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ANALYSES OF STREAM-SEDIMENT AND ROCK SAMPLES FROM THE EASTERN
PART OF THE EAGLE QUADRANGLE, EAST-CENTRAL ALASKA

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part of the Eagle quadrangle, east-central Alaska

By Helen L. Foster

Introduction

Analytical data for 67 stream-sediment samples and 96 rock samples from the eastern part of the Eagle quadrangle, east-central Alaska, are presented in this report together with a statistical treatment of the data. The samples were collected in the summer of 1970 and supplement data previously collected in this area (Foster and Clark, 1969, 1970, and Clark and Foster, 1969, 1971). Geochemical sampling has also been done under the auspices of the Division of Mines and Minerals, State of Alaska and the reported results (Saunders, 1966, 1967; Smith, 1968; and Burand, 1968) can be used to supplement the data presented here.

The most comprehensive discussion of the geology of the Yukon-Tanana Upland including the Eagle quadrangle, is a report by J. B. Mertie, Jr. (1937). More recent reports and maps by Foster (1969a, b), Foster and Keith (1968, 1969), Foster and Clark (1970), and Clark and Foster (1969, 1971) include the eastern part of the Eagle quadrangle.

Procedures and treatment of data

Standard procedures were followed in the collection and preparation of the stream-sediment samples. The samples were generally collected from the active stream channel; where this was not possible, the samples were collected from stream deposits adjacent to the active channel.

The samples were dried, sieved, and the minus 80-mesh fractions were analyzed for 30 elements by the six-step semiquantitative spectrographic method and for gold by the atomic absorption method. The spectrographic analyses were reported in percentage (pct) or parts per million (ppm) to the nearest number in the series 1.0, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc. The precision of a reported value is approximately plus 100 percent or minus 50 percent. Minimum limits of determination for each element are given on page 6. Semiquantitative spectrographic analyses were done by K. J. Curry; atomic absorption analyses were done by R. L. Miller and D. G. Murrey. After crushing, rock samples were processed and analyzed in the same manner as stream-sediment samples.

Localities where the stream-sediment samples were collected are shown on figure 1 and localities for the rock samples are shown on figure 2.

The results of the analyses of the stream-sediment and rock samples have been processed by means of a computer program known as GEOSUM and are presented in tables 1 and 2. The GEOSUM program is designed primarily for summarizing and tabulating geochemical data--especially data from semiquantitative spectrographic analyses (commonly referred to as six-step spectrographic analyses) by the laboratories of the U.S. Geological Survey. The computer output consists of: (a) a listing of the analytical data, (b) histograms and cumulative frequency distributions for all elements on which

there is sufficient data ^{1/}, (c) and a statistical summary which includes geometric means and geometric deviations.

Results

Examination of the histograms of the various elements for the stream-sediment samples indicates that most of the elements for which sufficient data is available have a roughly log-normal distribution. Manganese and lead are examples of this type of distribution. However, more meaningful histograms could be obtained by including the additional data of previous reports (Clark and Foster, 1969; Foster and Clark, 1969).

On the basis of these histograms and analytical results from other parts of the Eagle quadrangle (Foster and Clark, 1969 and 1970), anomalous values for several elements of possible economic interest are suggested: copper (Cu), 100 or more ppm; lead (Pb), 50 or more ppm; nickel (Ni), 100 or more ppm; chromium (Cr), 200 or more ppm; molybdenum (Mo), 5 or more ppm; and any reported value for gold, silver, tungsten, zinc, arsenic, tin, and bismuth is considered significant. The selection of these concentrations as anomalous values is subjective and interpretive and the

^{1/}The frequency tables and histograms for gold have been omitted because the classes used in calculating these tables are those used in the semi-quantitative spectrographic method and the gold was analyzed by the quantitative atomic absorption method; also gold was found in only 1 of 67 stream-sediment samples. Statistical summaries for arsenic, cadmium, tungsten, bismuth, and antimony are omitted because no values were reported for these elements in the stream-sediment samples. All statistical summaries are omitted for rock samples. They have little meaning because of the wide variety of geologic situations from which the rocks came.

local geology must be considered before application to any given part of the study area. It must be emphasized that the sampling was of a reconnaissance nature and the geology of the area is extremely varied. For some areas the background for one or more of these metals may be considerably higher than in other areas. These values can only serve as general guides until enough information becomes available to establish normal background limits which take into account the local geology.

The rock samples which were analyzed were of many different kinds and included mineralized specimens such as those high in visible sulfides, vein quartz without visible mineralization, rock from sheared and altered zones, and specimens of representative rock types (to help determine background values). Because of the wide variety of geologic situations from which these rocks came, it is not practicable to set overall upper limits for background values. To aid in evaluation and interpretation, the field identification of the rock is given in the last column in table 2. This is followed by the letter "M" or "U". "U" indicates a rock without visible evidence of mineralization that was analyzed primarily for background information. "M" indicates a rock with some visible evidence of possible mineralization. Rocks designated "M" may contain visible sulfides, have oxidized iron minerals, or be stained or from stained zones.

Anomalous areas

Many of the stream-sediments and rocks contained amounts of metals larger than apparent normal background concentrations and suggest places for further investigation. However, no large areas with strongly anomalous concentrations were found.

Samples from the upper part of the eastern branch of North Fork contained slightly higher than background amounts of several metals, particularly silver. A sample of black phyllite (sample no. 13) from this stream valley contained 15 ppm silver. Black phyllite crops out in many places in the drainage area of North Fork and may be a source of small amounts of silver in the sediments. Previous sampling of North Fork (Foster and Clark, 1970) had also shown several metals in slightly anomolous amounts, but these may be due to ultramafic rocks, sulfide-bearing greenstones, and phyllites which crop out in the area.

Boundary Creek and its tributaries including Quartz Creek were sampled for the first time and higher than background amounts of copper, nickel, and chromium were common, as were lead and molybdenum in some samples. Most of the high chromium and nickel concentrations can be attributed to nearby small ultramafic bodies and dikes. The copper may be from sulfides in greenstones. Tin was found in 3 stream-sediment samples on upper Boundary Creek and is notable because this is the only place, to date, where tin has been detected in stream-sediment samples from the eastern part of the Eagle quadrangle. Boundary Creek mineralization could be a continuation of a zone of mineralization which parallels the Tintina fault zone and has been described to the northwest in the Seventymile area (Clark and Foster, 1971).

Although sampling was limited, samples collected around the granodiorite of Taylor Mountain were notably low in metal concentrations.

Explanation of Tables 1 and 2

The results of the analyses of the stream-sediment and rock samples are given in table 1 and table 2 as analytical values such as 7.0000 ppm, 10.0000 percent, etc., or as qualified values expressed as a letter. These letter codes are N = not detected, L = less than specified limit of detection, G = greater than value shown, B = no data, H = interference, or T = trace. Note that the right-most zero digits for each analytical value may or may not be significant. The specified limits of detection are as follows:

Specified limits of detection

	FE PCT (Iron)	MG PCT (Magnesium)	CA PCT (Calcium)	TI PCT (Titanium)	MN PPM (Manganese)	AG PPM (Silver)
	0.05000	0.02000	0.05000	0.00200	10.00000	0.50000
	AS PPM (Arsenic)	AU PPM (Gold)	B PPM (Boron)	BA PPM (Barium)	BE PPM (Beryllium)	BI PPM (Bismuth)
	200.00000	10.00000	10.00000	20.00000	1.00000	10.00000
CD PPM (Cadmium)	CO PPM (Cobalt)	CR PPM (Chromium)	CU PPM (Copper)	LA PPM (Lanthanum)	MO PPM (Molybdenum)	NB PPM (Niobium)
20.00000	5.00000	5.00000	5.00000	20.00000	5.00000	10.00000
	NI PPM (Nickel)	PB PPM (Lead)	SB PPM (Antimony)	SC PPM (Scandium)	SN PPM (Tin)	SR PPM (Strontium)
	5.00000	10.00000	100.00000	5.00000	10.00000	100.00000
	V PPM (Vanadium)	W PPM (Tungsten)	Y PPM (Yttrium)	ZN PPM (Zinc)	ZR PPM (Zirconium)	AU ^{1/} (Gold)
	10.00000	50.00000	10.00000	200.00000	10.00000	(By atomic absorption)
						0.0200

^{1/}The last column in the table is for gold by the atomic absorption method. A column for gold is also given for semiquantitative spectrographic analyses of gold, but no gold was found by this method because of the high limit of detection.

As has been mentioned, semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1.0, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, 0.12, 0.083, etc. The frequency distributions and histograms are on logarithmic scales and are computed using these brackets as class intervals, for example:

Reported value (ppm)	Limits	
1.0	.83	1.2
1.5	1.2	1.8
2.0	1.8	2.6
3.0	2.6	3.8
5.0	3.8	5.6
7.0	5.6	8.3
10.0	8.3	12.0

The statistics given below the histograms are derived only from data values within the ranges of analytical determination (analytical values), and are, therefore, biased if data values qualified with N, L, G, T, or H codes are present. Statistical estimates that are unbiased in this regard are given at the end of table 1. The geometric mean is the antilogarithm of the arithmetic mean of the logs of the analyses and an estimate of "central tendency", or a characteristic value, of a frequency distribution that is approximately symmetrical on a log scale, and is therefore useful for characterizing many geochemical distributions. The geometric mean is not an estimate of geochemical abundance and is of no value in estimating reserves or total amounts of elements present. The geometric deviation is

the antilogarithm of the standard deviation of the logs of the analyses. See USGS Professional Paper 574-B (Miesch, 1967) and USGS Bulletin 1147E, p. 20-23 (Miesch, 1963), for further discussion and explanation of geometric mean and deviation.

In the computations performed to produce the statistical summary at the end of table 1, all elements are ignored where one or more of the unqualified data values is less than the analytical limit of detection specified on input or where any data values are qualified with the G (greater than) code. Data values qualified with B or H are not used in the computations. Where none of the data values for an element are qualified, the mean and deviation should be the same as those given in the preceding section. Where data are qualified with the codes N, L, or T, the estimates of geometric mean and deviation are based on a method by A. J. Cohen for treating censored distributions. The application of this method to geochemical problems is described in USGS Professional Paper 574-B (Miesch, 1967). The estimates are unbiased in a strict sense only where the data are derived from a lognormal parent population, but experiments have shown that large departures from this requirement may not greatly invalidate the results. Acceptance and use of the estimates, however, is the responsibility of the individual.

References cited

- Burand, W. M., 1968, Geochemical investigations of selected areas in the Yukon-Tanana region of Alaska, 1965 and 1966: Geochemical report no. 13, Div. Mines and Min., Dept. of Natural Resources, State of Alaska, 51 p.
- Clark, S. H. B., and Foster, H. L., 1969, Analyses of stream-sediment, rock, and soil samples from a part of the Seventymile River area, Eagle quadrangle, Alaska: U.S. Geol. Survey open-file report.
- _____ 1971, Geochemical and geological reconnaissance in the Seventymile River area, Alaska: U.S. Geol. Survey Bull. 1315, 21 p.
- Foster, H. L., 1969a, Asbestos occurrence in the Eagle C-4 quadrangle, Alaska: U.S. Geol. Survey Circ. 611, 7 p.
- _____ 1969b, Reconnaissance geology of the Eagle A-1 and A-2 quadrangles, Alaska: U.S. Geol. Survey Bull. 1271-G, p. G1-G30.
- Foster, H. L., and Clark, S. H. B., 1969, Analyses of stream-sediment and rock samples from the Fortymile area, Eagle quadrangle, Alaska: U.S. Geol. Survey open-file report.
- _____ 1970, Geochemical and geologic reconnaissance of a part of the Fortymile area, Alaska: U.S. Geol. Survey Bull. 1312-M, p. M1-M30.
- Foster, H. L., and Keith, T. C., 1968, Preliminary geologic map of the Eagle B-1 and C-1 quadrangles, Alaska: U.S. Geol. Survey open-file report.
- _____ 1969, Geology along the Taylor Highway, Alaska: U.S. Geol. Survey Bull. 1281, 36 p.

- Mertie, J. B., Jr., 1937, The Yukon-Tanana region, Alaska: U.S. Geol. Survey Bull. 872, 276 p.
- Miesch, A. T., 1963, Distribution of elements in Colorado Plateau uranium deposits--A preliminary report: U.S. Geol. Survey Bull. 1147-E, 57 p.
- _____ 1967, Methods of computation for estimating geochemical abundance: U.S. Geol. Survey Prof. Paper 574-B, 15 p.
- Saunders, R. H., 1966, A geochemical investigation along the Taylor Highway, east-central Alaska: Geochemical report no. 9, Div. of Mines and Minerals, Dept. of Natural Resources, State of Alaska, 20 p., 13 figs.
- _____ 1967, Mineral occurrences in the Yukon-Tanana region, Alaska: Div. of Mines and Minerals, Dept. of Natural Resources, State of Alaska, 59 p.
- Smith, W. H., 1968, A geochemical investigation of a portion of the Fortymile district, east-central Alaska: Geochemical report no. 16, Div. of Mines and Minerals, State of Alaska, 17 p.

TITLE
EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES*

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
1 BAK067	15.0000	5.0000	2.0000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	1500.0000
2 BAK066	7.0000	5.0000	2.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
3 BAK065	7.0000	3.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
4 BAK064	10.0000	5.0000	1.5000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
5 BAK063	10.0000	3.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
6 BAK062	7.0000	3.0000	1.5000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
7 BAK061	7.0000	3.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
8 BAK060	10.0000	3.0000	1.5000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
9 BAK059	7.0000	2.0000	1.5000	0.5000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
10 BAK058	7.0000	2.0000	1.5000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
11 BAK057	3.0000	1.5000	1.0000	0.1500	700.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
12 BAK054	7.0000	1.5000	1.0000	0.7000	2000.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
13 BAK053	7.0000	2.0000	1.5000	1.0000	5000.0000G	0.5000N	200.0000N	10.0000N	50.0000	1500.0000
14 BAK056	7.0000	1.5000	1.5000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
15 BAK055	5.0000	1.5000	1.0000	0.7000	500.0000	0.5000N	200.0000N	10.0000N	30.0000	500.0000
16 BAK044	7.0000	2.0000	1.5000	0.7000	1500.0000	0.5000L	200.0000N	10.0000N	50.0000	700.0000
17 BAK043	7.0000	3.0000	1.5000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
18 BAK042	10.0000	3.0000	1.5000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
19 BAK045	10.0000	2.0000	1.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	1000.0000
20 BAK046	7.0000	1.5000	1.0000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	1000.0000
21 BAK047	7.0000	2.0000	1.5000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	1000.0000
22 BAK048	7.0000	2.0000	2.0000	0.7000	1500.0000	0.5000L	200.0000N	10.0000N	50.0000	700.0000
23 BAK049	7.0000	1.5000	1.5000	1.0000	1500.0000	0.5000L	200.0000N	10.0000N	70.0000	700.0000
24 BAK050	7.0000	2.0000	1.5000	1.0000	1500.0000	0.5000L	200.0000N	10.0000N	70.0000	1500.0000
25 BAK051	7.0000	1.5000	1.5000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
26 BAK052	5.0000	1.0000	1.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
27 BAK041	7.0000	2.0000	0.7000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	30.0000	700.0000
28 BAK040	5.0000	1.5000	1.5000	1.0000	1000.0000	0.5000	200.0000N	10.0000N	50.0000	1000.0000
29 BAK039	7.0000	2.0000	1.0000	0.7000	1000.0000	0.5000L	200.0000N	10.0000N	50.0000	1500.0000
30 BAK038	10.0000	2.0000	1.5000	0.7000	1500.0000	0.5000	200.0000N	10.0000N	50.0000	1500.0000
31 BAK633	7.0000	1.5000	1.0000	0.7000	1500.0000	0.5000	200.0000N	10.0000N	70.0000	700.0000
32 BAK632	10.0000	1.5000	1.0000	1.0000	2000.0000	0.7000	200.0000N	10.0000N	70.0000	700.0000
33 BAK079	7.0000	1.5000	1.5000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
34 BAK081	7.0000	5.0000	2.0000	1.0000	3000.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
35 BAK082	15.0000	7.0000	3.0000	1.0000G	1500.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
36 BAK080	7.0000	2.0000	1.5000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
37 BAK086	10.0000	2.0000	2.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
38 BAK085	7.0000	1.5000	1.5000	1.0000	700.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
39 BAK084	10.0000	1.5000	2.0000	1.0000	1500.0000	0.5000L	200.0000N	10.0000N	70.0000	700.0000
40 BAK083	10.0000	2.0000	3.0000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
41 BAK087	10.0000	2.0000	3.0000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
42 BAK088	10.0000	1.5000	1.5000	0.7000	3000.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
43 BAK089	10.0000	3.0000	3.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	100.0000	500.0000
44 BAK090	10.0000	2.0000	2.0000	0.7000	2000.0000	0.5000L	200.0000N	10.0000N	70.0000	700.0000
45 BAK092	10.0000	5.0000	1.5000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	70.0000	1000.0000
46 BAK091	10.0000	2.0000	1.5000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
47 BAK072	7.0000	1.5000	0.7000	1.0000	700.0000	0.5000L	200.0000N	10.0000N	100.0000	700.0000
48 BAK071	7.0000	2.0000	1.5000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	100.0000	700.0000
49 BAK073	10.0000	3.0000	1.5000	1.0000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
50 BAK074	10.0000	3.0000	1.5000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000

*Note that the right-most zero digits of each data value may or may not be significant.

