MINERAL APPRAISAL OF PRIORITY AREAS IN THE WESTERN PART OF PRESCOTT NATIONAL FOREST, ARIZONA

By

J.T. Neubert

MLA 15-95

Intermountain Field Operations Center
Denver, Colorado

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

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PREFACE

A January 1987 Interagency Agreement between the U.S. Bureau of Mines, U.S. Geological Survey, and U.S. Forest Service describes the purpose, authority, and program operation for the forest-wide studies. The program is intended to assist the Forest Service in incorporating mineral resource data in forest plans as specified by the National Forest Management Act (1976) and Title 36, Chapter 2, Part 219, Code of Federal Regulations, and to augment the U.S. Bureau of Mines mineral resource data base so that it can analyze and make available minerals information as required by the National Materials and Minerals Policy, Research and Development Act (1980). This report is based on available data from literature and a field investigation.

This open-file report summarizes the results of a U.S. Bureau of Mines forest-wide study. The report has not been edited or reviewed for conformity with the U.S. Bureau of Mines editorial standards. This study was conducted by personnel from the Intermountain Field Operations Center, Building 20, Denver Federal Center, Denver, CO 80225.

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UNIT OF MEASURE ABBREVIATIONS, AND METRIC-TO-ENGLISH CONVERSION FACTORS USED IN THIS REPORT

m	meter	X 3.28=	foot
km	kilometer	X 0.62=	mile
ppm	part per million	X 0.029=	oz/st - troy ounce per short ton
ppb	part per billion		
%	percent		

PRESCOTT EAST

M I L A

NJN 1-11-96

~~[illegible]~~

EASTERN REPORT
WILL NOT BE
FINISHED. SAMPLE
DESCRIPTIONS + ANALYSISES
WILL COME FROM EITHER
MICHAEL LANE, USBM OR
WE WILL NEED TO GET THEM
FROM BEV. MORGAN - PRESCOTT FS

12196 NJN

M. LANE NEVER WROTE
REPORT, STILL NEED TO
TRACK DOWN FIELD NOTES
+ ASSAY + SAMPLE DESCRIPTIONS.

#289

MIKE LANE, USBM
- WAS WORKING ON
EASTERN · 1-96
WILL SEND DATA + FIELD NOTES TO BEV MORGAN

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BEV MORGAN, WILL HAVE FIELD NOTES

MINERAL APPRAISAL OF PRIORITY AREAS IN THE WESTERN PART OF PRESCOTT NATIONAL FOREST, ARIZONA

By J.T. Neubert[1]

ABSTRACT

From 1993 through 1994, the U.S. Bureau of Mines studied Forest Service-designated priority areas in Prescott National Forest to determine types and locations of deposits that could be mined economically now and in the foreseeable future, and to determine which areas were likely to be the foci of mineral exploration activities. The study included a reconnaissance level field examination and literature search.

Prescott National Forest lies in central Arizona, northwest of Phoenix. The western half of the Forest lies south, west, and northwest of Prescott.

The western half of the Forest includes the Bradshaw Mountains which have undergone mineralization at least four times, and host numerous mining districts. Generalized types of ore deposits which have produced include: Precambrian syngenetic base-and precious-metal-bearing "massive sulfides" hosted in Yavapai Series; tungsten associated with Precambrian pegmatite dikes; base- and precious-metal-bearing veins of Precambrian, Laramide, and mid-Tertiary ages; and Laramide-age porphyry copper systems. Historic mining efforts in the Bradshaw Mountains began in the 1860's, with the bulk of past production coming from veins and massive sulfides.

Marginally economic copper occurs at the Copper Basin porphyry deposit. Other known metallic deposits, most of which are veins, are subeconomic. Some of the veins and vein-like lenses of massive sulfides contain economic grades of base and precious metals, but the extent of the high-grade material is unknown. Small-scale exploration and possible production are likely to continue throughout most of the priority areas in the Bradshaw Mountains. Major exploration programs for large-tonnage, low-grade deposits will probably resume if copper and/or gold prices increase dramatically.

Decomposed granite is an important commodity for the growing population of Prescott. Vast resources are available west of Iron Springs.

Placer gold occurs in many of the drainages in the Bradshaw Mountains, and recreational and small commercial operators will continue working sporadically and when streamflows permit.

Priority areas in the north part of the study area have low mineral development potential.

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INTRODUCTION

During 1993 and 1994, the U.S. Bureau of Mines (USBM) conducted a mineral appraisal of Forest Service-designated priority areas in the western half of Prescott National Forest (Forest), in west-central Arizona. The study was done to provide the U.S. Forest Service with mineral data to incorporate into its land-use planning decisions.

Geographic setting

The western part of Prescott National Forest is in Yavapai County, and lies south, west, and northwest of Prescott, and northwest of Phoenix (fig. 1). The southern priority areas encompass about 1/4 of the north-northwest-trending Bradshaw Mountains; the central priority areas are in the Sierra Prieta; and the northern priority areas are proximal to the Connell and Santa Maria Mountains. Elevations range from about 800 m where the Black Canyon leaves the Forest, to about 2,370 m on Mt. Union. Conifer forests are common at higher elevations and on north-facing slopes, scrub oak and manzanita predominate at moderate elevations, and desert vegetation is dominant at lowest elevations. The priority areas include the headwaters of the Hassayampa River. Other major watersheds include Lynx Creek, Groom Creek, Granite Creek, Big Bug Creek, Turkey Creek, Poland Creek, Cottonwood Canyon, and Sycamore Canyon.

Methods of investigation

This project was initiated with the concept of completing a mineral appraisal of the entire Prescott National Forest. In addition, USBM personnel completed Inactive/Abandoned Mined Land forms provided by, and at the request of, the Forest Service. After field work was partly completed, mainly in the southern part of the Bradshaw Ranger District, budgetary constraints forced the USBM and Forest Service to focus both the mineral appraisal and inactive mine survey on specific areas within the Forest. These areas were selected by the Forest Service, and usually reflected where mineral development may conflict with other uses of the Forest. Examples of potential conflicting uses are home sites on patented lands, endangered species habitat, and riparian habitat. This report covers the western part of Prescott National Forest. Another report by the USBM covers priority areas in the eastern part of the Forest.

A detailed literature search for pertinent geologic and mineral resource information regarding Prescott National Forest was conducted initially. Arizona Department of Mines and Mineral Resources files were examined, and provided valuable insights regarding individual mines within the Forest. Forest Service and mining company personnel were interviewed to obtain information relative to mining and exploration activities.

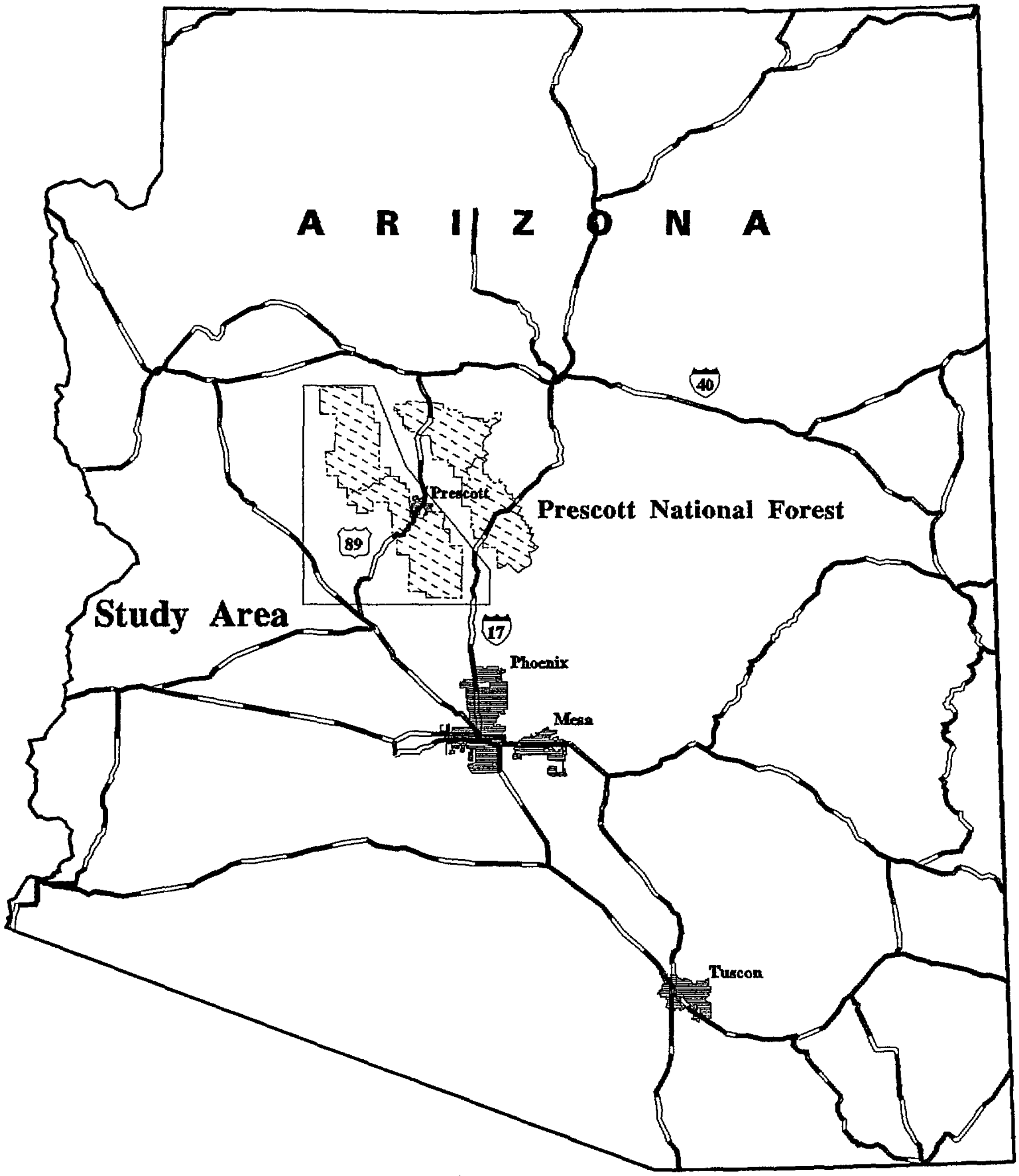

Figure 1.--Index map of Prescott National Forest, Arizona.

Field work was conducted by three USBM personnel in September and October of 1993, and by two USBM personnel from January to October, 1994. At the start of the project, accessible underground workings were mapped and sampled. After imposition of budgetary and personnel constraints in October, 1993, underground work was restricted to reconnaissance sketch mapping and limited sampling, at most. Field work was limited to mines and prospects on public lands. A total of 440 rock samples was collected from mining districts and mineralized areas. Brief sample descriptions are in appendix A.

Most samples were analyzed by Bondar-Clegg & Company Ltd. (Vancouver, British Columbia) for gold and 33 other elements by the neutron activation technique (appendix B), and by inductively-coupled plasma mass spectrometry (appendix C.) Samples exceeding detection limits in gold or silver were analyzed by the fire-assay gravimetric method (appendixes D, E); and samples exceeding detection limits in copper, lead, or zinc were analyzed by atomic absorption spectrometry (appendix E). Elements not included in the multi-element packages (platinum-group elements, whole rock analyses) were analyzed by Bondar-Clegg in selected samples (appendixes F, G). Platinum-group elements were analyzed by fire-assay with a directly-coupled plasma finish.

When discussing sample results in the text, if an element was analyzed by multiple techniques, the higher of the analytical results is reported.

Geologic and mineral setting

The western part of Prescott National Forest is within the transition zone between the Colorado Plateau to the northeast, and the Basin and Range province to the southwest. Geology includes complexly deformed Precambrian low- to medium-grade metamorphic rocks composed of strongly foliated metasediments and metavolcanics (Reynolds, 1988). The metavolcanics range in composition from basalts to rhyolites and have been interpreted differently by various authors. Early work lumped the metamorphic rock together under the name Yavapai Schist (Jaggar and Palache, 1905; Lindgren, 1926). Later work defined the Yavapai Series, and split the series into groups and formations such as the Alder Group, which included the Texas Gulch Formation, Spud Mountain Volcanics, Iron King Volcanics, and Green Gulch Volcanics (Krieger, 1965). Later adjustments and refinements in the metamorphic stratigraphy dropped the Alder Group from the Bradshaw Mountains, replacing it with the Big Bug Group, which included the Green Gulch Volcanics, Spud Mountain Volcanics, and Iron King Volcanics (Anderson and Blacet, 1972a, 1972b). Controversy regarding the stratigraphy and deformational histories of these rocks is renewed with each successive study, and no theory appears indisputable presently.

Yavapai Series rocks were intruded by Precambrian igneous rocks, such as the Brady Butte Granodiorite, Crooks Canyon Granodiorite, Government Canyon Granodiorite, Prescott Granodiorite, and Crazy Basin Quartz Monzonite (Anderson and Blacet, 1972a, 1972b; Krieger, 1965). Textural and compositional variations occur within these large intrusive bodies. Migmatitic and several types of granitoidal compositions, and aplitic and pegmatitic textures were observed in several localities during this investigation. The large intrusions and the metamorphic rocks were cut by later, but still Precambrian-age, pegmatite dikes (Ed DeWitt, 1994, personal communication). The Precambrian igneous rocks are usually not foliated or weakly foliated, although strong foliation was observed locally, especially in the migmatite.

Laramide-age intermediate to felsic igneous rocks intruded the Precambrian rocks. Stocks were emplaced at Copper Basin, Glen Oaks, Pine Flat, Big Bug Creek, Walker, and Crown King (Reynolds, 1988). Slightly younger dikes, ranging in composition from andesite to rhyolite, are found throughout the Bradshaw Mountains (Anderson and Blacet, 1972a, 1972b; Krieger, 1965). Dikes are frequently spatially related to stocks, and dikes which are isolated from exposed stocks may indicate buried stocks nearby.

Late-tertiary basalts of the Hickey Formation cap the Precambrian and Laramide rocks in some localities (Anderson and Blacet, 1972a, 1972b).

Quaternary deposits, usually unconsolidated, are found in the larger drainages.

Unmetamorphosed sedimentary rocks are generally absent throughout priority areas in the western part of Prescott National Forest.

Significant mineralization occurred in the Bradshaw Mountains at least twice during Precambrian time, and during Laramide and mid-Tertiary times. Generalized types of ore deposits which have produced include: syngenetic base-and precious-metal-bearing "massive sulfides" hosted in Yavapai Series; base- and precious-metal-bearing veins of Precambrian, Laramide, and mid-Tertiary ages; Laramide-age porphyry copper systems; and tungsten associated with Precambrian pegmatite dikes. (See Keith and others, 1983, map.)

Table 1 gives a brief synopsis of the mining districts mentioned later in the text. District geology has been highly generalized, and in many instances, evidence of two or more mineralization ages is present.

RESULTS OF INVESTIGATION

This section reveals Bureau findings within or near the priority areas established by the Forest Service, followed by results of our studies in the southern Bradshaw Mountains. The priority areas are shown on plate 1, and are discussed in the order assigned by the Forest Service. Some of the

Table 1.--Summary of mining districts in the western part of Prescott National Forest. Districts are modified from Keith and others (1983, map). Production data from Keith and others (1983), unless noted.

Mining districts	Mining history	Production	Geology
Battle Flat	Not much information is available regarding the history of this obscure district. Prospecting probably began in the 1870's, but production did not result until after Lindgren's (1926, p. 176) 1922 investigation.	Produced 200 tons containing 2,000 lb copper, 1,000 lb lead 400 lb zinc, 7,000 oz silver, from 1922-1949.	Mostly NE.-trending veins are associated with feldspar porphyry dikes. Occurrences are similar to the nearby Laramide-age Pine Flat porphyry copper district (Welty and others, 1985, p. 44).
Big Bug	Placers were discovered in the late 1860's; greatest activity was during the 1880's (Wilson, 1952, p. 48). Lode mining began about 1866 (Wilson and others, 1967, p. 39), with greatest activity between 1933 and 1952 (Koschmann and Bergandahl, 1968, p. 46).	Produced 6,200,000 tons containing 14,300,000 lb copper, 233,000,000 lb lead, 614,000,000 lb zinc, 462,000 oz gold, 16,771,000 oz silver, from 1902-1969.	Precambrian massive sulfides and veins are hosted in Yavapai Series (Krieger, 1965, p.106-107; Webb, 1979, p. 63; Keith and others, 1983, map).
Black Canyon	Lode mining began in 1873 (Wilson and others, 1967, p. 52), with greatest activity between 1934 and 1941 (Koschmann and Bergandahl, 1968, p. 46). Production prior to 1902 is largely unrecorded.	Produced 265,000 tons containing 263,000 lb copper, 3,580,000 lb lead, 225,000 lb zinc, 32,000 oz gold, 949,000 oz silver, from 1902-1971.	Low-angle veins may be related to Tertiary? dikes (Welty and others, 1985, p. 44).
Camp Wood	Tungsten prospecting began about 1915 (Dale, 1961, p. 42). Most production was from outside of Prescott National Forest.	Produced unrecorded tonnage containing 8,686 short ton units tungsten, less than 10 oz gold, less than 100 oz silver, during the 1940's.	Precambrian veins are hosted in granitoid rocks (Dale, 1961, p. 42-53).

Table 1.--Summary of mining districts in the west part of Prescott National Forest.--continued

Mining districts	Mining history	Production	Geology
Copper Basin	Placers were operated by small operators prior to 1929; during the depression larger placer mines operated (Wilson, 1961, p. 47-48). The district was organized about 1890; most lode production was during both World Wars, and during the late 1950's (Johnston and Lowell, 1961, p. 936.)	Produced 357,000 tons containing 19,631,000 lb copper, 508,000 lb lead, 1,400,000 lb zinc, 500 oz gold, 45,700 oz silver, from 1901-1968.	Veins, breccia pipes, and disseminated copper are associated with the Laramide Copper Basin stock (Johnston and Lowell, 1961, p. 936-937).
Finch	This is a subdivision of the Copper Basin district; the mining history is identical.	Produced 500 tons containing 17,000 lb copper, 100 oz gold, 1,000 oz silver, from 1936-1949.	Precambrian vein deposits hosted in granodiorite were cut by the Copper Basin Laramide intrusions (DeWitt, 1987, p. 96).
Groom Creek	The district "has been worked for many years but has not yielded a large output" according to Lindgren (1926, p. 113). Most production was probably prior to 1920.	Produced 15,000 tons containing 51,000 lb copper, 25,000 lb lead, 6,700 lb zinc, 5,200 oz gold, 86,000 oz silver, from 1874-1961.	Mostly N.- to NE.-trending veins are associated with rhyolite dikes and the Laramide Walker Stock (Welty and others, 1985, p. 48).
Hassayampa	Placers were discovered in 1864; lodes were located subsequently. Production prior to 1902 is unrecorded, but significant. (See Wilson and others, 1967, p. 41.)	Produced 18,000 tons containing 151,000 lb copper, 409,000 lb lead, 530,000 lb zinc, 9,200 oz gold, 78,000 oz silver, from 1902-1965.	Mostly NE.-trending veins are associated with Laramide? rhyolite dikes (Welty and others, 1985, p. 49). Lindgren (1926, p. 115-116) presents strong evidence of Precambrian vein deposits in the district.
Lane Mountain	District was well established, with a mill, by 1884 (Lindgren, 1926, p. 178).	Produced 5,000 tons containing 250 oz gold, 360,000 oz silver, from 1882-1886.	Keith and others (1983, map) assign a late Cretaceous age to the veins. The veins may be related to the nearby Laramide stock at Crown King.

Table 1.--Summary of mining districts in the west part of Prescott National Forest.--continued

Mining districts	Mining history	Production	Geology
Little Copper Creek	Exploration for vein deposits probably began in the late 1800's. Porphyry copper exploration was active from 1960 to at least 1977 (Hennessy, 1981, p. 6-8).	Produced 400 tons containing 21,000 lb copper, 9,000 lb lead, 600 lb zinc, 100 oz gold, 1,500 oz silver, from 1908-1949.	Veins are associated with the Laramide Glen Oaks stock (Hennessy, 1981, p. 19, 61).
Lucky Star	The district was active in the early 1950's (Dale, 1961, p. 23-24).	Recorded production was 7 tons containing 15 short ton units of tungsten (Dale, 1961, p. 24).	Quartz-tourmaline veins are hosted in Yavapai Series (Dale, 1961, p. 25).
Mayer	Exploration and production probably began in the 1870's. Most production was between 1906 and 1925 (Arizona Department of Mineral Resources, 1941, p. 55).	Produced 1,424,000 tons containing 92,000,000 lb copper, 71,600 oz gold, 1,786,000 oz silver, from 1896-1972.	Precambrian massive sulfide deposits hosted in schist (DeWitt, 1976, p. 104; DeWitt, 1987, p. 144, 150).
Minnehaha	Placer mining began in the 1880's; lode mining was active by 1900 (Lindgren, 1926, p. 176-178).	Produced 1,000 tons containing 1,200 lb copper, 8,600 lb lead, 400 oz gold, 1,400 oz silver, from 1901-1950.	N.- and E.-trending veins; lead isotope data suggests post-Proterozoic deposition (Clement, 1991, p. 46, 133-134). Keith and others (1983, map) believe mineralization is Proterozoic.
Money Maker	Tungsten exploration was most intense in the 1950's (Dale, 1961, p. 24-25).	Produced unrecorded tonnage containing 26 short ton units tungsten, probably during the 1940's.	Precambrian veins are hosted in schist, and may be related to the Crazy Basin Quartz Monzonite (Dale, 1961, p. 24-25; DeWitt, 1987, p. 124).

Table 1.--Summary of mining districts in the west part of Prescott National Forest.--continued

Mining districts	Mining history	Production	Geology
Mt. Union	Placers were discovered in 1864; lodes were located subsequently (Wilson and others, 1967, p. 41). This district is the upper part of the Hassayampa district of Lindgren (1926, p. 114).	Produced 108,000 tons containing 1,663,000 lb copper, 1,827,000 lb lead, 485,000 lb zinc, 51,700 oz gold, 593,000 oz silver, from 1874-1961.	Mostly NE.-trending veins are associated with rhyolite dikes and the Laramide Walker Stock (Welty and others, 1985, p. 50-51).
Peck	The district was discovered in 1875; most activity was prior to 1932 (Koschmann and Bergandahl, 1968, p. 49-50).	Produced 26,000 tons containing 27,000 lb copper, 365,000 lb lead, 130 oz gold, 1,374,000 oz silver, from 1875-1976.	Mostly NE.-trending veins are associated with Laramide? rhyolite dikes (Welty and others, 1985, p. 51).
Pine Flat	Prospecting probably began in the late 1800's. Most production was prior to 1908. Drilling programs for porphyry copper occurred from 1960 until at least 1972. (See Spatz, 1974, p. 5.)	Produced less than 100 tons containing minor amounts of gold and silver, from 1935-1941.	Veins and disseminated copper associated with the Laramide? Pine Flat stock (Spatz, 1974, p. 12; Keith and others, 1983, map).
Prescott	Placers in Lynx Creek were discovered in 1863. Not much lode mining has occurred in the district. (See Lindgren, 1926, p. 108-109.)	Lodes produced 300 tons containing 10,000 lb copper, and less than 100 oz gold and silver, from 1908-1938. Placer mines on Lynx Creek, including areas near Walker, produced $1,000,000 prior to 1881; and $1,000,000 from 1900-1960. Granite Creek produced at least $2,000 from placers prior to 1949. (See Wilson 1961, p. 41-42, 56-57.)	Placer deposits were derived from veins associated with the Laramide Walker Stock (Lindgren, 1926, p. 109). Lode deposits are Precambrian-age veins, probably slightly post-orogenic (Keith and others, 1983, map; Krieger, 1965, p. 110).

Table 1.--Summary of mining districts in the west part of Prescott National Forest.--continued

Mining districts	Mining history	Production	Geology
Silver Mountain	Prospecting probably began in the 1880's. Recorded production was limited to the Pacific Mine (Lindgren, 1926, p. 178).	Produced 50 tons containing 5,400 lb copper, 20 oz gold, 600 oz silver, from 1910-1911.	Keith and others (1983, map) assign a mid-Tertiary age, probably because of the commodities produced. Description by Lindgren (1926, p. 178) could imply a Precambrian syngenetic origin, or association with a Laramide? porphyry dike.
Thumb Butte	District was probably discovered in the late 1800's, but production was probably mostly during the 1910's.	Produced 2,000 tons containing 2,700 lb copper, 800 oz gold, 300 oz silver, from 1905-1941.	Precambrian veins are hosted in granodiorite (Keith and others, 1983, map; Krieger, 1965, plate 1).
Ticonderoga	This is a subdivision of the Big Bug district; the mining history is identical.	Produced 336,000 tons containing 2,593,000 lb copper, 3,217,000 lb lead, 29,000 lb zinc, 257,000 oz gold, 1,724,000 oz silver, from 1867-1979.	Veins associated with the Laramide? Big Bug stock (Keith and others, 1983, map).
Tiger	The district was operated as early as 1874, with the most activity between 1893 and 1900. Several spurts of production occurred between 1903 and 1951. (See Koschmann and Bergandahl, 1968, p. 49-50.)	Produced 270,000 tons containing 1,518,000 lb copper, 913,000 lb lead, 3,312,000 lb zinc, 139,500 oz gold, 1,576,000 oz silver, from the 1880's-1965.	Mostly NE.-trending veins are within a Laramide stock (DeWitt, 1987, p. 148).
Turkey Creek	Poorly defined district was active prior to 1874, with significant production before 1900 (Lindgren, 1926, p. 150-152).	Produced 5,000 tons containing 38,000 lb copper, 1,214,000 lb lead, 4,300 lb zinc, 1,600 oz gold, 198,000 oz silver, from 1872-1965.	Mostly N.-trending veins of unknown origin (Welty and others, 1985, p. 53) are likely Precambrian or Laramide in age.

Table 1.--Summary of mining districts in the west part of Prescott National Forest.--continued

Mining districts	Mining history	Production	Geology
Tuscumbia	District was active by 1883, and most production was prior to 1900 (Lindgren, 1926, p. 176).	Produced 850 tons containing 1,700 lb copper, 500 lb lead, 900 oz gold, 90,800 oz silver, from 1883-1942.	N.-trending veins of "comparatively recent" age (Lindgren, 1926, p. 176). Deposits may be related to the Laramide stock at Crown King. Keith and others (1983, map) assign a Precambrian age.
Walker	Lodes were discovered by placer miners working Lynx Creek. Production from the late 1800's is largely unrecorded. (See Lindgren, 1926, p. 109-110.)	Produced 213,000 tons containing 3,940,000 lb copper, 4,473,000 lb lead, 524,000 lb zinc, 65,000 oz gold, 871,000 oz silver, from 1887-1975.	Mostly NE.-trending veins are associated with rhyolite dikes and the Laramide Walker Stock (Keith and others, 1983, map; Lindgren, 1926, p. 110).
Walnut Grove	Placers were operated prior to 1899 until at least 1936 (Wilson, 1961, p. 54).	Produced 6,000 tons containing 40,000 lb copper, 560,000 lb lead, 200 oz gold, 30,000 oz silver, from 1941-1964. Produced about $12,000 from placers through 1936 (Wilson, 1961, p. 54-55).	Veins are related to NE.-trending silicic dikes of unknown age (Welty and others, 1985, p. 53).

priority areas were not designated numerically by the Forest Service, and are discussed in order of decreasing mineral endowment.

Priority area 1 - Groom Creek

The Groom Creek priority area includes the Forest adjacent to the town of Prescott, and surrounds the community and drainage of Groom Creek (plate 1). This area is considered by the Forest Service to be "socially sensitive" due to the relatively dense population residing and summering on inholdings within the Forest boundary. Many of the inholdings are patented mining claims, especially on Spruce Mountain. This area also includes threatened or endangered species habitat (Mexican Spotted Owl) and significant riparian habitat along the headwaters of the Hassayampa River.

Rocks in the area include Precambrian Green Gulch metavolcanics, gabbro, and Government Canyon Granodiorite. The Walker Stock, a Laramide-age granodiorite intrusion crops out near the southeast boundary, and dikes related to it are exposed throughout the priority area. (See Anderson and Blacet, 1972a; Kreiger, 1965, plate 1.) The Groom Creek, most of the Mt. Union, and parts of the Walker and Prescott mining districts fall within the Groom Creek priority area (Keith and others, 1983, map; plate 1). The Prescott district is believed to be Precambrian in age, the other districts are probably related to the Walker Stock (table 1).

Most major mines within the priority area are on patented lands. Some of the major mines are the Sheldon, Mudhole, Amulet, Midnight Test, Monte Cristo, Empire, King-Kelly, Home Run, Senator, and Ruth (Lindgren, 1926 p. 107-120).

During this investigation, 75 samples were collected from mine workings on public land within or near the Groom Creek priority area (samples 031-050, 069-091, 097-101, 123-133, 137-143, 149-157). Gold occurrences are distributed throughout most of the priority area. Areas with higher gold concentrations include Spruce Mountain, both sides of the upper Hassayampa River, and the area north and northeast of Lynx Lake. Maximum gold concentration was 0.852 oz/t in a gossan sample (sample 129). Fifty-seven of 75 samples contained greater than 100 ppb gold; 28 contained greater than 1,000 ppb gold (appendixes B, D).

Samples of altered, pyritic Walker Stock granodiorite were tested for the presence of low-grade disseminated gold (samples 140, 142). Both samples contained less than 250 ppb gold, far below economic concentrations (appendix B).

Silver occurs with both gold and/or base metals throughout the priority area. The maximum silver concentration was 16.99 oz/t (sample 099) in a select sample in the southwest part of the priority area. Twenty of 75 samples contained greater than 50 ppm silver (1.5 oz/t). (See appendixes B, C, E.)

Base metals occur throughout the priority area. Of 75 samples, 3 contained greater than 1% copper, 6 contained greater than 1% lead, 5 contained greater than 1% zinc, and 2 contained greater than 0.1% molybdenum. Maximum copper concentration was 2.58% from a vein at the Convergens Mine on Bean Peaks (sample 088); maximum molybdenum concentration was 3,460 ppm at the Arizona Victory Mine near Walker (sample 141). Maximum lead and zinc concentrations were 12.24% and 24,300 ppm (2.43%), respectively, in a smelter slag sample at Smelter Hill, north of Walker (sample 048) (See appendixes B, C, E.)

Arsenic and antimony are common throughout the priority area, maximum concentrations are greater than 1% arsenic (sample 139) and 1,440 ppm antimony (sample 129). Anomalous quantities of tungsten, bismuth, cobalt, and tellurium occur sporadically throughout the priority area. The maxima are 354 ppm tungsten (sample 037), 238 ppm tellurium (sample 099), 240 ppm cobalt (sample 039), and 486 ppm bismuth (sample 129). In most samples these elements were either not detected, or the concentrations are not considered anomalous. (See appendixes B, C, D, E.)

The Groom Creek priority area yielded a few high grade, and numerous anomalous samples from vein-type occurrences, but most samples contained subeconomic metal concentrations. Metallic mineral development potential in the Groom Creek priority area is rated moderate to high (plate 1). Most development will be by small companies and/or independent operators conducting relatively minor exploration programs, possibly even drilling a few holes. Periodic attempts to reopen old mines for exploration or small-scale production will probably mirror precious-metal prices, ie., higher prices will result in more activity. Anomalous quantities of molybdenum and copper in veins and faults in the Bean Peaks area may be indicative of a buried Laramide stock. The closest mapped Phanerozoic intrusive rock is the Walker Stock, about 5 km distant (Anderson and Blacet, 1972a, map). Large tonnage deposits may be present in association with this postulated buried Laramide intrusion near Bean Peaks, or with the Walker Stock, but surface evidence is not overwhelming. Because of the lack of well-defined near-surface large-tonnage targets, and the large population density at or near many potential targets, major exploration projects by large companies in the Groom Creek priority area are unlikely in the immediate future. Significant price jumps in copper or gold would increase the interest by major companies.

Placer gold occurs in most of the drainages within the Groom Creek priority area, especially in Groom Creek, Lynx Creek, and the Hassayampa River. Because most of the valleys are narrow and the gradients are fairly steep, none of these drainages have large alluvial deposits within the priority area. In the past, sections of these drainages were sites of medium-scale dredging operations. Gravel piles, some of which are difficult to discern because of natural revegetation, remain as a legacy of previous placer activity. Small placer operators, mostly recreational, continually work and rework these drainages with suction dredges, sluices, and pans. Placer operators interviewed by USBM personnel reported that most of their findings were fine gold, and recovery was difficult, especially in clayey areas. Occasional nuggets are recovered by lucky and/or skilled individuals.

Metarhyolite used for dimension stone was quarried at and adjacent to a former metal mine, about 1 km west of Lynx Lake. Some of the pits at the quarry have been reclaimed, and some are still active on an irregular basis. This low level of activity will probably continue, or possibly increase slightly as the population of Prescott expands.

Priority area 2 - Big Bug Creek

The Big Bug Creek priority area includes the headwaters of Big Bug Creek, Grapevine Creek, and Big Bug Mesa, but excludes Eugene Gulch (plate 1). This area contains threatened or endangered species habitat (Mexican Spotted Owl) on the mesa and in the pine forests along the creeks. Significant riparian habitat exists along Big Bug Creek and the upper part of Grapevine Creek. A relatively dense human population resides or summers on inholdings within the Forest boundary along Big Bug Creek from Breezy Pines eastward. Many of the inholdings are patented mining claims which have been subdivided.

Precambrian rocks in the area include Spud Mountain and Iron King metavolcanics, Texas Gulch metasediments, gabbro, and Government Canyon Granodiorite. Late Cretaceous or early Tertiary (Laramide) granodiorite intrusions include the Walker Stock near the northwest part of the priority area, and the Big Bug Stock in the northeast part. Late Tertiary Hickey Formation basalt caps Big Bug Mesa. (See Anderson and Blacet, 1972a.) Parts of the Walker, Big Bug, and Ticonderoga mining districts fall within the Big Bug Creek priority area (Keith and others, 1983, map; plate 1). The Big Bug district is believed to be Precambrian in age, the other districts are related to the Walker and Big Bug Laramide stocks (table 1).

Most of the mine workings within the priority area are on patented lands. Some of the largest mines are the Butternut, Postmaster, Red Rock, Poland, and Money Metals (shown as Snowdrift on the Groom Creek 7.5' topographic map) (Lindgren, 1926 p. 134-142). In addition, many large mines located on patented and unpatented lands immediately north of the priority area, in Eugene, Ticonderoga, and Galena Gulches, were not examined during the course of this investigation.

Metallic mineralization exposed at the surface is limited to the northern and eastern parts of the priority area. Barren basalt which may exceed 150-m thick overlies much of the southern and western parts (Anderson and Blacet, 1972a, map).

Twenty-five samples were collected from mine workings on public land within or near the Big Bug Creek priority area (samples 051-068, 158-164). In general, samples from the Big Bug Creek priority area were slightly less mineralized than in the Groom Creek priority area. Maximum gold concentration was 8,840 ppb (0.26 oz/t) in phyllic-altered porphyry at the Money Metals Mine (sample 162). Seventeen of 25 samples contained greater than 100 ppb gold; 4 contained greater than 1,000 ppb gold. Maximum silver and molybdenum concentrations were 4.61 oz/t and 711 ppm, respectively, in a select sample from a shear zone at the Maxwell Property (sample 159). Maximum base-metal concentrations were: 7.49% copper in a select sample of mineralized chlorite-quartz schist at the Lawson Property (sample 068); 28.6% lead and 1,787 ppm vanadium in an oxidized shear zone at the Leadview Mine (sample 064); and 8,200 ppm zinc in a select sample of gray schist at the Alteration Group (sample 067). Most samples contain 1 or 2 orders of magnitude less than these maxima. (See appendixes B, D, E.) Although anomalous, at current prices most are subeconomic grades for the vein-type deposits which are exposed at the surface.

Samples of altered, pyritic Precambrian? granodiorite at the Money Metals Mine (sample 160), and mineralized Big Bug Stock granodiorite (samples 55, 57-61, 63) were tested for the presence of low-grade disseminated gold, copper, or platinum-group elements. Samples contained a maximum of 539 ppb gold, 2,389 ppm copper, and 18 ppb platinum, far below economic concentrations (appendixes B, C, E).

Placer gold occurs in Big Bug Creek, and dredge tailings remain, especially in the stream bed below the confluence of Eugene Gulch and Big Bug Creek. Recent, medium-scale placer activity has occurred at the Homestead Mine, immediately below this confluence. The operation appeared to be both a placer and hard rock mine. Small placer operators and recreational panners probably work Big Bug Creek fairly often, but none were observed during the Bureau field investigation.

Because of the thick basalt cover elsewhere, future mineral activity will probably be limited to the northern and eastern parts of the Big Bug Creek priority area (plate 1). The most likely future prospects for exploration are the ridge between Big Bug and Lynx Creeks, and an area of weakly mineralized Big Bug Stock near the intersection of Eugene Gulch and Big Bug Creek. Low impact exploration programs, or minor production activity may be attempted by small companies and/or independent operators. Although the Walker and Big Bug Stocks show evidence of mineralization, no well-defined near-surface large-tonnage exploration targets are obvious. Without significant metal price increases, major exploration projects by large companies in the Big Bug Creek priority area are unlikely in the immediate future. Placer operators will continue working Big Bug Creek on a sporadic basis, and when water conditions permit.

Priority area 3 - Crooks Canyon

The Crooks Canyon priority area adjoins the south part of the Groom Creek priority area. The area includes Mexican Spotted Owl habitat at the headwaters of the Hassayampa River and Lynx Creek, on the west side of Mt. Union, and along Crooks Canyon to about 5 km south of Palace Station (plate 1). A relatively dense human population resides or summers on inholdings within the Forest boundary between Mt. Union and the Hassayampa River on patented mining claims which have been subdivided. Population density, and the number of patented claims, decreases significantly south of the divide between the Hassayampa River and Crooks Canyon.

Most of the priority area is underlain by Precambrian Crooks Canyon Granodiorite. In addition, smaller parcels are composed of Precambrian Green Gulch and Spud Mountain metavolcanics, and gabbro. The southern part of the Walker Stock granodiorite intrusion extends into the northern part of the priority area. (See Anderson and Blacet, 1972a.) Parts of the Mt. Union and Turkey Creek mining districts fall within the Crooks Canyon priority area (Keith and others, 1983, map; plate 1). The Mt. Union district is probably Laramide in age, and related to the Walker Stock. The Turkey Creek district contains veins which may be Precambrian and/or Laramide in age. (See table 1.) Laramide veins may be related to the Walker Stock, or to a quartz latite stock exposed at Pine Flat (Anderson and Blacet, 1972a).

Most mine workings within the northern part of the priority area are on patented lands; further south, patented land is sparse, and most mines are on public land. Some of the largest mines are the Cash, Storm Cloud, Mt. Union, Starlight, Venezia, Bodie, Oro Fino, and War Eagle (Lindgren, 1926 p. 122-126, 150-151). The density of mines, prospects, mineral occurrences decreases in a southerly direction, especially south of Palace Station.

During this investigation, 42 samples were collected from mine workings on public land within or near the Crooks Canyon priority area (samples 134-136, 144-148, 165-191, 195-201). In general, samples from the divide between the Hassayampa River and Crooks Canyon, southward to Palace Station and the Orofino Mine are the most mineralized. Maximum gold concentration was 0.649 oz/t in a select sample of quartz vein material at a recently reclaimed adit (sample 197). Twenty-five of 42 samples contained greater than 100 ppb; 14 contained greater than 1,000 ppb, and 2 contained greater than 10,000 ppb gold. Maximum silver and antimony concentrations were 37.91 oz/t and 3,010 ppm, respectively, in a select sample of copper-bearing quartz-calcite breccia at the Gold Note? Mine (sample 191). Maximum base-metal concentrations were: 5,570 ppm molybdenum in a select sample of copper-bearing bull and gray quartz at a caved shaft (sample 199); 11,225 ppm copper and 1,840 ppm tungsten in a select sample of vein and breccia at the Copper Penny shaft (sample 166); 3.18% lead in a select sample of oxidized quartz vein material at the War Eagle shafts (sample 195); and greater than 30,000 ppm zinc and 28 ppm tellurium in a select sample of quartz vein and mineralized wall rock at the Starlight Mine (sample 180). Most samples contain 1 or 2 orders of magnitude less than these maxima. (See appendixes B, C, D, E.) Although anomalous, at current prices most of these concentrations are subeconomic grades for the vein-type deposits which are exposed at the surface.

Samples of altered, pyritic Walker Stock granodiorite near Potato Patch (samples 135-136), and altered, pyritic rhyolite porphyry and pyritic Precambrian? granodiorite near the contact of the Walker Stock (samples 144-148) were tested for the presence of low-grade disseminated gold, copper, or molybdenum. Samples contained a maximum of 100 ppb gold, 211 ppm copper, and 217 ppm molybdenum, far below economic concentrations (appendixes B, C).

Placer gold occurs in Crooks Canyon and Turkey Creek. Small placer operators and recreational panners frequently work these drainages, and suction dredges were in use in Crooks Canyon below Palace Station during the Bureau field investigation.

Future mineral activity is likely throughout the Crooks Canyon priority area. Although the density of vein-type mineral occurrences decreases southward, the intensity of the mineralization remains fairly constant. Low impact exploration programs, or minor production activity may be attempted by small companies and/or independent operators. The Walker Stock and adjacent Precambrian granodiorite show evidence of mineralization, but no near-surface large-tonnage exploration targets are obvious. Major exploration projects by large companies in the Crooks Canyon priority area are unlikely in the immediate future, unless metal prices increase dramatically. Placer operators will continue working both Crooks Canyon and Turkey Creek when conditions permit.

Priority area 4 - Iron Springs-Thumb Butte

The Iron Springs and Thumb Butte priority areas are discussed together because they are separated by less than 1 km, and have similar geology and mineralogy. They are immediately west and northwest of the town of Prescott. The Iron Springs priority area is of concern because of past and present mining of common variety minerals, mainly decomposed granite for construction purposes. Mexican Spotted Owl habitat exists in the pine forests west of

Prescott, in the Thumb Butte priority area (plate 1). A relatively dense human population resides or summers on inholdings within the Forest boundary west of Thumb Butte and near Iron Springs on patented lands (mostly homesteads?) which have been subdivided.

Most of the priority areas are underlain by Precambrian granite and Yavapai Series schists. Laramide intrusive rocks of Copper Basin crop out within 1 km of the southern boundary of the Thumb Butte priority area. (See Krieger, 1967a.) Parts of the Copper Basin, Finch, and Thumb Butte mining districts are within the Iron Springs-Thumb Butte priority area (Keith and others, 1983, map; plate 1). The Copper Basin district is a Laramide porphyry copper system. The Finch and Thumb Butte districts are probably Precambrian in age. (See table 1.)

Mine workings are widely scattered, and no large mines were observed within the priority area. Most of the mines and prospects have been inactive since the early 1900's and are small. Many have been obscured by time and the pine forest's ability to conceal. References are sparse regarding the Finch and Thumb Butte mining districts.

During this investigation, 15 samples were collected from mine workings on public land within or near the Iron Springs-Thumb Butte priority area (samples 006-020). In general, most samples from this priority area were weakly mineralized, especially when compared to samples from priority areas 1-3. Maximum gold concentration, and the only detectable tellurium and tungsten concentrations, were 1,420 ppb (0.04 oz/t), 19 ppm, and 58 ppm, respectively, in a select sample of quartz-pyrite vein material at a flooded shaft (sample 020). Six of 15 samples contained greater than 100 ppb gold. Maximum silver, lead, and zinc concentrations were 51.06 oz/t, 2.32%, and 5,200 ppm, respectively, in a select sample of quartz-galena vein at the Silver Button Mine (sample 013). Maximum copper concentration was 8,060 ppm in a select sample of quartz-pyrite vein material at a caved shaft (sample 010). An unusually high bismuth value (1,690 ppm) was obtained from a select sample of quartz-pyrite vein material at 2 caved adits near Willow Creek (sample 015). Most samples contain 1 or 2 orders of magnitude less than these maxima. (See appendixes B, C, E.) Although most of the samples were select samples of the most mineralized material available, in many cases the metal concentrations were close to background values, or weakly anomalous. At current prices, even the most mineralized samples contain subeconomic grades for the narrow vein-type deposits which are exposed at the surface.

A sample of altered, bleached granite, near the contact with schist (sample 006) was tested for the presence of low-grade disseminated metals, but yielded weakly anomalous to background values (appendixes B, C).

Placer gold probably occurs in some of the drainages, such as Miller and Willow Creeks. Wilson (1961, p. 57) reports $133 of recorded production from the Thumb Butte district between 1935 and 1940. Recreational panners may occasionally work these drainages, but none were observed during the Bureau field investigation.

Small-scale mineral activity is likely to continue in isolated locations within the Iron Springs-Thumb Butte priority area. Reconnaissance examination of the area reveals that mineral occurrences are sparse and low grade. Low impact exploration programs, or minor production activity may be attempted by small companies and/or independent operators, such as the recent activity and reclamation project at the Silver Button Mine. No near-surface large-tonnage exploration targets are obvious, therefore, major exploration projects by large companies are unlikely in the immediate future. Recreational placer operators may work some of the drainages when water conditions permit.

Decomposed granite

Several inactive, and at least one active, decomposed granite quarries are in the western part of Prescott National Forest, especially in the Iron Springs and Groom Creek priority areas. The decomposed granite is used for road construction and other construction needs. The Forest Service wishes to know what areas may be suitable for additional quarries in the future, especially if alternative sites are desirable for environmental or social purposes.

Both private and county operators of the quarries are secretive regarding geologic specifics of the deposits. The deposits are generally a maximum of 10-m deep, but most are about 5- to 7-m deep. Once a site is selected by its surface features, operators have to trench and/or drill to determine the subsurface extent of decomposition. Bureau observations of past and present sites indicate that most of the Precambrian granitoid rock mapped in the Prescott area may be suitable hosts for decomposed granite. It appears that areas of low relief, where mechanical transportation of material is slower than the chemical weathering process, are the best sites.

Over 1/2 of the Iron Springs priority area is underlain by Precambrian granitoid rocks (Krieger, 1967a). Much of the previous activity has centered near Iron Springs, and the Dosie Pit is currently operating about 3 km west of the resort community. An area of low relief underlain by granitoid rocks west of Iron Springs to the Dosie Pit, then westward along the north side of the old railroad grade (Forest Service Route 43) is likely to contain significant quantities of decomposed granite.

The southeastern 3/4 of the Thumb Butte priority area is underlain by Precambrian granitoid rocks, but quarrying activity has been minimal. Based on brief field reconnaissance, and comparing the geologic and topographic maps, the best exploration sites for decomposed granite in the Thumb Butte priority area are probably: east of Porter Mountain, immediately to the west of Deering Park Estates; north of Williams Peak, southeast and east of Deering Park Estates; northeast of Williams Peak, on the northwest side of Butte Creek; and between Thumb Butte Park and Fireplace Spring.

Much of the western part of the Groom Creek priority area is underlain by Precambrian granitoid rock which has been quarried in a few places. An area bounded by the Senator Highway to the east, Bean Peaks and Upper Goldwater Lake to the north, the Hassayampa River to the south, and the confluence of Groom Creek and the Hassayampa to the west, has low relief and decomposed granite was observed in several locations at the surface. A similar situation occurs north and northeast of the Ponderosa Park subdivision extending northward to U.S. 89. (See plate 1.)

The need for construction materials such as decomposed granite will probably increase in the Prescott area. This region is currently undergoing tremendous population growth, and infrastructure and housing are necessary to support the new residents and businesses. Because decomposed granite is a high-bulk, low-unit cost commodity, transportation costs are a major proportion of the price. For these reasons, private operators will seek development options as close to Prescott as possible, and the county will seek sites close to road construction or renovation projects. The area west of Iron Springs is mostly chaparral-type vegetation, has low population density, and is not a high public-use area. Many other sites in the area west of Thumb Butte, and in the granitoid rocks south of Prescott in the Groom Creek priority area, are in scenic pine forests with high public-use factors, and often have subdivisions nearby. Barring factors unknown to the Bureau, the best sites for additional privately-owned decomposed granite quarries are in the area west of Iron Springs. County quarries are generally smaller and have a variety of end-use locations, hence, likely development sites are difficult to predict.

Priority area 5 - Crown King

The Crown King priority area lies in the southern Bradshaw Mountains, more or less surrounding the former mining town of Crown King. Two segments, separated by less than 1 km, comprise the priority area, which extends from about Wasson Peak on the south, to the Swastika Mine on the north, and is about 6 km wide. Both segments are considered to be Mexican Spotted Owl habitat (plate 1). A relatively dense human population summers (with a few year-round residents) on inholdings within the Forest boundary near Crown King on patented mining claims, many which have been subdivided.

Precambrian rocks exposed in the priority area are Spud Mountain, Iron King, and Texas Gulch Formations metavolcanics and metasediments, Brady Butte Granodiorite, Crazy Basin Quartz Monzonite, and diorite. The Crown King

Laramide-age granodiorite stock crops out in the western 1/2 of the southern segment, and the southern part of the northern segment. (See Anderson and Blacet, 1972a; Reynolds, 1988; Lindgren, 1926, plate 2.) The Tiger mining district, which is related to the Laramide stock, lies within the priority area (Keith and others, 1983, map; plate 1; table 1).

Virtually all of the large past producing mines are on patented lands. Some of the largest mines within the priority area are the Crown King, War Eagle-Gladiator, Wildflower, and Lincoln. Most of these vein deposits are on the margin or outside of the Crown King stock. (See Lindgren, 1926 p. 166-171, plate 2.)

During this investigation, 28 samples were collected from mine workings on public land within or near the Crown King priority area (samples 345-372). Most of the samples were not highly mineralized, with notable exceptions. Maximum gold concentration was 1.122 oz/t in a chip sample of quartz stringers at the portal of the Johnson Tunnel at the Del Pasco Mine (sample 358). Ten of 28 samples contained greater than 100 ppb; 3 contained greater than 1,000 ppb, and 2 contained greater than 10,000 ppb gold. Maximum silver and barium concentrations were 10.17 oz/t and 6,400 ppm, respectively, in a chip sample of a shear zone with quartz stringers at the portal of the Little Debbie Mine (sample 345). Maximum base-metal concentrations were: 7.20% copper, 273 ppm molybdenum, and 220 ppm bismuth in a select sample of copper-stained porphyry at the Springfield Mine (sample 367); 1.73% lead, greater than 30,000 ppm zinc, 5,910 ppm arsenic, 1,190 ppm antimony, and 131 ppm tungsten in a select sample of mineralized schist at a recently worked shaft (sample 354). (See appendixes B, C, D, E.) Most of the metal concentrations are subeconomic grades at current prices for the vein-type deposits which are exposed at the surface.

Samples of altered, pyritic Crown King Stock from an exploration drift about 0.5 km north of the Springfield Mine (samples 364-366) were tested for the presence of low-grade disseminated gold, copper, or molybdenum. Samples contained a maximum of 120 ppb gold, 726 ppm copper, and 215 ppm molybdenum, far below economic concentrations (appendixes B, C).

Placer gold probably occurs in some of the drainages, but because this priority area is at the headwaters of several watersheds, most of the creeks are dry. In addition, many of the drainages are on private patented mining claims. No placer activity was observed during Bureau field work, but recreational panning probably occurs sporadically.

Future mineral activity is likely within the Crown King priority area. Low impact exploration programs, or minor production activity may be attempted by small companies and/or independent operators. Most activity will probably be restricted to known veins on patented lands, and probably not affect the public land. Known veins on unpatented land, such as the Del

Pasco Mine, are also likely sites. The ridge extending from Towers Mountain eastward to the Lincoln Mine is relatively sparsely populated and has a large number of known veins, and is probably the most likely area for future mineral activity. Although the Crown King Stock shows evidence of mineralization, and DeWitt (1987, p. 148) compares the district favorably with the Copper Basin porphyry copper district, no near-surface large-tonnage exploration targets are obvious. Unless copper prices increase significantly, major exploration projects by large companies in the Crown King priority area are unlikely in the immediate future. Recreational panning will probably continue when water conditions permit.

Copper Basin

The Copper Basin priority area is about 12 km west-southwest of the town of Prescott (plate 1). This has been deemed a priority area because of its rich mineral endowment and proximity to Prescott.

Precambrian rocks exposed in Copper Basin include granodiorite, granodiorite porphyry, quartz diorite, amphibolite, aplite, and schist. These were intruded by the Laramide-age Copper Basin stock. Quartz monzonite, quartz latite porphyry, and several highly mineralized breccia pipes comprise the bulk of this composite stock. Late Tertiary rhyolite dikes and plugs are present in the southern and western parts of the district. (See Johnston, 1955, plate X, plate XI; Pawlowski and Ladner, 1994)

Parts of the Copper Basin and Finch mining districts are within the priority area (Keith and others, 1983, map; plate 1; table 1). Most of the past producing mines are on patented lands owned by Phelps Dodge. Some of the largest mines within the priority area are the Commercial, Copper Hill, Loma Prieta, Boston-Arizona, and U.S. Navy. Most production has been from breccia pipes and peripheral vein deposits related to the Copper Basin stock (DeWitt, 1987, p. 95.)

During this investigation, 10 samples were collected from mine workings on public land within the Copper Basin priority area (samples 021-030). Maximum concentrations of gold (270 ppb), silver (56 ppm), zinc (9.59%), cadmium (610 ppm), copper (4,337 ppm), molybdenum (30 ppm), tellurium (88 ppm), and tungsten (1,828 ppm) were in a select sample of a quartz-calcite-sphalerite vein at the U.S. Navy Mine (sample 026). Maximum lead concentration was 10.90% in 0.3-m chip sample of a nearly horizontal quartz-galena vein at the Silver Gulch Mine (sample 022). (See appendixes B, C, E.) These maximum concentrations are subeconomic grades at current prices for the vein-type occurrences from which the samples were obtained.

In recent years, and during the Bureau field investigation, Copper Basin has been one of the more active mining districts in Prescott National

Forest. At the U.S. Navy Mine, a small custom mill was erected within the last few years, but apparently has no sources of ore. During the Bureau investigation, mining of oxidized copper ore, mostly malachite and azurite, was being conducted by a lessee on Phelps Dodge patented land. The material was being processed for use in jewelry and other ornamental products. Small-scale placer activity was in progress on a patented claim immediately north of the Phelps Dodge property. An intense exploration program, including drilling, in the 1970's revealed 175 million tons of ore averaging 0.55% copper and 0.02% molybdenum on the block of patented claims owned by Phelps Dodge (Paydirt, Phelps Dodge Centennial 1881-1981, Summer, 1981, p. 184). Reserve figures decreased to 70 million tons averaging 0.53% copper in the 1990's (Phelps Dodge Corporation, Annual Report, 1993, p. 21), possibly because of environmental considerations, increasing data, copper price changes, and tax laws. Because of lack of significant progress in negotiations, local opposition, and more promising mining opportunities elsewhere, a proposed land exchange between Phelps Dodge and the Forest Service and Bureau of Land Management was suspended in 1990 (Southwestern Paydirt, December, 1990, p. 7A). A proposed open pit mine would be on patented land, and a land exchange would have allowed Phelps Dodge to erect support facilities and waste dumps on private land, as well. At the present time, virtually all development plans for an open pit mine in Copper Basin are on hold.

Future mineral activity is likely within the Copper Basin priority area. Low impact exploration programs, or minor production activity by small companies and/or independent operators will continue. Future attempts to develop the known porphyry copper deposit probably depend on the political and economic climate. A significant price increase would probably spark renewed interest by Phelps Dodge, even if the political climate remained hostile. Recreational panning will continue when water conditions allow.

Hassayampa River

The Hassayampa River priority area adjoins the southwestern part of the Groom Creek priority area. The area includes riparian habitat along the Hassayampa River, extending southward from near the confluence of Groom Creek to the Forest boundary (plate 1). Although there are a few patented claims in the northern part of the priority area, the population density is relatively low, and many of the patented claims have not yet been subdivided and developed for housing.

Precambrian rocks in the priority area include metavolcanics and Government Canyon Granodiorite. The Laramide-age Glen Oaks quartz latite porphyry stock lies west of and adjacent to the priority area, and dikes associated with the stock extend into the priority area. (See DeWitt, 1987,

p. 90-91; Hennessy, 1981, p. 21.) The Hassayampa and Little Copper Creek mining districts fall partially within the Hassayampa priority area (Keith and others, 1983, map; plate 1). Lodes are associated with the Glen Oaks stock (table 1), and are concentrated in the northern 1/3 of the priority area. Some of the largest lode mines on public land are the Oro Flame, Climax, and Catoctin. The Climax Mine was recently active, and some of the underground workings were significantly enlarged, but no production is believed to have resulted, and reclamation of the site is imminent (Doug Vandergon, U.S. Forest Service minerals specialist, personal communication, 1994). Virtually the entire length of the Hassayampa priority area has been worked by placer operators at one time or another; and a dragline dredge operated during the 1940's (Wilson, 1961, p. 52), probably at the confluence of Orofino Wash and the Hassayampa River.

During this investigation, 26 samples were collected from mine workings on public land within or near the Hassayampa priority area (samples 092-096, 102-122). Maximum gold concentration was 0.892 oz/t from a quartz vein at the Climax Mine (sample 119). Select samples (111-112) from the Little Johnnie? caved workings contained about 0.5 oz/t gold. Twenty of 26 samples contained greater than 100 ppb; 11 contained greater than 1,000 ppb; and 3 contained greater than 10,000 ppb gold. Maximum silver concentration was 150 ppm in selected material from a quartz-sulfide vein (sample 096). Maximum base-metal concentrations were: 12.88% lead in a silicified, oxidized shear zone overlooking Board Creek (sample 102); 18,000 ppm zinc of quartz-pyrite ore from a hopper at a shaft on a ridge west of Board Creek (sample 104); 6,042 ppm copper in a stockpile sample of bull quartz with chalcopyrite and other copper minerals at the Sundance? Mine (sample 110); 198 ppm molybdenum in a silicified shear zone exposed in an adit northeast of the Oro Flame Mine (sample 093); 184 ppm and 431 ppm bismuth and tungsten, respectively, from the same shear zone of sample 093 (sample 094); and 5,530 ppm arsenic, 521 ppm antimony, and 31 ppm tellurium in a select sample of quartz-sulfide vein material at a caved adit near the junction of Copper Creek and the Hassayampa River (sample 109). Most samples contain 1 or 2 orders of magnitude less than these maxima. (See appendixes B, C, D, E.) Most samples contained subeconomic concentrations of metals for the vein-type deposits which are exposed at the surface.

Future mineral activity is likely throughout the Hassayampa River priority area. Activity on lode deposits is most likely in the northern 1/3 of the priority area, where past prospecting has revealed numerous narrow, discontinuous mineralized veins. Low impact exploration programs, or minor production activity may be attempted by small companies and/or independent operators. On a larger scale, the Glen Oaks porphyry copper system was extensively explored until at least 1977. The occurrence lies about 800 to

1500 m from the Hassayampa River, in the area between Little Copper Creek and Copper Creek. Average known grade is about 0.2% copper and 0.01% molybdenum, far below economic grades. The occurrence may be the root zone of an eroded porphyry copper system (Hennessy, 1981, p. 93-95), and additional major exploration programs by large companies are unlikely. Much of the occurrence is patented, and exploration would have little effect on the priority area. If a minable deposit were to be discovered, any uncontrolled drainage from the mine could significantly affect the Hassayampa River priority area.

Small-scale, mostly recreational placer operators will continue working the entire length of the Hassayampa River priority area.

Camp Wood - Sycamore Creek - Cottonwood Canyon

The Camp Wood, Sycamore Creek, and Cottonwood Canyon priority areas are discussed together because they are similar geographically, geologically, and have relatively poor mineral endowments. They are located along or near the western boundary of the Forest, and are 25 to 50 km northwest of Prescott (plate 1). The Camp Wood priority area includes isolated tracts of Threatened and Endangered Species habitat, probably Mexican Spotted Owl nesting sites. The Sycamore Creek and Cottonwood Canyon priority areas include significant riparian habitat. These parts of Prescott National Forest are sparsely populated, with few homesteads. The lack of patented land and the distance to Prescott has probably discouraged subdividing and developing to a certain extent.

