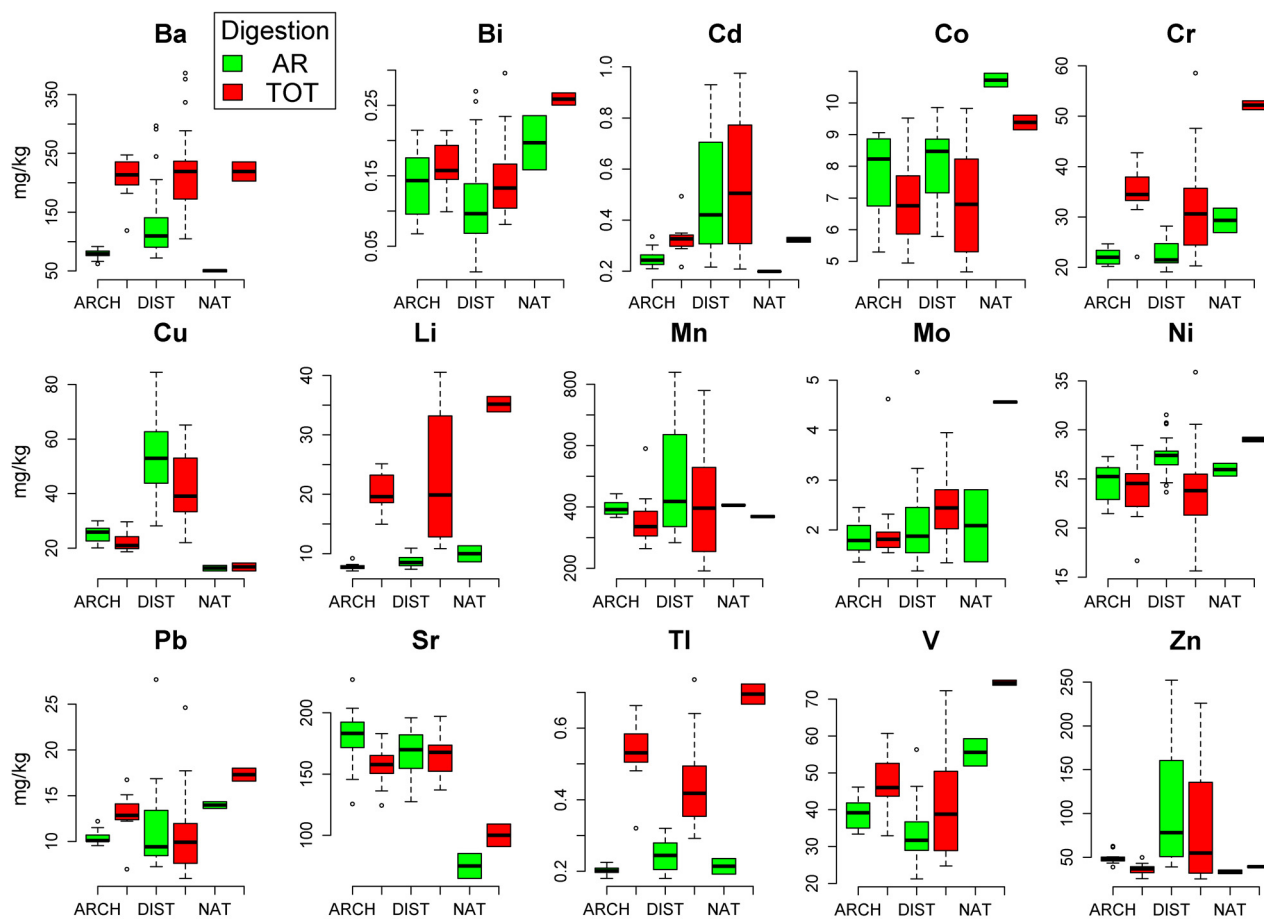


Figure S4. Boxplots for trace elements concentrations (AR: *aqua regia*; TOT: total digestion; ARCH: archaeological; DIST: disturbed; NAT: natural).

Table S4. REE concentrations expressed as mg kg⁻¹ and REE fractionation parameters obtained by *aqua regia* digestion.

