

DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY

ANALYSES OF STREAM-SEDIMENT, ROCK, AND SOIL SAMPLES FROM A
PART OF THE SEVENTYMILE RIVER AREA, EAGLE QUADRANGLE, ALASKA

By

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This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards and nomenclature.

Analyses of stream-sediment, rock, and soil samples from a part of
the Seventymile River area, Eagle quadrangle, Alaska

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Introduction

Analytical data for 322 stream-sediment samples, 207 rock samples, and 76 soil samples from the Seventymile River area, Eagle quadrangle, and rock samples from a locality in the Charley River quadrangle, are presented in this report together with a statistical treatment of the data. The samples were collected in 1968 as part of the Heavy Metals program of the U.S. Geological Survey.

The most comprehensive discussion of the geology of the Seventymile area is a report by J. B. Mertie, Jr. (1937), and additional data, particularly on placer mining areas, is given in later reports by Mertie (1938, 1942). Open-file maps by Brabb and Churkin (1964, 1965) of the Eagle D-1 quadrangle and the Charley River quadrangle, by Foster and Keith (1967) of the Eagle B-1 and C-1 quadrangles, and by Clark and Foster (1969¹) of the Eagle D-2 and D-3 quadrangles cover much of the area. Reports giving results of geochemical reconnaissance and a tabulation of mineral occurrences done under the auspices of the Division of Mines and Minerals, State of Alaska (Saunders, 1966; 1967) can be used to supplement the data presented here.

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. Rock samples are mostly grab samples from prospects and outcrops. They were chosen for analysis to provide data on background, because they were in the vicinity of prospects, or because they contain abundant visible sulfides. Soil samples were collected in only a few selected localities where outcrops are rare. Most of the soil samples are loose weathered material obtained from 2 to 8 inches below the surface. The minus 80 mesh fractions of the samples were analyzed for 30 elements by the six-step semiquantitative spectrographic method and for gold by the atomic absorption method.^{1/} 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 4. Semiquantitative spectrographic analyses were done by K. J. Curry and E. E. Martinez; atomic absorption analyses were done by R. L. Miller, A. L. Meier, W. R. Vaughn, and M. S. Rickard.

^{1/}Analyses for 28 elements by semiquantitative analyses and for gold by atomic absorption are given in the tables. Semiquantitative analyses for cadmium and gold are omitted.

Location of the stream-sediment samples is shown on figures 1, 3, and 5 of the rock samples on figures 2, 4, 5, and 6, and of soil samples on figures 1, 4, and 5. The Eagle D-2 and D-3 quadrangles were divided into five smaller areas, and within most of these areas, sample numbers are roughly from north to south or from west to east.

The results of the analyses of the stream-sediment, rock, and soil samples have been processed by means of a computer program known as GEOSUM and are presented in tables 1, 2, and 3. 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^{2/}, (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 roughly log-normal distribution. Boron and nickel (table 1) are examples of this type of distribution. A few elements such as chromium and manganese (table 1) have a bi-modal type of distribution.

On the basis of these histograms, anomalous values in stream-sediment samples for several elements of possible economic interest are suggested: silver (Ag), 0.5 ppm; boron (B), 200 ppm; barium (Ba), 500 ppm; chromium (Cr), 500 ppm; copper (Cu), 150 ppm; molybdenum (Mo), 5.0 ppm; nickel (Ni), 150 ppm; lead (Pb), 100 ppm; zinc (Zn), 200 ppm; and any reported value of gold, arsenic, and tin. The selection of these concentrations as anomalous values is subjective and interpretive and for application to any given part of the Seventymile River area, drainage basin geology must be considered. It must be emphasized that the sampling was of a reconnaissance nature and the geology of the area is extremely varied. In some areas the background for one or more of these metals may be considerably higher or lower than in other areas.

Anomalous Areas

Geochemical sampling in the Seventymile River area did not detect any new mineral deposits, although several geochemical anomalies are found in localities not previously known to be mineralized. These localities include the upper parts of the drainage areas of Flume, Alder, and Deep Creeks and the headwater areas of Sutter, Deer, and Sonickson Creeks. Gold is found in

^{2/}The frequency table and histogram for gold have been omitted because the classes used in calculating these tables are those used in the semiquantitative spectrographic method and the gold was analyzed by the quantitative atomic absorption method. Gold is found in only 6 of 322 stream-sediment samples (2 percent). The frequency tables and histograms for bismuth, antimony, and tungsten in tables 1, 2, and 3, and for arsenic in table 1 are omitted because no values were reported for these elements. The frequency tables and histograms are omitted for tin in table 1 and for zinc and arsenic in table 3 because these were only one, two, and three values, respectively.

two rock samples collected near North Peak. Most chromium and nickel anomalies can probably be attributed to ultramafic rocks, some of which are unmapped.

Geochemical sampling and geologic investigations indicate that placer gold in Flume, Alder, and Bonanza Creeks is associated with altered ultramafic rocks in a fault zone. Gold and other anomalous elements in sediments, rocks, and soils on the north side of the Seventymile River areas probably have a different origin because the rocks are Tertiary(?) conglomerate, shale, and sandstone cut by dikes and faults. Analyses of geochemical samples in the American Creek and Eagle Bluff areas adds general information on the distribution of metallic elements in these areas but does not define any new specific mineralized localities.

Explanation of Tables 1, 2, and 3

The results of the analyses of the stream-sediment, rock, and soil samples are given in tables 1, 2, and 3 as analytical values such as 7.0000 ppm, 10.000 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 to the left of G, 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 determination are as follows:

Specified limits of determination

FE PCT (Iron)	MG PCT (Magnesium)	CA PCT (Calcium)	TI PCT (Titanium)	MN PPM (Manganese)	AG PPM (Silver)
0.05000	0.02000	0.05000	0.00100	10.00000	0.50000
AS PPM (Arsenic)	AU PPM (Gold)	B PPM (Boron)	BA PPM (Barium)	BE PPM (Beryllium)	BI PPM (Bismuth)
200.00000	0.02000	10.00000	5.00000	1.00000	10.00000
CO PPM (Cobalt)	CR PPM (Chromium)	CU PPM (Copper)	LA PPM (Lanthanum)	MO PPM (Molybdenum)	NB PPM (Niobium)
5.00000	5.00000	5.00000	20.00000	5.00000	2.00000
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	50.00000
V PPM (Vanadium)	W PPM (Tungsten)	Y PPM (Yttrium)	ZN PPM (Zinc)	ZR PPM (Zirconium)	
10.00000	50.00000	10.00000	200.00000	20.00000	

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 geometrical mean and deviation 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 each table. 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) for further discussion and USGS Bulletin 1147E, p. 20-23 (Miesch, 1963) for further discussion and explanation of geometric deviation.

In the computations performed to produce the statistical summary at the end of each table, 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.

In table 2 (rock samples) the kind of rock in the sample is indicated by a code consisting of one or two letters or a number in two columns to the left of the sample numbers. The explanation of the code follows:

Left-hand column

A Granitic rock
 B Fine-grained felsic rock
 C Diorite or quartz-diorite
 D Intermediate fine-grained igneous rock
 E Mafic rock
 F Ultramafic rock
 G Argillite
 H Phyllite
 I Schist
 J Gneiss
 K Amphibolite
 L Greenschist
 M Greenstone
 N Quartzite
 O Marble
 P Hornfels
 Q Chert
 R Clay
 S Siltstone
 T Sandstone
 U Conglomerate
 V Coal
 W Quartz vein
 X Carbonate vein
 Y Quartz-carbonate rock
 Z Gossan material