The priority areas are underlain by Precambrian granite and Yavapai Series schists. Tertiary-age basalts and conglomerates overlie the Precambrian rocks, especially in the topographically higher locations (See Krieger, 1967a, 1967b, maps). The poorly defined Camp Wood mining district includes parts of the priority areas, although the major producers of that district lie outside the Forest boundary (Keith and others, 1983, map; plate 1). The Camp Wood district is a Precambrian tungsten district (table 1).

Brief reconnaissance of the priority areas revealed no mine workings. Four prospects were sampled within 5 km of the priority areas (plate 1, samples 001-005). The Black Magic (Mary D.) Mine was a past producer of at least 300 kg of tungsten concentrates during the late 1930's (Dale, 1961, p. 42), but the adit is now caved (sample 003). A tungsten? prospect (sample 002) and a mica? prospect (sample 001) near the past settlement of Camp Wood were also examined. Base- and precious-metal concentrations in the samples were low (appendixes B, C).

An active kyanite prospect about 3.5 km upstream from the Sycamore Creek priority area, near the head of Weed Canyon, was examined and sampled (samples 004-005, plate 1). The area is claimed, but no mine workings had been excavated by 1994. Kyanite is used as a refractory material and in ceramics. Kyanite, as a source of a alumina, may be useful as an additive to cement, and the possibility of a market at the Clarkdale cement plant (about 65 km away by rail) is being explored (Robert Poley, Jr., claimant, Prescott, Arizona, personal communication, October, 1994). Geologic studies by the claimant indicate a mineralized area of kyanite-quartz schist about 3,000 m by 1,800 m containing numerous high grade zones where kyanite composes at least 30% of the rock. The area examined during this investigation was about 700 m by 300 m. Samples contained greater than 20% Al_2O_3 (appendix G), which corresponds to kyanite content of at least 30%. Much of the surface was covered by colluvium, but bedrock exposures were consistently kyanite-quartz schist, with kyanite nodules which varied in size.

Because of the lack of known occurrences, mineral activity within the Camp Wood - Sycamore Creek - Cottonwood Canyon priority areas is unlikely in the near future. Any mining or exploration at the prospects near Camp Wood or at the Mary D. would probably not affect the priority areas. Detailed evaluation, such as drilling, trenching, or bulk sampling of the kyanite occurrence would probably not affect Sycamore Creek. Medium- to large-scale production could increase sedimentation in Sycamore Creek. This potential problem could easily be mitigated by adequate drainage controls in the relatively gentle terrain that hosts the occurrence.

Southern Bradshaw Mountains

Numerous mines and prospects in the southern Bradshaw Mountains were examined and sampled prior to the designation of "priority areas." The results of those examinations are summarized briefly in this section. The prospects examined lie in an area from about 3 km north of Goodwin to the southern boundary of Prescott National Forest (samples 192-194, 202-344, 373-440, plate 1).

Precambrian rocks exposed in the southern Bradshaw Mountains include metavolcanics and metasediments of the Big Bug Group of the Yavapai Series, gabbro, Brady Butte Granodiorite, Crooks Canyon Granodiorite, and Crazy Basin Quartz Monzonite. Laramide-age rocks include intermediate composition stocks and associated dikes near Pine Flat and Crown King, and rhyolite porphyry dikes of significant horizontal extent between Crown King and Mayer. Tertiary basalts and sedimentary rocks of the Hickey and Milk Creek Formations overlie the Precambrian rocks, primarily on the east and west flanks of the range. (See Anderson and Blacet, 1972a; Reynolds, 1988; Lindgren, 1926, plate 2.)

Several types and ages of mineralization occur in the southern Bradshaw Mountains. Precambrian massive sulfide deposits are typical in the Mayer district. Later Precambrian tungsten-bearing quartz veins are found in the Money Maker and Lucky Star districts. The Pine Flat, Battle Flat, and possibly parts of the Turkey Creek districts are related to the Laramide-age Pine Flat stock. The Tiger, Peck, Lane Mountain, and possibly the Tuscumbia and Minnehaha districts are related to the Laramide-age Crown King stock and associated rhyolite porphyry dikes. The Black Canyon district is mid-Tertiary in age. (See Keith and others, 1983, map; plate 1; table 1).

Most of the large past producing mines are on patented lands, although major exceptions are in the Black Canyon district, where the Golden Belt, Golden Turkey, and French Lilly mines and mills are on public land.

During this investigation, 214 samples were collected from mine workings on public land in the southern Bradshaw Mountains, outside of Forest Service designated priority areas (samples 192-194, 202-344, 373-440). Maximum gold concentration was 2.085 oz/t in a select sample of iron-stained quartz and silicified breccia from the dump of a short adit near Blanchard Spring (sample 309). The highest gold concentration in a chip sample was 0.912 in a quartz-specularite vein at the Camp Bird Mine, between Minnehaha and Wagoner (sample 439). Eight of 214 samples contained greater than 10,000 ppb, 42 contained greater than 1,000 ppb, and 99 contained greater than 100 ppb gold. Maximum silver concentration was 46.83 oz/t from a small stockpile of copper-stained quartz at the Morgan Mine, between Battle Flat and Pine Flat (sample 222). This sample contained considerable quantities of copper and antimony, indicating the possible presence of pyrargyrite and/or tetrahedrite. Maximum copper concentration was 6.72% in metarhyolite with abundant azurite and malachite at a stockpile at a shallow shaft north of Townsend Butte (sample 291). Considerable gold, silver, arsenic, antimony, and tellurium were in this sample. Maximum lead concentration was 3.71% in a chip sample from a gently-dipping oxidized hematite-quartz vein at Cleators Claims along Turkey Creek about 1.5 km north of the confluence with Poland Creek (sample 327). Silver, zinc, arsenic, and antimony were also present in significant quantities. Maximum zinc concentration was 10.28% in a select sample of quartz-sulfide vein material at the Gazelle shaft dump along Humbug Creek (sample 378). (See appendixes B, C, D, E.) These maximum concentrations are at least 2 orders of magnitude higher than most of the sample values. In general, most samples contain subeconomic grades of base and precious metals for vein-type deposits.

Placer gold occurs in some of the drainages. Small-scale placer activity was observed in Black Canyon, Turkey Creek, Poland Creek, and Cherry Creek. Evidence of previous placer activity was noted in Humbug Creek, Crazy Basin Creek, and in the Minnehaha Flat area. Wilson (1961, p. 54-57) reports placer activity at Blind Indian Creek, Peck Creek, and Tiger Creek. Historically, the Minnehaha Flat area was the largest recorded producer (Wilson, 1961, p. 55), but most current activity seems to be concentrated in Turkey and Poland Creeks, and in Black Canyon.

Future mineral activity is almost certain within the southern Bradshaw Mountains. Low impact exploration programs, or minor production activity may be attempted by small companies and/or independent operators. Reprocessing of tailings or dumps may be attempted, especially at the often-claimed and studied tailings at the Golden Belt - Golden Turkey mills along Turkey Creek. Activity in the Black Canyon district would probably be on public land. Mineral activities in other districts will probably be mostly restricted to known veins on patented lands, and probably have negligible effect on public land.

The Pine Flat Stock shows evidence of mineralization and Spatz (1974, p. 141) suggests the Pine Flat Stock may represent the upper portion of a porphyry copper deposit. The area was drilled extensively in the mid-1960's, and Spatz feels economic grade mineralization might not be encountered for 1 to 2 kilometers below the surface. Because of the depth, and recent homebuilding on patented claims at Pine Flat, an intensive exploration effort by a large company is unlikely in the near future, unless copper prices jump dramatically.

Recreational and small-scale commercial placer activity will continue, especially where vehicle access is available along Turkey and Poland Creeks.

CONCLUSIONS

Many types of mineral occurrences and deposits occur in Forest Service-designated priority areas in the western part of Prescott National Forest. These mineralized areas are known to contain subeconomic, and in some cases, marginally economic concentrations of metals.

As defined in this report, "mineral development potential" refers to minerals-related development beyond the extent of claim staking. Examples of mineral development could include, but are not limited to, activities such as road-building or improving, refurbishing old workings, exploration drilling and/or trenching, tailings or dump processing, small-scale production, and large-scale production. Areas in the western part of Prescott National Forest with moderate and high metallic "mineral development potential" are delineated on plate 1. Placer potential is not shown, because virtually every drainage in the Bradshaw Mountains has potential for recreational panning when water conditions permit.

Most of the mineral development potential is for small-scale activity on vein-type deposits. In many cases, previous lode mines exploited naturally concentrated oxidized ore from veins near the surface. The mines often closed when primary ore, considerably richer in sulfides but lower in precious metals, was encountered. Economic grades may still remain within ore shoots, in both oxidized and unoxidized portions of the veins; however, these types of deposits are generally small tonnage and can be difficult to locate. For these reasons, large companies probably will not expend great effort or expense to develop vein deposits in the Bradshaw Mountains. Continued claim staking, underground and surface exploration of known vein systems, and possibly small-scale production activities by individuals or small companies should be expected in the priority areas south of, and west of Prescott. Because most of the large past-producing mines, and many of the known vein systems, are patented, development at these properties should have little effect on Forest Service land, especially if the commodity is to be mined underground. Road and drill pad construction, mine waste dumps, and uncontrolled, untreated mine drainage could impact public land adjacent to the patents. These impacts can be mitigated by requiring detailed operating plans which include reclamation provisions, by mine operator cooperation in following operating plans, and by careful surveying to delineate public and private land in active areas.

Altered Laramide igneous rocks could be targets for large gold or copper exploration projects. Areas with potential for exploration for large tonnage deposits, in addition to Copper Basin, include the Walker stock in the southeast part of the Groom Creek priority area, the northwest part of the Big Bug Creek priority area, and the north part of the Crooks Canyon priority area; the Big Bug stock in the northern part of the Big Bug Creek priority area; the Crown King stock and priority area; the Glen Oaks stock near the north part of the Hassayampa priority area; and the Pine Flat stock, east of Goodwin. With the exception of Copper Basin, none of the stocks have well-defined near-surface large-tonnage targets. Major exploration projects by large companies are unlikely unless copper or gold prices increase dramatically. Exploration projects for these large deposits should have little effect on the Forest. Road and drill pad construction could temporarily impact public land, but reclamation of the sites should effectively mitigate such minor disturbances.

Large mines, as proposed for Copper Basin, could significantly affect public land. Under the current ownership scheme, the pit would be on private land, but most of the waste rock and tailings disposal sites, mine and mill support facilities, etc., would be on public land. Land exchanges, such as the one negotiated and suspended in the late 1980's, could mitigate these impacts. Air quality is a concern, because it can affect areas off-site. This problem can be addressed by using mining and blasting methods which create less dust, and by liberal use of water trucks. At present, the socio-economic climate in Prescott is unfavorable for major mining projects. Much, but certainly not all, of the local population is concerned about the recent rapid growth and development of the Prescott area. Because Prescott is only about 8 km away from the deposit, some Prescottonians feel their lifestyles may be threatened by an influx of population related to a major mining project. The Copper Basin deposit is considered to be marginally economic, and Phelps Dodge is currently pursuing other, more lucrative projects in less restrictive locales. Major efforts to mine in Copper Basin will probably coincide with a significant copper price increase.

Recreational and a few small commercial placer operators work many of the streams in the Bradshaw Mountains, especially the Hassayampa River, Lynx Creek, Groom Creek, Turkey Creek, Poland Creek, Crooks Canyon, Big Bug Creek, and Cherry Creek (west of Minnehaha Flat). Tributaries of these streams are worked sporadically and when water levels permit. This trend is expected to continue, barring restrictions by Forest Service officials concerned about detrimental impacts to riparian habitat. At present, the placer operators are not allowed to dig in established soils on terraces adjacent to streams; and are required to work in the active channel, below the high water mark. In many cases, the riparian damage is a result of camping pressure on the terraces alongside these streams. During our study, it became obvious that placer operators, recreational campers, and day-users frequently used the same riparian areas, simply because they were the most scenic, had pine trees for shade, flat terrace areas to park and camp, water, and often were adjacent to major roads for easy access. Cattle also used these areas extensively for grazing and water. Before further restrictions on placer operators are enforced, an accurate assessment of the damage done by other human users and cattle is needed.

Decomposed granite is a commodity in demand in the rapidly-growing Prescott area. Several areas near Groom Creek, Thumb Butte, and Iron Springs appear to have ample resources. Because of lower population density and less public use, the area west of Iron Springs is probably best suited for additional large commercial quarries. Smaller quarries used by the county are less socially objectionable, and should be located as close as possible to the end use site.

Metarhyolite used for dimension stone is sporadically quarried at and adjacent to a former metal mine about 1 km west of Lynx Lake, in the Groom Creek priority area. A similar quarry is active on private land at the Blue Bell Mine (a former massive sulfide base-metal producer) near Mayer. Future locations of these small, commodity- and market-specific operations are difficult to predict. Any further dimension stone quarries will probably be similar in size and nature, with minimal impact to public land.

Because of lack of historic mining, and lack of known mineralization at the surface, the Camp Wood - Sycamore Creek - Cottonwood Canyon priority areas have low mineral development potential. Any future development at mineral occurrences such as the Black Magic Mine or the Poley kyanite prospect should not affect the priority areas, if the work is done in a responsible manner.

Some sites were examined in the southern Bradshaw Mountains before the study focused on priority areas. Complete conclusions cannot be drawn, but a few generalizations can be made. Most of the vein-type deposits are east of the Senator Highway, with exceptions near Minnehaha Flat, where veins occur up to 8 km west, south, and east. Future activity will probably be similar to the development discussed regarding priority areas, with minor impact to public land. In the Black Canyon district, near Cleator, several moderate-sized mines and mills are not patented, and exploration or development would have a slightly greater impact on public land. Production activity would probably be mostly underground. Mill tailings processing near Cleator could have a beneficial impact to public land by removing tailings from areas adjacent to perennial streams. Known massive sulfides in the southern Bradshaw Mountains are narrow lenses for the most part, and most previous mines have utilized underground mining techniques, similar to those used on vein deposits. Any activity in the near future would probably be on the known deposits, with little impact to public land. A significant lead and zinc price increase could spur exploration for larger massive sulfide deposits such as the Iron King near Humboldt, and the world-class Verde deposit at Jerome. In the southern Bradshaw Mountains, the most likely areas for major exploration for large-tonnage massive sulfides is north of the Crown King road, south of the Mayer-Goodwin road and east of a line between Brady Butte and the town of Crown King. Areas north of the Mayer-Goodwin road, which are not in priority areas were not examined during this evaluation, but may also be suitable target areas. Exploration activity should not be a major impact to public land, if reclaimed properly.

These conclusions are based on current Forest Service regulations and commodity prices, and the 1872 Mining Law. More restrictive laws and/or regulations would probably result in less mineral activity; higher commodity prices would almost certainly lead to increased mineral activity.

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Appendix A.--Description of samples from Prescott National Forest, Arizona

[Rock sample type definitions: select samples are usually the most apparently mineralized rocks found on dumps or stockpiles; chip samples are linear series of chips taken continuously across an exposure; chip samples longer than 3-m are discontinuous, and are linear series of chips taken at intervals across wide mineralized zones, where a continous chip sample would be impractical; grab samples are numerous, randomly selected rock fragments from dumps, float material, etc.; grid samples are numerous rock or tailings fragments collected in an orderly grid pattern on the surface of dumps, tailings ponds, etc.; channel samples are vertical, and are cut carefully in an effort to obtain equal amounts of material for the entire length of the sample.]

No.	Type, Length	Remarks
001	Grab, dump	Pegmatite strikes N. 40° E., dips vertically. at least 4-m wide; bull quartz, feldspar, muscovite; granodiorite gneiss country rock, foliation strikes N. 45° W., dips steeply SW. 12-m trench.
002	Select	Siliceous zone and foliation strike N. 10° W., dip steeply NE., at least 2-m wide; milky and bull quartz, minor hematite, goethite, trace malachite; granodiorite country rock. 17-m trench.
003	Select	Vein strikes E.; goethite-stained pegmatitic granite, some vuggy. Mary D Mine, caved 180-m adit.
004	4-m chip	Quartz-kyanite schist, foliation strikes N.
005	20-m chip	Do.
006	4-m chip	Bleached argillized granite, sparse malachite. 30-m open cut.
007	Select	Altered granite, quartz, moderate malachite, azurite.
008	Select	Pyrite- and magnetite-rich granular rock; granite country rock. Caved adit, 100-m estimated length.
009	1.3-m chip	Foliation and mineralized rock strike N. 28° E., dip 75° NW.; banded iron formation, abundant hematite, limonite, magnetite, quartz; felsic schist country rock. Open cut, 3-m highwall.
010	Select	Limonite- and malachite-stained quartz, moderate pyrite, chalcopyrite; granodiorite and diorite country rock. Caved shaft, 100-m estimated depth.
011	0.6-m chip	Limonite-stained quartz. Caved shaft, 30-m estimated depth.
012	Select	Vein strikes N. 55° E., dips 55° SE.; limonite-stained quartz, minor galena, pyrite, sparse malachite; diorite, granite country rock. Silver Button Mine, 2 caved, reclaimed adits, 150-m of workings.
013	Select	Shear zone strikes N. 40° E., dips 85° SE., 0.1-m wide; as 12, more galena, sphalerite, less pyrite. Granite country rock. Silver Button Mine, 3 caved adits, largest estimated to be 100-m long.
014	0.5-m chip	Vein strikes N. 70° E., dips 85° SE.; bull quartz, moderate limonite, hematite. Series of shallow pits.
015	Select	Quartz, abundant pyrite, moderate malachite, chrysocolla, sparse galena; granite and diorite country rock. 2 caved adits, 50-m estimated combined length.
016	Select	As 015. 3 caved adits, 75-m estimated combined length.
017	Select	Bull quartz, minor limonite, hematite; granite country rock. 5-m trench.
018	Grab, dump	Bull and vuggy quartz, moderate limonite-hematite. 1-m pit.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
019	Select	Diorite dike strikes N. 70° E., dips vertically, 0.5-m wide; dark, fine-grained rock, breccia, quartz stringers, minor pyrite, chalcopyrite, trace malachite. Caved shaft, now 5-m deep.
020	Select	Vein strikes N. 30° E., dips 60° SE., 1.5-m wide; quartz, abundant pyrite, sparse galena; quartz diorite and quartz monzonite porphyry dike country rock. 22-m flooded shaft.
021	1.2-m chip	Deeply weathered, clay-altered quartz monzonite?, limonite stringers. Portal of E.-trending 15-m adit, stoped to surface.
022	0.3-m chip	Quartz-galena vein within a bleached quartz latite? sill? that dips 8° SE., 3-m thick; quartz-biotite granodiorite country rock. Silver Gulch Mine, 34-m open cut.
023	7-m chip	Series of dikes and shears strike N. 70° W., dip SW.; weathered diorite with calcite veinlets, quartz stringers, limonite, hematite, minor malachite. 7-m open cut.
024	Select	Vein strikes N. 60° W., dips 60° NE., 0.3-m wide; limonite-, hematite-stained quartz, silicified quartz diorite. Flower Gold Mine, 25-m shaft.
025	1-m chip	Leached caprock, gossan, abundant limonite, hematite; diorite country rock. 20-m open cut.
026	Select	Quartz-calcite vein, abundant sphalerite, chalcopyrite, galena; quartz diorite country rock. U.S. Navy Mine, caved inclined shaft.
027	4-m chip	Vein and dike strike N. 6° E., dip 75° SE.; irregular vein within dike, abundant hematite, limonite, sparse malachite; chalky, clay-altered felsic igneous country rock. 18-m open cut.
028	1.5-m chip	Porphyry dike strikes N. 65° E., dips vertically; bleached and limonitic, clay-altered, limonite veinlets, quartz diorite country rock. 7-m open cut.
029	Grab, dump	Fine-grained granite, or coarse rhyolite, abundant quartz. pyrite veinlets. 2-m pit.
030	Grab, dump	As 029. Caved shaft, 20-m estimated depth.
031	Grab, dump	Poorly exposed pegmatite; bull quartz, abundant limonite, hematite; granodiorite country rock. 6-m trench.
032	Select	Shear zone strikes N. 7° E., dips 70° NW.; sulfur- and limonite-stained quartz, pyrite, trace malachite, galena, sphalerite; diorite country rock. Caved adit.
033	Select	Limonite- and hematite-stained quartz, trace pyrite; coarse metarhyolite or gneiss country rock. Several shallow pits and trenches.
034	Select	Foliation strikes N., dips 75° W.; sulfur- and limonite-stained silicified schist, abundant fine pyrite. New Strike Mine, caved adit and dimension stone quarry.
035	0.3-m chip	Vein strikes N. 70° W., dips 35° SW.; fractured quartz, abundant limonite; granite country rock. Declined adit with horizontal stopes, 70-m total workings.
036	Select	Quartz, abundant limonite, moderate malachite, sparse azurite, trace chalcopyrite.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
037	Select	Quartz pod, elongate at N. 60° E., 70° SE.; sulfur- and limonite-stained quartz, coarse pyrite; unmetamorphosed diorite country rock. Stockpile at 14-m shaft with drifts of unknown length.
038	Select	Vein strikes N. 80° W., dips vertically; bull quartz with trace malachite and chalcopyrite, metadiorite with minor malachite and chrysocolla. 5-m shaft.
039	0.2-m chip	Vein strikes N. 80° E., dips vertically; sheared quartz, schist, abundant limonite. 3-m pit.
040	0.3-m chip	Vein strikes N. 40° W., dips 80° NE.; quartz, moderate chalcopyrite, pyrite, bornite; gabbro country rock. Adit 18-m long to flooded winze, stoped to surface.
041	Select	Limonite-stained bull quartz, vuggy quartz, sparse malachite, pyrite; mafic schist country rock, foliation strikes N. 14° E., dips 85° SE.; probably lens parallel to foliation. 10-m open cut.
042	2.4-m chip	Vein and foliation strike N. 8° E., dip 70° SE.; limonite-stained bull and vuggy quartz, sheared schist, trace malachite. Open cut.
043	0.4-m chip	Siliceous zone and foliation strike N. 40° E., dip 85 SE.; schist with sugary quartz, limonite, and black iron-oxide along fractures; fine-grained gray metasiltstone country rock. King Benjamin, trash-filled shaft, 100-m estimated depth.
044	Select	Bleached, limonitic gossan and breccia, quartz, sparse pyrite; amphibole-quartz schist. 2-m pit.
045	Select	Black, hard, dense iron-rich rock; probably lens in chlorite and chlorite-quartz schist; foliation strikes N. 20° W., dips 47° SW. Series of pits aligned N.-S.
046	1-m chip	Shear zone, calcite vein strike N. 20° E.?, dip vertically; sheared schist, 10-cm-thick calcite vein; parallel or subparallel to foliation; interlayered mafic and tan schist country rock. Hoot Owl, face of 8-m open cut.
047	0.5-m chip	Lens of resistant rock strikes N. 25° E., dips 60° NW., subparallel to foliation; Iron-rich, abundant limonite, foot wall brecciated with metasiltstone, quartz, and iron-oxides mixed. 2-m pit.
048	Select	Smelter slag, minor malachite, chrysocolla.
049	Select	Quartz and felsic schist with massive and stringers of sulfides, including sphalerite, galena, pyrite, chalcopyrite?; Amulet Mine, caved shaft, 15-m estimated depth.
050	Tailings, grid	Buff and limonitic sand. Amulet Mine tailings, 800 m^3.
051	Select	Vein and foliation strike NE., dip NW., but not necessarily parallel; limonite- and hematite-stained mafic and bleached fine-grained rock, minor vuggy quartz, pyrite, trace chrysocolla; fresh, fine-grained diorite country rock. Postmaster Mine, caved adit, 1,300 m^3 dump.
052	1.1-m chip	Shear zone and foliation strike N. 70° E., dip 80° SE.; sheared diorite, bleached, limonitic gouge, quartz stringers; diorite country rock. Caved shaft, 30-m estimated depth.
053	0.4-m chip	Shear zone and weak foliation strike N. 78° E., dip 85° NW.; bleached, limonitic gouge; diorite country rock. Portal of gated, flooded adit.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
054	1.3-m chip	Braided vein and foliation strike N. 35° E., dip 85° SE.; fractured, vuggy quartz, abundant hematite; mafic schist country rock. Portal of caved, flooded adit.
055	Dump, grid	Bleached pyritic granodiorite. New Years Gift, shaft, 30-m to water.
056	Random chip	Brecciated, recemented gossan, abundant limonite, hematite. New Years Gift.
057	Grab, stockpile	Altered granodiorite with abundant pyrite, some coarse, minor chalcopyrite. Homestead Mine, stockpiles on S. side of road near open pit, about 380 m^3.
058	Grab, stockpile	As 057, less altered, oxidized. Stockpiles on N. side of road, about 230 m^3.
059	Grab, stockpile	As 058, less chalcopyrite. Eastern stockpiles, about 380 m^3.
060	Grab, stockpile	As 057. Northwestern stockpiles, 100 m^3.
061	1.5-m chip	Slightly clay-altered fractured granodiorite, abundant limonite. Caved shaft, 350 m^3 dump.
062	Select	Granodiorite and quartz with abundant pyrite, chalcopyrite. Shaft, 6-m to water, estimated depth at least 50-m.
063	Dump, grid	Fine- to medium-grained altered granite, disseminated and veinlets of pyrite, chalcopyrite. Caved shaft, 500 m^3 dump.
064	0.2-m chip	Vein and foliation strike N. 40° E., dip 75° NW.; sheared limonite- and hematite-stained quartz, limonitic sandy gouge; interlayered mafic and talc schist country rock. Leadview, caved shaft.
065	0.8-m chip	Irregular vein and foliation strike N. 40° E., dip vertically; bull quartz, minor tourmaline?, limonite, hematite; gray slate, quartz-rich schist country rock. Good Luck Claims, shaft, 12-m to water.
066	1.1-m chip	Foliation strikes N. 35° E., dips 85° NW.; mica-quartz schist, moderate limonite, hematite, minor malachite, azurite. Alteration Group, 18-m dozer scrape.
067	Select	Vein and foliation strike N. 30° E., dip 85° SE.; quartz, gossan, sparse pyrite, chalcopyrite, malachite, azurite; gray schist country rock. Alteration Group, 15-m shaft.
068	Select	Mineralized zone and foliation strike N. 28° E., dip vertically; chlorite-quartz schist, minor chrysocolla, malachite, azurite, trace pyrite, chalcopyrite. Lawson Property, southwestern of 2 caved shafts.
069	Select	Vein strikes N.?, dips ?, not exposed; Dense, iron-rich rock, breccia, massive and drusy quartz; schist country rock foliated at N. 10° E., dips 75° NW. Caved shaft, 30-m estimated depth.
070	Select	Vein strikes N. 28° E.?, dips ?; drusy and massive quartz, abundant limonite, hematite, minor pyrite; intermixed felsic and mafic massive metavolcanics? Several shallow pits.
071	0.3-m chip	Vein and foliation strike N. 3° E., dip 80° NW.; vuggy quartz, silicified, dense limonitic rock; intermediate schist country rock. Portal of caved adit, 15-m estimated length.
072	0.2-m chip	Vein strikes N. 15° E., dips ?; drusy banded quartz, limonite; chunk of vein adjacent to 15-m trench.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
073	Select	Breccia zone and foliation strike N., dip 50° W.; as 071, and brecciated; chlorite schist and diorite country rock. Caved adit, flooded shaft, less than 100-m total estimated length.
074	0.3-m chip	Vein and foliation strike N. 26° E., dip 75° NW.; dense, intensely iron- and manganese-stained rock, drusy quartz, sheared limonitic, partly silicified felsic schist; schist and diorite country rock. From N. wall of caved shaft.
075	2.4-m chip	Reddish-brown sandy tailings; backhoe trench in 400 m^3 tailings pile.
076	2-m chip	As 075; backhoe trench in 400 m^3 tailings pile. Upper pile.
077	Select	Vein? and foliation strike N. 20° E., dip 63° NW.; dense intensely iron- and manganese-stained rock, drusy quartz; felsic schist country rock. From western of 2 parallel veins; float from shallow pit.
078	0.5-m chip	Vein strikes N. 10° E., dips 85° SE.; drusy and massive limonitic quartz; diorite country rock. Caved shaft.
079	0.4-m chip	Contact and foliation strike N. 25° W., dip vertically; bleached, limonitic clay, clay-altered rock; diorite on west, intermediate schist on east. Open cut, 3-m-high highwall.
080	0.3-m chip	Vein and weak foliation strike N. 7° E., dip 75° NW.; dense limonitic rock, drusy quartz, limonitic, bleached clay gouge; diorite country rock. Caved shaft, 30-m estimated depth.
081	0.6-m chip	Vein strikes N., dips 85° W.; altered diorite?, clayey and sandy gouge, quartz stringers, abundant limonite. 2-m pit.
082	0.5-m chip	Vein strikes N. 30° E., dips 85° SE.; dense limonitic rock, drusy quartz, clay gouge; deeply weathered diorite country rock. Open cut, 5-m-high highwall.
083	Select	Vein strikes N. 7° E., dips 75° NW.; dense limonitic rock, drusy quartz, pyrite; interlayered diorite, felsic schist country rock. Caved shaft and adit, 200-m estimated length of workings.
084	0.5-m chip	Shear zone strikes N. 12° E., dips 75° SE.; clay gouge, abundant iron-oxide, quartz stringers; diorite country rock. Open cut with 15-m-high highwall.
085	Select	Vein strikes N. 5° E., dips 70° NW.; as 083; hornfels (blocky metarhyolite?) country rock. Caved shaft, now 6-m deep.
086	0.8-m chip	Shear zone strikes N. 5° W., dips 80° SW.; limonitic, bleached clay, sheared limonitic diorite. 20-m from portal in Hidden Treasure adit, caved at 22-m.
087	0.3-m dump	Vein strikes N. 80° E., dips 60° NW.; bull quartz, minor limonite, manganese oxide; schist country rock foliated at N. 80° W., dips 75° NE. Caved shaft.
088	Select	Vein strikes N. 45° E., dips steeply NW., 0.3 - 0.7-m wide; chrysocolla, malachite, sheared limonitic granodiorite, minor quartz. Convergens Mine, upper and main adit dumps.
089	0.5-m chip	Fracture zone strikes N. 70° E., dips 80° NW.; limonitic, hematitic gouge, chrysocolla- and malachite-stained granodiorite. Convergens Mine, portal of northern adit, trends SW. for 10-m.
090	Select	Pegmatite in granodiorite and mafic schist country rock; bull and vuggy quartz, abundant galena, pyrite, minor chalcopyrite. Caved Silver Flake shaft, at least 300-m of workings.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
091	Select	Vein strikes N. 30° W., dips 60° NE., 0.5-m wide; quartz, sparse pyrite, chalcopyrite, bornite, galena; granodiorite country rock. Ruth Mine dump.
092	2.1-m chip	Vein strikes N. 22° W., dips 85° NE.; bull quartz, moderate limonite; granodiorite country rock. About 20-m from S. end of 70-m open cut.
093	1-m chip	Shear zone strikes N. 19° W., dips 70° SE.; sheared and silicified granodiorite, quartz, abundant limonite, minor pyrite. Adjacent to stope, about 45-m from face of 109-m adit trending NNW.
094	1-m chip	Vein strikes N. 5° W., dips 72° NE.; fractured quartz, gouge, limonite. Adjacent to stope, about 15-m from portal in adit of 093.
095	1-m chip	Quartz vein strikes N. 6° E., dips 75° SE.; clear, milky quartz, sheared limonitic sandy granodiorite country rock. Portal of 68-m adit trending N.
096	Select	Quartz vein strikes N. 15° E?, at least 0.3-m wide; sparse pyrite, galena, sphalerite?; granodiorite country rock. 2 open cuts.
097	1.1-m chip	Vein and foliation strike N. 15° E., dip 70° SE.; irregular quartz veinlets in shear zone; mafic to intermediate chlorite schist country rock. Portal of Independence adit, caved at 12-m.
098	Select	Quartz vein strikes N. 55° W., dips 60° SW., up to 0.5-m wide; sparse pyrite, sphalerite?, galena?; granodiorite country rock. 18-m adit trends SE.
099	Select	As 098, more sulfides. Caved adit, 75-m estimated length.
100	Select	Milky, clear quartz; moderate pyrite, chalcopyrite, trace bornite; limonitic granodiorite country rock. 1-m pit.
101	Select	Shear zone and weak foliation strike N. 20° W., dip vertically; partly silicified granodiorite, moderate pyrite disseminated and in veinlets, minor galena, trace chalcopyrite, bornite. Interconnected 25-m adit, 15-m shaft.
102	0.3-m chip	Silicified shear zone strikes N. 30° W., dips 60° NW.; sheared granodiorite, quartz, moderate limonite, sparse galena. Portal of 10-m adit trending NW.
103	1-m chip	Shear zone strikes N. 80° E., dips 80° NW.; sheared, partly silicified limonitic granite. Caved 80-m adit.
104	Select	Quartz-pyrite rock, sparse galena, sphalerite. Hopper adjacent to shaft, at least 20-m deep.
105	0.2-m chip	Shear zone strikes N. 65° E., dips 55° NW.; sheared, clay-altered bleached, limonitic granite. 30-m adit trends north.
106	1.8-m chip	Shear zone strikes N. 53° W., dips 75° NE.; sheared limonitic clay-altered granodiorite, green-gray gouge. Catoctin Mine, SE. side of stope, about 15-m from portal.
107	0.3-m chip	Shear zone strikes N. 80° W., dips 75° NE.; intensely clay-altered, bleached and limonitic granodiorite. 8-m shaft.
108	2.0-m chip	Shear zone strikes N. 45° E., dips 70° NW.; bleached and limonitic gouge; dark, fine-grained granodiorite country rock. Portal of partly caved adit.
109	Select	Gray, sulfur-stained quartz, sparse pyrite, galena. Caved adit, 50-m estimated length.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
110	Select	Vein strikes N. 5° E., dips vertically, 0.6-m wide; bull quartz with abundant chalcopyrite, pyrite, malachite, minor bornite; granodiorite and quartz latite? country rock. Stockpile at caved shaft, 30-m estimated depth.
111	Select	Vein strikes E., dip ?; quartz, felsic fine-grained rock, pyrite; diorite and granodiorite country rock, foliation strikes N. 17° W., dips 65° SW. Large dump at caved shaft.
112	Select	Crushed limonite- and hematite-stained rock. From hopper at shaft of 111.
113	Select	Joints and weak shears strike E., dip 30° S.; silicified quartz latite porphyry, abundant limonite, hematite, sulfur-stain, moderate pyrite, arsenopyrite?. Buck Haven Mine stockpile, 50-m adit trends S. 10° W.
114	1-m chip	As 113, fewer sulfides. Buck Haven Mine, 7-m declined adit connected by winze to adit of 113.
115	0.5-m chip	Vein strikes N. 14° W., dips 80° SW., possible north extension of 116; fractured, slightly limonitic quartz. Climax Mine, above portal of upper adit, north of 116.
116	0.7-m chip	Fracture zone strikes N. 45° W., dips vertically; glassy and gray quartz, partly silicified quartz latite?, moderate limonite. Climax Mine, upper adit trends N. 45° W. for 15-m.
117	2-m channel	Buff sandy mill tailings. Climax Mine, about 100 m^3 of tailings.
118	Select	Quartz, silicified quartz latite?, abundant coarse pyrite. Climax Mine, caved lowest adit.
119	0.7-m chip	Silicified zone strikes N. 12° W., dips 70° SW., possible continuation of 121; bleached and limonitic, clay-altered and silicified quartz latite? Climax Mine, west side of portal above and south of new adit; this adit at least 30-m long with downstopes.
120	1-m chip	Intersecting shear zones strike N. 30° E. and N. 15° W., dip 50° NW. and 70° SW., respectively; gray and limonitic gouge, pieces of altered quartz latite?, abundant limonite, minor chrysocolla. Climax Mine, newest adit.
121	2-m chip	Shear zone strikes N. 8° W., dips vertically; bleached and limonitic, clayey and sandy gouge, limonitic, moderately clay-altered quartz latite? Climax Mine, portal of caved adit adjacent to new adit.
122	Select	Sulfur-stained silicified and pyritized quartz latite? Climax Mine, dump of new adit.
123	0.6-m chip	Quartz vein strikes N. 30° W., dips 55° NE.; abundant pyrite, minor chrysocolla, trace chalcopyrite; sheared limonitic granodiorite country rock. Twin Ledge adit, 35-m.
124	Select	Quartz vein strikes N. 60° W., dips vertically, 0.6-m wide; silicified granodiorite, quartz veinlets, abundant fine pyrite. 8-m shaft.
125	Select	Jarosite-, goethite-stained granodiorite, quartz veinlets; silicified, clay altered; pyrite in siliceous pieces; pod of pyritized country rock? 3-m pit.
126	3-m chip	Quartz lenses in granodiorite; bull and vuggy quartz, moderate goethite. 10-m open cut.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
127	Select	Fresh to slightly clay altered granodiorite; disseminated pyrite, trace malachite. Caved shaft, 40-m estimated depth.
128	1.5-m chip	Fracture zone strikes N. 50° E., dips 75° NW.; deeply weathered or sheared granodiorite, pods of gossan, drusy quartz, dark brown, fine-grained, dense rock. Portal of mostly caved adit, trends NE., 70-m estimated length.
129	Select	Quartz lenses, parallel to fractures, strike N. 30° E., dip 65° NW.; limonitic gossan, fine-grained, green-gray hard rock, banded quartz with sparse pyrite; granodiorite country rock. 1-m pit.
130	0.3-m chip	Vein strikes N. 75° E., dips 50° NW.; limonitic quartz, sheared brown granodiorite. 1.5-m pit.
131	Select	Limonitic gossan, drusy quartz, quartz-ankerite vein with sparse pyrite; granodiorite country rock. Caved shaft, 30-m estimated depth.
132	Select	Vein strikes N. 48° E., dips 80° SE.; quartz, abundant pyrite, arsenopyrite, galena, sphalerite; some is banded; fresh diorite country rock. Caved shaft, now 3-m deep.
133	3-m channel	Sulfide-rich and oxidized tailings. 900 m^3 tailings pile.
134	0.3-m chip	Shear zone strikes N., dips vertically?; locally silicified, pyrite disseminated and in stringers; altered pyritic Walker Stock country rock. W.-trending 14-m adit.
135	Dump, grid	Fresh Walker Stock granodiorite, sparse, fine disseminated pyrite. Flooded adit, at least 50-m long.
136	Dump, grid	Intensely altered fine-grained Walker Stock, vuggy quartz, abundant coarse and fine pyrite. Shaft, 6-m to water.
137	Select	Banded iron-formation, dense siliceous, abundant hematite, limonite. 6-m-long open cut.
138	Select	Vuggy jarosite- and limonite-stained quartz, abundant pyrite, galena. Caved shaft, 150-m estimated depth.
139	Select	Vein strikes N., dips steeply W.; quartz, sparse pyrite, trace chalcopyrite; dark, hard, dense, fine-grained metabasalt? wall rock, with blebs and stringers of pyrite. Transcendent, flooded 350-m adit.
140	Dump, grid	Bleached, fine-grained Walker Stock, quartz phenocrysts, moderate pyrite disseminated and in blebs. Transcendent, NW.-trending 30-m adit.
141	0.2-m chip	Vein strikes N. 70° E., dips vertically; quartz, pyrite. Arizona Victory Copper Mine, 8-m from portal in NE.-trending adit, caved at 16-m.
142	1.8-m chip	Walker Stock granodiorite altered to crumbly quartz, pyrite, and clay. Arizona Victory Copper Mine, 12-m from portal.
143	Select	Limonitic rhyolite porphyry, gossan, sparse pyrite. 2-m pit.
144	Select	Medium- and fine-grained granodiorite with pyrite disseminated and in veinlets. 2-m pit.
145	0.9-m chip	Rhyolite dike strikes N. 15° E., dips 85° SE.; sheared near contacts, quartz phenocrysts in fine-grained matrix; granodiorite country rock. Portal of flooded adit at least 25-m long.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
146	0.7-m chip	Rhyolite porphyry with fine disseminated pyrite, pod of bull and vuggy limonite- and hematite-stained quartz. Portal of NE.-trending 12-m adit.
147	Dump, grid	Granodiorite with sparse fine disseminated pyrite. 3-m open cut.
148	Select	Rhyolite dike strikes N. 30° E.?, dips vertically?; limonite-stained rhyolite, oxidized quartz vein; granite country rock. Caved adit, 20-m estimated length.
149	Dump, grid	Silicified gray biotite porphyry, moderate fine disseminated pyrite, trace malachite; granodiorite country rock. 2-m pit.
150	1.8-m chip	Shear zone strikes N. 70° W., dips 60° SW.; pod of limonite-stained hanging wall, foot wall, and gossan zone (0.1-m), sparse pyrite; granodiorite country rock. Portal of caved adit, 40-m estimated length.
151	1.8-m chip	Irregular shear zone strikes about N. 70° E., dips 55° SE.; sheared, clay-altered granodiorite, abundant chrysocolla, malachite, pyrite, limonitic clay; near contact with Walker Stock. Porphyry Group, 5-m from face of SW.-trending 20-m adit.
152	0.9-m chip	Shear zone strikes N. 30° E., dips vertically?; sheared, bleached, and clay-altered latite porphyry?, moderate limonite; Walker Stock country rock. Subsided 15-m adit.
153	Select	NE.-trending quartz-calcite vein, breccia, sparse pyrite, malachite, barite?; dark, hard, fine-grained metabasalt? and chlorite schist country rock. Curtis (Paystreak) gated adit.
154	Select	Dark gray, fine-grained diorite; moderate pyrite disseminated and in veinlets, minor epidote; probably wall rock of vein; country rock is weakly altered Walker Stock granodiorite. Victor, caved shaft, at least 200-m estimated length.
155	Select	Sulfur- and limonite-stained quartz, abundant pyrite, minor malachite. 2 t stockpile, Victor shaft.
156	0.5-m chip	Shear zone strikes N. 40° E., dips 72° SE.; sandy and clay gouge, sheared Walker Stock granodiorite. Caved shaft, 25-m estimated depth.
157	Select	Fine-grained dark siliceous rock with sparse pyrite, trace malachite; Walker Stock granodiorite country rock. 4-m pit.
158	1.7-m chip	Irregular shear zone and foliation strike N. 40° E., dip 75° NW.; gray clay, sandy gouge, lenses of siliceous, fine-grained rock; interlayered felsic and biotite schist, granodiorite country rock. Maxwell Property, portal of partly caved and flooded adit.
159	Select	Shear zone of 158; quartz, gossan, sparse pyrite, black metallic. Maxwell Property, 1.5-m pit.
160	3-m chip	Footwall of shear of 161; highly clay-altered granodiorite, disseminated pyrite. Money Metals Mine, left drift of S.-trending 60-m adit.
161	0.8-m chip	Shear zone strikes N. 10° W., dips 57° SW.; bleached, limonitic gouge, minor fragments of fine-grained, competent rock. Money Metals Mine portal.
162	Select	Quartz-latite porphyry?; highly clay-altered and pyritized fine-grained rock with quartz phenocrysts. Money Metals Mine dump.
163	2.1-m chip	Mineralized zone and foliation strike N., dip 60° W.; metarhyolite, quartz stringers, moderate limonite. 5 x 5 x 2 m pit.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
164	Select	Fine-grained, dark green dike?; sparse disseminated pyrite; country rock is granitic gneiss. Small caved shaft, dump about 100 m^3.
165	0.5-m	Breccia zone strikes N., dips vertically; clasts of mafic and felsic fine-grained rock, limonitic dark matrix; granodiorite foliation strikes N. 22° E., dips 85° NW. 6-m trench.
166	Select	Intersection of vein (strikes N. 30° E., dips vertically) and breccia zone (strikes N. 45° W.?, dips vertically?; hard, dark, dense, gray-green fine-grained rock, abundant pyrite, chalcopyrite, sparse bornite. Copper Penny shaft, at least 15-m deep.
167	0.6-m chip	Breccia zone strikes N. 10° W.?, dips 30° SW.?; red, green mottled brecciated fine-grained granodiorite?, abundant specularite, sparse pyrite. 4-m pit.
168	Dump, grid	Mineralized zone strikes N. 30° W., dips 85° NE.; brecciated mottled granodiorite?, abundant pyrite, specularite, sparse chalcopyrite, bornite, malachite. NW.-trending 20-m adit.
169	Select	Green, fine-grained siliceous rock, felsic fine-grained rock, abundant pyrite; Crooks Creek Granodiorite country rock. Caved adit, 100-m estimated length.
170	Select	Gray, partly silicified Crooks Creek Granodiorite, sparse malachite, azurite, trace pyrite. Silver Spruce, caved adit, 100-m estimated length.
171	0.8-m chip	Vein strikes N. 45° E., dips 45° NW.; gray quartz, silicified granodiorite, galena, pyrite; fine-grained dark country rock, foliation strikes N. 22°E., dips 70° NW. Open cut, 4-m highwall.
172	Select	Bleached, limonitic gossan, milky quartz, sparse pyrite. Caved adit, 15-m estimated length.
173	0.7-m chip	Irregular shear zone trends NE., dips 65° NW.; sheared, and locally resilicified, gray fine-grained granodiorite? Gneissic granodiorite country rock, foliation strikes N., dips steeply W. Portal of inclined shaft, 5-m deep.
174	Select	Quartz-calcite vein, sparse pyrite barite?, drusy quartz; granodiorite country rock. Caved adit trends NE., at least 30-m long.
175	2.0-m chip	Shear zone strikes N. 10° E., dips 85° NW.; bleached, limonitic, sandy and clayey gouge, fragments of fine-grained rock, minor fresh diorite?; granodiorite country rock. Portal of flooded adit, 150-m estimated length.
176	Select	Silicified, mineralized granodiorite, milky quartz, moderate pyrite.
177	0.5-m chip	Sheared vein strikes N. 4° W., dips 75° SW.; yellow, black, bleached, and red sheared rock; foot wall of diorite dike; granodiorite country rock, weak foliation strikes NE., dips steeply W. Venezia, flooded 110-m adit.
178	Select	Quartz-rich granodiorite, sparse pyrite on fractures. Venezia, 15-m open cut.
179	2.5-m chip	Shear zone strikes N. 70° E., dips 78° NW.; limonitic and green gouge, rock fragments, sparse malachite; sheared mafic dike?; argillized granodiorite country rock. Starlight Mine, portal of upper adit, 110-m, trends NE.
180	Select	Pieces of medium-grained granodiorite and fine-grained diorite, quartz veins; pyrite, sphalerite, galena concentrated along contact and in the mafic rock. Starlight Mine, dumps of lower adits.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
181	2.4-m chip	Shear zone strikes N. 20° W.?, dips 80° SW.?; bleached, limonitic, sandy and clayey gouge, quartz lenses with sparse pyrite, galena; coarse-grained granodiorite country rock. Mostly caved adit, 20-m estimated length.
182	Select	Bleached, limonitic gossan, sparse quartz-pyrite vein; granodiorite country rock, foliation strikes NE., dips steeply NW. Caved shaft, 60-m deep, above Tomlinson Mill.
183	0.3-m chip	Shear zone strikes N. 30° E., dips 80° NW.; sheared green clay, 2-cm limonitic quartz vein; propylitic and argillic granodiorite country rock. 5-m from face of SW.-trending 55-m adit.
184	0.5-m chip	Vein strikes N. 70° E., dips 60° NW.; massive and vuggy quartz, moderate limonite stain. 8-m-long open cut.
185	1.0-m chip	Altered granodiorite with quartz in veinlets, vesicles, moderate limonite, manganese-oxide coating. Collar of flooded 10-m shaft.
186	Select	Altered granodiorite with quartz in veinlets, vesicles, moderate limonite. 2-m pit.
187	0.5-m chip	Weak fracture zone strikes N. 30° E., dips 80° SE.; fractured, weathered diorite, moderate limonite. 1-m pit.
188	Select	Vein, shear zone strike N. 70° E., dip vertically, 1-m wide; quartz, oxidized, altered diorite, moderate pyrite, sparse galena. Caved 45-m Orofino shaft.
189	0.8-m chip	Vein strikes N. 65° E., dips 80° SE.; sheared limonitic diorite, quartz, limonitic gouge, minor chrysocolla. Orofino adit trends S. 70° W., caved at 90-m.
190	0.2-m chip	Vein strikes N. 50° E., dips vertically; quartz with limonite in fractures; country rock is green fine-grained diorite. Mastodon Mine, 20-m shaft.
191	Select	Breccia with abundant quartz and calcite, moderate chalcocite?, malachite and azurite staining. Gold Note? Mine, 20-m-long open cut.
192	0.3-m chip	Shear zone strikes N. 5° E., dips 80° NW.; includes 2/3 bleached shear zone material, 1/3 limonite-stained quartz; country rock is fine-grained, altered diorite? or other igneous rock. 5-m from portal of 12-m adit trending north.
193	Select	Shear zone strikes N., dips 70° E., possibly shear zone of 192; bull quartz with minor limonite and manganese, sheared, limonite-stained and partly bleached country rock. 6 x 3 x 2 m pit.
194	1.1-m chip	Shear zone strikes N. 20° E., dips 50° NW.; sheared, bleached, weathered limonite-rich igneous? rock. Pit or caved shaft (7 x 3 x 2 m).
195	Select	Vein strikes N. 30° E., dips steeply; quartz, limonite-stained gossan rock, galena, pyrite, sparse malachite; country rock is granodiorite. War Eagle Mine, dumps of 3 shafts, all 10- to 15-m deep.
196	Select	Red, black dense gossan rock, abundant iron oxides, moderate quartz; granodiorite country rock. Shallow pit.
197	Select	Vein strikes N. 15° W., dips vertically; bull, drusy, and gray quartz, minor pyrite. Recently reclaimed adits.
198	Select	Vein strikes N. 15° W., dips steeply E.; bull and gray quartz, moderate pyrite, minor actinolite or chlorite; country rock is interlayered felsic schist and diorite, foliation strikes.N. 15° E., dips 65° NW. Caved adit, 200-m estimated length.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
199	Select	As 198, more pyrite, minor chrysocolla, malachite. Caved shaft, 20-m estimated depth.
200	0.9-m chip	Vein strikes N. 8° E., dips 80° NW.; bull and vuggy quartz, trace pyrite, galena?; migmatitic granodiorite country rock. 6-m trench.
201	Select	Vein strikes N. 40° E., dips 56° NW.; quartz, silicified granodiorite, minor chrysocolla, malachite, siliceous breccia. Inclined 12-m shaft.
202	Select	Vein? strikes N. 40° E., dips 75° NW.; quartz, sphalerite, specularite, minor malachite, trace chalcopyrite. 6-m-deep shaft, then caved?
203	Select	Vein? strikes N. 40° E., dips 70° NW.; quartz, sphalerite? or specularite?, minor malachite, azurite; country rock is diorite, hornfels?. Two shafts, 9-m-deep and 3-m-deep.
204	Select	Vein strikes N. 40° E.?, dips vertically?; quartz, bleached schist, moderate massive and crystalline malachite and azurite, specularite. Victor Group, 25-m shaft.
205	0.1-m chip	Vein strikes N. 45° E., dips 85° NW.; silicified schist, minor galena, trace malachite. Victor Group, 2 x 2 x 1 m pit.
206	1.0-m chip	Shear zone and foliation strike N. 55° E., dip 70° NW.; fractured dark green metadiorite, quartz stringers, 3 cm gray gouge, pieces of granite, moderate limonite stain. Victor Group, face of 27-m adit trending SW. Adit cuts an irregular granitic intrusive 12-m from portal, which extends almost to face.
207	Select	Sphalerite? or iron oxide?, minor galena, chalcopyrite, pyrite, bornite, quartz, calcite; chlorite schist country rock, foliation strikes N. 40° E., dips 70° NW., shaft driven on this trend. Silver Streak Group, 7-m shaft.
208	Select	Limonite- and hematite-stained quartz, siliceous hematite-rich breccia. Silver Streak Group, shaft 15-m to water.
209	0.8-m chip	Shear zone strikes N. 15° E., dips 80° NW.; sheared rock, quartz stringers. Silver Streak Group, 4-m-deep shaft.
210	0.2-m chip	Vein strikes N. 35° E., dips vertically; oxidized, intensely limonite-stained quartz. 2 x 2 x 1 m pit.
211	0.4-m chip	Shear zone and foliation strike N. 30° E., dip 65° NE.; sheared and partly silicified limonitic rhyolite? schist. 5 x 5 x 2 pit.
212	Select	Altered granite with partly oxidized pyrite, chalcopyrite? Old Soldier, 4-m shaft.
213	Select	Vein and foliation strike N. 40° E., dip 75° NW.; quartz-pyrite vein; felsic schist country rock. Abundance #5, shaft 12-m to water.
214	Select	Quartz lenses and foliation strike N. 30° E., dip 70° NW.; Quartz, moderate malachite, chrysocolla, minor chalcopyrite, cuprite, pyrite, trace azurite; chlorite schist country rock. "Stockpile" at 6-m and 10-m shafts.
215	0.3-m chip	Shear zone strikes N. 38° E., dips 65° NW.; brecciated, silicified, sparse fine black metallic; chlorite schist, diorite country rock. Happy Days, 2-m shaft, with 2-m adit.
216	0.7-m chip	Silicified porphyry dike, parallel or extension of 217; pyrite disseminated and blebs (pyrite amount proportional to degree of silicification). King Solomon Mine, 6 x 6 x 3 m pit.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
217	Select	Vein and foliation strike N. 15° E., dip 75° NW.; comb quartz, pyrite; country rock is quartz-chlorite schist. King Solomon Mine, 5-m-deep shaft.
218	0.5-m chip	Shear zone and contact between pink-brown rhyolite schist and weathered diorite? strike N. 20° E., dip 75° NW.; sample from footwall, sheared schist with siliceous pods. Portal of caved adit.
219	Select	Shear zone of 218; vuggy quartz, breccia, sphalerite, galena, barite?. Adit at least 20-m long.
220	0.2-m chip	Vein strikes N. 30° E., dips vertically, cuts foliation; quartz, moderate limonite and manganese quartz. 30-m open cut with short, inaccessible adit at face.
221	Select	Quartz-rich rock, weak limonite stain; country rock is light granitic rock. "Stockpile" adjacent to shaft (5-m to water).
222	Select	Quartz, minor hematite, secondary copper mineral stain, sphalerite?. Morgan Mine, "stockpile" adjacent to 10-m inclined (65° W.) shaft.
223	1.0-m chip	Vein strikes N. 30° E., dip unknown, but probably 65° NW.; intensely iron-stained quartz; one of several parallel veins in area. Outcrop N. of 222.
224	0.7-m chip	Vein strikes N. 20° E., dips 62° NW.; siliceous rock, quartz, minor azurite, trace galena. Trinity Mine, 15-m-long open cut N. of inclined, flooded shaft.
225	0.7-m chip	Vein strikes N. 20° E., dips 65° NW.; quartz, manganese stain, minor hematite. Trinity Mine, 10-m trench N. of inclined shaft.
226	Grab, stockpile	Quartz, azurite, malachite, trace galena. Trinity Mine, adjacent to 200 m^3 dump at caved shaft.
227	Select	Quartz, sparse galena, pyrite, and chalcopyrite; country rock is Yavapai Schist, foliation strikes N. 40° E. and dips 65° NW. Beaver Group, upper dozer cuts and lower adits.
228	1.7-m chip	Quartz vein strikes N. 5° E., dips 70° NW., pinches to north, cuts foliation; fractured and massive quartz, moderate limonite, manganese stain. Beaver Group, 20-m-long adit trends N.
229	0.3-m chip	Vein strikes N. 25° E., dips vertically, but undulates; limonite-stained quartz, locally vuggy. Beaver Group, 20-m-long open cut.
230	0.3-m chip	Quartz vein, foliation strike N. 20° E., dip 70° NW.; fractured country rock, limonite stain; country rock is micaceous schist and foliated lenses of diorite. Beaver Group #2, 9 m from portal, 17-m adit trends NNE.
231	0.1-m chip	As 230; fractured quartz, limonite and manganese stain. Beaver #2 Group, prospect above adit of 230.
232	0.2-m chip	Tuscumbia vein strikes N. 48° E., dips 60° NW.; silicified vein material, quartz lenses, abundant clay gouge, sphalerite in quartz, disseminated pyrite; country rock is schist. Tuscumbia Mine, lowest adit, 100-m-long.
233	0.4-m chip	Tuscumbia vein strikes N. 42° E., dips 58° NW.; as 232, fewer sulfides. Lowest adit.
234	1.0-m chip	Tuscumbia vein strikes N. 40° E., dips about 60° NW.; highly fractured rock, quartz lenses and veinlets, minor hematite. Lowest adit.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
235	0.7-m chip	Tuscumbia vein strikes N. 42° E., dips 54° NW.; quartz, clay gouge with abundant hematite. Tuscumbia Mine, second lowest adit, 160-m-long.
236	0.4-m chip	Tuscumbia vein strikes N. 47° E., dips 63° NW.; silicified schist with abundant limonite, minor manganese oxides, and clay gouge with abundant limonite. Second lowest adit.
237	0.4-m chip	Tuscumbia vein strikes N. 45° E., dips 64° NW.; clay gouge with moderate limonite stain, weakly siliceous lenses, sparse manganese oxide. Second lowest adit.
238	0.2-m chip	Tuscumbia vein strikes N. 47° E., dips 63° NW.; clay gouge, quartz vein 2-3 cm thick, limonite stain. Tuscumbia Mine, second lowest adit.
239	0.4-m chip	Tuscumbia vein strikes N. 42° E., dips 65° NW.; sheared, brecciated, and re-silicified, moderate limonite, azurite, malachite, hematite. Tuscumbia Mine, second highest adit, 43 m to cave-in.
240	Select	Abundant quartz, moderate to abundant sphalerite, galena, pyrite, chalcopyrite. Tuscumbia Mine, caved upper adit, dump size 150 m^3.
241	1.3-m chip	Silicified shear zone and foliation trend N. 22° E., dip 65° NW.; sheared and partly re-silicified bleached schist, locally vuggy, minor limonite. Tuscumbia Mine, caved shaft.
242	Select	Vein strikes N. 5° W., dips 65° SW., possible continuation or branch of Tuscumbia vein; intensely iron- and manganese-stained, gossany quartz; country rock is coarse-grained monzonite. Tuscumbia Mine, 8-m-deep shaft.
243	Grab, stockpile	Intensely iron-stained gossan rock, chlorite schist with moderate malachite; schist foliation strikes N. 15° E., dips 85° NW. Silver Chloride Mine, 30-m-deep shaft.
244	0.4-m chip	Shear zone strikes N. 12° E., dips 80° NW.; quartz stringers, limonite stain, trace pyrite. BF claims, 2 x 2 x 3 m pit.
245	1.1-m chip	Shear zone, strikes N. 60° E., dips steeply NW., 2-m-wide; sheared and partly silicified magnetite-hematite schist, pyrite. Note: compass readings for samples 245-247 strongly affected by magnetite. BF claims, 7-m from face of 26-m adit trending NE.
246	0.7-m chip	As 245; secondary sulfur precipitated on ribs and floor at portal.
247	0.5-m chip	Shear zone, strikes N. 30° to 60° E., dips 80° NW.; sheared pyritic magnetite-hematite schist. BF claims, 2-m adit trends SW.
248	0.4-m chip	Pegmatite, includes feldspar, muscovite, quartz; sampled near contact with schist. Thomas Ilardo mine, 3 x 5 x 2 m prospect pit.
249	Select	Pegmatite; bull quartz, earthy limonite. Last Found prospect, 2-m shaft.
250	0.1-m chip	Vein strikes N. 15° E., dips 60° NW.; bull quartz with tourmaline, trace limonite; country rock is metadiorite. What-a-Pal prospect, 12-m-long trench.
251	Select	Shear zone and foliation strike N. 55° E., dip 80° NW.; abundant quartz, hematite, limonite, trace pyrite; country rock is amphibolite. What-a-Pal claim, 9-m-deep shaft.
252	1.0-m chip	Shear zone and.foliation? strike N. 50° E., dip 75° NW.; sheared diorite, quartz stringers. Little Surprise Mine, open cut.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
253	1.2-m chip	Foliation strikes N. 40° E., dips 70° NW.; banded iron- and quartz-rich and schist. 4-m pit with 5-m adit.
254	0.5-m chip	Limonitic, hematitic siliceous zone and foliation strike N. 50° E., dips 75° NW. Adjacent to shaft, 5-m to water.
255	0.4-m chip	Foliation strikes N. 55° E., dips 60° NW.; banded iron- and quartz-rich and schist. Taken above and left of portal of SW.-trending 40-m adit.
256	Select	Foliation strikes N. 30° E., dips 87° NW.; sulfur- and limonite-stained schist and quartz, sparse pyrite, probably from a lens parallel to foliation; diorite, mica schist country rock. Cedar Claims, 15-m shaft.
257	3.0-m chip	Mineralized zone and foliation strike N. 40° E., dip 85° NW.; intensely iron-stained schist, quartz stringers, magnetite? 5-m-deep pit.
258	Grab, stockpile	Vein and foliation strike N. 20° E., dip 62° NW.; vuggy quartz, minor limonite stain; ferruginous chert, quartz-chlorite schist country rock. RR Claims, shaft at least 14-m deep.
259	Select	Irregular bull quartz pods and lenses cut diorite and metasiltstone; bull quartz, moderate malachite, chrysocolla stain; "stockpile" near series of shallow pits.
260	Select	Vein and foliation strike N. 35° E., dip 75° NW.; quartz, minor malachite, trace pyrite; chlorite-quartz schist country rock. Shaft at least 10-m deep.
261	Select	Bull quartz, mica schist, diorite, abundant malachite, sparse pyrite, chalcocite? 2 pits and a 7-m trench.
262	Select	Foliation and vein strike N. 15° E., dip 70° NW.; hematite- and limonite-stained quartz; mica schist country rock. Shaft at least 8-m-deep.
263	0.9-m chip	Bull quartz vein strikes N. 37° E., dips 82° NW.; minor manganese, limonite stain. Three E's #3, dozer cut.
264	0.6-m chip	Vein strikes N. 75° W., dips 85° SW.; banded and vuggy calcite, quartz, pieces of country rock; country rock is schist and metasiltstone, foliation strikes N. 12° E., dips 75° NW. Three E's #3, 2-m-deep prospect.
265	6-m chip	Complex mixture of diorite, weakly metamorphosed sandstones, siltstones, marble, and quartz stringers; variable limonite; possible fault zone? Three E's #2, dozer cut.
266	Select	Pegmatite vein strikes N. 80° E., dips 85° NW., subparallel to foliation; bull quartz, malachite, limonite, hematite, trace pyrite. Three E's #1, 50-m dozer cut.
267	Select	Pegmatite vein strikes N. 75° E., dips vertically; bull quartz, malachite, chrysocolla, pyrite, trace chalcopyrite, bornite; 8-m shaft.
268	1.0-m chip	Shear zone strikes N. 45° E., dips 70° NW.; sheared schist, quartz, moderate limonite; country rock is fine-grained, dark chert. Jubilee Mine prospect pit.
269	1.0-m chip	Shear zone strikes N. 80° E., dips vertically; sheared granodiorite, moderate limonite. 4-m open cut.
270	0.6-m chip	Intersection of horizontal veinlet and shear zone concordant with foliation (strike N., dip steeply W.); limonite-stained quartz, bleached siliceous rock, minor biotite, pyrite; country rock is interlayered granodiorite, chlorite schist. Portal of E.-trending 6-m adit.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
271	Select	Foliation and vein strike N. 14° E., dip 85° SE.; vuggy and bull quartz, minor pyrite, sparse malachite; pink-brown metarhyolite. 10-m shaft.
272	0.5-m chip	Sheared quartz vein strikes N. 35° W., dips 75° NE.; minor chalcopyrite, malachite; diorite country rock. Portal of NW.-trending adit, at least 30-m-long with a split.
273	0.6-m chip	Shear zone strikes N. 75° W., dips 80° SW.; sheared diorite, sandy limonitic gouge, abundant secondary copper minerals. 1-m from face of lower adit (trends W. for 7-m.)
274	0.2-m chip	Shear zone and foliation strike N. 11° E., dip vertically; sheared schist, quartz stringers, moderate limonite; adit trends S. for 8-m, 4-m flooded winze.
275	0.5-m chip	Shear zone and foliation strike N. 25° E., dip 75° SE.; sheared and partly resilicified diorite, quartz stringers, trace pyrite. Face of open cut.
276	1.1-m chip	Vein and foliation strike N. 35° E., dip 80° SE.; quartz stringers, sheared diorite. Shaft at least 8-m deep.
277	Select	Shear zone strikes N. 75° E., dips 70° SE.; gossan, quartz, abundant limonite and manganese-oxides. Upper trench.
278	0.1-m chip	Shear zone strikes N. 60° W., dips 80° SW.; Portal of NW.-trending 5-m adit.
279	Select	Vein strikes N. 20° W., dips 36° NE.; quartz, limonite, sparse pyrite, trace galena?; granodiorite country rock. Several small open cuts, and short inaccessible adits.
280	0.4-m chip	Shear zone strikes N. 4° W., 65° NE.; bleached and limonitic, clay and sandy gouge, fractured chlorite-quartz schist; foliation strikes N. 55° E., dips 65° NE. Portal of S.-trending 16-m adit.
281	1.5-m chip	Foliation strikes N. 57° E., dips steeply; black-stained schist and quartz. Portal of NE.-trending 7-m adit.
282	Dump, grid	Limonitic, sandy rock, fragments of pyrite-rich quartz. Rainbow, 20-m shaft, 70 m^3 dump.
283	Select	Gossan, vuggy quartz, abundant limonite, hematite. 8-m shaft.
284	0.9-m chip	Vein strikes N. 45° W., dips 40° NE.; sheared red schist, sandy gouge, quartz; Parker Claims, S.-trending 4-m adit.
285	Grab, stockpile	Limonitic, vuggy quartz; "stockpile" in vicinity of several shallow pits driven on pegmatite veins parallel to foliation. Parker Claims.
286	0.2-m chip	Quartz pegmatite vein and foliation strike N. 10° E., dip 65° SE.; minor malachite; chlorite schist country rock. Parker Claims, 3 x 2 x 2 m prospect.
287	0.2-m chip	Gently SE.-dipping vein; limonite-stained, partly silicified gouge. 25-m from portal on left rib in stope; adit is 60-m, with extensive stoping.
288	2.0-m chip	Shear zone strikes N., dips 40° E.; limonite-stained sheared diorite, quartz stringers; diorite foliation strikes N. 20° E., dips 85° NW. Parker Claims prospect pit 6 x 4 x 3 m.
289	0.3-m chip	Vein and foliation strike N. 8° E., dip 75° NW.; limonite-stained quartz; metarhyolite country rock. Portal of S.-trending 8-m adit.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
290	0.9-m chip	Foliation strikes N. 15° E., dips 82° NW.; malachite-stained metarhyolite, talc schist, quartz veinlet. Prospect pit.
291	Grab, stockpile	Foliation strikes N. 8° E., dips 85° NW; metarhyolite with abundant azurite, malachite. 4-m shaft.
292	Dump, grid	Decomposed limonitic rock, quartz fragments, sulfur stain. Great Republic shaft, flooded, 280 m^3 dump.
293	0.6-m chip	Shear zone strikes N., dips 30° E.; sheared quartz, minor limonite. Los Felices, upper adit, from left rib S. of inclined winze; adit trends NE. for 32-m, but is sinuous.
294	0.6-m chip	Shear zone of 293 strikes N. 22° E., dips 30° SE.; sheared diorite, schist, abundant manganese and iron oxides, moderate quartz. Los Felices, lower adit, from left rib at N. end of stope; adit trends NE. for 20-m.
295	0.4-m chip	Horizontal vein; limonitic, vuggy quartz, sparse oxidized galena? Fairview Group, portal of N.-trending, 30-m adit.
296	0.2-m chip	Shear zone strikes N. 25° E., dips 40° SE.; limonitic and bleached clay, sheared schist. Near intersection of inclined adit and raise to surface, St. Johns Mine.
297	Dump, grid	Quartz-muscovite and chlorite schist, trace pyrite? St. Johns Mine, 1,000 m^3 dump.
298	Grab, stockpile	Vein and foliation strike N. 5° E., dip 80° NW., and a weak gently-east-dipping shear zone intersect; dark and white quartz, fluorite veinlets, trace malachite. 10-m open cut.
299	3.1-m chip	Intensely limonite-stained, altered granodiorite, quartz stringers, moderate malachite, very oxidized. 4-m open cut.
300	0.5-m chip	Vein strikes N. 35° E., dips 32° SE.; fractured quartz, schist, moderate limonite stain. Fairview Group, 5-m from portal of W.-trending adit at least 25-m long, with extensive horizontal stopes.
301	Dump, grid	Chlorite and mica schist, abundant iron- and manganese-stained siliceous rock, moderate pyrite. Golden Belt Mine, lowest dump, 900 m^3.
302	Dump, grid	Chlorite and mica schist, diorite, minor limonite- and manganese stained rock and quartz. Golden Belt Mine, upper dump, 2,700 m^3.
303	Tailings, grid	Buff sand. Golden Turkey mill tailings, 40,000 m^3.
304	Dump, grid	As 302. Golden Turkey Mine, 9,000 m^3.
305	Dump, grid	Quartz-chlorite-muscovite schist, quartz, trace pyrite, malachite. Western Gray Goose adit, inaccessible, inclined, 400 m^3 dump.
306	0.1-m chip	Shear zone strikes E., dips 30° S.; fractured diorite, minor gouge, quartz, moderate limonite stain. Portal of eastern Gray Goose adit (trends S. for 30-m, declines 30°.)
307	Select	Gossan, quartz, coarse pyrite; diorite country rock. 5 x 5 x 2 m pit.
308	0.4-m chip	Vein strikes N. 15° W., dips 50° NE.; fractured and sheared granite and schist, vuggy quartz, gouge, abundant limonite stain. 5-m open cut.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
309	Select	Limonite- and hematite-stained quartz, minor silicified breccia, sparse pyrite. 20-m branching adit.
310	0.5-m chip	Contact zone between granite and schist strikes NW., dips NE.; gouge, broken quartz, abundant limonite, hematite. Portal of nearly caved 10-m? adit.
311	1.0-m chip	Shear zone strikes N. 22° W., dips 70° NE.; Sheared schist, 0.1-m quartz veinlet, moderate limonite. Portal of caved adit, estimated length 30-m.
312	Select	Quartz-biotite-feldspar pegmatite, molybdenum. Moly Crystal prospect.
313	Tailings, grid	Buff, sandy tails. French Lilly, 2,200 m^3 tailings pile.
314	Dump, grid	Siliceous, micaceous red-brown schist, diorite, minor quartz with pyrite. French Lilly, east half of dump of eastern shaft; represents about 2,500 m^3.
315	Dump, grid	As 314; west half of dump of eastern shaft; represents about 2,500 m^3.
316	0.5-m chip	Vein strikes N. 55° W., dips 40° NE.; limonite- and hematite-stained quartz, minor galena; schist country rock weathers dark red. Short open cut.
317	0.3-m chip	Shear zone strikes N., dips 28° E.; limonitic and bleached, sheared and sandy green diorite. 25-m declined adit trends E.
318	Dump, grid	Bleached schist, minor quartz, trace galena, malachite. Silver Cord Mine, 1,100 m^3 dump.
319	Select	Quartz, moderate galena, pyrite, sphalerite. Dump of 318.
320	0.2-m chip	Gently dipping, undulating vein; bull quartz, minor vugs, moderate limonite, specular hematite; diorite country rock. From lowest in series of cuts.
321	Dump, grid	Limonite-stained schist and quartz, trace malachite, galena. Silver Cord Mine, 8,000 m^3 dump.
322	0.3-m chip	Horizontal shear zone; sandy gouge, sheared country rock, minor quartz, hematite. 8-m adit trends SW.
323	1.5-m chip	Vein and foliation trend N.30° E., dip steeply NW.; iron- and manganese-stained quartz, altered and silicified schist hanging wall. Portal of 3-m adit (trends NE.)
324	Dump, grid	Siliceous chlorite schist with quartz phenocrysts, minor quartz vein with galena, pyrite. Adjacent to mill foundation, 160 m^3 dump.
325	0.2-m chip	Gently dipping, undulating quartz vein; limonite, hematite, minor galena; metarhyolite country rock. Cleators Claims, portal of northernmost adit (trends E. for 30-m.)
326	Select	Quartz-galena vein. Cleators Claims, stockpile at open cut and portal on cliff.
327	0.2-m chip	As 325; oxidized, abundant hematite, minor quartz. Cleators Claims, 11-m from portal on left rib, adit trends S. for 40-m, is sinuous and stoped.
328	0.2-m chip	Shear zone strikes N., dips 30° E.; sheared and sandy country rock; host rock is quartz-rich metarhyolite, foliation strikes N. 10° E., dips 70° NW. Roosevelt Mine, 5-m from portal in 10-m declined adit.
329	Select	Vuggy quartz, limonite, fine sphalerite? Roosevelt Mine dump.
330	Dump, grid	Quartz-mica-chlorite schist, diorite, minor malachite. Last Chance (Brown-Crawford) Mine, 500 m^3 dump.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
331	0.2-m chip	Shear zone strikes N. 80° E., dips 85° SE.; limonitic, bleached gouge, fragments of quartz schist and dark chert?; Irle Claims, flooded adit at least 20-m long.
332	0.4-m chip	Weak shear zone strikes N., dips 15° W.; sheared, oxidized fine-grained rock. Irle Claims, face of stope on right rib, 3-m from portal of NE.-trending 14-m adit.
333	0.3-m chip	Silicified shear zone strikes N. 65° W., dips 75° SW.; abundant barite, limonite. Irle Claims, 4-m shaft.
334	Dump, grid	Red-brown blocky and fissile schist, diorite, minor quartz. Thunderbolt Mine, largest dump, 6,000 m^3.
335	1.1-m chip	Breccia zone strikes E., dips 45° N.; breccia, quartz, gossan. Thunderbolt Mine, collar of lowest inclined shaft.
336	0.1-m chip	Shear zone strikes N. 20° W., dips 40° NE.; limonitic, bleached sandy gouge, schist fragments. Collar of 25-m inclined shaft.
337	Select	Quartz lenses and foliation strike N., dip 75° W.; quartz, fine pyrite. 2-m shaft.
338	Dump, grid	Gray, green schist, olive-green amphibolite, minor quartz, pyrite. Shaft, 500 m^3 dump.
339	2.5-m chip	Shear zone strikes N. 28° W., dips 60° NE; fractured quartz, sheared schist, abundant limonite, chlorite seam on hanging wall. Bimetals (Snaffle) Mine, from NW. wall of caved shaft, adjacent to 40-m adit (trends SE).
340	Dump, grid	Red-brown schist, diorite, minor quartz with galena, pyrite; minor pyritic fines, possible small mill site. Bimetals Mine, 300 m^3.
341	Dump, grid	Gray, green schist, minor quartz, barite, pyrite. Shaft, 550 m^3 dump.
342	0.4-m chip	Vein strikes N. 50° E., dips 38° NW.; quartz, abundant sulfur stain, minor limonite; quartz monzonite country rock. Silver Christmas Mine, 30-m from portal, in newest adit near headframe.
343	Select	Quartz, moderate pyrite, malachite, sparse azurite, sphalerite? Silver Christmas Mine.
344	0.5-m chip	Irregular vein strikes about N. 45° W., dips 50° NE.; gray, black clay gouge, fragments of quartz monzonite. Silver Christmas Mine, pillar between downstopes, eastern adit.
345	1.2-m chip	Shear zone strikes N. 32° E., dips 70° NW.; quartz pods and stringers, sheared country rock; country rock is schist and metadiorite. Portal of Little Debbie, 10-m adit trends NE.
346	3.7-m chip	Pegmatite, feldspar zone; feldspar, muscovite, minor quartz. 20-m open cut.
347	Select	Intensely limonite- and manganese-stained dense rock, locally slightly gossany, minor limonitic quartz. Dozer cut, dump size 250 m^3.
348	Select	Vuggy, weakly limonite- and hematite-stained quartz, bull quartz; diorite country rock. Caved adit trends SW., estimated 75-m long.
349	1.1-m chip	Foliation trends N. 45° E., dips 65° NW.; chlorite schist, limonite, quartz lenses. Open cut adjacent to 10-m? shaft.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
350	0.6-m chip	Vein strikes N. 20° E., dips 80° SE.; highly fractured, silicified, manganese-oxide-coated metasediment, disseminated pyrite. 75-m SSW.-trending adit.
351	0.3-m chip	Vein strikes N. 61° E., dips 60° NW.; clay gouge, quartz fragments. Adit of 350.
352	0.3-m chip	Vein strikes N. 15° E., dips 67° NW.; highly fractured schist?, clay gouge, local quartz fragments and lenses, minor limonite stain. Adit of 350.
353	1.2-m chip	Foliation trends N. 30° E., dips 60° NW.; chlorite schist, abundant hematite, limonite, manganese oxides; mineralization parallels foliation. 8-m adit adjacent to shaft (5-m to water).
354	Select	Mineralized lens and foliation trend N. 30° E., dip 70° NW.; iron-stained schist with stringers of pyrite, galena, sphalerite. Covered, recently worked shaft.
355	0.3-m chip	Vein strikes N. 20° E., dips 77° NW.; sheared, gouge metasediments, abundant limonite, hematite. SW.-trending drift in lower adit, Del Pasco Mine.
356	0.3-m chip	Vein strikes N. 37° E., dips 75° NW.; as 355; quartz stringers, gouge, moderate limonite, hematite, pyrite in quartz and gouge, minor malachite. Drift of 355.
357	0.3-m chip	Vein strikes N. 43° E., dips 75° NW.; limonitic and bleached clay gouge. NE.-trending drift in lower adit, Del Pasco Mine.
358	0.3-m chip	Vein strikes N. 12° E., dips 70° NW.; quartz stringers in limonite-stained medium-grained granite; fissile green schist on foot wall. 3-m from portal of SSW.-trending Johnson Tunnel of Del Pasco Mine, caved at 10 m.
359	0.4-m chip	Vein strikes N. 9° E., dips 77° SE.; limonite- and hematite-stained gouge; granodiorite country rock. 56-m-long adit.
360	0.3-m chip	Vein of 359 strikes N. 13° E., dips 65° SE.; fractured country rock, quartz vein, limonite, hematite, pyrite, clay gouge. Adit of 359.
361	0.3-m chip	Vein of 359 strikes N. 2° E., dip not measured, offset and curved by mafic intrusive; quartz with disseminated pyrite, limonite, hematite, secondary copper minerals. Adit of 359.
362	0.2-m chip	Vein of 359 strikes N. 12° E., dips 58° SE.; quartz with pyrite, chalcopyrite, minor limonite, hematite, secondary copper minerals, clay gouge. Adit of 359.
363	1.0-m chip	Shear zone trends N. 55° E., dips 65° NW.; chlorite schists, quartz boudins; hanging wall is white micaceous gneiss. Gigantic Lode, 25 m open cut above caved adit.
364	Grab	Granitic rock, moderate clay alteration; disseminated pyrite, trace malachite. Material sloughed off rib 280 m from portal of 303-m adit trending N. 83° E.
365	0.6-m chip	Silicified shear zone strikes N. 17° E., dips vertically; quartz veinlets with chalcopyrite, limonite, silicified gouge. 212 m from portal of adit of 364.
366	0.8-m chip	Weak shear zone strikes N. 15° E., dips vertically; abundant fresh and oxidized pyrite, sparse malachite stain. In north drift, 37 m from portal of adit of 364.
367	Select	Vein strikes N. 5° E., dips steeply NW.; malachite- and chrysocolla-stained porphyry. 15-m-deep shaft, Springfield Mine.
368	Select	Quartz, chalcopyrite, and malachite. Caved adit below sample 367, estimated length 30 m.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
369	Grab, dump	White, yellow powdery material, abundant coarse (to 5 mm) pyrite. Middle lobe of lower dump, Springfield Mine.
370	Grab, stockpile	Purple metallic mineral (oxidized chalcopyrite?), pyrite. Lower dump, Springfield Mine.
371	1.2-m chip	Vein strikes N. 5° E., dips steeply SE.; oxidized, hematite- and limonite-stained fine-grained rock; quartz monzonite host rock. Portal of inaccessible adit at lower dump, Springfield Mine.
372	0.2-m chip	Vein strikes N. 15° E., dips 75° NW.; hematite- and limonite-stained siliceous vein material; country rock is coarse-grained granite. 6-m-deep shaft.
373	1.3-m chip	Vein or pod strikes N. 18° E., dips 60° NW.; fine-grained sulfide-, limonite-, and hematite-stained sheared granite. Standard Mine, 20-m adit trends N. 40° W., then a flooded winze near face.
374	1.0-m chip	Vein or pod of 373; as 373 but granite is less sheared, more siliceous and oxidized. Standard Mine, 3-m-deep shaft above adit of 373.
375	1.0-m chip	Gray siliceous gneiss with minor pyrite veinlets; country rock is dark amphibole? schist interlayered with light gray siliceous gneiss; foliation strikes N. 15° E. Taken at of portal of 10-m-long, SW.-trending lower adit, Antelope Mine.
376	2.0-m chip	Gray fine-grained rock, some silicified; country rock is schist foliated at N. 7° E., dips 55° NW. Antelope Mine, 68-m adit.
377	1.5-m chip	Pod of intensely hematite-, limonite-, malachite-, and chrysocolla-stained rock, pyrite and quartz. Antelope Mine.
378	Select	Quartz, abundant pyrite, moderate sphalerite, chalcopyrite, minor galena, bornite?. Gazelle Mine, 10-m-deep shaft, mostly in colluvium. Origin of material not certain.
379	Select	Quartz-pyrite vein, moderate galena. Dump of adit of 380-382.
380	1.5-m chip	Vein strikes N. 12° E., dips 70° NW.; silicified schist with irregular quartz-pyrite veinlets; country rock is schist foliated parallel to vein. 100-m adit with 20 m shaft to surface in crosscut.
381	0.5-m chip	Vein of 380; fine-grained gray quartz with pyrite. Adit of 380.
382	0.7-m chip	Limonitic schist; hanging wall of 381. Adit of 380.
383	1.3-m chip	Juniper vein strikes due N., dips 45° W.; massive, intensely hematite- and limonite-stained quartz, abundant specularite; country rock is muscovite schist. Juniper Mine, southernmost open cut.
384	0.9-m chip	Juniper vein; as 383, but fractured; secondary copper minerals. Vein postdates foliation of schist. Juniper Mine, 3 x 2 x 3 m open cut.
385	0.6-m chip	Juniper vein, strikes N. 10° E., dips 75° NW.; mostly dark schist, some specularite. Juniper Mine, large adit, about 125 m total workings.
386	0.6-m chip	Juniper vein; siliceous dark rock with abundant pyrite. Large adit.
387	Select	Limonite-stained schist, pyrite, galena, quartz. 10-m adit and water-filled shaft.
388	0.2-m chip	Vein, strikes N. 11° E., dips 77° NW.; vuggy limonite- and hematite-stained quartz, pyrite, galena?. Sample 5-m from portal at 10-m adit trending N. 15° E.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
389	0.6-m chip	Rhyolite dike? trends N. 25° W., dips 58° SW.; gray fine-grained rock, limonite staining, no visible mineralization; mica schist country rock. Small open cut.
390	Select	Limonite-stained quartz, metallic iron oxide, sparse pyrite. 0.25 t "stockpile" adjacent to cut of 389.
391	Select, stockpile	Limonite-stained quartz, moderate pyrite and hematite-staining. Quartz-mica pegmatite lens strikes N. 5° E., dips 85° SE. Two open cuts, both 6 x 3 x 3 m.
392	Random chip	Quartz-muscovite-feldspar pegmatite. Adjacent to 8-m adit trending SSW., Fat Jack Mine.
393	3.0-m chip	Irregular pod of limonite-stained, sheared, fine-grained felsic rock with quartz-filled vugs; country rock is heterogenous pegmatite with irregular pods of diorite and felsic rock. At open cut (15 x 14 x 10 m) formed by recent excavation of old Fat Jack Mine adit(s).
394	1.2-m chip	Intensely limonite-stained, clay-altered gneiss?; abundant clay and mica. 9-m from face of 45-m Bartol Springs adit (Ford claim) trending SE.
395	1.0-m chip	Micaceous granitic gneiss. 3-m from portal of Bartol Springs adit.
396	Select	Limonite- and hematite-stained quartz-feldspar-muscovite pegmatite. 4 x 3 x 2 m pit.
397	0.6-m chip	Vein strikes N. 4° W., dips 70° SW.; weakly altered and silicified rock, limonite- and hematite-stained. Christmas Holiday Mine, 28-m adit trends S. 4° E., taken at midpoint.
398	0.5-m chip	As 397; black, hematite- and limonite-stained siliceous zone, sparse fresh pyrite, clay gouge. Christmas Holiday Mine, taken 1 m from face.
399	0.3-m chip	Diorite dike strikes N. 60° W., dips 25° SW. Outcrop on access road.
400	4.0-m chip	Button vein strikes N. 30° E., dips 70° NW.; sheared granitic rock and diorite, slight to intense clay alteration, gouge, moderate limonite stain. Button Mine, open cut adjacent to Paydirt D adit.
401	0.1-m chip	Button vein; narrow zone of more siliceous rock and gouge along hanging wall. Adjacent to 400.
402	1.5-m chip	Fault zone strikes N., dips 65° W., also exposed in Paydirt C; white, green clay gouge. Button Mine, Paydirt D adit, 60 m to caved area, at sample site.
403	3.0-m chip	Button vein, strikes N. 30° E., dips 75° NW.; east half of vein contains gray and limonitic gouge, sheared granitic rock; west half of vein is more siliceous, limonitic. Button Mine, 20 x 10 x 15 m open cut adjacent to caved Paydirt B adit.
404	1.2-m chip	Hanging wall of "Button vein"; green, fine-grained diorite, sheared with bleached and limonitic gouge stringers, pyrite disseminated and in veinlets. Button Mine, Paydirt C adit, 75 m total.
405	1.2-m chip	"Button vein" strikes N. 20° E., dips 70° NW.; gray-green gouge with pockets of pyrite. Paydirt C adit.
406	Select	Pyrite-rich, partially clay-altered granitic rock. Paydirt C adit, at face.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
407	0.6-m chip	Vein strikes N. 20° E., dips 55° NW., pinches and swells, curves to E.; gouge and altered, decomposed granite (leaving residual quartz), abundant limonite. Button Mine, 14-m adit trends south-southwest.
408	8.0-m chip	Footwall of Paydirt A vein; slightly propylitic to intensely clay-altered granite, depending of closeness of vein. Dozer cut between the Paydirt A and B.
409	0.3-m chip	Vein strikes N. 20° E., dips irregularly and steeply; limonitic, sheared granitic rock, gouge. Button Mine, Fortuna adit, Paydirt A adit, 70 m of drift, caved on SW. end.
410	0.6-m chip	As 409; more sheared, less quartz remaining in wallrock; country rock is mostly granite with lenses of granodiorite and diorite. Paydirt A adit.
411	0.6-m chip	Vein of Paydirt A strikes N. 30° E., dips 70° to near vertical NW.; sheared, decomposed granite, minor quartz, moderate limonite stain. 12-m hand-worked open cut above Paydirt A adit, and south of dozer cut.
412	0.5-m chip	Vein of Paydirt A strikes N. 30° E., dips 70° NW.; as 411. Inclined shaft 7-m-deep.
413	0.6-m chip	Vein strikes N. 40° E., dips 80° NW.; as 411 but less sheared. 18-m adit, taken 7 m from portal.
414	0.3-m chip	Shear zone strikes N. 40° W., dips 75° NE.; gray and limonitic clay; granite country rock. Adit of 413, taken along side drift paralleling this shear.
415	0.8-m chip	Weak shear zone strikes N. 60° E., dips steeply SE.; limonite-stained or bleached granite. 5-m adit trends S. 60° W.
416	0.6-m chip	Shear zone strikes N. 70° E., dips 30° NW.; limonite-stained clay, sand, altered granite, extensively stoped on. Gold Button Mine.
417	6.0-m chip	Intensely limonite-stained, decomposed granite and diorite. Road cut.
418	0.5-m chip	Vein strikes N. 18° E., dips vertically; gray and limonite-stained clay gouge, sheared granite, quartz stringers. "Chavez adit", 18-m of drifts.
419	0.5-m chip	Fracture zone strikes N. 10° E., dips irregularly about 75° NW.; limonitic gouge, fractured fine-grained siliceous rock. Convict prospect, 30-m-long open cut.
420	0.2-m chip	White bull quartz vein parallel to fracture zone of 419; minor manganese and iron stain. Convict prospect.
421	0.3-m chip	Fault zone strikes N. 32° E., dips 80° NW.; breccia, bleached gouge, limonite; fresh diorite in footwall, weakly altered granite in hanging wall. Face of Fat Mexican Mine, 63-m adit trends NE.
422	0.3-m chip	As 421; more quartz fragments and less clay. 18-m from face of Fat Mexican Mine.
423	0.6-m chip	As 421; less gouge, mostly sheared wallrock and limonite. 33-m from face of Fat Mexican Mine.
424	1.0-m chip	Shear zone strikes N. 33° E., dips 77° NW.; abundant limonite, fragmented quartz stringers, moderate chlorite; country rock is fine-grained diorite with pods of calcite, and chlorite schist. 40-m adit trends NE.
425	0.2-m chip	As 424; gouge, limonite. Adit of 424.

