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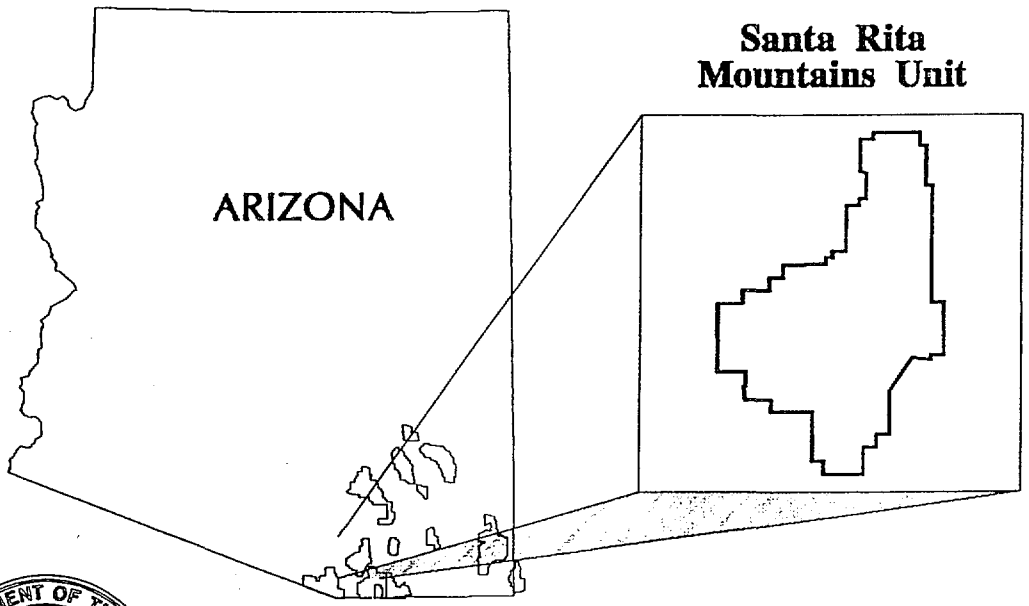
MINERAL APPRAISAL OF CORONADO NATIONAL FOREST, PART 12

Santa Rita Mountains Unit
Pima and Santa Cruz Counties, Arizona



BUREAU OF MINES
UNITED STATES DEPARTMENT OF THE INTERIOR

MINERAL APPRAISAL OF CORONADO NATIONAL FOREST,

PART 12, SANTA RITA MOUNTAINS UNIT, PIMA AND SANTA CRUZ COUNTIES, ARIZONA

by

Staff, Resource Evaluation Branch
U.S. Bureau of Mines

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16. Abstract (Limit: 200 words)

Sporadic mining has taken place in the Santa Rita Mountains Unit of the Coronado National Forest in Arizona since the late 1600's and $10-$15 million worth of silver, lead, copper, and gold have been recovered. The U.S. Bureau of Mines (USBM) resource investigation indicated that a porphyry copper system, low-grade gold bearing veins, placer gold deposits, and "marbleized" limestone deposits occur in the unit.

The porphyry copper system, the Helvetia Deposit, has been estimated to contain identified resources over 500 million tons of 0.50% copper. ASARCO Inc. purchased the property in 1988 and is continuing exploration and planning development. A USBM cost estimating evaluation of the deposit concluded that the economic viability for development would have an 11% rate of return at a market price of $0.81/lb copper and 15% at $0.92/lb. The evaluation also noted areas of concern for Forest Service land managers due to the disposal of waste products and an access infrastructure for shipping and utilities.

Low-grade gold-bearing veins occur, and although no economic resources were identified, the possibility of gold discoveries will continue to attract prospectors and miners in the future. Placer-gold deposits occur and an economic operation may be possible, but additional exploration is necessary to define developable deposits. Arizona Mining Co. is pusuing such a project. Escabrosa Limestone is currently being mined from the unit to provide assorted construction and industrial materials in Tucson, AZ. Reserves having a 75-year production capability have been delineated, and additional limestone occurrences are known to exist. Continued growth in the Southwestern United States will likely increase the demand for assorted limestone products, and the exploration and development of limestone deposits will probably increase to meet regional needs.

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PREFACE

A January 1987 Interagency Agreement between the U.S. Bureau of Mines (USBM), U.S. Geological Survey, and U.S. Forest Service describes the purpose, authority, and program operation for 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 USBM mineral resource database 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 open-file report summarizes the results of part of the USBM forest-wide study of the Coronado National Forest. The report is preliminary and has not been edited or reviewed for conformity with USBM editorial standards. This study was conducted by personnel from the Resource Evaluation Branch, Intermountain Field Operations Center, Building 20, Denver Federal Center, Denver, CO 80225.

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UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT

cps	count per second
d/yr	day per year
°(superscript)	degree
$	dollar (U.S.)
$/lb	dollar (U.S.) per pound
$/oz	dollar (U.S.) per ounce
$/st	dollar (U.S.) per short ton
$/yd^3	dollar (U.S.) per cubic yard
ft	foot
in.	inch
mi	mile
mi^2	square mile
oz	troy ounce
oz/yd^3	troy ounce per cubic yard
oz/st	troy ounce per short ton
ppb	part per billion
ppm	part per million
%	percent
lb	pound (mass)
st	short ton (2,000 pounds)
st/d	short ton per day
st/yr	short ton per year

MINERAL APPRAISAL OF THE CORONADO NATIONAL FOREST, PART 12, SANTA RITA MOUNTAINS UNIT, PIMA AND SANTA CRUZ COUNTIES, ARIZONA

by

Staff, Resource Evaluation Branch
U.S. Bureau of Mines

SUMMARY

The Santa Rita Mountains Unit comprises about 135,000 acres in Pima and Santa Cruz Counties, Arizona. The unit is part of the Coronado National Forest and is administered by the U.S. Department of Agriculture Forest Service. From 1989 to 1992, the U.S. Bureau of Mines (USBM) conducted a mineral investigation of the unit as authorized by an Interagency Agreement (1987) to provide the Forest Service with mineral resource data to incorporate in the forest planning process. Bureau personnel reviewed literature and records concerning the history, geology, mineral resources, and mining activity, and performed a field examination of mines, prospects, and mineral occurrences to evaluate identified resources.

Sporadic mining has taken place in the Santa Rita Mountains since the late 1600's and a total production of $10-$15 million worth of metals has been estimated for the Helvetia-Rosemont, Greaterville, Old Baldy, Tyndall, and Wrightson mining districts. Silver, lead, copper, and gold were the primary metals recovered, with minor zinc and molybdenum byproducts. The metallic mineral deposits generally are: disseminated in, or are replacements of, rocks that have been metamorphosed or hydrothermally altered; mineralized vein systems emplaced along fractures and fault zones; and placer-gold deposits in present drainages and old stream channels.

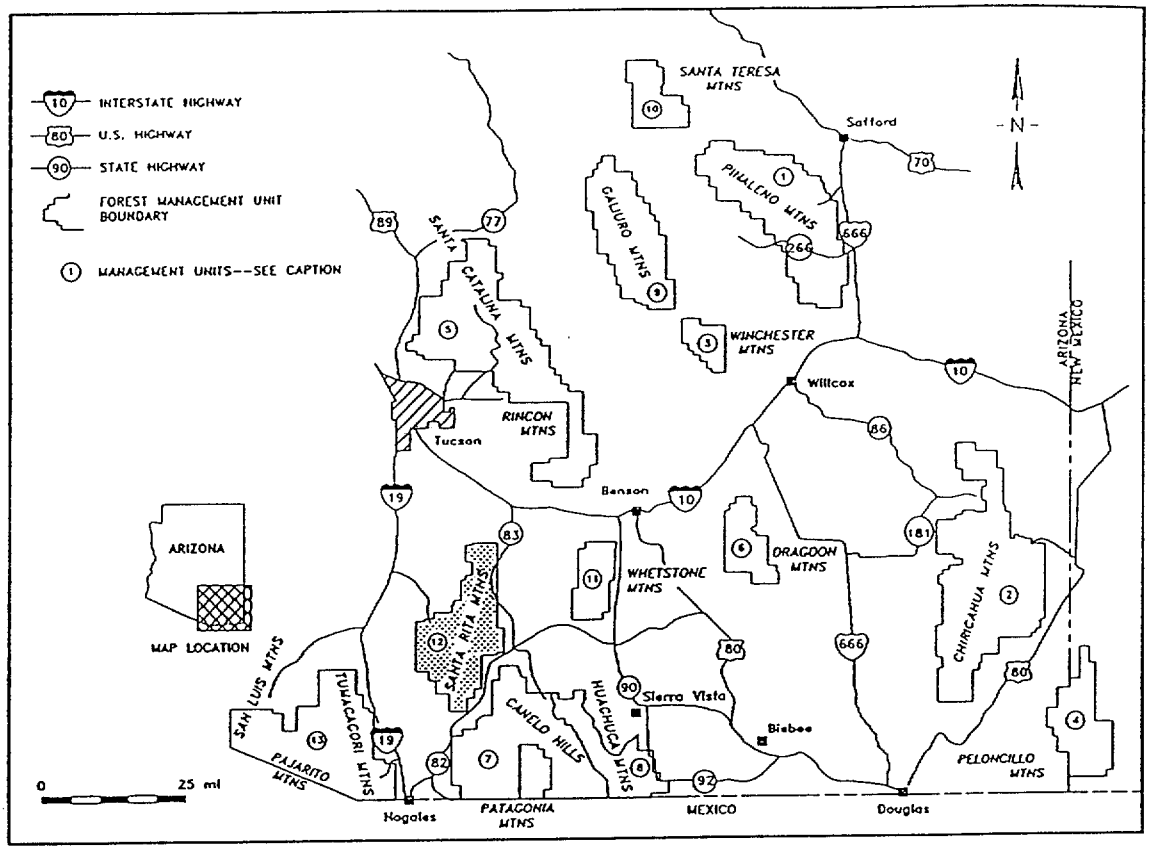
Many previously active mining areas within the Santa Rita Mountains Unit were evaluated, and an assessment of the available data indicates that a porphyry copper system, low-grade gold-bearing veins, placer gold deposits, and "marbleized" limestone deposits occur in the unit. Exploration by several companies has identified a porphyry copper system that extends into the northern part of the unit. The system, called the Helvetia Deposit, includes three porphyry copper deposits inside the Santa Rita Mountains Unit and one deposit about 1 mi outside of the unit. The

system has been estimated to contain identified resources totalling over 500 million tons of 0.50% copper. ASARCO, Inc. purchased the properties in 1988 and is continuing exploration and planning development. A USBM cost estimating evaluation of the deposit concluded that the economic viability for development would have a rate of return of 11% at a market price of $0.81/lb copper and 15% at $0.92/lb. The evaluation also noted areas of concern for Forest Service land managers due to the disposal of waste products and an access infrastructure for shipping and utilities.

Low-grade gold-bearing fissure veins occur throughout the unit, and although no economic resources were identified, the possibility of gold discoveries will continue to attract prospectors and miners in the future. Placer-gold deposits occur in the Greaterville district and an economic operation may be possible, but additional exploration is necessary to define developable deposits; Arizora Mining Co. is pursuing such a project. Escabrosa Limestone is currently being mined in the northern part of the unit to provide an assortment of products to the construction and industrial materials market in Tucson, Arizona. Reserves having a 75-year production capability have been delineated, and additional limestone occurrences are known to exist within the unit. Continued growth in the Southwestern United States will likely increase the demand for assorted limestone products, and the exploration and development of limestone deposits will probably increase to meet regional needs.

INTRODUCTION

From 1989 to 1992, the U.S. Bureau of Mines (USBM) conducted a mineral investigation of the Santa Rita Mountains Unit of the Coronado National Forest, Pima and Santa Cruz Counties, Arizona. The Santa Rita Mountains Unit is one of 13 management units within the forest (fig. 1) and comprises about 135,000 acres of land administered by the U.S. Department of Agriculture Forest Service. USBM personnel surveyed and studied mines, prospects, and mineral occurrences to evaluate mineral resources. This report presents the results of the investigation of the Santa Rita Mountains Unit.



Management Units:

1. Pinaleno-Greasewood Mountains
2. Chiricahua-Pedregosa Mountains
3. Winchester Mountains
4. Peloncillo Mountains
5. Santa Catalina-Rincon Mountains
6. Dragoon Mountains
7. Canelo Hills-Patagonia Mountains
8. Huachuca Mountains Unit
9. Galiuro Mountains Unit
10. Santa Teresa Mountains
11. Whetstone Mountains
12. Santa Rita Mountains
13. Atascosa-Pajarito-San Luis-Tumacacori Mountains

Figure 1.-- Index map of Coronado National Forest.

Geographic setting

The Santa Rita Mountains Unit begins about 20 mi south of Tucson, Arizona (fig. 1) and lies in southeastern Pima and northern Santa Cruz Counties. Elevations range from about 3,480 ft on the western side to 9,453 ft on Mt. Wrightson. The mountains are moderately rugged with steep to gentle slopes cut by numerous canyons, gulches, and washes. Access to the unit is from Interstate Highway 19 and State Highways (SH) 82 and 83. Paved and unpaved county and Forest Service roads, which lead to nonmaintained dirt roads and trails, provide entry within the unit.

Previous investigations

The Santa Rita Mountains Unit has been included in many studies of the State and region. Extensive geologic studies of the Santa Rita Mountains were prepared by Drewes (1967, 1969, 1970, 1971a-c, 1972a-b, 1973, 1976). The earliest and most comprehensive report concerning the mineral deposits and mining activity in the mountains was amassed by Schrader (1915). Creasey and Quick (1955) presented detailed discussions about copper deposits in part of the Helvetia mining district, and numerous dissertations and theses by University of Arizona students examined the geology and mineral deposits of specific localities in the unit (Thomas, 1931; Dunham, 1937; Popoff, 1940; Johnson, 1941; Anthony, 1951; Sulik, 1957; Heyman, 1958; Michel, 1959; Olson, 1961; Rohrbacker, 1964; See, 1964; Whitacre, 1964; Heatwole, 1966; Gross, 1969; Stewart, 1971; and McNew, 1981).

Methods of investigation

Background research included a review of literature concerning the history, geology, mineral resources, and mining activity in and near the Santa Rita Mountains Unit. Mining claim, mineral lease, and land status records were researched at County, State, and Federal offices. USBM personnel spent 300 field-days between June 1989 and November 1992 investigating mining activity and mineral occurrences in the unit. Workings and prospects that were found and accessible on public land and patented claims, where permission was granted, were mapped by tape-and-compass method and sampled. Mine and prospect localities are shown on plate 1 and figures I-1 through I-15, and maps of workings are presented in figures M-1 through M-77.

A total of 954 samples was taken, including 752 chip, 125 grab, and 77 select. All samples were analyzed by Bondar-Clegg, Inc., Vancouver, British Columbia for 34 elements[1] by induced neutron activation (INA) method and by Chemex Labs, Inc., Vancouver, British Columbia for 32 elements[2] by inductively coupled plasma (ICP) method. Sample localities are shown on plate 1, figures I-1 through I-15, and M-1 through M-77, sample descriptions are given in appendix A, and sample assay data are presented in appendices B and C. Data are available for public inspection at the U.S. Bureau of Mines, Intermountain Field Operations Center, Building 20, Denver Federal Center, Denver, CO.

Acknowledgements

Appreciation is expressed to ASARCO, Inc., Tucson, Arizona, and S. A. Anzalone, Chief Geologist, Mining Dept., for allowing access to patented property and providing information that was vital to the investigation of the Helvetia mining district. Special thanks are extended to Bob Knox, claimant, for providing company information and allowing access to the Blue Jay Mine. Appreciation is also extended to all patented claim owners that allowed access and(or) provided information concerning their claims.

GEOLOGIC SETTING

The following geologic setting was compiled from detailed discussions by Drewes (1969, 1971a-c, 1972a-b, 1973).

The Santa Rita Mountains consist of a complex sequence of sedimentary, volcanic, and metamorphic rocks that have undergone recurring intrusive and structural activity. The oldest rocks are Precambrian schist and gneiss intruded by granodiorite. The Precambrian rocks are unconformably overlain by a thick sequence of Paleozoic shallow-water marine sedimentary rock

---

[1]Ag, As, Au, Ba, Br, Cd, Ce, Co, Cr, Cs, Eu, Fe, Hf, Ir, La, Lu, Mo, Na, Ni, Rb, Sb, Sc, Se, Sm, Sn, Ta, Tb, Te, Th, U, W, Yb, Zn, and Zr.

[2]Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sc, Sr, Ti, Tl, U, V, W, and Zn.

units comprised of shale, limestone, dolomite, sandstone, siltstone, marlstone, and gypsum. Mesozoic rock units unconformably overlie the Paleozoic rocks and consist of interlayered rhyolitic to andesitic volcanic rocks, and sedimentary rocks ranging from shale to conglomerate and a little limestone, all of which were intruded by monzonite, granite, diorite, quartz monzonite, and granodiorite stocks. The Mesozoic rocks are overlain by Cenozoic rhyolitic to andesitic volcanics, and intruded by Cenozoic stocks, plugs, dikes, and laccoliths of granodiorite, dacite porphyry, quartz latite porphyry, and rhyolite. Erosion of the rocks has deposited gravels and intercalated sands along the flanks of the mountains forming pediments and alluvial fans.

Rocks in the Santa Rita Mountains Unit are heavily faulted, and Drewes (1972) separated them into three major structural units divided by two large fault zones. The Santa Rita fault zone separates the southwestern and central structural units and trends northwest from the southern end of the Santa Rita Mountains Unit near Patagonia to about Madera Canyon in the northwest. The Sawmill Canyon fault zone also trends northwest and separates the central and northeastern structural units. The fault zone initially parallels Sawmill Canyon and is relatively narrow in the northwest part of the Santa Rita Mountains Unit, but becomes much more complex and splays to about 1.5 mi wide to the southeast. The three major structural units are composed of smaller fault-bound structural blocks that developed independent rock sequences due to differences in structural position and magmatic history. The southwestern unit primarily consists of Precambrian rocks unconformably overlain by upper Mesozoic and lower Cenozoic volcanic and sedimentary rocks and Mesozoic intrusives. The central unit consists of Mesozoic volcanic and sedimentary rocks intruded by a few small stocks, plugs, swarms of dikes, and quartz veins. The southern part of the northeastern unit consist mainly of Precambrian rocks unconformably overlain by upper Mesozoic sedimentary rocks, and the northern part consists of metamorphosed Paleozoic and lower Mesozoic rocks overlain by upper Mesozoic sedimentary and volcanic rocks, and cut by small Cenozoic intrusives.

Most mineral deposits in the Santa Rita Mountains Unit probably are related to magmatic events of the Laramide orogeny during late Mesozoic and early Cenozoic. Porphyry copper deposits formed by contact pyrometasomatism and lode gold vein deposits were implaced by hydrothermal activity. Later weathering and erosion of the hydrothermally altered and mineralized rocks produced placer-gold deposits in drainages. Cenozoic intrusions likely metamorphosed and altered the Paleozoic Escabrosa Limestone creating marbleized zones within the formation.

MINING HISTORY

Schrader (1915) and Keith (1974, 1975) presented comprehensive discussions concerning the mining history of the Santa Rita Mountains and vicinity, and the following is taken from their studies.

The first record of mining in the Santa Rita Mountains was made by Father Kino, a Jesuit Father, while establishing missions in the Santa Cruz Valley. In the late 1600's, Spanish settlers prospected and mined shallow oxidized lead-silver deposits. Mining in the region progressed at a very sporadic rate due to changes in civil protection and political control until the late 1870's. The completion of local rail transportation and increases in immigration and capital led to renewed prospecting and the reoccupation of old workings. Five mining districts were eventually established in the Santa Rita Mountains Unit; Helvetia-Rosemont, Greaterville, Old Baldy, Tyndall, and Wrightson (plate 1).

Metal production from the districts has been estimated at $10-15 million (historic dollars). Silver, lead, copper, and gold were the main metals recovered, with a little zinc and molybdenum as byproducts (Drewes, 1973). Production was primarily from metallic mineral deposits disseminated in, or replacing rocks that were metamorphosed or hydrothermally altered, and mineralized vein systems that occur along fractures and fault zones. Placer gold was recovered from gravels deposited in drainages down slope from the altered and mineralized rocks. Table 1 summarizes mining activity in the Santa Rita Mountains Unit, including descriptions of mines and prospects, and a brief review of deposits and production in individual mining districts.

The only active mining operations discerned during the USBM field investigation were in the Helvetia-Rosemont district. Recorded development and production of copper from the Helvetia mining district began in the early 1880's, but since 1950, a significant amount of exploration and development drilling by several companies has identified a large porphyry copper system. In 1988, the patented property that overlies much of the system was purchased by ASARCO, Inc., Tucson, Arizona, and planning for development continues. Small-scale underground development was being conducted at the Blue Jay Mine in E. center (ctr.) sec. 11 and W. ctr. sec. 12, T. 18 S., R. 15 E., and the production of assorted limestone products by Specialty Minerals, Inc. is continuing in SE/4 sec. 11, T. 18 S., R. 15 E. Activity in the other districts appeared to be limited recreational placer-gold panning and prospecting, and a possible large-scale placer-gold exploration project by Arizora Mining Co.

MINERAL RESOURCE APPRAISAL

Deposits containing copper, lead, silver, gold, and limestone have been developed within the Santa Rita Mountains Unit. The deposits occur as porphyry copper, lode veins, placer, and "marbleized" limestone. This appraisal extrapolates from published literature, USBM field studies, and geologic concept to evaluate mineral resources identified in the unit.

Porphyry copper deposits

Past exploration has delineated a porphyry copper system, and ASARCO, Inc. is pursuing development of the discovery. Anzalone and Brown (1992) of ASARCO, discussed the system and the following evaluation is summarized from their work.

The system, referred to as the "Helvetia Deposit" by ASARCO, consists of four porphyry copper deposits: Rosemont, Broadtop Butte, and Copper World, which are within the Santa Rita Mountains Unit (figs. 2 and I-2), and Peach-Elgin, which is about 1 mi west of the Copper World deposit, outside the unit (fig. 2). The deposits occur within a structurally complex series of Paleozoic and Mesozoic sedimentary and Laramide intrusive rocks that were altered and mineralized by pyrometasomatism. Characteristics of the deposits are similar to those found at the Mission and

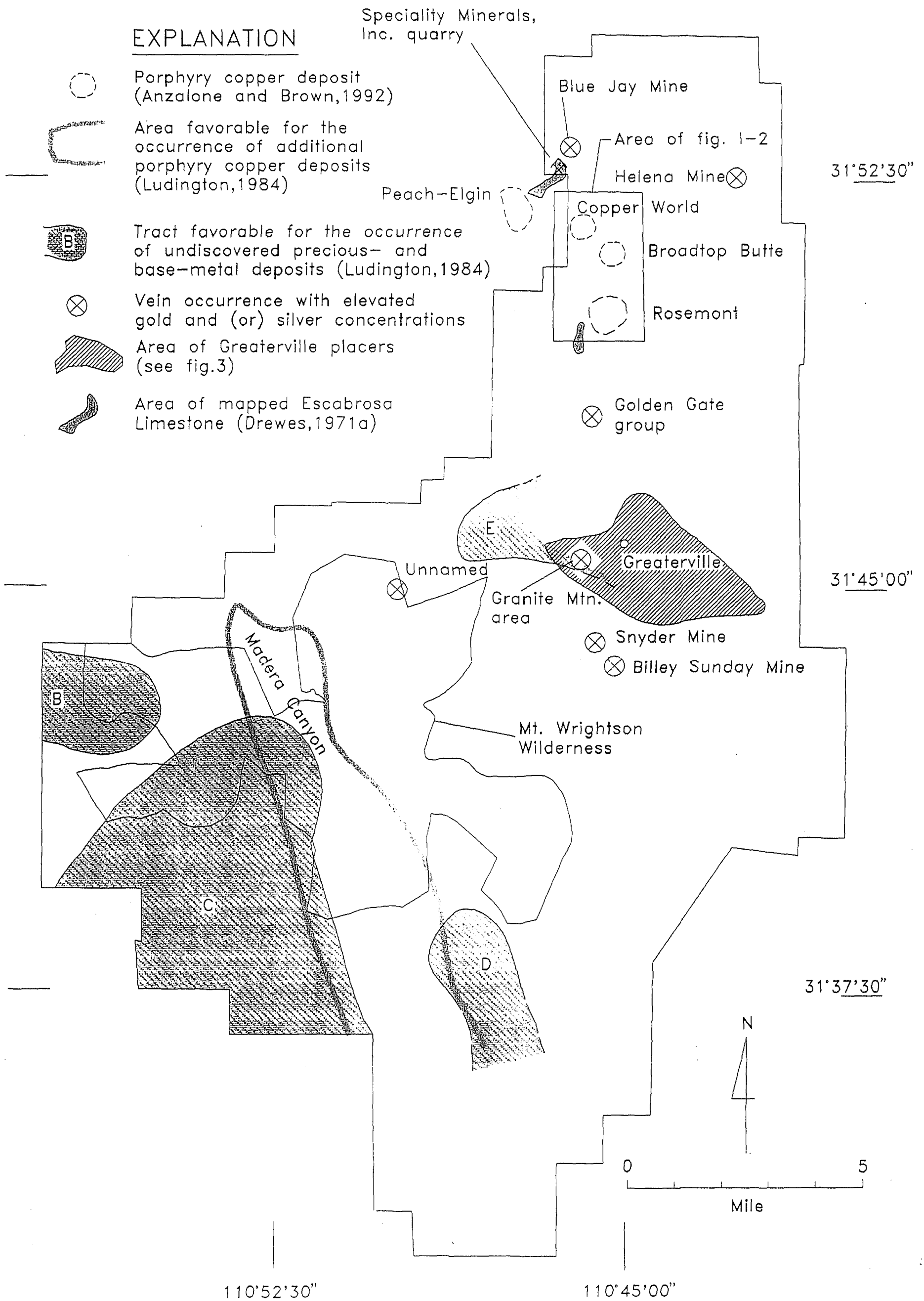


Figure 2.--Santa Rita Mountains Unit, showing locations of areas discussed under appraised resources.

Twin Buttes copper mines located about 20 mi to the west, and exploration and testing indicated that the deposits are amenable to open-pit mining, heap leaching, and standard flotation methods.

The Rosemont deposit has received the most complete examination and is estimated to contain identified resources of over 420 million st, averaging greater than 0.50% copper with silver and molybdenum as byproducts. Exploration of the other deposits within the unit is incomplete, but ASARCO's current evidence suggests that the entire Helvetia Deposit contains in excess of 500 million st. Additional drilling is necessary to further define the resources, outline minable ore reserves, and develop a mine plan for the entire deposit.

Helvetia Deposit development evaluation

The following mine development appraisal is derived from information contained in Anzalone and Brown (1992), using methods and data by O. L. Schumacher, Mining Cost Service, a subscription service of Western Mine Engineering, Inc., Spokane, Washington, and the U.S. Bureau of Mines Cost Estimating System (version 2.0).

The Helvetia Deposit, with identified resources of about 410 million st of sulfide and 90 million st of oxide material, is of a size and grade (≈0.6% Cu, 0.019% Mo, and substantial Ag) to warrant economic review. This entails estimating capital and operating costs based on assumed capacity and technologies. Economic viability is then projected using grades and assumed recoveries, prices, and investment schemes.

Given the above resources and an assumed mine life of 20 years, 20.5 million st of sulfide and 4.5 million st of oxide ore would have to be mined annually (≈68,500 st/d, 365 d/yr). With stripping ratios (waste:ore) on the order of 3:1, open-pit mining would be the logical method to employ, and a conventional shovel/truck scheme is anticipated.

Mining of sulfidic ores would concentrate on the Rosemont deposit with production being supplemented concurrently from the three other "satellite" ore bodies. It is assumed that production would be scheduled such that the "satellite" deposits would deplete along with Rosemont and a mill

recovery rate of 90% would result in 1,080 st/d (@ 28% Cu) copper concentrate. The sulfide concentrator would likely be a conventional copper flotation plant that also would have a molybdenum recovery circuit.

The oxide, and some mixed ores, would likely be treated using a solvent extraction/electrowinning (SX/EW) process, and oxide resources are apparently of a grade that would permit heap leaching. In addition, low-grade oxide and mixed ores would probably be dump leached for further SX/EW feed. The proportion of heap leach and dump leach ores will change over the life of the mine and the plant would be sized sufficiently to handle the changing character of the ore. Availability of ores for leaching is assumed for the duration of mining activity.

Disposal of waste products from operations would be a primary concern for the Forest Service land managers. Given the above scenario, tailings from the sulfide concentrator (≈ 20.4 million st/yr) would be disposed of in ponds probably located on the lower lying unpatented areas to the east of the mine site. This would require about 2,000 acres of ultimate pond area depending on final site layout. Waste and leach dumps, as well as heap leach pads, would be in the immediate vicinity of the mining activity. How much of this material that may need to fall on Forest Service land would be dependent on the final mine plans.

Other factors that the land manager needs to consider are access and shipping to and from the property. The most logical way into the area is via SH-83 to the east. An access road (≈ 4.5 mi in length) would have to be built from SH-83 to the site. In addition, basic utilities would need infrastructure from their sources. Traffic, both heavy and light vehicles, would increase on SH-83 to the mine. The assumption is made that copper concentrate (≈ 1,080 st/d) would be hauled by truck to a load out on the rail line between Tucson and Benson. This haulage would result in about 35 round-trips per day by 35-st (assumed) semi-trailer trucks.

Below are the assumed capital and operating costs for a mine of this type and the estimated economic viability of the project:

Capital Expenditures	1994 Dollars
Mine capital & development	179,000,000
Mill capital	244,000,000
SX/EW capital	38,000,000
Total working capital (@ 60 days operating cost)	28,500,000
Total capital	489,500,000

Operating Costs	$/st ore	$/lb Cu
Mine to crusher	2.86	0.27
Mill to concentrate	3.57	0.34
Total to concentrate	6.43	0.61
SX/EW to cathode		0.27

Assuming 1994 dollars at the onset of development, this project should have the following performance and(or) copper price requirements:

Rate of return ≈ 11% @ $0.81/lb Cu

≈ 15% @ $0.92/lb Cu

Average domestic copper price for 1992 was 1.07/lb (U.S. Bureau of Mines, 1993).

Socioeconomic impacts of development

The existence of economically minable copper resources raises a question about the economic impact to the area, if mining takes place. To address this question, a Federal software package for mine Input/Output analysis, called IMPLAN (IMpact analysis for PLANning) was used. Based on IMPLAN's data, in 1990, the copper industry contributed $673.5 million to Pima County's economy from the gross sale of copper concentrates, and the county's domestic product or Total Industry Output (TIO) amounted to about $17.5 billion. Although the copper industry is currently healthy, that contribution was only 3.75% of the county's TIO; the whole mining industry contributed 4.2%. Given this, changes in the local copper industry would have only a small overall influence in the county's economy.

If the Helvetia Deposit is developed and approximates the preceding development appraisal, an estimated $150 million per year (0.85% of the county's TIO) would be generated. This value is based on the estimations for copper concentrate production, operating costs to concentrate, and profit (including SX/EW and byproduct credits). The county's TIO would increase by $244.7 million (+1.4%), and employment would increase by about 1,380 jobs (+0.4%), 430 of which would be directly in the mining industry. This scenario assumes that mining the Helvetia deposit would be in addition to current mining activities, but in reality, the mine would likely be a replacement of an existing local mine of similar type and production. The economic impact, in that case, would be noticeable during the mine construction stage, but when the existing mine is phased out as the new mine begins to operate, the local economy would settle to approximately the same level as before.

Mining of the Helvetia Deposit may locally restrain other uses of the Forest for the duration of mining, but those uses would likely resume after conclusion of mining, depending on how the area is reclaimed. Because of a lack of multiple use input in the data base relative to the county's economy, and the small scale of anticipated mining, no assessment was completed on the socioeconomic interaction and impact between these activities.

Undiscovered porphyry copper deposits

A resource assessment of the Mt. Wrightson Wilderness by the U.S. Geological Survey (USGS) (Ludington, 1984), postulated a northwest-trending area about 9 mi long and 2-3 mi wide in the west central part of the Santa Rita Mountains Unit as favorable for the occurrence of additional porphyry copper deposits. The favorable area is shown on fig. 2 and was derived largely from studies by Drewes (1971a, 1971b, 1973, 1980), whose work delineated areas of anomalous metal concentrations in the Santa Rita Mountains that affirm known deposits and point out possible localities of undiscovered resources. Ludington's (1984) assessment determined the favorable area by using the following characteristics: surrounded by a swarm of copper-bearing precious- and base-metal vein deposits; large areas of argillic alteration; appropriate geochemical signature; rocks

of appropriate age and chemical composition; and proximity of porphyry copper deposits at Red Mountain to the south and the Helvetia Deposit to the north. Most of the area, however, lies within the Madera Canyon recreation area and the Mt. Wrightson Wilderness, which would impede exploration and development should deposits exist.

Lode vein deposits

The USGS assessment (Ludington, 1984) also indicated four tracts favorable for the occurrence of undiscovered precious- and base-metal vein deposits (fig. 2). Veins are disseminated throughout the Santa Rita Mountains Unit, but the most extensive occurrences are in the Tyndall and Wrightson mining districts and were referred to as the Alto vein swarm by Drewes (1973) (Ludington's Tracts C and D). Numerous veins within the unit have been prospected or mined and the USBM field study examined many of the localities.

The veins are commonly associated with faulting and were produced by mineralized hydrothermal solutions circulating along the fractures. Veins cut virtually all rock types in the unit, but are more massive and abundant in sedimentary and volcanic rocks. Some vein textures show multiple episodes of brecciation and silicification suggesting that the faulting and mineralizing events occurred contemporaneously and repeatedly. Within the veins, quartz varies from massive tabular bodies several feet thick to silicified pods streaked with multiple quartz veinlets and stockworks. The most commonly observed primary minerals are pyrite, chalcopyrite, galena, and sphalerite. Iron and manganese oxides are prevalent and the copper oxides, malachite and azurite are common.

Past production and analytical data indicates that numerous mines and workings in the unit contained mineralized vein systems. A widespread enrichment of copper, lead, and zinc, and localized intermittent elevated concentrations of gold and silver are exhibited by both historical data and the USBM study. The USBM study highlighted seven localities where fairly uniform distributions of elevated gold and(or) silver concentrations were detected along individual veins or clusters of spatially associated veins. The sites are considered noteworthy, but more detailed site-specific evaluations would be necessary to calculate reliable ton and grade estimates. The localities are

shown in figure 2 and are listed in the following table, from north to south, showing average gold and silver concentrations calculated using rock-chip samples taken along the mineralized vein or veins.

Locality	Average of chip sample assays (oz/st) [>, greater than; <, less than] Au	Ag
Blue Jay Mine (SR 32-48)		
Main vein	0.011	4.3
SW vein	.040	8.2
Helena Mine (SR 14-23)	.013	
Golden Gate group (SR 118-130)		
Goldfish Mine	>.176	
other veins	.072	
Granite Mountain area (SR 183-204)		
Apex adit	.047	
other veins	>.058	2.5
Unnamed (SR 218-224)	.049	
Snyder Mine (SR 229-249)	.018	
Billey Sunday Prospect (SR 250-254)	<.026	>4.68

USBM mineral commodity summary records suggest that for precious-metal vein-type deposits to be economical, the deposit needs to be continuous with grades exceeding 0.03 oz/st gold or 10 oz/st silver. Several of the localities appear to meet the basic grade criterion and likely contain some low-grade gold resources, but field observations were limited and unable to define the extent and continuity of the veins and no quantitative estimates were made.

Placer deposits

Placer gold deposits have been discovered in the Greaterville, Old Baldy, and Tyndall mining districts. Past descriptions (Hill, 1910; Schrader, 1915) have placed the principal deposits in the Old Baldy and Tyndall districts within gravels that occur mostly outside the Santa Rita Mountains Unit, but small pockets of placer gold are possible in any drainage downstream from lode gold occurrences located in the unit. The Greaterville placers are entirely within the unit (fig. 2) and have been the most substantial producers.

The Greaterville placers cover about 8 mi^2 and include the area shown in fig. 3. Placer deposits occur in gravels along present drainages and also on benches and ridges that are old stream channels. The main gold-producing gravels have been found in channels as wide as 300 ft, and from surface level to a depth of about 25 ft. The gold-bearing zone was reportedly a bed about 2 ft thick containing slightly cemented, small (usually less than 1 in.), angular pebbles and clay lying on bedrock and covered by overburden and less-rich gravels. The gold is uniformly dispersed in the bed and is normally angular and coarse, ranging in size from flakes to small nuggets. The largest nugget reported from the area weighed 37 oz. (See Wilson, 1981.)

Intermittent production has taken place since the first discovery in 1874 and has varied from small-scale handwork to mechanical dredging and hydraulic mining methods. The most productive gulches are listed below from north to south (fig. 3), and include descriptions condensed from Hill (1910), Schrader (1915), and Johnson (1972).

Empire Gulch: Gold found in 2-ft-thick bed at depth of 16 ft for 1½ mi below junction with Chispa Gulch. Channel width ranged from 300 to 1,000 ft and a steam shovel, screens, and conical concentrating tank were used.

Chispa Gulch (including other upper reaches of Empire Gulch): Gold-bearing channels from 5 to 50 ft wide on bedrock as deep as about 10 ft.

Colorado and Los Pozos Gulches: Workable gravels in upper reaches from 2,000 to 3,000 ft.

Hughes Gulch (including small tributaries around Granite Mountain): Narrow channels, rarely over 6 ft wide, were productive at 2 to 6 ft deep.

Ophir Gulch: No placer deposits in upper end above junction with Hughes Gulch, but a channel 200 ft wide was found to contain gold as far down as the junction with Sucker Gulch; the bedrock, however, was considered too deep and little work was done.

Louisiana Gulch: At the head of the gulch, gold was found near the surface, but at the mouth near the junction with Sucker Gulch it lay at a depth of 10 to 12 ft; the average channel width was about 6 ft. In 1948, lower end of the gulch was worked with a dragline shovel.

Graham and Sucker Gulches: Gold found from head of gulches to junction with Ophir Gulch. Channels increase in width from 6 to 100 ft and depth from 6 in. to more than 25 ft as distance from gulch heads increased. Below Louisiana Gulch, the overburden became excessive and little work was done.

Kentucky Gulch: Gold-bearing gravels throughout the length of the gulch in a channel from 6 to 10 ft wide, and ranging from surface deposits at the head of the gulch to a depth of 6 ft at the mouth. A hydraulic plant worked this gulch in the early 1900's.

Boston Gulch (including tributary Harshaw Gulch): Gold-bearing gravels from the head of the gulches to about ½ mi south of the junction with Kentucky Gulch. Gravel channels increased in width from 4 to 50 ft and in depth from 2 to 16 ft as distance from the head of the gulch increased.

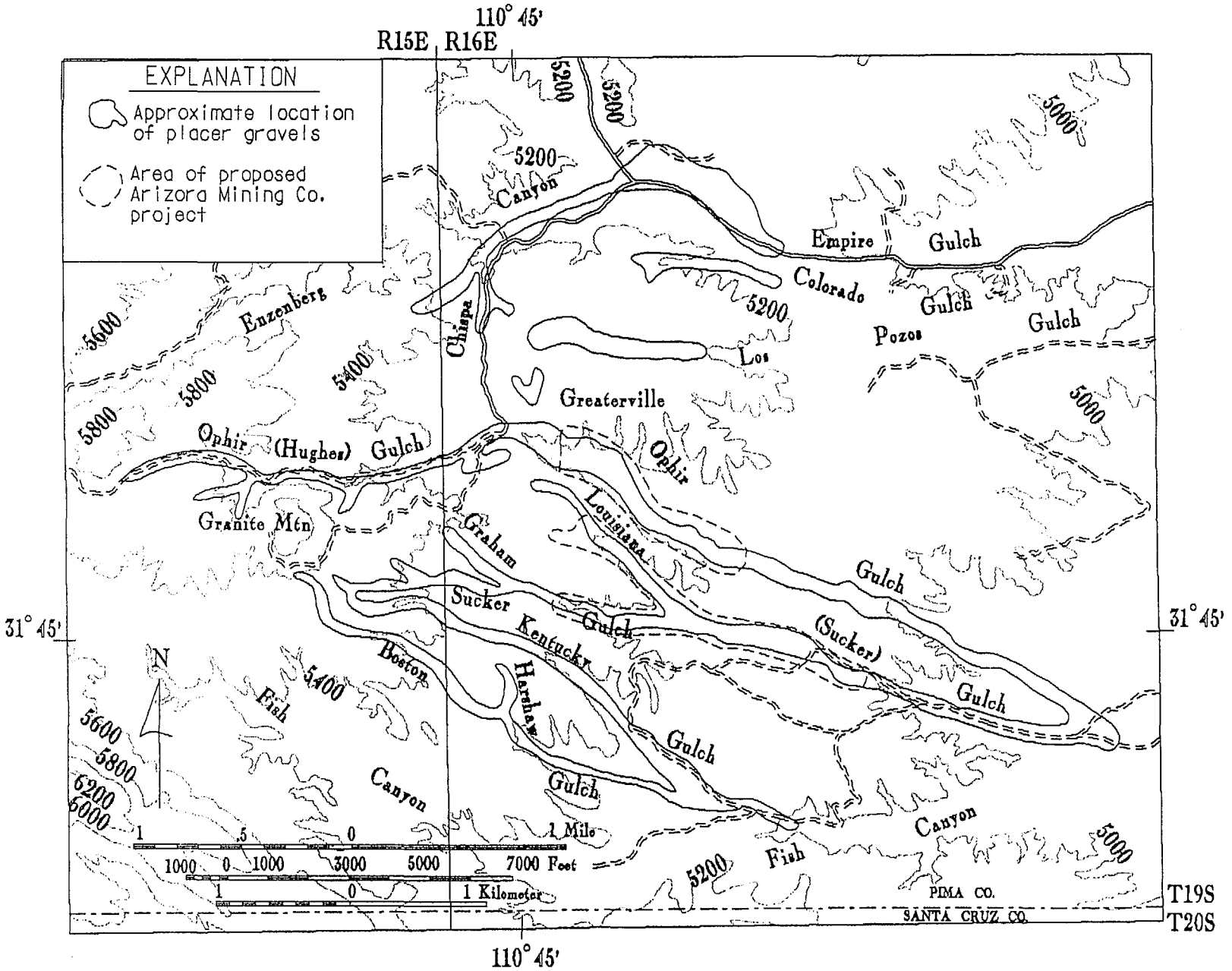


Figure 3.--Greaterville placer area, showing approximate location of placer gravels and areas of proposed Arizona Mining Co. project. (Adapted from Cox, 1994)

Some past mining operations were profitable, but many shut down due to the scarcity of water, and because the gold-bearing zone was not valuable enough to support removal of thick overburden. During the USBM field investigation, the most prevalent placer activity observed was recreational panning and sluicing for gold, and small quantities were being recovered. Arizora Mining Co., Inc., Tucson, AZ, however, holds a lease for the private mineral rights over much of the Greaterville placer area and was planning to cut ponds and exploratory trenches in Ophir, Louisiana, and Succor (Sucker) Gulches (fig. 3) to determine if a large-scale operation is feasible. As of January 1994, permits had been obtained and the project was still in preparation.

Much of the gravel in the gulches of the Greaterville placer area has been previously worked, but it is still possible that mineable deposits are present. In the early 1900's, several mining engineers estimated 2-5 million oz of gold remained in the placer deposits (Hill, 1910), and since that time, recovery has been reported as less than 5,000 oz. Analytical information obtained from Arizora Mining Co. relating to a number of pits hand dug to bedrock (14-25 ft deep) in Ophir, Succor, Louisiana, and Kentucky Gulches suggests average gold concentrations of 0.03-0.04 oz/yd^3 for those localities. Manipulating the data, using gold prices of \$300-\$400/oz, produces values of \$9-\$16/yd^3. Estimates derived from USBM commodity summary records, indicate that placer gold operations can be profitable beginning at recoveries of \$3-\$5/yd^3, which suggests an economic placer operation may be possible in those gulches, but additional exploration is necessary to define developable deposits.

Limestone

Escabrosa Limestone occurs in the northern part of the Santa Rita Mountains Unit in sec. 11, T. 18 S., R. 15 E. and extends southerly into sec. 14 outside the unit boundary into land administered by the Bureau of Land Management (fig. 2). The limestone varies in quality from high-calcium high-brightness (white) marble to material contaminated by impurities, and has been mined since the 1970's. Currently (1994), Specialty Minerais, Inc. is developing the deposit by open-pit methods using drilling and blasting to provide feed to an on-site processing plant. In the processing

plant, the material is crushed, screened, ground, and sorted for distribution depending on the desired end product.

Limestone and marble products are important in construction, chemical, and industrial uses and the ultimate use determines end-product specifications, which are primarily based on variations in chemical composition, color, and size. Assorted blend combinations have been produced at the Specialty Minerals quarry and used in copper processing circuits, wallboard, marking chalk, plastic and glass production, and as roofing gravel, decorative stone, landscape material, swimming pool plaster sand, livestock feed supplement, and functional fillers-extenders (Phillips, 1992). The following table, assembled by Phillips (1992, p. 32), lists some examples of products that have been produced:

PRODUCT	COMMERCIAL LOT PRICES	SIZE	USES
Marblewhite A 4500	Bagged, $70/ton	100% minus 325 mesh, controlled brightness and particle size.	Filler for flat paints and coatings
Marblewhite A 325	Bagged, $49/ton Bulk, $29/ton	98% minus 325 mesh	Filler for less critical applications than Marblewhite 4500, such as calcium in liquid feed supplements.
Marblewhite A 220	Bagged, $47/ton Bulk, $28/ton	Minus 200 mesh	Filler in dark colored products such as asphalt pavement crack sealants.
Marblewhite A 50	Bagged, $43/ton	Minus 50 mesh	Filler for cultured marble
Calcium grits A 69	Bagged, $48/ton Bulk, $28/ton	A 50:50 blend of 0.25-in. and 30 mesh to 0.125-in. marble sand.	Poultry feed calcium supplement and digestive aid (grit).
Marblemix A	Bagged, $46/ton Bulk, $29/ton	Minus 30 mesh	Swimming pool plaster sand
Viroc A #1	Bulk, $12/ton	Typical 0.625 in.	Decorative rock for landscaping and roofing rock.
Viroc A #2	Bulk, $12/ton	Typical 0.875 in.	Decorative rock, landscape rock, and acid neutralization.

The limestone is structurally complex and has been deformed by folding and faulting, which impedes reserve assessments, but the deposit has been reported to be 300-500 ft thick and contain 116 million tons of high-brightness marble (Eyde and Eyde, 1992, p. 41). During a USBM visit to the quarry in 1992, material was being produced at nearly 100,000 st/yr with a future rate of 200,000 st/yr being pursued. Company assessments indicated a 75-year production capability. An

additional exposure of Escabrosa Limestone was mapped (Drewes, 1971a) about 3 mi to the south within the Santa Rita Mountains Unit (fig. 2), but the extent and quality are unknown.

Developable limestone deposits, in addition to meeting desired specifications, need to be readily accessible and amenable to a cost-effective operation. Projected population growth in the Southwestern United States indicates a continued expansion of the construction and industrial materials market in the Tucson area. The growth would directly influence the demand for limestone products, and will likely generate continued development of known deposits and exploration for new resources to supply the increasing regional needs.

CONCLUSION

During the USBM investigation, many previously active mining areas within the Santa Rita Mountains Unit were evaluated. Most of the historical activity had been focused on deposits containing copper, silver, lead, and gold. An assessment of the available data indicates that a porphyry copper deposit, low-grade gold-bearing veins, placer-gold deposits, and limestone deposits occur in the unit.

ASARCO's "Helvetia Deposit" is a porphyry copper deposit within the northern part of the Santa Rita Mountains Unit that reportedly contains identified resources of over 500 million tons of 0.50% copper. Exploration and development of the property will continue. A USBM cost estimating evaluation determined an economic viability for development of the deposit at an 11% rate of return using a market price of $0.81/lb copper and 15% at $0.92/lb.

Mineralized veins containing low-grade gold resources occur in the unit. Although no quantitative estimates were made, the presence of possible economic gold deposits will likely continue to attract prospectors and miners in the future.

Placer gold deposits occur in the Greaterville, Old Baldy, and Tyndall mining districts. Within the unit, an economic placer operation may be possible in the Greaterville district, and Arizora Mining Co. is planning additional exploration to determine if a large-scale operation is feasible.

Escabrosa Limestone is currently being mined in the northern part of the unit by Specialty Minerals, Inc. Reserves have been targeted indicating a 75-year production capability, and additional occurrences of unknown quality have been mapped. Continued growth in the Southwestern United States will likely increase the demand for limestone products and the exploration and development of limestone deposits probably will increase to meet regional needs.

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Table 1.--Summary of mining activity in the Santa Rita Mountains Unit, Coronado National Forest, Arizona.

[(_), numbered references at back; <, less than; >, greater than; cps, count per second; $, dollar (U.S.); ft, foot; in., inch; mi, mile; oz, troy ounce; ppb, part per billion; ppm, part per million; %, percent; lb, pound (mass); st, short ton (2,000 pounds); t, ton as used in historical references, probably short ton; yd³, cubic yard]

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
Helvetia-Rosemont mining district					
Copper minerals were discovered in the Helvetia-Rosemont mining district prior to 1880, but recorded development and production began in the early 1880's. Mineralization was primarily contact pyrometasomatic, and generally formed along faults and contacts in limestone, dolomitic limestone, and quartzite at or near the contact with quartz latite porphyry. Through 1972, an estimated 426,000 tons of ore containing about 17,430 tons Cu, 680 tons Zn, 261 tons Pb, 347,000 oz Ag, and 1,580 oz Au were produced from the district. Minor molybdenum and high-grade tungsten concentrates have also been produced. The deposits were originally worked using underground methods, but some surface and near-surface ore bodies were mined using opencuts and pits beginning in the 1940's. The first significant porphyry copper mineralization was discovered in the 1950's, and continued exploration delineated a porphyry system consisting of four copper deposits estimated to contain identified resources totalling about 500 million tons of copper averaging 0.50% Cu. (1, 2)					
SR 1	Unnamed	NE¼ sec. 36, T. 17 S., R. 15 E.	Historical: USBM: Ag, 0.2 ppm; Au, <5 ppb; Cu, 198 ppm.	Historical: USBM: Adit, 51 ft long.	Sedimentary and metasedimentary rocks near contact with granitic intrusive; sparse malachite.
SR 2-8	Unnamed	N. ctr. sec. 31, T. 17 S., R. 16 E.	Historical: USBM: Ag, <0.2-16 ppm; Au, <5-98 ppb; Cu, 59->10,000 ppm; Mo, 4-1,306 ppm.	Historical: USBM: Adits; 160, 60, 65, and 10 ft long (figs. M-1 and M-2); plus small cuts and pits.	Faults and veins cutting granite. Veins contain blebs, streaks, and zones of quartz, malachite, chrysocolla, and hematite.
SR 9-23	Helena Mine area	S. ctr. sec. 9, NE¼ sec. 16, T. 18 S., R. 16 E.	Historical: Discovered in 1894, "the richer ore ... in ... honeycombed portion of the vein, and 1 to 2 inch "pay streak" ... said to average about $350 to the ton" gold (3). USBM: Helena Mine (SR 14-23): Ag, 0.5-2.8 ppm; Au, <5-2,950 ppb. Prospects to north (SR 9-13): Ag, <0.2-0.4 ppm; Au, <5-430 ppb.	Historical: 500 ft of aggregate workings; main drift, 250 ft long with stoping upward 30 ft or more and a 40 ft deep inclined winze (3). USBM: Helena Mine; adits, 140 and 75 ft long, and an adit, caved at 150 ft, with inclined winze and stoping upward to surface (figs. M-3 and M-4). Prospects to north; caved adit estimated at least 50 ft long, 40-ft-long adit, and surface prospects.	Fissure veins cutting rhyolitic volcanic rock. Veins contain quartz and hematite.
SR 24-31	Unnamed (May have been part of Blue Jay Mine claim group).	NE¼ sec. 11, T. 18 S., R. 15 E.	Historical: USBM: Ag, 0.2-29 ppm; Au, <5-360 ppb; Cu, 6-277 ppm; Pb, 6-9,766 ppm; Zn, 18-2,300 ppm.	Historical: USBM: Three adits, four shafts and several surface prospects aggregating over 300 ft (figs. I-1 and M-5).	Sedimentary and metasedimentary rocks, primarily limestone, near contact with granitic intrusive. Limestone has been intruded by lamprophyric dikes, faulted, and mineralized. Pyrite and chalcopyrite are disseminated in the limestone; hematite occurs as stain, coating, and fracture filling.
SR 32-48	Blue Jay Mine (Good Friday, St. Louis, Cedar Rapids, Blue Eagle, Blue Flag).	W. ctr sec. 12, T. 18 S., R. 15 E.	Historical: Discovered in 1881, at least 12 "carloads" of high grade ore and 250 tons of "good second grade ore" have been produced. Ore averaged at least 100 oz/t Ag and from $4 to $25/t Au (3). Assays from vein as high as $12/t Au and Ag (4). Worked sporadically from 1881-1939, produced about 2,300 tons of ore averaging about 21 oz/t Ag, 1 oz/t Au, and minor Pb (1). Main vein: Au, <0.001-0.055 oz/st; Ag, 0.22-21.66 oz/st. Southwest vein: Au, <0.001-0.565 oz/st; Ag, <0.001-47.36 oz/st (calculated by USBM from claimant's 1980 survey). USBM: Main vein: Ag, 1.6-115.4 ppm; Au, 6-1,080 ppb; Cu, 11-388 ppm; Mo, 2-109 ppm; Pb, 62->10,000 ppm; Zn, 300-22,200 ppm. Southwest vein: Ag, 1.6-250 ppm; Au, 41-1,360 ppb; Cu, 24-426 ppm; Mo, 10-326 ppm; Pb, 256-2,894 ppm; Zn, 680-5,100 ppm.	Historical: Four tunnels, several shafts, drifts, crosscuts, stopes, and winzes aggregating 3,000 ft or more (3). USBM: Workings approximate historical description. Mine is currently being developed by additional drifts and stopes (figs. I-1, M-6, and M-7).	Sedimentary and metasedimentary rocks, primarily limestone, in contact with granitic intrusive. Limestone has been silicified, intruded by lamprophyric dikes, faulted, and mineralized by silver-gold-bearing solutions forming replacement veins. Veins contain pyrite, chalcopyrite, galena and hematite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 49-51	Specialty Minerals, Inc. Quarry (Pfizer, Sabado, Butch, O.S., Santa Rita Limestone Quarry).	SE¼ sec. 11, T. 18 S., R. 15 E.	Historical: Sabado - 1955, stockpile, 300 tons ore "will" average 0.75% WO_3 (5). Marbleized high-calcium limestone mined by Homestake Prod. Co. beginning in 1972. Material used in copper flotation circuits at nearby mills. (6) USBM: Limestone/marble production has continued intermittently to present. Sample assays from adit: W, <2-6 ppm.	Historical: Sabado - three shafts, 30-48 ft deep, adit, 215 ft long, and opencut, 45 ft long (5). USBM: Adit, 215 ft long (figs. I-1 and M-8), was driven beneath the marble quarry, which is currently being developed on the ridge about 200 ft above. The quarry is several hundred feet long, wide, and deep.	Limestone, which has been metamorphosed to varying grades of marble, in contact with quartz monzonite.
SR 52-57	Copper World Mine area (Wisconsin, Flying Dutchman, Black Bess, Exchange, Leader, Copper World, Tally Ho, Black Horse, Owosko, Copper Fend, Omega, Little Dave, Brunswick, Antelope, Baltimore, A. O. T., Pilot, Indian Club, and Isle Royal patented claims).	SW¼ sec. 13, NW¼ sec. 24, T. 18 S., R. 15 E.	Historical: Copper World Mine production, 1899-1911: Cu, 4,250,000 lb; Au, $1,000; and Ag, $20,000 (7). 1899-1916: produced about 42,000 tons of ore averaging better than 5% Cu, about 1 oz/t Ag, and minor Au (1). Leader Mine production: large amount of ore in the early days [1880-1910], averaged 14% Cu (3); a few tons of Mo (7); 13,000 lb of Mo produced (8). 1942: Mining 8-ft-thick ore zone running 12-15% Cu; five cars of ore shipped July 1942; "shipped nearly 300,000 lb Cu in high-grade ore and concentrates". 1946: no production (5). Sporadic production, about 30,000 tons of ore averaging about 6% Cu, 1 oz/t Ag, and minor Au (1). Isle Royal Mine production: 30,000 tons of medium grade ore (3). Sporadic production early 1880's-1912, 30,000 tons of ore averaging about 3% Cu and 1 oz/t Ag (1). Omega Mine production: 2,000 tons of ore prior to 1909 (3); 1883: 500,000 lb Cu (7). USBM: SR 52 (Blackhorse shaft): Ag, 2.2 ppm; Au, <5 ppb; Cu, 4,113 ppm; W, 276 ppm; Zn, 1,600 ppm. SR 53-56 (workings on Copper World and Exchange Claims): Ag, <0.2-11 ppm; Au, <5-15 ppb; Cu, SR 54, 935 ppm, all others >10,000 ppm; Mo, SR 54, 1,660 ppm, all others 12-84 ppm. SR 57 (Leader Mine): Ag, 11 ppm; Au, 26 ppb; Cu, >10,000 ppm.	Historical: Copper World Mine underlies Copper World, Owosko, Brunswick, and Little Dave Claims and was developed by two shafts, 500 and 200 ft deep, and 15,000 ft of workings on six levels (3, 7, 9). Leader Mine underlies Copper Fend, Copper World, and Owosko Claims, and was developed by a shaft and adit and 2,000 ft of workings on at least five levels (3, 7, 8). Black Horse shaft, on Owosko Claim, 100 ft deep with 400 ft of workings (3, 7). Isle Royal Mine underlies Little Dave, Indian Club, and Isle Royal Claims, developed by a shaft 800 ft deep and 4,000 ft of workings on seven levels (3, 7). Omega Mine, shaft and four adits with 2,000 ft of workings (3, 7). Indian Club Claim, 40- and 80-ft-long adits with workings on two or more levels (3). Pilot Claim, shaft, 70 ft deep (3). USBM: Copper World Mine area underground workings are mostly inaccessible. Leader Mine adit had limited access and an adit on the Copper World Claim was open (figs. I-2, M-9, and M-10).	Silicified and marbleized limestone and quartzite at or near contact with monzonite and granite intrusive. Mineralization generally followed silicified fault zones and cross fractures. Ore minerals include chalcopyrite, azurite, malachite, cuprite, chalcanthite and pyrite. Pods, disseminations, streaks, and seams of molybdenite and scheelite also occur. (3, 7, 8)
	King-Exile group (Blue Point, Aceola, Cuprite, Amole, Bonnie Blue, King, Vulture, Exile, Broad Top, and Malachite patented claims).	SE¼ sec. 13, NE¼ sec. 24, T. 18 S., R. 15 E.; NW¼ sec. 19, T. 18 S., R. 16 E.	Historical: 1941-42: produced several thousand tons of hand-sorted ore averaging about 6% Cu (7). 1952: "King in Exile Mine", 33 claims; operating, 50,000 tons of ore "blocked out", 200,000 tons as probable. Ore was hand sorted; about 3 carloads of high-grade (probably better than 8% Cu) were shipped weekly to smelter in Texas, and a small quantity of low-grade ore (about 4% Cu and high in silica) was sent to Hayden, Ariz. smelter. (5) 1955-1959: Produced 125-350 tons of ore per week, 3-10% Cu. Mostly on King and Exile Claims. (5) Early 1900's to 1959, produced over 55,000 tons of ore averaging about 6% Cu, 1 oz/t Ag, and minor Zn and Pb (1). USBM: Not sampled.	Historical: Principal workings are on the King and Exile Claims; adits as long as 150 ft, with winzes and stopes (3). At least 650 ft of workings including five adits with drifts, crosscuts, and stopes (7). (See Fig I-2.) USBM: Not examined.	Silicified limestone and quartzite at or near contact with quartz monzonite porphyry intrusive. Mineralization resulted from contact metamorphism of the monzonite and localized in fracture zones as thick as 12 ft. Chalcopyrite and pyrite are present, as well as malachite, azurite, and cuprite. (3, 7) Sparsely disseminated scheelite, pods of molybdenite, and small pockets of pitchblende (1).

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 58-63	Curtice Mine (Curtis; part of Frijole Claim group).	SW¼ sec. 24, T. 18 S., R. 15 E.	Historical: The ore is reported to average 6% Pb, 8% Cu, and 86 oz/t Ag (3). USBM: Ag, 0.8->300 ppm; Au, <5-220 ppb; Cu, 117-3,321 ppm; Mo, 16-303 ppm; Pb, 40-8,842 ppm; Sb, 10-2,010 ppm. SR 60 also contained 352 ppm Sr.	Historical: Tunnels 70 and 90 ft long, about 50 ft apart, connected by an inclined winze (3). USBM: Adits, 20+, 25, 30, 80+, and 100+ ft; several opencuts and pits. Main workings, 80- and 100-ft-long adits, are caved or backfilled, have at least 100 ft of stopes and drifts, and are connected by a 20-ft-long inclined winze (figs. I-2 and M-11).	Fissure vein, as thick as 15 in., cutting granite. Vein consists of quartz, pyrite, galena, chalcopyrite, argentite(?), azurite, malachite, and hematite.
SR 64-79	Frijole Mine (Silver Spur, Old Frijole, part of Frijole Claim group).	SW¼ sec. 24, T. 18 S., R. 15 E.	Historical: Production, 1880-1889: $40,000 worth of silver ore (3, 10). Some ore in last 18 ft of 648-ft-long adit assayed 0.7-1.5% Cu (5). Produced about 200 tons of ore averaging about 22 oz/t Ag, 1% Cu, and 1% Pb (1). A geochemical exploration and drilling project in 1970 concluded that the monzonite on the claims is not mineralized and that the NW-trending fracture zone north of Hart Butte is the main feeder of mineralization in the Helvetia district (5). USBM: Ag, <0.2->300 ppm; Au, <5-613 ppb; Cu, 11-1,309 ppm; Mo, 3-2,159 ppm; Pb, <2-7,628 ppm; Zn, 34-2,600 ppm; SR 74 also contained 1,750 ppm W.	Historical: Inclined shaft, 100 ft long with levels at 30-ft intervals and a short tunnel (3). Adit, 648 ft long, driven NE in granite toward granite/limestone contact (5). USBM: Two adits, 170 ft and 980 ft, with stopes and interconnecting inclined winze, 60 ft deep; two shallow inclined shafts, 35 ft deep and backfilled at 100 ft deep with 80 ft of drifts; and several small cuts and prospects (figs. I-2 and M-12).	Fissure vein associated with aplite in granite. Vein consists of massive quartz that splays, pinches, and swells to as thick as 2 ft and contains galena, pyrite, chalcopyrite, malachite, limonite, and hematite.
SR 80-82	Alta Claim (patented).	SE¼ sec. 24, T. 18 S., R. 15 E.	Historical: USBM: Ag, <0.2-23 ppm; Au, <5-53 ppb; Cu, 1,699->10,000 ppm.	Historical: 1939: Anaconda Copper Mining Co. conducted diamond drilling (7). USBM: Several cuts and two shafts, 50 ft and 100+ ft deep; old drill pads are visible. (See fig. I-2.)	Mineralized zone (400 x 200 x 150 ft) of brecciated quartz monzonite porphyry and Comanche series [sedimentary and metasedimentary rocks] (7). Exposures are heavily oxidized and contain malachite, chrysocolla, azurite, and hematite.
SR 83-86	Eclipse group (Eclipse, Backbone, and Triangle patented claims).	SE¼ sec. 24, T. 18 S., R. 15 E.	Historical: Assays of ore ranged 9.3-24% Cu, plus 0.5 oz/t Au and Ag (3). Probably produced a few hundred tons of ore prior to 1900 averaging at least 10% Cu and some high-grade Pb-Ag ore (1). USBM: Ag, <0.2-4.4 ppm; Au, 15-20 ppb; Cu, 5,779->10,000 ppm; Mg, 1.34-2.06%; Zn, 220-3600 ppm.	Historical: Shafts, one 150 ft deep with a crosscut at the bottom (3). USBM: Two adits and drifts, 50 ft and over 400 ft long (figs. I-2 and M-13), and several surface prospects, and caved shafts and adits.	Gossan zone with copper and lead carbonates in replacement deposits along fault contact between quartzite and limestone (1). Fault zone breccia contains fragmented metasedimentary rocks with pods, streaks, and blebs of malachite and chrysocolla.
SR 87-92	Narragansett and Daylight Mines (patented claims).	SE¼ sec. 24, NE¼ sec. 25, T. 18 S., R. 15 E.	Historical: 1915-1918: shipped 34,331 tons of ore with net smelter return of $835,860; 1917, yielded 1,611,429 lb Cu; 1918, 13,248 tons of ore shipped averaging 7.01% Cu, 1.15 oz/t Ag (11). 1915-1920: 6 million lb Cu and $40,000 Ag. Reserves on Narragansett Claim negligible; ore continues onto Daylight Claim. (7) 1945-48: considerable prospecting and development in the Daylight Shaft, 8-9 carloads of ore shipped, but no deposit size reported (5). 1958-60: Open pit, produced 60-180 tons per day, averaging 2.5-3.0% Cu and 8-30% lime (5). 1963: Brief operation in open pit, shipped about 50 tons of ore averaging 4% Cu (5). Narragansett Mine worked intermittently, 1870's-1961, produced over 90,000 tons of ore averaging over 4% Cu and 0.5 oz/t Ag. Daylight Mine, 1943-51, produced about 4,000 tons of ore averaging about 5% Cu, 5% Zn, 3% Pb, and 1 oz/t Ag. (1) USBM: Ag, 3.8-28 ppm; Au, 18-430 ppb; Cu, 3,359->10,000 ppm; Mg, 0.29-3.33%; Mn, 1,105-7,045 ppm; Zn, 558->30,000 ppm.	Historical: Mine workings underlie the Narragansett, Olcutt (Triangle), Daylight, and York patented claims. Mine contains 3,000 ft of drifts and crosscuts, 260 ft of inclined winzes, and many stopes (figs. I-2 and M-14). (7, 11) USBM: Mine drifts and crosscuts approximate historical description and map, but there is much more stoping up and down along the vein than was shown in map. Large opencuts near ridgeline above underground workings total over 1,000 ft long and 300 ft wide.	Faulted sedimentary and metasedimentary rocks; limestone has been intensely silicified and is the most heavily mineralized. Deposit is replacement-type and contains malachite, azurite, chalcopyrite, chalcocite, and pyrite. In large opencuts near ridge, ore was found along the contact between limestone and intruding granite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 93-97	Taylor Prospect	E. ctr. sec. 25, T. 18 S., R. 15 E.	Historical: USBM: Ag, 1-120 ppm; Au, 10-36 ppb; Cu, 217-1,875 ppm; Mn, 1,095-5,550 ppm; Pb, 670->10,000 ppm; Sb, 6.2-647.0 ppm.	Historical: USBM: Two adits, 50 and 80 ft long, a 10-ft-long inclined shaft, and prospects (figs. I-2 and M-15).	Fissure vein cutting sedimentary and metasedimentary rocks. Vein contains quartz, malachite, chrysocolla, wulfenite, and limonite.
SR 98-102	Merchant Mine	E. ctr. sec. 25, T. 18 S., R. 15 E.	Historical: USBM: Ag, 0.2->200 ppm; Au, 5-16 ppb; Bi, <2-5,050 ppm; Cu, 43->10,000 ppm; Zn, 330->30,000 ppm; SR 99 also contained 69 ppm Cd, 559 ppm Mo, 4,548 ppm Pb, 40 ppm U, and 319 ppm V.	Historical: USBM: Two open adits, 50 and 200 ft long with inaccessible 75-ft-deep winze leading to a lower level (figs. I-2 and M-16), and one caved adit.	Fissure vein cutting brecciated limestone and arkosic sandstone. Mineralized zone extends as far as 10 in. to either side of fracture. Zone contains chrysocolla, malachite, pyrite, calcite, limonite, and hematite.
SR 103	Unnamed prospect (Central patented claim ?).	SE¼ sec. 25, T. 18 S., R. 15 E.	Historical: USBM: Ag, 78 ppm; Au, 23 ppb; Cu, >10,000 ppm; Zn, 8,500 ppm.	Historical: USBM: Several pits, opencuts, trenches and possibly a caved adit; also a drill hole locality. (See fig. I-2.)	Brecciated arkosic sandstone. Some drusy quartz veins and veinlets; malachite and hematite coating and fracture filling.
SR 104-107	Santa Rita group	SE¼ sec. 25, T. 18 S., R. 15 E.; SW¼ sec. 30, T. 18 S., R. 16 E.	Historical: USBM: Ag, 1.6-20.4 ppm; Au, <5-61 ppb; Cu, 2,514->10,000 ppm; Pb, 52-5,192 ppm; Sc, 11-23 ppm; Zn, 710-5,500 ppm.	Historical: USBM: Shaft, 70 ft deep; trench, 200 ft long, as wide as 60 ft, as deep as 50 ft; two adits, 45 and 140 ft long (figs. I-2 and M-17); several prospect pits.	Brecciated arkosic sandstone and quartzite. Fine-grained disseminated pyrite and chalcopyrite, minor bornite and malachite, and heavy limonite and hematite coating and stain.
	Falls Claim (patented).	E. ctr. sec. 25, T. 18 S., R. 15 E.	Historical: Production 1958-59: some 170 tons of ore averaging about 5% Cu and 0.3 oz/t Ag (1). USBM: Not sampled.	Historical: Short adit and shallow shaft (1). USBM: Not examined.	Faulted and silicified limestone containing irregular lenses of copper-carbonate and -sulfide minerals (1).
	Old Pap Claim (patented).	Ctr. sec. 25, T. 18 S., R. 15 E.	Historical: Production combined with Old Put Claim, late 1800's-early 1900's; some 2,000 tons of ore averaging about 5% Cu (1). USBM: Not sampled.	Historical: Adit, 550 ft long, with 100-ft-long crosscut and winze, and opencut (3). USBM: Not examined.	Faulted, altered, and sheared quartzite and granite. Fault zone is silicified and contains copper carbonates, cuprite, and chrysocolla. (1, 3)
	Old Put Claim (patented).	SW¼ sec. 25, T. 18 S., R. 15 E.	Historical: Production combined with Old Pap Claim, late 1800's-early 1900's; some 2,000 tons of ore averaging about 5% Cu (1). USBM: Not sampled.	Historical: Adit, 65 ft long, with a large stope in area of the face (3). USBM: Not examined.	Faulted, altered, and sheared quartzite and granite. Fault zone is silicified and contains copper carbonates, cuprite, and chrysocolla. (1, 3)
	Franklin, Cushing, and Marion Claims (patented).	S. ctr. sec. 25, N. ctr. sec. 36, T. 18 S., R. 15 E.	Historical: 1944: produced some 150 tons of ore averaging about 4% Cu and 2 oz/t Ag (1). USBM: Not sampled.	Historical: Adits (1). USBM: Not examined.	Faulted, silicified limestone. Small, spotty, irregular deposits of copper carbonates and sulfides. (1)
SR 108	Chicago Claim (patented).	N. ctr. sec. 36, T. 18 S., R. 15 E.	Historical: Production for combined Chicago, Oregon Copper, and Coconino Claims, 1890's: some 3,000 tons of ore averaging 10% Cu and 1 oz/t Ag (1). USBM: Ag, 32 ppm; Au, 130 ppb; Cu, >10,000 ppm; W, 320 ppm; Zn, 1,074 ppm.	Historical: Shaft, 100 ft deep (3). USBM: Inaccessible shafts. (See fig. I-2.)	Fault contact between limestone and granite. Fault zone is mineralized with chalcopyrite, pyrite, malachite, and chrysocolla.
SR 109-110	Last Chance	N. ctr. sec. 36, T. 18 S., R. 15 E.	Historical: USBM: Ag, 1.8 and 73.8 ppm; Au, <5 and 400 ppb; Cu, 464 and >10,000 ppm. SR-109 also contained: 1,994 ppm Bi, >100 ppm Cd, 145 ppm Co, 101 ppm Cr, 4,052 ppm Pb, 2,300 ppm Sb, 25,200 ppm Zn.	Historical: USBM: Adit with connecting inclined shaft, total 130 ft of workings (figs. I-2 and M-18).	Brecciated, partly silicified limestone; minor malachite.
	Coconino Claim (patented).	N. ctr. sec. 36, T. 18 S., R. 15 E.	Historical: Production for combined Chicago, Oregon Copper, and Coconino Claims, 1890's: some 3,000 tons of ore averaging 10% Cu and 1 oz/t Ag (1). USBM: Not sampled.	Historical: Opencuts and caved workings (3). USBM: Opencuts and prospects that could be caved underground workings.	Brecciated and silicified limestone. Limestone has been mineralized with quartz, calcite, cuprite, malachite, azurite, and chrysocolla. (1, 3)

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 111	Oregon Copper Claim (patented).	N. ctr. sec. 36, T. 18 S., R. 15 E.	Historical: Production for combined Chicago, Oregon Copper, and Coconino Claims, 1890's: some 3,000 tons of ore averaging 10% Cu and 1 oz/t Ag (1). USBM: Ag, 10 ppm; Au, 87 ppb; Cu, >10,000 ppm.	Historical: USBM: Two short adits (less than 20 ft long) and several surface prospects. (See fig. I-2.)	Sedimentary rocks with much fracturing, apparently along bedding planes. Malachite coats surfaces, calcite stringers and veinlets fill some fractures, and minor chrysocolla also is present.
	Pickwick Mine (Sweet group).	NE¼ sec. 36, T. 18 S., R. 15 E.	Historical: Late 1910's: produced some 140 tons of ore averaging about 8% Cu and 6 oz/t Ag (1). USBM: Not sampled.	Historical: Shaft with about 160 ft of connecting adit and crosscut (3). Sweet group: 23 claims, 3 patented; shaft, 365 ft deep (11). USBM: Not examined.	Fault contact between limestone and granite. Ore minerals include cuprite, malachite, and azurite. (1, 3)
	Sweet Bye and Bye (Saratoga).	NE¼ sec. 36, T. 18 S., R. 15 E.	Historical: Some 1,500 tons of ore through 1918 averaged about 7% Cu, 3 oz/t Ag, and minor Au (1). USBM: Not sampled.	Historical: Two adits, 118 and 80 ft long, with a connecting 40-ft winze (3). USBM: Not examined.	Fault zones in altered, crushed, and silicified limestone. Zones contain quartz, cuprite, malachite, azurite, and chrysocolla. (1, 3)
SR 112-114	Santa Rita No. 26 (Muheim Grafen group).	NE¼ sec. 36, T. 18 S., R. 15 E.	Historical: Muheim Grafen group: 1918, 11 carloads of ore shipped, averaged 5% Cu and 3.5 oz/t Ag; 1960-61, 3 carloads shipped, averaged 5.5% Cu and 1 oz/t Ag. Ore assay reported by owner (1960): Cu, 3.76%; Ag, 3.7 oz; Fe, 11.2%; Al, 12.0%. (5) USBM: Ag, <0.2-14.8 ppm; Au, <5-19 ppb; Cu, 339->10,000 ppm; Zn, 330->30,000 ppm.	Historical: Muheim Grafen group: shaft, 220 ft deep, 3 opencuts (5). USBM: Adit, 30 ft long; 100-ft-deep shaft; 200-ft-long opencut; and several surface prospects. (See fig. I-2.)	Fault and shear contacts between limestone, granite, and arkosic sandstone. Malachite and azurite fill fractures and coat rock surfaces.
SR 115-117	Unnamed prospects (Muheim Grafen group ?).	S. ctr. sec. 36, T. 18 S., R. 15 E.	Historical: USBM: Ag, 2.0-12.2 ppm; Au, 5-15 ppb; Cu, 117-1,280 ppm; Mn, 1,610-8,965 ppm; Zn, 960->30,000 ppm. Also SR 115: 233 ppm Sr; SR 116: 620 ppm Cd, 89 ppm Co, 1,030 ppm P.	Historical: USBM: Shaft, 20 ft deep, and several pits, trenches, and opencuts as long as 125 ft.	Limestone, dolomite, and other sedimentary and metasedimentary rocks that have been tilted, faulted, fractured, sheared, and altered.
SR 118-121	Goldfish Mine (Gold Fish; Arrastra and Golden Gate groups).	SW¼ sec. 1, T. 19 S., R. 15 E.	Historical: Worked in 1890's, produced Au with minor Pb and Ag (12). USBM: Ag, <0.8-22 ppm; Au, 14->10,000 ppb; Pb, 306->10,000 ppm. SR 121, 1,010 ppm P.	Historical: Opencut and adit, 60 ft long, with 40-ft inclined raise to surface and 70-ft inclined winze (12). USBM: Adit with raise and winze (shaft) as described in historical (fig. M-19).	Fissure vein cutting silicified conglomerate. Vein contains vuggy quartz with sparse chalcanthite.
SR 122-124	Lexington Mine (Arrastra and Golden Gate groups).	SW¼ sec. 1, T. 19 S., R. 15 E.	Historical: Production unknown, probably Au with minor Pb and Ag (12). USBM: Ag, <0.5-4.0 ppm; Au, 450-3,040 ppb; Pb, 714-3,078 ppm. SR 122 and 124 also contained 980 and 910 ppm P, respectively.	Historical: Opencuts, adit, and inclined shaft (12). USBM: Flooded shaft, opencuts, and prospects (caved adit ?).	Fissure vein cutting sedimentary and metasedimentary rocks near contact with granite. Vein contains quartz, pyrite, and hematite.
SR 125	Unnamed prospect (Arrastra and Golden Gate groups).	NW¼ sec. 12, T. 19 S., R. 15 E.	Historical: USBM: Ag, 7 ppm; Au, 9,290 ppb; Pb, 2,668 ppm; Zn, 2,858 ppm.	Historical: USBM: Inclined shaft, flooded at 30 ft deep.	Quartz fissure vein cutting metasedimentary rock.
SR 126-130	Golden Gate Mine (AMERCO; Arrastra and Golden Gate groups).	NE¼ sec. 12, T. 19 S., R. 15 E.	Historical: 1880's-1969: worked sporadically producing some 200 tons of ore averaged about 1 oz/t Au, 3 oz/t Ag, 4% Pb, and minor Zn and Cu (1). USBM: Ag, <0.5-20 ppm; Au, 14-2,390 ppb; Cu, 24-410 ppm; Mn, 610-3,300 ppm; Pb, 152->10,000 ppm; Zn, 260-3,544 ppm.	Historical: Inclined shaft, 40 ft deep, with a 20-ft-long crosscut at bottom (3). Adits, 500 ft long and 200 ft long with 50-ft winze; 80-ft-deep shaft; and several 10- to 20-ft-deep inclined shafts and opencuts (5). Adits on two levels, upper is 500 ft including drifts and crosscuts, lower is caved and water-filled (12). USBM: Lower adit, caved at 80 ft; upper adit, flooded; and three inclined shafts, 20 to over 50 ft deep.	Fissure vein and replacement mineralization along shear contact between limestone and other sedimentary and metasedimentary rock units. The mineralized zones contain quartz, galena, malachite, and azurite. (1, 3, 12)

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
Greaterville mining district					
The Greaterville mining district includes both lode and placer gold deposits that were discovered in about 1874. Lode gold occurs primarily in hydrothermal quartz-calcite veins that fill fracture, breccia, fault, and shear zones in sedimentary, metasedimentary, and intrusive host rocks. Placer gold deposits, derived by erosion of the lode occurrences, occur in both present stream drainages and past channels, some of which now form benches, ridges, and terraces. Production has been estimated at about 28,500 oz Au and 6,000 oz Ag from placer deposits and some 2,000 tons of ore containing about 20 tons Cu, 170 tons Pb, 16 tons Zn, 390 oz Au, and 12,660 oz Ag from lode deposits. Production estimates range from $500,000 to $7 million, mostly prior to 1900. (1, 3, 13, 14)					
SR 131-135	Wisconsin Mine (Buckhorn).	E. ctr. sec. 14, T. 19 S., R. 15 E.	Historical: Worked in late 1880's and 1936-37, producing a small tonnage of Au-Ag-Pb-Cu ore (1). USBM: Ag, 5-250 ppm; Au, <5-706 ppb; Cr, 390-780 ppm; Cu, 85-1,020 ppm; Pb, 248-7,858 ppm. Also SR 131: 8,035 ppm Mn; SR 132: 633 ppm Sb; SR 134: 751 ppm Sr.	Historical: Shallow shafts and tunnel (1). USBM: Adit, 50 ft long with stope to surface, and several shafts (about 20 ft deep) and surface prospects.	Fissure and stockwork quartz vein cutting granite. Vein is massive to splaying stringers of quartz, heavily iron-oxide stained, with chalcopyrite, pyrite, and galena.
SR 136-138	Plata Cascabel	S. ctr. sec. 14, T. 19 S., R. 15 E.	Historical: USBM: Ag, 11-300 ppm; Au, 9-739 ppb; Cr, 670-790 ppm; Cu, 268-4,180 ppm; Pb, 496-6,366 ppm; Sb, 49-959 ppm; Zn, 300-4,800 ppm.	Historical: USBM: Adit, 80 ft long with raise to surface (fig. M-20); shaft; and adit (locked gate at portal) with connecting shaft.	Quartz vein cutting granite. Vein is as thick as 2 ft and contains pyrite, galena, malachite, and hematite.
SR 139	Hancock Mine	SE¼ sec. 14, T. 19 S., R. 15 E.	Historical: Worked in 1885; shipped small amount of high-grade Pb-Ag ore (3). USBM: Ag, 270 ppm; Au, 260 ppb; Bi, 222 ppm; Cr, 800 ppm; Cu, 1,115 ppm; Pb, 9,220 ppm; Zn, 630 ppm.	Historical: Shaft, 100 ft deep (3). USBM: Shaft, flooded at 15 ft deep.	Quartz vein cutting granite. Vein is vuggy and contains pyrite, galena, limonite, and hematite.
SR 140-142	Unnamed prospects	SW¼ sec. 14, SE¼ sec. 15, T. 19 S., R. 15 E.	Historical: USBM: Ag, 43->300 ppm; Au, 13-320 ppb; Cu, 73-2,316 ppm; Pb, 662->10,000 ppm; Zn, 560->10,000 ppm.	Historical: USBM: Two shafts (one flooded, the other caved), and several surface prospects.	Fissure vein cutting granite. Vein contains quartz, galena, pyrite, chalcopyrite, malachite, and hematite.
SR 143-147	Mountain King Mine area (patented) (Enzenberg, Silver Butte ?).	NW¼ sec. 23, T. 19 S., R. 15 E.	Historical: Late 1800's: small tonnage of high-grade Pb-Ag ore shipped (1). USBM: Ag, 1-48 ppm; Au, <5-22 ppb; Cu, 11-1,313 ppm; Mn, 520-5,365 ppm; Pb, 70-1,652 ppm; Zn, 210-1,300 ppm.	Historical: Tunnel, 65 ft long (3). USBM: Adit, 85 ft long (fig. M-21), and shallow (20 ft) inclined shaft SW of adit.	Fissure vein cutting metasedimentary rock (quartzite ?) near contact with granite. Vein is associated with rhyolite dike that has intruded both country rocks. Vein pinches and swells, and contains quartz, galena, pyrite, and malachite.
SR 148-150	Summit Mine	S. ctr. sec. 22, T. 19 S., R. 15 E.	Historical: USBM: Ag, 31-120 ppm; Au, 15-34 ppb; Cu, 178-671 ppm; Pb, 1,112-3,700 ppm.	Historical: Inclined shaft (3). USBM: Inclined shaft, 40 ft deep, with 20-ft-long drift (fig. M-22), and several opencuts and pits.	Quartz vein cutting granite. Vein pinches and swells and contains galena, chalcopyrite, malachite, and azurite.
	Hughes Mine	S½ sec. 22 (?), T. 19 S., R. 15 E.	Historical: Worked in mid-1880's, averaged about $100/t Ag and Au (3). USBM: Not sampled.	Historical: Shaft, 45 ft deep (3). USBM: Not examined.	Quartz vein, 6 ft thick, cutting granite; lean sulfides, Ag- and Au-bearing (3).
SR 151	Friez Prospect (Gold Bug).	W. ctr. sec. 23, T. 19 S., R. 15 E.	Historical: USBM: Ag, 2 ppm; Au, <5 ppb; Cu, 102 ppm; Pb, 42 ppm.	Historical: USBM: Flooded shaft and an opencut. (See fig. I-3.)	Stockwork of quartz veins and veinlets cutting granite. Sparse fine-grained pyrite is also present.
SR 152-153	Unnamed prospect	SE¼ sec. 23, T. 19 S., R. 15 E.	Historical: USBM: Ag, 27-136 ppm; Au, <5-<21 ppb; Cu, 729-1,012 ppm; Mn, 415-1,135 ppm; Pb, 1,178-2,122 ppm.	Historical: USBM: Adit, 42 ft long. (See fig. I-3.)	Sheared and faulted sedimentary and metasedimentary rocks, with quartz vein. Vein contains iron-oxide lined vugs and sparse malachite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 154-158	Keith Claims	S. ctr. sec. 23, T. 19 S., R. 15 E.	Historical: USBM: Ag, 2-200 ppm; Au, 14-43 ppb; Cu, 333-4,443 ppm; Mn, 690-3,660 ppm; Pb, 18-976 ppm; Zn, 570-6,200 ppm.	Historical: USBM: Two adits, 90 and 110 ft long with a connecting 35-ft-deep inclined shaft (figs. I-3 and M-23).	Fissure vein and quartz veins cutting sedimentary and metasedimentary rocks. Veins contains quartz, pyrite, chalcopyrite, malachite, and galena.
SR 159	Yuba Mine	S. ctr. sec. 23, T. 19 S., R. 15 E.	Historical: Early 1874, mine operated in small way; shipped ore netted $90/t (15). Ores averaged $1/lb in Au and Ag; total production is several thousand dollars (3). Produced some 50 or more tons of high-grade Pb-Ag-Au ore (1). USBM: Ag, >300 ppm; Au, 140 ppb; Ba, >20,000 ppm; Cu, 1,219 ppm; Pb, >10,000 ppm; Sb, 1,250 ppm; Sr, 475 ppm.	Historical: Four shafts, deepest is 100 ft, and surface stripping (3). USBM: Area has several pits, trenches, bulldozer cuts, and flooded shafts. One shaft was open to 25 ft deep and drifts could be seen at bottom. (See fig. I-3.)	Quartz-barite veins along a fault zone cutting sheared granite. Veins contain galena, chalcopyrite, and malachite. Small pockets of argentite also were reported (1).
SR 160-169	Gold Ledge (Keith group)	S. ctr. sec. 23, T. 19 S., R. 15 E.	Historical: Two samples taken in 1959 assayed 7.02 and 2.00 oz/t Au (16). USBM: Ag, 1-54 ppm; Au, <5-2,490 ppb; Cu, 88-510 ppm; Mn, 440-2,290 ppm; Pb, 42-5,086 ppm; Zn, 420-2800 ppm. Also SR 169: 1,530 ppm W.	Historical: Two adits connected by a crosscut about 75 ft in from portals (16). USBM: Three adits on two levels, all interconnected by crosscuts and winzes or raises, totalling at least 500 ft of workings (figs. I-3 and M-24); several inaccessible adits, and an opencut.	Sedimentary and metasedimentary rocks intruded by latite(?) dikes, faulted, and mineralized by silica-rich solutions. Host rock has been silicified and quartz veins and veinlets formed in fractures and faults. Fine-grained pyrite is present in the quartz and disseminated into the host rock.
SR 170-172	Quebec Mine	NE¼ sec. 26, T. 19 S., R. 15 E.	Historical: Ore shipped in 1880's said to average 100 oz Ag and a little Au per ton (3). 1880's-1940: worked sporadically producing small tonnage of Pb-Ag ore with minor Au and Cu (1). USBM: Ag, 142-170 ppm; Au, <14-<32 ppb; Ba, 7,000->20,000 ppm; Cu, 362-1,075 ppm; Pb, 3,026-9,974 ppm; Sb, 363-922 ppm; Zn, 410-984 ppm.	Historical: Workings consist of a 50-ft shaft and 100-ft tunnel with a 50-ft raise to the surface and a 20-ft winze to a 50-ft drift with a 25-ft winze at the end of the drift (3). USBM: Two inclined shafts with at least 150 ft of crosscuts and drifts (figs. I-3 and M-25).	Fissure vein along quartz latite stock cutting sedimentary and metasedimentary rock units. Fissure contains quartz-calcite-barite vein that pinches and swells to at least 15 in. thick, with pyrite, galena, chalcopyrite, malachite, and hematite.
SR 173-182	Gold Buck	NW¼ sec. 25, T. 19 S., R. 15 E.	Historical: USBM: Ag, <1-72 ppm; Au, <5-270 ppb; Cu, 122-2,948 ppm; Mn, 585-2,110 ppm; Pb, 4-5,736 ppm; Zn, 118-5,068 ppm; also SR 182, 632 ppm Mo.	Historical: USBM: Adit, with at least 415 ft of drifts and crosscuts (figs. I-3 and M-26) and two caved workings that may have been connected; an additional 30-ft-long adit (SR 182) is to the NE.	Shear cutting sedimentary and meta-sedimentary rocks near quartz latite. Rocks have been faulted, silicified, and veined. Fractures contain iron-stained gouge with quartz veinlets and veins at least 1 ft thick and galena, pyrite, and malachite.
SR 183-185	Unnamed prospects	NW¼ sec. 25, T. 19 S., R. 15 E.	Historical: USBM: Ag, 10->200 ppm; Au, 100-743 ppb; Cu, 255-4,225 ppm; Mo, 33-1,442 ppm; Pb, 192->10,000 ppm; Zn, 510-2,300 ppm; also SR 184, 700 ppm W.	Historical: USBM: Caved adit and prospect pits. (See fig. I-3.)	Fissure vein (?) cutting sedimentary and metasedimentary rocks and quartz latite stock. Vein contains quartz with sparse specks of secondary copper minerals and hematite.
SR 186-190	Silver Leaf	NW¼ sec. 25, T. 19 S., R. 15 E.	Historical: USBM: Ag, 37-175 ppm; Au, 791->10,000 ppb; Cu, 1,023-3,714 ppm; Mo, 71-2,173 ppm; Pb, 7,458->10,000 ppm; Zn, 510-3,100 ppm.	Historical: USBM: Inclined shaft, 25 ft deep; adits, 80 and 22 ft long; and several surface prospects. (See fig. I-3.)	Quartz veins cutting quartz latite stock. Veins pinch and swell to at least 1.5 ft thick, have limonite- and hematite-lined vugs, and contain minor malachite coating.
SR 191-192	Zeckendorf Mine	N. ctr. sec. 25, T. 19 S., R. 15 E.	Historical: USBM: Ag, 77 & 230 ppm; Au, 72 & 120 ppb; Cd, 100 & 120 ppm; Cr, 590 & 650 ppm; Cu, 2,533 & 3,003 ppm; Pb, both >10,000 ppm; Zn, 19,000 & 20,400 ppm; also SR 191, 279 ppm W.	Historical: Inclined shaft, about 100 ft deep with two short stopes (17). USBM: Inclined shaft, at least 100 ft deep (figs. I-3 and M-27) and several surface prospects.	Massive quartz vein cutting quartz latite stock. Vein splays, pinches, and swells to at least 2 ft thick. Pyrite, galena, and chalcopyrite are present in the vein and very fine-grained pyrite is also disseminated into the adjacent country rock.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 193-198	Comstock group (Apex, Fulton).	N. ctr. sec. 25, T. 19 S., R. 15 E.	Historical: Late 1800's-1940: prospected and worked intermittently, produced some 100 tons of ore averaging about 30% Pb, 5% Cu, 15 oz/t Ag, and 0.3 oz/t Au (1). USBM: Ag, 17-171 ppm; As, 504-2,230 ppm; Au, 350-3,310 ppb; Cr, 110-570 ppm; Cu, 476-2,343 ppm; Mn, 830-2,470 ppm; Mo, 8-1,805 ppm; Pb, 3,834->10,000 ppm; W, 70-450 ppm; Zn, 1,300-13,000 ppm.	Historical: Fulton; 60-ft and 100-ft shafts (3). USBM: Adit (Apex), totalling 150 ft with drifts (figs. I-3 and M-28); caved or backfilled shaft (Fulton); and several less than 25-ft-long or -deep adits, shafts, cuts, and prospect pits.	Fissure veins cutting sedimentary and metasedimentary rocks near contact with quartz latite stock. Veins contain quartz that splits, splays, and thickens to at least 8 in. with hematite- and limonite-lined vugs and fractures, galena, and minor malachite.
SR 199-201	Old Tucson Mine area	NE¼ sec. 25, T. 19 S., R. 15 E.	Historical: Old Tucson shaft: dump grab sample of vein material assayed 3.47 oz Ag, sample of same vein taken at 20 ft deep in shaft, assayed 9.7 oz Ag; Au was negligible in both samples (17). USBM: Ag, <5->300 ppm; Au, <5-18 ppb; Cu, 33-1,577 ppm, Mg, 1.25%-2.60%; Mn, 1,245-1,665 ppm; Pb, 194->10,000 ppm; Sr, 55-728 ppm; Zn, 1,100-17,000 ppm; also SR 201, >20,000 ppm Ba, 190 ppm Cd, 1,190 ppm Sb, 530 ppm W.	Historical: Old Tucson shaft: 12 ft deep vertical, then inclined 20° for 60 ft, then another 12 ft vertical (17). USBM: Shaft (Old Tucson), covered and inaccessible, dump material suggests over 50 ft deep; adit, 40 ft long; and shaft, 10 ft deep. (See fig. I-3.)	Fissure veins cutting sedimentary and metasedimentary rocks. Veins contain galena, pyrite, and malachite.
SR 202-204	Morning Star Mine (St. Louis, Isabel).	S. ctr. sec. 24, N. ctr. sec. 25, T. 19 S., R. 15 E.	Historical: 1875-1946: sporadic production, 300+ tons of ore averaging about 6% Pb, 7% Zn, 11 oz/t Ag, 0.5 oz/t Au, and 1% Cu (1). 1886: shipped ore said to average 40% Pb, 75 oz/t Ag, and 12 oz/t Au (3). 1900-1910: sorted ore, about $800/t in Au, Ag, and Pb; 1945: sample from stope in 100-ft level, 0.42 oz/t Au, 5.00 oz/t Ag, 1.31% Cu, 8.36% Pb, and 19.48% Zn (5). 1922: 30-in. sample from 90-ft level assayed $2.80 Au, 16.9 oz Ag, 2.2% Cu, 41.2% Pb, 12.1% Zn (11). Ore shipments, total no more than 250 tons (17). USBM: Ag, 2-23 ppm; Au, 56-3,600 ppb; Cu, 375-2,277 ppm; Mn, 745-3,495 ppm; Pb, 346-4,598 ppm; Zn, 1,144-5,204 ppm.	Historical: 1886: 75-ft shaft and drifts (3). 1918: inclined shaft, 225 ft deep with over 600 ft of drifting at 225-ft level (5). Inclined shaft, 256 ft deep, with about 700 ft of drifts, raises, and stopes (17). (See fig. I-3.) USBM: Underground was inaccessible; surface examined only.	Discontinuous, pinching and swelling (generally less than 1 ft thick, but as thick as 2 ft), subparallel veins, mostly of quartz, occur as replacement and open-space filling along bedding planes in a sequence of sedimentary and metasedimentary rock units. Veins contain pyrite, galena, sphalerite, and chalcopyrite, with minor amounts of gold and silver and sparse molybdenum. Pyrite is also disseminated along veins into wall rock. (17)
	Greaterville placers (primarily Ophir, Louisiana, Sucker, Kentucky, and Boston Gulches, and their tributaries; see fig. 3).	SE¼ sec. 23, S½ sec. 24, all sec. 25, NE¼ sec. 26, T. 19 S., R. 15 E. S½ sec. 17-19, all sec. 29-30, N½ sec. 31-33, T. 19 S., R. 16 E.	Historical: Main operations, 1875-early 1900's; small, sporadic operations since. Estimated production: not less than 29,000 oz Au and 6,000 oz Ag. (1) Total production of the camp amounted to about $7,000,000 (3). Most recent activity (1948); 535 oz gold, averaging 0.006 oz/yd³ mined from Louisiana Gulch (14). Less than $1,000,000 total production (17). Over $73,000 in production from Greaterville placers between 1874 and 1927 (18). USBM: Not sampled.	Historical: Development was mainly by hand-dug methods, but hydraulic mining and dredging also took place (17). USBM: Many small pits and shallow shafts, as well as larger cuts and trenches are visible. The area has been worked and reworked many times and workings and prospects range from very old and totally caved to freshly dug pits.	Auriferous gravel derived from altered gold-bearing intrusive, sedimentary, and metasedimentary rocks to the west, deposited in present drainages. Older gravels, which occur on ridges above the present-day drainages, are also gold-bearing. (1, 3, 13, 15)
SR 205-210	Royal Mountain Mine	SE¼ sec. 26, T. 19 S., R. 15 E.	Historical: USBM: Ag, 22->200 ppm; Au, <5-519 ppb; Cu, 273-1,594 ppm; Pb, 1,030-7,044 ppm; Zn, 790-12,000 ppm.	Historical: Crosscut tunnel, 75 ft long; two 80-ft shafts and drifts (3). Three adits, three shafts, and three pits (19). USBM: Several inclined shafts at least 45 ft deep and connecting crosscuts; two adits, caved or backfilled at about 40 ft; and several pits. (See fig. I-3.)	NW-striking, SW-dipping fissure vein or veins cutting granite near contact with sedimentary and metasedimentary rocks. Veins contain quartz, barite, pyrite, galena, chalcopyrite, and malachite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 211-215	Unnamed	NW¼ sec. 28, T. 19 S., R. 15 E.	Historical: USBM: Ag, <1-1 ppm; Au, all <5 ppb; Cu, 4-17 ppm; Mo, <1-1 ppm; Pb, 24-78 ppm; Zn, 36-82 ppm.	Historical: USBM: Adit, 550 ft long (fig. M-29).	NW-striking, SW-dipping fault zone contact between limestone and quartz monzonite intrusive. Limestone is silicified and partly marbleized. No mineralized zones noted.
SR 216-217	Unnamed	NW¼ sec. 20, T. 19 S., R. 15 E.	Historical: USBM: Ag, 1-8 ppm; Au, 7-22 ppb; Sc, 25-27 ppm; also SR 216, 130 ppm Ce, 750 ppm Cr, and SR 217, 666 ppm Bi.	Historical: USBM: Adit, 11 ft long, and opencut.	Shear zone cutting granite and pegmatite.
SR 218-224	Unnamed (May have been part of Florida Mine group in Old Baldy district).	SE¼ sec. 29, T. 19 S., R. 15 E.	Historical: USBM: Ag, 1-140 ppm; As, 12-5,548 ppm; Au, 9-5,160 ppb; Cu, 24-3,551 ppm; Pb, 762->10,000 ppm; Zn, 1,700-19,000 ppm; also SR 222, 100 ppm Ce; and SR 223, 130 ppm Cd.	Historical: USBM: Two adits, 185 and 70 ft long, and flooded shaft (fig. M-30). Also a caved adit to SE. over the ridge along strike of fault zone.	NW-striking, NE-dipping fault zone cutting andesite. Shear zone contains galena, pyrite, and malachite.
SR 225-228	Aliso Springs Prospect (Santa Rita, El Rey, Aliso, Eliso).	S. ctr. 34 sec., T. 19 S., R. 15 E.	Historical: No recorded production. Past sample assays from prospects: Au, trace to 0.910 oz/t (dump sample assaying 8.55 oz/t Au also reported); Ag, <0.006-1.77 oz/t. (5) USBM: Ag, 0.6-64 ppm; Au, 10-4,080 ppb.	Historical: Shafts, 40 and 60 ft deep; adit, 135 ft long, with 20-ft raise. Adit, 97 ft long, with 45-ft raise to surface; two shafts, each 50 ft deep; and an old 125-ft-deep shaft that has been backfilled (5). USBM: Two adits, 20 ft long and caved at 40 ft; Bulldozer cut, 120 ft long; and a flooded shaft.	NE-striking, nearly vertical fault zones cutting pebble conglomerate. Sparse quartz veinlets and minor iron oxide.
SR 229-249	Snyder Mine (Conglomerate, Anderson, A.W.A., Aurum, Silver Moon, Reese, Colossa, Sonoita).	S. ctr. sec. 36, T. 19 S., R. 15 E.	Historical: Early 1900's-1955: worked sporadically producing some 1,000 tons of ore averaging about 10% Pb, 8 oz/t Ag, minor Cu and Au (1). Shipped 19 tons of galena that assayed 68% Pb and 54 oz/t Ag (3). Assays for four samples taken in underground workings: Ag, 0.4-24.1 oz/t; Au, 0.02-0.22 oz/t; Pb, 8.5%-50.0%. Assays for five samples taken from surface prospects: Ag, 0.3-0.4 oz/t (4 samples), 5.7 oz/t (1 sample); Au, trace-0.06 oz/t; Pb, trace-0.3% (4 samples), 2.1% (1 sample). (5) USBM: Ag, <1-73 ppm; Au, 12-3,170 ppb; Cu, 14-2,227 ppm; Mn, 260->10,000 ppm; Pb, 40->10,000 ppm; Sr, 7-380 ppm; Zn, 50-14,000 ppm.	Historical: Shaft, 50 ft deep (3). Shaft, 340 ft deep, with connecting 200-ft-long crosscut adit and 1,000 ft of drifts, stopes, and winzes; plus three other adits, 140, 140, and 250 ft long. (5) USBM: Seven shafts: 12, 50, 55, and 65 ft deep; flooded at over 100 ft deep; and caved at 20 and 3 ft deep. Five adits; 25, 30, 140, 250, and 330 ft long. Also many small prospect pits, trenches and cuts. (See figs. I-4 and M-31 to M-34.)	Primary mineralized zone is NW-striking, nearly vertical fault zone along contact of granite and limestone. Conjugate(?) faults striking NE have also been mineralized. The primary fault zone is heavily brecciated and silicified, and contains quartz and calcite veinlets with spotty galena. Cerussite and anglesite have also been reported (3, 5).
SR 250-254	Billey Sunday Prospect.	W. ctr. sec. 6, T. 20 S., R. 16 E.	Historical: USBM: Ag, <5->300 ppm; Au, 13-1,560 ppb; Cu, 12-1,371 ppm; Mn, 305-7,630 ppm; Mo, 2-691 ppm; Pb, 80->10,000 ppm; Sb, 14-4,224 ppm; Zn, 80->10,000 ppm. (Some assays had interference due to high Sb, As, and Zn concentrations.)	Historical: USBM: Several inclined shafts to at least 75 ft deep containing many interconnecting drifts and stopes; also many surface prospects (fig. M-35).	Several crosscutting shear and fault zones cutting limestone and quartzite. Primarily, the zones contain heavily oxidized gouge material.
	Onyx Cave (Cave Hill deposit).	SW¼ sec. 1, T. 20 S., R. 15 E.	Historical: Minor operations in early 1900's produced a few blocks of onyx marble (travertine) (20). USBM: Not sampled.	Historical: USBM: Cave closed with locked gate.	Solution cave in faulted limestone containing travertine (20).

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 255-258	Sweet Water group (Last Chance, Lonesome One, Jewell).	NE¼ sec. 10, T. 20 S., R. 15 E.	Historical: 1962: shipped one carload of ore (5). *Forest Service examination (1965): two samples* from adit on Sweet Water B and Lonesome One Claims (adit shown in fig. M-37) assayed: Ag, 0.8-2.7 oz/t; Au, trace and nil; Cu, 0.7%-3.5%, Pb, trace. Two samples taken across shear at portal of an inaccessible adit on Last Chance A Claim assayed: Ag, 6.0-8.0 oz/t; Au, trace; Cu, 0.9%-2.3%; Pb, trace. (21) 1963: shipped some 90 tons of ore averaging about 1.5% Cu and 0.8 oz/t Ag (20). USBM: Ag, 2.6-44.8 ppm; Au, all <64 ppb; Cu, 587->10,000 ppm; Pb, 194-872 ppm; Sb, 44.3-900 ppm; Zn, 550-3,200 ppm.	Historical: Two adits, one inaccessible and the other 116 ft long with 46 ft of drifts and a 21-ft raise to the surface (21). USBM: Adit, 120 ft long, with 40 ft of drifts and 20-ft deep connecting shaft (fig. M-36). Area where inaccessible adit was located has been bulldozed and partly reclaimed.	Andesitic(?) dike intruded volcanic breccia, and both have been faulted and sheared. The rocks have been heavily silicified and contain chalcopyrite, azurite, and malachite.
	Pomona Mine (Red Berry and Hidden Tunnel).	E. ctr. and SE¼ sec. 10, T. 20 S., R. 15 E.	Historical: 1947: shipped some 1,240 tons of ore averaging about 0.8% Cu, 2.5 oz/t Ag, and trace Au (20). Sampling reported to have shown 3% Cu and 17 oz/t Ag (5). USBM: Not sampled.	Historical: Adit, over 270 ft long (fig M-37) (5). Shallow shaft (20). USBM: Not examined.	Fault zone cutting sedimentary and volcanic rocks. Zone contains argentiferous copper mineralization (20).
SR 259-270	Rock Candy Mountain Mine area.	NE¼ sec. 8, N½ sec. 9, T. 20 S., R. 15 E.	Historical: 1933-1955: worked intermittently, producing some 125 tons of ore averaging about 6% Cu, 22 oz/t Ag, minor Pb and Au (20). USBM: Ag, 1.8->300 ppm; Au, <5-2,310 ppb; Cu, 149->10,000 ppm; Mn, 1,415->10,000 ppm; Pb, 18->10,000 ppm; Zn, 42-23,100 ppm.	Historical: Shaft and tunnel, aggregating 240 ft of workings (5, 20). USBM: Adits, several aggregating over 400 ft long plus over 100 ft of stopes, and several caved; shafts, one 45 ft deep and several caved or flooded; and many small pits and opencuts (figs. M-38 and M-39).	Main workings are cut on or near sheared contact between diorite intrusive and volcanic breccia; other workings expose other faults cutting both diorite and breccia. Shear and fault zones contain chalcopyrite, malachite, azurite, and pyrite.
Old Baldy mining district					
Copper and gold were discovered in the Old Baldy mining district in the late 1870's or earlier, but there has been no major recorded production. Mineralization occurred primarily along quartz veins or in shear and fault zones in intrusive and volcanic rocks. (3, 20)					
SR 271	Florida Mine area (Copper King, Invincible; may also have included Unnamed workings at SR 218-224, listed under Greaterville district).	SW¼ sec. 29, N½ sec. 32, T. 19 S., R. 15 E.	Historical: Ore contains a considerable amount of copper and about 60 oz/t Ag. Average assays for vein, 3%-12% Cu and 20-25 oz/t Ag. (3) 1914: *Assays for several samples from the Florida group:* Ag, 17.70-59.00 oz/t; Au, trace-0.73 oz/t; Cu, 8%-26%. 2,500-lb sample assayed 21.00 oz/t Ag and 10% Cu. (5) USBM: Ag, <1 ppm; Au, <5 ppb; Cu, 26 ppm; Pb, 54 ppm; Zn, 58 ppm.	Historical: Several 50- to 100-ft-long tunnels and shallow shafts aggregating about 500 ft (3). USBM: Only one caved adit found; Florida Mine is not *located where shown on USGS Mt. Wrightson 7.5* Min. Quad.	NW-striking fault or shear zone cutting rhyolite, andesite, and latite volcanic rocks. The zone contains azurite, malachite, chalcopyrite, cuprite, and pyrite. (3)
SR 272-273	Star Pointer Mine	NW¼ sec. 19, T. 19 S., R. 15 E.	Historical: USBM: Ag, 33-63 ppm; Au, 230-460 ppb; Cu, 4,333->10,000 ppm.	Historical: Principal working is 100-ft-deep shaft, inclined 85° SW (3). Shafts, 80 and 30 ft deep (5). USBM: Two shafts, 20 and 25 ft deep, and a couple of shallow pits.	NW-striking shear zone cutting quartzitic metasediment and silicified rhyolite. Zone contains malachite and azurite. Chalcocite, bornite, and chalcopyrite have also been reported (3).

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 274-277	*Jackson group* (Jackson Mine, Old Hickory, Iron Mask, Decatur, La Rosa, and others; Part of McCleary and Parker Bros. properties).	SE¼ sec. 24, NE¼ sec. 25, T. 19 S., R. 14 E.	Historical: *Intermittent production of picked ore:* 200 tons at 9% Cu and 3 oz/t Ag, primarily 1915-1919 (1). Sample across an ore shoot about 20 ft down in shaft assayed 30.6% Cu, 9 oz/t Ag, and trace Au (3). 1915-1960: 17-st shipment of ore paid on 17% Cu (22). Various estimates for one ore lens mined out, 15 to 50 tons averaging 16% Cu. About 1915-17, test car of 31 tons of ore yielded $1,361.98 (Cu was 15.5¢/lb, indicates ~14% Cu). (5) 1973: 16-lb grab sample from dump of Jackson shaft assayed: 0.270 oz/t Au, 0.85 oz/t Ag, 0.93% Cu, 1,430 ppm Mo. Also a 15.5-lb grab sample from the dump of the Decatur opencut assayed: 0.200 oz/t Au, 0.10 oz/t Ag, 0.46% Cu, 1,450 ppm Mo. (21) USBM: Ag, 1-10 ppm; Au, 5-85 ppb; Cu, 796-5,815 ppm; Mo, 32-1,064 ppm; W, 20-314 ppm. SR 277 (Jackson Mine dump) also contained: 910 ppm Ce; 10.96% Fe; 588 ppm La; 1.42% Mg; 1,130 ppm Mn; 1,110 ppm P; 115 ppm V.	Historical: 1914: Jackson shaft, 80 ft deep, and Iron Mask shaft, 30 ft deep (5). Shaft, 100 ft deep, and a tunnel about 100 ft below and to the north of the shaft (3). Jackson shaft, 190 ft deep in Nov. 1918 (11). 1915-1960: shaft depth increased from 100 to 210 ft (22). 1954: shaft, 210 ft deep, bottom 30 ft caved; 160 ft of drifting on 40-ft level, 600 ft of drifting on 90-ft level plus about 90 ft of crosscuts, 50 ft of drifting on 140-ft level, and 50 ft of drifting on 160-ft level (5). USBM: Jackson shaft, flooded at about 50 ft deep; shaft, flooded at 2 ft deep, and several surface prospects on Big Jim Claim; and 30-ft-long opencut on Decatur Claim. Localities of other workings in claim group were unknown at time of field work and were not examined.	Several parallel to subparallel, NE-striking (almost E/W), nearly vertical fissure veins and stockworks cutting granodiorite and quartz monzonite. Veins contain quartz, magnetite, chalcopyrite, pyrite, bornite, and chalcocite. Many ore occurrences in the Jackson Mine were found in elliptical-shaped diabase lenses in the shear zone. The lenses were reported to average 20 ft in length, 10 ft in width, and 3-4 ft in diameter. (3, 5, 22)
	Upper and Great Western (Central) groups (Part of McCleary and Parker Bros. properties).	W½ sec. 31, T. 19 S., R. 15 E.	Historical: USBM: Not sampled.	Historical: A few scattered prospects (3). Short tunnel on Birthday vein and several opencuts (5). USBM: Not examined.	Several parallel to subparallel, NE-striking (~E/W), nearly vertical fissure veins cutting granodiorite and a rhyolite porphyry dike. Veins contain quartz, magnetite, chalcopyrite, and pyrite. (3, 5)
SR 278	Sun Lode Claim group (*Molybdenite*, Morales, and McCleary Prospects).	Secs. 26 & 35, T. 19 S., R. 14 E.; Sec. 2, T. 20 S., R. 14 E.	Historical: Samples taken from 252-ft-long adit (1959): Ag, trace-0.23 oz/t(?); Au, trace-0.01 oz/t(?); Cu, 0.03-0.35% or ppm(?); Mo, 0.08-1.23% or ppm(?) (22). USBM: Ag, 7 ppm; Au, 14 ppb; Cr, 430 ppm; Cu, 1,068 ppm; Mo, 123 ppm; Pb, 140 ppm.	Historical: Shaft, 40 ft deep; tunnel, 10 ft long; and surface prospects (3). Adits, 250 and 42 ft long; and opencut, 49 ft long (7). Adit, 252 ft long (fig M-40) (22). USBM: Opencuts as long as 10 ft, and surface prospects. Location of 250-ft-long adit was not known and the adit was not examined.	Fissure and stockwork veins cutting granodiorite. Veins pinch and swell to as wide as 3 ft and contain irregular distributions of quartz, molybdenite, pyrite, and chalcopyrite. (3, 7, 22)
SR 279	Daniels Mine	NW¼ sec. 1, T. 20 S., R. 14 E.	Historical: USBM: Ag, <1 ppm; Au, <5 ppb; Cu, 212 ppm; Mo, 13 ppm; Pb, 48 ppm.	Historical: USBM: Caved shaft.	Brecciated and silicified metasedimentary rocks, quartzite, and granodiorite; heavily iron-oxide and limonite coated.
SR 280	Old Baldy Prospect	SW¼ sec. 1, T. 20 S., R. 14 E.	Historical: USBM: Ag, 1 ppm; Au, 5 ppb; Cu, 60 ppm; Mo, 18 ppm; Pb, 52 ppm.	Historical: Opened by a 65-ft drift (3). Shaft, 60 ft deep, crosscuts will be made in 1913 (9). USBM: Caved adit (inclined shaft ?).	Quartz vein cutting granodiorite. Vein is at least 1 ft thick,and contains vugs and gossan. Galena and chalcopyrite also have been reported (3).
	Tucson Prospect	SE¼ sec. 2, T. 20 S., R. 14 E.	Historical: USBM: Not sampled.	Historical: Inclined shaft, 70 ft deep (3). USBM: Not examined; area now covered with summer homes and private residences.	Vein cutting granodiorite. Vein is iron-stained, drusy quartz containing copper carbonates and iron oxides. (3)
	Lucky Ledge Mine	NE¼ sec. 12, T. 20 S., R. 14 E.	Historical: USBM: Not sampled.	Historical: Tunnel, 175 ft long. Possibly developed to 3,000 ft or more at a later date, with tunnels at two levels, the lower of which is 700 ft long. (3) USBM: Not Examined. No workings were found in the vicinity of adit symbol on USGS Mt. Wrightson 7.5 Min. Quad.	Shear zone in metaplutonic (schist) rocks cut by lamprophyric dikes. Mineralized areas contain principally copper sulfide, gold, and silver. (3)

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 281-282	Suzy Lode (patented).	SE¼ sec. 2, NE¼ sec. 11, T. 20 S., R. 14 E.	Historical: USBM: Ag, 1.0-1.6 ppm; Au, <5-10 ppb; Cu, 255-941 ppm.	Historical: Mineral Survey Plat shows claim having 6 opencuts, 2 shafts, and 2 tunnels. USBM: Adit, 52 ft long; other workings caved or reclaimed.	Shear zone cutting granodiorite. Zone contains pyrite, chalcopyrite, and malachite.
SR 283-284	Old Madera Mine (Copper Queen).	E. ctr. sec. 12, T. 20 S., R. 14 E.	Historical: USBM: Ag, 2.0-8.0 ppm; Au, 19-67 ppb; Cu, 597-5,063 ppm.	Historical: Tunnel, 50 ft long and shaft, 16 ft deep (3). USBM: Caved adit.	Fault between schist (metaplutonic and metasedimentary) and aplite dike. Rocks are highly metamorphosed and contain chalcopyrite and malachite. (3)
SR 285	Little Shot Mine (Velvet).	NE¼ sec. 13, T. 20 S., R. 14 E.	Historical: Ore averages 3% Cu, several oz Ag, and about $100/t Au (3). USBM: Ag, 2.6 ppm; Au, 11 ppb.	Historical: Tunnel, 200 ft long, and a shallow shaft (3). USBM: Adit, closed by cement wall with a pipe that transports collected and stored water to a Forest Service campground in Madera Canyon.	Granodiorite and altered rhyolite. Rhyolite is silicified and contains quartz veinlets and abundant iron-oxide. Pyrite, chalcopyrite, and chalcocite have been reported (3).
	Iron Cliff Prospect	S. ctr. sec. 12, T. 20 S., R. 14 E.	Historical: USBM: Not sampled.	Historical: Two tunnels, "short" and 20 ft long (3). USBM: Not examined.	Fault or shear cutting granite. Zone contains pyrite, galena, chalcopyrite, and some arsenopyrite. (3)
SR 286-294	Carrie Nation Mine (Square Deal).	NE¼ sec. 14, T. 20 S., R. 14 E.	Historical: Ore said to average 3% Cu (3). USBM: Ag, 0.4-24.8 ppm; Au, <5-43 ppb; Cu, 61-6,194 ppm; Mn, 335-4,580 ppm; Pb, 184->10,000; Zn, 350->30,000 ppm. Also SR 290; 170 ppm Cd, and 110 ppm Mo, and SR 292; 239 ppm Mo.	Historical: Crosscut tunnel, 240 ft long, with 110 ft of drift, and shaft, 30 ft deep (3). USBM: Adit, 675 ft total of crosscuts and drifts, plus a connecting 60-ft-deep shaft and stopes (figs. I-5 and M-41), and a 35-ft-long opencut and adit.	NW-striking shear and fault zones cutting granodiorite. Zones contain quartz, pyrite, chalcopyrite, bornite(?), and malachite. Galena and molybdenite also have been reported (3).
SR 295	Spear Prospect	SE¼ sec. 11, T. 20 S., R. 14 E.	Historical: USBM: Ag, 7.2 ppm; Au, 21 ppb; Cu, 1,906 ppm; Mn, 2,290 ppm; Pb, 2,912 ppm; Zn, 7,400 ppm.	Historical: Opened by cuts and a short adit (3). USBM: Adit, driven 52 ft S. 82 E. (See fig. I-5.)	NW-striking fissure vein cutting diorite. Vein contains intermittent quartz and malachite coating. Pyrite, chalcopyrite, cuprite, and galena also reported (3).
SR 296-304	Lead Prospect	S. ctr. sec. 11, T. 20 S., R. 14 E.	Historical: Ore down slope contained 33% Zn (3). USBM: Ag, 1.8-35 ppm; Au, <5-57 ppb; Cu, 69-6,634 ppm; Mn, 3,055->10,000 ppm; P, 660-1,220 ppm; Pb, 810->10,000 ppm; Zn, 1,800->30,000 ppm. SR 301 also contained 210 ppm Cd.	Historical: Two tunnels, 75 ft long and unknown length, and two shafts, 12 and 50 ft deep (3). USBM: Adit, 130 ft long, 80-ft-long opencut with stopes, and several surface prospects (figs. I-5 and M-42).	Primary structure is a NE-striking fissure vein, as thick as 9 ft, cutting diorite. The vein contains drusy quartz that pinches and swells to as thick as 2 ft, galena, chalcopyrite, pyrite, malachite, and azurite. Cerusite also has been reported (3).
SR 305	Unnamed	SW¼ sec. 11, T. 20 S., R. 14 E.	Historical: USBM: Ag, 8.4 ppm; Au, 45 ppb; Cu, 2,098 ppm; Pb, 3,750 ppm; Zn, 4,400 ppm.	Historical: USBM: Inclined shaft, flooded at 30 ft. (See fig. I-5.)	Shear zones cutting diorite. Zones contain pyrite, chalcopyrite, galena, and malachite.
Tyndall mining district					
The discovery and initial extraction of lead-silver minerals from the Tyndall mining district reportedly were made by Spanish settlers in the 1680's, but the most significant mining development began in the early 1870's and intermittently continued until about 1972. Mineralization in the district generally occurred as argentiferous lead-zinc-copper deposits in and along irregular quartz-barite fissure veins cutting volcanic, arkosic, and granitic rocks, and as argentiferous lead-zinc-copper replacement deposits in structurally altered limestone. Recorded production for the district through 1972 has been estimated to be 56,000 tons of ore containing about 9,400 tons lead, 2,800 tons zinc, 520 tons copper, 480,000 oz silver, and 1,260 oz gold. (3, 20)					
SR 306-307	Treasure Vault Mine	SE¼ sec. 10, T. 20 S., R. 14 E.	Historical: Some of the ore was said to average 18% Cu, 100 oz/t Ag, and $20/t Au (3). USBM: Ag, 5.6-41 ppm; Au, <5-33 ppb; Cu, 913-2,965 ppm; Pb, 1,028->10,000 ppm; Zn, 560-2,200 ppm.	Historical: Tunnels, lower is 135 ft long with 30-ft crosscut and upper is 80 ft long, and a shaft, 100 ft deep (3). USBM: Lower adit is caved, upper adit is 43 ft long, and shaft is flooded at 23 ft deep. (See fig. I-5.)	NE-striking fissure vein cutting diorite. Gouge material and adjacent country rock appear to be resilicified. Vein contains quartz, pyrite, malachite, chalcopyrite, and chrysocolla. Galena, tetrahedrite, and sphalerite also have been reported (3).

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 308-310	Blacksmith Prospect	SE¼ sec. 10, T. 20 S., R. 14 E.	Historical: Vein similar to, and possibly the same as the Treasure Vault vein (3). USBM: Ag, 0.6->300 ppm; Au, <5-160 ppb; Cu, 104->10,000 ppm; Pb, 56->10,000 ppm; Zn, 562-4,100 ppm.	Historical: Shaft, 80 ft deep (3). USBM: Two shafts, one caved at 14 ft and one flooded at 11 ft, and a flooded adit. (See fig. I-5.)	NE- to E-striking fissure vein cutting diorite. Gouge material and adjacent country rock appear to be resilicified. Vein contains quartz, chalcopyrite, galena, malachite, and azurite.
SR 311-314	Hermits Home Mine	SE¼ sec. 10, T. 20 S., R. 14 E.	Historical: USBM: Ag, 1.8-119.6 ppm; Au, <5-57 ppb; Cu, 81->10,000 ppm; Pb, 180-6,424 ppm; Zn, 70-6,172 ppm.	Historical: Tunnel, 130 ft long (3). USBM: Adit, flooded, and shaft, flooded at 25 ft deep. (See fig. I-5.)	Contact between diorite and granite; a fault cutting the granite was also reported (3). Mineralized rock contains pyrite, chalcopyrite, galena, bornite(?), and some quartz veinlets.
SR 315-327, and 346-355.	Elephant Head group (Horse Shoe, Grand Prize, Look Out, Tip Top, Quantrell, Elephant Head, Quantero, Eureka, Homestake, and Stonewall Claims, plus Elephant Head Mill Site)	SW¼ sec. 4, SE¼ sec. 5, NE¼ & ctr. sec. 8, NW¼ sec. 9, T. 20 S., R. 14 E.	Historical: Quantrell Claim: much of the ore averaged 1.5% Cu and 11 oz/t Ag. Eureka Claim: much of the ore averaged 2.5% Cu, 17 oz/t Ag, and $10/t Au. (3) Worked in the early 1900's and 1913-1914, producing 950 tons of ore averaging about 8% Pb, 3 oz/t Ag, minor Cu, Zn, and Au (20). A 1956 preliminary examination of the mine stated that a 1917 mine report indicated assays of 2-4% Pb, 4-6% Zn, and $5-$8 Ag. The 1956 examination took samples that assayed: Au, trace-0.005 oz; Ag, trace-0.2 oz; Pb, 0.3%-3.6%; Zn, trace-2.7%; Cu, trace-0.5%. (5) USBM: SR 315-327: Ag, <0.2-114.0 ppm; Au, <5-1,180 ppb; Cu, 9->10,000 ppm; Pb, 24->10,000 ppm; Zn, 16->20,000 ppm. Also: SR 315, 1,200 ppm As, 2,470 ppm Sb; SR 316, 141 ppm Sb; SR 318, 570 ppm Cd, 169 ppm Sb; SR 320, 306 ppm Mo; SR 321, 221 ppm U; SR 327, 140 ppm Bi, 130 ppm Cd, 3,140 ppm Mn. SR 346-355 (Horse Shoe adit): Ag, <0.2-2.4 ppm; Au, <5-42 ppb; Cu, 4-161 ppm; Pb, 8-5,898 ppm; Zn, 8-11,000 ppm.	Historical: Crosscut tunnel 1,500 ft long (3). Mineral Survey Plat (1915) for the claim group shows: Horse Shoe, tunnel and crosscuts, 1,236 ft; Quantrell, shaft, 228 ft, and 769 ft of total workings; Elephant Head, tunnel and crosscut, 36 ft; Quantero, shafts, 11, 25, & 40 ft, and tunnel, 52 ft; Eureka, shaft, 70 ft; Stonewall, tunnels, 11 & 20 ft; Homestake, tunnel, 20 ft; all claims also contain surface cuts. A 1956 preliminary examination of the mine stated that the Quantrell shaft had 140 ft of drifts, crosscuts, winzes, and raises on 50-, 100-, and 150-ft levels, but the shaft was caved in 1956 (5). USBM: Quantrell Mine, adit connects to caved shaft (figs. I-6 and M-43); Horse Shoe Mine, adit and drifts totaling 1,230 ft of workings (figs. I-6 and M-44); Eureka Claim, shaft (SR 324-325, fig. I-6), flooded at 6 ft, and adit, 20 ft long (Eureka Mine on USGS Mt. Hopkins 7.5 Min. Quad. is not the correct locality of the Eureka Claim shaft); several adits (<20 ft), shafts (<15 ft), and surface prospects on other claims.	Quartz monzonite that has been intruded by rhyolite dikes, then faulted, altered, and mineralized. Argentiferous minerals were deposited in the fault and clayey alteration zones. Quartz veining, chalcopyrite, and pyrite were observed, and galena and sphalerite have been reported. (3, 20)
SR 328-335	Elephant Head Silver Prospect.	SE¼ sec. 31, SW¼ sec. 32, T. 19 S., R. 14 E.	Historical: USBM: Ag, <0.2-0.2 ppm; Au, <5-41 ppb; Cu, 1-21 ppm; Pb, <2-4 ppm; Zn, 16-20 ppm.	Historical: USBM: Shaft, <15-ft-deep, and prospect pit sunk on quartz vein. (See fig. I-6.)	Massive quartz vein cutting quartz monzonite. Vein exposures, as thick as 100 ft, traced for 2,500 ft along N. 50 E. trend. Small pods of sedimentary rocks, mainly limestone, also observed along vein.
SR 336-345	Unnamed	S½ sec. 6, N½ sec. 7, T. 20 S., R. 14 E.	Historical: USBM: Ag, <0.2-8.2 ppm; Au, <5-1,910 ppb; Cu, 5-1,028 ppm; Pb, <2-210 ppm; Zn, 8-56 ppm.	Historical: USBM: One small prospect pit in vicinity of quartz vein exposures. (See fig. I-6.)	Massive quartz vein and stockwork trending northerly in quartz monzonite. Vein exposures, as thick as 50 ft, were traced for about 1,500 ft along trend.
SR 356-357	Unnamed	SW¼ sec. 8, T. 20 S., R. 14 E.	Historical: USBM: Ag, 13.2 & 6.2 ppm; Au, 160 & 69 ppb; Cu, 4,614 & >10,000 ppm; Pb, 382 & 266 ppm; Zn, 292 & 338 ppm.	Historical: USBM: Shaft about 11 ft deep. (See fig. I-6.)	Fractured quartz monzonite near contact with diorite pod. Malachite, azurite, and possibly brochantite coating.
SR 358-360	Santa Rita Mines (Good Luck Claims)	NE¼ sec. 17, T. 20 S., R. 14 E.	Historical: 1907-1908: test runs; 385 tons, averaged $1.50/t Au. Average ore ran $.50/t, but some near surface ran as high as $5/t. (3) 1908: 384 tons of ore yielded 28 oz/t Au, 13 oz/t Ag, and 16% Pb (20). USBM: Ag, 0.2-11.2 ppm; Au, 450-6,050 ppb; Cu, 4-168 ppm; Pb, 284-3,028 ppm; Zn, 50-1,044 ppm.	Historical: USBM: Two shafts, one flooded at about 10 ft deep; under water a drift may trend to west. (See fig. I-6.)	Sheared quartz monzonite with disseminated pyrite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 361-362	Jenkins Prospect (?)	NE¼ sec. 16, T. 20 S., R. 14 E.	Historical: USBM: Ag, 2.6 & 3.0 ppm; Au, both <5 ppb; Cu, 5 & 34 ppm; Mn, >10,000 & 1,330 ppm; Pb, 158 & 362 ppm; Zn, 1,340 & 262 ppm.	Historical: USBM: Flooded adit at least 40 ft long.	Shear cutting quartz monzonite. Shear contains quartz veinlets and pyrite. Reportedly the Jenkins Prospect also contained galena, chalcopyrite, and sphalerite (3).
	Edward's Mine (St. Mary's group).	E½ sec. 16, T. 20 S., R. 14 E. [0.3 mi E. of Jenkins Prospect (5)]	Historical: Sample assayed 5% MoO_3 and other assays detected lead and gold (5). USBM: Not sampled.	Historical: Shafts, 50 and 37 ft deep, tunnel, several opencuts, and prospect holes. (5) USBM: Not examined.	Fissure vein cutting monzonite and diorite with crudely banded ore containing drusy quartz (5).
SR 363-364, and 371-382.	Bonanza Mine (Devil's Cash Box group, Orosco, Veta Grande).	S½ sec. 18, NE¼ sec. 19, T. 20 S., R. 14 E.	Historical: Lead-silver ore averaging $30/t, but deep part of mine has rock containing 40% Zn, 22% Pb, and 14 oz/t Ag; seven cars of ore shipped by 1914 (3). Worked intermittently, early 1900's-1961, producing some 300 tons of ore averaging about 8% Pb, 8 oz/t Ag, 3% Cu, and minor Au (20). USBM: Ag, <0.2-146 ppm; Au, <5-943 ppb; Cu, 10->10,000 ppm; Mn, 1,010->10,000 ppm; Pb, 20-7,776 ppm; Zn, 56->10,000 ppm. Also: 7 samples, 140-808 ppm Sr; 4 samples, 140-350 ppm Bi, 728-3,200 ppm Mo; and 2 samples, 330 & 905 ppm Sb, 161 & 253 ppm V.	Historical: Opened to a depth of 100 ft (3). USBM: Adits, 19 and 80 ft long, several shafts from 10 to 70 ft deep (some flooded and some caved). (See fig. I-7.) The 80-ft-long adit was driven S. 35 W. across a fault contact between limestone and sandstone and has an inaccessible 40-ft-deep winze with a possible drift at its base.	Tilted and faulted sedimentary rocks, primarily limestone and sandstone. Irregular replacement lenses formed along fault and contain galena, chalcopyrite, pyrite, and sphalerite. (3, 20)
SR 365-368	Agua Caliente Caves	SW¼ sec. 18, T. 20 S., R. 14 E.	Historical: USBM: Ag, <0.5-2.4 ppm; Au, <5-90 ppb; Sr, 35-250 ppm.	Historical: USBM: Three adits, 120 ft, 50 ft, and caved (figs. I-7 and M-45).	Sheared limestone with travertine coatings.
SR 369-370	Unnamed	NW¼ sec. 19, T. 20 S., R. 14 E.	Historical: USBM: Ag, 1.4 & 6.8 ppm; Au, 14 & <5 ppb; Mn, 760 & 2,595 ppm; Zn, 120 & 2,300 ppm.	Historical: USBM: Adit, 10 ft long, and shaft, 13 ft deep. (See fig. I-7.)	Faulted sedimentary rock, primarily limestone and siltstone.
SR 383	Duranium Claim (?) (Santa Cruz, Bear Claw, Bald Eagle).	S. ctr sec. 19, T. 20 S., R. 14 E.	Historical: As much as 500 tons of 0.50% uranium ore shipped. 1957 AEC report gave sample analysis: 0.475% U_3O_8, 0.8% Pb, 11.3% $CaCo_3$. (5) 1956-57: 680 tons of ore averaging ≈0.20% U_3O_8 produced from bulldozer pit (23). USBM: Ca, >15%; Th, 5.4 ppm; U, 2.4 ppm; scintillometer readings over opencut averaged 30 cps (regional background = 20 cps).	Historical: Opencut, 12-15 ft wide, 6-10 ft deep, 75 ft long, and several churn drill holes (5). USBM: Weathered and overgrown opencut about 75 ft long. (See fig. I-7.)	Narrow uranium-bearing shear zones related to a more major undefined westerly-trending structure that cuts sandstone near a limestone-shale contact (5).
SR 384-389	Unnamed	W½ sec. 30, T. 20 S., R. 14 E.	Historical: USBM: Ag, <0.2-3.2 ppm; Au, <5-89 ppb; Cu, 19-1,224 ppm; Mn, 695->10,000 ppm.	Historical: USBM: Several prospect pits, opencuts, and shallow (<15 ft deep) shafts. (See fig. I-7.)	Faulted sedimentary rocks with a few diorite dikes. Minor chrysocolla with manganese and hematite coating.
SR 390	Glove Mine (Sheehy-O'Donnell, Blacksmith, O. K., Rover).	S½ sec. 30, T. 20 S., R. 14 E.	Historical: Intermittent production, 1911-1972, over 29,000 tons of ore averaging about 22% Pb, 9% Zn, 7 oz/t Ag, 0.3% Cu, and minor Au (20). USBM: Ag, 0.8 ppm; Au, 6 ppb; Cu, 625 ppm; Pb, 1,296 ppm; W, 482 ppm.	Historical: Complex mine, 6 levels interconnected by shafts, winzes, raises, and stopes, over 400 ft in depth, over 5,000 ft of workings. Exploratory drilling in early 1970's. (5, 24) USBM: Many surface prospects and shafts, all openings inaccessible. (See fig. I-7.)	Replacement and fissure-filling in permeable zones along faults and bedding planes in limestone. Ore zones contain argentiferous galena, sphalerite, and lesser amounts of quartz, pyrite, and chalcopyrite. (5, 20, 24)

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 391-400	Go Devil group	NE¼ sec. 30, T. 20 S., R. 14 E.	Historical: USBM: Ag, <0.2-20.5 ppm; Au, <5-15 ppb; Pb, 38->10,000 ppm; Zn, 38-676 ppm. Also 1 sample, 134 ppm Cr and 107 ppm Cu and 1 sample, 363 ppm Mo.	Historical: USBM: Adits, 105 and 80 ft long; one shaft, 25 ft to water; and several adits, <10 ft long, trenches, and pits (figs. I-7 and M-46).	Faulted and sheared limestone. Minor silicification and trace wulfenite.
SR 401-404	Unnamed	Ctr. sec. 20, T. 20 S., R. 14 E.	Historical: USBM: Ag, <0.5->200 ppm; Au, 5-250 ppb; Cu, 30-2,362 ppm; Pb, 28-9,492 ppm; Zn, 56-638 ppm. Also SR 403; 1,114 ppm Bi.	Historical: About ¾ mi north of Montosa Mine, shaft 100 ft deep (3). USBM: Shaft, 20 ft deep (caved ?), adit, 10 ft long, and 50-ft-long bulldozer cut to SW. of shaft and adit. (See fig. I-7.)	Sedimentary rocks near fault contact with quartz monzonite. Rocks appear resilicified and contain minor pyrite.
SR 405-417	Montosa Mine (Isabella and Black Diamond patented claims) (Amado Mine, Double O Mine).	NW¼ sec. 29, T. 20 S., R. 14 E.	Historical: 1912-1913: 32 cars of ore averaging 32% Pb, 9.0 oz/t Ag, 3.5% Cu. 1947-1948: 102 tons of ore averaging 17% Pb, 4 oz/t Ag, 2% Cu, and minor Au. (5) 1900's-1949: 1,000 tons of ore averaging 22% Pb, 3% Cu, 11 oz/t Ag, minor Zn and Au (20). USBM: Ag, <0.8-49.6 ppm; Au, <5-29 ppb; Cu, 13-9,036 ppm; Mn, 1,395->10,000 ppm; Pb, 72->10,000 ppm; Zn, 134->20,000 ppm. Also 5 samples, 112-462 ppm Bi; 2 samples, 360 & >2,000 ppm Cd; 5 samples, 130-540 ppm Cr; 3 samples, 202-254 ppm Mo; 4 samples, 117-547 ppm Sb; and 6 samples, 340-1,190 ppm W.	Historical: Patent Survey Plats (1912) indicate six shafts a total of 225 ft deep and one tunnel, 50 ft long. Several shafts, adits, and drifts; sunk as deep as 250 ft with 2,000 ft of underground workings (3, 5, 25). USBM: Several prospect pits and cuts that may be remnants of shafts and adits; no underground is accessible. Shaft shown on USGS Mt. Hopkins 7.5 min. topographic map and labeled Montosa Mine is partly opened but inaccessible. The shaft is not situated on the plot of claims and does not align with workings shown on historical mapping. (See fig. I-7.)	Irregular replacement body in large limestone block engulfed in dacitic volcanic breccia and sporadically mineralized quartz-fissure vein cutting the dacitic breccia. Galena, chalcopyrite, pyrite, and sphalerite are present. (20)
SR 418-426	Extension Prospect	W. ctr. sec. 29, T. 20 S., R. 14 E.	Historical: Ore averages 23% Pb, 2% Cu, and 6 oz/t Ag (5). USBM: Ag, <0.8-32.8 ppm; Au, <5-17 ppb; Cu, 26-7,397 ppm; Mn, 1,145->10,000 ppm; Pb, 74->10,000 ppm; Zn, 234->20,000 ppm. Also, 3 samples, 242-1,424 ppm Mo; and 1 sample, 105 ppm U and 200 ppm W.	Historical: 1960: shaft, 58 ft deep (5). Shaft, 92 ft deep (22). USBM: Two shafts, 15 & 25 ft deep, one connected to a 50-ft-long inclined adit, and 130-ft-long bulldozer cut. (See fig. I-7.)	Sedimentary and intrusive rocks engulfed in dacitic volcanic breccia and faulted. Minor pyrite, malachite, and azurite noted.
SR 427-442	Vulcan Mine group	SW¼ sec. 28, T. 20 S., R. 14 E.	Historical: Worked in early 1900's and 1954, 650 tons of ore averaging 8% Cu and 1 oz/t Ag (20). USBM: Ag, <0.2-172.2 ppm; Au, <5-200 ppb; Cu, 50->10,000 ppm; Mn, 1,285->10,000 ppm; Pb, 50->10,000 ppm; Zn, 118->20,000 ppm. Also, 3 samples, 140-170 ppm Cd; 5 samples, 140-340 ppm Cr; 3 samples, 140-381 ppm Mo; 3 samples, 133-243 ppm Sb; 2 samples, 194 & 366 ppm Sr; and 3 samples, 100-269 ppm W.	Historical: Tunnel, 350 ft long, with about 270 ft of drifts, stopes, and raises (3). USBM: Flooded adit at least 100 ft long, 180-ft-long adit with connecting 50-ft-deep shaft, 50-ft-long adit with connecting 20-ft-deep shaft, and many shallow pits (figs. I-8 and M-47).	Sedimentary (primarily limestone) and intrusive rocks engulfed in dacitic volcanic breccia unit. Unit has been intruded by quartz latite dikes, faulted, and had quartz-fissure veins form. Chalcopyrite, pyrite, and secondary copper carbonate coatings were noted.
SR 443	BJ No. 1 Claim	SW¼ sec. 21, T. 20 S., R. 14 E.	Historical: USBM: Ag, 2 ppm; Au, 5 ppb; Cr, 500 ppm; Cu, 22 ppm; Pb, 290 ppm; Zn, 40 ppm.	Historical: USBM: Flooded shaft.	Quartz monzonite, fractured, containing quartz veins and abundant pyrite.
SR 444-445	Unnamed (part of Braathen group ?).	NE¼ sec. 21, T. 20 S., R. 14 E.	Historical: USBM: Ag, 8.4 & 9.0 ppm; Au, <5 ppb (both); Cd, 110 & 140 ppm; Ce, 170 & 180 ppm; Cu, 13 & 26 ppm; Mn, >10,000 ppm (both); Pb, 1,268 & 5,564 ppm; Zn, >20,000 ppm (both).	Historical: USBM: Adit with drift, 50 ft.	Sheared quartz monzonite with minor pyrite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 446-450	Braathen group (Big Blue, Combination Claims).	E. ctr. sec. 21, W. ctr. sec. 22, T. 20 S., R. 14 E.	Historical: Shipped 14 tons of low grade ore (5). USBM: Ag, 2.4-7.8 ppm; Au, <5-8 ppb; Cu, 37-768 ppm; Cr, 83-240 ppm; Pb, 586->10,000 ppm; Zn, 212->20,000 ppm. Also 1 sample, 110 ppm Cd, 170 ppm Ce.	Historical: Tunnels, 30, 40, and 90 ft long; 90-ft tunnel has drift and 45-ft-long crosscut; two shafts, 30 and 55 ft deep with 25-ft-long crosscut (5). USBM: Flooded shaft, two flooded adits, each at least 40 ft long.	Fissure vein cutting quartz monzonite, pyrite is present.
SR 451-452	Herr Mine (Hilda & Edith, and Ruth & Ruby Claims).	SW¼ sec. 22, T. 20 S., R. 14 E.	Historical: 1953: Hand sorted 15.5 tons averaging 0.01 oz/t Au, 1.10 oz/t Ag, 3.0% Zn, 2.6% Pb, and 0.76% Cu (26). USBM: Ag, 17.6-28 ppm; Au, <13-16 ppb; Cr, 490-560 ppm; Cu, 837-1,818 ppm; Pb, 6,416->10,000 ppm; Zn, 1,500-1,700 ppm. Also 1 sample, 373 ppm Sb.	Historical: In 1953, shaft, 55 ft deep with 100-ft-long drift at base to northeast along mineralized fracture, and several drill holes (26). USBM: Workings have been caved or backfilled and are no longer visible.	Two NE-trending fissure quartz veins cutting quartz monzonite. Irregular pods of pyrite, sphalerite, galena, and chalcopyrite. (26)
SR 453-456	R & R Prospect (?)	SE¼ sec. 22, T. 20 S., R. 14 E.	Historical: USBM: Ag, 0.2-45.4 ppm; Au, <5-31 ppb; Cu, 72-1,283 ppm; Pb, 114-8,196 ppm; Zn, 420-15,000 ppm.	Historical: USBM: Two adits, upper one is 20 ft long and the lower one is caved at 14 ft. (See fig. I-9.)	Fault cutting diorite with quartz veinlets, pyrite, chalcopyrite, and malachite.
SR 457-473	Tia Juana Mine (Santa Cruz, Tia Juana, and Santa Maria Claims).	N½ sec. 26, T. 20 S., R. 14 E.	Historical: Worked 1870's-1968, produced 100 tons of ore averaging 15 oz/t Ag, 3% Pb, 3% Zn, and 1% Cu (20). Ore shoots range: Au, 0.01-0.05 oz/t; Ag, 1-21 oz/t; Pb, 6%-22%; and Cu, 1.2%-8%. Average ore: 1.5 oz/t Ag, 3% Pb, 3% Zn, and 1% Cu. (5) USBM: Ag, 2.2-184 ppm; Au, <5-330 ppb; Cu, 142-4,990 ppm; Pb, 568->10,000 ppm; Zn, 422-7,300 ppm. Also: Ba, 180->20,000 ppm; Cr, 57-1,100 ppm; and Sb, 7.3-2,900 ppm.	Historical: Opened by cuts, drifts, tunnels, and shafts aggregating an estimated 500 ft (3). In 1954: four shafts, 8, 15, 33, & 35 ft deep; three adits, 54, 55, & 125 ft long (5). USBM: Adit, 160 ft long with 80-ft-long crosscut drift; adit, caved at 60 ft; adit, 80 ft long with 20-ft-long crosscut drift; 100-ft-long opencut with 25-, 15-, & 15-ft-long adits; shaft, caved at 16 ft; and assorted surface prospects (figs. I-9, M-48, and M-49).	NW-striking fissure quartz vein as thick as 20 ft cutting diorite. Mineralized zones occur as irregular shoots, streaks, and pods containing pyrite, galena, chalcopyrite, bornite(?), malachite, and azurite.
	Camp Bird Prospect	SE¼ sec. 24, T. 20 S., R. 14 E.	Historical: USBM: Not sampled.	Historical: Shaft, 10 ft deep (3). USBM: Not examined.	Fissure vein cutting granite containing disseminated pyrite and chalcopyrite (3).
SR 474-477	Silver King Mine	S. ctr. sec. 25, T. 20 S., R. 14 E.	Historical: USBM: Ag, 11-34 ppm; Au, <5-30 ppb; Cu, 1,857-6,551 ppm; Pb, 360-2,764 ppm; Zn, 1,300-4,700 ppm. Also: Cr, 120-300 ppm; and Sb, 86.3-630 ppm	Historical: Drift, 150 ft long, and 45-ft-long cut (3). USBM: Adit, 200 ft long with 80-ft raise (figs. I-10 and M-50).	Fissure vein cutting diorite. Vein contains quartz, galena, chalcopyrite, and malachite.
SR 478-485	Connecticut Mine (likely includes Rhode Island Mine).	SW¼ sec. 25, NW¼ sec. 36, T. 20 S., R. 14 E.	Historical: Connecticut Mine, 1904-1905: two carloads of ore averaged 22% Cu, 15 oz/t Ag, and $1/t Au. Rhode Island Mine, 1903: one carload of ore carried 11% Cu, 3 oz/t Ag, $2/t Au, and a little Pb and Zn. (3) Approximate grade of vein: 8%-10% Cu, 9 oz/t Ag, and 4% Pb (5). 1890's-1937: intermittent development and production, 240 tons of ore averaged 11% Cu, 9% Pb, 8 oz/t Ag, minor Au (20). USBM: Ag, <1-48 ppm; Au, <5-10 ppb; Cu, 132->10,000 ppm; Pb, 68->10,000 ppm; Zn, 450->30,000 ppm.	Historical: Connecticut Mine: two drifts, 80 ft (lower) and 240 ft (upper) long with stopes and raises; possibly developed to 400 ft at later date. Rhode Island Mine: 100-ft-long drift and 60-ft-deep shaft. (3) Connecticut Mine lower tunnel is supposed to be 500-600 ft long (5). USBM: Three adits (considered Connecticut Mine), lower is caved, middle is 250 ft long (fig. M-51), and upper is caved at 50 ft; also prospect pits. Another caved adit (SR-480) may have been the Rhode Island Mine. (See fig. I-10.)	Fissure vein cutting diorite. Vein contains quartz, galena, chalcopyrite, pyrite, malachite, and azurite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 486-490	Compadre Mine group (Leroy, Polatski, Mary, East Compadre).	E½ sec. 35, W½ sec. 36, T. 20 S., R. 14 E.	Historical: 1960's: assay reported 17.5% Cu, 17% Zn, 8% Pb, 9 oz/t Ag, and $1.50/t Au at Compadre Mine (5). Sporadic production early 1900's-1960, some 350 tons of ore averaging about 7% Zn, 3% Cu, 2% Pb, and 3 oz/t Ag (20). USBM: Ag, 2-190 ppm; Au, <5-42 ppb, Cu, 190->10,000 ppm; Pb, 844->10,000 ppm; Zn, 220->30,000 ppm.	Historical: Mary Claim: 55-ft-long drift with a 50-ft-long crosscut; Polatski Claim: 60-ft-long drift (3). 1960: Compadre adit, 400 ft long; Leroy adit, 40 ft long (5). USBM: Leroy: adit driven N. 75 E. and caved at 60 ft. Compadre: two adits, one caved at portal and the other caved at 25 ft. East Compadre: three shafts, two caved near collars and one caved at 35 ft. Other surface prospects are also scattered on the properties. (See fig. I-10.)	Fissure veins cutting arkose and rhyodacite tuff in contact with dacite intrusive. Vein contains vuggy quartz, galena, chalcopyrite, pyrite, malachite, azurite, and hematite.
SR 491-492	Grey Fox	SW¼ sec. 35, T. 20 S., R. 14 E.	Historical: USBM: Ag, 45-78 ppm; Au, 15-21 ppb; Cu, 1,705-4,502 ppm; Pb, 6,592->10,000 ppm; Zn, 1,000-6,800 ppm.	Historical: USBM: Surface prospects and a flooded shaft. (See fig. I-10.)	Fissure veins cutting diorite. Veins contain quartz, galena, malachite, and azurite.
SR 493	Josephine	N. ctr. sec. 2, T. 21 S., R. 14 E.	Historical: USBM: Ag, 78 ppm; Au, 31 ppb; Cd, 380 ppm; Cr, 530 ppm; Cu, >10,000 ppm; Pb, >10,000 ppm; Zn, >30,000 ppm.	Historical: USBM: Caved adit. (See fig. I-10.)	Vuggy quartz vein cutting rhyodacite. Vein contains galena, chalcopyrite, malachite, azurite, and hematite.
SR 494-499	Unnamed	NW¼ sec. 2, T. 21 S., R. 14 E.	Historical: USBM: Ag, 16->200 ppm; Au, <5-22 ppb; Cu, 1,680-5,279 ppm; Pb, 2,744->10,000 ppm; Zn, 930->30,000 ppm.	Historical: USBM: Adits, one caved at 180 ft and one 30 ft long; 100-ft-long opencut with flooded shaft; and surface prospects (figs. I-10 and M-52).	Fissure vein cutting quartz latite. Vein contains vuggy quartz, malachite, azurite, and abundant hematite.
SR 500	Bull Springs Mine	NW¼ sec. 3, T. 21 S., R. 14 E.	Historical: 1950-1955: 550 tons of ore produced averaging about 10% Pb, 11 oz/t Ag, 5% Zn, and minor Cu (20). USBM: Ag, >300 ppm; Au, 320 ppb; Cd, 420 ppm; Cu, 4,804 ppm; Mn, >10,000 ppm; Pb, >10,000 ppm; Sr, 368 ppm; Zn, >30,000 ppm.	Historical: Shaft, 125 ft deep, and 270 ft of total workings (5). 1957: Shaft, 125 ft deep, with about 85 ft of drift on 50-ft level, 65 ft of drift on 100-ft level, and 60 ft of drift on 120-ft level (22). USBM: Two caved shafts, and two adits, one caved at portal and the other caved at 35 ft.	Fissure vein cutting rhyodacite and arkose. Vein contains argentiferous galena, sphalerite, pyrite, and chalcopyrite. (20)
SR 501	Unnamed	Ctr. sec. 2, T. 21 S., R. 14 E.	Historical: USBM: Ag, 23 ppm; Au, 13 ppb; Cr, 290 ppm; Cu, 3,881 ppm; Mo, 263 ppm; Pb, 3,206 ppm; Zn, 2,900 ppm.	Historical: USBM: Two flooded shafts.	Vein cutting quartz latite. Vein contains splaying quartz veinlets and veins as thick as 2 ft, sparse malachite, chrysocolla, and hematite after pyrite.
SR 502-506	Bonanza Claim (patented) (Bonanza Tunnel).	NE¼ sec. 2, T. 21 S., R. 14 E.	Historical: Production described on unpatented Tennantite claim, which adjoined the Bonanza in 1962 is believed to be the same as the Chino Tunnel and 80-ft-level. 35.74-ton shipment of ore from the upper tunnel [80-ft-level] in 1961 averaged 2.55% Cu and 1.63 oz/t Ag. (5) 1968 report provided by claim holder indicates three pieces of ore from the 80-ft-level adit assayed 4.65% Cu, 2.54 oz/t Ag, and trace Au. A sample taken from an ore shoot in the Chino Tunnel [lower adit] assayed 6.40% Cu, 1.96 oz/t Ag, 3.40% Zn, 0.8% Pb, and trace Au. USBM: Ag, 9-33 ppm; Au, <5-130 ppb; Cu, 1,123-4,887 ppm; Pb, 626->10,000 ppm; Zn, 2,100-29,200 ppm.	Historical: Workings described on unpatented Tennantite claim, which adjoined the Bonanza in 1962 are believed to be the same as the Chino Tunnel and 80-ft-level. Lower adit [Chino Tunnel], 485 ft long, but caved at 180 ft, and upper adit (80 ft above lower adit), 220 ft long. (5) USBM: Two adits, lower adit (Chino Tunnel) is probably several hundred feet long with numerous stopes, but was too dangerous to thoroughly examine, upper adit (80-ft-level) has nearly 400 ft of workings (fig. M-53). Two shafts, one 20 ft deep and the other flooded at 25 ft, also several smaller surface cuts and pits. (See fig. I-10.)	Shear zone containing fissure vein cutting arkosic breccia. Mineralized areas contain splaying quartz veinlets and veins as thick as 6 in., malachite, azurite, and hematite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 507-509	Unnamed	W. ctr. sec. 1, T. 21 S., R. 14 E.	Historical: USBM: Ag, <5-27 ppm; Au, <5-12 ppb; Cu, 50-7,484 ppm; Pb, 120-4,388 ppm; Zn, 450-11,000 ppm.	Historical: USBM: Opencuts, 16 and 25 ft long, and adit, caved at 150 ft (fig. M-54).	Shear zones cutting arkose and diorite containing minor quartz veining, malachite, and azurite.
SR 510-514	Arizona-Pittsburg Mine (Black Hills).	SE¼ sec. 1, T. 21 S., R. 14 E.	Historical: 1890's-early 1900's: produced some 100 tons of ore averaging 30% Pb, 9 oz/t Ag, 2% Cu, and minor Au (20). USBM: Ag, 6->200 ppm; Au, 15-834 ppb; Cu, 154-2,375 ppm; Mn, all >10,000 ppm; Pb, 306-5,700 ppm; Zn, 780-8,900 ppm.	Historical: Shaft, 185 ft deep with 25 ft of drift on the 125-ft level (3). USBM: Two shafts, both flooded at 25 ft, and an adit, 220 ft long (fig. M-54).	Fissure vein cutting diorite. Vein contains quartz and malachite, and was reported to contain pyrite and chalcopyrite (3).
SR 515	Unnamed	S. ctr. sec. 1, T. 21 S., R. 14 E.	Historical: USBM: Ag, 6 ppm; Au, <5 ppb; Cu, 411 ppm; Pb, 434 ppm; Zn, 1,400 ppm.	Historical: USBM: Caved adit, and a shaft, flooded at 20 ft.	Quartz vein cutting arkose near diorite contact. Quartz pinches and swells from less than 1 in. to 2 ft thick and contains hematite.
SR 516	Merry Widow (part of Toluachi group).	SE¼ sec. 2, T. 21 S., R. 14 E.	Historical: A shipment of 5 tons of ore averaged 8% Pb and 72 oz/t Ag (3). USBM: Ag, 1 ppm; Au, <5 ppb; Cu, 102 ppm; Pb, 160 ppm; Zn, 510 ppm.	Historical: Shaft, 100 ft deep, with 45-ft-long drift to west at bottom and 20-ft-deep winze at face of drift (3). USBM: Adit, 55 ft long, and shaft, flooded at 3 ft deep.	Shears and quartz vein cutting arkose. Fine-grained pyrite is sparsely disseminated through arkosic country rock.
SR 517	Silver Sally (part of Toluachi group).	NE¼ sec. 11, T. 21 S., R. 14 E.	Historical: Some of the ore averaged 50 oz/t Ag (3). USBM: Ag, >300 ppm; Au, <41 ppb; Ba, >20,000 ppm; Cu, 3,277 ppm; Pb, 5,008 ppm; Sb, 1,420 ppm; Zn, 3,600 ppm.	Historical: Shaft, 280 ft deep, with 100-ft-long drift on 22-ft level (3). USBM: Caved adit and shaft.	Fissure vein cutting quartz latite porphyry. Vein contains quartz as thick as 6 in., barite, chrysocolla, malachite, and azurite. The vein was also reported to carry galena and sphalerite (3).
SR 518	Unnamed	NE¼ sec. 11, T. 21 S., R. 14 E.	Historical: USBM: Ag, 8 ppm; Au, 15 ppb; Cu, 550 ppm; Mo, 199 ppm; Pb, 3,154 ppm; Zn, 2,300 ppm.	Historical: USBM: Two adits, one flooded and the other caved, and two caved shafts or pits.	Sheared arkose breccia containing quartz veinlets less than 1 in. thick and minor chrysocolla blebs.
SR 519-520	Jersey Girl (part of Toluachi group).	NE¼ sec. 11, T. 21 S., R. 14 E.	Historical: Some of the ore carried 10% Cu, 30% Pb, and 120 oz/t Ag (3). USBM: Ag, 4.8-70 ppm; Au, <5-<29 ppb; Cu, 282-1,475 ppm; Mn, 5,695->10,000 ppm; Pb, 2,884-->10,000 ppm; Sb, 108-1,110 ppm; Zn, 596-4,600 ppm.	Historical: Shaft, 115 ft deep (3). USBM: Flooded shaft and caved adit.	Sheared diorite and arkose with quartz veinlets and hematite. Principal ore minerals were reported to be galena, proustite, tetrahedrite, horn silver, embolite, bromyrite, chalcopyrite, chalcocite, malachite, azurite, cuprite, argentite, and tennantite (3).
SR 521-522	Unnamed	SE¼ sec. 11, T. 21 S., R. 14 E.	Historical: USBM: Ag, 68->300 ppm; Au, <34-<600 ppb; Cd, 56->100 ppm; Cu, 3,738->10,000 ppm; Pb, both >10,000 ppm; Sb, 1,260->10,000 ppm; Zn, 4,600-8,760 ppm.	Historical: USBM: Two caved shafts.	Galena veining in dacitic country rock, malachite and azurite also present.
SR 523	Mineral West (part of Alto group).	SE¼ sec. 11, T. 21 S., R. 14 E.	Historical: USBM: Ag, 5 ppm; Au, <5 ppm; Cu, 92 ppm; Pb, 652 ppm; Zn, 650 ppm.	Historical: USBM: Two caved adits.	Fissure vein cutting arkose. Vein contains quartz as thick as 8 in., and hematite.
SR 524-540	Wandering Jew group (patented claims).	N½ sec. 12, T. 21 S., R. 14 E.	Historical: Early 1900's-1951: worked sporadically, producing some 1,700 tons of ore averaging about 11% Pb, 3 oz/t Ag, and minor Cu and Au (20). USBM: Ag, 4-74.4 ppm; Au, 9-230 ppb; Cu, 104-6,367 ppm; Pb, 1,612->10,000 ppm; Zn, 110->30,000 ppm.	Historical: Eight claims, developed to 100 ft by two shafts, drifts, tunnels, and crosscuts aggregating 2,000 ft (3). 1939: 200-ft-deep inclined shaft, five 100-ft-deep inclined shafts, 400-ft-long tunnel, three 100-ft-long tunnels, and 400-ft-long trench (5). USBM: Five shafts, flooded or caved at 25 ft or less; five adits, one caved, one flooded, three at 80-110 ft long; plus many prospect pits and trenches (figs. I-11, M-55, and M-56).	Argentiferous galena, pyrite, chalcopyrite, and sphalerite in irregular quartz fissure vein cutting rhyodacite tuff and arkose (20).

