UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Geochemical and Statistical Analysis of Analytical Results for Stream Sediments, Panned Concentrates from Stream Sediments, Rocks, and Waters Collected from the Goat Rocks Wilderness and Adjacent Roadless Areas Lewis and Yakima Counties, Washington

by

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STUDIES RELATED TO WILDERNESS

The Wilderness Act (Public Law 88-577, September, 1964) and related acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine their mineral resource potential. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a geochemical survey of the Goat Rocks Wilderness and adjacent roadless areas in the Gifford Pinchot and Snoqualmie National Forests, Lewis and Yakima Counties, Washington. The Goat Rocks Wilderness (NF032) was established by Public Law 88-577, September, 1964. The Goat Rocks Roadless Areas (06036) were classified as Further Planning areas during the Second Roadless Area Review and Evaluation (RARE II) by the U.S. Forest Service, January 1979.

INTRODUCTION

The Goat Rocks Wilderness (NF032) and adjacent Roadless areas (06036A, C, and D) straddle the crest of the Cascade Mountains in southern Washington. The study areas, located between Mt. Rainier and Mt. Adams, cover 107,920 acres of rugged mountainous terrain. Elevations range from 2,930 ft. (893 m) to 8,184 ft. (2,494 m) at Gilbert Peak. Much of the area is above timberline, but the stream drainages are heavily forested, especially on the west side of the Cascade Mountains. There is also a dense undergrowth of low deciduous brush in the drainages. There is good access to the study area by unpaved roads from U.S. Highway 12 (see figure 1), and there is a good system of trails in the study areas maintained by the U.S. Forest Service, including the Pacific Crest National Scenic Trail, which parallels the crest of the Cascade Range.

The Yakima Indian Reservation borders the study area on the southeast side and is closed to the general public. Although it is a general practice to extend our studies slightly outside the boundaries of the study area in order to adequately sample the terrain, no samples were taken inside the Yakima Indian Reservation.

Stream-sediment, water, and some of the rock samples were collected in July, 1981, by S. E. Church, J. G. Frisken, W. M. Kemp and R. S. Werschky. The remaining rock samples were collected by D. A. Swanson and G. A. Clayton during the course of the geologic mapping. Stream-sediments constituted the primary sample medium utilized in the study, although this data base was supplemented by data from rock samples representing specific geologic units mapped with the study area, from waters taken from streams within the drainages, and from panned concentrates from stream sediments. Sample localities are shown in plate 1.

A special sampling problem was encountered in the Goat Rocks study area because of the heavy blanket of pyroclastic and air-fall volcanic deposits that cover the area as a result of the May 18, 1980 eruption of Mount St. Helens. The thickness of these deposits in the study areas is shown in Figure 2 (data from Figure 355, Waitt and Dzurisin, 1981, p. 604). Descriptions of these deposits can be found in Waitt and Dzurisin (1981) and in Sarna-Wojcicki and others (1981a). The thickness of the volcanic deposits in the study area ranged from about 5 cm at the southwest corner to less than 1 cm on the northeast corner on the east side of the Cascade Range crest. Erosional processes have concentrated these deposits in the stream drainages. We conducted several experiments in the study area in an attempt to evaluate and to reduce the dilution effect caused by the presence of the volcanic debris in the stream-sediment samples. The results of these experiments are discussed in a later section of this report.

FIELD METHODS

Stream-sediment samples were collected from all active streams draining areas of 5-10 km^2, with the exception of one sample that represents a drainage basin of about 20 km^2. The sediment samples are composites collected from several sites within the streambed, usually within a distance of 100 ft. The samples were sieved to pass a 10-mesh stainless steel screen (2 mm) and air-dried; 141 stream-sediment sites were sampled. An ash sample was also collected in the study area (GR1016A) and was treated as if it were a stream-sediment sample. In addition, an ash sample from the May 18, 1980 eruption, collected on June 16, 1980, by Carolyn Driedger and Jerry Kendall

from a picnic table near Takhlakh Lake, about 10 miles southwest of the study area (see figure 2), has also been studied to evaluate the sampling problem caused by the presence of the volcanic deposits.

Panned concentrates from stream sediments were taken from about 2/3 of the sites (91); generally, they were taken from the larger drainages within the study area. The concentrate was panned in the field and air dried.

Water samples were collected from the streams at all sites as well as from some lakes over a five-day period. Two water samples were taken at each site. A 250 mL sample was taken for the determination of anion concentrations and pH. This sample was collected in a 250 mL, polypropylene bottle, and the pH was determined with a Fisher model 107 pH meter within 24 hours of collection in the field. All the samples had pH values within one pH unit of 7.0. A second water sample was filtered through a 0.4 micron filter into a 50 mL, polypropylene bottle that had been previously soaked in 1.0 N nitric acid for 24 hours or longer before use. This sample was acidified with 4 drops (approximately 0.1 mL) of concentrated, high purity nitric acid immediately following collection in the field.

SAMPLE PREPARATION

The stream-sediment samples from the study area were sieved in the laboratory and three sample splits for each site were prepared: Sample A, minus-80 mesh (<177 microns); sample B, minus-30 mesh to plus-80 mesh (>177 microns but <590 microns); sample C, minus-10 mesh to plus-30 mesh (>590 microns but <2000 microns). These three stream-sediment data sets will be referred to as stream-sediment data sets A, B, and C in the text. A 30-mesh (590 microns) stainless steel screen was used to sieve the panned concentrate from stream-sediment samples and the minus-30-mesh fraction was retained for further separation. The most magnetic fraction was removed using an electromagnet. This fraction contained magnetite and rock fragments having a high magnetite content. This fraction was discarded. The low-density fraction (specific gravity <2.8) was separated from the heavy-mineral fraction by flotation in bromoform and was discarded. A final magnetic separation of the heavy-mineral fraction was made on the Frantz isodynamic separator at a setting of 0.6 amperes with a forward slope of 25° and a side slope of 15°. Under these conditions, a nonmagnetic, heavy-mineral fraction is separated from a more magnetic fraction. The magnetic fraction included many rock fragments and most of the more magnesian mafic silicates. Mineralogically, the nonmagnetic fraction contains the high-specific gravity rock-forming accessory minerals such as apatite, zircon, rutile and sphene, in addition to minerals possibly indicative of mineralization such as epidote, tourmaline, fluorite, barite, scheelite, and the sulfide minerals. The heavy-mineral separations for the samples were incomplete and a substantial component of feldspar remained in the nonmagnetic, heavy-mineral fraction resulting in a dilution of the geochemical results from this sample medium. Following mineralogical examination of the nonmagnetic, heavy-mineral fraction, the samples were ground under acetone in an agate mortar prior to spectrographic analysis.

Mineralogical examinations and estimates of the volume percent of the total nonmagnetic, heavy-mineral fraction of the panned concentrates were performed visually using a binocular microscope. Minerals not readily recognized were identified using X-ray diffraction. The visual mineralogical identifications should be considered tentative because rigorous X-ray techniques were not applied to all samples.

Rock samples were crushed and then ground to about minus-200 mesh (74 micron) prior to analysis.

No further sample preparation work was done on the water samples prior to analysis.

ANALYTICAL METHODS

The analytical limits of detection for spectrographic analysis of stream sediments, rocks, and panned concentrates of stream sediments are given in table 1. Analytical limits for the determinations made from aqua regia leaches of the samples using ICP (Inductively Coupled Plasma) methods are summarized in table 2. Additional studies and discussions of ICP methods are given in Church (1978; 1979; 1981a; Church and others, 1982) and a complete discussion of spectral interference corrections is given in Church (1981b). Analytical methods and limits of detection for waters are given in table 3 and discussions of the use of these data are given by Miller and Ficklin, (1976).

Emission spectrographic results obtained from rocks, ores, stream sediments, and panned concentrates from stream sediments are obtained by visual comparison of spectra derived from the unknown sample against spectra determined from standards made from pure oxides or carbonates using a d.c. (direct current) arc emission spectrographic method (Grimes and Marranzino, 1968). Standard concentrations are geometrically spaced over any given order of magnitude of concentration and are prepared in such a way that the range of concentrations normally found in naturally occurring samples are bracketed. When comparisons are made with sample films for semiquantitative use, reported values are rounded to 100, 50, 20, 10, and so forth. Those samples whose concentrations are estimated to fall between the above values are arbitrarily given values of 70, 30, 15, 7 and so forth. The precision of the method is approximately plus or minus one reporting unit at the 83-percent confidence level and plus or minus two reporting units at the 96-percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (magnesium, calcium, iron, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram).

A complete semiquantitative 31-element set of spectrographic determinations was made for all samples analyzed. Only those elements detected are reported in the data tables, but the analytical data from all elements are summarized in the Fisher-K statistical tables for each data set (VanTrump and Miesch, 1977). Interpretation of the means, variance, skewness, and kurtosis of data sets which are 30 percent or more censored must be made with caution. Methods for estimating the means of censored populations are available; the applications of these methods are left to the reader.

Analytical results from ICP methods are obtained by comparison with gravimetric standard solutions and are accurate to ± 1-3% at levels 10 times the limit of detection if no significant interference is present. For further discussions of the calibration, matrix effects and analytical error caused by spectral interferences, see Church (1981b).

Analytical results obtained from the water samples are made by comparison of measured intensities against linear curves defined by gravimetric standard. Metal concentrations were determined using flameless atomic absorption methods whereas fluoride, nitrate, chloride, and sulphate were determined by ion chromatography. For further discussion of the analytical methods used for the water samples, see Miller and Ficklin (1976) and Smee and Hall (1978).

The analytical data presented below are arranged by sample type and by analytical method. Statistical treatments of the data will also be presented

following the analytical data tables, but the discussion and interpretation of these summaries will be presented in a separate report. Tables 4 through 11 present the analytical data and statistical treatments of the stream-sediment data. Tables 12 through 15 present analytical data, mineralogy, and statistical summaries of the data from the nonmagnetic, heavy-mineral fraction from panned concentrates. In table 15, the columns Pyroxene/Amphibole (Px/Amph), Rock Fragments (Rk. Frag), Realgar/Cinnabar (Real/Cin), and Scheelite (Schelite) were abbreviated for ease of handling in the computer. Tables 16-18 contain the data from the water samples. The results from the various studies of the volcanic ash samples are presented in tables 19 and 20. Finally, analytical and statistical results from both altered and fresh rock samples are given in tables 21 to 30.

Distributions of selected metals in the stream sediment, panned concentrates from stream sediments, and water samples are shown in figures 3-35 and 39-44. Mineralogy of the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments are shown in figures 36-38. These plots are computer generated with a separate symbol used for each spectrographic reporting interval or for each class of data defined by the histograms. Specific details for each plot are given in the figure captions.

Analytical results, sample descriptions, and locations have been entered into a computerized rock storage system (RASS) used by the U.S. Geological Survey. The data have been processed using computer programs in a statistical package (STATPAC, VanTrump and Miesch, 1977) to provide statistical summaries and histograms of observed elemental abundances. All raw analytical data for each data set are summarized in the Fisher-K data tables. Log transforms were made of all unqualified values in the data sets to prepare the histograms and the correlation coefficient tables of analytical values. Mineralogical abundances (table 13) are defined on a geometric scale. Only those correlations that are significant at the 95-percent confidence level, as indicated by the Z-statistic, have been included in defining geochemical coherence patterns in these data sets; a minimum of 10% of the total number of samples analysed must be included in paired data sets in the correlation tables before the correlation can be considered part of a plausible geochemical signature.

DISCUSSION OF THE VOLCANIC ASH PROBLEM

Approximately 2 ft^3 of St. Helens ash sample collected from near Lake Takhlakh was split into 10 equal fractions and two fractions were analyzed (EKR090 & EKR091). The remaining eight fractions were recombined and panned to produce the remaining samples. Sample EKR092 is the pumice fraction from the separation. Sample EKR093 is a light colored fraction; sample EKR094 is a dark colored, more dense fraction. EKR095 is the nonmagnetic, heavy-mineral fraction of the panned concentrate. This sample contained predominately fine-grained pyrite. Spectrographic data (table 19, data set 1), indicate no measurable difference between the first five samples. Trace element compositions of ash as reported here agree favorably with those reported earlier from the Yakima/Tieton area (Taylor and Lichte, 1980; Fruchter and others, 1980; Hoblitt and others, 1981; Sarna-Wojcicki and others, 1981b). Several metals of interest to geochemical exploration are reported from unconcentrated ash samples in Taylor and Lichte (1980); all occur at one part per million or less (table 3, p. 951). Concentration levels of trace elements present in the ash are insufficient to cause anomalies in the stream-sediment medium represented by the spectrographic results in tables 4-6.

Secondly, the ash samples (table 19, data set 2) were also analyzed using the aqua regia leach/ICP technique described above. Concentrations obtained from these experiments fall below the 25th percentile for all elements except for strontium (see table 11).

Examination of the spectrographic values determined for the nonmagnetic concentrate obtained from the ash indicates a potential for contamination of concentrate samples collected in the Goat Rocks area if these samples were dominantly composed of ash concentrate. This is due to the relatively high analytical values for iron, manganese, cobalt, copper, chromium, and nickel (two to ten times the corresponding values in the unconcentrated ash). A strong statistical correlation does occur between the pyrite in the Goat Rocks samples and iron, cobalt, copper, and nickel but visual examination of the few concentrates that contain more than 50% pyrite shows that the source of most of the pyrite is not the ash. This is indicated by the pyrite being coarser grained, more oxidized, enclosed in rock fragments, or stalactitic in form. Although some ash concentrate is no doubt incorporated in all of the Goat Rocks concentrates, it appears that geochemical anomalies in the Goat Rocks area are not attributable to this source.

Finally, the two bulk ash samples (ERK090 & EKR091) were leached with warm (60°C) distilled water (solution A), in an acidic solution buffered with sodium acetate and acetic acid, and acidified with hydrochloric acid to a pH of 2.5 (solution B), and in a second buffered solution that was acidified with sulfuric acid to a pH of 2.5 (solution C). Twenty-five grams of each sample were leached in 100 mL of each solution for a period of 24 hours at 60°C. Both the leachate and the residue were analyzed. Element concentrations obtained from the leaching solutions are given in table 20. Values measured in the residues are given in table 19 (data set 3). Comparisons of the two data sets (1 and 3) in table 19 do not indicate any major change in the chemistry of the samples as a result of the leaching process except that the concentrations of both magnesium and calcium decreased in the leached samples. Comparison of the concentrations of metals leached by distilled water are similar to those given by Fruchter and others (1980), Taylor and Lichte (1980), and by Smith and others (1982). Studies by Smith and others (1982) indicate that leaching of water-soluble components from the ash occurs quickly, in much less time than the one year elapsed time between the ash fall and the sampling (May, 1980 to July, 1981). We conclude from these studies that anomalies observed in the water samples collected could not have come from leaching of the ash.

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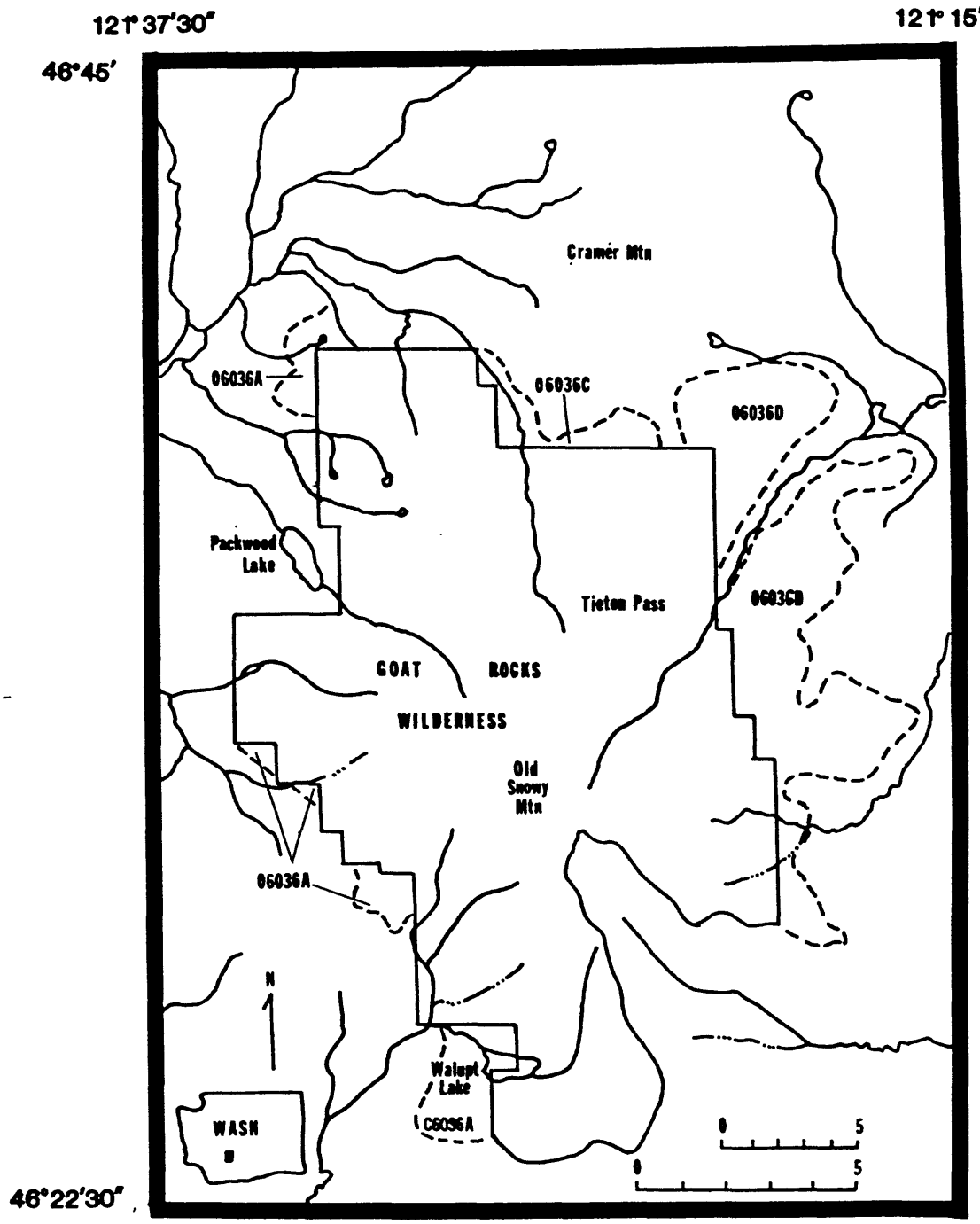

Figure 1.--Index map of the Goat Rocks Wilderness and adjacent roadless areas.

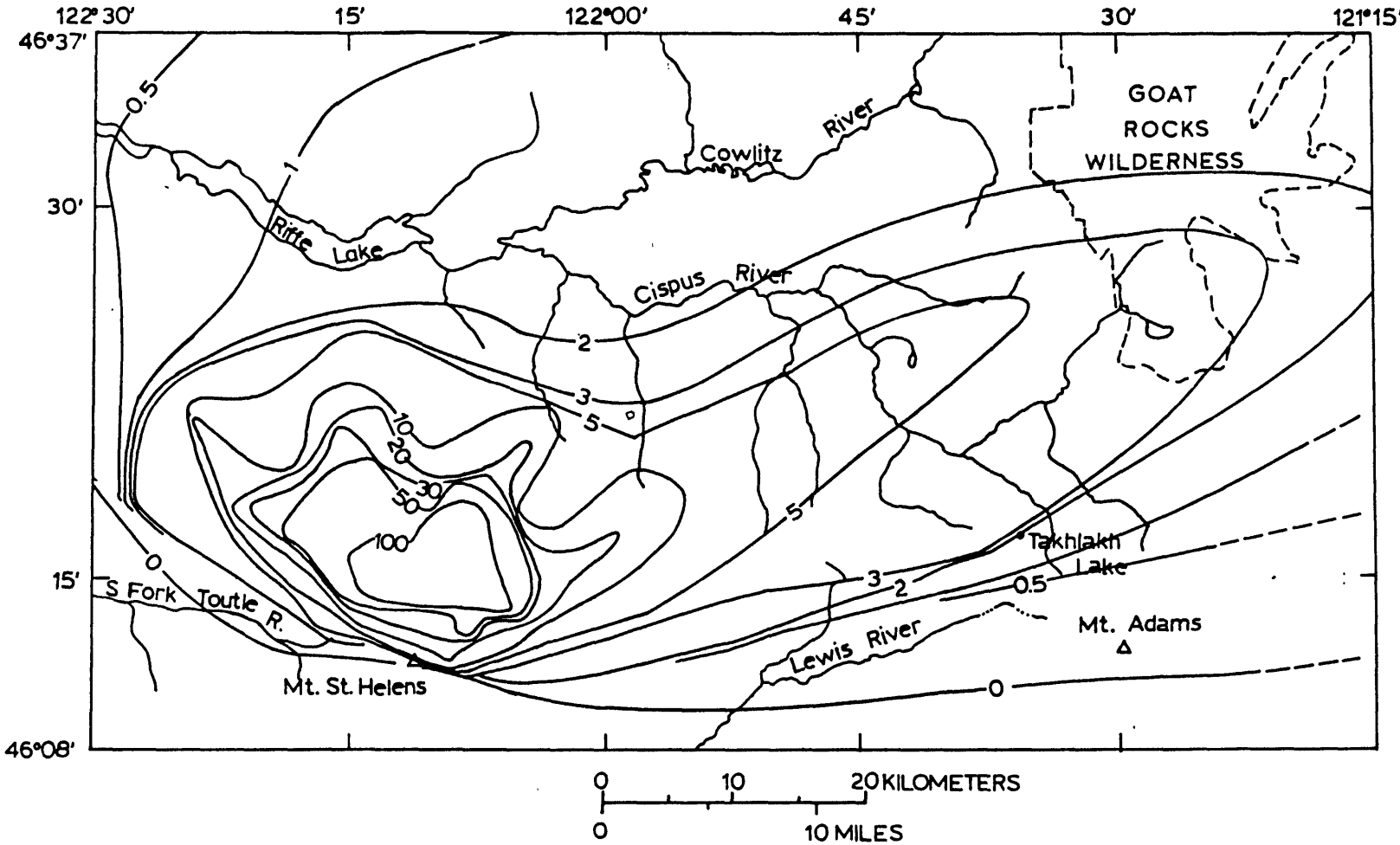

Figure 2.--Isopach map of the total May 18, 1980 direct-blast and air flow deposits. Contour values are in centimeters. (from Waitt and Dzurisin, 1981, figure 355, p. 604).

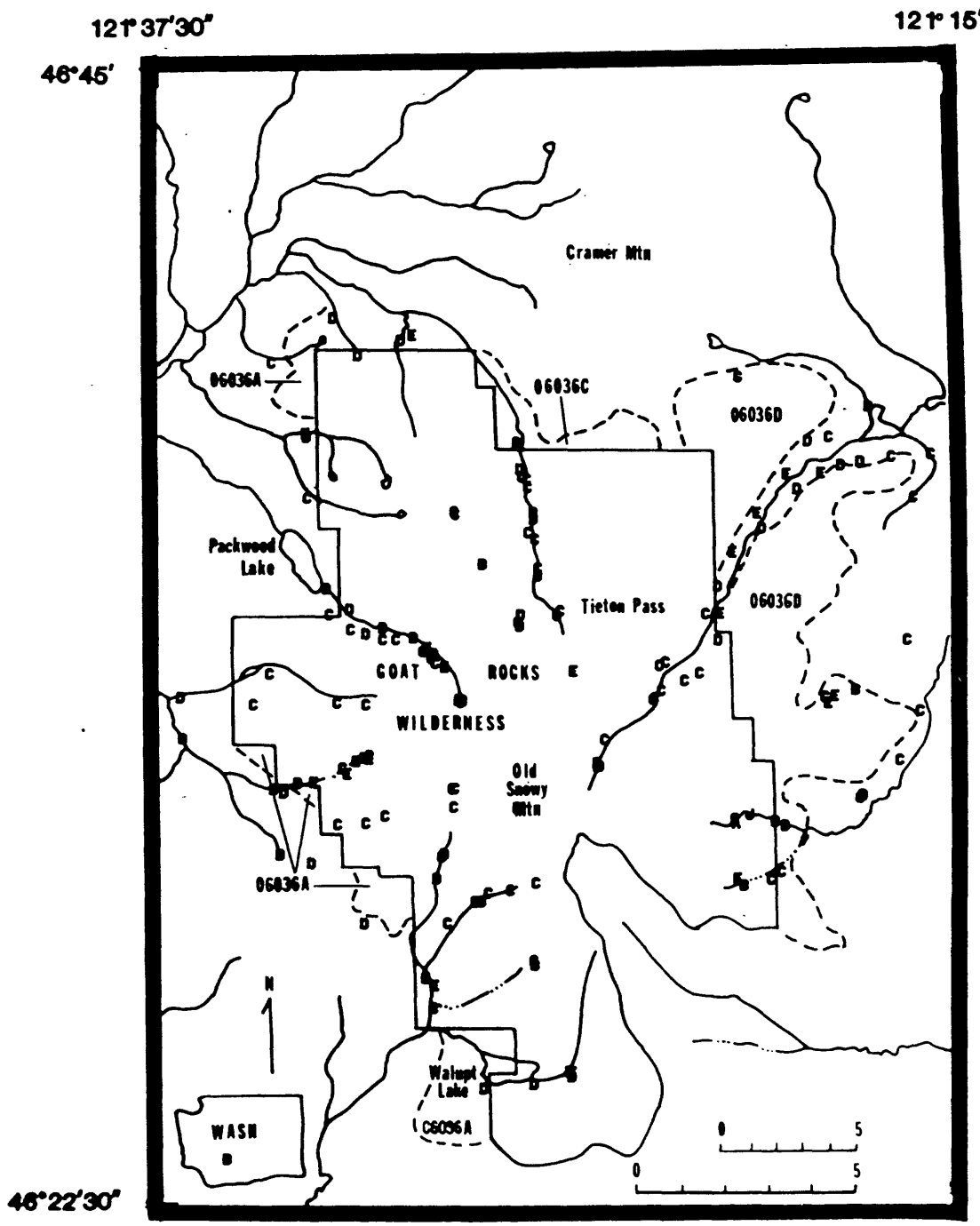

Figure 3.--Plot of spectrographic analytical data for vanadium from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-500 ppm, B-300 ppm, C-200 ppm, D-150 ppm, E-100 ppm, G-70 ppm, H-50 ppm, I-30 ppm, J-20 ppm. Refer to table 10 for frequency distributions by spectrographic class.

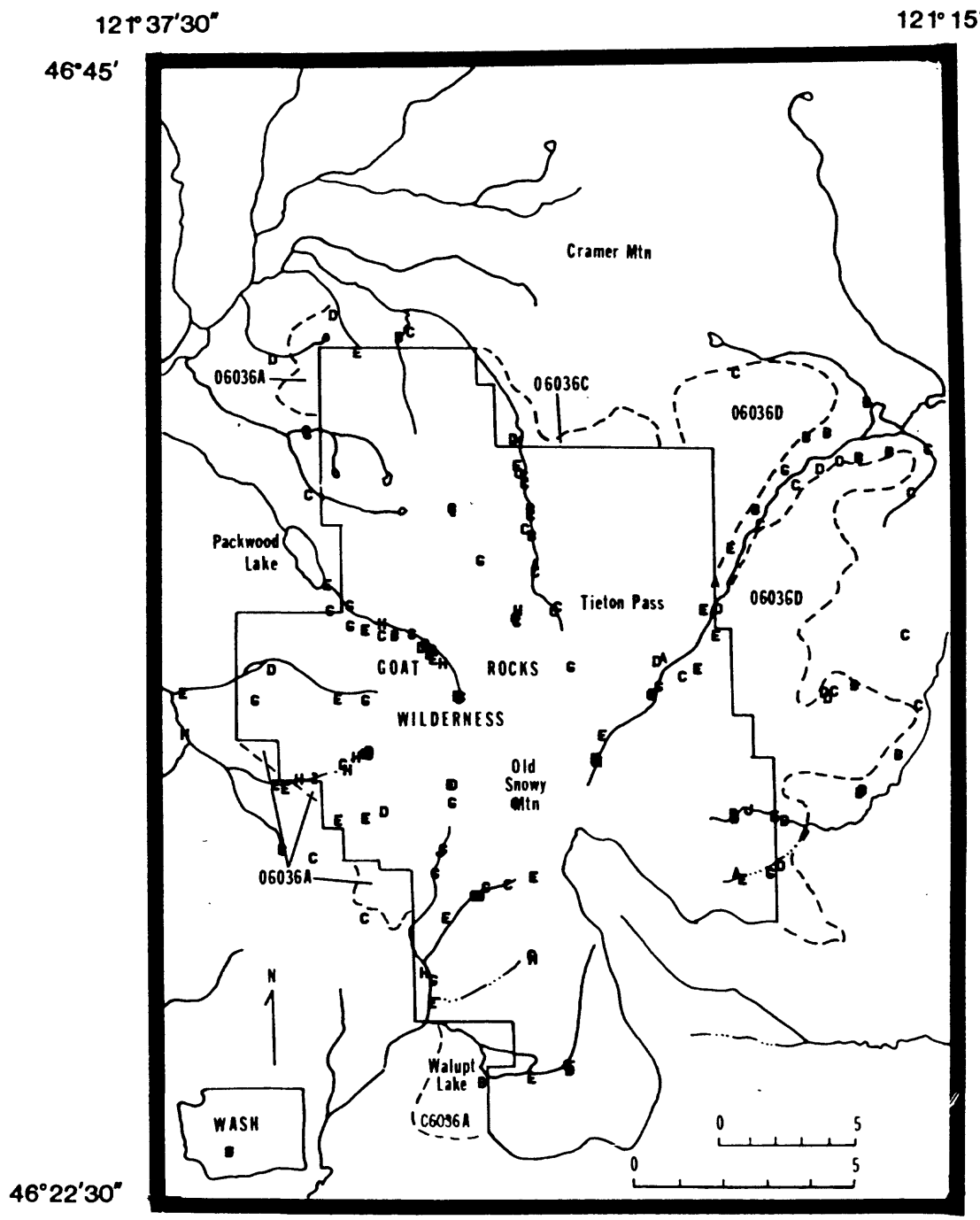

Figure 4 .--Plot of spectrographic analytical data for chromium from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-200 ppm, B-150 ppm, C-100 ppm, D-70 ppm, E-50 ppm, G-30 ppm, H-20 ppm, I-15 ppm, J-10 ppm. Refer to table 10 for frequency distributions by spectrographic class.

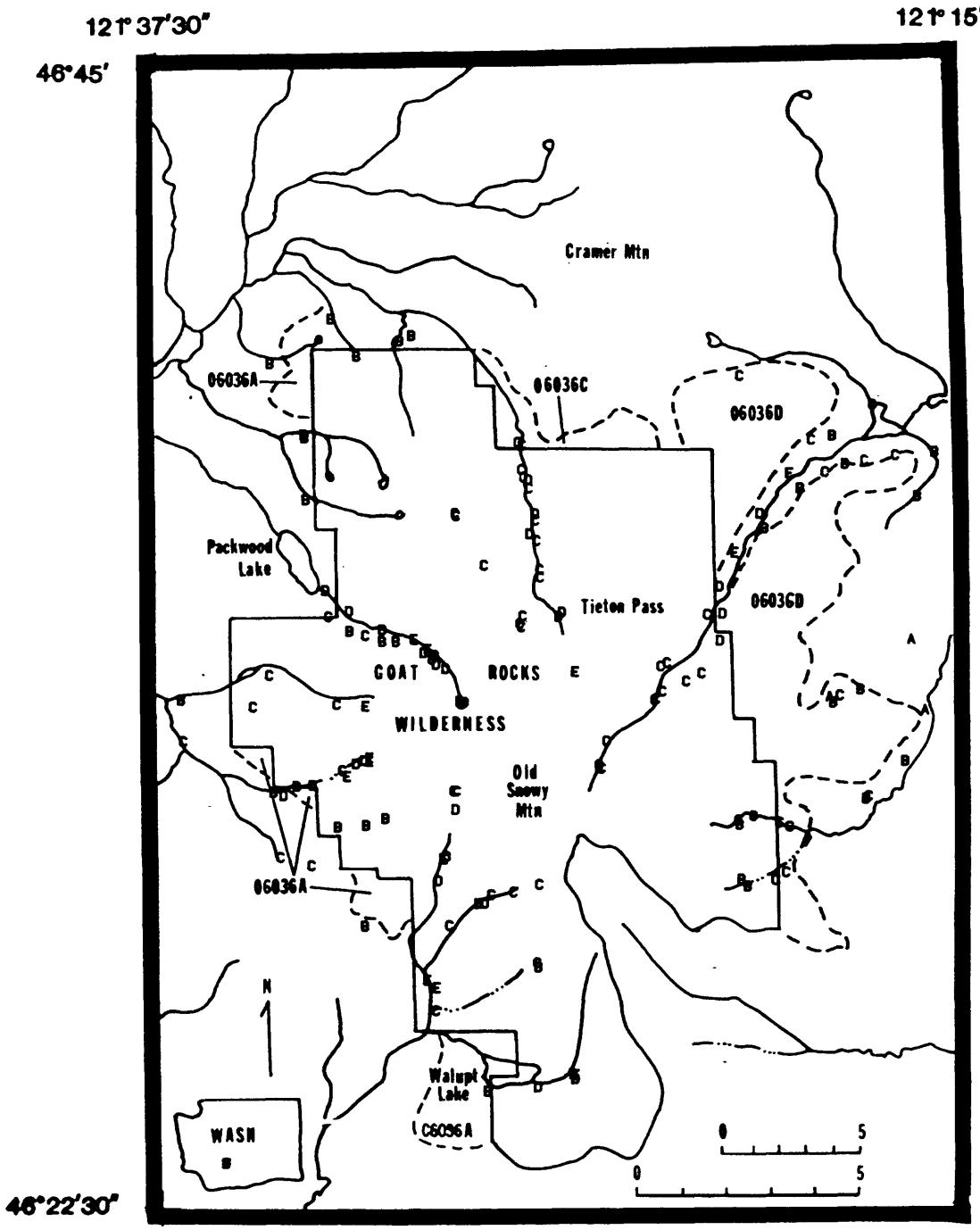

Figure 5.--Plot of spectrographic analytical data for manganese from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-2000 ppm, B-1500 ppm, C-1000 ppm, D-700 ppm, E-500 ppm, G-300 ppm. Refer to table 10 for frequency distributions by spectrographic class.

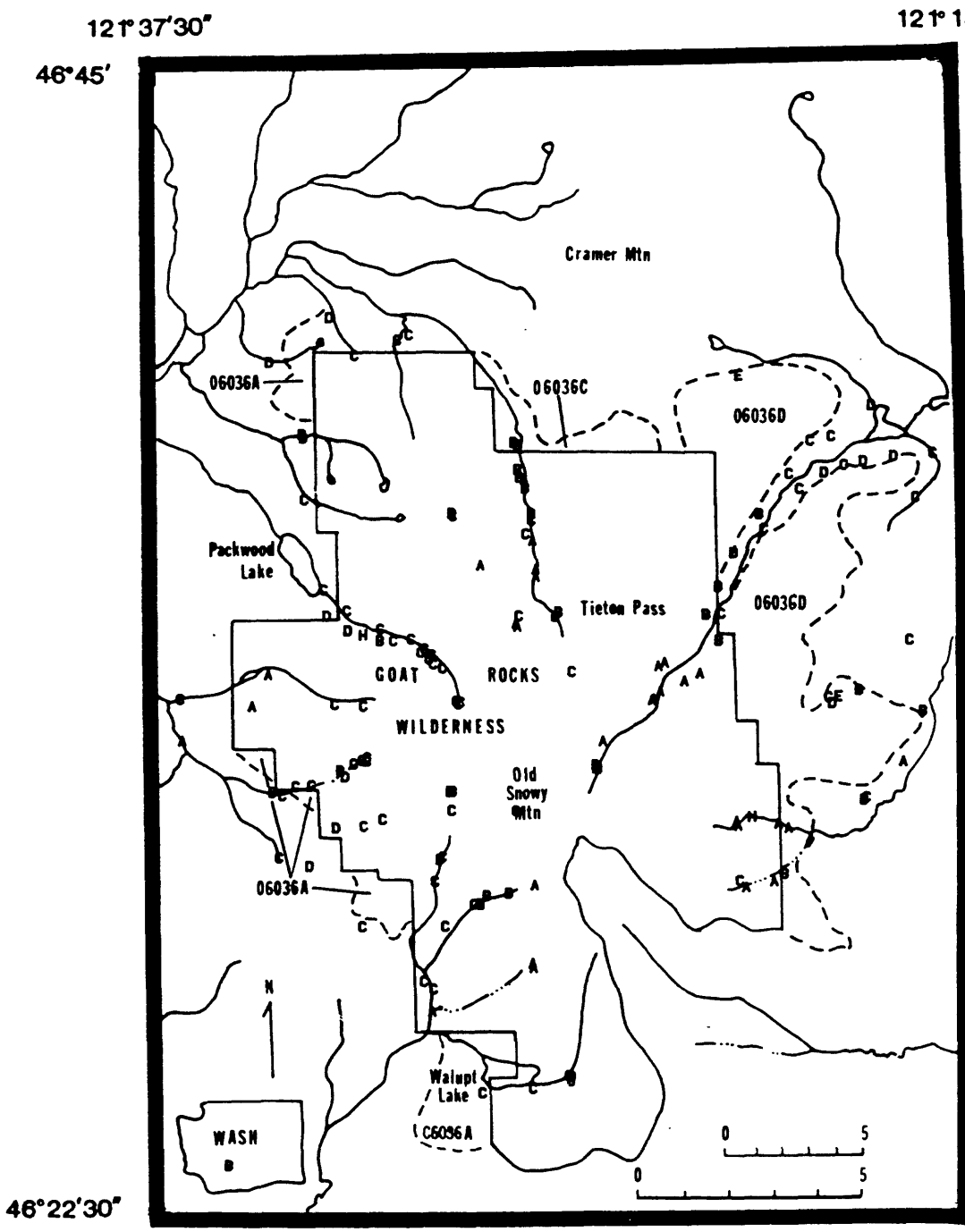

Figure 6.--Plot of spectrographic analytical data for cobalt from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-50 ppm, B-30 ppm, C-20 ppm, D-15 ppm, E-10 ppm, G-7 ppm, H-5 ppm. Refer to table 10 for frequency distributions by spectrographic class.

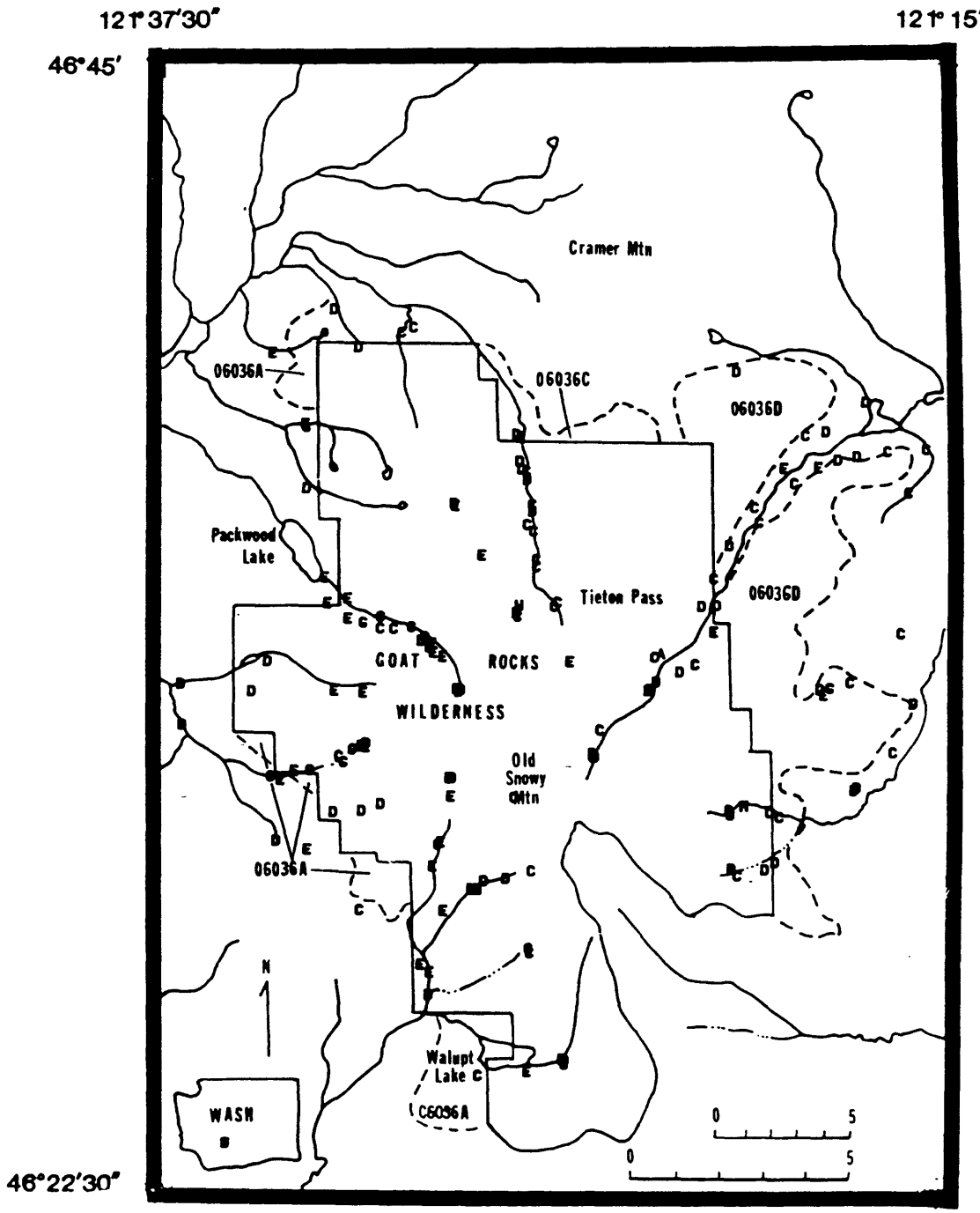

Figure 7.--Plot of spectrographic analytical data for nickel from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-100 ppm, B-70 ppm, C-50 ppm, D-30 ppm, E-20 ppm, G-15 ppm, H-10 ppm. Refer to table 10 for frequency distributions by spectrographic class.

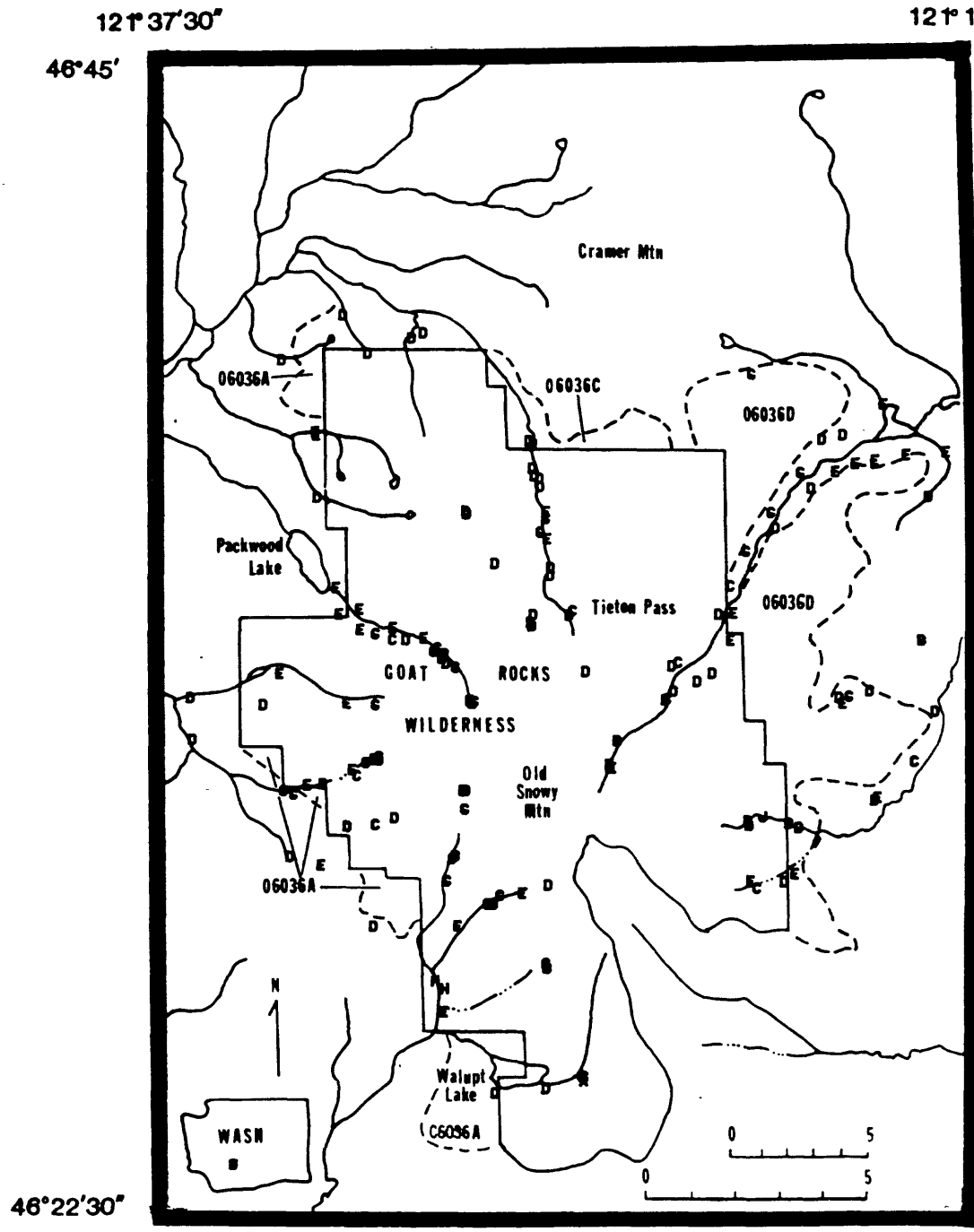

Figure 8.--Plot of spectrographic analytical data for copper from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-150 ppm, B-100 ppm, C-70 ppm, D-50 ppm, E-30 ppm, G-20 ppm, H-15 ppm, I-10 ppm, J-7 ppm. Refer to table 10 for frequency distributions by spectrographic class.

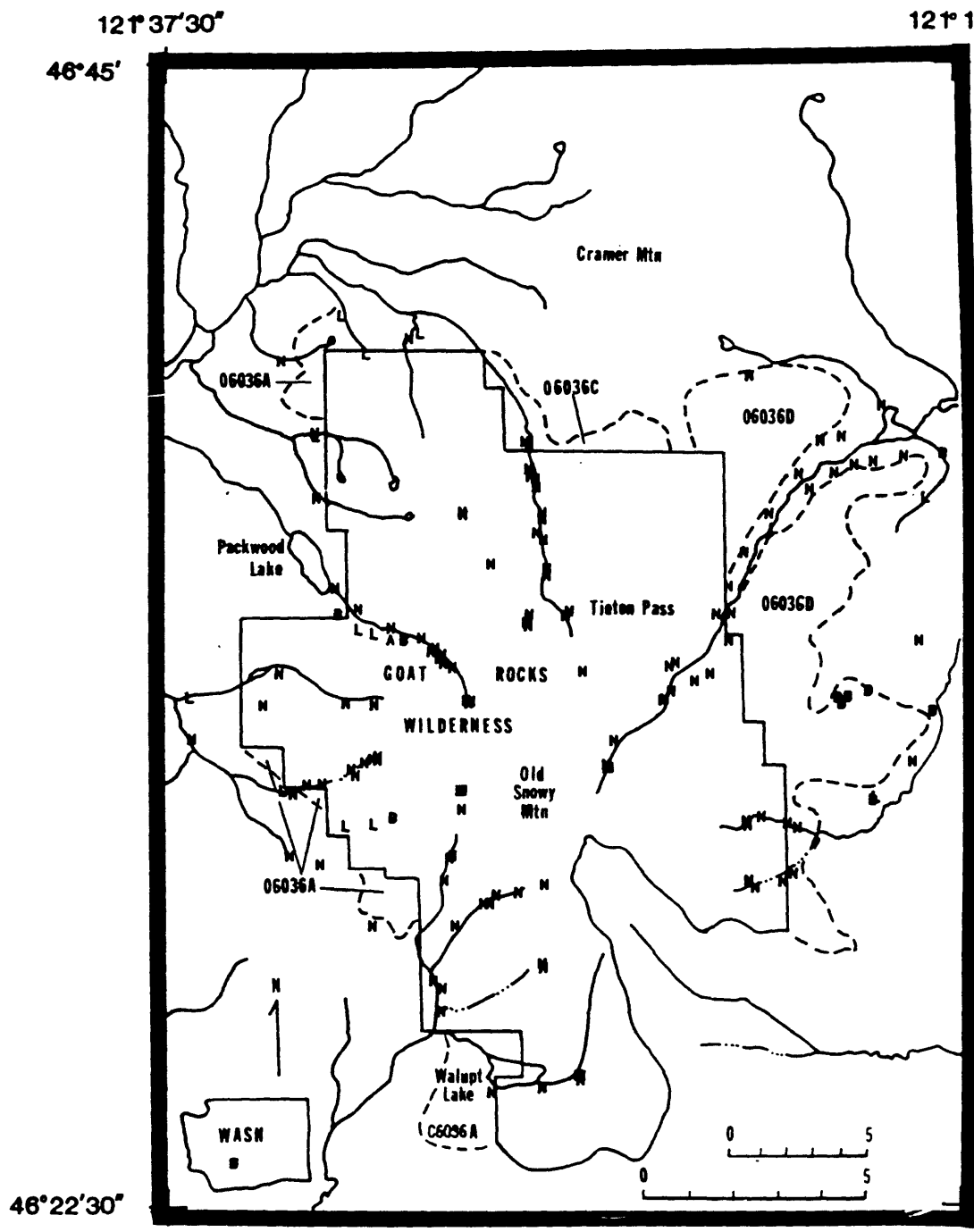

Figure 9.--Plot of spectrographic analytical data for molybdenum from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-7 ppm, B-5 ppm, L-detected, but present at a concentration less than 5 ppm, N-concentration less than the detection limit. Refer to table 10 for frequency distributions by spectrographic class.

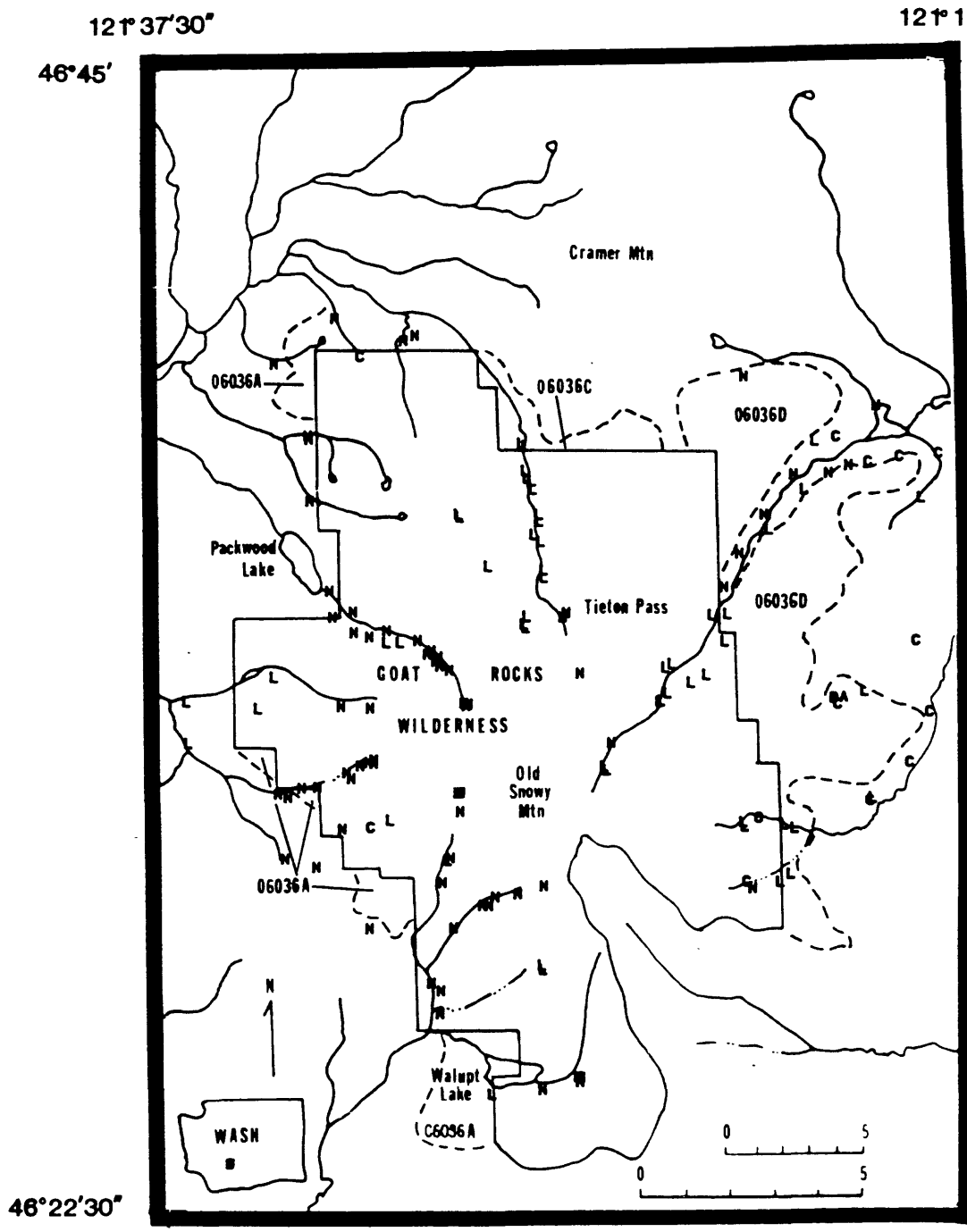

Figure 10.-Plot of spectrographic analytical data for lead from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-20 ppm, B-15 ppm, C-10 ppm, L-detected but present at a concentration less than 10 ppm, N-concentration less than the detection limit. Refer to table 10 for frequency distributions by spectrographic class.

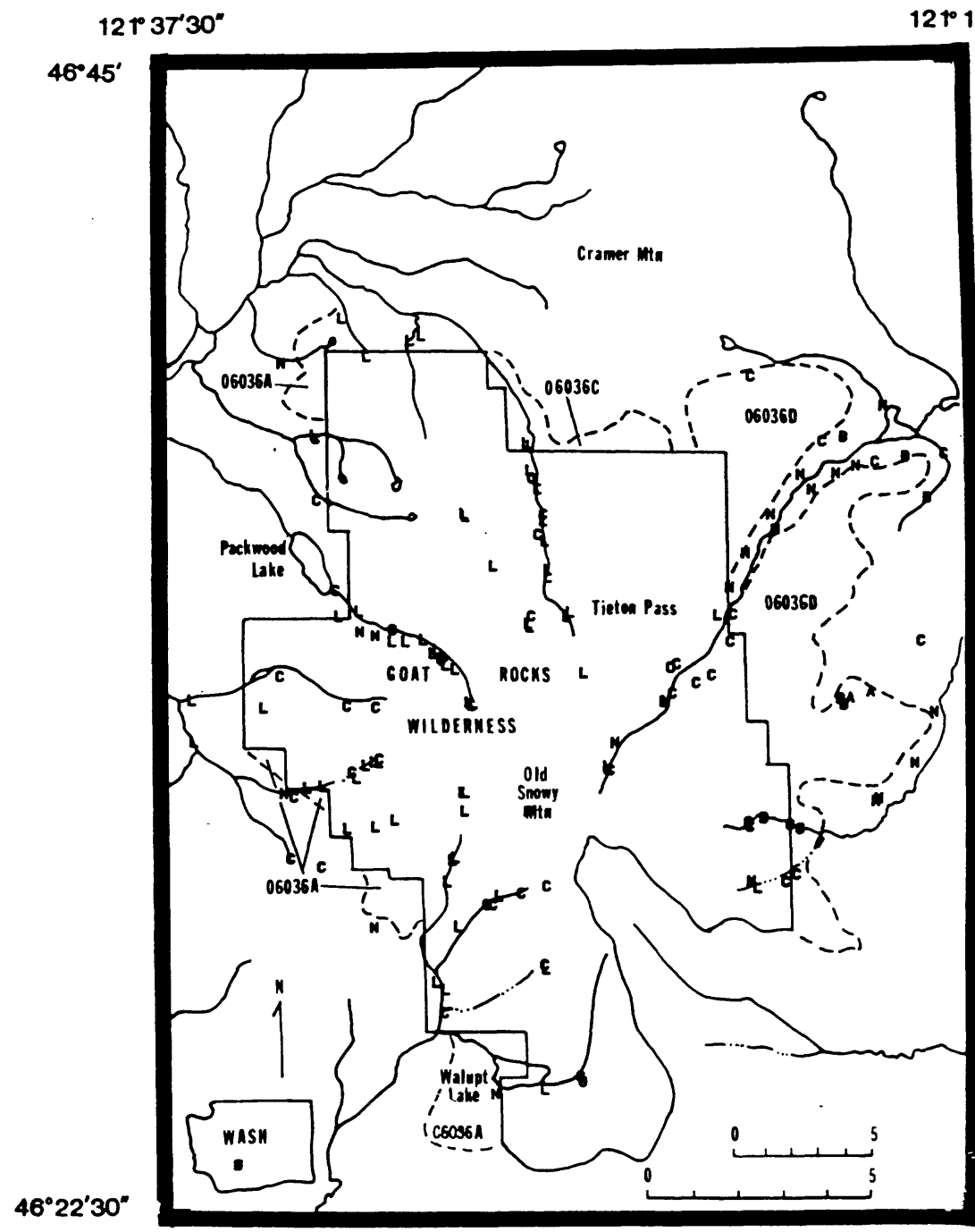

Figure 11.-Plot of spectrographic analytical data for lead from stream sediments (Data Set C) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-20 ppm, B-15 ppm, C-10 ppm, L-detected, but present at a concentration less than 10 ppm, N-concentration less than the detection limit. Histograms for lead indicate a different distribution as a function of grain size between Data Sets A and C; compare with figure 10.

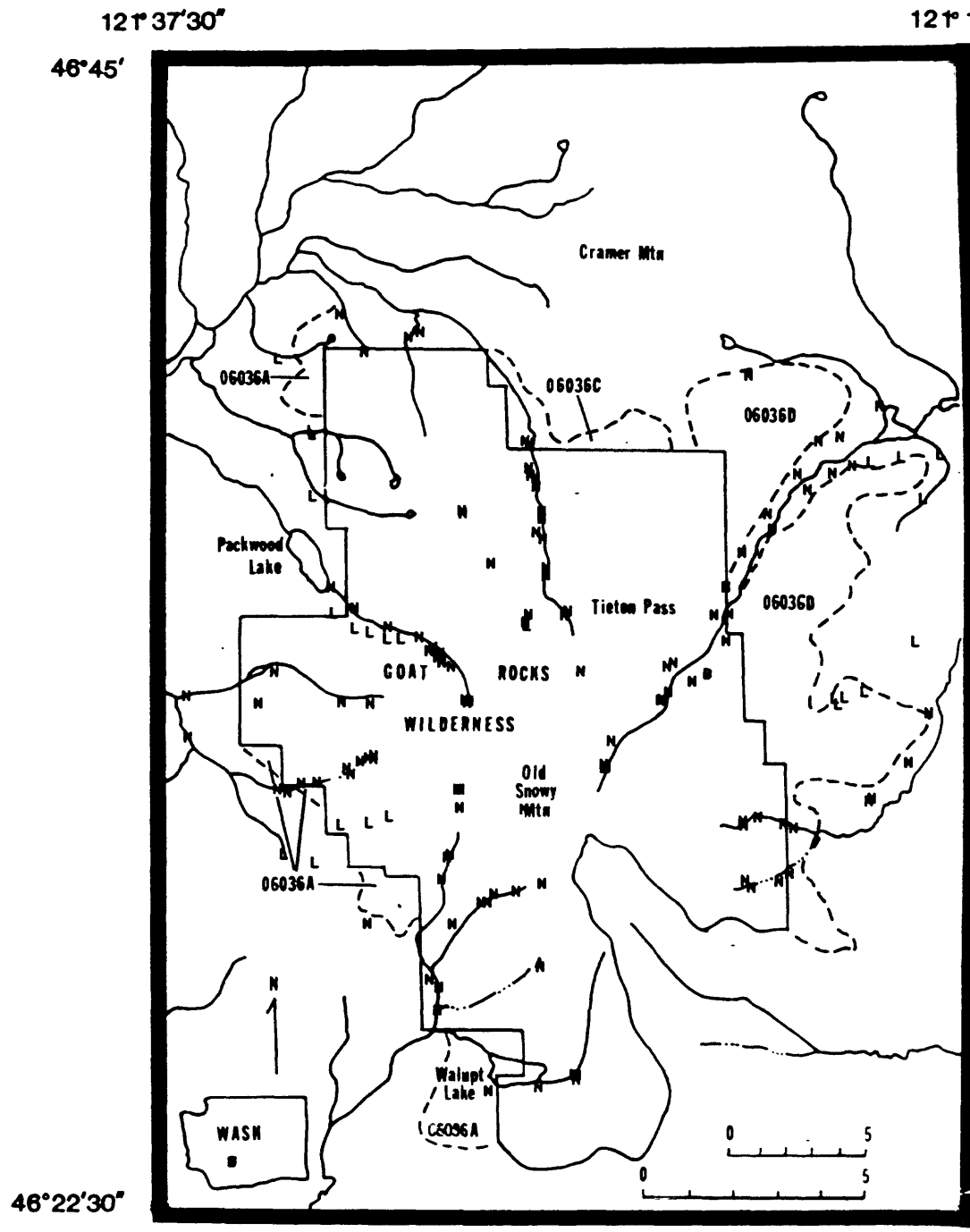

Figure 12.-Plot of spectrographic analytical data for silver from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-0.7 ppm, B-0.5 ppm, L-detected, but present at concentration less than 0.5 ppm, N-concentration less than the detection limit. Refer to table 10 for frequency distributions by spectrographic class.

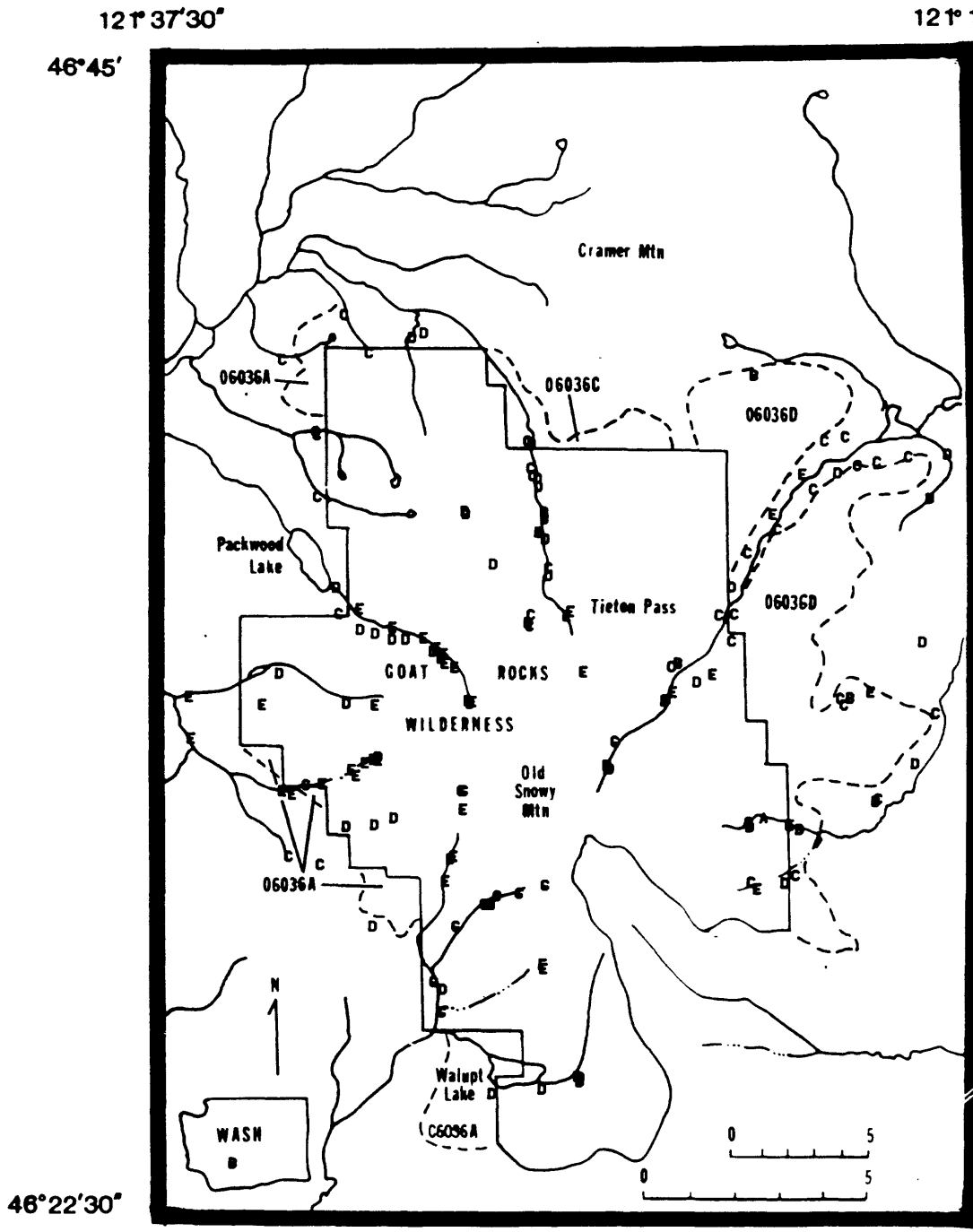

Figure 13.-Plot of spectrographic analytical data for barium from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-1000 ppm, B-700 ppm, C-500 ppm, D-300 ppm, E-200 ppm, G-150 ppm, H-100 ppm. Refer to table 10 for frequency distributions by spectrographic class.

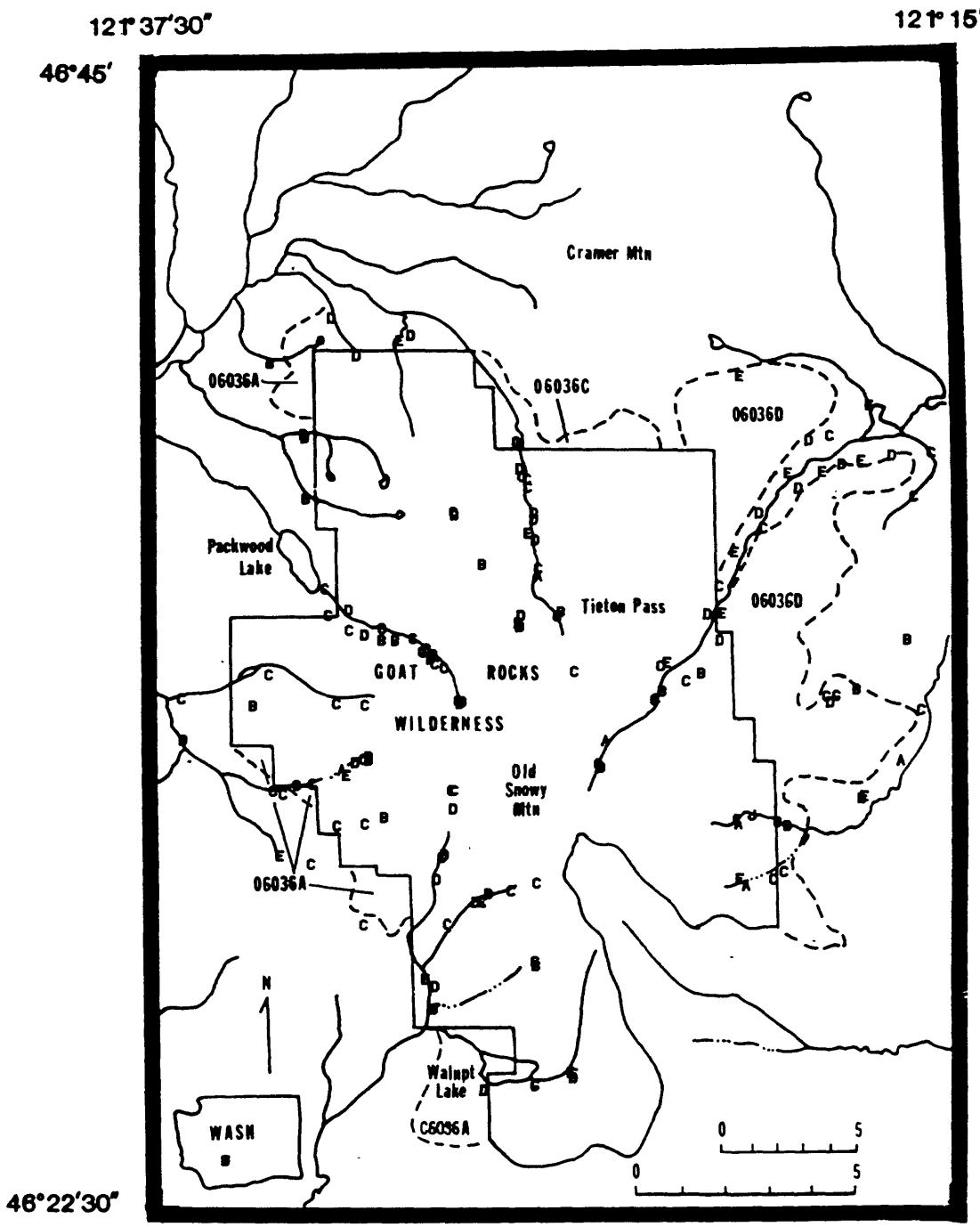

Figure 14.-Plot of aqua-regia leach/ICP analytical data for vanadium from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 180-500 ppm; B, 130-170 ppm; C, 86-120 ppm; D, 61-85 ppm; E, 41-60 ppm; G, 26-40 ppm; H, 18-25 ppm; I, 13-17 ppm; J, 5-12 ppm. Refer to table 11 for frequency distributions.

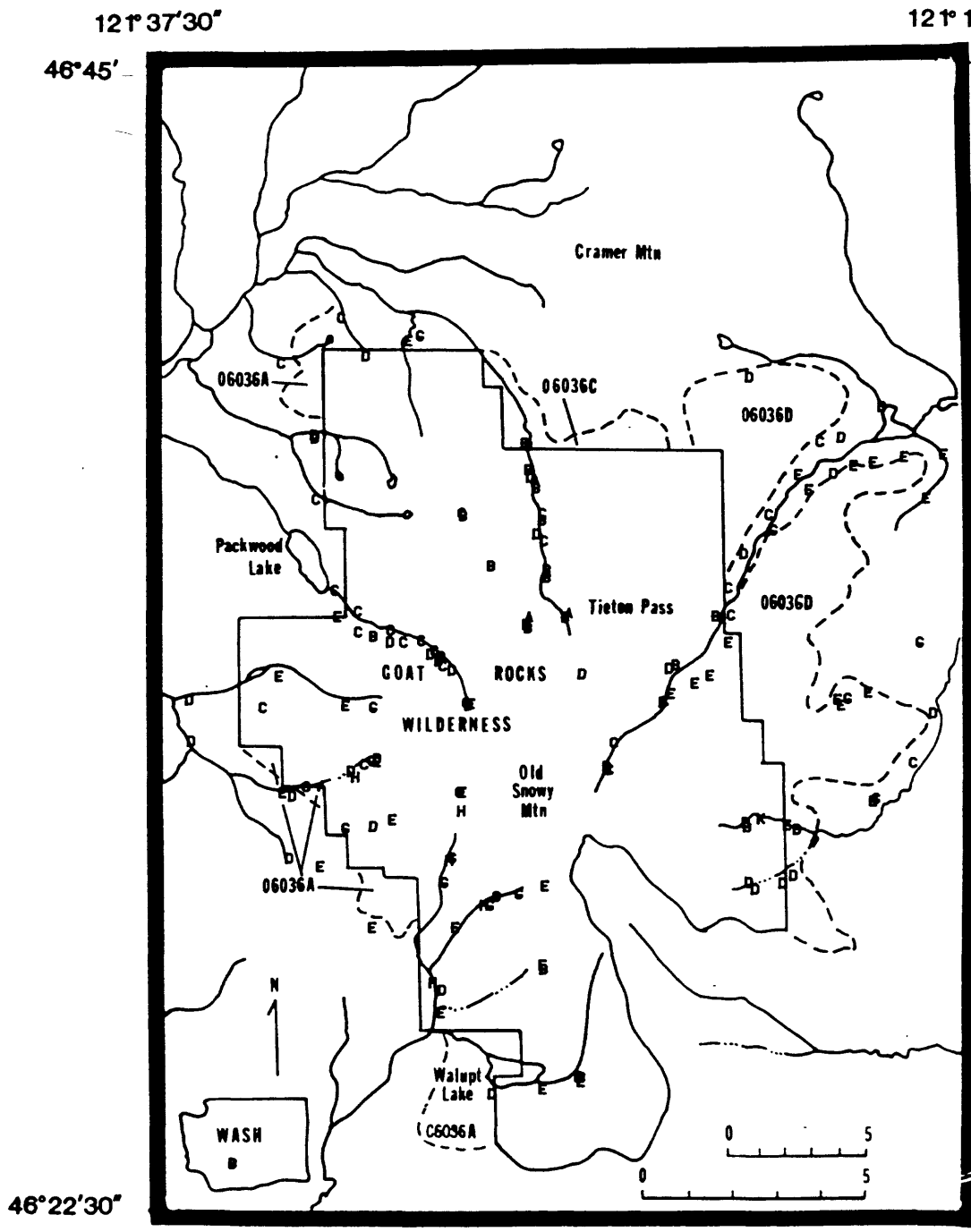

Figure 15.-Plot of aqua-regia leach/ICP analytical data for manganese from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 860-10,000 ppm; B, 610-850 ppm; C, 410-600 ppm; D, 260-400 ppm; E, 180-250 ppm; G, 130-170 ppm: H, 86-120 ppm; I, 61-85 ppm; J, 41-60 ppm; K, 20-40 ppm. Refer to table 11 for frequency distributions.

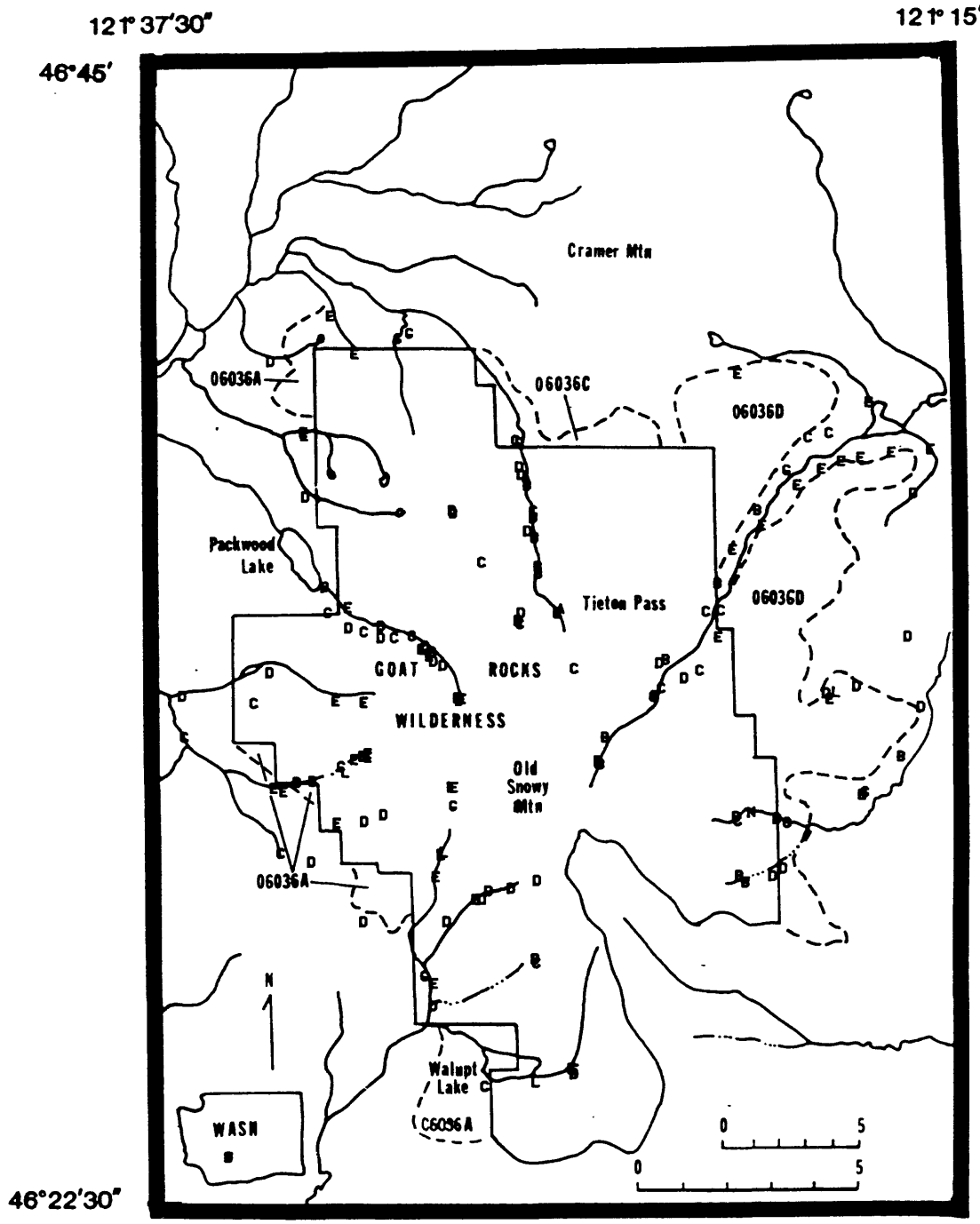

Figure 16.-Plot of aqua-regia leach/ICP analytical data for cobalt from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 26-50 ppm; B, 18-25 ppm; C, 13-17 ppm; D, 9.1-12 ppm; E, 6.1-9.0 ppm; G, 5.1-6.0 ppm; L, detected, but present at a concentration less than 5.0; N, concentration less than the detection limit. Refer to table 11 for frequency distributions.

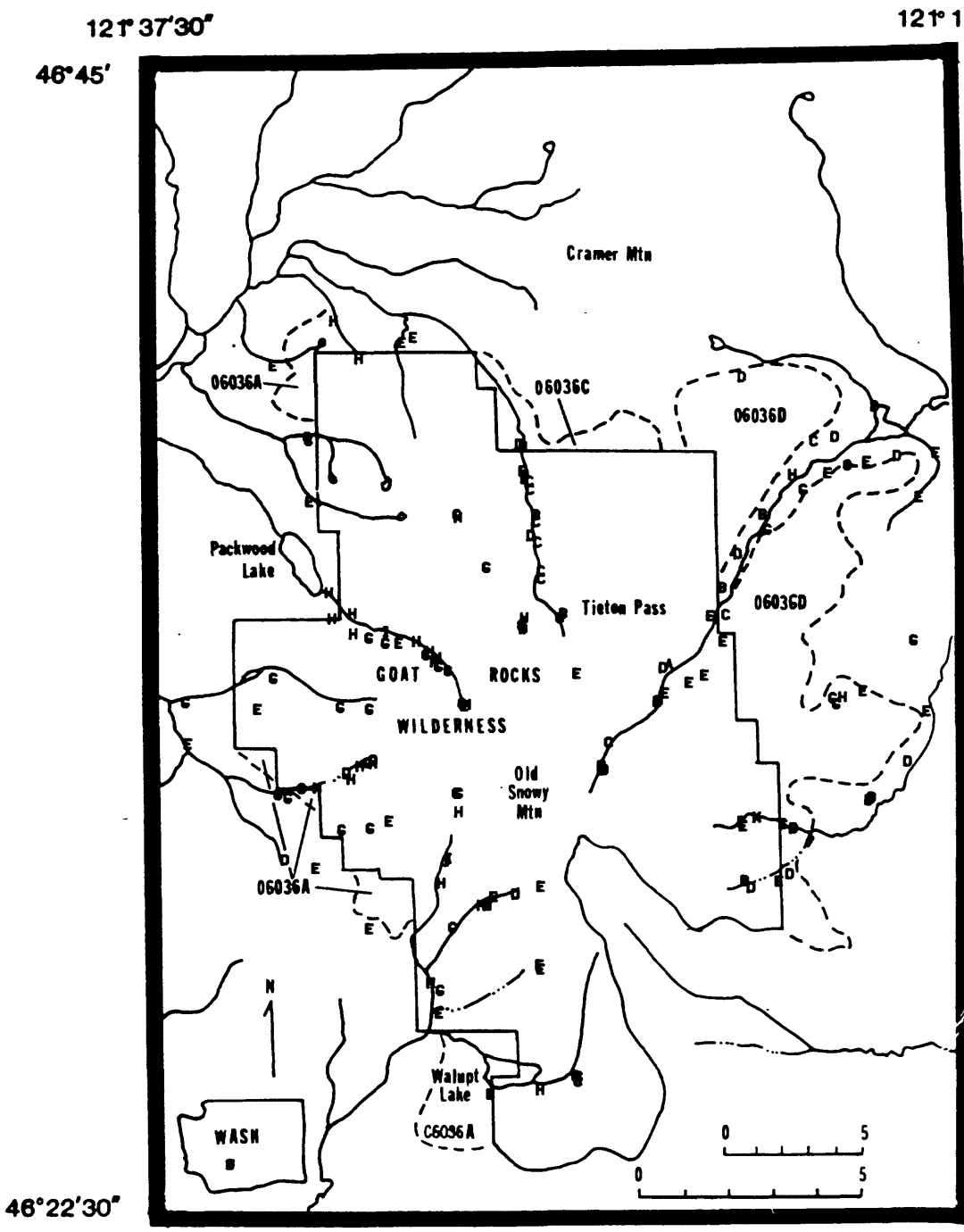

Figure 17.-Plot of aqua-regia leach/ICP analytical data for nickel from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 610-1500 ppm, B, 410-600 ppm; C, 260-400 ppm; D, 180-250 ppm; E, 130-170 ppm; G, 86-170 ppm; H, 61-85 ppm; I, 36-60 ppm; J, 26-35 ppm; K, 5-25 ppm. Refer to table 11 for frequency distributions.

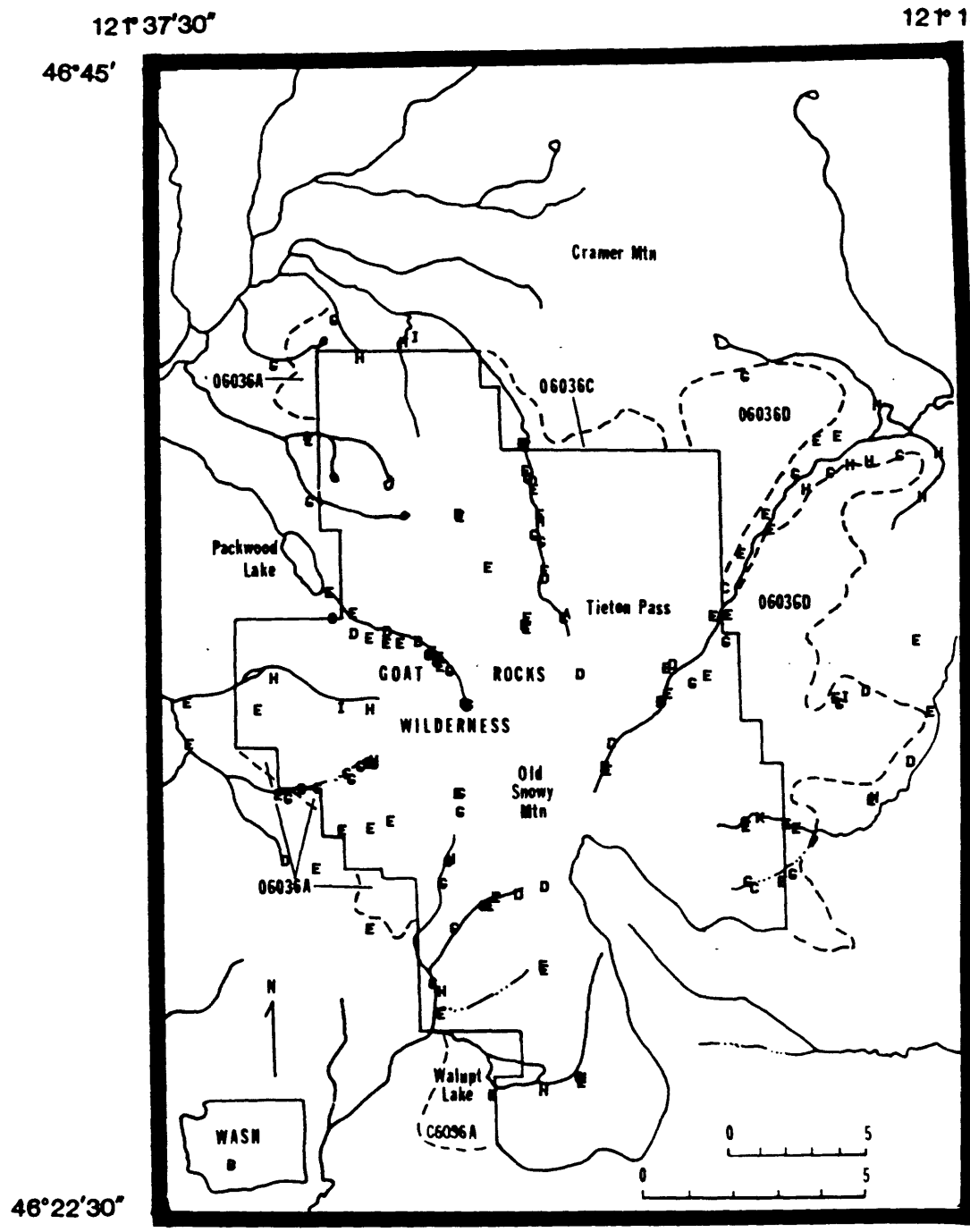

Figure 18.-Plot of aqua-regia leach/ICP analytical data for copper from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 130-500 ppm; B, 86-120 ppm; C, 61-85 ppm; D, 41-60 ppm; E, 25-40 ppm; G, 18-25 ppm; H, 13-17 ppm; I, 8.6-12.0 ppm; J, 6.1-8.5 ppm; K, 4-6 ppm. Refer to table 11 for frequency distributions.

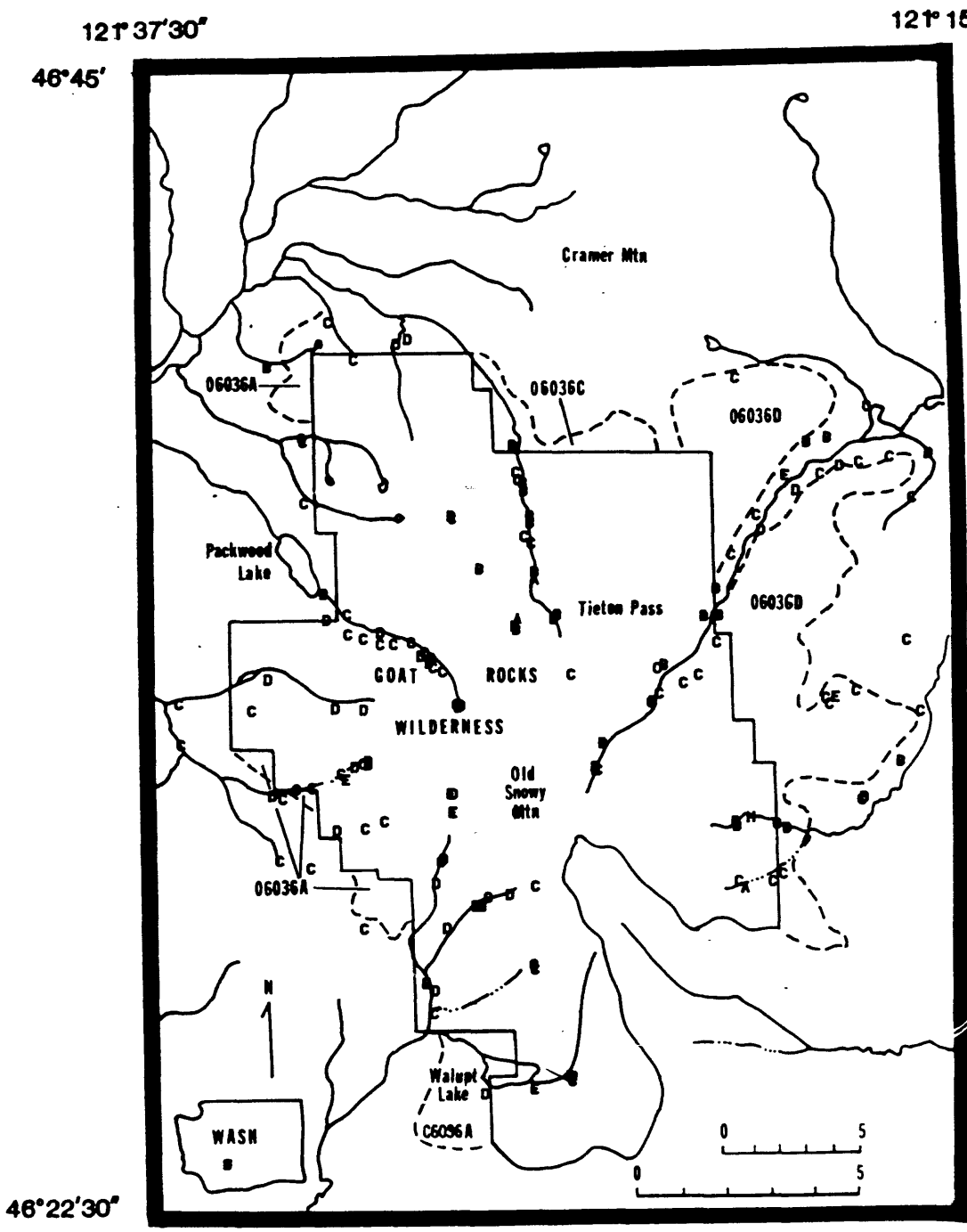

Figure 19.-Plot of aqua-regia leach/ICP analytical data for zinc from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 86-300 ppm; B, 61-85 ppm; C, 41-60 ppm; D, 26-40 ppm; E, 18-25 ppm; G, 13-17 ppm; H, 5-12 ppm. Refer to table 11 for frequency distributions.

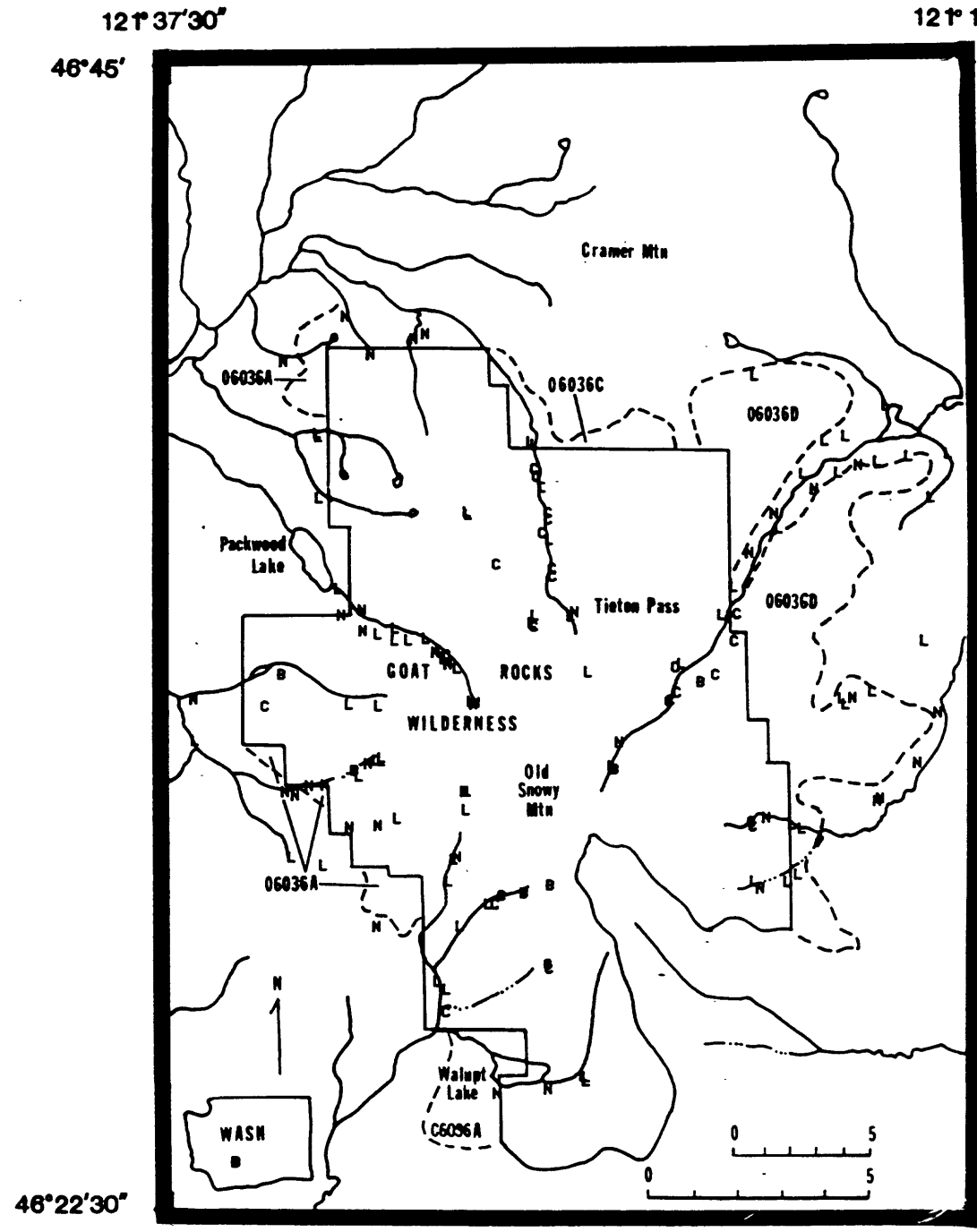

Figure 20.-Plot of aqua-regia leach/ICP analytical data for molybdenum from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 1.8-5.0 ppm; B, 1.3-1.7 ppm; C, 0.6-1.2 ppm; L, detected, but present at a concentration less than 0.6 ppm; N, concentration less than the detection limit. Refer to table 11 for frequency distributions.

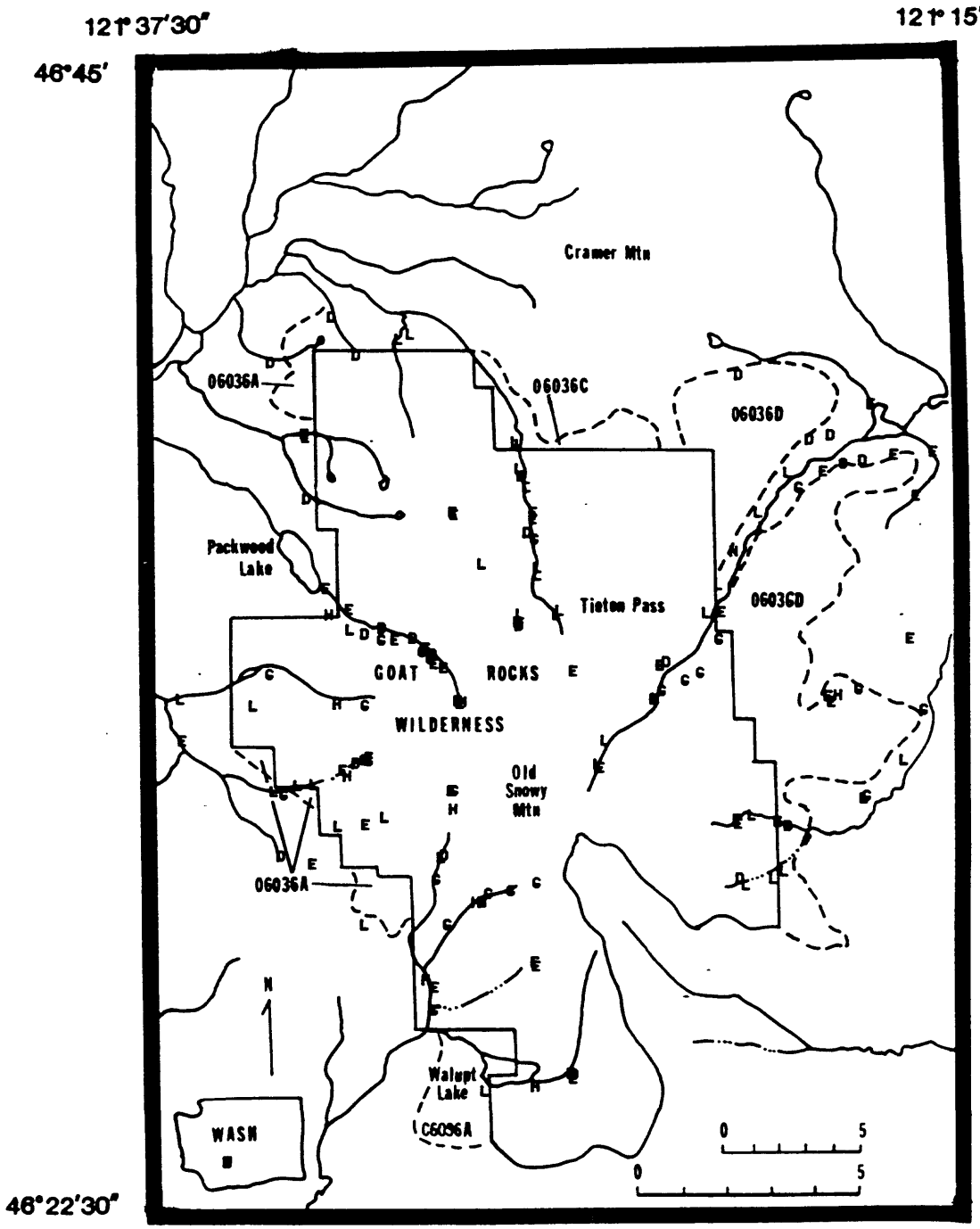

Figure 21.-Plot of aqua-regia leach/ICP analytical data for lead from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 36-100 ppm; B, 26-35 ppm; C, 18-25 ppm; D, 13-17 ppm; E, 8.6-12 ppm; G, 6.1-8.5 ppm; H, 3.0-6.0 ppm; L, detected, but present at a concentration less than 3.0 ppm; N, concentration less than the detection limit. Refer to table 11 for frequency distributions.

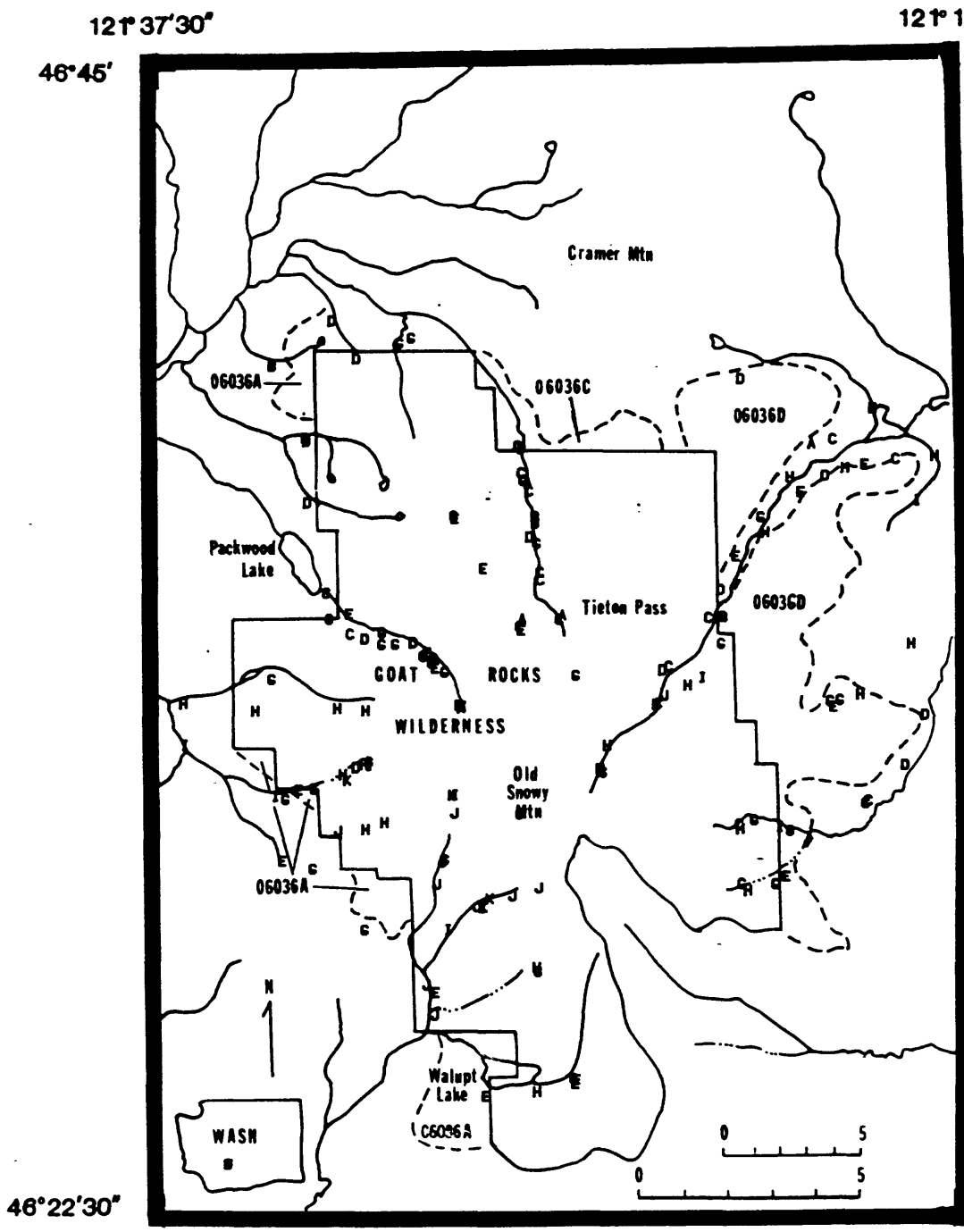

Figure 22.-Plot of aqua-regia leach/ICP analytical data for barium from stream sediments (Data Set A) collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 180-500 ppm; B, 130-170 ppm; C, 86-120 ppm; D, 61-85 ppm; E, 41-60 ppm; G, 26-40 ppm; H, 18-25 ppm; I, 13-17 ppm; J, 8.6-12 ppm; K, 5.0-8.6 ppm. Refer to table 11 for frequency distributions.

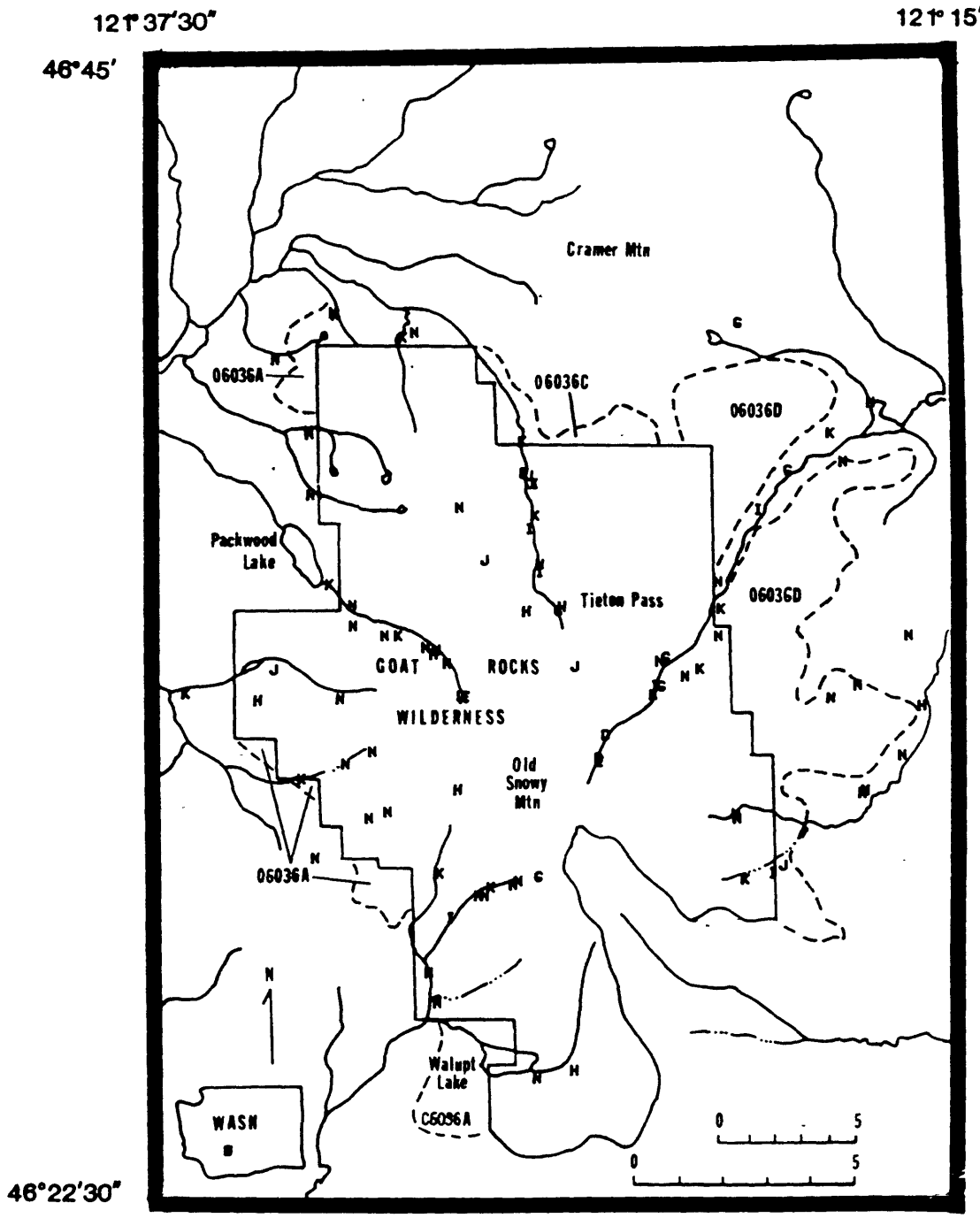

Figure 23.-Plot of spectrographic analytical data for cobalt from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-300 ppm, B-200 ppm, C-150 ppm, D-100 ppm, E-70 ppm, G-50 ppm, H-30 ppm, I-20 ppm, J-15 ppm, K-10 ppm, N-concentration less than the detection limit.