Appendix A.--Description of samples from Prescott National Forest, Arizona.

No.	Type, Length	Remarks
426	0.6-m chip	Weak shear zone strikes N. 40° E., dips 80° SE.; white clay, partly sheared and fractured, decomposed granite. Portal of 6-m adit trending NE.
427	Select	Fresh diorite with numerous quartz veinlets, some vuggy, trace pyrite. Small "stockpile" at a caved adit.
428	1.5-m chip	Weak shear zone strikes N., dips 60° E.; intensely limonite-stained, partially sheared granite, local quartz. Button Mine, 35-m open cut.
429	Select	Pod of sulfur-stained bull quartz, minor pyrite, hematite. 2 x 2 x 1 m pit.
430	0.2-m chip	Narrow bleached gouge zone strikes N. 25° E., dips 70° NW. 18-m adit trends N. 15° E., taken 9 m from portal.
431	1.0-m chip	Vein strikes N. 5° W., dips steeply W., possible N. extension of Legal Tender vein; limonite-stained granitic rock, minor quartz; country rock is decomposed granodiorite with abundant chlorite. Open cut 15 x 10 x 6 m.
432	1.2-m chip	Quartz-pyrite-hematite vein strikes N. 8° E., dips 70° NW.; deeply weathered. Legal Tender Mine, caved at portal.
433	Select	Dense hard hematite- and pyrite-rich rock, and quartz-pyrite rock with granitic matrix, trace chalcopyrite, malachite; country rock is weathered granitic rock. Legal Tender Mine, dump size about 50 m^3.
434	Select	Bull and vuggy quartz, minor pyrite, galena, trace malachite. Paxton Place, shallow pit in group of four pits and two shallow shafts on E.-W. trend.
435	0.3-m chip	Quartz vein strikes E., dips 80° N.; minor limonite stain, biotite. Paxton Place, 22-m adit trends east.
436	1.0-m chip	Fault plane strikes E., dips 63° N.; hanging wall is limonite-stained quartz, clay-altered, coarse-grained granite, pyrite?. Paxton Place adit.
437	Select	Limonite-stained quartz, sparse pyrite, galena, trace malachite. Camp Bird Mine, lower adit, mostly caved and unsafe to enter, 100 m^3 dump.
438	0.1-m chip	Fractured quartz vein strikes N. 68° W., dips 70° NE., pinches to E.; limonite stain, pyrite?. Camp Bird Mine, upper adit, 55-m of drifts.
439	0.2-m chip	Quartz vein strikes N. 68° W., dips 68° NE.; limonite, hematite, specularite, altered granite (quartz remaining, feldspars altered to clay). Camp Bird Mine, upper adit.
440	0.2-m chip	Fractured quartz vein, strikes N. 68° W., dips 40° NE.; minor limonite stain. Camp Bird Mine, upper adit.

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.

[<, less than; >, greater than]

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
001	26	<5	1	<100	1	<10	<10	<10	200	6	<2	0.6	<2	<100	<5	<0.5	7	2.90	<20	160	<0.2	3.3	<10	0.8	<200	2	<1	<20	1.2	2.5	6	<5	<200	<500
002	<5	<5	<1	150	<1	<10	12	<10	180	11	<2	1.1	<2	<100	7	<0.5	10	2.10	<20	490	<0.2	2.6	<10	1.3	<200	1	<1	<20	3.0	11.0	335	<5	210	<500
003	29	<5	3	<100	<1	<10	<10	<10	250	1	<2	0.7	<2	<100	<5	<0.5	8	0.06	21	46	<0.2	1.0	<10	0.6	<200	<1	<1	<20	1.7	1.5	<2	<5	<200	<500
006	18	<5	93	670	7	<10	<10	<10	250	8	<2	3.8	<2	<100	6	<0.5	<2	<0.05	<20	64	67.2	16.0	<10	1.0	<200	<1	<1	<20	2.4	1.4	4	<5	<200	<500
007	<5	73	497	1300	23	<10	<10	<10	260	2	<2	1.8	<2	<100	<5	<0.5	8	<0.05	25	28	176.0	7.7	<10	0.7	<200	<1	<1	<20	1.9	5.2	5	<5	<200	<500
008	682	6	17	<100	<1	<10	<10	47	<50	1	<2	>10.0	<2	<100	12	<0.5	5	<0.05	<20	<10	0.8	2.7	34	4.2	<200	<1	1	<20	1.2	0.9	<2	<5	410	<500
009	210	<5	13	170	1	<10	19	<10	92	1	<2	>10.0	3	<100	14	<0.5	<2	0.09	<20	11	2.1	8.4	<10	3.5	<200	<1	<1	<20	3.1	3.5	2	<5	2100	<500
010	55	<5	430	<100	6	<10	<10	57	290	<1	<2	3.0	<2	<100	<5	<0.5	6	<0.05	69	<10	35.8	1.4	<10	0.5	<200	<1	<1	<20	<0.5	1.2	<2	<5	<200	<500
011	10	23	19	100	2	<10	<10	<10	210	<1	<2	0.7	<2	<100	<5	<0.5	6	<0.05	<20	<10	1.3	1.2	<10	0.3	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
012	440	>300	380	940	7	<10	<10	62	330	1	<2	9.4	<2	<100	8	<0.5	69	0.25	210	27	44.4	10.0	<10	2.2	<200	<1	<1	<20	0.9	1.4	<2	<5	610	<500
013	87	>300	127	700	113	74	23	<10	200	<1	<2	3.1	<2	<100	19	<0.5	25	<0.05	23	<10	188.0	<0.5	<10	1.9	<200	<1	<1	<20	<0.5	1.5	<2	<5	5200	<500
014	33	<5	21	<100	1	<10	<10	<10	300	<1	<2	0.9	<2	<100	<5	<0.5	5	<0.05	<20	<10	1.3	0.7	<10	<0.2	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
015	130	37	15	330	2	<10	69	32	300	1	<2	10.0	<2	<100	40	<0.5	5	0.41	110	31	7.2	4.9	<10	6.6	<200	<1	<1	<20	1.6	1.1	10	<5	<200	<500
016	72	150	160	7200	17	<10	<10	25	250	<1	<2	>10.0	<2	<100	5	<0.5	12	<0.05	61	<10	169.0	1.1	<10	0.7	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
017	11	<5	6	180	2	<10	<10	<10	240	<1	<2	0.8	<2	<100	<5	<0.5	13	<0.05	<20	12	1.2	1.0	<10	0.5	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
018	12	<5	3	<100	2	<10	<10	<10	260	<1	<2	0.5	<2	<100	<5	<0.5	3	<0.05	<20	<10	2.4	0.7	<10	0.5	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
019	200	6	26	680	<1	<10	38	18	760	3	<2	6.0	2	<100	20	<0.5	<2	0.07	110	69	4.6	19.0	<10	4.4	<200	<1	<1	<20	1.9	1.5	5	<5	240	<500
020	1420	150	126	610	6	610	22	<10	200	1	<2	5.7	<2	<100	12	<0.5	22	0.65	38	70	82.5	1.3	<10	1.9	<200	<1	<1	<20	4.7	2.0	7	<5	2400	<500
021	37	<5	40	650	1	<10	38	12	61	9	<2	2.4	<2	<100	15	<0.5	11	0.75	25	120	1.3	6.4	<10	3.0	<200	<1	<1	<20	2.1	1.6	8	<5	<200	<500
022	160	56	16	320	3	<10	35	<10	170	2	<2	4.0	<2	<100	24	<0.5	13	0.41	33	61	15.0	5.1	<10	3.0	<200	<1	<1	<20	1.7	2.2	5	<5	990	<500
023	51	<5	43	550	2	<10	46	110	700	13	<2	6.6	<2	<100	22	<0.5	<2	1.20	280	44	3.4	15.0	<10	4.3	<200	<1	<1	<20	2.1	5.6	<2	<5	260	<500
024	98	<5	10	910	<1	<10	30	<10	210	9	<2	1.7	<2	<100	15	<0.5	3	2.20	<20	65	1.0	2.4	<10	1.5	<200	<1	<1	<20	3.8	1.1	<2	<5	<200	<500
025	85	7	50	330	3	<10	<10	<10	200	<1	<2	9.2	<2	<100	9	<0.5	10	<0.05	<20	15	3.3	3.3	<10	1.6	<200	<1	<1	<20	1.1	1.3	4	<5	290	<500
026	270	56	27	<100	<1	610	41	<10	56	<1	3	4.0	<2	<100	23	<0.5	5	<0.05	<20	35	4.3	1.2	<10	6.6	<200	<1	<1	<20	0.8	3.3	3	<5	>30000	<500
027	9	<5	14	<100	1	<10	<10	<10	340	<1	<2	4.2	<2	<100	<5	<0.5	24	0.10	26	<10	0.4	1.5	<10	0.9	<200	<1	<1	<20	0.7	2.4	<2	<5	<200	<500
028	11	<5	7	550	2	<10	47	19	190	12	<2	2.5	3	<100	38	<0.5	<2	1.40	<20	130	1.8	10.0	<10	4.7	<200	<1	<1	<20	5.4	2.8	8	<5	<200	<500
029	150	<5	2	1200	<1	<10	52	11	120	2	<2	3.1	4	<100	30	<0.5	6	2.70	<20	86	0.2	5.5	<10	4.0	<200	<1	<1	<20	3.9	1.9	2	<5	<200	<500
030	<5	<5	3	1400	<1	<10	57	<10	100	3	<2	2.4	5	<100	31	<0.5	4	2.80	<20	92	0.3	4.6	<10	3.5	<200	1	<1	<20	5.0	2.1	<2	<5	<200	<500
031	8	<5	1	<100	14	<10	<10	<10	280	<1	<2	<0.5	<2	<100	<5	<0.5	81	<0.05	<20	<10	0.5	<0.5	<10	0.2	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
032	2380	150	57	340	4	84	39	13	240	<1	2	1.6	2	<100	22	<0.5	40	0.06	38	14	52.1	1.7	<10	2.6	<200	<1	<1	<20	3.5	1.7	10	<5	2300	<500
033	866	7	46	180	2	<10	11	<10	290	<1	<2	1.2	<2	<100	<5	<0.5	4	0.05	<20	16	2.7	3.1	<10	0.8	<200	<1	<1	<20	1.0	0.8	3	<5	<200	<500
034	39	<5	44	5300	<1	<10	26	<10	140	<1	<2	1.4	4	<100	9	<0.5	13	0.46	30	120	3.9	3.0	<10	2.4	<200	1	<1	<20	5.8	3.6	3	<5	290	<500
035	1200	6	76	250	9	<10	<10	17	230	<1	<2	3.6	<2	<100	<5	<0.5	8	0.09	26	23	5.1	4.1	<10	0.9	<200	<1	<1	<20	1.3	0.9	<2	<5	<200	<500
036	1170	130	66	150	12	<10	26	<10	220	<1	<2	0.9	<2	<100	13	<0.5	4	0.05	<20	12	48.1	0.7	<10	1.3	<200	<1	<1	<20	1.2	1.2	<2	<5	620	<500
037	74	<5	941	<100	7	<10	<10	57	240	<1	<2	3.4	<2	<100	<5	<0.5	248	0.20	<20	<10	1.6	5.9	<10	0.7	<200	<1	<1	<20	<0.5	<0.5	350	<5	<200	<500
038	2960	<5	9	150	4	<10	<10	27	160	<1	<2	3.1	<2	<100	<5	<0.5	7	0.50	<20	11	1.2	13.0	<10	0.6	<200	<1	<1	<20	<0.5	<0.5	7	<5	<200	<500
039	230	<5	961	250	7	<10	<10	240	190	<1	<2	10.0	<2	<100	31	<0.5	16	<0.05	170	22	36.1	2.1	<10	5.5	<200	<1	<1	<20	3.1	2.9	14	5	<200	<500
040	951	<5	24	110	6	<10	<10	<10	250	<1	<2	1.5	<2	<100	<5	<0.5	4	0.06	<20	<10	3.2	1.6	<10	0.5	<200	<1	<1	<20	<0.5	0.5	2	<5	<200	<500
041	440	<5	19	130	4	<10	<10	10	310	<1	<2	2.0	<2	<100	<5	<0.5	7	<0.05	38	<10	12.0	5.9	<10	0.8	<200	<1	<1	<20	<0.5	0.5	<2	<5	<200	<500
042	10	<5	163	450	4	<10	23	29	180	<1	<2	5.0	<2	<100	7	<0.5	12	0.10	45	33	8.4	19.0	<10	2.5	<200	<1	<1	<20	0.7	0.7	3	<5	<200	<500
043	28	<5	234	350	3	25	52	<10	92	3	<2	6.2	<2	<100	24	<0.5	10	0.05	<20	47	14.0	7.3	<10	4.2	<200	<1	<1	<20	2.8	2.3	<2	<5	3000	<500
044	310	<5	1190	240	<16	<10	<21	<10	<50	4	<2	>10.0	<2	<100	15	<0.5	9	<0.05	<20	86	77.0	7.3	<10	3.9	<200	<1	<1	<60	2.3	1.7	<2	<6	<200	<500
045	210	230	1470	<210	<51	<27	<32	<10	150	<1	<2	>10.0	<2	<100	9	<0.5	21	<0.05	45	<25	788.0	5.6	<20	3.3	<920	<1	<1	<100	<1.6	<0.5	<5	<14	4300	<500
046	<5	<5	152	530	5	<10	26	28	130	19	<2	7.6	<2	<100	18	<0.5	<2	0.15	51	160	14.0	28.0	<10	5.1	<200	<1	1	<20	2.6	1.6	5	<5	220	<500
047	72	12	204	1500	3	<10	52	19	53	5	<2	9.0	6	<100	30	0.5	3	0.11	<20	200	12.0	35.0	<10	7.9	<200	<1	2	<20	4.6	3.7	12	7	<200	<500
048	978	200	226	5800	21	<10	<10	15	120	2	<2	>10.0	<2	<100	25	<0.5	205	0.28	<20	45	243.0	7.7	<10	2.3	<200	<1	<1	<20	2.9	8.8	16	5	24300	<500
049	120	100	172	860	13	170	36	16	140	3	<2	3.2	<2	<100	26	<0.5	11	0.57	66	130	157.0	7.7	<10	4.1	<200	<1	<1	<40	2.0	1.0	6	<5	17000	<500
050	180	32	53	740	5	43	32	<10	85	5	<2	2.2	3	<100	26	<0.5	19	0.39	<20	210	62.3	5.5	<10	2.9	<200	<1	<1	<20	3.7	1.6	11	<5	2600	<500
051	1090	47	150	380	7	40	<10	15	61	6	<2	6.7	4	<100	10	0.5	5	0.12	<20	140	95.6	15.0	<10	3.4	<200	<1	<1	<20	3.4	3.9	20	6	5300	<500
052	502	20	202	310	6	23	<10	62	100	4	<2	6.3	<2	<100	8	<0.5	10	0.08	<20	63	28.9	18.0	<10	2.4	<200	<1	<1	<20	0.9	0.8	3	<5	2000	<500
053	40	<5	182	<100	3	<10	17	17	1000	<1	<2	6.7	<2	<100	8	<0.5	7	<0.05	160	15	10.0	17.0	<10	1.5	<200	<1	<1	<20	0.9	1.0	2	<5	840	<500
054	50	<5	1030	260	<10	<10	<10	19	190	<1	<2	9.0	<2	<100	<5	<0.5	9	0.09	<20	<10	4.6	22.0	<10	1.5	<200	<1	<1	<45	<0.5	0.6	<2	<5	250	<500
055	41	<5	1	500	<1	<10	<10	<10	160	2	<2	2.0	3	<100	9	<0.5	50	0.11	<20	150	0.9	3.6	<10	1.2	<200	<1	<1	<20	1.2	0.7	19	<5	<200	<500

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
056	330	<5	3	500	<1	<10	36	<10	160	1	<2	2.8	5	<100	19	0.7	21	0.11	<20	140	0.7	11.0	<10	2.8	<200	<1	1	<20	1.9	1.5	27	<5	<200	<500
057	200	<5	19	340	<1	<10	10	34	400	2	<2	>10.0	<2	<100	12	<0.5	14	1.10	130	53	1.1	7.1	<10	2.6	<200	<1	<1	<20	2.0	2.1	8	<5	<200	<500
058	120	<5	16	340	<1	<10	34	35	250	2	<2	8.8	2	<100	19	<0.5	13	1.50	53	43	1.0	6.4	<10	3.4	<200	<1	<1	<20	2.6	2.8	10	<5	<200	<500
059	180	<5	12	420	<1	<10	43	17	210	2	<2	6.3	<2	<100	22	<0.5	7	1.90	72	34	0.8	6.0	<10	3.9	<200	<1	<1	<20	2.2	1.6	<2	<5	<200	<500
060	539	7	10	270	<1	<10	18	11	220	1	<2	5.6	<2	<100	16	<0.5	16	1.30	76	25	1.0	8.0	<10	3.3	<200	<1	<1	<20	2.0	1.7	3	<5	<200	<500
061	14	<5	5	510	<1	<10	36	<10	74	2	<2	1.9	3	<100	19	<0.5	4	3.80	<20	100	0.7	6.4	<10	2.8	<200	<1	<1	<20	3.4	1.4	7	<5	<200	<500
062	563	12	5	990	<1	<10	23	21	200	<1	<2	4.3	2	<100	16	<0.5	88	2.20	<20	100	0.7	5.7	<10	1.8	<200	<1	<1	<20	2.1	1.4	3	<5	<200	<500
063	490	<5	14	430	<1	<10	82	13	88	1	3	9.3	<2	<100	37	<0.5	190	2.00	30	36	0.8	28.0	<10	4.7	<200	<1	1	<20	1.8	2.6	287	5	<200	<500
064	200	93	125	360	<21	<10	<10	18	160	5	<2	8.3	<2	<100	10	<0.5	16	<0.05	39	27	244.0	15.0	<10	1.5	<480	<1	<1	<55	<1.0	1.9	3	<6	730	<500
065	<5	<5	8	200	<1	<10	42	21	180	<1	<2	2.1	<2	<100	24	<0.5	14	0.43	78	12	4.6	4.5	<10	3.8	<200	<1	<1	<20	4.7	1.5	<2	<5	<200	<500
066	72	10	52	470	11	<10	57	11	59	3	<2	2.6	3	<100	26	<0.5	4	2.90	25	53	148.0	6.3	<10	4.3	<200	<1	<1	<20	4.1	1.2	<2	<5	<200	<500
067	190	<5	49	<100	11	34	<10	<10	160	<1	<2	2.8	<2	<100	<5	<0.5	8	0.14	29	<10	142.0	3.4	<10	0.9	<200	<1	<1	<20	<0.5	<0.5	<2	<5	8200	<500
068	250	9	74	<100	2	<10	20	94	<50	<1	<2	>10.0	<2	<100	10	<0.5	10	0.07	<20	<10	4.6	20.0	160	3.2	<200	<1	<1	<20	1.5	8.2	4	<5	230	<500
069	10000	140	2500	<210	<6	<45	<30	14	150	2	<2	7.2	<2	<100	11	<0.5	16	<0.05	61	<28	319.0	5.1	<21	3.1	<610	<1	<1	<58	1.7	1.1	<4	<5	1900	<500
070	240	18	1160	320	<7	<25	44	<10	200	4	2	3.0	<2	<100	21	<0.5	<2	<0.05	<20	65	109.0	7.8	<10	4.5	<200	<1	<1	<20	3.4	1.9	<2	<5	730	<500
071	1160	68	433	<100	<6	39	<23	<10	210	<1	<2	4.1	<2	<100	9	<0.5	12	<0.05	53	44	390.0	7.1	<10	2.3	<530	<1	<1	<49	<1.3	<0.5	5	<5	1900	<500
072	340	280	4390	<100	<7	220	<25	<10	210	<1	3	8.3	<2	<100	5	<0.5	6	<0.05	<48	<25	128.0	1.0	<10	1.9	<520	<1	<1	<51	2.7	<0.5	<4	<5	10000	<500
073	3240	46	1450	<100	<6	32	<10	<10	250	2	<2	7.7	<2	<100	<5	<0.5	18	<0.05	<20	45	68.4	6.0	<10	1.8	<200	<1	<1	<20	<0.5	<0.5	4	<5	1400	<500
074	8930	25	3830	<200	<15	<44	<33	<10	68	<1	<2	>10.0	<2	<100	22	<0.5	7	0.08	<51	<31	48.0	8.2	<10	3.2	<520	<1	<1	<62	4.3	2.0	<4	<5	2400	<1000
075	4340	<5	2670	<100	<11	37	<21	20	100	3	<2	9.2	<2	<100	7	<0.5	8	0.09	48	53	48.1	16.0	<10	2.8	<410	<1	<1	<41	<1.1	1.0	9	<5	2600	<500
076	2720	10	1760	230	<7	56	46	11	100	5	<2	7.0	<2	<100	22	<0.5	7	0.07	<20	88	56.1	10.0	<10	4.9	<200	<1	<1	<20	2.1	2.6	7	<5	2500	<500
077	230	<12	5090	240	<12	160	<33	21	140	<1	<2	>10.0	<2	<100	11	<0.5	10	<0.05	100	<31	183.0	2.8	<22	4.9	<630	<1	<1	<68	<1.6	2.1	<4	<11	3100	<1100
078	330	190	3000	<100	<7	120	<21	67	<50	<1	3	>10.0	<2	<100	<5	<0.5	22	<0.05	<43	<23	104.0	0.8	<10	0.8	<200	<1	<1	<41	<1.0	5.2	<2	<5	7000	<500
079	647 *	<5	2800	660	<10	<37	33	50	<50	3	<2	>10.0	<2	<100	20	<0.5	<2	0.13	57	190	140.0	23.0	<10	5.6	<450	<1	<1	<44	1.3	<0.5	31	<12	810	<500
080	6340	45	1150	370	<4	150	<10	32	120	7	<2	>10.0	<2	<100	8	<0.5	<2	<0.05	<20	63	20.9	21.0	<10	3.1	<200	<1	<1	<20	0.8	1.0	12	<5	13000	<500
081	180	<5	156	390	2	<10	12	22	91	5	<2	7.9	5	<100	8	<0.5	26	0.30	<20	100	19.0	14.0	<10	2.6	<200	<1	<1	<20	3.5	2.3	17	<5	<200	<500
082	643	6	598	110	<4	36	<10	11	130	1	3	>10.0	<2	<100	12	<0.5	10	<0.05	46	28	26.6	6.3	<10	4.4	<200	<1	<1	<20	1.1	2.2	10	<5	4400	<500
083	>10000	43	921	170	<3	100	36	21	130	2	<2	>10.0	<2	<100	22	0.7	9	0.07	<20	66	16.0	7.4	<10	7.5	<200	<1	2	<20	1.0	1.3	9	<5	4200	<500
084	1170	24	262	210	3	39	23	50	400	13	<2	8.9	<2	<100	10	<0.5	<2	0.10	130	75	9.3	27.0	<10	3.8	<200	<1	<1	<20	<0.5	0.5	5	<5	2400	<500
085	2470	55	551	120	<3	31	25	18	150	3	<2	8.0	<2	<100	12	<0.5	4	0.07	59	41	21.0	11.0	<10	3.9	<200	<1	<1	<20	0.8	1.6	7	<5	1700	<500
086	548	120	358	230	5	42	30	57	61	11	<2	>10.0	<2	<100	16	0.8	51	0.11	58	86	38.5	30.0	<10	4.9	<200	<1	<1	<20	1.7	1.9	8	<5	1800	<500
087	697	<5	7	480	6	<10	<10	<10	230	1	<2	3.3	<2	<100	<5	<0.5	15	0.06	<20	11	1.3	2.4	<10	0.7	<200	<1	<1	<20	0.6	<0.5	4	<5	<200	<500
088	943	21	39	140	5	<10	21	110	190	2	<2	8.1	<2	<100	12	<0.5	409	1.60	<20	<10	13.0	10.0	<10	5.4	<200	<1	<1	<20	7.8	30.0	4	<5	<200	<500
089	1740	<5	12	270	5	<10	25	23	76	2	2	>10.0	4	<100	34	<0.5	1230	2.50	<20	43	2.0	8.2	42	5.8	<200	<1	<1	<20	13.0	25.0	4	<5	<200	<500
090	380	<5	134	470	<7	<32	<29	<10	150	4	<2	2.3	<2	<100	20	<0.5	44	0.13	<20	91	255.0	3.8	<10	2.2	<460	<1	<1	<61	4.2	<0.5	22	<5	<200	<500
091	63	59	26	330	4	<10	11	14	230	<1	<2	2.4	<2	<100	9	<0.5	46	0.31	<20	17	63.2	1.3	<10	1.4	<200	<1	<1	<20	2.8	1.1	209	<5	1500	<500
092	35	13	4	<100	2	<10	<10	<10	300	<1	<2	0.7	<2	<100	<5	<0.5	12	<0.05	<20	<10	1.6	<0.5	<10	0.3	<200	<1	<1	<20	<0.5	0.7	73	<5	<200	<500
093	320	8	10	1100	1	<10	85	<10	150	3	2	2.8	4	<100	39	<0.5	170	1.00	<20	170	6.8	3.9	<10	5.1	<200	<1	<1	<20	7.2	2.3	42	<5	<200	<500
094	59	52	24	410	7	17	89	25	620	6	<2	3.7	4	<100	43	<0.5	64	0.06	200	95	7.0	6.5	<10	6.3	<200	<1	<1	<20	3.6	4.6	376	<5	370	<500
095	58	25	12	400	2	<10	65	18	310	5	<2	3.9	2	<100	25	<0.5	11	0.08	83	80	8.8	8.3	<10	5.4	<200	<1	<1	<20	2.5	2.9	64	<5	230	<500
096	43	150	81	<100	<9	<29	<10	<10	360	2	<2	3.6	<2	<100	5	<0.5	6	<0.05	<20	40	251.0	4.3	<10	1.4	<200	<1	<1	<20	<0.5	<0.5	21	<5	2400	<500
097	51	14	64	220	4	<10	<10	52	230	<1	<2	6.4	<2	<100	<5	<0.5	6	0.51	46	<10	20.0	16.0	<10	1.4	<200	<1	<1	<20	<0.5	0.9	6	<5	<200	<500
098	1480	180	285	460	3	57	<10	<10	240	1	<2	1.3	<2	<100	7	<0.5	4	<0.05	29	42	29.2	1.3	<10	1.0	<200	<1	<1	<20	0.8	<0.5	5	<5	2300	<500
099	3740	>300	331	120	3	270	<10	<10	300	2	<2	1.3	<2	<100	8	<0.5	4	<0.05	<20	33	64.6	<0.5	<10	0.8	<200	<1	<1	190	<0.5	0.7	11	<5	8800	<500
100	110	21	95	160	6	<10	21	<10	360	2	<2	1.5	<2	<100	11	<0.5	3	0.68	23	38	9.5	2.9	<10	1.5	<200	<1	<1	<20	2.2	0.7	2	<5	<200	<500
101	170	25	3	1300	2	<10	88	15	140	4	<2	4.2	5	<100	47	<0.5	3	2.10	34	160	1.7	9.2	<10	8.0	<200	<1	<1	<20	7.8	4.1	43	<5	510	<500
102	698	120	186	200	4	<10	27	<10	140	4	<2	5.6	<2	<100	24	<0.5	7	0.10	<20	76	20.1	2.5	<10	1.4	<200	<1	<1	<20	2.8	11.0	4	<5	800	<500
103	1230	15	219	130	4	<10	48	<10	130	6	<2	2.5	<2	<100	26	<0.5	3	0.06	<20	120	3.5	4.2	<10	2.9	<200	<1	<1	<20	8.4	5.2	<2	<5	530	<500
104	9150	39	672	<100	5	91	11	<10	210	1	<2	9.0	<2	<100	<5	<0.5	<2	<0.05	<20	16	6.9	2.1	<10	0.8	<200	<1	<1	<20	<0.5	<0.5	<2	<5	18000	<500
105	619	5	118	540	2	15	61	16	200	5	<2	4.1	4	<100	37	<0.5	6	0.15	34	120	2.9	8.5	<10	5.1	<200	<1	<1	<20	7.2	8.0	10	<5	2300	<500
106	110	6	174	350	2	<10	21	39	82	7	<2	5.2	<2	<100	12	<0.5	10	0.34	47	94	6.5	22.0	<10	2.2	<200	<1	<1	<20	5.7	12.0	5	<5	430	<500
107	3980	120	1330	530	<11	<10	55	53	130	8	<2	5.1	<2	<100	26	<0.5	10	0.80	74	62	20.0	6.1	<10	4.9	<200	<1	<1	<20	4.2	15.0	17	<5	1100	<500
108	24	<5	960	300	12	<10	20	25	130	6	<2	10.0	<2	<100	12	<0.5	44	0.47	36	65	76.9	28.0	<10	3.6	<200	<1	<1	<20	1.3	4.7	38	<5	570	<500
109	3600	77	5530	<100	<62	<27	<30	16	290	1	<2	4.8	<2	<100	<5	<0.5	66	0.18	69	<22	521.0	6.3	<10	1.9	<790	<1	<1	<95	2.3	19.0	26	<12	1100	<500
110	3340	<5	132	<100	4	<10	<10	<10	260	<1	<2	1.0	<2	<100	<5	<0.5	4	<0.05	<20	<10	5.2	<0.5	<10	<0.2	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
111	>10000	11	180	770	3	<10	36	<10	160	2	<2	5.9	<2	<100	21	<0.5	3	0.67	<20	38	10.0	9.0	<10	4.0	<200	<1	<1	<20	1.6	1.2	3	<5	<200	<500