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 541-545	Ramon Prospect	E. ctr. sec. 12, T. 21 S., R. 14 E.	Historical: USBM: Ag, 1.2-140 ppm; Au, 87-1,130 ppb; Cu, 156-500 ppm; Pb, 1,846->10,000 ppm; Zn, 512-9,700 ppm.	Historical: USBM: Caved adit, two shafts connecting to adit about 50 ft below, and surface opencuts and pits.	Fissure vein cutting arkose near contact with diorite. Vein contains quartz as thick as 4 ft, chalcopyrite, pyrite, and hematite.
SR 546-554	San Ramon Mine	E. ctr. sec. 12, T. 21 S., R. 14 E.	Historical: Worked mainly from mid-1940's to mid-1950's, produced 250 tons of ore averaging about 8% Pb, 7 oz/t Ag, 2.5% Zn, 1% Cu, minor Au (20). USBM: Ag, 26.2->300 ppm; Au, 490-2,400 ppb; Cu, 422->10,000 ppm; Pb, 1,150->10,000 ppm; Sb, 46-4,422 ppm; Zn, 342->30,000 ppm.	Historical: USBM: Three adits, 265 ft, over 100 ft, and 30 ft long; and two shafts connecting to adits, 35 and 75 ft deep (figs. I-11 and M-57).	Fissure vein cutting arkose and rhyodacite. Vein contains quartz, pyrite, malachite, chalcopyrite, chalcanthite(?), and galena.
SR 555-566	Apache Mine	Ctr. sec. 12, T. 21 S., R. 14 E.	Historical: Discovered in about 1899, and in 1901, shipped two carloads of chalcocite ore that averaged $250/t (3); Worked intermittently since late 1800's, producing 500 tons of ore, averaging 14% Pb, 29 oz/t Ag, 2% Cu, and minor Au (20). USBM: Ag, 1->300 ppm; Au, <5-150 ppb; Cu, 28-7,244 ppm; Pb, 490->10,000 ppm; Zn, 600-17,000 ppm.	Historical: Developed by tunnels, shafts, and crosscuts to a depth of 470 ft and aggregating more than 2,500 ft of work (3). USBM: Three adits, one caved at 100 ft, the others are 260 and 180 ft long (fig. M-58), three shafts 30-50 ft deep, and surface prospects (fig. I-11).	Fissure vein cutting arkose and diorite. Vein contains quartz, chalcopyrite, galena, pyrite, malachite, azurite, and hematite; sphalerite was also reported (20).
SR 567-590	Alto Mine group (Gold Tree Mine, El Plomo Mine; Mineral West, Albert No. 2, Steinfelt, Mineral Nos. 1 and 2, Oak, Alto, Alto East, Albion, Record, and Grand Prize Claims).	S½ sec. 12, T. 21 S., R. 14 E.	Historical: Reportedly discovered by Spanish settlers about 1667, and worked intermittently by several owners. 1906-1907: ore shipped averaged 32% Pb, 9% Zn, 5% Cu, and 24 oz/t Ag. (3) Worked intermittently since 1680's, probably producing more than 3,500 tons of ore averaging 12% Pb, 14 oz/t Ag, 3% Cu, minor Zn and Au (20). Ore values (1954): 4.5%-18% Pb, 4%-9% Zn, 6-17 oz/t Ag, trace-8% Cu, and very little gold. 1956 ore shipments were 4 cars totalling 168 tons and running 14.5%-19.2% Pb, 3.8%-5.6% Cu, 18.5-27.4 oz/t Ag, and about 3.5% Zn. (5) USBM: Ag, <1->300 ppm; Au, <5-2,640 ppb; Cu, 73->10,000 ppm; Pb, 246->10,000 ppm; Zn, 212-24,900 ppm.	Historical: Tunnels, drifts, shafts, and stopes aggregating 10,000 ft or more (3). Mine workings described in (5) (1954): Mineral West; adit, 120 ft long with 30-ft deep winze. Mineral No. 1; shafts, 50, 40, 12, and 10 ft deep; adits, 240, 75, 65, 15, and 225 ft long with raises, winzes, and stopes. Mineral No. 2; 3 shafts, 15 ft deep. Record; adits, 45 and 25 ft long; shaft, 40 ft deep; and opencut, 150 ft long and 40 ft deep. Albion; 9 shafts, 8-145 ft deep, some with connecting drifts; and 2 adits, 45 and 65 ft long. Oak; 65-ft-deep shaft with 100-ft-long drift. Albert No. 2; adit, 25 ft long. Albert; shaft, 25 ft deep. USBM: Many shafts, adits, and surface prospects (figs. I-11, M-59, and M-60).	Fissure veins cutting arkose and underlying intrusive diorite. Veins contain quartz, chalcopyrite, galena, pyrite, malachite, and azurite. Argentite, tetrahedrite, chalcocite, and sphalerite also have been reported (20).
	Florida Mine	SE¼ sec. 12, T. 21 S., R. 14 E.	Historical: Produced 140 tons of ore, averaging about 6% Cu, 5% Pb, 20 oz/t Ag, and 0.7 oz/t Au (20). USBM: Not Sampled.	Historical: Adits and shafts (20). USBM: Not examined; may have been part of Alto Mine group.	Fissure vein cutting rhyodacite and arkose. Vein contains argentiferous galena, chalcopyrite, and pyrite. (20)
	Joplin Mine	NW¼ sec. 18, T. 21 S., R. 15 E.	Historical: 1904: 25 tons of ore averaging 5% Pb and Cu, and 35 oz/t Ag (3). 1880's-1926: worked intermittently, producing 270 tons of ore averaging 14% Pb, 13 oz/t Ag, 2% Cu, and 0.3 oz/t Au (20). USBM: Not sampled.	Historical: Developed by about 1,000 ft of work, including a shaft, 110 ft deep, a drift 100 ft long, and a tunnel 220 ft long (3). USBM: Not examined.	Fissure vein cutting quartz monzonite and granite. Vein contains quartz, argentiferous galena, pyrite, and chalcopyrite. (20)
SR 591-609	Victor Mine area (Bowling Green patent, Lucky Spur group ?).	SE¼ sec. 17, T. 21 S., R. 15 E.	Historical: Worked sporadically, late 1800's-1959, producing some 800 tons of ore averaging about 10% Pb, 5 oz/t Ag, and minor Zn, Cu, and Au (20). USBM: Ag, 0.2-130 ppm; Au, <5-1,220 ppb; Cu, 14-4,327 ppm; Pb, 220->10,000 ppm; Zn, 22->30,000 ppm.	Historical: Tunnel, 410 ft long, with 90-ft raise to surface (3). USBM: Adit, impassable flooded winze at 120 ft in from portal, but adit continues (fig. M-61); several shafts from 10 ft deep to unknown depth; and many surface prospects.	Fissure vein cutting granite. Vein contains quartz, galena, pyrite, sphalerite, chalcopyrite, and hematite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 610-619	Aldolfo-Compromise	Sec. 20, T. 21 S., R. 15 E.	Historical: USBM: Ag, <0.2-71 ppm; Au, <5-2,810 ppb; Cu, 7-2,217 ppm; Mn, 1,760->10,000 ppm; Pb, 112->10,000 ppm; Zn, 840->30,000 ppm.	Historical: USBM: Adit, caved at 80 ft, and several smaller shafts, adits, and surface prospects less than 20 ft long or deep.	Fissure veins cutting diorite and granite near contact. Mineralized zones contain variable amounts of quartz, sphalerite, chalcopyrite, malachite, and hematite.
SR 620-649	Cowboys Dream Mine area.	Sec. 28, T. 21 S., R. 15 E.	Historical: USBM: Ag, <0.2->300 ppm; Au, <5-300 ppb; Cu, 9-5,822 ppm; Pb, 124->10,000 ppm; Zn, 28-16,000 ppm.	Historical: USBM: Four shafts, 25 and 30 ft deep and flooded at 4 and 30 ft; three adits, lower adit connects to shaft about 30 ft deep and is unsafe past 80 ft from portal, middle adit is 160 ft long and connects to a 30-ft-long upper adit by 40-ft-deep shaft and much stoping; and many surface prospect pits and cuts (figs. I-12 and M-62).	Faults, shears, and fissure veins cutting granite. Mineralized zones in structures contain some quartz veins and veinlets, barite(?), chrysocolla, malachite, and iron- and manganese-oxides.
SR 650-669	Mohawk Mine area (Willie Joe Francis, Cracker Jack, Oak Ridge).	S½ sec. 29, T. 21 S., R. 15 E.	Historical: Cracker Jack Mine was being explored for uranium in the 1950's (5). Primarily worked 1928-1929, producing 140 tons of ore averaging 8% Pb, 7 oz/t Ag, 4% Cu, and minor Au (20). USBM: Ag, <0.2-103.2 ppm; Au, <5-310 ppb; Cu, 80->10,000 ppm; Mo, 4-427 ppm; Pb, 134->10,000 ppm; U, 1.1-40 ppm; Zn, 122->30,000 ppm.	Historical: USBM: Several shafts, most are water-filled or caved at 20 ft, but one is of unknown depth; a caved adit and many prospect pits and cuts are also present.	Faults, shears, and fissure veins cutting granite and diorite. Mineralized zones in structures contain variable amounts of quartz, chrysocolla, sphalerite, pyrite, galena, chalcopyrite, malachite, azurite, and hematite.
SR 670-675	Missouri and General Craig Claims area (patented)(area includes Mammoth Mine).	SW¼ sec. 32, T. 21 S., R. 15 E.	Historical: USBM: Ag, <5-110 ppm; Au, <5-<120 ppb; Cu, 97-4,514 ppm; Pb, 36->10,000 ppm; Zn, 118->10,000 ppm.	Historical: USBM: Caved adit, two shafts, 35 and 50 ft deep, and surface prospects.	Faulted and veined diorite. Mineralized zones contain some quartz, chalcopyrite, pyrite, malachite, azurite, and hematite.
SR 676	Blue Jay Prospect	NE¼ sec. 33, T. 21 S., R. 15 E.	Historical: USBM: Ag, 2.2 ppm; Au, <5 ppb; Cu, 90 ppm; Pb, 312 ppm; U, 70 ppm; Zn, 590 ppm.	Historical: USBM: Prospect pit.	Sheared granite with quartz veins as thick as 3 in. Rock is leached and heavily weathered. Scintillometer readings of 150-190 cps were taken in pit and 100-120 cps around pit (areal background was 60-70 cps).
SR 677-685	Blue Lead Mine	SE¼ sec. 33, T. 21 S., R. 15 E.	Historical: Ore carries 15% Pb and 7 oz/t Ag (11). Worked 1912-1916 and 1920-1923, producing 340 tons of ore averaging 22% Pb, 18 oz/t Ag, 0.6% Cu, and minor Au (20). USBM: Ag, <0.5-88 ppm; Au, <5-1,610 ppb; Cu, 15-649 ppm; Mo, 4-200 ppm; Pb, 40->10,000 ppm; Zn, 6-420 ppm.	Historical: Four tunnels and one shaft (5). USBM: Three shafts, two flooded and one 80 ft deep, and several prospect cuts.	Fractured and altered granite with minor pyrite.
	Ivanhoe Mine group (patented).	S. ctr. sec 34, T. 21 S., R. 15 E.	Historical: Worked 1850's through 1924, producing some 420 tons of ore averaging about 51 oz/t Ag, 2% Cu, and minor Pb (20). Ore estimated to average 16% Cu, 6% Pb, and 225 oz/t Ag (11). USBM: Not sampled.	Historical: About 300 ft each of tunnel, drift, and shafts to a depth of 250 ft [included 200-ft-long Commercial tunnel](3). Several tunnels: 2,700 ft of workings (1918)(11). USBM: Ivanhoe Mine not Examined, but Commercial Claims on eastern part of claim group are discussed under Wrightson mining district.	Fissure veins cutting granite and volcanic rocks. Veins contain quartz, chalcopyrite, pyrite, and galena. (3, 20)

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
Wrightson mining district					
The discovery of copper-lead minerals in the Wrightson mining district was made in the late 1870's and mining continued sporadically until the late 1950's. Ore mineralization in the district has been spotty and sparse, but generally occurred as argentiferous base-metal-sulfide deposits in and along irregular groups or swarms of quartz fissure veins cutting volcanic, arkosic, and granitic rocks. Recorded production for the district through 1972 has been estimated to be 4,000 tons of ore containing about 475 tons lead, 51,000 oz silver, 386 oz gold, and 119 tons copper. (3, 20)					
SR 686-699	Unnamed (prospects and workings around Monarch patented claim).	S½ sec. 2, T. 22 S., R. 15 E.	Historical: USBM: Ag, <0.2-47 ppm; Au, <55-1,020 ppb; Cu, 55-8,641 ppm; Pb, 52-254 ppm; Zn, 38-2,934 ppm.	Historical: USBM: Monarch patented claim was not examined. Adits, 120 (fig. M-63), 35, and 10 ft long, two flooded shafts, and several prospect pits and cuts were found near claim.	Rhyolitic tuff(?) in contact with granite. Faulting and alteration has occurred in both rocks and minor quartz veins, copper oxides, and hematite are present.
SR 700-701	Unnamed	NW¼ sec. 2, T. 22 S., R. 15 E.	Historical: USBM: Ag, 1.4-22 ppm; Au, 350-979 ppb; Cu, 217-3,472 ppm; Pb, both 100 ppm; Zn, 38-140 ppm.	Historical: USBM: Two shafts, one 30 ft deep and the other flooded at 50 ft.	Fissure vein cutting andesite(?). Vein contains quartz, pyrite, and hematite.
SR 702-706	FS 1	SE¼ sec. 35, T. 21 S., R. 15 E.	Historical: USBM: Ag, 1.5-14 ppm; Au, <5-270 ppb; Cu, 45-718 ppm; Pb, 594-8,264 ppm; Zn, 38-2,718 ppm.	Historical: USBM: Two inaccessible shafts, 30-ft-long adit, and surface prospects.	Fissure vein cutting interbedded sedimentary and rhyolitic rock units. Veins contain quartz and hematite.
SR 707-715	Ellen Della and Vansuella Prospects.	SW¼ sec. 35, T. 21 S., R. 15 E.	Historical: USBM: Ag, 0.8-14 ppm; Au, <5-190 ppb; Cu, 85-6,099 ppm; Pb, 24-1,006 ppm; Zn, 156-7,800 ppm.	Historical: Several short tunnels and two shafts, 40 and 60 ft deep (3). USBM: Adit, 80 ft long, and shaft, flooded at 17 ft (fig. M-64), and surface prospects.	Fissure vein cutting granite near contact with andesite. Vein contains quartz, malachite, and hematite. Ore minerals reported to be cerussite, chalcopyrite, argentite, chalcocite, and malachite (5).
SR 716-717	Unnamed	SE¼ sec. 34, T. 21 S., R. 15 E.	Historical: USBM: Ag, 10.4-32.4 ppm; Au, all <17 ppb; Co, 23-274 ppm; Cu, 317-4,301 ppm; Mn, all >10,000 ppm; Pb, 80-166 ppm; Zn, 1,788-6,200 ppm.	Historical: USBM: Shaft and pits, 10 ft deep or less.	Fracture zone cutting rhyolite(?); limonite and hematite.
SR 718-732	Commercial Claims (patented) (part of Ivanhoe Mine group).	E½ and NW¼ sec. 34, T. 21 S., R. 15 E.	Historical: At adit, 150 tons of ore on dump said to average $3/t Au and $6/t Ag and Pb. At shaft above adit, some ore said to have averaged 90 oz/t Ag and $6.50/t Au. (3) USBM: Ag, <0.2-11.4 ppm; Au, <5-360 ppb; Cu, 13-348 ppm; Pb, 36-8,874 ppm; Zn, 42-2,600 ppm.	Historical: Tunnel, 200 ft long, and 10-ft deep inclined shaft (3). USBM: Adit with drift, 220 ft long (fig. M-65), and surface prospects.	Fissure vein cutting granite and interbedded andesitic volcanic and sedimentary rocks. Vein contains quartz, hematite, and minor secondary copper mineral biebs, probably malachite. Galena and cerusite were also reported (3).
SR 733-734	Unnamed	NW¼ sec. 35, T. 21 S., R. 15 E.	Historical: USBM: Ag, 0.4-18 ppm; Au, 30-340 ppb; Cu, 20-24 ppm; Pb, 194-5,926 ppm; Zn, 98-380 ppm.	Historical: USBM: Two shafts, one about 50 ft deep and the other is caved and flooded at 6 ft.	Fissure vein cutting rhyolitic volcanic rock. Vein contains quartz and hematite.
SR 735-748	Unnamed	N½ sec. 35, T. 21 S., R. 15 E.	Historical: USBM: Ag, 0.8-22 ppm; Au, <5-240 ppb; Cu, 25-1,391 ppm; Pb, 250->10,000 ppm; Zn, 82-3,100 ppm.	Historical: USBM: Several shafts, as deep as 30 ft, adit, 10 ft long, and many small surface prospects. (See fig. I-13.)	Fissure veins, faults, and quartz veins cutting rhyolitic and andesitic volcanic rocks. Structures contain quartz, sparse malachite and azurite, and abundant hematite, some after pyrite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 749-775	Gringo Mine area (Francis group, Temporal group, Star Mine).	NE¼ sec. 35, SE¼ sec. 26, T. 21 S., R. 15 E.	Historical: The Gringo vein averages about $10/t Au plus a little Ag, Cu, and Pb. The independent vein (600 ft north of the Gringo vein) averages about $9/t Au. At the Star Mine, just below the Gringo Mine, a considerable portion of the vein is said to average $37/t Au. (3) Produced some 100 tons of ore averaging 0.43 oz/t Au and 0.5 oz/t Ag and some 40 tons averaging 6% Pb, 4% Cu, and 12 oz/t Ag (20). USBM: Ag, <0.2-72 ppm; Au, <5-1,880 ppb; Cu, 13-8,453 ppm; Pb, 40->10,000 ppm; Zn, 2-1,810 ppm.	Historical: The Gringo Mine was developed by drifts and shafts aggregating about 3,000 ft of work (3). USBM: Many shafts, caved to as deep as 100 ft; adits, as long as 100 ft; and prospect pits and trenches (figs. I-13 and M-66).	Quartz-calcite veins, veinlets, and splays, some associated with shears and faults in fissure veins, cutting rhyolitic and andesitic volcanic rocks. Sparse chrysocolla and malachite, minor pyrite, and abundant hematite and limonite.
SR 776-787	Last Chance Mine	SW¼ sec. 15, T. 21 S., R. 15 E.	Historical: Produced some 100 tons of ore averaging about 5.5 oz/t Ag and 1.6% Cu (20). USBM: Ag, <0.2-28.8 ppm; Au, <5-160 ppb; Cu, 44-642 ppm; Pb, 218->10,000 ppm; Zn, 298->20,000 ppm.	Historical: USBM: Two adits, 100 and 160 ft long (fig. M-67).	Fissure vein cutting granite. Vein contains quartz, chalcopyrite, pyrite, sphalerite, and hematite.
SR 788-794	"Happy Jack Mine" (name on topographic map).	S½ sec. 16, N½ sec. 21, T. 21 S., R. 15 E.	Historical: USBM: Ag, <0.2-0.8 ppm; Au, <5-47 ppb; Cu, 12-464 ppm; Pb, 80-706 ppm; Zn, 164-2,800 ppm.	Historical: USBM: Two adits, 100 and 150 ft long (fig. M-68).	Shear zone cutting granite. Zone contains quartz and hematite.
SR 795-803	Mountain View group (patented)(Happy Jack, Clipper, Eclipse).	W½ sec. 16, E½ sec. 17, T. 21 S., R. 15 E.	Historical: By 1908, six carloads of ore had been shipped, averaging 41.8% Pb, 2.5% Cu, 21 oz/t Ag, and $2/t Au (3). Worked sporadically, 1881-1908, producing some 150 tons of ore averaging about 34% Pb, 24 oz/t Ag, 2% Cu, and 0.1 oz/t Au (20). USBM: Ag, <0.2->200 ppm; Au, <5-963 ppb; Cu, 31->10,000 ppm; Pb, 240->10,000 ppm; U, <1.9-28 ppm; Zn, 92-1,618 ppm.	Historical: Tunnels, drifts, winzes, and stopes aggregating 4,000 ft; main or lower drift, 950 ft long, connected to an upper drift by a 200-ft raise (3). USBM: Two adits, lower is flooded and upper is caved at 100 ft, but has a deep winze with many drifts (fig. M-69). Two other short adits (less than 40 ft) may have been prospects or used for storage.	Fissure vein cutting granite, quartzite, and rhyolite. Vein contains azurite, malachite, chalcopyrite, bornite, galena, and pyrite; uranium was reported (20), and detected in assays.
SR 804-805	Mansfield group (Sweet, Black Cap, Ruby, Rupert, Lee, New Era and New Era #2, patented).	SE¼ sec. 9, SW¼ sec. 10, NW¼ sec. 15, NE¼ sec. 16, T. 21 S., R. 15 E.	Historical: Worked intermittently, 1879-1951, producing some 370 tons of ore averaging about 19% Pb, 22 oz/t Ag, 2% Cu, and 0.1 oz/t Au (20). USBM: Ag, 1.4-50.8 ppm; Au, 34-130 ppb; Cu, 31->10,000 ppm; Pb, 108-1,794 ppm; Zn, 46-510 ppm.	Historical: Developed by over 4,000 ft of shafts, tunnels, and drifts, primarily at the Sweet and Black Cap Mines (3). USBM: Patented private property at time of investigation and not completely field examined.	Fissure veins cutting dacitic, latitic, and andesitic volcanic and intrusive rocks. Veins contain quartz, pyrite, galena, sphalerite, tetrahedrite, chalcopyrite, and bornite. (20)
SR 806-820	Dragon Z Mine	NE¼ sec. 15, T. 21 S., R. 15 E.	Historical: USBM: Ag, 0.4->300 ppm; Au, <5-140 ppb; Cu, 49-7,599 ppm; Pb, 192->10,000 ppm; Zn, 244->30,000 ppm.	Historical: USBM: Several adits, caved to as long as 90 ft (fig. M-70), at least two flooded shafts, and surface prospects.	Fissure veins cutting latite and granite. Veins contain quartz, calcite, chalcopyrite, azurite, malachite, sphalerite, and pyrite.
SR 821	Los Burritos Prospect (?) (Lucky Jim Mine ?).	W½ sec. 14, T. 21 S., R. 15 E.	Historical: Lucky Jim Mine samples assayed 12-15% Pb and 8-10 oz/t Ag; ore average considered to be lower. Surface sample of vein (1961) assayed 5.5 oz/t Ag, trace Au, 0.65% Cu, and 30.75% Pb. (5) USBM: Ag, 13.8 ppm; Au, 20 ppb, Cu, 129 ppm; Pb, 1,158 ppm; Zn, 390 ppm.	Historical: Lucky Jim Mine adit, 70-80 ft long, and several old inaccessible shafts (5). USBM: Adit, 25 ft long.	Fissure vein in dacite. Vein contains massive quartz and limonite.
SR 822-839	Unnamed (Hornet ?)	S½ sec. 10, T. 21 S., R. 15 E.	Historical: Lead King Mine: 1933-1942, produced about 280 tons of ore averaging about 12% Pb, 13 oz/t Ag, 6% Cu, and minor Au (20). USBM: Ag, <0.2-48 ppm; Au, <5-140 ppb; Cu, 9-147 ppm; Pb, 44->10,000 ppm; Zn, 30-3,200 ppm.	Historical: USBM: Several adits, as long as 230 ft, shafts, as deep as 50 ft to flooding, and surface prospects (figs. I-14 and M-71).	Fissure veins and quartz veins cutting dacitic, latitic, and andesitic volcanic rocks. Veins contain chrysocolla, malachite, azurite, pyrite, galena, limonite, and hematite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 840-898	Anaconda Mine group	Sec. 3, N½ sec. 10, T. 21 S., R. 15 E.	Historical: Anaconda Mine group: worked intermittently from early 1870's to 1949, producing some 300 tons of ore averaging about 5% Pb, 30 oz/t Ag, 3% Cu, and minor Au (20).		Quartz-fissure veins containing calcite, barite, galena, chalcopyrite, sphalerite, tetrahedrite, and pyrite cutting rhyolite, andesite, and latite volcanics (20).
SR 840-846	Silver Cave	NE¼ sec. 10, T. 21 S., R. 15 E.	Historical: Deposit is said to carry as high as 4 oz/t Au (3). USBM: Ag, 0.6-28.6 ppm; Au, <5-94 ppb; Cu, 24-433 ppm; Pb, 50-2,636 ppm; Zn, 22-1,500 ppm.	Historical: Shaft, 40 ft deep (3). USBM: Adit, 280 ft long, two shafts, both flooded, but one is at least 25 ft deep, and surface prospects (figs. I-14 and M-72).	Fissure veins cutting andesite. Veins contain quartz, pyrite, limonite, and hematite.
SR 847-851	Copper Mountain	NE¼ sec. 10, T. 21 S., R. 15 E.	Historical: Sorted ore said to average 5.5% Cu, 1.25 oz/t Ag, and trace Au (3). USBM: Ag, <0.2-150 ppm; Au, <5-49 ppb; Cu, 27-3,430 ppm; Pb, 36-1,714 ppm; Zn, 32-980 ppm.	Historical: Shaft, 45 ft deep, and tunnel, 90 ft long (3). USBM: Two adits, 10 and 95 ft long, shaft, 20 ft deep, and surface prospects (figs. I- 14 and M-73).	Shear zone in andesitic and rhyolitic volcanic rock. Zone contains malachite, azurite, chalcanthite(?), limonite, and hematite.
SR 852-868	Armada	N. ctr. sec. 10, T. 21 S., R. 15 E.	Historical: USBM: Ag, 1.8->300 ppm; Au, <5-669 ppb; Cu, 64->10,000 ppm; Pb, 520->10,000 ppm; Zn, 16->10,000 ppm.	Historical: USBM: Adit, 225 ft long, 180-ft-long trench with 130-ft-long adit and undercuts, and surface prospects (figs. I-14, M-74, and M-75).	Fissure vein cutting rhyolitic volcanic rock. Vein contains quartz, barite, pyrite, chalcopyrite, bornite, chalcanthite, hematite, and limonite.
SR 869-870	Double Header	S. ctr. sec. 3, N. ctr. sec. 10, T. 21 S., R. 15 E.	Historical: Ore said to run 47% Pb, 44 oz/t Ag, and $8/t Au, some ore reported as high as $60/t (3). USBM: Ag, 163.8->200 ppm; Au, <400-450 ppb; Cu, 557-609 ppm; Pb, both >10,000 ppm; Zn, 40-2,504 ppm.	Historical: Inclined shaft, 100 ft deep (3). USBM: Three flooded shafts and surface prospects. (See fig. I-14.)	Fissure vein cutting rhyolitic volcanic rock. Vein contains quartz, barite, pyrite, galena, hematite, and limonite. Sphalerite was also reported (3).
SR 871-876	Ultimo	S. ctr. sec. 3, T. 21 S., R. 15 E.	Historical: Some ore lenses said to average about $40/t (3). USBM: Ag, 7->300 ppm; Au, 24-89 ppb; Cu, 36-747 ppm; Pb, 462-9,460 ppm; Zn, 58-1,100 ppm.	Historical: Adit, 100 ft long, with 30-ft-deep connecting shaft and 6-ft-deep winze (3). USBM: Caved adit and two shafts, about 12 and 18 ft deep. (See fig. I-14.)	Fissure vein cutting andesitic volcanic rock. Vein contains quartz, hematite, and limonite. Barite, chalcopyrite, tetrahedrite, galena, and pyrite were also reported (3).
SR 877-881	Philadelphia	Ctr. sec. 3, T. 21 S., R. 15 E.	Historical: First worked in 1873, shipped two carloads of ore in 1882, averaging 300 oz/t Ag (3). USBM: Ag, 11->200 ppm; Au, 29-240 ppb, Cu, 44-707 ppm; Pb, 386-3,446 ppm; Zn, 80-2,828 ppm.	Historical: Several shafts, two said to be 90 and 60 ft deep, and drifts (3). USBM: Four shafts, from flooded to about 20 ft deep, trenches, and surface prospects. (See fig. I-14.)	Fissure vein cutting rhyolitic and andesitic volcanic rock. Vein contains quartz, barite, azurite, hematite, and limonite. Malachite and galena were also reported (3).
SR 882-888	St. Louis	NW¼ sec. 3, T. 21 S., R. 15 E.	Historical: In 1882, 20 sacks of silver-copper ore netted $300/t. Two tons of ore were said to have returned 5.75% Cu and 96 oz/t Ag. (3) USBM: Ag, 1.2-53.8 ppm; Au, <5-45 ppb; Cu, 35-732 ppm; Pb, 34-992 ppm; Zn, 6-940 ppm.	Historical: Short tunnels and shafts (3). USBM: Three shafts (caved, flooded, and 100 ft deep), 15-ft-long adit, and surface prospects. (See fig. I-14.)	Fissure vein cutting rhyolitic and andesitic volcanic rock. Vein contains quartz, barite, pyrite, hematite, and limonite. Galena, chalcopyrite, sphalerite, malachite, azurite, and cerusite were also reported (3).
SR 889-898	Little Joker	NW¼ sec. 3, T. 21 S., R. 15 E.	Historical: Sorted ore said to average 5.2% Cu, 22.3 oz/t Ag, and $1/t Au (3). USBM: Ag, 1.8->200 ppm; Au, <5-130 ppb; Cu, 27-3,660 ppm; Pb, 152-8,874 ppm; Zn, 18-830 ppm.	Historical: Three shafts, deepest is 60 ft (3). USBM: Four shafts, two flooded and two 100 ft deep; two adits, 40 and 20 ft long; and surface prospects. (See fig. I-14.)	Fissure vein cutting rhyolitic volcanic rock. Vein contains quartz, malachite, azurite, and hematite. Barite and galena were also reported (3).
SR 899-919	American Boy Mine group (patented).	E½ sec. 8, W½ sec. 9, T. 21 S., R. 15 E.	Historical: Fifteen tons of sorted ore shipped from one ore shoot averaging 18% Cu (3). Ore said to average 12 oz/t Ag, 10% Cu, and $5/t Au (11). Worked sporadically through 1951, producing some 200 tons of ore averaging about 4.5% Pb, 8 oz/t Ag, 4% Cu, and 0.1 oz/t Au (20). USBM: Ag, <0.2-75 ppm; Au, <5-1,780 ppb; Cu, 21-6,872 ppm; Pb, 30->10,000 ppm; Zn, 24->30,000 ppm.	Historical: Tunnel, 350 ft long, with drifts, crosscuts, stopes, and raises (3). About 7,000 ft of tunnels and drifts (5). Inclined shaft, 120 ft deep, and a 370-ft-long tunnel that cuts the bottom of the shaft (11). Tunnel, 2,800 ft long (22). USBM: Several adits, from caved, closed, or flooded to at least 280 ft long; several shafts, from caved or flooded to about 80 ft deep; and many trenches and surface prospects (figs. I-15 and M-76).	Shears and veins cutting monzonite. Veins contain quartz, pyrite, chalcopyrite, hematite, and limonite. Cerusite, malachite, galena, tetrahedrite, chalcocite, bornite, and sphalerite were also reported (3, 20).

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

Sample number(s)	Mine, claim, or prospect name(s)	Location	Production/ assay data	Development	Geology/ mineralization
SR 920-925	Dixie Mine	NE¼ sec. 8, T. 21 S., R. 15 E.	Historical: Worked intermittently, 1911-1953, producing some 310 tons of ore averaging about 17% Pb, 7 oz/t Ag, 0.5% Cu, and minor Au (20). USBM: Ag, <5-280 ppm; Au, 40-430 ppb; Cu, 519-3,980 ppm; Pb, 1,586->10,000 ppm; Zn, 870->30,000 ppm.	Historical: USBM: Three caved or flooded adits with at least two connecting shafts, 20 and 100 ft deep, and prospects. (See fig. I-15.)	Fissure veins cutting monzonite. Veins contain quartz, barite, pyrite, galena, cerusite(?), hematite, and limonite. Chalcopyrite and sphalerite were also reported (20).
SR 926-937	Lee (Ruby) Claim group.	SE¼ sec. 7, S½ sec. 8, T. 21 S., R. 15 E.	Historical: Ore assays as high as 27% Cu and 100 oz/t Ag, estimated to average about 6% Cu, 12 oz/t Ag, and $0.11/t Au (11). USBM: Ag, 0.4-84.8 ppm; Au, <5->10,000 ppb; Cu, 34-390 ppm; Pb, 42-5,840 ppm; Zn, 16-1,000 ppm.	Historical: Shafts, 400 and 80 ft deep, and a drift in ore for 160 ft, with about 600 ft of workings (9). Shaft, 460 ft deep, and a drift with about 5,000 ft of workings (11). USBM: Several flooded or caved shafts and adits. (See fig. I-15.)	Shears and veins cutting granitic rocks. Veins contain quartz, pyrite, hematite, and limonite.
SR 938-946	Hosey Mine group (Augusta, Presidential, Exposed Reef, Red Cloud).	SE¼ sec. 6, NE¼ sec. 7, T. 21 S., R. 15 E.	Historical: 8,000 tons of ore shipped, running 6-18% Cu, and 1 oz Ag per percent of Cu (5). Worked sporadically, 1880's-1936, producing some 450 tons of ore averaging about 15% Pb, 9% Cu, 9 oz/t Ag, and 0.4 oz/t Au (20). USBM: Ag, 1.4-230 ppm; Au, <5-340 ppb; Cu, 24->10,000 ppm; Pb, 40->10,000 ppm; Zn, 46-5,672 ppm.	Historical: Shafts, drifts, crosscuts, and stopes aggregating about 1,000 ft, including a 215-ft-deep double compartment inclined shaft and an 80-ft-deep shaft (3). Inclined shaft, about 200 ft deep, and 300-ft-deep vertical shaft (5). USBM: Several caved or flooded adits and shafts (figs. I-15 and M-77).	Fissure veins cutting granitic and rhyolitic rocks. Veins contain quartz, pyrite, chalcopyrite, chalcanthite, malachite, azurite, galena, sphalerite, hematite, and limonite. Tetrahedrite, chalcocite, and argentite were also reported (3, 20).
SR 947	Mary Juanita Mine (?)	SW¼ sec. 27, T. 20 S., R. 15 E.	Historical: Assays reported by past claimants: 0.03 oz/t Au, 6.1-6.6 oz/t Ag, and 1.44%-3.75% Cu (5). USBM: Ag, 33.2 ppm; Au, <5 ppb; Cu, 267 ppm; Pb, 58 ppm; Zn, 38 ppm.	Historical: Bulldozer cut, 55 ft long and 14 ft wide, and surface cut, 20 ft in diameter and 10 ft deep (5). USBM: Bulldozer cut about 50 ft long, 15 ft wide, and 6 ft deep.	Quartz veins cutting rhyolitic volcanic rock.
SR 948-950	Walker Mine	NW¼ sec. 28, T. 20 S., R. 15 E.	Historical: USBM: Ag, 69.6->200 ppm; Au, all <28 ppb; Cu, 499-7,694 ppm; Pb, 664-1,984 ppm; Zn, 96-318 ppm.	Historical: USBM: Two shafts, flooded and 6 ft deep, and surface prospects.	Vein cutting rhyolite, containing malachite, azurite, and pyrite.
SR 951-954	Wildcat Mine	W. ctr. sec. 30, T. 20 S., R. 15 E.	Historical: Parts of the veins assayed 0.5% Cu, 6 oz/t Ag, and $18.60/t Au (3). USBM: Ag, all <0.2 ppm; Au, all <5 ppb; Cu, 21-87 ppm; Pb, 8-166 ppm; Zn, 68-854 ppm.	Historical: Two tunnels, each about 200 ft long (3). USBM: Caved adits.	Silicified latitic rock near contact with monzonite, containing pyrite.

Table 1.--Summary of mining activity in the Santa Rita Mountains Unit--continued.

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APPENDIX A.–Description of samples taken in the Santa Rita Mountains Unit, Coronado National Forest, Arizona.
[na, not applicable; ft, feet; cps, counts per second;]

Sample type:

Chip - a regular series of rock chips taken either in a continuous line across an exposure or at uniformly spaced intervals. Chip samples are taken across veins, quartz- or sulfide-bearing fracture zones, layered or bedded deposits, and irregular mineralized bodies using a rock pick.

Grab - a collection of rock fragments taken more or less at random from dumps, ore stockpiles, or scattered float. Grab samples generally are representative fragments from the mineral occurrence and are usually evaluated to show the presence or absence of minerals, or the overall composition of the mineral occurrence.

Select - a collection of specific mineral or rock fragments suspected to be highly mineralized taken from dumps, ore stockpiles, or scattered float. Select samples are taken to indicate maximum concentrations present in the deposit. Presumably, if analyses of these fragments are high, it shows that high-grade materials exist; conversely, if analyses are low, it suggests that the occurrence has low potential for development.

Sample			Description
No.	Type	Length (ft)	
SR 1	chip	2.9	Adit, right rib at 20 ft; fractured metasedimentary rock; malachite and hematite.
SR 2	chip	1.6	Adit, left rib at 90 ft; fault cutting granite; gouge and fragments with hematite.
SR 3	chip	1.3	Adit, right rib at 135 ft; granite/quartzite contact; chrysocolla and hematite.
SR 4	chip	2.0	Adit, right rib at 30 ft; fissure vein cutting granite; gouge and fragments with quartz, chrysocolla, malachite, and hematite.
SR 5	chip	2.4	Adit, face at 68 ft; fissure vein cutting granite; gouge and fragments with quartz, chrysocolla, and malachite, and hematite.
SR 6	chip	2.8	Adit, across portal; fissure vein cutting granite; gouge and fragments with quartz, chrysocolla, malachite, and hematite.
SR 7	chip	7.0	Do.
SR 8	chip	1.2	Adit, back at 35 ft; fissure vein cutting granite; gouge and fragments with quartz, chrysocolla, malachite, and hematite.
SR 9	chip	2.8	Adit, back at 33 ft; fault cutting rhyolitic volcanic breccia; gouge and fragments with minor hematite.
SR 10	chip	2.7	Pit; fissure vein cutting rhyolitic volcanic breccia; gouge and fragments with quartz and hematite.
SR 11	grab	na	Random from dump of caved adit; rhyolitic volcanic breccia fragments with hematite.
SR 12	grab	na	Dump of opencut and pit; fissure vein cutting rhyolitic volcanic breccia; vein contains vuggy quartz with hematite.
SR 13	chip	3.3	Pit; fissure vein cutting rhyolitic volcanic breccia; vein contains vuggy quartz and hematite.
SR 14	chip	2.3	Adit, right rib at 32 ft; fault cutting rhyolitic volcanic breccia; gouge and fragments with hematite.
SR 15	chip	2.2	Adit, left rib at 93 ft; fault cutting rhyolitic volcanic breccia; fragments and gouge with hematite.
SR 16	chip	3.0	Adit, back near face at 145 ft; fault cutting rhyolitic volcanic breccia; fragments and gouge with hematite.
SR 17	chip	2.0	Adit, left rib at 25 ft; fault cutting rhyolitic volcanic breccia; fragments and gouge with hematite.
SR 18	chip	1.8	Adit, face at 82 ft; fault cutting rhyolitic volcanic breccia; gouge and fragments with hematite.
SR 19	grab	na	Grid of east half of adit dump; faulted rhyolitic volcanic breccia; breccia fragments and quartz with hematite.
SR 20	grab	na	Grid of west half of adit dump; faulted rhyolitic volcanic breccia; breccia fragments and quartz with hematite.
SR 21	chip	5.0	North side of inclined shaft and stope above adit; faulted rhyolitic volcanic breccia with hematite.

Sample			Description
No.	Type	Length (ft)	
SR 22	chip	2.3	North side of stope connecting to inclined shaft above adit; faulted rhyolitic volcanic breccia with hematite.
SR 23	chip	3.0	Adit, back at 123 ft; fault cutting rhyolitic volcanic breccia; gouge and fragments with minor hematite.
SR 24	chip	4.0	Adit, left rib at 30 ft; fault intersection at limestone and claystone/quartzite contact; gouge and fragments with calcite veinlets and hematite.
SR 25	chip	3.0	Adit, left rib at 17 ft; solution cavity in fractured limestone; calcite, travertine, and hematite.
SR 26	chip	2.5	Adit, left rib in drift at 70 ft; solution cavity in fractured limestone; calcite, travertine, and hematite.
SR 27	chip	2.5	Adit, left rib at 90 ft; solution cavity in fractured limestone; calcite, travertine, hematite.
SR 28	chip	2.5	Adit, left rib at face at 125 ft; shear contact of limestone and claystone (altered rhyolite ?); hematite.
SR 29	grab	na	Random from dump of shaft; sheared and brecciated lamprophyre dike; calcite veinlets, chalcopyrite, and travertine.
SR 30	grab	na	Random from dump of shaft; limestone with calcite veinlets and relict pyrite.
SR 31	chip	3.0	Adit, left rib at 25 ft; fault contact of lamprophyre dike and limestone.
SR 32	grab	na	Random from dump of shaft; limestone and marbleized limestone; quartz, calcite, and hematite.
SR 33	chip	2.5	Shaft, outcrop at collar; fissure vein cutting limestone; vein contains quartz, calcite, malachite, and hematite.
SR 34	chip	3.5	Adit, back at 33 ft; lamprophyric dike intruding limestone; disseminated chalcopyrite and hematite.
SR 35	grab	na	Random from ore bin; silicified limestone with disseminated chalcopyrite.
SR 36	chip	3.9	Adit, across portal; lamprophyric dike intruding limestone; hematite.
SR 37	chip	3.0	Adit, across back of drift to right at about 150 ft; lamprophyre dike intruding limestone; quartz, calcite, and hematite.
SR 38	chip	3.0	Adit, back at about 235 ft; shear cutting limestone; fragments and gouge with quartz and calcite.
SR 39	chip	5.4	Adit, face at base of winze; lamprophyre dike intruding limestone; calcite veinlets.
SR 40	chip	3.6	Tunnel, back at 20 ft inside drift about 40 ft in from NW. portal; shear cutting limestone containing lamprophyre and limestone fragments with malachite and hematite.
SR 41	chip	4.0	Tunnel, back at about 75 ft from NW. portal; shear contact of lamprophyre and limestone; calcite veinlets.
SR 42	chip	4.6	Tunnel, across back at SE. portal; lamprophyre dike cutting limestone; calcite veinlets.
SR 43	chip	4.0	Opencut; shear cutting limestone; lamprophyre and limestone fragments with calcite stringers.
SR 44	chip	4.6	Trench, across floor; shear cutting limestone; calcite stringers and hematite.
SR 45	chip	5.0	Opencut; silicified limestone with two shear zones; calcite, quartz, and hematite.
SR 46	chip	9.0	Adit, right rib at 190 ft across from winze; shear cutting limestone with lamprophyric dike, calcite, and quartz.
SR 47	chip	2.8	Adit, across back of drift to NW.; sheared limestone with quartz and calcite.
SR 48	chip	3.3	Shaft cutting adit, about 25 ft below drift level; shear cutting limestone; quartz, calcite, malachite, and hematite.
SR 49	chip	3.0	Adit, left rib at 70 ft; fault contact between quartz monzonite and marble; gouge and fragments with hematite.
SR 50	chip	7.5	Adit, right rib at 125 ft; coarse-grained white marble with hematite.
SR 51	chip	8.0	Adit, left rib near face at 210 ft; shear cutting marble and containing highly fractured mafic dike (?) with chalcopyrite.

Sample			Description
No.	Type	Length (ft)	
SR 52	select	na	Dump of shaft; silicified limestone with malachite and azurite.
SR 53	select	na	Dumps of several cuts and drifts; limestone with malachite and azurite.
SR 54	chip	2.5	Adit, left rib at 138 ft; fissure vein cutting dolomitic limestone; vein contains quartz and molybdenite veinlets.
SR 55	chip	4.6	Adit, left rib at 15 ft; fault zone between quartzite and limestone; gouge and fragments with malachite, azurite, marcasite(?), hematite, and limonite.
SR 56	grab	na	Stockpile on shaft dump; fault contact between granite and limestone noted in shaft; limestone fragments with malachite and azurite.
SR 57	chip	6.0	Adit, right rib of drift to SW. at 200 ft; fissure vein in granite/limestone contact; vein contains pyrite, chalcopyrite, malachite, azurite, chalcanthite(?), chrysocolla(?), and hematite.
SR 58	grab	na	Stockpile at opencut; quartz vein material with malachite and hematite.
SR 59	chip	2.4	Adit, right rib at 30 ft; fissure vein cutting granite; vein contains quartz and hematite after pyrite.
SR 60	chip	1.5	Adit, south rib at about 80 ft; quartz vein cutting granite; vein contains galena, malachite, and hematite after pyrite.
SR 61	chip	2.0	Adit, right rib at about 40 ft; quartz vein cutting granite; vein contains hematite.
SR 62	chip	1.7	Adit, back at 20 ft; joint set in granite; quartz and pyrite veinlets with hematite.
SR 63	chip	1.1	Adit, left rib at 12 ft; shear cutting granite; quartz veinlets and hematite after pyrite.
SR 64	chip	2.0	Adit, face at 37 ft; fissure vein cutting granite; vein contains quartz, chrysocolla, hematite, and limonite.
SR 65	chip	1.7	Adit, right rib at 20 ft; fissure vein cutting granite; vein contains quartz, pyrite, chalcopyrite, malachite, and hematite.
SR 66	chip	1.0	Adit, right rib at 40 ft; fissure vein cutting granite; vein contains quartz, galena, pyrite, chalcopyrite, malachite, and hematite.
SR 67	chip	0.8	Adit, left rib near face of drift to N. at about 110 ft; fissure vein cutting granite; vein contains quartz, pyrite, chalcopyrite, malachite, and hematite.
SR 68	chip	1.7	Adit, left rib at 85 ft; fissure vein cutting granite; vein contains quartz, malachite, and hematite.
SR 69	chip	3.3	Opencut; fissure vein cutting granite; vein contains quartz and hematite.
SR 70	chip	1.7	Adit, left rib at 70 ft; fissure vein cutting granite; vein contains quartz, malachite, and hematite.
SR 71	chip	1.7	Adit, left rib at 120 ft; fissure vein cutting granite; vein contains quartz and malachite.
SR 72	chip	1.5	Adit, right rib at 50 ft; fissure vein cutting granite; vein contains quartz and hematite.
SR 73	chip	1.8	Adit, left rib at 170 at ft; fissure vein cutting granite; vein contains quartz, malachite, and hematite.
SR 74	chip	1.3	Adit, left rib at 120 ft; fissure vein cutting granite; vein contains vuggy quartz and hematite.
SR 75	chip	2.8	Adit, left rib at 280 ft; fissure vein cutting granite; vein contains quartz, pyrite, and chalcopyrite.
SR 76	chip	1.0	Adit, face of drift to right at 385 ft; fissure vein cutting granite; vein contains pyrite and hematite.
SR 77	chip	1.0	Adit, right rib at 440 ft; fissure vein cutting granite; vein contains quartz, pyrite, malachite, hematite, and limonite.
SR 78	chip	1.0	Adit, left rib at 630 ft; fissure vein cutting granite; vein contains quartz, pyrite, malachite, hematite, and limonite.
SR 79	chip	1.3	Opencut; fissure vein cutting granite; vein contains vuggy quartz and hematite.
SR 80	chip	20.0	Composite across opencut; fault zone cutting metasedimentary rock; gouge and fragments with malachite, chrysocolla, azurite, and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 81	chip	21.0	Composite along opencut; highly shattered metasedimentary rock; heavily oxidized and contains malachite, chrysocolla, and hematite.
SR 82	grab	na	Random from dump of shaft; arkosic sandstone with minor malachite, chrysocolla, and hematite.
SR 83	chip	100.0	Composite along opencut; fault zone cutting metasedimentary rock; zone contains malachite, chrysocolla, hematite, and limonite.
SR 84	chip	9.5	Adit, face of drift to right at about 290 ft; fault zone cutting metasedimentary rock; zone contains malachite, chrysocolla, hematite, and limonite.
SR 85	chip	8.0	Adit, across back of drift to left at about 310 ft; fault zone cutting metasedimentary rock; zone contains malachite, chrysocolla, hematite, and limonite.
SR 86	chip	5.0	Adit, back at 12 ft; fault zone cutting metasedimentary rock; zone contains malachite, chrysocolla, hematite, and limonite.
SR 87	chip	32.0	Composite along opencut; fault zone cutting sedimentary and metasedimentary rocks; zone contains chrysocolla, azurite, malachite, hematite, and limonite.
SR 88	chip	42.0	Composite along opencut; fractured sandstone and quartzite; quartz veins and veinlets, malachite, chrysocolla, chalcanthite, and hematite.
SR 89	chip	4.0	Adit, stoped area at 125 ft; shear zone cutting arkosic sandstone and quartzite; zone contains quartz, calcite, malachite, chrysocolla, chalcanthite, hematite, and limonite.
SR 90	chip	8.0	Adit, left rib at 560 ft; fault zone cutting limestone and arkose; zone contains malachite, azurite, and hematite.
SR 91	chip	5.8	Adit, right rib at 680 ft in stope; fault zone cutting arkose and limestone; zone contains malachite, azurite, chalcanthite(?), hematite, and limonite.
SR 92	chip	4.0	Adit, face of drift at 730 ft; fault zone cutting limestone; zone contains azurite, malachite, chalcanthite, bornite, hematite, and limonite.
SR 93	chip	2.3	Adit, left rib at 10 ft; fault contact between arkose and limestone; malachite, chrysocolla, hematite, and limonite.
SR 94	chip	1.8	Pit; fissure vein cutting silicified limestone; vein contains quartz, malachite, and hematite.
SR 95	chip	2.3	Adit, left rib at 20 ft; fissure vein cutting limestone; vein contains quartz, wulfenite, malachite, chrysocolla, hematite, and limonite.
SR 96	chip	3.0	Adit, face at 85 ft; fault cutting limestone with hematite coatings.
SR 97	chip	4.0	Inclined shaft; fault zone cutting limestone; zone contains white marbleized limestone and gray limestone fragments with hematite.
SR 98	grab	na	Random from dump of adit; limestone breccia with minor hematite.
SR 99	chip	2.0	Adit, back at 44 ft; fissure vein cutting limestone breccia; vein contains brown calcite, malachite, chrysocolla, and hematite.
SR 100	chip	2.2	Adit, back at 120 ft; brown calcite vein cutting limestone breccia.
SR 101	chip	3.0	Adit, back at 25 ft; fault cutting arkose breccia; malachite, hematite, and manganese oxide.
SR 102	grab	na	Random from ore pile on adit dump; arkose breccia with calcite veinlets, pyrite, malachite, chalcopyrite, hematite, and manganese oxide.
SR 103	grab	na	Random from dumps of opencuts, caved adit, trenches, and pits; arkosic sandstone breccia with drusy quartz, malachite, and hematite.
SR 104	chip	200.0	Composite random chip along large pit; shattered arkose with malachite, hematite, and limonite.
SR 105	chip	3.0	Adit, back at 29 ft; brecciated quartzite with pyrite, chalcopyrite, malachite, bornite(?), hematite, and limonite.
SR 106	chip	3.0	Adit, right rib at 55 ft; two small faults cutting arkose; malachite and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 107	chip	1.7	Adit, back at 100 ft; fault zone cutting arkose; zone contains malachite, hematite, manganese oxide, and limonite.
SR 108	select	na	Dump of shaft; limestone with calcite veinlets, pyrite, chalcopyrite, chrysocolla, malachite, and hematite.
SR 109	chip	4.3	Adit, right rib at 55 ft; altered and fractured limestone; clayey gouge with malachite, hematite, and limonite.
SR 110	chip	3.0	Adit, face at 105 ft; fault zone in fractured and altered limestone; zone contains unidentified black mineral and hematite.
SR 111	chip	7.0	Adit, across back at 8 ft; heavily fractured and altered sedimentary rock; calcite veinlets, malachite, and chrysocolla.
SR 112	chip	4.0	Opencut; fault contact between granite and arkose; malachite and azurite.
SR 113	chip	5.5	Adit, right rib at portal; fault contact between arkose and limestone; malachite, azurite, manganese oxide, and hematite.
SR 114	chip	5.4	Opencut; shear zone between limestone and arkose; zone contains clayey gouge with malachite, azurite, and chrysocolla.
SR 115	chip	50.0	Composite along opencut; fractured limestone/dolomite gouge and fragments.
SR 116	chip	10.0	Shaft/opencut, north end of opencut; fault zone cutting metasediments.
SR 117	chip	12.0	Opencut; shear zone cutting metasediments.
SR 118	grab	na	Grid from dump of opencut; faulted conglomerate made up of mostly broken sedimentary rocks.
SR 119	chip	3.0	Adit, left rib at portal; fissure vein cutting conglomerate; vein contains vuggy quartz, chalcanthite, and hematite.
SR 120	chip	2.0	Adit, left rib at 40 ft; fissure vein cutting conglomerate; vein contains vuggy quartz, chalcanthite, and hematite.
SR 121	chip	3.0	Adit, face at 60 ft; fissure vein cutting conglomerate; vein contains vuggy quartz and hematite.
SR 122	grab	na	Grid from dump of shaft; fissure vein cutting sedimentary and metasedimentary rocks; vein contains quartz, pyrite, and hematite.
SR 123	select	na	Vein material from dump of shaft; fissure vein cutting sedimentary and metasedimentary rocks; vein contains quartz and hematite.
SR 124	chip	5.0	Outcrop exposed in pit; fissure vein cutting sedimentary and metasedimentary rocks; vein contains quartz, pyrite, and hematite.
SR 125	chip	2.0	Inclined shaft, left rib at about 30 ft; quartz fissure vein cutting metasedimentary rock.
SR 126	chip	4.0	Inclined shaft; fractured sedimentary and metasedimentary rocks.
SR 127	chip	5.0	Do.
SR 128	grab	na	Grid from upper half of adit dump; fragments of fractured sedimentary and metasedimentary rocks.
SR 129	grab	na	Grid from lower half of adit dump; fragments of fractured sedimentary and metasedimentary rocks.
SR 130	chip	3.5	Adit; back at 45 ft; shear zone cutting metasediments; zone contains clayey gouge with hematite and limonite.
SR 131	select	na	Dump of pit; quartz vein with sphalerite, pyrite, hematite, and limonite.
SR 132	select	na	Dump of inclined shaft; quartz vein with sphalerite, chalcopyrite, galena, bornite, malachite, azurite, hematite, and limonite.
SR 133	chip	4.0	Inclined shaft; quartz stockwork cutting granite with hematite.
SR 134	select	na	Stockpile on dump of shaft; quartz vein with hematite.

Sample			Description
No.	Type	Length (ft)	
SR 135	chip	1.5	Adit, collapsed raise; fractured quartz vein cutting granite; vein contains hematite.
SR 136	select	na	Stockpile on dump of shaft; quartz vein with pyrite, galena, and hematite.
SR 137	chip	1.0	Adit, right rib at 10 ft; quartz vein cutting granite; vein contains pyrite, galena, malachite, and hematite.
SR 138	chip	1.0	Adit, right rib at 68 ft; quartz vein cutting granite; vein contains pyrite, galena, malachite, and hematite.
SR 139	select	na	Dump of shaft; quartz vein with pyrite, galena, hematite, and limonite.
SR 140	select	na	Dump of shaft and pit; vuggy quartz vein with pyrite, galena, hematite, and limonite.
SR 141	chip	1.5	Outcrop in pit; fissure vein cutting granite; vein contains quartz and pyrite.
SR 142	chip	3.0	Outcrop; fissure vein cutting granite; vein contains vuggy quartz, galena, chalcopyrite, and malachite.
SR 143	chip	4.0	Adit, right rib at portal; quartz fissure vein cutting quartzite(?).
SR 144	chip	1.0	Adit, right rib at 38 ft; fissure vein cutting quartzite(?); vein contains quartz, pyrite, galena, malachite, hematite, and limonite.
SR 145	chip	3.0	Adit, left rib at 40 ft; gray quartzite(?) with disseminated pyrite.
SR 146	chip	1.0	Adit, face at 88 ft; fissure vein cutting quartzite(?); vein contains quartz, limonite, and hematite.
SR 147	chip	3.0	Shaft; fissure vein cutting quartzite(?); vein contains quartz and hematite.
SR 148	chip	1.5	Inclined shaft, right rib at 23 ft; quartz vein cutting granite; vein contains galena, chalcopyrite, malachite, and hematite.
SR 149	chip	2.0	Inclined shaft, face at 45 ft; quartz vein cutting granite; vein contains galena, chalcopyrite, malachite, and hematite.
SR 150	grab	na	Random from dump of pit; altered granite and quartz vein with hematite after pyrite.
SR 151	chip	100.0	Composite from outcrop near shaft and pit; quartz stockwork cutting granite with pyrite and hematite.
SR 152	chip	1.0	Adit, left rib at 20 ft; sheared quartz vein cutting metasedimentary rocks; malachite and hematite.
SR 153	chip	1.0	Adit, back at 45 ft; sheared quartz vein cutting metasedimentary rocks; malachite and hematite.
SR 154	chip	3.0	Inclined shaft; shear zone cutting arkose; zone contains malachite.
SR 155	chip	0.5	Adit, back at 41 ft; vuggy quartz vein cutting arkose; malachite and hematite.
SR 156	chip	0.8	Adit, left rib at 81 ft; fissure vein cutting arkose; vein contains quartz, malachite, and hematite after pyrite.
SR 157	chip	2.0	Adit, back at right rib at 105 ft; fissure vein cutting arkose; vein contains pyrite, chalcopyrite, malachite, galena, hematite, and limonite.
SR 158	chip	2.0	Adit, right rib at 70 ft; fissure vein cutting arkose; vein contains pyrite, hematite, and limonite.
SR 159	select	na	Composite from dumps of several trenches, shafts, and pits; quartz/barite vein with minor malachite, galena, and hematite.
SR 160	chip	2.5	Adit, right rib at 8 ft; shear zone cutting metasedimentary rocks; zone contains quartz, hematite, and limonite.
SR 161	chip	2.0	Adit, left rib at 25 ft; shear cutting metasedimentary rocks; hematite and limonite.
SR 162	chip	1.5	Adit, face of stope to left at 79 ft; shear cutting metasedimentary rocks; hematite and limonite.
SR 163	chip	1.5	Adit, back at 112 ft; shear cutting metasedimentary rocks; hematite and limonite.
SR 164	chip	2.0	Adit, right rib at back at 17 ft; shear cutting metasedimentary rocks; quartz veinlets, hematite, and limonite.
SR 165	chip	1.0	Adit, stope to right at 80 ft; shear cutting metasedimentary rocks; quartz veinlet, pyrite, hematite, and limonite.

Sample			Description
No.	Type	Length (ft)	
SR 166	chip	1.0	Adit, left rib at 130 ft; shear cutting metasedimentary rocks; quartz veinlets, pyrite, hematite, and limonite.
SR 167	chip	2.0	Adit, right rib at 20 ft; contact of latite(?) and siltstone; disseminated pyrite.
SR 168	chip	2.5	Adit, left rib at 40 ft; contact of latite(?) and siltstone; disseminated pyrite.
SR 169	chip	1.0	Adit, left rib of lower level at about 60 ft; shear cutting metasedimentary rocks; quartz veinlets, pyrite, hematite, and limonite.
SR 170	chip	1.0	Drift between two inclined shafts; fissure vein cutting metasedimentary rocks; vein contains quartz, malachite, chalcopyrite(?), pyrite, and hematite.
SR 171	chip	1.0	Inclined shaft, left rib at 28 ft; fissure vein cutting metasedimentary rocks; vein contains quartz, malachite, pyrite, and hematite.
SR 172	chip	1.3	Inclined shaft; fissure vein cutting metasedimentary rocks; vein contains quartz, galena, and hematite.
SR 173	chip	1.0	Adit, left rib at 26 ft; shear cutting argillite; hematite and limonite.
SR 174	chip	0.7	Adit, right rib at 97 ft; shear cutting metasedimentary rocks; hematite and limonite.
SR 175	chip	1.5	Adit, right rib at 105 ft; shear cutting metasedimentary rocks; hematite and limonite.
SR 176	chip	2.0	Adit, right rib at 113 ft; shear cutting metasedimentary rocks; hematite and limonite.
SR 177	chip	2.0	Adit, right rib at 170 ft; shear cutting metasedimentary rocks; malachite.
SR 178	chip	3.0	Adit, back in drift to left at 220 ft; shear zone cutting metasedimentary rocks; zone contains quartz, hematite, limonite, and manganese oxide.
SR 179	chip	2.0	Adit, back in drift to right at 204 ft; shear zone cutting metasedimentary rocks; zone contains hematite and limonite.
SR 180	chip	1.0	Adit, left rib in drift to right at 245 ft; fractured quartz vein cutting metasedimentary rocks; vein contains manganese oxide, limonite, and hematite after pyrite.
SR 181	chip	1.0	Adit, face of drift to right at 305 ft; fractured quartz vein cutting metasedimentary rocks; vein contains manganese oxide, limonite, and galena.
SR 182	chip	1.0	Adit, left rib at 17 ft; vuggy quartz veinlets with hematite cutting metasedimentary rocks.
SR 183	select	na	Dump of caved adit; quartz vein with malachite, hematite, limonite, and manganese oxide.
SR 184	chip	0.7	Pit; vuggy quartz vein cutting granite; abundant hematite.
SR 185	chip	3.0	Pit; fissure vein (?) cutting quartz monzonite and metasedimentary rocks; vein contains quartz, hematite, and manganese oxide.
SR 186	chip	1.0	Inclined shaft, outcrop at collar; quartz vein cutting quartz monzonite; vein contains malachite, hematite, and manganese oxide.
SR 187	grab	na	Grid from dump of inclined shaft; quartz vein and quartz monzonite with hematite and limonite.
SR 188	chip	0.7	Adit, left rib at back at 10 ft; quartz vein cutting quartz monzonite; hematite.
SR 189	select	na	Adit, quartz vein from dump.
SR 190	chip	1.0	Adit; quartz vein cutting quartz monzonite; malachite and hematite.
SR 191	chip	2.0	Inclined shaft, left rib in left drift at 40 ft; quartz vein cutting quartz monzonite; vein contains pyrite, galena, chalcanthite, and chalcopyrite.
SR 192	chip	2.0	Inclined shaft, left rib at 75 ft; quartz vein cutting quartz monzonite; vein contains pyrite, galena, chalcanthite, and chalcopyrite.
SR 193	chip	1.5	Adit, back at 52 ft; fissure vein cutting metasedimentary rocks; vein contains quartz, hematite, and limonite.

Sample			Description
No.	Type	Length (ft)	
SR 194	chip	2.0	Adit, back at 100 ft; fissure vein cutting metasedimentary rocks; vein contains quartz, hematite, and limonite.
SR 195	chip	0.2	Adit, back in drift to left at 115 ft; quartz veinlet in metasedimentary rocks; galena.
SR 196	chip	0.7	Adit, right rib in drift to right at 125 ft; quartz vein cutting metasedimentary rocks; vein contains hematite, limonite, manganese oxide, and galena(?).
SR 197	chip	1.0	Opencut; quartz vein cutting metasedimentary rocks; galena, malachite, and hematite.
SR 198	chip	1.0	Pit; quartz vein cutting metasedimentary rocks; hematite.
SR 199	chip	4.0	Inclined shaft; fissure vein cutting metasedimentary rocks; vein contains quartz and hematite.
SR 200	chip	1.5	Adit, left rib at 23 ft; fissure vein cutting limestone; vein contains galena(?) and hematite.
SR 201	grab	na	Stockpile on dump of inclined shaft; quartz veinlets in limestone; galena, malachite, and mimetite(?).
SR 202	chip	8.0	Pit; silicified limestone with hematite.
SR 203	chip	0.7	Outcrop; quartz vein cutting siltstone.
SR 204	grab	na	Random from dump of inclined shaft; sedimentary and metasedimentary rock fragments.
SR 205	chip	2.0	Adit, across portal; fissure vein cutting granite; vein contains vuggy quartz, hematite, limonite, and manganese oxide.
SR 206	chip	2.5	Adit, left rib at 12 ft; fissure vein cutting granite; vein contains quartz, hematite, limonite, and manganese oxide.
SR 207	chip	2.0	Caved inclined shaft, outcrop on west side; fissure vein cutting granite; vein contains quartz, malachite, hematite, and manganese oxide.
SR 208	select	na	Dump of shaft; quartz vein with chalcopyrite, malachite, pyrite, hematite, and limonite.
SR 209	chip	3.0	Adit and shaft, left rib of adit at 28 ft; fissure vein cutting granite; vein contains quartz, hematite, limonite, and manganese oxide.
SR 210	chip	3.0	Shaft; fissure vein cutting granite; vein contains quartz, hematite, and limonite.
SR 211	chip	4.0	Adit, back at 35 ft; shear cutting limestone that has been silicified and marbleized.
SR 212	chip	6.0	Adit, stope to right at 83 ft; multiple shears at contact of limestone, quartz monzonite, and sandstone.
SR 213	chip	5.0	Adit, back at 155 ft; shear contact between limestone and quartz monzonite.
SR 214	chip	5.0	Adit, right rib at 270 ft; shear contact between limestone and quartz monzonite.
SR 215	chip	3.5	Adit, left rib at 540 ft; shear zone cutting quartz monzonite.
SR 216	chip	2.0	Adit, left rib at 8 ft; shear zone cutting granite; hematite.
SR 217	chip	6.0	Opencut; shear cutting pegmatite; large quartz, feldspar, and mica crystals.
SR 218	grab	na	Random from wooden ore chute; andesite with pyrite and malachite.
SR 219	chip	0.6	Adit, left rib at 27 ft; shear cutting andesite; hematite and manganese oxide.
SR 220	chip	5.0	Adit, right rib at 63 ft; shear cutting andesite; hematite.
SR 221	chip	2.5	Adit, right rib at 30 ft; shear cutting andesite; hematite, limonite, and manganese oxide.
SR 222	chip	0.8	Adit, left rib at 73 ft; shear cutting andesite; malachite, hematite, and limonite.
SR 223	chip	2.0	Adit, back at 150 ft; shear cutting andesite; malachite, hematite, and limonite.
SR 224	chip	2.5	Caved adit, across portal; shear zone cutting andesite; zone contains galena, malachite, azurite, bornite, and hematite.
SR 225	chip	3.0	Shaft; shear cutting conglomerate; manganese oxide and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 226	chip	1.5	Bulldozer cut; shear zone cutting conglomerate; hematite.
SR 227	chip	2.5	Adit, back at 13 ft; shear zones cutting conglomerate; hematite and manganese oxide.
SR 228	chip	5.0	Adit, back at 25 ft; multiple shears cutting conglomerate; hematite.
SR 229	chip	2.5	Adit, back at 20 ft; fault cutting granite; hematite.
SR 230	chip	4.0	Adit, back of right drift at 35 ft; shear cutting granite; limonite.
SR 231	chip	3.5	Adit, back of right drift at 143 ft; shear cutting granite; limonite.
SR 232	chip	3.0	Adit, back of stope in left drift at 130 ft; limestone and granite breccia with hematite.
SR 233	chip	3.5	Adit, back of left drift at 150 ft; shears cutting limestone; limonite and manganese oxide.
SR 234	chip	3.5	Adit, small stope above left drift at chute; shears cutting limestone; calcite veinlets, hematite, and limonite.
SR 235	grab	na	Random from ore bin; limestone breccia and gossan material with quartz, calcite, hematite, limonite, and manganese oxide.
SR 236	grab	na	Grid from dump of shaft; sheared and brecciated granite and limestone with hematite.
SR 237	grab	na	Stockpile(?) on dump of shaft; sheared and brecciated granite and limestone with calcite, quartz, hematite, and limonite.
SR 238	chip	3.5	Adit, back at 19 ft; limestone breccia near contact with granite; hematite.
SR 239	chip	3.0	Adit, back at 63 ft; limestone breccia with hematite.
SR 240	chip	3.0	Adit, back at 147 ft; limestone breccia with hematite.
SR 241	grab	na	Grid from dump of shaft; brecciated limestone with calcite, hematite, and limonite.
SR 242	chip	5.0	Adit, stope beneath opencut at portal; shear cutting limestone breccia; calcite, hematite, and limonite.
SR 243	chip	2.5	Adit, left rib at 45 ft; shear cutting limestone breccia; calcite, hematite, and limonite.
SR 244	chip	2.5	Adit, face of drift/stope to left at 135 ft; shear cutting limestone breccia; calcite, hematite, and limonite.
SR 245	chip	4.0	Adit, back at 143 ft; shear cutting limestone breccia; calcite, hematite, and limonite.
SR 246	chip	3.5	Adit, face at 205 ft; shear cutting limestone breccia; calcite, hematite, and limonite.
SR 247	grab	na	Grid from dump of shaft; limestone breccia with calcite, hematite, and limonite.
SR 248	chip	3.5	Shaft; shear cutting limestone; hematite and limonite.
SR 249	grab	na	Grid from dump of shaft; sheared limestone with malachite, calcite, and hematite.
SR 250	grab	na	Grid from dump of shaft; sheared limestone; calcite, limonite, and hematite.
SR 251	grab	na	Dump of shaft (stockpile ?); sheared quartzite; hematite and limonite.
SR 252	chip	5.0	Inclined shaft, right rib at 25 ft; shear cutting limestone; hematite, limonite, and "terra rosa".
SR 253	chip	2.0	Inclined shaft, left rib at 10 ft; shear cutting limestone; hematite, limonite, and manganese oxides.
SR 254	chip	3.0	Inclined shaft, left rib at 32 ft; shear cutting limestone; hematite, limonite, and manganese oxides.
SR 255	chip	1.5	Adit, right rib at back at 7 ft; shear cutting andesitic volcanic breccia; azurite, malachite, hematite, limonite, and manganese oxide.
SR 256	chip	3.5	Adit, face of left drift at 25 ft; shears cutting andesitic volcanic breccia; azurite, malachite, hematite, limonite, and manganese oxide.
SR 257	chip	2.0	Adit, left rib at 44 ft; shear between andesitic volcanic breccia and quartzitic block; malachite, chalcanthite, chalcopyrite, hematite, and limonite.

Sample			Description
No.	Type	Length (ft)	
SR 258	chip	4.0	Adit, right rib at 60 ft; shear cutting andesitic volcanic breccia; malachite, azurite, hematite, and limonite.
SR 259	chip	2.0	Adit, across portal; shear cutting diorite; hematite and manganese oxide.
SR 260	chip	1.5	Adit, right rib at 68 ft; shear cutting diorite; malachite, hematite, limonite, and manganese oxide.
SR 261	chip	3.0	Adit, back at 100 ft; shear cutting diorite; hematite, manganese oxide, and limonite.
SR 262	grab	na	Grid from dump of shaft; brecciated diorite with azurite, malachite, chalcopyrite, hematite, and limonite.
SR 263	grab	na	Grid from dump of caved adit; altered andesitic volcanic rock; azurite, malachite, and chalcopyrite.
SR 264	grab	na	Grid from dump of caved adit; altered andesitic volcanic rock; azurite, malachite, bornite, olivine, and epidote.
SR 265	chip	2.5	Shaft; shears cutting dacite(?); hematite and malachite.
SR 266	chip	2.5	Adit, right rib at 50 ft; fault contact between diorite and volcanic breccia; malachite, brochantite, bornite, pyrite, hematite, and limonite.
SR 267	chip	2.0	Adit, SE. side of stope to surface; fault contact of diorite and volcanic breccia; malachite, brochantite, and bornite, pyrite, hematite, and limonite.
SR 268	chip	3.0	Adit, back at 12 ft; shears cutting diorite; malachite, azurite, chalcanthite(?), and brochantite(?).
SR 269	chip	2.0	Adit, right rib at 86 ft; shear cutting diorite; pyrite, limonite, and hematite.
SR 270	grab	na	Grid from dump of caved shaft; fractured and altered diorite; quartz, chalcopyrite, brochantite, hematite, and limonite.
SR 271	grab	na	Random from dump of caved adit; latite with pyrite.
SR 272	grab	na	Random from dumps of shaft and two pits; sheared quartzitic fragments with malachite, azurite, hematite, and limonite.
SR 273	grab	na	Random from dump of shaft; sheared quartzitic fragments with malachite, azurite, hematite, and limonite.
SR 274	grab	na	Random from dump of pit; sheared granodiorite with vuggy quartz, malachite, and hematite; scintillometer readings, 80-90 cps.
SR 275	chip	5.0	Shaft, undercut at collar; shear zone cutting granodiorite; chalcanthite, malachite, azurite, hematite, and limonite; scintillometer readings, 150-180 cps.
SR 276	chip	25.0	Opencut, composite from west side; multiple quartz veins cutting sheared quartz monzonite; malachite and limonite; scintillometer readings, 100-120 cps.
SR 277	grab	na	Random from dump of shaft; fissure vein cutting granodiorite; vein contains granodiorite and quartz with pyrite, galena, malachite, hematite, and limonite.
SR 278	chip	4.0	Opencut, composite from east cut; quartz stockwork cutting granite; malachite, azurite, pyrite, hematite, and limonite.
SR 279	grab	na	Random from dump of shaft; quartzite with hematite.
SR 280	select	na	Dump of caved adit; vuggy quartz vein with hematite and limonite.
SR 281	chip	8.0	Outcrop south of adit portal; shear zone cutting granite; hematite and limonite.
SR 282	chip	3.8	Adit, back at 45 ft; fissure vein cutting granodiorite; vein contains pyrite, chalcopyrite, malachite, hematite, and limonite.
SR 283	grab	na	Random from dump of caved adit; silicious metasedimentary rock and gossan material with chalcopyrite, brochantite, hematite, and limonite.
SR 284	select	na	Dump of caved adit; high grade of metasedimentary rock containing chalcopyrite, brochantite, hematite, and limonite.
SR 285	select	na	Dump of closed adit; altered rhyolite and granodiorite with hematite after pyrite.

Sample			Description
No.	Type	Length (ft)	
SR 286	chip	3.8	Opencut, 15 ft from adit; fault cutting granodiorite; pyrite, hematite, and limonite.
SR 287	chip	3.4	Adit, left rib at face of right drift at 100 ft; fissure vein cutting granodiorite; vein contains quartz, pyrite, limonite, and hematite.
SR 288	chip	1.8	Adit, right rib at 180 ft; shear cutting granodiorite; pyrite, limonite, hematite, and calcium carbonate precipitate.
SR 289	chip	2.3	Adit, back in east drift at 260 ft; shear zone cutting granodiorite; malachite, pyrite, hematite, and limonite.
SR 290	chip	4.6	Adit, back in small west drift at 230 ft; shear zone cutting granodiorite; malachite, pyrite, hematite, and limonite.
SR 291	chip	1.7	Adit, right rib at 300 ft; shear zone cutting granodiorite; hematite and calcium carbonate precipitate.
SR 292	chip	3.5	Adit, back in raise at right rib at 395 ft; fault cutting granodiorite; quartz, malachite, and hematite.
SR 293	chip	2.8	Adit, back at 18 ft; fractured granodiorite; calcium carbonate precipitate and pyrite.
SR 294	chip	6.7	Shaft; shear cutting granodiorite; pyrite, chalcopyrite, malachite, hematite, and limonite.
SR 295	chip	2.8	Adit, back at 27 ft; fissure vein cutting diorite; vein contains quartz, malachite, hematite, and limonite.
SR 296	chip	3.6	Opencut; fissure vein cutting diorite; vein contains quartz, malachite, hematite, and limonite.
SR 297	select	na	Vein material from dump of opencut; white vuggy quartz veinlets in diorite with galena and chalcopyrite.
SR 298	chip	2.2	Adit, face at 15 ft; fault cutting diorite; malachite and hematite.
SR 299	chip	3.3	Adit, back at 64 ft; fissure vein cutting diorite; vein contains malachite, hematite, and calcium carbonate precipitate.
SR 300	chip	2.0	Adit, back at 123 ft; fault cutting diorite.
SR 301	chip	3.2	Opencut; part of massive fissure vein cutting diorite; vein contains galena, pyrite, sphalerite, chalcopyrite, malachite, hematite, and limonite.
SR 302	chip	5.0	Opencut; massive fissure vein cutting diorite; vein contains five distinct zones, two sampled in SR 303, and three sampled here, 1) massive quartz vein with pyrite, galena, chalcopyrite, malachite, hematite, limonite, and calcium carbonate precipitate (1.0 ft), 2) massive blocky diorite with disseminated pyrite (3.0 ft), 3) sheared quartz vein in diorite with pyrite, chalcopyrite, malachite, azurite, hematite, and limonite (1.0 ft).
SR 303	chip	4.0	Opencut; massive fissure vein cutting diorite; vein contains five distinct zones, three sampled in SR 302, and two sampled here, 1) diorite fragments and gouge, quartz vein, silicified diorite, malachite, azurite, and hematite (0.8 ft), 2) massive blocky diorite with disseminated pyrite (3.2 ft).
SR 304	chip	4.6	Opencut; part of massive fissure vein cutting diorite; three distinctive zones, 1) sheared quartz and diorite, quartz veins, and hematite (1.2 ft), 2) sheared diorite with vuggy quartz veinlets, hematite, and limonite (2.0 ft), 3) massive vuggy quartz vein, pyrite, chalcopyrite, galena, malachite, azurite, hematite, and limonite (1.4 ft).
SR 305	grab	na	Random from dump of shaft; sheared diorite; pyrite, chalcopyrite, galena, malachite, tetrahedrite(?), hematite, and limonite.
SR 306	chip	3.8	Shaft; fissure vein cutting diorite; vein contains quartz, pyrite, chalcopyrite, hematite, and limonite.
SR 307	chip	3.0	Adit, back at 35 ft; fault cutting diorite; quartz veinlets, chalcopyrite, chrysocolla, malachite, hematite, and limonite.
SR 308	select	na	Dump of two shafts; altered diorite with quartz veinlets; chalcopyrite, galena, and tetrahedrite(?).
SR 309	chip	5.0	Shaft; fissure vein cutting diorite; vein contains quartz, chalcopyrite, malachite, azurite, and galena.
SR 310	grab	na	Random from dump of flooded adit; diorite with chalcopyrite, quartz, and olivine.
SR 311	chip	2.6	Opencut; shears cutting diorite; pyrite, chalcopyrite, malachite, calcium carbonate, hematite, and limonite.

Sample			Description
No.	Type	Length (ft)	
SR 312	select	na	Dump of adit; altered dioritic and granitic fragments; quartz, pyrite, chalcopyrite, chrysocolla, galena, and malachite.
SR 313	select	na	Dump of shaft; altered dioritic and granitic fragments; quartz, pyrite, galena, bornite, chalcopyrite, malachite, azurite, chrysocolla, and hematite.
SR 314	chip	6.3	Shaft; fractured diorite; quartz, malachite, hematite, and limonite.
SR 315	select	na	High grade from dump of shaft; quartz vein and quartz monzonite with azurite, malachite, and chalcopyrite.
SR 316	grab	na	Grid from dump of shaft; quartz monzonite with quartz, azurite, malachite, and chalcopyrite.
SR 317	grab	na	Grid from dump of pit; quartz monzonite with quartz vein.
SR 318	select	na	High grade from dump of adit and shaft; quartz monzonite with quartz vein and chalcopyrite.
SR 319	grab	na	Random from dump of adit and shaft; quartz monzonite with quartz vein and chalcopyrite.
SR 320	chip	2.8	Shaft; fissure vein cutting quartz monzonite; vein contains quartz, malachite, azurite, hematite, and limonite.
SR 321	chip	1.8	Adit, face of SE. drift at 60 ft; fracture cutting quartz monzonite; chalcopyrite, malachite, bornite(?), hematite, and limonite.
SR 322	chip	20.0	Adit, composite along entire length of adit on right rib; quartz monzonite with chalcopyrite and malachite.
SR 323	chip	10.0	Outcrop, composite; quartz vein cutting quartz monzonite.
SR 324	select	na	Dump of shaft; quartzitic material and quartz vein containing pyrite, hematite, and limonite.
SR 325	chip	2.5	Adit, back at 4 ft; brecciated quartz monzonite and quartz vein (fault zone ?); malachite, and yellow sulfur-like precipitate.
SR 326	grab	na	Grid from dump of shaft; quartz monzonite with hematite.
SR 327	select	na	Stockpile on dump of shaft; quartz monzonite with chalcopyrite, chrysocolla, malachite, and hematite.
SR 328	chip	10.0	Outcrop; quartz vein cutting quartz monzonite.
SR 329	chip	7.0	Do.
SR 330	chip	6.0	Do.
SR 331	chip	6.0	Do.
SR 332	chip	34.0	Composite across outcrop; quartz vein cutting quartz monzonite.
SR 333	chip	42.0	Do.
SR 334	chip	80.0	Do.
SR 335	chip	30.0	Do.
SR 336	chip	3.0	Outcrop; quartz stockwork cutting quartz monzonite; hematite.
SR 337	chip	12.0	Do.
SR 338	chip	12.0	Outcrop; quartz vein cutting quartz monzonite.
SR 339	chip	2.5	Pit; fractured quartz monzonite with malachite and hematite.
SR 340	chip	20.0	Composite across outcrop; quartz stockwork cutting quartz monzonite.
SR 341	chip	53.0	Do.
SR 342	chip	35.0	Do.
SR 343	chip	20.0	Do.

Sample			Description
No.	Type	Length (ft)	
SR 344	chip	25.0	Composite across outcrop; quartz stockwork cutting quartz monzonite.
SR 345	chip	10.0	Do.
SR 346	grab	na	Stockpile on dump of adit; quartz monzonite fragments; chalcopyrite, pyrite, bornite, and malachite.
SR 347	chip	1.1	Adit, right rib at 155 ft; fault cutting quartz monzonite; gouge and fragments with hematite.
SR 348	chip	2.5	Adit, left rib in drift to left at 230 ft; fault cutting quartz monzonite; gouge and fragments with hematite.
SR 349	chip	1.3	Adit, right rib at 270 ft; fault cutting quartz monzonite; gouge and fragments with hematite.
SR 350	chip	1.3	Adit, right rib at 450 ft; fault cutting quartz monzonite; gouge and fragments with hematite and limonite.
SR 351	chip	1.4	Adit, right rib at 555 ft; fault cutting quartz monzonite; gouge and fragments with hematite and limonite.
SR 352	chip	3.5	Adit, back in left drift at 800 ft; shear zone cutting quartz monzonite; gouge and fragments with hematite and limonite.
SR 353	chip	2.0	Adit, back at right rib in left drift at 845 ft; shear zone cutting quartz monzonite; gouge and fragments with hematite and limonite.
SR 354	chip	1.9	Adit, face of right drift at 910 ft; shear zone cutting quartz monzonite; gouge and fragments with hematite and limonite.
SR 355	chip	2.5	Adit, face at left rib in left drift at 965 ft; fault cutting quartz monzonite; gouge and fragments with hematite, limonite, and calcium carbonate precipitate.
SR 356	grab	na	Grid from dump of shaft; granitic fragments with malachite, azurite, and manganese oxide.
SR 357	select	na	High grade from dump of shaft; granitic fragments with malachite, azurite, and manganese oxide.
SR 358	select	na	High grade from dump of shaft; quartz monzonite with disseminated pyrite.
SR 359	grab	na	Grid from dump of shaft; quartz monzonite fragments.
SR 360	chip	4.0	Shaft; shear cutting quartz monzonite.
SR 361	chip	4.0	Adit, across portal; fractured quartz monzonite.
SR 362	grab	na	Grid from dump of adit; fractured quartz monzonite with quartz, pyrite, and hematite.
SR 363	chip	0.8	Pit; fractured siltstone with quartz veinlets and malachite.
SR 364	chip	6.0	Opencut; quartz-rich dike cutting siltstone.
SR 365	chip	5.0	Opencut; marbleized limestone.
SR 366	chip	4.0	Adit, right rib at 35 ft; limestone with sparry calcite and travertine.
SR 367	chip	4.5	Adit, left rib at 17 ft; shear zone cutting limestone; hematite.
SR 368	chip	3.0	Adit, left rib at 90 ft; shear zone cutting limestone; hematite.
SR 369	chip	6.0	Adit, face at 10 ft; silicified limestone.
SR 370	grab	na	Grid from dump of shaft; siltstone.
SR 371	chip	6.0	Inclined shaft; siltstone with malachite.
SR 372	select	na	High grade from dump of shaft; fractured siltstone with malachite and azurite.
SR 373	grab	na	Grid from dump of shaft; siltstone fragments.
SR 374	chip	5.0	Pit; shear cutting siltstone with quartz vein.
SR 375	chip	5.0	Inclined shaft, back and right rib at 5 ft; shear at limestone/sandstone contact with quartz veining and brochantite.
SR 376	chip	5.0	Opencut; faulted siltstone with quartz veining.

Sample			Description
No.	Type	Length (ft)	
SR 377	chip	6.0	Adit, right rib at 40 ft; sheared limestone with calcite, brochantite, hematite, and limonite.
SR 378	grab	na	Grid from dump of shaft; sheared limestone with hematite and limonite.
SR 379	chip	2.5	Two inclined shafts, outcrop at collar at NW. end; sheared limestone; brochantite, hematite, and limonite.
SR 380	chip	3.0	Adit, across portal; sheared siltstone with quartz and hematite.
SR 381	grab	na	High grade from dump of adit/shaft; sheared siltstone with brochantite and hematite.
SR 382	chip	5.0	Shaft; sheared siltstone with brochantite and hematite.
SR 383	chip	3.3	Opencut; limestone and silicified limestone.
SR 384	chip	5.5	Bulldozer cut; andesitic(?) rock in fault contact with limestone.
SR 385	chip	4.5	Do.
SR 386	grab	na	Random from dump of pit; rhyodacite(?) fragments.
SR 387	chip	2.0	Outcrop; limestone near rhyodacite(?) dike.
SR 388	chip	5.0	Pit; diorite with hematite and limonite.
SR 389	chip	5.5	Opencut; shear cutting silicified limestone; chrysocolla and hematite.
SR 390	select	na	Stockpile; black hematitic rock (specularite) with chalcopyrite, pyrite, and cerussite.
SR 391	chip	20.0	Trench, composite along east side; faulted limestone.
SR 392	chip	6.0	Adit, left rib at portal; limestone breccia.
SR 393	chip	1.7	Adit, left rib at 120 ft; shear contact between brecciated limestone and blocky limestone; hematite and limonite.
SR 394	chip	4.0	Adit, face at 95 ft; shear cutting limestone.
SR 395	grab	na	Grid from dump of pit; limestone and silicified limestone fragments.
SR 396	grab	na	Grid from dump of shaft; limestone and silicified limestone fragments; trace wulfenite.
SR 397	chip	5.0	Adit, back at 8 ft; fracture cutting silicified limestone.
SR 398	chip	3.0	Adit, right rib at portal; shear cutting limestone.
SR 399	chip	3.0	Adit, back at 18 ft; fault cutting limestone; gouge and fragments with hematite.
SR 400	chip	5.0	Adit, face at 83 ft; shear cutting limestone.
SR 401	grab	na	Grid from dump of shaft; siltstone and quartz monzonite.
SR 402	chip	20.0	Composite from outcrop; silicified siltstone with hematite.
SR 403	chip	7.0	Adit, across portal; silicified siltstone with hematite.
SR 404	chip	15.0	Bulldozer cut, composite along NE. side; silicified siltstone.
SR 405	chip	4.5	Shaft, outcrop at NE. side of collar; silicified and brecciated limestone with hematite.
SR 406	chip	10.0	Outcrop north of shaft collar; altered andesitic(?) rock with hematite.
SR 407	grab	na	Random from dump of shaft; limestone with copper oxides and hematite.
SR 408	grab	na	Random from dump of adit; limestone with copper oxides and hematite.
SR 409	chip	5.0	Pit; limestone with copper oxides and hematite.
SR 410	grab	na	Random from dump of pit; limestone with copper oxides and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 411	chip	4.0	Opencut; faulted limestone with copper oxides, hematite, and calcite.
SR 412	grab	na	Grid from dump of inclined shaft; andesitic(?) rock with copper oxides and hematite.
SR 413	chip	15.0	Composite from pit; fractured rhyolite(?) with copper oxides and hematite.
SR 414	chip	3.0	Pit; rhyolite with hematite.
SR 415	chip	6.0	Do.
SR 416	chip	8.0	Outcrop; limestone with quartz.
SR 417	chip	5.0	Opencut; brecciated limestone with quartz and hematite.
SR 418	chip	6.0	Pit; fractured dacite with malachite(?).
SR 419	grab	na	Random from dump of inclined shaft; limestone with calcite and hematite.
SR 420	chip	10.0	Opencut, composite along west side; fractured dacitic volcanic rock.
SR 421	chip	2.3	Adit, back at 15 ft; fault cutting limestone; calcium carbonate and(or) silica with hematite.
SR 422	grab	na	Grid from dump of shaft; limestone with calcite, malachite, and hematite.
SR 423	grab	na	Ore bin; limestone fragments with pyrite and copper oxides.
SR 424	chip	4.0	Pit; fault cutting dacite; azurite, malachite, and hematite.
SR 425	grab	na	Random from dump of shaft; dacite fragments with azurite, malachite, and hematite.
SR 426	grab	na	Grid from dump of shaft; dacite fragments with pyrite, azurite, malachite, and hematite.
SR 427	chip	14.0	Opencut; fractured quartz latite.
SR 428	chip	14.0	Do.
SR 429	chip	7.0	Opencut; limestone block in quartz latite.
SR 430	select	na	High grade from dump of opencut; limestone with chalcopyrite, malachite, azurite, and hematite.
SR 431	chip	6.0	Adit, across portal; shear cutting granite.
SR 432	grab	na	Grid from dump of adit; granite and quartz latite fragments.
SR 433	select	na	High grade from dump of adit; quartz latite with chalcopyrite, malachite, and hematite.
SR 434	select	na	High grade from dump of pit; limestone with malachite, azurite, chalcopyrite, and hematite.
SR 435	select	na	High grade from dump of pit; selected fragments of marbleized limestone.
SR 436	select	na	High grade from dump of pit; altered quartz latite with quartz and pyrite.
SR 437	chip	6.0	Pit; fractured limestone with hematite.
SR 438	chip	7.0	Pit; limestone with hematite.
SR 439	chip	6.0	Pit; unidentified dike cutting granite.
SR 440	chip	11.0	Adit, back at 50 ft; sheared and brecciated dacite; hematite, limonite, and calcium carbonate precipitate.
SR 441	chip	6.0	Adit, back at 110 ft; sheared and brecciated dacite; hematite.
SR 442	chip	3.0	Adit, back at 10 ft; fault cutting dacite; malachite and hematite.
SR 443	chip	15.0	Composite from outcrop near flooded shaft; faulted quartz monzonite with pyrite and quartz veins.
SR 444	chip	2.0	Adit, left rib at 25 ft; sheared quartz monzonite; quartz veinlets, pyrite, and hematite.
SR 445	select	na	High grade from dump of adit; quartz monzonite with pyrite.

Sample			Description
No.	Type	Length (ft)	
SR 446	grab	na	Random from dump of flooded shaft; quartz monzonite with pyrite.
SR 447	chip	5.0	Adit, flooded, across back at portal; quartz monzonite with pyrite.
SR 448	grab	na	Random from dump of adit; quartz monzonite with pyrite and hematite.
SR 449	chip	5.0	Outcrop near shaft; fissure vein cutting quartz monzonite; vein contains quartz, pyrite, and hematite.
SR 450	grab	na	Random from dump of shaft; quartz monzonite with vuggy quartz vein, pyrite, and hematite.
SR 451	chip	4.4	Outcrop near reclaimed shaft; fissure vein cutting granite and quartz monzonite breccia; vein contains quartz and hematite.
SR 452	chip	1.0	Outcrop near reclaimed shaft; fissure vein cutting quartz monzonite; vein contains quartz, malachite, azurite, and manganese oxide.
SR 453	chip	0.8	Outcrop; quartz vein cutting diorite.
SR 454	chip	3.0	Adit, caved, across back at portal; fractured diorite with trace pyrite.
SR 455	chip	3.0	Adit, across back at portal; fractured diorite with minor malachite.
SR 456	chip	3.0	Adit, face at 17 ft; fractured diorite with pyrite, chalcopyrite, and malachite.
SR 457	chip	3.8	Adit, back at 35 ft; fissure vein cutting diorite; vein contains quartz, chalcopyrite, malachite, sphalerite (?), and hematite.
SR 458	chip	7.0	Adit, face of main drift at 165 ft; fissure vein cutting diorite; vein contains quartz, chalcopyrite, calcium carbonate coatings, and minor hematite.
SR 459	chip	3.7	Adit, right rib of drift to right at 205 ft; fissure vein cutting diorite; vein contains quartz, hematite, and limonite.
SR 460	chip	7.0	Opencut, east side; fissure vein cutting diorite; vein contains quartz, azurite, malachite, and hematite.
SR 461	chip	7.0	Adit, left rib at 9 ft; fissure vein cutting diorite; vein contains quartz, malachite, azurite, hematite, and limonite.
SR 462	chip	6.0	Adit, caved, left half of back at 45 ft; fissure vein cutting diorite; vein contains quartz, azurite, malachite, and hematite.
SR 463	chip	6.0	Adit, caved, right half of back at 45 ft; fissure vein cutting diorite; vein contains quartz, azurite, malachite, and hematite.
SR 464	chip	3.0	Opencut leading to adit, left rib; fissure vein cutting diorite; vein contains quartz, malachite, azurite, and hematite.
SR 465	chip	5.0	Adit, right rib of drift to left at 55 ft; fissure vein cutting diorite; vein contains quartz, malachite, azurite, chalcopyrite, sphalerite, bornite, hematite, and limonite.
SR 466	chip	5.5	Adit, face at 80 ft; fissure vein cutting diorite; vein contains quartz, malachite, azurite, hematite, and limonite.
SR 467	chip	10.0	Opencut, left half of vein; fissure vein cutting diorite; vein contains quartz, malachite, azurite, chalcopyrite, galena, hematite, and limonite.
SR 468	chip	10.0	Opencut, right half of vein; fissure vein cutting diorite; vein contains quartz and hematite.
SR 469	chip	4.7	Shaft; fissure vein cutting diorite; vein contains quartz, malachite, azurite, hematite, and limonite.
SR 470	chip	3.0	Adit, back at 8 ft; fissure vein cutting diorite; vein contains quartz, malachite, azurite, chalcopyrite, galena, hematite, and limonite.
SR 471	chip	10.0	Adit, left rib beginning at portal; fissure vein cutting diorite; vein contains quartz, malachite, azurite, chalcopyrite, galena, hematite, and limonite.
SR 472	chip	15.0	Adit, left rib; fissure vein cutting diorite; vein contains quartz, hematite, and limonite.
SR 473	chip	16.0	Adit, along left rib; fissure vein cutting diorite; vein contains quartz, malachite, azurite, chalcopyrite, galena, hematite, and limonite.

Sample			Description
No.	Type	Length (ft)	
SR 474	chip	2.3	Adit, back at 105 ft; fissure vein cutting diorite; vein contains quartz, chalcopyrite, galena, malachite, and hematite.
SR 475	chip	4.6	Adit, back at 145 ft; fissure vein cutting diorite; vein contains quartz, chalcopyrite, galena, and hematite.
SR 476	chip	1.3	Adit, left rib at face at 210 ft; fissure vein cutting diorite; vein contains quartz, malachite, chalcopyrite, galena, hematite, and calcium carbonate coating.
SR 477	chip	3.0	Adit, in stope to SE. at 220 ft; fissure vein cutting diorite; vein contains malachite, azurite, chalcopyrite, galena, and hematite.
SR 478	chip	2.3	Opencut; fissure vein cutting diorite; vein contains quartz, malachite, and hematite.
SR 479	chip	1.5	Adit, back at left rib at 40 ft; fissure vein cutting diorite; vein contains quartz, malachite, and hematite.
SR 480	chip	3.9	Adit, caved, across portal; massive quartz vein cutting diorite; vein contains malachite, galena, and hematite.
SR 481	chip	3.0	Adit, back at 77 ft; fissure vein cutting diorite; vein contains quartz, malachite, hematite, and limonite.
SR 482	chip	5.6	Adit, back at 150 ft; fissure vein cutting diorite; vein contains quartz, galena, and chalcopyrite.
SR 483	chip	1.4	Adit, back at 225 ft; fissure vein cutting diorite; vein contains quartz, chalcopyrite, galena, pyrite, malachite, hematite, and calcium carbonate precipitate.
SR 484	chip	1.5	Adit, face at 270 ft; fissure vein cutting diorite; vein contains quartz, chalcopyrite, galena, malachite, hematite, limonite, and calcium carbonate precipitate.
SR 485	chip	4.4	Adit, caved, across portal; fissure vein cutting diorite; vein contains malachite and hematite.
SR 486	chip	5.8	Doghole, across portal; fissure vein cutting dacite; vein contains quartz and hematite.
SR 487	chip	4.0	Adit, caved, back at 35 ft; fissure vein cutting rhyodacite; vein contains chrysocolla, malachite, chalcanthite, hematite, and limonite.
SR 488	chip	5.2	Adit, caved, across portal; fissure vein cutting rhyodacite; vein contains quartz, malachite, galena, chalcopyrite, and hematite.
SR 489	chip	5.0	Opencut; quartz vein cutting diorite(?); vein contains malachite, azurite, and hematite.
SR 490	select	na	Stockpile, west of shaft; vuggy quartz vein with malachite, azurite, galena, chalcopyrite, and hematite.
SR 491	chip	1.8	Opencut; fissure vein cutting diorite; vein contains quartz, azurite, malachite, galena, and hematite.
SR 492	chip	3.3	Pit; fissure vein cutting diorite; vein contains azurite, malachite, and hematite.
SR 493	select	na	Dump of caved adit; vuggy quartz vein with chalcopyrite, galena, malachite, azurite, and hematite.
SR 494	chip	4.8	Adit, back at 80 ft; fissure vein cutting quartz latite; vein contains quartz, malachite, azurite, and hematite.
SR 495	chip	3.2	Opencut; fissure vein cutting quartz latite; vein contains quartz, malachite, and hematite.
SR 496	chip	11.0	Do.
SR 497	chip	6.2	Pit; fissure vein cutting quartz latite; vein contains quartz, azurite, malachite, and hematite.
SR 498	chip	1.5	Adit, left rib at 10 ft; fissure vein cutting quartz latite; vein contains quartz, malachite, azurite, and hematite.
SR 499	chip	3.5	Adit, face at 55 ft; fissure vein cutting quartz latite; vein contains quartz, azurite, malachite, and hematite.
SR 500	select	na	High grade from dump of shaft; rhyodacite and arkose with quartz and pyrite.
SR 501	chip	10.0	Shaft, outcrop at collar; vuggy quartz veins cutting quartz latite; veins contain malachite, chrysocolla, and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 502	chip	6.7	Adit, left rib at 80 ft in drift to left; shear zone cutting arkose; fragments and gouge with malachite and hematite.
SR 503	chip	4.2	Adit, back at 135 ft; shear zone cutting arkose; fragments and gouge with hematite.
SR 504	chip	2.9	Adit, back at 260 ft; shear zone cutting arkose; fragments and gouge with malachite, hematite, and limonite.
SR 505	chip	3.0	Adit, face at 355 ft; shear zone cutting claystone; fragments and gouge with malachite, hematite, limonite, and calcium carbonate precipitate.
SR 506	chip	20.0	Composite of outcrop; fissure vein cutting arkose; vein contains quartz, malachite, azurite, and hematite.
SR 507	chip	4.4	Opencut; fissure vein cutting arkose; vein contains quartz, manganese oxide, and hematite.
SR 508	grab	na	Random from dump of opencut; sheared tuffaceous(?) rock with malachite, azurite, hematite, and limonite.
SR 509	chip	4.8	Adit, back at 103 ft; shear zone cutting diorite; fragments and gouge with hematite and limonite.
SR 510	chip	4.8	Outcrop; fissure vein cutting diorite; vein contains quartz and hematite.
SR 511	chip	1.3	Adit, right rib at 65 ft; shear cutting diorite; fragments and gouge with hematite.
SR 512	chip	2.8	Adit, left rib at 85 ft; shear cutting diorite; fragments and gouge with quartz veinlet, hematite, and calcite.
SR 513	chip	5.0	Adit, back at 135 ft; fissure vein cutting diorite; vein contains quartz, malachite, chrysocolla, hematite, and calcite.
SR 514	chip	3.4	Adit, face at 220 ft; shear cutting diorite; fragments and gouge with hematite and calcite.
SR 515	chip	10.0	Outcrop near flooded shaft and caved adit; quartz vein cutting arkose; vein contains hematite.
SR 516	chip	1.8	Adit, left rib at 35 ft; shear cutting arkose; fragments and gouge with quartz and pyrite.
SR 517	grab	na	Random from dump of adit and shaft; quartz latite with vein containing quartz, bornite, azurite, chrysocolla, malachite, and hematite.
SR 518	chip	1.7	Pit; shear cutting arkose; fragments and gouge with quartz, chrysocolla, and hematite.
SR 519	chip	1.7	Shaft; remanent pillar at collar; shear cutting arkose; fragments and gouge with manganese oxide and hematite.
SR 520	chip	5.0	Adit, near portal; shear zone cutting dioritic and arkosic rocks; fragments and gouge with quartz and hematite.
SR 521	grab	na	Random from dump of shaft; arkose with malachite, azurite, galena, and hematite.
SR 522	select	na	Dump of shaft; galena vein material.
SR 523	chip	2.0	Adit, outcrop above portal; fissure vein cutting arkose; vein contains quartz and hematite.
SR 524	select	na	Dump of pit; vuggy quartz vein with hematite and limonite.
SR 525	chip	2.0	Doghole to east of flooded shaft; fissure vein cutting rhyodacite; vein contains quartz and hematite.
SR 526	chip	2.0	Opencut; fissure vein cutting arkose; vein contains quartz, galena, and hematite.
SR 527	chip	1.3	Adit, left rib at 8 ft; fissure vein cutting arkose; vein contains quartz, hematite, and limonite.
SR 528	chip	9.0	Adit, left rib at 40 ft; fissure vein cutting arkose; vein contains quartz, hematite, manganese oxide, and copper oxides.
SR 529	chip	7.0	Adit, left rib at 49 ft; fissure vein cutting arkose; vein contains hematite and manganese oxide.
SR 530	chip	4.0	Adit, back at 75 ft; fissure vein cutting arkose; vein contains quartz, azurite, malachite, galena, and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 531	chip	3.3	Inclined shaft, at collar; fissure vein cutting arkose; vein contains massive quartz, chalcopyrite, galena, and hematite.
SR 532	chip	4.0	Doghole next to flooded shaft, across portal; fissure vein cutting rhyodacite; vein contains quartz, hematite, and copper oxides.
SR 533	chip	4.5	Do.
SR 534	grab	na	Random from dump of flooded adit; arkose fragments with galena, chalcopyrite, pyrite, malachite, and limonite.
SR 535	chip	1.7	Adit, face at 55 ft; fissure vein cutting arkose; vein contains massive quartz, malachite, azurite, chalcopyrite(?), pyrite, hematite, and limonite.
SR 536	chip	2.0	Adit, back at 10 ft; fissure vein cutting arkose; vein contains massive quartz, pyrite, galena, hematite, limonite, and calcium carbonate.
SR 537	chip	1.0	Adit, back at 10 ft; shear cutting arkose; fragments and gouge with hematite, limonite, and manganese oxide.
SR 538	chip	1.0	Doghole in opencut, at portal; massive quartz vein cutting arkose; hematite and limonite.
SR 539	chip	3.0	Outcrop at collar of flooded shaft; fissure vein cutting rhyodacite; vein contains massive quartz, hematite, limonite, and relic pyrite.
SR 540	chip	4.0	Adit, across portal; quartz veins cutting rhyodacite; galena, hematite, and limonite.
SR 541	chip	3.3	Outcrop at collar of shaft; fissure vein cutting arkose; vein contains quartz, hematite, limonite, and relict pyrite.
SR 542	chip	6.0	Adit, across portal; fissure vein cutting arkose; vein contains quartz, hematite, and limonite.
SR 543	chip	10.0	Opencut; fissure vein cutting arkose; vein contains vuggy quartz, chalcopyrite, hematite, and limonite.
SR 544	chip	10.0	Do.
SR 545	grab	na	Random from dump of pit; leached and altered arkose(?) with fractured quartz, pyrite, hematite, and manganese oxide.
SR 546	chip	2.8	Adit, back at 20 ft; fissure vein cutting arkose; vein contains quartz, pyrite, chalcopyrite, malachite, chalcanthite, hematite, and limonite.
SR 547	chip	2.0	Adit, back at 92 ft; fissure vein cutting arkose; vein contains pyrite, chalcopyrite, malachite, chalcanthite, limonite, and sphalerite.
SR 548	chip	1.3	Adit, back at 152 ft; fissure vein cutting arkose; vein contains pyrite, chalcopyrite, malachite, and chalcanthite.
SR 549	chip	1.8	Adit, back at 215 ft; fissure vein cutting arkose; vein contains pyrite, chalcopyrite, malachite, chalcanthite, limonite, and hematite.
SR 550	chip	1.3	Adit, left rib at 230 ft; fissure vein cutting arkose; vein contains pyrite, chalcopyrite, malachite, chalcanthite, limonite, and hematite.
SR 551	chip	2.3	Adit, face at 265 ft; fissure vein cutting arkose; vein contains pyrite, malachite, chalcanthite, limonite, and hematite.
SR 552	chip	1.5	Adit, back at 8 ft; fissure vein cutting arkose; vein contains quartz, pyrite, chalcopyrite, malachite, hematite, and limonite.
SR 553	chip	1.7	Adit, back at 40 ft; fissure vein cutting arkose; vein contains pyrite, chalcanthite, malachite, hematite, and limonite.
SR 554	chip	1.8	Adit, face at 30 ft; fissure vein cutting arkose; vein contains pyrite, chalcopyrite, malachite, chalcanthite, hematite, and limonite.
SR 555	chip	1.7	Adit, left rib at 10 ft; fissure vein cutting diorite; vein contains massive quartz, hematite, and limonite.
SR 556	chip	4.0	Adit, back at 56 ft; fissure vein cutting diorite; vein contains quartz, hematite, and limonite.

Sample			Description
No.	Type	Length (ft)	
SR 557	chip	2.2	Adit, back at 110 ft; fissure vein cutting diorite; vein contains quartz and copper oxides.
SR 558	chip	2.0	Adit, back at 198 ft; fault cutting diorite; fragments and gouge with hematite, limonite, and calcium carbonate.
SR 559	chip	1.0	Adit, face at 275 ft; fault cutting diorite; fragments and gouge with calcium carbonate and copper oxides.
SR 560	chip	3.0	Outcrop at shaft collar; fissure vein cutting diorite; vein contains vuggy quartz, hematite, limonite, and manganese oxide.
SR 561	chip	5.0	Outcrop upslope from shaft; fissure vein cutting diorite; vein contains vuggy quartz, manganese oxide, and hematite.
SR 562	select	na	Stockpile on dump of shaft; silicious diorite and quartz vein fragments with malachite, azurite, hematite, limonite, manganese oxide, and relict pyrite.
SR 563	select	na	Dump of shaft; vein material with chalcopyrite, pyrite, and galena.
SR 564	chip	1.0	Adit, right rib at 55 ft; quartz vein cutting diorite; azurite, malachite, limonite, hematite, and relict pyrite.
SR 565	chip	1.7	Adit, right rib at 135 ft; fissure vein cutting diorite; vein contains quartz, copper oxide, and calcium carbonate precipitate.
SR 566	chip	1.3	Adit, back in drift to left at 160 ft; quartz vein cutting diorite; copper oxide and calcium carbonate.
SR 567	chip	2.2	Adit, doghole in left rib at 10 ft; shears cutting arkose; fragments and gouge with calcite veinlets, hematite, and limonite.
SR 568	chip	3.3	Adit, back at 75 ft; fissure vein cutting arkose; vein contains quartz, azurite, malachite, pyrite, galena, and hematite.
SR 569	chip	2.5	Adit, back of drift at 140 ft; fissure vein cutting arkose; vein contains quartz and hematite.
SR 570	chip	1.1	Adit, face at 200 ft; fissure vein cutting arkose; vein contains quartz, galena, and copper oxide.
SR 571	chip	3.3	Adit, back at 18 ft; fissure vein cutting arkose; vein contains quartz, azurite, malachite, hematite, limonite, and relict pyrite.
SR 572	chip	2.0	Adit, face at 72 ft; fissure vein cutting arkose; vein contains quartz, galena, chalcopyrite, and hematite.
SR 573	chip	2.5	Adit, back at 37 ft; fissure vein cutting arkose; vein contains quartz, galena, pyrite, chalcopyrite, malachite, and azurite.
SR 574	chip	1.8	Adit, face at 82 ft; fissure vein cutting arkose; vein contains vuggy quartz, malachite, hematite, and limonite.
SR 575	chip	8.0	Outcrop near shaft; fissure vein cutting arkose; vein contains vuggy quartz, malachite, azurite, and hematite.
SR 576	chip	4.6	Adit, back at 10 ft; fissure vein cutting arkose; vein contains quartz, hematite, and limonite.
SR 577	chip	3.5	Adit, back at 20 ft; fissure vein cutting arkose; vein contains quartz, galena, and hematite.
SR 578	chip	1.4	Adit, back at 45 ft; fissure vein cutting arkose; vein contains quartz, galena, and hematite.
SR 579	chip	1.1	Adit, drift to left at 90 ft; fissure vein cutting arkose; vein contains quartz, hematite, and limonite.
SR 580	chip	1.9	Adit, face at 130 ft; fissure vein cutting arkose; vein contains quartz, malachite, azurite, hematite, and limonite.
SR 581	chip	1.3	Adit, back at 10 ft; fissure vein cutting arkose; vein contains quartz, hematite, and limonite.
SR 582	chip	1.0	Pit; fissure vein cutting arkose; vein contains vuggy quartz, hematite, and relict pyrite.
SR 583	chip	1.0	Adit, back at 32 ft; fissure vein cutting diorite; vein contains vuggy quartz, hematite, and limonite.
SR 584	chip	1.2	Adit, back at 36 ft; fissure vein cutting arkose; vein contains galena, chalcopyrite, and malachite.

Sample			Description
No.	Type	Length (ft)	
SR 585	select	na	Stockpile on dump of trench, shaft, and adit; quartz vein with pyrite, malachite, azurite, galena, hematite, and limonite.
SR 586	chip	4.5	Trench connecting flooded shaft and adit; fissure vein cutting arkose; vein contains quartz, pyrite, malachite, and azurite.
SR 587	chip	1.7	Shaft, at collar; fissure vein cutting diorite(?); vein contains quartz, chrysocolla, azurite, and hematite.
SR 588	chip	2.2	Shaft, at collar; fissure vein cutting volcanic breccia (?); vein contains quartz and hematite.
SR 589	select	na	Dump of shaft; quartz vein with pyrite.
SR 590	chip	1.7	Adit, across portal; fissure vein cutting arkose; vein contains massive quartz, hematite, and relict pyrite.
SR 591	chip	10.0	Outcrop; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 592	chip	8.0	Pit; fissure vein cutting granite; vein contains quartz, hematite, limonite, and manganese oxide.
SR 593	chip	2.3	Shaft; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 594	chip	1.8	Doghole, across portal; quartz vein cutting granite; hematite and manganese oxide.
SR 595	chip	3.0	Adit, across portal; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 596	chip	6.5	Do.
SR 597	select	na	High grade from dump of adit; vuggy quartz vein with pyrite, sphalerite, and magnetite.
SR 598	chip	2.0	Adit, at portal; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 599	chip	1.2	Adit, back at 20 ft; fissure vein cutting granite; vein contains quartz, hematite, limonite, and manganese oxide.
SR 600	chip	1.2	Adit, right rib at 70 ft; fissure vein cutting granite; vein contains quartz, manganese oxide, and limonite.
SR 601	chip	0.5	Adit, left rib at 95 ft; fissure vein cutting granite; vein contains quartz, sphalerite, and limonite.
SR 602	chip	0.5	Adit, right rib at 100 ft; fissure vein cutting granite; vein contains quartz, manganese oxide, and limonite.
SR 603	chip	6.0	Adit, back at 112 ft; fissure vein cutting granite; vein contains quartz and limonite.
SR 604	chip	6.0	Shaft; fissure vein cutting granite; vein contains quartz, limonite, hematite, and copper oxide.
SR 605	select	na	High grade from dump of shaft; quartz vein with galena, pyrite, and hematite.
SR 606	chip	1.8	Outcrop, 75 ft upslope from shaft; fissure vein cutting granite; vein contains quartz and hematite.
SR 607	chip	4.7	Opencut; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 608	chip	4.1	Pit; fissure vein cutting granite; vein contains quartz and hematite.
SR 609	chip	5.0	Pit; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 610	select	na	Dump of shaft; quartz vein with sphalerite, malachite, chalcopyrite, and hematite.
SR 611	chip	3.0	Shaft; fissure vein cutting granite; vein contains quartz, sphalerite, hematite, and manganese oxide.
SR 612	chip	1.8	Pit; fissure vein cutting granite; vein contains quartz and hematite.
SR 613	chip	1.5	Adit, right rib at 25 ft; fissure vein cutting granite; vein contains quartz, sphalerite, hematite, and manganese oxide.
SR 614	chip	8.5	Adit, left rib at 75 ft; fissure vein cutting granite; vein contains quartz, sphalerite, hematite, and manganese oxide.
SR 615	select	na	Adit, caved material at 100 ft; quartz vein with sphalerite.
SR 616	chip	5.0	Opencut; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.

Sample			Description
No.	Type	Length (ft)	
SR 617	chip	5.5	Adit, across portal; shear cutting diorite; fragments and gouge with hematite and manganese oxide.
SR 618	chip	2.1	Doghole, across face; fissure vein cutting diorite; vein contains quartz, hematite, manganese oxide, and calcite veinlets.
SR 619	chip	4.0	Adit, face at 10 ft; shear cutting granite; fragments and gouge with hematite and manganese oxide.
SR 620	select	na	Dump of flooded shaft; quartz vein with chrysocolla, hematite, and magnetite.
SR 621	chip	2.7	Inclined shaft; fissure vein cutting granite; vein contains quartz and hematite.
SR 622	chip	3.0	Pit; fault cutting granite; fragments and gouge with quartz, barite, hematite, and manganese.
SR 623	select	na	Dump of opencut; granite fragments with quartz veinlets, hematite, and manganese oxide.
SR 624	chip	4.4	Opencut; shear cutting granite; fragments and gouge with quartz, hematite, and manganese oxide.
SR 625	chip	2.8	Trench next to shaft; shear cutting granite; fragments and gouge with quartz, hematite, and manganese oxide.
SR 626	chip	4.6	Pit; shear cutting granite; fragments and gouge with quartz, hematite, and manganese oxide.
SR 627	chip	1.0	Shaft; shear cutting granite; fragments and gouge with quartz, hematite, and manganese oxide.
SR 628	chip	3.0	Pit; shear cutting granite; fragments and gouge with quartz, hematite, and manganese oxide.
SR 629	chip	1.7	Pit; fissure vein (?) cutting granite; vein contains quartz and malachite.
SR 630	select	na	High grade from dump of adit; vuggy quartz vein with cerussite and hematite.
SR 631	chip	1.3	Adit, back at 3 ft; shear cutting granite; fragments and gouge with hematite and manganese oxide.
SR 632	chip	3.0	Adit, right side of back at 24 ft; shear cutting granite; fragments and gouge with hematite and manganese oxide.
SR 633	chip	0.8	Adit, left side of back at 24 ft; shear cutting granite; fragments and gouge with hematite and manganese oxide.
SR 634	chip	1.6	Adit, back at 47 ft; shear cutting granite; fragments and gouge with hematite and manganese oxide.
SR 635	select	na	Dump of trench; vuggy quartz vein material.
SR 636	select	na	Dump of adit; vuggy quartz vein with limonite and manganese oxide.
SR 637	chip	2.7	Adit, across portal; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 638	chip	3.9	Adit, back at 35 ft; fissure vein cutting granite; vein contains quartz, hematite, and limonite.
SR 639	chip	2.3	Adit, pillar in back at 80 ft; fissure vein cutting granite; vein contains quartz, hematite, manganese oxide, and limonite.
SR 640	chip	3.2	Adit, back at 98 ft; fissure vein cutting granite; vein contains quartz and malachite.
SR 641	chip	2.6	Adit, back at 126 ft; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 642	chip	3.0	Adit, back at 141 ft; fissure vein cutting granite; vein contains quartz and hematite.
SR 643	chip	2.4	Adit, face at 160 ft; fissure vein cutting granite; vein contains quartz, limonite, and manganese oxide.
SR 644	select	na	Dump of shaft; quartz vein with hematite and manganese oxide.
SR 645	chip	2.1	Shaft; fissure vein cutting granite; vein contains hematite.
SR 646	grab	na	Random from dump of pit; vuggy quartz vein with hematite.
SR 647	chip	1.4	Outcrop; fissure vein cutting granite; vein contains quartz, manganese oxide, and hematite.
SR 648	chip	3.5	Do.
SR 649	chip	1.6	Opencut; fissure vein cutting granite; vein contains vuggy quartz, pyrite, and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 650	chip	6.8	Pit; fissure vein cutting granite; vein contains quartz and copper oxide.
SR 651	select	na	Dump of shaft; high grade of quartz vein with malachite, azurite, sphalerite, magnetite, and hematite.
SR 652	chip	5.0	Outcrop; quartz vein in diorite; minor hematite in vugs.
SR 653	chip	4.5	Opencut; fissure vein cutting diorite; vein contains quartz, manganese oxide, hematite, and copper oxide.
SR 654	chip	2.8	Opencut; fissure vein cutting diorite; vein contains massive quartz with manganese oxide and hematite.
SR 655	chip	7.3	Opencut; fissure vein cutting diorite; vein contains quartz and copper oxide.
SR 656	select	na	Dump of shaft; high grade of quartz vein with malachite, azurite, chalcopyrite, and sphalerite.
SR 657	chip	2.5	Opencut; fissure vein cutting diorite; vein contains quartz, hematite, and malachite.
SR 658	grab	na	Grid from dump of shaft; diorite fragments with quartz, pyrite, and malachite.
SR 659	grab	na	Dump of shaft; diorite fragments with pyrite.
SR 660	select	na	Outcrop; composite of quartz vein material with malachite, azurite, sphalerite, hematite, and manganese oxide.
SR 661	grab	na	Dump of shaft; diorite fragments with quartz and hematite.
SR 662	grab	na	Grid from dump of shaft; diorite fragments with quartz, pyrite, chalcopyrite, malachite, and chrysocolla.
SR 663	chip	2.0	Shaft; fault cutting diorite; gouge and fragments.
SR 664	select	na	Dump of shaft; high grade of quartz vein with azurite, bornite, chrysocolla, pyrite, and chalcopyrite.
SR 665	chip	2.0	Outcrop; fissure vein cutting diorite; vein contains quartz, manganese oxide, and hematite.
SR 666	chip	3.0	Outcrop; quartz vein in diorite; manganese oxide.
SR 667	chip	4.0	Pit; fractured diorite.
SR 668	chip	6.0	Pit; quartz vein cutting granitic rock; hematite and manganese oxide.
SR 669	chip	6.0	Outcrop; fractured granitic rock with hematite and manganese oxide.
SR 670	grab	na	Grid from dump of caved adit; dioritic fragments with quartz.
SR 671	grab	na	Grid from dump of shaft; diorite fragments.
SR 672	grab	na	Do.
SR 673	grab	na	Do.
SR 674	select	na	Stockpile on dump of shaft; quartz vein with azurite, magnetite, malachite, pyrite, and chalcopyrite.
SR 675	grab	na	Pit; dioritic fragments.
SR 676	chip	9.0	Pit; shear zone cutting granite; fragments and gouge with quartz and hematite; scintillometer readings, background 60-70 cps, pit 150-190 cps.
SR 677	grab	na	Grid from dump of flooded shaft; altered granite.
SR 678	chip	6.0	Pit; altered granite.
SR 679	chip	3.0	Pit; fault(?) cutting granite; altered fragments.
SR 680	chip	4.0	Opencut; altered granite.
SR 681	grab	na	Grid from dump of shaft; altered granite with pyrite.
SR 682	grab	na	Do.
SR 683	chip	2.5	Outcrop; fissure vein cutting granite; vein contains hematite.

