

Variable	pH	P_ppm	K_ppm	Mg_ppm	Ca_ppm	S_ppm	Mn_ppm	Cu_ppm	B_ppm	Zn_ppm	Mo_ppm	Fe_ppm	Na_ppm	CEC_meq_100gCo_1	N_2	Cl	Cu_1	Zn_1	Pb_3	Ni_1	As_1	Cd_3	Hg_1	Cr_1	CLAY_%_1	SILT_%_1	SAND_%_1	Organic	
Moisture	-0.271	0.394	0.100	0.117	-0.119	0.069	0.019	-0.099	-0.218	0.375	-0.243	0.609	-0.129	-0.168	-0.448	0.306	-0.103	-0.006	-0.122	0.231	-0.384	-0.305	-0.162	0.230	-0.324	-0.602	-0.508	0.564	0.283
Nut_CV	0.212	-0.385	-0.170	-0.167	0.139	-0.042	-0.050	0.107	0.167	-0.354	0.227	-0.561	0.107	0.122	0.408	0.263	0.043	0.000	0.155	-0.215	0.335	0.382	0.172	-0.202	0.322	0.594	0.515	-0.570	-0.256
Ash_1	0.175	0.148	0.506	0.131	-0.043	0.089	-0.250	0.225	-0.092	0.294	0.189	0.084	0.102	0.367	-0.103	0.092	0.253	-0.030	-0.406	-0.058	0.054	-0.251	-0.197	-0.204	-0.060	-0.309	-0.353	0.360	0.125
Volatile_matter_1	0.149	-0.194	0.322	0.249	0.372	0.261	-0.427	-0.109	0.395	-0.633	0.319	0.129	0.308	0.543	-0.246	0.292	0.185	0.219	-0.156	-0.268	0.263	0.241	0.236	-0.353	0.367	0.168	0.122	-0.207	0.361
GV_2	-0.348	0.201	-0.251	-0.277	0.057	0.170	-0.226	-0.050	-0.317	0.201	0.006	0.480	0.188	-0.219	0.343	0.178	-0.316	-0.070	0.021	0.103	-0.396	-0.045	-0.046	0.098	-0.104	-0.301	-0.202	0.225	0.368
C_1	-0.307	-0.007	-0.055	-0.251	0.117	-0.043	-0.060	-0.215	0.185	-0.053	0.331	0.214	-0.119	-0.268	0.287	-0.055	-0.104	0.078	-0.268	-0.181	-0.242	-0.148	0.203	-0.065	-0.276	-0.133	0.180	0.166	0.166
H_2	0.160	0.042	-0.469	-0.002	-0.409	-0.066	0.340	0.335	-0.305	0.255	-0.247	-0.558	-0.404	-0.451	0.588	-0.472	-0.174	0.049	0.232	-0.006	-0.097	0.258	0.249	-0.323	-0.206	0.184	0.258	-0.199	-0.435
N_1	-0.018	-0.141	0.137	-0.225	0.490	0.241	-0.490	-0.215	0.122	-0.304	0.421	0.323	0.311	0.205	-0.398	0.509	-0.225	-0.102	0.105	-0.153	0.315	0.246	0.071	-0.308	0.165	-0.056	-0.085	0.435	0.435
Sulfur_2	0.064	-0.303	-0.038	0.337	0.422	0.570	-0.552	0.324	0.344	-0.647	0.064	0.065	0.523	0.448	-0.286	0.475	0.173	0.512	0.359	0.481	0.400	0.370	0.573	-0.352	0.601	0.369	0.397	0.510	0.525
Chlorine_2	-0.419	0.273	-0.414	-0.354	-0.475	-0.221	0.320	-0.062	-0.382	0.553	-0.499	0.180	-0.211	-0.526	-0.019	-0.241	-0.380	-0.215	0.091	-0.111	-0.421	-0.470	-0.306	0.416	-0.544	-0.382	-0.125	0.285	-0.319
Ba	-0.178	-0.433	-0.433	-0.145	-0.722	-0.173	0.254	0.049	-0.583	-0.005	-0.643	-0.227	-0.312	-0.635	0.264	-0.449	-0.072	0.019	0.108	0.165	-0.194	-0.430	0.039	-0.436	-0.442	-0.156	0.486	-0.241	-0.405
Cr	0.323	-0.728	0.255	-0.189	-1.104	-0.244	-0.720	-0.105	-0.094	0.906	0.162	0.040	-0.312	-0.097	0.282	-0.220	-0.066	-0.255	-0.388	-0.341	-0.391	-0.355	-0.338	0.009	-0.581	-0.938	-0.860	0.300	-0.251
Co	-0.283	-0.074	0.145	-0.171	0.387	0.166	-0.669	-0.358	0.127	-0.366	0.335	0.614	0.365	0.268	-0.669	0.566	-0.199	-0.099	-0.194	0.163	-0.118	0.297	-0.068	0.332	0.300	0.054	-0.093	-0.025	0.507