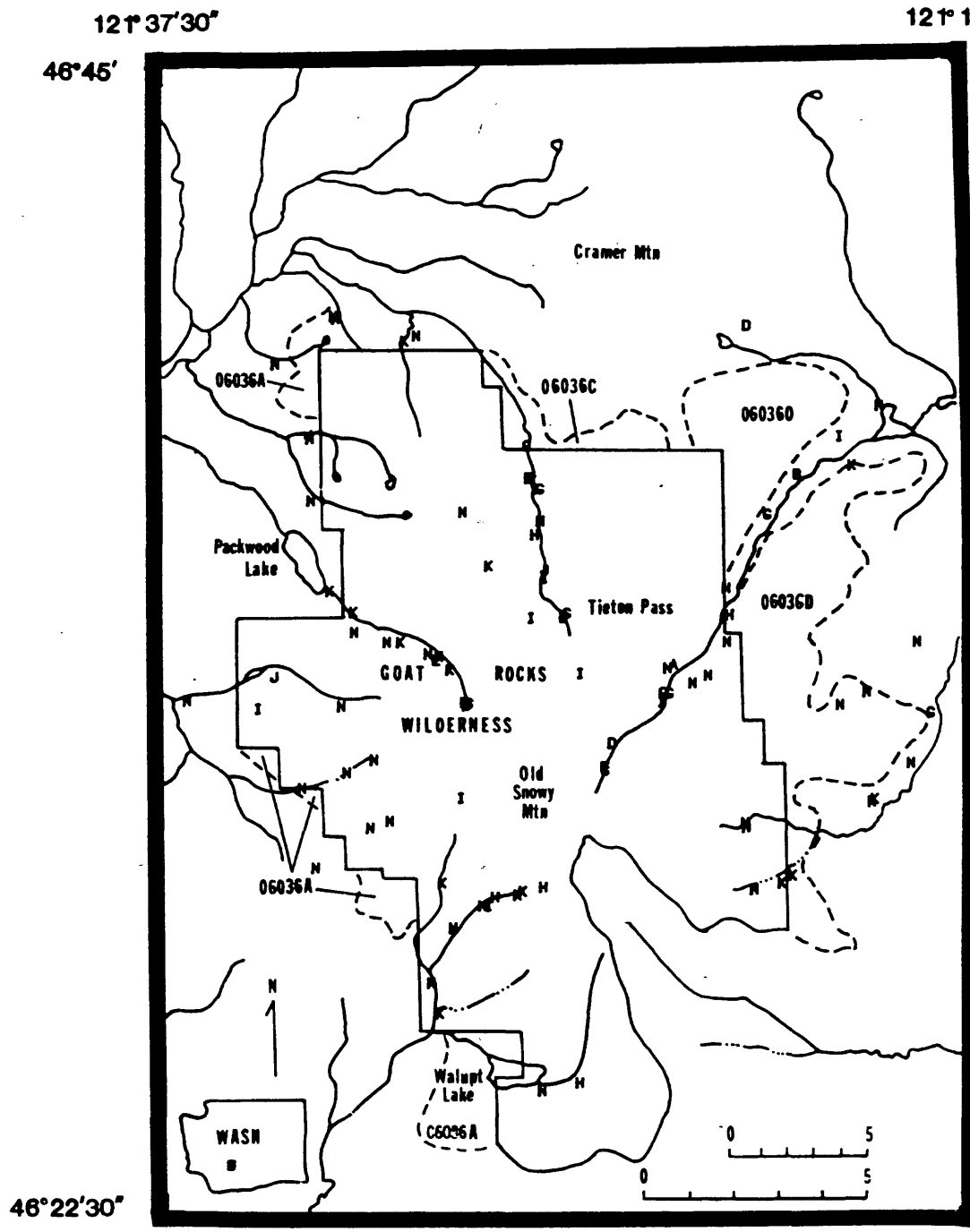

Figure 24.-Plot of spectrographic analytical data for nickel from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-300 ppm, B-200 ppm, D-100 ppm, E-70 ppm, G-50 ppm, H-30 ppm, I-20 ppm, J-15 ppm, K-10 ppm, N, concentrations less than the detection limit.

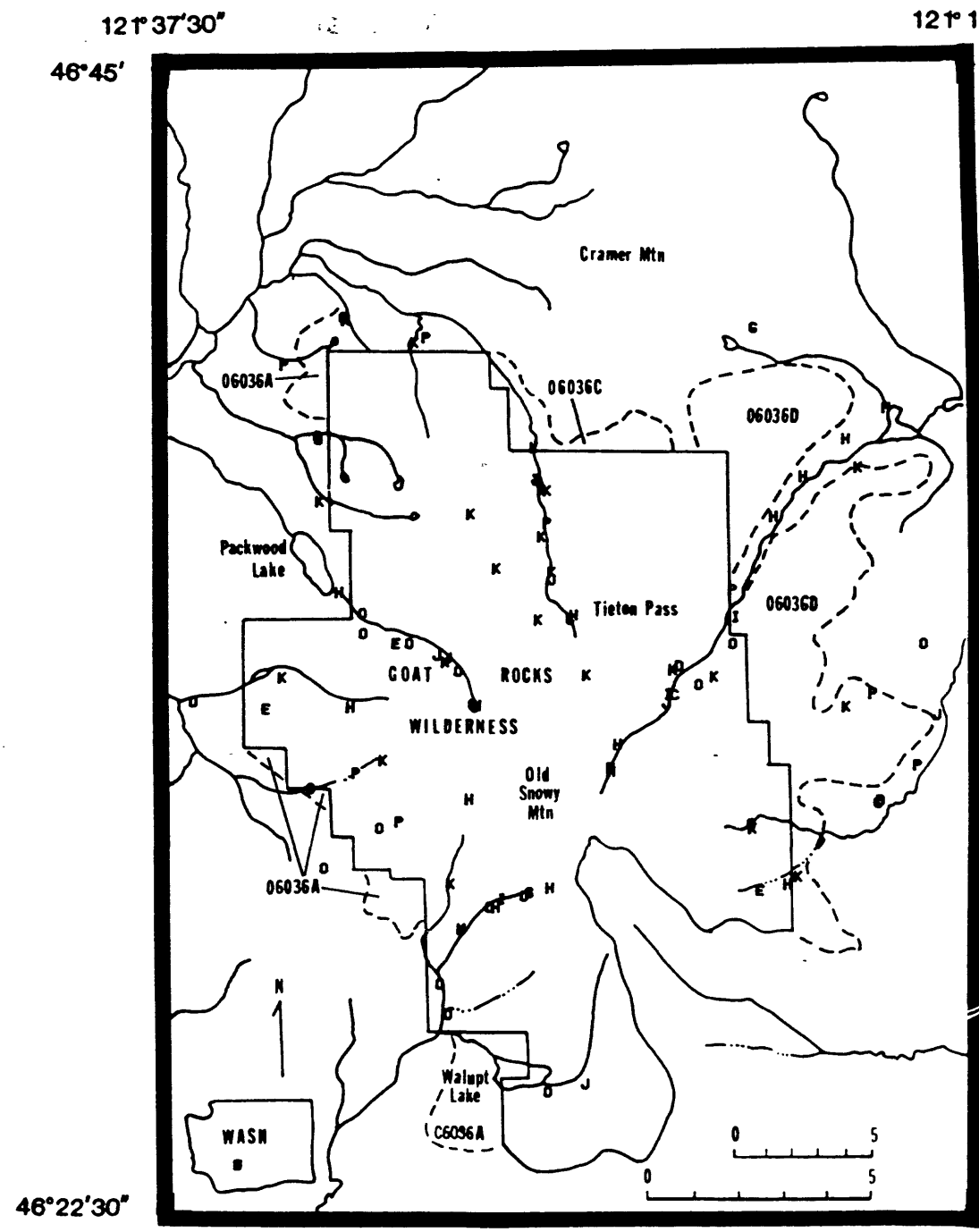

Figure 25.-Plot of spectrographic analytical data for copper from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-1000 ppm, C-500 ppm, D-300 ppm, E-200 ppm, G-150 ppm, H-100 ppm, I-70 ppm, J-50 ppm, K-30 ppm, O-20 ppm, P-15 ppm, Q-10 ppm.

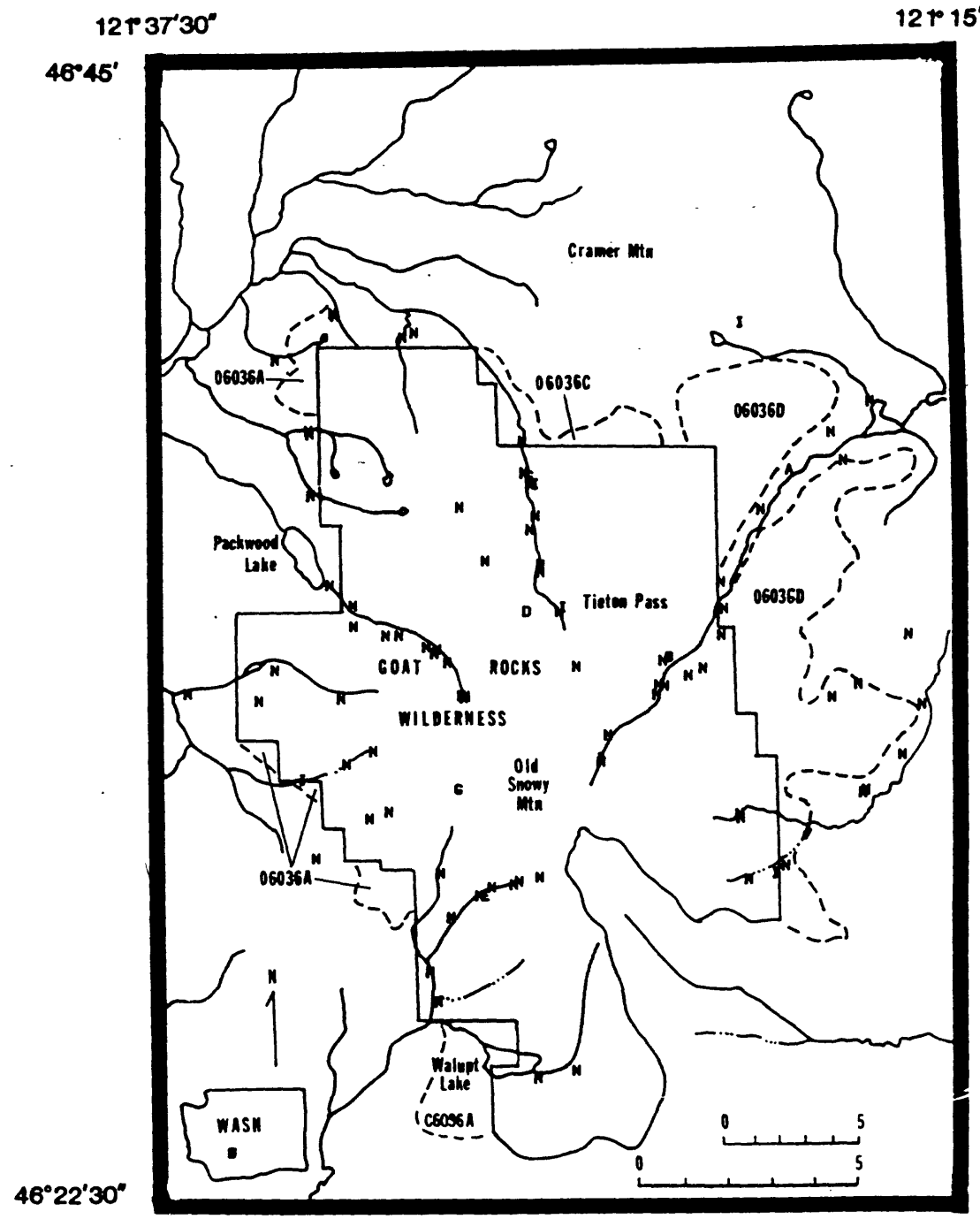

Figure 26.-Plot of spectrographic analytical data for zinc from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-7000 ppm, B-5000 ppm, D-2000 ppm, E-1500 ppm, G-1000 ppm, I-500 ppm, N-concentration less than the detection limit.

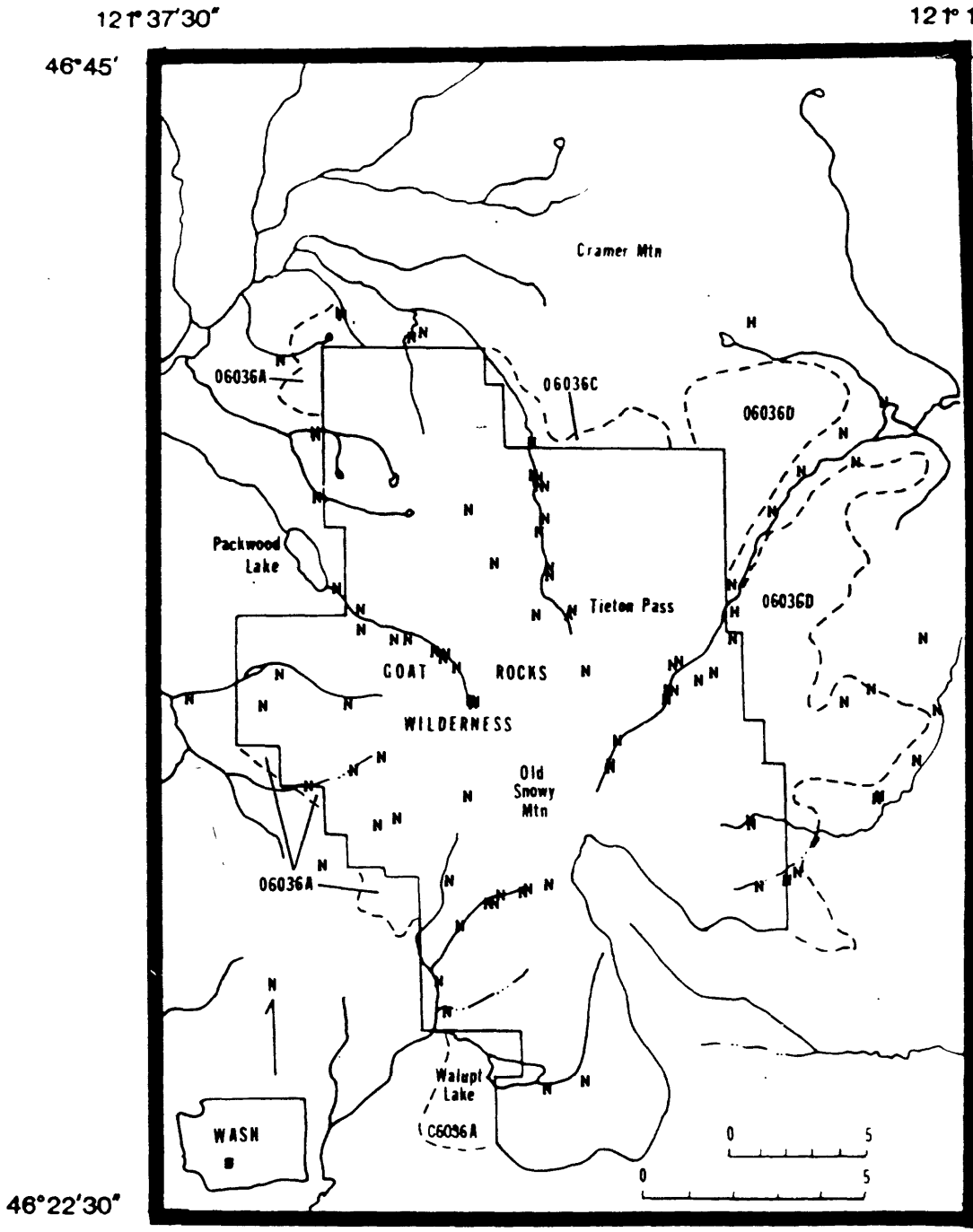

Figure 27.-Plot of spectrographic analytical data for molybdenum from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-100 ppm, E-20 ppm, H-10 ppm, N-concentration less than the detection limit.

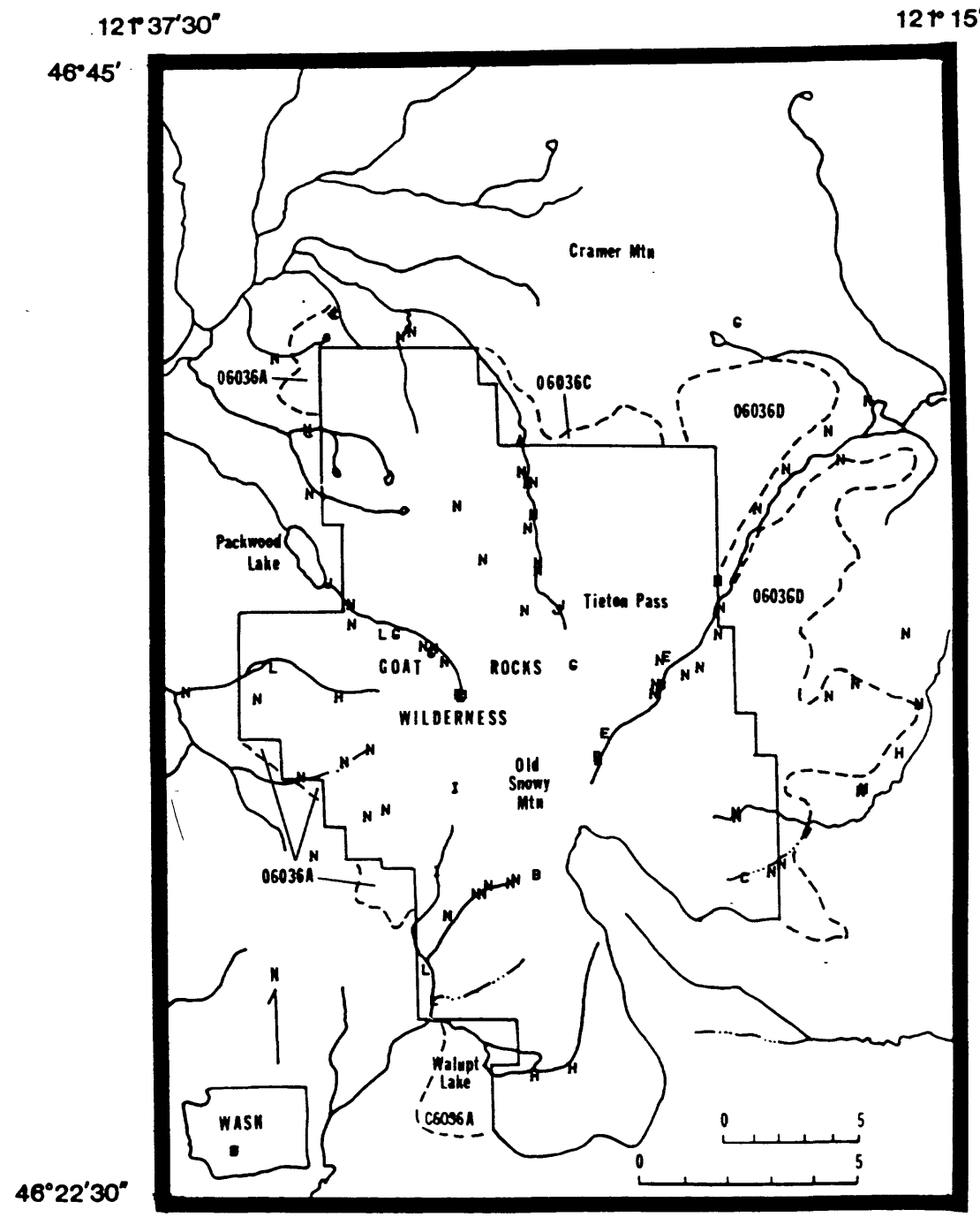

Figure 28.-Plot of spectrographic analytical data for lead from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrograhic interval are as follows: A-500 ppm, B-300 ppm, C-200 ppm, E-100 ppm, G-70 ppm, H-50 ppm, I-30 ppm, J-20 ppm, L-detected, but present at a concentration less than 20 ppm, N-concentration less than the detection limit.

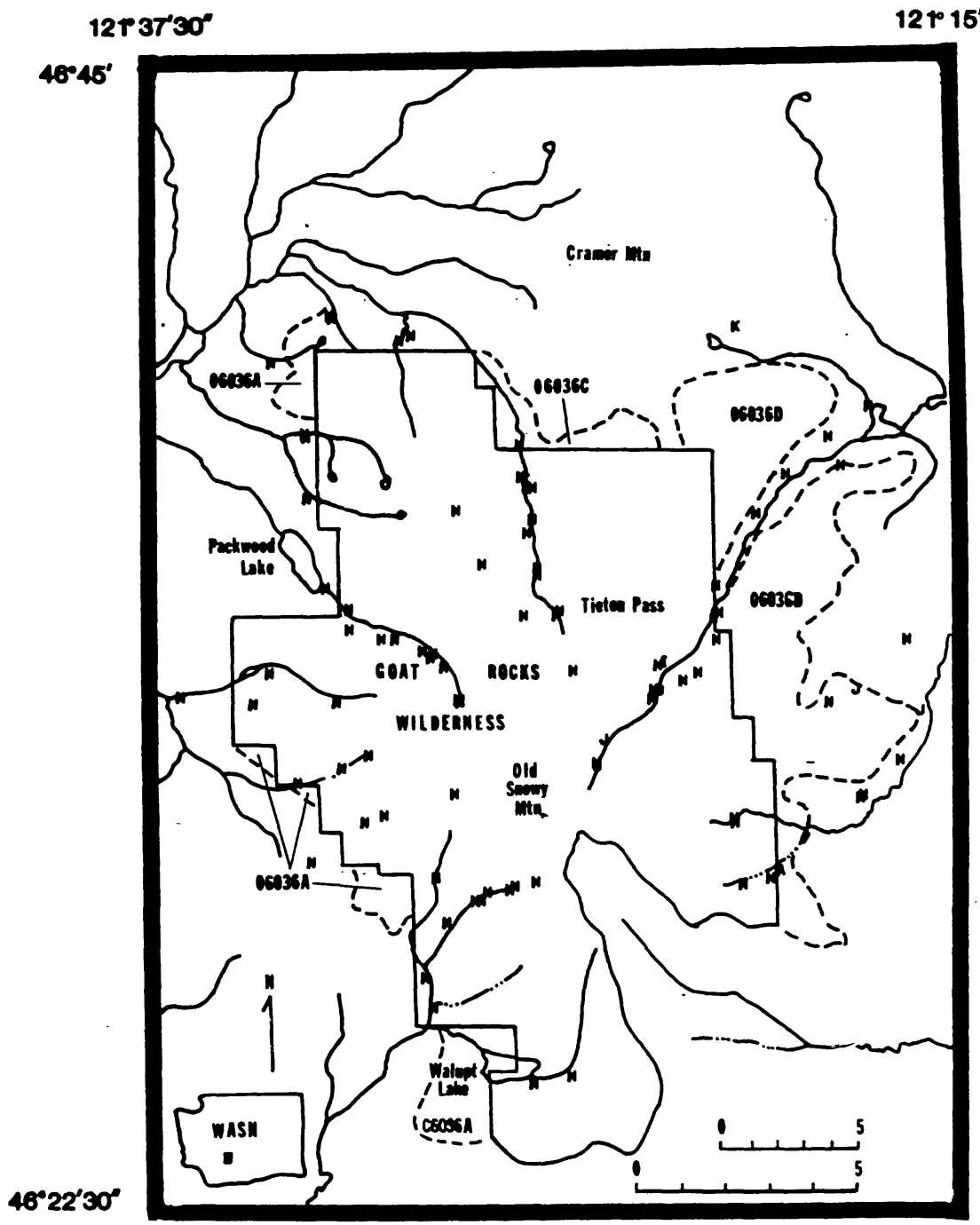

Figure 29.-Plot of spectrographic analytical data for tin from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-700 ppm, B-500 ppm, I-50 ppm, J-30 ppm, K-20 ppm, N-concentration less than the detection limit.

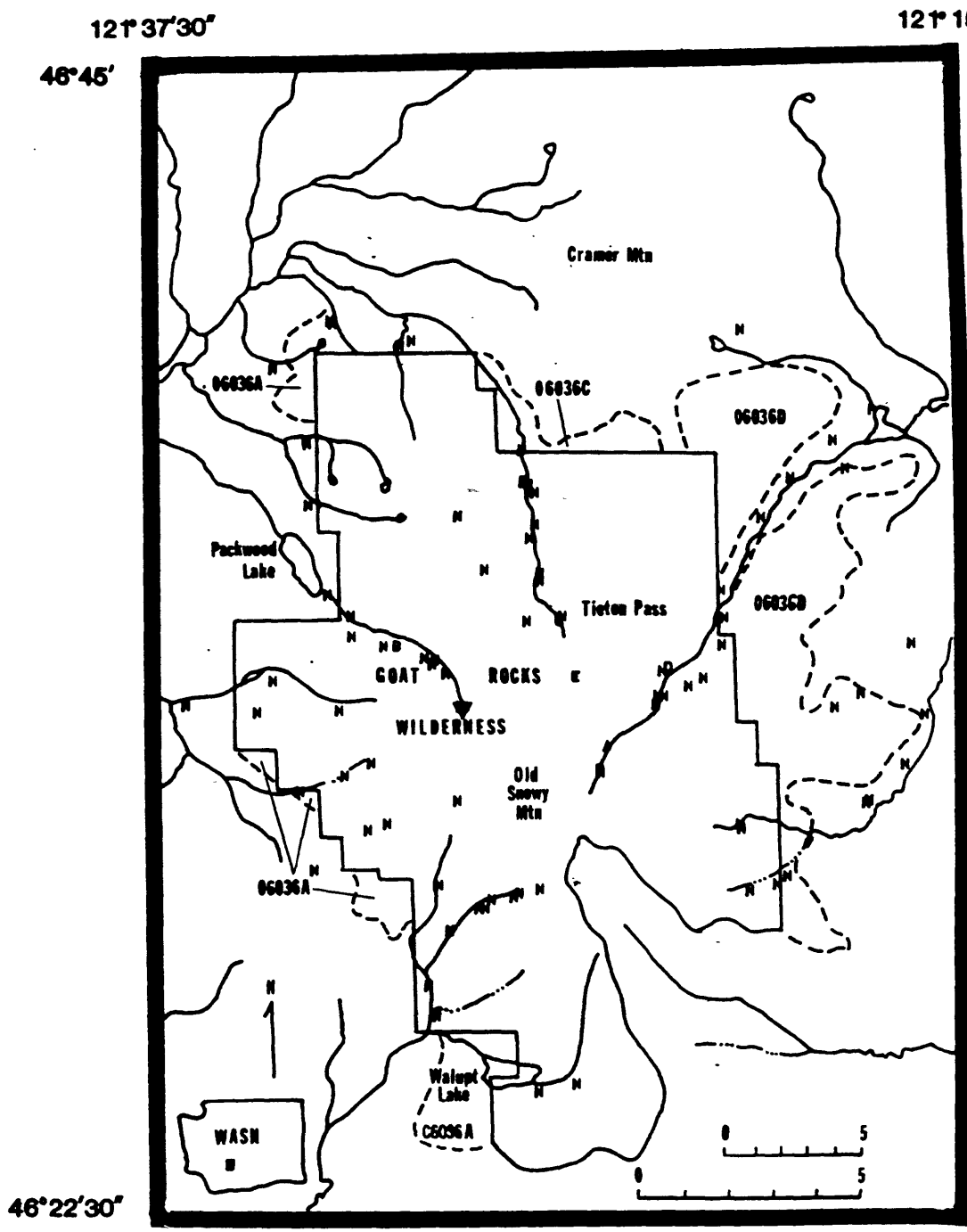

Figure 30.-Plot of spectrographic analytical data for arsenic from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: -present at a concentration greater than 2000 ppm, A-2000 ppm, B, 1500 ppm, C-1000 ppm, D-700 ppm, E-500 ppm, N-concentration less than the detection limit.

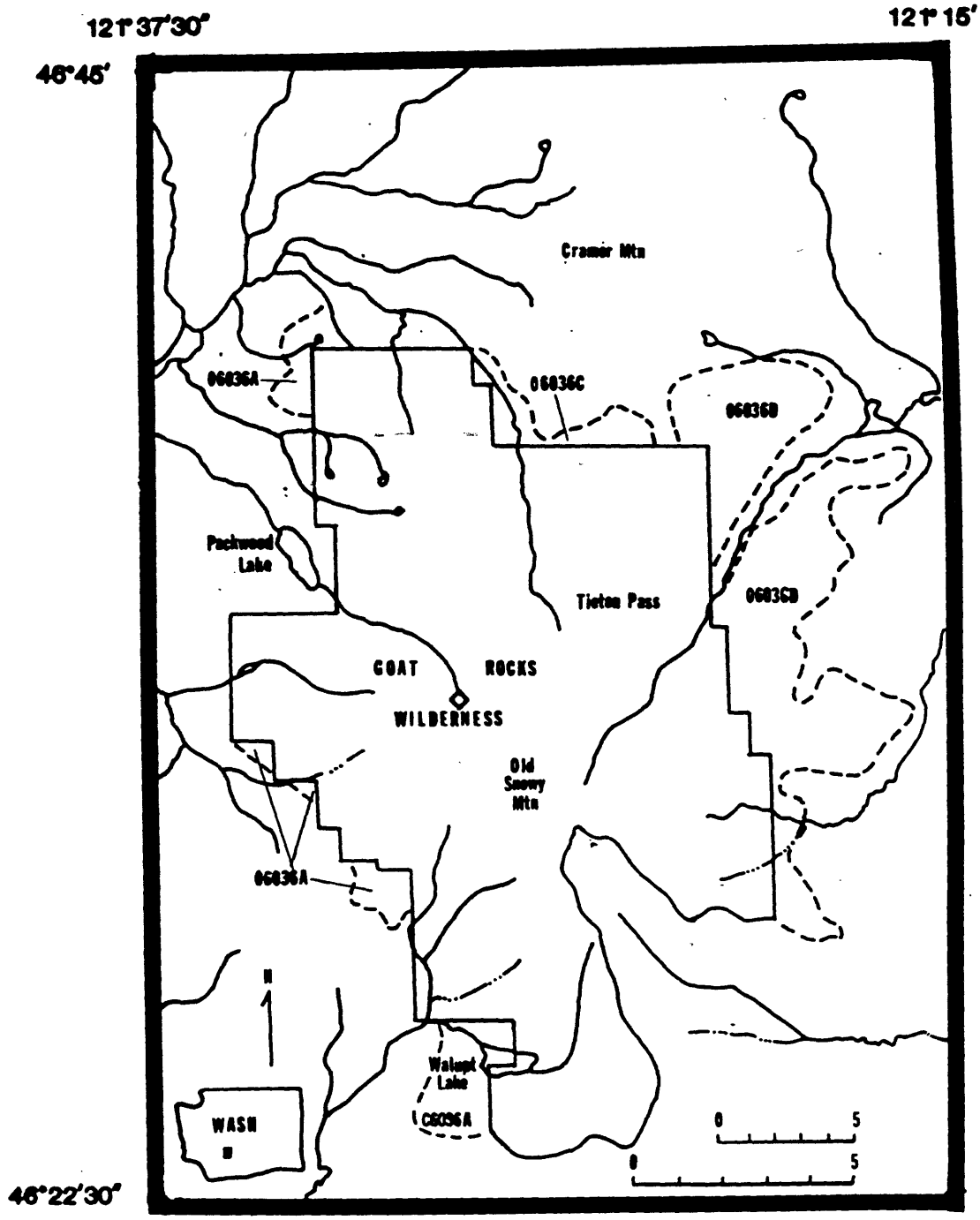

Figure 31.-Plot of spectrographic analytical data for antimony from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval area as follows:◇ -200 ppm.

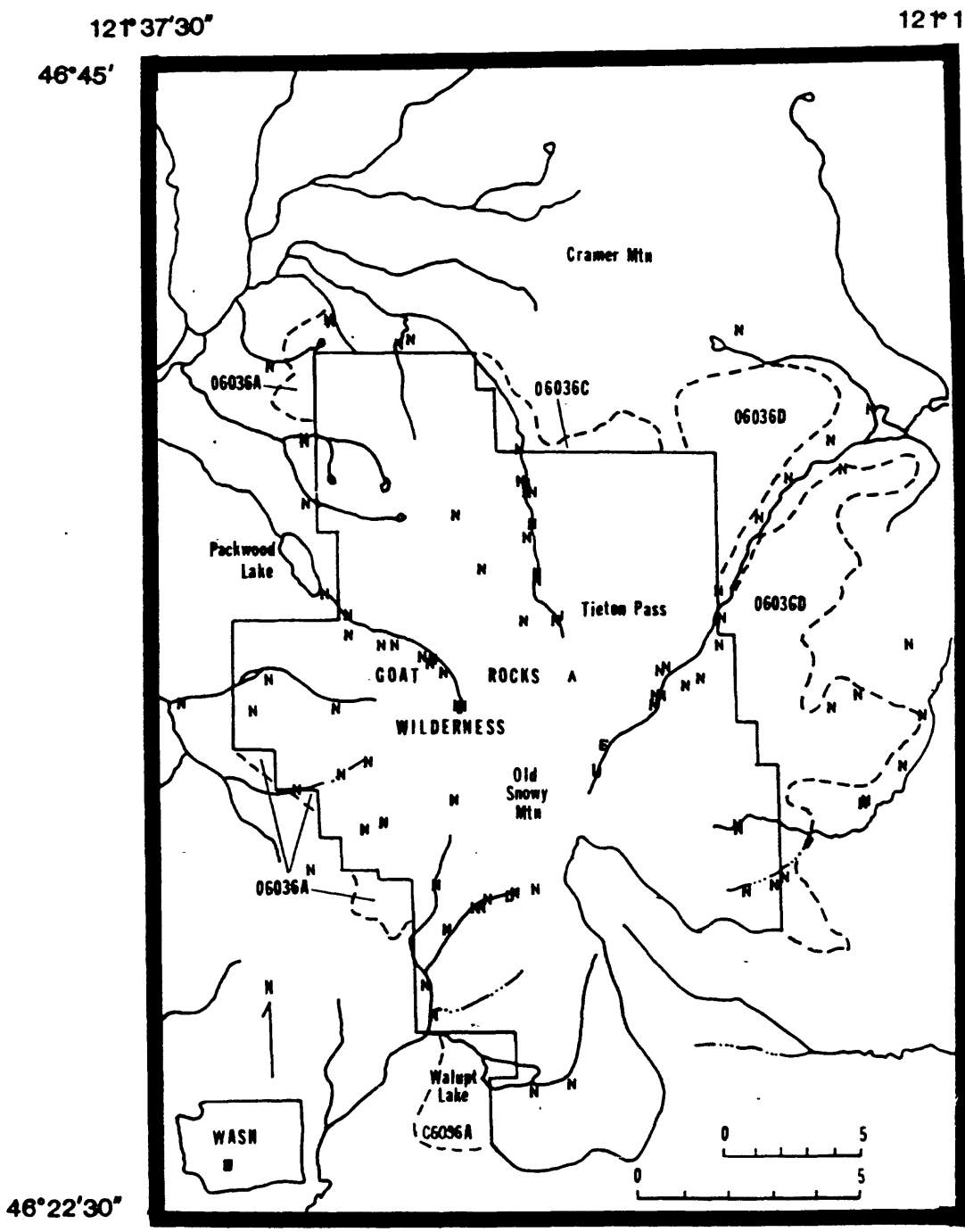

Figure 32.-Plot of spectrographic analytical data for bismuth from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-1000 ppm, B-700 ppm, C-500 ppm, D-300 ppm, E-200 ppm, G-150 ppm, H-100 ppm, J-70 ppm, J-50 ppm, L-detected, but present at a concentration less than 50 ppm, N-concentration less than detection limit.

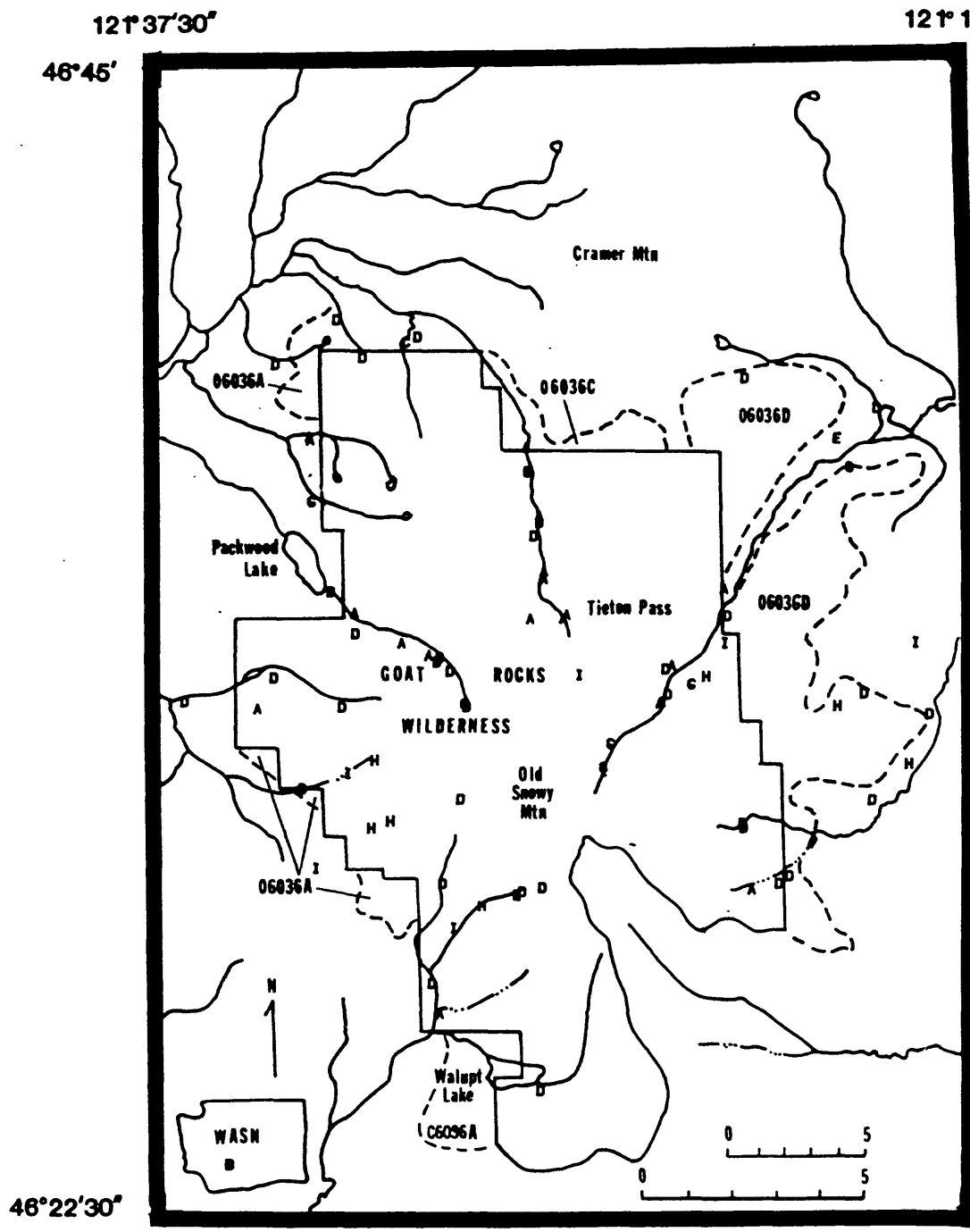

Figure 33.-Plot of atomic absorption data for mercury from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each interval are as follows: A-present at a concentration greater than 3.0 ppm, B-3.0 ppm, C-2.0 ppm, D-1.0 ppm, E-0.07 ppm, G-0.05 ppm, H-0.03 ppm, I-0.02 ppm.

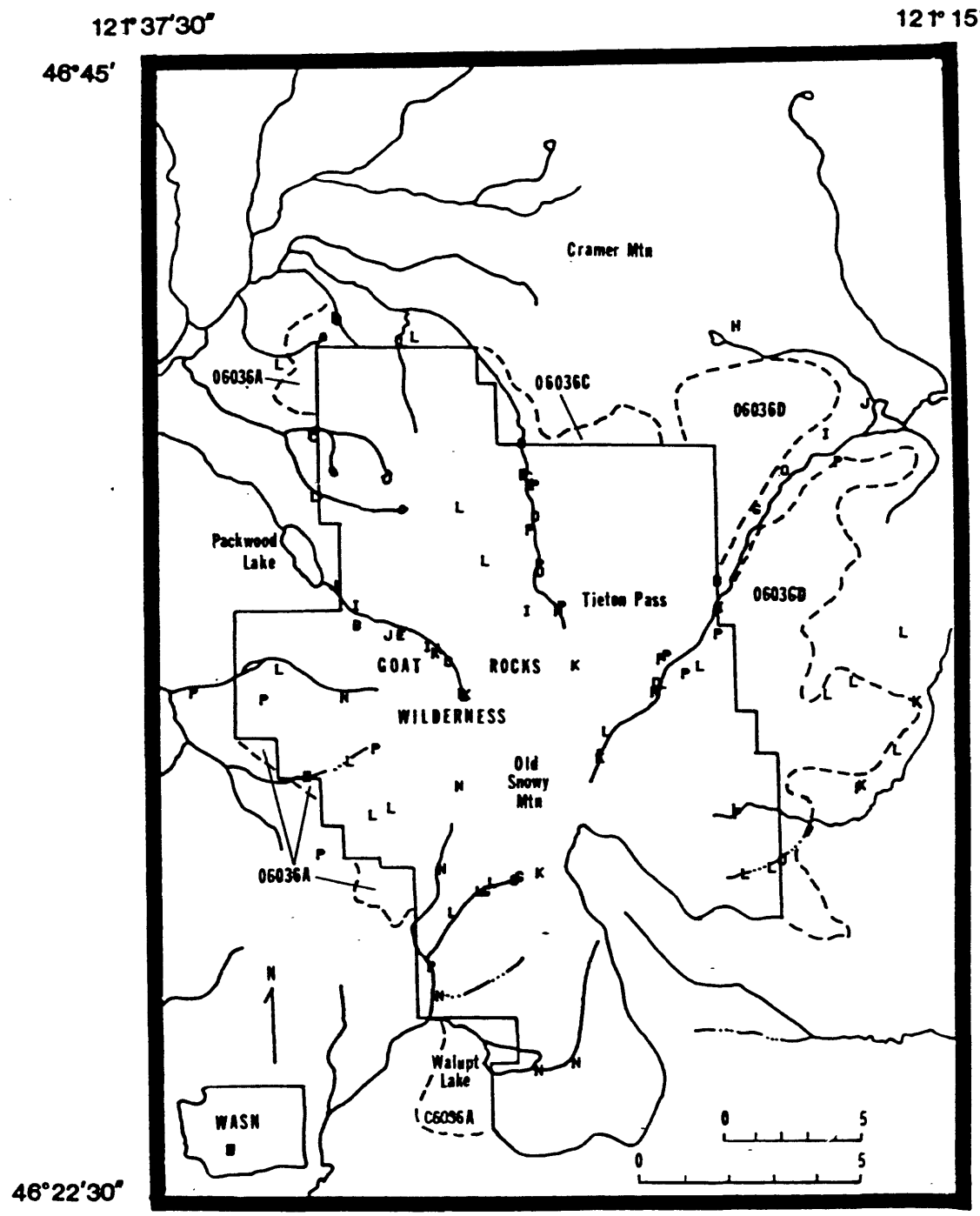

Figure 34.-Plot of spectrographic analytical data for boron from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-present at a concentration greater than 1000 ppm, B-1000 ppm, C-700 ppm, D-500 ppm, E-300 ppm, G-200 ppm, M-150 ppm, J-100 ppm, J-70 ppm, K-50 ppm, O-30 ppm, P-20 ppm, L-detected, but at a concentration less than 20 ppm, N-concentration less than the detection limit.

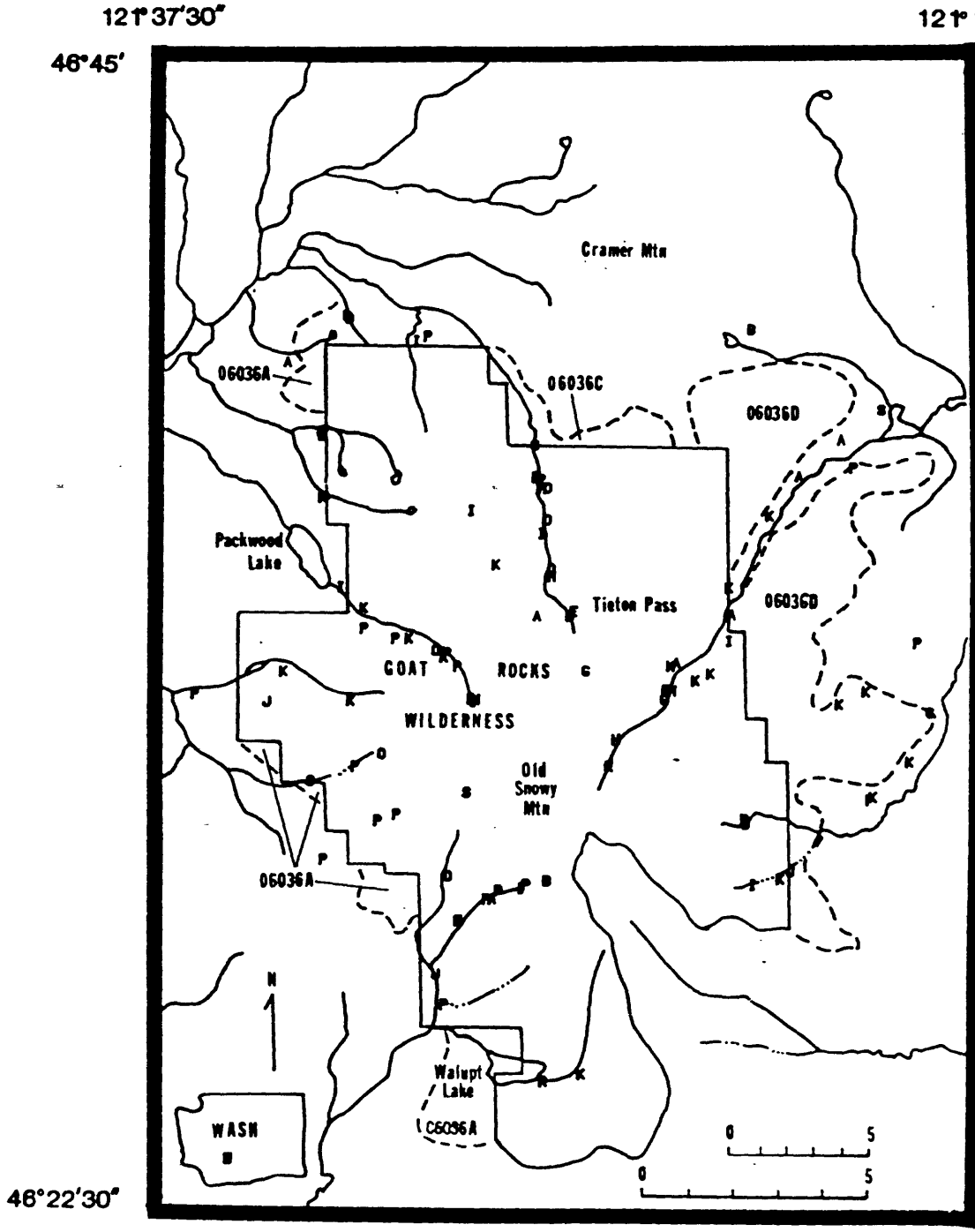

Figure 35. Plot of spectrographic analytical data for barium from the nonmagnetic, heavy-mineral fraction from panned concentrates from stream sediments collected in the Goat Rocks study area. Concentrations for each spectrographic interval are as follows: A-present at a concentration greater than 10,000 ppm, B-10,000 ppm, C-7000 ppm, D-5000 ppm, E-3000 ppm, G-2000 ppm, H-1500 ppm, I-1000 ppm, J-700 ppm, K-500 ppm, O-300 ppm, P-200 ppm, R-150 ppm, S-100 ppm.

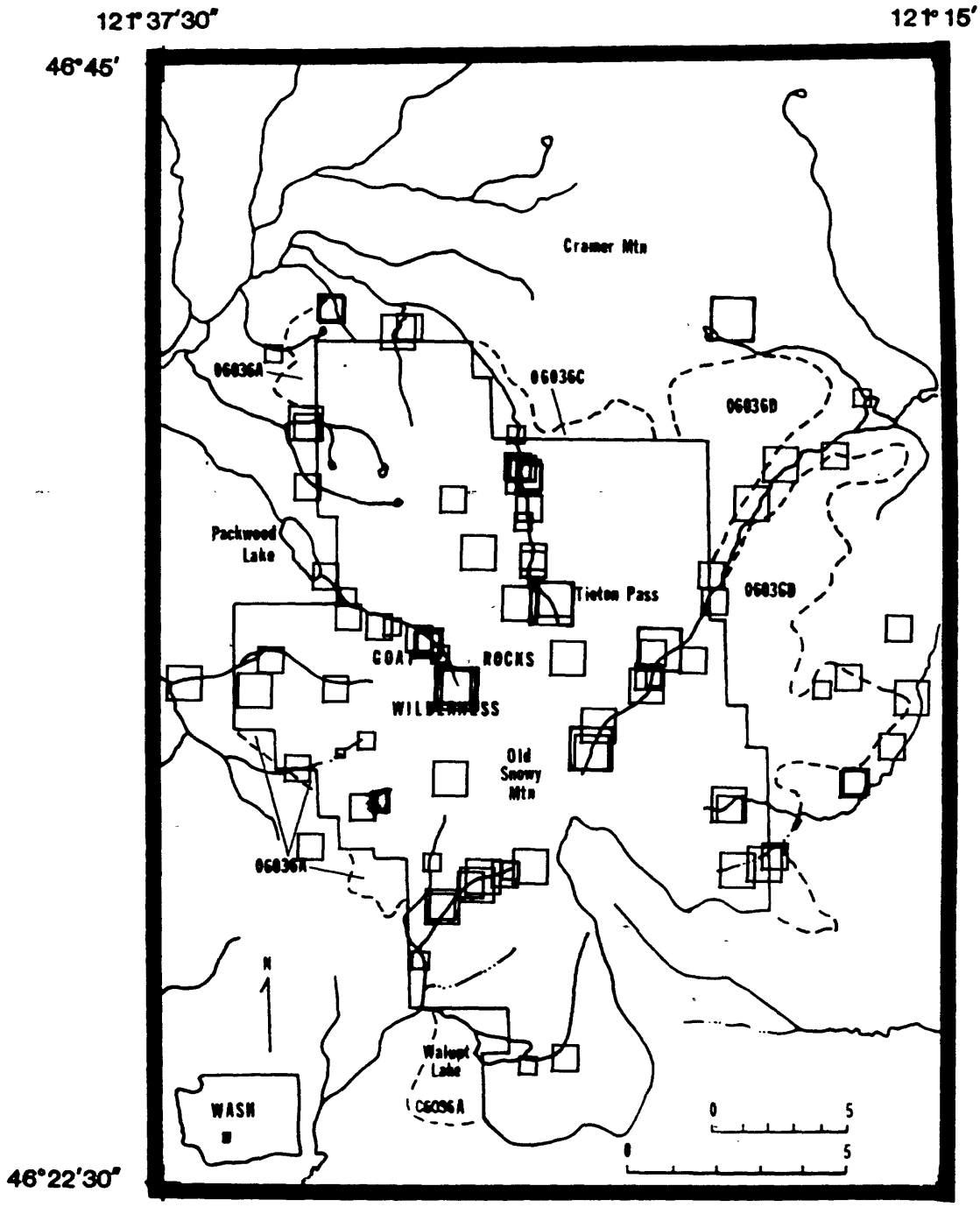

Figure 36.-Plot of pyrite in the nonmagnetic, heavy-mineral fraction from the panned concentrates from stream sediments collected in the Goat Rocks study area. Abundance of pyrite identified in the nonmagnetic, heavy-mineral fraction are as follows: ▫ -less than 2%; ☐-greater than 2%;☐-greater than 5%;☐-greater than 20%;☐-greater than 50%.

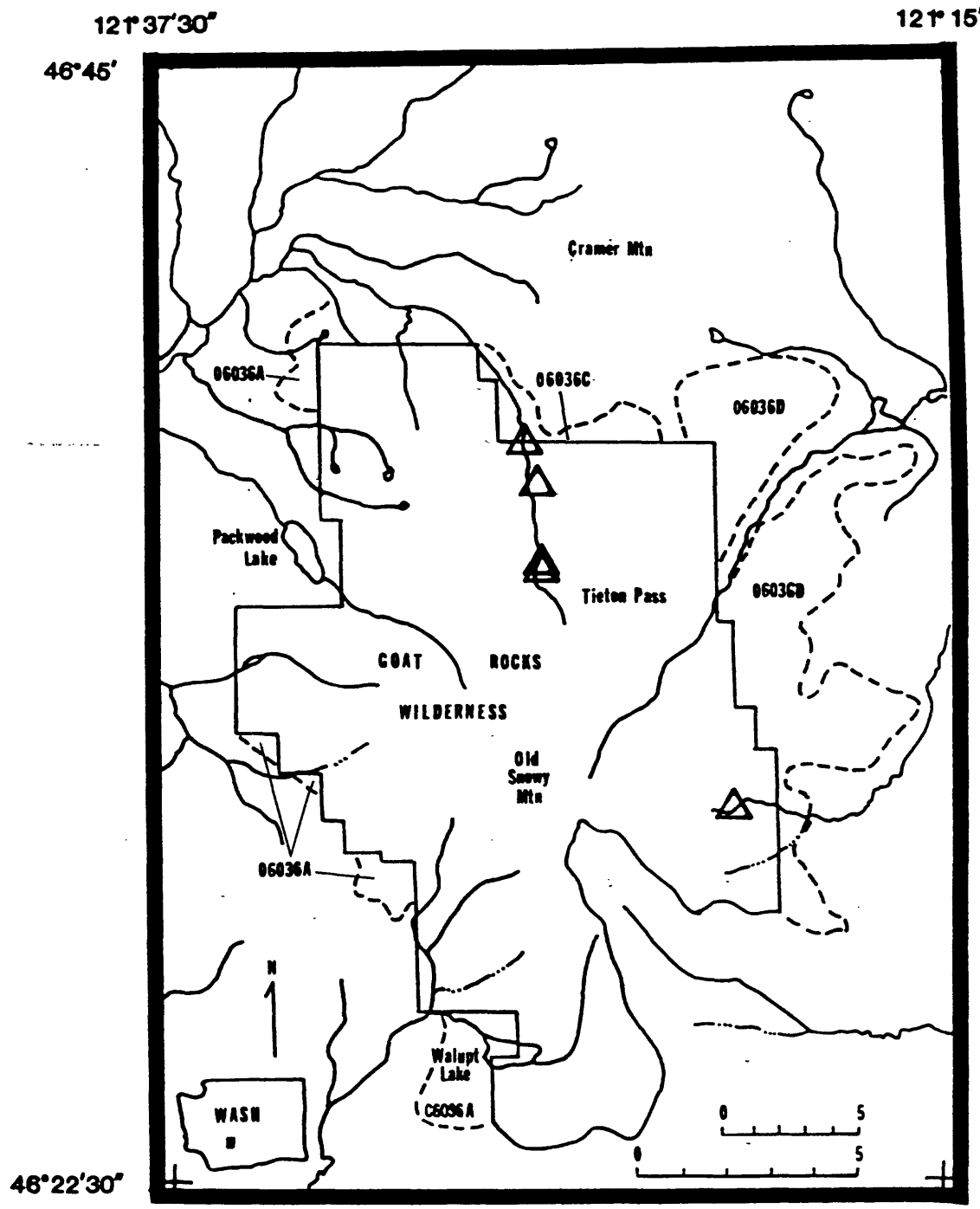

Figure 37.-Plot of realgar and cinnabar in the nonmagnetic, heavy-mineral fraction from the panned concentrates from stream sediments collected in the Goat Rocks study area. Abundance of realgar and cinnabar tentatively identified in the nonmagnetic, heavy-mineral fraction are as follows △-less than 2%; △-greater than 2% but less than 5%.

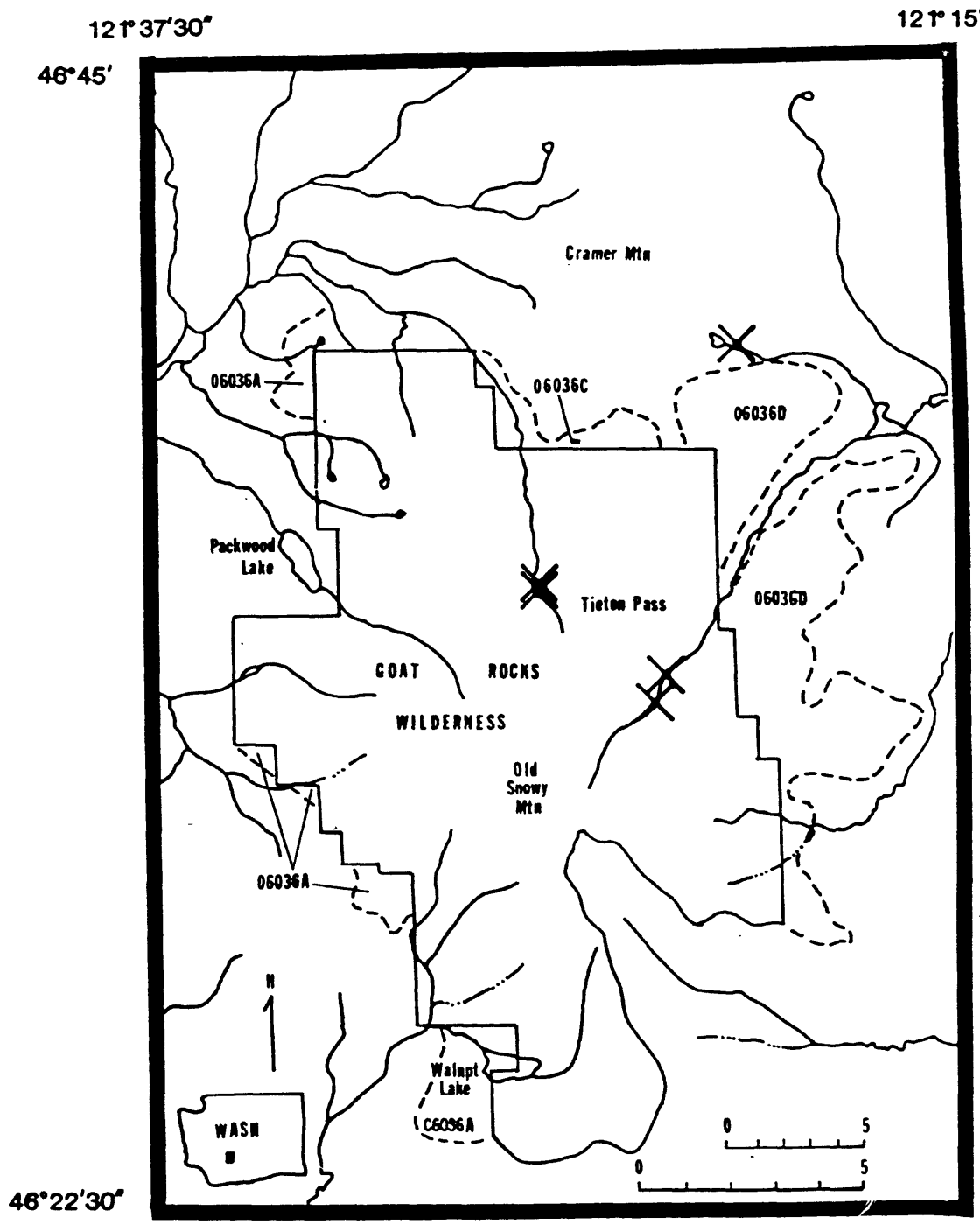

Figure 38.-Plot of barite in the nonmagnetic, heavy-mineral fraction from the panned concentrates from stream sediments collected in the Goat Rocks study area. Abundance of barite tentatively identified in the nonmagnetic, heavy-mineral fraction are as follows: × -less than 2%; ✕ -greater than 2%.

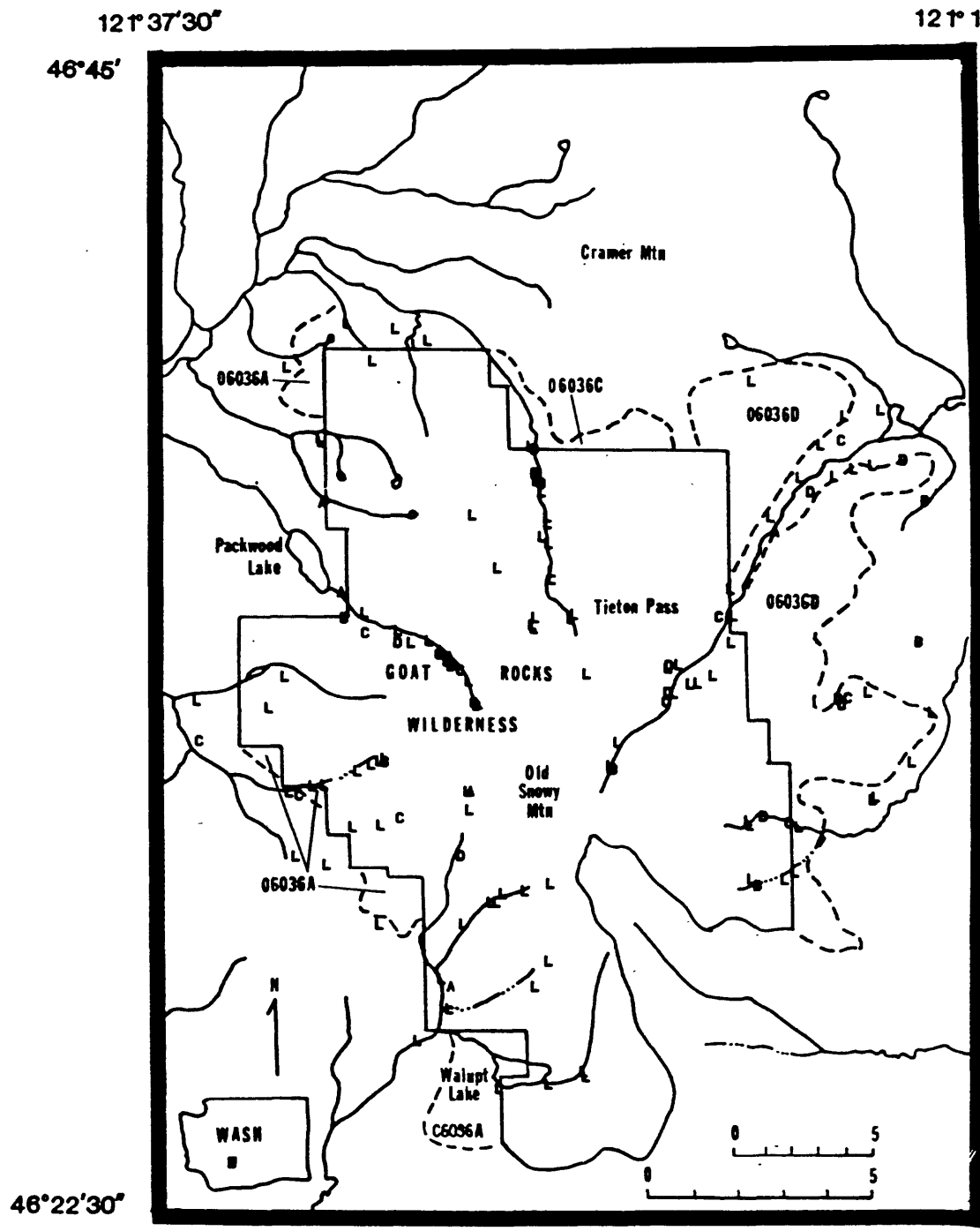

Figure 39.-Plot of analytical data for copper from water samples collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, present at a concentration greater than 0.0025 ppm; B, 0.0015-0.0025 ppm; C, 0.0010-0.0015 ppm; D, 0.0010 ppm; L, detected, but present at-less than 0.0010 ppm.

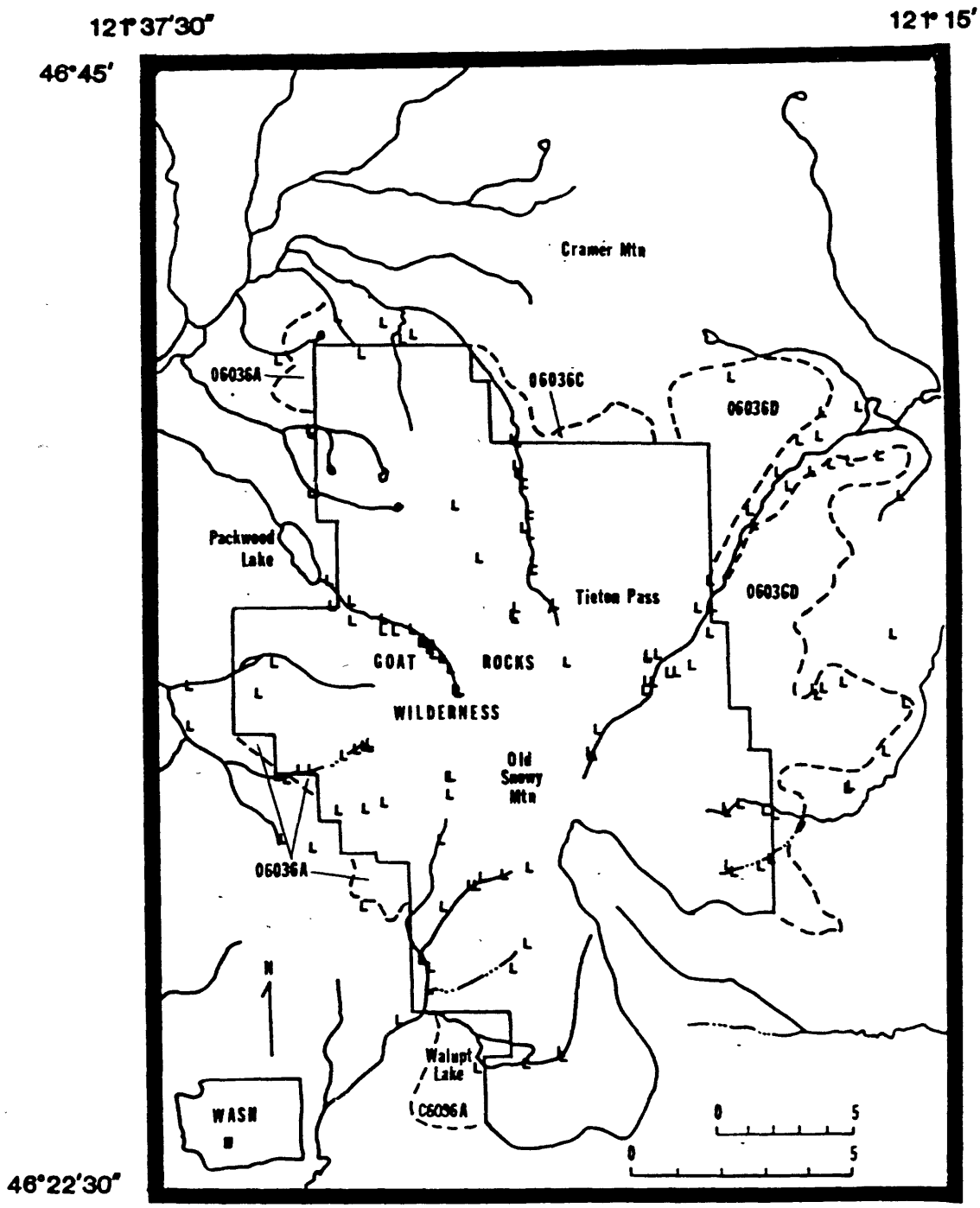

Figure 40.-Plot of analytical data for molybdenum from water samples collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, present at concentrations greater than 0.001 ppm; L, detected, but present at concentrations less than 0.001 ppm.

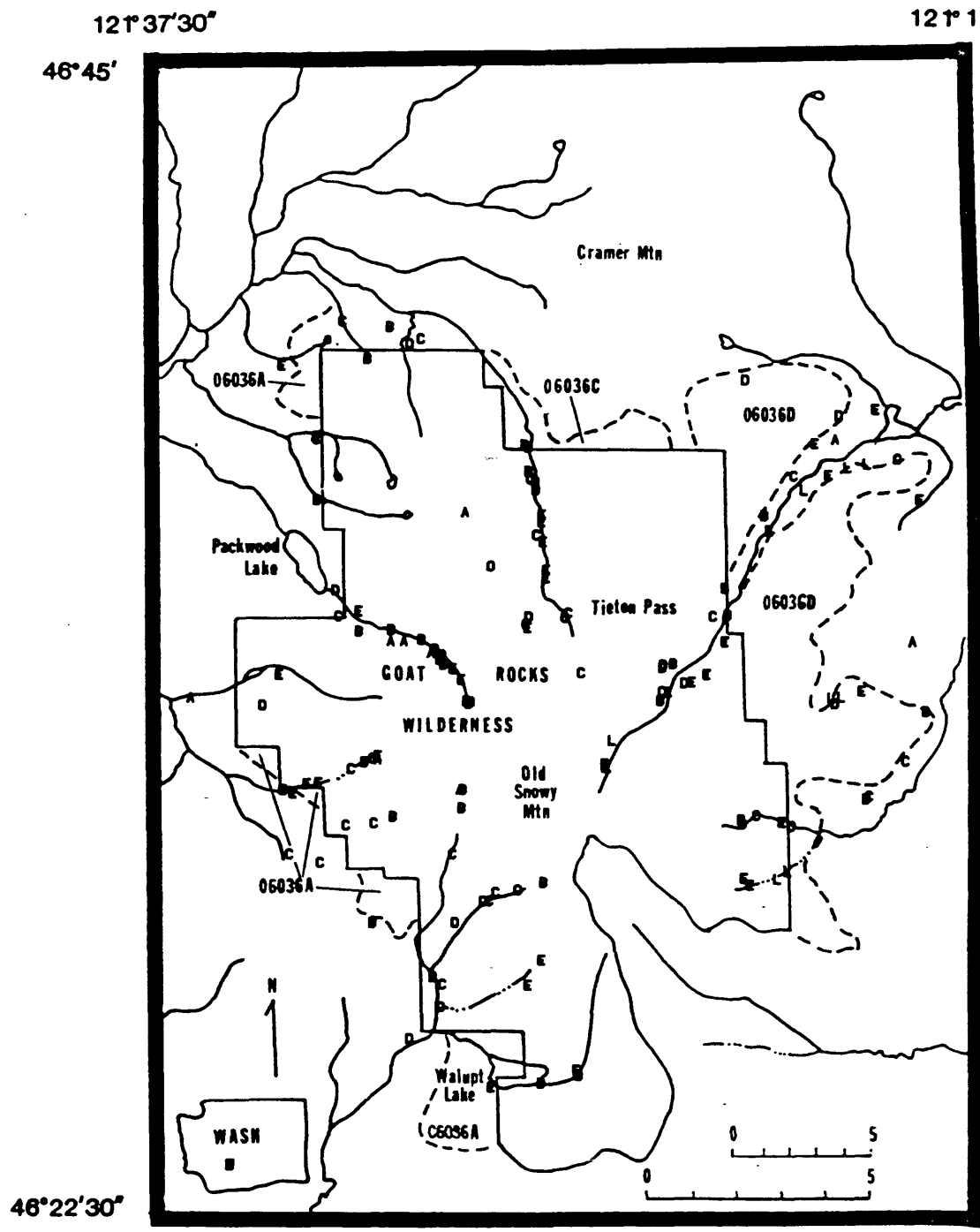

Figure 41.-Plot of analytical data for zinc from water samples collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 0.01-0.1 ppm; B-0.005-0.01 ppm; C, 0.0035-0.0050 ppm; D, 0.0025-0.0035 ppm; E, 0.0001-0.0025 ppm; L, detected, but present at a concentration less than 0.001 ppm.

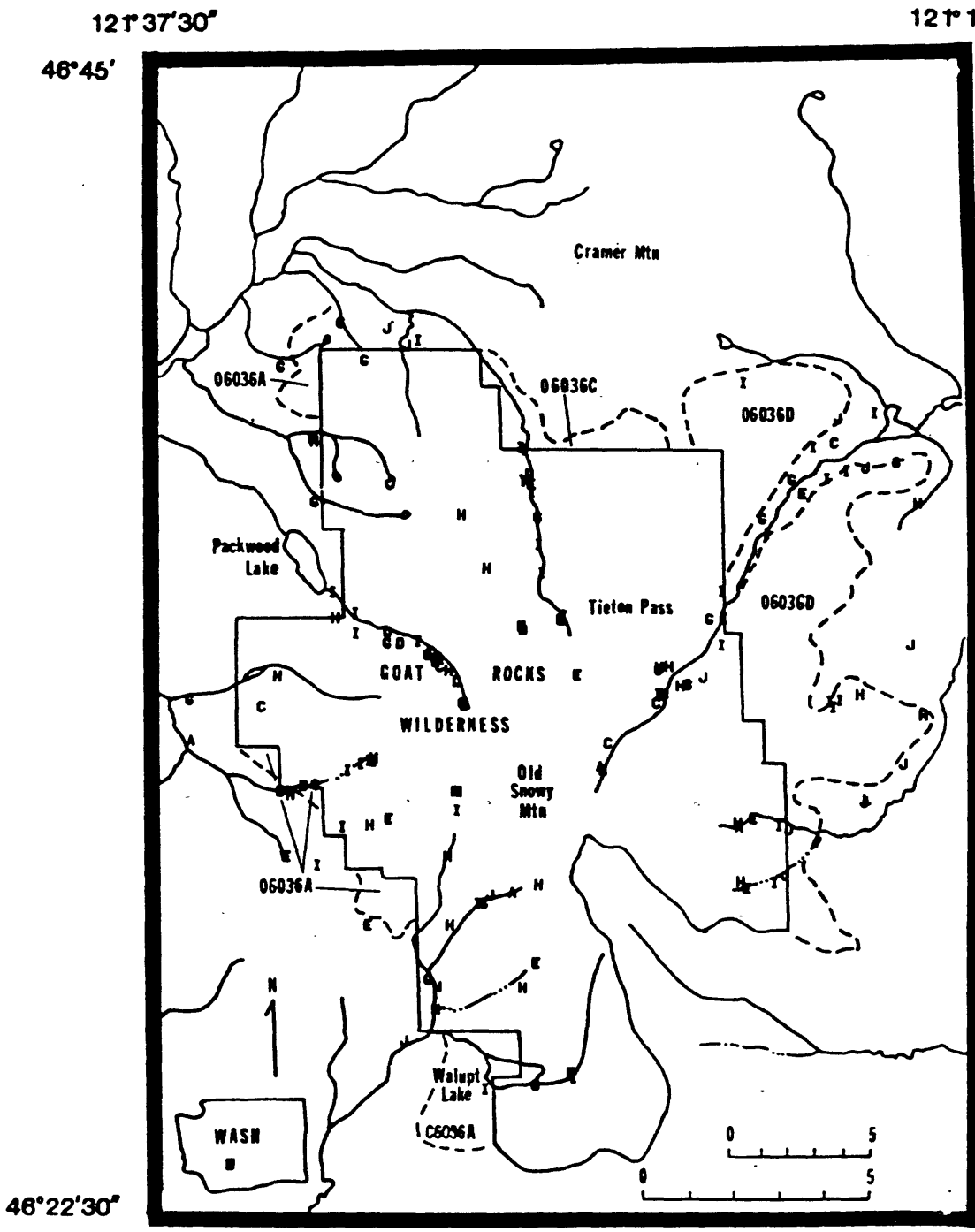

Figure 42.-Plot of analytical data for sulfate from water samples collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 10-25 ppm; B, 8-10 ppm; C, 6-8 ppm; D, 5-6 ppm; E, 4-5 ppm; G, 3-4 ppm; H, 2-3 ppm; I, 1-2 ppm; J, 0.1-1.0 ppm; L, detected, but present at a concentration less than 0.1 ppm.

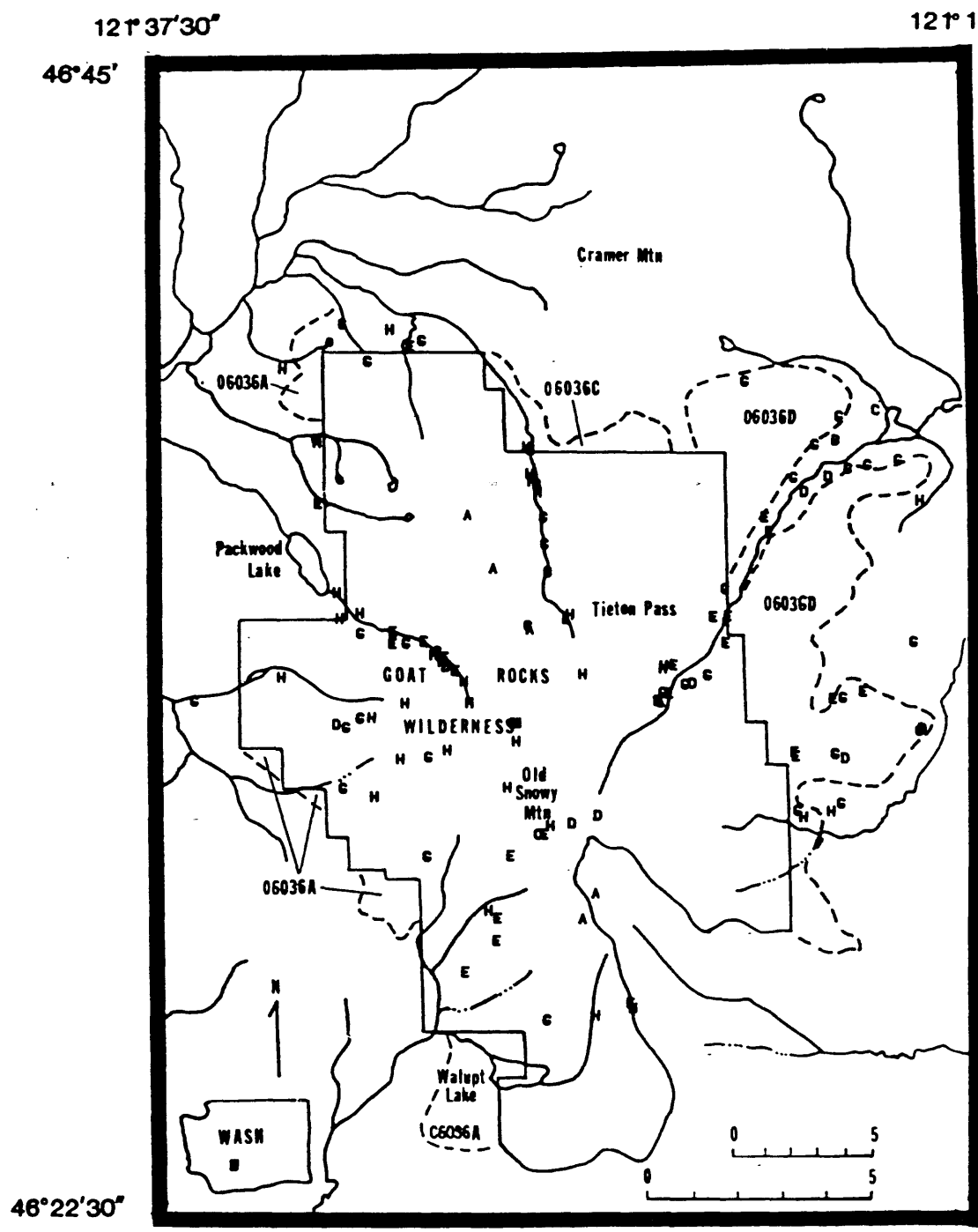

Figure 43.-Plot of analytical data for fluoride from water samples collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 1.0-5.0 ppm; B, 0.4-1.0 ppm; C, 0.3-0.4 ppm; D, 0.2-0.3 ppm; E, 0.1-0.2 ppm; G, 0.05-0.1 ppm; H, 0.02-0.05 ppm.

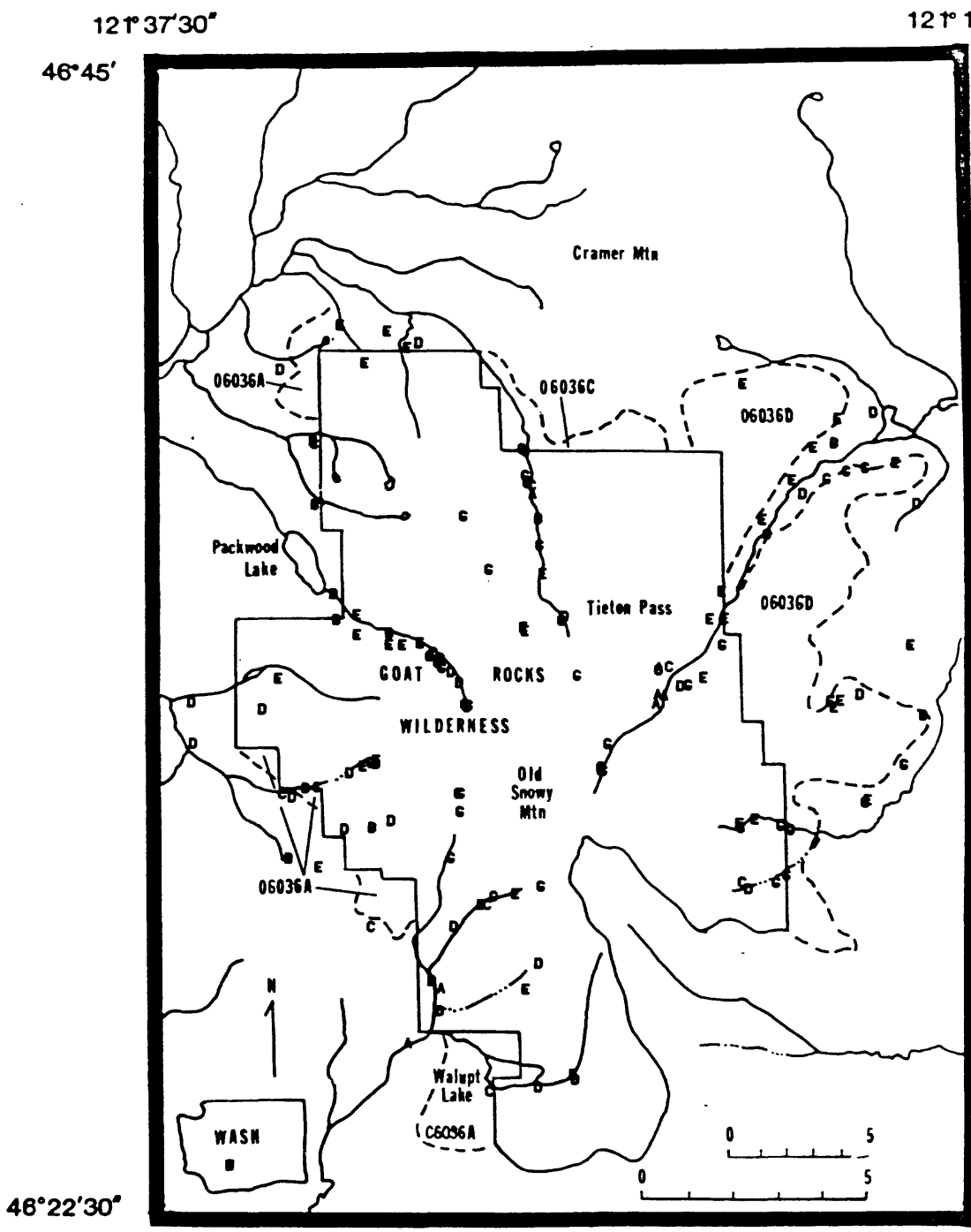

Figure 44.-Plot of analytical data for chloride from water samples collected in the Goat Rocks study area. Concentrations for each interval are as follows: A, 6.0-20.0 ppm; B, 3.5-6.0 ppm; C, 2.5-3.5 ppm; D, 1.5-2.5 ppm; E, 1.0-1.5 ppm; G, 0.1-1.0 ppm.

Table 1.--Limits of detection for analytical results obtained from stream sediments, concentrates panned from stream sediments using d.c. arc emission spectrography[1]

Element	Sediment and rock sample weights (g)	Concentrate and ore sample weight (g)	Detection limit (sediments and rocks)[2,3]	Detection limit (concentrates and ores)[2,3]
Mg-----	0.01	0.005	0.02	0.05
Ca-----	0.01	0.005	.05	.10
Fe-----	0.01	0.005	.05	.10
Ti-----	0.01	0.005	.002	.005
V------	0.01	0.005	10	20
Cr-----	0.01	0.005	10	20
Mn-----	0.01	0.005	10	20
Co-----	0.01	0.005	5	10
Ni-----	0.01	0.005	5	10
Cu-----	0.01	0.005	5	10
Zn-----	0.01	0.005	--	500
Mo-----	0.01	0.005	5	10
Ag-----	0.01	0.005	--	1
Au-----	0.01	0.005	--	20
Sn-----	0.01	0.005	--	20
Pb-----	0.01	0.005	10	20
Bi-----	0.01	0.005	--	20
As-----	0.01	0.005	--	500
Sb-----	0.01	0.005	--	200
B------	0.01	0.005	10	20
Be-----	0.01	0.005	1	--
Sr-----	0.01	0.005	100	200
Ba-----	0.01	0.005	20	50
Sc-----	0.01	0.005	5	10
La-----	0.01	0.005	20	50
Y------	0.01	0.005	10	20
Zr-----	0.01	0.005	10	20

[1]Direct current (d.c.) arc-spectrographic method (Grimes and Marranzino, 1968).
[2]Results for magnesium, calcium, iron, and titanium given in weight percent.
[3]Results for vanadium and all succeeding elements given in parts per million.

Table 2.--ICP-137100 instrumental array and sensitivities for elements determined in this study

Element	Wavelength	LQD[1] (µg/mL)	Lower limit of determination (µg/g)
Mg-----	279.0	0.200	2.0
Ca-----	422.7	.030	.30
Fe-----	259.9	.025	2.5
Ti-----	334.9	.001	.64
Al-----	396.1	.052	.52
V------	311.0	.012	.12
Cr-----	283.5	.010	1.0
Mn-----	257.9	.002	.40
Co-----	345.3	.100	1.0
Ni-----	231.6	.050	.50
Cu-----	324.7	.007	.08
Zn-----	202.5	.015	.16
Mo-----	287.1	.031	.32
W------	239.7	.130	1.3
Cd-----	226.5	.010	.20
Ag-----	328.0	.015	.16
Pb-----	220.3	.150	4.0
As-----	193.7	.175	4.0
Sb-----	217.5	.250	4.0
Bi-----	306.7	.400	8.0
Sn-----	189.9	.130	1.3
B------	249.8	.007	2.0
Be-----	313.0	.001	.01
Sr-----	407.7	.0003	.0032
Ba-----	455.4	.008	.08
La-----	398.8	.018	.20
Ce-----	418.6	.072	1.0
Y------	371.0	.002	.20
Nb-----	309.4	.013	.20
P------	213.6	.300	3.0

[1]Lowest quantitative determinable concentration is defined as that concentration of the element that will give a net signal equal to approximately 10 times the standard deviation of the background. The values given are those determined for the voltage biases and calibration used in this study.

[2]The lower limit of determination is the LQD times the dilution factor. For this study, two and one half grams of sample were leached and the final solution diluted to 25 mL. Uncertainties due to interference corrections are also included for the level of uncertainty and concentrations found in an average sample.

Table 3.--Limits of detection for analytical results obtained from waters using flameless atomic absorption spectrophotometry (FAAS) and ion chromatography (IC)

Element or ion	Limit of detection (µg/mL)	Method
Cu-----	0.001	FAAS[1]
Zn-----	.0005	FAAS[1]
Mo-----	.001	FAAS[1]
SO_4^{--} --	.10	IC[2]
Cl^-----	.05	IC[2]
F^------	.01	IC[2]

[1]Miller and Ficklin (1976).

[2]Smee and Hall (1978).

Table 4. Spectrographic analytical data from stream sediment samples (data set A) collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: --, no determination made; N, concentration less than the detection limit; <, detected, but present at a concentration less than the value reported; >, element present at a concentration greater than the upper calibration limit; and II, interfering spectra render analytical lines unusable.]

