

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_mes_100g_Co_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	0.277	0.569	0.141	-0.030	-0.056	-0.058	0.442	0.028	0.204	0.107	-0.173	-0.493	-0.601	-0.102	0.324	-0.246	-0.075	-0.266	-0.371	-0.606	-0.171	-0.230	0.066	-0.246	-0.254	-0.546	0.437	-0.193		
Net_CV	-0.275	-0.606	-0.225	-0.409	0.067	0.002	-0.398	-0.125	-0.286	-0.157	0.149	-0.449	0.633	0.122	-0.304	0.214	0.126	0.215	0.329	0.613	0.204	0.217	0.255	-0.082	0.207	0.252	0.563	-0.442	0.163	
Ash_1	0.243	0.301	0.488	0.407	0.092	0.305	-0.029	0.537	0.659	0.225	0.209	-0.099	-0.376	0.015	0.160	0.234	-0.282	0.242	0.191	-0.272	0.122	-0.166	-0.095	0.148	0.279	-0.055	-0.195	0.209	0.206	
Volatile_matter_1	-0.056	-0.538	-0.010	-0.035	0.268	-0.010	-0.294	-0.239	-0.123	-0.245	0.365	0.355	0.647	0.267	-0.156	0.269	0.207	0.202	0.369	0.476	0.373	0.276	0.291	0.140	0.418	0.577	0.697	-0.655	0.252	
GOV_2	0.159	-0.380	-0.373	-0.337	0.269	-0.280	0.216	-0.453	-0.199	-0.306	0.094	-0.353	0.240	0.308	0.255	0.119	0.329	-0.108	0.024	0.111	0.410	0.312	0.066	0.067	0.072	0.289	-0.204	0.078		
C_1	0.254	0.118	-0.159	-0.315	0.118	-0.009	-0.135	-0.422	-0.103	-0.166	-0.173	-0.330	-0.258	0.084	0.140	-0.151	-0.026	-0.441	-0.259	-0.234	-0.126	0.047	0.009	-0.163	-0.073	-0.156	0.134	-0.134		
H_2	0.031	-0.535	-0.010	0.042	0.320	-0.220	-0.208	-0.069	0.113	-0.009	0.311	-0.156	0.379	0.310	0.195	0.496	0.487	0.329	0.527	0.424	0.480	0.386	0.490	0.479	0.455	0.250	0.570	-0.483	0.477	
N_1	0.141	0.128	-0.269	-0.318	-0.047	-0.126	0.075	-0.168	0.056	-0.035	0.093	-0.376	-0.318	0.016	0.403	-0.131	-0.340	-0.255	-0.036	-0.167	-0.018	0.314	-0.046	-0.311	-0.132	-0.404	-0.229	0.318	-0.242	
Sulphur_2	0.231	0.419	0.196	0.071	-0.040	-0.056	0.433	0.181	0.373	0.188	0.057	-0.485	-0.493	-0.033	0.412	-0.061	-0.165	0.019	-0.032	-0.385	0.034	0.101	0.045	-0.057	-0.289	-0.376	0.337	-0.071		
Chlorine_2	-0.502	-0.004	-0.114	0.213	-0.418	0.064	-0.214	0.295	0.087	-0.355	0.295	-0.419	0.293	0.098	-0.487	-0.328	-0.120	-0.063	0.262	-0.124	-0.116	0.226	-0.245	-0.316	-0.284	-0.091	0.170	-0.061		
Ba	0.137	0.197	-0.103	-0.105	-0.237	-0.190	0.285	0.033	0.088	0.005	-0.127	-0.333	-0.249	0.261	-0.184	-0.158	-0.122	-0.026	-0.129	0.004	-0.103	0.024	-0.020	-0.151	-0.170	-0.346	-0.319	0.344	-0.215	
Co	0.085	0.241	0.265	0.240	-0.048	0.390	-0.262	0.362	0.342	0.183	-0.080	0.097	-0.353	-0.085	-0.130	0.067	-0.377	0.006	0.007	-0.169	-0.133	-0.274	-0.244	-0.039	0.030	-0.190	-0.261	0.219	0.043	
Cu	-0.310	-0.127	-0.212	-0.038	-0.244	0.020	-0.132	0.079	-0.185	0.274	-0.036	0.299	0.125	-0.219	-0.087	0.065	-0.240	0.055	0.306	0.482	-0.105	-0.018	-0.015	-0.240	-0.056	-0.134	0.102	0.065	-0.018	
