Table VI-3. Classification of selected sedimentary rocks.

Particle size or mineral composition	Rock name		
Clastic			
gravel > 2 mm	Conglomerate and breccia		
sand 2 to 1/16 mm	Sandstone (Arenite)		Wack
silt 1/16 to 1/256 mm	Siltstone	Shale or Mudstone	
clay <1/256 mm	Claystone		
Nonclastic			
calcite, $CaCO_3$	Limestone	Carbonates	
dolomite, $CaMg(CO_3)_2$	Dolomite		
gypsum, $CaSO_4 \cdot 2H_2O$; anhydrite, $CaSO_4$ halite, NaCl and others	Evaporite		
opal, quartz, SiO_2	Chert		
apatite, $Ca_5(PO_4)_3(OH,F,Cl)$	Phosphorite		
hematite, $Fe2O_3$; magnetite, Fe_3O_4 siderite, $FeCO_3$; ankerite, $Ca(Fe,Mg,Mn)CO_3$ iron silicates (greenalite, stilpnomelane, minesotaite) pyrite, FeS_2; quartz and chalcedony, SiO_2	Iron-formation		
carbon, hydrocarbon	Coal, Oils		

Ideal formula for greenalite = $(Fe,Mg)_6\ Si_4O_{10}\ (OH)_8$; stilpnomelane = $K_{0.6}\ (Mg,Fe)_6\ (Si,Al)_6\ (O,OH)_{22}$; and minnesotaite = $Fe_3Si_4O_{10}\ (OH)_2$