

SOME NEW OCCURRENCES OF MINERALS  
OF ARIZONA

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The following list is a compilation of recently recognized mineral occurrences which are not included in *Minerals of Arizona* (1). Thirty-three species previously unreported in Arizona have been added; these are indicated by an asterisk. After each occurrence the identifier, discoverer, or principal referent is indicated in parentheses.

- \*Aegirine-augite --with sphene, scapolite and other species listed below in a pulaskite-melatutvetite dike; Gunsight Mtn., N. end of Sierrita Mtns., Pima Co. (SAW, RWT)
- \*Aegirine --in a pulaskite dike; Gunsight Mtn., Pima Co. (SAW, RWT)
- \*Aerinite --in a pulaskite dike; Gunsight Mtn., Pima Co. (SAW, RWT)
- Allanite --with epidote, actinolite and apatite; Linda Lee claim, Quijotoa Mtns., Pima Co. (SAW)
- Andalusite --var. titanandalusite with sillimanite, corundum and cordierite; Gila River Indian Reservation, 10 miles N. of Casa Grande, Pinal Co. (SAW)
- Anglesite --large orebody; some specimens showing relic galena; Glove mine, Santa Rita Mtns., Santa Cruz Co. (RAB)
- \*Apophyllite --as subhedral grains with vesuvianite & wollastonite in tactite; Tombstone, Cochise Co. (SAW)
- Atacamite --as laths in chrysocolla and cornuite (var. chrysocolla) and along fractures; San Manuel Mine, Pinal Co. (RAB, SAW)
- Augite --loose crystals; unnamed diatreme N. of Bidahochi Butte, Navajo Co. (SAW)
- var. titanaugite in dikes on W. side of Montezuma's Chair, Hopi volcanic field, Navajo Co. (SAW)
- \*Austinite --as intergrowths with conicalcite; "barthite"; Table Mtn. mine, Galiuro Mtns., Pinal Co. (SAW)
- \*Axinite --var. manganaxinite; yellow plates being replaced by withamite and piedmontite; in vesicle fillings in andesite flow boulders; N. end of the South Comobabi Mtns. and N. of the Ko Vaya Hills, Pima Co. (SAW, RWT)
- Barite --brilliant tabular brown crystals on chalcocite; Magma mine, Superior, Gila Co. (RAB)

1. *Minerals of Arizona*, by F. W. Galbraith and D. J. Brennan; 3rd ed., Univ. of Ariz.: Phys. Sci. Bull. no. 4, 1959.

- \*Bisbeeite --as crystals with plancheite, shattuckite, malachite and chrysocolla in quartz at the Azurite mine, Tortolita Mtns. (RAB)
- \*Celadonite (near glauconite) --as vesicle fillings; Midway Station, Pinal Co. (SAW)  
 Cerussite --with anglesite in a large orebody; Glove Mine, Santa Rita Mtns., Santa Cruz Co. (RAB)  
 --fine groups of jackstraw crystals; Flux mine, Patagonia Mtns., Santa Cruz Co. (RAB)
- \*Chabazite --crystals intergrown with calcite; railway cut in Malpais Hill, N. of Mammoth, Pinal Co. (SAW)  
 --filling amygdules in a monchiquite; Coliseum diatreme near Indian Wells, Navajo Co. (SAW)
- Chalcophyllite --crystals in vesicles in basalt; Turtle Mtn. area, E. of Bonito Creek, Graham Co. (RWT)
- \*Chloritoid --crystals in phyllite; Chiricahua Mtns., Cochise Co. (SAW)
- \*Clinoclase --druses on barite; derived from the alteration of tennantite; St. Louis mine, Temporal Gulch, Santa Cruz Co. (RAB)
- \*Clinohumite --as detrital grains; Buell Park, Apache Co. (SAW)  
 -- var. titanclinohumite as detrital grains; Buell Park, Apache Co. Ming-Shan Sun, New Mexico Bureau of Mines.
- Clinozoisite --var. withamite with manganaxinite and piedmontite as vesicle fillings in andesite flow boulders; N. end of the S. Comababi Mtns. and N. of the Ko Vaya Hills, Pima Co. (SAW, RWT)
- Conichalcite --good crystals in vugs with willemite, plancheite and malachite; Table Mtn. mine, Galiuro Mtns., Pinal Co. (RWT)
- \*Cordierite --cyclic twins with sillimanite, corundum and titanandalusite; Gila River Indian Reservation, 10 miles N. of Casa Grande, Pinal Co. (SAW)
- Descloizite --as thick crusts of cuprian descloizite on wulfenite crystals; Glove mine, Santa Rita Mtns., Santa Cruz Co. (J. W. Anthony)
- Diopside --var. chrome diopside as detrital grains; Buell Park, Apache Co. (Ming-Shang Sun, New Mexico Bureau of Mines)
- Dioptase --with chrysocolla and opal; Table Mtn. mine, Galiuro Mtns., Pinal Co. (RWT)
- \*Fornacite --with wulfenite and fluorite; Mammoth-St. Anthony mine Tiger, Pinal Co. (George Switzer, U. S. National Museum)  
 --on hematite and quartz; Old Yuma mine, Tucson Mtns. Pima Co. (RAB)
- \*Gastunite --as radial aggregates of acicular to fibrous crystals with chalcodony, wulfenite, vanadinite, cuprite and "limonite"; Red Knob Mine, Muggins Mtns., Yuma Co. (see Russell M. Honea (1959), Am. Mineral. 44, 1047-1056.