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)
112	>10000	14	364	730	7	<10	28	11	110	4	<2	>10.0	<2	<100	17	<0.5	<2
113	1880	<5	36	1600	<1	<10	42	<10	130	<1	<2	1.6	2	<100	23	<0.5	3
114	1070	<5	27	1600	<1	<10	36	<10	66	<1	<2	1.8	3	<100	17	<0.5	4
115	100	<5	189	1800	2	<10	11	<10	200	<1	<2	4.2	4	<100	11	<0.5	11
116	180	<5	92	2000	1	<10	<10	<10	190	<1	<2	2.5	3	<100	6	<0.5	9
117	250	<5	84	1500	1	<10	63	<10	98	2	<2	2.4	3	<100	31	<0.5	7
118	2100	<5	321	1500	3	<10	17	17	220	<1	<2	3.3	<2	<100	10	<0.5	3
119	>10000	5	1080	1700	7	<10	22	<10	160	2	<2	3.5	3	<100	14	<0.5	3
120	14	<5	231	1600	2	<10	63	95	650	11	<2	5.5	3	<100	35	<0.5	4
121	240	<5	29	1200	1	<10	75	20	330	7	<2	4.2	3	<100	42	<0.5	4
122	310	<5	93	2100	<1	<10	22	<10	180	<1	<2	1.8	3	<100	9	<0.5	5
123	592	31	83	560	<7	<33	<31	54	350	4	5	>10.0	<2	<100	22	<0.5	379
124	140	<5	230	870	2	<10	67	14	270	5	<2	4.2	2	<100	28	<0.5	<2
125	3080	<5	427	220	<5	<44	<34	<10	150	2	<5	4.1	<2	<100	29	<0.5	33
126	1510	27	287	890	<7	<37	69	<10	190	6	<2	2.3	<2	<100	36	<0.5	<2
127	1840	150	20	380	6	<10	<10	<10	330	<1	<2	1.3	<2	<100	5	<0.5	8
128	1900	59	401	570	<5	<10	47	10	200	6	<2	6.3	2	<100	33	<0.5	22
129	>10000	<12	1020	<410	<91	<54	<72	<31	<180	<2	<6	>10.0	<7	<210	<15	<1.4	110
130	58	<5	55	770	3	<10	110	17	480	9	2	5.2	4	<100	56	<0.5	6
131	1900	170	185	340	4	25	37	15	160	4	<2	6.3	<2	<100	19	<0.5	12
132	6340	18	651	<100	<3	160	23	21	260	3	<2	7.4	<2	<100	16	<0.5	<2
133	1010	18	50	1000	2	<10	60	95	320	3	<2	>10.0	4	<100	32	<0.5	21
134	250	<5	25	1100	2	<10	72	<10	140	3	<2	2.5	2	<100	48	<0.5	150
135	23	<5	7	990	<1	<10	50	<10	110	2	<2	3.0	2	<100	26	<0.5	5
136	100	7	5	570	<1	<10	29	<10	190	<1	<2	2.6	<2	<100	14	<0.5	203
137	<5	<5	67	270	<1	<10	34	46	<50	2	3	>10.0	5	<100	23	0.7	<2
138	1540	160	317	850	3	60	<10	11	240	3	<2	4.5	<2	<100	7	<0.5	53
139	5920	<12	>10000	<320	<88	<44	<58	46	<140	<5	<2	7.6	<6	<100	6	<1.1	51
140	14	<5	7	940	<1	<10	37	14	120	1	<2	2.4	3	<100	21	<0.5	16
141	2500	81	41	640	2	<10	53	16	170	<1	<2	>10.0	<2	<100	51	<0.5	3460
142	240	11	10	830	<1	<10	31	<10	180	2	<2	2.0	4	<100	21	<0.5	21
143	150	<5	92	1900	2	<10	55	<10	87	1	<2	7.6	3	<100	32	<0.5	26
144	68	7	34	990	<1	<10	24	<10	150	3	<2	3.2	<2	<100	23	<0.5	32
145	66	<5	56	1100	4	<10	25	<10	98	7	<2	4.1	3	<100	17	<0.5	37
146	31	<5	8	920	1	<10	12	<10	260	1	<2	2.0	<2	<100	8	<0.5	6
147	31	<5	8	1400	1	<10	56	<10	140	2	<2	1.5	6	<100	25	<0.5	16
148	33	<5	33	740	<1	<10	19	<10	130	5	<2	1.0	<2	<100	10	<0.5	16
149	33	<5	20	1200	<1	<10	35	<10	120	4	<2	1.4	3	<100	22	<0.5	7
150	58	7	8	1300	<1	<10	37	<10	150	2	<2	3.0	2	<100	22	<0.5	10
151	220	78	117	120	2	<10	47	44	1200	8	<2	>10.0	3	<100	32	<0.5	23
152	180	<5	135	740	3	<10	39	<10	120	3	<2	3.9	4	<100	22	<0.5	13
153	57	8	155	280	2	37	38	13	120	3	<2	4.9	2	<100	17	<0.5	17
154	6	<5	10	620	1	<10	28	27	78	1	<2	9.0	3	<100	18	0.6	5
155	33	<5	28	420	<1	<10	24	<10	130	2	<2	2.3	3	<100	17	<0.5	72
156	858	54	797	490	<21	<10	37	<10	89	6	<2	6.5	<2	<100	18	<0.5	67
157	745	5	108	660	1	<10	110	16	390	4	2	7.8	7	<100	38	<0.5	12
158	350	10	127	830	2	<10	95	<10	110	5	<2	1.7	6	<100	45	<0.5	6
159	2900	130	345	210	4	<10	13	<10	190	1	<2	3.5	<2	<100	<5	<0.5	711
160	69	<5	33	630	<1	<10	44	<10	71	5	<2	1.6	3	<100	23	<0.5	8
161	1220	<5	252	300	3	<10	57	<10	62	5	<2	4.9	4	<100	32	<0.5	3
162	8840	17	167	610	2	63	41	25	170	5	<2	5.0	4	<100	31	<0.5	13
163	390	<5	306	590	4	<10	45	<10	82	3	<2	1.8	3	<100	26	<0.5	8
164	11	<5	64	260	1	<10	<10	66	82	5	<2	10.0	<2	<100	7	<0.5	3
165	110	<5	57	1200	<1	<10	70	22	79	2	<2	7.6	5	<100	39	<0.5	6
166	4270	100	213	430	<1	<10	68	68	130	<1	<2	>10.0	<2	<100	30	0.8	23
167	11	<5	17	230	1	<10	44	<10	89	<1	<2	>10.0	3	<100	32	<0.5	<2

Sample No.	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
112	0.18	<20	39	52.8	14.0	<10	3.8	<200	<1	<1	<20	1.2	1.4	5	<5	<200	<500
113	2.30	<20	30	1.0	1.4	<10	2.4	<200	<1	<1	<20	5.0	2.8	<2	<5	<200	<500
114	1.90	<20	33	0.9	1.5	<10	1.8	<200	<1	<1	<20	5.4	3.3	<2	<5	<200	<500
115	0.60	<20	44	3.2	4.1	<10	1.5	<200	<1	<1	<20	4.1	2.6	3	<5	<200	<500
116	0.40	<20	47	0.5	3.8	<10	0.8	<200	<1	<1	<20	3.9	2.1	5	<5	<200	<500
117	1.90	23	52	1.8	5.6	<10	5.2	<200	<1	<1	<20	5.8	5.0	2	<5	<200	<500
118	0.22	<20	37	15.0	2.6	<10	1.6	<200	<1	<1	<20	3.0	2.2	<2	<5	<200	<500
119	0.77	<20	37	8.3	4.2	<10	2.9	<200	<1	<1	<20	4.7	6.9	7	<5	<200	<500
120	0.89	120	51	13.0	22.0	<10	7.7	<200	<1	1	<20	3.3	14.0	<2	<5	310	<500
121	1.20	44	52	1.9	13.0	<10	5.6	<200	1	<1	<20	7.5	4.6	<2	<5	<200	<500
122	0.50	<20	45	1.5	3.8	<10	1.4	<200	<1	<1	<20	3.3	2.8	4	<5	<200	<500
123	0.08	100	61	310.0	7.8	<10	4.3	<470	<1	<1	<120	3.4	3.4	8	<5	<200	<500
124	1.60	30	120	6.6	11.0	<10	3.8	<200	<1	<1	<20	6.0	1.7	6	<5	<200	<500
125	0.11	<41	86	484.0	5.7	<21	3.5	<640	<1	<1	<69	2.5	<0.5	14	<5	<200	<500
126	0.10	<20	150	314.0	5.8	<10	4.6	<520	<1	<1	<52	8.4	2.9	30	<5	<200	<500
127	0.08	35	29	90.5	2.0	<10	1.0	<200	<1	<1	<20	0.7	0.8	5	<5	930	<500
128	<0.05	<20	130	20.6	5.8	<10	5.9	<200	<1	<1	<20	4.7	10.0	6	<5	1400	<500
129	<0.25	<68	<50	1440.0	<2.2	<43	<2.6	<1800	<1	<1	<210	<3.3	<2.4	<19	<14	<230	<1300
130	0.08	98	150	15.0	14.0	<10	7.6	<200	<1	<1	<20	6.6	4.4	9	<5	<200	640
131	0.05	21	98	36.6	3.2	<10	3.2	<200	<1	<1	<20	2.2	5.0	<2	<5	3200	<500
132	<0.05	<20	32	20.5	7.0	<10	3.8	<200	<1	<1	<20	<0.5	<0.5	9	<5	10000	<500
133	0.23	57	100	14.0	10.0	<10	3.7	<200	<1	<1	<20	2.1	2.2	150	<5	<200	<500
134	0.17	<20	260	3.2	5.5	<10	3.5	<200	<1	<1	<20	2.5	0.9	26	<5	<200	<500
135	3.00	<20	83	0.5	7.4	<10	3.4	<200	<1	<1	<20	3.7	1.7	5	<5	<200	<500
136	0.11	<20	110	2.3	4.1	<10	1.7	<200	<1	<1	<20	0.8	0.6	23	<5	580	<500
137	0.23	<20	38	5.5	43.0	<10	6.5	<200	<1	1	<20	2.4	1.3	<2	6	230	<500
138	0.11	<20	170	36.7	19.0	<10	2.0	<200	<1	<1	<20	<0.5	<0.5	32	<5	3400	<500
139	0.17	<71	<63	184.0	18.0	<33	3.2	<1400	<1	<1	<160	<2.6	32.0	24	<13	1200	<1300
140	2.90	<20	150	0.8	7.5	<10	2.8	<200	<1	<1	<20	2.2	1.2	12	<5	<200	<500
141	0.10	35	91	2.8	2.5	<10	3.9	<200	<1	1	<20	1.1	<0.5	10	<5	210	<500
142	0.23	<20	260	2.8	4.6	<10	2.2	<200	1	<1	<20	2.5	1.3	18	<5	<200	<500
143	0.26	<20	260	0.8	4.9	<10	3.6	<200	<1	<1	<20	2.7	1.4	15	<5	<200	<500
144	0.69	<20	220	2.5	5.5	<10	2.6	<200	1	<1	<20	3.1	2.7	28	<5	<200	<500
145	0.71	<20	170	26.1	7.4	<10	2.3	<200	<1	<1	<20	4.0	2.0	22	<5	<200	<500
146	0.12	<20	130	2.5	1.5	<10	1.0	<200	<1	<1	<20	1.7	1.6	4	<5	<200	<500
147	2.20	24	140	0.6	2.3	<10	4.6	<200	1	<1	<20	7.7	3.3	5	6	<200	<500
148	0.09	<20	140	2.3	2.7	<10	1.1	<200	<1	<1	<20	2.7	2.6	9	<5	<200	<500
149	1.50	<20	120	2.8	3.0	<10	2.1	<200	<1	<1	<20	4.2	1.5	6	<5	210	<500
150	2.60	28	120	2.6	2.8	<10	2.0	<200	<1	<1	<20	2.7	1.6	8	<5	<200	<500
151	0.37	300	76	12.0	29.0	<10	5.0	<200	<1	<1	<20	2.4	4.1	27	<5	430	<500
152	0.20	<20	230	9.3	6.2	<10	2.3	<200	<1	<1	<20	2.5	1.4	19	<5	<200	<500
153	0.24	<20	120	8.0	8.5	<10	3.7	<200	<1	1	<20	2.9	1.9	5	5	3800	<500
154	2.60	<20	24	1.0	30.0	<10	5.0	<200	<1	1	<20	2.7	1.2	<2	<5	<200	<500
155	0.35	<20	170	5.0	4.1	<10	2.4	<200	<1	<1	<20	3.3	1.7	10	<5	<200	<500
156	0.16	<20	190	149.0	4.6	<10	2.0	<410	<1	<1	<45	3.7	3.5	12	<5	340	<500
157	1.90	55	66	3.4	22.0	<10	11.0	<200	<1	2	<20	4.8	2.5	<2	<5	<200	<500
158	0.34	<20	200	3.6	3.4	<10	8.1	<200	<1	1	<20	9.3	5.8	2	8	620	520
159	<0.05	<20	23	16.0	<0.5	<10	0.8	<200	<1	<1	<20	1.6	2.1	52	<5	280	<500
160	0.10	<20	400	1.8	2.8	<10	2.9	<200	<1	<1	<20	3.7	8.3	3	<5	760	<500
161	1.00	<20	180	3.3	11.0	<10	5.3	<200	1	<1	<20	8.0	3.4	11	<5	1000	<500
162	0.13	<20	230	10.0	6.9	<10	5.3	<200	<1	<1	<20	4.9	10.0	11	<5	6900	<500
163	0.10	<20	150	12.0	2.2	<10	3.6	<200	<1	<1	<20	9.4	2.3	5	<5	200	<500
164	1.90	170	130	4.3	39.0	<10	2.4	<200	<1	<1	<20	0.8	0.6	3	<5	410	<500
165	0.74	46	200	2.8	17.0	<10	7.1	<200	1	1	<20	6.1	2.4	37	5	250	<500
166	0.26	<20	58	2.6	9.3	<10	5.4	<200	<1	<1	<20	4.0	3.1	1840	6	450	<500
167	0.08	80	36	3.1	13.0	<10	4.4	<200	<1	<1	<20	4.2	1.3	120	<5	540	<500

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
168	3250	34	176	1700	2	<10	26	140	140	1	<2	>10.0	<2	<100	20	<0.5	10	0.57	<20	170	3.7	11.0	<10	3.8	<200	<1	<1	<20	3.2	0.8	36	<5	210	<500
169	758	<5	209	370	2	<10	35	130	110	4	<2	>10.0	3	<100	21	<0.5	8	0.29	38	150	3.5	13.0	<10	3.5	<200	<1	<1	<20	2.9	3.2	25	<5	320	<500
170	35	10	97	200	<22	180	<47	<10	120	6	<2	1.1	<2	<100	7	0.7	<12	0.10	24	140	279.0	1.7	<10	0.8	<540	<1	<1	<70	<1.2	1.0	<2	<5	1400	<500
171	7100	15	13	1000	<1	<10	45	<10	110	<1	<2	2.2	2	<100	21	<0.5	9	2.40	<20	58	5.1	3.4	<10	2.2	<200	<1	<1	<20	4.2	1.6	5	<5	1700	<500
172	1450	<5	1260	<100	<12	<10	35	<10	320	4	<2	>10.0	<2	<100	26	<0.5	20	0.08	49	97	11.0	12.0	<10	3.3	<200	<1	<1	<20	3.2	2.9	10	<5	1100	<500
173	1700	6	6	1100	<1	<10	28	<10	150	<1	<2	2.6	3	<100	21	<0.5	11	1.80	<20	58	0.4	1.9	<10	1.7	<200	<1	<1	<20	2.7	1.2	5	<5	<200	<500
174	6380	78	325	700	6	59	30	<10	190	2	<2	5.9	<2	<100	22	<0.5	24	<0.05	39	24	45.7	1.3	<10	3.7	<200	<1	<1	<20	<0.5	1.3	21	<5	6500	<500
175	440	<5	39	830	3	<10	32	32	220	12	<2	7.7	<2	<100	20	<0.5	24	0.83	76	160	3.4	24.0	<10	4.5	<200	<1	<1	<20	1.8	1.7	5	<5	440	<500
176	5200	8	11	230	<1	<10	11	10	240	1	<2	3.4	<2	<100	<5	<0.5	94	<0.05	<20	37	4.0	4.6	<10	1.5	<200	<1	<1	<20	<0.5	1.0	19	<5	<200	<500
177	2220	6	605	900	<7	15	48	36	300	22	3	7.5	<2	<100	40	<0.5	49	0.22	110	240	15.0	24.0	<10	6.5	<200	1	<1	<20	5.2	7.2	12	<5	1400	<500
178	27	<5	18	800	1	<10	91	<10	160	6	<2	1.4	7	<100	45	<0.5	4	1.90	28	130	2.3	2.5	<10	7.3	<200	1	1	<20	10.0	7.7	2	6	<200	<500
179	2080	26	61	280	4	<10	68	<10	560	20	<2	4.5	3	<100	52	<0.5	15	0.19	60	500	8.4	16.0	<10	4.4	<200	<1	<1	<20	4.8	6.8	94	<5	590	<500
180	5350	22	88	160	2	380	34	18	230	6	<2	6.9	<2	<100	16	<0.5	11	0.26	74	160	29.2	7.3	<10	3.3	<200	<1	<1	<20	1.6	2.7	30	6	>30000	<500
181	170	<5	84	470	3	15	56	21	440	14	<2	7.0	2	<100	29	<0.5	28	0.05	69	240	16.0	20.0	<10	6.3	<200	<1	1	<20	3.1	8.8	19	7	1700	<500
182	>10000	17	185	430	4	<10	36	<10	100	9	2	3.9	<2	<100	22	0.6	160	0.06	<20	140	29.6	19.0	<10	4.0	<200	<1	<1	<20	<0.5	2.3	12	<5	290	<500
183	36	<5	21	1300	2	<10	49	<10	110	18	<2	1.5	<2	<100	21	<0.5	22	<0.05	<20	180	25.8	3.8	<10	2.9	<200	<1	<1	<20	2.0	3.0	6	<5	430	<500
184	39	<5	24	<100	<1	<10	<10	<10	310	<1	<2	1.0	<2	<100	<5	<0.5	20	<0.05	<20	<10	0.7	0.7	<10	<0.2	<200	<1	<1	<20	<0.5	0.8	<2	<5	<200	<500
185	260	10	45	600	<1	17	63	<10	140	3	<2	7.1	4	<100	35	<0.5	<2	0.08	24	200	5.5	3.3	<10	4.6	<200	<1	<1	<20	8.9	5.2	5	<5	400	<500
186	7500	22	132	500	2	<10	63	<10	200	3	<2	2.6	4	<100	39	<0.5	8	0.09	<20	130	13.0	3.0	<10	5.0	<200	<1	<1	<20	12.0	4.1	2	<5	<200	<500
187	17	<5	26	730	<1	22	45	23	83	15	<2	4.1	3	<100	26	<0.5	3	1.30	49	150	7.8	16.0	<10	4.3	<200	<1	<1	<20	5.8	3.0	5	<5	790	<500
188	1360	23	77	640	1	150	<10	24	140	6	<2	>10.0	<2	<100	13	<0.5	<2	0.06	43	37	15.0	16.0	<10	4.0	<200	<1	<1	<20	0.8	3.3	10	<5	9300	<500
189	210	<5	24	180	<1	38	18	39	130	14	<2	10.0	<2	<100	8	0.5	<2	0.13	<20	110	4.9	33.0	<10	3.0	<200	<1	<1	<20	0.8	1.4	6	<5	2200	<500
190	<5	<5	2	<100	2	<10	<10	<10	180	<1	<2	0.9	<2	<100	<5	<0.5	3	<0.05	<20	12	3.7	2.0	<10	0.4	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
191	<78	>300	607	<830	<131	<83	<170	<22	<360	<4	<13	3.8	<13	<400	<11	<2.4	<19	<0.23	<130	<100	3010.0	3.5	<85	1.5	<3300	<2	<1	<370	<6.5	<4.0	<13	<57	<930	<2300
192	<5	<5	24	290	7	<10	22	13	100	10	<2	3.3	<2	<100	12	<0.5	<2	0.06	<20	64	61.9	8.3	<10	2.5	<200	<1	<1	<20	1.5	1.0	11	<5	<200	<500
193	37	5	27	<100	7	<10	<10	<10	200	4	<2	1.7	<2	<100	<5	<0.5	<2	0.10	32	17	67.0	5.1	<10	0.8	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
194	<5	40	72	500	17	<10	34	19	130	23	<2	6.9	<2	<100	16	<0.5	<2	0.14	74	140	180.0	15.0	<10	3.4	<200	<1	<1	<20	2.3	2.1	7	<5	400	<500
195	<28	>300	263	<250	<59	38	<37	24	410	8	<5	5.0	<4	<100	13	<0.5	<5	<0.26	<48	58	812.0	9.4	<21	1.9	<850	<1	<1	<120	<2.0	3.3	14	<16	3900	<500
196	623	32	690	120	4	<10	<10	64	58	<1	<2	>10.0	<2	<100	7	<0.5	<2	0.06	99	<10	5.6	3.6	46	1.1	<200	<1	<1	<20	<0.5	1.2	<2	<5	240	<500
197	>10000	15	226	100	1	<10	<10	17	300	<1	<2	2.7	<2	<100	<5	<0.5	10	0.23	<20	<10	3.2	3.5	<10	0.7	<200	<1	<1	<20	<0.5	<0.5	13	<5	<200	<500
198	35	<5	41	140	2	<10	<10	25	200	<1	<2	4.8	<2	<100	<5	<0.5	<2	0.16	32	<10	0.9	6.1	<10	0.6	<200	<1	<1	<20	<0.5	<0.5	10	<5	<200	<500
199	470	15	181	350	1	19	<10	30	280	1	<2	4.4	<2	<100	<5	<0.5	5570	<0.05	27	20	12.0	0.8	12	0.9	<200	<1	3	<20	<0.5	7.3	<2	<5	<200	<500
200	654	17	87	<100	4	<10	<10	<10	240	<1	<2	2.4	<2	<100	<5	<0.5	45	<0.05	<20	<10	1.3	<0.5	<10	0.3	<200	<1	<1	<20	<0.5	<0.5	3	<5	<200	<500
201	<26	280	280	>20000	<3	<57	<34	<10	<50	<1	<5	1.8	<4	<100	29	<0.5	8	<0.12	51	<30	623.0	<0.5	<24	2.4	<730	<1	<1	<67	<1.8	<1.1	20	<12	<200	<500
202	<110	>300	983	10500	<234	<120	<120	53	<310	<4	<13	>10.0	<12	<360	18	<2.3	<21	<1.90	<140	<79	3540.0	11.0	<71	2.8	<2800	<3	<1	<360	<5.7	<5.5	<30	<53	1600	<2200
203	<46	>300	553	2000	<112	<54	<51	<10	<130	6	<6	1.0	<5	<100	17	<1.0	<35	<0.82	<59	45	1590.0	7.0	<30	3.1	<1200	<1	<1	<160	<2.5	<2.3	26	<23	<330	<1000
204	<52	>300	632	2300	<133	<62	<57	<10	<150	<5	<14	1.4	<6	<100	16	<2.4	<30	<0.92	<67	54	1790.0	8.2	<34	3.5	<1400	<1	<1	<180	<2.9	<2.7	<28	<27	<300	<1200
205	<12	130	78	>20000	<19	<10	39	19	<50	4	<2	5.4	<2	<100	18	<0.5	19	<0.05	<20	97	261.0	12.0	<10	3.6	<200	<1	<1	<45	2.2	2.1	12	<7	440	<500
206	<5	<5	13	630	2	<10	52	37	130	22	<2	7.3	<2	<100	24	<0.5	<2	1.30	56	100	9.4	21.0	<10	5.4	<200	<1	<1	<20	2.4	1.9	3	<5	<200	<500
207	<24	190	234	4500	<56	<29	<29	69	<50	4	<6	>10.0	<2	<110	10	0.7	<4	<0.24	94	41	880.0	15.0	<10	2.7	<740	<1	<1	<89	<1.5	3.1	<13	<21	1300	<500
208	<23	150	394	>20000	<47	<28	<30	31	<50	1	<2	>10.0	<2	<100	6	<0.5	<11	<0.22	<60	<22	810.0	10.0	<10	1.7	<720	<1	<1	<87	<1.4	1.5	23	<13	1200	<500
209	<5	37	69	760	15	<10	40	34	130	12	<2	9.0	<2	<100	18	0.6	3	0.28	<20	120	144.0	28.0	<10	4.5	<200	<1	1	<20	2.4	2.0	11	7	370	<500
210	6	7	33	790	3	<10	15	20	710	4	<2	7.4	<2	<100	10	<0.5	<2	0.08	59	81	39.4	20.0	<10	2.5	<200	<1	<1	<20	1.5	2.5	4	<5	<200	<500
211	8	10	50	4500	3	21	35	13	110	11	<2	5.6	<2	<100	16	<0.5	5	0.14	49	94	41.5	17.0	<10	3.6	<200	<1	<1	<20	2.9	1.9	8	<5	540	<500
212	43	<5	6	350	<1	<10	25	17	110	3	<2	2.2	3	<100	11	<0.5	12	2.50	<20	56	1.1	6.1	<10	2.4	<200	<1	<1	<20	4.6	1.4	<2	<5	<200	<500
213	200	<5	3960	<100	12	<10	<10	13	<50	3	<2	2.9	<2	<100	8	<0.5	7	<0.05	37	19	116.0	6.1	<10	1.4	<200	<1	<1	<20	0.9	<0.5	6	7	600	<500
214	>10000	69	213	<100	3	<10	<10	15	97	<1	<2	8.8	<2	<100	<5	<0.5	9	0.33	33	<10	38.2	8.3	<10	0.9	<200	<1	<1	<20	<0.5	0.6	<2	<5	320	<500
215	210	210	130	420	8	130	22	19	65	8	<2	4.6	<2	<100	9	<0.5	14	0.06	<20	79	158.0	15.0	<10	2.2	<200	<1	<1	<20	3.1	1.8	7	<5	9900	<500
216	44	<5	32	2000	<1	<10	54	12	<50	<1	<2	4.0	3	<100	27	<0.5	<2	1.80	39	84	3.4	10.0	<10	3.8	<200	<1	<1	<20	2.6	1.8	2	<5	530	<500
217	2360	8	123	730	1	<10	21	<10	<50	<1	<2	>10.0	3	<100	11	<0.5	<2	0.09	<20	100	4.6	20.0	<10	2.1	<200	<1	<1	<20	2.8	1.2	28	<5	590	<500
218	<11	20	141	1700	8	<24	<10	32	50	13	<2	5.7	<2	<100	12	<0.5	6	0.11	<20	77	211.0	22.0	<10	3.2	<420	<1	<1	<20	3.5	2.1	12	<5	210	<500
219	<26	240	166	>20000	<15	230	<34	<10	<50	3	<4	2.4	<2	<100	7	<0.5	<21	<0.27	<41	40	1070.0	8.3	<22	1.6	<950	<1	<1	<99	3.3	1.8	<5	<18	11000	<500
220	3080	<5	26	200	1	<10	<10	14	76	1	<2	4.3	<2	<100	<5	<0.5	3	0.06	<20	<10	2.6	2.7	<10	1.1	<200	<1	<1	<20	<0.5	0.9	3	<5	<200	<500
221	<5	62	26	<100	7	<10	12	<10	140	3	<2	<0.5	<2	<100	10	<0.5	<2	<0.05	<20	33	91.0	0.9	<10	1.4	<200	<1	<1	<20	2.1	0.7	<2	<5	<200	<500
222	150	>300	342	2700	<140	<50	<58	<10	<170	4	<8	<0.5	<7	<100	<16	<1.2	<9	<0.41	<72	<42	1670.0	<0.5	<32	1.4	<1300	3	<1	<190	<2.6	<1.9	20	<35	<200	1400
223	17	<5	22	460	3	<10	17	11	<50	5	<2	3.8	<2	<100	11	<0.5	<2	<0.05	24	120	23.9	16.0	<10	2.1	<200	<1	<1	<20	2.6	2.4	10	<5	<200	<500

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
224	<20	>300	183	19200	<42	<24	<26	<10	88	6	<2	1.0	<2	<100	18	<0.5	<2	<0.16	<20	43	676.0	3.7	<10	2.7	<640	<1	<1	<77	3.8	<0.5	12	<9	470	<500
225	<5	140	42	3100	14	<10	37	<10	58	3	<2	0.9	<2	<100	16	<0.5	3	0.06	<20	82	145.0	2.8	<10	2.1	<200	<1	<1	<20	4.6	1.1	4	<5	220	<500
226	<91	>300	851	>20000	<285	<110	<110	<10	<270	<3	<11	<1.0	<10	<310	<17	<2.1	<19	<1.50	<110	82	3170.0	<1.0	<63	1.3	<2500	<2	<1	<310	<5.2	<4.8	<55	<51	3100	<2000
227	360	76	57	110	9	<10	<10	12	110	<1	<2	2.6	<2	<100	<5	<0.5	3	0.09	<20	11	67.1	3.2	<10	0.6	<200	<1	<1	<20	<0.5	0.8	<2	<5	1200	<500
228	11	<5	45	120	4	<10	<10	12	130	<1	<2	1.3	<2	<100	<5	<0.5	<2	<0.05	<20	11	3.6	4.0	<10	1.0	<200	<1	<1	<20	<0.5	<0.5	<2	<5	260	<500
229	<5	<5	5	440	3	<10	13	12	120	1	<2	1.7	<2	<100	8	<0.5	<2	0.08	<20	40	3.4	11.0	<10	1.7	<200	<1	<1	<20	1.9	1.1	2	<5	<200	<500
230	<5	<5	9	430	26	<10	36	41	<50	10	<2	8.7	<2	<100	18	<0.5	<2	0.15	<20	100	7.7	32.0	<10	4.0	<200	<1	<1	<20	2.0	4.8	5	<5	1800	<500
231	200	>300	83	<100	54	380	<21	45	<50	6	4	8.2	<2	<100	19	0.7	<2	<0.05	<20	52	239.0	21.0	<10	4.8	<420	<1	<1	<49	<0.5	3.3	<7	<6	24500	<500
232	180	140	15	130	2	39	41	25	60	33	<2	6.1	<2	<100	24	0.6	<2	0.06	<20	110	20.9	13.0	<10	4.8	<200	<1	<1	<20	3.8	3.2	3	<5	2900	<500
233	13	5	10	230	<1	<10	35	22	57	20	<2	6.4	3	<100	16	0.7	6	0.30	<20	160	5.1	18.0	<10	5.2	<200	<1	1	<20	2.6	3.1	<2	<5	210	<500
234	8	9	12	170	3	<10	40	<10	83	15	<2	3.4	<2	<100	15	0.7	<2	0.05	24	100	28.1	13.0	<10	4.8	<200	<1	1	<20	1.8	2.3	7	<5	<200	<500
235	<5	<5	15	200	9	<10	52	23	<50	29	<2	5.6	<2	<100	23	0.6	<2	0.12	<20	140	37.2	17.0	<10	6.5	<200	<1	<1	<20	2.8	2.4	18	6	<200	<500
236	<5	<5	9	260	4	<10	43	15	64	20	<2	5.1	2	<100	18	<0.5	2	0.14	28	160	8.8	23.0	<10	5.2	<200	<1	1	<20	2.4	2.5	9	5	<200	<500
237	<5	<5	8	230	<1	<10	58	25	<50	32	<2	5.9	<2	<100	28	<0.5	<2	0.29	<20	120	13.0	21.0	<10	4.0	<200	<1	<1	<20	4.6	4.1	11	<5	<200	<500
238	<5	<5	24	290	6	<10	32	<10	<50	37	<2	0.9	<2	<100	12	<0.5	<2	<0.05	30	110	76.9	5.3	<10	3.0	<200	<1	<1	<20	3.9	1.5	4	<5	<200	<500
239	78	260	175	<100	<44	<10	<10	<10	<50	6	4	2.6	<2	<100	7	<0.5	3	<0.11	<20	63	504.0	4.2	<10	1.7	<500	<1	<1	<60	<1.2	<0.5	8	<8	410	570
240	680	160	256	580	<35	<10	<10	15	<50	1	<2	6.1	<2	<100	<5	<0.6	<2	<0.11	41	35	479.0	5.6	<10	1.4	<500	<1	<1	<60	<0.5	<0.5	6	<8	1800	500
241	<5	46	84	<100	15	<10	29	15	57	5	<2	5.2	<2	<100	12	0.8	6	<0.05	<20	88	201.0	13.0	<10	3.2	<200	<1	<1	<20	2.2	2.4	10	7	2500	<500
242	12	7	81	1300	7	44	21	39	<50	2	<2	>10.0	<2	<100	22	0.6	160	<0.05	53	15	82.5	3.9	<10	3.5	<200	<1	<1	<20	1.0	9.3	<2	7	3500	<500
243	871	45	193	110	5	29	68	38	<50	5	<2	>10.0	3	<100	36	1.2	17	<0.05	<20	35	28.6	1.5	90	9.5	<200	2	2	<20	3.4	2.9	<2	<5	6800	<500
244	14	<5	28	290	2	<10	37	28	86	9	<2	>10.0	<2	<100	17	<0.5	<2	0.42	32	66	5.2	7.5	<10	3.2	<200	<1	<1	<20	3.9	1.8	<2	<5	290	<500
245	39	<5	540	210	16	<10	67	<10	95	7	<2	>10.0	2	<100	32	<0.5	6	0.34	<20	100	36.4	10.0	<10	4.3	<200	<1	<1	<20	12.0	4.3	<2	<5	<200	<500
246	19	10	601	160	17	<10	53	<10	<50	5	<2	>10.0	<2	<100	31	<0.5	6	<0.05	<20	40	142.0	4.9	<10	4.6	<200	<1	<1	<20	5.3	3.6	<2	6	380	<500
247	20	<5	241	290	3	<10	58	<10	<50	4	<2	>10.0	3	<100	29	0.7	9	0.09	<20	99	19.0	11.0	<10	2.0	<200	<1	<1	<20	7.3	4.7	3	<5	530	520
248	<5	6	4	<100	2	<10	<10	<10	67	16	<2	1.3	3	<100	5	<0.5	<2	2.10	<20	300	1.0	1.9	<10	1.1	<200	23	<1	<20	4.2	5.2	<2	<5	<200	<500
249	<5	<5	3	690	<1	<10	<10	<10	200	<1	<2	2.4	<2	<100	<5	<0.5	10	<0.05	<20	<10	1.9	1.2	<10	0.4	<200	<1	<1	<20	<0.5	0.7	<2	<5	<200	<500
250	<5	<5	7	<100	2	<10	<10	14	110	2	<2	2.7	<2	<100	<5	<0.5	7	0.33	<20	<10	1.7	8.2	<10	0.7	<200	<1	<1	<20	<0.5	<0.5	3	<5	<200	<500
251	<5	22	373	900	25	<10	21	13	120	1	<2	>10.0	<2	<100	13	0.6	120	<0.05	<20	15	227.0	8.4	<10	2.9	<200	<1	<1	<20	2.0	3.8	10	<5	950	<500
252	<5	<5	28	430	6	<10	33	41	160	45	<2	10.0	<2	<100	14	<0.5	10	0.06	93	68	47.2	28.0	<10	5.0	<200	<1	1	<20	2.3	1.5	77	<5	<200	<500
253	11	<5	101	310	1	<10	73	25	53	3	<2	10.0	6	<100	28	0.8	6	0.16	74	40	3.7	10.0	<10	6.6	<200	2	1	<20	8.7	4.2	<2	7	510	<500
254	<5	<5	15	<100	1	<10	<10	<10	200	<1	<2	3.9	<2	<100	<5	<0.5	20	<0.05	<20	<10	4.7	2.6	<10	0.6	<200	<1	<1	<20	<0.5	<0.5	27	<5	<200	<500
255	23	<5	14	370	1	<10	34	35	<50	1	<2	>10.0	<2	<100	24	<0.5	<2	<0.05	<20	<10	4.7	6.4	<10	3.8	<200	<1	<1	<20	3.8	1.4	3	<5	270	790
256	8	<5	11	<100	<1	<10	13	18	150	<1	<2	3.0	<2	<100	<5	<0.5	27	0.11	32	<10	0.8	3.8	<10	1.3	<200	<1	<1	<20	1.1	2.4	<2	<5	<200	<500
257	16	6	184	270	3	<10	37	14	84	2	<2	>10.0	<2	<100	22	<0.5	3	0.06	<20	<10	20.0	6.1	<10	3.8	<200	<1	<1	<20	5.9	2.9	4	<5	<200	<500
258	7230	<5	254	<100	<1	<10	<10	<10	190	<1	<2	6.3	<2	<100	<5	<0.5	20	<0.05	<20	<10	2.2	1.4	<10	0.3	<200	<1	<1	<20	<0.5	<0.5	4	<5	<200	<500
259	2620	<5	38	<100	2	<10	<10	<10	140	<1	<2	1.8	<2	<100	<5	<0.5	13	0.14	<20	<10	4.3	5.6	<10	0.3	<200	<1	<1	<20	<0.5	1.5	3	<5	<200	<500
260	3420	<5	13	<100	<1	<10	<10	<10	150	<1	<2	2.0	<2	<100	<5	<0.5	9	0.27	<20	<10	3.1	10.0	<10	0.4	<200	<1	<1	<20	<0.5	<0.5	4	<5	<200	<500
261	230	43	164	110	5	26	86	22	180	<1	<2	2.7	3	<100	18	<0.5	492	0.06	<20	<10	31.9	0.8	18	5.0	<200	<1	<1	<20	<0.5	3.5	234	<5	4900	<500
262	1420	<5	69	<100	2	<10	<10	<10	200	<1	<2	3.7	<2	<100	<5	<0.5	12	0.05	<20	<10	3.9	1.3	<10	0.4	<200	<1	<1	<20	<0.5	<0.5	3	<5	<200	<500
263	9	<5	40	520	2	<10	41	13	190	3	<2	2.3	3	<100	17	<0.5	8	0.30	<20	77	6.3	8.9	<10	2.9	<200	<1	<1	<20	2.5	1.6	3	<5	<200	<500
264	38	5	175	580	2	<10	26	22	100	3	<2	5.5	<2	<100	14	<0.5	8	0.08	<20	30	11.0	9.3	<10	3.0	<200	<1	<1	<20	1.6	1.5	<2	<5	<200	<500
265	11	<5	105	760	2	<10	63	24	160	20	<2	6.0	3	<100	27	<0.5	<2	1.20	28	110	14.0	18.0	<10	5.4	<200	<1	<1	<20	3.7	2.3	14	<5	340	<500
266	220	9	241	<100	<13	<33	<21	<10	260	<1	<2	0.8	<2	<100	<5	<0.5	24	<0.05	<20	<10	553.0	<0.5	<10	<0.2	<720	<1	<1	<65	<1.2	<0.5	<2	<8	<200	<500
267	82	<5	9	<100	16	<10	<10	<10	280	<1	<2	1.4	<2	<100	<5	<0.5	5	<0.05	<20	<10	2.6	6.9	<10	3.1	<200	<1	<1	<20	<0.5	0.6	<2	<5	<200	<500
268	<5	<5	105	550	2	<10	38	18	170	7	<2	5.0	<2	<100	16	<0.5	<2	1.20	26	13	1.0	10.0	<10	4.1	<200	<1	<1	<20	4.7	1.3	5	<5	<200	<500
269	8	<5	78	690	2	<10	76	28	160	20	<2	5.1	<2	<100	32	<0.5	<2	1.10	<20	56	4.1	19.0	<10	6.5	<200	2	<1	<20	5.8	2.7	5	<5	<200	<500
270	30	<5	3	560	<1	<10	25	<10	130	1	<2	3.5	4	<100	12	<0.5	82	0.82	<20	81	0.6	8.7	<10	2.0	<200	<1	<1	<20	3.5	1.4	6	<5	<200	<500
271	>10000	25	255	120	2	<10	<10	<10	170	1	<2	2.7	<2	<100	<5	<0.5	18	<0.05	<20	35	10.0	2.5	<10	1.3	<200	<1	<1	<20	<0.5	1.5	10	<5	930	<500
272	72	<5	10	590	2	<10	27	10	160	4	<2	3.4	<2	<100	20	<0.5	20	0.94	<20	78	1.3	10.0	<10	4.4	<200	<1	<1	<20	3.2	1.4	<2	<5	<200	<500
273	370	10	13	310	11	<10	37	58	120	2	<2	>10.0	<2	<100	27	<0.5	<2	0.54	<20	42	1.3	13.0	<10	7.4	<200	<1	<1	<20	1.8	2.6	93	<5	<200	<500
274	2310	<5	213	670	5	11	38	12	87	10	<2	6.1	<2	<100	17	<0.5	5	0.08	<20	82	12.0	15.0	<10	4.2	<200	<1	<1	<20	3.5	2.6	42	<5	1300	<500
275	1280	<5	50	1100	1	<10	60	21	92	7	2	6.1	<2	<100	30	<0.5	2	0.25	<20	100	6.1	15.0	<10	5.6	<200	<1	<1	<20	5.7	3.1	12	<5	440	<500
276	9900	<5	59	800	2	<10	29	21	100	3	<2	5.3	2	<100	24	<0.5	10	0.08	27	78	5.9	9.2	<10	5.3	<200	<1	<1	<20	2.2	2.4	27	<5	970	<500
277	4200	5	74	<100	1	<10	<10	170	86	<1	<2	>10.0	<2	<100	17	<0.5	6	<0.05	<20	<10	2.4	4.8	<10	6.5	<200	<1	1	110	<0.5	5.5	49	<5	250	<500
278	6	<5	4	620	1	<10	60	14	120	2	<2	5.3	5	<100	26	<0.5	41	1.40	<20	96	0.4	15.0	<10	4.4	<200	<1	<1	<20	5.1	2.9	5	<5	<200	<500
279	>10000	11	72	200	1	<10	<10	14	350	<1	<2	4.4	<2	<100	<5	<0.5	14	<0.05	36	<10	6.0	1.1	<10	0.9	<200	<1	<1	<20	<0.5	0.5	41	<5	<200	<500

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
280	>10000	13	230	830	2	33	63	11	180	13	<2	8.0	<2	<100	32	<0.5	17	0.06	42	110	3.5	11.0	<10	6.6	<200	<1	<1	<20	2.9	6.7	25	<5	2600	<500
281	45	<5	5	250	<1	<10	48	34	<50	3	<2	>10.0	<2	<100	18	<0.5	6	<0.05	44	14	0.5	6.5	<10	3.3	<200	<1	<1	<20	5.2	1.8	3	<5	260	<500
282	14	<5	4	170	<1	<10	<10	14	<50	<1	<2	>10.0	<2	<100	<5	<0.5	8	0.38	<20	42	0.3	33.0	<10	1.2	<200	<1	<1	<20	<0.5	1.2	57	<5	<200	<500
283	11	<5	7	<100	<1	<10	<10	<10	83	<1	<2	7.4	<2	<100	<5	<0.5	253	<0.05	<20	<10	0.5	1.2	10	0.4	<200	<1	<1	<20	0.7	<0.5	31	<5	<200	<500
284	1210	<5	270	150	8	36	<10	25	<50	7	<2	7.0	<2	<100	5	<0.5	4	0.08	<20	51	9.1	24.0	<10	1.4	<200	<1	<1	<20	<0.5	0.7	10	<5	2800	<500
285	470	20	399	<100	3	<10	<10	<10	200	<1	<2	7.2	<2	<100	6	1.1	19	0.07	<20	11	13.0	18.0	<10	2.7	<200	<1	1	<20	<0.5	1.3	<2	7	3200	<500
286	120	<5	72	<100	1	<10	11	26	190	<1	<2	4.2	<2	<100	6	<0.5	10	0.07	<20	<10	2.4	15.0	<10	1.6	<200	<1	<1	<20	0.6	<0.5	<2	<5	<200	<500
287	320	9	1210	140	<24	<28	38	35	350	17	3	10.0	<2	<100	18	0.5	10	0.34	100	100	141.0	23.0	<10	4.1	<500	2	1	<46	3.3	2.5	120	<5	2800	<500
288	3540	47	4230	<100	<16	<41	<26	<10	90	6	<2	>10.0	<2	<100	7	<0.5	31	0.12	54	55	229.0	34.0	<10	2.1	<780	<1	<1	<75	<1.4	1.6	27	<11	3000	<500
289	13	<5	165	190	3	<10	16	10	170	<1	<2	3.4	<2	<100	13	<0.5	14	0.14	<20	<10	26.8	15.0	<10	3.6	<200	<1	<1	<20	<0.5	<0.5	3	<5	<200	<500
290	140	10	117	<100	7	<25	<10	<10	130	<1	<2	3.0	<2	<100	7	0.6	8	0.27	<20	21	207.0	8.1	<10	2.4	<500	<1	<1	<46	3.5	<0.5	4	8	<200	<500
291	>10000	260	3000	<4400	<76	<1000	<640	<120	<1800	<24	<76	<5.4	<71	<210	<63	<12.0	<110	<5.09	<790	<460	>9999.0	<7.1	<470	5.8	<20000	<15	<10	<1900	<33.0	<24.0	<87	<644	<3000	<1600
292	370	<5	3810	<100	<13	<31	<22	<10	130	2	<2	>10.0	<2	<100	9	<0.5	16	1.00	<20	<21	32.5	6.0	<19	2.0	<560	<1	<1	<62	1.8	1.2	<2	<5	900	<500
293	120	<5	325	480	6	<10	21	<10	<50	2	<2	1.6	2	<100	11	<0.5	<2	0.12	<20	40	1.8	8.3	<10	3.4	<200	<1	<1	<20	2.0	1.2	5	<5	400	<500
294	2440	<5	738	1700	<10	20	77	49	51	3	<2	>10.0	<2	<100	25	0.7	27	0.32	85	46	2.6	9.4	<10	5.3	<200	<1	<1	<20	7.8	8.0	17	<5	1100	<500
295	3480	78	7170	<100	<19	74	<33	<10	200	<1	<2	7.6	<2	<100	<5	<0.5	25	<0.05	64	<24	82.1	0.9	<10	1.2	<690	<1	<1	<98	<1.3	2.0	49	<15	1900	<500
296	160	<5	294	710	5	<10	19	<10	53	8	<2	5.7	<2	<100	16	<0.5	<2	0.30	<20	77	4.9	21.0	<10	3.4	<200	<1	<1	<20	1.4	1.0	19	<5	<200	<500
297	89	<5	83	440	1	<10	29	<10	<50	5	<2	5.4	2	<100	18	<0.5	<2	1.50	<20	80	3.3	16.0	<10	3.8	<200	<1	<1	<20	2.8	1.7	7	<5	<200	<500
298	6620	49	452	530	6	70	<10	17	220	<1	<2	7.5	<2	<100	6	<0.5	7	<0.05	43	19	16.0	6.9	<10	1.7	<200	<1	<1	<20	<0.5	1.3	49	<5	9400	<500
299	1140	14	32	2800	<1	<10	170	16	160	2	<2	7.3	3	<100	76	<0.5	7	1.00	<20	89	1.7	11.0	<10	10.0	<200	<1	<1	<20	3.2	3.3	27	<5	<200	<500
300	>10000	210	3100	220	30	<37	<30	<10	190	<1	3	3.0	<2	<100	7	<0.5	17	0.11	<41	<24	153.0	2.2	<10	2.1	<720	<1	<1	<82	1.8	2.8	<4	<5	1300	<500
301	710	<5	982	350	<11	22	53	15	<50	4	<2	8.4	<2	<100	17	<0.5	4	0.11	<20	29	15.0	14.0	<10	4.2	<200	<1	<1	<20	4.3	4.4	10	<5	1600	<500
302	2180	20	592	300	<8	14	28	16	<50	5	<2	6.5	<2	<100	11	<0.5	<2	0.22	<20	33	25.4	21.0	<10	3.3	<200	<1	<1	<20	1.0	2.8	11	<5	1100	<500
303	1050	<5	638	290	<8	22	19	<10	<50	3	<2	4.4	<2	<100	11	0.5	<2	0.08	22	38	17.0	16.0	<10	3.3	<200	<1	<1	<20	1.8	2.6	23	<5	3900	<500
304	730	22	654	370	<9	16	21	<10	<50	3	<2	4.3	<2	<100	12	<0.5	<2	0.11	<20	28	34.0	14.0	<10	3.8	<200	<1	<1	<20	2.1	2.3	9	<5	1400	<500
305	2030	<5	50	290	1	14	32	19	180	4	<2	3 6	2	<100	15	<0.5	<2	0.33	61	61	1.9	11.0	<10	3.5	<200	<1	<1	<20	2.8	5.0	14	<5	2000	<500
306	1910	<5	20	1100	1	15	58	27	140	10	3	6 0	3	<100	50	<0.5	5	0.79	45	140	1.2	22.0	<10	10.0	<200	1	1	<20	5.4	3.1	10	<5	2300	<500
307	60	<5	9	<100	2	<10	<10	<10	260	<1	<2	5.1	<2	<100	<5	<0.5	15	<0.05	<20	11	0.7	2.1	<10	0.5	<200	<1	<1	<20	<0.5	0.9	4	<5	<200	<500
308	2120	<5	147	470	7	<10	50	<10	62	8	<2	4 5	<2	<100	17	<0.5	6	0.07	21	81	15.0	7.8	<10	4.4	<200	<1	<1	<20	4.6	28.0	20	<5	1000	<500
309	>10000	18	463	390	7	11	<31	<10	100	<1	<2	>10.0	<2	<100	<5	7.0	17	<0.05	<20	29	33.2	1.0	<10	4.6	<410	<1	<1	<58	4.4	91.4	5	<5	1800	<500
310	8030	<5	80	250	3	<10	32	<10	93	8	<2	3.9	<2	<100	11	<0.5	5	0.06	21	79	4.9	5.1	<10	2.3	<200	3	<1	<20	4.6	11.0	9	<5	1400	<500
311	20	<5	9	730	<1	<10	64	14	81	5	<2	4.2	4	<100	28	<0.5	<2	0.54	<20	89	0.6	14.0	<10	6.2	<200	<1	<1	<20	6.2	5.1	4	<5	<200	<500
312	19	<5	10	<100	<1	<10	<10	<10	100	2	<2	<0.5	<2	<100	<5	<0.5	512	0.49	<20	91	0.3	<0.5	<10	0.2	<200	<1	<1	<20	<0.5	0.8	<2	<5	<200	<500
313	1550	<5	22	430	<1	<10	38	17	60	3	<2	4.8	<2	<100	15	<0.5	4	0.14	<20	61	0.9	11.0	<10	3.9	<200	<1	<1	<20	3.2	5.2	21	<5	560	<500
314	1420	<5	23	570	<1	34	51	20	92	5	<2	5.1	2	<100	19	<0.5	<2	0.67	31	71	0.8	16.0	<10	4.9	<200	<1	<1	<20	4.3	5.1	14	<5	3700	<500
315	3610	<5	25	720	<1	47	42	22	100	4	<2	5.0	2	<100	22	<0.5	<2	0.61	<20	76	1.5	14.0	<10	5.2	<200	<1	<1	<20	4.8	4.7	13	<5	5500	<500
316	825	43	364	960	22	33	<10	<10	56	<1	<2	8.8	<2	<100	<5	<0.5	8	<0.05	<20	12	201.0	6.3	<10	1.7	<200	<1	<1	<40	<0.5	2.2	11	<5	2600	<500
317	53	11	255	410	16	<10	13	14	<50	3	<2	8.9	<2	<100	10	<0.5	6	0.14	<20	28	18.0	14.0	<10	3.5	<200	<1	<1	<20	2.1	1.4	9	<5	1000	<500
318	531	21	1620	550	<27	<10	27	<10	<50	1	<2	3.2	<2	<100	14	0.8	<2	0.18	<20	<10	109.0	14.0	<10	4.4	<200	<1	<1	<20	3.7	1.3	11	<8	1400	<500
319	5100	>300	>10000	<720	<202	<150	<120	<10	<310	<4	<8	3.3	<11	<360	8	<2.1	<15	<0.05	<150	<75	946.0	3.1	<74	0.8	<2700	<3	<2	<310	<5.9	<3.4	28	<41	19000	<2400
320	8	6	80	390	7	<10	<10	<10	130	<1	<2	0.7	<2	<100	<5	<0.5	2	<0.05	<20	<10	32.6	1.8	<10	0.3	<200	<1	<1	<20	<0.5	<0.5	<2	<5	340	<500
321	1730	190	4940	1100	<89	46	<27	<10	<50	<1	<2	2.8	<2	<100	12	0.7	<2	0.16	<46	<24	204.0	6.7	<10	4.3	<680	<1	<1	<78	<1.4	1.2	19	<13	2800	<500
322	3320	51	>10000	<470	<175	170	<72	<10	<200	<3	<5	5.7	<7	<230	9	<1.3	<9	<0.05	<100	<53	508.0	8.1	<46	2.2	<1700	<2	<1	<200	<3.7	<2.1	<7	<27	6700	<1600
323	28	<5	1360	290	<18	<10	23	10	74	2	<2	>10.0	<2	<100	10	<0.5	2	<0.05	25	<10	40.1	3.4	<10	2.1	<200	<1	<1	<20	3.8	1.0	5	<5	770	<500
324	99	65	1230	520	<24	19	<10	<10	<50	3	<2	3.7	<2	<100	10	<0.5	<2	0.35	<20	54	176.0	16.0	<10	3.4	<200	<1	<1	<45	<0.5	3.2	8	<9	3000	<500
325	190	>300	1220	<100	<49	<10	<24	<10	<50	<1	<2	0.9	<2	<100	10	0.7	4	<0.05	44	<10	554.0	1.4	<10	2.6	<640	<1	<1	<71	<1.3	1.1	14	<12	1500	<500
326	180	300	932	670	<34	17	<10	<10	140	<1	<2	1.3	<2	<100	<5	<0.5	2	<0.05	<20	<10	330.0	1.3	<10	0.6	<480	<1	<1	<53	<0.5	<0.5	89	<7	4100	<500
327	2510	>300	>10000	<1100	<349	240	<180	<28	720	<6	<13	9.1	<17	<540	15	<3.1	<22	<0.10	510	<110	1660.0	13.0	<110	2.5	<4100	<5	<3	<480	<8.8	<5.1	57	<54	16000	<3500
328	15	<5	544	950	14	<10	29	13	<50	5	3	7.0	<2	<100	17	0.7	5	0.09	<20	38	37.6	18.0	<10	5.6	<200	<1	<1	<20	2.8	1.2	13	<5	1500	<500
329	33	86	739	500	<12	49	<10	<10	100	<1	<2	3.5	<2	<100	<5	<0.5	7	<0.05	23	<10	58.2	5.6	<10	1.5	<200	<1	<1	<20	1.1	0.6	6	<5	7800	<500
330	180	<5	26	410	<1	<10	22	47	<50	<1	<2	7.5	<2	<100	10	<0.5	7	1.60	<20	23	2.0	30.0	<10	3.0	<200	<1	<1	<20	1.5	0.7	<2	<5	480	<500
331	63	<5	62	140	2	<10	17	<10	51	7	<2	7.3	<2	<100	9	<0.5	8	0.08	<20	29	10.0	16.0	<10	2.9	<200	<1	<1	<20	0.6	1.2	18	<5	240	<500
332	<11	52	2150	580	<9	49	<10	51	230	10	<2	10.0	<2	<100	<5	<0.5	4	0.07	110	83	69.4	38.0	<10	2.5	<420	<1	<1	<41	1.1	0.6	28	<7	5400	<500
333	6	<5	106	310	1	<10	11	<10	<50	2	<2	7.8	<2	<100	<5	<0.5	3	0.05	<20	13	2.5	4.8	<10	2.2	<200	<1	<1	<20	1.4	2.1	<2	<5	290	<500
334	<5	81	862	270	<14	23	34	11	94	6	<2	4.6	<2	<100	11	0.6	2	0.27	<20	42	65.4	20.0	<10	3.6	<200	<1	<1	<20	1.5	2.9	6	<6	3100	<500
335	<5	17	318	110	7	<10	20	31	310	10	<2	6.8	<2	<100	5	<0.5	3	0.05	73	38	20.6	17.0	<10	2.3	<200	<1	<1	<20	<0.5	11.0	19	<5	810	<500