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EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
1 BAK067	1.0000	10.00000	20.00000	30.0000	500.0000	150.0000	20.0000	5.0000	15.0000	200.0000
2 BAK066	1.0000L	10.00000	20.00000	30.0000	500.0000	150.0000	20.0000L	5.0000L	10.0000	150.0000
3 BAK065	1.0000	10.00000	20.00000	30.0000	300.0000	100.0000	20.0000	5.0000L	10.0000	150.0000
4 BAK064	1.0000L	10.00000	20.00000	30.0000	300.0000	100.0000	20.0000L	5.00000	10.0000	200.0000
5 BAK063	1.5000	10.00000	20.00000	30.0000	300.0000	100.0000	20.0000L	5.00000	10.0000	150.0000
6 BAK062	1.0000	10.00000	20.00000	30.0000	300.0000	150.0000	20.0000L	5.0000L	10.0000	150.0000
7 BAK061	1.0000L	10.00000	20.00000	30.0000	300.0000	150.0000	20.0000L	5.00000	10.0000	150.0000
8 BAK060	1.5000	10.00000	20.00000	30.0000	300.0000	100.0000	20.0000L	5.0000L	15.0000	150.0000
9 BAK059	3.0000	10.00000	20.00000	30.0000	200.0000	100.0000	20.0000L	5.0000L	15.0000	150.0000
10 BAK058	5.0000	10.00000	20.00000	30.0000	200.0000	70.0000	20.0000L	5.0000L	20.0000	150.0000
11 BAK057	10.0000	10.00000	20.00000	5.0000L	150.0000	30.0000	20.0000L	5.00000	70.0000	100.0000
12 BAK054	2.0000	10.00000	20.00000	15.0000	100.0000	70.0000	20.0000L	5.00000	10.0000	100.0000
13 BAK053	1.0000	10.00000	20.00000	30.0000	150.0000	100.0000	20.0000L	5.0000L	10.0000	150.0000
14 BAK056	1.0000	10.00000	20.00000	20.0000	150.0000	70.0000	20.0000L	5.0000L	10.0000	100.0000
15 BAK055	1.0000L	10.00000	20.00000	10.0000	70.0000	70.0000	20.0000L	5.00000	10.0000L	15.0000
16 BAK044	1.5000	10.00000	20.00000	30.0000	300.0000	150.0000	20.0000	5.0000L	10.0000	150.0000
17 BAK043	1.0000	10.00000	20.00000	20.0000	300.0000	150.0000	20.0000L	5.00000	10.0000L	150.0000
18 BAK042	1.0000	10.00000	20.00000	30.0000	300.0000	100.0000	20.0000	5.0000L	10.0000	150.0000
19 BAK045	1.0000L	10.00000	20.00000	20.0000	150.0000	150.0000	20.0000L	5.0000L	10.0000	70.0000
20 BAK046	1.0000	10.00000	20.00000	20.0000	150.0000	100.0000	20.0000	5.00000	10.0000	70.0000
21 BAK047	1.0000L	10.00000	20.00000	20.0000	150.0000	70.0000	20.0000L	5.0000L	10.0000L	150.0000
22 BAK048	1.0000	10.00000	20.00000	30.0000	150.0000	150.0000	20.0000	5.0000L	10.0000	100.0000
23 BAK049	1.0000	10.00000	20.00000	20.0000	150.0000	100.0000	30.0000	5.0000L	10.0000	150.0000
24 BAK050	1.0000	10.00000	20.00000	20.0000	300.0000	100.0000	20.0000	5.0000L	10.0000	200.0000
25 BAK051	1.0000L	10.00000	20.00000	20.0000	70.0000	100.0000	20.0000L	5.00000	10.0000	70.0000
26 BAK052	1.00000	10.00000	20.00000	15.0000	70.0000	100.0000	30.0000	5.00000	10.0000	100.0000
27 BAK041	1.0000L	10.00000	20.00000	30.0000	300.0000	70.0000	20.0000L	5.00000	10.0000	300.0000
28 BAK040	1.5000	10.00000	20.00000	20.0000	150.0000	70.0000	20.0000L	5.0000L	10.0000	150.0000
29 BAK039	1.5000	10.00000	20.00000	20.0000	700.0000	100.0000	20.0000	5.0000L	10.0000	150.0000
30 BAK038	1.5000	10.00000	20.00000	30.0000	200.0000	100.0000	20.0000	5.0000	15.0000	150.0000
31 BAK633	1.5000	10.00000	20.00000	30.0000	150.0000	70.0000	30.0000	15.0000	10.0000	150.0000
32 BAK632	1.5000	10.00000	20.00000	30.0000	150.0000	100.0000	20.0000	30.0000	10.0000	150.0000
33 BAK079	1.0000	10.00000	20.00000	20.0000	150.0000	100.0000	20.0000	5.00000	15.0000	100.0000
34 BAK081	1.0000	10.00000	20.00000	30.0000	700.0000	70.0000	20.0000L	5.0000L	15.0000	300.0000
35 BAK082	1.0000	10.00000	20.00000	30.0000	700.0000	150.0000	20.0000L	5.00000	15.0000	300.0000
36 BAK080	1.0000L	10.00000	20.00000	20.0000	150.0000	70.0000	20.0000	5.00000	15.0000	70.0000
37 BAK086	1.0000L	10.00000	20.00000	20.0000	150.0000	70.0000	20.0000L	5.00000	15.0000	70.0000
38 BAK085	1.0000L	10.00000	20.00000	15.0000	150.0000	70.0000	20.0000L	5.00000	15.0000	70.0000
39 BAK084	1.0000	10.00000	20.00000	30.0000	150.0000	70.0000	30.0000	5.00000	15.0000	70.0000
40 BAK083	1.0000	10.00000	20.00000	30.0000	200.0000	100.0000	20.0000L	5.00000	10.0000	70.0000
41 BAK087	1.0000	10.00000	20.00000	20.0000	150.0000	70.0000	20.0000	5.00000	15.0000	100.0000
42 BAK088	1.0000	10.00000	20.00000	20.0000	150.0000	100.0000	20.0000	5.00000	15.0000	100.0000
43 BAK089	1.5000	10.00000	20.00000	20.0000	150.0000	70.0000	20.0000	5.00000	15.0000	100.0000
44 BAK090	1.5000	10.00000	20.00000	30.0000	150.0000	100.0000	20.0000	5.00000	15.0000	100.0000
45 BAK092	3.0000	10.00000	20.00000	30.0000	300.0000	70.0000	70.0000	5.0000L	15.0000	100.0000
46 BAK091	1.0000	10.00000	20.00000	30.0000	150.0000	100.0000	20.0000L	5.0000L	15.0000	100.0000
47 BAK072	1.0000	10.00000	20.00000	10.0000	150.0000	100.0000	30.0000	5.00000	15.0000	50.0000
48 BAK071	1.0000	10.00000	20.00000	15.0000	150.0000	70.0000	20.0000	5.00000	15.0000	100.0000
49 BAK073	1.0000L	10.00000	20.00000	30.0000	200.0000	70.0000	20.0000L	5.0000L	15.0000	150.0000
50 BAK074	1.0000L	10.00000	20.00000	30.0000	300.0000	70.0000	20.0000L	5.0000L	15.0000	150.0000

TITLE
EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
1 BAK067	30.0000	100.0000	30.0000	10.0000	200.0000	300.0000	50.0000	30.0000	200.0000	300.0000
2 BAK066	30.0000	100.0000	30.0000	10.0000	150.0000	300.0000	50.0000	20.0000	200.0000	150.0000
3 BAK065	50.0000	100.0000	30.0000	10.0000	200.0000	200.0000	50.0000	20.0000	200.0000	300.0000
4 BAK064	30.0000	100.0000	30.0000	10.0000	100.0000L	300.0000	50.0000	20.0000	200.0000	200.0000
5 BAK063	30.0000	100.0000	30.0000	10.0000	100.0000	200.0000	50.0000	30.0000	200.0000	200.0000
6 BAK062	30.0000	100.0000	30.0000	10.0000	100.0000	300.0000	50.0000	30.0000	200.0000	150.0000
7 BAK061	30.0000	100.0000	30.0000	10.0000	150.0000	300.0000	50.0000	20.0000	200.0000	150.0000
8 BAK060	30.0000	100.0000	30.0000	10.0000	200.0000	300.0000	50.0000	50.0000	200.0000	300.0000
9 BAK059	70.0000	100.0000	30.0000	15.0000	200.0000	300.0000	50.0000	70.0000	200.0000	150.0000
10 BAK058	70.0000	100.0000	20.0000	50.0000	150.0000	200.0000	50.0000	70.0000	200.0000	200.0000
11 BAK057	100.0000	100.0000	5.0000L	150.0000	100.0000L	30.0000	50.0000	100.0000	200.0000	100.0000
12 BAK054	30.0000	100.0000	20.0000	10.0000	100.0000	200.0000	50.0000	30.0000	200.0000	150.0000
13 BAK053	20.0000	100.0000	30.0000	10.0000	100.0000	200.0000	50.0000	30.0000	200.0000	200.0000
14 BAK056	30.0000	100.0000	30.0000	10.0000	150.0000	300.0000	50.0000	30.0000	200.0000	200.0000
15 BAK055	20.0000	100.0000	20.0000	10.0000	150.0000	150.0000	50.0000	20.0000	200.0000	300.0000
16 BAK044	70.0000	100.0000	30.0000	10.0000	100.0000	300.0000	50.0000	50.0000	200.0000	150.0000
17 BAK043	50.0000	100.0000	30.0000	10.0000	150.0000	200.0000	50.0000	30.0000	200.0000	150.0000
18 BAK042	30.0000	100.0000	30.0000	10.0000	100.0000	300.0000	50.0000	30.0000	200.0000	200.0000
19 BAK045	50.0000	100.0000	30.0000	10.0000	150.0000	300.0000	50.0000	50.0000	200.0000	200.0000
20 BAK046	50.0000	100.0000	30.0000	10.0000	150.0000	200.0000	50.0000	50.0000	200.0000	300.0000
21 BAK047	30.0000	100.0000	30.0000	10.0000	150.0000	200.0000	50.0000	30.0000	200.0000	200.0000
22 BAK048	50.0000	100.0000	30.0000	10.0000	150.0000	300.0000	50.0000	50.0000	200.0000L	300.0000
23 BAK049	50.0000	100.0000	30.0000	10.0000	200.0000	300.0000	50.0000	30.0000	200.0000L	300.0000
24 BAK050	70.0000	100.0000	30.0000	10.0000	200.0000	300.0000	50.0000	50.0000	200.0000L	300.0000
25 BAK051	20.0000	100.0000	30.0000	10.0000	100.0000	300.0000	50.0000	30.0000	200.0000	300.0000
26 BAK052	20.0000	100.0000	20.0000	10.0000	150.0000	200.0000	50.0000	15.0000	200.0000L	500.0000
27 BAK041	20.0000	100.0000	15.0000	10.0000	100.0000L	200.0000	50.0000	15.0000	200.0000	100.0000
28 BAK040	70.0000	100.0000	20.0000	10.0000	150.0000	200.0000	50.0000	30.0000	200.0000	200.0000
29 BAK039	100.0000	100.0000	20.0000	10.0000	150.0000	300.0000	50.0000	30.0000	300.0000	150.0000
30 BAK038	150.0000	100.0000	30.0000	10.0000	200.0000	300.0000	50.0000	50.0000	500.0000	200.0000
31 BAK633	30.0000	100.0000	20.0000	10.0000	200.0000	300.0000	50.0000	30.0000	200.0000	300.0000
32 BAK632	30.0000	100.0000	30.0000	10.0000	150.0000	300.0000	50.0000	30.0000	200.0000	500.0000
33 BAK079	30.0000	100.0000	30.0000	10.0000	200.0000	200.0000	50.0000	30.0000	200.0000	300.0000
34 BAK081	10.0000	100.0000	20.0000	10.0000	200.0000	200.0000	50.0000	15.0000	200.0000	200.0000
35 BAK082	30.0000	100.0000	30.0000	10.0000	300.0000	300.0000	50.0000	30.0000	200.0000	300.0000
36 BAK080	15.0000	100.0000	30.0000	10.0000	300.0000	200.0000	50.0000	30.0000	200.0000	500.0000
37 BAK086	30.0000	100.0000	30.0000	10.0000	200.0000	300.0000	50.0000	15.0000	200.0000L	150.0000
38 BAK085	50.0000	100.0000	20.0000	10.0000	200.0000	200.0000	50.0000	20.0000	200.0000	300.0000
39 BAK084	70.0000	100.0000	30.0000	10.0000	200.0000	200.0000	50.0000	30.0000	200.0000	300.0000
40 BAK083	30.0000	100.0000	30.0000	10.0000	300.0000	200.0000	50.0000	20.0000	200.0000	200.0000
41 BAK087	150.0000	100.0000	30.0000	10.0000	300.0000	200.0000	50.0000	20.0000	200.0000	200.0000
42 BAK088	50.0000	100.0000	20.0000	10.0000	200.0000	300.0000	50.0000	30.0000	200.0000L	300.0000
43 BAK089	70.0000	100.0000	30.0000	10.0000	300.0000	300.0000	50.0000	20.0000	200.0000	300.0000
44 BAK090	200.0000	100.0000	30.0000	10.0000	300.0000	300.0000	50.0000	20.0000	200.0000	300.0000
45 BAK092	70.0000	100.0000	20.0000	10.0000	200.0000	200.0000	50.0000	30.0000	200.0000	300.0000
46 BAK091	70.0000	100.0000	30.0000	10.0000	300.0000	300.0000	50.0000	20.0000	200.0000L	300.0000
47 BAK072	70.0000	100.0000	15.0000	10.0000	100.0000L	200.0000	50.0000	30.0000	200.0000	300.0000
48 BAK071	30.0000	100.0000	20.0000	10.0000	100.0000	150.0000	50.0000	30.0000	200.0000	200.0000
49 BAK073	30.0000	100.0000	30.0000	10.0000	200.0000	200.0000	50.0000	20.0000	200.0000	300.0000
50 BAK074	20.0000	100.0000	30.0000	10.0000	100.0000	300.0000	50.0000	20.0000	200.0000	200.0000