Sample	Sc	Y	LREE	MREE	HREE	Ce _n /Ce*	Eu _n /Eu*	La _n /Yb _n	La _n /Sm _n	Sm _n /Yb _n
S4a1	3.49	7.47	51.6	6.38	1.35	0.95	1.10	1.72	0.87	1.99
S4a2	2.58	7.21	48.4	6.07	1.31	0.95	1.11	1.68	0.87	1.95
S4a3	3.06	6.92	45.3	5.77	1.26	0.95	1.13	1.64	0.86	1.92
S4a4	2.92	6.62	43.5	5.55	1.21	0.96	1.15	1.64	0.85	1.93
S4a5	3.28	7.22	49.2	6.20	1.36	0.96	1.14	1.63	0.86	1.90
S4a6	3.70	9.34	63.5	7.62	1.78	0.97	1.08	1.61	0.90	1.77
S4a7	3.90	10.2	70.5	8.35	1.93	0.97	1.05	1.62	0.90	1.79
S4a8	4.12	10.7	70.1	8.71	2.01	0.98	1.09	1.53	0.87	1.77
S4b1	3.45	7.59	48.5	6.29	1.37	0.95	1.08	1.60	0.85	1.89
S4b2	3.71	8.29	53.2	6.89	1.49	0.93	1.08	1.63	0.85	1.92
S4b3	3.89	8.11	53.4	6.72	1.44	0.96	1.09	1.71	0.87	1.96
S4b4	4.04	8.05	52.2	6.71	1.46	0.95	1.10	1.63	0.86	1.89
S4b5	3.55	7.23	48.0	6.13	1.33	0.95	1.09	1.62	0.86	1.88
S4b6	3.54	7.08	47.0	5.98	1.31	0.95	1.09	1.64	0.86	1.91
S4b7	3.52	7.11	46.5	5.96	1.31	0.93	1.11	1.63	0.87	1.87
S4b8	4.53	11.2	69.8	9.27	2.01	0.91	1.09	1.58	0.82	1.93
S4c1	5.64	12.9	95.1	11.5	2.31	1.01	1.06	1.80	0.86	2.10
S4c2	4.68	12.4	78.1	10.2	2.19	1.01	1.10	1.55	0.82	1.90
S4c3	4.27	10.3	68.7	8.88	1.88	0.98	1.09	1.58	0.81	1.96
S4c4	4.11	8.86	61.6	7.81	1.64	0.97	1.06	1.69	0.85	1.99
S4c5	4.07	9.18	62.3	7.93	1.70	0.98	1.09	1.62	0.85	1.91
S4c6	4.07	8.45	56.5	7.21	1.57	0.97	1.09	1.61	0.86	1.86
S4c7	4.02	8.61	59.8	7.46	1.56	0.97	1.08	1.72	0.87	1.97
S4c8	3.76	8.38	56.7	7.21	1.53	0.96	1.09	1.68	0.87	1.93
S4d1	3.93	9.21	65.1	7.87	1.62	0.95	1.09	1.84	0.88	2.08
S4d2	3.71	8.24	60.2	7.18	1.46	0.96	1.08	1.87	0.89	2.11
S4d3	3.81	8.61	63.1	7.54	1.54	0.96	1.08	1.84	0.88	2.08
S4d4	3.85	8.28	61.3	7.19	1.45	0.97	1.06	1.94	0.91	2.14
S4d5	3.80	8.63	63.0	7.54	1.54	0.97	1.08	1.86	0.88	2.11
S4d6	3.41	8.39	60.2	7.22	1.46	0.93	1.08	1.91	0.91	2.10
S4e1	5.26	11.9	93.2	10.71	2.09	1.03	1.05	1.93	0.87	2.22
S4e2	4.88	11.6	83.7	10.18	2.03	0.97	1.08	1.85	0.84	2.19
S4e3	3.97	10.4	71.0	8.86	1.85	0.99	1.11	1.67	0.83	2.01
S4e4	4.30	10.3	73.7	8.94	1.83	0.98	1.09	1.77	0.85	2.09
S4f1	4.55	11.3	81.1	9.90	2.02	0.97	1.09	1.80	0.86	2.10
S4f2	4.10	10.3	73.7	9.11	1.87	0.98	1.11	1.76	0.85	2.08
S4f3	4.13	10.1	72.5	8.99	1.89	0.98	1.12	1.70	0.85	2.01
S4f4	4.20	10.0	74.3	9.14	1.89	0.97	1.11	1.76	0.85	2.07
S4f5	3.61	9.58	70.3	8.51	1.78	0.99	1.11	1.75	0.85	2.07
Mean	3.9	9.1	63	7.8	1.7	0.97	1.09	1.71	0.86	1.98
St. Dev.	0.6	1.6	13	1.5	0.3	0.02	0.02	0.11	0.02	0.11

Note: LREE: sum of light REE (i.e., from La to Nd); MREE: sum of medium REE (i.e., from Sm to Ho); HREE: sum of heavy REE (i.e., from Er to Lu). n (subscript; e.g.: La_n): element normalised by Post Archean Australian Shale (PAAS).

Ce*: (La_n/2) + (Pr_n/2); Eu*: (Sm_n/2) + (Gd_n/2). See also Gallelo et al. 2021. [14].

Table S5. REE concentrations expressed as mg kg⁻¹ and REE fractionation parameters obtained by total acid digestion.