Sample			Description
No.	Type	Length (ft)	
SR 684	chip	5.0	Pit; altered granite.
SR 685	chip	4.0	Pit; fault(?) cutting granite; fragments and gouge.
SR 686	chip	4.5	Adit, across portal; fault cutting rhyolite tuff(?); fragments and gouge with hematite.
SR 687	chip	2.0	Adit, right rib at 60 ft; fault cutting rhyolite tuff(?); fragments and gouge with malachite (?).
SR 688	chip	5.0	Adit, right rib at 105 ft; fault cutting rhyolite tuff(?); fragments and gouge with copper oxide.
SR 689	chip	6.0	Doghole, face at 6 ft; fractured rhyolite tuff(?); fragments and gouge with hematite.
SR 690	chip	40.0	Outcrop, composite; fractured, altered, and leached rhyolite tuff(?) with limonite and hematite.
SR 691	grab	na	Grid from dump of trench and flooded shaft; rhyolite tuff with hematite, and manganese and copper oxides.
SR 692	chip	6.0	Shaft; fractured rhyolite tuff with hematite, and manganese and copper oxides.
SR 693	chip	6.0	Opencut; faulted trachyte(?) with quartz and hematite.
SR 694	chip	7.0	Do.
SR 695	chip	2.0	Outcrop; fractured rhyolite with hematite.
SR 696	chip	2.5	Outcrop; fault zone cutting rhyolite; fragments and gouge with limonite and hematite.
SR 697	chip	3.0	Pit; rhyolite/granite fault(?) contact; fragments and gouge with quartz, hematite, and manganese oxide.
SR 698	chip	3.0	Outcrop; rhyolite/granite fault(?) contact; fragments and gouge with quartz, hematite, and manganese oxide.
SR 699	chip	4.0	Adit, across portal; rhyolite/granite fault(?) contact; fragments and gouge with quartz, hematite, and manganese oxide.
SR 700	select	na	Stockpile on dump of flooded shaft; quartz vein with pyrite, hematite, limonite, and manganese oxide.
SR 701	grab	na	Random from dump of shaft; altered andesite(?) with hematite, manganese oxide, and minor quartz vein.
SR 702	chip	7.0	Opencut next to adit portal; fissure vein cutting sedimentary and rhyolitic rocks; vein contains massive quartz.
SR 703	chip	4.0	Adit, face at 30 ft; fissure vein cutting sedimentary and rhyolitic rocks; vein contains massive quartz.
SR 704	chip	4.0	Reclaimed(?) shaft; fissure vein cutting sedimentary and rhyolitic rocks; vein contains quartz and hematite.
SR 705	chip	7.0	Outcrop; fissure vein cutting sedimentary and rhyolitic rocks; vein contains brecciated quartz.
SR 706	chip	10.0	Outcrop; brecciated and silicified rhyolite.
SR 707	chip	6.0	Pit; faulted fragments and gouge of granite and andesite with hematite and manganese oxide.
SR 708	chip	4.0	Outcrop; fissure vein cutting granite; vein contains quartz, hematite, and manganese oxide.
SR 709	chip	10.0	Adit, across portal; fissure vein (?) cutting granite; vein contains quartz, malachite, hematite, and manganese oxide.
SR 710	chip	4.5	Adit, back at 24 ft; fissure vein (?) cutting granite; vein contains malachite, hematite, and manganese oxide.
SR 711	chip	3.5	Adit, face of drift to right at 70 ft; fissure vein (?) cutting granite; vein contains malachite and hematite.
SR 712	chip	3.5	Adit, face of main drift at 60 ft; fissure vein (?) cutting granite; vein contains malachite and hematite.
SR 713	chip	12.0	Adit, left rib at 60 ft of drift to left; faulted granite; fragments and gouge with hematite and malachite.
SR 714	chip	8.0	Opencut; fissure vein cutting granite; vein contains malachite and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 715	chip	13.0	Opencut; sheared andesite with hematite.
SR 716	grab	na	Random from dump of pit; rhyolite(?) with manganese oxide and limonite.
SR 717	chip	1.7	Pit; fracture zone cutting rhyolite(?); fragments and gouge with hematite.
SR 718	chip	4.7	Inclined shaft; fissure vein cutting rhyolitic rock; vein contains quartz and hematite.
SR 719	chip	0.5	Opencut; high grade of vuggy quartz vein with hematite.
SR 720	chip	4.0	Outcrop; quartz vein cutting granite; moderate hematite and limonite.
SR 721	chip	7.0	Outcrop; fissure vein cutting granite; vein contains vuggy quartz and hematite.
SR 722	chip	3.0	Outcrop; select of vuggy quartz vein with hematite in brecciated granite.
SR 723	chip	5.0	Outcrop; fissure vein cutting andesite; vein contains vuggy quartz and hematite.
SR 724	chip	5.5	Adit, across portal; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with hematite and manganese oxide.
SR 725	chip	4.0	Adit, back at 30 ft; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with quartz, hematite, and copper oxide.
SR 726	chip	4.8	Adit, back at 65 ft; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with quartz, hematite, and limonite.
SR 727	chip	5.5	Adit, back at 90 ft; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with quartz, hematite, and limonite.
SR 728	chip	5.5	Adit, back at 120 ft; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with hematite and limonite.
SR 729	chip	23.0	Adit, composite along back of drift to right at 140 ft; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with hematite.
SR 730	chip	3.2	Adit, back at 145 ft; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with hematite.
SR 731	chip	3.0	Adit, select of silicious pods on left rib at 185 ft; calcium carbonate with copper oxide.
SR 732	chip	3.8	Adit, back at 190 ft; shear zone cutting interbedded andesitic volcanic and sedimentary rocks; fragments and gouge with hematite and limonite.
SR 733	chip	0.6	Shaft; fault cutting volcanic breccia; fragments and gouge with quartz and hematite.
SR 734	select	na	Dump of shaft; quartz vein with mimetite(?), hematite, and limonite.
SR 735	chip	4.0	Outcrop; fissure vein cutting andesite; vein contains vuggy quartz, hematite, and manganese oxide.
SR 736	chip	0.6	Opencut; vuggy quartz vein cutting volcanic breccia; hematite, limonite, magnetite, and relict pyrite.
SR 737	chip	60.0	Outcrop, composite; rhyolite and andesite fragments with hematite.
SR 738	grab	na	Grid from dump of shaft; rhyolitic volcanic rock with quartz, hematite, and manganese oxide.
SR 739	grab	na	Dump of pit; rhyolitic volcanic rock with vuggy quartz, hematite, and limonite.
SR 740	chip	1.5	Pit; andesitic volcanic rock with quartz, chrysocolla(?), and calcium carbonate.
SR 741	chip	1.7	Shaft; quartz vein cutting andesite; malachite and hematite after pyrite.
SR 742	chip	6.0	Shaft; fractured andesitic rock with quartz, hematite, and manganese oxide.
SR 743	chip	2.0	Shaft; fissure vein cutting andesite; vein contains quartz, malachite, hematite, and manganese oxide.
SR 744	chip	5.0	Trench; altered andesite with quartz and hematite.
SR 745	chip	2.5	Adit, portal; altered andesite with quartz and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 746	chip	5.0	Shaft; leached and altered andesite with quartz, manganese oxide, and hematite.
SR 747	grab	na	Grid from dump of shaft; rhyolitic volcanic rock fragments with quartz veining.
SR 748	chip	5.0	Pit; fissure vein cutting rhyolitic tuff; vein contains quartz, hematite, and manganese oxide.
SR 749	chip	6.0	Outcrop; rhyolitic tuff with vuggy quartz veinlets.
SR 750	chip	3.0	Pit; fractured rhyolitic tuff with manganese oxide.
SR 751	chip	4.0	Opencut; quartz vein cutting rhyolitic tuff.
SR 752	chip	15.0	Outcrop; andesitic rock with quartz veins and pyrite.
SR 753	chip	5.5	Pit; vuggy quartz vein cutting andesite.
SR 754	chip	4.0	Pit; quartz vein cutting andesite; hematite.
SR 755	chip	4.5	Trench near shaft; quartz vein cutting andesite.
SR 756	chip	3.0	Outcrop; quartz vein cutting andesite; malachite, hematite, and relict pyrite.
SR 757	chip	5.0	Opencut; vuggy quartz vein cutting andesite.
SR 758	chip	4.5	Adit, back at 55 ft; shear zone cutting andesite; fragments and gouge with quartz and hematite.
SR 759	chip	9.0	Adit, back at 60 ft; shear zone cutting andesite; fragments and gouge with hematite.
SR 760	chip	4.0	Adit, face at 80 ft; shear zone cutting andesite; fragments and gouge with quartz and hematite.
SR 761	grab	na	Grid from dump of shaft; quartz veining and altered andesite with hematite.
SR 762	chip	4.0	Outcrop; altered andesite.
SR 763	chip	4.0	Adit, back at 10 ft; fissure vein cutting andesite; vein contains quartz and hematite.
SR 764	chip	3.3	Adit, back at 28 ft; fissure vein cutting andesite; vein contains quartz, hematite, limonite, and manganese oxide.
SR 765	chip	4.0	Adit, face at 105 ft; fissure vein cutting andesite; vein contains quartz and hematite.
SR 766	chip	3.0	Shaft; vuggy quartz vein in altered and silicified andesite; hematite and manganese oxide.
SR 767	chip	4.0	Adit, across portal; vuggy quartz vein cutting andesite; chrysocolla, malachite, hematite, limonite, and manganese oxide.
SR 768	grab	na	Dump of shaft; quartz and andesite fragments with hematite.
SR 769	select	na	Dump of shaft; quartz stockwork cutting altered rhyolite(?); hematite and limonite.
SR 770	chip	10.0	Outcrop, composite; quartz stockwork cutting altered rhyolite(?); hematite and limonite.
SR 771	chip	5.0	Shaft; andesite and quartz fragments with copper oxides.
SR 772	chip	5.0	Pit; splaying quartz veinlets cutting andesite; malachite and hematite.
SR 773	chip	4.0	Outcrop; fissure vein cutting andesite; vein contains quartz and hematite.
SR 774	chip	4.0	Shaft; fissure vein cutting andesite; vein contains quartz and hematite.
SR 775	select	na	Dump of shaft; leached andesite with quartz veins and hematite.
SR 776	select	na	High grade from dump of adit; quartz vein with pyrite.
SR 777	chip	5.0	Adit, left rib at 26 ft; shears cutting granite; fragments and gouge with hematite.
SR 778	chip	2.0	Adit, left rib at 30 ft; fault cutting granite; fragments and gouge.
SR 779	chip	2.5	Adit, back at 60 ft; shear cutting granite; fragments and gouge with quartz, limonite, and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 780	chip	3.0	Adit, back at 95 ft; shear cutting granite; fragments and gouge with quartz.
SR 781	chip	2.5	Adit, back at 125 ft; shear cutting granite; fragments and gouge with hematite and limonite.
SR 782	chip	3.5	Adit, back at face at 160 ft; shear cutting granite; fragments and gouge with hematite and limonite.
SR 783	chip	2.0	Adit, back at 3 ft; fissure vein cutting granite; vein contains quartz and hematite.
SR 784	chip	3.0	Adit, back at 26 ft; fissure vein cutting granite; vein contains quartz, hematite, and limonite.
SR 785	chip	3.0	Adit, back at 50 ft; fissure vein cutting granite; vein contains quartz, hematite, and limonite.
SR 786	chip	2.0	Adit, back at 73 ft; fissure vein cutting granite; vein contains quartz, pyrite, hematite, and limonite.
SR 787	chip	2.0	Adit, face at 103 ft; fissure vein cutting granite; vein contains quartz, chalcopyrite, pyrite, sphalerite, hematite, and limonite.
SR 788	chip	4.0	Adit, across portal; shear zone cutting granite; fragments and gouge with quartz, hematite, and limonite.
SR 789	chip	4.0	Adit, back at 41 ft; shear zone cutting granite; fragments and gouge with quartz, limonite, and hematite.
SR 790	chip	3.5	Adit, back at 85 ft; shear zone cutting granite; fragments and gouge with quartz, limonite, and hematite.
SR 791	chip	2.5	Adit, back at 40 ft; shear zone cutting granite; fragments and gouge with quartz, hematite, limonite, and manganese oxide.
SR 792	chip	3.0	Adit, left rib at 70 ft; shear zone cutting granite; fragments and gouge.
SR 793	chip	3.0	Adit, back at 95 ft; shear zone cutting granite; fragments and gouge with hematite and aragonite.
SR 794	chip	4.0	Adit, face at 130 ft; shear cutting granite; fragments and gouge.
SR 795	chip	3.0	Adit, back at 23 ft; shear cutting granite; fragments and gouge with quartz and hematite.
SR 796	chip	3.0	Adit, back at 64 ft; shear cutting granite; fragments and gouge with quartz and hematite.
SR 797	chip	1.3	Adit, right rib at 92 ft; fissure vein cutting granite; vein contains quartz, malachite, azurite, bornite, chalcopyrite, galena, hematite, and limonite.
SR 798	chip	3.0	Adit, flooded; fractured granite with hematite.
SR 799	select	na	Stockpile on dump of adit; granite fragments with pyrite and hematite.
SR 800	select	na	Stockpile on dump of adit; quartz fragments with chalcopyrite and galena.
SR 801	grab	na	Dump of adit; granitic fragments with hematite.
SR 802	chip	3.0	Doghole, face at 10 ft; fractured rhyolite(?) with hematite.
SR 803	chip	1.7	Adit, back at 3 ft; faulted quartzite; fragments and gouge with limonite, hematite, and manganese oxide.
SR 804	chip	5.0	Shaft, flooded; fractured trachyte(?) with malachite.
SR 805	chip	12.0	Adit, along right rib; quartz vein cutting altered rhyolite breccia; hematite.
SR 806	chip	4.5	Pit; granite with hematite.
SR 807	chip	7.0	Opencut at flooded shaft; fault cutting latite; fragments and gouge with quartz and pyrite.
SR 808	chip	3.5	Adit, back at 3 ft; fissure vein cutting latite; vein contains quartz, azurite, malachite, limonite, and hematite.
SR 809	chip	3.0	Adit, face of doghole to right at 25 ft; shear cutting latite; fragments and gouge with limonite and hematite.

Sample			Description
No.	Type	Length (ft)	
SR 810	chip	4.0	Adit, back at 18 ft; fissure vein cutting latite; vein contains malachite, azurite, limonite, hematite, and manganese oxide.
SR 811	chip	1.5	Adit, back at 44 ft; fissure vein cutting latite; vein contains malachite, azurite, limonite, and malachite.
SR 812	chip	4.0	Adit, back at 60 ft; fissure vein cutting latite; vein contains quartz, malachite, azurite, limonite, and hematite.
SR 813	chip	2.5	Adit, back at 73 ft; fissure vein cutting latite; vein contains malachite, azurite, limonite, and hematite.
SR 814	chip	1.5	Adit, face at 93 ft; fissure vein cutting latite; vein contains malachite, limonite, and hematite.
SR 815	chip	3.5	Doghole, face at 10 ft; fissure vein cutting latite; vein contains quartz, pyrite, limonite, and hematite.
SR 816	chip	4.5	Adit, face at 18 ft; latite with calcite veinlets.
SR 817	chip	3.5	Doghole, face; fissure vein cutting latite; vein contains vuggy quartz, limonite, and hematite.
SR 818	select	na	High grade from dump of adit; vuggy quartz vein with sphalerite, malachite, and hematite.
SR 819	chip	10.0	Adit, across portal; fractured latite.
SR 820	select	na	High grade from dump of adit; quartz vein material with sphalerite and chalcopyrite.
SR 821	chip	3.5	Adit, back at 16 ft; fissure vein cutting dacite(?); vein contains massive quartz, limonite, and hematite.
SR 822	chip	6.0	Opencut; latitic(?) volcanic rock with quartz vein and hematite.
SR 823	grab	na	Dump of shaft; latitic(?) volcanic rock with galena.
SR 824	chip	3.0	Shaft; fractured latitic(?) volcanic rock with hematite.
SR 825	chip	7.5	Shaft; quartz vein cutting latitic rock; vein contains pyrite, hematite, and manganese oxide.
SR 826	chip	6.0	Shaft; rhyolitic(?) rock with manganese oxide.
SR 827	chip	6.0	Adit, face at 25 ft; faulted latite with pyrite and hematite.
SR 828	chip	1.5	Adit, right rib at back at 5 ft; shear cutting dacite; fragments and gouge with hematite.
SR 829	chip	2.0	Adit, left rib at 72 ft; fault cutting dacitic breccia; fragments and gouge with hematite.
SR 830	chip	3.0	Adit, right rib at 33 ft; faults cutting dacitic rock; fragments and gouge with hematite, limonite, and manganese oxide.
SR 831	chip	2.0	Adit, left rib at 2 ft; fissure vein cutting andesite; vein contains quartz, hematite, and limonite.
SR 832	chip	2.5	Adit, right rib at 38 ft; fissure vein cutting andesite; vein contains pyrite, chrysocolla, hematite, and limonite.
SR 833	chip	2.0	Adit, back at 95 ft; fissure vein cutting andesite; vein contains pyrite, chrysocolla, hematite, and limonite.
SR 834	chip	2.0	Adit, back at 125 ft; fissure vein cutting andesite; vein contains quartz, chrysocolla, pyrite, hematite, and limonite.
SR 835	chip	3.0	Adit, back at 165 ft; fissure vein cutting andesite; vein contains quartz, chrysocolla, hematite, and limonite.
SR 836	chip	2.5	Adit, back at 203 ft; fissure vein cutting andesite; vein contains chrysocolla, hematite, and limonite.
SR 837	chip	1.0	Adit, left rib at 225 ft; fissure vein cutting andesite; vein contains pyrite and chrysocolla.
SR 838	chip	2.5	Adit, back at 238 ft; fissure vein cutting andesite; vein contains quartz, hematite, and limonite.
SR 839	chip	1.3	Adit, left rib at face at 255 ft; fissure vein cutting andesite; vein contains quartz, hematite, and limonite.
SR 840	chip	4.0	Shaft; shear zone cutting andesite; fragments and gouge with quartz, hematite, and limonite.

Sample			Description
No.	Type	Length (ft)	
SR 841	chip	2.5	Adit, left rib at 5 ft; shear cutting andesite; fragments and gouge with hematite, limonite, manganese oxide, and calcium carbonate.
SR 842	chip	1.5	Adit, right rib at 105 ft; shear cutting andesite breccia; fragments and gouge with hematite and limonite.
SR 843	chip	5.0	Adit, left rib at 128 ft; shear cutting andesite breccia; fragments and gouge with quartz, pyrite, hematite, and limonite.
SR 844	chip	1.3	Adit, left rib at 185 ft; shear cutting andesite breccia; fragments and gouge with hematite.
SR 845	chip	3.0	Adit, right rib at 245 ft; shear cutting andesite breccia; fragments and gouge with manganese oxide, hematite, and limonite.
SR 846	chip	2.5	Adit, right rib at 250 ft; shear cutting andesite breccia; fragments and gouge with manganese oxide and limonite.
SR 847	chip	5.0	Adit, across portal; shear cutting andesitic breccia; fragments and gouge.
SR 848	chip	5.0	Adit, back at 45 ft; shear cutting andesitic breccia; fragments and gouge with malachite, hematite, and limonite.
SR 849	chip	3.0	Adit, face at 88 ft; shear cutting andesitic breccia; fragments and gouge with chalcanthite and limonite.
SR 850	chip	3.5	Pit, near shaft; shear zone cutting rhyolite; fragments and gouge with malachite, azurite, hematite, and limonite.
SR 851	chip	4.0	Adit, across portal; fractured andesite with hematite.
SR 852	chip	1.0	Adit, across pillar at 20 ft; fissure vein cutting rhyolite; vein contains chalcanthite and hematite.
SR 853	chip	2.0	Adit, face of drift to right at 45 ft; fissure vein cutting rhyolite; vein contains quartz, pyrite, galena, chalcopyrite, and specularite.
SR 854	chip	2.0	Adit, right rib at 65 ft; fissure vein cutting rhyolite; vein contains quartz, pyrite, and manganese oxide.
SR 855	chip	0.7	Adit, right rib at 145 ft; fissure vein cutting rhyolite; vein contains quartz, galena, chalcopyrite, chalcanthite, and sphalerite.
SR 856	chip	1.0	Adit, right side of back at 170 ft; fissure vein cutting rhyolite; vein contains quartz, galena, bornite, chalcopyrite, and chalcanthite.
SR 857	chip	3.0	Adit, left side of back at 170 ft; fissure vein cutting rhyolite; vein contains limonite and hematite.
SR 858	chip	1.5	Adit, back at 197 ft; fissure vein cutting rhyolite; vein contains limonite and hematite.
SR 859	chip	3.0	Adit, right side of face at 225 ft; fissure vein cutting rhyolite; vein contains pyrite, chalcanthite, specularite, and galena.
SR 860	chip	2.0	Adit, left side of face at 225 ft; fissure vein cutting rhyolite; vein contains malachite, azurite, and limonite.
SR 861	chip	1.5	Adit, across portal; fissure vein cutting rhyolite; vein contains quartz, hematite, and manganese oxide.
SR 862	chip	3.0	Adit, back at 10 ft; fissure vein cutting rhyolite; vein contains hematite.
SR 863	chip	1.0	Adit, back at 45 ft; fissure vein cutting rhyolite; vein contains quartz, barite, limonite, and manganese oxide.
SR 864	chip	3.0	Adit, left side of face at 125 ft; fissure vein cutting rhyolite; vein contains chalcanthite, hematite, limonite, and manganese oxide.
SR 865	chip	1.2	Adit, right side of face at 125 ft; fissure vein cutting rhyolite; vein contains quartz and limonite.
SR 866	chip	3.0	Adit, in trench; fissure vein cutting rhyolite; vein contains vuggy quartz, hematite, and limonite.
SR 867	chip	2.5	Trench; fissure vein cutting rhyolite; vein contains quartz, hematite, limonite, and manganese oxide.
SR 868	chip	3.0	Pit; fissure vein cutting rhyolite; vein contains quartz, hematite, and manganese oxide.

Sample			Description
No.	Type	Length (ft)	
SR 869	grab	na	Dump of pit; quartz, barite, and rhyolite with limonite.
SR 870	select	na	Dump of flooded shafts; vein quartz with galena, pyrite, hematite, and manganese oxide.
SR 871	chip	2.0	Opencut; shear zone cutting andesite; fragments and gouge with quartz stringers, hematite, and manganese oxide.
SR 872	chip	3.0	Outcrop; fissure vein cutting andesite; vein contains quartz, hematite, limonite, and manganese oxide.
SR 873	chip	2.0	Outcrop; fissure vein cutting andesite; vein contains quartz, hematite, and limonite.
SR 874	chip	3.0	Outcrop near shaft; quartz stockwork cutting andesite; hematite.
SR 875	grab	na	Grid from dump of pit; quartz vein and andesite fragments.
SR 876	chip	3.0	Outcrop; massive quartz vein cutting andesite; hematite, limonite, and manganese oxide.
SR 877	grab	na	Grid from dump of inclined shaft; rhyolitic tuff fragments with hematite.
SR 878	chip	4.0	Shaft; shear zone cutting rhyolitic(?) tuff; fragments and gouge with azurite, rosasite, and hematite.
SR 879	chip	3.0	Shaft; shear zone cutting rhyolitic(?) tuff; fragments and gouge.
SR 880	chip	2.0	Outcrop; fissure vein cutting andesite; vein contains quartz, barite, hematite, limonite, and manganese oxide.
SR 881	grab	na	Random from dump of shaft; sheared andesite fragments and quartz vein with hematite and limonite.
SR 882	chip	2.8	Outcrop; fissure vein cutting rhyolite; vein contains massive vuggy quartz with hematite and limonite.
SR 883	chip	6.0	Outcrop; fissure vein cutting rhyolite; vein contains massive vuggy quartz with hematite and limonite.
SR 884	grab	na	Grid from dump of flooded shaft; andesitic fragments with pyrite.
SR 885	grab	na	Grid from dump of flooded shaft; rhyolitic fragments with barite.
SR 886	chip	1.5	Shaft; fissure vein cutting rhyolite; vein contains vuggy quartz, limonite, and hematite.
SR 887	chip	3.0	Outcrop; fissure vein cutting rhyolitic rock; vein contains massive quartz, barite, hematite, and manganese oxide.
SR 888	chip	3.0	Adit, across portal; shear cutting rhyolite; fragments and gouge with hematite and limonite.
SR 889	grab	na	Grid from dump of shaft; rhyolitic fragments with azurite and malachite.
SR 890	grab	na	Grid from dump of shaft; quartz and rhyolite fragments with pyrite, azurite, and malachite.
SR 891	chip	3.0	Pit; fissure vein cutting rhyolite; vein contains quartz, malachite, azurite, hematite, and manganese oxide.
SR 892	chip	4.5	Opencut; fissure vein cutting rhyolite; vein contains quartz, hematite, and manganese oxide.
SR 893	chip	2.5	Adit, back at 11 ft; shear cutting rhyolite; fragments and gouge with quartz and hematite.
SR 894	chip	4.0	Opencut; fissure vein cutting rhyolite; vein contains vuggy quartz, hematite, and manganese oxide.
SR 895	chip	3.0	Opencut leading to caved adit; fissure vein cutting rhyolite; vein contains vuggy quartz, hematite, and manganese oxide.
SR 896	chip	2.0	Adit, across portal; fissure vein cutting rhyolite; vein contains quartz and hematite.
SR 897	chip	3.0	Adit, doghole in left rib at 9 ft; fissure vein cutting rhyolite; vein contains quartz, limonite, and hematite.
SR 898	chip	5.0	Adit, face at 40 ft; fissure vein cutting rhyolite; vein contains quartz, hematite, and limonite.
SR 899	chip	6.0	Adit, closed and flooded, across portal; fractured monzonite with hematite.
SR 900	select	na	Stockpile(?) on dump of adit; monzonite fragments with pyrite, hematite, and limonite.
SR 901	grab	na	Grid from dump of shaft; monzonite and quartz fragments.

Sample			Description
No.	Type	Length (ft)	
SR 902	chip	3.5	Adit, back at 12 ft; shear zone cutting monzonite; fragments and gouge with hematite and limonite.
SR 903	chip	3.0	Outcrop, near inclined shaft; quartz vein cutting rhyolite; pyrite and hematite.
SR 904	chip	2.5	Pit; shear cutting monzonite; fragments and gouge with quartz, hematite, and limonite.
SR 905	chip	4.0	Trench; fractured monzonite with hematite.
SR 906	grab	na	Grid from dump of shaft; monzonite fragments with hematite and limonite.
SR 907	grab	na	Do.
SR 908	chip	4.0	Outcrop; quartz vein cutting monzonite; hematite and specularite(?).
SR 909	chip	3.0	Adit, left rib at 51 ft; shear zone cutting monzonite; fragments and gouge with quartz, pyrite, limonite, and hematite.
SR 910	chip	4.5	Adit, back at 70 ft; shear zone cutting monzonite; fragments and gouge with quartz, pyrite, limonite, and hematite.
SR 911	chip	5.0	Adit, back at 48 ft; shear cutting monzonite; fragments and gouge with quartz, pyrite, chalcanthite, limonite, and hematite.
SR 912	chip	2.5	Adit, back at 84 ft; shear cutting monzonite; fragments and gouge with limonite and hematite.
SR 913	chip	3.5	Adit, back at 172 ft; shear cutting monzonite; fragments and gouge with pyrite, limonite, and hematite.
SR 914	chip	2.5	Adit, back at 236 ft; shear cutting monzonite; fragments and gouge with limonite and hematite.
SR 915	chip	4.0	Adit, across portal; shear zone cutting monzonite; fragments and gouge with limonite.
SR 916	chip	4.0	Adit, back at 28 ft; shear zone cutting monzonite; fragments and gouge with quartz and pyrite.
SR 917	grab	na	Dump of shaft; monzonite fragments.
SR 918	select	na	Dump of shaft; altered monzonite with pyrite.
SR 919	grab	na	Random from dump of shaft; monzonite fragments and gouge with quartz, pyrite, hematite, and limonite.
SR 920	grab	na	Random from dump of adit; altered monzonite and quartz with pyrite, cerussite, hematite, and limonite.
SR 921	chip	2.0	Opencut; fissure vein cutting monzonite; vein contains quartz, pyrite, limonite, hematite, and manganese oxide.
SR 922	grab	na	Grid from dump of caved adit; monzonite and vuggy quartz fragments with pyrite.
SR 923	grab	na	Random from dump of shafts; monzonite and quartz fragments with limonite, hematite, and manganese oxide.
SR 924	grab	na	Grid from dump of flooded adit; monzonite and quartz fragments with galena, pyrite, limonite, and hematite.
SR 925	select	na	Dump of adit; quartz fragments containing galena and pyrite.
SR 926	grab	na	Grid from dump of flooded adit; altered granite fragments with quartz, pyrite, limonite, and hematite.
SR 927	chip	3.0	Pit; fractured granitic rock with hematite and limonite.
SR 928	chip	3.0	Shaft, flooded; granitic rock.
SR 929	chip	6.0	Adit, flooded, across portal; fractured granitic rock with hematite and limonite.
SR 930	chip	3.0	Opencut leading to adit; quartz vein cutting granite; pyrite and hematite.
SR 931	chip	4.0	Adit, flooded, across portal; fractured granitic rock with pyrite(?) and hematite.
SR 932	chip	5.0	Shaft; fissure vein (?) cutting granitic rock; vein contains quartz, pyrite, and hematite.
SR 933	chip	20.0	Outcrop; fractured granitic rock with hematite.

Sample			Description
No.	Type	Length (ft)	
SR 934	grab	na	Random from dump of caved adit; altered diorite and vuggy quartz with pyrite and hematite.
SR 935	select	na	Dump of adit; diorite and quartz vein fragments with pyrite.
SR 936	grab	na	Random from dump of shaft; sheared granite fragments and gouge with quartz, limonite, and hematite.
SR 937	chip	0.8	Adit, back at 6 ft; fissure vein cutting diorite; vein contains quartz, pyrite, limonite, and hematite.
SR 938	chip	2.0	Adit, right rib at 33 ft; fissure vein cutting granite; vein contains pyrite, chalcanthite, limonite, and hematite.
SR 939	chip	1.5	Adit, left rib at 75 ft; fault cutting granite; fragments and gouge with pyrite, hematite, and limonite.
SR 940	grab	na	Grid from dump of shaft; altered granitic rock with quartz, pyrite, hematite, and limonite.
SR 941	chip	4.0	Adit, back at 65 ft; fractured rhyolite dike (?) with pyrite, chalcanthite, bornite, hematite, and limonite.
SR 942	chip	20.0	Adit, across back into right drift at 90 ft; fractured rhyolite dike (?) with pyrite, chalcopyrite, bornite, malachite, azurite, and chalcanthite.
SR 943	chip	12.0	Adit, back at 170 ft; fractured rhyolite dike (?) with pyrite, chalcopyrite, bornite, malachite, azurite, and chalcanthite.
SR 944	chip	7.0	Outcrop; shear cutting rhyolite(?); fragments and gouge with hematite and limonite.
SR 945	grab	na	Dump of shaft and caved adit; altered and silicified rhyolite(?) with pyrite, galena, sphalerite, hematite, and limonite.
SR 946	chip	4.0	Adit, flooded, across portal; shear cutting monzonite; fragments and gouge.
SR 947	chip	4.0	Bulldozer cut; quartz veins cutting rhyolitic rock.
SR 948	chip	3.0	Trench; rhyolitic rock with malachite, azurite, and hematite.
SR 949	grab	na	Grid from dump of trench; rhyolitic rock with malachite, azurite, and calcite.
SR 950	select	na	Stockpile(?) on dump of trench; rhyolitic rock with malachite and azurite.
SR 951	select	na	High grade from dump of caved adit; latitic rock with pyrite and magnetite.
SR 952	select	na	Do.
SR 953	grab	na	Random from dump of pit; latitic rock with pyrite, magnetite, and hematite.
SR 954	select	na	High grade from dump of pit; latitic rock with pyrite and tetrahedrite(?).

Appendix B.-- Assay data for samples taken in the Santa Rita Mountains Unit, Coronado National Forest, Arizona, analyzed by Bondar-Clegg & Co., Ltd.
[<, less than; >, greater than]

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR001	<5	3	<5	1000	<1	<10	98	16	160	10	<2	4.5	6	<100	50	0.6	5	1.10	<20	230	0.5	13.0	<10	8.8	<200	<1	1	<20	16.0	5.8	<2	7	240	<500
SR002	5	6	<5	610	<1	<10	47	<10	340	7	<2	0.8	<2	<100	22	<0.5	5	2.60	<20	230	0.4	2.6	<10	3.2	<200	1	<1	<20	9.4	3.4	4	<5	<200	<500
SR003	<5	4	5	710	<1	<10	98	<10	320	9	<2	2.2	22	<100	45	0.9	5	1.70	<20	140	0.6	10.0	<10	6.0	<200	2	1	<20	19.0	6.2	7	7	<200	1000
SR004	8	122	37	310	2	<10	24	17	360	3	<2	4.3	<2	<100	20	<0.5	408	0.07	<20	130	5.6	1.1	30	2.7	<200	<1	<1	<20	6.4	5.4	16	<5	<200	<500
SR005	6	18	6	940	<1	<10	75	<10	300	6	<2	1.5	5	<100	35	<0.5	12	2.30	<20	270	1.6	2.3	<10	5.4	<200	2	<1	<20	11.0	4.1	13	<5	<200	<500
SR006	16	103	98	<100	2	<10	<10	<10	410	3	<2	6.8	<2	<100	19	<0.5	807	0.45	<20	47	5.2	1.0	37	2.7	<200	<1	<1	<20	4.0	24.0	20	<5	<200	<500
SR007	9	36	11	510	3	<10	73	24	390	9	<2	2.9	4	<100	34	<0.5	25	1.80	<20	150	1.6	3.3	<10	4.8	<200	<1	1	<20	9.4	7.2	10	<5	<200	<500
SR008	<5	59	35	500	1	<10	52	<10	390	5	<2	2.7	2	<100	22	<0.5	71	1.20	<20	240	1.4	1.4	<10	3.2	<200	<1	<1	<20	8.3	11.0	12	<5	<200	<500
SR009	<5	26	49	410	<1	<10	59	<10	220	31	<2	1.6	<2	<100	27	<0.5	14	0.80	<20	240	8.5	3.6	<10	4.3	<200	1	<1	<20	9.0	3.1	13	<5	<200	<500
SR010	<5	20	29	260	1	<10	53	<10	200	15	<2	1.8	2	<100	32	<0.5	3	1.20	<20	230	12.0	4.2	<10	4.2	<200	<1	<1	<20	10.0	3.1	11	<5	<200	<500
SR011	<5	6	<5	920	<1	<10	53	<10	200	12	<2	1.7	3	<100	24	<0.5	2	2.80	<20	200	1.0	4.9	<10	3.7	<200	1	<1	<20	10.0	2.9	11	<5	<200	<500
SR012	<5	10	430	180	<1	<10	30	<10	300	10	<2	1.3	<2	<100	15	<0.5	6	0.46	<20	120	7.9	2.6	<10	2.8	<200	<1	<1	<20	4.8	1.9	4	<5	<200	<500
SR013	<5	14	86	170	<1	<10	47	<10	200	30	<2	1.6	2	<100	27	<0.5	25	2.20	<20	140	12.0	3.9	<10	4.1	<200	<1	<1	<20	8.6	2.7	14	<5	<200	<500
SR014	<5	25	1110	650	1	<10	67	<10	150	43	<2	1.5	<2	<100	24	<0.5	7	0.26	<20	290	19.0	3.7	<10	3.7	<200	1	<1	<20	8.9	3.2	5	<5	<200	<500
SR015	<5	66	460	540	2	<10	61	<10	170	37	<2	1.6	<2	<100	37	<0.5	2	0.46	<20	430	20.7	3.9	<10	3.9	<200	<1	<1	<20	10.0	3.1	28	<5	<200	<500
SR016	<5	21	<5	640	<1	<10	60	<10	200	32	<2	1.3	<2	<100	28	<0.5	<2	1.50	<20	260	4.6	4.7	<10	4.5	<200	<1	<1	<20	11.0	3.4	14	<5	<200	<500
SR017	<5	70	607	680	3	<10	41	<10	160	66	<2	1.5	<2	<100	30	<0.5	5	0.59	<20	360	37.1	4.0	<10	3.8	<200	<1	<1	<20	8.4	3.1	39	<5	<200	<500
SR018	<5	46	846	190	4	<10	48	<10	170	31	<2	1.3	<2	<100	20	<0.5	13	0.12	23	210	32.4	3.3	<10	2.8	<200	<1	<1	<20	6.7	2.3	10	<5	<200	<500
SR019	<5	36	2950	1000	<1	<10	40	<10	150	36	<2	1.5	<2	<100	29	<0.5	7	1.10	<50	190	17.0	4.4	<10	4.3	<200	1	<1	<20	10.0	3.8	22	<5	<200	<500
SR020	<5	32	602	2100	<1	<10	40	<10	220	35	<2	1.2	<2	<100	24	<0.5	8	0.39	<50	130	21.8	3.4	<10	3.5	<200	<1	<1	<20	7.9	2.8	21	<5	<200	<500
SR021	5	49	54	660	<1	<10	56	<10	150	33	<2	1.2	<2	<100	29	<0.5	10	0.33	<50	110	31.3	4.5	<10	4.1	<200	<1	<1	<20	8.9	3.7	14	<5	<200	<500
SR022	<5	30	41	800	<1	<10	58	<10	190	46	<2	1.7	<2	<100	27	<0.5	6	1.70	<20	220	9.4	4.8	<10	4.1	<200	<1	<1	<20	9.3	3.8	12	<5	<200	<500
SR023	<5	19	110	1100	2	<10	67	<10	230	45	<2	1.6	<2	<100	26	<0.5	3	0.29	<20	300	15.0	4.1	<10	3.9	<200	1	<1	<20	10.0	3.3	17	<5	<200	<500
SR024	<5	12	22	440	<1	<10	36	<10	98	10	<2	1.4	3	<100	20	<0.5	3	0.08	27	90	2.7	4.1	<10	2.7	<200	<1	<1	<20	6.7	1.9	5	<5	1000	<500
SR025	28	27	360	<100	5	270	<10	<10	<50	<1	<2	0.7	<2	<100	<5	<0.5	95	<0.05	<20	<10	18.0	<0.5	<10	0.3	<200	<1	<1	<20	0.5	1.5	9	<5	2300	<500
SR026	<5	6	<5	<100	<1	<10	<10	<10	<50	<1	<2	<0.5	<2	<100	<5	<0.5	5	<0.05	<20	<10	3.0	0.6	<10	0.3	<200	<1	<1	<20	0.6	2.1	<2	<5	210	<500
SR027	28	6	54	870	<1	21	<10	<10	<50	<1	<2	<0.5	<2	<100	<5	<0.5	46	<0.05	<20	<10	13.0	0.9	<10	0.6	<200	<1	<1	<20	0.9	1.2	<2	<5	1200	<500
SR028	<5	21	5	690	<1	<10	37	<10	60	11	<2	1.3	3	<100	19	<0.5	3	0.13	<20	120	1.0	5.0	<10	2.8	<200	<1	<1	<20	7.8	2.1	<2	<5	<200	<500
SR029	<5	5	5	260	<1	<10	18	<10	77	3	<2	1.8	<2	<100	10	<0.5	2	0.69	<20	52	0.9	4.0	<10	1.7	<200	<1	<1	<20	3.8	1.7	4	<5	<200	<500
SR030	<5	2	<5	<100	<1	<10	<10	<10	<50	1	<2	<0.5	<2	<100	7	<0.5	3	0.09	<20	13	0.3	1.3	<10	0.7	<200	<1	<1	<20	1.7	2.0	<2	<5	<200	<500
SR031	<5	6	7	300	<1	<10	28	24	360	6	<2	4.3	<2	<100	15	<0.5	<2	0.83	74	68	1.0	15.0	<10	3.1	<200	<1	<1	<20	1.7	1.5	3	<5	210	<500
SR032	16	4	120	<100	1	11	<10	<10	96	<1	<2	0.9	<2	<100	<5	<0.5	5	<0.05	<20	<10	3.4	0.5	<10	0.5	<200	<1	<1	<20	0.5	2.2	4	<5	340	<500
SR033	70	10	180	940	1	31	<10	<10	80	<1	<2	0.9	<2	<100	<5	<0.5	77	<0.05	<20	<10	10.0	<0.5	<10	<0.2	<200	<1	<1	<20	<0.5	3.3	<2	<5	2700	<500
SR034	30	19	350	250	3	140	24	24	110	9	<2	4.5	4	<100	20	<0.5	74	0.45	62	160	9.2	12.0	<10	2.8	<200	<1	<1	<20	4.7	3.3	3	<5	22200	<500
SR035	72	9	1080	<100	<1	12	<10	<10	71	2	<2	0.7	<2	<100	7	<0.5	93	0.05	<20	35	8.8	1.8	<10	1.0	<200	<1	<1	<20	1.2	1.9	<2	<5	2300	<500
SR036	<5	14	20	300	2	<10	31	21	130	9	<2	4.1	2	<100	19	<0.5	3	0.55	72	120	2.4	11.0	<10	2.7	<200	<1	<1	<20	4.3	2.0	3	<5	1100	<500
SR037	110	38	1360	220	3	<10	23	14	110	9	<2	3.7	<2	<100	15	<0.5	59	0.06	58	140	25.8	8.7	<10	2.1	<200	<1	<1	<20	3.2	2.3	4	<5	5100	<500
SR038	37	4	330	<100	<1	<10	<10	<10	190	<1	<2	0.7	<2	<100	<5	<0.5	20	<0.05	<20	<10	6.8	0.7	<10	0.2	<200	<1	<1	<20	0.6	3.3	<2	<5	840	<500
SR039	12	5	20	180	<1	<10	21	12	51	7	<2	2.2	<2	<100	11	<0.5	9	0.35	22	56	3.7	5.6	<10	1.4	<200	<1	<1	<20	2.1	1.9	<2	<5	1300	<500
SR040	110	36	606	220	5	<10	15	11	140	9	<2	3.0	<2	<100	14	<0.5	16	0.06	<20	190	30.7	6.8	<10	1.6	<200	<1	<1	<20	3.1	4.1	6	<5	420	<500
SR041	6	3	23	<100	3	<10	<10	<10	<50	<1	<2	<0.5	<2	<100	<5	<0.5	5	<0.05	<20	16	1.7	1.1	<10	0.4	<200	<1	<1	<20	0.5	1.8	<2	<5	300	<500
SR042	100	8	48	300	4	30	17	13	62	9	<2	2.8	<2	<100	13	<0.5	11	<0.05	<20	100	11.0	6.5	<10	1.8	<200	<1	<1	<20	2.9	1.8	7	<5	3000	<500
SR043	26	23	320	<100	2	28	<10	<10	190	2	<2	0.8	<2	<100	<5	<0.5	264	<0.05	<20	20	29.1	1.1	<10	0.5	<200	<1	<1	<20	0.6	2.6	3	<5	2300	<500
SR044	92	6	679	140	2	70	<10	<10	100	4	<2	1.8	<2	<100	9	<0.5	77	<0.05	<20	74	32.1	4.5	<10	1.2	<200	<1	<1	<20	2.1	1.8	3	<5	4300	<500
SR045	250	16	879	<100	11	17	<10	<10	230	<1	<2	0.9	<2	<100	<5	<0.5	39	<0.05	<20	<10	88.2	<0.5	<10	0.6	<200	<1	<1	<20	0.9	2.0	<2	<5	1100	<500
SR046	<5	4	6	170	<1	<10	14	12	57	8	<2	1.9	<2	<100	9	<0.5	7	0.50	<20	40	2.3	5.2	<10	1.2	<200	<1	<1	<20	1.9	3.8	<2	<5	380	<500
SR047	26	6	180	<100	2	<10	<10	<10	54	<1	<2	<0.5	<2	<100	6	<0.5	33	<0.05	<20	<10	15.0	0.7	<10	0.9	<200	<1	<1	<20	0.8	2.0	3	<5	680	<500
SR048	18	70	41	<100	1	11	<10	<10	<50	2	<2	1.4	<2	<100	<5	<0.5	11	<0.05	<20	<10	20.2	<0.5	<10	0.4	<200	<1	<1	<20	<0.5	3.5	7	<5	1000	<500
SR049	<5	5	<5	<100	<1	<10	29	<10	68	13	<2	1.2	<2	<100	14	<0.5	2	0.06	<20	65	3.3	3.4	<10	1.8	<200	<1	<1	<20	4.0	3.5	2	<5	<200	<500
SR050	<5	1	<5	<100	<1	<10	<10	<10	<50	<1	<2	<0.5	<2	<100	<5	<0.5	<2	<0.05	<20	<10	0.3	0.5	<10	<0.2	<200	<1	<1	<20	<0.5	<0.5	<2	<5	<200	<500
SR051	<5	7	6	500	<1	<10	46	42	500	13	2	7.2	4	<100	22	<0.5	<2	2.20	96	140	1.6	23.0	<10	3.8	<200	<1	<1	<20	2.4	<0.5	6	<5	<200	<500
SR052	<5	2	<5	<100	<1	<10	58	12	110	<1	2	6.8	3	<100	34	<0.5	49	0.05	34	<10	1.8	10.0	<10	5.4	<200	1	<1	<20	8.4	4.5	276	<5	1600	<500
SR053	<5	1	<5	<100	<1	<10	14	110	73	<1	<2	1.2	4	<100	12	<0.5	10	<0.05	25	16	2.3	3.6	<10	2.3	<200	<1	<1	<20	3.4	5.6	6	<5	380	<500
SR054	<5	2	6	<100	<1	<10	22	12	350	<1	<2	3.7	<2	<100	12	<0.5	1460	<0.05	<20	<10	1.2	3.8	<10	2.8	<200	<1	<1	<20	4.4	14.0	6	<5	<200	<500
SR055	11	4	15	<100	<1	<10	13	39	65	4	<2	>10.0	<2	<100	11	<0.5	29	0.10	<20	60	1.2	4.7	<10	2.0	<200	<1	<1	<20	1.8	15.0	27	<5	520	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR056	<5	11	<5	<100	<1	<10	54	32	130	3	3	6.4	5	<100	32	0.6	73	0.61	<20	76	4.9	12.0	<10	7.1	<200	1	1	<20	7.4	12.0	4	8	330	<500
SR057	11	10	26	<100	<1	<10	13	42	250	2	<2	>10.0	<2	<100	21	<0.5	83	<0.05	<20	25	4.8	5.8	21	3.4	<200	<1	<1	<20	2.9	8.2	13	<5	470	<500
SR058	130	262	220	540	<6	<27	<33	<10	600	<1	<7	1.2	<5	<100	<5	<0.5	190	<0.13	<61	<43	1260.0	<0.5	<22	0.4	<1000	<1	<1	<130	<2.6	3.9	<5	<23	<200	<1200
SR059	10	11	20	970	7	<10	86	<10	320	9	<2	3.0	6	<100	43	0.9	13	0.61	<20	280	19.0	9.3	<10	8.1	<200	<1	1	<20	11.0	4.8	30	6	700	<500
SR060	>300	306	<29	>20000	<11	<25	<36	<10	560	<1	<8	0.8	<5	<100	13	1.9	234	<0.45	75	160	2010.0	2.1	<10	2.4	<850	<1	<1	<150	3.9	1.7	43	<49	<200	<500
SR061	8	11	16	770	2	<10	37	<10	330	6	<2	2.0	3	<100	22	<0.5	12	0.13	<20	370	33.8	4.5	<10	3.5	<200	<1	<1	<20	5.8	2.5	16	<5	500	<500
SR062	<5	8	<5	1000	<1	<10	33	<10	350	10	<2	2.7	5	<100	20	<0.5	17	0.50	<20	370	10.0	5.3	<10	3.4	<200	<1	<1	<20	6.4	4.2	18	<5	<200	<500
SR063	<5	10	7	1200	<1	<10	62	<10	340	5	<2	2.8	4	<100	27	<0.5	35	0.53	<20	260	13.0	2.2	<10	5.0	<200	<1	<1	<20	7.6	4.4	23	<5	<200	<500
SR064	<5	11	7	580	<1	<10	79	<10	220	10	<2	3.8	5	<100	44	0.7	37	1.20	<20	230	1.6	10.0	<10	8.4	<200	2	1	<20	13.0	3.9	10	6	<200	<500
SR065	53	30	40	1200	8	<10	45	<10	660	3	<2	1.7	3	<100	26	<0.5	242	0.13	<20	210	115.0	4.2	<10	4.1	<200	1	<1	<20	7.8	3.4	98	<5	<200	<500
SR066	190	53	28	290	29	<10	<10	<10	530	2	<2	1.4	<2	<100	13	<0.5	311	<0.05	<20	140	233.0	2.5	<10	2.6	<200	<1	<1	<20	2.8	1.7	13	6	370	<500
SR067	>300	132	613	260	43	<10	<10	<10	430	2	5	1.6	<2	<100	22	<0.5	594	0.12	<20	140	704.0	3.2	<10	3.9	<500	<1	<1	<61	5.8	2.4	26	13	370	<500
SR068	51	38	14	250	7	<10	30	<10	430	4	<2	1.6	3	<100	25	<0.5	150	0.11	<20	190	189.0	5.3	<10	4.2	<200	<1	<1	<20	8.7	1.7	21	<5	470	<500
SR069	7	10	<5	510	1	<10	53	<10	390	4	2	1.5	4	<100	26	<0.5	12	0.07	<20	340	31.3	7.1	<10	4.9	<200	1	<1	<20	9.2	2.8	27	<5	<200	<500
SR070	<5	8	<5	430	1	<10	55	<10	440	4	<2	1.4	4	<100	29	<0.5	3	<0.05	<20	300	29.6	7.1	<10	5.4	<200	<1	<1	<20	9.4	1.9	26	<5	<200	<500
SR071	49	23	<5	370	28	<10	53	<10	460	2	<2	1.0	3	<100	30	0.6	41	<0.05	35	260	198.0	4.8	<10	5.0	<200	1	<1	<20	8.7	1.5	26	6	<200	<500
SR072	<5	8	10	630	<1	<10	61	<10	250	9	2	2.5	3	<100	37	<0.5	33	0.57	<20	370	8.5	7.3	<10	5.8	<200	<1	<1	<20	15.0	4.8	52	<5	<200	<500
SR073	73	31	34	1100	5	30	67	<10	380	4	<2	1.6	4	<100	38	0.5	190	0.08	<20	350	147.0	7.0	<10	6.7	<200	<1	<1	<20	12.0	3.1	32	8	2600	<500
SR074	16	8	9	8200	<1	<10	29	<10	360	5	<2	2.0	7	<100	29	0.6	1650	0.06	<20	260	16.0	5.8	<10	5.7	<200	<1	2	<20	8.7	5.5	1380	<5	600	<500
SR075	<5	3	13	730	<1	<10	77	<10	330	6	<2	3.1	6	<100	38	0.7	2	0.20	<20	420	8.6	10.0	<10	7.9	<200	2	1	<20	14.0	6.2	27	5	<200	<500
SR076	<5	33	<5	770	<1	<10	110	11	260	9	3	4.3	7	<100	65	1.0	12	1.10	<20	330	7.0	14.0	<10	11.0	<200	2	1	<20	16.0	4.6	52	6	210	580
SR077	<5	2	<5	690	<1	<10	110	<10	300	7	<2	3.7	7	<100	58	0.8	9	1.20	<20	330	1.3	12.0	<10	11.0	<200	2	1	<20	16.0	4.4	20	7	<200	560
SR078	<5	3	<5	910	<1	<10	120	<10	260	11	<2	3.5	8	<100	67	1.1	22	1.10	<20	310	1.3	13.0	<10	12.0	<200	2	2	<20	23.0	5.9	20	7	<200	610
SR079	<5	4	7	1000	<1	<10	<10	<10	510	2	<2	1.4	<2	<100	7	<0.5	13	<0.05	<20	190	7.1	1.3	<10	1.3	<200	<1	<1	<20	3.1	1.1	459	<5	<200	<500
SR080	23	13	53	<100	<1	<10	51	36	<50	1	<2	8.7	<2	<100	40	<0.5	9	0.11	35	30	1.8	1.7	<10	2.1	<200	<1	<1	<20	1.9	3.5	78	<5	800	<500
SR081	9	78	39	710	1	<10	30	<10	160	7	<2	>10.0	3	<100	20	<0.5	150	0.07	30	190	12.0	4.4	21	2.6	<200	<1	<1	<20	7.4	4.5	75	<5	1800	<500
SR082	<5	25	<5	220	<1	<10	41	<10	230	5	<2	10.0	6	<100	21	<0.5	36	0.28	<20	100	7.7	4.3	<10	3.8	<200	<1	<1	<20	4.5	6.7	120	<5	200	<500
SR083	<5	37	17	280	<1	<10	55	41	140	40	<2	8.7	12	<100	25	0.9	80	0.06	<20	230	15.0	8.1	<10	5.5	<200	1	<1	<20	12.0	6.3	25	6	230	770
SR084	<5	18	20	<100	<1	<10	34	30	<50	9	<2	>10.0	3	<100	20	<0.5	17	0.05	<20	92	1.8	4.3	<10	3.3	<200	<1	<1	<20	4.8	7.6	100	<5	3600	<500
SR085	<5	7	15	<100	<1	<10	43	11	<50	3	<2	>10.0	<2	<100	28	<0.5	40	<0.05	<20	18	2.0	5.2	<10	5.1	<200	1	<1	<20	5.0	13.0	242	<5	1300	<500
SR086	6	79	16	380	2	<10	100	69	140	56	<2	10.0	6	<100	53	0.7	42	0.13	38	270	44.5	12.0	<10	8.8	<200	2	2	<20	16.0	8.0	36	6	280	<500
SR087	<5	26	28	<100	<1	<10	51	16	58	3	<2	>10.0	4	<100	28	<0.5	97	0.13	<20	110	3.6	10.0	<10	5.5	<200	1	<1	<20	9.4	13.0	72	<5	770	<500
SR088	<5	9	54	140	<1	<10	39	29	130	3	<2	>10.0	3	<100	21	<0.5	240	0.11	24	51	3.0	3.0	<10	3.7	<200	<1	<1	<20	3.6	3.9	61	<5	590	<500
SR089	21	79	120	840	2	300	76	110	150	20	2	7.5	<2	<100	53	<0.5	44	0.50	<20	230	22.5	6.8	<10	6.3	<200	1	1	<20	12.0	13.0	11	<5	>30000	<500
SR090	<5	11	18	160	<1	13	14	<10	<50	2	<2	3.7	<2	<100	14	<0.5	15	<0.05	<20	19	2.5	2.3	<10	1.7	<200	<1	<1	<20	2.3	1.9	150	<5	2100	<500
SR091	<5	35	150	<100	<1	11	34	80	<50	2	2	>10.0	3	<100	25	<0.5	11	<0.05	<20	<10	3.1	1.9	<10	5.1	<200	<1	<1	<20	2.5	9.0	71	<5	1400	<500
SR092	28	137	430	<100	2	14	32	61	65	<1	<2	>10.0	<2	<100	24	<0.5	13	<0.05	<20	20	5.7	1.4	13	3.6	<200	<1	<1	<20	5.5	17.0	52	<5	14000	<500
SR093	34	226	36	<100	<22	14	<10	<10	76	4	<2	7.3	<2	<100	<5	<0.5	634	<0.11	<20	29	561.0	1.1	<10	1.3	<200	<1	<1	<43	1.3	2.7	26	<10	3100	<500
SR094	120	93	<18	<100	<16	<10	<10	<10	390	<1	<4	1.3	<2	<100	<5	<0.5	81	<0.05	<20	<25	647.0	0.7	<10	0.4	<600	<1	<1	<72	<1.3	5.0	7	<11	2100	<500
SR095	110	90	<13	100	<22	<10	<10	<10	330	<1	<2	1.2	<2	<100	<5	<0.5	77	<0.12	<20	<10	571.0	<0.5	<10	0.4	<200	<1	<1	<48	<0.5	4.5	8	<8	1700	<500
SR096	<5	11	18	<100	2	12	15	<10	65	1	<2	1.1	<2	<100	8	<0.5	36	<0.05	<20	<10	23.5	1.8	<10	1.1	<200	<1	<1	<20	1.9	1.5	6	<5	2000	<500
SR097	<5	31	10	<100	2	<10	<10	10	110	<1	<2	4.1	<2	<100	<5	<0.5	8	<0.05	<20	<10	6.2	1.0	<10	0.7	<200	<1	<1	<20	0.8	2.0	37	<5	1400	<500
SR098	<5	11	<5	220	<1	<10	16	<10	<50	5	<2	0.6	<2	<100	10	<0.5	65	<0.05	<20	38	12.0	1.5	<10	1.4	<200	<1	<1	<20	1.6	1.7	4	<5	330	<500
SR099	200	192	12	<100	3	60	<10	69	180	2	<2	9.3	<2	<100	12	<0.5	515	<0.05	<20	<10	13.0	1.5	<10	1.4	<200	<1	<1	<20	2.2	38.0	36	<5	>30000	<500
SR100	18	32	16	910	5	<10	20	<10	290	3	<2	1.4	<2	<100	14	<0.5	53	0.13	<20	120	97.6	2.1	<10	2.5	<200	<1	<1	<20	3.4	2.9	37	<5	1900	<500
SR101	<5	25	13	<100	2	<10	17	<10	140	4	<2	>10.0	5	<100	10	<0.5	3	<0.05	<20	<10	4.9	7.4	<10	4.1	<200	<1	<1	<20	6.2	3.9	81	<5	2100	<500
SR102	16	24	8	<100	<1	33	11	13	130	1	<2	>10.0	3	<100	<5	<0.5	10	<0.05	<20	<10	1.6	2.7	<10	2.2	<200	<1	<1	<20	2.6	3.0	120	<5	9900	<500
SR103	78	23	23	930	<1	18	45	38	180	<1	<2	6.9	3	<100	28	<0.5	22	0.24	<20	180	4.5	13.0	10	4.8	<200	<1	<1	<20	2.4	4.2	53	<5	8500	<500
SR104	<5	9	<5	1700	<1	<10	76	15	110	4	3	4.9	4	<100	43	<0.5	5	0.55	<20	210	2.6	18.0	<10	7.1	<200	1	<1	<20	2.3	4.0	6	<5	3000	<500
SR105	17	13	22	780	1	<10	50	35	100	2	2	6.7	4	<100	27	<0.5	5	0.52	<20	170	2.4	21.0	<10	5.5	<200	<1	<1	<20	1.9	3.1	5	<5	710	<500
SR106	<5	37	<5	1700	4	18	65	110	120	6	3	7.0	4	<100	42	<0.5	<2	0.24	<20	210	16.0	23.0	<10	7.5	<200	1	<1	<20	5.3	5.6	7	<5	5500	<500
SR107	6	39	61	1700	2	<10	55	67	120	4	2	10.0	5	<100	33	<0.5	190	0.16	<20	220	4.3	11.0	21	5.0	<200	<1	<1	<20	8.9	11.0	9	<5	1400	<500
SR108	32	182	130	<100	8	<10	23	19	170	<1	<2	>10.0	<2	<100	9	<0.5	160	<0.05	<20	<10	182.0	0.9	<10	0.9	<200	<1	<1	<20	<0.5	4.4	190	<5	1000	<500
SR109	29	476	400	<350	<14	58	<50	<49	<210	<1	<11	>10.0	<7	<220	<5	<1.6	8310	<0.64	<63	<47	2300.0	2.5	<26	1.8	<1100	<1	2	<200	4.5	3.6	68	<53	25200	<1400
SR110	<5	28	<5	250	1	<10	100	<10	110	3	2	5.1	5	<100	63	<0.5	6	0.07	<20	86	20.3	4.3	<10	3.3	<200	1	<1	<20	10.0	5.9	27	<5	260	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR111	10	23	87	280	2	<10	19	16	160	2	<2	7.6	3	<100	10	<0.5	40	0.14	36	110	3.4	6.0	<10	2.5	<200	<1	<1	<20	5.0	5.1	24	<5	710	<500
SR112	8	12	16	570	<1	<10	33	13	130	2	<2	4.0	4	<100	19	<0.5	20	0.39	<20	180	2.2	5.1	<10	3.7	<200	<1	<1	<20	7.4	6.1	38	<5	540	<500
SR113	10	11	19	<100	<1	73	<10	47	<50	2	<2	4.4	<2	<100	<5	<0.5	11	0.07	<20	29	0.4	2.6	<10	0.6	<200	<1	<1	<20	2.4	3.2	10	<5	>30000	<500
SR114	<5	9	<5	420	<1	<10	29	12	83	13	<2	3.0	2	<100	22	<0.5	<2	0.16	<20	120	1.9	8.5	<10	3.6	<200	<1	<1	<20	6.4	1.9	5	<5	330	<500
SR115	7	8	<5	120	1	<10	22	<10	110	4	<2	2.2	3	<100	16	<0.5	<2	0.07	<20	53	21.6	5.2	<10	2.4	<200	<1	<1	<20	4.3	3.4	<2	<5	960	<500
SR116	11	14	15	<100	1	620	28	89	190	5	<2	3.9	5	<100	33	0.6	5	<0.05	<20	100	4.2	7.7	<10	5.6	<200	<1	<1	<20	5.5	2.8	28	<5	>30000	<500
SR117	<5	6	9	100	<1	<10	60	<10	260	5	3	3.4	16	<100	62	1.0	<2	<0.05	53	180	3.1	12.0	<10	10.0	<200	1	1	<20	10.0	2.7	8	7	3100	720
SR118	7	14	1160	580	<1	<10	72	18	320	11	<2	3.4	4	<100	39	<0.5	7	0.27	<50	180	6.2	6.9	<10	6.0	<200	<1	<1	<20	11.0	3.4	9	<5	1800	<500
SR119	22	15	>10000	1000	<1	<10	36	<10	410	11	<2	4.0	6	<100	36	<0.5	16	0.12	<50	150	6.3	7.1	<10	5.9	<200	1	1	<20	15.0	2.8	7	<5	790	<500
SR120	<5	49	8050	510	<1	<10	58	<10	270	14	<2	5.3	5	<100	36	<0.5	11	0.19	<50	170	17.0	5.8	<10	5.3	<200	<1	<1	<20	8.6	2.5	24	<5	290	<500
SR121	<5	14	14	680	<1	<10	88	13	200	26	2	3.3	10	<100	49	0.7	3	0.86	<50	280	5.6	11.0	<10	8.5	<200	1	2	<20	16.0	4.6	11	<5	440	<500
SR122	<5	14	1160	820	<1	<10	130	13	310	16	<2	3.0	7	<100	61	<0.5	6	0.07	<50	260	9.2	12.0	<10	11.0	<200	1	2	<20	16.0	4.2	16	6	790	<500
SR123	<5	10	3040	<100	<1	<10	18	10	380	1	<2	2.6	<2	<100	7	<0.5	13	<0.05	<50	18	7.3	0.9	<10	0.9	<200	<1	<1	<20	1.5	1.8	6	<5	250	<500
SR124	<5	8	450	950	<1	<10	120	<10	320	12	3	2.7	6	<100	66	<0.5	6	0.26	<50	300	11.0	8.2	<10	10.0	<200	1	1	<20	18.0	5.6	11	<5	1200	530
SR125	7	24	9290	840	3	11	65	<10	130	27	<2	4.8	<2	<100	32	<0.5	11	0.10	<50	310	14.0	11.0	<10	4.9	<200	<1	<1	<20	9.4	9.1	89	<5	2200	<500
SR126	<5	34	120	510	1	<10	76	17	120	20	<2	2.9	4	<100	49	0.6	5	0.07	<50	190	19.0	9.1	<10	8.3	<200	1	2	<20	14.0	3.8	6	<5	620	<500
SR127	20	66	2390	610	4	<10	33	15	290	11	<2	4.4	<2	<100	28	<0.5	14	<0.05	<50	130	228.0	5.7	<10	4.4	<200	<1	<1	<20	9.8	6.2	6	9	2800	<500
SR128	<5	19	170	630	1	<10	54	<10	60	12	<2	2.3	4	<100	23	<0.5	9	0.06	<50	140	48.0	4.9	<10	5.0	<200	<1	<1	<20	9.2	2.9	3	<5	1200	<500
SR129	<5	26	200	840	2	<10	54	<10	<50	9	<2	2.1	5	<100	21	<0.5	20	0.07	<50	170	43.5	5.2	<10	5.4	<200	<1	1	<20	8.2	3.3	6	<5	1100	<500
SR130	<5	9	14	710	<1	<10	89	<10	130	37	<2	3.6	<2	<100	48	<0.5	<2	0.07	<20	250	6.8	11.0	<10	7.0	<200	<1	1	<20	16.0	3.6	<2	<5	260	<500
SR131	10	14	706	240	2	<10	11	12	540	<1	<2	3.5	<2	<100	5	<0.5	6	<0.05	<20	25	22.6	1.0	<10	1.0	<200	<1	<1	<20	1.0	1.4	<2	<5	250	<500
SR132	250	129	370	4400	<26	<30	<60	<10	390	<1	<5	1.5	<5	<100	20	<0.5	<6	0.09	<63	89	633.0	1.4	<33	4.1	<1300	<1	<1	<98	<2.9	<1.3	20	<16	280	<500
SR133	11	10	18	5100	1	<10	<10	<10	650	2	<2	1.0	<2	<100	5	<0.5	6	<0.05	<20	88	20.0	1.9	<10	1.0	<200	<1	<1	<20	1.8	1.0	5	<5	<200	<500
SR134	61	14	140	>20000	<1	<10	23	<10	660	3	<2	1.4	3	<100	15	<0.5	25	<0.05	<20	120	29.0	3.6	<10	2.6	<200	<1	<1	<20	4.1	<0.5	12	<5	<200	<500
SR135	<5	14	<5	6800	2	<10	44	<10	780	4	<2	2.2	2	<100	26	<0.5	4	0.10	<20	140	47.6	4.7	<10	4.6	<200	<1	<1	<20	5.4	1.3	17	<5	<200	<500
SR136	300	173	739	>20000	<20	36	<30	15	790	<1	<2	3.4	<2	<100	6	<0.5	7	<0.30	<20	<22	561.0	<0.5	<10	0.8	<480	<1	<1	<62	<1.5	<1.2	15	<7	4800	<500
SR137	6	33	9	310	2	<10	39	<10	670	3	<2	2.0	3	<100	20	<0.5	20	<0.05	<20	100	49.0	5.0	<10	3.7	<200	<1	<1	<20	3.1	1.5	11	<5	300	<500
SR138	160	370	140	14500	<33	<39	<43	15	680	6	<7	3.5	<4	<100	14	<0.5	25	<0.55	<55	100	959.0	8.4	<24	2.7	<710	<1	<1	<100	<2.1	<1.7	16	<15	3900	<500
SR139	270	19	260	850	4	<10	<10	12	800	<1	<2	6.8	<2	<100	<5	<0.5	21	<0.05	<20	23	86.8	<0.5	<10	0.5	<200	<1	<1	<20	0.9	<0.5	11	<5	630	<500
SR140	160	64	14	<100	6	260	42	<10	460	3	<2	3.4	<2	<100	15	0.6	60	<0.05	<20	110	334.0	5.2	<10	2.6	<200	<1	<1	<20	<0.5	<0.5	10	10	>30000	930
SR141	34	40	13	300	3	<10	73	<10	510	4	<2	2.9	3	<100	43	0.5	29	0.05	<20	170	54.0	5.9	<10	6.4	<200	<1	<1	<20	12.0	3.1	12	<5	540	<500
SR142	>300	1150	320	<810	<128	<110	<120	<21	<350	<6	<17	2.5	<12	<410	<43	<2.7	3470	<1.40	<150	130	4540.0	3.2	<71	4.1	<2100	<3	<1	<280	<6.3	18.0	<30	<77	<670	<2200
SR143	27	47	22	700	4	11	90	<10	200	12	<2	5.7	<2	<100	52	0.8	3	0.10	<20	530	122.0	18.0	<10	7.1	<200	1	<1	<20	16.0	4.0	21	7	1300	<500
SR144	27	23	11	420	6	<10	43	<10	570	8	<2	4.7	<2	<100	26	0.5	5	0.10	<20	260	47.3	10.0	<10	3.4	<200	<1	<1	<20	7.7	1.7	14	<5	1200	<500
SR145	6	4	<5	980	<1	<10	48	<10	310	7	<2	2.1	6	<100	29	<0.5	<2	1.60	<20	270	4.3	4.2	<10	4.2	<200	2	<1	<20	7.7	1.9	<2	<5	370	<500
SR146	<5	6	<5	280	<1	<10	72	10	220	18	<2	4.5	<2	<100	35	<0.5	<2	0.08	<20	340	10.0	12.0	<10	5.4	<200	<1	<1	<20	10.0	2.9	27	<5	760	<500
SR147	46	55	<5	520	4	<10	24	<10	280	4	<2	2.8	<2	<100	18	<0.5	3	0.08	<20	200	123.0	3.0	<10	2.8	<200	<1	<1	<20	4.8	1.9	7	<5	210	<500
SR148	90	43	15	640	22	<10	82	<10	360	4	<2	3.8	<2	<100	43	1.3	<2	0.08	<20	240	313.0	9.1	<10	7.6	<200	<1	<1	<20	6.4	6.3	21	10	590	<500
SR149	110	55	26	1500	14	<10	47	<10	480	1	<2	2.3	<2	<100	25	0.6	5	0.07	<20	110	322.0	4.8	<10	4.7	<200	<1	<1	<20	4.6	0.8	17	7	240	<500
SR150	30	14	34	7900	5	<10	43	<10	390	5	<2	2.4	4	<100	24	<0.5	<2	0.21	<20	190	81.7	7.1	<10	3.5	<200	<1	<1	<20	7.1	2.1	8	<5	<200	<500
SR151	<5	2	<5	570	<1	<10	53	<10	530	4	<2	2.8	4	<100	29	<0.5	33	0.09	<20	260	2.9	6.5	<10	3.7	<200	<1	<1	<20	5.7	2.2	36	<5	<200	<500
SR152	110	116	<21	2000	22	<20	<22	<10	470	1	7	1.7	<2	<100	12	<0.5	91	<0.12	<41	130	704.0	0.8	<10	1.9	<490	<1	<1	<60	2.7	<0.5	89	11	450	<500
SR153	21	70	<5	640	8	<10	77	<10	250	6	3	3.5	4	<100	49	0.7	23	0.12	<20	420	183.0	11.0	<10	6.0	<200	<1	<1	<20	15.0	2.7	120	6	280	<500
SR154	<5	43	27	570	1	<10	120	31	120	10	<2	>10.0	5	<100	63	0.6	4	0.05	<20	170	18.0	11.0	<10	8.7	<200	1	2	<20	16.0	6.2	85	5	2600	<500
SR155	200	118	43	280	<37	<26	<25	<10	430	4	<2	3.5	<2	<100	22	<1.1	26	<0.46	<20	120	796.0	2.0	<10	3.0	<460	1	<1	<59	4.5	2.9	200	<13	2900	<500
SR156	<5	4	16	830	<1	<10	95	20	220	10	<2	4.6	8	<100	49	0.7	<2	0.58	<20	270	8.4	10.0	<10	6.5	<200	1	<1	<20	15.0	3.6	19	<5	2900	<500
SR157	10	38	34	280	<1	14	96	77	68	10	2	>10.0	2	<100	52	0.6	<2	0.10	<20	200	7.4	14.0	<10	7.3	<200	1	<1	<20	18.0	5.8	63	<5	6200	<500
SR158	<5	19	14	620	<1	<10	72	<10	160	2	<2	>10.0	8	<100	42	<0.5	10	0.19	<20	94	4.5	7.6	<10	5.3	<200	<1	<1	<20	13.0	4.4	29	<5	570	<500
SR159	>300	265	140	>20000	<113	<39	<42	<10	680	<1	<6	1.0	<4	<100	8	<0.5	11	0.55	<51	<31	1250.0	<0.5	<23	0.7	<680	<1	<1	<97	<2.0	2.3	20	<14	<200	<500
SR160	<5	11	25	950	7	<10	96	27	220	10	<2	5.6	6	<100	49	<0.5	<2	0.19	<20	430	22.8	8.0	<10	6.7	<200	1	<1	<20	13.0	5.4	19	6	950	<500
SR161	<5	14	8	1100	2	<10	56	<10	350	4	2	6.0	4	<100	36	<0.5	<2	0.89	<20	120	4.4	4.1	<10	4.8	<200	<1	<1	<20	8.1	3.8	84	<5	660	<500
SR162	<5	126	<5	1500	<1	<10	110	13	110	5	2	6.1	5	<100	60	0.8	<2	0.51	<20	200	7.6	14.0	<10	8.2	<200	2	<1	<20	20.0	4.6	14	6	2800	<500
SR163	<5	12	<5	1700	5	<10	110	<10	100	11	2	3.5	7	<100	52	0.5	<2	0.64	<20	260	16.0	13.0	<10	7.7	<200	<1	1	<20	19.0	6.6	5	5	420	<500
SR164	<5	16	<5	660	5	<10	23	<10	200	5	<2	>10.0	5	<100	25	<0.5	<2	0.23	<20	160	2.1	7.9	<10	1.5	<200	<1	<1	<20	13.0	4.6	65	<5	700	<500
SR165	<5	12	6	730	4	11	110	<10	120	13	<2	4.9	3	<100	53	0.7	<2	0.17	21	420	1.8	18.0	<10	8.1	<200	1	1	<20	22.0	3.3	30	<5	1800	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR166	<5	25	2490	1500	<1	<10	110	25	120	8	<2	4.3	9	<100	63	0.6	<2	0.29	<20	450	1.9	13.0	<10	8.4	<200	2	<1	<20	21.0	4.6	39	6	1800	680
SR167	<5	10	8	1200	42	<10	91	<10	99	13	<2	3.4	5	<100	42	0.5	<2	0.56	28	340	4.9	11.0	<10	7.2	<200	2	1	<20	25.0	3.9	4	<5	1800	<500
SR168	<5	11	8	1400	<1	<10	93	<10	110	12	<2	5.0	4	<100	42	0.6	<2	0.94	<20	300	2.4	11.0	<10	6.6	<200	2	<1	<20	19.0	3.6	16	<5	840	<500
SR169	45	110	93	1000	12	12	71	14	140	8	<2	5.3	10	<100	44	1.0	11	0.40	<20	360	6.3	14.0	<10	6.3	<200	1	<1	<20	19.0	4.4	1530	5	1600	750
SR170	170	357	<32	>20000	<54	37	<36	<10	320	<5	9	1.9	<2	<100	21	0.8	31	<0.49	<47	170	922.0	2.7	<20	2.7	<610	<1	<1	<80	5.9	4.1	35	<13	580	<500
SR171	160	261	<25	7200	<76	<25	<33	<10	360	<2	<6	2.1	<2	<100	20	0.8	9	<0.15	<52	170	850.0	3.1	<10	3.3	<590	<1	<1	<72	7.3	1.7	150	<16	870	<500
SR172	120	120	<14	>20000	18	<10	<10	<10	660	2	<2	1.2	<2	<100	10	<0.5	7	<0.05	<20	86	363.0	2.5	<10	1.8	<200	<1	<1	<40	4.5	<0.5	21	8	410	<500
SR173	65	169	270	580	8	<10	24	<10	480	2	<2	2.8	<2	<100	11	<0.5	6	<0.05	<20	99	141.0	3.4	<10	1.8	<200	<1	<1	<20	4.6	0.7	61	<5	1300	<500
SR174	26	82	35	470	3	<10	43	<10	390	4	<2	2.4	4	<100	22	<0.5	4	<0.05	<20	210	53.2	5.3	<10	3.1	<200	<1	<1	<20	7.0	1.7	30	<5	930	520
SR175	<5	71	20	610	2	10	110	<10	<50	11	3	5.6	2	<100	55	<0.5	<2	0.18	<20	150	14.0	15.0	<10	8.2	<200	1	1	<20	18.0	5.6	15	<5	1600	<500
SR176	<5	19	<5	970	6	<10	100	12	65	11	2	4.1	4	<100	51	0.7	<2	0.77	<20	210	2.1	16.0	<10	7.2	<200	1	1	<20	17.0	3.2	6	<5	1300	<500
SR177	<5	3	25	<100	<1	17	73	12	<50	<1	3	>10.0	3	<100	48	<0.5	8	0.49	<20	<10	1.2	10.0	<10	6.5	<200	<1	1	<20	10.0	12.0	110	<5	7500	<500
SR178	<5	11	13	<100	<1	<10	58	<10	92	<1	<2	>10.0	2	<100	36	<0.5	2	0.52	<20	<10	2.9	11.0	<10	5.4	<200	1	<1	<20	12.0	9.4	83	<5	3700	<500
SR179	<5	6	<5	540	<1	<10	110	12	140	9	<2	6.0	<2	<100	57	<0.5	3	0.92	<20	160	1.4	18.0	<10	8.1	<200	2	1	<20	22.0	8.1	9	<5	230	<500
SR180	<5	8	<5	460	<1	<10	110	13	130	9	2	6.2	3	<100	57	<0.5	6	1.10	<20	150	1.5	16.0	<10	8.3	<200	2	1	<20	19.0	6.7	11	<5	620	<500
SR181	<5	243	11	810	1	<10	130	12	<50	18	<2	5.2	3	<100	61	0.7	<2	0.12	<20	190	20.4	16.0	<10	8.1	<200	1	1	<20	18.0	3.8	16	5	1300	<500
SR182	<5	37	35	540	5	<10	120	<10	94	9	2	4.0	5	<100	62	0.5	581	0.33	<20	290	6.6	16.0	<10	8.2	<200	2	1	<20	20.0	4.1	8	<5	1100	<500
SR183	38	207	743	<100	6	<10	18	<10	580	2	<2	1.2	<2	<100	8	<0.5	28	<0.05	<20	53	107.0	1.5	<10	1.3	<200	<1	<1	<20	2.0	1.1	9	<5	510	<500
SR184	210	472	130	580	19	<10	<10	<10	400	<1	<2	3.8	3	<100	12	<0.5	1070	<0.05	<20	76	296.0	0.9	<10	1.1	<200	<1	<1	<20	1.9	7.2	537	<5	680	<500
SR185	5	597	100	190	4	10	120	37	100	7	2	>10.0	2	<100	79	<0.5	110	<0.05	<20	190	15.0	12.0	<10	8.3	<200	<1	<1	<20	13.0	9.2	68	<5	2300	<500
SR186	140	122	4420	19000	8	<10	<10	<10	570	<1	<2	3.3	<2	<100	<5	<0.5	25	0.14	<20	44	275.0	<0.5	<10	0.4	<200	<1	<1	<20	<0.5	4.4	44	<5	720	<500
SR187	37	158	791	8300	6	17	28	<10	120	3	<2	1.9	<2	<100	16	<0.5	71	0.91	<50	110	111.0	1.8	<10	2.5	<200	<1	<1	<20	4.7	2.7	20	<5	2900	<500
SR188	57	1510	6290	290	<13	<10	<10	<10	560	1	<2	1.6	<2	<100	8	<0.5	1590	<0.05	<20	54	189.0	0.7	<10	0.7	<200	<1	<1	<20	1.3	16.0	201	<6	1000	<500
SR189	88	214	4050	370	7	<10	25	<10	180	1	<2	2.5	<2	<100	8	<0.5	100	0.19	<50	93	116.0	0.7	<10	1.2	<200	<1	<1	<20	2.0	7.0	140	<5	510	<500
SR190	160	331	>10000	630	10	<10	<10	<10	500	<1	2	5.9	<2	<100	6	<0.5	252	<0.05	<20	48	237.0	<0.5	<10	0.6	<200	<1	<1	<20	1.3	13.0	14	<5	3100	<500
SR191	72	256	72	740	8	120	31	<10	650	2	<2	3.0	<2	<100	15	<0.5	20	0.10	<20	190	186.0	1.8	<10	1.7	<200	<1	<1	<20	5.0	0.9	279	<5	19000	<500
SR192	230	143	120	280	4	100	29	<10	590	2	<2	2.8	<2	<100	17	<0.5	36	0.06	<20	210	69.8	1.7	<10	1.8	<200	<1	<1	<20	3.0	1.1	12	<5	20400	<500
SR193	10	1920	511	<270	<9	50	57	<10	290	4	3	4.0	<2	<100	37	<0.5	26	0.07	<20	300	30.9	12.0	<10	5.4	<200	<1	<1	<20	12.0	3.1	78	<5	3900	<500
SR194	10	1070	3310	810	<5	11	100	14	110	7	4	5.2	3	<100	51	<0.5	140	0.25	<20	280	19.0	15.0	<10	7.5	<200	<1	<1	<20	17.0	6.5	140	<5	3400	<500
SR195	76	478	1470	500	10	19	26	<10	410	<1	<2	5.1	<2	<100	21	<0.5	1430	<0.05	<20	84	79.3	4.6	<10	2.7	<200	<1	<1	<20	5.0	4.5	397	<5	3800	<500
SR196	27	1640	1190	940	<7	60	71	15	200	2	<2	6.5	<2	<100	38	<0.5	7	0.14	<20	120	21.5	9.5	<10	5.7	<200	<1	<1	<20	12.0	5.0	41	<5	13000	<500
SR197	160	2070	606	<100	<13	<10	<10	<10	570	1	3	1.4	<2	<100	6	<0.5	130	<0.05	<20	34	262.0	1.1	<10	1.0	<200	<1	<1	<20	1.8	2.5	180	<7	1400	<500
SR198	30	1880	350	<200	<14	<10	<10	<10	460	2	4	4.2	3	<100	19	0.7	24	<0.05	<20	130	212.0	4.8	<10	3.5	<200	<1	<1	<20	5.1	2.5	257	<9	1300	<500
SR199	19	129	18	130	7	25	14	<10	110	<1	<2	>10.0	<2	<100	15	<0.5	8	0.08	<20	46	112.0	5.4	<10	2.2	<200	<1	<1	<20	4.4	3.2	9	<5	4300	<500
SR200	<5	8	<5	140	<1	<10	23	<10	<50	<1	<2	1.6	<2	<100	12	<0.5	2	0.11	<20	18	1.9	3.6	<10	1.8	<200	<1	<1	<20	3.6	2.9	<2	<5	1100	<500
SR201	>300	350	<47	>20000	<37	190	<51	<10	<250	<1	<7	<1.0	<5	<100	<8	<1.7	<49	<0.64	<71	<40	1190.0	<0.5	<30	<1.2	<890	<1	<1	<120	<2.7	<2.2	513	<18	17000	<1100
SR202	<5	115	56	630	<1	<10	110	11	<50	10	<2	5.3	3	<100	46	<0.5	36	0.49	<50	270	7.4	13.0	<10	8.4	<200	1	1	<20	20.0	7.5	22	<5	1200	<500
SR203	23	437	3600	150	4	18	18	<10	170	2	<2	1.4	<2	<100	7	<0.5	150	<0.05	<50	86	64.6	2.2	<10	1.6	<200	<1	<1	<20	3.1	1.0	5	<5	1500	<500
SR204	<5	757	657	<100	4	32	40	<10	73	3	<2	15.0	<2	<100	26	<0.5	27	0.09	<50	130	27.2	7.5	15	4.4	<200	<1	<1	<20	8.4	14.0	59	<5	5700	<500
SR205	42	37	<5	4300	5	<10	69	10	250	6	4	3.4	2	<100	37	0.7	<2	0.06	<20	370	150.0	9.0	<10	5.5	<200	<1	<1	<20	11.0	3.5	27	6	920	<500
SR206	22	46	74	320	7	<10	65	<10	160	10	<2	4.3	4	<100	33	<0.5	3	0.06	<20	410	290.0	8.8	<10	5.2	<200	1	<1	<20	11.0	6.9	16	8	12000	<500
SR207	60	34	47	700	5	<10	80	11	340	6	<2	3.3	3	<100	46	0.8	<2	0.15	<20	350	103.0	10.0	<10	7.1	<200	<1	<1	<20	9.3	3.4	14	6	6600	<500
SR208	120	71	63	3100	9	37	<10	<10	510	<1	<2	3.3	<2	<100	11	<0.5	5	<0.05	<20	61	364.0	2.0	<10	2.0	<200	<1	<1	<20	2.0	1.5	8	<5	10000	<500
SR209	85	36	81	440	9	<10	47	<10	250	7	<2	2.9	4	<100	30	<0.5	4	0.11	29	310	151.0	4.6	<10	4.2	<200	<1	<1	<20	7.3	4.8	12	7	1800	<500
SR210	180	93	519	2000	10	<10	36	<10	390	3	<2	5.9	<2	<100	22	1.1	9	0.08	48	150	484.0	3.6	<10	3.1	<200	1	<1	<20	11.0	6.1	8	<5	790	<500
SR211	<5	4	<5	130	1	<10	23	<10	<50	2	<2	1.1	<2	<100	14	<0.5	<2	0.05	<20	57	1.3	4.1	<10	2.0	<200	<1	<1	<20	3.4	1.5	<2	<5	<200	<500
SR212	<5	2	<5	<100	1	<10	38	<10	95	3	<2	1.5	6	<100	20	<0.5	<2	0.07	<20	61	0.6	5.6	<10	3.1	<200	<1	<1	<20	5.2	2.2	<2	<5	<200	<500
SR213	<5	2	<5	130	<1	<10	26	<10	67	4	<2	1.7	<2	<100	15	<0.5	<2	<0.05	<20	77	0.6	5.8	<10	2.4	<200	<1	<1	<20	4.4	1.8	<2	<5	<200	<500
SR214	<5	2	<5	180	<1	<10	41	<10	72	5	<2	1.5	4	<100	23	<0.5	<2	0.10	<20	100	0.4	5.2	<10	3.2	<200	<1	<1	<20	5.1	2.8	<2	<5	<200	<500
SR215	<5	2	<5	1100	<1	<10	110	<10	300	25	<2	2.2	4	<100	58	<0.5	<2	0.15	<20	290	1.5	5.6	<10	8.2	<200	1	1	<20	15.0	5.5	<2	<5	<200	<500
SR216	<5	36	7	1300	<1	<10	130	25	750	9	3	7.4	8	<100	61	0.9	<2	0.57	68	250	1.9	27.0	<10	6.7	<200	<1	<1	<20	25.0	3.1	42	5	310	<500
SR217	6	4	22	140	1	<10	49	<10	190	6	<2	0.9	<2	<100	21	0.6	<2	6.73	<20	190	1.3	25.0	<10	4.3	<200	2	<1	<20	15.0	3.7	<2	<5	<200	<500
SR218	10	238	220	770	<1	47	83	<10	130	9	<2	3.8	7	<100	43	0.5	<2	0.74	<20	320	4.9	8.3	<10	5.9	<200	1	<1	<20	17.0	5.6	6	<5	8200	<500
SR219	<5	22	21	920	<1	10	83	<10	90	26	<2	2.3	3	<100	48	<0.5	<2	0.59	<20	360	3.0	7.6	<10	6.4	<200	1	<1	<20	17.0	5.2	3	<5	1700	540
SR220	<5	12	9	1100	<1	12	94	<10	100	11	2	3.3	6	<100	46	<0.5	<2	0.60	<20	380	2.5	8.9	<10	6.5	<200	<1	<1	<20	18.0	6.3	5	<5	2300	520

