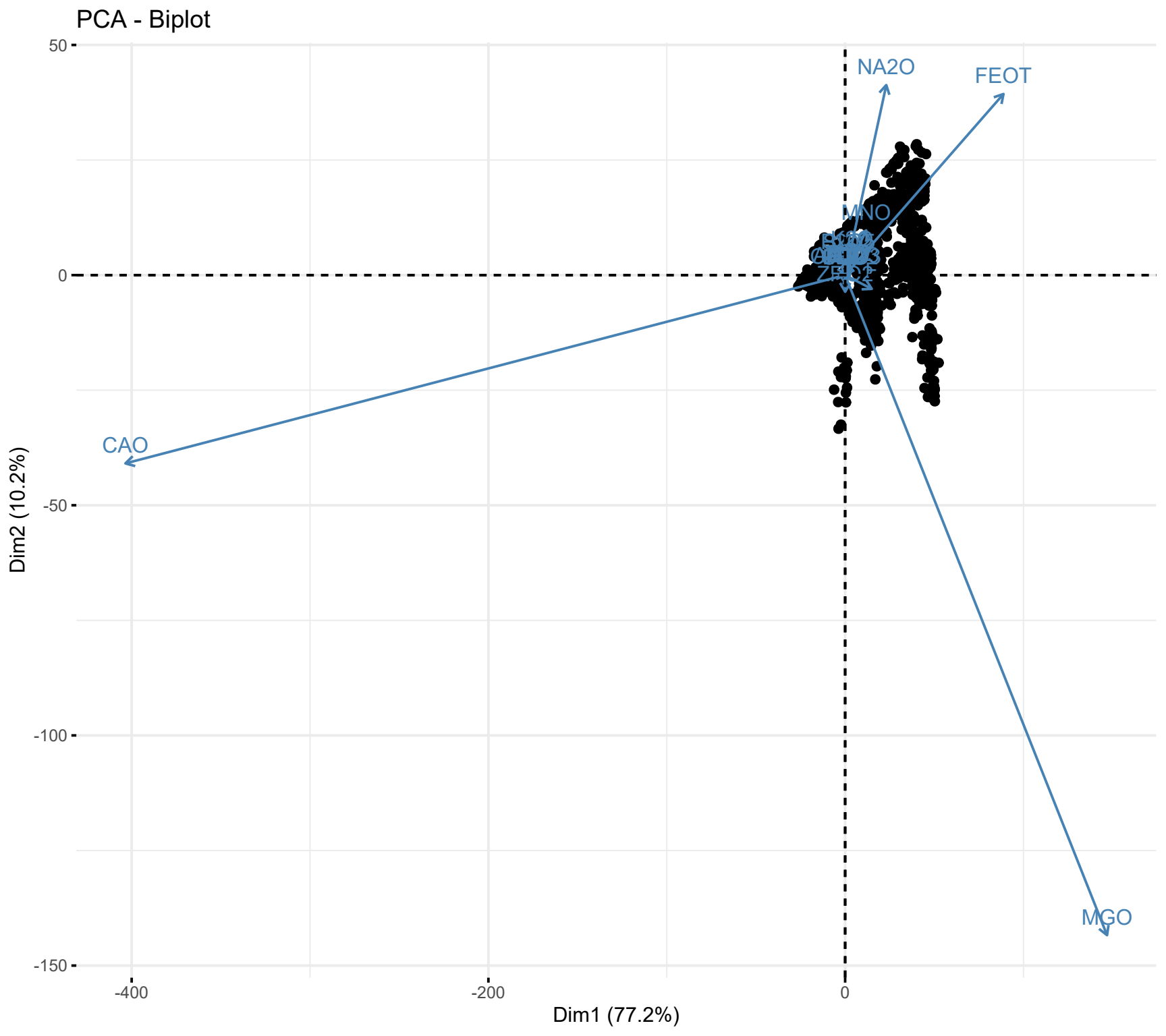
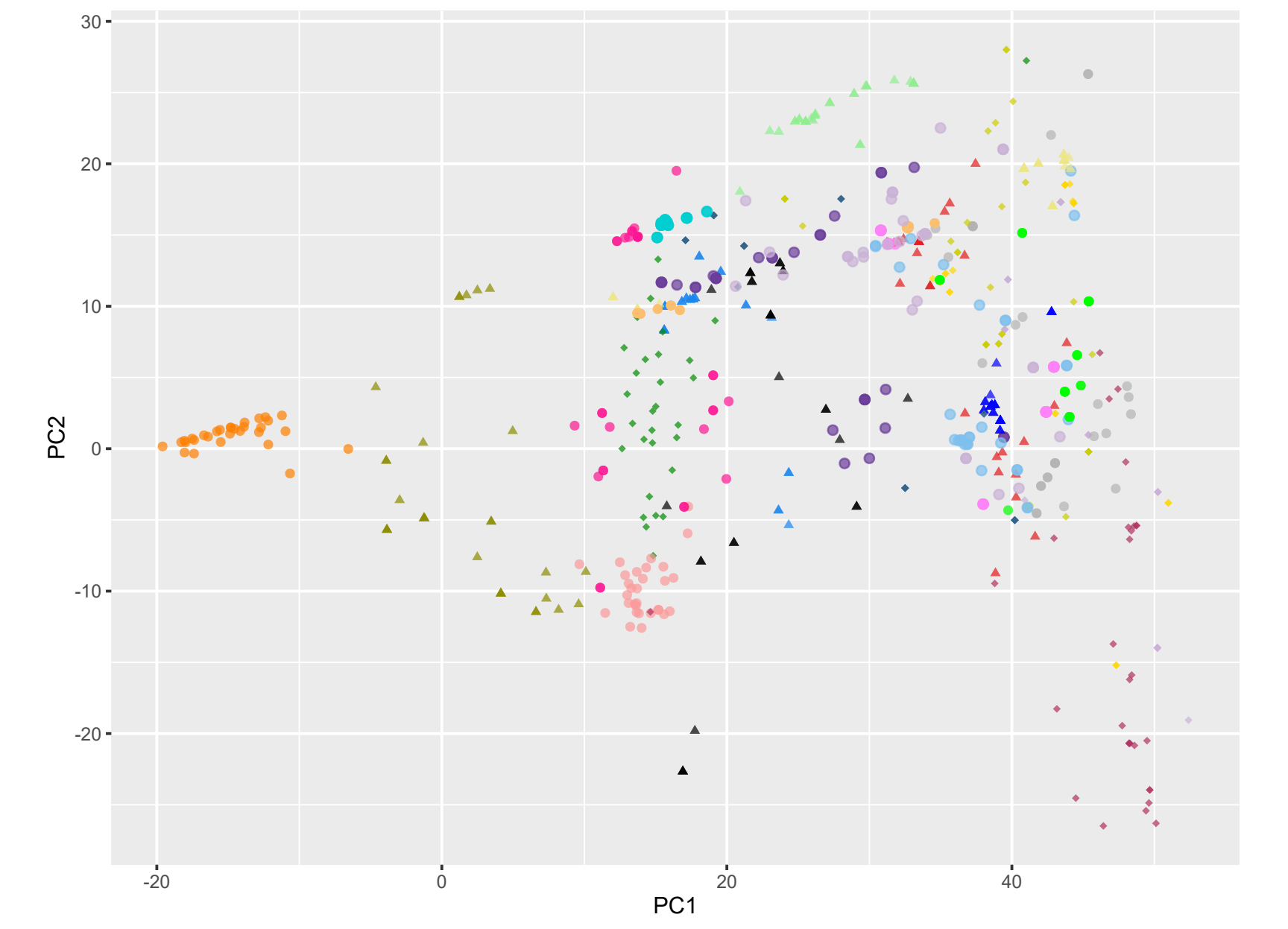
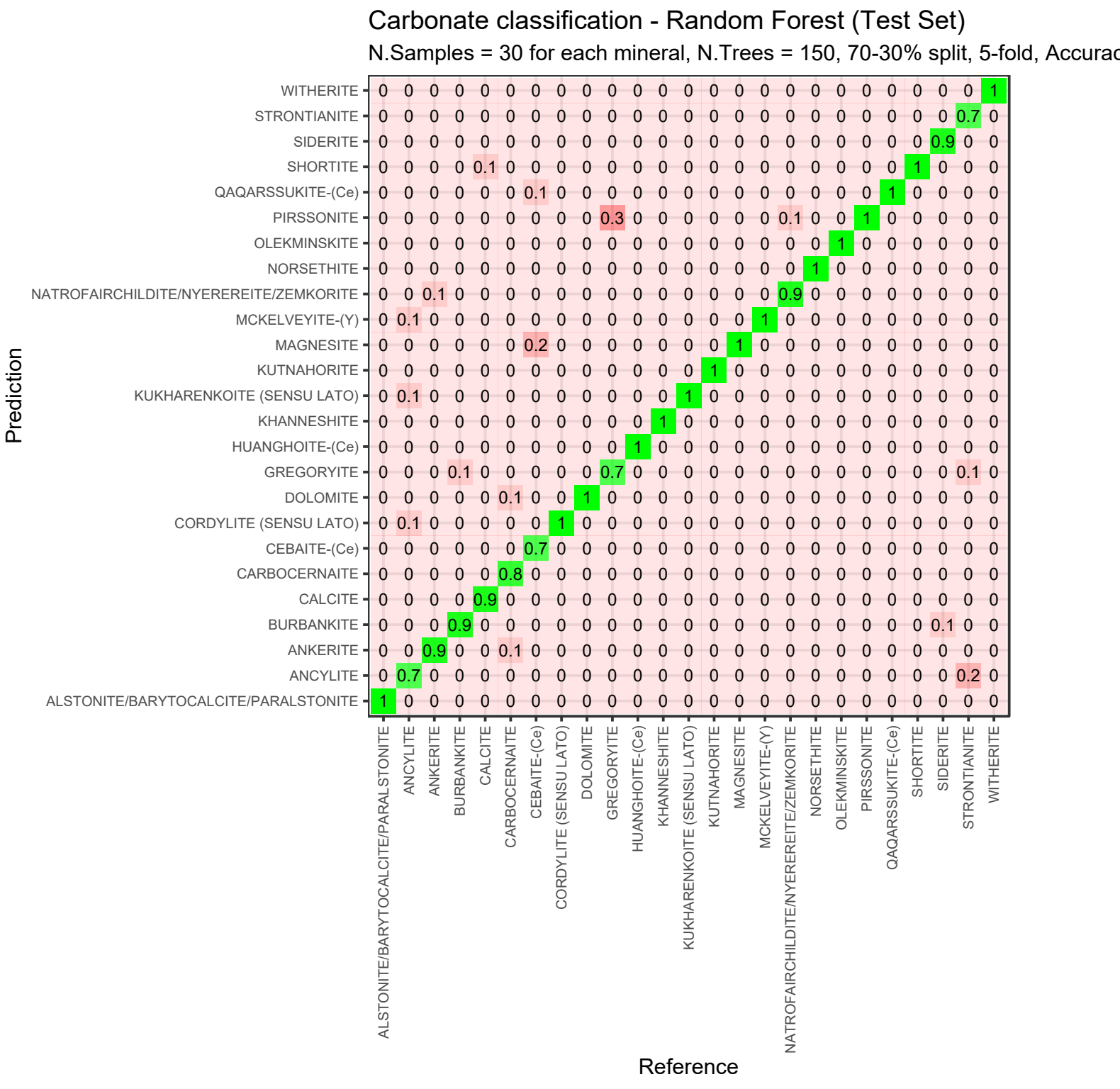

PCA - Biplot
NA2O
FEOT
MNO
CAO
MGO
50
0
-50
-100
-150
-400
-200
0
Dim2 (10.2%)
Dim1 (77.2%)


30
20
10
0
-10
-20
PC2
-20
0
20
40
PC1
ALSTONITE/BARYTOCALCITE/PARALSTONITE
ANCYLITE
ANKERITE
BURBANKITE
CALCITE
CARBOCERNAITE
CEBAITE-(Ce)
CORDYLITE (SENSU LATO)
DOLOMITE
GREGORYITE
HUANGHOITE-(Ce)
KHANNESHITE
KUKHARENKOITE (SENSU LATO)
KUTNAHORITE
MAGNESITE
MCKELVEYITE-(Y)
NATROFAIRCHILDITE/NYERERE ITE/ZEMKORITE
NORSETHITE
OLEKMINSKITE
PIRSSONITE


Carbonate classification - Random Forest (Test Set)
N.Samples = 30 for each mineral, N.Trees = 150, 70-30% split, 5-fold, Accurac
Prediction
WITHERITE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
STRONTIANITE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.7 0
SIDERITE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.9 0 0
SHORTITE 0 0 0 0 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0
