

Supplementary data

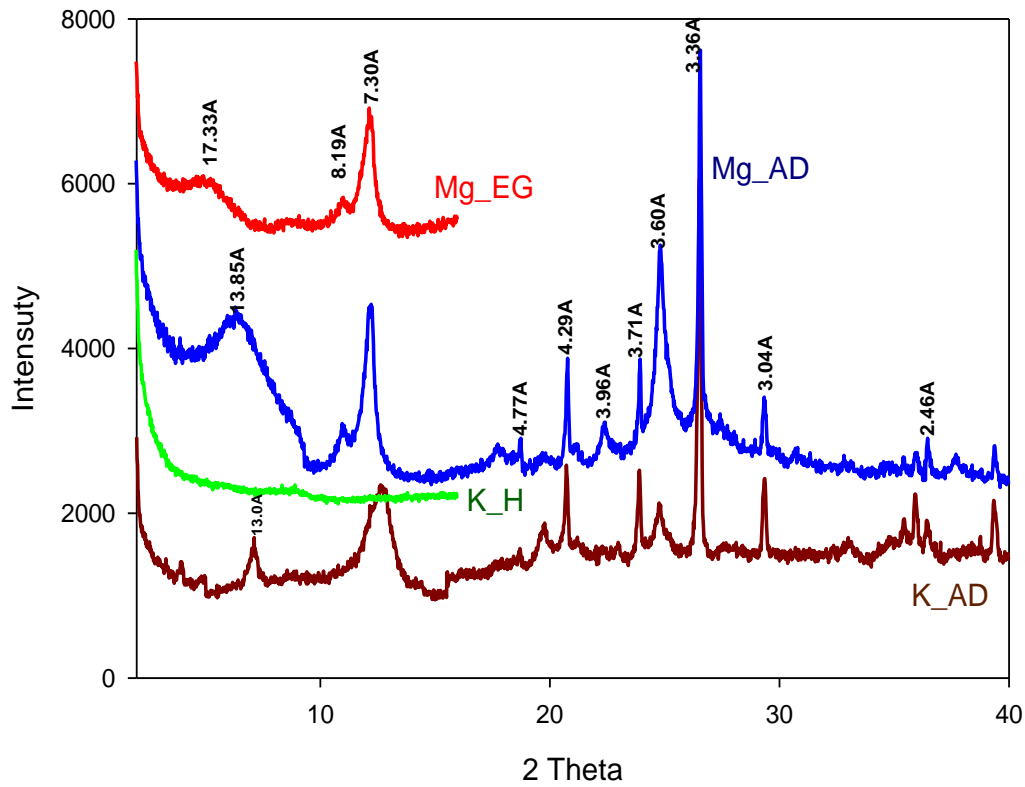


Figure S1. XRD analysis for clay fraction ($<2\ \mu$) of raw unmodified clay deposits.

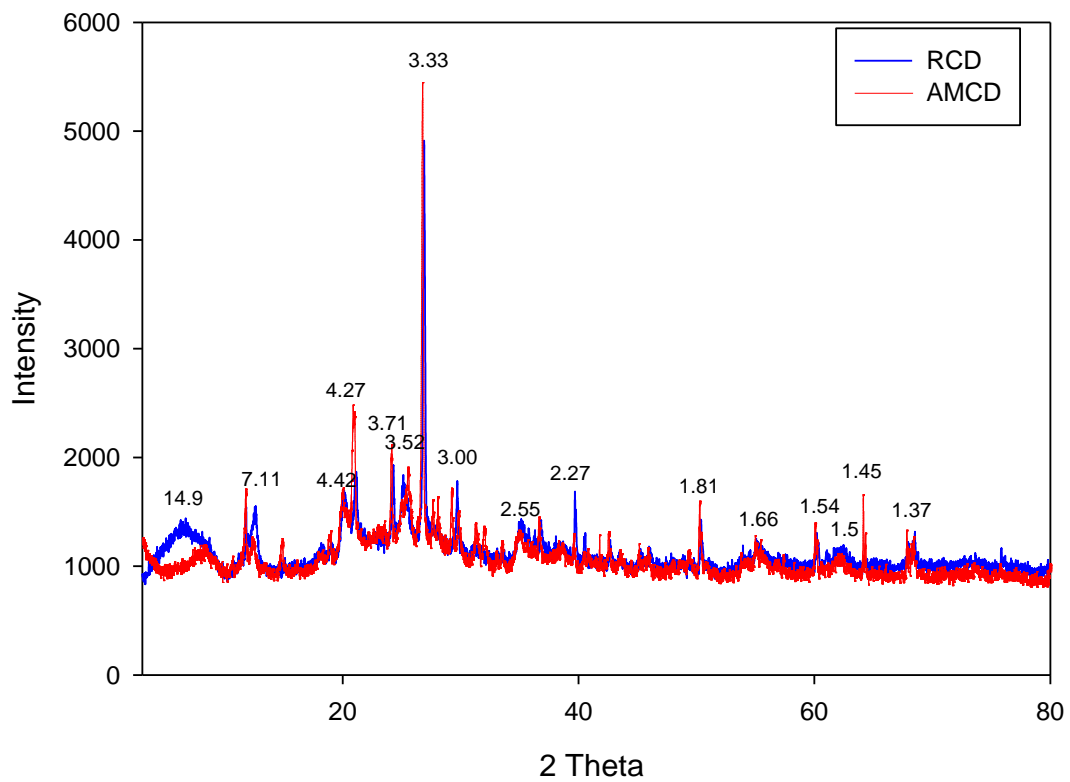


Figure S2. XRD analysis for raw (RCD) and acid-modified clay deposits (AMCD).