TITLE
EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES

SAMPLE	AU PPM
1 BAK067	0.0200L
2 BAK066	0.0200L
3 BAK065	0.0200L
4 BAK064	0.0200L
5 BAK063	0.0200L
6 BAK062	0.0200L
7 BAK061	0.0200L
8 BAK060	0.0200L
9 BAK059	0.0200L
10 BAK058	0.0200L
11 BAK057	0.0200L
12 BAK056	0.0200L
13 BAK055	0.0200L
14 BAK054	0.0200L
15 BAK053	0.0200L
16 BAK052	0.0200L
17 BAK051	0.0200L
18 BAK050	0.0200L
19 BAK049	0.0200L
20 BAK048	0.0200L
21 BAK047	0.0200L
22 BAK046	0.0200L
23 BAK045	0.0200L
24 BAK044	0.0200L
25 BAK043	0.0200L
26 BAK042	0.0200L
27 BAK041	0.0200L
28 BAK040	0.0200L
29 BAK039	0.0200L
30 BAK038	0.0200L
31 BAK037	0.0200L
32 BAK036	0.0200L
33 BAK035	0.0200L
34 BAK034	0.0200L
35 BAK033	0.0200L
36 BAK032	0.0200L
37 BAK031	0.0200L
38 BAK030	0.0200L
39 BAK029	0.0200L
40 BAK028	0.0200L
41 BAK027	0.0200L
42 BAK026	0.0200L
43 BAK025	0.0200L
44 BAK024	0.0200L
45 BAK023	0.0200L
46 BAK022	0.0200L
47 BAK021	0.0200L
48 BAK020	0.0200L
49 BAK019	0.0200L
50 BAK018	0.0200L

TITLE
EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
51 BAK078	7.0000	1.5000	0.7000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	70.0000	500.0000
52 BAK077	7.0000	1.5000	0.7000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
53 BAK076	7.0000	2.0000	1.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
54 BAK075	7.0000	1.5000	0.7000	0.7000	500.0000	0.5000L	200.0000N	10.0000N	70.0000	700.0000
55 BAK070	5.0000	3.0000	3.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	700.0000
56 BAK069	5.0000	7.0000	3.0000	0.3000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	1000.0000
57 BAK068	3.0000	2.0000	2.0000	0.2000	700.0000	0.5000N	200.0000N	10.0000N	15.0000	300.0000
58 BAK615	10.0000	2.0000	1.5000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	1000.0000
59 BAK614	15.0000	3.0000	5.0000	1.0000G	2000.0000	0.5000N	200.0000N	10.0000N	30.0000	700.0000
60 BAK616	10.0000	3.0000	3.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	30.0000	700.0000
61 BAK631	7.0000	1.5000	2.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	15.0000	500.0000
62 BAK630	10.0000	1.5000	3.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	30.0000	300.0000
63 BAK629	10.0000	1.5000	3.0000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	30.0000	300.0000
64 BAK628	10.0000	1.5000	5.0000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	30.0000	300.0000
65 BAK627	10.0000	1.5000	3.0000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	30.0000	300.0000
66 BAK626	10.0000	1.5000	3.0000	0.7000	3000.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000
67 BAK625	7.0000	2.0000	3.0000	0.7000	700.0000	0.5000N	200.0000N	10.0000N	50.0000	300.0000

TITLE
EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
51 BAK078	1.0000L	10.0000N	20.0000N	15.0000	150.0000	70.0000	20.0000L	5.0000N	15.0000	70.0000
52 BAK077	1.0000L	10.0000N	20.0000N	20.0000	150.0000	100.0000	20.0000	5.0000N	15.0000	100.0000
53 BAK076	1.0000L	10.0000N	20.0000N	20.0000	150.0000	70.0000	20.0000	5.0000N	15.0000	150.0000
54 BAK075	1.0000L	10.0000N	20.0000N	10.0000	70.0000	150.0000	20.0000N	5.0000N	15.0000	30.0000
55 BAK070	1.0000	10.0000N	20.0000N	15.0000	100.0000	70.0000	20.0000L	5.0000N	10.0000L	70.0000
56 BAK069	1.5000	10.0000N	20.0000N	20.0000	150.0000	100.0000	20.0000L	5.0000N	10.0000L	150.0000
57 BAK068	1.0000N	10.0000N	20.0000N	10.0000	70.0000	50.0000	20.0000N	5.0000N	10.0000L	50.0000
58 BAK615	1.5000	10.0000N	20.0000N	30.0000	70.0000	100.0000	20.0000N	5.0000L	10.0000	70.0000
59 BAK614	1.5000	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000L	5.0000L	10.0000	70.0000
60 BAK616	1.0000L	10.0000N	20.0000N	30.0000	150.0000	100.0000	20.0000L	5.0000L	10.0000	50.0000
61 BAK631	1.0000	10.0000N	20.0000N	15.0000	50.0000	7.0000	20.0000	5.0000N	10.0000	30.0000
62 BAK630	1.0000L	10.0000N	20.0000N	30.0000	150.0000	20.0000	20.0000	5.0000L	10.0000	50.0000
63 BAK629	1.0000L	10.0000N	20.0000N	20.0000	150.0000	15.0000	20.0000	5.0000L	10.0000L	50.0000
64 BAK628	1.0000	10.0000N	20.0000N	20.0000	150.0000	10.0000	20.0000	5.0000L	10.0000	50.0000
65 BAK627	1.0000	10.0000N	20.0000N	20.0000	150.0000	10.0000	20.0000	5.0000L	10.0000	50.0000
66 BAK626	1.0000	10.0000N	20.0000N	30.0000	150.0000	15.0000	30.0000	5.0000L	10.0000	50.0000
67 BAK625	1.0000L	10.0000N	20.0000N	20.0000	150.0000	15.0000	20.0000	5.0000L	10.0000	70.0000

TITLE
EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
51 BAK078	50.0000	100.0000N	20.0000	10.0000N	100.0000L	200.0000	50.0000N	15.0000	200.0000	200.0000
52 BAK077	50.0000	100.0000N	20.0000	10.0000N	150.0000	200.0000	50.0000N	20.0000	200.0000N	300.0000
53 BAK076	30.0000	100.0000N	15.0000	10.0000N	100.0000	150.0000	50.0000N	15.0000	200.0000N	300.0000
54 BAK075	70.0000	100.0000N	15.0000	10.0000N	150.0000	150.0000	50.0000N	15.0000	200.0000N	300.0000
55 BAK070	30.0000	100.0000N	15.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000N	200.0000
56 BAK069	50.0000	100.0000N	15.0000	10.0000N	200.0000	150.0000	50.0000N	20.0000	200.0000N	150.0000
57 BAK068	10.0000L	100.0000N	15.0000	10.0000N	200.0000	150.0000	50.0000N	10.0000	200.0000N	100.0000
58 BAK615	30.0000	100.0000N	15.0000	10.0000N	200.0000	200.0000	50.0000N	20.0000	200.0000N	200.0000
59 BAK614	70.0000	100.0000N	30.0000	10.0000N	500.0000	300.0000	50.0000N	30.0000	200.0000N	300.0000
60 BAK616	20.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	30.0000	200.0000N	150.0000
61 BAK631	10.0000	100.0000N	15.0000	10.0000N	700.0000	150.0000	50.0000N	20.0000	200.0000N	150.0000
62 BAK630	15.0000	100.0000N	20.0000	10.0000N	500.0000	300.0000	50.0000N	20.0000	200.0000N	300.0000
63 BAK629	15.0000	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000N	200.0000
64 BAK628	10.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000N	300.0000
65 BAK627	15.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000N	300.0000
66 BAK626	15.0000	100.0000N	20.0000	10.0000N	300.0000	300.0000	50.0000N	20.0000	200.0000N	500.0000
67 BAK625	15.0000	100.0000N	20.0000	10.0000N	300.0000	200.0000	50.0000N	20.0000	200.0000N	200.0000

TITLE
EASTERN EAGLE STREAM SEDS-1970

TABLE 1. STREAM SEDIMENT SAMPLES

SAMPLE	AU PPM
51 BAK078	0.0200L
52 BAK077	0.0200L
53 BAK076	0.0200L
54 BAK075	0.0200L
55 BAK070	0.0200L
56 BAK069	0.0200L
57 BAK068	0.0200L
58 BAK615	0.0200L
59 BAK614	0.0200L
60 BAK616	0.0200L
61 BAK631	0.0200L
62 BAK630	0.0200L
63 BAK629	0.0200L
64 BAK628	0.0200L
65 BAK627	0.0200L
66 BAK626	0.0200L
67 BAK625	0.0200L

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 1 (FE PCT)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
3.8E-02	5.6E-02	0	0	0.0	0.0
5.6E-02	8.3E-02	0	0	0.0	0.0
8.3E-02	1.2E-01	0	0	0.0	0.0
1.2E-01	1.8E-01	0	0	0.0	0.0
1.8E-01	2.6E-01	0	0	0.0	0.0
2.6E-01	3.8E-01	0	0	0.0	0.0
3.8E-01	5.6E-01	0	0	0.0	0.0
5.6E-01	8.3E-01	0	0	0.0	0.0
8.3E-01	1.2E 00	0	0	0.0	0.0
1.2E 00	1.8E 00	0	0	0.0	0.0
1.8E 00	2.6E 00	0	0	0.0	0.0
2.6E 00	3.8E 00	2	2	2.99	2.99
3.8E 00	5.6E 00	5	7	7.46	10.45
5.6E 00	8.3E 00	32	39	47.76	58.21
8.3E 00	1.2E 01	25	64	37.31	95.52
1.2E 01	1.8E 01	3	67	4.48	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

HISTOGRAM FOR COLUMN 1 (FE PCT)

```

3.0E 00 XXX
5.0E 00 XXXXXX
7.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 01 XXXX

```

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL

VALUES

67

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

MAXIMUM = 1.50000E 01
 MINIMUM = 3.00000E 00
 GEOMETRIC MEAN = 7.86721E 00
 GEOMETRIC DEVIATION = 1.35235E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 2 (MG PCT)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
1.8E-02	2.6E-02	0	0	0.0	0.0
2.6E-02	3.8E-02	0	0	0.0	0.0
3.8E-02	5.6E-02	0	0	0.0	0.0
5.6E-02	8.3E-02	0	0	0.0	0.0
8.3E-02	1.2E-01	0	0	0.0	0.0
1.2E-01	1.8E-01	0	0	0.0	0.0
1.8E-01	2.6E-01	0	0	0.0	0.0
2.6E-01	3.8E-01	0	0	0.0	0.0
3.8E-01	5.6E-01	0	0	0.0	0.0
5.6E-01	8.3E-01	0	0	0.0	0.0
8.3E-01	1.2E 00	1	1	1.49	1.49
1.2E 00	1.8E 00	24	25	35.82	37.31
1.8E 00	2.6E 00	22	47	32.84	70.15
2.6E 00	3.8E 00	13	60	19.40	89.55
3.8E 00	5.6E 00	5	65	7.46	97.01
5.6E 00	8.3E 00	2	67	2.99	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 2 (MG PCT)

1.0E 00 X
 1.5E 00 XX
 2.0E 00 XX
 3.0E 00 XX
 5.0E 00 XXXXXXXX
 7.0E 00 XXX

ANALYTICAL					
N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

MAXIMUM = 7.00000E 00
 MINIMUM = 1.00000E 00
 GEOMETRIC MEAN = 2.14726E 00
 GEOMETRIC DEVIATION = 1.52087E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 3 (CA PCT)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
3.8E-02	5.6E-02	0	0	0.0	0.0
5.6E-02	8.3E-02	0	0	0.0	0.0
8.3E-02	1.2E-01	0	0	0.0	0.0
1.2E-01	1.8E-01	0	0	0.0	0.0
1.8E-01	2.6E-01	0	0	0.0	0.0
2.6E-01	3.8E-01	0	0	0.0	0.0
3.8E-01	5.6E-01	0	0	0.0	0.0
5.6E-01	8.3E-01	6	6	8.96	8.96
8.3E-01	1.2E 00	9	15	13.43	22.39
1.2E 00	1.8E 00	29	44	43.28	65.67
1.8E 00	2.6E 00	9	53	13.43	79.10
2.6E 00	3.8E 00	12	65	17.91	97.01
3.8E 00	5.6E 00	2	67	2.99	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 3 (CA PCT)

```

7.0E-01 XXXXXXXXX
1.0E 00 XXXXXXXXXX
1.5E 00 XXXXXXXXXX
2.0E 00 XXXXXXXXXX
3.0E 00 XXXXXXXXXX
5.0E 00 XXX

```

ANALYTICAL

VALUES

67

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0		0.0	0.0	0.0

MAXIMUM = 5.00000E 00
 MINIMUM = 7.00000E-01
 GEOMETRIC MEAN = 1.61846E 00
 GEOMETRIC DEVIATION = 1.58463E 00

DATE 1/21/71

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 4 (TI PCT)

	LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
	LOWER	UPPER				
1.8E-03	-	2.6E-03	0	0	0.0	0.0
2.6E-03	-	3.8E-03	0	0	0.0	0.0
3.8E-03	-	5.6E-03	0	0	0.0	0.0
5.6E-03	-	8.3E-03	0	0	0.0	0.0
8.3E-03	-	1.2E-02	0	0	0.0	0.0
1.2E-02	-	1.8E-02	0	0	0.0	0.0
1.8E-02	-	2.6E-02	0	0	0.0	0.0
2.6E-02	-	3.8E-02	0	0	0.0	0.0
3.8E-02	-	5.6E-02	0	0	0.0	0.0
5.6E-02	-	8.3E-02	0	0	0.0	0.0
8.3E-02	-	1.2E-01	0	0	0.0	0.0
1.2E-01	-	1.8E-01	1	1	1.49	1.49
1.8E-01	-	2.6E-01	1	2	1.49	2.99
2.6E-01	-	3.8E-01	1	3	1.49	4.48
3.8E-01	-	5.6E-01	3	6	4.48	8.96
5.6E-01	-	8.3E-01	30	36	44.78	53.73
8.3E-01	-	1.2E-00	29	65	43.28	97.01

HISTOGRAM FOR COLUMN 4 (TI PCT)

[illegible]

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

	N	L	H	B	T	G	ANALYTICAL VALUES
	0	0	0	0	0	2	65
	0.0	0.0	0.0	0.0	0.0	2.99	

MAXIMUM = 1.0000E 00
 MINIMUM = 1.5000E-01
 GEOMETRIC MEAN = 7.64082E-01
 GEOMETRIC DEVIATION = 1.43009E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 5 (MN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
LOWER	UPPER				
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0
5.6E 01 -	8.3E 01	0	0	0.0	0.0
8.3E 01 -	1.2E 02	0	0	0.0	0.0
1.2E 02 -	1.8E 02	0	0	0.0	0.0
1.8E 02 -	2.6E 02	0	0	0.0	0.0
2.6E 02 -	3.8E 02	0	0	0.0	0.0
3.8E 02 -	5.6E 02	2	2	2.99	2.99
5.6E 02 -	8.3E 02	10	12	14.93	17.91
8.3E 02 -	1.2E 03	20	32	29.85	47.76
1.2E 03 -	1.8E 03	27	59	40.30	88.06
1.8E 03 -	2.6E 03	4	63	5.97	94.03
2.6E 03 -	3.8E 03	3	66	4.48	98.51

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 5 (MN PPM)

```

5.0E 02 XXX
7.0E 02 XXXXXXXXXXXXXXXX
1.0E 03 XXXXXXXXXXXXXXXX
1.5E 03 XXXXXXXXXXXXXXXX
2.0E 03 XXXXX
3.0E 03 XXXX

```

ANALYTICAL

VALUES
66

N	L	H	B	T	G
0	0	0	0	0	1
0.0	0.0			0.0	1.49

MAXIMUM = 3.00000E 03
MINIMUM = 5.00000E 02
GEOMETRIC MEAN = 1.20053E 03
GEOMETRIC DEVIATION = 1.48026E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 6 (AG PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER - UPPER					
3.8E-01 -	5.6E-01	3	3	4.48	4.48
5.6E-01 -	8.3E-01	1	4	1.49	5.97