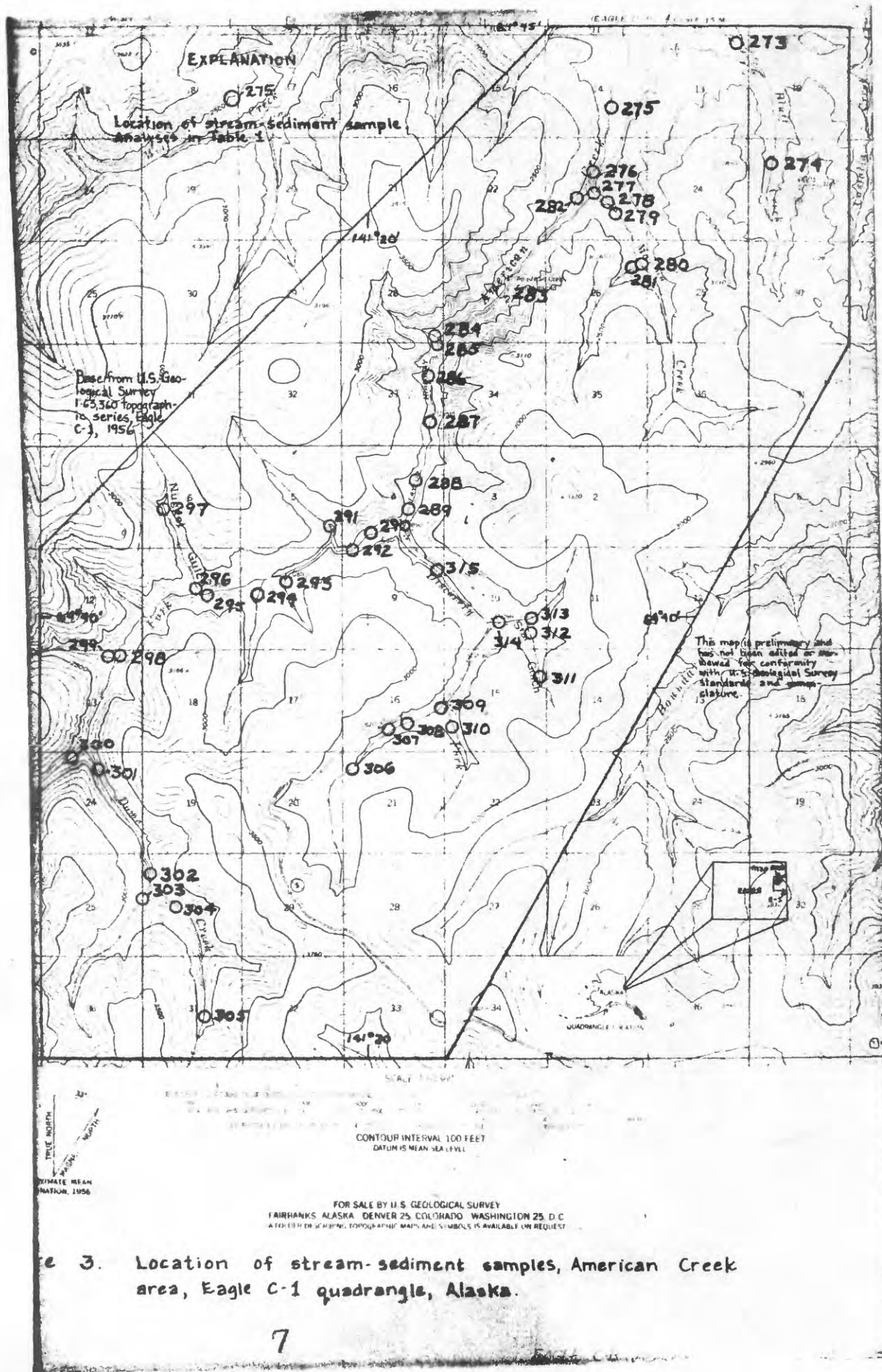
1 Gouge
 2 Stibnite
 3 Galena

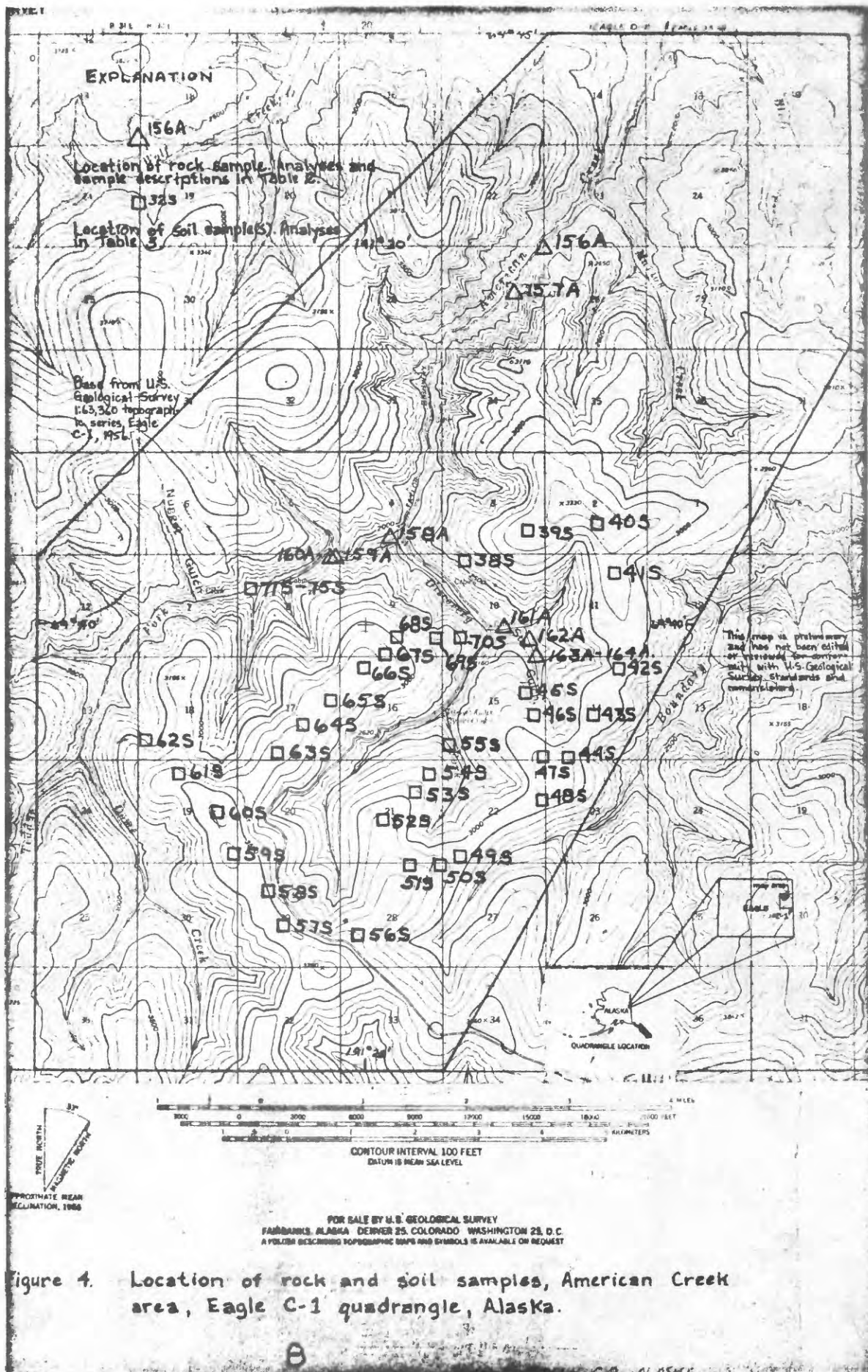
Right-hand column

A Pegmatite, alaskite
 B Quartz monzonite or granodiorite
 C Andesite
 D Gabbro
 E Basalt
 F Porphyritic
 G Chlorite
 H Mica
 I Biotite
 J Sericite or muscovite-quartz
 K Graphite
 L Metamorphosed
 M Metamorphosed igneous rock
 N Altered
 O Serpentinized
 P Silicified
 Q Limonite-stained
 R Copper-oxide stained
 S Visible sulfides
 T Calcareous or containing carbonate
 U Brecciated and(or) sheared veinlets
 V Vein
 X Dike
 Y Quartz

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64° 50'

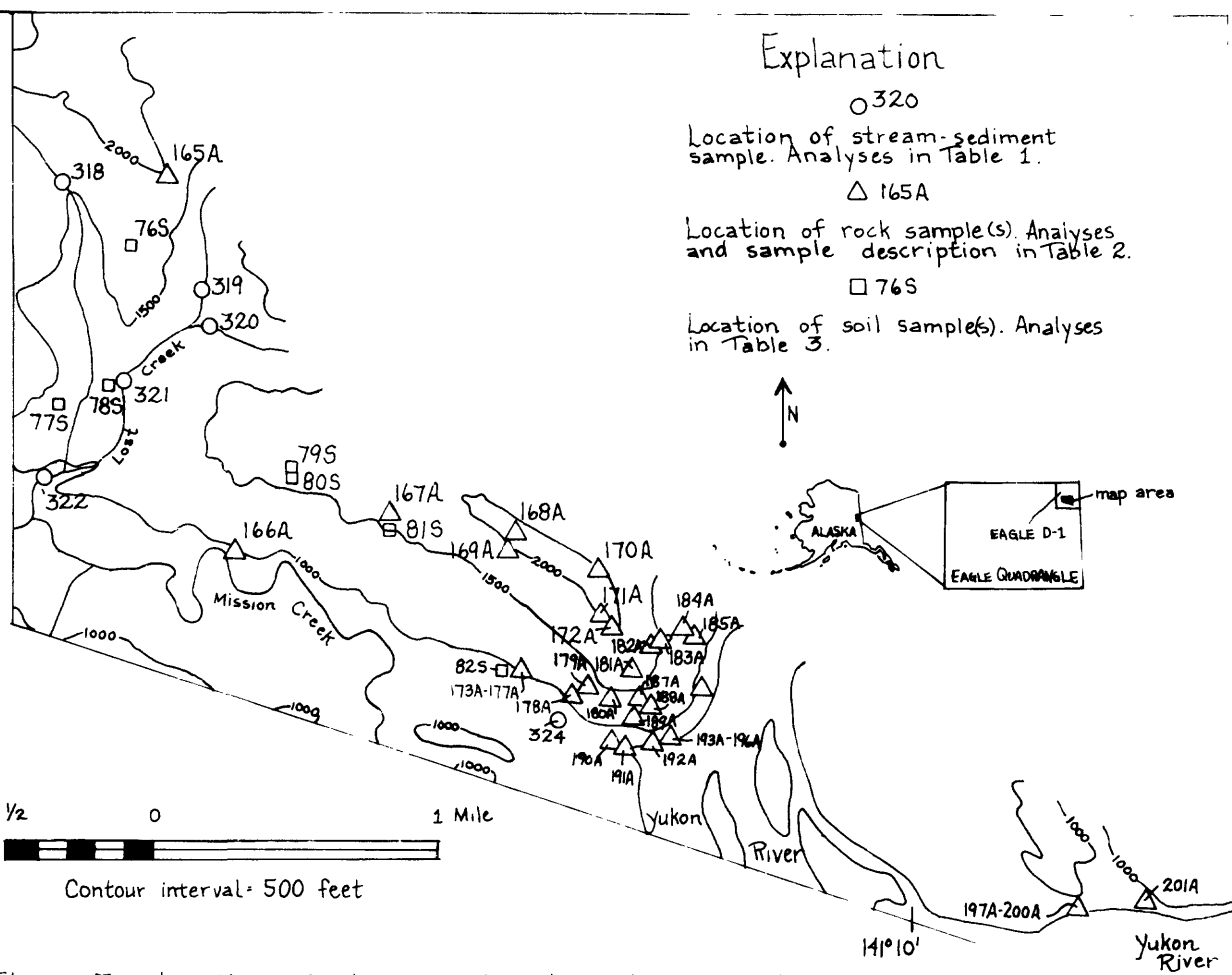
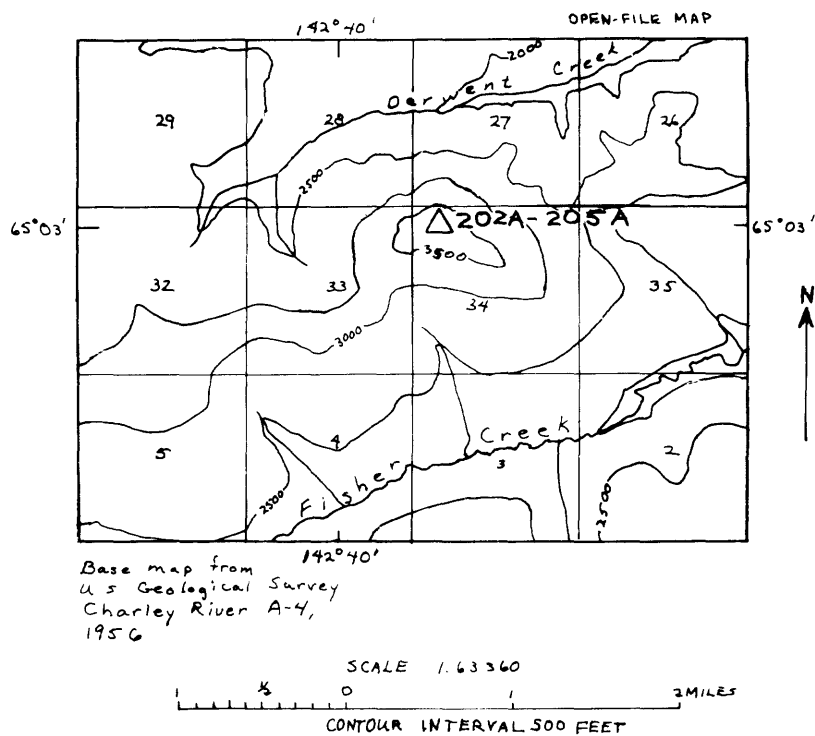


Figure 5. Location of stream-sediment, rock, and soil samples.
Eagle Bluff area, Eagle D-1 quadrangle, Alaska.



EXPLANATION

- △ Location of rock sample(s).
Analyses and sample description in table 2.

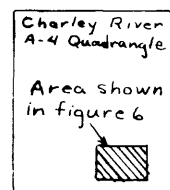


Figure 6. Location of rock samples near Fisher Creek,
Charley River A-4 quadrangle, Alaska.