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
336	<5	49	174	520	7	<10	23	24	140	10	<2	5.8	<2	<100	15	<0.5	33	0.09	43	89	115.0	13.0	<10	3.5	<200	<1	<1	<20	2.6	6.0	16	<5	<200	<500
337	230	180	761	<100	<5	<10	<10	<10	90	<1	<2	2.7	<2	<100	<5	<0.5	35	0.53	21	<10	3.0	8.7	<10	0.9	<200	<1	<1	50	<0.5	<0.5	53	<5	<200	<500
338	<5	<5	177	610	2	11	16	26	100	3	<2	8.8	<2	<100	8	<0.5	<2	0.77	<20	<10	4.8	24.0	<10	2.3	<200	<1	<1	<20	0.7	0.7	<2	<5	1700	<500
339	2310	28	104	220	6	<10	22	15	170	1	<2	4.1	<2	<100	10	<0.5	17	0.10	32	41	55.2	6.5	<10	2.6	<200	<1	<1	<20	2.3	6.5	17	<5	2200	<500
340	260	15	43	760	5	<10	47	15	120	5	<2	5.2	<2	<100	22	<0.5	11	0.56	<20	97	41.6	14.0	<10	5.1	<200	<1	<1	<20	5.7	8.7	13	<5	1700	<500
341	28	<5	699	440	<11	<10	34	12	78	<1	<2	6.0	<2	<100	15	<0.5	8	0.34	<20	<10	37.5	13.0	<10	4.1	<200	<1	<1	<20	2.7	1.6	<2	<5	<200	500
342	19	220	108	210	20	<10	<10	<10	190	20	<2	1.2	<2	<100	<5	<0.5	8	0.15	21	380	43.8	<0.5	<10	0.3	<200	2	<1	<20	<0.5	3.5	<2	<5	<200	<500
343	31	>300	406	310	<9	<29	<10	<10	180	4	<2	2.5	<2	<100	<5	<0.5	16	0.26	<20	60	356.0	<0.5	<10	0.8	<550	1	<1	<51	<0.5	7.9	<2	<5	710	<500
344	629	>300	127	<100	4	320	42	<10	280	12	<2	2.1	<2	<100	26	<0.5	9	0.06	<20	110	23.4	1.1	<10	4.7	<200	<1	<1	<20	11.0	42.0	6	<5	19000	<500
345	16	>300	42	6400	70	<10	27	17	110	15	<2	4.1	<2	<100	23	<0.5	<2	0.12	<20	120	70.9	12.0	<10	3.6	<200	<1	<1	<20	2.9	2.4	7	<5	250	<500
346	<5	<5	2	320	2	<10	<10	<10	78	23	<2	<0.5	<2	<100	<5	<0.5	<2	2.70	<20	600	1.3	<0.5	<10	0.3	<200	2	<1	<20	0.8	<0.5	<2	<5	<200	<500
347	64	52	361	<100	13	<10	24	27	<50	3	<2	>10.0	3	<100	12	0.6	<2	<0.05	<20	35	128.0	13.0	<10	2.0	<200	<1	<1	<20	1.2	1.6	5	<5	1000	<500
348	<5	<5	166	<100	2	<10	<10	10	86	<1	<2	2.4	<2	<100	<5	<0.5	<2	0.18	<20	16	4.3	2.0	<10	1.2	<200	<1	<1	<20	0.7	<0.5	<2	<5	<200	<500
349	10	8	52	1000	4	<10	90	33	89	10	<2	8.8	2	<100	43	<0.5	11	0.25	24	180	34.8	20.0	<10	6.9	<200	<1	<1	<20	8.0	3.0	5	<5	1900	<500
350	533	<5	309	500	6	27	61	19	69	5	<2	>10.0	<2	<100	32	<0.5	31	0.10	<20	130	34.0	13.0	<10	6.2	<200	<1	<1	<20	4.0	24.0	8	<5	2900	<500
351	57	<5	44	560	1	22	65	19	130	19	<2	5.6	2	<100	33	<0.5	<2	0.31	46	290	3.9	15.0	<10	5.8	<200	6	<1	<20	5.9	9.2	5	<5	2100	<500
352	<5	<5	25	310	1	<10	53	<10	60	17	<2	3.0	<2	<100	23	<0.5	6	0.09	<20	220	5.7	11.0	<10	4.4	<200	7	<1	<20	4.1	12.0	4	<5	420	<500
353	56	5	651	380	12	<10	71	<10	77	7	<2	>10.0	3	<100	40	0.5	6	0.09	<20	110	78.1	13.0	14	6.5	<200	<1	<1	<20	16.0	9.1	8	<5	1600	<500
354	677	73	5910	<350	<126	420	<53	21	<140	3	<6	>10.0	<5	<100	20	<1.0	<16	<0.55	<72	<38	1190.0	5.1	<31	3.7	<1200	<1	<1	<160	<2.5	6.0	<12	<19	>30000	<1100
355	140	<5	34	1100	<1	<10	92	<10	<50	8	3	2.6	5	<100	49	0.6	<2	0.11	<20	210	4.9	7.7	<10	8.1	<200	<1	1	<20	8.9	4.0	11	<5	520	<500
356	2260	6	34	780	<1	<10	61	<10	<50	7	<2	2.8	4	<100	30	<0.5	4	0.10	<20	200	6.2	7.0	<10	5.1	<200	<1	<1	<20	7.8	3.6	8	<5	860	<500
357	>10000	29	99	300	5	<10	15	17	<50	3	<2	>10.0	4	<100	10	0.5	47	0.82	<20	99	5.1	5.7	<10	1.7	<200	<1	<1	<20	2.6	3.0	6	<5	1800	<500
358	>10000	12	213	290	5	<10	32	<10	<50	2	<2	>10.0	<2	<100	10	0.6	24	0.05	<20	92	51.2	2.5	<10	1.5	<200	<1	<1	<20	4.4	4.6	3	<5	1400	<500
359	120	8	301	300	10	<10	38	18	<50	10	<2	10.0	<2	<100	22	<0.5	31	0.17	<20	250	100.0	18.0	<10	4.5	<200	<1	<1	<20	2.5	5.4	77	<5	1500	<500
360	99	16	240	270	9	<10	26	26	<50	10	<2	8.8	<2	<100	13	<0.5	11	0.11	<20	170	88.8	15.0	<10	2.1	<200	<1	<1	<20	1.2	1.7	39	<5	310	<500
361	16	<5	62	220	3	<10	40	28	<50	16	<2	6.3	<2	<100	19	<0.5	21	0.25	29	150	30.6	17.0	<10	4.6	<200	<1	<1	<20	1.9	3.7	24	<5	410	<500
362	<18	<5	1220	<100	<41	<21	<28	16	<50	6	<2	6.9	<2	<100	7	<0.7	12	0.20	<20	59	431.0	7.0	<10	2.7	<600	<1	<1	<84	<1.2	<0.5	10	<13	810	<500
363	<5	<5	15	290	2	<10	86	57	1600	15	2	8.7	<2	<100	45	<0.5	7	0.30	440	99	3.9	25.0	<10	6.4	<200	<1	<1	<20	4.4	1.9	7	<5	<200	<500
364	<5	<5	2	690	<1	<10	49	<10	<50	4	<2	1.2	3	<100	27	<0.5	180	3.90	<20	96	<0.2	4.1	<10	3.8	<200	<1	<1	<20	3.3	2.6	11	<5	<200	<500
365	120	5	19	770	1	<10	41	<10	<50	6	<2	1.7	2	<100	21	<0.5	200	0.61	<20	200	13.0	2.9	<10	3.0	<200	<1	<1	<20	2.4	11.0	28	<5	1200	<500
366	21	<5	10	1100	<1	<10	20	<10	<50	3	<2	1.8	3	<100	13	<0.5	200	2.50	<20	210	1.4	4.0	<10	1.8	<200	<1	<1	<20	2.6	2.7	27	<5	<200	<500
367	44	55	34	1700	<1	<10	56	<10	<50	5	<2	5.0	3	<100	28	<0.5	273	1.50	<20	180	1.5	3.5	14	4.0	<200	<1	<1	<20	2.6	5.8	44	<5	<200	<500
368	44	16	7	2200	<1	<10	20	<10	59	2	<2	1.8	3	<100	10	<0.5	160	1.70	<20	200	0.7	3.1	<10	1.5	<200	<1	<1	<20	2.4	2.0	31	<5	<200	<500
369	430	40	17	1600	5	<10	<10	38	<50	2	<2	7.3	4	<100	5	<0.5	61	2.90	<20	190	67.9	2.9	13	0.6	<200	<1	<1	<20	<0.5	0.8	34	<5	<200	<500
370	97	48	12	1900	<1	<10	10	11	<50	1	<2	3.7	3	<100	9	<0.5	160	3.40	<20	220	24.7	3.1	<10	1.0	<200	<1	<1	<20	2.1	2.3	35	<5	<200	<500
371	64	<5	47	1800	2	<10	21	<10	<50	5	<2	>10.0	3	<100	13	<0.5	50	2.40	<20	150	17.0	4.3	<10	2.5	<200	<1	<1	<20	3.0	3.7	29	<5	<200	<500
372	230	29	35	1300	3	<10	33	<10	90	2	<2	2.5	<2	<100	18	<0.5	88	<0.05	<20	92	38.7	2.2	<10	1.8	<200	<1	<1	<20	1.4	1.6	3	<5	<200	<500
373	93	110	356	240	8	<10	32	<10	120	11	<2	8.6	<2	<100	18	<0.5	130	0.38	<20	140	35.7	8.8	<10	2.6	<200	<1	<1	<38	3.7	1.7	13	<5	400	<500
374	320	>300	219	170	11	<10	<10	<10	140	1	<2	5.7	<2	<100	6	<0.5	69	<0.05	<20	14	125.0	1.5	13	1.0	<200	<1	<1	<20	<0.5	1.0	5	<5	310	<500
375	41	<5	15	<100	46	<10	<10	43	220	2	<2	8.7	<2	<100	<5	<0.5	<2	2.00	70	16	1.2	46.0	<10	2.1	<200	<1	<1	<20	0.6	0.6	<2	<5	360	<500
376	8	<5	6	270	2	<10	18	36	58	5	<2	8.0	<2	<100	7	<0.5	<2	0.48	<20	74	1.4	35.0	<10	2.7	<200	<1	<1	<20	0.9	<0.5	<2	<5	260	<500
377	772	44	18	420	2	<10	<10	220	<50	<1	<2	>10.0	<2	<100	<5	<0.5	<2	0.14	340	11	0.5	7.8	<10	0.9	<200	<1	<1	<20	0.7	0.6	<2	<5	270	<500
378	680	47	96	<100	11	440	<10	38	110	<1	<2	5.1	<2	<100	<5	<0.5	<2	<0.05	<20	<10	155.0	0.7	<10	0.3	<200	<1	<1	<40	<0.5	<0.5	4	<5	>30000	<500
379	1190	30	124	<100	6	160	18	22	140	<1	<2	2.5	<2	<100	6	<0.5	11	<0.05	<20	<10	66.7	1.8	<10	1.0	<200	<1	<1	<20	1.8	2.6	3	<5	>30000	<500
380	74	<5	89	<100	3	<10	41	11	120	3	<2	6.9	<2	<100	20	<0.5	14	<0.05	<20	47	28.6	6.3	<10	3.6	<200	<1	<1	<20	3.6	6.5	3	<5	1600	<500
381	3450	37	238	110	11	<10	31	<10	81	<1	<2	2.8	<2	<100	8	<0.5	9	<0.05	<20	33	122.0	5.0	<10	1.3	<200	<1	<1	<20	1.7	1.3	3	<5	240	<500
382	32	<5	29	120	2	<10	24	<10	130	2	<2	3.4	<2	<100	10	<0.5	<2	<0.05	<20	32	11.0	4.1	<10	1.8	<200	<1	<1	<20	3.2	3.0	3	<5	800	<500
383	2050	<5	390	860	5	11	<10	600	<50	<1	2	>10.0	<2	<100	12	0.5	79	0.17	110	<10	24.3	6.8	<10	3.5	<200	<1	<1	<20	1.0	4.3	488	<5	<200	<500
384	536	<5	66	880	4	<10	<10	77	120	<1	<2	>10.0	<2	<100	<5	<0.5	16	0.30	24	<10	71.7	5.8	<10	1.0	<200	<1	<1	<20	5.2	3.0	502	<5	<200	<500
385	16	<5	78	4100	1	<10	24	41	89	2	<2	4.6	3	<100	15	<0.5	6	0.66	<20	100	6.7	9.1	<10	3.2	<200	1	<1	<20	14.0	2.7	36	<5	<200	<500
386	250	<5	171	1300	1	<10	<10	410	<50	<1	<2	>10.0	<2	<100	7	<0.5	63	0.18	87	24	5.2	4.3	<10	2.0	<200	<1	<1	<20	2.7	2.8	140	<5	<200	<500
387	450	25	218	100	7	83	<10	280	61	2	<2	8.7	<2	<100	<5	0.5	7	0.07	39	44	69.9	10.0	<10	2.6	<200	<1	<1	<20	1.8	<0.5	11	6	15000	510
388	380	12	324	260	10	25	<10	30	57	1	<2	>10.0	<2	<100	9	<0.5	3	0.07	45	50	90.8	12.0	<10	2.9	<200	<1	<1	<20	0.8	1.3	6	<5	1400	<500
389	8	<5	2	920	<1	<10	84	11	<50	2	<2	4.0	4	<100	43	<0.5	<2	4.10	<20	44	1.4	10.0	<10	6.7	<200	<1	<1	<20	1.8	1.5	7	<5	230	<500
390	280	9	5	140	<1	<10	<10	<10	87	1	<2	1.6	<2	<100	<5	<0.5	9	<0.05	<20	26	4.7	1.8	<10	0.7	<200	<1	<1	<20	<0.5	3.1	6	<5	<200	<500
391	3670	26	11	<100	1	<10	<10	<10	200	<1	<2	1.5	<2	<100	<5	<0.5	6	<0.05	<20	<10	7.3	0.6	<10	0.3	<200	<1	<1	<20	<0.5	7.3	<2	<5	<200	<500

Appendix B.--Neutron activation analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Au (Ppb)	Ag (Ppm)	As (Ppm)	Ba (Ppm)	Br (Ppm)	Cd (Ppm)	Ce (Ppm)	Co (Ppm)	Cr (Ppm)	Cs (Ppm)	Eu (Ppm)	Fe (Pct)	Hf (Ppm)	Ir (Ppb)	La (Ppm)	Lu (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Rb (Ppm)	Sb (Ppm)	Sc (Ppm)	Se (Ppm)	Sm (Ppm)	Sn (Ppm)	Ta (Ppm)	Tb (Ppm)	Te (Ppm)	Th (Ppm)	U (Ppm)	W (Ppm)	Yb (Ppm)	Zn (Ppm)	Zr (Ppm)
392	9	<5	2	140	<1	<10	<10	<10	85	5	<2	<0.5	<2	<100	<5	<0.5	<2	2.20	<20	350	0.3	1.7	<10	0.7	<200	2	<1	<20	2.2	3.3	3	<5	<200	<500
393	2360	36	112	<100	2	<10	14	<10	64	4	<2	5.8	<2	<100	11	<0.5	10	0.08	<20	120	7.0	2.2	16	2.5	<200	<1	<1	<20	3.8	29.0	42	<5	540	<500
394	<5	<5	2	560	<1	<10	88	13	150	8	<2	6.5	5	<100	50	<0.5	<2	2.30	<20	150	0.5	21.0	<10	5.9	<200	<1	<1	<20	5.9	2.9	3	<5	<200	<500
395	13	<5	3	690	<1	<10	110	20	97	8	2	8.4	5	<100	50	<0.5	<2	3.90	<20	160	0.5	24.0	<10	7.0	<200	3	<1	<20	6.9	11.0	3	<5	<200	<500
396	11	<5	4	470	<1	<10	50	<10	64	2	<2	5.1	4	<100	29	<0.5	5	0.15	<20	170	0.5	2.9	<10	2.7	<200	1	<1	<20	7.0	12.0	5	<5	<200	<500
397	8	<5	7	1500	<1	<10	36	35	<50	4	<2	>10.0	3	<100	18	1.5	6	0.10	<20	100	7.0	18.0	<10	7.0	<200	<1	1	<20	5.8	82.1	3	12	360	<500
398	59	<5	19	390	<1	<10	36	70	<50	6	4	>10.0	<2	<100	22	2.7	4	0.06	57	90	13.0	32.0	<10	9.3	<200	<1	3	<20	3.8	60.6	<2	17	540	<500
399	18	<5	7	520	1	<10	43	31	160	10	<2	6.2	3	<100	24	<0.5	7	0.09	51	140	2.6	19.0	<10	5.4	<200	<1	1	<20	7.5	10.0	4	<5	<200	<500
400	74	<5	17	740	3	<10	46	13	<50	5	<2	4.2	5	<100	27	0.7	10	0.15	<20	170	21.2	11.0	<10	5.1	<200	<1	<1	<20	10.0	15.0	4	<5	<200	<500
401	23	<5	9	710	1	<10	41	11	62	8	<2	2.9	3	<100	20	0.6	12	0.11	<20	180	10.0	8.6	<10	4.1	<200	<1	<1	<20	8.3	9.3	7	<5	<200	<500
402	26	<5	6	820	<1	<10	34	15	110	16	<2	3.4	3	<100	18	<0.5	<2	0.26	31	120	9.0	14.0	<10	4.4	<200	<1	<1	<20	6.4	28.0	5	<5	<200	<500
403	500	<5	32	550	<1	<10	34	54	<50	4	<2	6.7	3	<100	22	<0.5	18	0.23	25	130	2.8	13.0	<10	4.9	<200	<1	<1	<20	9.2	55.2	4	<5	<200	<500
404	330	<5	33	<100	<1	<10	<10	82	850	8	<2	>10.0	<2	<100	<5	<0.5	<2	0.06	120	29	4.8	58.4	<10	2.1	<200	<1	<1	<20	0.8	16.0	12	<5	270	<500
405	58	<5	9	480	<1	<10	38	17	170	10	<2	5.4	2	<100	19	<0.5	7	0.70	26	100	10.0	15.0	<10	3.2	<200	<1	<1	<20	7.5	10.0	7	<5	<200	<500
406	43	<5	86	460	2	<10	43	18	<50	5	<2	3.1	4	<100	25	<0.5	11	1.40	<20	130	25.2	8.8	<10	4.5	<200	<1	<1	<20	8.6	15.0	3	<5	<200	<500
407	584	<5	11	760	<1	<10	53	33	<50	7	<2	8.6	3	<100	26	0.8	13	0.07	<20	240	14.0	11.0	<10	6.3	<200	<1	1	<20	8.3	15.0	4	7	200	<500
408	30	<5	25	370	<1	<10	44	<10	<50	5	<2	3.0	4	<100	27	0.6	<2	0.27	<20	150	5.0	7.6	<10	4.1	<200	<1	<1	<20	13.0	4.8	3	<5	<200	<500
409	53	<5	9	620	<1	<10	36	17	<50	5	<2	7.1	3	<100	18	<0.5	5	0.07	<20	170	2.4	10.0	<10	2.8	<200	<1	<1	<20	9.4	5.4	8	<5	<200	<500
410	81	<5	42	350	<1	<10	52	30	57	7	<2	10.0	3	<100	27	<0.5	<2	0.10	49	150	3.6	26.0	<10	5.1	<200	<1	<1	<20	4.7	6.0	12	<5	<200	<500
411	2690	65	210	350	22	<10	<10	15	<50	3	<2	6.9	<2	<100	10	0.5	7	<0.05	36	100	265.0	7.2	<10	1.8	<200	<1	<1	<20	5.3	4.9	5	6	<200	<500
412	120	7	4	820	<1	<10	52	33	51	5	<2	4.7	3	<100	31	<0.5	5	1.50	<20	110	2.6	12.0	<10	4.9	<200	<1	<1	<20	11.0	6.2	<2	<5	<200	<500
413	78	6	85	640	19	<10	31	14	<50	5	<2	5.3	<2	<100	19	0.8	14	0.60	23	150	160.0	8.4	<10	3.5	<200	<1	<1	<20	7.8	5.3	5	7	<200	<500
414	39	<5	6	400	26	<10	36	39	240	7	<2	>10.0	<2	<100	25	0.9	8	0.37	47	120	3.3	41.0	<10	5.2	<200	<1	2	<20	3.6	9.2	12	7	310	<500
415	57	<5	9	1100	<1	<10	55	17	100	3	<2	4.8	3	<100	31	0.5	3	1.10	<20	140	8.4	9.2	<10	4.6	<200	<1	<1	<20	10.0	5.3	7	<5	400	<500
416	24	40	49	1100	8	<10	<10	14	120	5	<2	3.6	<2	<100	14	<0.5	3	0.06	<20	110	77.5	12.0	<10	2.8	<200	<1	<1	<20	3.7	2.7	8	<5	410	<500
417	26	<5	18	720	<1	<10	38	14	<50	4	<2	4.6	3	<100	24	<0.5	5	0.35	<20	150	3.4	10.0	<10	4.2	<200	<1	<1	<20	7.6	6.5	4	<5	220	<500
418	420	<5	12	240	2	<10	<10	10	58	5	<2	5.0	2	<100	7	<0.5	12	0.06	<20	88	5.9	6.3	<10	1.9	<200	<1	<1	<20	4.3	7.1	7	<5	<200	<500
419	5060	74	389	480	15	<10	57	<10	<50	3	<2	4.3	<2	<100	24	<0.5	5	0.07	26	140	143.0	7.5	<10	3.8	<200	<1	<1	<20	6.4	10.0	8	<5	1200	<500
420	17	<5	4	<100	<1	<10	<10	<10	200	<1	<2	0.6	<2	<100	<5	<0.5	<2	<0.05	<20	24	3.0	0.9	<10	0.3	<200	<1	<1	<20	0.8	0.6	<2	<5	<200	<500
421	<5	<5	9	470	<1	<10	37	38	320	17	3	9.2	3	<100	16	<0.5	<2	0.47	<20	66	5.5	41.0	<10	5.2	<200	<1	<1	<20	2.0	8.9	22	<5	680	<500
422	867	7	9	320	1	28	49	<10	<50	14	<2	3.8	3	<100	22	<0.5	5	0.07	<20	160	6.7	7.7	<10	4.1	<200	<1	<1	<20	8.2	10.0	11	<5	3100	<500
423	595	5	14	970	22	47	68	58	370	10	<2	>10.0	3	<100	29	0.7	82	0.54	<20	130	12.0	51.0	<10	7.3	<200	<1	2	<20	3.9	28.0	29	7	7700	<500
424	83	<5	13	450	1	<10	11	46	<50	4	<2	10.0	<2	<100	8	0.7	3	0.16	96	91	6.4	22.0	<10	2.9	<200	<1	<1	<20	0.6	5.1	13	6	<200	<500
425	320	6	34	1400	3	<10	12	23	80	4	<2	6.1	<2	<100	10	<0.5	3	0.25	65	200	3.9	24.0	<10	3.2	<200	<1	<1	<20	0.9	3.2	20	<5	660	<500
426	912	<5	10	1200	<1	<10	39	19	66	3	<2	3.6	3	<100	24	<0.5	<2	1.30	<20	130	0.9	9.1	<10	4.3	<200	<1	<1	<20	7.3	3.4	6	<5	<200	<500
427	599	<5	13	920	<1	<10	18	36	78	<1	<2	5.1	3	<100	10	<0.5	<2	0.07	<20	92	0.6	12.0	<10	2.0	<200	<1	<1	<20	4.7	1.5	5	<5	<200	<500
428	31	<5	17	1400	<1	<10	52	23	<50	4	<2	10.0	5	<100	36	0.9	25	0.28	<20	190	2.3	14.0	<10	6.9	<200	<1	<1	<20	10.0	19.0	8	7	<200	<500
429	8310	7	3	9600	<1	<10	<10	<10	180	<1	<2	1.4	<2	<100	<5	<0.5	14	<0.05	<20	<10	2.0	<0.5	<10	0.3	<200	<1	<1	<20	<0.5	4.4	<2	<5	<200	<500
430	29	<5	39	300	1	<10	41	38	<50	4	<2	>10.0	<2	<100	30	0.9	11	0.05	40	170	4.6	17.0	<10	6.7	<200	<1	1	<20	4.1	23.0	5	8	390	<500
431	16	<5	12	230	<1	11	24	14	65	2	<2	3.4	3	<100	13	0.6	2	3.80	<20	110	1.1	10.0	<10	3.4	<200	<1	<1	<20	5.2	8.1	11	<5	1300	<500
432	1540	12	888	2800	9	<10	<10	190	<50	2	<2	>10.0	<2	<100	16	0.9	41	0.90	<20	94	3.5	34.0	<10	4.4	<200	<1	1	<20	5.5	7.2	80	<5	<200	<500
433	524	<5	313	1300	3	<10	<10	380	<50	2	<2	>10.0	<2	<100	8	1.0	300	0.82	<20	49	1.9	26.0	<10	2.9	<200	<1	1	<20	3.5	3.0	92	6	230	<500
434	4700	7	18	3000	1	<10	<10	<10	200	<1	<2	1.8	<2	<100	<5	<0.5	43	<0.05	<20	<10	12.0	<0.5	<10	0.2	<200	<1	<1	<20	<0.5	4.2	4	<5	280	<500
435	<5	<5	2	2000	2	<10	13	<10	80	<1	<2	0.6	<2	<100	5	<0.5	<2	1.20	<20	140	0.4	0.8	<10	0.9	<200	<1	<1	<20	1.3	0.9	<2	<5	<200	<500
436	140	<5	7	1000	<1	<10	64	<10	84	1	<2	2.4	4	<100	36	<0.5	<2	1.00	<20	83	1.0	4.8	<10	6.0	<200	<1	1	<20	3.8	6.0	13	<5	<200	<500
437	3330	<5	3	2100	<1	<10	28	<10	200	<1	<2	2.7	<2	<100	18	<0.5	16	0.48	<20	52	0.7	2.7	<10	2.3	<200	<1	<1	<20	4.1	4.4	4	<5	<200	<500
438	440	<5	7	1300	<1	<10	66	<10	63	2	<2	1.6	3	<100	36	<0.5	<2	1.20	<20	190	0.4	2.8	<10	4.8	<200	<1	<1	<20	8.6	5.6	<2	<5	<200	<500
439	>10000	16	67	270	2	<12	<39	23	61	<1	<2	7.2	<2	<100	11	8.9	691	0.30	<20	<10	22.4	3.3	<10	9.2	<550	<1	2	<20	<0.5	292.0	19	<10	1100	<500
440	6140	<5	5	1200	<1	<10	<10	17	200	<1	<2	2.6	<2	<100	<5	<0.5	34	<0.05	21	<10	0.5	<0.5	<10	<0.2	<200	<1	<1	<20	<0.5	3.3	<2	<5	<200	<500

Appendix C--Inductively coupled plasma-atomic emission spectroscopy analyses from the western part of Prescott National Forest.

[<, less than; >, greater than]

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
001	<0.2	0.25	<5	9	<5	0.11	<1.0	<1	150	10	0.32	0.11	3	0.02	60	6	0.05	15	4	<5	<20	3	<10	1	<20	3	3
002	1.7	0.60	<5	18	42	0.36	1.5	<1	114	36	0.60	0.37	6	0.03	217	9	0.07	2	10	<5	<20	13	<10	3	380	4	170
003	0.6	0.11	<5	17	<5	0.02	<1.0	<1	183	460	0.54	0.07	3	0.01	27	7	<0.01	17	45	<5	<20	5	<10	5	<20	1	7
006	<0.2	0.57	<5	340	<5	0.04	<1.0	9	155	643	3.16	0.12	<1	0.04	390	1	<0.01	23	33	24	<20	17	<10	54	<20	3	88
007	>50.0	0.24	347	973	<5	0.03	<1.0	4	145	17	1.47	0.06	<1	0.02	108	4	<0.01	15	75	93	<20	14	<10	21	<20	2	77
008	<0.2	1.36	<5	5	<5	2.97	<1.0	24	171	4400	8.53	0.15	3	0.58	238	<1	0.03	3	33	<5	49	<1	<10	7	<20	17	314
009	<0.2	0.83	<5	46	<5	0.06	<1.0	<1	174	655	7.88	0.06	3	0.04	109	<1	0.01	<1	84	<5	42	9	<10	22	<20	2	1340
010	0.8	0.07	292	31	<5	1.97	<1.0	46	160	8060	2.34	0.01	1	0.72	215	2	<0.01	53	12	15	<20	12	<10	10	<20	1	38
011	29.1	0.26	<5	13	64	0.06	<1.0	4	152	192	0.90	0.02	<1	0.12	125	5	<0.01	16	316	<5	<20	2	<10	14	<20	<1	19
012	>50.0	0.15	67	21	<5	2.94	<1.0	45	130	256	4.78	0.11	2	0.65	5310	46	<0.01	158	2747	<5	<20	59	<10	31	<20	6	431
013	>50.0	0.10	<5	344	<5	0.05	64.1	3	149	260	2.54	0.07	1	0.02	4992	23	<0.01	7	>10000	103	<20	23	<10	7	<20	7	4031
014	1.3	0.04	<5	41	<5	0.02	<1.0	7	215	88	0.87	0.02	<1	<0.01	50	4	<0.01	9	66	<5	<20	5	<10	5	<20	<1	14
015	25.0	0.50	<5	6	1690	0.47	<1.0	27	190	5429	6.10	0.14	17	0.33	285	2	0.01	79	78	<5	30	21	<10	16	<20	5	19
016	>50.0	0.05	<5	3	47	0.01	<1.0	19	186	1432	6.73	0.04	<1	<0.01	26	8	<0.01	46	342	73	33	8	<10	4	<20	<1	102
017	<0.2	0.22	<5	36	<5	0.06	<1.0	3	182	24	0.85	0.07	3	0.11	144	11	<0.01	18	164	<5	<20	6	<10	9	<20	<1	17
018	0.7	0.05	<5	44	<5	0.02	<1.0	<1	166	51	0.48	0.03	3	<0.01	33	3	<0.01	4	31	<5	<20	3	<10	2	<20	<1	6
019	<0.2	1.72	<5	414	<5	3.63	<1.0	13	268	2561	3.74	0.23	14	2.15	2296	<1	<0.01	84	48	<5	<20	43	<10	58	<20	7	144
020	>50.0	0.27	70	11	312	1.50	564.0	10	177	568	4.69	0.17	6	0.50	838	24	0.01	12	>10000	61	<20	14	19	9	58	4	2670
021	0.9	0.82	25	39	<5	>10.00	1.1	12	59	387	1.93	0.26	10	0.46	1007	11	<0.01	30	38	<5	<20	961	<10	37	<20	5	94
022	>50.0	0.55	<5	34	7	0.16	1.7	4	134	949	3.18	0.18	12	0.26	378	12	0.03	17	>10000	<5	<20	34	<10	151	<20	4	865
023	<0.2	1.95	<5	209	33	9.25	<1.0	83	168	3426	3.48	0.18	18	0.98	1613	<1	0.02	200	281	<5	23	78	<10	70	<20	8	176
024	2.0	0.34	<5	124	32	0.16	<1.0	8	121	257	1.05	0.24	13	0.05	216	3	0.03	15	52	<5	<20	14	<10	5	<20	2	16
025	<0.2	0.54	<5	99	<5	0.09	<1.0	6	181	77	5.94	0.14	6	0.11	74	6	0.01	15	559	<5	27	31	<10	157	<20	4	243
026	>50.0	0.11	<5	17	59	>10.00	542.2	7	65	4337	3.55	0.09	21	0.59	7307	30	<0.01	8	>10000	15	<20	171	88	9	1828	15	>20000
027	<0.2	0.19	<5	55	<5	0.03	<1.0	4	195	22	3.40	0.09	2	0.01	47	20	0.07	31	144	<5	<20	181	<10	10	<20	<1	27
028	0.2	1.14	<5	55	<5	0.73	<1.0	17	79	9	1.65	0.26	35	0.50	350	2	0.02	24	26	<5	<20	80	<10	30	<20	9	62
029	<0.2	0.89	<5	72	<5	0.88	<1.0	12	111	107	2.60	0.30	15	0.95	412	9	0.06	16	15	<5	<20	40	<10	63	<20	5	64
030	<0.2	0.76	<5	62	<5	0.43	<1.0	8	84	42	1.93	0.35	23	0.51	313	4	0.06	6	25	<5	<20	36	<10	45	<20	7	49
031	<0.2	0.04	<5	24	<5	0.03	<1.0	<1	191	9	0.40	0.02	1	<0.01	27	61	0.01	6	15	<5	<20	12	<10	2	<20	<1	6
032	>50.0	0.23	53	95	12	0.12	46.3	11	177	1028	2.19	0.16	19	0.09	54	38	<0.01	30	>10000	44	<20	38	<10	20	34	1	2048
033	6.5	0.17	18	36	<5	0.34	<1.0	4	168	203	0.88	0.09	4	0.03	186	3	0.01	8	87	<5	<20	5	<10	9	<20	1	36
034	<0.2	0.13	41	132	<5	<0.01	1.8	9	96	91	1.64	0.18	5	<0.01	109	11	0.01	16	85	<5	<20	4	<10	1	<20	1	312
035	<0.2	0.29	<5	102	<5	0.10	<1.0	15	173	341	2.70	0.08	2	0.04	466	5	0.02	27	37	<5	<20	11	<10	37	<20	3	95
036	>50.0	0.11	23	28	<5	0.07	5.4	1	151	1044	0.75	0.08	11	0.02	59	2	0.01	4	4260	32	<20	12	<10	10	<20	1	541
037	0.9	0.79	908	12	<5	3.00	<1.0	46	151	350	3.86	0.02	1	0.56	448	217	0.01	14	32	<5	<20	41	<10	52	354	3	29
038	0.4	1.11	<5	39	<5	1.50	<1.0	21	114	6838	3.23	0.06	<1	0.66	840	11	0.05	15	53	<5	<20	45	<10	65	<20	2	84
039	<0.2	0.41	861	102	<5	0.10	<1.0	205	127	672	9.72	0.06	26	0.06	286	22	<0.01	173	76	28	<20	17	<10	234	<20	22	75

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
040	0.8	0.09	<5	22	<5	0.05	<1.0	6	165	3665	1.32	0.04	2	0.02	144	2	0.02	18	82	<5	<20	6	<10	7	<20	2	27
041	3.9	0.42	14	28	<5	0.06	<1.0	11	239	1251	2.39	0.06	<1	0.24	454	6	0.02	35	8	7	<20	9	<10	14	<20	3	35
042	5.0	0.94	152	55	<5	0.13	<1.0	29	117	1754	5.07	0.17	5	0.37	1352	11	0.01	43	4	5	<20	10	<10	28	<20	6	48
043	2.3	0.36	235	145	6	0.06	21.4	12	64	76	6.17	0.22	22	0.04	12334	14	<0.01	24	2794	8	<20	72	<10	108	28	6	2560
044	4.8	0.50	1105	69	<5	0.07	1.3	5	53	50	9.16	0.32	12	0.03	110	17	<0.01	3	38	57	<20	39	<10	22	<20	9	59
045	>50.0	0.12	1056	33	27	0.07	23.1	11	59	192	9.88	0.14	4	0.02	18674	26	0.01	10	2378	523	<20	332	<10	16	32	16	2836
046	0.4	1.23	127	132	<5	1.98	<1.0	23	34	63	6.12	0.27	11	0.16	1362	7	<0.01	39	17	8	<20	20	<10	43	<20	17	174
047	10.5	0.45	171	885	<5	0.06	1.3	17	27	86	7.32	0.35	24	0.03	9465	7	<0.01	12	62	<5	<20	53	<10	22	<20	13	107
048	>50.0	0.48	<5	105	<5	0.44	<1.0	5	137	2608	6.58	0.03	<1	0.40	2162	49	0.05	<1	>10000	33	38	14	12	265	<20	<1	8107
049	>50.0	0.68	151	90	<5	4.47	152.8	15	85	522	2.84	0.31	12	0.94	2963	15	0.03	32	4280	142	<20	50	18	23	167	6	10594
050	36.0	0.62	44	398	6	1.56	32.4	3	77	328	1.95	0.33	19	0.21	3430	19	<0.01	9	3586	56	<20	28	<10	14	30	7	2480
051	48.7	2.09	123	69	54	1.35	38.9	15	35	360	5.71	0.49	4	1.50	1588	11	<0.01	5	1272	68	<20	10	<10	36	44	10	4061
052	24.9	0.61	189	49	63	0.33	17.7	64	77	860	5.86	0.17	4	0.08	989	12	<0.01	6	3294	18	<20	10	<10	38	<20	6	1778
053	0.9	1.91	173	48	7	0.17	1.5	18	525	168	6.12	0.03	5	0.95	1801	11	<0.01	133	155	5	<20	12	<10	106	<20	4	624
054	0.6	2.01	980	68	<5	0.23	<1.0	19	132	256	7.54	0.10	2	1.05	1588	13	0.02	22	889	<5	<20	16	<10	88	<20	6	110
055	0.8	0.28	<5	85	43	0.01	<1.0	4	121	15	1.56	0.41	6	0.01	23	55	0.01	11	340	<5	<20	19	<10	5	<20	<1	5
056	0.9	0.44	<5	99	131	0.14	<1.0	1	111	15	2.30	0.23	16	0.06	136	18	<0.01	3	185	<5	<20	9	<10	12	<20	1	11
057	0.7	1.84	9	23	<5	0.82	<1.0	28	221	1964	7.91	0.26	2	1.46	226	17	0.06	89	20	<5	<20	34	<10	32	<20	4	49
058	<0.2	1.64	13	24	24	0.95	<1.0	32	133	874	6.88	0.25	4	1.07	178	15	0.06	58	13	<5	<20	45	<10	25	<20	4	47
059	<0.2	1.61	7	39	<5	0.76	<1.0	16	122	930	5.43	0.14	4	1.11	190	7	0.07	47	15	<5	<20	48	<10	25	<20	4	45
060	1.6	1.46	<5	75	<5	0.79	<1.0	12	144	1311	4.91	0.11	6	0.80	146	17	0.08	55	9	<5	<20	59	<10	27	<20	5	34
061	0.6	0.77	<5	68	<5	0.14	<1.0	1	45	953	1.81	0.24	15	0.24	76	7	0.04	3	4	<5	<20	20	<10	11	<20	6	21
062	13.2	0.73	<5	25	<5	0.24	<1.0	19	119	>20000	4.32	0.11	5	0.68	184	85	0.03	30	16	<5	<20	10	17	38	<20	4	148
063	1.1	1.10	8	55	<5	1.02	<1.0	10	59	2389	5.90	0.22	8	0.40	131	158	0.13	5	6	<5	<20	70	<10	107	210	6	28
064	>50.0	0.54	74	112	21	0.21	10.9	16	72	592	7.10	0.08	6	0.07	2996	26	0.01	24	>10000	160	<20	52	<10	1787	<20	15	571
065	<0.2	0.20	<5	81	<5	0.18	<1.0	2	165	20	0.41	0.04	19	0.02	219	12	<0.01	4	14	<5	<20	31	<10	3	<20	2	30
066	17.6	0.69	25	110	<5	1.48	<1.0	11	46	5772	2.53	0.16	21	0.20	393	7	0.06	23	41	111	<20	33	<10	14	<20	2	104
067	5.7	0.07	28	10	<5	>10.00	36.7	8	106	280	2.91	0.02	<1	2.09	1382	12	0.01	9	948	124	<20	46	<10	5	68	3	6350
068	12.6	3.02	53	21	<5	0.17	<1.0	70	7	>20000	9.31	0.03	2	2.41	1534	20	<0.01	2	44	<5	<20	14	51	118	<20	3	264
069	>50.0	0.16	2842	125	6	0.41	12.0	13	133	476	5.74	0.11	8	0.03	5224	14	<0.01	26	3836	272	<20	75	<10	187	27	16	2024
070	16.5	0.34	1188	99	<5	0.14	7.9	6	125	107	2.46	0.26	13	0.04	2955	5	<0.01	15	355	64	<20	58	<10	13	<20	5	755
071	>50.0	0.26	438	19	<5	0.05	12.9	6	222	503	4.02	0.11	8	0.03	838	11	<0.01	14	4572	254	<20	4	<10	400	23	6	1755
072	>50.0	0.13	4176	48	8	0.08	105.0	7	140	232	6.05	0.03	3	0.02	14836	12	<0.01	17	5780	90	<20	75	<10	54	116	9	7434
073	34.3	0.23	1452	5	<5	0.06	10.2	7	147	318	6.29	0.13	3	0.03	528	21	<0.01	12	4444	34	<20	4	<10	120	<20	4	1392
074	30.9	0.37	3646	21	8	0.08	8.1	3	70	699	9.55	0.16	14	0.04	171	10	<0.01	3	>10000	30	<20	44	<10	47	25	3	2034
075	12.0	0.45	2586	21	<5	0.34	10.7	15	68	335	6.56	0.12	4	0.16	2644	13	0.01	50	4890	27	<20	42	<10	139	32	10	2334
076	14.4	0.39	1738	64	<5	1.01	25.1	13	72	633	5.31	0.17	15	0.07	2335	12	<0.01	15	6978	33	<20	26	<10	73	32	8	2380
077	11.5	0.03	4443	235	<5	1.13	65.1	11	63	232	7.05	0.02	9	0.06	13145	15	0.02	28	2302	132	<20	165	<10	441	32	22	2288

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
078	>50.0	0.13	2164	11	133	0.06	37.4	36	40	4488	>10.00	0.01	<1	0.02	88	23	<0.01	7	2256	58	<20	5	<10	686	50	7	3534
079	10.3	0.55	2662	29	91	0.25	28.4	36	22	426	8.02	0.22	16	0.11	224	8	<0.01	22	503	71	<20	14	<10	173	<20	15	712
080	33.8	0.65	1007	58	14	0.28	64.6	21	49	1722	9.06	0.12	5	0.16	3026	10	<0.01	37	945	17	<20	17	<10	64	132	16	8012
081	4.4	0.36	156	25	5	0.05	1.0	17	83	32	6.33	0.18	6	0.04	188	33	0.01	14	361	5	<20	7	<10	23	<20	5	109
082	2.4	0.37	523	53	<5	0.10	8.5	8	77	275	8.63	0.07	9	0.05	1056	16	<0.01	17	1820	19	<20	9	<10	28	51	17	3220
083	29.4	0.25	839	27	<5	0.23	36.1	13	68	904	8.53	0.14	9	0.06	2373	11	<0.01	14	3410	11	<20	30	<10	43	47	11	3184
084	21.8	2.03	262	38	<5	0.51	22.3	36	142	236	5.63	0.12	7	1.27	4163	7	<0.01	110	1150	7	<20	50	<10	80	27	14	2039
085	47.3	0.22	521	11	<5	8.16	16.3	13	39	420	5.65	0.08	6	1.34	4241	6	<0.01	32	1414	14	<20	43	<10	39	22	20	1498
086	>50.0	0.85	311	40	<5	2.12	13.1	37	28	1209	6.49	0.14	10	0.27	5264	47	0.02	37	1130	18	<20	45	<10	67	<20	26	1457
087	0.5	0.19	6	60	<5	0.04	<1.0	6	176	19	3.63	0.09	2	0.03	73	24	0.02	22	91	<5	<20	12	<10	13	<20	3	24
088	18.9	0.57	33	52	13	1.14	<1.0	83	114	>20000	5.41	0.05	8	0.21	571	387	0.03	24	80	6	<20	46	14	94	<20	17	89
089	9.3	1.72	10	79	<5	0.62	<1.0	15	54	17070	7.50	0.05	25	0.90	557	1132	0.02	58	79	<5	<20	145	<10	48	<20	13	75
090	2.5	0.24	127	65	12	0.02	<1.0	2	128	131	2.01	0.21	12	0.02	28	48	<0.01	18	86	172	<20	11	<10	4	<20	<1	31
091	>50.0	0.10	24	54	188	2.74	11.6	13	191	409	2.14	0.07	4	0.83	505	52	0.01	22	>10000	64	<20	43	<10	8	142	4	1683
092	12.0	0.07	<5	25	12	0.02	<1.0	1	200	14	0.67	0.03	1	0.01	54	12	<0.01	12	146	<5	<20	8	<10	2	100	<1	32
093	5.0	0.29	8	92	<5	0.78	<1.0	7	104	19	1.79	0.24	14	0.09	241	198	0.02	10	193	<5	<20	52	<10	3	<20	2	74
094	46.8	0.48	20	180	184	0.46	4.1	25	170	31	3.14	0.31	15	0.34	1628	69	0.03	159	854	<5	<20	62	<10	23	431	8	263
095	20.8	0.50	9	102	165	0.32	1.4	16	144	61	3.50	0.25	14	0.09	308	13	<0.01	72	373	5	<20	30	<10	19	25	10	228
096	>50.0	0.17	65	19	95	0.81	15.1	5	207	507	3.07	0.14	1	0.42	1824	7	0.01	17	5675	179	<20	40	<10	11	27	2	2139
097	14.3	0.63	60	42	<5	0.81	2.7	44	139	1158	5.26	0.07	<1	0.30	1760	8	0.02	46	4644	12	<20	16	<10	43	<20	5	150
098	>50.0	0.09	309	43	<5	0.51	34.1	3	140	104	1.44	0.10	3	0.19	141	6	<0.01	20	751	19	<20	16	53	2	31	1	2452
099	>50.0	0.10	341	34	<5	0.22	124.5	3	157	166	1.36	0.09	3	0.08	42	7	<0.01	19	5446	54	<20	34	236	3	113	<1	7718
100	20.6	0.19	98	72	<5	0.08	<1.0	9	215	3614	1.61	0.11	3	0.02	114	5	0.02	23	115	8	<20	17	<10	6	<20	2	39
101	17.9	0.91	<5	20	37	5.61	<1.0	12	73	13	3.11	0.32	17	0.88	1255	2	0.02	28	1105	<5	<20	113	<10	20	<20	8	385
102	>50.0	0.40	20	80	<5	0.04	<1.0	<1	125	363	4.32	0.35	16	0.03	85	4	0.07	11	>10000	<5	<20	27	14	10	<20	2	727
103	12.7	0.32	151	29	<5	0.06	<1.0	4	89	89	1.90	0.21	22	0.03	837	1	<0.01	7	3189	<5	<20	6	<10	5	<20	3	506
104	27.7	0.07	361	7	<5	0.01	68.9	5	154	182	5.38	0.08	<1	<0.01	146	4	<0.01	8	5851	<5	21	9	14	2	<20	<1	10761
105	0.2	0.38	<5	308	<5	0.14	10.6	14	119	247	3.08	0.30	27	0.04	3490	5	0.01	31	2349	<5	<20	22	<10	6	<20	10	2003
106	1.2	0.73	11	31	<5	4.51	<1.0	32	75	148	3.46	0.25	9	0.78	1829	6	0.02	38	268	<5	<20	64	<10	65	<20	5	319
107	>50.0	0.46	1118	401	<5	0.13	<1.0	54	106	79	3.99	0.19	8	0.07	1421	7	0.01	63	511	<5	<20	23	<10	9	<20	6	1024
108	<0.2	1.95	551	60	<5	0.10	<1.0	21	133	251	5.80	0.34	6	0.84	936	28	0.02	24	113	15	24	20	<10	105	<20	13	436
109	>50.0	0.21	5248	24	27	0.09	<1.0	15	181	344	4.06	0.11	1	0.05	120	56	<0.01	25	2966	335	<20	4	31	7	<20	4	1051
110	2.0	<0.01	82	7	<5	0.26	<1.0	7	180	6042	1.16	<0.01	<1	0.07	103	2	<0.01	7	18	<5	<20	3	<10	<1	<20	<1	31
111	5.4	0.46	<5	11	<5	0.06	<1.0	3	148	1457	4.43	0.20	5	0.19	112	2	0.01	4	23	<5	<20	2	<10	19	<20	<1	20
112	1.2	0.31	13	9	<5	2.34	<1.0	8	111	1899	6.15	0.49	3	0.11	229	<1	0.02	9	101	<5	<20	18	<10	29	<20	2	62
113	0.5	0.33	<5	183	18	0.06	<1.0	5	95	351	1.14	0.19	16	0.02	45	1	0.03	2	13	<5	<20	4	<10	<1	<20	1	11
114	<0.2	0.22	<5	171	33	0.03	<1.0	2	50	400	1.25	0.11	12	0.02	100	2	0.02	2	18	<5	<20	4	<10	1	<20	2	36
115	<0.2	0.33	78	245	<5	0.05	<1.0	9	170	221	3.41	0.24	11	0.01	73	10	0.02	3	13	<5	<20	7	<10	1	<20	3	6

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
116	<0.2	0.32	38	208	<5	0.04	<1.0	1	150	220	1.65	0.27	5	0.01	41	7	0.01	13	10	<5	<20	4	<10	2	<20	2	17
117	<0.2	0.56	21	233	<5	0.65	<1.0	6	91	216	1.82	0.26	30	0.16	352	4	0.03	20	16	<5	<20	17	<10	4	<20	10	53
118	<0.2	0.27	222	23	<5	0.79	<1.0	17	171	1477	2.72	0.23	7	0.02	151	2	0.01	11	13	<5	<20	12	<10	<1	<20	2	42
119	6.0	0.35	1039	301	19	0.02	<1.0	7	143	405	2.87	0.27	11	0.01	75	6	0.02	5	29	<5	<20	4	12	2	<20	7	74
120	<0.2	0.51	67	622	<5	1.76	1.3	92	192	874	4.02	0.26	22	0.67	5034	3	0.01	120	59	<5	25	41	<10	62	<20	28	273
121	<0.2	1.47	<5	251	<5	0.94	<1.0	19	134	166	2.80	0.29	31	0.59	810	2	0.04	44	20	<5	<20	54	<10	60	<20	8	60
122	<0.2	0.30	56	214	<5	0.03	<1.0	4	139	117	1.15	0.27	6	0.01	70	4	0.01	7	11	<5	<20	2	<10	<1	<20	2	16
123	16.3	0.25	62	5	203	0.13	1.8	46	165	1965	7.81	0.17	8	0.05	103	319	0.02	74	149	176	<20	17	139	14	<20	5	77
124	1.6	1.28	256	75	<5	0.92	<1.0	8	98	21	2.18	0.20	15	0.29	244	3	0.17	15	225	<5	<20	117	<10	48	<20	6	121
125	6.5	0.20	448	58	52	0.05	<1.0	5	91	307	2.93	0.20	11	0.02	35	42	<0.01	17	105	289	<20	9	<10	3	<20	1	54
126	18.4	0.34	313	36	45	0.23	2.8	8	100	1788	1.71	0.30	13	0.06	38	5	<0.01	13	794	224	<20	14	<10	3	<20	2	134
127	>50.0	0.18	17	67	12	0.56	10.1	8	245	113	0.97	0.13	3	0.17	336	10	0.01	13	>10000	78	<20	27	<10	4	<20	2	905
128	>50.0	0.61	383	413	<5	0.07	2.7	11	123	181	6.28	0.16	30	0.08	5434	23	<0.01	26	2584	17	<20	61	<10	72	<20	17	1195
129	19.1	0.31	774	94	486	0.08	1.6	33	86	2078	9.73	0.06	7	0.09	278	72	<0.01	34	201	1195	<20	27	<10	120	<20	5	225
130	0.3	0.76	49	177	<5	0.30	<1.0	18	153	24	4.14	0.26	45	0.12	427	8	<0.01	78	17	<5	<20	40	<10	16	<20	8	82
131	>50.0	0.23	158	108	<5	>10.00	17.8	12	76	216	5.02	0.16	8	0.96	2585	9	<0.01	33	1267	26	<20	79	<10	30	30	13	2300
132	17.0	0.28	639	3	<5	2.04	76.8	15	121	377	5.78	0.09	5	0.43	2304	5	<0.01	13	721	18	<20	27	<10	22	123	7	7770
133	21.3	0.50	42	4	11	0.84	<1.0	65	167	783	7.24	0.30	4	0.11	234	22	<0.01	23	152	6	<20	12	<10	23	129	1	110
134	9.1	0.29	27	79	25	0.02	<1.0	1	100	60	3.00	0.42	21	0.03	52	152	0.01	5	628	<5	<20	29	<10	7	<20	<1	33
135	<0.2	0.84	<5	47	<5	0.82	1.0	10	96	162	3.15	0.16	11	0.75	406	7	0.05	13	70	<5	<20	40	<10	65	<20	5	99
136	11.4	0.26	<5	41	14	0.02	6.6	3	152	177	3.56	0.22	6	0.03	34	217	<0.01	3	3432	<5	<20	19	<10	6	<20	<1	547
137	<0.2	3.35	45	93	<5	0.30	<1.0	28	21	11	7.70	0.14	14	0.52	1008	2	0.02	11	8	<5	<20	15	<10	214	<20	7	109
138	>50.0	0.29	307	16	113	0.11	34.6	10	121	220	4.14	0.23	2	0.05	258	57	<0.01	24	>10000	19	<20	5	<10	19	42	3	2978
139	38.9	0.25	>10000	11	<5	5.62	6.3	42	88	555	6.51	0.11	2	0.70	5845	47	<0.01	33	527	151	<20	28	<10	28	<20	16	844
140	<0.2	0.37	29	16	<5	0.11	<1.0	16	101	3	3.15	0.12	17	0.26	142	14	0.04	8	5	<5	<20	10	<10	21	<20	2	34
141	>50.0	0.13	38	6	105	<0.01	2.3	14	101	180	>10.00	0.11	9	<0.01	26	2500	<0.01	3	601	<5	<20	4	<10	5	<20	<1	154
142	13.4	0.28	9	40	37	0.01	<1.0	5	138	415	1.89	0.25	10	0.02	29	25	0.01	12	87	<5	<20	6	<10	6	<20	1	51
143	2.4	0.36	86	82	10	0.01	<1.0	6	75	162	7.15	0.19	16	0.02	34	18	<0.01	1	80	<5	<20	26	<10	15	<20	2	111
144	6.7	0.78	31	52	14	0.06	<1.0	5	103	211	3.73	0.34	12	0.36	140	25	0.02	5	447	<5	<20	23	<10	29	<20	2	77
145	4.3	1.10	51	105	<5	0.11	<1.0	3	65	202	4.11	0.30	13	0.28	247	30	0.02	6	1002	16	<20	51	<10	39	<20	3	85
146	0.4	0.27	<5	37	<5	0.03	<1.0	<1	200	140	2.40	0.17	7	0.03	27	<1	0.02	15	467	<5	<20	13	<10	3	<20	<1	30
147	<0.2	0.45	5	67	<5	0.03	<1.0	1	95	38	1.83	0.19	24	0.03	79	9	0.04	5	18	<5	<20	4	<10	3	<20	9	27
148	2.5	0.42	33	48	<5	0.03	<1.0	<1	111	44	1.03	0.25	9	0.02	35	15	<0.01	5	165	<5	<20	14	<10	5	<20	3	60
149	2.1	0.75	21	56	<5	0.24	1.9	5	92	195	1.82	0.33	13	0.45	296	3	0.03	7	40	<5	<20	9	<10	16	<20	5	267
150	12.4	0.73	<5	38	<5	0.11	<1.0	5	112	344	3.32	0.17	11	0.29	226	2	0.03	11	40	<5	<20	11	<10	10	<20	4	90
151	>50.0	3.72	95	30	86	0.34	2.6	31	735	15176	7.33	0.29	10	4.33	1717	18	0.01	208	94	13	<20	14	<10	115	<20	4	337
152	4.5	0.52	145	100	12	0.10	1.3	<1	95	215	4.52	0.49	14	0.06	99	12	0.02	5	317	7	<20	33	<10	15	<20	2	176
153	6.7	0.86	151	24	<5	>10.00	31.4	9	63	218	4.60	0.24	3	1.02	4470	15	<0.01	13	853	9	<20	25	<10	15	34	7	3124

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
154	<0.2	1.62	6	233	<5	0.76	<1.0	26	61	69	6.69	1.02	7	1.63	614	10	0.09	12	11	<5	<20	18	<10	197	<20	10	93
155	5.0	0.99	23	18	<5	0.05	<1.0	7	102	996	2.59	0.24	9	0.49	397	66	0.01	12	110	<5	<20	5	<10	19	<20	3	115
156	>50.0	0.42	735	43	<5	0.08	3.9	5	93	1230	6.23	0.33	15	0.04	1052	56	0.03	8	1144	120	<20	65	<10	11	<20	3	323
157	7.5	1.60	97	371	<5	1.39	<1.0	14	198	500	5.45	0.61	22	1.73	618	9	0.06	31	190	5	<20	29	<10	91	<20	17	78
158	9.3	0.68	126	59	<5	0.06	<1.0	3	81	86	1.51	0.31	39	0.11	394	<1	0.01	9	1353	<5	<20	7	<10	4	<20	20	478
159	>50.0	0.15	374	99	12	<0.01	1.9	2	154	239	4.10	0.12	3	<0.01	26	704	0.01	3	2924	<5	<20	3	<10	2	61	1	288
160	0.2	0.36	35	21	<5	1.42	6.5	4	59	101	1.21	0.34	10	0.04	1045	7	0.02	4	90	<5	<20	29	<10	2	<20	7	780
161	6.4	1.26	247	40	<5	0.03	1.4	6	41	286	4.78	0.29	20	0.16	853	3	0.01	11	5018	<5	<20	6	<10	30	<20	3	835
162	27.7	0.78	164	33	34	0.32	55.4	24	97	1270	4.68	0.38	10	0.30	1034	11	<0.01	13	3276	15	<20	10	<10	22	64	7	5484
163	4.5	0.39	308	57	<5	0.03	2.6	3	84	39	1.85	0.25	21	0.03	222	2	<0.01	5	290	9	<20	5	<10	4	<20	3	203
164	<0.2	2.69	45	20	<5	0.52	1.6	26	29	59	4.03	0.22	1	2.34	845	6	0.05	77	44	<5	<20	18	<10	61	<20	3	178
165	5.7	2.18	47	101	<5	0.16	<1.0	21	54	1611	6.42	0.33	31	1.02	2335	10	0.01	13	12	<5	<20	30	<10	59	<20	12	159
166	>50.0	3.42	155	10	204	0.38	1.4	47	56	11225	9.65	0.08	4	1.45	3598	18	<0.01	8	185	<5	<20	8	<10	46	390	9	265
167	<0.2	4.17	13	124	<5	0.15	1.0	6	65	4	9.84	0.10	17	2.24	2110	10	<0.01	48	15	7	<20	12	<10	73	47	5	389
168	35.5	1.18	158	39	342	0.22	<1.0	121	88	5652	8.47	0.22	4	0.57	1121	12	<0.01	28	109	<5	<20	6	<10	42	<20	2	117
169	1.1	1.71	177	29	<5	0.94	2.5	104	59	178	7.72	0.26	3	1.14	2882	10	<0.01	30	48	<5	<20	23	<10	31	<20	5	239
170	14.8	0.45	57	148	<5	0.58	194.7	3	120	745	1.01	0.19	4	0.13	206	5	<0.01	20	4173	252	<20	29	<10	3	<20	2	1201
171	19.0	0.71	16	125	6	0.11	6.8	4	66	1445	2.10	0.25	17	0.23	182	8	0.04	7	>10000	7	<20	14	<10	5	29	3	1448
172	4.4	0.45	1071	46	15	0.05	6.9	3	114	169	>10.00	0.25	10	0.06	906	21	0.02	16	6212	7	<20	106	<10	23	<20	3	829
173	3.3	0.42	10	113	5	0.05	<1.0	4	120	259	2.18	0.23	19	0.02	112	10	0.03	3	29	<5	<20	14	<10	2	<20	2	15
174	>50.0	0.10	262	132	<5	5.28	41.0	6	82	351	4.77	0.07	5	0.73	15260	22	<0.01	18	1124	31	<20	115	<10	11	71	9	4268
175	1.2	1.83	40	366	<5	0.46	2.7	30	88	31	6.39	0.40	18	1.29	4896	29	0.01	99	46	5	<20	43	<10	44	<20	19	369
176	6.7	0.15	7	67	<5	7.91	<1.0	8	112	95	3.02	0.12	2	2.04	3326	76	<0.01	26	67	<5	<20	151	<10	6	<20	7	85
177	11.2	1.48	534	591	<5	0.45	6.7	32	72	63	6.50	0.79	32	0.46	5365	44	0.03	85	243	10	<20	46	<10	56	<20	20	975
178	<0.2	0.31	18	38	<5	0.83	<1.0	1	109	11	1.33	0.23	29	0.16	864	3	0.02	9	108	<5	<20	20	<10	1	<20	5	106
179	35.5	1.66	54	98	<5	0.05	1.9	6	129	128	4.45	0.83	43	0.43	717	18	0.01	22	2040	9	<20	29	<10	31	30	7	377
180	27.4	0.86	71	38	16	6.17	262.8	13	105	1294	5.54	0.44	7	1.10	16142	16	<0.01	46	>10000	38	<20	94	28	17	357	21	14494
181	1.6	0.96	76	87	<5	0.12	20.5	22	125	109	6.78	0.53	23	0.25	3580	29	<0.01	60	426	15	<20	19	<10	32	<20	14	1452
182	19.6	0.51	187	184	<5	0.04	<1.0	2	79	46	4.23	0.36	18	0.04	154	161	0.01	8	476	22	<20	17	<10	27	<20	3	173
183	6.7	0.42	16	345	<5	0.27	4.5	2	96	19	1.00	0.35	12	0.04	355	20	0.01	4	679	10	<20	16	<10	4	<20	3	414
184	0.5	0.07	22	17	<5	0.01	<1.0	6	228	10	0.98	0.04	<1	<0.01	62	23	<0.01	6	26	<5	<20	2	<10	2	<20	<1	12
185	9.0	0.31	40	66	<5	0.03	2.4	3	80	4	5.57	0.23	29	0.01	11616	4	<0.01	11	119	<5	<20	18	<10	3	<20	7	383
186	19.5	0.27	139	43	<5	0.04	<1.0	<1	145	51	2.42	0.21	32	0.02	99	10	<0.01	5	491	6	<20	9	<10	2	<20	4	75
187	0.4	0.93	18	362	<5	0.27	6.5	17	49	66	3.25	0.29	19	0.33	2600	5	0.02	33	459	<5	<20	20	<10	42	<20	13	723
188	17.1	0.17	56	62	7	0.66	57.4	15	58	257	7.36	0.11	3	1.03	18838	8	<0.01	45	3088	13	<20	58	<10	50	97	20	6366
189	2.3	0.32	14	23	<5	3.89	13.3	27	42	92	5.80	0.21	<1	2.14	9684	4	0.01	38	1206	<5	<20	40	<10	74	22	9	1792
190	1.4	0.10	<5	57	<5	0.05	1.4	2	96	76	0.97	0.05	<1	0.01	1337	3	<0.01	5	267	7	<20	3	<10	3	<20	2	99
191	>50.0	0.18	276	56	<5	>10.00	52.5	9	12	7655	2.36	0.10	3	0.74	1356	3	<0.01	8	268	>2000	<20	92	<10	22	<20	7	661