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR221	<5	50	1250	650	<1	<10	82	22	120	12	<2	4.2	7	<100	43	0.5	<2	0.13	<20	390	8.4	9.0	<10	5.8	<200	1	<1	<20	19.0	6.8	7	<5	9700	<500
SR222	120	5170	5160	<100	<17	56	100	<10	<170	<10	4	4.6	<2	<100	65	<0.6	<2	<0.06	<20	<210	33.2	<6.2	<10	7.3	<200	<1	<1	<20	13.0	10.0	<9	<7	4000	830
SR223	29	904	1130	320	4	130	82	<10	120	9	2	4.5	6	<100	48	<0.5	<2	0.24	<20	260	7.7	6.5	<10	5.9	<200	<1	<1	<20	15.0	7.2	7	<5	19000	<500
SR224	120	473	2600	590	5	<10	58	<10	200	14	<2	3.6	4	<100	39	<0.5	5	0.14	<20	330	73.4	6.9	<10	4.4	<200	<1	<1	<20	15.0	9.1	13	<5	2400	<500
SR225	64	94	4080	550	2	<10	54	<10	270	18	<2	3.5	3	<100	27	0.6	10	0.30	<20	260	11.0	7.1	<10	4.2	<200	<1	<1	<20	7.0	2.0	9	<5	<200	<500
SR226	<5	9	10	930	<1	<10	97	<10	190	15	<2	4.2	7	<100	46	0.7	4	1.60	<20	250	3.5	10.0	<10	7.0	<200	<1	<1	<20	14.0	3.8	5	<5	200	<500
SR227	<5	21	860	590	3	<10	83	<10	240	28	<2	4.0	4	<100	38	0.6	29	0.27	<20	360	12.0	10.0	<10	6.4	<200	<1	<1	<20	12.0	4.2	<2	<5	<200	<500
SR228	<5	10	68	1200	5	<10	90	<10	260	15	<2	3.3	5	<100	39	0.7	3	0.63	<20	350	10.0	9.1	<10	5.9	<200	<1	<1	<20	16.0	3.6	3	<5	<200	<500
SR229	59	1410	2050	330	<20	<10	49	<10	290	3	<2	7.2	<2	<100	38	1.2	3	0.16	100	160	94.1	6.9	<10	4.6	<200	<1	<1	<53	7.8	1.7	7	10	760	<500
SR230	<5	46	28	1100	4	<10	140	13	200	23	3	4.9	7	<100	79	1.3	<2	0.73	<20	230	4.9	13.0	<10	11.0	<200	<1	2	<20	21.0	5.3	5	7	<200	<500
SR231	<5	19	12	1300	<1	97	150	19	190	11	2	6.3	10	<100	74	1.0	<2	0.34	<20	230	4.9	14.0	<10	12.0	<200	2	2	<20	15.0	4.3	3	7	9900	630
SR232	19	445	677	<100	6	<10	<10	<10	190	3	<2	>10.0	<2	<100	31	0.7	<2	<0.05	<20	82	302.0	5.5	<10	3.6	<200	<1	<1	<20	6.8	3.0	11	10	2300	<500
SR233	<5	51	59	850	<1	<10	69	12	160	31	<2	3.4	5	<100	40	<0.5	3	0.05	<20	170	6.6	7.0	<10	6.1	<200	<1	<1	<20	11.0	3.4	5	<5	650	<500
SR234	27	889	3170	<100	6	<10	27	<10	200	2	4	>10.0	<2	<100	29	0.8	5	<0.05	<20	47	125.0	4.6	15	3.3	<200	<1	<1	<20	5.6	2.0	3	<5	1200	<500
SR235	38	493	1530	220	19	<10	<10	<10	300	<1	<2	>10.0	4	<100	11	<0.5	3	<0.05	28	40	122.0	2.2	<10	1.7	<200	<1	<1	<20	3.9	1.8	<2	<5	1500	<500
SR236	12	76	180	1400	4	<10	150	11	250	3	3	5.5	10	<100	61	0.9	<2	2.00	<20	170	42.2	11.0	<10	10.0	<200	1	2	<20	13.0	4.5	<2	9	890	<500
SR237	24	283	1390	130	13	25	31	<10	230	2	<2	7.9	5	<100	21	<0.5	9	<0.05	<20	70	108.0	3.6	27	2.8	<200	<1	<1	<20	4.0	3.7	7	<5	1300	<500
SR238	<5	20	64	120	6	<10	41	<10	120	6	<2	1.6	5	<100	27	<0.5	<2	0.06	<20	67	4.0	4.7	<10	4.3	<200	<1	<1	<20	5.1	3.0	<2	<5	330	560
SR239	<5	10	28	410	1	<10	67	<10	160	10	<2	2.3	4	<100	36	<0.5	<2	<0.05	<20	120	3.5	6.2	<10	5.5	<200	<1	<1	<20	10.0	3.2	2	<5	290	<500
SR240	<5	43	22	1000	<1	<10	78	<10	200	17	<2	4.9	6	<100	45	0.7	<2	<0.05	<20	200	3.3	8.8	<10	6.1	<200	1	<1	<20	11.0	4.1	4	<5	<200	<500
SR241	43	188	350	250	1	190	36	13	150	3	<2	10.0	3	<100	19	<0.5	5	<0.05	<20	91	28.7	4.4	<10	3.8	<200	<1	<1	<20	5.1	8.8	5	<5	10000	<500
SR242	<5	22	46	670	2	<10	33	<10	220	4	<2	1.9	<2	<100	19	<0.5	4	<0.05	<20	71	2.5	2.4	<10	2.7	<200	<1	<1	<20	3.0	2.3	<2	<5	320	<500
SR243	<5	58	360	1700	<1	<10	81	<10	230	6	<2	5.8	6	<100	40	<0.5	11	0.06	<20	180	5.2	7.6	<10	6.1	<200	1	<1	<20	11.0	5.0	3	<5	590	<500
SR244	19	332	340	<100	3	22	47	<10	130	2	<2	>10.0	4	<100	31	<0.5	5	0.05	<20	74	17.0	4.7	<10	3.4	<200	<1	<1	<20	7.2	12.0	4	<5	14000	<500
SR245	48	277	576	250	2	52	62	16	200	15	3	>10.0	3	<100	37	<0.5	9	0.05	<20	140	56.5	6.3	<10	4.8	<200	<1	<1	<20	8.5	16.0	3	<5	4400	<500
SR246	7	267	529	370	2	51	60	<10	100	12	2	>10.0	4	<100	38	<0.5	29	<0.05	<20	140	9.1	7.7	<10	5.7	<200	<1	<1	<20	7.2	11.0	5	<5	8300	<500
SR247	11	197	420	400	1	47	34	<10	74	9	<2	>10.0	3	<100	21	<0.5	6	0.05	<20	79	10.0	5.3	<10	3.4	<200	<1	<1	<20	7.5	4.0	2	<5	2100	<500
SR248	10	1060	1120	<100	<7	<10	<10	<10	<50	1	<2	>10.0	<2	<100	<5	<0.5	100	<0.05	<20	<10	36.1	1.1	13	1.0	<200	<1	<1	<20	1.4	19.0	<2	<5	2500	<500
SR249	6	137	59	290	8	<10	23	<10	<50	2	<2	2.0	<2	<100	9	0.6	9	<0.05	<20	36	460.0	1.7	<10	1.8	<200	<1	<1	<20	2.9	3.1	4	10	320	<500
SR250	<5	14	13	<100	2	<10	24	<10	77	3	<2	1.3	3	<100	15	<0.5	4	<0.05	<20	65	4.4	5.0	<10	2.8	<200	<1	<1	<20	3.6	3.5	<2	<5	<200	<500
SR251	19	1070	290	<610	<107	<61	<130	<10	<660	<3	<10	<3.0	<10	<310	<6	<2.0	97	0.22	<120	<79	630.0	<0.5	<69	1.9	<2700	<1	<1	<310	<6.1	<3.1	<19	<40	1500	<1700
SR252	>300	<1000	1560	<3500	<1460	<420	<750	<69	<1600	<14	<52	<4.1	<55	<999	<38	<12.0	<421	<7.68	<600	<400	> 999.0	<4.4	<390	<1.4	<14000	<9	<7	<1800	<28.0	<21.0	<448	<390	<5100	<9300
SR253	<65	<4170	<230	<2300	<397	<230	<510	<50	<1100	<10	<37	<6.2	<38	<999	<17	<7.7	<421	<1.00	<430	<290	280.0	<6.9	<270	<7.8	<10000	<7	<5	<1200	<19.0	<12.0	<120	<120	<17000	<6600
SR254	150	<5110	916	16500	<414	<340	<780	<69	<1600	<15	<52	<6.9	<57	<999	<5	<11.0	<190	<1.40	<640	<410	520.0	<4.9	<410	<1.6	<15000	<9	<7	<1700	<29.0	<21.0	<130	<210	>30000	<9800
SR255	30	1060	<64	<690	<110	<68	<170	<10	<300	16	13	4.0	<11	<340	42	2.7	24	1.40	<130	250	640.0	8.6	<76	6.8	<3000	<2	<1	<340	17.0	3.4	<21	<50	780	<2000
SR256	<5	25	<5	880	3	<10	130	17	180	17	<2	3.6	7	<100	47	0.8	<2	1.50	32	280	44.3	12.0	<10	7.5	<200	1	<1	<20	22.0	4.8	8	7	550	<500
SR257	29	970	<20	1100	<78	<24	<45	<10	230	6	<4	7.8	<4	<100	24	0.8	<5	1.30	<54	160	465.0	6.3	<23	3.5	<930	<1	<1	<110	6.7	2.2	7	<14	3200	<500
SR258	9	234	<11	880	27	<10	97	11	190	10	<2	2.8	6	<100	35	0.6	<2	1.40	<20	200	319.0	8.9	<10	5.9	<350	1	<1	<45	16.0	3.7	8	15	890	<500
SR259	<5	4	12	1400	<1	<10	76	<10	79	53	<2	3.1	<2	<100	28	<0.5	12	0.13	<20	270	4.7	3.7	<10	4.7	<200	<1	<1	<20	3.6	2.6	6	<5	1900	<500
SR260	12	3	11	750	1	<10	73	<10	110	37	<2	2.9	4	<100	26	<0.5	2	0.11	<20	300	4.9	4.1	<10	4.8	<200	<1	<1	<20	3.5	1.7	5	<5	2200	<500
SR261	9	3	17	610	<1	29	77	<10	160	12	<2	3.1	4	<100	27	<0.5	38	0.30	<20	280	4.8	2.9	<10	4.8	<200	<1	<1	<20	3.8	2.0	7	<5	3800	710
SR262	48	25	59	620	<1	120	63	<10	170	8	<2	3.8	4	<100	19	<0.5	19	0.71	<20	190	10.0	2.4	<10	3.7	<200	<1	<1	<20	3.8	1.6	3	<5	23100	<500
SR263	37	6	120	710	<1	<10	120	<10	150	13	<2	2.4	8	<100	40	0.7	<2	1.30	<20	410	3.5	8.3	<10	7.4	<200	1	<1	<20	18.0	5.5	9	<5	<200	<500
SR264	13	8	13	600	1	<10	59	42	<50	4	<2	7.9	7	<100	31	<0.5	<2	5.64	<20	84	1.9	22.0	<10	6.4	<200	<1	<1	<20	2.4	3.6	7	<5	450	<500
SR265	<5	6	37	710	<1	<10	110	<10	120	15	2	2.7	9	<100	43	0.8	2	0.17	<20	470	5.3	8.6	<10	6.8	<200	<1	<1	<20	22.0	8.4	11	6	240	<500
SR266	31	5	65	650	<1	<10	170	<10	91	23	<2	2.9	9	<100	64	0.9	<2	0.11	<20	640	8.6	9.3	<10	10.0	<200	1	<1	<20	23.0	7.7	10	7	<200	<500
SR267	260	9	210	550	2	<10	110	11	100	20	<2	3.7	7	<100	51	0.8	<2	0.17	<20	520	32.0	8.8	<10	8.5	<200	1	<1	<20	19.0	7.9	16	5	280	720
SR268	>300	21	2310	490	4	<10	160	10	180	19	<2	4.2	7	<100	69	0.8	<2	0.12	<20	470	40.0	10.0	<10	10.0	<200	<1	<1	<20	20.0	8.0	28	<5	390	<500
SR269	<5	6	<5	1100	<1	<10	110	<10	110	8	<2	3.2	7	<100	46	0.8	<2	1.80	<20	300	3.6	8.7	<10	7.6	<200	1	1	<20	17.0	5.0	28	6	380	<500
SR270	140	8	200	630	<1	<10	110	<10	160	10	<2	4.1	6	<100	51	0.6	7	0.63	<20	440	14.0	8.0	<10	8.5	<200	<1	<1	<20	15.0	6.8	16	<5	310	<500
SR271	<5	4	<5	830	<1	<10	81	<10	130	12	<2	2.5	9	<100	42	0.5	<2	2.30	<20	300	1.4	7.9	<10	6.3	<200	1	<1	<20	18.0	7.0	<2	<5	<200	610
SR272	60	4	230	590	<1	<10	38	<10	320	5	<2	5.6	4	<100	23	<0.5	10	0.87	<20	210	3.2	6.4	<10	3.1	<200	<1	<1	<20	8.5	7.3	11	<5	<200	<500
SR273	33	5	460	1100	<1	<10	69	<10	190	3	<2	2.5	6	<100	36	<0.5	<2	2.00	<20	350	1.6	7.8	<10	5.3	<200	<1	<1	<20	14.0	5.0	4	<5	<200	550
SR274	5	2	11	1000	2	<10	58	<10	310	5	<2	3.3	5	<100	33	<0.5	676	1.60	<20	280	1.0	6.2	<10	4.5	<200	<1	<1	<20	14.0	7.6	314	<5	<200	<500
SR275	<5	2	5	940	<1	<10	46	10	340	9	<2	2.5	2	<100	26	<0.5	26	2.20	<20	290	1.2	3.5	<10	3.3	<200	<1	<1	<20	5.3	3.6	150	<5	<200	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR276	<5	3	85	480	2	<10	27	<10	520	5	<2	2.0	2	<100	15	<0.5	140	1.40	<20	210	0.8	1.7	<10	1.7	<200	<1	<1	<20	3.5	6.8	200	<5	<200	<500
SR277	<5	6	34	330	<1	<10	910	65	370	24	<2	>10.0	4	<100	588	<0.5	978	1.10	<20	420	1.7	16.0	<10	24.9	<200	<1	2	<20	34.0	16.0	12	<5	<200	<500
SR278	6	2	14	460	<1	<10	20	<10	430	3	<2	3.8	2	<100	13	<0.5	87	1.30	<20	260	2.5	1.9	<10	1.0	<200	<1	<1	<20	12.0	6.4	18	<5	<200	510
SR279	<5	4	<5	350	<1	<10	83	24	290	13	2	5.1	6	<100	41	0.5	10	0.61	<20	320	2.1	19.0	<10	7.4	<200	<1	1	<20	26.0	8.4	7	<5	<200	<500
SR280	<5	2	<5	640	<1	<10	38	<10	430	5	<2	8.3	3	<100	25	<0.5	12	0.45	<20	340	1.1	4.2	<10	2.2	<200	<1	<1	<20	17.0	2.7	29	<5	<200	<500
SR281	<5	6	<5	640	<1	<10	48	<10	290	4	<2	4.6	4	<100	35	<0.5	52	1.40	<20	380	5.1	5.5	<10	3.4	<200	1	<1	<20	42.0	4.5	85	<5	<200	<500
SR282	<5	<1	10	670	<1	<10	44	12	310	7	<2	4.0	5	<100	23	<0.5	20	1.40	<20	360	1.0	5.1	<10	2.6	<200	<1	<1	<20	17.0	8.7	44	<5	<200	<500
SR283	<5	9	19	420	<1	<10	37	16	470	12	<2	3.4	6	<100	19	<0.5	<2	0.39	<20	240	3.0	8.1	<10	3.4	<200	<1	<1	<20	7.3	2.7	3	<5	<200	<500
SR284	<5	9	67	400	<1	<10	24	65	370	7	<2	6.6	5	<100	15	<0.5	<2	0.34	33	160	2.4	6.2	16	3.8	<200	<1	<1	<20	4.9	3.6	<2	<5	460	<500
SR285	<5	10	11	730	<1	<10	38	12	260	4	<2	3.1	6	<100	23	<0.5	6	2.20	<20	350	2.6	5.5	<10	3.3	<200	1	<1	<20	25.0	6.8	11	<5	270	<500
SR286	<5	8	29	690	<1	<10	68	14	200	7	<2	3.3	4	<100	27	<0.5	5	2.70	<20	390	2.1	6.9	<10	3.6	<200	1	<1	<20	23.0	7.0	19	<5	700	<500
SR287	<5	2	<5	900	<1	<10	47	14	280	5	<2	2.7	5	<100	24	<0.5	15	2.70	<20	270	1.5	5.0	<10	2.5	<200	1	<1	<20	17.0	4.6	17	<5	350	<500
SR288	<5	2	9	750	<1	<10	95	<10	310	11	<2	3.2	6	<100	47	<0.5	3	2.10	<20	370	1.3	5.7	<10	5.6	<200	1	<1	<20	39.0	15.0	16	<5	1400	<500
SR289	<5	2	43	520	<1	31	24	<10	340	14	<2	2.8	6	<100	13	<0.5	25	0.09	<20	600	3.2	3.5	<10	1.2	<200	1	<1	<20	21.0	6.2	44	<5	6900	<500
SR290	<5	7	40	840	<1	170	84	35	160	9	<2	6.4	5	<100	42	<0.5	110	0.78	<20	470	11.0	7.2	<10	4.9	<200	<1	<1	<20	21.0	12.0	45	<5	>30000	<500
SR291	<5	3	8	520	<1	<10	85	<10	120	17	<2	3.8	5	<100	40	<0.5	4	2.20	<20	320	3.7	7.4	<10	4.9	<200	<1	<1	<20	19.0	9.2	29	<5	1400	<500
SR292	<5	2	11	1100	<1	<10	62	<10	210	17	<2	1.7	5	<100	29	<0.5	239	1.00	<20	500	5.7	4.4	<10	3.3	<200	1	<1	<20	46.0	19.0	55	<5	780	<500
SR293	<5	7	<5	800	<1	<10	30	<10	160	4	<2	1.4	6	<100	16	<0.5	31	4.40	<20	230	3.7	14.0	<10	1.3	<200	<1	<1	<20	72.2	9.2	33	<5	350	<500
SR294	21	2	12	830	<1	20	56	12	260	9	<2	3.8	9	<100	22	<0.5	8	0.10	<20	560	2.4	7.0	<10	2.7	<200	2	<1	<20	40.0	16.0	25	<5	4000	<500
SR295	<5	7	21	530	<1	33	72	14	260	27	<2	4.3	5	<100	30	<0.5	4	0.41	<20	380	5.1	4.6	<10	4.1	<200	<1	<1	<20	27.0	10.0	16	<5	7400	<500
SR296	34	8	51	1200	<1	<10	32	24	330	5	<2	9.0	5	<100	15	<0.5	18	0.06	<20	270	3.9	5.9	<10	2.5	<200	<1	<1	<20	10.0	2.8	15	<5	2000	<500
SR297	<5	4	<5	600	<1	14	45	<10	260	11	<2	3.1	3	<100	17	<0.5	17	0.34	<20	330	12.0	6.9	<10	2.9	<200	<1	<1	<20	5.7	1.8	12	<5	2700	<500
SR298	7	4	41	1100	<1	<10	75	28	180	11	2	5.8	5	<100	34	<0.5	19	0.45	<20	430	4.2	9.0	<10	6.0	<200	<1	<1	<20	17.0	5.8	19	<5	3000	<500
SR299	<5	4	6	460	<1	14	49	11	320	11	<2	2.9	<2	<100	21	<0.5	2	0.12	<20	340	11.0	6.7	<10	4.1	<200	<1	<1	<20	6.6	1.5	9	<5	1800	<500
SR300	<5	4	14	720	<1	39	69	24	130	14	<2	5.6	4	<100	29	<0.5	4	0.12	<20	460	7.0	9.3	<10	5.3	<200	<1	<1	<20	10.0	3.6	8	<5	9300	<500
SR301	35	7	57	600	2	210	17	18	410	6	<2	2.7	3	<100	13	<0.5	62	0.07	38	240	24.1	4.9	<10	2.2	<200	<1	<1	<20	6.0	1.8	7	<5	>30000	<500
SR302	17	10	50	830	2	65	66	17	230	9	<2	4.5	3	<100	23	<0.5	71	0.44	<20	390	29.5	7.6	<10	3.6	<200	<1	<1	<20	10.0	3.6	9	<5	17000	<500
SR303	<5	4	22	700	<1	52	56	22	220	13	<2	4.8	4	<100	26	<0.5	12	0.48	<20	400	6.5	8.6	<10	4.4	<200	<1	<1	<20	11.0	3.1	11	<5	13000	<500
SR304	15	5	11	510	<1	32	49	15	370	11	<2	4.8	4	<100	20	<0.5	8	0.17	<20	370	8.4	6.8	<10	3.3	<200	<1	<1	<20	9.0	3.0	8	<5	7800	<500
SR305	6	2	45	680	<1	15	74	<10	240	9	<2	4.6	6	<100	44	0.5	18	0.48	<20	550	5.3	3.2	<10	4.4	<200	2	<1	<20	33.0	8.9	12	6	4400	<500
SR306	34	23	33	320	1	<10	<10	19	310	4	<2	>10.0	<2	<100	14	<0.5	24	0.09	<20	220	12.0	5.9	<10	2.0	<200	<1	<1	<20	3.4	2.8	19	<5	560	<500
SR307	<5	3	<5	300	<1	13	47	30	150	6	<2	8.2	3	<100	21	<0.5	<2	0.31	34	310	4.3	12.0	<10	4.3	<200	<1	<1	<20	5.3	1.7	8	<5	2200	<500
SR308	>300	17	160	820	4	32	130	40	220	8	<2	>10.0	11	<100	61	<0.5	67	0.17	<41	370	3.2	9.5	<10	10.0	<200	2	<1	<20	54.8	12.0	18	<5	4100	<500
SR309	15	12	12	540	<1	<10	41	70	160	7	<2	>10.0	3	<100	23	<0.5	<2	0.35	<20	330	2.8	13.0	<10	4.3	<200	<1	<1	<20	6.5	3.1	14	<5	920	<500
SR310	<5	5	<5	950	<1	<10	110	15	160	6	<2	4.5	13	<100	46	<0.5	3	1.90	<20	390	1.9	6.8	<10	7.0	<200	2	<1	<20	57.6	17.0	5	<5	500	<500
SR311	<5	15	<5	520	2	<10	65	36	130	6	<2	7.6	5	<100	33	<0.5	<2	2.40	<20	240	10.0	22.0	<10	6.5	<200	1	<1	<20	27.0	8.1	4	<5	870	<500
SR312	<5	3	8	460	<1	<10	89	<10	340	7	<2	2.5	8	<100	42	<0.5	11	0.72	<20	450	2.4	3.5	<10	5.9	<200	2	<1	<20	47.0	12.0	4	<5	220	<500
SR313	110	20	57	360	3	70	77	14	510	6	<2	3.1	5	<100	40	0.7	22	0.05	<20	360	30.4	1.3	<10	5.5	<200	2	<1	<20	40.0	6.0	5	6	6000	<500
SR314	<5	3	<5	410	<1	<10	100	<10	430	6	<2	1.5	5	<100	43	<0.5	32	0.17	<20	440	3.7	1.2	<10	5.5	<200	2	<1	<20	42.0	6.0	<2	<5	<200	<500
SR315	82	1200	<84	<100	83	84	110	<10	<350	4	<11	2.8	<11	<490	52	<2.8	48	1.90	<98	380	2470.0	3.5	<66	6.0	<2100	<2	2	<240	42.0	13.0	<18	<18	7700	<2400
SR316	11	66	<10	<100	13	<10	95	<10	<50	6	<2	1.0	12	<100	51	<0.5	<2	2.70	<20	390	141.0	2.9	<10	6.7	<200	5	1	<20	59.9	10.0	8	9	680	<500
SR317	6	22	<5	450	5	<10	130	<10	170	5	<2	1.1	4	<100	49	<0.5	4	2.60	<20	330	40.1	3.1	<10	6.1	<200	3	1	<20	52.8	11.0	3	<5	<200	650
SR318	45	71	170	270	19	570	55	22	95	4	<2	2.6	<2	<100	44	<0.5	<2	1.60	<20	420	169.0	2.0	<10	5.3	<200	3	1	<20	43.0	8.1	9	<5	>20000	<500
SR319	9	6	31	290	1	77	98	<10	190	5	<2	1.2	6	<100	49	<0.5	6	2.40	<20	360	14.0	2.8	<10	5.2	<200	2	1	<20	43.0	29.0	4	<5	9600	<500
SR320	<5	2	31	410	<1	<10	73	<10	370	4	<2	1.2	3	<100	32	<0.5	210	0.73	<20	330	6.0	2.3	<10	4.8	<200	2	<1	<20	23.0	11.0	2	5	1600	<500
SR321	12	7	1180	<660	1	39	130	10	320	2	<2	1.9	4	<100	45	2.9	<7	1.30	<20	360	20.5	2.2	<10	<6.1	<200	1	<1	<20	31.0	221.0	4	6	4400	<500
SR322	<5	2	34	390	<1	<10	120	<10	310	4	<2	3.2	6	<100	54	<0.5	2	0.62	<20	490	6.0	2.9	<10	6.5	<200	1	<1	<20	37.0	12.0	18	<5	210	<500
SR323	<5	4	<5	170	<1	<10	27	<10	170	3	<2	0.7	2	<100	15	<0.5	<2	0.16	<20	150	7.0	1.4	<10	2.3	<200	<1	<1	<20	19.0	4.1	2	<5	<200	<500
SR324	<5	4	90	230	<1	<10	36	<10	380	3	<2	1.2	3	<100	19	<0.5	13	0.36	<20	350	17.0	1.3	<10	2.2	<200	1	<1	<20	7.6	2.7	3	<5	<200	<500
SR325	7	9	42	<100	7	<10	69	13	470	4	<2	0.9	2	<100	32	<0.5	<2	0.12	<20	390	29.6	1.3	<10	2.7	<200	1	<1	<20	28.0	43.0	3	<5	560	<500
SR326	<5	5	11	300	1	14	120	<10	190	8	<2	1.8	4	<100	52	<0.5	3	2.60	<20	340	11.0	6.4	<10	7.2	<200	2	<1	<20	30.0	7.9	10	5	1600	<500
SR327	96	24	160	<100	10	130	81	12	<50	4	<2	1.7	4	<100	21	<0.5	13	3.30	<20	260	94.3	4.0	<10	3.2	<200	2	<1	<20	22.0	6.0	8	<5	13000	<500
SR328	<5	2	17	120	<1	<10	25	<10	340	5	<2	0.5	<2	<100	7	<0.5	3	0.23	<20	120	5.4	0.6	<10	0.7	<200	<1	<1	<20	6.8	2.6	<2	<5	<200	<500
SR329	<5	2	32	130	<1	<10	10	<10	310	5	<2	<0.5	<2	<100	6	<0.5	2	0.08	<20	110	3.3	<0.5	<10	0.6	<200	<1	<1	<20	5.6	1.9	<2	<5	<200	<500
SR330	<5	3	10	100	<1	<10	11	<10	310	10	<2	<0.5	<2	<100	6	<0.5	<2	<0.05	<20	63	8.6	0.6	<10	0.6	<200	<1	<1	<20	4.7	1.3	<2	<5	<200	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR331	<5	3	41	130	<1	<10	19	<10	300	2	<2	<0.5	<2	<100	5	<0.5	3	<0.05	<20	54	5.8	<0.5	<10	0.6	<200	<1	<1	<20	4.6	1.3	<2	<5	<200	<500
SR332	<5	3	<5	<100	<1	<10	17	<10	320	3	<2	<0.5	<2	<100	<5	<0.5	<2	0.08	<20	63	5.3	0.5	<10	0.5	<200	<1	<1	<20	4.9	1.6	<2	<5	<200	<500
SR333	<5	2	<5	110	<1	<10	15	<10	300	1	<2	<0.5	<2	<100	8	<0.5	2	0.18	<20	80	4.3	<0.5	<10	0.6	<200	<1	<1	<20	6.4	1.8	2	<5	<200	<500
SR334	<5	3	<5	200	<1	<10	17	<10	310	2	<2	<0.5	<2	<100	10	<0.5	<2	0.35	<20	100	3.3	<0.5	<10	1.0	<200	<1	<1	<20	7.6	2.2	<2	<5	<200	<500
SR335	<5	3	<5	110	<1	<10	12	<10	280	2	<2	<0.5	<2	<100	7	<0.5	<2	0.21	<20	90	6.1	<0.5	<10	0.7	<200	<1	<1	<20	5.5	1.5	<2	<5	<200	<500
SR336	<5	3	6	<100	<1	<10	16	<10	300	6	<2	0.6	<2	<100	10	<0.5	<2	<0.05	<20	230	3.6	1.2	<10	0.6	<200	1	<1	<20	12.0	7.1	3	<5	<200	<500
SR337	<5	8	130	490	3	<10	60	<10	300	6	<2	0.8	3	<100	28	<0.5	79	<0.05	<20	440	23.8	1.9	<10	3.0	<200	2	<1	<20	21.0	4.1	7	<5	<200	<500
SR338	<5	3	10	200	<1	<10	26	<10	370	11	<2	0.6	<2	<100	9	<0.5	2	0.24	<20	210	4.9	0.8	<10	1.0	<200	<1	<1	<20	10.0	3.7	<2	<5	<200	<500
SR339	11	17	1910	520	<1	<10	68	<10	160	5	<2	4.1	6	<100	31	<0.5	22	1.60	<20	300	2.2	4.4	<10	2.5	<200	2	<1	<20	28.0	9.3	8	<5	<200	<500
SR340	<5	2	<5	260	<1	<10	27	<10	360	5	<2	<0.5	<2	<100	12	<0.5	2	0.39	<20	170	5.2	0.7	<10	1.1	<200	<1	<1	<20	10.0	3.2	<2	<5	<200	<500
SR341	<5	2	<5	210	<1	<10	23	<10	440	3	<2	<0.5	<2	<100	13	<0.5	<2	0.30	<20	140	4.6	0.6	<10	1.2	<200	<1	<1	<20	8.3	2.8	2	<5	<200	<500
SR342	<5	2	<5	210	<1	<10	16	<10	330	4	<2	<0.5	<2	<100	9	<0.5	<2	0.25	<20	190	3.6	0.5	<10	0.9	<200	<1	<1	<20	8.7	3.5	<2	<5	<200	<500
SR343	<5	3	<5	220	<1	<10	21	<10	370	3	<2	<0.5	<2	<100	7	<0.5	<2	<0.05	<20	110	3.7	0.7	<10	0.8	<200	<1	<1	<20	5.2	2.4	<2	<5	<200	<500
SR344	<5	2	<5	120	<1	<10	13	<10	360	3	<2	<0.5	<2	<100	6	<0.5	<2	0.15	<20	110	3.8	0.7	<10	0.7	<200	<1	<1	<20	6.5	2.8	<2	<5	<200	<500
SR345	<5	2	<5	250	<1	<10	71	<10	320	3	<2	0.6	<2	<100	22	<0.5	17	0.22	21	200	3.3	1.6	<10	2.3	<200	<1	<1	<20	11.0	2.2	<2	<5	<200	<500
SR346	<5	4	42	260	<1	100	75	<10	210	3	<2	1.0	4	<100	37	<0.5	3	5.38	<20	170	18.0	3.0	<10	4.4	<200	2	1	<20	35.0	16.0	3	<5	11000	<500
SR347	<5	1	<5	320	<1	<10	75	<10	320	14	<2	1.7	4	<100	34	<0.5	<2	0.88	<20	490	2.1	2.9	<10	4.9	<200	1	1	<20	22.0	8.5	6	<5	<200	<500
SR348	<5	1	18	590	<1	<10	120	<10	250	7	<2	1.9	5	<100	53	<0.5	3	1.70	<20	410	1.7	3.6	<10	6.4	<200	1	<1	<20	30.0	12.0	4	<5	<200	<500
SR349	<5	2	<5	450	<1	<10	120	<10	210	30	<2	1.5	4	<100	59	<0.5	<2	1.10	<20	820	2.0	3.5	<10	6.9	<200	1	1	<20	31.0	33.0	7	5	<200	<500
SR350	<5	1	<5	370	<1	<10	100	<10	260	6	<2	1.5	6	<100	48	<0.5	4	1.60	<20	500	1.1	3.4	<10	5.5	<200	2	<1	<20	27.0	18.0	7	<5	<200	<500
SR351	<5	2	<5	290	<1	<10	90	<10	350	5	<2	1.4	4	<100	39	<0.5	7	1.40	<20	280	3.2	2.0	<10	5.1	<200	2	<1	<20	28.0	14.0	5	<5	<200	<500
SR352	<5	2	<5	540	<1	<10	140	<10	210	8	<2	3.7	9	<100	65	0.8	6	0.25	<20	590	0.9	4.5	<10	8.4	<200	3	1	<20	19.0	23.0	13	9	<200	<500
SR353	<5	2	8	<100	<1	<10	59	<10	230	8	<2	1.7	6	<100	30	<0.5	130	1.20	<20	430	0.8	5.4	<10	3.9	<200	2	1	<20	15.0	46.0	21	5	<200	<500
SR354	<5	1	36	180	<1	<10	120	<10	260	10	<2	1.3	5	<100	50	<0.5	<2	0.22	<20	460	1.2	2.9	<10	4.3	<200	2	<1	<20	33.0	61.7	10	<5	<200	<500
SR355	<5	2	<5	540	<1	<10	80	<10	180	12	2	2.6	9	<100	37	<0.5	8	2.20	<20	630	1.6	3.6	<10	5.2	<200	4	<1	<20	30.0	11.0	19	7	<200	<500
SR356	11	7	168	1800	3	<10	31	<10	50	5	<2	1.0	5	<100	7	<0.5	7	1.60	26	580	16.0	7.8	<10	0.6	<200	2	<1	<20	35.0	13.0	<2	<5	220	<500
SR357	9	4	69	1500	<1	<10	25	<10	<50	5	<2	0.7	4	<100	6	<0.5	4	1.90	<20	540	5.5	10.0	<10	0.6	<200	2	<1	<20	37.0	14.0	<2	<5	300	<500
SR358	<5	9	6050	800	<1	<10	110	36	140	6	<2	5.4	5	<100	49	<0.5	7	1.90	<20	530	2.6	3.4	<10	6.0	<200	2	<1	<20	8.9	2.3	11	<5	<200	<500
SR359	5	6	2620	740	<1	<10	110	<10	140	8	<2	2.1	7	<100	56	<0.5	50	1.60	<20	610	7.4	4.4	<10	6.4	<200	2	<1	<20	39.0	11.0	9	<5	1100	<500
SR360	<5	5	450	950	<1	<10	69	<10	150	7	<2	3.0	5	<100	42	<0.5	28	1.00	<20	520	6.2	3.1	<10	3.8	<200	2	<1	<20	27.0	7.4	4	<5	<200	560
SR361	<5	7	<5	890	1	<10	71	15	<50	15	<2	4.2	3	<100	29	<0.5	<2	1.00	<20	410	13.0	4.6	<10	4.4	<200	<1	<1	<20	12.0	5.4	22	<5	1300	<500
SR362	7	5	<5	1100	<1	<10	65	<10	59	14	<2	>10.0	5	<100	32	<0.5	<2	1.60	<20	430	7.6	4.4	<10	4.2	<200	2	<1	<20	18.0	5.2	74	<5	350	<500
SR363	<5	12	87	<100	<1	<10	78	67	87	17	<2	>10.0	4	<100	37	<0.5	14	1.90	<20	210	5.0	11.0	<10	6.3	<200	<1	1	<20	12.0	9.1	15	<5	<200	<500
SR364	<5	5	10	730	2	<10	38	<10	110	7	<2	1.6	4	<100	26	<0.5	<2	1.80	<50	48	2.0	7.0	<10	4.2	<200	<1	<1	<20	6.1	2.7	<2	<5	<200	<500
SR365	<5	13	<5	130	1	<10	10	<10	56	<1	<2	<0.5	<2	<100	6	<0.5	<2	<0.05	<20	<10	15.0	0.6	<10	0.6	<200	<1	<1	<20	<0.5	2.1	<2	<5	<200	<500
SR366	<5	3	90	<100	1	<10	10	<10	63	2	<2	<0.5	<2	<100	<5	<0.5	<2	<0.05	<50	<10	3.1	0.6	<10	0.5	<200	<1	<1	<20	1.5	1.9	<2	<5	<200	<500
SR367	<5	3	<5	<100	<1	<10	<10	<10	<50	<1	<2	<0.5	<2	<100	<5	<0.5	14	<0.05	<20	<10	2.1	<0.5	<10	0.3	<200	<1	<1	<20	0.6	1.6	<2	<5	240	<500
SR368	<5	6	22	160	<1	<10	18	<10	<50	4	<2	0.6	<2	<100	11	<0.5	3	<0.05	<50	<10	2.2	1.3	<10	1.8	<200	<1	<1	<20	3.8	1.9	<2	<5	570	<500
SR369	<5	19	14	320	3	<10	29	<10	140	7	<2	1.2	<2	<100	11	<0.5	<2	<0.05	<20	36	19.0	2.0	<10	2.1	<200	<1	<1	<20	2.7	3.2	<2	<5	<200	<500
SR370	<5	41	<5	570	6	<10	83	65	130	4	<2	5.0	7	<100	31	<0.5	<2	<0.05	<20	71	48.1	10.0	<10	6.4	<200	<1	<1	<20	11.0	3.2	3	<5	2300	<500
SR371	<5	22	<5	840	1	<10	53	37	130	14	<2	5.1	5	<100	27	<0.5	3	1.30	<20	150	9.3	13.0	<10	6.2	<200	<1	<1	<20	10.0	3.1	5	<5	<200	<500
SR372	9	2	16	230	<1	<10	10	36	57	5	<2	>10.0	<2	<100	15	<0.5	170	0.14	<20	280	1.0	8.2	<10	2.8	<200	<1	<1	<20	4.9	6.2	98	<5	<200	960
SR373	<5	6	<5	850	<1	<10	32	28	110	15	<2	>10.0	5	<100	26	<0.5	35	0.91	<20	910	1.3	13.0	<10	5.3	<200	<1	1	<20	9.0	6.8	47	<5	<200	<500
SR374	<5	8	8	360	1	<10	40	13	98	16	<2	3.3	3	<100	24	<0.5	<2	0.13	<50	100	6.9	10.0	<10	4.4	<200	<1	1	<20	7.5	3.1	2	<5	<200	<500
SR375	120	43	15	<100	3	<10	17	15	78	1	<2	1.1	<2	<100	11	<0.5	9	<0.05	<20	26	31.2	4.8	<10	1.8	<200	<1	<1	<20	2.0	3.7	6	<5	380	<500
SR376	<5	36	15	420	2	<10	43	12	100	12	<2	2.9	4	<100	25	0.9	7	0.15	<50	96	52.1	14.0	<10	5.5	<200	<1	<1	<20	8.1	2.7	7	<5	<200	<500
SR377	50	199	62	300	6	12	10	72	140	8	<2	>10.0	<2	<100	11	<0.5	728	0.10	<50	<10	17.0	0.6	<10	0.4	<200	<1	<1	<20	1.1	25.0	46	<5	13000	<500
SR378	50	255	<5	<100	6	<21	21	<10	84	<1	<2	1.5	<2	<100	6	<0.5	1180	<0.05	<50	21	905.0	<0.5	21	0.7	<200	<1	<1	<20	<0.5	5.8	<2	<5	2300	<500
SR379	22	151	<12	<100	9	<10	<10	<10	<66	<1	4	0.8	<2	<100	10	<0.5	3090	<0.13	<20	<10	330.0	<0.5	<10	1.3	<200	<1	<1	<20	<0.5	8.6	<2	<5	250	<500
SR380	26	35	300	<100	1	<10	48	44	92	5	<2	10.0	3	<100	27	<0.5	988	0.19	<50	35	39.0	13.0	<10	4.2	<200	<1	1	<20	7.1	16.0	10	<5	1400	<500
SR381	31	10	943	120	1	<10	10	28	88	4	<2	>10.0	<2	<100	15	<0.5	315	0.05	<50	18	19.0	4.5	<10	2.7	<200	<1	<1	<20	4.5	14.0	280	<5	450	<500
SR382	<5	7	81	590	<1	<10	34	15	92	17	<2	>10.0	<2	<100	18	<0.5	77	<0.05	<50	33	13.0	5.2	<10	3.6	<200	<1	<1	<20	4.2	5.4	255	<5	210	<500
SR383	<5	6	<5	200	6	<10	44	<10	140	4	<2	1.8	8	<100	21	<0.5	<2	0.66	<20	50	1.2	5.4	<10	3.8	<200	<1	<1	<20	5.4	2.4	<2	<5	<200	<500
SR384	<5	46	<5	1800	4	<10	81	27	<50	9	<2	6.9	5	<100	36	<0.5	5	1.00	<20	320	5.6	23.0	<10	8.7	<200	<1	1	<20	7.7	3.8	5	<5	970	<500
SR385	<5	4	<5	170	7	<10	25	<10	<50	1	<2	0.9	4	<100	12	<0.5	2	0.40	<20	14	3.2	2.4	<10	2.3	<200	<1	<1	<20	2.9	1.9	<2	<5	240	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR386	<5	10	<5	150	<1	<10	50	<10	61	14	<2	1.4	4	<100	23	<0.5	10	0.06	<20	330	5.2	4.6	<10	3.7	<200	1	<1	<20	19.0	7.8	3	<5	<200	<500
SR387	<5	15	<5	200	2	<10	45	<10	<50	4	<2	1.4	2	<100	21	<0.5	39	<0.05	<20	81	13.0	2.2	<10	4.4	<200	<1	<1	<20	3.6	3.5	3	<5	330	<500
SR388	<5	10	13	400	<1	<10	66	<10	95	12	<2	2.4	8	<100	27	<0.5	<2	0.13	<20	220	6.5	8.3	<10	5.4	<200	1	1	<20	10.0	3.7	4	<5	<200	550
SR389	7	101	89	<100	14	<10	220	91	52	<1	<2	>10.0	<2	<100	140	<0.5	13	<0.05	<20	<10	62.4	1.1	<10	2.5	<200	<1	<1	<20	1.5	10.0	20	<5	400	<500
SR390	<5	30	6	<100	3	<10	<10	55	<50	1	<2	>10.0	10	<100	<5	<0.5	29	<0.05	<20	<10	8.0	2.0	<10	0.8	<200	<1	<1	<20	1.8	4.4	482	<5	360	<500
SR391	<5	5	<5	<100	<1	<10	10	<10	64	<1	<2	<0.5	<2	<100	<5	<0.5	3	0.05	<50	<10	0.9	1.0	<10	0.8	<200	<1	<1	<20	0.9	2.0	<2	<5	<200	<500
SR392	<5	5	<5	<100	<1	<10	10	<10	<50	<1	<2	<0.5	<2	<100	<5	<0.5	2	<0.05	<50	<10	1.2	0.6	<10	0.6	<200	<1	<1	<20	<0.5	1.7	<2	<5	<200	<500
SR393	<5	6	<5	<100	<1	<10	11	<10	140	<1	<2	1.1	<2	<100	6	<0.5	6	0.07	<20	<10	3.3	1.1	<10	1.1	<200	<1	<1	<20	1.1	2.0	6	<5	<200	<500
SR394	<5	9	<5	<100	<1	<10	39	<10	120	15	<2	0.8	12	<100	18	<0.5	6	0.08	<50	80	4.8	4.2	<10	2.8	<200	<1	<1	<20	8.8	7.6	3	<5	<200	<500
SR395	<5	12	15	<100	<1	<10	30	<10	65	3	<2	0.9	5	<100	15	<0.5	2	0.05	<50	35	1.7	3.8	<10	2.7	<200	<1	<1	<20	4.3	9.3	<2	<5	<200	<500
SR396	28	14	<5	<100	<1	<10	10	<10	54	1	<2	0.8	<2	<100	8	<0.5	372	<0.05	<50	<10	3.7	1.6	<10	0.5	<200	<1	<1	<20	1.6	12.0	2	<5	530	<500
SR397	<5	11	<5	<100	<1	<10	10	<10	140	2	<2	0.8	5	<100	<5	<0.5	46	<0.05	<50	16	10.0	1.5	<10	0.5	<200	<1	<1	<20	1.8	7.8	2	<5	280	<500
SR398	<5	9	<5	<100	<1	<10	26	<10	51	2	<2	0.9	4	<100	13	<0.5	3	0.05	<50	16	1.4	3.5	<10	2.4	<200	<1	<1	<20	3.5	4.8	<2	<5	<200	<500
SR399	<5	5	<5	<100	<1	<10	18	<10	<50	<1	<2	1.8	<2	<100	8	<0.5	4	<0.05	<20	<10	1.6	1.2	<10	1.1	<200	<1	<1	<20	0.9	1.9	10	<5	<200	<500
SR400	<5	12	<5	<100	<1	<10	14	<10	56	2	<2	1.0	3	<100	9	<0.5	8	0.06	<50	14	5.3	2.5	<10	1.5	<200	<1	<1	<20	2.9	6.3	3	<5	560	<500
SR401	<5	9	8	740	<1	<10	46	<10	88	25	<2	4.3	3	<100	22	<0.5	7	0.44	<50	160	5.5	13.0	<10	5.1	<200	<1	1	<20	8.2	3.2	9	<5	<200	<500
SR402	<5	2	5	700	<1	<10	30	<10	84	11	<2	2.7	6	<100	22	<0.5	4	0.25	<50	160	3.3	12.0	<10	5.2	<200	1	<1	<20	16.0	4.0	3	<5	<200	<500
SR403	> 50	91	250	490	3	<10	10	<10	70	8	<2	>10.0	3	<100	12	<0.5	17	0.06	<50	120	11.0	12.0	<10	2.3	<200	<1	<1	<20	7.8	4.9	23	<5	620	<500
SR404	13	23	31	840	<1	<10	45	14	110	4	<2	3.9	4	<100	24	<0.5	6	1.50	<50	78	7.0	11.0	<10	5.2	<200	<1	<1	<20	7.7	3.0	4	<5	<200	<500
SR405	<5	34	<5	<100	11	<10	<10	<10	540	5	<2	1.5	<2	<100	<5	<0.5	18	<0.05	<20	28	117.0	1.2	<10	0.4	<200	<1	<1	<20	0.8	4.4	4	<5	<200	<500
SR406	<5	21	<5	270	4	<10	10	<10	470	8	<2	1.2	<2	<100	<5	<0.5	17	<0.05	<50	14	122.0	1.2	<10	0.6	<200	<1	<1	<20	0.8	4.8	6	<5	200	<500
SR407	> 50	41	<5	<220	4	99	10	42	78	11	3	>10.0	<2	<100	14	<0.5	243	<0.05	50	33	90.8	4.1	<10	<2.0	<200	<1	<1	<20	3.6	67.7	340	<5	>20000	<500
SR408	44	63	16	<100	4	57	10	50	130	10	<2	>10.0	<2	<100	13	<0.5	190	<0.05	<50	15	136.0	2.3	<10	<1.4	<200	<1	<1	<41	4.2	55.6	310	<5	>20000	<500
SR409	10	31	<5	<100	1	51	25	27	<50	17	<2	3.1	<2	<100	16	<0.5	39	0.11	<50	<10	12.0	0.8	<10	1.7	<200	<1	<1	<20	<0.5	2.8	56	<5	9200	<500
SR410	22	213	<5	<100	2	360	10	80	62	4	<2	6.4	<2	<100	14	<0.5	79	<0.05	<50	<10	29.8	1.1	<10	<1.4	<200	<1	<1	<20	0.8	44.0	36	<5	>20000	<500
SR411	8	218	<21	<100	7	>2000	22	110	150	3	<2	7.9	<2	<100	15	<0.5	64	# 0	<50	26	547.0	0.8	<10	1.2	<200	<1	<1	<20	<0.5	13.0	150	<5	>20000	<500
SR412	<5	14	<5	650	<1	<10	39	17	87	12	<2	4.0	2	<100	24	<0.5	9	0.52	<50	160	22.6	6.5	<10	3.6	<200	<1	<1	<20	8.1	5.7	13	<5	580	<500
SR413	<5	25	<5	840	<1	<10	52	<10	130	9	<2	2.5	3	<100	31	<0.5	5	1.40	<50	130	20.9	5.0	<10	4.0	<200	<1	<1	<20	11.0	4.8	<2	<5	260	<500
SR414	7	5	29	<100	2	<10	10	<10	71	3	<2	>10.0	<2	<100	<5	<0.5	45	<0.05	<50	<10	4.3	0.7	<10	0.6	<200	<1	<1	<20	<0.5	2.6	1190	<5	600	<500
SR415	<5	7	6	390	<1	<10	46	37	99	7	<2	6.7	5	<100	25	<0.5	5	0.21	<50	100	8.4	12.0	<10	4.6	<200	<1	1	<20	9.4	3.2	15	<5	860	<500
SR416	<5	34	<5	<100	<1	19	10	<10	74	<1	<2	0.7	<2	<100	<5	<0.5	6	<0.05	<50	<10	10.0	<0.5	<10	0.3	<200	<1	<1	<20	<0.5	4.7	13	<5	1200	<500
SR417	> 50	49	9	260	1	24	10	29	52	1	<2	>10.0	<2	<100	8	<0.5	224	<0.05	<50	<10	53.5	0.7	<10	0.8	<200	<1	<1	<20	<0.5	5.7	698	<5	3300	<500
SR418	8	8	6	1900	<1	<10	35	48	<50	11	<2	6.8	4	<100	23	<0.5	32	0.22	<50	210	8.7	6.2	<10	3.3	<200	<1	<1	<20	5.7	6.5	10	<5	320	<500
SR419	<5	27	<5	<100	<1	<10	20	<10	53	1	<2	2.9	<2	<100	12	<0.5	13	<0.05	<50	<10	5.8	1.4	<10	1.2	<200	<1	<1	<20	1.3	9.5	4	<5	2600	<500
SR420	<5	5	<5	560	<1	<10	49	10	<50	14	2	4.6	4	<100	26	<0.5	3	2.20	<50	95	1.6	10.0	<10	4.7	<200	<1	<1	<20	4.4	4.1	<2	<5	<200	<500
SR421	<5	10	<5	<100	<1	38	<10	<10	<50	<1	<2	0.8	<2	<100	5	<0.5	21	<0.05	<20	<10	4.8	0.7	<10	<0.2	<200	<1	<1	<20	0.7	9.1	<2	<5	1600	<500
SR422	9	23	<5	<100	<1	16	10	<10	66	2	<2	1.5	<2	<100	7	<0.5	17	<0.05	<50	<10	7.3	1.0	<10	<0.5	<200	<1	<1	<20	0.5	16.0	8	<5	5900	<500
SR423	46	73	17	<340	3	54	27	52	79	11	<2	8.9	<2	<100	20	<0.5	1140	0.07	<50	24	49.5	6.0	<10	<2.5	<200	<1	<1	<40	3.7	105.0	13	<5	>20000	<500
SR424	7	14	12	1500	<1	<10	45	37	<50	16	2	>10.0	3	<100	31	<0.5	39	0.11	<50	150	28.7	7.2	<10	3.5	<200	<1	<1	<20	4.5	32.0	92	<5	360	<500
SR425	12	93	<5	1300	3	19	72	20	<50	22	<2	5.6	<2	<100	34	<0.5	322	0.21	<50	220	116.0	8.5	<10	5.2	<200	<1	<1	<20	5.9	3.3	4	<5	660	<500
SR426	9	13	12	450	<1	14	41	10	71	18	<2	4.6	<2	<100	24	<0.5	225	0.08	<50	150	27.2	5.5	<10	3.6	<200	<1	<1	<20	4.0	2.9	20	<5	3000	<500
SR427	<5	12	<5	890	1	<10	90	12	<50	15	<2	3.6	6	<100	46	<0.5	<2	0.49	<20	330	9.0	6.7	<10	5.8	<200	1	<1	<20	27.0	6.9	4	<5	470	<500
SR428	<5	17	<5	680	<1	<10	72	20	80	11	2	5.4	4	<100	34	<0.5	<2	0.10	<20	220	10.0	16.0	<10	5.8	<200	1	<1	<20	18.0	8.7	3	<5	460	<500
SR429	>100	117	62	<100	20	92	29	45	<50	4	<2	9.4	<2	<100	11	<0.5	140	0.14	<20	29	133.0	<0.5	<10	0.9	<470	<1	<1	<41	<0.5	3.9	<2	<5	>20000	<500
SR430	>100	341	43	<100	33	140	41	62	220	1	<2	>10.0	<2	<100	13	<0.5	82	<0.05	<20	<30	243.0	<0.5	<10	1.4	<670	<1	<1	<59	<1.3	4.0	100	<5	>20000	<500
SR431	<5	8	<5	1600	<1	<10	83	11	<50	9	<2	3.1	3	<100	31	<0.5	<2	2.00	<20	200	4.7	5.7	<10	5.7	<200	<1	<1	<20	12.0	3.4	7	<5	220	<500
SR432	<5	8	<5	930	1	<10	100	<10	53	31	<2	2.8	3	<100	42	<0.5	5	1.10	<20	270	7.6	6.8	<10	6.1	<200	1	<1	<20	14.0	5.4	4	<5	<200	<500
SR433	89	98	100	530	25	<10	36	19	<50	10	<2	10.0	<2	<100	19	1.0	33	0.17	<20	170	201.0	1.6	<10	3.2	<530	<1	<1	<46	7.0	2.1	33	<5	400	<500
SR434	51	46	200	<100	11	170	10	77	97	4	<2	>10.0	<2	<100	<5	<0.5	29	<0.05	<20	31	85.6	<0.5	<10	0.4	<200	<1	<1	<20	<0.5	3.5	225	<5	>20000	<500
SR435	<5	18	<5	1800	<1	<10	83	<10	150	11	<2	2.4	5	<100	41	<0.5	2	1.40	<20	350	11.0	5.0	<10	4.6	<200	<1	<1	<20	14.0	4.1	10	<5	1400	530
SR436	<5	7	<5	<100	<1	<10	10	<10	70	<1	<2	<0.5	<2	<100	9	<0.5	3	<0.05	<20	12	1.4	<0.5	<10	0.5	<200	<1	<1	<20	0.7	3.3	<2	<5	790	<500
SR437	10	6	<5	<100	<1	170	100	39	86	2	<2	>10.0	<2	<100	38	<0.5	369	0.08	<20	23	6.1	6.6	<10	6.1	<200	<1	1	<20	8.7	8.0	26	<5	>20000	<500
SR438	5	7	17	<100	2	35	45	25	87	3	<2	>10.0	<2	<100	23	<0.5	296	<0.05	<20	<10	13.0	5.4	<10	4.9	<200	1	1	<20	6.7	4.4	269	<5	11000	<500
SR439	<5	6	<5	610	<1	<10	80	13	140	11	<2	3.8	3	<100	30	<0.5	4	0.45	41	210	7.7	10.0	<10	4.1	<200	1	<1	<20	16.0	4.3	4	<5	250	<500
SR440	<5	21	<5	490	1	<10	33	27	52	10	<2	7.9	4	<100	16	<0.5	31	0.41	<20	150	7.2	4.6	<10	2.7	<200	<1	<1	<20	11.0	5.6	4	<5	1400	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR441	<5	12	<5	1100	<1	<10	50	14	170	18	<2	4.5	5	<100	28	<0.5	17	0.45	<20	260	14.0	10.0	<10	4.4	<200	1	<1	<20	9.3	3.2	4	<5	260	<500
SR442	9	5	17	<100	2	<10	23	<10	340	1	<2	4.4	4	<100	10	<0.5	72	<0.05	<20	<10	8.5	3.8	<10	2.3	<200	<1	<1	<20	3.2	1.6	4	<5	1600	<500
SR443	<5	11	5	290	2	<10	42	55	500	7	<2	6.9	3	<100	17	<0.5	17	0.09	<20	270	23.8	2.6	<10	2.0	<200	<1	<1	<20	4.9	3.0	17	<5	<200	<500
SR444	<5	5	<5	610	<1	140	170	11	81	25	2	3.3	7	<100	70	<0.5	53	0.08	<20	480	5.9	4.4	<10	7.9	<200	2	2	<20	48.0	12.0	47	<5	>20000	<500
SR445	7	5	<5	410	<1	110	180	<10	<50	24	<2	4.1	8	<100	82	<0.5	44	0.09	<20	450	4.1	4.4	<10	8.3	<200	3	1	<20	65.4	17.0	39	<5	>20000	<500
SR446	9	3	7	480	<1	110	170	33	100	20	<2	8.0	7	<100	84	<0.5	6	0.12	43	530	5.9	4.6	<10	9.2	<200	2	2	<20	50.7	13.0	39	<5	>20000	<500
SR447	7	5	<5	760	<1	<10	57	15	130	15	<2	4.3	4	<100	30	<0.5	3	0.09	<20	440	5.2	3.9	<10	3.7	<200	<1	<1	<20	8.4	4.9	16	<5	1100	<500
SR448	<5	3	6	560	<1	<10	10	<10	83	7	<2	3.7	3	<100	14	<0.5	4	0.17	<20	290	3.5	2.1	<10	1.5	<200	<1	<1	<20	6.8	2.3	21	<5	220	<500
SR449	<5	4	7	410	<1	<10	49	<10	110	6	<2	3.5	3	<100	23	<0.5	3	0.08	<20	290	3.7	2.5	<10	2.8	<200	<1	<1	<20	9.0	5.7	14	<5	<200	<500
SR450	<5	2	8	400	<1	15	18	13	240	5	<2	2.7	2	<100	12	<0.5	<2	0.06	<20	220	2.8	1.5	<10	1.5	<200	<1	<1	<20	5.5	2.0	10	<5	3700	<500
SR451	24	150	<13	<100	34	<10	<30	<10	560	3	<2	1.4	<2	<100	10	<0.5	17	<0.05	<20	70	373.0	1.1	<10	0.8	<500	<1	<1	<83	3.8	15.0	11	<15	1500	<500
SR452	9	39	16	<100	2	<10	120	37	490	14	<2	8.5	3	<100	37	<0.5	3	0.14	44	210	18.0	18.0	<10	5.2	<200	<1	<1	<20	6.0	14.0	59	<5	1700	<500
SR453	<5	5	<5	930	<1	<10	48	15	94	4	<2	2.8	5	<100	22	<0.5	2	1.80	<20	110	3.5	10.0	<10	4.0	<200	<1	<1	<20	4.6	1.5	4	<5	420	<500
SR454	<5	7	<5	1100	<1	<10	54	21	<50	9	<2	4.8	5	<100	25	<0.5	4	2.50	<20	89	1.3	13.0	<10	5.4	<200	<1	1	<20	6.6	1.2	<2	<5	450	<500
SR455	43	6	31	1600	<1	<10	100	19	50	23	3	4.1	9	<100	45	<0.5	19	1.40	<20	550	2.5	10.0	<10	8.5	<200	1	1	<20	42.0	8.5	9	<5	3300	<500
SR456	27	3	<5	1500	<1	67	40	14	<50	18	<2	3.0	4	<100	26	<0.5	79	0.61	<20	370	1.8	4.0	<10	4.4	<200	1	<1	<20	9.4	3.8	4	<5	15000	<500
SR457	6	36	50	520	1	22	36	<10	350	16	<2	3.1	<2	<100	12	<0.5	17	<0.05	<20	270	12.0	7.5	<10	2.7	<200	<1	<1	<20	2.3	1.0	11	<5	4600	<500
SR458	<5	5	<5	1200	<1	<10	57	24	52	30	2	5.9	3	<100	28	<0.5	<2	0.18	<20	530	7.3	12.0	<10	5.6	<200	<1	<1	<20	6.0	1.5	7	<5	1600	<500
SR459	<5	20	13	890	2	<10	55	20	180	42	<2	5.6	<2	<100	25	<0.5	3	0.33	<20	560	11.0	12.0	<10	4.8	<200	<1	<1	<20	5.8	2.1	6	<5	1000	510
SR460	<5	5	<5	1700	<1	30	62	32	110	14	<2	7.0	4	<100	29	<0.5	65	0.38	<20	390	7.3	14.0	<10	5.7	<200	<1	<1	<20	6.4	2.3	7	<5	7300	<500
SR461	<5	88	16	1500	13	<10	48	13	290	12	<2	3.2	<2	<100	21	0.9	69	0.06	<20	260	235.0	6.9	<10	4.1	<550	<1	<1	<20	9.0	3.4	23	<7	2500	<500
SR462	<5	82	<13	2200	<12	74	<37	<10	190	14	<2	3.7	<2	<100	22	0.9	22	0.11	<41	380	296.0	8.2	<10	4.3	<660	<1	<1	<49	7.3	3.0	30	<7	6000	<500
SR463	<5	136	<23	880	<27	<26	<52	<10	360	11	<4	2.2	<5	<100	14	0.9	59	0.09	<52	300	525.0	5.4	<28	3.3	<1100	<1	<1	<86	4.9	<1.1	26	<16	720	900
SR464	25	199	<33	10700	<29	42	<76	<10	250	18	<6	3.3	<7	<100	24	<1.1	12	0.16	<77	270	775.0	7.3	<41	4.4	<1600	<1	<1	<120	11.0	5.2	21	<23	1900	<1200
SR465	<5	178	330	300	<7	<23	<43	<10	320	5	<2	2.6	<4	<100	19	1.0	26	0.12	<54	260	496.0	4.5	<23	3.2	<960	<1	<1	<72	11.0	5.1	19	<19	3300	<500
SR466	<5	82	45	1400	<13	17	93	11	320	9	<2	3.2	<2	<100	20	<0.5	36	0.07	<20	220	251.0	6.7	<10	4.0	<580	<1	<1	<44	11.0	2.2	15	8	2400	<500
SR467	<5	156	<12	250	<16	<10	<28	14	620	3	<2	2.0	<2	<100	<5	<0.5	120	<0.05	<20	59	246.0	3.5	<10	1.2	<590	<1	<1	<48	4.5	<0.5	8	<7	3300	<500
SR468	6	107	<12	180	<15	<10	<28	<10	120	3	<2	1.7	<2	<100	7	0.5	49	0.06	<20	120	211.0	7.1	<10	1.7	<550	<1	<1	<50	3.4	<0.5	10	<5	1700	<500
SR469	62	1100	<120	>20000	<36	<130	<300	<29	1100	<6	<21	1.8	<24	<730	16	<4.4	407	0.50	<250	<160	2900.0	<1.8	<160	1.1	<6000	<4	<3	<460	<11.0	<6.4	22	<72	<2400	<3000
SR470	53	438	<67	14900	<49	<74	<160	<10	<660	<4	<12	1.9	<13	<400	13	<3.4	92	0.23	<230	<140	1700.0	4.7	<84	3.1	<3300	<2	<1	<250	<6.0	<3.4	27	<50	1600	<2200
SR471	<10	179	<23	790	<14	<28	<50	14	370	6	<5	3.9	<5	<100	17	0.9	16	0.14	<63	210	606.0	6.6	<27	3.8	<1100	<1	<1	<85	7.0	2.7	13	<14	3300	<500
SR472	<5	152	<20	1400	<13	<24	<43	12	190	6	<2	4.2	<5	<100	23	1.2	15	0.10	<55	300	498.0	8.4	<23	4.4	<960	<1	<1	<73	7.0	2.5	17	<13	2500	<500
SR473	<5	101	<15	500	<18	<10	39	<10	280	15	<2	3.5	<2	<100	17	<0.5	38	0.07	<41	250	323.0	7.3	<10	3.5	<720	<1	<1	<54	4.5	3.5	22	<5	2000	<500
SR474	<5	137	<14	670	28	<10	100	11	120	20	<2	3.3	<2	<100	39	0.7	9	1.20	<20	360	357.0	8.3	<10	6.2	<570	<1	<1	<78	21.0	5.5	14	<11	4700	<500
SR475	17	101	<5	1300	8	<10	86	15	170	42	<2	4.1	5	<100	34	<0.5	7	0.81	<20	320	86.3	10.0	<10	6.0	<200	<1	<1	<20	18.0	6.0	7	<5	1400	<500
SR476	31	308	<18	850	<44	<23	<40	<10	300	31	5	3.3	<2	<100	18	0.9	24	<0.05	<50	210	630.0	7.1	<10	3.8	<740	2	<1	<85	8.9	3.0	16	<16	2700	<500
SR477	<5	92	30	440	9	14	65	18	140	26	3	3.6	6	<100	37	<0.5	45	2.30	<20	370	110.0	11.0	<10	6.7	<200	<1	<1	<20	21.0	4.5	8	<5	1300	<500
SR478	47	4	8	440	<1	<10	41	21	110	12	<2	5.0	6	<100	19	<0.5	180	0.80	<20	290	3.8	11.0	<10	2.8	<200	<1	<1	<20	11.0	11.0	15	<5	5300	<500
SR479	<5	4	<5	440	<1	87	62	59	89	11	<2	4.8	5	<100	27	<0.5	47	1.90	56	230	3.3	13.0	<10	5.0	<200	<1	<1	<20	15.0	9.4	8	<5	>30000	<500
SR480	9	19	8	310	1	<10	15	16	500	5	<2	2.4	<2	<100	8	<0.5	140	<0.05	<20	96	13.0	3.7	<10	1.4	<200	<1	<1	<20	3.3	3.7	5	<5	4000	<500
SR481	<5	5	6	600	<1	12	61	28	98	18	<2	5.9	5	<100	29	<0.5	16	1.80	53	250	2.6	15.0	<10	6.0	<200	<1	1	<20	13.0	4.2	5	<5	3600	<500
SR482	<5	4	5	950	<1	37	66	27	110	13	<2	4.4	4	<100	27	<0.5	9	0.71	62	270	3.0	13.0	<10	4.9	<200	<1	<1	<20	13.0	5.8	12	<5	15000	<500
SR483	27	4	10	350	<1	160	15	27	220	12	<2	4.3	<2	<100	8	<0.5	398	0.23	<20	300	3.8	12.0	<10	1.9	<200	<1	<1	<20	2.6	2.4	6	<5	>30000	<500
SR484	<5	4	<5	360	<1	<10	66	21	100	10	2	3.8	5	<100	27	<0.5	6	3.50	<20	200	1.9	11.0	<10	4.7	<200	<1	<1	<20	14.0	4.9	5	<5	450	<500
SR485	7	7	<5	500	<1	47	70	27	100	12	<2	4.6	4	<100	30	<0.5	6	0.79	<20	280	3.1	11.0	<10	5.3	<200	<1	<1	<20	12.0	4.9	7	<5	17000	<500
SR486	18	11	6	110	2	<10	32	<10	330	4	<2	0.9	3	<100	13	<0.5	33	0.08	<20	140	24.7	1.6	<10	2.3	<200	1	<1	<20	6.1	4.9	8	<5	220	<500
SR487	7	27	14	<100	3	<10	170	21	290	14	2	5.5	12	<100	80	<0.5	32	0.19	<20	290	40.7	9.0	<10	11.0	<200	2	2	<20	69.7	15.0	16	<5	3000	<500
SR488	26	37	15	<100	6	290	<10	39	440	5	<2	4.0	<2	<100	14	<0.5	35	<0.05	<20	85	62.6	3.9	<10	2.0	<200	<1	<1	<20	4.6	3.3	23	<5	>30000	<500
SR489	76	163	<5	<100	19	10	<10	<10	410	<1	<2	1.4	<2	<100	<5	<0.5	32	<0.05	<20	<10	241.0	<0.5	<10	<0.2	<200	<1	<1	<20	1.1	3.9	10	6	940	<500
SR490	190	666	42	<310	<61	67	<60	<10	550	<1	<5	0.5	<5	<100	<5	<0.5	170	<0.11	<57	<37	918.0	<0.5	<31	<0.2	<1200	<1	<1	<140	<2.2	7.7	<5	<26	14000	<500
SR491	28	17	21	190	2	18	37	11	320	9	<2	2.7	<2	<100	16	<0.5	8	0.16	<20	92	25.9	2.9	<10	2.8	<200	<1	<1	<20	5.1	1.9	4	<5	6800	<500
SR492	45	16	15	490	2	<10	33	12	320	5	<2	2.9	3	<100	16	<0.5	31	0.14	<20	170	20.0	4.0	<10	2.8	<200	<1	<1	<20	8.0	4.9	6	<5	1000	<500
SR493	67	486	31	<100	<13	300	<10	25	530	5	<2	2.7	<2	<100	<5	<0.5	13	0.10	<20	35	122.0	1.0	12	0.6	<200	<1	<1	<20	1.7	2.3	<2	<5	>30000	<500
SR494	100	182	22	180	20	210	25	<10	300	38	<2	0.9	<2	<100	12	<0.5	86	<0.05	<20	180	247.0	1.5	<10	1.6	<200	<1	<1	<44	3.7	2.5	6	<5	>30000	<500
SR495	29	41	8	540	5	30	20	<10	360	11	<2	1.3	<2	<100	11	<0.5	13	<0.05	<20	180	57.2	1.6	<10	1.1	<200	<1	<1	<20	4.7	4.9	5	<5	8800	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR496	35	57	5	350	7	<10	26	<10	410	13	<2	1.5	<2	<100	10	<0.5	28	<0.05	<20	160	69.5	1.4	<10	1.1	<200	<1	<1	<20	3.8	5.8	4	<5	2000	<500
SR497	20	120	<5	170	19	<10	<10	<10	320	9	<2	1.5	<2	<100	6	<0.5	394	<0.05	<20	130	223.0	1.2	<10	0.7	<200	<1	<1	<20	3.1	5.7	4	5	930	<500
SR498	34	188	<5	500	18	<10	<10	<10	350	32	<2	2.1	<2	<100	13	<0.5	48	<0.05	<20	220	212.0	1.9	<10	1.5	<200	<1	<1	<47	5.0	3.4	4	<5	2200	<500
SR499	14	42	<5	720	6	<10	52	12	250	20	<2	2.7	<2	<100	19	<0.5	56	0.06	<20	240	68.2	1.8	<10	2.3	<200	<1	<1	<20	5.7	6.1	5	<5	1200	<500
SR500	>300	452	320	260	<1	420	27	25	61	4	2	11.0	<2	<100	18	<0.5	120	0.05	<50	26	68.5	2.1	<10	1.9	<200	<1	<1	<43	3.4	2.1	10	<5	>30000	<500
SR501	22	105	13	300	13	<10	<10	<10	290	7	<2	1.3	<2	<100	15	<0.5	232	<0.05	<20	140	164.0	1.5	<10	1.7	<200	<1	<1	<20	4.0	5.0	5	<5	2900	<500
SR502	24	115	110	280	16	21	90	44	190	32	<2	6.1	<2	<100	32	<0.5	48	0.07	<20	260	205.0	6.8	<10	3.1	<200	<1	<1	<45	10.0	12.0	30	8	9900	<500
SR503	8	101	<5	970	10	<10	67	24	320	32	<2	5.3	<2	<100	34	<0.5	20	<0.05	<20	200	120.0	5.8	<10	3.3	<200	<1	<1	<44	10.0	7.8	12	<5	5200	<500
SR504	21	304	42	770	15	86	49	29	160	16	2	6.7	<2	<100	21	<0.5	281	<0.05	<20	280	163.0	4.1	91	2.9	<200	<1	<1	<49	5.5	10.0	24	<5	4700	<500
SR505	25	322	130	<210	15	100	<10	22	280	20	<2	5.8	<2	<100	23	<0.5	74	<0.05	<20	240	173.0	6.7	<10	0.5	<410	<1	<1	<67	6.4	66.9	12	7	29200	<500
SR506	23	580	<14	450	<37	<10	<27	15	100	6	<2	4.1	<2	<100	13	0.6	110	<0.05	<20	110	467.0	2.9	19	2.0	<610	<1	<1	<68	10.0	5.0	12	<10	2100	<500
SR507	24	147	<5	520	10	24	49	13	77	31	<2	2.6	<2	<100	29	<0.5	63	0.07	<20	370	124.0	5.1	<10	3.9	<200	<1	<1	<20	11.0	10.0	8	6	5600	<500
SR508	21	11	12	830	<1	23	63	17	63	18	<2	4.5	5	<100	27	<0.5	180	0.48	26	410	11.0	5.5	<10	4.1	<200	<1	<1	<20	10.0	7.6	20	<5	11000	<500
SR509	<5	10	9	720	1	<10	80	<10	<50	42	<2	6.5	5	<100	31	<0.5	10	0.53	23	420	5.7	7.1	<10	4.4	<200	2	<1	<20	18.0	5.3	26	<5	450	<500
SR510	23	190	15	<100	17	<10	<10	17	500	5	<2	5.3	<2	<100	<5	<0.5	21	<0.05	<20	25	225.0	2.2	<10	1.3	<200	<1	<1	<20	4.4	1.2	18	6	1900	<500
SR511	9	138	51	130	7	<10	77	19	95	82	3	5.4	3	<100	36	<0.5	6	<0.05	39	340	88.3	8.4	<10	5.9	<200	1	<1	<20	23.0	8.9	9	<5	1700	<500
SR512	15	413	634	<100	<14	<10	60	22	150	46	2	5.9	<2	<100	30	<0.5	4	0.05	<20	330	151.0	10.0	<10	4.7	<200	<1	<1	<20	12.0	12.0	12	7	780	<500
SR513	170	478	034	<270	<49	<28	<49	15	170	23	<4	4.5	<4	<100	12	0.9	45	<0.05	<53	150	815.0	4.3	<26	2.5	<1100	<1	<1	<120	<2.4	7.1	14	<24	8900	<500
SR514	<5	64	22	110	4	<10	58	39	67	38	<2	8.3	<2	<100	26	<0.5	4	0.07	34	320	52.3	13.0	<10	5.2	<200	<1	<1	<20	5.7	2.6	6	<5	1400	<500
SR515	<5	67	<5	170	7	<10	38	26	230	15	<2	4.6	2	<100	16	<0.5	20	0.07	<20	120	78.9	7.4	<10	3.2	<200	<1	<1	<20	3.8	1.6	17	<5	1400	<500
SR516	<5	9	<5	320	<1	<10	42	11	72	75	<2	3.7	<2	<100	27	<0.5	<2	1.50	<20	310	7.8	6.4	<10	4.2	<200	<1	<1	<20	11.0	5.8	17	<5	510	<500
SR517	>300	445	<41	>20000	<151	<48	<90	<10	330	12	<7	1.2	<8	<330	14	<1.4	88	<0.12	<87	140	1420.0	<0.5	<48	1.3	<1900	3	<1	<210	<4.3	13.0	18	<29	3600	<1300
SR518	<5	136	15	910	2	<10	38	<10	160	20	<2	2.2	<2	<100	23	<0.5	180	0.31	<20	290	14.0	2.6	<10	2.5	<200	<1	<1	<20	8.3	5.5	6	<5	2300	<500
SR519	61	304	<29	<100	<50	<35	<71	<10	<120	42	7	2.2	<5	<100	31	<0.5	24	0.20	<74	580	1110.0	5.6	<31	4.0	<1300	<1	<1	<140	13.0	12.0	12	<25	2800	<500
SR520	<5	45	<5	630	8	<10	66	<10	250	23	<2	1.8	3	<100	31	<0.5	7	0.28	<20	330	108.0	6.6	<10	4.0	<200	<1	<1	<20	13.0	3.1	6	<5	710	<500
SR521	68	348	<34	1300	<75	<40	<110	<10	<200	21	<8	3.8	<8	<230	18	2.2	27	<0.18	<64	280	1260.0	4.2	<37	2.4	<1400	<1	<1	<230	<3.1	2.1	13	<46	4600	<1200
SR522	>300	<9999	<600	<2700	<1620	<820	<480	<55	<1500	<9	<45	<3.1	<39	<999	<83	<11.0	<180	# 0	<380	<330	>9999.0	<3.3	<210	<3.0	<7700	<7	<4	<1500	<16.0	<34.0	<620	<190	<6200	<6500
SR523	<5	69	<5	290	6	<10	32	<10	210	25	<2	2.3	<2	<100	16	<0.5	5	0.07	<20	220	65.7	3.2	<10	2.5	<200	<1	<1	<20	4.9	3.9	16	<5	650	<500
SR524	7	56	15	<100	4	<10	23	<10	600	5	<2	2.6	<2	<100	8	<0.5	35	<0.05	<20	55	23.5	1.3	<10	1.0	<200	<1	<1	<20	6.3	2.4	14	<5	1500	<500
SR525	65	492	36	140	<26	<10	21	16	420	9	3	3.4	<2	<100	14	<0.5	65	<0.05	<20	120	177.0	2.2	<10	1.3	<200	<1	<1	<20	8.1	13.0	28	<5	2300	<500
SR526	30	117	34	530	19	<10	53	<10	290	14	<2	2.7	<2	<100	23	0.6	110	0.13	25	280	203.0	5.1	<10	3.8	<200	<1	<1	<20	20.0	3.5	17	9	1200	<500
SR527	6	39	16	550	3	15	49	17	290	24	<2	5.7	<2	<100	25	<0.5	15	0.06	<20	350	37.8	5.5	<10	3.5	<200	<1	<1	<20	8.9	3.4	10	<5	3100	<500
SR528	12	325	22	390	21	17	52	13	340	14	<2	4.2	<2	<100	25	<0.5	26	0.08	<20	310	190.0	4.4	<10	3.4	<200	<1	<1	<20	9.2	3.3	17	<5	7600	<500
SR529	<5	19	59	180	2	<10	61	11	89	36	<2	6.4	3	<100	28	<0.5	12	0.10	<20	470	20.1	5.2	<10	3.8	<200	<1	<1	<20	10.0	4.5	11	<5	3000	<500
SR530	44	561	140	350	<30	55	32	<10	410	9	<2	4.4	<2	<100	13	0.7	226	<0.05	<20	190	284.0	2.7	<10	1.6	<490	<1	<1	<69	5.0	2.8	20	8	16000	<500
SR531	74	498	230	<100	<30	110	24	17	470	10	<2	5.6	<2	<100	14	<0.5	256	<0.05	<20	150	335.0	2.6	<10	1.6	<320	<1	<1	<63	3.4	2.0	13	10	>30000	<500
SR532	22	184	58	520	16	<10	69	16	190	13	<2	4.2	<2	<100	26	<0.5	30	0.05	<20	220	173.0	4.3	<10	2.4	<200	<1	<1	<20	11.0	13.0	15	6	1200	<500
SR533	28	256	77	<100	19	<10	30	<10	390	8	<2	3.2	<2	<100	15	<0.5	17	<0.05	<20	130	190.0	2.4	<10	1.7	<200	<1	<1	<20	6.9	6.9	30	<5	600	<500
SR534	13	191	55	500	12	12	29	<10	230	15	<2	3.9	<2	<100	23	<0.5	27	0.21	<20	320	182.0	4.5	<10	2.7	<200	<1	<1	<20	7.8	4.4	11	<5	5900	<500
SR535	42	468	210	240	<50	<26	<52	<10	340	11	7	3.3	<4	<100	26	1.1	18	<0.13	<45	310	819.0	4.8	<21	4.2	<950	1	<1	<120	11.0	7.1	17	<24	3200	<500
SR536	33	70	69	<100	11	<10	35	<10	840	5	<2	2.4	<2	<100	11	<0.5	20	<0.05	<20	80	102.0	0.6	<10	1.2	<200	<1	<1	<20	3.5	2.3	13	<5	1500	<500
SR537	18	352	47	300	<31	<10	57	<10	<50	20	<2	3.1	<2	<100	24	<0.5	17	0.09	<20	450	370.0	5.6	<10	3.2	<540	<1	<1	<74	13.0	7.0	14	<12	380	<500
SR538	27	225	28	190	18	<10	21	<10	460	10	<2	2.1	<2	<100	11	<0.5	100	<0.05	<20	170	213.0	2.4	<10	1.6	<200	<1	<1	<20	7.3	3.1	17	<5	740	<500
SR539	70	186	76	<100	<46	<22	<32	<10	420	3	<2	1.6	<2	<100	11	<0.5	15	<0.05	<20	39	702.0	<0.5	<10	1.3	<730	<1	<1	<83	5.0	0.9	12	<18	<200	820
SR540	<5	48	9	120	6	<10	30	<10	470	10	<2	2.1	<2	<100	19	<0.5	19	0.07	<20	240	65.7	3.8	<10	2.0	<200	<1	<1	<20	7.4	6.2	19	<5	<200	<500
SR541	140	853	1130	<400	<83	<44	<71	<10	<230	<4	<6	4.8	<6	<100	<10	<1.1	36	<0.20	<83	<80	1470.0	<1.4	<38	<1.2	<1500	<1	<1	<180	<2.8	<1.9	15	<22	470	<1100
SR542	10	244	94	<100	10	41	46	25	110	40	<2	>10.0	<2	<100	19	<0.5	11	0.06	<20	270	108.0	11.0	<10	4.6	<200	<1	<1	<20	2.6	2.2	29	6	6900	<500
SR543	32	449	160	<100	25	<10	<26	11	270	26	<2	4.8	<2	<100	21	<0.5	45	0.07	<20	330	303.0	6.4	<10	3.5	<460	<1	<1	<52	5.3	1.4	14	7	4300	<500
SR544	<5	655	250	<100	9	75	29	17	88	24	<2	>10.0	<2	<100	14	<0.5	15	<0.05	<20	330	46.5	7.8	<10	2.9	<200	<1	<1	<20	3.3	1.9	9	<5	9700	<500
SR545	9	132	87	420	15	<10	61	<10	250	20	<2	4.3	4	<100	26	<0.5	45	0.90	<20	260	194.0	11.0	<10	3.7	<200	<1	<1	<20	8.2	4.1	8	<5	1700	<500
SR546	30	361	490	260	<24	<10	45	<10	640	11	<2	5.0	<2	<100	22	0.8	110	<0.05	<20	240	344.0	1.6	<10	3.0	<470	1	<1	<54	12.0	3.5	7	<5	860	<500
SR547	170	1520	490	<310	<156	<110	<47	<12	410	<11	<5	4.5	<4	<100	36	<1.5	22	# 0	<60	220	2900.0	4.3	<23	4.2	<910	<1	<1	<150	8.9	<4.3	<110	<27	>30000	<500
SR548	200	667	2400	5400	<79	<62	<26	<10	370	63	<4	6.6	<2	<100	33	<0.7	17	<0.25	<20	220	1550.0	5.2	<10	3.3	<510	<1	<1	<81	6.6	<2.4	<54	<12	1200	<500
SR549	43	918	868	360	<45	<29	<60	28	320	46	<2	>10.0	<4	<100	29	0.9	17	0.10	<54	500	768.0	11.0	<25	5.4	<1000	<1	<1	<110	10.0	2.4	31	<12	4200	1100
SR550	75	1470	1940	<100	<100	<66	63	19	420	31	<5	9.2	<2	<100	36	<1.1	160	<0.35	<20	270	1790.0	4.5	<30	4.0	<560	<1	<1	<89	7.7	3.5	<33	<15	4600	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR551	73	1450	1380	220	<67	<38	36	13	440	29	<2	8.7	<2	<100	25	1.0	63	# 0	43	150	1080.0	2.6	<10	3.1	<200	<1	<1	<48	5.8	<1.3	25	<11	3800	<500
SR552	260	2850	700	<330	<171	<110	<68	<10	<310	<2	<6	5.4	<5	<150	40	<1.9	309	<0.50	<57	<89	3230.0	<0.5	<25	5.6	<1000	1	<1	<160	10.0	<4.6	<27	<11	1700	<500
SR553	>300	2510	1190	<1300	<299	<180	<81	<10	<260	<1	<10	5.6	<7	<200	<37	<2.0	140	<0.20	<86	<140	5280.0	<0.5	<40	<3.0	<1600	<2	<1	<250	14.0	<7.2	<28	<45	<520	<1300
SR554	15	2400	685	3700	<26	<10	56	<10	530	21	<2	>10.0	<2	<100	23	<0.5	24	<0.05	66	130	102.0	1.3	<13	2.3	<200	<1	<1	<46	8.9	9.4	15	<5	770	<500
SR555	44	210	150	390	26	<10	<26	13	310	14	<2	4.0	<2	<100	20	<0.5	17	<0.05	<20	190	357.0	3.1	<10	2.6	<460	<1	<1	<53	7.6	7.2	13	<5	4000	<500
SR556	15	87	20	<100	14	19	32	25	490	19	<2	6.1	<2	<100	14	<0.5	17	<0.05	<20	120	180.0	4.5	<10	1.2	<200	<1	<1	<20	4.3	31.0	7	7	8500	<500
SR557	19	127	<5	220	17	22	36	12	310	26	<2	3.7	<2	<100	16	<0.5	21	<0.05	<20	190	208.0	3.0	<10	1.9	<200	<1	<1	<20	5.3	6.6	11	5	10000	<500
SR558	<5	24	<5	290	4	12	77	<10	180	52	<2	3.3	2	<100	32	<0.5	4	0.06	<20	360	47.2	5.7	<10	3.9	<200	<1	<1	<20	11.0	10.0	17	<5	4600	<500
SR559	38	53	19	410	5	<10	55	<10	130	51	<2	3.4	<2	<100	29	<0.5	3	0.07	<20	420	56.1	5.3	<10	3.7	<200	<1	<1	<20	10.0	12.0	10	<5	3800	<500
SR560	<5	22	<5	280	4	<10	35	<10	440	8	<2	1.6	<2	<100	14	<0.5	8	0.06	<20	150	42.1	2.7	<10	1.8	<200	<1	<1	<20	5.3	3.2	6	<5	700	<500
SR561	<5	6	<5	420	<1	<10	35	<10	460	6	<2	2.0	<2	<100	12	<0.5	6	<0.05	<20	140	6.9	2.6	<10	1.7	<200	<1	<1	<20	4.8	1.5	4	<5	600	<500
SR562	>300	1310	<120	<490	<280	<170	<73	<10	<500	<10	<8	<2.1	<7	<270	<28	<1.7	<53	# 0	<83	<160	5150.0	<1.8	<36	<2.2	<1400	<1	<1	<230	<2.8	<6.8	<39	<40	<3100	<1300
SR563	160	530	<51	<200	<112	<74	<29	<10	430	13	<4	2.7	<2	<130	18	<1.0	<11	# 0	<20	170	1900.0	2.0	<10	2.3	<590	<1	<1	<95	3.2	<2.8	<74	<12	3900	<500
SR564	16	179	17	510	10	<10	38	<10	340	20	<2	1.7	3	<100	21	<0.5	91	0.13	<20	250	98.8	3.6	<10	2.8	<200	<1	<1	<20	7.5	4.2	10	<5	1200	<500
SR565	37	428	<5	300	<18	68	34	<10	440	16	<2	2.2	<2	<100	18	<0.5	8	<0.05	34	240	219.0	3.9	<10	2.9	<200	<1	<1	<20	5.8	2.3	12	<5	17000	<500
SR566	11	34	17	260	2	21	45	<10	240	18	<2	1.8	2	<100	22	<0.5	20	0.07	<20	260	28.4	4.3	<10	3.0	<200	<1	<1	<20	7.3	4.3	9	<5	5700	<500
SR567	<5	13	<5	970	3	<10	75	<10	140	55	<2	2.6	2	<100	34	<0.5	5	1.50	<20	290	10.0	6.2	<10	5.0	<200	1	<1	<20	21.0	3.5	7	<5	490	<500
SR568	92	196	<12	<100	<29	57	<34	18	250	16	<2	4.3	<2	<100	18	0.8	430	0.05	<20	230	443.0	3.5	<10	2.9	<580	<1	<1	<69	7.0	9.0	14	<15	10000	<500
SR569	28	240	<16	1800	<30	61	<35	10	190	17	3	2.2	<2	<100	16	<0.5	471	<0.05	<20	200	492.0	2.6	<10	2.4	<740	<1	<1	<81	8.4	10.0	10	<15	18000	<500
SR570	22	251	<12	650	<26	68	<32	<10	200	27	<2	3.1	<2	<100	20	0.8	207	<0.05	<20	250	439.0	3.5	<10	3.1	<560	<1	<1	<62	8.3	5.9	24	<15	23700	<500
SR571	13	273	<15	340	<33	34	<43	<10	170	18	<2	3.4	<2	<100	23	<0.5	99	<0.05	<20	300	545.0	3.7	<10	3.3	<680	<1	<1	<89	7.1	11.0	17	<19	6200	<500
SR572	33	376	<15	180	<33	70	<46	11	120	14	<2	4.9	<2	<100	17	<0.5	41	<0.05	<20	240	450.0	3.2	<10	2.4	<660	<1	<1	<100	4.6	5.7	15	<18	24900	<500
SR573	96	1370	<62	<230	<198	<93	<37	<10	390	11	<5	6.5	<2	<100	35	1.1	396	# 0	<41	180	2150.0	3.1	<10	3.4	<670	<1	<1	<130	3.1	5.3	<41	<15	10000	<500
SR574	40	344	<16	230	42	57	<31	<10	620	12	<2	5.1	<2	<100	16	<0.5	307	<0.15	<20	160	466.0	2.9	<10	1.4	<530	<1	<1	<90	2.9	6.0	12	<14	15000	<500
SR575	8	55	11	570	4	<10	30	<10	450	8	<2	2.4	3	<100	13	<0.5	44	<0.05	<20	280	30.4	3.4	<10	1.4	<200	<1	<1	<20	5.4	4.2	4	<5	1600	<500
SR576	9	18	18	280	2	24	60	<10	120	22	<2	5.1	<2	<100	27	<0.5	25	0.06	<20	550	30.2	5.9	<10	2.9	<200	<1	<1	<20	8.5	7.9	20	<5	4100	<500
SR577	45	138	130	120	21	<10	60	<10	280	19	<2	4.6	<2	<100	25	<0.5	18	<0.05	<20	330	209.0	4.1	<10	2.0	<200	<1	<1	<20	6.3	12.0	9	<5	2400	<500
SR578	16	43	29	340	12	16	95	<10	85	35	<2	4.0	4	<100	46	<0.5	6	0.09	<20	620	73.4	7.1	<10	4.7	<200	1	<1	<20	12.0	11.0	38	<5	4000	<500
SR579	6	33	12	160	2	32	49	<10	140	53	<2	7.4	<2	<100	33	<0.5	6	0.07	<20	380	26.1	6.1	<10	3.6	<200	<1	<1	<20	7.3	10.0	19	<5	11000	<500
SR580	24	156	76	<100	26	<10	46	<10	340	20	4	4.9	<2	<100	24	<0.5	14	<0.05	53	260	264.0	2.9	<10	2.4	<200	<1	<1	<20	5.9	2.9	18	<5	4600	<500
SR581	<5	19	<5	510	2	<10	51	<10	160	29	<2	2.3	2	<100	20	<0.5	3	0.06	<20	430	20.0	5.5	<10	2.5	<200	<1	<1	<20	9.0	5.1	8	<5	1300	<500
SR582	83	170	30	<100	12	<10	<10	<10	790	4	<2	2.5	<2	<100	8	<0.5	23	<0.05	<20	38	100.0	1.0	<10	0.9	<200	<1	<1	<20	1.7	4.3	<2	<5	1700	<500
SR583	45	780	<58	<220	<144	<87	<54	<10	<540	<8	<2	2.7	<2	<100	39	<1.0	43	# 0	<20	130	2130.0	3.7	<10	3.2	<640	<1	<1	<110	26.0	40.0	<17	<16	720	<500
SR584	24	111	150	160	18	51	56	<10	210	35	<2	5.7	3	<100	32	<0.5	6	<0.05	<20	320	203.0	6.9	<10	3.6	<200	1	<1	<20	24.0	10.0	22	7	18000	<500
SR585	190	1220	2640	200	<130	<71	<27	<10	810	<2	<2	6.5	<2	<100	12	<0.5	64	<0.46	<20	36	1650.0	<0.5	<10	1.3	<530	<1	<1	<86	3.2	<2.7	<29	<9	8900	<500
SR586	22	273	130	<100	<34	<10	110	<10	270	21	<2	7.2	7	<100	58	0.9	59	<0.05	<20	450	372.0	10.0	<10	8.3	<500	1	<1	<58	55.9	11.0	18	<10	1800	<500
SR587	>300	2250	1010	<350	<328	<130	77	<10	<410	<18	<6	7.6	<5	<100	42	<1.2	180	# 0	<60	<180	3270.0	<3.2	<26	4.4	<1000	<1	<1	<170	16.0	5.3	<75	<27	450	1300
SR588	140	2570	370	<420	<245	<160	<65	<10	<460	<4	<10	6.0	<6	<240	<47	<1.5	<90	# 0	<20	<220	4070.0	<3.3	<31	<4.9	<1300	<1	<1	<200	<9.1	<6.1	<24	<36	<200	<1100
SR589	48	1130	1000	<100	<110	<58	<23	<10	880	<1	<2	>10.0	<2	<100	11	<1.0	41	# 0	<20	<23	1350.0	<0.5	<10	<0.7	<440	<1	<1	<72	<0.5	<2.2	<56	<12	490	<500
SR590	7	132	67	220	9	<10	59	<10	640	9	<2	4.4	3	<100	27	<0.5	22	<0.05	<20	220	80.0	4.9	<10	3.6	<200	<1	<1	<20	16.0	5.9	7	<5	370	<500
SR591	<5	47	<5	520	3	<10	96	<10	340	7	<2	2.7	3	<100	40	<0.5	28	<0.05	<20	70	31.0	3.3	<10	7.8	<200	<1	<1	<20	24.0	7.8	4	<5	<200	<500
SR592	17	71	120	<100	9	<10	43	<10	310	8	<2	6.3	<2	<100	20	<0.5	44	<0.05	<20	64	95.9	3.5	<10	2.1	<200	<1	<1	<20	42.0	44.0	6	<5	800	<500
SR593	16	38	15	<100	5	<10	59	<10	430	8	<2	4.3	4	<100	26	<0.5	190	<0.05	<20	180	62.6	2.3	<10	3.3	<200	<1	<1	<20	16.0	3.8	4	<5	<200	<500
SR594	<5	32	<5	<100	2	<10	110	<10	440	7	<2	2.1	3	<100	41	<0.5	14	0.06	<20	210	15.0	3.3	<10	6.4	<200	1	<1	<20	51.5	13.0	6	<5	210	<500
SR595	11	57	94	<100	7	<10	71	<10	420	8	<2	2.0	<2	<100	29	<0.5	50	<0.05	25	180	84.0	2.1	<10	4.9	<200	1	<1	<20	39.0	5.8	<2	6	240	<500
SR596	9	62	150	<100	7	<10	92	<10	400	8	<2	4.3	6	<100	37	<0.5	31	<0.05	<20	160	75.1	3.6	<10	5.5	<200	2	1	<20	46.0	8.6	5	6	1300	<500
SR597	130	248	1220	<280	34	160	<56	<10	500	4	<5	>10.0	<5	<100	26	1.4	18	<0.10	<72	<43	526.0	0.9	<25	5.2	<500	<1	<1	<61	3.8	5.0	15	19	>30000	<1100
SR598	<5	14	130	<100	<1	<10	37	<10	410	6	<2	1.5	2	<100	16	<0.5	37	<0.05	<20	120	14.0	1.3	<10	2.1	<200	<1	<1	<20	19.0	2.9	<2	<5	<200	<500
SR599	18	132	59	<100	9	<10	99	<10	400	18	2	3.4	<2	<100	36	<0.5	32	0.07	<20	250	82.7	5.2	<10	3.7	<200	<1	<1	<20	34.0	40.0	<2	<5	530	<500
SR600	<5	10	17	<100	3	<10	37	<10	440	7	<2	1.0	<2	<100	14	<0.5	29	<0.05	<20	74	20.0	1.0	<10	1.3	<200	<1	<1	<20	11.0	15.0	3	<5	1600	<500
SR601	120	556	350	<280	34	400	<50	<10	330	5	<4	2.1	<5	<100	21	1.4	16	<0.05	<85	61	523.0	1.8	<25	<0.9	<490	<1	<1	<57	24.0	28.0	<8	16	>30000	<1300
SR602	8	21	160	<100	3	15	32	<10	460	9	<2	1.2	<2	<100	11	<0.5	39	<0.05	31	72	33.3	0.9	<10	1.1	<200	<1	<1	<20	8.0	15.0	2	<5	2900	<500
SR603	60	157	100	<100	28	190	<33	<10	410	7	<2	0.9	<2	<100	21	<0.5	18	<0.05	<51	71	354.0	0.7	<10	2.4	<200	<1	<1	<20	17.0	15.0	7	14	>30000	<500
SR604	51	162	99	<100	18	<10	<22	<10	500	4	<2	3.1	<2	<100	13	<0.5	26	<0.05	<20	33	216.0	<0.5	<10	2.0	<200	<1	<1	<20	37.0	4.9	7	<5	210	<500
SR605	89	98	350	<100	16	84	47	<10	490	4	<2	3.5	<2	<100	14	<0.5	32	<0.05	<20	28	700.0	<0.5	<10	1.6	<200	<1	<1	<20	5.0	2.2	<2	7	21300	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR606	<5	71	170	100	4	<10	<10	<10	400	5	<2	1.9	<2	<100	11	<0.5	100	<0.05	<20	69	34.7	1.0	<10	1.4	<200	<1	<1	<20	16.0	4.0	2	<5	<200	<500
SR607	<5	27	35	<100	3	<10	31	<10	250	7	<2	2.0	3	<100	18	<0.5	130	<0.05	<20	110	29.3	3.5	<10	3.0	<200	<1	<1	<20	20.0	2.7	5	<5	<200	<500
SR608	10	79	50	<100	8	<10	120	<10	240	8	<2	3.4	6	<100	44	0.7	31	<0.05	<20	160	95.6	6.7	<10	9.4	<200	1	1	<20	18.0	5.6	7	9	<200	<500
SR609	<5	23	5	<100	2	<10	120	<10	230	8	<2	3.0	4	<100	50	<0.5	8	<0.05	<20	190	19.0	3.2	<10	5.2	<200	1	<1	<20	42.0	3.9	2	<5	<200	<500
SR610	10	63	32	460	4	37	28	10	360	9	<2	3.1	<2	<100	10	<0.5	8	<0.05	<20	110	40.1	1.8	<10	1.8	<200	<1	<1	<20	4.3	3.0	<2	<5	7800	<500
SR611	<5	42	450	320	6	150	44	15	210	13	<2	4.6	<2	<100	27	<0.5	4	0.10	<20	140	48.9	9.1	<10	4.7	<200	<1	<1	<20	13.0	3.3	9	<5	>30000	<500
SR612	7	68	<5	360	6	18	90	<10	360	18	2	4.5	4	<100	41	<0.5	16	<0.05	<20	250	66.0	5.0	<10	6.3	<200	1	<1	<20	30.0	11.0	<2	<5	1800	<500
SR613	49	224	87	290	36	<26	61	<10	120	41	5	2.1	<2	<100	30	<0.5	<5	<0.05	<47	370	421.0	8.9	<10	4.9	<200	1	<1	<46	15.0	12.0	<5	9	2700	<500
SR614	17	73	55	270	6	100	54	18	180	27	<2	4.4	3	<100	25	<0.5	11	<0.05	<20	230	66.1	8.3	<10	2.8	<200	<1	<1	<20	11.0	28.0	8	5	24500	<500
SR615	71	145	2810	<100	21	430	<43	<10	300	32	<2	0.5	<2	<100	22	<0.5	<6	<0.05	<66	120	278.0	2.8	<10	<1.3	<200	<1	<1	<50	3.6	46.0	<6	8	>30000	<500
SR616	5	26	24	190	4	17	150	<10	360	33	<2	2.3	7	<100	83	0.8	9	0.07	<20	430	39.1	4.2	<10	11.0	<200	2	1	<20	40.0	12.0	<2	7	3500	<500
SR617	<5	32	<5	940	2	<10	89	19	110	49	<2	5.4	5	<100	33	<0.5	4	1.20	<20	400	9.1	14.0	<10	6.1	<200	1	<1	<20	24.0	4.5	3	<5	2100	<500
SR618	33	229	<17	880	27	28	56	17	<50	49	<2	6.3	<2	<100	31	0.7	12	<0.05	<42	240	304.0	10.0	<10	4.7	<200	<1	1	<20	12.0	8.3	9	14	5500	<500
SR619	<5	37	6	<100	1	<10	130	17	290	15	<2	3.2	4	<100	45	<0.5	7	0.14	<20	340	11.0	4.0	<10	5.6	<200	2	<1	<20	34.0	40.0	7	7	840	<500
SR620	170	2600	<92	<580	<64	<120	<100	<10	250	<2	<9	<0.5	<8	<250	26	<2.0	418	<4.70	<99	<76	520.0	<0.5	<51	<3.5	<1000	<1	<1	<140	13.0	<50.0	<42	<41	<460	<1500
SR621	<17	<2400	180	<590	<245	<120	<110	97	<310	3	<11	>10.0	<9	<270	26	<2.1	47	<4.10	<110	110	910.0	1.9	<51	<3.4	<1000	<1	<1	<150	<3.8	<102.0	<52	<37	16000	<1800
SR622	<5	40	<5	180	2	<10	100	<10	180	10	<2	5.1	6	<100	42	<0.5	6	0.12	<20	350	11.0	4.5	<10	4.9	<200	1	<1	<20	32.0	8.5	5	<5	<200	<500
SR623	<5	30	<5	<100	2	<10	51	11	150	8	<2	4.1	4	<100	24	<0.5	4	<0.05	<20	75	21.4	3.3	<10	3.7	<200	1	<1	<20	29.0	19.0	10	<5	380	<500
SR624	47	133	25	<100	7	<10	460	<10	230	11	<2	0.6	3	<100	250	1.3	30	<0.05	<20	270	129.0	3.4	<10	38.2	<200	<1	4	<20	35.0	36.0	<2	15	790	<500
SR625	210	380	88	<100	12	<31	670	<10	280	8	4	1.6	10	<100	593	<0.5	23	<0.11	<20	220	478.0	2.1	<10	75.7	<200	2	6	<20	39.0	30.0	<8	20	1600	<500
SR626	160	499	<28	<100	42	<39	<30	<10	180	5	<2	0.9	<2	<100	64	<0.5	562	<0.12	<20	130	845.0	1.1	<10	3.7	<200	<1	<1	<42	14.0	20.0	<73	17	1200	<500
SR627	98	2390	160	<280	45	<28	63	<10	230	4	<2	1.9	<2	<100	38	<0.5	785	<0.69	<20	38	364.0	<0.5	<10	<2.4	<200	<1	<1	<20	8.5	82.4	<5	7	1300	<500
SR628	80	234	160	<210	23	<22	130	10	250	7	<2	1.2	<2	<100	48	0.8	22	<0.05	<41	98	386.0	2.2	<10	2.5	<200	1	<1	<41	21.0	68.5	6	10	870	<500
SR629	66	380	93	<240	41	<26	84	<10	220	11	<2	1.8	<2	<100	66	0.7	42	<0.05	<49	84	531.0	1.4	<21	3.6	<430	2	<1	<50	19.0	21.0	<2	12	2000	<500
SR630	230	<4940	300	<490	<305	<200	<180	<20	<350	<4	<15	4.1	<14	<410	52	<3.3	234	<5.90	<160	<120	910.0	<1.2	<86	<4.9	<1600	5	<1	<230	13.0	<153.0	<62	<83	3400	<2500
SR631	8	24	19	<100	3	<10	79	<10	160	40	<2	1.1	3	<100	35	<0.5	9	0.07	<20	220	37.2	3.1	<10	4.0	<200	1	<1	<20	36.0	14.0	4	5	560	<500
SR632	9	42	44	<100	2	<10	130	<10	230	21	<2	4.9	7	<100	52	<0.5	9	0.07	<20	440	23.3	7.1	<10	7.5	<200	2	1	<20	54.4	35.0	15	7	870	<500
SR633	9	54	<5	<100	4	<10	53	<10	220	42	<2	1.7	4	<100	42	<0.5	6	0.09	<20	370	55.1	3.4	<10	2.6	<200	2	<1	<20	45.0	13.0	3	5	690	<500
SR634	6	70	46	<100	12	<10	69	<10	220	25	<2	1.1	<2	<100	36	<0.5	11	<0.05	<20	300	153.0	3.2	<10	2.7	<200	2	<1	<20	41.0	8.5	4	8	490	<500
SR635	300	620	240	<100	88	<40	220	<10	350	4	3	1.2	<2	<100	97	<0.5	243	<1.40	<20	31	677.0	<0.5	<10	9.3	<200	<1	<1	<41	13.0	45.0	50	17	1500	<500
SR636	210	354	110	<220	26	<25	210	<10	340	5	<2	1.4	<2	<100	88	1.1	140	0.05	<48	90	454.0	1.7	<10	11.0	<200	<1	<1	<46	18.0	26.0	<5	11	1000	<500
SR637	300	7690	270	270	40	<59	650	<10	97	5	<5	2.1	<4	<100	400	<0.5	78	<0.17	<64	250	977.0	<0.5	<22	46.0	<450	1	2	<61	24.0	33.0	15	19	2000	<500
SR638	59	1220	56	<100	48	47	280	<10	<120	7	8	5.9	<5	<100	190	3.8	57	<0.11	<75	180	664.0	3.3	<30	16.0	<600	2	<1	<93	37.0	39.0	<7	31	1600	<1100
SR639	<5	45	<5	140	3	<10	98	<10	180	10	<2	4.2	6	<100	46	<0.5	15	0.08	<20	220	19.0	4.4	<10	5.9	<200	2	<1	<20	44.0	13.0	14	7	410	<500
SR640	17	385	270	<100	19	<10	93	<10	210	9	<2	2.2	<2	<100	48	<0.5	21	<0.05	<20	96	199.0	3.0	<10	3.5	<200	<1	<1	<20	19.0	4.6	7	<5	780	<500
SR641	12	37	27	<100	4	<10	130	<10	210	5	<2	1.3	5	<100	45	<0.5	12	0.07	<20	150	44.0	4.2	<10	6.2	<200	2	<1	<20	18.0	9.4	4	7	230	<500
SR642	26	153	32	<100	9	<10	130	<10	280	14	<2	1.7	5	<100	85	<0.5	120	0.06	<20	260	63.5	4.7	<10	10.0	<200	1	3	<20	37.0	50.1	<2	17	710	<500
SR643	33	161	37	<100	9	<10	150	<10	310	28	<2	2.4	4	<100	71	<0.5	120	<0.05	<20	140	107.0	3.2	<10	8.9	<200	<1	1	<20	26.0	25.0	4	7	1000	<500
SR644	>300	115	56	<100	22	23	280	<10	170	4	<2	0.6	5	<100	110	0.8	52	0.05	<20	74	300.0	1.2	<10	13.0	<200	<1	<1	<20	20.0	16.0	6	14	600	<500
SR645	120	95	23	<100	14	<10	250	<10	200	7	<2	1.4	5	<100	64	<0.5	9	0.09	<20	230	174.0	3.5	<10	8.0	<200	<1	<1	<20	39.0	20.0	5	9	910	<500
SR646	210	295	<22	<100	24	<22	240	<10	240	6	5	1.5	<4	<100	110	1.7	36	<0.05	<20	65	359.0	0.8	<10	11.0	<200	<1	<1	<57	18.0	31.0	<4	20	690	<500
SR647	60	56	<5	<100	6	<10	200	<10	180	9	<2	2.9	5	<100	33	<0.5	6	0.05	<20	150	76.2	3.4	<10	2.2	<200	<1	<1	<20	32.0	64.0	5	6	3100	<500
SR648	<5	80	6	110	3	<10	67	<10	160	6	<2	1.3	6	<100	43	<0.5	<2	0.08	<20	270	21.8	3.5	<10	3.7	<200	2	<1	<20	43.0	8.4	4	6	<200	<500
SR649	19	235	34	870	7	<10	120	<10	200	5	<2	4.0	5	<100	47	<0.5	15	0.14	<20	150	64.0	2.6	<10	6.4	<200	<1	<1	<20	49.0	5.0	4	<5	<200	<500
SR650	21	461	68	1900	53	<39	<39	<10	130	34	<4	2.2	<2	<100	30	<0.5	18	<0.13	<41	240	813.0	5.5	<10	4.6	<200	<1	<1	<58	16.0	12.0	<6	26	2300	<500
SR651	33	68	<5	<100	9	30	51	<10	340	2	<2	1.5	<2	<100	19	<0.5	390	0.07	<20	110	124.0	1.1	<10	2.4	<200	<1	<1	<20	10.0	19.0	3	6	6400	<500
SR652	<5	12	<5	240	2	<10	<10	<10	470	7	<2	1.0	<2	<100	6	<0.5	37	<0.05	<20	120	20.0	2.0	<10	0.8	<200	<1	<1	<20	4.8	1.2	3	<5	<200	<500
SR653	<5	99	<11	1600	11	17	75	16	<50	18	3	5.3	5	<100	45	<0.5	6	0.24	<44	520	130.0	14.0	<10	6.8	<200	1	<1	<20	24.0	8.6	6	<5	3100	<500
SR654	6	129	<5	240	10	24	33	11	270	8	<2	3.4	<2	<100	15	<0.5	50	<0.05	<20	77	102.0	4.6	<10	2.5	<200	<1	<1	<20	7.5	5.8	<2	<5	4900	<500
SR655	<5	27	<5	420	3	<10	56	<10	150	20	<2	3.1	<2	<100	24	<0.5	13	0.06	<20	140	30.6	6.0	<10	3.7	<200	<1	<1	<20	12.0	4.7	3	<5	1200	<500
SR656	86	675	<25	<290	40	130	<48	<10	290	3	<4	2.5	<5	<100	7	1.2	292	<0.05	<66	87	636.0	<0.5	<26	1.2	<530	<1	<1	<60	<2.3	3.5	10	15	>30000	<500
SR657	24	468	<19	460	34	<24	<37	<10	310	10	<2	2.8	<2	<100	17	<0.5	120	<0.05	<46	190	438.0	4.5	<10	2.8	<400	<1	<1	<46	10.0	8.0	<2	12	6900	<500
SR658	8	129	12	770	3	<10	74	11	160	29	<2	2.8	<2	<100	33	<0.5	36	0.20	<50	150	142.0	8.2	<10	4.9	<200	<1	<1	<20	17.0	6.0	4	<5	4000	610
SR659	> 50	211	310	<100	4	46	37	11	430	12	<2	3.5	<2	<100	24	<0.5	68	0.08	<50	84	281.0	3.5	<10	2.2	<200	<1	<1	<20	14.0	18.0	6	16	14000	<500
SR660	6	37	<5	440	7	<10	59	<10	440	9	<2	1.6	<2	<100	16	<0.5	26	0.06	<20	200	76.3	2.9	<10	2.1	<200	<1	<1	<20	16.0	6.2	5	<5	590	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR661	9	29	<5	970	<1	<10	53	22	220	12	<2	3.6	3	<100	27	<0.5	8	1.00	<50	140	69.1	10.0	<10	4.2	<200	<1	<1	<20	12.0	4.3	4	<5	2500	<500
SR662	<5	18	9	930	<1	<10	66	14	220	11	<2	3.7	6	<100	39	<0.5	7	1.30	<50	180	41.0	10.0	<10	5.8	<200	1	<1	<20	24.0	8.6	3	<5	1200	<500
SR663	8	48	<5	790	1	<10	47	<10	390	5	<2	2.2	<2	<100	19	<0.5	24	0.31	<50	120	55.6	6.7	<10	3.0	<200	<1	<1	<20	14.0	5.0	3	<5	1600	<500
SR664	13	79	13	710	10	20	35	<10	470	5	<2	2.2	<2	<100	10	<0.5	39	<0.05	<20	130	113.0	3.4	<10	1.5	<200	<1	<1	<20	6.6	4.3	4	<5	8400	<500
SR665	8	20	<5	<100	4	<10	28	<10	400	4	<2	1.6	<2	<100	8	<0.5	6	<0.05	<20	37	52.6	2.7	<10	1.4	<200	<1	<1	<20	3.7	1.1	4	<5	600	<500
SR666	<5	57	<5	<100	3	<10	43	40	520	5	<2	4.6	<2	<100	16	<0.5	17	<0.05	<50	28	100.0	1.1	<10	1.2	<200	<1	<1	<20	4.7	15.0	4	<5	1100	<500
SR667	<5	39	<5	590	3	<10	110	<10	280	9	<2	1.4	4	<100	70	<0.5	63	0.12	<50	280	127.0	3.6	<10	6.0	<200	1	<1	<20	27.0	18.0	3	5	500	<500
SR668	5	23	6	100	1	<10	54	11	270	9	<2	2.0	<2	<100	30	<0.5	34	<0.05	<50	88	29.0	2.8	<10	3.3	<200	<1	<1	<20	15.0	9.4	4	<5	1100	<500
SR669	9	20	<5	620	2	<10	49	<10	250	15	<2	2.3	4	<100	35	<0.5	5	0.09	<50	180	56.7	8.7	<10	6.0	<200	<1	<1	<20	15.0	6.3	6	<5	380	<500
SR670	<5	15	<5	970	<1	<10	100	<10	200	12	<2	1.6	6	<100	51	<0.5	6	1.00	<50	230	18.0	4.8	<10	6.6	<200	<1	<1	<20	31.0	13.0	3	<5	510	<500
SR671	<5	17	5	740	<1	<10	75	22	190	21	<2	3.8	5	<100	41	<0.5	5	1.60	<50	160	14.0	10.0	<10	6.7	<200	<1	1	<20	20.0	7.1	5	<5	<200	<500
SR672	<5	33	<5	1100	<1	<10	94	15	250	25	<2	3.7	7	<100	48	<0.5	7	0.09	<50	98	37.9	12.0	<10	7.2	<200	1	1	<20	27.0	9.4	31	<5	<200	<500
SR673	<5	324	32	1300	5	<10	40	13	<50	14	<2	3.7	<2	<100	30	<0.5	22	0.40	<50	140	377.0	10.0	<10	4.7	<200	<1	1	<20	13.0	7.9	11	13	2700	<500
SR674	110	<3360	<120	<810	<338	<150	<130	<10	<440	4	<12	1.0	<11	<320	22	<2.5	<130	<4.00	<120	<98	160.0	3.3	<66	<3.1	<1300	<2	<1	<180	<5.0	<6.5	<49	<62	<10000	<1900
SR675	9	991	<25	810	<4	<22	63	13	130	7	<2	3.7	2	<100	38	0.6	28	<0.05	<50	190	900.0	10.0	<10	6.4	<200	<1	<1	<20	17.0	6.2	14	<5	1900	<500
SR676	<5	147	<5	<100	5	<10	<10	21	230	11	<2	6.2	2	<100	22	<0.5	<2	0.06	<20	180	37.2	15.0	<10	3.1	<200	<1	<1	<20	12.0	46.0	12	5	590	910
SR677	<5	8	5	430	1	<10	58	<10	270	17	<2	0.9	7	<100	29	<0.5	14	0.19	<50	210	6.4	5.5	<10	3.5	<200	1	<1	<20	8.5	5.0	2	<5	<200	<500
SR678	<5	6	<5	430	1	<10	82	<10	320	6	<2	1.7	6	<100	53	<0.5	6	2.50	<50	180	2.2	5.8	<10	6.5	<200	1	<1	<20	31.0	5.9	4	<5	<200	<500
SR679	<5	211	100	130	3	<10	57	<10	170	30	<2	4.3	<2	<100	38	0.7	49	0.09	<50	170	43.5	7.5	<10	5.3	<200	1	<1	<20	15.0	6.3	5	6	220	<500
SR680	> 50	474	1610	290	15	<10	50	<10	290	29	<2	4.2	<2	<100	39	1.1	200	<0.05	<50	140	461.0	5.5	<10	4.2	<600	<1	<1	<81	24.0	14.0	14	14	210	<500
SR681	<5	43	36	280	<1	<10	83	<10	240	20	<2	1.7	6	<100	50	<0.5	42	0.84	<50	210	26.7	5.9	<10	6.2	<200	<1	<1	<20	24.0	11.0	6	<5	420	<500
SR682	28	192	96	<100	4	<10	61	<10	290	20	<2	2.8	<2	<100	35	<0.5	140	0.13	<50	170	123.0	6.9	<10	5.1	<200	<1	<1	<20	24.0	11.0	14	6	200	<500
SR683	8	61	23	<100	5	<10	26	<10	310	6	<2	0.8	<2	<100	14	<0.5	75	<0.05	<20	98	64.6	2.1	<10	1.9	<200	<1	<1	<20	6.8	4.2	8	<5	<200	<500
SR684	10	167	50	<100	3	<10	33	<10	210	12	<2	3.0	3	<100	26	<0.5	140	0.06	<50	130	55.4	3.1	<10	3.3	<200	<1	<1	<20	13.0	8.9	8	6	<200	<500
SR685	12	987	170	<100	6	<10	69	<10	230	12	<2	3.3	<2	<100	31	<0.5	99	<0.05	<50	93	144.0	3.5	<10	4.1	<200	<1	<1	<50	14.0	5.4	10	<5	<200	<500
SR686	<5	749	110	290	12	<10	82	24	70	4	<2	6.6	3	<100	43	1.0	9	<0.26	<20	73	212.0	6.7	<10	3.6	<200	<1	<1	<20	16.0	13.0	7	7	<200	<500
SR687	<5	330	77	250	6	<10	48	<10	160	3	<2	3.1	5	<100	26	1.1	5	0.14	<20	33	99.1	8.7	<10	1.6	<200	<1	<1	<20	11.0	19.0	25	6	<200	<500
SR688	8	1560	390	370	11	<10	120	<10	160	<1	<2	>10.0	<2	<100	56	1.1	6	<0.34	<20	10	311.0	3.0	<10	5.6	<200	<1	<1	<20	8.3	13.0	14	9	<200	<500
SR689	7	381	1020	520	8	<10	100	<10	85	5	<2	>10.0	6	<100	40	1.0	3	0.21	<20	98	103.0	22.0	<10	7.3	<200	<1	<1	<20	14.0	4.9	17	6	<200	<500
SR690	17	484	270	150	13	<10	67	<10	150	6	<2	3.9	5	<100	35	<0.5	4	0.10	<20	210	102.0	11.0	<10	3.8	<200	1	<1	<20	11.0	4.6	10	<5	<200	<500
SR691	15	2860	<55	840	75	<54	120	36	<210	15	<6	7.9	<6	<230	43	2.6	<13	<2.10	<56	340	2080.0	8.5	<36	6.3	<1200	2	2	<140	17.0	22.0	48	38	1300	<1300
SR692	26	7750	<190	1000	258	<200	140	150	540	4	<15	6.9	<13	# 0	28	<3.5	<32	# 0	<130	270	>5000.0	4.8	<82	6.6	<2600	<3	<1	<340	15.0	57.5	<140	<39	2200	<2900
SR693	<5	174	110	1200	3	<10	170	<10	100	11	2	4.6	13	<100	72	1.5	<2	0.29	<20	370	50.5	14.0	<10	7.9	<200	<1	1	<20	16.0	5.4	8	9	<200	750
SR694	<5	186	100	1300	6	<10	150	<10	150	8	2	3.9	11	<100	65	1.0	<2	<0.05	<20	260	97.6	14.0	<10	8.8	<200	<1	1	<20	16.0	5.2	7	9	<200	650
SR695	7	759	340	210	14	<10	37	<10	230	5	<2	>10.0	3	<100	20	0.6	11	<0.40	<20	19	364.0	3.9	<10	2.3	<200	<1	<1	<20	8.5	2.1	15	8	<200	<500
SR696	<5	1190	624	<240	34	<26	120	<10	120	4	<5	>10.0	11	<100	81	1.0	33	<0.05	<53	83	393.0	6.6	<22	7.6	<430	<1	<1	<58	20.0	4.2	22	13	360	<1100
SR697	<44	6930	<530	<2100	677	<580	340	<53	<1200	<9	<34	>10.0	<32	# 0	98	<8.6	<92	>10.00	<280	<240	>5000.0	6.8	<190	10.0	<6100	<7	<4	<840	<14.0	<27.0	<430	130	<2000	<6700
SR698	47	3000	<150	<700	230	<160	260	<10	<400	<3	<11	8.1	<11	<410	110	<2.8	<26	# 0	190	130	4690.0	8.8	<67	13.0	<2100	2	<1	<270	<5.9	<7.5	<84	69	<690	<2300
SR699	<5	2190	340	<380	128	<86	180	<10	<220	<1	<6	>10.0	<6	<230	63	1.9	17	# 0	<55	53	2630.0	4.8	<36	7.2	<1200	<1	<1	<150	8.4	<4.1	<47	34	<410	<1300
SR700	22	303	979	2100	12	<10	24	<10	620	2	<2	5.9	<2	<100	17	<0.5	6	<0.05	24	<10	103.0	0.9	16	4.1	<200	<1	<1	<20	4.4	1.0	6	<5	<200	<500
SR701	<5	380	350	550	7	14	100	<10	290	10	<2	5.6	9	<100	47	0.5	<2	0.91	39	280	36.0	7.8	<10	7.7	<200	2	1	<20	24.0	9.2	10	6	<200	<500
SR702	9	947	160	120	6	<10	21	<10	470	4	<2	2.6	<2	<100	10	<0.5	44	<0.05	<50	16	107.0	2.9	<10	1.6	<200	<1	<1	<41	3.7	3.0	5	5	240	<500
SR703	10	189	<5	930	9	11	52	19	86	76	<2	5.8	<2	<100	28	<0.5	4	0.13	<50	340	23.6	22.0	<10	5.6	<200	<1	2	<20	6.3	11.0	7	5	2700	<500
SR704	7	768	150	250	4	13	10	12	310	12	<2	4.3	<2	<100	13	<0.5	45	0.11	<50	46	53.6	12.0	<10	2.3	<200	<1	<1	<20	3.5	3.9	19	5	880	<500
SR705	6	442	73	130	5	<10	20	<10	300	3	<2	2.4	<2	<100	8	0.7	35	<0.05	<50	<10	147.0	2.2	<10	1.2	<200	<1	<1	<41	3.7	1.6	3	7	<200	<500
SR706	14	157	270	100	2	<10	10	<10	410	2	<2	1.4	<2	<100	9	<0.5	14	<0.05	<50	<10	98.6	2.7	<10	1.4	<200	<1	<1	<20	3.2	1.1	4	<5	<200	<500
SR707	14	780	190	140	10	<10	110	<10	210	17	<2	6.9	3	<100	42	<0.5	20	0.07	<20	250	29.3	11.0	<10	10.0	<200	<1	<1	<20	19.0	6.8	18	<5	240	<500
SR708	<5	181	36	410	12	<10	200	<10	250	9	<2	1.6	10	<100	69	1.4	6	0.16	<20	500	140.0	6.6	<10	8.6	<200	1	<1	<20	32.0	5.8	62	10	960	<500
SR709	<5	462	21	150	13	54	180	22	240	11	6	2.2	8	<100	71	1.8	<2	0.66	<20	360	74.6	6.1	<10	20.3	<200	2	3	<20	34.0	29.0	43	14	7800	<500
SR710	<5	300	<5	260	13	<10	220	<10	230	10	<2	2.1	9	<100	82	1.9	<2	0.19	<20	450	126.0	6.6	<10	18.0	<200	<1	2	<20	30.0	13.0	87	15	2300	<500
SR711	<5	540	21	130	18	<10	190	<10	250	8	<2	1.0	10	<100	85	1.0	<2	0.14	<20	320	113.0	6.4	<10	8.0	<200	<1	<1	<20	62.4	5.9	63	9	450	<500
SR712	<5	94	17	340	2	11	190	<10	300	8	2	1.4	9	<100	87	1.5	<2	1.40	<20	460	14.0	6.7	<10	14.0	<200	1	2	<20	35.0	7.1	19	10	1600	<500
SR713	<5	74	85	250	2	<10	160	<10	270	20	<2	1.8	8	<100	68	1.4	<2	0.18	<20	410	16.0	7.5	<10	7.2	<200	2	<1	<20	23.0	4.4	13	6	960	<500
SR714	<5	422	65	140	<16	<10	140	<10	290	5	<2	1.1	10	<100	70	1.2	<2	0.20	<20	350	100.0	6.7	<10	7.9	<200	<1	<1	<20	24.0	8.2	140	11	720	<500
SR715	9	73	58	450	2	12	190	11	230	10	<2	2.2	13	<100	77	1.0	<2	1.20	<20	440	8.4	8.0	<10	12.0	<200	<1	2	<20	26.0	0.0	24	7	1900	640

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR716	32	349	<14	800	16	29	160	340	89	13	<2	3.2	7	<100	71	<0.5	<5	0.36	120	590	168.0	9.5	<10	10.0	<200	<1	1	<20	15.0	23.0	12	10	6200	<500
SR717	<5	372	<17	<100	19	<23	380	29	470	12	<2	>10.0	8	<100	180	<0.5	<4	0.17	53	440	206.0	29.0	<10	19.0	<200	<1	2	<53	60.5	29.0	89	15	2000	<500
SR718	11	766	76	<100	9	<10	29	<10	300	6	<2	3.0	<2	<100	17	<0.5	18	<0.05	37	86	69.6	4.1	<10	3.9	<200	<1	<1	<20	14.0	2.5	9	<5	220	<500
SR719	<5	1400	360	<270	39	<30	<57	<10	300	2	<4	>10.0	<4	<100	28	1.3	21	<0.05	79	<39	535.0	2.7	<25	8.5	<500	<1	<1	<57	24.0	9.2	7	<11	2600	<500
SR720	10	614	180	<100	13	<10	170	<10	420	4	2	3.2	<2	<100	71	<0.5	7	<0.05	<20	42	97.7	0.8	<10	11.0	<200	<1	<1	<20	28.0	2.0	4	<5	<200	<500
SR721	<5	65	63	370	3	<10	120	<10	400	5	<2	1.2	<2	<100	45	<0.5	5	<0.05	<20	78	30.8	1.4	<10	8.3	<200	<1	<1	<20	17.0	1.9	3	<5	<200	<500
SR722	<5	56	<5	700	2	<10	52	<10	290	4	2	1.3	4	<100	22	<0.5	3	0.06	<20	140	6.6	4.6	<10	3.7	<200	<1	<1	<20	4.0	3.5	4	<5	<200	540
SR723	<5	627	<12	500	16	17	94	<10	<50	13	3	10.0	<2	<100	38	<0.5	31	0.10	<20	200	139.0	18.0	<10	7.2	<200	<1	<1	<20	13.0	11.0	25	8	720	<500
SR724	<5	1050	110	<100	18	<10	69	<10	230	7	<2	6.8	<2	<100	28	0.5	5	0.10	41	23	110.0	8.1	<10	3.4	<200	<1	<1	<20	6.4	5.8	17	5	420	<500
SR725	6	801	85	190	14	<10	87	<10	170	10	<2	4.6	<2	<100	40	<0.5	6	<0.05	<20	64	88.8	9.1	<10	5.0	<200	<1	<1	<20	7.6	9.3	17	5	680	<500
SR726	<5	1040	130	<100	18	<10	60	<10	280	9	3	8.5	<2	<100	37	<0.5	120	0.05	<20	42	100.0	13.0	<10	4.0	<200	<1	<1	<20	4.6	14.0	16	6	1200	<500
SR727	8	587	58	470	12	<10	110	<10	210	17	<2	6.2	5	<100	64	<0.5	9	0.09	<20	180	88.7	10.0	<10	6.2	<200	<1	<1	<20	9.2	10.0	11	5	430	<500
SR728	<5	455	17	<100	10	<10	84	<10	220	6	<2	4.8	9	<100	36	<0.5	7	0.09	<20	59	74.6	10.0	<10	6.2	<200	<1	<1	<20	10.0	14.0	22	8	<200	<500
SR729	<5	213	<5	380	5	<10	91	<10	<50	18	2	6.3	7	<100	40	<0.5	<2	0.12	<20	200	37.1	17.0	<10	7.4	<200	<1	<1	<20	15.0	13.0	23	6	350	<500
SR730	<5	434	<5	2600	9	<10	130	<10	140	7	<2	4.7	5	<100	53	<0.5	5	0.16	<20	67	61.7	11.0	<10	6.8	<200	<1	<1	<20	14.0	23.0	17	<5	420	<500
SR731	<5	459	<5	710	9	47	62	46	110	6	<2	6.0	4	<100	27	<0.5	4	0.08	49	33	62.9	8.3	<10	4.5	<200	<1	<1	<20	10.0	10.0	14	<5	400	<500
SR732	<5	1460	<14	240	26	66	60	21	250	5	<2	4.0	<2	<100	28	<0.5	15	0.19	<20	48	205.0	3.8	<10	3.1	<200	<1	<1	<20	3.4	11.0	8	10	500	<500
SR733	<5	370	30	800	8	<10	140	<10	160	32	<2	2.3	8	<100	59	<0.5	<2	0.10	<20	360	40.2	10.0	<10	8.0	<200	2	<1	<20	21.0	5.0	10	<5	380	<500
SR734	18	2520	340	<280	54	<31	<59	<10	410	4	<4	5.3	<5	<100	21	0.8	11	<0.05	<60	92	481.0	1.9	<26	2.2	<520	<1	<1	<60	4.9	2.0	<5	<14	<200	<500
SR735	<5	523	28	150	16	<10	<21	<10	470	15	<2	3.4	<2	<100	12	<0.5	7	0.07	<20	110	150.0	6.6	<10	2.3	<200	<1	<1	<20	1.6	1.5	6	<5	450	<500
SR736	<5	158	27	210	4	<10	35	<10	550	5	<2	1.5	<2	<100	9	<0.5	15	0.19	23	130	34.0	2.0	<10	1.5	<200	<1	<1	<20	4.8	1.6	3	<5	<200	<500
SR737	<5	60	<5	450	2	<10	95	<10	210	25	<2	1.7	6	<100	40	<0.5	5	0.10	<20	380	28.7	6.5	<10	6.0	<200	1	<1	<20	24.0	4.7	10	6	280	<500
SR738	19	196	47	730	1	<10	64	<10	140	26	<2	2.6	3	<100	33	<0.5	6	0.07	<50	150	35.2	8.5	<10	4.6	<200	<1	<1	<20	9.1	5.0	9	<5	260	<500
SR739	22	580	51	780	5	<10	55	<10	290	9	<2	3.9	<2	<100	37	0.5	7	0.12	<50	80	157.0	5.8	<10	5.2	<200	<1	<1	<46	5.5	4.8	5	6	870	<500
SR740	7	42	8	820	<1	<10	55	11	160	8	<2	2.8	3	<100	28	<0.5	4	0.69	<50	290	10.0	7.4	<10	4.3	<200	<1	<1	<20	10.0	4.6	2	<5	<200	<500
SR741	19	94	73	780	3	<10	62	<10	200	9	3	3.0	3	<100	20	<0.5	5	0.86	<20	380	35.3	7.4	<10	3.9	<200	<1	<1	<20	11.0	4.2	<2	<5	<200	<500
SR742	<5	3140	<21	500	7	<24	88	14	380	9	<2	5.3	5	<100	38	0.6	73	<0.05	<50	150	459.0	3.5	<10	5.6	<200	<1	<1	<20	13.0	6.0	9	8	1200	<500
SR743	13	480	66	130	14	<10	61	<10	260	14	<2	2.8	<2	<100	32	<0.5	8	0.06	61	210	134.0	5.8	<10	3.7	<200	<1	<1	<20	10.0	5.4	6	7	580	<500
SR744	21	1020	12	460	6	<10	63	<10	140	14	<2	5.2	<2	<100	31	<0.5	12	<0.05	56	110	165.0	8.5	<10	5.1	<200	<1	<1	<51	10.0	7.5	11	<5	400	<500
SR745	6	785	62	550	4	<10	23	<10	120	11	<2	5.8	<2	<100	19	0.5	16	0.08	<50	83	114.0	5.0	<10	2.2	<200	<1	<1	<44	7.6	4.0	6	8	360	<500
SR746	6	572	240	740	10	<10	55	<10	300	5	<2	3.8	<2	<100	26	<0.5	4	0.07	40	<10	58.7	5.1	<10	3.8	<200	<1	<1	<20	7.4	3.0	6	<5	430	<500
SR747	14	270	26	1600	3	<10	84	<10	280	26	<2	4.6	4	<100	35	0.8	2	<0.05	<20	270	53.3	6.0	<10	5.9	<200	<1	<1	<20	11.0	7.2	<2	<5	350	<500
SR748	12	210	9	2800	3	31	64	33	270	28	<2	6.3	<2	<100	27	0.8	17	<0.05	<20	180	32.5	3.5	<10	3.3	<200	<1	<1	<20	6.5	25.0	6	<5	3100	<500
SR749	<5	78	7	800	1	<10	110	<10	320	3	<2	1.6	9	<100	43	1.0	2	<0.05	<20	32	24.6	5.2	<10	5.4	<200	1	<1	<20	18.0	5.9	<2	<5	<200	570
SR750	<5	53	11	1300	4	<10	100	240	62	8	<2	7.0	5	<100	40	0.9	<2	<0.05	130	150	72.8	18.0	<10	7.6	<200	<1	1	<20	15.0	7.7	4	5	810	<500
SR751	<5	60	<5	2300	5	<10	95	<10	280	6	<2	4.6	6	<100	39	0.7	<2	<0.05	<20	42	38.9	16.0	<10	5.1	<200	<1	<1	<20	14.0	6.4	8	<5	660	<500
SR752	30	91	11	260	4	<10	97	<10	350	2	<2	1.6	5	<100	62	<0.5	11	<0.05	<50	<10	122.0	4.3	<10	6.9	<200	1	<1	<20	16.0	6.0	10	<5	<200	620
SR753	<5	47	170	420	1	<10	21	<10	520	2	<2	1.0	2	<100	16	<0.5	11	<0.05	<50	11	80.2	2.3	<10	1.9	<200	<1	<1	<20	3.1	1.7	5	<5	<200	<500
SR754	42	157	78	490	2	<10	54	<10	360	3	<2	2.8	<2	<100	29	<0.5	3	0.07	<50	37	125.0	6.2	<10	6.7	<200	1	<1	<20	11.0	4.9	8	<5	<200	<500
SR755	20	71	41	230	3	<10	10	<10	420	2	<2	0.7	<2	<100	<5	<0.5	15	<0.05	<50	11	87.4	0.9	<10	0.7	<200	<1	<1	<20	1.1	<0.5	5	<5	<200	<500
SR756	32	433	260	<400	52	190	<65	<10	340	<1	<7	0.9	<6	<100	8	<1.3	180	<0.17	<71	<56	430.0	2.8	<34	1.7	<680	1	<1	<94	4.1	<3.4	<10	<26	420	<1100
SR757	29	275	150	<100	9	<10	10	<10	440	5	<2	1.2	<2	<100	9	0.6	130	<0.05	<50	55	629.0	2.7	<10	3.1	<200	<1	<1	<20	4.6	<1.3	<2	<5	380	<500
SR758	9	165	250	360	6	<10	73	<10	430	4	<2	3.5	3	<100	26	<0.5	9	0.10	<20	120	62.0	7.9	<10	3.9	<200	<1	<1	<20	8.5	4.4	11	<5	230	<500
SR759	7	92	150	160	6	<10	34	<10	660	3	<2	1.5	<2	<100	7	<0.5	11	<0.05	<20	13	71.8	2.0	<10	0.9	<200	<1	<1	<20	1.8	1.1	<2	<5	<200	<500
SR760	23	175	120	180	7	<10	43	<10	270	2	<2	1.4	<2	<100	24	0.8	4	0.07	<50	23	221.0	7.4	<10	2.2	<200	<1	<1	<46	8.3	4.4	7	<5	<200	660
SR761	20	242	230	410	6	<10	51	<10	310	3	<2	1.9	<2	<100	23	0.9	32	<0.05	<50	34	313.0	6.2	<10	4.2	<440	<1	<1	<58	8.2	3.8	7	9	<200	<500
SR762	<5	105	<5	430	<1	10	94	42	120	8	<2	6.4	4	<100	54	<0.5	2	0.07	<50	81	33.2	20.0	<10	7.8	<200	<1	<1	<20	14.0	7.1	10	<5	1500	<500
SR763	<5	310	66	100	6	<10	42	<10	330	15	<2	2.7	<2	<100	23	<0.5	8	0.09	<50	140	60.2	6.5	<10	2.8	<200	<1	<1	<20	7.4	4.2	6	<5	250	<500
SR764	7	135	220	<100	7	11	73	<10	370	17	<2	2.9	5	<100	32	<0.5	7	0.05	<20	270	54.8	8.3	<10	4.5	<200	<1	<1	<20	12.0	6.8	7	<5	580	<500
SR765	26	328	64	<100	13	<10	72	11	86	11	<2	2.4	5	<100	30	<0.5	8	0.06	<50	80	216.0	11.0	<10	4.0	<200	1	<1	<52	11.0	8.3	16	<5	630	<500
SR766	17	535	<15	<100	25	<10	66	<10	430	2	<2	2.2	<2	<100	26	<0.5	17	<0.05	<20	46	311.0	4.1	<10	3.7	<200	<1	<1	<20	6.3	2.3	5	7	<200	<500
SR767	> 50	1710	42	<100	6	<27	25	31	480	5	<2	2.7	<2	<100	20	<0.5	34	<0.05	<50	<10	1060.0	4.3	<10	2.6	<200	<1	<1	<54	3.5	11.0	9	<5	280	<500
SR768	28	1050	27	360	9	<10	54	<10	370	7	<2	2.5	<2	<100	24	0.6	21	<0.05	<50	39	488.0	6.4	<10	3.9	<200	<1	<1	<20	6.9	3.3	<2	<5	640	<500
SR769	14	233	45	230	28	<22	<33	<10	640	<1	<2	1.6	<2	<100	<5	<0.5	26	<0.05	<20	33	459.0	1.0	<10	0.4	<200	<1	<1	<42	<1.6	1.3	5	10	<200	<500
SR770	24	408	56	390	32	<25	<41	<10	520	2	<2	2.1	<2	<100	12	<0.5	74	<0.05	<44	63	499.0	4.2	<21	1.7	<430	<1	<1	<52	4.7	2.3	<2	10	<200	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR771	> 50	23	36	700	2	<10	66	13	110	15	<2	3.6	5	<100	39	<0.5	<2	1.90	<50	230	98.7	10.0	<10	5.7	<200	<1	<1	<20	14.0	7.1	7	<5	<200	<500
SR772	<5	14	910	940	<1	<10	92	13	210	7	<2	3.5	5	<100	32	<0.5	5	1.50	<20	380	9.2	8.7	<10	4.8	<200	<1	<1	<20	13.0	5.4	4	<5	<200	<500
SR773	<5	15	41	<100	3	<10	<10	<10	650	2	<2	0.8	<2	<100	<5	<0.5	6	<0.05	<20	11	22.7	1.4	<10	0.5	<200	<1	<1	<20	1.0	0.7	4	<5	<200	<500
SR774	<5	20	1880	370	<1	<10	58	<10	270	5	<2	2.5	4	<100	27	<0.5	6	0.17	<50	120	14.0	9.3	<10	3.8	<200	<1	<1	<20	8.7	4.3	6	<5	<200	<500
SR775	<5	18	11	940	<1	<10	72	<10	160	8	<2	6.9	4	<100	31	<0.5	<2	0.16	<20	110	7.3	13.0	<10	5.6	<200	<1	<1	<20	12.0	3.5	4	<5	<200	<500
SR776	26	180	160	<100	10	380	30	<10	93	4	<2	5.8	<2	<100	17	0.8	24	<0.05	<20	24	140.0	4.6	<10	4.2	<200	<1	1	<20	8.6	8.1	<2	8	>20000	<500
SR777	<5	22	29	280	7	<10	110	<10	98	30	<2	1.7	6	<100	49	1.4	4	0.17	<20	300	18.0	4.9	<10	8.9	<200	2	2	<20	48.0	12.0	5	6	1000	<500
SR778	<5	21	21	440	8	<10	57	46	<50	44	<2	7.6	<2	<100	22	0.9	5	0.16	<20	330	14.0	33.0	<10	5.2	<200	<1	<1	<20	3.4	12.0	9	<5	4100	690
SR779	<5	55	17	370	2	12	110	<10	400	20	<2	1.5	6	<100	52	1.1	5	0.07	22	280	26.9	3.7	<10	6.9	<200	2	<1	<20	22.0	5.1	2	7	1100	<500
SR780	<5	51	18	<100	4	<10	110	<10	120	15	<2	0.8	7	<100	46	1.4	7	0.06	<20	140	55.1	4.6	<10	7.1	<200	2	1	<20	42.0	11.0	<2	6	3600	<500
SR781	<5	19	<5	180	2	<10	120	<10	460	25	<2	1.9	5	<100	52	0.8	8	0.08	<20	280	38.1	3.2	<10	6.6	<200	2	<1	<20	24.0	9.0	5	7	1200	<500
SR782	<5	41	24	<100	4	32	140	<10	360	19	<2	2.3	6	<100	58	0.7	4	0.06	<20	190	38.4	3.8	<10	7.7	<200	1	1	<20	41.0	30.0	5	6	6800	<500
SR783	8	59	42	1500	7	<10	79	<10	480	11	<2	1.7	3	<100	36	<0.5	11	<0.05	<20	110	86.2	2.4	<10	3.3	<200	<1	<1	<20	15.0	5.3	<2	<5	720	<500
SR784	10	55	86	6500	7	<10	45	<10	290	16	<2	>10.0	<2	<100	26	0.7	9	0.16	<20	160	69.6	2.7	<10	3.1	<200	<1	<1	<20	10.0	2.7	<2	<5	470	<500
SR785	<5	54	32	<100	4	<10	120	<10	450	18	<2	2.5	7	<100	59	0.6	21	0.08	<20	300	52.0	3.8	<10	7.9	<200	1	1	<20	74.0	45.0	5	8	1400	740
SR786	<5	26	8	>20000	2	160	120	<10	470	15	<2	1.6	7	<100	48	<0.5	12	0.06	<20	210	34.2	3.2	<10	4.4	<200	1	<1	<20	46.0	40.0	<2	<5	24500	<500
SR787	16	48	34	<100	4	92	80	<10	440	11	<2	2.9	3	<100	31	<0.5	12	<0.05	<20	130	57.8	3.9	<10	2.9	<200	<1	<1	<20	18.0	47.0	3	<5	21300	<500
SR788	<5	15	47	<100	2	<10	130	<10	490	29	<2	2.3	3	<100	48	<0.5	13	<0.05	<20	170	24.7	2.1	<10	4.3	<200	1	<1	<20	25.0	11.0	3	<5	210	<500
SR789	<5	11	<5	<100	<1	<10	140	<10	450	28	<2	2.0	5	<100	62	<0.5	15	0.06	<20	330	10.0	3.9	<10	5.9	<200	2	<1	<20	38.0	14.0	7	<5	370	<500
SR790	<5	7	12	<100	<1	<10	140	<10	420	86	<2	1.9	<2	<100	53	<0.5	4	0.07	<20	360	12.0	3.8	<10	7.3	<200	2	1	<20	38.0	58.5	3	7	450	<500
SR791	<5	14	7	<100	2	<10	98	<10	460	16	<2	1.9	4	<100	43	<0.5	11	0.08	<20	260	18.0	2.9	<10	6.0	<200	1	1	<20	62.9	26.0	3	<5	390	<500
SR792	<5	18	12	<100	<1	16	140	<10	98	16	<2	2.7	6	<100	54	2.0	5	0.08	<20	190	10.0	7.2	<10	10.0	<200	2	1	<20	71.9	28.0	4	<5	2800	<500
SR793	<5	20	<5	<100	1	<10	95	20	430	21	<2	4.5	5	<100	40	0.6	3	0.10	<20	360	14.0	24.0	<10	7.6	<200	<1	1	<20	17.0	23.0	10	5	770	<500
SR794	<5	29	<5	130	<1	<10	130	18	210	18	<2	2.7	5	<100	51	1.8	4	0.09	20	310	12.0	4.8	<10	8.3	<200	1	1	<20	129.0	38.0	<2	<5	1100	<500
SR795	75	1070	963	1700	18	<10	160	<10	400	9	<2	8.4	<2	<100	58	1.8	72	0.15	32	170	513.0	15.0	<10	11.0	<200	<1	1	<42	54.3	8.5	9	17	<200	<500
SR796	>100	1440	687	4900	51	<44	70	<10	470	4	<6	6.7	<5	<210	36	2.4	<8	<0.18	<51	120	1640.0	24.0	<33	11.0	<1100	<1	<1	<120	47.0	28.0	23	39	<200	<1200
SR797	130	4060	838	1700	<291	<120	<290	<26	<500	<5	<18	4.3	<18	<560	62	7.7	100	0.57	<220	<140	720.0	2.9	<130	31.4	<4800	<4	<3	<550	38.0	<5.9	50	<64	750	<3100
SR798	<5	50	20	850	3	<10	89	<10	150	17	<2	5.3	4	<100	36	0.6	4	0.07	<20	290	19.0	14.0	<10	7.2	<200	1	1	<20	31.0	9.1	6	<5	220	<500
SR799	>100	939	549	2100	65	<44	140	<10	510	10	4	2.7	<2	<100	52	1.9	23	<0.12	<20	170	1120.0	6.4	<10	14.0	<570	1	<1	<73	29.0	4.2	10	23	660	<500
SR800	>100	1660	633	<290	43	<39	140	<10	970	<1	<5	5.9	<5	<100	44	1.6	28	<0.14	<44	<33	1420.0	<0.5	<29	16.0	<950	<1	<1	<110	17.0	<1.9	20	23	1100	<1100
SR801	42	778	200	1000	14	<10	80	10	160	27	3	10.0	<2	<100	34	1.1	19	<0.05	<20	330	361.0	21.0	<10	7.4	<200	<1	<1	<44	21.0	7.7	16	10	1000	<500
SR802	<5	14	<5	2600	2	<10	110	<10	310	12	<2	2.6	6	<100	48	0.8	7	0.13	<20	130	12.0	4.8	<10	6.3	<200	1	<1	<20	64.0	6.8	7	<5	<200	<500
SR803	5	94	36	100	7	<10	120	<10	240	17	<2	3.8	4	<100	54	1.4	6	0.07	<20	300	69.6	4.0	<10	6.2	<200	<1	<1	<20	50.6	10.0	17	8	<200	<500
SR804	50	26	130	1200	<1	<10	130	27	280	38	4	6.0	4	<100	43	1.3	<2	0.65	<20	310	17.0	27.0	<10	12.0	<200	<1	2	<20	8.6	10.0	2	7	510	<500
SR805	<5	29	34	190	2	<10	72	<10	440	16	<2	2.9	2	<100	26	0.5	35	0.11	<20	180	20.3	10.0	<10	6.5	<200	<1	<1	<20	12.0	4.1	7	<5	<200	<500
SR806	27	118	28	580	6	<10	110	<10	190	50	3	5.5	3	<100	46	0.9	5	0.13	31	280	133.0	20.0	<10	7.2	<200	<1	<1	<20	7.5	3.6	5	5	330	<500
SR807	21	161	33	3000	3	<10	76	<10	110	33	2	2.8	3	<100	46	0.6	27	0.10	<50	180	147.0	13.0	<10	6.4	<200	<1	<1	<20	8.6	3.4	7	8	410	<500
SR808	<5	109	29	190	8	<10	110	<10	100	51	<2	3.1	5	<100	52	0.8	<2	0.07	<20	370	100.0	16.0	<10	7.7	<200	<1	1	<20	10.0	3.0	10	8	710	850
SR809	25	97	140	1500	10	160	100	<10	130	33	<2	3.6	6	<100	52	0.9	<2	0.08	<20	350	125.0	12.0	<10	6.9	<200	<1	<1	<20	7.2	2.2	11	<5	>30000	<500
SR810	>300	<5230	<250	<2600	<423	<260	<550	<54	<1200	<18	<40	<3.2	<43	<999	38	<8.3	<61	<1.00	<460	<320	640.0	<11.0	<300	<6.4	<11000	<7	<5	<1300	<21.0	<13.0	<170	<170	<3900	<7000
SR811	<5	141	32	260	7	<10	130	11	200	48	<2	4.9	5	<100	53	0.8	<2	<0.05	<20	480	72.3	17.0	<10	10.0	<200	<1	<1	<20	8.1	3.3	9	9	800	<500
SR812	16	153	29	310	12	18	110	11	150	27	<2	4.8	5	<100	49	0.7	<2	0.06	<20	280	164.0	14.0	<10	8.5	<200	<1	<1	<20	7.1	3.7	8	7	2900	<500
SR813	8	51	34	480	4	16	80	18	170	28	2	3.3	3	<100	38	0.7	<2	<0.05	<20	260	62.3	12.0	<10	6.8	<200	<1	<1	<20	6.7	2.9	6	<5	2700	<500
SR814	7	86	34	840	8	10	96	22	250	28	2	4.8	3	<100	45	<0.5	<2	0.06	<20	340	89.9	16.0	<10	8.0	<200	<1	2	<20	6.5	4.1	10	6	2800	<500
SR815	<5	55	<5	120	<1	<10	140	<10	60	58	<2	2.0	6	<100	73	0.6	4	0.07	<50	290	40.9	8.7	<10	12.0	<200	<1	2	<20	16.0	4.1	3	7	830	<500
SR816	<5	31	<5	440	<1	<10	120	<10	87	73	<2	2.6	6	<100	67	0.9	3	0.07	<50	260	42.3	11.0	<10	11.0	<200	<1	2	<20	16.0	4.7	7	<5	470	<500
SR817	39	84	27	<100	12	18	120	<10	280	25	<2	2.2	7	<100	54	0.7	11	0.08	38	190	148.0	6.0	<10	6.9	<200	<1	<1	<20	10.0	4.4	<2	6	2600	<500
SR818	51	261	61	<100	<31	600	<43	<10	490	5	4	<0.5	<2	<100	26	<0.5	26	0.06	<60	63	358.0	1.2	<10	3.3	<700	<1	<1	<85	3.7	1.0	9	<8	>30000	<500
SR819	<5	65	14	280	<1	<10	62	21	83	24	<2	4.0	<2	<100	37	0.5	4	0.08	<50	260	20.0	19.0	<10	7.6	<200	<1	<1	<20	6.6	2.5	5	<5	630	<500
SR820	46	317	95	2900	<38	28	63	<10	280	7	<2	1.4	<2	<100	16	0.7	66	0.08	<45	69	459.0	3.7	<10	2.2	<780	<1	<1	<88	<1.4	1.7	10	<8	15000	<500
SR821	10	56	20	10300	8	<10	34	<10	630	12	<2	1.9	<2	<100	16	<0.5	86	<0.05	<20	92	110.0	4.0	<10	2.8	<200	<1	<1	<20	2.7	1.1	6	<5	390	<500
SR822	23	70	17	1500	4	<10	60	<10	65	37	<2	3.9	3	<100	29	<0.5	13	0.12	<20	270	66.1	8.3	<10	3.3	<200	<1	<1	<20	7.2	2.7	3	<5	370	<500
SR823	48	113	37	14400	13	<10	86	<10	220	40	2	3.9	3	<100	42	<0.5	8	0.15	<20	310	211.0	12.0	<10	4.9	<200	<1	<1	<20	8.8	3.6	5	<5	3200	<500
SR824	26	60	24	1200	5	<10	59	<10	130	17	<2	4.4	3	<100	29	<0.5	<2	0.62	<20	230	47.3	6.9	<10	2.9	<200	<1	<1	<20	7.2	4.0	<2	<5	1800	<500
SR825	<5	64	30	660	2	<10	50	<10	250	14	<2	1.8	2	<100	22	<0.5	8	<0.05	<20	210	22.6	5.9	<10	2.4	<200	<1	<1	<20	5.3	2.6	6	<5	<200	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR826	<5	6	<5	1900	<1	<10	73	<10	84	37	<2	1.3	3	<100	34	<0.5	<2	1.13	<20	360	4.7	4.0	<10	3.4	<200	<1	<1	<20	13.0	3.5	<2	<5	<200	<500
SR827	<5	35	<5	1800	9	<10	98	<10	84	42	<2	2.1	3	<100	52	<0.5	6	0.12	<20	390	102.0	4.3	<10	4.0	<200	<1	<1	<20	11.0	3.8	<2	<5	520	<500
SR828	<5	34	14	1400	1	<10	140	<10	91	42	2	7.0	4	<100	57	0.6	2	0.12	<20	320	13.0	11.0	<10	9.0	<200	<1	<1	<20	7.1	2.4	14	<5	<200	<500
SR829	<5	26	<5	800	2	<10	93	33	87	37	<2	4.8	<2	<100	37	<0.5	3	0.08	<20	190	29.3	7.6	<10	5.1	<200	<1	<1	<20	8.0	6.3	7	<5	510	<500
SR830	<5	101	8	1200	2	<10	68	40	98	18	<2	6.4	3	<100	31	<0.5	<2	0.08	<20	130	14.0	11.0	<10	6.1	<200	<1	<1	<20	5.3	2.6	<2	<5	490	<500
SR831	<5	85	21	460	3	<10	93	<10	300	18	<2	2.3	<2	<100	34	<0.5	8	0.06	<20	180	24.9	4.9	<10	4.2	<200	<1	<1	<20	4.4	1.9	8	<5	<200	<500
SR832	<5	38	16	350	1	<10	21	12	480	13	<2	5.6	3	<100	13	<0.5	<2	<0.05	<20	160	17.0	4.2	10	2.1	<200	<1	<1	<20	3.5	1.8	10	<5	350	<500
SR833	<5	88	40	670	2	<10	65	13	380	29	<2	5.2	<2	<100	24	<0.5	5	0.06	<20	290	13.0	6.9	<10	3.7	<200	<1	<1	<20	3.6	2.3	9	<5	640	<500
SR834	<5	44	57	440	2	<10	79	<10	260	40	<2	3.5	2	<100	33	<0.5	9	0.07	<20	260	20.0	6.4	<10	5.0	<200	<1	<1	<20	5.7	2.8	10	<5	240	<500
SR835	<5	41	20	300	1	<10	90	<10	450	25	<2	2.2	<2	<100	35	<0.5	12	<0.05	<20	190	17.0	4.3	<10	3.6	<200	<1	<1	<20	5.1	1.6	6	<5	<200	<500
SR836	<5	55	12	750	1	<10	85	15	110	55	<2	5.3	<2	<100	35	<0.5	<2	0.07	<20	380	13.0	9.4	<10	4.9	<200	<1	<1	<20	6.3	3.0	8	<5	380	<500
SR837	7	10	140	<100	1	<10	73	34	400	10	<2	>10.0	5	<100	30	<0.5	<2	0.06	34	280	12.0	5.9	18	3.8	<200	<1	<1	<20	6.4	2.2	15	<5	2500	<500
SR838	<5	37	25	670	2	<10	62	<10	110	55	<2	4.5	<2	<100	28	<0.5	3	0.08	29	350	20.2	6.9	<10	3.1	<200	<1	<1	<20	5.1	2.3	8	<5	320	<500
SR839	<5	51	9	460	<1	<10	72	<10	79	42	<2	4.1	<2	<100	32	<0.5	<2	0.12	<20	360	14.0	7.3	<10	4.0	<200	<1	<1	<20	5.4	1.8	4	<5	<200	<500
SR840	21	196	21	7900	12	<10	200	<10	120	4	4	8.9	6	<100	80	<0.5	4	0.14	<20	<10	115.0	5.0	<10	14.0	<200	2	<1	<20	22.0	6.1	10	<5	<200	<500
SR841	<5	149	27	2000	5	<10	83	11	110	18	4	2.9	6	<100	37	<0.5	<2	1.40	<20	180	35.9	11.0	<10	5.3	<200	1	<1	<20	7.0	3.7	4	<5	<200	<500
SR842	<5	39	<5	1500	1	<10	71	39	77	25	<2	5.7	3	<100	28	<0.5	<2	2.80	<20	250	14.0	11.0	<10	5.0	<200	<1	<1	<20	7.4	3.1	<2	<5	<200	<500
SR843	<5	310	94	490	7	<10	67	34	380	15	<2	5.2	3	<100	30	<0.5	94	0.10	41	140	34.4	8.5	<10	5.0	<200	<1	<1	<20	5.4	6.6	10	<5	1400	<500
SR844	<5	289	25	320	8	<10	42	39	200	26	<2	6.0	3	<100	32	0.5	<2	0.07	<20	340	46.6	8.7	<10	5.1	<200	<1	<1	<20	8.3	4.0	2	<5	1500	<500
SR845	<5	23	9	1100	<1	<10	78	31	220	22	<2	4.7	2	<100	36	<0.5	<2	0.12	<20	260	11.0	10.0	<10	5.2	<200	<1	<1	<20	6.9	7.4	5	<5	1300	<500
SR846	<5	68	21	2900	2	<10	91	27	180	31	<2	4.3	2	<100	34	<0.5	14	0.11	23	310	12.0	10.0	<10	5.6	<200	<1	<1	<20	5.9	3.7	8	<5	410	<500
SR847	<5	74	<5	2400	<1	<10	84	11	<50	39	<2	4.8	3	<100	36	0.5	3	2.00	<20	130	12.0	12.0	<10	4.5	<200	<1	<1	<20	7.9	2.6	<2	<5	<200	<500
SR848	<5	36	<5	1100	<1	<10	75	29	<50	47	<2	5.1	3	<100	30	<0.5	<2	2.50	<20	130	5.7	10.0	<10	5.8	<200	<1	<1	<20	5.8	3.6	<2	<5	220	<500
SR849	<5	52	<5	400	1	<10	82	15	130	40	<2	4.5	3	<100	36	<0.5	2	0.28	<20	190	15.0	13.0	<10	5.4	<200	<1	<1	<20	10.0	5.9	2	<5	980	<500
SR850	150	8470	<85	12100	<526	<95	<170	<10	680	<3	<13	<1.7	<13	<390	<31	<2.7	<20	<1.50	<140	<99	140.0	<5.6	<83	<2.5	<3100	<3	<1	<420	<5.9	<4.6	<57	<70	<680	<2200
SR851	<5	32	49	1500	<1	<10	91	17	<50	94	<2	5.8	<2	<100	38	0.6	3	1.10	<20	320	10.0	15.0	<10	5.7	<200	<1	<1	<20	6.8	2.5	8	<5	210	<500
SR852	>100	117	120	240	10	<10	44	<10	150	8	<2	1.3	<2	<100	25	<0.5	31	<0.05	<20	140	243.0	3.4	<10	1.4	<200	<1	<1	<20	7.8	6.1	<2	5	490	<500
SR853	17	714	720	210	<30	<22	23	<10	180	19	<2	1.7	<2	<100	22	0.8	14	<0.15	<20	240	785.0	2.2	<10	2.2	<460	<1	<1	<54	5.2	4.4	<2	14	2300	760
SR854	<5	35	<5	760	3	32	60	<10	70	27	<2	1.5	<2	<100	27	<0.5	3	<0.05	<20	400	69.4	1.8	<10	3.0	<200	<1	<1	<20	7.1	5.5	<2	<5	3300	<500
SR855	>100	2870	<310	3500	477	<340	200	<32	<680	<6	<20	3.3	<19	<710	63	<5.2	140	# 0	<170	<140	>5000.0	<2.3	<110	5.4	<3500	<4	<2	<490	<18.0	<16.0	<250	<130	<17000	<4100
SR856	>100	>10000	<1300	<4100	# 0	<1500	640	<94	<2100	<15	<59	<5.6	<59	# 0	<130	<17.0	<220	# 0	<520	<430	>5000.0	<7.0	<350	<4.8	<11000	<12	<7	<1600	<26.0	<65.0	<1700	<400	# 0	# 0
SR857	<5	25	5	570	3	41	50	<10	190	19	<2	1.9	2	<100	24	<0.5	3	0.07	<20	430	28.8	2.1	<10	2.1	<200	<1	<1	<20	7.4	8.5	<2	<5	2300	<500
SR858	>100	1320	669	4200	209	<150	110	<10	<370	<3	15	2.3	<10	<920	17	<2.6	234	# 0	<97	<75	4440.0	<1.4	<63	2.1	<2000	<2	<1	<260	<4.5	<6.9	<99	38	>20000	<2300
SR859	<5	89	<10	220	11	84	25	22	160	7	<2	1.3	<2	<100	15	0.6	19	<0.33	27	120	328.0	1.4	<10	1.2	<200	<1	<1	<20	5.3	6.3	<2	7	13000	<500
SR860	<5	25	7	690	<1	40	36	16	210	19	<2	5.0	<2	<100	18	<0.5	2	0.07	<20	310	11.0	2.1	<10	1.9	<200	<1	<1	<20	6.3	7.7	<2	<5	7000	<500
SR861	>100	276	<36	3200	42	<34	49	<10	370	5	<2	1.7	<2	<100	18	1.6	110	<0.18	<20	91	1270.0	1.1	<24	1.4	<780	<1	<1	<90	8.3	3.6	<2	26	<200	<500
SR862	9	24	6	1700	2	<10	48	<10	140	13	<2	1.0	<2	<100	20	<0.5	3	0.08	<20	280	17.0	1.2	<10	2.0	<200	<1	<1	<20	5.0	1.9	<2	<5	<200	<500
SR863	>100	1520	<120	>20000	154	<120	87	<10	510	<3	<9	1.9	<8	<320	16	<2.2	140	# 0	<78	74	3870.0	<1.1	<50	1.2	<1600	<1	<1	<210	<3.6	<5.8	<100	<20	<560	<1900
SR864	15	81	24	500	13	<10	49	<10	290	12	<2	1.5	<2	<100	21	<0.5	78	0.06	<20	260	159.0	1.5	<10	2.1	<200	<1	<1	<20	5.7	4.0	4	<5	420	<500
SR865	>100	2860	<220	3100	413	<250	140	<22	<470	<4	<14	2.1	<13	<500	34	<3.6	250	# 0	150	<99	>5000.0	<1.6	<79	1.4	<2500	<3	<1	<340	<5.8	<11.0	<200	<60	<900	<2800
SR866	>300	6050	<150	<1400	<575	<170	<280	<30	<590	<6	<22	<2.5	<22	<660	<30	<4.9	<97	<2.50	<250	<180	690.0	<1.8	<150	<1.2	<5700	<4	<3	<690	<11.0	<8.3	<160	<120	<1100	<3900
SR867	190	4780	150	<3100	<464	<150	<250	<27	<530	<5	<20	<3.8	<20	<590	<17	<4.1	<568	<2.30	<220	<160	840.0	<2.2	<130	<1.8	<5100	<4	<2	<620	<9.7	<7.4	<100	<120	<4000	<3300
SR868	280	3420	370	<900	<374	<110	<180	<10	<380	<4	<15	<0.5	<14	<430	<9	<2.9	<202	<1.30	<160	<110	110.0	<1.2	<96	<1.4	<3700	<3	<1	<440	<7.0	<5.3	<60	<75	<700	<2400
SR869	>100	3340	<400	>20000	521	<450	270	<38	<890	<7	<25	2.8	<24	<900	54	<6.8	130	# 0	<210	<170	>5000.0	<2.8	<150	<1.5	<4500	<5	<3	<620	<11.0	<21.0	<532	<130	<1400	<5000
SR870	>100	213	450	3200	34	<23	45	<10	260	9	<2	2.3	<2	<100	25	1.0	271	<0.14	51	100	894.0	1.0	<10	2.2	<500	<1	<1	<58	6.1	1.2	<5	18	2400	<500
SR871	>300	196	78	2000	23	<10	63	<10	97	36	3	4.1	<2	<100	35	0.6	7	0.12	<40	370	241.0	3.7	<10	2.7	<600	<1	<1	<67	3.9	1.5	16	6	1100	<500
SR872	31	124	44	1200	4	<10	21	<10	570	17	<2	5.2	<2	<100	12	<0.5	110	0.13	<20	160	23.6	4.3	<10	1.6	<200	<1	<1	<20	2.7	1.0	8	<5	400	<500
SR873	17	941	89	2900	<56	<20	59	<10	110	11	<2	6.8	<2	<100	27	1.0	35	0.17	49	280	335.0	7.2	<10	3.9	<710	<1	<1	<81	5.0	4.8	12	<12	320	<500
SR874	>100	758	<56	2900	82	<54	58	<10	1200	<1	<6	4.3	<6	<220	12	1.5	140	<2.80	<52	57	2230.0	3.5	<35	1.4	<1200	<1	<1	<130	5.6	<2.6	<22	49	<200	<1200
SR875	7	38	24	2600	3	<10	58	<10	400	33	<2	2.8	<2	<100	26	<0.5	20	<0.05	<20	260	57.7	7.6	<10	3.1	<200	<1	<1	<20	5.9	4.3	6	<5	210	<500
SR876	13	155	35	1400	20	<10	<21	<10	650	3	<2	3.3	<2	<100	6	0.7	373	0.08	<20	23	235.0	1.0	<10	0.8	<460	<1	<1	<53	2.1	1.9	9	5	<200	<500
SR877	90	370	130	>20000	27	<25	71	<10	250	33	<2	3.7	<2	<100	24	0.6	14	<0.98	<20	120	807.0	7.0	<10	3.0	<500	<1	<1	<59	3.3	1.7	<10	17	2700	<500
SR878	17	377	88	8000	15	<10	63	<10	<50	38	<2	3.7	<2	<100	28	0.6	6	<0.48	<20	190	455.0	10.0	<10	4.1	<200	<1	<1	<20	5.0	2.8	14	8	280	<500
SR879	>100	2520	240	>20000	309	<200	140	<28	<500	<4	<15	8.5	<14	<520	30	<3.6	64	# 0	<130	<100	>5000.0	6.2	<84	3.5	<2600	3	<1	<350	13.0	<9.6	<140	71	<880	<3000
SR880	11	61	29	1500	8	<10	19	<10	550	5	<2	1.6	<2	<100	12	<0.5	29	<0.05	<20	70	111.0	1.1	<10	0.9	<200	<1	<1	<20	4.5	2.1	4	<5	<200	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR881	22	425	66	3400	49	<23	<37	<10	210	8	<2	1.9	<2	<100	19	1.0	<4	0.18	<44	130	560.0	0.9	<20	2.0	<840	<1	<1	<97	3.4	1.2	17	<12	<200	<500
SR882	<5	42	<5	1600	7	<10	<10	<10	610	5	<2	1.0	<2	<100	7	<0.5	9	<0.05	<20	<10	101.0	0.6	<10	0.7	<200	<1	<1	<20	2.3	2.4	3	<5	<200	<500
SR883	<5	27	6	900	5	<10	14	<10	520	4	<2	1.0	<2	<100	10	<0.5	4	<0.05	<20	64	57.2	0.8	<10	0.8	<200	<1	<1	<20	2.6	1.3	4	<5	<200	<500
SR884	19	147	45	2700	14	<10	37	<10	110	15	<2	1.4	<2	<100	21	<0.5	6	<0.45	<20	160	436.0	1.7	<10	1.6	<200	<1	<1	<20	5.8	3.2	<2	<5	850	<500
SR885	5	42	9	1200	4	<10	61	<10	200	21	<2	1.1	3	<100	29	<0.5	3	<0.05	<20	220	98.8	2.1	<10	2.6	<200	<1	<1	<20	7.2	3.8	<2	<5	940	<500
SR886	<5	27	17	>20000	2	<10	22	<10	630	10	<2	1.3	5	<100	12	<0.5	77	0.05	<20	75	57.5	0.8	<10	1.0	<200	<1	<1	<20	2.0	1.7	3	<5	<200	<500
SR887	46	157	<12	1000	20	<10	<22	<10	370	7	<2	1.3	<2	<100	15	0.8	<2	0.06	<20	100	247.0	1.2	<10	1.1	<490	<1	<1	<56	4.5	2.0	8	<5	<200	<500
SR888	19	116	26	7800	12	<10	57	<10	260	12	<2	2.3	<2	<100	24	<0.5	<2	<0.05	<20	210	153.0	2.0	<10	1.8	<200	<1	<1	<20	8.5	5.3	5	<5	<200	<500
SR889	34	736	<31	13600	68	<38	97	<10	<280	12	<6	0.7	<6	<250	14	1.7	17	<0.14	<50	110	955.0	0.8	<38	1.7	<1300	<1	<1	<120	5.7	2.1	8	22	830	<1100
SR890	100	940	<72	14000	73	<68	110	<10	370	<3	<9	1.2	<9	<350	12	<2.4	19	<0.95	<80	<61	2030.0	<1.1	<56	1.6	<1900	<1	<1	<200	<4.0	<3.3	<15	17	480	2600
SR891	>100	1550	<73	>20000	75	<69	93	<10	<300	<3	<9	1.1	<9	<350	9	2.6	25	<0.99	<82	<61	1980.0	<1.2	<57	1.1	<1900	<1	<1	<210	<4.9	<3.3	<15	29	<460	<2000
SR892	23	457	<24	390	<56	<27	<44	<10	370	8	<5	1.0	<4	<100	12	1.4	<5	0.13	<51	47	648.0	1.0	<25	1.4	<1000	<1	<1	<120	3.3	1.9	13	<16	<200	<500
SR893	<5	17	<5	210	2	<10	41	<10	160	21	<2	1.1	3	<100	23	<0.5	<2	0.05	<20	280	22.9	1.5	<10	2.3	<200	1	<1	<20	5.9	3.7	<2	<5	<200	<500
SR894	150	1670	<63	1400	<164	<69	<120	<10	<270	8	<11	1.2	<10	<310	27	<2.0	<14	0.36	<130	200	800.0	1.4	<67	2.9	<2700	<2	<1	<310	<4.9	<3.1	42	<34	390	<1900
SR895	94	1400	70	630	<139	<60	<110	<10	510	10	<9	1.3	<9	<270	17	<1.7	<12	0.27	<110	<77	520.0	0.9	<59	3.0	<2300	<1	<1	<270	<5.3	<2.8	32	<27	<560	<1700
SR896	<5	19	19	500	2	<10	60	<10	270	10	<2	1.5	3	<100	21	<0.5	3	0.05	<20	200	23.6	2.1	<10	1.6	<200	<1	<1	<20	5.8	4.7	5	<5	<200	<500
SR897	8	60	130	1600	9	<10	36	<10	240	13	<2	4.3	<2	<100	19	<0.5	<2	0.07	<20	160	42.3	1.9	<10	1.8	<200	<1	<1	<20	5.6	4.4	6	<5	<200	<500
SR898	<5	37	30	570	6	<10	22	<10	480	13	<2	1.4	<2	<100	13	<0.5	4	0.07	<20	160	77.0	1.2	<10	1.1	<200	<1	<1	<20	5.2	3.2	4	<5	<200	<500
SR899	<5	14	<5	880	<1	<10	140	<10	79	26	<2	6.9	10	<100	52	1.4	<2	0.23	<20	310	5.5	25.0	<10	9.4	<200	2	1	<20	66.8	23.0	7	<5	270	<500
SR900	<5	315	240	640	5	<10	92	<10	220	16	<2	5.2	7	<100	42	1.6	47	1.00	<20	170	92.5	8.9	<10	5.4	<200	1	<1	<20	19.0	5.7	7	10	380	<500
SR901	8	120	150	1200	2	<10	83	<10	78	33	<2	7.1	4	<100	37	<0.5	<2	0.16	<20	510	37.1	16.0	<10	7.1	<200	1	<1	<20	33.0	10.0	10	<5	520	<500
SR902	9	157	110	600	4	<10	77	19	58	24	<2	>10.0	4	<100	38	<0.5	13	0.34	<20	490	14.0	16.0	<10	4.6	<200	<1	<1	<20	22.0	7.3	13	<5	2600	<500
SR903	<5	9	<5	1000	<1	<10	100	<10	160	12	<2	1.7	4	<100	42	0.9	5	0.18	<20	510	7.3	3.7	<10	4.8	<200	2	<1	<20	41.0	10.0	3	<5	<200	<500
SR904	8	85	130	850	3	<10	84	<10	280	13	<2	5.6	6	<100	31	<0.5	32	0.10	<20	310	20.1	12.0	<10	4.7	<200	<1	<1	<20	16.0	4.6	9	<5	470	<500
SR905	<5	96	80	390	3	<10	92	<10	75	16	<2	7.6	10	<100	42	0.9	2	0.40	<20	370	64.3	18.0	<10	6.2	<200	1	1	<20	39.0	10.0	8	<5	610	530
SR906	53	2320	460	630	179	<120	85	<10	<300	13	<9	7.6	<8	<310	45	2.9	254	# 0	<76	250	3620.0	22.0	<49	10.0	<1600	3	3	<210	33.0	12.0	<83	41	420	<1800
SR907	18	739	200	690	51	<44	150	<10	360	25	6	5.8	<5	<280	55	2.0	46	<0.24	<48	380	1750.0	25.0	<31	10.0	<1000	<1	<1	<120	35.0	17.0	24	26	<200	<1500
SR908	<5	59	<5	190	4	<10	160	<10	73	3	<2	3.2	6	<100	69	0.9	9	0.09	<20	220	60.9	4.4	<10	6.2	<200	1	<1	<20	48.0	6.9	4	<5	<200	<500
SR909	5	23	140	310	2	<10	99	<10	300	43	<2	3.0	4	<100	40	0.7	4	0.08	<20	390	28.5	12.0	<10	5.8	<200	1	<1	<20	14.0	5.7	10	6	2000	520
SR910	68	195	1600	350	24	170	66	<10	330	24	<2	6.7	<2	<100	35	0.8	<2	0.07	<54	300	295.0	7.0	<10	5.1	<680	<1	<1	<75	15.0	10.0	13	11	>30000	<500
SR911	<5	116	190	<100	8	14	69	11	350	36	<2	6.0	<2	<100	38	0.6	<2	0.06	<20	360	93.2	12.0	<10	6.4	<200	<1	<1	<20	20.0	15.0	12	8	1200	590
SR912	17	683	1070	720	<77	59	<89	<10	<190	17	<7	7.9	<7	<210	41	2.1	<9	0.15	<97	240	20.0	7.7	<47	8.4	<1900	<1	<1	<200	22.0	29.0	29	<30	18000	<1400
SR913	14	671	480	640	<72	<29	100	<10	290	13	<5	2.9	<6	<100	34	<0.5	11	0.11	<67	290	769.0	6.7	<30	4.9	<1200	<1	<1	<140	12.0	4.5	26	<23	1100	<1000
SR914	<5	363	190	260	<44	<22	95	<10	290	23	<4	3.7	7	<110	52	0.7	<4	0.12	<53	400	531.0	7.9	<22	6.8	<920	<1	<1	<100	20.0	3.2	15	<14	1200	<500
SR915	<5	356	340	430	23	<10	120	<10	95	24	4	7.5	4	<100	48	1.2	16	0.26	<20	320	200.0	16.0	<10	7.8	<200	<1	<1	<20	5.5	4.5	12	9	430	<500
SR916	7	148	310	510	9	<10	76	<10	170	15	<2	4.5	4	<100	38	0.8	27	0.09	<20	180	121.0	12.0	<10	5.2	<200	<1	<1	<20	6.6	3.7	7	5	240	<500
SR917	<5	46	<5	1400	<1	<10	140	14	80	33	2	5.1	8	<100	58	1.1	<2	2.50	<20	310	6.8	18.0	<10	9.1	<200	1	1	<20	34.0	10.0	9	5	<200	<500
SR918	<5	43	<5	1500	2	<10	100	11	180	18	<2	4.3	9	<100	40	0.8	<2	2.70	<20	310	6.0	16.0	<10	6.6	<200	<1	<1	<20	28.0	9.1	5	<5	<200	650
SR919	54	2130	1780	<1500	<201	<140	<320	<30	770	7	<22	7.3	<24	<730	31	<4.7	46	0.49	<270	320	480.0	3.3	<170	6.4	<6400	<4	<3	<720	<12.0	8.8	<65	<76	<1700	<4000
SR920	<5	60	40	590	2	13	120	19	210	28	3	7.5	6	<100	48	0.9	<2	0.57	<20	430	19.0	19.0	<10	8.8	<200	<1	<1	<20	31.0	9.2	12	6	1300	<500
SR921	16	183	430	130	11	39	99	40	240	19	<2	9.1	4	<100	37	0.8	78	0.06	<20	230	97.5	13.0	<10	6.5	<200	<1	<1	<20	24.0	21.0	11	6	8900	<500
SR922	34	484	160	220	49	26	<45	<10	520	10	<2	3.9	<2	<100	30	1.3	<6	0.12	<49	200	486.0	8.1	<10	4.6	<500	<1	<1	<71	16.0	3.6	17	<16	14000	<500
SR923	80	331	310	<100	32	<10	34	<10	330	7	<2	5.7	<2	<100	26	0.7	8	0.14	<20	150	310.0	7.2	<10	2.9	<200	<1	<1	<20	14.0	20.0	13	7	870	<500
SR924	65	455	170	<100	<46	70	<36	<10	320	10	<2	4.7	6	<100	31	<0.5	<4	0.44	<54	190	428.0	10.0	<10	4.6	<750	<1	<1	<87	16.0	5.2	14	<14	27300	<500
SR925	280	1590	280	<760	135	<84	<170	<10	340	<4	<12	3.1	<12	<380	9	<2.5	34	0.63	<160	<96	820.0	2.3	<85	<0.7	<3200	<2	<1	<370	12.0	17.0	30	34	>30000	<2400
SR926	<5	15	20	<100	<1	<10	93	<10	300	3	<2	1.5	6	<100	40	0.7	17	0.09	<20	270	7.9	4.3	<10	4.5	<200	1	<1	<20	23.0	4.3	6	<5	<200	<500
SR927	<5	38	<5	<100	2	<10	100	<10	310	10	<2	1.6	7	<100	43	1.1	<2	0.12	<20	260	29.7	6.0	<10	3.3	<200	2	<1	<20	29.0	4.6	5	<5	<200	<500
SR928	<5	286	120	130	7	<10	170	<10	290	12	<2	2.7	7	<100	71	1.3	3	0.07	<20	310	122.0	5.3	<10	9.0	<200	2	1	<20	20.0	3.5	20	11	<200	<500
SR929	<5	99	27	<100	3	<10	100	<10	230	2	<2	8.1	6	<100	46	<0.5	13	0.08	<20	28	63.1	4.3	<10	4.7	<200	1	<1	<20	37.0	3.7	18	<5	<200	<500
SR930	<5	18	26	200	1	<10	140	<10	220	9	<2	2.4	10	<100	63	1.4	55	0.10	<20	300	22.1	6.7	<10	7.5	<200	1	1	<20	25.0	4.3	9	8	<200	<500
SR931	<5	27	<5	1500	1	<10	99	33	<50	35	<2	6.4	3	<100	33	0.6	<2	2.10	<20	220	12.0	14.0	<10	5.4	<200	<1	<1	<20	6.2	5.2	12	<5	300	<500
SR932	78	3840	<160	<730	240	<160	140	<10	<410	<4	<12	5.5	<11	<430	130	3.1	<26	# 0	<100	110	>5000.0	2.3	<68	11.0	<2200	<2	<1	<290	106.0	14.0	<93	72	<730	<2500
SR933	<5	376	19	<100	8	<10	120	<10	280	10	<2	2.2	7	<100	46	1.8	7	0.10	<20	300	193.0	5.5	<10	5.9	<200	2	1	<20	37.0	5.7	9	14	<200	<500
SR934	<5	46	47	820	4	<10	92	14	210	18	<2	4.5	9	<100	38	0.6	9	1.10	<20	390	53.1	7.9	<10	5.8	<200	<1	<1	<20	21.0	4.9	21	<5	490	<500
SR935	<5	519	100	<100	<44	<10	<49	<10	450	3	<5	>10.0	<4	<100	24	1.0	<2	0.10	<43	200	376.0	4.6	<20	4.4	<780	<1	<1	<120	11.0	8.1	27	<11	560	<500

Appendix B.--continued.