TABLE 1--S₁RM, S₁₀, SAMP, FABLE

SAMPLE	FF PCT	KG PCT	CA PCT	TI PCT	MIN PPM	AG PPM	AS PPM	AIJ PPM	R PPM	HA PPM
1	10.0000	5.0000	2.0000	0.7000	1500.0000	0.0	0.0	0.0	50.0000	1500.0000
2	7.0000	3.0000	3.0000	0.7000	2000.0000	0.0	0.0	0.0	70.0000	1500.0000
3	7.0000	5.0000	4.0000	1.0000	1500.0000	0.0	0.0	0.0	70.0000	1500.0000
4	10.0000	5.0000	3.0000	1.0000	1500.0000	0.0	0.0	0.0	50.0000	1500.0000
5	7.0000	3.0000	3.0000	1.0000	1500.0000	0.0	0.0	0.0	50.0000	1500.0000
6	10.0000	5.0000	5.0000	1.0000	2000.0000	0.0	0.0	0.0	70.0000	1500.0000
7	10.0000	2.0000	0.3000	1.0000	1000.0000	1.0000	0.0	0.0	150.0000	3000.0000
8	10.0000	5.0000	4.0000	1.0000	1500.0000	0.0	0.0	0.0	70.0000	1000.0000
9	10.0000	5.0000	3.0000	1.0000	1500.0000	0.5000	0.0	0.0	50.0000	1500.0000
10	7.0000	3.0000	1.5000	0.7000	1500.0000	0.0	0.0	0.0	50.0000	1500.0000
11	10.0000	5.0000	3.0000	1.0000	200.0000	0.0	0.0	0.0	70.0000	1500.0000
12	15.0000	5.0000	2.0000	1.0000	1500.0000	0.0	0.0	0.0	70.0000	2000.0000
13	7.0000	5.0000	3.0000	1.0000	1500.0000	0.0	0.0	0.0	70.0000	1500.0000
14	15.0000	5.0000	5.0000	1.0000	1000.0000	0.0	0.0	0.0	20.0000	1500.0000
15	15.0000	5.0000	3.0000	1.0000	1000.0000	0.0	0.0	0.0	70.0000	1500.0000
16	10.0000	1.5000	2.0000	1.0000	1000.0000	0.5000	0.0	0.0	100.0000	3000.0000
17	10.0000	3.0000	3.0000	1.0000	700.0000	0.5000	0.0	0.0	70.0000	2000.0000
18	15.0000	3.0000	5.0000	1.0000	1500.0000	0.0	0.0	0.0	150.0000	2000.0000
19	15.0000	3.0000	5.0000	1.0000	1500.0000	0.0	0.0	0.0	70.0000	2000.0000
20	10.0000	3.0000	5.0000	1.0000	1500.0000	0.5000	0.0	0.0	50.0000	3000.0000
21	15.0000	7.0000	2.0000	1.0000	1500.0000	0.0	0.0	0.0	100.0000	1000.0000
22	5.0000	1.5000	0.3000	0.7000	500.0000	0.0	0.0	0.0	100.0000	1000.0000
23	15.0000	7.0000	5.0000	1.0000	1500.0000	0.0	0.0	0.0	70.0000	1500.0000
24	15.0000	5.0000	5.0000	1.0000	2000.0000	0.0	0.0	0.0	150.0000	1500.0000
25	15.0000	3.0000	2.0000	1.0000	1500.0000	0.0	0.0	0.0	70.0000	3000.0000
26	15.0000	3.0000	1.5000	1.0000	3000.0000	0.0	0.0	0.0	200.0000	5000.0000
27	20.0000	7.0000	7.0000	1.0000	5000.0000	0.0	0.0	0.0	150.0000	2000.0000
28	15.0000	7.0000	7.0000	1.0000	2000.0000	0.0	0.0	0.0	100.0000	3000.0000
29	15.0000	7.0000	7.0000	1.0000	2000.0000	0.0	0.0	0.0	70.0000	3000.0000
30	15.0000	5.0000	7.0000	1.0000	3000.0000	0.0	0.0	0.0	150.0000	3000.0000
31	15.0000	5.0000	7.0000	1.0000	2000.0000	0.0	0.0	0.0	150.0000	5000.0000
32	10.0000	3.0000	5.0000	1.0000	3000.0000	0.0	0.0	0.0	50.0000	3000.0000
33	15.0000	5.0000	7.0000	1.0000	3000.0000	0.0	0.0	0.0	70.0000	3000.0000
34	15.0000	5.0000	3.0000	1.0000	3000.0000	0.0	0.0	0.0	150.0000	5000.0000
35	20.0000	5.0000	3.0000	1.0000	3000.0000	0.0	0.0	0.0	150.0000	5000.0000
36	20.0000	3.0000	2.0000	1.0000	3000.0000	0.0	0.0	0.0	150.0000	5000.0000
37	15.0000	5.0000	1.5000	1.0000	2000.0000	0.0	0.0	0.0	150.0000	5000.0000
38	20.0000	5.0000	2.0000	1.0000	3000.0000	0.0	0.0	0.0	200.0000	5000.0000
39	15.0000	3.0000	3.0000	1.0000	2000.0000	0.0	0.0	0.0	200.0000	5000.0000
40	10.0000	3.0000	1.5000	1.0000	1500.0000	0.0	0.0	0.0	200.0000	3000.0000
41	10.0000	3.0000	1.5000	1.0000	2000.0000	0.0	0.0	0.0	70.0000	3000.0000
42	15.0000	5.0000	5.0000	1.0000	3000.0000	0.0	0.0	0.0	50.0000	3000.0000
43	3.0000	1.5000	3.0000	0.3000	700.0000	0.5000	0.0	0.0	20.0000	1000.0000
44	3.0000	1.0000	1.5000	0.3000	1500.0000	0.0	0.0	0.0	30.0000	700.0000
45	4.0000	1.5000	3.0000	0.1500	700.0000	0.0	0.0	0.0	10.0000	1000.0000
46	4.0000	1.0000	1.0000	0.3000	1000.0000	0.0	0.0	0.0	30.0000	700.0000
47	4.0000	0.7000	0.3000	0.5000	300.0000	0.0	0.0	0.0	70.0000	1500.0000
48	5.0000	2.0000	3.0000	0.5000	1000.0000	0.0	0.0	0.0	20.0000	1000.0000
49	3.0000	0.7000	1.5000	0.2000	700.0000	0.0	0.0	0.0	10.0000	700.0000
50	5.0000	1.5000	2.0000	0.7000	700.0000	0.5000	0.0	0.0	30.0000	1500.0000

TABLE 1---SIRM SFI¹ SAMPLE FAULT

SAMPLE	RE PPM	NI PPM	CU PPM	CR PPM	LA PPM	MI PPM	NR PPM	NI PPM	PK PPM
1	1.5000	0.0	70.0000	3000.0000	70.0000	0.0	10.0000	500.0000	30.0000
2	1.5000	0.0	70.0000	200.0000	70.0000	0.0	10.0000	100.0000	15.0000
3	1.0000	0.0	50.0000	500.0000	70.0000	0.0	10.0000	100.0000	10.0000
4	1.0000	0.0	30.0000	300.0000	70.0000	0.0	15.0000	100.0000	15.0000
5	1.0000	0.0	70.0000	300.0000	70.0000	0.0	10.0000	100.0000	10.0000
6	1.0000	0.0	50.0000	400.0000	70.0000	0.0	10.0000	100.0000	15.0000
7	1.0000	0.0	15.0000	300.0000	200.0000	7.0000	15.0000	70.0000	15.0000
8	1.0000	0.0	50.0000	7.0000	30.0000	0.0	15.0000	100.0000	10.0000
9	1.0000	0.0	50.0000	300.0000	70.0000	0.0	10.0000	150.0000	15.0000
10	1.0000	0.0	30.0000	300.0000	100.0000	0.0	10.0000	100.0000	15.0000
11	1.5000	0.0	30.0000	300.0000	70.0000	0.0	15.0000	100.0000	15.0000
12	1.0000	0.0	50.0000	700.0000	70.0000	5.0000	10.0000	150.0000	70.0000
13	1.5000	0.0	50.0000	1000.0000	150.0000	0.0	10.0000	100.0000	20.0000
14	1.0000	0.0	50.0000	700.0000	70.0000	0.0	10.0000	200.0000	10.0000
15	1.0000	0.0	30.0000	500.0000	70.0000	0.0	2.0000	150.0000	15.0000
16	1.5000	0.0	15.0000	150.0000	70.0000	0.0	15.0000	70.0000	150.0000
17	1.0000	0.0	20.0000	300.0000	100.0000	0.0	10.0000	100.0000	20.0000
18	1.5000	0.0	20.0000	300.0000	70.0000	0.0	15.0000	70.0000	30.0000
19	1.5000	0.0	15.0000	300.0000	50.0000	0.0	10.0000	70.0000	30.0000
20	1.0000	0.0	15.0000	300.0000	70.0000	0.0	10.0000	100.0000	15.0000
21	1.0000	0.0	50.0000	700.0000	70.0000	0.0	20.0000	300.0000	15.0000
22	1.0000	0.0	10.0000	100.0000	70.0000	0.0	2.0000	70.0000	10.0000
23	1.0000	0.0	70.0000	500.0000	50.0000	0.0	15.0000	200.0000	15.0000
24	1.0000	0.0	30.0000	300.0000	70.0000	0.0	20.0000	150.0000	10.0000
25	1.0000	0.0	15.0000	200.0000	70.0000	0.0	15.0000	70.0000	15.0000
26	1.0000	0.0	50.0000	300.0000	100.0000	0.0	15.0000	100.0000	15.0000
27	1.0000	0.0	70.0000	1500.0000	100.0000	0.0	15.0000	1000.0000	15.0000
28	1.0000	0.0	50.0000	300.0000	100.0000	0.0	15.0000	70.0000	15.0000
29	1.0000	0.0	70.0000	700.0000	70.0000	0.0	15.0000	150.0000	10.0000
30	1.0000	0.0	15.0000	150.0000	100.0000	0.0	15.0000	70.0000	15.0000
31	1.0000	0.0	50.0000	300.0000	30.0000	0.0	15.0000	150.0000	15.0000
32	1.0000	0.0	30.0000	150.0000	100.0000	0.0	10.0000	70.0000	15.0000
33	1.0000	0.0	30.0000	150.0000	20.0000	0.0	15.0000	100.0000	15.0000
34	1.0000	0.0	50.0000	500.0000	100.0000	0.0	15.0000	100.0000	15.0000
35	1.0000	0.0	50.0000	700.0000	100.0000	0.0	15.0000	150.0000	10.0000
36	1.0000	0.0	70.0000	300.0000	100.0000	0.0	15.0000	70.0000	20.0000
37	1.0000	0.0	50.0000	500.0000	100.0000	0.0	15.0000	70.0000	20.0000
38	1.0000	0.0	70.0000	500.0000	100.0000	0.0	15.0000	150.0000	15.0000
39	1.0000	0.0	70.0000	300.0000	100.0000	0.0	15.0000	150.0000	15.0000
40	1.0000	0.0	70.0000	300.0000	100.0000	0.0	15.0000	70.0000	15.0000
41	1.0000	0.0	70.0000	300.0000	70.0000	0.0	20.0000	100.0000	10.0000
42	1.0000	0.0	20.0000	100.0000	50.0000	0.0	10.0000	70.0000	10.0000
43	1.5000	0.0	10.0000	30.0000	15.0000	5.0000	10.0000	50.0000	20.0000
44	1.5000	0.0	15.0000	70.0000	30.0000	0.0	2.0000	70.0000	15.0000
45	1.5000	0.0	10.0000	15.0000	10.0000	0.0	2.0000	7.0000	15.0000
46	1.5000	0.0	20.0000	70.0000	30.0000	0.0	10.0000	50.0000	15.0000
47	1.5000	0.0	15.0000	70.0000	20.0000	7.0000	15.0000	50.0000	15.0000
48	1.5000	0.0	15.0000	30.0000	30.0000	0.0	10.0000	20.0000	30.0000
49	1.0000	0.0	10.0000	30.0000	10.0000	0.0	2.0000	30.0000	30.0000
50	1.5000	0.0	10.0000	70.0000	50.0000	5.0000	10.0000	70.0000	30.0000