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
192	4.2	0.31	<5	151	<5	0.17	<1.0	9	41	62	2.95	0.19	3	0.05	797	<1	0.02	14	13	28	<20	13	<10	23	<20	3	123
193	3.0	0.13	10	67	<5	0.05	<1.0	6	71	125	1.72	0.06	<1	0.02	121	1	<0.01	25	19	30	<20	5	<10	12	<20	1	29
194	44.4	0.47	24	104	<5	1.59	2.6	19	13	286	5.21	0.26	3	0.38	3122	2	0.02	34	3878	173	<20	70	<10	25	<20	5	384
195	>50.0	0.26	130	114	14	0.32	58.3	23	82	3258	4.23	0.18	1	0.28	1931	<1	<0.01	43	>10000	886	<20	14	<10	16	<20	5	3469
196	17.2	0.41	503	75	5	0.04	2.2	37	59	5030	>10.00	0.02	4	0.02	50	7	0.03	52	50	9	<20	17	<10	66	<20	4	209
197	12.0	0.33	228	77	<5	0.31	<1.0	14	199	1734	2.33	0.07	1	0.18	175	16	0.03	8	2194	<5	<20	7	<10	15	<20	2	33
198	0.5	0.56	36	98	<5	5.34	<1.0	18	113	376	3.37	0.03	<1	0.57	1057	2	<0.01	29	31	<5	<20	26	<10	26	<20	4	66
199	11.2	0.07	182	17	<5	0.67	3.7	19	119	5534	3.03	0.05	<1	0.19	192	4992	<0.01	35	393	<5	<20	17	<10	2	<20	2	150
200	13.0	0.08	78	56	<5	0.03	<1.0	3	144	339	2.29	0.03	<1	0.01	68	53	<0.01	5	28	<5	<20	3	<10	4	<20	<1	53
201	>50.0	0.16	267	669	<5	0.04	9.9	4	112	2140	1.19	0.16	3	0.01	371	4	<0.01	15	144	469	<20	138	<10	4	<20	3	159
202	>50.0	0.17	546	87	26	0.31	70.8	32	47	7792	7.43	0.11	<1	1.14	6159	<1	<0.01	50	676	>2000	<20	88	<10	32	<20	3	1947
203	>50.0	0.15	281	338	8	0.23	34.0	34	32	4442	8.89	0.11	<1	1.35	10718	<1	<0.01	41	274	>2000	<20	32	<10	39	<20	3	1339
204	>50.0	0.30	346	782	13	0.47	30.5	5	31	4396	1.09	0.21	4	0.02	264	38	<0.01	6	3765	1960	<20	27	<10	9	<20	2	297
205	>50.0	0.26	25	1927	<5	0.12	<1.0	14	18	216	4.26	0.20	8	0.02	2258	20	<0.01	22	7375	209	<20	54	<10	12	<20	3	451
206	<0.2	0.81	<5	310	<5	4.39	<1.0	21	36	3	4.36	0.47	9	2.32	1285	<1	0.02	37	11	<5	<20	142	<10	57	<20	5	94
207	>50.0	0.16	37	330	<5	1.94	6.4	40	17	1032	8.76	0.12	<1	1.60	10885	<1	<0.01	67	5731	756	<20	24	<10	32	<20	8	1050
208	>50.0	0.28	240	825	<5	0.11	<1.0	17	37	889	9.10	0.16	<1	0.13	3355	14	<0.01	35	>10000	786	<20	104	<10	41	<20	8	1063
209	31.7	0.53	25	351	<5	0.14	<1.0	26	22	386	6.41	0.24	10	0.13	2140	1	0.02	29	248	131	<20	12	<10	46	<20	9	275
210	0.4	0.27	<5	405	<5	0.13	<1.0	16	75	25	6.07	0.17	2	0.04	2967	<1	<0.01	51	21	11	<20	14	<10	29	<20	4	105
211	4.4	0.41	40	1948	<5	0.12	7.0	14	66	82	5.84	0.28	10	0.04	971	5	0.01	25	24	25	<20	38	<10	25	<20	5	563
212	0.3	0.32	<5	41	<5	1.95	<1.0	16	72	169	2.61	0.18	8	0.59	700	12	0.03	8	18	<5	<20	22	<10	11	<20	8	45
213	11.4	0.37	9516	49	<5	0.15	10.1	30	82	418	7.14	0.25	3	0.25	828	18	<0.01	26	361	182	<20	13	<10	25	23	4	1402
214	47.1	0.09	189	15	<5	0.07	5.5	8	103	>20000	8.58	0.03	<1	0.02	185	14	<0.01	26	301	29	<20	3	30	4	<20	3	300
215	>50.0	0.42	113	35	<5	0.13	59.3	18	66	237	5.55	0.34	7	0.16	5950	14	0.01	8	2622	124	<20	8	<10	10	147	4	8116
216	1.1	2.17	11	299	<5	0.65	1.3	11	23	20	3.03	0.29	6	1.33	932	4	0.10	14	102	<5	<20	57	<10	43	<20	3	444
217	6.8	0.44	90	56	13	0.01	<1.0	7	13	221	7.90	0.43	4	0.01	23	4	<0.01	<1	1794	<5	<20	2	<10	27	<20	1	363
218	9.2	0.82	114	1400	<5	0.16	2.9	27	38	408	6.42	0.43	9	0.17	1392	2	<0.01	11	121	148	<20	14	<10	41	<20	8	213
219	>50.0	0.27	105	187	7	0.04	136.0	11	133	1042	2.57	0.18	<1	0.03	602	9	<0.01	11	>10000	927	<20	43	25	16	184	3	9464
220	0.3	0.12	15	141	<5	0.04	<1.0	13	44	261	3.92	0.06	4	0.03	92	3	<0.01	16	30	<5	<20	7	<10	6	<20	5	26
221	>50.0	0.16	5	75	<5	0.02	<1.0	<1	67	29	0.26	0.12	2	<0.01	42	2	<0.01	2	42	34	<20	4	<10	1	<20	<1	26
222	>50.0	0.22	123	1228	19	0.05	61.8	3	53	6227	0.21	0.18	3	<0.01	26	<1	<0.01	<1	465	1770	<20	38	<10	2	<20	1	157
223	2.1	0.29	<5	109	<5	0.03	<1.0	8	21	26	2.94	0.25	<1	0.04	614	<1	<0.01	7	12	15	<20	5	<10	16	<20	2	137
224	>50.0	0.23	83	1691	<5	0.06	16.5	2	30	1076	0.58	0.19	6	0.01	149	<1	<0.01	2	1244	649	<20	67	<10	4	<20	2	457
225	>50.0	0.23	20	1471	<5	0.05	1.8	3	39	176	0.52	0.20	14	0.01	163	<1	<0.01	2	1011	127	<20	35	<10	2	<20	3	247
226	>50.0	0.19	360	274	29	0.04	117.5	5	52	5392	0.45	0.16	3	<0.01	131	6	<0.01	<1	>10000	>2000	<20	82	<10	1	<20	2	2924
227	>50.0	0.23	42	27	7	0.03	7.0	6	59	1616	2.17	0.04	1	0.06	258	3	<0.01	5	>10000	58	<20	5	<10	12	<20	2	1153
228	1.6	0.23	38	55	<5	0.20	<1.0	8	64	127	1.03	0.07	3	0.05	479	2	0.01	4	239	<5	<20	3	<10	17	<20	5	259
229	1.5	0.67	<5	59	<5	0.07	<1.0	9	53	24	1.24	0.29	7	0.20	330	<1	<0.01	5	22	6	<20	5	<10	21	<20	4	41

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
230	<0.2	0.58	<5	82	<5	4.39	2.8	23	8	22	5.56	0.30	10	0.18	1113	<1	0.09	7	105	<5	<20	19	<10	66	<20	15	1438
231	>50.0	0.45	24	79	21	2.84	319.4	26	19	386	5.40	0.24	8	0.07	1179	<1	<0.01	7	3381	204	<20	17	<10	59	95	12	13613
232	>50.0	0.38	<5	41	<5	6.12	33.2	14	14	75	3.56	0.22	7	2.08	2260	2	<0.01	11	790	15	<20	117	<10	20	<20	15	2374
233	3.3	0.78	<5	32	<5	3.04	<1.0	14	15	114	4.07	0.27	5	1.82	1323	2	<0.01	8	28	<5	<20	52	<10	24	<20	13	140
234	7.0	0.37	<5	54	<5	1.16	<1.0	2	20	44	2.35	0.27	10	0.35	1521	<1	<0.01	7	22	11	<20	21	<10	13	<20	3	58
235	<0.2	0.73	<5	66	<5	0.51	<1.0	13	22	12	3.82	0.39	17	0.27	1282	<1	0.04	11	11	9	<20	18	<10	29	<20	8	101
236	<0.2	0.43	<5	100	<5	0.90	<1.0	6	14	5	3.28	0.34	12	0.21	1062	2	0.06	7	83	<5	<20	15	<10	25	<20	8	88
237	<0.2	0.54	<5	42	<5	2.56	<1.0	15	10	10	3.98	0.36	21	1.23	1149	<1	<0.01	6	11	<5	<20	46	<10	39	<20	10	88
238	4.2	0.36	7	179	<5	0.85	3.1	2	21	71	0.30	0.24	10	0.07	655	2	0.01	1	16	45	<20	6	<10	5	<20	3	36
239	>50.0	0.24	98	70	<5	0.07	3.6	8	40	964	2.28	0.19	5	0.07	1318	2	0.03	5	191	476	<20	6	<10	12	<20	1	366
240	>50.0	0.13	166	67	17	1.70	20.4	10	28	2640	4.35	0.13	<1	0.84	2813	<1	<0.01	28	8538	407	<20	30	<10	12	<20	2	1656
241	35.2	0.36	33	98	<5	0.14	5.2	7	24	516	4.43	0.23	9	0.04	2323	4	<0.01	9	2390	178	<20	8	<10	19	<20	4	2488
242	<0.2	0.16	<5	904	<5	0.04	32.5	21	15	370	>10.00	0.12	8	0.04	14249	126	<0.01	25	3086	51	<20	70	<10	10	<20	18	2610
243	28.8	0.43	109	16	102	0.01	9.5	19	16	>20000	9.83	0.09	17	0.21	142	12	<0.01	3	386	26	<20	2	<10	2	<20	12	4908
244	<0.2	1.78	<5	146	<5	0.20	<1.0	14	50	115	7.03	0.61	12	0.44	3555	<1	0.02	24	68	<5	<20	21	<10	64	<20	4	222
245	<0.2	0.53	443	25	<5	0.07	<1.0	10	29	215	8.61	0.50	15	0.14	394	2	0.27	13	72	29	<20	50	<10	73	<20	4	106
246	2.8	0.50	482	13	<5	0.09	<1.0	2	22	47	9.21	0.12	4	0.05	248	4	<0.01	7	125	115	<20	8	<10	81	<20	3	320
247	<0.2	0.80	203	55	<5	0.05	<1.0	<1	31	45	7.29	0.96	22	0.22	502	8	0.02	8	94	8	<20	4	<10	136	<20	3	61
248	0.5	0.25	<5	29	11	0.05	<1.0	2	38	11	0.35	0.15	3	0.02	155	<1	0.02	2	8	<5	<20	6	<10	2	<20	4	9
249	1.2	0.04	<5	725	<5	2.38	<1.0	6	63	45	1.55	0.03	<1	0.92	432	8	<0.01	5	44	<5	<20	82	<10	14	<20	1	37
250	<0.2	0.16	6	32	51	5.12	<1.0	9	32	129	1.03	0.02	<1	0.07	510	6	<0.01	10	8	<5	<20	13	35	25	<20	3	4
251	23.5	0.22	304	412	<5	0.02	<1.0	10	54	289	7.38	0.12	1	<0.01	96	124	<0.01	28	2176	241	<20	21	<10	50	<20	5	815
252	<0.2	1.27	<5	270	<5	0.17	<1.0	32	77	62	6.26	0.44	2	0.41	5098	7	<0.01	68	18	6	<20	90	<10	125	<20	10	197
253	<0.2	1.72	76	67	<5	0.28	3.1	19	49	67	8.19	0.63	26	0.45	12082	13	0.02	58	27	<5	<20	62	<10	65	<20	14	426
254	<0.2	0.11	8	18	<5	0.05	<1.0	7	181	36	4.92	0.02	1	0.01	118	16	<0.01	14	6	<5	<20	3	<10	50	30	3	36
255	<0.2	1.30	<5	230	5	0.28	2.2	20	33	94	>10.00	0.19	16	0.34	8944	11	<0.01	16	38	<5	<20	29	<10	67	<20	11	149
256	<0.2	0.28	6	40	<5	6.07	1.3	16	94	47	3.29	0.09	3	0.11	610	22	<0.01	31	11	<5	<20	11	<10	29	<20	7	144
257	<0.2	0.90	143	103	<5	0.23	<1.0	8	67	129	>10.00	0.10	13	0.20	829	11	0.03	14	59	12	<20	119	<10	232	<20	4	133
258	<0.2	0.06	224	10	<5	0.03	<1.0	3	160	35	6.81	<0.01	<1	0.02	72	18	<0.01	6	14	<5	<20	5	<10	29	<20	<1	29
259	7.3	0.02	31	6	<5	0.27	<1.0	2	143	10745	1.52	<0.01	<1	<0.01	171	12	<0.01	5	20	<5	<20	6	20	9	<20	<1	32
260	2.3	0.34	9	10	<5	>10.00	<1.0	3	91	4186	1.17	0.03	<1	0.21	596	6	0.01	6	16	5	<20	61	<10	32	<20	3	24
261	33.1	0.36	158	23	<5	0.19	14.9	18	129	>20000	3.09	0.02	17	0.32	116	461	<0.01	7	2850	30	<20	11	97	10	339	6	4438
262	<0.2	0.07	52	22	<5	0.04	<1.0	<1	167	47	4.29	0.02	<1	0.01	137	9	<0.01	4	6	5	<20	5	<10	27	<20	<1	22
263	<0.2	0.45	28	97	<5	0.27	<1.0	9	125	327	2.28	0.22	13	0.04	580	6	0.01	9	7	<5	<20	18	<10	11	<20	4	37
264	<0.2	0.27	135	238	<5	>10.00	<1.0	12	33	52	4.16	0.14	2	0.13	1805	5	<0.01	10	15	8	<20	111	<10	45	<20	9	104
265	<0.2	1.32	73	164	<5	6.69	1.2	17	65	66	5.05	0.42	16	0.50	1935	3	0.02	31	51	9	<20	83	<10	62	<20	10	314
266	6.9	0.03	200	6	<5	0.03	4.0	1	251	5086	0.62	0.01	<1	<0.01	29	16	<0.01	5	30	440	<20	5	<10	4	<20	<1	63
267	1.2	0.02	<5	7	<5	3.33	<1.0	6	208	13369	1.50	<0.01	2	0.01	254	4	<0.01	15	10	<5	<20	12	17	13	<20	7	22

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
268	<0.2	1.46	84	198	<5	0.27	<1.0	13	119	128	4.28	0.35	19	0.94	2159	<1	0.03	45	13	<5	<20	15	<10	64	<20	5	76
269	<0.2	1.58	64	233	<5	0.96	<1.0	17	47	93	3.91	0.18	21	0.35	1484	<1	0.04	42	14	<5	<20	50	<10	87	<20	13	88
270	<0.2	1.00	<5	92	<5	0.19	<1.0	7	91	183	3.91	0.57	11	0.34	192	67	0.08	7	4	<5	<20	35	<10	20	<20	4	20
271	24.0	0.20	236	41	44	0.81	6.5	6	137	1065	3.12	0.13	3	0.05	740	17	<0.01	9	754	9	<20	12	<10	11	<20	7	906
272	<0.2	0.72	<5	136	<5	0.38	<1.0	8	121	188	3.50	0.23	19	0.15	731	20	0.02	11	10	<5	<20	16	<10	26	<20	11	75
273	15.1	2.11	<5	74	79	0.19	<1.0	41	61	17510	7.38	0.29	23	1.09	1410	<1	0.07	15	14	<5	23	17	11	93	57	35	123
274	<0.2	0.54	203	84	<5	0.23	6.1	18	19	433	4.71	0.20	8	0.07	1648	4	<0.01	30	26	11	<20	24	<10	43	<20	9	1700
275	0.6	0.71	32	55	10	4.83	2.3	14	48	474	4.76	0.32	19	0.19	3826	3	<0.01	17	40	<5	<20	48	<10	23	<20	12	418
276	1.6	0.69	37	316	25	0.22	2.4	16	95	492	5.42	0.35	20	0.06	1553	12	<0.01	16	18	5	<20	25	<10	66	<20	22	857
277	3.9	1.20	37	43	184	0.12	2.1	103	62	6658	>10.00	0.03	11	0.97	793	13	<0.01	28	23	<5	<20	23	52	103	<20	27	257
278	<0.2	2.05	<5	154	<5	0.51	<1.0	10	66	66	5.35	0.71	13	0.79	261	33	0.04	15	8	<5	<20	115	<10	48	<20	5	38
279	7.5	0.09	73	148	37	0.10	1.8	13	263	271	5.12	0.04	3	0.03	1162	12	<0.01	36	83	10	<20	14	<10	22	52	3	249
280	10.3	0.69	235	547	41	0.09	12.2	7	76	2529	7.50	0.36	23	0.08	8088	22	<0.01	13	149	10	<20	47	<10	27	36	25	2371
281	<0.2	1.53	<5	105	<5	0.32	<1.0	20	35	36	9.47	0.33	10	0.63	6476	<1	0.01	22	25	<5	39	19	<10	64	<20	6	313
282	<0.2	1.38	<5	40	<5	1.49	<1.0	9	29	751	6.17	0.52	<1	0.68	404	4	0.12	5	12	<5	24	30	<10	127	49	<1	43
283	<0.2	0.38	<5	27	<5	0.17	<1.0	<1	60	655	6.46	0.06	<1	0.09	138	265	0.01	4	14	<5	<20	11	<10	29	48	<1	32
284	4.4	0.53	232	84	<5	>10.00	11.9	16	19	161	5.68	0.26	<1	0.13	6594	5	0.02	4	1378	7	<20	72	<10	122	28	4	2141
285	16.6	0.19	367	8	10	0.30	12.1	6	174	224	6.88	0.09	<1	0.03	10006	18	0.01	3	>10000	17	<20	60	<10	6	36	8	2798
286	1.7	2.19	58	9	<5	0.20	<1.0	20	119	7181	4.18	0.04	4	2.18	650	10	<0.01	6	62	<5	<20	3	<10	72	<20	2	100
287	9.3	0.87	1131	54	<5	2.12	14.0	25	85	276	8.10	0.43	5	0.30	6754	14	0.15	112	3222	98	<20	106	<10	69	87	14	2410
288	33.1	0.50	3808	28	<5	0.25	5.1	6	66	203	>10.00	0.22	<1	0.07	950	25	0.03	10	2473	163	<20	26	<10	84	44	9	2439
289	<0.2	0.74	163	64	<5	0.13	<1.0	12	145	372	4.02	0.06	10	0.31	343	13	<0.01	8	40	24	<20	25	<10	70	<20	16	82
290	10.5	3.35	98	19	<5	0.03	1.5	6	58	9764	3.02	0.07	7	4.67	278	16	0.01	4	67	150	<20	5	15	11	<20	2	121
291	>50.0	2.14	5418	67	<5	0.28	54.2	9	96	>20000	2.81	0.07	25	3.02	270	19	0.02	<1	260	>2000	<20	27	120	16	<20	15	568
292	8.9	0.82	3533	24	7	0.03	3.5	4	78	841	8.90	0.04	3	0.20	101	17	0.06	2	1127	62	<20	33	<10	27	<20	<1	893
293	3.0	0.44	358	61	<5	0.07	1.6	<1	25	254	1.39	0.29	11	0.06	983	3	0.09	2	1131	<5	<20	21	<10	11	<20	2	580
294	2.5	0.82	589	881	<5	0.34	13.9	31	41	141	7.48	0.51	16	0.27	16380	18	0.03	68	554	<5	26	259	<10	177	<20	19	1367
295	>50.0	0.09	6762	17	63	0.11	45.7	<1	132	534	6.82	0.10	1	0.01	634	22	0.03	2	>10000	68	<20	37	<10	3	80	3	1766
296	<0.2	0.69	260	307	<5	0.19	<1.0	5	14	19	3.88	0.23	10	0.10	1471	1	0.02	4	76	<5	26	23	<10	19	<20	6	110
297	<0.2	0.81	66	93	<5	0.65	<1.0	3	23	18	3.39	0.24	13	0.24	4561	<1	0.02	4	71	<5	<20	33	<10	19	<20	6	104
298	40.1	0.34	419	410	31	2.36	52.8	7	81	934	4.59	0.14	<1	0.11	12516	7	<0.01	35	593	15	40	153	<10	76	<20	7	7240
299	6.6	1.06	27	302	<5	0.13	<1.0	14	96	11606	6.89	0.50	68	0.27	490	13	0.02	14	46	9	<20	29	14	63	<20	13	89
300	>50.0	0.24	3136	21	91	0.05	10.2	1	193	726	3.24	0.09	6	0.06	1401	16	0.07	15	>10000	132	<20	6	<10	13	<20	5	1182
301	10.0	1.14	961	39	<5	0.79	7.7	6	26	197	5.77	0.41	6	0.88	4090	<1	0.01	29	530	16	<20	16	<10	74	<20	6	2067
302	21.8	1.00	673	45	<5	1.00	6.0	<1	16	453	4.95	0.30	4	1.10	3922	<1	0.01	7	2080	32	<20	20	<10	45	<20	5	1577
303	18.5	0.57	647	53	9	1.11	24.9	1	20	88	3.66	0.29	5	0.85	7304	2	<0.01	5	827	18	<20	23	<10	29	<20	5	4914
304	41.4	0.70	664	43	<5	1.11	10.0	7	16	163	3.94	0.26	5	1.00	5000	<1	<0.01	5	2164	38	22	20	<10	24	<20	5	2219
305	2.5	0.76	42	62	11	3.33	12.8	16	49	378	3.02	0.30	7	1.25	3159	2	0.01	51	20	<5	22	70	<10	38	<20	7	2635

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
306	0.5	1.45	<5	535	7	0.35	8.3	27	51	214	3.99	0.37	41	0.36	4194	5	0.02	33	18	<5	<20	39	<10	70	<20	25	2185
307	1.3	0.21	9	56	47	0.08	<1.0	3	199	653	5.94	0.14	3	0.04	73	17	0.03	16	13	<5	<20	43	19	23	<20	2	23
308	6.4	0.79	132	87	7	0.13	<1.0	<1	30	254	4.01	0.34	14	0.06	205	4	0.01	7	259	10	<20	32	<10	11	<20	5	1627
309	42.9	0.21	397	305	11	0.03	3.3	11	41	476	7.83	0.11	<1	0.02	2959	14	<0.01	14	5739	36	31	94	<10	7	<20	5	2777
310	6.4	0.69	82	54	6	0.13	5.3	14	37	188	4.05	0.25	7	0.07	3669	4	0.02	6	2021	<5	<20	36	<10	10	<20	3	2212
311	<0.2	1.08	<5	118	<5	0.87	<1.0	6	32	34	3.38	0.45	24	0.15	1258	<1	0.01	9	9	<5	21	26	<10	15	<20	10	102
312	0.8	0.11	10	5	23	0.02	<1.0	<1	75	145	0.16	0.09	<1	<0.01	85	662	0.02	2	17	<5	<20	2	<10	<1	<20	2	16
313	2.7	0.51	7	46	<5	2.38	3.2	13	26	142	3.96	0.23	3	0.64	2831	3	<0.01	23	51	<5	<20	50	<10	22	<20	6	978
314	3.3	1.04	<5	62	13	2.52	24.9	22	41	810	3.83	0.29	10	0.91	1845	2	0.01	25	101	<5	<20	68	<10	42	<20	8	4664
315	4.9	0.93	16	75	27	2.06	39.2	18	41	1120	3.73	0.26	9	0.85	1809	2	0.01	22	156	<5	<20	58	<10	35	<20	7	6640
316	>50.0	0.15	301	804	9	0.14	22.7	7	56	1377	6.13	0.09	<1	0.05	17269	9	<0.01	15	1580	190	<20	207	<10	34	<20	10	3490
317	17.4	0.54	219	176	<5	0.17	4.9	26	36	113	6.07	0.21	6	0.05	8877	4	0.09	9	449	10	20	38	<10	22	<20	15	1468
318	>50.0	0.68	1837	113	6	0.77	8.7	8	17	453	2.92	0.26	8	0.35	6929	1	0.01	3	3746	110	<20	27	<10	11	<20	8	2231
319	>50.0	0.14	>10000	6	44	0.10	135.4	<1	48	1122	3.63	0.09	<1	0.09	8274	3	<0.01	4	>10000	1059	<20	2	15	<1	230	1	19207
320	10.7	0.08	88	194	<5	0.10	<1.0	10	100	14	0.82	0.03	<1	0.02	4627	1	<0.01	3	386	31	<20	15	<10	6	<20	2	588
321	>50.0	0.48	6336	275	10	0.23	19.8	3	25	394	2.96	0.23	4	0.12	10490	4	0.01	3	>10000	232	21	34	<10	16	<20	13	4547
322	>50.0	0.39	>10000	40	17	3.68	163.6	16	37	838	4.58	0.18	<1	0.06	10781	5	0.02	16	>10000	560	<20	236	<10	4	<20	3	8017
323	11.3	0.62	1295	190	<5	0.22	<1.0	13	39	100	7.58	0.19	6	0.09	8679	<1	<0.01	10	980	34	24	49	<10	40	<20	4	932
324	>50.0	1.00	1341	114	<5	1.42	19.0	12	25	69	3.28	0.46	6	0.79	6569	<1	0.01	2	3292	188	<20	28	<10	24	<20	7	4497
325	>50.0	0.20	1420	20	9	0.04	19.3	<1	76	274	1.10	0.05	10	0.03	1170	3	<0.01	2	>10000	651	<20	6	<10	<1	<20	6	3142
326	>50.0	0.06	1043	364	15	0.02	34.8	8	88	192	1.78	0.03	<1	<0.01	6387	4	<0.01	2	>10000	342	<20	28	<10	4	105	3	6493
327	>50.0	0.38	>10000	10	27	0.28	258.5	17	41	619	5.78	0.17	<1	0.09	14829	2	0.08	37	>10000	1607	<20	131	<10	<1	116	3	14700
328	11.0	0.56	501	784	<5	0.40	2.1	16	24	126	5.15	0.21	3	0.07	8229	6	0.06	8	1211	36	<20	143	<10	54	<20	15	1985
329	>50.0	0.17	755	313	16	0.03	45.9	<1	68	110	3.46	0.10	<1	<0.01	9022	8	<0.01	3	3497	59	<20	64	<10	8	<20	5	9241
330	2.8	2.67	24	156	<5	0.36	<1.0	35	18	4590	4.81	0.36	7	2.13	1192	1	0.03	6	130	<5	33	11	<10	136	<20	8	554
331	4.0	0.27	46	29	<5	>10.00	<1.0	2	39	63	5.53	0.14	<1	1.96	1816	12	0.01	2	69	8	<20	120	<10	6	<20	10	251
332	41.2	0.52	1814	426	7	1.39	19.4	34	57	150	7.85	0.28	<1	0.16	15298	9	0.01	72	1395	52	<20	104	<10	75	63	8	4125
333	<0.2	0.19	85	173	<5	>10.00	1.6	2	28	9	5.78	0.11	<1	2.60	3568	6	<0.01	5	54	6	<20	165	<10	12	<20	8	250
334	>50.0	0.71	835	111	<5	2.63	18.6	5	27	70	3.61	0.28	3	1.15	5460	<1	0.01	14	1873	60	<20	40	<10	29	<20	6	3989
335	21.6	0.46	253	29	<5	9.03	2.7	16	56	61	4.33	0.19	<1	0.23	7816	<1	0.01	76	399	19	<20	89	<10	55	<20	8	976
336	31.2	0.34	146	193	<5	9.02	1.6	17	57	453	5.03	0.20	1	0.10	2644	30	<0.01	18	98	81	<20	57	<10	31	<20	9	175
337	>50.0	0.59	779	19	551	2.10	1.4	8	133	121	2.62	0.04	<1	0.50	376	30	0.02	13	2720	7	<20	24	28	36	58	8	46
338	<0.2	2.27	158	130	<5	2.36	2.8	17	79	262	5.74	0.06	1	2.52	2422	<1	0.02	28	15	<5	24	73	<10	104	<20	3	2052
339	37.4	0.83	95	63	<5	0.19	17.3	3	74	1176	3.73	0.45	8	0.20	2308	18	0.03	19	>10000	61	<20	19	14	15	<20	5	3184
340	23.2	1.34	27	123	<5	0.70	9.8	5	43	489	4.04	0.62	13	0.40	1429	11	0.03	16	2386	45	<20	28	<10	28	<20	6	2210
341	<0.2	1.54	693	58	<5	1.24	<1.0	7	35	524	5.12	0.10	7	2.01	986	3	0.02	9	55	35	<20	30	<10	40	<20	3	183
342	>50.0	0.28	107	186	<5	0.08	<1.0	<1	215	99	1.18	0.24	<1	<0.01	33	7	0.03	16	821	37	<20	5	<10	<1	<20	<1	81
343	>50.0	0.09	388	49	<5	0.02	8.9	1	138	1018	3.51	0.08	1	<0.01	105	13	<0.01	4	1582	290	<20	6	<10	2	<20	<1	719

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
344	>50.0	0.32	138	31	9	1.21	157.6	7	205	554	2.54	0.21	6	0.20	3634	13	0.02	22	9634	37	<20	24	36	4	280	3	12598
345	>50.0	0.44	20	>2000	<5	0.27	<1.0	12	33	179	3.00	0.30	8	0.08	906	<1	0.04	14	103	61	<20	53	<10	20	<20	4	190
346	0.9	0.20	<5	14	<5	0.03	<1.0	3	33	6	0.08	0.19	<1	<0.01	20	<1	0.05	1	20	<5	<20	3	<10	<1	<20	<1	11
347	31.8	0.35	184	17	<5	0.12	<1.0	12	19	4131	>10.00	0.17	1	0.05	14062	<1	<0.01	23	141	81	<20	70	<10	24	<20	7	711
348	1.2	0.11	172	46	<5	0.09	<1.0	3	43	15	2.38	0.06	3	0.02	1654	<1	<0.01	10	11	<5	<20	7	<10	11	<20	5	146
349	3.6	0.99	25	126	<5	0.28	<1.0	21	35	508	5.47	0.18	30	0.45	1178	9	<0.01	35	432	29	<20	32	<10	17	<20	6	1497
350	1.8	0.27	269	37	<5	2.01	25.5	13	15	121	6.47	0.20	5	0.49	8598	26	<0.01	27	1386	25	<20	49	<10	7	<20	15	2495
351	2.0	0.53	18	27	<5	2.83	15.1	7	16	80	3.66	0.29	18	0.84	4712	<1	<0.01	34	588	<5	<20	97	<10	9	<20	9	1876
352	0.5	0.47	17	21	<5	3.11	<1.0	3	14	80	1.80	0.27	15	0.86	2488	3	<0.01	10	97	<5	<20	86	<10	9	<20	7	387
353	0.5	0.49	538	29	<5	0.02	<1.0	<1	21	269	9.01	0.18	21	0.02	1518	2	<0.01	28	264	51	<20	18	<10	67	<20	5	1432
354	>50.0	0.19	4801	18	78	0.09	333.2	13	22	1383	8.72	0.09	3	0.19	8251	19	<0.01	20	>10000	922	<20	12	<10	18	131	5	14823
355	<0.2	0.39	23	346	<5	0.13	3.2	<1	16	70	1.86	0.29	35	0.04	1924	4	<0.01	4	317	<5	<20	32	<10	3	<20	8	456
356	1.2	0.25	27	272	<5	2.23	4.0	<1	13	124	1.86	0.19	13	0.03	1769	2	<0.01	3	386	<5	<20	15	<10	5	<20	8	750
357	16.7	0.45	29	46	<5	0.12	<1.0	7	12	102	8.26	0.15	3	0.07	115	40	0.03	9	2323	<5	<20	17	<10	7	<20	5	1358
358	19.2	0.25	165	52	<5	0.02	<1.0	<1	19	2162	7.23	0.13	2	0.02	107	25	0.01	3	9029	35	<20	2	<10	3	<20	3	1228
359	8.5	0.58	240	163	16	0.33	<1.0	14	9	590	6.47	0.52	10	0.09	1148	27	0.06	6	248	86	<20	102	<10	56	<20	16	1347
360	12.1	0.45	186	33	13	0.33	<1.0	19	17	921	6.24	0.28	7	0.07	1353	7	0.01	6	167	78	<20	34	<10	27	<20	4	259
361	1.9	1.14	29	86	<5	3.45	<1.0	17	12	406	4.23	0.44	9	0.43	1053	15	0.01	7	115	17	<20	46	<10	32	<20	12	399
362	12.0	0.30	1080	32	17	7.09	<1.0	14	17	7460	4.53	0.17	3	2.40	1878	8	<0.01	5	184	363	<20	75	<10	19	<20	7	622
363	<0.2	3.70	<5	155	<5	0.79	<1.0	27	923	28	4.22	0.61	13	4.10	1255	3	0.02	251	8	<5	<20	53	<10	87	<20	4	86
364	<0.2	0.58	<5	73	<5	0.49	<1.0	<1	22	114	0.94	0.22	22	0.33	131	173	0.05	2	3	<5	<20	16	<10	21	<20	6	12
365	6.1	0.17	6	122	11	0.31	6.8	<1	19	726	1.26	0.14	15	0.04	639	215	<0.01	3	118	9	<20	9	<10	2	<20	5	1198
366	<0.2	0.23	<5	109	<5	0.05	<1.0	3	12	283	1.42	0.18	8	0.02	11	213	0.03	1	6	<5	<20	8	<10	2	<20	2	8
367	48.4	0.39	12	25	220	0.35	<1.0	4	12	>20000	3.82	0.19	21	0.06	291	257	0.01	<1	<2	<5	<20	8	17	4	<20	6	95
368	14.3	0.25	<5	130	41	0.13	<1.0	<1	28	8277	1.49	0.18	7	0.06	44	153	0.02	<1	4	<5	<20	11	<10	6	<20	2	45
369	25.9	0.11	<5	11	45	0.03	<1.0	26	18	3790	5.05	0.15	<1	<0.01	5	48	0.03	3	20	12	<20	7	<10	2	<20	<1	25
370	38.6	0.09	<5	32	119	0.12	<1.0	8	12	15848	2.93	0.10	5	<0.01	14	138	0.03	<1	30	15	<20	7	44	2	<20	1	20
371	1.9	0.75	<5	639	<5	0.10	<1.0	<1	11	2992	6.21	0.14	6	0.05	194	39	0.02	3	17	<5	<20	26	<10	12	<20	3	15
372	26.3	0.20	15	617	7	0.03	<1.0	<1	36	98	2.12	0.16	8	0.04	30	82	<0.01	4	1775	21	<20	15	<10	7	<20	<1	141
373	>50.0	0.43	322	59	253	0.05	2.2	2	36	783	6.67	0.69	5	0.03	38	127	0.29	3	1788	20	<20	91	<10	30	<20	<1	309
374	>50.0	0.28	180	39	388	0.02	<1.0	2	55	339	4.93	0.13	3	0.03	48	71	0.03	3	3137	86	<20	15	<10	7	<20	<1	294
375	0.5	3.00	10	29	<5	3.73	1.1	20	61	512	3.69	0.17	<1	0.61	439	5	0.30	55	14	<5	<20	82	<10	103	<20	7	144
376	<0.2	2.83	<5	58	<5	>10.00	1.7	16	27	99	3.56	0.94	<1	1.86	388	4	0.11	19	18	<5	<20	51	<10	91	<20	3	247
377	35.5	0.70	10	11	<5	1.46	1.8	126	22	>20000	8.00	0.03	<1	0.84	412	6	<0.01	221	15	<5	<20	12	10	72	<20	2	221
378	33.6	0.06	78	13	36	1.30	388.8	29	58	2712	5.36	0.03	<1	0.47	1462	12	<0.01	4	1140	144	<20	14	46	6	1247	<1	>20000
379	29.4	0.11	120	5	15	0.04	154.5	19	81	1163	2.91	0.08	3	0.02	174	16	<0.01	9	>10000	68	<20	3	33	11	413	<1	15349
380	3.5	0.29	79	8	<5	0.04	7.5	10	61	131	6.38	0.21	9	0.04	1163	17	<0.01	23	358	17	<20	7	<10	26	21	6	1480
381	29.8	0.09	222	8	7	<0.01	1.3	8	48	80	2.92	0.10	2	<0.01	28	10	<0.01	12	8704	74	<20	2	<10	6	<20	<1	223

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
382	1.6	0.26	24	17	<5	0.02	4.4	5	70	89	3.39	0.14	8	0.01	629	3	0.01	6	364	6	<20	3	<10	14	<20	3	705
383	2.3	0.09	292	712	<5	0.04	1.5	388	13	772	>10.00	0.01	8	0.02	2602	61	<0.01	43	28	16	<20	24	<10	36	105	14	139
384	0.9	0.11	40	522	<5	0.05	<1.0	46	27	431	8.36	0.04	<1	0.01	1018	15	<0.01	4	18	27	<20	17	<10	25	108	3	59
385	0.3	0.45	62	1544	<5	0.75	<1.0	33	24	52	3.08	0.25	13	0.03	378	6	0.02	5	9	<5	<20	38	<10	12	<20	5	84
386	2.5	0.13	115	51	6	0.14	<1.0	240	20	57	>10.00	0.09	2	<0.01	214	39	<0.01	23	16	<5	<20	8	<10	24	37	5	65
387	22.8	0.20	177	19	13	3.25	67.3	176	26	1452	5.82	0.15	<1	0.76	2108	10	<0.01	16	6917	59	<20	47	<10	13	154	11	8271
388	8.1	0.17	266	68	<5	2.78	19.3	22	14	908	7.68	0.16	3	0.27	2961	6	0.04	15	753	65	<20	35	<10	14	<20	12	1156
389	<0.2	1.10	<5	102	<5	0.47	<1.0	8	12	36	3.26	0.17	33	0.11	333	3	0.07	8	13	<5	<20	47	<10	55	<20	5	51
390	6.5	0.12	<5	62	6	0.02	<1.0	4	47	10	1.51	0.11	2	0.02	662	9	<0.01	4	19	<5	<20	6	<10	3	<20	<1	13
391	20.1	0.07	7	45	18	<0.01	<1.0	5	102	189	1.54	0.03	<1	<0.01	51	5	<0.01	7	30	<5	<20	5	<10	3	<20	<1	16
392	<0.2	0.27	<5	8	<5	0.04	<1.0	1	37	57	0.28	0.10	2	0.01	54	2	0.02	2	116	<5	<20	10	<10	3	<20	1	79
393	15.5	0.47	100	13	94	0.05	1.5	<1	37	930	4.86	0.21	7	0.02	24	9	0.01	<1	9522	6	<20	16	<10	16	52	2	412
394	<0.2	1.24	<5	123	<5	0.39	<1.0	10	54	43	4.29	0.49	27	0.76	309	5	0.04	15	13	<5	<20	27	<10	56	<20	6	63
395	<0.2	1.32	<5	179	<5	0.39	<1.0	14	44	51	4.90	0.54	23	0.72	526	4	0.03	20	23	<5	<20	23	<10	62	<20	10	89
396	0.4	0.53	<5	51	<5	0.03	<1.0	<1	30	65	4.09	0.26	21	0.03	23	6	0.01	<1	93	<5	<20	10	<10	1	<20	<1	16
397	<0.2	0.63	<5	483	<5	2.52	2.6	21	18	<1	7.44	0.22	8	0.68	6720	10	0.01	21	27	<5	<20	40	<10	13	<20	52	258
398	<0.2	0.45	6	105	<5	1.51	3.0	40	9	<1	8.66	0.18	11	0.49	8241	8	0.01	23	31	<5	<20	28	<10	26	<20	66	363
399	0.2	2.48	<5	192	<5	1.89	<1.0	21	63	100	4.49	0.93	16	2.04	1084	10	<0.01	37	20	<5	<20	84	<10	79	<20	9	91
400	3.9	0.50	12	74	<5	0.09	<1.0	10	18	49	3.68	0.26	18	0.09	616	11	0.01	3	39	11	<20	13	<10	9	<20	11	80
401	0.5	0.54	5	61	<5	0.10	<1.0	9	29	2	2.55	0.34	16	0.07	640	13	<0.01	3	13	<5	<20	7	<10	8	<20	12	37
402	0.3	0.86	<5	281	<5	5.89	<1.0	9	41	34	2.36	0.21	10	0.83	1271	4	0.01	11	9	<5	<20	59	<10	20	<20	10	50
403	3.1	0.75	26	50	<5	0.08	1.1	42	23	408	6.11	0.22	14	0.13	719	22	<0.01	12	76	<5	<20	13	<10	17	<20	7	98
404	2.3	2.78	18	10	<5	1.77	<1.0	45	425	117	7.42	0.10	<1	2.55	1816	6	<0.01	74	30	<5	<20	27	<10	155	<20	5	135
405	0.8	0.55	<5	20	<5	2.12	<1.0	12	48	40	4.46	0.25	8	0.99	1495	8	0.01	16	25	<5	<20	36	<10	19	<20	6	73
406	5.7	0.36	79	26	<5	2.14	<1.0	12	20	993	2.40	0.28	8	0.62	919	10	0.02	3	17	20	<20	24	<10	4	<20	6	45
407	0.3	0.58	<5	144	<5	0.31	<1.0	23	11	13	6.46	0.39	9	0.21	2706	15	<0.01	9	21	8	<20	22	<10	14	<20	14	120
408	0.4	0.51	19	75	<5	0.07	<1.0	7	28	33	2.53	0.30	23	0.06	548	3	<0.01	2	23	<5	<20	6	<10	4	<20	6	39
409	<0.2	0.46	<5	50	<5	0.03	<1.0	14	24	1	6.37	0.34	9	0.05	847	7	<0.01	8	14	<5	<20	3	<10	10	<20	4	90
410	0.6	1.40	27	28	<5	0.30	<1.0	21	19	33	7.65	0.34	10	0.27	509	5	0.02	15	31	<5	<20	29	<10	54	<20	6	94
411	>50.0	0.43	161	35	32	0.02	<1.0	13	24	631	6.60	0.30	4	0.03	187	10	0.01	8	612	200	<20	11	<10	10	<20	3	192
412	6.0	0.84	<5	54	<5	0.10	1.7	29	21	725	4.23	0.26	25	0.10	1801	10	0.02	6	22	<5	<20	13	<10	18	<20	11	109
413	6.2	0.59	53	45	6	0.15	1.2	12	29	278	4.49	0.37	15	0.07	1781	15	0.06	9	70	109	<20	34	<10	9	<20	11	107
414	<0.2	0.76	<5	18	<5	0.40	1.0	25	62	2	9.38	0.21	16	0.23	3180	10	0.09	35	212	<5	<20	27	<10	59	<20	27	207
415	2.1	0.67	<5	50	5	0.04	3.5	13	41	195	4.42	0.38	24	0.06	1215	4	0.02	5	548	6	<20	5	<10	10	<20	12	333
416	29.0	0.57	30	636	<5	2.15	5.1	8	37	779	2.90	0.36	9	0.12	942	4	0.03	5	397	58	<20	16	<10	17	<20	6	345
417	0.9	0.48	13	48	<5	0.01	<1.0	10	26	25	4.12	0.29	17	0.04	621	8	<0.01	5	88	<5	<20	2	<10	10	<20	10	148
418	0.7	0.39	9	43	<5	0.05	3.6	7	32	93	4.80	0.20	5	0.06	1104	16	0.02	9	39	<5	<20	6	<10	20	<20	8	190
419	>50.0	0.38	354	57	50	0.04	2.9	11	26	1374	3.61	0.29	9	0.03	819	3	0.02	2	1971	106	<20	4	<10	6	<20	6	1088

Appendix C.--Inductively coupled plasma-atomic emission spectroscopy analyses for samples from the western part of Prescott National Forest.-Continued

Sample No.	Ag (Ppm)	Al (Pct)	As (Ppm)	Ba (Ppm)	Bi (Ppm)	Ca (Pct)	Cd (Ppm)	Co (Ppm)	Cr (Ppm)	Cu (Ppm)	Fe (Pct)	K (Pct)	La (Ppm)	Mg (Pct)	Mn (Ppm)	Mo (Ppm)	Na (Pct)	Ni (Ppm)	Pb (Ppm)	Sb (Ppm)	Sn (Ppm)	Sr (Ppm)	Te (Ppm)	V (Ppm)	W (Ppm)	Y (Ppm)	Zn (Ppm)
420	1.2	0.12	<5	47	<5	<0.01	<1.0	1	130	43	0.63	0.08	<1	<0.01	320	2	<0.01	3	39	<5	<20	<1	<10	1	<20	1	44
421	<0.2	1.59	<5	11	<5	6.66	1.4	24	92	91	5.59	0.16	8	1.35	2406	5	0.02	19	214	<5	<20	97	<10	94	<20	14	400
422	4.0	0.44	<5	27	<5	0.13	22.9	8	26	282	3.05	0.26	13	0.07	744	4	0.01	3	752	7	<20	7	<10	6	35	7	2638
423	8.1	1.50	<5	77	13	0.51	36.5	31	90	264	7.62	0.32	14	0.40	3133	67	0.11	15	7139	9	<20	22	<10	125	63	22	4327
424	0.2	2.02	5	46	<5	2.13	1.1	27	20	16	6.87	0.19	4	1.78	2435	7	0.01	59	31	6	<20	31	<10	75	<20	22	124
425	10.1	1.75	24	27	<5	0.44	2.6	16	38	232	4.67	0.31	5	1.02	516	5	0.01	50	637	<5	<20	10	<10	90	<20	14	546
426	1.2	1.14	6	82	<5	0.19	<1.0	16	28	16	3.08	0.41	19	0.44	619	3	0.02	3	46	<5	<20	10	<10	29	<20	11	85
427	8.1	1.68	8	64	<5	0.07	<1.0	26	44	<1	4.25	0.28	4	0.83	650	5	<0.01	11	9	<5	<20	2	<10	29	<20	8	52
428	<0.2	0.65	8	145	<5	0.12	1.7	18	14	56	8.34	0.39	20	0.07	3116	29	0.01	18	67	<5	<20	9	<10	19	<20	32	179
429	5.3	0.02	<5	206	<5	<0.01	<1.0	5	92	118	1.43	0.01	2	<0.01	19	15	<0.01	5	774	<5	<20	47	<10	3	<20	<1	16
430	1.2	0.42	27	147	<5	0.10	2.1	27	18	179	8.25	0.23	21	0.09	4606	15	0.01	32	30	<5	<20	10	<10	25	<20	41	272
431	0.6	0.45	9	92	<5	0.14	4.3	9	27	34	3.37	0.20	9	0.05	2043	6	0.04	6	381	<5	<20	5	<10	13	21	18	1053
432	3.7	0.63	664	167	<5	0.06	<1.0	120	8	4025	>10.00	0.15	10	0.05	767	38	0.03	5	46	<5	<20	23	<10	83	52	22	77
433	0.7	0.29	234	54	<5	0.27	1.1	246	12	3075	>10.00	0.13	5	0.16	1931	232	0.02	5	28	<5	<20	12	<10	74	69	22	114
434	6.0	0.02	15	266	<5	<0.01	2.2	6	131	325	1.99	0.01	<1	<0.01	46	46	<0.01	10	3414	10	<20	27	<10	26	<20	<1	287
435	<0.2	0.19	<5	69	<5	0.05	<1.0	1	44	7	0.56	0.15	5	0.05	103	2	0.02	2	15	<5	<20	12	<10	5	<20	2	14
436	<0.2	0.45	<5	68	<5	0.17	<1.0	4	44	38	2.12	0.17	29	0.11	256	3	0.02	5	161	<5	<20	17	<10	17	<20	15	97
437	2.3	0.26	<5	474	<5	0.06	<1.0	3	103	281	2.82	0.16	13	0.08	80	19	0.03	7	6127	<5	<20	36	<10	12	<20	4	194
438	<0.2	0.52	<5	69	<5	0.17	<1.0	5	42	106	1.59	0.21	31	0.19	264	3	0.04	4	629	<5	<20	17	<10	85	<20	9	151
439	14.6	0.13	66	143	21	0.04	7.6	22	59	717	7.34	0.03	11	0.02	133	931	0.01	42	>10000	18	<20	32	<10	48	39	92	1180
440	2.2	0.01	6	811	<5	<0.01	<1.0	13	114	47	2.59	<0.01	<1	<0.01	39	39	0.01	16	1122	<5	<20	38	<10	5	<20	<1	35

Appendix D.--Gold analyses for selected samples from Prescott National Forest. Gold was analyzed by the fire-assay gravimetric method.

Sample No.	Au (oz/st)
069	0.366
083	0.395
111	0.579
112	0.469
119	0.892
129	0.852
182	0.156
197	0.649
214	0.297
271	0.584
279	0.369
280	0.387
291	0.575
300	0.257
309	2.085
357	0.342
358	1.122
439	0.912[1]

[1] Erratic result.

Appendix E.--Silver, copper, lead, and zinc analyses for selected samples from Prescott National Forest. Silver was analyzed by the fire-assay gravimetric method; copper, lead, and zinc were analyzed by atomic absorption.

Sample No.	Ag (oz/st)	Cu (pct)	Pb (pct)	Zn (pct)
012	14.68	--	--	--
013	51.06	--	2.32	--
020	--	--	2.19	--
022	--	--	10.90	--
026	--	--	1.51	9.59
032	3.28	--	2.04	--
045	7.44	--	--	--
048	--	--	12.24	--
049	3.56	--	--	--
062	--	2.50	--	--
064[1]	3.04	--	>15.00	--
068	--	7.49	--	--
074	--	--	1.79	--
088	--	2.58	--	--
091	--	--	1.27	--
099	16.99	--	--	--
102	--	--	12.88	--
127	--	--	1.88	--
128	2.18	--	--	--
131	5.68	--	--	--
138	--	--	1.43	--
141	2.31	--	--	--
151	2.11	--	--	--
156	7.53	--	--	--
159	4.61	--	--	--
166	3.20	--	--	--
171	--	--	0.99	--
174	2.43	--	--	--
180	--	--	1.42	--
191	37.91	--	--	--
195	20.12	--	3.18	--
202	42.72	--	--	--
203	22.96	--	--	--
204	20.58	--	--	--
205	3.05	--	--	--
207	5.26	--	--	--
208	4.18	--	1.10	--
214	--	2.62	--	--
215	4.94	--	--	--
219	5.57	--	1.16	--
221	1.64	--	--	--
222	46.83	--	--	--
224	8.17	--	--	--
225	3.56	--	--	--
226	37.67	--	1.15	--
227	1.71	--	2.17	--
231	19.66	--	--	--
232	3.55	--	--	--
239	7.19	--	--	--
240	3.90	--	--	--
243	--	3.59	--	--
261	--	4.70	--	--

[1] 2nd re-run using HCl/HNO_3 (1:1) digestion, atomic absorption analysis, gave 28.60 pct Pb.

Appendix E.--Silver, copper, lead, and zinc analyses for selected samples from Prescott National Forest.--continued.

Sample No.	Ag (oz/st)	Cu (pct)	Pb (pct)	Zn (pct)
285	--	--	1.30	--
291	7.59	6.72	--	--
295	2.47	--	1.55	--
300	4.81	--	1.24	--
316	1.46	--	--	--
318	1.66	--	--	--
319	28.58	--	3.39	--
321	10.85	--	1.24	--
322	3.91	--	1.84	--
324	2.42	--	--	--
325	18.60	--	3.40	--
326	11.79	--	1.46	--
327	20.96	--	3.71	--
329	2.90	--	--	--
334	2.83	--	--	--
337	4.60	--	--	--
339	--	--	1.92	--
342	5.33	--	--	--
343	11.32	--	--	--
344	15.78	--	--	--
345	10.17	--	--	--
354	2.97	--	1.73	--
367	--	7.20	--	--
373	2.47	--	--	--
374	12.02	--	--	--
377	--	3.18	--	--
378	--	--	--	10.28
379	--	--	0.97	--
411	1.61	--	--	--
419	1.84	--	--	--
439	--	--	2.05	--

Appendix F.--Platinum and palladium analyses for selected samples from Prescott National Forest. Both elements were analyzed by the fire-assay directly-coupled plasma method.

Sample No.	Pt (Ppb)	Pd (Ppb)
010	<5	<1
040	<5	4
057	<5	4
058	<5	5
059	<5	3
060	18	5
069	<5	5
070	<5	3
071	<5	<1
072	<5	<1
073	<5	<1
074	<5	<1
075	<5	<1
076	<5	<1
077	<5	4
078	<5	10
079	6	2
080	<5	4
081	<5	9
082	7	<1
083	<5	10
084	<5	13
085	<5	<1
086	9	13
087	13	15
088	8	3
089	<5	9
090	<5	1
091	6	7
092	<5	8
093	<5	<1
094	8	<1
095	5	4
096	<5	8
097	<5	7
098	12	<1
099	<5	<1
100	<5	5
110	<5	4
123	<5	2
124	7	1
125	<5	5
126	<5	<1
127	<5	7
132	<5	<1
133	5	<1
137	<5	3
138	<5	<1
184	<5	4
185	<5	<1
186	<5	<1
187	<5	4
188	9	4
189	<5	2
197	<5	1
198	<5	11
199	<5	2
200	<5	<1
201	<5	7

Appendix G.--Whole rock analyses for selected samples from Prescott National Forest.

[<, less than; >, greater than]

Sample total No.	SiO2 (Pct)	TiO2 (Pct)	Al2O3 (Pct)	Fe2O3 (Pct)	MnO (Pct)	MgO (Pct)	CaO (Pct)	Na2O (Pct)	K2O (Pct)	P2O5 (Pct)	LOI (Pct)	Total (Pct)	BaO (Pct)	Cr2O3 (Pct)	S (Ppm)
004	55.15	0.79	21.68	9.33	0.13	2.26	0.22	0.41	5.71	0.07	3.52	99.41	0.109	0.03	<0.02
005	56.79	0.86	21.08	9.60	0.09	1.71	0.21	0.52	5.53	0.09	3.83	100.46	0.135	0.03	<0.02

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
001	PNF438	330815	3856840
002	PNF439	329350	3854850
003	PNF440	319390	3846690
004	PNF436	341095	3836260
005	PNF437	340930	3835620
006	PNF411	352479	3827513
007	PNF412	352479	3827513
008	PNF404	351441	3826811
009	PNF410	351585	3826776
010	PNF413	354184	3826301
011	PNF414	354558	3826240
012	PNF420	355294	3822981
013	PNF421	354477	3822918
014	PNF422	355294	3823193
015	PNF423	357246	3823750
016	PNF424	357560	3823602
017	PNF401	356886	3821283
018	PNF402	356770	3821417
019	PNF403	356767	3821418
020	PNF431	356035	3820269
021	PNF432	355295	3818552
022	PNF426	353440	3818844
023	PNF427	352962	3818899
024	PNF428	352388	3818649
025	PNF425	353397	3818420
026	PNF430	352477	3818064
027	PNF429	352323	3816861
028	PNF435	356398	3817868
029	PNF433	354089	3815698
030	PNF434	354220	3815678
031	PNF383	361596	3816134
032	PNF241	373170	3822810
033	PNF419	372625	3822030
034	PNF240	372330	3819010
035	PNF417	374031	3822078
036	PNF418	374031	3822078
037	PNF244	375836	3822660
038	PNF242	375580	3821980
039	PNF243	375628	3821311
040	PNF416	375930	3818265
041	PNF294	374318	3817560
042	PNF295	374280	3817444
043	PNF296	374953	3816513
044	PNF308	373185	3817170
045	PNF292	372850	3815560

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
046	PNF293	371120	3818120
047	PNF297	374152	3815126
048	PNF415	374389	3815135
049	PNF298	374669	3814323
050	PNF299	374777	3814371
051	PNF266	376391	3812600
052	PNF265	378709	3811869
053	PNF264	379122	3811872
054	PNF263	379300	3811551
055	PNF261	378670	3813075
056	PNF262	378670	3813075
057	PNF256	379316	3813094
058	PNF257	379316	3813094
059	PNF258	379316	3813094
060	PNF259	379316	3813094
061	PNF254	380137	3813373
062	PNF255	380394	3813387
063	PNF253	380536	3813458
064	PNF260	380770	3812114
065	PNF269	381541	3811356
066	PNF267	380656	3810573
067	PNF268	380396	3810223
068	PNF270	383312	3810697
069	PNF350	371420	3815225
070	PNF351	371580	3815165
071	PNF352	371565	3814955
072	PNF354	371470	3814885
073	PNF353	371240	3814550
074	PNF358	370555	3815190
075	PNF355	370300	3815260
076	PNF356	370405	3815170
077	PNF357	370315	3814855
078	PNF361	370270	3814375
079	PNF362	370275	3814440
080	PNF363	370105	3814460
081	PNF366	369525	3814075
082	PNF364	369585	3814545
083	PNF365	369430	3814670
084	PNF359	369590	3814805
085	PNF367	369435	3814885
086	PNF360	369150	3815485
087	PNF347	366260	3817805
088	PNF348	366425	3816775
089	PNF349	366375	3816885
090	PNF335	364740	3815365

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
091	PNF346	363405	3814690
092	PNF345	362525	3814115
093	PNF343	362690	3813630
094	PNF344	362690	3813630
095	PNF342	362645	3813520
096	PNF340	363055	3812600
097	PNF341	363545	3812055
098	PNF338	364035	3812950
099	PNF339	363915	3812960
100	PNF337	363945	3813150
101	PNF384	362172	3815138
102	PNF398	359278	3811156
103	PNF407	359216	3810707
104	PNF408	359216	3810707
105	PNF409	359495	3810580
106	PNF399	359077	3810461
107	PNF400	359347	3810241
108	PNF388	360341	3810957
109	PNF389	360321	3810852
110	PNF385	361455	3810960
111	PNF386	361768	3811004
112	PNF387	361768	3811004
113	PNF405	360802	3808913
114	PNF406	360798	3808869
115	PNF397	360103	3808857
116	PNF393	360154	3808769
117	PNF395	359888	3808699
118	PNF396	359888	3808699
119	PNF392	360058	3808664
120	PNF390	360047	3808724
121	PNF391	360047	3808724
122	PNF394	360047	3808724
123	PNF336	364995	3813850
124	PNF331	365765	3812005
125	PNF332	365790	3810845
126	PNF333	366170	3810870
127	PNF334	366195	3810925
128	PNF328	367615	3811155
129	PNF329	367565	3811250
130	PNF330	367770	3811265
131	PNF327	368205	3811690
132	PNF368	367900	3810520
133	PNF369	369090	3809970
134	PNF304	370180	3810010
135	PNF305	370215	3810120

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
136	PNF306	370270	3810245
137	PNF378	369665	3811235
138	PNF379	369740	3811140
139	PNF302	370170	3812245
140	PNF303	370180	3812300
141	PNF287	371000	3812110
142	PNF288	371000	3812110
143	PNF282	371170	3811490
144	PNF279	371230	3811125
145	PNF278	371255	3811115
146	PNF281	371495	3811030
147	PNF280	371635	3810815
148	PNF277	372105	3810930
149	PNF283	371540	3811555
150	PNF284	371660	3811765
151	PNF285	371930	3812005
152	PNF301	371750	3813025
153	PNF300	371865	3813645
154	PNF289	372585	3813995
155	PNF290	372585	3813995
156	PNF291	372880	3814015
157	PNF286	372685	3813265
158	PNF275	373080	3810975
159	PNF276	372990	3810935
160	PNF271	372455	3810400
161	PNF272	372455	3810400
162	PNF273	372455	3810400
163	PNF274	372625	3809710
164	PNF3	371875	3808825
165	PNF312	368710	3808930
166	PNF313	368660	3808935
167	PNF310	368460	3808550
168	PNF311	368765	3808540
169	PNF309	368885	3808280
170	PNF307	368320	3808070
171	PNF314	368905	3807680
172	PNF315	369180	3807735
173	PNF316	369145	3807675
174	PNF326	368245	3807385
175	PNF324	369200	3806675
176	PNF325	369200	3806675
177	PNF317	369775	3806590
178	PNF318	369815	3806600
179	PNF321	370595	3807355
180	PNF322	370495	3807295

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
181	PNF323	370255	3807040
182	PNF320	369855	3806245
183	PNF319	369980	3805775
184	PNF372	370600	3805360
185	PNF371	370575	3805265
186	PNF370	370625	3805045
187	PNF373	371495	3804970
188	PNF374	371690	3804735
189	PNF375	372020	3804830
190	PNF5	372115	3805390
191	PNF4	372855	3805535
192	PNF138	374003	3805202
193	PNF139	374068	3804980
194	PNF140	373812	3804694
195	PNF141	372290	3804240
196	PNF252	372281	3803473
197	PNF382	371477	3802992
198	PNF380	371509	3802251
199	PNF381	371542	3802022
200	PNF377	370410	3802325
201	PNF376	369080	3800379
202	PNF137	373797	3804197
203	PNF136	373750	3804096
204	PNF130	374467	3803686
205	PNF131	374478	3803795
206	PNF129	374587	3803791
207	PNF132	374052	3803434
208	PNF133	374162	3803446
209	PNF134	373881	3803121
210	PNF135	373809	3802828
211	PNF249	373830	3802134
212	PNF247	375095	3803025
213	PNF248	374938	3802468
214	PNF245	375044	3801597
215	PNF246	375754	3801731
216	PNF2	376194	3803440
217	PNF1	376213	3803334
218	PNF250	373584	3800896
219	PNF251	373574	3800867
220	PNF123	373567	3799747
221	PNF117	376874	3799966
222	PNF118	376747	3799591
223	PNF119	376747	3799591
224	PNF116	376640	3798818
225	PNF115	376591	3798527

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
226	PNF114	376545	3797938
227	PNF110	375097	3798019
228	PNF111	375097	3798019
229	PNF122	375042	3797783
230	PNF112	375298	3797505
231	PNF113	375310	3797523
232	PNF99	373548	3793497
233	PNF100	373548	3793497
234	PNF101	373548	3793497
235	PNF102	373584	3793540
236	PNF103	373584	3793540
237	PNF104	373584	3793540
238	PNF107	373584	3793540
239	PNF109	373659	3793593
240	PNF108	373712	3793642
241	PNF105	373832	3793743
242	PNF106	373830	3793882
243	PNF124	378983	3795228
244	PNF125	378921	3793780
245	PNF126	378969	3793997
246	PNF127	378969	3793997
247	PNF128	378968	3793946
248	PNF121	382591	3792765
249	PNF142	382976	3792923
250	PNF146	384253	3794628
251	PNF145	384050	3794818
252	PNF171	384497	3796576
253	PNF239	384688	3798642
254	PNF237	384898	3799103
255	PNF238	384944	3799083
256	PNF235	386015	3801647
257	PNF234	387172	3801838
258	PNF232	389529	3802942
259	PNF236	389560	3804320
260	PNF222	389327	3800917
261	PNF233	388917	3799677
262	PNF204	389482	3799380
263	PNF207	388174	3799167
264	PNF206	388108	3799101
265	PNF205	387747	3799117
266	PNF203	387231	3798870
267	PNF202	385635	3798659
268	PNF170	385308	3797676
269	PNF169	386646	3796633
270	PNF195	387436	3795709

