

Table 3.1a

Sample nr.	A ₁	A ₁	A ₂	A ₂	A ₃	A ₃	A ₄	A ₄	B ₁₀	C ₁₆	C ₁₈
Fraction in μ	<2	2-50	<2	2-50	<2	2-50	<2	2-50	2-50	2-50	2-50
Diffr.nr.	225,258,259, 260,261	226,262,263	227	228	291	292	293	294	217B	176	178
Material	joint in	saprolite	saprolite		A-horizon	paleosol	B-horizon	paleosol	estuarine terrace	saprolite	saprolite
Depth in m.	4.25-4.45	4.25-4.45	4.00-4.25	4.00-4.25	0.60-0.75	0.60-0.75	1.15-1.20	1.15-1.20	1.47-1.64	2.30-2.46	2.77-3.05
Kaolinite		+++ possibly	+++	++	+++ and/or +++	+++	++	++	+++ (good crystallised)		+++
Metahalloysite	++	+++	+++	++			++	++		+++	
Gibbsite					+		+			tr.	
Micas						++		++	+		
Muscovite (>2 μ)		+++		++ (2M ₁ and M)		++		++	+		
Illite (<2 μ)			+				possibly				
Biotite		+++									
Vermiculite		+++		+	..		possibly				
Montmorillonite	+++										
Palygorskite											
Sepiolite											
Mixed-layer minerals		..	+	..	.. (21Å)	+	+	+ (45Å, 34Å, 29Å)		possibly	
Siderite											
Quartz	tr.	+++	.	+	..	+++	+	++	+		+
Feldspars					.. (plag.)	tr.	tr.				
Microcline		.	..					++			
Plagioclase		..	..	++ (albite)				+(anorthite)			
Goethite											
Other components											

+++ = abundant

++ = moderate

+ = some

.. = little

. = very little

tr. = trace

(p) = treated with peroxide

Table 3.1b

Sample nr.	D ₁	D ₁	D ₁ (p)	D ₁ (p)	D ₂	D ₂	E ₁ (p)	E ₁ (p)	E ₂ (p)	E ₂ (p)	E ₃	E ₃	E ₄	E ₄
Fraction in μ	<2	2-50	<2	2-50	<2	2-50	<2	2-50	<2	2-50	<2	2-50	<2	2-50
Diffr.nr.	250,265	251	295	296,311, 312,313	240	241,268, 269	297	298,314, 315,316	299	300	242,270, 271	243,272, 273,274	244,275 276,277	245,256, 278,279
Material	A-soil horizon		A-soil horizon		B-soil horizon		A-soil horizon		B-soil horizon		C-soil horizon		D-soil horizon	
Depth in m.	0.10-0.25	0.10-0.25	0.10-0.25	0.10-0.25	0.45-0.58	0.45-0.58	0.00-0.09	0.00-0.09	0.25-0.32	0.25-0.32	0.51-0.59	0.51-0.59	0.90-1.00	0.90-1.00
Kaolinite		+	++	+	++	++		++ and/or	++ and/or	++	++	++	++	+++ (possibly)
Metahalloysite	++	+	++	+	++	++	++	++	++	++	++	++	++	+++
Gibbsite	+	none	+			..	++		+	..	..	..	+	+
Micas		..		.						..
Muscovite (>2 μ)						..						..		+
Illite (>2 μ)			..			..(2M ₁)		..						
Biotite					..	..						..		+
Vermiculite	++	+	++	++	++	++	++	++	++	++	++	+++		+++
Montmorillonite														
Palygorskite														
Sepiolite														
Mixed-layer minerals	..	..	+	.	+		..	..(37Å)	+	..	..	..	..	..
											with mica component			
Siderite														
Quartz	+	++	..	++	+	+	tr.	++	tr.	++	tr.	++	+	++
Feldspars									tr.	++				
Microcline				+	tr.	..						.		
Plagioclase	++	++		++	tr.	++		++				++		++
Goethite														
Other components	Fe-bearing amorph mat.+++		Fe-bearing amorph mat.+++											

+++ = abundant
 ++ = moderate
 .. = little
 . = very little
 tr. = trace
 (p) = treated with peroxide

Table 3.1c

Sample nr.	H ₂	H ₂	H ₂ (p)	H ₂ (p)	H ₃	H ₃	H ₄	H ₄	K ₅	L ₁₀	L ₁₃	P ₄	S ₃	2-64a	2-64a	2-64b	2-64b
Fraction in μ	2	2-50	<2	2-50	<2	2-50	<2	2-50	2-50	2-50	2-50	2-50	2-50	<2	2-50	<2	2-50
Diffr.nr.	252	253	301	302	246	247	248,280	249	218,281,282	174,175, 283,284	177,184,185, 186,187	219	220	224,264	222	113	221
Material	A-soil	horizon	A-soil	horizon	B-soil	horizon	C-soil	horizon	amphibolite saprolite	saprolite	schist saprolite	estuarine terrace	schist saprolite	joint in	bedrock	joint in	bedrock
Depth in m.	1.05-1.20	1.05-1.20	1.05-1.20	1.05-1.20	1.55-1.65	1.55-1.65	1.70-1.75	1.70-1.75	0.64-0.81	1.60-1.76	1.10-1.26	0.71-0.94	2.60-2.76	4.80-4.90	4.80-4.90	4.80-4.90	4.80-4.90
Kaolinite	++ and/or	++ and/or	present	++ and/or	++	+++	+++	+++	+++	+++	+++	+++	+++				
Metahalloysite	++	++		++	++		+++	+++	+++	+++							
Gibbsite		..		..	+	+	++	+	tr.	+							tr. (possibly 2M)
Micas						++							++ (2M and 1M)				+
Muscovite (>2μ)		++		++						+	+	..	++				
Illite (<2μ)	+		present		+		.					..	++				
Biotite				++				++				..	++				
Vermiculite		..		..			.	.			possibly			++			+
Montmorillonite										possibly							possibly
Palygorskite										possibly							
Sepiolite										possibly							
Mixed-layer minerals	+	..	present	.. (23Å)	..				++ (illite-possibly montmorillonite or vermiculite component)			+ not determinable		+++ (10, 2Å) (pos- sibly vermiculite- mica (micadominant))	+++ (10, 4Å)	+++ (10, 2Å)	+++ (10, 6Å)
Siderite																	
Quartz	++	+++	present	+++	++	+++	.	+++	tr.		+	+	++	..	+	tr.	..
Feldspars	..				tr.		tr.			.. (micr.)				..		tr.	..
Microcline		..				..								..	+++
Plagioclase		+++		+++		.											..
Goethite									+								
Other components			amorph mat.											4,12Å peak	..7Å		

+++ = abundant
 ++ = moderate
 + = some
 .. = little
 . = very little
 tr. = trace
 (p) = treated with peroxide

