UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analytical results and sample locality maps of stream-sediment, panned-concentrate, and rock samples from the Baboquivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Pima, Pinal, and Maricopa Counties, Arizona

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Bureau of Land Management Wilderness Study Areas

The Federal Land Policy and Management Act (Public Law 94-579, October 21, 1976) requires the U.S. Geological Survey and the U.S. Bureau of Mines to conduct mineral surveys on certain areas to determine their mineral values, if any. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a geochemical survey of the Baboquivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Pima, Pinal, and Maricopa Counties, Arizona.

INTRODUCTION

In March and April, 1986, the U.S. Geological Survey conducted a reconnaissance geochemical survey of the Baboquivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Pima, Pinal, and Maricopa Counties, Arizona.

The Baboquivari Peak Wilderness Study Area (AZ-020-203B) comprises about 3 mi^2 (8 km^2) in the southeastern part of Pima County, Arizona, and lies about 50 mi (80 km) southwest of Tucson, Arizona (see fig. 1). Access to the study area is provided on the east by state and private roads from Arizona Route 286, and on the west by Papago (Tohono O'Odham) Indian Reservation roads from Arizona Route 86.

The topographic relief in the study area is about 3,400 ft (1,036 m), with a maximum elevation of 7,734 ft (2,357 m) at the summit of Baboquivari Peak, a dramatic granite monolith that rises 500-1,000 ft above surrounding ridges and peaks. The study area lies along the east side of the crest of the Baboquivari Mountains in an area of rugged canyons, spectacular walls, and jagged outcrops of bedrock. The vegetation is mostly that of the Upper Sonoran life zone. Arizona white oak and Mexican pinyon are the dominant types of vegetation. Streams are ephemeral but may have running water for several months at a time during winter and early spring. A number of springs and wells exist outside the wilderness study area within one-half mile of the boundary and at least one spring is within the wilderness study area in Sabino Canyon. Analyses of water from springs and domestic wells on and near the Papago Indian Reservation are tabulated by Ficklin and others (1980, 1982).

The Baboquivari Peak Wilderness Study Area is underlain by granitic, volcanic, and sedimentary rocks of Jurassic age. The Jurassic rocks are cut by numerous Tertiary rhyolite dikes that generally trend northwest and in some cases were intruded along pre-existing faults. A reconnaissance geologic map of the Baboquivari Peak 15-minute quadrangle has been released by the U.S. Geological Survey (Haxel and others, 1980).

The Baboquivari Peak Wilderness Study Area is within the Baboquivari mining district (Keith, 1974, p. 14-17) which covers the Baboquivari and Quinlan Mountains, an area that reaches about 33 mi (53 km) from the Mexican border north to Arizona Route 86 (McDonnell, 1986b). Known mineral deposits within the district consist of scattered small occurrences of gold, silver, copper, lead, zinc, molybdenum, tungsten, manganese, fluorine, and beryllium. The deposits are closely associated with fault zones and swarms of intrusive dikes and sills (Keith, 1974). Keith (1969) indicates a copper occurrence in the Baboquivari Peak Wilderness Study Area. A gold-silver occurrence near the center of the wilderness study area was reported by Cruver and others (1982) and by Stipp and others (1967). These are the only reported mineral

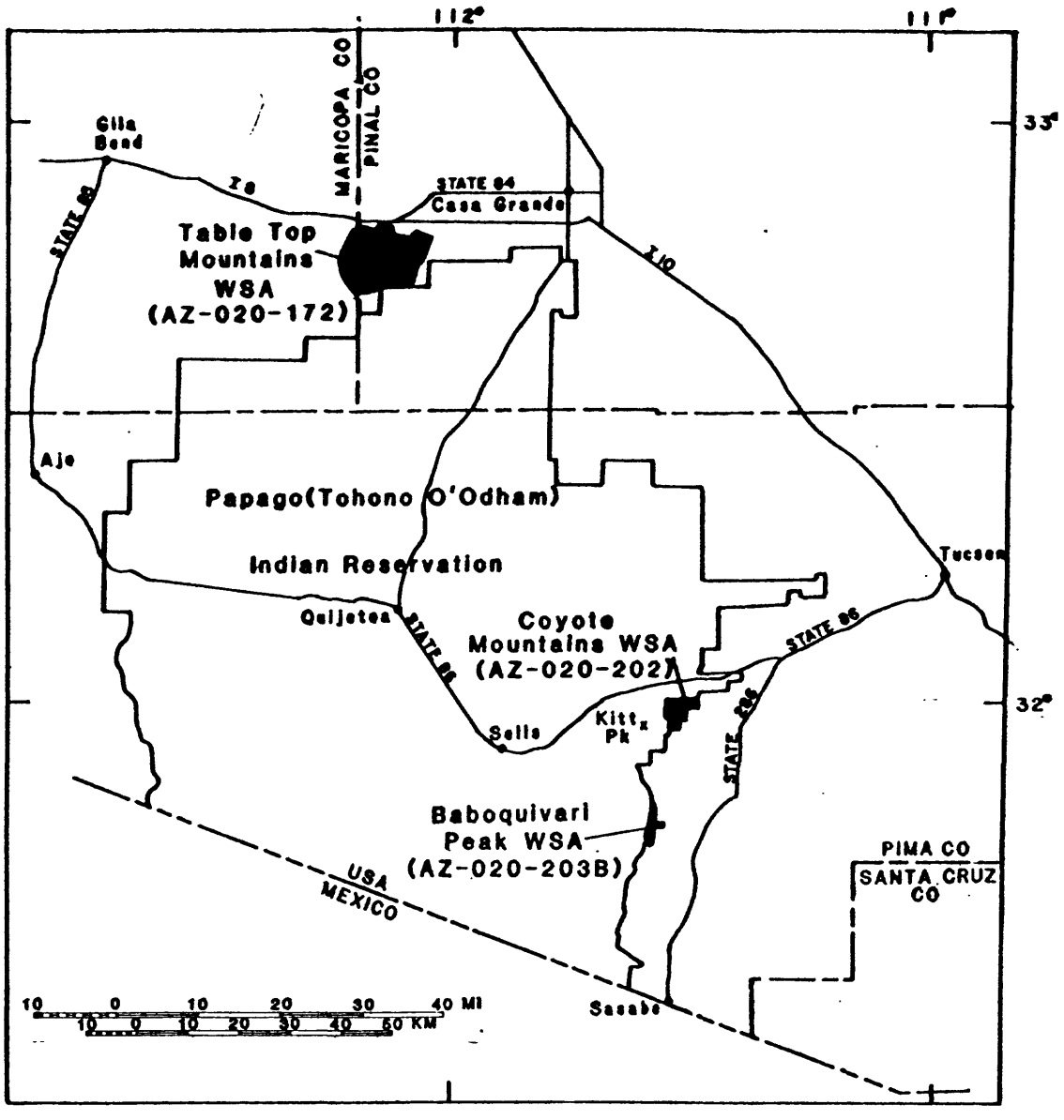

Figure 1. Index map, Baboquivari Peak Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Pima, Pinal, and Maricopa Counties, Arizona.

occurrences within the wilderness study area. Mining took place for many years at the Allison mine (Keith, 1974), 3 mi west, and in the Jupiter Canyon region (Seaman, 1983), 1-2 mi south of the wilderness study area. Production figures for the nearby mining districts are listed by Keith and others (1983).

The Coyote Mountains Wilderness Study Area (AZ-020-202) comprises about 8 mi^2 (21 km^2) in the east-central part of Pima County, Arizona, and lies about 35 mi (56 km) southwest of Tucson, Arizona, and 4 mi (6.4 km) east of Kitt Peak National Observatory (see fig. 1). Access to the study area is provided on the south and east by state and private roads from Arizona Route 286 and on the north and west by private and Papago Indian Reservation roads from Arizona Route 86.

The topographic relief in the study area is about 3,500 ft (1,067 m), with a maximum elevation of 6,529 ft (1,990 m). The topography of the area is one of massive, barren, rounded outcrops of white granite and gneiss making up a mountain mass that rises steeply out of a flat valley floor. Vegetation is characteristic of Lower and Upper Sonoran life zones. At the lower elevations, mesquite, paloverde, acacia, ironwood, and cactus are predominant. Stands of cacti are almost universal up to about 4,000 ft (1,219 m). Above 4,200 ft (1,280 m), the vegetation is dominated by manzanita, mountain mahogany, buckthorn, oak, and silktassel. At the highest elevations, Arizona white oak, Mexican pinyon, and native grasses are predominant. Streams are ephemeral. A number of springs and domestic wells exist within or very near the wilderness study area. Analyses of some of these springs and wells are tabulated by Ficklin and others (1980).

Geology of most of the central and southern portions of the Coyote Mountains Wilderness Study Area is included in the published geologic map of the Baboquivari Peak 15-minute quadrangle (Haxel and others, 1980). The geology of the Coyote Mountains is discussed by Wright and Haxel (1982). The geology of the wilderness study area consists of a Tertiary garnet-two-mica granite that intruded Jurassic dioritic to granitic rocks and Paleozoic metasedimentary rocks.

The Coyote Mountains Wilderness Study Area is within the Coyote mining district (Keith, 1974, p. 22-23). The only active mining within the wilderness study area was carried out intermittently from 1909 to 1951 (Keith, 1974). The mineralization is in the form of small, high-grade copper bodies at the contact between Paleozoic limestone and granitic intrusive rocks. The ore contained some gold, silver, molybdenum, and zinc. According to Keith and others (1983), the district, between 1916 and 1964, produced 140,000 lb of Cu, 1,500 oz of Ag, and less than 100 oz of Au. The geologic setting of the deposits is discussed by Carrigan (1971) and that report includes copper and molybdenum analyses of stream-sediment samples collected from the Coyote Mountains.

The Table Top Mountains Wilderness Study Area (AZ-020-172) comprises about 60 mi^2 (155 km^2) in the southwest corner of Pinal County and the southeast corner of Maricopa County, Arizona, and lies about 20 mi (32 km) southwest of Casa Grande, Arizona (see fig. 1). Access to the study area is provided on the north by roads leading from the Hidden Valley interchange on Interstate 8 (plate 1), on the west by roads leading from the Vekol interchange (7.0 mi (11.3 km) west of Hidden Valley interchange) on Interstate 8, and on the south and east by county roads.

