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Description of Mineral Areas, Arizona

USGS OF 84-086

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Map, description and bibliography of the Mineralized Areas of the Basin and Range Province in Arizona

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Introduction

The purpose of this report is twofold: first, to show mineralized areas within the Basin and Range province in Arizona that contain any of the following elements; copper, lead, zinc, molybdenum, iron, manganese, barium, mercury, gold, silver, platinum, beryllium, lithium, tungsten, tin, fluorine, vanadium, or uranium: second, to classify the areas on the basis of age and type of deposit rather than on geographical or political criteria. Excluded are areas that contain building materials, sand and gravel, placer deposits of various minerals, and areas that contain only iron deposits. The areas shown either (1) have produced ore (Keith and others, 1983), (2) have mine workings to suggest past production, (3) are described in publications that verify past production or drilled out reserves of ore, (4) are mentioned in unpublished reports that contain assay information indicating the presence of metals (Arizona Department of Mineral Resources, unpub. data), or (5) have been investigated by mining companies who have documented the presence of mineralized material. The map does not purport to delimit all the mineralized terrane within the Basin and Range province in Arizona, but rather delimits "Mineralized Areas", areas of known mineralization documented by one or more of the above sources. The boundaries of the Mineralized Areas on the map are, with some minor exceptions, the same as those of the Metallic Mineral Districts of Keith, Gest, and DeWitt (1983).

Classification and nomenclature of the Mineralized Areas

The Mineralized Areas on the map have been defined on the basis of geologic rather than geographic criteria. Therefore, the name of a given Mineralized Area may not be the same as the conventional Mining District name from older literature for the same geographical area. If an existing Mining District contained deposits of a specific age and type (for example, Laramide copper veins and/or copper porphyry systems), its name was adopted for the Mineralized Area that contains these deposits. However, if an existing Mining District contained deposits of differing ages and types, the district was subdivided geologically, with different names applied to each mineral system present. In such cases, the conventional Mining District name for the geographical area was retained for the Mineralized Area containing the mineral system with the largest historical production.

For example, all documented mineralization for the Copper Mountain-Morenci District is of early Tertiary age, and is part of a zoned porphyry copper system related to early Tertiary granodiorite porphyry plutons. Consequently, the Mineralized Area containing those deposits is also called Copper Mountain-Morenci, which conforms to the classical usage of that name. However, the Big Bug District of Yavapai County, which includes both early Tertiary base and precious metal veins, and Precambrian massive sulfide deposits, was subdivided into two Mineralized Areas. The name Big Bug was retained for the area with the largest historical production, which is the area of Precambrian massive sulfide deposits, and the name Ticonderoga was coined for the area of early Tertiary vein deposits which cut the Laramide Big Bug pluton.

Commodities and deposit descriptions

A summary of types of deposits found in the Basin and Range Province of Arizona is given in Table 1. These deposit types are divided on the basis of age and are listed from youngest to oldest.

Major commodities for each district are listed from left to right in the "Commodities" column of Table 2, ranked in approximate order of decreasing economic importance. The word "importance" is used to denote the monetary value of the commodity as determined from cumulative historical production data (Keith and others, unpub. data). Where no such data are available, commodity rankings are more speculative and are given in parentheses in Table 2. Many additional minor commodities may also be present in a Mineralized Area but not listed in Table 2. Deposit descriptions, given in the fifth column of Table 2, emphasize the age and type of mineralization, and may also include information about related igneous rocks or associated structures.

Sources of information

The map was modified from Keith, Gest, and DeWitt (1983), and Keith and others (1983). Due to their relative abundance and relatively minor importance (in terms of retrievable commodity per unit area), placer deposits were not included on the present map.

Much of the information on the present map and on the map of Keith, Gest, and DeWitt (1983), and the reference data in Table 2 was obtained from CRIB (Computer Resources Information Bank of the U.S. Geological Survey) for the state of Arizona. During 1981-1982, the CRIB database for Arizona was revised and updated, and many, but not all, of the Mineralized Area names were substituted for the old Mining District names.

Production data for the Mineralized Areas is summarized by Keith and others (1983). The present map, and the map of Keith, Gest, and DeWitt (1983) was prepared jointly by the Arizona Bureau of Geology and Mineral Technology and the U.S. Geological Survey.

Acknowledgements

We gratefully acknowledge Viki Lawrence of the U.S. Geological Survey, for her work on the preparation of the map. We also acknowledge Tony Antelak of the U.S. Geological Survey, and Susan Calder, Peter Laraba, and Frances Roth of the Arizona Bureau of Geology and Mineral Technology for their contributions.

Table 1.--Summary of deposit types of the Basin and Range Province in Arizona

Era	Deposit type
Cenozoic	Uranium deposits in late Tertiary diatremes.
	Strata-bound uranium deposits in late Tertiary basin fill
	Uranium deposits in middle Tertiary diatremes.
	Strata-bound copper deposits in middle Tertiary clastic rocks.
	Strata-bound uranium deposits in middle Tertiary sedimentary rocks.
	Strata-bound manganese deposits in middle Tertiary clastic rocks.
	Middle Tertiary copper-gold deposits in low-angle faults.
	Middle Tertiary gold-copper-lead veins.
	Middle Tertiary fluorine ± manganese ± barium veins.
	Middle Tertiary manganese ± lead ± silver veins and replacement deposits.
	Middle Tertiary lead-zinc-silver veins and replacement deposits.
	Early Tertiary lead-silver veins, with or without copper.
	Early Tertiary tungsten-bearing quartz veins.
Cenozoic-Mesozoic	Latest Cretaceous-early Tertiary porphyry copper, copper-molybdenum and molybdenum-copper deposits.

Table 1.--Continued

Era	Deposit type
Mesozoic	Late Cretaceous lead-zinc-silver veins and replacements.
	Late Cretaceous gold-copper-lead veins.
	Strata-bound uranium deposits in the Cretaceous Toreva Formation.
	Strata-bound uranium deposits in the Upper Jurassic Morrison Formation.
	Jurassic gold-quartz veins, with or without mercury.
	Jurassic porphyry copper or molybdenum deposits.
	Jurassic, strata-bound uranium deposits in breccia pipes.
Proterozoic	Strata-bound manganese deposits in Permian sedimentary rocks.
	Strata-bound uranium-copper deposits in Permian sedimentary rocks.
	Strata-bound uranium deposits in Proterozoic rocks.
	Proterozoic tungsten/beryllium-bearing pegmatites.
	Proterozoic gold-copper-lead veins.
	Mercury deposits of uncertain age in Proterozoic rocks.
	Proterozoic stratiform massive sulfide deposits.

References cited

Keith, Stanley B., Gest, D. E., and DeWitt, Ed, 1983, Metallic mineral districts of Arizona: Arizona Bureau of Geology and Mineral Technology map, scale 1:1,000,000, 1 sheet.

Keith, Stanley B., Gest, D. E., DeWitt, Ed, Woode-Toll, Netta, and Everson, B. A., 1983, Metallic mineral districts and production in Arizona: Arizona Bureau of Geology and Mineral Technology Bulletin 198.

Table 2.--Mineralized Areas of the Basin and Range province of Arizona (by county)

[sa, see also indicated Mineralized Area (in this table) for additional information; MD, Mining District, a Mining District name which was used for the area now partly or entirely encompassed by the Mineralized Area whose name it follows. Location is in terms of coordinates used on Plate 1. Rankings of commodities given in parentheses are speculative. Deposit descriptions by Stanley B. Keith.]

County	Mineralized area	Location	Commodities	Description of deposit	References
Cochise					52,410,420
	Apache Pass (Dos Cabezas, MD)	J 11,12	Au, Pb, Ag, (W)	Middle Tertiary veins associated with a rhyolite dike swarm. Minor scheelite present.	49,47,56,276,280,332,407,410,412,414,429,436, 452,453,454,476,629,672,694,870,925,1110, 1114,1111,1118,1286,1287,1288,1295,1378, 1391,1394.
	Bluebird (sa Cochise)	J 10	W	Middle Tertiary quartz veins in and marginal to a muscovite leucogranite.	47,291,296,332,407,410,449,518,519,672,705 794,870,1314,1328,1378.
	Blue Rock	J 10	(U, F)	Veins or fissures of uncertain age. Deposits occur along a complex, low-angle fault zone.	47,146,263,264,265,274,319,526,761,1032,1118, 1119,1250,1252,1253.
	California (Chiricahua, MD)	J 12	Pb, Zn, Ag	Middle Tertiary veins and replacements.	45,47,56,76,193,230,259,277,279,280,286,407, 410,416,436,450,451,467,672,694,751,825,826, 924,940,966,1034,1059,1110,1111,1112,1115, 1212,1231,1286-88,1295,1325,1326,1332,1338.
	Cochise (sa Bluebird; Johnson Camp, MD)	J 10,11	Cu, Zn, Pb, Ag	Cretaceous porphyry skarn deposits marginal to the biotite quartz monzonite phase of at least 50-m.y.-old Texas Canyon pluton.	45,47,50,57,78,79,164,275,284-86,291,295,296, 351,407,410,448,518,519,593,603,672,694,705, 713A,786,794,870,1095,1151,1212,1231,1286, 1295,1314,1325,1329.
	Cottonwood Basin	K 12	Ag, (Mn)	Middle Tertiary veins in 30-25-m.y.-old felsic volcanic rocks.	287,407,410,672
	Golden Rule (Dragoon)	J 10,11	Au, Ag, Pb, Cu	Late Cretaceous veins cutting Carboniferous strata.	47,216,288,351,407,410,436,518,629,672,924, 1386,1394.
	Gold Hill (Warren, MD)	K 11	Au, Ag, (Mn)	Late Cretaceous veins cutting early Cretaceous Bisbee Group strata.	47,207,230,277,407,410,462,570,625,672,1040, 1039,1272,1273,1394.
	Hartford (Huachuca, MD; sa Reef)	K 10	Pb, Zn, Ag, Cu, (W)	Early Tertiary veins and replacements along a SW-directed thrust system locally intruded by muscovite alaskite dikes.	10,46,47,53,56,230,332,407,410,436,462,571, 672,694,786,1212,1286,1323,1378,1383,1388.
	Juniper Flats (Warren, MD)	K 11	Au, Ag, Cu, Pb	Jurassic veins in middle Jurassic Juniper Flats monzonite.	47,179,207,230,407,410,570,625,672,694,1040, 1039,1118,1212,1272,1273,1286,1325.
	Mascot (Dos Cabezas, MD)	J 11	Cu, Ag, Pb, Au, Zn, Mo	Cretaceous porphyry deposits.	47,49,56,276,280,288,407,410,436,452,453,454, 462,476,557,672,694,940,1165,1286-88,1295, 1326-29,1335-37,1378,1391,1394.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Cochise (cont.)					
	Middle Pass	J 10,11	Zn, Cu, Ag, Pb, Au, Mo, (W, Be)	Middle Tertiary veins and skarns marginal to 25-m.y.-old Stronghold granite.	45,47,230,252,253,277,291,332,343,344,351,407,410,412,513,518,519,557,671,672,694,699,830,870,979,1057,1212,1217,1231,1279,1286,1314,1383,1386.
	Mine Canyon (Whetstone, MD)	K 10	Cu, Ag, Au	Latest Cretaceous-early Tertiary vein deposits in and near the 74-m.y.-old Mine Canyon pluton.	47,56,229,314,407,410,435,672,694,695,1276,1286,1380.
	Pat Hills	J 11	Base metals	Unclassified deposits--altered areas, probable middle Tertiary deposits.	288,407,410,670,672,873.
	Pearce (Commonwealth, MD)	J 11	Ag, Au, Cu, Pb	Middle Tertiary bonanza veins and replacements in Oligocene felsic volcanic rocks.	45,47,49,277,332,407,410,441,518,526,635,670,672,692,694,873,1034,1058,1118,1149,1151,1196,1231,1279,1286,1333.
	Peloncillo	J 12	Ag, Cu	Early Tertiary veins and replacements.	47,407,410,672.
	Reef (sa Hartford; Huachuca, MD)	K 10	(W), Ag, Au	Early Tertiary quartz veins near 47-m.y.-old alaskite sills.	10,46,47,56,230,332,407,410,571,672,694,786,940,1118,1286,1323,1378,1383.
	Rucker Canyon	K 12	Ag, Au	Late Cretaceous(?) veins.	47,277,407,410,672.
	Silver Camp (Dos Cabezas, MD)	J 11	Ag, Au, Pb, Cu, Mo	Cretaceous porphyry deposits in and near the 62-m.y.-old Silver Camp quartz monzonite stock.	47,276,280,288,407,410,436,452,453,454,462,476,672,694,870,895,897,928,940,1034,1118,1286,1378,1394.
	Spike "E" Hills	I 11	Base metals	Unclassified altered areas in middle Tertiary volcanic rocks.	288,629,670,873,1081.
	Swisshelm (Elfrida, MD)	K 11	Pb, Ag, Au, Zn, Cu, Mo, (Be)	Middle Tertiary veins and replacements near diorite porphyry intrusions and the 33-m.y.-old Swisshelm stock.	45,47,193,230,259,277,286,287,332,380,407,410,416,494,672,694,806,924,966,1115,1118,1231,1286,1328,1383.
	Teviston (sa Silver Camp, Apache Pass, Mascot; Dos Cabezas, MD)	J 11	Au, Ag, Pb, Cu	Middle Tertiary veins related(?) to a 40-35-m.y.-old dike swarm.	47,49,56,216,276,280,288,332,436,437,452,453,454,476,694,1118,1286,1287,1288,1295,1378,1391,1394.
	Tombstone	K 10	Ag, Au, Pb, Cu, Zn	Late Cretaceous veins and replacements marginal to the 76-m.y.-old Schieffelin granodiorite pluton.	39,45,47,160,164,218,230,239,240,241,267,321,332,375,407,410,462,489,515,518,519,523,668,672,673,694,777,866,941,946,1026,1053,1097,1231,1286,1296,1314,1359,1393,1394.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Cochise (cont.)					
	Turquoise (Courtland, Gleeson, MD)	K 11	Cu, Pb, Ag, Au, Zn, Mo	Jurassic(?) porphyry deposits and skarn marginal to the Jurassic(?) Copper Belle monzonite pluton.	22,45,47,53,56,135,277,291,308,312,344,351,383 407,410,462,513,518,519,671,672,694,791,830, 869,870,873,979,1011,1014,1044,1045,1108, 1279,1286,1314,1326,1371,1386,1394.
	Warren (Bisbee, MD; sa Juniper Flats)	K 11	Cu, Ag, Au, Zn, Pb, (U)	Jurassic porphyry deposits in, and replacement deposits marginal to the Sacramento stock apophysis of Juniper Flats monzonite.	22,45,47,77,142,143,179,207,230,239,277,291, 321,332,407,410,462,570,625,672,668,694,830, 875,915,949,969,970,982,1036,1038,1039,1040, 1041,1043,1048,1052,1106,1118,1141,1143, 1225,1230,1232,1234,1272,1273,1298,1325, 1370,1393,1407.
	Whetstone (Benson, MD; sa Mine Canyon)	J 10	(F, W, U, Be), Au, Ag, Cu	Veins in and near the Precambrian alaskite phase of an unnamed ~1.40-b.y.-old granite batholith.	47,229,233,314,332,407,410,435,599,672,692, 694,891,1118,1276,1286,1378,1380.
	Willcox	J 11	U	Strata-bound deposits in late Tertiary basin fill.	288,407,410,476,629,670,672,873,1118.
	Winchester	J 10	Cu, Pb, Ag	Middle Tertiary(?) veins and jasperoids in Paleozoic sedimentary rocks.	47,296,319,1287,1288.
	Yellowstone	J 10	Au, Ag, Pb, Cu	Middle Tertiary veins near probable middle Tertiary lamprophyre dikes.	47,296,405,407,410,672,694,1287.
Gila					1398.
	Banner (sa Christmas, Dripping Springs; Troy, MD)	H 9	Cu, Cu-Mo,	Cretaceous porphyry deposits in, and skarn deposits marginal to 63-m.y.-old rhyodacite porphyry stocks.	45,47,104,321,427,436,533,661,698,711,712, 713A,713B,722,741,745,981,1008,1047,1050, 1104,1118,1391,1404.
	Bee Cave	G 9	U	Uranium-bearing fractures in and near a middle Tertiary(?) rhyolite plug.	351,390,871,1118,1147.
	Breadpan	F 8	(Be, F)	1.7(?)-b.y.-old veins in Alder schist and Haigler Group 1.7-b.y.-old rhyolites.	331,390,502,557,1298,1378.
	Christmas (Banner, MD)	H 9	Cu, Cu-Mo,	Cretaceous porphyry, skarn, and replacement deposits in, and marginal to 63-m.y.-old rhyodacite porphyry stocks.	53,176,319,321,426,427,661,721,722,723,724, 724A,862,947,980,981,1007,1008,1047,1104, 1229,1353,1354,1355,1358,1391.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Gila (cont.)					
	Dripping Springs (Troy, MD)	H 9	Cu, Ag, Au, Mo, Zn	Cretaceous porphyry deposits, skarns and veins in the 70-m.y.-old Rattler granodiorite pluton and rhyodacite porphyry dike swarms.	45,47,53,182,300,302,351,427,557,661,713A, 713B,722,741,743,745,877,947,981,1008,1047, 1050,1117,1125,1145,1216,1391.
	El Capitan (Pioneer, Pinal Mountains, MD)	H 9	Ag, Cu, Au, Pb	Latest Cretaceous-early Tertiary vein deposits marginal to a porphyry system.	302,351,741,1047,1050,1118.
	Fluorine (Sierra Ancha, MD)	F 8	F	Younger Precambrian(?) veins in Apache Group strata marginal to ~1.15-b.y.-old diabase sills.	134,390,424,527,528,1118,1216,1372.
	Fossil Creek	E 7	(U), Cu	Strata-bound deposits in Permian sedimentary rocks.	47,390,471,529,784,973,975,1118,1320.
	Four Peaks	G 8	(W, Be), amethyst	Precambrian pegmatites and veins in and near the probable 1.4-b.y.-old Four Peaks granite.	330,390,1298,1376.
	Giant Cactus	G 9	Mn	Cretaceous vein deposits marginal to a porphyry system in the Miami-Inspiration area.	351,390,1037,1047,1287,1288,1295.
	Globe Hills	G 9	Cu, Ag, Au, Pb, Zn, (V)	Cretaceous vein deposits marginal to a porphyry system in the Miami-Inspiration area.	351,390,952,996,997,1001,1037,1042,1047,1118, 1287,1288,1295.
	Green Valley (Payson, MD)	F 8	Au, Cu, Ag, Pb, Zn	Precambrian veins in and near the Payson diorite pluton (> 1.7 b.y.).	351,390,462,661,773,774,784,1376,1391,1394
	Lucky Boy (Pioneer, Pinal Mountains, MD)	H 9	U	Strata-bound deposits in younger Precambrian sedimentary rocks near 1.15-b.y.-old diabase sills.	55,302,351,525,741,1037,1042,1047,1050,1118, 1146.
	Mazatzal Mountains (Sunflower, MD)	F 7	(Hg), Au, Pb, Ag, Cu	Deposits of uncertain age in Precambrian Alder Group.	119,331,390,447,456,525,772,851,1146,1286, 1376,1378,1394.
	Miami-Inspiration (Pinto Valley, Inspiration, Globe-Miami, MD)	G 9	Cu, Mo, Ag, Au, Pb	Latest Cretaceous-early Tertiary porphyry deposits and veins, generally marginal to the 61-m.y.-old Schultze granite pluton.	22,45,47,118,135,147,161,180,215,321,331,368, 376,390,392,425,436,438,457,462,475,484,486, 531,533,557,598,608,713A,713B,745,746,757, 767,780,781,807,952,969,970,993,994,996,997, 998,999,1001,1002,1004,1005,1006,1037,1042, 1047,1062,1064,1118,1141,1182,1216,1218, 1393,1403.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Gila (cont.)					
	Pinal Mountains (Pioneer, MD)	H 9	Ag, Cu, Au, Pb, Zn	Cretaceous vein deposits marginal to a porphyry system in the Miami-Inspiration area.	47,302,321,331,351,390,573,741,996,1000,1002, 1037,1042,1047,1050,1118,1378.
	Pittsburgh-Tonto	F 8	Cu, Zn	Precambrian strata-bound volcanogenic massive sulfide deposits.	390,1394.
	Polk	F 7	Cu, Ag, Au	Precambrian(?) veins in ~1.7-b.y.-old granitic rocks.	351,390,784.
	Pranty's Cabin	F 8	Zn, Cu	Precambrian strata-bound volcanogenic massive sulfide deposits.	390,502,1118.
	Promontory Butte	F 8	(U), Cu	Strata-bound deposits in Permian sedimentary rocks.	390,973,1091,1118,1376.
	Punkin Center	F 8	U	Strata-bound deposits in late Tertiary basin fill.	390.
	Ramsdell	G 9	Mn	Middle Tertiary veins.	351,358,390.
	Richmond Basin (McMorris, MD)	G 9	(Ag, Pb, Zn, Cu)	Cretaceous vein deposits marginal to a porphyry system in the Miami-Inspiration area.	351,390,997,1001,1037,1042,1047,1216,1287, 1288,1295.
	Rye Creek	F 8	Mn	Veins of uncertain age.	390,1394.
	Salt River	G 9	(U), Cu	Strata-bound epigenetic vein deposits in younger Precambrian sedimentary rocks near 1.15-b.y.-old diabase sills.	351,358,390,1118.
	Sierra Ancha (sa Fluorine)	G 8, F 9	U	Strata-bound epigenetic vein deposits in younger Precambrian rocks near 1.15-b.y.-old diabase sills.	45,47,55,134,390,424,471,525,526-29,557,682, 692,1117,1118,1144,1146,1216,1372.
	Spring Creek (Young, MD)	F 8	Au, Pb, Cu, Ag	Precambrian veins in and near 1.65-b.y.-old Young granodiorite pluton.	331,390,502,557,1298,1378.
	Summit	G 9	Cu, Ag, Au, Pb	Latest Cretaceous-early Tertiary porphyry and vein deposits in the 61-m.y.-old Schultze granite pluton.	47,68,321,330,340,350,390,436,713A,713B,863, 993,995,996,1000,1001,1002,1004,1006,1037, 1042,1047,1118,1286,1287,1288,1295.
	Sunset	G 8	Mn	Middle Tertiary(?) veins.	47,331,390,1216,1298,1378