Mn	0.169	0.217	0.515	0.220	0.097	0.339	-0.218	0.003	0.273	-0.022	-0.022	0.103	-0.112	0.060	-0.203	0.018	-0.002	-0.031	-0.037	-0.170	0.051	-0.122	-0.195	0.323	0.117	0.322	0.011	-0.146	0.121	
Ni	0.171	0.200	0.511	0.211	0.106	0.328	-0.212	-0.001	-0.329	-0.032	0.000	0.094	-0.117	0.068	-0.206	0.035	0.004	-0.026	-0.006	-0.164	0.075	-0.102	-0.183	0.333	0.146	0.315	0.021	-0.150	0.132	
V	0.212	-0.231	0.031	0.134	0.241	0.179	-0.034	0.041	0.115	-0.130	0.072	-0.172	0.323	0.323	-0.040	0.287	0.106	0.306	0.190	0.191	0.308	0.327	0.190	-0.021	0.152	0.102	0.285	-0.233	0.245	
Zn	-0.021	-0.123	0.427	0.458	0.140	0.376	-0.439	0.214	0.306	0.104	0.232	-0.420	0.243	-0.003	-0.224	0.361	-0.081	0.404	0.990	0.367	0.269	-0.158	0.183	0.176	0.430	0.383	0.342	-0.391	0.377	
Sb	-0.402	-0.292	0.216	0.432	-0.373	0.209	-0.411	-0.285	0.044	0.410	-0.180	-0.470	-0.397	-0.633	-0.173	0.004	-0.655	0.125	0.513	0.475	-0.176	-0.388	0.092	0.066	-0.025	-0.210	-0.262	0.238	0.093	
As	-0.220	-0.348	-0.344	-0.327	-0.127	-0.327	-0.065	-0.391	-0.221	-0.065	-0.344	-0.046	0.137	-0.155	0.119	-0.024	-0.257	-0.224	0.421	0.587	0.157	0.359	0.441	-0.365	-0.119	-0.274	0.197	0.044	-0.130	
Hg	0.296	-0.016	0.124	-0.123	0.211	-0.201	-0.498	-0.103	-0.179	-0.261	-0.261	-0.235	0.186	0.352	-0.269	-0.098	0.140	-0.462	-0.153	0.048	0.146	0.339	-0.103	0.146	-0.140	0.268	0.259	-0.279	0.028	
Bz	0.408	0.321	0.584	0.462	0.313	0.327	0.057	0.394	0.738	-0.042	0.387	-0.131	-0.512	0.175	0.276	0.491	0.029	0.404	0.149	-0.536	0.299	-0.206	-0.113	0.630	0.523	0.248	-0.091	-0.137	0.581	
Cd_2	-0.484	-0.063	-0.198	-0.023	-0.408	0.065	-0.383	-0.185	0.187	-0.305	0.532	0.153	-0.473	-0.349	-0.206	-0.206	-0.218	-0.036	0.204	0.597	-0.313	0.051	-0.345	-0.329	-0.232	-0.061	-0.172	-0.185		
Pb_2	-0.530	-0.012	-0.249	-0.117	-0.468	-0.118	-0.126	-0.141	-0.344	0.187	-0.195	0.356	-0.070	-0.533	-0.107	-0.283	-0.258	-0.163	0.312	0.582	-0.221	-0.052	0.126	-0.309	-0.335	-0.361	-0.171	0.306	-0.283	
Al2O3_1	0.123	-0.194	0.059	0.218	-0.058	0.102	-0.321	-0.183	0.337	-0.079	0.170	-0.113	0.234	0.303	-0.093	0.142	-0.093	0.242	0.297	0.173	0.362	-0.148	0.289	0.148	0.200	-0.188	0.125	0.188	0.125	
BaO_1	-0.437	0.164	-0.271	-0.020	-0.476	-0.127	-0.098	-0.103	-0.471	0.310	-0.485	0.078	-0.067	-0.516	-0.144	-0.346	-0.041	-0.081	-0.026	0.353	-0.041	0.110	-0.331	-0.539	-0.407	-0.297	0.363	-0.283		
CaCO3	0.328	0.005	-0.156	-0.418	0.227	-0.281	0.461	-0.710	-0.112	-0.225	0.102	-0.649	-0.082	0.251	0.440	-0.143	0.086	-0.337	0.041	-0.028	0.303	0.685	0.083	-0.040	0.108	0.107	-0.090	-0.920	-0.121	
Fe2O3_1	0.024	0.007	-0.270	-0.099	-0.058	-0.270	0.372	-0.351	0.266	-0.120	-0.272	-0.085	-0.364	-0.012	0.051	0.231	-0.228	0.069	-0.180	-0.141	-0.031	0.035	0.409	-0.069	-0.151	-0.270	-0.156	-0.068	0.126	-0.226