The topographic relief in the study area is about 2,700 ft (823 m), with a maximum elevation of 4,373 ft (1,333 m) at the summit of Table Top. The topography of most of the study area consists of deep, wide canyons and steeply rising, flat-topped mountains with ridges radiating from the mountains. Included within the wilderness study area are gently sloping

bajadas that nearly surround the mountain range. On the west side, the bajada extends from the northern boundary to the southern boundary and is between 2 and 4 mi in width from the base of the mountains to the western boundary of the wilderness study area. Vegetation over most of the area is typical of the Lower Sonoran life zone. Paloverde and saguaro, cholla, and prickly pear cacti are almost universal. Mesquite, ironwood, and acacia grow along the ephemeral streams. An undisturbed 40-acre (16 hectare) desert grassland, unique for the vicinity, exists at the top of Table Top. Natural springs are almost nonexistent.

Bedrock of the mountainous portions of the Table Top Mountains Wilderness Study Area is mainly Precambrian granite and schist (Dockter and Keith, 1978; J. A. Peterson, unpublished map, 1986). Some of the mountains and hills are capped by Tertiary basalts. Quaternary sediments in varying stages of consolidation blanket the bajadas.

No mineral production is recorded from within the Table Top Mountains Wilderness Study Area (McDonnell, 1986a). Visible chrysocolla is found in quartz veins and fault zones in Precambrian schist in the west-central part of the study area (McDonnell, 1986a).

METHODS OF STUDY

Sample Media

Analyses of the stream-sediment samples represent the chemistry of the rock material eroded from the drainage basin upstream from each sample site. Such information is useful in identifying those basins which contain concentrations of elements that may be related to mineral deposits. Panned-concentrate samples derived from stream sediment provide information about the chemistry of certain minerals in rock material eroded from the drainage basin upstream from each sample site. The selective concentration of minerals, many of which may be ore related, permits determination of some elements that are not easily detected in stream-sediment samples. Analyses of altered or mineralized rocks may provide useful geochemical information about the major- and trace-element assemblages associated with a mineralizing system.

Sample Collection

Stream-sediment and panned-concentrate samples were collected at 10 sites in the Baboquivari Peak area, 15 sites in the Coyote Mountains area, and 72 sites in the Table Top Mountains area (figs. 2-3, plate 1). At all of the sites, a stream-sediment sample and two panned-concentrate samples were collected. The two panned-concentrate samples will be referred to as the heavy-mineral-concentrate sample and the raw panned-concentrate sample. Average sampling density was about one sample site per mi^2. The area of the drainage basins sampled ranged from 0.5 mi^2 to 2 mi^2.

Mineralized or altered rocks were collected from outcrops, prospect pits, or mine workings at two sites in the Coyote Mountains area and at seven sites in the Table Top Mountains area.

Stream-sediment samples

The stream-sediment samples consisted of active alluvium collected primarily from first-order (unbranched) and second-order (below the junction of two first-order) streams as shown on USGS topographic maps (scale = 1:24,000).

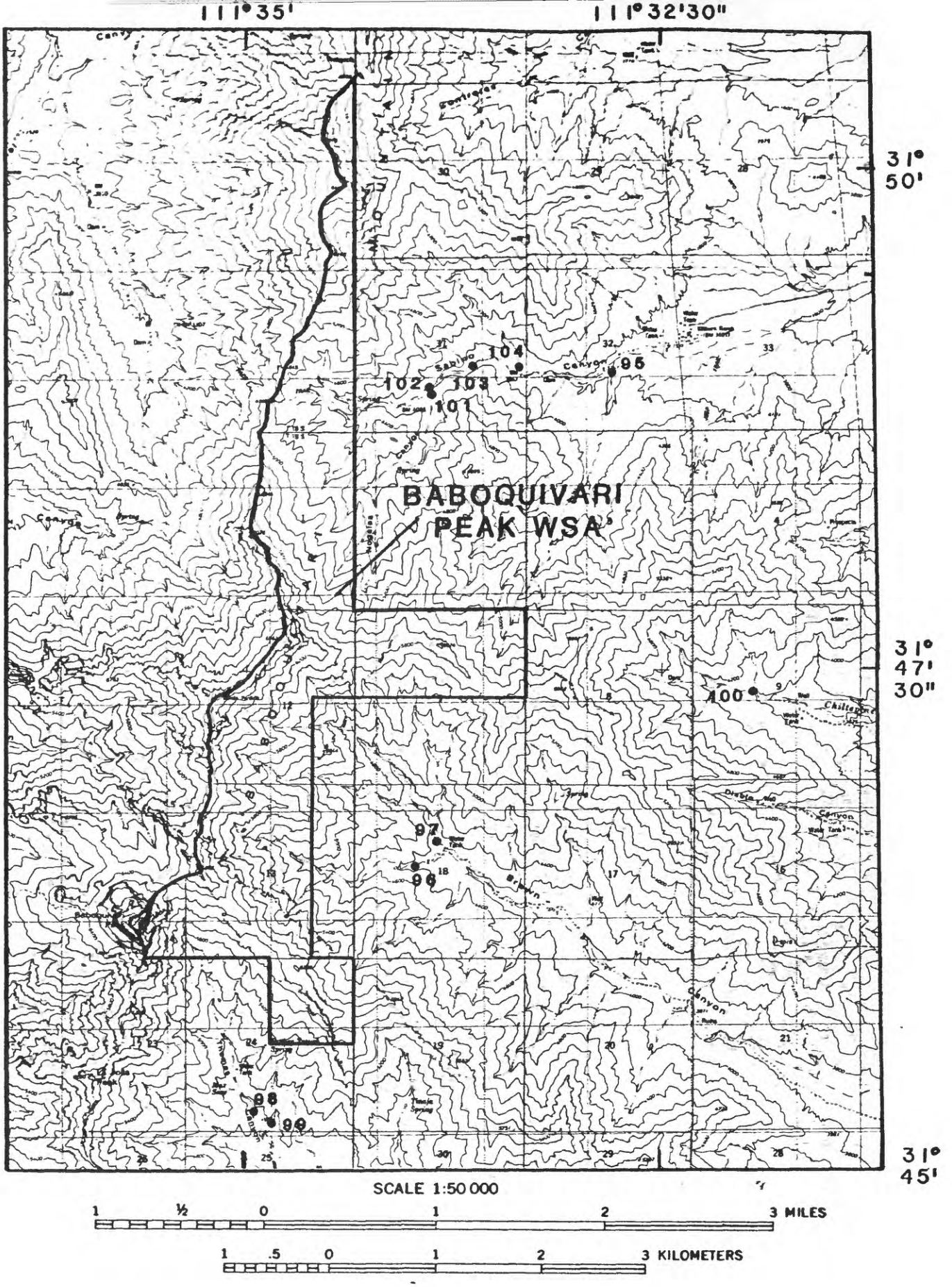

Figure 2. Localities of stream-sediment and panned-concentrate samples, Baboquivari Peak Wilderness Study Area, Pima County, Arizona. Base from U.S. Geological Survey, 1:24,000, Baboquivari Peak, 1979, quadrangle.

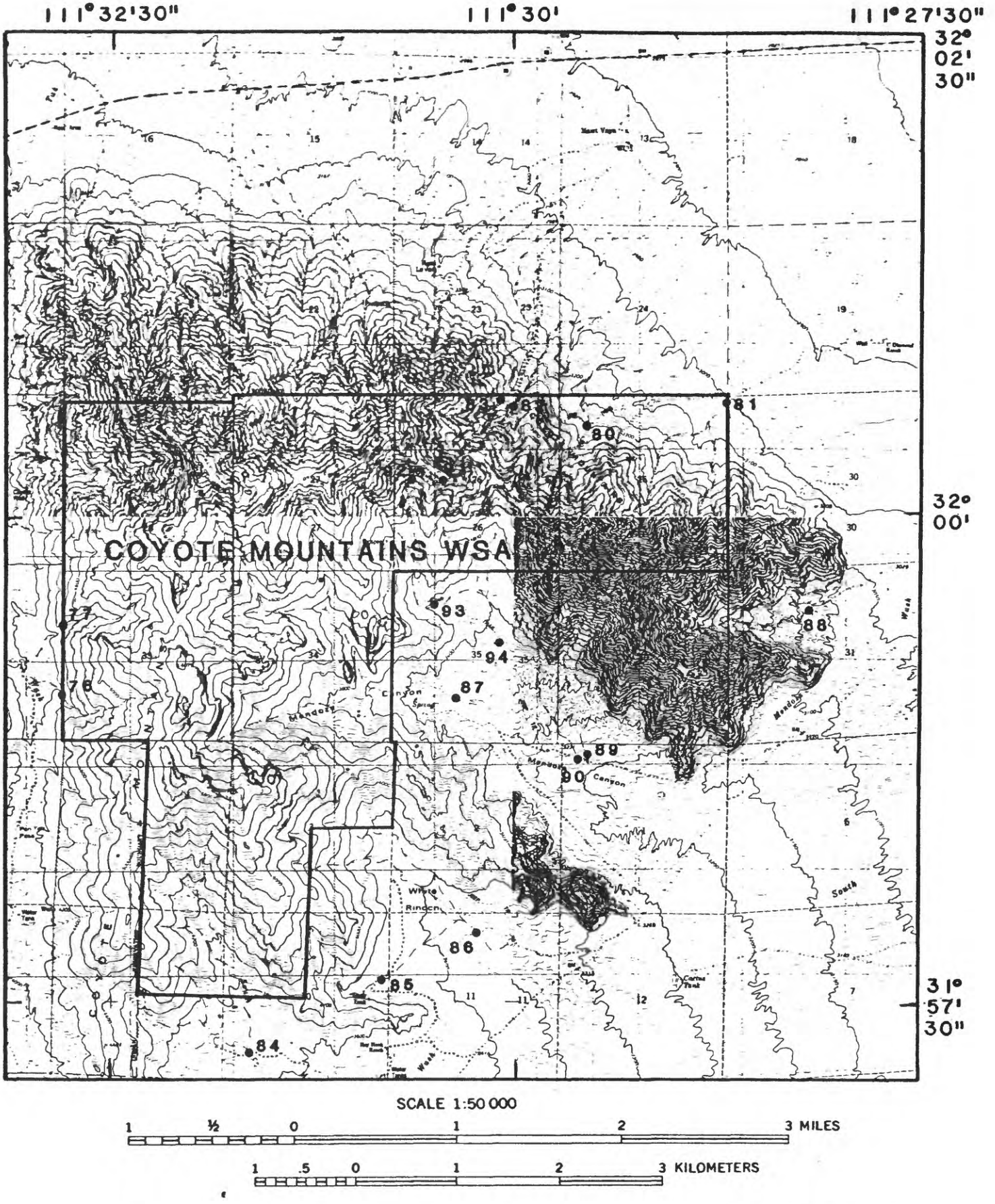

Figure 3. Localities of stream-sediment, panned-concentrate, and rock samples, Coyote Mountains Wilderness Study Area, Pima County, Arizona. Base from U.S. Geological Survey, 1:24,000, Kitt Peak, Palo Alto Ranch, Pan Tak, and San Pedro, 1979, quadrangles.