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1000SA	46 30 42	121 29 10	1.5	2.0	7.0	.5	15	200	50	1,000	30	30
GR1001SA	46 30 42	121 29 5	1.5	3.0	7.0	.7	15	200	70	1,000	30	30
GR1003SA	46 28 56	121 29 37	1.5	3.0	5.0	.5	15	150	30	700	20	20
GR1004SA	46 30 20	121 29 7	2.0	3.0	7.0	.5	15	200	30	700	20	20
GR1005SA	46 29 25	121 29 23	1.5	2.0	5.0	.5	10	150	30	700	20	20
GR1006SA	46 28 51	121 26 46	2.0	2.0	10.0	.7	20	200	50	1,000	50	50
GR1007SA	46 33 2	121 25 40	1.0	2.0	5.0	.5	15	100	30	500	20	20
GR1008SA	46 34 13	121 26 2	1.5	2.0	7.0	.7	20	200	100	700	30	50
GR1009SA	46 34 8	121 26 8	1.0	2.0	7.0	.5	20	200	100	700	30	50
GR1010SA	46 32 23	121 31 38	1.0	2.0	5.0	.7	15	200	30	500	20	20
GR1012SA	46 28 42	121 27 30	1.5	2.0	10.0	.7	15	200	100	1,000	30	30
GR1013SA	46 28 39	121 28 8	1.5	2.0	7.0	.7	20	200	30	1,000	30	30
GR1014AA	46 28 29	121 28 19	1.0	2.0	5.0	.2	10	150	10	700	10	10
GR1014SA	46 28 29	121 28 19	1.5	1.5	7.0	.5	15	200	20	1,000	30	20
GR1015SA	46 28 29	121 28 30	1.5	2.0	5.0	.3	15	150	30	700	20	20
GR1016SA	46 28 3	121 29 19	1.5	2.0	7.0	.5	15	200	50	1,000	20	20
GR1017SA	46 26 58	121 29 57	1.5	2.0	5.0	.2	15	100	20	500	20	20
GR1018SA	46 26 49	121 29 41	1.0	2.0	5.0	.5	15	100	30	500	20	20
GR1019SA	46 26 22	121 29 43	2.0	2.0	10.0	.7	20	200	50	1,000	50	30
GR1020SA	46 36 28	121 33 17	1.0	1.5	10.0	1.0	20	200	100	1,500	20	30
GR1021SA	46 37 41	121 33 18	.7	2.0	5.0	1.0	20	150	30	1,500	15	15
GR1022SA	46 37 45	121 33 20	.7	1.5	5.0	1.0	15	100	30	1,500	15	20
GR1024SA	46 39 10	121 34 17	.7	1.5	7.0	1.0	20	200	70	1,500	15	20
GR1025SA	46 32 23	121 18 19	1.0	1.5	5.0	1.0	20	100	70	1,500	15	20
GR1026SA	46 32 30	121 18 25	1.5	2.0	10.0	1.0	20	200	70	2,000	20	30
GR1027SA	46 32 31	121 18 8	1.0	1.5	3.0	.7	10	100	100	1,000	10	15
GR1028SA	46 32 38	121 17 33	1.0	2.0	10.0	>1.0	30	300	150	1,500	30	50
GR1029SA	46 33 37	121 16 5	1.5	2.0	10.0	>1.0	20	200	100	2,000	20	50
GR1030SA	46 36 26	121 15 52	1.0	2.0	7.0	>1.0	20	200	100	1,500	20	50
GR1031SA	46 37 18	121 15 22	1.0	2.0	7.0	1.0	20	200	100	1,500	20	50
GR1032SA	46 37 15	121 16 29	1.0	1.5	5.0	.7	15	200	150	1,000	15	30
GR1033SA	46 37 9	121 17 22	1.0	1.5	5.0	1.0	15	150	150	1,000	15	30
GR1034SA	46 37 5	121 17 55	1.0	2.0	5.0	.7	20	150	100	1,500	20	30
GR1035SA	46 35 50	121 20 12	1.0	2.0	7.0	.7	20	150	100	1,500	20	50
GR1036SA	46 36 37	121 19 11	1.0	2.0	5.0	.7	15	150	100	1,500	20	50
GR1037SA	46 28 47	121 20 47	2.0	2.0	10.0	>1.0	20	300	50	1,500	50	50
GR1038SA	46 28 54	121 20 0	2.0	2.0	7.0	1.0	20	200	30	1,000	50	30
GR1039SA	46 29 3	121 19 42	2.0	2.0	7.0	1.0	20	200	70	1,000	30	30
GR1040SA	46 31 8	121 24 59	2.0	2.0	10.0	>1.0	20	300	100	1,000	50	50
GR1041SA	46 31 8	121 24 55	1.5	2.0	5.0	.5	15	150	20	1,000	30	30
GR1042SA	46 31 12	121 25 0	1.5	2.0	7.0	.5	20	150	50	1,000	30	30
GR1043SA	46 31 40	121 24 47	2.0	2.0	7.0	.5	15	200	50	1,000	50	50
GR1046PA	46 29 22	121 29 28	1.0	3.0	3.0	.2	10	70	10	500	15	15
GR1047SA	46 33 0	121 34 22	2.0	3.0	10.0	1.0	20	200	70	1,000	50	30
GR1049RA	46 30 19	121 27 17	1.5	2.0	5.0	.3	15	100	100	500	20	50

Table 4. Spectrographic analytical data from stream sediment samples (data set A) collected in the Goat Rocks area

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1000SA	30	200	N	N	N	<10	N	200	150	N	15	100	N
GR1001SA	50	N	N	N	N	<10	N	300	150	N	15	150	N
GR1003SA	20	N	N	N	N	10	N	300	200	N	15	100	N
GR1004SA	20	N	N	N	N	<10	N	300	200	N	15	100	N
GR1005SA	100	N	N	N	N	<10	N	300	200	N	15	100	N
GR1006SA	50	N	N	N	N	20	N	200	150	N	15	100	N
GR1007SA	50	N	N	N	N	20	N	300	200	N	15	100	N
GR1008SA	70	N	N	N	N	15	N	150	200	N	20	100	N
GR1009SA	50	N	N	N	N	15	N	200	200	N	50	100	N
GR1010SA	20	N	N	N	N	<10	N	300	200	N	20	100	<20
GR1012SA	30	N	N	N	N	20	N	200	150	N	15	100	N
GR1013SA	20	N	N	N	N	N	N	300	150	N	15	100	N
GR1014AA	50	N	N	N	N	<10	N	300	300	N	15	100	N
GR1014SA	20	N	N	N	N	N	N	200	100	N	10	70	N
GR1015SA	20	N	N	N	N	N	N	500	150	N	15	70	N
GR1016SA	30	N	N	N	N	N	N	300	150	N	15	70	N
GR1017SA	15	N	N	N	N	15	N	300	150	N	10	70	N
GR1018SA	15	N	N	N	N	10	1.0	300	300	N	15	150	N
GR1019SA	30	N	N	N	N	N	N	200	150	N	15	70	N
GR1020SA	50	<200	N	N	<.5	20	1.5	300	500	N	20	500	N
GR1021SA	30	N	<5	N	<.5	30	1.5	500	500	N	20	300	N
GR1022SA	30	N	N	N	<.5	15	1.5	500	500	N	10	500	N
GR1024SA	50	<200	N	N	<.5	15	1.5	300	500	N	15	500	N
GR1025SA	30	200	5	10	<.5	20	1.5	500	500	N	20	500	30
GR1026SA	50	200	5	15	<.5	20	1.0	500	500	N	15	200	N
GR1027SA	20	N	5	20	<.5	50	1.5	200	700	N	20	200	N
GR1028SA	50	200	5	<10	<.5	20	<1.0	500	200	N	15	200	<20
GR1029SA	100	200	N	10	<.5	15	1.0	500	300	N	15	300	<20
GR1030SA	50	200	<5	<10	<.5	15	1.0	500	300	N	15	300	N
GR1031SA	30	200	5	10	<.5	15	1.0	500	300	N	15	300	N
GR1032SA	30	<200	N	10	<.5	20	1.0	500	500	N	10	200	N
GR1033SA	30	<200	N	10	<.5	50	1.0	300	500	N	15	500	N
GR1034SA	30	N	N	N	N	20	1.5	500	500	N	15	150	N
GR1035SA	50	N	<5	<10	N	15	1.5	500	500	N	20	200	N
GR1036SA	50	N	N	<10	N	20	1.0	500	500	N	15	100	N
GR1037SA	70	300	N	N	N	N	N	200	200	N	15	100	<20
GR1038SA	50	N	N	<10	N	<10	1.0	300	300	N	15	150	<20
GR1039SA	30	N	N	<10	N	<10	1.0	300	500	N	20	300	<20
GR1040SA	50	N	N	<10	N	<10	1.0	300	200	N	20	200	<20
GR1041SA	30	N	N	<10	N	100	1.0	300	300	N	15	100	N
GR1042SA	30	N	N	<10	N	10	1.0	300	300	N	20	100	N
GR1043SA	100	N	N	N	N	15	N	200	150	N	15	100	N
GR1046PA	20	N	N	<10	N	<10	1.0	500	300	N	10	100	N
GR1047SA	30	N	N	<10	N	<10	1.0	300	300	N	20	300	<20
GR1049RA	30	N	N	N	N	10	1.0	300	300	N	15	100	N

Table 4. Spectrographic analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1250SA	46 33 7	121 29 22	1.5	2.0	5.0	.5	15	100	20	700	20	20
GR1251SA	46 33 23	121 29 40	1.0	2.0	7.0	.5	20	150	30	700	20	20
GR1252SA	46 33 30	121 29 52	1.0	2.0	5.0	.5	15	100	150	500	20	15
GR1253SA	46 33 42	121 30 15	1.0	2.0	5.0	.5	15	150	30	500	20	15
GR1254SA	46 33 54	121 31 8	1.0	2.0	5.0	.5	15	150	20	700	20	15
GR1255SA	46 34 16	121 32 5	1.0	2.0	5.0	.5	15	150	30	700	20	20
GR1256SA	46 34 41	121 32 45	1.0	2.0	5.0	.5	15	150	50	700	20	20
GR1257SA	46 31 18	121 31 32	1.5	2.0	5.0	.5	15	100	30	500	20	20
GR1258SA	46 31 22	121 31 32	1.5	2.0	5.0	.7	20	200	70	500	20	30
GR1259SA	46 31 19	121 31 41	1.5	3.0	5.0	.5	10	150	30	700	20	20
GR1260SA	46 31 15	121 31 55	1.0	2.0	5.0	.3	10	100	20	700	20	15
GR1261SA	46 31 0	121 32 10	1.0	3.0	5.0	.3	10	100	20	500	15	15
GR1262SA	46 31 7	121 32 18	1.5	2.0	7.0	1.0	20	200	100	1,000	30	50
GR1263SA	46 30 50	121 33 8	1.0	2.0	5.0	.3	20	100	15	700	20	15
GR1265SA	46 30 49	121 33 35	1.0	2.0	5.0	.5	15	150	20	700	20	20
GR1266SA	46 30 38	121 33 59	1.5	2.0	7.0	.5	15	150	50	700	20	20
GR1267SA	46 40 3	121 32 32	1.0	2.0	5.0	1.0	20	150	70	1,500	15	30
GR1268SA	46 39 18	121 31 49	1.0	2.0	7.0	1.0	15	150	50	1,500	20	30
GR1270SA	46 39 36	121 30 35	1.0	2.0	10.0	1.0	20	150	70	1,500	20	50
GR1271SA	46 39 42	121 30 15	1.0	2.0	10.0	1.0	15	100	100	1,500	20	50
GR1272SA	46 34 10	121 21 25	1.0	1.5	5.0	.3	15	100	70	700	20	30
GR1273SA	46 33 38	121 21 30	1.5	3.0	7.0	.5	20	150	50	700	30	20
GR1274SA	46 32 59	121 22 2	2.0	2.0	10.0	1.0	20	200	50	1,000	50	50
GR1275SA	46 32 50	121 22 28	2.0	3.0	7.0	1.0	20	200	100	1,000	50	30
GR1276SA	46 32 38	121 23 9	2.0	3.0	10.0	1.0	20	200	30	1,000	50	30
GR1278SA	46 36 50	121 26 58	1.5	2.0	10.0	.5	20	200	100	700	50	50
GR1279SA	46 36 40	121 26 57	1.5	2.0	7.0	.7	20	200	100	1,000	30	30
GR1280SA	46 36 10	121 26 47	1.5	2.0	5.0	.5	15	150	150	700	30	50
GR1281SA	46 36 2	121 26 47	1.0	2.0	5.0	.3	10	150	100	1,000	20	30
GR1282SA	46 35 4	121 26 40	1.5	3.0	10.0	1.0	20	200	200	1,000	50	50
GR1283SA	46 34 55	121 26 40	2.0	2.0	10.0	1.0	20	300	100	1,000	50	50
GR1284SA	46 32 23	121 34 50	2.0	3.0	10.0	.7	20	200	30	1,000	50	30
GR1500SA	46 33 26	121 29 59	1.5	3.0	7.0	.5	15	200	70	700	20	30
GR1501SA	46 33 40	121 30 46	1.0	2.0	7.0	1.0	30	200	150	1,500	20	50
GR1502SA	46 33 40	121 31 9	1.0	2.0	10.0	1.0	20	200	100	1,500	30	50
GR1503SA	46 33 47	121 31 38	.7	1.0	1.5	.5	10	150	50	1,000	5	15
GR1504SA	46 33 52	121 32 4	.7	1.5	5.0	.5	20	200	30	1,500	15	20
GR1505SA	46 34 10	121 32 40	.7	1.5	5.0	1.0	15	200	30	1,000	15	20
GR1506SA	46 30 10	121 31 6	1.5	1.5	7.0	1.0	20	200	70	1,500	20	30
GR1507SA	46 30 2	121 31 39	1.0	2.0	10.0	1.0	20	200	50	1,500	20	30
GR1508SA	46 30 0	121 32 27	1.5	2.0	7.0	1.0	20	200	50	1,500	15	30
GR1509SA	46 29 15	121 33 12	1.0	1.5	7.0	1.0	15	150	100	1,000	15	20
GR1510SA	46 29 25	121 34 5	.7	1.0	5.0	1.0	20	150	150	1,000	20	30
GR1511SA	46 34 42	121 21 30	2.0	2.0	5.0	.3	20	150	200	700	30	50
GR1512SA	46 35 22	121 21 3	1.0	2.0	3.0	.2	10	100	50	500	15	30

Table 4. Spectrographic analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1250SA	20	N	N	N	N	<10	N	500	200	N	20	100	N
GR1251SA	50	N	N	N	N	20	N	300	200	N	20	100	N
GR1252SA	20	N	N	N	N	<10	N	300	200	N	20	100	N
GR1253SA	30	N	N	N	N	<10	1.0	200	200	N	20	100	N
GR1254SA	30	N	N	N	N	<10	1.0	200	200	N	20	100	N
GR1255SA	30	N	N	N	N	<10	1.0	300	200	N	30	150	N
GR1256SA	30	N	N	N	N	<10	1.0	200	300	N	20	100	N
GR1257SA	20	N	N	N	N	<10	N	300	200	N	15	200	N
GR1258SA	20	N	N	N	N	<10	1.0	200	300	N	20	150	<20
GR1259SA	30	N	N	N	N	<10	N	300	200	N	15	70	N
GR1260SA	20	N	N	N	N	10	N	200	200	N	15	100	N
GR1261SA	70	N	N	N	N	<10	N	300	200	N	15	100	N
GR1262SA	30	N	N	N	N	<10	N	200	200	N	20	200	20
GR1263SA	50	N	N	N	N	<10	N	200	200	N	15	100	N
GR1265SA	30	N	N	N	N	<10	N	200	150	N	15	70	N
GR1266SA	20	N	N	N	N	<10	N	300	200	N	15	100	N
GR1267SA	50	N	<5	N	N	20	1.5	500	500	N	15	200	N
GR1268SA	50	N	<5	10	N	20	1.5	500	500	N	15	200	N
GR1270SA	50	N	N	N	N	10	1.0	500	300	N	10	200	N
GR1271SA	50	N	<5	N	N	15	1.5	500	300	N	10	300	N
GR1272SA	30	N	N	<10	N	20	1.0	200	500	N	15	150	N
GR1273SA	30	N	N	<10	N	10	1.0	300	500	N	15	100	N
GR1274SA	50	200	N	<10	.5	10	1.0	300	200	N	15	100	N
GR1275SA	50	N	N	<10	N	10	1.0	300	300	N	15	100	N
GR1276SA	50	N	N	<10	N	<10	N	500	200	N	15	70	N
GR1278SA	50	N	N	<10	N	15	1.0	200	300	N	20	100	N
GR1279SA	50	N	N	<10	N	20	1.0	300	300	N	20	150	N
GR1280SA	30	N	N	<10	N	30	1.0	300	700	N	15	100	N
GR1281SA	20	N	N	<10	N	20	1.0	300	700	N	15	100	N
GR1282SA	50	N	N	<10	N	20	1.0	300	500	N	20	150	N
GR1283SA	50	<200	N	<10	N	20	1.0	200	300	N	20	100	N
GR1284SA	50	N	N	<10	N	<10	N	300	200	N	15	100	N
GR1500SA	20	N	N	N	N	<10	1.0	200	300	N	20	200	<20
GR1501SA	50	N	5	<10	<.5	20	1.0	300	300	N	20	300	20
GR1502SA	70	N	7	<10	<.5	20	1.0	500	300	N	20	500	N
GR1503SA	20	N	<5	N	<.5	15	1.5	200	300	N	15	200	N
GR1504SA	30	N	<5	N	<.5	10	1.0	300	300	N	10	100	N
GR1505SA	30	N	5	N	<.5	15	1.5	300	500	N	10	200	N
GR1506SA	50	N	5	<10	<.5	20	1.5	500	300	N	10	200	N
GR1507SA	70	N	<5	10	<.5	20	1.5	500	300	N	15	200	N
GR1508SA	50	N	<5	N	<.5	15	1.0	500	300	N	15	150	N
GR1509SA	30	N	N	N	<.5	15	1.0	500	500	N	10	200	N
GR1510SA	50	N	N	N	<.5	30	1.5	500	500	N	30	300	N
GR1511SA	70	N	N	N	N	10	1.0	300	300	N	20	100	N
GR1512SA	20	N	N	N	N	10	1.0	300	500	N	15	100	N

Table 4. Spectrographic analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1513SA	46 36 8	121 20 20	2.0	2.0	5.0	.3	15	100	150	700	30	50
GR1514SA	46 36 55	121 19 29	1.0	2.0	5.0	.2	10	100	30	500	20	20
GR1515SA	46 32 28	121 23 23	2.0	3.0	10.0	.7	20	200	30	1,000	50	30
GR1516SA	46 32 29	121 23 20	2.0	3.0	10.0	.7	20	200	150	1,000	50	70
GR1519SA	46 33 8	121 23 12	2.0	3.0	10.0	.7	20	200	70	1,000	50	50
GR1520SA	46 33 12	121 23 1	1.5	1.5	7.0	.5	20	200	200	1,000	50	100
GR1521SA	46 34 9	121 21 51	1.5	2.0	7.0	.7	20	200	50	1,000	30	30
GR1522SA	46 37 2	121 27 10	1.0	2.0	5.0	.7	20	150	50	1,000	30	30
GR1523SA	46 36 53	121 27 7	1.5	3.0	7.0	.5	20	200	100	1,000	30	30
GR1524SA	46 35 46	121 26 57	1.0	1.5	5.0	.5	15	200	100	700	20	50
GR1525SA	46 35 38	121 26 45	2.0	3.0	7.0	.7	20	200	150	1,000	50	50
GR1526SA	46 37 31	121 27 9	1.5	3.0	7.0	.7	20	200	20	1,000	30	20
GR1527SA	46 37 34	121 27 16	1.5	2.0	10.0	.7	20	200	70	1,000	30	30
GR1750SA	46 32 28	121 28 58	1.5	3.0	5.0	.5	15	150	50	700	20	20
GR1751SA	46 32 25	121 28 54	1.5	2.0	5.0	.5	15	200	100	700	20	30
GR1752SA	46 32 27	121 28 50	1.5	2.0	7.0	.5	15	150	30	700	20	30
GR1754SA	46 33 12	121 29 38	1.5	3.0	5.0	.5	15	200	50	700	20	20
GR1755SA	46 33 18	121 29 45	1.5	3.0	5.0	.7	15	200	50	1,000	20	20
GR1756SA	46 32 25	121 32 27	1.5	2.0	7.0	1.0	15	200	50	1,000	20	20
GR1757SA	46 25 0	121 25 46	1.5	2.0	5.0	.5	15	150	70	700	20	50
GR1758SA	46 25 5	121 25 45	1.0	2.0	3.0	.3	10	100	50	500	15	30
GR1759SA	46 25 6	121 25 50	1.5	2.0	5.0	.5	15	150	30	700	20	20
GR1760SA	46 24 51	121 26 51	1.5	2.0	5.0	.5	10	150	50	700	20	20
GR1762SA	46 24 46	121 28 17	1.0	2.0	10.0	1.0	20	150	150	1,500	20	50
GR1763SA	46 28 3	121 31 42	1.0	2.0	10.0	1.0	20	150	100	1,500	20	50
GR1764SA	46 30 42	121 34 16	1.0	1.5	10.0	1.0	20	150	50	1,500	30	50
GR1765SA	46 30 29	121 17 26	1.0	1.5	10.0	>1.0	20	200	150	1,500	30	50
GR1766SA	46 30 32	121 17 21	1.0	1.5	5.0	1.0	20	150	150	1,000	20	30
GR1767SA	46 31 14	121 16 18	1.0	2.0	10.0	>1.0	30	200	150	1,500	50	50
GR1768SA	46 32 13	121 15 43	1.5	2.0	10.0	>1.0	20	200	100	2,000	30	30
GR1769SA	46 38 51	121 20 52	.7	1.0	3.0	.5	10	70	100	1,000	10	30
GR1770SA	46 28 55	121 20 58	1.0	2.0	5.0	.5	15	100	200	1,500	20	70
GR1771SA	46 38 15	121 17 7	1.0	1.5	5.0	.5	15	150	150	1,000	15	30
GR1772SA	46 37 39	121 18 16	1.0	2.0	10.0	.7	15	200	150	1,500	20	30
GR1773SA	46 37 34	121 18 52	1.0	1.5	5.0	.5	20	150	150	1,000	20	50
GR1775SA	46 36 56	121 18 29	1.0	2.0	5.0	.5	15	100	70	1,000	15	20
GR1776SA	46 30 5	121 21 2	2.0	3.0	10.0	.7	20	200	150	1,000	50	50
GR1777SA	46 30 0	121 21 0	2.0	3.0	10.0	>1.0	30	500	70	1,500	50	70
GR1778SA	46 30 10	121 20 36	.5	1.5	2.0	.1	5	20	10	300	5	<5
GR1779SA	46 30 2	121 19 52	2.0	2.0	10.0	1.0	20	300	50	1,000	50	50
GR1780SA	46 29 57	121 19 35	2.0	2.0	10.0	1.0	20	300	70	1,000	50	50
GR1781SA	46 34 0	121 27 15	1.5	2.0	10.0	.7	20	200	30	1,000	50	30
GR1782SA	46 33 56	121 27 12	1.5	2.0	10.0	1.0	20	300	100	1,000	50	50
GR1783SA	46 34 9	121 27 10	1.0	1.5	7.0	.7	20	150	20	1,000	20	10
GR1785SA	46 35 9	121 28 15	1.5	2.0	10.0	1.0	20	300	30	1,000	50	20

Table 4. Spectrographic analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1513SA	20	N	N	N	N	10	1.0	200	200	N	15	100	N
GR1514SA	20	N	N	N	N	<10	1.0	300	200	N	15	70	N
GR1515SA	50	N	N	<10	N	10	N	300	300	N	15	100	N
GR1516SA	70	N	N	<10	N	20	N	200	300	N	20	100	N
GR1519SA	50	N	N	<10	N	20	1.0	500	500	N	20	100	N
GR1520SA	70	N	N	<10	N	50	1.0	150	700	N	20	100	N
GR1521SA	50	N	N	<10	N	15	1.0	300	500	N	20	150	N
GR1522SA	50	N	N	<10	N	10	1.0	300	500	N	20	150	N
GR1523SA	50	N	N	<10	N	15	1.0	500	500	N	20	150	N
GR1524SA	20	N	N	<10	N	30	1.0	300	700	N	20	150	N
GR1525SA	30	N	N	<10	N	10	1.0	300	300	N	20	100	N
GR1526SA	50	N	N	<10	N	10	N	300	300	N	20	100	N
GR1527SA	50	N	N	<10	N	20	1.0	300	500	N	30	100	N
GR1750SA	30	N	N	N	N	<10	1.0	300	300	N	20	200	N
GR1751SA	30	N	N	N	N	<10	1.0	300	300	N	20	100	N
GR1752SA	20	N	N	N	N	100	N	300	200	N	15	100	N
GR1754SA	50	N	N	N	N	<10	N	200	200	N	20	100	N
GR1755SA	30	N	N	N	N	<10	1.0	300	300	N	20	200	N
GR1756SA	30	N	N	N	N	<10	1.0	300	300	N	20	200	20
GR1757SA	150	N	N	N	N	<10	N	300	300	N	15	100	N
GR1758SA	20	N	N	N	N	<10	1.0	200	300	N	15	150	N
GR1759SA	20	N	N	N	N	<10	1.0	300	300	N	20	200	N
GR1760SA	50	N	N	N	N	20	N	300	300	N	15	100	N
GR1762SA	50	N	N	<10	N	15	1.5	500	300	N	15	200	N
GR1763SA	50	N	N	N	N	10	1.5	500	300	N	15	200	N
GR1764SA	70	N	<5	N	N	10	1.0	300	200	N	15	200	<20
GR1765SA	50	N	5	10	N	20	1.0	300	300	N	20	300	20
GR1766SA	30	N	<5	<10	N	20	1.5	300	500	N	20	300	N
GR1767SA	70	N	N	10	N	15	1.0	500	300	N	20	300	20
GR1768SA	50	N	5	10	N	20	1.5	500	500	N	15	300	N
GR1769SA	20	N	N	N	N	50	1.5	500	700	30	15	200	N
GR1770SA	30	N	N	10	N	20	1.5	500	500	N	15	300	N
GR1771SA	30	N	N	N	N	30	1.5	300	1,000	N	15	200	N
GR1772SA	50	N	N	10	N	50	1.5	500	500	N	20	200	N
GR1773SA	50	N	N	<10	N	50	1.5	300	500	N	15	150	N
GR1775SA	30	N	N	N	N	30	1.5	300	300	N	15	100	N
GR1776SA	50	N	N	<10	N	15	1.0	300	500	N	20	100	<20
GR1777SA	50	N	N	<10	N	<10	1.0	300	300	N	20	300	20
GR1778SA	7	N	N	10	N	30	2.0	100	1,000	30	30	100	N
GR1779SA	50	<200	N	<10	N	10	N	500	200	N	15	100	<20
GR1780SA	50	N	N	<10	N	15	1.0	300	300	N	20	100	<20
GR1781SA	50	N	N	<10	N	20	1.0	300	300	N	20	100	N
GR1782SA	50	N	N	<10	<.5	15	1.0	500	500	N	20	150	N
GR1783SA	50	N	N	<10	N	30	1.5	300	500	N	30	200	N
GR1785SA	50	N	N	<10	N	10	1.0	300	300	N	20	150	N

Table 4. Spectrographic analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1786SA	46 36 11	121 29 4	1.5	2.0	10.0	1.0	20	200	30	1,000	30	30
GR1787SA	46 36 8	121 29 2	1.5	2.0	10.0	.7	20	200	15	1,000	20	20
GR1789SA	46 27 13	121 26 48	2.0	2.0	10.0	1.0	20	300	20	1,500	50	50
GR1790SA	46 27 18	121 26 50	2.0	3.0	10.0	.7	20	200	30	1,000	50	50
GR1796SA	46 32 32	121 36 53	1.0	2.0	10.0	1.0	20	150	50	1,500	20	30
GR1797SA	46 31 38	121 36 46	2.0	3.0	10.0	1.0	20	300	20	1,000	50	30

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1786SA	50	N	N	<10	N	10	1.0	500	300	N	20	100	N
GR1787SA	50	N	N	<10	N	10	1.0	300	300	N	20	100	N
GR1789SA	50	<200	N	<10	N	<10	1.0	300	200	N	15	150	N
GR1790SA	50	N	N	<10	.7	10	1.0	500	200	N	15	100	N
GR1796SA	50	N	<5	<10	N	15	1.0	500	200	N	15	200	N
GR1797SA	50	N	N	<10	N	10	1.0	500	200	N	15	100	N

Table 5. Spectrographic analytical data from stream sediment samples (data set B) collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: --, no determination made; N, concentration less than the detection limit; <, detected, but present at a concentration less than the value reported; >, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

Sample	Latitude	Longitude	Mg-pct.	Ca-pct.	Fe-pct.	Ti-pct.	Sc-ppm	V-ppm	Cr-ppm	Mn-ppm	Co-ppm	Ni-ppm
			s	s	s	s	s	s	s	s	s	s
GR1000SB	46 30 42	121 29 10	2.0	3.0	5.0	.30	15	200	30	500	30	30
GR1001SB	46 30 42	121 29 5	1.0	3.0	3.0	.15	7	150	10	300	15	20
GR1003SB	46 28 56	121 29 37	1.5	2.0	5.0	.20	10	200	30	500	20	30
GR1004SB	46 30 20	121 29 7	1.5	3.0	3.0	.20	10	200	15	500	20	30
GR1005SB	46 29 25	121 29 23	1.0	2.0	3.0	.20	10	200	15	500	15	20
GR1006SB	46 28 51	121 26 46	1.5	3.0	5.0	.30	10	100	20	500	20	20
GR1007SB	46 33 2	121 25 40	1.5	2.0	5.0	.30	10	100	30	500	15	20
GR1008SB	46 34 13	121 26 2	1.5	2.0	7.0	.30	20	150	100	700	30	50
GR1009SB	46 34 8	121 26 8	1.5	2.0	5.0	.30	15	150	50	500	20	30
GR1010SB	46 32 23	121 31 38	1.5	2.0	5.0	.20	10	100	20	500	20	20
GR1012SB	46 28 42	121 27 30	1.5	3.0	3.0	.20	10	100	20	500	20	20
GR1013SB	46 28 39	121 28 8	1.5	3.0	5.0	.30	15	150	20	500	20	30
GR1014AB	46 28 29	121 28 19	1.0	3.0	3.0	.20	10	100	15	300	10	10
GR1014SB	46 28 29	121 28 19	1.5	3.0	3.0	.20	10	100	20	500	20	15
GR1015SB	46 28 29	121 28 30	1.5	3.0	3.0	.20	10	100	20	500	20	15
GR1016SB	46 28 3	121 29 19	1.5	3.0	5.0	.30	10	150	30	500	20	20
GR1017SB	46 26 58	121 29 57	1.5	3.0	3.0	.20	10	100	20	500	15	20
GR1018SB	46 26 49	121 29 41	1.0	2.0	3.0	.20	10	100	20	500	10	15
GR1019SB	46 26 22	121 29 43	1.5	3.0	3.0	.20	10	100	20	700	15	20
GR1020SB	46 36 28	121 33 17	.5	1.5	1.5	.30	15	100	50	1,000	15	10
GR1021SB	46 37 41	121 33 18	.5	1.5	1.5	.30	15	70	20	700	10	10
GR1022SB	46 37 45	121 33 20	.3	1.0	1.0	.20	10	70	N	500	15	15
GR1024SB	46 39 10	121 34 17	.3	1.0	1.5	.30	10	100	100	700	15	15
GR1025SB	46 32 23	121 18 19	.5	1.5	1.5	.30	10	70	50	700	15	20
GR1026SB	46 32 30	121 18 25	1.0	2.0	2.0	.30	15	150	30	700	7	10
GR1027SB	46 32 31	121 18 8	.3	1.0	1.0	.15	5	50	30	700	15	30
GR1028SB	46 32 38	121 17 33	1.0	1.5	2.0	.50	20	100	50	1,500	15	20
GR1029SB	46 33 37	121 16 5	1.0	2.0	3.0	.50	20	150	50	1,000	15	30
GR1030SB	46 36 26	121 15 52	1.0	2.0	3.0	.50	20	150	100	1,000	15	30
GR1031SB	46 37 18	121 15 22	1.0	2.0	2.0	.50	20	100	100	1,500	15	20
GR1032SB	46 37 15	121 16 29	.7	1.5	1.5	.30	15	100	100	700	15	20
GR1033SB	46 37 9	121 17 22	.7	1.5	1.5	.50	15	70	150	1,000	15	20
GR1034SB	46 37 5	121 17 55	.7	1.5	1.5	.50	15	100	70	700	15	30
GR1035SB	46 35 50	121 20 12	.7	2.0	1.5	.30	15	150	50	700	15	20
GR1036SB	46 36 38	121 19 11	.7	1.5	1.0	.30	7	70	30	500	15	10
GR1037SB	46 28 47	121 20 47	2.0	3.0	7.0	.50	20	150	30	1,000	30	30
GR1038SB	46 28 54	121 20 0	2.0	3.0	7.0	.50	15	100	20	1,000	20	20
GR1039SB	46 29 3	121 19 42	1.5	3.0	5.0	.30	15	100	30	700	20	20
GR1040SB	46 31 8	121 24 59	2.0	3.0	7.0	.30	15	150	30	700	20	20
GR1041SB	46 31 8	121 24 55	1.5	2.0	3.0	.30	10	100	15	500	20	20
GR1042SB	46 31 12	121 25 0	1.5	3.0	5.0	.30	15	100	50	500	20	20
GR1043SB	46 31 40	121 24 47	1.5	3.0	5.0	.30	15	100	30	500	20	30
GR1046PB	46 29 22	121 29 28	1.0	3.0	5.0	.20	10	100	10	500	15	10
GR1047SB	46 33 0	121 34 22	1.5	3.0	5.0	.30	15	100	30	500	20	20
GR1049RB	46 30 19	121 27 17	1.0	2.0	3.0	.20	10	100	50	500	20	50

Table 5. Spectrographic analytical data from stream sediment samples (data set B) collected in the Goat Rocks area

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1000SB	50	N	N	N	N	<10	N	500	200	N	10	70	N
GR1001SB	30	N	N	N	N	<10	N	500	300	N	15	50	N
GR1003SB	30	N	N	N	N	<10	N	500	200	N	15	70	N
GR1004SB	30	N	N	N	N	<10	N	500	200	N	15	70	N
GR1005SB	50	N	N	N	N	<10	1.0	500	300	N	15	100	N
GR1006SB	20	N	N	N	N	10	N	500	150	N	10	70	N
GR1007SB	20	N	N	N	N	10	N	500	200	N	10	70	N
GR1008SB	70	N	N	N	N	15	N	200	300	N	20	100	N
GR1009SB	50	N	N	N	N	10	N	300	200	N	15	70	N
GR1010SB	30	N	N	N	N	<10	N	200	150	N	15	100	N
GR1012SB	20	N	N	N	N	10	N	500	200	N	10	50	N
GR1013SB	20	N	N	N	N	<10	N	500	200	N	10	70	N
GR1014AB	20	N	N	N	N	<10	N	500	200	N	10	70	N
GR1014SB	20	N	N	N	N	<10	N	500	150	N	10	70	N
GR1015SB	20	N	N	N	N	<10	N	500	150	N	10	70	N
GR1016SB	20	N	N	N	N	<10	N	500	150	N	15	70	N
GR1017SB	20	N	N	N	N	<10	N	500	150	N	10	50	N
GR1018SB	20	N	N	N	N	<10	1.0	500	200	N	15	100	N
GR1019SB	20	N	N	N	N	<10	N	500	150	N	15	70	N
GR1020SB	15	N	N	N	N	10	1.5	300	200	N	15	100	N
GR1021SB	30	N	N	N	N	20	1.0	300	300	N	15	150	N
GR1022SB	5	N	N	N	N	10	1.0	200	300	N	10	70	N
GR1024SB	15	N	N	N	N	10	1.0	200	300	N	15	150	N
GR1025SB	20	N	N	<10	N	10	1.0	700	300	N	15	70	N
GR1026SB	20	N	N	N	N	<10	2.0	300	200	N	15	70	N
GR1027SB	10	N	N	15	N	30	<1.0	150	500	N	15	50	N
GR1028SB	20	N	N	N	N	<10	<1.0	500	200	N	20	70	N
GR1029SB	20	N	N	N	N	<10	<1.0	500	200	N	15	70	N
GR1030SB	30	N	N	10	N	N	<1.0	300	200	N	15	70	N
GR1031SB	20	N	N	10	1.5	10	<1.0	300	200	N	15	70	N
GR1032SB	20	N	N	N	N	20	<1.0	300	300	N	10	70	N
GR1033SB	20	N	N	<10	N	15	<1.0	300	300	N	10	70	N
GR1034SB	20	N	<5	10	N	15	1.0	300	500	N	15	70	N
GR1035SB	30	N	N	N	N	10	1.0	300	200	N	10	70	N
GR1036SB	10	N	N	N	N	10	1.0	200	200	30	<10	70	N
GR1037SB	30	N	N	N	N	<10	N	500	150	N	15	70	N
GR1038SB	20	N	N	N	N	<10	N	500	200	N	15	70	N
GR1039SB	20	N	N	N	N	10	1.0	500	300	N	20	100	N
GR1040SB	20	N	N	N	1.5	10	N	500	200	N	20	100	N
GR1041SB	15	N	N	N	N	50	N	500	200	N	15	100	N
GR1042SB	20	N	N	N	N	10	N	500	200	N	20	100	N
GR1043SB	20	N	N	N	N	10	N	500	200	N	15	100	N
GR1046PB	20	N	N	N	N	<10	N	500	300	N	15	100	N
GR1047SB	20	N	N	N	N	10	1.0	500	300	N	20	100	N
GR1049RB	20	N	N	N	N	10	N	300	300	N	10	70	N

Table 5. Spectrographic analytical data from stream sediment samples (data set B) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1250SB	46 33 7	121 29 22	1.0	2.0	3.0	.20	10	100	20	500	10	15
GR1251SB	46 33 23	121 29 40	1.0	3.0	5.0	.30	15	150	15	700	15	10
GR1252SB	46 33 30	121 29 52	1.0	2.0	3.0	.30	10	100	20	500	15	10
GR1253SB	46 33 42	121 30 15	1.5	2.0	5.0	.30	20	150	20	700	20	15
GR1254SB	46 33 54	121 31 8	1.5	3.0	5.0	.30	15	150	30	700	20	10
GR1255SB	46 34 16	121 32 5	.7	2.0	3.0	.30	10	100	20	500	15	10
GR1256SB	46 34 41	121 32 45	.7	2.0	5.0	.20	10	100	20	500	15	10
GR1257SB	46 31 18	121 31 32	1.5	3.0	3.0	.20	10	100	20	500	15	15
GR1258SB	46 31 22	121 31 32	1.5	3.0	5.0	.50	10	150	50	500	20	20
GR1259SB	46 31 19	121 31 41	1.5	3.0	3.0	.30	10	100	20	500	20	20
GR1260SB	46 31 15	121 31 55	1.5	2.0	5.0	.30	10	100	30	500	20	20
GR1261SB	46 31 0	121 32 10	1.5	3.0	3.0	.20	10	70	15	300	15	20
GR1262SB	46 31 7	121 32 18	2.0	2.0	5.0	.30	10	100	70	500	30	50
GR1263SB	46 30 50	121 33 8	1.0	2.0	5.0	.20	10	100	15	500	20	20
GR1265SB	46 30 49	121 33 35	1.0	3.0	5.0	.20	10	100	20	500	20	20
GR1266SB	46 30 38	121 33 59	1.0	2.0	3.0	.20	7	70	20	300	15	20
GR1267SB	46 40 3	121 32 32	.7	2.0	1.5	.50	15	100	30	700	15	15
GR1268SB	46 39 18	121 31 49	.7	2.0	2.0	.50	10	100	30	1,500	15	15
GR1270SB	46 39 36	121 30 35	1.0	2.0	1.5	.30	15	150	70	1,000	15	20
GR1271SB	46 39 42	121 30 15	.7	2.0	1.5	.30	10	70	100	700	15	20
GR1272SB	46 34 10	121 21 25	1.5	2.0	5.0	.30	15	100	70	500	20	30
GR1273SB	46 33 38	121 21 30	1.5	3.0	5.0	.30	15	100	50	500	20	20
GR1274SB	46 32 59	121 22 2	1.5	3.0	5.0	.20	15	100	20	500	20	20
GR1275SB	46 32 50	121 22 28	1.5	3.0	5.0	.30	20	100	70	500	30	30
GR1276SB	46 32 38	121 23 9	1.5	5.0	5.0	.30	15	100	20	500	20	20
GR1278SB	46 36 50	121 26 58	1.5	2.0	7.0	.30	20	100	70	500	30	30
GR1279SB	46 36 40	121 26 57	1.5	2.0	7.0	.30	20	100	70	500	30	30
GR1280SB	46 36 10	121 26 47	1.5	2.0	5.0	.20	15	100	100	500	20	50
GR1281SB	46 36 2	121 26 47	1.5	2.0	5.0	.20	10	100	100	500	20	50
GR1282SB	46 35 4	121 26 40	1.5	2.0	5.0	.30	15	100	100	700	30	50
GR1283SB	46 34 55	121 26 40	1.5	3.0	5.0	.30	20	100	100	700	30	30
GR1284SB	46 32 23	121 34 50	1.5	5.0	5.0	.30	20	100	15	500	20	15
GR1500SB	46 33 26	121 29 59	1.0	2.0	3.0	.20	10	150	20	500	15	20
GR1501SB	46 33 40	121 30 46	.7	1.5	3.0	.50	15	150	50	700	15	15
GR1502SB	46 33 40	121 31 9	.5	1.5	2.0	.30	15	150	20	1,000	15	15
GR1503SB	46 33 47	121 31 38	.5	1.0	1.5	.30	10	100	10	700	10	10
GR1504SB	46 33 52	121 32 4	.5	1.0	3.0	.30	15	150	10	700	15	15
GR1505SB	46 34 10	121 32 40	.5	1.5	1.0	.20	7	70	N	700	10	10
GR1506SB	46 30 10	121 31 6	.7	2.0	1.5	.30	15	150	30	1,000	15	20
GR1507SB	46 30 2	121 31 39	.7	2.0	1.0	.30	10	70	10	700	10	15
GR1508SB	46 30 0	121 32 27	.7	2.0	1.5	.30	15	150	20	1,000	15	30
GR1509SB	46 29 15	121 33 12	.7	2.0	2.0	.30	15	100	30	700	15	20
GR1510SB	46 29 25	121 34 5	.5	1.5	1.5	.20	10	70	30	500	10	15
GR1511SB	46 34 42	121 21 30	1.5	2.0	5.0	.30	15	100	150	500	30	70
GR1512SB	46 35 22	121 21 3	1.0	2.0	3.0	.20	10	100	50	300	15	30

Table 5. Spectrographic analytical data from stream sediment samples (data set B) collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1250SB	20	N	N	N	N	<10	N	500	150	N	15	100	N
GR1251SB	30	N	N	N	N	15	N	300	150	N	20	100	N
GR1252SB	20	N	N	N	N	<10	1.0	300	150	N	15	100	N
GR1253SB	30	N	N	N	N	<10	N	300	200	N	20	100	N
GR1254SB	30	N	N	N	N	<10	N	300	200	N	20	100	N
GR1255SB	20	N	N	N	N	<10	N	200	200	N	15	100	N
GR1256SB	30	N	N	N	N	<10	N	200	200	N	20	100	N
GR1257SB	20	N	N	N	N	<10	N	500	150	N	<10	50	N
GR1258SB	20	N	N	N	N	<10	N	300	200	N	15	100	N
GR1259SB	50	N	N	N	N	<10	N	500	200	N	15	70	N
GR1260SB	30	N	N	N	N	10	N	500	200	N	15	100	N
GR1261SB	30	N	N	N	N	<10	N	500	200	N	10	70	N
GR1262SB	30	N	N	N	N	10	1.0	300	300	N	20	100	N
GR1263SB	70	N	N	N	N	10	N	300	200	N	20	70	N
GR1265SB	50	N	N	N	N	<10	N	500	200	N	15	50	N
GR1266SB	30	N	N	N	N	<10	N	300	300	N	15	70	N
GR1267SB	30	N	N	<10	N	15	1.5	300	300	N	20	100	N
GR1268SB	20	<200	N	N	N	15	1.5	300	500	N	15	100	N
GR1270SB	30	N	N	10	N	10	1.0	300	500	N	15	100	N
GR1271SB	15	N	N	10	N	10	1.0	500	300	N	10	100	N
GR1272SB	30	N	N	N	N	20	N	300	500	N	20	100	N
GR1273SB	20	N	N	N	N	<10	N	500	300	N	15	100	N
GR1274SB	20	N	N	N	N	<10	N	500	200	N	15	70	N
GR1275SB	20	N	N	N	N	<10	N	500	300	N	20	70	N
GR1276SB	20	N	N	N	N	<10	N	500	200	N	15	50	N
GR1278SB	50	N	N	N	N	10	N	300	300	N	20	100	N
GR1279SB	50	N	N	N	N	15	1.0	300	300	N	20	100	N
GR1280SB	30	N	N	N	N	20	N	300	500	N	20	70	N
GR1281SB	15	N	N	N	N	10	N	500	500	N	15	70	N
GR1282SB	20	N	N	N	N	10	N	300	300	N	20	70	N
GR1283SB	30	N	N	N	N	15	N	500	300	N	20	100	N
GR1284SB	20	N	N	N	N	<10	N	500	200	N	20	70	N
GR1500SB	30	N	N	N	N	<10	1.0	300	300	N	20	200	N
GR1501SB	30	N	N	N	N	15	1.5	300	300	N	20	150	N
GR1502SB	20	N	N	<10	N	<10	1.0	500	200	N	15	100	N
GR1503SB	15	N	N	N	N	10	1.5	300	300	N	15	100	N
GR1504SB	30	N	N	<10	N	10	1.0	300	300	N	15	70	N
GR1505SB	10	N	N	<10	N	<10	1.5	300	500	N	10	100	N
GR1506SB	20	N	N	N	N	10	1.0	500	200	N	10	70	N
GR1507SB	20	N	N	<10	N	N	1.5	300	200	N	10	50	N
GR1508SB	30	N	N	N	N	N	1.0	500	200	N	15	70	N
GR1509SB	20	N	N	<10	N	10	1.0	500	200	N	15	70	N
GR1510SB	20	N	N	<10	N	15	1.0	500	200	50	15	70	N
GR1511SB	20	N	N	N	N	<10	N	300	200	N	15	100	N
GR1512SB	15	N	N	N	N	10	1.0	300	500	N	10	70	N

Table 5. Spectrographic analytical data from stream sediment samples (data set B) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct.	s	Ca-pct.	s	Fe-pct.	s	Ti-pct.	s	Sc-ppm	s	V-ppm	s	Cr-ppm	s	Mn-ppm	s	Co-ppm	s	Ni-ppm	s
GR1513SB	46 36 8	121 20 20	1.5		2.0		5.0		.20		15		100		100		500		20		50	
GR1514SB	46 36 55	121 19 29	1.0		2.0		3.0		.20		10		100		20		500		15		15	
GR1515SB	46 32 28	121 23 23	1.5		3.0		5.0		.30		15		100		20		700		20		20	
GR1516SB	46 32 39	121 23 20	1.5		3.0		5.0		.30		20		150		100		500		30		30	
GR1519SB	46 33 8	121 23 12	1.5		5.0		5.0		.30		15		100		30		500		20		20	
GR1520SB	46 33 12	121 23 1	1.5		2.0		5.0		.20		20		100		200		700		20		50	
GR1521SB	46 34 9	121 21 51	1.5		2.0		5.0		.30		20		100		50		1,000		20		20	
GR1522SB	46 37 2	121 27 10	1.5		3.0		5.0		.30		15		100		50		700		20		20	
GR1523SB	46 36 53	121 27 7	1.5		2.0		5.0		.20		10		100		50		500		20		20	
GR1524SB	46 35 46	121 26 57	1.5		1.5		5.0		.30		10		100		70		500		20		30	
GR1525SB	46 35 38	121 26 45	1.5		2.0		5.0		.30		15		100		100		700		30		50	
GR1526SB	46 37 31	121 27 9	1.0		3.0		5.0		.30		20		100		20		700		20		20	
GR1527SB	46 37 34	121 27 16	1.5		2.0		5.0		.30		15		100		30		700		20		30	
GR1702SB	46 24 46	121 28 17	1.0		3.0		1.5		.30		15		100		70		700		15		50	
GR1703SB	46 28 3	121 31 42	1.0		3.0		1.5		.50		15		150		50		1,000		20		20	
GR1750SB	46 32 28	121 28 58	1.0		2.0		3.0		.20		10		150		50		500		15		20	
GR1751SB	46 32 25	121 28 54	1.5		2.0		3.0		.20		10		150		30		500		15		20	
GR1752SB	46 32 27	121 28 50	1.5		3.0		5.0		.20		10		150		30		500		20		30	
GR1754SB	46 33 12	121 29 38	1.0		2.0		3.0		.20		10		150		20		500		15		20	
GR1755SB	46 33 18	121 29 45	1.0		2.0		5.0		.20		10		150		30		500		20		20	
GR1756SB	46 32 25	121 32 27	1.5		2.0		5.0		.50		15		200		50		700		30		30	
GR1757SB	46 25 0	121 25 46	1.0		3.0		3.0		.20		10		150		20		300		20		30	
GR1758SB	46 25 5	121 25 45	1.0		2.0		3.0		.20		10		150		30		500		15		20	
GR1759SB	46 25 6	121 25 50	1.0		3.0		3.0		.15		7		150		15		300		15		20	
GR1760SB	46 24 51	121 26 51	1.0		3.0		3.0		.20		10		150		15		500		15		20	
GR1764SB	46 30 42	121 34 16	.5		2.0		2.0		.50		15		100		30		700		15		20	
GR1765SB	46 30 29	121 17 26	.7		3.0		1.5		.50		15		100		30		700		15		20	
GR1766SB	46 30 32	121 17 21	.5		1.5		2.0		.70		15		150		100		700		15		15	
GR1767SB	46 31 14	121 16 18	.7		3.0		2.0		.50		15		150		70		1,000		20		20	
GR1768SB	46 32 13	121 15 43	.7		2.0		2.0		.50		15		150		70		1,000		15		20	
GR1769SB	46 38 51	121 20 52	.5		1.0		1.5		.30		15		100		100		700		15		20	
GR1770SB	46 28 55	121 20 58	.5		1.5		2.0		.30		15		100		150		1,000		15		30	
GR1771SB	46 38 15	121 17 7	.5		1.0		1.5		.30		10		70		50		700		10		20	
GR1772SB	46 37 39	121 18 16	.7		1.5		3.0		.50		20		200		100		1,500		15		30	
GR1773SB	46 37 34	121 18 52	.7		1.5		2.0		.30		15		150		100		1,000		15		30	
GR1775SB	46 36 56	121 18 29	.7		1.5		2.0		.50		10		150		50		700		10		15	
GR1776SB	46 30 5	121 21 2	.5		1.5		1.5		.10		5		20		N		200		5		10	
GR1777SB	46 30 0	121 21 0	1.5		3.0		5.0		.50		20		150		100		500		20		30	
GR1778SB	46 30 10	121 20 36	1.5		3.0		5.0		.50		15		100		30		500		20		20	
GR1779SB	46 30 2	121 19 52	1.5		5.0		5.0		.30		15		100		15		500		20		20	
GR1780SB	46 29 57	121 19 35	1.5		3.0		5.0		.50		15		100		30		700		30		20	
GR1781SB	46 34 0	121 27 15	1.0		3.0		5.0		.30		15		100		20		500		20		20	
GR1782SB	46 33 56	121 27 12	1.5		3.0		5.0		.50		20		150		50		700		20		30	
GR1783SB	46 34 9	121 27 10	1.0		2.0		5.0		.50		20		100		20		700		20		15	
GR1785SB	46 35 9	121 28 15	1.5		3.0		5.0		.50		20		100		20		700		20		15	

Table 5. Spectrographic analytical data from stream sediment samples (data set B) collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1513SB	15	N	N	N	N	<10	N	300	300	N	15	70	N
GR1514SB	20	N	N	N	N	<10	N	500	300	N	15	100	N
GR1515SB	20	N	N	N	N	<10	N	500	200	N	15	70	N
GR1516SB	50	N	N	N	N	10	N	500	200	N	20	70	N
GR1519SB	20	N	N	<10	N	<10	N	500	200	N	15	100	N
GR1520SB	50	N	N	N	N	30	1.0	200	500	N	20	100	N
GR1521SB	30	N	N	N	N	10	1.0	300	200	N	30	100	N
GR1522SB	30	N	N	N	N	<10	1.0	500	300	N	20	100	N
GR1523SB	20	N	N	N	N	<10	N	500	200	N	10	100	N
GR1524SB	20	N	N	N	N	20	1.0	200	500	N	15	100	N
GR1525SB	20	N	N	N	N	<10	N	300	200	N	15	100	N
GR1526SB	20	N	N	N	N	10	1.0	300	300	N	20	100	N
GR1527SB	20	N	7	N	N	10	N	500	300	N	20	100	N
GR1702SB	20	N	N	N	N	<10	1.0	300	200	N	10	70	N
GR1703SB	30	N	N	N	N	10	1.0	500	300	N	15	70	N
GR1750SB	30	N	N	N	N	<10	1.0	500	300	N	20	100	N
GR1751SB	30	N	N	N	N	<10	N	500	300	N	15	100	N
GR1752SB	30	N	N	N	N	100	N	500	200	N	15	100	N
GR1754SB	50	N	N	N	N	<10	N	300	200	N	15	70	N
GR1755SB	30	N	N	N	N	<10	1.0	500	500	N	20	100	N
GR1756SB	30	N	N	N	N	10	N	300	300	N	20	100	N
GR1757SB	30	N	N	N	N	<10	N	500	200	N	10	70	N
GR1758SB	30	N	N	N	N	10	N	500	300	N	15	100	N
GR1759SB	30	N	N	N	N	<10	N	500	300	N	10	70	N
GR1760SB	30	N	N	N	N	<10	N	500	300	N	10	70	N
GR1764SB	20	N	N	N	N	<10	1.0	300	300	N	10	70	N
GR1765SB	20	N	N	N	N	<10	1.0	300	200	N	10	50	N
GR1766SB	15	N	N	N	N	15	1.0	300	300	N	15	150	N
GR1767SB	20	N	N	N	N	10	1.0	500	300	N	15	70	N
GR1768SB	20	N	N	10	N	15	1.0	300	500	N	15	70	N
GR1769SB	30	N	N	10	N	50	1.0	300	700	N	15	100	N
GR1770SB	20	N	N	<10	N	15	1.0	300	500	N	15	100	N
GR1771SB	15	N	N	N	N	20	1.5	300	500	N	10	100	N
GR1772SB	50	<200	N	10	N	50	1.0	300	500	N	15	100	N
GR1773SB	30	N	N	<10	N	30	1.0	200	500	N	10	70	N
GR1775SB	20	N	N	<10	N	20	1.0	300	300	N	15	100	N
GR1776SB	7	N	5	10	N	30	1.5	150	700	20	30	100	N
GR1777SB	20	N	<5	N	N	<10	1.0	500	200	N	20	100	N
GR1778SB	20	N	10	N	N	<10	1.0	500	200	N	20	100	N
GR1779SB	20	N	N	N	N	<10	N	500	200	N	15	70	N
GR1780SB	30	N	N	N	N	<10	N	500	200	N	15	70	N
GR1781SB	20	N	N	N	N	<10	N	500	200	N	15	100	N
GR1782SB	30	N	N	<10	N	10	N	500	300	N	30	100	N
GR1783SB	20	N	N	N	N	15	N	300	300	N	30	150	N
GR1785SB	20	N	N	N	N	10	N	300	200	N	20	150	N

Table 5. Spectrographic analytical data from stream sediment samples (data set B) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1786SB	46 36 11	121 29 4	1.5	3.0	5.0	.30	20	100	20	500	20	20
GR1787SB	46 36 8	121 29 2	1.0	3.0	5.0	.50	20	100	10	700	20	15
GR1789SB	46 27 13	121 26 48	1.5	3.0	5.0	.30	10	100	15	500	20	20
GR1790SB	46 27 18	121 26 50	2.0	5.0	5.0	.30	15	100	20	700	30	20
GR1796SB	46 32 32	121 36 53	.7	3.0	2.0	.50	20	150	50	1,000	15	20
GR1797SB	46 31 38	121 36 46	1.5	3.0	3.0	.20	10	100	15	500	20	20

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1786SB	20	N	N	N	N	<10	1.0	500	200	N	20	100	N
GR1787SB	30	N	N	N	N	<10	N	500	200	N	20	100	N
GR1789SB	15	N	N	N	N	<10	N	500	200	N	10	70	N
GR1790SB	20	N	N	N	N	<10	N	500	200	N	15	70	N
GR1796SB	30	N	N	N	N	<10	1.0	300	300	N	15	100	N
GR1797SB	20	N	N	N	N	<10	N	500	200	N	15	70	N

Table 6. Spectrographic analytical data from stream sediment samples (data set C) collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: --, no determination made; N, concentration less than the detection limit; <, detected, but present at a concentration less than the value reported; >, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1000SC	46 30 42	121 29 10	1.0	2.0	5.0	.50	10	100	20	500	20	20
GR1001SC	46 30 47	121 29 5	1.0	2.0	5.0	.50	10	100	10	500	15	15
GR1003SC	46 28 56	121 29 37	1.0	3.0	5.0	.50	15	150	15	500	20	20
GR1004SC	46 30 20	121 29 7	1.0	2.0	5.0	.50	10	100	15	500	20	15
GR1005SC	46 29 25	121 29 23	1.0	2.0	5.0	.50	10	100	20	500	20	15
GR1006SC	46 28 51	121 26 46	1.0	1.0	5.0	.50	15	150	50	300	10	20
GR1007SC	46 33 2	121 25 40	1.5	2.0	7.0	.50	20	200	150	500	20	50
GR1008SC	46 34 13	121 26 2	1.5	2.0	10.0	.50	20	200	100	1,000	50	70
GR1009SC	46 34 8	121 26 8	1.5	2.0	10.0	.50	20	200	100	1,000	30	50
GR1010SC	46 32 23	121 31 38	1.0	3.0	5.0	.50	15	150	30	500	20	20
GR1012SC	46 28 42	121 27 30	1.0	1.5	5.0	.50	10	150	30	300	15	20
GR1013SC	46 28 39	121 28 8	1.0	3.0	5.0	.50	15	150	20	500	20	20
GR1014AC	46 28 29	121 28 19	1.0	3.0	5.0	.30	10	150	15	500	15	20
GR1014SC	46 28 29	121 28 19	1.0	2.0	5.0	.50	10	100	30	500	15	20
GR1015SC	46 28 29	121 28 30	1.5	3.0	5.0	.50	15	200	30	700	30	20
GR1016SC	46 28 3	121 29 19	1.5	3.0	5.0	.50	15	150	30	700	20	20
GR1017SC	46 26 58	121 29 57	1.0	3.0	5.0	.50	15	150	20	500	20	20
GR1018SC	46 26 49	121 29 41	1.0	2.0	5.0	.50	10	100	20	500	15	15
GR1019SC	46 26 27	121 29 43	1.0	2.0	5.0	.50	10	100	50	500	20	20
GR1020SC	46 36 28	121 33 17	1.0	2.0	7.0	.70	20	150	50	1,500	20	15
GR1021SC	46 37 41	121 33 18	.7	2.0	7.0	.70	20	100	15	1,500	15	10
GR1022SC	46 37 45	121 33 20	.5	.7	3.0	.50	10	50	<10	1,000	10	7
GR1024SC	46 39 10	121 34 17	.5	1.0	3.0	.50	15	70	<10	1,000	15	7
GR1025SC	46 32 23	121 18 19	.7	2.0	7.0	.70	15	70	100	1,000	15	15
GR1026SC	46 32 30	121 18 25	.7	2.0	2.0	.50	10	100	70	1,000	15	15
GR1027SC	46 32 31	121 18 8	.3	1.0	.7	.20	5	50	<10	1,000	7	7
GR1028SC	46 32 38	121 17 33	1.0	2.0	7.0	.50	15	150	150	1,500	20	20
GR1029SC	46 33 37	121 16 5	1.0	2.0	5.0	.50	15	100	100	1,000	15	10
GR1030SC	46 36 26	121 15 52	1.0	2.0	7.0	.70	10	100	100	1,500	20	20
GR1031SC	46 37 18	121 15 22	1.0	2.0	7.0	.70	20	150	150	1,500	20	20
GR1032SC	46 37 15	121 16 29	1.0	1.0	5.0	.50	20	150	150	1,000	20	50
GR1033SC	46 37 9	121 17 22	1.0	1.5	5.0	.50	15	100	100	1,000	15	20
GR1034SC	46 37 5	121 17 55	1.0	2.0	5.0	.50	15	100	50	1,000	15	20
GR1035SC	46 35 50	121 20 12	1.0	3.0	5.0	.50	10	150	30	1,500	20	20
GR1036SC	46 36 38	121 19 11	1.0	2.0	2.0	.30	7	100	30	1,000	15	15
GR1037SC	46 28 47	121 20 47	.7	1.5	5.0	.50	10	100	15	500	10	10
GR1038SC	46 28 54	121 20 0	1.0	2.0	5.0	.50	15	100	30	500	15	15
GR1039SC	46 29 3	121 19 42	1.0	2.0	5.0	.50	15	100	30	500	10	10
GR1040SC	46 31 8	121 24 59	1.5	2.0	5.0	.50	15	150	50	500	20	20
GR1041SC	46 31 8	121 24 55	1.5	2.0	5.0	.50	15	100	70	500	20	50
GR1042SC	46 31 12	121 25 0	1.5	2.0	5.0	.50	15	100	70	700	20	30
GR1043SC	46 31 40	121 24 47	1.0	2.0	5.0	.30	15	100	50	500	20	30
GR1046PC	46 29 22	121 29 28	1.5	2.0	5.0	.30	10	100	10	500	15	10
GR1047SC	46 33 0	121 34 22	1.5	3.0	5.0	.50	15	200	50	700	20	20
GR1049RC	46 30 19	121 27 17	1.0	2.0	3.0	.20	10	100	30	300	15	20

Table 6. Spectrographic analytical data from stream sediment samples (data set C) collected in the Goat Rocks area

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1000SC	20	N	N	<10	N	N	10	1.5	300	500	N	20	200	N
GR1001SC	20	N	N	<10	N	N	10	1.5	500	500	N	20	150	N
GR1003SC	30	N	N	<10	N	N	20	1.5	500	500	N	20	150	N
GR1004SC	20	N	N	<10	N	N	<10	1.0	500	300	N	15	100	N
GR1005SC	20	N	N	<10	N	N	<10	1.0	500	300	N	15	100	N
GR1006SC	50	N	5	10	N	N	200	1.5	200	500	N	20	200	<20
GR1007SC	70	N	N	<10	N	N	50	1.5	200	300	N	20	150	<20
GR1008SC	100	N	N	<10	N	N	30	1.0	150	300	N	30	100	N
GR1009SC	100	N	N	<10	N	N	30	1.0	200	200	N	30	100	N
GR1010SC	20	N	<5	10	N	N	15	1.5	300	700	20	20	200	<20
GR1012SC	30	N	<5	10	N	N	150	1.5	200	500	N	20	200	<20
GR1013SC	20	N	N	<10	N	N	10	1.0	300	500	N	15	150	<20
GR1014AC	50	N	N	10	N	N	10	1.0	500	300	N	15	100	N
GR1014SC	20	N	N	10	N	N	100	1.5	200	700	N	20	200	<20
GR1015SC	50	N	N	10	N	N	10	1.0	500	500	N	20	150	N
GR1016SC	30	N	N	<10	N	N	10	1.0	500	500	N	20	150	N
GR1017SC	30	N	N	<10	N	N	15	1.0	300	500	N	30	150	N
GR1018SC	20	N	N	<10	N	N	15	1.0	300	500	N	20	200	<20
GR1019SC	30	N	N	10	N	N	10	1.5	300	700	20	20	200	<20
GR1020SC	50	N	N	10	N	N	50	2.0	300	500	N	20	300	N
GR1021SC	50	N	N	10	N	N	70	2.0	300	500	N	20	300	N
GR1022SC	20	N	N	<10	N	N	50	2.0	200	500	N	15	150	N
GR1024SC	30	N	N	N	N	N	20	2.0	200	500	N	20	200	N
GR1025SC	20	N	<5	15	N	N	50	2.0	500	700	N	20	500	<20
GR1026SC	15	N	N	15	N	N	50	2.0	500	700	N	20	200	N
GR1027SC	10	N	N	20	N	N	50	3.0	200	1,000	N	20	70	N
GR1028SC	30	N	N	20	N	N	30	2.0	500	1,000	N	20	150	N
GR1029SC	30	N	N	10	N	N	30	2.0	500	1,000	N	15	300	N
GR1030SC	30	N	5	15	N	N	30	2.0	500	700	N	15	200	N
GR1031SC	50	N	<5	10	N	N	30	1.5	500	500	N	15	300	N
GR1032SC	50	N	N	15	N	N	100	2.0	200	700	N	20	300	N
GR1033SC	30	N	N	10	N	N	50	1.5	200	500	N	10	200	N
GR1034SC	50	N	5	N	N	N	20	1.5	500	500	N	15	100	N
GR1035SC	50	N	5	N	N	N	20	1.5	500	300	N	10	100	N
GR1036SC	20	N	<5	N	N	N	15	1.5	500	300	N	<10	100	N
GR1037SC	30	N	N	<10	N	N	10	1.5	200	700	20	20	200	<20
GR1038SC	15	N	N	10	N	N	15	1.5	300	700	30	30	200	<20
GR1039SC	15	N	N	10	N	N	10	1.5	200	700	30	30	200	<20
GR1040SC	30	N	N	10	N	N	10	1.5	300	500	20	20	200	<20
GR1041SC	20	N	N	10	N	10	150	1.5	200	500	20	20	200	<20
GR1042SC	20	N	N	<10	N	N	10	1.5	300	500	20	20	200	<20
GR1043SC	20	N	N	N	N	N	15	1.0	200	300	N	20	150	N
GR1046PC	20	N	N	<10	N	N	10	1.5	300	300	N	15	150	N
GR1047SC	20	N	5	10	N	N	10	1.5	500	700	30	30	200	<20
GR1049RC	20	N	N	N	N	N	10	N	150	300	N	15	100	N

Table 6. Spectrographic analytical data from stream sediment samples (data set C) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1250SC	46 33 7	121 29 22	1.0	1.5	7.0	.50	15	150	15	700	20	10
GR1251SC	46 33 23	121 29 40	1.5	3.0	10.0	.70	20	200	10	1,000	30	10
GR1252SC	46 33 30	121 29 52	1.0	3.0	7.0	.50	20	150	30	1,000	20	10
GR1253SC	46 33 42	121 30 15	1.5	3.0	10.0	.50	20	200	20	1,000	30	15
GR1254SC	46 33 54	121 31 8	1.0	3.0	7.0	.50	20	200	20	1,000	30	10
GR1255SC	46 34 16	121 32 5	1.0	2.0	5.0	.50	15	100	10	1,000	20	7
GR1256SC	46 34 41	121 32 45	1.0	2.0	7.0	.50	15	100	15	1,000	20	7
GR1257SC	46 31 18	121 31 32	1.5	3.0	7.0	.50	15	200	20	700	30	20
GR1258SC	46 31 22	121 31 32	1.5	3.0	5.0	.50	15	150	50	500	20	20
GP1259SC	46 31 19	121 31 41	1.5	3.0	5.0	.50	20	200	30	700	30	20
GR1260SC	46 31 15	121 31 55	1.0	2.0	5.0	.50	15	200	10	700	20	10
GR1261SC	46 31 0	121 32 10	1.0	3.0	5.0	.30	10	150	10	500	15	15
GR1262SC	46 31 7	121 32 18	1.0	3.0	5.0	.50	15	200	30	500	20	20
GR1263SC	46 30 50	121 33 8	1.0	3.0	5.0	.50	20	200	10	700	30	15
GR1265SC	46 30 49	121 33 35	1.0	3.0	7.0	.50	20	200	15	700	30	10
GR1266SC	46 30 38	121 33 59	1.0	2.0	5.0	.50	10	150	15	700	20	15
GR1267SC	46 40 3	121 32 32	1.0	2.0	7.0	.70	15	150	20	1,500	15	15
GR1268SC	46 39 18	121 31 49	1.0	2.0	5.0	.50	10	100	10	1,500	15	15
GR1270SC	46 39 36	121 30 35	1.0	2.0	7.0	.70	15	100	100	1,500	20	20
GR1271SC	46 39 42	121 30 15	1.0	2.0	5.0	.50	15	100	150	1,500	20	20
GR1272SC	46 34 10	121 21 25	1.5	1.5	5.0	.30	15	150	100	700	15	50
GR1273SC	46 33 38	121 21 30	1.5	2.0	5.0	.30	15	150	100	500	20	50
GR1274SC	46 32 59	121 22 2	1.5	2.0	5.0	.50	15	100	70	500	15	20
GR1275SC	46 32 50	121 22 28	1.5	2.0	5.0	.50	15	100	100	500	20	30
GR1276SC	46 32 38	121 23 9	1.5	2.0	5.0	.50	15	100	70	500	15	20
GR1278SC	46 36 50	121 26 58	1.5	2.0	7.0	.50	20	200	70	700	30	30
GR1279SC	46 36 40	121 26 57	1.5	2.0	7.0	.50	20	200	100	700	30	30
GR1280SC	46 36 10	121 26 47	1.5	2.0	5.0	.50	15	150	100	500	20	30
GR1281SC	46 36 2	121 26 47	1.5	3.0	7.0	.50	20	150	150	700	30	50
GR1282SC	46 35 4	121 26 40	1.5	3.0	7.0	.50	20	150	200	700	30	50
GR1283SC	46 34 55	121 26 40	1.5	2.0	7.0	.50	20	200	150	700	30	50
GR1284SC	46 32 23	121 34 50	1.0	3.0	7.0	.50	20	200	15	700	30	10
GR1500SC	46 33 26	121 29 59	1.0	3.0	5.0	.50	10	150	20	500	20	15
GR1501SC	46 33 40	121 30 46	1.0	2.0	5.0	.50	20	150	50	1,000	20	15
GR1502SC	46 33 40	121 31 9	1.0	1.5	5.0	.50	15	150	50	1,000	20	10
GR1503SC	46 33 47	121 31 38	1.0	2.0	5.0	.50	20	100	30	1,000	20	10
GR1504SC	46 33 52	121 32 4	.5	2.0	3.0	.50	20	100	<10	1,000	10	5
GR1505SC	46 34 10	121 32 40	.7	2.0	5.0	.50	10	100	20	1,000	15	5
GR1506SC	46 30 10	121 31 6	1.0	2.0	5.0	.70	20	100	70	1,500	20	15
GR1507SC	46 30 2	121 31 39	1.0	2.0	5.0	.70	20	150	10	1,500	20	10
GR1508SC	46 30 0	121 32 27	1.0	2.0	5.0	.50	15	100	<10	1,000	15	10
GR1509SC	46 29 15	121 33 12	1.0	1.5	5.0	.50	20	100	100	1,000	20	20
GR1510SC	46 29 25	121 34 5	1.0	1.5	7.0	.70	20	150	100	1,000	20	20
GR1511SC	46 34 42	121 21 30	1.5	2.0	5.0	.20	15	100	100	500	30	50
GR1512SC	46 35 22	121 21 3	1.0	2.0	3.0	.20	10	100	70	500	15	30

Table 6. Spectrographic analytical data from stream sediment samples (data set C) collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1250SC	50	N	N	<10	N	N	20	1.5	200	500	N	30	150	N
GR1251SC	100	N	N	<10	N	N	10	1.0	200	500	N	30	150	N
GR1252SC	70	N	N	<10	N	N	10	1.0	200	500	N	30	150	N
GR1253SC	70	N	N	<10	N	N	10	1.0	200	500	N	30	100	N
GR1254SC	100	N	N	10	N	N	10	1.0	200	500	N	30	200	N
GR1255SC	50	N	N	<10	N	N	10	1.5	200	700	N	30	150	N
GR1256SC	50	N	N	10	N	N	10	1.5	200	500	N	30	150	N
GR1257SC	70	N	N	<10	N	N	10	1.0	500	300	N	20	150	N
GR1258SC	30	N	N	10	N	N	10	1.5	300	700	30	20	200	<20
GR1259SC	70	N	N	<10	N	N	10	1.0	500	500	N	20	150	N
GR1260SC	50	N	N	<10	N	N	10	1.0	300	500	N	20	150	N
GR1261SC	50	N	N	<10	N	N	10	1.0	500	500	N	15	100	N
GR1262SC	50	N	N	10	N	N	10	1.5	300	700	20	20	200	<20
GR1263SC	100	N	N	<10	N	N	10	N	300	300	N	20	100	N
GR1265SC	70	N	N	<10	N	N	10	1.0	200	300	N	20	100	N
GR1266SC	30	N	N	10	N	N	10	1.5	200	700	20	20	150	N
GR1267SC	30	N	<5	<10	N	N	20	2.0	500	500	N	20	150	N
GR1268SC	30	N	<5	<10	N	N	20	1.5	500	500	N	15	150	N
GR1270SC	50	N	N	<10	N	N	10	2.0	500	500	N	20	200	N
GR1271SC	20	N	N	<10	N	N	10	2.0	500	500	N	10	150	N
GR1272SC	50	N	N	10	N	N	50	1.5	200	700	N	20	100	N
GR1273SC	20	N	N	10	N	N	30	1.5	300	700	20	20	150	N
GR1274SC	20	N	N	10	N	N	20	1.5	300	700	20	20	200	<20
GR1275SC	20	N	N	10	N	N	15	1.5	300	700	N	20	150	<20
GR1276SC	20	N	N	10	N	N	15	1.5	300	500	20	30	200	<20
GR1278SC	50	N	N	<10	N	N	20	1.5	200	500	N	30	200	N
GR1279SC	50	N	N	<10	N	N	20	1.5	200	500	N	30	150	<20
GR1280SC	30	N	N	10	N	N	20	1.0	300	700	N	20	150	N
GR1281SC	30	N	N	<10	N	N	15	1.0	300	700	N	20	200	N
GR1282SC	30	N	N	<10	N	N	20	1.0	300	500	N	30	200	N
GR1283SC	70	N	N	<10	N	N	50	1.5	200	500	N	30	200	N
GR1284SC	70	N	N	<10	N	N	10	1.0	200	300	N	20	100	N
GR1500SC	30	N	N	<10	N	N	10	1.5	200	500	20	20	150	N
GR1501SC	50	N	N	<10	.5	N	50	1.5	500	500	N	20	500	N
GR1502SC	30	N	<5	<10	N	N	30	2.0	300	500	N	20	300	N
GR1503SC	50	N	N	N	N	N	70	2.0	500	500	N	15	200	N
GR1504SC	30	N	N	N	N	N	10	1.5	500	200	N	15	100	N
GR1505SC	20	N	N	<10	.5	N	20	2.0	200	500	N	15	200	N
GR1506SC	50	N	N	<10	N	N	30	2.0	300	500	N	20	300	N
GR1507SC	50	N	N	<10	N	N	20	2.0	500	500	N	20	200	N
GR1508SC	30	N	N	<10	N	N	30	2.0	500	500	N	15	200	N
GR1509SC	50	N	N	10	N	N	30	2.0	300	500	N	20	200	N
GR1510SC	50	N	N	10	N	N	50	2.0	300	500	N	20	200	N
GR1511SC	20	N	N	N	N	N	<10	1.0	300	300	N	15	100	N
GR1512SC	20	N	N	N	N	N	10	1.0	300	500	N	15	100	N

Table 6. Spectrographic analytical data from stream sediment samples (data set C) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1513SC	46 36 8	121 20 20	1.5	3.0	5.0	.20	15	100	100	500	30	50
GR1514SC	46 36 55	121 19 29	1.0	2.0	3.0	.20	10	100	30	300	20	15
GR1515SC	46 32 28	121 23 23	1.5	2.0	10.0	.70	20	200	70	1,000	50	50
GR1516SC	46 32 39	121 23 20	1.5	3.0	7.0	.70	20	200	200	700	50	70
GR1519SC	46 33 8	121 23 12	1.5	2.0	5.0	.50	20	200	100	700	20	50
GR1520SC	46 33 12	121 23 1	1.5	2.0	7.0	.50	20	200	200	1,000	30	70
GR1521SC	46 34 9	121 21 51	1.0	2.0	10.0	.50	20	200	20	1,000	20	15
GR1522SC	46 37 2	121 27 10	1.5	3.0	5.0	.50	20	150	50	700	20	30
GR1523SC	46 36 53	121 27 7	1.5	2.0	5.0	.50	15	150	100	500	20	30
GR1524SC	46 35 46	121 26 57	1.0	1.5	5.0	.50	15	150	70	500	15	30
GR1525SC	46 35 38	121 26 45	2.0	3.0	7.0	.50	20	200	200	700	50	50
GR1526SC	46 37 31	121 27 9	1.0	2.0	7.0	.50	20	200	10	700	20	7
GR1527SC	46 37 34	121 27 16	1.5	2.0	7.0	.50	20	200	50	1,000	30	30
GR1750SC	46 32 28	121 28 58	1.0	3.0	5.0	.50	15	150	20	500	20	15
GR1751SC	46 32 25	121 28 54	1.5	3.0	5.0	.50	15	200	50	500	30	30
GR1752SC	46 32 27	121 28 50	1.5	1.5	5.0	.50	15	150	70	700	20	30
GR1754SC	46 33 12	121 29 38	1.5	3.0	7.0	.50	20	200	20	1,000	30	20
GR1755SC	46 33 18	121 29 45	1.0	3.0	5.0	.50	15	150	30	500	20	20
GR1756SC	46 32 25	121 32 27	1.0	3.0	5.0	.50	15	150	30	500	20	20
GR1757SC	46 25 0	121 25 46	1.5	3.0	5.0	.50	15	150	70	700	30	50
GR1758SC	46 25 5	121 25 45	1.0	1.0	5.0	.30	10	100	30	500	15	30
GR1759SC	46 25 6	121 25 50	1.0	1.5	5.0	.50	10	100	20	500	15	20
GR1760SC	46 24 51	121 26 51	1.0	1.5	5.0	.30	10	100	20	500	15	20
GR1762SC	46 24 46	121 28 17	1.0	2.0	5.0	.50	20	100	100	1,500	20	30
GR1763SC	46 28 3	121 31 42	1.0	3.0	5.0	.50	15	100	70	2,000	20	20
GR1764SC	46 30 42	121 34 16	1.0	2.0	5.0	.50	15	100	20	2,000	20	20
GR1765SC	46 30 29	121 17 26	1.0	3.0	5.0	.50	15	100	20	2,000	15	20
GR1766SC	46 30 32	121 17 21	1.0	2.0	7.0	1.00	20	100	100	2,000	20	15
GR1767SC	46 31 14	121 16 18	1.0	3.0	7.0	.70	20	100	70	2,000	20	15
GR1768SC	46 32 13	121 15 43	1.0	2.0	7.0	1.00	20	100	100	2,000	20	15
GR1769SC	46 38 51	121 20 52	1.0	1.5	5.0	.50	10	100	100	1,000	15	20
GR1770SC	46 28 55	121 20 58	1.0	2.0	5.0	.50	15	100	150	1,000	15	30
GR1771SC	46 38 15	121 17 7	.7	1.5	3.0	.50	10	100	100	1,000	20	20
GR1772SC	46 37 39	121 18 16	1.0	2.0	7.0	.70	20	150	100	1,500	15	20
GR1773SC	46 37 34	121 18 52	1.0	2.0	5.0	.50	15	100	100	1,500	15	20
GR1775SC	46 36 56	121 18 29	1.0	2.0	5.0	.50	10	100	70	1,500	15	20
GR1776SC	46 30 5	121 21 2	1.5	3.0	5.0	.30	20	150	500	700	20	50
GR1777SC	46 30 0	121 21 0	1.0	2.0	3.0	.30	10	150	50	700	15	15
GR1778SC	46 30 10	121 20 36	.1	.7	1.0	.05	<5	N	N	200	N	N
GR1779SC	46 30 2	121 19 52	1.0	2.0	5.0	.50	10	100	30	500	15	20
GR1780SC	46 29 57	121 19 35	1.5	1.5	5.0	.50	15	150	70	500	20	50
GR1781SC	46 34 0	121 27 15	1.0	2.0	7.0	.50	20	150	15	1,000	20	10
GR1782SC	46 33 56	121 27 12	1.5	2.0	7.0	.50	20	200	70	700	30	30
GR1783SC	46 34 9	121 27 10	1.0	2.0	7.0	.50	20	150	<10	1,000	20	7
GR1785SC	46 35 9	121 29 15	1.0	2.0	7.0	.50	20	200	10	1,000	20	7

Table 6. Spectrographic analytical data from stream sediment samples (data set C) collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1513SC	20	N	N	N	N	N	10	1.0	300	500	N	20	100	N
GR1514SC	30	N	N	N	N	N	<10	N	500	300	N	15	100	N
GR1515SC	100	N	N	<10	N	N	20	1.0	150	300	N	30	150	N
GR1516SC	100	N	N	N	N	N	15	1.0	150	300	N	30	100	N
GR1519SC	50	N	N	10	N	N	20	1.5	300	700	N	20	150	N
GR1520SC	100	N	N	10	N	N	50	1.5	200	700	N	30	100	N
GR1521SC	70	N	N	<10	N	N	10	1.5	200	500	N	50	200	N
GR1522SC	50	N	N	<10	N	N	<10	1.5	300	500	N	20	200	N
GR1523SC	30	N	N	10	N	N	20	1.5	300	700	N	20	150	N
GR1524SC	20	N	N	10	N	N	30	1.5	200	700	30	20	200	N
GR1525SC	30	N	N	<10	N	N	10	1.0	300	500	N	20	150	N
GR1526SC	50	N	N	<10	N	N	10	1.0	200	500	N	30	150	N
GR1527SC	30	N	N	<10	N	N	10	1.5	200	500	N	30	200	<20
GR1750SC	50	N	N	<10	N	N	10	1.5	300	500	20	20	150	N
GR1751SC	50	N	N	<10	N	N	10	1.5	300	500	N	30	150	N
GR1752SC	50	N	N	<10	N	N	200	1.5	200	300	N	20	200	N
GR1754SC	70	N	N	<10	N	N	10	1.0	200	500	N	30	150	N
GR1755SC	50	N	N	10	N	N	10	1.5	300	500	N	20	150	N
GR1756SC	30	N	N	10	N	N	10	2.0	500	700	30	20	200	<20
GR1757SC	50	N	N	10	N	N	10	1.5	500	500	N	20	150	N
GR1758SC	20	N	N	<10	N	N	50	1.5	200	500	N	20	150	N
GR1759SC	30	N	N	10	N	N	30	1.5	200	500	N	20	200	N
GR1760SC	20	N	N	<10	N	N	30	1.5	200	500	N	20	200	N
GR1762SC	30	N	<5	N	N	N	<10	1.5	500	300	N	10	100	N
GR1763SC	50	N	N	N	N	N	10	1.5	700	300	N	10	100	N
GR1764SC	50	N	<5	N	N	N	<10	1.5	700	300	N	10	100	N
GR1765SC	50	N	5	N	N	N	10	1.5	700	300	N	10	100	N
GR1766SC	30	N	5	N	N	N	20	1.5	500	500	N	15	200	N
GR1767SC	50	N	<5	N	N	N	15	1.5	500	500	N	10	200	N
GR1768SC	50	N	N	N	N	N	20	1.5	700	500	N	15	100	<20
GR1769SC	50	N	N	10	N	N	50	1.5	500	1,000	N	15	100	N
GR1770SC	30	N	N	N	N	N	20	1.5	500	1,000	N	15	150	N
GR1771SC	15	N	N	N	N	N	30	1.5	500	1,000	N	10	100	N
GR1772SC	50	N	N	15	N	N	70	1.5	500	1,000	N	20	200	N
GR1773SC	50	N	N	10	N	N	50	1.5	500	1,000	N	15	150	N
GR1775SC	30	N	N	N	N	N	30	1.5	500	500	N	10	200	N
GR1776SC	20	N	N	10	N	N	10	1.5	300	700	30	30	200	<20
GR1777SC	20	N	N	10	N	N	10	1.5	300	700	30	20	200	<20
GR1778SC	5	N	N	15	N	N	30	2.0	<100	1,000	30	30	100	<20
GR1779SC	15	N	N	10	N	N	15	1.5	300	1,000	20	30	150	N
GR1780SC	30	N	N	10	N	N	20	1.5	200	700	20	20	150	N
GR1781SC	50	N	N	<10	N	N	15	1.5	200	500	N	30	200	N
GR1782SC	50	N	N	<10	N	N	15	1.0	200	500	N	30	150	N
GR1783SC	30	N	N	10	N	N	20	1.5	200	700	20	30	200	N
GR1785SC	50	N	N	<10	N	N	10	1.0	150	300	N	30	150	N

Table 6. Spectrographic analytical data from stream sediment samples (data set C) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1786SC	46 36 11	121 29 4	1.0	2.0	7.0	.70	20	150	15	1,000	20	10
GR1787SC	46 36 8	121 29 2	1.0	2.0	7.0	.50	20	200	10	1,000	20	7
GR1789SC	46 27 13	121 26 48	.7	1.0	5.0	.30	10	70	15	500	10	15
GR1790SC	46 27 18	121 26 50	1.5	2.0	5.0	.50	15	150	30	700	20	20
GR1796SC	46 32 32	121 36 53	1.0	2.0	7.0	.70	20	150	50	2,000	20	20
GR1797SC	46 31 38	121 36 46	1.5	2.0	7.0	.50	20	200	10	1,000	20	10

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1786SC	50	N	N	<10	N	N	10	1.5	200	300	N	30	200	N
GR1787SC	50	N	N	<10	N	N	10	1.0	200	300	N	30	200	N
GR1789SC	20	N	N	<10	N	N	<10	2.0	150	500	30	20	200	<20
GR1790SC	20	N	N	10	N	N	15	1.5	300	500	N	20	200	<20
GR1796SC	50	N	<5	<10	N	N	10	1.5	500	300	N	20	150	N
GR1797SC	50	N	N	<10	N	N	10	1.0	200	300	N	30	150	N

Table 7. ICP analytical data from stream sediment samples (data set A) collected in the Goat Rocks area

[The following qualifiers are used in reporting ICP analytical data: --, no determination made; <, concentration less than the given detection limit; L, detected, but data are qualitative only.]

Sample	Latitude	Longitude	MG-ppm ICP	CA-ppm ICP	FE-ppm ICP	TI-ppm ICP	AL-ppm ICP	V-ppm ICP	MN-ppm ICP	CO-ppm ICP	NI-ppm ICP	CU-ppm ICP
GR1000SA	46 30 42	121 29 10	2,000	2,400	25,000	2,100	2,200	110.0	150	7.1	11.0	27.0
GR1001SA	46 30 42	121 29 5	3,100	2,800	23,000	1,600	3,900	95.0	250	7.1	9.9	23.0
GR1003SA	46 28 56	121 29 37	2,000	2,400	17,000	1,300	3,800	75.0	160	6.2	8.4	18.0
GR1004SA	46 30 20	121 29 7	1,700	2,700	15,000	1,100	3,700	65.0	100	6.0	7.6	22.0
GR1005SA	46 29 25	121 29 23	1,200	4,300	14,000	1,300	9,100	63.0	140	L3.5	5.7	13.0
GR1006SA	46 28 51	121 26 46	2,800	2,800	34,000	1,600	3,800	120.0	190	10.0	13.0	46.0
GR1007SA	46 33 2	121 25 40	5,400	3,600	33,000	660	8,800	90.0	350	13.0	17.0	44.0
GR1008SA	46 34 13	121 26 2	13,000	16,000	70,000	24	17,000	130.0	910	34.0	42.0	130.0
GR1009SA	46 34 8	121 26 8	7,800	7,200	57,000	84	14,000	120.0	690	22.0	29.0	61.0
GR1010SA	46 32 23	121 31 38	1,700	2,400	19,000	1,300	4,200	95.0	170	7.6	8.7	15.0
GR1012SA	46 28 42	121 27 30	2,700	2,700	28,000	1,700	3,300	110.0	170	11.0	22.0	42.0
GR1013SA	46 28 39	121 28 8	2,200	2,700	28,000	2,300	2,800	130.0	160	11.0	13.0	33.0
GR1014AA	46 28 29	121 28 19	3,100	3,300	13,000	710	4,400	43.0	130	4.8	6.6	32.0
GR1014SA	46 28 29	121 28 19	2,400	2,600	28,000	2,100	2,400	120.0	160	10.0	13.0	35.0
GR1015SA	46 28 29	121 28 30	1,900	2,300	16,000	1,100	2,800	71.0	110	6.6	8.3	21.0
GR1016SA	46 28 3	121 29 19	1,800	2,400	25,000	2,200	4,400	120.0	210	9.9	11.0	23.0
GR1017SA	46 26 58	121 29 57	1,900	2,200	12,000	780	3,100	49.0	110	5.9	6.7	25.0
GR1018SA	46 26 49	121 29 41	2,700	2,800	24,000	840	8,800	62.0	310	8.2	8.8	15.0
GR1019SA	46 26 22	121 29 43	2,400	2,400	34,000	2,200	2,800	130.0	200	11.0	13.0	35.0
GR1020SA	46 36 28	121 33 17	3,300	4,500	43,000	2,100	11,000	130.0	420	11.0	13.0	21.0
GR1021SA	46 37 41	121 33 18	3,700	3,900	32,000	700	9,100	78.0	360	7.9	9.4	26.0
GR1022SA	46 37 45	121 33 20	2,100	2,400	30,000	940	5,300	84.0	280	7.6	10.0	18.0
GR1024SA	46 39 10	121 34 17	2,800	4,000	54,000	310	8,800	140.0	540	12.0	15.0	19.0
GR1025SA	46 32 23	121 18 19	1,900	3,500	25,000	1,700	5,200	79.0	240	8.0	9.2	22.0
GR1026SA	46 32 30	121 18 25	1,900	2,700	30,000	2,300	3,700	120.0	190	9.9	11.0	28.0
GR1027SA	46 32 31	121 18 8	1,100	1,300	10,000	600	2,500	37.0	130	4.0	6.4	10.0
GR1028SA	46 32 38	121 17 33	2,300	3,000	43,000	3,300	3,200	170.0	210	12.0	16.0	41.0
GR1029SA	46 33 37	121 16 5	2,000	2,900	32,000	2,800	3,500	130.0	170	9.9	12.0	33.0
GR1030SA	46 36 26	121 15 52	1,800	2,400	29,000	2,900	5,800	120.0	250	9.5	13.0	16.0
GR1031SA	46 37 18	121 15 22	2,400	2,600	24,000	2,300	5,600	100.0	180	8.0	13.0	17.0
GR1032SA	46 37 15	121 16 29	4,100	2,500	24,000	820	8,600	68.0	250	7.8	23.0	18.0
GR1033SA	46 37 9	121 17 22	4,200	2,200	24,000	400	8,700	60.0	220	7.4	15.0	13.0
GR1034SA	46 37 5	121 17 55	2,700	3,000	20,000	1,200	6,000	66.0	190	6.2	8.9	15.0
GR1035SA	46 35 50	121 20 12	2,600	3,100	27,000	2,000	4,200	100.0	160	8.7	12.0	27.0
GR1036SA	46 36 37	121 19 11	2,700	3,500	22,000	1,700	6,800	74.0	190	6.5	11.0	17.0
GR1037SA	46 28 47	121 20 47	2,100	3,200	66,000	3,200	4,700	250.0	370	18.0	20.0	68.0
GR1038SA	46 28 54	121 20 0	2,000	2,200	29,000	1,900	4,800	110.0	280	9.9	16.0	29.0
GR1039SA	46 29 3	121 19 42	3,500	1,800	31,000	2,300	7,900	110.0	310	12.0	25.0	22.0
GR1040SA	46 31 8	121 24 59	2,300	3,400	45,000	2,400	8,400	200.0	290	15.0	17.0	30.0
GR1041SA	46 31 8	121 24 55	4,800	3,500	33,000	840	14,000	77.0	430	18.0	18.0	27.0
GR1042SA	46 31 12	121 25 0	5,000	3,200	36,000	1,100	11,000	86.0	260	12.0	15.0	28.0
GR1043SA	46 31 40	121 24 47	4,900	4,400	88,000	3,300	11,000	260.0	430	22.0	26.0	53.0
GR1046PA	46 29 22	121 29 28	1,200	1,500	7,200	440	3,200	26.0	87	4.1	4.7	19.0
GR1047SA	46 33 0	121 34 22	1,600	2,700	22,000	1,600	6,800	100.0	230	9.7	9.9	15.0
GR1049RA	46 30 19	121 27 17	7,100	4,400	34,000	1,100	16,000	71.0	480	12.0	34.0	32.0

Table 7. ICP analytical data from stream sediment samples (data set A) collected in the Goat Rocks area

Sample	ZN-ppm ICP	MO-ppm ICP	PB-ppm ICP	BE-ppm ICP	SR-ppm ICP	BA-ppm ICP	LA-ppm ICP	CE-ppm ICP	Y-ppm ICP	NB-ppm ICP	P-ppm ICP
GR1000SA	34.0	<.38	L3.4	L.059	8.5	7.0	3.9	6.3	<.040	4.90	630
GR1001SA	37.0	L.45	6.3	.120	13.0	13.0	5.2	9.5	<.040	4.40	570
GR1003SA	28.0	L.61	6.5	L.082	13.0	12.0	4.3	7.5	.180	3.60	520
GR1004SA	24.0	L.56	5.7	L.054	16.0	12.0	3.3	6.5	L.053	3.10	520
GR1005SA	27.0	<.38	13.0	.120	38.0	28.0	3.3	5.1	<.040	3.20	300
GR1006SA	41.0	1.60	8.3	.110	12.0	12.0	5.1	8.6	<.040	4.90	770
GR1007SA	46.0	L.60	8.9	.210	25.0	39.0	6.5	11.0	<.040	4.10	560
GR1008SA	76.0	<.38	L11.0	.570	79.0	230.0	11.0	16.0	4.100	6.10	460
GR1009SA	70.0	L.59	L12.0	.480	48.0	87.0	10.0	15.0	1.600	5.40	490
GR1010SA	31.0	L.76	7.5	.160	17.0	25.0	9.1	17.0	2.100	4.10	590
GR1012SA	37.0	1.60	8.5	.120	12.0	11.0	4.7	7.8	<.040	4.60	720
GR1013SA	41.0	1.20	6.8	L.091	12.0	7.7	4.1	6.9	<.040	5.20	680
GR1014AA	24.0	L.66	5.5	L.074	28.0	16.0	3.9	6.9	.910	2.00	400
GR1014SA	39.0	1.00	7.0	.110	11.0	7.3	4.2	7.2	<.040	5.00	650
GR1015SA	24.0	L.77	5.3	L.073	14.0	9.4	3.6	6.9	L.047	3.00	480
GR1016SA	37.0	L.95	8.0	.130	16.0	17.0	3.8	6.0	<.040	4.90	550
GR1017SA	21.0	L.91	5.9	L.084	13.0	12.0	3.8	7.6	.770	2.30	460
GR1018SA	38.0	L.70	10.0	.240	25.0	50.0	6.6	11.0	.130	3.30	450
GR1019SA	52.0	1.00	6.7	.130	11.0	10.0	5.0	8.9	<.040	5.50	600
GR1020SA	56.0	L.80	13.0	.260	36.0	64.0	7.7	14.0	<.040	5.30	500
GR1021SA	45.0	L.66	12.0	.260	24.0	62.0	6.4	12.0	.230	3.30	540
GR1022SA	47.0	L.75	9.9	.300	16.0	130.0	6.6	12.0	<.040	3.20	370
GR1024SA	76.0	<.38	13.0	.430	32.0	140.0	12.0	22.0	<.040	5.10	460
GR1025SA	41.0	L.69	9.9	.200	25.0	59.0	7.8	14.0	2.100	2.90	630
GR1026SA	41.0	L.60	8.7	L.098	19.0	31.0	4.3	6.5	<.040	4.10	490
GR1027SA	20.0	<.38	6.0	.130	12.0	38.0	3.0	5.5	.430	1.30	190
GR1028SA	52.0	L.50	8.0	L.084	16.0	18.0	4.4	6.5	<.040	5.30	620
GR1029SA	41.0	L.57	8.6	L.092	17.0	18.0	3.9	6.1	<.040	4.30	610
GR1030SA	41.0	L.86	12.0	.240	21.0	16.0	5.1	6.8	<.040	4.40	350
GR1031SA	40.0	L.62	9.1	.200	22.0	21.0	4.3	7.2	<.040	3.50	400
GR1032SA	45.0	L.50	12.0	.240	26.0	87.0	4.2	6.0	<.040	2.60	310
GR1033SA	48.0	L.46	13.0	.250	19.0	57.0	3.9	6.4	<.040	2.30	310
GR1034SA	37.0	<.38	6.5	.180	31.0	24.0	5.0	8.4	<.040	2.50	360
GR1035SA	36.0	L.57	14.7	L.091	21.0	21.0	4.0	6.1	<.040	3.50	530
GR1036SA	35.0	<.38	6.3	.180	33.0	49.0	5.3	7.5	<.040	2.80	360
GR1037SA	86.0	<.38	L6.7	.190	18.0	22.0	5.8	9.2	<.040	7.30	710
GR1038SA	51.0	L.67	L4.8	.180	17.0	34.0	5.6	11.0	.520	3.70	640
GR1039SA	58.0	L.99	L6.5	.260	19.0	43.0	6.8	13.0	.730	3.60	430
GR1040SA	61.0	1.80	L7.2	.200	34.0	21.0	8.2	14.0	<.040	6.60	630
GR1041SA	57.0	1.50	11.0	.460	33.0	28.0	6.9	14.0	.140	3.00	790
GR1042SA	39.0	L.93	L8.7	.230	27.0	20.0	6.4	10.0	<.040	3.00	730
GR1043SA	79.0	<.38	L5.8	.480	32.0	19.0	6.6	6.7	<.040	10.00	520
GR1046PA	17.0	L.95	L3.6	L.053	19.0	11.0	3.1	6.5	1.100	1.20	330
GR1047SA	39.0	1.30	6.6	.150	29.0	29.0	7.6	15.0	1.900	3.80	570
GR1049RA	54.0	<.38	L6.4	.430	62.0	98.0	7.7	12.0	<.040	3.70	390

Table 7. ICP analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	MG-ppm ICP	CA-ppm ICP	FE-ppm ICP	TI-ppm ICP	AL-ppm ICP	V-ppm ICP	MN-ppm ICP	CO-ppm ICP	NI-ppm ICP	CU-ppm ICP
GR1250SA	46 33 7	121 29 22	3,500	3,900	30,000	1,400	7,900	90.0	400	9.2	9.5	22.0
GR1251SA	46 33 23	121 29 40	6,000	13,000	43,000	5,300	18,000	110.0	720	15.0	8.2	38.0
GR1252SA	46 33 30	121 29 52	3,800	7,200	25,000	2,600	11,000	67.0	420	9.9	7.3	30.0
GR1253SA	46 33 42	121 30 15	6,900	8,500	38,000	950	18,000	89.0	560	13.0	7.5	41.0
GR1254SA	46 33 54	121 31 8	4,400	9,200	33,000	3,000	14,000	100.0	450	12.0	5.8	42.0
GR1255SA	46 34 16	121 32 5	2,300	5,000	31,000	120	7,900	85.0	480	7.2	6.5	28.0
GR1256SA	46 34 41	121 32 45	2,900	5,000	41,000	270	9,500	98.0	590	10.0	8.5	32.0
GR1257SA	46 31 18	121 31 32	2,300	3,500	17,000	1,200	5,500	65.0	190	6.2	7.7	21.0
GR1258SA	46 31 22	121 31 32	2,100	3,200	26,000	2,100	6,800	140.0	260	8.5	12.0	17.0
GR1259SA	46 31 19	121 31 41	2,600	3,300	25,000	2,000	5,800	100.0	170	8.0	9.9	28.0
GR1260SA	46 31 15	121 31 55	2,700	6,600	23,000	1,200	13,000	82.0	430	6.7	6.1	21.0
GR1261SA	46 31 0	121 32 10	2,200	2,800	12,000	690	3,100	46.0	100	4.3	6.4	22.0
GR1262SA	46 31 7	121 32 18	2,300	3,900	45,000	3,500	5,000	240.0	270	14.0	18.0	18.0
GR1263SA	46 30 50	121 33 8	9,000	15,000	50,000	1,000	27,000	110.0	880	20.0	8.3	71.0
GR1265SA	46 30 49	121 33 35	4,700	11,000	44,000	570	20,000	110.0	570	12.0	8.6	44.0
GR1266SA	46 30 38	121 33 59	2,200	3,700	28,000	2,000	6,600	100.0	280	6.4	9.4	23.0
GR1267SA	46 40 3	121 32 32	3,700	4,200	33,000	1,300	9,600	76.0	420	7.5	7.8	19.0
GR1268SA	46 39 18	121 31 49	2,700	3,200	29,000	1,200	7,200	76.0	370	6.8	8.2	16.0
GR1270SA	46 39 36	121 30 35	3,200	2,600	17,000	1,300	6,900	52.0	200	5.8	14.0	14.0
GR1271SA	46 39 42	121 30 15	2,300	2,400	22,000	1,700	5,900	81.0	150	5.8	13.0	12.0
GR1272SA	46 34 10	121 21 25	5,500	3,600	28,000	780	16,000	56.0	500	13.0	30.0	30.0
GR1273SA	46 33 38	121 21 30	1,800	2,100	20,000	1,400	6,900	79.0	210	8.8	13.0	20.0
GR1274SA	46 32 59	121 22 2	1,700	2,100	35,000	2,700	3,300	160.0	210	13.0	15.0	36.0
GR1275SA	46 32 50	121 22 28	2,100	2,200	30,000	1,900	5,300	120.0	210	12.0	16.0	21.0
GR1276SA	46 32 38	121 23 9	1,900	2,700	41,000	2,200	4,300	160.0	220	14.0	15.0	35.0
GR1278SA	46 36 50	121 26 58	13,000	7,100	74,000	420	30,000	110.0	900	29.0	39.0	52.0
GR1279SA	46 36 40	121 26 57	7,600	5,700	47,000	540	23,000	99.0	630	21.0	28.0	37.0
GR1280SA	46 36 10	121 26 47	7,600	2,700	35,000	720	13,000	76.0	550	16.0	45.0	26.0
GR1281SA	46 36 2	121 26 47	4,400	3,100	28,000	560	15,000	66.0	800	12.0	26.0	17.0
GR1282SA	46 35 4	121 26 40	6,700	3,500	52,000	990	12,000	120.0	640	21.0	36.0	35.0
GR1283SA	46 34 55	121 26 40	5,200	4,100	60,000	2,100	15,000	180.0	660	22.0	30.0	43.0
GR1284SA	46 32 23	121 34 50	3,700	7,100	42,000	2,100	18,000	140.0	430	16.0	13.0	39.0
GR1500SA	46 33 26	121 29 59	2,900	4,800	23,000	1,600	6,000	89.0	300	6.3	8.6	21.0
GR1501SA	46 33 40	121 30 46	5,700	6,900	37,000	1,900	12,000	130.0	440	15.0	14.0	29.0
GR1502SA	46 33 40	121 31 9	2,700	5,000	31,000	2,500	7,100	130.0	270	9.6	10.0	29.0
GR1503SA	46 33 47	121 31 38	7,100	9,000	36,000	1,700	22,000	82.0	760	14.0	11.0	38.0
GR1504SA	46 33 52	121 32 4	3,500	9,200	31,000	2,400	14,000	95.0	510	10.0	8.1	42.0
GR1505SA	46 34 10	121 32 40	2,600	4,500	24,000	1,400	6,700	87.0	210	5.4	8.4	22.0
GR1506SA	46 30 10	121 31 6	2,700	3,800	38,000	3,100	4,800	150.0	220	10.0	14.0	38.0
GR1507SA	46 30 2	121 31 39	3,200	5,400	33,000	2,600	7,600	120.0	320	9.1	10.0	36.0
GR1508SA	46 30 0	121 32 27	2,600	3,500	30,000	2,500	3,500	120.0	170	9.0	12.0	35.0
GR1509SA	46 29 15	121 33 12	3,200	3,400	28,000	890	7,300	86.0	250	9.3	14.0	29.0
GR1510SA	46 29 25	121 34 5	3,900	3,700	34,000	18	11,000	52.0	390	13.0	22.0	45.0
GR1511SA	46 34 42	121 21 30	12,000	5,700	42,000	1,600	20,000	95.0	510	19.0	46.0	85.0
GR1512SA	46 35 22	121 21 3	4,500	5,600	22,000	1,600	24,000	50.0	320	7.4	18.0	27.0

Table 7. ICP analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	ZN-ppm ICP	MO-ppm ICP	PB-ppm ICP	BE-ppm ICP	SR-ppm ICP	BA-ppm ICP	LA-ppm ICP	CE-ppm ICP	Y-ppm ICP	NB-ppm ICP	P-ppm ICP
GR1250SA	44.0	L.74	11.0	.240	28.0	27.0	6.3	12.0	.900	4.30	490
GR1251SA	62.0	1.00	17.0	.420	53.0	33.0	7.8	14.0	3.000	6.50	480
GR1252SA	42.0	L.81	12.0	.290	40.0	41.0	6.4	13.0	2.800	3.90	470
GR1253SA	47.0	L.40	14.0	.380	50.0	71.0	7.4	14.0	1.400	5.00	470
GR1254SA	40.0	L.56	13.0	.310	53.0	40.0	7.2	14.0	3.100	5.10	450
GR1255SA	59.0	<.38	10.0	.460	23.0	44.0	9.3	18.0	1.600	3.80	390
GR1256SA	76.0	L.43	12.0	.410	37.0	110.0	9.7	18.0	<.040	4.50	410
GR1257SA	25.0	L.68	7.1	.140	19.0	13.0	3.7	6.9	.780	3.20	460
GR1258SA	39.0	L.86	9.3	.260	22.0	35.0	9.8	20.0	3.100	6.10	580
GR1259SA	33.0	L.71	7.9	.160	21.0	18.0	4.0	7.1	<.040	4.60	480
GR1260SA	37.0	<.38	13.0	.290	35.0	63.0	5.3	9.4	1.800	4.30	430
GR1261SA	19.0	L.52	4.2	L.058	19.0	7.0	3.4	6.8	.830	2.10	420
GR1262SA	56.0	1.30	9.9	.190	17.0	19.0	10.0	20.0	.470	9.90	650
GR1263SA	48.0	<.38	L17.0	.330	82.0	47.0	6.3	10.0	.800	5.60	360
GR1265SA	43.0	<.38	L13.0	.190	46.0	54.0	4.5	5.8	<.040	5.20	400
GR1266SA	44.0	<.38	6.2	.170	26.0	29.0	5.8	10.0	.120	4.60	500
GR1267SA	48.0	<.38	13.0	.290	21.0	79.0	5.8	9.0	<.040	2.90	370
GR1268SA	44.0	<.38	13.0	.280	20.0	61.0	5.6	8.9	<.040	2.80	370
GR1270SA	27.0	<.38	L4.9	.120	19.0	26.0	3.3	6.3	L.098	2.20	340
GR1271SA	32.0	<.38	L4.4	.130	20.0	26.0	3.8	7.0	<.040	2.90	410
GR1272SA	64.0	1.10	12.0	.410	70.0	170.0	8.9	16.0	.810	2.40	500
GR1273SA	43.0	1.10	7.0	.180	38.0	40.0	4.6	8.2	<.040	3.10	400
GR1274SA	53.0	1.20	6.3	L.075	17.0	15.0	4.3	7.0	<.040	5.70	670
GR1275SA	44.0	1.40	7.4	.140	29.0	22.0	5.1	8.5	<.040	4.70	470
GR1276SA	53.0	1.10	7.1	L.067	28.0	12.0	4.4	6.6	<.040	5.90	530
GR1278SA	83.0	L.46	L11.0	.560	130.0	190.0	10.0	14.0	<.040	3.80	500
GR1279SA	82.0	L.91	L9.8	.510	93.0	120.0	10.0	16.0	1.900	3.90	600
GR1280SA	72.0	1.20	12.0	.450	42.0	130.0	10.0	18.0	.550	3.20	560
GR1281SA	62.0	1.10	10.0	.390	47.0	130.0	9.1	16.0	.360	3.10	500
GR1282SA	71.0	1.10	L9.9	.430	41.0	92.0	9.8	17.0	.560	4.40	520
GR1283SA	100.0	1.10	L10.0	.440	45.0	95.0	8.6	14.0	<.040	6.20	510
GR1284SA	54.0	1.00	L11.0	.190	50.0	24.0	5.0	7.6	<.040	5.10	570
GR1500SA	33.0	<.38	7.7	.180	18.0	31.0	9.3	18.0	3.000	4.00	620
GR1501SA	58.0	L.75	11.0	.280	43.0	36.0	10.0	19.0	1.700	5.80	630
GR1502SA	42.0	L.46	6.8	.170	30.0	27.0	6.7	13.0	.830	4.90	590
GR1503SA	49.0	L.55	14.0	.480	61.0	77.0	11.0	24.0	4.800	4.50	620
GR1504SA	56.0	<.38	L9.0	.320	110.0	110.0	5.0	9.6	.920	4.00	420
GR1505SA	36.0	<.38	5.9	.160	37.0	39.0	5.1	9.7	.180	3.20	500
GR1506SA	46.0	L.48	L5.8	L.087	20.0	18.0	4.3	7.0	<.040	5.50	650
GR1507SA	45.0	<.38	8.6	.130	34.0	20.0	5.0	8.4	<.040	4.40	620
GR1508SA	40.0	<.38	L4.7	L.053	21.0	13.0	4.1	7.3	<.040	4.20	720
GR1509SA	43.0	L.60	10.0	.170	24.0	31.0	5.6	10.0	<.040	3.40	530
GR1510SA	58.0	L.50	13.0	.370	23.0	58.0	7.5	14.0	<.040	2.50	410
GR1511SA	72.0	L.62	L6.2	.440	83.0	68.0	8.6	14.0	<.040	5.10	400
GR1512SA	47.0	<.38	<2.7	.550	82.0	54.0	11.0	18.0	1.000	2.70	360

Table 7. ICP analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	MG-ppm ICP	CA-ppm ICP	FE-ppm ICP	TI-ppm ICP	AL-ppm ICP	V-ppm ICP	MN-ppm ICP	CO-ppm ICP	NI-ppm ICP	CU-ppm ICP
GR1513SA	46 36 8	121 20 20	16,000	4,300	35,000	1,500	13,000	67.0	410	19.0	46.0	28.0
GR1514SA	46 36 55	121 19 29	1,600	3,300	18,000	980	16,000	55.0	200	5.8	7.4	23.0
GR1515SA	46 32 28	121 23 23	3,900	3,200	33,000	1,600	11,000	110.0	380	14.0	17.0	38.0
GR1516SA	46 32 29	121 23 20	8,100	7,700	41,000	260	23,000	90.0	580	20.0	41.0	58.0
GR1519SA	46 33 8	121 23 12	3,600	4,700	26,000	1,400	14,000	87.0	350	12.0	21.0	33.0
GR1520SA	46 33 12	121 23 1	10,000	4,500	35,000	170	21,000	49.0	710	18.0	63.0	49.0
GR1521SA	46 34 9	121 21 51	4,200	5,800	39,000	1,600	18,000	82.0	750	14.0	14.0	34.0
GR1522SA	46 37 2	121 27 10	3,200	4,200	27,000	1,800	22,000	76.0	650	12.0	15.0	29.0
GR1523SA	46 36 53	121 27 7	2,900	3,600	28,000	2,000	11,000	110.0	260	12.0	17.0	25.0
GR1524SA	46 35 46	121 26 57	5,100	3,200	22,000	620	12,000	54.0	370	11.0	25.0	19.0
GR1525SA	46 35 38	121 26 45	12,000	2,700	29,000	1,300	8,600	80.0	430	18.0	36.0	20.0
GR1526SA	46 37 31	121 27 9	3,100	5,100	32,000	1,600	16,000	83.0	620	11.0	7.5	30.0
GR1527SA	46 37 34	121 27 16	5,100	4,700	34,000	1,300	23,000	86.0	730	15.0	18.0	31.0
GR1750SA	46 32 28	121 28 59	4,300	5,500	25,000	1,300	7,200	86.0	430	8.6	9.0	23.0
GR1751SA	46 32 25	121 28 54	5,900	5,200	28,000	890	8,900	75.0	340	9.6	14.0	19.0
GR1752SA	46 32 27	121 28 50	2,500	1,700	22,000	1,000	4,200	69.0	210	7.4	8.5	23.0
GR1754SA	46 33 12	121 29 38	6,200	11,000	37,000	2,300	17,000	110.0	480	12.0	9.1	38.0
GR1755SA	46 33 18	121 29 45	3,300	5,200	21,000	1,300	7,000	73.0	330	7.0	8.2	20.0
GR1756SA	46 32 25	121 32 27	1,700	2,800	23,000	1,600	4,400	110.0	190	7.8	8.9	12.0
GR1757SA	46 25 0	121 25 46	5,600	2,900	23,000	1,600	11,000	72.0	250	9.6	26.0	31.0
GR1758SA	46 25 5	121 25 45	4,100	3,900	23,000	660	15,000	53.0	480	8.6	12.0	17.0
GR1759SA	46 25 6	121 25 50	3,800	3,000	23,000	710	7,900	60.0	290	7.7	10.0	22.0
GR1760SA	46 24 51	121 26 51	2,300	1,600	12,000	580	4,300	37.0	180	4.1	7.1	14.0
GR1762SA	46 24 46	121 28 17	14,000	3,900	30,000	2,400	10,000	80.0	360	16.0	53.0	29.0
GR1763SA	46 28 3	121 31 42	4,300	4,100	33,000	2,000	9,000	120.0	230	11.0	16.0	34.0
GR1764SA	46 30 42	121 34 16	2,500	4,300	32,000	2,100	5,600	120.0	210	8.3	10.0	31.0
GR1765SA	46 30 29	121 17 26	2,700	2,700	34,000	2,600	4,300	130.0	210	9.0	14.0	26.0
GR1766SA	46 30 32	121 17 21	2,700	2,900	20,000	1,200	8,300	59.0	140	5.3	9.9	13.0
GR1767SA	46 31 14	121 16 18	5,900	7,400	58,000	3,700	14,000	190.0	430	18.0	24.0	58.0
GR1768SA	46 32 13	121 15 43	3,700	3,700	33,000	1,800	6,600	110.0	290	9.3	16.0	26.0
GR1769SA	46 38 51	121 20 52	6,800	6,900	24,000	410	13,000	46.0	330	8.6	24.0	22.0
GR1770SA	46 28 55	121 20 58	15,000	8,500	27,000	1,700	19,000	51.0	390	18.0	60.0	20.0
GR1771SA	46 38 15	121 17 7	6,200	4,700	22,000	880	12,000	59.0	270	8.5	22.0	13.0
GR1772SA	46 37 39	121 18 16	5,600	4,100	38,000	1,200	11,000	110.0	400	15.0	22.0	38.0
GR1773SA	46 37 34	121 18 52	7,200	5,200	30,000	460	15,000	66.0	510	15.0	27.0	32.0
GR1775SA	46 36 56	121 18 29	3,800	4,200	19,000	960	11,000	60.0	290	7.5	16.0	19.0
GR1776SA	46 30 5	121 21 2	2,900	3,200	30,000	2,100	9,500	120.0	350	12.0	17.0	24.0
GR1777SA	46 30 0	121 21 0	2,300	3,300	42,000	2,200	6,100	200.0	330	14.0	17.0	29.0
GR1778SA	46 30 10	121 20 36	280	530	2,600	190	1,200	9.4	34	<1.4	1.9	5.6
GR1779SA	46 30 2	121 19 52	1,700	2,700	24,000	2,100	4,800	120.0	190	9.8	12.0	30.0
GR1780SA	46 29 57	121 19 35	2,900	2,600	32,000	2,300	8,200	140.0	340	13.0	20.0	32.0
GR1781SA	46 34 0	121 27 15	3,500	4,900	35,000	1,500	16,000	100.0	650	12.0	12.0	31.0
GR1782SA	46 33 56	121 27 12	7,500	4,700	38,000	780	17,000	83.0	750	16.0	24.0	38.0
GR1783SA	46 34 9	121 27 10	2,800	4,000	35,000	1,100	32,000	68.0	970	11.0	7.7	26.0
GR1785SA	46 35 9	121 28 15	3,200	4,900	41,000	2,300	17,000	130.0	730	14.0	9.5	31.0

Table 7. ICP analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	ZN-ppm ICP	MO-ppm ICP	PB-ppm ICP	BE-ppm ICP	SR-ppm ICP	BA-ppm ICP	LA-ppm ICP	CE-ppm ICP	Y-ppm ICP	NB-ppm ICP	P-ppm ICP
GR1513SA	45.0	<.38	L4.6	.340	53.0	34.0	8.3	13.0	<.040	4.00	310
GR1514SA	24.0	L.70	L4.5	.240	52.0	21.0	4.6	9.0	.330	2.60	330
GR1515SA	51.0	.99	9.1	.170	30.0	24.0	5.3	7.8	<.040	3.90	540
GR1516SA	64.0	.99	L12.0	.350	61.0	120.0	6.9	10.0	<.040	3.40	420
GR1519SA	50.0	1.00	11.0	.260	91.0	91.0	6.6	11.0	.130	3.00	480
GR1520SA	83.0	L.94	15.0	.510	42.0	110.0	8.4	15.0	1.100	2.20	530
GR1521SA	76.0	L.75	L12.0	.440	56.0	91.0	8.3	15.0	1.800	2.90	440
GR1522SA	53.0	1.10	L12.0	.440	67.0	110.0	8.5	19.0	2.400	3.10	580
GR1523SA	52.0	.99	11.0	.240	58.0	38.0	6.6	11.0	<.040	4.00	500
GR1524SA	55.0	.98	13.0	.440	51.0	75.0	11.0	20.0	1.800	2.10	420
GR1525SA	46.0	L.78	8.2	.210	32.0	39.0	6.3	12.0	<.040	3.10	480
GR1526SA	68.0	L.78	L11.0	.350	54.0	74.0	7.2	13.0	1.900	2.70	440
GR1527SA	62.0	L.91	L12.0	.520	73.0	120.0	8.6	18.0	1.300	2.90	530
GR1750SA	42.0	L.44	9.1	.220	24.0	47.0	11.0	19.0	3.500	4.10	600
GR1751SA	40.0	<.38	9.3	.210	27.0	25.0	8.3	14.0	1.500	3.90	620
GR1752SA	27.0	<.38	5.0	.100	7.8	13.0	3.8	6.1	<.040	3.20	380
GR1754SA	45.0	<.38	12.0	.230	47.0	41.0	8.7	13.0	1.900	5.20	490
GR1755SA	32.0	L.39	7.9	.200	22.0	37.0	10.0	18.0	3.300	3.60	580
GR1756SA	33.0	L.61	5.7	.130	16.0	23.0	8.7	16.0	1.800	5.20	610
GR1757SA	42.0	L.49	12.0	.190	21.0	59.0	6.1	11.0	<.040	4.40	510
GR1758SA	39.0	L.93	15.0	.560	30.0	46.0	16.0	19.0	4.500	3.80	570
GR1759SA	40.0	L.54	11.0	.330	18.0	33.0	7.8	13.0	.680	3.40	500
GR1760SA	22.0	<.38	5.4	.140	10.0	18.0	3.5	6.3	.330	2.10	290
GR1762SA	40.0	<.38	L7.4	.230	30.0	50.0	5.4	10.0	L.043	3.90	520
GR1763SA	42.0	<.38	L6.7	.160	33.0	27.0	3.9	6.0	<.040	3.90	490
GR1764SA	40.0	<.38	L3.9	.100	23.0	14.0	3.3	5.3	<.040	3.60	590
GR1765SA	47.0	<.38	L4.9	.150	17.0	26.0	4.5	6.9	<.040	4.20	540
GR1766SA	37.0	<.38	7.1	.270	36.0	90.0	4.8	7.7	<.040	2.20	250
GR1767SA	82.0	<.38	L8.7	.400	71.0	83.0	6.6	9.0	<.040	6.00	720
GR1768SA	50.0	<.38	6.8	.230	24.0	65.0	5.6	9.9	<.040	3.50	600
GR1769SA	49.0	L.68	13.0	.480	64.0	74.0	11.0	19.0	2.000	2.90	410
GR1770SA	44.0	L.63	14.0	.490	98.0	97.0	10.0	19.0	1.300	4.10	350
GR1771SA	45.0	L.55	11.0	.380	51.0	55.0	8.9	15.0	.350	3.30	400
GR1772SA	69.0	L.82	13.0	.330	43.0	110.0	5.7	9.5	<.040	4.90	520
GR1773SA	67.0	L.75	14.0	.430	55.0	210.0	9.3	15.0	.660	3.80	480
GR1775SA	46.0	L.47	10.0	.270	44.0	65.0	5.6	8.8	.240	3.70	350
GR1776SA	64.0	1.10	11.0	.330	47.0	98.0	7.6	15.0	.460	4.20	490
GR1777SA	67.0	1.20	9.9	.240	27.0	25.0	8.8	17.0	.470	6.40	660
GR1778SA	8.8	<.38	L3.6	.100	5.7	29.0	1.5	3.3	.820	L.39	68
GR1779SA	41.0	L.71	10.0	.130	27.0	17.0	3.6	7.1	<.040	3.80	610
GR1780SA	61.0	L.86	39.0	.280	26.0	39.0	6.2	11.0	<.040	4.50	660
GR1781SA	70.0	L.66	11.0	.440	56.0	90.0	7.1	14.0	1.200	3.30	570
GR1782SA	64.0	1.00	13.0	.440	50.0	58.0	8.9	18.0	2.800	3.10	590
GR1783SA	87.0	L.82	L14.0	.700	61.0	230.0	9.2	22.0	3.800	2.70	840
GR1785SA	85.0	1.00	L12.0	.380	44.0	52.0	7.5	15.0	1.200	4.20	510