Sample No.	Ag (ppm)	As (ppm)	Au (ppb)	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)
SR936	51	969	>10000	570	<83	<44	<110	<10	<230	7	<9	5.5	<9	<250	30	<1.8	27	0.18	<91	260	897.0	5.3	<53	4.3	<2000	<1	<1	<260	7.8	<2.2	<31	<20	<420	<1500
SR937	<5	102	160	640	5	<10	64	<10	270	21	<2	4.7	<2	<100	28	0.6	4	0.06	<20	340	47.3	7.1	<10	3.8	<200	<1	<1	<20	12.0	4.3	6	<5	1000	<500
SR938	6	42	63	690	2	<10	56	32	170	23	<2	8.7	3	<100	24	<0.5	<2	0.11	<20	480	19.0	9.0	<10	3.3	<200	<1	<1	<20	4.5	4.0	7	<5	430	<500
SR939	<5	14	<5	620	1	<10	34	29	99	19	<2	5.5	<2	<100	22	<0.5	<2	0.20	<20	260	10.0	5.6	<10	3.5	<200	<1	<1	<20	7.1	4.7	3	<5	890	<500
SR940	<5	92	8	<100	7	<10	53	<10	420	6	<2	4.0	4	<100	21	0.8	8	0.15	<20	320	93.5	2.6	<10	3.0	<200	2	<1	<20	10.0	2.8	11	6	<200	540
SR941	14	498	340	230	17	<10	69	21	240	17	<2	10.0	<2	<100	31	<0.5	<2	0.12	44	320	85.7	7.3	<10	5.3	<200	<1	<1	<20	10.0	15.0	37	5	570	<500
SR942	<5	80	120	260	6	<10	100	26	200	25	<2	10.0	3	<100	42	<0.5	<2	0.15	<20	450	67.9	8.3	<10	6.5	<200	<1	<1	<20	14.0	16.0	27	<5	1300	<500
SR943	<5	122	140	290	8	<10	140	13	370	15	<2	>10.0	11	<100	52	0.8	6	0.06	<20	340	94.0	5.8	<10	8.1	<200	2	<1	<20	81.0	19.0	36	7	780	<500
SR944	<5	255	<5	150	14	<10	500	<10	140	5	<2	7.2	18	<100	240	2.7	7	0.15	<46	320	123.0	12.0	<10	17.0	<200	<1	2	<20	54.9	8.7	38	16	350	1100
SR945	230	1000	190	<500	<96	<56	<120	<10	550	8	<10	5.0	<10	<290	25	<1.8	27	0.82	<120	<82	290.0	7.2	<64	4.7	<2500	<1	<1	<280	10.0	<2.7	<28	<37	5200	<1700
SR946	<5	17	<5	910	1	<10	150	<10	170	23	<2	6.6	15	<100	61	0.7	7	0.15	<20	430	13.0	15.0	<10	8.3	<200	2	<1	<20	68.0	20.0	19	<5	250	980
SR947	27	25	<5	1000	4	<10	25	<10	85	5	<2	<0.5	<2	<100	13	<0.5	<2	<0.05	<20	140	35.8	<0.5	<10	1.5	<200	<1	<1	<27	3.6	3.4	<2	<5	<200	<500
SR948	67	471	<25	680	66	<33	64	<10	<180	11	5	1.0	<5	<100	22	1.4	<7	0.14	<20	330	602.0	1.3	<31	2.3	<1100	<1	<1	<94	12.0	3.8	<2	18	<200	<500
SR949	>100	226	<20	1100	39	<25	61	<10	<140	9	<2	<0.5	5	<100	21	1.2	<6	0.09	<20	350	382.0	<0.5	<24	2.0	<840	1	<1	<72	6.2	6.4	<4	11	470	<500
SR950	>100	509	<28	18100	65	<37	71	<10	<210	7	<6	<0.5	<6	<200	19	<1.6	12	<0.11	<49	170	651.0	<0.5	<35	2.5	<1200	2	<1	<100	5.2	<1.7	11	15	670	<1100
SR951	<5	14	<5	1200	<1	<10	60	10	83	47	<2	4.0	5	<100	25	<0.5	13	0.82	<20	320	3.5	11.0	<10	4.8	<200	<1	<1	<20	23.0	6.0	23	<5	<200	690
SR952	<5	3	<5	530	<1	<10	10	19	220	4	<2	3.9	6	<100	<5	<0.5	12	0.36	27	160	2.4	8.5	<10	0.6	<200	1	<1	<20	2.6	2.3	28	<5	<200	<500
SR953	<5	20	<5	420	<1	<10	61	<10	93	12	<2	3.7	5	<100	21	<0.5	43	0.36	<20	250	13.0	10.0	<10	5.8	<200	1	1	<20	18.0	6.7	17	<5	840	530
SR954	<5	6	<5	400	1	<10	10	18	200	3	<2	4.1	6	<100	12	<0.5	77	0.40	<20	88	2.7	11.0	<10	2.9	<200	1	<1	<20	7.0	3.4	18	<5	210	<500

Appendix C.-- Assay data for samples taken in the Santa Rita Mountains Unit, Coronado National Forest, Arizona, analyzed by Chemex Labs, Inc.
[<, less than; >, greater than]

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR001	0.2	4.46	<2	150	0.5	<2	1.85	0.5	12	104	198	3.67	10	<1	0.87	20	1.19	475	8	0.28	18	620	12	2	10	176	0.22	<10	<10	59	<10	62
SR002	<0.2	0.65	6	120	<0.5	2	0.15	<0.5	3	180	59	0.82	<10	<1	0.19	10	0.17	760	6	0.07	9	120	16	<2	1	15	<0.01	<10	<10	4	<10	18
SR003	0.2	1.42	8	100	0.5	2	0.25	<0.5	4	169	149	1.97	<10	<1	0.35	20	0.44	740	4	0.07	11	140	12	2	2	11	0.07	<10	<10	20	<10	28
SR004	9.8	0.75	160	30	<0.5	12	0.03	<0.5	18	259	5534	4.46	10	<1	0.19	10	0.02	40	609	0.02	11	350	12	4	1	23	<0.01	<10	10	3	10	34
SR005	1.6	0.71	40	30	<0.5	<2	0.11	<0.5	6	207	3457	1.37	<10	<1	0.25	30	0.19	475	15	0.09	2	220	22	<2	1	21	<0.01	<10	<10	7	<10	68
SR006	10.0	0.72	128	20	<0.5	<2	0.11	<0.5	10	292	>10000	7.21	<10	<1	0.07	10	0.13	165	1306	0.02	13	220	38	4	1	20	<0.01	<10	<10	19	80	168
SR007	2.0	0.81	44	40	0.5	<2	0.10	<0.5	22	255	5916	2.53	10	<1	0.22	30	0.10	415	31	0.04	4	220	14	<2	1	21	<0.01	<10	<10	11	<10	78
SR008	5.4	0.66	86	30	0.5	2	0.07	<0.5	9	281	6743	2.38	10	<1	0.35	20	0.06	175	103	0.05	7	200	46	<2	1	11	<0.01	<10	<10	8	<10	88
SR009	0.4	1.04	28	80	1.0	<2	0.33	<0.5	4	134	11	1.32	<10	<1	0.49	30	0.23	670	19	0.05	6	370	30	<2	1	30	<0.01	<10	<10	8	<10	30
SR010	<0.2	1.01	26	40	1.0	<2	0.39	<0.5	4	116	10	1.21	<10	<1	0.43	30	0.23	465	2	0.03	4	380	18	<2	1	18	<0.01	<10	<10	9	<10	34
SR011	<0.2	1.02	6	30	<0.5	8	1.89	<0.5	5	113	14	1.83	<10	<1	0.23	20	0.47	585	1	0.09	7	420	20	<2	3	96	0.08	<10	<10	21	<10	46
SR012	0.2	0.44	18	20	<0.5	<2	0.09	<0.5	2	168	8	0.85	<10	<1	0.27	10	0.02	95	7	0.03	2	140	12	2	<1	8	<0.01	<10	<10	4	<10	6
SR013	<0.2	0.83	26	40	0.5	2	0.18	<0.5	4	128	25	1.37	10	<1	0.34	30	0.16	250	34	0.06	6	380	14	2	1	13	<0.01	<10	<10	6	10	30
SR014	1.2	1.20	24	110	1.5	<2	0.17	<0.5	2	133	10	1.05	10	<1	0.64	20	0.11	135	9	0.04	4	330	34	4	1	92	<0.01	<10	<10	7	<10	24
SR015	1.4	1.30	46	60	1.5	2	0.12	<0.5	2	154	13	1.23	10	<1	0.76	30	0.16	170	3	0.04	7	250	32	10	1	79	<0.01	<10	10	11	10	26
SR016	0.6	1.23	24	60	1.0	2	0.25	<0.5	6	150	21	1.37	10	<1	0.60	30	0.25	345	1	0.07	6	390	42	4	1	12	<0.01	<10	<10	11	<10	40
SR017	0.6	0.93	64	50	1.5	4	0.09	<0.5	2	125	7	1.19	10	<1	0.54	20	0.12	100	7	0.04	3	170	30	18	1	57	<0.01	<10	<10	8	20	18
SR018	2.8	0.79	44	40	1.0	2	0.08	<0.5	1	162	9	0.91	10	<1	0.47	20	0.07	105	16	0.03	7	110	20	6	1	59	<0.01	<10	10	6	<10	6
SR019	0.5	0.77	10	140	1.0	<2	0.52	0.5	5	75	83	1.26	<10	1	0.41	20	0.24	740	2	0.05	7	300	46	10	1	24	0.01	<10	<10	8	<10	90
SR020	0.5	0.69	30	1310	1.0	<2	0.15	<0.5	4	116	33	0.93	<10	2	0.47	20	0.10	585	4	0.03	7	220	40	5	<1	45	<0.01	<10	10	6	20	30
SR021	<0.8	1.23	35	130	2.0	12	0.15	<0.5	2	141	14	1.04	<10	<1	0.65	30	0.07	205	7	0.02	6	240	48	10	1	48	<0.01	<10	<10	7	10	14
SR022	0.8	0.96	34	100	1.5	2	0.19	<0.5	5	122	10	1.42	10	<1	0.48	20	0.09	300	5	0.07	4	400	2	4	1	14	<0.01	<10	<10	6	<10	22
SR023	1.0	1.06	4	160	1.5	4	0.20	0.5	3	144	11	0.89	10	<1	0.62	20	0.12	270	2	0.03	5	310	30	2	1	16	<0.01	<10	<10	7	<10	34
SR024	0.6	2.69	24	150	1.0	<2	>15.00	7.0	5	75	33	1.33	<10	<1	0.46	<10	2.23	930	2	0.01	20	680	274	<2	3	148	0.09	<10	<10	53	<10	908
SR025	27.8	0.31	28	100	<0.5	<2	>15.00	>100.0	8	28	277	0.47	<10	6	<0.01	<10	1.28	2455	106	0.01	15	340	9766	10	<1	58	<0.01	<10	<10	780	10	2040
SR026	0.8	0.21	<2	20	<0.5	<2	>15.00	2.5	2	31	6	0.27	<10	1	0.06	<10	0.44	385	4	<0.01	4	950	168	4	1	200	<0.01	<10	<10	19	<10	172
SR027	29.0	0.51	4	830	<0.5	<2	>15.00	24.0	3	27	58	0.37	<10	1	<0.01	<10	2.27	1265	50	<0.01	11	1080	4606	8	1	247	<0.01	<10	<10	79	<10	1104
SR028	<0.2	3.18	32	270	1.0	2	>15.00	<0.5	5	42	20	1.28	<10	<1	0.75	<10	1.56	430	3	0.02	9	320	52	8	3	85	0.05	<10	<10	32	<10	122
SR029	<0.2	1.84	<2	70	<0.5	2	>15.00	<0.5	6	61	16	1.57	<10	<1	0.29	<10	4.09	335	2	0.02	14	320	14	4	3	135	0.11	<10	<10	33	<10	34
SR030	<0.2	0.65	<2	50	<0.5	4	>15.00	0.5	1	11	12	0.30	<10	<1	0.10	<10	4.94	90	2	0.01	4	540	8	6	<1	133	0.01	<10	<10	10	<10	18
SR031	<0.2	3.73	14	280	<0.5	4	12.60	<0.5	21	247	13	3.96	<10	<1	0.65	<10	3.04	655	1	0.06	94	840	6	4	13	217	0.21	<10	<10	112	10	80
SR032	18.8	0.39	<2	20	<0.5	20	>15.00	10.0	2	85	46	0.77	<10	<1	0.01	<10	1.75	1340	4	<0.01	6	630	228	6	<1	134	<0.01	<10	<10	12	<10	318
SR033	76.0	0.12	14	940	<0.5	4	>15.00	30.0	3	54	1833	0.80	<10	<1	0.04	<10	0.12	140	93	<0.01	8	660	9946	12	<1	123	<0.01	<10	<10	14	10	2472
SR034	36.8	4.48	14	120	<0.5	8	10.93	>100.0	24	107	115	4.24	<10	2	1.09	<10	2.39	675	85	0.06	84	1410	>10000	<2	8	180	0.02	<10	<10	104	70	>10000
SR035	66.8	0.97	8	20	<0.5	<2	>15.00	8.0	4	42	41	0.74	<10	<1	0.25	<10	0.72	665	109	0.01	14	500	3948	8	1	270	<0.01	<10	<10	39	10	2260
SR036	6.4	4.23	20	170	0.5	2	>15.00	3.0	18	82	103	3.63	<10	1	0.88	<10	2.17	630	2	0.02	68	910	364	6	8	143	0.02	<10	<10	114	20	1142
SR037	106.8	2.07	40	20	1.0	4	12.73	9.5	14	55	133	2.72	<10	1	0.27	<10	2.60	595	64	<0.01	47	930	2894	18	3	106	<0.01	<10	<10	54	20	4416
SR038	34.6	0.31	<2	30	<0.5	<2	>15.00	6.5	2	81	100	0.54	<10	<1	0.01	<10	1.27	470	22	0.01	9	610	432	10	<1	111	<0.01	<10	<10	13	<10	636
SR039	19.0	2.12	4	60	<0.5	6	>15.00	8.5	12	49	45	1.94	<10	<1	0.37	<10	4.09	1055	10	0.01	34	650	408	6	4	147	0.01	<10	<10	51	<10	1130
SR040	115.4	2.16	44	40	0.5	4	13.96	4.0	12	79	388	2.79	<10	1	1.03	<10	0.95	255	19	0.01	41	790	170	24	4	80	<0.01	<10	<10	68	10	478
SR041	7.4	0.48	<2	40	<0.5	2	>15.00	2.0	2	28	11	0.36	<10	1	0.09	<10	4.88	405	4	0.01	9	290	76	6	1	177	<0.01	<10	<10	21	<10	226
SR042	114.6	2.80	2	200	0.5	4	>15.00	37.5	15	57	105	2.39	<10	1	0.66	<10	2.49	1445	13	<0.01	37	810	950	16	5	155	0.01	<10	<10	60	10	2796
SR043	23.2	0.59	26	10	<0.5	2	>15.00	28.0	3	149	65	0.83	<10	3	0.16	<10	0.68	670	326	<0.01	11	630	2544	24	1	102	<0.01	<10	<10	33	<10	2330
SR044	95.6	1.93	<2	30	<0.5	4	>15.00	70.0	8	79	156	1.60	<10	<1	0.67	<10	1.42	795	83	0.01	25	830	1818	24	3	160	0.01	<10	<10	44	20	3702
SR045	>200.0	0.52	6	70	<0.5	<2	13.34	16.5	2	178	426	0.76	<10	<1	0.17	<10	0.47	395	51	0.06	7	610	1246	94	<1	105	<0.01	<10	<10	34	10	1082
SR046	1.6	1.01	8	100	<0.5	6	>15.00	1.5	10	38	17	1.53	<10	<1	0.09	<10	3.58	355	8	0.04	30	620	62	6	3	158	<0.01	<10	<10	42	<10	244
SR047	24.0	0.47	2	30	<0.5	<2	>15.00	5.0	2	47	24	0.32	<10	<1	0.01	<10	1.37	1070	35	0.01	9	790	314	20	1	259	<0.01	<10	<10	16	<10	542
SR048	14.0	0.14	72	10	<0.5	<2	>15.00	9.0	3	20	95	1.17	<10	<1	0.01	<10	0.18	780	10	<0.01	10	300	256	24	<1	262	<0.01	<10	<10	30	10	866
SR049	<0.2	1.99	4	20	0.5	4	>15.00	0.5	4	58	11	0.90	<10	<1	0.48	<10	3.12	395	<1	0.01	11	280	26	6	2	245	0.07	<10	<10	22	<10	82
SR050	<0.2	0.08	<2	<10	<0.5	<2	>15.00	<0.5	1	<1	8	0.12	<10	<1	0.01	<10	0.15	120	<1	<0.01	1	<10	34	6	<1	79	<0.01	<10	<10	7	<10	20
SR051	0.6	4.18	16	80	<0.5	4	5.15	<0.5	26	302	63	5.12	10	1	0.58	<10	3.26	680	1	0.12	99	1020	50	8	16	207	0.45	10	<10	158	10	100
SR052	2.2	2.18	<2	<10	1.0	<2	10.90	3.0	6	71	4113	3.16	<10	<1	0.02	<10	0.51	3645	48	<0.01	9	340	84	4	4	29	0.12	<10	<10	22	150	1310
SR053	<0.2	1.12	<2	20	3.0	<2	>15.00	6.0	85	45	>10000	0.83	<10	<1	0.01	<10	0.45	2845	12	<0.01	26	430	2	6	3	147	0.07	<10	<10	17	170	446
SR054	0.2	1.27	<2	<10	0.5	<2	7.43	<0.5	9	207	935	2.72	<10	<1	<0.01	<10	0.69	2405	1660	<0.01	7	230	<2	8	2	26	0.08	<10	<10	6	<10	88
SR055	10.0	1.45	<2	30	1.5	<2	2.73	0.5	35	40	>10000	9.80	<10	<1	0.49	<10	2.39	2615	31	0.02	6	440	<2	2	6	18	0.03	<10	<10	44	180	588

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR056	<0.2	2.03	<2	10	0.5	<2	4.61	0.5	28	48	>10000	2.26	<10	<1	0.10	<10	0.72	2845	84	0.01	23	530	<2	4	7	36	0.12	<10	<10	49	390	530
SR057	10.8	1.26	24	10	<0.5	<2	2.22	0.5	33	135	>10000	>15.00	<10	<1	0.10	10	0.37	570	94	0.01	28	680	<2	6	4	45	0.08	<10	<10	76	20	428
SR058	183.2	0.12	206	260	<0.5	4	0.01	14.5	2	302	461	1.03	<10	18	0.10	<10	<0.01	75	249	<0.01	8	60	3292	522	<1	10	<0.01	<10	10	<1	<10	154
SR059	5.4	1.20	26	200	0.5	6	0.33	0.5	8	157	495	2.84	10	<1	0.55	40	0.57	1300	19	0.06	7	1020	186	12	6	34	0.04	<10	<10	22	<10	692
SR060	>200.0	0.26	176	8680	<0.5	4	0.04	20.0	4	264	3321	0.80	10	18	0.29	10	0.03	115	303	<0.01	6	170	8842	556	<1	352	<0.01	<10	10	4	10	266
SR061	6.4	0.66	8	280	0.5	<2	0.19	0.5	4	139	335	1.52	<10	1	0.43	10	0.24	960	16	0.01	6	690	680	20	1	19	<0.01	<10	<10	9	<10	506
SR062	0.8	0.77	10	90	<0.5	2	0.22	<0.5	1	167	157	2.03	10	<1	0.47	10	0.14	145	22	0.05	4	910	40	6	1	26	0.01	<10	<10	13	<10	64
SR063	1.2	0.64	18	170	<0.5	2	0.11	<0.5	3	179	117	2.65	10	<1	0.41	20	0.08	150	46	0.03	3	450	110	6	<1	21	0.01	<10	<10	15	<10	44
SR064	0.4	1.28	18	30	<0.5	6	1.05	<0.5	9	88	618	3.34	10	<1	0.67	30	0.74	430	47	0.03	8	510	8	2	7	32	0.08	<10	<10	38	<10	70
SR065	67.4	0.57	28	1210	<0.5	4	0.24	2.0	5	386	347	1.73	10	2	0.40	20	0.13	555	327	0.01	8	430	4684	80	2	41	<0.01	<10	<10	14	90	236
SR066	>200.0	0.30	38	90	<0.5	4	0.07	4.5	2	258	535	1.54	10	3	0.22	10	0.08	420	403	<0.01	6	220	4626	162	1	7	<0.01	<10	<10	10	<10	400
SR067	>200.0	0.36	82	70	<0.5	4	0.10	13.0	3	201	1309	1.59	10	19	0.29	10	0.09	185	752	<0.01	5	330	7628	404	1	10	<0.01	<10	<10	16	30	376
SR068	52.6	0.53	24	70	0.5	4	0.15	5.0	3	187	557	1.41	10	3	0.33	20	0.17	315	187	<0.01	4	430	1434	118	2	8	<0.01	<10	<10	25	<10	380
SR069	5.2	0.32	2	140	<0.5	2	0.40	<0.5	2	148	71	1.11	<10	1	0.38	10	0.06	460	16	<0.01	4	470	60	24	2	9	<0.01	<10	<10	4	<10	48
SR070	3.6	0.36	<2	150	<0.5	<2	0.27	<0.5	2	157	272	1.14	<10	<1	0.29	10	0.15	625	5	<0.01	6	800	56	18	2	9	<0.01	<10	<10	3	<10	46
SR071	56.2	0.32	8	60	<0.5	2	0.20	2.0	2	157	225	0.81	<10	<1	0.34	20	0.08	195	47	<0.01	4	470	204	40	1	7	<0.01	<10	<10	4	<10	236
SR072	1.8	0.60	8	400	0.5	4	0.20	<0.5	4	117	153	2.36	10	<1	0.43	30	0.13	890	52	0.01	1	600	266	4	3	29	<0.01	<10	<10	21	40	84
SR073	76.4	0.43	24	730	0.5	4	0.22	27.0	3	157	457	1.11	<10	6	0.40	20	0.12	430	238	<0.01	3	670	1758	98	2	33	<0.01	<10	<10	8	<10	2536
SR074	14.2	0.56	4	7910	0.5	6	0.23	<0.5	7	167	130	1.61	10	<1	0.36	20	0.16	1195	2159	<0.01	3	540	6350	14	3	297	<0.01	<10	<10	7	1750	494
SR075	1.8	0.75	<2	40	<0.5	<2	2.11	<0.5	7	160	92	2.66	<10	<1	0.50	20	0.44	2055	3	<0.01	6	820	2	8	3	42	<0.01	<10	<10	6	<10	34
SR076	<0.2	1.31	42	70	1.0	6	0.41	<0.5	10	112	859	4.03	20	<1	0.66	50	0.63	745	18	0.03	10	1180	<2	6	8	24	0.07	<10	<10	35	20	62
SR077	0.2	1.11	2	50	<0.5	6	0.41	<0.5	7	127	239	3.38	10	1	0.71	40	0.61	305	14	0.03	7	1140	2	2	7	8	0.07	<10	<10	21	<10	92
SR078	0.4	1.25	2	40	<0.5	10	0.40	<0.5	9	108	396	3.36	10	<1	0.54	30	0.68	440	32	0.02	8	1050	20	<2	6	27	0.05	<10	<10	18	<10	128
SR079	1.8	0.30	10	890	<0.5	2	0.06	<0.5	2	258	11	1.22	<10	1	0.26	<10	0.03	510	13	<0.01	4	100	152	2	<1	32	<0.01	<10	<10	2	560	60
SR080	18.6	0.71	14	<10	<0.5	<2	4.92	2.0	27	16	>10000	6.29	<10	<1	0.07	<10	2.32	1495	10	<0.01	10	190	<2	<2	1	4	0.03	<10	<10	25	150	772
SR081	2.8	0.98	92	40	<0.5	4	0.74	5.5	8	55	8346	10.84	10	1	0.24	10	0.50	910	171	<0.01	15	460	52	4	2	14	0.02	<10	<10	50	100	1800
SR082	<0.2	0.77	30	10	<0.5	2	8.56	0.5	7	113	1699	7.16	<10	<1	0.06	<10	0.23	1190	33	0.01	17	350	12	4	3	9	0.11	<10	<10	35	140	222
SR083	<0.2	2.54	38	110	1.0	8	0.19	<0.5	39	65	5779	7.83	20	<1	1.46	10	1.36	760	89	<0.01	16	820	<2	12	7	165	0.17	<10	<10	43	30	252
SR084	4.4	1.80	22	20	1.5	2	13.54	10.5	25	20	>10000	9.55	<10	<1	0.53	<10	2.01	3990	17	0.01	9	430	90	2	3	24	0.10	<10	<10	39	150	2954
SR085	2.8	1.88	14	10	7.0	<2	10.75	3.5	12	37	>10000	13.71	10	3	0.10	<10	1.34	5890	40	<0.01	12	530	<2	2	5	34	0.09	<10	<10	46	300	1108
SR086	<0.2	3.82	70	90	1.5	4	0.18	<0.5	64	69	>10000	9.00	30	<1	1.52	40	2.06	1885	48	0.02	30	530	<2	30	11	36	0.20	<10	<10	49	60	220
SR087	6.4	3.45	12	60	1.5	<2	8.99	3.0	14	34	>10000	8.68	<10	<1	0.28	<10	3.33	2730	101	0.03	10	470	<2	4	7	54	0.21	<10	<10	68	110	646
SR088	9.8	1.45	<2	30	3.0	<2	5.22	1.0	22	69	>10000	9.14	<10	<1	0.12	<10	1.72	2645	258	<0.01	20	810	2	4	3	21	0.07	<10	<10	27	130	558
SR089	17.6	3.36	86	380	1.5	<2	6.27	>100.0	86	51	>10000	5.83	<10	3	0.16	<10	2.17	7045	47	0.26	25	680	<2	6	4	267	0.11	<10	<10	61	120	>10000
SR090	3.8	0.98	<2	150	1.0	<2	>15.00	13.5	8	27	3359	2.86	<10	1	0.12	<10	2.77	4425	18	<0.01	6	260	46	6	2	57	0.03	<10	<10	21	180	1782
SR091	3.8	0.84	34	40	<0.5	<2	7.31	4.5	60	47	>10000	>15.00	20	<1	0.01	<10	0.29	1520	15	<0.01	21	810	<2	6	3	7	0.02	<10	<10	59	130	1290
SR092	22.6	0.94	138	20	<0.5	<2	8.07	13.0	48	58	>10000	>15.00	20	<1	0.08	<10	0.45	1105	17	<0.01	19	740	<2	<2	3	5	0.02	<10	20	104	260	>10000
SR093	28.6	0.62	208	40	<0.5	<2	>15.00	27.0	11	66	1077	6.55	<10	1	0.16	<10	0.95	3550	704	0.03	8	560	3732	268	1	42	0.02	<10	<10	179	50	2864
SR094	119.6	0.14	70	10	<0.5	8	5.15	22.0	2	160	726	1.22	<10	6	0.02	<10	0.10	1095	96	<0.01	9	110	2580	382	<1	10	<0.01	<10	<10	22	10	1930
SR095	18.8	0.33	220	30	<0.5	32	8.93	32.5	23	46	1875	5.92	<10	<1	0.01	<10	0.91	5550	7038	<0.01	9	640	>10000	130	1	37	0.01	<10	<10	25	90	>10000
SR096	2.0	0.75	8	50	<0.5	4	>15.00	11.5	6	50	217	0.94	<10	<1	0.01	<10	1.99	3285	55	0.01	6	560	728	10	1	122	0.01	<10	<10	14	10	1724
SR097	1.0	0.52	32	60	<0.5	<2	>15.00	6.5	9	70	311	3.22	<10	<1	0.01	<10	0.92	2680	12	<0.01	7	510	670	6	1	69	0.01	<10	<10	14	50	1120
SR098	0.2	0.33	6	20	<0.5	<2	>15.00	1.0	2	20	43	0.35	<10	<1	0.07	<10	1.04	315	72	0.01	3	140	230	10	<1	235	0.03	<10	<10	4	<10	192
SR099	>200.0	0.86	184	20	2.0	5050	6.35	69.0	62	98	>10000	9.20	<10	3	0.03	<10	1.60	4070	559	<0.01	12	580	4548	<2	4	70	0.02	<10	40	319	360	>10000
SR100	25.2	0.53	32	590	<0.5	138	>15.00	5.0	3	164	1316	1.24	<10	<1	0.24	<10	0.45	655	60	0.01	4	280	694	36	1	186	0.02	<10	<10	16	40	2270
SR101	3.4	2.23	26	30	<0.5	40	>15.00	7.5	7	92	2487	9.70	<10	<1	0.08	<10	0.51	3160	5	0.01	15	430	350	6	7	17	0.15	<10	<10	52	100	1816
SR102	11.8	1.31	34	<10	<0.5	140	>15.00	30.5	11	80	7257	10.73	<10	<1	<0.01	<10	0.57	2845	10	<0.01	8	320	540	<2	2	2	0.09	<10	<10	18	160	8628
SR103	73.4	1.38	30	40	<0.5	62	3.43	13.5	32	103	>10000	5.39	10	<1	0.22	<10	0.88	1055	27	0.02	43	1940	522	2	9	98	0.53	<10	<10	72	170	8162
SR104	6.6	1.40	16	70	<0.5	6	2.06	7.0	18	47	4663	3.12	10	<1	0.31	10	1.43	1245	8	0.03	30	2690	2322	2	9	126	0.56	<10	<10	88	20	2808
SR105	20.4	1.38	18	30	<0.5	<2	3.10	3.0	29	70	>10000	4.48	10	<1	0.23	<10	0.97	1330	7	0.03	57	1890	52	4	12	173	0.79	<10	<10	111	30	722
SR106	1.6	2.25	36	80	<0.5	4	1.92	22.0	98	60	2514	4.93	10	<1	0.29	10	1.82	1360	8	0.06	71	1730	1984	12	12	94	0.55	<10	<10	110	20	5114
SR107	9.8	0.61	50	60	<0.5	<2	0.13	4.0	69	64	5796	10.63	10	12	0.16	<10	0.08	1370	238	<0.01	14	360	5192	4	7	36	0.03	<10	10	74	20	1114
SR108	25.8	0.20	164	<10	<0.5	<2	11.67	4.5	16	64	>10000	11.01	<10	<1	0.02	<10	0.22	1285	171	<0.01	4	110	48	106	2	55	<0.01	<10	<10	51	320	1074
SR109	73.8	0.95	486	10	<0.5	1994	2.26	>100.0	145	101	>10000	3.57	40	11	0.13	<10	3.28	1855	13	<0.01	20	410	4052	2192	2	13	0.01	<10	<10	18	160	>10000
SR110	1.8	3.68	28	230	2.0	6	13.04	<0.5	7	51	464	2.67	<10	<1	0.30	<10	3.27	7270	8	0.02	8	390	46	16	3	82	0.08	<10	<10	10	10	338

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR111	9.8	1.22	28	20	<0.5	<2	5.89	1.0	13	97	>10000	6.79	<10	<1	0.41	<10	1.31	740	44	<0.01	15	560	<2	8	6	54	0.07	<10	<10	68	80	712
SR112	4.4	1.17	8	20	<0.5	<2	3.13	1.0	8	80	>10000	3.77	10	<1	0.28	<10	0.52	1095	25	0.01	10	380	280	2	4	13	0.09	<10	<10	42	60	590
SR113	14.8	0.64	4	40	<0.5	<2	3.47	69.5	40	36	>10000	3.83	<10	<1	0.30	<10	7.78	2775	13	0.01	10	460	32	<2	2	7	0.08	<10	<10	9	40	>10000
SR114	<0.2	3.11	36	80	0.5	4	14.06	4.0	11	62	339	2.61	<10	<1	0.98	<10	4.21	590	2	0.02	24	390	66	10	7	55	0.16	<10	<10	47	10	238
SR115	2.0	1.41	12	60	0.5	14	>15.00	5.5	7	65	117	1.10	<10	<1	0.22	<10	2.62	3480	<1	0.01	14	630	82	22	2	233	0.10	<10	<10	22	<10	932
SR116	12.2	1.90	8	30	0.5	132	4.71	>100.0	78	71	1280	2.76	<10	3	0.48	<10	0.39	8965	4	<0.01	24	1030	834	<2	3	27	0.04	<10	<10	46	240	>10000
SR117	4.0	0.84	12	20	<0.5	10	8.94	9.5	8	74	262	1.84	<10	<1	0.34	<10	0.32	1610	2	<0.01	45	190	192	6	2	30	0.03	<10	<10	18	10	3042
SR118	6.5	1.06	<5	120	1.0	<2	0.12	5.0	15	131	312	2.75	<10	<1	0.39	30	0.48	635	5	0.02	14	470	9214	5	2	31	<0.01	<10	10	16	<10	2124
SR119	12.0	0.61	<5	650	<0.5	<2	0.10	1.0	3	147	1013	3.65	<10	1	0.35	20	0.04	90	15	0.02	10	170	>10000	5	1	50	<0.01	<10	10	14	<10	606
SR120	2.5	0.59	30	90	0.5	4	0.28	1.0	2	114	90	5.11	<10	<1	0.40	20	0.07	135	12	0.03	8	240	2342	10	1	60	<0.01	<10	20	17	<10	244
SR121	<0.8	1.77	15	90	1.5	4	0.40	0.5	6	116	27	2.94	<10	<1	0.78	50	0.45	395	2	0.03	13	1010	306	5	5	11	0.03	<10	<10	50	<10	432
SR122	<0.5	0.86	<5	290	1.0	<2	0.21	4.0	13	143	62	2.59	<10	<1	0.48	50	0.13	1915	4	0.01	8	980	1174	10	3	29	<0.01	<10	<10	12	<10	1012
SR123	4.0	0.15	10	100	<0.5	<2	0.03	0.5	7	204	44	2.91	<10	<1	0.09	<10	0.01	360	8	0.01	9	90	714	5	<1	8	<0.01	<10	60	14	<10	290
SR124	2.5	0.75	<5	70	0.5	<2	0.15	1.5	4	129	154	2.22	<10	<1	0.45	50	0.09	580	2	0.02	1	910	3078	15	1	53	<0.01	<10	<10	8	<10	1394
SR125	4.0	0.80	15	430	3.0	<2	1.17	14.0	7	29	207	4.08	<10	<1	0.40	30	0.38	665	8	0.03	4	780	2668	5	2	33	<0.01	<10	<10	24	70	2858
SR126	<0.5	0.69	15	420	3.5	<2	3.58	8.5	14	49	53	2.56	<10	<1	0.45	50	0.10	3175	4	0.02	8	630	810	20	4	103	<0.01	<10	<10	9	<10	688
SR127	18.5	0.52	50	410	1.5	<2	0.21	6.0	13	123	410	4.22	<10	2	0.31	20	0.05	2535	11	0.02	8	370	>10000	185	2	46	<0.01	<10	<10	4	<10	3544
SR128	3.4	0.87	5	330	0.5	<2	8.15	9.0	5	83	121	1.77	<10	<1	0.34	<10	0.54	2260	7	<0.01	4	440	1812	30	2	132	<0.01	<10	<10	6	<10	1140
SR129	3.0	0.67	25	640	1.0	<2	8.95	9.5	7	84	153	1.96	<10	<1	0.36	<10	0.72	3300	18	<0.01	8	390	1278	35	2	189	<0.01	<10	<10	6	<10	1036
SR130	3.0	1.36	<2	430	2.0	<2	5.44	1.5	9	42	24	2.27	10	<1	0.77	30	1.11	610	<1	0.01	2	640	152	6	4	196	<0.01	<10	<10	13	10	146
SR131	14.0	0.15	<2	230	<0.5	8	0.01	3.0	16	331	216	3.45	<10	1	0.08	<10	0.02	8035	9	0.02	8	150	1356	16	<1	16	<0.01	<10	20	3	<10	286
SR132	>200.0	0.31	64	4510	<0.5	22	0.08	11.5	4	353	1020	1.37	<10	16	0.27	20	0.04	435	2	0.02	7	210	7858	510	1	72	<0.01	<10	<10	4	10	216
SR133	10.0	0.54	<2	4970	0.5	2	0.06	2.0	1	422	85	0.86	<10	<1	0.34	<10	0.04	50	7	0.01	2	120	358	14	1	111	<0.01	<10	<10	7	<10	174
SR134	62.0	0.88	<2	8900	0.5	<2	0.12	2.0	4	418	136	1.11	10	<1	0.50	10	0.11	90	28	0.01	2	420	1142	20	1	751	<0.01	<10	<10	12	10	80
SR135	5.0	1.20	12	6300	0.5	<2	0.14	<0.5	4	498	150	1.82	10	<1	0.58	20	0.13	225	3	0.01	6	240	248	24	3	119	0.01	10	<10	19	10	116
SR136	>200.0	0.14	118	260	<0.5	164	0.03	53.0	10	484	2926	3.19	10	<1	0.11	<10	0.01	40	7	0.01	7	80	6366	444	<1	1089	<0.01	<10	<10	3	30	4766
SR137	11.0	0.75	28	170	0.5	6	0.08	1.0	7	382	268	1.70	<10	<1	0.46	10	0.06	325	25	0.02	4	240	496	30	2	16	<0.01	<10	<10	10	<10	230
SR138	150.0	0.76	280	720	0.5	50	0.15	40.5	11	371	4180	2.82	<10	<1	0.54	<10	0.07	365	23	0.02	9	350	2944	588	2	265	<0.01	<10	<10	16	20	3756
SR139	>200.0	0.19	4	790	0.5	222	0.04	5.5	14	486	1115	6.12	<10	<1	0.14	<10	0.01	30	25	0.01	4	50	9220	68	<1	24	<0.01	<10	<10	5	30	488
SR140	177.0	0.62	50	70	<0.5	18	1.40	>100.0	10	272	450	3.18	<10	86	0.32	10	0.26	475	63	0.01	13	170	5516	190	2	33	<0.01	<10	<10	9	60	>10000
SR141	43.0	0.92	36	110	<0.5	6	0.09	6.0	4	299	73	2.51	<10	3	0.53	30	0.07	280	37	0.01	11	170	662	32	2	9	<0.01	30	<10	9	<10	560
SR142	>200.0	0.67	776	170	1.5	278	0.46	67.0	7	157	2316	2.81	<10	20	0.28	20	0.14	1390	4256	0.01	2	480	>10000	1434	2	14	<0.01	30	<10	21	20	630
SR143	37.0	2.40	40	320	1.5	26	0.73	9.5	9	79	1313	3.86	10	4	1.43	40	0.24	2565	7	0.02	6	750	1080	72	6	15	0.02	40	<10	18	<10	1060
SR144	28.0	1.51	20	240	0.5	18	0.17	3.5	7	290	650	3.30	<10	3	0.86	20	0.16	675	7	0.03	8	310	680	24	3	13	0.01	20	<10	15	<10	954
SR145	1.0	1.58	14	200	0.5	4	1.09	1.0	3	173	11	1.72	<10	2	0.79	30	0.53	520	2	0.07	10	320	70	4	2	31	0.03	<10	<10	34	<10	212
SR146	4.0	1.88	8	90	2.0	12	4.04	3.0	9	123	92	3.27	10	<1	1.06	20	0.99	5365	3	0.03	12	620	104	6	5	41	0.01	<10	<10	13	<10	584
SR147	48.0	1.02	42	260	0.5	6	0.07	1.0	4	162	341	2.32	<10	1	0.64	10	0.06	1030	3	0.02	5	220	1652	78	1	5	<0.01	40	<10	3	<10	150
SR148	105.0	1.21	28	220	1.0	8	0.16	2.5	7	206	671	2.77	10	2	0.68	30	0.12	445	3	0.04	3	650	3700	174	2	15	<0.01	40	<10	10	<10	374
SR149	120.0	0.87	48	1190	<0.5	4	0.12	4.0	2	342	571	1.70	10	<1	0.53	20	0.08	55	3	0.03	7	430	2020	230	1	28	<0.01	50	<10	8	<10	98
SR150	31.0	0.58	14	6180	0.5	8	0.14	2.0	5	152	178	1.66	<10	1	0.36	10	0.10	370	1	0.02	8	310	1112	40	1	78	<0.01	30	<10	5	<10	94
SR151	2.0	0.70	<2	200	<0.5	4	0.06	<0.5	2	175	102	2.02	10	<1	0.57	10	0.14	125	34	0.02	7	310	42	<2	<1	14	0.01	30	<10	8	<10	50
SR152	136.0	0.87	82	1720	1.5	<2	0.08	22.5	9	315	1012	1.71	10	9	0.36	10	0.09	1135	108	0.02	2	190	2122	518	1	37	<0.01	<10	10	11	100	320
SR153	27.0	2.31	40	290	3.0	<2	0.11	1.0	4	169	729	2.94	20	<1	1.42	40	0.22	415	32	0.03	<1	510	1178	128	3	55	0.02	<10	<10	26	120	226
SR154	9.0	4.33	66	360	2.5	8	2.02	2.0	26	62	4443	9.95	20	1	0.76	40	1.57	3660	3	0.01	16	820	18	6	7	73	0.16	<10	<10	44	70	2048
SR155	200.0	1.21	48	230	1.0	10	0.48	39.5	8	251	1113	2.89	10	41	0.56	10	0.15	950	29	0.02	9	270	976	508	2	10	0.01	30	<10	11	200	3080
SR156	4.0	3.24	14	100	1.0	40	2.21	4.0	18	118	1536	3.19	10	<1	0.91	30	1.01	1295	1	0.05	11	770	42	8	6	65	0.17	<10	<10	39	<10	2486
SR157	16.0	4.07	46	40	2.5	24	2.90	15.5	60	47	2394	13.03	20	<1	0.69	20	1.50	1895	<1	0.02	11	800	34	2	8	53	0.22	<10	<10	50	80	4762
SR158	2.0	2.28	24	170	<0.5	12	1.24	<0.5	8	102	333	11.73	20	<1	0.23	20	0.44	690	11	0.03	11	880	22	2	4	58	0.24	<10	<10	39	20	502
SR159	>200.0	0.16	202	>10000	<0.5	12	0.06	29.0	4	399	1219	0.78	10	17	0.09	<10	0.01	390	<1	0.01	8	160	>10000	1100	<1	475	<0.01	30	<10	<1	<10	114
SR160	4.0	2.68	22	250	2.0	6	0.23	1.0	23	127	299	4.18	10	<1	1.22	40	0.47	2065	2	0.04	7	640	2030	10	3	18	0.02	50	<10	46	<10	712
SR161	3.0	2.32	20	220	0.5	6	1.05	4.0	10	218	449	4.88	10	1	0.30	20	0.63	695	3	0.14	8	460	74	2	2	95	0.14	10	<10	30	60	632
SR162	1.0	4.64	156	230	3.0	4	1.97	5.0	13	52	510	4.54	20	<1	0.35	20	0.74	1310	1	0.15	14	770	368	8	9	119	0.30	<10	<10	58	10	2172
SR163	3.0	4.92	2	900	3.0	2	2.96	2.0	8	60	88	2.42	10	<1	1.07	20	1.23	705	<1	0.30	14	860	506	8	9	135	0.22	<10	<10	57	<10	334
SR164	1.0	3.63	14	200	4.0	6	0.84	<0.5	8	149	164	13.54	30	<1	0.71	20	0.50	440	3	0.11	1	740	42	<2	7	153	0.22	<10	<10	75	30	570
SR165	1.0	6.48	26	240	4.5	14	0.81	8.0	8	70	356	3.99	30	<1	2.50	30	1.42	2290	2	0.09	14	880	778	<2	13	56	0.27	<10	<10	103	30	1492

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR166	2.0	5.13	14	180	4.0	<2	0.68	2.5	18	82	431	3.65	30	<1	1.94	40	1.13	2020	1	0.04	5	1020	1884	2	9	24	0.33	<10	<10	97	20	1500
SR167	1.0	3.59	24	280	3.0	4	0.64	1.0	8	23	173	2.39	10	<1	1.07	20	1.10	490	1	0.14	6	480	296	<2	4	70	0.13	10	<10	30	<10	1430
SR168	1.0	4.29	12	170	3.5	10	1.12	1.5	8	45	243	3.82	20	<1	1.09	20	0.96	495	2	0.28	9	490	54	4	6	134	0.14	<10	<10	33	10	504
SR169	54.0	5.36	76	190	4.5	280	1.36	2.0	12	88	446	4.37	30	3	1.91	30	1.01	1565	8	0.24	8	860	5086	14	11	58	0.23	<10	<10	104	1230	1298
SR170	169.0	1.73	310	>10000	1.5	<2	0.12	62.0	4	266	583	1.72	10	<1	0.84	10	0.15	310	32	0.02	<1	780	9974	628	2	427	0.01	<10	<10	37	50	638
SR171	184.0	1.62	198	7000	1.5	<2	0.11	15.0	9	334	1075	1.68	10	<1	0.74	10	0.16	900	7	0.03	1	410	3054	448	2	105	<0.01	<10	<10	15	130	984
SR172	142.0	1.05	104	>10000	1.0	<2	0.07	18.0	5	479	362	0.98	10	2	0.57	<10	0.08	240	8	0.02	1	280	3026	240	1	385	0.01	<10	<10	13	30	406
SR173	72.0	1.03	164	640	1.5	154	0.14	5.0	8	362	332	2.55	10	3	0.52	10	0.12	845	9	0.01	4	240	5736	82	1	18	0.01	<10	<10	38	60	1102
SR174	23.0	2.11	68	430	2.5	2	0.20	2.0	8	271	206	1.95	10	3	0.99	20	0.23	655	4	0.02	5	400	1034	24	3	18	0.02	<10	<10	22	20	788
SR175	1.0	7.32	<2	130	3.5	<2	4.66	12.5	11	39	122	4.33	40	3	1.14	30	1.84	2100	1	0.04	9	880	226	6	14	204	0.25	<10	<10	72	30	1302
SR176	<1.0	5.97	12	200	2.0	<2	1.43	1.0	8	41	235	3.15	30	3	1.17	30	1.42	635	1	0.19	12	670	4	8	12	305	0.25	<10	<10	66	20	892
SR177	3.0	3.47	<2	50	5.0	6	5.75	15.0	14	37	2948	>15.00	30	<1	0.03	20	0.31	2110	4	0.19	7	1010	28	<2	4	153	0.13	<10	<10	37	50	5060
SR178	2.0	5.13	<2	20	4.5	18	3.48	8.0	10	66	2758	>15.00	40	<1	0.06	20	0.42	760	1	0.29	7	810	22	2	5	241	0.18	<10	<10	33	50	2682
SR179	<1.0	8.49	6	70	4.5	14	4.87	<0.5	5	86	894	4.39	40	1	0.95	30	1.56	685	3	0.63	13	740	58	16	11	217	0.28	<10	10	70	20	118
SR180	<1.0	7.71	16	80	4.5	<2	3.85	<0.5	12	83	848	4.99	30	<1	1.09	30	1.58	585	8	0.62	11	910	28	2	11	218	0.26	<10	<10	70	20	436
SR181	2.0	5.84	230	90	3.5	<2	2.14	6.0	10	27	436	3.83	30	4	0.71	20	1.65	1180	3	0.02	8	750	354	<2	11	140	0.23	<10	<10	62	10	946
SR182	2.0	6.68	12	140	3.0	<2	1.19	1.0	10	56	579	3.32	30	4	2.03	30	1.85	925	632	0.17	4	870	2546	<2	11	84	0.23	<10	<10	72	20	932
SR183	40.0	0.65	190	90	0.5	<2	0.08	4.5	5	399	255	1.13	10	<1	0.29	<10	0.09	675	33	0.01	3	140	1348	54	1	15	<0.01	<10	<10	9	10	458
SR184	>200.0	1.01	522	500	0.5	188	0.08	5.0	2	326	983	3.74	10	2	0.54	<10	0.07	50	1442	0.02	<1	1420	>10000	244	1	74	<0.01	<10	10	17	700	560
SR185	10.0	4.20	602	140	1.0	26	0.38	9.0	26	94	4225	>15.00	30	3	1.04	70	0.56	1110	130	0.02	<1	1240	192	6	10	497	0.03	<10	<10	92	50	1688
SR186	154.0	0.50	110	>10000	0.5	54	0.07	4.0	4	371	1318	3.13	<10	<1	0.20	<10	0.03	15	33	0.02	<1	160	>10000	170	<1	543	<0.01	<10	<10	6	80	554
SR187	31.8	0.64	110	2810	<0.5	24	0.32	19.0	4	62	1296	1.86	<10	1	0.19	10	0.21	530	58	0.01	2	460	7458	55	<1	80	<0.01	<10	<10	7	10	2462
SR188	76.0	0.93	1736	240	<0.5	18	0.16	10.0	4	439	1023	1.80	10	<1	0.40	<10	0.08	100	2173	0.03	<1	2300	>10000	170	1	28	<0.01	<10	10	27	270	954
SR189	66.2	0.36	165	160	<0.5	130	0.07	1.5	2	98	1415	2.27	<10	<1	0.16	<10	0.04	115	92	0.01	3	500	>10000	70	<1	16	<0.01	<10	<10	2	160	500
SR190	175.0	0.43	346	760	0.5	126	0.11	13.0	4	388	3714	5.58	10	3	0.21	<10	0.03	65	316	0.02	4	1440	>10000	148	<1	30	<0.01	<10	10	6	40	2786
SR191	77.0	1.17	258	510	0.5	22	0.10	>100.0	5	418	3003	2.56	10	<1	0.73	10	0.08	90	25	0.02	1	400	>10000	68	1	15	<0.01	<10	<10	8	340	>10000
SR192	>200.0	1.35	136	80	0.5	298	0.08	>100.0	4	367	2533	2.32	10	2	0.86	10	0.09	105	43	0.02	3	290	>10000	2	1	4	<0.01	<10	<10	8	60	>10000
SR193	17.0	3.78	2064	150	3.0	<2	0.29	40.0	9	158	476	3.41	20	<1	1.81	30	0.67	2080	33	0.02	7	580	6056	4	9	17	0.04	<10	<10	42	70	3482
SR194	20.0	5.81	1092	130	3.0	<2	1.63	14.0	13	54	572	4.18	30	<1	1.49	40	1.26	1220	162	0.14	15	880	>10000	8	11	175	0.19	<10	<10	68	120	2754
SR195	88.0	2.29	504	410	1.5	36	0.21	13.5	6	301	1368	4.80	10	<1	0.81	10	0.67	1875	1805	0.02	1	490	>10000	58	4	74	0.02	<10	<10	137	450	3482
SR196	38.0	3.95	1588	370	1.5	90	4.14	53.5	13	137	2343	5.12	20	<1	0.57	20	0.61	2470	8	0.07	10	760	3834	<2	7	296	0.17	<10	<10	57	70	>10000
SR197	171.0	0.71	2230	70	0.5	<2	0.10	19.5	2	434	1282	1.25	<10	<1	0.33	<10	0.09	1040	177	0.01	4	390	>10000	154	1	31	<0.01	<10	<10	26	230	1112
SR198	33.0	1.76	1984	110	1.5	26	0.20	10.5	3	336	802	3.74	10	3	0.87	10	0.23	830	32	0.02	4	570	9966	130	3	11	0.01	<10	<10	23	270	1032
SR199	23.0	1.89	92	110	0.5	108	3.61	19.0	5	94	1167	8.25	10	<1	0.19	<10	2.60	1665	9	0.02	<1	440	1994	44	3	55	0.09	<10	<10	30	50	3246
SR200	<1.0	1.07	<2	40	<0.5	<2	>15.00	4.5	2	11	33	0.80	<10	<1	0.06	<10	2.28	1245	1	0.03	2	280	194	4	1	728	0.05	<10	<10	13	20	748
SR201	>200.0	0.40	256	>10000	<0.5	<2	5.19	>100.0	3	194	1577	1.00	10	<1	0.11	<10	1.25	1590	52	0.02	<1	140	>10000	680	1	653	0.01	<10	<10	14	530	>10000
SR202	2.0	3.21	95	90	<0.5	<2	0.43	4.5	8	24	914	4.80	<10	<1	0.42	30	1.90	745	31	0.04	10	670	346	5	7	35	0.09	<10	<10	37	10	1144
SR203	21.2	0.54	410	100	<0.5	2	0.12	10.0	3	113	375	1.69	<10	3	0.20	<10	0.10	3495	137	<0.01	6	170	4598	45	1	12	<0.01	<10	<10	3	<10	1618
SR204	4.4	1.77	650	40	<0.5	<2	0.14	28.0	4	54	2277	>15.00	<10	<1	0.24	20	0.98	3370	27	0.02	7	720	382	5	5	41	<0.01	<10	<10	39	<50	5204
SR205	47.0	1.03	46	4180	1.5	10	0.10	1.5	10	95	273	2.20	10	5	0.68	20	0.10	1185	2	0.01	7	590	1030	90	2	62	0.01	40	<10	14	<10	678
SR206	21.0	1.96	34	170	1.5	136	0.26	12.5	14	105	1156	3.13	10	4	1.08	30	0.35	1415	2	0.01	8	730	1478	152	3	25	0.02	40	<10	18	20	>10000
SR207	68.0	1.96	48	120	1.0	34	0.18	3.0	9	170	410	2.28	10	5	1.04	40	0.17	1165	2	0.02	10	890	2056	48	4	16	0.01	50	<10	19	<10	5574
SR208	122.0	0.52	62	3160	<0.5	84	0.57	66.5	13	331	515	2.82	10	9	0.31	10	0.12	1415	<1	0.01	9	170	1602	264	1	58	<0.01	20	<10	6	10	9400
SR209	100.0	1.87	40	180	1.0	36	0.13	9.5	9	173	964	2.38	10	4	1.02	20	0.19	860	6	0.05	5	450	1054	86	2	11	0.01	50	<10	18	<10	1536
SR210	>200.0	0.69	84	1940	<0.5	214	0.11	4.0	7	153	1594	5.28	<10	7	0.31	10	0.09	410	6	0.02	8	600	7044	300	2	33	<0.01	20	<10	8	10	702
SR211	1.0	1.07	<2	80	0.5	18	>15.00	0.5	3	33	17	0.78	<10	<1	0.39	<10	1.25	425	<1	0.02	8	270	78	8	2	449	<0.01	<10	<10	19	20	82
SR212	<1.0	2.33	<2	60	0.5	8	>15.00	<0.5	4	61	11	1.16	<10	<1	0.46	10	2.09	230	<1	0.02	13	460	42	2	3	190	0.01	<10	<10	26	10	54
SR213	<1.0	2.23	<2	80	0.5	<2	>15.00	1.0	3	45	15	1.26	<10	<1	0.43	10	2.03	385	<1	0.02	17	430	24	2	3	416	0.01	<10	10	27	20	58
SR214	<1.0	2.06	<2	80	0.5	<2	>15.00	0.5	1	43	8	1.10	<10	<1	0.72	10	1.49	290	<1	0.02	12	450	34	<2	3	341	0.01	<10	10	24	20	36
SR215	1.0	2.30	<2	390	1.0	<2	2.29	<0.5	4	173	4	1.66	10	<1	0.97	50	0.56	655	1	0.02	2	420	38	2	2	93	<0.01	<10	<10	13	10	46
SR216	1.0	3.36	28	120	2.0	<2	1.44	<0.5	20	322	22	4.62	20	<1	0.52	40	1.95	1375	3	0.02	67	640	98	8	7	31	0.02	<10	<10	51	10	190
SR217	8.0	0.87	<2	30	0.5	666	0.12	0.5	4	75	39	0.41	10	<1	0.36	10	0.12	115	1	0.18	3	60	200	2	4	11	<0.01	<10	<10	8	<10	46
SR218	15.0	2.06	214	50	1.0	<2	0.36	44.0	4	57	104	2.82	10	<1	0.74	30	0.51	885	<1	0.03	<1	610	5228	<2	2	12	0.02	<10	<10	20	20	6574
SR219	1.0	2.33	<2	60	1.5	<2	0.24	10.0	3	51	24	2.02	10	<1	0.67	40	0.68	1160	<1	0.03	<1	580	762	2	3	14	0.01	<10	<10	25	10	1526
SR220	1.0	2.26	4	70	1.5	<2	0.19	12.5	6	61	55	2.66	10	<1	0.76	30	0.63	1340	<1	0.03	<1	650	782	<2	3	9	0.01	<10	<10	38	10	1940

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR221	10.0	2.57	30	60	2.0	<2	0.19	7.5	18	62	129	3.09	10	5	0.90	30	0.58	1050	3	0.01	2	710	6840	<2	2	11	0.01	<10	<10	21	30	7822
SR222	140.0	2.26	5548	40	2.0	<2	0.14	71.0	10	97	553	3.72	10	<1	0.84	60	0.33	485	2	0.02	1	650	>10000	14	2	28	0.01	<10	<10	21	40	3286
SR223	38.0	2.47	934	50	1.5	<2	0.15	>100.0	9	75	651	3.63	10	<1	0.86	40	0.51	955	2	0.02	1	500	>10000	<2	2	11	0.01	<10	<10	16	60	>10000
SR224	128.0	1.59	464	50	1.0	12	0.16	7.5	9	90	3551	2.75	10	<1	0.66	20	0.32	635	9	0.01	<1	650	>10000	28	1	16	<0.01	<10	<10	28	40	1940
SR225	59.8	1.02	94	160	<0.5	6	0.27	<0.5	3	123	19	2.15	10	1	0.43	20	0.23	340	8	0.02	6	280	12	<2	1	12	<0.01	30	<10	10	<10	30
SR226	0.6	2.20	12	120	0.5	4	0.27	<0.5	6	89	24	3.03	10	<1	0.48	40	0.52	165	4	0.05	10	540	14	<2	4	23	<0.01	40	<10	35	<10	46
SR227	2.2	1.66	28	70	0.5	4	0.47	<0.5	7	122	39	2.66	10	<1	0.53	30	0.28	215	27	0.04	12	700	22	2	3	19	<0.01	30	<10	18	<10	60
SR228	0.8	1.49	4	80	<0.5	6	0.28	<0.5	6	120	52	2.23	10	<1	0.47	30	0.37	395	2	0.04	11	550	22	4	2	21	<0.01	30	<10	21	<10	62
SR229	73.0	0.63	1474	50	<0.5	12	0.31	1.5	1	85	1046	5.68	10	<1	0.71	10	0.04	260	3	0.10	3	550	>10000	1064	1	7	<0.01	20	<10	12	<10	514
SR230	<1.0	1.19	40	580	1.5	<2	2.84	0.5	10	57	31	3.37	10	<1	0.54	40	0.22	1065	3	0.04	7	870	174	8	5	26	<0.01	<10	<10	9	<10	140
SR231	1.0	0.95	8	750	0.5	6	0.49	91.5	16	51	49	4.93	10	<1	0.45	30	0.12	3000	3	0.01	9	1150	164	<2	6	29	<0.01	20	<10	8	10	7632
SR232	14.0	0.88	442	50	<0.5	14	0.15	1.5	1	98	260	>15.00	10	1	0.37	20	0.08	1405	3	0.01	1	50	7618	196	4	15	<0.01	20	<10	327	<10	1826
SR233	2.0	1.01	58	580	0.5	6	6.31	2.0	10	61	54	2.56	<10	<1	0.49	10	0.15	8050	2	0.02	14	630	520	8	3	219	<0.01	<10	<10	20	<10	524
SR234	20.0	0.67	922	80	<0.5	16	0.23	4.0	<1	154	182	14.14	10	<1	0.30	20	0.07	990	5	0.01	3	160	5838	84	3	56	<0.01	30	<10	108	<10	1028
SR235	26.0	0.30	462	30	<0.5	4	0.09	1.5	1	114	144	11.54	<10	2	0.15	<10	0.03	1625	5	0.02	2	270	>10000	70	1	97	<0.01	<10	10	42	10	1070
SR236	2.6	0.38	50	970	<0.5	<2	3.85	5.0	8	82	62	3.78	<10	<1	0.30	30	0.84	1840	<1	0.04	9	830	1198	28	3	95	<0.01	<10	<10	44	<10	548
SR237	14.8	0.43	250	60	<0.5	46	4.32	26.0	2	105	205	6.23	<10	<1	0.21	<10	0.07	4575	10	0.02	1	240	>10000	66	1	86	<0.01	<10	<10	43	10	942
SR238	<1.0	0.69	24	60	0.5	4	>15.00	0.5	4	31	30	1.24	<10	<1	0.32	<10	0.88	495	<1	0.03	7	250	134	8	2	156	<0.01	<10	<10	19	<10	210
SR239	<1.0	0.92	18	280	0.5	2	14.70	<0.5	7	41	26	1.70	<10	<1	0.39	<10	0.37	1220	1	0.02	7	510	100	12	3	71	<0.01	<10	<10	15	<10	158
SR240	1.0	0.72	36	730	<0.5	12	7.10	<0.5	5	52	14	3.53	<10	<1	0.45	<10	0.13	5455	4	0.01	6	420	40	2	3	99	<0.01	<10	<10	26	<10	50
SR241	48.0	1.00	182	270	<0.5	34	2.56	>100.0	20	96	596	8.82	10	2	0.62	20	0.13	>10000	7	0.02	5	370	7404	14	3	231	<0.01	<10	<10	28	20	8110
SR242	<1.0	0.56	20	550	<0.5	6	>15.00	0.5	4	122	59	1.48	<10	<1	0.30	<10	0.21	5170	4	0.02	4	540	250	12	1	98	<0.01	<10	<10	8	<10	228
SR243	1.0	1.19	54	1400	0.5	14	8.84	<0.5	9	109	59	4.46	<10	<1	0.60	<10	0.31	9750	12	0.03	10	710	328	8	3	160	<0.01	<10	<10	22	<10	488
SR244	15.0	1.34	314	40	<0.5	20	0.16	18.0	4	54	1383	>15.00	10	3	0.44	20	0.10	>10000	8	0.02	6	470	>10000	2	3	139	0.01	20	<10	13	10	>10000
SR245	58.0	1.02	268	170	<0.5	32	0.31	54.0	22	52	1372	9.61	10	6	0.57	30	0.10	>10000	11	0.03	11	530	>10000	32	3	380	<0.01	40	10	<1	<10	3484
SR246	9.0	0.84	250	330	<0.5	26	8.28	45.5	15	37	663	9.78	<10	1	0.50	<10	0.16	>10000	31	0.02	9	360	3704	2	3	322	<0.01	<10	<10	23	20	6348
SR247	11.0	0.85	178	300	<0.5	22	9.18	41.0	11	28	464	10.95	<10	1	0.48	<10	0.23	>10000	7	0.03	4	410	3846	8	3	194	<0.01	<10	<10	32	20	1582
SR248	8.0	0.54	962	30	<0.5	18	5.42	10.0	2	34	155	>15.00	<10	<1	0.07	<10	0.16	680	99	0.01	12	<10	1730	30	2	25	<0.01	<10	20	50	20	1810
SR249	<1.0	0.45	104	90	<0.5	6	>15.00	2.0	3	13	2227	1.62	<10	<1	0.13	<10	1.53	1060	4	0.01	4	20	154	206	1	103	<0.01	<10	<10	11	<10	302
SR250	<1.0	0.76	22	20	<0.5	4	>15.00	0.5	6	18	12	1.13	<10	<1	0.30	<10	3.55	375	2	0.02	10	90	80	14	3	49	<0.01	<10	<10	18	<10	80
SR251	18.8	0.18	324	<10	<0.5	<2	0.07	21.5	1	230	221	2.79	<10	10	0.04	<10	0.01	305	81	0.02	10	210	5112	398	<1	6	<0.01	<10	<10	12	<10	1050
SR252	>200.0	2.24	1386	140	<0.5	36	10.77	>100.0	4	122	536	3.72	<10	227	0.44	<10	2.59	4150	691	0.06	12	1780	>10000	4224	4	469	0.02	<10	<10	238	80	4354
SR253	30.0	0.94	566	90	<0.5	64	1.80	81.0	8	70	366	5.15	<10	26	0.33	10	0.21	7630	430	0.02	15	790	>10000	1538	4	21	<0.01	<10	<10	115	60	>10000
SR254	>200.0	0.26	840	>10000	<0.5	18	0.94	>100.0	7	72	1371	3.89	<10	102	0.07	<10	0.43	1130	126	0.02	19	1770	>10000	4170	<1	325	<0.01	<10	<10	10	210	>10000
SR255	32.6	0.79	476	250	<0.5	18	0.30	10.5	8	99	6448	2.81	10	<1	0.42	30	0.13	920	<1	0.04	9	380	196	900	4	20	<0.01	40	<10	11	<10	794
SR256	2.6	1.15	12	280	<0.5	10	1.48	3.0	7	85	587	2.35	10	<1	0.46	40	0.46	700	<1	0.03	7	620	194	16	4	94	<0.01	20	<10	14	<10	294
SR257	44.8	0.44	718	570	<0.5	60	1.33	27.0	8	89	>10000	5.45	<10	<1	0.31	10	0.27	425	1	0.04	7	400	564	294	4	67	<0.01	<10	<10	8	100	2456
SR258	19.6	0.86	130	210	<0.5	6	0.83	8.5	5	79	3049	1.98	10	<1	0.44	30	0.22	485	2	0.04	<1	480	872	158	3	41	<0.01	<10	<10	11	<10	862
SR259	5.4	1.23	6	520	0.5	4	1.73	5.5	5	38	586	1.83	10	<1	0.51	30	0.34	4460	11	0.03	2	840	4626	<2	1	136	<0.01	<10	<10	2	10	1528
SR260	7.8	1.13	4	160	<0.5	<2	2.10	7.0	3	48	794	1.45	<10	<1	0.46	20	0.39	2820	2	0.03	<1	820	4666	<2	1	161	<0.01	<10	<10	2	<10	1698
SR261	7.8	1.11	14	90	<0.5	4	3.77	22.5	5	53	456	1.75	<10	1	0.36	20	0.53	5185	36	0.03	<1	630	3738	2	<1	173	<0.01	<10	<10	<1	10	2900
SR262	43.8	0.68	20	70	<0.5	20	0.34	97.5	9	68	6160	2.29	<10	<1	0.31	20	0.19	9935	16	0.03	1	630	>10000	<2	1	21	0.01	<10	<10	<1	50	>10000
SR263	30.4	1.10	6	130	0.5	26	0.73	<0.5	4	54	3921	1.34	10	<1	0.55	30	0.28	4160	1	0.04	3	470	20	<2	2	31	0.06	<10	<10	11	10	72
SR264	16.6	2.72	18	360	<0.5	14	0.99	<0.5	30	20	8758	5.65	10	<1	0.27	20	2.92	1415	<1	0.14	19	1670	18	4	10	42	0.12	<10	10	123	20	236
SR265	2.2	1.07	2	100	0.5	4	0.58	<0.5	3	64	844	0.87	10	<1	0.63	30	0.14	>10000	1	0.04	<1	460	92	2	1	97	0.09	<10	<10	8	<10	72
SR266	32.0	0.87	<2	110	1.5	4	3.13	<0.5	3	21	403	0.60	<10	<1	0.63	40	0.18	3500	<1	0.03	<1	550	18	4	1	85	0.01	<10	<10	3	<10	42
SR267	>200.0	1.50	6	100	1.5	10	3.15	<0.5	4	28	3904	1.41	10	<1	0.74	40	0.54	4170	<1	0.04	<1	580	26	14	2	154	0.04	<10	<10	11	20	120
SR268	>200.0	1.06	24	80	2.5	280	1.69	0.5	8	46	>10000	1.62	10	<1	0.59	60	0.27	4145	<1	0.02	1	800	42	22	2	66	0.02	<10	<10	7	50	134
SR269	1.8	1.45	4	70	0.5	2	5.21	<0.5	8	47	149	1.79	<10	<1	0.32	20	0.82	4860	<1	0.05	1	590	38	6	2	245	0.03	<10	<10	5	<10	132
SR270	135.4	0.93	4	80	0.5	80	1.33	0.5	4	59	>10000	1.63	10	<1	0.57	40	0.28	4035	8	0.03	2	600	186	12	2	44	0.07	<10	<10	4	<50	192
SR271	<1.0	1.89	<2	140	1.0	<2	0.40	<0.5	3	71	26	1.77	10	<1	0.92	30	0.34	325	<1	0.09	<1	580	54	<2	3	18	0.03	<10	<10	20	<10	58
SR272	63.0	1.16	<2	120	1.0	20	0.47	<0.5	6	171	>10000	4.07	10	<1	0.49	10	0.41	475	11	0.05	6	400	500	4	3	18	0.04	<10	<10	92	<50	136
SR273	33.0	0.77	<2	120	0.5	6	0.36	<0.5	2	97	4333	2.32	10	<1	0.42	30	0.26	255	2	0.08	2	670	60	2	4	20	0.02	<10	<10	36	<10	62
SR274	7.0	0.95	<2	120	0.5	<2	0.23	<0.5	3	144	796	2.66	10	<1	0.31	20	0.24	230	745	0.08	<1	570	60	4	3	29	0.14	<10	<10	28	280	38
SR275	1.0	1.00	<2	70	0.5	4	0.48	<0.5	11	195	2172	2.46	10	<1	0.44	10	0.49	350	32	0.12	2	550	60	<2	2	25	0.11	<10	10	33	140	52

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR276	3.0	0.66	<2	70	0.5	<2	0.38	<0.5	6	244	3517	1.69	<10	<1	0.27	10	0.22	225	159	0.07	3	340	50	2	<1	14	0.01	<10	<10	14	170	152
SR277	10.0	2.04	<2	90	1.0	54	0.57	<0.5	53	166	5815	10.96	60	<1	1.23	330	1.42	1130	1064	0.06	18	1110	52	14	11	24	0.12	<10	<10	115	20	168
SR278	7.0	0.56	2	190	<0.5	30	0.06	<0.5	4	295	1068	3.38	<10	<1	0.31	10	0.12	80	123	0.06	10	300	140	4	1	31	<0.01	20	<10	69	<10	38
SR279	<1.0	2.81	<2	120	1.5	<2	0.88	<0.5	22	165	212	3.97	20	<1	0.91	30	0.68	500	13	0.04	16	1680	48	2	6	56	0.02	<10	10	68	10	54
SR280	1.0	1.15	<2	290	1.0	34	0.10	<0.5	5	275	60	7.47	10	<1	1.32	20	0.10	85	18	0.21	3	480	52	<2	1	74	0.01	<10	<10	25	10	20
SR281	1.0	0.63	<2	230	<0.5	8	0.10	<0.5	2	150	255	4.51	10	<1	0.46	30	0.11	95	68	0.06	1	430	24	4	1	66	0.01	<10	<10	21	<10	16
SR282	1.6	1.00	<2	60	<0.5	30	0.66	<0.5	8	170	941	3.29	<10	<1	0.37	10	0.55	220	27	0.08	12	330	22	2	1	24	0.01	<10	20	20	<10	26
SR283	2.0	2.28	<2	70	1.0	<2	1.59	<0.5	15	312	597	2.81	10	<1	0.61	10	0.89	1230	1	0.05	7	620	34	<2	4	34	0.13	<10	<10	62	10	134
SR284	8.0	2.29	<2	90	1.0	<2	0.83	<0.5	53	254	5063	5.10	10	2	0.49	10	2.07	1925	1	0.04	16	480	106	<2	4	16	0.15	<10	<10	115	10	316
SR285	2.6	1.12	14	40	<0.5	2	0.15	<0.5	11	184	34	3.00	<10	<1	0.32	20	0.60	470	9	0.06	8	530	106	2	2	13	0.02	<10	10	41	<10	82
SR286	2.8	1.77	10	20	<0.5	<2	0.18	1.0	11	159	134	3.09	<10	<1	0.36	20	1.07	3505	6	0.07	13	640	1196	<2	2	8	<0.01	<10	<10	45	<10	582
SR287	0.8	1.27	<2	40	<0.5	<2	0.28	2.0	8	200	61	2.78	<10	<1	0.32	20	0.84	1505	19	0.09	15	550	210	2	2	19	0.02	<10	<10	47	<10	298
SR288	1.2	1.36	<2	30	<0.5	<2	1.94	5.5	5	205	222	2.92	<10	<1	0.36	40	0.83	2115	3	0.06	16	600	644	<2	2	55	0.01	<10	<10	49	<10	1248
SR289	10.8	0.81	<2	70	<0.5	6	0.50	36.0	3	206	560	1.61	<10	<1	0.65	10	0.10	510	32	0.03	10	420	>10000	<2	<1	20	<0.01	<10	<10	6	<10	7292
SR290	10.2	1.84	<2	130	<0.5	8	2.69	>100.0	31	100	3602	5.61	<10	<1	0.73	30	0.61	3570	151	0.03	17	640	>10000	<2	2	61	0.01	<10	<10	39	80	>10000
SR291	2.0	2.05	<2	30	0.5	<2	1.43	4.0	7	101	149	3.12	10	11	0.43	40	1.11	4580	4	0.05	16	400	1368	2	2	23	<0.01	<10	<10	42	<10	1180
SR292	4.6	0.89	2	30	0.5	<2	1.23	5.0	3	126	1952	1.37	<10	<1	0.42	30	0.30	335	310	0.03	10	430	370	4	1	18	<0.01	<10	<10	11	<10	672
SR293	0.4	1.37	6	30	<0.5	<2	0.76	1.5	6	92	72	1.33	<10	<1	0.21	10	1.33	2120	38	0.10	12	220	184	2	6	24	<0.01	<10	<10	68	<10	380
SR294	24.8	1.24	<2	80	<0.5	6	0.10	20.5	8	150	6194	2.87	<10	<1	0.55	20	0.39	2495	10	0.02	8	790	6794	<2	2	4	<0.01	<10	<10	13	10	4090
SR295	7.2	1.77	2	40	<0.5	4	0.73	34.0	16	153	1906	3.54	<10	<1	0.48	30	0.74	2290	7	0.02	11	540	2912	<2	2	12	<0.01	<10	<10	29	10	6866
SR296	34.4	2.21	<2	130	<0.5	<2	0.06	5.5	22	228	4317	8.11	10	<1	0.37	10	0.62	7105	27	0.02	8	730	4074	<2	3	5	<0.01	<10	<10	53	10	1764
SR297	2.0	1.62	<2	80	<0.5	<2	0.52	10.5	11	145	69	2.21	<10	<1	0.41	10	0.86	4525	19	0.02	14	660	2592	<2	2	15	0.01	<10	<10	36	<10	2358
SR298	14.2	3.09	<2	120	<0.5	16	0.32	8.0	24	116	1634	4.68	10	<1	0.60	30	1.40	9575	24	0.02	14	1120	3366	<2	6	13	0.05	<10	<10	77	10	2390
SR299	1.8	1.44	<2	60	<0.5	<2	0.33	11.5	11	187	311	2.37	10	<1	0.42	20	0.72	3080	3	0.02	12	750	810	<2	2	7	<0.01	<10	<10	39	<10	1696
SR300	7.2	3.36	4	120	<0.5	<2	2.09	45.5	23	90	1032	4.72	<10	3	0.64	30	1.75	>10000	7	0.02	18	1220	5696	2	4	19	<0.01	<10	<10	62	20	8858
SR301	30.8	1.26	8	110	<0.5	12	0.16	>100.0	20	265	5602	2.63	<10	<1	0.42	10	0.55	3055	79	0.02	11	690	>10000	<2	2	6	<0.01	<10	<10	26	80	>10000
SR302	28.0	2.41	<2	120	<0.5	4	0.26	59.5	21	154	4510	4.11	10	<1	0.54	20	1.22	6725	91	0.02	12	1060	>10000	8	4	14	0.01	<10	<10	57	40	>10000
SR303	9.4	2.74	<2	90	<0.5	6	0.47	52.5	21	166	2702	4.11	10	<1	0.61	20	1.46	6215	13	0.03	13	1100	>10000	<2	4	13	0.01	<10	<10	68	30	>10000
SR304	18.4	1.89	<2	80	<0.5	<2	0.20	31.0	14	234	6634	3.94	<10	<1	0.55	10	0.87	4425	11	0.02	11	810	5892	2	3	8	<0.01	<10	<10	39	20	6870
SR305	8.4	0.95	<2	80	<0.5	14	0.15	18.5	6	131	2098	2.59	<10	<1	0.73	30	0.10	1815	23	0.02	2	130	3750	<2	1	4	<0.01	<10	<10	4	10	3650
SR306	41.0	1.71	4	70	<0.5	90	0.11	0.5	18	199	2965	9.88	10	<1	0.33	10	0.33	1615	31	0.04	10	820	>10000	2	3	15	0.01	<10	10	63	10	468
SR307	5.6	3.51	14	70	<0.5	6	1.02	12.5	26	99	913	6.58	<10	<1	0.52	10	1.79	7970	3	0.03	25	940	1028	2	6	33	0.10	<10	<10	87	20	1952
SR308	>200.0	2.57	12	330	<0.5	2180	0.95	28.0	44	131	>10000	10.80	10	<1	0.64	60	0.78	4545	88	0.02	19	940	>10000	<2	4	27	0.01	<10	<10	50	90	3902
SR309	21.8	3.88	4	80	<0.5	34	0.33	1.5	66	95	2268	9.45	<10	<1	0.53	10	1.81	8600	4	0.03	28	1160	1496	<2	7	15	0.10	<10	<10	116	30	852
SR310	0.6	1.58	<2	80	<0.5	2	1.01	3.5	11	101	104	3.95	<10	<1	0.48	30	0.68	1925	8	0.08	13	970	56	<2	3	35	0.15	<10	<10	50	10	562
SR311	1.8	2.15	<2	20	<0.5	<2	1.21	2.0	20	84	81	5.12	<10	<1	0.24	10	1.43	4085	1	0.12	22	1250	446	4	6	68	0.23	<10	<10	132	<10	558
SR312	4.8	0.83	<2	40	0.5	6	0.33	1.0	4	208	1337	1.76	10	<1	0.42	40	0.27	525	15	0.03	3	410	234	2	1	9	<0.01	<10	<10	12	<10	160
SR313	119.6	0.48	4	70	<0.5	198	0.41	76.5	8	296	>10000	2.09	<10	<1	0.49	20	0.01	290	28	0.02	4	110	6424	16	<1	9	<0.01	<10	10	2	20	6172
SR314	3.2	0.52	<2	60	0.5	4	0.08	0.5	1	267	240	0.63	<10	<1	0.51	40	0.02	175	42	0.03	5	40	180	4	<1	4	<0.01	<10	<10	2	<10	70
SR315	84.8	1.30	1010	50	<0.5	40	1.21	>100.0	5	18	8821	1.72	10	<1	0.65	50	0.20	1320	46	0.04	<1	130	>10000	1605	1	31	<0.01	<10	<10	3	<10	9546
SR316	4.8	0.73	45	20	0.5	<2	0.94	9.0	2	20	561	0.49	10	<1	0.48	50	0.07	510	2	0.07	<1	230	2936	120	<1	21	<0.01	<10	<10	2	<10	582
SR317	1.4	0.61	15	50	<0.5	<2	0.31	0.5	1	57	147	1.21	<10	<1	0.25	30	0.20	335	3	0.12	1	250	1074	25	1	12	0.02	<10	10	8	<10	164
SR318	40.4	1.03	30	40	<0.5	36	0.12	>100.0	17	34	5898	2.55	10	<1	0.44	30	0.08	395	1	0.06	2	180	>10000	35	1	10	<0.01	<10	<10	5	70	>10000
SR319	11.0	0.69	<5	30	<0.5	8	0.28	81.5	3	41	472	1.05	10	<1	0.32	40	0.07	320	6	0.07	<1	290	6400	5	<1	11	<0.01	<10	10	3	10	9594
SR320	2.0	0.80	6	20	1.5	<2	0.15	1.5	2	253	111	0.97	10	<1	0.27	40	0.05	90	306	0.04	4	220	1142	2	1	11	<0.01	<10	<10	4	<10	1246
SR321	24.4	0.72	8	20	0.5	12	0.17	57.0	6	231	8014	1.46	10	1	0.30	40	0.05	115	4	0.04	1	310	>10000	12	1	8	<0.01	<10	200	2	10	5272
SR322	3.6	1.26	<2	20	0.5	8	1.16	1.0	4	227	291	2.58	10	<1	0.48	60	0.11	880	3	0.06	4	340	24	6	1	17	<0.01	<10	<10	4	<10	102
SR323	<0.2	0.41	<5	20	<0.5	<2	0.09	<0.5	2	63	9	0.76	<10	<1	0.09	10	0.02	65	2	0.03	<1	120	62	5	<1	6	<0.01	<10	<10	5	<10	16
SR324	2.8	0.36	6	10	<0.5	2	0.07	0.5	8	270	82	0.90	<10	1	0.31	20	0.01	40	15	0.03	6	30	248	12	<1	2	<0.01	<10	<10	1	<10	42
SR325	9.6	0.48	8	10	0.5	10	0.31	9.0	13	365	1012	0.72	10	1	0.39	30	0.04	140	6	0.09	6	220	1018	20	<1	7	<0.01	<10	30	1	<10	538
SR326	4.4	1.17	<5	30	3.5	<2	0.69	19.0	6	54	521	1.56	10	<1	0.34	50	0.45	1635	1	0.09	6	610	1332	5	3	18	<0.01	<10	<10	11	<10	1586
SR327	114.0	1.21	<5	20	0.5	140	1.44	>100.0	10	29	>10000	2.06	10	<1	0.30	20	0.61	3140	9	0.10	12	<200	>10000	40	3	51	<0.01	<10	<10	10	<50	>10000
SR328	<0.2	0.36	<5	20	1.0	<2	2.90	<0.5	<1	201	17	0.49	10	<1	0.14	10	0.02	330	1	0.03	6	120	<2	5	<1	33	<0.01	<10	<10	4	<10	18
SR329	<0.2	0.26	<5	40	<0.5	<2	0.14	<0.5	<1	166	21	0.41	<10	<1	0.11	<10	0.01	40	3	0.03	5	70	<2	5	<1	8	<0.01	<10	<10	3	<10	20
SR330	<0.2	0.27	<5	50	<0.5	10	0.03	<0.5	<1	159	2	0.43	<10	<1	0.08	<10	0.01	60	2	0.02	8	80	4	5	<1	5	<0.01	<10	<10	4	<10	18

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR331	<0.2	0.22	<5	50	<0.5	<2	0.02	<0.5	2	153	3	0.43	<10	<1	0.05	<10	<0.01	60	2	0.03	7	110	4	5	<1	4	<0.01	<10	<10	2	<10	16
SR332	<0.2	0.24	10	70	<0.5	<2	0.03	<0.5	<1	158	1	0.43	<10	<1	0.07	<10	0.01	85	1	0.02	3	170	<2	5	<1	5	<0.01	<10	<10	3	<10	16
SR333	<0.2	0.33	5	50	<0.5	<2	0.03	<0.5	<1	150	2	0.42	<10	<1	0.06	<10	0.01	90	3	0.03	5	90	<2	5	<1	4	<0.01	<10	<10	4	<10	18
SR334	0.2	0.30	<5	70	<0.5	8	0.05	<0.5	<1	180	3	0.43	<10	<1	0.07	<10	0.01	125	1	0.03	5	120	<2	5	<1	6	<0.01	<10	<10	3	<10	20
SR335	0.2	0.24	<5	50	<0.5	6	0.05	<0.5	3	150	12	0.34	<10	<1	0.05	<10	0.01	120	<1	0.03	5	110	<2	5	<1	4	<0.01	<10	<10	2	<10	16
SR336	<0.2	0.61	<5	60	<0.5	4	0.02	<0.5	5	177	8	0.50	<10	<1	0.37	<10	0.03	165	2	0.02	4	240	14	5	<1	4	<0.01	<10	<10	5	<10	22
SR337	3.6	0.64	<5	90	<0.5	<2	0.03	<0.5	5	153	9	0.37	10	<1	0.50	30	0.04	75	86	0.02	4	120	210	5	<1	7	<0.01	<10	<10	4	<10	56
SR338	<0.2	0.49	<5	70	<0.5	<2	0.04	<0.5	2	216	5	0.49	<10	<1	0.23	10	0.02	60	2	0.03	<1	170	<2	5	<1	8	<0.01	<10	<10	4	<10	20
SR339	8.2	0.75	5	40	<0.5	12	0.07	<0.5	4	100	1028	4.39	<10	<1	0.25	30	0.12	110	21	0.08	1	870	28	5	2	17	0.01	<10	<10	9	<10	40
SR340	0.4	0.34	10	50	<0.5	<2	0.09	<0.5	3	196	19	0.46	<10	<1	0.17	10	0.03	110	1	0.04	1	260	8	5	<1	8	<0.01	10	<10	3	<10	28
SR341	<0.2	0.27	<5	70	<0.5	4	0.05	<0.5	2	182	8	0.41	<10	<1	0.12	10	0.01	55	<1	0.03	3	160	<2	5	<1	8	<0.01	<10	<10	1	<10	8
SR342	<0.2	0.42	<5	50	<0.5	2	0.05	<0.5	3	180	20	0.45	<10	<1	0.17	<10	0.02	65	2	0.04	<1	130	<2	5	<1	7	<0.01	<10	<10	3	<10	10
SR343	0.6	0.39	<5	90	<0.5	<2	0.05	<0.5	3	226	51	0.57	<10	<1	0.14	<10	0.02	220	2	0.03	3	270	38	5	<1	12	<0.01	<10	<10	4	<10	40
SR344	0.2	0.31	<5	60	<0.5	<2	0.04	<0.5	<1	159	308	0.38	<10	<1	0.11	<10	0.01	105	2	0.03	1	160	42	5	<1	7	<0.01	<10	<10	2	<10	34
SR345	<0.2	0.41	<5	40	<0.5	8	0.04	<0.5	1	126	130	0.38	<10	<1	0.29	20	0.03	135	17	0.03	1	110	38	5	<1	4	<0.01	<10	<10	1	<10	40
SR346	2.4	0.47	2	10	0.5	2	0.39	>100.0	8	144	161	0.60	<10	<1	0.22	30	0.03	295	1	0.14	4	360	5898	8	1	9	<0.01	<10	<10	1	10	>10000
SR347	0.6	0.59	2	30	2.0	<2	0.13	<0.5	3	216	6	0.90	10	<1	0.44	30	0.08	845	2	0.03	4	260	18	2	<1	11	<0.01	<10	10	5	<10	30
SR348	1.8	0.73	4	70	2.5	8	0.15	<0.5	6	191	20	1.43	10	<1	0.40	60	0.14	1240	3	0.06	6	380	62	<2	1	14	<0.01	<10	<10	6	<10	52
SR349	0.4	0.80	<2	20	4.0	<2	0.12	<0.5	2	169	7	0.96	10	<1	0.68	60	0.11	330	1	0.03	4	360	32	<2	1	6	<0.01	<10	<10	4	<10	30
SR350	0.8	0.73	<2	20	1.5	2	1.43	<0.5	4	216	12	0.96	10	3	0.56	60	0.09	880	7	0.04	6	390	8	4	<1	20	<0.01	<10	<10	4	<10	18
SR351	0.6	0.96	<2	10	1.5	8	0.69	2.0	4	264	29	1.27	20	1	0.45	50	0.18	405	11	0.06	6	190	98	2	1	6	<0.01	<10	<10	9	<10	144
SR352	0.8	1.31	<2	40	1.5	2	0.58	<0.5	3	149	6	3.30	10	<1	0.66	70	0.09	145	12	0.03	4	540	74	2	1	39	<0.01	<10	<10	3	10	52
SR353	<0.2	0.93	<2	20	1.5	2	0.68	<0.5	1	178	9	1.07	10	<1	0.59	30	0.06	145	180	0.04	6	620	16	<2	1	41	<0.01	<10	30	1	<10	8
SR354	<0.2	0.78	<2	20	1.5	2	1.23	<0.5	2	170	4	0.83	10	<1	0.53	50	0.07	230	4	0.01	3	150	52	<2	<1	40	<0.01	<10	20	1	<10	56
SR355	0.4	0.68	<2	30	2.5	<2	1.09	<0.5	2	121	6	2.09	10	<1	0.57	40	0.09	675	11	0.07	4	140	12	<2	1	29	<0.01	<10	<10	4	<10	20
SR356	13.2	0.71	<5	80	<0.5	<2	0.17	<0.5	<1	22	4614	0.90	<10	<1	0.40	<10	0.10	245	6	0.06	<1	480	382	5	1	12	<0.01	<10	10	4	<10	292
SR357	6.2	0.56	<5	60	0.5	40	0.15	<0.5	5	6	>10000	0.51	<10	<1	0.30	<10	0.12	445	4	0.05	3	<200	266	5	2	9	<0.01	<10	10	4	<50	338
SR358	11.2	0.44	<5	40	<0.5	8	0.02	<0.5	38	69	4	5.94	<10	<1	0.46	20	0.01	20	7	0.07	<1	100	284	5	<1	6	<0.01	<10	<10	<1	<10	50
SR359	2.8	0.81	<5	40	<0.5	2	0.04	4.5	1	57	168	1.61	<10	<1	0.50	50	0.05	230	56	0.05	<1	390	3028	5	1	10	<0.01	<10	<10	3	<10	1044
SR360	0.2	0.79	<5	80	<0.5	<2	0.05	<0.5	8	76	102	2.91	<10	<1	0.41	40	0.06	225	29	0.05	<1	220	538	5	<1	13	<0.01	<10	10	6	<10	124
SR361	2.6	3.61	10	530	<0.5	<2	1.56	<0.5	12	17	5	4.32	20	<1	0.98	30	0.84	>10000	<1	0.05	11	840	158	5	2	37	0.03	<10	10	33	10	1340
SR362	3.0	2.05	<5	410	<0.5	<2	2.36	<0.5	7	18	34	11.25	20	<1	0.91	30	0.40	1330	<1	0.06	<1	770	362	5	2	37	0.03	<10	<10	28	60	262
SR363	<0.2	2.83	<5	60	<0.5	356	0.88	<0.5	65	38	4722	11.28	10	<1	0.34	30	1.17	875	14	0.09	17	850	108	5	5	72	0.05	<10	<10	76	<10	84
SR364	<0.5	0.91	<5	150	<0.5	<2	7.54	<0.5	5	46	10	1.26	<10	<1	0.21	10	0.30	570	<1	0.05	5	300	52	5	2	43	<0.01	<10	20	19	<10	56
SR365	2.4	0.33	<5	140	<0.5	<2	>15.00	0.5	2	29	28	0.25	80	<1	0.03	40	0.33	260	2	0.02	<1	2140	38	5	1	219	<0.01	<10	10	24	10	116
SR366	<0.5	0.22	5	30	<0.5	<2	>15.00	0.5	1	21	11	0.27	<10	1	0.06	<10	0.29	320	<1	0.02	2	170	144	10	<1	35	<0.01	<10	10	4	<10	148
SR367	1.0	0.21	<2	60	<0.5	<2	>15.00	2.0	<1	19	47	0.18	<10	<1	0.08	<10	0.34	700	21	0.01	2	40	132	6	<1	250	<0.01	<10	<10	13	10	148
SR368	<0.5	0.61	5	140	0.5	<2	>15.00	3.0	3	12	20	0.48	<10	3	0.09	<10	0.66	1605	1	0.02	16	170	106	15	1	62	<0.01	<10	<10	14	<10	606
SR369	1.4	1.17	<5	240	<0.5	<2	13.17	0.5	4	69	44	1.19	40	<1	0.26	30	0.50	760	<1	0.03	8	820	66	20	1	66	0.01	<10	<10	27	10	120
SR370	6.8	4.93	15	480	<0.5	<2	4.68	10.5	57	57	314	4.38	10	<1	0.16	40	1.35	2595	<1	0.02	18	580	388	25	9	247	0.21	<10	<10	69	10	2034
SR371	2.4	2.83	20	380	<0.5	8	1.17	<0.5	33	42	2271	3.79	<10	<1	0.34	10	1.48	1755	4	0.09	10	550	48	5	4	74	0.15	<10	<10	50	<10	88
SR372	2.4	1.50	<5	10	<0.5	220	0.86	<0.5	37	25	>10000	>15.00	10	<1	0.12	10	1.21	1015	154	0.03	17	<200	72	5	8	9	0.12	<10	<10	161	<50	98
SR373	1.2	2.05	<5	20	<0.5	198	0.77	<0.5	21	50	3727	11.78	<10	3	0.35	10	1.75	1010	34	0.06	12	410	40	5	11	18	0.23	<10	<10	93	<10	74
SR374	<0.5	1.98	<5	140	0.5	2	5.04	0.5	10	47	28	2.54	<10	<1	0.33	20	1.32	1145	1	0.02	13	410	20	5	2	41	<0.01	<10	<10	35	<10	66
SR375	146.0	1.48	22	40	<0.5	<2	>15.00	0.5	10	53	4064	0.94	<10	<1	0.27	<10	1.54	1610	9	0.02	7	210	312	18	3	242	<0.01	<10	10	46	10	262
SR376	<0.5	2.12	25	190	0.5	<2	8.18	3.5	9	38	127	2.50	<10	<1	0.31	<10	1.24	1515	5	0.03	11	630	114	40	3	59	<0.01	<10	<10	24	<10	130
SR377	77.5	0.51	180	580	3.5	140	1.28	27.0	58	71	2330	>15.00	<10	<1	0.09	20	0.51	>10000	715	0.11	8	1100	6308	10	1	808	0.01	10	<10	5	<50	>10000
SR378	59.0	0.15	235	20	<0.5	<2	>15.00	11.5	4	8	6668	1.48	<10	1	0.04	<10	0.33	4310	1085	0.02	6	340	2508	645	<1	292	<0.01	<10	<10	<1	<10	1894
SR379	26.0	0.32	128	10	<0.5	<2	>15.00	5.0	2	34	3719	0.59	<10	<1	0.10	<10	0.51	2480	3200	0.02	2	330	7776	300	1	335	<0.01	<10	10	32	20	234
SR380	24.0	5.85	25	60	<0.5	94	1.53	7.5	35	75	6803	9.43	<10	<1	0.19	20	4.91	7175	996	0.02	19	730	5820	20	7	165	0.13	<10	<10	253	<10	1540
SR381	28.0	3.49	5	130	<0.5	64	7.03	5.5	21	58	2509	13.58	<10	<1	0.17	<10	2.99	6370	154	0.02	16	440	1262	15	4	152	0.01	<10	<10	68	<10	480
SR382	1.5	1.99	<5	570	0.5	22	>15.00	0.5	13	31	1057	4.60	<10	<1	0.19	<10	1.53	4635	35	0.03	6	340	582	15	3	140	0.01	<10	<10	45	10	200
SR383	<0.2	1.63	2	10	<0.5	<2	>15.00	<0.5	4	74	17	1.28	<10	<1	0.17	10	2.79	420	<1	0.09	8	290	44	8	3	93	0.03	<10	<10	29	<10	28
SR384	<0.2	3.18	<5	100	<0.5	2	1.89	1.5	24	12	232	6.32	<10	<1	0.42	20	2.91	1805	5	0.06	12	1640	358	5	11	70	0.35	<10	<10	167	<10	802
SR385	0.2	1.15	<5	70	<0.5	20	>15.00	2.5	2	27	42	0.84	50	<1	0.03	40	2.14	770	1	0.05	<1	90	68	10	2	184	0.07	<10	<10	17	<10	270

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR386	0.4	0.98	10	70	<0.5	6	7.35	0.5	5	16	19	0.92	30	<1	0.68	30	0.10	3760	10	0.02	<1	470	42	5	2	148	<0.01	<10	<10	17	<10	80
SR387	3.2	0.46	<5	140	<0.5	<2	>15.00	1.5	11	13	53	1.35	60	<1	0.30	50	0.19	>10000	34	0.03	1	190	278	10	2	609	<0.01	<10	<10	25	10	372
SR388	<0.2	1.29	<5	250	<0.5	4	4.73	0.5	9	13	19	1.82	20	9	0.55	30	0.57	2465	<1	0.03	1	510	28	5	3	62	<0.01	<10	<10	15	<10	108
SR389	<0.2	0.22	60	90	<0.5	22	7.19	<0.5	63	65	1224	>15.00	30	3	0.06	80	0.20	695	8	0.05	2	830	248	40	2	109	0.01	<10	<10	53	<50	372
SR390	0.8	1.25	28	20	<0.5	96	0.74	<0.5	41	49	625	>15.00	10	<1	0.06	<10	0.67	405	22	0.02	5	30	1296	12	3	7	0.02	<10	<10	16	200	324
SR391	<0.5	0.79	25	20	<0.5	<2	>15.00	<0.5	3	49	5	0.41	<10	1	0.03	<10	4.80	1790	1	0.03	5	590	50	10	1	107	<0.01	<10	<10	14	<10	84
SR392	<0.5	0.21	20	40	<0.5	<2	>15.00	<0.5	3	18	10	0.15	<10	<1	0.01	<10	0.37	1455	<1	0.03	6	570	74	10	<1	185	<0.01	<10	<10	8	<10	38
SR393	<0.2	0.50	12	20	<0.5	<2	>15.00	<0.5	3	66	32	0.67	<10	<1	0.03	<10	6.31	590	4	0.03	6	180	314	8	<1	142	<0.01	<10	10	18	10	120
SR394	<0.5	2.32	20	40	0.5	2	5.77	<0.5	5	82	7	0.79	<10	<1	0.64	20	2.93	250	2	0.03	10	340	58	5	2	33	<0.01	<10	<10	19	<10	80
SR395	<0.5	2.05	25	40	0.5	<2	>15.00	<0.5	6	55	9	0.92	<10	<1	0.29	<10	3.03	815	1	0.03	10	330	38	5	2	86	<0.01	<10	<10	18	<10	52
SR396	20.5	1.12	25	40	<0.5	<2	>15.00	7.5	6	46	19	1.00	<10	<1	0.06	<10	2.03	3965	363	0.03	12	270	>10000	5	1	275	<0.01	<10	<10	35	<10	602
SR397	0.5	1.35	35	20	<0.5	2	11.99	0.5	4	134	107	0.89	<10	<1	0.08	<10	2.11	2865	43	0.02	16	240	2230	10	1	68	<0.01	<10	<10	28	<10	364
SR398	<0.5	1.96	10	20	0.5	4	>15.00	0.5	6	50	7	0.92	<10	1	0.13	<10	2.82	1365	2	0.02	12	290	128	10	2	126	<0.01	<10	<10	19	<10	138
SR399	<0.2	0.54	<2	20	<0.5	<2	>15.00	0.5	1	23	24	1.11	<10	<1	0.03	<10	0.84	5955	1	0.02	2	230	164	6	1	283	<0.01	<10	40	21	10	96
SR400	0.5	1.68	20	40	0.5	<2	>15.00	3.5	6	61	37	1.03	<10	<1	0.12	<10	3.82	3365	6	0.02	11	420	1452	10	2	137	<0.01	<10	<10	28	<10	676
SR401	<0.5	2.59	15	380	0.5	2	2.41	<0.5	12	57	52	3.92	<10	<1	0.61	20	1.27	1870	4	0.03	11	570	52	5	4	84	0.03	<10	<10	41	<10	136
SR402	<0.5	1.96	<5	80	0.5	10	0.13	0.5	7	38	30	2.85	<10	<1	0.43	20	0.51	640	4	0.04	8	370	28	5	1	13	<0.01	<10	40	16	<10	58
SR403	>200.0	2.32	55	350	<0.5	1114	0.10	<0.5	9	52	2362	>15.00	<10	<1	0.44	10	0.56	1530	17	0.02	2	540	9492	10	5	10	0.01	<10	<10	41	<50	638
SR404	8.0	2.23	5	60	<0.5	42	1.86	<0.5	12	110	98	2.85	<10	<1	0.16	20	0.91	845	3	0.07	13	500	308	5	6	100	0.29	10	20	48	<10	56
SR405	1.0	0.47	10	110	<0.5	<10	3.42	0.5	3	243	44	1.54	10	<1	0.07	<10	0.10	1490	14	0.01	12	770	172	6	1	57	<0.01	<10	70	17	<10	134
SR406	<0.8	1.06	10	210	0.5	8	0.46	1.0	6	406	82	1.63	<10	<1	0.14	10	0.11	2465	15	0.02	18	670	290	10	1	40	<0.01	<10	<10	25	<10	250
SR407	49.6	3.76	10	60	<0.5	174	0.68	>100.0	35	115	5715	>15.00	<10	<1	0.34	20	0.62	>10000	254	0.02	17	900	>10000	40	5	203	0.02	<10	40	100	550	>10000
SR408	27.2	3.11	55	80	<0.5	130	2.09	78.5	41	79	5517	>15.00	<10	<1	0.25	20	0.72	8505	202	0.03	10	850	>10000	75	3	163	0.01	<10	<10	82	400	>10000
SR409	7.2	0.28	35	20	5.5	6	9.28	75.5	21	44	13	2.35	<10	<1	0.04	<10	4.26	>10000	21	0.05	4	720	2916	5	<1	326	<0.01	<10	<10	3	70	>10000
SR410	12.8	1.21	215	50	0.5	54	3.98	>100.0	81	104	8035	8.56	<10	<1	0.09	30	0.60	>10000	81	0.03	18	1700	>10000	5	1	313	<0.01	<10	<10	24	340	>10000
SR411	2.4	0.92	175	20	4.0	112	8.24	>100.0	96	153	9036	9.03	<10	<1	0.03	<10	2.24	>10000	56	0.02	6	1560	7980	310	1	110	<0.01	<10	<10	27	430	>10000
SR412	<0.8	4.09	25	80	1.0	28	2.03	1.5	13	63	1052	3.87	<10	3	0.98	30	0.90	3885	8	0.03	2	830	516	5	4	170	0.11	<10	<10	48	<10	782
SR413	<0.8	2.71	20	100	<0.5	<2	0.75	<0.5	9	110	739	2.98	<10	<1	0.45	30	0.91	3115	4	0.05	5	630	426	5	2	52	0.03	<10	<10	41	<10	386
SR414	3.2	1.33	<5	30	<0.5	462	0.14	<0.5	<1	39	111	>15.00	<10	<1	0.17	<10	0.34	1640	38	0.02	5	250	286	5	3	7	<0.01	<10	<10	104	850	830
SR415	<0.8	4.90	<5	140	<0.5	4	0.81	0.5	30	91	118	7.39	<10	<1	0.76	30	2.18	6315	4	0.02	17	1040	72	5	7	63	0.07	<10	<10	53	<10	1146
SR416	<0.8	0.20	25	20	<0.5	10	>15.00	24.5	3	54	170	0.67	<10	2	0.02	<10	0.24	1395	4	0.03	5	1300	240	10	<1	172	<0.01	<10	10	7	30	1492
SR417	46.4	3.36	40	210	<0.5	220	8.72	31.0	24	92	2170	>15.00	<10	<1	0.05	<10	1.93	9510	212	0.02	7	1110	3312	35	2	165	<0.01	<10	<10	87	1000	4150
SR418	3.2	4.29	20	160	0.5	32	0.54	<0.5	40	21	1948	7.19	<10	<1	1.07	20	1.53	4620	35	0.03	8	1240	256	5	3	29	0.04	<10	<10	62	20	316
SR419	2.4	0.83	15	60	<0.5	<2	>15.00	12.0	8	48	276	2.97	<10	<1	0.02	<10	2.53	>10000	12	0.03	11	420	3194	10	2	559	<0.01	<10	<10	17	10	3054
SR420	<0.8	3.81	15	220	<0.5	8	3.74	<0.5	17	12	26	4.27	<10	1	0.99	40	1.48	1145	<1	0.07	1	1530	74	5	4	81	0.01	<10	<10	60	<10	234
SR421	3.0	0.32	8	30	<0.5	14	>15.00	33.5	4	16	202	0.71	<10	<1	<0.01	<10	0.42	3930	19	0.01	7	220	2630	4	1	310	<0.01	<10	<10	36	<10	1270
SR422	24.0	0.44	35	50	<0.5	4	>15.00	19.5	6	33	1835	1.73	<10	1	0.05	<10	0.68	>10000	18	0.03	6	180	4736	10	1	320	<0.01	<10	<10	20	20	6932
SR423	32.8	3.78	85	140	2.5	30	5.77	74.0	49	64	5350	10.57	<10	2	0.36	30	1.32	>10000	1424	0.02	18	870	>10000	20	5	325	0.01	<10	60	100	200	>10000
SR424	4.8	4.40	<5	1120	<0.5	158	1.27	<0.5	30	28	7397	14.88	<10	<1	0.90	30	1.01	4155	39	0.02	7	1670	682	10	5	189	0.07	<10	<10	66	70	536
SR425	6.4	4.73	50	1310	1.0	26	8.44	23.5	19	19	5141	5.18	<10	2	1.57	20	1.20	5225	358	0.03	5	1860	1938	60	4	124	0.01	<10	<10	49	30	800
SR426	6.4	3.68	10	280	1.0	14	2.20	20.5	12	100	3647	4.73	<10	<1	1.36	30	0.57	>10000	242	0.02	3	1080	5326	10	3	68	0.01	<10	<10	34	50	3870
SR427	<0.2	1.69	<5	100	<0.5	8	0.89	1.0	11	11	78	2.44	10	<1	0.42	20	0.68	2495	<1	0.03	1	710	62	5	2	45	0.03	<10	<10	19	<10	340
SR428	<0.2	2.93	10	110	<0.5	<2	0.84	<0.5	20	9	50	3.74	<10	<1	0.28	10	1.64	4450	<1	0.02	3	950	64	5	4	72	0.08	<10	<10	59	<10	418
SR429	113.8	7.58	60	10	<0.5	200	0.27	94.5	44	18	>10000	9.99	30	<1	0.10	10	7.36	>10000	139	0.02	16	800	>10000	5	1	24	<0.01	<10	<10	74	<50	>10000
SR430	172.2	5.06	260	120	<0.5	<20	0.22	>100.0	53	22	>10000	12.05	10	1	0.05	10	4.20	9935	76	0.02	2	600	4808	5	2	11	<0.01	<10	<10	65	300	>10000
SR431	0.8	2.35	<5	120	<0.5	14	4.16	0.5	9	17	544	3.10	30	3	0.23	40	1.04	1640	<1	0.08	<1	1360	50	5	3	63	0.05	<10	<10	48	<10	298
SR432	1.2	2.04	15	160	<0.5	24	1.81	<0.5	9	22	548	2.03	10	<1	0.69	30	0.58	1285	4	0.05	<1	620	288	5	2	78	0.03	<10	<10	28	<10	118
SR433	92.2	0.88	30	220	<0.5	400	2.38	<0.5	16	55	>10000	9.19	10	<1	0.46	20	0.17	2025	33	0.03	<1	<200	1550	75	2	61	<0.01	<10	<10	5	<50	616
SR434	50.2	1.26	30	130	<0.5	180	4.99	>100.0	56	33	>10000	11.61	20	<1	0.08	10	1.23	>10000	19	0.03	<1	200	2204	5	1	194	<0.01	<10	10	28	<50	>10000
SR435	1.6	0.70	<5	150	<0.5	22	0.50	6.5	4	64	865	2.05	<10	<1	0.46	40	0.11	1350	3	0.08	<1	400	108	5	1	24	0.02	<10	<10	10	<10	1366
SR436	3.4	0.28	<5	20	<0.5	20	>15.00	6.0	1	30	187	0.42	80	3	0.03	40	0.27	1660	3	0.03	1	600	514	5	<1	366	<0.01	<10	<10	12	20	770
SR437	5.8	6.35	20	90	<0.5	<2	5.90	>100.0	34	37	2493	12.88	40	<1	0.09	50	3.99	>10000	381	0.02	6	760	>10000	5	6	83	0.01	<10	<10	65	50	>10000
SR438	3.8	4.15	<5	30	<0.5	<2	5.25	25.5	27	39	2662	>15.00	30	<1	0.10	40	1.82	>10000	287	0.02	2	650	2306	5	6	93	0.04	<10	<10	48	150	9330
SR439	<0.2	2.58	5	120	<0.5	<2	1.38	<0.5	11	61	250	3.23	10	<1	0.41	20	1.16	3200	3	0.03	18	500	70	5	3	45	<0.01	<10	<10	43	<10	288
SR440	<1.0	3.34	40	120	<0.5	<10	1.10	4.0	24	43	87	7.46	10	1	0.43	10	4.16	2145	34	0.03	9	1280	204	12	2	26	0.01	<10	<10	32	<10	1326

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR441	1.0	2.07	6	60	<0.5	<10	0.84	0.5	15	98	1010	3.03	10	<1	0.40	10	0.95	2095	17	0.03	16	680	92	4	4	55	0.02	<10	<10	39	<10	196
SR442	11.0	1.55	6	20	<0.5	<10	0.37	2.5	10	149	948	3.35	10	1	0.03	<10	1.12	5120	74	0.02	8	220	2684	2	2	30	0.01	<10	20	13	<10	1324
SR443	2.0	0.57	4	80	<0.5	12	0.21	<0.5	41	215	22	5.43	10	<1	0.57	10	0.04	150	15	0.03	3	190	290	14	<1	19	<0.01	<10	<10	6	10	40
SR444	9.0	3.67	<5	300	<0.5	<2	0.45	>100.0	17	28	26	3.44	20	<1	1.23	70	0.34	>10000	54	0.03	<1	370	1268	5	3	85	0.03	<10	10	13	50	>10000
SR445	8.4	3.35	<5	170	<0.5	<2	0.72	>100.0	9	19	13	3.40	10	<1	0.95	60	0.42	>10000	45	0.02	<1	410	5564	5	2	113	0.06	<10	10	13	50	>10000
SR446	7.8	3.65	<5	140	<0.5	<2	1.47	>100.0	31	19	768	7.42	30	<1	0.99	90	0.62	>10000	6	0.02	<1	320	>10000	5	2	33	0.01	<10	20	16	40	>10000
SR447	4.0	2.62	<5	150	<0.5	<2	0.22	2.5	19	30	68	3.91	10	<1	0.85	20	0.55	6690	7	0.02	<1	870	992	5	1	14	0.01	<10	<10	24	<10	1216
SR448	2.4	1.13	<5	210	<0.5	2	0.08	<0.5	9	52	37	3.48	<10	<1	0.63	10	0.11	1140	5	0.02	<1	200	586	5	<1	12	0.01	<10	10	8	<10	296
SR449	3.0	1.72	<5	120	<0.5	22	0.05	<0.5	8	55	110	3.56	10	<1	0.72	20	0.24	2420	3	0.02	5	540	1030	5	1	11	0.01	<10	<10	13	<10	212
SR450	6.2	1.11	10	120	<0.5	<2	0.06	10.5	14	144	327	3.07	<10	<1	0.56	10	0.11	1205	<1	0.02	<1	200	7214	5	<1	5	0.01	<10	<10	7	<10	3678
SR451	28.0	0.29	98	20	0.5	17	0.11	8.5	3	279	837	1.21	10	<1	0.14	<10	0.03	1350	18	0.01	6	160	6416	266	<1	4	<0.01	<10	50	4	<10	1368
SR452	17.6	5.66	20	10	<0.5	<2	0.81	<0.5	33	263	1818	8.79	30	<1	0.36	30	2.83	>10000	<1	0.02	79	1670	>10000	5	12	99	0.02	<10	30	99	20	1582
SR453	0.2	2.03	<5	60	<0.5	12	0.98	<0.5	14	50	72	3.01	<10	<1	0.19	10	1.53	2275	<1	0.10	9	960	180	5	7	70	0.19	<10	<10	100	10	372
SR454	0.2	2.61	<5	60	<0.5	12	1.81	<0.5	21	26	99	5.11	<10	<1	0.15	20	1.91	725	<1	0.16	16	1280	114	5	12	94	0.36	10	<10	178	10	396
SR455	45.4	2.80	10	150	<0.5	72	0.64	5.5	15	10	1283	4.42	20	<1	0.78	40	1.04	4820	21	0.04	<1	1940	5284	5	6	29	0.02	<10	<10	72	10	3440
SR456	25.2	2.58	<5	270	<0.5	50	2.45	70.0	14	30	1267	3.27	20	<1	0.76	30	1.05	6335	85	0.04	8	1100	8196	5	3	36	0.02	<10	<10	51	30	>10000
SR457	8.0	0.93	26	440	<0.5	<2	2.85	18.5	10	224	1221	2.50	<10	1	0.48	10	0.51	4465	19	0.02	12	600	3054	6	2	25	<0.01	<10	<10	21	<10	4148
SR458	2.2	2.83	<2	210	<0.5	<2	4.14	5.0	22	57	311	4.06	<10	<1	0.70	10	1.70	7205	1	0.02	23	1180	928	8	6	122	<0.01	<10	<10	66	10	1250
SR459	2.2	3.84	<2	80	1.5	2	2.87	3.5	20	122	142	4.20	10	<1	0.91	20	1.92	2175	1	0.03	23	1050	580	8	8	154	0.01	<10	<10	109	<10	838
SR460	10.6	3.21	4	130	<0.5	<2	0.43	22.5	31	66	4990	5.53	<10	<1	0.44	10	2.03	9425	79	0.02	24	1420	>10000	<2	7	33	0.06	<10	<10	73	20	6130
SR461	22.0	0.94	58	1480	<0.5	<2	0.24	17.5	17	135	825	2.90	<10	1	0.48	20	0.21	7375	93	0.02	15	770	1562	120	3	39	<0.01	10	<10	14	<10	3096
SR462	30.8	0.92	44	1800	<0.5	2	0.41	88.0	15	113	1148	2.69	<10	6	0.46	20	0.28	4260	27	0.02	15	870	1244	128	4	44	<0.01	10	<10	23	10	6706
SR463	47.8	0.50	86	420	<0.5	<2	0.13	6.5	9	171	1155	1.67	<10	3	0.38	10	0.07	2320	76	0.02	10	540	1916	306	2	8	<0.01	<10	<10	13	<10	1070
SR464	100.0	0.96	116	7600	<0.5	<2	0.21	27.5	14	146	1213	2.76	10	5	0.46	20	0.15	5165	16	0.02	13	710	5008	470	4	239	<0.01	10	<10	19	10	2802
SR465	46.4	1.01	138	570	<0.5	2	0.30	24.0	13	177	1589	2.57	<10	6	0.40	10	0.32	2895	33	0.02	15	660	9668	316	3	21	<0.01	10	<10	19	10	4850
SR466	24.8	1.12	50	1210	<0.5	2	0.49	14.0	18	159	829	2.90	<10	2	0.40	20	0.38	4790	43	0.03	20	640	2750	132	3	37	<0.01	20	<10	25	<10	3044
SR467	6.4	0.35	148	70	<0.5	2	0.03	10.5	16	356	2988	1.77	<10	<1	0.11	<10	0.12	1765	183	0.01	16	180	2904	168	1	5	<0.01	10	<10	9	<10	3628
SR468	4.0	0.60	94	40	<0.5	2	0.07	4.5	7	265	1733	1.51	<10	<1	0.24	<10	0.14	1350	67	0.02	15	280	568	130	2	6	<0.01	20	<10	16	<10	1722
SR469	149.4	0.21	868	7860	<0.5	8	0.02	27.0	4	350	1650	1.36	<10	11	0.14	<10	0.01	245	616	0.02	8	110	9880	2426	<1	284	<0.01	10	<10	4	<10	422
SR470	184.0	0.64	284	2390	<0.5	2	0.13	20.5	7	240	3049	1.86	<10	9	0.40	<10	0.09	975	123	0.02	15	420	3830	1142	2	142	<0.01	10	<10	16	10	2240
SR471	37.0	0.91	132	860	<0.5	<2	0.33	32.0	17	182	1608	3.46	<10	7	0.50	<10	0.24	6125	24	0.02	17	860	5566	388	6	31	<0.01	<10	<10	31	<10	5592
SR472	19.6	1.10	104	1330	<0.5	<2	0.40	22.5	18	166	1392	3.85	<10	4	0.49	10	0.34	5355	19	0.02	17	940	1874	280	5	44	<0.01	10	<10	32	<10	3364
SR473	20.2	0.91	66	430	<0.5	<2	0.44	12.5	14	191	631	3.43	<10	3	0.43	10	0.20	6005	54	0.02	17	710	1200	170	6	26	<0.01	<10	<10	26	<10	2246
SR474	20.0	2.12	104	80	1.0	<10	1.80	11.0	17	118	6551	2.78	20	1	0.42	30	1.71	4460	5	0.03	16	760	2764	158	4	24	<0.01	<10	<10	60	<10	3902
SR475	22.0	1.54	96	770	<0.5	<10	4.48	1.5	16	95	1857	3.49	10	<1	0.35	10	1.18	2930	7	0.06	13	880	360	38	6	42	<0.01	<10	30	56	<10	1178
SR476	34.0	1.64	222	490	0.5	<10	4.31	10.5	16	233	6155	2.78	10	<1	0.41	<10	0.78	2265	23	0.03	16	500	1136	306	4	50	<0.01	<10	<10	40	<10	2560
SR477	11.0	2.47	92	100	0.5	<10	0.27	3.0	17	75	2418	3.32	20	<1	0.41	40	1.88	2095	48	0.06	18	890	524	40	5	11	0.01	<10	<10	88	<10	1174
SR478	48.0	1.83	14	90	<0.5	<10	0.13	5.5	23	60	>10000	4.48	10	<1	0.49	20	1.03	3375	192	0.02	13	370	5598	6	4	15	0.02	20	<10	45	<10	4300
SR479	8.0	3.16	12	70	<0.5	<10	0.23	86.0	55	43	>10000	4.09	20	<1	0.36	20	2.43	7125	50	0.03	23	760	3022	<2	6	12	<0.01	<10	<10	65	30	>10000
SR480	11.0	0.85	16	160	<0.5	<10	0.12	7.0	15	289	6849	2.17	10	<1	0.26	10	0.27	3310	147	0.01	9	390	>10000	4	2	12	<0.01	<10	<10	18	<10	3512
SR481	2.0	3.83	30	60	2.0	<10	0.66	3.5	31	74	760	5.45	20	<1	0.40	20	2.71	7835	18	0.04	33	1020	2378	12	9	30	0.03	<10	<10	128	<10	2994
SR482	4.0	3.07	18	110	0.5	<10	3.24	40.0	28	86	276	4.12	20	<1	0.44	10	2.22	8685	9	0.03	27	880	7466	4	7	21	0.02	<10	<10	80	10	>10000
SR483	30.0	1.68	14	60	3.0	13	1.68	>100.0	31	121	>10000	4.01	10	<1	0.50	<10	0.86	4635	443	0.02	18	340	4368	<2	3	13	<0.01	40	<10	27	40	>10000
SR484	<1.0	2.29	12	30	<0.5	<10	2.07	3.0	19	66	132	3.61	20	<1	0.36	20	1.59	1005	5	0.08	19	610	68	2	6	28	0.06	<10	<10	84	<10	354
SR485	8.0	2.80	16	100	<0.5	<10	2.31	49.0	29	65	1850	4.07	20	<1	0.49	20	1.68	8725	8	0.03	21	890	>10000	4	6	22	0.01	<10	<10	66	10	>10000
SR486	21.0	0.56	16	40	0.5	<10	0.08	<0.5	3	217	190	0.80	10	2	0.30	10	0.05	370	37	0.02	4	150	844	8	<1	7	<0.01	<10	<10	6	<10	176
SR487	10.0	0.94	22	50	<0.5	<10	0.07	11.0	22	192	>10000	5.08	10	<1	0.53	40	0.07	400	40	0.03	9	850	2502	22	1	11	<0.01	<10	<10	9	<10	2632
SR488	32.0	0.61	40	70	<0.5	19	0.22	>100.0	37	231	5474	3.77	10	<1	0.26	10	0.07	4790	42	0.02	4	430	>10000	28	1	21	<0.01	<10	<10	9	100	>10000
SR489	2.0	0.11	140	<10	<0.5	308	0.08	9.0	3	296	3919	1.30	10	<1	0.06	<10	0.01	145	33	0.01	7	170	6670	178	<1	4	<0.01	20	30	16	<10	880
SR490	21.0	0.17	636	20	0.5	268	0.37	82.0	7	323	>10000	1.28	10	<1	0.06	<10	0.02	210	218	0.01	6	40	>10000	922	<1	19	<0.01	<10	40	3	20	>10000
SR491	41.0	1.19	24	30	1.0	<10	5.31	18.5	12	186	4502	2.20	10	1	0.21	<10	0.56	3925	8	0.02	8	390	6592	12	2	49	0.01	<10	30	28	<10	5504
SR492	41.0	1.42	26	30	0.5	<10	0.35	1.5	11	212	1705	2.41	20	1	0.24	10	0.58	3550	33	0.01	10	820	>10000	12	2	46	0.01	<10	<10	45	<10	850
SR493	70.0	0.35	500	10	<0.5	20	0.38	>100.0	25	273	>10000	2.91	<10	<1	0.09	<10	0.07	855	12	0.01	8	<200	>10000	52	1	28	<0.01	20	20	10	50	>10000
SR494	>200.0	0.57	136	100	<0.5	81	0.06	>100.0	12	176	2399	0.79	10	<1	0.35	10	0.03	630	94	0.01	5	290	>10000	126	<1	10	<0.01	10	<10	4	30	>10000
SR495	35.0	0.56	32	180	<0.5	<10	0.08	33.0	4	212	2900	1.04	10	<1	0.30	10	0.03	375	11	0.01	6	250	3822	20	<1	8	<0.01	<10	<10	10	<10	7534

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR496	33.0	0.44	46	140	<0.5	45	0.05	6.5	6	218	3238	1.14	10	<1	0.28	10	0.03	1035	26	0.01	7	210	5844	34	<1	7	<0.01	<10	10	6	<10	1558
SR497	23.0	0.44	96	70	<0.5	35	0.03	4.0	6	192	5270	1.29	10	<1	0.27	<10	0.02	765	444	0.01	7	180	2744	138	<1	3	<0.01	<10	10	<1	<10	826
SR498	39.0	0.55	166	40	0.5	33	0.04	12.0	2	191	4671	1.72	10	<1	0.29	10	0.03	95	50	0.02	4	250	5086	108	1	6	<0.01	<10	10	8	<10	1780
SR499	16.0	0.54	28	170	<0.5	20	0.07	4.0	14	160	1680	2.60	10	<1	0.33	20	0.04	3825	59	0.01	4	290	4650	42	1	6	<0.01	<10	<10	8	<10	1062
SR500	>200.0	1.67	345	120	<0.5	<2	8.28	>100.0	19	28	4804	6.81	<10	4	0.09	<10	0.81	>10000	93	<0.01	6	350	>10000	10	2	368	<0.01	<10	<10	18	100	>10000
SR501	23.0	0.46	86	170	0.5	19	0.08	4.0	6	141	3881	1.05	10	<1	0.27	10	0.02	940	263	0.01	2	320	3206	104	<1	11	<0.01	<10	20	5	<10	2440
SR502	30.0	1.27	122	110	<0.5	47	0.08	25.0	40	88	3279	4.36	10	2	0.59	20	0.09	7615	58	0.01	7	390	7682	138	2	10	<0.01	<10	<10	17	10	7638
SR503	9.0	1.01	104	960	<0.5	<10	0.14	14.0	25	129	1123	4.09	10	2	0.41	20	0.08	>10000	29	0.01	9	360	626	90	3	65	<0.01	<10	<10	22	<10	4022
SR504	33.0	0.73	322	30	<0.5	63	0.09	>100.0	24	158	4667	5.17	10	1	0.43	20	0.12	4555	81	0.01	9	260	>10000	86	6	4	<0.01	<10	20	15	30	>10000
SR505	21.0	0.93	306	470	<0.5	42	0.22	90.0	27	83	2873	5.60	10	1	0.52	20	0.08	3870	310	0.01	3	580	1194	100	2	17	<0.01	<10	<10	14	<10	4036
SR506	27.0	0.75	566	320	<0.5	80	0.04	11.0	19	81	4887	3.78	10	2	0.27	10	0.02	5845	122	0.01	3	460	2242	324	2	13	<0.01	<10	<10	17	<10	2018
SR507	26.0	0.76	148	210	1.5	<10	0.18	25.5	17	60	942	1.75	10	<1	0.55	30	0.07	>10000	69	0.02	3	740	4388	60	1	39	<0.01	<10	<10	9	<10	4672
SR508	27.0	2.40	14	160	1.5	25	0.25	28.5	19	32	7484	3.66	10	<1	0.75	20	0.77	7300	203	0.02	7	930	1400	6	2	19	0.01	<10	<10	27	10	9470
SR509	<1.0	1.56	2	110	1.5	<10	0.23	0.5	9	29	50	5.46	10	<1	0.49	30	0.49	1855	11	0.06	4	880	120	<2	2	48	<0.01	<10	<10	33	<10	348
SR510	25.0	0.22	174	40	0.5	<10	0.10	4.0	19	236	2375	5.31	<10	4	0.07	<10	0.04	>10000	22	0.01	19	410	2876	170	2	82	<0.01	<10	<10	41	<10	1680
SR511	8.0	1.09	130	160	1.0	<10	1.30	3.0	25	51	230	4.74	10	3	0.47	40	0.37	>10000	13	0.02	17	810	544	36	4	62	<0.01	<10	<10	23	<10	1344
SR512	22.0	0.81	402	60	1.0	<10	1.17	1.0	29	54	275	5.10	10	2	0.42	30	0.36	>10000	6	0.01	22	870	306	66	6	13	<0.01	<10	<10	22	<10	652
SR513	>200.0	0.40	396	30	<0.5	<10	1.08	31.0	22	127	2187	4.53	10	10	0.25	10	0.34	>10000	39	0.01	20	370	5700	516	2	12	<0.01	<10	<10	19	20	8084
SR514	6.0	0.86	60	30	1.5	11	2.75	2.0	36	29	154	7.81	10	2	0.37	20	1.16	>10000	5	0.01	35	1080	392	30	6	44	<0.01	<10	<10	49	<10	1182
SR515	6.0	1.01	60	100	1.5	<10	0.26	4.0	24	121	411	4.23	10	<1	0.21	10	0.08	7275	22	0.01	13	780	434	42	6	40	<0.01	<10	10	57	<10	1180
SR516	1.0	2.15	16	80	2.0	11	1.89	0.5	12	23	102	2.84	20	<1	0.58	20	0.84	1565	2	0.05	8	840	160	2	3	48	<0.01	<10	<10	36	<10	328
SR517	>200.0	0.61	296	>10000	1.0	<10	0.10	25.5	6	137	3277	0.84	10	2	0.40	10	0.04	130	94	0.01	6	310	5008	754	<1	295	<0.01	<10	<10	21	70	3474
SR518	8.0	1.26	130	110	0.5	<10	0.17	1.5	7	86	550	1.81	10	1	0.48	20	0.28	1485	199	0.02	4	560	3154	6	1	22	<0.01	<10	<10	14	<10	1834
SR519	70.0	2.94	246	220	1.5	<2	0.17	8.5	13	102	1475	1.77	20	<1	1.49	20	0.15	>10000	15	0.01	<1	780	>10000	544	3	24	<0.01	<10	<10	34	30	2652
SR520	4.8	2.20	10	430	1.0	<2	0.22	7.0	7	165	282	1.31	20	<1	0.91	30	0.19	5695	8	0.02	5	510	2884	68	3	132	<0.01	<10	<10	28	10	596
SR521	75.2	2.18	214	510	1.0	<2	2.26	56.0	6	135	3738	1.70	10	11	1.05	10	0.18	2960	23	0.01	3	400	>10000	726	2	53	0.01	<10	<10	26	40	3634
SR522	>200.0	0.57	2712	610	<0.5	<2	0.55	>100.0	6	229	>10000	0.88	10	123	0.37	<10	0.03	755	14	0.01	6	400	>10000	>10000	1	71	<0.01	<10	<10	9	200	8760
SR523	5.0	0.76	66	240	1.5	<10	0.18	<0.5	3	111	92	1.64	<10	<1	0.46	10	0.06	1400	4	0.01	6	370	652	32	1	25	<0.01	<10	<10	16	10	318
SR524	8.8	0.54	66	60	<0.5	4	0.03	2.0	10	389	174	2.24	<10	<1	0.23	<10	0.01	4450	38	0.02	9	90	1612	12	<1	10	<0.01	<10	<10	12	10	1324
SR525	70.0	0.86	516	60	<0.5	344	0.05	7.5	15	307	956	3.00	<10	<1	0.40	10	0.03	>10000	69	0.01	5	190	7418	106	1	13	<0.01	<10	<10	17	20	1894
SR526	24.6	0.64	96	70	<0.5	4	0.27	3.0	7	121	460	2.04	<10	<1	0.34	10	0.04	1750	125	0.02	4	890	>10000	110	1	32	<0.01	<10	<10	41	20	1042
SR527	4.2	0.53	44	310	<0.5	<2	0.22	10.0	15	133	202	4.34	10	<1	0.37	20	0.07	9245	14	0.01	7	600	5302	18	2	55	<0.01	<10	10	31	20	2570
SR528	12.4	0.50	290	90	<0.5	<2	0.20	20.5	13	132	1612	3.40	<10	<1	0.40	20	0.04	7870	24	0.04	5	750	7300	84	1	30	<0.01	<10	10	38	20	6056
SR529	4.8	0.79	28	170	<0.5	<2	0.39	9.0	13	57	104	5.31	10	<1	0.57	20	0.13	>10000	14	0.04	5	980	>10000	4	2	52	<0.01	<10	10	155	20	2642
SR530	44.8	0.45	570	70	<0.5	4	0.11	66.5	12	199	4080	3.58	<10	<1	0.35	10	0.04	3230	269	0.03	6	340	>10000	148	1	26	<0.01	<10	10	15	70	>10000
SR531	74.4	0.44	468	60	<0.5	114	0.18	>100.0	16	188	3092	4.47	<10	1	0.25	<10	0.07	5040	281	0.02	10	380	>10000	98	2	32	<0.01	<10	<10	22	100	>10000
SR532	23.8	1.74	192	220	<0.5	<2	0.05	0.5	16	187	850	3.54	10	<1	0.84	20	0.08	3210	30	0.03	7	510	>10000	92	2	37	<0.01	<10	<10	29	30	964
SR533	26.4	0.31	252	40	<0.5	16	0.08	0.5	6	160	733	2.29	<10	<1	0.25	10	0.01	1120	16	0.01	4	260	>10000	100	<1	12	<0.01	<10	10	22	10	394
SR534	16.6	2.02	200	270	<0.5	<2	0.23	19.0	4	146	1504	3.04	20	<1	1.02	10	0.18	1735	25	0.02	6	420	>10000	80	2	16	0.01	<10	<10	24	40	5342
SR535	45.4	1.81	396	130	<0.5	<2	0.06	10.0	6	235	6367	2.45	10	<1	0.98	20	0.12	795	19	0.02	4	650	>10000	500	2	6	<0.01	<10	<10	22	40	2480
SR536	31.0	0.54	62	40	<0.5	20	0.08	4.5	3	520	213	1.99	<10	<1	0.31	<10	0.03	235	18	0.02	12	220	>10000	50	<1	7	<0.01	<10	<10	10	10	1222
SR537	18.2	2.47	362	130	<0.5	<2	0.04	1.0	3	89	472	2.03	10	<1	1.32	20	0.10	3235	12	0.02	1	600	8180	226	2	7	<0.01	<10	<10	26	10	274
SR538	30.0	1.30	240	130	<0.5	28	0.07	1.0	4	338	2808	1.73	10	<1	0.67	<10	0.07	885	110	0.02	4	320	>10000	118	1	8	<0.01	<10	<10	21	20	678
SR539	71.2	0.50	112	60	<0.5	<2	0.04	1.0	3	453	147	1.46	10	<1	0.23	<10	0.01	220	17	0.01	8	530	2026	448	<1	10	<0.01	<10	<10	10	10	110
SR540	4.0	1.68	50	70	<0.5	4	0.06	<0.5	4	336	242	1.60	10	<1	0.81	10	0.08	350	19	0.02	3	350	2338	36	1	8	0.01	<10	<10	21	10	142
SR541	135.4	0.57	760	30	<0.5	<2	0.08	5.0	3	442	371	5.12	10	1	0.50	<10	0.02	400	25	0.03	1	190	>10000	780	1	20	<0.01	<10	<10	36	30	512
SR542	4.2	2.61	230	50	<0.5	<2	0.19	39.0	24	70	205	9.17	10	<1	0.67	<10	0.12	>10000	10	0.03	7	850	4204	40	8	134	<0.01	<10	<10	88	40	5648
SR543	26.8	0.77	458	80	<0.5	<2	0.14	22.5	14	111	500	4.01	<10	2	0.51	10	0.07	7560	47	0.04	2	800	>10000	172	2	61	<0.01	<10	<10	28	20	3626
SR544	1.2	1.64	700	110	<0.5	<2	0.14	81.0	21	88	156	10.25	10	<1	0.68	10	0.07	>10000	13	0.02	1	1080	1846	2	5	65	<0.01	<10	<10	63	30	7962
SR545	15.6	1.93	112	240	<0.5	4	0.44	4.0	11	174	268	3.65	10	<1	0.69	10	0.33	1360	45	0.12	13	690	8812	82	5	52	0.08	<10	<10	81	10	1436
SR546	35.2	1.15	346	230	<0.5	14	0.15	4.0	2	542	422	4.30	10	<1	0.67	10	0.06	390	121	0.01	6	130	>10000	184	1	9	<0.01	<10	<10	10	10	786
SR547	187.0	1.98	1600	140	<0.5	<20	0.10	>100.0	13	329	>10000	5.22	10	15	0.99	10	0.08	235	30	0.02	15	600	>10000	1920	4	39	<0.01	<10	<10	27	200	>10000
SR548	>200.0	1.72	638	670	<0.5	242	0.31	10.0	9	202	1285	6.86	10	10	0.85	<10	0.07	400	31	0.03	7	160	>10000	1038	2	277	<0.01	<10	<10	31	70	1220
SR549	55.2	2.34	930	60	<0.5	130	0.40	12.5	36	154	2221	10.77	20	<1	1.20	20	0.41	8975	10	0.02	21	870	5022	348	6	12	<0.01	<10	<10	46	40	3494
SR550	85.6	1.00	1372	70	<0.5	70	0.31	20.0	21	326	3577	9.38	10	3	0.65	10	0.10	1840	182	0.04	12	210	8598	1150	2	42	<0.01	<10	<10	16	40	4756

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR551	108.2	1.00	1292	100	<0.5	270	0.30	14.0	10	370	3191	8.72	10	1	0.55	10	0.11	1310	76	0.04	15	220	6932	722	1	30	<0.01	<10	<10	14	40	3782
SR552	>200.0	1.06	2670	120	<0.5	200	0.11	25.5	4	292	>10000	5.72	20	5	0.60	20	0.03	315	428	0.03	8	<200	>10000	2936	1	46	<0.01	<10	<10	8	100	1948
SR553	>200.0	1.14	2206	1380	<0.5	98	0.13	16.5	6	299	5174	7.85	10	20	0.68	20	0.10	145	150	0.18	3	150	>10000	4422	1	46	<0.01	<10	<10	7	90	342
SR554	76.2	1.16	2690	60	<0.5	44	0.11	11.0	12	501	746	>15.00	10	<1	0.63	<10	0.06	120	21	0.02	6	30	1150	46	2	40	<0.01	<10	<10	12	<50	616
SR555	43.8	1.52	184	220	<0.5	6	0.14	9.0	15	250	758	3.32	10	<1	0.48	10	0.11	8820	19	0.01	9	460	7906	172	2	19	<0.01	<10	<10	23	20	3232
SR556	11.0	1.34	88	120	0.5	<2	0.11	10.0	25	361	1088	5.25	10	<1	0.35	10	0.10	>10000	19	0.02	5	310	>10000	98	4	15	<0.01	<10	<10	30	40	6760
SR557	19.4	1.85	122	160	<0.5	4	0.12	21.5	12	250	1033	3.09	10	<1	0.74	10	0.11	5685	20	0.02	1	310	7806	92	2	16	<0.01	<10	<10	25	30	8318
SR558	2.4	3.02	42	120	0.5	<2	1.73	11.5	10	139	130	2.62	20	<1	1.15	20	0.23	5260	3	0.02	3	550	1300	16	3	28	<0.01	<10	<10	30	10	3690
SR559	40.8	2.58	52	170	0.5	196	2.21	9.0	8	115	279	2.35	20	<1	1.10	20	0.58	5340	2	0.03	2	620	2566	20	2	22	<0.01	<10	<10	24	20	3016
SR560	4.6	1.59	28	180	<0.5	<2	0.15	0.5	5	315	93	1.34	10	1	0.58	10	0.10	2120	8	0.02	4	430	1170	24	1	11	<0.01	20	<10	17	10	590
SR561	1.0	1.62	14	370	<0.5	<2	0.03	<0.5	7	355	28	1.68	10	<1	0.55	10	0.07	1480	4	0.01	6	470	490	4	1	6	<0.01	<10	<10	18	<10	530
SR562	>200.0	1.05	732	180	<0.5	<2	0.14	55.5	3	373	7244	2.04	10	2	0.59	10	0.06	6105	30	0.01	8	260	>10000	3044	2	19	<0.01	<10	<10	16	110	3772
SR563	170.4	0.86	330	100	<0.5	<2	0.25	21.0	6	303	4273	2.41	10	<1	0.57	10	0.05	8370	15	0.01	7	330	>10000	1240	1	12	<0.01	<10	<10	12	60	3676
SR564	15.8	1.96	174	70	0.5	4	0.18	4.0	9	241	2150	1.23	10	<1	0.62	10	0.10	865	93	0.02	2	490	8432	40	2	10	<0.01	<10	<10	20	10	1008
SR565	38.0	1.75	444	200	<0.5	86	0.73	59.5	14	332	1977	1.56	10	5	0.82	10	0.09	3055	6	0.02	6	370	6540	76	3	13	<0.01	<10	<10	22	50	>10000
SR566	6.4	2.30	64	130	0.5	<2	0.19	15.5	11	198	477	1.40	10	<1	1.05	20	0.12	3515	22	0.02	3	490	3780	12	2	11	<0.01	<10	<10	25	20	5512
SR567	<1.0	1.29	4	150	1.0	<10	1.05	1.5	8	61	73	2.03	20	1	0.30	30	0.51	1285	6	0.04	4	550	246	8	3	35	<0.01	<10	10	33	<10	402
SR568	>200.0	1.39	152	100	<0.5	172	0.22	55.0	19	127	2390	4.14	10	<1	0.55	20	0.29	>10000	501	0.03	9	500	>10000	244	2	49	<0.01	30	<10	12	10	>10000
SR569	37.0	0.73	246	1640	<0.5	15	2.73	82.5	14	141	1790	2.30	10	1	0.45	10	0.27	5730	575	0.02	8	490	>10000	336	1	70	<0.01	<10	<10	2	30	>10000
SR570	36.0	0.66	216	470	1.0	<10	0.64	89.5	15	97	1824	3.14	10	3	0.41	20	0.25	>10000	241	0.02	6	590	>10000	248	1	43	<0.01	<10	<10	8	20	>10000
SR571	32.0	1.12	230	200	0.5	<10	0.15	32.0	10	98	3648	3.11	10	<1	0.63	20	0.06	7205	113	0.03	9	540	8718	276	2	14	<0.01	20	<10	13	<10	6186
SR572	36.0	0.96	372	60	<0.5	20	0.76	>100.0	21	158	2630	4.60	10	1	0.54	20	0.46	>10000	47	0.02	13	430	7908	218	2	15	<0.01	10	<10	15	30	>10000
SR573	123.4	0.49	1130	40	<0.5	34	0.06	91.5	13	154	6766	5.40	<10	<1	0.38	10	0.04	7135	491	0.01	1	310	7282	1752	2	8	<0.01	<10	20	18	60	9388
SR574	33.6	0.41	280	110	0.5	10	0.14	63.0	11	258	1605	3.22	<10	<1	0.31	<10	0.06	6900	348	0.02	5	190	5444	242	1	15	<0.01	<10	20	13	30	>10000
SR575	8.4	0.72	56	270	<0.5	14	0.03	2.0	<1	179	548	1.48	<10	<1	0.43	<10	0.02	1530	44	0.01	3	500	2290	16	1	6	<0.01	<10	30	13	<10	1234
SR576	4.2	0.86	22	160	<0.5	<2	0.12	16.0	5	62	90	3.11	<10	<1	0.72	<10	0.04	7045	28	0.02	2	530	3090	<2	1	24	<0.01	<10	30	13	10	3038
SR577	43.6	0.83	112	60	0.5	<2	0.08	4.5	5	144	328	3.26	<10	<1	0.60	<10	0.03	4760	15	0.02	5	500	>10000	76	1	11	<0.01	<10	10	12	20	1790
SR578	15.0	0.97	20	140	1.0	<2	0.24	16.0	9	46	244	2.15	10	<1	0.73	20	0.07	>10000	9	0.05	2	670	8378	30	1	28	<0.01	<10	40	13	20	3174
SR579	5.4	0.65	30	100	2.5	<2	0.29	34.0	8	73	101	5.63	<10	<1	0.46	10	0.15	7280	13	0.01	3	510	>10000	<2	3	10	<0.01	<10	20	20	30	8980
SR580	25.4	0.48	102	20	<0.5	6	0.18	11.5	2	150	477	3.54	<10	<1	0.45	<10	0.04	4090	12	0.02	6	310	4250	98	1	12	<0.01	<10	<10	9	20	3542
SR581	4.8	1.03	30	70	0.5	8	0.20	1.5	1	75	108	1.11	10	<1	0.56	10	0.04	1350	4	0.01	4	620	2170	4	2	5	<0.01	<10	<10	15	10	972
SR582	83.4	0.20	154	30	<0.5	194	0.04	5.5	2	356	1041	1.92	<10	1	0.09	<10	0.01	1480	20	0.01	8	260	4048	62	1	3	<0.01	<10	20	8	10	1226
SR583	46.2	0.71	480	20	<0.5	4	0.06	23.0	6	183	1273	2.05	10	<1	0.32	20	0.03	2395	69	0.01	9	230	>10000	1592	1	6	<0.01	<10	30	7	10	944
SR584	18.4	0.59	92	160	<0.5	<2	0.33	62.5	6	107	1209	3.96	<10	2	0.48	20	0.13	4965	8	0.01	4	800	>10000	78	1	23	<0.01	<10	10	10	70	>10000
SR585	>200.0	0.08	1084	240	<0.5	102	0.03	47.5	6	368	5563	6.75	<10	<1	0.09	<10	<0.01	185	59	0.01	9	90	>10000	1456	<1	5	<0.01	<10	<10	3	60	8518
SR586	33.0	0.80	232	110	<0.5	50	0.18	4.0	6	113	2724	4.91	10	<1	0.63	40	0.03	1515	64	0.01	3	1100	4492	216	2	9	<0.01	<10	<10	14	20	1160
SR587	>200.0	0.60	1948	20	<0.5	2344	0.10	12.5	2	163	>10000	7.51	<10	1	0.45	<10	0.03	375	192	0.03	<1	800	>10000	2596	1	20	<0.01	<10	10	14	100	972
SR588	137.2	0.47	2410	60	<0.5	108	0.06	14.0	4	215	966	4.91	<10	4	0.39	<10	0.01	215	63	0.01	6	400	2784	2394	1	13	<0.01	<10	<10	8	10	378
SR589	53.8	0.04	1168	<10	<0.5	78	0.05	9.5	10	412	2047	11.27	<10	3	0.05	<10	<0.01	60	44	0.01	7	60	1022	1182	<1	3	<0.01	<10	<10	2	20	506
SR590	8.0	0.63	124	80	<0.5	<2	0.20	<0.5	7	240	1025	3.16	10	<1	0.38	20	0.05	1225	26	0.01	4	560	562	44	1	22	<0.01	<10	<10	12	<10	212
SR591	1.8	0.41	32	460	<0.5	6	0.04	1.0	<1	156	16	2.45	10	2	0.36	10	0.01	405	28	0.01	5	460	528	14	1	20	<0.01	<10	<10	13	<10	148
SR592	13.2	1.02	60	10	<0.5	2	0.06	1.0	1	171	284	5.70	10	<1	0.35	<10	0.02	760	46	0.01	7	120	822	34	3	8	<0.01	<10	30	9	<10	712
SR593	15.2	0.39	24	10	<0.5	8	0.04	0.5	1	229	54	3.73	10	<1	0.59	10	0.02	40	192	0.01	6	140	1970	38	<1	3	<0.01	<10	<10	7	<10	150
SR594	0.2	0.65	24	20	<0.5	<2	0.03	<0.5	<1	243	21	2.06	<10	<1	0.31	30	0.03	75	12	0.01	6	370	1520	8	1	4	<0.01	<10	<10	7	<10	144
SR595	12.0	0.61	48	20	<0.5	10	0.03	0.5	4	282	128	1.91	10	<1	0.57	10	0.02	35	51	0.01	13	220	6096	40	<1	3	<0.01	<10	<10	5	<10	238
SR596	8.4	0.74	60	20	<0.5	8	0.04	4.0	4	220	174	3.81	10	<1	0.75	10	0.03	155	29	0.02	4	140	2726	30	1	5	<0.01	<10	<10	7	<10	1136
SR597	124.4	0.15	178	<10	<0.5	76	0.05	>100.0	2	302	1069	>15.00	30	<1	0.22	<10	<0.01	35	15	0.01	13	100	>10000	318	1	5	<0.01	<10	<10	3	10	>10000
SR598	0.6	0.40	6	10	<0.5	4	0.02	0.5	4	234	14	1.49	10	<1	0.45	10	0.01	70	39	0.01	10	230	520	4	<1	3	<0.01	<10	<10	6	<10	116
SR599	20.8	0.84	142	20	<0.5	2	0.02	3.5	1	236	75	2.98	10	2	0.89	30	0.05	75	32	0.04	10	360	2996	44	2	7	<0.01	<10	20	16	<10	550
SR600	1.2	0.29	10	10	<0.5	<2	0.07	6.5	1	240	37	0.95	<10	<1	0.33	10	0.01	90	27	0.02	9	70	2774	<2	<1	3	<0.01	<10	<10	4	<10	1606
SR601	125.6	0.32	520	<10	<0.5	52	0.02	>100.0	1	151	4327	2.32	10	<1	0.37	<10	0.01	55	14	0.02	5	120	>10000	202	<1	1	<0.01	<10	20	3	100	>10000
SR602	5.0	0.34	<2	<10	<0.5	8	0.05	14.0	2	249	92	1.07	<10	<1	0.32	10	0.02	135	37	0.03	12	30	2698	6	<1	1	<0.01	<10	<10	5	<10	2916
SR603	68.8	0.35	104	<10	<0.5	4	0.05	>100.0	7	213	1309	1.05	<10	<1	0.34	10	0.01	45	20	0.03	7	70	>10000	120	<1	2	<0.01	<10	<10	3	50	>10000
SR604	58.0	0.35	114	40	<0.5	<2	0.05	0.5	1	286	259	2.88	10	<1	0.29	<10	<0.01	60	27	0.01	10	100	>10000	88	<1	7	<0.01	<10	<10	6	10	154
SR605	89.8	0.12	88	10	<0.5	10	0.02	79.0	2	259	267	3.53	10	1	0.24	<10	<0.01	<5	25	0.02	5	60	>10000	88	<1	4	<0.01	<10	<10	3	50	>10000

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR606	5.0	0.31	72	40	<0.5	<2	0.03	<0.5	<1	244	29	1.73	10	<1	0.39	<10	0.01	40	112	0.02	7	90	1168	16	<1	5	<0.01	<10	<10	11	10	38
SR607	3.2	0.53	16	30	<0.5	6	0.02	<0.5	1	162	64	1.97	10	<1	0.58	<10	0.03	25	147	0.01	1	80	360	4	1	5	<0.01	<10	<10	10	10	22
SR608	7.0	0.42	80	40	<0.5	20	0.04	<0.5	1	108	356	3.58	<10	<1	0.31	<10	0.04	65	35	0.02	2	110	3032	48	1	5	<0.01	<10	<10	13	<10	54
SR609	0.4	0.47	44	<10	<0.5	10	0.02	<0.5	<1	106	15	2.75	<10	<1	0.24	10	0.01	50	9	0.01	<1	70	220	2	<1	2	<0.01	<10	<10	3	<10	56
SR610	10.0	0.41	80	480	<0.5	<2	6.05	31.5	11	252	2217	2.92	10	<1	0.20	10	0.99	>10000	6	0.02	7	190	3058	22	1	46	<0.01	<10	20	20	20	7694
SR611	2.6	1.93	46	200	<0.5	<2	1.24	>100.0	10	128	142	4.37	10	<1	0.23	20	0.25	8330	7	0.03	8	710	>10000	<2	7	45	0.01	<10	10	97	50	>10000
SR612	6.8	1.02	56	270	<0.5	<2	0.23	5.5	9	212	425	4.16	10	2	0.33	40	0.11	7785	16	0.02	10	460	1224	28	2	28	<0.01	<10	10	26	<10	1604
SR613	45.6	1.60	184	170	<0.5	<2	0.25	6.5	11	104	380	1.60	10	<1	0.59	20	0.13	3275	6	0.02	3	800	8438	208	4	7	<0.01	<10	<10	41	10	2212
SR614	29.0	0.72	64	360	<0.5	44	1.39	97.0	14	95	205	3.96	10	<1	0.26	20	0.51	5490	11	0.01	16	680	>10000	4	4	9	<0.01	<10	20	45	40	>10000
SR615	63.0	0.35	116	<10	<0.5	16	0.12	>100.0	6	170	762	1.27	<10	2	0.14	<10	0.06	1760	2	0.01	1	220	>10000	30	2	3	<0.01	<10	30	16	100	>10000
SR616	8.8	1.07	6	110	<0.5	<2	0.11	11.0	<1	174	104	1.83	10	5	0.32	80	0.07	8155	7	0.02	4	180	3210	22	2	14	<0.01	<10	10	7	10	3292
SR617	0.2	2.76	32	140	<0.5	<2	0.78	5.0	14	93	177	4.80	20	<1	0.41	30	0.66	3650	5	0.04	27	1080	316	8	11	33	0.03	<10	<10	133	<10	1948
SR618	29.2	1.75	164	1100	<0.5	<2	1.52	16.0	19	84	1272	5.88	20	<1	0.49	20	0.31	>10000	13	0.05	19	910	2694	178	6	62	<0.01	<10	30	87	20	5438
SR619	<0.2	1.04	46	10	<0.5	2	0.02	<0.5	7	168	7	3.09	10	<1	0.21	40	0.02	2785	9	0.02	3	130	112	<2	1	3	<0.01	<10	20	5	<10	756
SR620	>200.0	0.59	732	40	<0.5	<2	0.15	>100.0	4	197	583	1.48	10	11	0.19	10	0.02	760	632	0.01	4	4380	>10000	2698	1	11	<0.01	<10	180	21	20	268
SR621	17.0	0.49	2618	10	<0.5	94	0.07	17.0	87	112	5822	12.76	<10	<1	0.09	20	0.03	>10000	72	0.01	1	380	>10000	1858	3	6	<0.01	<10	150	11	<10	>10000
SR622	<0.2	0.70	42	20	<0.5	2	0.05	<0.5	<1	90	10	5.09	<10	<1	0.22	40	0.02	150	7	0.02	7	290	334	<2	1	11	<0.01	<10	<10	7	<10	42
SR623	1.4	1.11	8	90	<0.5	12	0.04	4.5	9	106	46	4.15	<10	6	0.15	20	0.02	5620	10	0.01	10	230	444	22	3	13	<0.01	<10	10	18	<10	300
SR624	26.2	1.15	132	20	<0.5	<2	0.04	1.5	<1	152	85	0.72	40	1	0.35	270	0.05	1215	43	0.02	1	140	8944	50	3	7	<0.01	30	<10	6	10	718
SR625	>200.0	1.39	394	40	<0.5	4	0.07	16.0	<1	175	446	1.32	80	6	0.37	630	0.08	40	57	0.02	7	150	>10000	288	4	20	<0.01	100	<10	6	40	1374
SR626	>200.0	1.52	516	20	<0.5	12	0.06	35.0	<1	137	483	0.88	10	<1	0.44	60	0.07	30	1012	0.02	5	340	>10000	690	1	13	<0.01	<10	20	26	40	1316
SR627	112.4	0.72	3214	10	<0.5	<2	0.12	6.5	1	202	328	2.48	<10	4	0.13	20	0.04	830	1357	0.01	7	2160	>10000	388	1	13	<0.01	<10	120	17	10	1408
SR628	75.8	1.10	226	10	<0.5	<2	0.05	5.0	6	159	931	1.76	<10	<1	0.39	20	0.04	2320	20	0.02	1	120	>10000	208	1	21	<0.01	<10	70	5	10	842
SR629	68.0	1.21	358	10	<0.5	<2	0.03	5.0	<1	165	313	1.52	<10	<1	0.39	30	0.02	190	34	0.01	7	140	>10000	276	1	22	<0.01	<10	10	6	20	1672
SR630	>200.0	0.07	1848	<10	<0.5	<2	0.03	>100.0	18	213	2258	6.54	10	12	0.13	30	<0.01	4400	357	0.01	9	270	>10000	3002	1	7	<0.01	<10	190	8	10	4014
SR631	1.4	1.70	22	10	<0.5	2	0.08	<0.5	1	125	114	1.14	10	<1	0.44	30	0.13	1035	10	0.04	<1	180	1858	4	1	13	<0.01	<10	<10	5	10	582
SR632	2.2	2.69	64	30	<0.5	<2	0.09	<0.5	2	136	246	4.68	10	<1	0.70	50	0.22	605	10	0.02	6	220	2748	14	4	11	0.01	<10	20	18	10	810
SR633	2.6	1.68	24	10	<0.5	2	0.07	1.0	<1	126	155	1.86	<10	6	0.41	30	0.12	175	7	0.03	3	260	2316	18	1	16	<0.01	<10	<10	5	<10	586
SR634	3.6	1.59	56	10	<0.5	16	0.05	0.5	1	146	119	1.01	<10	<1	0.39	30	0.09	115	8	0.02	2	160	1508	72	1	16	<0.01	<10	<10	5	<10	418
SR635	>200.0	0.39	622	30	<0.5	<2	0.02	27.0	3	158	634	0.96	20	<1	0.05	100	0.01	3995	363	0.01	10	140	>10000	480	1	8	<0.01	<10	40	9	30	1334
SR636	>200.0	0.48	334	20	<0.5	2	0.02	9.5	1	132	207	1.33	10	<1	0.11	70	0.01	785	175	0.02	3	100	>10000	230	1	11	<0.01	<10	10	7	30	870
SR637	>200.0	1.67	760	120	<0.5	6	0.07	35.5	<1	129	583	2.55	70	3	0.47	560	0.05	270	160	0.02	4	150	>10000	612	3	33	<0.01	90	<10	8	50	1748
SR638	73.4	1.61	1236	20	<0.5	8	0.05	6.5	2	144	271	5.48	20	<1	0.47	190	0.08	210	77	0.02	7	130	7954	438	3	14	<0.01	<10	10	10	<10	1376
SR639	1.0	1.42	66	20	<0.5	<2	0.05	<0.5	3	106	88	4.25	10	<1	0.26	40	0.05	150	19	0.01	2	200	598	14	2	12	<0.01	<10	<10	10	<10	348
SR640	14.0	0.95	392	20	<0.5	6	0.03	0.5	<1	119	387	2.06	<10	<1	0.31	20	0.02	200	19	0.02	5	240	3708	134	2	21	<0.01	<10	<10	33	<10	560
SR641	6.4	1.39	32	20	<0.5	<2	0.02	0.5	<1	127	115	1.08	10	<1	0.21	40	0.02	135	13	0.01	2	150	604	14	1	15	<0.01	<10	<10	7	<10	68
SR642	15.0	1.69	144	30	<0.5	<2	0.06	1.5	3	147	104	1.32	10	1	0.49	70	0.10	930	140	0.04	5	160	3292	20	3	11	<0.01	<10	30	10	10	658
SR643	24.0	1.15	192	10	<0.5	<2	0.03	0.5	1	171	116	2.16	10	<1	0.33	70	0.05	530	148	0.02	7	100	>10000	46	2	9	<0.01	<10	10	9	10	942
SR644	>200.0	0.91	94	100	<0.5	4	0.02	5.0	<1	91	181	0.76	10	<1	0.12	100	0.01	355	54	0.02	<1	70	>10000	114	1	10	<0.01	<10	<10	2	20	468
SR645	85.2	1.15	102	40	<0.5	2	0.04	4.5	<1	118	172	1.37	10	2	0.23	40	0.04	785	15	0.01	7	40	8246	112	2	9	<0.01	<10	<10	5	<10	792
SR646	162.0	0.42	256	180	<0.5	10	0.03	6.0	<1	165	103	1.13	<10	5	0.13	20	0.02	360	48	0.01	8	40	4010	138	1	22	<0.01	<10	10	6	<10	462
SR647	22.2	0.57	46	60	<0.5	10	0.03	1.0	5	86	227	2.74	<10	<1	0.11	10	0.01	>10000	5	0.01	<1	90	>10000	34	2	7	<0.01	<10	70	8	<10	2822
SR648	0.4	0.65	46	30	<0.5	2	0.06	<0.5	2	63	9	1.19	<10	<1	0.09	20	<0.01	245	2	0.01	<1	140	124	<2	1	12	<0.01	<10	<10	4	<10	28
SR649	24.4	0.85	272	820	<0.5	16	0.03	<0.5	3	134	85	4.40	<10	<1	0.31	40	0.02	80	18	0.02	6	150	2206	38	1	31	<0.01	<10	<10	5	<10	154
SR650	27.2	1.50	416	2120	<0.5	116	3.21	28.5	9	168	6176	2.39	10	<1	0.52	30	0.13	8875	30	0.02	2	560	2052	618	4	21	<0.01	<10	20	28	10	2278
SR651	39.4	1.10	80	40	<0.5	<2	4.19	28.5	1	216	7864	1.59	20	<1	0.16	10	0.59	2805	427	0.01	6	230	3326	72	1	18	<0.01	<10	30	14	<10	6044
SR652	0.6	0.48	22	90	<0.5	10	0.10	<0.5	3	263	80	0.99	<10	2	0.14	<10	0.04	285	35	0.01	11	200	134	8	1	7	<0.01	<10	<10	28	10	122
SR653	3.0	2.77	66	50	<0.5	<2	3.21	10.0	15	47	1327	4.25	20	<1	0.24	40	0.67	6640	10	0.04	13	1310	3062	72	7	57	0.01	<10	10	146	10	2736
SR654	3.4	1.37	130	120	<0.5	<2	1.45	37.0	7	170	1615	3.20	10	<1	0.12	10	0.16	7910	51	0.02	10	550	5442	44	4	54	0.01	<10	20	71	20	4892
SR655	<0.2	1.33	14	100	<0.5	16	7.28	7.0	8	110	188	2.83	10	<1	0.23	20	0.21	4680	11	0.02	14	570	384	22	4	61	<0.01	<10	10	54	<10	1132
SR656	103.2	0.34	662	70	<0.5	<2	8.35	>100.0	9	136	>10000	2.02	<10	<1	0.09	<10	0.46	4855	335	0.01	7	280	>10000	436	1	36	<0.01	10	30	26	50	>10000
SR657	32.0	1.08	436	110	<0.5	<2	0.44	23.0	9	129	7512	2.56	10	<1	0.14	10	0.13	7355	123	0.02	14	600	>10000	246	3	23	0.01	<10	30	37	<10	5294
SR658	6.5	0.96	120	160	0.5	<2	5.21	20.0	10	111	1880	2.57	<10	<1	0.23	30	0.63	4180	29	0.02	10	720	7764	95	4	30	0.01	<10	<10	49	<10	4726
SR659	49.5	0.52	195	20	<0.5	26	2.49	65.5	4	234	4173	3.79	<10	3	0.18	20	0.10	1535	65	0.03	8	300	>10000	190	1	18	<0.01	<10	40	14	10	>10000
SR660	2.2	0.57	36	130	<0.5	<2	0.09	<0.5	<1	221	173	1.47	<10	1	0.18	10	0.03	1160	24	0.01	9	210	630	42	1	9	<0.01	<10	<10	21	<10	524

