UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analytical results and sample locality map of rock samples from the Mazatzal Wilderness and contiguous roadless areas, Gila, Maricopa, and Yavapai Counties, Arizona

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STUDIES RELATED TO WILDERNESS

The Wilderness Act (Public Law 88-577, September 3, 1964) and related acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine their mineral resource potential. 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 Mazatzal Wilderness and contiguous roadless areas in the Tonto and Coconino National Forest, Gila, Maricopa, and Yavapai Counties, Arizona. The area was established as a wilderness by Public Law 88-577, September 3, 1964. The Mazatzal Wilderness and contiguous roadless areas were classified as a further planning area during the Second Roadless Area Review and Evaluation (RARE II) by the U.S. Forest Service, January 1979.

INTRODUCTION

In 1979-81 a reconnaissance geochemical survey was made of the Mazatzal Wilderness and contiguous roadless areas, Gila, Maricopa, and Yavapai Counties, Arizona.

The Mazatzal Wilderness and contiguous roadless areas comprise about 452 sq mi in Gila, Maricopa, and Yavapai Counties, Arizona, and lie about 8 mi west of Payson, Arizona (see figure 1). Access to the vicinity of the study area is provided on the east by Arizona State Highway 87; several U.S. Forest Service roads go to the east boundary of the wilderness from Highway 87 and Payson, Arizona.

Geologic Setting

The Mazatzal Mountains lie at the margin of the Basin and Range physiographic province in a region of Arizona where the mountain ranges are about as wide or wider than the intervening basins. The Mogollon Rim, which defines the southern physiographic border of the Colorado Plateau, is about 5 mi (8 km) north of the Mazatzal Wilderness. Paleozoic rocks, extensively exposed along the Mogollon Rim, have been largely eroded from the wilderness and roadless areas. The few remaining masses of Paleozoic rocks in the wilderness rest on thick sequences of mostly steeply-tilted, stratified Proterozoic rocks and on Proterozoic granitic rocks. These rocks are similar to Proterozoic layered and intrusive rocks exposed widely in central Arizona east and northwest of the wilderness. Tertiary volcanic rocks exposed within the wilderness are at the southern end of a large volcanic field that extends north and northwest for more than 100 mi (160 km) in the western parts of the Colorado Plateau and adjacent areas of the Basin and Range Province.

Physiography

The Mazatzal Mountains constitute the dominant physiographic feature of the wilderness. The eastern slopes of these mountains rise steeply from 3,500 ft along the valley of Rye Creek east of the range to 7,903 ft at Mazatzal Peak. To the west, the range slopes steeply from the crest, then more gently along the lower flanks to the Verde River, one of the main drainage channels of Arizona. In the northern part of the wilderness, the East Verde River, a tributary of the Verde, occupies a deep canyon that separates the Mazatzal Mountains from mesas to the north. The lowest parts of

the wilderness have altitudes of about 2,200 ft and are located near Bartlett Reservoir in the southwestern part of the area studied.

METHODS OF STUDY

Sample Collection

Rock samples were collected at sites shown on plate 1. Analyses for a total of 364 rock samples are listed in this report (tables 3).

Rock samples were collected from outcrops or exposures in the vicinity of the plotted site location. Most samples were taken from areas of observed or suspected mineralization including mines, mine dumps, and prospect pits. Altered areas and structures were sampled where observed.

Sample Preparation

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

Sample Analysis

Spectrographic method

The rock samples were analyzed for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). Spectrographic results are obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given 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 unit at the 83 percent confidence level and plus or minus two reporting units at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram) (Table 1).

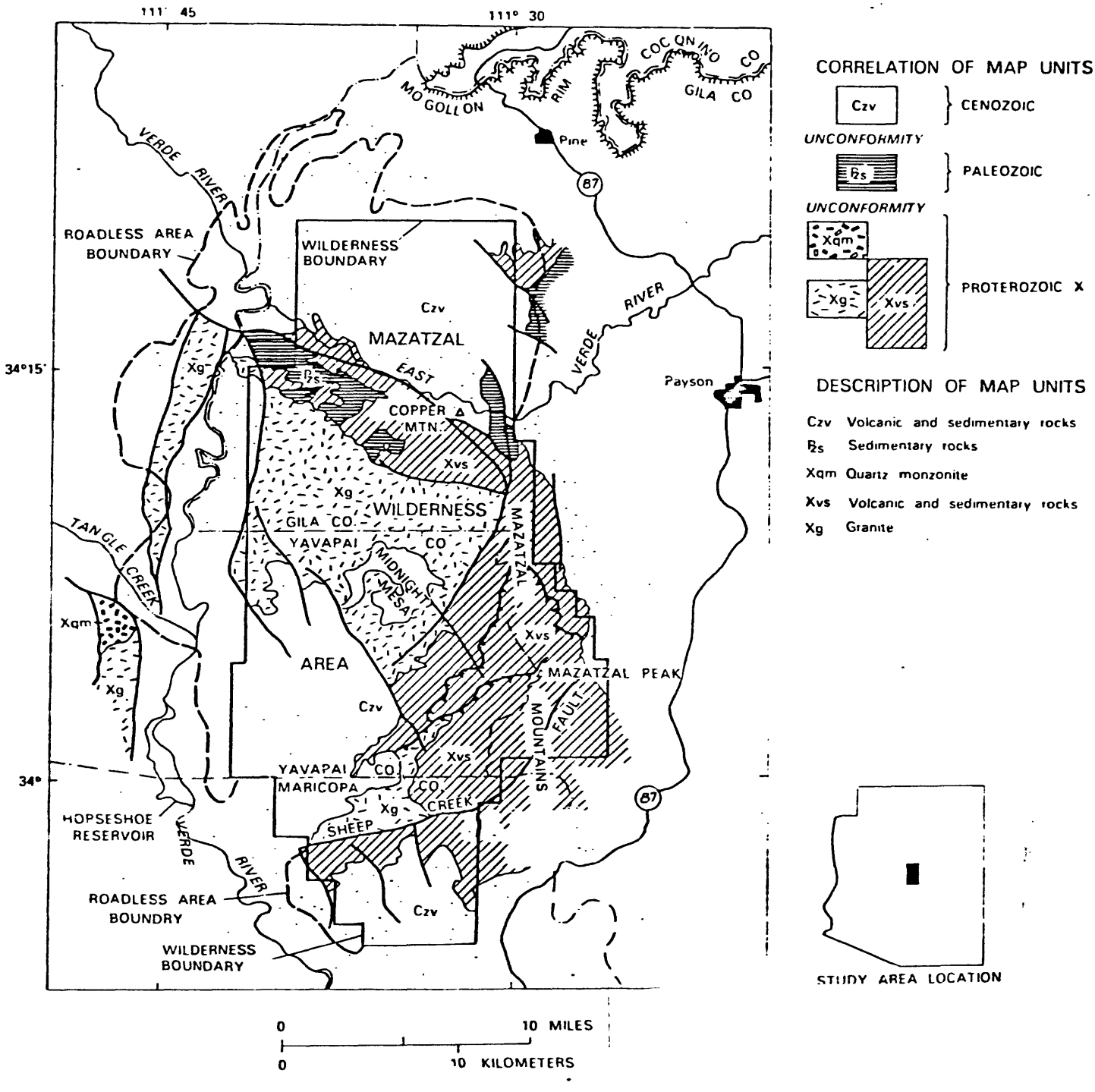

FIGURE 1.--Map showing location and generalized geology of the Mazatzal Wilderness and contiguous roadless areas (Wrucke and Ellis, 1983).

TABLE 1.--Limits of determination for the spectrographic analysis of rocks based on a 10-mg sample

Element	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	10,000
Gold (Au)	10	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20	500
Cobalt (Co)	5	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Lanthanum (La)	20	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	2,000

Chemical methods

Other methods of analysis used on samples from the Mazatzal Wilderness and contiguous roadless areas are summarized in table 2.

Table 2.--Chemical methods used

Element or constituent determined	Analytical Method	Determination limit[1] (micrograms/ gram or ppm)	Analyst	Reference
Gold (Au)	Atomic absorption	0.05	J. Grey	Thompson and others, 1968.
Mercury (Hg)	Instrument (Jerome)	0.02	M. Spoo B. Arbogast	Modification of McNerney and others, 1972 and Vaughn, and McCarthy, 1964
Arsenic (As)	Colorimetric	10	B. Arbogast	Ward, 1963.
Antimony (Sb)	Atomic absorption	2	B. Arbogast	Welsch and Chao, 1975.
Zinc (Zn)	Atomic absorption	5	B. Arbogast	Modification of Viets, 1978.
Bismuth (Bi)	Atomic absorption	1	B. Arbogast	Modification of Viets, 1978.
Cadmium (Cd)	Atomic absorption	0.05	B. Arbogast	Modification of Viets, 1978.
Copper (Cu)	Atomic absorption	5	B. Arbogast	Modification of Viets, 1978.
Lead (Pb)	Atomic absorption	5	B. Arbogast	Modification of Viets, 1978.
Silver (Ag)	Atomic absorption	.05	B. Arbogast	Modification of Viets, 1978.
Tellurium (Te)	Atomic absorption	0.1	B. Vaughn	Chao and others, 1978.
Tin (Sn)	Atomic absorption	2	M. Spoo B. Arbogast	Welsch and Chao, 1976.

[1]The determination limit is dependent upon sample weight. Given limits imply use of sample weight required by method. Higher limits of determination result from using less than required sample weight.

Analytical results for rock samples are listed in Table 3.

RASS

Upon completion of all analytical work, the geological and analytical data for the samples was entered into a computer-based file called RASS (Rock Analysis Storage System). Any or all of this information may be retrieved and converted to a standard form (STATPAC) for computerized statistical analysis or publication (VanTrump and Miesch, 1976).

DESCRIPTION OF DATA TABLE

Table 3 lists the analyses for the rock samples. For the table, the data are arranged so that column 1 contains the USGS-assigned sample numbers. These numbers correspond to the numbers shown on the site location maps (plate 1). Columns in which the element headings show the letter "s" below the element symbol are emission spectrographic analyses; "aa" indicates atomic absorption analyses. A letter "N" in the table indicates that a given element was looked for but not detected at the lower limit of determination shown for that element in table 3. If an element was observed but was below the lowest reporting value, a "less than" symbol (<) was entered in the table in front of the lower limit of determination. If an element was observed but was above the highest reporting value, a "greater than" symbol (>) was entered in the table in front of the upper limit of determination.

REFERENCES CITED

Chao, T. T., Sanzolone, R. F., and Hubert, A. E., 1978, Flame and flameless atomic-absorption determination of tellurium in geological materials: Analytica Chimica Acta, v. 96, p. 251-257.

Grimes, D. J., and Marranzino, A. P., 1968, Direct-current arc and alternating-current spark emission spectrographic field methods for the semiquantitative analysis of geologic materials: U.S. Geological Survey Circular 591, 6 p.

McNerney, J. J., Buseck, P. R., and Hanson, R. C., 1972, Mercury detection by means of thin gold films: Science, v. 178, p. 611-612.

Motooka, J. M., and Grimes, D. J., 1977, Analytical precision of one-sixth order semiquantitative spectrographic analyses: U.S. Geological Survey Circular 738, 25 p.

Thompson, C. E., Nakagawa, H. M., and Van Sickle, G. H., 1968, Rapid analysis for gold in geologic materials, in Geological Survey Research 1968: U.S. Geological Survey Professional Paper 600-B, p. B130-B132.

VanTrump, George, Jr., and Miesch, A. T., 1976, The U.S. Geological Survey RASS-STATPAC system for management and statistical reduction of geochemical data: Computers and Geosciences, v. 3, p. 475-488.

Vaughn, W. W., and McCarthy, J. H., Jr., 1964, An instrumental technique for the determination of submicrogram concentrations of mercury in soils, rocks, and gas, in Geological Survey Research 1964: U.S. Geological Survey Professional Paper 501-D, p. D123-D127.

Viets, J. G., 1978, Determination of silver, bismuth, cadmium, copper, lead, and zinc in geological materials by atomic-absorption spectrometry with tricaprylylmethylammonium chloride: Analytical Chemistry, v. 52, p. 1097-1101.

Ward, F. N., Lakin, H. W., Canney F. C., and others, 1963, Analytical methods used in geochemical exploration by the U.S. Geological Survey: U.S. Geological Survey Bulletin 1152, 100 p.

Welsch, E. P., and Chao, T. T., 1975, Determination of trace amounts of antimony in geological materials by atomic-absorption spectrometry: Analytica Chimica Acta, v. 76, p. 65-69.

Welsch, E. P., and Chao, T. T., 1976, Determination of trace amounts of tin in geological materials by atomic-absorption spectrometry: Analytica Chimica Acta, v. 82, p. 337-342.

Wrucke, Chester T., and Ellis, Clarence E., 1983, Mazatzal Wilderness and contiguous areas, Arizona, in Marsh, S. P., Kropschot, S. J., and Dickinson, R. G., eds., Wilderness Mineral Potential: U.S. Geological Survey Professional Paper 1300, v. 1, p. 83-86.

Table 3.--Spectrographic and atomic absorption analyses of rock samples from the Mazatzal Wilderness and contiguous roadless areas, Gila, Maricopa, and Yavapai Counties, Arizona

[The following qualifiers are used in reporting spectrographic data: N, not detected at the limit of determination; < detected, but below the limit of determination; > greater than the upper determination limit. The qualifier used in reporting atomic absorption data was >n, values which exceeded the upper detection limits of the method of analysis.]

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ011R	34 2 40	111 33 26	.30	.07	<.05	.020	>5,000	N	N	N	10
MZ012R	34 21 50	111 37 49	3.00	.05	.05	.020	70	N	N	N	10
MZ012RA	34 21 50	111 37 49	5.00	2.00	5.00	.200	1,000	N	N	N	30
MZ012RB	34 21 50	111 37 49	5.00	.05	.07	.100	50	5.0	N	N	15
MZ012RC	34 21 50	111 37 49	3.00	1.50	.10	.100	1,000	1.0	N	N	20
MZ012RD	34 21 50	111 37 49	20.00	1.00	.50	.150	5,000	20.0	N	<10	150
MZ012RE	34 21 50	111 37 49	>20.00	.50	.15	.100	N	N	N	N	200
MZ013R	34 21 47	111 39 30	7.00	3.00	10.00	.700	1,000	N	N	N	20
MZ026R	34 16 5	111 40 29	7.00	3.00	>20.00	.700	1,000	N	N	N	10
MZ030R	34 15 11	111 41 46	.50	7.00	>20.00	.030	>5,000	N	N	N	30
MZ044R	34 10 39	111 42 10	5.00	5.00	>20.00	.010	5,000	N	N	N	50
MZ060R	34 12 45	111 38 5	1.50	.50	.30	.150	200	N	N	N	200
MZ060RA	34 13 0	111 37 46	<.05	.02	.05	.002	30	N	N	N	<10
MZ071R	34 11 39	111 44 50	7.00	3.00	10.00	1.000	1,000	N	N	N	20
MZ076R	34 8 47	111 36 12	1.50	.20	.15	.100	700	20.0	N	N	200
MZ076RA	34 8 47	111 38 11	1.50	.10	.07	.150	1,500	<.5	N	N	70
MZ076RB	34 8 47	111 38 25	.30	.07	.05	.050	150	N	N	N	20
MZ082R	34 7 30	111 40 11	.20	.05	.10	.020	200	N	N	N	N
MZ089R	34 12 40	111 33 13	1.50	.50	3.00	.500	500	70.0	>10,000	N	1,000
MZ099R	34 14 18	111 31 35	10.00	5.00	20.00	.700	2,000	1.0	N	N	50
MZ102R	34 12 39	111 29 1	2.00	.30	5.00	.050	700	.7	N	N	<10
MZ102RA	34 12 39	111 29 1	1.50	.30	.30	.150	300	7.0	N	N	<10
MZ102RB	34 12 39	111 29 1	7.00	2.00	.70	.500	700	7.0	N	N	100
MZ102RC	34 12 39	111 29 1	1.50	.30	.20	.200	200	.5	N	N	50
MZ102RD	34 12 40	111 29 1	7.00	1.00	.20	.200	500	15.0	N	20	30
MZ103R	34 14 39	111 34 55	7.00	1.50	20.00	.300	1,500	20.0	N	N	100
MZ103RA	34 14 39	111 34 55	2.00	1.00	5.00	.300	1,000	.5	N	N	20
MZ103RB	34 14 39	111 34 55	15.00	3.00	.30	.070	700	3.0	N	N	100
MZ107R	34 14 5	111 39 7	10.00	5.00	20.00	1.000	1,500	<.5	N	N	20
MZ175R	34 11 34	111 33 55	1.00	.10	.05	.050	150	N	N	N	20
MZ249R	34 4 29	111 33 37	.20	.07	.07	.010	100	N	N	N	<10
MZ249RA	34 4 31	111 33 37	.50	.07	.07	.002	300	<.5	N	N	20
MZ269R	34 6 55	111 31 28	2.00	.05	.50	.100	70	5.0	1,500	N	50
MZ269RA	34 6 53	111 31 29	.50	.05	.70	.050	70	20.0	1,500	N	10
MZ269RB	34 6 54	111 31 29	7.00	.05	.05	.010	30	10.0	N	N	20
MZ357R	33 56 34	111 30 31	1.00	.50	.50	.070	2,000	<.5	<200	N	20
MZ358R	33 57 42	111 32 47	15.00	.30	.15	.300	500	300.0	>10,000	N	2,000
MZ358RA	33 57 41	111 30 19	>20.00	.50	.50	.100	150	200.0	>10,000	N	>2,000
MZ358RB	33 57 42	111 32 48	>20.00	.50	.15	.100	70	200.0	>10,000	N	>2,000
MZ358RC	33 57 42	111 32 47	>20.00	.50	.10	.200	70	100.0	5,000	N	>2,000
MZ359R	34 10 1	111 27 37	20.00	1.00	.10	.300	300	3.0	N	N	200
MZ359RA	34 10 1	111 27 37	15.00	1.00	.30	.300	3,000	5.0	N	N	100
MZ376R	34 5 42	111 25 34	5.00	.15	.1	.300	1	N	N	N	30
MZ403R	34 33	111 46 43	3.00	.15	.07	.200	50	N	N	N	15

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ001R	>5,000	10.0	N	N	15	100	50	N	15	N	10	<10	N
MZ010R	700	<1.0	N	N	30	200	30	30	N	<20	150	<10	N
MZ012R	200	N	N	N	N	70	150	N	N	N	7	N	N
MZ012RA	300	N	N	N	20	100	100	N	N	N	20	15	N
MZ012RB	200	N	N	N	N	30	150	N	20	N	5	N	N
MZ012RC	300	N	N	N	50	20	5,000	30	N	N	30	50	N
MZ012RD	500	<1.0	N	N	200	70	>20,000	20	N	N	50	70	N
MZ012RE	100	N	N	N	300	30	700	N	70	N	150	70	N
MZ013R	1,500	<1.0	N	N	50	500	500	50	N	<20	150	20	N
MZ026R	5,000	1.0	N	N	50	1,000	150	70	N	<20	150	15	N
MZ030R	100	<1.0	N	N	10	70	50	N	N	N	50	15	N
MZ044R	100	3.0	N	N	30	10	30	20	N	N	70	30	N
MZ060R	700	5.0	N	N	N	10	15	150	N	20	N	20	N
MZ060RA	>5,000	N	N	N	N	20	20	N	N	N	N	30	N
MZ071R	3,000	1.0	N	N	30	150	100	50	N	<20	100	20	N
MZ076R	2,000	7.0	50	N	5	10	>20,000	50	N	<20	N	700	N
MZ076RA	1,000	3.0	N	N	<5	10	200	100	N	<20	N	50	N
MZ076RB	500	1.5	N	N	N	20	50	<20	N	N	<5	20	N
MZ082R	300	<1.0	N	N	N	<10	20	N	N	N	<5	N	N
MZ090R	1,500	<1.0	200	N	20	200	10,000	N	N	N	<5	1,500	N
MZ099R	>5,000	<1.0	N	N	70	700	500	100	N	30	150	30	N
MZ102R	300	N	<10	N	7	20	3,000	N	N	N	10	150	N
MZ102RA	1,000	N	50	N	7	15	3,000	N	N	N	<5	150	N
MZ102RB	3,000	<1.0	20	N	50	70	>20,000	30	N	N	30	30	N
MZ102RC	1,500	1.5	N	N	N	10	500	150	N	<20	<5	70	N
MZ102RD	1,500	<1.0	50	N	5	20	10,000	20	N	N	15	10	N
MZ103R	<20	<1.0	N	N	15	150	7,000	30	N	N	15	70	N
MZ103RA	500	<1.0	N	N	7	10	500	<20	N	N	<5	50	N
MZ103RB	5,000	N	10	N	70	<10	>20,000	N	N	N	50	20	N
MZ107R	3,000	<1.0	N	N	70	700	200	100	N	30	150	50	N
MZ175R	300	5.0	20	N	N	N	15	50	N	20	N	10	N
MZ249R	300	<1.0	N	N	N	<10	200	N	N	N	<5	70	N
MZ249RA	200	2.0	<10	N	N	<10	100	N	N	N	<5	20	N
MZ269R	100	1.5	150	N	<5	<10	5,000	N	100	<20	<5	150	N
MZ269RA	1,500	2.0	700	N	<5	<10	>20,000	30	20	N	<5	200	N
MZ269RB	1,500	50.0	70	N	N	<10	>20,000	N	N	N	<5	100	N
MZ357R	500	<1.0	N	N	10	30	50	N	N	N	20	200	N
MZ358R	500	N	N	N	N	1,500	1,000	20	N	N	30	>20,000	3,000
MZ358RA	200	<1.0	N	300	N	150	2,000	<20	30	N	10	>20,000	2,000
MZ358RB	100	<1.0	N	200	N	100	2,000	<20	N	N	10	>20,000	500
MZ358RC	300	N	N	200	N	500	1,000	<20	100	N	5	>20,000	N
MZ359R	>5,000	<1.0	N	N	100	150	>20,000	<20	N	N	70	500	N
MZ359RA	2,000	N	N	N	100	150	10,000	<20	N	N	70	200	N
MZ366R	700	2.0	N	N	15	50	30	30	N	<20	15	10	N
MZ403R	1,000	3.0	N	N	7	N	5	50	N	<20	5	20	N