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Gila (cont.)					
	Tonto	G 8		Unclassified deposits.	358,390.
	Tonto Basin	F 8	F	Younger Precambrian(?) veins in 1.4(?)-b.y.-old granite related(?) to 1.15-b.y.-old diabase intrusions.	390.
	Wayner	G 8	W	Precambrian quartz veins in the 1.4-b.y.-old Ruin granite.	390,1001,1047.
Graham					1395A
	Aravaipa	H 10	Zn, Pb, Cu, Ag, (F), Au, Mo	Middle Tertiary veins and replacements marginal to the 22-m.y.-old Goodwin Canyon quartz monzonite, and to a widespread rhyolite porphyry dike swarm.	45,47,144,319,373,436,713A,718,1088,1105,1183, 1184,1185,1286,1306.
	Ash Peak (Duncan, MD)	I 12	Ag, Au, Cu, Pb, Zn	Middle Tertiary(?) veins in 25-20-m.y.-old felsic volcanic rocks.	45,56,391,435,436,462,668,722,793,928,1054, 1082,1285,1286,1393.
	Black Beauty	I 10	W	Precambrian quartz veins in a 1.4-b.y.-old granite.	128.
	Black Hawk	I 10	Mn	Middle Tertiary veins cutting middle Tertiary agglomerate above a detachment fault.	155,462,1394.
	Clark	I 10	Pb, Ag, Cu, Au	Middle Tertiary(?) veins near a 26-m.y.-old quartz latite porpyhry dike swarm.	155,330,357,435,462,718,1217,1394.
	Day Mine Wash	H 11	Cu, Mo, Ag, Pb	Altered areas in middle Tertiary volcanic rocks.	197,668,786.
	Dos Pobres (Safford, Lone Star, MD; sa Golden Rule)	H 11	Cu, Mo, Au, Ag	Latest Cretaceous-early Tertiery porphyry deposits near the 52-m.y.-old Dos Pobres pluton.	283,420,592,630,718,763,910,1089,1285,1298, 1394,1413.
	Fisher Hills	I 11	Mn	Middle Tertiary(?) veins cutting 1.4(?)-b.y.-old porphyrytic granite.	288,462,873,1118,1285.
	Golondrina	I 11	(Ag?, Pb?, Cu?)	Middle Tertiary(?) veins cutting 1.4-b.y.-old megacryst granite.	55,526,873,1118,1251,1415.
	Ill Ranch	I 11	U	Strata-bound deposits in late Tertiary basin fill.	55,718,1082,1118,1300.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Graham (cont.)					
	Lone Star (Sanchez, Dos Pobres, San Juan, MD)	H 11	Cu, Mo, Ag, Cu	Latest Cretaceous-early Tertiary porphyry deposits in and marginal to the 60-m.y.-old Lone Star pluton.	23,40,47,157,248,283,355,376,420,429,436,533, 586,592,630,713A,718,757,897,909,1089,1212, 1286,1414.
	Rattlesnake (Galiuro, MD)	I 10	Ag, Au	Middle Tertiary veins cutting 25-20-m.y.-old rhyolitic volcanic rocks near a rhyolite dike swarm.	319,320,362,605,786,1394.
	San Carlos	H 10	Mn	Middle Tertiary(?) veins.	197,351,462,1118,1148.
	Sanchez	H 11	Cu, Ag, Mo, Au	Latest Cretaceous-early Tertiary porphyry deposits in Paleocene andesitic volcanic rocks.	355,586,718,1285.
	San Juan (Lone Star, Safford, MD)	H 11	Cu, Ag, Au, Mo	Latest Cretaceous-early Tertiary porphyry deposits in and near the 58-m.y.-old San Juan stock.	157,283,420,436,592,630,718,1089,1285.
	Sol	H 11	Cu, Mo	Latest Cretaceous-early Tertiary porphyry deposits in and near a ~65-m.y.-old dioritic stock.	355,718,1417.
	Stanley	H 10	Pb, Cu, Ag, Au, Zn	Middle Tertiary veins within a 25-20-m.y.-old rhyolitic dike swarm.	197,319,436,462,557,1018,1105,1217,1298,1300.
Greenlee					1395A
	Ash Peak (Duncan, MD)	I 12	Ag, Au, Cu, Pb, Zn	Middle Tertiary(?) veins in 25-20-m.y.-old felsic volcanic rocks.	45,56,391,435,436,462,668,722,793,928,1054, 1082,1285,1286,1393.
	Blue River	G 12	U	Deposits in late Tertiary diatremes.	1055.
	Copper Mountain (Morenci, Copper King Mountain, MD)	H 12	Cu, Ag, Mo, Au, Pb, Zn	Latest Cretaceous-early Tertiary porphyry deposits in, and skarn deposits marginal to 62-52-m.y.-old diorite to quartz monzonite porphyry stocks.	46,47,56,124,219,220-24,239,328,363,462,489, 661,762,789,790,903,916,969,970,1118,1141, 1212,1286,1288,1325,1326,1329,1364,1391, 1394.
	Gila Hot Springs	H 12	Mn	Middle Tertiary veins in the middle Miocene Gila conglomerate.	24,56,283,429,462,909,1285,1286.
	Goat Camp	H 12	Ag, Au, Cu, Pb, (F, Mn, W)	Middle Tertiary veins in 30-20-m.y.-old felsic volcanic rocks.	136,576,871,925,1054,1271,1285,1400.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Greenlee (cont.)					
	Kimball (Peloncillo, MD)	I 12	Precious metals(?)	Unclassified deposits--altered areas, probable middle Tertiary deposits in middle Tertiary volcanic rocks.	931.
	Twin Peaks (Steeple Rock, Mayflower, Big Springs, MD)	H 12	Ag, Au, Cu, Pb, (F, Mn, W)	Middle Tertiary veins in 30-20-m.y.-old rhyolitic volcanic rocks.	56,435,462,576,668,722,793,1054,1286.
La Paz					88,430,1390
	ABC	H 1	(Mn, Ba)	N-striking, steeply W-dipping veins of middle Tertiary age cutting middle Tertiary volcanic rocks.	47,49,461,499,697,908,968,1103,1286,1374,1378.
	Alamo (sa Artillery; Lincoln Ranch, MD)	F 3	Cu, Au, Pb, Ag	Middle Tertiary deposits in and near low-angle detachment faults.	356,666,667,697,766,779,961,962,963,1066,1103, 1212,1374,1394.
	Alamo Springs	G 2,3	Au, Ag, Cu	Middle Tertiary(?) veins cutting volcanic rocks.	47,49,218,266,436,666,697,860,1070,1103,1374, 1389,1391,1394.
	Artillery Peak (Artillery, MD)	F 3	Mn	Strata-bound lenses in middle Tertiary clastic rocks.	22,45,47,331,356,461,501,574,604,666,667,668, 697,753,764,765,766,779,832,874,932,933,959, 960-64,984,1066,1070,1113,1117,1135,1136, 1173,1265,1374,1378,1393,1394,1396.
	Bouse (sa North Plomosa, Plomosa Pass)	F 2	Au, Cu, Ag, (Mn, Ba, F)	Middle Tertiary veins.	47,49,54,87,325,436,461,604,609,652,661,668, 697,772,779,879,886,888,1066,1103,1286,1389, 1393,1394.
	Cienega (sa Mammon, Pride)	F 2	Cu, Au, Ag	Middle Tertiary veins located in the Buckskin-Rawhide detachment fault system.	87,158,202,779,827,1103.
	Cinnabar (La Paz, La Cholla, MD)	G 2	(Hg), Cu, Au, Ag	Middle Tertiary(?) vein system cutting mid-late Mesozoic sedimentary rocks.	11,47,87,172,351,356,436,466,604,668,697,779, 940,1103,1212,1286,1325,1327,1350,1393,1394, 1424.
	Clara (Santa Maria, MD)	F 3	Cu, Ag, Au	Middle Tertiary veins. Detachment related system.	47,87,325,356,557,609,697,779,963,1066,1070, 1103,1327,1350,1394.
	Cleopatra	F 3	(Cu, Au)	Middle Tertiary veins in and near low-angle detachment faults.	356,430,766,961,962,1066,1070,1118.
	Cunningham Pass (sa Harcuvar)	F 3	Cu, Au, Ag, Pb	Middle Tertiary veins. Pyrite and rare specular hematite present; barite locally present. Associated with microdiorite dikes.	47,55,71,87,269,330,436,661,684,697,779,1066, 1071,1103,1212,1217,1269,1286,1325,1327, 1374.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
La Paz (cont.)					
	Eagle Tail	G 3	(Mn, Ba)	Middle Tertiary stringers and irregular veins along a NW-trending fault zone.	47,461,697,1103,1374.
	Ellsworth (Harquahala, Harcuvar, Three Musketeers, MD)	G 3	Cu, Au, Ag, Pb, (W)	Vein in and near a 28-23-m.y.-old microdiorite-rhyolite dike swarm. Partially located near Mesozoic thrust faults.	47,49,54,55,87,269,330,341,351,436,461,485, 557,604,661,668,683,684,697,779,879,1019, 1066,1071,1073,1103,1194,1270,1286,1303, 1327,1374,1389,1390,1391,1394.
	Fools Folly	G 2	Mn	Middle Tertiary veins in a steeply dipping fracture zone.	1103.
	Grand Central (Trigo Mountains, MD)	H 1	Au, Ag	Sporadic, high-grade, gold-bearing fractures associated(?) with middle Tertiary(?) granite porphyry dikes.	47,51,54,436,461,499,526,661,697,908,968,1103, 1286,1374,1378,1391,1394.
	Harcuvar (Ellsworth, MD)	F 3	Cu, Au, Ag, (Ba)	Middle Tertiary veins in and near microdiorite dikes.	47,55,87,269,436,684,697,779,879,1066,1071, 1103,1212,1217,1269,1286,1325,1327,1389, 1400.
	Harquahala (sa Little Harquahala, Ellsworth)	G 3,4	Au, Cu, Ag, Pb, (F)	Middle Tertiary disseminations and veins in or near NW- to WNW-striking, 28-23-m.y.-old microdiorite dikes. Partially located near Mesozoic thrust faults.	47,49,54,87,330,436,461,485,493,557,604,661, 684,697,701,779,880,1019,1066,1070,1071, 1073,1103,1194,1217,1270,1286,1303,1304, 1389,1391,1394.
	La Cholla	G 2	Au, Cu, Ag	Sporadic deposits of middle Tertiary(?) age along fractures and joints.	47,49,82,86,87,119,126,436,495,557,582,667, 697,727,772,779,786,853,1103,1286,1288,1329, 1389,1391,1394.
	La Paz (Weaver, MD)	G 2	Au, Cu, Ag, Pb	Middle Tertiary(?) veins and disseminated deposits. Locally widespread quartz-sericite-pyrite alteration. Partially located in NW-striking fractures. Associated(?) with the Diablo quartz monzonite.	47,49,87,202,330,436,594,604,661,667,697,772, 779,1102,1103,1237,1286,1389,1391,1394.
	Lincoln Ranch (Alamo, MD)	F 3	Mn	Strata-bound deposits in middle Tertiary clastic rocks.	47,356,461,666,667,697,766,779,961,962,963, 1066,1070,1103,1374,1394.
	Little Harquahala (Harquahala, MD)	G 3	Au, Ag, Pb, Cu	Middle Tertiary veins, locally near 28-23-m.y.-old microdiorite dikes. Partially located near Mesozoic thrust faults.	47,49,54,87,330,436,461,485,557,661,684,697, 779,880,1066,1071,1073,1080,1103,1270,1286, 1303,1389,1391,1394.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
La Paz (cont.)					
	Mammon (Lakeshore, Slate, MD)	F 2	Cu, Au, Ag	Middle Tertiary deposits along a shear zone between metamorphic rocks and Tertiary intrusive. Near the Buckskin-Rawhide detachment fault system.	11,47,87,172,351,356,436,466,668,697,779,1103, 1286,1327,1350,1393,1394,1424.
	Metate (La Paz, MD)	G 2	Mn	Irregular replacements of middle Tertiary age in folded limestone.	47,49,87,202,436,461,582,661,667,697,727,772, 779,1103,1286,1389,1391,1394.
	Middle Camp (Oro Fino, MD)	G 2	Pb, Au, Ag, Cu, alunite	Middle Tertiary(?) disseminations and veins, locally NW-striking. Associated(?) with the Diablo quartz monzonite.	47,49,72,82,87,119,202,291,330,430,436,461, 498,557,582,661,667,686,697,779,786,888, 1103,1237,1286,1389,1390,1391,1394.
	Midway	F 3	Cu, Au, Ag	Middle Tertiary veins. Fluorite present; barite is a gangue mineral. Possibly related to a detachment fault system.	47,87,351,356,557,697,779,963,1066,1103.
	Moon Mountains	F, G 2	Au, Ag	Sporadic gold-silver veins and disseminations in and near the 18-15-m.y.-old Moon Mountains low-angle detachment fault. Associated(?) with rhyolitic plugs.	47,49,87,202,330,436,594,604,661,667,697,772, 779,1102,1103,1237,1286,1389,1391,1394.
	New Water (sa Southern Plomosa)	G 2	Ag, Pb, Cu, Au, Zn, (Mn, Ba, F)	Middle Tertiary veins and replacements in shear zones in Miocene(?) volcanic rocks, and in steeply inclined fissure zones in volcanic agglomerate and pre-Cenozoic rocks.	47,49,87,325,436,461,609,652,667,697,772,779, 786,879,886,887,888,1103,1286,1389,1391, 1394.
	Northern Plomosa(sa Bouse, Plomosa Pass)	F 2	Au, Cu, Ag, Pb, (Mn, Ba)	Middle Tertiary veins cutting metasedimentary rocks and Miocene volcanic rocks. Located in or near the Plomosa detachment fault.	47,49,87,325,436,461,557,609,652,667,697,772, 779,886,888,940,1103,1217,1286,1327,1389 1391,1394.
	Planet (Mineral Hills Wash, Santa Maria, MD)	F 2	Cu, Au, Ag	Middle Tertiary deposits in the Buckskin-Rawhide low-angle detachment fault system.	47,87,325,351,436,461,557,604,609,668,779, 1070,1286,1349,1350,1393,1394.
	Plomosa Pass (sa Northern Plomosa)	G 2	Cu, Ag, Au	Deep level mesothermal copper skarn system marginal to the probable late Cretaceous Mudersback pluton.	47,49,87,324,436,557,609,652,667,697,772,779, 886,888,1103,1212,1286,1327,1389,1394.
	Pride (Cienega, MD)	F 2	Au, Cu, Ag	Middle Tertiary veins located in the Buckskin-Rawhide detachment fault system. Specular hematite abundant.	11,47,87,172,351,356,436,668,697,779,1103, 1286,1329,1350,1393,1394,1424.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
La Paz (cont.)					