QAQARSSUKITE-(Ce) 0 0 0 0 0 0 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0
PIRSSONITE 0 0 0 0 0 0 0 0 0 0.3 0 0 0 0 0 0 0.1 0 0 1 0 0 0 0 0
OLEKMINSKITE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0
NORSETHITE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0
NATROFAIRCHILDITE/NYERERE ITE/ZEMKORITE 0 0 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.9 0 0 0 0 0 0 0
MCKELVEYITE-(Y) 0 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
MAGNESITE 0 0 0 0 0 0 0.2 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0
KUTNAHORITE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
KUKHARENKOITE (SENSU LATO) 0 0.1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
KHANNESHITE 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
HUANGHOITE-(Ce) 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
GREGORYITE 0 0 0 0.1 0 0 0 0 0 0.7 0 0 0 0 0 0 0 0 0 0 0 0 0 0.1 0
DOLOMITE 0 0 0 0 0 0.1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CORDYLITE (SENSU LATO) 0 0.1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CEBAITE-(Ce) 0 0 0 0 0 0 0.7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CARBOCERNAITE 0 0 0 0 0 0.8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CALCITE 0 0 0 0 0.9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BURBANKITE 0 0 0 0.9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.1 0 0
ANKERITE 0 0 0.9 0 0 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ANCYLITE 0 0.7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.2 0
ALSTONITE/BARYTOCALCITE/PARALSTONITE 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ALSTONITE/BARYTOCALCITE/PARALSTONITE
ANCYLITE
ANKERITE
BURBANKITE
CALCITE
CARBOCERNAITE
CEBAITE-(Ce)
CORDYLITE (SENSU LATO)
DOLOMITE
GREGORYITE
HUANGHOITE-(Ce)
KHANNESHITE
KUKHARENKOITE (SENSU LATO)
KUTNAHORITE
MAGNESITE
MCKELVEYITE-(Y)
NATROFAIRCHILDITE/NYERERE ITE/ZEMKORITE
NORSETHITE
OLEKMINSKITE
PIRSSONITE
QAQARSSUKITE-(Ce)
SHORTITE
SIDERITE
STRONTIANITE
WITHERITE
Reference