



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

The following file is part of the Grover Heinrichs Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

AEC RMO-896. Geology and uranium deposits of Marysvale, Utah, A.O. Taylor et alii. 1951.

Igneous rocks, older to younger: QMP, QM, porphyritic, QM, G. Overlain by late Tertiary extrusive rhy. All intrusions invaded early Tertiary Bullion Canyon volcanic series, but most of latter eroded before rhy. extrusion.

N65E fracture and shear zones; NW set. These two sets contain all known ore shoots. NE set vertical, NW 45-60 SW. Normal, reverse and strike faulting. Intramineral movements: early silification brecciated before introduction of later vein Qtz., fluorite, pitchblende etc.

Primary minerals: vein Qtz., silica, adularia, py., calcite, siderite, fluorite, hematite, magnetite, pitchblende. F always associated with primary ores.

Age, post Mt. Belknap rhyolite, i.e. late Tertiary. High epithermal. There are epithermal precious-metal deposits of tellurides and the mercuric selenide and sulfo-selenide in Tushar Mts.

Secondary minerals: Autunite, torbernite, schroekingerite, uranophane.

Uranophane: most abundant at or near surface. may leave parent vein to 10'. May crop out, but found at depths to 130'. Most widely dispersed secondary U mineral.

Autunite, schroekingerite, torbernite, at depths 5 to 10' below leached OCs, usually over an ore shoot. Depths to which they reach depend on permeability, fracturing etc., amount of pyrite present, and amounts of elements available for combination with U in solution. p. 16: The important observation is that the secondary uranium minerals are deposited not far from the position of primary mineralization. Veins that have been exploited at depth all show secondary ore shoots at surface. p. 16.

Solution of primary uranium minerals and redeposition as secondary ones occur essentially in place. Pitchblende-fluorite ore shoots as now exposed show no marked tendency to be richer than their overlying secondary counterparts, but slightly extended distribution may be found on joint and fracture faces at some distance from the main site of primary deposition.

It appears that outcrops of veins bearing important uranium mineralization at depth tend to bear secondary uranium mineralization of ore grade at surface, in discontinuous lenses or pods (roughly in place) and corresponding to the initial deposition.

Gypsum on joints seems to be an ore guide at Bullion Monarch mine.