	Silver (Eureka, MD)	H 1	Ag, Pb, Zn, Au, Cu, (F, Ba)	Middle Tertiary veins along faults cutting Miocene volcanic and sedimentary rocks; probably associated with Trigo Mts. detachment fault system.	45,47,51,87,135,159,218,266,291,436,461,478, 474,499,526,547,604,609,661,697,899,968, 1061,1103,1179,1217,1244,1245,1247,1286, 1327,1374,1387,1391.
	Southern Plomosa (sa New Water; Plomosa, MD)	G 2	Cu, Au, Ag, Pb, (W)	Middle Tertiary veins near Cretaceous thrust faults.	47,49,54,87,325,330,436,582,604,609,652,661, 667,686,697,772,779,822,886,887,888,1016, 1099,1103,1286,1389,1391,1394.
	Swansea (Santa Maria, MD)	F 3	Cu, Ag, Au, (Fe, F)	Middle Tertiary deposits in the low-angle Buckskin-Rawhide detachment fault system.	47,87,351,356,557,609,697,779,1066,1070,1103, 1212,1325,1327,1328,1350,1394.
	Trigo Mountains (Cibola, MD)	H 1	(Mn), Pb, Ag, Au, Cu	Middle Tertiary veins. Possibly related to the Trigo Mts. detachment fault system.	47,51,54,436,461,499,526,661,697,908,968,1103, 1286,1374,1378,1391,1394.
	Tungsten Hill (La Paz, MD)	H 1	(W ± Be, Li)	Late Cretaceous skarns and veins near a foliated dioritic pluton.	87,202,604,779,1103,1104.
Maricopa					430
	Aguila (Bighorn, MD)	G 4	(Mn), Au, Cu, Pb, Ag, (Ba)	Middle Tertiary veins cutting volcanic rocks and Precambrian metamorphic rocks.	47,87,436,461,604,668,779,882,906,1066,1103, 1118,1286,1393,1394.
	Bickle	F 7	U	Precambrian pegmatites at intersection of NW- and NE-trending shears with pegmatites in coarse-grained 1.4(?)-b.y.-old biotite granite.	330,390,1118.
	Bighorn (sa Aguila)	G 4	Au, Cu, Ag, Pb	Middle Tertiary veins associated with a microdiorite dike swarm.	53,436,461,462,604,668,882,906,1066,1070,1103, 1118,1286,1393,1394.
	Bronco Creek (Cave Creek, MD)	F 7	Au, Cu, Ag	Precambrian strata-bound volcanogenic massive sulfide deposits.	390,436,787,1394.
	Buckeye Hills	H 5	(Be? Li?)	Late Cretaceous-early Tertiary(?) pegmatitic deposits.	110,204,205,206,1030,1103,1118.
	Cave Creek (Camp Creek, MD; sa Bronco Creek)	F 6,7	Au, Cu, Ag, Pb, (W)	Middle Tertiary(?) veins near middle Tertiary(?) felsic stock.	45,47,330,390,436,522,600,603,661,668,786,787, 871,1118,1286,1378,1394.
	Dushey Canyon	F 4	Au, Cu, Ag	Middle Tertiary(?) veins associated with 28-23-m.y.-old microdiorite dikes.	87,604,684,779,1066,1070,1071,1103.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Maricopa (cont.)					
	Four Peaks	G 8	(W, Be), amethyst	Precambrian pegmatites and veins in and near the probable 1.4-b.y.-old Four Peaks granite.	330,390,1298,1376.
	Gila Bend Mountains (sa Webb)	H 4	Au, Cu	Deposits in quartz veins of Middle Tertiary(?) age cutting schist of uncertain age and associated(?) with middle Tertiary(?) andesitic to granitic dikes.	47,49,261,430,461,661,697,1103,1286,1374, 1389,1390.
	Goldfields	G 7	Au, Ag	Middle Tertiary veins. Deposits along two N-trending steeply W-dipping faults.	53,390,436,477,661,905,986,1087,1155,1167, 1168,1169,1170,1171,1223,1231,1286,1394.
	Grays Gulch	F 6	(Cu, Au ± Ag, ± Zn)	Precambrian strata-bound volcanogenic massive sulfide deposits.	67,390,782,1286.
	Hardly Able	F 6	Cu, Au,	Middle Tertiary(?) veins.	390,436,661,1103,1286,1298.
	Harquahala (sa Ellsworth, Little Harquahala)	G 4	Au, Cu, Ag, Pb, (F)	Middle Tertiary veins and disseminations in or near NW- to WNW-striking 28-23-m.y.-old microdiorite dikes. Partially located near Mesozoic thrust faults.	47,49,54,87,330,436,461,485,493,557,604,661, 684,697,701,779,880,1019,1066,1070,1071, 1073,1103,1194,1217,1270,1286,1303,1304, 1389,1391,1394.
	Lime Creek	F 7	U	Precambrian veins or fissures. Pitchblende and autunite in a NE-striking shear zone.	330,390,1118.
	Magazine (Red Rover, MD)	F 7	Ag, Cu, Au	Lenses of uncertain age in a Proterozoic metarhyolite schist.	67,390,787,1286.
	Mazatzal Mountains (Sunflower, MD)	F 7	(Hg), Au, Pb, Ag, Cu	Deposits in Precambrian (1.65-b.y.-old) granitic rocks.	119,330,390,447,456,525,666,667,772,851, 1146,1286,1376,1378,1394.
	McDowell	G 7	Cu, Ag, Au	Unclassified deposits.	390,1286.
	Midway	G 4	Base and precious metals	Unclasified deposits--altered areas in middle Tertiary volcanic rocks.	1070,1103.
	Osborne	G 4,5	Pb, Au, Cu, Ag, Zn	Middle Tertiary veins cutting 25-20(?)-m.y.-old volcanic rocks.	50,604,1070,1103,1286,1298.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Maricopa (cont.)					
	Painted Rock	H 4	Cu, Pb, Ag, Au, (Ba)	Middle Tertiary veins and replacements. Veins cut Miocene volcanic rocks of the Painted Rock Mountains.	45,204,205,206,581,601,713A,717,983,1103,1217, 1286,1327,1329,1405.
	Phoenix Mountains	G 6	Au, (Hg), Cu, Ag	Veins of uncertain age in 1.8-1.7-b.y.-old metasedimentary rocks.	390,1103.
	Pikes Peak (Morgan City, MD)	G 6, F 5	Au, Cu, Pb, Ag	Middle Tertiary veins associated with andesitic dikes.	45,47,330,390,489,600,603,661,786,1103,1193, 1286,1363,1378,1391,1394.
	Red Picacho	F 5	Cu, Au, Ag	Middle Tertiary veins, probably associated with microdiorite dikes.	46,56,189,390,430,647,798,1103,1394.
	Relief	G 6	Au, Ag	Middle Tertiary(?) veins.	390.
	Salt River Mountains	H 6	Au, Cu, Ag	Middle Tertiary veins associated with the 26-m.y.-old South Mountains granodiorite pluton and related microdiorite dike swarm.	53,204,205,206,436,1072,1074,1103,1286,1394.
	San Domingo	F 5	Au, Cu, Ag, Pb	Middle Tertiary veins along faults in possible upper plate of a regional detachment fault system.	49,390,604,661,1028,1070,1103,1286,1298,1391.
	Sar Jac	F 4,5	Cu, (W)	Cretaceous porphyry deposits near the 65-m.y.-old Wickenburg batholith.	390,871,1067,1070,1103,1118.
	Sunrise	F 4	Cu, Ag	Middle Tertiary(?) veins cutting 1.7(?)-b.y.-old granitic rocks. Hematite abundant; minor pyrite locally present.	390,1067,1103.
	Vulture (Wickenburg, MD)	F 5	Au, Ag, Pb, Cu, (Zn)	Middle Tertiary(?) veins cutting 1.8-1.7-b.y.-old schist.	48,49,62,330,365,390,436,526,604,637,661,668, 824,871,882,1023,1067,1070,1103,1118,1286, 1298,1394.
	Webb (sa Gila Bend Mountains)	H 5	Cu, Au, Ag, Pb	NW-striking middle Tertiary veins cutting schist of uncertain age.	47,1103,1217,1297,1399.
	White Picacho	F 5	(W, Li, Be), Mo, Au, Ag	Scheelite in fractures near 1.4(?)-b.y.-old pegmatites.	45,47,54,56,121,330,331,390,604,642,798,872, 1104,1378.
	White Tank	G 5	(Cu, ± Mo, Mn, Au, ± Pb, Zn)	Late Cretaceous(?) porphyry-like deposits near an undated quartz monzonite porphyry pluton.	1070,1103.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Maricopa (cont.)					
	Winifred	G 6	Au, Cu, Ag, Pb	Middle Tertiary(?) veins associated with felsic(?) dikes.	390,436,1103,1138,1286,1394.
Mohave					1397.
	Aquarius Mountains	E 3	W	Vein system in 1.68-1.65-b.y.-old biotite quartz monzonite with abundant aplites and pegmatites.	158,331,595,622,707,786,797,1217,1316,1378.
	Artillery (Artillery, MD)	E 3	Mn	Middle Tertiary(?) strata-bound lenses in Chapin Wash formation.	22,56,356,430,461,501,526,562,604,667,765,766, 779,799,932,933,959,961,962,1066,1070,1393.
	Artillery Peak (Artillery, MD)	F 3	Ag, Cu, Au, Pb, (Mn)	Veins associated with rhyolite neck and dikes that intrude the lower Artillery formation (~24-16-m.y.-old).	22,45,47,331,356,461,501,574,604,666,667,668, 697,753,764,765,766,779,832,874,932,933,959, 960-64,984,1066,1070,1113,1117,1135,1136, 1173,1265,1374,1378,1393,1394,1396.
	Black Burro	F 3	(Mn, U)	Stratiform lenses in Miocene sedimentary rocks.	356,430,461,765,766,961,962,1066,1070.
	Black Diamond	A 2	Mn	Middle Tertiary veins in a NE-striking fault zone cutting Paleozoic carbonate rocks.	246,351,461,926.
	Bonegas	E 3	Cu, (Mn)	Cretaceous porphyry copper deposit with marginal manganese-bearing veins.	604.
	Boriana (sa Silverado)	D 3	(W), Cu, Ag, Au	Early Tertiary veins along contact of two-mica granite (Laramide?) pluton.	47,127,331,604,622,707,709,779,786,797,832, 874,1025,1094,1129,1130,1135,1136,1265,1266, 1348,1378.
	Buck Mountains	E 2	Au, Pb, Ag, Cu	Middle Tertiary veins within a NW-striking dike swarm of probable middle Tertiary age.	604,634.
	Castenada	E 3	Mn	Strata-bound lenses in Miocene sedimentary rocks.	430,1070.
	Cedar Valley (sa Diamond Joe)	E 3	Au, Ag, Cu	NW-striking middle Tertiary(?) veins.	45,55,331,631,779,874,983,1094,1130,1265.
	Chemehuevis	E 2	Au, Pb, Ag, Cu, Zn, (W)	NW-striking middle Tertiary(?) veins within a NW-striking dike swarm.	331,634,661,707,712,937,1013,1339,1394.
	Cleopatra	F 3	Cu, Au, Ag, Pb	Middle Tertiary deposits in the 18-15-m.y.-old Buckskin-Rawhide low-angle detachment fault system.	356,430,766,961,962,1066,1070,1118.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Mohave (cont.)					
	Cottonwood (Cottonwood Cliffs, MD)	C 3	Cu, Au, Ag, Pb, (W)	Precambrian(?) veins within a 1.7-b.y.-old granodiorite pluton, locally associated with low-angle fault zones.	56,246,331,351,707,797,911,1130,1394.
	Crosby (Eureka, MD)	E 4	Au, Cu, Ag, Pb	Middle Tertiary(?) veins in and near middle Tertiary(?) low-angle detachment(?) faults.	46,47,56,390,430,604,882,961,962,1286,1394.
	Cyclopic (Gold Basin, MD)	C 2	Au, Ag, Pb, Cu	Middle Tertiary veins along a 15-13-m.y.-old detachment fault. Fluorite is an accessory mineral.	35,45,47,65,150,151,152,153,156,177,246,436, 577-80,604,613,661,707,811,1027,1129,1130, 1136,1246,1365,1375,1389,1391,1394,1396.
	Diamond Joe (sa Cedar Valley)	D 3	Ag, Cu, Pb, Au, Zn, (Mo)	Veins and disseminations in, and marginal to the 72-m.y-old Diamond Joe pluton.	45,47,56,127,483,553,579,602,713A,759,779,797, 832,874,1025,1130,1135,1136,1265,1348,1396.
	Eldorado Pass	C 1	Au, Ag, Cu, Pb	Middle Tertiary veins along faults cutting 20-14-m.y.-old alkaline volcanic rocks.	35,36,37,64,246,436,497,604,656,779,804,832, 874,1027,1129,1130,1135,1136,1140,1265,1331, 1368,1378,1394,1396.
	Emerald Isle (Wallapai, MD)	C 2	Cu, Au, Ag	Exotic oxide copper deposits in Tertiary-Quaternary fluvial sedimentary rocks near the Mineral Park porphyry deposit.	117,246,381,433,558,561,1027,1129,1227,1238, 1239,1240,1241,1394.
	Fluorescent	D 3	W	Veins in schist near contact with 1.4-b.y.-old megacrystic granite.	246,353,709,797,1130.
	Galen	C 1	Cu, Mo, Ag, Au, Pb, Zn	Late Cretaceous porphyry deposit.	36,37,246,804,1027.
	Garnet Mountain	C 2	W	Scheelite in narrow quartz veinlets (Precambrian) that cut horneblende schist.	153,246,331,766,786,868,1027,1274.
	Gold Basin	B 2	Au, Ag, Pb, Cu	Late Cretaceous veins in and near the 72-m.y.-old OK two-mica granite pluton.	35,45,47,65,150,151,152,153,156,177,246,436, 577-80,604,613,661,707,811,1027,1129,1130, 1136,1246,1365,1375,1389,1391,1394,1396,
	Gold Hill	B 2	Au, Ag, Cu, Pb	Late Cretaceous(?) veins marginal to the 72-m.y.-old OK two-mica granite pluton.	150,151,153,246,364,604,802,1129,1130,1136, 1394.
	Greenwood (Signal, MD; sa Lost)	E 3	Au, Ag, Cu, Pb	Middle Tertiary veins near NW-striking, probable middle Tertiary dikes.	331,558,613,707,786,961,962,1118,1130,1301, 1378.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Mohave (cont.)					
	Hackberry (Peacock, MD)	C 3	Ag, Pb, Au, Zn, Cu	Late Cretaceous(?) veins.	246,353,604,797,1130,1274.
	Hualapai (sa Maynard, Wheeler Wash)	D 2,3	Cu, Zn, Pb, Ag, Au	Precambrian strata-bound volcanogenic massive sulfides in the Hualapai Greenstone belt.	45,47,56,117,331,483,536,604,631,707,709,713A 779,797,832,874,983,1025,1094,1130,1129, 1135,1136,1205,1265,1348,1378,1394,1396.