HISTOGRAM FOR COLUMN 6 (AG PPM)

5.0E-01 XXXX
7.0E-01 X

ANALYTICAL

N	L	H	B	T	G
54	9	0	0	0	0
80.60	13.43			0.0	0.0

VALUES
4

Explanation

MAXIMUM = 7.00000E-01
MINIMUM = 5.00000E-01
GEOMETRIC MEAN = 5.43879E-01
GEOMETRIC DEVIATION = 1.18321E 00

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 9 (B PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER - UPPER					
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	2	2	2.99	2.99
1.8E 01 -	2.6E 01	1	3	1.49	4.48
2.6E 01 -	3.8E 01	12	15	17.91	22.39
3.8E 01 -	5.6E 01	24	39	35.82	58.21
5.6E 01 -	8.3E 01	24	63	35.82	94.03
8.3E 01 -	1.2E 02	4	67	5.97	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 9 (B PPM)

1.5E 01 XXX
2.0E 01 X
3.0E 01 XXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXX

ANALYTICAL

VALUES

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

MAXIMUM = 1.00000E 02
MINIMUM = 1.50000E 01
GEOMETRIC MEAN = 5.10501E 01
GEOMETRIC DEVIATION = 1.51763E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 10 (BA PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER - UPPER					
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0
5.6E 01 -	8.3E 01	0	0	0.0	0.0
8.3E 01 -	1.2E 02	0	0	0.0	0.0
1.2E 02 -	1.8E 02	0	0	0.0	0.0
1.8E 02 -	2.6E 02	0	0	0.0	0.0
2.6E 02 -	3.8E 02	7	7	10.45	10.45
3.8E 02 -	5.6E 02	4	11	5.97	16.42
5.6E 02 -	8.3E 02	36	47	53.73	70.15
8.3E 02 -	1.2E 03	15	62	22.39	92.54
1.2E 03 -	1.8E 03	5	67	7.46	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 10 (BA PPM)

```

3.0E 02 XXXXXXXXXXXX
5.0E 02 XXXXXX
7.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 03 XXXXXXXX

```

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

ANALYTICAL
VALUES
67

MAXIMUM = 1.50000E 03
MINIMUM = 3.00000E 02
GEOMETRIC MEAN = 7.19953E 02
GEOMETRIC DEVIATION = 1.48239E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 11 (BE PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
8.3E-01	1.2E 00	27	27	40.30	40.30
1.2E 00	1.8E 00	13	40	19.40	59.70
1.8E 00	2.6E 00	1	41	1.49	61.19
2.6E 00	3.8E 00	2	43	2.99	64.18
3.8E 00	5.6E 00	1	44	1.49	65.67
5.6E 00	8.3E 00	0	44	0.0	65.67
8.3E 00	1.2E 01	1	45	1.49	67.16

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 11 (BE PPM)

```

1.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 00 X
3.0E 00 XXX
5.0E 00 X
7.0E 00
1.0E 01 X

```

ANALYTICAL
VALUES

N	L	H	B	T	G
1	21	0	0	0	0
1.49	31.34			0.0	0.0

45

MAXIMUM = 1.00000E 01
 MINIMUM = 1.00000E 00
 GEOMETRIC MEAN = 1.30774E 00
 GEOMETRIC DEVIATION = 1.59863E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 14 (CO PPM)

Explanation

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	- UPPER				
3.8E 00	- 5.6E 00	0	0	0.0	0.0
5.6E 00	- 8.3E 00	0	0	0.0	0.0
8.3E 00	- 1.2E 01	4	4	5.97	5.97
1.2E 01	- 1.8E 01	7	11	10.45	16.42
1.8E 01	- 2.6E 01	24	35	35.82	52.24
2.6E 01	- 3.8E 01	31	66	46.27	98.51

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 14 (CO PPM)

```

1.0E 01 XXXXXX
1.5E 01 XXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

ANALYTICAL

VALUES

N	L	H	B	T	G
0	1	0	0	0	0
0.0	1.49			0.0	0.0

MAXIMUM = 3.00000E 01
 MINIMUM = 1.00000E 01
 GEOMETRIC MEAN = 2.25028E 01
 GEOMETRIC DEVIATION = 1.37804E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 15 (CR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
3.8E 00	5.6E 00	0	0	0.0	0.0
5.6E 00	8.3E 00	0	0	0.0	0.0
8.3E 00	1.2E 01	0	0	0.0	0.0
1.2E 01	1.8E 01	0	0	0.0	0.0
1.8E 01	2.6E 01	0	0	0.0	0.0
2.6E 01	3.8E 01	0	0	0.0	0.0
3.8E 01	5.6E 01	1	1	1.49	1.49
5.6E 01	8.3E 01	6	7	8.96	10.45
8.3E 01	1.2E 02	2	9	2.99	13.43
1.2E 02	1.8E 02	35	44	52.24	65.67
1.8E 02	2.6E 02	5	49	7.46	73.13
2.6E 02	3.8E 02	13	62	19.40	92.54
3.8E 02	5.6E 02	2	64	2.99	95.52
5.6E 02	8.3E 02	3	67	4.48	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 15 (CR PPM)

```

5.0E 01 X
7.0E 01 XXXXXXXXX
1.0E 02 XXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXX
7.0E 02 XXXX

```

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	67
0.0	0.0			0.0	0.0	

MAXIMUM = 7.00000E 02
 MINIMUM = 5.00000E 01
 GEOMETRIC MEAN = 1.76751E 02
 GEOMETRIC DEVIATION = 1.73160E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 16 (CU PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
LOWER	UPPER				
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	1	1	1.49	1.49
8.3E 00 -	1.2E 01	2	3	2.99	4.48
1.2E 01 -	1.8E 01	3	6	4.48	8.96
1.8E 01 -	2.6E 01	1	7	1.49	10.45
2.6E 01 -	3.8E 01	1	8	1.49	11.94
3.8E 01 -	5.6E 01	1	9	1.49	13.43
5.6E 01 -	8.3E 01	22	31	32.84	46.27
8.3E 01 -	1.2E 02	26	57	38.81	85.07
1.2E 02 -	1.8E 02	10	67	14.93	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 16 (CU PPM)

```

7.0E 00 X
1.0E 01 XXX
1.5E 01 XXXX
2.0E 01 X
3.0E 01 X
5.0E 01 X
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXX

```

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL

VALUES

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

MAXIMUM = 1.50000E 02
 MINIMUM = 7.00000E 00
 GEOMETRIC MEAN = 7.39103E 01
 GEOMETRIC DEVIATION = 1.99135E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 17 (LA PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
1.8E 01 -	2.6E 01	25	25	37.31	37.31
2.6E 01 -	3.8E 01	6	31	8.96	46.27
3.8E 01 -	5.6E 01	0	31	0.0	46.27
5.6E 01 -	8.3E 01	1	32	1.49	47.76

HISTOGRAM FOR COLUMN 17 (LA PPM)

2.0E 01 XX
 3.0E 01 XXXXXXXX
 5.0E 01
 7.0E 01 X

N	L	H	B	T	G
8	27	0	0	0	0
11.94	40.30			0.0	0.0

MAXIMUM = 7.00000E 01
 MINIMUM = 2.00000E 01
 GEOMETRIC MEAN = 2.24411E 01
 GEOMETRIC DEVIATION = 1.29987E 00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL VALUES

32

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 18 (MO PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
3.8E 00 -	5.6E 00	2	2	2.99	2.99
5.6E 00 -	8.3E 00	0	2	0.0	2.99
8.3E 00 -	1.2E 01	0	2	0.0	2.99
1.2E 01 -	1.8E 01	1	3	1.49	4.48
1.8E 01 -	2.6E 01	0	3	0.0	4.48
2.6E 01 -	3.8E 01	1	4	1.49	5.97

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 18 (MO PPM)

5.0E 00 XXX
7.0E 00
1.0E 01
1.5E 01 X
2.0E 01
3.0E 01 X

ANALYTICAL

VALUES

N	L	H	B	T	G
32	31	0	0	0	0
47.76	46.27			0.0	0.0

MAXIMUM = 3.00000E 01
MINIMUM = 5.00000E 00
GEOMETRIC MEAN = 1.02988E 01
GEOMETRIC DEVIATION = 2.41345E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 19 (NB PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
LOWER - UPPER					
8.3E 00 -	1.2E 01	33	33	49.25	49.25
1.2E 01 -	1.8E 01	25	58	37.31	86.57
1.8E 01 -	2.6E 01	1	59	1.49	88.06
2.6E 01 -	3.8E 01	0	59	0.0	88.06
3.8E 01 -	5.6E 01	0	59	0.0	88.06
5.6E 01 -	8.3E 01	1	60	1.49	89.55

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 19 (NB PPM)

1.0E 01 XX
 1.5E 01 XX
 2.0E 01 X
 3.0E 01
 5.0E 01
 7.0E 01 X

ANALYTICAL

VALUES		G		T		B		H		L	
60		0		0		0		0		7	
0.0		0.0		0.0		0		0		10.45	

MAXIMUM = 7.00000E 01
 MINIMUM = 1.00000E 01
 GEOMETRIC MEAN = 1.23727E 01
 GEOMETRIC DEVIATION = 1.36301E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 20 (NI PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
LOWER	UPPER				
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	0	0	0.0	0.0
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	1	1	1.49	1.49
1.8E 01 -	2.6E 01	0	1	0.0	1.49
2.6E 01 -	3.8E 01	2	3	2.99	4.48
3.8E 01 -	5.6E 01	8	11	11.94	16.42
5.6E 01 -	8.3E 01	14	25	20.90	37.31
8.3E 01 -	1.2E 02	13	38	19.40	56.72
1.2E 02 -	1.8E 02	23	61	34.33	91.04
1.8E 02 -	2.6E 02	3	64	4.48	95.52
2.6E 02 -	3.8E 02	3	67	4.48	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 20 (NI PPM)

```

1.5E 01 X
2.0E 01
3.0E 01 XXX
5.0E 01 XXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXX
2.0E 02 XXXX
3.0E 02 XXXX

```

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL

VALUES

67

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

MAXIMUM = 3.00000E 02
 MINIMUM = 1.50000E 01
 GEOMETRIC MEAN = 9.97859E 01
 GEOMETRIC DEVIATION = 1.75708E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 21 (PB PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
LOWER	UPPER				
8.3E 00 -	1.2E 01	3	3	4.48	4.48
1.2E 01 -	1.8E 01	6	9	8.96	13.43
1.8E 01 -	2.6E 01	7	16	10.45	23.88
2.6E 01 -	3.8E 01	22	38	32.84	56.72
3.8E 01 -	5.6E 01	11	49	16.42	73.13
5.6E 01 -	8.3E 01	12	61	17.91	91.04
8.3E 01 -	1.2E 02	2	63	2.99	94.03
1.2E 02 -	1.8E 02	2	65	2.99	97.01
1.8E 02 -	2.6E 02	1	66	1.49	98.51

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 21 (PB PPM)

```

1.0E 01 XXXX
1.5E 01 XXXXXXXXXX
2.0E 01 XXXXXXXXXX
3.0E 01 XXXXXXXXXX
5.0E 01 XXXXXXXXXX
7.0E 01 XXXXXXXXXX
1.0E 02 XXX
1.5E 02 XXX
2.0E 02 X

```

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL VALUES					
N	L	H	B	T	G
0	1	0	0	0	0
0.0	1.49			0.0	0.0

MAXIMUM = 2.00000E 02
 MINIMUM = 1.00000E 01
 GEOMETRIC MEAN = 3.65403E 01
 GEOMETRIC DEVIATION = 1.93347E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

Explanation

FREQUENCY TABLE FOR COLUMN 23 (SC PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER - UPPER					
3.8E 00 - 5.6E 00	0	0	0.0	0.0	0.0
5.6E 00 - 8.3E 00	0	0	0.0	0.0	0.0
8.3E 00 - 1.2E 01	0	0	0.0	0.0	0.0
1.2E 01 - 1.8E 01	9	9	13.43	13.43	13.43
1.8E 01 - 2.6E 01	21	30	31.34	44.78	44.78
2.6E 01 - 3.8E 01	36	66	53.73	98.51	98.51

Semi-quantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

HISTOGRAM FOR COLUMN 23 (SC PPM)

Histograms represent percent frequency distribution where each X equals one percent.

```

1.5E 01 XXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

ANALYTICAL VALUES					
N	L	H	B	T	G
0	1	0	0	0	0
0.0	1.49			0.0	0.0

MAXIMUM = 3.00000E 01
 MINIMUM = 1.50000E 01
 GEOMETRIC MEAN = 2.39903E 01
 GEOMETRIC DEVIATION = 1.30032E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 24 (SN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	1	1	1.49	1.49
1.8E 01 -	2.6E 01	0	1	0.0	1.49
2.6E 01 -	3.8E 01	0	1	0.0	1.49
3.8E 01 -	5.6E 01	1	2	1.49	2.99
5.6E 01 -	8.3E 01	0	2	0.0	2.99
8.3E 01 -	1.2E 02	0	2	0.0	2.99
1.2E 02 -	1.8E 02	1	3	1.49	4.48

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 24 (SN PPM)

1.5E 01 X
2.0E 01
3.0E 01
5.0E 01 X
7.0E 01
1.0E 02
1.5E 02 X

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL

VALUES

N	L	H	B	T	G
64	0	0	0	0	0
95.52	0.0	0	0	0.0	0.0

MAXIMUM = 1.50000E 02
MINIMUM = 1.50000E 01
GEOMETRIC MEAN = 4.82743E 01
GEOMETRIC DEVIATION = 3.16355E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 25 (SR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 01 -	1.2E 02	10	10	14.93	14.93
1.2E 02 -	1.8E 02	16	26	23.88	38.81
1.8E 02 -	2.6E 02	20	46	29.85	68.66
2.6E 02 -	3.8E 02	13	59	19.40	88.06
3.8E 02 -	5.6E 02	2	61	2.99	91.04
5.6E 02 -	8.3E 02	1	62	1.49	92.54

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 25 (SR PPM)

```

1.0E 02 XXXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXX
7.0E 02 X

```

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL

VALUES

62

T 0.0

B 0

H 0

L 5 7.46

N 0.0

MAXIMUM = 7.00000E 02
 MINIMUM = 1.00000E 02
 GEOMETRIC MEAN = 1.90004E 02
 GEOMETRIC DEVIATION = 1.53935E 00

TITLE
EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 26 (V PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
LOWER	UPPER				
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	1	1	1.49	1.49
3.8E 01 -	5.6E 01	0	1	0.0	1.49
5.6E 01 -	8.3E 01	0	1	0.0	1.49
8.3E 01 -	1.2E 02	0	1	0.0	1.49
1.2E 02 -	1.8E 02	7	8	10.45	11.94
1.8E 02 -	2.6E 02	27	35	40.30	52.24
2.6E 02 -	3.8E 02	32	67	47.76	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

HISTOGRAM FOR COLUMN 26 (V PPM)

```

3.0E 01 X
5.0E 01
7.0E 01
1.0E 02
1.5E 02 XXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

ANALYTICAL

VALUES

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

MAXIMUM = 3.00000E 02
 MINIMUM = 3.00000E 01
 GEOMETRIC MEAN = 2.28968E 02
 GEOMETRIC DEVIATION = 1.42295E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 28 (Y PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER - UPPER					
8.3E 00 -	1.2E 01	1	1	1.49	1.49
1.2E 01 -	1.8E 01	6	7	8.96	10.45
1.8E 01 -	2.6E 01	24	31	35.82	46.27
2.6E 01 -	3.8E 01	26	57	38.81	85.07
3.8E 01 -	5.6E 01	7	64	10.45	95.52
5.6E 01 -	8.3E 01	2	66	2.99	98.51
8.3E 01 -	1.2E 02	1	67	1.49	100.00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 28 (Y PPM)