Table 7. ICP analytical data from stream sediment samples (data set A) collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	MG-ppm ICP	CA-ppm ICP	FE-ppm ICP	TI-ppm ICP	AL-ppm ICP	V-ppm ICP	MN-ppm ICP	CO-ppm ICP	NI-ppm ICP	CU-ppm ICP
GR1786SA	46 36 11	121 29 4	3,800	4,600	32,000	2,600	16,000	97.0	540	12.0	12.0	27.0
GR1787SA	46 36 8	121 29 2	3,600	5,100	32,000	1,300	17,000	72.0	670	12.0	7.0	31.0
GR1789SA	46 27 13	121 26 48	2,300	3,000	38,000	2,200	5,600	150.0	360	14.0	17.0	40.0
GR1790SA	46 27 18	121 26 50	2,300	2,900	27,000	2,100	5,700	120.0	230	11.0	14.0	29.0
GR1796SA	46 32 32	121 36 53	3,700	6,200	39,000	2,200	12,000	120.0	340	11.0	9.4	27.0
GR1797SA	46 31 38	121 36 46	2,500	4,500	32,000	2,500	10,000	140.0	360	13.0	14.0	33.0

Sample	ZN-ppm ICP	MO-ppm ICP	PB-ppm ICP	BE-ppm ICP	SR-ppm ICP	BA-ppm ICP	LA-ppm ICP	CE-ppm ICP	Y-ppm ICP	NB-ppm ICP	P-ppm ICP
GR1786SA	62.0	L.90	12.0	.310	44.0	40.0	6.0	12.0	1.000	3.70	470
GR1787SA	55.0	L.76	12.0	.350	43.0	50.0	6.3	13.0	2.500	2.80	450
GR1789SA	68.0	1.00	11.0	.280	26.0	31.0	5.6	11.0	<.040	4.80	760
GR1790SA	46.0	.98	8.9	.170	29.0	19.0	4.5	9.0	<.040	4.00	690
GR1796SA	50.0	<.38	L9.6	.170	33.0	18.0	4.1	6.1	<.040	4.20	420
GR1797SA	54.0	L.83	9.5	.190	40.0	16.0	4.2	7.9	<.040	4.40	590

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

Data set A (table 4)

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	S-FE%	0	0	0	0	0	0	141	0	1.5000000	10.000000	3
4	S-MG%	0	0	0	0	0	0	141	0	0.5000000	2.0000000	4
5	S-CA%	0	0	0	0	0	0	141	0	1.0000000	3.0000000	5
6	S-TI%	0	0	0	9	0	0	132	0	0.1000000	1.0000000	6
7	S-MN	0	0	0	0	0	0	141	0	300.00000	2000.0000	7
8	S-AG	115	0	24	0	0	0	2	0	0.5000000	0.7000000	8
9	S-AS	141	0	0	0	0	0	0	0			9
10	S-AU	141	0	0	0	0	0	0	0			10
11	S-B	6	0	39	0	0	0	96	0	10.000000	100.00000	11
12	S-BA	0	0	0	0	0	0	141	0	100.00000	1000.0000	12
13	S-BE	41	0	1	0	0	0	99	0	1.0000000	2.0000000	13
14	S-BI	141	0	0	0	0	0	0	0			14
15	S-CD	141	0	0	0	0	0	0	0			15
16	S-CO	0	0	0	0	0	0	141	0	5.0000000	50.000000	16
17	S-CR	0	0	0	0	0	0	141	0	10.000000	200.00000	17
18	S-CU	0	0	0	0	0	0	141	0	7.0000000	150.00000	18
19	S-LA	139	0	0	0	0	0	2	0	30.000000	30.000000	19
20	S-MO	117	0	13	0	0	0	11	0	5.0000000	7.0000000	20
21	S-NB	120	0	14	0	0	0	7	0	20.000000	30.000000	21
22	S-NI	0	0	1	0	0	0	140	0	10.000000	100.00000	22
23	S-PB	72	0	54	0	0	0	15	0	10.000000	20.000000	23
24	S-SB	141	0	0	0	0	0	0	0			24
25	S-SC	0	0	0	0	0	0	141	0	5.0000000	30.000000	25
26	S-SN	141	0	0	0	0	0	0	0			26
27	S-SR	0	0	0	0	0	0	141	0	100.00000	500.00000	27
28	S-V	0	0	0	0	0	0	141	0	20.000000	500.00000	28
29	S-W	141	0	0	0	0	0	0	0			29
30	S-Y	0	0	0	0	0	0	141	0	10.000000	50.000000	30
31	S-ZN	125	0	7	0	0	0	9	0	200.00000	300.00000	31
32	S-ZR	0	0	0	0	0	0	141	0	70.000000	500.00000	32
33	S-TH	141	0	0	0	0	0	0	0			33

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	S-FE%	6.9539007	2.3098398	5.3353597	1.7964853	0.1457733	-32.950249	-1.1575274	3
4	S-MG%	1.3482270	0.4085869	0.1669433	0.0183945	0.2696705	-0.0284863	-1.0221107	4
5	S-CA%	2.0851064	0.4890130	0.2391337	0.0841604	0.7196914	0.0107887	0.1886635	5
6	S-TI%	0.6750000	0.2572239	0.0661641	-3.6332956D-04	-0.0213485	-0.0048769	-1.1140259	6
7	S-MN	1012.0567	357.06646	127496.45	24614372.	0.5406816	-3.6417356D+09	-0.2240331	7
8	S-AG	0.6000000	0.1414214	0.0200000					8
9	S-AS								9
10	S-AU								10
11	S-B	20.520833	15.243276	232.35746	12163.897	3.4342968	782855.13	14.500006	11
12	S-BA	336.52482	163.86835	26852.837	6101334.0	1.3865628	1.8574408D+09	2.5759335	12
13	S-BE	1.1464646	0.2396056	0.0574108	0.0165778	1.2051345	4.8985542D-04	0.1486210	13
14	S-BI								14
15	S-CD								15
16	S-CO	27.269504	12.934936	167.31256	1884.7402	0.8708807	-16269.857	-0.5812014	16
17	S-CR	71.985816	47.116419	2219.9569	90176.291	0.8621355	-156905.65	-0.0318383	17
18	S-CU	41.680851	19.592389	383.86170	12557.792	1.6697486	948357.44	6.4360956	18
19	S-LA	30.000000	0.0	0.0					19
20	S-MO	5.1818182	0.6030227	0.3636364	0.7272727	3.3166248	1.4545455	11.000000	20
21	S-NB	21.428571	3.7796447	14.285714	142.85714	2.6457513	1428.5714	7.0000000	21
22	S-NI	33.428571	15.054884	226.64954	3324.9341	0.9744303	76171.813	1.4828070	22
23	S-PB	11.000000	2.8030596	7.8571429	64.285714	2.9188885	517.85714	8.3884298	23
24	S-SB								24
25	S-SC	17.446809	4.0803108	16.648936	5.0725985	0.0746708	427.03997	1.5406200	25
26	S-SN								26
27	S-SR	336.17021	113.40609	12860.942	617334.25	0.4232639	-1.7815151D+08	-1.0770700	27
28	S-V	175.95745	59.293203	3515.6839	274315.99	1.3159409	73771478.	5.9685502	28
29	S-W								29
30	S-Y	17.304965	4.8002132	23.042047	297.73503	2.6918346	8129.7200	15.312055	30
31	S-ZN	211.11111	33.333333	1111.1111	111111.11	3.0000000	11111111.	9.0000000	31
32	S-ZR	163.68794	97.602776	9526.3019	1767132.1	1.9005640	3.4598292D+08	3.8124660	32
33	S-TH								33

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

Data set B (table 5)

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	S-FE%	0	0	0	0	0	0	141	0	1.0000000	7.0000000	3
4	S-MG%	0	0	0	0	0	0	141	0	0.3000000	2.0000000	4
5	S-CA%	0	0	0	0	0	0	141	0	1.0000000	5.0000000	5
6	S-TI%	0	0	0	0	0	0	141	0	0.1000000	0.7000000	6
7	S-MN	0	0	0	0	0	0	141	0	200.00000	1500.0000	7
8	S-AG	139	0	0	0	0	0	2	0	1.5000000	1.5000000	8
9	S-AS	141	0	0	0	0	0	0	0			9
10	S-AU	141	0	0	0	0	0	0	0			10
11	S-B	3	0	69	0	0	0	69	0	10.000000	100.00000	11
12	S-BA	0	0	0	0	0	0	141	0	150.00000	700.00000	12
13	S-BE	77	0	7	0	0	0	57	0	1.0000000	2.0000000	13
14	S-BI	141	0	0	0	0	0	0	0			14
15	S-CD	141	0	0	0	0	0	0	0			15
16	S-CO	0	0	0	0	0	0	141	0	5.0000000	30.000000	16
17	S-CR	3	0	0	0	0	0	138	0	10.000000	200.00000	17
18	S-CU	0	0	0	0	0	0	141	0	5.0000000	70.000000	18
19	S-LA	138	0	0	0	0	0	3	0	20.000000	50.000000	19
20	S-MO	136	0	2	0	0	0	3	0	5.0000000	10.000000	20
21	S-NB	141	0	0	0	0	0	0	0			21
22	S-NI	0	0	0	0	0	0	141	0	10.000000	70.000000	22
23	S-PB	117	0	14	0	0	0	10	0	10.000000	15.000000	23
24	S-SB	141	0	0	0	0	0	0	0			24
25	S-SC	0	0	0	0	0	0	141	0	5.0000000	20.000000	25
26	S-SN	141	0	0	0	0	0	0	0			26
27	S-SR	0	0	0	0	0	0	141	0	150.00000	700.00000	27
28	S-V	0	0	0	0	0	0	141	0	20.000000	200.00000	28
29	S-W	141	0	0	0	0	0	0	0			29
30	S-Y	0	0	2	0	0	0	139	0	10.000000	30.000000	30
31	S-ZN	139	0	2	0	0	0	0	0			31
32	S-ZR	0	0	0	0	0	0	141	0	50.000000	200.00000	32
33	S-TH	141	0	0	0	0	0	0	0			33

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	S-FE%	3.6276596	1.6073539	2.5835866	0.1679714	0.0404483	-7.3298092	-1.0981119	3
4	S-MG%	1.1510638	0.4245362	0.1802310	-0.0111884	-0.1462253	-0.0320751	-0.9874361	4
5	S-CA%	2.3723404	0.8071207	0.6514438	0.5106129	0.9711277	0.8139542	1.9179889	5
6	S-TI%	0.3088652	0.1129608	0.0127601	0.0013134	0.9111901	2.5380184D-05	0.1558779	6
7	S-MN	640.42553	233.59878	54568.389	20238379.	1.5876838	1.0451873D+10	3.5100384	7
8	S-AG	1.5000000	0.0	0.0					8
9	S-AS								9
10	S-AU								10
11	S-B	16.231884	13.757506	189.26897	10668.525	4.0971821	744503.82	20.782994	11
12	S-BA	271.63121	113.27983	12832.320	2286829.3	1.5731711	3.7442380D+08	2.2738043	12
13	S-BE	1.0964912	0.2203608	0.0485589	0.0238109	2.2252226	0.0106004	4.4955535	13
14	S-BI								14
15	S-CD								15
16	S-CO	18.170213	5.2248820	27.299392	103.40740	0.7249736	625.33490	0.8390865	16
17	S-CR	44.528986	34.850503	1214.5575	69238.952	1.6357741	4344619.0	2.9452048	17
18	S-CU	25.297872	10.760871	115.79635	2184.0321	1.7527368	53786.561	4.0112896	18
19	S-LA	33.333333	15.275252	233.33333	3333.3333	0.9352195			19
20	S-MO	7.3333333	2.5166115	6.3333333	9.3333333	0.5855827			20
21	S-NB								21
22	S-NI	22.765957	10.444163	109.08055	2011.0048	1.7651928	45641.215	3.8358585	22
23	S-PB	10.500000	1.5811388	2.5000000	12.500000	3.1622777	62.500000	10.000000	23
24	S-SB								24
25	S-SC	13.475177	3.9344296	15.479737	14.335567	0.2353800	-205.72298	-0.8585304	25
26	S-SN								26
27	S-SR	398.58156	116.33438	13533.688	-407110.15	-0.2585757	-2.3064260D+08	-1.2592362	27
28	S-V	115.31915	32.635502	1065.0760	20319.324	0.5845725	426585.31	0.3760492	28
29	S-W								29
30	S-Y	15.647482	4.2492340	18.055990	68.906125	0.8981024	613.78271	1.8826606	30
31	S-ZN								31
32	S-ZR	86.666667	23.502786	552.38095	17429.770	1.3425598	1185894.1	3.8865880	32
33	S-TH								33

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

Data set C (table 6)

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	S-FE%	0	0	0	0	0	0	141	0	0.7000000	10.000000	3
4	S-MG%	0	0	0	0	0	0	141	0	0.1000000	2.0000000	4
5	S-CA%	0	0	0	0	0	0	141	0	0.7000000	3.0000000	5
6	S-TI%	0	0	0	0	0	0	141	0	0.0500000	1.0000000	6
7	S-MN	0	0	0	0	0	0	141	0	200.00000	2000.0000	7
8	S-AG	139	0	0	0	0	0	2	0	0.5000000	0.5000000	8
9	S-AS	141	0	0	0	0	0	0	0			9
10	S-AU	141	0	0	0	0	0	0	0			10
11	S-B	0	0	8	0	0	0	133	0	10.000000	200.00000	11
12	S-BA	0	0	0	0	0	0	141	0	200.00000	1000.0000	12
13	S-BE	3	0	0	0	0	0	138	0	1.0000000	3.0000000	13
14	S-BI	141	0	0	0	0	0	0	0			14
15	S-CD	141	0	0	0	0	0	0	0			15
16	S-CO	1	0	0	0	0	0	140	0	7.0000000	50.000000	16
17	S-CR	1	0	6	0	0	0	134	0	10.000000	500.00000	17
18	S-CU	0	0	0	0	0	0	141	0	5.0000000	100.00000	18
19	S-LA	115	0	0	0	0	0	26	0	20.000000	30.000000	19
20	S-MO	122	0	12	0	0	0	7	0	5.0000000	5.0000000	20
21	S-NB	111	0	30	0	0	0	0	0			21
22	S-NI	1	0	0	0	0	0	140	0	5.0000000	70.000000	22
23	S-PB	23	0	64	0	0	0	54	0	10.000000	20.000000	23
24	S-SB	141	0	0	0	0	0	0	0			24
25	S-SC	0	0	1	0	0	0	140	0	5.0000000	20.000000	25
26	S-SN	140	0	0	0	0	0	1	0	10.000000	10.000000	26
27	S-SR	0	0	1	0	0	0	140	0	150.00000	700.00000	27
28	S-V	1	0	0	0	0	0	140	0	50.000000	200.00000	28
29	S-W	141	0	0	0	0	0	0	0			29
30	S-Y	0	0	1	0	0	0	140	0	10.000000	50.000000	30
31	S-ZN	141	0	0	0	0	0	0	0			31
32	S-ZR	0	0	0	0	0	0	141	0	70.000000	500.00000	32
33	S-TH	141	0	0	0	0	0	0	0			33

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	S-FE%	5.5652482	1.5798728	2.4959980	1.3800601	0.3499707	11.940219	1.9165663	3
4	S-MG%	1.1262411	0.2980042	0.0888065	-9.2967713D-04	-0.0351289	0.0036382	0.4613148	4
5	S-CA%	2.1553191	0.5838818	0.3409179	0.0214705	0.1078616	-0.0444911	-0.3828011	5
6	S-TI%	0.4982270	0.1309868	0.0171575	3.5976510D-04	0.1600797	0.0010459	3.5527706	6
7	S-MN	863.12057	418.91209	175487.34	81754345.	1.1120957	2.2812084D+10	0.7407530	7
8	S-AG	0.5000000	0.0	0.0					8
9	S-AS								9
10	S-AU								10
11	S-B	26.954887	31.806914	1011.6798	115302.66	3.5832303	15316435.	14.964823	11
12	S-BA	534.04255	185.86854	34547.112	5162419.4	0.8039622	8.3842076D+08	0.7024874	12
13	S-BE	1.4673913	0.3533289	0.1248413	0.0263152	0.5965801	0.0221079	1.4185026	13
14	S-BI								14
15	S-CD								15
16	S-CO	20.657143	7.3619393	54.198150	753.83694	1.8892991	15712.265	5.3489662	16
17	S-CR	61.380597	60.410226	3649.3954	740997.43	3.3611301	2.6795435D+08	20.119583	17
18	S-CU	40.425532	21.468327	460.88906	10988.852	1.1106002	239823.58	1.1290134	18
19	S-LA	23.846154	4.9613894	24.615385	61.538462	0.5038911	-1150.5017	-1.8987772	19
20	S-MO	5.0000000	0.0	0.0	0.0	0.0	0.0	0.0	20
21	S-NB								21
22	S-NI	22.592857	14.213124	202.01290	4243.1043	1.4777980	70832.394	1.7356962	22
23	S-PB	10.925926	2.3937958	5.7302586	36.512928	2.6618608	217.81749	6.6335242	23
24	S-SB								24
25	S-SC	15.550000	3.9753286	15.803237	-20.324632	-0.3235218	-254.14964	-1.0176475	25
26	S-SN	10.000000							26
27	S-SR	331.42857	141.59203	20048.304	1880508.5	0.6624587	-2.6857609D+08	-0.6682086	27
28	S-V	138.28571	41.551612	1726.5365	15494.240	0.2159766	-3339192.2	-1.1201854	28
29	S-W								29
30	S-Y	21.107143	6.4892788	42.110740	213.43307	0.7810384	2847.5200	1.6057615	30
31	S-ZN								31
32	S-ZR	170.35461	63.272781	4003.4448	553919.41	2.1867333	1.4829803D+08	9.2526833	32
33	S-TH								33

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

Data set A - ICP Analysis (table 7)

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	AG	141	0	0	0	0	0	0	0			3
4	AL	0	0	0	0	0	0	141	0	1200.0000	32000.000	4
5	AS	128	0	13	0	0	0	0	0			5
6	B	141	0	0	0	0	0	0	0			6
7	BA	0	0	0	0	0	0	141	0	7.0000000	230.00000	7
8	BE	0	0	17	0	0	0	124	0	0.1000000	0.7000000	8
9	BI	141	0	0	0	0	0	0	0			9
10	CA	0	0	0	0	0	0	141	0	530.00000	16000.000	10
11	CE	0	0	0	0	0	0	141	0	3.3000000	24.000000	11
12	CO	1	0	1	0	0	0	139	0	4.0000000	34.000000	12
13	CR	138	0	3	0	0	0	0	0			13
14	CU	0	0	0	0	0	0	141	0	5.6000000	130.00000	14
15	FE	0	0	0	0	0	0	141	0	2600.0000	88000.000	15
16	LA	0	0	0	0	0	0	141	0	1.5000000	16.000000	16
17	MG	0	0	0	0	0	0	141	0	280.00000	16000.000	17
18	MN	0	0	0	0	0	0	141	0	34.000000	970.00000	18
19	MO	39	0	70	0	0	0	32	0	0.9800000	1.8000000	19
20	NB	0	0	1	0	0	0	140	0	1.2000000	10.000000	20
21	NI	0	0	0	0	0	0	141	0	1.9000000	63.000000	21
22	P	0	0	0	0	0	0	141	0	68.000000	840.00000	22
23	PB	1	0	41	0	0	0	99	0	4.2000000	39.000000	23
24	SB	137	0	4	0	0	0	0	0			24
25	SR	0	0	0	0	0	0	141	0	5.7000000	130.00000	25
26	TI	0	0	0	0	0	0	141	0	18.000000	5300.0000	26
27	V	0	0	0	0	0	0	141	0	9.4000000	260.00000	27
28	Y	67	0	4	0	0	0	70	0	0.1200000	4.8000000	28
29	ZN	0	0	0	0	0	0	141	0	8.8000000	100.00000	29

Table 8. Fisher-K statistics for analytical data from stream sediment samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	AG								3
4	AL	10070.922	6192.3979	38345791.	2.5078101D+11	1.0561317	1.3294549D+15	0.9041452	4
5	AS								5
6	B								6
7	BA	51.669504	44.314698	1963.7924	160007.62	1.8386425	15255645.	3.9558465	7
8	BE	0.2839516	0.1329333	0.0176712	0.0015016	0.6392254	-1.3274396D-04	-0.4250894	8
9	BI								9
10	CA	4255.5319	2404.4068	5781172.0	3.2283677D+10	2.3225184	2.3950464D+14	7.1660881	10
11	CE	11.439007	4.5459051	20.665253	49.791681	0.5300242	-285.64325	-0.6688712	11
12	CO	11.310791	4.8338584	23.366187	163.91757	1.4512550	1979.3075	3.6252467	12
13	CR								13
14	CU	29.649645	14.978807	224.36466	9666.5811	2.8763466	747720.31	14.853550	14
15	FE	31232.624	12364.225	1.5287407D+08	2.5678196D+12	1.3585129	9.4612118D+16	4.0483598	15
16	LA	6.5148936	2.4363889	5.9359909	9.8079412	0.6781691	13.837657	0.3927138	16
17	MG	4054.4681	2826.4062	7988572.0	4.8553872D+10	2.1504044	3.2476606D+14	5.0889985	17
18	MN	360.85816	198.44577	39380.723	7586435.4	0.9707608	5.8956959D+08	0.3801611	18
19	MO	1.1571875	0.2125458	0.0451757	0.0152190	1.5849972	0.0040067	1.9632721	19
20	NB	4.0142857	1.3470229	1.8144707	3.2016408	1.3099287	13.598515	4.1303949	20
21	NI	16.114184	10.906430	118.95023	2660.5532	2.0508034	66112.690	4.6725535	21
22	P	505.30496	124.04077	15386.113	-226992.53	-0.1189373	1.3743249D+08	0.5805392	22
23	PB	10.028283	4.0598844	16.482661	248.65640	3.7158540	6941.2869	25.549672	23
24	SB								24
25	SR	35.659574	21.952748	481.92314	15802.300	1.4936665	638403.43	2.7487779	25
26	TI	1558.9787	866.08969	750111.35	4.6363907D+08	0.7136601	8.3802288D+11	1.4893762	26
27	V	98.279433	40.851381	1668.8354	86901.858	1.2747025	8338098.3	2.9939188	27
28	Y	1.4474286	1.1415013	1.3030252	1.5744299	1.0585079	0.9127005	0.5375547	28
29	ZN	48.729078	16.523077	273.01208	2262.7188	0.5016003	16334.294	0.2191476	29

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

Data set A (table 4)

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-MG%)	2	(S-CA%)	0.5828	141
1 (S-MG%)	3	(S-FE%)	0.5134	141
1 (S-MG%)	4	(S-TI%)	0.1635	132
1 (S-MG%)	5	(S-SC)	0.3283	141
1 (S-MG%)	6	(S-V)	0.5383	141
1 (S-MG%)	7	(S-CR)	0.0171	141
1 (S-MG%)	8	(S-MN)	-0.0232	141
1 (S-MG%)	9	(S-CO)	0.7575	141
1 (S-MG%)	10	(S-NI)	0.3156	140
1 (S-MG%)	11	(S-CU)	0.2525	141
1 (S-MG%)	12	(S-ZN)	0.5116	9
1 (S-MG%)	13	(S-MO)	-0.1102	11
1 (S-MG%)	14	(S-PB)	0.1717	15
1 (S-MG%)	15	(S-AG)	********	2
1 (S-MG%)	16	(S-B)	-0.2597	96
1 (S-MG%)	17	(S-BE)	-0.5786	99
1 (S-MG%)	18	(S-SR)	-0.1197	141
1 (S-MG%)	19	(S-BA)	-0.3846	141
1 (S-MG%)	20	(S-LA)	********	2
1 (S-MG%)	21	(S-Y)	0.0397	141
1 (S-MG%)	22	(S-ZR)	-0.3911	141
1 (S-MG%)	23	(S-NB)	-0.4379	7
2 (S-CA%)	3	(S-FE%)	0.3235	141
2 (S-CA%)	4	(S-TI%)	-0.0278	132
2 (S-CA%)	5	(S-SC)	0.1386	141
2 (S-CA%)	6	(S-V)	0.2470	141
2 (S-CA%)	7	(S-CR)	-0.1583	141
2 (S-CA%)	8	(S-MN)	-0.1424	141
2 (S-CA%)	9	(S-CO)	0.4622	141
2 (S-CA%)	10	(S-NI)	0.0385	140
2 (S-CA%)	11	(S-CU)	0.1369	141
2 (S-CA%)	12	(S-ZN)	0.1250	9
2 (S-CA%)	13	(S-MO)	0.2887	11
2 (S-CA%)	14	(S-PB)	-0.1780	15
2 (S-CA%)	15	(S-AG)	1.0000	2
2 (S-CA%)	16	(S-B)	-0.3888	96
2 (S-CA%)	17	(S-BE)	-0.4677	99
2 (S-CA%)	18	(S-SR)	0.0298	141
2 (S-CA%)	19	(S-BA)	-0.3041	141
2 (S-CA%)	20	(S-LA)	********	2
2 (S-CA%)	21	(S-Y)	0.0595	141
2 (S-CA%)	22	(S-ZR)	-0.3364	141
2 (S-CA%)	23	(S-NB)	-0.4985	7
3 (S-FE%)	4	(S-TI%)	0.6114	132
3 (S-FE%)	5	(S-SC)	0.7127	141
3 (S-FE%)	6	(S-V)	0.6850	141
3 (S-FE%)	7	(S-CR)	0.2048	141
3 (S-FE%)	8	(S-MN)	0.5349	141
3 (S-FE%)	9	(S-CO)	0.7415	141
3 (S-FE%)	10	(S-NI)	0.4796	140
3 (S-FE%)	11	(S-CU)	0.5821	141
3 (S-FE%)	12	(S-ZN)	0.2891	9
3 (S-FE%)	13	(S-MO)	0.2782	11
3 (S-FE%)	14	(S-PB)	-0.2629	15
3 (S-FE%)	15	(S-AG)	********	2
3 (S-FE%)	16	(S-B)	-0.2471	96
3 (S-FE%)	17	(S-BE)	-0.2674	99
3 (S-FE%)	18	(S-SR)	0.2531	141
3 (S-FE%)	19	(S-BA)	-0.2142	141
3 (S-FE%)	20	(S-LA)	********	2
3 (S-FE%)	21	(S-Y)	0.0622	141
3 (S-FE%)	22	(S-ZR)	0.0824	141
3 (S-FE%)	23	(S-NB)	-0.5332	7
4 (S-TI%)	5	(S-SC)	0.6875	132
4 (S-TI%)	6	(S-V)	0.6309	132
4 (S-TI%)	7	(S-CR)	0.3218	132
4 (S-TI%)	8	(S-MN)	0.7366	132
4 (S-TI%)	9	(S-CO)	0.3652	132
4 (S-TI%)	10	(S-NI)	0.3048	131
4 (S-TI%)	11	(S-CU)	0.4564	132
4 (S-TI%)	12	(S-ZN)	********	5
4 (S-TI%)	13	(S-MO)	0.1429	8
4 (S-TI%)	14	(S-PB)	0.1006	11
4 (S-TI%)	15	(S-AG)	-1.0000	2
4 (S-TI%)	16	(S-B)	-0.0704	90
4 (S-TI%)	17	(S-BE)	0.0734	92
4 (S-TI%)	18	(S-SR)	0.4203	132
4 (S-TI%)	19	(S-BA)	0.0911	132
4 (S-TI%)	20	(S-LA)	********	2
4 (S-TI%)	21	(S-Y)	0.0239	132
4 (S-TI%)	22	(S-ZR)	0.5081	132
4 (S-TI%)	23	(S-NB)	********	5
5 (S-SC)	6	(S-V)	0.6795	141
5 (S-SC)	7	(S-CR)	0.3480	141
5 (S-SC)	8	(S-MN)	0.5819	141
5 (S-SC)	9	(S-CO)	0.6092	141
5 (S-SC)	10	(S-NI)	0.4940	140
5 (S-SC)	11	(S-CU)	0.5294	141
5 (S-SC)	12	(S-ZN)	-0.0280	9
5 (S-SC)	13	(S-MO)	0.0172	11
5 (S-SC)	14	(S-PB)	-0.2200	15
5 (S-SC)	15	(S-AG)	********	2
5 (S-SC)	16	(S-B)	-0.2423	96
5 (S-SC)	17	(S-BE)	-0.2229	99
5 (S-SC)	18	(S-SR)	0.2875	141
5 (S-SC)	19	(S-BA)	-0.0639	141
5 (S-SC)	20	(S-LA)	********	2
5 (S-SC)	21	(S-Y)	0.1664	141
5 (S-SC)	22	(S-ZR)	0.2724	141
5 (S-SC)	23	(S-NB)	-0.1323	7

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
6 (S-V)	7	(S-CR)	0.2307	141
6 (S-V)	8	(S-MN)	0.4714	141
6 (S-V)	9	(S-CO)	0.6501	141
6 (S-V)	10	(S-NI)	0.4098	140
6 (S-V)	11	(S-CU)	0.5060	141
6 (S-V)	12	(S-ZN)	0.4631	9
6 (S-V)	13	(S-MO)	0.0918	11
6 (S-V)	14	(S-PB)	-0.0681	15
6 (S-V)	15	(S-AG)	********	2
6 (S-V)	16	(S-B)	-0.1879	96
6 (S-V)	17	(S-BE)	-0.4148	99
6 (S-V)	18	(S-SR)	0.1146	141
6 (S-V)	19	(S-BA)	-0.2041	141
6 (S-V)	20	(S-LA)	********	2
6 (S-V)	21	(S-Y)	0.1044	141
6 (S-V)	22	(S-ZR)	0.0555	141
6 (S-V)	23	(S-NB)	-0.6238	7
7 (S-CR)	8	(S-MN)	0.3806	141
7 (S-CR)	9	(S-CO)	0.1679	141
7 (S-CR)	10	(S-NI)	0.6619	140
7 (S-CR)	11	(S-CU)	0.2483	141
7 (S-CR)	12	(S-ZN)	-0.4097	9
7 (S-CR)	13	(S-MO)	0.0676	11
7 (S-CR)	14	(S-PB)	-0.0103	15
7 (S-CR)	15	(S-AG)	-1.0000	2
7 (S-CR)	16	(S-B)	0.1817	96
7 (S-CR)	17	(S-BE)	0.0546	99
7 (S-CR)	18	(S-SR)	0.1511	141
7 (S-CR)	19	(S-BA)	0.3911	141
7 (S-CR)	20	(S-LA)	********	2
7 (S-CR)	21	(S-Y)	0.1494	141
7 (S-CR)	22	(S-ZR)	0.3961	141
7 (S-CR)	23	(S-NB)	-0.2915	7
8 (S-MN)	9	(S-CO)	0.1936	141
8 (S-MN)	10	(S-NI)	0.3994	140
8 (S-MN)	11	(S-CU)	0.4986	141
8 (S-MN)	12	(S-ZN)	0.0397	9
8 (S-MN)	13	(S-MO)	0.0321	11
8 (S-MN)	14	(S-PB)	-0.0157	15
8 (S-MN)	15	(S-AG)	********	2
8 (S-MN)	16	(S-B)	0.0247	96
8 (S-MN)	17	(S-BE)	0.2586	99
8 (S-MN)	18	(S-SR)	0.5312	141
8 (S-MN)	19	(S-BA)	0.2146	141
8 (S-MN)	20	(S-LA)	********	2
8 (S-MN)	21	(S-Y)	-0.1544	141
8 (S-MN)	22	(S-ZR)	0.5658	141
8 (S-MN)	23	(S-NB)	0.2130	7
9 (S-CO)	10	(S-NI)	0.5384	140
9 (S-CO)	11	(S-CU)	0.4575	141
9 (S-CO)	12	(S-ZN)	0.5718	9
9 (S-CO)	13	(S-MO)	0.3445	11
9 (S-CO)	14	(S-PB)	-0.2701	15
9 (S-CO)	15	(S-AG)	********	2
9 (S-CO)	16	(S-B)	-0.2746	96
9 (S-CO)	17	(S-BE)	-0.5360	99
9 (S-CO)	18	(S-SR)	-0.0376	141
9 (S-CO)	19	(S-BA)	-0.2790	141
9 (S-CO)	20	(S-LA)	********	2
9 (S-CO)	21	(S-Y)	0.1571	141
9 (S-CO)	22	(S-ZR)	-0.2274	141
9 (S-CO)	23	(S-NB)	-0.5452	7
10 (S-NI)	11	(S-CU)	0.4368	140
10 (S-NI)	12	(S-ZN)	0.2350	9
10 (S-NI)	13	(S-MO)	0.3070	11
10 (S-NI)	14	(S-PB)	-0.5847	14
10 (S-NI)	15	(S-AG)	********	2
10 (S-NI)	16	(S-B)	-0.0216	95
10 (S-NI)	17	(S-BE)	-0.2018	98
10 (S-NI)	18	(S-SR)	0.1060	140
10 (S-NI)	19	(S-BA)	0.1410	140
10 (S-NI)	20	(S-LA)	********	1
10 (S-NI)	21	(S-Y)	0.0688	140
10 (S-NI)	22	(S-ZR)	0.1449	140
10 (S-NI)	23	(S-NB)	-0.5065	7
11 (S-CU)	12	(S-ZN)	0.3584	9
11 (S-CU)	13	(S-MO)	0.4806	11
11 (S-CU)	14	(S-PB)	-0.1894	15
11 (S-CU)	15	(S-AG)	********	2
11 (S-CU)	16	(S-B)	-0.1669	96
11 (S-CU)	17	(S-BE)	-0.1129	99
11 (S-CU)	18	(S-SR)	0.2296	141
11 (S-CU)	19	(S-BA)	-0.0328	141
11 (S-CU)	20	(S-LA)	********	2
11 (S-CU)	21	(S-Y)	0.0821	141
11 (S-CU)	22	(S-ZR)	0.1267	141
11 (S-CU)	23	(S-NB)	-0.3536	7
12 (S-ZN)	13	(S-MO)	********	4
12 (S-ZN)	14	(S-PB)	********	4
12 (S-ZN)	15	(S-AG)	********	1
12 (S-ZN)	16	(S-B)	********	7
12 (S-ZN)	17	(S-BE)	********	6
12 (S-ZN)	18	(S-SR)	-0.6033	9
12 (S-ZN)	19	(S-BA)	-0.2743	9
12 (S-ZN)	20	(S-LA)	********	0
12 (S-ZN)	21	(S-Y)	-0.1250	9
12 (S-ZN)	22	(S-ZR)	-0.4452	9
12 (S-ZN)	23	(S-NB)	********	1
13 (S-MO)	14	(S-PB)	********	6
13 (S-MO)	15	(S-AG)	********	0

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
13 (S-MO)	16 (S-B)		-0.0326	11
13 (S-MO)	17 (S-BE)		-0.3333	10
13 (S-MO)	18 (S-SR)		0.2250	11
13 (S-MO)	19 (S-BA)		-0.2028	11
13 (S-MO)	20 (S-LA)		********	0
13 (S-MO)	21 (S-Y)		0.2877	11
13 (S-MO)	22 (S-ZR)		0.5645	11
13 (S-MO)	23 (S-NB)		********	3
14 (S-PB)	15 (S-AG)		********	0
14 (S-PB)	16 (S-B)		0.3872	15
14 (S-PB)	17 (S-BE)		0.0333	15
14 (S-PB)	18 (S-SR)		-0.2832	15
14 (S-PB)	19 (S-BA)		0.3477	15
14 (S-PB)	20 (S-LA)		********	1
14 (S-PB)	21 (S-Y)		0.1048	15
14 (S-PB)	22 (S-ZR)		-0.2299	15
14 (S-PB)	23 (S-NB)		********	2
15 (S-AG)	16 (S-B)		********	2
15 (S-AG)	17 (S-BE)		********	2
15 (S-AG)	18 (S-SR)		1.0000	2
15 (S-AG)	19 (S-BA)		********	2
15 (S-AG)	20 (S-LA)		********	0
15 (S-AG)	21 (S-Y)		********	2
15 (S-AG)	22 (S-ZR)		********	2
15 (S-AG)	23 (S-NB)		********	0
16 (S-B)	17 (S-BE)		0.3650	79
16 (S-B)	18 (S-SR)		-0.0831	96
16 (S-B)	19 (S-BA)		0.3864	96
16 (S-B)	20 (S-LA)		********	2
16 (S-B)	21 (S-Y)		0.1314	96
16 (S-B)	22 (S-ZR)		0.1856	96
16 (S-B)	23 (S-NB)		********	4
17 (S-BE)	18 (S-SR)		0.1634	99
17 (S-BE)	19 (S-BA)		0.4508	99
17 (S-BE)	20 (S-LA)		********	2
17 (S-BE)	21 (S-Y)		-0.0650	99
17 (S-BE)	22 (S-ZR)		0.3928	99
17 (S-BE)	23 (S-NB)		0.4472	6
18 (S-SR)	19 (S-BA)		0.2142	141
18 (S-SR)	20 (S-LA)		********	2
18 (S-SR)	21 (S-Y)		-0.2648	141
18 (S-SR)	22 (S-ZR)		0.3910	141
18 (S-SR)	23 (S-NB)		0.5744	7
19 (S-BA)	20 (S-LA)		********	2
19 (S-BA)	21 (S-Y)		0.1604	141
19 (S-BA)	22 (S-ZR)		0.4490	141
19 (S-BA)	23 (S-NB)		0.4318	7
20 (S-LA)	21 (S-Y)		********	2
20 (S-LA)	22 (S-ZR)		********	2
20 (S-LA)	23 (S-NB)		********	0
21 (S-Y)	22 (S-ZR)		0.0361	141
21 (S-Y)	23 (S-NB)		0.1667	7
22 (S-ZR)	23 (S-NB)		0.7874	7

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

Data set B (table 5)

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-MG%)	2 (S-CA%)		0.6958	141
1 (S-MG%)	3 (S-FE%)		0.8250	141
1 (S-MG%)	4 (S-TI%)		-0.0398	141
1 (S-MG%)	5 (S-SC)		0.2410	141
1 (S-MG%)	6 (S-V)		0.2514	141
1 (S-MG%)	7 (S-CR)		-0.0743	138
1 (S-MG%)	8 (S-MN)		-0.2600	141
1 (S-MG%)	9 (S-CO)		0.6545	141
1 (S-MG%)	10 (S-NI)		0.3875	141
1 (S-MG%)	11 (S-CU)		0.3369	141
1 (S-MG%)	12 (S-ZN)		********	0
1 (S-MG%)	13 (S-MO)		0.8575	3
1 (S-MG%)	14 (S-PB)		-0.7401	10
1 (S-MG%)	15 (S-AG)		********	2
1 (S-MG%)	16 (S-B)		-0.1497	69
1 (S-MG%)	17 (S-BE)		-0.2235	57
1 (S-MG%)	18 (S-SR)		0.4427	141
1 (S-MG%)	19 (S-BA)		-0.3948	141
1 (S-MG%)	20 (S-LA)		-0.0662	3
1 (S-MG%)	21 (S-Y)		0.2096	139
1 (S-MG%)	22 (S-ZR)		-0.0756	141
1 (S-MG%)	23 (S-NB)		********	0
2 (S-CA%)	3 (S-FE%)		0.5551	141
2 (S-CA%)	4 (S-TI%)		0.0131	141
2 (S-CA%)	5 (S-SC)		0.2086	141
2 (S-CA%)	6 (S-V)		0.1905	141
2 (S-CA%)	7 (S-CR)		-0.3381	138
2 (S-CA%)	8 (S-MN)		-0.2446	141
2 (S-CA%)	9 (S-CO)		0.4355	141
2 (S-CA%)	10 (S-NI)		0.0671	141
2 (S-CA%)	11 (S-CU)		0.1798	141
2 (S-CA%)	12 (S-ZN)		********	0
2 (S-CA%)	13 (S-MO)		0.9967	3
2 (S-CA%)	14 (S-PB)		-0.5885	10
2 (S-CA%)	15 (S-AG)		********	2
2 (S-CA%)	16 (S-B)		-0.2514	69
2 (S-CA%)	17 (S-BE)		-0.2358	57
2 (S-CA%)	18 (S-SR)		0.5798	141
2 (S-CA%)	19 (S-BA)		-0.4921	141
2 (S-CA%)	20 (S-LA)		********	3
2 (S-CA%)	21 (S-Y)		0.0398	139
2 (S-CA%)	22 (S-ZR)		-0.2369	141
2 (S-CA%)	23 (S-NB)		********	0
3 (S-FE%)	4 (S-TI%)		-0.0169	141
3 (S-FE%)	5 (S-SC)		0.3161	141
3 (S-FE%)	6 (S-V)		0.2632	141
3 (S-FE%)	7 (S-CR)		-0.0748	138
3 (S-FE%)	8 (S-MN)		-0.2731	141
3 (S-FE%)	9 (S-CO)		0.6875	141
3 (S-FE%)	10 (S-NI)		0.3292	141
3 (S-FE%)	11 (S-CU)		0.3955	141
3 (S-FE%)	12 (S-ZN)		********	0
3 (S-FE%)	13 (S-MO)		0.8575	3
3 (S-FE%)	14 (S-PB)		-0.5776	10
3 (S-FE%)	15 (S-AG)		********	2
3 (S-FE%)	16 (S-B)		-0.1119	69
3 (S-FE%)	17 (S-BE)		-0.3104	57
3 (S-FE%)	18 (S-SR)		0.2996	141
3 (S-FE%)	19 (S-BA)		-0.2751	141
3 (S-FE%)	20 (S-LA)		0.0662	3
3 (S-FE%)	21 (S-Y)		0.4131	139
3 (S-FE%)	22 (S-ZR)		0.1469	141
3 (S-FE%)	23 (S-NB)		********	0
4 (S-TI%)	5 (S-SC)		0.6462	141
4 (S-TI%)	6 (S-V)		0.2632	141
4 (S-TI%)	7 (S-CR)		0.3219	138
4 (S-TI%)	8 (S-MN)		0.6554	141
4 (S-TI%)	9 (S-CO)		0.1949	141
4 (S-TI%)	10 (S-NI)		0.0223	141
4 (S-TI%)	11 (S-CU)		0.0437	141
4 (S-TI%)	12 (S-ZN)		********	0
4 (S-TI%)	13 (S-MO)		0.9749	3
4 (S-TI%)	14 (S-PB)		-0.4735	10
4 (S-TI%)	15 (S-AG)		********	2
4 (S-TI%)	16 (S-B)		-0.1340	69
4 (S-TI%)	17 (S-BE)		-0.0604	57
4 (S-TI%)	18 (S-SR)		-0.0402	141
4 (S-TI%)	19 (S-BA)		-0.0291	141
4 (S-TI%)	20 (S-LA)		0.5707	3
4 (S-TI%)	21 (S-Y)		0.1644	139
4 (S-TI%)	22 (S-ZR)		0.1996	141
4 (S-TI%)	23 (S-NB)		********	0
5 (S-SC)	6 (S-V)		0.3344	141
5 (S-SC)	7 (S-CR)		0.3849	138
5 (S-SC)	8 (S-MN)		0.5398	141
5 (S-SC)	9 (S-CO)		0.4251	141
5 (S-SC)	10 (S-NI)		0.2699	141
5 (S-SC)	11 (S-CU)		0.3044	141
5 (S-SC)	12 (S-ZN)		********	0
5 (S-SC)	13 (S-MO)		0.8575	3
5 (S-SC)	14 (S-PB)		-0.6135	10
5 (S-SC)	15 (S-AG)		********	2
5 (S-SC)	16 (S-B)		-0.1257	69
5 (S-SC)	17 (S-BE)		-0.2799	57
5 (S-SC)	18 (S-SR)		0.0625	141
5 (S-SC)	19 (S-BA)		-0.0750	141
5 (S-SC)	20 (S-LA)		0.9988	3
5 (S-SC)	21 (S-Y)		0.3673	139
5 (S-SC)	22 (S-ZR)		0.1851	141
5 (S-SC)	23 (S-NB)		********	0

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
6 (S-V)	7	(S-CR)	0.0254	138
6 (S-V)	8	(S-MN)	0.2346	141
6 (S-V)	9	(S-CO)	0.2972	141
6 (S-V)	10	(S-NI)	0.2024	141
6 (S-V)	11	(S-CU)	0.5383	141
6 (S-V)	12	(S-ZN)	********	0
6 (S-V)	13	(S-MO)	0.8575	3
6 (S-V)	14	(S-PB)	-0.3212	10
6 (S-V)	15	(S-AG)	********	2
6 (S-V)	16	(S-B)	-0.0849	69
6 (S-V)	17	(S-BE)	-0.2764	57
6 (S-V)	18	(S-SR)	0.2424	141
6 (S-V)	19	(S-BA)	-0.1682	141
6 (S-V)	20	(S-LA)	0.8310	3
6 (S-V)	21	(S-Y)	0.0115	139
6 (S-V)	22	(S-ZR)	0.0622	141
6 (S-V)	23	(S-NB)	********	0
7 (S-CR)	8	(S-MN)	0.3590	138
7 (S-CR)	9	(S-CO)	0.2274	138
7 (S-CR)	10	(S-NI)	0.5675	138
7 (S-CR)	11	(S-CU)	0.0340	138
7 (S-CR)	12	(S-ZN)	********	0
7 (S-CR)	13	(S-MO)	********	2
7 (S-CR)	14	(S-PB)	-0.9001	9
7 (S-CR)	15	(S-AG)	********	2
7 (S-CR)	16	(S-B)	0.1640	67
7 (S-CR)	17	(S-BE)	-0.2407	54
7 (S-CR)	18	(S-SR)	-0.3468	138
7 (S-CR)	19	(S-BA)	0.4743	138
7 (S-CR)	20	(S-LA)	********	2
7 (S-CR)	21	(S-Y)	0.1171	136
7 (S-CR)	22	(S-ZR)	0.1704	138
7 (S-CR)	23	(S-NB)	********	0
8 (S-MN)	9	(S-CO)	0.0096	141
8 (S-MN)	10	(S-NI)	0.0231	141
8 (S-MN)	11	(S-CU)	0.0386	141
8 (S-MN)	12	(S-ZN)	********	0
8 (S-MN)	13	(S-MO)	0.6946	3
8 (S-MN)	14	(S-PB)	-0.0826	10
8 (S-MN)	15	(S-AG)	********	2
8 (S-MN)	16	(S-B)	0.0069	69
8 (S-MN)	17	(S-BE)	0.0222	57
8 (S-MN)	18	(S-SR)	-0.1312	141
8 (S-MN)	19	(S-BA)	0.0998	141
8 (S-MN)	20	(S-LA)	0.8310	3
8 (S-MN)	21	(S-Y)	0.0850	139
8 (S-MN)	22	(S-ZR)	0.0931	141
8 (S-MN)	23	(S-NB)	********	0
9 (S-CO)	10	(S-NI)	0.5758	141
9 (S-CO)	11	(S-CU)	0.3661	141
9 (S-CO)	12	(S-ZN)	********	0
9 (S-CO)	13	(S-MO)	0.8575	3
9 (S-CO)	14	(S-PB)	0.1111	10
9 (S-CO)	15	(S-AG)	********	2
9 (S-CO)	16	(S-B)	-0.2278	69
9 (S-CO)	17	(S-BE)	-0.5643	57
9 (S-CO)	18	(S-SR)	0.2202	141
9 (S-CO)	19	(S-BA)	-0.1930	141
9 (S-CO)	20	(S-LA)	0.5707	3
9 (S-CO)	21	(S-Y)	0.2251	139
9 (S-CO)	22	(S-ZR)	-0.0139	141
9 (S-CO)	23	(S-NB)	********	0
10 (S-NI)	11	(S-CU)	0.2702	141
10 (S-NI)	12	(S-ZN)	********	0
10 (S-NI)	13	(S-MO)	0.6106	3
10 (S-NI)	14	(S-PB)	0.3213	10
10 (S-NI)	15	(S-AG)	********	2
10 (S-NI)	16	(S-B)	0.0883	69
10 (S-NI)	17	(S-BE)	-0.4971	57
10 (S-NI)	18	(S-SR)	0.0196	141
10 (S-NI)	19	(S-BA)	0.1961	141
10 (S-NI)	20	(S-LA)	0.8972	3
10 (S-NI)	21	(S-Y)	0.0195	139
10 (S-NI)	22	(S-ZR)	-0.1678	141
10 (S-NI)	23	(S-NB)	********	0
11 (S-CU)	12	(S-ZN)	********	0
11 (S-CU)	13	(S-MO)	0.8575	3
11 (S-CU)	14	(S-PB)	-0.4283	10
11 (S-CU)	15	(S-AG)	********	2
11 (S-CU)	16	(S-B)	0.0702	69
11 (S-CU)	17	(S-BE)	-0.2651	57
11 (S-CU)	18	(S-SR)	0.0922	141
11 (S-CU)	19	(S-BA)	-0.0690	141
11 (S-CU)	20	(S-LA)	0.9932	3
11 (S-CU)	21	(S-Y)	0.2301	139
11 (S-CU)	22	(S-ZR)	0.0457	141
11 (S-CU)	23	(S-NB)	********	0
12 (S-ZN)	13	(S-MO)	********	0
12 (S-ZN)	14	(S-PB)	********	0
12 (S-ZN)	15	(S-AG)	********	0
12 (S-ZN)	16	(S-B)	********	0
12 (S-ZN)	17	(S-BE)	********	0
12 (S-ZN)	18	(S-SR)	********	0
12 (S-ZN)	19	(S-BA)	********	0
12 (S-ZN)	20	(S-LA)	********	0
12 (S-ZN)	21	(S-Y)	********	0
12 (S-ZN)	22	(S-ZR)	********	0
12 (S-ZN)	23	(S-NB)	********	0
13 (S-MO)	14	(S-PB)	********	1
13 (S-MO)	15	(S-AG)	********	0

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
13 (S-MO)	16 (S-B)	-1.0000	2
13 (S-MO)	17 (S-BE)	-1.0000	2
13 (S-MO)	18 (S-SR)	0.8575	3
13 (S-MO)	19 (S-BA)	-0.9764	3
13 (S-MO)	20 (S-LA)	********	1
13 (S-MO)	21 (S-Y)	-0.8575	3
13 (S-MO)	22 (S-ZR)	********	3
13 (S-MO)	23 (S-NB)	********	0
14 (S-PB)	15 (S-AG)	********	1
14 (S-PB)	16 (S-B)	0.2269	9
14 (S-PB)	17 (S-BE)	********	7
14 (S-PB)	18 (S-SR)	-0.5965	10
14 (S-PB)	19 (S-BA)	0.1282	10
14 (S-PB)	20 (S-LA)	********	1
14 (S-PB)	21 (S-Y)	-0.0380	10
14 (S-PB)	22 (S-ZR)	-0.6902	10
14 (S-PB)	23 (S-NB)	********	0
15 (S-AG)	16 (S-B)	********	2
15 (S-AG)	17 (S-BE)	********	0
15 (S-AG)	18 (S-SR)	********	2
15 (S-AG)	19 (S-BA)	********	2
15 (S-AG)	20 (S-LA)	********	0
15 (S-AG)	21 (S-Y)	********	2
15 (S-AG)	22 (S-ZR)	********	2
15 (S-AG)	23 (S-NB)	********	0
16 (S-B)	17 (S-BE)	0.0937	38
16 (S-B)	18 (S-SR)	-0.2748	69
16 (S-B)	19 (S-BA)	0.4017	69
16 (S-B)	20 (S-LA)	-0.5707	3
16 (S-B)	21 (S-Y)	0.0045	68
16 (S-B)	22 (S-ZR)	0.1401	69
16 (S-B)	23 (S-NB)	********	0
17 (S-BE)	18 (S-SR)	-0.2575	57
17 (S-BE)	19 (S-BA)	0.0821	57
17 (S-BE)	20 (S-LA)	-0.8310	3
17 (S-BE)	21 (S-Y)	-0.0168	56
17 (S-BE)	22 (S-ZR)	0.0217	57
17 (S-BE)	23 (S-NB)	********	0
18 (S-SR)	19 (S-BA)	-0.4111	141
18 (S-SR)	20 (S-LA)	0.9745	3
18 (S-SR)	21 (S-Y)	-0.1180	139
18 (S-SR)	22 (S-ZR)	-0.2198	141
18 (S-SR)	23 (S-NB)	********	0
19 (S-BA)	20 (S-LA)	-0.8310	3
19 (S-BA)	21 (S-Y)	0.1375	139
19 (S-BA)	22 (S-ZR)	0.2283	141
19 (S-BA)	23 (S-NB)	********	0
20 (S-LA)	21 (S-Y)	-1.0000	2
20 (S-LA)	22 (S-ZR)	-0.8310	3
20 (S-LA)	23 (S-NB)	********	0
21 (S-Y)	22 (S-ZR)	0.4787	139
21 (S-Y)	23 (S-NB)	********	0
22 (S-ZR)	23 (S-NB)	********	0

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

Data set C (table 6)

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-MG%)	2	(S-CA%)	0.5163	141
1 (S-MG%)	3	(S-FE%)	0.6159	141
1 (S-MG%)	4	(S-TI%)	0.3551	141
1 (S-MG%)	5	(S-SC)	0.4193	140
1 (S-MG%)	6	(S-V)	0.5994	140
1 (S-MG%)	7	(S-CR)	0.3504	134
1 (S-MG%)	8	(S-MN)	-0.0290	141
1 (S-MG%)	9	(S-CO)	0.6618	140
1 (S-MG%)	10	(S-NI)	0.6460	140
1 (S-MG%)	11	(S-CU)	0.3988	141
1 (S-MG%)	12	(S-ZN)	********	0
1 (S-MG%)	13	(S-MO)	********	7
1 (S-MG%)	14	(S-PB)	-0.5506	54
1 (S-MG%)	15	(S-AG)	********	2
1 (S-MG%)	16	(S-SN)	********	1
1 (S-MG%)	17	(S-B)	-0.1569	133
1 (S-MG%)	18	(S-BE)	-0.4515	138
1 (S-MG%)	19	(S-SR)	-0.1066	140
1 (S-MG%)	20	(S-BA)	-0.1766	141
1 (S-MG%)	21	(S-LA)	-0.2776	26
1 (S-MG%)	22	(S-Y)	0.1792	140
1 (S-MG%)	23	(S-ZR)	0.0513	141
1 (S-MG%)	24	(S-NB)	********	0
2 (S-CA%)	3	(S-FE%)	0.3892	141
2 (S-CA%)	4	(S-TI%)	0.2558	141
2 (S-CA%)	5	(S-SC)	0.2934	140
2 (S-CA%)	6	(S-V)	0.4771	140
2 (S-CA%)	7	(S-CR)	-0.1173	134
2 (S-CA%)	8	(S-MN)	0.0658	141
2 (S-CA%)	9	(S-CO)	0.5219	140
2 (S-CA%)	10	(S-NI)	0.1277	140
2 (S-CA%)	11	(S-CU)	0.3561	141
2 (S-CA%)	12	(S-ZN)	********	0
2 (S-CA%)	13	(S-MO)	********	7
2 (S-CA%)	14	(S-PB)	-0.3767	54
2 (S-CA%)	15	(S-AG)	********	2
2 (S-CA%)	16	(S-SN)	********	1
2 (S-CA%)	17	(S-B)	-0.5757	133
2 (S-CA%)	18	(S-BE)	-0.4914	138
2 (S-CA%)	19	(S-SR)	0.2834	140
2 (S-CA%)	20	(S-BA)	-0.2068	141
2 (S-CA%)	21	(S-LA)	-0.1490	26
2 (S-CA%)	22	(S-Y)	0.0419	140
2 (S-CA%)	23	(S-ZR)	-0.1139	141
2 (S-CA%)	24	(S-NB)	********	0
3 (S-FE%)	4	(S-TI%)	0.6293	141
3 (S-FE%)	5	(S-SC)	0.6676	140
3 (S-FE%)	6	(S-V)	0.5607	140
3 (S-FE%)	7	(S-CR)	0.0242	134
3 (S-FE%)	8	(S-MN)	0.2931	141
3 (S-FE%)	9	(S-CO)	0.5757	140
3 (S-FE%)	10	(S-NI)	0.1804	140
3 (S-FE%)	11	(S-CU)	0.6478	141
3 (S-FE%)	12	(S-ZN)	********	0
3 (S-FE%)	13	(S-MO)	********	7
3 (S-FE%)	14	(S-PB)	-0.4339	54
3 (S-FE%)	15	(S-AG)	********	2
3 (S-FE%)	16	(S-SN)	********	1
3 (S-FE%)	17	(S-B)	-0.1120	133
3 (S-FE%)	18	(S-BE)	-0.3813	138
3 (S-FE%)	19	(S-SR)	-0.1800	140
3 (S-FE%)	20	(S-BA)	-0.2292	141
3 (S-FE%)	21	(S-LA)	-0.3429	26
3 (S-FE%)	22	(S-Y)	0.3061	140
3 (S-FE%)	23	(S-ZR)	0.2301	141
3 (S-FE%)	24	(S-NB)	********	0
4 (S-TI%)	5	(S-SC)	0.4806	140
4 (S-TI%)	6	(S-V)	0.2043	140
4 (S-TI%)	7	(S-CR)	0.0553	134
4 (S-TI%)	8	(S-MN)	0.5465	141
4 (S-TI%)	9	(S-CO)	0.2053	140
4 (S-TI%)	10	(S-NI)	-0.1333	140
4 (S-TI%)	11	(S-CU)	0.4802	141
4 (S-TI%)	12	(S-ZN)	********	0
4 (S-TI%)	13	(S-MO)	********	7
4 (S-TI%)	14	(S-PB)	-0.2502	54
4 (S-TI%)	15	(S-AG)	********	2
4 (S-TI%)	16	(S-SN)	********	1
4 (S-TI%)	17	(S-B)	0.0529	133
4 (S-TI%)	18	(S-BE)	0.0464	138
4 (S-TI%)	19	(S-SR)	0.1679	140
4 (S-TI%)	20	(S-BA)	-0.0395	141
4 (S-TI%)	21	(S-LA)	-0.3679	26
4 (S-TI%)	22	(S-Y)	0.0082	140
4 (S-TI%)	23	(S-ZR)	0.3804	141
4 (S-TI%)	24	(S-NB)	********	0
5 (S-SC)	6	(S-V)	0.5740	140
5 (S-SC)	7	(S-CR)	0.2569	134
5 (S-SC)	8	(S-MN)	0.3302	140
5 (S-SC)	9	(S-CO)	0.5628	140
5 (S-SC)	10	(S-NI)	0.1685	140
5 (S-SC)	11	(S-CU)	0.6231	140
5 (S-SC)	12	(S-ZN)	********	0
5 (S-SC)	13	(S-MO)	********	7
5 (S-SC)	14	(S-PB)	-0.2912	53
5 (S-SC)	15	(S-AG)	********	2
5 (S-SC)	16	(S-SN)	********	1
5 (S-SC)	17	(S-B)	-0.0590	132
5 (S-SC)	18	(S-BE)	-0.2168	137
5 (S-SC)	19	(S-SR)	-0.1235	140

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
5 (S-SC)	20 (S-BA)	-0.1733	140
5 (S-SC)	21 (S-LA)	0.1152	25
5 (S-SC)	22 (S-Y)	0.3727	139
5 (S-SC)	23 (S-ZR)	0.2195	140
5 (S-SC)	24 (S-NB)	********	0
6 (S-V)	7 (S-CR)	-0.0490	134
6 (S-V)	8 (S-MN)	-0.0865	140
6 (S-V)	9 (S-CO)	0.6707	140
6 (S-V)	10 (S-NI)	0.2686	140
6 (S-V)	11 (S-CU)	0.6290	140
6 (S-V)	12 (S-ZN)	********	0
6 (S-V)	13 (S-MO)	********	7
6 (S-V)	14 (S-PB)	-0.3471	53
6 (S-V)	15 (S-AG)	********	2
6 (S-V)	16 (S-SN)	********	1
6 (S-V)	17 (S-B)	-0.2284	132
6 (S-V)	18 (S-BE)	-0.4985	137
6 (S-V)	19 (S-SR)	-0.2540	140
6 (S-V)	20 (S-BA)	-0.1771	140
6 (S-V)	21 (S-LA)	0.0311	25
6 (S-V)	22 (S-Y)	0.5097	139
6 (S-V)	23 (S-ZR)	-0.0219	140
6 (S-V)	24 (S-NB)	********	0
7 (S-CR)	8 (S-MN)	0.1486	134
7 (S-CR)	9 (S-CO)	0.2188	134
7 (S-CR)	10 (S-NI)	0.7193	134
7 (S-CR)	11 (S-CU)	-0.0622	134
7 (S-CR)	12 (S-ZN)	********	0
7 (S-CR)	13 (S-MO)	********	7
7 (S-CR)	14 (S-PB)	0.3136	51
7 (S-CR)	15 (S-AG)	********	2
7 (S-CR)	16 (S-SN)	********	1
7 (S-CR)	17 (S-B)	0.3744	126
7 (S-CR)	18 (S-BE)	0.1985	131
7 (S-CR)	19 (S-SR)	0.1117	134
7 (S-CR)	20 (S-BA)	0.3023	134
7 (S-CR)	21 (S-LA)	0.1390	24
7 (S-CR)	22 (S-Y)	-0.1217	133
7 (S-CR)	23 (S-ZR)	0.1116	134
7 (S-CR)	24 (S-NB)	********	0
8 (S-MN)	9 (S-CO)	0.0595	140
8 (S-MN)	10 (S-NI)	-0.2161	140
8 (S-MN)	11 (S-CU)	0.3900	141
8 (S-MN)	12 (S-ZN)	********	0
8 (S-MN)	13 (S-MO)	********	7
8 (S-MN)	14 (S-PB)	0.3104	54
8 (S-MN)	15 (S-AG)	********	2
8 (S-MN)	16 (S-SN)	********	1
8 (S-MN)	17 (S-B)	0.0580	133
8 (S-MN)	18 (S-BE)	0.2497	138
8 (S-MN)	19 (S-SR)	0.3741	140
8 (S-MN)	20 (S-BA)	-0.0876	141
8 (S-MN)	21 (S-LA)	-0.1405	26
8 (S-MN)	22 (S-Y)	-0.2566	140
8 (S-MN)	23 (S-ZR)	0.0868	141
8 (S-MN)	24 (S-NB)	********	0
9 (S-CO)	10 (S-NI)	0.4666	140
9 (S-CO)	11 (S-CU)	0.5518	140
9 (S-CO)	12 (S-ZN)	********	0
9 (S-CO)	13 (S-MO)	********	7
9 (S-CO)	14 (S-PB)	-0.2858	53
9 (S-CO)	15 (S-AG)	********	2
9 (S-CO)	16 (S-SN)	********	1
9 (S-CO)	17 (S-B)	-0.2571	132
9 (S-CO)	18 (S-BE)	-0.5184	137
9 (S-CO)	19 (S-SR)	-0.1472	140
9 (S-CO)	20 (S-BA)	-0.2818	140
9 (S-CO)	21 (S-LA)	-0.3143	25
9 (S-CO)	22 (S-Y)	0.3355	139
9 (S-CO)	23 (S-ZR)	-0.1337	140
9 (S-CO)	24 (S-NB)	********	0
10 (S-NI)	11 (S-CU)	0.0771	140
10 (S-NI)	12 (S-ZN)	********	0
10 (S-NI)	13 (S-MO)	********	7
10 (S-NI)	14 (S-PB)	-0.1582	53
10 (S-NI)	15 (S-AG)	********	2
10 (S-NI)	16 (S-SN)	********	1
10 (S-NI)	17 (S-B)	0.1988	132
10 (S-NI)	18 (S-BE)	-0.2051	137
10 (S-NI)	19 (S-SR)	-0.0493	140
10 (S-NI)	20 (S-BA)	0.0450	140
10 (S-NI)	21 (S-LA)	-0.0579	25
10 (S-NI)	22 (S-Y)	0.0333	139
10 (S-NI)	23 (S-ZR)	-0.1287	140
10 (S-NI)	24 (S-NB)	********	0
11 (S-CU)	12 (S-ZN)	********	0
11 (S-CU)	13 (S-MO)	********	7
11 (S-CU)	14 (S-PB)	-0.3018	54
11 (S-CU)	15 (S-AG)	********	2
11 (S-CU)	16 (S-SN)	********	1
11 (S-CU)	17 (S-B)	-0.0475	133
11 (S-CU)	18 (S-BE)	-0.3132	138
11 (S-CU)	19 (S-SR)	-0.1260	140
11 (S-CU)	20 (S-BA)	-0.3655	141
11 (S-CU)	21 (S-LA)	-0.4348	26
11 (S-CU)	22 (S-Y)	0.2124	140
11 (S-CU)	23 (S-ZR)	-0.0674	141
11 (S-CU)	24 (S-NB)	********	0
12 (S-ZN)	13 (S-MO)	********	0
12 (S-ZN)	14 (S-PB)	********	0

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
12 (S-ZN)	15 (S-AG)		********	0
12 (S-ZN)	16 (S-SN)		********	0
12 (S-ZN)	17 (S-B)		********	0
12 (S-ZN)	18 (S-BE)		********	0
12 (S-ZN)	19 (S-SR)		********	0
12 (S-ZN)	20 (S-BA)		********	0
12 (S-ZN)	21 (S-LA)		********	0
12 (S-ZN)	22 (S-Y)		********	0
12 (S-ZN)	23 (S-ZR)		********	0
12 (S-ZN)	24 (S-NB)		********	0
13 (S-MO)	14 (S-PB)		********	3
13 (S-MO)	15 (S-AG)		********	0
13 (S-MO)	16 (S-SN)		********	0
13 (S-MO)	17 (S-B)		********	7
13 (S-MO)	18 (S-BE)		********	7
13 (S-MO)	19 (S-SR)		********	7
13 (S-MO)	20 (S-BA)		********	7
13 (S-MO)	21 (S-LA)		********	1
13 (S-MO)	22 (S-Y)		********	7
13 (S-MO)	23 (S-ZR)		********	7
13 (S-MO)	24 (S-NB)		********	0
14 (S-PB)	15 (S-AG)		********	0
14 (S-PB)	16 (S-SN)		********	1
14 (S-PB)	17 (S-B)		0.2910	54
14 (S-PB)	18 (S-BE)		0.5902	54
14 (S-PB)	19 (S-SR)		0.2270	53
14 (S-PB)	20 (S-BA)		0.4436	54
14 (S-PB)	21 (S-LA)		0.2582	21
14 (S-PB)	22 (S-Y)		-0.0453	54
14 (S-PB)	23 (S-ZR)		-0.0890	54
14 (S-PB)	24 (S-NB)		********	0
15 (S-AG)	16 (S-SN)		********	0
15 (S-AG)	17 (S-B)		********	2
15 (S-AG)	18 (S-BE)		********	2
15 (S-AG)	19 (S-SR)		********	2
15 (S-AG)	20 (S-BA)		********	2
15 (S-AG)	21 (S-LA)		********	0
15 (S-AG)	22 (S-Y)		********	2
15 (S-AG)	23 (S-ZR)		********	2
15 (S-AG)	24 (S-NB)		********	0
16 (S-SN)	17 (S-B)		********	1
16 (S-SN)	18 (S-BE)		********	1
16 (S-SN)	19 (S-SR)		********	1
16 (S-SN)	20 (S-BA)		********	1
16 (S-SN)	21 (S-LA)		********	1
16 (S-SN)	22 (S-Y)		********	1
16 (S-SN)	23 (S-ZR)		********	1
16 (S-SN)	24 (S-NB)		********	0
17 (S-B)	18 (S-BE)		0.4255	131
17 (S-B)	19 (S-SR)		-0.0818	132
17 (S-B)	20 (S-BA)		0.2244	133
17 (S-B)	21 (S-LA)		-0.1219	25
17 (S-B)	22 (S-Y)		-0.1572	132
17 (S-B)	23 (S-ZR)		0.2815	133
17 (S-B)	24 (S-NB)		********	0
18 (S-BE)	19 (S-SR)		0.1839	137
18 (S-BE)	20 (S-BA)		0.4086	138
18 (S-BE)	21 (S-LA)		0.4568	26
18 (S-BE)	22 (S-Y)		-0.2240	137
18 (S-BE)	23 (S-ZR)		0.3668	138
18 (S-BE)	24 (S-NB)		********	0
19 (S-SR)	20 (S-BA)		0.0613	140
19 (S-SR)	21 (S-LA)		0.1680	25
19 (S-SR)	22 (S-Y)		-0.6037	139
19 (S-SR)	23 (S-ZR)		-0.0613	140
19 (S-SR)	24 (S-NB)		********	0
20 (S-BA)	21 (S-LA)		0.2705	26
20 (S-BA)	22 (S-Y)		0.0910	140
20 (S-BA)	23 (S-ZR)		0.3167	141
20 (S-BA)	24 (S-NB)		********	0
21 (S-LA)	22 (S-Y)		0.3294	26
21 (S-LA)	23 (S-ZR)		0.1103	26
21 (S-LA)	24 (S-NB)		********	0
22 (S-Y)	23 (S-ZR)		0.1750	140
22 (S-Y)	24 (S-NB)		********	0
23 (S-ZR)	24 (S-NB)		********	0

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

Data set A - ICP Analysis (table 7)

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (MG)	2 (CA)		0.6681	141
1 (MG)	3 (FE)		0.5727	141
1 (MG)	4 (TI)		-0.1955	141
1 (MG)	5 (AL)		0.7356	141
1 (MG)	6 (V)		0.0938	141
1 (MG)	7 (MN)		0.7209	141
1 (MG)	8 (CO)		0.6624	139
1 (MG)	9 (NI)		0.7156	141
1 (MG)	10 (CU)		0.5163	141
1 (MG)	11 (ZN)		0.5668	141
1 (MG)	12 (MO)		-0.2859	32
1 (MG)	13 (PB)		0.5223	99
1 (MG)	14 (BE)		0.6213	124
1 (MG)	15 (SR)		0.6630	141
1 (MG)	16 (BA)		0.5493	141
1 (MG)	17 (LA)		0.6021	141
1 (MG)	18 (CE)		0.4987	141
1 (MG)	19 (Y)		0.2198	70
1 (MG)	20 (NB)		0.1112	140
1 (MG)	21 (P)		0.1712	141
2 (CA)	3 (FE)		0.5950	141
2 (CA)	4 (TI)		-0.0559	141
2 (CA)	5 (AL)		0.7422	141
2 (CA)	6 (V)		0.2796	141
2 (CA)	7 (MN)		0.7246	141
2 (CA)	8 (CO)		0.5046	139
2 (CA)	9 (NI)		0.2072	141
2 (CA)	10 (CU)		0.5845	141
2 (CA)	11 (ZN)		0.5085	141
2 (CA)	12 (MO)		-0.3329	32
2 (CA)	13 (PB)		0.4973	99
2 (CA)	14 (BE)		0.5204	124
2 (CA)	15 (SR)		0.7424	141
2 (CA)	16 (BA)		0.4461	141
2 (CA)	17 (LA)		0.5489	141
2 (CA)	18 (CE)		0.4662	141
2 (CA)	19 (Y)		0.3973	70
2 (CA)	20 (NB)		0.3484	140
2 (CA)	21 (P)		0.2247	141
3 (FE)	4 (TI)		0.1182	141
3 (FE)	5 (AL)		0.5090	141
3 (FE)	6 (V)		0.7885	141
3 (FE)	7 (MN)		0.7283	141
3 (FE)	8 (CO)		0.8518	139
3 (FE)	9 (NI)		0.5534	141
3 (FE)	10 (CU)		0.7192	141
3 (FE)	11 (ZN)		0.8750	141
3 (FE)	12 (MO)		0.0532	32
3 (FE)	13 (PB)		0.5076	99
3 (FE)	14 (BE)		0.4789	124
3 (FE)	15 (SR)		0.4607	141
3 (FE)	16 (BA)		0.3366	141
3 (FE)	17 (LA)		0.5305	141
3 (FE)	18 (CE)		0.3895	141
3 (FE)	19 (Y)		0.1950	70
3 (FE)	20 (NB)		0.6985	140
3 (FE)	21 (P)		0.5604	141
4 (TI)	5 (AL)		-0.1803	141
4 (TI)	6 (V)		0.4856	141
4 (TI)	7 (MN)		-0.1554	141
4 (TI)	8 (CO)		-0.0641	139
4 (TI)	9 (NI)		-0.1171	141
4 (TI)	10 (CU)		-0.0438	141
4 (TI)	11 (ZN)		0.0070	141
4 (TI)	12 (MO)		0.1025	32
4 (TI)	13 (PB)		-0.1216	99
4 (TI)	14 (BE)		-0.3263	124
4 (TI)	15 (SR)		-0.0964	141
4 (TI)	16 (BA)		-0.3900	141
4 (TI)	17 (LA)		-0.1930	141
4 (TI)	18 (CE)		-0.1853	141
4 (TI)	19 (Y)		-0.0192	70
4 (TI)	20 (NB)		0.3717	140
4 (TI)	21 (P)		0.3596	141
5 (AL)	6 (V)		0.0304	141
5 (AL)	7 (MN)		0.8619	141
5 (AL)	8 (CO)		0.5663	139
5 (AL)	9 (NI)		0.4146	141
5 (AL)	10 (CU)		0.3834	141
5 (AL)	11 (ZN)		0.6316	141
5 (AL)	12 (MO)		-0.3237	32
5 (AL)	13 (PB)		0.7210	99
5 (AL)	14 (BE)		0.8015	124
5 (AL)	15 (SR)		0.8942	141
5 (AL)	16 (BA)		0.7446	141
5 (AL)	17 (LA)		0.6518	141
5 (AL)	18 (CE)		0.5949	141
5 (AL)	19 (Y)		0.2659	70
5 (AL)	20 (NB)		0.0148	140
5 (AL)	21 (P)		0.0485	141
6 (V)	7 (MN)		0.2851	141
6 (V)	8 (CO)		0.5204	139
6 (V)	9 (NI)		0.2746	141
6 (V)	10 (CU)		0.5223	141
6 (V)	11 (ZN)		0.5875	141
6 (V)	12 (MO)		0.2396	32
6 (V)	13 (PB)		0.0564	99
6 (V)	14 (BE)		-0.0300	124
6 (V)	15 (SR)		0.0717	141
6 (V)	16 (BA)		-0.1296	141

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
6 (V)	17 (LA)		0.1904	141
6 (V)	18 (CE)		0.0902	141
6 (V)	19 (Y)		0.0936	70
6 (V)	20 (NB)		0.8702	140
6 (V)	21 (P)		0.6810	141
7 (MN)	8 (CO)		0.7128	139
7 (MN)	9 (NI)		0.4489	141
7 (MN)	10 (CU)		0.5299	141
7 (MN)	11 (ZN)		0.8206	141
7 (MN)	12 (MO)		-0.3516	32
7 (MN)	13 (PB)		0.6988	99
7 (MN)	14 (BE)		0.8010	124
7 (MN)	15 (SR)		0.7341	141
7 (MN)	16 (BA)		0.7144	141
7 (MN)	17 (LA)		0.7504	141
7 (MN)	18 (CE)		0.6941	141
7 (MN)	19 (Y)		0.3321	70
7 (MN)	20 (NB)		0.2422	140
7 (MN)	21 (P)		0.2757	141
8 (CO)	9 (NI)		0.7066	139
8 (CO)	10 (CU)		0.7069	139
8 (CO)	11 (ZN)		0.8114	139
8 (CO)	12 (MO)		-0.0713	32
8 (CO)	13 (PB)		0.5631	98
8 (CO)	14 (BE)		0.5327	122
8 (CO)	15 (SR)		0.5600	139
8 (CO)	16 (BA)		0.4198	139
8 (CO)	17 (LA)		0.5032	139
8 (CO)	18 (CE)		0.3974	139
8 (CO)	19 (Y)		0.2376	69
8 (CO)	20 (NB)		0.5407	139
8 (CO)	21 (P)		0.3504	139
9 (NI)	10 (CU)		0.4299	141
9 (NI)	11 (ZN)		0.6199	141
9 (NI)	12 (MO)		-0.0229	32
9 (NI)	13 (PB)		0.3764	99
9 (NI)	14 (BE)		0.4348	124
9 (NI)	15 (SR)		0.4278	141
9 (NI)	16 (BA)		0.4062	141
9 (NI)	17 (LA)		0.4576	141
9 (NI)	18 (CE)		0.3462	141
9 (NI)	19 (Y)		-0.0607	70
9 (NI)	20 (NB)		0.1904	140
9 (NI)	21 (P)		0.2671	141
10 (CU)	11 (ZN)		0.6001	141
10 (CU)	12 (MO)		-0.1211	32
10 (CU)	13 (PB)		0.2254	99
10 (CU)	14 (BE)		0.3684	124
10 (CU)	15 (SR)		0.4128	141
10 (CU)	16 (BA)		0.1533	141
10 (CU)	17 (LA)		0.2506	141
10 (CU)	18 (CE)		0.1586	141
10 (CU)	19 (Y)		0.2500	70
10 (CU)	20 (NB)		0.4677	140
10 (CU)	21 (P)		0.4704	141
11 (ZN)	12 (MO)		-0.2724	32
11 (ZN)	13 (PB)		0.6479	99
11 (ZN)	14 (BE)		0.6881	124
11 (ZN)	15 (SR)		0.5954	141
11 (ZN)	16 (BA)		0.5791	141
11 (ZN)	17 (LA)		0.6429	141
11 (ZN)	18 (CE)		0.5555	141
11 (ZN)	19 (Y)		0.1589	70
11 (ZN)	20 (NB)		0.4378	140
11 (ZN)	21 (P)		0.4562	141
12 (MO)	13 (PB)		-0.2800	25
12 (MO)	14 (BE)		-0.3098	29
12 (MO)	15 (SR)		-0.4004	32
12 (MO)	16 (BA)		-0.3156	32
12 (MO)	17 (LA)		-0.0207	32
12 (MO)	18 (CE)		-0.0076	32
12 (MO)	19 (Y)		-0.4341	15
12 (MO)	20 (NB)		0.2706	32
12 (MO)	21 (P)		0.4656	32
13 (PB)	14 (BE)		0.6972	87
13 (PB)	15 (SR)		0.5594	99
13 (PB)	16 (BA)		0.6118	99
13 (PB)	17 (LA)		0.5120	99
13 (PB)	18 (CE)		0.4643	99
13 (PB)	19 (Y)		0.3018	52
13 (PB)	20 (NB)		0.1522	99
13 (PB)	21 (P)		0.0336	99
14 (BE)	15 (SR)		0.7255	124
14 (BE)	16 (BA)		0.7829	124
14 (BE)	17 (LA)		0.7349	124
14 (BE)	18 (CE)		0.6832	124
14 (BE)	19 (Y)		0.2860	65
14 (BE)	20 (NB)		-0.0199	123
14 (BE)	21 (P)		0.0736	124
15 (SR)	16 (BA)		0.7005	141
15 (SR)	17 (LA)		0.5758	141
15 (SR)	18 (CE)		0.5252	141
15 (SR)	19 (Y)		0.1930	70
15 (SR)	20 (NB)		0.0280	140
15 (SR)	21 (P)		0.0341	141
16 (BA)	17 (LA)		0.6266	141
16 (BA)	18 (CE)		0.5984	141
16 (BA)	19 (Y)		0.2041	70
16 (BA)	20 (NB)		-0.1221	140
16 (BA)	21 (P)		-0.1528	141

Table 9. Correlation coefficients for analytical data from stream sediment samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
17 (LA)	18 (CE)		0.9509	141
17 (LA)	19 (Y)		0.4274	70
17 (LA)	20 (NB)		0.2396	140
17 (LA)	21 (P)		0.3235	141
18 (CE)	19 (Y)		0.4691	70
18 (CE)	20 (NB)		0.1341	140
18 (CE)	21 (P)		0.3145	141
19 (Y)	20 (NB)		0.1796	69
19 (Y)	21 (P)		0.1791	70
20 (NB)	21 (P)		0.5151	140

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

FREQUENCY TABLE FOR VARIABLE 3 (S-MG%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	0.01	0.01
-4.170E-01	-2.503E-01	1	1	0.71	0.71	0.58	0.31
-2.503E-01	-8.367E-02	8	9	5.67	6.38	10.48	0.59
-8.367E-02	8.300E-02	55	64	39.01	45.39	48.70	0.82
8.300E-02	2.497E-01	50	114	35.46	80.85	59.91	1.64
2.497E-01	4.163E-01	27	141	19.15	100.00	21.32	1.51
	G	0	141	0.00	100.00	0.01	0.01
	H	0	141				
	B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 3 (S-MG%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E-01 X
6.808E-01 XXXXXX
9.992E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+00 XXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  5.00000E-01
MAXIMUM ANTILOG      =  2.00000E+00
GEOMETRIC MEAN       =  1.28577E+00
GEOMETRIC DEVIATION  =  1.36855E+00
VARIANCE OF LOGS     =  1.85674E-02
```

PERCENT TABLE FOR VARIABLE 3 (S-MG%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-4.120388E-03	9.905573E-01
50.00	1.046677E-01	1.272529E+00
75.00	2.221679E-01	1.667892E+00
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 4 (S-CA%)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.01	0.01
-8.400E-02 - 8.267E-02	3	3	2.13	2.13	1.78	0.84
8.267E-02 - 2.493E-01	22	25	15.60	17.73	37.86	6.64
2.493E-01 - 4.160E-01	90	115	63.83	81.56	81.55	0.88
4.160E-01 - 5.827E-01	26	141	18.44	100.00	19.81	1.93
G	0	141	0.00	100.00	0.01	0.01
H	0	141				
B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 4 (S-CA%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-01 XX
1.466E+00 XXXXXXXXXXXXXXX
2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+00 XXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
MAXIMUM ANTILOG = 3.00000E+00
GEOMETRIC MEAN = 2.03049E+00
GEOMETRIC DEVIATION = 1.26052E+00
VARIANCE OF LOGS = 1.01099E-02

PERCENT TABLE FOR VARIABLE 4 (S-CA%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.683155E-01	1.854879E+00
50.00	3.335934E-01	2.155725E+00
75.00	3.988713E-01	2.505367E+00
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 5 (S-FE%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
8.300E-02 -	2.497E-01	1	1	0.71	0.71	0.02	38.71
2.497E-01 -	4.163E-01	1	2	0.71	1.42	0.79	0.05
4.163E-01 -	5.830E-01	5	7	3.55	4.96	9.15	1.88
5.830E-01 -	7.497E-01	54	61	38.30	43.26	37.69	7.05
7.497E-01 -	9.163E-01	36	97	25.53	68.79	56.29	7.32
9.163E-01 -	1.083E+00	44	141	31.21	100.00	37.05	1.31
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 5 (S-FE%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
1.467E+00 X
2.153E+00 X
3.160E+00 XXXX
4.638E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.50000E+00
MAXIMUM ANTILOG      =  1.00000E+01
GEOMETRIC MEAN       =  6.54365E+00
GEOMETRIC DEVIATION  =  1.43982E+00
VARIANCE OF LOGS     =  2.50614E-02
```

PERCENT TABLE FOR VARIABLE 5 (S-FE%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	6.701925E-01	4.679425E+00
50.00	7.936496E-01	6.217984E+00
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 6 (S-TI%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
-1.084E+00	-9.173E-01	1	1	0.71	0.71	0.02	51.74
-9.173E-01	-7.507E-01	0	1	0.00	0.71	0.34	0.34
-7.507E-01	-5.840E-01	5	6	3.55	4.26	3.15	1.09
-5.840E-01	-4.173E-01	10	16	7.09	11.35	15.02	1.68
-4.173E-01	-2.507E-01	44	60	31.21	42.55	36.58	1.50
-2.507E-01	-8.400E-02	30	90	21.28	63.83	45.59	5.33
-8.400E-02	8.267E-02	42	132	29.79	93.62	40.30	0.07
G		9	141	6.38	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 6 (S-TI%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-02 X
1.466E-01
2.151E-01 XXXX
3.157E-01 XXXXXXX
4.634E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E-01 XXXXXXXXXXXXXXXXXXXX
9.985E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E-01
MAXIMUM ANTILOG = 1.00000E+00
GEOMETRIC MEAN = 6.17714E-01
GEOMETRIC DEVIATION = 1.57555E+00
VARIANCE OF LOGS = 3.89793E-02

PERCENT TABLE FOR VARIABLE 6 (S-TI%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	-3.444152E-01	4.524648E-01	98.00	1.000000E+35	1.000000E+35
50.00	-1.923316E-01	6.421973E-01	99.00	1.000000E+35	1.000000E+35
75.00	-2.149789E-02	9.517045E-01			
90.00	6.243085E-02	1.154598E+00			
95.00	1.000000E+35	1.000000E+35			

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 7 (S-SC)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
5.830E-01 -	7.497E-01	1	1	0.71	0.71	0.00	659.50
7.497E-01 -	9.163E-01	0	1	0.00	0.71	0.39	0.39
9.163E-01 -	1.083E+00	14	15	9.93	10.64	13.47	0.02
1.083E+00 -	1.250E+00	49	64	34.75	45.39	67.16	4.91
1.250E+00 -	1.416E+00	73	137	51.77	97.16	53.24	7.33
1.416E+00 -	1.583E+00	4	141	2.84	100.00	6.73	1.10
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 7 (S-SC)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 X
6.808E+00
9.992E+00 XXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  5.00000E+00
MAXIMUM ANTILOG      =  3.00000E+01
GEOMETRIC MEAN       =  1.69218E+01
GEOMETRIC DEVIATION  =  1.29619E+00
VARIANCE OF LOGS     =  1.26944E-02
```

PERCENT TABLE FOR VARIABLE 7 (S-SC) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.151879E+00	1.418661E+01
50.00	1.264508E+00	1.838689E+01
75.00	1.344988E+00	2.213033E+01
90.00	1.393276E+00	2.473293E+01
95.00	1.409372E+00	2.566679E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 8 (S-V)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
1.250E+00 -	1.417E+00	1	1	0.71	0.71	0.00	0.00
1.417E+00 -	1.583E+00	0	1	0.00	0.71	0.00	0.00
1.583E+00 -	1.750E+00	0	1	0.00	0.71	0.21	0.21
1.750E+00 -	1.917E+00	2	3	1.42	2.13	3.74	0.81
1.917E+00 -	2.083E+00	21	24	14.89	17.02	23.53	0.27
2.083E+00 -	2.250E+00	43	67	30.50	47.52	53.63	2.11
2.250E+00 -	2.417E+00	63	130	44.68	92.20	44.72	7.48
2.417E+00 -	2.583E+00	10	140	7.09	99.29	13.61	0.96
2.583E+00 -	2.750E+00	1	141	0.71	100.00	1.56	0.20
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

PERCENT TABLE FOR VARIABLE 8 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.126940E+00	1.339491E+02
50.00	2.259261E+00	1.816608E+02
75.00	2.352515E+00	2.251725E+02
90.00	2.408468E+00	2.561344E+02
95.00	2.482502E+00	3.037403E+02
98.00	2.553003E+00	3.572750E+02
99.00	2.576503E+00	3.771400E+02

HISTOGRAM FOR VARIABLE 8 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+01 X
3.162E+01
4.642E+01
6.813E+01 X
1.000E+02 XXXXXXXXXXXXXX
1.468E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.154E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+02 XXXXXXX
4.642E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 2.00000E+01
MAXIMUM ANTILOG      = 5.00000E+02
GEOMETRIC MEAN       = 1.65900E+02
GEOMETRIC DEVIATION  = 1.44136E+00
VARIANCE OF LOGS     = 2.52088E-02
```

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 9 (S-CR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.46	0.46
9.160E-01 -	1.083E+00	3	3	2.13	2.13	1.59	1.25
1.083E+00 -	1.249E+00	2	5	1.42	3.55	5.02	1.82
1.249E+00 -	1.416E+00	12	17	8.51	12.06	11.93	0.00
1.416E+00 -	1.583E+00	28	45	19.86	31.91	21.33	2.08
1.583E+00 -	1.749E+00	27	72	19.15	51.06	28.72	0.10
1.749E+00 -	1.916E+00	18	90	12.77	63.83	29.12	4.24
1.916E+00 -	2.083E+00	29	119	20.57	84.40	22.22	2.07
2.083E+00 -	2.249E+00	18	137	12.77	97.16	12.77	2.15
2.249E+00 -	2.416E+00	4	141	2.84	100.00	7.85	1.89
G		0	141	0.00	100.00	0.46	0.46
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

PERCENT TABLE FOR VARIABLE 9 (S-CR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.524632E+00	3.346819E+01
50.00	1.740076E+00	5.496367E+01
75.00	2.006519E+00	1.015125E+02
90.00	2.155817E+00	1.431586E+02
95.00	2.221095E+00	1.663777E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

HISTOGRAM FOR VARIABLE 9 (S-CR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XX
1.466E+01 X
2.151E+01 XXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXXXXXXXX
9.985E+01 XXXXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXX
2.151E+02 XXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 2.00000E+02
GEOMETRIC MEAN = 5.71896E+01
GEOMETRIC DEVIATION = 2.03722E+00
VARIANCE OF LOGS = 9.55040E-02

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 10 (S-MN)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.03	0.03
2.416E+00	-	2.583E+00	1	1	0.71	0.71	0.86	0.02
2.583E+00	-	2.749E+00	14	15	9.93	10.64	9.62	1.99
2.749E+00	-	2.916E+00	32	47	22.70	33.33	38.63	1.14
2.916E+00	-	3.083E+00	59	106	41.84	75.18	56.15	0.14
3.083E+00	-	3.249E+00	32	138	22.70	97.87	29.66	0.18
3.249E+00	-	3.416E+00	3	141	2.13	100.00	6.05	1.54
	G		0	141	0.00	100.00	0.03	0.03
	H		0	141				
	B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 10 (S-MN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+02 X
4.634E+02 XXXXXXXXXX
6.802E+02 XXXXXXXXXXXXXXXXXXXXXX
9.985E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+03 XXXXXXXXXXXXXXXXXXXXX
2.151E+03 XX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+02
MAXIMUM ANTILOG = 2.00000E+03
GEOMETRIC MEAN = 9.49764E+02
GEOMETRIC DEVIATION = 1.43943E+00
VARIANCE OF LOGS = 2.50238E-02

PERCENT TABLE FOR VARIABLE 10 (S-MN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.854803E+00	7.158186E+02
50.00	2.982385E+00	9.602523E+02
75.00	3.081962E+00	1.207708E+03
90.00	3.191522E+00	1.554255E+03
95.00	3.228241E+00	1.691380E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 11 (S-CO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
5.830E-01 -	7.497E-01	2	2	1.42	1.42	0.11	33.32
7.497E-01 -	9.163E-01	0	2	0.00	1.42	1.27	1.27
9.163E-01 -	1.083E+00	3	5	2.13	3.55	7.82	2.97
1.083E+00 -	1.250E+00	17	22	12.06	15.60	25.38	2.76
1.250E+00 -	1.416E+00	62	84	43.97	59.57	43.38	8.00
1.416E+00 -	1.583E+00	27	111	19.15	78.72	39.12	3.76
1.583E+00 -	1.750E+00	30	141	21.28	100.00	23.93	1.54
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 11 (S-CO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 X
6.808E+00
9.992E+00 XX
1.467E+01 XXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 5.00000E+01
GEOMETRIC MEAN = 2.45137E+01
GEOMETRIC DEVIATION = 1.59455E+00
VARIANCE OF LOGS = 4.10623E-02

PERCENT TABLE FOR VARIABLE 11 (S-CO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.285286E+00	1.928796E+01	98.00	1.0000000E+35	1.0000000E+35
50.00	1.380045E+00	2.399079E+01	99.00	1.0000000E+35	1.0000000E+35
75.00	1.550595E+00	3.552995E+01			
90.00	1.0000000E+35	1.0000000E+35			
95.00	1.0000000E+35	1.0000000E+35			

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 12 (S-NI)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		1	1	0.71	0.71		
T		0	1	0.00	0.71	0.43	0.43
9.160E-01 -	1.083E+00	2	3	1.42	2.13	3.37	0.56
1.083E+00 -	1.249E+00	10	13	7.09	9.22	14.98	1.66
1.249E+00 -	1.416E+00	36	49	25.53	34.75	35.38	0.01
1.416E+00 -	1.583E+00	46	95	32.62	67.38	44.42	0.06
1.583E+00 -	1.749E+00	42	137	29.79	97.16	29.68	5.11
1.749E+00 -	1.916E+00	3	140	2.13	99.29	10.54	5.40
1.916E+00 -	2.083E+00	1	141	0.71	100.00	2.19	0.65
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 12 (S-NI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 X
1.466E+01 XXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+01 XX
9.985E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 1.00000E+02
GEOMETRIC MEAN = 3.03178E+01
GEOMETRIC DEVIATION = 1.56249E+00
VARIANCE OF LOGS = 3.75651E-02

PERCENT TABLE FOR VARIABLE 12 (S-NI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.352343E+00	2.250834E+01	98.00	1.814891E+00	6.529662E+01
50.00	1.493900E+00	3.118169E+01	99.00	1.893224E+00	7.820314E+01
75.00	1.625327E+00	4.220140E+01			
90.00	1.709256E+00	5.119830E+01			
95.00	1.737232E+00	5.460492E+01			

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 13 (S-CU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
7.500E-01 -	9.167E-01	1	1	0.71	0.71	0.07	12.04
9.167E-01 -	1.083E+00	0	1	0.00	0.71	0.94	0.94
1.083E+00 -	1.250E+00	2	3	1.42	2.13	6.44	3.06
1.250E+00 -	1.417E+00	25	28	17.73	19.86	22.87	0.20
1.417E+00 -	1.583E+00	38	66	26.95	46.81	42.42	0.46
1.583E+00 -	1.750E+00	61	127	43.26	90.07	41.11	9.62
1.750E+00 -	1.917E+00	10	137	7.09	97.16	20.83	5.63
1.917E+00 -	2.083E+00	3	140	2.13	99.29	5.50	1.14
2.083E+00 -	2.250E+00	1	141	0.71	100.00	0.81	0.04
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
R		0	141				

TOTALS LESS H AND R 141

HISTOGRAM FOR VARIABLE 13 (S-CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E+00 X
1.000E+01
1.468E+01 X
2.154E+01 XXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXX
1.000E+02 XX
1.468E+02 X
```

PERCENT TABLE FOR VARIABLE 13 (S-CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION.
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.448466E+00	2.808447E+01
50.00	1.595630E+00	3.941215E+01
75.00	1.691942E+00	4.919736E+01
90.00	1.749729E+00	5.619902E+01
95.00	1.865836E+00	7.342358E+01
98.00	1.982225E+00	9.598972E+01
99.00	2.060558E+00	1.149630E+02

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 7.00000E+00
MAXIMUM ANTILOG      = 1.50000E+02
GEOMETRIC MEAN       = 3.76101E+01
GEOMETRIC DEVIATION  = 1.58890E+00
VARIANCE OF LOGS     = 4.04404E-02
```

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 14 (S-ZN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		125	125	88.65	88.65		
L		7	132	4.96	93.62		
T		0	132	0.00	93.62	0.03	0.03
2.250E+00 -	2.417E+00	8	140	5.67	99.29	0.00	0.00
2.417E+00 -	2.583E+00	1	141	0.71	100.00	140.97	138.98
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 14 (S-ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+02 XXXXXX
3.162E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 2.00000E+02
MAXIMUM ANTILOG      = 3.00000E+02
GEOMETRIC MEAN       = 2.09216E+02
GEOMETRIC DEVIATION  = 1.14471E+00
VARIANCE OF LOGS     = 3.44533E-03
```

PERCENT TABLE FOR VARIABLE 14 (S-ZN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 15 (S-MO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	117	117	82.98	82.98		
	L	13	130	9.22	92.20		
	T	0	130	0.00	92.20	0.00	0.00
5.830E-01 -	7.497E-01	10	140	7.09	99.29	141.00	121.71
7.497E-01 -	9.163E-01	1	141	0.71	100.00	0.00	255.34
	G	0	141	0.00	100.00	0.00	0.00
	H	0	141				
	B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 15 (S-MO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
 4.638E+00 XXXXXXX
 6.808E+00 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 5.00000E+00
MAXIMUM ANTILOG      = 7.00000E+00
GEOMETRIC MEAN       = 5.15531E+00
GEOMETRIC DEVIATION  = 1.10677E+00
VARIANCE OF LOGS     = 1.94121E-03
```

PERCENT TABLE FOR VARIABLE 15 (S-MO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 16 (S-PB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		72	72	51.06	51.06		
L		54	126	38.30	89.36		
T		0	126	0.00	89.36	0.20	0.20
9.160E-01 -	1.083E+00	13	139	9.22	98.58	140.32	115.53
1.083E+00 -	1.249E+00	1	140	0.71	99.29	0.00	0.00
1.249E+00 -	1.416E+00	1	141	0.71	100.00	0.48	0.57
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 16 (S-PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXXXXX
1.466E+01 X
2.151E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 2.00000E+01
GEOMETRIC MEAN = 1.07599E+01
GEOMETRIC DEVIATION = 1.22236E+00
VARIANCE OF LOGS = 7.60363E-03

PERCENT TABLE FOR VARIABLE 16 (S-PB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.181001E+00	1.517052E+01

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 17 (S-AG)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	115	115	81.56	81.56		
	L	24	139	17.02	98.58		
	T	0	139	0.00	98.58	0.00	0.00
-4.170E-01	- -2.503E-01	1	140	0.71	99.29	141.00	139.00
-2.503E-01	- -8.367E-02	1	141	0.71	100.00	0.00	257.94
	G	0	141	0.00	100.00	0.00	0.00
	H	0	141				
	B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 17 (S-AG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E-01 X
6.808E-01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-01
MAXIMUM ANTILOG = 7.00000E-01
GEOMETRIC MEAN = 5.91608E-01
GEOMETRIC DEVIATION = 1.26861E+00
VARIANCE OF LOGS = 1.06767E-02

PERCENT TABLE FOR VARIABLE 17 (S-AG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 18 (S-B)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		6	6	4.26	4.26		
L		39	45	27.66	31.91		
T		0	45	0.00	31.91	16.84	16.84
9.160E-01 -	1.083E+00	25	70	17.73	49.65	31.94	1.51
1.083E+00 -	1.249E+00	24	94	17.02	66.67	42.87	8.31
1.249E+00 -	1.416E+00	31	125	21.99	88.65	32.20	0.04
1.416E+00 -	1.583E+00	8	133	5.67	94.33	13.53	2.26
1.583E+00 -	1.749E+00	6	139	4.26	98.58	3.17	2.52
1.749E+00 -	1.916E+00	0	139	0.00	98.58	0.41	0.41
1.916E+00 -	2.083E+00	2	141	1.42	100.00	0.03	123.43
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 18 (S-B)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXX
4.634E+01 XXXX
6.802E+01
9.985E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 1.00000E+02
GEOMETRIC MEAN = 1.75999E+01
GEOMETRIC DEVIATION = 1.65240E+00
VARIANCE OF LOGS = 4.75738E-02

PERCENT TABLE FOR VARIABLE 18 (S-B) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.000000E+35	1.000000E+35	98.00	1.726557E+00	5.327914E+01
50.00	1.086139E+00	1.219380E+01	99.00	1.000000E+35	1.000000E+35
75.00	1.312506E+00	2.053554E+01			
90.00	1.455584E+00	2.854857E+01			
95.00	1.609057E+00	4.064966E+01			

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 19 (S-BE)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	41	41	29.08	29.08		
L	1	42	0.71	29.79		
T	0	42	0.00	29.79	7.10	7.10
-8.400E-02 - 8.267E-02	71	113	50.35	80.14	97.13	7.03
8.267E-02 - 2.493E-01	27	140	19.15	99.29	36.52	2.48
2.493E-01 - 4.160E-01	1	141	0.71	100.00	0.24	2.34
G	0	141	0.00	100.00	0.00	0.00
H	0	141				
B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 19 (S-BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+00 XXXXXXXXXXXXXXXXXXX
2.151E+00 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
MAXIMUM ANTILOG = 2.00000E+00
GEOMETRIC MEAN = 1.12477E+00
GEOMETRIC DEVIATION = 1.20966E+00
VARIANCE OF LOGS = 6.83344E-03

PERCENT TABLE FOR VARIABLE 19 (S-BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.684696E-01	1.473906E+00
95.00	2.119882E-01	1.629252E+00
98.00	2.380994E-01	1.730212E+00
99.00	2.468031E-01	1.765237E+00

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 20 (S-SR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	0.01	0.01
1.916E+00 -	2.083E+00	1	1	0.71	0.71	0.36	1.12
2.083E+00 -	2.249E+00	2	3	1.42	2.13	6.17	2.82
2.249E+00 -	2.416E+00	26	29	18.44	20.57	33.55	1.70
2.416E+00 -	2.583E+00	71	100	50.35	70.92	59.43	2.25
2.583E+00 -	2.749E+00	41	141	29.08	100.00	41.48	0.01
	G	0	141	0.00	100.00	0.01	0.01
	H	0	141				
	P	0	141				

TOTALS LESS H AND P 141

HISTOGRAM FOR VARIABLE 20 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 X
1.466E+02 X
2.151E+02 XXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
MAXIMUM ANTILOG = 5.00000E+02
GEOMETRIC MEAN = 3.17326E+02
GEOMETRIC DEVIATION = 1.41249E+00
VARIANCE OF LOGS = 2.24954E-02

PERCENT TABLE FOR VARIABLE 20 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.430672E+00	2.695705E+02
50.00	2.513419E+00	3.261512E+02
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 21 (S-BA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.27	0.27
1.916E+00 -	2.083E+00	1	1	0.71	0.71	2.66	1.03
2.083E+00 -	2.249E+00	11	12	7.80	8.51	13.65	0.51
2.249E+00 -	2.416E+00	36	48	25.53	34.04	35.36	0.01
2.416E+00 -	2.583E+00	51	99	36.17	70.21	46.29	0.48
2.583E+00 -	2.749E+00	34	133	24.11	94.33	30.65	0.37
2.749E+00 -	2.916E+00	6	139	4.26	98.58	10.25	1.76
2.916E+00 -	3.083E+00	2	141	1.42	100.00	1.88	0.01
G		0	141	0.00	100.00	0.27	0.27
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 21 (S-BA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 X
1.466E+02 XXXXXXXX
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+02 XXXXXXXXXXXXXXXXXXXXXXXX
6.802E+02 XXXX
9.985E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 3.03294E+02
GEOMETRIC DEVIATION = 1.56985E+00
VARIANCE OF LOGS = 3.83599E-02

PERCENT TABLE FOR VARIABLE 21 (S-BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	2.356973E+00	2.274957E+02	98.00	2.893224E+00	7.820314E+02
50.00	2.489531E+00	3.086957E+02	99.00	1.000000E+35	1.000000E+35
75.00	2.615756E+00	4.128158E+02			
90.00	2.719433E+00	5.241227E+02			
95.00	2.775724E+00	5.966559E+02			

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 23 (S-Y)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.26	0.26
9.160E-01 - 1.083E+00	11	11	7.80	7.80	12.53	0.19
1.083E+00 - 1.249E+00	70	81	49.65	57.45	70.70	0.01
1.249E+00 - 1.416E+00	54	135	38.30	95.74	52.47	0.04
1.416E+00 - 1.583E+00	5	140	3.55	99.29	4.99	0.00
1.583E+00 - 1.749E+00	1	141	0.71	100.00	0.05	17.05
G	0	141	0.00	100.00	0.26	0.26
H	0	141				
B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 23 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXX
4.634E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 5.00000E+01
GEOMETRIC MEAN = 1.67720E+01
GEOMETRIC DEVIATION = 1.27702E+00
VARIANCE OF LOGS = 1.12778E-02