	Lead Pill	E 3	Pb, Au, Cu, Ag	Middle Tertiary veins and replacements in the upper plate of an 18-15-m.y.-old detachment(?) fault.	356,430,766,961,962,1066,1070.
	Lost (Greenwood, MD)	E 3	W	Precambrian wolframite and scheelite in a quartz vein cutting coarse-grained 1.4(?)-b.y.-old granite with pegmatites.	(no references)
	Lost Basin	B 2	Cu, Au, Ag, (U)	Late Cretaceous(?) veins marginal to the 72-m.y.-old OK two-mica granite pluton.	150,151,153,246,331,364,604,761,1027,1129, 1130,1136,1389,1394.
	Madrill Peak	E 3	Au, Cu,	Middle Tertiary veins near ENE-striking dikes.	47,766,961,962,1066,1070,1298.
	Maynard (sa Hualapai)	D 3	Ag, Au, Pg, Cu, Zn, (U)	Late Cretaceous veins near a 65-m.y.-old quartz monzonite pluton.	47,246,331,353,436,604,709,713A,759,779,797, 832,874,1025,1129,1130,1135,1136,1265,1348, 1394,1396.
	McConnico	D 2	Au, Ag, Cu,	Middle Tertiary(?) veins near NW-striking dikes.	246,353,604,709,797,1118,1129,1130,1389.
	McCracken	E 3	Ag, Pb, Au, Zn, Cu, (Ba)	Middle Tertiary deposits in a low-angle breccia zone cutting Precambrian gneisses. Barite is a gangue mineral.	87,436,604,764.
	Mesa	F 3	Mn	Middle Tertiary fracture fillings cutting Paleozoic carbonate rocks, and strata-bound, stratiform lenses in Tertiary sandstones.	356,430,461,1066,1070.
	Minnesota	B 1	Au, Cu, Ag, Pb	Middle Tertiary veins along faults cutting 20-14-m.y.-old alkaline volcanic rocks.	36,37,246,802,804,1027,1129,1130.
	Music Mountain	C 3	Au, Ag, Pb, Cu	Late Cretaceous veins in and marginal to 65-m.y.-old Music Mountain pluton.	246,604,868,1129,1130.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Mohave (cont.)					
	Oatman (San Francisco, MD; sa Union Pass)	D 2	Au, Ag, Cu, Pb	Middle Tertiary veins cutting 20-14-m.y.-old alkaline volcanic rocks and, locally, monzonite porphyry stocks.	35,59,60,61,89,175,178,225,226,246,353,384, 388,497,604,627,657,769,770,771,779,828, 832,832,874,902,929,950,951,965,1021,1027, 1051,1083,1086,1129,1130,1135,1136,1140, 1150,1163,1201,1202,1203,1254,1265,1331, 1366,1368,1378,1394,1396,1406,1408.
	Ophir	D 3	W	Precambrian veins. Sparse, sporadic scheelite occurs in discontinuous quartz veins that parallel foliation in metasedimentary rocks marginal to granitic late Proterozoic plutons.	246,331,622,709,797,1130,1378.
	Owens (Potts, Mountain, MD; sa McCracken)	F 3	Ag, Au, Pb, Cu, Zn	Middle Tertiary veins and replacements above a 18-15-m.y.-old low-angle detachment fault.	47,436,526,604,779,832,874,984,1025,1070, 1129,1130,1135,1136,1157,1173,1265,1378, 1393.
	Pilgrim	C 1,2	Au, Ag	Middle Tertiary veins along faults cutting 20-14-m.y.-old alkaline volcanic rocks.	37,246,497,559,804,1027,1129,1130,1394.
	Pilot Rock	E 2	Mn	Middle Tertiary veins cutting 20-15(?)-m.y.-old volcanic rocks and sandstone.	430,461,462,604,712,1070,1393.
	Pine Peak	E 3	Au, Zn, Pb, Ag, Cu	Middle Tertiary veins and replacements associated with a dike swarm.	604,779.
	Rawhide	F 3	Pb, Ag, Cu, Zn, Au	Middle Tertiary veins and replacements. Deposits occur along 18-15-m.y.-old low-angle faults.	356,430,764,765,766,961,962,1066,1070,1157-59, 1173.
	Shannon Basin	E 3	Cu	Cretaceous porphyry deposit associated with the Shannon Basin pluton.	45,604,779.
	Silverado (Hibernia, MD)	D 3	Ag, Pb, Cu	Laramide veins, possibly marginal to the 72-m.y.-old Diamond Joe composite pluton.	797,1130.
	Three-in-One	D 3	(W ± Be, Li)	Precambrian veins in pegmatites. (1.7-1.6(?)-b.y.-old)	246,786,797,1130.
	Topock	E 2	Au, Cu, Ag	Early Tertiary veins associated with a major NW-striking dike swarm.	353,604,634,668,712.
	Triple H	F 2	U	Miocene(?) vein.	158,430,1070.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Mohave (cont.)					
	Union Pass (Katherine, MD)	D 1,2	Au, Ag	Probable middle Tertiary veins associated with 20-14-m.y.-old alkaline volcanic rocks.	37,56,246,436,497,604,770,804,1027,1129,1130, 1286,1394.
	Virginia (Mockingbird, Weaver, MD)	C 1	Au, Ag, Cu, Pb	Middle Tertiary veins in faults that locally cut 20-14-m.y.-old alkaline volcanic rocks.	36,37,436,497,604,804,1027,1129,1130,1394.
	Wallapai (Chloride, Mineral Park, Cerbat, MD)	C 2	Cu, Mo, Ag, Zn Au, Pb	Cretaceous porphyry copper-molybdenum deposits in 72-m.y.-old Mineral Park pluton, with peripheral lead/zinc-bearing veins.	22,45,47,117,158,170,246,349,381,393,432,433, 436,470,500,506,526,558,561,595,597,604,648, 649,662,713A,779,795,832,835,866,874,958, 1027,1118,1128,1129,1130,1135,1136,1209, 1227,1238,1239,1241,1265,1301,1316,1351, 1352,1367,1394,1396.
	Wheeler Wash (Maynard, MD)	D 3	W	Tungsten-bearing quartz veins in or near a 68-m.y.-old muscovite-granite pluton.	246,604,709,797,1130.
	White Hills (Indian Secret, MD)	C 2	Ag, Au, Cu, Pb	Middle Tertiary(?) veins in Proterozoic schist.	37,246,604,1027,1129,1130.
	Willow Beach	B 1	Au, Ag, (Mn)	Middle Tertiary veins associated with 20-14-m.y.-old alkaline volcanism.	36,37,246,803,804,864,1027,1129,1130,1378.
	Yellow Jacket	E 3	Zn, Ag, Au, Cu, Pb	Middle Tertiary(?) veins and replacements.	(no references)
	Yucca (Topock, MD)	E 2	Mn	Middle Tertiary veins cutting Miocene volcanic rocks, and stratiform deposits in sandstone.	353,461,634.
Pima					1397.
	Aguirre Peak (Baboquivari, MD)	K 7	(W), Cu, Ag, Au	Early Tertiary veins near Paleocene Presumidio Peak two-mica granite pluton and related pegmatites.	47,84,204,205,206,332,389,458,565,567,585,590, 695,871,1118,1378,1391,1394.
	Ajo	I 5	Cu, Au, Ag, Pb, Zn, Mo	Cretaceous porphyry deposits in the ~65-m.y.-old New Cornelia pluton.	12,45,46,47,85,120,122,123,183,184,204,205, 206,235,350,359,366,367,385,430,464,508,509, 510,511,512,514,516,517,533,535,554,644,661, 674,676,680,695,745,758,814,837,863,969,970, 1084,1085,1098,1101,1141,1215,1268,1286, 1302,1308,1327,1400.
	Ajo Cornelia (Ajo, MD)	I 5	Cu, Ag, Au	Strata-bound exotic copper deposits in middle Tertiary clastic rocks.	47,204,205,206,366,385,430,510,511,514,516, 676,680,695,758,1098,1309,1327,1328.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pima (cont.)					
	Amado (sa Arivaca)	K 8	Au, Ag, Pb, Cu, Zn	Jurassic skarn deposits marginal to 154-m.y.-old Amado monzonite stock.	46,47,204,205,206,332,695,703,1015,1118,1378, 1391.
	Amole (Tucson Mts, MD; sa Quien Sabe, Sedimentary Hill, Saginaw Hill)	J 8	Cu, Pb, Ag, Au, Zn, (Mo)	Late Cretaceous veins and replacements marginal to the 74-m.y.-old Amole monzonite pluton.	13,45,47,73,125,137,138,141,168,192,200,204, 205,206,208,210,211,260,278,290,304,306,334, 335,336,337,342,344,345,349,412,430,465,504, 534,538,540,546,569,632,643,653,695,714,719, 839-48,861,884,885,927,947,1015,1078,1189, 1212,1222,1267,1286,1295,1327,1342,1347, 1378,1418.
	Arivaca (sa Amado, Oceanic, Easter, Las Guijas, Cerro De Fresnal)	K 8	Cu, Au, Ag, Pb, Zn	Middle Tertiary veins and replacements associated with a probable 30-25-m.y.-old rhyolitic dike swarm.	47,56,204,205,206,332,661,695,703,1302,1378, 1389,1391.
	Baboquivari (sa Aguirre, Mildred Peak, Quinlan)	K 7	Au, Ag, Cu, Pb	Middle Tertiary(?) veins associated with a 26-m.y.-old rhyolitic dike swarm.	45,47,56,84,204,205,206,270,389,458,460,566, 567,590,631,695,702,713A,745,871,940,1286, 1302,1328,1378,1391,1394,1410.
	Ben Nevis (Quijotoa, MD)	J 6	Ag, Au, Cu, Pb	Middle Tertiary veins cutting Miocene volcanic rocks.	47,56,204,205,206,442,503,557,585,661,695, 1109,1212,1217,1266,1295,1302,1389,1391, 1394.
	Black Dragon	J 7	Mn	Middle Tertiary(?) veins.	47,56,84,204,205,206,389,458,460,566,567,590, 631,695,702,871,1286,1302,1378,1391,1394.
	Blue Rock	J 10	(U, F)	Veins or fissures of uncertain age. Deposits occur along a complex, low-angle fault zone.	47,146,263,264,265,274,319,526,761,1032,1118, 1119,1250,1252,1253.
	Box Canyon	K 9	(Au, Ag, Cu, Pb, Zn)	Probable 26-25-m.y.-old deposits occur along SW-directed thrust faults cutting the Rosemont porphyry deposit of Laramide age 3 mi to the north. Related(?) to 26-25-m.y.-old Box Canyon dike swarm.	45,46,47,181,310,323,394-404,407,410,415,436, 483,539,575,602,611,658,659,675,693,695, 1118,1121,1133,1134,1137,1139,1295,1302, 1314,1327,1378.
	Brownell (Quijotoa, MD)	J 6	Cu, Ag, Pb, Au, (U)	Cretaceous porphyry deposits?	47,56,204,205,206,503,526,557,585,661,695, 1109,1118,1302,1389,1391,1394.
	Cababi (sa Comobabi)	J 7	Ag, Au, Pb, Cu, Zn, (Ba)	55-45-m.y.-old veins.	45,46,47,56,190,204,205,206,212,213,332,357, 460,503,564,585,589,678,695,713A,717,745, 819,838,863,1212,1286,1328,1356,1357,1389.
	Cadillac	J 5	Mn	Middle Tertiary veins in a fault cutting Miocene volcanic rocks.	204,205,206,585,680.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pima (cont.)					
	Canada Del Oro (sa Little Hills)	I 9	(Au ± Cu, Pb)	Middle Tertiary veins associated(?) with dikes cutting the 26-m.y.-old Catalina quartz monzonite pluton.	47,53,93,316,317,357,430,655,695,700,745,919, 920,1029,1295,1310,1391,1394.
	Cardinal Ave (Amole, MD)	J 8	(U ± V)	Strata-bound deposits in middle Tertiary sedimentary rocks.	200,204,205,206,410,430,583,715,977,978,1118, 1119.
	Catalina	I 9	Cu, Ag, Au, Pb	Late Cretaceous(?) porphyry skarn deposits associated(?) with a dioritic pluton. Probably deformed and metamorphosed in early Tertiary time.	1,2,45,47,90,93,94,95,99,168,169,195,196,209, 214,236,282,312,316,317,321,330,332,333,338, 340,346,347,348,349,357,417,430,459,695,700, 870,919,920,971,972,1118,1160-62,1174,1307.
	Cave Creek (Camp Creek, MD; sa Bronco Creek)	K 9	Cu, Ag, Au, Pb	Middle Tertiary vein deposits near a probable 30-25-m.y.-old NE-striking rhyolitic dike swarm.	45,47,330,390,436,522,600,603,661,668,786,787, 871,1118,1286,1378,1394.
	Cerro Colorado	K 8	Ag, Pb, Cu, Au	Late Cretaceous veins and replacements cutting 69-m.y.-old andesitic volcanic rocks.	47,204,205,206,254,360,462,669,695,703,1015, 1197,1212.
	Cerro De Fresnal (sa Arivaca)	K 8	Au, Ag, Cu	Middle Tertiary(?) veins associated (?) with a probable 30-25-m.y.-old NW-striking dike swarm.	204,205,206,695.
	Cimarron Mountains	I 6	(Mn), Au, Pb, Cu, Ag	Cretaceous veins in deformed Paleozoic carbonate rocks near the 68-m.y.-old Cimarron granodiorite pluton.	56,191,204,205,206,462,585,695,1302.
	Comobabi (Cababi, MD)	J 7	Cu, Ag	Early Tertiary veins. Barite present locally.	46,47,56,212,204,205,206,357,460,564,585,589, 661,695,745,819,1286.
	Coyote	J 7	Cu, Ag, Au	Late Cretaceous(?) porphyry skarn deposits adjacent to a deformed dioritic pluton.	45,47,190,204,205,206,249,332,357,430,460,567, 585,589,695,702,713A,717,755,863,1118,1266, 1286,1312,1313,1327,1328,1391,1394.
	Cuprite (Helvetia, MD)	J 9	Cu, Pb, Ag, Au Zn, (W)	Cretaceous porphyry skarn deposits near 60(?)-m.y.-old quartz latite porphyry stocks.	46,47,181,201,310,323,332,396-400,404,410,415, 421,430,473,675,658,659,693,695,776,1017, 1121,1134,1137,1243,1295,1302.
	Easter (Arivaca, MD)	K 8	Au, Ag, (W)	Early Tertiary(?) veins in and near muscovite granite pluton.	47,56,204,205,206,332,661,695,703,1302,1378, 1389,1391.
	Empire	J 9	Pb, Ag, Cu, Zn, Au, (W)	Late Cretaceous replacement mantos marginal to the 70-m.y.-old Empire Mountains monzonitic pluton.	5,9,45,47,186,187,243,332,410,415,430,436,472, 473,487,488,490,491,507,695,713A,831,849 876,921,1121,1133,1134,1137,1139,1153,1198, 1378,1384,1402.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pima (cont.)					