```

1.0E 01 X
1.5E 01 XXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXX
7.0E 01 XXX
1.0E 02 X

```

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

ANALYTICAL
VALUES

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0			0.0	0.0

MAXIMUM = 1.00000E 02
 MINIMUM = 1.00000E 01
 GEOMETRIC MEAN = 2.64195E 01
 GEOMETRIC DEVIATION = 1.52272E 00

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 29 (ZN PPM)

LIMITS		FREQ	CUM	PERCENT FREQ	PERCENT CUM
LOWER	UPPER				
1.8E 02	2.6E 02	4	4	5.97	5.97
2.6E 02	3.8E 02	1	5	1.49	7.46
3.8E 02	5.6E 02	1	6	1.49	8.96

HISTOGRAM FOR COLUMN 29 (ZN PPM)

2.0E 02 XXXXXX
 3.0E 02 X
 5.0E 02 X

ANALYTICAL
VALUES

N	L	H	B	T	G
52	9	0	0	0	0
77.61	13.43			0.0	0.0

MAXIMUM = 5.00000E 02
 MINIMUM = 2.00000E 02
 GEOMETRIC MEAN = 2.49287E 02
 GEOMETRIC DEVIATION = 1.45865E 00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

TITLE

EASTERN EAGLE STREAM SEDS-1970

FREQUENCY TABLE FOR COLUMN 30 (ZR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0
5.6E 01 -	8.3E 01	0	0	0.0	0.0
8.3E 01 -	1.2E 02	3	3	4.48	4.48
1.2E 02 -	1.8E 02	12	15	17.91	22.39
1.8E 02 -	2.6E 02	19	34	28.36	50.75
2.6E 02 -	3.8E 02	28	62	41.79	92.54
3.8E 02 -	5.6E 02	5	67	7.46	100.00

HISTOGRAM FOR COLUMN 30 (ZR PPM)

1.0E 02 XXXX
 1.5E 02 XXXXXXXXXXXXXXXXXXXX
 2.0E 02 XXXXXXXXXXXXXXXXXXXX
 3.0E 02 XXXXXXXXXXXXXXXXXXXX
 5.0E 02 XXXXXXXX

ANALYTICAL

VALUES

N	L	H	B	T	G
0	0	0	0	0	0
0.0	0.0	0	0	0.0	0.0

MAXIMUM = 5.00000E 02
 MINIMUM = 1.00000E 02
 GEOMETRIC MEAN = 2.33590E 02
 GEOMETRIC DEVIATION = 1.46486E 00

Explanation

Semiquantitative spectrographic analyses by the U.S. Geological Survey are reported as geometric midpoints (1, 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, etc.) of geometric brackets having the boundaries 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, .12, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

The letter E after a value stands for decimal exponent and is followed by a signed or unsigned, one- or two-digit integer constant. In this case, a value 1.0E-01 means 1.0×10^{-1} or 0.1, a value 1.0E 01 means 1.0×10^1 or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means 1.0×10^2 or 100, etc.

Histograms represent percent frequency distribution where each X equals one percent.

TITLE
EASTERN EAGLE STREAM SEDS-1970

IN THE COMPUTATIONS PERFORMED TO PRODUCE THE FOLLOWING TABLE OF GEOMETRIC MEANS AND DEVIATIONS, ALL ELEMENTS ARE IGNORED WHERE ONE OR MORE OF THE UNQUALIFIED DATA VALUES IS LESS THAN THE ANALYTICAL LIMIT OF DETECTION SPECIFIED ON INPUT OR WHERE ANY DATA VALUES ARE QUALIFIED WITH THE G (GREATER THAN) CODE. DATA VALUES QUALIFIED WITH B OR H ARE NOT USED IN THE COMPUTATIONS. WHERE NONE OF THE DATA VALUES FOR AN ELEMENT ARE QUALIFIED THE MEAN AND DEVIATION SHOULD BE THE SAME AS THOSE GIVEN IN THE PRECEDING SECTION. WHERE DATA ARE QUALIFIED WITH THE CODES N, L, OR T, THE ESTIMATES OF GEOMETRIC MEAN AND DEVIATION ARE BASED ON A METHOD BY A. J. COHEN FOR TREATING CENSORED DISTRIBUTIONS. THE APPLICATION OF THIS METHOD TO GEOCHEMICAL PROBLEMS IS DESCRIBED IN USGS PROFESSIONAL PAPER 574-B. THE ESTIMATES ARE UNBIASED IN A STRICT SENSE ONLY WHERE THE DATA ARE DERIVED FROM A LOGNORMAL PARENT POPULATION, BUT EXPERIMENTS HAVE SHOWN THAT LARGE DEPARTURES FROM THIS REQUIREMENT MAY NOT GREATLY INVALIDATE THE RESULTS ACCEPTANCE AND USE OF THE ESTIMATES, HOWEVER, IS THE RESPONSIBILITY OF THE INDIVIDUAL.

ELEMENT	N	L	H	B	T	G	ANALYTICAL VALUES
FE PCT	0	0	0	0	0	0	67
MG PCT	0	0	0	0	0	0	67
CA PCT	0	0	0	0	0	0	67
TI PCT	0	0	0	0	0	2	65
MN PPM	0	0	0	0	0	1	66
AG PPM	54	9	0	0	0	0	4
AS PPM	67	0	0	0	0	0	0
AU PPM	67	0	0	0	0	0	0
B PPM	0	0	0	0	0	0	67
BA PPM	0	0	0	0	0	0	67
BE PPM	1	21	0	0	0	0	45
BI PPM	67	0	0	0	0	0	0
CD PPM	67	0	0	0	0	0	0
CO PPM	0	1	0	0	0	0	66
CR PPM	0	0	0	0	0	0	67
CU PPM	0	0	0	0	0	0	67
LA PPM	8	27	0	0	0	0	32
MO PPM	32	31	0	0	0	0	4
NB PPM	0	7	0	0	0	0	60
NI PPM	0	0	0	0	0	0	67
PB PPM	0	1	0	0	0	0	66
SB PPM	67	0	0	0	0	0	0
SC PPM	0	1	0	0	0	0	66
SN PPM	64	0	0	0	0	0	3
SR PPM	0	5	0	0	0	0	62
V PPM	0	0	0	0	0	0	67
W PPM	67	0	0	0	0	0	0
Y PPM	0	0	0	0	0	0	67
ZN PPM	52	9	0	0	0	0	6
ZR PPM	0	0	0	0	0	0	67
AU PPM	0	66	0	0	0	0	1

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS
FE PCT	7.867200	1.35	67 SAMPLES AND 67 ANALYTICAL VALUES.
MG PCT	2.147264	1.52	67 SAMPLES AND 67 ANALYTICAL VALUES.
CA PCT	1.618463	1.58	67 SAMPLES AND 67 ANALYTICAL VALUES.
TI PCT	*****	*****	2 GREATER THAN VALUES. NO COMPUTATIONS.

MN PPM	*****	1 GREATER THAN VALUES. NO COMPUTATIONS.	4 REPORTED VALUES. NO COMPUTATIONS.
AG PPM	*****	63 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
AS PPM	*****	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
AU PPM	*****	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.	
B PPM	*****	67 SAMPLES AND 67 ANALYTICAL VALUES.	
HA PPM	51.050018	67 SAMPLES AND 67 ANALYTICAL VALUES.	
BE PPM	719.950884	22 NOT DETECTED, LESS THAN, OR TRACE VALUES.	45 REPORTED VALUES. NO COMPUTATIONS.
BI PPM	*****	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
CD PPM	*****	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
CO PPM	*****	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.	66 REPORTED VALUES.
CR PPM	21.889267	67 SAMPLES AND 67 ANALYTICAL VALUES.	
CU PPM	176.750793	67 SAMPLES AND 67 ANALYTICAL VALUES.	
LA PPM	73.910187	35 NOT DETECTED, LESS THAN, OR TRACE VALUES.	32 REPORTED VALUES. NO COMPUTATIONS.
MO PPM	*****	63 NOT DETECTED, LESS THAN, OR TRACE VALUES.	4 REPORTED VALUES. NO COMPUTATIONS.
NB PPM	*****	7 NOT DETECTED, LESS THAN, OR TRACE VALUES.	60 REPORTED VALUES.
PB PPM	11.634299	67 SAMPLES AND 67 ANALYTICAL VALUES.	
SB PPM	99.785751	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.	66 REPORTED VALUES.
SC PPM	35.605026	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
SN PPM	*****	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.	66 REPORTED VALUES.
SR PPM	23.319946	64 NOT DETECTED, LESS THAN, OR TRACE VALUES.	3 REPORTED VALUES. NO COMPUTATIONS.
V PPM	175.637253	5 NOT DETECTED, LESS THAN, OR TRACE VALUES.	62 REPORTED VALUES.
W PPM	228.968018	67 SAMPLES AND 67 ANALYTICAL VALUES.	
Y PPM	26.419418	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
ZN PPM	*****	67 SAMPLES AND 67 ANALYTICAL VALUES.	6 REPORTED VALUES. NO COMPUTATIONS.
ZR PPM	233.588898	67 SAMPLES AND 67 ANALYTICAL VALUES.	1 REPORTED VALUES. NO COMPUTATIONS.
AU PPM	*****	66 NOT DETECTED, LESS THAN, OR TRACE VALUES.	

TITLE
EASTERN EAGLE QUAD ROCKS-1970

TABLE 2. ROCK SAMPLES*

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
1 BAK018	15.0000	7.0000	7.0000	1.0000G	3000.0000	0.5000N	200.0000N	10.0000N	10.0000L	70.0000
2 BAK017	10.0000	10.0000G	0.3000	0.0150	1000.0000	0.5000N	200.0000N	10.0000N	100.0000	100.0000
3 BAK019	15.0000	10.0000	15.0000	1.0000G	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	20.0000L
4 BAK016	10.0000	3.0000	5.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	1500.0000
5 BAK020	5.0000	0.3000	0.0500L	0.1500	1000.0000	0.5000N	200.0000L	10.0000N	10.0000L	300.0000
6 BAK023	5.0000	1.5000	0.3000	0.7000	500.0000	1.0000	200.0000N	10.0000N	70.0000	200.0000
7 BAK022	7.0000	10.0000	7.0000	0.0150	700.0000	0.5000N	200.0000N	10.0000N	10.0000L	150.0000
8 BAK021	7.0000	7.0000	15.0000	0.1500	3000.0000	0.5000N	200.0000N	10.0000N	10.0000L	150.0000
9 BAK015	1.5000	0.7000	0.0500L	0.3000	70.0000	0.5000L	200.0000L	10.0000N	70.0000	700.0000
10 BAK014	10.0000	10.0000G	0.0500L	0.0150	3000.0000	0.5000N	200.0000N	10.0000N	70.0000	150.0000
11 BAK013	7.0000	5.0000	0.3000	0.5000	700.0000	0.5000N	200.0000N	10.0000N	10.0000L	300.0000
12 BAK623	20.0000	1.5000	2.0000	0.2000	5000.0000	2.0000	200.0000N	10.0000N	30.0000	300.0000
13 BAK622	15.0000	0.2000	0.0500L	0.1500	30.0000	15.0000	200.0000N	10.0000N	30.0000	700.0000
14 BAK621	5.0000	2.0000	0.1000	3.0000	700.0000	0.5000L	200.0000N	10.0000N	30.0000	1500.0000
15 BAK012	10.0000	10.0000G	0.0500L	0.0200	500.0000	0.5000N	200.0000N	10.0000N	20.0000	20.0000L
16 BAK104	15.0000	7.0000	10.0000	1.0000	3000.0000	0.5000N	200.0000N	10.0000N	10.0000	70.0000
17 BAK103	15.0000	7.0000	7.0000	1.0000G	5000.0000	0.5000N	200.0000N	10.0000N	10.0000L	300.0000
18a BAK100	15.0000	10.0000G	20.0000G	0.0100	1500.0000	0.5000N	200.0000N	10.0000N	10.0000N	300.0000
18b BAK101	15.0000	10.0000G	20.0000G	0.0300	2000.0000	0.5000N	200.0000N	10.0000N	10.0000L	700.0000
18c BAK102	15.0000	10.0000G	2.0000	0.0300	1500.0000	0.5000N	200.0000N	10.0000N	15.0000	70.0000
19a BAK005	3.0000	2.0000	20.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	700.0000
19b BAK006	5.0000	5.0000	10.0000	0.7000	1000.0000	0.5000N	200.0000N	10.0000N	70.0000	300.0000
19c BAK007	20.0000	0.7000	0.3000	0.0150	100.0000	7.0000	700.0000	10.0000N	50.0000	150.0000
19d BAK008	7.0000	5.0000	20.0000	0.1500	1500.0000	0.5000N	200.0000N	10.0000N	30.0000	150.0000
19e BAK009	3.0000	1.5000	5.0000	0.0700	500.0000	0.5000N	300.0000	10.0000N	10.0000L	50.0000
20 BAK011	7.0000	7.0000	5.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	20.0000	70.0000
21a BAK002	10.0000	5.0000	10.0000	0.7000	2000.0000	0.5000N	200.0000L	10.0000N	30.0000	700.0000
21b BAK003	0.3000	0.7000	2.0000	0.0050	300.0000	0.5000N	200.0000L	10.0000N	10.0000L	20.0000L
21c BAK004	7.0000	7.0000	15.0000	0.0070	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	300.0000
22 BAK001	7.0000	1.5000	2.0000	0.3000	700.0000	0.5000N	200.0000N	10.0000N	15.0000	150.0000
23 BAK105	15.0000	3.0000	7.0000	0.5000	2000.0000	0.5000N	200.0000N	10.0000N	15.0000	300.0000
24 BAK106	2.0000	1.5000	0.0700	0.1500	150.0000	0.5000N	200.0000N	10.0000N	50.0000	200.0000
25 BAK107	15.0000	7.0000	15.0000	1.0000G	2000.0000	0.5000N	200.0000N	10.0000N	10.0000	150.0000
26 BAK108	20.0000	7.0000	15.0000	1.0000G	5000.0000	0.5000N	200.0000N	10.0000N	15.0000	200.0000
27 BAK109	15.0000	7.0000	15.0000	1.0000G	5000.0000	0.5000N	200.0000N	10.0000N	10.0000	150.0000
28 BAK110	20.0000	10.0000	15.0000	1.0000G	5000.0000	0.5000N	200.0000N	10.0000N	15.0000	150.0000
29 BAK010	3.0000	3.0000	10.0000	0.0700	1500.0000	0.5000N	200.0000L	10.0000N	10.0000N	150.0000
30 BAK112	20.0000	7.0000	15.0000	1.0000G	3000.0000	0.5000N	200.0000N	10.0000N	10.0000	100.0000
31 BAK111	7.0000	1.0000	0.7000	0.2000	700.0000	0.5000N	200.0000N	10.0000N	50.0000	700.0000
32 BAK093	7.0000	1.5000	0.0700	0.3000	1000.0000	0.5000L	200.0000N	10.0000N	30.0000	20.0000
33 BAK096	5.0000	1.0000	0.3000	0.3000	500.0000	0.5000N	200.0000N	10.0000N	70.0000	700.0000
34 BAK095	7.0000	10.0000	20.0000	0.3000	1000.0000	0.5000N	200.0000N	10.0000N	10.0000L	70.0000
35 BAK094	3.0000	0.2000	0.0500	0.3000	150.0000	0.5000N	200.0000N	10.0000N	10.0000N	150.0000