Heavy-mineral-concentrate samples

Heavy-mineral-concentrate samples were collected from the active alluvium. Each bulk sample was screened with a 2.0-mm (10-mesh) screen to remove the coarse material. The less than 2.0-mm fraction was panned until most of the quartz, feldspar, and clay-sized material were removed.

Raw panned-concentrate samples

A heaping 16-in pan of alluvium that had been screened through a 2.0-mm screen (approximately 20 lb or 9 kg) was panned until between 10 g and 78 g remained.

Rock samples

Rock samples were collected from outcrops or exposures in the vicinity of the plotted site location. Samples were collected from altered or mineralized rocks. Descriptions of rock samples are listed in table 1.

Sample Preparation

The stream-sediment samples were air dried, then sieved using 30-mesh (0.595-mm) stainless-steel sieves. The portion of the sediment passing through the sieve was pulverized to pass through a 100-mesh (0.15-mm) sieve and then saved for analysis.

After oven drying at 90°C, bromoform (specific gravity 2.8) was used to remove the remaining quartz and feldspar from the heavy-mineral-concentrate samples that had been panned in the field. The resultant heavy-mineral sample was separated into three fractions using a large electromagnet (in this case a modified Frantz Isodynamic Separator). The most magnetic material, primarily magnetite, was not analyzed. The second fraction, largely ferromagnesian silicates and iron oxides, was saved for archival storage. The third fraction (the least magnetic material which may include the nonmagnetic ore minerals, zircon, sphene, etc.) was split using a Jones splitter. One split was hand ground for spectrographic analysis; the other split was saved for mineralogical analysis. These magnetic separates are the same separates that would be produced by using a Frantz Isodynamic Separator set at a slope of 15° and a tilt of 10° with a current of 0.1 ampere to remove the magnetite and ilmenite, and a current of 1.0 ampere to split the remainder of the sample into paramagnetic and nonmagnetic fractions.

The raw panned-concentrate samples were dried at 90°C and then were analyzed for Au without further preparation.

Rock samples were crushed and then pulverized to minus 0.15 mm with ceramic plates.

Sample Analysis

Spectrographic method

The stream-sediment, nonmagnetic heavy-mineral-concentrate, and rock samples were analyzed for 31 elements using semiquantitative, direct-current arc emission spectrographic methods. The analyses for heavy-mineral-concentrate and rock samples were performed by analysts in the Branch of Exploration Geochemistry using the method of Grimes and Marranzino (1968);

TABLE 1.--Descriptions of analyzed rock samples, Coyote Mountains and Table Top Mountains Wilderness Study Areas, Arizona

[Multiple samples at some sites are denoted by letters in site identifications]

Site	Description
	Coyote Mountains
91A	Specular hematite from dump by prospect pit
91B	Gossan from dump by prospect pit
91C	Malachite- and azurite-rich rock from dump by prospect pit
91D	Limonitic rock from dump by prospect pit
91E	Punky, malachite- and azurite-rich rock from dump by prospect pit
92A	Gossan from mine adit
92B	Specularite(?)-rich rock from mine adit
92C	Rock with secondary copper and manganese minerals. From mine adit
92D	Secondary-copper-rich rock from mine adit
	Table Top Mountains
7	Limonitic schist from probable fault
19	Quartz and specularite from dump by prospect pit in granite
20A	Iron-oxide-rich rock from granitic bedrock near prospect pit
20B	Fault gouge from dump by prospect pit in granite
20C	Fault gouge from prospect pit in granite
31A	Calcite with jasperoid. From calcite vein in granite
31B	Calcite with possible manganese oxides. From calcite vein in granite
34	Limonitic granite cobble in stream alluvium
40	Limonitic granite fragments in stream alluvium
48A	Schist with chrysocolla. From prospect pit
48B	Schist with chrysocolla. From dump several hundred feet from 48A

analyses for stream-sediment samples were performed by analysts in the Branch of Analytical Chemistry using the method of Myers and others (1961). The elements analyzed and their lower limits of determination are listed in table 2. For arsenic (As), gold (Au), cadmium (Cd), lanthanum (La), and thorium (Th), the lower limit of determination is different for the two analytical methods. The values in parentheses are the limits of determination for the method of Myers and others (1961). Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Element concentrations in the standards are geometrically spaced over any order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (Fe, Mg, Ca, and Ti) are given in weight percent; all others are given in parts per million (micrograms/gram).

Other methods

Other methods of analysis are summarized in table 3. The analytical method used for determining As, Bi, Cd, Sb, and Zn is a modification and adaptation for inductively coupled argon DLF plasma spectroscopy (ICP) of the atomic absorption method of O'Leary and Viets (1986). The percent count variations for neutron activation analyses of Th and U are given in table 4.

ROCK ANALYSIS STORAGE SYSTEM

Upon completion of all analytical work, the analytical results were entered into a computer-based file called Rock Analysis Storage System (RASS). This data base contains both descriptive geological information and analytical data. Any or all of this information may be retrieved and converted to a binary form (STATPAC) for computerized statistical analysis or publication (VanTrump and Miesch, 1977).

DESCRIPTION OF DATA TABLES

Tables 4-6 list the results of analyses for the samples of stream sediment, panned concentrate, and rock, respectively. For the three tables, the data are arranged so that column 1 contains the USGS-assigned site numbers. These numbers correspond to the numbers shown on the site location maps (figs. 2-3, plate 1). The weights of the raw panned-concentrate samples (table 5) are given in grams and are in the column headed by "weight."

A letter "N" in the tables for elements determined by emission spectrography indicates that a given element was looked for but not detected at the lower limit of determination. If an element determined by emission spectrography was observed but was below the lowest reporting value, a "less than" symbol (<) was entered in the tables in front of the lower limit of determination. No distinction was made between "not detected" and "less than" for samples analyzed by methods other than emission spectroscopy. If an element was observed but was above the highest reporting value, a "greater than" symbol (>) was entered in the tables in front of the upper limit of determination. The lower limit of determination for Au by atomic absorption

TABLE 2.--Limits of determination for the spectrographic analysis of rocks and stream sediments, based on a 10-mg sample

[The values shown are the lower limits of determination assigned by the Grimes and Marranzino (1968) method, except for those values in parentheses, which are the lower values assigned by the Conklin and others modified from Myers and others (1961) method. The spectrographic limits of determination for heavy-mineral-concentrate samples are based on a 5-mg sample, and are therefore two reporting intervals higher than the limits given for rocks and stream sediments]

Elements	Lower determination limit	Upper determination limit
	Percent	
Iron (Fe)	0.05	20
Magnesium (Mg)	.02	10
Calcium (Ca)	.05	20
Titanium (Ti)	.002	1
	Parts per million	
Manganese (Mn)	10	5,000
Silver (Ag)	0.5	5,000
Arsenic (As)	200 (700)	10,000
Gold (Au)	10 (15)	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20 (30)	500
Cobalt (Co)	5	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Lanthanum (La)	20 (30)	1,000
Molybdenum (Mo)	5	2,000
Niobium (Nb)	20	2,000
Nickel (Ni)	5	5,000
Lead (Pb)	10	20,000
Antimony (Sb)	100	10,000
Scandium (Sc)	5	100
Tin (Sn)	10	1,000
Strontium (Sr)	100	5,000
Vanadium (V)	10	10,000
Tungsten (W)	50	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000
Thorium (Th)	100 (200)	2,000

TABLE 3.--Analytical methods used other than emission spectrography

[AA = atomic absorption; NA = neutron activation; and ICP = inductively coupled plasma spectroscopy]

Element determined	Sample type	Method	Determination limit, ppm	Reference
Gold (Au)	raw panned concentrates	AA	0.05*	Thompson and others, 1968.
Mercury (Hg)	rocks	AA	0.02	Modification of McNerney and others, 1972, and Vaughn and McCarthy, 1964.
	stream sediments	AA	0.02	Koirtyohann and Khalil, 1976.
Arsenic (As)	stream sediments	ICP	5	Crock and others, 1983, and modification of O'Leary and Viets, 1986.
Antimony (Sb)	stream sediments	ICP	2	
Zinc (Zn)	stream sediments	ICP	2	
Bismuth (Bi)	stream sediments	ICP	2	
Cadmium (Cd)	stream sediments	ICP	0.1	
Thorium (Th)	stream sediments	NA	1*	Millard, 1976.
Uranium (U)	stream sediments	NA	0.1*	

*Based on a 10-g sample.

is 0.05 ppm, based on a 10-g sample. Because the sample weight for raw panned concentrates was variable, the lower limits of determination for Au varied from 0.01 to 0.05 ppm. Because of the formatting used in the computer program that produced tables 4-6, some of the elements listed in these tables (Fe, Mg, Ca, Ti, Ag, Au, Be, Th, and U) carry one or more nonsignificant digits to the right of the significant digits. The analysts did not determine these elements to the accuracy suggested by the extra zeros.

The spectrographic determinations for Ag, As, Au, Bi, Cd, Sb, Sn, and W in stream-sediment samples, for As, Cd, Sb, and Zn in heavy-mineral-concentrate samples, and for Au, Cd, Sb, and Th in rock samples were all below the lower limits of determinations shown in table 1; consequently, the columns for these elements have been deleted from tables 4, 5, and 6, respectively.

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A number of our colleagues also participated in the preparation and analyses of these samples: preparation, Robin Sanchez; and analyses, Olga Erlich, Carol Gent, Mollie Malcolm, F. W. Tippitt, and R. B. Vaughn.