K2O_1	0.014	0.455	0.050	0.091	-0.247	-0.032	0.293	0.142	0.214	-0.323	-0.280	-0.520	-0.235	0.131	-0.185	-0.018	-0.088	-0.374	-0.476	-0.286	-0.343	-0.286	-0.024	-0.352	-0.496	-0.406	0.561	-0.139		
MgO_1	-0.234	-0.139	-0.592	-0.533	-0.244	-0.428	0.351	-0.538	0.041	-0.202	-0.193	0.100	-0.089	0.141	-0.292	0.087	-0.324	-0.255	0.800	0.000	-0.273	-0.414	-0.377	-0.013	0.193	-0.331	0.193	-0.331		
MnSO4_1	-0.640	-0.279	-0.385	-0.148	-0.427	-0.270	-0.010	-0.542	-0.030	-0.188	-0.188	0.392	0.344	-0.399	-0.183	-0.183	0.183	0.030	0.154	0.594	-0.101	0.077	0.226	-0.256	-0.301	-0.186	0.111	0.029	-0.172	
Na2O_1	-0.447	-0.058	-0.441	-0.325	-0.392	-0.478	0.116	-0.196	-0.540	0.115	-0.331	-0.010	-0.044	-0.241	-0.101	-0.391	0.141	-0.243	-0.272	0.072	-0.288	0.092	-0.079	-0.146	-0.469	-0.366	-0.220	0.313	-0.366	
K2O_2	0.409	-0.218	0.191	0.280	0.480	0.188	0.005	0.126	0.166	-0.496	0.128	-0.144	0.513	0.497	-0.105	0.298	0.495	0.439	-0.191	-0.203	0.318	0.045	0.187	0.152	0.260	0.577	0.344	-0.470	0.343	
PP05_1	-0.415	-0.285	0.223	0.328	0.057	0.325	-0.650	0.335	0.090	0.132	0.217	0.717	0.376	-0.027	-0.418	0.317	-0.152	0.325	0.401	0.440	0.995	-0.286	0.028	0.055	0.466	0.347	0.410	0.050	-0.289	
SiO2_1	-0.118	0.267	-0.170	-0.106	-0.292	0.121	-0.049	0.031	-0.118	0.023	-0.375	0.013	-0.403	-0.266	-0.142	-0.328	-0.325	-0.306	-0.357	-0.233	-0.396	-0.220	-0.351	-0.427	-0.448	-0.509	0.508	-0.337		
Al	0.196	-0.193	0.020	0.137	0.283	-0.024	0.078	0.188	0.306	-0.077	0.430	-0.148	0.111	0.195	0.306	0.311	-0.075	0.313	0.356	0.087	0.385	0.211	0.381	-0.038	0.402	0.157	0.214	-0.211	0.222	
Ca	0.490	0.085	0.209	-0.105	0.369	-0.075	0.379	-0.331	0.380	-0.107	0.391	-0.632	-0.203	0.322	0.555	0.124	-0.074	-0.074	0.100	-0.107	0.508	0.622	0.308	0.212	0.141	-0.178	0.114	-0.178	0.114	
Fe	0.177	-0.071	-0.042	-0.116	0.150	-0.205	0.365	-0.081	0.267	-0.112	0.334	-0.414	-0.123	0.163	0.486	0.121	-0.003	0.050	0.216	-0.075	0.321	0.446	0.255	0.037	0.185	-0.073	0.040	0.001	0.049	
K	0.211	0.351	0.306	0.291	0.012	0.098	0.214	0.465	0.513	0.231	0.040	-0.321	-0.458	-0.045	0.282	0.130	-0.098	0.162	0.014	-0.372	0.002	-0.177	-0.074	0.141	0.069	-0.254	-0.344	-0.289	0.119	
Mg	-0.051	-0.089	-0.370	-0.286	-0.103	-0.287	0.349	-0.181	-0.188	0.190	0.033	-0.305	0.015	0.008	0.322	0.001	-0.096	-0.063	0.210	0.271	0.052	0.415	0.098	-0.190	-0.121	-0.407	0.053	0.138	-0.096	
Mn	-0.536	-0.278	-0.234	0.018	-0.323	-0.129	-0.085	-0.080	-0.389	-0.006	-0.147	0.380	0.384	-0.317	-0.216	-0.047	0.185	0.239	0.606	-0.007	0.056	0.259	-0.187	-0.185	-0.101	0.174	-0.057	-0.032		
Na	-0.415	0.050	-0.159	-0.105	-0.383	-0.56																								