$$\begin{split} &3\operatorname{CaMg}(\operatorname{CO}_3)_2 + 4\operatorname{SiO}_2 + \operatorname{H}_2\operatorname{O} \longrightarrow \operatorname{Mg}_3(\operatorname{Si}_2\operatorname{O}_5)_2(\operatorname{OH})_2 + 3\operatorname{CaCO}_3 + 3\operatorname{CO}_2 \\ &5\operatorname{CaMg}(\operatorname{CO}_3)_2 + 8\operatorname{SiO}_2 + \operatorname{H}_2\operatorname{O} \longrightarrow \operatorname{Ca}_2\operatorname{Mg}_5(\operatorname{Si}_8\operatorname{O}_{22})(\operatorname{OH})_2 + 3\operatorname{CaCO}_3 + 7\operatorname{CO}_2 \end{split}$$

3.6:	The state of the s
Minerals	Distinguishing characteristics
Dolomite - $CaMg(CO_3)_2$	Dust reacts with HCl when scratched. 3.5-4 on Mohs.
	Color ranges from white to gray, tan, light brown.
${\bf Magnetite} - {\rm Fe_3O_4}$	Metallic luster, magnetic, often well-defined octahe-
	dral crystals. 5.5-6.5 on Mohs.
${f Calcite}$ - ${f CaCO}_3$	Strongly reacts to HCl, three directions of rhombohe-
	dral cleavage. Produced from contact metamorphism
	of dolomite.
$\mathbf{Tremolite} \text{ - } \mathrm{Ca_2Mg_5}(\mathrm{Si_2O_8})(\mathrm{OH})_2$	Long, fibrous or prismatic crystals, often radiating
	outwards. 60/120 cleavage, typically white, light gray.
	5-6 on Mohs. Produced from contact metamorphism
	of dolomite.
${f Talc}$ - ${ m Mg}_3({ m Si}_2{ m O}_5)_2({ m OH})_2$	Very soft, flaky. Produced from contact metamor-
	phism of dolomite.
Igneous Rocks	Constituent minerals
Diabase	Plagioclase ($\approx 60\%$), Clinopyroxene ($\approx 20-30\%$),
	Olivine (\approx 5-10%), Magnetite and Ilmenite ($<$ 5%)
text	

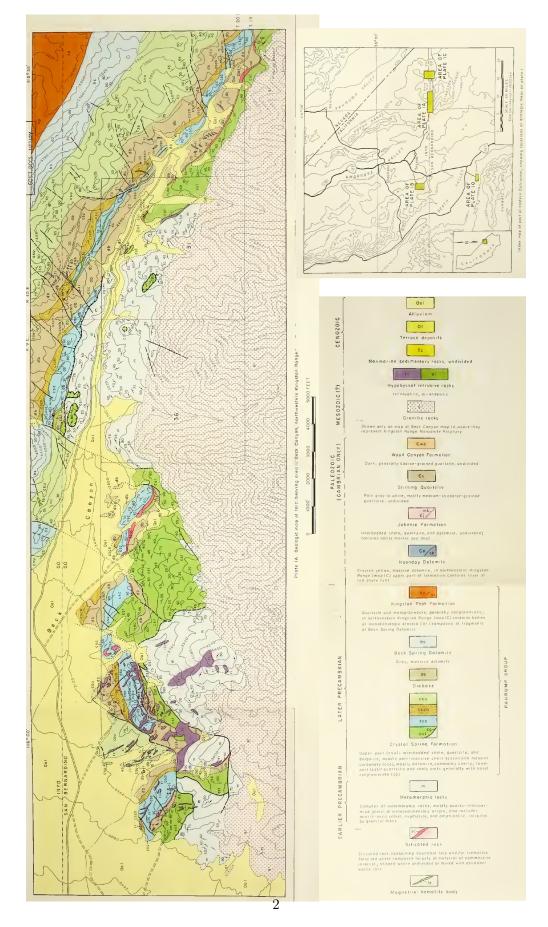


Figure 1: caption