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TABLE 4.--Results of analyses of stream-sediment samples collected from the Baboquivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Arizona

[N, not detected; <, detected below limit of determination. Methods: As-i, Bi-i, Cd-i, Sb-i, Zn-i, inductively coupled plasma spectroscopy; Hg, atomic absorption; Th-n, U-n, neutron activation; others, emission spectrography. CV/Th, CV/U, percent count variation for neutron activation. Element values in ppm except Fe, Mg, Ca, and Ti which are weight percent]

Site	Latitude	Longitude	Fe	Mg	Ca	Ti	Mn	As-i	B	Ba	Be	Bi-i	Cd-i	Co	Cr	Cu	Hg
Baboquivari Peak																	
95	31 49 0	111 32 48	1.5	.5	.5	.15	300	<5	10	500	1.5	<2	.3	5	20	10	.06
96	31 46 31	111 34 0	3.0	.7	.7	.15	300	6	15	500	1.5	2	.5	7	30	15	.05
97	31 46 39	111 33 52	2.0	.7	.7	.15	300	<5	15	500	1.5	<2	.5	7	30	15	.05
98	31 45 18	111 34 57	3.0	.7	.5	.50	300	<5	15	500	1.5	<2	.3	7	30	7	.05
99	31 45 14	111 34 50	1.5	.3	.7	.15	300	<5	10	300	1.0	<2	.3	<5	20	7	.02
100	31 47 23	111 31 58	1.5	.5	.7	.15	300	<5	<10	500	1.5	<2	.4	7	30	20	.02
101	31 48 52	111 33 54	3.0	.7	.7	.15	300	<5	15	500	1.5	<2	.6	15	30	15	.03
102	31 48 54	111 33 55	3.0	.7	.5	.15	300	<5	15	700	1.5	<2	.4	10	30	15	<.02
103	31 49 2	111 33 41	3.0	.5	.3	.15	300	<5	10	700	1.5	<2	.2	7	20	10	.05
104	31 49 0	111 33 22	2.0	.5	.3	.15	300	<5	<10	500	1.5	<2	.1	7	30	7	<.02
Coyote Mountains																	
76	31 59 5	111 32 48	7.0	1.0	2.0	.20	1,000	<5	<10	500	1.5	<2	1.2	10	30	7	.04
77	31 59 25	111 32 48	.7	.3	.7	.07	150	<5	<10	700	1.5	<2	.2	<5	<10	<5	<.02
80	32 0 28	111 29 32	3.0	1.5	3.0	.50	700	<5	<10	300	1.5	4	.5	15	70	15	.03
81	32 0 36	111 28 41	3.0	1.5	2.0	.30	700	<5	<10	300	1.5	<2	.5	10	30	15	.03
82	32 0 33	111 30 1	3.0	1.5	3.0	.50	1,500	<5	<10	200	1.5	<2	.5	15	50	20	.06
83	32 0 37	111 30 4	3.0	1.5	3.0	.20	700	<5	<10	200	1.5	2	.9	10	20	30	.06
84	31 57 14	111 31 39	7.0	.7	3.0	.50	1,500	<5	<10	300	1.5	3	1.6	10	10	30	.02
85	31 57 36	111 30 50	5.0	.7	1.5	.20	1,000	<5	<10	500	1.5	3	.7	7	10	7	<.02
86	31 57 52	111 30 13	1.0	.3	1.5	.10	200	<5	<10	700	1.5	<2	<.1	<5	<10	7	.03
87	31 59 3	111 30 21	15.0	.3	.7	.30	2,000	<5	<10	300	1.5	4	.2	7	10	7	.03
88	31 59 31	111 28 11	1.0	.5	.7	.10	300	<5	<10	500	1.5	<2	<.1	<5	15	7	.03
89	31 58 46	111 29 32	1.0	.3	1.0	.15	300	<5	<10	300	1.5	<2	<.1	<5	15	7	.02
90	31 58 46	111 29 34	1.5	.7	1.5	.15	500	<5	<10	300	1.5	<2	<.1	5	15	7	.03
93	31 59 32	111 30 28	3.0	1.5	3.0	.15	2,000	<5	<10	150	1.5	<2	.2	15	15	70	.02
94	31 59 21	111 30 5	3.0	1.0	2.0	.30	3,000	<5	<10	150	1.5	2	.1	10	30	15	<.02
Table Top Mountains																	
1	32 48 25	112 2 54	3.0	.5	2.0	.20	300	5	<10	300	1.5	3	.3	7	30	7	.02
2	32 48 40	112 3 34	3.0	.5	1.5	.20	300	5	<10	300	1.5	<2	.7	7	30	7	.02
3	32 49 7	112 4 35	2.0	.7	.7	.20	300	6	15	300	1.5	<2	.6	7	30	15	.03
4	32 46 29	112 7 15	7.0	1.0	1.5	1.00	300	<5	15	300	1.0	3	.9	15	70	15	.04
5	32 46 34	112 6 42	2.0	.7	.7	1.50	300	<5	30	300	1.5	3	.2	7	30	7	<.02
6	32 46 40	112 7 6	5.0	.7	.5	.30	300	<5	30	300	1.5	4	.4	10	30	7	.02
8	32 48 58	112 5 11	7.0	.7	1.5	1.00	500	<5	10	300	1.5	6	.7	15	70	7	<.02
9	32 47 4	112 3 42	3.0	.3	.7	.15	300	<5	15	300	1.5	<2	.2	7	30	7	<.02
10	32 46 9	112 4 7	2.0	.7	.7	.20	300	<5	20	300	1.5	3	<.1	7	30	7	<.02
11	32 46 57	112 4 47	2.0	.7	.7	.15	300	<5	20	300	1.5	2	.2	7	30	7	.07
12	32 48 6	112 2 57	2.0	.7	.7	.15	300	<5	30	300	1.5	4	.3	7	30	7	.06
13	32 45 24	112 4 20	2.0	.7	1.5	.15	300	<5	15	300	1.5	3	.3	7	30	10	.02
14	32 44 31	112 4 45	3.0	.3	.7	.30	300	5	15	150	2.0	7	.4	7	15	7	.04
15	32 44 1	112 5 4	1.5	.3	.7	.15	300	<5	20	150	1.5	<2	.2	<5	15	7	<.02
16	32 43 30	112 5 53	2.0	.7	1.5	.30	300	<5	15	300	3.0	4	.6	7	15	10	<.02
17	32 43 33	112 5 20	1.5	.2	.7	.15	300	<5	50	200	1.5	3	.1	<5	15	7	.02
18	32 43 45	112 5 4	1.5	.3	.7	.15	300	<5	15	200	1.5	3	.2	7	15	7	<.02
21	32 44 49	112 4 40	7.0	.5	1.5	.30	300	<5	15	200	2.0	5	.7	7	30	10	<.02
22	32 47 59	112 3 39	1.5	.7	5.0	.15	300	<5	<10	300	1.0	<2	.6	7	30	50	.05
23	32 47 54	112 3 35	3.0	.7	2.0	.30	500	<5	<10	300	<1.0	4	.8	10	70	10	<.02
24	32 48 56	112 4 12	3.0	.7	1.5	.30	300	<5	15	300	1.5	2	.5	10	70	7	.04
25	32 48 34	112 6 9	1.5	.3	1.5	.30	300	<5	<10	300	1.5	2	.4	7	30	7	<.02

TABLE 4.--Results of analyses of stream-sediment samples collected from the baboquivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Arizona--Continued

Site	La	Mo	Nb	Ni	Pb	Sb-i	Sc	Sr	Th	Th-n	CV/Th	U-n	CV/U	V	Y	Zn	Zn-i	Zr
Baboquivari Peak--Continued																		
95	30	N	<20	10	30	<2	7	200	N	21.50	4	4.49	2	30	15	N	62	100
96	30	N	<20	7	30	<2	7	150	N	22.80	5	5.53	2	100	15	N	52	200
97	30	N	<20	7	30	<2	7	150	N	21.70	5	5.62	2	50	15	N	64	100
98	30	N	20	7	15	<2	15	150	N	13.30	8	5.54	2	70	30	N	50	200
99	<30	N	<20	5	15	<2	7	100	N	9.95	8	2.97	3	30	15	N	33	150
100	30	<5	<20	15	30	<2	7	300	N	21.60	5	5.40	2	50	15	N	72	150
101	30	N	<20	15	30	<2	10	150	N	15.00	6	4.20	2	70	15	N	68	150
102	30	N	<20	15	20	<2	10	150	N	11.70	8	3.52	3	70	15	N	52	150
103	30	N	<20	10	30	<2	7	150	N	13.70	8	5.40	2	50	15	N	35	150
104	30	N	<20	15	20	<2	7	150	N	17.20	6	4.01	3	50	10	N	31	100
Coyote Mountains--Continued																		
76	30	N	<20	10	15	<2	20	300	N	13.40	12	12.70	2	150	30	N	35	150
77	N	N	<20	<5	15	<2	7	150	N	<4.30	--	10.60	2	20	10	N	19	70
80	30	N	<20	20	20	<2	30	300	N	19.40	9	13.70	2	150	20	N	48	300
81	70	N	30	15	15	<2	15	300	300	24.40	7	14.10	2	150	150	N	56	150
82	30	N	<20	15	15	<2	30	300	N	<4.70	--	12.20	2	150	50	<200	47	70
83	<30	N	<20	10	15	<2	15	300	N	<3.90	--	6.75	2	150	20	N	64	100
84	100	N	<20	<5	15	<2	30	300	N	39.70	4	13.80	1	200	70	N	37	150
85	30	N	<20	<5	15	<2	15	300	N	24.00	5	6.59	2	150	30	N	50	150
86	<30	N	<20	<5	15	<2	7	300	N	8.26	8	3.07	2	30	10	N	18	70
87	100	N	150	<5	15	<2	30	150	N	82.00	4	48.60	1	200	100	<200	21	150
88	<30	N	<20	7	15	<2	7	200	N	7.67	9	3.45	2	30	<10	N	26	70
89	70	N	<20	7	15	<2	7	200	N	9.53	8	3.62	2	30	15	N	21	30
90	<30	N	<20	7	15	<2	7	300	N	15.10	7	7.27	1	30	15	N	20	150
93	300	N	<20	10	15	<2	20	150	N	27.20	6	17.90	1	150	70	N	25	70
94	30	N	<20	15	15	<2	15	200	N	48.30	5	37.10	1	150	70	N	22	150
Table Top Mountains--Continued																		
1	30	N	<20	15	15	<2	10	150	N	14.50	7	3.92	3	70	15	N	44	150
2	30	N	<20	15	15	<2	7	150	N	17.30	6	4.00	3	70	20	N	46	150
3	30	N	<20	15	15	<2	7	150	N	7.79	12	3.03	3	50	15	N	50	200
4	30	N	<20	20	15	<2	20	150	N	5.76	11	1.75	4	300	15	N	61	100
5	30	N	<20	15	15	<2	15	<100	N	9.78	9	2.66	3	50	15	N	38	100
6	30	N	<20	15	15	<2	15	<100	N	8.44	10	3.16	3	150	15	N	37	100
8	30	N	20	15	15	<2	20	150	N	20.00	6	6.10	2	300	30	N	50	100
9	<30	N	<20	15	15	<2	7	<100	N	9.55	9	2.91	3	70	10	N	23	100
10	<30	N	<20	15	15	<2	10	<100	N	12.40	8	4.45	2	50	15	N	31	150
11	30	N	<20	15	15	<2	10	<100	N	10.30	8	2.20	4	50	15	N	31	150
12	30	N	<20	15	15	<2	10	<100	N	9.73	6	2.07	3	30	15	N	34	150
13	30	N	<20	10	15	<2	15	100	N	21.40	4	5.54	2	50	30	N	59	150
14	30	N	20	<5	15	<2	10	<100	N	30.90	4	9.12	1	50	50	N	49	100
15	<30	N	<20	5	20	<2	7	<100	N	15.80	6	5.47	2	30	15	N	41	100
16	30	N	20	5	15	<2	15	100	N	28.20	4	8.93	1	30	20	N	49	100
17	<30	N	<20	<5	15	<2	7	<100	N	14.70	5	4.16	2	30	30	N	25	70
18	30	N	<20	5	15	<2	10	100	N	17.70	5	6.52	2	30	50	N	44	150
21	50	N	20	7	15	<2	15	100	N	40.10	3	10.50	1	150	30	N	48	150
22	50	N	<20	10	15	<2	7	150	N	17.90	5	4.94	2	30	20	N	40	150
23	<30	N	<20	15	15	<2	10	150	N	8.87	7	2.16	3	150	10	N	66	70
24	30	N	<20	15	30	<2	15	150	N	20.70	4	4.66	2	150	30	N	44	150
25	N	N	<20	10	30	<2	7	150	N	12.50	6	3.21	2	70	15	N	30	70

