

Table 5.1. Mineralogical composition for each lithostratigraphic zone in drill core Rex 2. Abbreviations: Brnte = Braunite, Hem = Hematite, Todo = Todorokite, Jacob = Jacobsite, Man = Manganomelane, Pyr = Pyrolusite xxx = Dominant phase (> 5%), xx = Major phase (20 – 50%), x = Minor phase (5 – 20%), x = Trace phase (< 5%).

Zone	Diagenetic mineral assemblage			Supergene mineral assemblage			Whole rock analyses (wt%)					
	Oxides			Oxides			Mn ₃ O ₄	Fe ₂ O ₃	MgO	CaO	K ₂ O	Na ₂ O
	Brnte	Hem	Jacob	Man	Todo	Pyr						
M	x	xx		xxx	xxx		58.8	8.26	1.98	1.91	1.22	0.53
C	xx	xx		xxxx	xxx	xx	59.8	6.73	1.96	1.38	1.23	0.38
N	x	xx		xx	xxx	xx	54.7	9.36	1.83	1.81	0.79	0.45
B		xx	xxx		xxx	xx	40.7	21.3	1.14	1.16	0.58	0.37
L		xxxx	xx		xx		29.8	30.8	0.97	0.72	0.31	0.34

Hausmannite occurs in M, C and N - Zones (x). Calcite occurs in M -Zone (xx). Serpentine occurs in M (xx) and N -Zones (xxx). Magnetite occurs in L -Zone (xxx) and quartz was observed in the B (x) and L -Zones (xx). The term Manganomelane is used to name a whole group of poorly crystalline manganese oxides as suggested by Frenzel (1980). This group includes the end members romanèchite (Ba and H₂O-rich), cryptomelane (K-rich) and manjiroite (Na-rich).



50%),

Ba
0.84
0.74
0.10
0.10
0.06

te