TABLE 1--SIRV SFD SAMPLE FLAGL

SAMPLE	FF PCT	WG PCT	CA PCT	II PCT	WN PPM	AG PPM	AS PPM	AU PPM	R PPM	RA PPM
51	10.0000	2.0000	5.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
52	7.0000	3.0000	2.0000	0.7000	700.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
53	5.0000	2.0000	1.5000	0.7000	700.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
54	7.0000	3.0000	1.5000	1.0000	700.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
55	5.0000	1.0000	1.5000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
56	5.0000	1.5000	0.3000	0.7000	500.0000	0.0 N	0.0 N	0.0 N	100.0000	2000.0000
57	5.0000	1.5000	1.0000	0.7000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	2000.0000
58	7.0000	1.5000	2.0000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
59	7.0000	3.0000	1.5000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
60	5.0000	2.0000	0.5000	0.7000	1000.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
61	5.0000	2.0000	1.5000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
62	5.0000	1.5000	1.0000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	70.0000	2000.0000
63	3.0000	1.5000	1.5000	0.5000	1500.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
64	3.0000	1.5000	1.5000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	30.0000	1000.0000
65	15.0000	5.0000	5.0000	0.7000	1500.0000	0.5000L	0.0 N	0.0 N	70.0000	2000.0000
66	7.0000	1.5000	1.5000	0.5000	700.0000	0.5000L	0.0 N	0.0 N	500.0000	700.0000
67	7.0000	2.0000	1.5000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
68	10.0000	3.0000	2.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	170.0000	1500.0000
69	7.0000	1.5000	3.0000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
70	10.0000	1.5000	3.0000	0.5000	5000.0000	0.0 N	0.0 N	0.0 N	30.0000	1000.0000
71	7.0000	2.0000	3.0000	0.7000	1500.0000	0.5000L	0.0 N	0.0 N	50.0000	1500.0000
72	7.0000	2.0000	5.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
73	7.0000	1.5000	2.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
74	10.0000	2.0000	5.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	30.0000	2000.0000
75	7.0000	1.5000	3.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
76	7.0000	3.0000	1.5000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	70.0000	3000.0000
77	7.0000	3.0000	2.0000	1.0000	2000.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
78	7.0000	2.0000	1.5000	0.7000	2000.0000	0.5000	0.0 N	0.0 N	100.0000	2000.0000
79	5.0000	1.5000	1.5000	0.7000	1000.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
80	7.0000	1.5000	0.7000	0.7000	1500.0000	0.5000	0.0 N	0.0 N	100.0000	2000.0000
81	3.0000	1.0000	0.7000	0.3000	1500.0000	0.5000L	0.0 N	0.0 N	50.0000	1500.0000
82	3.0000	1.0000	1.0000	0.5000	1000.0000	0.5000	0.0 N	0.0 N	70.0000	1500.0000
83	3.0000	1.5000	1.0000	0.5000	700.0000	0.5000	0.0 N	0.0 N	70.0000	1500.0000
84	3.0000	1.5000	2.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	50.0000	1000.0000
85	3.0000	1.5000	2.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
86	3.0000	1.0000	1.5000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
87	3.0000	1.0000	1.5000	0.7000	500.0000	0.5000L	0.0 N	0.0 N	70.0000	700.0000
88	10.0000	2.0000	3.0000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
89	10.0000	2.0000	1.5000	0.7000	1500.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
90	10.0000	3.0000	3.0000	1.0000	700.0000	0.5000L	0.0 N	0.0 N	50.0000	1500.0000
91	10.0000	3.0000	3.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	150.0000	1500.0000
92	10.0000	5.0000	5.0000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	30.0000	1500.0000
93	7.0000	3.0000	7.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
94	10.0000	3.0000	7.0000	1.0000	2000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
95	15.0000	5.0000	5.0000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	10.0000	700.0000
96	10.0000	2.0000	0.7000	1.0000G	1500.0000	0.5000L	0.0 N	0.0 N	100.0000	2000.0000
97	15.0000	7.0000	5.0000	1.0000G	1500.0000	0.5000L	0.0 N	0.0 N	70.0000	2000.0000
98	15.0000	5.0000	3.0000	1.0000G	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	2000.0000
99	15.0000	3.0000	7.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
100	15.0000	5.0000	10.0000	1.0000	2000.0000	0.5000L	0.0 N	0.0 N	20.0000	1500.0000

TABLE 1---SIR₆ SFT SAMPLE FALG.F

SAMPLE	RF, PPM	KJ, PPM	CU, PPM	CR, PPM	CU, PPM	LA, PPM	MO, PPM	NR, PPM	NI, PPM	PH, PPM
51	1.5000	0.0	15.0000	50.0000	10.0000	30.0000	0.0	10.0000	30.0000	10.0000
52	1.5000	0.0	15.0000	100.0000	70.0000	30.0000	0.0	15.0000	70.0000	20.0000
53	1.5000	0.0	15.0000	100.0000	70.0000	30.0000	0.0	15.0000	70.0000	20.0000
54	1.0000	0.0	20.0000	300.0000	70.0000	30.0000	0.0	10.0000	150.0000	15.0000
55	1.0000	0.0	15.0000	70.0000	50.0000	30.0000	0.0	10.0000	70.0000	20.0000
56	1.0000	0.0	15.0000	150.0000	70.0000	30.0000	0.0	15.0000	70.0000	10.0000
57	1.0000	0.0	15.0000	150.0000	70.0000	20.0000	0.0	15.0000	70.0000	15.0000
58	1.5000	0.0	15.0000	100.0000	70.0000	20.0000	0.0	15.0000	70.0000	20.0000
59	1.5000	0.0	30.0000	150.0000	100.0000	30.0000	0.0	15.0000	70.0000	15.0000
60	1.0000L	0.0	20.0000	150.0000	70.0000	70.0000	0.0	10.0000	70.0000	15.0000
61	1.5000	0.0	20.0000	150.0000	70.0000	150.0000	0.0	10.0000	70.0000	20.0000
62	1.0000	0.0	15.0000	100.0000	70.0000	30.0000	0.0	15.0000	70.0000	15.0000
63	1.5000	0.0	20.0000	150.0000	50.0000	30.0000	0.0	15.0000	100.0000	15.0000
64	1.5000	0.0	10.0000	70.0000	15.0000	20.0000	0.0	10.0000	70.0000	15.0000
65	1.5000	0.0	30.0000	300.0000	70.0000	30.0000	0.0	15.0000	100.0000	30.0000
66	1.5000	0.0	20.0000	150.0000	70.0000	20.0000	0.0	10.0000	50.0000	150.0000
67	1.0000L	0.0	20.0000	150.0000	50.0000	20.0000	0.0	10.0000	70.0000	10.0000
68	1.0000	0.0	15.0000	150.0000	70.0000	30.0000	0.0	10.0000	50.0000	50.0000
69	1.5000	0.0	15.0000	150.0000	15.0000	20.0000	0.0	10.0000	70.0000	10.0000L
70	1.5000	0.0	30.0000	70.0000	15.0000	30.0000	0.0	2.0000L	30.0000	20.0000
71	2.0000	0.0	15.0000	70.0000	70.0000	50.0000	7.0000	15.0000	50.0000	70.0000
72	1.5000	0.0	10.0000	70.0000	15.0000	20.0000	7.0000	15.0000	20.0000	30.0000
73	1.0000L	0.0	15.0000	100.0000	15.0000	20.0000L	0.0	10.0000	50.0000	10.0000L
74	1.0000	0.0	20.0000	70.0000	20.0000	20.0000	0.0	10.0000	50.0000	10.0000
75	1.5000	0.0	15.0000	100.0000	70.0000	20.0000	0.0	10.0000	50.0000	20.0000
76	1.5000	0.0	30.0000	150.0000	70.0000	30.0000	0.0	20.0000	70.0000	30.0000
77	1.5000	0.0	20.0000	150.0000	100.0000	50.0000	0.0	15.0000	70.0000	150.0000
78	1.5000	0.0	70.0000	100.0000	100.0000	30.0000	0.0	10.0000	70.0000	20.0000
79	1.5000	0.0	20.0000	100.0000	150.0000	30.0000	0.0	10.0000	70.0000	30.0000
80	2.0000	0.0	50.0000	70.0000	150.0000	50.0000	0.0	15.0000	70.0000	30.0000
81	1.5000	0.0	15.0000	70.0000	50.0000	70.0000	0.0	10.0000	70.0000	30.0000
82	1.5000	0.0	10.0000	70.0000	70.0000	30.0000	0.0	10.0000	50.0000	70.0000
83	1.5000	0.0	10.0000	70.0000	70.0000	30.0000	0.0	10.0000	50.0000	70.0000
84	1.5000	0.0	20.0000	70.0000	70.0000	30.0000	0.0	10.0000	70.0000	30.0000
85	1.5000	0.0	15.0000	70.0000	70.0000	30.0000	0.0	15.0000	70.0000	30.0000
86	1.5000	0.0	15.0000	70.0000	70.0000	30.0000	0.0	10.0000	70.0000	50.0000
87	1.5000	0.0	20.0000	100.0000	50.0000	30.0000	0.0	10.0000	70.0000	70.0000
88	1.0000	0.0	20.0000	150.0000	100.0000	30.0000	0.0	15.0000	70.0000	50.0000
89	1.0000	0.0	30.0000	300.0000	100.0000	30.0000	0.0	10.0000	100.0000	30.0000
90	1.0000	0.0	10.0000	150.0000	70.0000	20.0000	0.0	15.0000	70.0000	20.0000
91	1.5000	0.0	20.0000	700.0000	70.0000	30.0000	0.0	10.0000	70.0000	20.0000
92	1.0000	0.0	15.0000	150.0000	70.0000	30.0000	5.0000L	10.0000	70.0000	30.0000
93	1.0000L	0.0	10.0000	100.0000	50.0000	20.0000	0.0	2.0000L	70.0000	10.0000L
94	1.0000	0.0	15.0000	70.0000	50.0000	30.0000	0.0	10.0000	50.0000	30.0000
95	0.0	0.0	15.0000	70.0000	50.0000	20.0000L	0.0	2.0000L	50.0000	10.0000
96	1.0000	0.0	15.0000	0.0	100.0000	30.0000	0.0	10.0000	70.0000	50.0000
97	1.0000L	0.0	50.0000	300.0000	100.0000	20.0000	0.0	10.0000	200.0000	20.0000
98	1.5000	0.0	15.0000	100.0000	70.0000	30.0000	0.0	15.0000	100.0000	10.0000
99	1.0000L	0.0	30.0000	70.0000	70.0000	30.0000	0.0	15.0000	50.0000	20.0000
100	1.0000L	0.0	50.0000	70.0000	70.0000	20.0000	0.0	10.0000	30.0000	15.0000