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ001R	N	N	200	15	70	<10	N	50	N	.10	.14	N	15.0
MZ010R	15	N	700	100	N	20	N	30	N	<.05	.02	N	5.0
MZ012R	N	N	N	30	N	N	N	N	N	1.50	.04	1.0	85.0
MZ012RA	20	N	1,500	200	N	10	N	<10	N	<.05	.02	N	75.0
MZ012RB	5	N	N	300	N	<10	N	10	N	<.05	.08	N	80.0
MZ012RC	<5	N	N	200	N	<10	N	N	N	.10	.08	N	4,700.0
MZ012RD	20	N	N	300	N	30	N	10	N	8.00	.24	N	>1.0
MZ012RE	100	N	N	500	N	10	200	20	N				
MZ013R	30	N	1,000	300	N	20	N	50	N	.05	.02	N	100.0
MZ026R	30	N	2,000	150	N	20	N	50	N	.05	.04	N	40.0
MZ030R	5	N	1,500	100	N	10	N	15	N	<.05	.04	N	20.0
MZ044R	<5	N	700	100	N	10	N	<10	N	.05	.02	N	10.0
MZ060R	5	10	N	10	N	100	N	300	N	.05	.04	N	<5.0
MZ060RA	N	N	>5,000	10	N	20	N	<10	N	<.05	4.00	N	<5.0
MZ071R	15	N	2,000	70	N	30	N	100	N	.05	.04	N	45.0
MZ076R	5	N	N	150	N	100	N	300	N	.65	.28	N	>1.0
MZ076RA	5	N	N	50	N	100	N	300	N	<.05	.02	N	130.0
MZ076RB	<5	N	N	10	N	20	N	100	N	.05	.04	N	20.0
MZ082R	N	N	N	15	N	<10	N	100	N	<.05	.04	N	<5.0
MZ090R	20	700	700	1,500	<50	15	N	100	N	.05	.14	N	>1.0
MZ099R	50	N	2,000	300	N	30	N	100	N	.05	.04	N	60.0
MZ102R	<5	N	N	150	N	<10	N	<10	N	8.50	.04	N	130.0
MZ102RA	7	N	N	200	N	20	N	<10	N	2.50	.02	N	130.0
MZ102RB	30	N	100	500	N	20	N	30	N	.20	.02	N	>1.0
MZ102RC	7	N	<100	20	N	30	N	200	N	.10	.04	N	10.0
MZ102RD	15	N	N	300	N	10	N	10	N	200.00	.06	N	>1.0
MZ103R	30	N	3,000	300	N	15	N	30	N	.10	.08	N	1,700.0
MZ103RA	10	N	700	70	N	15	N	70	N	.05	.04	N	190.0
MZ103RB	5	N	<100	500	N	10	N	30	N	.15	.50	N	>1.0
MZ107R	50	N	2,000	300	N	50	N	100	N				
MZ175R	N	<10	N	<10	N	30	N	100	N	<.05	.35	.1	5.0
MZ249R	N	N	N	10	N	N	N	20	N	.05	.02	N	140.0
MZ249RA	N	N	N	15	N	N	N	<10	N	.05	.02	N	35.0
MZ269R	N	N	<100	200	N	20	N	100	N				
MZ269RA	N	N	<100	150	N	10	N	30	N				
MZ269RB	N	N	N	10	N	<10	N	<10	N				
MZ357R	<5	N	N	30	N	<10	N	20	N				
MZ358R	30	N	500	300	N	10	5,000	100	N				
MZ358RA	15	N	300	100	N	10	>10,000	30	N				
MZ358RB	10	N	<100	50	N	<10	>10,000	30	N				
MZ358RC	15	N	700	200	N	15	7,000	50	N				
MZ359R	50	N	N	500	N	70	N	20	N				
MZ359RA	50	N	<100	300	N	20	N	30	N				
MZ366R	10	N	<100	50	N	15	N	200	N	<.05	.20	N	10.0
MZ403R	<5	N	150	50	N	20	N	200	N	N	.02	1.1	<5.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ001R	10	15	.20	.20	1	17	40	MnO_2 fracture fillings on quartzite
MZ010R	10	15	.10	.05	1	N	N	Altered greenstone with Fe oxides and pyrite(?)
MZ012R	10	<5	1.05	.05	5	N	N	Oxidized zone at Ox Bow mine; abundant Fe oxides and some sec. copper
MZ012RA	15	40	.20	.05	1	N	N	Diorite from the Ox Bow mine
MZ012RB	10	<5	2.60	.10	2	N	<10	Massive hematite in qtz vein
MZ012RC	20	30	.55	.20	2	N	<10	Qtz with abundant Fe oxides and some sec. Cu; from mine dump
MZ012RD	25	55	2.80	1.45	7	7	20	Qtz vein with sec Cu minerals; from Ox Bow mine dump
MZ012RE								Limonite after pyrite sample from placer operation
MZ013R	5	30	.05	.10	1	N	10	Red banded chert from stream bed
MZ026R	20	20	.05	.10	1	N	40	Sandstone with abundant volcanic clasts and $CaCO_3$
MZ030R	25	25	.10	1.95	2	N	20	Volcanic rocks with yellow oxide surface coatings; from stream bed
MZ044R	15	15	.05	.80	2	N	N	Silicified granite
MZ060R	5	<5	.10	.10	1	1	N	Payson granite near barite vein
MZ060RA	5	<5	.05	.10	2	N	N	Barite vein with some Fe oxide
MZ071R	10	50	.05	.10	1	N	N	Fe oxide from volcanic conglomerate contact zone
MZ076R	150	15	1.00	.90	25	12	10	Qtz vein with abundant sec. Cu; in Payson Granite
MZ076RA	<5	<5	.10	.05	2	N	N	Payson Granite wall rock with abundant qtz veins
MZ076RB	5	<5	.35	.05	3	N	N	Qtz vein at mine
MZ082R	10	<5	.05	.05	1	N	N	Qtz vein; as much as 30m wide in fault zone in Payson Granite
MZ090R	520	45	21.40	15.00	130	144	>1	Fe and Mn oxide stained metased with abundant sec. Cu; from prospect pit
MZ099R	15	30	.30	.30	3	1	30	Andesite with hornblende phenocrysts; weathered with some qtz veins
MZ102R	65	5	2.75	.15	4	2	10	Qtz vein in diorite with sec. Cu; from Magie mine
MZ102RA	45	5	3.15	.15	48	N	<10	Qtz vein with sec. Cu minerals; from Wonder mine dump
MZ102RB	10	45	1.70	.70	26	N	<10	Sheared diorite with abundant sec. Cu on fractures; Wonder mine
MZ102RC	45	25	.30	.20	2	N	N	Altered diorite wall rock; from Wonder mine adit
MZ102RD	10	20	11.80	.10	29	3	30	Qtz vein with abundand sec. Cu; high grade ore from Wonder mine
MZ103R	15	65	6.40	.25	3	4	10	Altered diorite with sec. Cu; from prospect pit
MZ103RA	10	20	.25	<.05	1	N	<10	Diorite with qtz veins and abundant sec. Cu; Copper Belle #1 mine
MZ103RB	10	120	1.55	.25	15	3	<10	Black phyllite with abundant sec. Cu; shear zone at Copper Bell #1 mine
MZ107R								Ultra mafic with augite and olivine phenocrysts
MZ175R	5	15	N	<.05	4	N	10	Payson granite with Fe oxides; from near contact with meta-graywacke
MZ249R	<5	<5	.10	<.05	N	N	N	Qtz vein
MZ249RA	5	<5	.20	<.05	7	2	N	Fe oxides from qtz vein
MZ269R								Qtz vein with abundant sec. Cu, Fe oxides, and Cu sulfide; in quartzite
MZ269RA								Qtz vein with abundant sec. Cu and Cu sulfide; in quartzite
MZ269RB								Qtz vein with abundant sec. Cu and Cu sulfide; in Payson Granite
MZ357R								Qtz vein with Fe oxides
MZ358R								Altered schist with Fe oxides and xls of mimetite; from Story mine dump
MZ358RA								Altered schist with Fe oxides and mimetite; from Story mine dump
MZ358RB								Altered schist with white mimetite xls; from Story mine dump
MZ358RC								Dark Fe oxide layer in altered schist; from Story mine area
MZ359R								Sheared and altered greenstone with abundant sec. Cu; from mine dump
MZ359RA								Altered greenstone with abundant Fe oxides and sec. Cu; from mine dump
MZ366R	<5	20	N	N	1	1	10	Metasediment; from very old adit
MZ403R	<5	<5	<.05	N	1	N	N	Trachyite dike

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ409R	34 6 2	111 45 18	2.00	.30	.50	.300	200	.5	N	N	15
MZ414R	34 10 13	111 43 34	1.50	1.50	1.00	.200	1,000	N	N	N	20
MZ416R	34 11 34	111 42 58	5.00	1.50	2.00	.300	500	N	N	N	<10
MZ416RA	34 11 34	111 42 58	5.00	1.50	2.00	.500	500	N	N	N	<10
MZ417R	34 11 48	111 43 37	.50	<.02	.10	.020	50	N	N	N	<10
MZ422R	34 13 5	111 43 8	1.00	.10	.20	.100	700	N	N	N	15
MZ422RA	34 13 5	111 43 8	.70	<.02	.20	.020	70	N	N	N	<10
MZ424R	34 13 5	111 42 48	.50	<.02	.30	.030	100	N	N	N	10
MZ424RA	34 13 5	111 42 48	.30	<.02	.20	.002	70	N	N	N	10
MZ429R	34 14 17	111 42 35	<.05	.70	>20.00	<.002	<10	N	N	N	N
MZ434R	34 8 20	111 33 48	1.00	.05	.50	.030	100	N	N	N	500
MZ435R	34 8 23	111 33 48	1.00	<.02	.10	.010	100	N	N	N	10
MZ435RA	34 8 29	111 34 12	10.00	.20	<.05	.050	500	N	N	N	50
MZ436R	34 8 16	111 33 24	3.00	.15	<.05	.050	500	.5	N	N	30
MZ436RB	34 8 32	111 33 9	7.00	<.02	<.05	.030	50	N	N	N	150
MZ436RC	34 8 32	111 33 9	1.50	.15	<.05	.050	200	N	N	N	15
MZ436RD	34 8 35	111 33 5	3.00	.15	<.05	.050	200	.7	N	N	20
MZ436RE	34 8 35	111 33 5	1.00	.10	<.05	.030	200	N	N	N	20
MZ436RF	34 8 32	111 32 58	5.00	.15	<.05	.100	300	N	N	N	30
MZ436RG	34 8 42	111 32 53	2.00	<.02	<.05	.007	2,000	.5	N	N	10
MZ442R	34 8 27	111 31 47	20.00	1.00	.07	<.002	<10	200.0	>10,000	N	70
MZ442RA	34 8 27	111 31 47	10.00	.30	<.05	.005	150	500.0	>10,000	N	30
MZ442RB	34 8 27	111 31 47	20.00	.70	.07	<.002	150	1,000.0	>10,000	N	50
MZ442RC	34 8 27	111 31 47	15.00	<.02	.05	<.002	<10	1,000.0	>10,000	N	50
MZ442RD	34 3 27	111 31 47	15.00	<.02	<.05	.015	200	500.0	>10,000	N	30
MZ442RE	34 8 27	111 31 47	15.00	<.02	.05	.010	200	70.0	>10,000	N	100
MZ442RF	34 8 26	111 31 47	15.00	<.02	.05	.005	50	5,000.0	>10,000	N	50
MZ442RG	34 8 27	111 31 47	20.00	<.02	.05	.003	<10	3,000.0	>10,000	N	50
MZ442RH	34 8 27	111 31 47	15.00	<.02	<.05	.015	70	1,000.0	>10,000	N	30
MZ442RI	34 8 27	111 31 47	20.00	<.02	.05	.005	50	1,000.0	>10,000	N	100
MZ445R	34 7 56	111 32 9	1.50	.05	<.05	.020	150	10.0	5,000	N	15
MZ445RA	34 7 56	111 32 9	2.00	.20	<.05	.050	200	2.0	N	N	20
MZ445RB	34 7 56	111 32 9	1.00	.30	<.05	.070	1,000	2.0	N	N	30
MZ445RC	34 7 56	111 32 9	5.00	.20	.05	.030	200	2.0	200	N	30
MZ445RD	34 8 0	111 32 7	1.00	<.02	<.05	.007	1,000	5.0	N	N	15
MZ445RE	34 8 0	111 32 7	1.00	.05	<.05	.015	100	1.0	N	N	30
MZ445RF	34 8 5	111 32 5	1.50	<.02	<.05	.015	150	1.5	N	N	20
MZ447R	34 8 32	111 33 37	1.00	.05	.07	.020	150	.5	N	N	10
MZ447RA	34 8 32	111 33 37	2.00	.05	.20	.030	150	N	N	N	1,000
MZ447RB	34 8 32	111 33 37	<.05	<.02	<.05	.002	50	N	N	N	<10
MZ447RC	34 8 32	111 33 37	1.50	.07	.20	.020	100	N	N	N	10
MZ447RD	34 8 31	111 33 45	20.00	.10	.20	.030	>5,000	100.0	N	N	20
MZ447RE	34 8 30	111 33 38	2.00	.10	<.05	.030	700	.5	N	N	20
MZ448R	34 8 41	111 33 26	1.50	.15	<.05	.020	300	.5	N	N	30
MZ448RA	34 8 41	111 33 33	2.00	.15	<.05	.020	700	N	N	N	50

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ409R	2,000	2.0	N	N	7	N	70	100	5	<20	5	20	N
MZ414R	300	2.0	N	N	7	20	50	50	N	30	15	20	N
MZ416R	2,000	1.0	N	N	15	50	50	50	N	20	50	15	N
MZ416RA	2,000	1.0	N	N	20	100	50	30	N	N	50	20	N
MZ417R	100	3.0	N	N	N	N	5	20	N	<20	N	20	N
MZ422R	2,000	2.0	N	N	N	N	5	50	N	N	N	20	N
MZ422RA	150	2.0	N	N	N	N	7	20	N	30	N	20	N
MZ424R	200	5.0	N	N	N	N	10	20	N	50	N	30	N
MZ424RA	500	5.0	N	N	N	N	7	N	N	20	N	30	N
MZ429R	N	1.0	N	N	N	<10	<5	20	N	<20	<5	N	N
MZ434R	100	15.0	N	N	N	N	5	50	N	<20	N	20	N
MZ435R	200	1.5	N	N	N	N	5	50	N	30	N	30	N
MZ435RA	500	5.0	<10	N	5	<10	10	30	<5	20	N	30	N
MZ436R	700	7.0	<10	N	N	<10	20	50	N	N	N	50	N
MZ436RB	20	2.0	<10	N	N	N	<5	30	N	<20	N	<10	N
MZ436RC	700	2.0	N	N	N	N	<5	50	N	<20	N	<10	N
MZ436RD	700	5.0	<10	N	N	20	30	30	N	20	N	20	N
MZ436RE	500	5.0	N	N	N	N	15	20	N	<20	N	<10	N
MZ436RF	1,000	10.0	<10	N	N	30	15	50	N	20	N	50	N
MZ436RG	1,500	10.0	N	N	N	N	30	50	5	<20	N	15	N
MZ442R	200	1.0	200	50	10	N	>20,000	30	5	70	<5	5,000	2,000
MZ442RA	3,000	2.0	500	100	<5	N	>20,000	70	15	<20	<5	5,000	2,000
MZ442RB	2,000	1.5	500	300	10	N	>20,000	30	20	50	<5	20,000	>10,000
MZ442RC	200	1.0	>1,000	50	N	N	>20,000	20	20	50	<5	7,000	5,000
MZ442RD	5,000	2.0	1,000	100	N	N	>20,000	50	20	20	<5	7,000	5,000
MZ442RE	500	2.0	150	<20	10	N	10,000	20	20	20	N	300	700
MZ442RF	300	2.0	>1,000	<20	N	N	>20,000	100	10	20	<5	10,000	2,000
MZ442RG	300	1.0	>1,000	N	N	N	>20,000	50	20	50	5	2,000	3,000
MZ442RH	200	1.5	1,000	N	N	N	>20,000	50	30	30	<5	3,000	1,500
MZ442RI	3,000	1.0	1,000	50	5	N	>20,000	20	20	50	<5	5,000	10,000
MZ445R	500	2.0	15	N	N	N	300	30	50	N	N	70	N
MZ445RA	1,000	3.0	<10	N	N	N	50	100	N	N	N	30	N
MZ445RB	1,000	3.0	N	N	N	N	30	50	N	20	N	20	N
MZ445RC	300	7.0	10	N	N	N	70	50	N	N	<5	30	N
MZ445RD	200	2.0	10	N	N	20	100	30	30	N	<5	700	N
MZ445RE	300	5.0	<10	N	N	N	20	30	N	N	N	30	N
MZ445RF	200	5.0	20	N	N	N	20	30	N	N	N	70	N
MZ447R	<20	5.0	N	N	N	N	7	20	N	30	N	50	N
MZ447RA	<20	10.0	N	N	N	N	7	100	N	50	5	10	N
MZ447RB	20	1.0	N	N	N	N	7	30	N	N	N	<10	N
MZ447RC	20	3.0	N	N	N	N	5	20	N	30	N	15	N
MZ447RD	2,000	5.0	50	N	5	N	2,000	50	N	50	N	150	N
MZ447RE	500	2.0	N	N	N	10	50	50	N	N	5	15	N
MZ448R	500	5.0	N	N	N	N	10	30	N	20	N	15	N
MZ448RA	300	2.0	<10	N	N	N	10	30	N	50	N	20	N

