

district under consideration is composed of a granite having the following characters.

This granite is of a dark grey color and is composed of quartz, feldspars, biotite and hornblende, with a good deal of accessory sphene.

Its striking visible feature, however, is the occurrence in it of large crystals of impure orthoclase, giving it a porphyritic appearance. These crystals are usually a half to one inch long, and are commonly twinned parallel to the orthopinacoid. Small scales of biotite are scattered through the crystals, and the analysis, as here given, shows a good deal of lime and soda for an orthoclase.

SiO <sub>2</sub> .....	59·86
Al <sub>2</sub> + Fe <sub>2</sub> O <sub>3</sub> .....	20·26
K <sub>2</sub> O.....	12·39
Na <sub>2</sub> O.....	5·76
CaO.....	2·90
MgO.....	0·78
<hr/>	
Total.....	101·95

The lime is probably present as calcium carbonate.

An analysis of the granite gave :—

SiO <sub>2</sub> .....	60·09
Al <sub>2</sub> O <sub>3</sub> .....	17·20
Fe <sub>2</sub> O <sub>3</sub> .....	6·73
CaO.....	8·24
Na <sub>2</sub> O.....	2·45
K <sub>2</sub> O.....	6·23
MgO.....	·47
<hr/>	
Total..	101·41

A microscopical examination of a specimen of this granite, taken from within a few feet of a quartz vein, was made by Dr. Adams. It was found to be a crushed