

**APPENDIX 1**  
**Quantitative and qualitative petrographic analyses of CC and TOM**

Sample symbol	Organic matter type (s) in sample	CC							TOM						
		Quantitative content per sample [%]	Size of organic matter debris	Maceral group (qualitative analyses)			$R_r [\%]^1$	Pyrite occurrence (qualitative analyses)	Quantitative content per sample [%]	Size of organic matter debris	Maceral group (qualitative analyses)			$R_r [\%]^2$	Pyrite occurrence (qualitative analyses)
				V	L	I					V	L	I		
E1	◆◆	81.0	1–2 mm	+	–	+	0.92	N	19.0	DOM <sup>*</sup>	+	–	+	0.47	P
E2	◆◆	47.5	1–2 mm	+	+	+	0.75	N	52.5	DOM	+	–	+	0.62	P
E3	●	96.7	1 mm	+	–	+	0.96	N	3.3	DOM	+	–	+	0.54	MS
E4	◆◆	52.5	3–5 mm	+	+	+	1.02	N	47.5	1–2 mm	+	–	+	0.52	P
E5	▲◆	100.0	1 mm	+	–	+	1.10	MS	0.0	xxx	xxx			xxx	MS
E6	◆◆	48.8	1 mm	+	+	+	0.53	N	52.2	1–5 mm	+	–	+	0.43	N
E7	◆◆	6.6	1–2 mm	+	–	+	0.92	N	93.4	2–6 mm	+	–	+	0.41	P
E8	▲◆	100.0	4x8 cm	+	+	+	1.17	N	0.0	xxx	xxx			xxx	xxx
E9	◆◆	traces	DOM	xxx		xxx	MS	traces	DOM	xxx			xxx	MS	
E10	□	100.0	2 mm–1 cm	+	+	+	1.07	MS	0.0	xxx	xxx			xxx	MS
E11	◆◆	97.7	1–2 mm	+	–	+	1.39	N	2.3	1–5 mm	+	–	–	0.61	P
E12	◆◆	95.2	1–3 mm	+	+	+	0.89	MS	4.8	DOM	+	+	+	0.56	MS
E13	◆◆	98.0	2–5 mm	+	+	+	1.22	MS	2.0	DOM	+	–	–	0.61	MS
E14	◆◆	38.3	1 mm	+	–	+	1.29	N	61.7	1mm–1 cm	+	–	+	0.44	P
E15	◆◆	39.8	1–2 mm	+	–	+	0.95	MS	60.2	DOM	+	–	+	0.49	MS
E16	◆◆	5.5	DOM	+	–	+	1.27	N	94.5	1–2 mm	+	–	+	0.53	P
EG1	▼◆	0.0	xxx	xxx		xxx	xxx	100.0	DOM	+	–	+	0.67	N	
EG2	□	100.0	2–4 mm	+	+	+	1.22	MS	0.0	xxx	xxx			xxx	MS
EG3	◆◆	96.7	2 mm–1cm	+	+	+	1.17	N	3.3	DOM	+	–	+	0.46	N
EG4	○	0.0	xxx	xxx		xxx	xxx	traces	DOM	xxx			xxx	xxx	

V – vitrinite; L – liptinite; I – inertinite; MS – pyrite occurrence in mineral setting; N – negative (no pyrite in organic matter); P – positive (occurrence in organic matter); + – occurrence in organic matter; – no maceral group in organic matter; DOM – dispersed organic matter, organic debris <0.1 mm; <sup>1</sup> – random reflectance in CC; <sup>2</sup> – random reflectance of TOM; xxx not determined;

▲ CC ; ▼ TOM; ● CC + TOM; □ CC + POM; ○ TOM + POM; ◆ CC + TOM + POM; CC coal clasts; TOM terrigenous organic matter; POM planktonic organic matter;