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ409R	<5	N	200	20	N	20	N	200	N	N	.02	2.2	180.0
MZ414R	5	N	200	30	N	15	N	50	N	N	.02	7.3	20.0
MZ416R	10	N	300	70	N	20	<200	70	N	N	.02	2.9	30.0
MZ416RA	10	N	300	70	N	15	N	50	N	N	.02	1.4	15.0
MZ417R	N	N	N	<10	N	30	N	30	N	N	.02	.6	<5.0
MZ422R	<5	N	100	<10	N	20	N	150	N	N	.04	.7	<5.0
MZ422RA	N	N	N	<10	N	30	N	70	N	N	.04	N	10.0
MZ424R	N	N	N	<10	N	70	N	100	<100	N	.08	.2	10.0
MZ424RA	N	N	N	<10	N	70	N	100	<100	N	.18	.1	10.0
MZ429R	N	N	200	<10	N	N	N	<10	N	N	N	N	N
MZ434R	N	10	N	<10	N	50	N	100	N	N	N	.3	<5.0
MZ435R	N	<10	N	<10	N	50	N	50	N	N	N	1.9	<5.0
MZ435RA	5	50	N	10	N	50	500	150	N	<.05	N	2.7	N
MZ436R	<5	200	N	10	N	30	300	100	N	N	N	1.0	10.0
MZ436RB	N	N	N	10	N	30	<200	20	N	N	N	.8	N
MZ436RC	<5	N	N	10	N	30	N	100	N	<.05	N	N	<5.0
MZ436RD	N	100	N	20	N	20	300	150	N	<.05	<.02	2.6	10.0
MZ436RE	N	300	N	10	N	15	200	70	N	N	N	N	<5.0
MZ436RF	<5	70	N	10	N	30	300	300	N	<.05	N	.5	5.0
MZ436RG	N	N	N	50	N	70	N	20	N	N	<.02	N	15.0
MZ442R	N	50	N	<10	N	N	1,000	10	N	.05	38.00	9.3	69,000.0
MZ442RA	N	300	200	50	N	10	3,000	30	<100	.10	.20	1.3	5,400.0
MZ442RB	N	>1,000	<100	10	N	N	10,000	<10	N	.10	90.00	5.5	77,000.0
MZ442RC	N	200	<100	10	N	<10	1,000	30	N	.15	13.00	9.4	38,000.0
MZ442RD	N	300	150	15	<50	20	5,000	<10	200	.05	50.00	7.5	58,000.0
MZ442RE	N	70	N	10	N	20	200	30	200	.05	.60	3.6	1,600.0
MZ442RF	N	300	200	10	N	<10	700	50	<100	.15	1.50	12.0	35,000.0
MZ442RG	N	300	150	10	N	N	300	30	<100	.20	9.00	13.0	24,000.0
MZ442RH	N	200	150	10	N	30	500	30	200	.05	.60	11.0	11,000.0
MZ442RI	N	150	N	15	N	<10	2,000	20	100	.10	24.00	10.0	27,000.0
MZ445R	N	10	N	10	N	10	N	200	150	N	.02	.7	160.0
MZ445RA	<5	N	N	15	N	50	200	30	<100	<.05	N	.4	5.0
MZ445RB	N	<10	N	10	N	70	200	50	N	N	.02	.5	<5.0
MZ445RC	N	100	N	10	N	20	500	100	N	<.05	<.02	.6	30.0
MZ445RD	N	30	N	50	N	10	300	300	N	<.05	.08	.6	260.0
MZ445RE	N	15	N	10	N	50	300	100	N	<.05	<.02	.4	25.0
MZ445RF	<5	50	N	10	N	15	<200	70	N	N	.08	.6	55.0
MZ447R	N	<10	N	<10	N	20	N	50	N	N	<.02	.5	<5.0
MZ447RA	N	10	N	<10	N	70	N	300	N	N	<.02	N	<5.0
MZ447RB	N	N	N	<10	N	<10	N	N	<100	<.05	N	N	<5.0
MZ447RC	N	10	N	<10	N	50	N	100	N	<.05	N	.6	<5.0
MZ447RD	N	30	150	10	N	50	2,000	100	N	N	.16	6.5	1,300.0
MZ447RE	N	70	N	15	N	50	300	100	N	<.05	<.02	.6	35.0
MZ448R	N	10	N	15	N	50	<200	50	N	<.05	<.02	.4	<5.0
MZ448RA	N	10	N	20	N	70	<200	200	N	<.05	.02	.5	<5.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ409R	10	30	.40	.05	1	1	N	Monzonite from Tangle Creek
MZ414R	<5	10	N	.05	<1	11	N	Tuff with relic biotite, qtz "eyes",and numerous basalt fragments
MZ416R	5	40	<.05	<.05	<1	2	30	Tuff; green stains along joints and fractures
MZ416RA	<5	25	<.05	N	1	2	N	Tuff
MZ417R	5	<5	N	N	<1	2	N	Aplite dike
MZ422R	10	40	N	<.05	<1	N	10	Payson Granite; weathered
MZ422RA	10	15	<.05	N	<1	1	<10	Aplitic phase of the Payson Granite
MZ424R	20	25	<.05	.05	<1	N	10	Aplitic phase of the Payson Granite
MZ424RA	25	15	<.05	N	<1	1	10	Payson Granite; coarse grained
MZ429R	N	5	N	<.05	<1	1	<10	Calcite float from stream bed
MZ434R	<5	15	N	N	<1	1	N	Payson Granite with tourmaline and fluorite; float from stream bed
MZ435R	10	10	N	N	<1	1	N	Payson Granite with bladed xls (arfedsonite?); float from stream bed
MZ435RA	5	20	N	N	<1	4	<10	Silicified granite with abundant Fe oxides; float from stream bed
MZ436R	10	15	.10	N	<1	2	<10	Griesen material with dark Fe oxides; float from stream bed
MZ436RB	<5	<5	N	N	<1	3	10	Qtz vein with black xls (tourmaline?)
MZ436RC	<5	<5	N	N	<1	2	<10	Payson Granite; coarse phase
MZ436RD	10	10	.10	N	<1	3	<10	Greisen zone in Payson Granite with abundant qtz
MZ436RE	<5	5	.10	.10	2	11	N	Breccia dike with altered Payson Granite clasts; altered feldspars
MZ436RF	<5	10	.05	.05	3	8	N	Breccia dike with altered Payson Granite clasts
MZ436RG	15	20	.10	.15	2	7	40	Breccia from zome 30m wide with abundant vuggy qtz veins and Fe oxides
MZ442R	3,000	2,400	435.00	90.00	1,600	>1	>1	Silver sulfide (arsenopyrite), pyrite, and chalcopyrite; Stingy Lady mine
MZ442RA	8,300	400	135.00	25.00	680	>1	>1	Arsenopyrite and other sulfide minerals; Stingy Lady mine dump
MZ442RB	30,000	7,800	575.00	170.00	4,300	>1	>1	Ore from Stingy Lady mine dump
MZ442RC	6,500	950	790.00	20.00	2,200	>1	>1	Secondary As mineralization (scorodite) from Stingy Lady mine dump
MZ442RD	4,700	2,100	450.00	60.00	1,300	>1	>1	Secondary As minerals from Stingy Lady mine dump
MZ442RE	200	140	45.00	15.00	130	>1	>1	Qtz vein 12cm thick in Payson Granite
MZ442RF	7,800	800	8,300.00	30.00	4,600	>1	>1	Ore from Stingy Lady mine upper dump
MZ442RG	1,600	60	4,400.00	2.70	3,500	>1	>1	Secondary As minerals from Stingy Lady mine; upper dump
MZ442RH	1,300	290	1,100.00	5.00	1,600	>1	>1	Secondary As minerals from Stingy Lady mine; upper dump
MZ442RI	4,900	900	460.00	25.00	730	>1	>1	Scorodite from Stingy Lady mine; upper dump
MZ445R	30	10	3.90	.20	7	34	320	Payson Granite; fine grained with qtz flooding and Fe oxides
MZ445RA	<5	5	.20	.05	1	4	20	Payson Granite; coarse grained
MZ445RB	<5	5	.20	.05	1	3	10	Purple mineral; soft, dense, in shear zones with qtz
MZ445RC	10	15	.85	.05	9	48	60	Qtz breccia zone in Payson Granite; abundant Fe oxides
MZ445RD	8,800	40	1.40	.65	10	42	120	Qtz flooded Payson Granite; yellow surface coating on fractures
MZ445RE	25	25	.70	.10	3	4	40	Pale green mineral; soft, dense, in shear zone with Qtz
MZ445RF	65	30	2.00	.45	60	17	80	Payson Granite; Fe oxide altered
MZ447R	5	5	.10	N	N	1	N	Aplitic phase of the Payson Granite
MZ447RA	5	10	<.05	N	N	1	N	Tourmaline rich qtz zone in Payson Granite
MZ447RB	<5	<5	.05	N	N	N	N	Qtz vein with dark green stains (chlorite?)
MZ447RC	<5	5	.10	N	N	1	<10	Aplitic phase of Payson Granite; biotite altered to chlorite, tourmaline?
MZ447RD	80	3,200	20.00	25.00	N	3	10	Greisen zone with some sulfide minerals
MZ447RE	5	80	.25	.30	N	1	10	Qtz rich material from shear zone
MZ448R	<5	15	.05	N	N	4	10	Qtz vein in Payson Granite
MZ448RA	<5	5	.10	<.05	N	3	20	Payson Granite

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ448RB	34 8 41	111 33 26	2.00	.20	<.05	.030	150	N	N	N	15
MZ448RC	34 8 41	111 33 26	10.00	<.02	.15	.010	70	1.0	N	N	20
MZ448RD	34 8 41	111 33 33	7.00	.30	<.05	.020	2,000	1.5	N	N	15
MZ448RE	34 8 41	111 33 33	.70	.10	.15	.020	200	N	N	N	10
MZ448RF	34 8 37	111 33 46	1.00	.05	.10	.020	150	N	N	N	10
MZ448RG	34 8 43	111 33 46	15.00	.20	.15	.007	>5,000	50.0	N	N	100
MZ448RH	34 8 43	111 33 45	10.00	<.02	<.05	.030	1,500	.5	N	N	30
MZ449R	34 8 14	111 31 57	10.00	.05	.07	.005	1,500	.5	N	N	20
MZ449RA	34 8 14	111 31 57	3.00	.02	<.05	.005	>5,000	1.0	N	N	20
MZ449RB	34 8 16	111 32 0	3.00	.07	.20	.200	1,000	15.0	N	N	20
MZ449RC	34 8 22	111 31 46	3.00	.07	<.05	.200	2,000	1.5	N	N	30
MZ449RD	34 8 22	111 31 46	3.00	.10	.07	.150	1,000	1.0	N	N	30
MZ449RE	34 8 22	111 31 46	15.00	.10	.07	.050	2,000	10.0	N	N	>2,000
MZ450RA	34 8 38	111 33 35	1.00	.05	.20	.020	100	N	N	N	30
MZ450RB	34 8 38	111 33 35	1.00	.05	.30	.020	70	N	N	N	15
MZ450RC	34 8 38	111 33 35	1.00	.10	.20	.030	70	N	N	N	10
MZ450RD	34 8 38	111 33 35	1.00	.07	.30	.030	50	N	N	N	15
MZ450RE	34 8 38	111 33 35	1.00	.20	.10	.030	100	N	N	N	20
MZ450RF	34 8 38	111 33 35	.70	.10	.07	.030	200	N	N	N	10
MZ450RG1	34 8 38	111 33 35	.70	.05	.10	.020	70	N	N	N	15
MZ450RG2	34 8 38	111 33 35	.70	.07	.15	.030	100	1.5	N	N	10
MZ450RG3	34 8 38	111 33 35	.70	.10	.15	.020	150	1.0	N	N	15
MZ450RG4	34 8 38	111 33 35	.70	.10	.30	.030	100	.7	N	N	10
MZ450RH	34 8 38	111 33 35	.70	.15	.30	.030	200	N	N	N	15
MZ450RI	34 8 38	111 33 35	.50	.05	.15	.020	70	N	N	N	15
MZ450RJ	34 8 38	111 33 35	1.00	.07	.30	.050	100	N	N	N	10
MZ450RK	34 8 38	111 33 35	1.00	.10	.30	.030	100	N	N	N	10
MZ450RL	34 8 38	111 33 35	.70	.05	.30	.020	70	N	N	N	10
MZ450RM	34 8 38	111 33 35	.70	.05	.07	.050	150	N	N	N	10
MZ450RN	34 8 38	111 33 35	.70	.05	.30	.030	70	N	N	N	10
MZ451R	34 6 17	111 31 48	1.00	<.02	<.05	<.002	<10	50.0	N	N	30
MZ451RA	34 6 16	111 31 49	.15	<.02	<.05	.003	<10	7.0	300	N	15
MZ451RB	34 6 21	111 31 44	2.00	.10	<.05	.070	200	N	N	N	20
MZ451RC	34 6 21	111 31 44	1.50	.10	<.05	.070	200	N	N	N	20
MZ452R	34 8 15	111 38 26	.15	.02	<.05	.005	50	3.0	N	N	20
MZ452RA	34 8 15	111 38 26	1.50	.07	.07	.100	200	2.0	N	N	100
MZ452RB	34 8 15	111 38 26	1.00	.15	<.05	.030	150	N	N	N	50
MZ452RC	34 8 15	111 38 26	<.05	<.02	.07	<.002	20	150.0	N	N	15
MZ452RD	34 8 15	111 38 26	.20	.02	.05	.005	30	20.0	N	N	50
MZ453R	34 9 32	111 12 19	15.00	1.00	2.00	.100	1,000	10.0	200	N	50
MZ453RA	34 9 32	111 12 19	7.00	1.00	2.00	.300	1,500	1.0	N	N	10
MZ453RB	34 9 32	111 12 19	10.00	.70	2.00	.150	1,000	10.0	500	N	30
MZ454R	34 12 41	111 33 19	15.00	.15	3.00	<.002	50	2,000.0	>10,000	N	30
MZ454RA	34 12 41	111 33 19	10.00	.10	1.50	.100	50	200.0	>10,000	N	30
MZ454RB	34 12 41	111 33 19	20.00	.15	3.00	.070	100	300.0	>10,000	N	30

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ448RB	1,000	1.5	N	N	N	N	10	50	N	N	N	20	N
MZ448RC	<20	2.0	<10	N	N	N	15	30	N	70	N	30	N
MZ448RD	700	5.0	10	N	7	N	100	30	N	50	5	70	N
MZ448RE	200	2.0	N	N	N	N	7	20	N	20	N	15	N
MZ448RF	20	5.0	N	N	N	N	7	20	N	20	7	20	N
MZ448RG	>5,000	10.0	15	N	50	10	200	100	15	20	20	150	N
MZ448RH	200	1.0	<10	N	N	N	15	50	N	50	N	<10	N
MZ449R	70	2.0	10	N	5	N	15	50	N	<20	7	50	N
MZ449RA	700	7.0	N	N	7	N	30	70	7	N	5	1,000	N
MZ449RB	700	5.0	<10	N	5	<10	50	100	5	20	10	200	N
MZ449RC	700	5.0	<10	N	N	N	70	70	5	<20	5	300	N
MZ449RD	2,000	7.0	<10	N	N	N	30	70	<5	20	5	700	N
MZ449RE	500	7.0	10	N	N	N	300	100	N	N	5	1,500	N
MZ450RA	50	5.0	N	N	N	N	7	30	N	N	N	50	N
MZ450RB	50	5.0	N	N	N	N	5	30	N	20	N	30	N
MZ450RC	50	5.0	N	N	N	N	5	30	N	20	N	15	N
MZ450RD	50	5.0	N	N	N	N	5	50	N	30	N	20	N
MZ450RE	50	5.0	N	N	N	N	<5	50	N	30	N	20	N
MZ450RF	100	3.0	N	N	N	N	15	30	N	20	<5	15	N
MZ450RG1	20	5.0	N	N	N	N	5	50	N	<20	N	20	N
MZ450RG2	200	7.0	N	N	N	N	5	50	N	20	N	50	N
MZ450RG3	150	7.0	N	N	N	N	5	50	N	50	5	30	N
MZ450RG4	200	2.0	N	N	N	N	10	100	N	20	N	50	N
MZ450RH	100	5.0	N	N	N	N	<5	100	N	20	N	30	N
MZ450RI	100	7.0	N	N	N	N	<5	70	N	20	N	50	N
MZ450RJ	50	5.0	N	N	N	N	<5	100	N	70	N	50	N
MZ450RK	50	5.0	N	N	N	N	5	70	N	20	N	50	N
MZ450RL	20	5.0	N	N	N	N	<5	70	N	<20	N	50	N
MZ450RM	20	5.0	N	N	N	N	7	30	N	20	N	50	N
MZ450RN	20	5.0	N	N	N	N	<5	30	N	20	N	50	N
MZ451R	>5,000	7.0	100	N	N	<10	>20,000	50	N	<20	5	10	N
MZ451RA	700	10.0	150	N	N	10	>20,000	70	N	<20	5	20	150
MZ451RB	300	5.0	<10	N	N	N	500	50	N	20	N	15	N
MZ451RC	300	5.0	N	N	<5	N	70	50	N	20	5	20	N
MZ452R	1,000	3.0	10	N	N	N	7,000	30	20	N	<5	15	150
MZ452RA	150	20.0	10	N	5	N	3,000	150	N	30	5	50	<100
MZ452RB	150	5.0	N	N	N	N	50	50	N	<20	N	10	N
MZ452RC	2,000	1.5	70	N	N	20	>20,000	70	N	<20	5	15	2,000
MZ452RD	2,000	10.0	150	N	N	<10	>20,000	50	N	<20	<5	500	N
MZ453R	20	1.0	<10	N	30	15	>20,000	30	10	N	15	1,000	N
MZ453RA	500	1.0	N	N	30	20	2,000	30	N	N	15	20	N
MZ453RB	150	1.0	N	N	30	20	>20,000	30	15	N	20	200	N
MZ454R	100	1.0	>1,000	50	30	15	>20,000	30	10	20	15	2,000	5,000
MZ454RA	300	1.0	>1,000	100	15	20	>20,000	30	15	<20	15	15,000	5,000
MZ454RB	300	<1.0	>1,000	200	20	30	>20,000	20	10	N	15	10,000	5,000