TABLE 4.--Results of analyses of stream-sediment samples collected from the baboquivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Stucy Areas, Arizona--Continued

Site	Latitude	Longitude	Fe	Mg	Ca	Ti	Mn	As-i	B	Ba	Be	Bi-i	Cd-i	Co	Cr	Cu	Hg
							Table Top Mountains--Continued										
26	32 48 7	112 7 47	3.0	.3	.7	.30	300	<5	10	300	1.5	5	.3	7	30	7	<.02
27	32 48 47	112 8 32	3.0	.3	.7	.30	300	<5	10	200	1.5	3	.4	7	20	7	<.02
28	32 48 44	112 8 29	1.5	.3	1.0	.15	300	<5	<10	200	1.5	<2	.4	<5	<10	7	.02
29	32 47 57	112 8 57	7.0	.2	.7	.20	300	<5	10	150	1.5	5	.5	7	30	7	.04
30	32 47 59	112 9 7	3.0	.5	1.5	.30	700	<5	10	300	1.5	4	.3	5	15	7	<.02
32	32 49 7	112 11 5	7.0	1.0	1.5	.70	700	<5	<10	300	1.5	6	.7	15	100	15	<.02
33	32 49 14	112 10 45	7.0	.3	.7	.30	300	<5	<10	200	1.5	6	.5	7	30	15	.02
34	32 47 50	112 9 23	2.0	.3	1.0	.20	700	<5	15	300	1.5	4	.2	<5	30	7	<.02
35	32 48 9	112 9 35	10.0	.3	1.0	.30	700	<5	N	200	2.0	5	.6	15	30	15	<.02
36	32 48 57	112 11 54	3.0	.7	1.5	.30	700	<5	10	300	1.5	3	.2	7	30	10	<.02
37	32 49 29	112 12 27	3.0	.7	3.0	.20	300	<5	<10	500	1.5	<2	.3	7	30	7	<.02
38	32 49 23	112 12 35	7.0	.3	1.0	.20	300	<5	10	300	1.5	3	.4	7	30	7	<.02
39	32 47 38	112 11 32	2.0	.7	1.5	.20	300	<5	20	300	1.5	<2	.3	7	30	7	<.02
40	32 47 15	112 10 10	3.0	.7	1.5	.15	300	<5	30	500	1.5	<2	.2	5	30	7	<.02
41	32 47 55	112 11 33	7.0	.5	1.0	.30	300	<5	20	300	1.5	3	.4	7	30	10	<.02
42	32 48 5	112 13 5	5.0	.5	2.0	.15	200	<5	20	300	1.0	<2	.6	7	30	7	<.02
43	32 46 49	112 11 14	3.0	.5	1.5	.15	300	<5	70	500	1.5	4	.2	7	30	10	<.02
44	32 46 29	112 10 50	5.0	.5	1.5	.15	300	<5	100	500	1.0	3	.2	10	30	7	<.02
45	32 45 41	112 9 26	2.0	.5	.7	.15	300	<5	50	500	1.0	<2	.1	7	30	7	<.02
46	32 46 9	112 9 24	3.0	.7	.5	.20	300	<5	30	500	1.5	<2	.1	15	50	7	<.02
47	32 46 19	112 9 33	3.0	.7	.5	.15	300	<5	50	500	1.5	3	.1	10	50	10	<.02
49	32 43 17	112 9 6	3.0	.7	.7	.20	300	<5	30	500	1.0	<2	.3	7	50	7	<.02
50	32 43 9	112 9 6	3.0	.3	1.0	.30	300	<5	20	300	2.0	<2	.2	15	30	50	<.02
51	32 43 1	112 10 17	3.0	.7	.7	.30	500	<5	30	700	1.5	<2	.2	7	50	7	<.02
52	32 43 50	112 9 50	3.0	.7	.7	.30	300	<5	20	500	1.5	<2	.1	7	50	20	<.02
53	32 43 48	112 9 53	3.0	.7	.7	.20	300	<5	30	700	1.0	<2	.3	10	50	7	<.02
54	32 43 54	112 10 50	2.0	.5	.7	.20	300	<5	30	500	1.0	<2	.2	7	30	7	<.02
55	32 47 29	112 13 30	15.0	.3	.5	.30	300	<5	20	300	1.0	5	.5	15	70	15	<.02
56	32 46 15	112 10 41	5.0	.7	.7	.15	300	<5	30	500	1.5	3	.4	7	30	7	.03
57	32 46 17	112 10 36	5.0	.7	.7	.20	300	7	30	300	1.5	<2	.8	7	30	7	<.02
58	32 46 54	112 13 45	1.5	.5	.5	.10	200	<5	50	300	1.5	<2	.4	5	30	7	<.02
59	32 46 18	112 13 32	1.5	.5	.5	.15	200	<5	30	300	1.0	<2	.5	5	30	7	<.02
60	32 45 32	112 12 53	3.0	.5	.5	.15	200	<5	20	300	1.0	3	.7	7	30	7	<.02
61	32 45 49	112 11 45	3.0	.5	.5	.15	200	<5	20	300	1.0	3	1.1	7	30	7	<.02
62	32 45 22	112 11 59	3.0	.7	.5	.20	300	<5	50	300	1.0	3	.5	7	30	7	<.02
63	32 45 11	112 12 17	2.0	.7	.3	.20	300	<5	50	300	1.0	<2	.3	7	30	7	<.02
64	32 44 40	112 13 25	2.0	.5	.3	.15	200	<5	20	300	1.0	<2	.3	5	30	7	<.02
65	32 43 36	112 13 29	1.5	.5	.5	.10	200	<5	15	300	1.0	<2	.3	5	20	7	<.02
66	32 42 35	112 11 8	10.0	.3	.7	.30	300	<5	<10	200	1.0	7	2.7	7	70	7	.05
67	32 44 15	112 13 39	2.0	.5	.3	.15	200	<5	15	300	1.0	<2	.3	7	30	7	<.02
68	32 44 45	112 12 48	2.0	.5	.3	.15	200	<5	30	300	1.0	<2	.3	7	30	7	.02
69	32 44 43	112 12 48	1.5	.5	.7	.15	300	<5	30	300	1.0	<2	.4	7	30	7	.02
70	32 43 28	112 7 48	1.5	.5	.7	.15	300	<5	15	200	1.5	<2	.5	5	10	7	.02
71	32 43 28	112 8 18	10.0	.5	.7	.50	300	<5	10	200	1.5	9	2.0	10	50	10	.02
72	32 44 10	112 12 30	1.5	.7	.5	.15	200	<5	20	300	1.0	<2	.3	7	30	7	<.02
73	32 44 11	112 12 28	2.0	.5	.5	.15	200	<5	20	300	1.0	<2	.4	7	30	7	<.02
74	32 43 28	112 6 55	3.0	.7	.7	.30	300	6	15	150	2.0	4	.6	5	20	7	.06
75	32 48 57	112 6 1	2.0	.7	1.5	.15	300	<5	10	300	1.5	<2	.5	5	30	7	.04
78	32 49 27	112 9 23	7.0	.3	.7	.30	500	<5	<10	300	1.5	5	1.5	7	30	7	.04
79	32 49 23	112 10 12	3.0	.7	2.0	.30	300	6	10	300	1.5	4	1.9	7	30	7	.02

TABLE 4.--Results of analyses of stream-sediment samples collected from the Baboquivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Arizona--Continued