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR661	4.5	1.20	20	80	<0.5	<2	3.22	13.5	15	113	2356	3.46	<10	<1	0.15	30	1.16	3930	5	0.04	18	820	2400	35	5	38	<0.01	<10	<10	58	<10	2824
SR662	1.5	1.96	<5	30	0.5	<2	2.40	5.0	15	95	1364	3.09	<10	<1	0.13	40	1.27	2580	4	0.04	16	820	2018	25	5	66	0.01	<10	10	64	<10	1542
SR663	2.5	1.15	40	80	0.5	<2	0.39	3.5	10	205	3567	1.97	<10	1	0.15	20	0.52	2245	21	0.02	16	550	3778	30	2	15	<0.01	<10	10	29	<10	1926
SR664	11.4	0.59	92	100	<0.5	22	1.94	21.0	3	277	>10000	1.99	<10	7	0.14	<10	0.15	1990	41	0.01	8	410	>10000	64	1	25	<0.01	<10	<10	16	<10	7760
SR665	1.8	1.65	28	60	<0.5	6	0.15	0.5	<1	268	284	1.96	<10	<1	0.08	<10	0.73	3095	5	0.02	11	840	1160	22	2	13	0.01	<10	<10	29	10	692
SR666	3.0	0.34	50	90	<0.5	<2	0.09	3.5	33	255	616	5.06	<10	<1	0.14	10	0.04	>10000	17	0.02	20	260	3392	80	<1	63	<0.01	<10	10	3	<10	1138
SR667	6.5	0.58	20	40	<0.5	14	0.11	1.5	4	121	276	0.87	<10	<1	0.37	60	0.07	900	55	0.02	2	270	1814	90	1	12	<0.01	<10	10	4	<10	528
SR668	3.0	0.87	15	80	1.0	20	0.09	2.5	11	262	644	2.31	<10	<1	0.30	30	0.06	4170	36	0.02	12	140	1706	15	1	10	<0.01	<10	<10	27	<10	1420
SR669	4.0	1.51	15	50	0.5	16	1.66	1.0	10	189	703	2.74	<10	2	0.40	40	0.17	1350	4	0.02	10	1120	1442	20	4	28	<0.01	<10	<10	79	<10	534
SR670	<0.5	0.69	10	110	<0.5	<2	0.18	1.5	5	102	198	1.46	<10	<1	0.21	40	0.10	355	4	0.04	6	370	296	10	2	35	<0.01	<10	20	25	<10	388
SR671	<0.5	1.42	<5	120	<0.5	<2	1.82	0.5	13	88	122	3.58	<10	1	0.16	30	0.83	960	3	0.07	16	970	82	5	12	48	0.06	<10	<10	84	<10	158
SR672	<0.5	0.92	10	990	<0.5	<2	0.15	0.5	9	110	97	3.59	<10	3	0.17	10	0.04	540	5	0.02	19	510	36	10	7	80	<0.01	<10	30	62	<10	118
SR673	1.5	0.77	300	760	<0.5	<2	1.23	19.5	12	57	861	3.07	<10	<1	0.25	30	0.46	3800	20	0.02	15	960	1316	230	3	21	0.01	<10	<10	43	<10	3180
SR674	87.2	0.65	1312	950	<0.5	<2	0.07	58.5	7	196	4514	1.09	10	<1	0.28	<10	0.04	3000	134	0.01	12	390	>10000	2114	1	22	<0.01	30	30	16	<10	>10000
SR675	2.5	0.76	920	140	<0.5	<2	0.17	9.5	14	48	3555	3.77	<10	<1	0.21	30	0.05	3245	20	0.02	4	1030	1704	625	4	24	<0.01	<10	10	42	<10	1524
SR676	2.2	1.23	130	110	0.5	<2	0.08	2.0	25	127	90	5.37	10	1	0.32	10	0.05	8545	6	0.02	30	580	312	20	9	29	<0.01	<10	70	62	<10	546
SR677	<0.5	0.76	<5	20	<0.5	8	0.07	0.5	1	175	15	0.74	<10	<1	0.28	20	0.03	60	10	0.03	4	90	96	5	1	6	<0.01	20	10	6	<10	6
SR678	<0.5	1.04	<5	30	0.5	10	0.13	<0.5	5	247	17	1.58	<10	<1	0.21	50	0.16	295	4	0.08	4	250	40	5	2	11	<0.01	<10	<10	14	<10	16
SR679	3.0	0.83	215	190	<0.5	12	0.04	4.0	1	127	649	4.61	<10	4	0.57	20	0.04	60	48	0.07	<1	310	1664	10	1	7	<0.01	<10	10	57	<10	248
SR680	88.0	0.99	465	180	<0.5	80	0.03	3.5	2	228	487	4.42	<10	1	0.84	30	0.02	50	198	0.04	1	380	3346	290	2	14	<0.01	<10	<10	16	<10	82
SR681	3.0	0.82	40	60	<0.5	10	0.04	1.0	2	170	33	1.18	<10	2	0.40	40	0.05	85	41	0.05	6	470	3382	10	1	10	<0.01	10	30	8	<10	216
SR682	28.5	0.85	200	50	<0.5	16	0.04	1.0	2	208	218	2.93	<10	1	0.56	30	0.03	40	154	0.03	3	800	>10000	70	1	11	<0.01	<10	<10	14	<10	114
SR683	7.4	0.48	60	30	<0.5	<2	0.04	<0.5	2	187	120	0.79	10	<1	0.24	10	0.02	55	75	0.01	6	110	1272	44	<1	10	<0.01	10	30	8	<10	42
SR684	8.0	0.59	160	30	<0.5	10	0.03	0.5	2	234	45	3.11	<10	<1	0.64	20	0.02	35	141	0.03	2	270	2242	25	1	11	<0.01	<10	20	12	<10	36
SR685	8.0	0.47	1065	40	<0.5	8	0.04	1.5	1	270	55	3.53	<10	2	0.53	20	0.02	55	102	0.08	5	210	3748	80	1	16	<0.01	<10	<10	4	<10	60
SR686	1.4	1.74	565	180	<0.5	32	0.10	1.0	18	46	527	5.30	20	2	0.44	20	0.13	2390	2	0.02	4	440	188	60	2	197	<0.01	<10	<10	20	<10	98
SR687	0.4	2.29	275	230	<0.5	10	0.16	0.5	3	74	3292	2.31	20	<1	0.35	10	0.08	540	2	0.05	2	310	134	30	3	315	<0.01	<10	<10	39	10	88
SR688	6.4	0.57	1175	370	<0.5	28	0.07	2.0	<1	83	3381	9.85	10	<1	0.10	10	0.06	495	3	0.02	1	270	76	210	2	173	<0.01	<10	<10	22	10	148
SR689	4.8	2.09	245	480	<0.5	42	0.17	1.0	<1	40	55	8.13	30	<1	0.38	30	0.20	115	2	0.15	2	450	254	45	6	494	0.01	<10	20	74	<10	96
SR690	8.2	1.84	272	70	<0.5	14	0.08	<0.5	<1	59	284	3.12	10	<1	0.39	10	0.06	410	1	0.02	14	220	90	56	3	259	<0.01	<10	<10	37	<10	48
SR691	7.0	1.20	2135	400	2.5	766	0.06	10.5	18	21	5814	5.20	10	<1	0.60	20	0.07	6060	2	0.02	8	480	182	1210	2	69	<0.01	<10	10	37	30	978
SR692	30.4	2.17	5430	1050	5.5	4100	0.13	63.5	119	21	8641	5.86	10	9	0.88	10	0.06	>10000	3	0.10	38	560	130	3705	2	162	<0.01	<10	20	60	110	2934
SR693	0.6	1.22	135	130	<0.5	12	0.06	<0.5	<1	41	75	3.30	20	<1	0.55	40	0.03	80	1	0.02	<1	520	68	15	3	57	<0.01	<10	<10	9	<10	44
SR694	<0.2	1.46	135	500	<0.5	22	0.07	<0.5	<1	53	105	2.95	20	<1	0.73	40	0.03	80	1	0.01	<1	740	52	35	3	148	<0.01	<10	<10	6	<10	38
SR695	3.2	0.50	600	110	<0.5	36	0.06	0.5	<1	113	66	9.44	10	1	0.11	10	0.02	255	10	0.01	<1	520	62	85	2	41	0.01	<10	<10	14	<10	122
SR696	4.0	1.31	1062	180	<0.5	506	0.10	<0.5	2	140	867	13.73	40	<1	0.37	30	0.03	150	32	0.02	2	320	218	256	4	119	<0.01	<10	<10	36	<10	152
SR697	24.8	1.83	3245	110	<0.5	2456	0.03	6.5	<1	73	809	10.20	30	1	0.59	20	0.03	50	5	0.06	3	300	222	5840	4	451	<0.01	<10	<10	9	<10	70
SR698	11.8	2.16	1445	110	<0.5	1110	0.10	5.0	<1	45	304	6.78	20	<1	0.57	20	0.03	50	3	0.16	3	500	62	1675	4	285	<0.01	<10	<10	17	<10	86
SR699	4.2	0.77	1445	60	<0.5	1208	0.04	3.0	<1	33	221	10.45	20	2	0.14	10	0.01	45	3	0.01	3	380	64	1225	3	73	<0.01	<10	<10	33	<10	96
SR700	20.2	0.22	270	2100	<0.5	50	0.03	<0.5	2	362	3472	5.75	<10	<1	0.07	<10	<0.01	100	9	0.01	13	70	100	26	<1	36	<0.01	<10	<10	3	<10	38
SR701	1.4	0.97	352	320	<0.5	14	0.05	<0.5	1	185	217	5.28	10	<1	0.36	30	0.05	100	5	0.04	1	420	100	20	4	43	0.01	<10	<10	22	<10	140
SR702	3.0	0.63	720	80	<0.5	12	0.07	3.0	2	364	121	3.08	<10	2	0.12	<10	0.03	220	39	0.02	9	220	2266	15	1	87	<0.01	<10	<10	106	<10	246
SR703	4.5	1.89	205	120	3.0	16	0.18	13.0	20	52	718	6.39	<10	<1	0.38	10	0.35	4625	4	0.03	14	1000	3426	5	7	55	<0.01	<10	<10	102	<10	2718
SR704	1.5	1.75	740	200	0.5	10	0.13	8.5	13	250	196	4.56	<10	1	0.43	10	0.06	3220	39	0.05	11	570	8264	15	4	123	<0.01	<10	<10	146	<10	930
SR705	3.0	0.38	360	60	<0.5	6	0.66	0.5	1	260	45	2.76	<10	<1	0.05	10	0.04	170	29	0.03	5	170	1110	25	1	77	<0.01	<10	<10	37	<10	68
SR706	7.0	0.35	140	70	<0.5	6	0.05	<0.5	2	361	82	1.67	<10	<1	0.10	<10	0.01	90	11	0.02	14	110	594	10	<1	25	<0.01	<10	10	32	<10	38
SR707	6.6	1.65	898	160	<0.5	<2	0.06	1.5	1	155	224	6.89	10	1	0.56	20	0.06	185	27	0.03	1	630	1006	20	5	97	0.01	<10	<10	64	<10	156
SR708	9.4	0.58	96	120	<0.5	42	0.07	6.0	<1	108	85	1.27	10	<1	0.28	50	0.02	85	2	0.02	4	110	274	76	<1	13	<0.01	30	<10	1	30	828
SR709	3.6	0.60	422	100	6.5	24	0.08	42.5	28	108	6099	1.60	10	1	0.36	60	0.04	>10000	4	0.03	9	210	170	34	1	16	<0.01	70	<10	<1	40	5852
SR710	5.0	0.47	266	60	1.0	38	0.09	12.0	7	103	1356	1.50	10	<1	0.27	70	0.05	4265	2	0.03	2	150	50	68	1	11	<0.01	60	<10	<1	30	1412
SR711	2.8	0.41	250	20	<0.5	48	0.06	2.0	<1	87	1290	0.73	10	1	0.28	60	0.03	100	<1	0.03	3	70	24	28	<1	12	<0.01	20	<10	1	<10	226
SR712	1.4	0.52	50	20	<0.5	<2	0.07	1.5	1	104	755	1.06	10	1	0.27	60	0.05	215	<1	0.04	2	120	78	4	1	14	<0.01	50	<10	3	<10	600
SR713	0.8	0.61	52	30	<0.5	<2	0.06	1.5	<1	99	377	1.25	10	<1	0.30	40	0.04	375	1	0.02	3	90	140	6	<1	25	<0.01	20	<10	1	<10	484
SR714	5.8	0.54	250	80	<0.5	12	0.06	3.5	<1	108	2185	0.70	10	<1	0.31	60	0.02	85	1	0.02	2	100	148	34	<1	14	<0.01	30	<10	<1	50	460
SR715	2.4	0.66	48	50	0.5	8	0.07	13.0	11	82	323	1.61	10	1	0.31	60	0.06	8760	1	0.03	6	200	132	<2	2	30	<0.01	40	<10	1	10	1230

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR716	32.4	1.38	338	340	<0.5	<2	0.05	<0.5	274	43	4301	2.62	20	<1	1.21	70	0.05	>10000	10	0.10	51	390	80	112	3	39	<0.01	<10	30	37	50	5348
SR717	10.4	2.43	344	110	<0.5	368	0.08	5.5	23	75	317	9.88	30	<1	1.02	160	0.20	>10000	14	0.04	45	900	166	126	9	110	0.01	10	30	61	<10	1788
SR718	9.2	0.74	264	30	<0.5	<2	0.03	<0.5	1	175	47	3.09	10	<1	0.29	<10	0.02	90	22	0.01	8	160	2058	40	1	88	<0.01	20	10	56	<10	90
SR719	9.8	1.51	1368	40	<0.5	<2	0.06	<0.5	1	154	151	13.24	10	<1	0.39	<10	0.01	145	20	0.01	13	250	3888	396	2	225	<0.01	10	<10	57	<10	2234
SR720	11.4	0.49	606	70	<0.5	<2	0.09	<0.5	1	263	36	3.03	10	<1	0.10	10	0.05	300	5	0.01	11	280	1840	50	<1	127	<0.01	20	30	16	<10	122
SR721	3.0	0.55	68	460	<0.5	<2	0.03	<0.5	<1	257	15	0.86	10	<1	0.18	20	0.02	120	4	0.01	11	180	292	14	<1	98	<0.01	20	20	6	<10	42
SR722	0.6	0.82	58	50	<0.5	<2	0.03	<0.5	3	186	13	1.12	10	<1	0.17	10	0.01	225	1	0.01	5	250	36	18	2	32	<0.01	10	<10	12	<10	104
SR723	3.2	2.32	594	120	<0.5	<2	0.11	1.5	8	40	177	9.16	10	<1	0.36	20	0.06	1730	31	0.01	4	1220	1226	108	11	130	0.02	<10	20	104	<10	432
SR724	2.0	1.73	924	100	<0.5	<2	0.07	<0.5	2	98	64	6.00	10	<1	0.35	<10	0.03	155	3	0.03	1	540	5008	46	3	79	0.01	<10	<10	162	<10	158
SR725	4.6	2.38	752	110	<0.5	<2	0.05	1.5	7	94	209	4.37	10	<1	0.42	20	0.04	1490	2	0.01	8	880	6950	56	4	108	0.01	10	<10	237	<10	478
SR726	3.8	2.54	1056	190	<0.5	<2	0.09	<0.5	6	183	208	7.12	10	<1	0.55	20	0.04	170	124	0.03	8	1100	8454	82	6	94	0.01	10	40	170	<10	822
SR727	2.4	2.54	574	90	<0.5	<2	0.06	<0.5	5	111	102	4.66	20	<1	0.68	30	0.07	1115	1	0.02	6	1070	6584	62	4	59	0.01	<10	<10	52	<10	446
SR728	1.4	2.52	456	190	<0.5	<2	0.12	<0.5	5	99	58	4.55	10	<1	0.33	10	0.04	60	3	0.05	7	1100	2092	40	4	310	0.01	30	10	60	<10	110
SR729	<0.2	1.66	198	180	<0.5	<2	0.09	3.5	4	39	56	5.54	10	<1	0.41	10	0.05	40	<1	0.04	2	900	462	22	7	119	0.01	10	20	69	<10	190
SR730	2.2	2.47	418	2460	<0.5	<2	0.09	3.0	9	70	348	4.42	10	<1	0.39	10	0.07	35	2	0.04	4	890	2860	26	4	78	<0.01	<10	20	43	<10	228
SR731	1.0	1.70	488	640	<0.5	<2	0.03	36.5	43	74	45	5.49	<10	<1	0.18	<10	0.01	45	1	0.01	13	220	422	22	2	35	<0.01	30	<10	28	<10	272
SR732	2.2	1.86	1506	210	<0.5	<2	0.06	59.5	19	184	271	3.76	10	<1	0.58	<10	0.03	130	11	0.12	7	1300	8874	46	2	78	<0.01	<10	20	108	<10	256
SR733	0.4	1.67	322	220	<0.5	10	0.07	<0.5	1	99	20	1.65	10	<1	0.72	10	0.06	180	1	0.01	4	380	194	16	2	125	<0.01	<10	<10	11	<10	184
SR734	6.2	0.54	2564	220	<0.5	12	0.06	<0.5	<1	236	24	4.92	10	<1	0.41	<10	<0.01	95	2	0.02	1	140	5926	170	1	69	<0.01	<10	<10	16	<10	98
SR735	3.4	1.01	500	70	<0.5	<2	0.12	4.0	1	251	84	2.76	10	<1	0.37	<10	0.04	395	5	0.03	9	370	2586	74	2	17	<0.01	20	30	38	<10	376
SR736	4.0	0.50	178	30	<0.5	<2	0.08	0.5	<1	355	292	1.32	10	<1	0.15	<10	0.09	525	11	0.01	4	280	1380	22	1	13	<0.01	<10	<10	46	<10	82
SR737	0.8	1.17	82	110	<0.5	<2	0.03	<0.5	<1	121	26	1.19	10	<1	0.56	20	0.04	485	3	0.01	<1	210	566	18	1	11	<0.01	<10	<10	13	<10	160
SR738	8.0	1.36	210	330	0.5	12	0.09	0.5	2	90	25	2.60	<10	<1	0.82	20	0.05	210	4	0.03	5	640	>10000	10	1	23	<0.01	20	<10	20	<10	214
SR739	16.5	1.07	590	470	<0.5	6	0.08	1.5	4	196	61	3.88	<10	<1	0.55	10	0.03	135	6	0.05	9	320	7942	25	1	21	<0.01	<10	<10	23	<10	386
SR740	1.6	1.40	35	50	0.5	<2	0.39	<0.5	11	114	1391	3.12	<10	2	0.27	30	0.57	920	4	0.02	9	980	250	15	3	24	0.01	<10	10	66	<10	102
SR741	14.0	1.47	86	100	<0.5	<2	0.31	1.0	3	117	1299	2.68	10	<1	0.41	20	0.39	620	1	0.04	5	820	458	20	3	54	0.02	<10	<10	62	<10	120
SR742	1.6	0.95	2755	160	1.0	4	0.08	23.0	12	139	51	5.44	<10	<1	0.37	30	0.04	4775	63	0.03	12	670	>10000	230	1	31	<0.01	<10	<10	164	<10	822
SR743	5.4	1.39	424	70	<0.5	24	0.08	4.0	<1	171	214	2.23	10	<1	0.38	10	0.05	775	4	0.01	6	260	1938	80	1	152	<0.01	<10	<10	33	<10	408
SR744	11.2	1.27	810	330	<0.5	6	0.11	<0.5	1	156	235	5.50	<10	<1	0.48	20	0.04	110	10	0.01	8	940	8310	75	2	102	<0.01	<10	<10	47	<10	292
SR745	4.8	0.74	650	350	<0.5	<2	0.06	5.0	2	149	71	5.93	<10	<1	0.32	10	0.03	110	19	0.02	3	220	8814	40	1	20	<0.01	<10	<10	56	<10	242
SR746	4.8	1.03	488	410	<0.5	<2	0.05	<0.5	3	191	51	3.75	<10	<1	0.38	<10	0.02	310	2	0.01	7	310	1558	22	1	89	<0.01	<10	<10	35	<10	122
SR747	13.8	1.09	230	1270	<0.5	4	0.04	1.0	<1	113	38	3.60	10	4	0.66	<10	0.03	760	1	0.03	<1	590	>10000	10	1	41	<0.01	<10	<10	3	<10	258
SR748	14.6	0.96	200	2490	<0.5	34	0.06	26.5	34	109	108	4.84	10	7	0.46	10	0.06	>10000	15	0.01	17	530	>10000	5	1	473	<0.01	<10	<10	<1	<10	2656
SR749	0.4	1.27	55	580	<0.5	2	0.31	<0.5	<1	109	13	1.26	<10	<1	0.10	20	0.07	245	1	0.02	5	320	312	5	1	77	<0.01	<10	<10	7	<10	34
SR750	0.8	1.47	35	1050	<0.5	28	0.05	3.0	192	18	291	5.57	20	8	0.28	20	0.03	>10000	2	0.01	143	820	630	25	8	46	0.01	<10	<10	73	<10	780
SR751	<0.2	1.73	65	1950	<0.5	2	0.15	1.0	4	88	98	3.27	10	<1	0.16	20	0.02	770	1	0.01	14	1210	630	10	5	39	<0.01	<10	<10	46	<10	566
SR752	12.8	1.84	70	170	<0.5	14	0.04	0.5	2	312	64	1.58	<10	1	0.02	10	0.01	175	10	0.02	6	350	688	35	1	222	<0.01	<10	<10	24	<10	34
SR753	3.2	1.11	45	410	<0.5	18	0.04	<0.5	2	494	147	1.06	<10	1	0.15	10	0.02	85	10	0.02	9	330	1432	35	1	37	<0.01	<10	<10	119	<10	90
SR754	17.6	2.42	150	450	<0.5	12	0.09	1.0	2	273	151	2.80	<10	3	0.28	10	0.05	100	4	0.05	7	890	1228	65	2	270	<0.01	<10	<10	77	<10	70
SR755	0.8	0.34	65	150	<0.5	12	0.04	0.5	2	380	190	0.74	<10	<1	0.04	<10	0.02	95	16	0.02	8	100	678	45	<1	15	<0.01	<10	10	29	<10	48
SR756	39.2	0.70	260	90	<0.5	4	0.03	>100.0	<1	282	2869	0.87	10	<1	0.07	<10	0.01	300	192	0.01	8	340	>10000	1014	2	27	<0.01	<10	<10	358	<10	242
SR757	18.4	0.88	210	50	<0.5	8	0.11	6.0	3	314	508	1.52	<10	<1	0.17	10	0.05	305	81	0.02	10	360	2738	215	2	30	<0.01	<10	<10	232	50	292
SR758	5.8	2.04	170	240	<0.5	16	0.05	<0.5	<1	260	168	3.35	10	<1	0.32	10	0.06	105	3	0.03	4	820	2578	26	3	233	<0.01	<10	<10	69	<10	222
SR759	6.8	0.52	94	90	<0.5	16	0.03	<0.5	<1	342	62	1.44	10	<1	0.02	<10	0.01	80	5	0.01	8	140	672	20	<1	30	<0.01	<10	<10	26	<10	48
SR760	8.8	1.23	140	150	<0.5	<2	0.42	1.0	2	216	360	1.51	<10	<1	0.10	10	0.04	155	4	0.07	8	520	2026	40	2	60	<0.01	<10	<10	96	20	132
SR761	8.8	1.71	190	220	<0.5	<2	0.06	0.5	2	250	192	2.50	<10	<1	0.15	10	0.02	185	20	0.03	8	550	2152	65	2	73	<0.01	<10	<10	149	20	148
SR762	2.4	2.09	90	400	0.5	<2	0.23	11.0	31	105	153	7.06	<10	<1	0.30	30	0.08	9375	2	0.02	40	1000	1846	10	10	240	0.02	<10	<10	77	<10	1810
SR763	4.8	0.77	250	70	<0.5	<2	0.48	3.0	1	209	92	2.58	<10	1	0.24	20	0.14	240	4	0.07	9	370	1588	30	1	165	<0.01	<10	<10	46	<10	288
SR764	12.6	1.95	140	70	<0.5	8	0.15	11.0	<1	208	217	2.41	10	<1	0.45	20	0.11	380	2	0.02	7	820	1570	32	2	74	<0.01	10	<10	60	<10	674
SR765	15.7	1.16	320	30	0.5	4	0.46	4.5	3	111	320	2.80	<10	<1	0.37	30	0.11	475	5	0.04	7	410	5802	140	3	40	<0.01	<10	<10	138	<10	656
SR766	11.2	1.05	540	120	<0.5	22	0.04	<0.5	2	241	211	1.98	10	<1	0.11	10	0.01	880	10	0.01	12	370	3530	82	2	86	<0.01	10	<10	79	<10	108
SR767	37.6	1.02	1705	100	<0.5	<2	0.33	44.0	31	339	8453	3.21	<10	7	0.17	10	0.04	7245	42	0.03	11	830	>10000	675	3	51	<0.01	<10	<10	1422	20	372
SR768	12.8	1.37	980	170	<0.5	<2	0.06	2.0	2	295	1362	2.85	<10	6	0.29	10	0.04	130	15	0.02	7	490	>10000	125	3	104	<0.01	<10	<10	1192	20	408
SR769	10.4	0.31	180	200	<0.5	10	0.03	<0.5	1	442	249	1.51	<10	<1	0.03	<10	0.01	60	24	0.01	10	50	4156	100	<1	26	<0.01	<10	<10	171	<10	82
SR770	16.4	0.69	350	170	<0.5	6	0.04	<0.5	<1	329	184	1.77	10	<1	0.23	<10	0.02	110	74	0.01	10	660	6424	118	1	31	<0.01	10	<10	119	<10	108

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR771	72.0	7.53	35	40	1.0	18	0.87	2.5	12	76	6392	3.44	<10	<1	0.51	40	0.77	1010	1	0.07	8	1250	562	65	6	73	0.10	<10	<10	94	<10	226
SR772	1.0	1.34	<2	50	<0.5	10	0.45	<0.5	10	94	1235	2.87	10	<1	0.22	20	0.60	670	<1	0.05	10	1050	48	8	3	42	0.03	<10	<10	72	<10	56
SR773	0.6	0.13	24	20	<0.5	2	0.01	<0.5	5	335	37	0.75	<10	<1	<0.01	<10	<0.01	70	2	0.01	11	150	164	4	<1	23	<0.01	<10	<10	5	<10	14
SR774	1.6	1.62	<5	60	<0.5	<2	0.51	<0.5	1	207	180	2.92	<10	<1	0.47	20	0.18	115	2	0.04	8	460	282	5	4	163	0.02	<10	<10	77	<10	46
SR775	<0.2	0.89	38	470	<0.5	2	0.04	<0.5	3	58	14	6.14	<10	<1	0.41	<10	0.02	15	1	0.02	3	160	40	12	1	36	<0.01	<10	<10	47	<10	2
SR776	28.8	0.25	120	<10	<0.5	50	2.74	>100.0	9	40	642	5.34	<10	25	0.06	<10	0.72	>10000	22	0.01	8	810	>10000	40	3	17	<0.01	<10	<10	<1	130	>10000
SR777	<0.2	1.00	<5	110	2.5	2	0.34	3.0	<1	41	107	1.27	<10	<1	0.34	50	0.17	1195	6	0.08	5	120	270	5	1	29	<0.01	<10	<10	3	<10	872
SR778	1.0	6.97	5	130	3.0	2	0.91	7.0	36	4	435	5.93	10	4	0.70	20	2.40	4115	3	0.07	14	1780	218	5	16	19	0.01	<10	<10	131	<10	3616
SR779	3.0	0.44	46	270	<0.5	<2	0.14	4.5	1	164	51	1.16	<10	1	0.35	30	0.01	1065	3	0.02	4	60	708	6	<1	12	<0.01	10	<10	<1	<10	710
SR780	0.6	0.60	<5	30	0.5	<2	0.11	14.5	<1	47	49	0.61	<10	9	0.16	30	0.05	1505	7	0.01	6	130	440	5	1	7	<0.01	<10	<10	<1	<10	3446
SR781	3.8	0.58	4	110	<0.5	<2	0.25	3.0	2	226	44	1.42	<10	3	0.37	30	0.05	520	8	0.02	6	80	824	18	<1	10	<0.01	10	<10	<1	<10	838
SR782	2.0	1.09	22	20	0.5	2	0.74	26.0	3	203	84	1.92	10	1	0.39	50	0.16	7295	5	0.02	4	110	1368	6	1	9	<0.01	<10	<10	<1	<10	5828
SR783	9.2	0.43	38	1630	<0.5	<2	0.06	1.5	2	259	133	1.45	<10	1	0.22	<10	0.03	1015	11	0.02	7	140	8574	42	<1	48	<0.01	10	<10	2	<10	558
SR784	9.6	0.45	46	5400	<0.5	2	0.06	0.5	2	163	106	8.42	<10	<1	0.37	10	0.03	180	9	0.12	6	50	1262	8	<1	67	<0.01	<10	<10	10	10	298
SR785	4.2	0.81	20	110	0.5	<2	0.09	11.0	4	214	238	1.91	<10	<1	0.41	30	0.04	1300	24	0.02	4	80	1788	16	1	8	<0.01	10	<10	<1	<10	1070
SR786	7.0	0.69	14	1020	0.5	4	0.22	>100.0	4	218	136	1.36	10	2	0.33	30	0.03	430	6	0.02	7	160	>10000	<2	1	268	<0.01	10	<10	1	30	>10000
SR787	10.2	0.41	28	130	<0.5	8	0.13	91.5	6	241	230	2.61	<10	3	0.21	<10	0.07	>10000	10	0.02	8	150	>10000	8	<1	6	<0.01	10	40	<1	30	>10000
SR788	0.8	0.60	4	10	<0.5	<2	0.04	0.5	3	292	39	1.53	<10	<1	0.34	20	0.03	150	11	0.03	10	80	706	2	<1	3	<0.01	<10	<10	1	<10	164
SR789	0.2	0.92	<2	10	0.5	<2	0.07	0.5	3	277	12	1.35	<10	<1	0.51	30	0.06	175	15	0.02	7	40	150	<2	<1	3	<0.01	<10	<10	<1	<10	258
SR790	0.6	1.06	2	10	1.0	<2	0.16	4.5	3	262	15	1.25	10	<1	0.56	40	0.09	185	9	0.02	3	40	172	<2	1	4	<0.01	<10	20	1	<10	438
SR791	0.2	0.83	14	30	<0.5	4	0.06	1.5	4	261	44	1.44	10	<1	0.41	20	0.09	415	11	0.04	8	100	140	<2	1	5	<0.01	<10	<10	4	<10	312
SR792	0.8	0.77	<5	20	<0.5	<2	0.15	11.0	5	33	194	2.02	<10	4	0.36	<10	0.08	1115	7	0.03	7	20	678	5	1	8	<0.01	<10	<10	1	<10	2698
SR793	0.6	1.19	24	40	1.0	<2	0.35	0.5	16	141	52	3.18	10	<1	0.50	30	0.14	2790	2	0.02	35	1370	80	2	4	12	<0.01	<10	<10	30	<10	472
SR794	<0.2	0.84	<5	260	1.0	<2	0.07	3.5	15	90	464	1.88	<10	1	0.50	30	0.10	650	6	0.02	19	130	178	5	1	8	<0.01	<10	<10	1	<10	1002
SR795	72.2	1.03	845	1460	<0.5	42	0.06	0.5	2	191	1330	5.90	20	<1	0.71	<10	0.05	75	72	0.05	10	1900	>10000	330	2	37	<0.01	<10	<10	54	<10	142
SR796	160.0	1.49	1235	4580	<0.5	72	0.06	0.5	5	128	3081	5.79	10	<1	0.55	10	0.05	150	6	0.05	15	2280	>10000	1305	5	85	<0.01	<10	10	32	10	210
SR797	194.4	0.80	2772	1980	<0.5	80	0.06	7.0	7	399	>10000	4.12	<10	4	0.41	<10	0.02	65	86	0.05	9	400	>10000	2120	2	36	<0.01	<10	10	10	<50	1030
SR798	1.8	2.43	50	640	1.0	20	0.06	<0.5	<1	98	185	5.11	20	<1	1.12	40	0.16	350	5	0.02	<1	1340	3808	5	7	41	<0.01	10	<10	42	<10	242
SR799	159.0	0.95	670	1940	<0.5	98	0.03	2.5	1	331	720	2.97	10	<1	0.63	10	0.02	140	25	0.02	6	230	>10000	725	1	37	<0.01	<10	<10	10	<10	836
SR800	>200.0	0.21	1530	110	<0.5	1640	0.03	7.5	2	451	>10000	5.46	10	<1	0.11	<10	<0.01	60	26	0.01	14	<200	>10000	1245	1	7	<0.01	<10	<10	<1	150	1618
SR801	47.4	1.71	665	750	<0.5	78	0.10	1.0	4	63	1164	7.69	20	<1	0.61	30	0.14	3005	19	0.01	5	1180	8586	140	5	18	<0.01	<10	<10	49	<10	834
SR802	<0.2	0.77	20	2440	<0.5	6	0.08	<0.5	<1	143	31	2.16	10	<1	0.59	30	0.03	160	8	0.06	<1	390	240	5	<1	83	<0.01	10	<10	1	<10	92
SR803	6.4	1.15	86	180	<0.5	8	0.08	<0.5	1	152	330	2.80	10	<1	0.61	20	0.08	180	8	0.03	3	230	704	42	1	29	<0.01	<10	<10	6	<10	110
SR804	50.8	1.72	30	450	0.5	20	0.66	<0.5	21	81	>10000	3.97	20	<1	0.49	40	0.98	1565	1	0.02	15	1400	1794	10	6	18	0.04	<10	<10	79	<50	444
SR805	1.4	0.46	28	100	<0.5	6	1.04	<0.5	<1	193	31	2.23	<10	<1	0.29	10	0.07	55	32	0.07	5	280	108	<2	1	25	<0.01	<10	<10	14	<10	46
SR806	25.0	1.42	110	320	<0.5	18	0.17	<0.5	1	49	248	3.76	20	<1	0.85	10	0.11	85	7	0.05	3	1160	902	60	3	149	<0.01	<10	<10	31	<10	244
SR807	19.4	0.86	155	1130	<0.5	4	0.09	3.5	5	41	475	2.99	10	<1	0.50	10	0.02	295	21	0.02	<1	1230	960	40	1	80	<0.01	10	<10	16	<10	542
SR808	5.8	0.59	76	110	<0.5	<2	0.18	3.0	3	48	200	2.15	<10	1	0.45	10	0.05	260	2	0.03	2	1070	1000	38	1	24	<0.01	<10	<10	10	<10	452
SR809	28.4	0.59	62	1020	<0.5	10	0.38	>100.0	4	86	132	2.57	<10	1	0.45	20	0.06	140	2	0.02	6	1260	6536	32	1	36	<0.01	<10	<10	24	60	>10000
SR810	>200.0	0.48	1554	60	<0.5	44	0.12	>100.0	3	99	4684	2.90	<10	10	0.39	<10	0.01	30	3	0.01	3	940	>10000	4954	1	15	<0.01	<10	<10	4	60	2290
SR811	13.2	0.86	134	130	<0.5	<2	0.17	3.5	9	65	1467	3.61	<10	<1	0.55	10	0.05	80	<1	0.02	13	1150	1200	42	1	26	<0.01	<10	<10	11	<10	506
SR812	34.2	1.29	104	170	<0.5	6	0.10	25.5	13	83	7599	3.66	<10	1	0.49	<10	0.04	50	3	0.02	13	1410	5088	84	2	76	<0.01	<10	<10	3	10	2414
SR813	13.6	0.77	42	480	<0.5	<2	0.44	16.0	14	110	197	2.63	<10	<1	0.49	10	0.07	335	2	0.01	12	1060	2452	20	1	14	<0.01	<10	<10	11	<10	2254
SR814	12.8	1.24	58	630	<0.5	<2	0.71	11.5	17	97	307	3.57	<10	<1	0.65	10	0.13	1060	1	0.02	16	1390	992	42	2	23	<0.01	<10	<10	21	<10	2016
SR815	0.4	1.24	80	60	1.0	2	0.21	3.0	7	38	80	1.40	10	<1	0.51	50	0.15	1335	3	<0.01	<1	690	192	5	1	15	<0.01	20	<10	3	<10	1072
SR816	0.6	1.72	55	340	1.5	<2	0.96	1.5	6	48	49	1.99	10	<1	0.53	30	0.21	690	2	<0.01	<1	900	194	5	1	58	<0.01	10	<10	8	<10	546
SR817	37.4	0.46	38	70	<0.5	4	0.14	23.5	2	143	284	1.75	<10	1	0.32	<10	0.02	155	11	0.03	5	450	>10000	68	<1	22	<0.01	<10	<10	2	<10	2120
SR818	75.4	0.23	76	70	<0.5	30	0.06	>100.0	6	186	692	1.42	<10	10	0.13	<10	0.01	210	19	0.02	6	560	>10000	180	<1	22	<0.01	<10	<10	2	140	>10000
SR819	4.8	1.75	75	290	1.0	6	0.35	1.5	15	72	153	3.87	<10	<1	0.52	20	0.32	1795	4	0.01	10	1090	474	5	3	48	<0.01	<10	<10	43	<10	832
SR820	64.2	0.23	116	1950	<0.5	4	0.10	>100.0	3	207	394	1.37	<10	2	0.18	<10	0.01	70	69	0.02	10	410	8918	288	<1	38	<0.01	<10	<10	4	20	>10000
SR821	13.8	0.32	28	4860	<0.5	<2	0.15	2.0	5	281	129	1.53	<10	1	0.16	<10	0.03	115	88	0.02	7	370	1158	28	<1	146	<0.01	<10	<10	6	<10	250
SR822	21.4	0.66	40	650	<0.5	<2	0.17	0.5	<1	15	135	2.74	<10	6	0.45	<10	0.03	470	11	0.04	6	620	5466	15	<1	54	<0.01	<10	<10	10	<10	302
SR823	30.8	0.87	25	8680	<0.5	<2	0.22	8.0	3	44	147	1.66	<10	<1	0.40	<10	0.07	530	2	0.02	5	410	>10000	70	<1	278	<0.01	<10	<10	11	<10	1842
SR824	26.6	1.20	45	460	<0.5	16	0.08	3.0	7	50	62	3.17	<10	<1	0.58	20	0.14	>10000	2	0.02	3	730	>10000	5	1	29	<0.01	<10	<10	11	<10	1612
SR825	1.2	0.86	60	570	<0.5	6	0.07	<0.5	<1	107	52	1.26	<10	<1	0.53	<10	0.03	85	9	0.01	<1	290	266	5	1	169	<0.01	10	<10	10	<10	66

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR026	<0.2	1.69	15	1100	1.5	2	2.04	<0.5	<1	32	32	0.39	10	<1	0.71	20	0.28	470	1	0.02	<1	120	176	5	<1	100	<0.01	10	<10	1	<10	32
SR027	0.4	1.51	15	1500	0.5	<2	0.10	10.5	2	17	25	1.03	<10	<1	0.75	10	0.07	640	5	0.05	<1	400	692	5	<1	34	<0.01	<10	<10	1	<10	290
SR028	4.4	1.02	34	920	<0.5	6	0.07	<0.5	<1	56	15	5.30	10	<1	0.96	<10	0.04	115	2	0.06	<1	490	526	<2	1	106	<0.01	<10	10	14	<10	30
SR029	1.2	2.23	24	200	0.5	2	1.51	<0.5	24	50	40	3.34	10	<1	0.64	10	0.48	835	1	0.03	13	880	44	4	2	46	<0.01	<10	20	33	10	362
SR030	0.8	2.30	96	820	<0.5	<2	2.68	1.0	28	62	39	4.74	<10	<1	0.60	10	1.77	4230	<1	0.03	11	1260	128	4	5	31	<0.01	<10	<10	24	<10	332
SR031	2.0	1.06	88	170	<0.5	<2	0.09	<0.5	2	194	9	1.82	10	<1	0.46	<10	0.04	65	7	0.02	8	640	136	2	<1	178	<0.01	<10	<10	14	<10	56
SR032	3.8	0.83	36	110	<0.5	<2	0.38	3.0	11	326	77	4.63	<10	<1	0.44	<10	0.07	1715	2	0.02	12	520	890	<2	1	33	<0.01	<10	10	9	<10	244
SR033	6.0	1.25	90	220	<0.5	<2	0.51	3.0	8	228	40	4.04	<10	<1	0.63	10	0.10	450	5	0.02	7	640	650	<2	1	62	<0.01	<10	10	16	<10	514
SR034	3.6	1.12	46	130	<0.5	<2	0.49	<0.5	3	154	21	2.49	<10	<1	0.52	<10	0.06	255	7	0.03	3	750	610	<2	1	55	<0.01	<10	10	11	<10	128
SR035	1.8	0.88	40	80	<0.5	<2	0.69	<0.5	3	229	14	1.79	<10	<1	0.43	<10	0.04	240	12	0.03	7	580	144	<2	<1	40	<0.01	<10	<10	4	<10	44
SR036	1.8	1.57	52	70	<0.5	4	1.12	<0.5	8	69	18	3.38	<10	<1	0.50	10	0.25	1930	<1	0.02	1	1000	80	2	2	27	<0.01	<10	<10	17	10	232
SR037	13.4	1.29	34	10	<0.5	<2	0.66	8.0	25	260	97	>15.00	<10	<1	0.81	<10	0.04	70	2	0.03	16	450	1562	2	1	53	<0.01	<10	20	2	<50	2022
SR038	3.8	1.60	40	110	<0.5	6	0.85	<0.5	3	84	29	3.21	<10	<1	0.70	10	0.17	495	1	0.03	2	950	1090	8	1	36	<0.01	<10	<10	16	<10	216
SR039	2.6	1.60	74	100	<0.5	<2	1.93	<0.5	3	72	29	3.01	<10	<1	0.71	10	0.12	290	1	0.06	<1	690	152	6	1	106	<0.01	<10	<10	8	10	100
SR040	28.6	0.91	220	5060	<0.5	16	0.07	<0.5	2	51	309	6.56	10	<1	0.11	<10	0.03	25	<1	0.04	<1	160	2636	56	<1	137	<0.01	<10	<10	10	<10	22
SR041	1.6	1.26	170	1630	<0.5	8	0.14	<0.5	10	65	43	2.30	10	<1	0.48	10	0.41	315	1	0.16	8	490	50	20	1	58	<0.01	<10	<10	25	<10	42
SR042	1.2	2.61	60	1280	<0.5	8	2.22	<0.5	27	42	51	3.73	10	9	0.85	10	0.90	675	<1	0.06	15	1170	128	14	3	48	0.01	<10	<10	49	<10	80
SR043	3.4	2.45	320	400	<0.5	2	0.18	4.0	28	220	38	3.80	10	2	0.53	<10	0.09	80	93	0.02	26	580	292	14	2	52	<0.01	<10	<10	28	<10	1140
SR044	3.0	2.05	314	200	1.5	6	0.43	1.0	37	147	433	4.63	10	1	1.04	10	0.26	1595	1	0.02	16	850	712	16	3	9	<0.01	<10	<10	20	<10	1214
SR045	1.4	2.12	24	820	1.0	8	0.20	9.5	26	137	36	3.60	10	11	0.79	10	0.12	100	2	0.03	18	480	654	2	2	110	<0.01	<10	<10	21	<10	1092
SR046	0.6	1.90	74	1810	0.5	6	0.33	9.5	21	103	24	3.54	20	6	0.74	20	0.15	1040	13	0.03	17	990	106	2	2	176	<0.01	<10	<10	20	<10	310
SR047	<0.2	1.43	65	1500	<0.5	<2	0.98	<0.5	9	5	32	3.55	20	1	0.39	10	0.08	290	<1	0.09	9	860	40	5	1	1150	<0.01	<10	<10	20	<10	52
SR048	0.6	2.60	46	440	<0.5	2	0.84	<0.5	25	27	27	4.15	10	<1	0.56	20	0.32	1170	<1	0.08	3	1520	42	<2	3	56	<0.01	<10	<10	34	<10	114
SR049	4.6	1.48	66	120	<0.5	12	1.76	4.0	13	87	38	3.58	10	<1	0.42	<10	0.09	85	<1	0.07	5	1000	1714	4	2	146	<0.01	<10	<10	14	<10	768
SR050	128.8	0.81	6646	9310	<0.5	22	0.03	9.0	4	128	3430	1.36	20	23	0.01	<10	0.01	35	4	0.02	3	180	246	2420	<1	468	<0.01	<10	<10	6	<10	32
SR051	<0.2	3.50	25	800	0.5	10	0.98	<0.5	14	4	38	3.86	10	<1	0.87	20	0.57	790	1	0.04	8	1300	36	5	4	44	0.01	<10	<10	52	<10	124
SR052	>200.0	0.63	85	230	<0.5	684	0.01	4.0	<1	81	1401	1.03	<10	<1	0.38	<10	<0.01	300	31	0.01	2	110	>10000	135	1	16	<0.01	<10	30	<1	20	416
SR053	13.6	0.88	125	340	3.5	44	0.08	23.5	<1	58	1623	1.16	10	1	0.51	<10	0.04	250	8	0.02	3	70	844	520	1	12	<0.01	<10	<10	<1	10	2720
SR054	6.2	1.15	15	580	1.5	20	0.08	37.0	<1	48	210	0.93	10	2	0.72	20	0.06	7400	3	0.02	4	180	1722	30	1	31	<0.01	<10	<10	<1	10	3532
SR055	194.6	0.41	995	1980	<0.5	160	0.05	>100.0	13	101	>10000	4.20	10	40	0.28	<10	0.01	125	128	0.01	9	<200	>10000	6245	1	46	<0.01	<10	30	<1	100	>10000
SR056	>200.0	0.15	4805	220	1.0	200	0.04	>100.0	17	62	>10000	3.58	<10	125	0.13	<10	<0.01	75	85	0.01	11	<200	>10000	>10000	2	7	<0.01	<10	10	<1	400	>10000
SR057	1.8	0.49	30	520	3.5	4	0.09	46.0	7	75	145	1.32	10	<1	0.31	<10	0.04	190	3	0.01	6	60	652	10	<1	13	<0.01	<10	<10	<1	<10	1998
SR058	195.0	0.36	610	910	<0.5	180	0.10	>100.0	11	42	>10000	2.03	10	10	0.20	<10	<0.01	50	230	0.01	10	<200	>10000	4305	1	36	<0.01	<10	20	<1	150	>10000
SR059	2.6	0.84	40	190	1.5	40	0.15	>100.0	22	51	>10000	1.11	<10	1	0.36	<10	0.03	460	16	0.01	8	<200	5106	190	1	7	<0.01	<10	10	<1	100	>10000
SR060	4.4	1.73	30	670	0.5	6	0.21	41.5	15	122	354	4.07	10	<1	0.72	<10	0.13	1460	3	0.03	13	100	696	<2	1	14	<0.01	<10	<10	1	10	6006
SR061	154.8	0.61	135	2990	<0.5	6	0.02	1.0	<1	147	200	1.40	<10	2	0.29	<10	0.01	150	114	0.01	2	50	634	905	<1	75	<0.01	<10	<10	<1	<10	30
SR062	8.0	0.73	20	1670	<0.5	8	0.03	0.5	2	88	64	0.47	10	<1	0.41	10	0.02	50	2	0.03	1	110	520	8	<1	22	<0.01	<10	<10	<1	<10	24
SR063	>200.0	0.46	775	>10000	<0.5	28	0.02	4.5	4	134	528	2.26	10	12	0.23	<10	<0.01	30	142	0.01	2	120	2604	2800	<1	593	<0.01	<10	<10	<1	20	84
SR064	19.4	0.56	50	580	<0.5	12	0.02	3.5	2	130	970	1.07	10	1	0.30	<10	0.01	65	84	0.02	3	100	674	68	<1	12	<0.01	<10	<10	<1	<10	322
SR065	>200.0	0.28	1160	3310	<0.5	54	0.03	12.5	<1	197	1446	2.57	10	18	0.14	<10	<0.01	30	267	0.02	4	100	1976	6650	<1	101	<0.01	<10	10	<1	20	258
SR066	>200.0	0.56	600	220	<0.5	62	0.02	20.5	2	149	647	1.71	10	19	0.28	<10	0.01	35	63	0.04	2	110	1444	3758	<1	12	<0.01	<10	<10	<1	<10	62
SR067	173.0	0.61	782	2500	<0.5	52	0.02	9.5	2	207	285	2.43	10	11	0.26	<10	0.01	35	497	0.01	2	230	3376	2804	<1	54	<0.01	<10	<10	2	<10	22
SR068	>200.0	0.43	744	420	<0.5	50	0.03	16.5	2	193	443	2.00	10	48	0.18	<10	0.01	110	178	0.01	3	270	5418	2562	<1	15	<0.01	<10	<10	2	<10	16
SR069	>200.0	0.22	1005	4590	<0.5	26	0.01	19.0	<1	88	609	3.89	20	45	0.31	<10	<0.01	20	40	0.01	3	120	>10000	6060	<1	1027	<0.01	<10	10	<1	20	40
SR070	163.0	0.47	110	3110	<0.5	26	0.03	13.0	<1	152	557	1.81	10	5	0.33	<10	0.01	1030	300	0.01	11	120	>10000	610	<1	100	<0.01	<10	20	<1	<10	2504
SR071	>200.0	1.33	128	1720	<0.5	94	0.13	2.5	6	65	275	2.25	10	6	0.76	20	0.08	4835	4	0.02	3	710	9460	128	1	64	<0.01	<10	<10	7	40	860
SR072	32.6	0.63	124	940	<0.5	8	0.06	0.5	4	303	148	4.27	10	1	0.33	<10	0.02	280	109	0.06	10	660	1816	8	1	130	<0.01	<10	<10	11	<10	288
SR073	42.2	0.66	852	2940	<0.5	16	0.28	3.0	4	94	747	5.95	10	3	0.49	<10	0.03	35	33	0.04	3	230	462	142	<1	285	<0.01	<10	10	12	<10	258
SR074	148.8	0.30	480	2500	<0.5	20	0.04	0.5	3	702	167	3.44	10	4	0.20	<10	<0.01	80	114	0.02	25	400	2552	1160	<1	107	<0.01	<10	<10	10	<10	122
SR075	7.0	1.23	35	2160	<0.5	12	0.39	<0.5	4	164	36	1.91	10	2	0.59	10	0.08	975	20	0.01	6	450	588	20	1	77	<0.01	<10	<10	15	<10	182
SR076	22.0	0.22	100	1630	<0.5	14	0.07	<0.5	4	427	172	3.04	10	3	0.10	<10	0.01	135	404	0.03	12	380	1904	164	<1	66	<0.01	<10	<10	6	<10	58
SR077	44.4	1.20	285	>10000	<0.5	66	0.30	13.0	7	172	498	3.18	30	5	0.52	<10	0.08	1585	3	0.02	6	640	3446	480	2	1431	<0.01	<10	<10	13	<10	2828
SR078	19.6	0.67	310	7370	<0.5	4	0.28	2.5	3	31	707	2.51	10	3	0.58	<10	0.01	40	<1	0.02	2	580	1192	245	1	299	<0.01	<10	<10	9	<10	314
SR079	>200.0	0.75	1350	6920	<0.5	196	0.34	3.0	2	63	248	5.54	30	45	0.40	<10	0.01	95	2	0.05	<1	450	2338	3985	2	851	<0.01	<10	<10	21	10	190
SR080	13.2	0.25	40	1570	<0.5	2	0.05	<0.5	2	242	44	1.26	10	1	0.17	<10	<0.01	95	26	0.02	12	120	438	46	<1	32	<0.01	<10	<10	3	<10	94

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR881	21.8	0.51	78	4400	<0.5	10	0.06	1.0	3	118	106	1.00	10	7	0.32	<10	0.02	745	3	0.02	6	180	386	274	<1	123	<0.01	<10	<10	1	<10	80
SR882	5.8	0.31	20	1610	<0.5	4	0.02	<0.5	2	357	38	0.76	10	2	0.04	<10	<0.01	55	9	0.02	8	330	42	56	<1	70	<0.01	<10	<10	6	<10	6
SR883	1.2	0.51	12	790	<0.5	4	0.03	<0.5	2	353	35	0.80	10	1	0.20	<10	0.01	90	3	0.02	10	90	34	30	<1	29	<0.01	<10	<10	2	<10	10
SR884	21.0	0.61	110	2600	<0.5	6	0.12	6.5	<1	80	732	0.95	10	1	0.40	<10	0.01	115	3	0.01	<1	120	992	240	<1	79	<0.01	<10	<10	<1	<10	836
SR885	3.6	0.78	15	840	1.0	4	1.12	5.0	<1	52	617	0.48	10	1	0.50	20	0.07	1675	<1	0.01	<1	110	776	40	<1	89	<0.01	<10	<10	<1	<10	804
SR886	2.2	0.50	6	>10000	<0.5	8	0.04	<0.5	6	428	50	1.08	20	2	0.23	<10	0.01	75	80	0.02	10	130	258	28	<1	613	<0.01	<10	<10	4	<10	26
SR887	53.8	0.60	86	1040	<0.5	2	0.02	<0.5	2	188	95	0.69	10	2	0.28	<10	0.01	140	3	0.02	7	180	142	154	<1	39	<0.01	<10	<10	4	<10	14
SR888	21.2	0.81	84	8240	<0.5	6	0.09	<0.5	3	162	96	1.84	10	1	0.45	<10	0.02	35	1	0.02	4	170	790	66	<1	108	<0.01	<10	<10	3	<10	22
SR889	48.2	1.18	725	>10000	<0.5	16	0.06	8.0	2	71	1958	0.63	10	21	0.61	<10	0.03	505	5	0.02	<1	90	1184	635	<1	416	<0.01	<10	<10	2	<10	774
SR890	118.4	0.66	770	>10000	<0.5	<2	0.06	26.5	1	99	3660	0.90	<10	1	0.22	<10	0.01	85	4	0.02	<1	70	1120	1515	<1	333	<0.01	<10	<10	1	<10	266
SR891	188.6	0.49	1380	>10000	<0.5	18	0.04	18.0	2	128	1400	0.78	<10	9	0.13	<10	0.01	150	7	0.01	<1	150	8874	1570	<1	337	<0.01	<10	<10	<1	<10	110
SR892	35.6	0.63	140	440	<0.5	<2	0.05	0.5	2	230	98	0.74	10	9	0.22	<10	0.01	360	2	0.02	7	110	184	394	<1	38	<0.01	<10	<10	2	<10	28
SR893	1.8	0.84	6	80	<0.5	<2	0.39	<0.5	1	93	111	0.51	10	1	0.49	20	0.04	45	<1	0.02	3	70	244	16	<1	17	<0.01	<10	<10	<1	<10	72
SR894	>200.0	0.83	492	1160	<0.5	6	0.10	14.0	1	196	361	1.44	10	27	0.42	<10	0.02	255	3	0.02	4	200	1126	120	<1	39	<0.01	<10	<10	2	<10	90
SR895	148.4	0.45	550	780	<0.5	2	0.07	4.5	2	162	464	1.47	10	9	0.24	<10	0.01	545	6	0.02	7	220	1098	1038	<1	22	<0.01	<10	<10	1	<10	134
SR896	3.6	0.77	16	490	<0.5	4	0.08	<0.5	2	181	27	1.21	10	<1	0.40	<10	0.02	85	1	0.02	4	90	306	6	<1	12	<0.01	<10	<10	3	<10	18
SR897	11.6	0.67	54	1640	<0.5	2	0.05	<0.5	1	181	92	3.43	10	4	0.48	<10	0.03	45	2	0.05	7	290	1388	20	<1	45	<0.01	<10	10	3	<10	54
SR898	3.4	0.63	16	570	<0.5	<2	0.04	0.5	1	283	27	1.12	10	1	0.32	<10	0.01	35	2	0.02	7	120	152	32	<1	20	<0.01	<10	<10	2	<10	40
SR899	<0.2	3.51	20	470	0.5	6	0.16	<0.5	6	28	107	4.92	20	<1	0.98	50	0.86	625	4	0.04	10	1800	30	5	6	71	0.01	<10	<10	52	<10	198
SR900	3.4	0.78	280	360	<0.5	30	0.38	0.5	5	85	1486	4.31	10	<1	0.34	30	0.28	325	47	0.03	10	500	122	55	2	22	<0.01	<10	<10	11	<10	350
SR901	9.6	1.57	75	560	<0.5	24	0.04	0.5	<1	23	145	6.56	20	<1	1.04	40	0.09	405	<1	0.04	<1	1820	8044	10	4	27	<0.01	<10	<10	33	<10	510
SR902	22.8	1.24	182	160	<0.5	20	0.00	2.0	14	36	698	12.71	<10	<1	0.59	30	0.16	9255	16	0.09	2	1890	>10000	8	4	42	<0.01	<10	<10	41	10	1890
SR903	<0.2	0.70	15	130	0.5	<2	0.03	<0.5	3	71	21	1.29	10	<1	0.46	40	0.01	940	6	0.01	19	270	154	5	1	14	<0.01	<10	<10	2	<10	156
SR904	7.8	0.65	96	590	<0.5	6	0.06	<0.5	6	107	141	4.17	10	<1	0.44	20	0.07	1345	31	0.02	4	810	>10000	6	2	15	<0.01	<10	<10	19	<10	284
SR905	7.0	2.06	85	90	<0.5	24	0.35	<0.5	1	58	262	6.63	20	<1	0.72	40	0.28	560	2	0.02	11	1640	9716	35	6	64	0.01	<10	<10	58	<10	534
SR906	45.2	1.11	1505	330	<0.5	338	0.03	1.0	<1	36	534	7.48	20	<1	0.66	20	0.03	40	245	0.03	5	1080	1698	2660	5	44	<0.01	<10	<10	41	40	76
SR907	23.4	1.34	545	330	<0.5	240	0.03	<0.5	<1	29	492	4.66	10	2	0.67	30	0.06	75	33	0.02	17	1190	1290	1010	5	32	<0.01	<10	<10	52	<10	120
SR908	1.4	0.49	35	200	<0.5	4	0.04	<0.5	<1	32	66	2.56	10	<1	0.32	50	<0.01	135	8	0.01	13	420	366	45	<1	10	<0.01	<10	<10	1	<10	24
SR909	8.8	0.65	20	90	<0.5	14	0.11	6.0	3	105	290	1.99	10	<1	0.48	20	0.03	80	7	0.01	6	170	906	6	1	8	<0.01	<10	<10	7	<10	1504
SR910	75.0	0.42	104	180	<0.5	82	0.06	>100.0	8	130	6872	5.66	<10	1	0.29	<10	0.02	75	1	0.02	5	480	>10000	154	1	30	<0.01	<10	<10	1	90	>10000
SR911	7.0	0.61	116	70	<0.5	14	0.07	11.5	11	121	269	4.68	<10	<1	0.44	10	0.03	90	3	0.02	10	260	3412	36	1	7	<0.01	<10	10	6	<10	932
SR912	33.8	0.75	226	380	<0.5	22	0.30	81.5	12	129	790	5.53	10	7	0.40	10	0.03	295	5	0.02	9	1150	1394	556	1	183	<0.01	<10	30	4	40	>10000
SR913	26.0	0.37	100	510	<0.5	34	0.08	5.0	5	114	193	2.27	<10	1	0.39	<10	0.02	110	3	0.01	4	90	1256	556	<1	11	<0.01	<10	<10	3	<10	816
SR914	8.6	0.59	84	200	<0.5	10	0.38	2.5	3	86	182	2.67	10	1	0.69	10	0.05	500	7	0.01	2	410	2674	356	1	12	<0.01	<10	<10	3	<10	688
SR915	8.6	1.54	326	370	<0.5	42	0.17	1.5	10	94	966	5.96	20	<1	0.81	20	0.16	510	12	0.16	2	1400	1566	102	4	184	<0.01	<10	<10	33	<10	248
SR916	8.0	0.68	115	480	<0.5	168	0.08	1.5	2	66	814	3.97	10	<1	0.51	10	0.03	240	31	0.05	<1	850	1086	50	1	86	<0.01	<10	<10	13	<10	196
SR917	<0.2	2.62	55	160	0.5	10	2.46	<0.5	8	23	51	3.59	10	<1	0.37	50	1.00	1015	2	0.03	3	1550	70	5	7	77	0.02	<10	<10	44	<10	78
SR918	<0.2	2.05	40	230	<0.5	6	1.59	<0.5	6	76	126	3.29	20	<1	0.50	40	0.75	520	1	0.08	2	1380	30	5	8	103	0.06	<10	<10	58	<10	40
SR919	66.8	0.28	768	30	<0.5	178	0.13	5.5	6	182	2059	7.20	<10	3	0.19	<10	0.02	180	37	0.02	9	250	4180	2360	1	18	<0.01	<10	<10	1	10	1032
SR920	6.4	1.54	60	190	0.5	2	0.65	2.0	14	71	519	4.98	10	1	0.48	40	0.55	2085	3	0.02	8	1480	1586	2	6	40	0.01	<10	<10	43	10	918
SR921	27.6	1.13	182	210	<0.5	20	0.10	32.5	42	123	641	7.20	20	3	0.47	20	0.08	>10000	80	0.02	9	1450	>10000	44	6	98	<0.01	<10	<10	21	10	7428
SR922	64.2	0.81	200	70	<0.5	26	0.09	48.5	6	292	578	3.38	10	<1	0.39	20	0.07	560	8	0.02	8	670	>10000	278	2	10	<0.01	<10	<10	20	10	>10000
SR923	100.0	1.14	204	50	<0.5	36	0.06	2.5	10	257	1202	4.69	20	1	0.47	10	0.05	4970	10	0.04	4	1010	>10000	186	3	22	<0.01	<10	10	21	<10	724
SR924	86.2	1.59	214	40	<0.5	46	0.37	94.0	11	280	883	4.06	<10	<1	0.51	20	0.34	2645	3	0.03	10	700	>10000	194	6	15	0.03	<10	<10	43	30	>10000
SR925	>200.0	0.51	634	10	<0.5	144	0.12	>100.0	4	428	3980	3.31	<10	5	0.14	<10	0.06	2445	18	0.02	8	380	>10000	1358	1	5	<0.01	<10	20	9	80	>10000
SR926	0.4	0.48	14	70	<0.5	2	0.03	<0.5	2	131	34	1.16	10	<1	0.37	<10	0.01	30	18	0.02	1	30	52	2	<1	10	<0.01	<10	10	1	<10	24
SR927	1.0	0.91	35	20	<0.5	2	0.03	<0.5	<1	107	101	1.16	10	<1	0.63	<10	0.04	25	2	0.03	<1	130	84	5	1	18	<0.01	<10	20	<1	<10	26
SR928	2.6	0.94	260	40	<0.5	60	0.03	<0.5	<1	117	53	2.05	10	<1	0.60	50	0.04	50	2	0.01	<1	100	80	60	1	5	<0.01	<10	<10	<1	20	62
SR929	2.4	0.49	50	60	<0.5	16	0.02	<0.5	<1	101	132	6.55	10	<1	0.49	<10	<0.01	5	13	0.03	<1	170	244	25	<1	30	<0.01	<10	10	1	<10	36
SR930	0.8	1.12	<5	120	<0.5	12	0.05	<0.5	<1	81	75	1.59	10	<1	0.80	10	0.06	25	55	0.02	<1	70	76	5	1	21	<0.01	<10	<10	<1	<10	16
SR931	1.0	3.51	<5	640	0.5	12	0.31	<0.5	23	13	220	4.48	20	<1	0.71	30	1.36	1515	2	0.04	11	1410	42	5	4	23	0.01	<10	<10	67	<10	240
SR932	69.4	0.86	2755	230	<0.5	110	0.02	2.0	<1	143	100	3.49	10	50	0.47	10	0.03	30	6	0.04	12	130	504	4065	1	51	<0.01	<10	<10	<1	<10	152
SR933	2.2	1.29	345	40	<0.5	66	0.04	<0.5	<1	116	67	1.49	10	<1	0.74	40	0.04	35	4	0.02	4	150	258	105	1	9	<0.01	<10	<10	<1	<10	30
SR934	3.4	1.07	32	80	<0.5	6	0.66	1.0	10	98	390	2.98	10	1	0.37	30	0.54	940	9	0.03	10	580	108	24	3	15	<0.01	<10	<10	39	10	336
SR935	11.4	0.43	396	60	<0.5	90	0.08	0.5	7	180	166	9.27	<10	2	0.31	<10	0.02	70	4	0.01	10	140	478	230	1	38	<0.01	<10	20	3	<10	410

Appendix C.--continued.

Sample No.	Ag (ppm)	Al (pct)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (pct)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (pct)	Ga (ppm)	Hg (ppm)	K (pct)	La (ppm)	Mg (pct)	Mn (ppm)	Mo (ppm)	Na (pct)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (pct)	Tl (ppm)	U (ppm)	V (ppm)	W (ppm)	Zn (ppm)
SR936	84.8	0.52	714	460	<0.5	2680	0.04	0.5	1	103	303	4.16	10	2	0.59	10	0.03	195	25	0.02	3	470	5840	640	1	10	<0.01	<10	<10	19	<10	214
SR937	3.6	0.64	108	570	<0.5	14	0.09	1.0	3	109	93	3.39	10	4	0.38	30	0.05	1790	<1	0.03	8	700	2134	16	2	22	<0.01	<10	<10	20	<10	788
SR938	8.2	0.91	44	300	<0.5	8	0.13	1.0	25	77	60	6.85	10	<1	0.66	20	0.07	80	2	0.02	6	340	858	2	1	12	<0.01	<10	<10	9	<10	402
SR939	1.4	0.06	26	180	<0.5	4	0.41	0.5	23	60	24	4.28	10	<1	0.51	20	0.15	2750	<1	0.03	8	920	40	<2	1	13	<0.01	<10	<10	8	<10	736
SR940	1.6	0.46	88	20	<0.5	8	0.09	<0.5	1	204	189	3.38	10	<1	0.35	10	0.03	90	7	0.02	6	60	46	44	<1	6	<0.01	<10	<10	3	<10	52
SR941	29.0	0.89	498	100	<0.5	122	0.19	2.0	19	135	9404	7.84	<10	<1	0.54	10	0.08	105	1	0.02	9	470	366	42	2	8	<0.01	<10	10	7	30	456
SR942	6.2	0.99	76	50	<0.5	100	0.32	8.0	20	111	>10000	8.06	10	<1	0.59	20	0.12	205	2	0.02	11	1400	554	30	2	13	<0.01	<10	<10	6	<50	1188
SR943	8.6	0.83	126	240	<0.5	76	0.12	12.5	12	180	4439	11.24	<10	<1	0.51	10	0.08	170	6	0.02	7	380	604	44	2	36	<0.01	<10	10	1	30	606
SR944	5.0	0.71	226	30	<0.5	20	0.04	<0.5	1	100	266	5.58	10	<1	0.42	50	0.03	55	12	0.02	1	540	388	80	2	27	<0.01	<10	<10	9	10	46
SR945	>200.0	0.92	642	80	<0.5	186	0.53	21.5	10	229	1542	4.24	10	<1	0.25	10	0.34	4720	26	0.09	13	520	>10000	716	3	31	0.03	<10	<10	40	20	5672
SR946	2.4	0.87	24	540	<0.5	<2	0.13	<0.5	10	73	55	4.84	10	<1	0.52	40	0.18	360	7	0.05	2	1070	352	4	3	135	<0.01	<10	<10	15	<10	222
SR947	33.2	1.27	<5	1630	<0.5	<2	0.06	<0.5	1	82	267	0.28	<10	<1	0.68	10	0.05	40	<1	0.01	<1	40	58	15	<1	31	<0.01	<10	<10	3	<10	38
SR948	69.6	1.87	355	220	<0.5	2	0.08	9.5	3	20	499	0.51	10	<1	1.03	20	0.07	345	2	0.02	<1	240	1934	395	<1	14	<0.01	<10	<10	4	<10	96
SR949	>200.0	1.65	145	900	0.5	6	0.95	9.5	1	40	1730	0.33	10	<1	0.97	20	0.06	420	1	0.02	<1	130	1984	230	<1	52	<0.01	<10	<10	3	10	312
SR950	>200.0	1.25	470	>10000	0.5	34	0.26	12.5	1	38	7694	0.38	10	<1	0.75	10	0.04	225	1	0.02	<1	30	664	465	<1	278	<0.01	<10	<10	2	10	318
SR951	<0.2	2.68	<5	800	<0.5	6	1.06	<0.5	14	30	87	4.77	10	<1	1.08	20	0.57	510	12	0.05	<1	1080	52	5	5	36	0.06	<10	<10	54	<10	154
SR952	<0.2	1.14	<5	490	<0.5	<2	0.18	<0.5	19	133	33	4.91	<10	<1	0.60	<10	0.04	55	6	0.04	5	350	8	5	<1	10	<0.01	<10	<10	7	<10	68
SR953	<0.2	1.38	10	420	<0.5	4	0.11	2.5	10	36	70	4.33	<10	<1	0.66	10	0.09	580	44	0.03	3	770	166	5	2	42	0.01	<10	<10	33	<10	854
SR954	<0.2	0.76	5	390	<0.5	14	0.06	<0.5	20	91	21	5.01	<10	<1	0.40	<10	0.02	170	80	0.03	6	330	102	5	1	33	<0.01	<10	<10	4	<10	280

EXPLANATION OF SYMBOLS FOR REPORT FIGURES AND PLATES, INCLUDING: Inset maps at various scales and 1:126,720-scale plates.

APPROXIMATE BOUNDARY OF THE FOREST MANAGEMENT AREA

APPROXIMATE BOUNDARY OF WILDERNESS

NATIONAL MONUMENT BOUNDARY

6000 — TOPOGRAPHIC CONTOUR–Showing elevation in feet above sea level

STATE LINE

COUNTY LINE

PRIMARY SECONDARY ROADS

UNIMPROVED ROADS TRAILS

INTERMITTENT STREAMS

GRID TICK MARK

PATENTED MINING CLAIM

SURFACE OPENINGS–Showing sample number(s); symbols may represent more than one working. Also, VARIOUS REPRESENTATIONS OF SAMPLE SITES:

616 — Rock sample locality–Showing sample number

or or — Adit open (left); Adit, inaccessible (right)

or — Trench

Opencut

Glory hole, open pit, or quarry

EXPLANATION OF SYMBOLS FOR REPORT FIGURES AND PLATES, INCLUDING:
Inset maps at various scales and 1:126,720-scale plates–Continued.

SURFACE OPENINGS–Showing sample number(s);
symbols may represent more than one working. Also,
VARIOUS REPRESENTATIONS OF SAMPLE SITES–Continued:

846 — Prospect (pit, opencut, or small trench)

326-328 — Tunnel

Mine or quarry (active, left; inactive, right)

Placer mine or gravel pit (active, left; inactive, right)

Shaft, open to surface (left);
Shaft, inclined (right)

Shaft, water filled (left);
Shaft, caved (right)

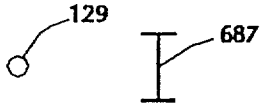
R — Shaft, reclaimed

Mine dump

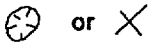
DHxxx — Drill hole collar

Land or mineral monument

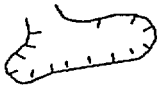
EXPLANATION OF SYMBOLS FOR REPORT FIGURES, INCLUDING:
Features of detailed mine maps, both surface and underground, at various scales (larger than 1:24,000).



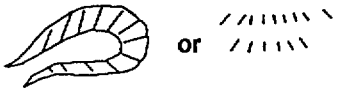
ROCK SAMPLE LOCALITY–Showing sample number



PITS

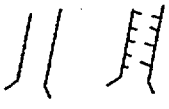


OPENCUT

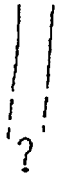


DUMPS

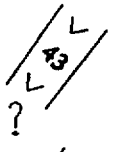
STOCKPILE



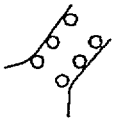
ADIT PORTAL (left);
ADIT PORTAL WITH TRENCH OR OPEN CUT (right)



LEVEL WORKING–Dashed and/or queried where uncertain



INCLINED WORKING–Showing degree of inclination, chevrons pointing down; queried where uncertain or inaccessible



TIMBERED (Vertical timbers and/or lagging)

CAVED

RUBBLE (BACKFALL) FILLED, MUCK-FILLED, OR BACKFILLED WORKING–Queried where uncertain or inaccessible

EXPLANATION OF SYMBOLS FOR REPORT FIGURES, INCLUDING:
Features of detailed mine maps, both surface and underground, at various scales (larger than 1:24,000)—Continued.

STEP DOWN IN SILL—Showing drop in feet; hachures on down side

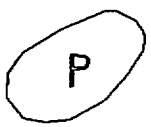
RAISE, head (left); RAISE, foot (right)

RAISE GOING UP AND WINZE GOING DOWN

WINZE—Noted if water filled

MANWAY (left); CHUTE (right)

SHAFT, open at surface (left);
SHAFT, bottom (right)

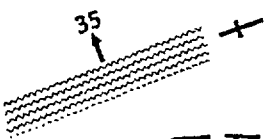


PILLAR

GEOLOGIC SYMBOLS

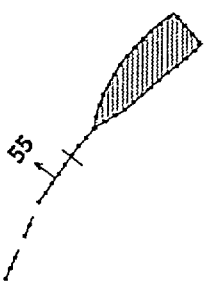
Strike and dip of bedding

Fault—Showing strike and dip (inclined or vertical, degrees); dashed where approximate



Fault zone or shear zone—Showing strike and dip (inclined or vertical, degrees); dashed where approximate

Thrust fault—Sawteeth on upthrown side



Vein—Showing strike and dip (inclined or vertical, degrees); dashed where approximate

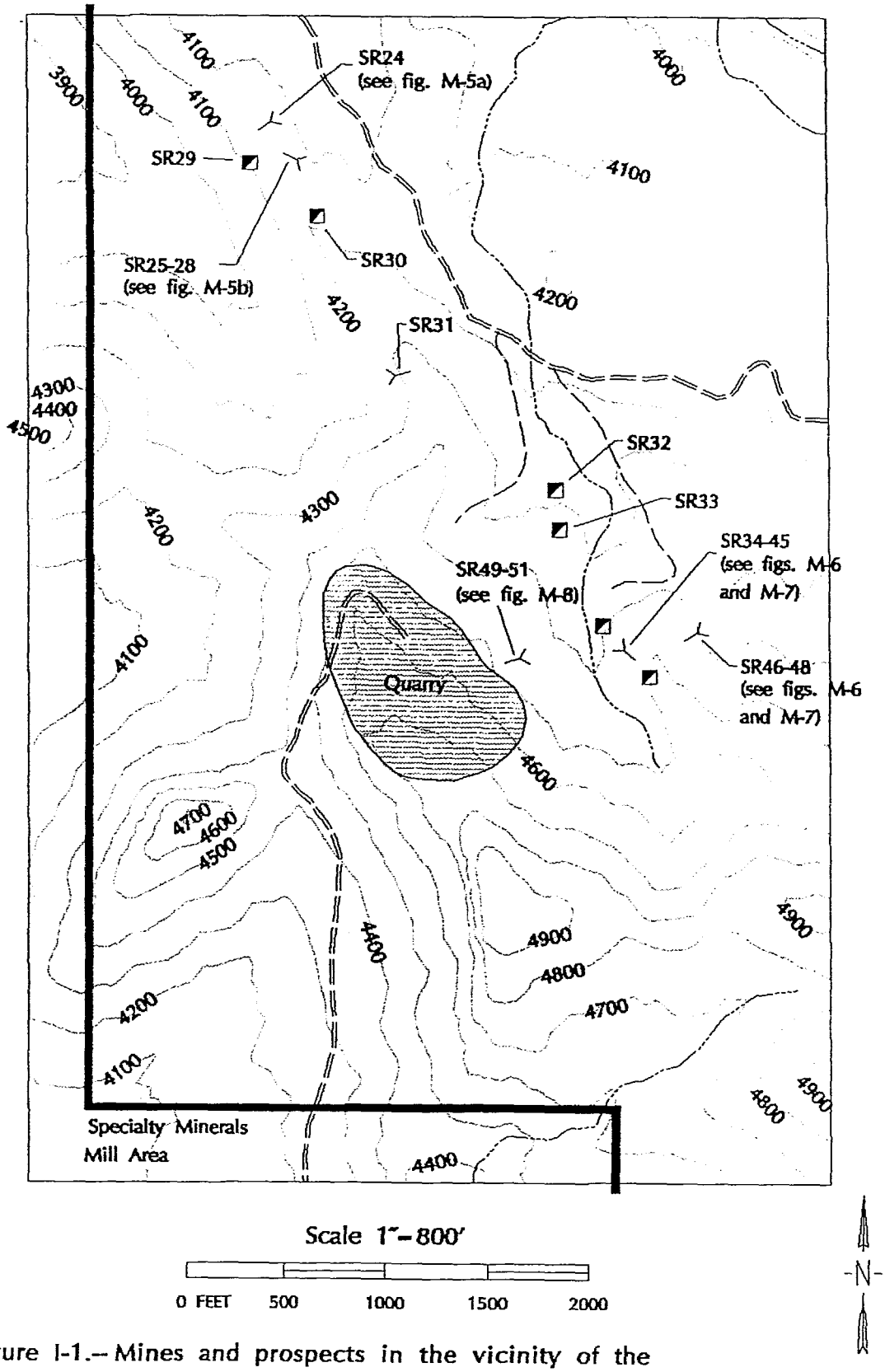


Figure I-1.—Mines and prospects in the vicinity of the Specialty Minerals Quarry and Blue Jay Mine, showing localities of samples SR 24-51.

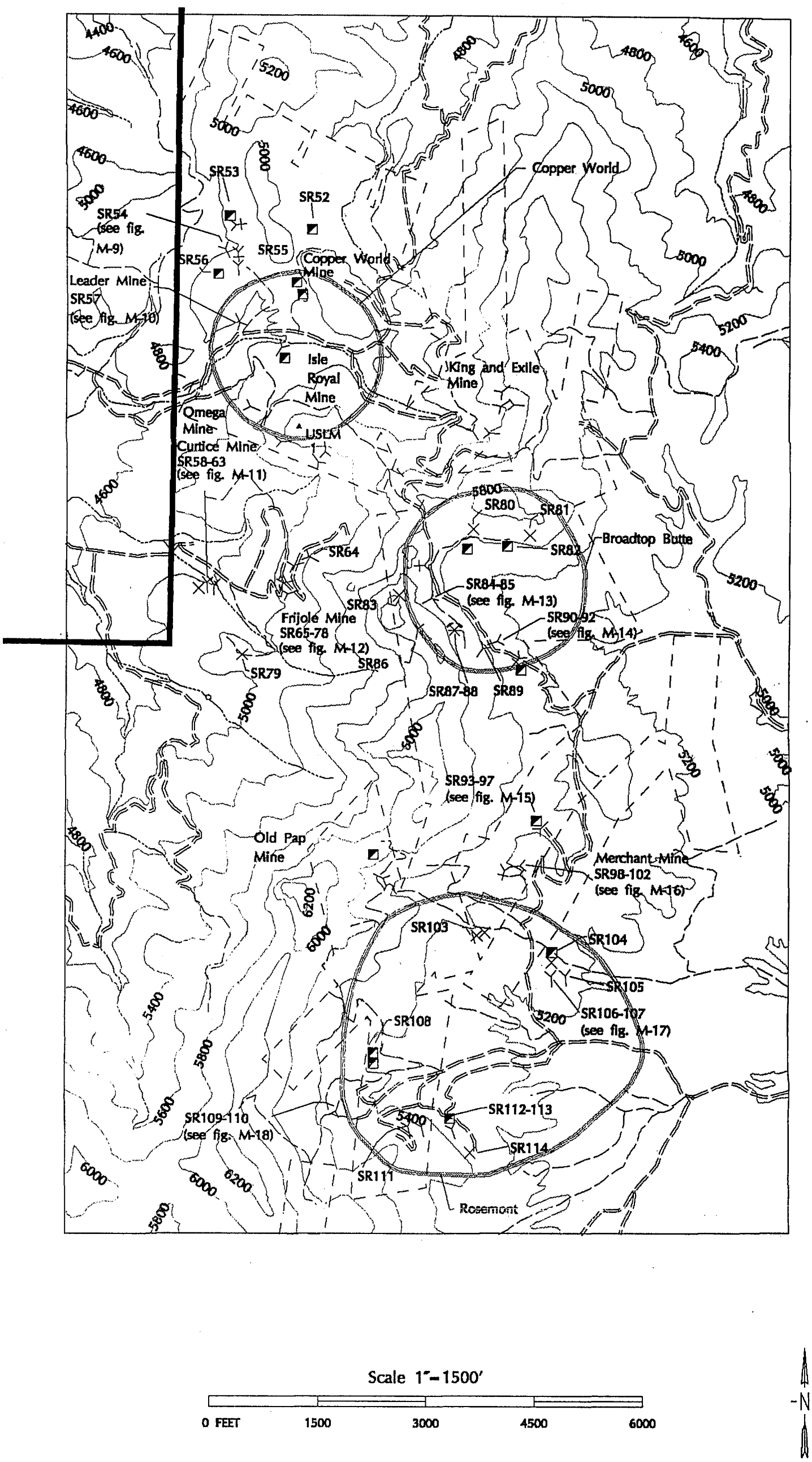


Figure I-2.– Helvetia-Rosemont district patented claim area showing localities of samples SR 52-114, and the Copper World, Broadtop Butte, and Rosemont porphyry deposits.

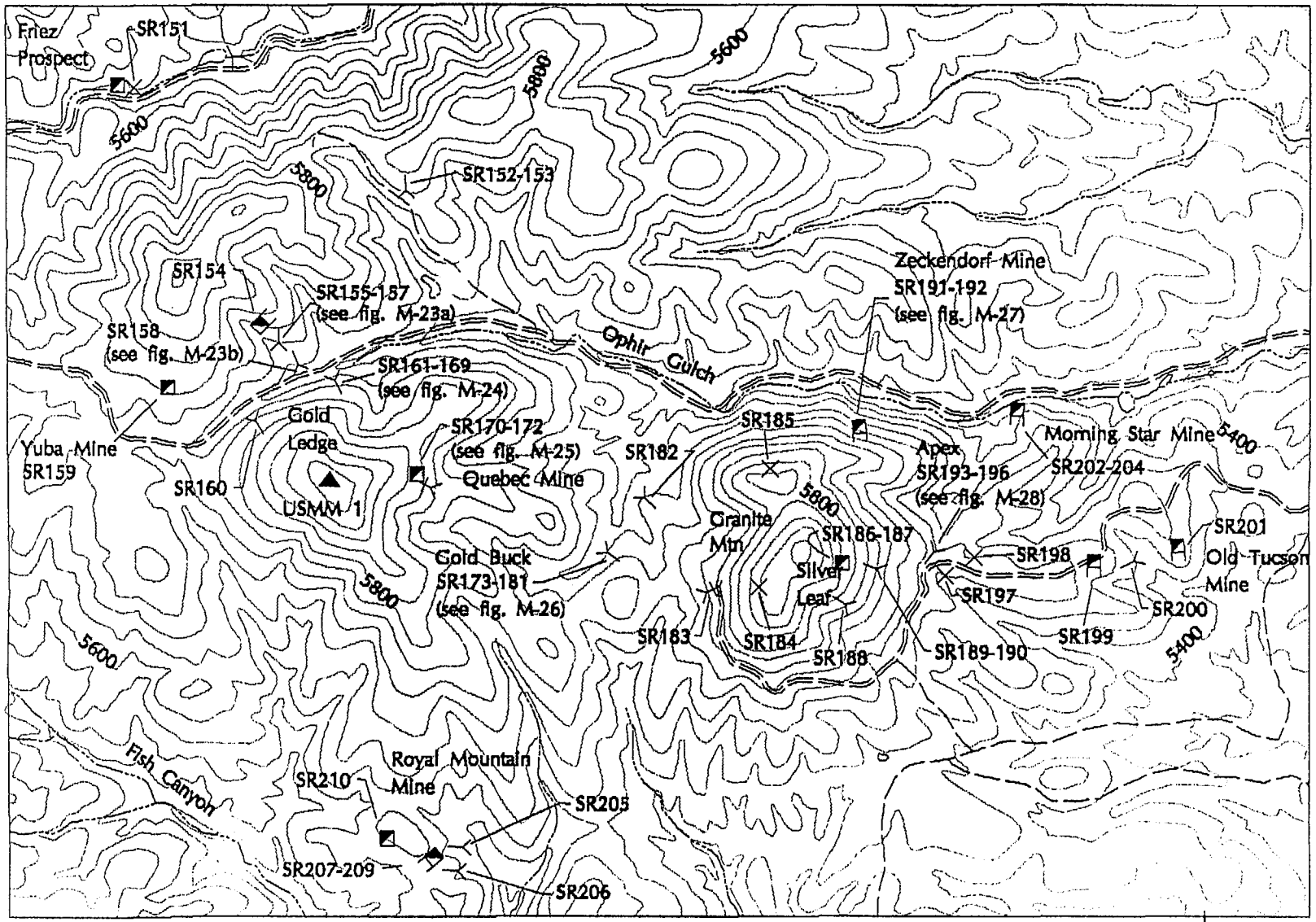


Figure I-3.– Mines and prospects in the vicinity of Granite Mountain showing localities of samples SR 151-210.

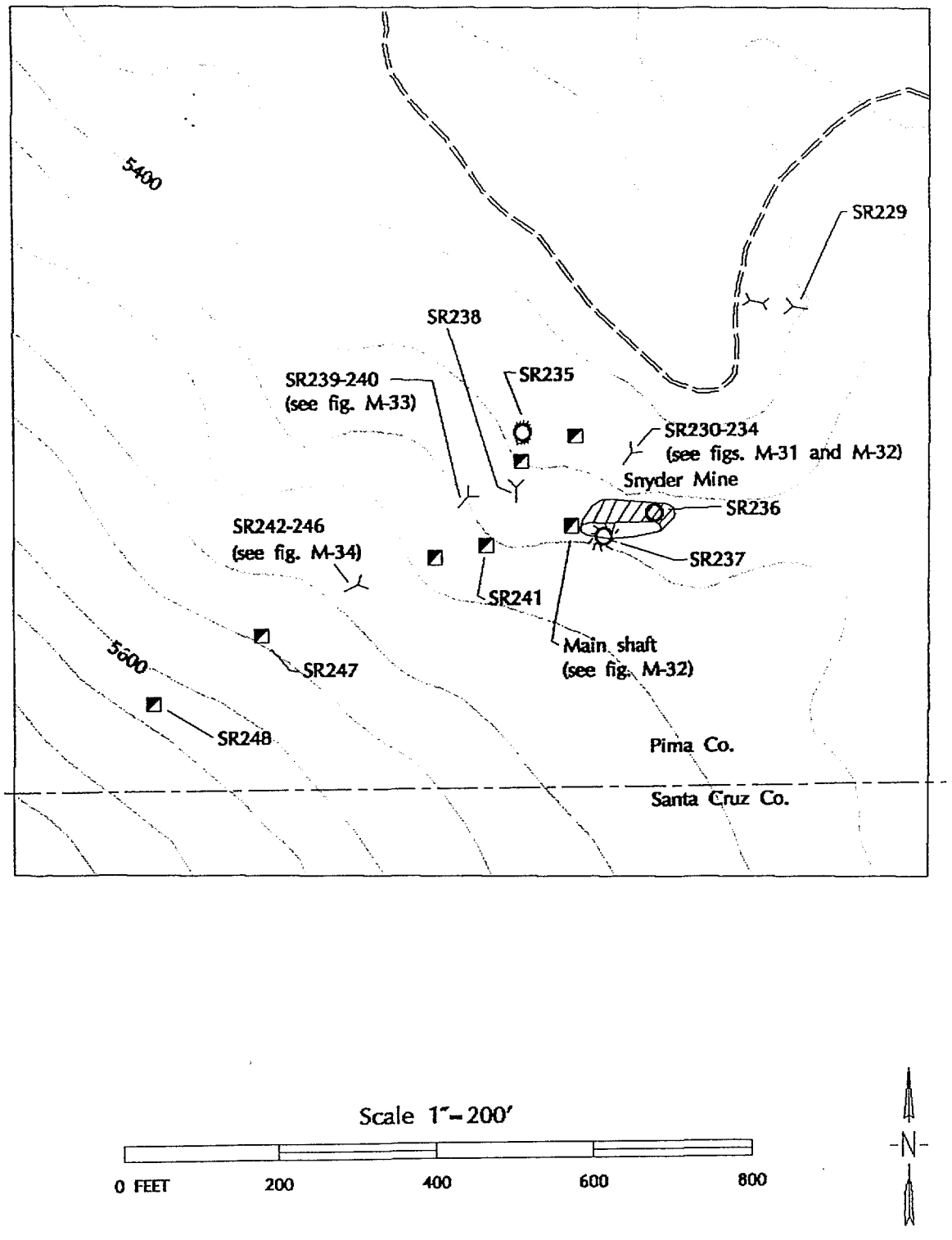
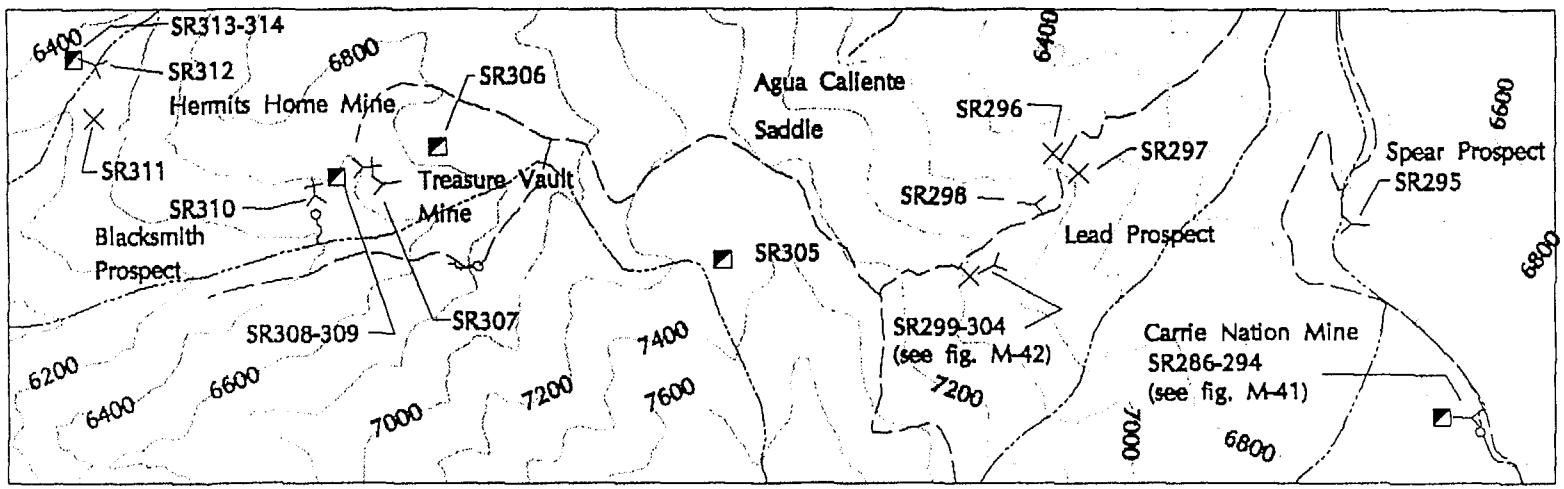
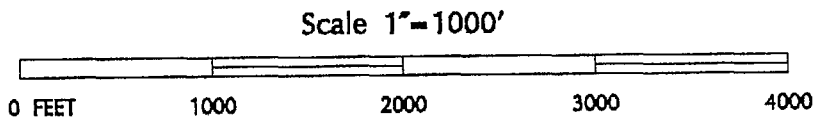


Figure I-4.-- Workings in the vicinity of the Snyder Mine, showing localities of samples SR 229-248.





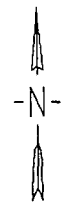
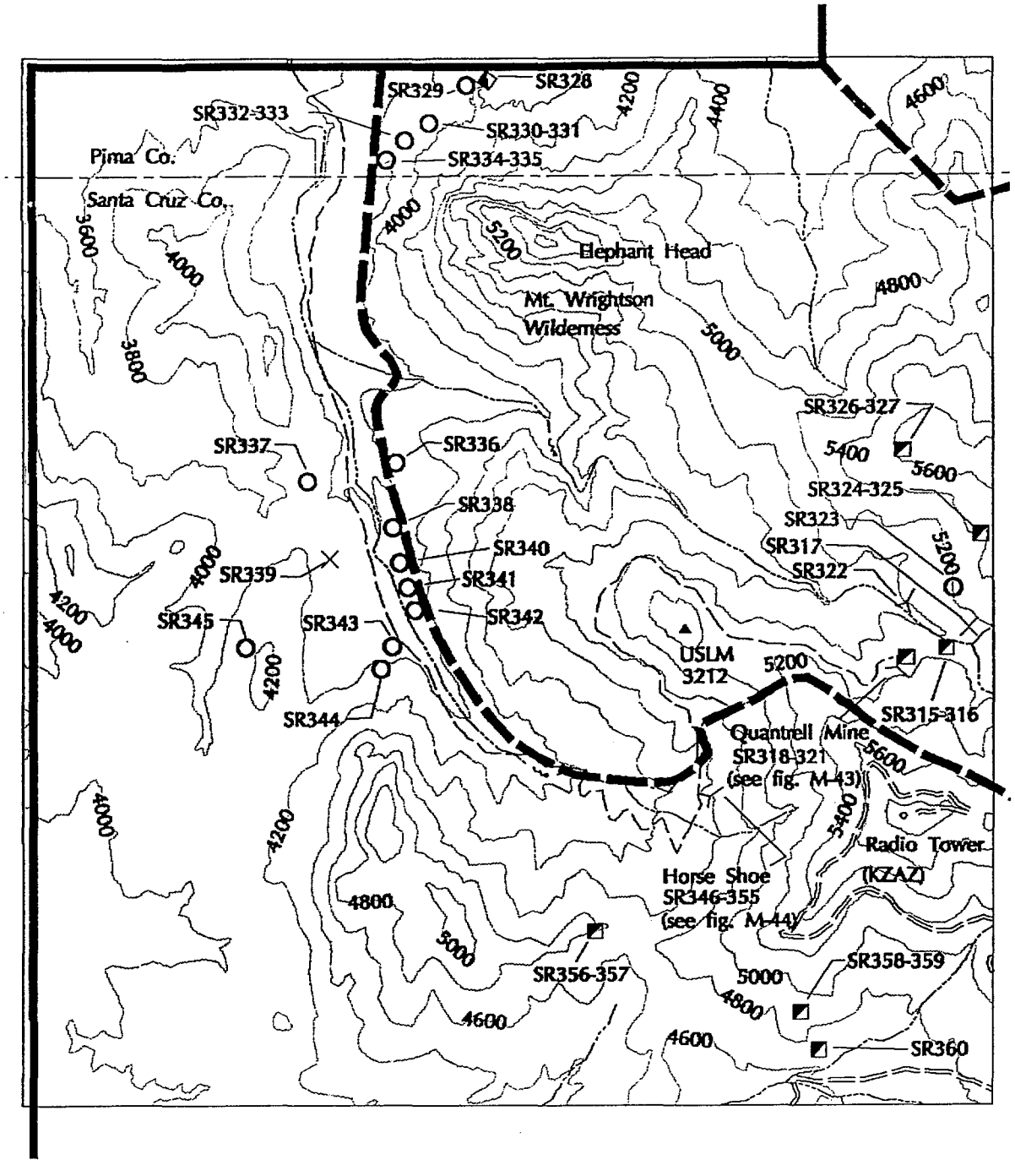


Figure I-5.– Mines and prospects in the vicinity of Agua Caliente Saddle, showing localities of samples SR 286-314.

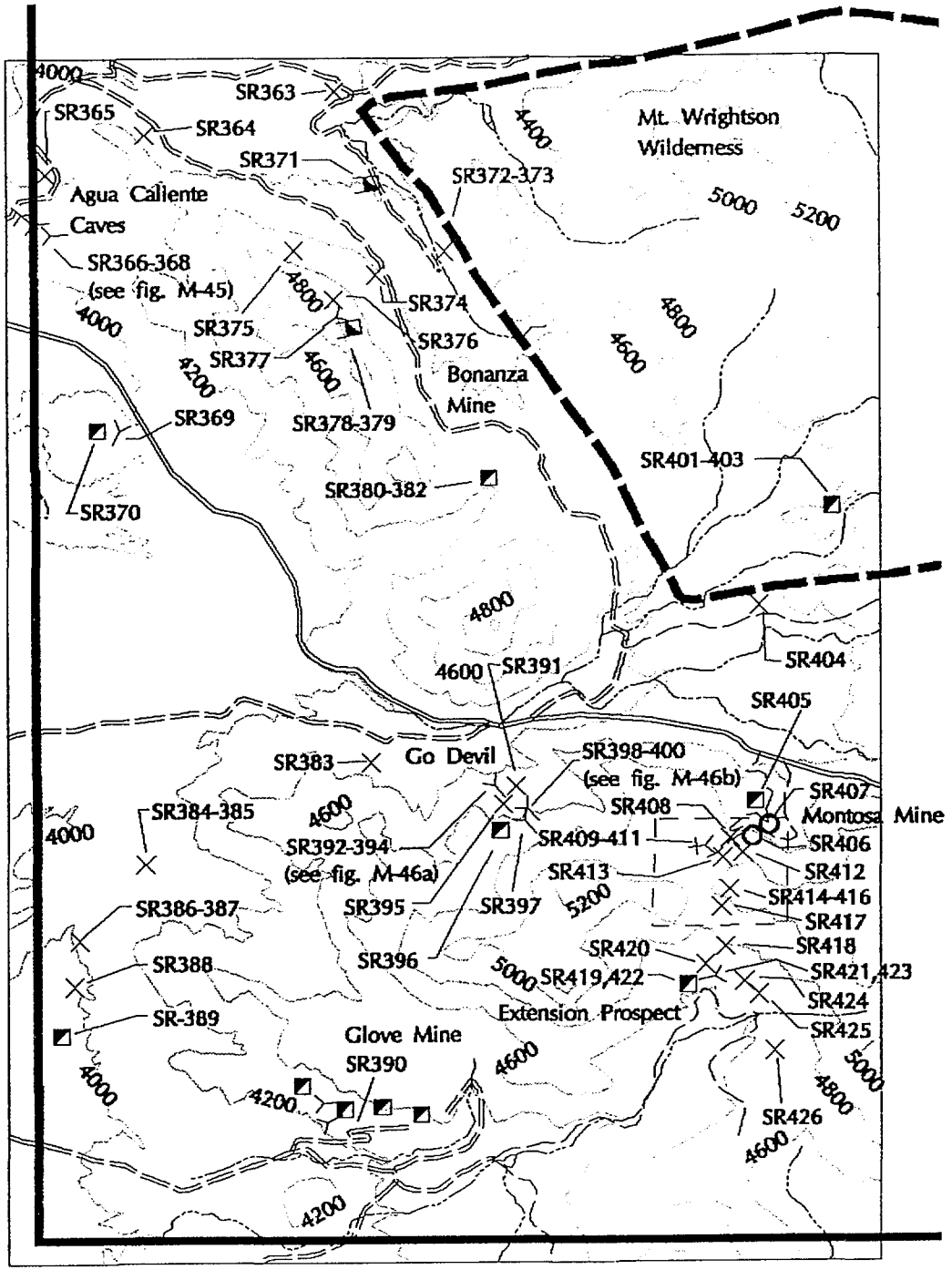


Scale 1"=2000'

0 FEET 2000 4000 6000 8000

-N-

Figure I-6.-- Mines and prospects north of Agua Caliente Canyon in the vicinity of Elephant Head, showing localities of samples SR 315-360.



Scale 1"=2000'

0 FEET 2000 4000 6000 8000

-N-

Figure I-7.– Mines and prospects south of Agua Caliente Canyon in the vicinity of Glove Mine and Agua Caliente Caves, showing localities of samples SR 363-426.

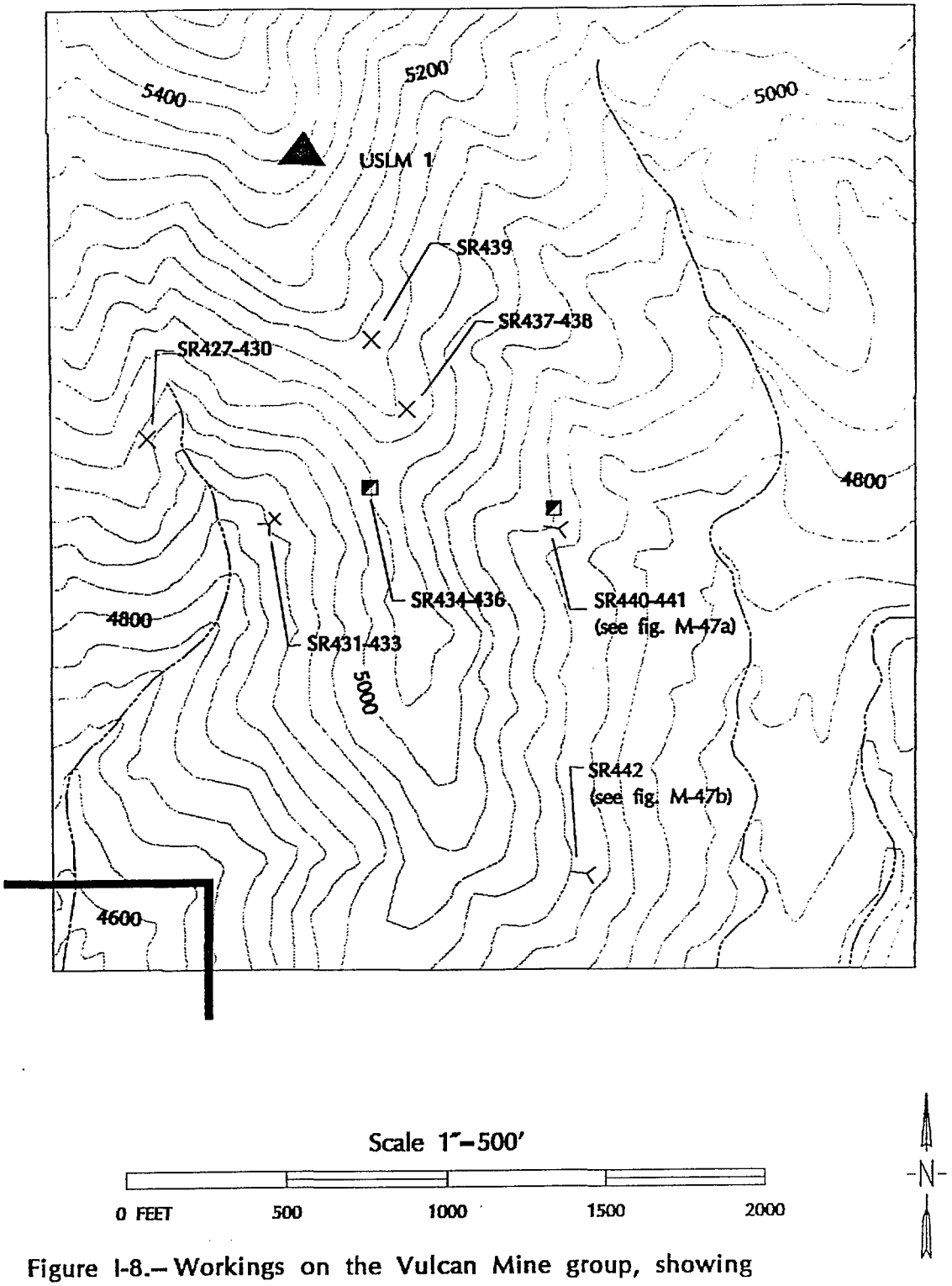
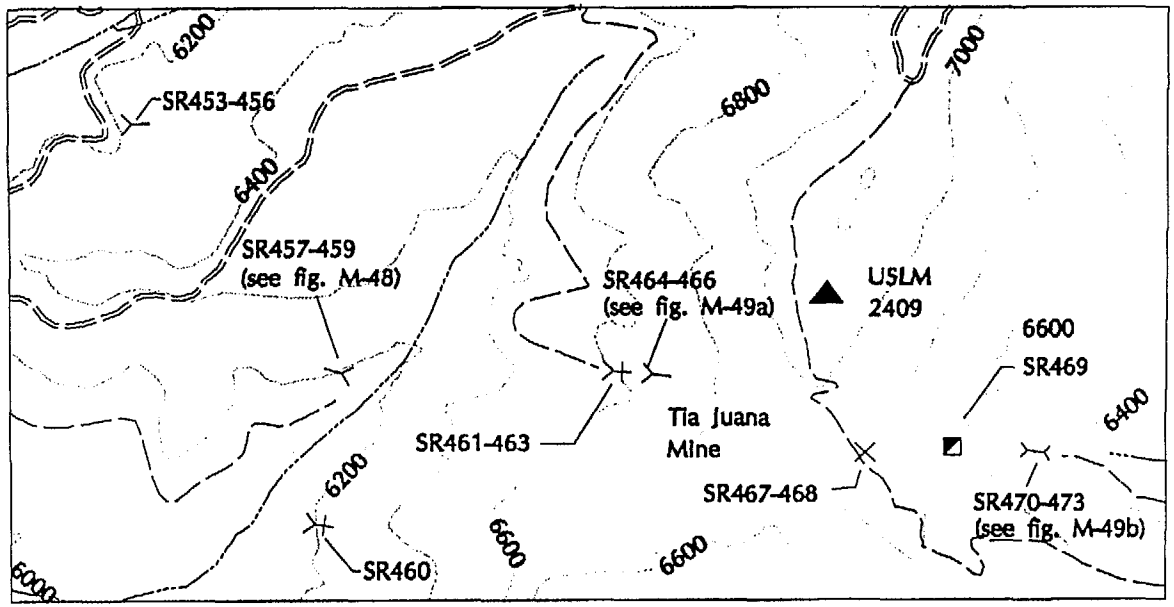


Figure I-8.— Workings on the Vulcan Mine group, showing localities of samples SR 427-442.



Scale 1"=800'

0 FEET 800 1600 2400 3200

-N-

Figure I-9.– Workings in the vicinity of Tia Juana Mine, showing localities of samples SR 453-473.

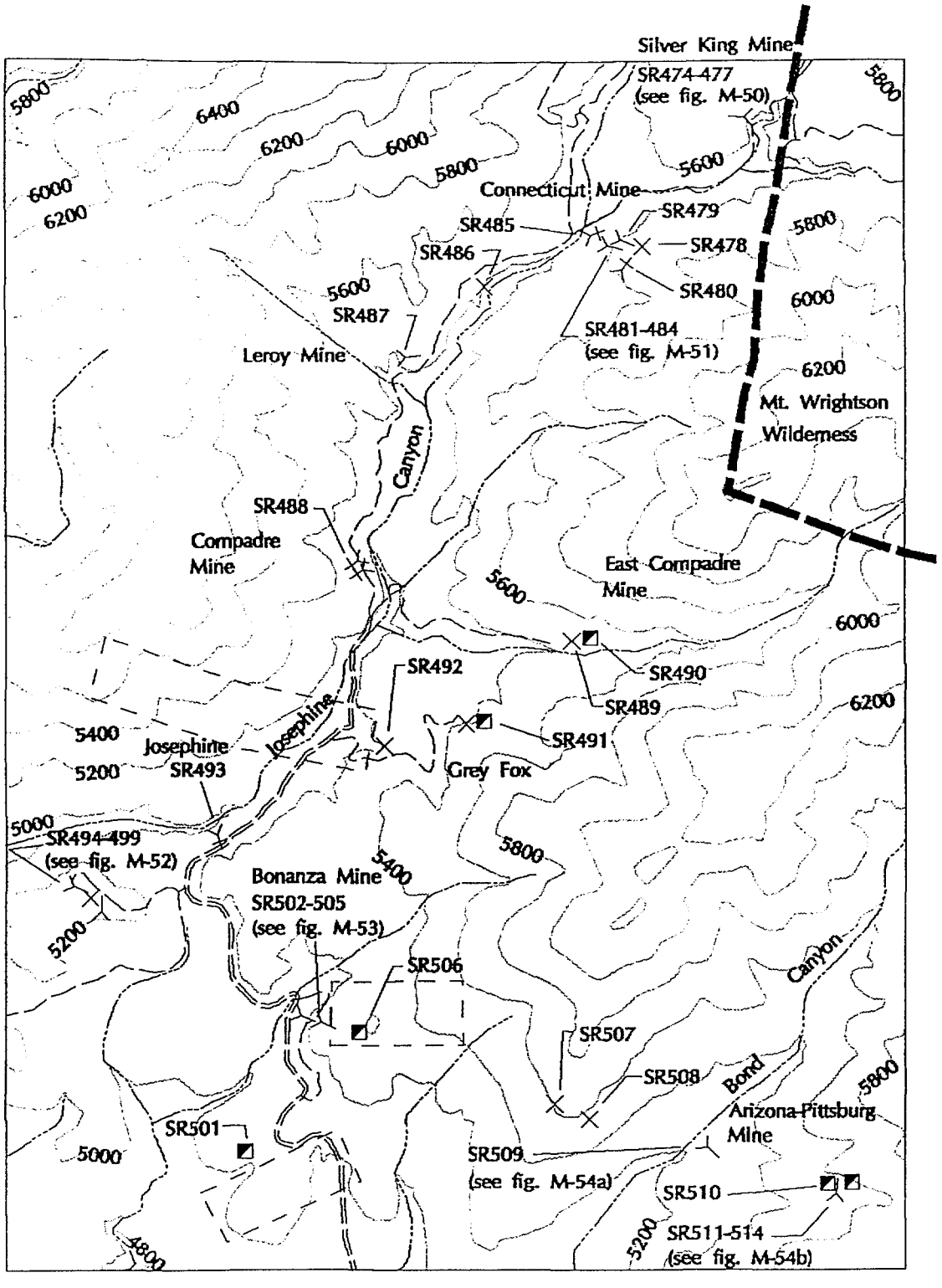
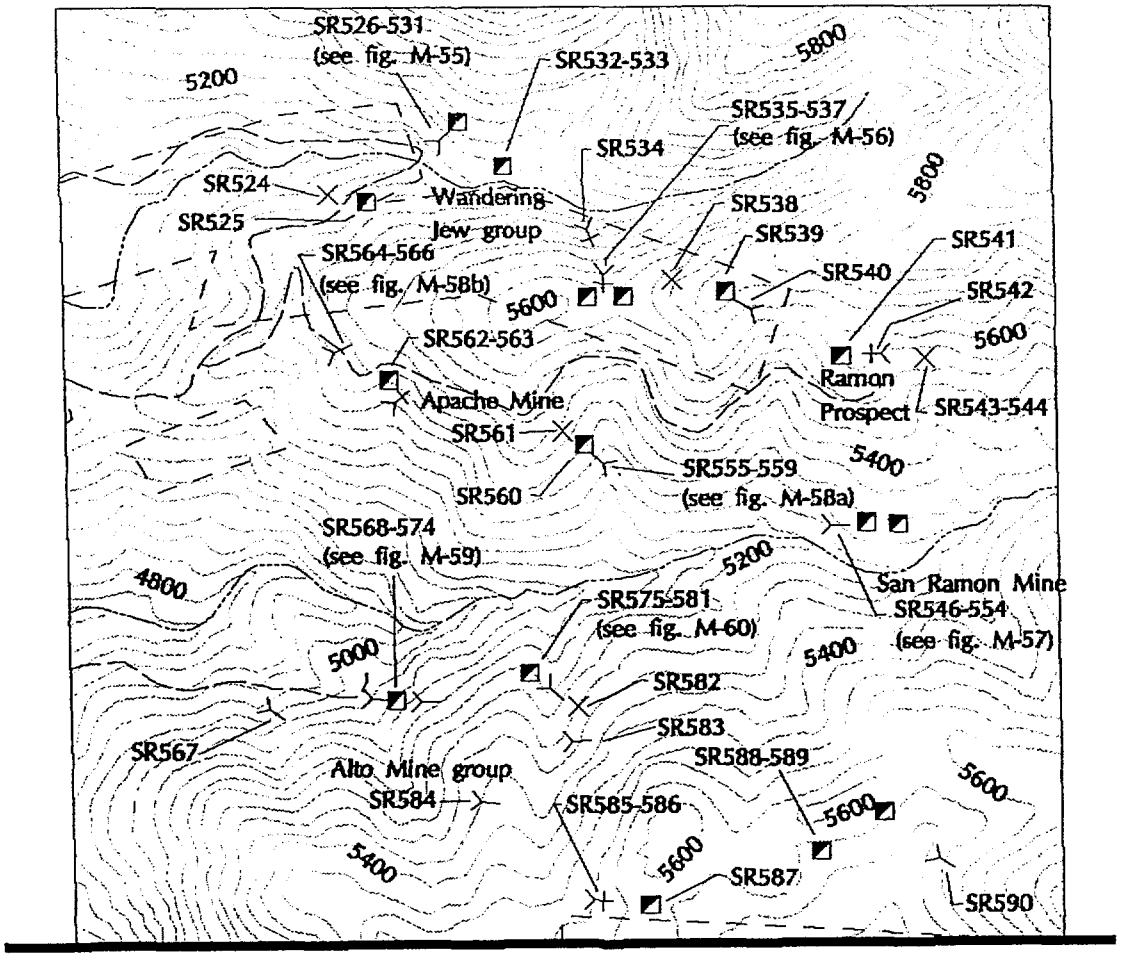


Figure I-10.—Mines and prospects in the vicinity of Josephine and Bond Canyons, showing localities of samples SR 474-499, 501-514.

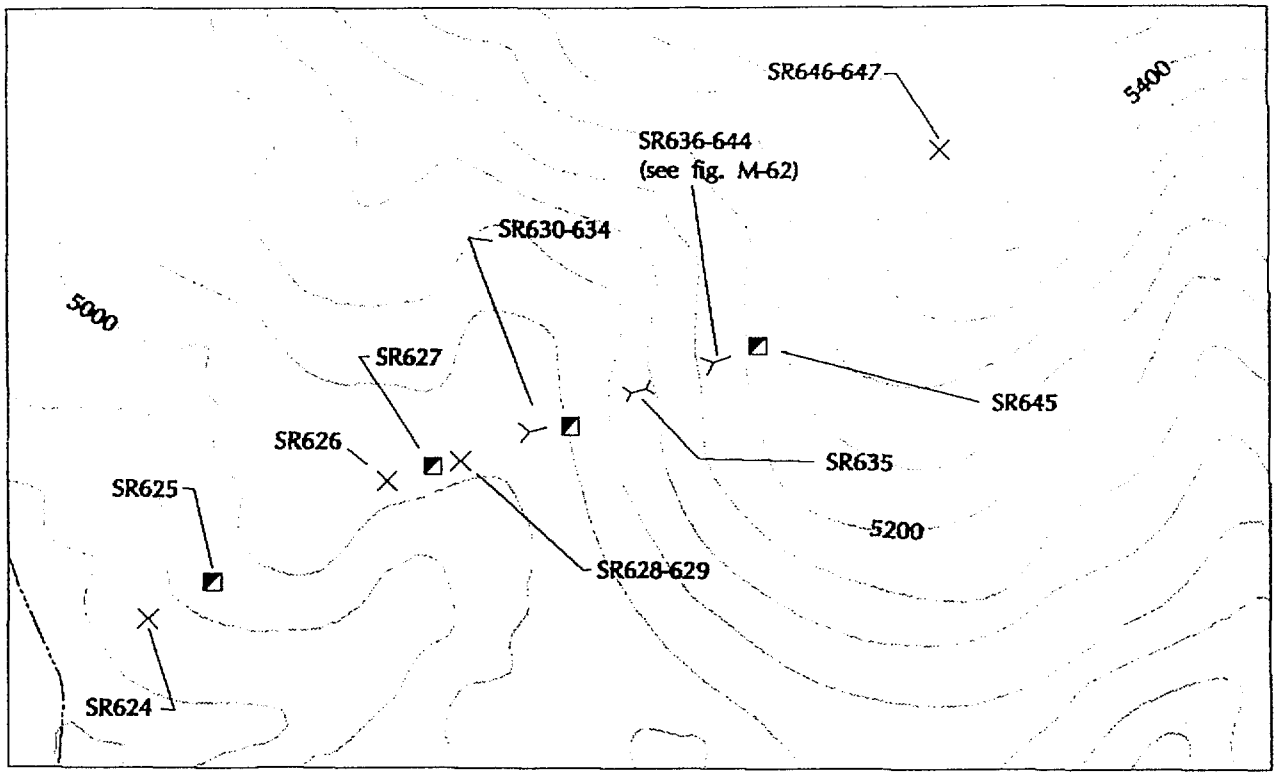


Scale 1"=1000'

0 FEET 1000 2000 3000 4000

-N-

Figure I-11.-- Mines and prospects in the vicinity of the Wandering Jew and Alto Mine groups, showing localities of samples SR 524-544, 546-590.



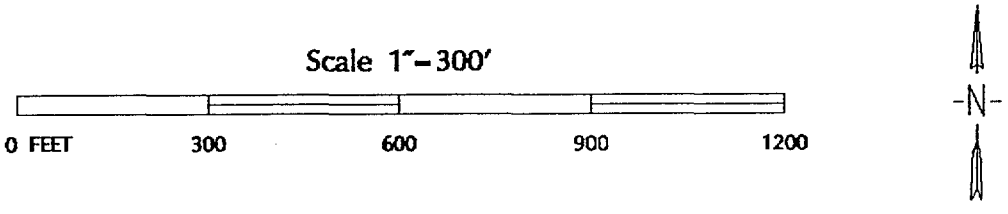
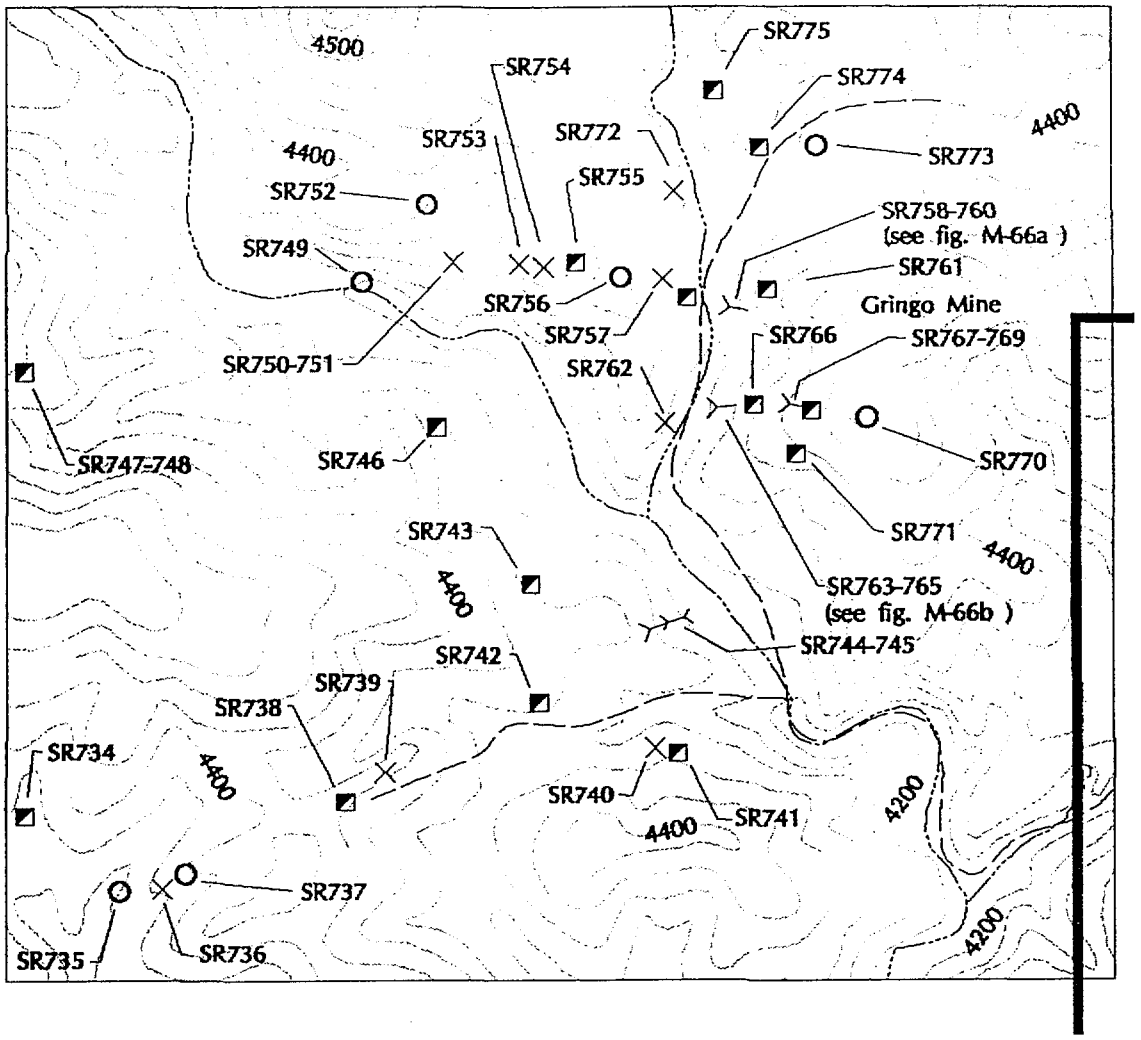


Figure I-12.—Workings at the Cowboys Dream Mine, showing localities of samples SR 624-647.

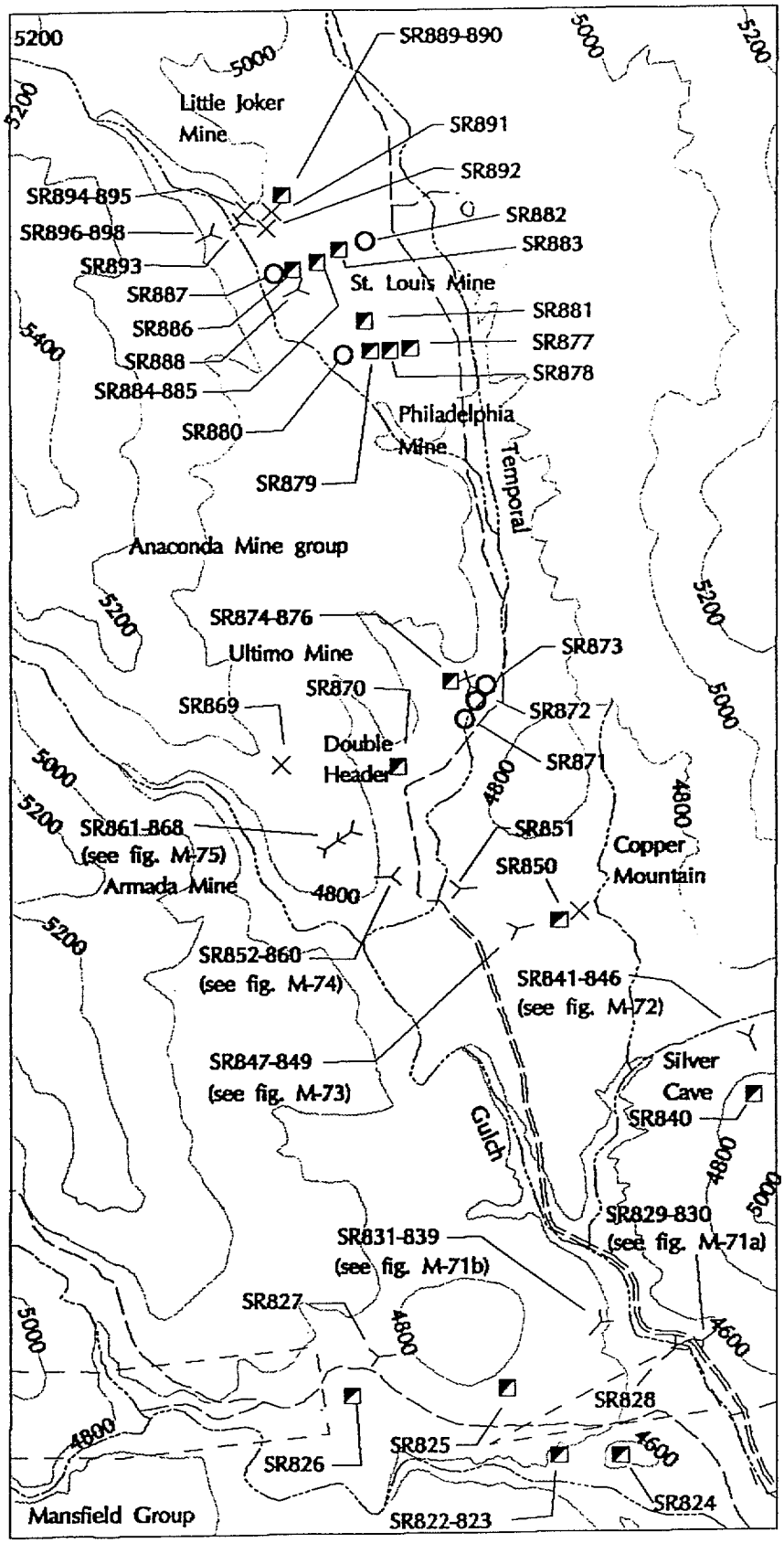


Scale 1"=800'

0 FEET 500 1000 1500 2000

-N-

Figure I-13.--Mines and prospects in the vicinity of the Gringo Mine, showing localities of samples SR 734-775.

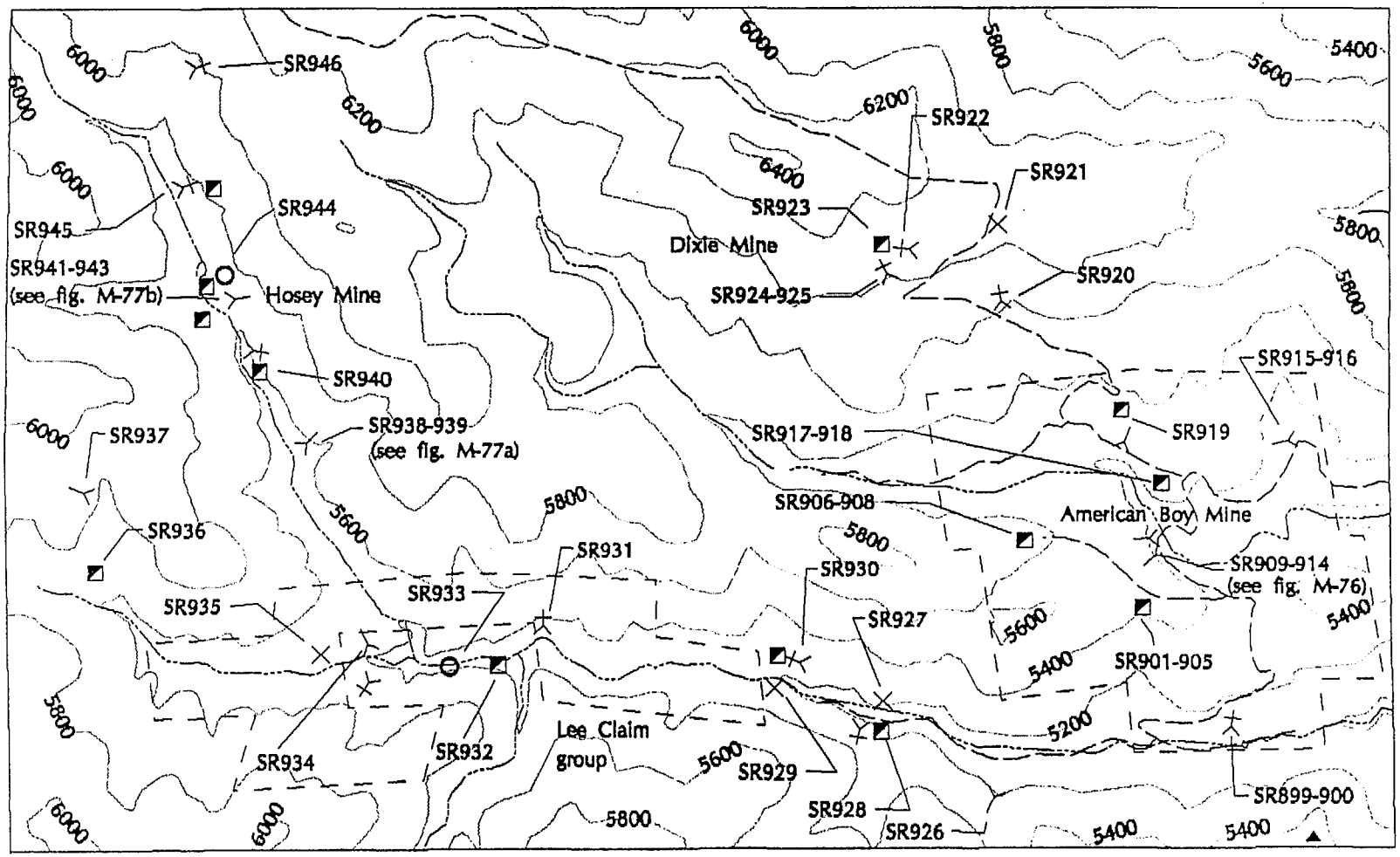


Scale 1"=1200'

0 FEET 1200 2400 3600 4800

-N-

Figure I-14.—Anaconda Mine group and unnamed mines and prospects along Temporal Gulch, showing localities of samples SR 822-898.



Scale 1"=1300'

0 FEET 1300 2600 3900 5200

-N-

Figure I-15.– Mines and prospects in the western end of Mansfield Canyon, showing localities of samples SR 899-946.

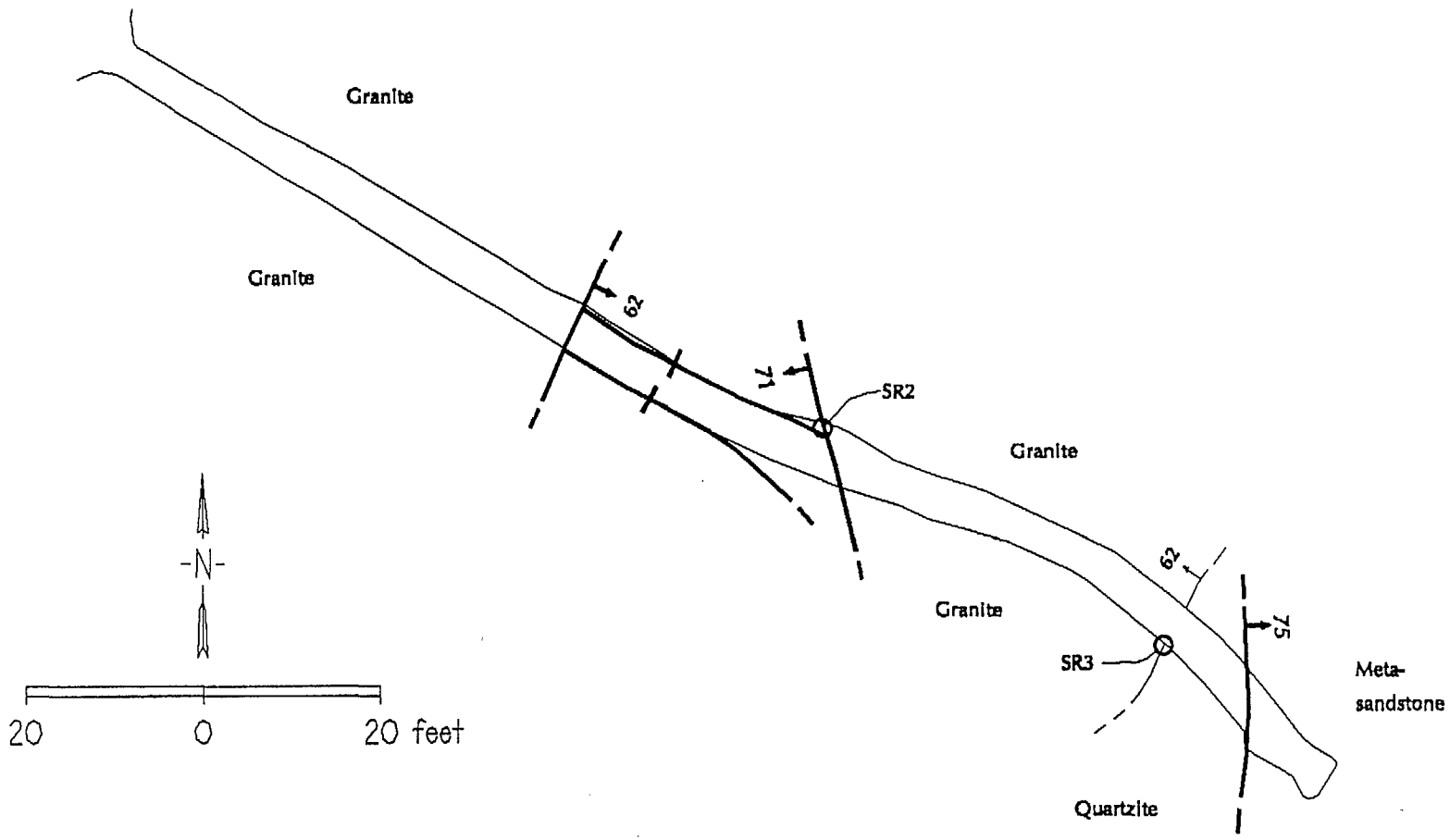


Figure M-1.--Adit on "Beach" peak, showing localities of samples SR 2-3.

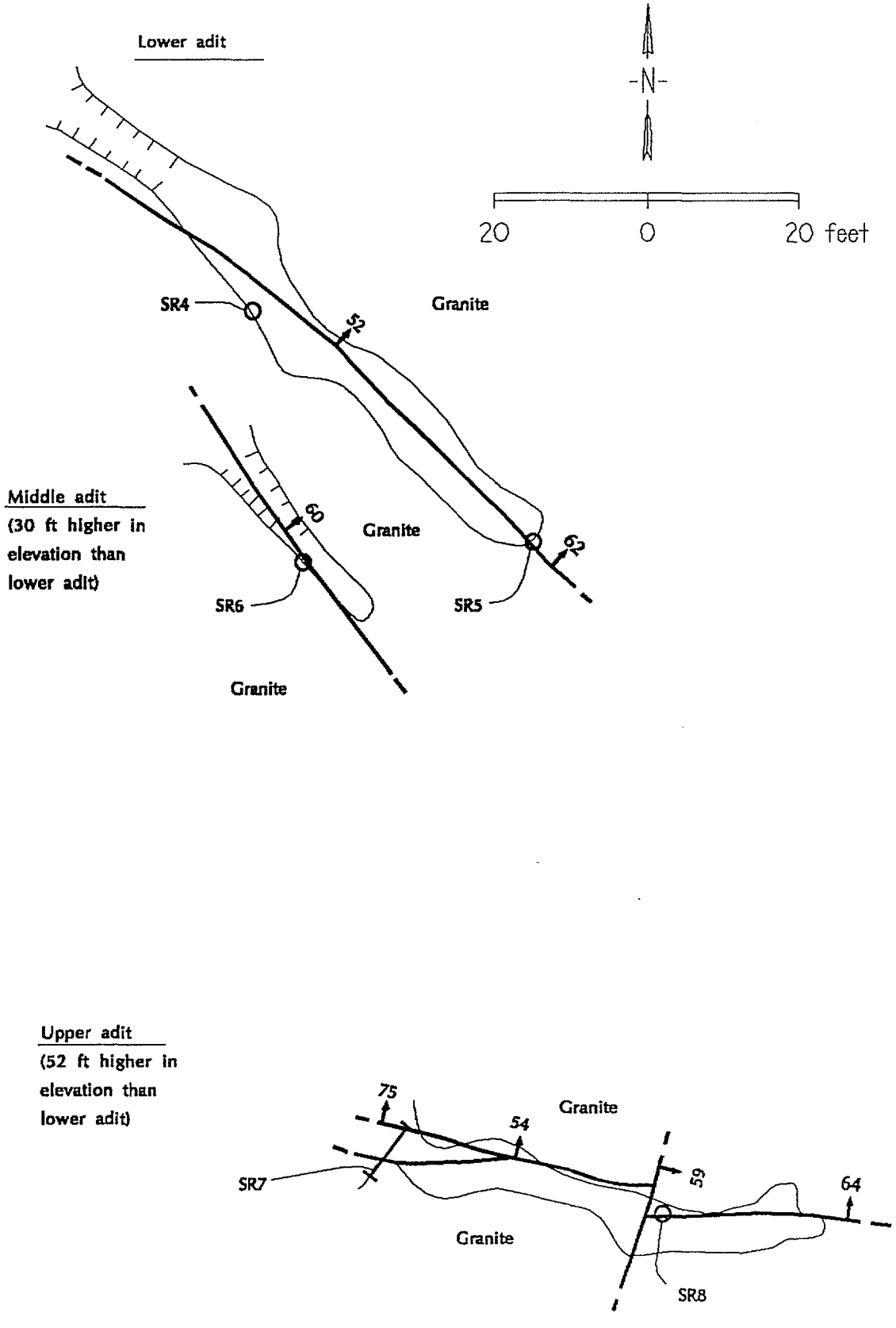


Figure M-2.--Adits on "Beach" peak, showing localities of samples SR 4-8.

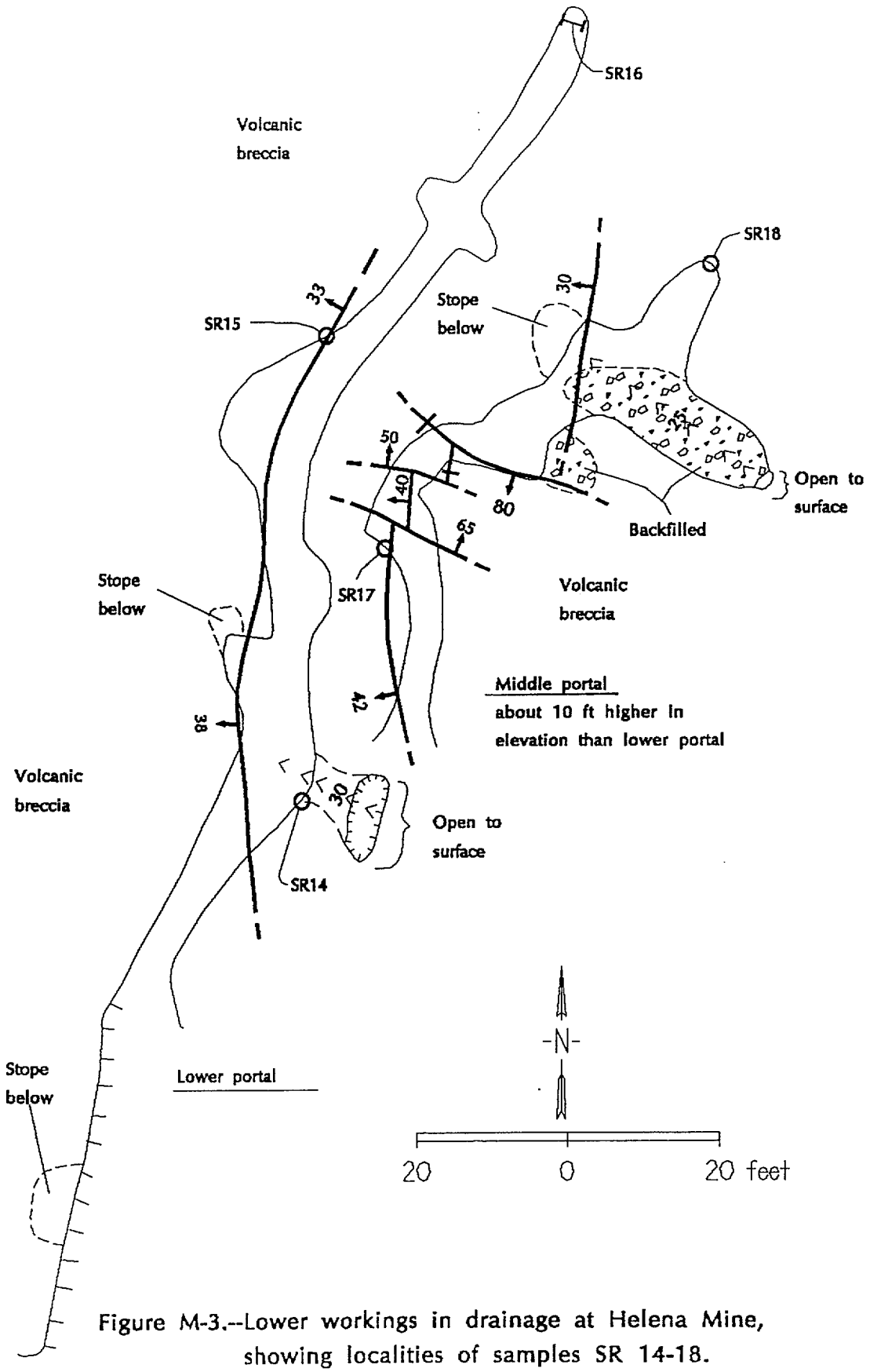


Figure M-3.--Lower workings in drainage at Helena Mine, showing localities of samples SR 14-18.

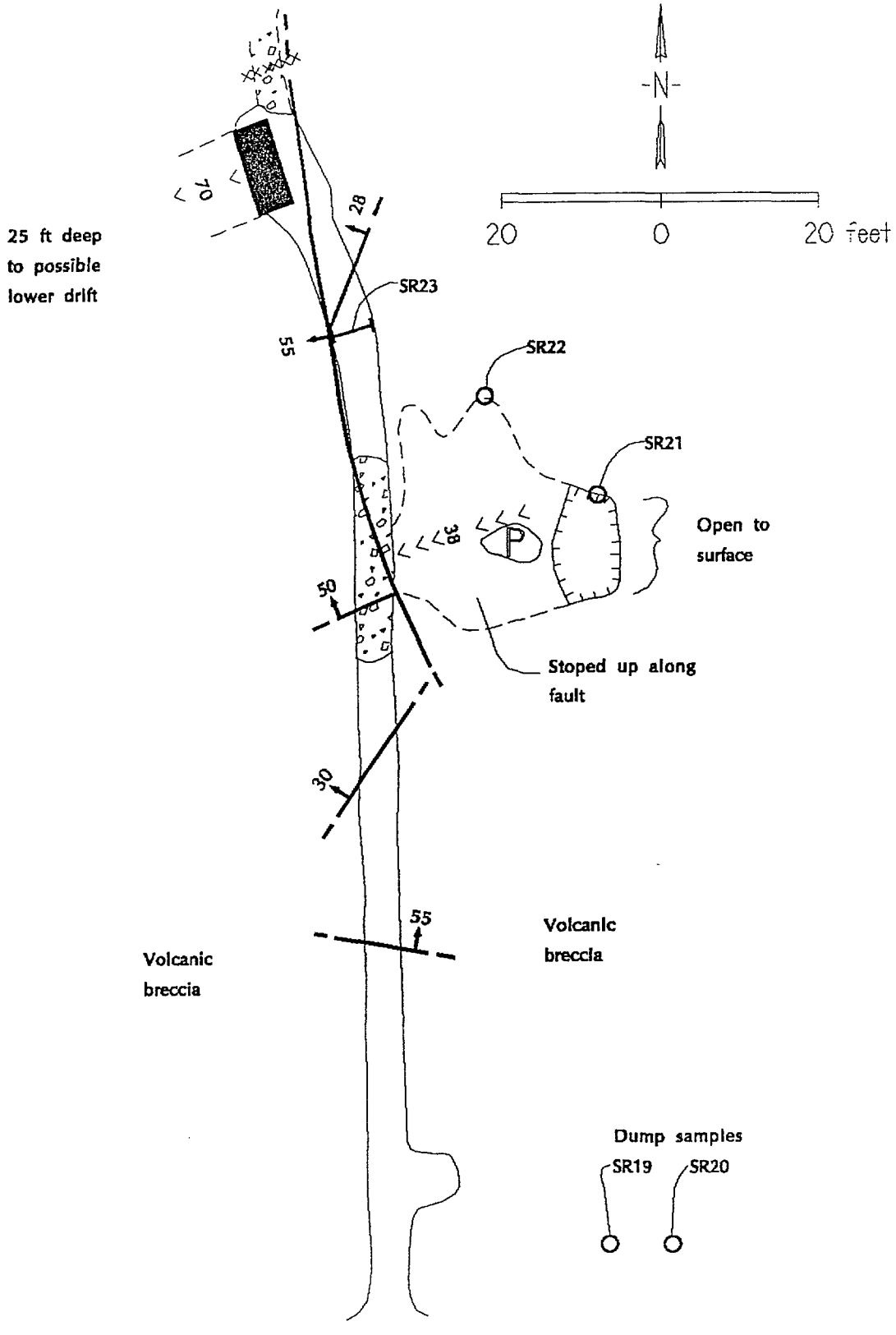


Figure M-4.–Upper adit at Helena Mine, showing localities of samples SR 19-23.