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ448RB	<5	20	N	20	N	30	500	100	N	<.05	N	.2	<5.0
MZ448RC	<5	N	N	10	N	50	200	50	N	N	N	1.0	<5.0
MZ448RD	N	10	N	10	N	30	700	100	N	N	<.02	1.2	110.0
MZ448RE	N	<10	N	10	N	50	<200	70	N	N	N	.7	<5.0
MZ448RF	N	<10	N	10	N	50	N	300	N	N	N	.5	<5.0
MZ448RG	N	100	200	70	N	500	200	30	N	N	.10	1.6	240.0
MZ448RH	N	N	N	10	N	30	200	50	N	N	.20	6.3	5.0
MZ449R	N	50	N	10	N	100	500	20	N	<.05	.06	.1	10.0
MZ449RA	<5	30	N	<10	N	50	700	30	N	N	.14	N	15.0
MZ449RB	5	200	N	<10	N	50	500	200	N	N	.06	N	40.0
MZ449RC	N	70	N	<10	N	50	500	200	N	N	.55	N	70.0
MZ449RD	<5	200	N	<10	N	50	500	300	N	N	.28	.1	35.0
MZ449RE	5	500	N	<10	N	100	1,500	300	N	N	.20	.1	270.0
MZ450RA	N	20	100	10	N	50	N	150	N	N	.02	N	10.0
MZ450RB	N	15	N	<10	N	30	N	50	N	N	.02	N	10.0
MZ450RC	N	15	N	<10	N	70	N	70	N	N	.02	.1	5.0
MZ450RD	N	<10	N	<10	N	50	N	50	N	N	.02	N	5.0
MZ450RE	N	N	N	<10	N	50	N	100	N	N	.02	N	10.0
MZ450RF	N	N	N	<10	N	30	N	50	N	N	.02	N	10.0
MZ450RG1	N	N	N	<10	N	30	N	50	N	N	.02	N	10.0
MZ450RG2	N	N	N	<10	N	50	N	70	N	N	.12	N	5.0
MZ450RG3	N	10	N	<10	N	70	N	150	N	.05	.02	N	5.0
MZ450RG4	N	N	N	<10	N	70	N	100	N	N	.04	N	5.0
MZ450RH	N	N	N	<10	N	50	N	100	N	N	.12	.1	5.0
MZ450RI	N	N	N	<10	N	30	N	70	N	<.05	<.02	N	5.0
MZ450RJ	N	10	N	<10	N	70	N	70	N	N	.02	N	5.0
MZ450RK	N	10	N	<10	N	50	N	100	N	N	.02	N	5.0
MZ450RL	N	<10	N	<10	N	50	N	50	N	N	.04	N	5.0
MZ450RM	N	<10	N	<10	N	20	N	70	N	N	<.02	N	10.0
MZ450RN	N	N	N	<10	N	50	N	70	N	N	N	N	5.0
MZ451R	N	N	N	10	N	N	N	<10	N	.20	.18	2.5	>1.0
MZ451RA	N	10	200	10	N	N	<200	20	N	.95	.30	2.3	>1.0
MZ451RB	<5	300	<100	<10	N	30	<200	100	N	N	.12	N	110.0
MZ451RC	<5	100	N	<10	50	70	N	150	N	N	.02	.1	40.0
MZ452R	N	N	N	<10	<50	15	N	30	N	N	.22	N	>1.0
MZ452RA	5	N	N	50	N	50	<200	200	N	N	.02	.1	450.0
MZ452RB	<5	N	N	15	N	50	<200	150	N	N	.02	N	55.0
MZ452RC	N	N	N	10	N	N	N	<10	N	.60	18.00	1.5	>1.0
MZ452RD	N	N	N	100	N	10	<200	30	20	2.00	1.30	.9	>1.0
MZ453R	15	N	N	200	N	20	500	20	300	N	.26	1.5	>1.0
MZ453RA	20	<10	100	200	N	15	200	50	300	N	N	N	710.0
MZ453RB	15	<10	300	200	N	20	200	30	500	N	.26	.5	>1.0
MZ454R	N	>1,000	200	30	N	N	1,000	10	<100	.20	.45	N	>1.0
MZ454RA	N	>1,000	150	50	N	<10	500	15	<100	.50	.30	1.3	>1.0
MZ454RB	<5	1,000	1,500	100	N	15	1,000	30	N	.25	.60	2.5	>1.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ448RB	5	15	.10	N	N	1	N	Payson Granite; coarse grained
MZ448RC	10	5	.20	N	N	1	10	Qtz vein in Payson Granite
MZ448RD	95	180	.30	.10	N	1	<10	Qtz vein
MZ448RE	<5	5	<.05	N	N	1	N	Payson Granite; Fe oxide alteration with qtz veins
MZ448RF	<5	<5	.05	<.05	1	1	N	Payson Granite; Fe oxide altered, medium grained, with chloritized biotite
MZ448RG	140	80	.10	2.20	20	91	40	Manganese nodules; float from stream bed
MZ448RH	<5	<5	<.05	.10	2	4	20	Qtz vein with some sulfides; float from stream bed
MZ449R	45	20	.15	.20	N	14	40	Fe oxide fracture fillings from shear zone
MZ449RA	910	130	.45	2.15	N	19	40	Qtz vein; 2.5 to 7.5cm wide with Fe and Mn oxides
MZ449RB	290	690	18.00	.30	1	1	10	Dike rock; Fe oxide rich with pyrite relics and some fresh sulfides
MZ449RC	310	530	1.10	.40	1	2	20	Greisen in Payson Granite; some oxidized pyrite; float sample on hillside
MZ449RD	380	630	.45	.60	N	1	40	Greisen in Payson Granite
MZ449RE	1,400	1,200	8.20	6.30	N	13	160	Payson Granite; coarse grained, Fe oxide altered, abundant tourmaline
MZ450RA	25	20	.10	.10	1	1	<10	Payson Granite
MZ450RB	30	15	<.05	<.05	N	N	<10	Payson Granite
MZ450RC	30	5	<.05	<.05	N	1	N	Payson Granite
MZ450RD	35	10	<.05	<.05	1	1	<10	Payson Granite
MZ450RE	30	10	<.05	N	1	2	40	Payson Granite
MZ450RF	35	10	<.05	.05	1	1	<10	Payson Granite
MZ450RG1	35	5	<.05	<.05	1	1	10	Payson Granite
MZ450RG2	40	5	.15	<.05	1	1	20	Payson Granite
MZ450RG3	45	5	.10	.05	1	1	10	Payson Granite
MZ450RG4	45	5	.15	<.05	1	1	10	Payson Granite
MZ450RH	50	30	<.05	<.05	1	1	10	Payson Granite
MZ450RI	55	20	<.05	<.05	N	1	<10	Payson Granite
MZ450RJ	55	20	<.05	<.05	1	1	<10	Payson Granite
MZ450RK	55	25	<.05	N	N	1	<10	Payson Granite
MZ450RL	55	20	<.05	N	1	1	N	Payson Granite
MZ450RM	50	20	<.05	.05	1	1	N	Payson Granite
MZ450RN	50	15	<.05	<.05	N	1	<10	Payson Granite
MZ451R	25	30	.15	.20	7	4	120	Sulfide ore in vein in Payson Granite; from trench
MZ451RA	55	30	8.00	.40	280	78	200	Sulfide ore in vein in Payson Granite; from prospect pit
MZ451RB	25	15	<.05	<.05	3	3	10	Payson Granite; feldspars being replaced by Fe oxides
MZ451RC	20	15	N	<.05	N	1	20	Payson Granite; feldspars being replaced by Fe oxides
MZ452R	30	20	1.30	.25	7	75	80	Qtz vein with primary and sec. Cu; from Los Conquistador mine dump
MZ452RA	25	10	.20	<.05	4	45	160	Fault gouge from adit
MZ452RB	15	10	.20	<.05	1	3	30	Green mineral (epidote?) from adit
MZ452RC	20	50	>1.00	.15	4	>1	200	Cu ore; primary and sec.; from qtz vein 0.6m wide at prospect pit
MZ452RD	460	40	18.20	.35	65	34	120	Qtz vein with diseminated Cu sulfide and sec. Cu; from upper mine dump
MZ453R	950	290	11.00	8.15	6	13	300	Cu ore; primary and sec.; in prospect pit in metasediments on Bullfrog Ridge
MZ453RA	15	140	.15	.05	N	1	60	Altered metasediments with green sec. minerals
MZ453RB	170	75	11.00	.45	6	4	400	Altered metasediments with abundant sec. Cu
MZ454R	>1	610	>1.00	20.00	>1	>1	>1	Altered metasediments with some sec. Cu and possible sulfides
MZ454RA	>1	440	>1.00	40.00	>1	>1	>1	Very altered vein material from prospect pit; soft, green stained
MZ454RB	>1	320	>1.00	>1.00	>1	>1	>1	Very altered vein material from prospect pit in metasediments; Fe oxides

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ454RC	34 12 41	111 33 19	1.50	.10	.20	.300	20	3.0	>10,000	N	200
MZ454RD	34 12 41	111 33 19	20.00	.20	3.00	.150	300	300.0	>10,000	N	150
MZ454RE	34 12 41	111 33 19	5.00	.30	.70	.200	50	50.0	>10,000	N	500
MZ454RF	34 12 41	111 33 19	5.00	.20	.70	.200	50	20.0	>10,000	N	200
MZ455R	34 13 12	111 32 24	15.00	2.00	.15	.200	5,000	3.0	500	N	50
MZ455RA	34 13 12	111 32 24	5.00	.70	.10	.300	200	10.0	3,000	N	>2,000
MZ455RB	34 13 12	111 32 24	10.00	.03	2.00	.100	<10	200.0	>10,000	N	100
MZ456R	34 14 39	111 34 51	1.00	.70	20.00	.100	5,000	1.5	<200	N	70
MZ456RA	34 14 39	111 34 57	3.00	1.50	1.00	.300	700	1.0	N	N	300
MZ456RB	34 14 41	111 35 1	5.00	1.50	15.00	.100	3,000	1.0	N	N	50
MZ457R	34 14 31	111 34 58	.50	.10	.10	.010	150	N	N	N	200
MZ457RA	34 14 29	111 34 59	5.00	.02	.07	.020	30	1.0	>1,000	N	50
MZ457RB	34 14 26	111 35 2	2.00	>10.00	7.00	.150	300	N	N	N	30
MZ458R	34 14 16	111 35 27	5.00	.50	.07	.300	70	.5	N	N	70
MZ458RA	34 14 16	111 35 27	2.00	.20	.05	.300	50	1.0	N	N	30
MZ458RB	34 14 16	111 35 27	15.00	.10	.05	.200	100	2.0	200	N	500
MZ458RC	34 14 16	111 35 27	5.00	.70	.05	.300	300	1.0	N	N	50
MZ458RD	34 14 23	111 35 24	20.00	.30	.05	.200	50	.7	N	N	200
MZ458RE	34 14 20	111 35 19	5.00	.70	5.00	.300	1,000	N	N	N	50
MZ458RF	34 14 21	111 35 18	5.00	.70	5.00	.100	1,000	3.0	N	N	30
MZ458RG	34 14 22	111 35 15	5.00	1.00	1.00	.300	1,000	N	N	N	20
MZ458RH	34 14 13	111 35 13	3.00	.70	.70	.150	700	N	N	N	50
MZ458RI	34 14 13	111 35 13	.50	10.00	>20.00	.010	200	N	N	N	N
MZ460R	34 10 39	111 27 59	5.00	1.50	1.00	.200	500	1.0	N	N	15
MZ460RA	34 10 39	111 27 59	7.00	1.50	.70	.200	500	.5	N	N	15
MZ460RB	34 10 31	111 28 0	10.00	1.50	1.00	.500	1,500	<.5	N	N	10
MZ462R	34 10 2	111 27 28	15.00	3.00	.15	.300	700	10.0	N	N	20
MZ463R	34 9 36	111 26 20	2.00	.50	.30	.050	50	700.0	1,000	N	20
MZ463RA	34 9 36	111 26 20	2.00	.70	2.00	.020	500	1.5	N	N	20
MZ464R	34 8 5	111 26 55	5.00	.70	.50	.100	100	300.0	200	N	15
MZ464RA	34 8 5	111 26 55	5.00	3.00	5.00	<.002	1,500	70.0	N	N	15
MZ464RB	34 8 5	111 26 55	10.00	1.50	7.00	.070	2,000	1.0	1,000	N	20
MZ464RC	34 8 5	111 26 55	5.00	.50	1.00	.050	300	500.0	1,000	N	15
MZ464RD	34 8 5	111 26 55	5.00	.20	.05	.100	20	5,000.0	N	N	50
MZ464RE	34 8 5	111 26 55	.50	<.02	<.05	.005	N	500.0	N	N	N
MZ464RF	34 8 5	111 26 55	1.00	<.02	<.05	.020	<10	70.0	N	N	15
MZ471R	34 10 25	111 34 42	.50	<.02	<.05	.010	20	.5	N	N	15
MZ476R	34 12 44	111 33 7	7.00	1.00	.20	.200	2,000	2.0	N	N	>2,000
MZ476RA	34 12 44	111 33 7	3.00	.70	1.00	.200	150	50.0	>10,000	N	>2,000
MZ476RB	34 12 44	111 33 7	2.00	.10	.10	.200	50	150.0	>10,000	N	1,000
MZ476RC	34 12 44	111 33 7	20.00	.70	.07	.150	1,500	30.0	5,000	N	300
MZ476RD	34 12 43	111 33 10	20.00	.50	.30	.200	5,000	10.0	3,000	N	700
MZ476RE	34 12 43	111 33 10	15.00	1.00	.10	.300	3,000	15.0	1,500	N	1,000
MZ476RF	34 12 42	111 33 12	10.00	1.50	.07	.200	1,000	3.0	200	N	>2,000
MZ476RG	34 12 42	111 33 12	10.00	.15	.07	.300	70	15.0	>10,000	N	200

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ454RC	150	N	100	N	5	50	500	70	<5	N	<5	200	100
MZ454RD	500	1.0	>1,000	100	100	70	>20,000	N	20	N	70	20,000	5,000
MZ454RE	300	<1.0	1,000	N	15	100	20,000	20	N	N	7	2,000	200
MZ454RF	300	1.0	500	N	15	150	15,000	20	5	N	7	1,000	500
MZ455R	300	2.0	50	N	50	30	1,000	30	N	N	20	700	N
MZ455RA	700	2.0	10	N	10	70	1,000	50	N	<20	20	150	100
MZ455RB	500	1.5	30	70	7	20	5,000	30	<5	N	10	70	5,000
MZ456R	300	1.5	N	N	10	70	50	50	N	N	15	20	N
MZ456RA	300	1.5	N	N	20	200	70	30	N	N	50	30	100
MZ456RB	500	1.5	<10	N	10	50	70	50	N	N	20	20	N
MZ457R	150	5.0	N	N	N	N	100	50	N	<20	<5	10	N
MZ457RA	500	1.5	50	N	N	N	50	50	10	20	N	70	500
MZ457RB	300	1.5	N	N	10	70	100	50	N	N	15	10	N
MZ458R	1,000	1.5	N	N	<5	100	20	30	N	N	10	2,000	N
MZ458RA	150	1.5	N	N	N	200	30	50	N	N	N	5,000	<100
MZ458RB	500	<1.0	<10	N	20	150	70	30	5	N	50	5,000	<100
MZ458RC	3,000	1.0	N	N	10	200	70	20	N	N	50	1,000	<100
MZ458RD	1,000	1.5	<10	N	7	50	70	30	5	N	15	5,000	<100
MZ458RE	500	2.0	<10	N	10	70	70	50	N	N	20	100	<100
MZ458RF	300	1.0	10	N	20	30	500	30	10	N	20	3,000	<100
MZ458RG	1,000	1.5	N	N	15	150	50	30	N	N	50	150	N
MZ458RH	500	2.0	N	N	10	70	20	50	N	N	30	200	N
MZ458RI	<20	2.0	N	N	<5	10	100	100	N	N	N	10	N
MZ460R	100	1.5	<10	N	20	N	2,000	50	<5	N	N	15	N
MZ460RA	1,000	1.5	<10	N	20	N	20,000	50	<5	N	N	10	N
MZ460RB	100	1.0	N	N	30	15	200	20	5	N	20	20	N
MZ462R	>5,000	<1.0	N	N	50	20	20,000	20	5	N	30	10	N
MZ463R	150	1.0	50	300	15	10	>20,000	N	N	N	10	1,000	>10,000
MZ463RA	70	<1.0	N	N	5	<10	200	N	N	N	5	<10	N
MZ464R	100	<1.0	N	20	20	<10	10,000	20	N	N	10	10	5,000
MZ464RA	5,000	<1.0	N	50	20	N	500	30	5	N	10	20	500
MZ464RB	70	N	N	50	15	20	150	N	7	N	7	30	<100
MZ464RC	1,000	N	N	70	20	N	10,000	30	5	N	10	1,000	>10,000
MZ464RD	>5,000	N	20	N	10	10	>20,000	20	5	N	10	10,000	2,000
MZ464RE	200	N	N	N	N	N	>20,000	N	N	N	N	>20,000	N
MZ464RF	50	1.0	N	N	N	N	3,000	20	N	N	5	1,500	N
MZ471R	200	1.0	N	N	N	N	30	50	N	<20	N	50	N
MZ476R	100	2.0	N	N	20	70	300	30	5	N	20	1,500	N
MZ476RA	100	1.5	200	100	10	100	>20,000	30	<5	N	10	1,000	10,000
MZ476RB	70	1.0	70	N	<5	70	15,000	70	7	N	5	100	10,000
MZ476RC	200	15.0	<10	100	10	100	5,000	30	30	N	20	1,500	700
MZ476RD	700	2.0	30	N	70	70	5,000	20	15	50	50	1,000	5,000
MZ476RE	500	2.0	N	N	50	100	500	30	5	<20	30	5,000	N
MZ476RF	300	1.5	N	N	20	100	300	30	N	N	30	500	N
MZ476RG	500	1.0	20	200	<5	150	300	50	15	N	7	150	300

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ454RC	<5	50	500	70	50	<10	N	150	N	<.05	.08	.8	550.0
MZ454RD	<5	>1,000	700	200	N	20	700	70	N	.25	.10	1.6	>1.0
MZ454RE	10	300	200	700	70	10	N	100	N	N	.12	.5	>1.0
MZ454RF	10	700	500	200	N	15	N	100	N	N	.08	.7	>1.0
MZ455R	15	70	700	200	N	15	1,500	50	1,000	N	.10	.1	510.0
MZ455RA	15	100	<100	150	N	20	N	100	N	N	.04	.5	900.0
MZ455RB	N	20	150	50	N	<10	700	30	N	N	.16	.8	4,600.0
MZ456R	7	N	300	20	<50	20	N	30	N	N	.06	.1	45.0
MZ456RA	10	N	200	70	<50	15	300	100	N	N	.16	N	35.0
MZ456RB	10	N	300	70	N	30	N	30	N	2.50	.20	.2	45.0
MZ457R	N	N	100	<10	N	30	<200	70	N	N	.04	N	25.0
MZ457RA	N	10	N	20	N	30	<200	100	N	N	.04	N	65.0
MZ457RB	10	N	150	30	N	50	N	50	N	N	.04	.1	15.0
MZ458R	10	N	200	70	N	10	<200	150	N	N	.04	N	20.0
MZ458RA	10	10	200	70	N	10	<200	150	N	N	.08	.1	15.0
MZ458RB	10	20	150	100	N	15	700	100	N	N	.10	N	20.0
MZ458RC	10	20	200	100	N	15	300	100	N	N	.06	N	60.0
MZ458RD	15	20	200	70	N	15	500	100	N	N	.22	.2	30.0
MZ458RE	10	<10	500	100	N	20	N	100	N	N	.04	.2	55.0
MZ458RF	5	<10	700	150	N	30	500	50	N	N	.14	2.6	330.0
MZ458RG	10	N	500	100	N	10	N	100	N	N	.04	N	30.0
MZ458RH	7	N	150	50	N	10	N	70	N	N	.02	N	60.0
MZ458RI	<5	N	150	<10	N	50	N	20	N	N	.02	N	290.0
MZ460R	15	N	300	50	N	20	N	100	N	<.05	.02	.4	1,500.0
MZ460RA	10	N	200	30	N	20	N	70	N	<.05	.04	.4	>1.0
MZ460RB	20	N	500	100	N	30	N	150	N	N	.02	N	65.0
MZ462R	20	N	N	200	N	10	200	30	N	N	.04	.5	>1.0
MZ463R	5	N	200	50	N	N	1,000	N	<100	13.00	>40.00	.8	>1.0
MZ463RA	5	N	100	100	N	<10	N	N	N	N	.10	N	60.0
MZ464R	5	<10	N	50	N	10	1,000	20	N	<.05	34.00	N	>1.0
MZ464RA	5	N	200	20	N	10	200	N	N	N	9.00	N	1,500.0
MZ464RB	10	N	300	50	N	10	5,000	10	N	N	.60	.5	110.0
MZ464RC	7	N	<100	50	N	20	2,000	50	N	N	22.00	.7	>1.0
MZ464RD	7	N	N	50	N	<10	300	15	N	4.00	3.00	.8	>1.0
MZ464RE	N	N	700	<10	N	N	N	N	N	.20	.35	.5	>1.0
MZ464RF	N	20	N	10	N	N	N	<10	N	2.00	.18	.4	3,100.0
MZ471R	N	20	N	<10	N	15	N	70	N	N	.02	N	20.0
MZ476R	15	700	100	200	N	15	2,000	100	N	<.05	.10	N	200.0
MZ476RA	15	70	100	150	70	10	300	100	N	<.05	.14	.4	>1.0
MZ476RB	5	300	N	50	100	15	200	150	N	N	.12	.4	>1.0
MZ476RC	10	50	300	100	N	20	3,000	100	N	N	.12	.7	1,700.0
MZ476RD	10	>1,000	200	200	50	15	10,000	150	N	N	.14	N	1,300.0
MZ476RE	10	70	<100	100	N	15	2,000	100	N	N	.16	.5	500.0
MZ476RF	15	200	200	100	N	20	300	150	N	N	.06	.5	290.0
MZ476RG	10	150	1,500	100	70	20	700	100	N	N	.06	.5	330.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ454RC	45	25	4.50	7.50	26	95	>1	White clay-like material from altered vein with sericite and sec. minerals
MZ454RD	>1	220	>1.00	72.00	>1	>1	>1	Central zone of altered vein; sec. Cu and other sec. minerals
MZ454RE	1,000	70	42.00	16.00	500	300	>1	Altered metasediments with sec. minerals
MZ454RF	300	85	23.00	13.00	260	350	>1	Altered metasediments with black oxidized xls
MZ455R	530	2,000	1.00	1.55	12	9	400	Altered metasediments from prospect pit
MZ455RA	220	180	14.20	2.95	1	150	3,200	Fe oxide zone in metasediments; from prospect pit
MZ455RB	80	1,200	>1.00	40.00	58	>1	>1	Altered metasediments with scorodite and other sec. minerals
MZ456R	30	40	.85	.25	N	8	200	Calcite vein in sheared metasediments
MZ456RA	10	220	<.05	.05	N	3	80	Vein of specularite in metasediments
MZ456RB	20	75	.20	.05	2	21	40	Fracture filling fron shear zone in metasediments
MZ457R	15	30	N	.20	N	4	40	Dike with some tourmaline
MZ457RA	45	80	.65	3.40	26	300	>1	Greisen with scorodite, Fe oxides, and monazite; float from stream bed
MZ457RB	10	65	.10	.05	N	2	60	Qtz vein in metasediments with some sec. Cu; float from stream bed
MZ458R	490	70	.80	.20	1	12	60	Altered metasediments; bleached with abundant pyrite casts, some fresh pyrite
MZ458RA	1,100	15	1.15	.05	N	17	60	Altered coarse grained metasediments; abundant pyrite casts and Fe oxides
MZ458RB	730	220	.60	.40	N	36	80	Altered metasediments; fine grained and fine bedded with abundant Fe oxides
MZ458RC	210	240	.55	.70	N	9	80	Altered metasediments; abundant pyrite casts, some limonite replacements
MZ458RD	350	130	.70	.15	N	46	60	Fe oxide vein in finegrained metasediments; 1.5cm thick
MZ458RE	50	40	.15	.20	1	3	120	Silicified metasediments
MZ458RF	1,500	940	2.90	2.00	19	8	160	Qtz vein with fresh pyrite and abundant Fe oxides; some silvery sulfide
MZ458RG	110	190	.20	.10	1	3	120	Altered metasediment; coarse grained with diseminated pyrite
MZ458RH	75	170	.20	.10	1	2	120	Altered metasediments; small Qtz stringers with fresh pyrite
MZ458RI	15	25	.10	N	N	1	10	Fluorite vein; 30cm thick
MZ460R	10	10	.30	.05	1	2	60	Altered metasediments; K flooded with abundant primary and sec. Cu
MZ460RA	10	10	.15	.10	N	1	10	Cu ore; primary and sec., from mine adit
MZ460RB	10	110	<.05	N	N	N	10	Metasediment
MZ462R	20	130	3.00	.15	2	N	20	Altered metasediment with sec. Cu on fractures; abundant Fe oxide
MZ463R	550	1,100	>1.00	>1.00	10	>1	1,200	Altered metasediment with sec. Cu; from House mine dump
MZ463RA	10	25	1.50	.20	N	2	<10	Metasediment from House mine dump
MZ464R	10	830	>1.00	37.00	N	>1	100	Metavolcanic with primary and sec. Cu and some pyrite; from collum mine dump
MZ464RA	30	410	89.00	11.00	N	1,150	40	Dolomite vein with Cu-Sb-Ag sulfosalt;from Collum mine dump
MZ464RB	40	>1	.80	42.00	N	4	1,200	Qtz vein with pyrite; from upper mine dump
MZ464RC	2,100	1,700	>1.00	40.00	N	>1	3,600	Metavolcanic with sec. Cu; from upper mine dump
MZ464RD	>1	220	>1.00	12.00	16	>1	160	Qtz vein with galena and Cu-Sb-Ag sulfosalt; from Collum mine dump
MZ464RE	>1	<5	>1.00	7.00	N	27	160	Qtz vein outcrop with massive galena (argentiferous); at Collum mine
MZ464RF	1,000	5	49.00	.15	N	10	120	Qtz vein with sulfides; outcrop at Collum mine
MZ471R	70	<5	.75	N	N	1	10	Qtz vein with Fe oxides; as much as 20m thick
MZ476R	950	>1	1.00	2.50	N	9	80	Altered metasediment; abundant Tourmaline and Fe oxides on fractures
MZ476RA	310	200	38.00	23.00	100	>1	>1	Silicified metasediment with abundant sec. Cu on fractures; from pros. pit
MZ476RB	140	180	210.00	14.00	17	>1	>1	Silicified metasediment with sec As; from prospect pit
MZ476RC	410	>1	7.00	38.00	2	1,200	>1	Gossan in metasediment; silicified
MZ476RD	180	2,000	1.50	13.00	12	6,200	3,200	Fracture filling from fault zone; Fe oxides
MZ476RE	1,700	1,600	3.00	7.00	1	71	1,200	Jasperoid from altered zone in metasediments
MZ476RF	310	610	2.00	.90	3	8	200	Breccia zone in metasediments; 10m wide with abundant tourmaline
MZ476RG	55	600	6.00	170.00	13	300	>1	Altered metasediments with abundant scorodite