PERCENT TABLE FOR VARIABLE 23 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.140405E+00	1.381673E+01
50.00	1.224334E+00	1.676231E+01
75.00	1.325723E+00	2.117011E+01
90.00	1.391001E+00	2.460373E+01
95.00	1.412760E+00	2.586785E+01
98.00	1.522001E+00	3.326605E+01
99.00	1.569001E+00	3.706818E+01

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 24 (S-ZR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	3.96	3.96
1.750E+00 -	1.917E+00	9	9	6.38	6.38	14.38	2.01
1.917E+00 -	2.083E+00	63	72	44.68	51.06	33.25	26.61
2.083E+00 -	2.250E+00	19	91	13.48	64.54	42.92	13.33
2.250E+00 -	2.417E+00	29	120	20.57	85.11	30.92	0.12
2.417E+00 -	2.583E+00	15	135	10.64	95.74	12.42	0.53
2.583E+00 -	2.750E+00	6	141	4.26	100.00	3.15	2.57
G		0	141	0.00	100.00	3.96	3.96
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 24 (S-ZR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E+01 XXXXXX
1.000E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.468E+02 XXXXXXXXXXXXX
2.154E+02 XXXXXXXXXXXXXXXXXXXX
3.162E+02 XXXXXXXXXXX
4.642E+02 XXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E+01
MAXIMUM ANTILOG = 5.00000E+02
GEOMETRIC MEAN = 1.43303E+02
GEOMETRIC DEVIATION = 1.63210E+00
VARIANCE OF LOGS = 4.52609E-02

PERCENT TABLE FOR VARIABLE 24 (S-ZR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA FITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.986112E+00	9.685267E+01
50.00	2.079366E+00	1.200510E+02
75.00	2.334771E+00	2.161580E+02
90.00	2.493335E+00	3.114116E+02
95.00	2.571668E+00	3.729652E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 10. Frequency tables and histograms of spectrographic analytical data (data set A) from stream sediments samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 25 (S-NB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		120	120	85.11	85.11		
L		14	134	9.93	95.04		
T		0	134	0.00	95.04	0.03	0.03
1.250E+00 -	1.417E+00	6	140	4.26	99.29	0.00	0.00
1.417E+00 -	1.583E+00	1	141	0.71	100.00	140.97	138.98
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND P 141

HISTOGRAM FOR VARIABLE 25 (S-NB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+01 XXXX
3.162E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 3.00000E+01
GEOMETRIC MEAN = 2.11927E+01
GEOMETRIC DEVIATION = 1.16562E+00
VARIANCE OF LOGS = 4.42974E-03

PERCENT TABLE FOR VARIABLE 25 (S-NB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

FREQUENCY TABLE FOR VARIABLE 3 (MG)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
2.416E+00 -	2.583E+00	1	1	0.71	0.71	0.01	65.40
2.583E+00 -	2.749E+00	0	1	0.00	0.71	0.14	0.14
2.749E+00 -	2.916E+00	0	1	0.00	0.71	0.99	0.99
2.916E+00 -	3.083E+00	3	4	2.13	2.84	4.51	0.50
3.083E+00 -	3.249E+00	7	11	4.96	7.80	13.56	3.18
3.249E+00 -	3.416E+00	39	50	27.66	35.46	27.06	5.26
3.416E+00 -	3.583E+00	43	93	30.50	65.96	35.81	1.44
3.583E+00 -	3.749E+00	22	115	15.60	81.56	31.42	2.82
3.749E+00 -	3.916E+00	17	132	12.06	93.62	18.29	0.09
3.916E+00 -	4.083E+00	4	136	2.84	96.45	7.05	1.32
4.083E+00 -	4.249E+00	5	141	3.55	100.00	2.15	3.80
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
P		0	141				

TOTALS LESS H AND P 141

HISTOGRAM FOR VARIABLE 3 (MG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+02 X
4.634E+02
6.802E+02
9.985E+02 XX
1.466E+03 XXXXX
2.151E+03 XXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+03 XXXXXXXXXXXXXXX
6.803E+03 XXXXXXXXXXXX
9.985E+03 XXX
1.466E+04 XXXX
```

PERCENT TABLE FOR VARIABLE 3 (MG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.352968E+00	2.254072E+03
50.00	3.495460E+00	3.129389E+03
75.00	3.679260E+00	4.778154E+03
90.00	3.866003E+00	7.345189E+03
95.00	3.997253E+00	9.936952E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  2.80000E+02
MAXIMUM ANTILOG      =  1.60000E+04
GEOMETRIC MEAN       =  3.38555E+03
GEOMETRIC DEVIATION  =  1.80100E+00
VARIANCE OF LOGS     =  6.52869E-02
```

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 4 (CA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
2.583E+00 -	2.750E+00	1	1	0.71	0.71	0.01	194.39
2.750E+00 -	2.916E+00	0	1	0.00	0.71	0.10	0.10
2.916E+00 -	3.083E+00	0	1	0.00	0.71	1.15	1.15
3.083E+00 -	3.250E+00	4	5	2.84	3.55	6.96	1.26
3.250E+00 -	3.416E+00	21	26	14.89	18.44	22.90	0.16
3.416E+00 -	3.583E+00	51	77	36.17	54.61	41.06	2.40
3.583E+00 -	3.750E+00	41	118	29.08	83.69	40.14	0.02
3.750E+00 -	3.916E+00	14	132	9.93	93.62	21.40	2.56
3.916E+00 -	4.083E+00	6	138	4.26	97.87	6.21	0.01
4.083E+00 -	4.250E+00	3	141	2.13	100.00	1.07	3.50
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 4 (CA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+02 X
6.808E+02
9.992E+02
1.467E+03 XXX
2.153E+03 XXXXXXXXXXXXXX
3.160E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.638E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E+03 XXXXXXXXXX
9.992E+03 XXXX
1.467E+04 XX
```

PERCENT TABLE FOR VARIABLE 4 (CA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.446564E+00	2.796172E+03
50.00	3.561760E+00	3.645525E+03
75.00	3.699872E+00	5.010397E+03
90.00	3.855622E+00	7.171692E+03
95.00	3.970503E+00	9.343353E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.30000E+02
MAXIMUM ANTILOG = 1.60000E+04
GEOMETRIC MEAN = 3.77389E+03
GEOMETRIC DEVIATION = 1.61584E+00
VARIANCE OF LOGS = 4.34298E-02

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 5 (FE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
3.250E+00 -	3.417E+00	1	1	0.71	0.71	0.00	0.00
3.417E+00 -	3.583E+00	0	1	0.00	0.71	0.00	0.00
3.583E+00 -	3.750E+00	0	1	0.00	0.71	0.01	0.01
3.750E+00 -	3.917E+00	1	2	0.71	1.42	0.25	2.20
3.917E+00 -	4.083E+00	4	6	2.84	4.26	2.88	0.44
4.083E+00 -	4.250E+00	7	13	4.96	9.22	15.41	4.59
4.250E+00 -	4.417E+00	36	49	25.53	34.75	39.16	0.26
4.417E+00 -	4.583E+00	66	115	46.81	81.56	47.40	7.30
4.583E+00 -	4.750E+00	19	134	13.48	95.04	27.35	2.55
4.750E+00 -	4.917E+00	6	140	4.26	99.29	7.50	0.30
4.917E+00 -	5.083E+00	1	141	0.71	100.00	1.04	0.00
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

PERCENT TABLE FOR VARIABLE 5 (FE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	4.353011E+00	2.254299E+04
50.00	4.470962E+00	2.957754E+04
75.00	4.559977E+00	3.630391E+04
90.00	4.687722E+00	4.872167E+04
95.00	4.749564E+00	5.617775E+04
98.00	4.866114E+00	7.347073E+04
99.00	4.905281E+00	8.040464E+04

HISTOGRAM FOR VARIABLE 5 (FE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+03 X
3.162E+03
4.642E+03
6.813E+03 X
1.000E+04 XXX
1.468E+04 XXXXX
2.154E+04 XXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+04 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.642E+04 XXXXXXXXXXXXX
6.813E+04 XXXX
1.000E+05 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.60000E+03
MAXIMUM ANTILOG = 8.80000E+04
GEOMETRIC MEAN = 2.88161E+04
GEOMETRIC DEVIATION = 1.53934E+00
VARIANCE OF LOGS = 3.50938E-02

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 6 (TI)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
1.250E+00 -	1.417E+00	2	2	1.42	1.42	0.00	0.00
1.417E+00 -	1.583E+00	0	2	0.00	1.42	0.00	0.00
1.583E+00 -	1.750E+00	0	2	0.00	1.42	0.02	0.02
1.750E+00 -	1.917E+00	0	2	0.00	1.42	0.08	0.08
1.917E+00 -	2.083E+00	2	4	1.42	2.84	0.33	8.37
2.083E+00 -	2.250E+00	1	5	0.71	3.55	1.13	0.01
2.250E+00 -	2.417E+00	2	7	1.42	4.96	3.12	0.40
2.417E+00 -	2.583E+00	2	9	1.42	6.38	7.07	3.64
2.583E+00 -	2.750E+00	7	16	4.96	11.35	13.09	2.83
2.750E+00 -	2.917E+00	15	31	10.64	21.99	19.80	1.16
2.917E+00 -	3.083E+00	23	54	16.31	38.30	24.49	0.09
3.083E+00 -	3.250E+00	33	87	23.40	61.70	24.76	2.75
3.250E+00 -	3.417E+00	43	130	30.50	92.20	20.46	24.84
3.417E+00 -	3.583E+00	10	140	7.09	99.29	13.82	1.05
3.583E+00 -	3.750E+00	1	141	0.71	100.00	12.84	10.92
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 6 (TI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+01 X
3.162E+01
4.642E+01
6.813E+01
1.000E+02 X
1.468E+02 X
2.154E+02 X
3.162E+02 X
4.642E+02 XXXXX
6.813E+02 XXXXXXXXXXX
1.000E+03 XXXXXXXXXXXXXXX
1.468E+03 XXXXXXXXXXXXXXXXXXXXXXXX
2.154E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+03 XXXXXXX
4.642E+03 X
```

PERCENT TABLE FOR VARIABLE 6 (TI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.947467E+00	8.860682E+02
50.00	3.166671E+00	1.467812E+03
75.00	3.322679E+00	2.102222E+03
90.00	3.404655E+00	2.538958E+03
95.00	3.482504E+00	3.037417E+03
98.00	3.553005E+00	3.572766E+03
99.00	3.576505E+00	3.771418E+03

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.80000E+01
MAXIMUM ANTILOG = 5.30000E+03
GEOMETRIC MEAN = 1.23681E+03
GEOMETRIC DEVIATION = 2.33364E+00
VARIANCE OF LOGS = 1.35449E-01

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 7 (AL)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.02	0.02
2.916E+00 -	3.083E+00	1	1	0.71	0.71	0.16	4.49
3.083E+00 -	3.249E+00	0	1	0.00	0.71	0.92	0.92
3.249E+00 -	3.416E+00	3	4	2.13	2.84	3.77	0.16
3.416E+00 -	3.583E+00	15	19	10.64	13.48	10.89	1.55
3.583E+00 -	3.749E+00	22	41	15.60	29.08	22.15	0.00
3.749E+00 -	3.916E+00	26	67	18.44	47.52	31.72	1.03
3.916E+00 -	4.083E+00	32	99	22.70	70.21	32.01	0.00
4.083E+00 -	4.249E+00	25	124	17.73	87.94	22.75	0.22
4.249E+00 -	4.416E+00	14	138	9.93	97.87	11.40	0.59
4.416E+00 -	4.583E+00	3	141	2.13	100.00	5.22	0.94
G		0	141	0.00	100.00	0.02	0.02
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 7 (AL)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+02 X
1.466E+03
2.151E+03 XX
3.157E+03 XXXXXXXXXXX
4.634E+03 XXXXXXXXXXXXXXXX
6.802E+03 XXXXXXXXXXXXXXXXXX
9.985E+03 XXXXXXXXXXXXXXXXXXXXXXX
1.466E+04 XXXXXXXXXXXXXXXXX
2.151E+04 XXXXXXXXXX
3.157E+04 XX
```

PERCENT TABLE FOR VARIABLE 7 (AL) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.705774E+00	5.078955E+03
50.00	3.934231E+00	8.594710E+03
75.00	4.127669E+00	1.341742E+04
90.00	4.283860E+00	1.922471E+04
95.00	4.367789E+00	2.332323E+04
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.20000E+03
MAXIMUM ANTILOG = 3.20000E+04
GEOMETRIC MEAN = 8.32345E+03
GEOMETRIC DEVIATION = 1.89424E+00
VARIANCE OF LOGS = 7.69700E-02

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 8 (V)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
9.160E-01 -	1.083E+00	1	1	0.71	0.71	0.00	0.00
1.083E+00 -	1.249E+00	0	1	0.00	0.71	0.01	0.01
1.249E+00 -	1.416E+00	1	2	0.71	1.42	0.30	1.68
1.416E+00 -	1.583E+00	2	4	1.42	2.84	3.15	0.42
1.583E+00 -	1.749E+00	13	17	9.22	12.06	16.05	0.58
1.749E+00 -	1.916E+00	39	56	27.66	39.72	39.42	0.00
1.916E+00 -	2.083E+00	59	115	41.84	81.56	46.78	3.19
2.083E+00 -	2.249E+00	19	134	13.48	95.04	26.83	2.28
2.249E+00 -	2.416E+00	7	141	4.96	100.00	8.47	0.26
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
H		0	141				

TOTALS LESS H AND H 141

HISTOGRAM FOR VARIABLE 8 (V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 X
1.466E+01
2.151E+01 X
3.157E+01 X
4.634E+01 XXXXXXXXX
6.802E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXX
9.985E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXXX
2.151E+02 XXXXX
```

PERCENT TABLE FOR VARIABLE 8 (V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.827327E+00	6.719340E+01
50.00	1.956963E+00	9.056545E+01
75.00	2.056539E+00	1.139040E+02
90.00	2.187055E+00	1.538350E+02
95.00	2.248897E+00	1.773770E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  9.40000E+00
MAXIMUM ANTILOG      =  2.60000E+02
GEOMETRIC MEAN       =  9.02037E+01
GEOMETRIC DEVIATION  =  1.54614E+00
VARIANCE OF LOGS     =  3.58154E-02
```

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 9 (MN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
1.416E+00 -	1.583E+00	1	1	0.71	0.71	0.02	59.26
1.583E+00 -	1.749E+00	0	1	0.00	0.71	0.17	0.17
1.749E+00 -	1.916E+00	0	1	0.00	0.71	1.20	1.20
1.916E+00 -	2.083E+00	5	6	3.55	4.26	5.49	0.04
2.083E+00 -	2.249E+00	15	21	10.64	14.89	16.11	0.08
2.249E+00 -	2.416E+00	36	57	25.53	40.43	30.51	0.99
2.416E+00 -	2.583E+00	32	89	22.70	63.12	37.24	0.74
2.583E+00 -	2.749E+00	29	118	20.57	83.69	29.32	0.00
2.749E+00 -	2.916E+00	19	137	13.48	97.16	14.89	1.14
2.916E+00 -	3.083E+00	4	141	2.84	100.00	6.05	0.69
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 9 (MN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+01 X
4.634E+01
6.802E+01
9.985E+01 XXXX
1.466E+02 XXXXXXXXXXX
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXXXXXXXXXXXXXX
4.634E+02 XXXXXXXXXXXXXXXXXXXX
6.803E+02 XXXXXXXXXXXXX
9.985E+02 XXX
```

PERCENT TABLE FOR VARIABLE 9 (MN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.315307E+00	2.066842E+02
50.00	2.486315E+00	3.064183E+02
75.00	2.678934E+00	4.774562E+02
90.00	2.827406E+00	6.720573E+02
95.00	2.889249E+00	7.749052E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.40000E+01
MAXIMUM ANTILOG = 9.70000E+02
GEOMETRIC MEAN = 3.10324E+02
GEOMETRIC DEVIATION = 1.76574E+00
VARIANCE OF LOGS = 6.09731E-02

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 10 (CO)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		1	1	0.71	0.71		
	L		1	2	0.71	1.42		
	T		0	2	0.00	1.42	1.95	1.95
5.830E-01	-	7.497E-01	7	9	4.96	6.38	10.76	1.32
7.497E-01	-	9.163E-01	33	42	23.40	29.79	31.95	0.03
9.163E-01	-	1.083E+00	57	99	40.43	70.21	47.03	2.11
1.083E+00	-	1.250E+00	25	124	17.73	87.94	34.39	2.56
1.250E+00	-	1.416E+00	15	139	10.64	98.58	12.47	0.51
1.416E+00	-	1.583E+00	2	141	1.42	100.00	2.44	0.08
	G		0	141	0.00	100.00	0.00	0.00
	H		0	141				
	B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 10 (CO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 XXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXX
3.160E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.00000E+00
MAXIMUM ANTILOG = 3.40000E+01
GEOMETRIC MEAN = 1.04226E+01
GEOMETRIC DEVIATION = 1.49792E+00
VARIANCE OF LOGS = 3.07960E-02

PERCENT TABLE FOR VARIABLE 10 (CO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	8.822430E-01	7.625056E+00
50.00	9.996675E-01	9.992347E+00
75.00	1.128001E+00	1.342768E+01
90.00	1.281890E+00	1.913772E+01
95.00	1.360224E+00	2.292048E+01
98.00	1.407224E+00	2.554018E+01
99.00	1.0000000E+35	1.0000000E+35

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 11 (NI)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.02	0.02
2.500E-01 -	4.167E-01	1	1	0.71	0.71	0.23	2.56
4.167E-01 -	5.833E-01	0	1	0.00	0.71	1.55	1.55
5.833E-01 -	7.500E-01	1	2	0.71	1.42	6.64	4.80
7.500E-01 -	9.167E-01	22	24	15.60	17.02	18.33	0.74
9.167E-01 -	1.083E+00	42	66	29.79	46.81	32.49	2.78
1.083E+00 -	1.250E+00	38	104	26.95	73.76	37.04	0.02
1.250E+00 -	1.417E+00	20	124	14.18	87.94	27.16	1.89
1.417E+00 -	1.583E+00	8	132	5.67	93.62	12.80	1.80
1.583E+00 -	1.750E+00	7	139	4.96	98.58	3.88	2.51
1.750E+00 -	1.917E+00	2	141	1.42	100.00	0.86	1.53
G		0	141	0.00	100.00	0.02	0.02
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 11 (NI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+00 X
3.162E+00
4.642E+00 X
6.813E+00 XXXXXXXXXXXXXXXX
1.000E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.468E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.154E+01 XXXXXXXXXXXXXX
3.162E+01 XXXXXX
4.642E+01 XXXXX
6.813E+01 X
```

PERCENT TABLE FOR VARIABLE 11 (NI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	9.613109E-01	9.147680E+00
50.00	1.103072E+00	1.267362E+01
75.00	1.264585E+00	1.839015E+01
90.00	1.477086E+00	2.999755E+01
95.00	1.629765E+00	4.263484E+01
98.00	1.730479E+00	5.376246E+01
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.90000E+00
MAXIMUM ANTILOG = 6.30000E+01
GEOMETRIC MEAN = 1.35775E+01
GEOMETRIC DEVIATION = 1.76236E+00
VARIANCE OF LOGS = 6.05629E-02

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 12 (CU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
5.830E-01 -	7.497E-01	1	1	0.71	0.71	0.02	41.37
7.497E-01 -	9.163E-01	0	1	0.00	0.71	0.45	0.45
9.163E-01 -	1.083E+00	3	4	2.13	2.84	4.25	0.37
1.083E+00 -	1.250E+00	17	21	12.06	14.89	19.36	0.29
1.250E+00 -	1.416E+00	42	63	29.79	44.68	42.46	0.00
1.416E+00 -	1.583E+00	56	119	39.72	84.40	45.00	2.69
1.583E+00 -	1.750E+00	15	134	10.64	95.04	23.05	2.81
1.750E+00 -	1.916E+00	5	139	3.55	98.58	5.69	0.08
1.916E+00 -	2.083E+00	1	140	0.71	99.29	0.68	0.16
2.083E+00 -	2.250E+00	1	141	0.71	100.00	0.04	23.50
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
D		0	141				

TOTALS LESS H AND D 141

PERCENT TABLE FOR VARIABLE 12 (CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.306216E+00	2.024024E+01
50.00	1.438656E+00	2.745721E+01
75.00	1.543567E+00	3.495769E+01
90.00	1.670780E+00	4.685759E+01
95.00	1.749113E+00	5.611945E+01
98.00	1.889003E+00	7.744665E+01
99.00	2.014670E+00	1.034355E+02

HISTOGRAM FOR VARIABLE 12 (CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 X
6.808E+00
9.992E+00 XX
1.467E+01 XXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXX
6.808E+01 XXXX
9.992E+01 X
1.467E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.60000E+00
MAXIMUM ANTILOG = 1.30000E+02
GEOMETRIC MEAN = 2.68956E+01
GEOMETRIC DEVIATION = 1.54623E+00
VARIANCE OF LOGS = 3.58242E-02

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 13 (ZN)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.00	0.00
9.160E-01	-	1.083E+00	1	1	0.71	0.71	0.02	43.76
1.083E+00	-	1.249E+00	1	2	0.71	1.42	0.70	0.13
1.249E+00	-	1.416E+00	9	11	6.38	7.80	8.20	0.08
1.416E+00	-	1.583E+00	21	32	14.89	22.70	35.18	5.71
1.583E+00	-	1.749E+00	71	103	50.35	73.05	55.92	4.07
1.749E+00	-	1.916E+00	32	135	22.70	95.74	33.11	0.04
1.916E+00	-	2.083E+00	6	141	4.26	100.00	7.86	0.44
	G		0	141	0.00	100.00	0.00	0.00
	H		0	141				
	B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 13 (ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.965E+00 X
1.466E+01 X
2.151E+01 XXXXXX
3.157E+01 XXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXXXXXXXXXXXXXXXXX
9.985E+01 XXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 8.80000E+00
MAXIMUM ANTILOG      = 1.00000E+02
GEOMETRIC MEAN       = 4.58033E+01
GEOMETRIC DEVIATION  = 1.44650E+00
VARIANCE OF LOGS     = 2.57021E-02
```

PERCENT TABLE FOR VARIABLE 13 (ZN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.590297E+00	3.893114E+01	98.00	1.0000000E+35	1.0000000E+35
50.00	1.673044E+00	4.710248E+01	99.00	1.0000000E+35	1.0000000E+35
75.00	1.763658E+00	5.803072E+01			
90.00	1.873814E+00	7.478499E+01			
95.00	1.910533E+00	8.138292E+01			

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 14 (MO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		39	39	27.66	27.66		
L		70	109	49.65	77.30		
T		0	109	0.00	77.30	101.68	101.68
-8.400E-02 -	8.267E-02	25	134	17.73	95.04	29.41	0.66
8.267E-02 -	2.493E-01	6	140	4.26	99.29	8.62	0.80
2.493E-01 -	4.160E-01	1	141	0.71	100.00	1.28	0.06
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 14 (MO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-01 XXXXXXXXXXXXXXXXX
1.466E+00 XXXX
2.151E+00 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	9.80000E-01
MAXIMUM ANTILOG	=	1.80000E+00
GEOMETRIC MEAN	=	1.14081E+00
GEOMETRIC DEVIATION	=	1.18054E+00
VARIANCE OF LOGS	=	5.19577E-03

PERCENT TABLE FOR VARIABLE 14 (MO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.987783E-01	1.580441E+00
99.00	2.379451E-01	1.729598E+00

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 15 (PB)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		1	1	0.71	0.71		
	L		41	42	29.08	29.79		
	T		0	42	0.00	29.79	2.56	2.56
5.830E-01	-	7.497E-01	5	47	3.55	33.33	15.90	7.48
7.497E-01	-	9.163E-01	29	76	20.57	53.90	43.62	4.90
9.163E-01	-	1.083E+00	44	120	31.21	85.11	49.92	0.70
1.083E+00	-	1.250E+00	20	140	14.18	99.29	23.86	0.62
1.250E+00	-	1.416E+00	0	140	0.00	99.29	4.74	4.74
1.416E+00	-	1.583E+00	0	140	0.00	99.29	0.39	0.39
1.583E+00	-	1.750E+00	1	141	0.71	100.00	0.01	74.04
	G		0	141	0.00	100.00	0.00	0.00
	H		0	141				
	B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 15 (PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 XXXX
6.809E+00 XXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXX
2.153E+01
3.160E+01
4.638E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 4.20000E+00
MAXIMUM ANTILOG      = 3.90000E+01
GEOMETRIC MEAN       = 9.44715E+00
GEOMETRIC DEVIATION  = 1.39969E+00
VARIANCE OF LOGS     = 2.13254E-02
```

PERCENT TABLE FOR VARIABLE 15 (PB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.000000E+35	1.000000E+35	98.00	1.234501E+00	1.715937E+01
50.00	8.847247E-01	7.668753E+00	99.00	1.246251E+00	1.762996E+01
75.00	1.029024E+00	1.069113E+01			
90.00	1.140501E+00	1.381978E+01			
95.00	1.199251E+00	1.582163E+01			

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 16 (BE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	17	17	12.06	12.06		
	T	0	17	0.00	12.06	7.71	7.71
-1.084E+00	- -9.173E-01	9	26	6.38	18.44	15.64	2.82
-9.173E-01	- -7.507E-01	22	48	15.60	34.04	28.26	1.39
-7.507E-01	- -5.840E-01	36	84	25.53	59.57	34.81	0.04
-5.840E-01	- -4.173E-01	25	109	17.73	77.30	29.23	0.61
-4.173E-01	- -2.507E-01	30	139	21.28	98.58	16.73	10.51
-2.507E-01	- -8.400E-02	2	141	1.42	100.00	8.62	5.09
	G	0	141	0.00	100.00	0.00	0.00
	H	0	141				
	B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 16 (BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
 9.985E-02 XXXXXX
 1.466E-01 XXXXXXXXXXXXXXXX
 2.151E-01 XXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E-01 XXXXXXXXXXXXXXXXXX
 4.634E-01 XXXXXXXXXXXXXXXXXXXXX
 6.802E-01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E-01
MAXIMUM ANTILOG = 7.00000E-01
GEOMETRIC MEAN = 2.54105E-01
GEOMETRIC DEVIATION = 1.61601E+00
VARIANCE OF LOGS = 4.34494E-02

PERCENT TABLE FOR VARIABLE 16 (BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-8.472571E-01	1.421487E-01
50.00	-6.464991E-01	2.256840E-01
75.00	-4.389987E-01	3.639161E-01
90.00	-3.178874E-01	4.809641E-01
95.00	-2.787206E-01	5.263358E-01
98.00	-2.552206E-01	5.556220E-01
99.00	1.0000000E+35	1.0000000E+35

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 17 (SR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.31	0.31
7.500E-01 -	9.167E-01	2	2	1.42	1.42	1.66	0.07
9.167E-01 -	1.083E+00	8	10	5.67	7.09	6.64	0.28
1.083E+00 -	1.250E+00	15	25	10.64	17.73	17.58	0.38
1.250E+00 -	1.417E+00	36	61	25.53	43.26	30.86	0.85
1.417E+00 -	1.583E+00	31	92	21.99	65.25	35.93	0.68
1.583E+00 -	1.750E+00	30	122	21.28	86.52	27.74	0.18
1.750E+00 -	1.917E+00	13	135	9.22	95.74	14.20	0.10
1.917E+00 -	2.083E+00	5	140	3.55	99.29	4.82	0.01
2.083E+00 -	2.250E+00	1	141	0.71	100.00	1.26	0.05
G		0	141	0.00	100.00	0.31	0.31
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 17 (SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E+00 X
1.000E+01 XXXXXX
1.468E+01 XXXXXXXXXXX
2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXX
1.000E+02 XXXX
1.468E+02 X
```

PERCENT TABLE FOR VARIABLE 17 (SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.297455E+00	1.983603E+01
50.00	1.467743E+00	2.935914E+01
75.00	1.659724E+00	4.567278E+01
90.00	1.812823E+00	6.498642E+01
95.00	1.903207E+00	8.002164E+01
98.00	2.022669E+00	1.053594E+02
99.00	2.069669E+00	1.174003E+02

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 5.70000E+00
MAXIMUM ANTILOG      = 1.30000E+02
GEOMETRIC MEAN       = 3.00875E+01
GEOMETRIC DEVIATION  = 1.80079E+00
VARIANCE OF LOGS     = 6.52608E-02
```

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 18 (BA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	1.29	1.29
7.500E-01 -	9.167E-01	4	4	2.84	2.84	2.92	0.40
9.167E-01 -	1.083E+00	10	14	7.09	9.93	7.04	1.24
1.083E+00 -	1.250E+00	10	24	7.09	17.02	13.59	0.95
1.250E+00 -	1.417E+00	27	51	19.15	36.17	20.99	1.72
1.417E+00 -	1.583E+00	21	72	14.89	51.06	25.95	0.94
1.583E+00 -	1.750E+00	22	94	15.60	66.67	25.68	0.53
1.750E+00 -	1.917E+00	19	113	13.48	80.14	20.33	0.09
1.917E+00 -	2.083E+00	19	132	13.48	93.62	12.88	2.90
2.083E+00 -	2.250E+00	5	137	3.55	97.16	6.53	0.36
2.250E+00 -	2.417E+00	4	141	2.84	100.00	3.79	0.01
G		0	141	0.00	100.00	1.29	1.29
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 18 (BA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E+00 XXX
1.000E+01 XXXXXXX
1.469E+01 XXXXXXX
2.154E+01 XXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXX
1.463E+02 XXXX
2.154E+02 XXX
```

PERCENT TABLE FOR VARIABLE 18 (BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.319446E+00	2.086631E+01
50.00	1.571430E+00	3.727608E+01
75.00	1.853072E+00	7.129719E+01
90.00	2.038599E+00	1.092947E+02
95.00	2.148336E+00	1.407136E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 7.00000E+00
MAXIMUM ANTILOG      = 2.30000E+02
GEOMETRIC MEAN       = 3.76128E+01
GEOMETRIC DEVIATION  = 2.23779E+00
VARIANCE OF LOGS     = 1.22373E-01
```

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 19 (LA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
8.300E-02 -	2.497E-01	1	1	0.71	0.71	0.09	9.15
2.497E-01 -	4.163E-01	0	1	0.00	0.71	1.82	1.82
4.163E-01 -	5.830E-01	15	16	10.64	11.35	14.13	0.05
5.830E-01 -	7.497E-01	47	63	33.33	44.68	43.11	0.35
7.497E-01 -	9.163E-01	39	102	27.66	72.34	52.00	3.25
9.163E-01 -	1.083E+00	38	140	26.95	99.29	24.83	6.99
1.083E+00 -	1.250E+00	1	141	0.71	100.00	5.02	3.22
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 19 (LA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
1.467E+00 X
2.153E+00
3.160E+00 XXXXXXXXXXX
4.638E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+00
MAXIMUM ANTILOG = 1.60000E+01
GEOMETRIC MEAN = 6.07287E+00
GEOMETRIC DEVIATION = 1.46570E+00
VARIANCE OF LOGS = 2.75712E-02

PERCENT TABLE FOR VARIABLE 19 (LA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	6.512635E-01	4.479851E+00	98.00	1.075020E+00	1.188556E+01
50.00	7.817193E-01	6.049498E+00	99.00	1.081204E+00	1.205601E+01
75.00	9.327824E-01	8.566085E+00			
90.00	1.025546E+00	1.060586E+01			
95.00	1.056467E+00	1.138851E+01			

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 20 (CE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.04	0.04
4.160E-01 -	5.827E-01	1	1	0.71	0.71	0.82	0.04
5.827E-01 -	7.493E-01	3	4	2.13	2.84	7.52	2.71
7.493E-01 -	9.160E-01	42	46	29.79	32.62	29.71	5.09
9.160E-01 -	1.083E+00	38	84	26.95	59.57	50.90	3.27
1.083E+00 -	1.249E+00	37	121	26.24	85.82	37.93	0.02
1.249E+00 -	1.416E+00	20	141	14.18	100.00	14.09	2.48
G		0	141	0.00	100.00	0.04	0.04
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 20 (CE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+00 X
4.634E+00 XX
6.802E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	3.30000E+00
MAXIMUM ANTILOG	=	2.40000E+01
GEOMETRIC MEAN	=	1.05625E+01
GEOMETRIC DEVIATION	=	1.49946E+00
VARIANCE OF LOGS	=	3.09526E-02

PERCENT TABLE FOR VARIABLE 20 (CE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	8.733422E-01	7.470371E+00
50.00	1.023457E+00	1.055498E+01
75.00	1.180641E+00	1.515797E+01
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 21 (Y)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	67	67	47.52	47.52		
	L	4	71	2.84	50.35		
	T	0	71	0.00	50.35	42.96	42.96
-1.084E+00	-9.173E-01	1	72	0.71	51.06	11.43	9.52
-9.173E-01	-7.507E-01	2	74	1.42	52.48	12.18	8.51
-7.507E-01	-5.840E-01	5	79	3.55	56.03	12.37	4.39
-5.840E-01	-4.173E-01	4	83	2.84	58.87	11.97	5.30
-4.173E-01	-2.507E-01	7	90	4.96	63.83	11.03	1.47
-2.507E-01	-8.400E-02	9	99	6.38	70.21	9.69	0.05
-8.400E-02	8.267E-02	10	109	7.09	77.30	8.10	0.44
8.267E-02	2.493E-01	7	116	4.96	82.27	6.46	0.05
2.493E-01	4.160E-01	13	129	9.22	91.49	4.90	13.36
4.160E-01	5.827E-01	9	138	6.38	97.87	3.55	8.38
5.827E-01	7.493E-01	3	141	2.13	100.00	6.36	1.77
	G	0	141	0.00	100.00	0.00	0.00
	H	0	141				
	B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 21 (Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.995E-02 X
1.466E-01 X
2.151E-01 XXXX
3.157E-01 XXX
4.634E-01 XXXXX
6.802E-01 XXXXXX
9.985E-01 XXXXXXX
1.466E+00 XXXXX
2.151E+00 XXXXXXXXX
3.157E+00 XXXXXX
4.635E+00 XX
```