36 BAK099	15.0000	10.0000G	0.0500L	0.0300	1500.0000	0.5000N	200.0000N	10.0000N	20.0000	20.0000L
37 BAK098	0.5000	0.0500	0.0500L	0.1500	70.0000	0.5000	200.0000N	10.0000N	10.0000N	1000.0000
38 BAK097	15.0000	5.0000	5.0000	0.7000	3000.0000	0.5000N	200.0000N	10.0000N	10.0000L	700.0000
39 BAK037	5.0000	2.0000	7.0000	0.3000	2000.0000	0.5000N	200.0000N	10.0000N	10.0000L	100.0000
40 BAK036	3.0000	1.5000	1.5000	0.2000	700.0000	0.5000N	200.0000N	10.0000N	15.0000	1500.0000
41 BAK024	10.0000	10.0000	20.0000	0.1500	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	20.0000L
42 BAK025	3.0000	0.7000	0.7000	0.1500	700.0000	0.5000N	200.0000N	10.0000N	15.0000	1500.0000

*Note that the right-most zero digits of each data value may or may not be significant.

TITLE

EASTERN EAGLE QUAD ROCKS-1970

TABLE 2. ROCK SAMPLES

SAMPLE	BE PPM	BI PPM	CO PPM	CR PPM	CU PPM	LA PPM	MD PPM	NB PPM	NI PPM
1 BAK018	1.0000	10.0000	20.0000	150.0000	150.0000	20.0000	5.0000L	10.0000	150.0000
2 BAK017	1.0000	10.0000	20.0000	5000.0000	100.0000	20.0000	5.0000L	10.0000	5000.0000
3 BAK019	1.0000	10.0000	20.0000	1000.0000	70.0000	20.0000	5.0000L	10.0000	300.0000
4 BAK016	1.5000	10.0000	20.0000	70.0000	70.0000	30.0000	5.0000L	10.0000	20.0000
5 BAK020	1.0000L	10.0000	20.0000	10.0000L	70.0000	20.0000L	5.0000L	10.0000	30.0000
6 BAK023	1.5000	10.0000	20.0000	150.0000	100.0000	20.0000L	5.0000L	10.0000	30.0000
7 BAK022	1.5000	10.0000	20.0000	1500.0000	70.0000	20.0000	5.0000L	10.0000	700.0000
8 BAK021	7.0000	10.0000	20.0000	2000.0000	30.0000	20.0000	5.0000L	10.0000	1500.0000
9 BAK015	1.0000L	10.0000	20.0000	70.0000	70.0000	20.0000L	5.0000L	10.0000	30.0000
10 BAK014	1.0000	10.0000	20.0000	5000.0000G	70.0000	20.0000	5.0000L	10.0000L	3000.0000
11 BAK013	1.0000L	10.0000	20.0000	10.0000L	70.0000	20.0000	5.0000L	10.0000L	100.0000
12 BAK623	1.0000	10.0000	20.0000	30.0000	150.0000	50.0000	7.0000	10.0000	150.0000
13 BAK622	1.0000L	10.0000	20.0000	30.0000	15.0000	20.0000	70.0000	10.0000	30.0000
14 BAK621	1.0000L	10.0000	20.0000	30.0000	70.0000	20.0000L	5.0000L	10.0000L	30.0000
15 BAK012	1.0000	10.0000	20.0000	5000.0000	70.0000	20.0000	5.0000L	10.0000L	3000.0000
16 BAK104	1.0000	10.0000	20.0000	700.0000	100.0000	20.0000	5.0000L	10.0000L	150.0000
17 BAK103	1.0000	10.0000	20.0000	50.0000	70.0000	70.0000	5.0000L	15.0000	30.0000
18a BAK100	1.0000	10.0000	20.0000	150.0000	70.0000	20.0000	5.0000L	10.0000L	200.0000
18b BAK101	1.0000L	10.0000	20.0000	5000.0000G	70.0000	20.0000	5.0000L	10.0000	5000.0000
18c BAK102	1.0000	10.0000	20.0000	5000.0000G	100.0000	20.0000	5.0000L	10.0000	5000.0000
19a BAK005	1.0000	10.0000	20.0000	300.0000	70.0000	20.0000L	5.0000L	10.0000L	150.0000
19b BAK006	1.0000L	10.0000	20.0000	300.0000	70.0000	20.0000L	5.0000L	10.0000L	70.0000
19c BAK007	1.0000L	10.0000	20.0000	50.0000	100.0000	20.0000	30.0000	10.0000	50.0000
19d BAK008	1.0000L	10.0000	20.0000	50.0000	70.0000	20.0000	5.0000	10.0000	50.0000
19e BAK009	1.0000	10.0000	20.0000	10.0000L	15.0000	20.0000	5.0000L	10.0000L	70.0000
20 BAK011	1.0000	10.0000	20.0000	300.0000	50.0000	20.0000L	5.0000L	10.0000L	150.0000
21a BAK002	1.0000L	10.0000	20.0000	300.0000	150.0000	20.0000	5.0000L	10.0000L	100.0000
21b BAK003	1.0000	10.0000	20.0000	10.0000L	70.0000	20.0000	5.0000L	10.0000L	30.0000
21c BAK004	1.0000	10.0000	20.0000	10.0000	30.0000	20.0000	5.0000L	10.0000L	15.0000
22 BAK001	1.0000L	10.0000	20.0000	10.0000L	1000.0000	20.0000L	5.0000L	10.0000	30.0000
23 BAK105	1.0000L	10.0000	20.0000	10.0000L	70.0000	20.0000L	5.0000L	10.0000L	10.0000
24 BAK106	5.0000	10.0000	20.0000	10.0000L	20.0000	70.0000	5.0000L	10.0000	5.0000L
25 BAK107	1.0000	10.0000	20.0000	700.0000	100.0000	20.0000	7.0000	10.0000L	150.0000
26 BAK108	1.0000L	10.0000	20.0000	700.0000	150.0000	20.0000L	5.0000L	10.0000	200.0000
27 BAK109	1.0000L	10.0000	20.0000	70.0000	100.0000	20.0000L	5.0000L	10.0000	70.0000
28 BAK110	1.0000L	10.0000	20.0000	700.0000	150.0000	20.0000L	5.0000	10.0000L	300.0000
29 BAK010	1.0000	10.0000	20.0000	10.0000L	70.0000	20.0000	5.0000L	10.0000L	15.0000
30 BAK112	1.0000	10.0000	20.0000	10.0000	300.0000	20.0000	5.0000L	10.0000	150.0000
31 BAK111	7.0000	10.0000	20.0000	10.0000L	100.0000	300.0000	5.0000L	30.0000	15.0000
32 BAK093	1.0000	10.0000L	20.0000	70.0000	30.0000	20.0000	5.0000L	10.0000	30.0000
33 BAK096	1.5000	10.0000L	20.0000	70.0000	100.0000	20.0000L	5.0000L	10.0000	70.0000
34 BAK095	1.0000	10.0000	20.0000	300.0000	70.0000	20.0000	5.0000L	10.0000L	150.0000
35 BAK094	1.0000L	10.0000	20.0000	30.0000	150.0000	30.0000	5.0000L	10.0000L	10.0000
36 BAK099	1.0000	10.0000	20.0000	5000.0000	100.0000	20.0000	5.0000L	10.0000L	5000.0000
37 BAK098	1.0000	10.0000	20.0000	20.0000	30.0000	20.0000	5.0000L	10.0000L	5.0000L
38 BAK097	1.0000L	10.0000	20.0000	100.0000	100.0000	20.0000	5.0000L	10.0000	30.0000
39 BAK037	1.0000	10.0000	20.0000	30.0000	50.0000	20.0000L	5.0000L	10.0000	150.0000
40 BAK036	1.5000	10.0000	20.0000	10.0000L	70.0000	20.0000	5.0000L	10.0000L	5.0000
41 BAK024	1.0000	10.0000	20.0000	5000.0000G	20.0000	20.0000	5.0000L	10.0000	200.0000
42 BAK025	3.0000	10.0000	20.0000	20.0000	70.0000	20.0000	5.0000L	10.0000	15.0000

TITLE
EASTERN EAGLE QUAD ROCKS-1970

TABLE 2. ROCK SAMPLES

SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
1 JAK018	10.0000L	100.0000N	100.0000	10.0000N	500.0000	500.0000	50.0000N	70.0000	200.0000L	150.0000
2 BAK017	10.0000N	100.0000N	15.0000	10.0000N	100.0000N	70.0000	50.0000N	10.0000N	200.0000N	10.0000N
3 BAK019	10.0000L	100.0000N	70.0000	10.0000N	300.0000	700.0000	50.0000N	15.0000	200.0000L	70.0000
4 BAK016	50.0000	100.0000N	30.0000	10.0000N	1500.0000	200.0000	50.0000N	30.0000	200.0000L	150.0000
5 BAK020	10.0000N	100.0000N	5.0000L	10.0000N	100.0000N	50.0000	50.0000N	10.0000L	200.0000N	30.0000
6 BAK023	30.0000	100.0000N	20.0000	10.0000N	100.0000L	300.0000	50.0000N	20.0000	200.0000N	200.0000
7 BAK022	10.0000	100.0000N	5.0000L	10.0000N	1000.0000	30.0000	50.0000N	10.0000	200.0000N	10.0000L
8 BAK021	10.0000N	100.0000N	30.0000	10.0000N	1000.0000	300.0000	50.0000N	15.0000	200.0000N	30.0000
9 BAK015	15.0000	100.0000N	10.0000	10.0000N	100.0000N	200.0000	50.0000N	10.0000L	200.0000N	100.0000
10 BAK014	10.0000L	100.0000N	20.0000	10.0000N	100.0000N	150.0000	50.0000N	10.0000N	200.0000N	10.0000N
11 BAK013	20.0000	100.0000N	30.0000	10.0000N	200.0000	300.0000	50.0000N	30.0000	200.0000N	200.0000
12 BAK623	100.0000	100.0000N	10.0000	10.0000N	300.0000	70.0000	50.0000N	150.0000	200.0000N	70.0000
13 BAK622	70.0000	100.0000	7.0000	10.0000N	100.0000L	200.0000	50.0000N	10.0000	200.0000N	70.0000
14 BAK621	15.0000	100.0000N	15.0000	10.0000N	100.0000L	150.0000	50.0000N	20.0000	200.0000N	200.0000
15 BAK012	10.0000L	100.0000N	15.0000	10.0000N	100.0000N	70.0000	50.0000N	10.0000N	200.0000N	10.0000L
16 BAK104	10.0000L	100.0000N	50.0000	10.0000N	200.0000	700.0000	50.0000N	20.0000	200.0000N	70.0000
17 BAK103	10.0000L	100.0000N	30.0000	10.0000N	700.0000	150.0000	50.0000N	70.0000	200.0000N	300.0000
18a BAK100	30.0000	100.0000N	5.0000L	10.0000N	700.0000	20.0000	50.0000N	10.0000L	200.0000N	10.0000L
18b BAK101	20.0000	100.0000N	20.0000	10.0000N	700.0000	150.0000	50.0000N	10.0000L	200.0000N	10.0000L
18c BAK102	15.0000	100.0000N	20.0000	10.0000N	100.0000L	100.0000	50.0000N	10.0000L	200.0000N	10.0000L
19a BAK005	20.0000	100.0000N	30.0000	10.0000N	500.0000	150.0000	50.0000N	30.0000	200.0000N	150.0000
19b BAK006	10.0000	100.0000N	30.0000	10.0000N	200.0000	150.0000	50.0000N	20.0000	200.0000N	150.0000
19c BAK007	10.0000L	100.0000N	5.0000L	10.0000N	100.0000L	300.0000	50.0000N	10.0000N	200.0000N	10.0000L
19d BAK008	15.0000	100.0000N	5.0000L	10.0000N	1000.0000	70.0000	50.0000N	15.0000	200.0000N	50.0000
19e BAK009	10.0000N	100.0000N	5.0000L	10.0000N	100.0000L	30.0000	50.0000N	10.0000L	200.0000N	10.0000L
20 BAK011	10.0000L	100.0000N	30.0000	10.0000N	100.0000	300.0000	50.0000N	30.0000	200.0000N	150.0000
21a BAK002	20.0000	100.0000N	30.0000	10.0000N	700.0000	300.0000	50.0000N	30.0000	200.0000L	70.0000
21b BAK003	10.0000N	100.0000N	5.0000N	10.0000N	100.0000L	15.0000	50.0000N	10.0000N	200.0000N	10.0000N
21c BAK004	10.0000L	100.0000N	15.0000	10.0000N	1500.0000	70.0000	50.0000N	10.0000	200.0000N	10.0000N
22 BAK001	15.0000	100.0000N	30.0000	10.0000N	100.0000L	300.0000	50.0000N	20.0000	200.0000N	70.0000
23 BAK105	15.0000	100.0000N	15.0000	10.0000N	200.0000	300.0000	50.0000N	20.0000	200.0000N	70.0000
24 BAK106	50.0000	100.0000N	5.0000L	20.0000	100.0000N	20.0000	50.0000N	30.0000	200.0000N	150.0000
25 BAK107	10.0000L	100.0000N	70.0000	10.0000N	700.0000	700.0000	50.0000N	50.0000	200.0000N	150.0000
26 BAK108	15.0000	100.0000N	100.0000	10.0000N	500.0000	700.0000	50.0000N	70.0000	200.0000N	300.0000
27 BAK109	15.0000	100.0000N	70.0000	10.0000N	1500.0000	500.0000	50.0000N	50.0000	200.0000N	200.0000
28 BAK110	30.0000	100.0000N	100.0000	10.0000N	1000.0000	700.0000	50.0000N	50.0000	200.0000N	300.0000
29 BAK110	10.0000	100.0000N	5.0000L	10.0000N	100.0000L	50.0000	50.0000N	70.0000	200.0000N	10.0000L
30 BAK112	10.0000L	100.0000N	70.0000	10.0000N	100.0000L	1500.0000	50.0000N	20.0000	200.0000N	10.0000L
31 BAK111	15.0000	100.0000N	5.0000L	15.0000	100.0000L	20.0000	50.0000N	100.0000	200.0000N	1000.0000G
32 BAK093	10.0000	100.0000N	15.0000	10.0000N	100.0000N	70.0000	50.0000N	15.0000	200.0000N	70.0000
33 BAK096	15.0000	100.0000N	15.0000	10.0000N	100.0000L	200.0000	50.0000N	10.0000	200.0000N	300.0000
34 BAK095	10.0000	100.0000N	30.0000	10.0000N	300.0000	200.0000	50.0000N	15.0000	200.0000N	10.0000L
35 BAK034	70.0000	100.0000N	7.0000	10.0000N	300.0000	70.0000	50.0000N	20.0000	200.0000N	150.0000
36 BAK099	200.0000L	100.0000N	15.0000	10.0000N	100.0000N	30.0000	50.0000N	10.0000L	200.0000N	100.0000L
37 BAK098	15.0000	100.0000N	30.0000L	10.0000N	100.0000N	30.0000	50.0000N	10.0000L	200.0000N	100.0000
38 BAK097	10.0000	100.0000N	15.0000	10.0000N	300.0000	500.0000	50.0000N	20.0000	200.0000N	150.0000
39 BAK037	10.0000L	100.0000N	15.0000	10.0000N	500.0000	150.0000	50.0000N	30.0000	200.0000N	150.0000
40 BAK036	70.0000	100.0000N	5.0000L	10.0000N	1000.0000	30.0000	50.0000N	10.0000	200.0000N	70.0000
41 BAK024	10.0000N	100.0000N	70.0000	10.0000N	100.0000L	200.0000	50.0000N	10.0000L	200.0000N	10.0000N
42 BAK025	50.0000	100.0000N	5.0000N	10.0000N	1500.0000	30.0000	50.0000N	15.0000	200.0000N	70.0000

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EASTERN EAGLE QUAD ROCKS-1970

TABLE 2. ROCK SAMPLES

SAMPLE	AU PPM	ROCK NAME	SYMBOL
1 BAK018	0.0200L	Ultramafic rock	U
2 BAK017	0.0200L	Ultramafic rock	U
3 BAK019	0.0200L	Ultramafic rock	U
4 BAK016	0.0200L	Diorite(?)	M
5 BAK020	0.0200L	Quartzite	M
6 BAK023	0.0200L	Quartzitic schist	M
7 BAK022	0.0200L	Ultramafic rock	M