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ476RH	34 12 42	111 33 12	20.00	.05	.20	.300	30	15.0	>10,000	N	100
MZ476RI	34 12 41	111 33 13	20.00	<.02	.30	.200	<10	20.0	>10,000	N	200
MZ476RJ	34 12 41	111 33 13	15.00	.30	.20	.300	30	5.0	>10,000	N	300
MZ477R	34 12 58	111 33 20	10.00	1.50	.10	.300	1,500	2.0	300	N	>2,000
MZ477RA	34 12 58	111 33 20	5.00	1.00	.05	.200	1,000	<.5	N	N	100
MZ477RB	34 12 58	111 33 20	5.00	.70	.05	.200	500	.7	N	N	100
MZ477RC	34 12 58	111 33 20	10.00	1.00	.15	.200	1,000	2.0	N	N	>2,000
MZ477RD	34 12 59	111 33 19	2.00	.70	.07	.150	700	1.0	N	N	200
MZ477RE	34 12 30	111 33 15	10.00	.50	<.05	.200	150	.7	N	N	100
MZ477RF	34 12 30	111 33 15	15.00	.70	.05	.200	500	10.0	10,000	N	500
MZ478RA	34 12 22	111 33 31	3.00	.30	.05	.150	200	1.0	N	N	500
MZ478RB	34 12 22	111 33 29	.50	.15	<.05	.070	100	N	N	N	20
MZ478RC	34 12 22	111 33 29	5.00	1.00	.05	.300	1,000	N	N	N	100
MZ478RD	34 12 23	111 33 27	1.50	.10	<.05	.050	30	N	N	N	20
MZ478RE	34 12 23	111 33 27	10.00	.10	.07	.100	1,500	20.0	2,000	N	150
MZ479R	34 6 14	111 26 9	15.00	1.50	.10	.300	1,000	<.5	N	N	20
MZ479RA	34 6 14	111 26 9	15.00	5.00	.15	.300	1,500	<.5	N	N	20
MZ479RB	34 6 19	111 26 18	20.00	3.00	.20	.300	1,500	15.0	N	N	30
MZ479RC	34 6 19	111 26 18	10.00	3.00	.15	.200	1,000	<.5	N	N	20
MZ479RD	34 6 9	111 26 36	20.00	3.00	.20	.200	500	<.5	N	N	20
MZ479RE	34 6 9	111 26 36	20.00	2.00	.15	.200	500	.5	N	N	20
MZ479RF	34 6 3	111 26 28	20.00	2.00	.15	.200	1,500	N	N	N	20
MZ479RG	34 6 3	111 26 28	20.00	1.00	<.05	.020	500	2.0	N	N	20
MZ479RH	34 6 3	111 26 28	20.00	2.00	.07	.030	1,500	.7	N	N	20
MZ479RI	34 6 3	111 26 28	15.00	1.50	.10	.030	700	<.5	N	N	15
MZ480R	34 7 42	111 40 20	.15	.10	.07	.005	>5,000	N	N	N	10
MZ481R	34 7 55	111 38 10	.50	<.02	<.05	.100	1,000	30.0	N	N	10
MZ481RA	34 7 55	111 38 10	.50	<.02	<.05	.100	500	300.0	N	N	15
MZ481RB	34 7 55	111 38 10	.50	.07	<.05	.050	200	20.0	N	N	20
MZ481RC	34 7 55	111 38 10	.70	<.02	<.05	.050	500	70.0	N	N	15
MZ481RD	34 7 55	111 38 10	1.00	.20	.05	.050	100	5.0	N	N	30
MZ481RE	34 7 55	111 38 10	1.00	.10	.05	.050	2,000	15.0	N	N	15
MZ481RF	34 7 55	111 38 10	.70	.10	<.05	.050	3,000	15.0	N	N	15
MZ481RG	34 7 55	111 38 10	.70	.10	<.05	.050	2,000	10.0	N	N	15
MZ482R	34 14 53	111 40 2	.70	.05	<.05	.050	300	N	N	N	10
MZ482RA	34 14 53	111 40 2	.50	.10	.10	.150	>5,000	N	N	N	15
MZ483R	34 15 27	111 40 19	.20	.05	<.05	<.002	50	5.0	N	N	15
MZ483RA	34 15 27	111 40 19	3.00	.15	.07	.020	200	.5	200	N	30
MZ484R	34 8 19	111 36 41	5.00	.02	<.05	.020	300	N	N	N	15
MZ485R	34 8 31	111 35 32	1.50	.10	<.05	.020	5,000	N	N	N	15
MZ486R	33 57 54	111 34 2	20.00	.05	<.05	.150	500	1.5	<200	N	50
MZ486RA	33 57 54	111 34 2	7.00	.15	<.05	.050	1,000	3.0	N	N	20
MZ486RB	33 57 53	111 34 6	>20.00	<.02	<.05	<.002	20	10.0	700	N	100
MZ486RC	33 57 53	111 34 6	5.00	.20	<.05	.100	500	2.0	N	N	30
MZ486RD	33 57 53	111 34 6	15.00	.05	<.05	.015	70	50.0	500	N	50

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ476RH	150	1.0	1,000	500	5	150	3,000	50	15	20	10	3,000	500
MZ476RI	<20	<1.0	1,000	N	5	50	700	50	10	50	5	200	7,000
MZ476RJ	500	<1.0	200	70	10	200	2,000	100	50	30	15	1,000	5,000
MZ477R	300	2.0	N	N	15	100	100	20	N	N	20	1,500	N
MZ477RA	500	1.5	N	N	15	50	30	20	N	N	15	50	N
MZ477RB	1,000	2.0	N	N	10	50	70	20	N	N	15	150	N
MZ477RC	70	<1.0	N	N	20	100	300	20	N	<20	30	3,000	<100
MZ477RD	700	2.0	N	N	10	20	50	30	N	N	15	15	N
MZ477RE	1,000	2.0	N	N	5	30	100	30	N	N	10	15	N
MZ477RF	500	3.0	20	300	50	30	1,000	50	50	N	20	70	100
MZ478RA	500	2.0	50	N	10	30	200	50	7	N	7	30	N
MZ478RB	200	2.0	N	N	5	10	20	50	N	N	5	<10	N
MZ478RC	500	2.0	N	N	15	50	100	30	N	N	20	20	N
MZ478RD	200	1.0	N	N	<5	20	15	50	N	<20	<5	<10	N
MZ478RE	300	2.0	150	N	30	10	100	100	20	<20	30	500	N
MZ479R	N	<1.0	N	N	50	15	2,000	30	N	<20	20	30	N
MZ479RA	500	<1.0	N	N	50	500	100	20	N	N	50	10	100
MZ479RB	50	<1.0	N	N	70	100	20,000	20	N	N	30	10	N
MZ479RC	20	N	N	N	50	70	100	50	N	N	20	10	N
MZ479RD	70	N	N	N	70	20	1,000	30	N	N	30	<10	N
MZ479RE	50	N	N	N	70	15	5,000	20	N	N	30	<10	N
MZ479RF	150	N	N	N	20	10	150	30	N	<20	20	<10	N
MZ479RG	200	<1.0	N	N	20	20	200	30	N	N	10	10	N
MZ479RH	300	N	N	N	70	10	1,000	30	10	N	20	<10	N
MZ479RI	500	N	N	N	30	10	200	N	5	N	15	<10	N
MZ480R	5,000	10.0	N	N	50	N	100	50	15	<20	10	200	N
MZ481R	50	5.0	150	N	N	N	5,000	50	N	20	7	20	N
MZ481RA	50	5.0	200	N	N	<10	>20,000	20	N	20	<5	15	N
MZ481RB	50	3.0	30	N	<5	50	70	30	N	20	N	15	N
MZ481RC	50	7.0	100	N	N	N	7,000	50	N	<20	N	20	N
MZ481RD	300	3.0	N	N	N	N	70	20	N	<20	N	30	N
MZ481RE	500	2.0	N	N	N	N	50	70	N	20	N	200	N
MZ481RF	700	2.0	70	N	N	N	500	50	N	20	N	2,000	N
MZ481RG	500	2.0	<10	N	N	<10	500	70	N	20	5	1,500	N
MZ482R	700	<1.0	N	N	<5	N	20	50	N	N	N	20	N
MZ482RA	5,000	1.0	N	N	70	10	100	50	20	N	15	20	N
MZ483R	<20	1.0	20	N	N	N	20	50	N	<20	N	<10	N
MZ483RA	500	2.0	30	N	5	10	70	50	N	<20	10	30	N
MZ484R	200	2.0	N	N	N	10	50	50	<5	20	<5	30	N
MZ485R	2,000	3.0	N	N	N	N	50	50	N	20	<5	300	N
MZ486R	200	1.5	150	N	10	<10	15,000	50	20	N	<5	500	N
MZ486RA	700	1.5	20	N	<5	N	2,000	30	5	N	N	200	N
MZ486RB	N	1.0	150	N	5	10	700	20	10	N	N	5,000	N
MZ486RC	1,500	2.0	N	N	10	N	1,000	30	<5	<20	<5	200	N
MZ486RD	200	2.0	500	N	30	<10	>20,000	100	15	N	5	5,000	N

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ476RH	N	>1,000	500	100	100	20	500	100	N	<.05	.06	2.9	1,400.0
MZ476RI	5	70	N	50	N	15	200	70	N	.60	2.00	1.0	500.0
MZ476RJ	7	100	700	500	50	50	200	150	N	.10	.40	.8	1,100.0
MZ477R	15	300	200	200	N	20	700	100	N	N	.10	N	120.0
MZ477RA	10	N	N	50	N	10	N	100	N	N	.04	N	15.0
MZ477RB	7	200	N	50	N	10	700	100	N	N	.04	N	50.0
MZ477RC	10	700	300	500	N	10	500	150	N	N	.24	.1	160.0
MZ477RD	5	N	N	50	N	<10	200	70	N	<.05	.02	N	40.0
MZ477RE	10	20	200	70	N	10	N	70	N	N	.02	N	60.0
MZ477RF	7	200	500	100	N	20	1,000	150	N	<.05	.06	.2	850.0
MZ478RA	5	200	300	50	N	10	N	50	N	N	.04	N	70.0
MZ478RB	N	N	N	20	N	<10	N	30	N	N	.02	N	10.0
MZ478RC	5	N	N	50	N	15	300	150	N	N	.02	N	90.0
MZ478RD	N	N	N	30	N	N	N	20	N	N	.04	N	10.0
MZ478RE	<5	150	2,000	70	N	30	500	50	N	N	.06	3.0	30.0
MZ479R	20	N	300	150	N	15	N	30	N	N	.08	.3	4,600.0
MZ479RA	30	N	300	500	N	10	N	<10	N	N	.02	N	25.0
MZ479RB	20	N	200	200	N	15	200	50	N	.10	.50	.3	16,000.0
MZ479RC	30	N	500	200	N	20	<200	50	N	N	.02	N	45.0
MZ479RD	20	N	N	500	N	20	<200	50	N	N	.06	.1	780.0
MZ479RE	20	N	N	500	N	15	<200	150	N	N	.02	.1	4,100.0
MZ479RF	30	N	N	500	N	15	<200	100	N	N	.04	.2	110.0
MZ479RG	15	N	N	200	N	15	300	30	N	N	.06	>1.0	130.0
MZ479RH	20	N	<100	200	N	15	300	50	N	<.05	.04	.4	400.0
MZ479RI	10	N	N	150	N	15	200	70	N	<.05	.06	.6	140.0
MZ480R	N	N	500	100	N	10	200	<10	200	N	.02	N	30.0
MZ481R	N	15	N	<10	N	50	>10,000	150	N	<.05	.20	N	6,500.0
MZ481RA	N	15	N	<10	N	30	>10,000	150	N	1.00	.28	N	>1.0
MZ481RB	N	<10	N	<10	N	20	>10,000	100	N	N	.02	N	65.0
MZ481RC	N	20	N	<10	N	20	>10,000	100	N	<.05	.45	N	5,400.0
MZ481RD	N	N	N	<10	N	50	300	200	N	N	<.02	N	50.0
MZ481RE	N	<10	N	50	N	30	1,000	100	N	N	.04	N	70.0
MZ481RF	N	<10	N	700	N	30	2,000	200	N	N	.06	N	660.0
MZ481RG	N	N	N	500	N	30	1,500	150	N	<.05	.20	N	600.0
MZ482R	N	N	200	20	N	15	N	100	N	N	<.02	N	10.0
MZ482RA	N	N	200	200	<50	20	N	200	150	N	.02	N	15.0
MZ483R	N	N	N	<10	N	N	N	<10	N	<.05	.02	13.0	35.0
MZ483RA	<5	N	N	100	N	20	N	30	N	N	.04	7.8	45.0
MZ484R	<5	50	<100	<10	N	30	<200	50	N	N	.02	N	10.0
MZ485R	N	10	N	10	N	100	<200	150	N	N	.02	N	25.0
MZ486R	7	N	200	50	N	20	700	100	N	.70	.18	26.0	>1.0
MZ486RA	5	N	150	20	N	15	700	100	N	N	.08	1.9	450.0
MZ486RB	N	N	<100	50	N	10	700	20	N	2.45	.35	2.8	130.0
MZ486RC	5	N	N	30	N	10	1,000	100	N	<.05	.08	N	70.0
MZ486RD	<5	N	N	30	N	<10	<200	20	N	1.90	2.00	10.0	>1.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ476RH	1,500	310	5.00	540.00	340	700	>1	Meta-graywacke from outcrop; altered red, bleached, and exsolved
MZ476RI	180	60	3.00	2.00	440	5,200	>1	Massive sulfide from prospect pit (arsenopyrite and tennantite(?))
MZ476RJ	420	350	4.00	57.00	180	4,300	>1	Fracture filling from gossan zone; abundant Fe oxides and sec. As minerals
MZ477R	720	700	.80	1.00	2	13	240	Fe metasomatized meta-graywacke
MZ477RA	15	75	.10	.05	1	4	40	Breccia in meta-graywacke; abundant Fe oxides and sec. qtz
MZ477RB	55	430	.20	1.00	N	4	120	Meta-graywacke; Fe altered with qtz veining
MZ477RC	110	300	.80	.60	N	19	120	Tourmaline
MZ477RD	15	180	.35	.60	N	3	20	Breccia in meta-graywacke; silicified
MZ477RE	5	10	.35	.20	N	8	80	Breccia in meta-graywacke; abundant Fe oxides and jasperoid
MZ477RF	30	670	8.50	>1.00	1	77	>1	Tourmaline bearing silicified zone; abundant Fe oxides
MZ478RA	10	25	.45	.10	51	44	120	Shear zone in meta-graywacke; abundant qtz veining
MZ478RB	<5	15	.05	N	N	2	320	Qtz vein from shear zone
MZ478RC	5	240	.10	N	N	1	20	Meta-graywacke; fractured, with some Fe oxides
MZ478RD	<5	<5	.05	N	N	2	<10	Qtz vein; vuggy, with Fe oxides
MZ478RE	30	110	3.00	.65	100	43	400	Qtz vein; vuggy, with Fe oxides
MZ479R	10	55	.40	<.05	N	N	10	Argillite; abundant sec. Cu and cuprite, from mine dump
MZ479RA	5	20	N	<.05	N	N	N	Meta-igneous country rock
MZ479RB	15	65	17.00	.10	3	1	<10	Meta-volcanic; abundant sec. Cu and cuprite along shears and fractures
MZ479RC	10	95	.05	N	N	2	N	Meta-volcanic; unmineralized
MZ479RD	10	40	.20	N	N	N	10	Meta-volcanic; Sec. Cu and qtz
MZ479RE	15	35	.25	N	N	1	<10	Meta-volcanic; unmineralized
MZ479RF	10	130	<.05	N	N	1	<10	Porphyry; argillic alteration, unmineralized
MZ479RG	10	85	1.00	<.05	1	N	160	Meta-volcanic; porphyritic, argillic alteration with pyrite
MZ479RH	10	150	.40	N	N	N	200	Meta-volcanic; chip sample across face of adit; altered, abundant pyrite
MZ479RI	10	85	.40	N	N	N	160	Fresh pyrite on older Fe oxides; in porphyritic meta-volcanics
MZ480R	10	15	.05	.50	N	1	80	MnO_2 as stains and fracture fillings in qtz veins; in Payson Granite
MZ481R	5	>1	44.00	.30	60	1	N	Qtz vein in Payson Granite; abundant sec. Cu and fluorite, at Blue Lode mine
MZ481RA	10	>1	>1.00	.20	120	1	10	Qtz vein with fluorite; sec. Cu, from Blue Lode mine
MZ481RB	<5	>1	5.50	N	10	1	N	Qtz vein with fluorite; sec. green mineral (smithsonite?)
MZ481RC	5	>1	80.00	.10	44	1	<10	Vuggy zone in qtz vein; abundant sec. Cu, from Blue Lode mine
MZ481RD	5	15	1.00	N	N	1	10	Payson Granite from outcrop near Blue Lode mine; unmineralized
MZ481RE	160	90	2.50	.25	N	1	<10	Qtz vein; gray, 7-8cm thick, in shear zone, Blue Lode mine
MZ481RF	1,800	>1	10.00	14.00	16	1	40	Qtz vein; yellow and green sec. minerals on fractures, Blue Lode mine
MZ481RG	1,200	140	6.50	7.00	1	1	20	Qtz vein; green and blue sec. minerals, Blue Lode mine
MZ482R	15	5	<.05	N	N	N	10	Tapeets sandstone; MnO_2 stains
MZ482RA	5	5	<.05	.05	N	4	80	Shear zone in Tapeets sandstone with MnO_2
MZ483R	10	40	2.00	.10	34	15	40	Meta-volcanic; propylitic alteretion, from old mine dump
MZ483RA	55	25	.25	N	22	12	120	Breccia with abundant qtz; from old mine dump
MZ484R	120	10	N	.15	3	N	10	Payson Granite; MnO_2 on fractures and joints
MZ485R	10	10	N	N	N	9	60	Shear zone in Payson Granite; abundant qtz and Fe oxides
MZ486R	80	190	2.00	.30	100	3	40	Gossan in meta-volcanics; abundant sec. Cu, from Cu Camp mine
MZ486RA	20	40	1.90	.10	6	1	20	Meta-volcanic rock; bleached and leached with some Fe oxides
MZ486RB	160	25	2.65	.15	120	16	200	Hematite rich zone with sec. yellow minerals; in meta-volcanic rock
MZ486RC	15	40	.75	<.05	N	16	<10	Altered schist with Fe oxides; from mine shaft
MZ486RD	140	4,200	18.80	4.05	160	19	200	Chlorite schist with abundant sec. Cu along schistocity; at pros. pit