Cu	0.118	-0.451	0.325	0.539	0.700	0.642	-0.553	0.479	0.605	-0.488	-0.117	0.174	0.822	0.644	-0.561	0.778	0.502	0.610	0.654	0.425	0.638	-0.075	0.633	0.209	0.817	0.375	0.229	-0.427	0.794
Md	0.289	0.203	0.533	0.076	0.334	0.036	0.081	-0.194	0.360	-0.051	0.368	0.175	0.147	0.485	-0.110	0.159	0.217	0.005	-0.349	-0.068	0.076	-0.185	-0.097	-0.145	-0.009	-0.255	-0.420	0.382	0.180
Ni	0.000	-0.413	0.418	-0.157	0.610	0.060	-0.564	-0.341	0.626	-0.643	0.407	0.200	0.399	0.681	-0.437	0.341	0.122	-0.056	-0.095	-0.099	0.370	0.079	-0.029	0.399	0.534	0.996	0.164	-0.316	0.312
V	0.289	0.203	0.533	0.076	0.334	0.036	0.081	-0.194	0.360	-0.051	0.368	0.175	0.147	0.485	-0.110	0.159	0.217	0.005	-0.349	-0.068	0.076	-0.185	-0.097	-0.145	-0.009	-0.255	-0.420	0.382	0.180
Zn	-0.096	-0.030	-0.222	0.051	-0.329	-0.015	0.425	0.280	-0.469	0.523	-0.531	-0.149	-0.130	-0.534	0.173	-0.096	-0.062	0.014	0.333	-0.039	-0.294	-0.533	0.230	0.000	-0.346	-0.232	-0.015	0.120	-0.147
Sb	0.467	0.019	0.694	0.082	0.449	-0.044	0.035	-0.250	0.426	-0.151	0.551	-0.022	0.070	0.542	0.004	0.120	0.277	0.086	-0.406	-0.184	0.143	-0.021	-0.012	-0.123	0.145	-0.020	-0.363	0.255	0.146
As	0.467	0.019	0.694	0.082	0.449	-0.044	0.035	-0.250	0.426	-0.151	0.551	-0.022	0.070	0.542	0.004	0.120	0.277	0.086	-0.406	-0.184	0.143	-0.021	-0.012	-0.123	0.145	-0.020	-0.363	0.255	0.146
Hg	-0.221	-0.082	-0.044	-0.493	-0.132	-0.239	-0.184	-0.670	-0.167	-0.280	0.255	0.173	-0.234	-0.092	-0.076	-0.170	-0.532	-0.421	-0.559	-0.058	-0.497	0.073	-0.123	-0.161	-0.321	-0.061	0.070	0.001	-0.204
Br	0.148	0.241	-0.034	0.454	-0.084	0.190	0.324	0.582	0.162	0.429	-0.117	0.144	0.056	0.104	-0.013	0.410	0.426	0.455	0.129	0.372	-0.286	0.057	0.041	0.037	-0.160	-0.105	0.132	0.048	0.148
Cd_2	0.253	-0.535	0.178	0.083	0.214	0.106	-0.022	0.092	0.194	-0.295	-0.047	-0.390	-0.089	0.160	0.139	-0.002	0.113	0.101	0.223	0.021	0.160	-0.193	0.559	0.160	0.202	0.369	0.354	-0.403	0.002
Pb_2	-0.228	0.447	-0.325	0.108	-0.086	0.447	-0.333	0.089	-0.045	-0.074	-0.173	0.554	0.249	0.022	-0.425	0.338	-0.383	0.317	0.020	0.635	-0.308	0.284	0.246	-0.258	-0.122	-0.318	-0.144	0.173	0.378
Al2O3_1	-0.655	0.081	-0.483	-0.126	-0.427	-0.093	-0.126	-0.056	-0.491	-0.162	-0.402	0.378	-0.034	-0.511	0.266	0.017	-0.240	-0.097	0.096	0.107	-0.249	-0.098	0.367	0.300	-0.218	-0.231	0.115	0.007	-0.031
BaO_1	-0.495	-0.390	-0.456	0.045	-0.703	-0.243	0.143	-0.035	-0.591	-0.059	-0.648	-0.196	-0.300	-0.666	0.183	-0.430	-0.110	0.134	0.093	-0.180	-0.424	-0.036	-0.216	-0.376	-0.047	0.577	-0.550	-0.413	0.360