8 BAK021	0.0200L	Fault gouge	U
9 BAK015	0.0200L	Quartz schist	M
10 BAK014	0.0200L	Quartzite	U
11 BAK013	0.0200L	Quartzite	M
12 BAK623	0.0200L	Phyllite	M
13 BAK622	0.0200L	Phyllite	M
14 BAK621	0.0200L	Micaceous quartz schist	M
15 BAK012	0.0200L	Serpentinized ultramafic	U
16 BAK104	0.0200L	Greenstone	M
17 BAK103	0.0200L	Garnetiferous amphibolite	U
18a BAK100	0.0200L	Marble	M
18b BAK101	0.0200L	Carbonate rock	M
18c BAK102	0.0200L	Serpentine	U
19a BAK005	0.0200L	Diorite(?)	U
19b BAK006	0.0200L	Dolomite(?)	M
19c BAK007	0.0200L	Gossan	M
19d BAK008	0.0200L	Quartzite	M
19e BAK009	0.0200L	Vein quartz	M
20 BAK011	0.0200L	Greenstone	M
21a BAK002	0.0200L	Altered dike rock	M
21b BAK003	0.0200L	Vein quartz	U
21c BAK004	0.0200L	Vein quartz	U
22 BAK001	0.0200L	Greenstone	U
23 BAK105	0.0200L	Greenstone	M
24 BAK106	0.0200L	Silicic volcanic rock	U
25 BAK107	0.0200L	Greenstone	M
26 BAK108	0.0200L	Greenstone	M
27 BAK109	0.0200L	Basalt	M
28 BAK110	0.0200L	Greenstone	M
29 BAK010	0.0200L	Quartz graphite schist	U
30 BAK112	0.0200L	Ultramafic	M
31 BAK111	0.0200L	Quartz rock	M
32 BAK093	0.0200L	Quartz-muscovite schist	M
33 BAK096	0.0200L	Gneiss breccia	M
34 BAK095	0.0200L	Carbonate rock	U
35 BAK094	0.0200L	Quartz-feldspar rock	U
36 BAK099	0.0200L	Serpentine	U
37 BAK098	0.0200L	Quartz-graphite schist	U
38 BAK097	0.0200L	Quartz-muscovite schist	U
39 BAK037	0.0200L	Quartzite	M
40 BAK036	0.0200L	Muscovite-biotite granite	U
41 BAK024	0.0200L	Ultramafic	U
42 BAK025	0.0200L	Granitic dike rock	M

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EASTERN EAGLE QUAD ROCKS-1970

TABLE 2.

ROCK SAMPLES

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
43a BAK026	2.0000	0.5000	1.0000	0.7000	300.0000	0.5000N	200.0000N	10.0000N	10.0000	5000.0000
43b BAK027	0.2000	1.5000	1.0000	0.3000	300.0000	0.5000N	200.0000N	10.0000N	10.0000	700.0000
44 BAK028	0.7000	0.0300	0.0500L	0.0020L	30.0000	0.5000L	200.0000N	10.0000N	10.0000N	300.0000
45 BAK029	7.0000	5.0000	5.0000	0.3000	1000.0000	0.5000L	200.0000N	10.0000N	10.0000	1500.0000
46 BAK030	1.5000	7.0000	20.0000G	0.1000	500.0000	0.5000N	200.0000N	10.0000N	10.0000N	150.0000
47 BAK031	0.3000	1.0000	20.0000G	0.1000	500.0000	0.5000N	200.0000N	10.0000N	10.0000N	700.0000
48 BAK032	10.0000	10.0000	20.0000	0.3000	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	20.0000L
49 BAK033	3.0000	1.5000	20.0000G	0.1500	700.0000	0.5000N	200.0000N	10.0000N	20.0000	700.0000
50 BAK034	1.5000	5.0000	20.0000G	0.0700	700.0000	0.5000N	200.0000N	10.0000N	10.0000L	20.0000L
51 BAK035	5.0000	10.0000	20.0000	0.0300	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	20.0000L
52 BAK608	15.0000	3.0000	15.0000	1.0000G	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	30.0000
53 BAK609	15.0000	10.0000G	0.7000	0.0150	1500.0000	0.5000N	200.0000N	10.0000N	20.0000	30.0000
54 BAK610	7.0000	1.5000	0.3000	0.5000	700.0000	0.5000N	200.0000N	10.0000N	150.0000	1500.0000
55 BAK611	15.0000	3.0000	7.0000	1.0000G	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	300.0000
56 BAK602	15.0000	5.0000	7.0000	1.0000G	1500.0000	0.5000N	200.0000N	10.0000N	10.0000L	700.0000
57 BAK601	15.0000	2.0000	3.0000	1.0000G	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	1000.0000
58 BAK600	2.0000	0.0500	0.0500L	0.1000	150.0000	0.5000N	200.0000N	10.0000N	10.0000L	50.0000
59 BAK599	3.0000	0.1500	0.7000	0.1500	300.0000	0.5000N	200.0000N	10.0000N	10.0000L	500.0000
60 BAK598	15.0000	5.0000	7.0000	1.0000G	3000.0000	0.5000N	200.0000N	10.0000N	10.0000	700.0000
61a BAK596	15.0000	10.0000	20.0000	0.3000	2000.0000	1.5000	200.0000N	10.0000N	10.0000	150.0000
61b BAK597	15.0000	10.0000	15.0000	0.2000	1500.0000	1.0000	200.0000N	10.0000N	10.0000	30.0000
62 BAK594	0.1500	0.0200L	0.1500	0.0700	10.0000	0.5000N	200.0000N	10.0000N	10.0000N	70.0000
63 BAK595	15.0000	5.0000	7.0000	1.0000G	2000.0000	0.5000N	200.0000N	10.0000N	15.0000	500.0000
64 BAK593	15.0000	3.0000	7.0000	1.0000G	2000.0000	0.5000N	200.0000N	10.0000N	10.0000	700.0000
65 BAK592	2.0000	3.0000	7.0000	0.0300	1500.0000	0.5000N	200.0000N	10.0000N	10.0000N	200.0000
66 BAK591	0.1500	0.0700	0.2000	0.0300	30.0000	0.5000N	200.0000N	10.0000N	15.0000	300.0000
67 BAK589	7.0000	7.0000	20.0000	0.1000	3000.0000	0.5000N	200.0000N	10.0000N	10.0000L	200.0000
68 BAK588	0.1500	0.0200L	0.0700	0.0150	30.0000	0.5000N	200.0000N	10.0000N	10.0000N	20.0000L
69 BAK590	20.0000	5.0000	10.0000	1.0000G	2000.0000	0.5000N	200.0000N	10.0000N	20.0000	300.0000
70 BAK587	3.0000	10.0000	20.0000G	0.0200	1500.0000	0.5000N	200.0000N	10.0000N	10.0000N	20.0000
71 BAK603	15.0000	1.5000	0.0700	0.3000	1500.0000	0.5000N	200.0000N	10.0000N	15.0000	1500.0000
72 BAK604	15.0000	7.0000	10.0000	0.5000	5000.0000	0.5000N	200.0000N	10.0000N	15.0000	500.0000
73 BAK607	15.0000	7.0000	10.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	300.0000
74 BAK586	3.0000	0.3000	0.7000	0.1500	300.0000	0.5000N	200.0000N	10.0000N	10.0000N	1500.0000
75 BAK606	15.0000	10.0000	15.0000	0.3000	3000.0000	0.5000N	200.0000N	10.0000N	10.0000	150.0000
76 BAK605	15.0000	3.0000	7.0000	1.0000G	3000.0000	0.5000N	200.0000N	10.0000N	10.0000	150.0000
77 BAK585	5.0000	1.5000	1.0000	0.3000	1000.0000	0.5000N	200.0000N	10.0000N	10.0000L	150.0000
78 BAK584	15.0000	2.0000	15.0000	1.0000	2000.0000	0.5000N	200.0000N	10.0000N	10.0000	1500.0000
79 BAK612	10.0000	3.0000	2.0000	1.0000	1000.0000	0.5000N	200.0000N	10.0000N	10.0000	50.0000
80a BAK560	3.0000	1.0000	2.0000	0.2000	500.0000	0.5000N	200.0000N	10.0000N	10.0000L	300.0000
80b BAK561	3.0000	0.7000	3.0000	0.3000	700.0000	0.5000N	200.0000N	10.0000N	10.0000	700.0000
80c BAK564	10.0000	1.5000	1.5000	0.3000	1000.0000	0.5000N	200.0000N	10.0000N	15.0000	500.0000
81 BAK620	3.0000	1.5000	20.0000G	0.1500	3000.0000	0.5000N	200.0000N	10.0000N	10.0000L	150.0000
82 BAK619	15.0000	5.0000	15.0000	0.7000	1500.0000	0.5000N	200.0000N	10.0000N	15.0000	100.0000
83 BAK618	7.0000	1.5000	5.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	10.0000	700.0000
84 BAK617	20.0000	10.0000	10.0000	0.5000	1500.0000	0.5000N	200.0000N	10.0000N	15.0000	70.0000

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EASTERN EAGLE QUAD ROCKS-1970

TABLE 2. ROCK SAMPLES

SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
43 a BAK026	1.0000L	10.0000N	20.0000N	5.0000N	10.0000L	100.0000	20.0000N	5.0000N	10.0000L	10.0000
43 b BAK027	1.0000N	10.0000N	20.0000N	5.0000N	10.0000L	30.0000	20.0000N	5.0000N	10.0000L	10.0000
44 BAK028	1.0000N	10.0000N	20.0000N	5.0000N	10.0000L	100.0000	20.0000N	7.0000	10.0000L	7.0000
45 BAK029	1.0000L	10.0000N	20.0000N	5.0000N	150.0000	150.0000	20.0000L	5.0000L	10.0000	10.0000
46 BAK030	1.0000N	10.0000N	20.0000N	5.0000N	30.0000	7.0000	20.0000N	5.0000N	10.0000L	5.0000L
47 BAK031	1.0000N	10.0000N	20.0000N	5.0000N	70.0000	20.0000	20.0000N	5.0000L	10.0000N	15.0000
48 BAK032	1.0000N	10.0000N	20.0000N	50.0000	2000.0000	70.0000	20.0000N	5.0000N	10.0000	150.0000
49 BAK033	1.0000L	10.0000N	20.0000N	15.0000	70.0000	70.0000	20.0000L	5.0000N	10.0000L	70.0000
50 BAK034	1.0000N	10.0000N	20.0000N	5.0000L	70.0000	30.0000	20.0000N	5.0000N	10.0000N	30.0000
51 BAK035	1.0000N	10.0000N	20.0000N	5.0000L	30.0000	30.0000	20.0000N	5.0000N	10.0000	70.0000
52 BAK036	1.0000L	10.0000N	20.0000N	5.0000N	150.0000	70.0000	300.0000	5.0000L	10.0000	50.0000
53 BAK039	1.0000N	10.0000N	20.0000N	300.0000	5000.0000	30.0000	20.0000N	5.0000L	10.0000	5000.0000
54 BAK610	2.0000	10.0000N	20.0000N	5.0000	150.0000	50.0000	20.0000N	5.0000N	10.0000	50.0000
55 BAK611	1.5000	10.0000N	20.0000N	30.0000	50.0000	50.0000	20.0000N	5.0000N	10.0000	50.0000
56 BAK602	1.0000	10.0000N	20.0000N	30.0000	50.0000	15.0000	30.0000	5.0000	10.0000	30.0000
57 BAK601	1.5000	10.0000N	20.0000N	30.0000	30.0000	50.0000	70.0000	7.0000	15.0000	5.0000N
58 BAK600	7.0000	10.0000N	20.0000N	5.0000N	10.0000L	30.0000	20.0000N	5.0000N	20.0000	5.0000L
59 BAK599	3.0000	10.0000N	20.0000N	5.0000N	10.0000L	10.0000	100.0000	5.0000N	20.0000	5.0000L
60 BAK598	1.5000	10.0000N	20.0000N	30.0000	70.0000	70.0000	50.0000	5.0000	15.0000	50.0000
61 a BAK596	1.0000N	10.0000N	20.0000N	200.0000	5000.0000G	1000.0000	20.0000N	5.0000L	10.0000	1500.0000
61 b BAK597	1.0000N	10.0000N	20.0000N	300.0000	1500.0000	1500.0000	20.0000N	5.0000L	10.0000	300.0000
62 BAK594	1.0000N	10.0000N	20.0000N	5.0000N	10.0000L	70.0000	20.0000N	5.0000N	10.0000L	5.0000L
63 BAK595	1.0000L	10.0000N	20.0000N	50.0000	70.0000	70.0000	20.0000	5.0000	10.0000	50.0000
64 BAK593	1.0000	10.0000N	20.0000N	30.0000	50.0000	50.0000	50.0000	5.0000	10.0000	20.0000
65 BAK592	1.0000N	10.0000N	20.0000N	5.0000N	70.0000	50.0000	20.0000L	5.0000N	10.0000L	15.0000
66 BAK591	1.0000N	10.0000N	20.0000N	5.0000N	10.0000L	30.0000	20.0000N	5.0000N	10.0000L	5.0000L
67 BAK589	1.0000N	10.0000N	20.0000N	5.0000N	150.0000	30.0000	20.0000N	5.0000N	10.0000L	15.0000
68 BAK588	1.0000N	10.0000N	20.0000N	5.0000L	10.0000L	10.0000	20.0000N	5.0000N	10.0000L	15.0000
69 BAK590	1.0000L	10.0000N	20.0000N	50.0000	70.0000	50.0000	20.0000L	5.0000L	10.0000	70.0000
70 BAK587	1.0000N	10.0000N	20.0000N	5.0000N	15.0000	30.0000	20.0000N	5.0000N	10.0000L	15.0000
71 BAK603	1.0000	10.0000N	20.0000N	5.0000N	15.0000	50.0000	20.0000L	5.0000	15.0000	5.0000N
72 BAK604	1.0000N	10.0000N	20.0000N	50.0000	700.0000	30.0000	20.0000N	5.0000L	10.0000L	150.0000
73 BAK607	1.0000N	10.0000N	20.0000N	70.0000	150.0000	50.0000	20.0000N	5.0000L	10.0000L	50.0000
74 BAK586	1.5000	10.0000N	20.0000N	7.0000	10.0000L	30.0000	20.0000N	5.0000N	10.0000L	10.0000
75 BAK606	1.0000N	10.0000N	20.0000N	50.0000	1500.0000	50.0000	20.0000N	5.0000L	10.0000	150.0000
76 BAK605	1.0000	10.0000N	20.0000N	30.0000	15.0000	15.0000	30.0000	5.0000L	20.0000	5.0000N
77 BAK585	1.5000	10.0000N	20.0000N	5.0000	70.0000	50.0000	20.0000N	5.0000L	10.0000L	15.0000
78 BAK584	1.0000L	10.0000N	20.0000N	30.0000	30.0000	50.0000	20.0000L	5.0000L	10.0000	10.0000
79 BAK612	1.5000	10.0000N	20.0000N	30.0000	100.0000	30.0000	30.0000	5.0000L	10.0000	50.0000
80 a BAK560	1.0000L	10.0000N	20.0000N	5.0000N	10.0000L	5.0000N	20.0000N	5.0000N	10.0000L	5.0000
80 b BAK561	1.0000	10.0000N	20.0000N	5.0000N	10.0000L	5.0000N	20.0000N	5.0000N	10.0000L	5.0000
80 c BAK564	1.5000	10.0000N	20.0000N	5.0000L	20.0000	5.0000	300.0000	5.0000L	10.0000	5.0000L
81 BAK620	1.0000L	10.0000N	20.0000N	5.0000N	10.0000L	5.0000L	20.0000	5.0000N	10.0000L	5.0000L
82 BAK619	1.0000N	10.0000N	20.0000N	30.0000	20.0000	5.0000	20.0000N	5.0000L	10.0000	10.0000
83 BAK618	1.0000L	10.0000N	20.0000N	5.0000	30.0000	7.0000	20.0000L	5.0000L	10.0000	5.0000
84 BAK617	1.0000N	10.0000N	20.0000N	150.0000	2000.0000	10.0000	20.0000N	5.0000L	10.0000	200.0000

TITLE
EASTERN EAGLE QUAD ROCKS-1970

TABLE 2. ROCK SAMPLES