PERCENT TABLE FOR VARIABLE 21 (Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	2.850222E-02	1.067830E+00
90.00	3.890799E-01	2.449514E+00
95.00	5.076698E-01	3.218621E+00
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.20000E-01
MAXIMUM ANTILOG      =  4.80000E+00
GEOMETRIC MEAN       =  1.00795E+00
GEOMETRIC DEVIATION  =  2.55226E+00
VARIANCE OF LOGS     =  1.65588E-01
```

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 22 (NB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		1	1	0.71	0.71		
T		0	1	0.00	0.71	0.01	0.01
-8.400E-02 -	8.267E-02	1	2	0.71	1.42	0.21	3.00
8.267E-02 -	2.493E-01	1	3	0.71	2.13	3.33	1.63
2.493E-01 -	4.160E-01	14	17	9.93	12.06	20.53	2.08
4.160E-01 -	5.827E-01	52	69	36.88	48.94	49.54	0.12
5.827E-01 -	7.493E-01	59	128	41.84	90.78	47.07	3.02
7.493E-01 -	9.160E-01	11	139	7.80	98.58	17.60	2.48
9.160E-01 -	1.083E+00	2	141	1.42	100.00	2.72	0.19
G		0	141	0.00	100.00	0.00	0.00
H		0	141				
B		0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 22 (NB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-01 X
1.466E+00 X
2.151E+00 XXXXXXXXXX
3.157E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+00 XXXXXXXX
9.985E+00 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.20000E+00
MAXIMUM ANTILOG	=	1.00000E+01
GEOMETRIC MEAN	=	3.80651E+00
GEOMETRIC DEVIATION	=	1.39178E+00
VARIANCE OF LOGS	=	2.06129E-02

PERCENT TABLE FOR VARIABLE 22 (NB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	4.744947E-01	2.981911E+00	98.00	9.035777E-01	8.008990E+00
50.00	5.869053E-01	3.862827E+00	99.00	1.000000E+35	1.000000E+35
75.00	6.864818E-01	4.858271E+00			
90.00	7.462276E-01	5.574779E+00			
95.00	8.394867E-01	6.910138E+00			

Table 11. Frequency tables and histograms of ICP analytical data (data set A) from stream sediment samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 23 (P)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.00	0.00
1.750E+00 - 1.917E+00	1	1	0.71	0.71	0.00	0.00
1.917E+00 - 2.083E+00	0	1	0.00	0.71	0.00	0.00
2.083E+00 - 2.250E+00	0	1	0.00	0.71	0.05	0.05
2.250E+00 - 2.417E+00	2	3	1.42	2.13	2.48	0.09
2.417E+00 - 2.583E+00	19	22	13.48	15.60	27.04	2.39
2.583E+00 - 2.750E+00	72	94	51.06	66.67	67.10	0.36
2.750E+00 - 2.917E+00	46	140	32.62	99.29	38.97	1.27
2.917E+00 - 3.083E+00	1	141	0.71	100.00	5.36	3.55
G	0	141	0.00	100.00	0.00	0.00
H	0	141				
B	0	141				

TOTALS LESS H AND B 141

HISTOGRAM FOR VARIABLE 23 (P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E+01 X
1.000E+02
1.468E+02
2.154E+02 X
3.162E+02 XXXXXXXXXXXX
4.642E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.813E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.000E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 6.80000E+01
MAXIMUM ANTILOG = 8.40000E+02
GEOMETRIC MEAN = 4.87078E+02
GEOMETRIC DEVIATION = 1.34621E+00
VARIANCE OF LOGS = 1.66697E-02

PERCENT TABLE FOR VARIABLE 23 (P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.614006E+00	4.111558E+02
50.00	2.695604E+00	4.961394E+02
75.00	2.792575E+00	6.202611E+02
90.00	2.869205E+00	7.399547E+02
95.00	2.894749E+00	7.847814E+02
98.00	2.910075E+00	8.129705E+02
99.00	2.915184E+00	8.223902E+02

Table 12. Spectrographic analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: --, no determination made; N, concentration less than the detection limit; <, detected, but present at a concentration less than the value reported; >, element present at a concentration greater than the upper calibration limit; and I, interfering spectra render analytical lines unusable.]

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1002C	46 30 36	121 29 5	.30	3.0	10.0	.20	N	20	N	200	30	20
GR1003C	46 28 56	121 29 37	.50	7.0	5.0	.20	N	30	N	300	10	10
GR1006C	46 28 51	121 26 46	.10	2.0	10.0	2.00	10	100	50	150	50	30
GR1007C	46 33 2	121 25 40	.70	5.0	7.0	1.50	10	150	70	200	15	20
GR1008C	46 34 13	121 26 2	.50	3.0	10.0	.30	10	50	30	200	30	50
GR1009C	46 34 8	121 26 8	.10	1.0	20.0	.50	N	70	20	100	50	70
GR1011C	46 28 46	121 27 21	.30	2.0	.7	.30	N	20	70	150	N	10
GR1012C	46 28 42	121 27 30	.30	3.0	2.0	1.00	N	70	30	150	N	10
GR1013C	46 28 39	121 28 8	.30	10.0	5.0	1.50	N	100	N	700	10	30
GR1014C	46 28 29	121 28 19	.20	10.0	5.0	>2.00	N	200	N	500	N	20
GR1015C	46 28 29	121 28 30	.20	5.0	3.0	.07	N	N	N	150	N	N
GR1016AC	46 28 3	121 29 19	1.00	10.0	10.0	.20	N	50	N	700	20	N
GR1016C	46 28 3	121 29 19	.15	5.0	10.0	.07	N	N	N	150	20	15
GR1017C	46 26 58	121 29 57	.20	7.0	3.0	.20	N	20	N	300	N	10
GR1019C	46 26 22	121 29 43	.15	7.0	1.0	.10	N	<20	N	150	N	10
GR1020C	46 36 28	121 33 17	.15	5.0	1.5	1.00	N	70	N	200	N	N
GR1021C	46 37 41	121 33 18	.20	5.0	1.0	1.00	N	70	20	200	N	N
GR1022C	46 37 45	121 33 20	.07	2.0	3.0	1.00	N	20	N	100	N	15
GR1024C	46 39 10	121 34 17	.10	5.0	.7	1.00	N	50	N	200	N	N
GR1025C	46 32 23	121 18 19	.50	5.0	2.0	.10	N	20	N	200	N	N
GR1028C	46 32 38	121 17 33	.10	5.0	2.0	.05	N	<20	N	100	N	N
GR1029C	46 33 37	121 16 5	.20	5.0	1.0	.07	N	20	N	150	N	N
GR1034C	46 37 5	121 17 55	1.00	5.0	2.0	1.00	N	100	100	300	N	10
GR1037C	46 28 47	121 20 47	.10	3.0	3.0	.20	N	30	N	100	10	N
GR1038C	46 28 54	121 20 0	.20	5.0	5.0	.15	N	20	N	200	20	10
GR1039C	46 29 3	121 19 42	.20	3.0	5.0	.30	N	30	N	150	15	10
GR1040C	46 31 8	121 24 59	.50	2.0	10.0	>2.00	N	200	70	200	70	50
GR1042C	46 31 12	121 25 0	.15	2.0	15.0	>2.00	N	200	70	150	100	70
GR1043C	46 31 40	121 24 47	.10	2.0	15.0	>2.00	30	150	30	100	100	100
GR1047C	46 33 0	121 34 22	.20	5.0	5.0	.30	N	50	N	200	15	15
GR1250C	46 33 7	121 29 22	.10	5.0	1.5	.15	N	N	N	100	N	10
GR1251C	46 33 23	121 29 40	.15	7.0	3.0	.15	N	30	N	200	N	N
GR1255C	46 34 16	121 32 5	.30	5.0	2.0	.15	N	20	N	200	N	10
GR1256C	46 34 41	121 32 45	.15	5.0	5.0	1.00	10	100	N	200	10	10
GR1258C	46 31 22	121 31 32	.15	5.0	1.5	.07	N	N	N	150	N	N
GR1262C	46 31 7	121 32 18	.10	3.0	1.0	.05	N	N	N	100	N	N
GR1265C	46 30 49	121 33 35	.15	5.0	5.0	.10	N	N	N	150	10	N
GR1267C	46 40 3	121 32 32	.15	3.0	3.0	1.00	N	70	N	300	10	N
GR1268C	46 39 18	121 31 49	.20	3.0	2.0	.70	N	50	N	300	N	N
GR1270C	46 39 36	121 30 35	.10	3.0	5.0	.50	N	20	N	100	10	10
GR1271C	46 39 42	121 30 15	.10	5.0	1.5	.10	N	N	N	100	N	N
GR1272C	46 34 10	121 21 25	.20	3.0	5.0	2.00	N	150	20	300	10	30
GR1273C	46 33 38	121 21 30	.50	5.0	2.0	.30	N	70	30	200	N	N
GR1274C	46 32 59	121 22 2	.10	5.0	5.0	.15	N	20	N	150	10	N
GR1275C	46 32 50	121 22 28	.15	5.0	2.0	.30	N	30	N	150	N	N

Table 12. Spectrographic analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	As-ppm s	Sb-ppm s	Bi-ppm s	Hg-ppm inst	B-ppm s	Be-ppm s	Sr-ppm s
GR1002C	100	1,000	N	30	N	N	N	N	N	.20	N	N	700
GR1003C	30	N	N	30	N	N	N	N	N	.16	N	N	1,000
GR1006C	100	N	N	300	N	N	N	N	N	.24	50	N	500
GR1007C	30	N	N	70	N	N	500	N	1,000	<.02	50	N	1,000
GR1008C	100	500	N	20	N	N	N	N	50	>3.00	20	N	500
GR1009C	150	N	100	20	N	N	1,000	N	N	>3.00	N	N	200
GR1011C	10	N	N	N	N	N	N	N	N	.16	200	N	700
GR1012C	20	N	N	N	N	N	N	N	300	.08	30	N	700
GR1013C	70	N	N	N	N	N	N	N	N	--	<20	N	500
GR1014C	100	1,500	N	N	N	N	N	N	N	--	200	N	700
GR1015C	20	N	N	N	N	N	N	N	N	.04	<20	N	1,000
GR1016AC	100	N	N	N	N	N	N	N	N	--	<20	N	700
GR1016C	30	N	N	50	N	N	N	N	N	.02	<20	N	1,000
GR1017C	20	N	N	<20	N	N	N	N	N	.16	20	N	700
GR1019C	20	N	N	<20	N	N	N	N	N	>3.00	N	N	1,000
GR1020C	30	N	N	N	N	N	N	N	N	.06	<20	N	700
GR1021C	20	N	N	200	N	N	N	N	N	>3.00	700	N	700
GR1022C	20	N	N	N	N	N	N	N	N	>3.00	20	2	500
GR1024C	15	N	N	N	N	N	N	N	N	.18	<20	N	500
GR1025C	30	N	N	N	N	N	N	N	N	.04	<20	N	700
GR1028C	15	N	N	N	N	30	N	N	N	.10	<20	N	1,000
GR1029C	20	N	N	N	N	N	N	N	N	<.02	<20	N	1,000
GR1034C	30	N	N	N	N	N	N	N	N	.06	20	N	700
GR1037C	200	N	N	200	N	N	N	N	N	>3.00	<20	N	700
GR1038C	100	500	N	N	N	N	N	N	N	.24	<20	N	1,000
GR1039C	30	N	N	N	N	700	N	N	N	.34	30	N	700
GR1040C	100	N	N	<20	N	30	N	N	50	.02	50	N	500
GR1042C	200	500	N	300	N	N	700	N	<20	.06	100	N	N
GR1043C	100	N	N	100	N	30	2,000	N	200	.06	<20	N	500
GR1047C	30	N	N	<20	N	N	N	N	N	1.00	<20	N	1,000
GR1250C	20	N	N	N	N	N	N	N	N	.12	30	N	700
GR1251C	50	N	N	N	N	N	N	N	N	.22	>5,000	2	700
GR1255C	20	N	N	N	N	N	N	N	N	>3.00	100	N	1,000
GR1256C	100	N	N	20	N	N	N	N	N	.30	70	N	1,000
GR1258C	30	N	N	N	N	N	N	N	N	.04	20	N	1,000
GR1262C	15	N	N	N	N	N	N	N	N	.02	<20	N	700
GR1265C	20	500	N	N	N	N	N	N	N	.10	300	N	1,000
GR1267C	30	N	N	200	N	N	N	N	N	.14	30	N	700
GR1268C	20	N	N	20	N	N	N	N	N	.10	20	N	1,000
GR1270C	30	N	N	N	N	N	N	N	N	2.50	<20	N	700
GR1271C	15	N	N	N	N	N	N	N	N	.35	<20	N	1,000
GR1272C	70	N	10	N	N	N	N	N	N	.14	100	N	500
GR1273C	20	N	N	N	N	N	N	N	N	.02	20	N	1,000
GR1274C	30	N	N	N	N	N	N	N	N	.04	<20	N	1,000
GR1275C	20	N	N	N	N	N	N	N	N	.06	20	N	1,000

Table 12. Spectrographic analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

Sample	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1002C	100	N	100	>2,000	N
GR1003C	300	N	100	>2,000	N
GR1006C	10,000	N	100	>2,000	50
GR1007C	2,000	N	30	2,000	<50
GR1008C	3,000	50	150	>2,000	N
GR1009C	5,000	N	70	>2,000	N
GR1011C	200	N	30	>2,000	N
GR1012C	1,000	N	20	1,500	N
GR1013C	200	500	300	>2,000	N
GR1014C	>10,000	150	500	>2,000	100
GR1015C	200	N	20	1,000	N
GR1016AC	200	500	200	>2,000	N
GR1016C	500	N	70	>2,000	N
GR1017C	700	100	150	>2,000	N
GR1019C	200	N	N	1,000	N
GR1020C	500	100	150	>2,000	<50
GR1021C	10,000	200	200	>2,000	<50
GR1022C	7,000	N	150	>2,000	<50
GR1024C	>10,000	200	200	>2,000	<50
GR1025C	500	N	70	1,500	N
GR1028C	500	N	N	>2,000	N
GR1029C	200	N	N	1,000	N
GR1034C	200	N	100	>2,000	<50
GR1037C	1,000	N	50	>2,000	N
GR1038C	500	N	30	>2,000	N
GR1039C	700	N	100	>2,000	N
GR1040C	500	N	70	>2,000	50
GR1042C	700	70	200	>2,000	100
GR1043C	1,500	N	100	>2,000	100
GR1047C	500	N	150	>2,000	N
GR1250C	200	N	N	1,500	N
GR1251C	200	N	70	>2,000	N
GR1255C	500	N	70	>2,000	N
GR1256C	1,000	150	150	>2,000	N
GR1258C	300	N	100	>2,000	N
GR1262C	200	N	50	>2,000	N
GR1265C	300	N	20	>2,000	N
GR1267C	5,000	N	100	>2,000	50
GR1268C	10,000	N	70	>2,000	<50
GR1270C	1,000	N	50	>2,000	N
GR1271C	200	N	20	>2,000	N
GR1272C	>10,000	100	200	>2,000	70
GR1273C	1,000	N	30	1,000	N
GR1274C	500	N	20	>2,000	N
GR1275C	500	N	50	2,000	N

Table 12. Spectrographic analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1276C	46 32 38	121 23 9	.70	5.0	15.0	.50	N	100	20	500	50	50
GR1278C	46 36 50	121 26 58	.70	5.0	5.0	>2.00	N	300	150	500	15	20
GR1279C	46 36 40	121 26 57	.20	5.0	5.0	>2.00	N	200	70	200	15	20
GR1280C	46 36 10	121 26 47	.50	2.0	5.0	1.00	N	100	200	300	20	50
GR1281C	46 36 2	121 26 47	.70	2.0	2.0	2.00	N	150	150	300	10	30
GR1282C	46 35 4	121 26 40	.10	1.5	3.0	.50	N	70	N	100	N	15
GR1283C	46 34 55	121 26 40	.15	3.0	5.0	.50	N	50	N	150	20	20
GR1284C	46 32 23	121 34 50	.70	5.0	10.0	.20	N	50	N	300	30	20
GR1500C	46 33 26	121 29 59	.15	3.0	2.0	.05	N	N	N	100	N	N
GR1501C	46 33 40	121 30 46	.15	3.0	1.5	>2.00	10	100	30	200	10	10
GR1502C	46 33 40	121 31 9	.70	3.0	2.0	.20	N	N	N	200	N	N
GR1504C	46 33 52	121 32 4	.15	5.0	2.0	.07	N	N	N	150	N	N
GR1506C	46 30 10	121 31 6	.10	5.0	1.0	.30	N	N	N	150	N	N
GR1507C	46 30 2	121 31 39	.10	5.0	2.0	.07	N	N	N	150	N	N
GR1509C	46 29 15	121 33 12	.20	3.0	2.0	1.00	N	70	30	200	N	N
GR1511C	46 34 42	121 21 30	.10	3.0	1.5	1.00	N	70	N	150	N	N
GR1513C	46 36 8	121 20 20	.50	10.0	7.0	2.00	N	100	50	500	20	50
GR1514C	46 36 55	121 19 29	2.00	7.0	7.0	>2.00	N	200	100	700	50	200
GR1515C	46 32 28	121 23,23	.15	5.0	5.0	.10	N	20	N	150	10	20
GR1516C	46 32 29	121 23 20	1.00	5.0	5.0	.50	N	100	70	700	20	50
GR1519C	46 33 8	121 23 12	.30	5.0	3.0	.20	N	50	N	200	N	N
GR1520C	46 33 12	121 23 1	.50	1.0	10.0	.70	N	70	N	1,000	50	300
GR1522C	46 37 2	121 27 7	5.00	2.0	10.0	1.00	30	200	1,000	2,000	70	200
GR1523C	46 36 53	121 27 7	1.50	2.0	5.0	1.00	10	100	30	700	20	30
GR1524C	46 35 46	121 26 57	1.50	2.0	5.0	.70	10	150	50	1,000	20	30
GR1526C	46 37 31	121 27 9	.20	1.0	3.0	1.50	N	100	N	200	10	50
GR1750C	46 32 28	121 28 58	2.00	5.0	15.0	.50	10	150	150	1,000	100	70
GR1751C	46 32 25	121 28 54	.10	1.5	15.0	2.00	10	50	20	150	300	100
GR1752C	46 32 27	121 28 50	.20	3.0	10.0	>2.00	10	200	70	200	70	50
GR1755C	46 33 18	121 29 45	1.50	3.0	10.0	.50	10	100	50	700	30	70
GR1756C	46 32 25	121 32 27	.15	5.0	2.0	.07	N	N	N	100	N	N
GR1757C	46 25 0	121 25 46	1.50	5.0	10.0	.30	10	70	30	700	30	30
GR1760C	46 24 51	121 26 51	.20	5.0	1.5	.70	N	50	N	150	N	N
GR1765C	46 30 29	121 17 26	.50	5.0	1.0	.70	N	70	70	200	N	10
GR1766C	46 30 32	121 17 21	.50	5.0	2.0	1.50	N	100	30	300	N	10
GR1767C	46 31 14	121 16 18	.20	5.0	1.5	.20	N	30	N	200	N	N
GR1768C	46 32 13	121 15 43	.30	5.0	7.0	.50	N	70	N	300	30	50
GR1769C	46 38 51	121 20 52	.20	5.0	10.0	>2.00	N	200	30	500	50	100
GR1771C	46 38 15	121 17 7	.30	3.0	1.0	>2.00	N	200	100	300	N	N
GR1772C	46 37 39	121 18 16	.50	1.5	5.0	1.50	N	100	N	200	10	20
GR1776C	46 30 5	121 21 2	.10	5.0	5.0	.20	N	20	N	150	N	N
GR1777C	46 30 0	121 21 0	.10	5.0	3.0	2.00	N	150	30	200	N	N
GR1784C	46 34 8	121 27 4	.15	3.0	7.0	2.00	N	100	N	200	30	20
GR1785C	46 35 9	121 28 15	.20	5.0	5.0	.15	N	20	N	200	15	10
GR1789C	46 36 13	121 28 59	.10	5.0	2.0	.20	N	30	N	150	N	N

Table 12. Spectrographic analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	As-ppm s	Sb-ppm s	Bi-ppm s	Hg-ppm inst	B-ppm s	Be-ppm s	Sr-ppm s
GR1276C	500	N	N	300	N	500	N	N	N	.16	<20	N	500
GR1278C	1,000	1,000	N	<20	N	20	N	N	N	--	700	3	300
GR1279C	30	N	N	N	N	20	N	N	N	--	300	2	200
GR1280C	30	500	N	N	N	N	N	N	N	>3.00	20	N	300
GR1281C	15	N	N	N	N	N	N	N	N	.20	30	N	300
GR1282C	30	N	N	N	N	N	N	N	N	>3.00	20	N	300
GR1283C	50	N	N	N	N	N	N	N	N	>3.00	30	N	700
GR1284C	200	N	N	N	N	N	N	N	N	>3.00	20	N	700
GR1500C	50	N	N	N	N	N	N	N	N	>3.00	100	N	700
GR1501C	20	N	N	70	N	N	1,500	N	N	>3.00	300	2	500
GR1502C	200	N	N	<20	N	N	N	N	N	--	70	N	700
GR1504C	20	N	N	N	N	N	N	N	N	.20	1,000	N	1,000
GR1506C	15	N	N	N	N	N	N	N	N	.04	<20	N	1,000
GR1507C	20	N	N	N	N	N	N	N	N	.04	<20	N	700
GR1509C	20	N	N	N	N	N	N	N	N	.02	20	N	700
GR1511C	15	N	N	N	N	N	N	N	N	>3.00	1,000	N	700
GR1513C	100	N	N	N	N	N	N	N	N	--	200	N	500
GR1514C	100	7,000	N	N	N	N	N	N	N	--	30	N	500
GR1515C	50	N	N	N	N	N	N	N	N	>3.00	N	N	1,000
GR1516C	70	N	N	N	N	N	N	N	N	>3.00	500	N	700
GR1519C	30	N	N	N	N	N	N	N	N	.20	20	N	1,000
GR1520C	300	5,000	N	100	5	50	700	N	N	>3.00	20	N	1,000
GR1522C	70	N	N	50	N	N	N	N	N	3.00	20	N	N
GR1523C	50	N	N	N	N	N	500	N	N	--	30	N	700
GR1524C	30	N	N	N	N	N	N	N	N	.30	20	N	700
GR1526C	30	N	N	500	N	N	N	N	N	>3.00	30	N	300
GR1750C	150	N	20	300	N	N	N	N	N	2.00	<20	N	700
GR1751C	150	N	N	100	N	N	>20,000	200	70	.24	<20	N	N
GR1752C	100	N	N	20	N	50	1,500	N	N	--	50	N	700
GR1755C	30	N	N	70	N	N	N	N	N	.20	50	2	500
GR1756C	100	N	N	50	N	N	N	N	N	.12	N	N	1,000
GR1757C	50	N	N	50	N	N	N	N	N	--	N	N	1,000
GR1760C	20	N	N	50	N	N	N	N	N	.10	N	N	1,000
GR1765C	20	N	N	N	N	N	N	N	N	--	20	N	1,000
GR1766C	20	N	N	N	N	N	N	N	N	.14	50	2	700
GR1767C	15	N	N	50	N	N	N	N	N	.04	<20	N	1,000
GR1768C	50	N	N	N	N	30	N	N	N	.75	50	N	700
GR1769C	150	500	10	70	N	20	N	N	N	.80	150	2	300
GR1771C	100	N	N	N	N	N	N	N	N	.20	70	3	N
GR1772C	100	N	N	N	N	N	N	N	N	.08	100	N	700
GR1776C	20	N	N	N	N	N	N	N	N	.28	<20	N	1,000
GR1777C	30	N	N	N	N	N	N	N	N	.60	20	3	500
GR1784C	30	2,000	N	N	N	N	N	N	N	>3.00	100	N	500
GR1785C	30	N	N	N	N	N	N	N	N	--	<20	N	700
GR1788C	30	N	N	N	N	N	N	N	N	--	<20	N	1,000

Table 12. Spectrographic analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area--continued

Sample	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1276C	1,500	100	150	>2,000	N
GR1278C	200	200	300	>2,000	<50
GR1279C	200	100	200	>2,000	100
GR1280C	5,000	70	150	>2,000	<50
GR1281C	5,000	100	150	>2,000	70
GR1282C	300	N	50	>2,000	N
GR1283C	1,500	N	70	>2,000	N
GR1284C	700	N	50	>2,000	N
GR1500C	300	N	100	>2,000	N
GR1501C	500	150	200	>2,000	100
GR1502C	200	N	70	>2,000	N
GR1504C	200	N	50	>2,000	N
GR1506C	200	N	20	1,500	N
GR1507C	200	N	50	>2,000	N
GR1509C	200	N	70	>2,000	50
GR1511C	500	N	100	>2,000	50
GR1513C	500	700	500	>2,000	50
GR1514C	>10,000	200	500	>2,000	70
GR1515C	2,000	N	20	2,000	N
GR1516C	3,000	N	50	>2,000	N
GR1519C	500	N	N	1,500	N
GR1520C	>10,000	50	100	2,000	N
GR1522C	5,000	150	100	>2,000	N
GR1523C	>10,000	N	50	>2,000	N
GR1524C	1,000	N	50	>2,000	N
GR1526C	7,000	50	200	>2,000	50
GR1750C	5,000	500	150	>2,000	N
GR1751C	1,000	N	70	>2,000	50
GR1752C	1,500	N	100	>2,000	70
GR1755C	500	50	300	>2,000	N
GR1756C	500	N	100	>2,000	N
GR1757C	500	70	100	>2,000	N
GR1760C	150	50	70	>2,000	50
GR1765C	200	70	100	>2,000	50
GR1766C	500	50	100	>2,000	50
GR1767C	500	N	30	>2,000	N
GR1768C	7,000	70	100	>2,000	N
GR1769C	10,000	300	500	>2,000	200
GR1771C	100	150	200	>2,000	150
GR1772C	>10,000	50	150	>2,000	<50
GR1776C	200	50	100	2,000	N
GR1777C	10,000	N	200	>2,000	N
GR1784C	>10,000	N	150	>2,000	N
GR1785C	500	N	200	>2,000	N
GR1788C	1,000	N	100	>2,000	N

Table 12. Spectrographic analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1796C	46 32 32	121 36 53	.10	5.0	5.0	.20	N	30	N	150	10	N

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	As-ppm s	Sb-ppm s	Bi-ppm s	Hg-ppm inst	B-ppm s	Be-ppm s	Sr-ppm s
GR1796C	20	N	N	N	N	N	N	N	N	.10	20	N	500

Sample	Ba-ppm s	La-ppm s	Y-ppm s	Zr-ppm s	Nb-ppm s
GR1796C	200	N	50	>2,000	N

Table 13. Mineralogy of the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

[Abundance of minerals tentatively identified in the nonmagnetic, heavy-mineral fraction: - = none observed; 1 = trace present, <1%; 2 = present, >2%; 3 = common, >5%; 4 = major, >20%; 5 = dominant, >50%; 6 = ubiquitous, >85%.]

Sample	Latitude	Longitude	Pyrite	Pyrrhotite	Hematite	Rutile	Realgar Cinnabar	Scheelite	Barite
GR1002C	46 30 36	121 29 5	4	2	--	--	--	--	--
GR1003C	46 28 56	121 29 37	2	--	--	--	--	--	--
GR1006C	46 28 51	121 26 46	4	2	--	--	--	--	--
GR1007C	46 33 2	121 25 40	4	--	--	--	--	--	--
GR1008C	46 34 13	121 26 2	4	--	--	2	--	--	--
GR1009C	46 34 8	121 26 8	5	--	--	--	--	--	--
GR1011C	46 28 46	121 27 21	2	--	--	--	--	--	--
GR1012C	46 28 42	121 27 30	3	--	--	--	--	--	--
GR1013C	46 28 39	121 28 8	4	--	--	--	--	--	--
GR1014C	46 28 29	121 28 19	4	--	--	--	--	--	--
GR1015C	46 28 29	121 28 30	3	--	--	--	--	--	--
GR1016AC	46 28 3	121 29 19	4	--	--	--	--	--	--
GR1016C	46 28 3	121 29 19	3	--	--	--	--	--	--
GR1017C	46 26 58	121 29 57	2	--	2	--	--	2	--
GR1019C	46 26 22	121 29 43	--	--	--	--	--	--	--
GR1020C	46 36 28	121 33 17	3	--	--	2	--	--	--
GR1021C	46 37 41	121 33 18	3	--	--	--	--	--	--
GR1022C	46 37 45	121 33 20	4	--	--	--	--	--	--
GR1024C	46 39 10	121 34 17	2	--	--	--	--	--	--
GR1025C	46 32 23	121 18 19	2	--	--	--	--	--	--
GR1028C	46 32 38	121 17 33	3	--	--	--	--	--	--
GR1029C	46 33 37	121 16 5	3	--	--	--	--	--	--
GR1034C	46 37 5	121 17 55	3	--	--	--	--	--	--
GR1037C	46 28 47	121 20 47	4	--	--	2	--	--	--
GR1038C	46 28 54	121 20 0	4	--	2	--	--	--	--
GR1039C	46 29 3	121 19 42	3	--	2	--	--	--	--
GR1040C	46 31 8	121 24 59	4	--	2	--	--	--	--
GR1042C	46 31 12	121 25 0	5	--	--	--	--	--	--
GR1043C	46 31 40	121 24 47	4	--	--	--	--	--	--
GR1047C	46 33 0	121 34 22	3	--	--	--	--	--	--
GR1250C	46 33 7	121 29 22	2	--	--	--	--	2	--
GR1251C	46 33 23	121 29 40	3	--	--	--	--	--	--
GR1255C	46 34 16	121 32 5	2	--	2	--	--	--	--
GR1256C	46 34 41	121 32 45	3	--	--	--	--	--	--
GR1258C	46 31 22	121 31 32	2	--	--	--	--	--	--
GR1262C	46 31 7	121 32 18	1	--	--	--	--	--	--
GR1265C	46 30 49	121 33 35	3	--	--	--	--	--	--
GR1267C	46 40 3	121 32 32	3	--	--	--	--	--	--
GR1268C	46 39 18	121 31 49	3	--	--	--	--	--	--
GR1270C	46 39 36	121 30 35	4	--	--	--	--	--	--
GR1271C	46 39 42	121 30 15	3	--	--	--	--	--	--
GR1272C	46 34 10	121 21 25	3	--	--	2	--	--	--
GR1273C	46 33 38	121 21 30	--	--	--	--	--	--	--
GR1274C	46 32 59	121 22 2	3	--	--	--	--	--	--
GR1275C	46 32 50	121 22 28	--	--	--	--	--	--	--

Table 13. Mineralogy of the nonmagnetic heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

Sample	Epidote	Sphene	Zircon	Apatite	Feldspar	Pyroxene Amphibole	Rock Fragments
GR1002C	--	2	2	--	5	2	--
GR1003C	--	--	2	--	6	--	--
GR1006C	--	2	2	--	4	--	3
GR1007C	--	--	--	--	5	4	2
GR1008C	--	--	2	--	5	2	2
GR1009C	--	--	--	--	4	3	3
GR1011C	2	--	--	--	5	3	--
GR1012C	--	2	--	--	6	2	3
GR1013C	--	--	4	4	2	--	--
GR1014C	--	--	4	4	5	--	--
GR1015C	--	--	--	--	6	--	--
GR1016AC	--	--	--	--	5	3	2
GR1016C	--	--	2	--	6	--	--
GR1017C	--	--	3	2	5	3	--
GR1019C	--	--	--	--	6	--	--
GR1020C	--	--	3	--	6	2	--
GR1021C	--	--	4	--	5	2	--
GR1022C	--	3	3	--	5	--	--
GR1024C	--	--	4	--	5	--	--
GR1025C	--	2	2	--	5	4	--
GR1028C	--	--	--	--	5	--	--
GR1029C	--	--	--	--	6	3	--
GR1034C	--	--	3	--	4	4	--
GR1037C	--	2	3	--	5	2	--
GR1038C	--	2	2	--	5	2	--
GR1039C	--	--	3	--	5	--	--
GR1040C	--	2	2	--	5	2	--
GR1042C	--	--	3	--	4	3	--
GR1043C	--	--	2	--	5	--	3
GR1047C	--	--	4	--	5	--	--
GR1250C	--	--	--	--	6	--	3
GR1251C	--	2	--	--	6	--	--
GR1255C	--	2	2	--	6	2	2
GR1256C	--	--	3	--	5	--	3
GR1258C	--	--	2	--	6	--	--
GR1262C	--	--	2	--	6	--	--
GR1265C	--	--	--	--	6	--	--
GR1267C	--	2	2	--	6	--	--
GR1268C	--	--	3	--	6	--	--
GR1270C	--	--	2	--	5	--	--
GR1271C	--	--	3	--	6	--	--
GR1272C	--	3	3	--	5	--	3
GR1273C	--	2	--	2	5	4	--
GR1274C	--	--	3	--	6	3	--
GR1275C	--	--	--	4	5	--	--

Table 13. Mineralogy of the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Pyrite	Pyrrhotite	Hematite	Rutile	Realgar Cinnabar	Scheelite	Barite
GR1276C	46 32 38	121 23 9	2	--	--	--	--	--	--
GR1278C	46 36 50	121 26 58	3	--	2	--	--	--	--
GR1279C	46 36 40	121 26 57	4	--	--	--	--	--	--
GR1280C	46 36 10	121 26 47	3	--	--	2	2	--	--
GR1281C	46 36 2	121 26 47	3	--	--	--	--	--	--
GR1282C	46 35 4	121 26 40	3	--	--	--	2	--	2
GR1283C	46 34 55	121 26 40	3	--	--	--	2	--	2
GR1284C	46 32 23	121 34 50	4	--	--	--	--	--	--
GR1500C	46 33 26	121 29 59	3	--	--	--	--	--	--
GR1501C	46 33 40	121 30 46	2	--	--	--	--	--	--
GR1502C	46 33 40	121 31 9	3	--	--	--	--	--	--
GR1504C	46 33 52	121 32 4	3	--	--	--	--	--	--
GR1506C	46 30 10	121 31 6	2	--	--	--	--	--	--
GR1507C	46 30 2	121 31 39	3	--	--	--	--	--	--
GR1509C	46 29 15	121 33 12	3	--	--	2	--	--	--
GR1511C	46 34 42	121 21 30	3	--	--	2	--	--	--
GR1513C	46 36 8	121 20 20	4	--	--	--	--	--	--
GR1514C	46 36 55	121 19 29	4	--	--	--	--	--	--
GR1515C	46 32 28	121 23 23	4	--	--	--	--	--	--
GR1516C	46 32 29	121 23 20	3	--	--	--	--	--	2
GR1519C	46 33 8	121 23 12	3	--	--	--	--	--	--
GR1520C	46 33 12	121 23 1	5	--	--	--	--	--	2
GR1522C	46 37 2	121 27 7	3	--	--	2	--	--	--
GR1523C	46 36 53	121 27 7	--	--	--	--	--	--	--
GR1524C	46 35 46	121 26 57	2	--	--	--	--	--	--
GR1526C	46 37 31	121 27 9	2	--	--	2	2	--	--
GR1750C	46 32 28	121 28 58	4	--	--	--	--	--	--
GR1751C	46 32 25	121 28 54	5	--	--	--	--	--	--
GR1752C	46 32 27	121 28 50	4	--	--	--	--	--	--
GR1755C	46 33 18	121 29 45	3	--	2	--	--	--	--
GR1756C	46 32 25	121 32 27	3	--	--	--	--	--	--
GR1757C	46 25 0	121 25 46	3	--	--	2	--	--	--
GR1760C	46 24 51	121 26 51	2	--	--	--	--	--	--
GR1765C	46 30 29	121 17 26	3	--	--	--	--	--	--
GR1766C	46 30 32	121 17 21	3	--	--	2	--	--	--
GR1767C	46 31 14	121 16 18	3	--	3	--	--	--	--
GR1768C	46 32 13	121 15 43	4	--	--	--	--	--	--
GR1769C	46 38 51	121 20 52	5	--	--	3	--	--	2
GR1771C	46 38 15	121 17 7	2	--	--	3	--	--	--
GR1772C	46 37 39	121 18 16	--	--	--	--	--	--	--
GR1776C	46 30 5	121 21 2	4	--	--	--	2	--	--
GR1777C	46 30 0	121 21 0	3	--	--	--	--	--	--
GR1784C	46 34 8	121 27 4	4	--	--	--	--	--	--
GR1785C	46 35 9	121 28 15	4	--	--	--	--	--	--
GR1788C	46 36 13	121 28 59	3	--	--	--	--	--	--

Table 13. Mineralogy of the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area--continued

Sample	Epidote	Sphene	Zircon	Apatite	Feldspar	Pyroxene Amphibole	Rock Fragments
GR1276C	--	2	--	--	6	2	--
GR1278C	--	--	4	--	4	--	4
GR1279C	--	--	3	3	5	--	3
GR1280C	--	--	4	4	4	3	--
GR1281C	--	--	4	3	5	3	--
GR1282C	--	--	2	3	5	--	--
GR1283C	--	--	2	3	5	--	2
GR1284C	--	2	--	--	5	2	--
GR1500C	--	--	2	--	6	3	--
GR1501C	--	--	3	4	4	3	--
GR1502C	--	--	3	--	5	4	--
GR1504C	--	--	--	2	6	3	--
GR1506C	--	2	--	--	6	2	--
GR1507C	--	2	--	--	6	2	--
GR1509C	--	2	2	--	6	2	--
GR1511C	--	2	3	--	5	--	--
GR1513C	--	3	4	4	3	--	--
GR1514C	--	4	4	4	3	4	3
GR1515C	--	--	--	--	5	--	--
GR1516C	--	--	2	--	5	3	--
GR1519C	--	--	--	--	6	3	--
GR1520C	--	2	--	--	3	2	3
GR1522C	--	4	4	2	3	4	--
GR1523C	--	--	--	2	6	2	--
GR1524C	4	--	2	2	5	2	2
GR1526C	--	2	3	2	6	--	--
GR1750C	4	2	2	--	5	3	--
GR1751C	--	3	--	--	3	--	--
GR1752C	--	--	2	--	5	--	3
GR1755C	--	--	4	--	4	4	--
GR1756C	--	--	--	--	5	--	--
GR1757C	--	2	2	--	5	4	--
GR1760C	--	--	2	3	6	2	2
GR1765C	--	3	3	--	5	3	--
GR1766C	--	4	--	--	5	3	3
GR1767C	--	--	3	--	6	--	--
GR1768C	--	3	3	--	5	3	--
GR1769C	--	3	3	--	--	2	--
GR1771C	--	4	4	--	--	3	5
GR1772C	--	4	--	4	5	--	--
GR1776C	--	--	2	--	5	--	2
GR1777C	--	--	4	--	4	--	--
GR1784C	--	--	3	3	4	--	3
GR1785C	--	--	4	3	4	--	--
GR1788C	--	--	--	--	5	--	--

Table 13. Mineralogy of the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Pyrite	Pyrrhotite	Hematite	Rutile	Realgar Cinnabar	Scheelite	Barite
GR1796C	46 32 32	121 36 53	4	--	--	--	--	--	--

Sample	Epidote	Sphene	Zircon	Apatite	Feldspar	Pyroxene Amphibole	Rock Fragments
GR1796C	--	--	3	--	5	3	--

Table 14. Fisher-K statistics for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	S-FE%	0	0	0	0	0	0	91	0	0.7000000	20.000000	3
4	S-MG%	0	0	0	0	0	0	91	0	0.0700000	5.0000000	4
5	S-CA%	0	0	0	0	0	0	91	0	1.0000000	10.000000	5
6	S-TI%	0	0	0	11	0	0	80	0	0.0500000	2.0000000	6
7	S-MN	0	0	0	0	0	0	91	0	100.00000	2000.0000	7
8	S-AG	90	0	0	0	0	0	1	0	5.0000000	5.0000000	8
9	S-AS	82	0	0	1	0	0	8	0	500.00000	2000.0000	9
10	S-AU	91	0	0	0	0	0	0	0			10
11	S-B	8	0	26	1	0	0	56	0	20.000000	1000.0000	11
12	S-BA	0	0	0	8	0	0	83	0	100.00000	10000.000	12
13	S-BE	81	0	0	0	0	0	10	0	2.0000000	3.0000000	13
14	S-BI	84	0	1	0	0	0	6	0	50.000000	1000.0000	14
15	S-CD	91	0	0	0	0	0	0	0			15
16	S-CO	41	0	0	0	0	0	50	0	10.000000	300.00000	16
17	S-CR	55	0	0	0	0	0	36	0	20.000000	1000.0000	17
18	S-CU	0	0	0	0	0	0	91	0	10.000000	1000.0000	18
19	S-LA	58	0	0	0	0	0	33	0	50.000000	700.00000	19
20	S-MO	87	0	0	0	0	0	4	0	10.000000	100.00000	20
21	S-NB	59	0	10	0	0	0	22	0	50.000000	200.00000	21
22	S-NI	35	0	0	0	0	0	56	0	10.000000	300.00000	22
23	S-PB	57	0	6	0	0	0	28	0	20.000000	500.00000	23
24	S-SB	90	0	0	0	0	0	1	0	200.00000	200.00000	24
25	S-SC	77	10	0	0	0	0	4	0	10.000000	30.000000	25
26	S-SN	80	0	0	0	0	0	11	0	20.000000	700.00000	26
27	S-SR	4	0	0	0	0	0	87	0	200.00000	1000.0000	27
28	S-V	13	0	2	0	0	0	76	0	20.000000	300.00000	28
29	S-W	91	0	0	0	0	0	0	0			29
30	S-Y	5	0	0	0	0	0	86	0	20.000000	500.00000	30
31	S-ZN	79	0	0	0	0	0	12	0	500.00000	7000.0000	31
32	S-ZR	0	0	0	77	0	0	14	0	1000.0000	2000.0000	32
33	S-TH	90	0	0	0	0	0	1	0	200.00000	200.00000	33
34	INST-HG	0	0	2	19	14	0	56	0	0.0200000	3.0000000	34

Table 14. Fisher-K statistics for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	S-FE%	5.0483516	4.0957529	16.775192	94.657910	1.3777032	462.01410	1.6418000	3
4	S-MG%	0.4210989	0.6375377	0.4064543	1.2310918	4.7508661	4.9292547	29.837178	4
5	S-CA%	4.2802198	1.9339206	3.7400488	5.9434364	0.8217159	21.267323	1.5204015	5
6	S-TI%	0.6167500	0.5947700	0.3537513	0.2412114	1.1464382	0.0328746	0.2627024	6
7	S-MN	287.91209	278.02285	77296.703	73600218.	3.4248192	9.5492832D+10	15.982652	7
8	S-AG	5.0000000							8
9	S-AS	1050.0000	555.49206	308571.43	1.1828571D+08	0.6900789	-8.6142857D+10	-0.9047068	9
10	S-AU								10
11	S-B	131.42857	224.94790	50601.558	32114403.	2.8213309	1.9712461D+10	7.6986230	11
12	S-BA	1733.1325	2702.7118	7304651.0	4.1590583D+10	2.1066665	1.8239832D+14	3.4183922	12
13	S-BE	2.3000000	0.4830459	0.2333333	0.1166667	1.0350983	-0.0666667	-1.2244898	13
14	S-BI	278.33333	367.44614	135016.67	1.0275733D+08	2.0712463	8.1081112D+10	4.4477967	14
15	S-CD								15
16	S-CO	34.800000	45.602094	2079.5510	410924.52	4.3331895	1.0182251D+08	23.545323	16
17	S-CR	87.222222	162.54426	26420.635	22956770.	5.3455933	2.1273688D+10	30.475882	17
18	S-CU	72.417582	121.62182	14791.868	10131451.	5.6316689	8.5612445D+09	39.128288	18
19	S-LA	163.63636	160.40609	25730.114	8442885.8	2.0456360	2.4630739D+09	3.7204377	19
20	S-MO	35.000000	43.588989	1900.0000	160000.00	1.9319220	13540000.	3.7506925	20
21	S-NB	76.363636	38.612292	1490.9091	112755.84	1.9586747	9377788.1	4.2188889	21
22	S-NI	42.142857	53.162334	2826.2338	470469.26	3.1312600	90678812.	11.352452	22
23	S-PB	119.28571	121.71395	14814.286	2853970.7	1.5828087	4.7275528D+08	2.1541451	23
24	S-SB	200.00000							24
25	S-SC	20.000000	11.547005	133.33333	0.0	0.0	-106666.67	-6.0000000	25
26	S-SN	134.54545	234.66417	55067.273	26805630.	2.0743674	9.5789102D+09	3.1588497	26
27	S-SR	727.58621	234.61480	55044.106	-4113024.2	-0.3184894	-2.3874981D+09	-0.7879912	27
28	S-V	86.315789	62.435932	3898.2456	261155.73	1.0729902	11086427.	0.7295469	28
29	S-W								29
30	S-Y	123.60465	106.39452	11319.795	2603005.3	2.1613108	6.7754347D+08	5.2876178	30
31	S-ZN	1708.3333	2104.7385	4429924.2	1.8824811D+10	2.0189993	6.4999148D+13	3.3121886	31
32	S-ZR	1535.7143	414.37097	171703.30	-10302198.	-0.1447978	-4.4486763D+10	-1.5089455	32
33	S-TH	200.00000							33
34	INST-HG	0.3067857	0.5691464	0.3239277	0.6610749	3.5857387	1.3790821	13.142986	34

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-MG%)	2	(S-CA%)	0.0243	91
1 (S-MG%)	3	(S-FE%)	0.3052	91
1 (S-MG%)	4	(S-TI%)	0.2488	80
1 (S-MG%)	5	(S-SC)	-0.2623	4
1 (S-MG%)	6	(S-V)	0.3901	76
1 (S-MG%)	7	(S-CR)	0.5577	36
1 (S-MG%)	8	(S-MN)	0.8220	91
1 (S-MG%)	9	(S-CO)	0.1762	50
1 (S-MG%)	10	(S-NI)	0.3545	56
1 (S-MG%)	11	(S-CU)	0.3129	91
1 (S-MG%)	12	(S-ZN)	0.5601	12
1 (S-MG%)	13	(S-MO)	-0.2828	4
1 (S-MG%)	14	(S-PB)	-0.0287	28
1 (S-MG%)	15	(S-AG)	********	1
1 (S-MG%)	16	(S-SN)	0.1954	11
1 (S-MG%)	17	(S-AS)	-0.7857	8
1 (S-MG%)	18	(S-SB)	********	1
1 (S-MG%)	19	(S-BI)	0.1964	6
1 (S-MG%)	20	(INST-HG)	0.2619	56
1 (S-MG%)	21	(S-B)	-0.1462	56
1 (S-MG%)	22	(S-BE)	0.0698	10
1 (S-MG%)	23	(S-SR)	-0.0639	87
1 (S-MG%)	24	(S-BA)	0.0889	83
1 (S-MG%)	25	(S-LA)	0.1473	33
1 (S-MG%)	26	(S-Y)	0.1999	86
1 (S-MG%)	27	(S-ZR)	0.0115	14
1 (S-MG%)	28	(S-NB)	-0.0864	22
1 (S-MG%)	29	(Feldspar)	-0.2823	89
1 (S-MG%)	30	(Pyrite)	-0.0119	86
1 (S-MG%)	31	(Pyrrhite)	********	2
1 (S-MG%)	32	(Zircon)	0.1558	63
1 (S-MG%)	33	(Apatite)	-0.1954	22
1 (S-MG%)	34	(Sphene)	0.3225	33
1 (S-MG%)	35	(Px/Amph)	0.4163	48
1 (S-MG%)	36	(Epidote)	0.9901	3
1 (S-MG%)	37	(Rk Frag.)	-0.0958	23
1 (S-MG%)	38	(Hematite)	-0.3066	8
1 (S-MG%)	39	(Rutile)	-0.1259	13
1 (S-MG%)	40	(Barite)	********	5
1 (S-MG%)	41	(Real/Cin)	********	5
1 (S-MG%)	42	(Schelite)	********	2
2 (S-CA%)	3	(S-FE%)	-0.2004	91
2 (S-CA%)	4	(S-TI%)	-0.3708	80
2 (S-CA%)	5	(S-SC)	********	4
2 (S-CA%)	6	(S-V)	-0.1534	76
2 (S-CA%)	7	(S-CR)	-0.0189	36
2 (S-CA%)	8	(S-MN)	0.1086	91
2 (S-CA%)	9	(S-CO)	-0.3002	50
2 (S-CA%)	10	(S-NI)	-0.3468	56
2 (S-CA%)	11	(S-CU)	-0.1422	91
2 (S-CA%)	12	(S-ZN)	-0.0338	12
2 (S-CA%)	13	(S-MO)	-0.8566	4
2 (S-CA%)	14	(S-PB)	-0.1955	28
2 (S-CA%)	15	(S-AG)	********	1
2 (S-CA%)	16	(S-SN)	-0.0512	11
2 (S-CA%)	17	(S-AS)	-0.0165	8
2 (S-CA%)	18	(S-SB)	********	1
2 (S-CA%)	19	(S-BI)	0.7120	6
2 (S-CA%)	20	(INST-HG)	-0.0464	56
2 (S-CA%)	21	(S-B)	0.2397	56
2 (S-CA%)	22	(S-BE)	0.0747	10
2 (S-CA%)	23	(S-SR)	0.3901	87
2 (S-CA%)	24	(S-BA)	-0.3768	83
2 (S-CA%)	25	(S-LA)	0.5908	33
2 (S-CA%)	26	(S-Y)	0.1054	86
2 (S-CA%)	27	(S-ZR)	-0.3641	14
2 (S-CA%)	28	(S-NB)	0.1619	22
2 (S-CA%)	29	(Feldspar)	0.1460	89
2 (S-CA%)	30	(Pyrite)	-0.1351	86
2 (S-CA%)	31	(Pyrrhite)	********	2
2 (S-CA%)	32	(Zircon)	0.2192	63
2 (S-CA%)	33	(Apatite)	0.3446	22
2 (S-CA%)	34	(Sphene)	-0.0253	33
2 (S-CA%)	35	(Px/Amph)	0.1385	48
2 (S-CA%)	36	(Epidote)	0.5000	3
2 (S-CA%)	37	(Rk Frag.)	-0.1787	23
2 (S-CA%)	38	(Hematite)	0.1992	8
2 (S-CA%)	39	(Rutile)	0.2347	13
2 (S-CA%)	40	(Barite)	********	5
2 (S-CA%)	41	(Real/Cin)	********	5
2 (S-CA%)	42	(Schelite)	********	2
3 (S-FE%)	4	(S-TI%)	0.2261	80
3 (S-FE%)	5	(S-SC)	0.9524	4
3 (S-FE%)	6	(S-V)	0.2917	76
3 (S-FE%)	7	(S-CR)	-0.0053	36
3 (S-FE%)	8	(S-MN)	0.3787	91
3 (S-FE%)	9	(S-CO)	0.8157	50
3 (S-FE%)	10	(S-NI)	0.6721	56
3 (S-FE%)	11	(S-CU)	0.6598	91
3 (S-FE%)	12	(S-ZN)	0.0233	12
3 (S-FE%)	13	(S-MO)	0.8033	4
3 (S-FE%)	14	(S-PB)	0.0074	28
3 (S-FE%)	15	(S-AG)	********	1
3 (S-FE%)	16	(S-SN)	0.1625	11
3 (S-FE%)	17	(S-AS)	-0.0041	8
3 (S-FE%)	18	(S-SB)	********	1
3 (S-FE%)	19	(S-BI)	-0.4450	6
3 (S-FE%)	20	(INST-HG)	0.3329	56
3 (S-FE%)	21	(S-B)	-0.0981	56
3 (S-FE%)	22	(S-BE)	-0.2920	10

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
3 (S-FE%)	23	(S-SR)	-0.3090	87
3 (S-FE%)	24	(S-BA)	0.3551	83
3 (S-FE%)	25	(S-LA)	0.0941	33
3 (S-FE%)	26	(S-Y)	0.2311	86
3 (S-FE%)	27	(S-ZR)	0.6547	14
3 (S-FE%)	28	(S-NB)	0.1512	22
3 (S-FE%)	29	(Feldspar)	-0.4394	89
3 (S-FE%)	30	(Pyrite)	0.6728	86
3 (S-FE%)	31	(Pyrrhite)	********	2
3 (S-FE%)	32	(Zircon)	-0.1437	63
3 (S-FE%)	33	(Apatite)	0.1014	22
3 (S-FE%)	34	(Sphene)	0.0003	33
3 (S-FE%)	35	(Px/Amph)	0.0256	48
3 (S-FE%)	36	(Epidote)	0.9353	3
3 (S-FE%)	37	(Rk Frag.)	-0.2162	23
3 (S-FE%)	38	(Hematite)	-0.6153	8
3 (S-FE%)	39	(Rutile)	-0.0761	13
3 (S-FE%)	40	(Barite)	********	5
3 (S-FE%)	41	(Real/Cin)	********	5
3 (S-FE%)	42	(Schelite)	********	2
4 (S-TI%)	5	(S-SC)	0.5000	3
4 (S-TI%)	6	(S-V)	0.7788	65
4 (S-TI%)	7	(S-CR)	0.0435	26
4 (S-TI%)	8	(S-MN)	0.3844	80
4 (S-TI%)	9	(S-CO)	0.1922	41
4 (S-TI%)	10	(S-NI)	0.3668	46
4 (S-TI%)	11	(S-CU)	0.1609	80
4 (S-TI%)	12	(S-ZN)	0.5368	7
4 (S-TI%)	13	(S-MO)	-0.7321	3
4 (S-TI%)	14	(S-PB)	0.3622	23
4 (S-TI%)	15	(S-AG)	********	1
4 (S-TI%)	16	(S-SN)	0.2692	5
4 (S-TI%)	17	(S-AS)	-0.9274	4
4 (S-TI%)	18	(S-SB)	********	1
4 (S-TI%)	19	(S-BI)	0.4570	4
4 (S-TI%)	20	(INST-HG)	0.3275	51
4 (S-TI%)	21	(S-B)	-0.0753	46
4 (S-TI%)	22	(S-BE)	0.5359	5
4 (S-TI%)	23	(S-SR)	-0.4983	78
4 (S-TI%)	24	(S-BA)	0.5402	74
4 (S-TI%)	25	(S-LA)	0.1195	25
4 (S-TI%)	26	(S-Y)	0.4529	75
4 (S-TI%)	27	(S-ZR)	0.5102	14
4 (S-TI%)	28	(S-NB)	0.4421	12
4 (S-TI%)	29	(Feldspar)	-0.4828	80
4 (S-TI%)	30	(Pyrite)	0.2261	75
4 (S-TI%)	31	(Pyrrhite)	********	2
4 (S-TI%)	32	(Zircon)	0.4303	52
4 (S-TI%)	33	(Apatite)	0.3541	18
4 (S-TI%)	34	(Sphene)	0.5231	29
4 (S-TI%)	35	(Px/Amph)	-0.0049	42
4 (S-TI%)	36	(Epidote)	0.9190	3
4 (S-TI%)	37	(Rk Frag.)	0.4860	17
4 (S-TI%)	38	(Hematite)	-0.1313	6
4 (S-TI%)	39	(Rutile)	********	11
4 (S-TI%)	40	(Barite)	********	4
4 (S-TI%)	41	(Real/Cin)	********	5
4 (S-TI%)	42	(Schelite)	********	2
5 (S-SC)	6	(S-V)	0.7021	4
5 (S-SC)	7	(S-CR)	0.5131	4
5 (S-SC)	8	(S-MN)	-0.2817	4
5 (S-SC)	9	(S-CO)	0.9848	4
5 (S-SC)	10	(S-NI)	0.9535	4
5 (S-SC)	11	(S-CU)	0.8680	4
5 (S-SC)	12	(S-ZN)	********	0
5 (S-SC)	13	(S-MO)	********	0
5 (S-SC)	14	(S-PB)	********	2
5 (S-SC)	15	(S-AG)	********	0
5 (S-SC)	16	(S-SN)	********	1
5 (S-SC)	17	(S-AS)	1.0000	2
5 (S-SC)	18	(S-SB)	********	0
5 (S-SC)	19	(S-BI)	********	1
5 (S-SC)	20	(INST-HG)	0.1018	3
5 (S-SC)	21	(S-B)	-0.5000	3
5 (S-SC)	22	(S-BE)	********	0
5 (S-SC)	23	(S-SR)	-1.0000	3
5 (S-SC)	24	(S-BA)	0.6949	3
5 (S-SC)	25	(S-LA)	********	1
5 (S-SC)	26	(S-Y)	1.0000	4
5 (S-SC)	27	(S-ZR)	********	0
5 (S-SC)	28	(S-NB)	********	1
5 (S-SC)	29	(Feldspar)	-0.6882	4
5 (S-SC)	30	(Pyrite)	0.8660	3
5 (S-SC)	31	(Pyrrhite)	********	0
5 (S-SC)	32	(Zircon)	0.5000	3
5 (S-SC)	33	(Apatite)	********	3
5 (S-SC)	34	(Sphene)	********	1
5 (S-SC)	35	(Px/Amph)	1.0000	3
5 (S-SC)	36	(Epidote)	********	1
5 (S-SC)	37	(Rk Frag.)	1.0000	2
5 (S-SC)	38	(Hematite)	********	0
5 (S-SC)	39	(Rutile)	********	1
5 (S-SC)	40	(Barite)	********	0
5 (S-SC)	41	(Real/Cin)	********	0
5 (S-SC)	42	(Schelite)	********	0
6 (S-V)	7	(S-CR)	0.4189	36
6 (S-V)	8	(S-MN)	0.4655	76
6 (S-V)	9	(S-CO)	0.3464	48
6 (S-V)	10	(S-NI)	0.5113	53
6 (S-V)	11	(S-CU)	0.4056	76

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
6 (S-V)	12	(S-ZN)	0.1906	11
6 (S-V)	13	(S-MO)	-0.9547	4
6 (S-V)	14	(S-PB)	0.2542	26
6 (S-V)	15	(S-AG)	********	1
6 (S-V)	16	(S-SN)	-0.7213	10
6 (S-V)	17	(S-AS)	0.1713	8
6 (S-V)	18	(S-SB)	********	1
6 (S-V)	19	(S-BI)	0.3166	6
6 (S-V)	20	(INST-HG)	0.0982	44
6 (S-V)	21	(S-B)	0.2814	50
6 (S-V)	22	(S-BE)	0.5206	10
6 (S-V)	23	(S-SR)	-0.4944	72
6 (S-V)	24	(S-BA)	0.2571	68
6 (S-V)	25	(S-LA)	0.2719	33
6 (S-V)	26	(S-Y)	0.4888	74
6 (S-V)	27	(S-ZR)	0.0567	10
6 (S-V)	28	(S-NB)	0.6744	22
6 (S-V)	29	(Feldspar)	-0.3402	74
6 (S-V)	30	(Pyrite)	0.1319	72
6 (S-V)	31	(Pyrrhite)	********	2
6 (S-V)	32	(Zircon)	0.3051	57
6 (S-V)	33	(Apatite)	0.1150	21
6 (S-V)	34	(Sphene)	0.4710	31
6 (S-V)	35	(Px/Amph)	0.1728	43
6 (S-V)	36	(Epidote)	1.0000	3
6 (S-V)	37	(Rk Frag.)	0.6352	22
6 (S-V)	38	(Hematite)	-0.1902	8
6 (S-V)	39	(Rutile)	0.5831	13
6 (S-V)	40	(Barite)	********	5
6 (S-V)	41	(Real/Cin)	********	5
6 (S-V)	42	(Schelite)	********	1
7 (S-CR)	8	(S-MN)	0.4687	36
7 (S-CR)	9	(S-CO)	-0.0310	26
7 (S-CR)	10	(S-NI)	0.1921	31
7 (S-CR)	11	(S-CU)	0.0467	36
7 (S-CR)	12	(S-ZN)	0.2847	6
7 (S-CR)	13	(S-MO)	-0.1331	4
7 (S-CR)	14	(S-PB)	0.0023	16
7 (S-CR)	15	(S-AG)	********	0
7 (S-CR)	16	(S-SN)	-0.5863	7
7 (S-CR)	17	(S-AS)	-0.2666	7
7 (S-CR)	18	(S-SB)	********	1
7 (S-CR)	19	(S-BI)	0.3260	6
7 (S-CR)	20	(INST-HG)	0.4630	21
7 (S-CR)	21	(S-B)	-0.1423	30
7 (S-CR)	22	(S-BE)	0.5410	8
7 (S-CR)	23	(S-SR)	-0.1443	32
7 (S-CR)	24	(S-BA)	-0.0209	33
7 (S-CR)	25	(S-LA)	0.1579	20
7 (S-CR)	26	(S-Y)	0.1073	36
7 (S-CR)	27	(S-ZR)	0.8131	3
7 (S-CR)	28	(S-NB)	0.0743	17
7 (S-CR)	29	(Feldspar)	-0.3730	34
7 (S-CR)	30	(Pyrite)	-0.1122	34
7 (S-CR)	31	(Pyrrhite)	********	1
7 (S-CR)	32	(Zircon)	0.3353	27
7 (S-CR)	33	(Apatite)	-0.0432	10
7 (S-CR)	34	(Sphene)	0.4190	17
7 (S-CR)	35	(Px/Amph)	0.4502	27
7 (S-CR)	36	(Epidote)	0.2183	3
7 (S-CR)	37	(Rk Frag.)	0.4115	14
7 (S-CR)	38	(Hematite)	********	3
7 (S-CR)	39	(Rutile)	-0.0384	9
7 (S-CR)	40	(Barite)	********	2
7 (S-CR)	41	(Real/Cin)	********	1
7 (S-CR)	42	(Schelite)	********	0
8 (S-MN)	9	(S-CO)	0.1705	50
8 (S-MN)	10	(S-NI)	0.4988	56
8 (S-MN)	11	(S-CU)	0.3732	91
8 (S-MN)	12	(S-ZN)	0.6952	12
8 (S-MN)	13	(S-MO)	-0.6824	4
8 (S-MN)	14	(S-PB)	0.0733	28
8 (S-MN)	15	(S-AG)	********	1
8 (S-MN)	16	(S-SN)	0.0141	11
8 (S-MN)	17	(S-AS)	-0.5489	8
8 (S-MN)	18	(S-SB)	********	1
8 (S-MN)	19	(S-BI)	-0.1197	6
8 (S-MN)	20	(INST-HG)	0.4470	56
8 (S-MN)	21	(S-B)	-0.0356	56
8 (S-MN)	22	(S-BE)	0.1430	10
8 (S-MN)	23	(S-SR)	-0.1381	87
8 (S-MN)	24	(S-BA)	0.2124	83
8 (S-MN)	25	(S-LA)	0.4268	33
8 (S-MN)	26	(S-Y)	0.4180	86
8 (S-MN)	27	(S-ZR)	0.2787	14
8 (S-MN)	28	(S-NB)	0.2513	22
8 (S-MN)	29	(Feldspar)	-0.4101	89
8 (S-MN)	30	(Pyrite)	0.0893	86
8 (S-MN)	31	(Pyrrhite)	********	2
8 (S-MN)	32	(Zircon)	0.3275	63
8 (S-MN)	33	(Apatite)	-0.0918	22
8 (S-MN)	34	(Sphene)	0.3089	33
8 (S-MN)	35	(Px/Amph)	0.1907	48
8 (S-MN)	36	(Epidote)	1.0000	3
8 (S-MN)	37	(Rk Frag.)	0.0595	23
8 (S-MN)	38	(Hematite)	-0.2160	8
8 (S-MN)	39	(Rutile)	0.1564	13
8 (S-MN)	40	(Barite)	********	5
8 (S-MN)	41	(Real/Cin)	********	5
8 (S-MN)	42	(Schelite)	********	2

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
9 (S-CO)	10	(S-NI)	0.6982	44
9 (S-CO)	11	(S-CU)	0.5068	50
9 (S-CO)	12	(S-ZN)	0.3032	11
9 (S-CO)	13	(S-MO)	0.3667	4
9 (S-CO)	14	(S-PB)	0.0973	23
9 (S-CO)	15	(S-AG)	********	1
9 (S-CO)	16	(S-SN)	-0.1253	10
9 (S-CO)	17	(S-AS)	0.3158	8
9 (S-CO)	18	(S-SB)	********	1
9 (S-CO)	19	(S-BI)	-0.5252	5
9 (S-CO)	20	(INST-HG)	0.0884	27
9 (S-CO)	21	(S-B)	-0.1993	32
9 (S-CO)	22	(S-BE)	-0.2597	5
9 (S-CO)	23	(S-SR)	-0.1592	47
9 (S-CO)	24	(S-BA)	0.2658	44
9 (S-CO)	25	(S-LA)	0.0488	23
9 (S-CO)	26	(S-Y)	0.1481	50
9 (S-CO)	27	(S-ZR)	********	3
9 (S-CO)	28	(S-NB)	0.0577	15
9 (S-CO)	29	(Feldspar)	-0.3590	49
9 (S-CO)	30	(Pyrite)	0.5009	48
9 (S-CO)	31	(Pyrrhite)	********	2
9 (S-CO)	32	(Zircon)	-0.2070	39
9 (S-CO)	33	(Apatite)	-0.2190	15
9 (S-CO)	34	(Sphene)	0.0784	20
9 (S-CO)	35	(Px/Amph)	0.0119	27
9 (S-CO)	36	(Epidote)	********	2
9 (S-CO)	37	(Rk Frag.)	0.1421	16
9 (S-CO)	38	(Hematite)	********	5
9 (S-CO)	39	(Rutile)	0.4255	8
9 (S-CO)	40	(Barite)	********	4
9 (S-CO)	41	(Real/Cin)	********	3
9 (S-CO)	42	(Schelite)	********	0
10 (S-NI)	11	(S-CU)	0.5647	56
10 (S-NI)	12	(S-ZN)	0.4910	11
10 (S-NI)	13	(S-MO)	0.2205	4
10 (S-NI)	14	(S-PB)	0.2750	21
10 (S-NI)	15	(S-AG)	********	1
10 (S-NI)	16	(S-SN)	-0.3094	10
10 (S-NI)	17	(S-AS)	0.0173	8
10 (S-NI)	18	(S-SB)	********	1
10 (S-NI)	19	(S-BI)	-0.5852	6
10 (S-NI)	20	(INST-HG)	0.2147	29
10 (S-NI)	21	(S-B)	-0.0810	40
10 (S-NI)	22	(S-BE)	-0.0820	7
10 (S-NI)	23	(S-SR)	-0.3574	53
10 (S-NI)	24	(S-BA)	0.5645	49
10 (S-NI)	25	(S-LA)	0.0843	26
10 (S-NI)	26	(S-Y)	0.3025	54
10 (S-NI)	27	(S-ZR)	0.5580	6
10 (S-NI)	28	(S-NB)	0.1799	17
10 (S-NI)	29	(Feldspar)	-0.5013	55
10 (S-NI)	30	(Pyrite)	0.4819	55
10 (S-NI)	31	(Pyrrhite)	********	2
10 (S-NI)	32	(Zircon)	0.1723	42
10 (S-NI)	33	(Apatite)	-0.0181	18
10 (S-NI)	34	(Sphene)	0.1860	23
10 (S-NI)	35	(Px/Amph)	0.1229	30
10 (S-NI)	36	(Epidote)	0.9008	3
10 (S-NI)	37	(Rk Frag.)	0.0965	19
10 (S-NI)	38	(Hematite)	********	7
10 (S-NI)	39	(Rutile)	0.3481	8
10 (S-NI)	40	(Barite)	********	5
10 (S-NI)	41	(Real/Cin)	********	4
10 (S-NI)	42	(Schelite)	********	2
11 (S-CU)	12	(S-ZN)	0.1882	12
11 (S-CU)	13	(S-MO)	0.4597	4
11 (S-CU)	14	(S-PB)	0.2045	28
11 (S-CU)	15	(S-AG)	********	1
11 (S-CU)	16	(S-SN)	0.0292	11
11 (S-CU)	17	(S-AS)	-0.0212	8
11 (S-CU)	18	(S-SB)	********	1
11 (S-CU)	19	(S-BI)	-0.7773	6
11 (S-CU)	20	(INST-HG)	0.2729	56
11 (S-CU)	21	(S-B)	0.1265	56
11 (S-CU)	22	(S-BE)	0.5594	10
11 (S-CU)	23	(S-SR)	-0.2880	87
11 (S-CU)	24	(S-BA)	0.1681	83
11 (S-CU)	25	(S-LA)	0.2763	33
11 (S-CU)	26	(S-Y)	0.3572	86
11 (S-CU)	27	(S-ZR)	0.4373	14
11 (S-CU)	28	(S-NB)	0.4060	22
11 (S-CU)	29	(Feldspar)	-0.4201	89
11 (S-CU)	30	(Pyrite)	0.4969	86
11 (S-CU)	31	(Pyrrhite)	********	2
11 (S-CU)	32	(Zircon)	0.0451	63
11 (S-CU)	33	(Apatite)	0.4039	22
11 (S-CU)	34	(Sphene)	0.0757	33
11 (S-CU)	35	(Px/Amph)	-0.1255	48
11 (S-CU)	36	(Epidote)	0.8068	3
11 (S-CU)	37	(Rk Frag.)	0.4678	23
11 (S-CU)	38	(Hematite)	-0.3611	8
11 (S-CU)	39	(Rutile)	0.4812	13
11 (S-CU)	40	(Barite)	********	5
11 (S-CU)	41	(Real/Cin)	********	5
11 (S-CU)	42	(Schelite)	********	2
12 (S-ZN)	13	(S-MO)	********	1
12 (S-ZN)	14	(S-PB)	0.0958	5
12 (S-ZN)	15	(S-AG)	********	1
12 (S-ZN)	16	(S-SN)	0.9560	3

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
12 (S-ZN)	17	(S-AS)	********	2
12 (S-ZN)	18	(S-SB)	********	0
12 (S-ZN)	19	(S-BI)	********	1
12 (S-ZN)	20	(INST-HG)	0.0374	5
12 (S-ZN)	21	(S-B)	-0.2792	10
12 (S-ZN)	22	(S-BE)	1.0000	2
12 (S-ZN)	23	(S-SR)	0.1870	11
12 (S-ZN)	24	(S-BA)	-0.6808	8
12 (S-ZN)	25	(S-LA)	0.0921	8
12 (S-ZN)	26	(S-Y)	0.3367	12
12 (S-ZN)	27	(S-ZR)	********	1
12 (S-ZN)	28	(S-NB)	-0.7627	4
12 (S-ZN)	29	(Feldspar)	-0.7130	11
12 (S-ZN)	30	(Pyrite)	0.2090	12
12 (S-ZN)	31	(Pyrrhite)	********	1
12 (S-ZN)	32	(Zircon)	0.4501	10
12 (S-ZN)	33	(Apatite)	-0.0647	4
12 (S-ZN)	34	(Sphene)	0.4193	5
12 (S-ZN)	35	(Px/Amph)	0.4153	8
12 (S-ZN)	36	(Epidote)	********	0
12 (S-ZN)	37	(Rk Frag.)	0.2235	5
12 (S-ZN)	38	(Hematite)	********	2
12 (S-ZN)	39	(Rutile)	********	3
12 (S-ZN)	40	(Barite)	********	2
12 (S-ZN)	41	(Real/Cin)	********	1
12 (S-ZN)	42	(Schelite)	********	0
13 (S-MO)	14	(S-PB)	-0.6490	3
13 (S-MO)	15	(S-AG)	********	0
13 (S-MO)	16	(S-SN)	********	1
13 (S-MO)	17	(S-AS)	********	1
13 (S-MO)	18	(S-SB)	********	0
13 (S-MO)	19	(S-BI)	********	0
13 (S-MO)	20	(INST-HG)	0.7641	3
13 (S-MO)	21	(S-B)	********	2
13 (S-MO)	22	(S-BE)	********	1
13 (S-MO)	23	(S-SR)	-0.5885	4
13 (S-MO)	24	(S-BA)	-0.7321	3
13 (S-MO)	25	(S-LA)	0.7442	3
13 (S-MO)	26	(S-Y)	-0.8693	4
13 (S-MO)	27	(S-ZR)	********	0
13 (S-MO)	28	(S-NB)	********	2
13 (S-MO)	29	(Feldspar)	-0.9560	3
13 (S-MO)	30	(Pyrite)	0.4980	4
13 (S-MO)	31	(Pyrrhite)	********	0
13 (S-MO)	32	(Zircon)	-1.0000	3
13 (S-MO)	33	(Apatite)	********	0
13 (S-MO)	34	(Sphene)	-1.0000	3
13 (S-MO)	35	(Px/Amph)	0.7321	3
13 (S-MO)	36	(Epidote)	********	1
13 (S-MO)	37	(Rk Frag.)	********	2
13 (S-MO)	38	(Hematite)	********	0
13 (S-MO)	39	(Rutile)	********	2
13 (S-MO)	40	(Barite)	********	1
13 (S-MO)	41	(Real/Cin)	********	0
13 (S-MO)	42	(Schelite)	********	0
14 (S-PB)	15	(S-AG)	********	1
14 (S-PB)	16	(S-SN)	0.6195	5
14 (S-PB)	17	(S-AS)	-0.3099	7
14 (S-PB)	18	(S-SB)	********	1
14 (S-PB)	19	(S-BI)	0.4051	4
14 (S-PB)	20	(INST-HG)	0.1172	18
14 (S-PB)	21	(S-B)	0.2391	15
14 (S-PB)	22	(S-BE)	********	3
14 (S-PB)	23	(S-SR)	-0.2247	25
14 (S-PB)	24	(S-BA)	0.2998	27
14 (S-PB)	25	(S-LA)	0.1377	14
14 (S-PB)	26	(S-Y)	0.2330	28
14 (S-PB)	27	(S-ZR)	********	2
14 (S-PB)	28	(S-NB)	-0.2600	10
14 (S-PB)	29	(Feldspar)	-0.0327	27
14 (S-PB)	30	(Pyrite)	-0.0145	28
14 (S-PB)	31	(Pyrrhite)	********	2
14 (S-PB)	32	(Zircon)	0.1371	22
14 (S-PB)	33	(Apatite)	-0.4110	4
14 (S-PB)	34	(Sphene)	-0.4465	12
14 (S-PB)	35	(Px/Amph)	-0.1307	16
14 (S-PB)	36	(Epidote)	********	1
14 (S-PB)	37	(Rk Frag.)	0.1355	9
14 (S-PB)	38	(Hematite)	-1.0000	2
14 (S-PB)	39	(Rutile)	-0.0777	6
14 (S-PB)	40	(Barite)	********	2
14 (S-PB)	41	(Real/Cin)	********	1
14 (S-PB)	42	(Schelite)	********	0
15 (S-AG)	16	(S-SN)	********	1
15 (S-AG)	17	(S-AS)	********	1
15 (S-AG)	18	(S-SB)	********	0
15 (S-AG)	19	(S-BI)	********	0
15 (S-AG)	20	(INST-HG)	********	0
15 (S-AG)	21	(S-B)	********	1
15 (S-AG)	22	(S-BE)	********	0
15 (S-AG)	23	(S-SR)	********	1
15 (S-AG)	24	(S-BA)	********	0
15 (S-AG)	25	(S-LA)	********	1
15 (S-AG)	26	(S-Y)	********	1
15 (S-AG)	27	(S-ZR)	********	1
15 (S-AG)	28	(S-NB)	********	0
15 (S-AG)	29	(Feldspar)	********	1
15 (S-AG)	30	(Pyrite)	********	1
15 (S-AG)	31	(Pyrrhite)	********	0
15 (S-AG)	32	(Zircon)	********	0

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
15 (S-AG)	33	(Apatite)	********	0
15 (S-AG)	34	(Sphene)	********	1
15 (S-AG)	35	(Px/Amph)	********	1
15 (S-AG)	36	(Epidote)	********	0
15 (S-AG)	37	(Rk Frag.)	********	1
15 (S-AG)	38	(Hematite)	********	0
15 (S-AG)	39	(Rutile)	********	0
15 (S-AG)	40	(Barite)	********	1
15 (S-AG)	41	(Real/Cin)	********	0
15 (S-AG)	42	(Schelite)	********	0
16 (S-SN)	17	(S-AS)	-0.7117	3
16 (S-SN)	18	(S-SB)	********	0
16 (S-SN)	19	(S-BI)	********	2
16 (S-SN)	20	(INST-HG)	0.1161	7
16 (S-SN)	21	(S-B)	-0.5772	8
16 (S-SN)	22	(S-BE)	********	3
16 (S-SN)	23	(S-SR)	0.3296	11
16 (S-SN)	24	(S-BA)	0.0209	10
16 (S-SN)	25	(S-LA)	-0.3209	6
16 (S-SN)	26	(S-Y)	-0.3077	10
16 (S-SN)	27	(S-ZR)	********	1
16 (S-SN)	28	(S-NB)	-0.6218	5
16 (S-SN)	29	(Feldspar)	0.3760	10
16 (S-SN)	30	(Pyrite)	-0.5881	11
16 (S-SN)	31	(Pyrrhite)	********	0
16 (S-SN)	32	(Zircon)	-0.0518	8
16 (S-SN)	33	(Apatite)	********	1
16 (S-SN)	34	(Sphene)	-0.5574	5
16 (S-SN)	35	(Px/Amph)	-0.2533	5
16 (S-SN)	36	(Epidote)	********	0
16 (S-SN)	37	(Rk Frag.)	-0.5454	5
16 (S-SN)	38	(Hematite)	********	3
16 (S-SN)	39	(Rutile)	********	1
16 (S-SN)	40	(Barite)	********	2
16 (S-SN)	41	(Real/Cin)	********	0
16 (S-SN)	42	(Schelite)	********	0
17 (S-AS)	18	(S-SB)	********	0
17 (S-AS)	19	(S-BI)	-1.0000	2
17 (S-AS)	20	(INST-HG)	********	2
17 (S-AS)	21	(S-B)	0.5743	6
17 (S-AS)	22	(S-BE)	********	1
17 (S-AS)	23	(S-SR)	-0.4213	7
17 (S-AS)	24	(S-BA)	-0.1616	6
17 (S-AS)	25	(S-LA)	0.9543	3
17 (S-AS)	26	(S-Y)	0.5337	8
17 (S-AS)	27	(S-ZR)	********	2
17 (S-AS)	28	(S-NB)	-0.1757	4
17 (S-AS)	29	(Feldspar)	-0.0947	8
17 (S-AS)	30	(Pyrite)	-0.4729	7
17 (S-AS)	31	(Pyrrhite)	********	0
17 (S-AS)	32	(Zircon)	-0.6735	4
17 (S-AS)	33	(Apatite)	1.0000	2
17 (S-AS)	34	(Sphene)	********	1
17 (S-AS)	35	(Px/Amph)	0.0465	6
17 (S-AS)	36	(Epidote)	********	0
17 (S-AS)	37	(Rk Frag.)	0.7023	5
17 (S-AS)	38	(Hematite)	********	0
17 (S-AS)	39	(Rutile)	********	0
17 (S-AS)	40	(Barite)	********	1
17 (S-AS)	41	(Real/Cin)	********	0
17 (S-AS)	42	(Schelite)	********	0
18 (S-SB)	19	(S-BI)	********	1
18 (S-SB)	20	(INST-HG)	********	1
18 (S-SB)	21	(S-B)	********	0
18 (S-SB)	22	(S-BE)	********	0
18 (S-SB)	23	(S-SR)	********	0
18 (S-SB)	24	(S-BA)	********	1
18 (S-SB)	25	(S-LA)	********	0
18 (S-SB)	26	(S-Y)	********	1
18 (S-SB)	27	(S-ZR)	********	0
18 (S-SB)	28	(S-NB)	********	1
18 (S-SB)	29	(Feldspar)	********	1
18 (S-SB)	30	(Pyrite)	********	1
18 (S-SB)	31	(Pyrrhite)	********	0
18 (S-SB)	32	(Zircon)	********	0
18 (S-SB)	33	(Apatite)	********	0
18 (S-SB)	34	(Sphene)	********	1
18 (S-SB)	35	(Px/Amph)	********	0
18 (S-SB)	36	(Epidote)	********	0
18 (S-SB)	37	(Rk Frag.)	********	0
18 (S-SB)	38	(Hematite)	********	0
18 (S-SB)	39	(Rutile)	********	0
18 (S-SB)	40	(Barite)	********	0
18 (S-SB)	41	(Real/Cin)	********	0
18 (S-SB)	42	(Schelite)	********	0
19 (S-BI)	20	(INST-HG)	0.1834	4
19 (S-BI)	21	(S-B)	0.4058	4
19 (S-BI)	22	(S-BE)	********	0
19 (S-BI)	23	(S-SR)	0.8951	5
19 (S-BI)	24	(S-BA)	0.2691	6
19 (S-BI)	25	(S-LA)	********	1
19 (S-BI)	26	(S-Y)	-0.7157	6
19 (S-BI)	27	(S-ZR)	1.0000	2
19 (S-BI)	28	(S-NB)	0.9726	3
19 (S-BI)	29	(Feldspar)	0.3747	6
19 (S-BI)	30	(Pyrite)	-0.3847	6
19 (S-BI)	31	(Pyrrhite)	********	0
19 (S-BI)	32	(Zircon)	********	3
19 (S-BI)	33	(Apatite)	********	0
19 (S-BI)	34	(Sphene)	-0.3391	3

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
19 (S-BI)	35	(Px/Amph)	0.8176	4
19 (S-BI)	36	(Epidote)	********	0
19 (S-BI)	37	(Rk Frag.)	0.0426	4
19 (S-BI)	38	(Hematite)	********	1
19 (S-BI)	39	(Rutile)	********	1
19 (S-BI)	40	(Barite)	********	0
19 (S-BI)	41	(Real/Cin)	********	0
19 (S-BI)	42	(Schelite)	********	0
20 (INST-HG)	21	(S-B)	0.1069	31
20 (INST-HG)	22	(S-BE)	0.1981	6
20 (INST-HG)	23	(S-SR)	-0.2115	52
20 (INST-HG)	24	(S-BA)	0.4451	53
20 (INST-HG)	25	(S-LA)	0.6009	18
20 (INST-HG)	26	(S-Y)	0.3615	53
20 (INST-HG)	27	(S-ZR)	0.6441	9
20 (INST-HG)	28	(S-NB)	0.4423	13
20 (INST-HG)	29	(Feldspar)	-0.4265	54
20 (INST-HG)	30	(Pyrite)	0.2924	53
20 (INST-HG)	31	(Pyrrhite)	********	2
20 (INST-HG)	32	(Zircon)	0.3250	38
20 (INST-HG)	33	(Apatite)	-0.3628	9
20 (INST-HG)	34	(Sphene)	0.3844	22
20 (INST-HG)	35	(Px/Amph)	0.1378	29
20 (INST-HG)	36	(Epidote)	0.6925	3
20 (INST-HG)	37	(Rk Frag.)	-0.0638	11
20 (INST-HG)	38	(Hematite)	-0.4533	6
20 (INST-HG)	39	(Rutile)	0.2951	7
20 (INST-HG)	40	(Barite)	********	1
20 (INST-HG)	41	(Real/Cin)	********	1
20 (INST-HG)	42	(Schelite)	********	2
21 (S-B)	22	(S-BE)	0.0234	9
21 (S-B)	23	(S-SR)	-0.1033	53
21 (S-B)	24	(S-BA)	-0.1703	49
21 (S-B)	25	(S-LA)	0.5291	24
21 (S-B)	26	(S-Y)	0.1879	54
21 (S-B)	27	(S-ZR)	0.2827	7
21 (S-B)	28	(S-NB)	0.3472	19
21 (S-B)	29	(Feldspar)	-0.0145	54
21 (S-B)	30	(Pyrite)	0.0101	52
21 (S-B)	31	(Pyrrhite)	********	1
21 (S-B)	32	(Zircon)	0.1893	42
21 (S-B)	33	(Apatite)	0.2359	19
21 (S-B)	34	(Sphene)	0.0558	22
21 (S-B)	35	(Px/Amph)	-0.0606	33
21 (S-B)	36	(Epidote)	-1.0000	2
21 (S-B)	37	(Rk Frag.)	0.4304	18
21 (S-B)	38	(Hematite)	********	6
21 (S-B)	39	(Rutile)	0.2603	10
21 (S-B)	40	(Barite)	********	5
21 (S-B)	41	(Real/Cin)	********	4
21 (S-B)	42	(Schelite)	********	2
22 (S-BE)	23	(S-SR)	-0.1551	9
22 (S-BE)	24	(S-BA)	-0.1055	10
22 (S-BE)	25	(S-LA)	0.3779	7
22 (S-BE)	26	(S-Y)	0.2039	10
22 (S-BE)	27	(S-ZR)	********	0
22 (S-BE)	28	(S-NB)	0.3470	5
22 (S-BE)	29	(Feldspar)	-0.5185	8
22 (S-BE)	30	(Pyrite)	-0.4005	10
22 (S-BE)	31	(Pyrrhite)	********	0
22 (S-BE)	32	(Zircon)	0.7746	8
22 (S-BE)	33	(Apatite)	********	2
22 (S-BE)	34	(Sphene)	0.5345	5
22 (S-BE)	35	(Px/Amph)	0.0000	5
22 (S-BE)	36	(Epidote)	********	0
22 (S-BE)	37	(Rk Frag.)	0.9045	4
22 (S-BE)	38	(Hematite)	********	2
22 (S-BE)	39	(Rutile)	0.5000	3
22 (S-BE)	40	(Barite)	********	1
22 (S-BE)	41	(Real/Cin)	********	0
22 (S-BE)	42	(Schelite)	********	0
23 (S-SR)	24	(S-BA)	-0.3339	79
23 (S-SR)	25	(S-LA)	-0.1734	30
23 (S-SR)	26	(S-Y)	-0.4974	82
23 (S-SR)	27	(S-ZR)	-0.0248	14
23 (S-SR)	28	(S-NB)	-0.4906	19
23 (S-SR)	29	(Feldspar)	0.4090	86
23 (S-SR)	30	(Pyrite)	-0.2340	82
23 (S-SR)	31	(Pyrrhite)	********	2
23 (S-SR)	32	(Zircon)	-0.3415	60
23 (S-SR)	33	(Apatite)	-0.1591	21
23 (S-SR)	34	(Sphene)	-0.2450	30
23 (S-SR)	35	(Px/Amph)	-0.0082	45
23 (S-SR)	36	(Epidote)	********	3
23 (S-SR)	37	(Rk Frag.)	-0.5188	22
23 (S-SR)	38	(Hematite)	0.3871	8
23 (S-SR)	39	(Rutile)	-0.4638	11
23 (S-SR)	40	(Barite)	********	5
23 (S-SR)	41	(Real/Cin)	********	5
23 (S-SR)	42	(Schelite)	********	2
24 (S-BA)	25	(S-LA)	-0.0035	27
24 (S-BA)	26	(S-Y)	0.2157	78
24 (S-BA)	27	(S-ZR)	0.4296	13
24 (S-BA)	28	(S-NB)	0.0422	19
24 (S-BA)	29	(Feldspar)	-0.2223	81
24 (S-BA)	30	(Pyrite)	0.2889	80
24 (S-BA)	31	(Pyrrhite)	********	2
24 (S-BA)	32	(Zircon)	0.1254	58
24 (S-BA)	33	(Apatite)	-0.2324	17
24 (S-BA)	34	(Sphene)	0.0846	29

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
24 (S-BA)	35	(Px/Amph)	-0.0046	45
24 (S-BA)	36	(Epidote)	0.8660	3
24 (S-BA)	37	(Rk Frag.)	-0.2314	19
24 (S-BA)	38	(Hematite)	0.0316	8
24 (S-BA)	39	(Rutile)	-0.0486	12
24 (S-BA)	40	(Barite)	********	4
24 (S-BA)	41	(Real/Cin)	********	5
24 (S-BA)	42	(Schelite)	********	2
25 (S-LA)	26	(S-Y)	0.5892	33
25 (S-LA)	27	(S-ZR)	********	2
25 (S-LA)	28	(S-NB)	0.3559	14
25 (S-LA)	29	(Feldspar)	-0.3953	31
25 (S-LA)	30	(Pyrite)	0.2001	32
25 (S-LA)	31	(Pyrrhite)	********	0
25 (S-LA)	32	(Zircon)	0.3912	28
25 (S-LA)	33	(Apatite)	0.3965	13
25 (S-LA)	34	(Sphene)	0.0247	15
25 (S-LA)	35	(Px/Amph)	0.0529	22
25 (S-LA)	36	(Epidote)	********	1
25 (S-LA)	37	(Rk Frag.)	0.2678	12
25 (S-LA)	38	(Hematite)	********	3
25 (S-LA)	39	(Rutile)	0.7482	10
25 (S-LA)	40	(Barite)	********	2
25 (S-LA)	41	(Real/Cin)	********	3
25 (S-LA)	42	(Schelite)	********	1
26 (S-Y)	27	(S-ZR)	0.4447	10
26 (S-Y)	28	(S-NB)	0.5573	22
26 (S-Y)	29	(Feldspar)	-0.5093	84
26 (S-Y)	30	(Pyrite)	0.1703	82
26 (S-Y)	31	(Pyrrhite)	********	2
26 (S-Y)	32	(Zircon)	0.5763	63
26 (S-Y)	33	(Apatite)	0.5888	22
26 (S-Y)	34	(Sphene)	0.5251	33
26 (S-Y)	35	(Px/Amph)	0.1453	46
26 (S-Y)	36	(Epidote)	0.7442	3
26 (S-Y)	37	(Rk Frag.)	0.4143	22
26 (S-Y)	38	(Hematite)	-0.5102	8
26 (S-Y)	39	(Rutile)	0.6579	13
26 (S-Y)	40	(Barite)	********	5
26 (S-Y)	41	(Real/Cin)	********	5
26 (S-Y)	42	(Schelite)	********	1
27 (S-ZR)	28	(S-NB)	********	0
27 (S-ZR)	29	(Feldspar)	-0.5500	14
27 (S-ZR)	30	(Pyrite)	0.5503	11
27 (S-ZR)	31	(Pyrrhite)	********	0
27 (S-ZR)	32	(Zircon)	********	2
27 (S-ZR)	33	(Apatite)	1.0000	2
27 (S-ZR)	34	(Sphene)	********	5
27 (S-ZR)	35	(Px/Amph)	-0.2371	8
27 (S-ZR)	36	(Epidote)	********	0
27 (S-ZR)	37	(Rk Frag.)	-0.6667	5
27 (S-ZR)	38	(Hematite)	********	0
27 (S-ZR)	39	(Rutile)	********	0
27 (S-ZR)	40	(Barite)	********	1
27 (S-ZR)	41	(Real/Cin)	********	1
27 (S-ZR)	42	(Schelite)	********	1
28 (S-NB)	29	(Feldspar)	-0.1560	20
28 (S-NB)	30	(Pyrite)	0.2165	22
28 (S-NB)	31	(Pyrrhite)	********	1
28 (S-NB)	32	(Zircon)	0.3458	20
28 (S-NB)	33	(Apatite)	0.4132	8
28 (S-NB)	34	(Sphene)	0.4493	14
28 (S-NB)	35	(Px/Amph)	0.0593	11
28 (S-NB)	36	(Epidote)	********	0
28 (S-NB)	37	(Rk Frag.)	0.7627	9
28 (S-NB)	38	(Hematite)	********	1
28 (S-NB)	39	(Rutile)	0.9681	7
28 (S-NB)	40	(Barite)	********	1
28 (S-NB)	41	(Real/Cin)	********	1
28 (S-NB)	42	(Schelite)	********	0
29 (Feldspar)	30	(Pyrite)	-0.5188	84
29 (Feldspar)	31	(Pyrrhite)	********	2
29 (Feldspar)	32	(Zircon)	-0.5522	61
29 (Feldspar)	33	(Apatite)	-0.4929	22
29 (Feldspar)	34	(Sphene)	-0.5128	31
29 (Feldspar)	35	(Px/Amph)	-0.4443	46
29 (Feldspar)	36	(Epidote)	********	3
29 (Feldspar)	37	(Rk Frag.)	-0.4201	22
29 (Feldspar)	38	(Hematite)	0.5345	8
29 (Feldspar)	39	(Rutile)	********	11
29 (Feldspar)	40	(Barite)	********	4
29 (Feldspar)	41	(Real/Cin)	********	5
29 (Feldspar)	42	(Schelite)	********	2
30 (Pyrite)	31	(Pyrrhite)	********	2
30 (Pyrite)	32	(Zircon)	0.0726	63
30 (Pyrite)	33	(Apatite)	0.5187	18
30 (Pyrite)	34	(Sphene)	0.0844	31
30 (Pyrite)	35	(Px/Amph)	-0.0625	46
30 (Pyrite)	36	(Epidote)	0.5000	3
30 (Pyrite)	37	(Rk Frag.)	-0.0685	23
30 (Pyrite)	38	(Hematite)	0.0000	8
30 (Pyrite)	39	(Rutile)	0.1919	13
30 (Pyrite)	40	(Barite)	********	5
30 (Pyrite)	41	(Real/Cin)	********	5
30 (Pyrite)	42	(Schelite)	********	2
31 (Pyrrhite)	32	(Zircon)	********	2
31 (Pyrrhite)	33	(Apatite)	********	0
31 (Pyrrhite)	34	(Sphene)	********	2
31 (Pyrrhite)	35	(Px/Amph)	********	1
31 (Pyrrhite)	36	(Epidote)	********	0

Table 15. Correlation coefficients for analytical data from the nonmagnetic, heavy-mineral fraction from panned concentrate samples from stream sediments collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
31 (Pyrrhite)	37	(Rk Frag.)	********	1
31 (Pyrrhite)	38	(Hematite)	********	0
31 (Pyrrhite)	39	(Rutile)	********	0
31 (Pyrrhite)	40	(Barite)	********	0
31 (Pyrrhite)	41	(Real/Cin)	********	0
31 (Pyrrhite)	42	(Schelite)	********	0
32 (Zircon)	33	(Apatite)	0.4359	17
32 (Zircon)	34	(Sphene)	0.8632	22
32 (Zircon)	35	(Px/Amph)	0.3809	32
32 (Zircon)	36	(Epidote)	********	2
32 (Zircon)	37	(Rk Frag.)	0.7806	16
32 (Zircon)	38	(Hematite)	0.0605	8
32 (Zircon)	39	(Rutile)	0.3162	12
32 (Zircon)	40	(Barite)	********	4
32 (Zircon)	41	(Real/Cin)	********	5
32 (Zircon)	42	(Schelite)	********	1
33 (Apatite)	34	(Sphene)	0.5571	6
33 (Apatite)	35	(Px/Amph)	0.1427	11
33 (Apatite)	36	(Epidote)	********	1
33 (Apatite)	37	(Rk Frag.)	0.5774	6
33 (Apatite)	38	(Hematite)	********	1
33 (Apatite)	39	(Rutile)	********	3
33 (Apatite)	40	(Barite)	********	2
33 (Apatite)	41	(Real/Cin)	********	4
33 (Apatite)	42	(Schelite)	********	1
34 (Sphene)	35	(Px/Amph)	0.4721	23
34 (Sphene)	36	(Epidote)	********	1
34 (Sphene)	37	(Rk Frag.)	0.5398	8
34 (Sphene)	38	(Hematite)	********	3
34 (Sphene)	39	(Rutile)	0.4015	10
34 (Sphene)	40	(Barite)	********	2
34 (Sphene)	41	(Real/Cin)	********	1
34 (Sphene)	42	(Schelite)	********	0
35 (Px/Amph)	36	(Epidote)	-0.5000	3
35 (Px/Amph)	37	(Rk Frag.)	0.2193	12
35 (Px/Amph)	38	(Hematite)	********	5
35 (Px/Amph)	39	(Rutile)	-0.1280	10
35 (Px/Amph)	40	(Barite)	********	3
35 (Px/Amph)	41	(Real/Cin)	********	1
35 (Px/Amph)	42	(Schelite)	********	1
36 (Epidote)	37	(Rk Frag.)	********	1
36 (Epidote)	38	(Hematite)	********	0
36 (Epidote)	39	(Rutile)	********	0
36 (Epidote)	40	(Barite)	********	0
36 (Epidote)	41	(Real/Cin)	********	0
36 (Epidote)	42	(Schelite)	********	0
37 (Rk Frag.)	38	(Hematite)	********	2
37 (Rk Frag.)	39	(Rutile)	0.9272	4
37 (Rk Frag.)	40	(Barite)	********	2
37 (Rk Frag.)	41	(Real/Cin)	********	2
37 (Rk Frag.)	42	(Schelite)	********	1
38 (Hematite)	39	(Rutile)	********	0
38 (Hematite)	40	(Barite)	********	0
38 (Hematite)	41	(Real/Cin)	********	0
38 (Hematite)	42	(Schelite)	********	1
39 (Rutile)	40	(Barite)	********	1
39 (Rutile)	41	(Real/Cin)	********	2
39 (Rutile)	42	(Schelite)	********	0
40 (Barite)	41	(Real/Cin)	********	2
40 (Barite)	42	(Schelite)	********	0
41 (Real/Cin)	42	(Schelite)	********	0

Table 16. Analytical data from water samples collected in the Goat Rocks area

The following qualifiers are used in reporting spectrographic data: --, no determination made; <, detected, but at a concentration less than the value reported.

Sample	Latitude	Longitude	Cu-ppm aa	Mo-ppm aa	Zn-ppm aa	SO4-- ppm	NO3- ppm	F ppm	CL ppm
GR1000W	46 30 42	121 22 10	<.0010	<.0010	.0150	2.60	<.1	.02	1.10
GR1001W	46 30 42	121 29 5	.0034	<.0010	.0066	2.60	<.1	.02	.80
GR1004W	46 30 20	121 29 7	<.0010	<.0010	.0051	2.00	<.1	.03	.80
GR1005W	46 29 25	121 29 23	.0010	<.0010	.0049	2.40	<.1	.03	.90
GR1006W	46 28 51	121 26 46	<.0010	<.0010	.0097	2.20	<.1	.23	.80
GR1007W	46 33 2	121 25 40	<.0010	<.0010	.0038	4.70	<.1	.05	.70
GR1008W	46 34 13	121 26 2	<.0010	<.0010	.0039	2.00	<.1	.04	2.20
GR1009W	46 34 8	121 26 8	<.0010	.0010	.0041	4.60	<.1	.11	.80
GR1012W	46 28 42	121 27 30	<.0010	<.0010	.0050	12.00	<.1	.29	1.20
GR1013W	46 28 39	121 28 8	<.0010	<.0010	.0046	.60	<.1	.04	3.30
GR1014W	46 28 29	121 28 19	<.0010	<.0010	.0045	3.20	<.1	.16	2.70
GR1015W	46 28 29	121 28 30	<.0010	<.0010	.0033	1.80	<.1	.34	1.80
GR1016W	46 28 3	121 29 19	<.0010	<.0010	.0032	2.07	<.1	.10	2.30
GR1017W	46 26 58	121 29 57	<.0010	<.0010	.0061	3.40	2.0	.04	1.60
GR1018W	46 26 49	121 29 41	.0033	<.0010	.0037	2.90	<.1	.10	6.80
GR1019W	46 26 22	121 29 43	<.0010	<.0010	.0030	2.60	.2	.14	1.80
GR1020W	46 36 28	121 33 17	.0026	<.0010	.0058	3.90	4.2	.10	4.60
GR1021W	46 37 41	121 33 18	<.0010	<.0010	.0049	2.50	<.1	.02	3.00
GR1022W	46 37 45	121 33 20	<.0010	<.0010	.0110	2.10	.6	.07	1.90
GR1024W	46 39 10	121 34 17	<.0010	<.0010	.0016	3.20	.2	.03	2.00
GR1025W	46 32 23	121 18 19	.0010	<.0010	.0028	1.50	<.1	.32	1.10
GR1026W	46 32 30	121 18 25	.0011	<.0010	<.0010	1.50	<.1	.17	1.20
GR1027W	46 32 31	121 18 8	.0013	<.0010	<.0010	2.00	.8	.07	1.10
GR1028W	46 32 38	121 17 33	<.0010	<.0010	.0020	2.20	<.1	.10	1.90
GR1029W	46 33 37	121 16 5	.0020	<.0010	.0100	1.00	.1	.07	1.10
GR1030W	46 36 26	121 15 52	.0016	<.0010	.0021	3.00	.7	.05	1.70
GR1032W	46 37 15	121 16 29	.0011	<.0010	.0043	3.10	.8	.08	1.40
GR1033W	46 37 9	121 17 22	<.0010	<.0010	<.0010	.70	<.1	.07	.90
GR1034W	46 37 5	121 17 55	<.0010	<.0010	<.0010	1.60	.2	.06	.70
GR1035W	46 35 50	121 20 12	.0030	<.0010	.0019	1.90	.2	.18	.70
GR1036W	46 36 37	121 19 11	.0010	<.0010	<.0010	4.90	.1	.27	2.10
GR1037AW	46 28 47	121 20 47	.0017	<.0010	.0019	4.70	.4	.03	2.10
GR1038A	46 28 54	121 20 0	<.0010	<.0010	<.0010	1.30	<.1	.03	.80
GR1039A	46 29 3	121 19 42	<.0010	<.0010	<.0010	.80	<.1	.06	.60
GR1040A	46 31 8	121 24 59	<.0010	<.0010	.0013	30.00	<.1	.55	.50
GR1041A	46 31 8	121 24 55	.0022	.0013	.0022	21.00	<.1	1.20	.90
GR1042A	46 31 12	121 25 0	<.0010	<.0010	.0010	12.00	<.1	.15	.60
GR1043A	46 31 40	121 24 47	<.0010	<.0010	<.0010	6.40	<.1	.49	.30
GR1047A	46 33 0	121 34 22	<.0010	<.0010	.0012	2.10	<.1	.03	1.40
GR1250A	46 33 7	121 29 22	.0012	<.0010	.0020	2.20	<.1	.10	1.50
GR1251A	46 33 23	121 29 40	.0061	.0010	.0057	8.20	<.1	.10	3.50
GR1252A	46 33 30	121 29 52	<.0010	<.0010	.0054	6.20	<.1	.06	2.50
GR1253A	46 33 42	121 30 15	<.0010	<.0010	.0054	1.50	<.1	.10	1.00
GR1254A	46 33 54	121 31 8	<.0010	<.0010	.0033	5.10	.4	.10	5.40
GR1255A	46 34 16	121 32 5	<.0010	<.0010	.0019	1.80	<.1	.03	1.40

Table 16. Analytical data from water samples collected in the Goat Rocks area

Sample	Latitude	Longitude	Cu-ppm aa	Mo-ppm aa	Zn-ppm aa	SO4--	NO3-	F	CL
GR1256W	46 34 41	121 32 45	.0028	<.0010	.0032	1.40	<.1	.05	2.10
GR1257W	46 31 18	121 31 32	.0013	<.0010	.0102	1.60	<.1	.07	2.00
GR1258W	46 31 22	121 31 32	<.0010	<.0010	.0025	2.90	.6	.09	1.00
GR1259W	46 31 19	121 31 41	<.0010	<.0010	.0040	1.60	<.1	.06	.90
GR1260W	46 31 15	121 31 55	<.0010	<.0010	.0026	1.50	<.1	.06	1.40
GR1262W	46 31 7	121 32 18	<.0010	<.0010	.0039	1.70	.1	.04	1.80
GR1264W	46 30 50	121 33 15	<.0010	<.0010	.0018	6.30	<.1	.05	2.60
GR1265W	46 30 49	121 33 35	<.0010	<.0010	.0020	5.20	<.1	.06	3.70
GR1266W	46 30 38	121 33 59	.0013	<.0010	.0019	2.30	<.1	.07	2.40
GR1267W	46 40 3	121 32 32	<.0010	<.0010	.0041	3.20	<.1	.09	1.40
GR1268W	46 39 18	121 31 49	<.0010	<.0010	.0066	3.10	.2	.07	1.30
GR1269W	46 39 56	121 31 10	<.0010	<.0010	.0082	1.00	.4	.03	1.40
GR1270W	46 39 36	121 30 35	<.0010	<.0010	.0033	1.00	<.1	.14	1.00
GR1271W	46 39 42	121 30 15	<.0010	<.0010	.0049	1.90	.1	.08	1.50
GR1272W	46 34 10	121 21 25	<.0010	<.0010	.0033	1.50	<.1	.12	1.20
GR1273W	46 33 38	121 21 30	<.0010	<.0010	.0021	1.60	<.1	.12	.80
GR1274W	46 32 59	121 22 2	<.0010	<.0010	.0018	1.00	<.1	.09	1.00
GR1275W	46 32 50	121 22 28	<.0010	<.0010	.0018	3.40	<.1	.28	.80
GR1276W	46 32 38	121 23 9	<.0010	<.0010	.0023	8.20	<.1	.12	11.00
GR1277W	46 32 49	121 22 41	<.0010	<.0010	.0032	3.00	.2	.06	2.00
GR1278W	46 36 50	121 26 58	.0016	<.0010	.0029	5.00	<.1	.81	2.90
GR1279W	46 36 40	121 26 57	<.0010	<.0010	.0027	1.20	<.1	.04	8.10
GR1280W	46 36 10	121 26 47	<.0010	<.0010	.0020	4.00	<.1	.06	3.70
GR1281W	46 36 2	121 26 47	<.0010	<.0010	.0014	--	--	--	--
GR1282W	46 35 4	121 26 40	<.0010	<.0010	.0016	1.40	.1	.74	1.40
GR1283W	46 34 55	121 26 40	<.0010	<.0010	.0023	--	--	--	--
GR1284W	46 32 23	121 34 50	<.0010	<.0010	.0027	8.00	.1	.22	2.00
GR1500W	46 33 26	121 29 59	.0012	<.0010	.0135	4.00	<.1	.03	.40
GR1501W	46 33 40	121 30 46	<.0010	<.0010	.0116	5.80	.5	.09	1.30
GR1502W	46 33 40	121 31 9	.0010	<.0010	.0110	3.80	<.1	.15	1.10
GR1504W	46 33 52	121 32 4	.0014	<.0010	.0066	1.10	<.1	.07	1.10
GR1505W	46 34 10	121 32 40	.0016	<.0010	.0046	2.10	<.1	.04	3.50
GR1506W	46 30 10	121 31 6	.0015	<.0010	.0068	4.70	.7	.05	1.60
GR1507W	46 30 2	121 31 39	<.0010	<.0010	.0046	3.00	2.2	.06	3.90
GR1508W	46 30 0	121 32 27	<.0010	<.0010	.0042	1.30	<.1	.04	1.70
GR1509W	46 29 15	121 33 12	<.0010	<.0010	.0040	1.90	<.1	.03	1.30
GR1510W	46 29 25	121 34 5	<.0010	<.0010	.0037	4.60	.3	.06	4.00
GR1511W	46 34 42	121 21 30	<.0010	<.0010	.0053	1.40	<.1	.07	1.20
GR1513W	46 36 8	121 20 20	<.0010	<.0010	.0061	3.80	.9	.13	1.40
GR1514W	46 36 55	121 19 29	<.0010	<.0010	.0041	3.10	.3	.07	1.30
GR1515W	46 32 28	121 23 23	.0015	<.0010	.0064	6.20	<.1	.11	14.00
GR1516W	46 32 29	121 23 20	.0011	<.0010	.0047	1.20	1.1	.06	12.00
GR1517W	46 33 8	121 23 19	<.0010	<.0010	.0031	3.90	.4	.04	3.00
GR1518W	46 33 11	121 23 18	.0011	<.0010	.0028	3.00	.5	.04	14.00
GR1520W	46 33 12	121 23 1	<.0010	<.0010	.0062	2.30	<.1	.12	2.50

Table 16. Analytical data from water samples collected in the Goat Rocks area

Sample	Latitude	Longitude	Cu-ppm aa	Mo-ppm aa	Zn-ppm aa	SO4--	NO3-	F	CL
GR1521W	46 34 9	121 21 51	.0013	<.0010	.0037	3.20	<.1	.10	1.00
GR1522W	46 37 2	121 27 10	.0019	<.0010	.0054	.50	<.1	.04	.60
GR1523W	46 36 53	121 27 7	<.0010	<.0010	.0037	2.40	.1	.02	.10
GR1524W	46 35 46	121 26 57	<.0010	<.0010	.0038	--	--	--	--
GR1525W	46 35 38	121 26 45	<.0010	<.0010	.0023	2.00	.2	.06	.40
GR1526W	46 37 31	121 27 9	.0010	<.0010	.0031	2.00	<.1	.05	.80
GR1527W	46 37 34	121 27 16	<.0010	<.0010	.0030	1.50	.1	.04	.90
GR1750W	46 32 28	121 28 58	.0012	<.0010	.0087	3.10	<.1	.03	.50
GR1751W	46 32 25	121 28 54	.0010	<.0010	.0064	7.90	<.1	.01	.70
GR1752W	46 32 27	121 28 50	<.0010	<.0010	.0068	24.00	<.1	.13	.82
GR1753W	46 32 54	121 29 7	<.0010	<.0010	.0025	5.60	<.1	.02	1.60
GR1754W	46 33 12	121 29 38	.0021	<.0010	.0056	6.40	<.1	.25	.80
GR1755W	46 33 19	121 29 45	<.0010	<.0010	.0024	4.40	<.1	.04	.60
GR1757W	46 25 0	121 25 46	<.0010	<.0010	.0031	2.00	<.1	.04	1.60
GR1759W	46 25 6	121 25 50	<.0010	<.0010	.0022	4.60	<.1	.14	1.40
GR1760W	46 24 51	121 26 51	<.0010	<.0010	.0033	3.40	<.1	.04	2.00
GR1761W	46 25 44	121 30 38	<.0010	<.0010	.0031	.90	.7	.13	6.80
GR1762W	46 24 46	121 28 17	<.0010	<.0010	.0023	1.20	1.1	.08	3.40
GR1763W	46 28 3	121 31 42	<.0010	<.0010	.0054	4.40	.4	.06	3.10
GR1764W	46 30 42	121 34 16	<.0010	<.0010	.0021	5.20	.2	.24	2.90
GR1765W	46 30 29	121 17 26	<.0010	<.0010	.0027	.90	<.1	.08	.70
GR1766W	46 30 32	121 17 21	<.0010	<.0010	.0040	.10	.1	.20	1.30
GR1767W	46 31 14	121 16 18	<.0010	<.0010	.0039	.40	.2	.25	.90
GR1768W	46 32 13	121 15 43	<.0010	<.0010	.0054	2.30	.1	.19	3.60
GR1769W	46 38 51	121 20 52	<.0010	<.0010	.0029	1.50	.1	.08	1.10
GR1770W	46 28 55	121 20 58	<.0010	<.0010	.0021	2.10	<.1	.08	3.20
GR1771W	46 38 15	121 17 7	<.0010	<.0010	.0021	1.20	.1	.35	2.20
GR1772W	46 37 39	121 18 16	.0012	<.0010	.0111	7.60	.5	.48	3.50
GR1773W	46 37 34	121 18 52	<.0010	<.0010	.0016	1.30	.9	.09	1.00
GR1774W	46 38 8	121 18 10	<.0010	<.0010	.0031	.20	.1	.09	1.20
GR1775W	46 36 56	121 18 29	<.0010	<.0010	.0015	1.10	.1	.21	.90
GR1776W	46 30 5	121 21 2	<.0010	<.0010	.0060	2.40	.2	.12	1.10
GR1777W	46 30 0	121 21 0	<.0010	<.0010	.0085	18.00	<.1	.14	.60
GR1778W	46 30 10	121 20 36	.0011	<.0010	.0049	4.90	<.1	--	1.00
GR1779W	46 30 2	121 19 52	.0013	<.0010	.0024	1.80	.2	.08	.90
GR1780W	46 29 57	121 19 35	<.0010	<.0010	.0028	1.00	<.1	.26	.60
GR1781W	46 34 0	121 27 15	<.0010	<.0010	.0038	4.60	<.1	.35	1.20
GR1782W	46 33 56	121 27 12	<.0010	<.0010	.0021	8.20	<.1	1.40	1.30
GR1783W	46 34 9	121 27 10	<.0010	<.0010	.0032	--	--	--	--
GR1785W	46 35 9	121 28 15	<.0010	<.0010	.0028	2.40	<.1	1.20	.90
GR1788W	46 36 13	121 28 59	<.0010	<.0010	.0198	2.40	<.1	1.40	.70
GR1789W	46 27 13	121 26 48	<.0010	<.0010	.0024	2.50	<.1	2.40	1.40
GR1790W	46 27 18	121 26 50	<.0010	<.0010	.0018	4.60	.2	1.00	1.70
GR1796W	46 32 32	121 36 53	<.0010	<.0010	.0166	3.30	.3	.06	1.80
GR1797W	46 31 38	121 36 46	.0012	<.0010	.4800	11.00	<.1	.14	1.90

Table 17. Fisher-K statistics for analytical data from water samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	AA-CU	0	0	97	0	0	0	38	0	0.0010000	0.0061000	3
4	AA-MO	0	0	132	0	0	0	3	0	0.0010000	0.0013000	4
5	AA-ZN	0	0	8	0	0	0	127	0	0.0010000	0.4800000	5
6	SO4--	0	0	0	0	4	0	131	0	0.1000000	30.000000	6
7	NO3-	0	0	80	0	4	0	51	0	0.1000000	4.2000000	7
8	F	0	0	0	0	5	0	130	0	0.0100000	2.4000000	8
9	CL	0	0	0	0	4	0	131	0	0.1000000	14.000000	9

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	AA-CU	0.0016921	9.8704627D-04	9.7426033D-07	2.7215869D-09	2.8301514	9.6321534D-12	10.147834	3
4	AA-MO	0.0011000	1.7320508D-04	3.0000000D-08	9.0000000D-12	1.7320508			4
5	AA-ZN	0.0081827	0.0423164	0.0017907	8.4682852D-04	11.175536	4.0263183D-04	125.56598	5
6	SO4--	3.7463359	4.2142667	17.760043	278.69866	3.7236500	5393.9408	17.100867	6
7	NO3-	0.5000000	0.6881860	0.4736000	1.2142579	3.7255759	3.8315762	17.082604	7
8	F	0.1806154	0.3195800	0.1021314	0.1386175	4.2469688	0.2246824	21.540234	8
9	CL	2.0680916	2.3089375	5.3311925	42.912342	3.4861468	390.92423	13.754470	9

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 18. Correlation coefficients for analytical data from water samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (AA-CU)	2	(AA-MO)	-1.0000	2
1 (AA-CU)	3	(AA-ZN)	-0.1346	35
1 (AA-CU)	4	(SO4--)	0.0817	38
1 (AA-CU)	5	(NO3-)	0.0905	13
1 (AA-CU)	6	(F)	0.0623	37
1 (AA-CU)	7	(CL)	0.1228	38
2 (AA-MO)	3	(AA-ZN)	-0.9402	3
2 (AA-MO)	4	(SO4--)	0.9262	3
2 (AA-MO)	5	(NO3-)	********	0
2 (AA-MO)	6	(F)	0.9994	3
2 (AA-MO)	7	(CL)	-0.4365	3
3 (AA-ZN)	4	(SO4--)	0.1079	123
3 (AA-ZN)	5	(NO3-)	0.2369	48
3 (AA-ZN)	6	(F)	-0.1039	122
3 (AA-ZN)	7	(CL)	-0.0243	123
4 (SO4--)	5	(NO3-)	0.2878	51
4 (SO4--)	6	(F)	0.1859	130
4 (SO4--)	7	(CL)	0.0525	131
5 (NO3-)	6	(F)	-0.2569	51
5 (NO3-)	7	(CL)	0.4111	51
6 (F)	7	(CL)	-0.0412	130

Table 19. Analytical data from ash samples from the May 18, 1980 eruption of Mt. St. Helens

[The following qualifiers are used in reporting spectrographic data: --, no determination made; N, concentration less than the detection limit; <, detected, but present at a concentration less than the value reported; >, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

Data set-1 Spectrographic analyses, whole rock samples

Sample	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s	Cu-ppm s	Pb-ppm s	B-ppm s
EKR090	2	2	5	.5	10	100	15	700	20	20	30	10	10
EKR091	2	3	5	.5	10	100	15	700	20	15	30	10	<10
EKR092	2	3	5	.5	10	100	10	700	20	15	50	10	10
EKR093	2	3	3	.3	10	70	10	700	15	10	50	10	10
EKR094	2	3	5	.5	10	100	20	700	20	20	30	10	10
EKR095	10	3	15	1.0	50	200	200	3,000	70	200	70	N	<20

Sample	Be-ppm s	Sr-ppm s	Ba-ppm s	Zr-ppm s
EKR090	1.5	500	200	100
EKR091	1.0	700	200	70
EKR092	1.5	700	200	100
EKR093	1.5	700	200	70
EKR094	1.0	700	200	70
EKR095	N	<200	50	200

Table 19. Analytical data from ash samples from the May 18, 1980 eruption of Mt. St. Helens

Data set 2 ICP analyses, aqua-regia leach, whole rock sample

Sample	Mg-ppm ICP	Ca-ppm ICP	Fe-ppm ICP	Ti-ppm ICP	Al-ppm ICP	V-ppm ICP	Mn-ppm ICP	Ni-ppm ICP	Cu-ppm ICP	Zn-ppm ICP	Be-ppm ICP	Sr-ppm ICP	Ba-ppm ICP
EKR090	2,100	2,700	21,000	750	6,000	41	110	6.8	25	23	.150	37	17
EKR091	1,800	2,600	19,000	740	5,900	39	100	6.4	22	19	.140	38	14
EKR092	720	1,500	11,000	520	2,800	28	55	3.4	17	13	.091	19	8
EKR093	1,300	2,200	16,000	710	4,900	35	81	5.4	17	17	.130	31	11
EKR094	1,600	2,500	17,000	780	5,400	40	86	7.4	18	17	.120	35	11

Sample	La-ppm ICP	Ce-ppm ICP	Nb-ppm ICP	P-ppm ICP
EKR090	4.2	7.2	3.7	330
EKR091	3.6	5.6	3.4	280
EKR092	L2.2	3.2	2.4	240
EKR093	3.1	4.6	3.0	250
EKR094	3.4	5.1	3.5	270

Table 19. Analytical data from ash samples from the May 18, 1980 eruption of Mt. St. Helens

[The letter suffixes of the sample numbers indicate the following: A = residue after leach with warm distilled water; B = residue after leach with buffered HCl solution; and C = residue after leach with buffered H_2SO_4 solution.]

Data set 3 Spectrographic analyses, residues after leaching with various solutions

Sample	Mg-pct.	s	Ca-pct.	s	Fe-pct.	s	Ti-pct.	s	Sc-ppm	s	V-ppm	s	Cr-ppm	s	Mn-ppm	s	Co-ppm	s	Ni-ppm	s	Cu-ppm	s	Pb-ppm	s	B-ppm	s
EKR090A	1.0		2		7		.5		15		100		30		700		15		30		50		<10		30	
EKR091A	1.0		2		7		.5		15		150		50		700		20		30		50		<10		20	
EKR090B	1.0		2		7		.5		15		100		30		700		15		30		50		<10		50	
EKR091B	1.0		2		5		.5		15		100		20		700		15		30		30		<10		20	
EKR090C	1.0		2		7		.5		15		100		30		700		15		30		70		<10		20	
EKR091C	.7		2		3		.5		15		70		20		500		10		20		30		<10		15	

Sample	Be-ppm	s	Sr-ppm	s	Ba-ppm	s	Zr-ppm	s
EKR090A	<1		700		300		100	
EKR091A	<1		700		300		100	
EKR090B	<1		700		300		100	
EKR091B	<1		700		300		100	
EKR090C	<1		700		300		100	
EKR091C	<1		500		300		100	

Table 20.--Analytical data from leach studies of ash samples from the May 18, 1980 eruption of Mt. St. Helens

[concentrations expressed in mg/L]

Element	Blank	EKR090	EKR091
		Solution A[1]	
Zn-----	<0.01	0.017	0.014
Fe-----	<0.03	0.06	0.03
Mn-----	<0.05	0.22	0.20
Cu-----	<0.01	<0.01	<0.01
		Solution B[2]	
Zn-----	0.024	0.66	0.93
Fe-----	0.25	6.6	13
Mn-----	<0.05	4.6	6.7
Cu-----	<0.01	0.99	1.4
		Solution C[3]	
Zn-----	0.04	0.74	0.78
Fe-----	0.21	11	16
Mn-----	<0.05	5.0	5.2
Cu-----	<0.01	1.1	1.2

[1]Solution A was a warm (60°C) solution of distilled water; 24 hour leach.

[2]Solution B was a warm (60°C) solution of distilled water buffered with sodium acetate and acetic acid and acidified with hydrochloric acid to a pH of 2.5; 24 hour leach.

[3]Solution C was a warm (60°C) solution of distilled water, buffered with sodium acetate and acetic acid, and acidified with sulfuric acid to a pH of 2.5; 24 hour leach.

Table 21. Spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: --, no determination made; N, concentration less than the detection limit; <, detected, but present at a concentration less than the value reported; >, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
DSGR115	46 36 56	121 30 25	2.00	3.00	10.0	1.000	30	200	N	2,000	50	7
DSGR124	46 34 45	121 30 14	1.50	3.00	10.0	1.000	50	50	N	2,000	30	N
DSGR139	46 32 40	121 27 1	1.50	2.00	5.0	.300	10	100	15	1,000	15	15
DSGR210	46 31 49	121 35 2	2.00	5.00	10.0	.500	30	300	30	2,000	30	15
DSGR212	46 30 32	121 32 2	.50	2.00	7.0	.500	20	70	<10	1,500	7	<5
DSGR222	46 26 6	121 26 50	1.00	1.50	3.0	.500	5	50	10	1,000	10	5
DSGR242	46 26 49	121 25 27	3.00	3.00	7.0	.500	20	200	200	1,000	30	50
GR1044RA	46 30 38	121 24 42	.70	1.50	2.0	.200	7	70	15	300	10	10
GR1051RA	46 29 48	121 26 12	1.00	2.00	3.0	.300	10	100	30	500	20	15
GR1053RA	46 29 43	121 26 14	1.00	.50	1.5	.200	5	20	N	100	N	5
GR1285	46 31 7	121 28 6	.20	.15	2.0	.150	10	100	N	200	N	N
GR1289RA	46 31 3	121 27 37	2.00	2.00	7.0	.500	20	200	150	1,000	30	50
GR1750RA	46 32 28	121 28 58	.07	.05	7.0	.015	N	50	N	500	15	20
GR1789RA	46 27 13	121 26 48	.20	2.00	3.0	.200	10	70	50	500	15	20
GS6	46 30 34	121 25 20	1.50	3.00	10.0	.500	15	100	50	1,000	50	50
GS7	46 30 29	121 25 25	1.00	3.00	10.0	.300	15	100	20	700	50	50
GS8	46 30 29	121 25 25	1.50	5.00	2.0	.700	20	150	70	500	5	15
GS9	46 30 6	121 25 24	1.00	1.00	5.0	.500	10	100	50	150	20	20
GS10	46 30 2	121 25 28	1.50	.70	5.0	.700	15	100	N	200	15	7
GS13	46 31 58	121 23 52	.70	1.50	10.0	.500	15	15	N	2,000	15	N
GS14	46 32 7	121 23 39	.50	.30	5.0	.150	15	10	N	700	N	N
GS15	46 32 34	121 23 59	2.00	5.00	10.0	1.000	50	300	50	2,000	70	50
GS20	46 31 52	121 24 24	3.00	5.00	7.0	.500	30	200	100	1,500	50	100
GS27	46 32 2	121 30 25	1.50	2.00	7.0	.500	15	150	70	700	20	50
GS28	46 35 6	121 27 18	.03	.20	5.0	.100	15	N	N	500	N	N
GS29	46 36 46	121 29 58	1.00	2.00	7.0	.500	20	50	N	2,000	10	N
GS30	46 37 7	121 30 12	.70	2.00	5.0	.300	15	50	200	1,500	10	10
GS31	46 36 47	121 30 15	.50	.10	2.0	.200	N	10	N	1,000	N	N
GS32	46 36 50	121 30 15	1.00	5.00	10.0	.700	30	200	N	2,000	50	10
GS33	46 36 56	121 30 16	1.00	2.00	7.0	1.000	20	70	20	1,500	20	7
DSGR121	46 35 48	121 30 17	1.50	2.00	5.0	.700	15	150	100	1,000	20	50
DSGR129	46 32 4	121 27 42	2.00	3.00	7.0	.700	15	200	70	1,000	30	50
DSGR22	46 32 55	121 33 14	1.50	2.00	3.0	.500	15	100	20	700	20	7
DSGR225	46 24 30	121 28 26	1.00	2.00	7.0	.500	15	100	30	700	20	10
GR1048RA	46 30 19	121 27 41	1.00	2.00	3.0	.300	10	100	20	500	20	15
GR1050RA	46 30 2	121 26 27	1.00	2.00	3.0	.300	10	100	20	500	15	15
GR1288	46 28 32	121 22 45	1.00	.70	3.0	.200	15	100	N	1,000	5	5
GS1	46 31 10	121 22 30	.50	.70	1.5	.030	N	N	N	200	N	N
GS2A	46 31 40	121 21 45	.30	.70	1.0	.010	N	N	N	300	N	N
GS2R	46 31 40	121 21 45	.20	.70	.7	.020	N	N	N	100	N	N
GS17	46 30 46	121 22 0	.70	2.00	5.0	.300	10	100	10	1,500	10	7
GS18	46 31 36	121 23 17	.50	1.00	2.0	.070	N	30	20	700	N	15
GS19	46 32 2	121 23 18	1.00	1.50	7.0	1.000	20	200	50	1,500	30	20
GS21	46 36 3	121 21 54	2.00	3.00	7.0	.500	20	200	200	1,000	50	150
GS26	46 32 8	121 30 25	1.50	2.00	7.0	.500	15	150	50	700	20	30

Table 21. Spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	As-ppm s	Bi-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s
DSGR115	300	N	N	10	N	N	N	N	10	1.0	200	200	N
DSGR124	70	N	N	<10	N	N	N	N	<10	1.0	200	200	N
DSGR139	10	N	N	<10	N	N	N	N	<10	1.0	700	500	N
DSGR210	100	N	N	10	N	N	N	N	N	<1.0	200	20	20
DSGR212	7	N	N	10	N	N	N	N	<10	1.0	150	200	20
DSGR222	7	N	N	15	N	N	N	N	15	2.0	200	500	20
DSGR242	30	N	N	10	N	N	N	N	15	1.0	500	300	50
GR1044RA	15	N	N	N	N	N	N	N	<10	1.5	150	300	30
GR1051RA	30	N	N	N	N	N	N	N	<10	N	500	200	N
GR1053RA	<5	N	N	N	N	N	N	N	30	1.5	200	300	30
GR1285	10	N	N	10	N	N	N	N	<10	2.0	150	700	30
GR1289RA	30	N	N	15	N	N	N	N	10	1.5	300	500	20
GR1750RA	15	N	N	N	N	N	N	N	30	2.0	N	50	N
GR1789RA	10	N	N	N	N	N	N	N	N	1.5	300	700	20
GS6	15	N	N	10	N	10	N	N	15	2.0	500	700	N
GS7	150	N	N	20	N	15	N	N	20	2.0	500	1,000	N
GS8	<5	N	N	N	N	50	N	N	30	3.0	700	70	20
GS9	15	N	N	N	N	15	N	N	30	2.0	200	150	20
GS10	20	N	10	N	N	N	N	N	15	3.0	200	700	50
GS13	100	N	N	N	N	N	N	N	<10	2.0	150	200	30
GS14	20	N	N	20	N	N	N	N	100	5.0	100	1,000	30
GS15	150	N	N	N	N	N	N	N	N	N	150	100	N
GS20	200	N	N	20	N	N	N	N	10	N	200	300	N
GS27	50	N	N	20	N	N	N	N	10	2.0	300	500	20
GS28	15	N	N	70	N	N	N	N	100	3.0	100	700	30
GS29	30	N	N	<10	N	N	N	N	<10	2.0	200	200	20
GS30	100	N	N	N	N	N	N	N	<10	2.0	100	500	20
GS31	7	N	N	30	N	N	N	N	15	3.0	200	1,500	30
GS32	100	N	N	50	N	N	N	N	<10	1.0	200	500	N
GS33	100	N	N	N	N	N	N	N	10	1.0	200	200	N
DSGR121	50	N	N	10	N	N	N	N	10	2.0	300	700	30
DSGR129	70	N	N	10	N	N	N	N	<10	1.0	500	500	20
DSGR22	15	N	N	<10	N	N	N	N	20	1.5	300	300	30
DSGR225	15	N	N	10	N	N	N	N	15	2.0	300	300	30
GR1048RA	30	N	N	N	N	N	N	N	<10	1.0	300	200	N
GR1050RA	20	N	N	N	N	N	N	N	<10	N	500	300	N
GR1288	15	N	N	10	N	N	N	N	<10	1.5	200	500	20
GS1	10	N	N	30	N	N	N	N	20	5.0	150	300	30
GS2A	5	N	N	30	N	N	N	N	50	5.0	150	700	N
GS2B	5	N	N	30	N	N	N	N	50	3.0	200	1,000	N
GS17	15	N	N	10	N	N	N	N	10	3.0	500	700	20
GS18	7	N	N	20	N	N	N	N	20	5.0	200	1,000	N
GS19	100	N	N	N	N	N	N	N	70	3.0	100	2,000	N
GS21	70	N	N	100	N	N	N	N	<10	1.0	1,000	500	N
GS26	50	N	N	50	N	N	N	N	15	2.0	300	700	30

Table 21. Spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

Sample	Y-ppms	Zr-ppms	Nb-ppms	Formation
DSGR115	50	150	N	To
DSGR124	50	150	N	To
DSGR139	15	100	N	To
DSGR210	20	50	N	To
DSGR212	50	150	N	To
DSGR222	20	200	<20	To
DSGR242	20	150	N	To
GR1044RA	20	200	<20	To
GR1051RA	15	100	N	To
GR1053RA	30	200	<20	To
GR1285	30	300	20	To
GR1289RA	30	150	N	To
GR1750RA	10	N	N	To
GR1789RA	20	150	<20	To
GS6	30	150	<20	To
GS7	30	150	N	To
GS8	30	200	N	To
GS9	20	150	N	To
GS10	50	500	20	To
GS13	100	300	20	To
GS14	100	500	<20	To
GS15	30	70	N	To
GS20	30	100	N	To
GS27	20	150	<20	To
GS28	30	300	<20	To
GS29	50	200	<20	To
GS30	50	200	N	To
GS31	30	200	N	To
GS32	50	100	N	To
GS33	50	150	<20	To
DSGR121	30	200	N	Qta
DSGR129	20	150	N	Qah
DSGR22	20	150	N	Qta
DSGR225	30	300	20	Qta
GR1048RA	15	100	N	Qah
GR1050RA	15	100	N	Qah
GR1288	30	200	<20	Qta
GS1	50	100	N	Qta
GS2A	20	50	N	Qta
GS2B	30	30	N	Qta
GS17	30	200	<20	Qta
GS18	20	50	N	Qta
GS19	50	200	N	Qta
GS21	20	150	N	Qah
GS26	30	200	<20	Qta

Table 21. Spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GS46	46 30 10	121 26 46	1.50	3.00	5.0	1.000	20	150	20	700	20	10
DSGR116	46 36 30	121 30 11	.50	.50	2.0	.200	N	10	N	1,000	N	N
DSGR126	46 36 45	121 32 5	1.00	2.00	7.0	.500	10	100	50	1,000	20	30
DSGR133	46 31 59	121 26 38	1.50	2.00	3.0	.500	15	150	30	100	20	20
DSGR229	46 24 30	121 23 14	1.50	3.00	5.0	.500	15	150	70	1,000	30	50
DSGR23	46 32 30	121 33 35	2.00	5.00	10.0	.700	30	300	70	1,500	50	30
DSGR230	46 24 40	121 23 8	1.00	2.00	7.0	.700	15	100	20	1,000	20	15
DSGR26	46 32 31	121 34 44	.50	1.50	7.0	.300	20	<10	<10	1,500	7	<5
GR1011RA	46 28 46	121 27 21	1.00	2.00	3.0	.200	10	100	30	500	15	20
GS3	46 31 9	121 25 7	2.00	2.00	7.0	1.000	20	200	30	200	20	30
GS4	46 31 9	121 25 7	1.00	.10	5.0	.700	15	100	15	500	7	15
GS5	46 31 9	121 25 7	1.00	1.00	3.0	.300	10	70	10	700	7	10
GS11	46 31 16	121 24 57	.70	1.00	3.0	.300	7	50	10	700	5	5
GS22	46 36 10	121 20 25	1.50	3.00	5.0	.300	15	150	15	1,000	15	15
GS23	46 37 57	121 19 5	2.00	2.00	7.0	.500	15	150	200	1,000	30	150
GS25	46 41 20	121 29 10	2.00	2.00	7.0	.500	15	150	30	1,000	20	30
GS12	46 32 7	121 23 21	1.00	1.00	5.0	.300	10	100	30	300	10	20
GS16	46 33 1	121 23 20	1.50	1.00	5.0	.300	15	150	70	1,000	15	30
GS24	46 39 8	121 19 49	1.50	1.50	7.0	.500	15	200	150	1,000	20	50
DSGR17	46 39 12	121 32 30	.15	.07	2.0	.070	N	<10	N	500	N	N
DSGR18	46 38 30	121 31 50	.10	.07	2.0	.070	N	<10	N	500	N	N
DSGR19	46 38 29	121 31 50	.20	1.00	5.0	.150	5	30	N	300	N	N
DSGR144	46 34 36	121 32 1	.30	.15	2.0	.150	N	<10	N	200	N	N
GS34	46 38 5	121 35 30	.30	1.00	2.0	.150	5	20	N	500	N	N

Table 21. Spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	As-ppm s	Bi-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s
GS46	50	N	N	15	N	N	N	N	10	1.0	500	100	N
DSGR116	7	N	N	20	N	N	N	N	<10	3.0	300	1,500	50
DSGR126	50	N	N	20	N	N	N	N	<10	2.0	300	700	50
DSGR133	7	N	N	15	N	N	N	N	700	2.0	300	150	50
DSGR229	30	N	N	10	N	N	N	N	N	1.0	300	300	30
DSGR23	100	N	N	<10	N	N	N	N	N	<1.0	200	50	20
DSGR230	30	N	N	20	N	N	N	N	<10	1.5	300	500	50
DSGR26	30	N	N	10	N	N	N	N	N	1.5	100	300	30
GR1011RA	20	N	N	<10	N	N	N	N	<10	1.5	200	500	20
GS3	70	N	N	<10	N	N	N	N	20	2.0	500	150	20
GS4	15	N	N	10	N	N	N	N	<10	N	200	700	30
GS5	15	N	N	20	N	N	N	N	10	2.0	300	700	20
GS11	<5	N	N	<10	N	N	N	N	10	3.0	200	500	30
GS22	20	N	N	50	N	N	N	N	<10	1.0	700	700	N
GS23	30	N	N	10	N	N	N	N	<10	N	500	500	N
GS25	30	N	N	50	N	N	N	N	20	1.0	500	500	N
GS12	20	N	N	20	N	N	N	N	70	1.5	300	700	30
GS16	20	N	N	15	N	N	N	N	15	N	300	1,000	20
GS24	30	N	N	15	N	N	N	N	30	1.0	300	700	N
DSGR17	7	N	N	10	N	N	N	N	30	5.0	N	1,000	20
DSGR18	5	N	N	15	N	N	N	N	20	3.0	N	1,000	20
DSGR19	10	N	N	10	N	N	N	N	30	3.0	100	1,000	20
DSGR144	15	N	N	20	N	N	N	N	10	3.0	N	1,000	30
GS34	10	N	N	10	N	N	N	N	30	1.5	100	1,000	30

Table 21. Spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area--continued

Sample	Y-ppm s	Zr-ppm s	Nb-ppm s	Formation
GS46	15	100	N	Qah
DSGR116	30	200	N	Tai
DSGR126	30	200	N	Tai
DSGR133	30	200	N	Tai
DSGR229	20	100	N	Tai
DSGR23	30	50	N	Tai
DSGR230	30	300	20	Tai
DSGR26	70	200	N	Tai
GR1011RA	20	150	N	Tai
GS3	30	200	<20	Tai
GS4	50	300	<20	Tai
GS5	30	200	N	Tai
GS11	50	300	<20	Tai
GS22	20	150	N	Tai
GS23	15	100	N	Tai
GS25	20	100	N	Tai
GS12	30	150	N	pTr
GS16	20	150	N	pTr
GS24	20	150	N	pTr
DSGR17	20	100	N	Tsr
DSGR18	20	100	N	Tsr
DSGR19	30	100	N	Tsr
DSGR144	20	200	N	Tsr
GS34	15	100	N	Tsr

Table 22. ICP analytical data from unaltered rock samples collected in the Goat Rocks area

[The following qualifiers are used in reporting ICP analytical data: --, no determination made; <, concentration less than the given detection limit; L, detected, but data are qualitative only.]

Sample	Latitude	Longitude	MG-ppm ICP	CA-ppm ICP	FE-ppm ICP	TI-ppm ICP	AL-ppm ICP	V-ppm ICP	CR-ppm ICP	MN-ppm ICP	CO-ppm ICP	NI-ppm ICP
DSGR115	46 36 56	121 30 25	5,200	5,400	51,000	970.0	15,000	130.00	<1.0	260	15.0	L2.4
DSGR116	46 36 30	121 30 11	2,000	2,600	25,000	730.0	8,500	L4.50	<1.0	650	<2.0	<1.0
DSGR121	46 35 48	121 30 17	1,300	2,700	25,000	1,300.0	4,800	68.00	<1.0	150	L4.9	12.0
DSGR124	46 34 45	121 30 14	1,600	2,500	39,000	4,600.0	3,200	L21.00	<1.0	590	8.0	<1.0
DSGR126	46 36 45	121 32 5	5,500	3,700	25,000	390.0	11,000	39.00	<1.0	250	8.0	9.7
DSGR129	46 32 4	121 27 42	630	5,800	25,000	740.0	12,000	84.00	L14.0	68	L4.4	13.0
DSGR133	46 31 59	121 26 38	8,500	12,000	20,000	500.0	16,000	29.00	<1.0	38	11.0	11.0
DSGR139	46 32 40	121 27 1	7,300	9,000	33,000	580.0	13,000	45.00	<1.0	550	9.6	6.6
DSGR144	46 34 36	121 32 1	840	330	24,000	29.0	6,900	1.50	<1.0	150	<2.0	<1.0
DSGR17	46 39 12	121 32 30	270	600	9,600	16.0	2,800	.67	<1.0	380	<2.0	L1.3
DSGR18	46 38 30	121 31 50	290	110	15,000	2.7	5,900	.72	<1.0	500	<2.0	<1.0
DSGR19	46 38 29	121 31 50	710	8,700	18,000	2.0	4,800	3.30	<1.0	220	<2.0	<1.0
DSGR210	46 31 49	121 35 2	15,000	25,000	85,000	2,200.0	55,000	180.00	<2.0	1,400	24.0	9.2
DSGR212	46 30 32	121 32 2	2,000	3,600	61,000	1,200.0	6,000	29.00	<1.0	1,200	L2.2	<1.0
DSGR22	46 32 55	121 33 14	1,100	3,800	18,000	1,100.0	7,400	61.00	<1.0	70	L3.3	L2.3
DSGR222	46 26 6	121 26 50	4,600	3,100	27,000	1,400.0	8,100	30.00	<1.0	570	6.9	2.9
DSGR225	46 24 30	121 28 26	1,900	3,100	24,000	800.0	4,200	41.00	<1.0	160	6.5	3.5
DSGR229	46 24 30	121 23 14	1,200	10,000	15,000	280.0	17,000	36.00	<1.0	58	<2.0	3.2
DSGR23	46 32 30	121 33 35	2,400	22,000	42,000	3,400.0	51,000	120.00	<1.0	470	18.0	8.9
DSGR230	46 24 40	121 23 8	6,300	13,000	41,000	37.0	16,000	45.00	<1.0	590	9.3	7.1
DSGR242	46 26 49	121 25 27	13,000	8,500	31,000	410.0	27,000	49.00	<1.0	280	13.0	23.0
DSGR26	46 32 31	121 34 44	2,200	7,800	64,000	510.0	19,000	<.81	<1.0	1,300	<2.0	<1.0
GR1011RA	46 28 46	121 27 21	7,500	3,200	28,000	280.0	8,100	69.00	<1.0	200	14.0	17.0
GR1044RA	46 30 38	121 24 42	5,500	2,800	26,000	780.0	8,900	53.00	<1.0	250	13.0	12.0
GR1048RA	46 30 19	121 27 41	610	7,200	16,000	2,100.0	17,000	110.00	L3.6	130	6.7	4.4
GR1050RA	46 30 2	121 26 27	,240	5,200	15,000	390.0	14,000	86.00	<2.2	83	4.0	4.3
GR1051RA	46 29 48	121 26 12	2,000	9,000	8,100	260.0	20,000	31.00	L3.0	88	5.0	9.7
GR1053RA	46 29 43	121 26 14	14,000	1,100	12,000	12.0	15,000	9.50	<1.0	150	3.8	L1.7
GR1285	46 31 7	121 28 6	690	1,000	27,000	4.3	8,300	41.00	<1.0	160	<1.4	L1.1
GR1288	46 28 32	121 22 45	3,400	4,400	40,000	500.0	14,000	32.00	<1.0	530	7.2	2.2
GR1289RA	46 31 3	121 27 37	16,000	18,000	41,000	47.0	27,000	54.00	<1.0	630	18.0	21.0
GR1750RA	46 32 28	121 28 58	560	590	150,000	66.0	1,200	86.00	<2.0	950	9.4	16.0
GR1789RA	46 27 13	121 26 48	690	1,900	43,000	40.0	6,700	28.00	<1.0	600	9.5	12.0
GS1	46 31 10	121 22 30	310	1,200	1,400	3.7	2,700	L.15	<1.0	13	<2.0	<1.0
GS11	46 31 16	121 24 57	1,500	1,100	15,000	220.0	3,400	9.30	<1.0	150	L2.7	L2.5
GS12	46 32 7	121 23 21	4,400	7,800	23,000	2.2	11,000	24.00	<1.0	320	5.9	11.0
GS13	46 31 58	121 23 52	3,500	3,400	74,000	500.0	24,000	L2.00	<1.0	1,200	7.7	<1.0
GS14	46 32 7	121 23 39	2,800	1,200	30,000	1.1	15,000	1.10	<1.0	440	<2.0	L1.6
GS15	46 32 34	121 23 59	3,700	9,100	33,000	1,400.0	16,000	120.00	<1.0	400	14.0	8.5
GS16	46 33 1	121 23 20	6,600	7,100	30,000	570.0	27,000	45.00	<1.0	610	8.5	14.0
GS17	46 30 46	121 22 0	2,400	11,000	28,000	410.0	11,000	28.00	<1.0	500	6.5	3.2
GS18	46 31 36	121 23 17	1,200	5,400	18,000	92.0	6,300	2.40	<1.0	380	L2.5	5.8
GS19	46 32 2	121 23 18	5,200	19,000	75,000	150.0	30,000	42.00	<1.0	970	17.0	18.0
GS20	46 31 52	121 24 24	19,000	7,200	43,000	780.0	31,000	52.00	<1.0	350	23.0	56.0
GS21	46 36 3	121 21 54	5,400	5,500	21,000	550.0	11,000	55.00	19.0	130	8.3	40.0

Table 22. ICP analytical data from unaltered rock samples collected in the Goat Rocks area

Sample	CU-ppm ICP	ZN-ppm ICP	MO-ppm ICP	PB-ppm ICP	AS-ppm ICP	BE-ppm ICP	SR-ppm ICP	BA-ppm ICP	LA-ppm ICP	CE-ppm ICP	Y-ppm ICP	NB-ppm ICP	P-ppm ICP
DSGR115	130.00	42.0	<.40	<2.0	<2.0	.180	24.0	15.0	11.0	17.0	4.00	10.00	590.0
DSGR116	.41	48.0	L.46	12.0	<2.0	.520	55.0	130.0	33.0	47.0	6.30	2.50	250.0
DSGR121	30.00	29.0	<.40	L3.6	<2.0	.460	19.0	41.0	29.0	45.0	10.00	5.20	600.0
DSGR124	26.00	47.0	L.59	8.1	L7.3	.130	11.0	13.0	12.0	20.0	8.90	3.60	590.0
DSGR126	17.00	28.0	1.10	13.0	<2.0	.440	20.0	21.0	18.0	29.0	3.40	4.00	480.0
DSGR129	47.00	26.0	<.40	<2.0	<2.0	.210	78.0	33.0	14.0	24.0	.52	6.50	720.0
DSGR133	.61	22.0	L.53	L4.7	<2.0	.280	26.0	18.0	6.3	7.4	.43	3.80	530.0
DSGR139	<.15	60.0	L.45	L3.7	<2.0	.230	52.0	27.0	11.0	16.0	<.04	4.50	440.0
DSGR144	8.40	58.0	L.42	5.9	<2.0	.820	4.1	69.0	26.0	41.0	2.20	.53	87.0
DSGR17	3.40	35.0	L.43	6.8	<2.0	.760	5.2	77.0	27.0	37.0	9.00	L.31	66.0
DSGR19	1.10	33.0	<.40	17.0	<2.0	.400	2.4	69.0	30.0	39.0	3.50	L.24	72.0
DSGR19	2.20	31.0	<.40	7.9	<3.3	.220	12.0	33.0	26.0	38.0	4.50	.66	130.0
DSGR210	100.00	71.0	L1.30	<4.0	<4.0	.610	63.0	13.0	6.3	<1.8	<.08	20.00	210.0
DSGR212	1.00	79.0	<.40	L6.7	<4.1	.260	15.0	15.0	16.0	28.0	13.00	3.50	640.0
DSGR22	8.10	15.0	<.40	<2.0	<5.0	.210	43.0	20.0	8.0	15.0	1.40	4.80	370.0
DSGR222	4.20	110.0	1.60	11.0	<6.7	.340	27.0	77.0	20.0	32.0	6.20	4.00	400.0
DSGR225	11.00	42.0	1.40	L3.4	L6.3	.420	20.0	20.0	18.0	31.0	10.00	3.90	480.0
DSGR229	24.00	11.0	<.40	<2.0	<2.0	.180	37.0	41.0	3.2	5.8	<.04	2.20	190.0
DSGR23	110.00	42.0	<.40	<2.0	<2.0	.460	71.0	22.0	5.4	5.7	<.04	11.00	280.0
DSGR230	13.00	62.0	1.20	L9.5	<2.0	.440	32.0	15.0	22.0	43.0	11.00	6.40	710.0
DSGR242	23.00	35.0	L.45	<5.2	<2.0	.350	67.0	36.0	3.7	L1.1	<.04	7.80	680.0
DSGR26	11.00	96.0	<.40	L6.1	<2.0	.540	10.0	9.6	15.0	27.0	3.30	2.80	360.0
GR1011RA	25.00	73.0	1.50	13.0	L17.0	.470	7.7	11.0	12.0	22.0	4.30	3.90	710.0
GR1044RA	23.00	72.0	2.10	15.0	L21.0	.590	9.9	25.0	22.0	39.0	7.10	3.30	710.0
GR1048RA	22.00	31.0	L.74	L5.7	<3.1	.230	92.0	25.0	8.7	16.0	3.60	4.60	350.0
GR1050RA	25.00	14.0	L.56	L5.3	<5.8	.170	70.0	27.0	9.1	17.0	1.40	3.80	410.0
GR1051RA	4.10	9.1	L.61	L5.0	<1.6	.120	110.0	20.0	4.8	7.9	1.70	2.00	320.0
GR1053RA	3.20	30.0	L.82	L5.5	<9.5	.430	7.1	25.0	37.0	53.0	15.00	2.10	340.0
GR1285	3.80	45.0	1.00	8.9	<1.6	.450	27.0	71.0	35.0	49.0	2.60	2.10	170.0
GR1288	5.60	61.0	L.56	L7.0	<1.6	.750	13.0	60.0	28.0	43.0	6.80	1.80	650.0
GR1289RA	16.00	49.0	<.38	<3.7	<1.6	.550	60.0	78.0	14.0	20.0	<.04	3.90	430.0
GR1750RA	<.20	21.0	L1.30	<3.4	L18.0	2.300	3.4	44.0	3.0	<2.6	<.08	3.40	54.0
GR1789RA	8.20	64.0	<.38	L4.3	<1.6	1.100	30.0	120.0	18.0	34.0	<.04	1.40	400.0
GS1	2.40	8.4	<.40	7.5	L4.3	.230	26.0	69.0	28.0	48.0	9.70	<.20	28.0
GS11	<.15	26.0	L.63	6.8	L5.8	.160	5.4	10.0	9.4	17.0	3.40	1.30	280.0
GS12	7.40	39.0	L.42	9.4	<5.9	.420	37.0	63.0	12.0	19.0	.31	3.10	290.0
GS13	43.00	120.0	<.40	<4.5	<2.0	.400	13.0	50.0	17.0	29.0	5.60	2.70	1,200.0
GS14	11.00	150.0	<.40	19.0	<2.0	.380	12.0	54.0	23.0	43.0	1.40	1.80	72.0
GS15	70.00	39.0	<.40	<2.0	<2.0	.290	36.0	30.0	6.4	8.1	1.70	9.10	390.0
GS16	8.30	59.0	<.40	<2.0	<2.0	.580	130.0	56.0	10.0	17.0	<.04	5.10	420.0
GS17	8.90	67.0	L.77	7.9	<4.9	.770	140.0	280.0	24.0	37.0	5.50	3.00	540.0
GS18	4.30	44.0	<.40	15.0	<5.7	.470	21.0	48.0	5.8	9.8	5.20	1.10	110.0
GS19	73.00	81.0	<.40	<2.0	<2.0	.810	35.0	110.0	10.0	14.0	<.04	5.40	580.0
GS20	140.00	45.0	<.40	20.0	<2.0	.190	32.0	23.0	3.3	<.9	<.04	6.70	350.0
GS21	35.00	24.0	L.49	48.0	<5.5	.160	130.0	28.0	10.0	20.0	<.04	4.90	640.0

Table 22. ICP analytical data from unaltered rock samples collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	MG-ppm ICP	CA-ppm ICP	FE-ppm ICP	TI-ppm ICP	AL-ppm ICP	V-ppm ICP	CR-ppm ICP	MN-ppm ICP	CO-ppm ICP	NI-ppm ICP
GS22	46 36 10	121 20 25	3,000	1,700	26,000	620.0	4,400	37.00	<1.0	240	L3.8	4.2
GS23	46 37 57	121 19 5	1,800	4,600	24,000	1,600.0	12,000	58.00	18.0	240	7.8	28.0
GS24	46 39 8	121 19 49	11,000	8,300	45,000	1,400.0	32,000	85.00	<1.0	670	15.0	18.0
GS25	46 41 20	121 29 10	11,000	6,400	35,000	460.0	23,000	29.00	<1.0	560	13.0	13.0
GS26	46 32 9	121 30 25	3,800	3,600	28,000	1,100.0	7,200	61.00	<1.0	290	9.1	12.0
GS27	46 32 2	121 30 25	3,600	5,900	24,000	580.0	12,000	67.00	<1.0	150	7.5	12.0
GS28	46 35 6	121 27 18	33	120	26,000	7.0	1,900	1.20	<1.0	210	<2.0	L1.8
GS29	46 36 46	121 29 58	5,800	19,000	100,000	3,100.0	59,000	38.00	<10.0	1,700	<20.0	<10.0
GS2A	46 31 40	121 21 45	530	4,400	620	1.2	21,000	<.15	<1.0	26	<2.0	<1.0
GS2D	46 31 40	121 21 45	430	4,700	400	1.2	28,000	<.15	<1.0	27	<2.0	<1.0
GS3	46 31 9	121 25 7	10,000	9,900	36,000	1,100.0	24,000	43.00	<1.0	81	9.7	14.0
GS30	46 37 7	121 30 12	4,100	19,000	47,000	1,900.0	49,000	21.00	<1.0	1,100	9.6	3.6
GS31	46 36 47	121 30 15	1,300	690	24,000	280.0	7,900	3.70	<1.0	760	<2.0	<1.0
GS32	46 36 50	121 30 15	4,700	23,000	67,000	1,300.0	41,000	52.00	<1.0	1,400	24.0	3.9
GS33	46 36 56	121 30 16	5,700	15,000	54,000	2,300.0	44,000	25.00	<1.0	990	11.0	3.7
GS34	46 38 5	121 35 30	710	12,000	19,000	2.0	6,300	1.90	<1.0	380	<2.0	L1.3
GS4	46 31 9	121 25 7	5,600	860	27,000	1.5	11,000	32.00	<1.0	360	L4.3	7.6
GS46	46 30 10	121 26 46	2,400	9,900	26,000	850.0	22,000	88.00	<1.0	100	5.6	5.7
GS5	46 31 9	121 25 7	4,500	12,000	21,000	93.0	9,900	25.00	<1.0	500	L4.2	5.0
GS6	46 30 34	121 25 20	390	2,600	60,000	370.0	2,800	7.10	<1.0	27	27.0	21.0
GS7	46 30 29	121 25 25	1,600	3,200	92,000	340.0	8,400	15.00	<1.0	76	42.0	26.0
GS8	46 30 29	121 25 25	1,300	9,100	1,900	330.0	12,000	7.40	4.1	65	<2.0	L2.4
GS9	46 30 6	121 25 24	11,000	7,900	60,000	800.0	28,000	41.00	<1.0	81	13.0	16.0

Table 22. ICP analytical data from unaltered rock samples collected in the Goat Rocks area--continued

Sample	CU-ppm ICP	ZN-ppm ICP	MO-ppm ICP	PB-ppm ICP	AS-ppm ICP	BE-ppm ICP	SR-ppm ICP	BA-ppm ICP	LA-ppm ICP	CE-ppm ICP	Y-ppm ICP	NB-ppm ICP	P-ppm ICP
GS22	13.00	40.0	<.40	20.0	<4.9	.160	25.0	48.0	6.6	11.0	<.04	3.20	460.0
GS23	23.00	36.0	L.76	<2.0	<2.0	.270	65.0	33.0	10.0	21.0	1.60	6.00	510.0
GS24	18.00	63.0	L.62	<2.0	<2.0	.550	130.0	100.0	6.9	9.6	<.04	9.00	340.0