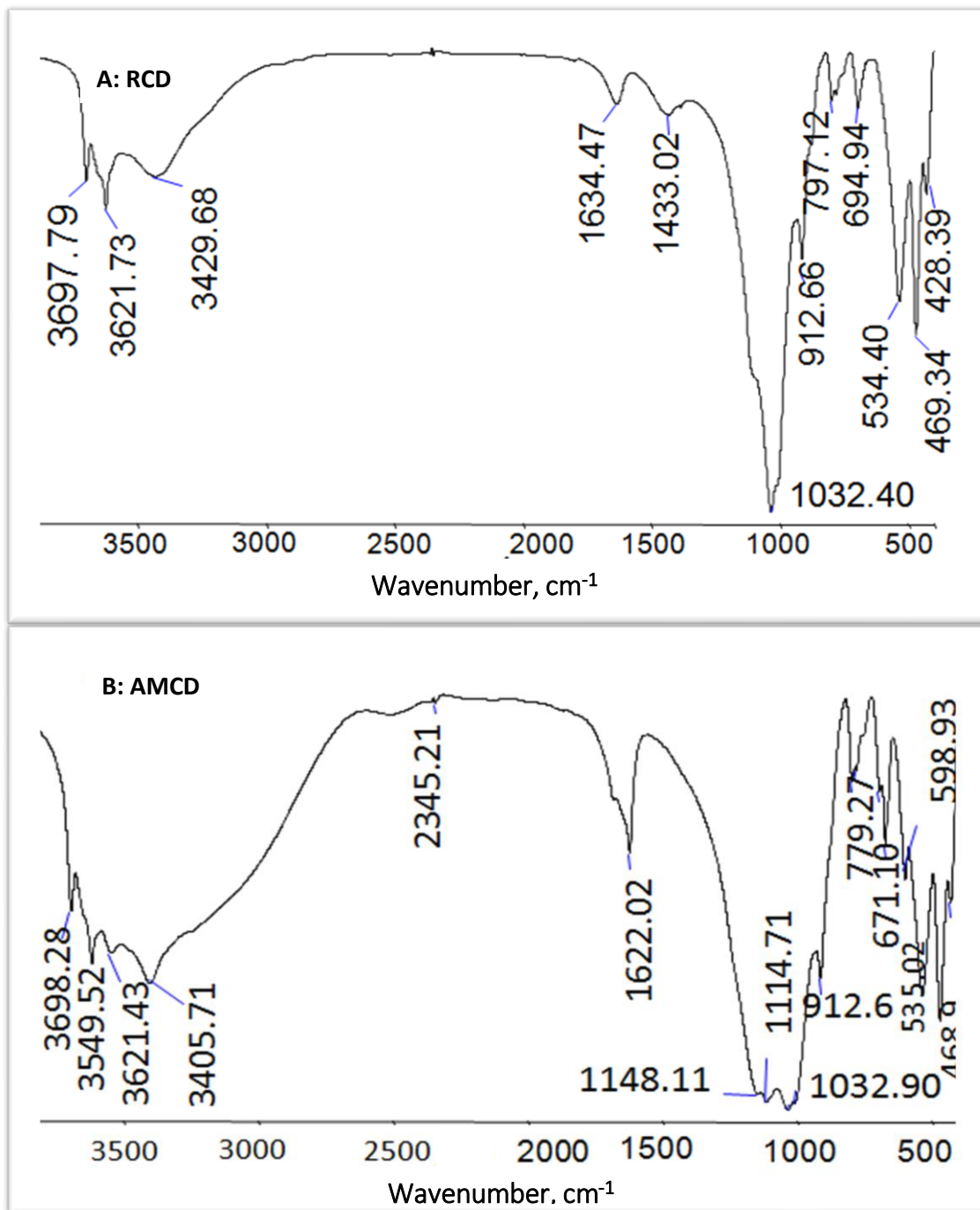


Figure S3. FTIR analysis for raw (A: RCD) and acid-modified clay deposits (B: AMCD).

Table S1. The overall changes in soil sand, silt and clay following the addition of modified and unmodified clay deposits, regardless levels of added Mo.

Treatments	Application rate (%)	Sand	SD	Silt	SD	Clay	SD	Texture
CK	0	78.5	±0.92	9.2	±0.00	12.3	±0.23	Sandy loam
	2.5	76.7	±0.67	9.3	±0.51	14.0	±0.45	Sandy loam
RCD	5	75.0	±0.54	9.1	±0.42	15.9	±0.00	Sandy loam
	10	70.5	±0.97	8.9	±0.81	20.6	±0.62	Sandy clay loam
	2.5	76.2	±0.81	9.4	±0.65	14.5	±0.83	Sandy loam
AMCD	5	74.6	±0.11	9.0	±0.96	16.3	±0.72	Sandy loam
	10	70.3	±0.34	8.4	±0.59	21.3	±0.67	Sandy Clay Loam

CK: control soil; RCD: raw clay deposits; AMCD: acid-modified clay deposits