Site	La	Mo	Nb	Ni	Pb	Sb-i	Sc	Sr	Th	Th-n	CV/Th	U-n	CV/U	V	Y	Zn	Zn-i	Zr
								Table Top Mountains--Continued										
26	<30	N	<20	15	30	<2	7	100	N	11.90	6	3.03	2	70	10	N	29	70
27	50	N	20	5	20	<2	7	100	N	24.60	4	8.13	1	70	50	N	43	150
28	30	N	<20	5	15	<2	7	100	N	16.00	6	5.95	2	30	20	N	43	150
29	50	N	20	5	20	<2	7	<100	N	40.80	4	15.90	1	150	30	N	36	100
30	30	N	30	5	20	<2	15	150	N	21.50	6	11.70	1	70	30	N	39	150
32	30	N	20	30	15	<2	15	200	N	16.10	5	4.17	2	200	20	N	53	100
33	30	N	<20	7	30	<2	7	150	N	22.30	4	4.87	2	150	20	N	36	70
34	50	N	20	5	15	<2	7	100	N	8.23	10	5.52	2	70	20	N	25	100
35	50	N	20	10	20	<2	15	100	N	25.40	5	10.00	2	150	50	N	36	200
36	70	N	20	10	15	<2	15	150	N	17.90	6	5.28	2	100	30	N	36	150
37	N	N	<20	10	15	<2	7	200	N	10.70	7	2.66	3	70	15	N	22	100
38	N	N	<20	10	15	<2	5	150	N	13.40	7	3.92	2	150	15	N	22	70
39	N	N	<20	15	15	<2	7	150	N	10.40	8	2.59	3	50	15	N	27	70
40	N	N	<20	10	15	<2	10	100	N	8.34	10	3.30	3	70	10	N	27	100
41	N	N	<20	10	15	<2	7	150	N	18.60	6	5.28	2	150	30	N	36	100
42	N	N	<20	15	15	<2	7	150	N	10.50	8	3.18	3	100	10	N	28	100
43	N	N	<20	15	15	<2	10	150	N	10.90	9	4.20	2	70	10	N	26	100
44	30	N	<20	20	15	<2	15	100	N	10.50	8	3.02	3	70	20	N	27	100
45	30	N	<20	15	10	<2	10	70	N	8.97	9	2.95	3	50	15	N	30	100
46	50	N	<20	20	15	<2	15	100	N	10.10	8	3.19	3	70	20	N	35	100
47	50	N	<20	15	15	<2	15	70	N	8.96	10	3.36	3	70	15	N	31	150
49	30	N	<20	15	10	<2	15	150	N	10.20	8	3.51	3	70	15	N	34	100
50	N	N	20	15	15	<2	10	150	N	15.60	7	5.78	2	70	30	N	32	100
51	N	N	20	15	15	<2	15	100	N	10.10	9	3.08	3	70	15	N	30	100
52	N	N	<20	15	<10	<2	10	150	N	9.18	9	2.76	3	70	10	N	29	150
53	N	N	<20	20	10	<2	15	150	N	10.30	8	2.55	3	70	15	N	33	100
54	N	N	<20	15	10	<2	10	70	N	8.79	9	2.21	3	70	10	N	28	100
55	30	N	<20	30	15	<2	7	70	N	11.80	7	3.71	2	150	10	N	22	100
56	30	N	<20	15	15	<2	15	100	N	12.80	6	3.58	2	70	15	N	39	150
57	30	N	<20	15	15	2	10	<100	N	13.50	5	2.90	2	70	30	N	42	150
58	<30	N	<20	10	15	<2	10	<100	N	9.52	7	2.23	3	30	10	N	35	100
59	N	N	<20	10	15	<2	7	<100	N	9.48	7	2.01	3	30	10	N	34	70
60	<30	N	<20	10	15	<2	7	<100	N	7.39	9	2.22	3	30	10	N	37	100
61	50	N	<20	15	15	<2	10	100	N	12.70	6	2.90	2	70	15	N	41	150
62	30	N	<20	15	15	<2	15	<100	N	10.40	6	2.33	3	70	15	N	37	150
63	<30	N	<20	15	15	<2	10	<100	N	9.96	6	2.11	3	50	10	N	39	150
64	30	N	<20	10	15	<2	7	<100	N	7.06	9	2.04	3	50	10	N	30	150
65	<30	N	<20	15	15	<2	7	<100	N	7.81	8	1.96	3	30	10	N	31	70
66	30	N	<20	15	15	<2	7	<100	N	29.80	4	7.64	1	150	20	N	50	150
67	30	N	<20	15	15	<2	7	<100	N	9.45	6	1.82	3	50	10	N	32	100
68	<30	N	<20	15	15	<2	10	<100	N	10.20	6	2.01	3	50	10	N	41	100
69	<30	N	<20	15	15	<2	7	<100	N	9.99	7	3.02	2	50	10	N	37	100
70	30	N	<20	<5	15	<2	10	<100	N	17.00	6	5.77	2	30	30	N	48	200
71	30	N	20	15	15	<2	15	100	N	39.40	4	13.20	1	200	50	N	58	200
72	N	N	<20	10	10	<2	7	<100	N	8.24	8	2.11	3	30	10	N	34	70
73	30	N	<20	10	10	<2	7	<100	N	9.18	7	2.21	3	30	15	N	35	70
74	30	N	<20	5	20	<2	10	<100	N	20.20	5	6.14	2	70	30	N	51	70
75	<30	N	<20	10	15	<2	7	150	N	9.26	7	2.36	3	50	15	N	36	70
78	30	N	<20	7	15	<2	7	300	N	19.20	6	5.60	2	150	50	N	66	150
79	30	N	<20	7	15	<2	15	150	N	15.40	7	5.81	2	150	50	N	58	70

TABLE 5.--Results of analyses of panned-concentrate samples collected from the Babocuivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Arizona

[N, not detected; <, detected but below the limit of determination shown; >, determined to be greater than the value shown. Weight, grams of raw panned concentrate; Au-a, atomic absorption analyses of Au in raw panned concentrates; remainder of analyses by emission spectrography. Element values are ppm except for Fe, Mg, Ca, and Ti, which are weight percent]

Site	Latitude	Longitude	Weight	Au-a	Au	Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Bi	Co	Cr
Babocuivari Peak																	
95	31 49 0	111 32 48	22.6	2.00	N	.7	.10	3.0	>2.00	700	7	50	1,500	7	1,500	N	N
96	31 46 31	111 34 0	31.4	52.00	N	.5	.10	.3	1.00	200	5	50	1,000	2	50	N	N
97	31 46 39	111 33 52	22.8	43.00	>1,000	.2	.05	.5	.70	100	1,000	20	2,000	2	<20	<10	N
98	31 45 18	111 34 57	20.3	<.02	50	.3	.05	.5	1.50	100	20	30	300	2	N	N	N
99	31 45 14	111 34 50	39.4	.59	50	.7	.05	.5	2.00	100	20	100	2,000	2	N	N	N
100	31 47 23	111 31 58	27.8	N	N	.7	.10	3.0	>2.00	200	5	20	500	7	N	10	N
101	31 48 52	111 33 54	19.4	32.00	500	1.0	.10	2.0	>2.00	300	100	30	1,000	3	N	10	N
102	31 48 54	111 33 55	20.9	.10	150	1.0	.07	1.0	>2.00	200	50	30	7,000	3	N	<10	N
103	31 49 2	111 33 41	31.2	1.10	20	1.0	.10	1.0	>2.00	200	10	30	2,000	5	N	<10	N
104	31 49 0	111 33 22	16.1	.04	N	3.0	.10	.7	>2.00	500	10	30	10,000	3	N	<10	N
Coyote Mountains																	
76	31 59 5	111 32 48	38.2	N	N	.3	<.05	10.0	>2.00	500	N	20	500	N	N	<10	N
77	31 59 25	111 32 48	26.4	N	N	.2	<.05	2.0	2.00	200	N	20	1,000	<2	N	N	N
80	32 0 28	111 29 32	40.8	.73	N	.3	.10	5.0	>2.00	300	N	20	200	<2	<20	N	N
81	32 0 36	111 28 41	25.2	.32	N	.3	.05	5.0	>2.00	300	N	20	100	N	N	N	N
82	32 0 33	111 30 1	34.5	2.60	N	.3	.70	7.0	>2.00	300	N	30	200	2	N	<10	N
83	32 0 37	111 30 4	40.0	.10	N	.5	.50	7.0	2.00	500	N	20	300	3	N	N	N
84	31 57 14	111 31 39	34.7	N	N	.5	<.05	10.0	>2.00	700	N	20	<50	N	N	N	N
85	31 57 36	111 30 50	49.8	N	N	.5	<.05	5.0	>2.00	300	N	30	700	<2	N	N	N
86	31 57 52	111 30 13	25.6	N	N	.3	<.05	5.0	>2.00	300	N	20	500	<2	N	N	N
87	31 59 3	111 30 21	55.6	.07	N	.3	<.05	3.0	>2.00	300	N	30	700	3	N	<10	N
88	31 59 31	111 28 11	23.5	.07	N	.5	.05	10.0	>2.00	700	N	20	200	N	N	<10	N
89	31 58 46	111 29 32	26.6	N	N	.3	.10	10.0	>2.00	700	N	20	100	N	N	N	<20
90	31 58 46	111 29 34	20.4	.20	N	.5	.20	7.0	>2.00	500	N	20	100	<2	N	<10	N
93	31 59 32	111 30 28	36.8	N	N	.7	2.00	7.0	2.00	500	N	20	100	5	N	<10	<20
94	31 59 21	111 30 5	38.7	.05	N	.5	1.00	5.0	>2.00	500	N	20	200	2	N	<10	N
Teble Top Mountains																	
1	32 48 25	112 2 54	39.2	N	N	1.0	.50	3.0	>2.00	500	N	20	1,500	2	N	N	50
2	32 48 40	112 3 34	24.1	N	N	1.0	.50	1.5	>2.00	300	N	30	700	<2	N	N	50
3	32 49 7	112 4 35	40.8	N	N	1.5	.70	5.0	>2.00	1,000	N	50	700	3	N	N	100
4	32 46 29	112 7 15	40.0	N	N	1.5	.50	15.0	.50	700	N	30	1,000	N	N	N	<20
5	32 46 34	112 6 42	21.8	N	N	2.0	.50	10.0	1.00	1,000	N	100	500	<2	N	<10	70
6	32 46 40	112 7 6	42.1	N	N	1.5	.50	5.0	.50	700	N	50	>10,000	N	700	<10	20
8	32 48 58	112 5 11	43.8	N	N	2.0	.30	3.0	>2.00	500	N	30	1,000	2	<20	<10	30
9	32 47 4	112 3 42	38.7	N	N	1.5	.30	5.0	.50	1,000	N	30	500	2	30	N	<20
10	32 46 9	112 4 7	35.5	N	N	1.5	.30	3.0	.50	1,000	N	50	500	<2	70	N	<20
11	32 46 57	112 4 47	32.9	N	N	1.0	.30	5.0	.50	700	N	30	300	N	N	N	<20
12	32 48 6	112 2 57	36.7	N	N	1.5	.20	5.0	.70	1,000	N	30	500	<2	N	N	<20
13	32 45 24	112 4 20	30.0	N	N	1.5	.20	5.0	1.00	1,500	N	50	1,000	7	50	N	N
14	32 44 31	112 4 45	48.5	N	N	1.0	.15	3.0	1.50	1,500	N	30	300	7	<20	N	N
15	32 44 1	112 5 4	44.9	N	N	1.0	.20	5.0	2.00	2,000	N	50	200	5	20	N	N
16	32 43 30	112 5 53	44.9	N	N	1.0	.30	5.0	1.50	2,000	N	50	300	5	50	N	N
17	32 43 33	112 5 20	26.0	N	N	1.5	.20	3.0	2.00	1,000	N	30	300	7	30	N	N
18	32 43 45	112 5 4	16.0	N	N	1.5	.20	5.0	2.00	1,500	N	50	300	10	N	N	N
21	32 44 49	112 4 40	51.4	N	N	1.0	.15	2.0	.50	1,000	N	20	300	5	50	N	N
22	32 47 59	112 3 39	38.9	N	N	2.0	.50	3.0	>2.00	700	N	30	5,000	5	300	N	30
23	32 47 54	112 3 35	40.8	N	N	1.0	.50	5.0	.50	200	N	30	700	N	N	N	<20
24	32 48 56	112 4 12	34.3	N	N	1.5	.50	2.0	1.50	300	N	30	500	<2	N	N	20
25	32 48 34	112 6 9	19.2	N	N	1.0	.20	3.0	2.00	500	N	20	10,000	2	N	N	<20

TABLE 5.--Results of analyses of panned-concentrate samples collected from the Babocuivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Arizona--Continued