	Greaterville	K 9	Pb, Ag, Au, Cu, Zn, (Mo)	Late Cretaceous replacements and skarns marginal to 60(?)-m.y.-old quartz latite porphyry stocks.	46,47,363,396-404,410,436,473,537,575,611, 695,1134,1137,1214,1286,1295,1378.
	Growler	J 4	Cu, Pb, Ag, Au	Early Tertiary(?) veins and replacements of Paleozoic carbonate rocks marginal to the Growler Mts. pluton.	47,204,205,206,351,430,680,695.
	Gunsight (Meyer, MD)	J 5	Ag, Pb, Au, Cu, Zn	55-45-m.y.-old veins cutting the Gunsight Mts. granodiorite pluton of probable Paleocene age. Deposits may be related to muscovite granite pluton in eastern Gunsight Hills.	45,47,184,190,204,205,206,332,366,585,695,863, 1098,1268,1327,1328,1378.
	Helvetia (sa Cuprite)	J 9	Cu, Ag, Zn, Au, Pb, Mo	Porphyry copper skarns marginal to ~60-m.y.-old quartz-latite porphyry stocks. System is subsequently modified by probable 20-15-m.y.-old low-angle detachment faults.	45,46,47,181,201,310,323,363,394-404,407,410, 415,421,436,483,539,602,606,611,658,659, 675,693,695,713A,745,835,883,889,890,1295, 1314,1302,1118,1121,1133,1134,1137,1139, 1327,1378.
	Jackson (Old Baldy, MD)	K 9	Cu, Ag, Au	Cretaceous porphyry deposits(?). Deposits cut Elephant Head quartz monzonite.	363,399,401,402,403,410,415,1118,1134.
	Keystone (sa Papago)	J 8	Au, Ag, Pb, Cu, Zn, (F)	Late Cretaceous veins cutting Ox Frame volcanic rocks and late Cretaceous Red Boy rhyolite; are truncated by 64-m.y.-old Ruby Star granodiorite.	46,47,56,204,205,206,289,293,294,321,410,618, 636,640,661,695,756,805,821,834,867,913, 1015,1049,1118,1302,1382,1389.
	Kitt Peak	K 7	(Cu ± Mo, Mn, Ag ± Pb-Zn)	Jurassic porphyry deposit associated with pre-147-m.y.-old Pavo Kug granite and Kitt Peak monzogranitic plutons.	204,205,206,460,566,567,695,702,1312.
	Las Guijas (Arivaca, MD)	K 8	(W), Au, Cu, Ag	Early Tertiary veins in pre-38-m.y.-old Las Guijas alaskite pluton.	14,47,56,204,205,206,332,661,695,703,1015, 1164,1302,1360,1378,1389,1391.
	Magonigal (Silver Bell, MD)	I 7	Cu, Ag, (Mn)	Late Cretaceous veins cutting late Cretaceous Claflin Ranch and Silver Bell formations.	3,22,47,56,100,109,204,205,206,271,435,462, 555,695,708,1079,1175,1213,1264,1266,1317.
	Marble Peak (Old Hat, Control MD)	I 9	Cu, Ag, Pb, Au, Zn, (W)	Cretaceous skarn deposits marginal to 70-65-m.y.-old Leatherwood quartz diorite pluton.	47,93,185,316,317,322,332,357,418,430,661,695, 700,919,920,1003,1389.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pima (cont.)					
	Mildred Peak (Baboquivari, MD)	K 7	Au, Ag, Pb, Cu	55-45-m.y.-old veins peripheral to probable late Paleocene Presumidio Peak two-mica granite.	47,56,84,204,205,206,389,458,462,565,566,567, 585,590,631,678,695,702,717,871,1286,1302, 1328,1378,1391,1394,1415.
	Mine Canyon (Whetstone, MD)	K 10	Cu, Ag, Au	Latest Cretaceous-early Tertiary vein deposits in and near the 74-m.y.-old Mine Canyon pluton.	47,56,229,314,407,410,435,672,695,695,1276, 1286,1380.
	Montezuma (Puerto Blanco Mts, MD)	J 5	Cu, Ag, Pb, Au	Early Tertiary veins marginal to the probable Paleocene Senita Basin two-mica granite pluton	47,204,205,206,695.
	Oceanic (Arivaca, MD)	K 8	Au, Ag, Pb, Cu	Middle Tertiary veins related(?) to 30-25-m.y.-old NW-striking rhyolitic dikes.	204,205,206,703,1015.
	Old Baldy (sa Jackson)	K 9	Pb, Zn, Ag	Late Cretaceous veins and replacements in and near the 68-m.y.-old Madera granodiorite pluton.	44,45,47,165,394,395,396,399-404,407,410,415, 436,483,531,539,569,575,661,695,696,713A, 745,835,1075,1133,1134,1136,1139,1224,1243, 1286,1326-28,1344,1389.
	Papago (Sierrita, Keystone, MD)	J 8	Pb, Ag, Cu, Au, Zn, (U, V)	Early Tertiary(?) veins and replacements in Paleozoic carbonate rocks marginal to a 50-m.y.-old pegmatite swarm in the 64-m.y.-old Ruby Star granodiorite.	12,15,47,199,204,205,206,293,294,414,435,462, 526,607,661,695,702,940,1049,1212,1248,1302, 1389,1391,1415.
	Quien Sabe (Amole, MD)	J 8	Cu, Ag, Au, Pb	Latest Cretaceous-early Tertiary porphyry deposits in and near intrusive bodies that cut Paleocene volcanic rocks.	13,47,125,137,138,168,192,200,204,205,206,278, 304,410,430,534,632,643,653,695,714,715,719, 840,848,861,1015,1212,1286,1325,1347,1378.
	Quijotoa (sa Brownell, Ben Nevis)	J 6	Au, Cu, Ag, Pb, (U)	Early Tertiary(?) veins marginal to the probable Paleocene Quijotoa two-mica granite pluton.	47,56,204,205,206,503,557,585,661,695,940, 1109,1118,1266,1302,1389,1391,1394.
	Quinlan (Baboquivari, MD)	J 7	Pb, Ag	Cretaceous quartz veins in and marginal to the 58-m.y.-old Gu Chuapo two-mica granite pluton.	47,56,84,204,205,206,332,389,458,460,566,567, 590,631,695,702,871,1118,1286,1302,1312, 1378,1391,1394.
	Quitobaquito	K 4	(Pb, Ag, ± Cu)	Early Tertiary(?) veins and replacements marginal to the Paleocene(?) Senita Basin two-mica granite pluton.	204,205,206,430.
	Redington	I 9	Cu, Ag	Latest Cretaceous-early Tertiary porphyry skarn system marginal to the 70-65-m.y.-old Leatherwood quartz diorite pluton.	1,2,45,46,47,90,93,94,95,97,169,195,196,209, 214,236,251,282,312,315,316,321,322,332,333, 338,346,347,348,349,526,695,700,865,919,920, 1029,1123,1302,1402.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pima (cont.)					
	Ridley (sa Helvetia)	J 9	(Cu, Pb, Au, Ag)	Veins in Precambrian crystalline rocks marginal to ~55-m.y.-old Helvetia stocks.	45,46,47,181,310,323,394-404,407,410,415,436, 483,539,602,611,658,659,675,693,695,1118, 1314,1121,1133,1134,1137,1139,1295,1302, 1327,1378.
	Rincon	J 9	Au, Cu, Ag, Pb, (Ba)	Middle Tertiary(?) veins cutting Paleozic carbonate rocks in the upper plate of the Catalina fault.	2,47,186,187,408,410,430,695,700,706,775,876, 920,1217,1252,1302,1330.
	Roadside	J 7	Au, Ag, (Mn)	Late Cretaceous(?) veins cutting the ~65-m.y.-old andesitic unit of the Roadside formation.	204,205,206,460,462,695,702,755,589,1286,1312.
	Rosemont		(Cu, Mo, Ag, Au, Pb)	~60-m.y.-old porphyry copper skarn system marginal to ~60-m.y.-old quartz-latite porphyry stocks.	45,46,47,181,310,323,394-404,407,410,415,436, 483,539,575,602,611,658,659,675,693,695,745, 808,835,1017,1243,1118,1121,1133,1134,1137, 1139,1295,1302,1314,1327,1378.
	Roskruge	J 8	Ag, Cu, Au	Latest Cretaceous-early Tertiary porphyry(?) deposits and veins in and marginal to the 69-m.y.-old Cocoraque Butte pluton.	47,139,140,204,205,206,589,695,702.
	Saginaw Hill (Amole, MD)	J 8	Zn, Cu, Pb, Ag, Au	Latest Cretaceous-early Tertiary porphyry deposits in and marginal to 61-m.y.-old biotite rhyolite dikes and plugs.	13,47,125,137,138,168,192,200,204,205,206,278, 304,410,430,534,632,643,653,695,714,715,719, 840,848,861,940,1015,1286,1328,1329,1347, 1378.
	San Pedro	I 9	(Mn ± Pb, Ba, Ag)	Middle Tertiary veins.	316,317,319,322,920.
	Santa Rosa	I 7	Cu, Au, Ag, Pb	Latest Cretaceous-early Tertiary porphyry deposits in 68-m.y.-old Santa Rosa pluton and related NE-striking dike swarm.	47,133,204,205,206,585,695.
	Sedimentary Hills (Amole, MD)	J 8	Cu, Ag	Latest Cretaceous-early Tertiary porphyry(?) deposits in early Cretaceous sedimentary rocks.	47,168,200,204,205,206,354,410,430,695,715, 1015.
	Sierrita-Esperanza (sa Twin Buttes, Keystone; Mineral Hill, Twin Buttes, Pima, MD)	J 8	Cu, Mo, Ag, Au, Pb, Zn	Porphyry copper-molybdenum system in and marginal to a 69-m.y.-old quartz diorite and ~62(?)-m.y.-old quartz monzonite porphyry stocks.	4,32,41,42,45,46,47,56,92,181,199,200,204,205, 206,208,209,227,245,289,293,294,306,313,321, 332,336,337,344,346,349,371,410,414,482,533, 569,583,596,615,616,636,641,642,650,661,695, 713A,745,805,814,816,817,818,834,850,867,940 977,978,1034,1049,1065,1116,1118,1127,1228, 1262,1263,1263A,1295,1302,1325-29,1343,1378, 1382,1389,1412.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pima (cont.)					
	Silver Bell (sa Magonigal)	I 7	Cu, Mo, Ag, Zn, Pb, Au, (F, Ba)	65-m.y.-old porphyry deposits and adjacent skarns in Paleozoic sedimentary rocks associated with the 67-m.y.-old Silver Bell quartz monzonite and related intrusions.	3,22,45,47,56,100,103,109,171,204,205,206,232, 271,335,386,434,435,439,444,532,533,555,568, 695,708,713A,834,836,859,969,970,1076,1078, 1079,1175,1212,1213,1264,1266,1295,1317, 1318,1327.
	Twin Buttes (sa Sierrita-Esperanza, Keystone; Mineral Hill, Twin Buttes, Pima, MD)	J 8	Cu, Mo, Ag, Zn, Au, Pb, (W)	Porphyry copper-molybdenum skarn system in and marginal to the 60-m.y.-old Twin Buttes quartz monzonite stock. System is subsequently displaced to the north by middle Tertiary movement on the San Xavier low-angle detachment fault (Mission-Pima and San Xavier north offset deposits).	41,42,45,46,47,56,63,92,113,114,115,181,199, 200,204,205,206,208,209,227,231,289,292,293, 294,306,313,321,326,332,336,337,344,346,349, 410,414,428,431,446,482,495,533,569,583,596, 617,618,633,636,640,645,651,661,679,695,713, 716,745,756,805,814,815,820,821,834,850,867, 913,940,967,977,978,1034,1049,1065,1077, 1118,1191,1192,1221,1260-63,1263A,1295,1302, 1305,1311,1325-29,1345,1378,1382,1389.
	Waterman (Silver Hill, MD)	I 7	Cu, Pb, Zn, Ag, Au	Late Cretaceous(?) veins and replacement deposits in Paleozoic sedimentary rocks ESE of the Silver Bell porphyry copper system.	47,56,204,205,206,695,854-59,940,1107.
Pinal					1396A
	Antelope (Priorwood, MD)	H 9	Cu, Ag, Au	Vein of uncertain age cutting 1.42-b.y.-old Oracle granite.	45,47,319,330,735,741,743,1298,1378.
	Black Mountain	I 8	(Be, W?)	Early Tertiary(?) pegmatite deposits. Blue beryl occurs sporadically in WNW-striking, early Tertiary(?) pegmatites that cut 1.42-b.y.-old Oracle granite.	102,319,330,430,738,786,1286,1378,1420.
	Bunker Hill (Copper Creek, MD)	I 9	Cu, Mo, Pb, Ag, Au	Latest Cretaceous-early Tertiary porphyry deposits. Associated with the 68-m.y.-old Copper Creek pluton and younger (61-53-m.y.-old) dacitic dikes. Barite locally present at Old Reliable mine.	22,23,45,47,51,70,250,319,321,362,372,436,440, 474,493,542,610,620,668,677,713A,713B,731 734,742,744,745,747-50,792,829,1011,1034 1178,1183,1185,1277,1286,1302,1324,1327, 1328,1329.
	Burney (sa Little Hills)	I 9	Pb, Cu, Zn, Ag, Au	Latest Cretaceous-early Tertiary replacement deposits related(?) to the 26-m.y.-old Catalina quartz monzonite pluton.	316,317,357,417,430,700,813,920,919,1288,1394.
	Canada Del Oro (sa Little Hills)	I 9	(Au ± Cu, Pb)	Middle Tertiary veins associated(?) with dikes cutting the 26-m.y.-old Catalina quartz monzonite pluton.	47,53,93,316,317,357,430,655,695,700,745,919, 920,1029,1295,1310,1391,1394.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pinal (cont.)					
	Casa Grande (Sacaton, MD; sa Vekol, Slate, Silver Reef)	H 7	Cu, Ag, Au, Pb, Zn, Mo	Latest Cretaceous-early Tertiary porphyry deposits marginal to the 65-60-m.y.-old Sacaton Peak quartz monzonite pluton.	47,53,85,103,131,132,258,430,533,544,549,914, 1024,1156,1231,1233,1278,1279,1286,1392, 1394.
	Christmas (Banner, MD)	H 9	(Cu, Cu-Mo, Mo-Cu)	Cretaceous porphyry, skarn, and replacement deposits in and marginal to 63-m.y.-old rhyodacite porphyry stocks.	53,176,319,321,426,427,661,721,722,723,724, 862,947,980,981,1007,1008,1047,1104,1229, 1353,1354,1355,1358,1391.
	Copper Butte	H 8	Cu, Ag, Au, Pb	Strata-bound exotic copper deposits derived(?) from the Mineral Creek porphyry copper system to the NE in 35-30-m.y.-old clastic rocks.	53,318,351,430,436,741,1046,1288,1394.
	Cottonwood (Crozier Peak, MD)	H 9	Au, Ag, Cu, Pb, Mo	Cretaceous porphyry deposits near 65-m.y.-old granodiorite porphyry stocks and E-W-striking dikes.	47,53,319,455,717,735,739,741,743,1104,1125, 1145,1298.
