Table S1: Results of micromorphological analysis. The classification is as follows: P – present, VF – very few (<5 %), FE – few (5– 15%), C – common (15–30 %), FR – frequent (30– 50%), D – dominant (50–70%), VD – very dominant (> 70% of the visible area)

Thin section	Lithostratigraphic unit	Depth (cm)	Microstructure	Voids	Groundmass		Mineral composition	Organic matter			Inorganic residues of biologic origin					Anthropogenic elements				Pedo-features	
					Nature (PPL)	B-fabric (XPL)	Mineral grains and rock fragments	Fresh roots	Plant tissue	Fine organic components	Diatoms	Bivalvia	Rafts	Shells/ malacofauna	Phytoliths	Charcoal	Ceramics	Ash	Bones	Nodules	Excremental features
1	3	146–149	Massif/ Channel	Channels Vughs Planes	Brownish grey	Crystallitic	-	-	C	FR	C	FR	FR	FE	-	P	-	-	P	-	-
	4 black upper laminae 0.5–0.8 cm	149–152	Platy/ Crack	Planes Channels	Dark brown	Undifferentiated	-	-	P	VD	P	-	-	C	-	-	-	-	-	Ca - P	-
	4 calcareous laminae		Platy	Planes Channels	Greyish brown	Crystallitic/ Undifferentiated	-	-	P	FR	FR	FE	-	C	-	-	-	-	-	-	-
	4 organic laminae		Platy	Planes Channel	Dark brown	Undifferentiated	-	-	P	VD	FR	FE	-	C	-	-	-	-	-	Ca - C	-
	5a	152–155	Platy	Planes, Channels Vughs Vesicles	Grey to brownish grey	Crystallitic	-	-	C	C	FR	P	-	FE	-	-	-	-	-	P	F
2	5a	156–164	Platy	Planes Channels Vughs	Grey to brownish grey	Crystallitic	-	-	C	C	FR	P	-	FE	P	P	-	-	P	-	F
3	6b	220	Massif	Planes	Pale brown to brown	Striated/ Crystallitic	Quartz, micas, fragments of travertine	-	FE	FR	-	-	-	VF	-	P	-	-	P	Fe - P	-
4	6b	245	Massif	Planes	Pale brown to brown	Striated/ Crystallitic	Quartz, micas, fragments of travertine	-	FE	FR	-	-	-	VF	-	P	-	-	-	-	-
5	6b	265	Massif	Planes	Pale brown to brown	Striated/ Crystallitic	Quartz, micas, fragments of travertine	-	FE	FR	-	-	-	VF	-	P	-	-	VF	Fe - P	-