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ486RE	33 57 53	111 34 6	3.00	<.02	<.05	<.002	20	5.0	<200	N	<10
MZ486RF	33 57 49	111 34 8	5.00	.70	<.05	.150	>5,000	2.0	N	N	50
MZ486RG	33 57 49	111 34 8	>20.00	.02	.10	.005	150	5.0	1,000	N	150
MZ486RH	33 57 49	111 34 8	20.00	.50	.50	<.002	20	100.0	200	N	50
MZ486RI	33 57 49	111 34 8	20.00	<.02	<.05	.050	<10	1.0	N	N	20
MZ486RJ	33 57 56	111 34 0	2.00	.15	<.05	.005	50	<.5	N	N	10
MZ487R	33 58 3	111 33 42	3.00	<.02	<.05	<.002	15	20.0	N	N	<10
MZ487RA	33 58 3	111 33 42	.20	<.02	<.05	<.002	70	N	N	N	<10
MZ487RB	33 58 3	111 33 42	3.00	<.02	<.05	<.002	10	150.0	N	N	<10
MZ487RC	33 58 3	111 33 42	2.00	<.02	<.05	<.002	20	100.0	300	N	<10
MZ488R	33 57 43	111 34 39	10.00	<.02	<.05	<.002	<10	.7	N	N	15
MZ489R	33 57 33	111 34 30	.70	.05	.05	.020	20	30.0	N	N	10
MZ489RA	33 57 31	111 34 32	.30	.02	.30	.010	70	200.0	3,000	N	20
MZ492R	33 57 47	111 35 0	7.00	1.00	.70	.150	1,500	N	N	N	15
MZ492RA	33 57 45	111 35 3	15.00	.05	.05	.150	20	N	N	N	30
MZ492RB	33 57 45	111 35 3	15.00	.20	.05	.100	30	N	N	N	30
MZ492RC	33 57 40	111 35 5	5.00	.20	.10	.300	70	N	N	N	30
MZ492RD	33 57 40	111 35 5	7.00	.20	.10	.300	20	N	N	N	30
MZ492RE	33 57 40	111 35 5	7.00	.30	.07	.300	20	N	N	N	200
MZ492RF	33 57 40	111 35 5	7.00	2.00	.10	.200	200	N	N	N	50
MZ492RG	33 57 40	111 35 5	1.00	.20	.10	.200	200	.5	N	N	50
MZ492RH	33 57 43	111 35 2	3.00	1.00	5.00	.150	5,000	N	N	N	<10
MZ492RI	33 57 43	111 35 2	10.00	2.00	3.00	.300	1,000	N	N	N	10
MZ493R	33 57 52	111 33 59	15.00	.70	2.00	.070	>5,000	2.0	N	N	20
MZ493RA	33 57 52	111 33 59	15.00	1.00	2.00	.200	5,000	2.0	N	N	15
MZ494R	33 58 17	111 33 21	5.00	.30	.05	.200	200	N	N	N	20
MZ494RA	33 58 17	111 33 21	3.00	.50	.05	.200	500	N	N	N	20
MZ494RB	33 58 18	111 33 14	3.00	.70	.05	.150	300	5.0	N	N	20
MZ494RC	33 58 23	111 33 20	1.50	.05	<.05	.020	30	1.0	N	N	<10
MZ494RD	33 58 23	111 33 20	2.00	.07	<.05	.020	100	<.5	N	N	15
MZ495R	33 57 38	111 30 19	20.00	.07	.05	.100	70	50.0	>10,000	N	200
MZ495RA	33 57 38	111 30 19	3.00	<.02	.07	.050	30	50.0	>10,000	N	100
MZ495RB	33 57 38	111 30 19	10.00	.70	.10	.500	>5,000	50.0	2,000	N	30
MZ495RC	33 57 38	111 30 19	20.00	.05	.10	.100	500	100.0	>10,000	N	100
MZ496R	33 57 26	111 29 40	2.00	.20	1.50	.030	200	N	N	N	10
MZ496RA	33 57 26	111 29 40	5.00	.50	7.00	.100	1,500	N	<200	N	50
MZ496RB	33 57 26	111 29 51	2.00	.10	.30	<.002	200	<.5	N	N	10
MZ496RC	33 57 26	111 29 51	2.00	.05	.20	<.002	100	<.5	N	N	10
MZ497R	34 12 35	111 33 20	5.00	1.00	.70	.150	700	N	N	N	200
MZ497RA	34 12 35	111 33 20	5.00	.70	2.00	.200	1,000	N	N	N	150
MZ497RB	34 12 35	111 33 20	.70	.20	.05	.050	70	1.5	N	N	200
MZ497RC	34 12 38	111 33 22	.20	.05	.05	.030	20	N	N	N	20
MZ497RD	34 12 38	111 33 22	.70	<.02	<.05	<.002	100	N	N	N	N
MZ498R	34 12 37	111 32 51	7.00	.70	.05	.200	700	2.0	N	N	2,000
MZ498RA	34 12 37	111 32 51	10.00	1.00	.07	.200	1,000	2.0	N	N	>2,000

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ486RE	N	<1.0	N	N	N	N	2,000	30	10	N	5	1,500	N
MZ486RF	1,500	2.0	N	N	70	20	>20,000	30	5	N	15	100	N
MZ486RG	200	1.0	50	N	15	10	2,000	20	20	70	5	2,000	N
MZ486RH	150	1.0	30	N	N	N	>20,000	50	10	30	<5	20,000	N
MZ486RI	500	<1.0	50	N	N	15	3,000	N	10	30	<5	10,000	N
MZ486RJ	100	<1.0	N	N	5	N	3,000	N	N	N	<5	50	N
MZ487R	1,500	<1.0	150	N	5	N	>20,000	30	7	N	<5	50	N
MZ487RA	100	<1.0	150	N	10	N	500	N	N	N	N	100	2,000
MZ487RB	300	1.0	30	N	7	N	5,000	30	10	N	<5	1,000	500
MZ487RC	1,500	<1.0	100	N	N	N	>20,000	30	10	N	<5	3,000	700
MZ488R	N	<1.0	N	N	N	N	700	20	N	N	<5	50	N
MZ489R	20	1.0	N	N	N	N	10,000	N	10	20	N	200	1,000
MZ489RA	<20	2.0	100	N	10	N	>20,000	20	30	N	5	20,000	>10,000
MZ492R	700	2.0	N	N	20	100	30	30	N	N	30	100	N
MZ492RA	700	1.0	N	N	5	50	50	30	<5	N	10	50	N
MZ492RB	1,500	<1.0	N	N	<5	50	50	N	10	N	7	20	N
MZ492RC	1,500	1.0	N	N	5	50	50	N	N	N	5	20	N
MZ492RD	1,500	1.0	N	N	15	30	50	N	N	N	15	20	N
MZ492RE	1,500	<1.0	N	N	10	50	70	N	N	N	10	30	N
MZ492RF	500	<1.0	N	N	15	20	100	N	N	N	15	15	N
MZ492RG	500	<1.0	N	N	15	10	20	N	N	N	7	10	N
MZ492RH	200	<1.0	N	N	20	20	70	20	N	N	15	20	N
MZ492RI	150	<1.0	N	N	30	70	100	20	N	N	20	20	N
MZ493R	100	5.0	N	70	300	10	>20,000	30	7	N	50	30	N
MZ493RA	100	3.0	N	N	700	30	>20,000	30	7	N	30	30	N
MZ494R	500	1.0	N	N	10	<10	300	N	10	N	7	20	N
MZ494RA	1,000	1.5	N	N	10	10	70	50	N	N	7	15	N
MZ494RB	1,000	1.5	N	N	7	N	10,000	50	<5	<20	N	15	N
MZ494RC	200	2.0	N	N	N	N	50	50	<5	N	N	20	N
MZ494RD	300	2.0	N	N	N	N	20	50	N	20	N	10	N
MZ495R	70	<1.0	<10	100	5	300	500	N	15	N	20	>20,000	3,000
MZ495RA	20	<1.0	N	N	5	300	1,000	N	7	N	20	20,000	1,500
MZ495RB	1,000	1.5	N	100	50	2,000	700	50	5	N	70	3,000	700
MZ495RC	200	N	N	300	<5	300	500	30	N	30	<5	>20,000	2,000
MZ496R	50	N	N	N	5	10	20	N	N	N	5	50	N
MZ496RA	500	1.5	N	N	20	30	100	N	<5	N	20	50	500
MZ496RB	N	N	N	N	N	N	15	30	N	N	N	<10	N
MZ496RC	N	N	N	N	N	N	15	30	N	<20	N	<10	N
MZ497R	300	1.0	N	N	15	50	15	N	N	N	10	30	N
MZ497RA	700	1.5	N	N	10	50	30	N	N	N	10	50	N
MZ497RB	1,000	1.5	N	N	N	N	30	N	N	20	N	100	N
MZ497RC	1,000	2.0	N	N	N	N	10	N	N	20	N	30	N
MZ497RD	>5,000	<1.0	N	N	N	<10	50	20	N	N	N	N	N
MZ498R	3,000	2.0	<10	N	15	50	100	70	7	N	15	50	N
MZ498RA	500	2.0	20	N	20	30	100	50	N	N	20	50	N

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ486RE	N	N	N	200	N	N	N	N	N	N	.04	1.4	450.0
MZ486RF	7	N	<100	100	N	15	1,500	150	N	N	.30	.6	>1.0
MZ486RG	N	N	N	30	N	10	700	N	<100	.40	.55	1.3	430.0
MZ486RH	N	N	150	<10	N	15	N	<10	N	.55	2.00	10.0	39,000.0
MZ486RI	<5	N	<100	100	N	10	1,000	70	N	N	10.00	6.3	440.0
MZ486RJ	N	N	N	<10	N	N	N	10	N	N	.90	.2	330.0
MZ487R	N	N	<100	<10	N	N	N	N	N	.55	18.00	6.1	>1.0
MZ487RA	N	N	150	<10	N	N	N	N	<100	.05	>40.00	5.4	95,000.0
MZ487RB	N	N	N	<10	N	N	N	N	N	4.75	>40.00	1.6	215,000.0
MZ487RC	N	N	150	<10	N	N	N	N	N	5.25	>40.00	2.7	>1.0
MZ488R	N	N	<100	<10	N	N	N	N	N	N	.90	N	570.0
MZ489R	5	N	100	<10	N	20	300	100	N	.25	6.00	.1	>1.0
MZ489RA	<5	N	150	<10	N	10	200	50	N	21.00	13.00	8.5	>1.0
MZ492R	10	N	200	20	N	20	<200	100	N	N	.20	.1	15.0
MZ492RA	10	10	200	200	N	10	200	30	N	N	.35	1.7	15.0
MZ492RB	15	10	200	200	N	<10	200	30	N	N	.20	.9	10.0
MZ492RC	15	N	200	300	N	10	N	50	N	<.05	.20	.5	15.0
MZ492RD	20	N	300	200	N	<10	<200	50	N	<.05	.21	.2	20.0
MZ492RE	20	N	200	300	N	10	<200	70	N	<.05	.12	.1	20.0
MZ492RF	15	N	150	150	N	10	<200	30	N	<.05	.30	.9	170.0
MZ492RG	20	N	100	100	N	<10	<200	30	N	N	.25	N	25.0
MZ492RH	10	N	100	50	N	15	<200	30	N	<.05	.21	.1	90.0
MZ492RI	20	N	200	100	N	15	200	50	N	N	.20	.2	130.0
MZ493R	15	N	200	70	N	30	>10,000	50	100	N	.25	1.2	>1.0
MZ493RA	15	N	200	70	N	15	>10,000	50	N	N	.25	1.4	>1.0
MZ494R	10	N	N	50	N	10	200	70	N	N	.20	.4	160.0
MZ494RA	10	N	N	30	N	15	<200	100	N	N	.25	.1	45.0
MZ494RB	7	N	100	20	N	15	N	100	N	N	2.00	1.3	>1.0
MZ494RC	N	N	N	<10	N	15	N	50	N	N	.25	N	20.0
MZ494RD	N	N	N	<10	N	20	200	70	N	N	.21	N	10.0
MZ495R	10	<10	200	100	N	<10	5,000	20	N	2.25	2.50	1.1	290.0
MZ495RA	10	N	150	50	N	N	1,500	10	N	4.90	2.00	.8	1,700.0
MZ495RB	15	30	100	150	N	20	>10,000	50	N	<.05	1.30	1.2	710.0
MZ495RC	10	<10	300	70	N	15	7,000	30	N	7.10	14.00	1.5	200.0
MZ496R	5	N	<100	10	N	N	N	N	N	N	1.40	.4	20.0
MZ496RA	10	N	<100	50	N	15	<200	15	N	N	>40.00	.1	50.0
MZ496RB	N	N	N	<10	N	N	N	N	N	N	8.00	N	5.0
MZ496RC	N	N	N	<10	N	N	N	N	N	N	6.00	N	10.0
MZ497R	10	N	200	50	N	10	<200	70	N	N	.20	N	10.0
MZ497RA	10	20	500	50	N	10	N	100	N	<.05	.20	N	25.0
MZ497RB	5	15	100	15	N	20	N	100	N	N	.40	.2	30.0
MZ497RC	<5	N	100	10	N	20	N	100	N	N	.08	N	<5.0
MZ497RD	N	N	>5,000	15	N	N	N	N	N	<.05	.40	N	65.0
MZ498R	10	70	200	50	N	15	500	100	N	N	.20	.7	160.0
MZ498RA	10	50	200	50	N	15	1,000	100	N	N	.21	1.1	130.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ486RE	1,000	20	1.60	.60	1	3	160	Fe oxide zone; qtz rich with yellow (As?) coatings, Cu Camp Creek mine
MZ486RF	75	4,200	1.40	9.75	3	N	80	Altered schist; abundant sec. Cu on fracture and bedding surfaces
MZ486RG	550	80	.60	.20	3	10	120	Fe oxide zone; qtz rich with yellow-green (As?) coatings, from pros. pit
MZ486RH	8,300	90	N	.10	2	20	160	Central part of Fe oxide zone; abundant sec. Cu, from prospect pit
MZ486RI	1,300	20	.05	<.05	7	14	160	Fe oxide from footwall; yellow-green (As?) sec. mineral, from pros. pit
MZ486RJ	35	80	.65	N	N	N	10	Qtz vein; 6cm thick, fractured, with Fe oxides and green sec. mineral
MZ487R	30	20	26.40	.45	260	26	60	Meta-volcanic; abundant sec. Cu, from mine shaft
MZ487RA	25	30	137.00	.40	180	2,300	80	Meta-volcanic; highly siliceous with abundant sec. Cu, from pros. pit
MZ487RB	140	50	32.80	.15	4	350	80	Meta-volcanic conglomerate; abundant qtz and sec. Cu, from pros. pit
MZ487RC	3,900	20	103.00	.30	34	500	160	Meta-volcanic conglomerate; abundant qtz and sec. Cu, from pros. pit
MZ488R	55	5	1.45	N	N	6	N	Hematite-qtz zone
MZ489R	90	65	23.20	.20	N	1,800	60	Phyllite; silicified with sec. Cu on fractures, from mine shaft
MZ489RA	13,000	310	195.00	6.60	7	>1	2,400	Silicified zone at margin of dike; abundant sec. Cu on fracture surfaces
MZ492R	40	5	.35	<.05	1	1	60	Meta-sediment; hematite and possible sulfides
MZ492RA	15	35	.05	N	1	2	10	Meta-volcanics; altered zone with Fe oxide stockwork like veins
MZ492RB	5	5	<.05	N	1	N	10	Shear zone in meta-volcanics; coarse sericite and abundant Fe oxides
MZ492RC	<5	10	N	<.05	1	1	20	Meta-volcanics; very altered with Fe oxides
MZ492RD	10	<5	N	<.05	2	1	160	Pyrite bearing zone; with sercite and qtz
MZ492RE	10	10	.05	<.05	1	N	<10	Pyrite bearing zone; very altered with sericite and yellow sec. (Fe?)
MZ492RF	10	80	.10	<.05	1	10	160	Pyrite bearing zone; weathered and fresh pyrite
MZ492RG	5	20	<.05	.10	1	N	<10	Coarse meta-igneous rock
MZ492RH	20	110	<.05	2.45	1	N	10	Altered greenstone (propylitic); epidote, calcite, and Fe oxides
MZ492RI	10	130	<.05	.15	1	N	N	Greenstone; with epidote, calcite, and green mica
MZ493R	10	21,000	.75	20.80	5	2	40	Meta-volcanics; abundant ssec. Cu and Fe oxides, from mine adit
MZ493RA	15	33,000	.65	12.00	4	2	40	Meta-volcanics; abundant sec. Cu, and Fe and Mn oxides
MZ494R	10	130	.05	.10	1	6	20	Phyllite; Fe oxide stained
MZ494RA	5	45	N	<.05	1	N	<10	Phyllite; Fe oxide vein and relic pyrite
MZ494RB	10	85	6.30	.20	3	55	80	Schist; sec. Cu along schistocity, from prospect pit
MZ494RC	15	30	N	<.05	N	1	<10	Payson Granite; sheared, brecciated, and qtz veined
MZ494RD	15	70	N	.10	1	N	20	Qtz vein; from fault zone, with Fe oxides
MZ495R	3,300	860	85.00	34.40	1	1,400	>1	Altered zone in schist; hanging wall, very altered with sec. (As) min.
MZ495RA	3,300	710	176.00	264.00	1	1,200	>1	Altered zone in schist; foot wall, Fe oxides and yellow sec. (As) min.
MZ495RB	890	21,000	74.00	10.60	N	400	1,600	Altered zone in schist; foot wall, abundant Fe oxides
MZ495RC	7,000	930	216.00	324.00	N	600	>1	Fe oxide gossan outcrop at Story mine
MZ496R	45	20	.30	.30	2	4	<10	Qtz vein; from open pit at Sunflower mine
MZ496RA	25	25	.05	.15	1	400	160	Fe oxide gossan; from Sunflower mine
MZ496RB	10	10	N	.05	1	2	20	Jasperoid; banded Fe fm between Story and Sunflower mines
MZ496RC	5	15	.05	<.05	2	2	60	Gossan in jasperoid; yellow Fe oxides, banded Fe fm
MZ497R	10	150	N	.05	1	N	20	Meta-sediment
MZ497RA	20	65	N	.05	1	N	20	Meta-sediment; tourmaline bearing
MZ497RB	70	10	.20	.10	2	20	10	Dike (rhyolite?); tourmaline bearing
MZ497RC	15	5	<.05	.05	1	1	<10	Rhyolite qtz porphyry dike; tourmaline bearing
MZ497RD	N	<5	.05	N	1	7	<10	Barite; float sample
MZ498R	<5	370	.60	.20	3	7	80	Silicified zone in meta-sediments; with tourmaline and Fe and Mn oxides
MZ498RA	5	1,000	.60	<.05	5	8	40	Meta-sediment; tourmaline bearing