TABLE 1-- γ -TRM STD SAMPLE EAGLE+

SAMPLE	SR PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	7N PPM	ZR PPM
51	0.0	40.0000	0.0	700.0000	200.0000	0.0	30.0000	200.0000L	300.0000
52	0.0	20.0000	0.0	100.0000	200.0000	0.0	30.0000	200.0000L	100.0000
53	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	200.0000L	150.0000
54	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	200.0000L	300.0000
55	0.0	15.0000	0.0	150.0000	200.0000	0.0	30.0000	200.0000L	200.0000
56	0.0	15.0000	0.0	50.0000L	300.0000	0.0	30.0000	200.0000L	200.0000
57	0.0	15.0000	0.0	150.0000	300.0000	0.0	20.0000	200.0000L	200.0000
58	0.0	20.0000	0.0	200.0000	300.0000	0.0	30.0000	200.0000L	300.0000
59	0.0	20.0000	0.0	100.0000	200.0000	0.0	30.0000	200.0000L	300.0000
60	0.0	20.0000	0.0	50.0000L	200.0000	0.0	30.0000	200.0000L	150.0000
61	0.0	20.0000	0.0	150.0000	200.0000	0.0	50.0000	0.0	200.0000
62	0.0	30.0000	0.0	50.0000L	150.0000	0.0	30.0000	200.0000L	100.0000
63	0.0	20.0000	0.0	150.0000	150.0000	0.0	30.0000	200.0000L	100.0000
64	0.0	15.0000	0.0	100.0000	100.0000	0.0	15.0000	0.0	150.0000
65	0.0	30.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0	200.0000
66	0.0	20.0000	0.0	100.0000	150.0000	0.0	50.0000	0.0	300.0000
67	0.0	20.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0	200.0000
68	0.0	30.0000	0.0	500.0000	150.0000	0.0	70.0000	0.0	300.0000
69	0.0	20.0000	0.0	200.0000	200.0000	0.0	30.0000	0.0	300.0000
70	0.0	30.0000	0.0	200.0000	150.0000	0.0	70.0000	200.0000L	300.0000
71	0.0	20.0000	0.0	300.0000	150.0000	0.0	30.0000	200.0000L	150.0000
72	0.0	30.0000	10.0000L	300.0000	200.0000	0.0	50.0000	200.0000L	500.0000
73	0.0	15.0000	0.0	150.0000	150.0000	0.0	30.0000	0.0	300.0000
74	0.0	30.0000	0.0	700.0000	200.0000	0.0	70.0000	200.0000L	300.0000
75	0.0	30.0000	0.0	300.0000	200.0000	0.0	30.0000	200.0000L	200.0000
76	0.0	30.0000	0.0	200.0000	200.0000	0.0	30.0000	200.0000L	500.0000
77	0.0	30.0000	0.0	200.0000	200.0000	0.0	30.0000	200.0000L	200.0000
78	0.0	15.0000	0.0	100.0000	150.0000	0.0	30.0000	200.0000	150.0000
79	0.0	20.0000	0.0	100.0000	150.0000	0.0	30.0000	200.0000L	200.0000
80	0.0	20.0000	0.0	100.0000	300.0000	0.0	30.0000	200.0000L	100.0000
81	0.0	15.0000	0.0	50.0000L	150.0000	0.0	30.0000	200.0000L	150.0000
82	0.0	15.0000	0.0	50.0000L	150.0000	0.0	20.0000	200.0000L	150.0000
83	0.0	15.0000	0.0	50.0000L	150.0000	0.0	20.0000	200.0000L	150.0000
84	0.0	20.0000	0.0	150.0000	150.0000	0.0	30.0000	200.0000L	200.0000
85	0.0	20.0000	0.0	150.0000	100.0000	0.0	30.0000	200.0000L	200.0000
86	0.0	15.0000	0.0	100.0000	100.0000	0.0	30.0000	0.0	150.0000
87	0.0	20.0000	0.0	200.0000	150.0000	0.0	30.0000	200.0000L	200.0000
88	0.0	30.0000	0.0	200.0000	200.0000	0.0	30.0000	200.0000L	300.0000
89	0.0	20.0000	0.0	150.0000	150.0000	0.0	50.0000	200.0000L	150.0000
90	0.0	30.0000	0.0	200.0000	200.0000	0.0	30.0000	0.0	200.0000
91	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	0.0	300.0000
92	0.0	30.0000	0.0	200.0000	200.0000	0.0	30.0000	0.0	300.0000
93	0.0	20.0000	0.0	200.0000	200.0000	0.0	15.0000	0.0	70.0000
94	0.0	30.0000	0.0	200.0000	200.0000	0.0	50.0000	0.0	300.0000
95	0.0	50.0000	0.0	200.0000	300.0000	0.0	30.0000	200.0000L	150.0000
96	0.0	20.0000	0.0	100.0000	300.0000	0.0	30.0000	200.0000L	300.0000
97	0.0	30.0000	0.0	200.0000	300.0000	0.0	30.0000	0.0	1000.0000
98	0.0	30.0000	0.0	150.0000	300.0000	0.0	30.0000	0.0	1000.0000
99	0.0	30.0000	0.0	700.0000	300.0000	0.0	30.0000	0.0	200.0000
100	0.0	50.0000	0.0	1500.0000	300.0000	0.0	50.0000	0.0	300.0000

TABLE 1-- STRM SED SAMP FAGLE

SAMPLE	FF PCT	MG PCT	CA PCT	TI PCT	NN PPM	AG PPM	AS PPM	AU PPM	R PPM	RA PPM
101	15.0000	5.0000	5.0000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	150.0000	1500.0000
102	10.0000	5.0000	3.0000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	150.0000	1500.0000
103	20.0000	7.0000	7.0000	1.0000G	1500.0000	0.0 N	0.0 N	0.0 N	200.0000	1500.0000
104	20.0000	7.0000	7.0000	1.0000G	1500.0000	0.0 N	0.0 N	0.0 N	200.0000	1500.0000
105	15.0000	5.0000	2.0000	1.0000G	1000.0000	0.0 N	0.0 N	0.0 N	70.0000	3000.0000
106	7.0000	1.5000	3.0000	0.5000	1500.0000	0.0 N	0.0 N	0.0 N	15.0000	1000.0000
107	3.0000	0.7000	1.0000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
108	5.0000	1.5000	0.7000	0.7000	1500.0000	0.5000L	0.0 N	0.0 N	50.0000	1500.0000
109	5.0000	1.5000	0.7000	1.0000	1500.0000	0.7000	0.0 N	0.0 N	70.0000	1500.0000
110	5.0000	2.0000	2.0000	0.7000	1500.0000	0.5000L	0.0 N	0.0 N	30.0000	1500.0000
111	7.0000	3.0000	2.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	10.0000	700.0000
112	10.0000	5.0000	7.0000	0.7000	3000.0000	0.5000L	0.0 N	0.0 N	70.0000	3000.0000
113	20.0000	5.0000	7.0000	1.0000G	3000.0000	0.5000L	0.0 N	0.0 N	20.0000	3000.0000
114	20.0000	5.0000	7.0000	1.0000G	5000.0000	0.5000L	0.0 N	0.0 N	30.0000	3000.0000
115	15.0000	5.0000	3.0000	1.0000G	1500.0000	0.0 N	0.0 N	0.0 N	150.0000	3000.0000
116	7.0000	1.5000	2.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
117	7.0000	2.0000	2.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
118	7.0000	1.5000	1.5000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
119	10.0000	3.0000	2.0000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
120	5.0000	1.5000	0.5000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
121	7.0000	1.5000	1.0000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
122	7.0000	1.5000	0.7000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
123	7.0000	2.0000	5.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
124	7.0000	2.0000	5.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
125	10.0000	3.0000	7.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	50.0000	1500.0000
126	10.0000	5.0000	7.0000	1.0000G	3000.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
127	5.0000	1.5000	5.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	10.0000	1500.0000
128	10.0000	3.0000	7.0000	1.0000	2000.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
129	7.0000	2.0000	5.0000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
130	7.0000	2.0000	5.0000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	15.0000	1500.0000
131	7.0000	2.0000	3.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
132	5.0000	1.5000	2.0000	0.5000	1500.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
133	3.0000	1.5000	2.0000	0.3000	1500.0000	0.0 N	0.0 N	0.0 N	15.0000	1500.0000
134	5.0000	1.5000	3.0000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	10.0000L	1500.0000
135	7.0000	2.0000	3.0000	0.5000	1000.0000	0.5000L	0.0 N	0.0 N	20.0000	1500.0000
136	5.0000	1.5000	3.0000	0.7000	1000.0000	0.5000L	0.0 N	0.0 N	15.0000	1500.0000
137	10.0000	2.0000	5.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
138	7.0000	1.5000	3.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
139	5.0000	3.0000	3.0000	0.3000	1000.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
140	5.0000	1.5000	3.0000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
141	5.0000	1.5000	3.0000	0.2000	700.0000	0.0 N	0.0 N	0.0 N	15.0000	1500.0000
142	10.0000	2.0000	5.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
143	10.0000	1.5000	3.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	15.0000	1500.0000
144	5.0000	1.5000	2.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	30.0000	1000.0000
145	5.0000	1.5000	5.0000	0.5000	1000.0000	0.5000L	0.0 N	0.0 N	30.0000	1500.0000
146	7.0000	3.0000	5.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	50.0000	1500.0000
147	3.0000	0.7000	1.5000	0.5000	1500.0000	0.0 N	0.0 N	0.0 N	20.0000	700.0000
148	5.0000	2.0000	3.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000L	1000.0000
149	5.0000	2.0000	5.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
150	3.0000	1.5000	2.0000	0.5000	500.0000	0.0 N	0.0 N	0.0 N	15.0000	700.0000

TABLE 1.--SYSTEM SET SAMPLE FACTS

SAMPLE	KT PPM	KL PPM	CU PPM	CR PPM	CI PPM	LA PPM	ML PPM	NH PPM	NI PPM	PH PPM
101	1.5000	0.0	50.0000	300.0000	70.0000	20.0000	0.0	15.0000	100.0000	70.0000
102	1.0000	0.0	40.0000	300.0000	70.0000	50.0000	0.0	20.0000	100.0000	50.0000
103	1.0000	0.0	70.0000	700.0000	100.0000	30.0000	0.0	20.0000	200.0000	20.0000
104	1.5000	0.0	70.0000	400.0000	70.0000	30.0000	0.0	30.0000	150.0000	30.0000
105	1.0000	0.0	50.0000	700.0000	70.0000	20.0000L	0.0	15.0000	100.0000	15.0000
106	1.5000	0.0	15.0000	70.0000	30.0000	20.0000	0.0	10.0000	50.0000	30.0000
107	1.0000	0.0	20.0000	70.0000	70.0000	20.0000	0.0	2.0000L	70.0000	20.0000
108	1.0000	0.0	15.0000	150.0000	70.0000	20.0000	0.0	15.0000	100.0000	20.0000
109	1.0000L	0.0	40.0000	70.0000	70.0000	20.0000	0.0	15.0000	70.0000	50.0000
110	1.0000L	0.0	15.0000	70.0000	50.0000	100.0000	0.0	15.0000	70.0000	20.0000
111	1.0000L	0.0	15.0000	150.0000	50.0000	20.0000L	0.0	10.0000	70.0000	10.0000
112	1.0000L	0.0	15.0000	70.0000	70.0000	20.0000	0.0	10.0000	50.0000	20.0000
113	1.0000L	0.0	20.0000	200.0000	70.0000	20.0000L	0.0	15.0000	70.0000	150.0000
114	1.0000L	0.0	30.0000	150.0000	70.0000	20.0000	0.0	10.0000	70.0000	100.0000
115	1.0000L	0.0	70.0000	300.0000	70.0000	20.0000	0.0	20.0000	100.0000	15.0000
116	1.0000	0.0	15.0000	100.0000	70.0000	20.0000	0.0	10.0000	50.0000	15.0000
117	1.5000	0.0	15.0000	150.0000	70.0000	20.0000	0.0	10.0000	70.0000	20.0000
118	1.5000	0.0	15.0000	100.0000	70.0000	30.0000	0.0	10.0000	50.0000	15.0000
119	1.0000	0.0	30.0000	200.0000	50.0000	30.0000	0.0	15.0000	70.0000	15.0000
120	1.0000	0.0	15.0000	150.0000	70.0000	20.0000	0.0	20.0000	70.0000	10.0000
121	1.0000	0.0	20.0000	100.0000	100.0000	30.0000	0.0	20.0000	70.0000	15.0000
122	1.0000L	0.0	15.0000	150.0000	50.0000	20.0000L	0.0	10.0000	70.0000	20.0000
123	1.5000	0.0	15.0000	150.0000	20.0000	20.0000	0.0	15.0000	50.0000	15.0000
124	1.5000	0.0	15.0000	150.0000	50.0000	30.0000	5.0000L	15.0000	50.0000	70.0000
125	1.5000	0.0	15.0000	150.0000	20.0000	20.0000	0.0	10.0000	70.0000	20.0000
126	1.0000	0.0	30.0000	150.0000	20.0000	20.0000	5.0000L	15.0000	30.0000	50.0000
127	1.5000	0.0	10.0000	30.0000	15.0000	20.0000	5.0000L	2.0000L	7.0000	50.0000
128	1.5000	0.0	15.0000	70.0000	20.0000	20.0000	0.0	15.0000	15.0000	30.0000
129	1.5000	0.0	15.0000	70.0000	15.0000	30.0000	0.0	10.0000	30.0000	50.0000
130	1.5000	0.0	10.0000	50.0000	15.0000	30.0000	0.0	10.0000	20.0000	30.0000
131	1.0000	0.0	15.0000	70.0000	20.0000	20.0000	5.0000L	15.0000	50.0000	50.0000
132	1.5000	0.0	15.0000	70.0000	15.0000	30.0000	0.0	10.0000	20.0000	50.0000
133	1.5000	0.0	10.0000	20.0000	7.0000	20.0000	0.0	2.0000L	15.0000	30.0000
134	1.0000	0.0	10.0000	30.0000	7.0000	50.0000	0.0	2.0000L	7.0000	15.0000
135	2.0000	0.0	15.0000	30.0000	15.0000	200.0000	0.0	10.0000	20.0000	150.0000
136	1.5000	0.0	10.0000	30.0000	7.0000	20.0000	0.0	10.0000	20.0000	150.0000
137	1.0000	0.0	15.0000	70.0000	15.0000	20.0000	0.0	2.0000L	30.0000	20.0000
138	1.5000	0.0	15.0000	100.0000	30.0000	30.0000	0.0	10.0000	70.0000	30.0000
139	1.5000	0.0	10.0000	30.0000	10.0000	30.0000	0.0	10.0000	20.0000	70.0000
140	1.5000	0.0	10.0000	30.0000	7.0000	20.0000L	0.0	2.0000L	20.0000	50.0000
141	1.5000	0.0	5.0000L	15.0000	10.0000	20.0000L	0.0	2.0000L	70.0000	70.0000
142	1.5000	0.0	15.0000	70.0000	15.0000	700.0000	0.0	10.0000	20.0000	70.0000
143	1.5000	0.0	10.0000	30.0000	20.0000	20.0000	0.0	2.0000L	30.0000	70.0000
144	1.5000	0.0	15.0000	150.0000	15.0000	30.0000	5.0000L	10.0000	70.0000	30.0000
145	2.0000	0.0	10.0000	50.0000	50.0000	50.0000	0.0	10.0000	30.0000	70.0000
146	2.0000	0.0	20.0000	150.0000	30.0000	30.0000	5.0000L	15.0000	70.0000	50.0000
147	1.0000	0.0	15.0000	70.0000	50.0000	30.0000	0.0	10.0000	70.0000	20.0000
148	1.0000	0.0	10.0000	50.0000	15.0000	30.0000	0.0	10.0000	10.0000	50.0000
149	1.5000	0.0	10.0000	50.0000	20.0000	20.0000L	0.0	15.0000	30.0000	50.0000
150	1.0000	0.0	5.0000	50.0000	30.0000	20.0000	0.0	2.0000L	30.0000	15.0000