GS25	15.00	86.0	L.61	60.0	<2.0	.210	49.0	19.0	4.7	6.8	<.04	5.10	410.0
GS26	23.00	45.0	2.30	22.0	<6.9	.360	36.0	48.0	24.0	48.0	7.80	5.70	620.0
GS27	28.00	40.0	1.00	L6.2	<2.0	.320	67.0	34.0	18.0	34.0	3.60	5.90	630.0
GS28	1.60	84.0	<.40	42.0	<2.0	.530	5.2	140.0	11.0	23.0	1.70	L.34	L6.7
GS29	19.00	140.0	<4.00	<20.0	<20.0	.720	120.0	65.0	L24.0	33.0	5.00	8.30	640.0
GS2A	1.40	3.3	<.40	10.0	<2.0	.820	170.0	640.0	14.0	23.0	7.20	1.10	L7.1
GS2B	1.90	5.9	<.40	<2.0	<2.0	.460	330.0	1,300.0	11.0	22.0	4.80	1.40	<4.0
GS3	15.00	8.0	<.40	<2.0	<2.0	.330	60.0	27.0	7.3	8.3	<.04	5.00	660.0
GS30	50.00	64.0	L.57	<2.0	<2.0	.490	44.0	43.0	8.5	14.0	<.04	4.70	290.0
GS31	L.23	49.0	L.45	12.0	<2.0	.660	6.2	68.0	29.0	51.0	5.00	1.40	210.0
GS32	46.00	64.0	<.40	L11.0	<2.0	.380	100.0	72.0	11.0	10.0	<.04	6.90	150.0
GS33	55.00	87.0	<.40	<2.0	<2.0	.440	98.0	110.0	10.0	16.0	<.04	5.20	430.0
GS34	3.70	28.0	<.40	7.9	<2.0	.420	47.0	140.0	23.0	37.0	4.60	.92	120.0
GS4	3.40	53.0	L.58	L5.8	<2.9	.120	4.6	23.0	9.6	15.0	<.04	3.40	590.0
GS46	34.00	35.0	L.50	<3.2	<2.0	.250	120.0	28.0	11.0	21.0	.60	7.40	540.0
GS5	5.30	38.0	L.99	8.5	<2.0	.600	27.0	16.0	13.0	21.0	8.30	2.80	370.0
GS6	<.15	2.6	<.40	10.0	41.0	.066	33.0	3.4	4.1	3.6	<.04	2.10	360.0
GS7	37.00	7.6	2.10	20.0	62.0	.150	34.0	2.1	6.1	4.7	<.04	2.80	630.0
GS8	.51	4.6	1.10	<2.0	<2.0	.210	65.0	8.2	4.3	6.4	1.10	1.60	670.0
GS9	<.15	7.5	<.40	<3.4	<2.0	.470	71.0	12.0	4.0	L1.6	<.04	6.40	580.0

Table 23. Spectrographic analytical data from altered rock samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: --, no determination made; N, concentration less than the detection limit; <, detected, but present at a concentration less than the value reported; >, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
DSGR128	46 32 16	121 27 15	1.50	1.50	5.0	.70	15	150	30	150	15	20
DSGR234	46 25 35	121 24 5	.70	1.00	3.0	.30	10	70	20	200	10	7
DSGR236	46 25 20	121 24 32	1.00	1.50	5.0	.50	15	100	20	700	5	7
DSGR238	46 26 52	121 24 40	.30	.05	1.0	.50	7	50	10	20	5	<5
DSGR239	46 27 37	121 24 38	1.50	2.00	5.0	.50	10	100	30	1,000	30	20
GR1009RA	46 34 8	121 26 8	.20	1.00	3.0	.07	N	N	N	700	N	N
GR1023RA	46 37 53	121 34 19	1.00	2.00	2.0	.20	10	70	20	500	15	15
GR1024RA	46 39 10	121 34 17	.50	1.50	3.0	.20	15	70	15	300	15	5
GR1045RA	46 30 42	121 25 32	1.00	2.00	2.0	.20	10	70	20	100	7	7
GR1045RB	46 30 32	121 25 32	2.00	3.00	3.0	.30	20	150	100	100	10	10
GR1045RC	46 30 32	121 25 32	1.00	2.00	1.5	.20	10	70	20	150	N	N
GR1045RD	46 30 32	121 25 32	1.00	2.00	3.0	.30	10	100	30	200	7	20
GR1045RE	46 30 32	121 25 32	1.00	3.00	3.0	.30	15	100	30	500	20	20
GR1052RA	46 29 45	121 26 11	1.00	1.50	5.0	.50	15	100	50	150	30	30
GR1054RA	46 29 39	121 26 9	1.00	1.50	3.0	.20	10	70	15	300	10	10
GR1054RB	46 29 39	121 26 9	1.50	1.50	3.0	.30	10	70	20	300	10	20
GR1100RA	46 32 12	121 26 53	2.00	7.00	10.0	.30	10	200	70	2,000	30	70
GR1101RA	46 32 11	121 26 55	2.00	2.00	10.0	1.00	15	200	70	1,000	20	30
GR1102RA	46 32 11	121 26 57	2.00	3.00	7.0	.50	10	100	50	1,000	20	20
GR1103RA	46 32 12	121 27 0	1.00	.70	7.0	1.00	10	100	10	150	15	5
GR1103RB	46 32 12	121 27 0	1.00	2.00	2.0	.70	10	50	N	500	N	N
GR1103RC	46 32 12	121 27 0	1.50	2.00	5.0	1.00	15	70	15	700	20	7
GR1104RA	46 32 15	121 26 58	2.00	2.00	10.0	1.00	15	150	50	200	30	30
GR1104RB	46 32 15	121 26 58	1.00	.70	7.0	.70	15	150	50	100	7	15
GR1104RC	46 32 15	121 26 58	2.00	5.00	5.0	1.00	20	200	300	500	7	150
GR1105RA	46 32 16	121 26 55	2.00	1.00	5.0	.50	10	100	20	1,000	20	10
GR1106RA	46 31 15	121 27 58	1.50	2.00	>20.0	.15	7	70	N	1,500	100	N
GR1106RA	46 31 15	121 27 58	1.50	1.50	10.0	.50	10	70	30	500	30	50
GR1106RB	46 31 15	121 27 58	.50	.07	10.0	.10	5	30	10	100	50	70
GR1267RA	46 40 2	121 32 36	.10	.15	1.5	.10	<5	20	<10	300	5	N
GR1275RA	46 32 50	121 22 28	.20	1.00	1.5	.02	N	N	N	200	N	N
GR1277RA	46 32 49	121 22 41	.05	1.00	.7	.05	<5	10	10	200	N	N
GR1286	46 28 51	121 22 59	.70	.50	5.0	.30	10	70	N	500	7	N
GR1287	46 28 58	121 23 5	.10	<.05	5.0	.15	N	N	N	500	N	N
GR1289RB	46 31 3	121 27 37	2.00	3.00	7.0	1.00	20	300	300	1,500	50	200
GR1289RC	46 31 3	121 27 37	.20	.05	5.0	.05	N	100	20	200	7	50
GR1289RD	46 31 3	121 27 37	2.00	2.00	5.0	.30	15	150	50	1,000	20	20
GR1507RA	46 30 2	121 31 39	1.00	3.00	5.0	.50	20	150	N	1,000	20	N
GR1507RB	46 30 2	121 31 39	1.50	3.00	5.0	.50	20	200	N	1,000	20	N
GR1508RA	46 30 0	121 32 27	.30	2.00	5.0	.20	20	50	N	700	5	N
GR1523RA	46 36 53	121 27 7	1.00	2.00	2.0	.10	7	20	15	700	5	5
GR1792RA	46 28 17	121 25 40	.10	.50	2.0	.10	<5	N	N	300	N	7
GR1793RA	46 28 48	121 26 0	2.00	.50	5.0	.50	15	150	10	200	20	15
GR1794RA	46 29 0	121 25 56	1.00	2.00	2.0	.30	10	100	20	500	15	15
GR1795RA	46 29 13	121 25 48	.50	1.00	2.0	.20	7	30	N	150	N	7

Table 23. Spectrographic analytical data from altered rock samples collected in the Goat Rocks area

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	As-ppm s	Bi-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s
DSGR128	10	N	N	N	N	N	N	N	200	2.0	200	200	N
DSGP234	15	N	N	10	N	N	N	N	15	1.5	200	500	20
DSGR236	10	N	N	15	N	N	N	N	20	1.5	300	300	30
DSGR238	<5	N	N	<10	N	N	N	N	500	3.0	N	150	30
DSGR239	30	N	N	10	N	N	N	N	N	2.0	300	500	30
GR1009RA	15	N	N	N	N	N	N	N	15	2.0	N	50	30
GR1023RA	50	N	N	N	N	N	N	N	N	N	700	300	N
GR1024RA	20	N	N	N	N	N	N	N	<10	1.0	150	150	N
GR1045RA	10	N	N	N	N	10	N	N	<10	1.0	200	200	N
GR1045RB	7	N	N	N	N	15	N	N	<10	1.0	300	200	20
GR1045RC	5	N	N	10	N	15	N	N	10	1.0	200	70	N
GR1045RD	7	N	N	N	N	N	N	N	<10	1.0	300	500	N
GR1045RE	<5	N	N	N	N	N	N	N	<10	1.0	300	100	N
GR1052RA	20	N	N	N	N	10	N	N	30	1.5	300	200	20
GR1054RA	20	N	N	N	N	N	N	N	<10	1.5	300	300	20
GR1054RB	50	N	N	<10	N	N	N	N	70	1.5	300	200	N
GR1100RA	150	N	N	<10	N	N	N	N	200	N	200	50	N
GR1101RA	50	N	N	10	N	N	N	N	50	3.0	300	500	N
GR1102RA	150	N	N	10	N	N	N	N	30	2.0	300	300	20
GR1103RA	10	N	5	<10	N	N	N	<10	300	1.5	150	500	N
GR1103RB	10	N	N	N	N	N	N	N	200	2.0	100	500	30
GR1103RC	10	N	N	N	N	N	N	N	150	2.0	300	300	20
GR1104RA	50	N	N	<10	N	N	N	10	70	3.0	300	500	N
GR1104RB	20	N	7	<10	N	15	N	10	200	N	200	1,000	N
GR1104RC	200	N	N	N	N	10	N	N	20	2.0	300	500	N
GR1105RA	20	N	N	10	N	N	N	N	200	2.0	150	500	20
GR1106RA	500	N	30	20	N	N	300	N	N	1.0	N	300	N
GR1106RA	20	N	50	70	.5	N	<200	N	10	<1.0	200	150	N
GR1106RB	70	N	50	20	.7	N	1,000	N	10	N	N	100	N
GR1267RA	10	N	N	N	N	N	N	N	20	1.5	100	500	20
GR1275RA	<5	N	N	10	N	N	N	N	30	1.5	200	500	N
GR1277RA	5	N	N	<10	N	N	N	N	<10	2.0	150	700	N
GR1286	15	N	N	10	N	N	N	N	10	2.0	150	500	20
GR1287	10	N	N	15	N	N	N	N	10	3.0	N	1,000	50
GR1289RB	20	N	N	10	N	N	N	N	<10	1.5	500	500	20
GR1289RC	50	N	N	<10	N	N	N	N	<10	1.5	N	50	N
GR1289RD	50	N	N	10	N	N	N	N	<10	1.5	500	200	20
GR1507RA	10	N	N	N	N	N	N	N	<10	N	150	150	N
GR1507RB	10	N	N	N	N	N	N	N	<10	N	150	150	N
GR1508RA	7	N	N	N	N	N	N	N	<10	N	150	300	N
GR1523RA	15	N	N	N	N	N	N	N	20	1.0	100	100	20
GR1792RA	10	N	N	N	N	N	N	N	N	1.5	<100	700	50
GR1793RA	50	N	N	N	N	N	N	N	100	1.0	N	150	20
GR1794RA	20	N	N	N	N	N	N	N	<10	1.0	500	300	20
GR1795RA	10	N	5	N	N	N	N	N	<10	2.0	200	500	50

Table 23. Spectrographic analytical data from altered rock samples collected in the Goat Rocks area

Sample	Y-ppm s	Zr-ppm s	Nb-ppm s	Comments
DSGR128	30	200	N	Pyrite in altered andesite porphyry intrustion
DSGR234	20	200	N	Limonitic-stained vitrophyric breccia (welded tuff)
DSGR236	20	200	N	Pyrite-in-altered microdiorite
DSGR238	20	300	20	Pyrite in bleached porphyritic andesite
DSGR239	20	150	N	Blue-green coatings in joints in-altered-porphyritic andesite
GR1009RA	50	200	20	Pyrite in silicified felsic aphanitic intrusive
GR1023RA	10	50	N	Altered unmineralized andesite
GR1024RA	30	100	N	Altered unmineralized andesite
GR1045RA	20	100	N	Pyrite in altered dacite porphyry
GR1045RB	20	100	N	Pyrite in altered dacite porphyry dike
GR1045RC	20	100	N	Pyrite in altered dacite porphyry
GR1045RD	20	150	N	Diss. sulfides in plutonic intrusive
GR1045RE	20	100	N	Diss. sulfides in plutonic intrusive
GR1052RA	20	150	<20	Argillic altered, unmineralized, felsic intrusive
GR1054RA	30	200	<20	Argillic altered felsic intrusive with diss. sulfides
GR1054RB	20	150	N	Argillic altered, felsic intrusive with diss. sulfides
GR1100RA	20	50	N	Brecciated dike, jasper from veins in dike
GR1101RA	30	200	N	Diss. sulfides in andesite dike
GR1102RA	20	100	N	Pyrite, Quartz, & calcite in veins in felsic intrusive
GR1103RA	20	300	<20	Vein Pyrite in silicic alteration zone
GR1103RB	30	200	N	Quartz, Pyrite vein
GR1103RC	30	300	<20	Epidote, Pyrite vein
GR1104RA	20	300	N	Diss. sulfides in andesite
GR1104RB	20	200	N	Diss. sulfides in mafic dike
GR1104RC	30	150	N	Quartz and boxwork in vein
GR1105RA	30	200	N	Diss. Pyrite in andesite porphyry
GR1106RA	30	50	N	Auto breccia above Cispus
GR1106RA	20	100	N	Base metal veins in felsic igneous rock
GR1106RB	N	30	N	Base metal veins in felsic igneous rock
GR1267RA	15	100	N	Diss. sulfides in quartz rich conglomerate cobble
GR1275RA	20	100	N	Diss. oxidized sulfides in cobbles
GR1277RA	20	100	N	Silicic altered, porphyritic felsic, mineralized cobbles
GR1286	50	300	20	Altered, iron stained volcanics
GR1287	50	500	30	Altered, iron stained volcanics
GR1289RB	30	150	<20	Altered greenish colored volcanic,andesite ?
GR1289RC	N	30	N	Red jasper beds
GR1289RD	20	100	N	Oxidized andesite (red)
GR1507RA	20	70	N	Propylitically altered andesite cobble with diss. sulfides
GR1507RB	20	70	N	Propylitically altered andesite cobble with diss. sulfides
GR1508RA	30	100	N	silicified, mineralized hornfels cobble
GR1523RA	30	100	N	Sericitically altered mineralized breccia
GR1792RA	50	300	30	Silicified mineralized andesite
GR1793RA	20	100	N	Pyrite veins & diss. in silicified green andesite
GR1794RA	20	100	N	Unmineralized chloritic andesite porphyry
GR1795RA	30	200	20	Pyrite in andesite porphyry

Table 23. Spectrographic analytical data from altered rock samples collected in the Goat Rocks area--continued

Sample	Latitude	Longitude	Mg-pct. s	Ca-pct. s	Fe-pct. s	Ti-pct. s	Sc-ppm s	V-ppm s	Cr-ppm s	Mn-ppm s	Co-ppm s	Ni-ppm s
GR1798RA	46 29 15	121 25 47	1.00	2.00	5.0	.30	10	100	10	700	10	15
GS36	46 28 15	121 21 8	1.50	3.00	3.0	.30	5	50	<10	200	5	5
GS37	46 28 15	121 22 33	.30	.10	2.0	.50	10	50	50	10	N	N
GS38	46 29 14	121 24 18	.70	2.00	5.0	.50	10	70	15	200	5	7
GS39	46 29 17	121 24 4	.50	.10	.3	.50	7	100	10	15	N	N
GS40	46 30 17	121 25 42	1.50	1.50	5.0	.50	10	200	20	200	30	7
GS41	46 30 6	121 25 44	1.00	1.00	2.0	.50	5	50	<10	100	5	5
GS42	46 30 25	121 25 47	1.50	3.00	3.0	.50	15	70	10	300	15	5
GS43	46 30 7	121 25 35	1.50	1.00	3.0	.70	15	100	20	300	20	7
GS44	46 29 24	121 25 32	1.00	1.00	3.0	.70	15	100	30	200	10	20
GS45	46 30 31	121 26 20	1.00	1.50	3.0	.70	10	70	15	700	10	10
GS47	46 30 36	121 26 0	.50	5.00	2.0	1.00	15	70	50	300	N	N
GS48	46 30 37	121 26 3	.50	.07	3.0	.70	10	50	<10	100	5	N
GS49	46 30 38	121 26 8	1.50	3.00	5.0	1.00	15	100	70	1,000	10	10
GS50	46 31 1	121 26 27	1.50	1.00	1.5	1.00	20	150	200	70	30	100
GS51	46 30 43	121 26 6	1.00	.50	5.0	1.00	15	70	20	200	7	7
GS52	46 30 55	121 24 35	1.50	3.00	2.0	.70	30	200	150	200	10	30
GS53	46 31 11	121 25 29	1.00	2.00	1.0	.30	5	50	<10	200	7	5
GS55	46 30 40	121 27 6	1.00	2.00	5.0	.50	10	70	20	300	20	10
GS56	46 30 40	121 27 7	1.00	3.00	7.0	.50	20	100	30	500	20	10
GS57	46 30 41	121 27 7	1.50	2.00	15.0	.50	20	50	30	3,000	100	15
GS58	46 30 41	121 27 8	.30	.50	1.0	.50	10	100	20	70	5	5
GS54	46 31 1	121 26 5	.50	1.00	1.0	.30	10	100	30	200	7	7
GS59	46 30 50	121 26 53	1.00	1.00	5.0	.07	10	70	100	300	10	15
GS60	46 32 29	121 23 37	1.50	7.00	1.5	.10	7	50	20	300	10	20

Table 23. Spectrographic analytical data from altered rock samples collected in the Goat Rocks area--continued

Sample	Cu-ppm s	Zn-ppm s	Mo-ppm s	Pb-ppm s	Ag-ppm s	Sn-ppm s	As-ppm s	Bi-ppm s	B-ppm s	Be-ppm s	Sr-ppm s	Ba-ppm s	La-ppm s
GR1798RA	30	N	<5	<10	N	10	N	N	<10	1.5	300	300	20
GS36	100	N	N	<10	N	N	N	N	10	<1.0	700	150	20
GS37	<5	N	5	20	N	N	N	N	20	1.0	N	200	30
GS38	50	N	N	10	N	N	N	N	20	1.0	200	200	20
GS39	<5	N	N	N	N	N	N	N	150	1.0	N	20	N
GS40	50	N	N	30	N	<10	N	N	30	<1.0	100	50	N
GS41	5	N	N	<10	N	N	N	N	20	1.0	100	150	N
GS42	1,500	N	N	30	N	N	N	N	10	N	150	70	N
GS43	20	N	N	10	N	N	N	N	100	1.5	100	200	20
GS44	30	N	N	15	N	N	N	N	20	1.0	200	200	20
GS45	100	N	N	10	N	N	N	N	15	1.5	200	200	20
GS47	20	N	N	N	N	N	N	10	150	1.0	100	70	N
GS48	20	N	15	N	N	N	N	N	100	1.0	N	100	30
GS49	<5	N	N	15	N	N	N	N	20	<1.0	300	500	20
GS50	N	N	N	N	N	N	N	N	20	N	200	1,000	N
GS51	10	N	N	20	N	10	N	N	10	1.0	200	700	N
GS52	<5	N	N	15	1.5	20	N	N	200	<1.0	N	70	20
GS53	<5	N	N	N	N	N	N	N	20	1.5	200	N	N
GS55	50	N	N	10	N	N	N	N	<10	<1.0	300	150	N
GS56	30	N	N	<10	N	N	N	N	15	N	500	100	20
GS57	300	N	N	50	<.5	N	N	N	10	1.0	300	150	N
GS58	30	N	N	15	<.5	N	N	N	100	1.0	2,000	100	20
GS54	150	N	N	20	<.5	N	N	N	10	N	100	100	N
GS59	5	<200	20	<10	N	15	N	N	150	<1.0	200	N	N
GS60	30	N	N	N	N	N	N	N	>2,000	N	200	N	N

Table 23. Spectrographic analytical data from altered rock samples collected in the Goat Rocks area--continued

Sample	Y-ppm s	Zr-ppm s	Nb-ppm s	Comments
GR1798RA	20	150	N	Diss. Pyrite in silicified andesite
GS36	N	150	N	Calcite dacite, no visible sulfides
GS37	20	500	<20	Pyritic alteration zone in pyroxene andesite
GS38	15	150	N	Argillic altered zone in Goat Rocks volcano
GS39	10	150	N	argillic altered pyroxene andesite from Goat Rocks volcano
GS40	15	200	N	propylitic altered and silicified rocks from Ohanapocosh Fm.
GS41	10	200	N	argillic altered propylitic altered rocks with diss. py.
GS42	10	50	N	andesite with minor diss. sulfides
GS43	20	200	N	pyritic-silicic altered and brecciated rock
GS44	20	200	N	Cispus Pass granodiorite with minor pyritic alteration
GS45	20	300	N	propylitic altered diorite with minor diss. pyrite
GS47	20	300	N	argillic alteration intense (Ohanapocosh Fm.)
GS48	30	300	<20	intensely altered (quartz-pyrite)rocks of Ohanapocosh Fm.
GS49	15	200	N	propylitically altered andesite with veins of chlorite
GS50	10	50	N	propylitic altered zone with quartz veins
GS51	20	300	N	Propylitic alteration, diss. sulfides
GS52	20	200	N	pyritic and argillic alteration
GS53	20	200	N	bleached Ohanapocosh Fm., weak argillic alteration
GS55	10	100	N	aphitic vein with diss. sulfides
GS56	15	200	N	oxidized mafics, hematitic coatings on altered rocks.
GS57	10	100	N	argillic altered volcanic rocks
GS58	N	100	N	iron-stained argillically altered volcanic rock
GS54	N	20	N	quartz, calcite, vein material from Ohanapocosh Fm.
GS59	10	N	N	intensely altered volcanic rock near Goat Rock volcano
GS60	N	N	N	basalt (Eocene) with calcite and chlorite veins

Table 24. ICP analytical data from altered rock samples collected in the Goat Rocks study area

[The following qualifiers are used in reporting ICP analytical data: --, no determination made; <, concentration less than the given detection limit; L, detected, but data are qualitative only.]

Sample	Latitude	Longitude	Mg-ppm ICP	Ca-ppm ICP	Fe-ppm ICP	Ti-ppm ICP	Al-ppm ICP	V-ppm ICP	Cr-ppm ICP	Mn-ppm ICP	Co-ppm ICP	Ni-ppm ICP
DSGR128	46 32 16	121 27 15	9,800	11,000	23,000	6.0	16,000	42.00	<1.0	73.0	8.5	11.00
DSGR234	46 25 35	121 24 5	2,800	610	31,000	360.0	12,000	35.00	<1.0	66.0	L4.4	5.60
DSGR236	46 25 20	121 24 32	6,700	1,100	33,000	660.0	14,000	39.00	<1.0	330.0	L2.1	4.70
DSGR238	46 26 52	121 24 40	94	200	14,000	1.2	2,400	1.20	<1.0	13.0	<2.0	<1.00
DSGR239	46 27 37	121 24 38	11,000	4,400	33,000	18.0	17,000	40.00	<1.0	570.0	12.0	12.00
GR1009RA	46 34 8	121 26 8	1,500	12,000	30,000	L2.6	3,500	L.35	<1.0	1,300.0	L3.0	L.98
GR1023RA	46 37 53	121 34 19	7,500	14,000	44,000	990.0	28,000	130.00	<1.0	170.0	20.0	22.00
GR1024RA	46 39 10	121 34 17	4,800	9,800	39,000	2,500.0	28,000	48.00	<1.0	600.0	15.0	5.40
GR1045RA	46 30 32	121 25 32	2,000	6,000	25,000	700.0	14,000	20.00	<1.0	74.0	11.0	10.00
GR1045RB	46 30 32	121 25 32	29,000	14,000	42,000	1,600.0	38,000	96.00	76.0	140.0	9.5	9.40
GR1045RC	46 30 32	121 25 32	1,200	8,200	6,100	400.0	18,000	11.00	<1.0	67.0	L2.6	3.30
GR1045RD	46 30 32	121 25 32	4,500	5,900	29,000	1,000.0	8,600	80.00	L11.0	110.0	7.5	14.00
GR1045RE	46 30 32	121 25 32	1,200	12,000	13,000	320.0	23,000	34.00	11.0	110.0	17.0	12.00
GR1052RA	46 29 45	121 26 11	12,000	5,800	36,000	960.0	25,000	66.00	<1.5	150.0	31.0	36.00
GR1054RA	46 29 39	121 26 9	6,200	2,500	32,000	490.0	9,900	45.00	<1.0	240.0	6.9	8.10
GR1054RB	46 29 39	121 26 9	18,000	9,700	46,000	1,100.0	37,000	49.00	<1.0	380.0	9.8	18.00
GR1100RA	46 32 12	121 26 53	8,200	31,000	43,000	480.0	12,000	32.00	<4.0	1,800.0	21.0	42.00
GR1101RA	46 32 11	121 26 55	15,000	12,000	84,000	420.0	31,000	70.00	<4.0	950.0	L16.0	29.00
GR1102RA	46 32 11	121 26 57	10,000	19,000	44,000	14.0	13,000	29.00	<2.0	920.0	20.0	23.00
GR1103RA	46 32 12	121 27 0	660	2,900	53,000	8.1	3,900	5.30	<2.0	92.0	L8.7	L4.10
GR1103RB	46 32 12	121 27 0	3,100	12,000	22,000	3.5	7,700	10.00	<1.0	310.0	L3.5	L2.30
GR1103RC	46 32 12	121 27 0	5,800	16,000	27,000	94.0	14,000	21.00	<1.0	370.0	11.0	6.70
GR1104RA	46 32 15	121 26 58	11,000	5,200	77,000	920.0	19,000	63.00	<4.0	130.0	L9.0	19.00
GR1104RB	46 32 15	121 26 58	2,200	1,100	55,000	650.0	4,900	29.00	<2.0	100.0	L4.6	11.00
GR1104RC	46 32 15	121 26 58	9,500	18,000	23,000	410.0	45,000	41.00	110.0	170.0	6.0	68.00
GR1105RA	46 32 16	121 26 55	11,000	7,400	45,000	4.8	19,000	44.00	<1.0	620.0	12.0	10.00
GR1106RA	46 31 15	121 27 58	3,600	16,000	370,000	40.0	19,000	45.00	<4.0	1,300.0	49.0	<4.00
GR1106RB	46 31 15	121 27 58	1,600	230	120,000	33.0	3,500	31.00	<4.0	94.0	47.0	81.00
GR1267RA	46 40 2	121 32 36	380	1,400	16,000	5.3	5,600	4.90	<1.0	530.0	4.8	3.50
GR1275RA	46 32 50	121 22 28	1,200	4,000	9,000	5.6	19,000	1.70	<1.0	58.0	L1.7	L1.60
GR1277RA	46 32 49	121 22 41	84	1,300	3,500	5.6	3,100	2.10	<1.0	86.0	<1.4	L.85
GR1286	46 28 51	121 22 59	2,000	1,000	39,000	40.0	10,000	25.00	<1.0	410.0	L2.9	L1.40
GR1287	46 28 58	121 23 5	180	22	21,000	2.2	3,800	<.15	<1.0	290.0	<2.0	<1.00
GR1289RB	46 31 3	121 27 37	20,000	19,000	65,000	950.0	32,000	88.00	L27.0	1,100.0	34.0	140.00
GR1289RC	46 31 3	121 27 37	970	300	44,000	33.0	2,600	98.00	<1.0	110.0	L3.7	29.00
GR1289RD	46 31 3	121 27 37	100	5,400	2,600	81.0	13,000	13.00	<1.0	32.0	<2.0	<1.00
GR1507RA	46 30 2	121 31 39	5,500	7,900	61,000	3,500.0	16,000	170.00	<1.0	390.0	16.0	L1.40
GR1507RB	46 30 2	121 31 39	5,000	8,300	59,000	3,700.0	14,000	140.00	<1.0	390.0	15.0	L1.20
GR1508RA	46 30 0	121 32 27	1,700	2,200	53,000	2,400.0	5,300	33.00	<1.0	770.0	3.7	<.72
GR1523RA	46 36 53	121 27 7	15,000	20,000	32,000	L1.6	3,000	17.00	<1.0	2,200.0	8.1	5.70
GR1792RA	46 28 17	121 25 40	400	430	22,000	490.0	8,000	L1.50	<1.0	480.0	<1.4	L.84
GR1793RA	46 28 48	121 26 0	45,000	1,900	85,000	8.1	43,000	84.00	<2.0	330.0	14.0	13.00
GR1794RA	46 29 0	121 25 56	920	3,300	17,000	1,100.0	7,600	59.00	<1.0	310.0	6.9	5.50
GR1795RA	46 29 13	121 25 48	2,500	1,900	26,000	460.0	12,000	10.00	<1.0	160.0	<1.4	L1.30
GR1798RA	46 29 15	121 25 47	14,000	9,500	57,000	1,400.0	26,000	71.00	<1.0	790.0	10.0	13.00

Table 24. ICP analytical data from altered rock samples collected in the Goat Rocks study area

Sample	Cu-ppm ICP	Zn-ppm ICP	Mo-ppm ICP	Pb-ppm ICP	Ag-ppm ICP	As-ppm ICP	Be-ppm ICP	Sr-ppm ICP	Ba-ppm ICP	La-ppm ICP	Ce-ppm ICP	Y-ppm ICP	Nb-ppm ICP
DSGR128	<.15	10.0	1.40	<2.0	<.20	L35.0	.500	32.0	28.0	9.7	11.0	7.000	4.70
DSGR234	8.00	11.0	1.50	12.0	<.20	<2.0	.300	16.0	34.0	7.3	13.0	<.040	4.50
DSGR236	4.80	43.0	1.40	11.0	<.20	<2.0	.280	29.0	99.0	16.0	31.0	<.040	5.70
DSGR238	<.15	2.2	<.40	L2.8	<.20	27.0	.290	19.0	31.0	16.0	29.0	<.040	L.22
DSGR239	18.00	45.0	<.40	L4.0	<.20	<2.0	.490	20.0	67.0	16.0	29.0	.730	6.20
GR1009RA	16.00	130.0	L.94	7.1	<.15	20.0	.950	14.0	9.6	23.0	40.0	9.800	.68
GR1023RA	82.00	60.0	1.10	L7.3	<.15	<1.6	.330	300.0	76.0	23.0	43.0	<.040	6.50
GR1024RA	33.00	70.0	L.64	L12.0	<.15	<1.6	.640	39.0	100.0	14.0	25.0	3.800	2.80
GR1045RA	9.70	6.7	1.70	9.9	<.15	L36.0	.290	37.0	13.0	8.0	12.0	<.040	1.90
GR1045RB	1.70	15.0	L1.20	<2.8	<.15	<1.6	.450	85.0	13.0	9.4	8.8	<.040	6.30
GR1045RC	2.80	7.5	.96	L5.9	<.15	<5.7	.320	71.0	14.0	4.8	6.2	1.100	1.10
GR1045RD	4.60	11.0	2.50	L6.0	<.15	L16.0	.340	26.0	34.0	12.0	18.0	1.100	4.00
GR1045RE	1.20	14.0	L.82	L8.1	<.15	<16.0	.440	99.0	16.0	2.2	L1.7	<.040	2.20
GR1052RA	19.00	15.0	L.75	L7.5	<.15	<1.6	.860	27.0	69.0	6.9	9.0	.350	4.50
GR1054RA	24.00	32.0	L.47	L3.4	<.15	<2.8	.270	10.0	27.0	5.6	7.2	<.040	2.40
GR1054RB	50.00	29.0	<.38	<3.9	<.15	<1.6	.740	57.0	26.0	5.3	3.8	<.040	3.70
GR1100RA	73.00	44.0	<1.60	<8.0	<.80	L39.0	.420	39.0	53.0	L9.8	L8.5	<.160	4.20
GR1101RA	22.00	72.0	<1.60	<8.0	<.80	<8.0	.870	36.0	85.0	19.0	25.0	<.160	9.10
GR1102RA	51.00	35.0	2.40	11.0	<.40	72.0	.390	73.0	54.0	13.0	20.0	<.080	4.70
GR1103RA	<.30	6.2	3.50	L8.0	<.40	76.0	.300	20.0	15.0	11.0	14.0	<.080	L.84
GR1103RB	3.50	34.0	L.81	L2.0	<.20	<8.3	.550	60.0	55.0	27.0	45.0	5.800	1.70
GR1103RC	2.10	31.0	L.96	L6.1	<.20	<2.0	.650	59.0	78.0	6.0	5.8	<.040	3.20
GR1104RA	10.00	14.0	<1.60	<8.0	<.80	<8.0	.390	33.0	24.0	L5.8	<3.6	<.160	6.90
GR1104RB	6.70	6.0	2.20	10.0	<.40	61.0	.190	11.0	34.0	5.0	L3.2	<.080	3.20
GR1104RC	170.00	43.0	1.20	<2.0	<.20	<2.0	.610	100.0	29.0	3.7	<.9	<.040	5.50
GR1105RA	7.10	41.0	2.50	L11.0	<.20	<15.0	.600	27.0	35.0	30.0	47.0	6.000	5.50
GR1106RA	250.00	100.0	27.00	51.0	<.80	170.0	.550	60.0	9.9	14.0	<3.6	<.160	6.90
GR1106RB	31.00	16.0	48.00	53.0	<.80	670.0	L.027	2.0	14.0	<4.0	<3.6	<.160	3.20
GR1267RA	13.00	65.0	2.10	13.0	<.15	L19.0	.740	15.0	59.0	16.0	28.0	1.200	.76
GR1275RA	1.30	13.0	L.51	12.0	<.15	<8.7	.700	150.0	26.0	8.3	15.0	7.000	.90
GR1277RA	2.70	20.0	1.40	7.0	<.15	11.0	.260	20.0	170.0	13.0	26.0	7.600	L.29
GR1286	4.60	53.0	1.30	11.0	<.20	L21.0	.360	7.6	48.0	18.0	36.0	1.700	3.60
GR1287	3.70	85.0	<.40	15.0	<.20	<2.0	1.100	2.4	35.0	47.0	95.0	1.700	.63
GR1289RB	20.00	61.0	<.38	<1.5	<.15	<1.6	.570	89.0	29.0	21.0	31.0	1.400	5.10
GR1289RC	22.00	8.1	2.30	11.0	<.20	16.0	.240	4.0	8.4	L1.7	<.9	<.040	8.20
GR1289RD	3.90	4.4	<.40	L2.3	<.20	<2.0	.059	85.0	11.0	3.9	5.7	1.300	2.00
GR1507RA	3.40	69.0	L.81	L7.2	<.15	<1.8	.470	24.0	12.0	9.7	15.0	5.400	6.90
GR1507RB	4.80	59.0	L.77	L7.9	<.15	<6.3	.390	27.0	12.0	9.0	13.0	2.700	5.80
GR1508RA	3.30	72.0	L.63	8.8	<.15	L12.0	.260	9.4	16.0	14.0	24.0	11.000	2.10
GR1523RA	19.00	83.0	3.50	12.0	<.15	30.0	.800	120.0	62.0	34.0	55.0	28.000	2.80
GR1792RA	9.90	57.0	1.80	L2.8	<.15	<1.6	.450	5.8	41.0	13.0	22.0	4.200	L.53
GR1793RA	11.00	12.0	<.82	<3.0	<.30	<3.1	.350	4.1	3.8	3.9	<2.6	<.080	6.30
GR1794RA	15.00	25.0	<.38	<1.5	<.15	<1.6	.310	46.0	39.0	13.0	24.0	3.800	2.10
GR1795RA	12.00	38.0	3.40	L3.1	<.15	<1.6	.440	17.0	25.0	13.0	20.0	<.040	.63
GR1798RA	19.00	49.0	2.80	<1.5	<.15	<1.6	.520	40.0	30.0	8.5	10.0	<.040	4.40

Table 24. ICP analytical data from altered rock samples collected in the Goat Rocks study area

Sample	P-ppm ICP
DSGR128	510.0
DSGR234	380.0
DSGR236	610.0
DSGR238	160.0
DSGR239	430.0
GR1009RA	110.0
GR1023RA	1,200.0
GR1024RA	180.0
GR1045RA	710.0
GR1045RB	610.0
GR1045RC	550.0
GR1045RD	790.0
GR1045RE	1,200.0
GR1052RA	730.0
GR1054RA	500.0
GR1054RB	480.0
GR1100RA	270.0
GR1101RA	630.0
GR1102RA	520.0
GR1103RA	680.0
GR1103RB	650.0
GR1103RC	700.0
GR1104RA	620.0
GR1104RB	510.0
GR1104RC	640.0
GR1105RA	560.0
GR1106RA	770.0
GR1106RB	81.0
GR1267RA	130.0
GR1275RA	<2.9
GR1277RA	14.0
GR1286	550.0
GR1287	35.0
GR1289RB	1,100.0
GR1289RC	120.0
GR1289RD	240.0
GR1507RA	490.0
GR1507RB	360.0
GR1508RA	550.0
GR1523RA	250.0
GR1792RA	32.0
GR1793RA	1,400.0
GR1794RA	520.0
GR1795RA	360.0
GR1798RA	530.0

Table 24. ICP analytical data from altered rock samples collected in the Goat Rocks study area--continued

Sample	Latitude	Longitude	Mg-ppm ICP	Ca-ppm ICP	Fe-ppm ICP	Ti-ppm ICP	Al-ppm ICP	V-ppm ICP	Cr-ppm ICP	Mn-ppm ICP	Co-ppm ICP	Ni-ppm ICP
GS36	46 38 15	121 21 8	3,000	4,900	23,000	460.0	13,000	32.00	<1.0	100.0	L3.3	4.40
GS37	46 28 15	121 22 33	140	210	25,000	1.4	3,800	2.90	<1.0	9.7	<2.0	L2.10
GS38	46 29 14	121 24 18	130	930	15,000	270.0	6,400	27.00	<1.0	26.0	<2.0	L2.50
GS39	46 29 17	121 24 4	430	1,700	1,200	13.0	3,700	3.80	<1.0	13.0	<2.0	L1.10
GS40	46 30 17	121 25 42	15,000	6,300	51,000	1,100.0	32,000	75.00	<1.0	400.0	24.0	7.50
GS41	46 30 6	121 25 44	7,300	5,400	37,000	530.0	23,000	36.00	<1.0	150.0	8.3	7.80
GS42	46 30 25	121 25 47	1,300	7,100	24,000	520.0	15,000	87.00	<2.0	120.0	<4.0	5.40
GS43	46 30 7	121 25 35	14,000	7,600	50,000	770.0	37,000	49.00	<1.0	450.0	18.0	9.50
GS44	46 29 24	121 25 32	14,000	2,100	39,000	140.0	24,000	69.00	<1.0	210.0	9.4	22.00
GS45	46 30 31	121 26 20	9,600	17,000	39,000	190.0	19,000	51.00	<1.0	770.0	12.0	11.00
GS47	46 30 36	121 26 0	690	23,000	20,000	6.0	6,400	25.00	<1.0	390.0	L4.1	L1.90
GS48	46 30 37	121 26 3	1,800	870	41,000	8.8	9,300	9.10	<1.0	170.0	L3.3	4.10
GS49	46 30 38	121 26 8	6,200	14,000	36,000	1,900.0	22,000	47.00	<1.0	640.0	9.4	9.80
GS50	46 31 1	121 26 27	11,000	6,700	18,000	540.0	12,000	50.00	74.0	120.0	20.0	76.00
GS51	46 30 43	121 26 6	3,700	1,000	35,000	15.0	9,800	19.00	<1.0	310.0	L4.6	5.90
GS52	46 30 55	121 24 35	3,600	22,000	22,000	3.8	11,000	25.00	<1.0	290.0	7.1	19.00
GS53	46 31 11	121 25 29	7,000	8,000	12,000	83.0	17,000	15.00	<1.0	290.0	7.5	7.40
GS54	46 31 1	121 26 5	5,000	4,100	16,000	160.0	17,000	31.00	<2.4	270.0	7.0	6.60
GS55	46 30 40	121 27 6	310	5,100	21,000	2,200.0	15,000	68.00	<1.0	100.0	L4.0	L1.70
GS56	46 30 40	121 27 7	1,200	7,200	42,000	2,000.0	18,000	77.00	<1.0	210.0	10.0	4.50
GS57	46 30 41	121 27 7	6,100	1,500	19,000	180.0	24,000	37.00	<1.0	1,400.0	13.0	4.00
GS58	46 30 41	121 27 8	480	1,000	5,400	58.0	18,000	10.00	<1.0	35.0	L2.2	3.20
GS59	46 30 50	121 26 53	250	550	9,500	17.0	22,000	12.00	<1.0	40.0	<2.0	L1.20
GS60	46 32 29	121 23 37	6,600	84,000	16,000	1,100.0	64,000	58.00	<10.0	310.0	<20.0	32.00

Table 24. ICP analytical data from altered rock samples collected in the Goat Rocks study area--continued

Sample	Cu-ppm ICP	Zn-ppm ICP	Mo-ppm ICP	Pb-ppm ICP	Ag-ppm ICP	As-ppm ICP	Be-ppm ICP	Sr-ppm ICP	Ba-ppm ICP	La-ppm ICP	Ce-ppm ICP	Y-ppm ICP	Nb-ppm ICP
GS36	94.00	25.0	<.40	<2.0	<.20	<2.0	.150	150.0	18.0	9.7	16.0	<.040	3.50
GS37	1.10	9.8	1.20	21.0	<.20	<2.0	.140	6.2	37.0	9.5	16.0	<.040	.61
GS38	20.00	14.0	<.40	<2.0	<.20	<2.0	.150	42.0	9.5	5.2	9.3	.280	2.20
GS39	2.40	2.1	<.40	<2.0	<.20	L8.5	.410	5.9	17.0	3.4	5.5	3.100	.62
GS40	36.00	33.0	L.75	<2.0	<.20	<2.0	.530	39.0	15.0	5.1	3.8	<.040	8.90
GS41	1.60	14.0	2.00	<2.0	<.20	<20.0	.290	47.0	12.0	3.1	<.9	<.040	5.30
GS42	1,800.00	29.0	<.80	40.0	<.40	<12.0	.210	88.0	19.0	13.0	23.0	2.100	7.60
GS43	11.00	28.0	L.51	<2.0	<.20	<2.0	.540	55.0	6.2	3.7	L1.5	<.040	7.60
GS44	26.00	35.0	1.70	<5.2	<.20	<13.0	.580	23.0	50.0	9.3	14.0	1.700	8.30
GS45	50.00	28.0	1.50	<3.8	<.20	<6.1	.410	34.0	22.0	3.7	L1.1	<.040	6.40
GS47	22.00	6.8	L.80	L4.5	<.20	30.0	.520	88.0	60.0	8.2	5.5	3.500	2.70
GS48	15.00	7.1	3.40	L5.8	<.20	L31.0	.390	5.4	9.5	4.5	6.4	<.040	2.20
GS49	<.15	35.0	L.53	L5.2	<.20	<2.0	.370	89.0	200.0	8.1	12.0	<.040	5.90
GS50	<.15	6.6	L.82	<2.0	<.20	L41.0	.250	18.0	30.0	2.6	L2.1	L.074	5.60
GS51	.64	9.8	L.90	15.0	<.20	43.0	.270	5.7	13.0	7.1	9.4	<.040	3.10
GS52	<.15	13.0	L.79	L6.4	.99	<5.3	.730	42.0	56.0	15.0	27.0	6.700	3.30
GS53	1.90	13.0	L.56	<2.0	<.20	<2.0	.660	18.0	9.3	4.5	7.5	.360	3.00
GS54	120.00	16.0	L.49	L9.3	<.20	<2.0	.110	38.0	30.0	3.0	2.9	<.040	3.70
GS55	47.00	19.0	<.40	<2.0	<.20	<2.0	.140	99.0	28.0	3.1	L2.2	<.040	5.80
GS56	7.10	24.0	<.40	<2.0	<.20	<2.0	.210	120.0	20.0	13.0	21.0	.630	7.20
GS57	140.00	47.0	1.00	14.0	<.20	<2.0	.330	47.0	380.0	7.8	13.0	2.000	4.30
GS58	10.00	7.5	<.40	<2.0	<.20	<2.0	.220	110.0	40.0	L2.5	2.9	.520	1.70
GS59	3.40	6.8	1.60	<2.0	<.20	<2.0	.680	47.0	19.0	L1.9	2.3	1.300	2.00
GS60	26.00	21.0	<4.00	<20.0	<2.00	<43.0	.240	240.0	52.0	L13.0	<9.0	L.520	10.00

Table 24. ICP analytical data from altered rock samples collected in the Goat Rocks study area--continued

Sample	P-ppm ICP
GS36	450.0
GS37	180.0
GS38	190.0
GS39	640.0
GS40	500.0
GS41	390.0
GS42	1,700.0
GS43	420.0
GS44	590.0
GS45	600.0
GS47	460.0
GS48	480.0
GS49	470.0
GS50	1,000.0
GS51	620.0
GS52	510.0
GS53	290.0
GS54	160.0
GS55	100.0
GS56	360.0
GS57	100.0
GS58	60.0
GS59	<4.0
GS60	L54.0

Table 25. Fisher-K statistics for analytical data from unaltered rock samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

D.C.-arc spectrographic data

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	S-FE%	0	0	0	0	0	0	69	0	0.7000000	10.000000	3
4	S-MG%	0	0	0	0	0	0	69	0	0.0300000	3.0000000	4
5	S-CA%	0	0	0	0	0	0	69	0	0.0500000	5.0000000	5
6	S-TI%	0	0	0	0	0	0	69	0	0.0100000	1.0000000	6
7	S-MN	0	0	0	0	0	0	69	0	100.00000	2000.0000	7
8	S-AG	69	0	0	0	0	0	0	0			8
9	S-AS	69	0	0	0	0	0	0	0			9
10	S-AU	69	0	0	0	0	0	0	0			10
11	S-B	6	0	22	0	0	0	41	0	10.000000	700.00000	11
12	S-BA	0	0	0	0	0	0	69	0	20.000000	2000.0000	12
13	S-BE	7	0	2	0	0	0	60	0	1.0000000	5.0000000	13
14	S-BI	69	0	0	0	0	0	0	0			14
15	S-CD	69	0	0	0	0	0	0	0			15
16	S-CO	15	0	0	0	0	0	54	0	5.0000000	70.000000	16
17	S-CR	22	0	2	0	0	0	45	0	10.000000	200.00000	17
18	S-CU	0	0	3	0	0	0	66	0	5.0000000	300.00000	18
19	S-LA	23	0	0	0	0	0	46	0	20.000000	50.000000	19
20	S-MO	68	0	0	0	0	0	1	0	10.000000	10.000000	20
21	S-NB	48	0	16	0	0	0	5	0	20.000000	20.000000	21
22	S-NI	16	0	2	0	0	0	51	0	5.0000000	150.00000	22
23	S-PB	15	0	8	0	0	0	46	0	10.000000	100.00000	23
24	S-SB	69	0	0	0	0	0	0	0			24
25	S-SC	10	0	0	0	0	0	59	0	5.0000000	50.000000	25
26	S-SN	65	0	0	0	0	0	4	0	10.000000	50.000000	26
27	S-SR	4	0	0	0	0	0	65	0	100.00000	1000.0000	27
28	S-V	4	0	4	0	0	0	61	0	10.000000	300.00000	28
29	S-W	69	0	0	0	0	0	0	0			29
30	S-Y	0	0	0	0	0	0	69	0	10.000000	100.00000	30
31	S-ZN	69	0	0	0	0	0	0	0			31
32	S-ZR	1	0	0	0	0	0	68	0	30.000000	500.00000	32
33	S-TH	69	0	0	0	0	0	0	0			33
34	AA-AU-P	3	0	0	0	66	0	0	0			34

Table 25. Fisher-K statistics for analytical data from unaltered rock samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	S-FE%	5.2565217	2.6938098	7.2566113	4.7934481	0.2454709	-47.792639	-0.9075975	3
4	S-MG%	1.1094203	0.6696375	0.4484144	0.1609606	0.5360437	0.0395736	0.1968096	4
5	S-CA%	1.8650725	1.3096987	1.7153107	2.0291021	0.9032120	1.9957768	0.6783071	5
6	S-TI%	0.4280435	0.2743056	0.0752435	0.0123154	0.5966842	-0.0013910	-0.2456988	6
7	S-MN	878.98551	545.05840	297088.66	1.0530787D+08	0.6503269	-2.9423704D+10	-0.3333690	7
8	S-AG								8
9	S-AS								9
10	S-AU								10
11	S-B	42.682927	107.58774	11575.122	7458073.0	5.9887788	4.9900787D+09	37.243993	11
12	S-BA	549.85507	379.75028	144210.27	65801323.	1.2015458	4.7917231D+10	2.3040893	12
13	S-BE	2.1083333	1.1202741	1.2550141	1.8670453	1.3279507	2.1798383	1.3839712	13
14	S-BI								14
15	S-CD								15
16	S-CO	22.555556	14.681096	215.53459	4065.3193	1.2847517	58635.192	1.2621890	16
17	S-CR	57.111111	55.764204	3109.6465	289108.27	1.6672242	17747078.	1.8352905	17
18	S-CU	42.484848	51.797013	2682.9305	378568.73	2.7241473	68347975.	9.4952586	18
19	S-LA	28.043478	9.8023954	96.086957	1224.9012	1.3004822	8004.1364	0.8669331	19
20	S-MO	10.000000							20
21	S-NB	20.000000	0.0	0.0	0.0	0.0	0.0	0.0	21
22	S-NI	29.117647	31.033947	963.10588	78985.884	2.6426426	7370433.8	7.9459345	22
23	S-PB	21.630435	18.106302	327.83816	15281.423	2.5743911	826783.09	7.6925897	23
24	S-SB								24
25	S-SC	16.423729	8.8652817	78.593220	1389.0864	1.9936625	34353.826	5.5616666	25
26	S-SN	22.500000	18.484228	341.66667	12000.000	1.9001038	432916.67	3.7085068	26
27	S-SR	296.15385	178.38417	31820.913	8832346.0	1.5559911	2.9820837D+09	2.9450627	27
28	S-V	117.13115	71.089492	5053.7158	242768.30	0.6757340	7528199.3	0.2947606	28
29	S-W								29
30	S-Y	31.231884	17.222715	296.62191	10884.669	2.1306415	519080.01	5.8996718	30
31	S-ZN								31
32	S-ZR	169.85294	88.224487	7783.5601	1107853.7	1.6132994	2.5794638D+08	4.2576785	32
33	S-TH								33
34	AA-AU-P								34

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 25. Fisher-K statistics for analytical data from unaltered rock samples collected in the Goat Rocks area

Aqua-regia leach/ICP data

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	AG	71	0	0	0	0	0	0	0			3
4	AL	0	0	0	0	0	0	71	0	1200.0000	59000.000	4
5	AS	62	0	7	0	0	0	2	0	41.000000	62.000000	5
6	B	71	0	0	0	0	0	0	0			6
7	BA	0	0	0	0	0	0	71	0	2.1000000	1300.0000	7
8	BE	0	0	0	0	0	0	71	0	0.0660000	2.3000000	8
9	BI	70	0	1	0	0	0	0	0			9
10	CA	0	0	0	0	0	0	71	0	110.00000	25000.000	10
11	CE	3	0	2	0	0	0	66	0	3.6000000	53.000000	11
12	CO	18	0	9	0	0	0	44	0	3.8000000	42.000000	12
13	CR	65	0	3	0	0	0	3	0	4.1000000	19.000000	13
14	CU	5	0	1	0	0	0	65	0	0.4100000	140.00000	14
15	FE	0	0	0	0	0	0	71	0	400.00000	150000.00	15
16	LA	0	0	1	0	0	0	70	0	3.0000000	37.000000	16
17	MG	0	0	0	0	0	0	71	0	33.000000	19000.000	17
18	MN	0	0	0	0	0	0	71	0	13.000000	1700.0000	18
19	MO	31	0	29	0	0	0	11	0	1.0000000	2.3000000	19
20	NB	1	0	3	0	0	0	67	0	0.5300000	20.000000	20
21	NI	14	0	11	0	0	0	46	0	2.2000000	56.000000	21
22	P	1	0	2	0	0	0	68	0	28.000000	1200.0000	22
23	PB	23	0	18	0	0	0	30	0	5.9000000	60.000000	23
24	SB	70	0	1	0	0	0	0	0			24
25	SR	0	0	0	0	0	0	71	0	2.4000000	330.00000	25
26	SN	53	0	6	0	0	0	12	0	0.0	5.0000000	26
27	TI	0	0	0	0	0	0	71	0	1.1000000	4600.0000	27
28	V	3	0	4	0	0	0	64	0	0.6700000	180.00000	28
29	Y	24	0	0	0	0	0	47	0	0.3100000	15.000000	29
30	ZN	0	0	0	0	0	0	71	0	2.6000000	150.00000	30

Table 25. Fisher-K statistics for analytical data from unaltered rock samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	AG								3
4	AL	16264.789	13112.155	1.7192860D+08	3.3994053D+12	1.5079285	6.0495012D+16	2.0465545	4
5	AS	51.500000	14.849242	220.50000					5
6	B								6
7	BA	75.088732	168.89468	28525.412	29710058.	6.1667397	3.4109002D+10	41.918445	7
8	BE	0.4364225	0.3063371	0.0938424	0.0982422	3.4174286	0.1665908	18.917029	8
9	BI								9
10	CA	7019.8592	6233.0883	38851390.	3.1430902D+11	1.2979172	1.7020652D+15	1.1276208	10
11	CE	25.077273	14.037234	197.04394	965.11363	0.3489264	-39641.551	-1.0209970	11
12	CO	12.045455	7.3215342	53.604863	789.10069	2.0106021	15829.929	5.5089722	12
13	CR	13.700000	8.3288655	69.370000	-984.52800	-1.7040037			13
14	CU	23.509692	30.209496	912.61366	63855.524	2.3161572	4595620.9	5.5178548	14
15	FE	34732.676	24917.123	6.2086301D+08	3.0820558D+13	1.9922637	2.3381497D+18	6.0656973	15
16	LA	14.635714	9.0353899	81.638271	550.32770	0.7460719	-3170.9689	-0.4757780	16
17	MG	4273.5634	4399.9366	19359442.	1.3046710D+11	1.5316578	6.8396380D+14	1.8249351	17
18	MN	426.77465	386.84978	149652.75	78651027.	1.3585554	3.2030497D+10	1.4301918	18
19	MO	1.4909091	0.4784445	0.2289091	0.0735091	0.6711916	-0.0580909	-1.1086184	19
20	NB	4.4434328	3.0825720	9.5022502	65.356947	2.2312697	792.69245	8.7791366	20
21	NI	12.628261	10.227103	104.59363	2358.8942	2.2052134	74253.499	6.7874473	21
22	P	425.27941	221.15496	48909.518	3731521.0	0.3449815	1.8778860D+09	0.7850231	22
23	PB	15.753333	12.722739	161.86809	4870.5182	2.3650117	143595.21	5.4804658	23
24	SB								24
25	SR	49.833803	51.792404	2682.4531	376985.16	2.7134763	81792247.	11.367052	25
26	SN	0.4166667	1.4433757	2.0833333	10.416667	3.4641016	52.083333	12.000000	26
27	TI	693.36197	869.06041	755266.00	1.4781275D+09	2.2519669	3.5777310D+12	6.2720255	27
28	V	44.434219	35.625508	1269.1768	60640.219	1.3411506	4179809.6	2.5948498	28
29	Y	4.9565957	3.4691587	12.035062	35.806217	0.8576023	60.631260	0.4186007	29
30	ZN	46.873239	30.712459	943.25513	31982.320	1.1039927	1578623.2	1.7742718	30

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

D.C.-arc spectrographic data

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-FE%)	2	(S-MG%)	0.4747	69
1 (S-FE%)	3	(S-CA%)	0.4890	69
1 (S-FE%)	4	(S-TI%)	0.6789	69
1 (S-FE%)	5	(S-MN)	0.6550	69
1 (S-FE%)	6	(S-AG)	********	0
1 (S-FE%)	7	(S-AS)	********	0
1 (S-FE%)	8	(S-AU)	********	0
1 (S-FE%)	9	(S-B)	-0.2294	41
1 (S-FE%)	10	(S-BA)	-0.3198	69
1 (S-FE%)	11	(S-BE)	-0.5062	60
1 (S-FE%)	12	(S-BI)	********	0
1 (S-FE%)	13	(S-CD)	********	0
1 (S-FE%)	14	(S-CO)	0.6358	54
1 (S-FE%)	15	(S-CR)	0.4089	45
1 (S-FE%)	16	(S-CU)	0.7491	66
1 (S-FE%)	17	(S-LA)	-0.0601	46
1 (S-FE%)	18	(S-MO)	********	1
1 (S-FE%)	19	(S-NB)	********	5
1 (S-FE%)	20	(S-NI)	0.4904	51
1 (S-FE%)	21	(S-PB)	-0.0851	46
1 (S-FE%)	22	(S-SB)	********	0
1 (S-FE%)	23	(S-SC)	0.7058	59
1 (S-FE%)	24	(S-SN)	-0.9277	4
1 (S-FE%)	25	(S-SR)	0.1430	65
1 (S-FE%)	26	(S-V)	0.4852	61
1 (S-FE%)	27	(S-W)	********	0
1 (S-FE%)	28	(S-Y)	0.2441	69
1 (S-FE%)	29	(S-ZN)	********	0
1 (S-FE%)	30	(S-ZR)	0.1689	68
1 (S-FE%)	31	(S-TH)	********	0
1 (S-FE%)	32	(AA-AU-P)	********	0
2 (S-MG%)	3	(S-CA%)	0.7385	69
2 (S-MG%)	4	(S-TI%)	0.7469	69
2 (S-MG%)	5	(S-MN)	0.3471	69
2 (S-MG%)	6	(S-AG)	********	0
2 (S-MG%)	7	(S-AS)	********	0
2 (S-MG%)	8	(S-AU)	********	0
2 (S-MG%)	9	(S-B)	-0.3136	41
2 (S-MG%)	10	(S-BA)	-0.2927	69
2 (S-MG%)	11	(S-BE)	-0.5196	60
2 (S-MG%)	12	(S-BI)	********	0
2 (S-MG%)	13	(S-CD)	********	0
2 (S-MG%)	14	(S-CO)	0.4595	54
2 (S-MG%)	15	(S-CR)	0.4298	45
2 (S-MG%)	16	(S-CU)	0.5660	66
2 (S-MG%)	17	(S-LA)	0.0629	46
2 (S-MG%)	18	(S-MO)	********	1
2 (S-MG%)	19	(S-NB)	********	5
2 (S-MG%)	20	(S-NI)	0.3701	51
2 (S-MG%)	21	(S-PB)	-0.1123	46
2 (S-MG%)	22	(S-SB)	********	0
2 (S-MG%)	23	(S-SC)	0.4269	59
2 (S-MG%)	24	(S-SN)	0.3310	4
2 (S-MG%)	25	(S-SR)	0.5414	65
2 (S-MG%)	26	(S-V)	0.6347	61
2 (S-MG%)	27	(S-W)	********	0
2 (S-MG%)	28	(S-Y)	0.0316	69
2 (S-MG%)	29	(S-ZN)	********	0
2 (S-MG%)	30	(S-ZR)	-0.0250	68
2 (S-MG%)	31	(S-TH)	********	0
2 (S-MG%)	32	(AA-AU-P)	********	0
3 (S-CA%)	4	(S-TI%)	0.6209	69
3 (S-CA%)	5	(S-MN)	0.4312	69
3 (S-CA%)	6	(S-AG)	********	0
3 (S-CA%)	7	(S-AS)	********	0
3 (S-CA%)	8	(S-AU)	********	0
3 (S-CA%)	9	(S-B)	-0.2028	41
3 (S-CA%)	10	(S-BA)	-0.3769	69
3 (S-CA%)	11	(S-BE)	-0.5607	60
3 (S-CA%)	12	(S-BI)	********	0
3 (S-CA%)	13	(S-CD)	********	0
3 (S-CA%)	14	(S-CO)	0.4891	54
3 (S-CA%)	15	(S-CR)	0.3238	45
3 (S-CA%)	16	(S-CU)	0.5918	66
3 (S-CA%)	17	(S-LA)	-0.0944	46
3 (S-CA%)	18	(S-MO)	********	1
3 (S-CA%)	19	(S-NB)	********	5
3 (S-CA%)	20	(S-NI)	0.2846	51
3 (S-CA%)	21	(S-PB)	0.0038	46
3 (S-CA%)	22	(S-SB)	********	0
3 (S-CA%)	23	(S-SC)	0.4591	59
3 (S-CA%)	24	(S-SN)	0.5166	4
3 (S-CA%)	25	(S-SR)	0.4127	65
3 (S-CA%)	26	(S-V)	0.5813	61
3 (S-CA%)	27	(S-W)	********	0
3 (S-CA%)	28	(S-Y)	0.0299	69
3 (S-CA%)	29	(S-ZN)	********	0
3 (S-CA%)	30	(S-ZR)	-0.2537	68
3 (S-CA%)	31	(S-TH)	********	0
3 (S-CA%)	32	(AA-AU-P)	********	0
4 (S-TI%)	5	(S-MN)	0.4714	69
4 (S-TI%)	6	(S-AG)	********	0
4 (S-TI%)	7	(S-AS)	********	0
4 (S-TI%)	8	(S-AU)	********	0
4 (S-TI%)	9	(S-B)	-0.2706	41
4 (S-TI%)	10	(S-BA)	-0.2605	69
4 (S-TI%)	11	(S-BE)	-0.5732	60
4 (S-TI%)	12	(S-BI)	********	0
4 (S-TI%)	13	(S-CD)	********	0
4 (S-TI%)	14	(S-CO)	0.3489	54

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
4 (S-TI%)	15	(S-CR)	0.2478	45
4 (S-TI%)	16	(S-CU)	0.6361	66
4 (S-TI%)	17	(S-LA)	0.0661	46
4 (S-TI%)	18	(S-MO)	********	1
4 (S-TI%)	19	(S-NB)	********	5
4 (S-TI%)	20	(S-NI)	0.1463	51
4 (S-TI%)	21	(S-PB)	-0.2090	46
4 (S-TI%)	22	(S-SB)	********	0
4 (S-TI%)	23	(S-SC)	0.6484	59
4 (S-TI%)	24	(S-SN)	0.6025	4
4 (S-TI%)	25	(S-SR)	0.2991	65
4 (S-TI%)	26	(S-V)	0.5369	61
4 (S-TI%)	27	(S-W)	********	0
4 (S-TI%)	28	(S-Y)	0.2337	69
4 (S-TI%)	29	(S-ZN)	********	0
4 (S-TI%)	30	(S-ZR)	0.3202	68
4 (S-TI%)	31	(S-TH)	********	0
4 (S-TI%)	32	(AA-AU-P)	********	0
5 (S-MN)	6	(S-AG)	********	0
5 (S-MN)	7	(S-AS)	********	0
5 (S-MN)	8	(S-AU)	********	0
5 (S-MN)	9	(S-B)	-0.4902	41
5 (S-MN)	10	(S-BA)	-0.1241	69
5 (S-MN)	11	(S-BE)	-0.3698	60
5 (S-MN)	12	(S-BI)	********	0
5 (S-MN)	13	(S-CD)	********	0
5 (S-MN)	14	(S-CO)	0.2516	54
5 (S-MN)	15	(S-CR)	0.2299	45
5 (S-MN)	16	(S-CU)	0.5611	66
5 (S-MN)	17	(S-LA)	-0.2021	46
5 (S-MN)	18	(S-MO)	********	1
5 (S-MN)	19	(S-NB)	********	5
5 (S-MN)	20	(S-NI)	0.1863	51
5 (S-MN)	21	(S-PB)	-0.1025	46
5 (S-MN)	22	(S-SB)	********	0
5 (S-MN)	23	(S-SC)	0.5737	59
5 (S-MN)	24	(S-SN)	-0.1431	4
5 (S-MN)	25	(S-SR)	0.0321	65
5 (S-MN)	26	(S-V)	0.1487	61
5 (S-MN)	27	(S-W)	********	0
5 (S-MN)	28	(S-Y)	0.2294	69
5 (S-MN)	29	(S-ZN)	********	0
5 (S-MN)	30	(S-ZR)	-0.0230	68
5 (S-MN)	31	(S-TH)	********	0
5 (S-MN)	32	(AA-AU-P)	********	0
6 (S-AG)	7	(S-AS)	********	0
6 (S-AG)	8	(S-AU)	********	0
6 (S-AG)	9	(S-B)	********	0
6 (S-AG)	10	(S-BA)	********	0
6 (S-AG)	11	(S-BE)	********	0
6 (S-AG)	12	(S-BI)	********	0
6 (S-AG)	13	(S-CD)	********	0
6 (S-AG)	14	(S-CO)	********	0
6 (S-AG)	15	(S-CR)	********	0
6 (S-AG)	16	(S-CU)	********	0
6 (S-AG)	17	(S-LA)	********	0
6 (S-AG)	18	(S-MO)	********	0
6 (S-AG)	19	(S-NB)	********	0
6 (S-AG)	20	(S-NI)	********	0
6 (S-AG)	21	(S-PB)	********	0
6 (S-AG)	22	(S-SB)	********	0
6 (S-AG)	23	(S-SC)	********	0
6 (S-AG)	24	(S-SN)	********	0
6 (S-AG)	25	(S-SR)	********	0
6 (S-AG)	26	(S-V)	********	0
6 (S-AG)	27	(S-W)	********	0
6 (S-AG)	28	(S-Y)	********	0
6 (S-AG)	29	(S-ZN)	********	0
6 (S-AG)	30	(S-ZR)	********	0
6 (S-AG)	31	(S-TH)	********	0
6 (S-AG)	32	(AA-AU-P)	********	0
7 (S-AS)	8	(S-AU)	********	0
7 (S-AS)	9	(S-B)	********	0
7 (S-AS)	10	(S-BA)	********	0
7 (S-AS)	11	(S-BE)	********	0
7 (S-AS)	12	(S-BI)	********	0
7 (S-AS)	13	(S-CD)	********	0
7 (S-AS)	14	(S-CO)	********	0
7 (S-AS)	15	(S-CR)	********	0
7 (S-AS)	16	(S-CU)	********	0
7 (S-AS)	17	(S-LA)	********	0
7 (S-AS)	18	(S-MO)	********	0
7 (S-AS)	19	(S-NB)	********	0
7 (S-AS)	20	(S-NI)	********	0
7 (S-AS)	21	(S-PB)	********	0
7 (S-AS)	22	(S-SB)	********	0
7 (S-AS)	23	(S-SC)	********	0
7 (S-AS)	24	(S-SN)	********	0
7 (S-AS)	25	(S-SR)	********	0
7 (S-AS)	26	(S-V)	********	0
7 (S-AS)	27	(S-W)	********	0
7 (S-AS)	28	(S-Y)	********	0
7 (S-AS)	29	(S-ZN)	********	0
7 (S-AS)	30	(S-ZR)	********	0
7 (S-AS)	31	(S-TH)	********	0
7 (S-AS)	32	(AA-AU-P)	********	0
8 (S-AU)	9	(S-B)	********	0
8 (S-AU)	10	(S-BA)	********	0
8 (S-AU)	11	(S-BE)	********	0
8 (S-AU)	12	(S-BI)	********	0

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
8 (S-AU)	13 (S-CD)	********	0
8 (S-AU)	14 (S-CO)	********	0
8 (S-AU)	15 (S-CR)	********	0
8 (S-AU)	16 (S-CU)	********	0
8 (S-AU)	17 (S-LA)	********	0
8 (S-AU)	18 (S-MO)	********	0
8 (S-AU)	19 (S-NB)	********	0
8 (S-AU)	20 (S-NI)	********	0
8 (S-AU)	21 (S-PB)	********	0
8 (S-AU)	22 (S-SB)	********	0
8 (S-AU)	23 (S-SC)	********	0
8 (S-AU)	24 (S-SN)	********	0
8 (S-AU)	25 (S-SR)	********	0
8 (S-AU)	26 (S-V)	********	0
8 (S-AU)	27 (S-W)	********	0
8 (S-AU)	28 (S-Y)	********	0
8 (S-AU)	29 (S-ZN)	********	0
8 (S-AU)	30 (S-ZR)	********	0
8 (S-AU)	31 (S-TH)	********	0
8 (S-AU)	32 (AA-AU-P)	********	0
9 (S-B)	10 (S-BA)	0.0088	41
9 (S-B)	11 (S-BE)	0.2468	39
9 (S-B)	12 (S-BI)	********	0
9 (S-B)	13 (S-CD)	********	0
9 (S-B)	14 (S-CO)	-0.0347	28
9 (S-B)	15 (S-CR)	0.0348	26
9 (S-B)	16 (S-CU)	-0.3478	38
9 (S-B)	17 (S-LA)	0.3532	28
9 (S-B)	18 (S-MO)	********	1
9 (S-B)	19 (S-NB)	********	2
9 (S-B)	20 (S-NI)	0.0387	30
9 (S-B)	21 (S-PB)	0.2267	31
9 (S-B)	22 (S-SB)	********	0
9 (S-B)	23 (S-SC)	-0.1052	32
9 (S-B)	24 (S-SN)	0.7083	4
9 (S-B)	25 (S-SR)	-0.3254	37
9 (S-B)	26 (S-V)	-0.1510	34
9 (S-B)	27 (S-W)	********	0
9 (S-B)	28 (S-Y)	0.1076	41
9 (S-B)	29 (S-ZN)	********	0
9 (S-B)	30 (S-ZR)	0.0052	40
9 (S-B)	31 (S-TH)	********	0
9 (S-B)	32 (AA-AU-P)	********	0
10 (S-BA)	11 (S-BE)	0.3808	60
10 (S-BA)	12 (S-BI)	********	0
10 (S-BA)	13 (S-CD)	********	0
10 (S-BA)	14 (S-CO)	-0.1033	54
10 (S-BA)	15 (S-CR)	-0.0092	45
10 (S-BA)	16 (S-CU)	-0.3845	66
10 (S-BA)	17 (S-LA)	0.1957	46
10 (S-BA)	18 (S-MO)	********	1
10 (S-BA)	19 (S-NB)	********	5
10 (S-BA)	20 (S-NI)	0.0813	51
10 (S-BA)	21 (S-PB)	0.2246	46
10 (S-BA)	22 (S-SB)	********	0
10 (S-BA)	23 (S-SC)	-0.4399	59
10 (S-BA)	24 (S-SN)	-0.7888	4
10 (S-BA)	25 (S-SR)	-0.1001	65
10 (S-BA)	26 (S-V)	-0.3439	61
10 (S-BA)	27 (S-W)	********	0
10 (S-BA)	28 (S-Y)	0.0811	69
10 (S-BA)	29 (S-ZN)	********	0
10 (S-BA)	30 (S-ZR)	0.2319	68
10 (S-BA)	31 (S-TH)	********	0
10 (S-BA)	32 (AA-AU-P)	********	0
11 (S-BE)	12 (S-BI)	********	0
11 (S-BE)	13 (S-CD)	********	0
11 (S-BE)	14 (S-CO)	-0.3642	45
11 (S-BE)	15 (S-CR)	-0.1999	36
11 (S-BE)	16 (S-CU)	-0.4668	57
11 (S-BE)	17 (S-LA)	0.0000	42
11 (S-BE)	18 (S-MO)	********	1
11 (S-BE)	19 (S-NB)	********	5
11 (S-BE)	20 (S-NI)	-0.2057	42
11 (S-BE)	21 (S-PB)	0.0439	41
11 (S-BE)	22 (S-SB)	********	0
11 (S-BE)	23 (S-SC)	-0.2907	50
11 (S-BE)	24 (S-SN)	0.9616	4
11 (S-BE)	25 (S-SR)	-0.3891	56
11 (S-BE)	26 (S-V)	-0.4975	52
11 (S-BE)	27 (S-W)	********	0
11 (S-BE)	28 (S-Y)	0.1974	60
11 (S-BE)	29 (S-ZN)	********	0
11 (S-BE)	30 (S-ZR)	0.0466	59
11 (S-BE)	31 (S-TH)	********	0
11 (S-BE)	32 (AA-AU-P)	********	0
12 (S-BI)	13 (S-CD)	********	0
12 (S-BI)	14 (S-CO)	********	0
12 (S-BI)	15 (S-CR)	********	0
12 (S-BI)	16 (S-CU)	********	0
12 (S-BI)	17 (S-LA)	********	0
12 (S-BI)	18 (S-MO)	********	0
12 (S-BI)	19 (S-NB)	********	0
12 (S-BI)	20 (S-NI)	********	0
12 (S-BI)	21 (S-PB)	********	0
12 (S-BI)	22 (S-SB)	********	0
12 (S-BI)	23 (S-SC)	********	0
12 (S-BI)	24 (S-SN)	********	0
12 (S-BI)	25 (S-SR)	********	0
12 (S-BI)	26 (S-V)	********	0

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
12 (S-BI)	27 (S-W)	********	0
12 (S-BI)	28 (S-Y)	********	0
12 (S-BI)	29 (S-ZN)	********	0
12 (S-BI)	30 (S-ZR)	********	0
12 (S-BI)	31 (S-TH)	********	0
12 (S-BI)	32 (AA-AU-P)	********	0
13 (S-CD)	14 (S-CO)	********	0
13 (S-CD)	15 (S-CR)	********	0
13 (S-CD)	16 (S-CU)	********	0
13 (S-CD)	17 (S-LA)	********	0
13 (S-CD)	18 (S-MO)	********	0
13 (S-CD)	19 (S-NB)	********	0
13 (S-CD)	20 (S-NI)	********	0
13 (S-CD)	21 (S-PB)	********	0
13 (S-CD)	22 (S-SB)	********	0
13 (S-CD)	23 (S-SC)	********	0
13 (S-CD)	24 (S-SN)	********	0
13 (S-CD)	25 (S-SR)	********	0
13 (S-CD)	26 (S-V)	********	0
13 (S-CD)	27 (S-W)	********	0
13 (S-CD)	28 (S-Y)	********	0
13 (S-CD)	29 (S-ZN)	********	0
13 (S-CD)	30 (S-ZR)	********	0
13 (S-CD)	31 (S-TH)	********	0
13 (S-CD)	32 (AA-AU-P)	********	0
14 (S-CO)	15 (S-CR)	0.4730	44
14 (S-CO)	16 (S-CU)	0.6382	52
14 (S-CO)	17 (S-LA)	0.1717	34
14 (S-CO)	18 (S-MO)	********	1
14 (S-CO)	19 (S-NB)	********	4
14 (S-CO)	20 (S-NI)	0.5922	49
14 (S-CO)	21 (S-PB)	0.2401	32
14 (S-CO)	22 (S-SB)	********	0
14 (S-CO)	23 (S-SC)	0.5402	53
14 (S-CO)	24 (S-SN)	-0.9370	4
14 (S-CO)	25 (S-SR)	0.1587	53
14 (S-CO)	26 (S-V)	0.5555	53
14 (S-CO)	27 (S-W)	********	0
14 (S-CO)	28 (S-Y)	-0.1507	54
14 (S-CO)	29 (S-ZN)	********	0
14 (S-CO)	30 (S-ZR)	-0.5202	53
14 (S-CO)	31 (S-TH)	********	0
14 (S-CO)	32 (AA-AU-P)	********	0
15 (S-CR)	16 (S-CU)	0.4210	43
15 (S-CR)	17 (S-LA)	-0.0210	28
15 (S-CR)	18 (S-MO)	********	0
15 (S-CR)	19 (S-NB)	********	2
15 (S-CR)	20 (S-NI)	0.7609	45
15 (S-CR)	21 (S-PB)	-0.0050	28
15 (S-CR)	22 (S-SB)	********	0
15 (S-CR)	23 (S-SC)	0.4755	44
15 (S-CR)	24 (S-SN)	0.4633	4
15 (S-CR)	25 (S-SR)	0.0397	45
15 (S-CR)	26 (S-V)	0.4991	45
15 (S-CR)	27 (S-W)	********	0
15 (S-CR)	28 (S-Y)	-0.0269	45
15 (S-CR)	29 (S-ZN)	********	0
15 (S-CR)	30 (S-ZR)	-0.1423	45
15 (S-CR)	31 (S-TH)	********	0
15 (S-CR)	32 (AA-AU-P)	********	0
16 (S-CU)	17 (S-LA)	-0.0781	43
16 (S-CU)	18 (S-MO)	********	1
16 (S-CU)	19 (S-NB)	********	5
16 (S-CU)	20 (S-NI)	0.3036	48
16 (S-CU)	21 (S-PB)	0.0666	46
16 (S-CU)	22 (S-SB)	********	0
16 (S-CU)	23 (S-SC)	0.6800	56
16 (S-CU)	24 (S-SN)	0.5000	3
16 (S-CU)	25 (S-SR)	0.0756	62
16 (S-CU)	26 (S-V)	0.4857	58
16 (S-CU)	27 (S-W)	********	0
16 (S-CU)	28 (S-Y)	0.2749	66
16 (S-CU)	29 (S-ZN)	********	0
16 (S-CU)	30 (S-ZR)	0.0150	65
16 (S-CU)	31 (S-TH)	********	0
16 (S-CU)	32 (AA-AU-P)	********	0
17 (S-LA)	18 (S-MO)	********	1
17 (S-LA)	19 (S-NB)	********	5
17 (S-LA)	20 (S-NI)	0.0105	31
17 (S-LA)	21 (S-PB)	0.2344	32
17 (S-LA)	22 (S-SB)	********	0
17 (S-LA)	23 (S-SC)	-0.0427	40
17 (S-LA)	24 (S-SN)	********	2
17 (S-LA)	25 (S-SR)	0.0175	43
17 (S-LA)	26 (S-V)	-0.1910	40
17 (S-LA)	27 (S-W)	********	0
17 (S-LA)	28 (S-Y)	0.1788	46
17 (S-LA)	29 (S-ZN)	********	0
17 (S-LA)	30 (S-ZR)	0.4250	46
17 (S-LA)	31 (S-TH)	********	0
17 (S-LA)	32 (AA-AU-P)	********	0
18 (S-MO)	19 (S-NB)	********	1
18 (S-MO)	20 (S-NI)	********	1
18 (S-MO)	21 (S-PB)	********	0
18 (S-MO)	22 (S-SB)	********	0
18 (S-MO)	23 (S-SC)	********	1
18 (S-MO)	24 (S-SN)	********	0
18 (S-MO)	25 (S-SR)	********	1
18 (S-MO)	26 (S-V)	********	1
18 (S-MO)	27 (S-W)	********	0

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
18 (S-MO)	28 (S-Y)	********	1
18 (S-MO)	29 (S-ZN)	********	0
18 (S-MO)	30 (S-ZR)	********	1
18 (S-MO)	31 (S-TH)	********	0
18 (S-MO)	32 (AA-AU-P)	********	0
19 (S-NB)	20 (S-NI)	********	3
19 (S-NB)	21 (S-PB)	********	3
19 (S-NB)	22 (S-SB)	********	0
19 (S-NB)	23 (S-SC)	********	5
19 (S-NB)	24 (S-SN)	********	0
19 (S-NB)	25 (S-SR)	********	5
19 (S-NB)	26 (S-V)	********	5
19 (S-NB)	27 (S-W)	********	0
19 (S-NB)	28 (S-Y)	********	5
19 (S-NB)	29 (S-ZN)	********	0
19 (S-NB)	30 (S-ZR)	********	5
19 (S-NB)	31 (S-TH)	********	0
19 (S-NB)	32 (AA-AU-P)	********	0
20 (S-NI)	21 (S-PB)	0.1595	31
20 (S-NI)	22 (S-SB)	********	0
20 (S-NI)	23 (S-SC)	0.3858	49
20 (S-NI)	24 (S-SN)	-0.7883	4
20 (S-NI)	25 (S-SR)	0.3640	50
20 (S-NI)	26 (S-V)	0.5466	51
20 (S-NI)	27 (S-W)	********	0
20 (S-NI)	28 (S-Y)	-0.2826	51
20 (S-NI)	29 (S-ZN)	********	0
20 (S-NI)	30 (S-ZR)	-0.3144	50
20 (S-NI)	31 (S-TH)	********	0
20 (S-NI)	32 (AA-AU-P)	********	0
21 (S-PB)	22 (S-SB)	********	0
21 (S-PB)	23 (S-SC)	0.1605	37
21 (S-PB)	24 (S-SN)	1.0000	2
21 (S-PB)	25 (S-SR)	0.1617	43
21 (S-PB)	26 (S-V)	0.0118	38
21 (S-PB)	27 (S-W)	********	0
21 (S-PB)	28 (S-Y)	-0.0044	46
21 (S-PB)	29 (S-ZN)	********	0
21 (S-PB)	30 (S-ZR)	-0.0641	46
21 (S-PB)	31 (S-TH)	********	0
21 (S-PB)	32 (AA-AU-P)	********	0
22 (S-SB)	23 (S-SC)	********	0
22 (S-SB)	24 (S-SN)	********	0
22 (S-SB)	25 (S-SR)	********	0
22 (S-SB)	26 (S-V)	********	0
22 (S-SB)	27 (S-W)	********	0
22 (S-SB)	28 (S-Y)	********	0
22 (S-SB)	29 (S-ZN)	********	0
22 (S-SB)	30 (S-ZR)	********	0
22 (S-SB)	31 (S-TH)	********	0
22 (S-SB)	32 (AA-AU-P)	********	0
23 (S-SC)	24 (S-SN)	0.6213	4
23 (S-SC)	25 (S-SR)	0.0479	59
23 (S-SC)	26 (S-V)	0.5484	57
23 (S-SC)	27 (S-W)	********	0
23 (S-SC)	28 (S-Y)	0.3110	59
23 (S-SC)	29 (S-ZN)	********	0
23 (S-SC)	30 (S-ZR)	-0.2315	59
23 (S-SC)	31 (S-TH)	********	0
23 (S-SC)	32 (AA-AU-P)	********	0
24 (S-SN)	25 (S-SR)	0.4633	4
24 (S-SN)	26 (S-V)	0.9616	4
24 (S-SN)	27 (S-W)	********	0
24 (S-SN)	28 (S-Y)	0.1911	4
24 (S-SN)	29 (S-ZN)	********	0
24 (S-SN)	30 (S-ZR)	0.9616	4
24 (S-SN)	31 (S-TH)	********	0
24 (S-SN)	32 (AA-AU-P)	********	0
25 (S-SR)	26 (S-V)	0.4151	60
25 (S-SR)	27 (S-W)	********	0
25 (S-SR)	28 (S-Y)	-0.5242	65
25 (S-SR)	29 (S-ZN)	********	0
25 (S-SR)	30 (S-ZR)	-0.0973	65
25 (S-SR)	31 (S-TH)	********	0
25 (S-SR)	32 (AA-AU-P)	********	0
26 (S-V)	27 (S-W)	********	0
26 (S-V)	28 (S-Y)	-0.2736	61
26 (S-V)	29 (S-ZN)	********	0
26 (S-V)	30 (S-ZR)	-0.3494	60
26 (S-V)	31 (S-TH)	********	0
26 (S-V)	32 (AA-AU-P)	********	0
27 (S-W)	28 (S-Y)	********	0
27 (S-W)	29 (S-ZN)	********	0
27 (S-W)	30 (S-ZR)	********	0
27 (S-W)	31 (S-TH)	********	0
27 (S-W)	32 (AA-AU-P)	********	0
28 (S-Y)	29 (S-ZN)	********	0
28 (S-Y)	30 (S-ZR)	0.4790	68
28 (S-Y)	31 (S-TH)	********	0
28 (S-Y)	32 (AA-AU-P)	********	0
29 (S-ZN)	30 (S-ZR)	********	0
29 (S-ZN)	31 (S-TH)	********	0
29 (S-ZN)	32 (AA-AU-P)	********	0
30 (S-ZR)	31 (S-TH)	********	0
30 (S-ZR)	32 (AA-AU-P)	********	0
31 (S-TH)	32 (AA-AU-P)	********	0

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

Aqua-regia leach/ICP data

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (MG)	2 (CA)		0.5612	68
1 (MG)	3 (FE)		0.3974	68
1 (MG)	4 (TI)		0.4134	68
1 (MG)	5 (AL)		0.6165	68
1 (MG)	6 (V)		0.4988	61
1 (MG)	7 (CR)		0.6994	3
1 (MG)	8 (MN)		0.3602	68
1 (MG)	9 (CO)		0.2364	42
1 (MG)	10 (NI)		0.2506	45
1 (MG)	11 (CU)		0.4128	62
1 (MG)	12 (ZN)		0.3264	68
1 (MG)	13 (MO)		0.2518	11
1 (MG)	14 (PB)		0.2187	29
1 (MG)	15 (AS)		1.0000	2
1 (MG)	16 (BE)		0.0068	68
1 (MG)	17 (SR)		0.2394	68
1 (MG)	18 (BA)		-0.2507	68
1 (MG)	19 (LA)		-0.2029	67
1 (MG)	20 (CE)		-0.1334	63
1 (MG)	21 (Y)		0.0895	45
1 (MG)	22 (NB)		0.5617	64
1 (MG)	23 (P)		0.5102	65
2 (CA)	3 (FE)		0.1601	68
2 (CA)	4 (TI)		0.4529	68
2 (CA)	5 (AL)		0.7120	68
2 (CA)	6 (V)		0.5690	61
2 (CA)	7 (CR)		-0.9593	3
2 (CA)	8 (MN)		0.1460	68
2 (CA)	9 (CO)		0.2831	42
2 (CA)	10 (NI)		-0.1211	45
2 (CA)	11 (CU)		0.4255	62
2 (CA)	12 (ZN)		0.0057	68
2 (CA)	13 (MO)		-0.1701	11
2 (CA)	14 (PB)		-0.0459	29
2 (CA)	15 (AS)		1.0000	2
2 (CA)	16 (BE)		-0.0719	68
2 (CA)	17 (SR)		0.7292	68
2 (CA)	18 (BA)		-0.1049	68
2 (CA)	19 (LA)		-0.3672	67
2 (CA)	20 (CE)		-0.3976	63
2 (CA)	21 (Y)		-0.1410	45
2 (CA)	22 (NB)		0.4977	64
2 (CA)	23 (P)		0.4253	65
3 (FE)	4 (TI)		0.4893	68
3 (FE)	5 (AL)		0.1199	68
3 (FE)	6 (V)		0.3551	61
3 (FE)	7 (CR)		0.9970	3
3 (FE)	8 (MN)		0.6520	68
3 (FE)	9 (CO)		0.6787	42
3 (FE)	10 (NI)		0.2443	45
3 (FE)	11 (CU)		0.5463	62
3 (FE)	12 (ZN)		0.5544	68
3 (FE)	13 (MO)		0.4033	11
3 (FE)	14 (PB)		0.2844	29
3 (FE)	15 (AS)		1.0000	2
3 (FE)	16 (BE)		0.1117	68
3 (FE)	17 (SR)		-0.1930	68
3 (FE)	18 (BA)		-0.4031	68
3 (FE)	19 (LA)		-0.1565	67
3 (FE)	20 (CE)		-0.0954	63
3 (FE)	21 (Y)		-0.0113	45
3 (FE)	22 (NB)		0.4584	64
3 (FE)	23 (P)		0.2996	65
4 (TI)	5 (AL)		0.3080	68
4 (TI)	6 (V)		0.6597	61
4 (TI)	7 (CR)		0.7278	3
4 (TI)	8 (MN)		0.2448	68
4 (TI)	9 (CO)		0.2249	42
4 (TI)	10 (NI)		-0.0823	45
4 (TI)	11 (CU)		0.5428	62
4 (TI)	12 (ZN)		0.1744	68
4 (TI)	13 (MO)		0.5197	11
4 (TI)	14 (PB)		0.2333	29
4 (TI)	15 (AS)		-1.0000	2
4 (TI)	16 (BE)		-0.1592	68
4 (TI)	17 (SR)		0.2993	68
4 (TI)	18 (BA)		-0.4142	68
4 (TI)	19 (LA)		-0.3559	67
4 (TI)	20 (CE)		-0.3290	63
4 (TI)	21 (Y)		0.0207	45
4 (TI)	22 (NB)		0.6417	64
4 (TI)	23 (P)		0.5721	65
5 (AL)	6 (V)		0.4497	61
5 (AL)	7 (CR)		-0.5267	3
5 (AL)	8 (MN)		0.2351	68
5 (AL)	9 (CO)		0.1943	42
5 (AL)	10 (NI)		-0.0170	45
5 (AL)	11 (CU)		0.4593	62
5 (AL)	12 (ZN)		0.1674	68
5 (AL)	13 (MO)		-0.4101	11
5 (AL)	14 (PB)		0.2898	29
5 (AL)	15 (AS)		1.0000	2
5 (AL)	16 (BE)		0.0738	68
5 (AL)	17 (SR)		0.6186	68
5 (AL)	18 (BA)		0.0941	68
5 (AL)	19 (LA)		-0.2701	67
5 (AL)	20 (CE)		-0.2741	63
5 (AL)	21 (Y)		-0.2442	45
5 (AL)	22 (NB)		0.4844	64
5 (AL)	23 (P)		0.3628	65

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
6 (V	) 7 (CR	)	0.9931	3
6 (V	) 8 (MN	)	0.0210	61
6 (V	) 9 (CO	)	0.0491	40
6 (V	) 10 (NI	)	0.1191	45
6 (V	) 11 (CU	)	0.6094	55
6 (V	) 12 (ZN	)	0.0079	61
6 (V	) 13 (MO	)	0.0746	11
6 (V	) 14 (PB	)	0.2184	25
6 (V	) 15 (AS	)	1.0000	2
6 (V	) 16 (BE	)	-0.0881	61
6 (V	) 17 (SR	)	0.5549	61
6 (V	) 18 (BA	)	-0.2147	61
6 (V	) 19 (LA	)	-0.3360	60
6 (V	) 20 (CE	)	-0.2264	56
6 (V	) 21 (Y	)	-0.0852	38
6 (V	) 22 (NB	)	0.8346	58
6 (V	) 23 (P	)	0.6243	60
7 (CR	) 8 (MN	)	0.8682	3
7 (CR	) 9 (CO	)	1.0000	2
7 (CR	) 10 (NI	)	1.0000	2
7 (CR	) 11 (CU	)	0.9983	3
7 (CR	) 12 (ZN	)	0.9763	3
7 (CR	) 13 (MO	)	********	1
7 (CR	) 14 (PB	)	********	1
7 (CR	) 15 (AS	)	********	0
7 (CR	) 16 (BE	)	-0.0538	3
7 (CR	) 17 (SR	)	0.5267	3
7 (CR	) 18 (BA	)	0.9903	3
7 (CR	) 19 (LA	)	0.9995	3
7 (CR	) 20 (CE	)	0.9977	3
7 (CR	) 21 (Y	)	1.0000	2
7 (CR	) 22 (NB	)	0.9849	3
7 (CR	) 23 (P	)	-0.6051	3
8 (MN	) 9 (CO	)	0.1209	42
8 (MN	) 10 (NI	)	-0.1888	45
8 (MN	) 11 (CU	)	0.2774	62
8 (MN	) 12 (ZN	)	0.8217	68
8 (MN	) 13 (MO	)	0.1120	11
8 (MN	) 14 (PB	)	0.1326	29
8 (MN	) 15 (AS	)	1.0000	2
8 (MN	) 16 (BE	)	0.4406	68
8 (MN	) 17 (SR	)	-0.1849	68
8 (MN	) 18 (BA	)	0.0842	68
8 (MN	) 19 (LA	)	0.1445	67
8 (MN	) 20 (CE	)	0.2201	63
8 (MN	) 21 (Y	)	0.3014	45
8 (MN	) 22 (NB	)	0.2686	64
8 (MN	) 23 (P	)	0.0327	65
9 (CO	) 10 (NI	)	0.4629	38
9 (CO	) 11 (CU	)	0.5228	38
9 (CO	) 12 (ZN	)	-0.0962	42
9 (CO	) 13 (MO	)	0.5230	9
9 (CO	) 14 (PB	)	0.2153	13
9 (CO	) 15 (AS	)	1.0000	2
9 (CO	) 16 (BE	)	-0.0755	42
9 (CO	) 17 (SR	)	0.0441	42
9 (CO	) 18 (BA	)	-0.3492	42
9 (CO	) 19 (LA	)	-0.4760	42
9 (CO	) 20 (CE	)	-0.5962	37
9 (CO	) 21 (Y	)	0.0601	22
9 (CO	) 22 (NB	)	0.3620	42
9 (CO	) 23 (P	)	-0.1048	42
10 (NI	) 11 (CU	)	0.2676	41
10 (NI	) 12 (ZN	)	-0.2616	45
10 (NI	) 13 (MO	)	0.2794	9
10 (NI	) 14 (PB	)	0.4860	15
10 (NI	) 15 (AS	)	1.0000	2
10 (NI	) 16 (BE	)	-0.1121	45
10 (NI	) 17 (SR	)	0.0299	45
10 (NI	) 18 (BA	)	-0.3171	45
10 (NI	) 19 (LA	)	-0.3219	45
10 (NI	) 20 (CE	)	-0.1740	40
10 (NI	) 21 (Y	)	-0.3211	22
10 (NI	) 22 (NB	)	0.2308	45
10 (NI	) 23 (P	)	0.1768	45
11 (CU	) 12 (ZN	)	0.2844	62
11 (CU	) 13 (MO	)	0.4462	11
11 (CU	) 14 (PB	)	0.3142	26
11 (CU	) 15 (AS	)	********	1
11 (CU	) 16 (BE	)	-0.1001	62
11 (CU	) 17 (SR	)	0.2231	62
11 (CU	) 18 (BA	)	-0.2733	62
11 (CU	) 19 (LA	)	-0.3315	61
11 (CU	) 20 (CE	)	-0.2395	59
11 (CU	) 21 (Y	)	-0.0643	43
11 (CU	) 22 (NB	)	0.6494	58
11 (CU	) 23 (P	)	0.3135	59
12 (ZN	) 13 (MO	)	0.1078	11
12 (ZN	) 14 (PB	)	0.2195	29
12 (ZN	) 15 (AS	)	1.0000	2
12 (ZN	) 16 (BE	)	0.3609	68
12 (ZN	) 17 (SR	)	-0.2572	68
12 (ZN	) 18 (BA	)	0.1377	68
12 (ZN	) 19 (LA	)	0.3497	67
12 (ZN	) 20 (CE	)	0.4062	63
12 (ZN	) 21 (Y	)	0.1586	45
12 (ZN	) 22 (NB	)	0.2468	64
12 (ZN	) 23 (P	)	0.0820	65
13 (MO	) 14 (PB	)	0.8370	7
13 (MO	) 15 (AS	)	********	1

Table 26. Correlation coefficients for analytical data from unaltered rock samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
13 (MO)	16 (BE)	-0.1049	11
13 (MO)	17 (SR)	-0.3467	11
13 (MO)	18 (BA)	-0.1897	11
13 (MO)	19 (LA)	-0.0582	11
13 (MO)	20 (CE)	-0.1106	11
13 (MO)	21 (Y)	0.5519	10
13 (MO)	22 (NB)	0.1531	11
13 (MO)	23 (P)	0.3784	11
14 (PB)	15 (AS)	1.0000	2
14 (PB)	16 (BE)	-0.2375	29
14 (PB)	17 (SR)	0.1689	29
14 (PB)	18 (BA)	-0.1385	29
14 (PB)	19 (LA)	-0.4424	29
14 (PB)	20 (CE)	-0.3286	28
14 (PB)	21 (Y)	-0.1898	23
14 (PB)	22 (NB)	0.5980	25
14 (PB)	23 (P)	0.3825	27
15 (AS)	16 (BE)	1.0000	2
15 (AS)	17 (SR)	1.0000	2
15 (AS)	18 (BA)	-1.0000	2
15 (AS)	19 (LA)	1.0000	2
15 (AS)	20 (CE)	1.0000	2
15 (AS)	21 (Y)	********	0
15 (AS)	22 (NB)	1.0000	2
15 (AS)	23 (P)	1.0000	2
16 (BE)	17 (SR)	-0.1225	68
16 (BE)	18 (BA)	0.5306	68
16 (BE)	19 (LA)	0.3224	67
16 (BE)	20 (CE)	0.5138	63
16 (BE)	21 (Y)	0.3252	45
16 (BE)	22 (NB)	-0.0644	64
16 (BE)	23 (P)	-0.2274	65
17 (SR)	18 (BA)	0.2257	68
17 (SR)	19 (LA)	-0.3147	67
17 (SR)	20 (CE)	-0.3348	63
17 (SR)	21 (Y)	-0.2321	45
17 (SR)	22 (NB)	0.3691	64
17 (SR)	23 (P)	0.3549	65
18 (BA)	19 (LA)	0.3638	67
18 (BA)	20 (CE)	0.4048	63
18 (BA)	21 (Y)	0.1136	45
18 (BA)	22 (NB)	-0.2404	64
18 (BA)	23 (P)	-0.3217	65
19 (LA)	20 (CE)	0.9579	62
19 (LA)	21 (Y)	0.5268	44
19 (LA)	22 (NB)	-0.3338	63
19 (LA)	23 (P)	-0.1620	64
20 (CE)	21 (Y)	0.5379	45
20 (CE)	22 (NB)	-0.2278	59
20 (CE)	23 (P)	-0.1872	60
21 (Y)	22 (NB)	-0.1184	41
21 (Y)	23 (P)	-0.0414	42
22 (NB)	23 (P)	0.4398	62

Table 27. Fisher-K statistics for analytical data from altered rock samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

D.C.-arc spectrographic data

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	S-FE%	0	0	0	1	0	0	69	0	0.3000000	15.000000	3
4	S-MG%	0	0	0	0	0	0	70	0	0.0500000	2.0000000	4
5	S-CA%	0	0	1	0	0	0	69	0	0.0500000	7.0000000	5
6	S-TI%	0	0	0	0	0	0	70	0	0.0200000	1.0000000	6
7	S-MN	0	0	0	0	0	0	70	0	10.000000	3000.0000	7
8	S-AG	64	0	3	0	0	0	3	0	0.5000000	1.5000000	8
9	S-AS	67	0	1	0	0	0	2	0	300.00000	1000.0000	9
10	S-AU	70	0	0	0	0	0	0	0			10
11	S-B	4	0	17	1	0	0	48	0	10.000000	500.00000	11
12	S-BA	3	0	0	0	0	0	67	0	20.000000	1000.0000	12
13	S-BE	12	0	7	0	0	0	51	0	1.0000000	3.0000000	13
14	S-BI	66	0	1	0	0	0	3	0	10.000000	10.000000	14
15	S-CD	70	0	0	0	0	0	0	0			15
16	S-CO	11	0	0	0	0	0	59	0	5.0000000	100.00000	16
17	S-CR	11	0	5	0	0	0	54	0	10.000000	300.00000	17
18	S-CU	1	0	8	0	0	0	61	0	5.0000000	1500.0000	18
19	S-LA	36	0	0	0	0	0	34	0	20.000000	50.000000	19
20	S-MO	60	0	1	0	0	0	9	0	5.0000000	50.000000	20
21	S-NB	57	0	7	0	0	0	6	0	20.000000	30.000000	21
22	S-NI	16	0	1	0	0	0	53	0	5.0000000	200.00000	22
23	S-PB	28	0	13	0	0	0	29	0	10.000000	70.000000	23
24	S-SB	70	0	0	0	0	0	0	0			24
25	S-SC	4	0	3	0	0	0	63	0	5.0000000	30.000000	25
26	S-SN	59	0	1	0	0	0	10	0	10.000000	20.000000	26
27	S-SR	11	0	1	0	0	0	58	0	100.00000	2000.0000	27
28	S-V	4	0	0	0	0	0	66	0	10.000000	300.00000	28
29	S-W	70	0	0	0	0	0	0	0			29
30	S-Y	6	0	0	0	0	0	64	0	10.000000	50.000000	30
31	S-ZN	69	0	1	0	0	0	0	0			31
32	S-ZR	2	0	0	0	0	0	68	0	20.000000	500.00000	32
33	S-TH	70	0	0	0	0	0	0	0			33
34	AA-AU-P	5	0	0	0	65	0	0	0			34

Table 27. Fisher-K statistics for analytical data from altered rock samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	S-FE%	4.1521739	2.7552948	7.5916496	29.644112	1.4172100	161.34049	2.7994393	3
4	S-MG%	1.0678571	0.5762218	0.3320316	0.0060556	0.0316508	-0.0975750	-0.8850746	4
5	S-CA%	1.8114493	1.3886317	1.9282979	4.6340520	1.7306121	16.666048	4.4821294	5
6	S-TI%	0.4565714	0.2921231	0.0853359	0.0139683	0.5603312	-0.0042920	-0.5893837	6
7	S-MN	474.78571	498.89039	248891.62	3.2468933D+08	2.6148851	5.8628740D+11	9.4643329	7
8	S-AG	0.9000000	0.5291503	0.2800000	0.2160000	1.4578630			8
9	S-AS	650.00000	494.97475	245000.00					9
10	S-AU								10
11	S-B	76.875000	97.689396	9543.2181	2070992.3	2.2214483	5.8889269D+08	6.4661603	11
12	S-BA	301.49254	236.92636	56134.102	17031758.	1.2806171	4.4529586D+09	1.4131722	12
13	S-BE	1.5294118	0.5780291	0.3341176	0.2268908	1.1748101	0.1134994	1.0167045	13
14	S-BI	10.000000	0.0	0.0	0.0	0.0			14
15	S-CD								15
16	S-CO	18.016949	18.610797	346.36178	20339.465	3.1553286	1399971.0	11.669685	16
17	S-CR	45.370370	61.397651	3769.6716	733447.86	3.1689397	1.4802487D+08	10.416640	17
18	S-CU	71.327869	202.04370	40821.657	51742297.	6.2734978	7.2168345D+10	43.307736	18
19	S-LA	24.705882	8.9562215	80.213904	1516.0428	2.1102649	24077.109	3.7420108	19
20	S-MO	20.777778	18.586136	345.44444	5801.8611	0.9036495	-93182.865	-0.7808716	20
21	S-NB	23.333333	5.1639778	26.666667	133.33333	0.9682458	-1333.3333	-1.8750000	21
22	S-NI	24.188679	35.762064	1278.9253	158887.48	3.4739370	21799229.	13.327565	22
23	S-PB	17.586207	13.337694	177.89409	6740.8662	2.8410144	281050.31	8.8809830	23
24	S-SB								24
25	S-SC	12.492063	4.8985614	23.995904	106.03219	0.9020530	714.07090	1.2401297	25
26	S-SN	13.000000	3.4960295	12.222222	33.333333	0.7801058	-21.825397	-0.1461039	26
27	S-SR	276.72414	265.93356	70720.659	95282749.	5.0663458	1.5772564D+11	31.536224	27
28	S-V	96.515152	54.221552	2939.9767	203483.73	1.2764795	18173430.	2.1025636	28
29	S-W								29
30	S-Y	22.421875	9.3855760	88.089038	1182.0907	1.4297759	20383.476	2.6268454	30
31	S-ZN								31
32	S-ZR	167.20588	98.372511	9677.1510	1138090.3	1.1955161	2.0114930D+08	2.1479467	32
33	S-TH								33
34	AA-AU-P								34

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 27. Fisher-K statistics for analytical data from altered rock samples collected in the Goat Rocks area

Aqua-regia leach/ICP data

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
3	AG	74	0	0	0	0	0	1	0	0.9900000	0.9900000	3
4	AL	0	0	0	0	0	0	75	0	2400.0000	64000.000	4
5	AS	51	0	11	0	0	0	13	0	11.000000	670.00000	5
6	B	74	0	0	0	0	0	1	0	970.00000	970.00000	6
7	BA	0	0	0	0	0	0	75	0	3.8000000	380.00000	7
8	BE	0	0	2	0	0	0	73	0	0.0590000	1.2000000	8
9	BI	72	0	3	0	0	0	0	0			9
10	CA	0	0	0	0	0	0	75	0	22.000000	84000.000	10
11	CE	9	0	8	0	0	0	58	0	2.3000000	100.00000	11
12	CO	13	0	19	0	0	0	43	0	3.7000000	49.000000	12
13	CR	68	0	3	0	0	0	4	0	11.000000	110.00000	13
14	CU	6	0	0	0	0	0	69	0	0.6400000	1800.0000	14
15	FE	0	0	0	0	0	0	75	0	1200.0000	370000.00	15
16	LA	1	0	7	0	0	0	67	0	1.7000000	53.000000	16
17	MG	0	0	0	0	0	0	75	0	84.000000	45000.000	17
18	MN	0	0	0	0	0	0	75	0	9.7000000	2200.0000	18
19	MO	20	0	23	0	0	0	32	0	0.9600000	48.000000	19
20	NB	0	0	5	0	0	0	70	0	0.6100000	11.000000	20
21	NI	6	0	18	0	0	0	51	0	3.2000000	140.00000	21
22	P	2	0	1	0	0	0	72	0	14.000000	1700.0000	22
23	PB	27	0	24	0	0	0	24	0	7.0000000	86.000000	23
24	SB	71	0	4	0	0	0	0	0			24
25	SR	0	0	0	0	0	0	75	0	2.0000000	300.00000	25
26	TI	0	0	2	0	0	0	73	0	1.2000000	3700.0000	26
27	V	2	0	2	0	0	0	71	0	1.2000000	170.00000	27
28	Y	36	0	2	0	0	0	37	0	0.2100000	28.000000	28
29	ZN	0	0	0	0	0	0	75	0	2.1000000	130.00000	29

Table 27. Fisher-K statistics for analytical data from altered rock samples collected in the Goat Rocks area

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
3	AG	0.9900000							3
4	AL	16350.667	11590.448	1.3433848D+08	2.2308213D+12	1.4327293	5.4832999D+16	3.0383734	4
5	AS	103.53846	176.22742	31056.103	17571901.	3.2106895	1.0451587D+10	10.836482	5
6	B	970.00000							6
7	BA	40.937333	51.791097	2682.3178	625853.23	4.5051282	1.8543745D+08	25.773713	7
8	BE	0.4393014	0.2308747	0.0533031	0.0124935	1.0152070	0.0033696	1.1859739	8
9	BI								9
10	CA	8212.5067	11218.370	1.2585183D+08	6.2872061D+12	4.4531609	4.4207306D+17	27.910972	10
11	CE	21.274138	19.212136	369.10616	16575.346	2.3374141	966856.24	7.0967469	11
12	CO	14.797674	10.479583	109.82166	2034.7152	1.7679567	38559.231	3.1970715	12
13	CR	67.750000	41.282563	1704.2500	-71028.250	-1.0095577	6005112.3	2.0675429	13
14	CU	51.799130	217.71386	47399.326	81011298.	7.8503197	1.4301678D+11	63.656486	14
15	FE	39146.667	44551.450	1.9848317D+09	5.0877913D+14	5.7536541	1.6439328D+20	41.728876	15
16	LA	11.828358	9.6807652	93.717214	1986.9705	2.1900920	54622.132	6.2191339	16
17	MG	6129.3067	7361.5317	54192150.	1.0440787D+12	2.6171504	3.0102270D+16	10.250062	17
18	MN	382.22267	419.35711	175860.39	1.6106141D+08	2.1839338	1.7135090D+11	5.5405175	18
19	MO	4.7925000	9.6213201	92.569800	3271.9282	3.6736669	120393.15	14.049573	19
20	NB	4.2734286	2.5135430	6.3178982	7.3534968	0.4630575	-14.931878	-0.3740841	20
21	NI	22.000000	29.220431	853.83360	68267.138	2.7362252	5732389.2	7.8630164	21
22	P	487.41667	330.80843	109434.22	42176964.	1.1650528	2.6381279D+10	2.2028735	22
23	PB	19.425000	19.032335	362.22978	17099.578	2.4803282	803519.76	6.1239022	23
24	SB								24
25	SR	49.946667	52.209623	2725.8447	339862.05	2.3880917	58771852.	7.9098302	25
26	TI	589.61781	801.74427	642793.87	1.0507117D+09	2.0388063	1.8522090D+12	4.4827708	26
27	V	44.957746	35.120278	1233.4339	55648.261	1.2846292	2960542.5	1.9459852	27
28	Y	3.7805405	4.9532615	24.534800	426.86743	3.5125235	9518.6152	15.812799	28
29	ZN	32.365333	26.732966	714.65148	23717.643	1.2414524	768239.81	1.5042091	29

NOTE: THE ABOVE STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

D.C.-arc spectrographic data

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-FE%)	2	(S-MG%)	0.4499	69
1 (S-FE%)	3	(S-CA%)	0.2491	68
1 (S-FE%)	4	(S-TI%)	0.2833	69
1 (S-FE%)	5	(S-MN)	0.5623	69
1 (S-FE%)	6	(S-AG)	-0.9543	3
1 (S-FE%)	7	(S-AS)	********	1
1 (S-FE%)	8	(S-AU)	********	0
1 (S-FE%)	9	(S-B)	-0.0973	48
1 (S-FE%)	10	(S-BA)	0.1726	66
1 (S-FE%)	11	(S-BE)	0.2578	50
1 (S-FE%)	12	(S-BI)	********	3
1 (S-FE%)	13	(S-CD)	********	0
1 (S-FE%)	14	(S-CO)	0.5784	58
1 (S-FE%)	15	(S-CR)	0.2348	54
1 (S-FE%)	16	(S-CU)	0.2792	60
1 (S-FE%)	17	(S-LA)	-0.2239	34
1 (S-FE%)	18	(S-MO)	0.6461	8
1 (S-FE%)	19	(S-NB)	0.2504	6
1 (S-FE%)	20	(S-NI)	0.3966	53
1 (S-FE%)	21	(S-PB)	0.2554	28
1 (S-FE%)	22	(S-SB)	********	0
1 (S-FE%)	23	(S-SC)	0.3613	62
1 (S-FE%)	24	(S-SN)	-0.3694	10
1 (S-FE%)	25	(S-SR)	0.1208	58
1 (S-FE%)	26	(S-V)	0.3879	65
1 (S-FE%)	27	(S-W)	********	0
1 (S-FE%)	28	(S-Y)	0.1182	63
1 (S-FE%)	29	(S-ZN)	********	0
1 (S-FE%)	30	(S-ZR)	0.0366	67
1 (S-FE%)	31	(S-TH)	********	0
1 (S-FE%)	32	(AA-AU-P)	********	0
2 (S-MG%)	3	(S-CA%)	0.5626	69
2 (S-MG%)	4	(S-TI%)	0.5892	70
2 (S-MG%)	5	(S-MN)	0.3212	70
2 (S-MG%)	6	(S-AG)	0.2183	3
2 (S-MG%)	7	(S-AS)	-1.0000	2
2 (S-MG%)	8	(S-AU)	********	0
2 (S-MG%)	9	(S-B)	0.1423	48
2 (S-MG%)	10	(S-BA)	-0.0592	67
2 (S-MG%)	11	(S-BE)	-0.0874	51
2 (S-MG%)	12	(S-BI)	********	3
2 (S-MG%)	13	(S-CD)	********	0
2 (S-MG%)	14	(S-CO)	0.4927	59
2 (S-MG%)	15	(S-CR)	0.4072	54
2 (S-MG%)	16	(S-CU)	0.3423	61
2 (S-MG%)	17	(S-LA)	-0.6229	34
2 (S-MG%)	18	(S-MO)	0.4172	9
2 (S-MG%)	19	(S-NB)	-0.8498	6
2 (S-MG%)	20	(S-NI)	0.2812	53
2 (S-MG%)	21	(S-PB)	0.0359	29
2 (S-MG%)	22	(S-SB)	********	0
2 (S-MG%)	23	(S-SC)	0.2916	63
2 (S-MG%)	24	(S-SN)	0.2117	10
2 (S-MG%)	25	(S-SR)	0.1948	58
2 (S-MG%)	26	(S-V)	0.6509	66
2 (S-MG%)	27	(S-W)	********	0
2 (S-MG%)	28	(S-Y)	-0.2548	64
2 (S-MG%)	29	(S-ZN)	********	0
2 (S-MG%)	30	(S-ZR)	-0.0686	68
2 (S-MG%)	31	(S-TH)	********	0
2 (S-MG%)	32	(AA-AU-P)	********	0
3 (S-CA%)	4	(S-TI%)	0.1873	69
3 (S-CA%)	5	(S-MN)	0.6139	69
3 (S-CA%)	6	(S-AG)	0.3841	3
3 (S-CA%)	7	(S-AS)	-1.0000	2
3 (S-CA%)	8	(S-AU)	********	0
3 (S-CA%)	9	(S-B)	-0.1238	47
3 (S-CA%)	10	(S-BA)	0.1074	66
3 (S-CA%)	11	(S-BE)	0.0087	50
3 (S-CA%)	12	(S-BI)	********	3
3 (S-CA%)	13	(S-CD)	********	0
3 (S-CA%)	14	(S-CO)	0.2423	59
3 (S-CA%)	15	(S-CR)	0.3756	54
3 (S-CA%)	16	(S-CU)	0.1615	60
3 (S-CA%)	17	(S-LA)	-0.3720	33
3 (S-CA%)	18	(S-MO)	0.0401	9
3 (S-CA%)	19	(S-NB)	0.0830	5
3 (S-CA%)	20	(S-NI)	0.0228	53
3 (S-CA%)	21	(S-PB)	-0.1034	28
3 (S-CA%)	22	(S-SB)	********	0
3 (S-CA%)	23	(S-SC)	0.3383	63
3 (S-CA%)	24	(S-SN)	0.0792	10
3 (S-CA%)	25	(S-SR)	0.1670	58
3 (S-CA%)	26	(S-V)	0.3129	66
3 (S-CA%)	27	(S-W)	********	0
3 (S-CA%)	28	(S-Y)	-0.0206	63
3 (S-CA%)	29	(S-ZN)	********	0
3 (S-CA%)	30	(S-ZR)	-0.0655	67
3 (S-CA%)	31	(S-TH)	********	0
3 (S-CA%)	32	(AA-AU-P)	********	0
4 (S-TI%)	5	(S-MN)	-0.0022	70
4 (S-TI%)	6	(S-AG)	0.3733	3
4 (S-TI%)	7	(S-AS)	-1.0000	2
4 (S-TI%)	8	(S-AU)	********	0
4 (S-TI%)	9	(S-B)	0.2713	48
4 (S-TI%)	10	(S-BA)	0.0647	67
4 (S-TI%)	11	(S-BE)	0.0332	51
4 (S-TI%)	12	(S-BI)	********	3
4 (S-TI%)	13	(S-CD)	********	0
4 (S-TI%)	14	(S-CO)	0.1563	59

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
4 (S-TI%)	15 (S-CR)	0.3302	54
4 (S-TI%)	16 (S-CU)	0.1580	61
4 (S-TI%)	17 (S-LA)	-0.3617	34
4 (S-TI%)	18 (S-MO)	-0.4901	9
4 (S-TI%)	19 (S-NB)	-0.4010	6
4 (S-TI%)	20 (S-NI)	0.1084	53
4 (S-TI%)	21 (S-PB)	0.0575	29
4 (S-TI%)	22 (S-SB)	********	0
4 (S-TI%)	23 (S-SC)	0.4858	63
4 (S-TI%)	24 (S-SN)	-0.1856	10
4 (S-TI%)	25 (S-SR)	0.1045	58
4 (S-TI%)	26 (S-V)	0.5666	66
4 (S-TI%)	27 (S-W)	********	0
4 (S-TI%)	28 (S-Y)	-0.1684	64
4 (S-TI%)	29 (S-ZN)	********	0
4 (S-TI%)	30 (S-ZR)	0.3674	68
4 (S-TI%)	31 (S-TH)	********	0
4 (S-TI%)	32 (AA-AU-P)	********	0
5 (S-MN)	6 (S-AG)	-0.3741	3
5 (S-MN)	7 (S-AS)	-1.0000	2
5 (S-MN)	8 (S-AU)	********	0
5 (S-MN)	9 (S-B)	-0.1925	48
5 (S-MN)	10 (S-BA)	0.1633	67
5 (S-MN)	11 (S-BE)	0.2099	51
5 (S-MN)	12 (S-BI)	********	3
5 (S-MN)	13 (S-CD)	********	0
5 (S-MN)	14 (S-CO)	0.4574	59
5 (S-MN)	15 (S-CR)	0.1872	54
5 (S-MN)	16 (S-CU)	0.3010	61
5 (S-MN)	17 (S-LA)	-0.1874	34
5 (S-MN)	18 (S-MO)	0.5662	9
5 (S-MN)	19 (S-NB)	0.3006	6
5 (S-MN)	20 (S-NI)	0.2120	53
5 (S-MN)	21 (S-PB)	-0.0382	29
5 (S-MN)	22 (S-SB)	********	0
5 (S-MN)	23 (S-SC)	0.2868	63
5 (S-MN)	24 (S-SN)	-0.3125	10
5 (S-MN)	25 (S-SR)	0.0624	58
5 (S-MN)	26 (S-V)	0.1893	66
5 (S-MN)	27 (S-W)	********	0
5 (S-MN)	28 (S-Y)	0.2217	64
5 (S-MN)	29 (S-ZN)	********	0
5 (S-MN)	30 (S-ZR)	-0.1680	68
5 (S-MN)	31 (S-TH)	********	0
5 (S-MN)	32 (AA-AU-P)	********	0
6 (S-AG)	7 (S-AS)	********	1
6 (S-AG)	8 (S-AU)	********	0
6 (S-AG)	9 (S-B)	0.9543	3
6 (S-AG)	10 (S-BA)	-0.9672	3
6 (S-AG)	11 (S-BE)	********	0
6 (S-AG)	12 (S-BI)	********	0
6 (S-AG)	13 (S-CD)	********	0
6 (S-AG)	14 (S-CO)	-0.8143	3
6 (S-AG)	15 (S-CR)	0.7527	3
6 (S-AG)	16 (S-CU)	1.0000	2
6 (S-AG)	17 (S-LA)	********	1
6 (S-AG)	18 (S-MO)	********	2
6 (S-AG)	19 (S-NB)	********	0
6 (S-AG)	20 (S-NI)	-0.7591	3
6 (S-AG)	21 (S-PB)	-0.8434	3
6 (S-AG)	22 (S-SB)	********	0
6 (S-AG)	23 (S-SC)	0.7666	3
6 (S-AG)	24 (S-SN)	********	1
6 (S-AG)	25 (S-SR)	********	1
6 (S-AG)	26 (S-V)	0.7210	3
6 (S-AG)	27 (S-W)	********	0
6 (S-AG)	28 (S-Y)	********	2
6 (S-AG)	29 (S-ZN)	********	0
6 (S-AG)	30 (S-ZR)	0.5559	3
6 (S-AG)	31 (S-TH)	********	0
6 (S-AG)	32 (AA-AU-P)	********	0
7 (S-AS)	8 (S-AU)	********	0
7 (S-AS)	9 (S-B)	********	1
7 (S-AS)	10 (S-BA)	-1.0000	2
7 (S-AS)	11 (S-BE)	********	1
7 (S-AS)	12 (S-BI)	********	0
7 (S-AS)	13 (S-CD)	********	0
7 (S-AS)	14 (S-CO)	-1.0000	2
7 (S-AS)	15 (S-CR)	********	1
7 (S-AS)	16 (S-CU)	-1.0000	2
7 (S-AS)	17 (S-LA)	********	0
7 (S-AS)	18 (S-MO)	1.0000	2
7 (S-AS)	19 (S-NB)	********	0
7 (S-AS)	20 (S-NI)	********	1
7 (S-AS)	21 (S-PB)	********	2
7 (S-AS)	22 (S-SB)	********	0
7 (S-AS)	23 (S-SC)	-1.0000	2
7 (S-AS)	24 (S-SN)	********	0
7 (S-AS)	25 (S-SR)	********	0
7 (S-AS)	26 (S-V)	-1.0000	2
7 (S-AS)	27 (S-W)	********	0
7 (S-AS)	28 (S-Y)	********	1
7 (S-AS)	29 (S-ZN)	********	0
7 (S-AS)	30 (S-ZR)	-1.0000	2
7 (S-AS)	31 (S-TH)	********	0
7 (S-AS)	32 (AA-AU-P)	********	0
8 (S-AU)	9 (S-B)	********	0
8 (S-AU)	10 (S-BA)	********	0
8 (S-AU)	11 (S-BE)	********	0
8 (S-AU)	12 (S-BI)	********	0

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
8 (S-AU)	13 (S-CD)	********	0
8 (S-AU)	14 (S-CO)	********	0
8 (S-AU)	15 (S-CR)	********	0
8 (S-AU)	16 (S-CU)	********	0
8 (S-AU)	17 (S-LA)	********	0
8 (S-AU)	18 (S-MO)	********	0
8 (S-AU)	19 (S-NB)	********	0
8 (S-AU)	20 (S-NI)	********	0
8 (S-AU)	21 (S-PB)	********	0
8 (S-AU)	22 (S-SB)	********	0
8 (S-AU)	23 (S-SC)	********	0
8 (S-AU)	24 (S-SN)	********	0
8 (S-AU)	25 (S-SR)	********	0
8 (S-AU)	26 (S-V)	********	0
8 (S-AU)	27 (S-W)	********	0
8 (S-AU)	28 (S-Y)	********	0
8 (S-AU)	29 (S-ZN)	********	0
8 (S-AU)	30 (S-ZR)	********	0
8 (S-AU)	31 (S-TH)	********	0
8 (S-AU)	32 (AA-AU-P)	********	0
9 (S-B)	10 (S-BA)	-0.0530	46
9 (S-B)	11 (S-BE)	0.2105	35
9 (S-B)	12 (S-BI)	********	3
9 (S-B)	13 (S-CD)	********	0
9 (S-B)	14 (S-CO)	-0.0115	40
9 (S-B)	15 (S-CR)	0.0006	38
9 (S-B)	16 (S-CU)	-0.2477	40
9 (S-B)	17 (S-LA)	-0.0038	25
9 (S-B)	18 (S-MO)	-0.6361	7
9 (S-B)	19 (S-NB)	-0.3791	4
9 (S-B)	20 (S-NI)	0.0617	36
9 (S-B)	21 (S-PB)	-0.3653	24
9 (S-B)	22 (S-SB)	********	0
9 (S-B)	23 (S-SC)	0.1012	44
9 (S-B)	24 (S-SN)	0.6768	7
9 (S-B)	25 (S-SR)	-0.0461	39
9 (S-B)	26 (S-V)	0.3094	45
9 (S-B)	27 (S-W)	********	0
9 (S-B)	28 (S-Y)	0.0467	44
9 (S-B)	29 (S-ZN)	********	0
9 (S-B)	30 (S-ZR)	0.2537	47
9 (S-B)	31 (S-TH)	********	0
9 (S-B)	32 (AA-AU-P)	********	0
10 (S-BA)	11 (S-BE)	0.4715	50
10 (S-BA)	12 (S-BI)	********	3
10 (S-BA)	13 (S-CD)	********	0
10 (S-BA)	14 (S-CO)	-0.0208	56
10 (S-BA)	15 (S-CR)	0.2600	52
10 (S-BA)	16 (S-CU)	-0.3045	59
10 (S-BA)	17 (S-LA)	0.3263	34
10 (S-BA)	18 (S-MO)	-0.6423	8
10 (S-BA)	19 (S-NB)	0.6390	6
10 (S-BA)	20 (S-NI)	0.0933	50
10 (S-BA)	21 (S-PB)	-0.3994	29
10 (S-BA)	22 (S-SB)	********	0
10 (S-BA)	23 (S-SC)	0.1534	60
10 (S-BA)	24 (S-SN)	-0.4766	9
10 (S-BA)	25 (S-SR)	0.0458	55
10 (S-BA)	26 (S-V)	-0.0607	63
10 (S-BA)	27 (S-W)	********	0
10 (S-BA)	28 (S-Y)	0.2752	62
10 (S-BA)	29 (S-ZN)	********	0
10 (S-BA)	30 (S-ZR)	0.3050	67
10 (S-BA)	31 (S-TH)	********	0
10 (S-BA)	32 (AA-AU-P)	********	0
11 (S-BE)	12 (S-BI)	********	2
11 (S-BE)	13 (S-CD)	********	0
11 (S-BE)	14 (S-CO)	0.1135	40
11 (S-BE)	15 (S-CR)	0.1490	39
11 (S-BE)	16 (S-CU)	0.0091	45
11 (S-BE)	17 (S-LA)	0.4180	30
11 (S-BE)	18 (S-MO)	-0.6033	5
11 (S-BE)	19 (S-NB)	-0.0811	6
11 (S-BE)	20 (S-NI)	0.3486	37
11 (S-BE)	21 (S-PB)	-0.4642	21
11 (S-BE)	22 (S-SB)	********	0
11 (S-BE)	23 (S-SC)	0.0431	44
11 (S-BE)	24 (S-SN)	-0.5157	7
11 (S-BE)	25 (S-SR)	-0.0241	41
11 (S-BE)	26 (S-V)	0.0900	47
11 (S-BE)	27 (S-W)	********	0
11 (S-BE)	28 (S-Y)	0.4386	49
11 (S-BE)	29 (S-ZN)	********	0
11 (S-BE)	30 (S-ZR)	0.3488	51
11 (S-BE)	31 (S-TH)	********	0
11 (S-BE)	32 (AA-AU-P)	********	0
12 (S-BI)	13 (S-CD)	********	0
12 (S-BI)	14 (S-CO)	********	2
12 (S-BI)	15 (S-CR)	********	3
12 (S-BI)	16 (S-CU)	********	3
12 (S-BI)	17 (S-LA)	********	0
12 (S-BI)	18 (S-MO)	********	1
12 (S-BI)	19 (S-NB)	********	0
12 (S-BI)	20 (S-NI)	********	2
12 (S-BI)	21 (S-PB)	********	0
12 (S-BI)	22 (S-SB)	********	0
12 (S-BI)	23 (S-SC)	********	3
12 (S-BI)	24 (S-SN)	********	1
12 (S-BI)	25 (S-SR)	********	3
12 (S-BI)	26 (S-V)	********	3

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
12 (S-BI)	27 (S-W)	********	0
12 (S-BI)	28 (S-Y)	********	3
12 (S-BI)	29 (S-ZN)	********	0
12 (S-BI)	30 (S-ZR)	********	3
12 (S-BI)	31 (S-TH)	********	0
12 (S-BI)	32 (AA-AU-P)	********	0
13 (S-CD)	14 (S-CO)	********	0
13 (S-CD)	15 (S-CR)	********	0
13 (S-CD)	16 (S-CU)	********	0
13 (S-CD)	17 (S-LA)	********	0
13 (S-CD)	18 (S-MO)	********	0
13 (S-CD)	19 (S-NB)	********	0
13 (S-CD)	20 (S-NI)	********	0
13 (S-CD)	21 (S-PB)	********	0
13 (S-CD)	22 (S-SB)	********	0
13 (S-CD)	23 (S-SC)	********	0
13 (S-CD)	24 (S-SN)	********	0
13 (S-CD)	25 (S-SR)	********	0
13 (S-CD)	26 (S-V)	********	0
13 (S-CD)	27 (S-W)	********	0
13 (S-CD)	28 (S-Y)	********	0
13 (S-CD)	29 (S-ZN)	********	0
13 (S-CD)	30 (S-ZR)	********	0
13 (S-CD)	31 (S-TH)	********	0
13 (S-CD)	32 (AA-AU-P)	********	0
14 (S-CO)	15 (S-CR)	0.1889	49
14 (S-CO)	16 (S-CU)	0.3907	53
14 (S-CO)	17 (S-LA)	-0.2220	28
14 (S-CO)	18 (S-MO)	0.6292	7
14 (S-CO)	19 (S-NB)	********	2
14 (S-CO)	20 (S-NI)	0.4716	51
14 (S-CO)	21 (S-PB)	0.3420	25
14 (S-CO)	22 (S-SB)	********	0
14 (S-CO)	23 (S-SC)	0.2126	57
14 (S-CO)	24 (S-SN)	-0.0762	9
14 (S-CO)	25 (S-SR)	0.0897	52
14 (S-CO)	26 (S-V)	0.3208	59
14 (S-CO)	27 (S-W)	********	0
14 (S-CO)	28 (S-Y)	-0.1057	53
14 (S-CO)	29 (S-ZN)	********	0
14 (S-CO)	30 (S-ZR)	-0.2559	57
14 (S-CO)	31 (S-TH)	********	0
14 (S-CO)	32 (AA-AU-P)	********	0
15 (S-CR)	16 (S-CU)	0.0439	47
15 (S-CR)	17 (S-LA)	-0.1031	25
15 (S-CR)	18 (S-MO)	-0.1405	6
15 (S-CR)	19 (S-NB)	********	1
15 (S-CR)	20 (S-NI)	0.6567	48
15 (S-CR)	21 (S-PB)	-0.1587	25
15 (S-CR)	22 (S-SB)	********	0
15 (S-CR)	23 (S-SC)	0.6044	52
15 (S-CR)	24 (S-SN)	0.3864	10
15 (S-CR)	25 (S-SR)	0.1870	47
15 (S-CR)	26 (S-V)	0.5790	54
15 (S-CR)	27 (S-W)	********	0
15 (S-CR)	28 (S-Y)	0.0677	49
15 (S-CR)	29 (S-ZN)	********	0
15 (S-CR)	30 (S-ZR)	0.0332	52
15 (S-CR)	31 (S-TH)	********	0
15 (S-CR)	32 (AA-AU-P)	********	0
16 (S-CU)	17 (S-LA)	-0.4353	30
16 (S-CU)	18 (S-MO)	0.4949	8
16 (S-CU)	19 (S-NB)	-0.6667	5
16 (S-CU)	20 (S-NI)	0.2223	48
16 (S-CU)	21 (S-PB)	0.3542	25
16 (S-CU)	22 (S-SB)	********	0
16 (S-CU)	23 (S-SC)	-0.0473	55
16 (S-CU)	24 (S-SN)	-0.5565	9
16 (S-CU)	25 (S-SR)	0.2082	53
16 (S-CU)	26 (S-V)	0.1877	58
16 (S-CU)	27 (S-W)	********	0
16 (S-CU)	28 (S-Y)	-0.2415	55
16 (S-CU)	29 (S-ZN)	********	0
16 (S-CU)	30 (S-ZR)	-0.4217	59
16 (S-CU)	31 (S-TH)	********	0
16 (S-CU)	32 (AA-AU-P)	********	0
17 (S-LA)	18 (S-MO)	-0.5000	3
17 (S-LA)	19 (S-NB)	0.6523	6
17 (S-LA)	20 (S-NI)	-0.1909	26
17 (S-LA)	21 (S-PB)	0.4358	17
17 (S-LA)	22 (S-SB)	********	0
17 (S-LA)	23 (S-SC)	-0.3389	30
17 (S-LA)	24 (S-SN)	********	4
17 (S-LA)	25 (S-SR)	-0.1552	26
17 (S-LA)	26 (S-V)	-0.3767	31
17 (S-LA)	27 (S-W)	********	0
17 (S-LA)	28 (S-Y)	0.5339	32
17 (S-LA)	29 (S-ZN)	********	0
17 (S-LA)	30 (S-ZR)	0.5315	34
17 (S-LA)	31 (S-TH)	********	0
17 (S-LA)	32 (AA-AU-P)	********	0
18 (S-MO)	19 (S-NB)	********	1
18 (S-MO)	20 (S-NI)	0.9423	6
18 (S-MO)	21 (S-PB)	0.4290	4
18 (S-MO)	22 (S-SB)	********	0
18 (S-MO)	23 (S-SC)	-0.4382	9
18 (S-MO)	24 (S-SN)	********	2
18 (S-MO)	25 (S-SR)	0.4447	5
18 (S-MO)	26 (S-V)	-0.1920	9
18 (S-MO)	27 (S-W)	********	0

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
18 (S-MO)	28 (S-Y)	-0.1036	8
18 (S-MO)	29 (S-ZN)	********	0
18 (S-MO)	30 (S-ZR)	-0.8303	8
18 (S-MO)	31 (S-TH)	********	0
18 (S-MO)	32 (AA-AU-P)	********	0
19 (S-NB)	20 (S-NI)	********	2
19 (S-NB)	21 (S-PB)	1.0000	2
19 (S-NB)	22 (S-SB)	********	0
19 (S-NB)	23 (S-SC)	********	3
19 (S-NB)	24 (S-SN)	********	0
19 (S-NB)	25 (S-SR)	********	2
19 (S-NB)	26 (S-V)	********	3
19 (S-NB)	27 (S-W)	********	0
19 (S-NB)	28 (S-Y)	0.4722	6
19 (S-NB)	29 (S-ZN)	********	0
19 (S-NB)	30 (S-ZR)	0.6978	6
19 (S-NB)	31 (S-TH)	********	0
19 (S-NB)	32 (AA-AU-P)	********	0
20 (S-NI)	21 (S-PB)	0.0298	23
20 (S-NI)	22 (S-SB)	********	0
20 (S-NI)	23 (S-SC)	0.3435	51
20 (S-NI)	24 (S-SN)	-0.0282	9
20 (S-NI)	25 (S-SR)	0.2001	48
20 (S-NI)	26 (S-V)	0.4876	52
20 (S-NI)	27 (S-W)	********	0
20 (S-NI)	28 (S-Y)	0.0639	47
20 (S-NI)	29 (S-ZN)	********	0
20 (S-NI)	30 (S-ZR)	-0.2896	51
20 (S-NI)	31 (S-TH)	********	0
20 (S-NI)	32 (AA-AU-P)	********	0
21 (S-PB)	22 (S-SB)	********	0
21 (S-PB)	23 (S-SC)	0.0213	27
21 (S-PB)	24 (S-SN)	-0.5000	3
21 (S-PB)	25 (S-SR)	-0.1372	24
21 (S-PB)	26 (S-V)	-0.2802	27
21 (S-PB)	27 (S-W)	********	0
21 (S-PB)	28 (S-Y)	-0.3415	26
21 (S-PB)	29 (S-ZN)	********	0
21 (S-PB)	30 (S-ZR)	-0.2520	29
21 (S-PB)	31 (S-TH)	********	0
21 (S-PB)	32 (AA-AU-P)	********	0
22 (S-SB)	23 (S-SC)	********	0
22 (S-SB)	24 (S-SN)	********	0
22 (S-SB)	25 (S-SR)	********	0
22 (S-SB)	26 (S-V)	********	0
22 (S-SB)	27 (S-W)	********	0
22 (S-SB)	28 (S-Y)	********	0
22 (S-SB)	29 (S-ZN)	********	0
22 (S-SB)	30 (S-ZR)	********	0
22 (S-SB)	31 (S-TH)	********	0
22 (S-SB)	32 (AA-AU-P)	********	0
23 (S-SC)	24 (S-SN)	0.3971	10
23 (S-SC)	25 (S-SR)	0.0604	55
23 (S-SC)	26 (S-V)	0.6267	63
23 (S-SC)	27 (S-W)	********	0
23 (S-SC)	28 (S-Y)	0.0339	58
23 (S-SC)	29 (S-ZN)	********	0
23 (S-SC)	30 (S-ZR)	0.0198	61
23 (S-SC)	31 (S-TH)	********	0
23 (S-SC)	32 (AA-AU-P)	********	0
24 (S-SN)	25 (S-SR)	-0.3500	9
24 (S-SN)	26 (S-V)	0.3338	10
24 (S-SN)	27 (S-W)	********	0
24 (S-SN)	28 (S-Y)	-0.3464	10
24 (S-SN)	29 (S-ZN)	********	0
24 (S-SN)	30 (S-ZR)	-0.0296	9
24 (S-SN)	31 (S-TH)	********	0
24 (S-SN)	32 (AA-AU-P)	********	0
25 (S-SR)	26 (S-V)	0.2698	57
25 (S-SR)	27 (S-W)	********	0
25 (S-SR)	28 (S-Y)	-0.0963	54
25 (S-SR)	29 (S-ZN)	********	0
25 (S-SR)	30 (S-ZR)	-0.0332	56
25 (S-SR)	31 (S-TH)	********	0
25 (S-SR)	32 (AA-AU-P)	********	0
26 (S-V)	27 (S-W)	********	0
26 (S-V)	28 (S-Y)	0.0198	60
26 (S-V)	29 (S-ZN)	********	0
26 (S-V)	30 (S-ZR)	-0.0089	64
26 (S-V)	31 (S-TH)	********	0
26 (S-V)	32 (AA-AU-P)	********	0
27 (S-W)	28 (S-Y)	********	0
27 (S-W)	29 (S-ZN)	********	0
27 (S-W)	30 (S-ZR)	********	0
27 (S-W)	31 (S-TH)	********	0
27 (S-W)	32 (AA-AU-P)	********	0
28 (S-Y)	29 (S-ZN)	********	0
28 (S-Y)	30 (S-ZR)	0.4081	63
28 (S-Y)	31 (S-TH)	********	0
28 (S-Y)	32 (AA-AU-P)	********	0
29 (S-ZN)	30 (S-ZR)	********	0
29 (S-ZN)	31 (S-TH)	********	0
29 (S-ZN)	32 (AA-AU-P)	********	0
30 (S-ZR)	31 (S-TH)	********	0
30 (S-ZR)	32 (AA-AU-P)	********	0
31 (S-TH)	32 (AA-AU-P)	********	0

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

Aqua-regia leach/ICP data

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (MG)	2 (CA)		0.5640	69
1 (MG)	3 (FE)		0.5538	69
1 (MG)	4 (TI)		0.3882	67
1 (MG)	5 (AL)		0.6263	69
1 (MG)	6 (V)		0.6495	66
1 (MG)	7 (CR)		0.8795	4
1 (MG)	8 (CO)		0.2766	41
1 (MG)	9 (NI)		0.4019	48
1 (MG)	10 (CU)		0.2250	63
1 (MG)	11 (ZN)		0.3534	69
1 (MG)	12 (MO)		0.0291	29
1 (MG)	13 (PB)		0.0282	20
1 (MG)	14 (AG)		********	1
1 (MG)	15 (AS)		0.3664	11
1 (MG)	16 (BE)		0.2931	67
1 (MG)	17 (SR)		0.1731	69
1 (MG)	18 (BA)		0.0276	69
1 (MG)	19 (LA)		-0.0552	63
1 (MG)	20 (CE)		0.0083	54
1 (MG)	21 (Y)		0.0403	33
1 (MG)	22 (NB)		0.6649	64
1 (MG)	23 (P)		0.5781	66
2 (CA)	3 (FE)		0.1488	69
2 (CA)	4 (TI)		0.3884	67
2 (CA)	5 (AL)		0.5263	69
2 (CA)	6 (V)		0.4344	66
2 (CA)	7 (CR)		0.1195	4
2 (CA)	8 (CO)		0.2011	41
2 (CA)	9 (NI)		0.2618	48
2 (CA)	10 (CU)		0.2598	63
2 (CA)	11 (ZN)		0.2555	69
2 (CA)	12 (MO)		-0.0770	29
2 (CA)	13 (PB)		-0.0811	20
2 (CA)	14 (AG)		********	1
2 (CA)	15 (AS)		-0.2152	11
2 (CA)	16 (BE)		0.2058	67
2 (CA)	17 (SR)		0.7004	69
2 (CA)	18 (BA)		0.0950	69
2 (CA)	19 (LA)		-0.0588	63
2 (CA)	20 (CE)		-0.0551	54
2 (CA)	21 (Y)		0.1562	33
2 (CA)	22 (NB)		0.3745	64
2 (CA)	23 (P)		0.5345	66
3 (FE)	4 (TI)		0.2490	67
3 (FE)	5 (AL)		0.1987	69
3 (FE)	6 (V)		0.5790	66
3 (FE)	7 (CR)		0.6629	4
3 (FE)	8 (CO)		0.4921	41
3 (FE)	9 (NI)		0.4249	48
3 (FE)	10 (CU)		0.3056	63
3 (FE)	11 (ZN)		0.4661	69
3 (FE)	12 (MO)		0.6965	29
3 (FE)	13 (PB)		0.5432	20
3 (FE)	14 (AG)		********	1
3 (FE)	15 (AS)		0.8233	11
3 (FE)	16 (BE)		0.1420	67
3 (FE)	17 (SR)		-0.1363	69
3 (FE)	18 (BA)		-0.1654	69
3 (FE)	19 (LA)		0.1817	63
3 (FE)	20 (CE)		0.2943	54
3 (FE)	21 (Y)		0.0598	33
3 (FE)	22 (NB)		0.5773	64
3 (FE)	23 (P)		0.3204	66
4 (TI)	5 (AL)		0.4845	67
4 (TI)	6 (V)		0.6859	65
4 (TI)	7 (CR)		0.4629	4
4 (TI)	8 (CO)		0.0893	40
4 (TI)	9 (NI)		0.0796	47
4 (TI)	10 (CU)		0.2278	61
4 (TI)	11 (ZN)		0.3315	67
4 (TI)	12 (MO)		-0.1505	28
4 (TI)	13 (PB)		-0.0987	18
4 (TI)	14 (AG)		********	1
4 (TI)	15 (AS)		0.4342	9
4 (TI)	16 (BE)		-0.1783	65
4 (TI)	17 (SR)		0.3546	67
4 (TI)	18 (BA)		-0.0299	67
4 (TI)	19 (LA)		-0.2294	61
4 (TI)	20 (CE)		-0.1382	52
4 (TI)	21 (Y)		-0.2660	31
4 (TI)	22 (NB)		0.4233	62
4 (TI)	23 (P)		0.2385	64
5 (AL)	6 (V)		0.5435	66
5 (AL)	7 (CR)		0.2556	4
5 (AL)	8 (CO)		0.2756	41
5 (AL)	9 (NI)		0.1214	48
5 (AL)	10 (CU)		0.2117	63
5 (AL)	11 (ZN)		0.1982	69
5 (AL)	12 (MO)		-0.2980	29
5 (AL)	13 (PB)		0.1940	20
5 (AL)	14 (AG)		********	1
5 (AL)	15 (AS)		0.3252	11
5 (AL)	16 (BE)		0.1399	67
5 (AL)	17 (SR)		0.5216	69
5 (AL)	18 (BA)		0.0160	69
5 (AL)	19 (LA)		-0.2509	63
5 (AL)	20 (CE)		-0.3420	54
5 (AL)	21 (Y)		-0.4801	33
5 (AL)	22 (NB)		0.5579	64
5 (AL)	23 (P)		0.4558	66

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
6 (V	)	7 (CR	) 0.4962	4
6 (V	)	8 (CO	) 0.2700	41
6 (V	)	9 (NI	) 0.4493	48
6 (V	)	10 (CU	) 0.4078	60
6 (V	)	11 (ZN	) 0.4568	66
6 (V	)	12 (MO	) 0.0706	28
6 (V	)	13 (PB	) 0.2632	18
6 (V	)	14 (AG	) ********	1
6 (V	)	15 (AS	) 0.5936	10
6 (V	)	16 (BE	) 0.0320	64
6 (V	)	17 (SR	) 0.1724	66
6 (V	)	18 (BA	) -0.1145	66
6 (V	)	19 (LA	) -0.0983	60
6 (V	)	20 (CE	) 0.0456	51
6 (V	)	21 (Y	) -0.1841	30
6 (V	)	22 (NB	) 0.8441	63
6 (V	)	23 (P	) 0.4335	63
7 (CR	)	8 (CO	) -0.5629	4
7 (CR	)	9 (NI	) 0.5544	4
7 (CR	)	10 (CU	) 0.6718	3
7 (CR	)	11 (ZN	) 0.2537	4
7 (CR	)	12 (MO	) ********	1
7 (CR	)	13 (PB	) ********	0
7 (CR	)	14 (AG	) ********	0
7 (CR	)	15 (AS	) ********	0
7 (CR	)	16 (BE	) 0.0431	4
7 (CR	)	17 (SR	) -0.2640	4
7 (CR	)	18 (BA	) 0.4612	4
7 (CR	)	19 (LA	) 0.5130	4
7 (CR	)	20 (CE	) ********	1
7 (CR	)	21 (Y	) ********	0
7 (CR	)	22 (NB	) 0.9653	4
7 (CR	)	23 (P	) -0.7881	4
8 (CO	)	9 (NI	) 0.4729	36
8 (CO	)	10 (CU	) 0.2812	37
8 (CO	)	11 (ZN	) 0.0746	41
8 (CO	)	12 (MO	) 0.6932	18
8 (CO	)	13 (PB	) 0.8528	10
8 (CO	)	14 (AG	) ********	1
8 (CO	)	15 (AS	) 0.8878	4
8 (CO	)	16 (BE	) 0.1771	40
8 (CO	)	17 (SR	) 0.1295	41
8 (CO	)	18 (BA	) -0.0484	41
8 (CO	)	19 (LA	) 0.0159	39
8 (CO	)	20 (CE	) -0.0938	30
8 (CO	)	21 (Y	) -0.4027	19
8 (CO	)	22 (NB	) 0.4813	41
8 (CO	)	23 (P	) 0.1661	41
9 (NI	)	10 (CU	) 0.2139	44
9 (NI	)	11 (ZN	) 0.0608	48
9 (NI	)	12 (MO	) 0.4416	21
9 (NI	)	13 (PB	) 0.3428	12
9 (NI	)	14 (AG	) ********	1
9 (NI	)	15 (AS	) 0.9523	5
9 (NI	)	16 (BE	) 0.2485	47
9 (NI	)	17 (SR	) -0.0935	48
9 (NI	)	18 (BA	) -0.0363	48
9 (NI	)	19 (LA	) -0.1163	43
9 (NI	)	20 (CE	) 0.2167	35
9 (NI	)	21 (Y	) -0.2923	18
9 (NI	)	22 (NB	) 0.4777	48
9 (NI	)	23 (P	) 0.2279	47
10 (CU	)	11 (ZN	) 0.3367	63
10 (CU	)	12 (MO	) 0.3183	27
10 (CU	)	13 (PB	) 0.5248	20
10 (CU	)	14 (AG	) ********	0
10 (CU	)	15 (AS	) 0.4938	9
10 (CU	)	16 (BE	) -0.0975	61
10 (CU	)	17 (SR	) 0.2638	63
10 (CU	)	18 (BA	) 0.1439	63
10 (CU	)	19 (LA	) 0.0224	57
10 (CU	)	20 (CE	) 0.0293	49
10 (CU	)	21 (Y	) -0.0887	31
10 (CU	)	22 (NB	) 0.3919	60
10 (CU	)	23 (P	) 0.0643	60
11 (ZN	)	12 (MO	) 0.1178	29
11 (ZN	)	13 (PB	) 0.0122	20
11 (ZN	)	14 (AG	) ********	1
11 (ZN	)	15 (AS	) 0.0335	11
11 (ZN	)	16 (BE	) 0.3843	67
11 (ZN	)	17 (SR	) 0.1049	69
11 (ZN	)	18 (BA	) 0.2780	69
11 (ZN	)	19 (LA	) 0.5393	63
11 (ZN	)	20 (CE	) 0.5548	54
11 (ZN	)	21 (Y	) 0.2754	33
11 (ZN	)	22 (NB	) 0.2637	64
11 (ZN	)	23 (P	) -0.0903	66
12 (MO	)	13 (PB	) 0.8530	14
12 (MO	)	14 (AG	) ********	0
12 (MO	)	15 (AS	) 0.8845	7
12 (MO	)	16 (BE	) 0.2890	28
12 (MO	)	17 (SR	) -0.3241	29
12 (MO	)	18 (BA	) -0.4204	29
12 (MO	)	19 (LA	) 0.1484	27
12 (MO	)	20 (CE	) 0.1058	22
12 (MO	)	21 (Y	) 0.4533	12
12 (MO	)	22 (NB	) 0.1003	26
12 (MO	)	23 (P	) -0.0571	28
13 (PB	)	14 (AG	) ********	0
13 (PB	)	15 (AS	) 0.8988	8

Table 28. Correlation coefficients for analytical data from altered rock samples collected in the Goat Rocks area

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
13 (PB)	16 (BE)	-0.0912	19
13 (PB)	17 (SR)	-0.0340	20
13 (PB)	18 (BA)	-0.2590	20
13 (PB)	19 (LA)	0.0299	19
13 (PB)	20 (CE)	-0.1405	16
13 (PB)	21 (Y)	-0.4187	10
13 (PB)	22 (NB)	0.3667	18
13 (PB)	23 (P)	0.2162	19
14 (AG)	15 (AS)	********	0
14 (AG)	16 (BE)	********	1
14 (AG)	17 (SR)	********	1
14 (AG)	18 (BA)	********	1
14 (AG)	19 (LA)	********	1
14 (AG)	20 (CE)	********	1
14 (AG)	21 (Y)	********	1
14 (AG)	22 (NB)	********	1
14 (AG)	23 (P)	********	1
15 (AS)	16 (BE)	-0.0736	10
15 (AS)	17 (SR)	-0.3901	11
15 (AS)	18 (BA)	-0.5324	11
15 (AS)	19 (LA)	-0.2700	10
15 (AS)	20 (CE)	-0.3444	8
15 (AS)	21 (Y)	0.1413	4
15 (AS)	22 (NB)	0.5377	8
15 (AS)	23 (P)	0.3082	11
16 (BE)	17 (SR)	-0.0513	67
16 (BE)	18 (BA)	0.1072	67
16 (BE)	19 (LA)	0.3612	62
16 (BE)	20 (CE)	0.2219	53
16 (BE)	21 (Y)	0.2671	32
16 (BE)	22 (NB)	-0.0346	62
16 (BE)	23 (P)	0.0477	64
17 (SR)	18 (BA)	0.2431	69
17 (SR)	19 (LA)	0.0116	63
17 (SR)	20 (CE)	-0.1383	54
17 (SR)	21 (Y)	-0.0895	33
17 (SR)	22 (NB)	0.2452	64
17 (SR)	23 (P)	0.2883	66
18 (BA)	19 (LA)	0.4332	63
18 (BA)	20 (CE)	0.3045	54
18 (BA)	21 (Y)	0.1605	33
18 (BA)	22 (NB)	0.0680	64
18 (BA)	23 (P)	-0.2016	66
19 (LA)	20 (CE)	0.9555	52
19 (LA)	21 (Y)	0.3845	31
19 (LA)	22 (NB)	-0.0421	58
19 (LA)	23 (P)	-0.1522	62
20 (CE)	21 (Y)	0.3927	33
20 (CE)	22 (NB)	0.0890	49
20 (CE)	23 (P)	-0.1088	52
21 (Y)	22 (NB)	-0.2080	30
21 (Y)	23 (P)	-0.1370	31
22 (NB)	23 (P)	0.3589	61

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

FREQUENCY TABLE FOR VARIABLE 3 (S-MG%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
-1.584E+00	-1.417E+00	1	1	1.45	1.45	0.02	61.57
-1.417E+00	-1.251E+00	0	1	0.00	1.45	0.07	0.07
-1.251E+00	-1.084E+00	1	2	1.45	2.90	0.24	2.39
-1.084E+00	-9.173E-01	1	3	1.45	4.35	0.72	0.11
-9.173E-01	-7.507E-01	1	4	1.45	5.80	1.79	0.35
-7.507E-01	-5.840E-01	4	8	5.80	11.59	3.73	0.02
-5.840E-01	-4.173E-01	3	11	4.35	15.94	6.48	1.87
-4.173E-01	-2.507E-01	7	18	10.14	26.09	9.40	0.61
-2.507E-01	-8.400E-02	5	23	7.25	33.33	11.37	3.57
-8.400E-02	8.267E-02	19	42	27.54	60.87	11.49	4.91
8.267E-02	2.493E-01	15	57	21.74	82.61	9.69	2.91
2.493E-01	4.160E-01	10	67	14.49	97.10	6.82	1.48
4.160E-01	5.827E-01	2	69	2.90	100.00	7.16	3.72
G		0	69	0.00	100.00	0.00	.00
H		0	69				
B		0	69				

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PERCENT TABLE FOR VARIABLE 3 (S-MG%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-2.685212E-01	5.388636E-01
50.00	1.688038E-02	1.039634E+00
75.00	1.910035E-01	1.552400E+00
90.00	3.343372E-01	2.159420E+00
95.00	3.918373E-01	2.465115E+00
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

HISTOGRAM FOR VARIABLE 3 (S-MG%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E-02 X
4.634E-02
6.802E-02 X
9.985E-02 X
1.466E-01 X
2.151E-01 XXXXXX
3.157E-01 XXXX
4.634E-01 XXXXXXXXXX
6.803E-01 XXXXXXX
9.985E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+00 XXXXXXXXXXXXXXXXXXXX
2.151E+00 XXXXXXXXXXXXX
3.157E+00 XXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 3.00000E-02
MAXIMUM ANTILOG      = 3.00000E+00
GEOMETRIC MEAN       = 8.42322E-01
GEOMETRIC DEVIATION  = 2.45057E+00
VARIANCE OF LOGS     = 1.51529E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 4 (S-CA%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	0.05	0.05
-1.417E+00	-1.250E+00	1	1	1.45	1.45	0.11	7.27
-1.250E+00	-1.084E+00	2	3	2.90	4.35	0.29	10.08
-1.084E+00	-9.170E-01	2	5	2.90	7.25	0.68	2.53
-9.170E-01	-7.503E-01	2	7	2.90	10.14	1.43	0.23
-7.503E-01	-5.837E-01	1	8	1.45	11.59	2.65	1.02
-5.837E-01	-4.170E-01	1	9	1.45	13.04	4.34	2.57
-4.170E-01	-2.503E-01	2	11	2.90	15.94	6.32	2.95
-2.503E-01	-8.366E-02	5	16	7.25	23.19	8.16	1.22
-8.366E-02	8.300E-02	8	24	11.59	34.78	9.33	0.19
8.300E-02	2.497E-01	6	30	8.70	43.48	9.47	1.27
2.497E-01	4.163E-01	23	53	33.33	76.81	8.51	24.64
4.163E-01	5.830E-01	10	63	14.49	91.30	6.79	1.52
5.830E-01	7.497E-01	6	69	8.70	100.00	10.86	2.18
	G	0	69	0.00	100.00	0.05	0.05
	H	0	69				
	B	0	69				

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PERCENT TABLE FOR VARIABLE 4 (S-CA%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-5.762228E-02	8.757451E-01
50.00	2.822788E-01	1.915485E+00
75.00	4.072790E-01	2.554342E+00
90.00	5.680040E-01	3.698316E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

HISTOGRAM FOR VARIABLE 4 (S-CA%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E-02 X
6.809E-02 XXX
9.992E-02 XXX
1.467E-01 XXX
2.153E-01 X
3.160E-01 X
4.638E-01 XXX
6.808E-01 XXXXXXX
9.992E-01 XXXXXXXXXXX
1.467E+00 XXXXXXXXX
2.153E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+00 XXXXXXXXXXXXXX
4.638E+00 XXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-02
MAXIMUM ANTILOG = 5.00000E+00
GEOMETRIC MEAN = 1.26686E+00
GEOMETRIC DEVIATION = 3.00545E+00
VARIANCE OF LOGS = 2.28398E-01

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 5 (S-FE%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.03	0.03
-2.500E-01	-8.333E-02	1	1	1.45	1.45	0.20	3.20
-8.333E-02	8.333E-02	1	2	1.45	2.90	1.01	0.00
8.333E-02	2.500E-01	2	4	2.90	5.80	3.55	0.68
2.500E-01	4.167E-01	10	14	14.49	20.29	8.60	0.23
4.167E-01	5.833E-01	11	25	15.94	36.23	14.40	0.80
5.833E-01	7.500E-01	15	40	21.74	57.97	16.68	0.17
7.500E-01	9.167E-01	20	60	28.99	86.96	13.37	3.29
9.167E-01	1.083E+00	9	69	13.04	100.00	11.16	0.42
G		0	69	0.00	100.00	0.03	0.03
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 5 (S-FE%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E-01 X
1.000E+00 X
1.468E+00 XXX
2.154E+00 XXXXXXXXXXXXXX
3.162E+00 XXXXXXXXXXXXXXXXX
4.642E+00 XXXXXXXXXXXXXXXXXXXXXX
6.813E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.000E+01 XXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 7.00000E-01
MAXIMUM ANTILOG      = 1.00000E+01
GEOMETRIC MEAN       = 4.46571E+00
GEOMETRIC DEVIATION  = 1.86310E+00
VARIANCE OF LOGS     = 7.30271E-02
```