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ504R	34 6 2	111 45 18	3.00	.50	.70	.300	700	.7	N	N	30
MZ504RA	34 5 58	111 45 25	2.00	.50	1.00	.200	1,000	.5	N	N	30
MZ504RB	34 5 59	111 45 30	2.00	.50	1.00	.200	1,000	.5	N	N	50
MZ504RC	34 5 59	111 45 32	2.00	.20	.20	.200	2,000	1.0	N	N	50
MZ505R	34 12 45	111 33 5	10.00	.70	.07	.500	1,000	1.5	<200	N	500
MZ505RA	34 12 44	111 33 4	7.00	2.00	1.50	.500	5,000	1.0	N	N	>2,000
MZ506R	34 12 43	111 32 58	7.00	2.00	.70	.500	1,500	1.5	N	N	>2,000
MZ507R	34 12 46	111 32 58	10.00	2.00	.50	.700	500	5.0	N	N	>2,000
MZ508R	34 12 49	111 32 57	10.00	2.00	2.00	.500	5,000	1.0	<200	N	500
MZ509R	34 12 15	111 32 53	10.00	3.00	.50	.700	3,000	5.0	N	N	>2,000
MZ510R	34 12 39	111 32 51	10.00	2.00	.10	.700	5,000	5.0	N	N	2,000
MZ511R	34 12 36	111 32 51	7.00	2.00	.30	.500	1,500	.7	N	N	>2,000
MZ512R	34 12 28	111 32 51	10.00	3.00	.50	.700	5,000	1.5	N	N	>2,000
MZ513R	34 12 24	111 33 1	10.00	3.00	.20	.700	3,000	.5	N	N	>2,000
MZ514R	34 12 32	111 33 2	10.00	.70	.10	.700	5,000	1.0	<200	N	1,000
MZ515R	34 12 34	111 33 5	5.00	.20	<.05	.200	150	5.0	N	N	500
MZ516R	34 12 46	111 33 16	10.00	3.00	1.50	.700	5,000	.7	N	N	>2,000
MZ517R	34 12 45	111 33 15	10.00	2.00	1.00	.500	1,500	N	500	N	>2,000
MZ518R	34 12 32	111 33 21	.70	.10	.10	.100	100	1.5	N	N	100
MZ519R	34 12 30	111 33 29	10.00	3.00	2.00	.500	3,000	3.0	N	N	>2,000
MZ519RA	34 12 30	111 33 29	2.00	.50	.20	.500	200	.7	N	N	500
MZ520R	34 12 56	111 33 29	5.00	.50	.05	.070	1,000	7.0	300	N	200
MZ520RA	34 12 26	111 33 31	1.00	.10	.10	.100	200	1.5	N	N	100
MZ521R	34 12 23	111 33 25	10.00	1.00	.10	.500	2,000	3.0	2,000	N	2,000
MZ522R	34 12 23	111 33 29	15.00	.70	.20	.300	300	7.0	>10,000	N	>2,000
MZ523R	34 4 38	111 46 24	15.00	.20	.20	.200	100	2.0	N	N	20
MZ523RA	34 4 38	111 46 24	3.00	.20	.15	.300	70	.5	N	N	50
MZ524R	34 4 46	111 45 58	3.00	.50	1.00	.200	70	N	N	N	10
MZ525R	34 4 52	111 45 58	.50	.10	.10	.015	100	N	N	N	10
MZ526R	34 4 56	111 45 57	2.00	.50	.50	.300	100	N	N	N	10
MZ527R	34 4 24	111 45 43	5.00	.10	.15	.050	500	N	N	N	20
MZ528R	34 4 53	111 45 23	3.00	.50	1.00	.200	200	N	N	N	10
MZ529R	34 4 59	111 45 20	2.00	.50	.10	.200	300	N	N	N	20
MZ530R	34 5 1	111 45 9	3.00	.50	.70	.200	300	1.0	N	N	10
MZ530RA	34 5 1	111 45 4	2.00	.20	1.50	.200	100	N	N	N	20
MZ531R	34 5 5	111 44 48	10.00	7.00	10.00	1.000	100	N	N	N	20
MZ532R	34 5 7	111 44 46	1.00	.10	.10	.100	500	N	N	N	20
MZ532RA	34 5 7	111 44 46	.50	.10	.05	.230	200	N	N	N	20
MZ532RB	34 5 6	111 44 44	.70	.15	.10	.020	N	N	N	N	20
MZ532RC	34 5 6	111 44 44	.20	.05	.05	.010	70	N	N	N	10
MZ533R	34 5 8	111 44 46	.20	.07	.05	.015	150	N	N	N	20
MZ534R	34 5 12	111 44 47	.50	.10	.05	.010	200	N	N	N	20
MZ535R	34 5 20	111 44 53	.20	.10	.05	.070	200	N	N	N	10
MZ536R	33 58 7	111 30 22	5.00	.50	<.05	.700	200	1.5	>10,000	N	100
MZ537R	33 58 9	111 30 26	3.00	.20	<.05	<.002	70	3.0	1,000	N	150

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ504R	1,500	3.0	<10	N	5	N	150	150	N	20	5	30	N
MZ504RA	2,000	3.0	N	N	7	N	100	100	30	<20	5	50	N
MZ504RB	2,000	3.0	N	N	<5	<10	100	150	5	<20	<5	30	N
MZ504RC	1,500	10.0	N	N	<5	N	15	50	<5	30	10	50	N
MZ505R	1,500	7.0	N	N	5	100	1,000	70	N	<20	20	500	N
MZ505RA	2,000	3.0	N	N	30	200	150	50	N	N	50	300	N
MZ506R	150	1.5	30	N	20	150	2,000	30	N	N	50	30	500
MZ507R	100	2.0	N	N	50	300	300	50	30	20	70	3,000	N
MZ508R	2,000	7.0	50	N	30	200	50	100	N	20	50	500	N
MZ509R	1,500	3.0	N	N	30	200	100	70	N	20	50	300	N
MZ510R	1,000	5.0	N	N	20	100	700	100	N	20	50	100	N
MZ511R	70	5.0	N	N	30	150	10	<20	N	<20	70	20	N
MZ512R	300	3.0	N	N	50	100	30	100	N	20	50	100	N
MZ513R	70	7.0	15	N	50	100	30	100	N	20	70	50	N
MZ514R	2,000	5.0	N	N	50	150	300	70	7	20	70	50	N
MZ515R	500	3.0	<10	N	7	50	70	20	7	<20	15	30	<100
MZ516R	1,000	2.0	N	N	30	200	150	20	N	<20	50	300	N
MZ517R	500	2.0	N	N	20	200	50	<20	N	<20	50	50	N
MZ518R	1,000	3.0	N	N	N	N	30	100	N	50	5	200	N
MZ519R	700	3.0	N	N	30	200	200	50	N	<20	50	1,000	N
MZ519RA	300	5.0	N	N	5	150	20	30	N	20	30	20	N
MZ520R	700	10.0	15	N	<5	10	150	30	5	50	5	1,000	N
MZ520RA	1,500	2.0	N	N	<5	N	50	<20	N	50	7	200	N
MZ521R	1,000	7.0	N	N	10	100	200	100	5	<20	30	1,500	N
MZ522R	1,000	7.0	50	150	5	70	1,500	70	10	<20	20	1,000	70
MZ523R	500	2.0	N	N	<5	N	30	130	N	20	5	300	N
MZ523RA	1,000	3.0	N	N	<5	N	30	70	<5	<20	5	300	N
MZ524R	700	2.0	N	N	<5	N	10	70	N	<20	5	70	N
MZ525R	70	1.0	N	N	<5	N	<5	20	N	<20	<5	20	N
MZ526R	300	2.0	N	N	<5	N	7	50	N	<20	5	70	N
MZ527R	700	30.0	N	N	<5	N	15	20	15	<20	5	50	N
MZ528R	700	2.0	N	N	<5	N	10	200	N	<20	5	70	N
MZ529R	300	2.0	N	N	<5	N	7	100	N	<20	5	50	N
MZ530R	700	2.0	N	N	10	N	1,000	100	70	<20	10	500	N
MZ530RA	300	3.0	N	N	<5	N	10	100	N	<20	<5	50	N
MZ531R	1,000	1.0	N	N	70	300	100	200	N	30	100	50	N
MZ532R	300	1.5	N	N	N	N	150	200	N	<20	5	30	N
MZ532RA	150	1.5	N	N	N	N	150	50	N	<20	<5	20	N
MZ532RB	100	3.0	N	N	<5	N	500	50	N	<20	5	20	N
MZ532RC	20	1.5	N	N	N	N	500	<20	N	<20	5	10	N
MZ533R	200	1.5	N	N	N	N	70	100	N	<20	5	10	N
MZ534R	<20	2.0	N	N	N	N	30	100	N	<20	5	10	N
MZ535R	200	2.0	30	N	N	N	100	100	N	<20	<5	200	N
MZ536R	700	2.0	N	N	5	N	100	50	N	<20	<5	50	N
MZ537R	500	3.0	N	N	N	N	100	<20	N	<20	<5	50	200

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ504R	7	N	300	50	N	50	N	200	N	N	.02	.2	80.0
MZ504RA	10	N	500	50	<50	30	N	200	N	<.05	<.02	.2	50.0
MZ504RB	10	10	500	70	N	20	N	300	N	N	<.02	.1	50.0
MZ504RC	5	<10	1,000	100	N	30	N	300	N	N	<.02	.2	5.0
MZ505R	20	200	150	200	N	20	5,000	150	N	N	<.02	.4	300.0
MZ505RA	30	70	700	300	N	20	500	100	N	N	<.02	.3	40.0
MZ506R	15	>1,000	300	200	N	15	N	100	150	N	<.02	.6	500.0
MZ507R	30	15	200	300	N	30	200	200	N	N	.18	1.5	240.0
MZ508R	30	N	1,000	300	<50	50	300	200	N	N	<.02	6.5	30.0
MZ509R	30	100	200	200	N	50	1,500	200	N	N	<.02	.4	40.0
MZ510R	20	300	200	200	<50	50	1,500	200	N	N	.18	.3	300.0
MZ511R	20	200	300	200	N	30	<200	200	N	N	<.02	1.4	<5.0
MZ512R	20	200	300	150	N	30	1,000	200	N	N	.08	.5	5.0
MZ513R	30	50	200	150	N	50	1,500	200	N	N	.02	1.7	10.0
MZ514R	30	70	500	200	N	50	300	200	N	N	.06	.4	120.0
MZ515R	7	70	500	100	N	15	N	70	N	N	.04	.2	35.0
MZ516R	30	N	500	200	N	30	300	150	N	N	<.02	.5	80.0
MZ517R	30	N	700	200	N	20	N	70	N	N	<.02	.6	20.0
MZ518R	10	10	100	200	N	100	N	200	N	N	.02	.3	20.0
MZ519R	20	20	700	200	N	20	200	150	N	N	.06	.5	100.0
MZ519RA	10	<10	N	150	N	15	N	200	N	N	.02	.9	5.0
MZ520R	10	500	N	200	N	100	700	300	N	N	.04	.3	25.0
MZ520RA	7	30	200	50	N	70	N	300	N	N	.04	.3	60.0
MZ521R	20	>1,000	200	200	<50	20	1,000	150	<100	N	.08	.2	100.0
MZ522R	15	500	>5,000	150	<50	50	500	100	N	N	.10	.8	400.0
MZ523R	10	N	100	20	N	70	N	100	N	N	.10	N	15.0
MZ523RA	10	N	100	50	N	70	N	300	N	N	.06	N	10.0
MZ524R	N	N	200	30	N	70	N	200	N	N	.04	N	5.0
MZ525R	7	N	N	10	N	10	<200	<10	N	N	<.02	N	N
MZ526R	7	N	100	30	N	70	N	300	N	N	.04	N	<5.0
MZ527R	10	N	N	100	N	50	N	200	N	N	.14	N	15.0
MZ528R	7	N	150	50	N	200	N	200	N	N	<.02	N	5.0
MZ529R	7	N	<100	20	N	70	N	200	N	N	.40	N	<5.0
MZ530R	7	N	100	20	N	70	N	200	N	.05	.16	N	1,000.0
MZ530RA	10	10	100	30	N	70	N	300	N	N	.08	N	5.0
MZ531R	30	N	2,000	200	N	50	N	200	N	N	.08	N	80.0
MZ532R	5	N	100	10	N	50	N	100	N	N	<.02	N	230.0
MZ532RA	N	N	N	10	N	10	N	50	N	N	<.02	N	190.0
MZ532RB	N	N	N	10	N	50	N	70	N	<.05	<.02	N	320.0
MZ532RC	N	N	N	10	N	<10	N	N	N	N	<.02	N	440.0
MZ533R	N	N	N	10	N	50	N	70	N	N	<.02	N	120.0
MZ534R	N	N	N	10	N	50	N	20	N	N	<.02	N	75.0
MZ535R	N	N	N	50	N	70	N	100	N	N	<.02	N	100.0
MZ536R	20	N	<100	50	<50	30	N	300	N	.20	.12	.9	60.0
MZ537R	N	N	N	<10	N	20	200	50	N	.05	.60	.5	95.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ504R	10	100	.15	<.05	N	1	10	Monzonite
MZ504RA	20	60	.10	<.05	N	1	<10	Monzonite; Fe oxide stained
MZ504RB	10	60	.20	<.05	N	N	<10	Monzonite; Fe oxide after mafic minerals
MZ504RC	15	60	.05	.10	N	1	<10	Trachyite dike
MZ505R	100	600	.35	2.50	N	7	30	Meta-sediment; abundant tourmaline on fracture surfaces
MZ505RA	120	210	.20	.20	N	3	10	Meta-sediment; yellow-green stains (As?)
MZ506R	15	70	.30	.10	6	100	30	Meta-volcanic; massive tourmalinization, veins as much as 0.5cm thick
MZ507R	1,100	240	1.90	.10	N	2	140	Meta-sediment; fine grained with abundant tourmaline, yellow-green stains
MZ508R	30	70	.10	.15	10	2	30	Qtz vein; 0.5cm thick with abundant tourmaline, in meta-sediment
MZ509R	50	300	.65	.75	N	2	20	Meta-sediment; fine grained with tourmaline and some Fe oxide
MZ510R	10	500	1.00	.50	1	11	40	Meta-sediment; fine-grained, altered and broken with Fe and Mn oxides
MZ511R	<5	75	.10	.10	N	1	<10	Meta-sediment; fine grained, abundant tourmaline
MZ512R	10	300	.35	.10	N	2	30	Meta-sediment; fine grained, abundant tourmaline
MZ513R	<5	400	.10	.05	N	9	20	Meta-sediment; fine grained, abundant tourmaline and Fe oxide
MZ514R	5	150	.20	<.05	N	6	30	Meta-sediment; fine grained, abundant tourmaline and Fe oxide
MZ515R	5	65	1.00	.15	N	34	40	Silicified zone in meta-sediment; qtz veining with abundant specularite
MZ516R	80	210	.20	<.05	N	1	10	Meta-sediment
MZ517R	15	75	<.05	<.05	N	1	30	Meta-sediment; coarse grained with abundant tourmaline, altered with Fe oxide
MZ518R	60	25	.25	<.05	N	2	10	Qtz porphyry dike; some oxidized pyrite cubes and clots of mafic minerals
MZ519R	310	110	1.80	.15	N	1	20	Meta-sediment; coarse grained with tourmaline and some fresh sulfide (pyrite)
MZ519RA	5	40	.05	<.05	N	2	<10	Meta-sediment(?); very altered, abundant Fe oxides, qtz, and green sec. min.
MZ520R	20	40	.25	.10	N	1	30	Meta-sediment; altered, abundant oxidized pyrite and Fe oxides
MZ520RA	520	890	.95	.95	N	5	10	Qtz porphyry dike; weathered, some tourmaline
MZ521R	140	400	1.30	3.50	N	6	600	Meta-sediment; fine grained with Fe oxides and yellow stains
MZ522R	30	180	1.30	59.00	1	35	>1	Meta-sediment; fine grained with abundant Fe oxides, vuggy with qtz crystals
MZ523R	80	40	.35	.20	N	20	70	Monzonite porphyry; Fe oxide stained, altered mafics
MZ523RA	80	55	<.05	.10	N	N	90	Trachyite porphyry dike; qtz phenocrysts, Fe and Mn oxide stained
MZ524R	10	55	N	.10	N	N	70	Monzonite porphyry
MZ525R	5	10	N	N	N	N	80	Qtz vein; Mn oxide stains
MZ526R	10	55	N	N	N	N	80	Aplite dike; about 8cm thick
MZ527R	5	70	.05	.10	N	1	190	Payson Granite; Fe oxides on fracture surfaces
MZ528R	10	65	<.05	.20	N	N	90	Monzonite porphyry
MZ529R	10	75	<.05	N	N	N	100	Payson Granite
MZ530R	290	210	.50	.20	N	N	90	Monzonite porphyry; some sec. Cu along small fracture
MZ530RA	15	45	N	.10	N	N	80	Monzonite porphyry; qtz veining with Fe oxides
MZ531R	5	95	<.05	.10	N	N	30	Mafic dike; in monzonite porphyry, very fine grained
MZ532R	10	10	<.05	N	N	N	60	Qtz vein; in monzonite porphyry, some Fe oxide
MZ532RA	5	5	N	N	N	N	70	Qtz vein; granular and brecciated, some Fe oxides
MZ532RB	10	5	N	.10	N	N	90	Qtz vein; some Fe oxides
MZ532RC	5	5	N	.10	N	N	100	Qtz vein; Qtz xls and siderite xls in vugs with abundant Fe oxides
MZ533R	10	5	N	N	N	N	120	Qtz vein; Fe oxide stained
MZ534R	5	10	N	.10	N	N	150	Qtz vein; vuggy with Fe oxide, 10cm thick
MZ535R	120	5	N	.10	2	N	160	Qtz vein; vuggy with Fe oxide
MZ536R	10	20	.60	.20	N	N	>1	Rhyolite from prospect; veinlets and masses of arsenopyrite.
MZ537R	15	30	1.60	.10	2	100	800	Adit in McFarland Canyon; Fe oxide fracture fillings in rhyolite sill.