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
271	PNF200	386481	3795371
272	PNF201	386514	3795360
273	PNF168	386802	3795232
274	PNF167	386428	3795050
275	PNF197	386259	3794472
276	PNF198	386400	3794358
277	PNF199	386514	3794293
278	PNF196	386573	3794028
279	PNF220	385941	3793816
280	PNF219	385509	3793713
281	PNF187	388062	3794392
282	PNF185	388247	3794595
283	PNF186	388392	3794991
284	PNF209	389359	3795454
285	PNF210	389431	3795412
286	PNF211	389384	3795382
287	PNF212	389411	3795148
288	PNF208	389521	3795269
289	PNF213	389225	3794764
290	PNF214	389187	3794715
291	PNF215	389146	3794201
292	PNF216	389627	3793966
293	PNF184	388393	3793621
294	PNF183	388367	3793324
295	PNF218	388996	3793065
296	PNF147	388368	3793040
297	PNF148	388368	3793040
298	PNF149	387916	3793032
299	PNF221	387218	3794271
300	PNF217	388977	3792770
301	PNF179	389227	3792829
302	PNF180	389227	3792829
303	PNF181	389290	3792538
304	PNF182	389147	3792456
305	PNF151	387609	3792097
306	PNF150	387760	3792115
307	PNF231	386710	3792391
308	PNF193	385510	3792502
309	PNF192	385401	3792360
310	PNF191	385563	3792189
311	PNF190	385855	3791989
312	PNF194	385860	3791629
313	PNF174	386167	3791668
314	PNF172	386466	3791605
315	PNF173	386468	3791602

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

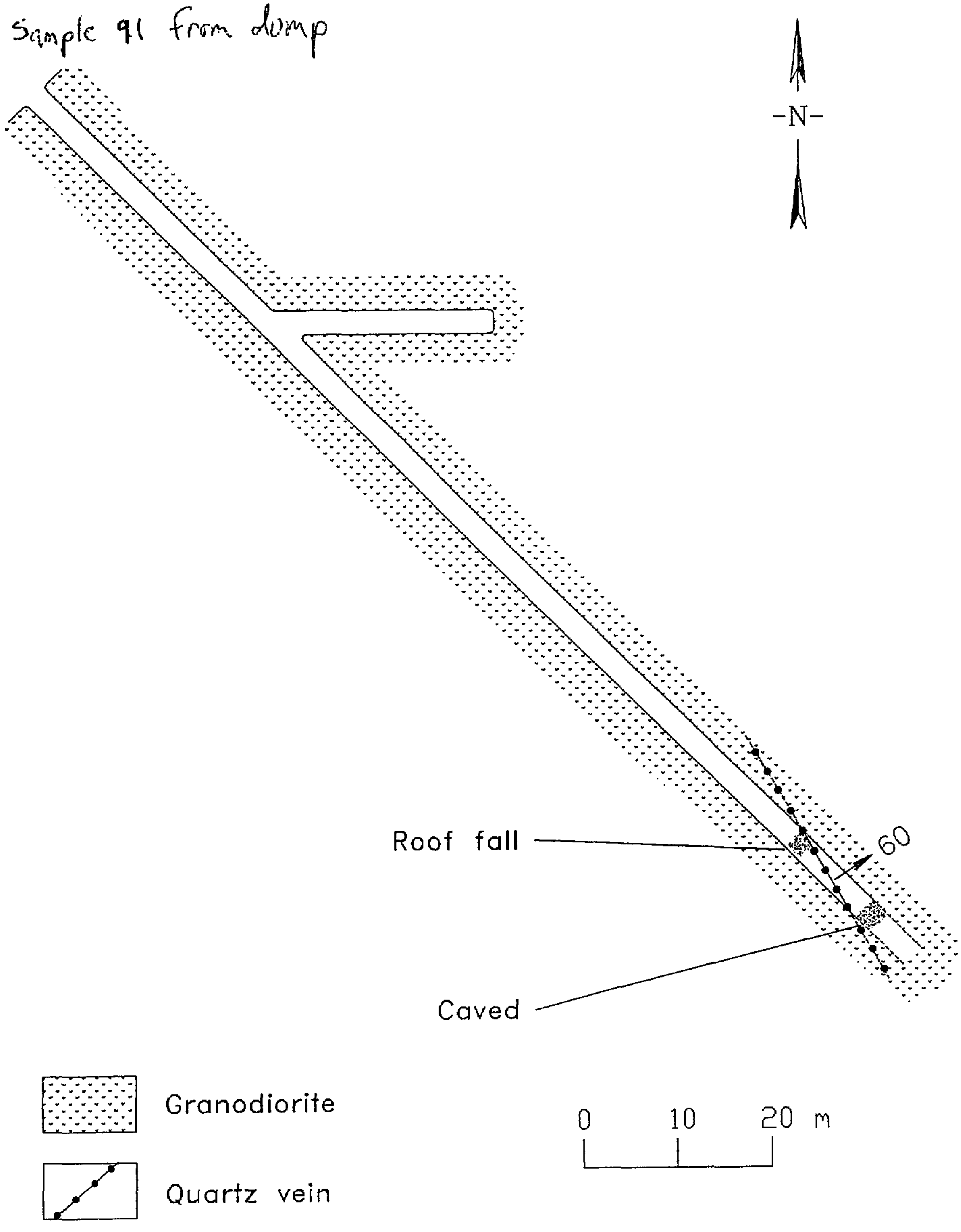
Report No.	Field No.	Easting	Northing
316	PNF166	388075	3790840
317	PNF152	388969	3791109
318	PNF154	389292	3791000
319	PNF156	389325	3791008
320	PNF155	389404	3790860
321	PNF153	389031	3790909
322	PNF164	388584	3790579
323	PNF165	388562	3790572
324	PNF163	388702	3790544
325	PNF160	388821	3790520
326	PNF161	388742	3790436
327	PNF162	388595	3790298
328	PNF158	389098	3789963
329	PNF159	389098	3789963
330	PNF157	389313	3789451
331	PNF226	388782	3789303
332	PNF227	388660	3789353
333	PNF228	388651	3789284
334	PNF177	388928	3788738
335	PNF178	388699	3788744
336	PNF229	388628	3788206
337	PNF230	388673	3788095
338	PNF189	390865	3790161
339	PNF175	386846	3790159
340	PNF176	386846	3790159
341	PNF188	389756	3792867
342	PNF223	383876	3789117
343	PNF224	383876	3789117
344	PNF225	384262	3789337
345	PNF144	380650	3789610
346	PNF143	380025	3788280
347	PNF120	378778	3790364
348	PNF91	378348	3790095
349	PNF86	378434	3789253
350	PNF87	378363	3789040
351	PNF88	378363	3789040
352	PNF89	378363	3789040
353	PNF90	378250	3789212
354	PNF92	378162	3788965
355	PNF83	376050	3788435
356	PNF84	376050	3788435
357	PNF85	376050	3788435
358	PNF82	376021	3788410
359	PNF93	375191	3788205
360	PNF94	375191	3788205

Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
361	PNF95	375191	3788205
362	PNF96	375191	3788205
363	PNF97	377534	3787432
364	PNF79	374057	3786577
365	PNF80	374057	3786577
366	PNF81	374057	3786577
367	PNF77	373966	3786180
368	PNF78	373966	3786180
369	PNF74	373944	3785791
370	PNF75	373944	3785791
371	PNF76	373944	3785791
372	PNF98	375413	3783834
373	PNF20	373920	3782726
374	PNF21	373900	3782747
375	PNF19	375104	3781659
376	PNF17	375117	3781608
377	PNF18	375117	3781608
378	PNF16	374842	3781449
379	PNF12	374536	3780862
380	PNF13	374536	3780862
381	PNF14	374536	3780862
382	PNF15	374536	3780862
383	PNF22	373704	3781044
384	PNF23	373722	3781103
385	PNF24	373730	3781177
386	PNF25	373730	3781177
387	PNF10	374245	3780146
388	PNF11	374245	3780146
389	PNF7	374619	3777919
390	PNF8	374619	3777919
391	PNF9	374639	3777984
392	PNF69	378042	3780461
393	PNF70	377968	3780363
394	PNF72	377967	3781028
395	PNF73	377967	3781028
396	PNF71	378241	3781270
397	PNF29	372854	3781994
398	PNF30	372854	3781994
399	PNF57	370809	3782559
400	PNF38	370863	3782514
401	PNF39	370863	3782514
402	PNF40	370863	3782514
403	PNF37	370842	3782432
404	PNF34	370849	3782461
405	PNF35	370849	3782461

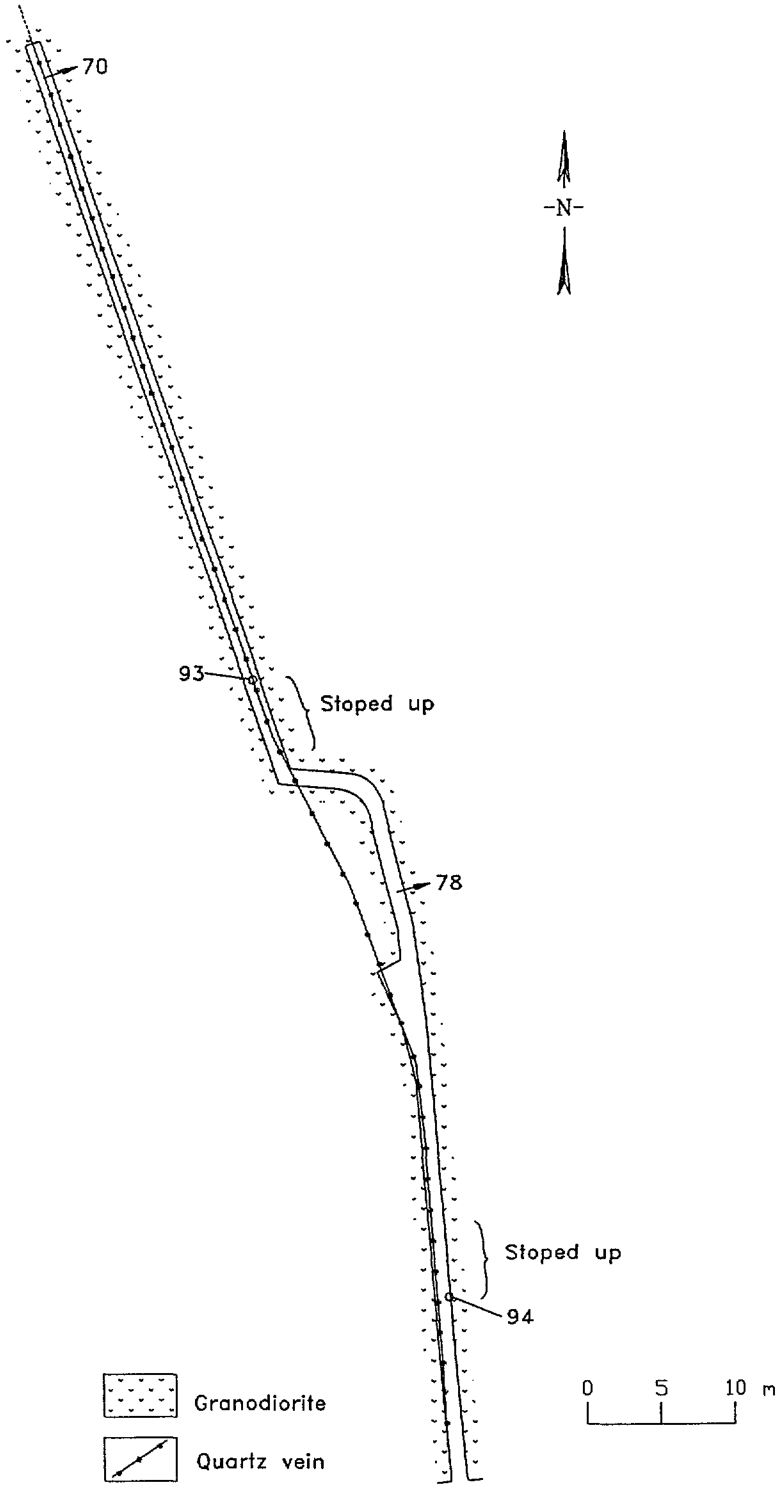
Appendix H.--Table with report and field sample numbers, and sample locations in UTM.

Report No.	Field No.	Easting	Northing
406	PNF36	370849	3782461
407	PNF58	371114	3782283
408	PNF50	370780	3782230
409	PNF41	370701	3782169
410	PNF42	370701	3782169
411	PNF43	370719	3782132
412	PNF44	370713	3782054
413	PNF45	370577	3781895
414	PNF46	370577	3781895
415	PNF47	370642	3781909
416	PNF63	370488	3781579
417	PNF65	370655	3781291
418	PNF64	370581	3781165
419	PNF32	370787	3781146
420	PNF33	370787	3781146
421	PNF66	370104	3781139
422	PNF67	370104	3781139
423	PNF68	370104	3781139
424	PNF59	371227	3782016
425	PNF60	371227	3782016
426	PNF61	371472	3781972
427	PNF62	371093	3781995
428	PNF48	371068	3781904
429	PNF6	370205	3780069
430	PNF31	372565	3782150
431	PNF28	373266	3782069
432	PNF26	373389	3781500
433	PNF27	373389	3781500
434	PNF49	363426	3782211
435	PNF51	363380	3782208
436	PNF52	363380	3782208
437	PNF53	363451	3781629
438	PNF54	363508	3781555
439	PNF55	363508	3781555
440	PNF56	363508	3781555



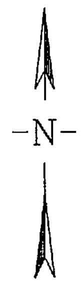
Sample 91 from dump
-N-
Roof fall
60
Caved
Granodiorite
Quartz vein
0
10
20 m

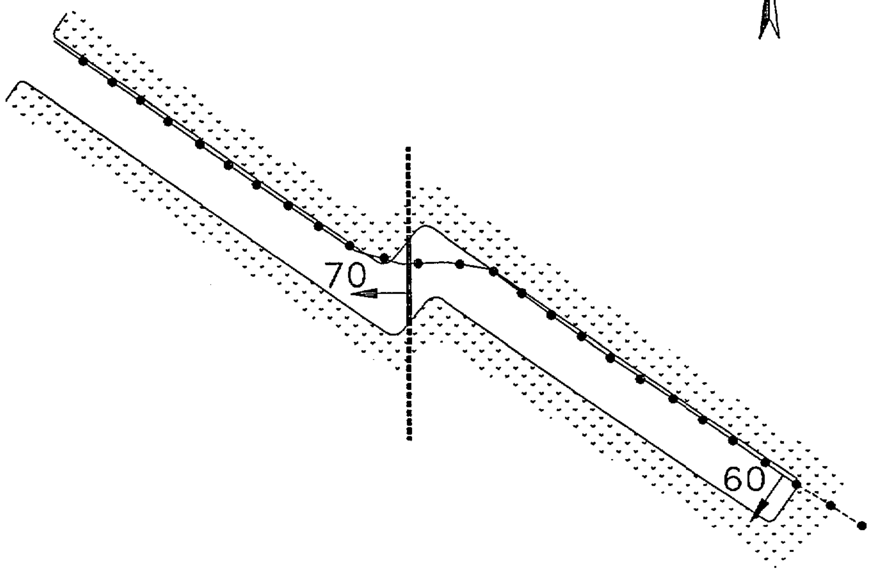
Ruth Mine

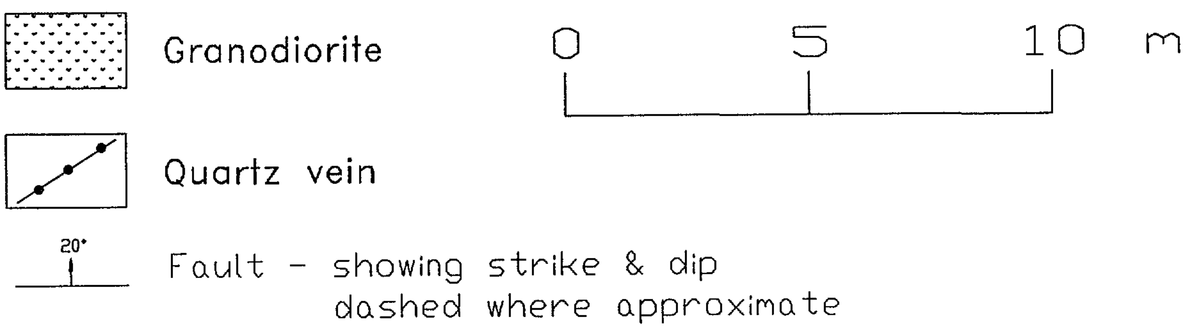


Indian Creek Mine

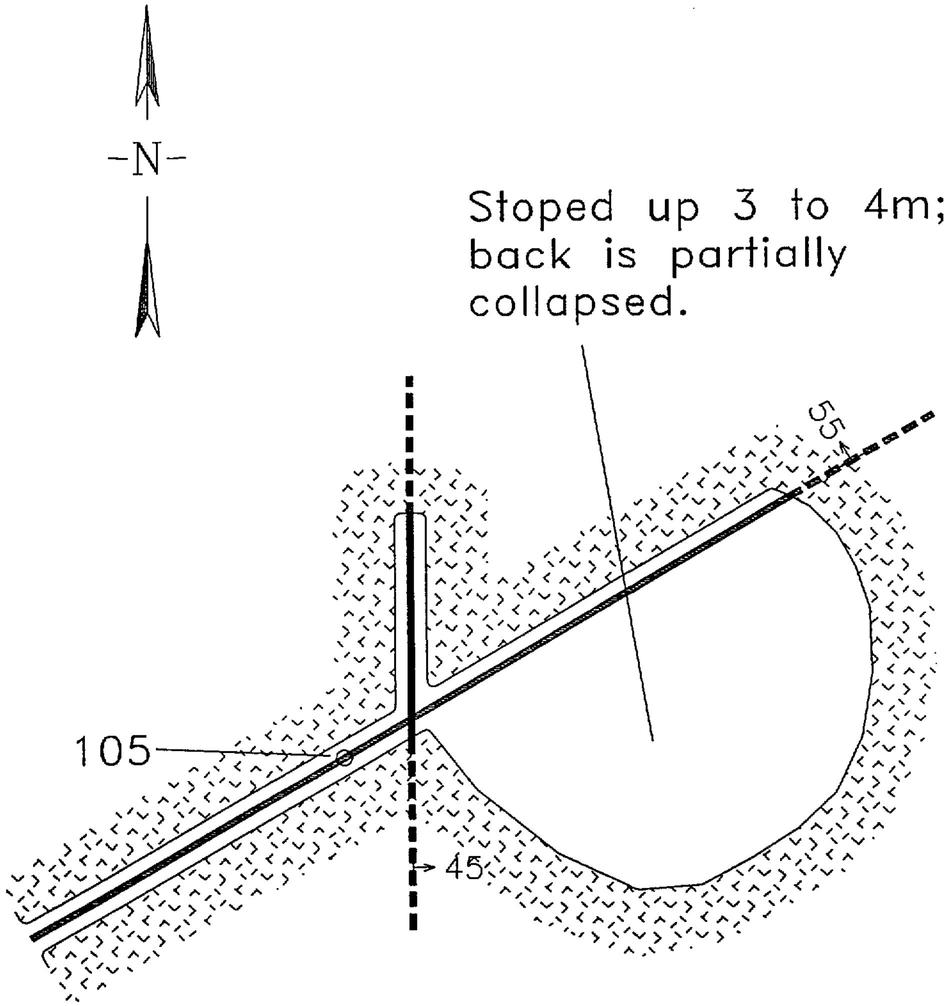
Sample 98 from dump

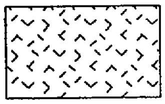




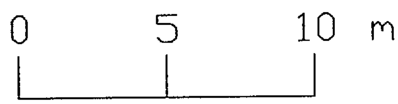


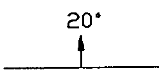
Hillside Mine





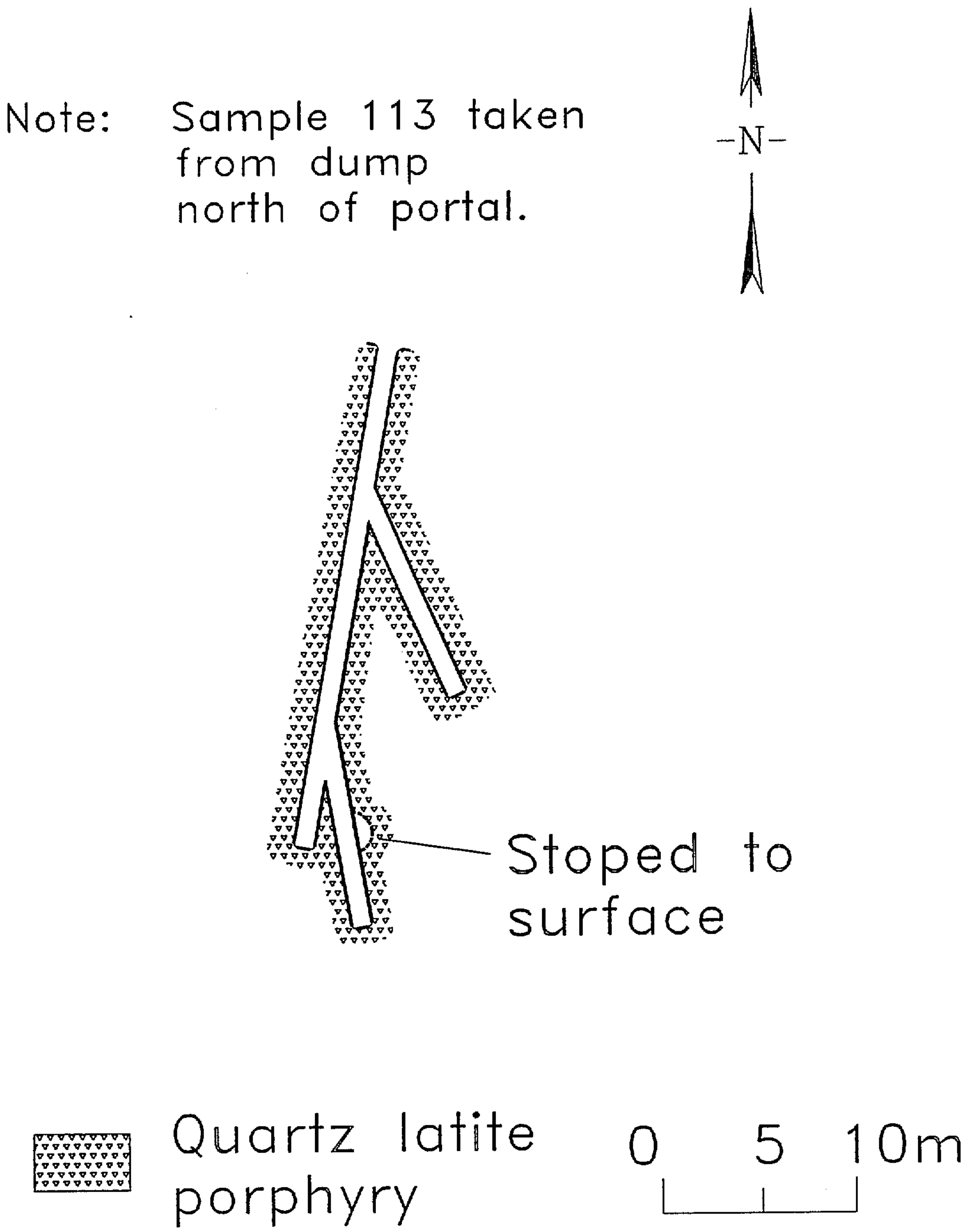
Granite



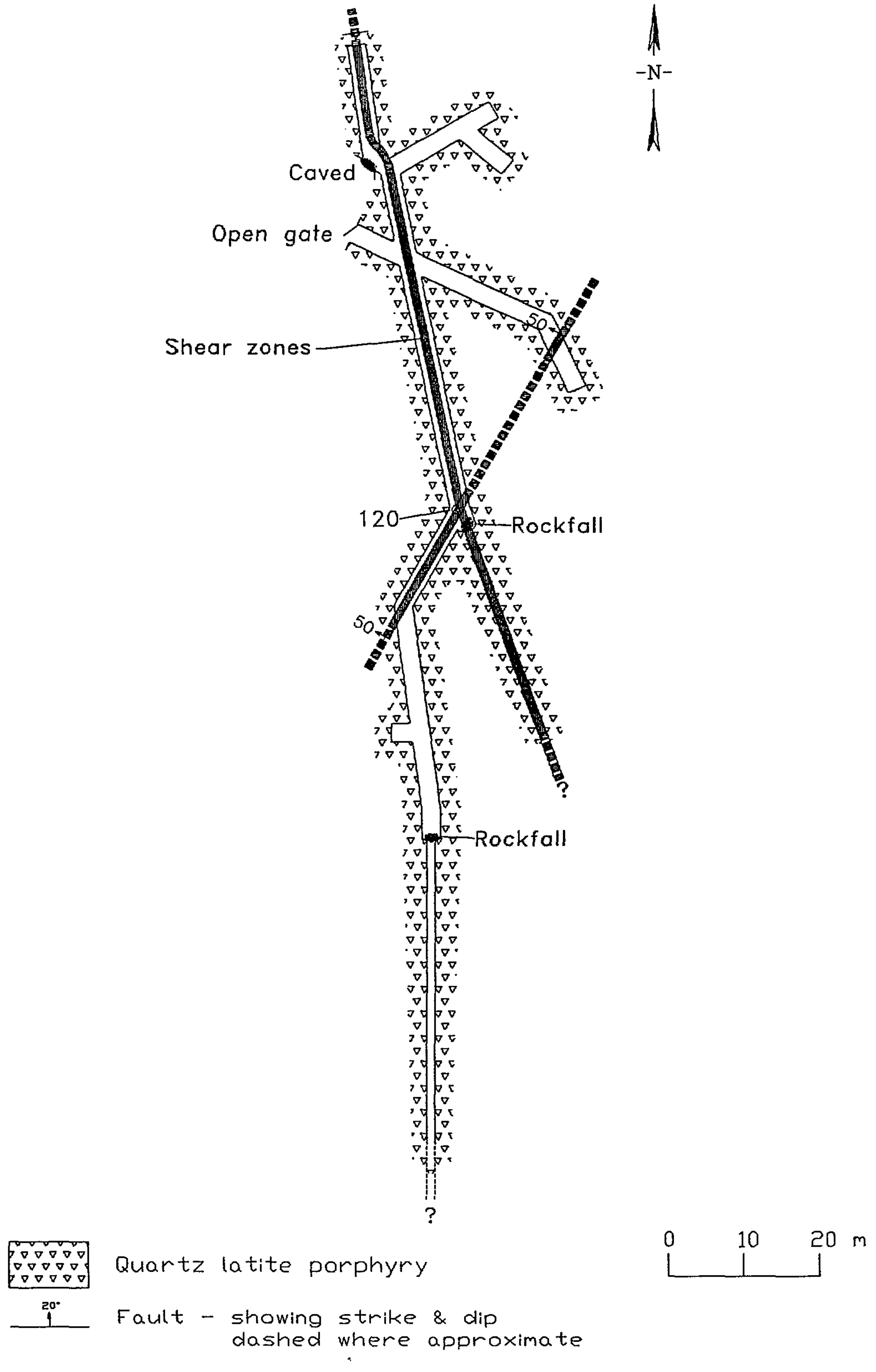


Fault - showing strike & dip
dashed where approximate

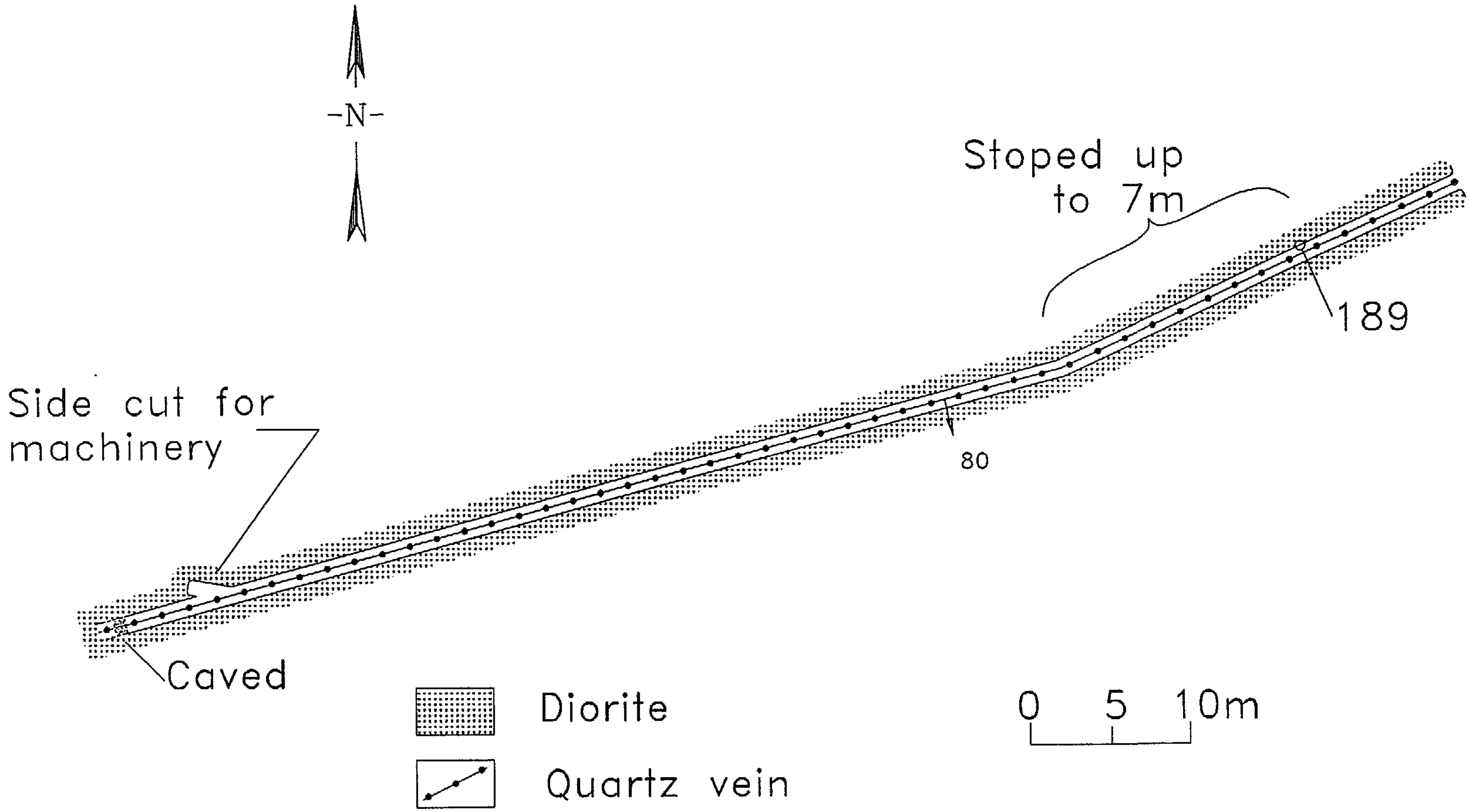
Unnamed Adit



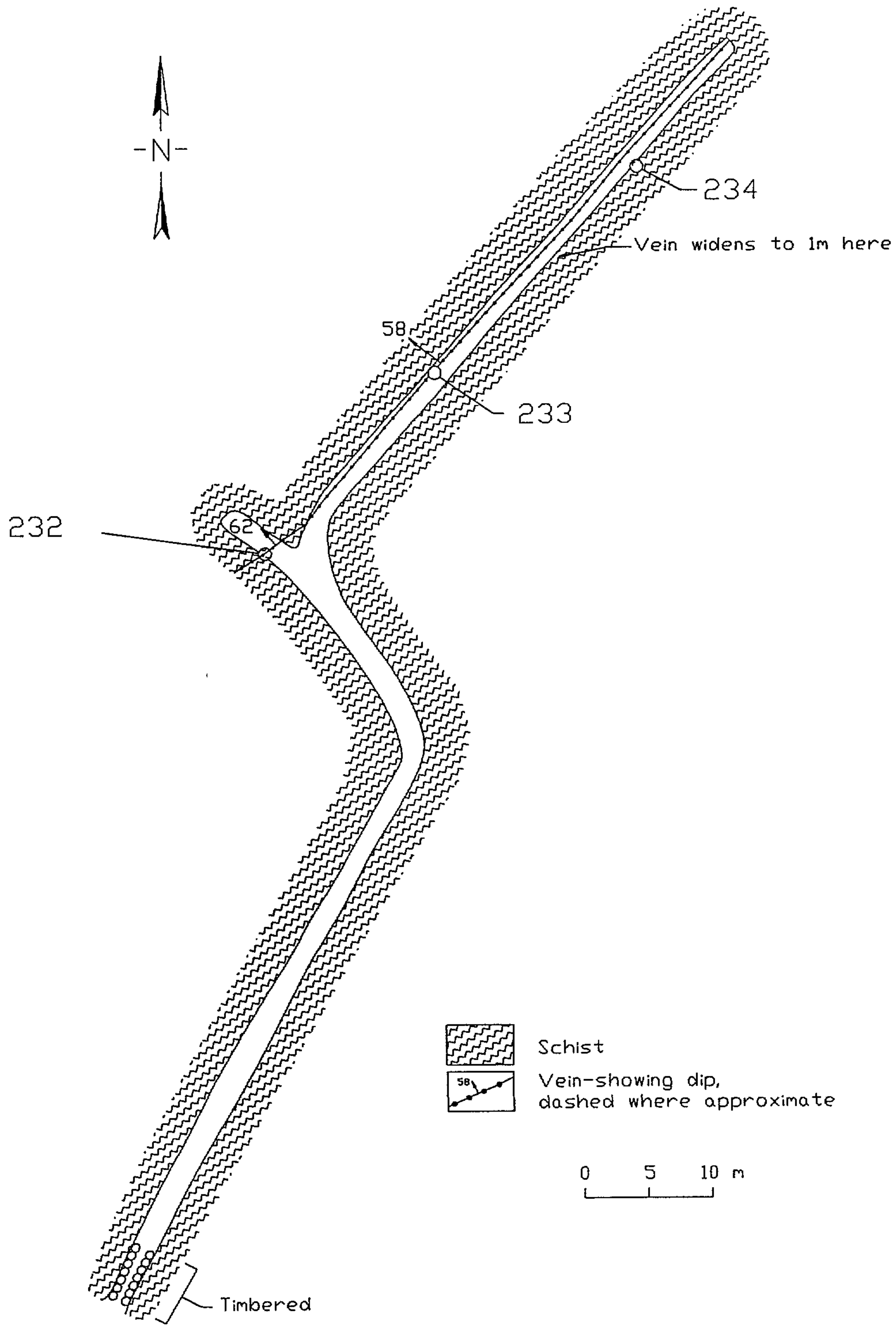
Buck Haven Mine


-N-
Caved
Open gate
Shear zones
50
120
Rockfall
50
Rockfall
?
?
Quartz latite porphyry
20°
Fault - showing strike & dip
dashed where approximate
0
10
20 m

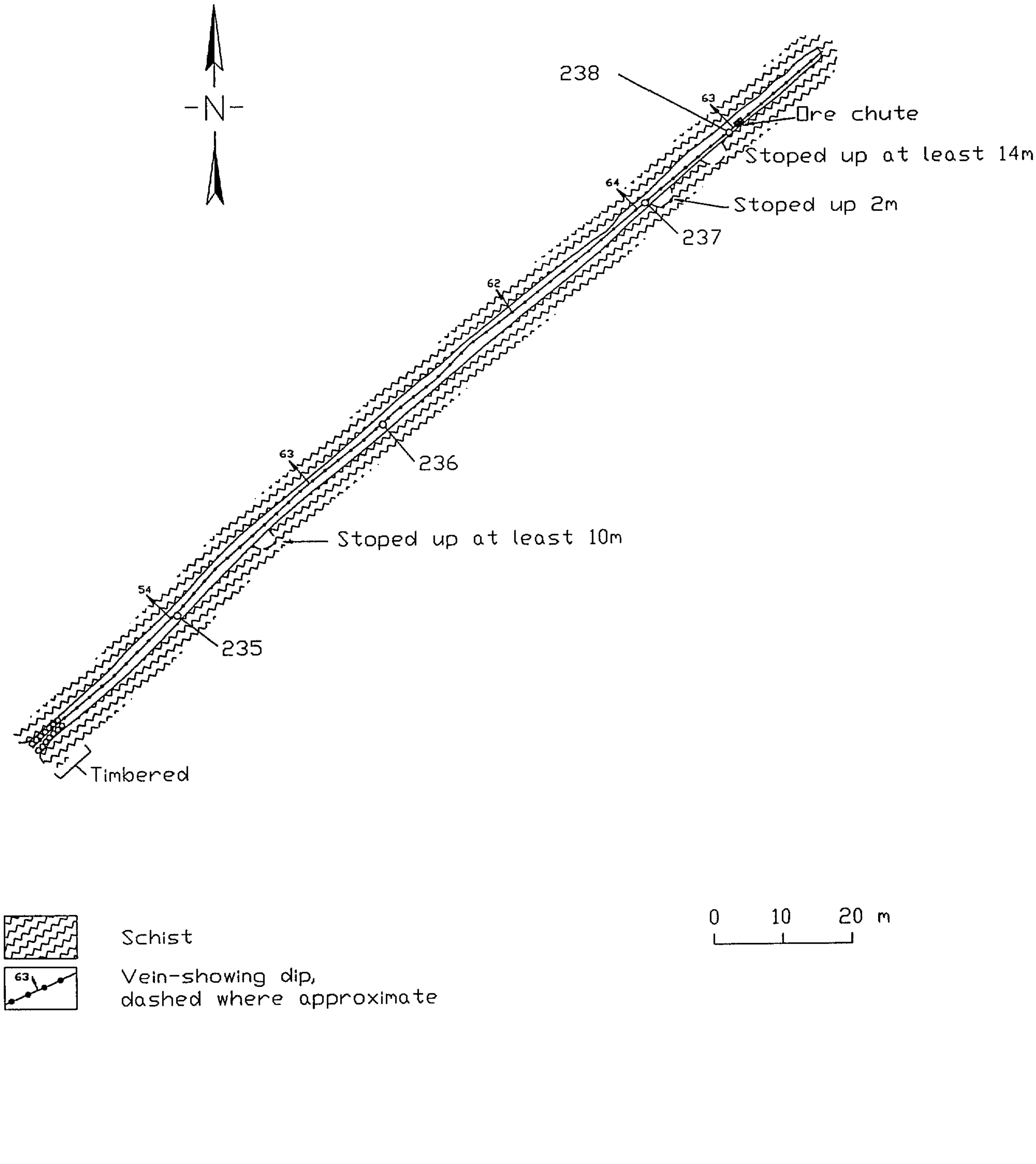
Climax Mine



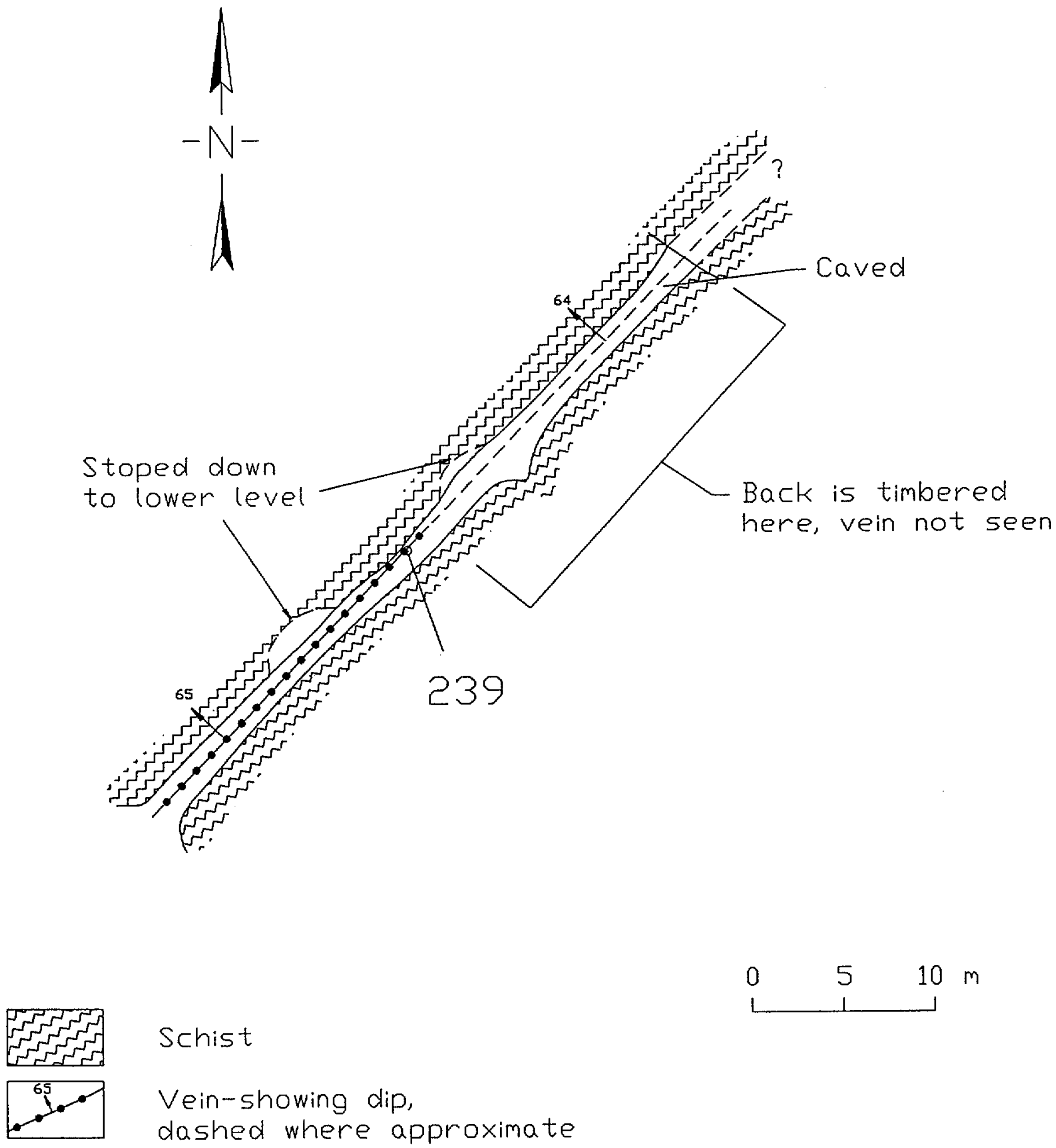
Oro Fino Mine



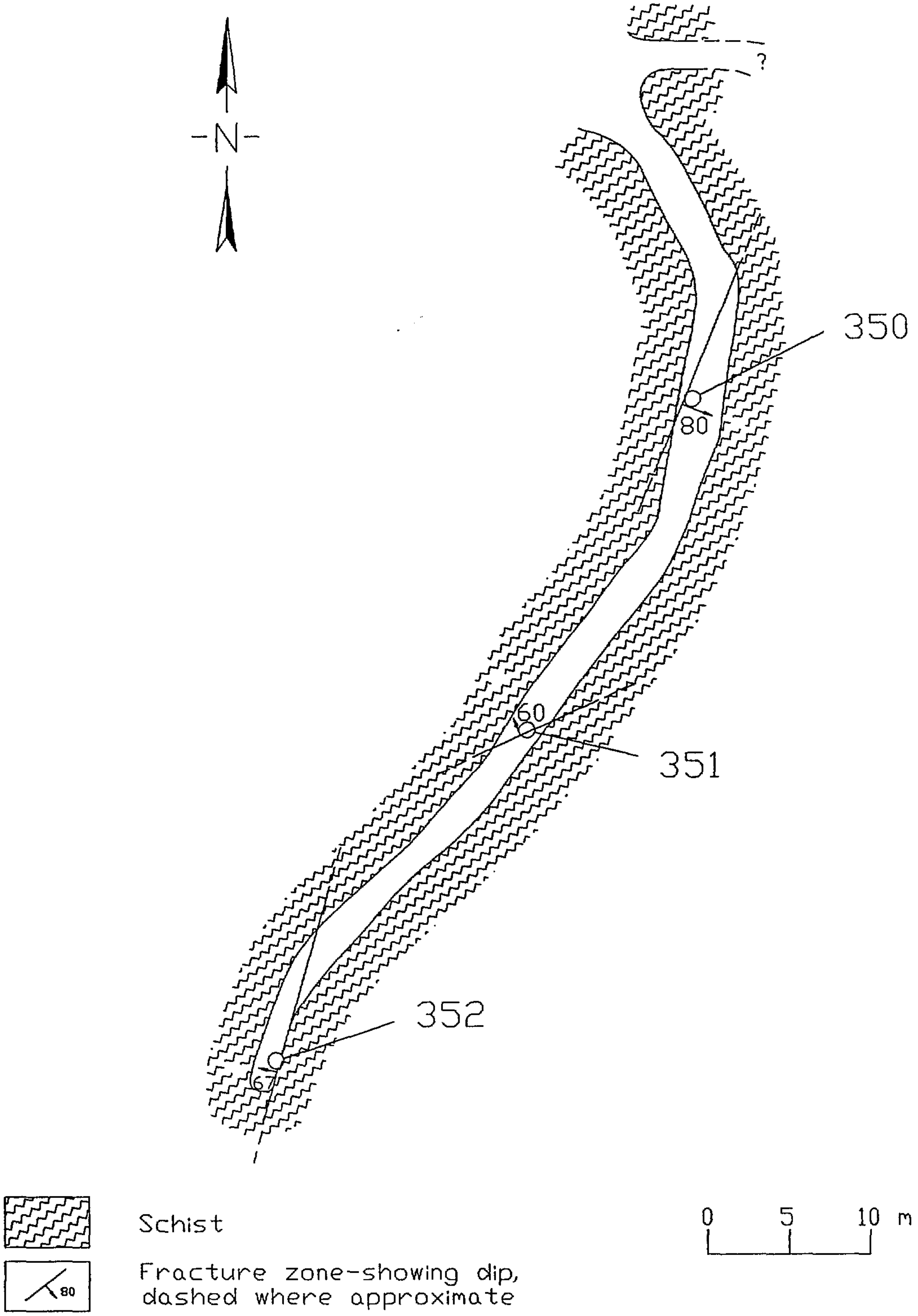
Tuscumbia - lowest level



Tuscumbia-2nd level

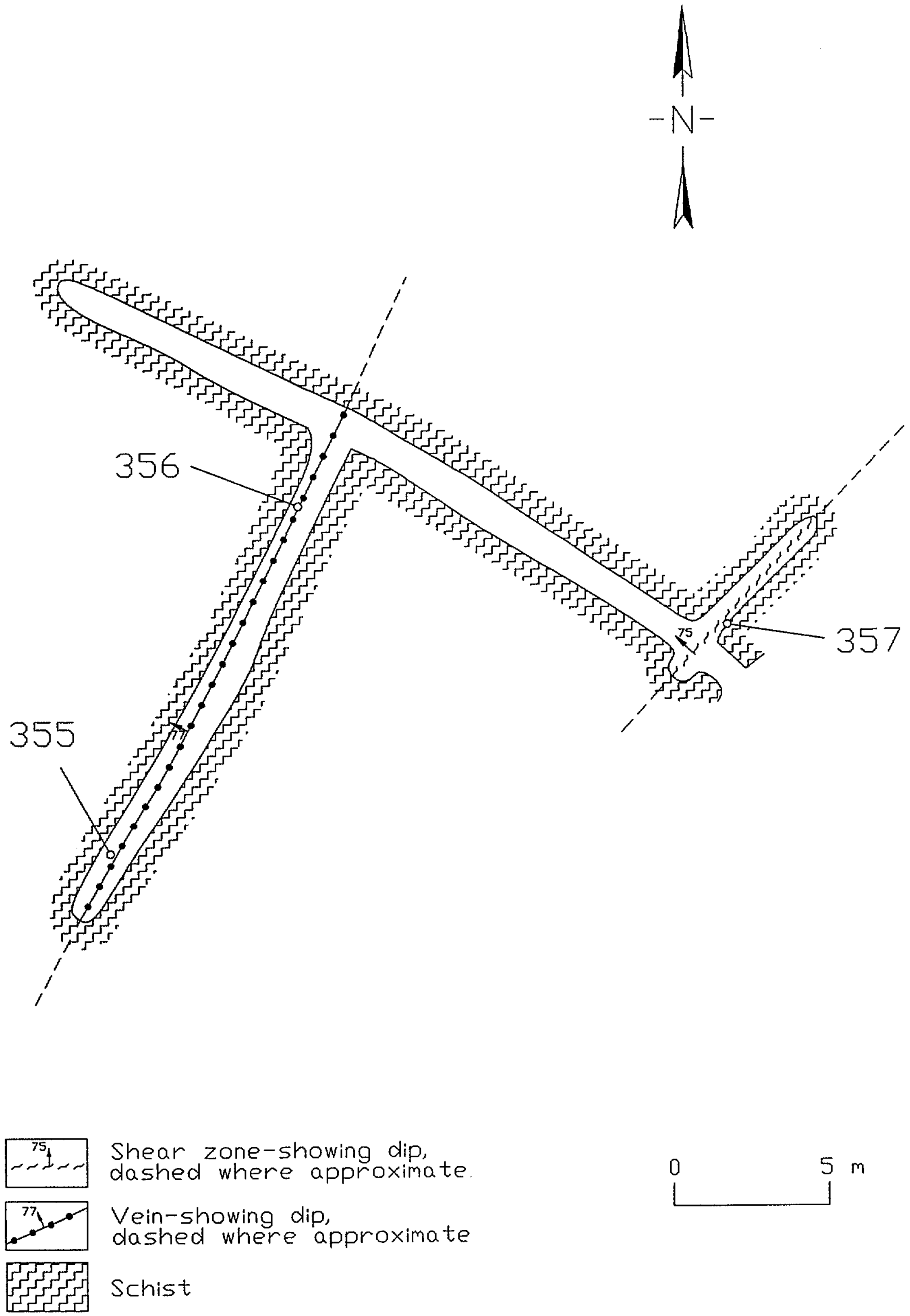


Tuscumbia upper open adit

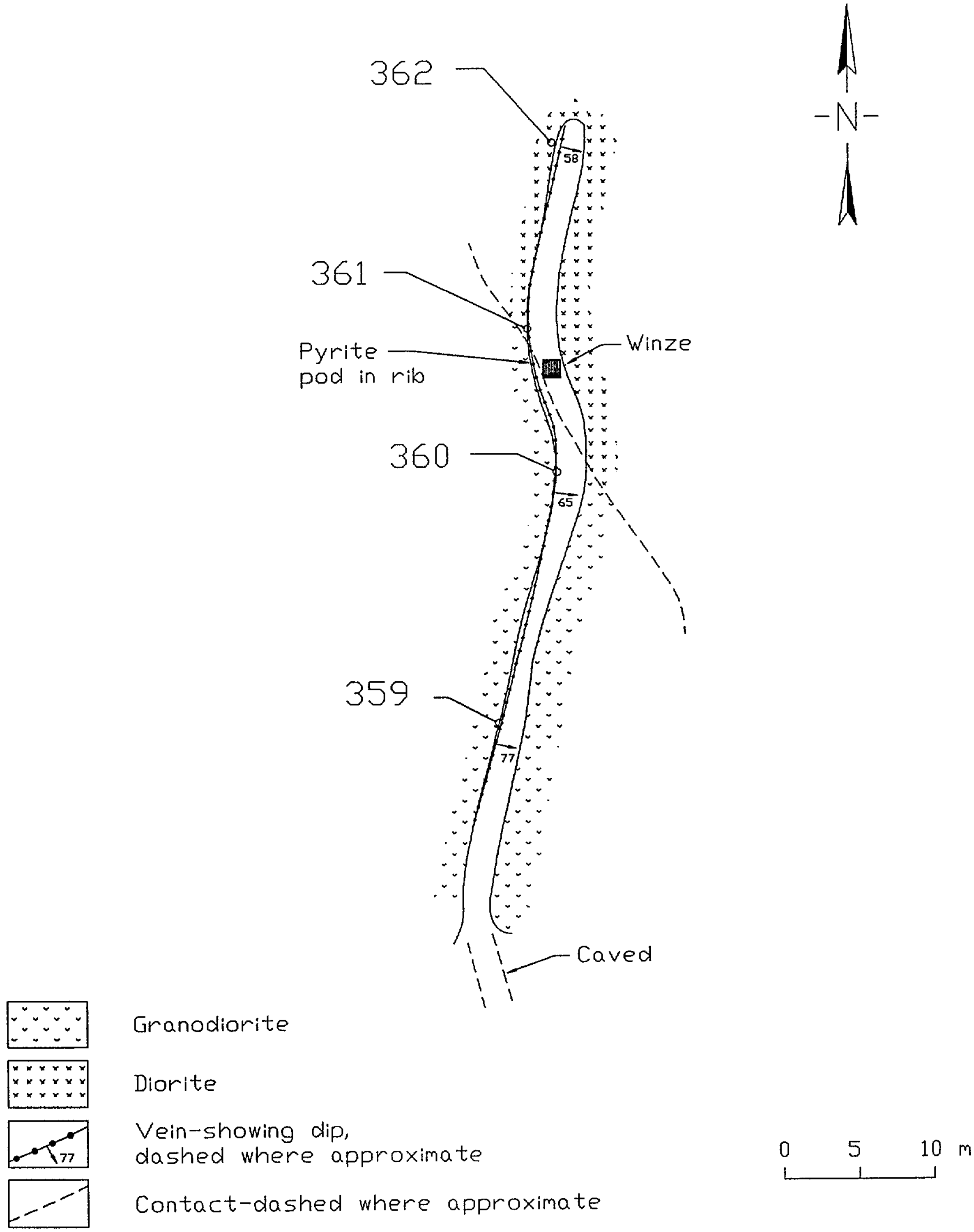


Unnamed Adit

Adit near Blue Bird, north of Crown King

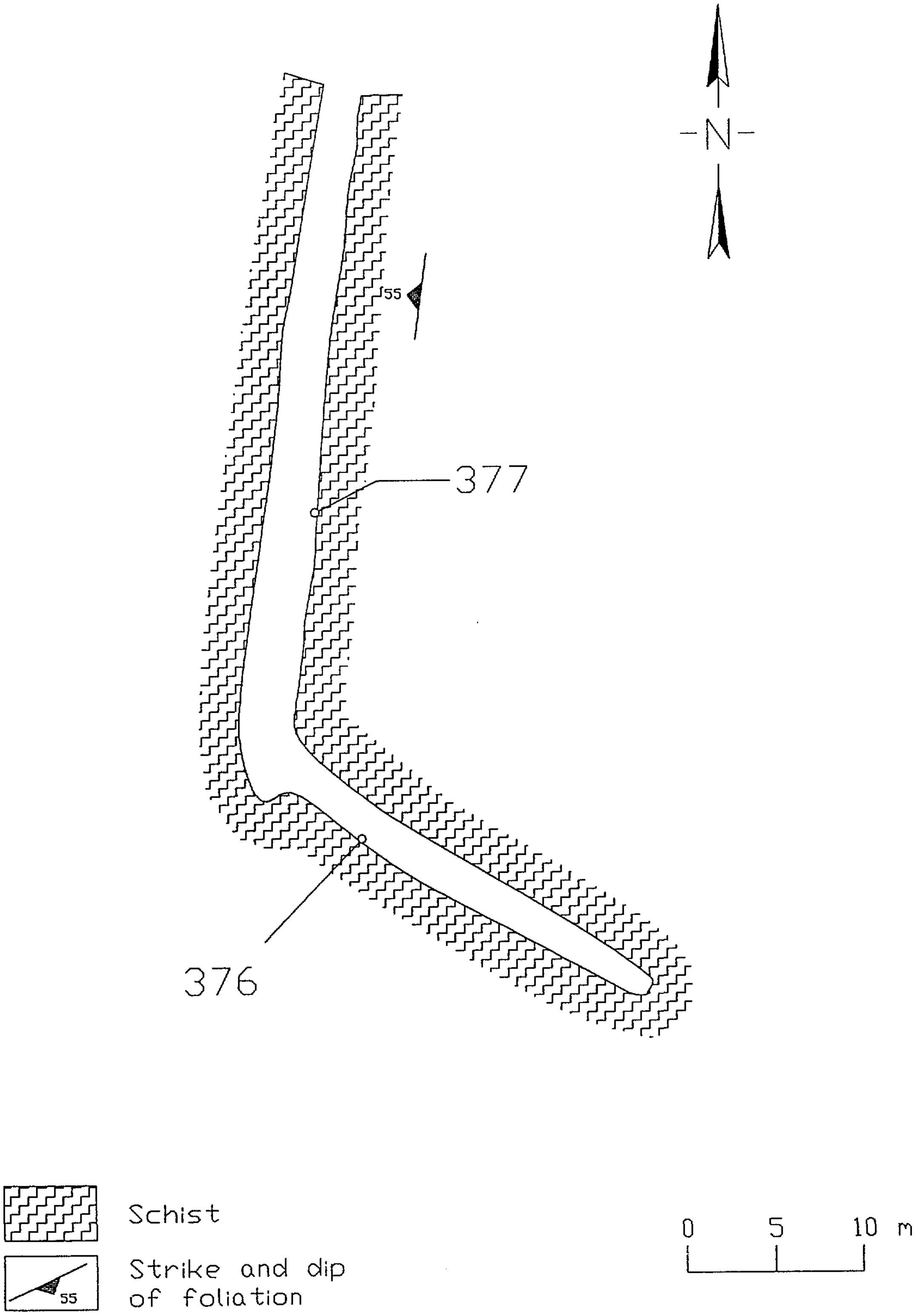

-N-
356
357
75
355
77
75
Shear zone-showing dip, dashed where approximate
77
Vein-showing dip, dashed where approximate
Schist
0
5 m

Del Pasco



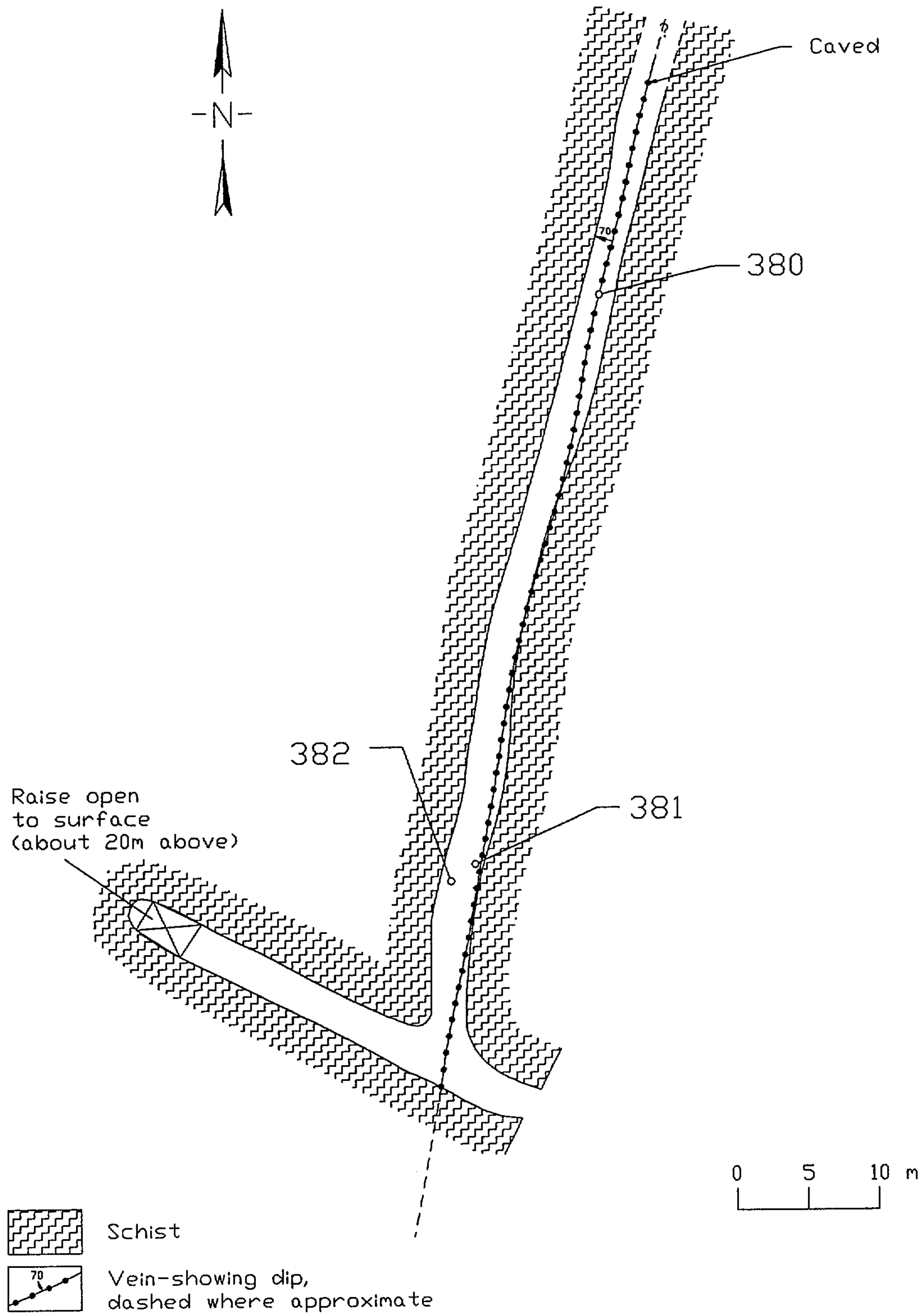
Unnamed Adit

South of Wildflower Saddle



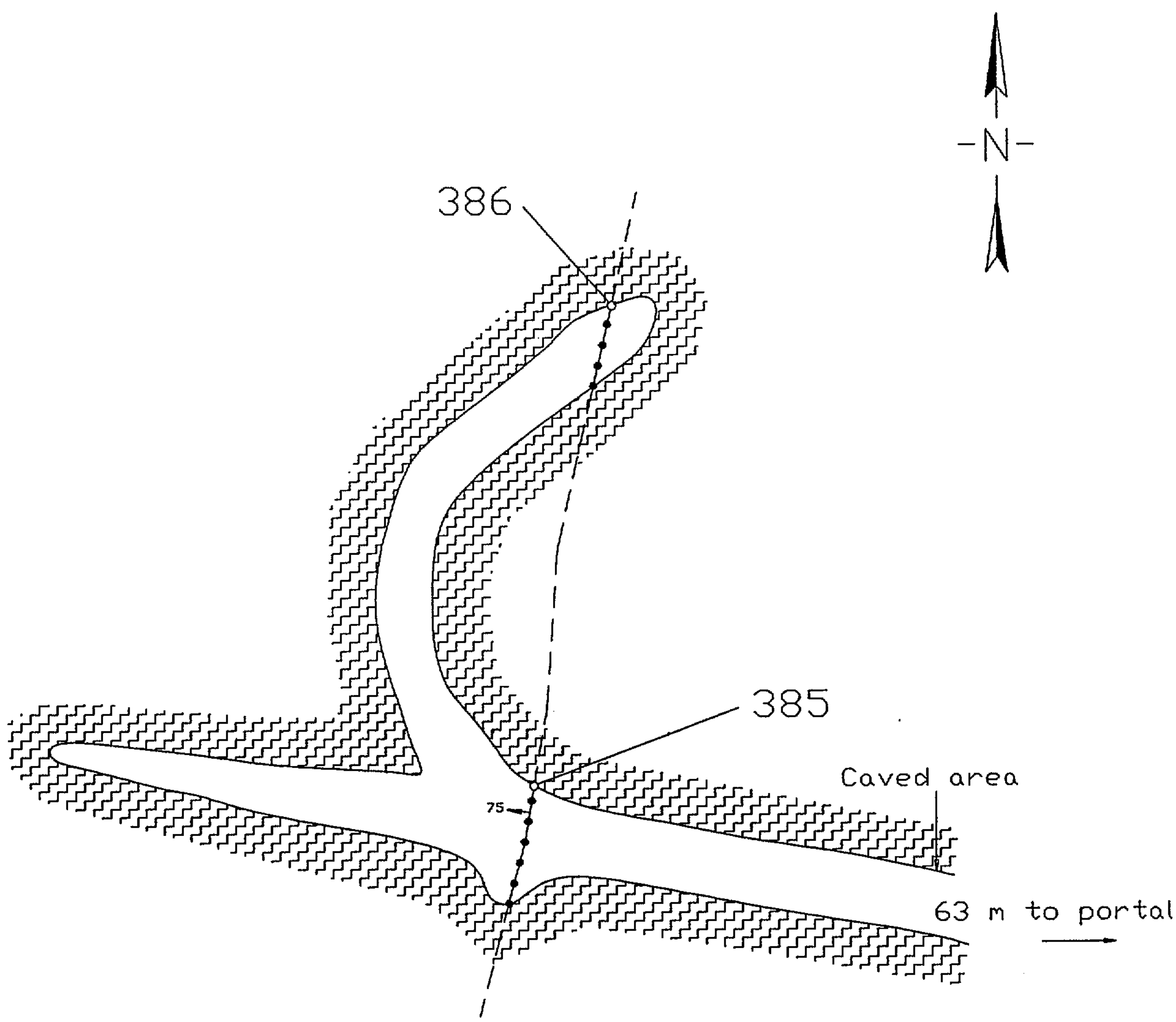
Unnamed Adit

Near Oro Belle



N
Caved
70
380
382
381
Raise open
to surface
(about 20m above)
0 5 10 m
Schist
70
Vein-showing dip,
dashed where approximate

Castle Rock ?