	Crescent	H 9	(Mn), Cu, Ag, Au	Middle Tertiary deposits along fracture zones in Apache Group and overlying fanglomerates of the 20-15-m.y.-old San Manuel formation.	53,319,462,732,743.
	Dripping Springs (Troy, MD)	H 9	Cu, Ag, Pb, Au	Latest Cretaceous-early Tertiary porphyry, vein, and replacement deposits in, and marginal to the 70-m.y.-old Rattler granodiorite pluton and probable 63-m.y.-old rhyodacite porphyry dikes.	45,47,53,182,300,302,351,427,557,661,713A, 7138,722,741,743,745,877,947,981,1008,1047, 1050,1117,1125,1145,1216,1391.
	Durham-Sulzo	I 8	Cu, Au, Ag	Latest Cretaceous-early Tertiary(?) porphyry deposits in probable 1.6-b.y.-old granodioritic rocks.	47,53,97,102,430,436.
	Estrella	H 6	Cu, Au, Ag	Veins of uncertain age in probable 1.8-1.7-b.y.-old metasedimentary rocks.	47,53,204,205,206,430,1103,1298,1392.
	Francisco Grande	H 7	Cu	Latest Cretaceous-early Tertiary porphyry deposits.	430,1421.
	Gold Circle	H 9	Au, Ag, Pb, Cu	Powellite, scheelite, wolfenite, gold, and galena in a quartz vein of uncertain age cutting 1.42-b.y.-old Oracle granite.	319,740.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pinal (cont.)					
	Goldfields	G 7	Au, Cu, Ag	Middle Tertiary veins cutting 20-15-m.y.-old rhyolitic volcanic rocks.	53,390,436,477,661,905,986,1087,1155,1167, 1168,1169,1170,1171,1223,1231,1286,1394.
	Gold Mine Mountain (Blackwater, MD)	H 7	U	Tertiary veins.	47,85,129,130,132,204,205,206,256,258,430,745, 914,1278,1392,1419.
	Grand Prize (Cottonwood, MD)	H 8	Au, Cu, Ag	Latest Cretaceous-early Tertiary vein deposits associated with 70-60-m.y.-old E-W-striking granodiorite porphyry dikes.	319,739,741,1420.
	Greenback (Pinal Grande, MD)	I 6	Au, Ag, Cu, (W, F)	Middle Tertiary veins associated with 26-m.y.-old dacitic plugs and dikes.	53,191,387,436,680,1394.
	Lakeshore	I 7	Cu, Au, Ag, Pb	66-65-m.y.-old porphyry deposits and skarns in, and marginal to the 67-m.y.-old Lakeshore pluton.	47,154,556,624,664,1199.
	Little Hills (Canada Del Oro, syn.)	I 9	Cu, Ag, Pb, Au	Latest Cretaceous-Early Tertiary(?) porphyry deposits in 1.42-b.y.-old Oracle granie associated with NE-trending rhyolitic and quartz monzonite porphyry dikes.	316,317,319,357,422,423,430,700,919.
	Mammon (Lakeshore, Slate, MD)	I 7	Au, Cu, Ag	Veins of uncertain age cutting Pinal schist.	47,53,154,556,624,664,1199.
	Mammoth (Tiger, Old Hat, MD; sa San Manuel)	I 9	Pb, Au, Cu, Zn, Mo, Ag, (V, F, Ba, W)	Middle Tertiary veins cutting the 28-22-m.y.-old Cloudburst formation. Associated with 22-m.y.-old alkalic plugs and dikes. Fluorite and barite are common gangue minerals.	47,50,228,234,237,311,319,368,370,462,668,732, 743,786,809,810,992,1142,1242,1286,1288, 1378,1388,1393,1394,1400.
	Martinez Canyon	H 8	Pb, Ag, Cu, Au, Zn	Middle Tertiary veins associated with 18-15-m.y.-old rhyolitic volcanic rocks and plugs.	50,68,430,704,741,1236,1286.
	Mineral Butte (Blackwater, MD)	H 7	Cu, Au, Pb, Ag	Latest Cretaceous-early Tertiary porphyry deposits associated with the 70-m.y.-old Mineral Butte quartz monzonite phase of the 73-60-m.y.-old Sacaton batholith.	204,205,206,430,1392.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pinal (cont.)					
	Mineral Creek (Ray, MD)	H 8	Cu, Mo, Ag, Au, Pb, Zn	60-52-m.y.-old porphyry deposits in, and marginal to the 62-60-m.y.-old Granite Mountain porphyry pluton and peripheral stocks.	22,45,47,53,68,91,92,96,98,99,106,107,272,273, 298,299,300,318,321,339,349,351,436,496,524, 526,533,584,713A,713B,736,741,743,745,795, 877,878,917,969,970,1000,1002,1009,1010, 1042,1047,1050,1125,1141,1207,1208,1235, 1286,1288.
	Mineral Hill	H 8	Ag, Cu, Au, Pb, Zn, (Mn, Ba, F)	Middle Tertiary veins. Related to 18-15-m.y.-old rhyolitic volcanic rocks of the Mineral Mountain volcanic center. Barite is a common gangue mineral.	50,53,181,430,704,741,1124,1235,1236,1286.
	Mineral Mountain	H 8	Au, Cu, Ag	Late Cretaceous-early Tertiary(?) veins associated(?) with the 71-m.y.-old Mineral Mountain pluton.	53,430,436,1235,1236,1288.
	North Star (Picacho, MD)	H 8	Cu, Ag, Au	Latest Cretaceous-early Tertiary porphyry deposits associated with 67-m.y.-old granodiorite plutons and related dikes, or middle Tertiary veins associated with the 22-m.y.-old North Star pluton and related dikes.	97,430,1419.
	Oracle (sa Burney, Little Hills; Control, Santa Catalina, Old Hat, MD)	I 9	(W), Au, Pb, Ag, Cu	Eocene (50-m.y.-old) veins (tungsten) and replacements (lead-silver).	1,2,45,53,70,90,94,95,169,196,209,214,236,282, 312,315,316,319,330,333,338,340,346-49,357, 368,370,417,436,700,786,813,919,1286,1378, 1394.
	Owl Head (sa Durham-Suizo)	I 8	Cu, Ag, Au	Middle Tertiary(?) veins associated with microdiorite dikes (25-20-m.y.-old?) in the upper plate of the Guild Wash low-angle fault.	47,97,101,102,103,105,112,214,357,430,700, 1286.
	Picacho (sa North Star)	I 8	Au, Cu, Ag	Middle Tertiary veins cutting 22-20-m.y.-old alkaline volcanic rocks and a 25-m.y.-old quartz monzonite pluton.	47,70,97,387,204,205,206,430,468,1286,1298.
	Pinal Grande (sa Greenback; Copperosity, MD)	I 6	Cu, Pb, Au, Zn, Ag	Latest Cretaceous-early Tertiary porphyry deposits related to an at least 55-m.y.-old quartz monzonite pluton.	53,387,436,680,1394.
	Pioneer [Superior] (Silver King, MD)	G,H 8	Cu, Ag, Au, Zn, Pb	Probable Paleocene copper vein system fringed by silver-copper-lead veins. Probably related to the Silver King quartz diorite and 63-60-m.y.-old Schultze granite plutons.	45,53,159,436,462,550,551,668,743,976,987,988, 990,991,1046,1176,1177,1286,1381,1394.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pinal (cont.)					
	Pioneer-Alabama	H 8	Cu	Paleocene(?) porphyry deposits in Pinal schist fault slice.	53,302,318,430,436,741,1288.
	Poston Butte	H 7,8	Cu, Ag, Mo	62-m.y.-old porphyry deposits in and near ENW-striking, probable 65-60-m.y.-old granodiorite porphyry stock.	47,53,85,258,330,430,436,462,668,745,939,1286, 1298.
	Randolph	G 8	Ag, Pb, Au, Cu	NW-striking, middle Tertiary veins associated with probable 18-15-m.y.-old NW-striking rhyolitic dike swarm.	430.
	Red Hills	H 8	Cu	Latest Cretaceous-early Tertiary porphyry-like deposits associated with a probable 70-60-m.y.-old ENE-striking rhyodacite porphyry dike swarm.	53,430,436.
	Ripsey	H 8	Ag, Au, Cu, Pb	Probable Paleocene vein system associated with a 65-60-m.y.-old E-W-striking rhyodacite porphyry dike swarm.	45,47,301,319,430,526,739,741,1050,1125,1286, 1298,1420.
	Riverside (Kelvin, MD; sa Wooley)	H 8	Cu, Au, Ag, Pb	Paleocene porphyry vein deposits associated with E-W-striking 65-60-m.y.-old rhyodacite porphyry dike swarm.	45,47,98,182,298,300,301,302,318,341,351,430, 436,455,462,526,713A,713B,741,743,745,1047, 1050,1124,1125,1145,1286,1288,1425.
	Saddle Mountain	H 9	Cu, Ag, Au, Pb, Zn	Paleocene porphyry, vein and skarn deposits associated with a 65-60-m.y.-old rhyodacite porphyry dike swarm.	47,53,111,244,319,436,455,1104,1286,1355.
	San Manuel (Mammoth, MD)	I 9	Cu, Mo, Au, Ag	Latest Cretaceous-Paleocene porphyry deposit that has been offset to the southwest (Kalamazoo portion) by 20-15-m.y.-old low-angle normal San Manuel detachment fault. Associated with 70-67-m.y.-old San Manuel granodiorite porphyry.	32,47,311,315,319,368,370,587,743,809,810,969, 970,992,1141,1142,1242,1288,1394.
	Sawtooth	I 7	Mn	Middle Tertiary veins cutting 20-15-m.y.-old volcanic rocks and Precambrian granitic rocks.	129,154,430.
	Silver Reef (sa Sawtooth, Slate)	I 7	Ag, Cu, Au, Pb	Middle Tertiary veins in shear zones cutting Precambrian coarse-grained granitic rocks, and probable 25-20-m.y.-old volcanic breccias.	47,85,154,258,430,462,481,544,549,1096,1156, 1231,1233,1279,1286,1298,1302.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Pinal (cont.)					
	Slate (sa Silver Reef, Lakeshore, Mammoth)	I 7	Ag, Au, Pb, Cu	Middle Tertiary veins in shear zones that cut probable 30-25-m.y.-old volcanic rocks.	47,154,258,430,445,533,544,549,585,588,591, 745,858,1024,1156,1231,1233,1298.
	Stanley	H 10	Pb, Cu, Ag, Au, (Zn)	Middle Tertiary veins and replacements associated with a probable 25-20-m.y.-old, NW-striking dike swarm.	197,319,436,462,557,1018,1105,1217,1298,1300.
	Steamboat Mountain	H 9	Mn	Middle Tertiary veins and siliceous replacements cutting the 18-14-m.y.-old Big Dome formation, and Paleozic carbonate rocks.	104,301,351,436,741,743,1047,1056,1104,1288, 1298,1355.
	Summit	G 8,9	Cu, Ag, Au, Pb	Latest Cretaceous-early Tertiary porphyry and vein deposits in 63-60-m.y.-old Schultze granite. System may project under 20-m.y.-old Apache Leap volcanic cover to the west.	47,68,321,330,340,350,390,436,713A,713B,863, 993,995,996,1000,1001,1002,1004,1006,1037, 1042,1047,1118,1286,1287,1288,1295.
	Superstition Mountains	G 8	Au, Cu, Ag	Veins(?) of uncertain age cutting a 1.4-b.y.-old megacryst granite.	53,430,436,1167,1223,1286,1394.
	Swingle	H 9	(Mn ± Pb, Ag, Ba)	Middle Tertiary(?) veins.	47,51,319,362,731,1185,1288.
	Table Mountain	H 9	Cu, Au, Ag, (Ba)	Strata-bound exotic copper deposits in 35-30-m.y.-old Whitetail conglomerate. May be derived from the Laramide Copper Creek porphyry copper system to the southwest. Barite is a common gangue mineral.	47,319,362,747,1183,1185.
	Tortolita	I 8	(Cu ± Mo, Mn, Au ± Pb, Zn)	Latest Cretaceous-early Tertiary porphyry deposits in and near the 70-65-m.y.-old Chirreon Wash granodiorite pluton.	47,97,102,105,214,357,436,700.
	Vekol (Pinal Grande, MD)	I 6	Ag, Cu, Zn, Au, Pb, Mo	Latest Cretaceous-early Tertiary porphyry deposits associated with probable Paleocene Vekol granite and related(?) dacite dikes and sills.	69,103,247,255,257,258,387,436,533,544,585, 588,591,680,745,858,1103,1156,1204,1231, 1233,1286,1394.
	Wood Camp Canyon	G 8	Cu, Ag, Au, (W)	Porphyry system(?) of middle Tertiary age associated with the 22-m.y.-old Wood Camp Canyon pluton.	430.
	Zig Zag	H 8	Mn	Middle Tertiary(?) veins cutting coarse-grained granitic rocks.	430,462,668,1419.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Santa Cruz					145,569,1397.
	Austerlitz (sa Oro Blanco, Ruby; Ruby, MD)	K 8	(Au, Ag, Cu, Pb)	Middle Tertiary veins related(?) to 30-25-m.y.-old NW-striking rhyolitic dikes.	38,43,47,165,166,204,205,206,412,462,479, 480,521,526,661,696,703,710,720,898,1015, 1031,1033,1035,1118,1215,1255,1286,1315, 1321,1391,1394,1416.
	Bluebird	K 9	Mn	Middle Tertiary(?) veins.	47,396,462,572,696,1134,1188,1286.
	Bradford (sa Tyndall)	K 9	Cu, Ag, Pb	Latest Cretaceous-early Tertiary porphyry deposits marginal to the 62-58-m.y.-old Patagonia batholith.	47,49,66,400,404,696,1134,1139,1212,1286,1391.
	Cave Creek	K 9	Cu, Ag, Au, Pb	Middle Tertiary vein deposits near a probable 30-25-m.y.-old NE-striking rhyolitic dike swarm.	45,47,330,390,436,522,600,603,661,668,786,787, 871,1118,1286,1378,1394.
	Duranium (Tyndall, MD)	K 9	(U ± V)	Veins and fissures of uncertain age. cutting the 85-80-m.y.-old Fort Crittenden formation.	44,45,47,49,66,165,204,205,206,394,395,396, 400-404,407,436,483,531,569,575,696,713A, 717,745,835,940,942,943,956,957,1118,1133, 1134,1136,1139,1154,1187,1224,1286,1327-29, 1344,1391.
	Hartford [Huachuca] (sa Reef)	K 10	Pb, Zn, Ag, Cu, (W)	Early Tertiary veins and replacements along SW-directed thrust system locally intruded by muscovite alaskite dikes.	10,46,47,53,56,230,332,407,410,436,462,571, 672,694,786,1212,1286,1323,1378,1383,1388.