TABLE 1.--SIRPM, SED, SAMP, FANGLE

SAMPLE	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR	SC	SN	SR
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TABLE 1.--SIRPM SITE SAMPLE ANALYSES

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MIN PPM	AG PPM	AS PPM	AU PPM	K PPM	KA PPM
151	3.0000	1.5000	2.0000	0.5000	1500.0000	0.5000L	0.0	N	15.0000	700.0000
152	2.0000	0.7000	1.5000	0.5000	1500.0000	0.0	N	N	20.0000	700.0000
153	3.0000	1.5000	4.0000	0.7000	1000.0000	0.0	N	0.0	15.0000	1000.0000
154	4.0000	1.5000	1.5000	0.7000	1000.0000	0.0	N	0.0	0.0	700.0000
155	50.0000	2.0000	3.0000	0.7000	700.0000	0.0	N	0.0	20.0000	700.0000
156	5.0000	1.5000	3.0000	0.7000	700.0000	0.0	N	0.0	30.0000	1000.0000
157	7.0000	3.0000	3.0000	0.7000	1500.0000	0.0	N	0.0	50.0000	1500.0000
158	4.0000	1.5000	2.0000	0.5000	1000.0000	0.0	N	0.0	30.0000	700.0000
159	10.0000	3.0000	3.0000	1.0000	1500.0000	0.0	N	0.0	70.0000	1500.0000
160	7.0000	1.5000	5.0000	0.7000	1500.0000	0.0	N	0.0	20.0000	1500.0000
161	7.0000	2.0000	3.0000	0.5000	1500.0000	0.0	N	0.0	15.0000	1500.0000
162	3.0000	1.5000	2.0000	0.2000	700.0000	0.0	N	0.0	15.0000	1000.0000
163	5.0000	1.5000	1.5000	0.3000	1000.0000	0.0	N	0.0	30.0000	1000.0000
164	7.0000	2.0000	2.0000	0.3000	1000.0000	0.0	N	0.0	20.0000	1000.0000
165	7.0000	1.5000	2.0000	0.5000	1000.0000	0.0	N	0.0	20.0000	1000.0000
166	7.0000	3.0000	3.0000	0.7000	1500.0000	0.5000L	0.0	N	20.0000	1500.0000
167	7.0000	2.0000	3.0000	0.5000	1500.0000	0.5000L	0.0	N	20.0000	1500.0000
168	15.0000	7.0000	7.0000	1.0000G	3000.0000	0.5000L	0.0	N	70.0000	3000.0000
169	20.0000	7.0000	10.0000	1.0000	3000.0000	0.5000L	0.0	N	10.0000	3000.0000
170	15.0000	1.5000	1.5000	1.0000G	5000.0000G	0.5000L	0.0	N	100.0000	3000.0000
171	15.0000	5.0000	5.0000	1.0000G	1500.0000	0.5000L	0.0	N	200.0000	2000.0000
172	15.0000	5.0000	5.0000	1.0000G	1500.0000	0.0	N	0.0	300.0000	1500.0000
173	15.0000	3.0000	3.0000	1.0000G	1500.0000	0.5000L	0.0	N	150.0000	1500.0000
174	15.0000	3.0000	7.0000	1.0000	1500.0000	0.0	N	0.0	150.0000	1500.0000
175	15.0000	5.0000	3.0000	1.0000G	2000.0000	0.0	N	0.0	70.0000	2000.0000
176	7.0000	3.0000	2.0000	1.0000G	1000.0000	0.5000L	0.0	N	100.0000	3000.0000
177	10.0000	3.0000	2.0000	1.0000G	1000.0000	0.5000L	0.0	N	70.0000	2000.0000
178	10.0000	3.0000	3.0000	1.0000	1500.0000	0.5000L	0.0	N	70.0000	2000.0000
179	15.0000	3.0000	2.0000	1.0000G	1500.0000	0.5000L	0.0	N	100.0000	3000.0000
180	7.0000	1.5000	1.0000	1.0000	700.0000	0.5000L	0.0	N	70.0000	1500.0000
181	7.0000	1.5000	1.5000	1.0000	500.0000	0.0	N	0.0	70.0000	1500.0000
182	7.0000	2.0000	2.0000	0.7000	700.0000	0.5000L	0.0	N	70.0000	1500.0000
183	3.0000	0.5000	2.0000	0.0300	700.0000	0.0	N	0.0	0.0	150.0000
184	7.0000	2.0000	3.0000	1.0000	1000.0000	0.7000	0.0	N	70.0000	2000.0000
185	5.0000	1.5000	1.5000	0.5000	500.0000	0.7000	0.0	N	70.0000	1500.0000
186	10.0000	2.0000	3.0000	0.7000	1500.0000	0.5000	0.0	N	70.0000	2000.0000
187	15.0000	3.0000	5.0000	1.0000	2000.0000	0.5000L	0.0	N	20.0000	1500.0000
188	5.0000	2.0000	3.0000	0.7000	1500.0000	0.0	N	0.0	50.0000	2000.0000
189	7.0000	2.0000	3.0000	1.0000	1000.0000	0.5000L	0.0	N	100.0000	2000.0000
190	7.0000	2.0000	1.5000	0.7000	500.0000	0.5000L	0.0	N	50.0000	1500.0000
191	7.0000	2.0000	3.0000	1.0000	700.0000	0.5000L	0.0	N	70.0000	1500.0000
192	15.0000	3.0000	3.0000	1.0000G	1500.0000	0.5000L	0.0	N	100.0000	3000.0000
193	20.0000	3.0000	5.0000	1.0000G	2000.0000	0.5000L	0.0	N	70.0000	3000.0000
194	15.0000	2.0000	2.0000	1.0000	1500.0000	0.5000L	0.0	N	70.0000	2000.0000
195	10.0000	5.0000	5.0000	1.0000G	2000.0000	0.5000L	0.0	N	70.0000	2000.0000
196	5.0000	1.5000	1.5000	0.7000	1500.0000	0.5000L	0.0	N	70.0000	1500.0000
197	15.0000	3.0000	3.0000	1.0000	1500.0000	0.5000L	0.0	N	30.0000	1500.0000
198	7.0000	1.5000	2.0000	0.7000	700.0000	0.0	N	0.0	100.0000	1500.0000
199	10.0000	3.0000	3.0000	1.0000	1000.0000	0.0	N	0.0	70.0000	1500.0000
200	7.0000	3.0000	2.0000	0.7000	700.0000	0.0	N	0.0	100.0000	1500.0000