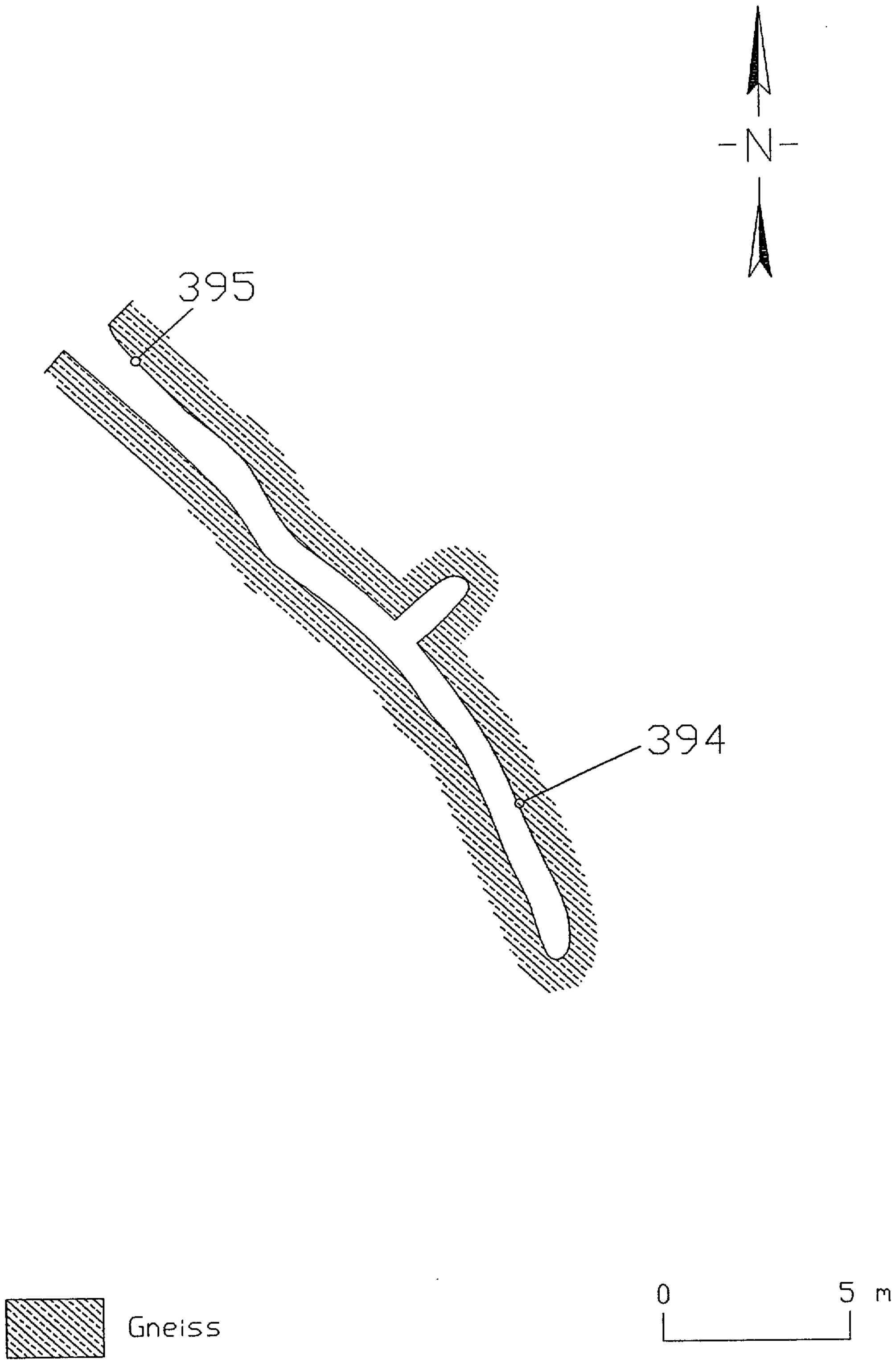
Schist

75

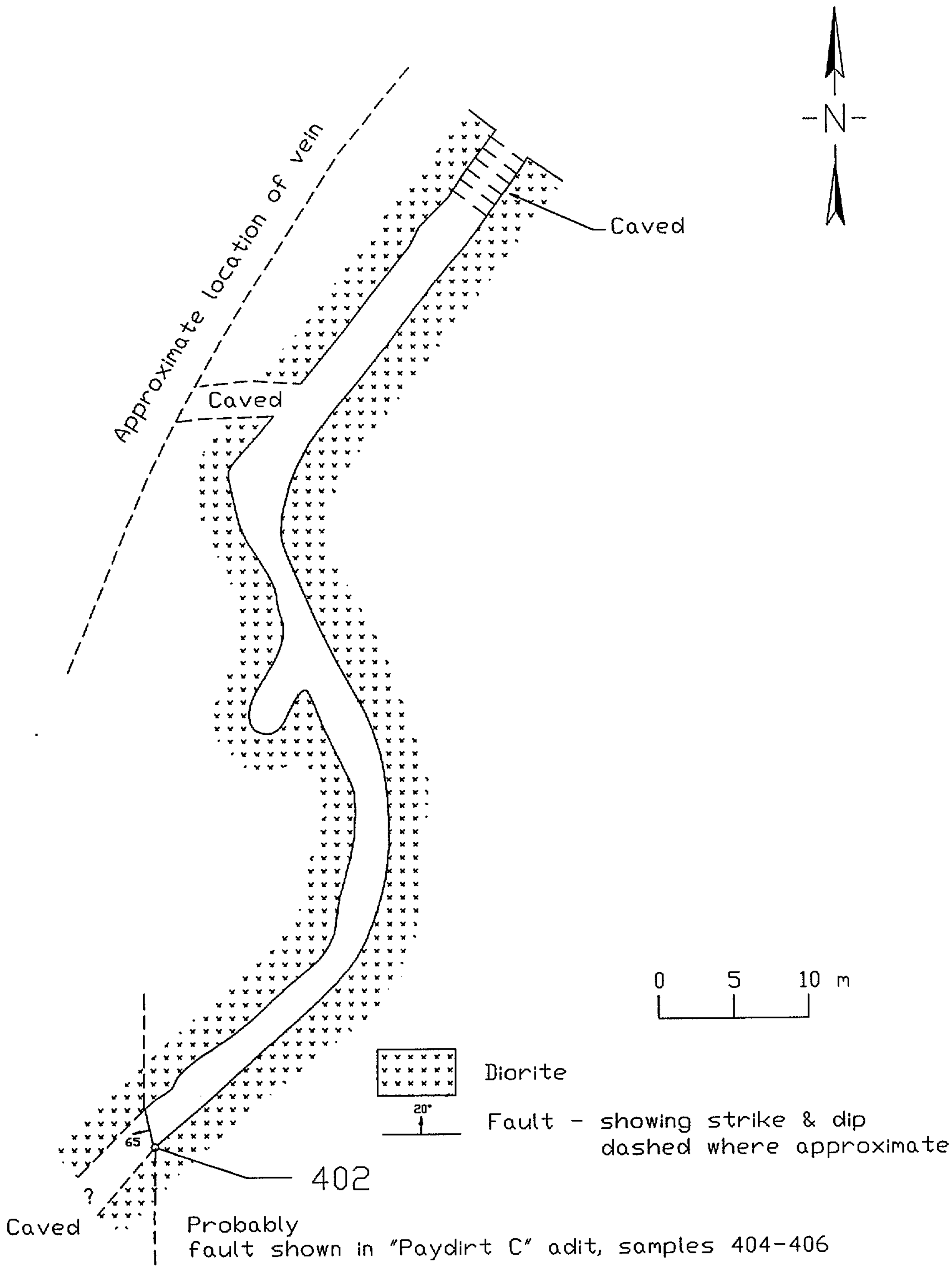
Vein-showing dip, dashed where approximate

0 5 10 m

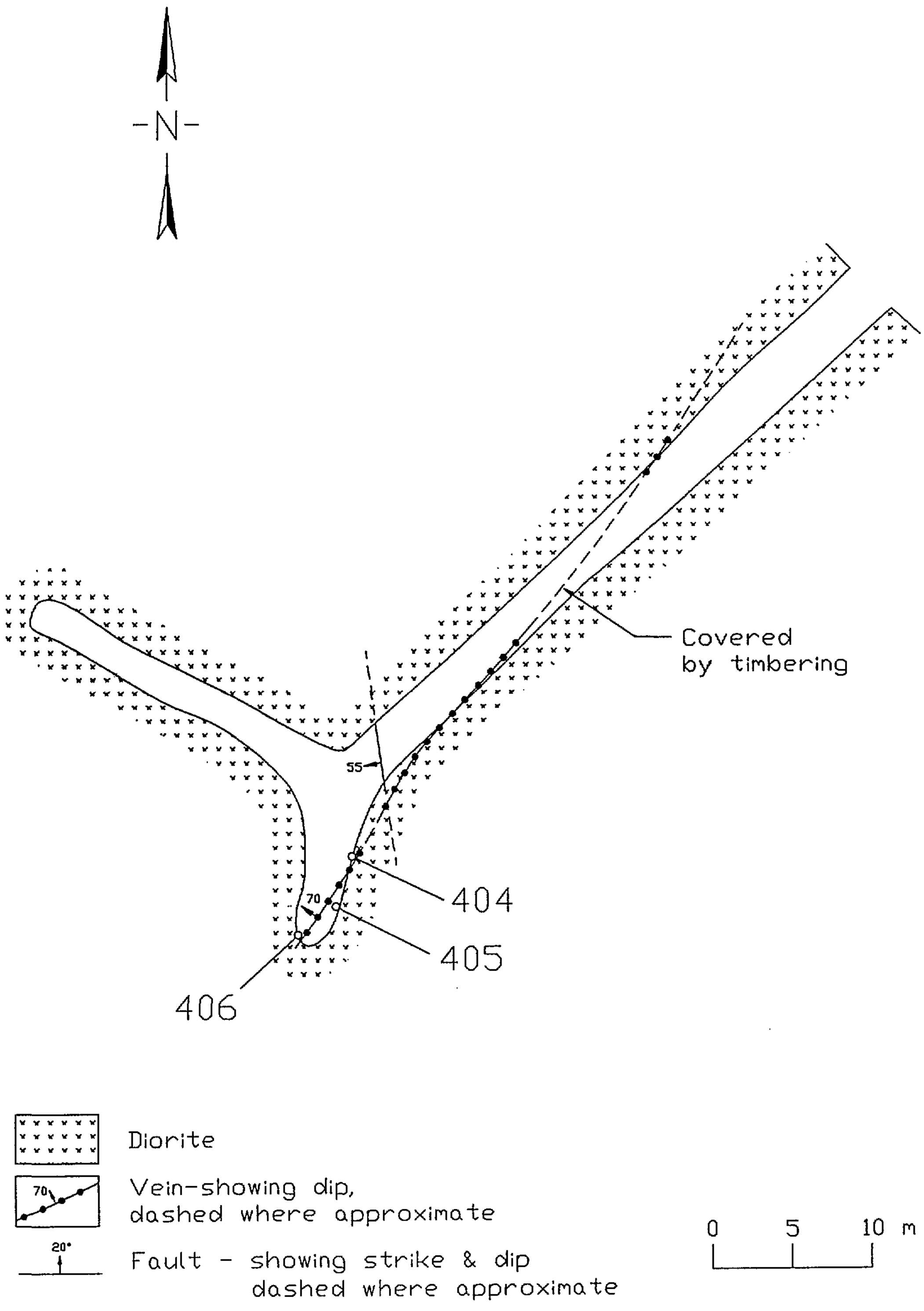
Juniper Mine



Ford Claim

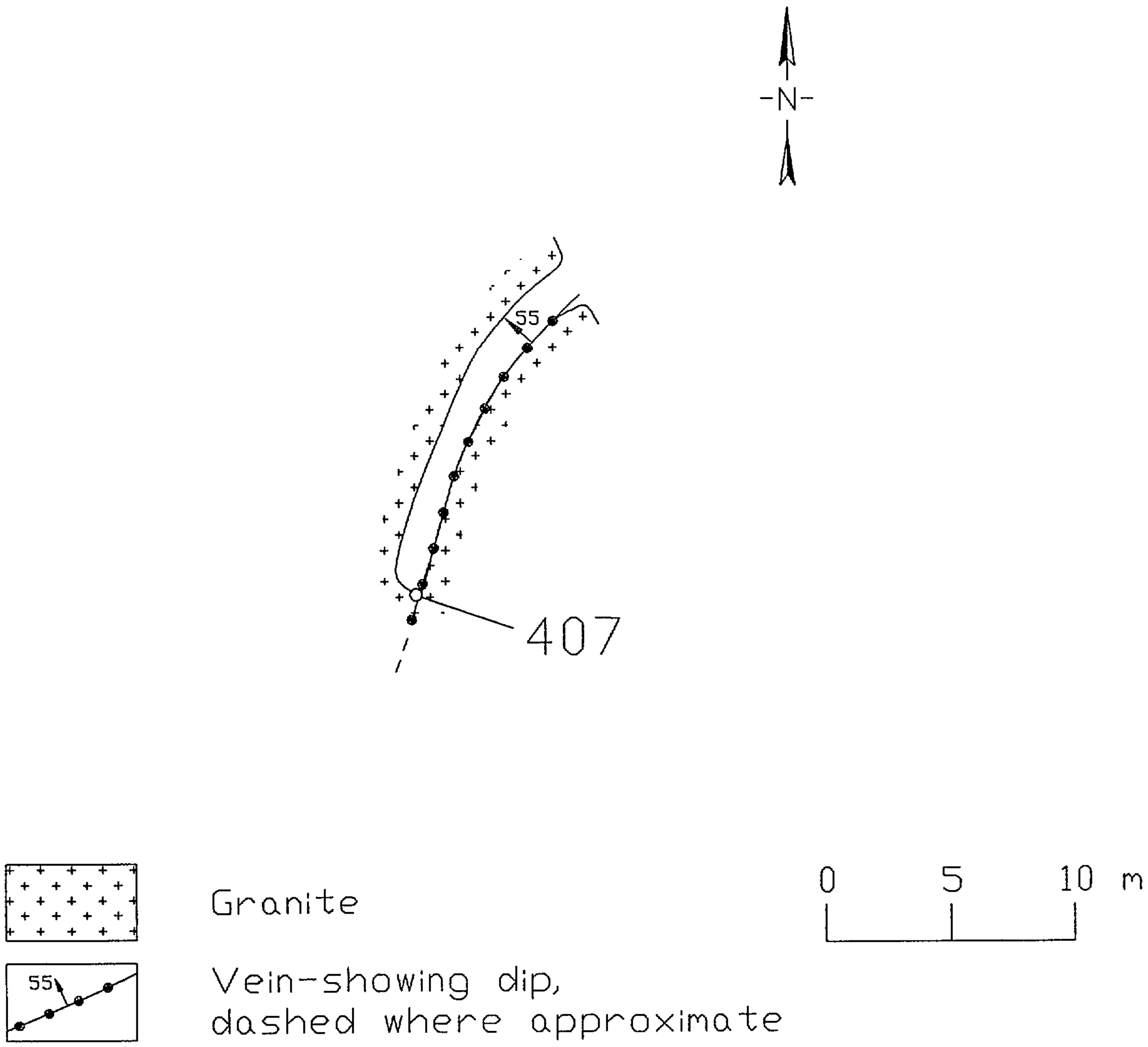

N
Approximate location of vein
Caved
Caved
0
5
10 m
Diorite
20°
Fault - showing strike & dip
dashed where approximate
65
402
?
Caved
Probably
fault shown in "Paydirt C" adit, samples 404-406

Paydirt D



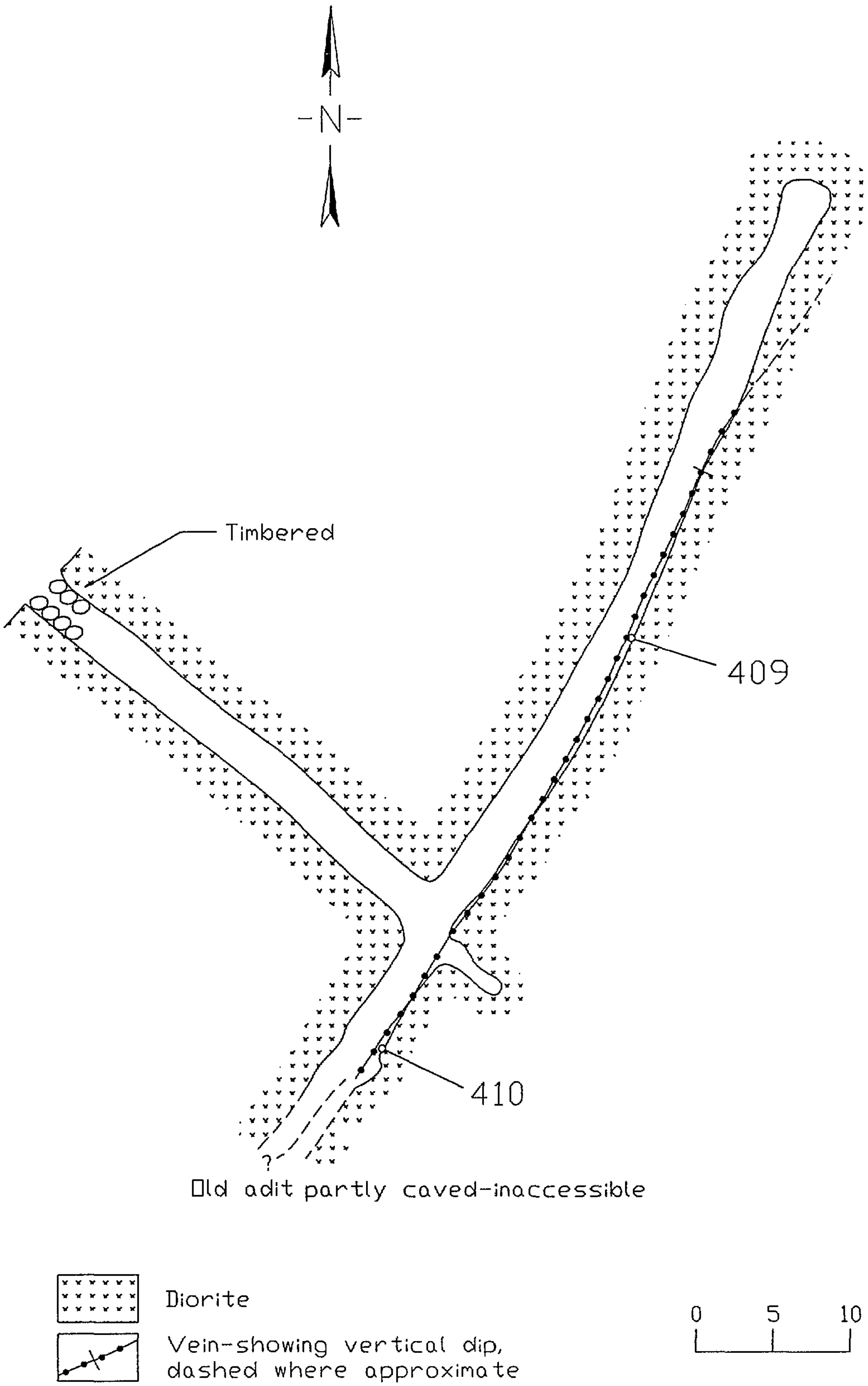
-N-
Covered
by timbering
55
70
404
405
406
Diorite
70
Vein-showing dip,
dashed where approximate
20°
Fault - showing strike & dip
dashed where approximate
0 5 10 m

Paydirt C

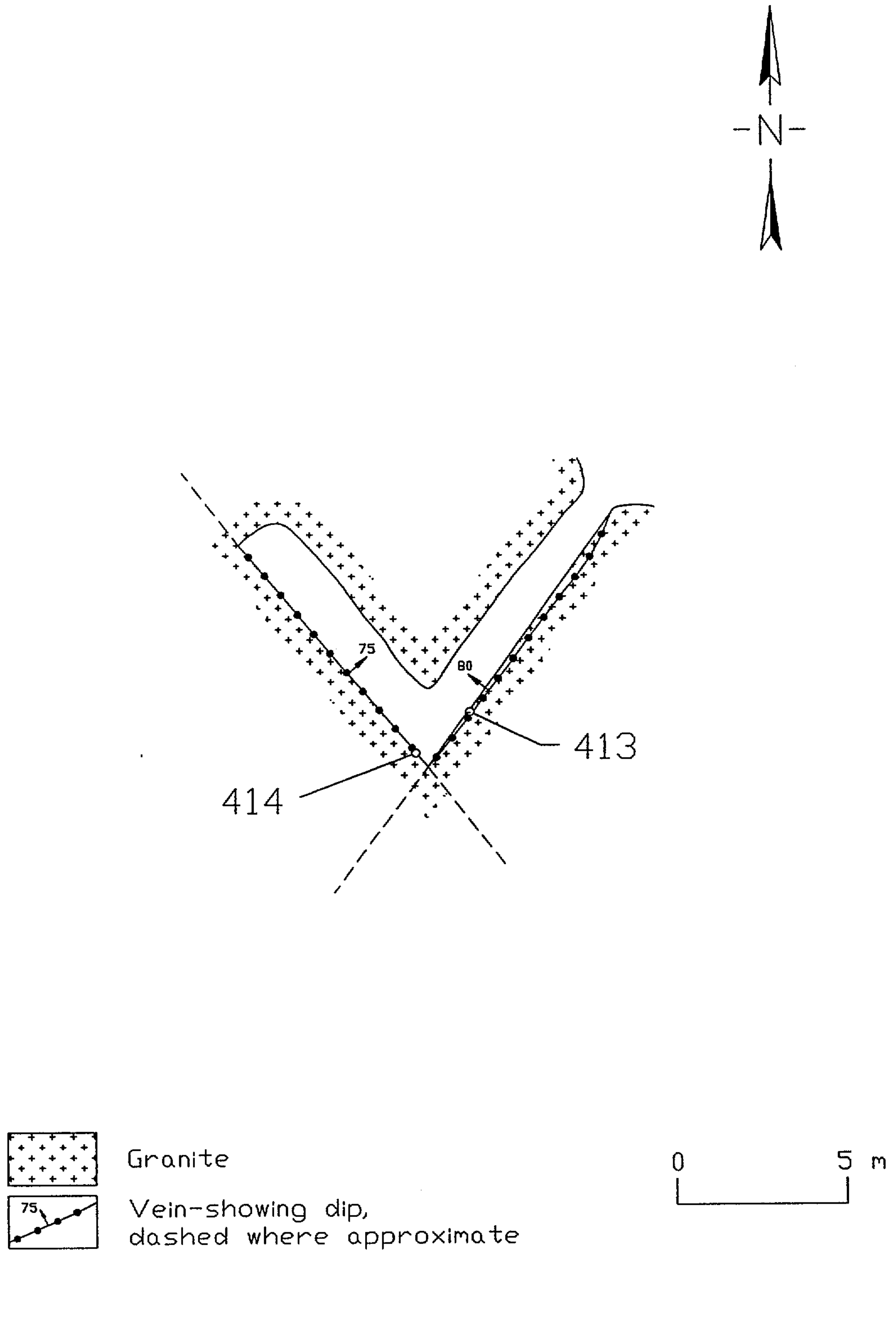


Unnamed Adit

Adit near road-MILS POINT 1098

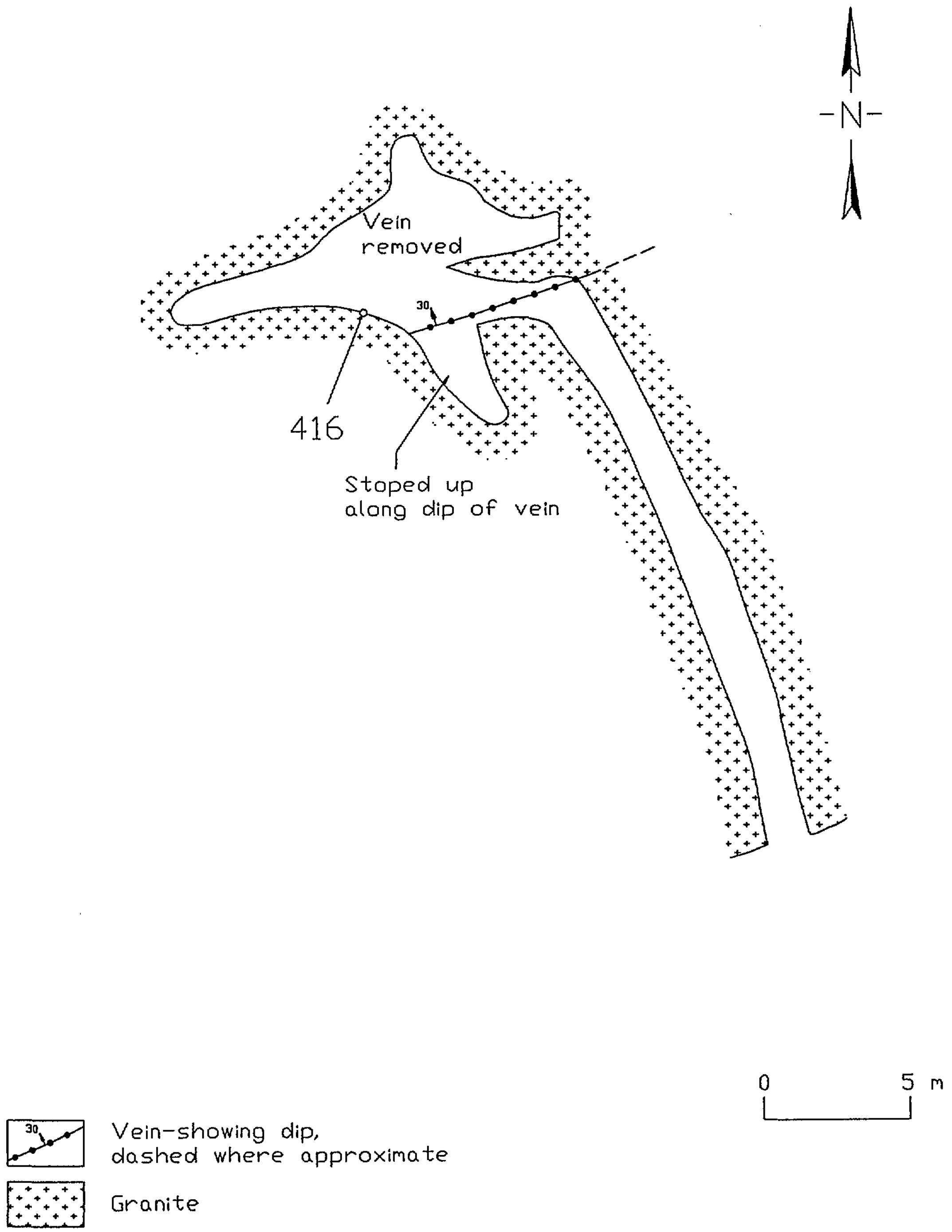


Fortuna (Paydirt A)



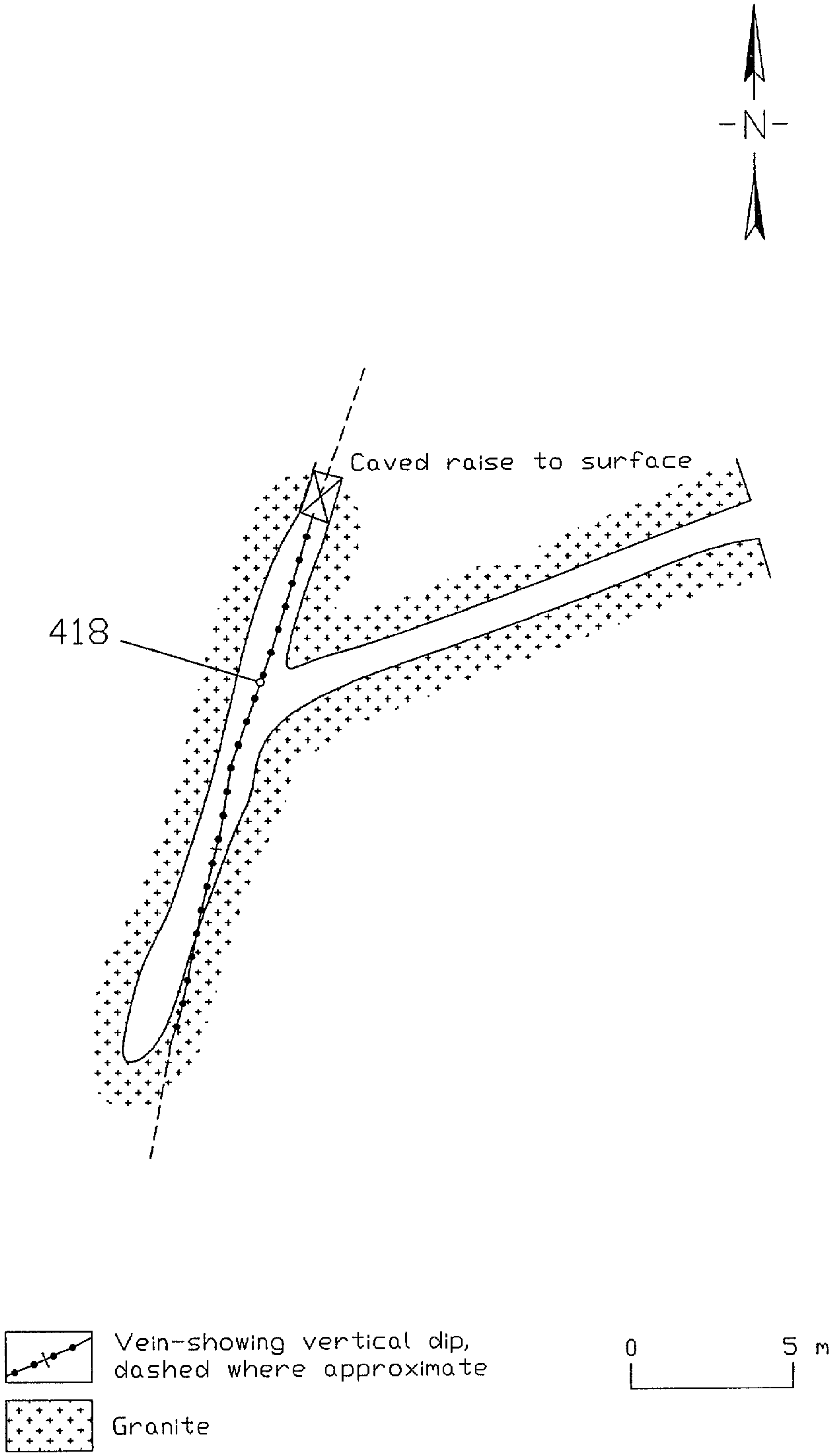
Unnamed Adit

MILS POINT 0393

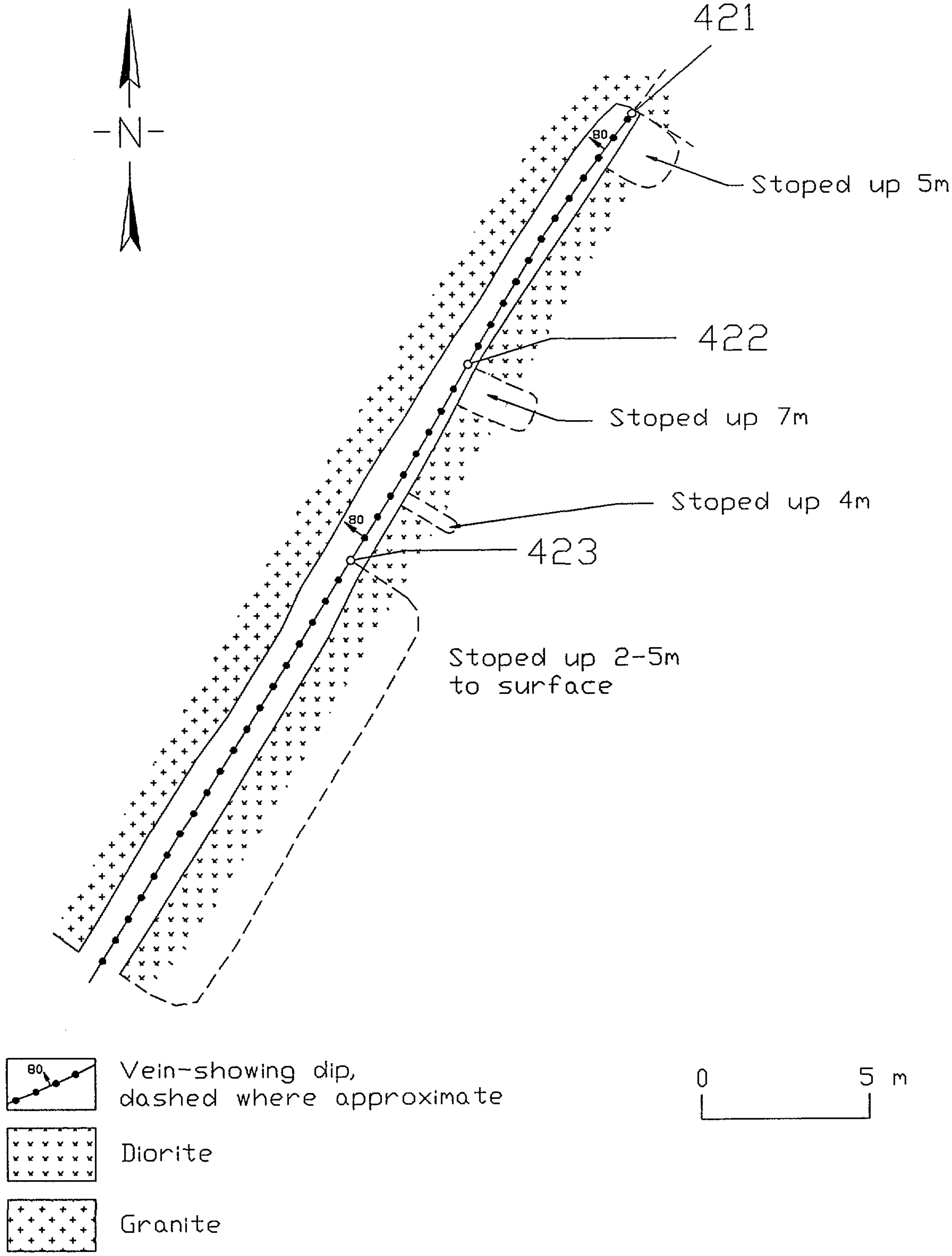


Gold Button (upper adit)

MILS POINT 0384

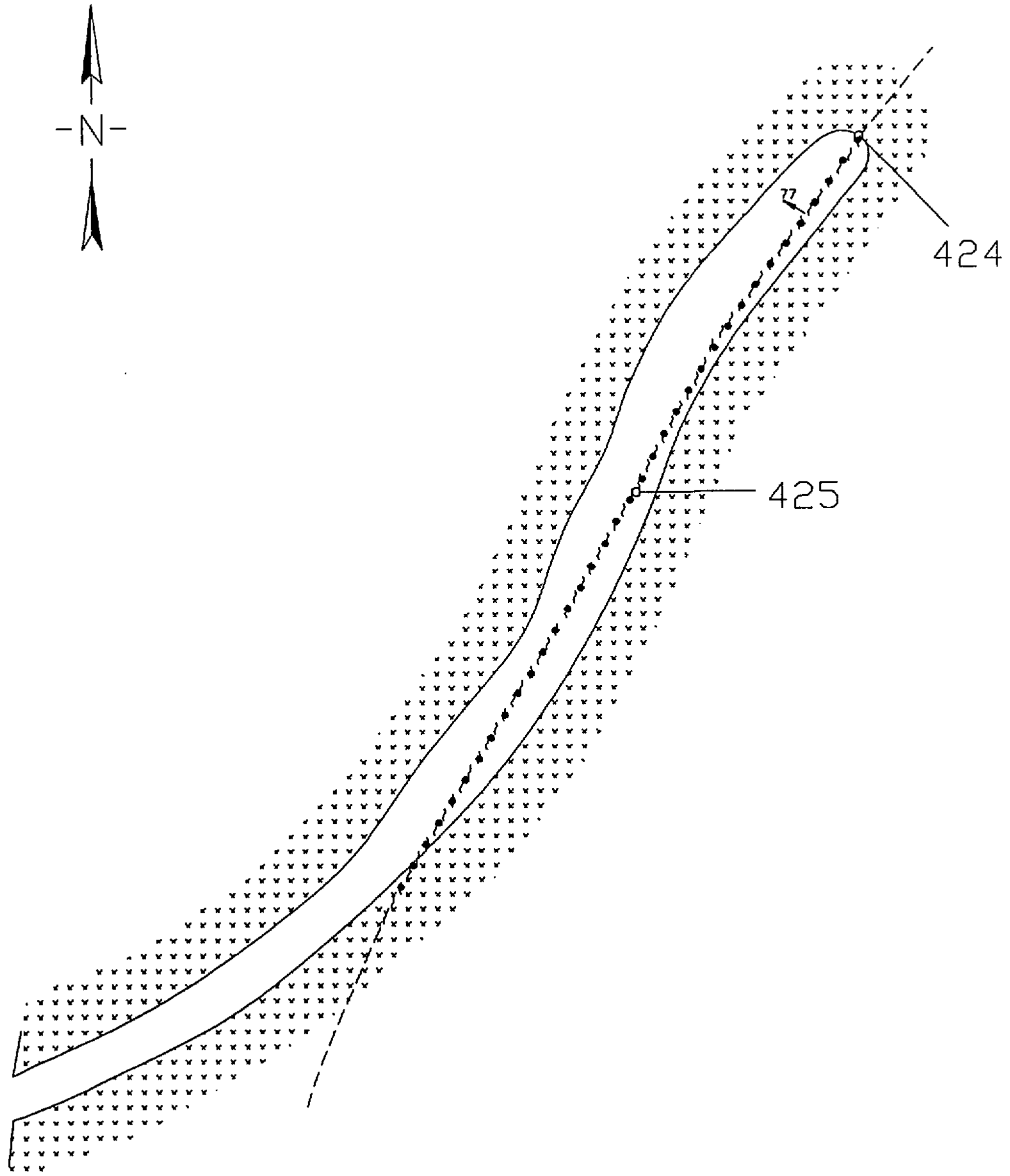

-N-
Caved raise to surface
418
Vein-showing vertical dip,
dashed where approximate
Granite
0
5 m

Chavez Adit



-N-
421
Stoped up 5m
422
Stoped up 7m
Stoped up 4m
80
80
423
Stoped up 2-5m
to surface
80
Vein-showing dip,
dashed where approximate
Diorite
Granite
0
5 m

Fat Mexican



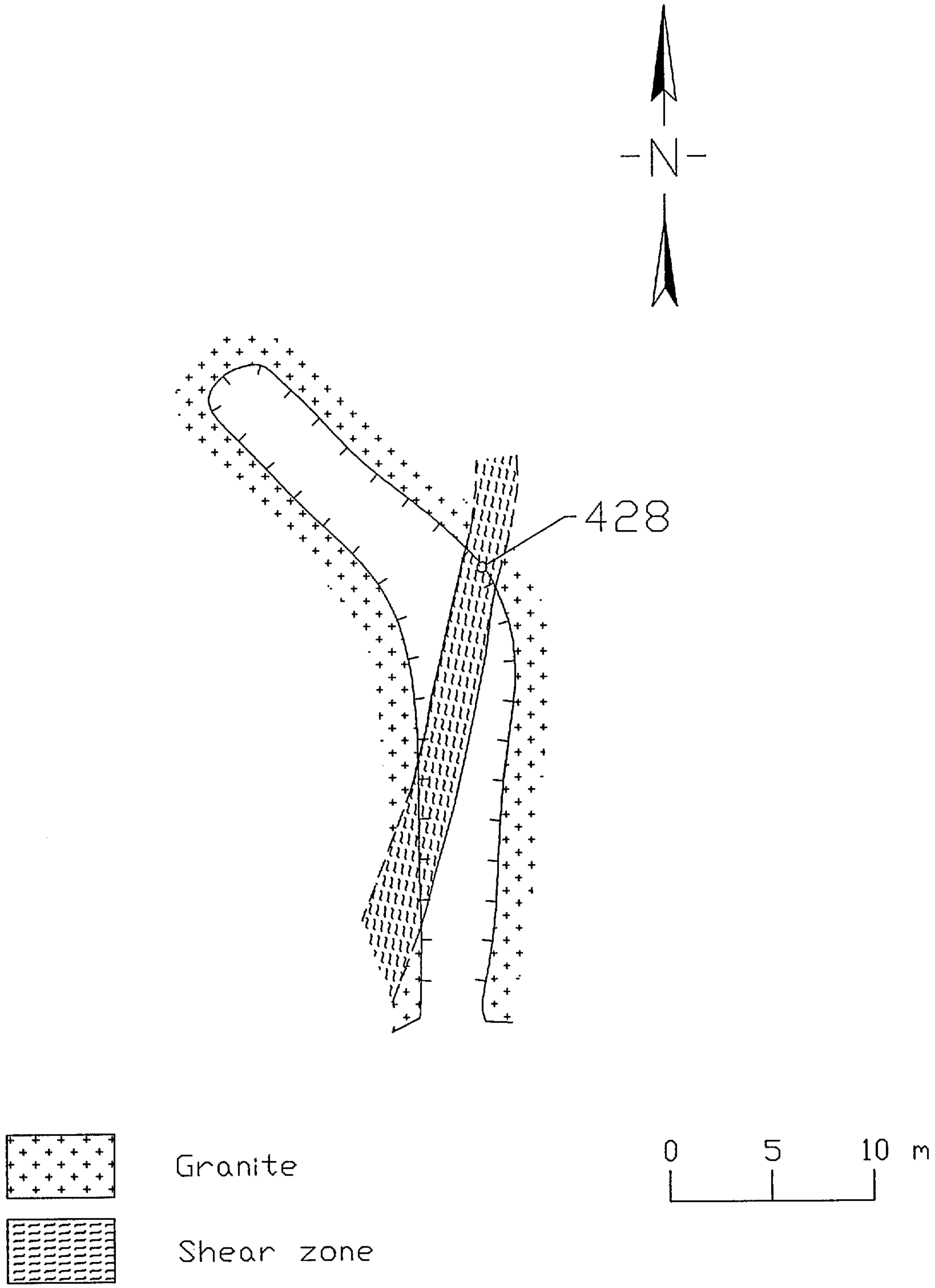
Diorite

Mineralized shear zone-showing dip, dashed where approximate

0 5 m

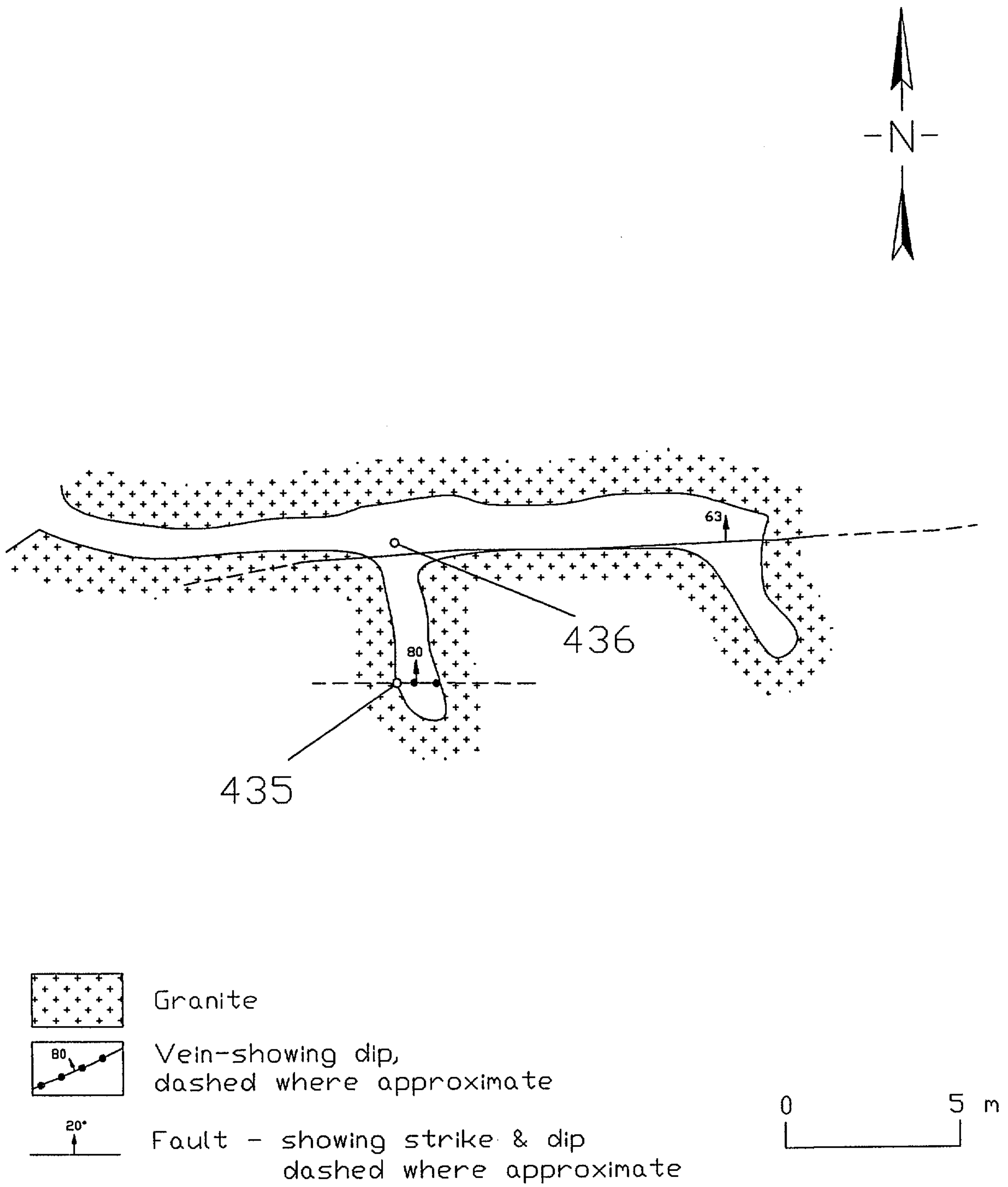
Unnamed Adit

East side of button road.

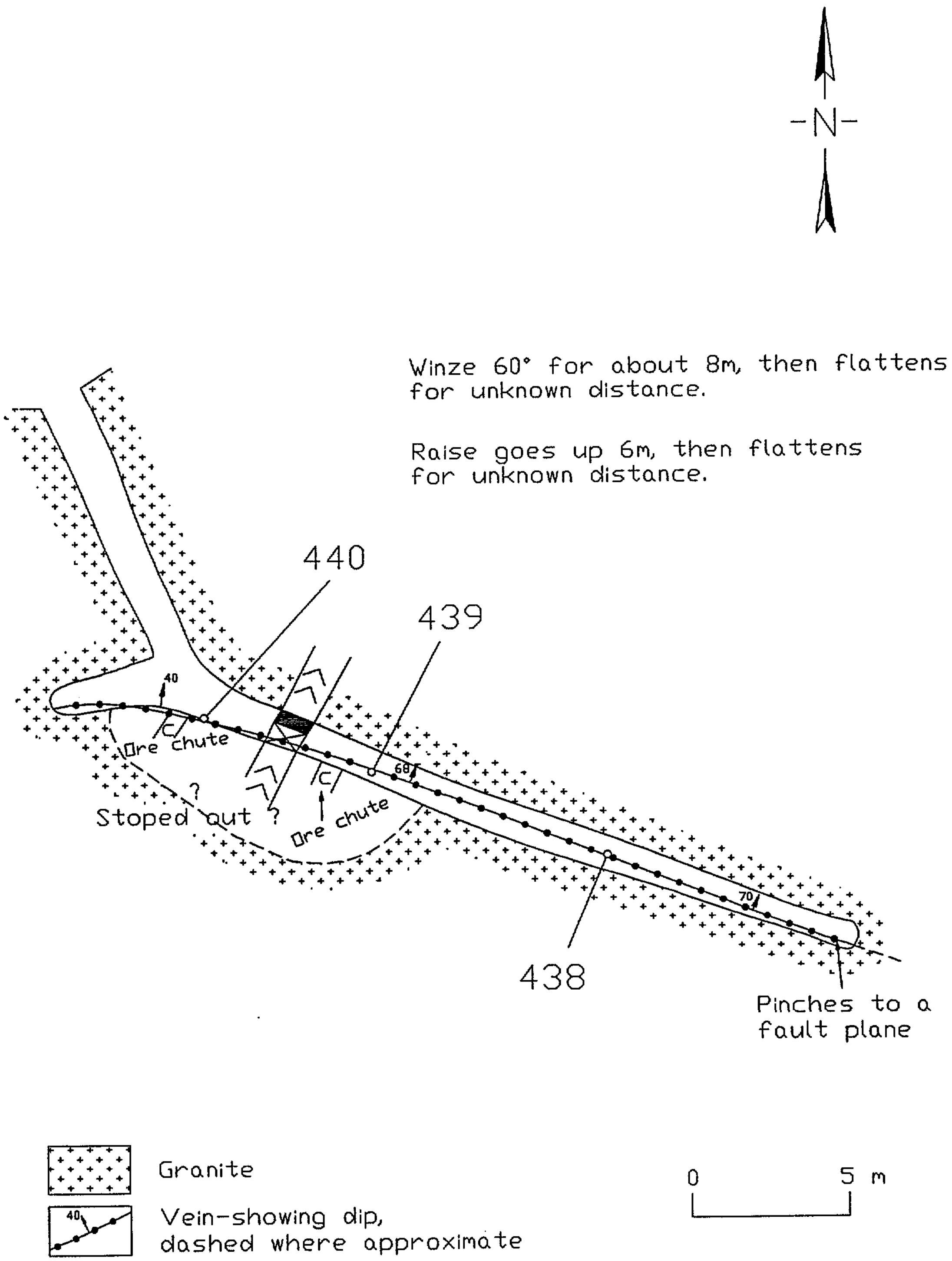


Unnamed Cut

Open cut on west side of Minnehaha Rd.



Paxton Place



Upper Camp Bird

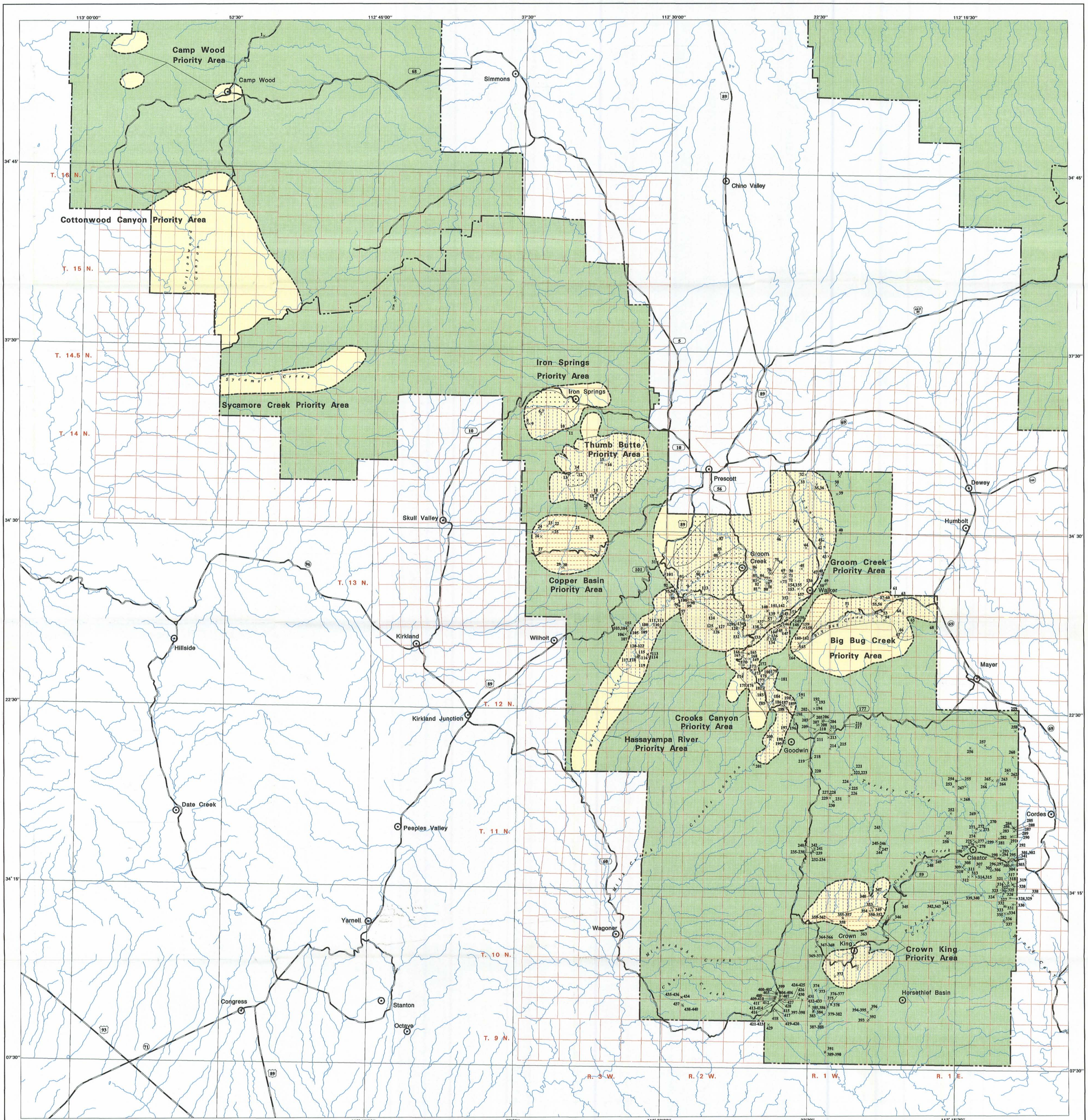
U.S. Bureau of Mines

Open File Report MLA 15-95
Mineral Appraisal of Priority Areas in the Western Part of the Prescott National Forest, Arizona
Plate I

Sample Localities, Western Part of Prescott National Forest

by

John T. Neubert



Prescott National Forest

Priority area

Decomposed granite occurrences

High metallic mineral development potential

Moderate metallic mineral development potential

Sample location and number

SCALE 1:126,720
(1 inch equals 2 miles)

KILOMETERS

MILES

Universal Transverse Mercator Projection
Zone 12
1995

Map prepared by Clark Roberts
Intermountain Field Operations Center
Denver, CO 80225
(303)236-0428