	Ivanhoe (Wrightson, MD)	K 9	Ag, Pb, Cu, Au, (Ba)	Latest Cretaceous veins associated with the 70-67-m.y.-old Josephine Canyon diorite, Madera Canyon granodiorite, and Elephant Head quartz monzonite plutons. Barite is a locally abundant gangue mineral.	47,49,66,394,395,396,400-404,407,462,696,1075, 1134,1136,1139,1286,1391.
	Mansfield (Wrightson, MD)	K 9	Pb, Ag, Cu, Au, (Ba)	67-m.y.-old veins associated with the Josephine quartz diorite pluton. Barite is a locally abundant gangue mineral.	394,395,396,400,401,402,403,407,1075,1093, 1118,1134,1136.
	Nogales (Gold Hills, MD)	K 9	Pb, Cu, Au, Ag, Zn, (W)	Jurassic veins in the 164-160-m.y.-old Mt. Benedict quartz monzonite. Tungsten present as wolframite, with minor scheelite from the Reagan Mine Group.	47,49,204,205,206,696,786,1134,1139,1186,1188, 1286,1378,1391.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Santa Cruz (cont.)					
	Old Baldy (sa Jackson)	K 9	Pb, Ag, Zn, Cu	Latest Cretaceous veins associated with a 69-m.y.-old WNW-striking dacite porphyry dike swarm, and the Josephine Canyon quartz diorite pluton.	44,45,47,165,394,395,396,399-404,407,410,415, 436,483,531,539,569,575,661,695,696,713A, 745,835,1075,1133,1134,1136,1139,1224,1243, 1286,1326-28,1344,1389.
	Oro Blanco (Ruby, MD; sa Ruby Austerlitz,)	K 8	Pb, Zn, Ag, Au, Cu	Middle Tertiary deposits in quartz veins along shear zones. Associated with a 26-m.y.-old NW-striking rhyolite porphyry dike swarm.	38,43,47,166,412,462,479,480,521,526,661,696, 710,720,898,1015,1031,1033,1035,1118,1255, 1286,1315,1321,1391,1394,1416.
	Pajarito	K 8	Ag, Pb, Au, Cu, Zn, (F, U, V)	Late Cretaceous(?) veins in Jurassic(?) rhyolite tuffs. Possibly associated with poorly mapped monzonite porphyry dikes. Fluorite is a local gangue mineral.	47,66,166,204,205,206,327,409,412,526,696,942, 943,1056,1063,1090,1118,1256,1286,1394.
	Parker Canyon	K 10	Au, Ag, Pb, Cu	Late Cretaceous(?) veins and/or replacements in Jurassic volcanic rocks.	571,572.
	Patagonia(sa Washington Camp, Thunder Mountain, Red Mountain Querces)	K 9	Cu, Ag, Au, Pb, Zn	62.5-m.y.-old porphyry deposits and breccia pipes near the margin of the 64-58-m.y.-old Patagonia batholith.	45,47,49,66,81,170,188,202,247,382,396,401, 436,469,483,505,531,572,577,578-80,696,713A, 717,745,786,835,866,871,1022,1133,1134,1136, 1139,1186-88,1195,1226,1210-12,1286,1289, 1292,1293,1325,1378,1391,1393,1400,1423.
	Querces (Patagonia, MD)	K 9	Cu, Au, Ag	Latest Cretaceous-early Tertiary porphyry deposits along the margin of the 64-58-m.y.-old Patagonia batholith.	47,49,53,66,247,382,396,400,436,696,717,754, 782,786,1133,1134,1136,1139,1187,1188,1286, 1292,1378,1391,1400.
	Red Mountain (sa Thunder Mountain)	K 9	(Cu, Mo, Ag, Au, Zn, Pb)	Zoned porphyry copper-molybdenum system around a ~62(?)-m.y.-old pluton beneath Red Mountain.	47,49,58,66,174,247,297,361,382,396,436,469, 531,685,696,835,867,930,1126,1131-34,1136, 1139,1186-89,1286,1294,1391.
	Red Rock	K 9	Cu, Pb, Ag, Zn, Au	Late Cretaceous veins and replacements in faulted Meadow Valley trachyandesite marginal to syeno-diorite stocks.	47,396,572,696,1118,1134,1189,1286.
	Ruby (sa Oro Blanco, Austerlitz; Ruby, MD)	K 8	(Pb, Ag, Au, Zn, Cu)	Veins and replacements in Jurassic and early Cretaceous rocks marginal to the 78-m.y.-old Ruby diorite pluton.	38,43,47,166,412,462,479,480,521,526,661,696, 710,720,898,1015,1031,1033,1035,1118,1255, 1286,1315,1321,1391,1394,1416.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Santa Cruz (cont.)					
	Salero (Tyndall, MD)	K 9	Pb, Ag, Au, Cu Zn, Ba	Late Cretaceous veins and disseminations in and marginal to the Josephine Canyon diorite pluton, and 69-m.y.-old dacite porphyry dikes. Barite is a locally common gangue mineral.	47,49,66,395,396,400-404,407,696,892,1118, 1134,1136,1139,1212,1286,1327,1391.
	San Cayetano	K 9	Pb, Zn, Ag	Middle Tertiary veins in and marginal to the 28-m.y.-old San Cayetano stock.	47,165,204,205,206,400,401,402,403,696,1134, 1286.
	Thunder Mountain (sa Red Mountain)	K 9	Cu, Ag, Pb, Zn, Mo, Au, (Mn)	Zoned porphyry copper-molybdenum system around diffuse copper-molybdenum core beneath Thunder Mt. System is marginal to the 62-58-m.y.-old Patagonia batholith. Most of the historical production is from the silver-lead-zinc-manganese peripheral zone near Harshaw.	45,47,48,49,53,58,66,81,174,247,297,361, 382,396,436,462,469,531,552,661,685,696, 713A,745,835,867,930,1020,1075,1126, 1131-34,1136,1139,1186-89,1286,1290, 1294,1391,1400.
	Tyndall (Aztec, MD; sa Salero, Ivanhoe, Mansfield, Wrightson, Bradford)	K 9	Pb, Zn, Ag, Cu, Au	Late Cretaceous veins, replacement pipes and mantos in Paleozoic carbonate rocks marginal to the 69-m.y.-old Elephant Head quartz monzonite and Josephine Canyon quartz diorite plutons.	44,45,47,49,66,165,204,205,206,394,395,396, 400-404,407,436,483,531,569,575,696,713A, 717,745,835,940,942,943,956,957,1118,1133, 1134,1136,1139,1154,1187,1224,1286,1327-29, 1344,1391.
	Washington Camp (Patagonia, Dusqune, MD)	K 9	Cu, Zn, Pb, Ag, Au, (W)	Latest Cretaceous-early Tertiary porphyry skarn deposits marginal to the Duquesne stock, an apophysis of the 64-58-m.y.-old Patagonia batholith. Tungsten minor as scheelite in skarn zones.	47,49,53,66,81,247,324,382,396,400,436,602, 638,696,717,782,786,1133,1134,1136,1139, 1186,1187,1188,1212,1286,1378,1391,1400.
	Wrightson (sa Salero, Mansfeild Ivanhoe)	K 9	Cu, Pb, Zn, Ag, Au	Late Cretaceous veins in the 69-m.y.-old Elephant Head quartz monzonite and 68-m.y.-old Josephine Canyon quartz diorite plutons.	44,45,47,49,66,394,395,396,400-404,407,415, 436,443,462,483,531,575,602,696,713A,745, 835,1075,1133,1134,1136,1139,1212,1286,1291, 1327,1391.
Yavapai					51A
	Agua Fria	E 6	Cu, Ag, Au, Zn, Pb	Precambrian strata-bound volcanogenic massive sulfide lenses and gold-bearing carbonate lenses in metavolcanic rocks.	21,25,26,27,29,34,47,56,198,377,390,436,557, 604,646,792,1283,1285,1286,1299,1328.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yavapai (cont.)					
	Battle Flat (Turkey Creek, MD)	E 6	Ag, Cu, Au, Pb, Zn	Middle Tertiary veins.	26,28,29,34,47,390,436,792,1299.
	Big Bug (sa Ticonderoga, Mayer)	E 6	Zn, Pb, Au, Ag, Cu	Precambrian strata-bound volcanogenic massive sulfide lenses within Proterozoic metavolcanic rocks.	21,25,26,27,29,30,31,34,46,47,309,377,390,436, 604,646,725,792,1282,1299,1322.
	Black Canyon (sa Kay, Richinbar)	F 6	Au, Ag, Pb, Cu, Zn	Middle Tertiary veins associated with andesitic dikes of the eastern Bradshaw Mts.	25,26,27,29,34,46,47,331,390,436,541,557,646, 654,792,1118,1299,1394.
	Black Dome	F 6	Mn	Middle Tertiary deposits in fracture zones cutting Miocene volcanic, and Precambrian granitic rocks.	390,430,461,798,647.
	Black Hills	E 6	Cu, Ag, Au, Pb, Zn	Tertiary veins associated with E-W-trending andesitic dikes.	21,29,30,31,34,46,47,56,238,351,390,604,784, 768,792,1275,1376.
	Black Rock (sa Castle Creek)	F 5	Au, Cu, Ag, Pb, Zn	Middle Tertiary veins cutting Proterozoic crystalline rocks.	46,47,54,56,116,374,390,430,526,604,647,687, 688,689,690,691,798,1070,1118,1281,1299, 1319,1394.
	Bloody Basin	F 7	Cu, Ag	Veins in an ~1.76-b.y.-old granite.	390.
	Blue Tank	F 5	Cu, Au, Ag, Pb	Latest Cretaceous-early Tertiary porphyry deposits(?).	46,47,390,430,604,1070.
	Box Canyon	F 5	Mn	Middle Tertiary deposits in steeply dipping fractures in volcanic breccia and Proterozoic granites.	390,430,461,1070,1299.
	Bullard (Peirce, MD)	F 4	Au, Cu, Ag	Middle Tertiary veins cutting 18-15-m.y.-old alkaline volcanic rocks.	46,47,430,604,962,1066,1070,1071,1103,1119.
	Burmister	F 6	(Mn ± Pb, Ag)	Middle Tertiary veins.	27,29,34,390,461,646,668,792,1299.
	Camp Verde	E 7	W	Narrow, parallel Precambrian veins of wolframite, huebnerite and scheelite cutting altered dioritic rocks.	331,390,784,1275.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yavapai (cont.)					
	Camp Wood	E 4	(W), Au, Ag	Precambrian veins. Pyrite, wolframite, bismuthinite, molybdenite in NE-striking fissure veins in coarse-grained horneblend biotite granite.	331,390,727,1286,1378.
	Castle Creek (sa Black Rock)	F 5	Au, Cu, Ag, Pb	Middle Tertiary veins in and near low-angle detachment(?) faults. Asssociated with trachyte porphyry dikes.	46,47,56,331,374,390,430,604,647,792,798,872, 1285,1299,1394.
	Cherry Creek	E 6	Au, Cu, Ag, Zn, Pb	Precambrian veins in 1.76-b.y.-old unnamed quartz diorite pluton.	21,29,30,31,34,46,47,56,238,351,390,526,604, 768,792,1275,1295,1376,1394.
	Congress	F 5	(W, F)	Precambrian disseminations and veins in altered horneblende schist adjacent to contact with a 1.4-b.y.-old(?) granitic pluton. Fluorite occurs as cubes in pegmatites.	331,390,430,1118,1299.
	Copper Basin	E 5	Cu, Zn, Pb, Ag, Au	Late Cretaceous porphyry deposits and breccia pipes in the 74-71-m.y.-old Copper Basin pluton.	17,45,47,49,119,268,390,436,533,604,663,665, 713A,717,729,772,894,1119,1249.
	Copper Ridge	E 4	(Cu ± Mo)	Late Cretaceous porphyry deposits associated with a small apophysis SE of the Copper Basin pluton.	390.
	Crosby (Eureka, MD)	E 4	Au, Cu, Ag, Pb	Middle Tertiary(?) veins in and near a low-angle detachment(?) fault.	46,47,56,390,430,604,882,961,962,1286,1394.
	Date Creek	F 4	(U, V)	Strata-bound deposits in 18-13-m.y.-old carbonaceous deltaic sedimentary rocks.	390,430,604,959,960,961,962,1069,1070,1119, 1166.
	Eureka (Bagdad, MD; sa Crosby, Zanneropolis, Old Dick)	E 4	Cu, Mo, Ag, Au, Pb, Zn, (W, U, V)	Late Cretaceous porphyry deposits and peripheral lead-zinc-silver veins associated with 74-m.y.-old Bagdad stocks and related NW- and NE-striking granodiorite porphyry dikes.	6,7,18,19,20,21,33,45,47,50,74,80,83,237,238, 331,369,379,390,436,474,533,604,621,639, 713A,907,938,969,970,1118,1141,1180,1190, 1220,1262,1339,1340,1341,1378,1394,1415, 1419.
	Finch (Copper Basin, MD)	E 5	Cu, Au, Ag	Precambrian veins associated(?) with probable 1.75-b.y.-old granodiorite plutons.	47,268,390,663,665,729.
	Fiscus	F 6	Mn	Irregular masses and seams of manganese oxides in middle Tertiary volcanic tuff.	390,430,461,646,792,1299.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yavapai (cont.)					
	French Gulch (Walnut Grove, MD)	F 5	Au, Ag, Cu, Pb	Middle Tertiary veins.	46,390,430,604,1299,1326.
	Groom Creek (Mt. Union, Hassayampa, MD)	E 5	Au, Ag, Cu, Zn, Pb	Precambrian(?) or early Tertiary(?) veins in 1.76-b.y.-old Government Canyon granodiorite.	28,29,46,47,56,390,436,604,646,717,792,1299, 1394.
	Harris	F 4	(Mn, Ba, F)	Middle Tertiary lenticular ore shoots in a vein cutting red sandstone. Probably associated with 18-15-m.y.-old alkalic volcanic rocks.	430,461,668,961,962,1103,1066,1070,1071.
	Hassayampa (sa Mt Union)	E 5	Au, Ag, Pb, Cu, Zn, (W)	Early Tertiary (?) veins in Proterozoic metamorphic and plutonic rocks.	28,29,34,46,47,331,390,436,604,646,661,792, 1299,1389.
	Hillside (Eureka, MD)	E 4	(Au ± Cu, Pb)	Precambrian(?) veins.	390,728,1394.
	Humbug	F 6	Au, Cu, Ag, Pb	Middle Tertiary veins associated with NNE-striking rhyolite dikes.	46,47,390,430,436,604,646,792,1285,1299,1394.
	Kay (Black Canyon, MD)	F 6	Cu, Ag, Au, Pb	Precambrian strata-bound volcanogenic massive sulfide lenses within meta-volcanic rocks.	27,47,390,430,541,557,646,792,948,1299.