PERCENT TABLE FOR VARIABLE 5 (S-FE%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
			90.00	1.0000000E+35	1.0000000E+35
25.00	4.659105E-01	2.923550E+00	95.00	1.0000000E+35	1.0000000E+35
50.00	6.888908E-01	4.885295E+00	98.00	1.0000000E+35	1.0000000E+35
75.00	8.479189E-01	7.045614E+00	99.00	1.0000000E+35	1.0000000E+35

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 6 (S-TI%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	0.01	0.01
-2.084E+00	-1.917E+00	1	1	1.45	1.45	0.02	38.52
-1.917E+00	-1.751E+00	1	2	1.45	2.90	0.09	9.37
-1.751E+00	-1.584E+00	1	3	1.45	4.35	0.27	1.93
-1.584E+00	-1.417E+00	1	4	1.45	5.80	0.73	0.10
-1.417E+00	-1.251E+00	0	4	0.00	5.80	1.66	1.66
-1.251E+00	-1.084E+00	3	7	4.35	10.14	3.25	0.02
-1.084E+00	-9.173E-01	1	8	1.45	11.59	5.49	3.68
-9.173E-01	-7.507E-01	5	13	7.25	18.84	7.98	1.11
-7.507E-01	-5.840E-01	7	20	10.14	28.99	9.96	0.88
-5.840E-01	-4.173E-01	13	33	18.84	47.83	10.69	0.50
-4.173E-01	-2.507E-01	21	54	30.43	78.26	9.87	12.55
-2.507E-01	-8.400E-02	8	62	11.59	89.86	7.84	0.00
-8.400E-02	8.267E-02	7	69	10.14	100.00	11.14	1.54
	G	0	69	0.00	100.00	0.01	0.01
	H	0	69				
	B	0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 6 (S-TI%)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-03 X
1.466E-02 X
2.151E-02 X
3.157E-02 X
4.634E-02
6.802E-02 XXXX
9.985E-02 X
1.466E-01 XXXXXXX
2.151E-01 XXXXXXXXXX
3.157E-01 XXXXXXXXXXXXXXXXXX
4.635E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.803E-01 XXXXXXXXXXX
9.985E-01 XXXXXXXXXX
```

PERCENT TABLE FOR VARIABLE 6 (S-TI%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-6.494733E-01	2.241438E-01
50.00	-4.054252E-01	3.931649E-01
75.00	-2.685202E-01	5.388648E-01
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.00000E-02
MAXIMUM ANTILOG      =  1.00000E+00
GEOMETRIC MEAN       =  3.12232E-01
GEOMETRIC DEVIATION  =  2.66934E+00
VARIANCE OF LOGS     =  1.81820E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 7 (S-SC)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		10	10	14.49	14.49		
L		0	10	0.00	14.49		
T		0	10	0.00	14.49	1.60	1.60
5.830E-01 -	7.497E-01	4	14	5.80	20.29	4.56	0.07
7.497E-01 -	9.163E-01	2	16	2.90	23.19	10.58	6.96
9.163E-01 -	1.083E+00	12	28	17.39	40.58	16.37	1.17
1.083E+00 -	1.250E+00	23	51	33.33	73.91	16.89	2.21
1.250E+00 -	1.416E+00	11	62	15.94	89.86	11.63	0.03
1.416E+00 -	1.583E+00	5	67	7.25	97.10	5.34	0.02
1.583E+00 -	1.750E+00	2	69	2.90	100.00	2.02	0.00
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 7 (S-SC)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 XXXXXX
6.803E+00 XXX
9.992E+00 XXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXX
3.160E+01 XXXXXXX
4.638E+01 XXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+00
MAXIMUM ANTILOG	=	5.00000E+01
GEOMETRIC MEAN	=	1.45626E+01
GEOMETRIC DEVIATION	=	1.63795E+00
VARIANCE OF LOGS	=	4.59250E-02

PERCENT TABLE FOR VARIABLE 7 (S-SC) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	9.336951E-01	8.584107E+00			
50.00	1.130103E+00	1.349281E+01	98.00	1.000000E+35	1.000000E+35
75.00	1.261032E+00	1.824029E+01	99.00	1.000000E+35	1.000000E+35
90.00	1.419668E+00	2.628360E+01			
95.00	1.534669E+00	3.425063E+01			

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 8 (S-V)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		4	4	5.80	5.80		
	L		4	8	5.80	11.59		
	I		0	8	0.00	11.59	1.43	1.43
9.160E-01	-	1.083E+00	3	11	4.35	15.94	1.81	0.78
1.083E+00	-	1.249E+00	1	12	1.45	17.39	3.32	1.62
1.249E+00	-	1.416E+00	2	14	2.90	20.29	5.32	2.07
1.416E+00	-	1.583E+00	2	16	2.90	23.19	7.48	4.02
1.583E+00	-	1.749E+00	6	22	8.70	31.88	9.23	1.13
1.749E+00	-	1.916E+00	5	27	7.25	39.13	9.98	2.48
1.916E+00	-	2.083E+00	18	45	26.09	65.22	9.46	7.72
2.083E+00	-	2.249E+00	11	56	15.94	81.16	7.86	1.25
2.249E+00	-	2.416E+00	10	66	14.49	95.65	5.73	3.19
2.416E+00	-	2.583E+00	3	69	4.35	100.00	7.39	2.61
	G		0	69	0.00	100.00	0.00	0.00
	H		0	69				
	B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 8 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXX
1.466E+01 X
2.151E+01 XXX
3.157E+01 XXX
4.634E+01 XXXXXXXXX
6.802E+01 XXXXXXX
9.985E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXXXXX
2.151E+02 XXXXXXXXXXXXX
3.157E+02 XXXX
```

PERCENT TABLE FOR VARIABLE 8 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.617390E+00	4.143719E+01
50.00	1.985447E+00	9.670448E+01
75.00	2.184942E+00	1.530383E+02
90.00	2.351003E+00	2.243897E+02
95.00	2.408503E+00	2.561551E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.00000E+01
MAXIMUM ANTILOG      =  3.00000E+02
GEOMETRIC MEAN       =  9.10991E+01
GEOMETRIC DEVIATION  =  2.28117E+00
VARIANCE OF LOGS     =  1.28278E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 9 (S-CR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		22	22	31.88	31.88		
L		2	24	2.90	34.78		
T		0	24	0.00	34.78	9.02	9.02
9.160E-01 -	1.083E+00	4	28	5.80	40.58	7.20	1.42
1.083E+00 -	1.249E+00	4	32	5.80	46.38	9.57	3.24
1.249E+00 -	1.416E+00	8	40	11.59	57.97	10.87	0.76
1.416E+00 -	1.583E+00	8	48	11.59	69.57	10.54	0.61
1.583E+00 -	1.749E+00	7	55	10.14	79.71	8.72	0.34
1.749E+00 -	1.916E+00	6	61	8.70	88.41	6.16	0.00
1.916E+00 -	2.083E+00	2	63	2.90	91.30	3.71	0.79
2.083E+00 -	2.249E+00	2	65	2.90	94.20	1.91	0.00
2.249E+00 -	2.416E+00	4	69	5.80	100.00	1.29	5.69
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 9 (S-CR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXX
1.466E+01 XXXXXX
2.151E+01 XXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXX
4.634E+01 XXXXXXXXXX
6.802E+01 XXXXXXXXX
9.985E+01 XXX
1.466E+02 XXX
2.151E+02 XXXXXX
```

PERCENT TABLE FOR VARIABLE 9 (S-CR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.301417E+00	2.001785E+01
75.00	1.671954E+00	4.698442E+01
90.00	2.007669E+00	1.017815E+02
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.00000E+01
MAXIMUM ANTILOG      =  2.00000E+02
GEOMETRIC MEAN       =  3.87045E+01
GEOMETRIC DEVIATION  =  2.40096E+00
VARIANCE OF LOGS     =  1.44692E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 10 (S-MN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.20	0.20
1.916E+00 -	2.083E+00	3	3	4.35	4.35	0.63	9.02
2.083E+00 -	2.249E+00	1	4	1.45	5.80	1.88	0.41
2.249E+00 -	2.416E+00	5	9	7.25	13.04	4.42	0.08
2.416E+00 -	2.583E+00	4	13	5.80	18.84	8.17	2.13
2.583E+00 -	2.749E+00	12	25	17.39	36.23	11.87	0.00
2.749E+00 -	2.916E+00	10	35	14.49	50.72	13.53	0.92
2.916E+00 -	3.083E+00	19	54	27.54	78.26	12.12	3.91
3.083E+00 -	3.249E+00	8	62	11.59	89.86	8.52	0.03
3.249E+00 -	3.416E+00	7	69	10.14	100.00	7.66	0.06
G		0	69	0.00	100.00	0.20	0.20
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 10 (S-MN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 XXXX
1.466E+02 X
2.151E+02 XXXXXXX
3.157E+02 XXXXXX
4.634E+02 XXXXXXXXXXXXXXXX
6.802E+02 XXXXXXXXXXXXX
9.985E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+03 XXXXXXXXXXX
2.151E+03 XXXXXXXXXX
```

PERCENT TABLE FOR VARIABLE 10 (S-MN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.641696E+00	4.382237E+02
50.00	2.907669E+00	8.08478RE+02
75.00	3.062932E+00	1.155932E+03
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.00000E+02
MAXIMUM ANTILOG      =  2.00000E+03
GEOMETRIC MEAN       =  6.91468E+02
GEOMETRIC DEVIATION  =  2.16515E+00
VARIANCE OF LOGS     =  1.12552E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 11 (S-CO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		15	15	21.74	21.74		
L		0	15	0.00	21.74		
T		0	15	0.00	21.74	3.51	3.51
5.830E-01 -	7.497E-01	3	18	4.35	26.09	5.12	0.88
7.497E-01 -	9.163E-01	4	22	5.80	31.88	8.86	2.67
9.163E-01 -	1.083E+00	6	28	8.70	40.58	12.16	3.12
1.083E+00 -	1.250E+00	9	37	13.04	53.62	13.23	1.35
1.250E+00 -	1.416E+00	16	53	23.19	76.81	11.42	1.84
1.416E+00 -	1.583E+00	8	61	11.59	88.41	7.81	0.00
1.583E+00 -	1.750E+00	7	68	10.14	98.55	4.24	1.80
1.750E+00 -	1.916E+00	1	69	1.45	100.00	2.66	1.03
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
R		0	69				

TOTALS LESS H AND R 69

HISTOGRAM FOR VARIABLE 11 (S-CO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 XXXX
6.803E+00 XXXXXX
9.992E+00 XXXXXXXXX
1.467E+01 XXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXXXXX
4.638E+01 XXXXXXXXXX
6.803E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 7.00000E+01
GEOMETRIC MEAN = 1.85049E+01
GEOMETRIC DEVIATION = 1.91122E+00
VARIANCE OF LOGS = 7.91360E-02

PERCENT TABLE FOR VARIABLE 11 (S-CO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
			90.00	1.609193E+00	4.066236E+01
25.00	1.000000E+35	1.000000E+35	95.00	1.691336E+00	4.912373E+01
50.00	1.203372E+00	1.597245E+01	98.00	1.740621E+00	5.503277E+01
75.00	1.403314E+00	2.531128E+01	99.00	1.000000E+35	1.000000E+35

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 12 (S-NI)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		16	16	23.19	23.19		
L		2	18	2.90	26.09		
T		0	18	0.00	26.09	6.19	6.19
5.830E-01 -	7.497E-01	4	22	5.80	31.88	5.77	0.54
7.497E-01 -	9.163E-01	5	27	7.25	39.13	8.38	1.36
9.163E-01 -	1.083E+00	6	33	8.70	47.83	10.37	1.84
1.083E+00 -	1.250E+00	10	43	14.49	62.32	10.96	0.08
1.250E+00 -	1.416E+00	7	50	10.14	72.46	9.87	0.83
1.416E+00 -	1.583E+00	6	56	8.70	81.16	7.58	0.33
1.583E+00 -	1.750E+00	10	66	14.49	95.65	4.97	5.09
1.750E+00 -	1.916E+00	0	66	0.00	95.65	2.78	2.78
1.916E+00 -	2.083E+00	1	67	1.45	97.10	1.32	0.08
2.083E+00 -	2.250E+00	2	69	2.90	100.00	0.80	1.81
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 12 (S-NI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 XXXXXX
6.808E+00 XXXXXXX
9.992E+00 XXXXXXXXX
1.467E+01 XXXXXXXXXXXXX
2.153E+01 XXXXXXXXX
3.160E+01 XXXXXXXXX
4.638E+01 XXXXXXXXXXXXX
6.808E+01
9.992E+01 X
1.467E+02 XXX
```

PERCENT TABLE FOR VARIABLE 12 (S-NI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.108001E+00	1.282334E+01
75.00	1.464946E+00	2.917066E+01
90.00	1.684669E+00	4.838033E+01
95.00	1.742169E+00	5.522923E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 5.00000E+00
MAXIMUM ANTILOG      = 1.50000E+02
GEOMETRIC MEAN       = 1.97680E+01
GEOMETRIC DEVIATION  = 2.36353E+00
VARIANCE OF LOGS     = 1.39548E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 13 (S-CU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		3	3	4.35	4.35		
T		0	3	0.00	4.35	2.73	2.73
5.830E-01 -	7.497E-01	3	6	4.35	8.70	3.00	0.00
7.497E-01 -	9.163E-01	7	13	10.14	18.84	5.00	0.80
9.163E-01 -	1.083E+00	6	19	8.70	27.54	7.25	0.22
1.083E+00 -	1.250E+00	12	31	17.39	44.93	9.18	0.87
1.250E+00 -	1.416E+00	7	38	10.14	55.07	10.14	0.97
1.416E+00 -	1.583E+00	11	49	15.94	71.01	9.76	0.16
1.583E+00 -	1.750E+00	5	54	7.25	78.26	8.21	1.25
1.750E+00 -	1.916E+00	4	58	5.80	84.06	6.02	0.68
1.916E+00 -	2.083E+00	7	65	10.14	94.20	3.85	2.58
2.083E+00 -	2.250E+00	2	67	2.90	97.10	2.15	0.01
2.250E+00 -	2.416E+00	1	68	1.45	98.55	1.05	0.00
2.416E+00 -	2.583E+00	1	69	1.45	100.00	0.68	0.15
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 13 (S-CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 XXXX
6.808E+00 XXXXXXXXXX
9.992E+00 XXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXX
3.160E+01 XXXXXXXXXXXXXXXX
4.638E+01 XXXXXXX
6.808E+01 XXXXXX
9.992E+01 XXXXXXXXXX
1.467E+02 XXX
2.153E+02 X
3.160E+02 X
```

PERCENT TABLE FOR VARIABLE 13 (S-CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.034390E+00	1.082405E+01
50.00	1.333001E+00	2.152789E+01
75.00	1.674669E+00	4.727906E+01
90.00	2.013955E+00	1.032655E+02
95.00	2.128836E+00	1.345353E+02
98.00	2.353004E+00	2.254257E+02
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  5.00000E+00
MAXIMUM ANTILOG      =  3.00000E+02
GEOMETRIC MEAN       =  2.51951E+01
GEOMETRIC DEVIATION  =  2.71845E+00
VARIANCE OF LOGS     =  1.88635E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 16 (S-PB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		15	15	21.74	21.74		
L		8	23	11.59	33.33		
T		0	23	0.00	33.33	10.81	10.81
9.160E-01 -	1.083E+00	18	41	26.09	59.42	14.98	0.61
1.083E+00 -	1.249E+00	7	48	10.14	69.57	18.53	7.17
1.249E+00 -	1.416E+00	11	59	15.94	85.51	14.56	0.87
1.416E+00 -	1.583E+00	4	63	5.80	91.30	7.28	1.48
1.583E+00 -	1.749E+00	4	67	5.80	97.10	2.31	1.24
1.749E+00 -	1.916E+00	1	68	1.45	98.55	0.47	0.61
1.916E+00 -	2.083E+00	1	69	1.45	100.00	0.06	13.57
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 16 (S-PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXX
3.157E+01 XXXXXX
4.634E+01 XXXXXX
6.802E+01 X
9.985E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 1.00000E+02
GEOMETRIC MEAN = 1.74246E+01
GEOMETRIC DEVIATION = 1.83320E+00
VARIANCE OF LOGS = 6.92792E-02

PERCENT TABLE FOR VARIABLE 16 (S-PB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.000000E+35	1.000000E+35	98.00	1.852669E+00	7.123092E+01
50.00	1.000000E+35	1.000000E+35	99.00	1.000000E+35	1.000000E+35
75.00	1.306152E+00	2.023729E+01			
90.00	1.545168E+00	3.508875E+01			
95.00	1.688918E+00	4.885603E+01			

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 18 (S-SN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		65	65	94.20	94.20		
L		0	65	0.00	94.20		
T		0	65	0.00	94.20	9.08	9.08
9.160E-01 -	1.083E+00	1	66	1.45	95.65	44.51	42.53
1.083E+00 -	1.249E+00	2	68	2.90	98.55	15.13	11.40
1.249E+00 -	1.416E+00	0	68	0.00	98.55	0.00	0.00
1.416E+00 -	1.583E+00	0	68	0.00	98.55	0.00	0.00
1.583E+00 -	1.749E+00	1	69	1.45	100.00	0.29	1.79
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 18 (S-SN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 X
1.466E+01 XXX
2.151E+01
3.157E+01
4.634E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.00000E+01
MAXIMUM ANTILOG      =  5.00000E+01
GEOMETRIC MEAN       =  1.83142E+01
GEOMETRIC DEVIATION  =  2.00634E+00
VARIANCE OF LOGS     =  9.14483E-02
```

PERCENT TABLE FOR VARIABLE 18 (S-SN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.217667E+00	1.650697E+01
99.00	1.000000E+35	1.000000E+35

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 21 (S-B)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		6	6	8.70	8.70		
L		22	28	31.88	40.58		
T		0	28	0.00	40.58	13.22	13.22
9.160E-01 -	1.083E+00	11	39	15.94	56.52	11.27	0.01
1.083E+00 -	1.249E+00	8	47	11.59	68.12	13.52	2.25
1.249E+00 -	1.416E+00	7	54	10.14	78.26	12.70	2.56
1.416E+00 -	1.583E+00	8	62	11.59	89.86	9.34	0.19
1.583E+00 -	1.749E+00	2	64	2.90	92.75	5.38	2.12
1.749E+00 -	1.916E+00	2	66	2.90	95.65	2.43	0.07
1.916E+00 -	2.083E+00	2	68	2.90	98.55	0.86	1.53
2.083E+00 -	2.249E+00	0	68	0.00	98.55	0.24	0.24
2.249E+00 -	2.416E+00	0	68	0.00	98.55	0.05	0.05
2.416E+00 -	2.583E+00	0	68	0.00	98.55	0.01	0.01
2.583E+00 -	2.749E+00	0	68	0.00	98.55	0.00	0.00
2.749E+00 -	2.916E+00	1	69	1.45	100.00	0.00	781.09
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 21 (S-B)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXX
2.151E+01 XXXXXXXXXX
3.157E+01 XXXXXXXXXXXX
4.634E+01 XXX
6.802E+01 XXX
9.985E+01 XXX
1.466E+02
2.151E+02
3.157E+02
4.635E+02
6.803E+02 X
```

PERCENT TABLE FOR VARIABLE 21 (S-B) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.362429E+00	2.303719E+01
90.00	1.591001E+00	3.899432E+01
95.00	1.878502E+00	7.559654E+01
98.00	2.051002E+00	1.124611E+02
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 1.00000E+01
MAXIMUM ANTILOG      = 7.00000E+02
GEOMETRIC MEAN       = 2.22820E+01
GEOMETRIC DEVIATION  = 2.35762E+00
VARIANCE OF LOGS     = 1.38737E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 22 (S-BE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		7	7	10.14	10.14		
L		2	9	2.90	13.04		
T		0	9	0.00	13.04	4.88	4.88
-8.400E-02 -	8.267E-02	15	24	21.74	34.78	11.72	0.92
8.267E-02 -	2.493E-01	11	35	15.94	50.72	19.60	3.77
2.493E-01 -	4.160E-01	17	52	24.64	75.36	18.73	0.16
4.160E-01 -	5.827E-01	12	64	17.39	92.75	10.24	0.30
5.827E-01 -	7.493E-01	5	69	7.25	100.00	3.82	0.36
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 22 (S-BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
 9.985E-01 XXXXXXXXXXXXXXXXXXXXX
 1.466E+00 XXXXXXXXXXXXXXX
 2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+00 XXXXXXXXXXXXXXXXX
 4.634E+00 XXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+00
MAXIMUM ANTILOG	=	5.00000E+00
GEOMETRIC MEAN	=	1.86744E+00
GEOMETRIC DEVIATION	=	1.62779E+00
VARIANCE OF LOGS	=	4.47737E-02

PERCENT TABLE FOR VARIABLE 22 (S-BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	2.417582E-01	1.744851E+00
75.00	4.135500E-01	2.591493E+00
90.00	5.562791E-01	3.599806E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 23 (S-SR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		4	4	5.80	5.80		
L		0	4	0.00	5.80		
T		0	4	0.00	5.80	2.24	2.24
1.916E+00 -	2.083E+00	7	11	10.14	15.94	5.91	0.20
2.083E+00 -	2.249E+00	7	18	10.14	26.09	12.59	2.48
2.249E+00 -	2.416E+00	19	37	27.54	53.62	17.58	0.11
2.416E+00 -	2.583E+00	17	54	24.64	78.26	16.09	0.05
2.583E+00 -	2.749E+00	11	65	15.94	94.20	9.65	0.19
2.749E+00 -	2.916E+00	3	68	4.35	98.55	3.79	0.16
2.916E+00 -	3.083E+00	1	69	1.45	100.00	1.16	0.02
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 23 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 XXXXXXXXXX
1.466E+02 XXXXXXXXXX
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+02 XXXXXXXXXXXXXXX
6.802E+02 XXXX
9.985E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 2.53758E+02
GEOMETRIC DEVIATION = 1.73885E+00
VARIANCE OF LOGS = 5.77256E-02

PERCENT TABLE FOR VARIABLE 23 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	2.231477E+00	1.704028E+02	98.00	2.894891E+00	7.850383E+02
50.00	2.394071E+00	2.477828E+02	99.00	1.000000E+35	1.000000E+35
75.00	2.560609E+00	3.635877E+02			
90.00	2.705396E+00	5.074526E+02			
95.00	2.779891E+00	6.024078E+02			

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 24 (S-BA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.01	0.01
1.250E+00 -	1.417E+00	1	1	1.45	1.45	0.04	20.79
1.417E+00 -	1.583E+00	0	1	0.00	1.45	0.17	0.17
1.583E+00 -	1.750E+00	2	3	2.90	4.35	0.56	3.73
1.750E+00 -	1.917E+00	1	4	1.45	5.80	1.49	0.16
1.917E+00 -	2.083E+00	2	6	2.90	8.70	3.31	0.52
2.083E+00 -	2.250E+00	3	9	4.35	13.04	6.05	1.54
2.250E+00 -	2.417E+00	8	17	11.59	24.64	9.16	0.15
2.417E+00 -	2.583E+00	10	27	14.49	39.13	11.48	0.19
2.583E+00 -	2.750E+00	14	41	20.29	59.42	11.88	0.38
2.750E+00 -	2.917E+00	15	56	21.74	81.16	10.18	2.28
2.917E+00 -	3.083E+00	10	66	14.49	95.65	7.21	1.08
3.083E+00 -	3.250E+00	2	68	2.90	98.55	4.22	1.17
3.250E+00 -	3.417E+00	1	69	1.45	100.00	3.23	1.54
G		0	69	0.00	100.00	0.01	0.01
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 24 (S-BA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+01 X
3.162E+01
4.642E+01 XXX
6.813E+01 X
1.000E+02 XXX
1.468E+02 XXXX
2.154E+02 XXXXXXXXXXXX
3.162E+02 XXXXXXXXXXXXXX
4.642E+02 XXXXXXXXXXXXXXXXXXXX
6.813E+02 XXXXXXXXXXXXXXXXXXXXXX
1.000E+03 XXXXXXXXXXXXXX
1.468E+03 XXX
2.154E+03 X
```

PERCENT TABLE FOR VARIABLE 24 (S-BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.420836E+00	2.635334E+02
50.00	2.672622E+00	4.705675E+02
75.00	2.869448E+00	7.403681E+02
90.00	3.018337E+00	1.043126E+03
95.00	3.075837E+00	1.190795E+03
98.00	3.218337E+00	1.653245E+03
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 2.00000E+01
MAXIMUM ANTILOG      = 2.00000E+03
GEOMETRIC MEAN       = 4.11164E+02
GEOMETRIC DEVIATION  = 2.39527E+00
VARIANCE OF LOGS     = 1.43910E-01
```

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 25 (S-LA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	23	23	33.33	33.33		
	L	0	23	0.00	33.33		
	T	0	23	0.00	33.33	9.78	9.78
1.250E+00 -	1.417E+00	21	44	30.43	63.77	31.81	3.67
1.417E+00 -	1.583E+00	19	63	27.54	91.30	23.58	0.89
1.583E+00 -	1.750E+00	6	69	8.70	100.00	3.83	1.23
	G	0	69	0.00	100.00	0.00	0.00
	H	0	69				
	B	0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 25 (S-LA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  2.00000E+01
MAXIMUM ANTILOG      =  5.00000E+01
GEOMETRIC MEAN       =  2.66482E+01
GEOMETRIC DEVIATION  =  1.36576E+00
VARIANCE OF LOGS     =  1.83265E-02
```

PERCENT TABLE FOR VARIABLE 25 (S-LA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.484650E+00	3.052457E+01
90.00	1.575439E+00	3.762177E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 26 (S-Y)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.28	0.28
9.160E-01	-	1.083E+00	1	1	1.45	1.45	2.12	0.60
1.083E+00	-	1.249E+00	7	8	10.14	11.59	8.88	0.40
1.249E+00	-	1.416E+00	21	29	30.43	42.03	19.21	0.17
1.416E+00	-	1.583E+00	25	54	36.23	78.26	21.55	0.55
1.583E+00	-	1.749E+00	12	66	17.39	95.65	12.54	0.02
1.749E+00	-	1.916E+00	1	67	1.45	97.10	3.78	2.04
1.916E+00	-	2.083E+00	2	69	2.90	100.00	0.64	2.92
	G		0	69	0.00	100.00	0.28	0.28
	H		0	69				
	B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 26 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
 9.985E+00 X
 1.466E+01 XXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 4.634E+01 XXXXXXXXXXXXXXXXX
 6.802E+01 X
 9.985E+01 XXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 1.00000E+02
GEOMETRIC MEAN = 2.78705E+01
GEOMETRIC DEVIATION = 1.58428E+00
VARIANCE OF LOGS = 3.99325E-02

PERCENT TABLE FOR VARIABLE 26 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.322747E+00	2.102553E+01	98.00	1.000000E+35	1.000000E+35
50.00	1.452668E+00	2.835749E+01	99.00	1.000000E+35	1.000000E+35
75.00	1.567668E+00	3.695456E+01			
90.00	1.695168E+00	4.956421E+01			
95.00	1.743085E+00	5.534584E+01			

Table 29. Frequency tables and histograms of spectrographic analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 27 (S-ZR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		1	1	1.45	1.45		
L		0	1	0.00	1.45		
T		0	1	0.00	1.45	0.18	0.18
1.416E+00 -	1.583E+00	1	2	1.45	2.90	0.87	0.02
1.583E+00 -	1.749E+00	4	6	5.80	8.70	3.23	0.18
1.749E+00 -	1.916E+00	1	7	1.45	10.14	8.22	6.34
1.916E+00 -	2.083E+00	15	22	21.74	31.88	14.28	0.04
2.083E+00 -	2.249E+00	19	41	27.54	59.42	16.96	0.25
2.249E+00 -	2.416E+00	19	60	27.54	86.96	13.78	1.98
2.416E+00 -	2.583E+00	7	67	10.14	97.10	7.66	0.06
2.583E+00 -	2.749E+00	2	69	2.90	100.00	3.82	0.87
G		0	69	0.00	100.00	0.00	0.00
H		0	69				
B		0	69				

TOTALS LESS H AND B 69

HISTOGRAM FOR VARIABLE 27 (S-ZR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+01 X
4.634E+01 XXXXXX
6.802E+01 X
9.985E+01 XXXXXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXX
4.634E+02 XXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	3.00000E+01
MAXIMUM ANTILOG	=	5.00000E+02
GEOMETRIC MEAN	=	1.49731E+02
GEOMETRIC DEVIATION	=	1.68643E+00
VARIANCE OF LOGS	=	5.15147E-02

PERCENT TABLE FOR VARIABLE 27 (S-ZR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
			90.00	2.466002E+00	2.924167E+02
25.00	2.029890E+00	1.071248E+02	95.00	2.548145E+00	3.533012E+02
50.00	2.192317E+00	1.557103E+02	98.00	1.000000E+35	1.000000E+35
75.00	2.343633E+00	2.206142E+02	99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

[The following qualifiers are used in reporting spectrographic data: B, no determination made; N, concentration less than the detection limit; L, detected, but present at a concentration less than the value reported; T, not used; G, element present at a concentration greater than the upper calibration limit; and H, interfering spectra render analytical lines unusable.]

FREQUENCY TABLE FOR VARIABLE 3 (MG)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.01	0.01
1.416E+00	-	1.583E+00	1	1	1.47	1.47	0.02	46.32
1.583E+00	-	1.749E+00	0	1	0.00	1.47	0.06	0.06
1.749E+00	-	1.916E+00	0	1	0.00	1.47	0.15	0.15
1.916E+00	-	2.083E+00	0	1	0.00	1.47	0.33	0.33
2.083E+00	-	2.249E+00	0	1	0.00	1.47	0.70	0.70
2.249E+00	-	2.416E+00	1	2	1.47	2.94	1.32	0.08
2.416E+00	-	2.583E+00	3	5	4.41	7.35	2.29	0.22
2.583E+00	-	2.749E+00	4	9	5.88	13.24	3.58	0.05
2.749E+00	-	2.916E+00	6	15	8.82	22.06	5.11	0.15
2.916E+00	-	3.083E+00	4	19	5.88	27.94	6.62	1.04
3.083E+00	-	3.249E+00	6	25	8.82	36.76	7.80	0.42
3.249E+00	-	3.416E+00	9	34	13.24	50.00	8.36	0.05
3.416E+00	-	3.583E+00	7	41	10.29	60.29	8.14	0.16
3.583E+00	-	3.749E+00	11	52	16.18	76.47	7.20	2.00
3.749E+00	-	3.916E+00	6	58	8.82	85.29	5.79	0.01
3.916E+00	-	4.083E+00	5	63	7.35	92.65	4.24	0.14
4.083E+00	-	4.249E+00	4	67	5.88	98.53	2.82	0.50
4.249E+00	-	4.416E+00	1	68	1.47	100.00	3.45	1.74
	G		0	68	0.00	100.00	0.01	0.01
	H		0	68				
	B		0	68				

TOTALS LESS H AND B 68

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.30000E+01
MAXIMUM ANTILOG = 1.90000E+04
GEOMETRIC MEAN = 2.34003E+03
GEOMETRIC DEVIATION = 3.44760E+00
VARIANCE OF LOGS = 2.88924E-01

HISTOGRAM FOR VARIABLE 3 (MG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+01 X
4.634E+01
6.802E+01
9.985E+01
1.466E+02
2.151E+02 X
3.157E+02 XXXX
4.634E+02 XXXXXX
6.803E+02 XXXXXXXXX
9.985E+02 XXXXXX
1.466E+03 XXXXXXXXX
2.151E+03 XXXXXXXXXXXXX
3.157E+03 XXXXXXXXXX
4.635E+03 XXXXXXXXXXXXXXXX
6.803E+03 XXXXXXXXX
9.985E+03 XXXXXXX
1.466E+04 XXXXXX
2.151E+04 X
```

PERCENT TABLE FOR VARIABLE 3 (MG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.999337E+00	9.984734E+02
50.00	3.416004E+00	2.606178E+03
75.00	3.734186E+00	5.422336E+03
90.00	4.022672E+00	1.053591E+04
95.00	4.149339E+00	1.410389E+04
97.00	4.206006E+00	1.606962E+04
98.00	4.234339E+00	1.715295E+04
99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 4 (CA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	0.02	0.02
1.916E+00 -	2.083E+00	2	2	2.94	2.94	0.05	74.28
2.083E+00 -	2.249E+00	0	2	0.00	2.94	0.14	0.14
2.249E+00 -	2.416E+00	0	2	0.00	2.94	0.34	0.34
2.416E+00 -	2.583E+00	1	3	1.47	4.41	0.74	0.09
2.583E+00 -	2.749E+00	0	3	0.00	4.41	1.46	1.46
2.749E+00 -	2.916E+00	3	6	4.41	8.82	2.57	0.07
2.916E+00 -	3.083E+00	6	12	8.82	17.65	4.08	0.90
3.083E+00 -	3.249E+00	1	13	1.47	19.12	5.82	3.99
3.249E+00 -	3.416E+00	4	17	5.88	25.00	7.46	1.60
3.416E+00 -	3.583E+00	11	28	16.18	41.18	8.58	0.68
3.583E+00 -	3.749E+00	8	36	11.76	52.94	8.87	0.08
3.749E+00 -	3.916E+00	9	45	13.24	66.18	8.23	0.07
3.916E+00 -	4.083E+00	14	59	20.59	86.76	6.86	7.42
4.083E+00 -	4.249E+00	2	61	2.94	89.71	5.14	1.92
4.249E+00 -	4.416E+00	7	68	10.29	100.00	7.63	0.05
	G	0	68	0.00	100.00	0.02	0.02
	H	0	68				
	B	0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 4 (CA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 XXX
1.466E+02
2.151E+02
3.157E+02 X
4.634E+02
6.802E+02 XXXX
9.985E+02 XXXXXXXXX
1.466E+03 X
2.151E+03 XXXXXX
3.157E+03 XXXXXXXXXXXXXXXX
4.635E+03 XXXXXXXXXXX
6.803E+03 XXXXXXXXXXXX
9.985E+03 XXXXXXXXXXXXXXXXXXXX
1.466E+04 XXX
2.151E+04 XXXXXXXXXX
```

PERCENT TABLE FOR VARIABLE 4 (CA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.416003E+00	2.606171E+03
50.00	3.707670E+00	5.101175E+03
75.00	3.987433E+00	9.714774E+03
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
97.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.10000E+02
MAXIMUM ANTILOG = 2.50000E+04
GEOMETRIC MEAN = 4.30393E+03
GEOMETRIC DEVIATION = 3.21112E+00
VARIANCE OF LOGS = 2.56701E-01

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 5 (FE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
2.583E+00 -	2.750E+00	1	1	1.47	1.47	0.00	199.45
2.750E+00 -	2.916E+00	1	2	1.47	2.94	0.02	47.95
2.916E+00 -	3.083E+00	0	2	0.00	2.94	0.07	0.07
3.083E+00 -	3.250E+00	1	3	1.47	4.41	0.21	2.89
3.250E+00 -	3.416E+00	1	4	1.47	5.88	0.57	0.33
3.416E+00 -	3.583E+00	0	4	0.00	5.88	1.30	1.30
3.583E+00 -	3.750E+00	0	4	0.00	5.88	2.59	2.59
3.750E+00 -	3.916E+00	1	5	1.47	7.35	4.49	2.71
3.916E+00 -	4.083E+00	2	7	2.94	10.29	6.76	3.36
4.083E+00 -	4.250E+00	5	12	7.35	17.65	8.85	1.67
4.250E+00 -	4.416E+00	21	33	30.88	48.53	10.06	11.90
4.416E+00 -	4.583E+00	13	46	19.12	67.65	9.93	0.95
4.583E+00 -	4.750E+00	11	57	16.18	83.82	8.52	0.72
4.750E+00 -	4.916E+00	7	64	10.29	94.12	6.35	0.07
4.916E+00 -	5.083E+00	3	67	4.41	98.53	4.11	0.30
5.083E+00 -	5.250E+00	1	68	1.47	100.00	4.17	2.41
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

PERCENT TABLE FOR VARIABLE 5 (FE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	4.289353E+00	1.946940E+04
50.00	4.429158E+00	2.686319E+04
75.00	4.658762E+00	4.557868E+04
90.00	4.849671E+00	7.074100E+04
95.00	4.949671E+00	8.905769E+04
97.00	5.025227E+00	1.059808E+05
98.00	5.063005E+00	1.156125E+05
99.00	1.000000E+35	1.000000E+35

HISTOGRAM FOR VARIABLE 5 (FE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+02 X
6.808E+02 X
9.992E+02
1.467E+03 X
2.153E+03 X
3.160E+03
4.638E+03
6.808E+03 X
9.992E+03 XXX
1.467E+04 XXXXXXX
2.153E+04 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+04 XXXXXXXXXXXXXXXXX
4.638E+04 XXXXXXXXXXXXXXX
6.808E+04 XXXXXXXXXX
9.992E+04 XXXX
1.467E+05 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.00000E+02 GEOMETRIC MEAN = 2.51891E+00 VARIANCE OF LOGS = 1.95050E-01
MAXIMUM ANTILOG = 1.50000E+05 GEOMETRIC DEVIATION = 2.76468E+00

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 6 (TI)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.65	0.65
-8.400E-02	-	8.267E-02	3	3	4.41	4.41	0.35	20.35
8.267E-02	-	2.493E-01	1	4	1.47	5.88	0.49	0.52
2.493E-01	-	4.160E-01	3	7	4.41	10.29	0.69	7.76
4.160E-01	-	5.827E-01	2	9	2.94	13.24	0.93	1.22
5.827E-01	-	7.493E-01	1	10	1.47	14.71	1.23	0.04
7.493E-01	-	9.160E-01	1	11	1.47	16.18	1.58	0.21
9.160E-01	-	1.083E+00	1	12	1.47	17.65	1.97	0.48
1.083E+00	-	1.249E+00	1	13	1.47	19.12	2.40	0.82
1.249E+00	-	1.416E+00	0	13	0.00	19.12	2.84	2.84
1.416E+00	-	1.583E+00	2	15	2.94	22.06	3.28	0.50
1.583E+00	-	1.749E+00	2	17	2.94	25.00	3.68	0.76
1.749E+00	-	1.916E+00	1	18	1.47	26.47	4.02	2.26
1.916E+00	-	2.083E+00	2	20	2.94	29.41	4.27	1.21
2.083E+00	-	2.249E+00	1	21	1.47	30.88	4.42	2.64
2.249E+00	-	2.416E+00	2	23	2.94	33.82	4.45	1.35
2.416E+00	-	2.583E+00	6	29	8.82	42.65	4.36	0.61
2.583E+00	-	2.749E+00	10	39	14.71	57.35	4.16	8.18
2.749E+00	-	2.916E+00	10	49	14.71	72.06	3.87	9.71
2.916E+00	-	3.083E+00	6	55	8.82	80.88	3.50	1.79
3.083E+00	-	3.249E+00	6	61	8.82	89.71	3.08	2.77
3.249E+00	-	3.416E+00	4	65	5.88	95.59	2.64	0.70
3.416E+00	-	3.583E+00	2	67	2.94	98.53	2.20	0.02
3.583E+00	-	3.749E+00	1	68	1.47	100.00	6.94	5.08
	G		0	68	0.00	100.00	0.65	0.65
	H		0	68				
	B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 6 (TI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-01 XXXX
1.466E+00 X
2.151E+00 XXXX
3.157E+00 XXX
4.634E+00 X
6.802E+00 X
9.985E+00 X
1.466E+01 X
2.151E+01
3.157E+01 XXX
4.635E+01 XXX
6.803E+01 X
9.985E+01 XXX
1.466E+02 X
2.151E+02 XXX
3.157E+02 XXXXXXXXX
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

```
 4.635E+02 XXXXXXXXXXXXXX
 6.803E+02 XXXXXXXXXXXXXXX
 9.985E+02 XXXXXXXXX
 1.466E+03 XXXXXXXXX
 2.151E+03 XXXXXX
 3.157E+03 XXX
 4.635E+03 X


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG      =  1.10000E+00
MAXIMUM ANTILOG      =  4.60000E+03
GEOMETRIC MEAN       =  1.97012E+02
GEOMETRIC DEVIATION  =  1.03336E+01
VARIANCE OF LOGS     =  1.02871E+00


PERCENT TABLE FOR VARIABLE   6 (TI      ) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
    THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

   SELECTED                DATA VALUE      ANTI LOG OF VALUE
  PERCENTILE

    25.00                 1.749337E+00        5.614835E+01
    50.00                 2.666005E+00        4.634528E+02
    75.00                 2.971562E+00        9.366162E+02
    90.00                 3.257673E+00        1.809978E+03
    95.00                 3.399340E+00        2.508074E+03
    97.00                 3.496007E+00        3.133337E+03
    98.00                 3.552674E+00        3.570047E+03
    99.00                 1.000000E+35        1.000000E+35
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 7 (AL)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.05	0.05
2.916E+00 -	3.083E+00	1	1	1.47	1.47	0.18	3.78
3.083E+00 -	3.249E+00	0	1	0.00	1.47	0.60	0.60
3.249E+00 -	3.416E+00	1	2	1.47	2.94	1.64	0.25
3.416E+00 -	3.583E+00	5	7	7.35	10.29	3.65	0.50
3.583E+00 -	3.749E+00	4	11	5.88	16.18	6.65	1.05
3.749E+00 -	3.916E+00	11	22	16.18	32.35	9.88	0.13
3.916E+00 -	4.083E+00	14	36	20.59	52.94	11.98	0.34
4.083E+00 -	4.249E+00	11	47	16.18	69.12	11.86	0.06
4.249E+00 -	4.416E+00	7	54	10.29	79.41	9.58	0.69
4.416E+00 -	4.583E+00	8	62	11.76	91.18	6.31	0.45
4.583E+00 -	4.749E+00	5	67	7.35	98.53	3.40	0.76
4.749E+00 -	4.916E+00	1	68	1.47	100.00	2.23	0.68
G		0	68	0.00	100.00	0.05	0.05
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 7 (AL)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+02 X
1.466E+03
2.151E+03 X
3.157E+03 XXXXXXX
4.634E+03 XXXXXX
6.802E+03 XXXXXXXXXXXXXXX
9.985E+03 XXXXXXXXXXXXXXXXXXXX
1.466E+04 XXXXXXXXXXXXXXX
2.151E+04 XXXXXXXXXX
3.157E+04 XXXXXXXXXXX
4.635E+04 XXXXXXX
6.803E+04 X
```

PERCENT TABLE FOR VARIABLE 7 (AL) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.840244E+00	6.922202E+03
50.00	4.058859E+00	1.145142E+04
75.00	4.344574E+00	2.210926E+04
90.00	4.566003E+00	3.681318E+04
95.00	4.669337E+00	4.670215E+04
97.00	4.714670E+00	5.184063E+04
98.00	4.737337E+00	5.461815E+04
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.20000E+03
MAXIMUM ANTILOG      =  5.90000E+04
GEOMETRIC MEAN       =  1.18634E+04
GEOMETRIC DEVIATION  =  2.32569E+00
VARIANCE OF LOGS     =  1.34360E-01
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 8 (V)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		3	3	4.41	4.41		
L		4	7	5.88	10.29		
T		0	7	0.00	10.29	1.57	1.57
-2.500E-01	-8.333E-02	2	9	2.94	13.24	1.01	0.96
-8.333E-02	8.333E-02	2	11	2.94	16.18	1.50	0.17
8.333E-02	2.500E-01	1	12	1.47	17.65	2.10	0.58
2.500E-01	4.167E-01	2	14	2.94	20.59	2.82	0.24
4.167E-01	5.833E-01	2	16	2.94	23.53	3.60	0.71
5.833E-01	7.500E-01	0	16	0.00	23.53	4.38	4.38
7.500E-01	9.167E-01	2	18	2.94	26.47	5.07	1.86
9.167E-01	1.083E+00	2	20	2.94	29.41	5.61	2.32
1.083E+00	1.250E+00	1	21	1.47	30.88	5.90	4.07
1.250E+00	1.417E+00	4	25	5.88	36.76	5.92	0.63
1.417E+00	1.583E+00	12	37	17.65	54.41	5.67	7.08
1.583E+00	1.750E+00	15	52	22.06	76.47	5.17	18.73
1.750E+00	1.917E+00	6	58	8.82	85.29	4.49	0.51
1.917E+00	2.083E+00	8	66	11.76	97.06	3.71	4.94
2.083E+00	2.250E+00	1	67	1.47	98.53	2.93	1.27
2.250E+00	2.417E+00	1	68	1.47	100.00	6.56	4.71
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 8 (V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E-01 XXX
1.000E+00 XXX
1.468E+00 X
2.154E+00 XXX
3.162E+00 XXX
4.642E+00
6.813E+00 XXX
1.000E+01 XXX
1.468E+01 X
2.154E+01 XXXXXX
3.162E+01 XXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXX
1.000E+02 XXXXXXXXXXX
1.468E+02 X
2.154E+02 X
```

PERCENT TABLE FOR VARIABLE 8 (V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	7.500020E-01	5.623439E+00
50.00	1.541670E+00	3.480729E+01
75.00	1.738893E+00	5.481417E+01
90.00	1.983338E+00	9.623605E+01
95.00	2.054171E+00	1.132847E+02
97.00	2.082505E+00	1.209218E+02
98.00	2.190005E+00	1.548834E+02
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 6.70000E-01 GEOMETRIC MEAN = 2.58238E+01 VARIANCE OF LOGS = 3.49533E-01
MAXIMUM ANTILOG = 1.80000E+02 GEOMETRIC DEVIATION = 3.80134E+00

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 9 (CR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		62	62	91.18	91.18		
L		3	65	4.41	95.59		
T		0	65	0.00	95.59	64.25	64.25
5.830E-01 -	7.497E-01	1	66	1.47	97.06	2.69	1.07
7.497E-01 -	9.163E-01	0	66	0.00	97.06	0.83	0.83
9.163E-01 -	1.083E+00	0	66	0.00	97.06	0.19	0.19
1.083E+00 -	1.250E+00	0	66	0.00	97.06	0.03	0.03
1.250E+00 -	1.416E+00	2	68	2.94	100.00	0.00	921.36
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 9 (CR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+00 X
6.808E+00
9.992E+00
1.467E+01
2.153E+01 XXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.10000E+00
MAXIMUM ANTILOG = 1.90000E+01
GEOMETRIC MEAN = 1.11927E+01
GEOMETRIC DEVIATION = 2.38727E+00
VARIANCE OF LOGS = 1.42810E-01

PERCENT TABLE FOR VARIABLE 9 (CR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
97.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 10 (MN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.18	0.18
1.083E+00 -	1.250E+00	1	1	1.47	1.47	0.32	1.47
1.250E+00 -	1.416E+00	1	2	1.47	2.94	0.73	0.10
1.416E+00 -	1.583E+00	3	5	4.41	7.35	1.51	1.48
1.583E+00 -	1.750E+00	0	5	0.00	7.35	2.75	2.75
1.750E+00 -	1.916E+00	7	12	10.29	17.65	4.45	1.46
1.916E+00 -	2.083E+00	3	15	4.41	22.06	6.39	1.80
2.083E+00 -	2.250E+00	9	24	13.24	35.29	8.14	0.09
2.250E+00 -	2.416E+00	8	32	11.76	47.06	9.21	0.16
2.416E+00 -	2.583E+00	8	40	11.76	58.82	9.25	0.17
2.583E+00 -	2.750E+00	9	49	13.24	72.06	8.24	0.07
2.750E+00 -	2.916E+00	9	58	13.24	85.29	6.52	0.94
2.916E+00 -	3.083E+00	6	64	8.82	94.12	4.58	0.44
3.083E+00 -	3.250E+00	4	68	5.88	100.00	5.73	0.52
G		0	68	0.00	100.00	0.18	0.18
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 10 (MN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
1.467E+01 X
2.153E+01 X
3.160E+01 XXXX
4.638E+01
6.808E+01 XXXXXXXXXX
9.992E+01 XXXX
1.467E+02 XXXXXXXXXXXXX
2.153E+02 XXXXXXXXXXXX
3.160E+02 XXXXXXXXXXXX
4.638E+02 XXXXXXXXXXXXX
6.808E+02 XXXXXXXXXXXXX
9.992E+02 XXXXXXXXX
1.467E+03 XXXXXX
```

PERCENT TABLE FOR VARIABLE 10 (MN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.120039E+00	1.318375E+02
50.00	2.458003E+00	2.870799E+02
75.00	2.786707E+00	6.119376E+02
90.00	3.005226E+00	1.012106E+03
95.00	1.000000E+35	1.000000E+35
97.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.30000E+01
MAXIMUM ANTILOG      =  1.70000E+03
GEOMETRIC MEAN       =  2.64266E+02
GEOMETRIC DEVIATION  =  3.02055E+00
VARIANCE OF LOGS     =  2.30483E-01
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 11 (CO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		17	17	25.00	25.00		
L		9	26	13.24	38.24		
T		0	26	0.00	38.24	10.73	10.73
4.160E-01 -	5.827E-01	1	27	1.47	39.71	8.97	7.08
5.827E-01 -	7.493E-01	3	30	4.41	44.12	11.45	6.24
7.493E-01 -	9.160E-01	11	41	16.18	60.29	12.00	0.08
9.160E-01 -	1.083E+00	11	52	16.18	76.47	10.31	0.05
1.083E+00 -	1.249E+00	9	61	13.24	89.71	7.26	0.42
1.249E+00 -	1.416E+00	5	66	7.35	97.06	4.20	0.15
1.416E+00 -	1.583E+00	1	67	1.47	98.53	1.99	0.49
1.583E+00 -	1.749E+00	1	68	1.47	100.00	1.10	0.01
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 11 (CO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+00 X
4.634E+00 XXXX
6.802E+00 XXXXXXXXXXXXXXX
9.985E+00 XXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXX
2.151E+01 XXXXXXX
3.157E+01 X
4.634E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.80000E+00
MAXIMUM ANTILOG = 4.20000E+01
GEOMETRIC MEAN = 1.04407E+01
GEOMETRIC DEVIATION = 1.68107E+00
VARIANCE OF LOGS = 5.08892E-02

PERCENT TABLE FOR VARIABLE 11 (CO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.000000E+35	1.000000E+35	95.00	1.369335E+00	2.340643E+01
50.00	8.099402E-01	6.455653E+00	97.00	1.414669E+00	2.598177E+01
75.00	1.067516E+00	1.168198E+01	98.00	1.522669E+00	3.331723E+01
90.00	1.256002E+00	1.803025E+01	99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 12 (NI)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		13	13	19.12	19.12		
L		10	23	14.71	33.82		
T		0	23	0.00	33.82	12.36	12.36
2.500E-01 -	4.167E-01	1	24	1.47	35.29	6.97	5.12
4.167E-01 -	5.833E-01	6	30	8.82	44.12	8.44	0.71
5.833E-01 -	7.500E-01	5	35	7.35	51.47	9.12	1.86
7.500E-01 -	9.167E-01	5	40	7.35	58.82	8.80	1.64
9.167E-01 -	1.083E+00	12	52	17.65	76.47	7.58	2.58
1.083E+00 -	1.250E+00	7	59	10.29	86.76	5.83	0.24
1.250E+00 -	1.417E+00	6	65	8.82	95.59	4.00	1.00
1.417E+00 -	1.583E+00	1	66	1.47	97.06	2.45	0.86
1.583E+00 -	1.750E+00	2	68	2.94	100.00	2.44	0.08
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 12 (NI)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+00 X
3.162E+00 XXXXXXXXX
4.642E+00 XXXXXXX
6.813E+00 XXXXXXX
1.000E+01 XXXXXXXXXXXXXXXXX
1.468E+01 XXXXXXXXXX
2.154E+01 XXXXXXXXX
3.162E+01 X
4.642E+01 XXX
```

PERCENT TABLE FOR VARIABLE 12 (NI) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	7.166676E-01	5.207960E+00
75.00	1.069446E+00	1.173400E+01
90.00	1.311113E+00	2.046978E+01
95.00	1.405558E+00	2.544239E+01
97.00	1.576669E+00	3.772848E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  2.20000E+00
MAXIMUM ANTILOG      =  5.60000E+01
GEOMETRIC MEAN       =  9.46604E+00
GEOMETRIC DEVIATION  =  2.11134E+00
VARIANCE OF LOGS     =  1.05338E-01
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 13 (CU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		5	5	7.35	7.35		
L		1	6	1.47	8.82		
T		0	6	0.00	8.82	3.20	3.20
-4.170E-01	-2.503E-01	2	8	2.94	11.76	1.70	0.05
-2.503E-01	-8.367E-02	1	9	1.47	13.24	2.32	0.75
-8.367E-02	8.300E-02	2	11	2.94	16.18	3.03	0.35
8.300E-02	2.497E-01	2	13	2.94	19.12	3.77	0.83
2.497E-01	4.163E-01	3	16	4.41	23.53	4.49	0.50
4.163E-01	5.830E-01	5	21	7.35	30.88	5.11	0.00
5.830E-01	7.497E-01	5	26	7.35	38.24	5.56	0.06
7.497E-01	9.163E-01	3	29	4.41	42.65	5.77	1.33
9.163E-01	1.083E+00	6	35	8.82	51.47	5.73	0.01
1.083E+00	1.250E+00	6	41	8.82	60.29	5.43	0.06
1.250E+00	1.416E+00	11	52	16.18	76.47	4.92	7.50
1.416E+00	1.583E+00	5	57	7.35	83.82	4.26	0.13
1.583E+00	1.750E+00	5	62	7.35	91.18	3.53	0.61
1.750E+00	1.916E+00	2	64	2.94	94.12	2.79	0.22
1.916E+00	2.083E+00	2	66	2.94	97.06	2.11	0.01
2.083E+00	2.250E+00	2	68	2.94	100.00	4.27	1.21
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 13 (CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E-01 XXX
6.808E-01 X
9.992E-01 XXX
1.467E+00 XXX
2.153E+00 XXXX
3.160E+00 XXXXXXX
4.638E+00 XXXXXXX
6.808E+00 XXXX
9.992E+00 XXXXXXXXX
1.467E+01 XXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXX
3.160E+01 XXXXXXX
4.638E+01 XXXXXXX
6.808E+01 XXX
9.992E+01 XXX
1.467E+02 XXX
```

PERCENT TABLE FOR VARIABLE 13 (CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	4.496684E-01	2.816232E+00
50.00	1.055225E+00	1.135599E+01
75.00	1.401185E+00	2.518752E+01
90.00	1.723004E+00	5.284505E+01
95.00	1.966338E+00	9.254183E+01
97.00	2.079672E+00	1.201356E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.10000E-01
MAXIMUM ANTILOG = 1.40000E+02
GEOMETRIC MEAN = 1.12118E+01
GEOMETRIC DEVIATION = 4.05602E+00
VARIANCE OF LOGS = 3.69786E-01

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 14 (ZN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	0.02	0.02
2.500E-01 -	4.167E-01	1	1	1.47	1.47	0.08	10.27
4.167E-01 -	5.833E-01	1	2	1.47	2.94	0.29	1.71
5.833E-01 -	7.500E-01	1	3	1.47	4.41	0.86	0.02
7.500E-01 -	9.167E-01	4	7	5.88	10.29	2.12	1.67
9.167E-01 -	1.083E+00	3	10	4.41	14.71	4.30	0.39
1.083E+00 -	1.250E+00	2	12	2.94	17.65	7.23	3.79
1.250E+00 -	1.417E+00	5	17	7.35	25.00	10.09	2.57
1.417E+00 -	1.583E+00	12	29	17.65	42.65	11.67	0.01
1.583E+00 -	1.750E+00	16	45	23.53	66.18	11.18	2.07
1.750E+00 -	1.917E+00	15	60	22.06	88.24	8.89	4.21
1.917E+00 -	2.083E+00	6	66	8.82	97.06	5.85	0.00
2.083E+00 -	2.250E+00	2	68	2.94	100.00	5.41	2.15
	G	0	68	0.00	100.00	0.02	0.02
	H	0	68				
	B	0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 14 (ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+00 X
3.162E+00 X
4.642E+00 X
6.813E+00 XXXXXX
1.000E+01 XXXX
1.468E+01 XXX
2.154E+01 XXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXX
1.468E+02 XXX
```

PERCENT TABLE FOR VARIABLE 14 (ZN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.416669E+00	2.610171E+01
50.00	1.635419E+00	4.319360E+01
75.00	1.816670E+00	6.556466E+01
90.00	1.950003E+00	8.912579E+01
95.00	2.044448E+00	1.107766E+02
97.00	2.082226E+00	1.208442E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  2.60000E+00
MAXIMUM ANTILOG      =  1.50000E+02
GEOMETRIC MEAN       =  3.51272E+01
GEOMETRIC DEVIATION  =  2.40851E+00
VARIANCE OF LOGS     =  1.45732E-01
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 15 (MO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	31	31	45.59	45.59		
	L	26	57	38.24	83.82		
	T	0	57	0.00	83.82	49.18	49.18
-8.400E-02 -	8.267E-02	5	62	7.35	91.18	12.11	4.16
8.267E-02 -	2.493E-01	3	65	4.41	95.59	5.11	0.87
2.493E-01 -	4.160E-01	3	68	4.41	100.00	1.60	1.23
	G	0	68	0.00	100.00	0.00	0.00
	H	0	68				
	B	0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 15 (MO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E-01 XXXXXXX
1.466E+00 XXXX
2.151E+00 XXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.00000E+00
MAXIMUM ANTILOG      =  2.30000E+00
GEOMETRIC MEAN       =  1.42575E+00
GEOMETRIC DEVIATION  =  1.36336E+00
VARIANCE OF LOGS     =  1.81199E-02
```

PERCENT TABLE FOR VARIABLE 15 (MO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	2.271117E-01	1.686987E+00
97.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 16 (PB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		23	23	33.82	33.82		
L		16	39	23.53	57.35		
T		0	39	0.00	57.35	30.59	30.59
7.500E-01 -	9.167E-01	8	47	11.76	69.12	11.89	1.27
9.167E-01 -	1.083E+00	8	55	11.76	80.88	10.35	0.53
1.083E+00 -	1.250E+00	5	60	7.35	88.24	7.42	0.79
1.250E+00 -	1.417E+00	5	65	7.35	95.59	4.38	0.09
1.417E+00 -	1.583E+00	0	65	0.00	95.59	2.13	2.13
1.583E+00 -	1.750E+00	2	67	2.94	98.53	0.86	1.53
1.750E+00 -	1.917E+00	1	68	1.47	100.00	0.38	1.01
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 16 (PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E+00 XXXXXXXXXXXX
1.000E+01 XXXXXXXXXXXX
1.468E+01 XXXXXXX
2.154E+01 XXXXXXX
3.162E+01
4.642E+01 XXX
6.813E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.90000E+00
MAXIMUM ANTILOG = 6.00000E+01
GEOMETRIC MEAN = 1.30798E+01
GEOMETRIC DEVIATION = 1.80974E+00
VARIANCE OF LOGS = 6.63656E-02

PERCENT TABLE FOR VARIABLE 16 (PB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.000000E+35	1.000000E+35	98.00	1.690002E+00	4.897810E+01
50.00	1.000000E+35	1.000000E+35	99.00	1.000000E+35	1.000000E+35
75.00	1.000000E+00	1.000001E+01			
90.00	1.290001E+00	1.949849E+01			
95.00	1.403335E+00	2.531248E+01			
97.00	1.576668E+00	3.772840E+01			

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 17 (AS)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		59	59	86.76	86.76		
L		7	66	10.29	97.06		
T		0	66	0.00	97.06	67.92	67.92
1.583E+00 -	1.750E+00	1	67	1.47	98.53	0.07	13.09
1.750E+00 -	1.916E+00	1	68	1.47	100.00	0.02	62.03
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 17 (AS)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+01 X
6.808E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.10000E+01
MAXIMUM ANTILOG = 6.20000E+01
GEOMETRIC MEAN = 5.04183E+01
GEOMETRIC DEVIATION = 1.33968E+00
VARIANCE OF LOGS = 1.61295E-02

PERCENT TABLE FOR VARIABLE 17 (AS) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
97.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 18 (BE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	0.09	0.09
-1.250E+00	-1.083E+00	1	1	1.47	1.47	0.48	0.56
-1.083E+00	-9.167E-01	2	3	2.94	4.41	2.04	0.00
-9.167E-01	-7.500E-01	6	9	8.82	13.24	5.96	0.00
-7.500E-01	-5.833E-01	13	22	19.12	32.35	11.92	0.10
-5.833E-01	-4.167E-01	10	32	14.71	47.06	16.33	2.45
-4.167E-01	-2.500E-01	22	54	32.35	79.41	15.33	2.90
-2.500E-01	-8.333E-02	12	66	17.65	97.06	9.87	0.46
-8.333E-02	8.334E-02	1	67	1.47	98.53	4.35	2.58
8.334E-02	2.500E-01	0	67	0.00	98.53	1.32	1.32
2.500E-01	4.167E-01	1	68	1.47	100.00	0.31	1.49
	G	0	68	0.00	100.00	0.09	0.09
	H	0	68				
	B	0	68				

TOTALS LESS H AND B 68

PERCENT TABLE FOR VARIABLE 18 (BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

HISTOGRAM FOR VARIABLE 18 (BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
6.813E-02 X
1.000E-01 XXX
1.468E-01 XXXXXXXXX
2.154E-01 XXXXXXXXXXXXXXXXXXX
3.162E-01 XXXXXXXXXXXXXXX
4.642E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.813E-01 XXXXXXXXXXXXXXXXX
1.000E+00 X
1.468E+00
2.154E+00 X
```

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-6.474347E-01	2.251984E-01
50.00	-4.015135E-01	3.967222E-01
75.00	-2.727253E-01	5.336723E-01
90.00	-1.499978E-01	7.079494E-01
95.00	-1.027755E-01	7.892680E-01
97.00	-8.388656E-02	8.243534E-01
98.00	2.333591E-02	1.055203E+00
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 6.60000E-02
MAXIMUM ANTILOG = 2.30000E+00
GEOMETRIC MEAN = 3.59418E-01
GEOMETRIC DEVIATION = 1.84866E+00
VARIANCE OF LOGS = 7.12121E-02

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 19 (SR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.27	0.27
2.500E-01 -	4.167E-01	1	1	1.47	1.47	0.46	0.63
4.167E-01 -	5.833E-01	1	2	1.47	2.94	1.04	0.00
5.833E-01 -	7.500E-01	5	7	7.35	10.29	2.06	4.20
7.500E-01 -	9.167E-01	3	10	4.41	14.71	3.60	0.10
9.167E-01 -	1.083E+00	5	15	7.35	22.06	5.56	0.06
1.083E+00 -	1.250E+00	3	18	4.41	26.47	7.56	2.75
1.250E+00 -	1.417E+00	8	26	11.76	38.24	9.08	0.13
1.417E+00 -	1.583E+00	13	39	19.12	57.35	9.61	1.19
1.583E+00 -	1.750E+00	6	45	8.82	66.18	8.97	0.99
1.750E+00 -	1.917E+00	11	56	16.18	82.35	7.39	1.76
1.917E+00 -	2.083E+00	6	62	8.82	91.18	5.37	0.07
2.083E+00 -	2.250E+00	5	67	7.35	98.53	3.44	0.71
2.250E+00 -	2.417E+00	0	67	0.00	98.53	1.94	1.94
2.417E+00 -	2.583E+00	1	68	1.47	100.00	1.64	0.25
G		0	68	0.00	100.00	0.27	0.27
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 19 (SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+00 X
3.162E+00 X
4.642E+00 XXXXXXX
6.813E+00 XXXX
1.000E+01 XXXXXXX
1.468E+01 XXXX
2.154E+01 XXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXX
1.468E+02 XXXXXXX
2.154E+02
3.162E+02 X
```

PERCENT TABLE FOR VARIABLE 19 (SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.194446E+00	1.564755E+01
50.00	1.519233E+00	3.305471E+01
75.00	1.840912E+00	6.932857E+01
90.00	2.061115E+00	1.151104E+02
95.00	2.170004E+00	1.479121E+02
97.00	2.215337E+00	1.641864E+02
98.00	2.238004E+00	1.729832E+02
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 2.40000E+00
MAXIMUM ANTILOG      = 3.30000E+02
GEOMETRIC MEAN       = 3.10682E+01
GEOMETRIC DEVIATION  = 2.93690E+00
VARIANCE OF LOGS     = 2.18920E-01
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 20 (BA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.11	0.11
2.500E-01 -	4.167E-01	1	1	1.47	1.47	0.24	2.43
4.167E-01 -	5.833E-01	1	2	1.47	2.94	0.61	0.25
5.833E-01 -	7.500E-01	0	2	0.00	2.94	1.36	1.36
7.500E-01 -	9.167E-01	1	3	1.47	4.41	2.64	1.02
9.167E-01 -	1.083E+00	4	7	5.88	10.29	4.49	0.05
1.083E+00 -	1.250E+00	6	13	8.82	19.12	6.68	0.07
1.250E+00 -	1.417E+00	12	25	17.65	36.76	8.67	1.28
1.417E+00 -	1.583E+00	11	36	16.18	52.94	9.84	0.14
1.583E+00 -	1.750E+00	10	46	14.71	67.65	9.76	0.01
1.750E+00 -	1.917E+00	12	58	17.65	85.29	8.45	1.49
1.917E+00 -	2.083E+00	4	62	5.88	91.18	6.39	0.90
2.083E+00 -	2.250E+00	3	65	4.41	95.59	4.23	0.36
2.250E+00 -	2.417E+00	0	65	0.00	95.59	2.44	2.44
2.417E+00 -	2.583E+00	1	66	1.47	97.06	1.23	0.04
2.583E+00 -	2.750E+00	0	66	0.00	97.06	0.54	0.54
2.750E+00 -	2.917E+00	1	67	1.47	98.53	0.21	2.99
2.917E+00 -	3.083E+00	0	67	0.00	98.53	0.07	0.07
3.083E+00 -	3.250E+00	1	68	1.47	100.00	0.03	34.39
G		0	68	0.00	100.00	0.11	0.11
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 20 (BA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+00 X
3.162E+00 X
4.642E+00
6.813E+00 X
1.000E+01 XXXXXX
1.468E+01 XXXXXXXXX
2.154E+01 XXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXX
1.000E+02 XXXXXX
1.468E+02 XXXX
2.154E+02
3.162E+02 X
4.642E+02
6.813E+02 X
1.000E+03
1.468E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  2.10000E+00
MAXIMUM ANTILOG      =  1.30000E+03
GEOMETRIC MEAN       =  3.73716E+01
GEOMETRIC DEVIATION  =  2.82494E+00
VARIANCE OF LOGS     =  2.03409E-01
```

PERCENT TABLE FOR VARIABLE 20 (BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.305558E+00	2.020960E+01
50.00	1.553033E+00	3.572999E+01
75.00	1.819448E+00	6.598536E+01
90.00	2.050004E+00	1.122028E+02
95.00	2.227782E+00	1.689592E+02
97.00	2.570005E+00	3.715392E+02
98.00	2.796672E+00	6.261405E+02
99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 21 (LA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		1	1	1.47	1.47		
T		0	1	0.00	1.47	0.80	0.80
4.160E-01 -	5.827E-01	4	5	5.88	7.35	2.30	1.25
5.827E-01 -	7.493E-01	6	11	8.82	16.18	5.93	0.00
7.493E-01 -	9.160E-01	9	20	13.24	29.41	11.06	0.38
9.160E-01 -	1.083E+00	19	39	27.94	57.35	14.94	1.10
1.083E+00 -	1.249E+00	7	46	10.29	67.65	14.63	3.98
1.249E+00 -	1.416E+00	13	59	19.12	86.76	10.37	0.66
1.416E+00 -	1.583E+00	9	68	13.24	100.00	7.97	0.13
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 21 (LA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+00 XXXXXX
4.634E+00 XXXXXXXXX
6.802E+00 XXXXXXXXXXXX
9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+00
MAXIMUM ANTILOG = 3.70000E+01
GEOMETRIC MEAN = 1.16697E+01
GEOMETRIC DEVIATION = 1.94609E+00
VARIANCE OF LOGS = 8.36156E-02

PERCENT TABLE FOR VARIABLE 21 (LA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	8.604453E-01	7.251792E+00	98.00	1.000000E+35	1.000000E+35
50.00	1.038808E+00	1.093474E+01	99.00	1.000000E+35	1.000000E+35
75.00	1.313438E+00	2.057964E+01			
90.00	1.000000E+35	1.000000E+35			
95.00	1.000000E+35	1.000000E+35			
97.00	1.000000E+35	1.000000E+35			

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 22 (CE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		3	3	4.41	4.41		
L		2	5	2.94	7.35		
T		0	5	0.00	7.35	1.74	1.74
4.160E-01 -	5.827E-01	1	6	1.47	8.82	2.40	0.82
5.827E-01 -	7.493E-01	1	7	1.47	10.29	4.44	2.67
7.493E-01 -	9.160E-01	7	14	10.29	20.59	7.00	0.00
9.160E-01 -	1.083E+00	5	19	7.35	27.94	9.40	2.06
1.083E+00 -	1.249E+00	11	30	16.18	44.12	10.75	0.01
1.249E+00 -	1.416E+00	12	42	17.65	61.76	10.48	0.22
1.416E+00 -	1.583E+00	13	55	19.12	80.88	8.71	2.12
1.583E+00 -	1.749E+00	13	68	19.12	100.00	13.08	0.00
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 22 (CE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+00 X
4.634E+00 X
6.802E+00 XXXXXXXXXX
9.985E+00 XXXXXXX
1.466E+01 XXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.60000E+00
MAXIMUM ANTILOG = 5.30000E+01
GEOMETRIC MEAN = 2.02333E+01
GEOMETRIC DEVIATION = 1.97391E+00
VARIANCE OF LOGS = 8.72182E-02

PERCENT TABLE FOR VARIABLE 22 (CE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE			
25.00	1.016001E+00	1.037531E+01	95.00	1.000000E+35	1.000000E+35
50.00	1.304891E+00	2.017858E+01	97.00	1.000000E+35	1.000000E+35
75.00	1.531387E+00	3.399279E+01	98.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35	99.00	1.000000E+35	1.000000E+35

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 23 (Y)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
		N	23	23	33.82	33.82		
		L	0	23	0.00	33.82		
		T	0	23	0.00	33.82	21.00	21.00
-5.840E-01	-	-4.173E-01	1	24	1.47	35.29	4.25	2.48
-4.173E-01	-	-2.507E-01	2	26	2.94	38.24	4.49	1.38
-2.507E-01	-	-8.400E-02	1	27	1.47	39.71	4.61	2.83
-8.400E-02	-	8.267E-02	1	28	1.47	41.18	4.60	2.82
8.267E-02	-	2.493E-01	7	35	10.29	51.47	4.46	1.45
2.493E-01	-	4.160E-01	2	37	2.94	54.41	4.20	1.15
4.160E-01	-	5.827E-01	6	43	8.82	63.24	3.84	1.21
5.827E-01	-	7.493E-01	10	53	14.71	77.94	3.41	12.72
7.493E-01	-	9.160E-01	6	59	8.82	86.76	2.94	3.17
9.160E-01	-	1.083E+00	7	66	10.29	97.06	2.47	8.32
1.083E+00	-	1.249E+00	2	68	2.94	100.00	7.73	4.24
		G	0	68	0.00	100.00	0.00	0.00
		H	0	68				
		B	0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 23 (Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E-01 X
4.634E-01 XXX
6.802E-01 X
9.985E-01 X
1.466E+00 XXXXXXXXXX
2.151E+00 XXX
3.157E+00 XXXXXXXXX
4.634E+00 XXXXXXXXXXXXXXX
6.803E+00 XXXXXXXXX
9.985E+00 XXXXXXXXXX
1.466E+01 XXX
```

PERCENT TABLE FOR VARIABLE 23 (Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	2.255254E-01	1.680836E+00
75.00	7.160026E-01	5.199991E+00
90.00	9.683841E-01	9.297883E+00
95.00	1.049337E+00	1.120306E+01
97.00	1.081718E+00	1.207029E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  3.10000E-01
MAXIMUM ANTILOG      =  1.50000E+01
GEOMETRIC MEAN       =  3.59213E+00
GEOMETRIC DEVIATION  =  2.53734E+00
VARIANCE OF LOGS     =  1.63522E-01
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 24 (NB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		1	1	1.47	1.47		
L		3	4	4.41	5.88		
T		0	4	0.00	5.88	0.82	0.82
-4.170E-01	-2.503E-01	1	5	1.47	7.35	1.44	0.13
-2.503E-01	-8.367E-02	1	6	1.47	8.82	3.07	1.39
-8.367E-02	8.300E-02	3	9	4.41	13.24	5.51	1.14
8.300E-02	2.497E-01	5	14	7.35	20.59	8.32	1.32
2.497E-01	4.163E-01	8	22	11.76	32.35	10.56	0.62
4.163E-01	5.830E-01	14	36	20.59	52.94	11.28	0.66
5.830E-01	7.497E-01	16	52	23.53	76.47	10.13	3.41
7.497E-01	9.163E-01	10	62	14.71	91.18	7.65	0.72
9.163E-01	1.083E+00	5	67	7.35	98.53	4.86	0.00
1.083E+00	1.250E+00	0	67	0.00	98.53	2.59	2.59
1.250E+00	1.416E+00	1	68	1.47	100.00	1.79	0.35
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 24 (NB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E-01 X
6.808E-01 X
9.992E-01 XXXX
1.467E+00 XXXXXXX
2.153E+00 XXXXXXXXXXXX
3.160E+00 XXXXXXXXXXXXXXXXXXXX
4.638E+00 XXXXXXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXX
9.992E+00 XXXXXXX
1.467E+01
2.153E+01 X
```

PERCENT TABLE FOR VARIABLE 24 (NB) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.121681E-01	2.051956E+00
50.00	5.591924E-01	3.624035E+00
75.00	7.392523E-01	5.485956E+00
90.00	9.030026E-01	7.998391E+00
95.00	1.003003E+00	1.006938E+01
97.00	1.048336E+00	1.117728E+01
98.00	1.071003E+00	1.177614E+01
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 5.30000E-01
MAXIMUM ANTILOG      = 2.00000E+01
GEOMETRIC MEAN       = 3.51002E+00
GEOMETRIC DEVIATION  = 2.01525E+00
VARIANCE OF LOGS     = 9.26155E-02
```

Table 30. Frequency tables and histograms of ICP analytical data from unaltered rock samples collected in the Goat Rocks area

FREQUENCY TABLE FOR VARIABLE 25 (P)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		1	1	1.47	1.47		
L		2	3	2.94	4.41		
T		0	3	0.00	4.41	1.08	1.08
1.416E+00 -	1.583E+00	1	4	1.47	5.88	1.34	0.08
1.583E+00 -	1.749E+00	1	5	1.47	7.35	2.47	0.87
1.749E+00 -	1.916E+00	3	8	4.41	11.76	4.05	0.27
1.916E+00 -	2.083E+00	3	11	4.41	16.18	5.93	1.45
2.083E+00 -	2.249E+00	3	14	4.41	20.59	7.72	2.88
2.249E+00 -	2.416E+00	4	18	5.88	26.47	8.94	2.73
2.416E+00 -	2.583E+00	13	31	19.12	45.59	9.23	1.54
2.583E+00 -	2.749E+00	16	47	23.53	69.12	8.47	6.69
2.749E+00 -	2.916E+00	20	67	29.41	98.53	6.92	24.71
2.916E+00 -	3.083E+00	1	68	1.47	100.00	11.85	9.94
G		0	68	0.00	100.00	0.00	0.00
H		0	68				
B		0	68				

TOTALS LESS H AND B 68

HISTOGRAM FOR VARIABLE 25 (P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
3.157E+01 X
4.634E+01 X
6.802E+01 XXXX
9.985E+01 XXXX
1.466E+02 XXXX
2.151E+02 XXXXXX
3.157E+02 XXXXXXXXXXXXXXXXXX
4.634E+02 XXXXXXXXXXXXXXXXXXXXXXXX
6.803E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
9.985E+02 X
```

PERCENT TABLE FOR VARIABLE 25 (P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.374335E+00	2.367747E+02
50.00	2.613919E+00	4.110731E+02
75.00	2.782669E+00	6.062746E+02
90.00	2.867670E+00	7.373430E+02
95.00	2.896003E+00	7.870511E+02
97.00	2.907336E+00	8.078604E+02
98.00	2.913003E+00	8.184704E+02
99.00	1.000000E+35	1.000000E+35

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  2.80000E+01
MAXIMUM ANTILOG      =  1.20000E+03
GEOMETRIC MEAN       =  3.45812E+02
GEOMETRIC DEVIATION  =  2.10896E+00
VARIANCE OF LOGS     =  1.05021E-01
```