TABLE 1.--SIRLM SITE SAMPLE ANALY-

SAMPLE	HF PPM	KI PPM	CU PPM	CR PPM	CU PPM	LA PPM	MO PPM	NR PPM	NI PPM	PR PPM
151	1.0000	0.0	10.0000	70.0000	70.0000	20.0000	0.0	10.0000	70.0000	30.0000
152	1.0000	0.0	10.0000	50.0000	50.0000	20.0000L	0.0	2.0000L	50.0000	20.0000
153	1.5000	0.0	10.0000	30.0000	50.0000	20.0000	0.0	10.0000	50.0000	30.0000
154	1.0000L	0.0	10.0000	100.0000	50.0000	20.0000L	0.0	10.0000	70.0000	20.0000
155	1.5000	0.0	15.0000	100.0000	50.0000	30.0000	0.0	15.0000	50.0000	20.0000
156	1.0000	0.0	10.0000	70.0000	50.0000	30.0000	0.0	15.0000	30.0000	20.0000
157	1.0000	0.0	15.0000	70.0000	70.0000	30.0000	0.0	10.0000	50.0000	70.0000
158	1.5000	0.0	10.0000	50.0000	30.0000	20.0000	0.0	10.0000	30.0000	50.0000
159	1.0000L	0.0	15.0000	100.0000	70.0000	30.0000	0.0	10.0000	70.0000	15.0000
160	1.5000	0.0	5.0000	5.0000L	20.0000	20.0000	0.0	10.0000	7.0000	15.0000
161	1.5000	0.0	15.0000	70.0000	30.0000	20.0000	0.0	15.0000	70.0000	20.0000
162	1.5000	0.0	10.0000	70.0000	15.0000	20.0000	0.0	2.0000L	50.0000	20.0000
163	1.5000	0.0	15.0000	30.0000	50.0000	20.0000	0.0	10.0000	30.0000	50.0000
164	1.5000	0.0	15.0000	70.0000	50.0000	20.0000	0.0	10.0000	50.0000	20.0000
165	1.5000	0.0	10.0000	70.0000	20.0000	20.0000	0.0	10.0000	30.0000	30.0000
166	1.5000	0.0	15.0000	30.0000	30.0000	50.0000	0.0	2.0000L	10.0000	70.0000
167	1.5000	0.0	15.0000	100.0000	70.0000	20.0000	0.0	10.0000	70.0000	50.0000
168	1.0000L	0.0	30.0000	300.0000	70.0000	30.0000	0.0	20.0000	70.0000	70.0000
169	1.0000L	0.0	30.0000	70.0000	20.0000	20.0000L	0.0	15.0000	20.0000	150.0000
170	1.0000L	0.0	50.0000	300.0000	150.0000	20.0000	0.0	20.0000	100.0000	70.0000
171	1.5000	0.0	50.0000	500.0000	100.0000	20.0000	0.0	15.0000	70.0000	15.0000
172	1.0000	0.0	30.0000	150.0000	70.0000	30.0000	0.0	20.0000	70.0000	15.0000
173	1.5000	0.0	70.0000	300.0000	70.0000	30.0000	0.0	15.0000	100.0000	30.0000
174	1.0000L	0.0	20.0000	70.0000	50.0000	30.0000	0.0	15.0000	30.0000	10.0000
175	1.0000	0.0	50.0000	200.0000	70.0000	20.0000	0.0	20.0000	70.0000	15.0000
176	1.0000	0.0	30.0000	300.0000	150.0000	20.0000	0.0	15.0000	70.0000	50.0000
177	1.0000L	0.0	15.0000	200.0000	70.0000	20.0000	0.0	20.0000	70.0000	15.0000
178	1.0000	0.0	20.0000	200.0000	70.0000	30.0000	0.0	15.0000	70.0000	20.0000
179	1.5000	0.0	50.0000	300.0000	100.0000	20.0000	0.0	20.0000	100.0000	50.0000
180	1.5000	0.0	20.0000	100.0000	70.0000	20.0000	0.0	20.0000	20.0000	20.0000
181	1.0000	0.0	15.0000	150.0000	70.0000	30.0000	0.0	15.0000	70.0000	20.0000
182	1.0000	0.0	15.0000	150.0000	50.0000	20.0000	0.0	2.0000L	70.0000	15.0000
183	1.0000L	0.0	5.0000L	20.0000	10.0000	20.0000L	0.0	2.0000L	5.0000L	10.0000L
184	1.5000	0.0	20.0000	150.0000	70.0000	20.0000	5.0000L	15.0000	70.0000	15.0000
185	1.0000L	0.0	15.0000	150.0000	70.0000	20.0000	7.0000	10.0000	70.0000	20.0000
186	1.5000	0.0	30.0000	150.0000	70.0000	30.0000	0.0	15.0000	70.0000	20.0000
187	1.0000	0.0	20.0000	70.0000	50.0000	20.0000L	0.0	15.0000	30.0000	30.0000
188	1.0000	0.0	15.0000	70.0000	70.0000	30.0000	0.0	15.0000	70.0000	10.0000
189	1.5000	0.0	20.0000	300.0000	70.0000	20.0000	0.0	15.0000	70.0000	30.0000
190	1.0000	0.0	15.0000	300.0000	70.0000	20.0000	0.0	10.0000	70.0000	15.0000
191	1.0000L	0.0	10.0000	150.0000	70.0000	20.0000	0.0	15.0000	70.0000	15.0000
192	1.0000	0.0	30.0000	300.0000	70.0000	30.0000	0.0	15.0000	70.0000	30.0000
193	1.0000	0.0	20.0000	150.0000	100.0000	70.0000	0.0	20.0000	70.0000	50.0000
194	1.0000	0.0	30.0000	150.0000	70.0000	20.0000	5.0000L	10.0000	70.0000	30.0000
195	1.0000	0.0	50.0000	300.0000	70.0000	20.0000	0.0	15.0000	100.0000	15.0000
196	1.0000	0.0	15.0000	150.0000	70.0000	20.0000	0.0	15.0000	100.0000	30.0000
197	1.0000L	0.0	20.0000	100.0000	70.0000	20.0000L	0.0	10.0000	70.0000	50.0000
198	1.5000	0.0	15.0000	150.0000	50.0000	30.0000	0.0	15.0000	70.0000	30.0000
199	1.5000	0.0	20.0000	200.0000	50.0000	30.0000	0.0	15.0000	70.0000	20.0000
200	1.0000	0.0	20.0000	300.0000	70.0000	30.0000	0.0	15.0000	70.0000	30.0000

TABLE 1.--S (PPM), SFI, SAMP, F&GLEF

SAMPLE	SH PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
151	0.0	20.0000	0.0	100.0000	200.0000	0.0	30.0000	200.0000L	150.0000
152	0.0	15.0000	0.0	50.0000L	100.0000	0.0	30.0000	200.0000L	150.0000
153	0.0	15.0000	0.0	300.0000	150.0000	0.0	30.0000	0.0	150.0000
154	0.0	15.0000	0.0	50.0000L	150.0000	0.0	20.0000	0.0	100.0000
155	0.0	30.0000	0.0	200.0000	150.0000	0.0	30.0000	0.0	200.0000
156	0.0	30.0000	0.0	300.0000	150.0000	0.0	30.0000	0.0	300.0000
157	0.0	20.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0	300.0000
158	0.0	15.0000	0.0	200.0000	150.0000	0.0	20.0000	0.0	150.0000
159	0.0	20.0000	0.0	200.0000	300.0000	0.0	50.0000	0.0	1000.0000G
160	0.0	15.0000	0.0	300.0000	150.0000	0.0	30.0000	0.0	100.0000
161	0.0	30.0000	0.0	300.0000	150.0000	0.0	50.0000	200.0000L	300.0000
162	0.0	20.0000	0.0	300.0000	150.0000	0.0	30.0000	200.0000L	100.0000
163	0.0	15.0000	0.0	300.0000	150.0000	0.0	20.0000	200.0000L	300.0000
164	0.0	20.0000	0.0	200.0000	150.0000	0.0	30.0000	200.0000L	70.0000
165	0.0	20.0000	0.0	300.0000	150.0000	0.0	30.0000	200.0000L	200.0000
166	0.0	20.0000	0.0	300.0000	150.0000	0.0	30.0000	200.0000L	150.0000
167	0.0	15.0000	0.0	300.0000	150.0000	0.0	30.0000	0.0	700.0000
168	0.0	30.0000	0.0	300.0000	500.0000	0.0	70.0000	0.0	500.0000
169	0.0	70.0000	0.0	500.0000	700.0000	0.0	100.0000	0.0	300.0000
170	0.0	30.0000	0.0	100.0000	500.0000	0.0	200.0000	0.0	300.0000
171	0.0	30.0000	0.0	300.0000	300.0000	0.0	30.0000	0.0	500.0000
172	0.0	30.0000	0.0	700.0000	200.0000	0.0	50.0000	0.0	200.0000
173	0.0	30.0000	0.0	300.0000	200.0000	0.0	50.0000	0.0	200.0000
174	0.0	30.0000	0.0	700.0000	200.0000	0.0	30.0000	0.0	150.0000
175	0.0	30.0000	0.0	700.0000	200.0000	0.0	50.0000	0.0	500.0000
176	0.0	30.0000	0.0	200.0000	300.0000	0.0	30.0000	0.0	300.0000
177	0.0	30.0000	0.0	200.0000	300.0000	0.0	200.0000	0.0	200.0000
178	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	0.0	500.0000
179	0.0	30.0000	0.0	100.0000	300.0000	0.0	30.0000	200.0000L	500.0000
180	0.0	15.0000	0.0	100.0000	150.0000	0.0	30.0000	200.0000L	500.0000
181	0.0	15.0000	0.0	100.0000	150.0000	0.0	30.0000	0.0	500.0000
182	0.0	20.0000	0.0	200.0000	300.0000	0.0	30.0000	200.0000L	200.0000
183	0.0	5.0000L	0.0	50.0000L	30.0000	50.0000L	20.0000	200.0000L	20.0000L
184	0.0	30.0000	0.0	300.0000	300.0000	0.0	50.0000	200.0000L	300.0000
185	0.0	30.0000	0.0	100.0000	300.0000	0.0	30.0000	200.0000L	200.0000
186	0.0	30.0000	0.0	300.0000	300.0000	0.0	30.0000	200.0000L	300.0000
187	0.0	50.0000	0.0	700.0000	300.0000	0.0	50.0000	0.0	500.0000
188	0.0	20.0000	0.0	200.0000	200.0000	0.0	30.0000	200.0000L	150.0000
189	0.0	30.0000	0.0	200.0000	500.0000	0.0	70.0000	200.0000L	300.0000
190	0.0	20.0000	0.0	150.0000	300.0000	0.0	30.0000	0.0	500.0000
191	0.0	20.0000	0.0	200.0000	300.0000	0.0	50.0000	0.0	700.0000
192	0.0	30.0000	0.0	150.0000	500.0000	0.0	30.0000	200.0000L	200.0000
193	0.0	50.0000	0.0	150.0000	700.0000	0.0	100.0000	0.0	700.0000
194	0.0	30.0000	0.0	200.0000	300.0000	0.0	50.0000	200.0000L	150.0000
195	0.0	50.0000	0.0	300.0000	500.0000	0.0	50.0000	0.0	500.0000
196	0.0	20.0000	0.0	100.0000	300.0000	0.0	50.0000	200.0000L	200.0000
197	0.0	30.0000	0.0	200.0000	300.0000	0.0	30.0000	0.0	300.0000
198	0.0	15.0000	0.0	150.0000	150.0000	0.0	30.0000	200.0000L	1000.0000
199	0.0	30.0000	0.0	200.0000	300.0000	0.0	50.0000	200.0000L	500.0000
200	0.0	20.0000	0.0	200.0000	200.0000	0.0	50.0000	200.0000L	500.0000