SAMPLE	PR PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
43a BAK026	70.0000	100.0000	5.00000	10.0000	1500.0000	30.0000	50.0000	15.0000	200.0000	150.0000
43b BAK027	10.0000	100.0000	5.00000	10.0000	100.0000L	30.0000	50.0000	10.0000	200.0000	10.0000L
44 BAK028	10.0000	100.0000	5.00000	10.0000	100.0000L	20.0000	50.0000	10.0000	200.0000	10.0000L
45 BAK029	20.0000	100.0000	30.0000	10.0000	1500.0000	500.0000	50.0000	20.0000	200.0000	150.0000
46 BAK030	10.0000L	100.0000	5.00000	10.0000	700.0000	30.0000	50.0000	20.0000	200.0000	30.0000
47 BAK031	10.0000	100.0000	5.00000	10.0000	700.0000	30.0000	50.0000	20.0000	200.0000	30.0000
48 BAK032	10.0000L	100.0000	100.0000	10.0000	100.0000	300.0000	50.0000	10.0000	200.0000	10.0000L
49 BAK033	20.0000	100.0000	10.0000	10.0000	500.0000	70.0000	50.0000	10.0000	200.0000	50.0000
50 BAK034	30.0000	100.0000	5.0000	10.0000	700.0000	30.0000	50.0000	20.0000	200.0000	30.0000
51 BAK035	10.0000L	100.0000	5.0000L	10.0000	100.0000	30.0000	50.0000	15.0000	200.0000	30.0000
52 BAK608	15.0000	100.0000	50.0000	10.0000	700.0000	300.0000	50.0000	70.0000	200.0000	70.0000
53 BAK609	10.0000L	100.0000	20.0000	10.0000	100.0000L	100.0000	50.0000	10.0000L	200.0000	10.0000
54 BAK610	20.0000	100.0000	20.0000	10.0000	100.0000	200.0000	50.0000	20.0000	200.0000	200.0000
55 BAK611	15.0000	100.0000	30.0000	10.0000	300.0000	300.0000	50.0000	70.0000	200.0000	500.0000
56 BAK602	15.0000	100.0000	50.0000	10.0000	300.0000	300.0000	50.0000	70.0000	200.0000	500.0000
57 BAK601	20.0000	100.0000	30.0000	10.0000	300.0000	100.0000	50.0000	100.0000	200.0000	1000.0000
58 BAK600	50.0000	100.0000	5.00000	20.0000	100.0000L	20.0000	50.0000	50.0000	200.0000	200.0000
59 BAK599	70.0000	100.0000	5.0000	10.0000	100.0000	20.0000	50.0000	70.0000	200.0000	300.0000
60 BAK598	15.0000	100.0000	50.0000	10.0000	500.0000	300.0000	50.0000	70.0000	200.0000	1000.0000
61a BAK596	10.0000	100.0000	100.0000	10.0000	150.0000	300.0000	50.0000	15.0000	200.0000	10.0000L
61b BAK597	10.0000	100.0000	100.0000	10.0000	100.0000	500.0000	50.0000	10.0000L	200.0000	10.0000L
62 BAK594	10.0000	100.0000	5.00000	10.0000	100.0000L	30.0000	50.0000	10.0000L	200.0000	10.0000
63 BAK595	10.0000L	100.0000	30.0000	10.0000	300.0000	300.0000	50.0000	70.0000	200.0000	300.0000
64 BAK593	20.0000	100.0000	30.0000	10.0000	500.0000	300.0000	50.0000	70.0000	200.0000	500.0000
65 BAK592	10.0000	100.0000	15.0000	10.0000	150.0000	70.0000	50.0000	20.0000	300.0000	10.0000L
66 BAK591	10.0000	100.0000	5.00000	10.0000	100.0000	30.0000	50.0000	15.0000	200.0000	10.0000
67 BAK589	20.0000	100.0000	5.0000	10.0000	200.0000	70.0000	50.0000	15.0000	200.0000	10.0000L
68 BAK588	10.0000	100.0000	5.00000	10.0000	100.0000	20.0000	50.0000	10.0000L	200.0000	10.0000L
69 BAK590	10.0000L	100.0000	50.0000	10.0000	500.0000	300.0000	50.0000	70.0000	200.0000	200.0000
70 BAK587	15.0000	100.0000	7.0000	10.0000	300.0000	30.0000	50.0000	15.0000	200.0000	10.0000
71 BAK603	15.0000	100.0000	20.0000	10.0000	100.0000	1500.0000	50.0000	70.0000	200.0000	300.0000
72 BAK604	15.0000	100.0000	50.0000	10.0000	300.0000	300.0000	50.0000	20.0000	200.0000	70.0000
73 BAK607	10.0000	100.0000	100.0000	10.0000	300.0000	700.0000	50.0000	20.0000	200.0000	10.0000L
74 BAK586	30.0000	100.0000	5.0000	10.0000	700.0000	70.0000	50.0000	10.0000	200.0000	100.0000
75 BAK606	10.0000	100.0000	70.0000	10.0000	200.0000	300.0000	50.0000	20.0000	200.0000	30.0000
76 BAK605	70.0000	100.0000	30.0000	10.0000	300.0000	500.0000	50.0000	30.0000	200.0000	200.0000
77 BAK585	30.0000	100.0000	15.0000	10.0000	500.0000	150.0000	50.0000	10.0000	200.0000	100.0000
78 BAK584	30.0000	100.0000	30.0000	10.0000	300.0000	700.0000	50.0000	30.0000	200.0000	100.0000
79 BAK612	20.0000	100.0000	30.0000	10.0000	300.0000	150.0000	50.0000	70.0000	200.0000	300.0000
80a BAK560	10.0000	100.0000	5.0000L	10.0000	300.0000	70.0000	50.0000	10.0000L	200.0000	70.0000
80b BAK561	10.0000L	100.0000	5.0000	10.0000	1000.0000	70.0000	50.0000	10.0000L	200.0000	70.0000
80c BAK564	30.0000	100.0000	10.0000	10.0000	300.0000	150.0000	50.0000	15.0000	200.0000	150.0000
81 BAK620	10.0000	100.0000	7.0000	10.0000	700.0000	70.0000	50.0000	30.0000	200.0000	70.0000
82 BAK619	10.0000	100.0000	30.0000	10.0000	700.0000	300.0000	50.0000	20.0000	200.0000	20.0000
83 BAK618	10.0000L	100.0000	15.0000	10.0000	700.0000	150.0000	50.0000	15.0000	200.0000	200.0000
84 BAK617	10.0000	100.0000	70.0000	10.0000	200.0000	500.0000	50.0000	15.0000	200.0000	30.0000

TITLE
EASTERN EAGLE QUAD ROCKS-1970

TABLE 2. ROCK SAMPLES

SAMPLE	AU PPM	ROCK NAME	SYMBOL
43a	0.0200L	Igneous dike rock	U
43b	0.0200L	Quartzite	U
44	0.0200L	Quartzite	M
45	0.0200L	Igneous dike rock	M
46	0.0200L	Quartz-feldspar dike rock	M
47	0.0200L	Quartzite	M
48	0.0200L	Gabbro	U
49	0.0200L	Quartzite	M
50	0.0200L	Marble	M
51	0.0200L	Marble	M
52	0.0200L	Quartzite	U
53	0.0200L	Ultramafic rock	U
54	0.0200L	Quartzite	U
55	0.0200L	Mafic dike rock	U
56	0.0200L	Diorite	U
57	0.0200L	Quartzite	U
58	0.0200L	Igneous intrusive rock	U
59	0.0200L	Rhyolite	U
60	0.0200L	Mafic dike rock	U
61a	0.0200L	Ultramafic rock	M
61b	0.0200L	Ultramafic rock	M
62	0.0200L	Quartzite	U
63	0.0200L	Mafic dike rock	U
64	0.0200L	Mafic dike rock	M
65	0.0200L	Quartzite	M
66	0.0200L	Quartzite	U
67	0.0200L	Marble	M
68	0.0200L	Quartzite	M
69	0.0200L	Mafic dike rock	U
70	0.0200L	Marble	M
71	0.0200L	Quartz schist	M
72	0.0200L	Greenstone	M
73	0.0200L	Mafic dike rock	M
74	0.0200L	Granite	M
75	0.0200L	Marble	U
76	0.0200L	Hornblende gneiss	M
77	0.0200L	Diorite (dike)	M
78	0.0200L	Biotite-epidote-schist	U
79	0.0200L	Quartz-mica schist	U
80a	0.0200L	Granodiorite	U
80b	0.0200L	Granodiorite	M
80c	0.0200L	Granodiorite (gouge)	M
81	0.0200L	Granodiorite	M
82	0.0200L	Hornblende gabbro	U
83	0.0200L	Hornblende-biotite granodiorite	U
84	0.0200L	Hornblende-biotite granodiorite	U

TITLE
EASTERN EAGLE QUAD ROCKS-1970

IN THE COMPUTATIONS PERFORMED TO PRODUCE THE FOLLOWING TABLE OF GEOMETRIC MEANS AND DEVIATIONS, ALL ELEMENTS ARE IGNORED WHERE ONE OR MORE OF THE UNQUALIFIED DATA VALUES IS LESS THAN THE ANALYTICAL LIMIT OF DETECTION SPECIFIED ON INPUT OR WHERE ANY DATA VALUES ARE QUALIFIED WITH THE G (GREATER THAN) CODE. DATA VALUES QUALIFIED WITH B OR H ARE NOT USED IN THE COMPUTATIONS. WHERE NONE OF THE DATA VALUES FOR AN ELEMENT ARE QUALIFIED THE MEAN AND DEVIATION SHOULD BE THE SAME AS THOSE GIVEN IN THE PRECEDING SECTION. WHERE DATA ARE QUALIFIED WITH THE CODES N, L, OR T, THE ESTIMATES OF GEOMETRIC MEAN AND DEVIATION ARE BASED ON A METHOD BY A. J. COHEN FOR TREATING CENSORED DISTRIBUTIONS. THE APPLICATION OF THIS METHOD TO GEOCHEMICAL PROBLEMS IS DESCRIBED IN USGS PROFESSIONAL PAPER 574-B. THE ESTIMATES ARE UNBIASED IN A STRICT SENSE ONLY WHERE THE DATA ARE DERIVED FROM A LOGNORMAL PARENT POPULATION, BUT EXPERIMENTS HAVE SHOWN THAT LARGE DEPARTURES FROM THIS REQUIREMENT MAY NOT GREATLY INVALIDATE THE RESULTS ACCEPTANCE AND USE OF THE ESTIMATES, HOWEVER, IS THE RESPONSIBILITY OF THE INDIVIDUAL.

ELEMENT	N	L	H	B	T	G	ANALYTICAL VALUES
FE PCT	0	0	0	0	0	0	96
MG PCT	0	2	0	0	0	8	86
CA PCT	0	9	0	0	0	8	79
TI PCT	0	1	0	0	0	17	78
MN PPM	0	0	0	0	0	0	96
AG PPM	84	5	0	0	0	0	7
AS PPM	90	4	0	0	0	0	2
AU PPM	96	0	0	0	0	0	0
B PPM	14	24	0	0	0	0	58
BA PPM	0	9	0	0	0	0	87
BE PPM	42	26	0	0	0	0	28
BI PPM	93	2	0	0	0	0	1
CD PPM	96	0	0	0	0	0	0
CO PPM	26	10	0	0	0	0	60
CR PPM	0	22	0	0	0	5	69
CU PPM	2	1	0	0	0	0	93
LA PPM	56	21	0	0	0	0	19
MD PPM	42	38	0	0	0	0	16
NB PPM	2	38	0	0	0	0	56
NI PPM	3	9	0	0	0	0	84
PB PPM	19	21	0	0	0	0	56
SB PPM	95	0	0	0	0	0	1
SC PPM	11	13	0	0	0	0	72
SN PPM	92	0	0	0	0	0	4
SR PPM	9	18	0	0	0	0	69
V PPM	0	0	0	0	0	0	96
W PPM	96	0	0	0	0	0	0
Y PPM	8	15	0	0	0	0	0
ZN PPM	88	7	0	0	0	0	73
ZR PPM	9	20	0	0	0	0	1
AU PPM	0	96	0	0	0	1	66
						0	0

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS
FE PCT	5.910371	3.31	96 ANALYTICAL VALUES.
MG PCT	*****	*****	8 GREATER THAN VALUES. NO COMPUTATIONS.
CA PCT	*****	*****	8 GREATER THAN VALUES. NO COMPUTATIONS.
TI PCT	*****	*****	17 GREATER THAN VALUES. NO COMPUTATIONS.

MN PPM	920.686035	3.51	96 SAMPLES AND	96 ANALYTICAL VALUES.	7 REPORTED VALUES.	NO COMPUTATIONS.
AG PPM	*****	*****	89 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	2 REPORTED VALUES.	NO COMPUTATIONS.
AS PPM	*****	*****	94 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES.	NO COMPUTATIONS.
4U PPM	*****	*****	96 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	58 REPORTED VALUES.	
B PPM	10.288758	2.78	38 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	87 REPORTED VALUES.	
JA PPM	201.128616	4.47	9 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	28 REPORTED VALUES.	
JE PPM	0.424477	3.29	68 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES.	NO COMPUTATIONS.
RI PPM	*****	*****	95 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES.	NO COMPUTATIONS.
LD PPM	*****	*****	96 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	60 REPORTED VALUES.	
CO PPM	9.504227	8.64	36 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	93 REPORTED VALUES.	
CR PPM	*****	*****	5 GREATER THAN VALUES,	NO COMPUTATIONS.	19 REPORTED VALUES.	
CU PPM	49.767685	3.00	3 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	16 REPORTED VALUES.	NO COMPUTATIONS.
LA PPM	3.377064	7.01	77 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	56 REPORTED VALUES.	
MO PPM	*****	*****	80 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	84 REPORTED VALUES.	
VB PPM	8.745873	1.40	40 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	56 REPORTED VALUES.	
NI PPM	40.821671	8.46	12 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES.	NO COMPUTATIONS.
PB PPM	10.416156	3.61	40 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	72 REPORTED VALUES.	
SB PPM	*****	*****	95 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	4 REPORTED VALUES.	NO COMPUTATIONS.
SC PPM	12.961607	4.06	24 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	69 REPORTED VALUES.	
SN PPM	*****	*****	92 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES.	NO COMPUTATIONS.
SR PPM	203.767059	3.63	27 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	73 REPORTED VALUES.	
V PPM	128.380508	3.20	96 SAMPLES AND	96 ANALYTICAL VALUES.	1 REPORTED VALUES.	NO COMPUTATIONS.
W PPM	*****	*****	96 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES.	NO COMPUTATIONS.
Y PPM	17.483353	2.69	23 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	73 REPORTED VALUES.	
ZN PPM	*****	*****	95 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES.	NO COMPUTATIONS.
ZR PPM	*****	*****	1 GREATER THAN VALUES,	NO COMPUTATIONS.	0 REPORTED VALUES.	NO COMPUTATIONS.
AU PPM	*****	*****	96 NOT DETECTED,	LESS THAN, OR TRACE VALUES.		