Site	Cu	La	Mo	Nb	Ni	Pb	Sc	Sn	Sr	V	W	Y	Zr	Th
							Baboquivari Peak--Continued							
95	10	100	100	50	10	500	50	N	200	100	300	700	>2,000	200
96	N	<50	70	N	10	2,000	<10	N	200	30	150	1,000	>2,000	500
97	20	<50	10	N	20	200	50	N	200	20	100	2,000	>2,000	200
98	N	150	N	N	15	50	50	N	200	20	N	2,000	>2,000	<200
99	N	<50	N	N	15	70	70	N	200	50	N	1,500	>2,000	<200
100	15	200	200	50	15	2,000	100	<20	200	100	500	1,000	>2,000	2,000
101	<10	200	300	<50	10	3,000	70	N	200	70	500	1,000	>2,000	500
102	<10	100	15	<50	10	2,000	70	N	200	50	150	700	>2,000	<200
103	<10	150	10	50	15	100	70	N	200	50	100	700	>2,000	200
104	15	200	N	50	15	200	70	N	200	70	<100	700	>2,000	<200
							Coyote Mountains--Continued							
76	<10	200	<10	70	<10	N	100	<20	500	100	150	300	>2,000	<200
77	N	150	N	70	<10	N	70	N	300	70	N	200	>2,000	N
80	<10	100	N	<50	10	N	150	N	300	150	100	200	>2,000	N
81	30	200	N	<50	15	500	150	N	200	500	N	500	>2,000	200
82	<10	100	N	<50	10	50	100	N	500	100	100	300	>2,000	N
83	10	<50	N	50	<10	30	70	N	500	70	200	100	>2,000	N
84	N	500	<10	100	<10	N	150	20	<200	200	N	1,000	>2,000	N
85	<10	200	N	50	10	N	100	N	300	100	N	500	>2,000	200
86	<10	200	N	50	10	N	150	N	200	100	N	700	>2,000	<200
87	<10	300	N	50	<10	20	100	N	200	70	N	300	>2,000	300
88	N	300	N	70	<10	<20	<10	20	200	200	N	500	>2,000	300
89	<10	300	N	70	<10	<20	N	20	200	300	N	1,000	>2,000	N
90	N	150	N	70	<10	N	N	<20	200	150	N	500	>2,000	N
93	20	100	N	50	<10	N	N	N	200	100	N	150	>2,000	N
94	10	<50	N	70	<10	N	N	N	500	100	N	150	>2,000	N
							Teble Top Mountains--Continued							
1	<10	150	N	50	15	50	70	N	500	100	N	700	>2,000	<200
2	10	150	N	50	10	50	30	70	300	100	N	500	>2,000	<200
3	15	700	N	50	15	70	100	100	200	150	N	1,000	>2,000	300
4	10	300	N	N	10	N	N	N	500	70	N	500	>2,000	N
5	15	200	N	<50	15	500	<10	N	200	100	N	300	>2,000	<200
6	10	100	20	N	15	50	N	N	300	50	200	200	>2,000	N
8	10	200	N	100	10	70	30	<20	200	100	N	500	>2,000	<200
9	10	100	N	N	10	500	<10	N	200	50	N	200	>2,000	200
10	15	150	N	N	15	5,000	<10	N	200	50	N	300	>2,000	<200
11	10	<50	N	N	<10	20	N	N	200	30	N	150	>2,000	N
12	15	150	N	N	10	700	50	N	200	70	N	500	>2,000	<200
13	10	300	N	N	10	100	150	N	<200	70	N	1,000	>2,000	<200
14	10	200	N	N	<10	200	150	N	<200	50	N	1,000	>2,000	N
15	10	500	N	50	<10	50	100	N	<200	70	N	700	>2,000	<200
16	10	200	N	<50	<10	50	50	N	<200	30	150	500	>2,000	N
17	10	<50	N	N	<10	50	100	N	<200	50	100	1,000	>2,000	N
18	15	300	N	N	10	70	200	<20	<200	70	N	1,500	>2,000	N
21	<10	200	N	N	10	150	200	N	<200	50	N	1,000	>2,000	N
22	15	200	N	50	20	100	150	N	2,000	100	N	1,500	>2,000	<200
23	<10	100	N	N	<10	<20	<10	N	300	70	N	200	>2,000	<200
24	<10	150	N	100	10	20	<10	N	200	50	N	300	>2,000	N
25	<10	200	N	70	10	50	50	N	200	70	N	700	>2,000	N

TABLE 5.--Results of analyses of panned-concentrate samples collected from the Babocuivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Arizona--Continued

Site	Latitude	Longitude	Weight	Au-a	Au	Fe	Mg	Ca	Ti	Mn	Ag	B	Ba	Be	Bi	Co	Cr
								Table Top Mountains--Continued									
26	32 48 7	112 7 47	49.5	N	N	1.0	.30	3.0	.50	500	N	50	5,000	2	500	N	20
27	32 48 47	112 8 32	37.9	N	N	1.0	.20	3.0	.70	1,000	N	30	700	5	150	N	N
28	32 48 44	112 8 29	10.0	N	N	1.5	.30	5.0	>2.00	1,500	N	50	500	5	150	N	20
29	32 47 57	112 8 57	52.9	N	N	1.0	.20	2.0	.30	500	N	50	500	5	1,500	N	N
30	32 47 59	112 9 7	40.2	N	N	1.0	.30	5.0	1.00	1,000	N	50	500	5	50	N	N
32	32 49 7	112 11 5	46.3	N	N	1.0	.50	2.0	.50	700	N	30	700	3	<20	N	<20
33	32 49 14	112 10 45	77.8	N	N	1.0	.30	1.5	.20	500	N	30	500	2	N	N	<20
34	32 47 50	112 9 23	22.3	N	N	2.0	1.00	5.0	>2.00	1,000	N	100	5,000	5	1,000	N	20
35	32 48 9	112 9 35	35.2	N	N	1.0	.30	3.0	2.00	1,000	N	30	500	7	20	N	<20
36	32 48 57	112 11 54	58.1	N	N	1.0	.30	3.0	1.00	1,000	N	30	500	5	30	N	<20
37	32 49 29	112 12 27	40.0	N	N	2.0	.70	3.0	>2.00	700	N	50	700	3	100	<10	100
38	32 49 23	112 12 35	42.6	N	N	2.0	.70	1.0	2.00	500	N	50	500	2	50	<10	50
39	32 47 38	112 11 32	42.0	N	N	1.0	.50	2.0	.70	500	N	50	500	2	50	N	70
40	32 47 15	112 10 10	27.6	N	N	1.0	.30	3.0	.20	500	N	30	5,000	2	300	<10	20
41	32 47 55	112 11 33	25.0	N	N	1.0	.20	1.5	1.00	700	N	50	500	5	150	N	<20
42	32 48 5	112 13 5	31.1	N	N	1.0	.50	2.0	1.00	200	N	50	700	<2	100	<10	<20
43	32 46 49	112 11 14	34.1	N	N	2.0	.70	5.0	1.00	1,000	N	100	2,000	3	1,500	<10	<20
44	32 46 29	112 10 50	28.4	.04	N	2.0	.50	10.0	2.00	1,000	N	70	5,000	<2	150	<10	50
45	32 45 41	112 9 26	17.8	N	N	3.0	.70	10.0	1.00	1,500	N	50	1,500	<2	100	<10	70
46	32 46 9	112 9 24	27.9	N	N	1.0	.50	3.0	.50	500	N	50	1,000	N	100	<10	20
47	32 46 19	112 9 33	17.2	N	N	1.5	.50	10.0	1.00	1,000	N	50	>10,000	<2	1,500	N	20
49	32 43 17	112 9 6	20.3	.19	N	1.0	.30	3.0	.20	700	N	30	1,000	N	200	<10	20
50	32 43 9	112 9 6	45.6	N	N	1.0	.20	2.0	.50	500	N	30	500	<2	20	<10	20
51	32 43 1	112 10 17	21.9	N	N	2.0	.30	10.0	1.50	1,500	N	50	1,000	2	<20	<10	50
52	32 43 50	112 9 50	26.6	N	N	1.5	.50	10.0	.70	1,500	N	30	2,000	2	300	N	20
53	32 43 48	112 9 53	19.7	N	N	2.0	.50	15.0	2.00	1,500	N	100	1,000	2	700	N	50
54	32 43 54	112 10 50	25.6	N	N	7.0	1.00	15.0	2.00	2,000	N	70	1,000	2	100	N	100
55	32 47 29	112 13 30	35.9	N	N	1.0	.20	2.0	1.00	2,000	N	30	500	N	1,000	N	<20
56	32 46 15	112 10 41	46.7	N	N	.5	.10	5.0	.20	500	N	50	5,000	N	N	N	N
57	32 46 17	112 10 36	41.3	N	N	.7	.20	1.0	.15	200	N	70	500	N	<20	N	<20
58	32 46 54	112 13 45	41.7	N	N	.7	.15	1.0	.30	200	N	50	500	N	N	N	<20
59	32 46 18	112 13 32	32.4	N	N	.5	.15	1.0	.15	200	N	50	300	N	N	N	<20
60	32 45 32	112 12 53	29.1	N	N	.7	.15	1.0	.70	200	N	50	500	N	N	N	<20
61	32 45 49	112 11 45	43.6	N	N	1.0	.15	2.0	.70	500	N	70	1,500	N	N	N	<20
62	32 45 22	112 11 59	50.8	N	N	.7	.15	3.0	.50	300	N	70	500	<2	N	N	<20
63	32 45 11	112 12 17	29.5	N	N	.7	.10	10.0	1.00	500	N	50	700	2	N	N	N
64	32 44 40	112 13 25	27.8	N	N	1.0	.10	5.0	1.50	1,000	N	100	500	2	N	N	N
65	32 43 36	112 13 29	27.9	N	N	.5	.10	2.0	1.00	300	N	50	2,000	<2	70	N	N
66	32 42 35	112 11 8	47.9	N	N	.5	.10	.5	.10	100	N	70	300	N	N	N	N
67	32 44 15	112 13 39	29.6	N	N	.7	.10	1.5	1.00	300	N	70	500	2	50	N	N
68	32 44 45	112 12 48	30.8	N	N	.7	.10	7.0	1.00	300	N	100	300	2	N	N	N
69	32 44 43	112 12 48	25.6	N	N	1.0	.15	5.0	1.50	700	N	100	700	2	150	<10	N
70	32 43 28	112 7 48	16.1	N	N	.5	.05	15.0	2.00	2,000	N	100	300	15	<20	N	N
71	32 43 28	112 8 18	32.4	N	N	.5	.10	2.0	1.00	700	N	70	500	7	<20	N	N
72	32 44 10	112 12 30	14.5	N	N	1.0	.10	3.0	1.50	700	N	150	700	3	70	N	<20
73	32 44 11	112 12 28	10.5	N	N	.3	.07	2.0	1.00	300	N	30	700	2	<20	N	N
74	32 43 28	112 6 55	17.9	N	N	1.0	.05	5.0	2.00	2,000	N	100	200	20	100	N	N
75	32 48 57	112 6 1	14.2	N	N	.7	.20	2.0	2.00	500	N	30	3,000	3	200	N	<20
78	32 49 27	112 9 23	39.7	N	N	.5	.10	.7	.50	150	N	50	500	2	50	<10	N
79	32 49 23	112 10 12	64.8	N	N	1.0	.15	2.0	1.50	1,000	N	70	500	5	300	N	N

