

AM-95-575

Crystal structure of minehillite: Twinning and structural relationships to
reyerite

Yongshan Dai, Jeffrey E. Post, Daniel E. Appleman

For deposit: Tables 4 and 5

American Mineralogist, 80, 1-2, 173-178.

Table 4. Atomic displacement factors for minehillite structure

ATOM	U_{11}	U_{22}	U_{33}	U_{23}	U_{13}	U_{12}
K	0.0211(9)	0.0211(9)	0.027(1)	0	0	0.0122(4)
Zn	0.0043(4)	0.0110(3)	0.0120(3)	-0.0001(1)	-0.0003(3)	0.0022(2)
Al	0.0071(5)	0.0071(5)	0.0099(9)	0	0	0.0035(3)
Ca1	0.0056(4)	0.0056(4)	0.0182(7)	0	0	0.0028(2)
Ca2	0.0073(3)	0.0076(4)	0.0148(4)	-0.0005(3)	-0.0010(3)	0.0036(3)
Ca3	0.0090(4)	0.0088(4)	0.0163(4)	-0.0002(3)	-0.0001(3)	0.0046(3)
Si1	0.0054(5)	0.0054(5)	0.0113(9)	0	0	0.0027(3)
Si2	0.0052(5)	0.0053(5)	0.0113(5)	-0.0001(4)	0.0003(4)	0.0019(4)
Si3	0.0049(5)	0.0048(5)	0.0114(5)	0.0005(4)	0.0003(4)	0.0022(4)
Si4	0.0056(5)	0.0072(5)	0.0109(5)	-0.0006(4)	0.0000(4)	0.0032(4)
O1	0.011(1)	0.011(1)	0.023(2)	0	0	0.0054(7)
O2	0.013(1)	0.013(1)	0.006(2)	0	0	0.0066(7)
O3	0.015(1)	0.010(1)	0.011(1)	0.002(1)	0.001(1)	0.006(1)
O4	0.013(1)	0.006(1)	0.017(1)	-0.001(1)	-0.002(1)	0.003(1)

Table 4. continued

05	0.011(1)	0.011(1)	0.015(1)	-0.000(1)	0.000(1)	0.005(1)
06	0.008(1)	0.008(1)	0.016(2)	-0.001(1)	-0.000(1)	0.004(1)
07	0.015(1)	0.007(1)	0.024(2)	-0.001(1)	-0.004(1)	0.005(1)
08	0.008(1)	0.007(1)	0.016(2)	-0.002(1)	-0.002(1)	0.003(1)
09	0.013(1)	0.011(1)	0.012(1)	0.001(1)	0.001(1)	0.006(1)
010	0.017(1)	0.012(1)	0.015(1)	-0.000(1)	-0.003(1)	0.010(1)
011	0.010(1)	0.011(1)	0.018(1)	-0.005(1)	-0.003(1)	0.004(1)
012	0.013(1)	0.011(1)	0.017(1)	0.000(1)	-0.002(1)	0.006(1)