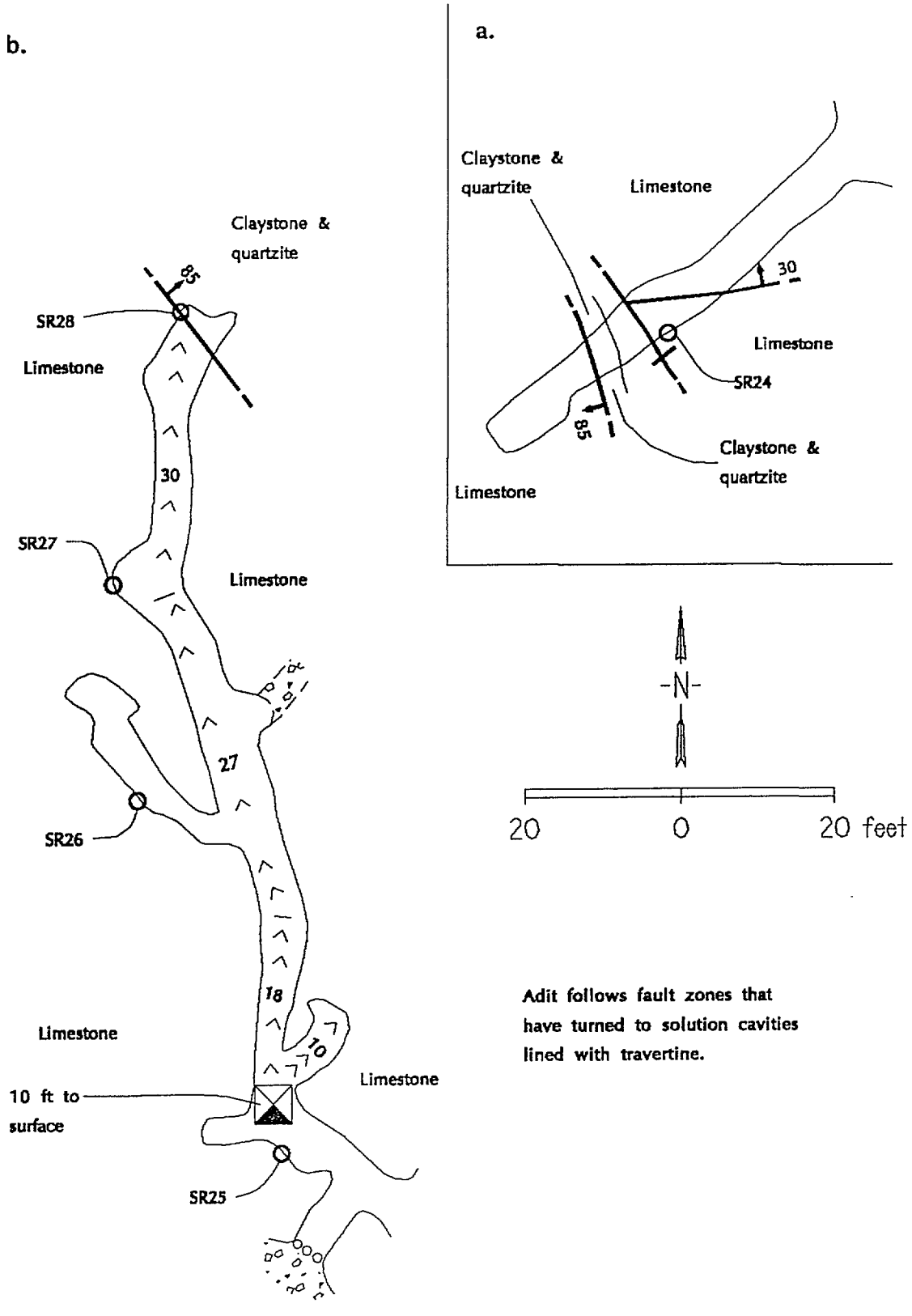


Figure M-5.–Adits northwest of the Blue Jay Mine, showing localities of samples SR 24-28.

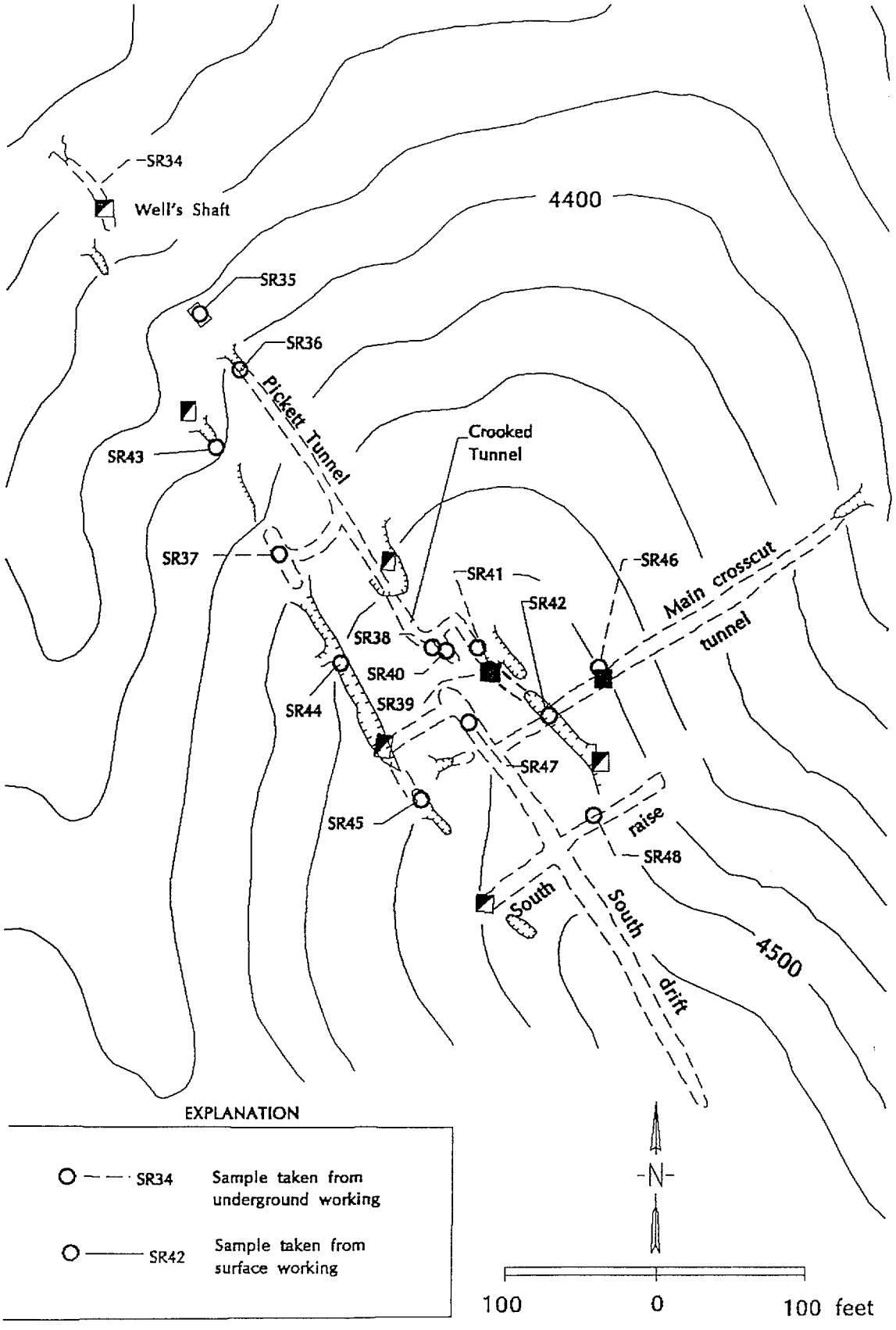


Figure M-6.--Plan view of workings at the Blue Jay Mine, showing localities of samples SR 34-48.

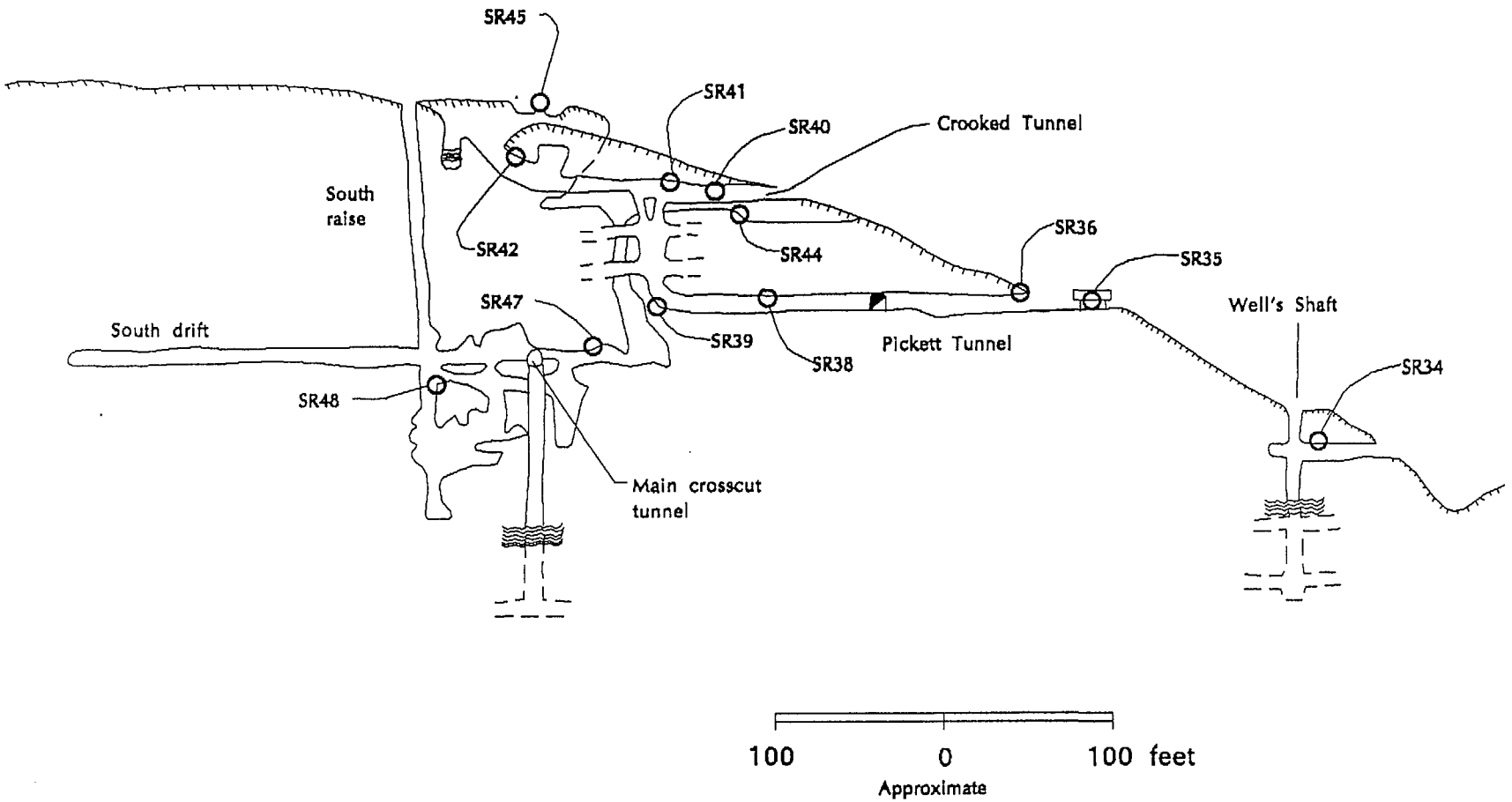


Figure M-7.--Section sketch of workings at the Blue Jay Mine looking southwest parallel to the main crosscut tunnel, showing localities of samples SR 34-36, 38-42, 44-45, 47-48 (modified from section sketches recieved from claimant and drawn by Bill Devitt).

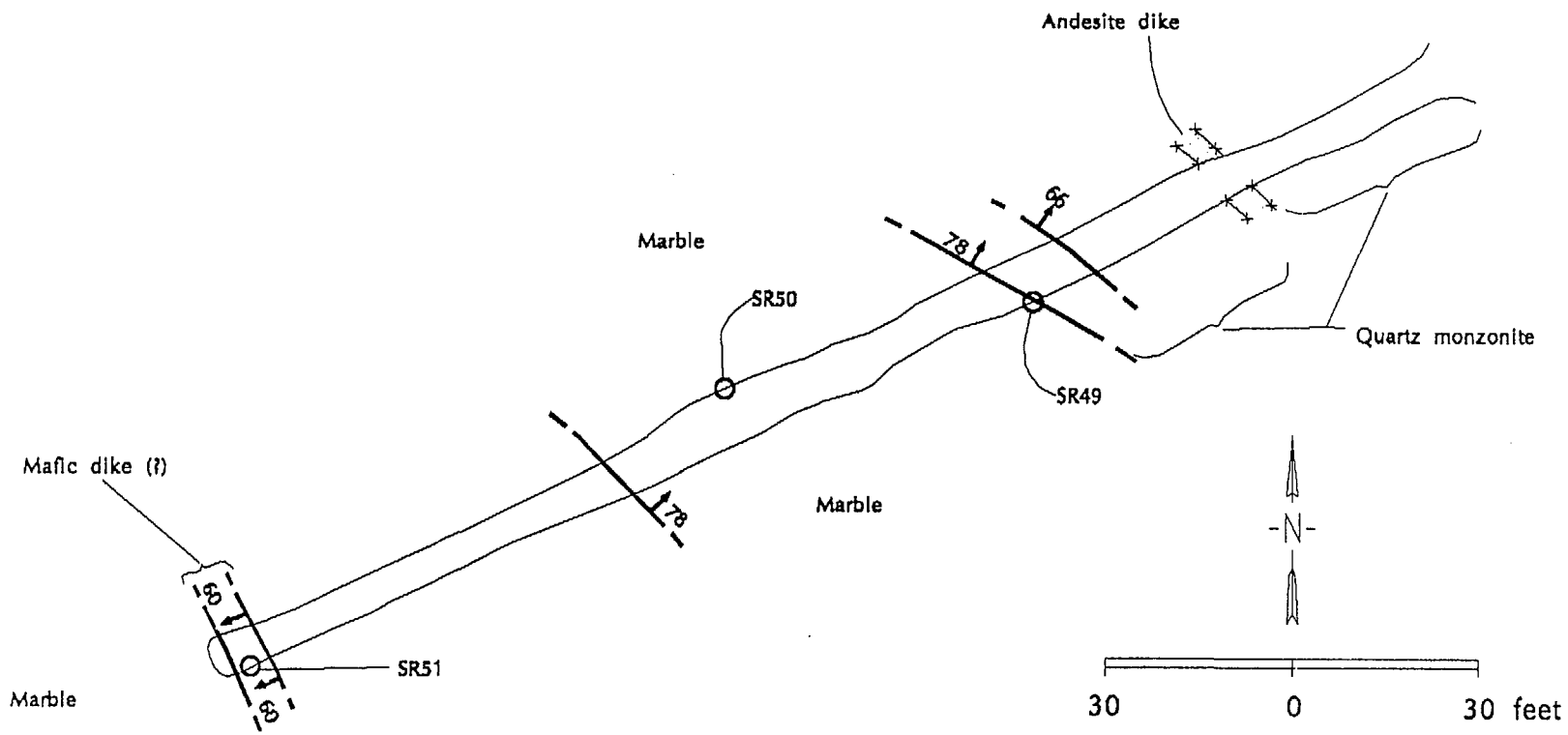


Figure M-8.–Sabado adit, below Specialty Minerals Quarry, showing localities of samples SR 49-51.

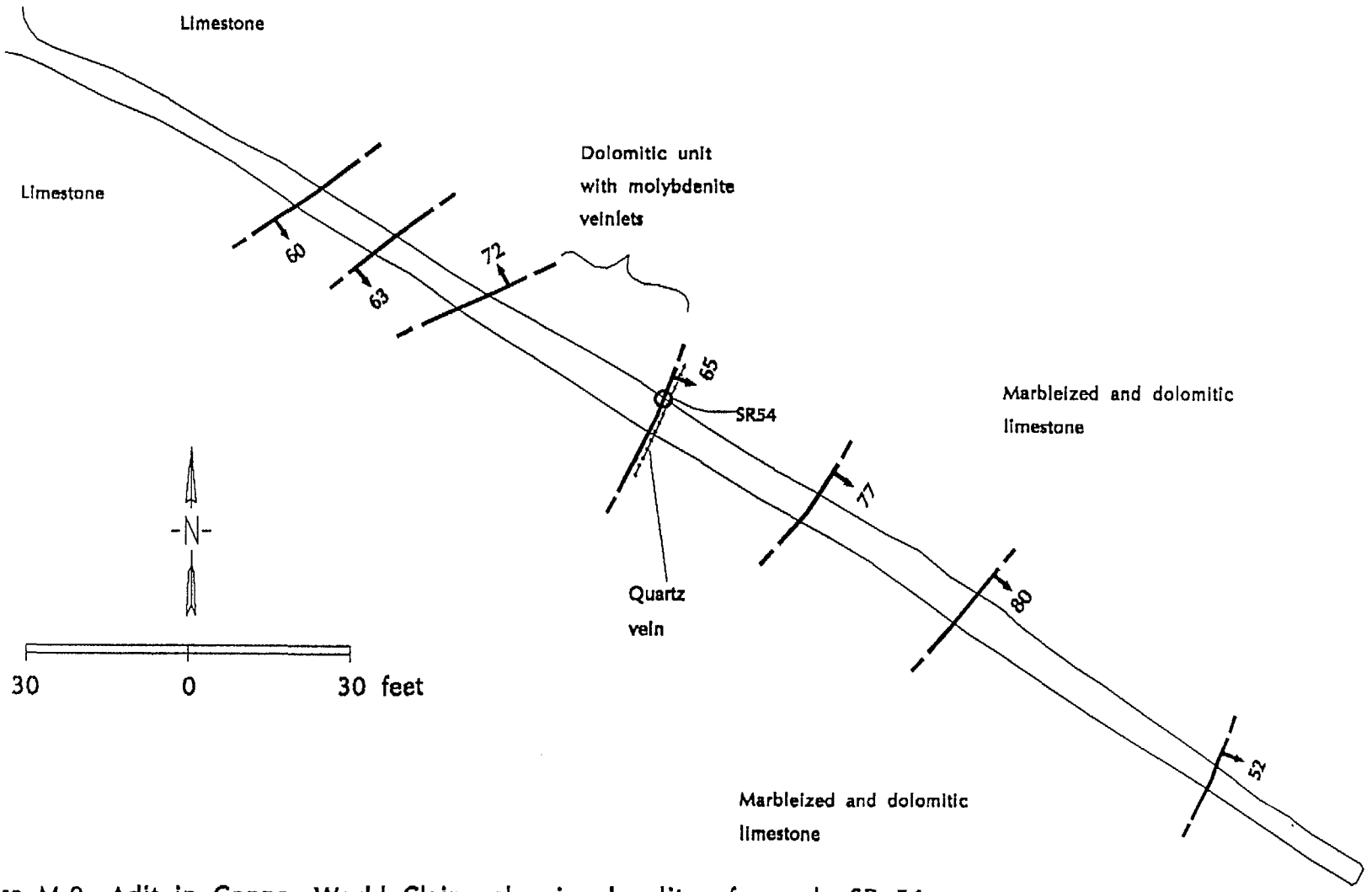


Figure M-9.--Adit in Copper World Claim, showing locality of sample SR 54.

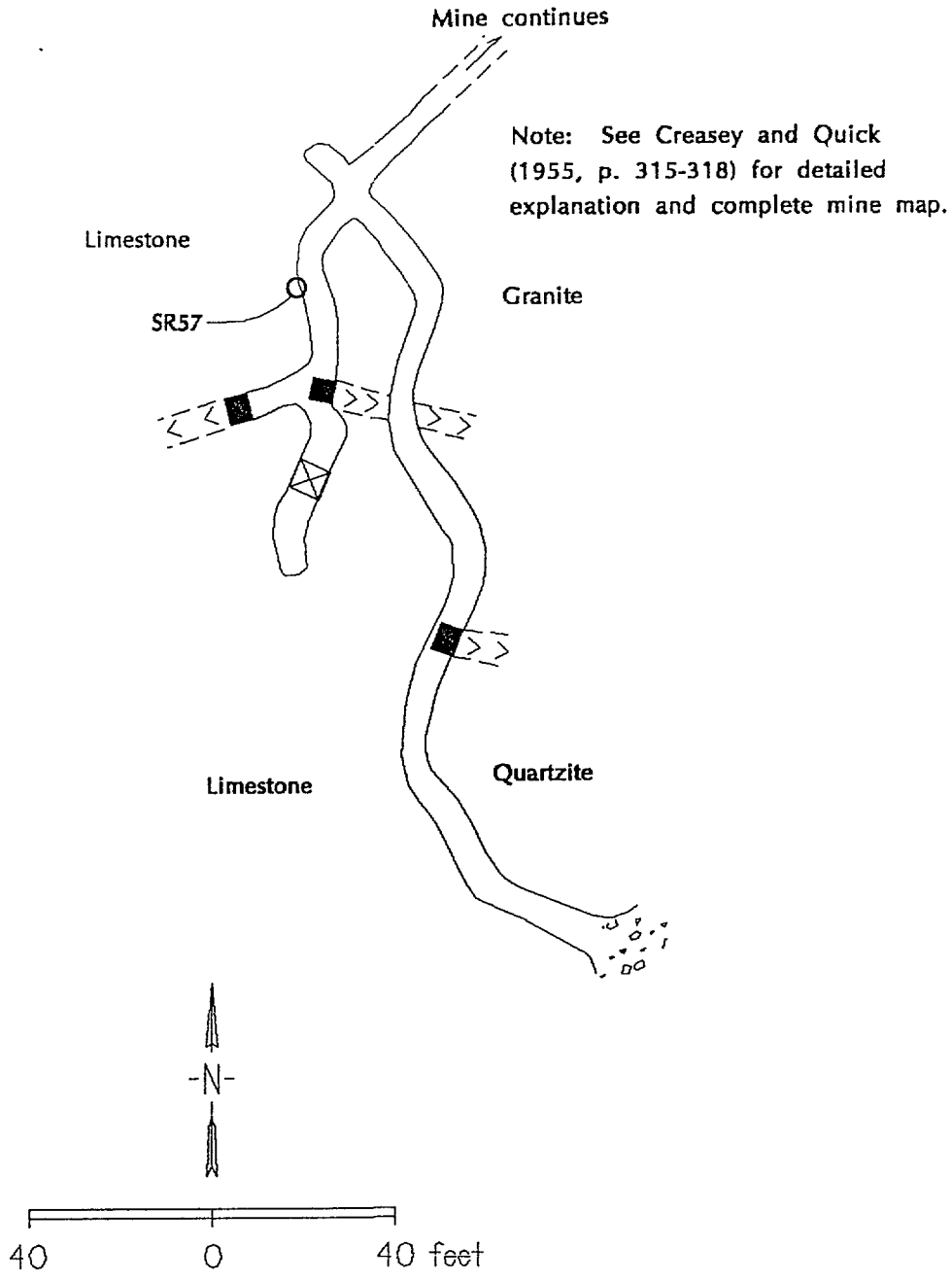


Figure M-10.–Partial map of Leader Mine adit, showing locality of sample SR 57.

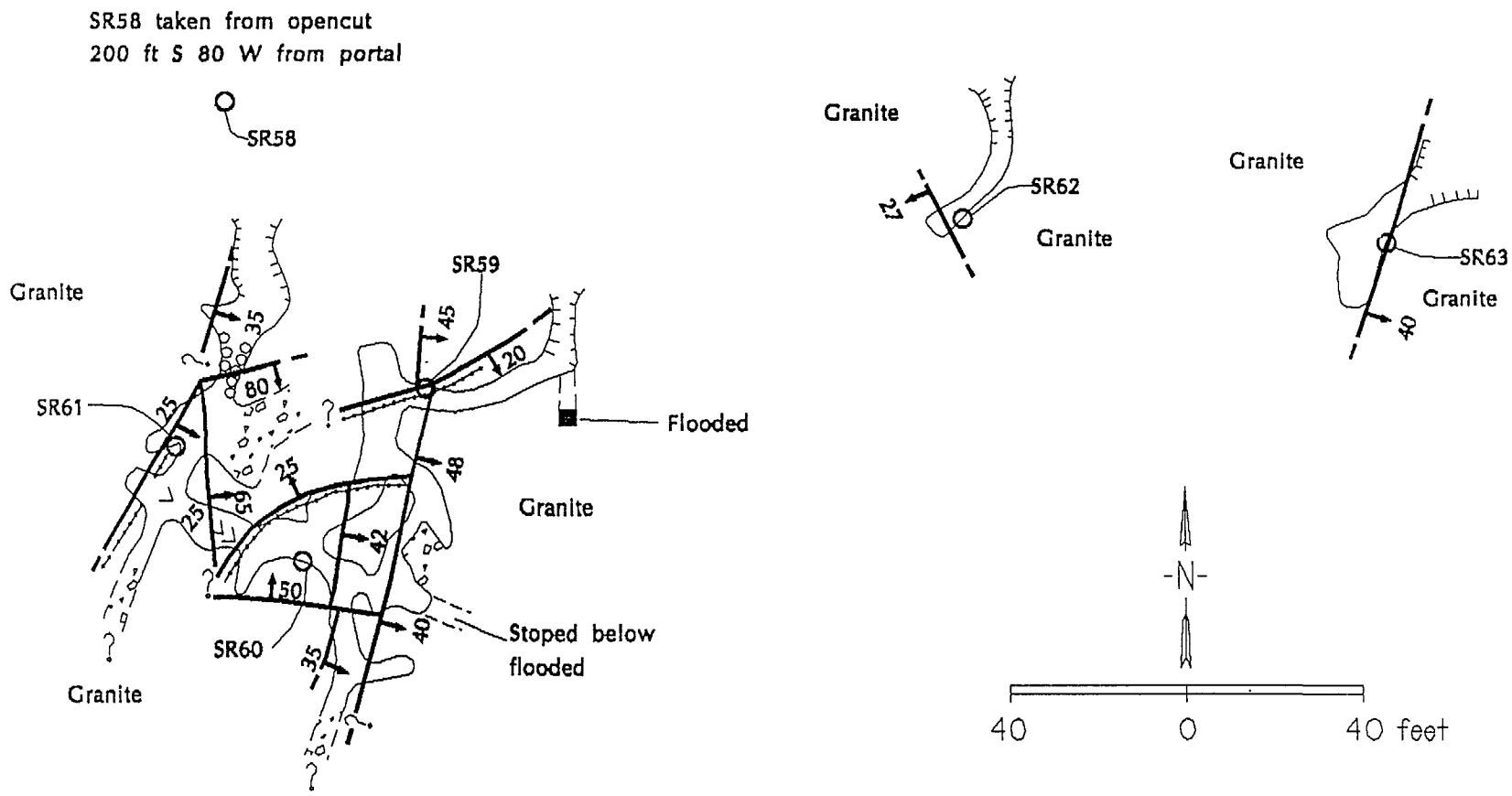


Figure M-11.–Workings at the Curtice Mine, showing localities of samples SR 58-63.

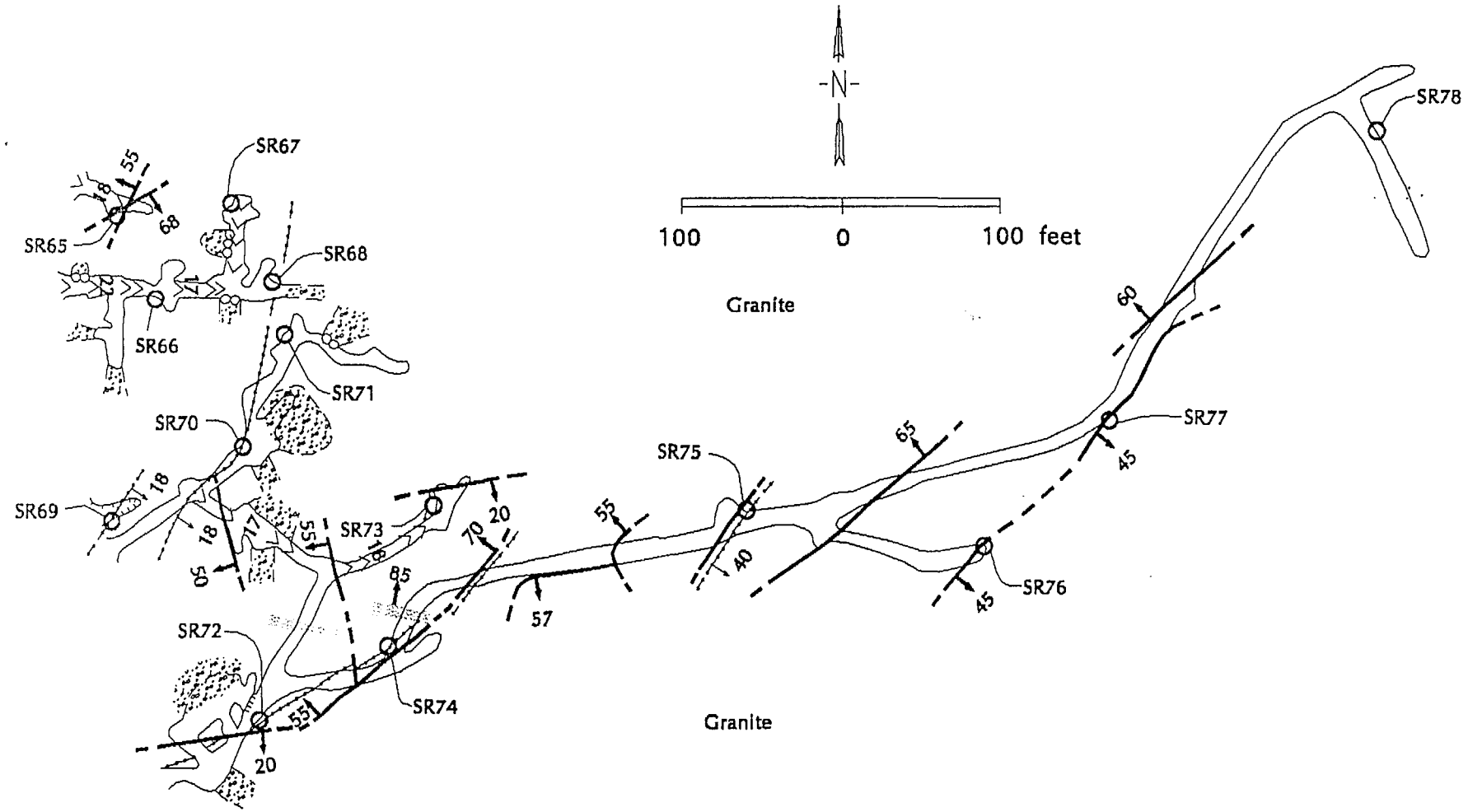


Figure M-12.--Frijole Mine, showing localities of samples SR 65-78.

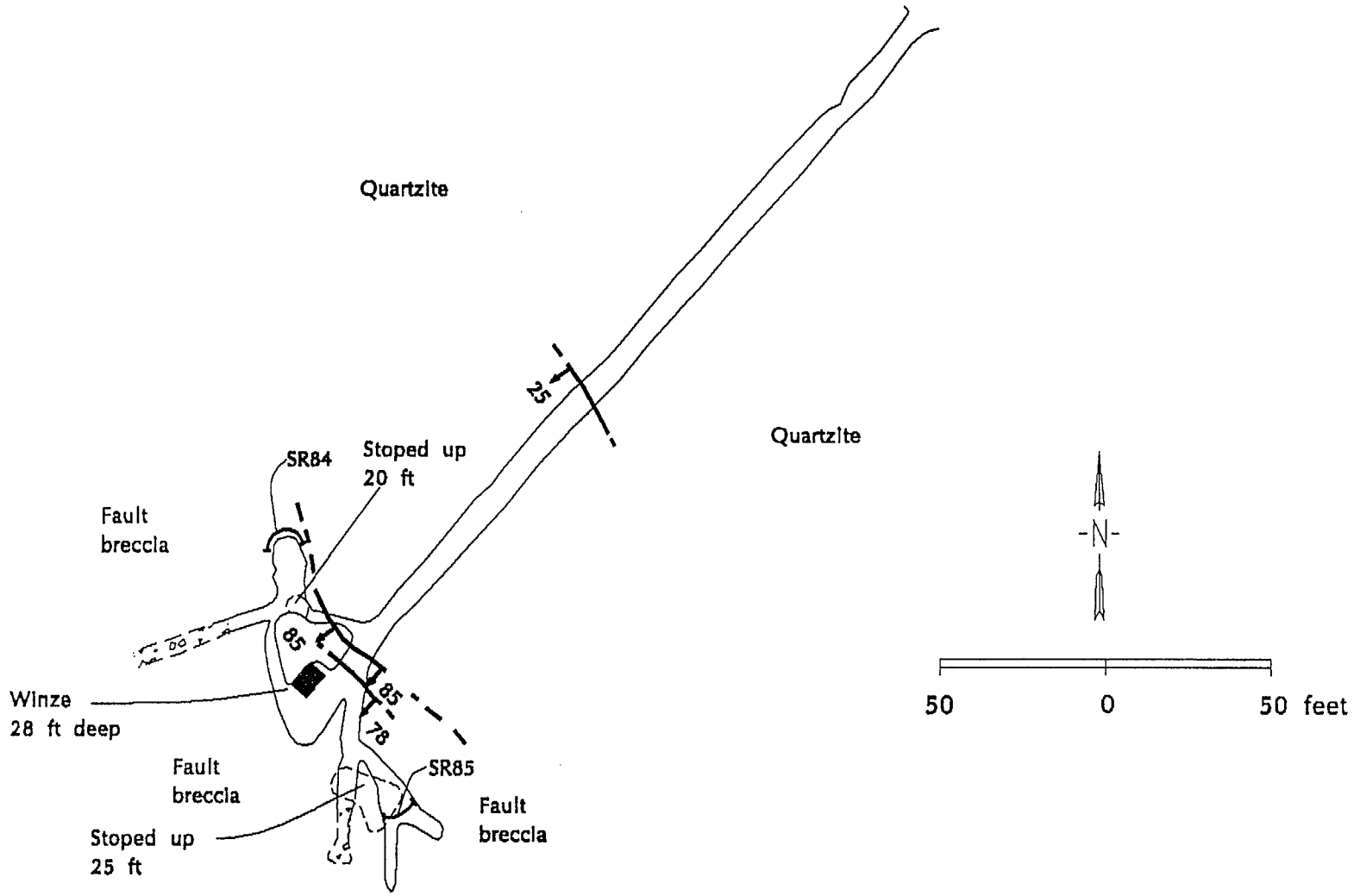
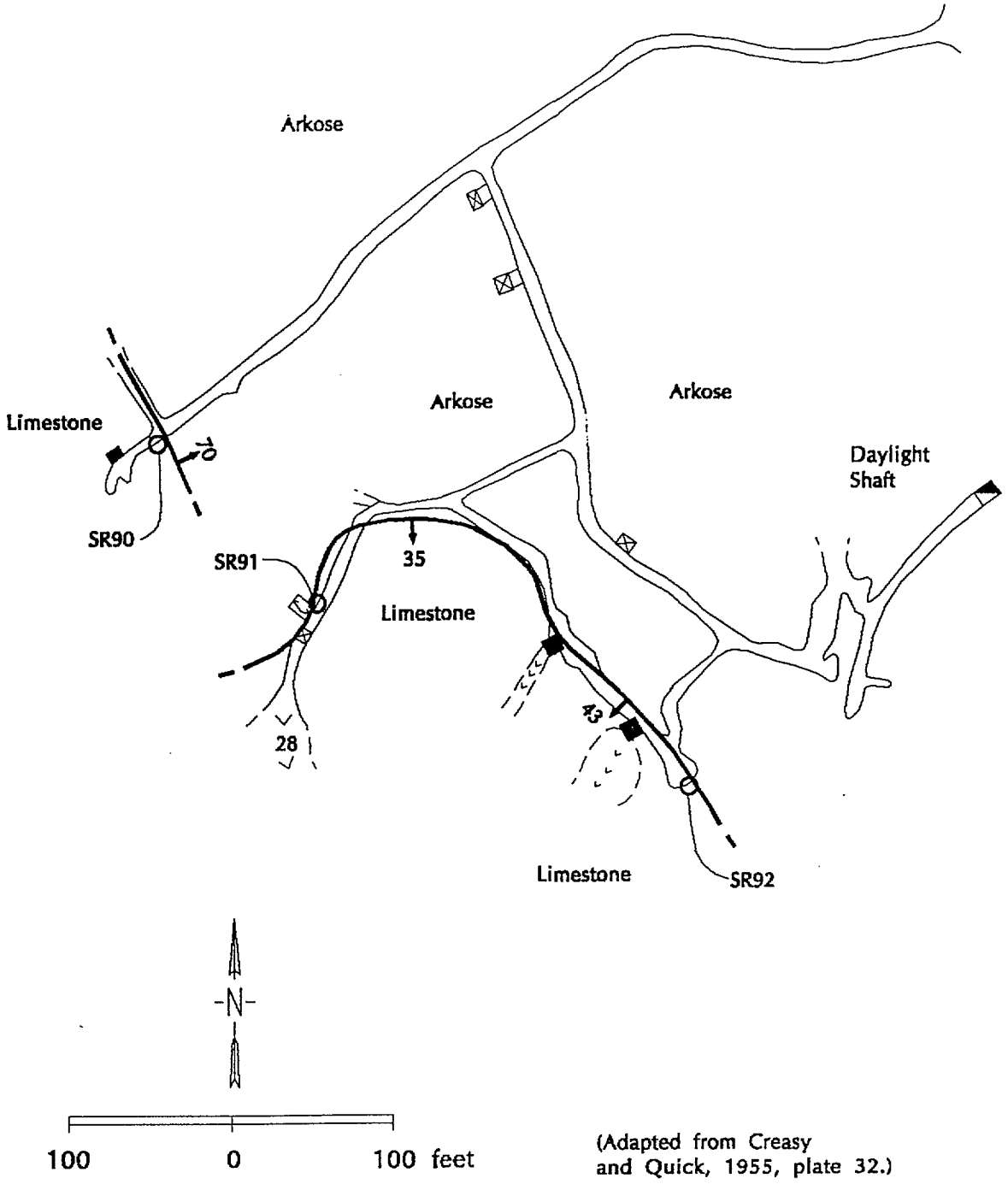


Figure M-13.--Eclipse adit, showing localities of samples SR 84-85.



(Adapted from Creasy and Quick, 1955, plate 32.)

Figure M-14.–Narragansett Mine and Daylight Shaft, showing localities of samples SR 90-92.

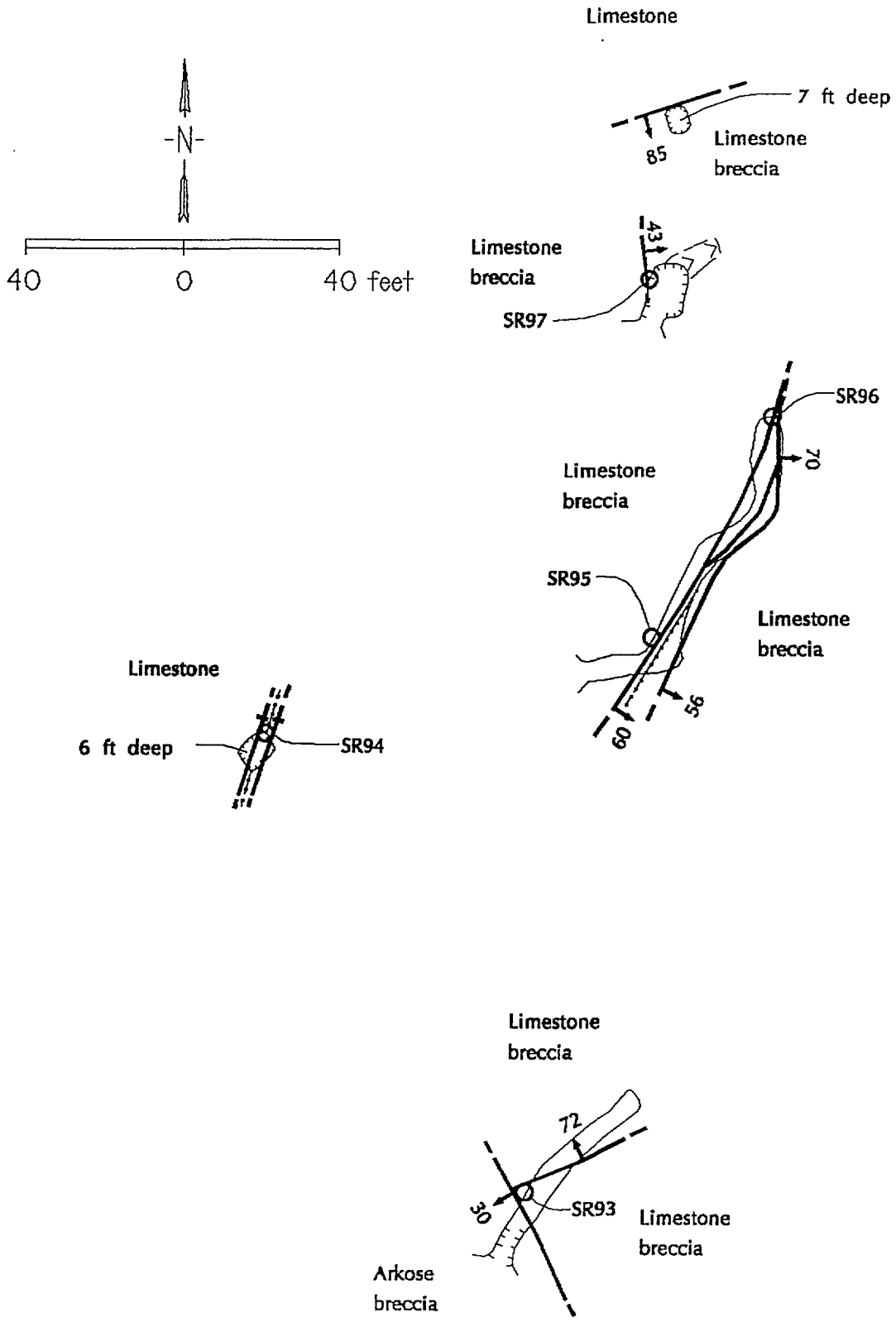


Figure M-15.–Workings on the Taylor Prospect, showing localities of samples SR 93-97.

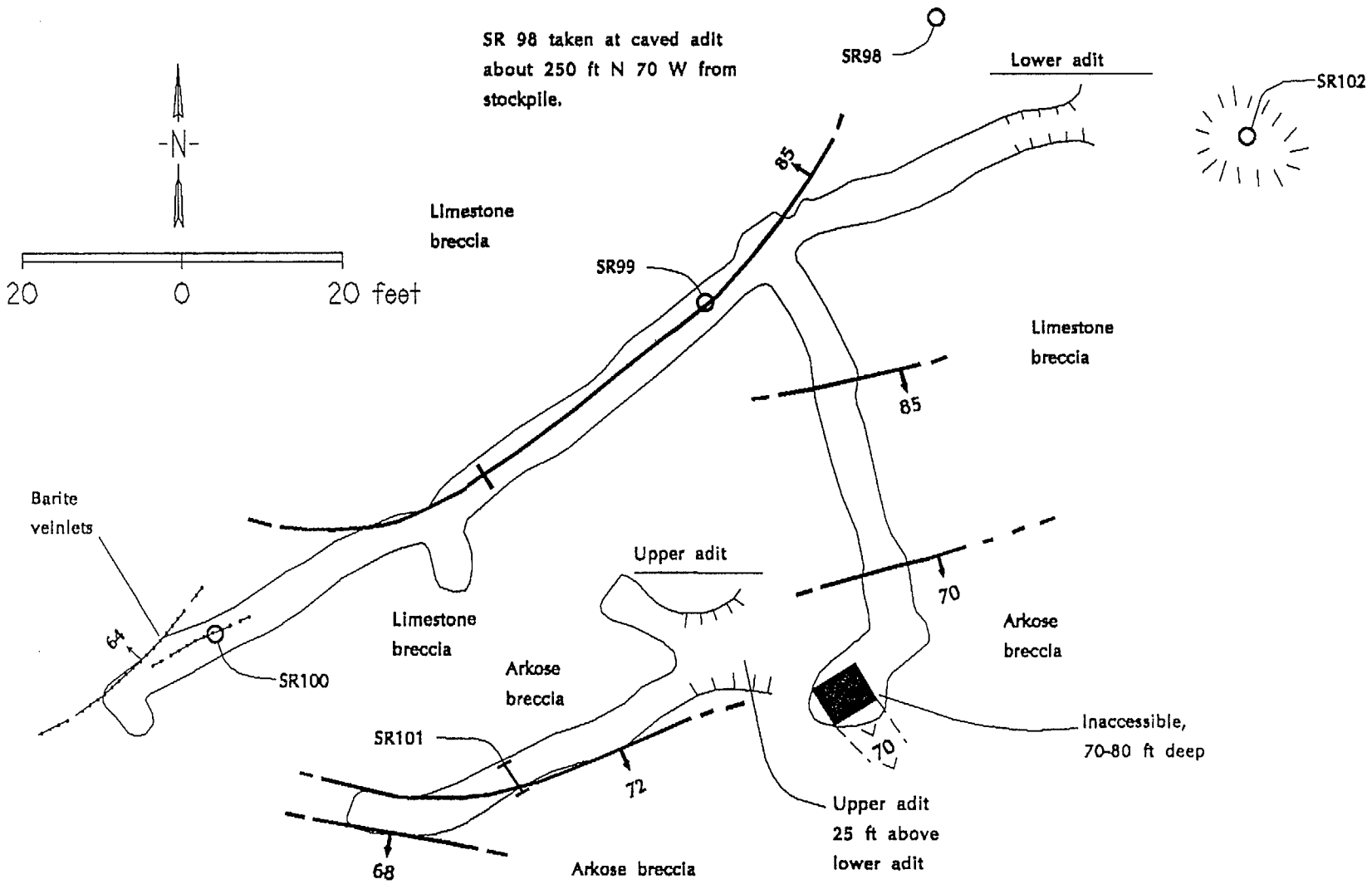


Figure M-16.--Merchant Mine, showing localities of samples SR 98-102.

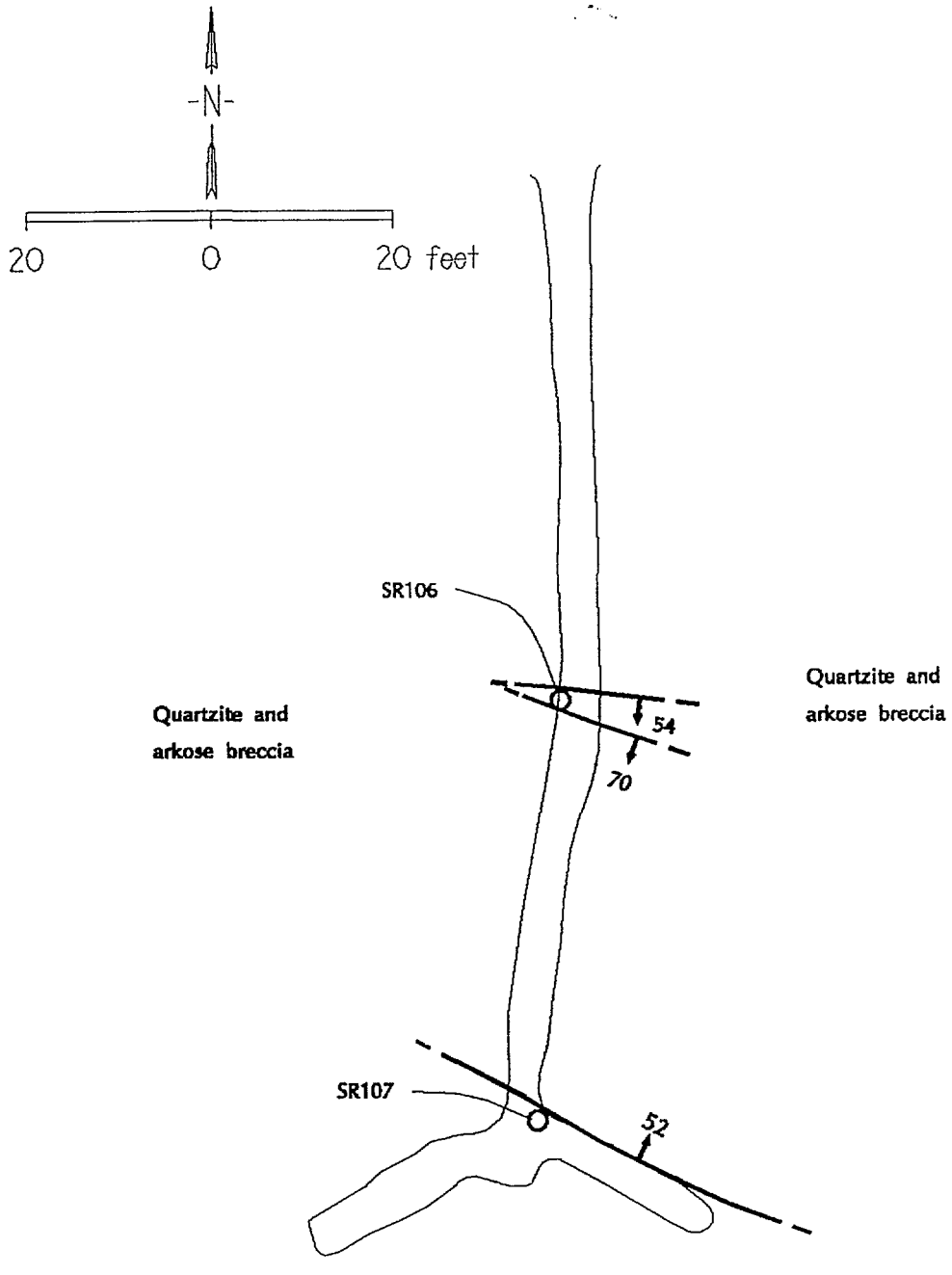


Figure M-17.–Adit on Santa Rita group, showing localities of samples SR 106-107.

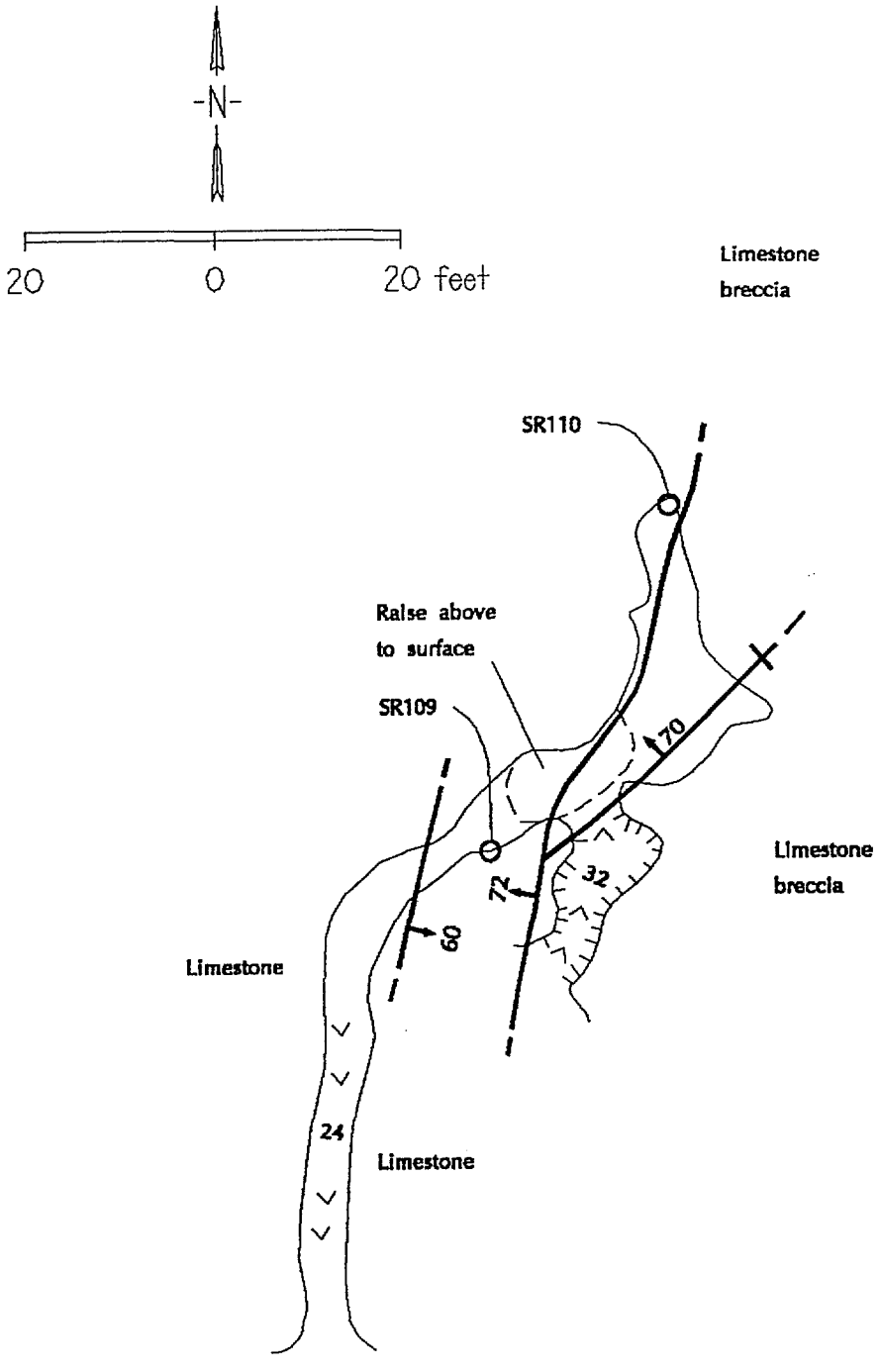


Figure M-18.--Working on Last Chance, showing localities of samples SR 109-110.

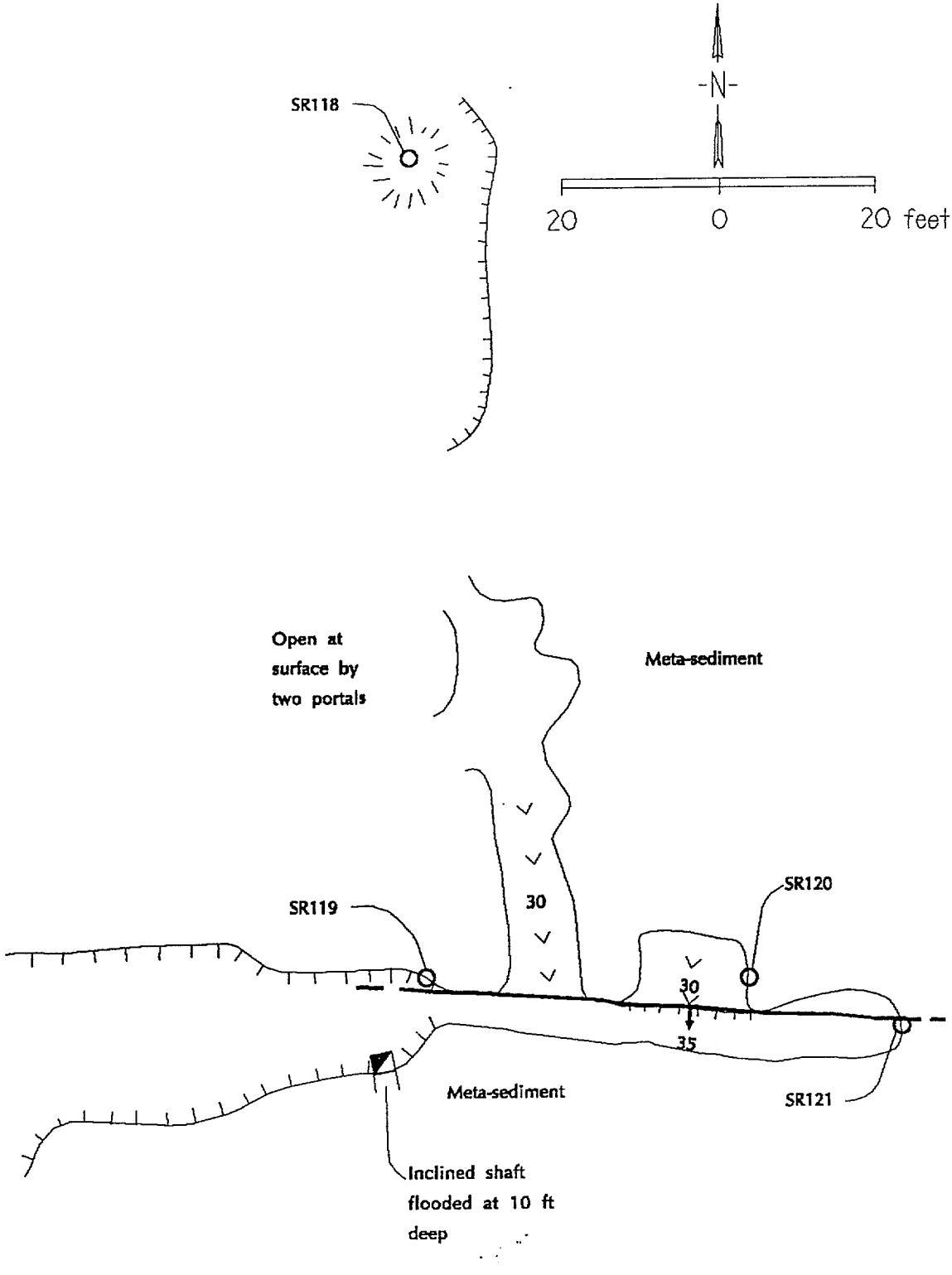


Figure M-19.–Workings at Goldfish Mine, showing localities of samples SR 118-121.

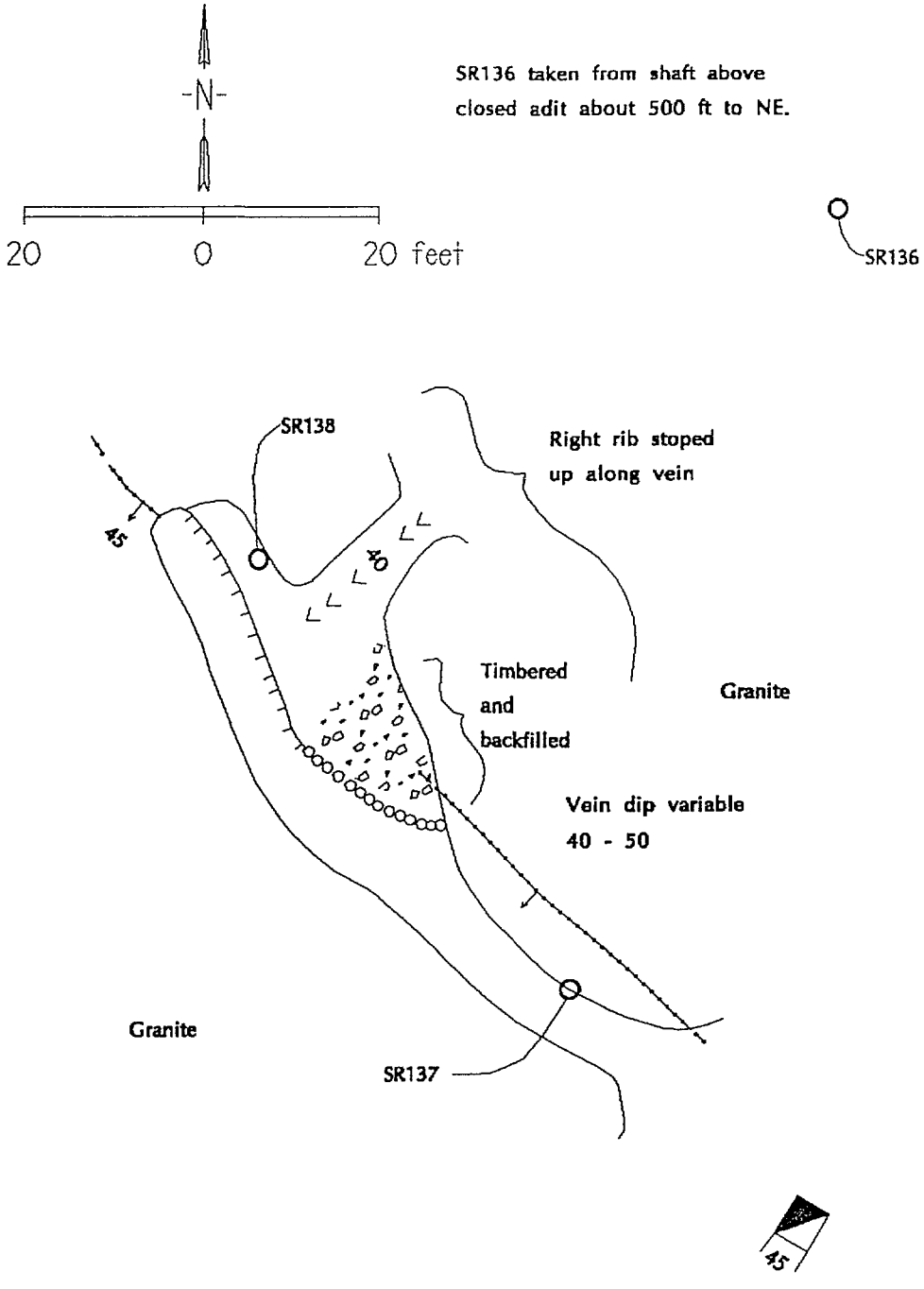


Figure M-20.–Plata Cascabel adit, showing localities of samples SR 136-138.

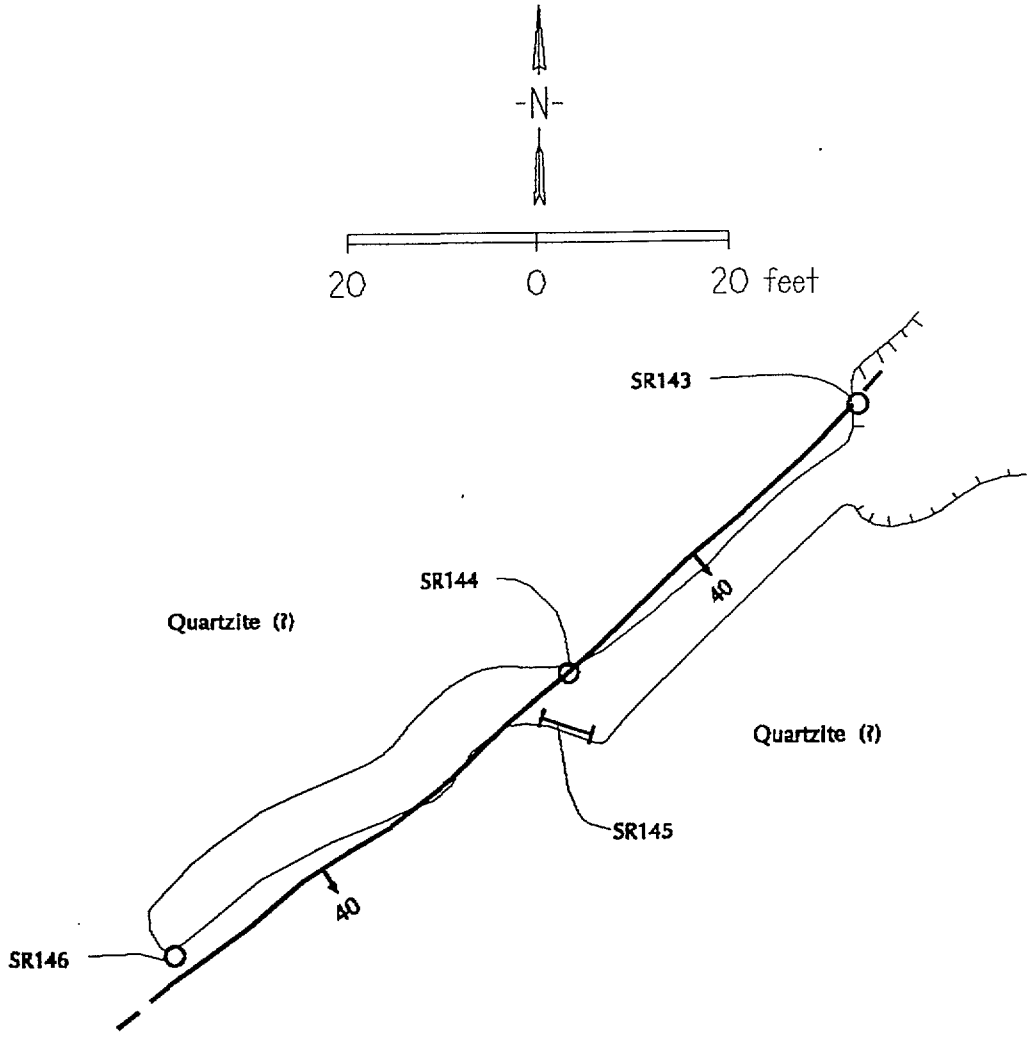


Figure M-21.–Mountain King Mine, showing localities of samples SR 143-146.

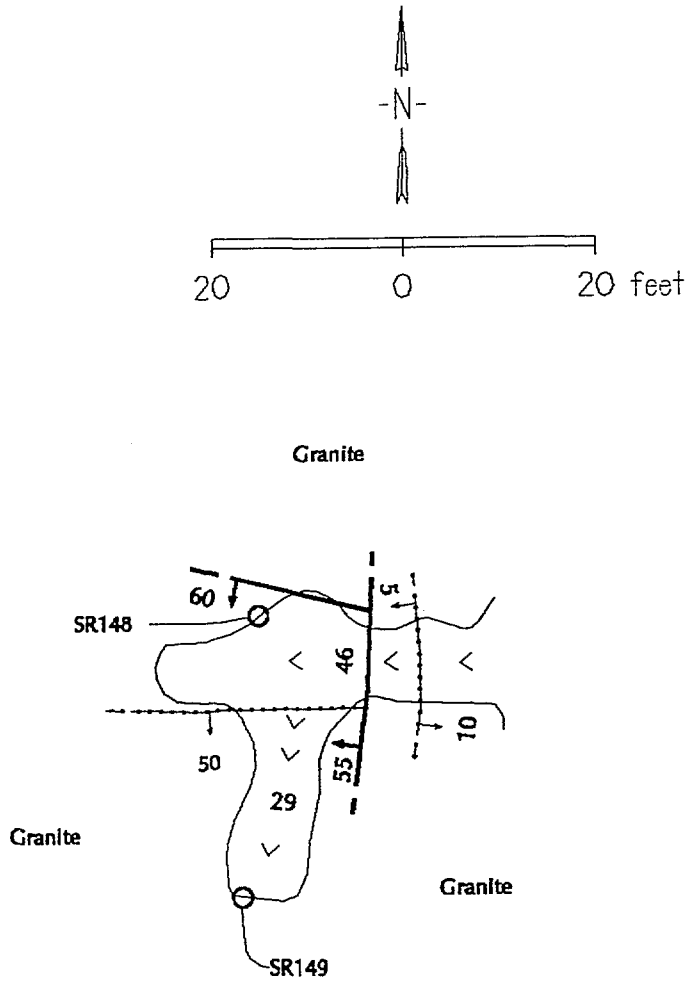


Figure M-22.--Summit Mine, showing localities of samples SR 148-149.

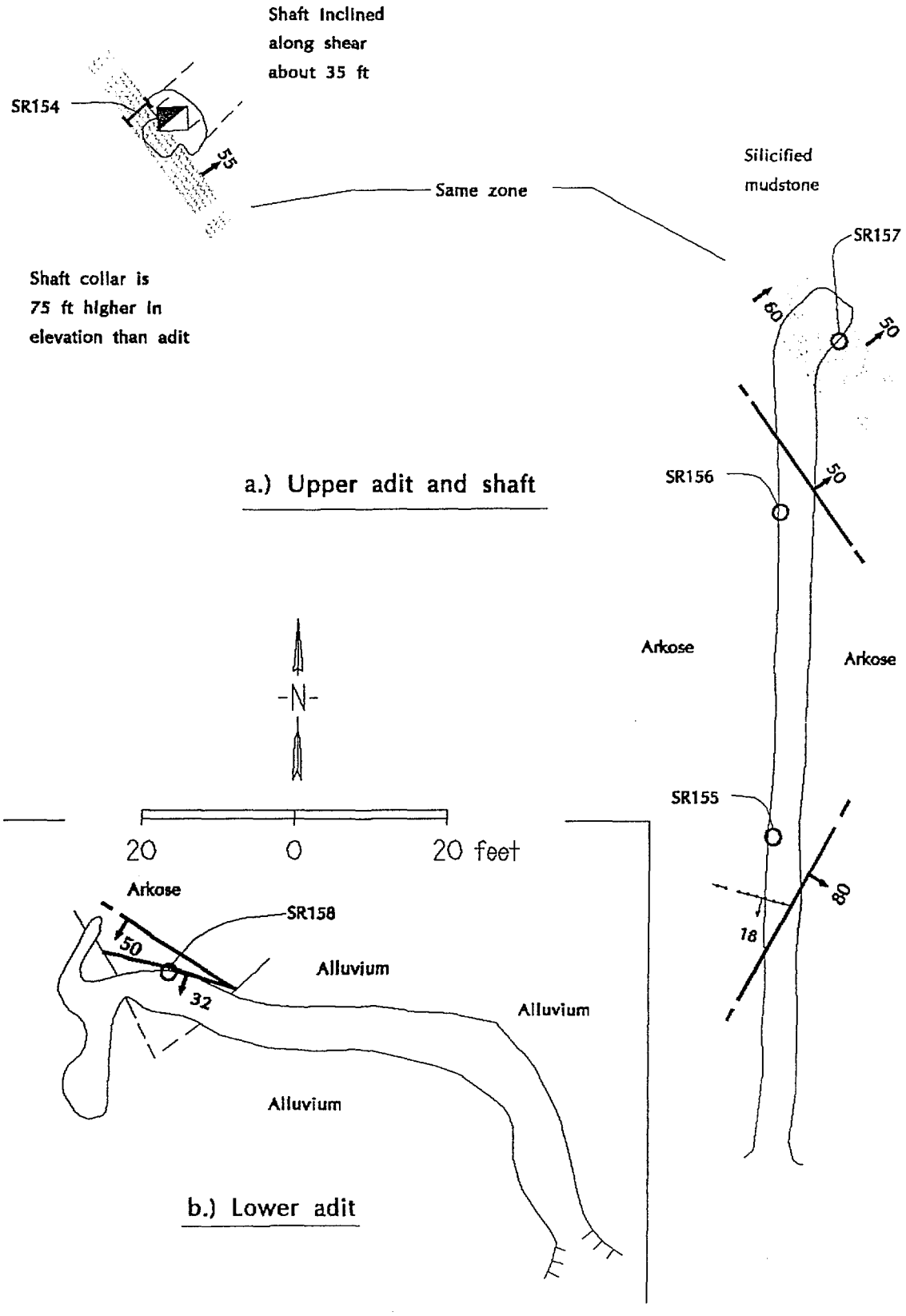


Figure 23.--Workings on the Keith Claims, showing localities of samples SR 154-158.

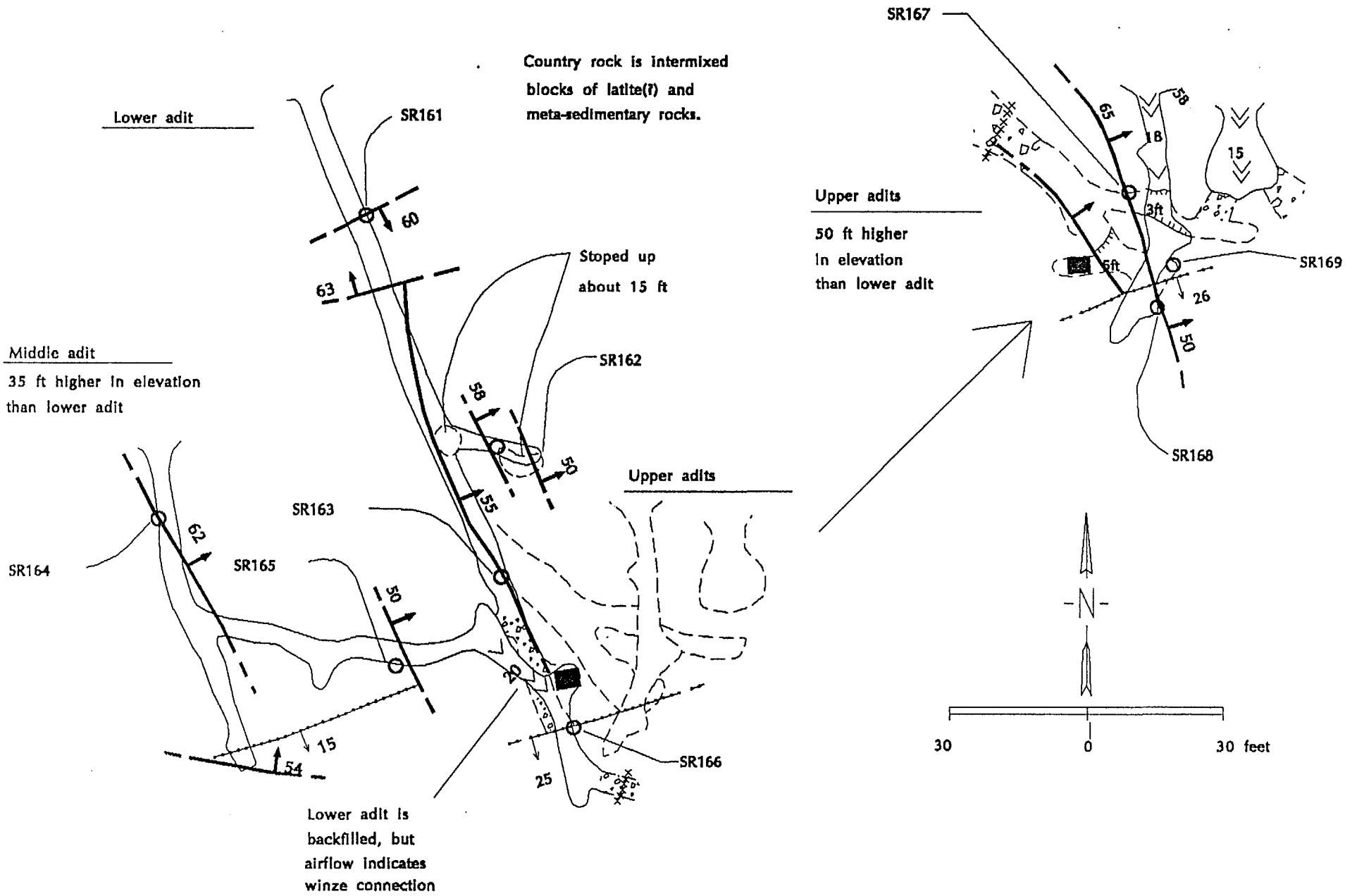


Figure M-24.--Gold Ledge adits, showing localities of samples SR 161-169.

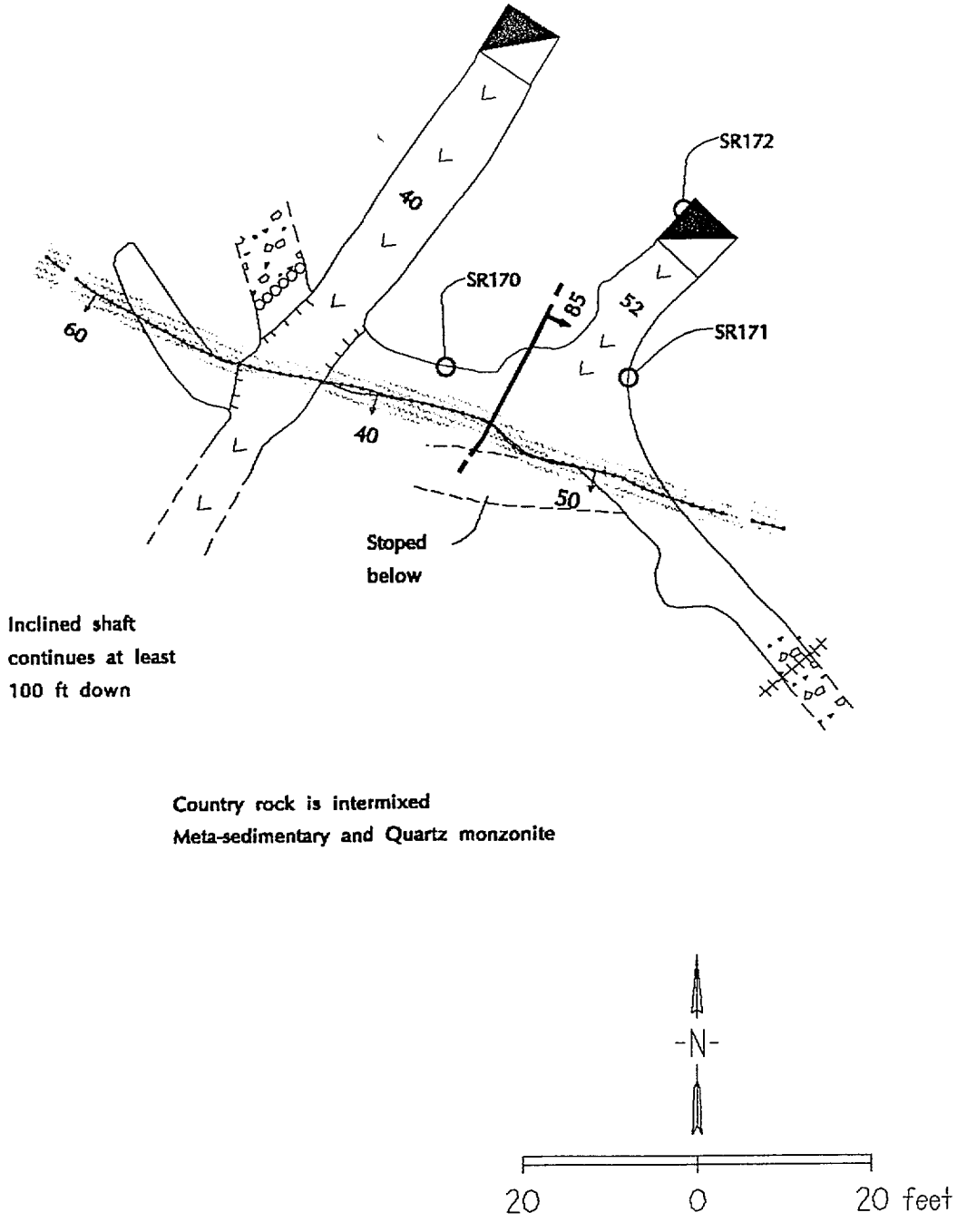


Figure M-25.–Quebec Mine, showing localities of samples SR 170-172.

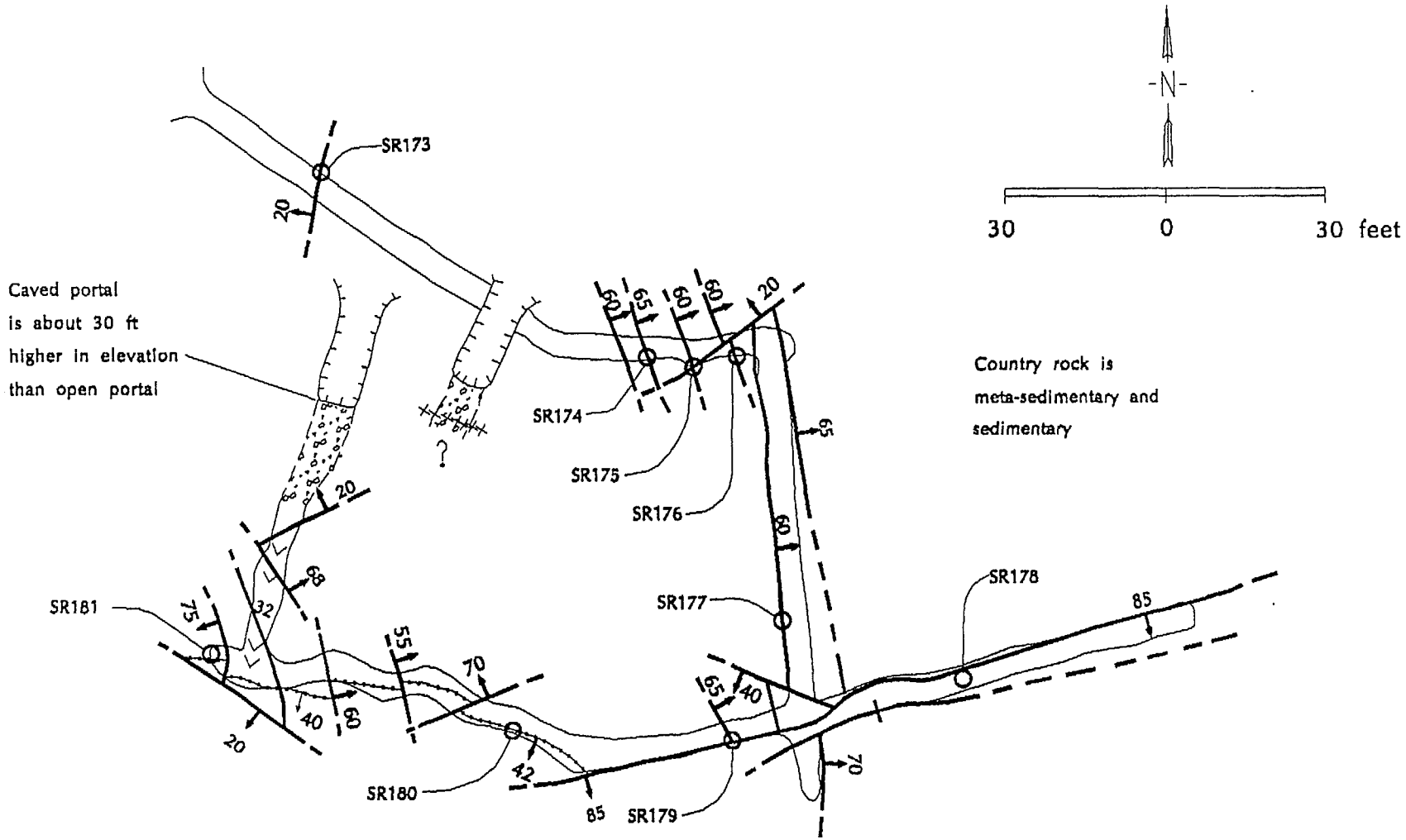


Figure M-26.–Gold Buck adit, showing localities of samples SR 173-181.

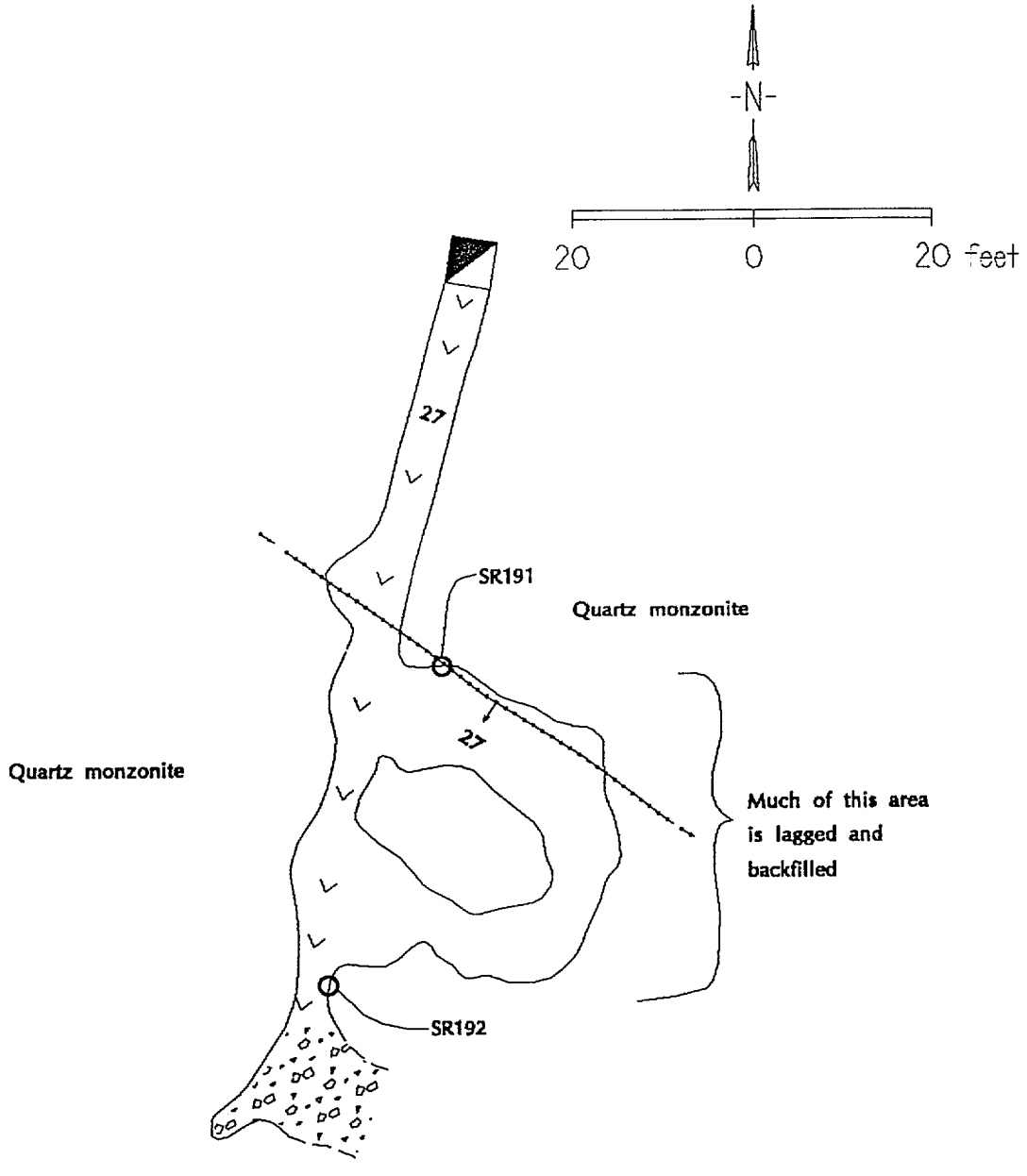


Figure M-27.–Zeckendorf Mine, showing localities of samples SR 191-192 (sketch of working adapted from Anaconda Geological Document Collection).

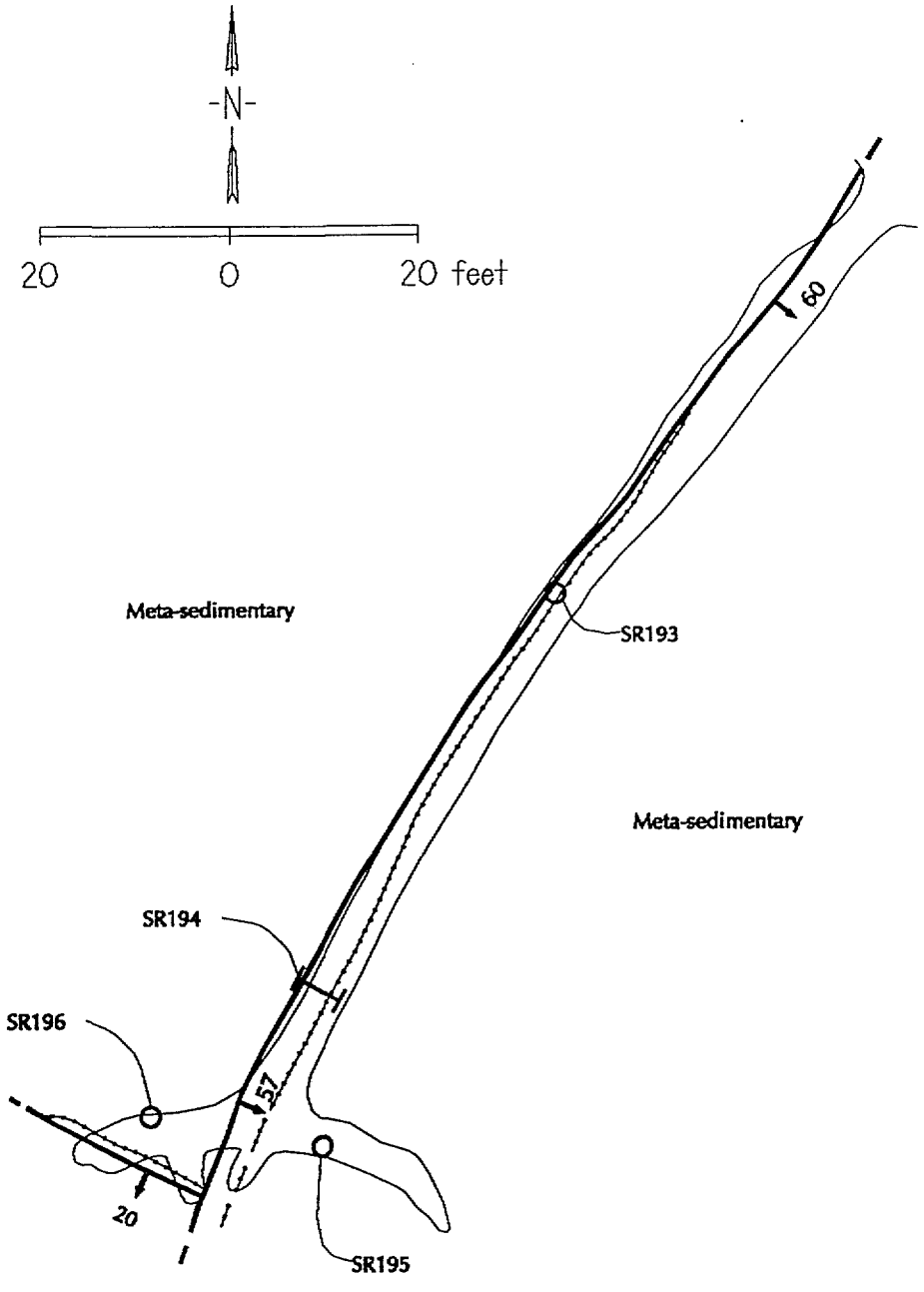


Figure M-28.--Apex adit, showing localities of samples SR 193-196.

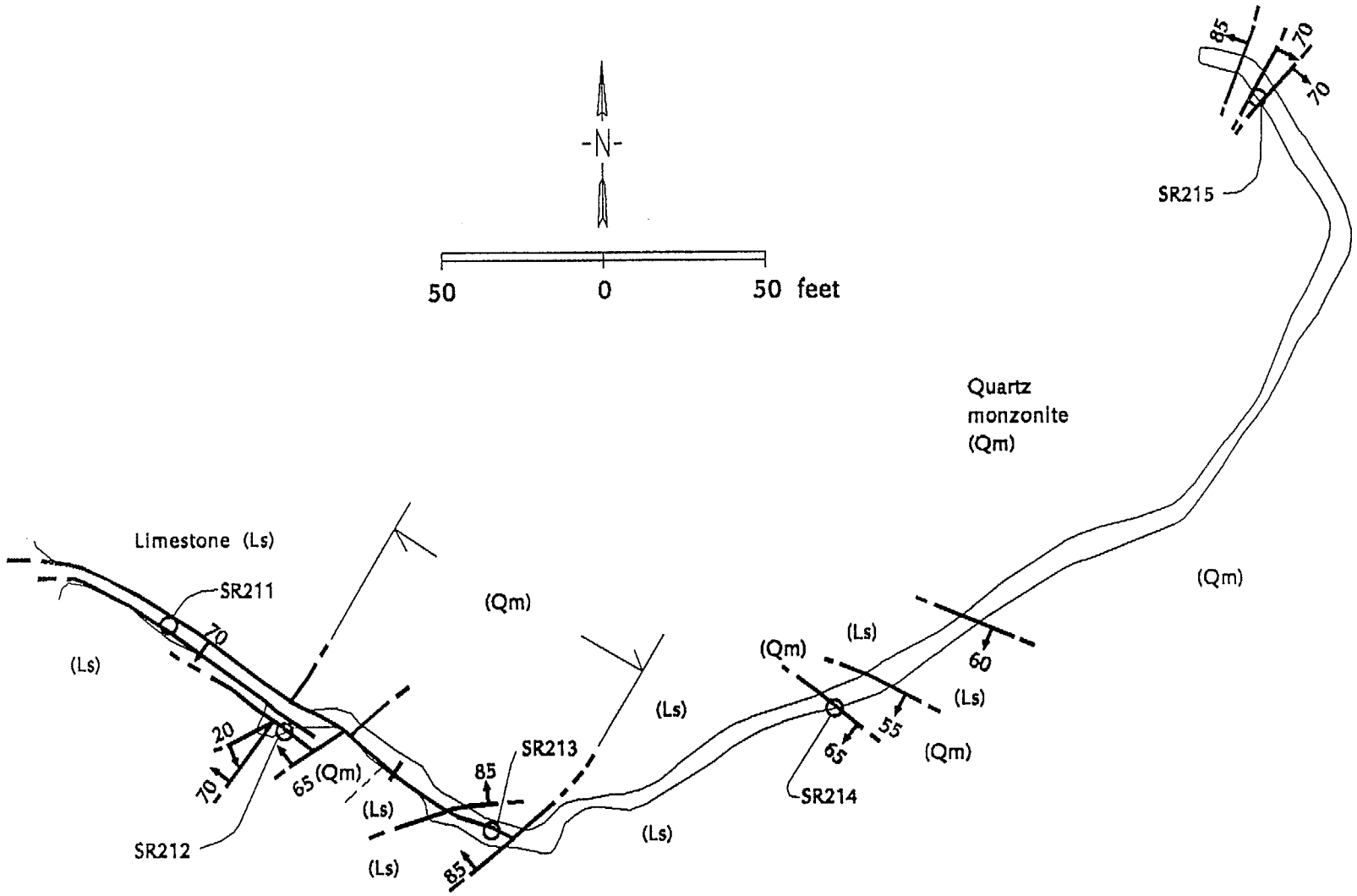


Figure M-29.--Unnamed adit, showing localities of samples SR 211-215.

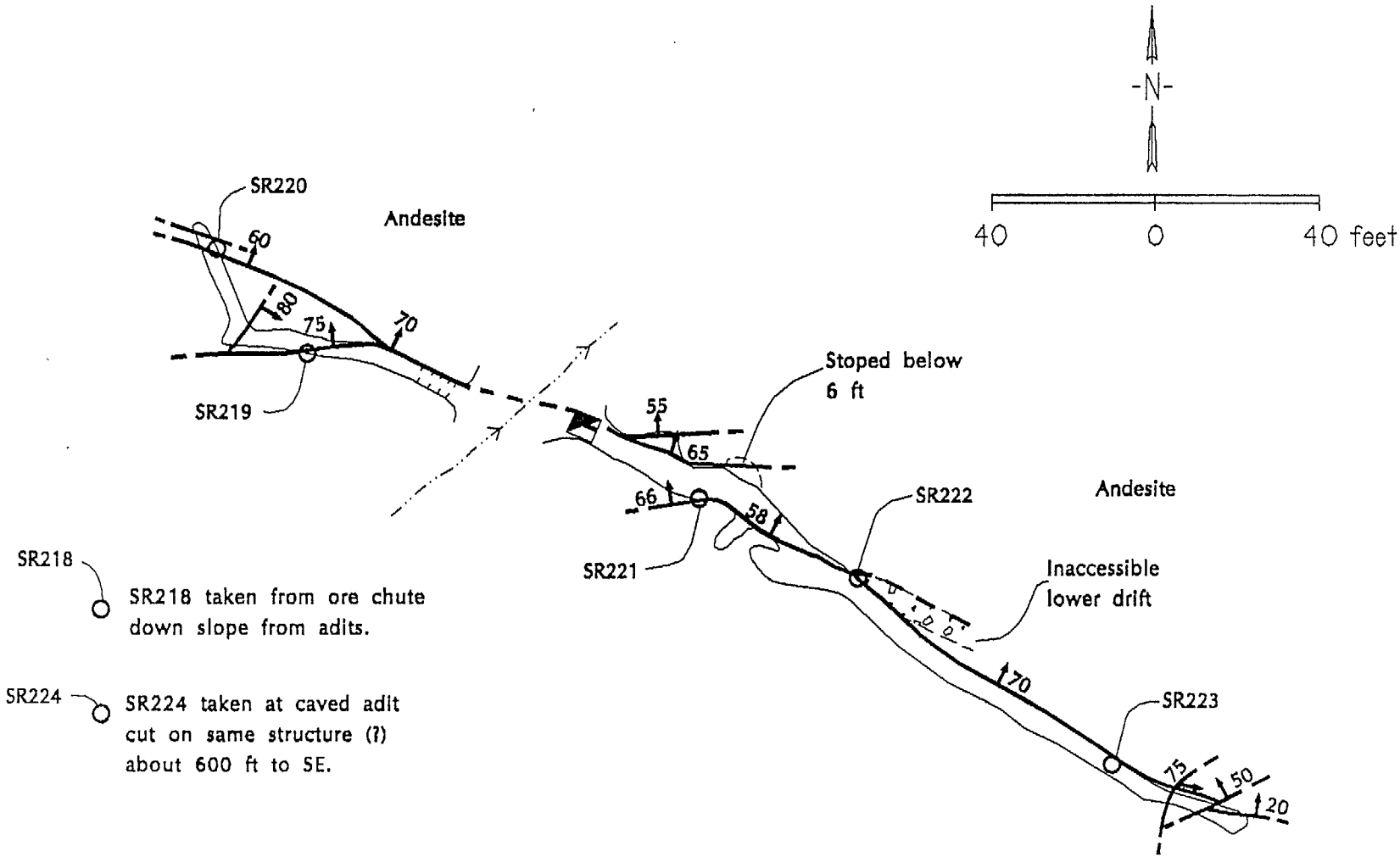


Figure M-30.--Unnamed adits, showing localities of samples SR 218-224.

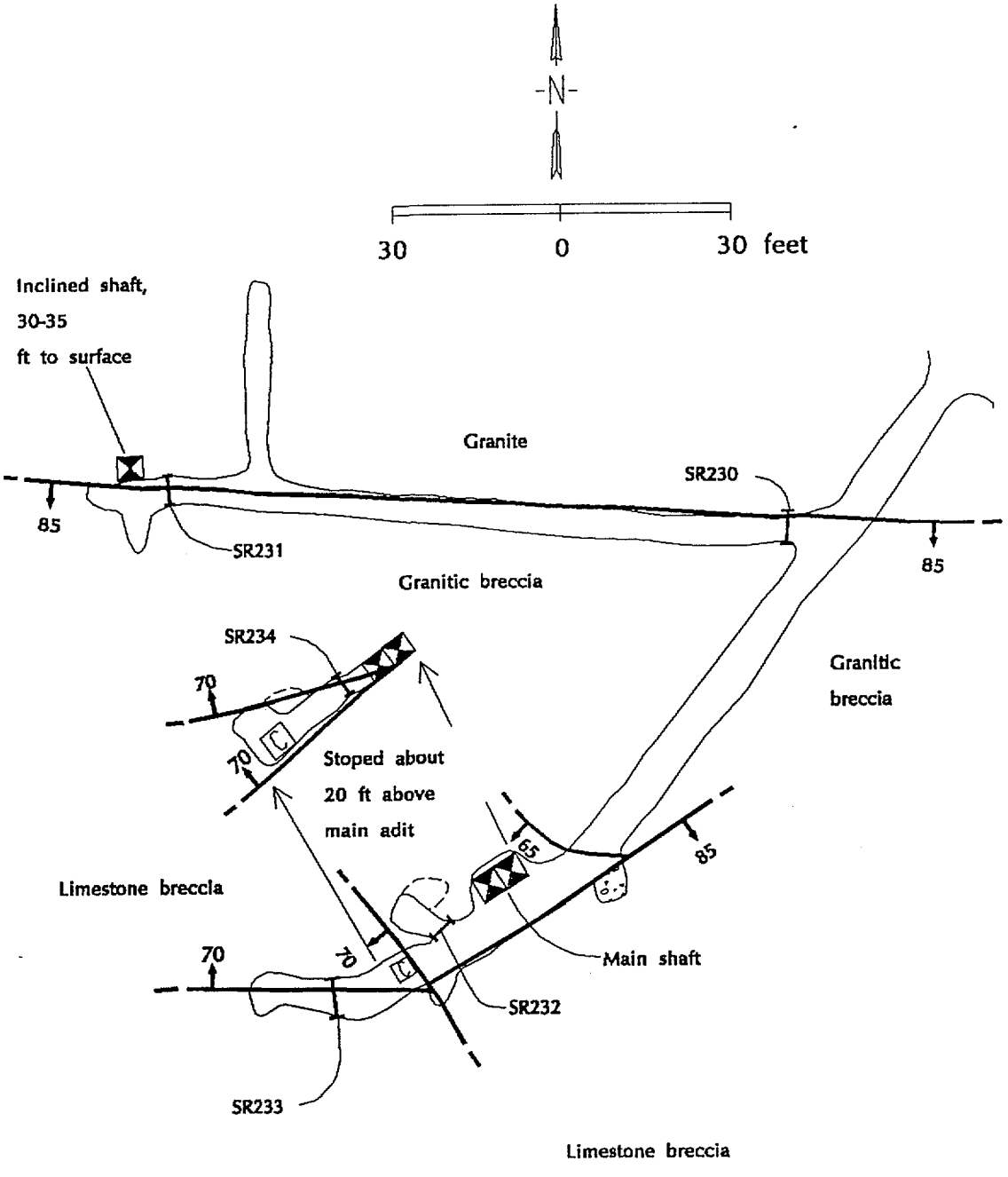


Figure M-31.–Snyder Mine, adit at 60 ft below collar of main shaft, showing localities of samples SR 230-234.

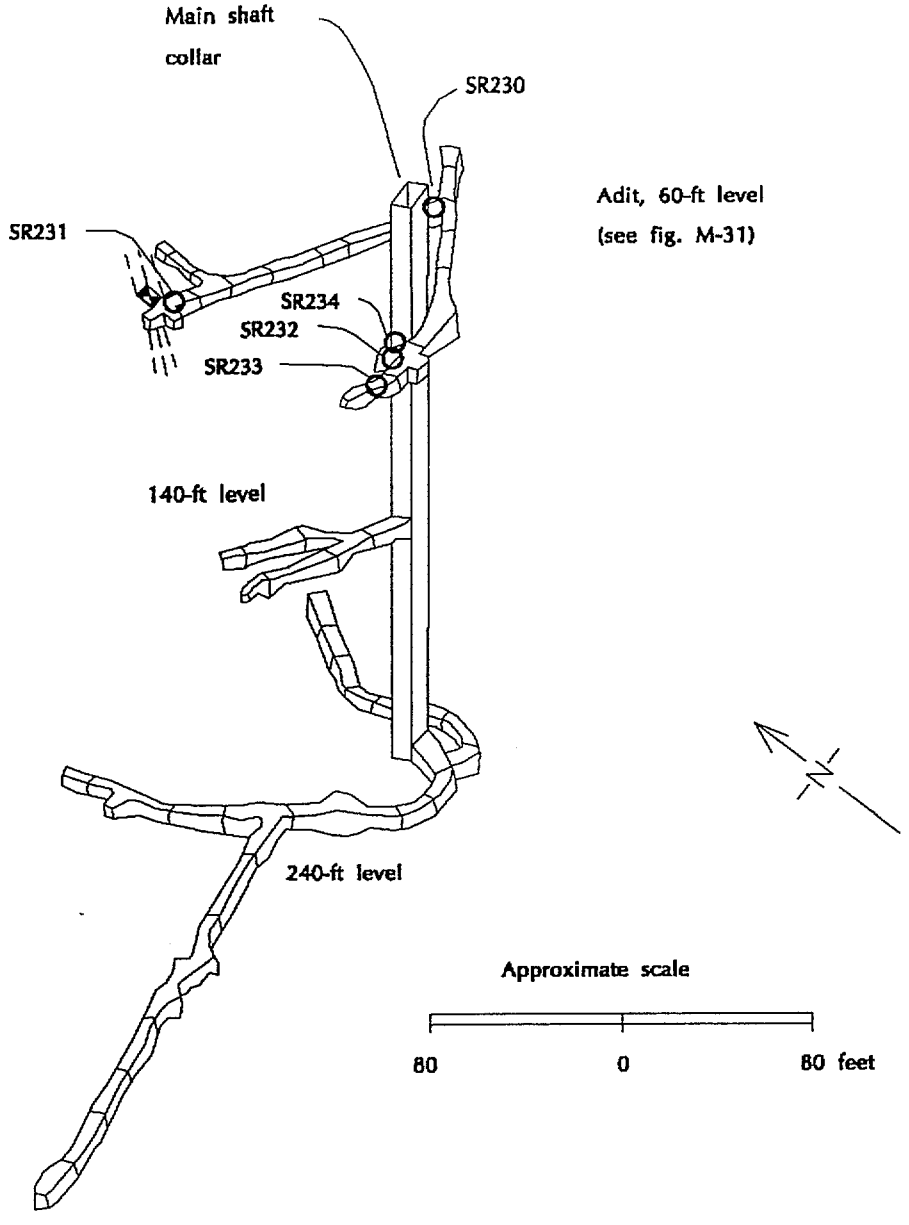


Figure M-32.–Snyder Mine, oblique 3-D computer modeled sketch of underground workings, adapted from mine maps by G.W. Irvin, D. Chilson, and D. McGee (1957).

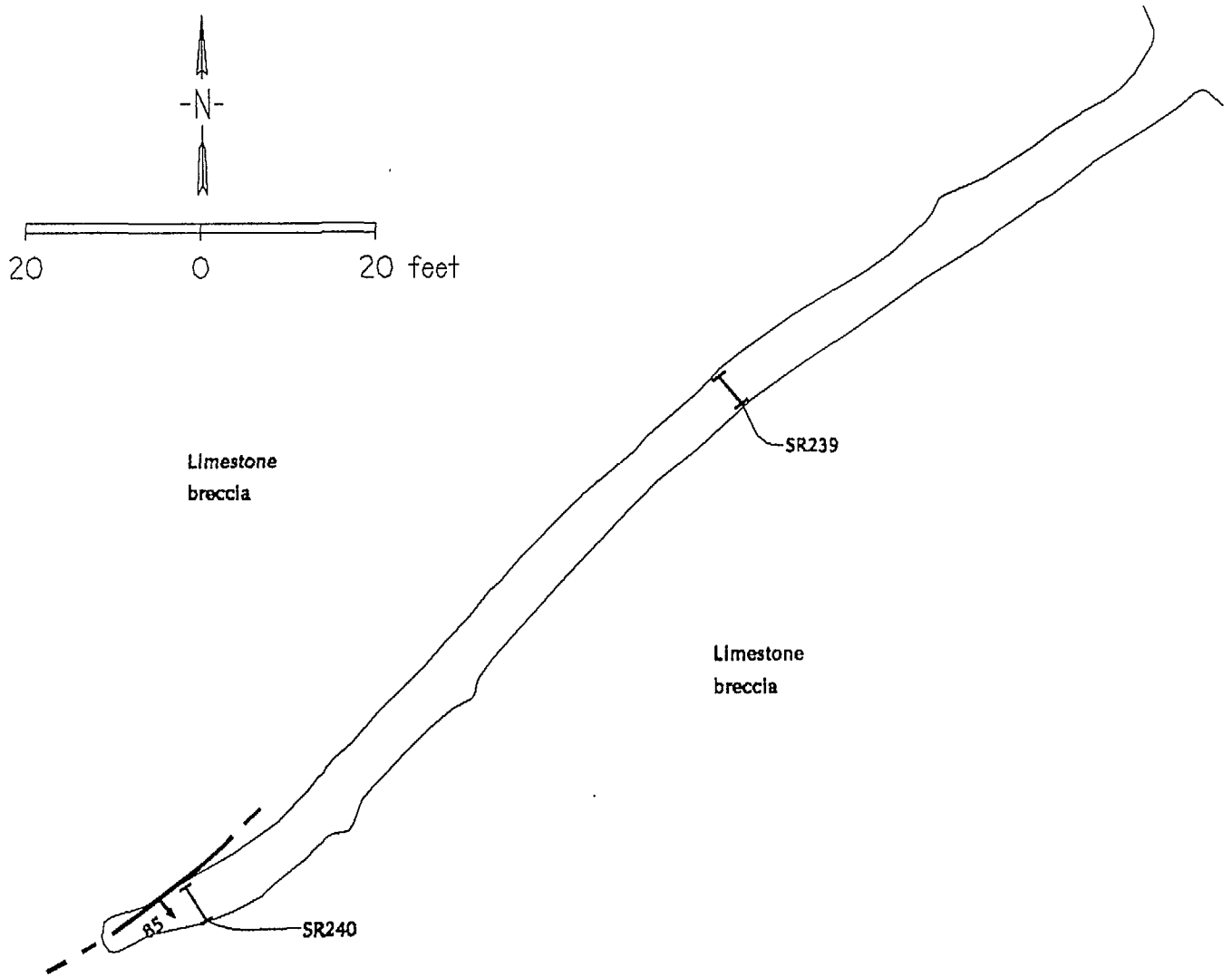


Figure M-33.--Adit in area of Snyder Mine, showing localities of samples SR 239-240.

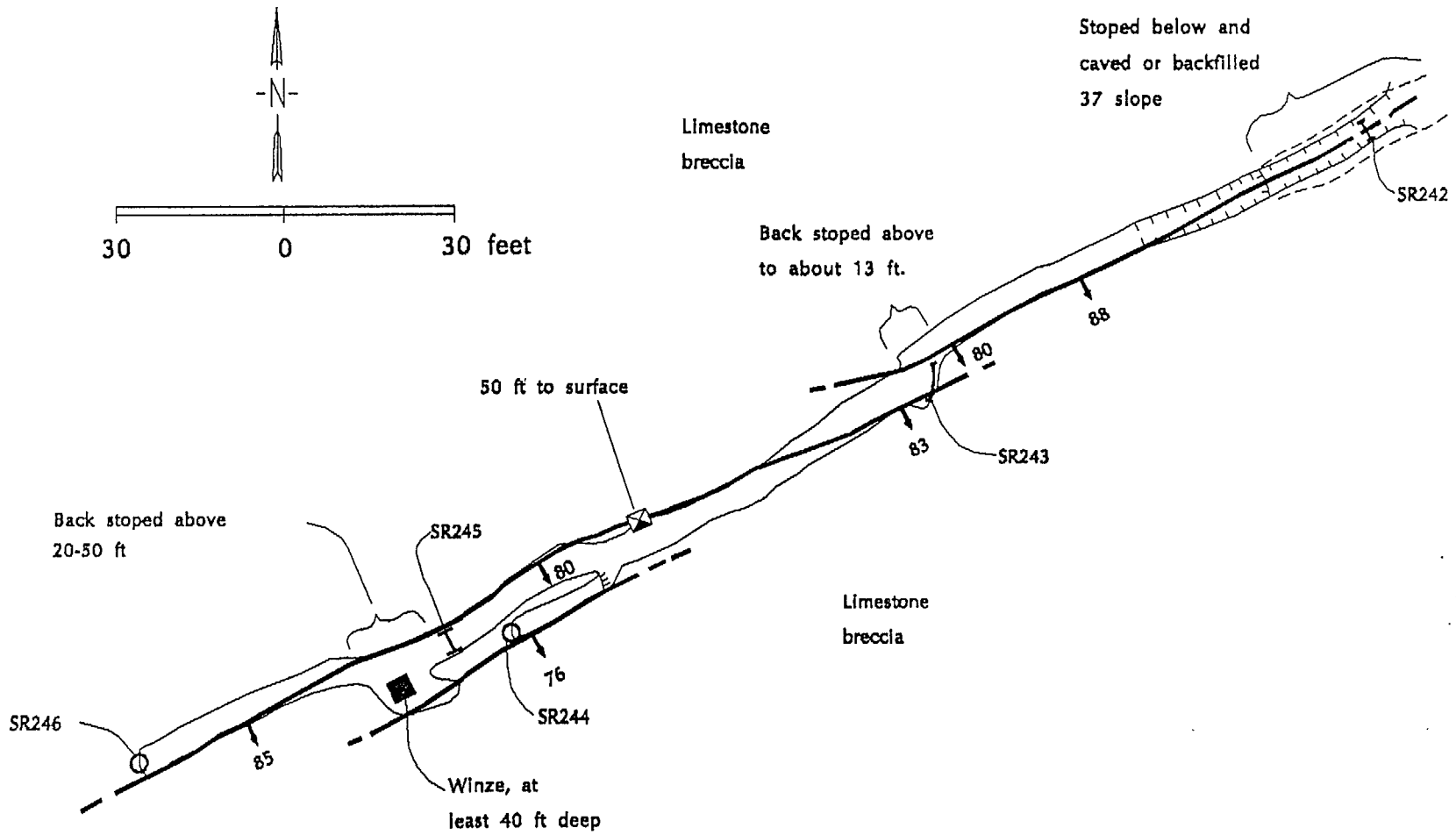


Figure M-34.–Adit in area of Snyder Mine, showing localities of samples SR 242-246.

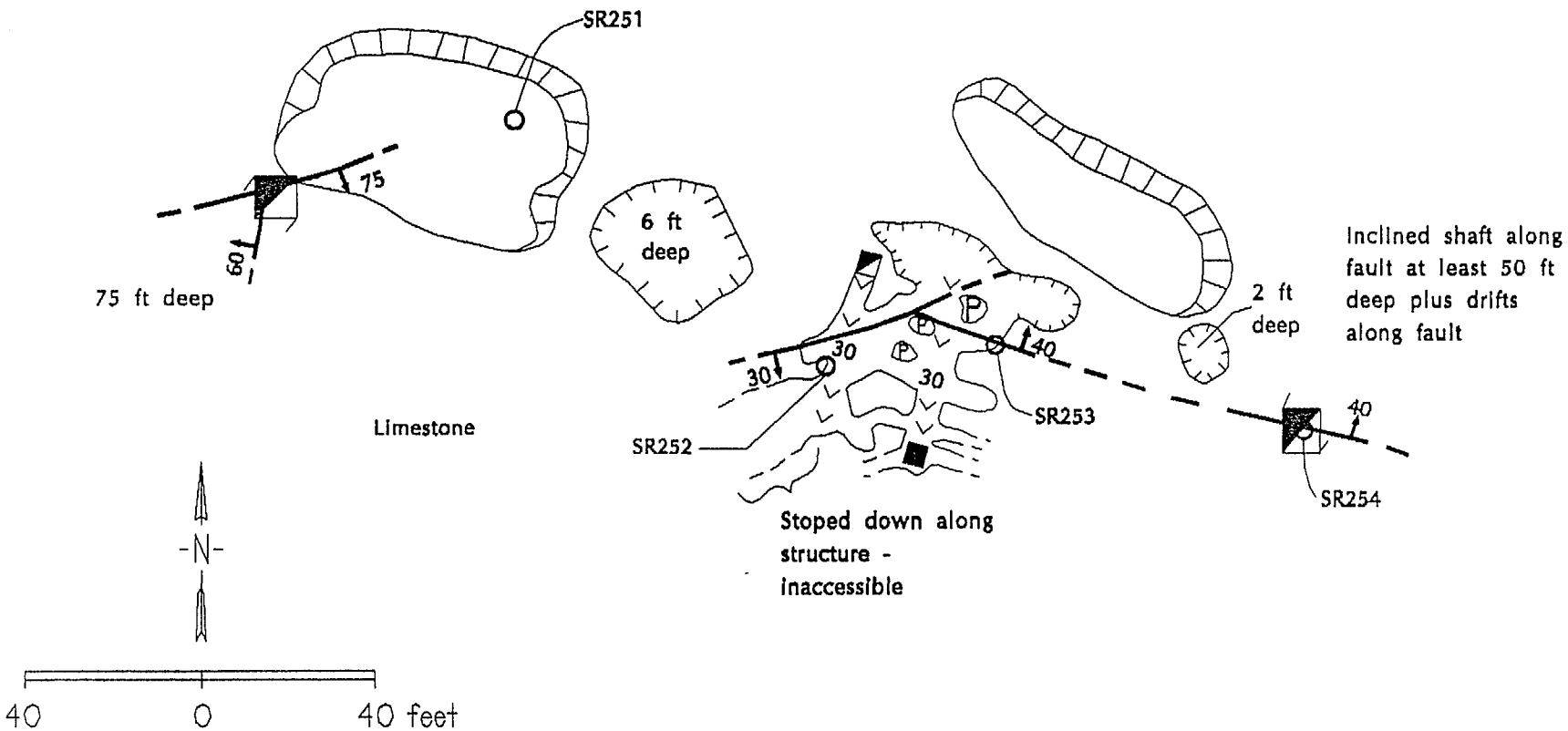


Figure M-35.–Billey Sunday Prospect, showing surface and underground workings and localities of samples SR 251-254.

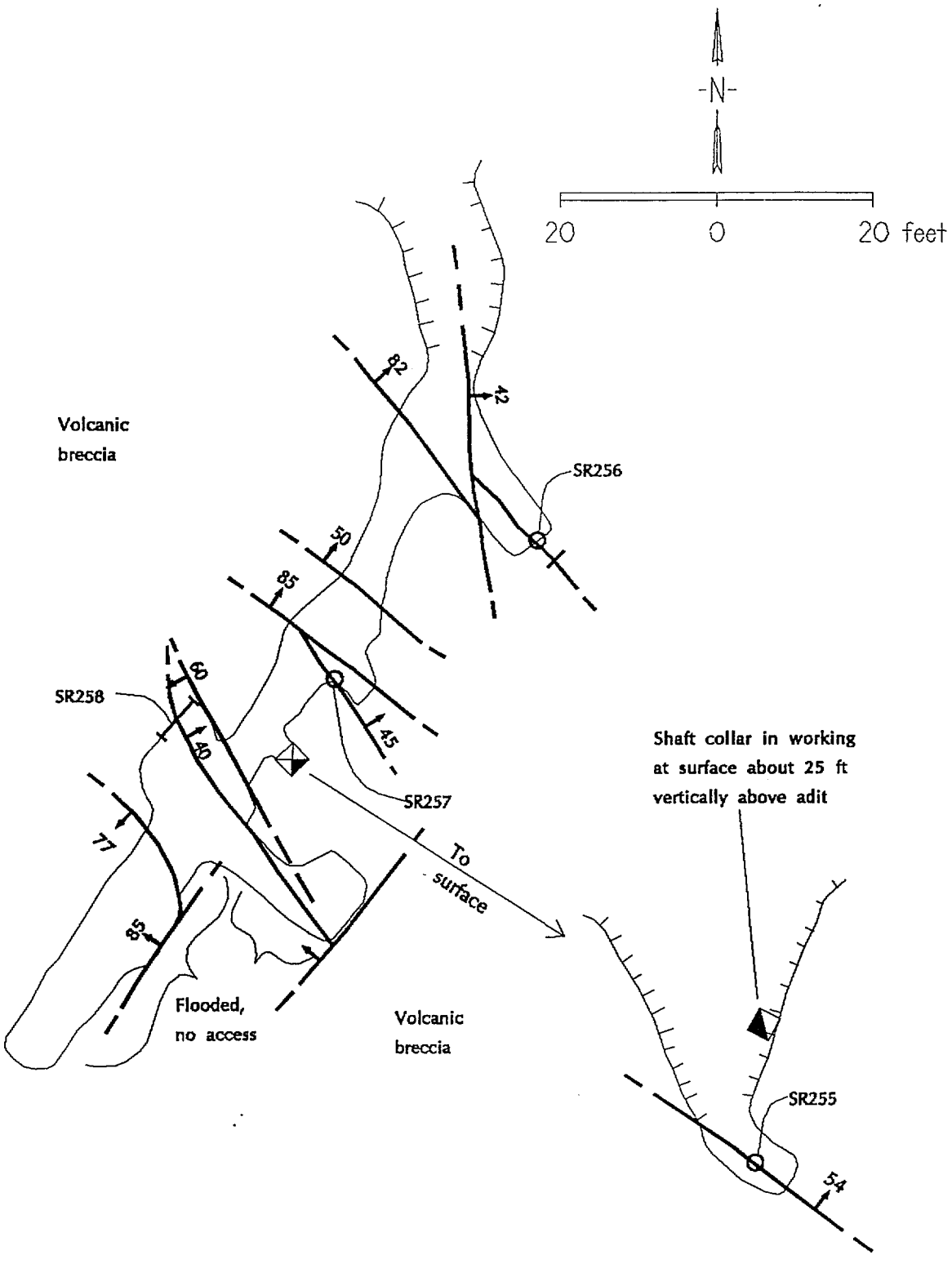


Figure M-36.–Workings on Sweet Water group (Jewell No.1 Claim), showing localities of samples SR 255-258.

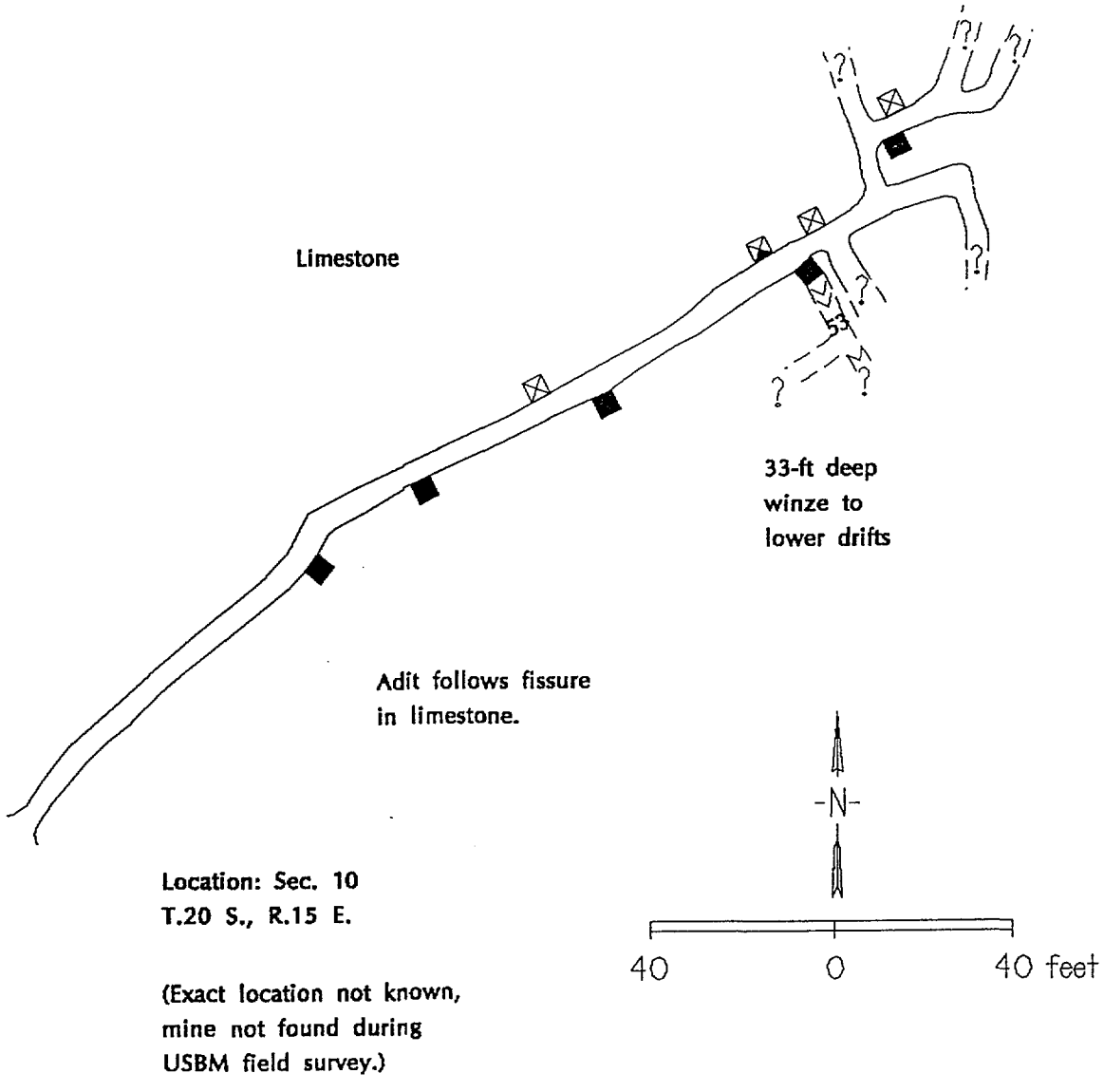


Figure M-37.–Pomona Mine (Red Berry and Hidden Tunnel) (copy of map on file with Arizona Bureau of Mines and Mineral Resources).

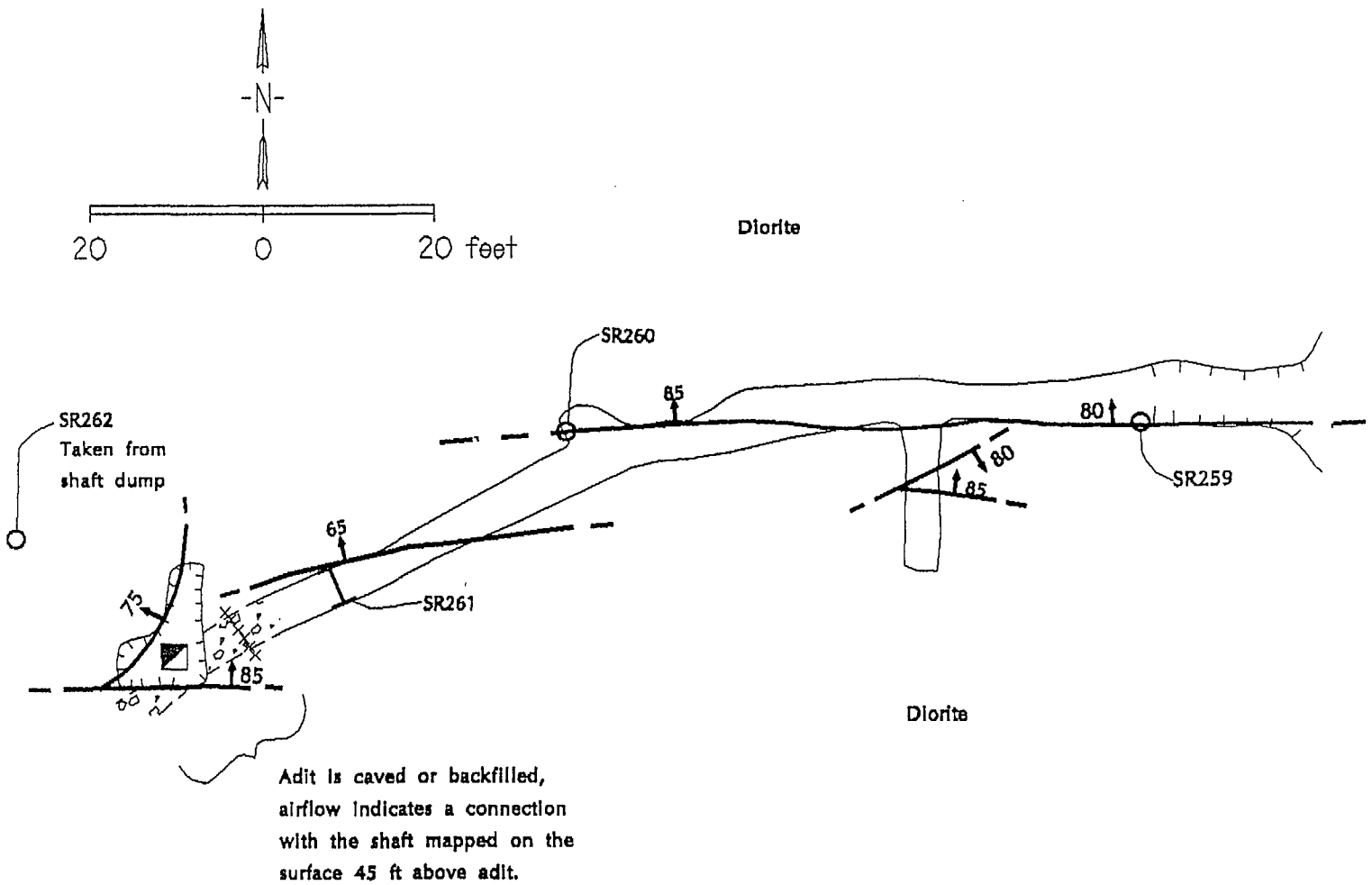


Figure M-38.--Adit and shaft in Rock Candy Mine area, showing localities of samples SR 259-262.

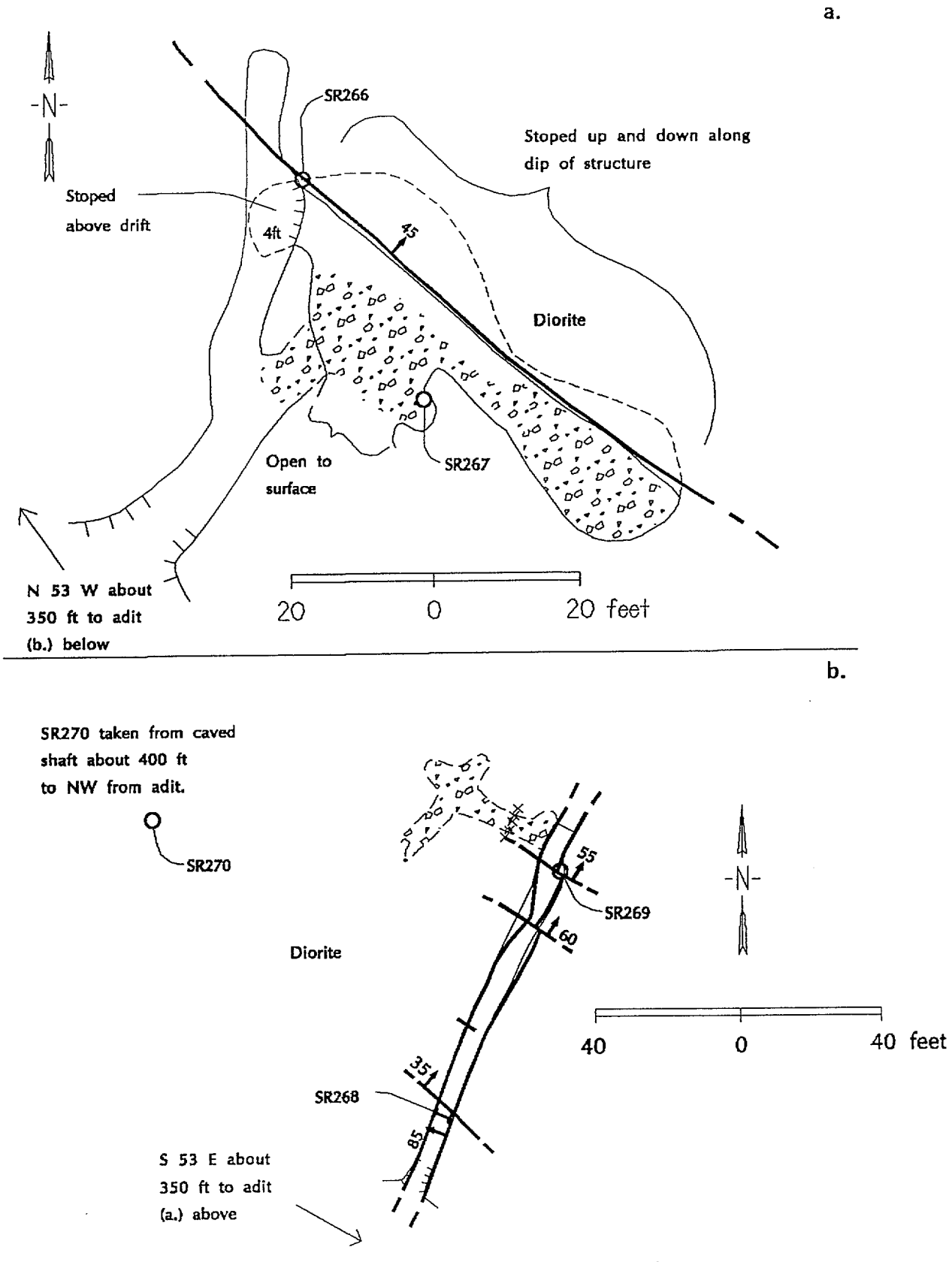


Figure M-39.– Workings in the Rock Candy Mine area, showing localities of samples SR 266-270.

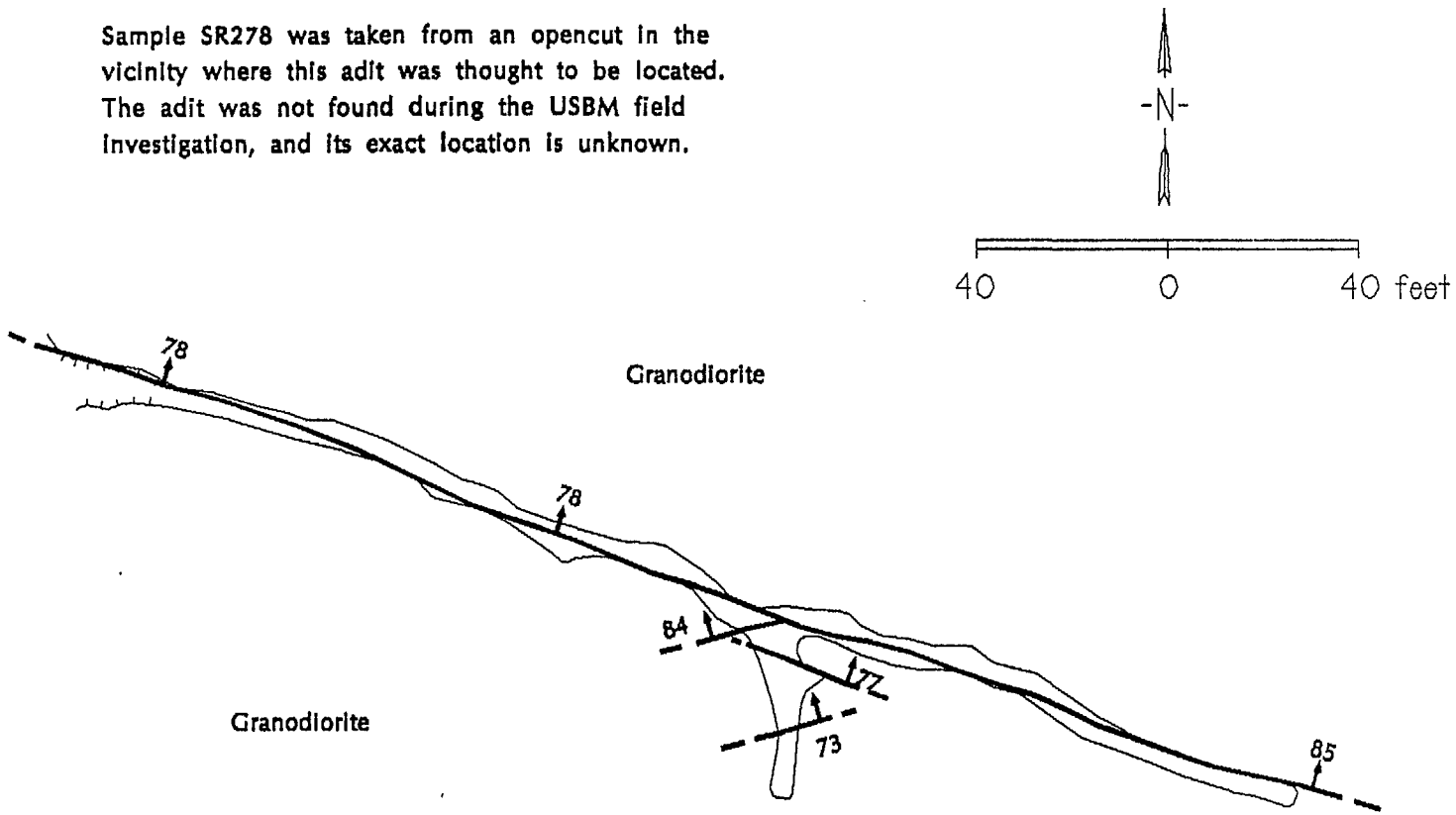


Figure M-40.--Adit on Sun Lode Claim group (from Anaconda Geological Document Collection).

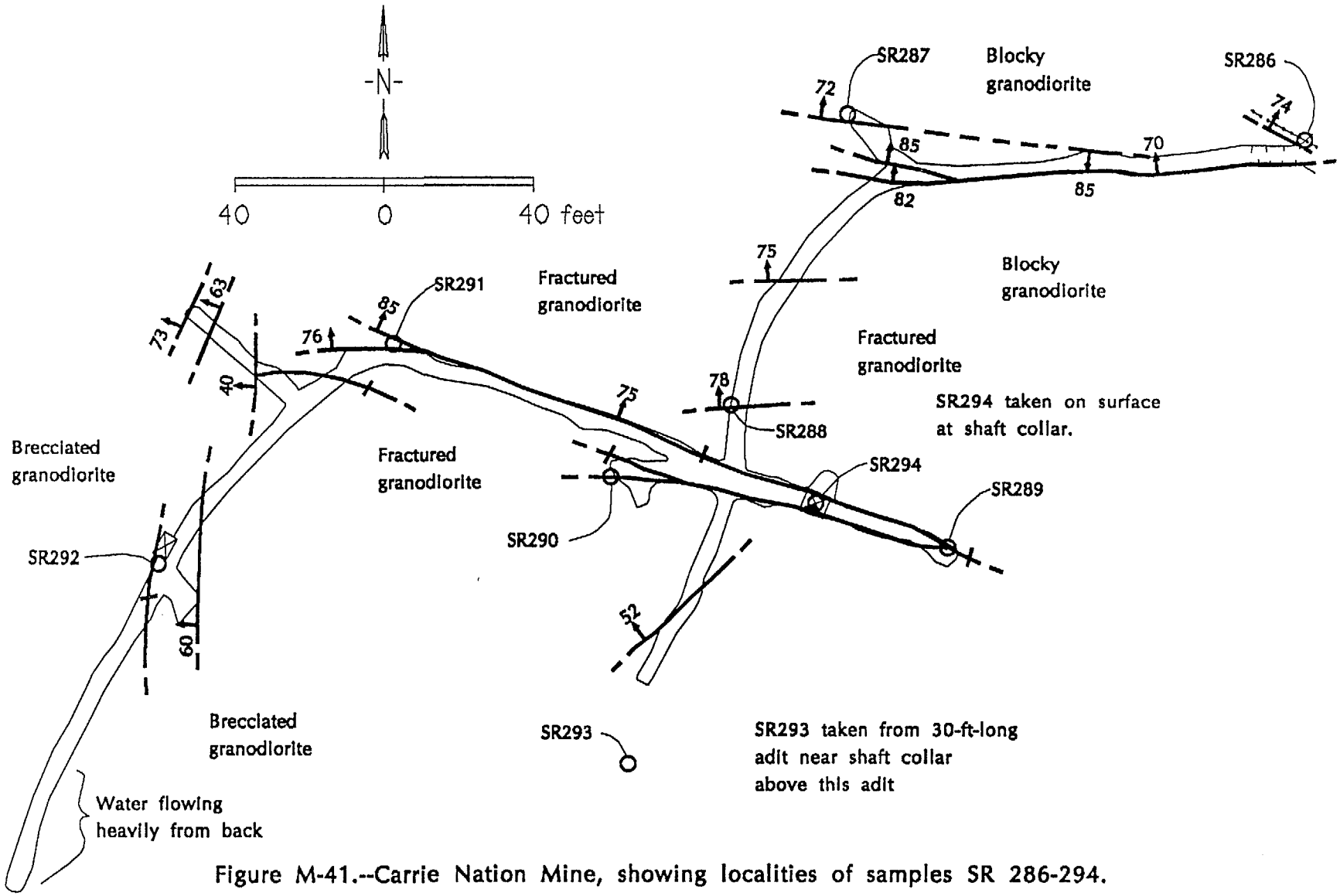


Figure M-41.--Carrie Nation Mine, showing localities of samples SR 286-294.