TABLE 5.--Results of analyses of panned-concentrate samples collected from the Babocuivari Peak, Coyote Mountains, and Table Top Mountains Wilderness Study Areas, Arizona--Continued

Site	Cu	La	Mo	Nb	Ni	Pb	Sc	Sn	Sr	V	W	Y	Zr	Th
								Table Top Mountains--Continued						
26	10	200	10	<50	10	50	<10	N	200	70	200	500	>2,000	200
27	10	500	N	N	10	100	200	N	<200	50	N	1,500	>2,000	<200
28	10	1,000	N	50	10	100	200	N	<200	100	N	1,500	>2,000	200
29	10	200	N	N	<10	150	100	N	<200	30	500	1,000	>2,000	<200
30	10	300	N	<50	10	100	150	N	<200	30	N	1,500	>2,000	<200
32	15	100	N	N	15	70	70	N	200	50	N	700	>2,000	N
33	<10	<50	N	N	<10	30	<10	N	200	30	N	150	2,000	N
34	20	200	20	<50	20	200	100	N	<200	150	500	1,000	>2,000	200
35	10	300	N	N	10	50	100	N	<200	50	N	1,000	>2,000	N
36	10	150	N	N	10	50	70	N	<200	70	N	700	>2,000	N
37	15	300	N	50	20	30	70	N	200	100	N	700	>2,000	N
38	10	100	N	50	15	30	50	N	200	100	100	500	>2,000	<200
39	<10	100	N	N	10	20	<10	N	200	70	N	300	>2,000	N
40	<10	<50	30	N	10	20	N	N	200	30	700	200	>2,000	200
41	10	200	N	N	10	50	50	N	<200	70	N	1,000	>2,000	N
42	<10	150	N	N	10	20	<10	100	200	70	N	300	>2,000	N
43	10	150	30	50	15	300	30	N	200	150	1,000	500	>2,000	<200
44	10	150	<10	<50	15	70	30	N	200	100	500	500	>2,000	N
45	100	100	<10	N	20	20	<10	N	200	100	700	300	>2,000	N
46	<10	100	N	N	10	<20	N	N	200	50	300	100	>2,000	N
47	20	100	10	<50	10	50	<10	N	1,500	70	5,000	200	>2,000	N
49	<10	N	100	N	10	150	N	N	200	50	700	100	>2,000	N
50	<10	<50	N	<50	<10	20	N	N	200	50	N	150	>2,000	N
51	15	100	50	N	20	20	30	N	200	100	300	300	>2,000	N
52	<10	300	<10	N	15	30	50	N	200	100	150	700	>2,000	<200
53	10	200	N	<50	15	50	50	N	200	100	<100	700	>2,000	1,000
54	15	200	N	N	30	30	50	N	200	150	300	700	>2,000	<200
55	<10	N	N	N	10	30	N	N	200	150	150	100	>2,000	N
56	15	<50	70	N	N	<20	<10	N	300	20	1,000	70	>2,000	N
57	<10	<50	N	N	<10	N	N	N	<200	30	<100	20	>2,000	N
58	N	150	N	N	<10	<20	N	N	200	30	N	50	>2,000	N
59	N	<50	N	N	<10	N	N	N	200	20	N	30	2,000	N
60	<10	<50	N	N	<10	N	N	N	200	30	<100	70	>2,000	N
61	<10	100	<10	N	<10	N	N	N	200	50	200	100	>2,000	N
62	N	<50	N	N	<10	N	N	N	200	30	100	100	>2,000	N
63	10	<50	N	N	<10	20	20	N	200	50	100	300	>2,000	N
64	10	100	N	N	10	20	30	50	200	70	<100	300	>2,000	<200
65	N	<50	N	N	<10	N	<10	N	200	50	<100	150	>2,000	N
66	N	N	N	N	<10	<20	N	N	200	20	N	<20	1,000	N
67	<10	<50	N	N	<10	<20	20	N	200	50	N	100	>2,000	N
68	N	<50	N	N	10	N	<10	N	200	30	200	200	>2,000	N
69	N	200	N	<50	15	N	30	N	200	50	N	200	>2,000	N
70	<10	200	N	<50	20	30	200	N	<200	70	N	2,000	>2,000	N
71	<10	150	N	N	10	20	150	N	<200	50	<100	1,000	>2,000	N
72	N	100	N	N	15	<20	30	N	200	70	<100	500	>2,000	200
73	N	<50	N	N	10	N	20	N	200	30	<100	300	>2,000	N
74	<10	200	N	N	15	70	>200	N	200	70	N	2,000	>2,000	N
75	N	100	N	<50	10	150	50	N	200	50	200	500	>2,000	N
78	N	N	N	N	<10	N	<10	N	200	10	N	100	>2,000	N
79	<10	100	N	<50	15	30	50	N	200	70	150	500	>2,000	N

TABLE 6.--Results of analyses of rock samples collectec from the Coyote Mountains and Table Top Mountains Wilderness Stuay Areas, Arizona

[N, not detected; <, detected but below the limit of determination shown; >, determined tc be greater than the value shown. Analyses by emission spectrograph except Hg. Values are ppm except for Fe, Mg, Ca, and Ti which are weight percent. Mutiple samples at some sites are indicated by letters in site identifications]

Site	Latituce	Longitude	Fe	Mg	Ca	Ti	Mn	Ag	As	B	Ba	Be	Bi	Co	Cr	Cu
Coyote Mountains																
91A	32 0 11	111 30 26	>20.0	<.02	.07	.010	1,500	.7	N	50	N	70.0	N	50	10	700
91B	32 0 11	111 30 26	>20.0	.07	.20	.030	100	300.0	N	<10	50	2.0	20	N	70	7,000
91C	32 0 11	111 30 26	1.0	.50	3.00	.020	2,000	7.0	N	10	30	50.0	<10	15	10	20,000
91D	32 0 11	111 30 26	>20.0	.02	.10	.005	700	10.0	N	30	N	2.0	N	30	50	15,000
91E	32 0 11	111 30 26	15.0	.70	.30	.007	>5,000	15.0	N	N	N	5.0	N	500	15	>20,000
92A	32 0 12	111 30 39	>20.0	<.02	<.05	.300	30	300.0	N	30	70	N	15	<5	10	7,000
92B	32 0 12	111 30 39	>20.0	2.00	.05	.020	5,000	1.0	N	30	N	15.0	N	20	N	2,000
92C	32 0 12	111 30 39	7.0	3.00	7.00	1.000	5,000	2.0	N	N	1,000	N	N	50	100	15,000
92D	32 0 12	111 30 39	10.0	2.00	15.00	.150	5,000	.7	N	<10	N	30.0	10	10	N	10,000
Table Top Mountains																
7	32 46 58	112 6 29	7.0	2.00	.10	.500	2,000	N	N	100	1,000	2.0	N	15	100	70
19	32 44 1	112 5 8	15.0	.10	10.00	.010	5,000	N	N	30	500	20.0	10	5	20	50
20A	32 44 14	112 5 3	15.0	.70	1.00	.150	1,000	N	N	50	50	5.0	N	<5	20	30
20B	32 44 14	112 5 3	.7	.50	.30	.100	500	N	N	50	200	5.0	N	<5	N	N
20C	32 44 14	112 5 3	10.0	2.00	3.00	.200	2,000	N	N	70	200	50.0	N	<5	<10	5
31A	32 47 49	112 9 6	1.0	.10	>20.00	.020	>5,000	N	N	<10	70	<1.0	N	N	N	<5
31B	32 47 49	112 9 6	1.0	.20	>20.00	.007	>5,000	N	N	N	150	N	N	N	N	<5
34	32 47 50	112 9 23	5.0	.70	1.00	.700	1,000	N	N	20	700	1.5	N	<5	<10	<5
40	32 47 15	112 10 10	5.0	2.00	2.00	.200	2,000	N	N	30	700	3.0	N	7	20	<5
48A	32 46 0	112 9 38	3.0	1.00	.10	.700	500	2.0	200	3,000	500	2.0	1,000	5	100	>20,000
48B	32 46 0	112 9 38	3.0	2.00	.15	1.000	500	1.0	<200	2,000	500	2.0	500	5	150	>20,000

TABLE 6.--Results of analyses of rock samples collected from the Coyote Mountains and Table Top Mountains Wilderness Study Areas, Arizona--Continued

Site	Hg	La	Mo	Nb	Ni	Pb	Sc	Sn	Sr	V	W	Y	Zn	Zr
								Coyote Mountains--Continued						
91A	<.02	N	N	<20	10	N	<5	70	N	700	100	N	<200	<10
91B	.26	N	100	N	10	<10	5	70	N	150	>10,000	15	N	20
91C	<.02	N	N	N	10	N	N	N	300	20	100	20	300	<10
91D	.10	N	10	N	30	N	N	N	N	30	500	N	1,000	N
91E	.24	N	20	N	30	N	<5	N	N	70	1,000	15	1,000	N
92A	<.02	N	<5	N	<5	<10	7	100	N	15	100	50	N	20
92B	<.02	N	20	N	7	N	7	150	N	200	500	N	200	<10
92C	<.02	100	N	N	50	20	15	N	1,000	200	N	50	N	150
92D	<.02	N	N	<20	5	20	15	20	500	50	N	70	N	20
								Table Top Mountains--Continued						
7	.02	100	N	N	30	50	20	N	100	100	N	50	N	100
19	.02	N	N	N	<5	50	N	N	100	50	N	20	N	N
20A	N	N	N	20	5	<10	10	N	<100	30	N	150	N	100
20B	N	N	N	<20	N	10	7	N	N	10	N	50	N	50
20C	N	N	<5	20	5	15	15	N	150	50	N	200	N	100
31A	<.02	50	N	N	<5	50	7	N	200	10	N	150	N	<10
31B	<.02	<20	N	N	5	15	5	N	200	10	N	70	N	<10
34	<.02	70	N	<20	5	15	20	N	<100	70	N	70	N	500
40	N	N	N	N	15	<10	7	N	150	100	N	30	N	150
48A	.12	N	N	N	20	15	15	N	100	100	N	50	N	300
48B	N	100	N	<20	50	10	20	N	100	100	N	70	N	1,000