CaCO3	0.319	-0.405	0.155	-0.086	0.198	0.003	0.144	0.173	0.313	-0.266	0.048	-0.522	0.028	0.271	0.332	-0.186	0.321	0.126	0.204	-0.174	0.432	-0.149	0.249	0.299	0.369	0.350	-0.376	-0.159	-0.179
Fe2O3_1	-0.240	-0.122	-0.368	-0.265	-0.365	-0.208	-0.161	-0.252	-0.513	0.131	0.074	-0.078	-0.079	-0.530	0.055	-0.159	-0.512	-0.328	-0.257	0.023	-0.504	0.566	-0.137	0.045	-0.241	0.041	0.015	-0.001	-0.179
K2O_1	0.078	0.230	0.348	-0.210	0.393	-0.063	-0.200	-0.297	0.206	0.275	0.367	0.388	0.108	0.190	-0.377	0.358	-0.216	-0.305	-0.209	-0.197	-0.240	0.155	-0.158	0.753	0.081	-0.032	-0.561	0.389	0.206
MgO_1	-0.362	-0.007	-0.502	0.157	-0.248	0.481	-0.200	0.584	-0.149	-0.167	-0.652	0.186	0.355	-0.145	-0.237	0.232	0.623	0.594	0.631	0.298	-0.053	0.291	-0.302	-0.140	-0.093	0.390	-0.297	0.301	0.301
MnSO4_1	-0.375	0.388	-0.606	-0.200	-0.507	-0.072	0.085	0.005	-0.653	0.349	-0.166	0.188	-0.286	-0.635	0.077	-0.146	-0.435	-0.129	-0.089	0.109	-0.489	0.281	-0.151	-0.397	-0.296	-0.061	-0.182	-0.173	0.182
Na2O_1	-0.070	0.145	-0.671	-0.282	-0.714	-0.219	0.241	-0.040	-0.679	0.409	-0.650	0.188	-0.260	-0.774	-0.002	-0.300	-0.404	-0.175	0.123	0.020	-0.460	-0.425	-0.334	-0.164	-0.586	-0.391	0.145	0.094	-0.362
P2O5_1	0.104	0.516	-0.273	0.148	-0.551	0.148	0.567	0.240	-0.605	0.697	-0.224	-0.163	-0.456	-0.833	0.442	-0.321	-0.126	-0.032	-0.079	0.042	-0.432	0.042	-0.041	-0.384	-0.548	-0.434	-0.344	0.440	-0.288
SiO2_1	-0.323	0.276	-0.033	-0.368	-0.128	-0.375	0.060	-0.677	-0.396	0.334	0.274	0.378	-0.355	-0.283	-0.100	-0.181	-0.427	-0.796	-0.110	-0.571	0.146	-0.552	-0.063	-0.469	-0.370	-0.260	0.362	-0.200	0.362
TiO2_1	0.444	-0.121	0.379	-0.480	0.441	-0.142	0.000	-0.357	0.224	0.058	0.570	0.205	-0.140	0.205	0.128	0.024	-0.308	-0.406	-0.288	-0.359	-0.282	0.200	0.257	0.216	0.043	0.289	-0.248	0.082	-0.061
Al	-0.271	0.293	0.191	-0.045	-0.167	-0.292	0.048	-0.367	0.175	0.198	0.090	-0.425	-0.096	-0.091	0.227	0.004	0.053	-0.270	-0.288	-0.159	-0.160	-0.188	-0.672	0.274	-0.248	-0.437	-0.394	0.440	-0.009
Ca	0.392	-0.155	0.345	0.133	-0.234	-0.188	0.230	-0.131	0.350	-0.172	0.336	-0.300	-0.051	0.406	0.251	-0.170	0.456	-0.059	-0.257	-0.316	0.357	-0.220	-0.342	-0.189	0.115	0.061	-0.075	0.051	-0.126
Fe	-0.149	0.206	-0.173	-0.254	-0.128	-0.296	-0.142	-0.406	-0.437	0.126	0.235	0.121	-0.437	-0.428	0.052	0.186	-0.415	-0.478	-0.040	-0.526	0.582	0.257	0.037	-0.285	-0.029	-0.146	-0.188	0.146	-0.188
K	0.164	0.293	0.584	-0.223	0.374	-0.190	-0.068	-0.455	0.271	0.200	0.520	-0.037	0.329	-0.297	0.242	-0.028	-0.355	-0.491	-0.292	-0.165	-0.020	-0.378	0.536	-0.008	-0.198	-0.676	0.548	0.189	0.548
Mg	-0.265	0.013	-0.382	0.664	0.217	0.490	-0.152	0.638	-0.083	-0.176	-0.622	0.147	0.372	-0.062	-0.201	0.234	0.319	0.686	0.576	0.634	0.351	-0.072	0.274	-0.375	0.183	-0.117</			