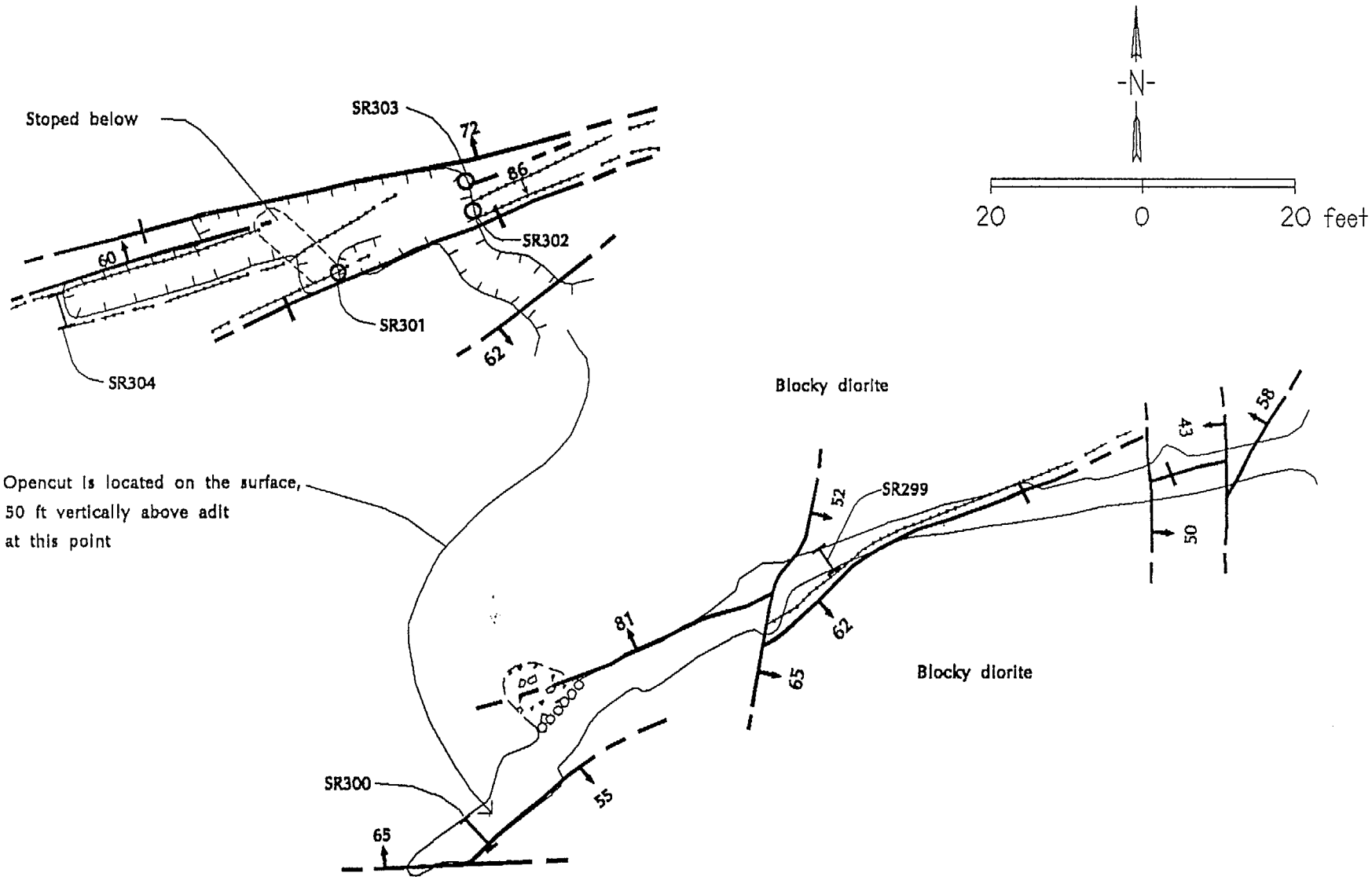


Figure M-42.–Workings on the Lead Prospect, showing localities of samples SR 299-304.

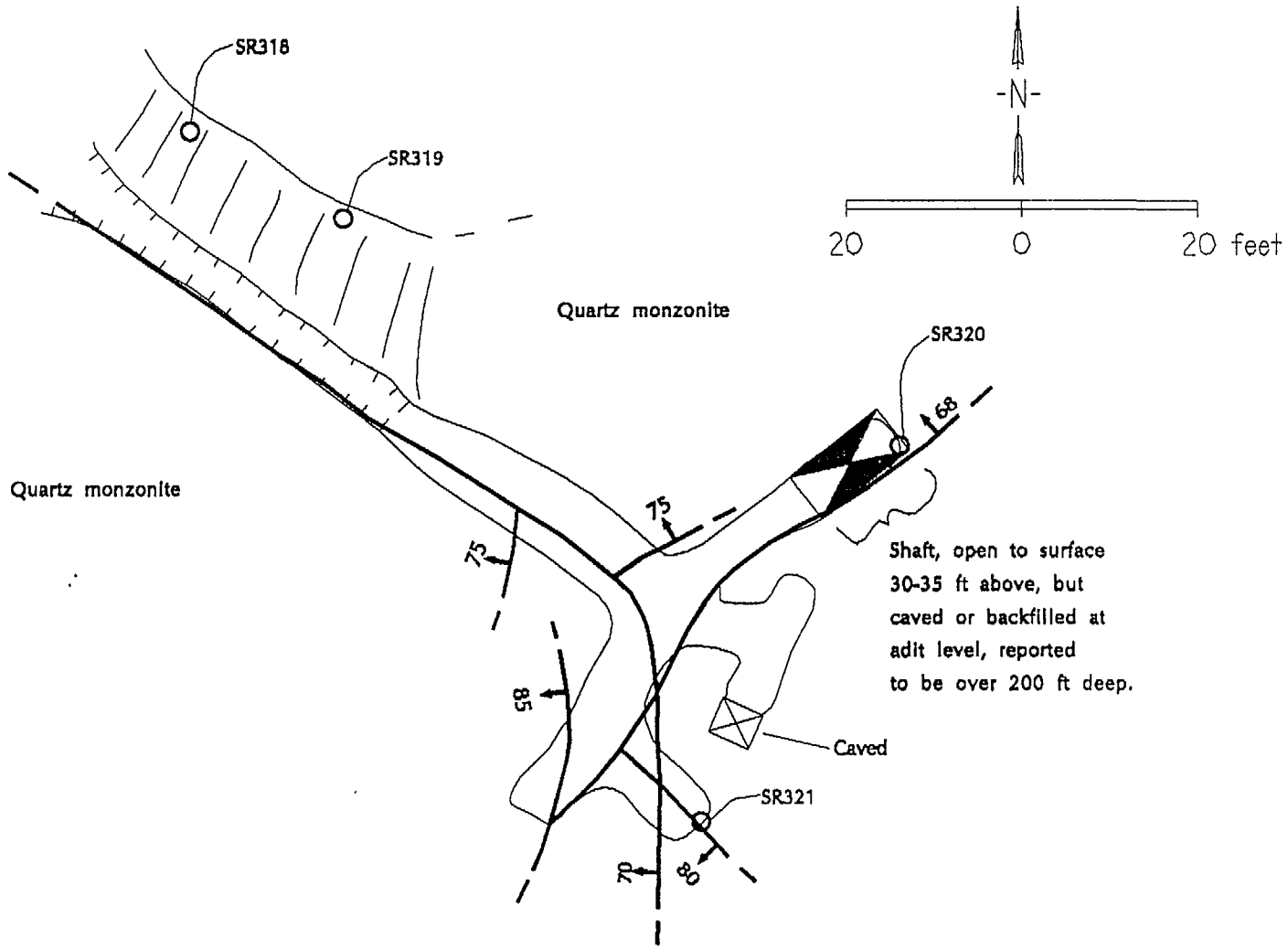


Figure M-43.–Workings at the Quantrell Mine, showing localities of samples SR 318-321.

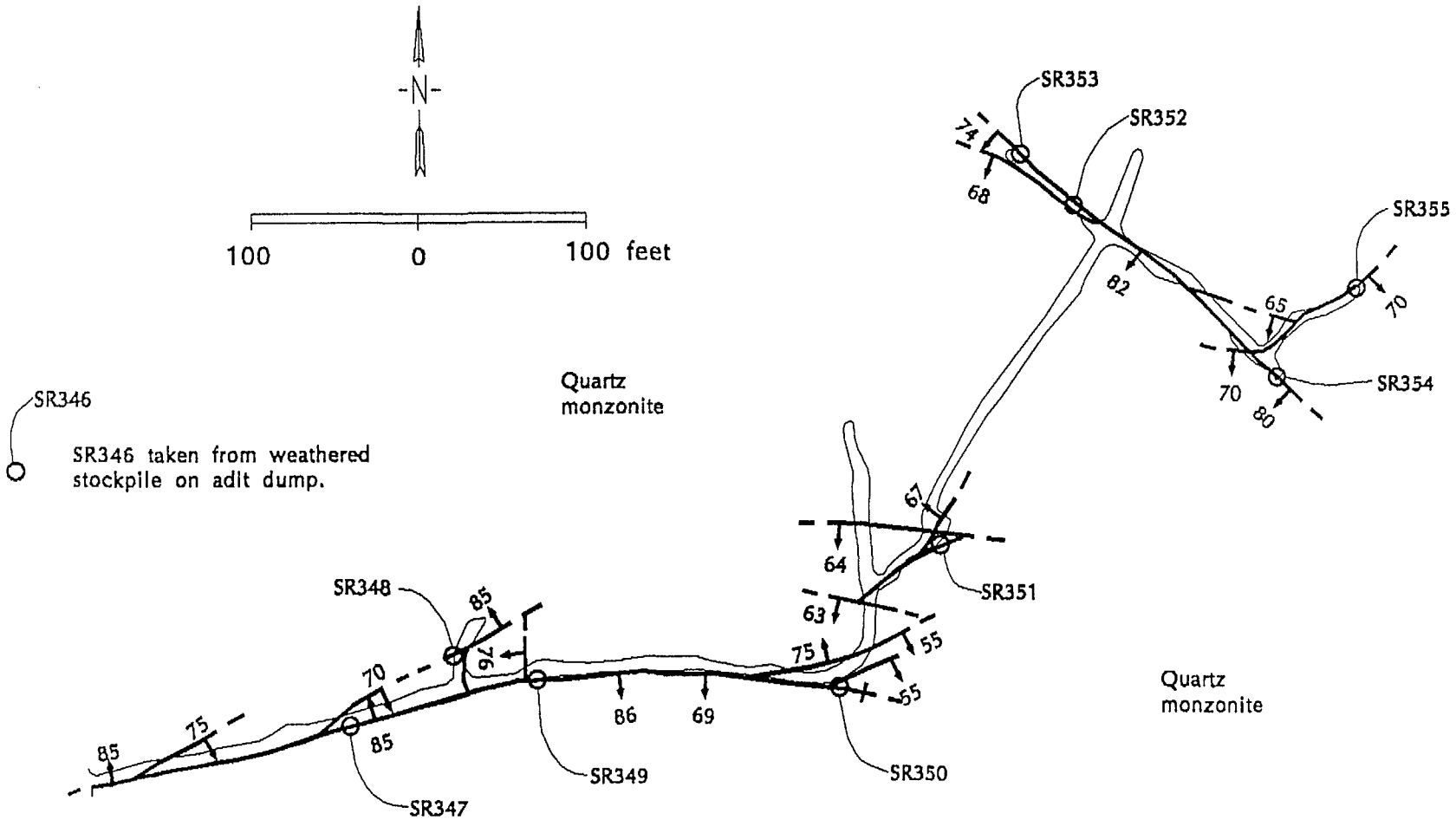


Figure M-44.--Horse Shoe Mine, showing localities of samples SR 346-355.

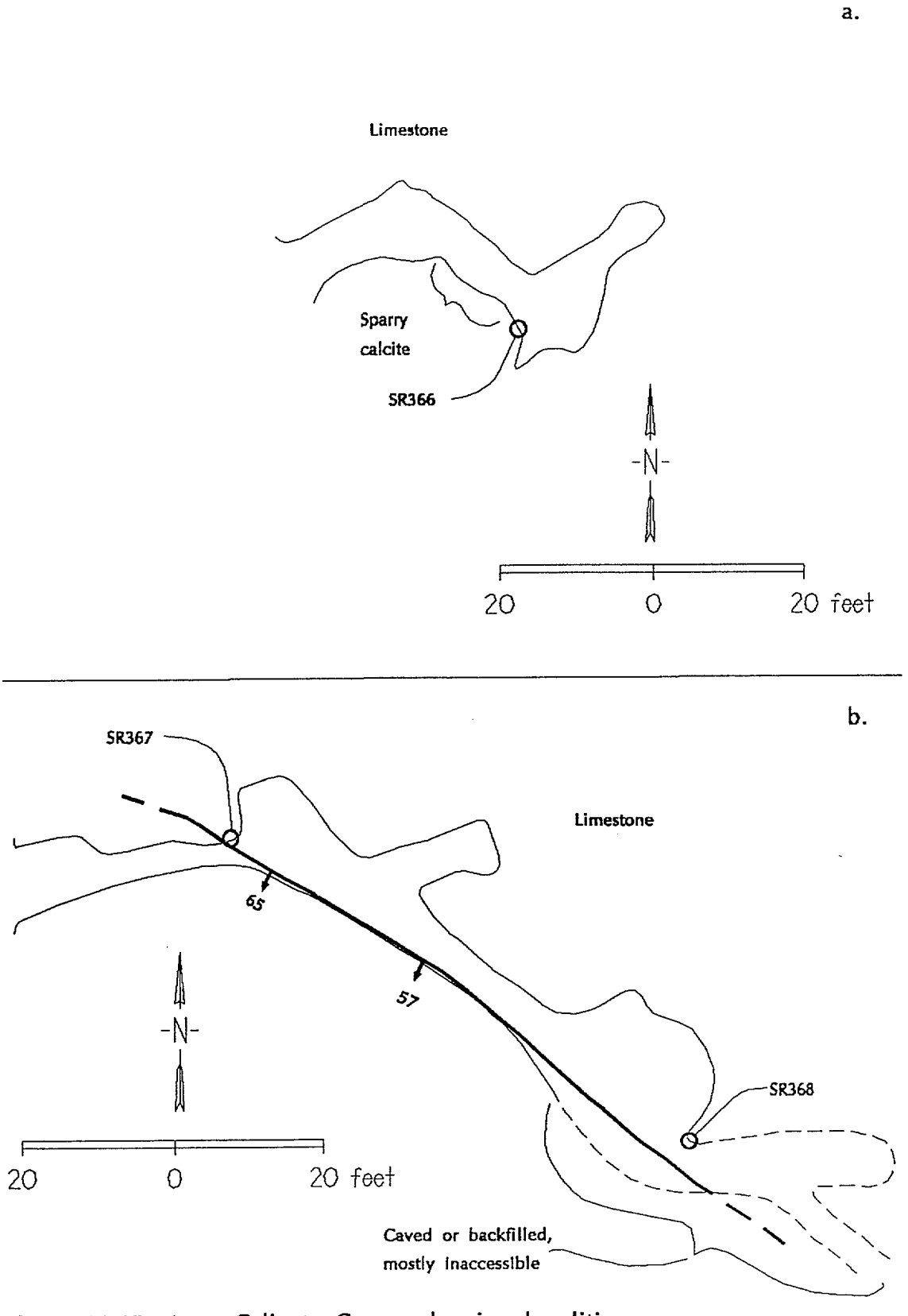


Figure M-45.--Agua Caliente Caves, showing localities of samples SR 366-368.

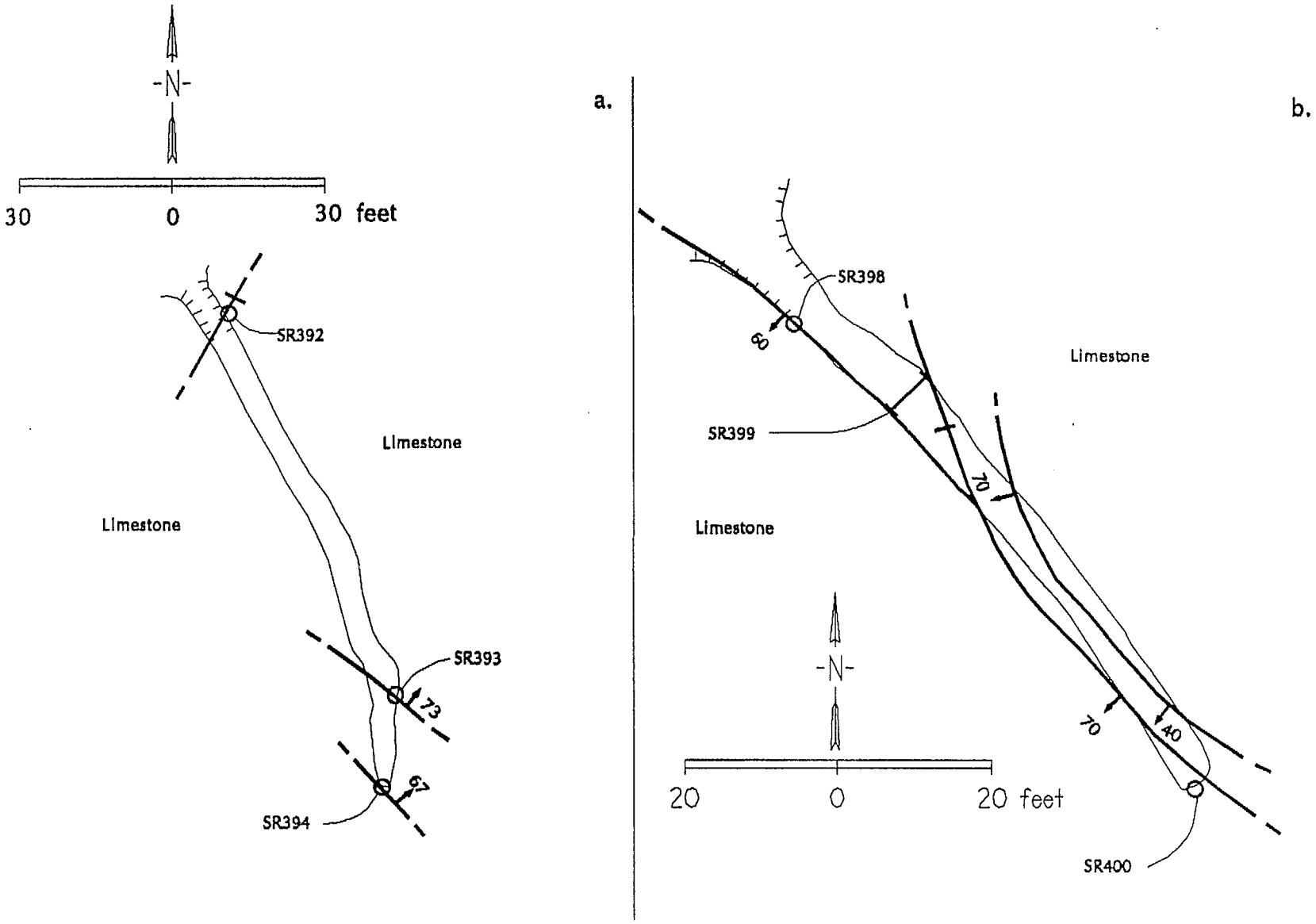


Figure M-46.–Adits on Go Devil group, showing localities of samples SR 392-394, 398-400.

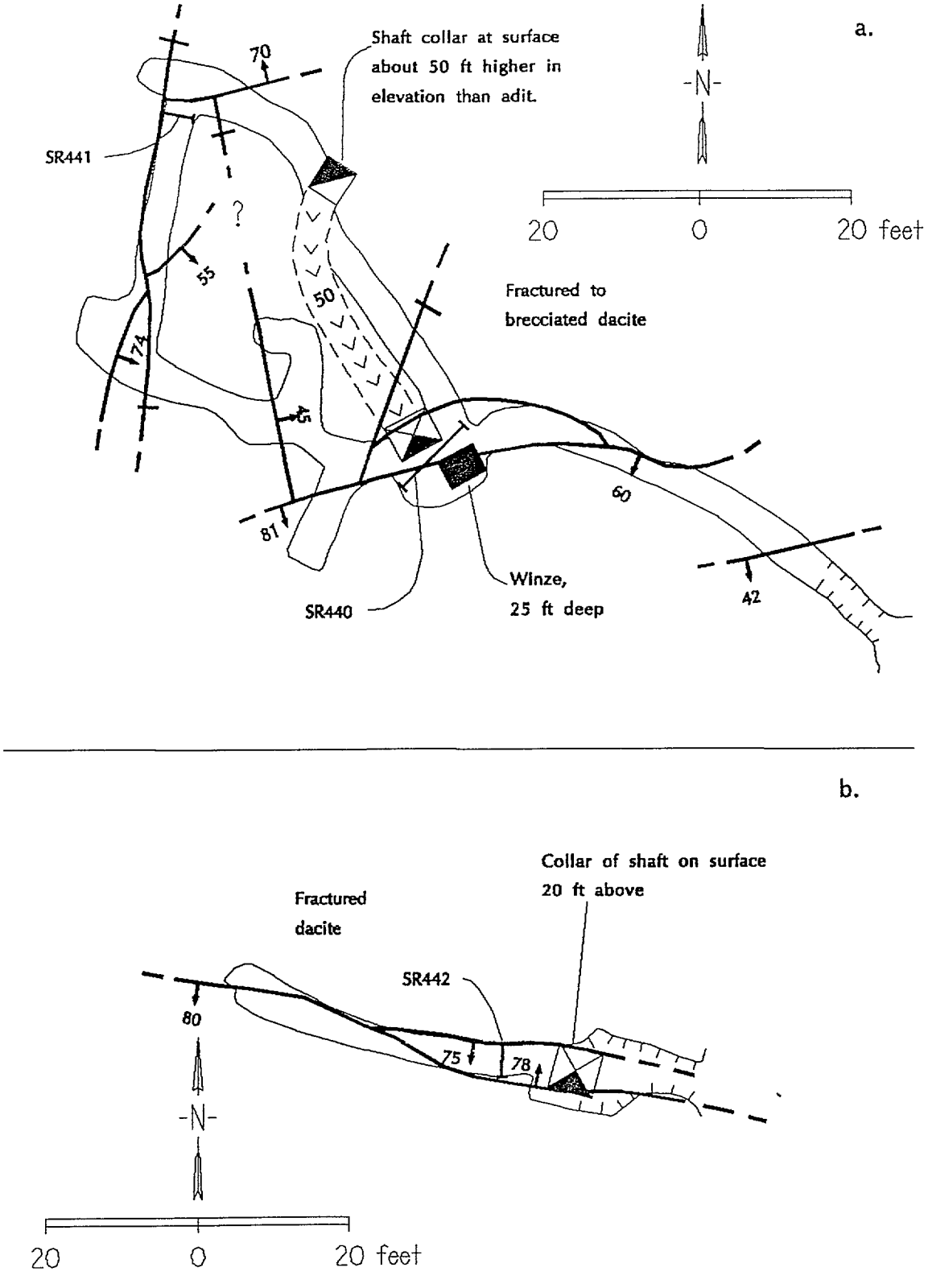


Figure M-47.–Adits on Vulcan Mine group, showing localities of samples SR 440-442.

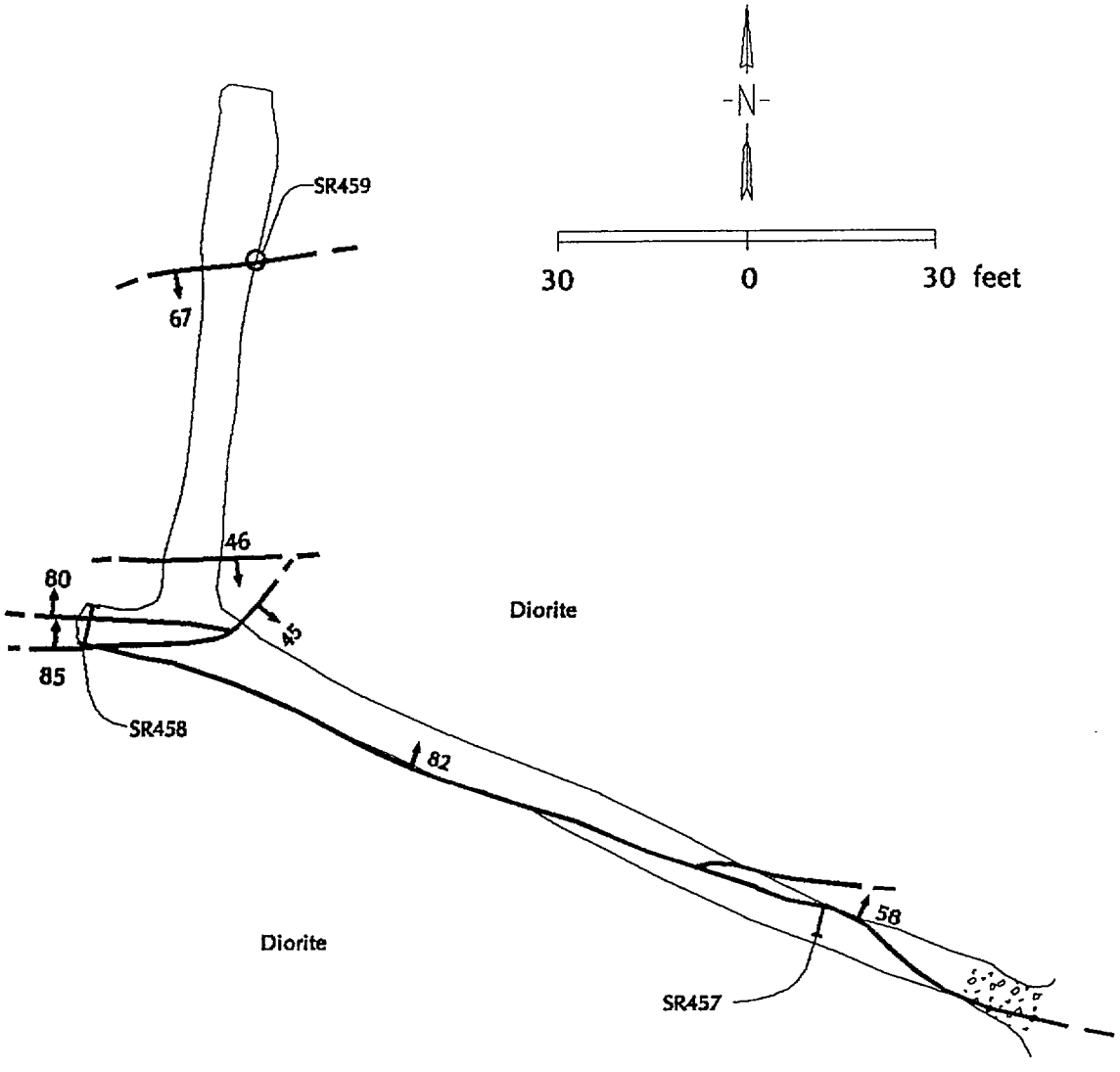
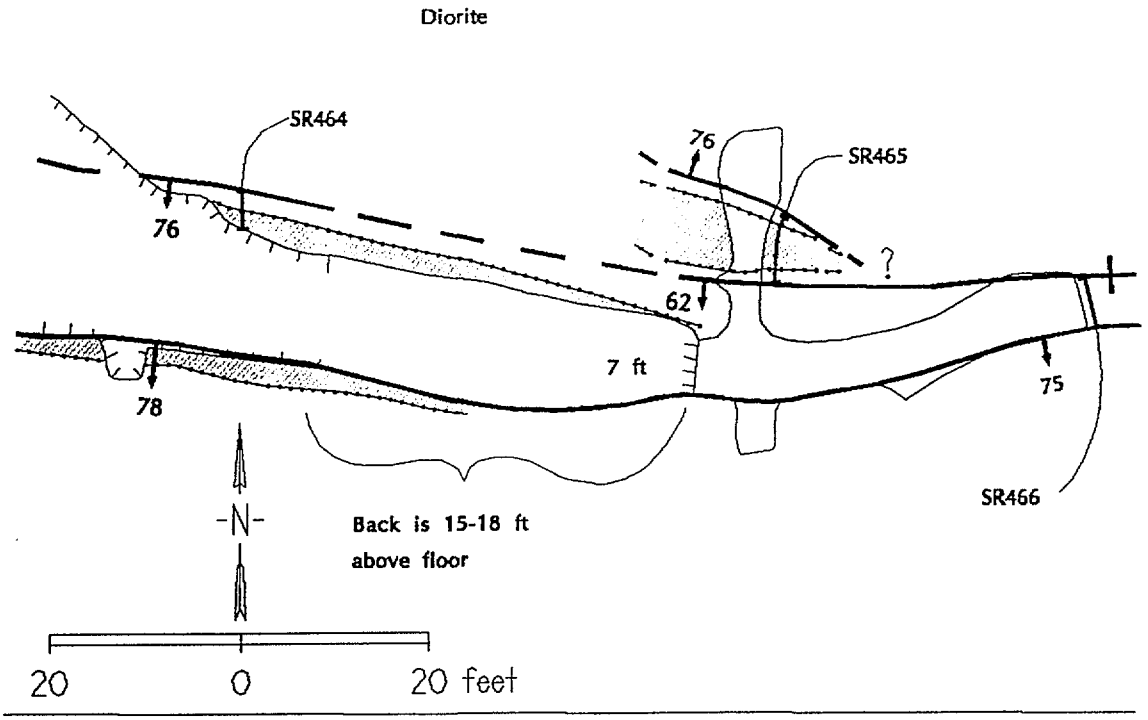


Figure M-48.–Tia Juana Mine, westernmost adit showing localities of samples SR 457-459.

a.



b.

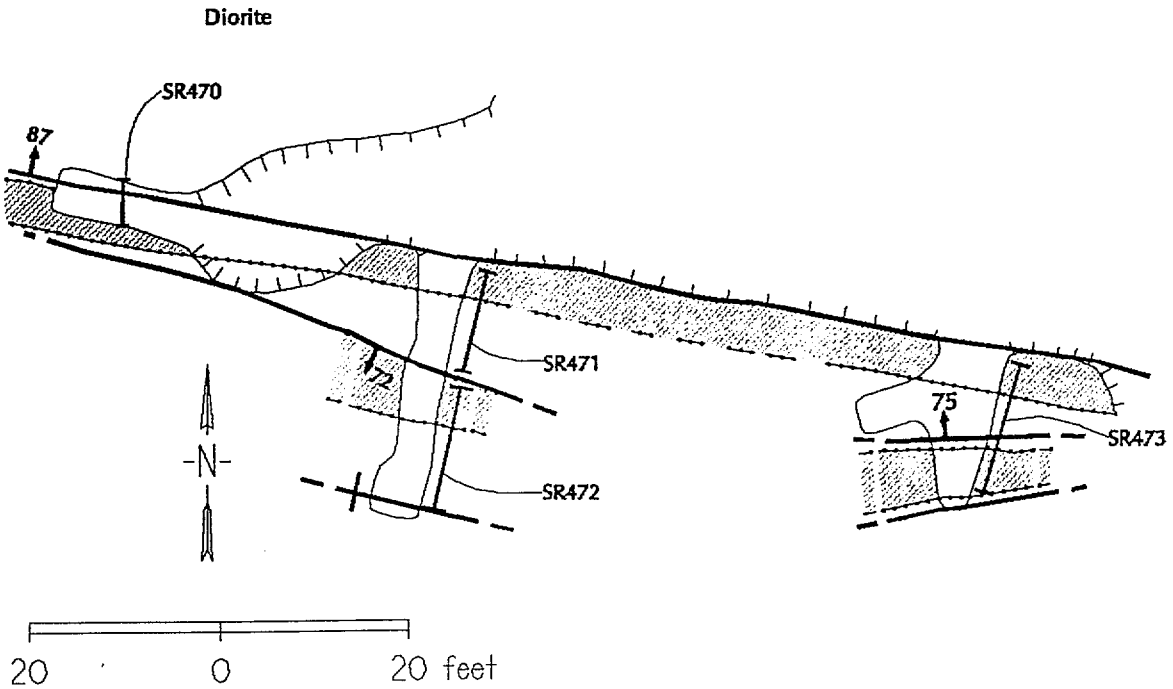


Figure M-49.--Workings on Tia Juana Mine, showing localities of samples SR 464-466, 470-473.

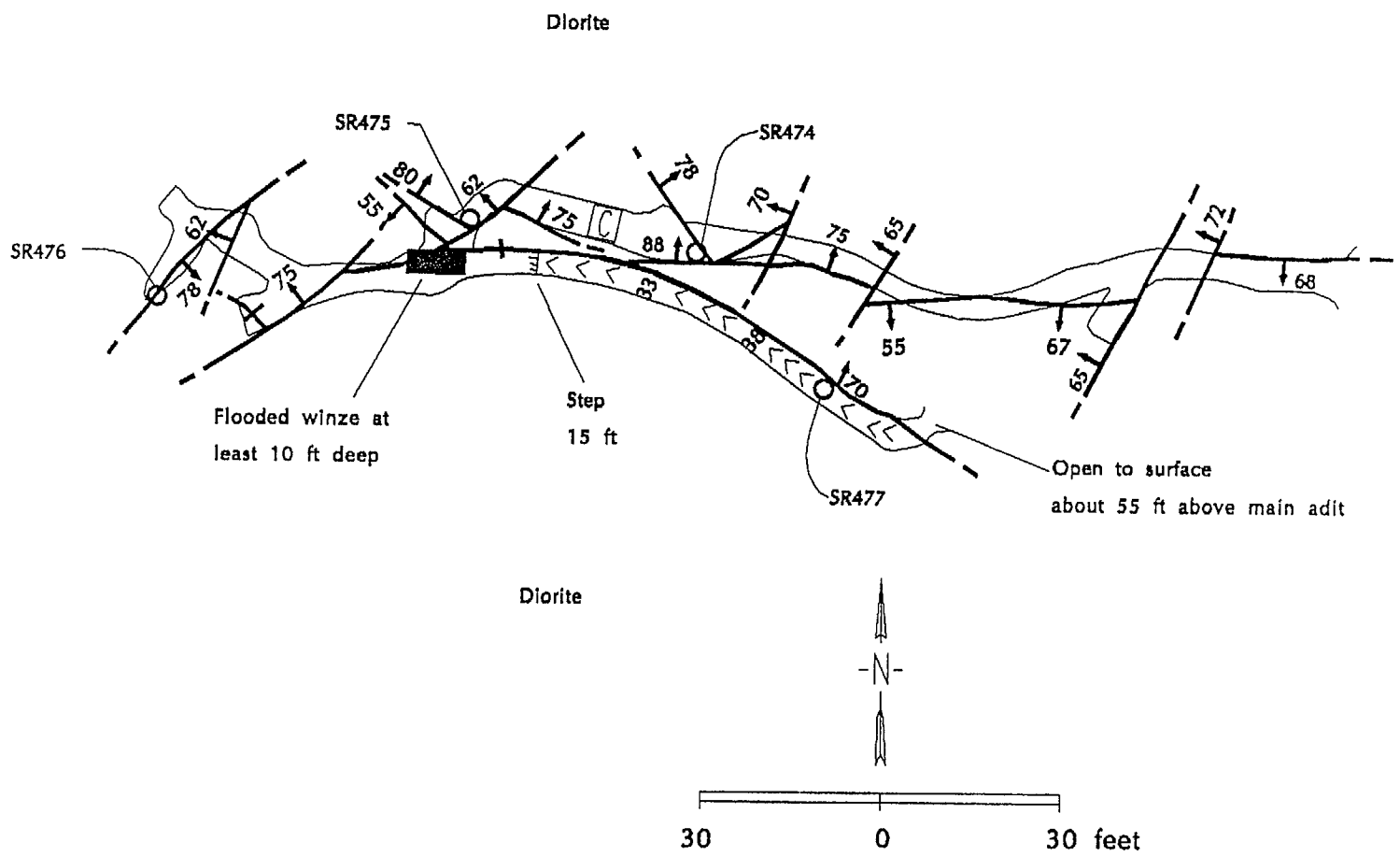


Figure M-50.--Silver King Mine, showing localities of samples SR 474-477.

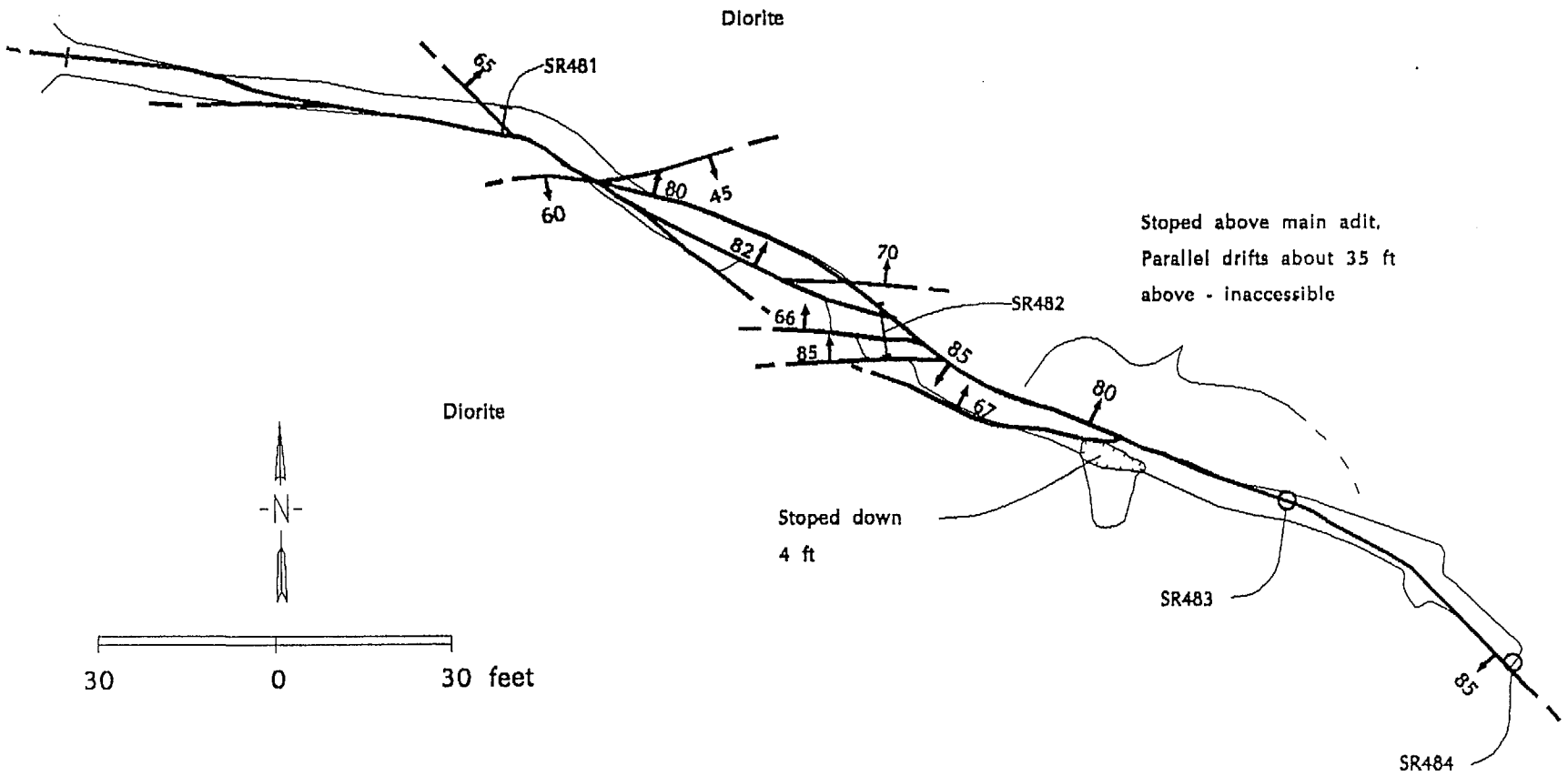


Figure M-51.--Connecticut Mine, middle adit, showing localities of samples SR 481-484.

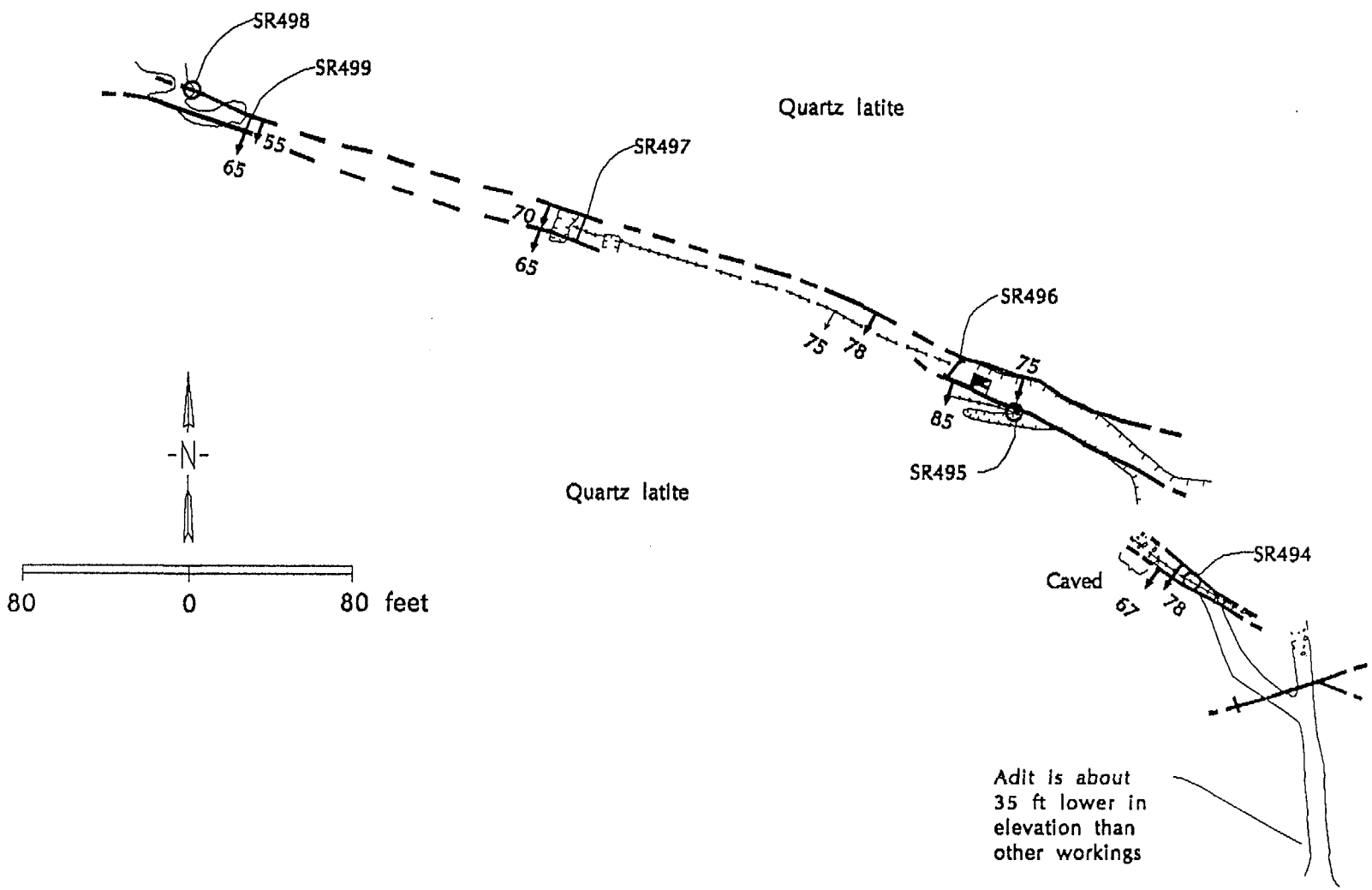


Figure M-52.--Unnamed workings, showing localities of samples SR 494-499.

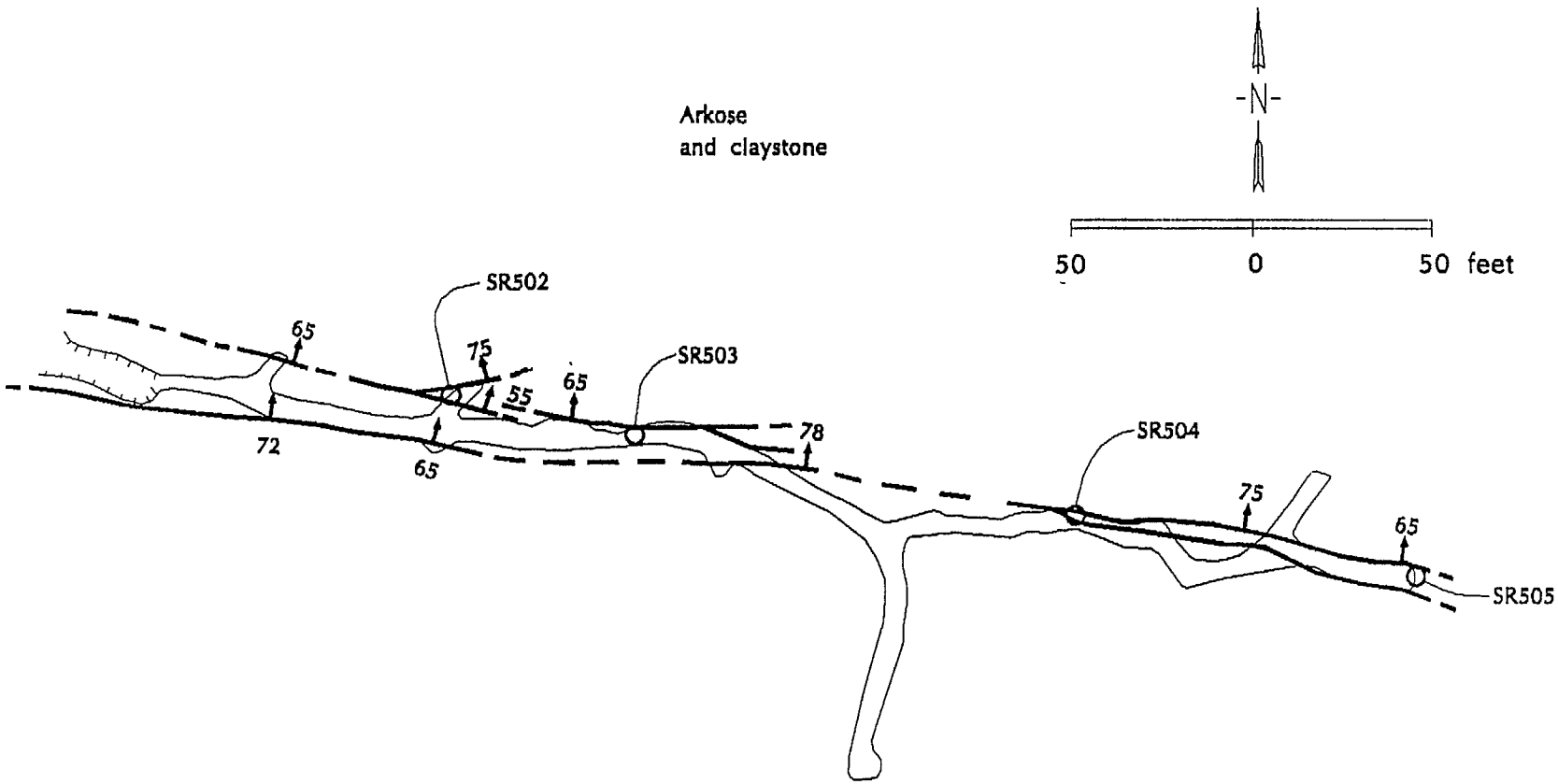


Figure M-53.–Upper adit (80-ft-level) of Bonanza Claim, showing localities of samples SR 502-505.

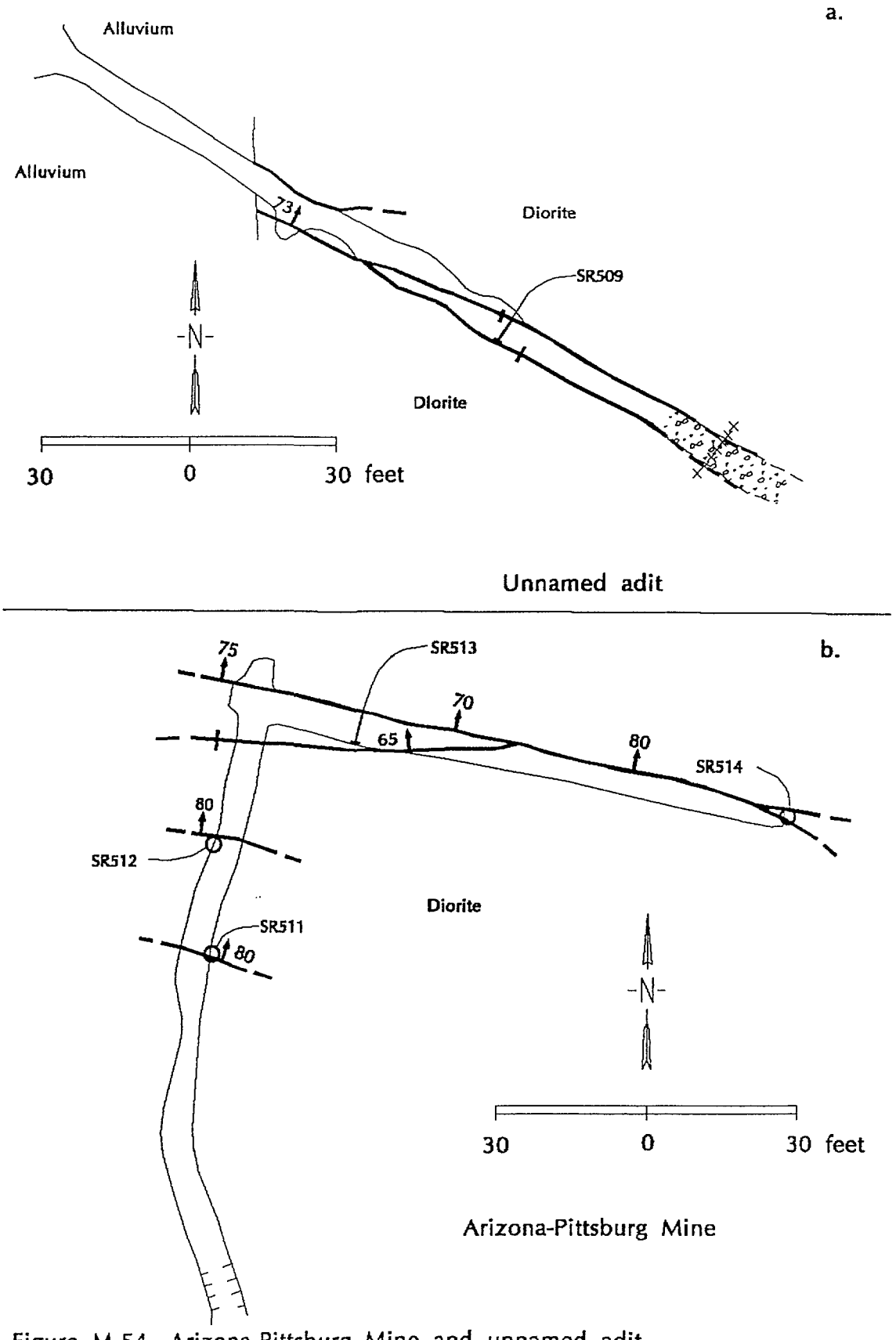


Figure M-54.–Arizona-Pittsburg Mine and unnamed adit, showing localities of samples SR 509, 511-514.

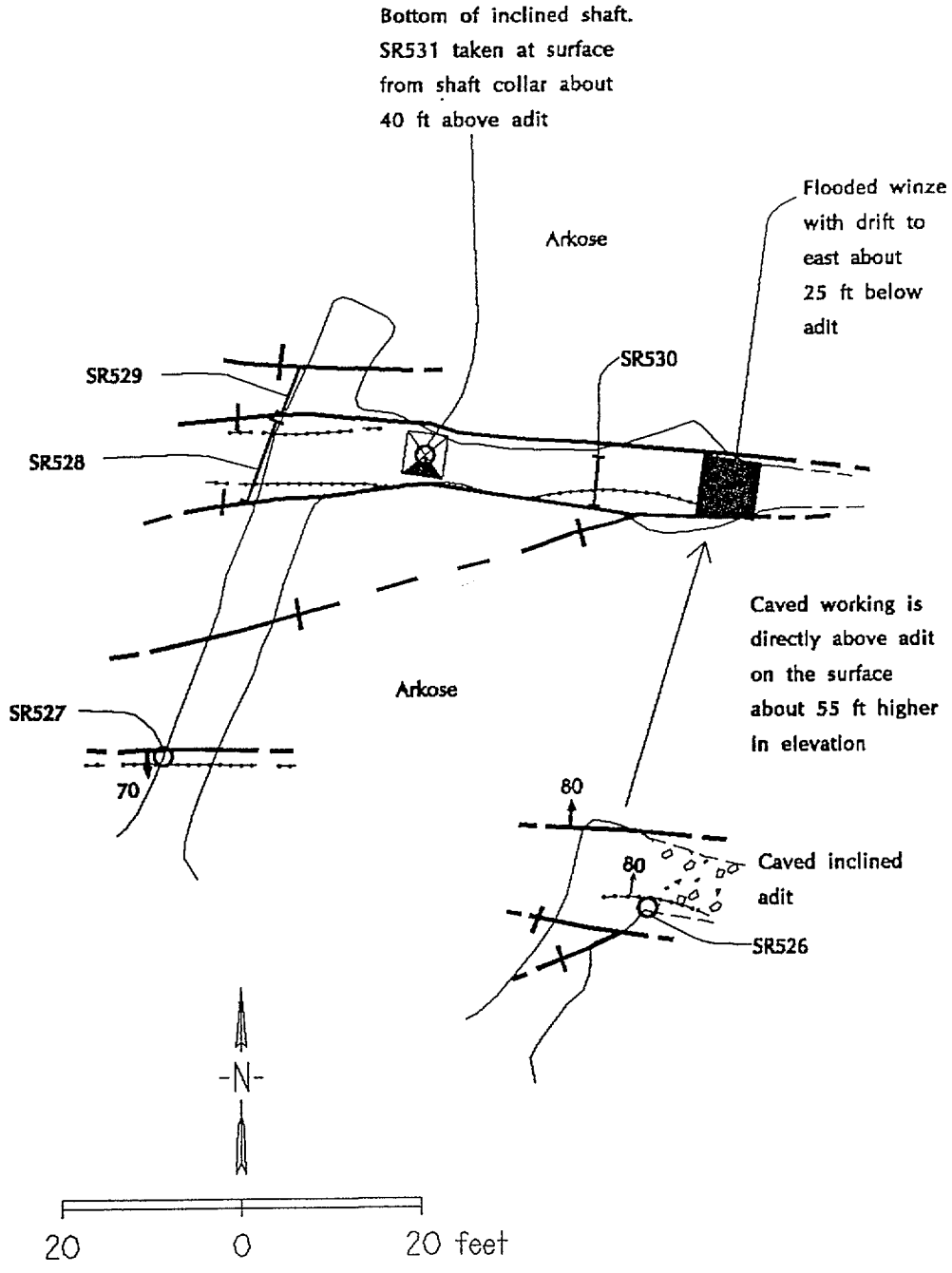


Figure M-55.–Adit and shaft on the Wandering Jew group, showing localities of samples SR 526-531.

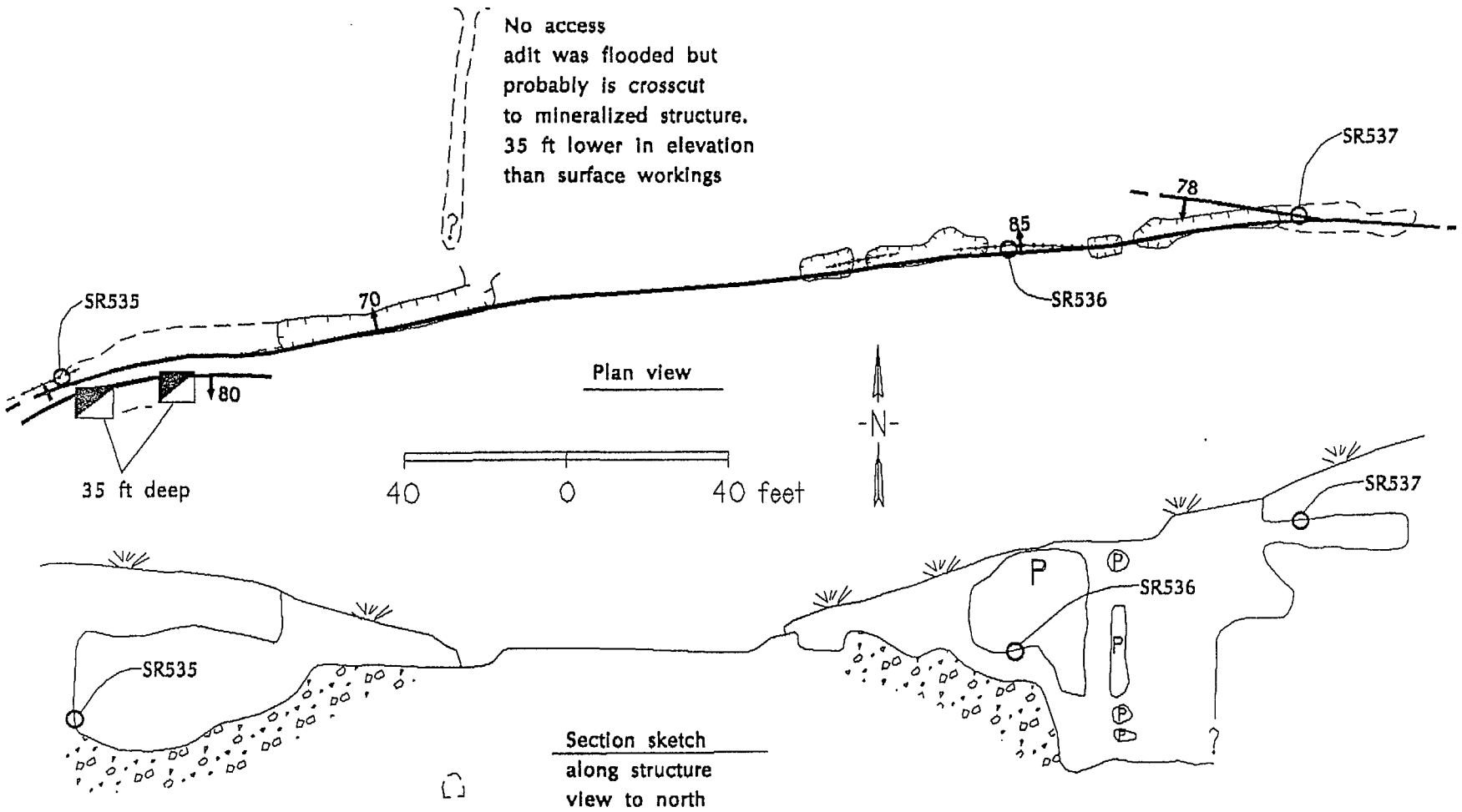


Figure M-56.–Workings on the Wandering Jew group, showing localities of samples SR 535-537.

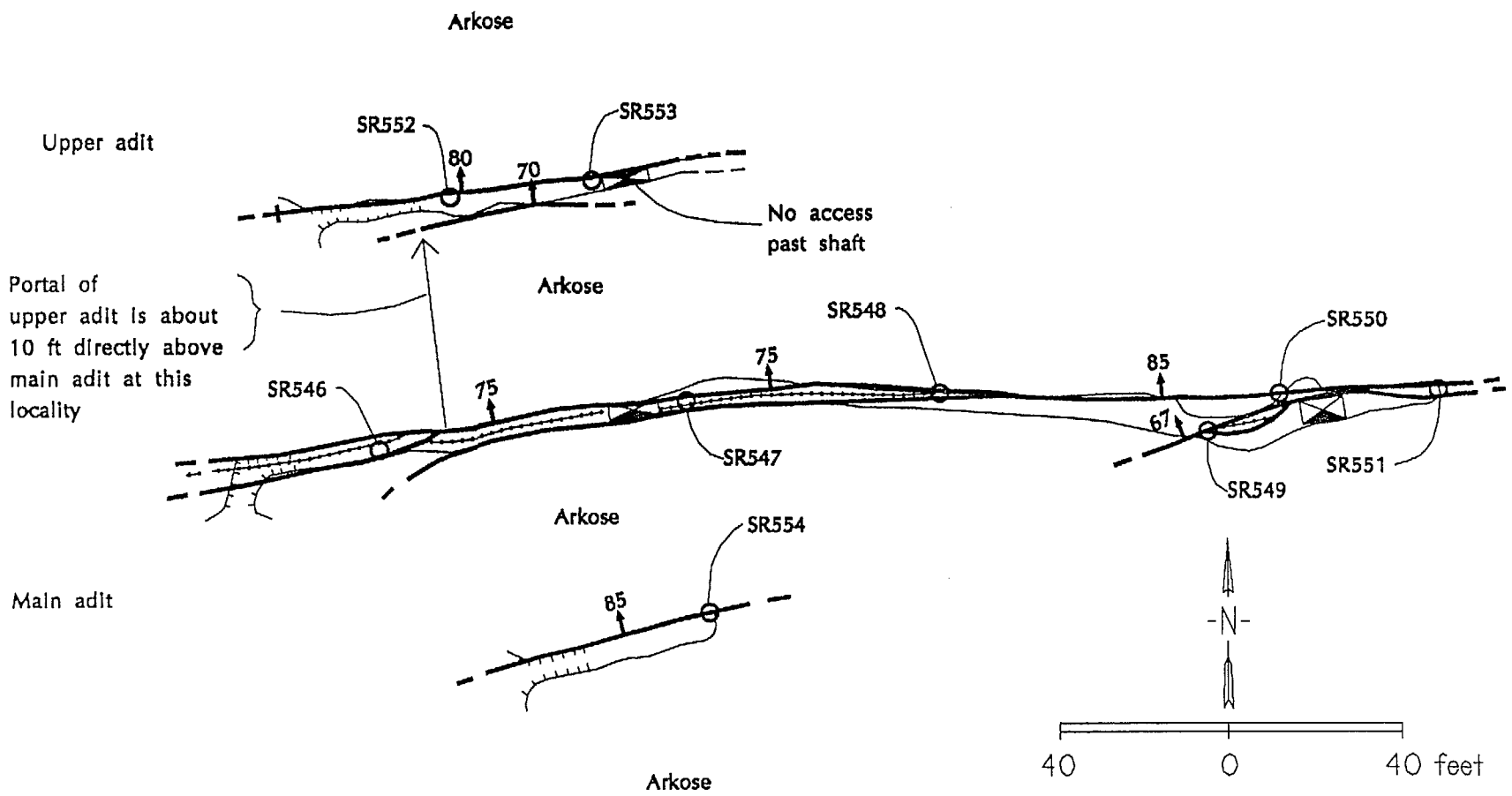


Figure M-57.--San Ramon Mine workings, showing localities of samples SR 546-554.

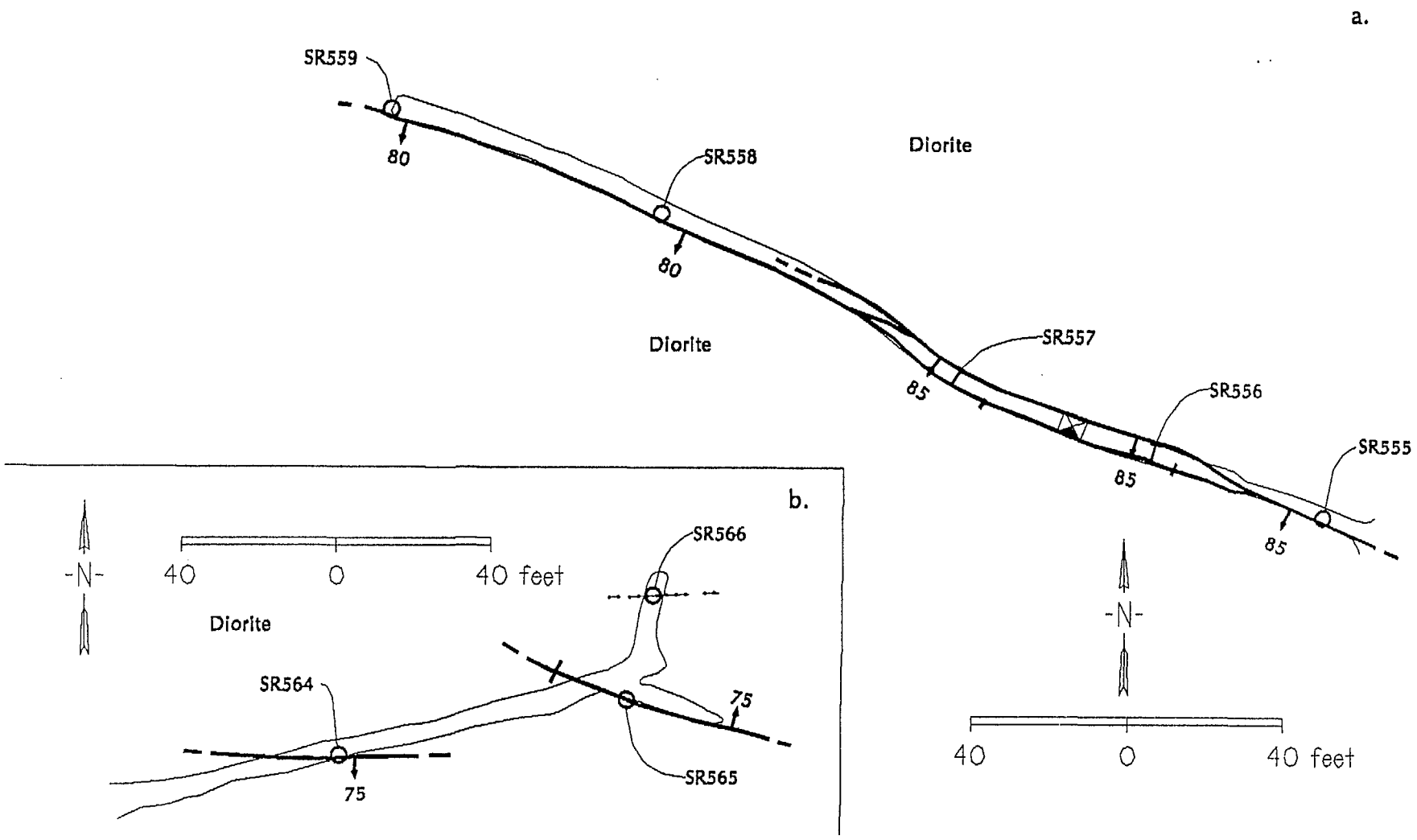


Figure M-58.–Apache Mine workings, showing localities of samples SR 555-559, 564-566.

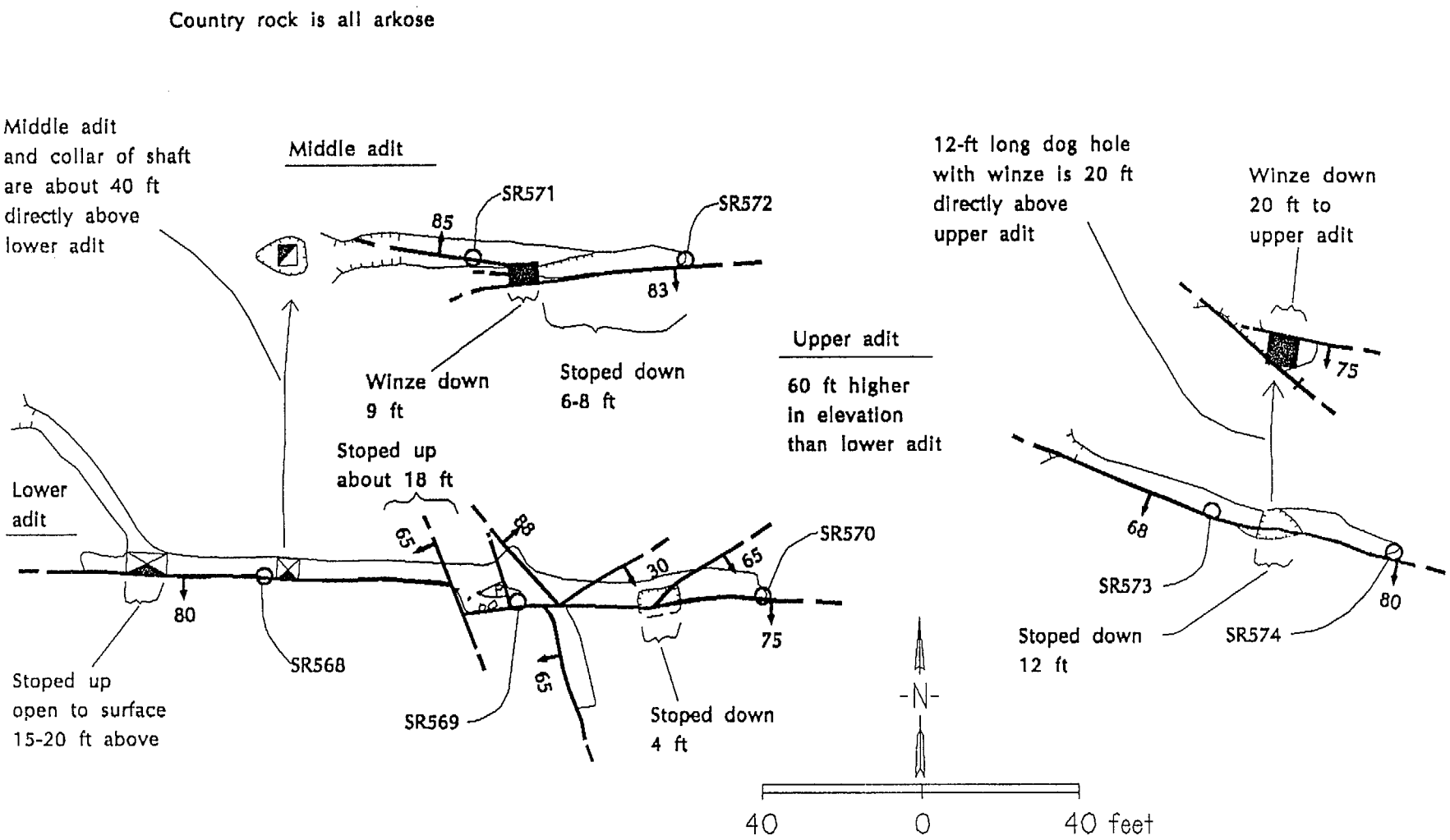


Figure M-59.--Workings on Alto Mine group, showing localities of samples SR 568-574.

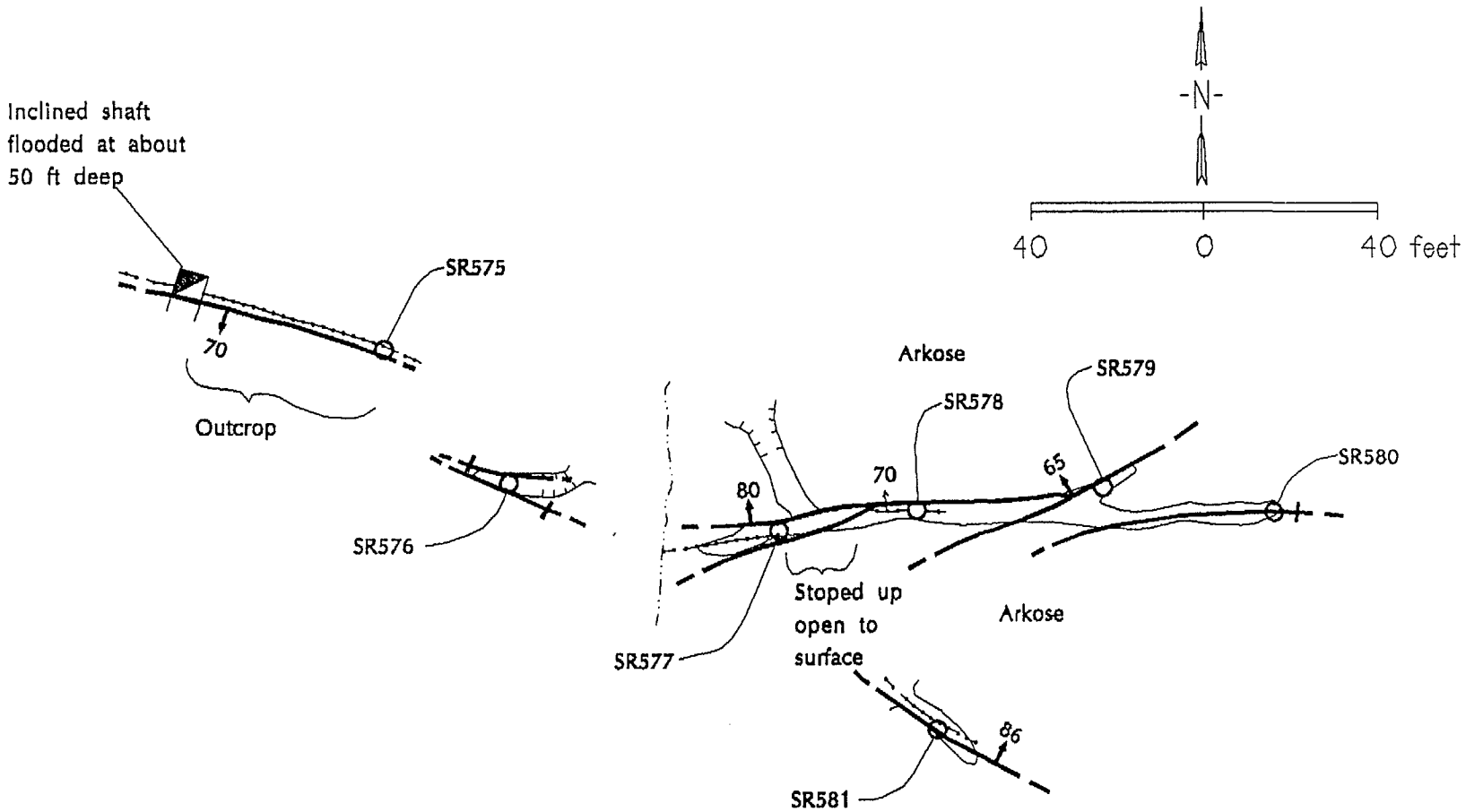


Figure M-60.--Workings on Alto Mine group, showing localities of samples SR 575-581.

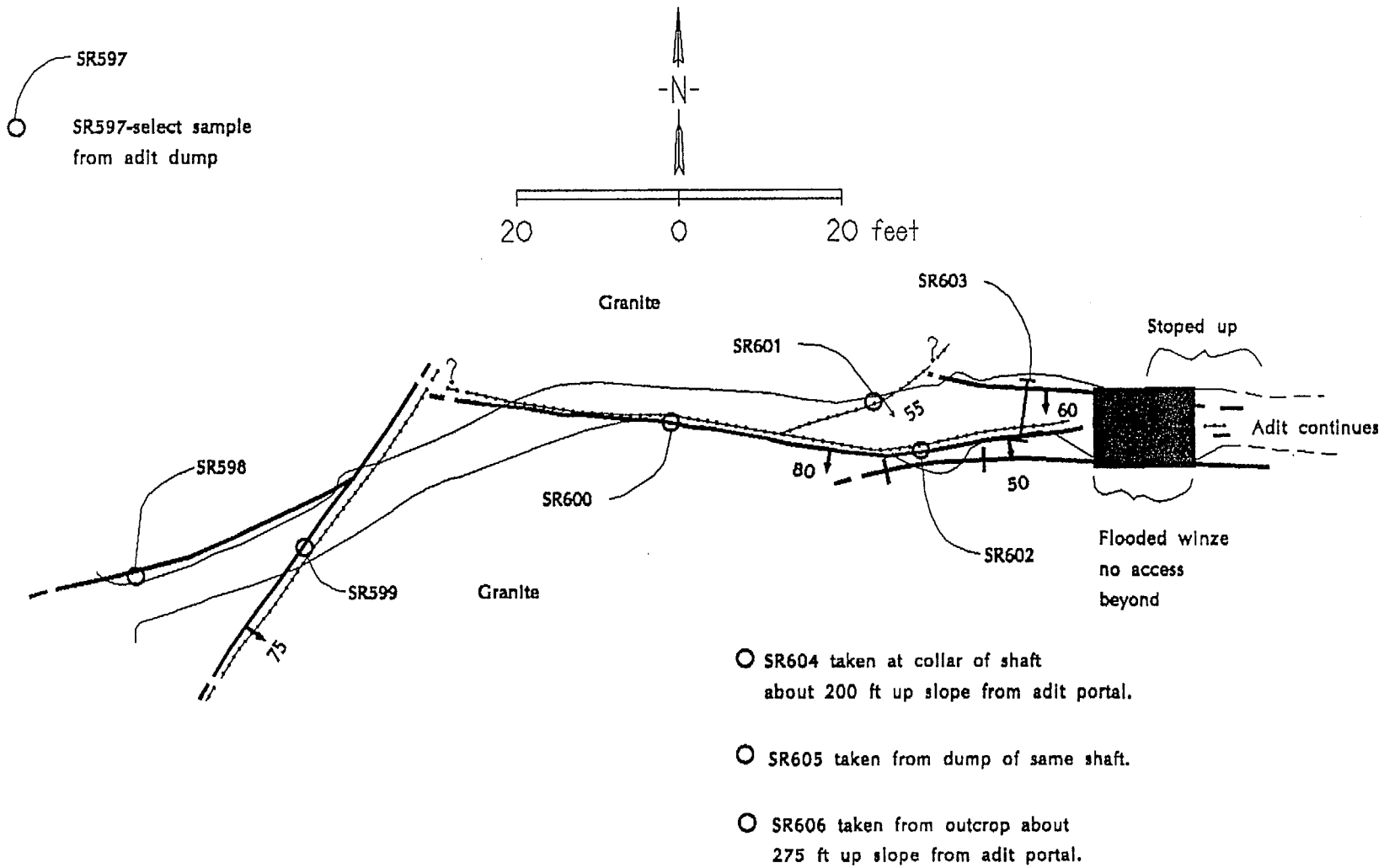


Figure M-61.–Victor Mine, showing localities of samples SR 597-606.

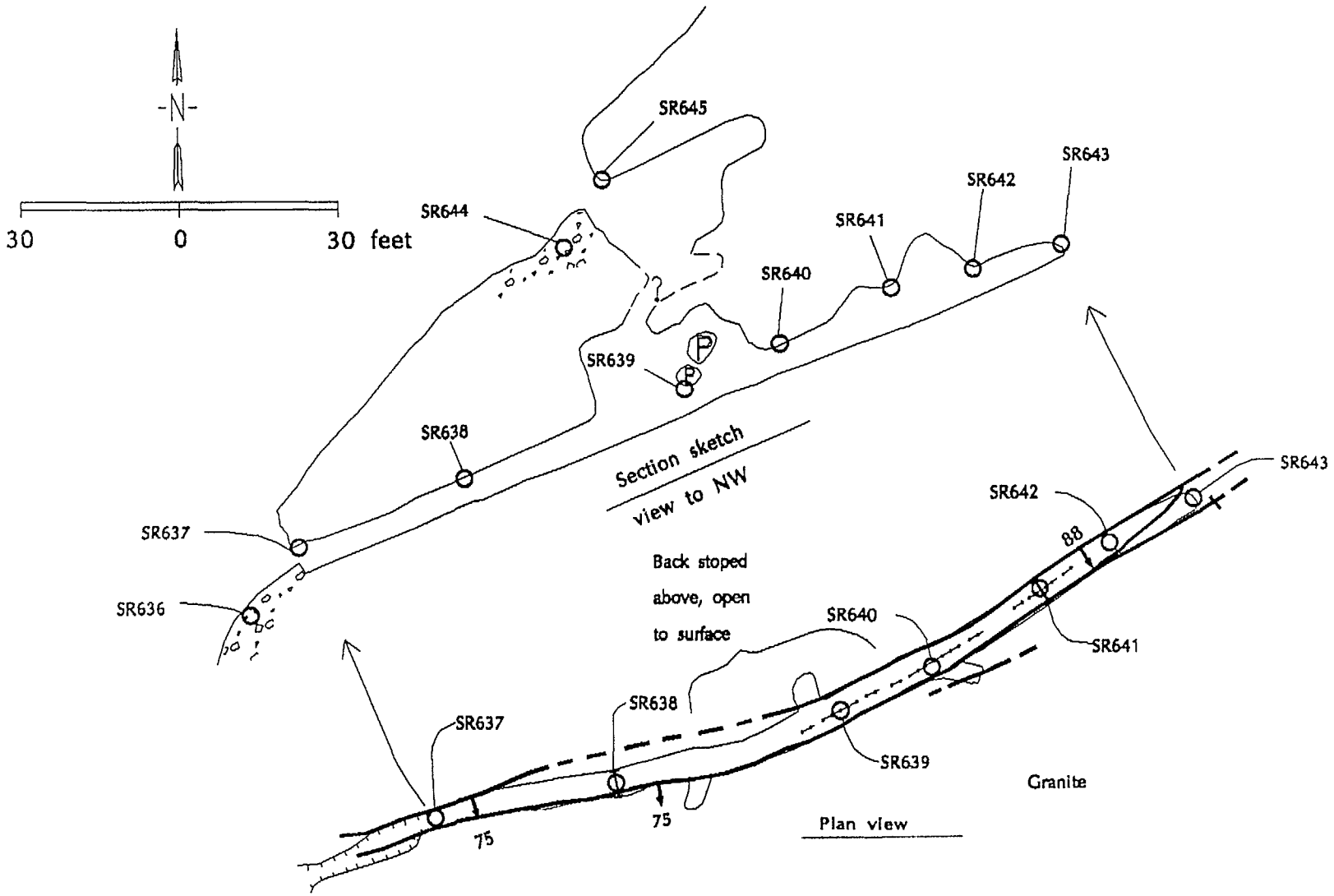


Figure M-62.--Cowboys Dream Mine, showing localities of samples SR 636-645.

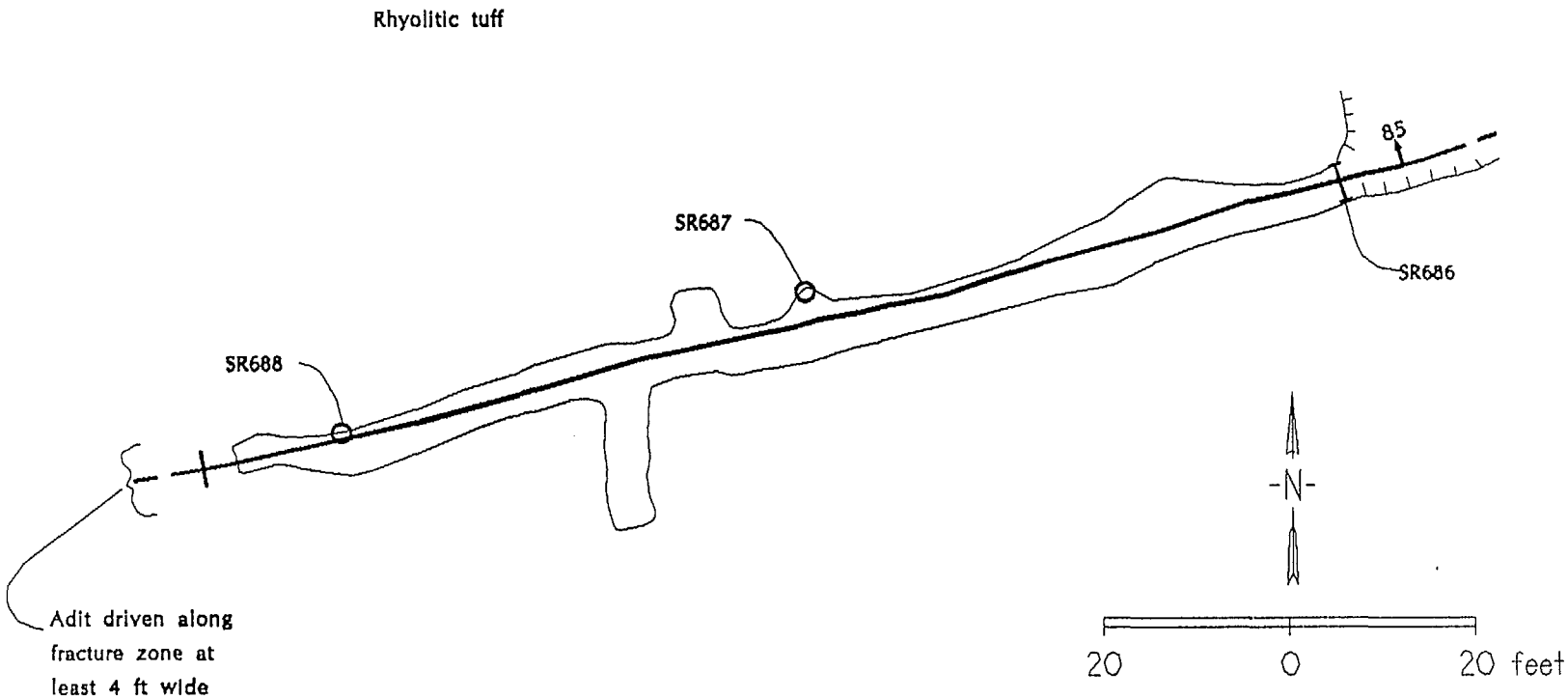


Figure M-63.–Unnamed adit, showing localities of samples SR 686-688.

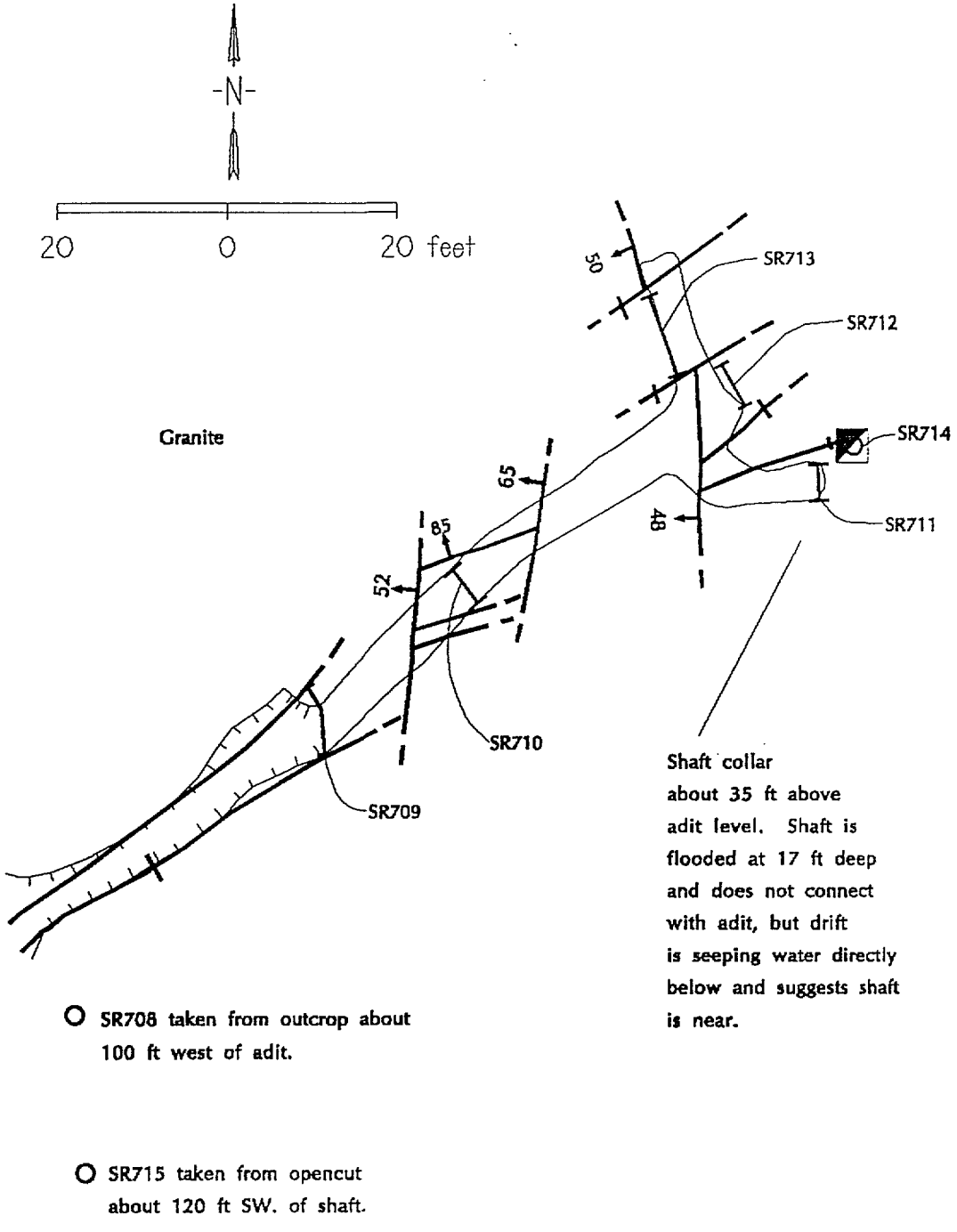


Figure M-64.--Vansuella adit, showing localities of samples SR 708-715.

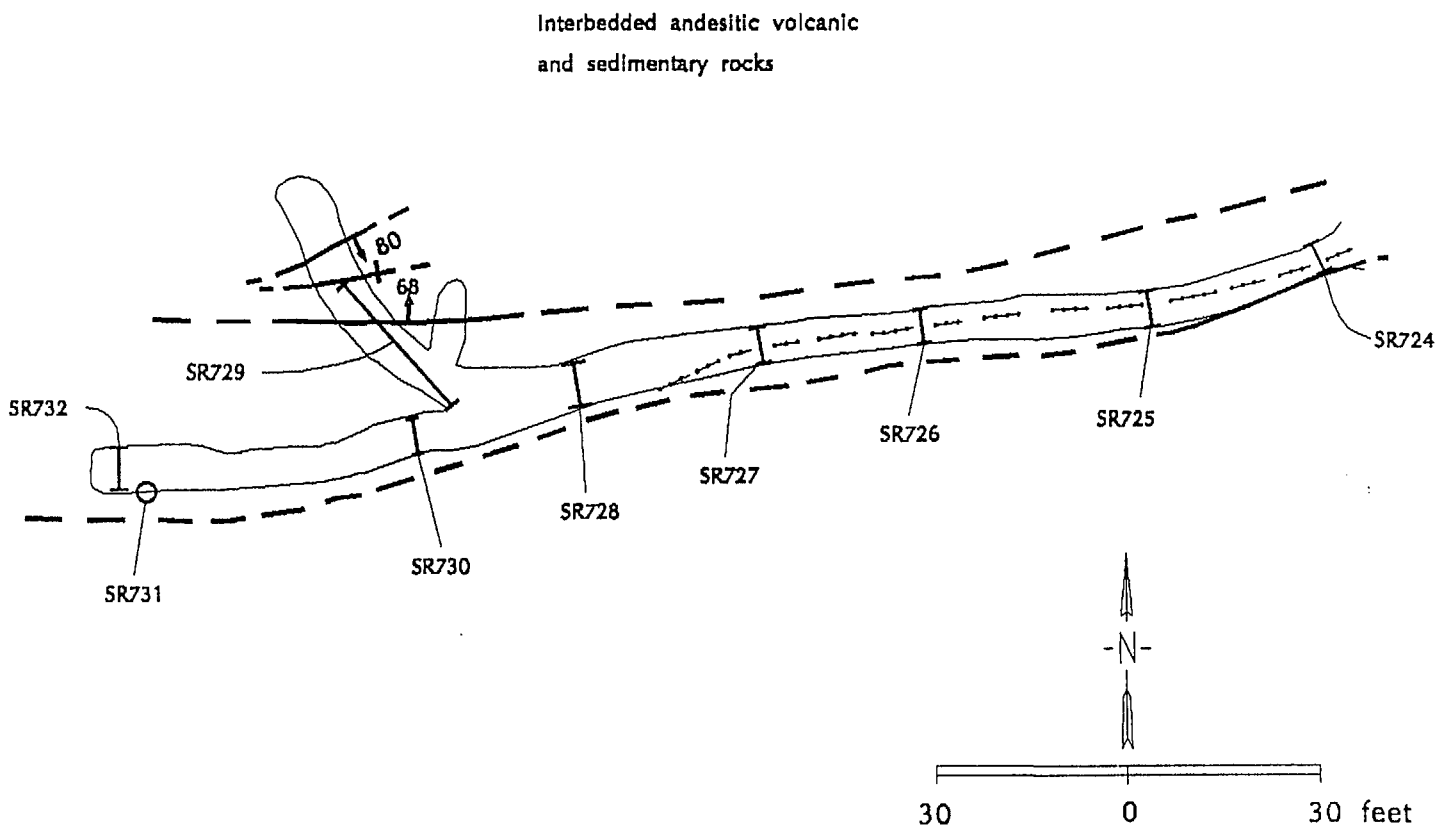


Figure M-65.--Commercial Claim group adit, showing localities of samples SR 724-732.

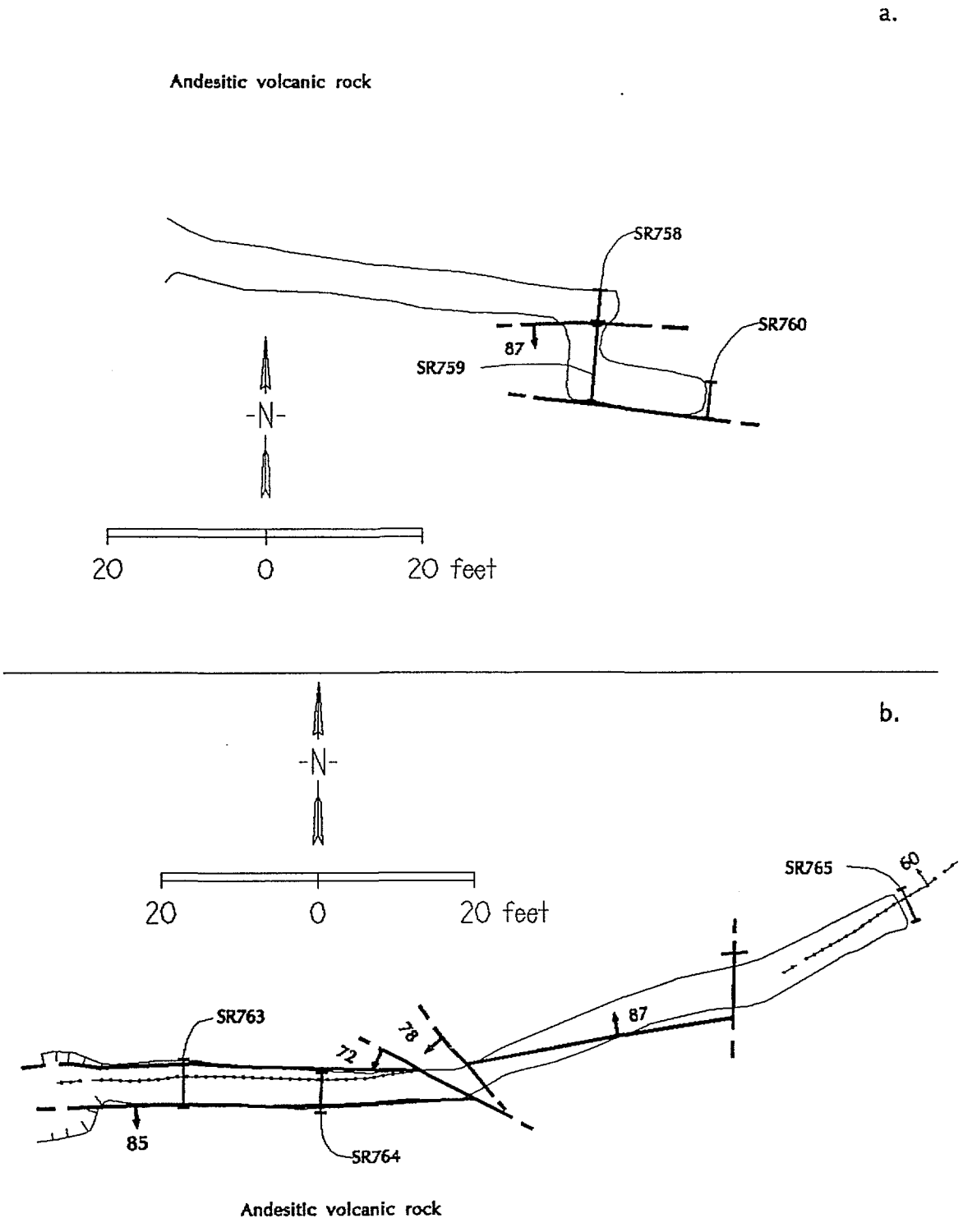


Figure M-66.—Adits in the Gringo Mine area, showing localities of samples SR 758-760, 763-765.

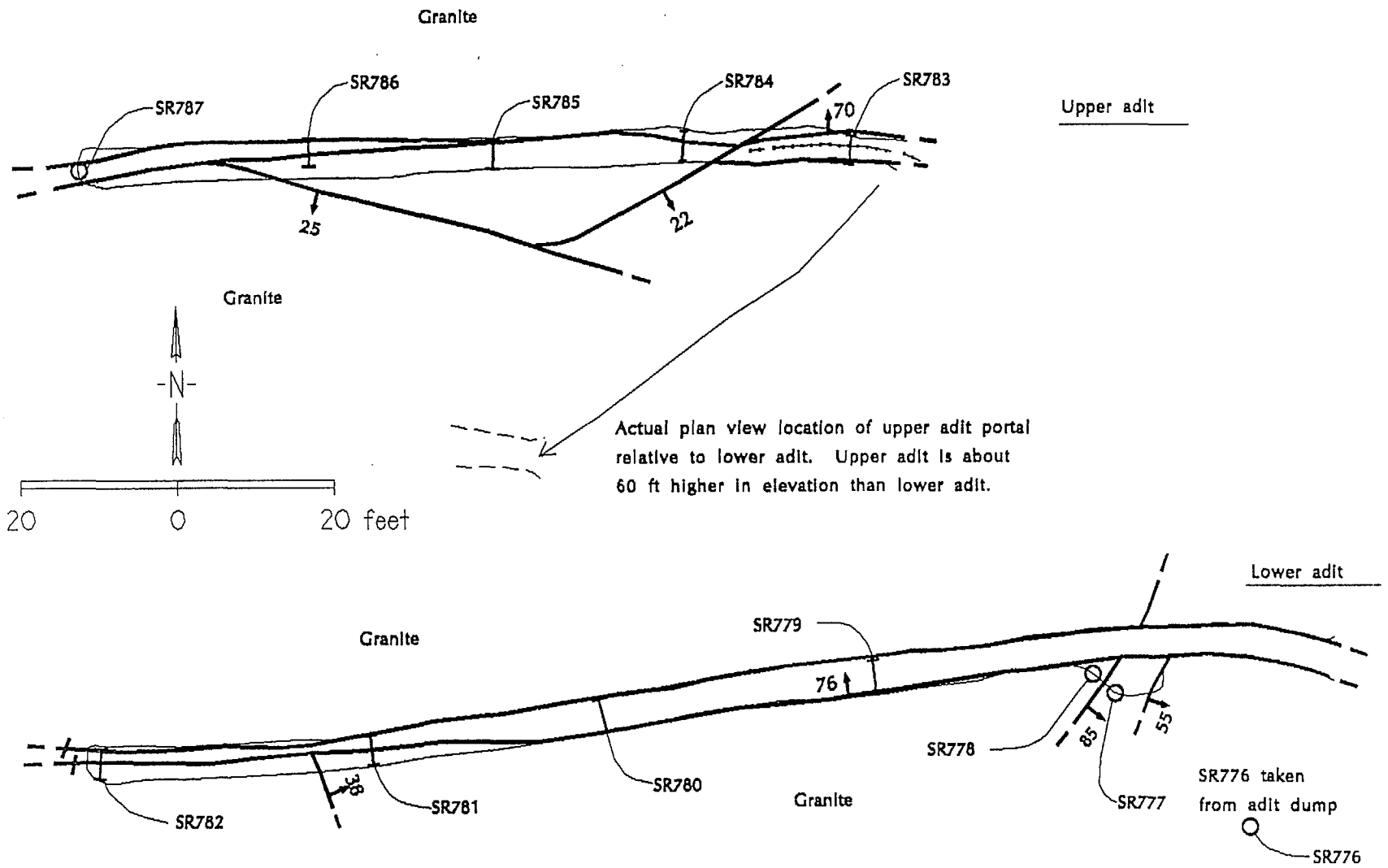


Figure M-67.–Last Chance Mine adits, showing localities of samples SR 776-787.

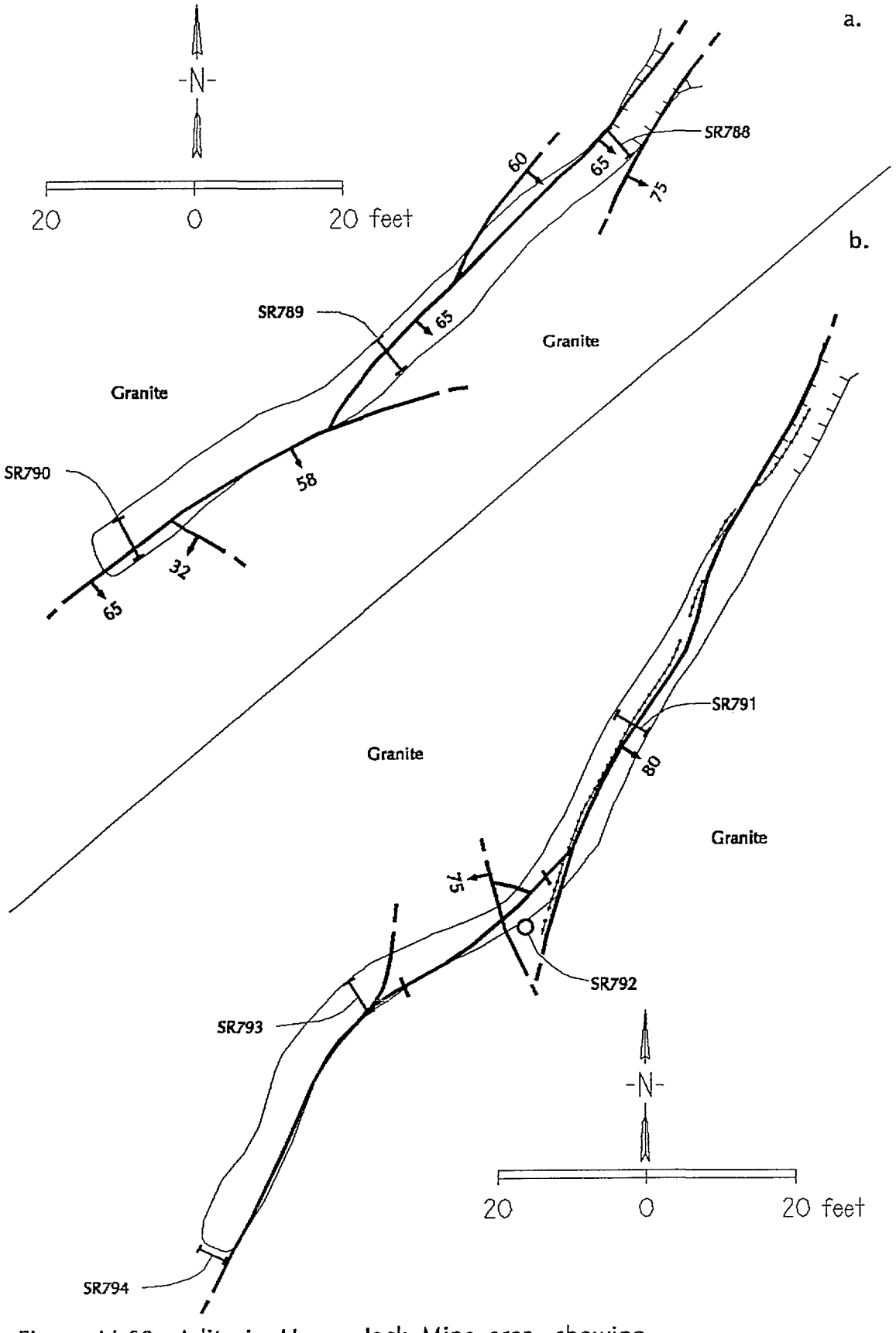


Figure M-68.–Adits in Happy Jack Mine area, showing localities of samples SR 788-794.

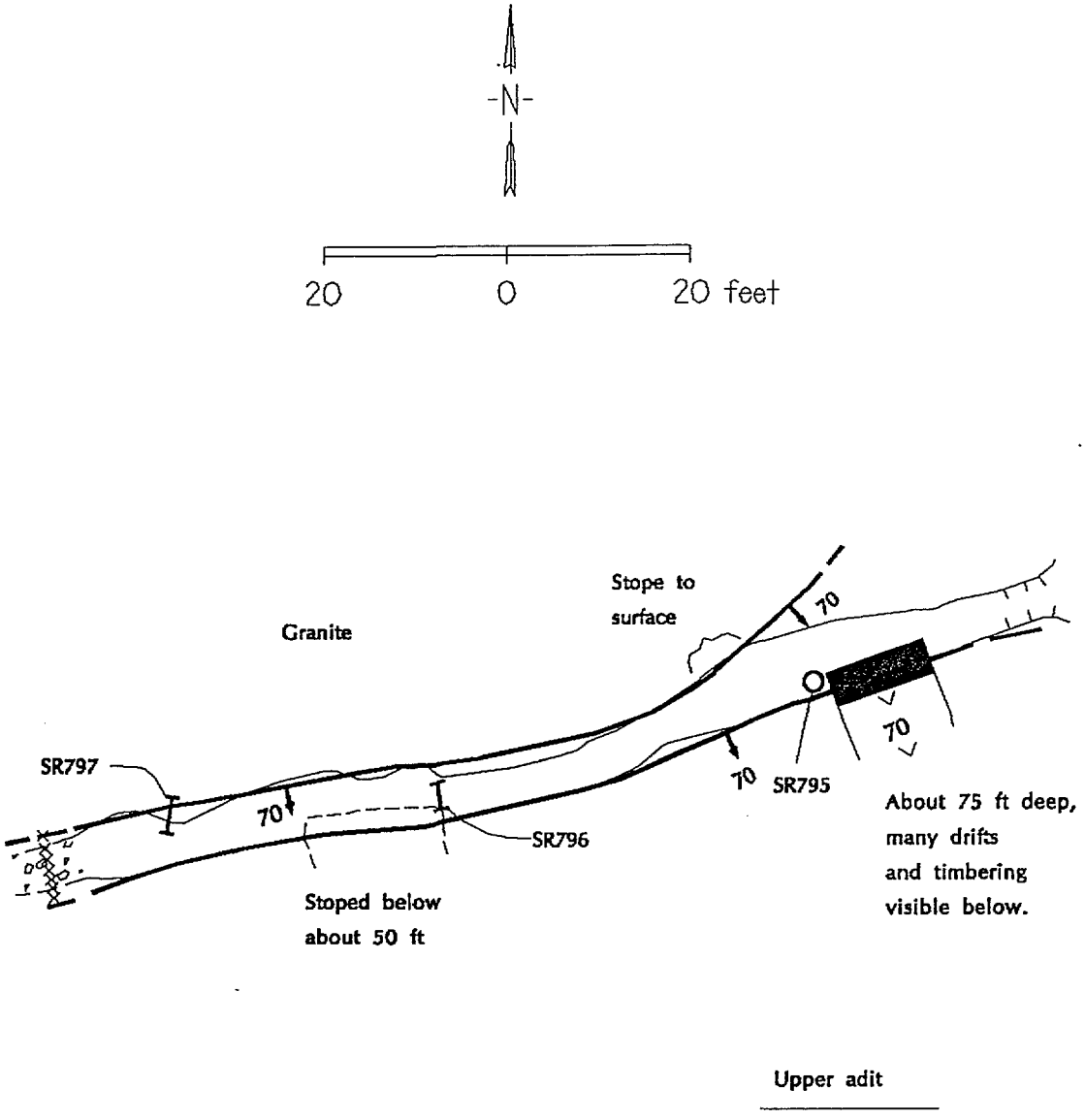


Figure M-69.–Mountain View adit (Happy Jack Mine of Schrader, 1915), showing localities of samples SR 795-797.

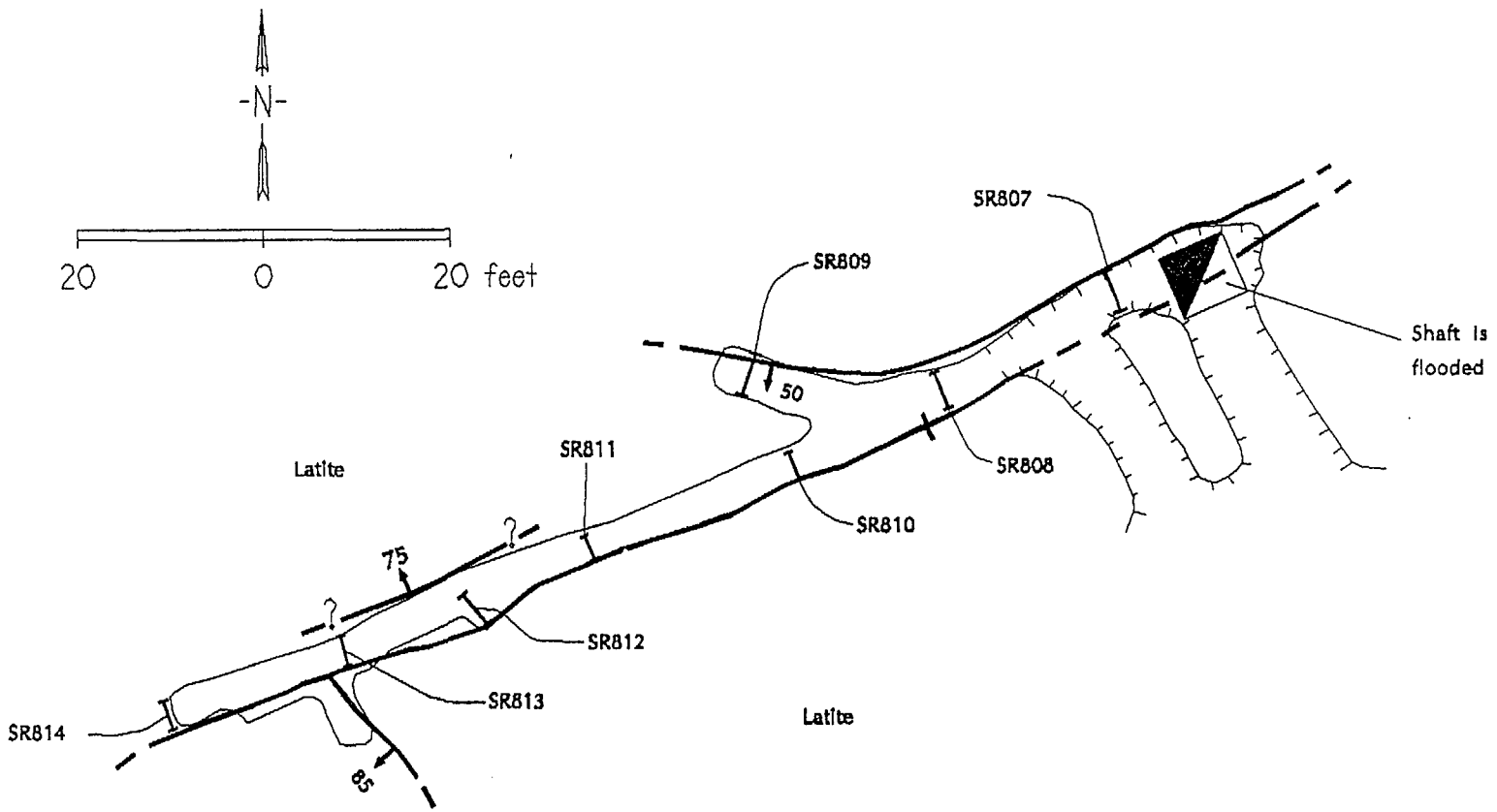


Figure M-70.–Dragon Z Mine, showing localities of samples SR 807-814.

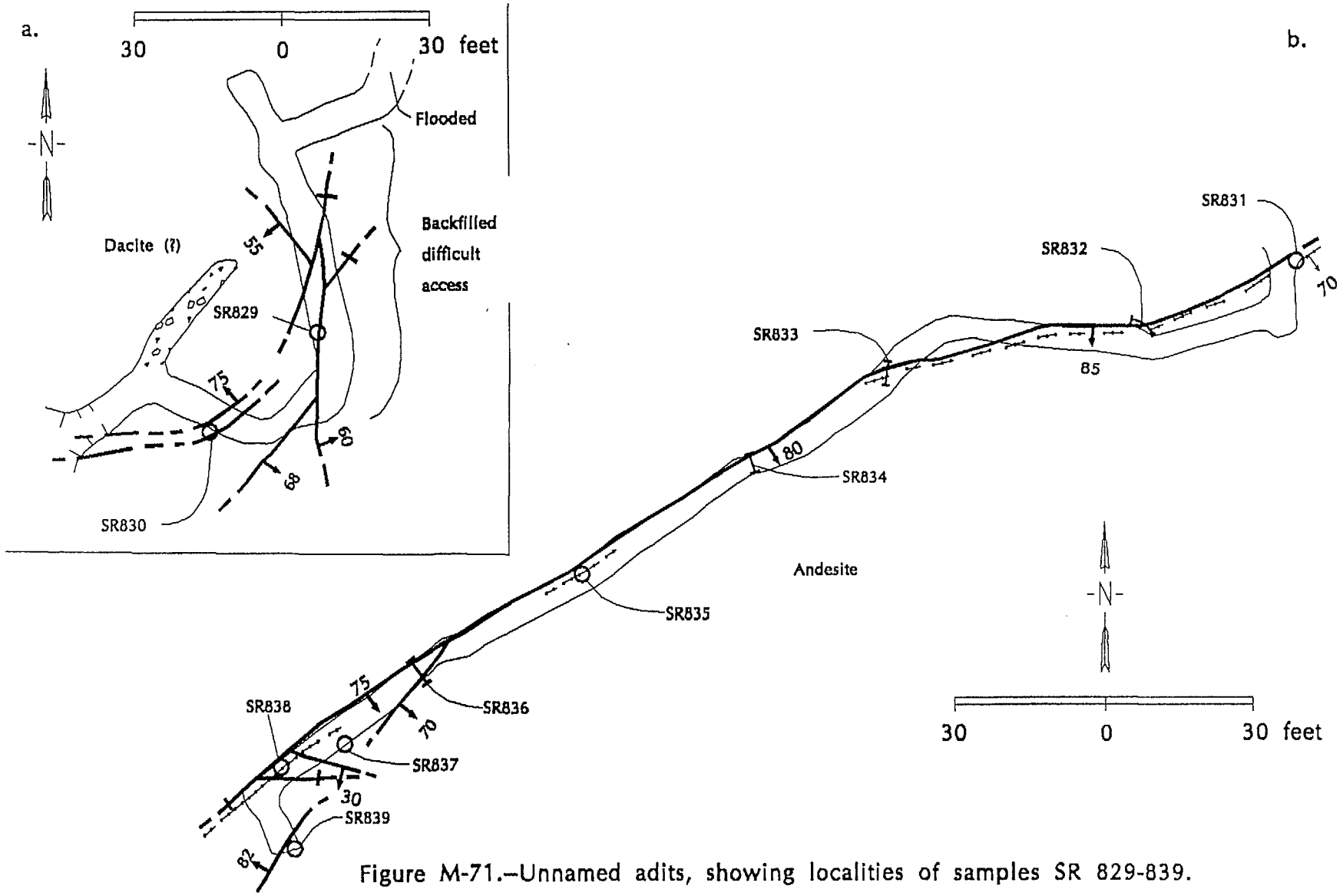


Figure M-71.–Unnamed adits, showing localities of samples SR 829-839.

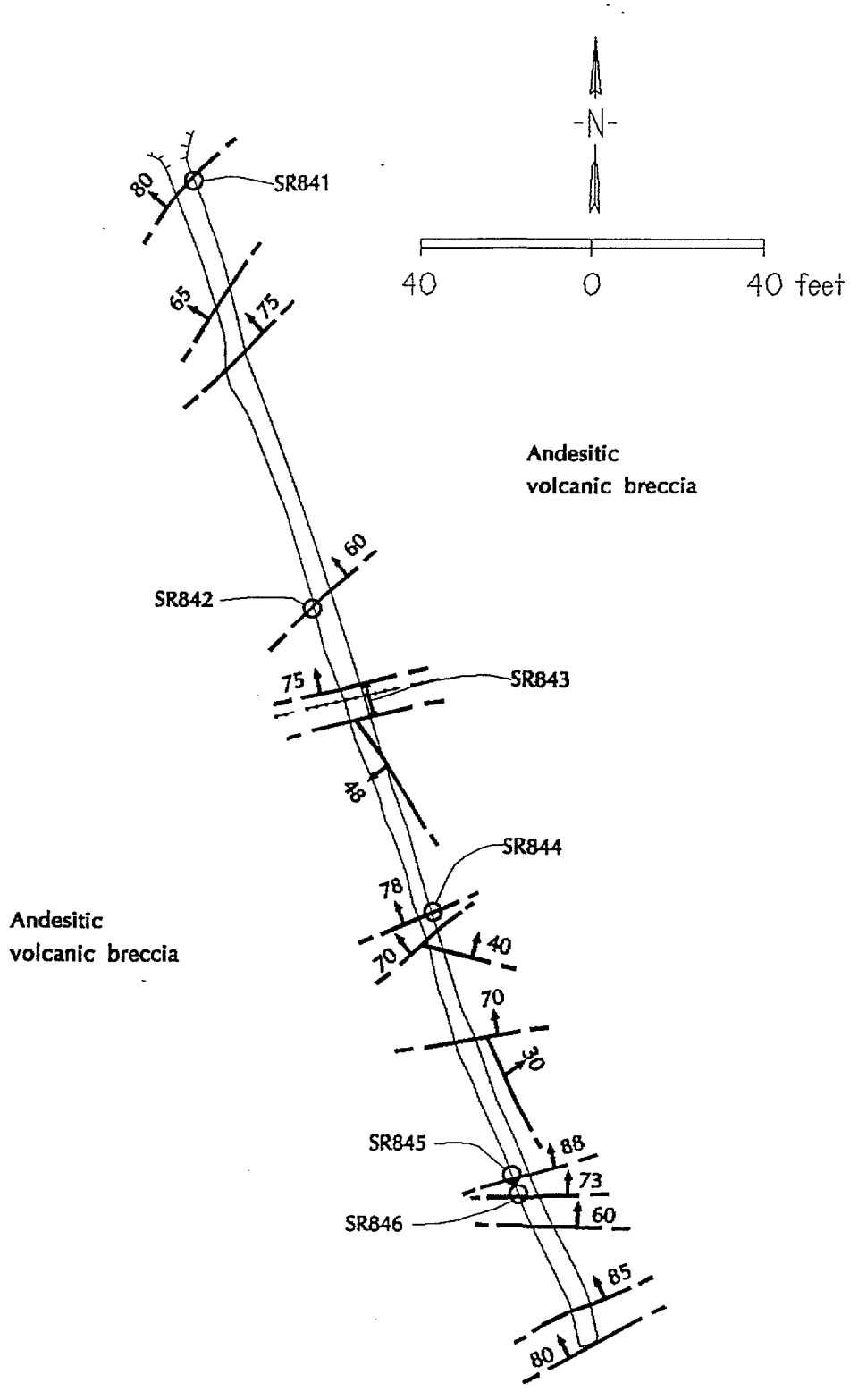


Figure M-72.–Silver Cave adit, showing localities of samples SR 841-846.

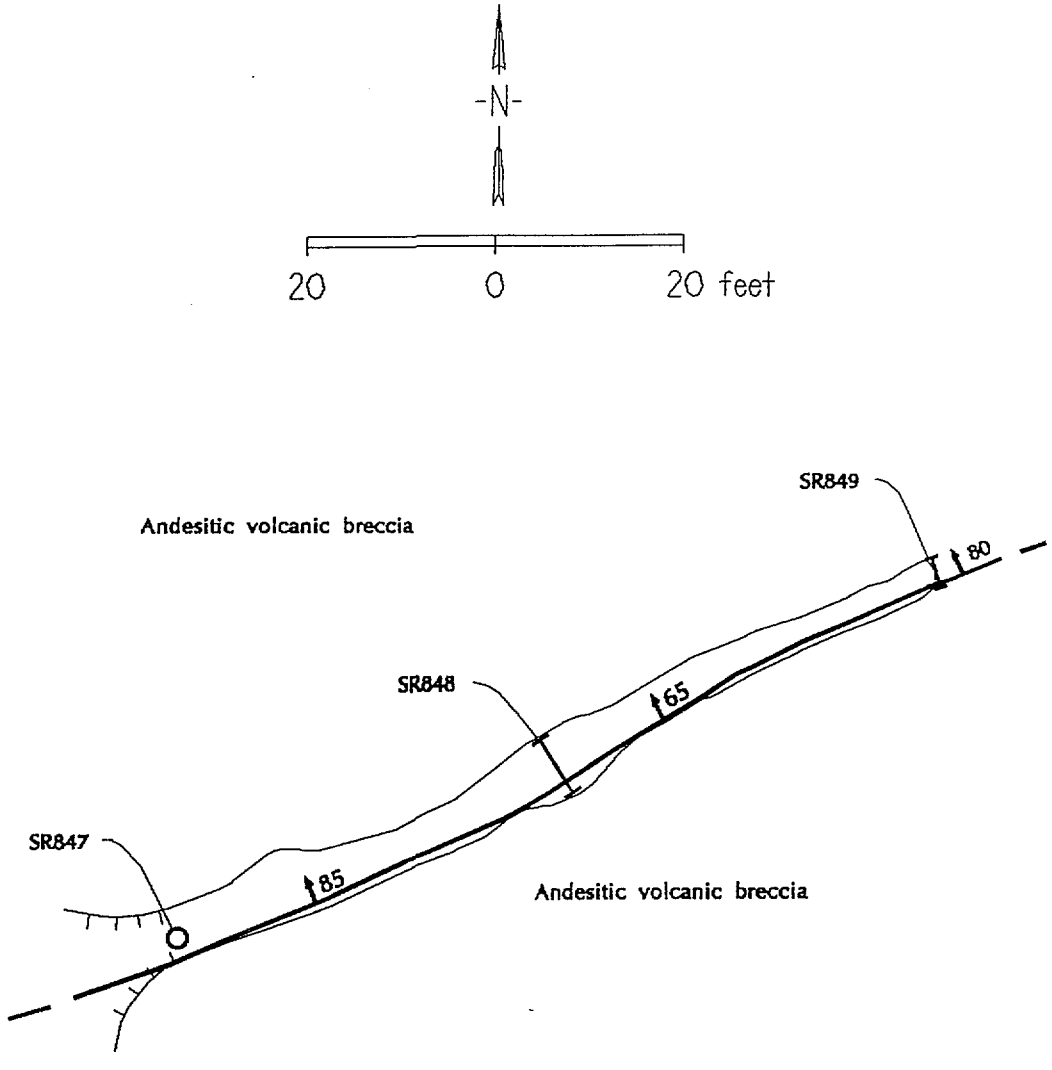


Figure M-73.–Copper Mountain adit (upper), showing localities of samples SR 847-849.

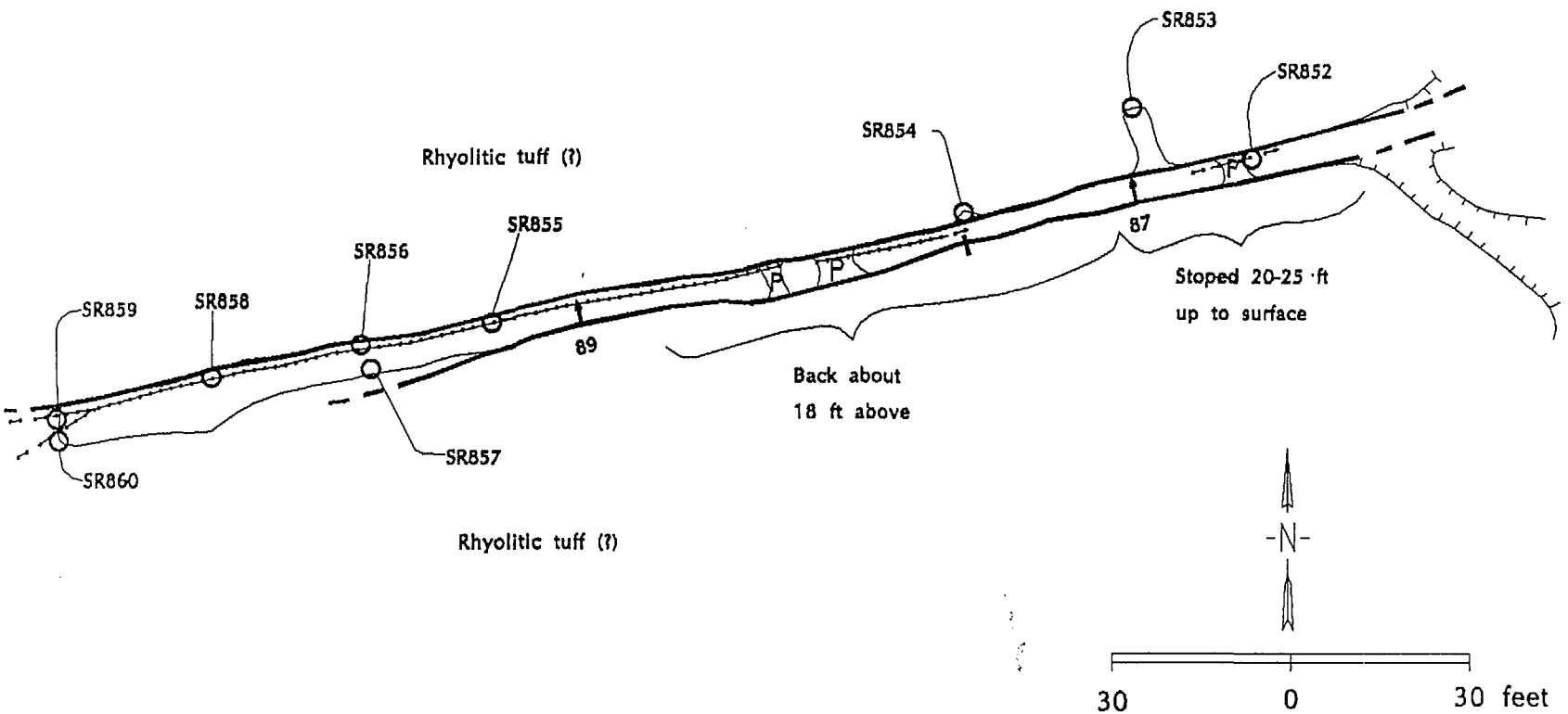


Figure M-74.–Armada Mine, lower adit, showing localities of samples SR 852-860.

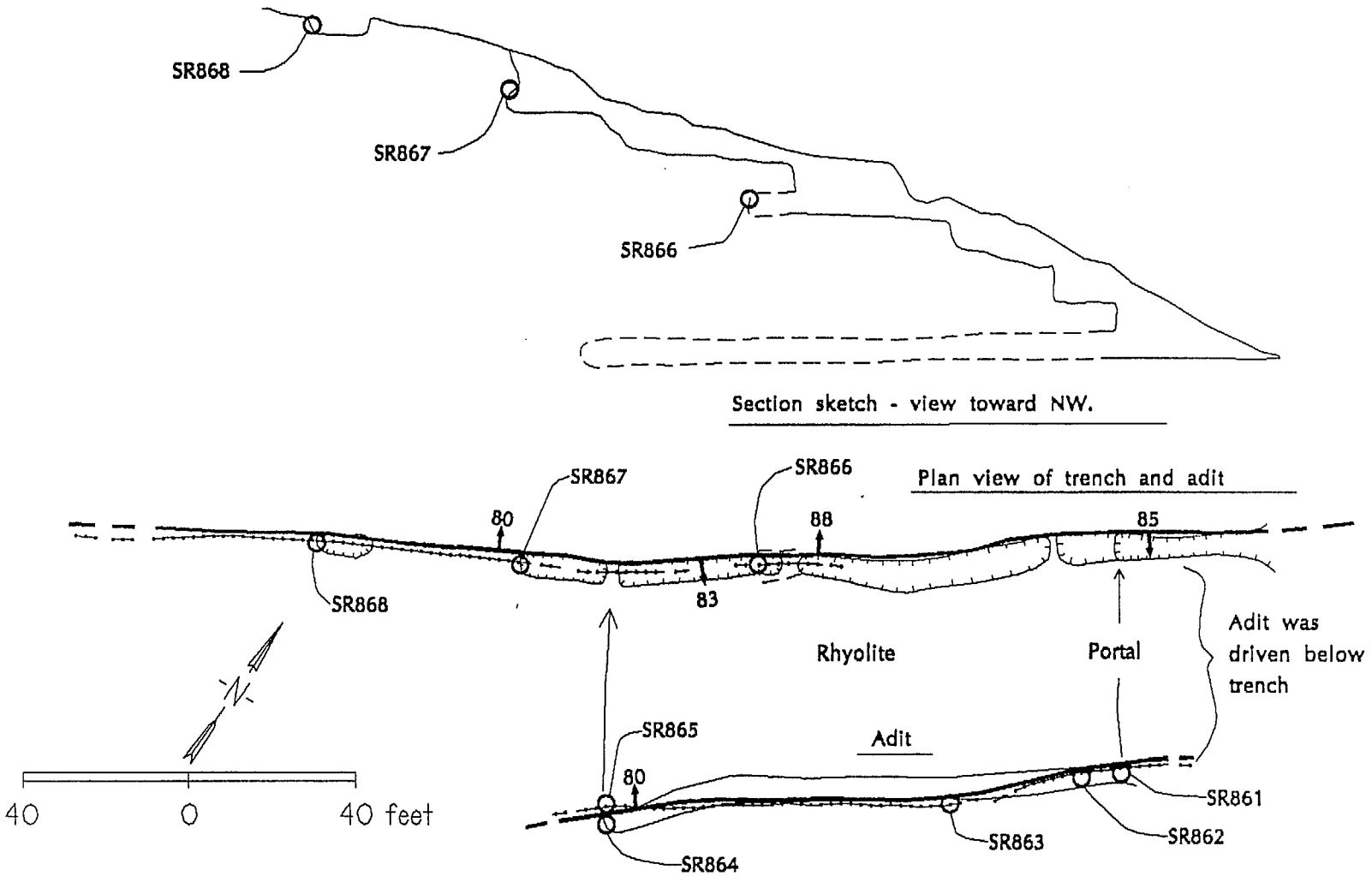


Figure M-75.–Armada Mine, surface trench and upper adit, showing localities of samples SR 861-868.

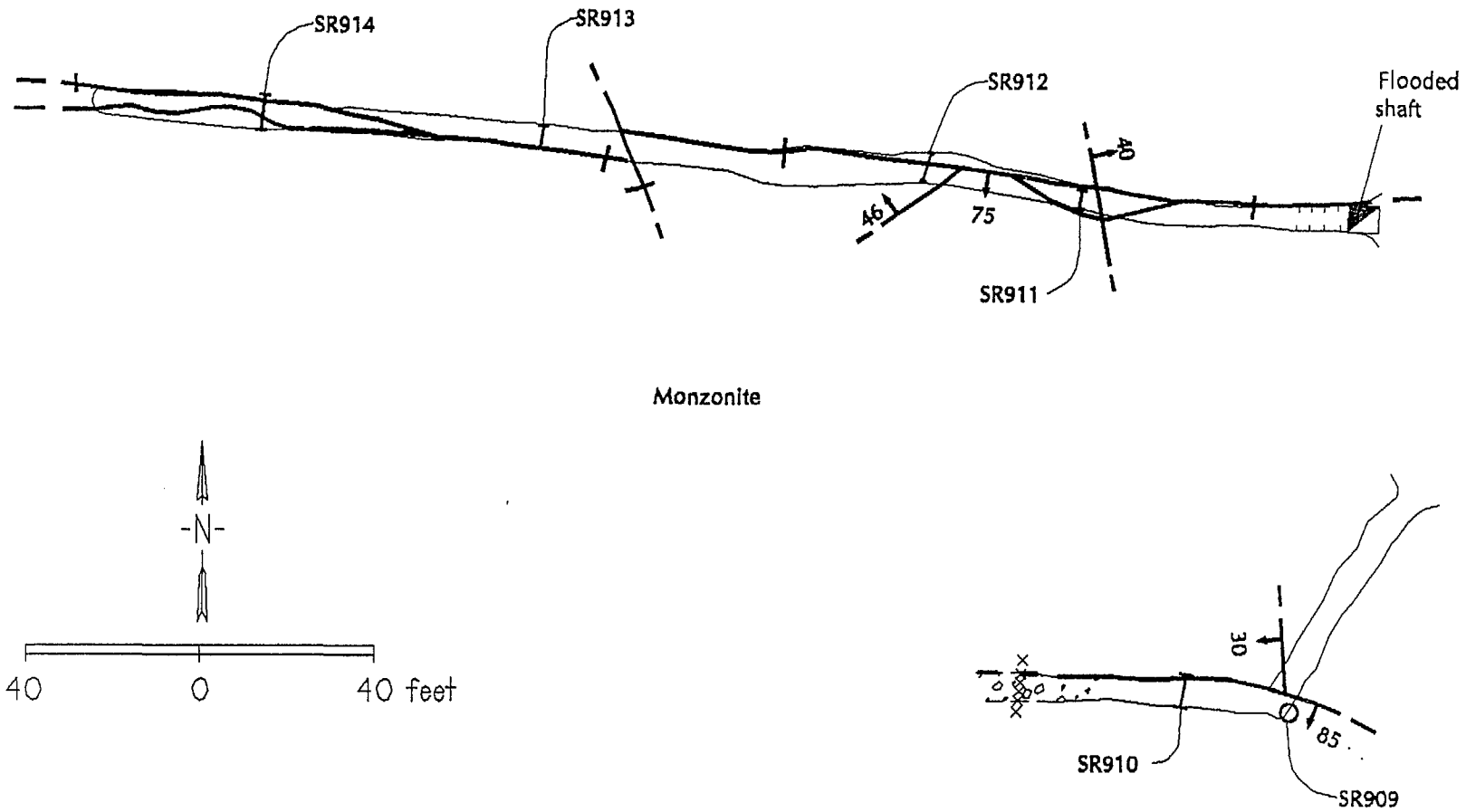


Figure M-76.–Adits on Albert Gross patented claim in the American Boy group, showing localities of samples SR 909-914.

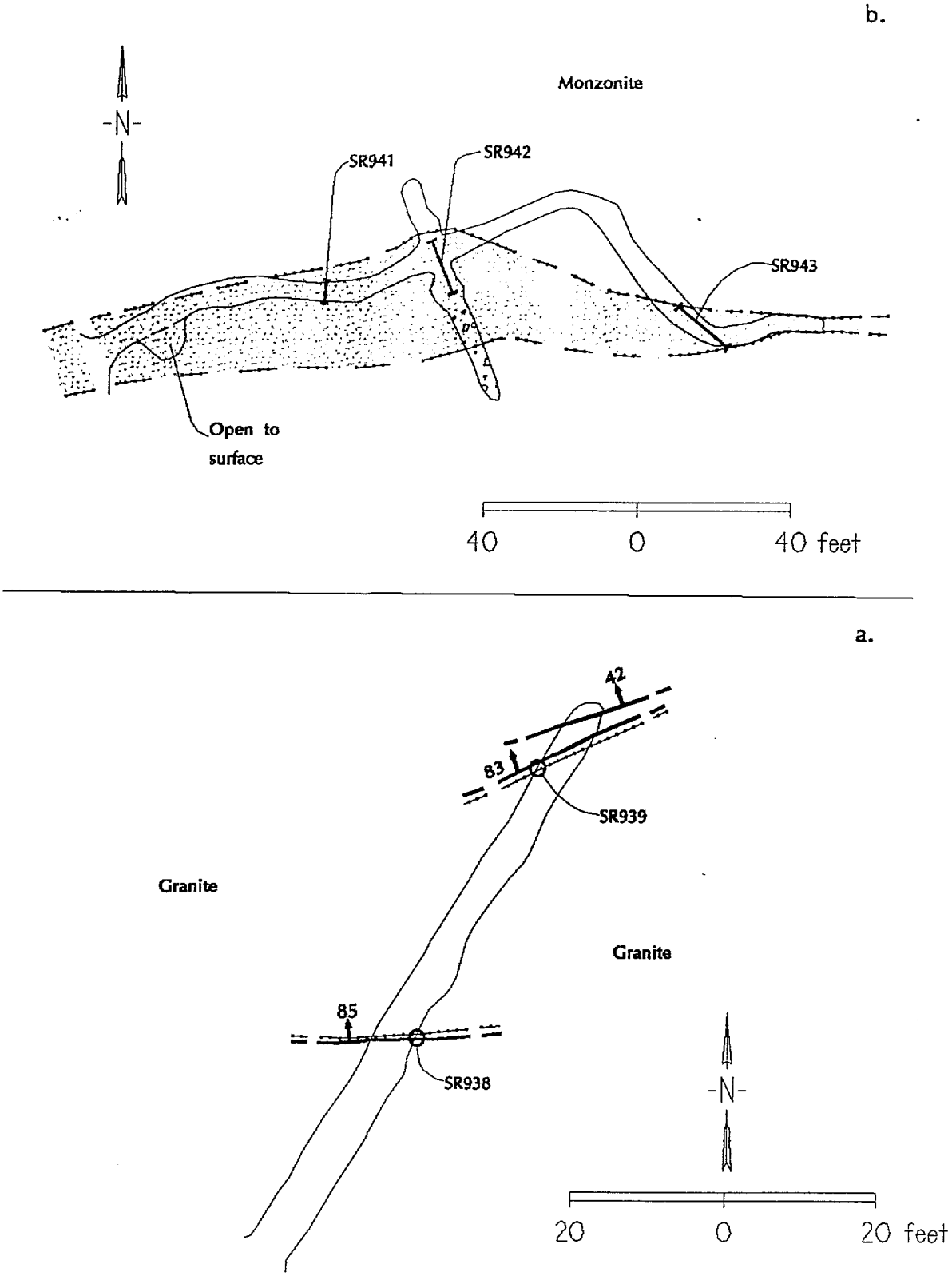
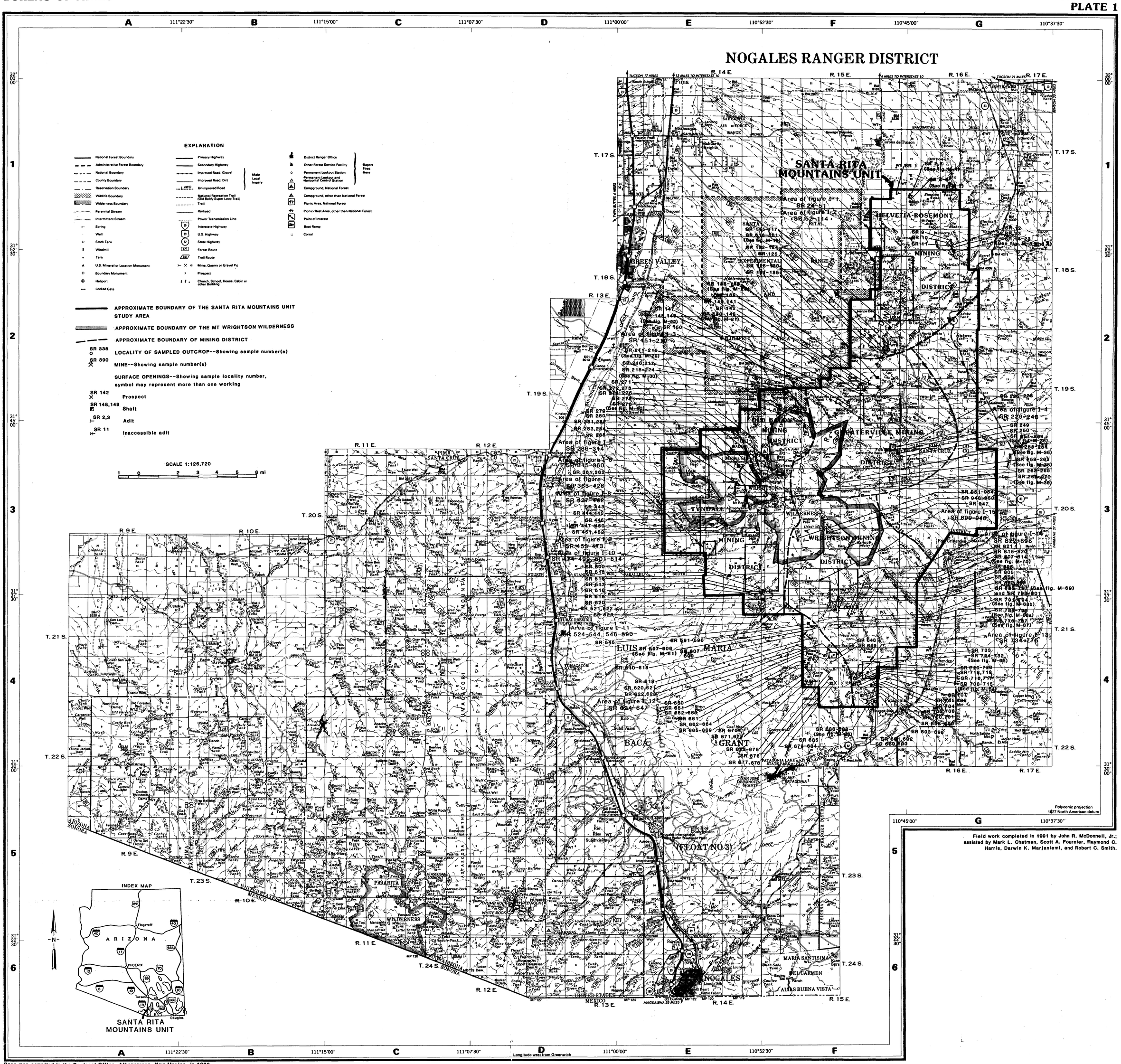


Figure M-77.–Hosey Mine adits, showing localities of samples SR 938-939, 941-943.



SAMPLE LOCALITY MAP OF THE SANTA RITA MOUNTAINS UNIT, CORONADO NATIONAL FOREST, PIMA AND SANTA CRUZ COUNTIES, ARIZONA

BY
JOHN R. McDONNELL, JR., U.S. BUREAU OF MINES

1994