Sample	Sc	Y	LREE	MREE	HREE	Ce _n /Ce*	Eu _n /Eu*	La _n /Yb _n	La _n /Sm _n	Sm _n /Yb _n
S4a1	3.30	5.84	49.2	5.21	1.15	0.84	1.20	2.29	1.17	1.95
S4a2	2.80	3.25	35.1	3.70	0.769	0.83	1.16	2.46	1.16	2.12
S4a3	3.94	5.43	56.9	7.40	1.57	0.96	1.04	1.60	0.78	2.04
S4a4	4.06	6.45	56.3	7.33	1.60	0.97	1.04	1.53	0.79	1.93
S4a5	3.86	6.15	55.4	7.19	1.61	0.99	1.03	1.48	0.78	1.89
S4a6	4.06	9.94	70.0	9.35	2.40	1.00	0.99	1.24	0.79	1.57
S4a7	6.06	9.11	70.6	9.15	2.13	1.02	0.99	1.40	0.78	1.79
S4a8	7.68	10.8	87.4	11.2	2.55	1.01	0.95	1.45	0.80	1.82
S4b1	5.10	4.52	57.4	7.92	1.74	0.95	1.02	1.45	0.73	1.97
S4b2	4.57	4.39	55.7	7.66	1.72	0.94	1.02	1.42	0.74	1.91
S4b3	4.22	5.01	59.5	8.21	1.81	0.94	0.99	1.42	0.74	1.92
S4b4	3.66	5.75	48.8	5.27	1.15	0.83	1.17	2.21	1.13	1.95
S4b5	4.53	5.08	63.5	8.72	1.90	0.95	1.03	1.47	0.74	1.98
S4b6	4.06	4.60	58.3	7.85	1.71	0.94	1.02	1.50	0.75	2.00
S4b7	4.08	4.50	59.1	7.98	1.75	0.94	1.00	1.48	0.75	1.98
S4b8	5.91	11.5	101.0	13.6	3.15	0.96	1.01	1.36	0.77	1.77
S4c1	6.91	13.3	127.3	16.3	3.56	0.99	0.98	1.54	0.80	1.93
S4c2	7.11	13.6	143.3	18.8	4.18	0.99	1.01	1.45	0.77	1.88
S4c3	5.44	9.11	121.9	17.0	3.78	0.98	1.00	1.38	0.73	1.88
S4c4	4.53	6.45	88.8	12.2	2.69	0.98	0.99	1.40	0.73	1.92
S4c5	5.65	7.21	87.6	12.1	2.75	1.00	1.03	1.32	0.72	1.83
S4c6	4.01	6.92	55.1	5.92	1.30	0.83	1.18	2.24	1.17	1.92
S4c7	5.73	5.27	71.2	9.98	2.20	0.96	1.02	1.39	0.72	1.93
S4c8	6.40	7.60	90.4	12.8	2.88	0.98	1.03	1.32	0.72	1.83
S4d1	5.17	7.86	91.0	12.8	2.90	0.98	1.01	1.32	0.73	1.82
S4d2	4.58	7.47	93.2	13.1	2.99	0.99	1.00	1.30	0.72	1.79
S4d3	4.99	7.26	92.2	13.3	3.07	0.98	1.01	1.26	0.72	1.76
S4d4	5.49	6.02	86.3	12.8	3.05	0.98	1.00	1.18	0.70	1.69
S4d5	4.69	3.75	67.0	9.72	2.25	0.97	1.01	1.29	0.71	1.81
S4d6	4.32	3.07	55.0	8.22	1.87	0.94	1.03	1.29	0.69	1.88
S4e1	7.84	11.7	122	17.0	3.99	0.99	1.00	1.28	0.72	1.77
S4e2	5.62	10.9	78.9	8.88	1.93	0.82	1.17	2.00	1.04	1.93
S4e3	7.99	9.40	93.9	12.9	3.03	1.00	1.01	1.30	0.74	1.77
S4e4	6.82	10.1	81.6	10.4	2.24	1.02	1.01	1.57	0.81	1.93
S4f1	7.28	12.3	97.6	12.7	2.81	1.00	1.01	1.49	0.80	1.86
S4f2	6.38	10.3	86.8	11.3	2.50	1.01	1.01	1.47	0.78	1.88
S4f3	5.72	9.47	78.4	10.2	2.27	1.01	1.01	1.45	0.79	1.85
S4f4	5.54	6.83	70.0	9.22	2.06	1.00	1.02	1.45	0.79	1.84
S4f5	6.16	10.4	87.3	11.2	2.58	1.00	1.03	1.44	0.82	1.77
Mean	5.3	8	78	10	2.3	0.96	1.03	1.51	0.80	1.87
St. Dev.	1.3	3	24	3	0.8	0.06	0.06	0.30	0.13	0.10

Note: LREE: sum of light REE (i.e., from La to Nd); MREE: sum of medium REE (i.e., from Sm to Ho); HREE: sum of heavy REE (i.e., from Er to Lu). n (subscript; e.g.: La_n): element normalised by Post Archean Australian Shale (PAAS).

Ce*: (La_n/2) + (Pr_n/2); Eu*: (Sm_n/2) + (Gd_n/2). See also Gallelo et al. 2021. [14].