	Kirkland	E 5	Au, Cu, Ag, Pb (W, Mo, F, Hg, Fe)	Middle Tertiary veins near probable middle Tertiary NW- and NE-striking rhyolite porphyry dikes.	56,390,1299.
	Lane Mountain	F 6	Ag, Au	Late Cretaceous veins and porphyry-like deposits associated with the probable late Cretaceous Lane Mountain pluton.	46,47,56,390,430,646,792,1299.
	La McCoy	F 7	Mn	Middle Tertiary seams and narrow veinlets in Precambrian granitic rocks.	390,461.
	Lime Creek	F 7	U	Precambrian veins or fissures. Pitchblende and autunite in a NE-striking shear zone.	330,390,430,1118.
	Little Copper Creek	E 5	Au, Cu, Ag, Pb, Zn	Late Cretaceous porphyry deposits associated with the probable late Cretaceous Little Copper Creek stock.	46,56,390,1118,1299.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yavapai (cont.)					
	Lucky Star	F 6	W	Precambrian scheelite-bearing quartz-tourmaline veins in metasedimentary rocks.	28,29,34,331,390,604,646,792,1299.
	Magazine (Red Rover, MD)	F 7	Ag, Cu, Au	Lenses of uncertain age in a probable Proterozoic metarhyolite schist.	67,390,430,787,1286.
	Martinez (Congress Mine, MD)	F 5	Au, Ag, Cu, Pb	Middle Tertiary(?) veins associated with probable middle Tertiary micro-diorite dikes.	46,47,56,390,430,604,882,1394.
	Mayer (Peck, Big Bug, MD)	F 6	Cu, Ag, Au	Precambrian strata-bound volcano-genic massive sulfide lenses in metarhyolite.	25-29,34,46,47,56,148,149,377,378,390,436,557, 646,792,1299.
	Mineral Point	E 6	Au, Ag, Cu, Pb	Precambrian veins associated with alaskite phase of the probable 1.75-b.y.-old Prescott granodiorite.	29,31,34,47,390,725,792.
	Minnehaha	F 5,6	Au, Ag, Pb, Cu	Precambrian(?) veins related(?) to the 1.77-b.y.-old Brady Butte granodiorite pluton.	47,378,390,430,604,646,792,1299,1394.
	Money Maker (Peck, MD)	F 6	W	Probable Precambrian scheelite in tourmaline-bearing quartz veins in metasedimentary rocks.	27,29,34,331,390,646,792,1299.
	Mt. Union	E 5	Au, Cu, Ag, Pb, Zn	Early Tertiary veins associated with a NNE-striking rhyolite dike swarm.	28,29,34,46,47,56,390,436,646,792,1299,1394.
	Old Dick (Eureka, MD; sa Bagdad)	E 4	Zn, Cu, Ag, Pb, Au	Precambrian strata-bound volcanogenic massive sulfide lenses within a 1.76-1.74-b.y.-old metarhyolite.	21,33,46,47,50,56,80,238,369,390,557,901,912, 1118,1280.
	Peck (sa Money Maker; Tiger, Mayer, MD)	F 6	Ag, Pb, Cu, Au	Middle Tertiary veins associated with a NNE-striking, probable middle Tertiary rhyolite porphyry dike swarm.	28,29,34,45,46,47,56,148,149,378,390,604,646, 792,1299.
	Pine Flat (Turkey Creek, MD)	E 6	Cu, Mo, Au, Ag	Latest Cretaceous-early Tertiary porphyry deposits and veins associated with the late Cretaceous-early Tertiary Pine Flat quartz latite porphyry intrusion.	26,28,29,34,47,390,436,646,792,1299.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yavapai (cont.)					
	Prescott	E 6	Au, Cu, Ag	Precambrian quartz veins associated(?) with the probable 1.77-1.75-b.y.-old Prescott granodiorite pluton.	29,34,46,56,390,604,725,792,1286,1394.
	Red Picacho	F 5	Au, Cu, Ag, Pb	Middle Tertiary(?) veins associated(?) with poorly documented microdiorite dikes.	46,56,189,390,430,647,798,1103,1394.
	Rich Hill (sa Congress; Octave, Weaver, MD)	F 5	Au, Ag, Pb, Cu	Middle Tertiary veins associated with microdiorite dikes.	46,47,56,331,390,430,436,526,604,882,1118, 1285,1286,1299,1394.
	Richinbar (Black Canyon, MD)	F 6	Au, Ag, Cu, Pb	Precambrian veins in Proterozoic schist and granite.	25,27,29,34,46,47,390,436,541,646,654,792, 1299,1394.
	Shea (Verde, Black Hills, MD)	E 6	Ag, Au, Cu	Middle Tertiary(?) veins in Proterozoic metavolcanic rocks.	29,30,31,34,46,56,238,351,390,768,784,792, 1275,1376.
	Silver Mountain (sa Tussock)	F 6	Au, Cu, Ag, Pb	Middle Tertiary(?) veins.	46,47,56,390,430,646,792,1299.
	Squaw Creek	F 6	(Au, Ag ± Cu, Pb)	Precambrian(?) veins.	390,430,646,792,1299.
	Squaw Peak	E 7	Ag, Mo, Pb, Cu, Au, Zn	Latest Cretaceous-early Tertiary porphyry deposits, associated with the Squaw Peak quartz monzonite pluton(?).	45,47,390,533,604,713A,717,784,1092,1275.
	Thumb Butte	E 5	Au, Cu, Pb, Ag	Precambrian(?) veins associated with plutons that resemble 1.77-1.75-b.y.-old granodioritic plutons.	47,56,390,729,1286,1327.
	Ticonderoga (Big Bug, MD)	E 6	Au, Ag, Cu, Pb, Zn	Late Cretaceous, NE-striking veins. associated with the 71-m.y.-old Big Bug pluton.	26,28,29,30,31,34,56,390,436,541,604,646,725, 792,1284,1285,1299,1394.
	Tiger (Pine Grove, Crown King, Harrington, MD)	F 6	Au, Ag, Zn, Cu, Pb, (Mo)	Latest Cretaceous-early Tertiary porphyry deposit system fringed outward by zinc-gold-silver veins at Tiger. Associated with the 65-m.y.-old Crown King pluton and probably related NNE-striking felsic dikes.	46,47,56,377,378,390,430,436,604,646,792,1118, 1285,1299,1394.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yavapai (cont.)					
	Tip Top	F 6	Ag, Au, Cu, Pb, (W)	Middle Tertiary veins and replacements associated with a rhyolite porphyry dike swarm.	46,47,56,305,331,390,430,436,604,646,786,792, 1118,1172,1299,1378.
	Tungstona (Eureka, MD)	E 4	W	Precambrian quartz-wolframite veins cutting muscovite granite phase of the 1.4-b.y.-old Lawler Peak granite.	33,368,390,526.
	Turkey Creek (Pine Flat, Battle Flat, MD)	E 5	Ag, Pb, Au, Cu, Zn	Middle Tertiary(?) veins in Proterozoic metavolcanic and plutonic rocks.	28,29,34,47,149,390,436,533,604,646,717,792, 1200,1299.
	Tuscumbia (Bradshaw, MD)	F 6	Au, Ag, Cu, Pb	Precambrian(?) or Laramide(?) veins in the 1.76-b.y.-old Brady Butte granodiorite.	26,28,34,46,378,390,436,646,792,1299.
	Tussock	F 5	W	Precambrian scheelite-bearing fractures cutting horneblende schists cut by numerous tourmaline-bearing pegmatite dikes and irregular masses.	331,390,430,646,647,792,798,1299,1378.
	Verde (sa Shea; Jerome, MD)	E 6	Cu, Au, Ag, Zn, Pb	Precambrian strata-bound volcanogenic massive sulfide lenses associated with 1.78-1.77-b.y.-old felsic metavolcanic rocks.	8,29,30,31,46,47,277,331,351,390,520,604,768, 783,784,788,792,1275,1376.
	Walnut Grove (Wagoner, MD)	F 5	Pb, Ag, Au, Cu, Zn	Middle fertiary(?) veins and replacements.	46,47,56,390,604,1299.
	Walker (sa Mt Union; Ticonderoga, Prescott, MD)	E 6	Au, Cu, Ag, Pb, Zn	Paleocene(?) veins associated(?) with the 65-m.y.-old Walker granodiorite pluton.	26,28,29,34,46,47,363,390,436,604,646,725, 792,1285,1299,1394.
	White Picacho	F 5	(Li, Be, W,) Pb, Cu, Ag, Au	Spodumene beryl-bearing 1.4(?)-b.y.-old pegmatites, and peripheral scheelite dissemination in adjacent Proterozoic schist.	45,47,54,56,121,189,330,331,390,430,604,647, 798,872,1118,1378.
	Yarber Wash (Agua Fria, MD)	E 6	Cu, Au, Ag	Precambrian veins.	21,25,26,27,29,34,47,390,646,792,1299.
	Zanneropolis (Eureka, MD)	E 4	(W ± Be, Li)	Precambrian tungsten replacements of schist marginal to a granitic pluton.	50,56,80,278,331,390,961,962.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yavapai (cont.)					
	Zonia (Wagoner, French Gulch, MD)	F 5	Cu, Au, Ag, Pb	Precambrian strata-bound(?) volcanogenic(?) massive sulfides.	47,56,390,430,604,752,1285,1286,1299.
Yuma					88,430,1390.
	Alamo Springs	G 2,3	Au, Ag, Cu,	Middle Miocene, NW-striking veins cutting 18-16(?)-m.y.-old volcanic rocks.	47,49,218,266,436,666,697,860,1070,1103,1374, 1389,1391,1394.
	Big Chimney	I 2	U	Davidite, allanite, samarskite, and monazite in veins and pegmatites in granitic gneiss.	47,162,163,204,205,206,436,697,1103,1374,1394.
	Black King	H 3	Mn	Middle Miocene, N-striking veins cutting 18-15(?)-m.y.-old volcanic rocks.	47,49,218,266,461,661,697,1103,1374,1389,1391.
	Black Top	H 2	Mn	Middle Miocene, N-striking veins cutting 18-15(?)-m.y.-old volcanic rocks.	543,1103,1374.
	Castle Dome (sa Middle Mountains)	H 2	Pb, Ag, Au, Zn, Cu, (F, Ba)	Middle Miocene veins and replacements associated with major NW-striking, 20-19-m.y.-old intermediate to felsic dike swarm. Barite is a common gangue mineral.	15,47,49,51,54,159,203,436,478,543,604,628, 697,924,944,969,970,1103,1141,1217,1244, 1245,1247,1374,1385,1389.
	Dome (Gila City, MD)	I 2	W, Au, Ag	Paleocene(?) gold/tungsten-bearing quartz veins and fractures in schist and gneiss marginal to the Paleocene muscovite-bearing Gunnery Range batholith.	47,49,204,205,206,661,697,833,955,1061,1102, 1103,1374,1389,1391,1394.
	Fortuna	I 2	Au, Ag, Cu	Paleocene gold-bearing quartz veins and pegmatites near Red Top granite, a probable apohysis of the Paleocene, muscovite-bearing Gunnery Range batholith.	47,162,163,204,205,206,436,697,1103,1374,1394.
	Frisco	I 2	Au, Cu, Ag	Paleocene gold-bearing quartz veins in the Paleocene, muscovite-bearing Gunnery Range batholith.	47,204,205,206,526,680,697,1286,1374.
	Gila Bend Mountains (sa Webb)	H 4	Au, Cu	Deposits in quartz veins of middle Tertiary(?) age cutting schist of uncertain age and associated(?) with middle Tertiary(?) andesitic to granitic dikes.	47,49,261,430,461,661,697,1103,1286,1374, 1389,1390.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yuma (cont.)					
	Hovatter	G 3	Mn	Middle Miocene NW-striking veins cutting 25-20-m.y.-old volcanic rocks.	1103,1374.
	Kofa (sa Tank Mountains)	H 2	Au, Ag, Cu, Pb, (W, Mn)	Middle Tertiary(?) gold-bearing quartz veins and fractures associated with intermediate to silicic NW-striking dikes.	47,49,163,218,266,329,330,436,461,604,661, 666,697,860,1103,1244,1245,1247,1374,1389, 1391,1394.
	Laguna (Las Flores, MD)	I 1	Au, Ag, Cu	Sporadic deposits of middle Tertiary age in zones of shearing within schist. In irregular quartz veins and stringers associated with ENE-striking pegmatitic(?) dikes of Paleocene(?) age.	47,49,217,661,697,953,954,1061,1103,1374, 1389,1391,1394.
	La Posa (Welton, MD; sa Frisco)	I 2	Au, Cu, Ag	Lensing irregular Paleocene(?) quartz veins along fissure zones in Mesozoic schist and gneiss marginal to the Paleocene, muscovite-bearing Gunnery Range batholith.	47,204,205,206,526,697,1103,1286,1374.
	Middle Mountains (Castle Dome, MD)	H 2	Pb, Ag, Cu, (Ba)	Lead-zinc-bearing streaks in a silicified fault zone cutting middle Tertiary(?) diorite porphyry dikes. Barite is a common gangue mineral.	1103,1374.
	Mohawk	I 3	Ag, Pb, Cu, (Ba, F)	Middle Miocene(?) veins in and above the Mohawk detachment fault. Barite common; minor fluorite.	47,194,204,205,205,352,680,697,936,1217,1374.
	Muggins	I 2	U	Strata-bound middle Tertiary deposits in middle Tertiary lacustrine sedimentary rocks.	45,47,49,75,340,352,661,692,697,760,955,985, 1068,1103,1374,1389,1391,1409.
	Neversweat (Palomas Mts., MD)	H 3	Pb, Au, Cu, Ag	Middle Tertiary(?) veins and replacements associated with middle Tertiary rhyolite and andesite dikes.	47,697,1103,1217,1286,1374.
	Sheep Tanks	G 3	Au, Ag, Cu, (Mn)	Middle Tertiary, NW-striking veins and brecciated zones cutting 18-16-m.y.-old volcanic rocks.	47,307,436,461,604,661,697,896,1097,1103,1374, 1394.
	Tank Mountains (Kofa, MD)	H 3	Au, Ag	Middle Tertiary veins in Mesozoic schist associated with dioritic to rhyolitic dikes.	47,49,218,266,461,661,697,1103,1374,1389, 1391,1394.

Table 2.--Continued

County	Mineralized area	Location	Commodities	Description of deposit	References
Yuma (cont.)					
	Yuma	I 1	Au, Ag	Gold-bearing quartz veins and stringers along faults and fractures in Mesozoic gneiss. Deposits of Paleocene(?) age.	47,204,205,206,697,1103,1374.

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