Appendix D. Thin sections descriptions. Fine material: clay and fine silt; l.p.: lower part; u.p.: upper part; abundance: very dominant: >70%; dominant: 50-70%; common: 30-50%; frequent: 15-30; few: 5-15%; very few: <5%.

	01 A2-BC-2AB1 (29-39 cm)	01 2AB1-2AB2 (41-51 cm)	01 2Bt (86-96 cm)
Microstructure	Complex, subangular blocky/crumb	u.p. complex, subangular blocky/locally crumb l.p. subangular blocky	Intergrain microaggregate
Aggregates	Common moderately separated partially accommodated subangular blocky (coarse sand to very fine gravel size), and common weakly-moderately separated unaccommodated crumb (very fine sand to very coarse sand size)	Common weakly-moderately separated accommodated subangular blocky (very fine gravel to fine gravel size), and frequent weakly-moderately separated unaccommodated crumb and granular (very fine sand to very coarse sand size)	Few weakly separated partially accommodated subangular blocky (coarse sand to medium sand size), and dominant weaklymoderately separated unaccommodated crumb and granular (very fine sand to very coarse sand size)
Porosity	Frequent complex packing voids; few linear planes	Common compound packing voids; frequent linear planes; very few chambers	Frequent complex packing voids; very few linear planes
c/f limit - c/f ratio	15 μm - 40/60	15 μm - 30/70	15 μm - 50/50
c/f related disrtibution	Closed single spaced porphiric	Open double spaced porphiric	Gefuric
Mineral fragments	Few weakly weathered angular and subangular claystones and very few weakly weathered angular and subangular sandstones Few allochthonous weathered rock fragments	Few moderately weathered angular and subangular claystones and sandstones	Frequent weakly weathered angular and subangular sandstones and few weakly weathered angular and subangular claystones
Fine material	Yellowish cloudy	Yellow-reddish cloudy	Yellowish cloudy
b - Fabric	Speckled	Speckled-striated	Speckled
Plant origin material	Few plant residues and very few charcoals	Few plant residues and charcoals	Very few plant residues and charcoals
Pedofeatures	Very few concentric nodules of Fe-Mn (moderately impregnated)	Few typic nodules of Fe-Mn (moderately impregnated)	Few aggregate and few alteromorphic nodules of Fe-Mn (moderately impregnated); few typic clay coatings; rare typic clay infillings
Reworked soil fragments	Frequent reddish, weakly striated, subangular blocky aggregates rich in nodulesof Fe- Mn		
	02 ABt1 (20-60 cm)	02 2Btg (121-151 cm)	04 Btg-Bt (49-59 cm)
Microstructure	Complex, granular/subangolar blocky	Vughy	Fissure (u.p.) Crumb (l.p.)
Aggregates	Very few weakly separated partially accommodated subangular blocky (very coarse sand to medium sand size), and dominant weakly separated unaccommodated granular (fine sand to medium sand size)	Few weakly separated unaccommodated granular (silt to medium sand size)	Dominant weakly-moderately separated accommodated subangular blocky (very coarse sand to coarse sand size), and few weakly-moderately separated unaccommodated granular (fine sand to coarse sand size)
Porosity	Common complex packing voids; very few linear planes; very few chamber	Common vughs; very few compound packing voids; few linear planes; very few chamber; very few channels	Frequent complex packing voids; frequent linear planes; few chamber
c/f limit - c/f ratio	15 μm - 40/60	15 μm - 40/60	15 μm - 30/70
c/f related disrtibution	Closed single spaced porphiric	Closed single spaced porphiric	Porphiric; open double spaced (u.p.) and close single spaced (l.p.)
Mineral fragments	Few moderately weathered angular and subangular claystones and sandstones Few allochthonous weathered rock fragments	Common moderately weathered angular and subangular claystones and sandstones	Frequent moderately weathered angular and subangular claystones and sandstones

Fine material	Yellowish cloudy	Yellobrownish cloudy	Yellowish cloudy
b - Fabric	Speckled-striated	Speckled-striated	Speckled-striated
Plant origin material	Few plant residues		Very few roots
Pedofeatures	Very few digitate nodules of Fe- Mn (moderately impregnated); few typic clay coatings; rare intercalations	Few dense digitate nodules of Fe- Mn (thick impregnated); frequent typic clay coatings; rare crescent typic clay coatings; very few typic clay infillings; rare Fe-Mn hypocoatings	Few aggregate nodules of Fe-M (moderately impregnated); frequent typic clay coatings; frequent typic clay infillings; ra- depletion podefeatures; rare intercalations
Reworked soil fragments	Very few subangular blocky aggregates of fine material		
	05 ABt1-ABt2 (21-31 cm)		
Microstructure	Complex, subangular blocky/locally crumb	_	
Aggregates	Common moderately separated partially accommodated subangular blocky (very fine gravel to coarse sand size), and frequent moderately separated unaccommodated granular (very fine gravel to coarse sand size)		
Porosity	Frequent compound packing voids; frequent linear planes and channels; few chambers		
c/f limit - c/f ratio	15 μm - 30/70	_	
c/f related disrtibution	Open porphiric	_	
Mineral fragments	Frequent moderately weathered angular and subangular claystones and sandstones	-	
Fine material	Yellowbrownish cloudy	_	
b - Fabric	Speckled-striated	_	
Plant origin material	Few plant residues and charcoals	-	
Pedofeatures	Frequent typic nodules of Fe-Mn (moderately impregnated); very few typic clay coatings; rare passage features		
Reworked soil fragments	1 5	_	