



EXPLANATION

- SEDIMENTARY ROCKS**
- ALLUVIUM
 - Stream deposits
 - LIMESTONE AND SHALE--CARBONIFEROUS
(limestones largely altered to garnet-epidote rock, series within mine mostly thin bedded)
- IGNEOUS ROCKS--**
- QUARTZ-MICA DIORITE PORPHYRY
Biotite-quartz diorite, includes finer grained sills and dikes, most of which contain hornblende in place of biotite
 - HORNBLLENDE PORPHYRY
(white, felsitic, with small hornblende needles)
 - ANDESITIC VOLCANICS--CRETACEOUS ?
 - BASALT
(fine grained dark dikes, may be andesite in part)
- Strike and dip of bedding
- Fault showing dip
- Geologic contact
- Dump

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
BUREAU OF MINES PROJECT 1419
TOPOGRAPHIC AND GEOLOGIC MAP
CHRISTMAS COPPER MINE
GILA COUNTY, ARIZONA

Scale $\frac{1}{2400}$
0 50 100 200 400 600 Feet
Contour interval 50 feet

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