- \*Hausmannite --as a constituent of fine-grained, black to brownish manganese oxides; Glove mine, Santa Rita Mtns., Santa Cruz Co. (William B. Purdom)
- \*Heulandite --crystals with calcite in vesicles; railway cut in Malpais Hill, N. of Mammoth, Pinal Co. (RWT)
- Laumontite --with stilbite in quartz veins with copper silicates; Azurite mine, Tortolita Mtns., Pinal Co. (RWT)
- Lazulite --in quartzite, with kyanite, andalusite, pyrophyllite and dumortierite; near Quartzsite, Yuma Co. (RWT)
- \*Leucite --in a cocite; Buell Park, Apache Co. (Howel Williams)
- Libethenite --crystals, near Rosemont, Santa Rita Mtns., Pima Co. (RAB)
- \*Mackayite --with tellurium and emmonsite; Toughnut-Empire mine, Tombstone, Cochise Co. (SAW)
- \*Manandonite --as minute tablets in quartz with kyanite, andalusite and dumortierite; near Quartzsite, Yuma Co. (SAW)
- Matlockite --with cerussite, brochantite and boleite; Apache mine, near Globe, Gila Co. (RWT)
- Metatorbernite --with jarosite and gypsum in sulfide vein; Linda Lee claim, Quijotoa Mtns., Pima Co. (SAW)
- \*Mordenite --as vesicle fillings in flow rock; Midway Station, Pinal Co. (SAW)
- Murdochite --with plattnerite and aurichalcite; Silver Hill mine, Waterman Mtns., Pima Co. (RAB)
- \*Natrolite --sprays of crystals in a kaersutite camptonite; on U. S. 93-446, 7 miles S. E. of Hoover Dam, Mohave Co. (SAW, RWT)
- Nepheline --sparse in a pulaskite dike; Gunsight Mtn., Pima Co. (SAW, RWT)
- \*Papagoite --a new copper calcium aluminum silicate with ajoite and shattuckite; New Cornelia pit, Ajo, Pima Co. (C. Osborne Hutton, Stanford University)
- \*Perovskite --as polysynthetically twinned cores of sphene crystals in a pulaskite dike; Gunsight Mtn., Pima Co. (SAW, RWT)
- \*Pharmacosiderite --on barite with azurite; resulting from the alteration of tennantite; St. Louis mine, Temporal Gulch, Santa Rita Mtns., Santa Cruz Co. (RWT)
- Pisanite --crystal efflorescences on tunnel walls; St. Louis mine, Temporal Gulch, Santa Rita Mtns., Santa Cruz Co. (RWT, RAB)
- Plancheite --with bisbeeite and shattuckite; Azurite mine, Tortolita Mtns., Pinal Co. (SAW)
- Plattnerite --with murdochite and malachite on goethite; Bisbee, Cochise Co. (RAB)
- with wulfenite; Tom Scott, Silver Bill and Defiance

- mines, Gleeson, Cochise Co. (RWT)
- with murdochite and aurichalcite; Silver Hill mine, Waterman Mtns., Pima Co. (RAB)
- with hemimorphite on limonite; Total Wreck mine, Empire Mtns., Pima Co. (RAB)
- on vanadinite crystals; Old Yuma mine, Tucson Mtns., Pima Co. (RAB)
- \*Prehnite --as crystalline masses with copper, epidote, and quartz in andesite; Mount Fagan, Pima Co. (SAW)
- \*Pumpellyite --with thomsonite, pennine, prehnite, epidote and copper; Mt. Fagan, Santa Rita Mtns., Pima Co. (SAW)
- Sanidine --var. barian sanidine in a pulaskite dike; Gunsight Mtn., Pima Co. (SAW, RWT)
- \*Scorodite --on barite; from alteration of tennantite; St. Louis mine, Temporal Gulch, Santa Rita Mtns., Santa Cruz Co. (RAB)
- \*Sillimanite --with titanandalusite, corundum and cordierite; Gila River Indian Reservation, 10 miles N. of Casa Grande, Pinal Co. (SAW, RWT)
- Smithsonite --gray and green botryoidal masses; Glove mine, Santa Rita Mtns., Santa Cruz Co. (RAB)
- Sphene --with davidite; Pandora Prospect, Quijotoa Mtns., Pima Co. (SAW, RWT)
- \*Stilbite --with laumontite in quartz veins with copper silicates; Azurite mine, Tortolita Mtns., Pinal Co. (RWT, SAW)
- Stromeyerite --massive with malachite and chalcocite; Cole shaft, Bisbee, Cochise Co. (RAB)
- Thomsonite --with pennine, pumpellyite, prehnite, epidote and copper; Mt. Fagan, Santa Rita Mtns., Pima Co. (SAW, RWT)
- \*Tsumebite --with wulfenite; Clay orebody, Morenci, Greenlee Co. (J. W. Anthony and Henry E. Wenden)
- Wulfenite --in a limestone cavern in large amount; Defiance mine, Gleeson, Cochise Co. (RAB)
- \*Xenotime --with gadolinite in biotite gneiss; N. side of the Rincon Mtns., Pima Co. (SAW)
- Zoisite --in schist; near mouth of Madera Canyon, Pima Co. (SAW)