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ537RA	33 58 9	111 30 26	10.00	.05	.05	<.002	70	5.0	10,000	N	100
MZ538R	33 58 12	111 30 18	7.00	2.00	.50	.500	300	N	N	N	100
MZ538RA	33 58 13	111 30 17	2.00	.20	<.05	<.002	>5,000	7.0	5,000	N	100
MZ538RB	33 58 13	111 30 17	10.00	.20	<.05	.100	200	150.0	>10,000	10	>2,000
MZ538RC	33 58 13	111 30 17	1.00	.05	.10	<.002	1,000	5.0	>10,000	N	50
MZ538RD	33 58 13	111 30 17	15.00	.20	<.05	.100	500	30.0	>10,000	N	500
MZ538RE	33 58 13	111 30 17	10.00	.50	<.05	.100	300	30.0	>10,000	N	1,000
MZ539R	33 58 3	111 30 17	1.00	.30	.05	.100	500	N	300	N	150
MZ540R	33 57 42	111 30 15	.20	.05	<.05	<.002	300	N	200	N	10
MZ540RA	33 57 54	111 30 16	5.00	.50	<.05	.300	500	150.0	10,000	N	>2,000
MZ541R	33 57 49	111 30 11	.20	.05	<.05	.015	200	2.0	N	N	50
MZ542R	33 58 9	111 30 17	10.00	.70	.07	.500	700	2.0	10,000	N	>2,000
MZ543R	33 58 11	111 30 21	1.00	.07	<.05	<.002	500	N	700	N	150
MZ543RA	33 58 11	111 30 21	2.00	.05	.05	<.002	1,000	3.0	5,000	N	200
MZ544R	33 58 16	111 30 7	5.00	1.00	.50	.500	150	N	N	N	100
MZ544RA	33 58 16	111 30 7	2.00	.50	.07	.200	100	15.0	500	N	500
MZ544RB	33 58 16	111 30 7	20.00	<.02	<.05	.005	150	200.0	>10,000	15	<10
MZ544RC	33 58 14	111 30 7	5.00	.20	<.05	.030	100	5.0	>10,000	N	2,000
MZ545R	33 58 10	111 30 0	5.00	.10	<.05	.050	70	10.0	700	N	150
MZ546R	33 58 10	111 30 0	2.00	.50	.10	.200	70	N	N	N	150
MZ547R	33 58 10	111 30 0	5.00	.70	.05	.100	200	N	3,000	N	2,000
MZ547RA	33 58 10	111 30 0	10.00	.20	<.05	.100	70	2.0	>10,000	N	500
MZ548R	33 58 8	111 29 58	7.00	.70	<.05	.700	70	2.0	1,000	N	2,000
MZ549R	33 58 14	111 29 52	2.00	.30	.05	.200	70	1.5	5,000	N	200
MZ549RA	33 58 14	111 29 52	20.00	.70	<.05	.200	1,000	5.0	1,500	N	<10
MZ549RB	33 58 14	111 29 52	7.00	.70	.20	.500	70	N	2,000	N	200
MZ550R	33 58 18	111 29 53	5.00	1.00	.50	.300	500	10.0	500	N	100
MZ550RA	33 58 18	111 29 53	7.00	.50	.10	.070	150	150.0	>10,000	N	>2,000
MZ550RB	33 58 18	111 29 53	10.00	.10	<.05	.020	50	10.0	>10,000	10	1,000
MZ551R	33 58 17	111 29 57	2.00	.50	.10	.070	300	10.0	1,000	N	700
MZ552R	33 58 15	111 29 58	5.00	.50	.20	.300	200	70.0	2,000	N	2,000
MZ553R	33 57 49	111 30 16	15.00	.50	.10	.200	>5,000	500.0	>10,000	10	>2,000
MZ554R	33 57 43	111 30 20	10.00	.50	1.00	.300	1,000	70.0	>10,000	N	500
MZ554RA	33 57 43	111 30 20	5.00	.20	.15	.020	5,000	100.0	200	N	50
MZ554RB	33 57 43	111 30 20	15.00	.10	.10	.100	2,000	70.0	>10,000	15	1,500
MZ555R	33 57 41	111 30 22	2.00	.10	.07	.010	2,000	200.0	3,000	N	30
MZ556R	33 57 45	111 30 21	1.00	.20	.07	.100	100	N	<200	N	300
MZ557R	33 57 44	111 30 25	1.00	.10	.07	.020	1,000	300.0	<200	N	200
MZ558R	33 57 47	111 30 27	3.00	.50	.05	.500	200	50.0	1,000	N	>2,000
MZ559R	33 57 35	111 30 33	.20	.02	<.05	<.002	200	N	N	N	20
MZ560R	33 57 32	111 30 40	10.00	.20	.70	.050	100	70.0	>10,000	N	2,000
MZ561R	33 57 30	111 30 38	7.00	1.00	20.00	.500	>5,000	<.5	2,000	N	100
MZ562R	33 57 28	111 30 42	7.00	.10	.20	.005	>5,000	N	<200	N	50
MZ563R	33 56 58	111 30 28	1.00	.10	.05	.002	500	N	N	N	10
MZ564R	33 57 3	111 30 8	5.00	.10	.07	.300	700	N	700	N	500

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ537RA	200	2.0	10	N	N	N	5	<20	N	<20	<5	70	200
MZ538R	500	1.5	N	N	70	150	50	50	N	<20	50	15	<100
MZ538RA	500	2.0	<10	N	<5	N	300	<20	N	<20	<5	50	200
MZ538RB	100	2.0	200	50	5	20	5,000	<20	N	<20	15	10,000	3,000
MZ538RC	<20	<1.0	500	N	N	N	200	<20	N	<20	<5	500	500
MZ538RD	200	1.0	300	N	10	30	1,000	<20	20	<20	10	2,000	700
MZ538RE	300	2.0	200	N	15	50	1,000	30	<5	<20	30	2,000	700
MZ539R	500	2.0	N	N	N	N	20	20	N	<20	<5	50	N
MZ540R	<20	N	N	N	N	N	<5	<20	N	<20	<5	10	N
MZ540RA	200	N	N	N	<5	1,000	500	20	<5	<20	10	20,000	N
MZ541R	70	<1.0	N	N	N	N	5	<20	N	<20	N	100	N
MZ542R	500	3.0	70	N	N	50	70	50	N	<20	7	500	N
MZ543R	200	2.0	N	N	N	N	50	<20	N	<20	<5	100	N
MZ543RA	300	3.0	20	N	N	N	500	<20	N	<20	<5	50	200
MZ544R	300	1.0	N	N	5	200	100	50	N	<20	100	30	N
MZ544RA	200	1.0	200	N	<5	70	70	20	N	<20	5	500	300
MZ544RB	50	N	200	N	N	N	2,000	<20	N	<20	<5	20,000	1,500
MZ544RC	<20	2.0	100	N	<5	N	100	<20	N	<20	7	1,000	200
MZ545R	300	2.0	50	N	<5	N	700	<20	N	<20	<5	150	500
MZ546R	700	1.5	N	N	<5	N	50	100	N	<20	<5	70	N
MZ547R	200	5.0	N	N	N	N	15	<20	N	<20	<5	50	N
MZ547RA	500	3.0	<10	N	N	N	150	70	N	<20	<5	1,000	300
MZ548R	500	2.0	30	N	<5	70	<5	<20	N	<20	<5	150	<100
MZ549R	500	2.0	N	N	N	N	50	30	N	<20	<5	100	<100
MZ549RA	100	1.5	20	N	50	20	500	30	N	<20	50	50	200
MZ549RB	700	2.0	N	N	50	150	100	50	N	<20	70	30	<100
MZ550R	70	2.0	10	30	10	N	700	50	N	<20	10	500	150
MZ550RA	50	5.0	1,000	N	10	N	500	20	N	<20	10	5,000	200
MZ550RB	150	1.0	100	N	15	N	70	20	N	<20	10	500	<100
MZ551R	150	2.0	70	N	5	20	500	20	N	<20	10	100	<100
MZ552R	300	2.0	>1,000	N	20	500	700	30	5	<20	10	2,000	500
MZ553R	200	2.0	N	200	20	30	1,500	30	N	<20	100	>20,000	10,000
MZ554R	1,000	2.0	N	150	5	N	200	100	N	<20	7	20,000	5,000
MZ554RA	100	1.0	N	N	<5	10	50	20	N	<20	7	100	100
MZ554RB	500	1.5	200	N	N	N	700	20	N	<20	N	10,000	700
MZ555R	200	N	N	N	N	N	20	<20	N	<20	10	100	<100
MZ556R	200	1.0	N	N	N	N	5	<20	N	<20	7	30	N
MZ557R	200	1.0	N	N	N	N	50	<20	N	<20	7	30	<100
MZ558R	200	1.5	N	N	N	N	20	50	10	<20	5	5,000	1,000
MZ559R	<20	<1.0	N	N	N	N	<5	<20	N	<20	5	<10	N
MZ560R	100	1.0	N	>500	N	N	1,000	<20	N	<20	5	>20,000	5,000
MZ561R	300	<1.0	N	N	50	1,500	100	<20	N	<20	500	200	700
MZ562R	50	N	N	N	<5	10	7	<20	N	<20	<5	30	N
MZ563R	50	N	N	N	<5	N	10	<20	N	<20	<5	10	N
MZ564R	300	<1.0	N	N	20	500	150	<20	N	<20	10	20	N

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ537RA	N	N	N	10	N	20	N	20	N	.40	.30	14.0	60.0
MZ538R	30	N	200	100	N	20	N	100	N	N	<.02	N	30.0
MZ538RA	N	20	N	N	N	20	N	70	N	.10	.40	.7	170.0
MZ538RB	5	N	100	50	N	10	5,000	30	N	7.00	4.60	17.0	>1.0
MZ538RC	10	N	N	<10	N	N	200	N	N	.30	.02	11.0	290.0
MZ538RD	10	N	N	50	N	20	500	30	N	3.90	.16	16.0	650.0
MZ538RE	N	10	<100	70	N	20	500	200	N	3.30	.08	6.8	620.0
MZ539R	7	N	300	15	N	10	N	100	N	N	.08	.1	15.0
MZ540R	5	N	N	10	N	N	N	N	N	N	<.02	N	5.0
MZ540RA	10	70	100	70	N	N	1,000	50	N	2.80	1.60	<.1	290.0
MZ541R	10	N	N	10	N	N	<200	N	N	N	.02	<.1	15.0
MZ542R	10	70	1,000	100	N	50	<200	200	N	1.20	.50	13.0	45.0
MZ543R	10	N	100	<10	N	50	N	150	N	N	.04	.2	80.0
MZ543RA	50	10	N	<10	N	50	N	100	N	.15	.14	.7	300.0
MZ544R	<5	N	N	100	N	30	N	200	N	N	.02	.1	55.0
MZ544RA	N	N	100	70	N	10	<200	100	N	.25	.42	2.7	75.0
MZ544RB	N	N	N	<10	N	N	700	N	N	17.00	.50	.9	>1.0
MZ544RC	N	N	N	20	N	<10	<200	10	N	.70	.02	5.5	120.0
MZ545R	N	20	<100	<10	N	100	N	300	N	.15	.34	1.4	540.0
MZ546R	N	N	N	20	N	10	N	200	N	N	.04	<.1	20.0
MZ547R	N	20	1,000	20	N	10	<200	150	N	.15	.04	.1	5.0
MZ547RA	20	20	100	20	N	<10	500	200	N	.40	.40	.7	70.0
MZ548R	<5	150	<100	20	N	50	N	300	N	.25	.04	1.1	<.5
MZ549R	N	10	<100	20	N	10	N	200	N	.70	.40	.3	25.0
MZ549RA	30	N	N	50	N	10	N	50	N	2.00	.40	.2	230.0
MZ549RB	N	N	N	300	N	50	<200	100	N	.05	.10	N	100.0
MZ550R	10	10	<100	70	N	10	1,000	200	N	2.20	.65	N	170.0
MZ550RA	5	N	500	50	N	N	200	20	N	4.70	.20	7.3	220.0
MZ550RB	N	N	200	15	N	N	<200	10	N	11.00	.08	1.4	40.0
MZ551R	N	N	N	20	N	10	<200	30	N	1.20	.14	.6	370.0
MZ552R	20	30	100	100	<50	30	200	150	N	1.20	1.50	50.0	390.0
MZ553R	20	70	500	100	N	20	10,000	100	N	8.00	4.00	.6	1,000.0
MZ554R	20	30	1,500	100	N	30	1,500	200	N	1.50	.55	.4	100.0
MZ554RA	5	N	100	50	N	10	500	20	N	N	.12	.1	15.0
MZ554RB	10	N	500	50	N	20	500	100	N	13.00	1.20	24.0	470.0
MZ555R	N	N	N	10	N	<10	500	N	N	.10	.15	.2	5.0
MZ556R	5	N	N	15	N	10	200	50	N	N	<.02	N	<5.0
MZ557R	<5	N	N	15	N	N	<200	20	N	.10	.18	.2	45.0
MZ558R	20	N	100	70	N	20	200	200	N	1.30	3.00	<.1	10.0
MZ559R	N	N	N	N	N	N	<200	N	N	N	.10	N	<5.0
MZ560R	10	N	300	70	N	10	10,000	20	N	1.30	>10.00	.1	480.0
MZ561R	30	N	700	200	N	50	<200	50	N	<.05	.24	N	50.0
MZ562R	N	N	200	10	N	N	<200	N	N	N	.12	<.1	<5.0
MZ563R	N	N	N	20	N	N	N	N	N	N	.60	<.1	5.0
MZ564R	30	N	200	200	N	20	<200	70	N	N	>10.00	<.1	85.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ537RA	50	45	4.50	1.10	16	180	>1	Rhyolite qtz porphyry pieces from dump; very altered, bleached, pyrite relics
MZ538R	<5	110	N	.20	N	3	70	Clastic metasediment; abundant pyrite xls and irregular masses throughout
MZ538RA	15	10	4.60	.10	4	60	>1	Sample of rhyolite; abundant arsenopyrite.
MZ538RB	>1	>1	>1.00	56.00	470	>1	>1	Relatively pure arsenopyrite from margin of vein.
MZ538RC	>1	80	9.00	2.70	1,000	300	>1	Vein about 14 cm wide; disseminated arsenopyrtie and some relic pyrite cubes.
MZ538RD	>1	450	31.00	7.30	680	450	>1	2 cm selvage on top side of vein; mostly arsenopyrite and sec. AS minerals
MZ538RE	>1	250	25.00	5.50	260	300	>1	Metasediment; fine grained, abundant Fe oxided, pyrite and arsenopyrite
MZ539R	5	5	.10	.10	N	2	300	Rhyolite; limonite after pyrite and Fe oxides; some sericitic alteration.
MZ540R	5	5	.05	.60	N	<1	200	Quartz vein with Fe oxides in cavities from Story mine area.
MZ540RA	0	500	.0	10.00	N	180	>1	Siliceous sulfide bearing vein at caved adit with abundant As and Fe oxides.
MZ541R	>1	70	1.00	.20	N	4	150	Bull qtz vein; abundant vugs with Fe oxides.
MZ542R	160	90	1.80	.70	30	21	>1	Gossan; abundant sulfides and secondary arsenic minerals.
MZ543R	45	10	.30	.20	N	6	400	Rhyolite; Fe oxides, secondary copper stains, some disseminated arsenopyrite.
MZ543RA	10	5	1.30	.10	6	40	>1	Hard dense rhyolite, greenish with abundant disseminated arsenopyrite.
MZ544R	5	150	.20	1.10	N	18	130	Meta-sediment; fine grained, siliceous, with abundant fresh pyrite
MZ544RA	170	60	12.00	1.30	120	200	300	Qtz rich rock finely laminated with Fe oxides and sec. arsenic (scorodite).
MZ544RB	>1	250	>1.00	12.00	350	>1	>1	Massive sulfide, arsenopyrite and pyrite.
MZ544RC	>1	35	52.00	3.70	90	100	>1	Quartz vein system with massive sulfides, both pyrite and arsenopyrite.
MZ545R	15	20	3.50	.20	12	230	300	Hard dense ryholite; disseminated pyrite and arsenopyrite, Fe oxides
MZ546R	10	15	.10	N	N	2	70	Rhyolite; disseminated pyrite (oxidized) and tiny veinlets of arsenopyrite.
MZ547R	20	25	.10	.10	N	4	>1	Rhyolite beccia; siliceous matrix with disseminated pyrite and arsenopyrite.
MZ547RA	320	350	.80	2.20	4	210	>1	Fracture filling with abundant Fe oxides and earthy material.
MZ548R	55	5	1.10	N	12	5	300	Metasediment with much disseminated pyrite and arsenopyrite in small veins.
MZ549R	35	15	.75	.10	N	22	>1	Rhyolite with disseminated pyrite and arsenopyrite.
MZ549RA	20	70	3.60	.10	20	130	1,100	Zone of sulfide bearing sediments; altered to green sec. As and some pyrite.
MZ549RB	20	95	.35	.30	N	22	330	Gossan; along foliation in meta-sediments, red, yellow, and brown Fe oxides.
MZ550R	210	820	3.40	13.00	4	58	>1	Sulfide bearing silicified sediments.
MZ550RA	>1	110	47.00	2.80	1,000	95	>1	Very siliceous vein material; abundant pyrite and arsenopyrite.
MZ550RB	180	20	5.30	.50	58	22	>1	Siliceous material; same character and perhaps more quartz as 350A.
MZ551R	75	25	5.00	.20	42	5	200	Silicified breccia pieces; fine grained black matrix that contains sulfides.
MZ552R	>1	90	27.00	2.80	>1	120	1,000	Silicified metasediments; sulfides present.
MZ553R	>1	>1	>1.00	76.00	2	>1	>1	Slate-phyllite; purple-red, abundant Fe oxides as sec. As (scorodite)
MZ554R	>1	1,000	>1.00	59.00	<2	>1	>1	Slate-phyllite; altered with Fe oxides, pyrite relics, and siliceous zones.
MZ554RA	35	130	>1.00	.05	N	6	>1	4-cm thick quartz (red jasperoid) vein in slate phyllite.
MZ554RB	>1	140	>1.00	11.00	190	110	>1	Fe oxide gossan; sec. As and grey sulfides in stringers and patches.
MZ555R	50	130	>1.00	.80	<2	3	>1	Jasperoid in silicified slate-phyllite.
MZ556R	<5	40	.05	.10	N	2	120	Extremely silicified zone of green shale-phyllite; was pyrite bearing.
MZ557R	15	40	>1.00	.20	N	10	60	Qtz vein in slate-phyllite; vuggy, Fe oxides throughout, clots of chlorite.
MZ558R	>1	40	>1.00	3.90	1	400	400	Slate-phyllite; oxidized and silicified, fine grained sulfide and Fe oxide
MZ559R	10	5	.10	N	N	1	50	Quartz veining in slate-phyllite.
MZ560R	>1	>1	>1.00	>1.00	N	>1	>1	Red jasperoid; sec. As and Fe oxide stains; pyrite casts, some sulfides.
MZ561R	10	85	.10	.30	N	5	1,100	Fe stained meta-sediment; qtz-carbonate veins and abundant carbonate
MZ562R	10	5	.10	.10	N	1	150	Qtz zone in greywacke; jasperoid, Mn(?) and chlorite, some relic pyrite
MZ563R	5	N	.05	.10	N	N	140	Siliceous zone in phyllitic material; stained red and brown with Fe oxides.
MZ564R	5	25	.05	N	N	10	400	Phyllitic material; all Fe oxide stained, pyrite relics and casts silicifie

TABLE 3.--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s
MZ564RA	33 57 3	111 30 8	5.00	.15	1.50	.020	1,000	N	N	N	1,000
MZ564RB	33 57 5	111 30 8	10.00	.10	.10	.100	1,500	N	<200	N	100
MZ564RC	33 57 5	111 30 8	7.00	.05	.10	.200	100	N	1,000	N	50
MZ565R	33 56 18	111 30 24	2.00	.50	<.05	.015	100	1.0	N	N	>2,000

TABLE 3.--continued

Sample	Ba-ppm s	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s
MZ564RA	100	N	N	N	20	<10	50	<20	N	<20	15	10	N
MZ564RB	200	N	N	N	20	<10	50	<20	N	<20	20	50	100
MZ564RC	200	<1.0	N	N	15	<10	70	<20	N	<20	20	20	N
MZ565R	20	1.5	N	N	10	N	50	<20	5	<20	10	10	N

TABLE 3.--continued

Sample	Sc-ppm s	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Te-ppm aa	Cu-ppm aa
MZ564RA	5	N	N	200	N	N	<200	20	N	N	1.00	N	20.0
MZ564RB	30	N	N	200	N	10	300	<10	N	N	>10.00	N	25.0
MZ564RC	10	N	N	100	N	10	<200	30	N	N	>10.00	N	35.0
MZ565R	5	N	N	50	N	10	500	10	N	<.05	.22	1.0	60.0

TABLE 3.--continued

Sample	Pb-ppm aa	Zn-ppm aa	Ag-ppm aa	Cd-ppm aa	Bi-ppm aa	Sb-ppm aa	As-ppm cm	DESCRIPTION OF ROCK SAMPLES
MZ564RA	<5	15	.05	N	N	N	140	Bands and lenses of red jasper; Fe oxides, some relic pyrite.
MZ564RB	30	95	.10	N	N	N	180	Qtz vein; gossan and cinnabar as small blebs associated with quartz veins
MZ564RC	5	<5	.10	N	N	5	200	Schist; abundant silica and disseminated sulfides, mostly fresh pyrite
MZ565R	5	90	.15	N	N	7	50	Quartz-chlorite vein with Fe oxides in black siliceous country rock.