TABLE 1.—STH-W SED SAMPLE TABLE

SAMPLE	FF PCT	MG PCT	CA PCT	TI PCT	KN PPM	AG PPM	AS PPM	AI PPM	R PPM	HA PPM
201	7.0000	2.0000	1.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
202	7.0000	1.5000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
203	7.0000	1.5000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
204	10.0000	2.0000	2.0000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
205	10.0000	2.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
206	5.0000	1.5000	0.5000	0.7000	500.0000	0.0 N	200.0000L	0.0 N	70.0000	1000.0000
207	7.0000	3.0000	1.5000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
208	10.0000	2.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
209	10.0000	2.0000	1.0000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
210	10.0000	2.0000	1.0000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	200.0000	1500.0000
211	10.0000	2.0000	1.5000	1.0000	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
212	7.0000	1.5000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
213	15.0000	3.0000	1.5000	1.5000	1500.0000	0.0 N	0.0 N	0.0 N	300.0000	2000.0000
214	7.0000	1.5000	0.7000	0.7000	500.0000	0.0 N	0.0 N	0.0 N	150.0000	1500.0000
215	15.0000	1.5000	5.0000	1.0000G	1500.0000	0.5000L	0.0 N	1.6000	200.0000	1500.0000
216	3.0000	1.0000	0.3000	0.3000	300.0000	0.7000	200.0000L	0.0 N	70.0000	1500.0000
217	7.0000	2.0000	2.0000	0.7000	700.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
218	7.0000	2.0000	2.0000	0.7000	700.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
219	10.0000	3.0000	3.0000	1.0000	1000.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
220	5.0000	0.7000	0.7000	0.7000	300.0000	1.5000	200.0000L	0.0 N	100.0000	1500.0000
221	7.0000	2.0000	2.0000	1.0000	2000.0000	0.5000L	0.0 N	0.0 N	150.0000	1500.0000
222	5.0000	1.5000	1.5000	0.5000	700.0000	0.5000L	200.0000L	0.0 N	50.0000	1500.0000
223	5.0000	1.0000	1.5000	0.7000	500.0000	0.5000L	200.0000L	0.2000	50.0000	1500.0000
224	5.0000	0.7000	1.0000	0.7000	700.0000	0.5000L	0.0 N	0.0 N	50.0000	1500.0000
225	5.0000	1.5000	1.5000	0.5000	700.0000	0.5000	200.0000L	0.0 N	100.0000	1500.0000
226	5.0000	0.7000	0.7000	0.7000	300.0000	1.5000	200.0000L	0.0 N	100.0000	1500.0000
227	10.0000	2.0000	2.0000	0.7000	700.0000	0.5000L	0.0 N	0.0 N	150.0000	1500.0000
228	5.0000	0.7000	0.5000	0.5000	500.0000	0.0 N	200.0000L	0.0 N	70.0000	1500.0000
229	3.0000	0.5000	0.2000	0.5000	200.0000	0.5000L	200.0000L	0.0 N	30.0000	1500.0000
230	7.0000	1.5000	1.0000	0.7000	700.0000	0.5000L	200.0000L	0.0 N	100.0000	3000.0000
231	5.0000	1.0000	0.7000	0.7000	700.0000	0.5000L	200.0000L	0.0 N	100.0000	2000.0000
232	3.0000	1.0000	1.0000	0.5000	300.0000	0.5000L	200.0000L	0.0400	70.0000	1500.0000
233	3.0000	0.7000	0.7000	0.5000	300.0000	0.5000L	200.0000L	0.0 N	70.0000	1500.0000
234	3.0000	0.7000	0.7000	0.5000	300.0000	0.5000L	200.0000L	0.0 N	50.0000	1500.0000
235	5.0000	0.7000	0.3000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	150.0000	1500.0000
236	5.0000	1.0000	1.5000	0.5000	700.0000	0.0 N	200.0000L	0.0 N	70.0000	2000.0000
237	3.0000	1.5000	1.0000	0.5000	500.0000	0.5000L	200.0000L	0.0 N	50.0000	1500.0000
238	3.0000	0.7000	1.0000	0.5000	300.0000	0.5000L	200.0000L	0.0 N	70.0000	2000.0000
239	3.0000	0.7000	1.5000	0.5000	500.0000	0.0 N	200.0000L	0.0 N	70.0000	2000.0000
240	3.0000	1.5000	2.0000	0.7000	500.0000	0.5000L	200.0000L	0.0 N	50.0000	1500.0000
241	3.0000	1.5000	2.0000	0.5000	300.0000	0.0 N	200.0000L	0.0 N	50.0000	1500.0000
242	3.0000	0.7000	1.5000	0.3000	300.0000	0.5000L	200.0000L	0.0 N	50.0000	1500.0000
243	3.0000	1.0000	1.5000	0.5000	300.0000	0.5000L	200.0000L	0.0 N	70.0000	1500.0000
244	5.0000	1.5000	1.5000	0.7000	700.0000	0.5000L	200.0000L	0.0 N	70.0000	2000.0000
245	3.0000	1.5000	2.0000	0.7000	300.0000	0.5000L	200.0000L	0.0 N	70.0000	1500.0000
246	3.0000	1.5000	2.0000	0.5000	300.0000	0.0 N	200.0000L	0.0 N	50.0000	2000.0000
247	5.0000	2.0000	2.0000	0.5000	500.0000	0.5000L	200.0000L	0.0 N	70.0000	1500.0000
248	5.0000	0.5000	0.7000	0.5000	300.0000	0.5000L	200.0000L	0.0 N	50.0000	1500.0000
249	3.0000	1.0000	1.5000	0.5000	300.0000	0.5000L	200.0000L	0.0 N	70.0000	1500.0000
250	3.0000	1.5000	2.0000	0.5000	500.0000	0.5000L	200.0000L	0.0 N	70.0000	1500.0000

TABLE 1.--STRIM SED SAMP FLAGLT

SAMPLE	HF PPM	RI PPM	CU PPM	CR PPM	CU PPM	LA PPM	MU PPM	NR PPM	NI PPM	PR PPM
201	1.0000	0.0	20.0000	150.0000	70.0000	30.0000	0.0	15.0000	70.0000	15.0000
202	1.5000	0.0	15.0000	150.0000	70.0000	20.0000	0.0	10.0000	70.0000	15.0000
203	1.0000	0.0	20.0000	150.0000	100.0000	20.0000	0.0	10.0000	70.0000	30.0000
204	1.5000	0.0	15.0000	150.0000	70.0000	30.0000	0.0	10.0000	70.0000	15.0000
205	1.0000	0.0	20.0000	150.0000	70.0000	20.0000	0.0	2.0000L	100.0000	15.0000
206	1.0000L	0.0	15.0000	100.0000	70.0000	20.0000L	0.0	10.0000	70.0000	20.0000
207	1.0000	0.0	15.0000	150.0000	70.0000	30.0000	0.0	10.0000	100.0000	20.0000
208	1.0000L	0.0	15.0000	100.0000	70.0000	30.0000	0.0	15.0000	70.0000	10.0000
209	1.0000L	0.0	15.0000	100.0000	70.0000	20.0000	0.0	10.0000	70.0000	10.0000
210	1.0000L	0.0	15.0000	70.0000	70.0000	20.0000	0.0	2.0000L	70.0000	10.0000
211	1.0000	0.0	20.0000	100.0000	50.0000	20.0000	0.0	15.0000	70.0000	15.0000
212	1.0000L	0.0	15.0000	100.0000	50.0000	20.0000	0.0	10.0000	70.0000	15.0000
213	1.0000	0.0	30.0000	150.0000	70.0000	20.0000	0.0	15.0000	70.0000	70.0000
214	1.0000	0.0	15.0000	150.0000	70.0000	20.0000	0.0	15.0000	100.0000	100.0000
215	1.0000	0.0	50.0000	200.0000	100.0000	30.0000	0.0	15.0000	150.0000	30.0000
216	1.0000	0.0	15.0000	15.0000	70.0000	20.0000	0.0	10.0000	100.0000	20.0000
217	1.0000	0.0	15.0000	150.0000	70.0000	30.0000	5.0000L	2.0000L	150.0000	30.0000
218	1.5000	0.0	15.0000	200.0000	70.0000	70.0000	0.0	10.0000	150.0000	30.0000
219	1.0000L	0.0	10.0000	300.0000	50.0000	20.0000	0.0	2.0000L	100.0000	10.0000
220	2.0000	0.0	15.0000	150.0000	100.0000	50.0000	5.0000	30.0000	70.0000	20.0000
221	1.0000	0.0	15.0000	200.0000	70.0000	50.0000	0.0	10.0000	100.0000	70.0000
222	1.5000	0.0	15.0000	150.0000	50.0000	30.0000	0.0	15.0000	70.0000	30.0000
223	1.5000	0.0	15.0000	150.0000	50.0000	30.0000	0.0	15.0000	70.0000	30.0000
224	1.0000	0.0	15.0000	200.0000	15.0000	30.0000	5.0000L	30.0000	70.0000	15.0000
225	1.5000	0.0	15.0000	150.0000	70.0000	30.0000	0.0	10.0000	70.0000	30.0000
226	2.0000	0.0	15.0000	150.0000	100.0000	50.0000	5.0000	30.0000	70.0000	70.0000
227	1.0000	0.0	15.0000	300.0000	100.0000	30.0000	0.0	10.0000	150.0000	30.0000
228	1.5000	0.0	15.0000	150.0000	50.0000	30.0000	0.0	10.0000	70.0000	100.0000
229	1.5000	0.0	15.0000	150.0000	7.0000	30.0000	0.0	10.0000	50.0000	30.0000
230	2.0000	0.0	15.0000	150.0000	50.0000	30.0000	0.0	10.0000	70.0000	150.0000
231	3.0000	0.0	15.0000	150.0000	70.0000	30.0000	0.0	10.0000	70.0000	150.0000
232	2.0000	0.0	10.0000	150.0000	30.0000	50.0000	0.0	15.0000	50.0000	100.0000
233	2.0000	0.0	10.0000	150.0000	50.0000	30.0000	0.0	10.0000	50.0000	100.0000
234	1.5000	0.0	15.0000	150.0000	30.0000	50.0000	0.0	15.0000	70.0000	30.0000
235	1.0000	0.0	10.0000	150.0000	70.0000	30.0000	0.0	10.0000	70.0000	100.0000
236	1.5000	0.0	15.0000	100.0000	70.0000	50.0000	5.0000L	20.0000	70.0000	50.0000
237	1.5000	0.0	15.0000	150.0000	50.0000	50.0000	5.0000L	10.0000	70.0000	30.0000
238	1.5000	0.0	10.0000	100.0000	70.0000	50.0000	0.0	15.0000	30.0000	30.0000
239	2.0000	0.0	15.0000	100.0000	30.0000	50.0000	0.0	15.0000	70.0000	30.0000
240	1.5000	0.0	15.0000	200.0000	15.0000	50.0000	5.0000L	15.0000	70.0000	30.0000
241	1.5000	0.0	15.0000	150.0000	30.0000	50.0000	5.0000L	10.0000	50.0000	50.0000
242	1.5000	0.0	15.0000	100.0000	20.0000	30.0000	0.0	10.0000	50.0000	30.0000
243	1.5000	0.0	10.0000	100.0000	15.0000	70.0000	0.0	10.0000	50.0000	30.0000
244	1.5000	0.0	15.0000	150.0000	30.0000	50.0000	5.0000L	15.0000	70.0000	30.0000
245	1.5000	0.0	15.0000	150.0000	50.0000	50.0000	5.0000L	15.0000	50.0000	30.0000
246	1.5000	0.0	15.0000	150.0000	20.0000	50.0000	0.0	15.0000	50.0000	30.0000
247	1.5000	0.0	15.0000	100.0000	30.0000	50.0000	0.0	15.0000	50.0000	30.0000
248	1.5000	0.0	10.0000	150.0000	30.0000	50.0000	0.0	15.0000	50.0000	30.0000
249	1.5000	0.0	15.0000	150.0000	30.0000	50.0000	5.0000L	15.0000	70.0000	30.0000
250	1.5000	0.0	15.0000	100.0000	15.0000	50.0000	5.0000L	20.0000	50.0000	30.0000

TABLE 1.--S-1-PM STD SAMPLE TABLE

SAMPLE	SR	SC	SN	SP	V	W	Y	ZN	ZR
201	0.0 N	15.0000	0.0 N	100.0000	200.0000	0.0 N	20.0000	0.0 N	300.0000
202	0.0 N	20.0000	0.0 N	100.0000	200.0000	0.0 N	30.0000	0.0 N	500.0000
203	0.0 N	20.0000	0.0 N	100.0000	200.0000	0.0 N	30.0000	0.0 N	300.0000
204	0.0 N	20.0000	0.0 N	100.0000	300.0000	0.0 N	30.0000	0.0 N	300.0000
205	0.0 N	20.0000	0.0 N	50.0000L	200.0000	0.0 N	70.0000	0.0 N	300.0000
206	0.0 N	15.0000	0.0 N	50.0000L	150.0000	0.0 N	20.0000	0.0 N	300.0000
207	0.0 N	15.0000	0.0 N	100.0000	200.0000	0.0 N	30.0000	0.0 N	300.0000
208	0.0 N	15.0000	0.0 N	50.0000L	200.0000	0.0 N	20.0000	0.0 N	700.0000
209	0.0 N	15.0000	0.0 N	50.0000L	200.0000	0.0 N	20.0000	0.0 N	500.0000
210	0.0 N	15.0000	0.0 N	50.0000L	200.0000	0.0 N	20.0000	0.0 N	500.0000
211	0.0 N	20.0000	0.0 N	50.0000L	300.0000	0.0 N	30.0000	0.0 N	500.0000
212	0.0 N	15.0000	0.0 N	50.0000L	300.0000	0.0 N	30.0000	700.0000	700.0000
213	0.0 N	15.0000	0.0 N	100.0000	300.0000	0.0 N	20.0000	0.0 N	500.0000
214	0.0 N	15.0000	0.0 N	100.0000	500.0000	0.0 N	20.0000	200.0000L	300.0000
215	0.0 N	30.0000	0.0 N	150.0000	500.0000	0.0 N	30.0000	0.0 N	300.0000
216	0.0 N	10.0000	0.0 N	100.0000	300.0000	0.0 N	30.0000	200.0000L	200.0000
217	0.0 N	15.0000	0.0 N	200.0000	300.0000	0.0 N	30.0000	200.0000L	300.0000
218	0.0 N	20.0000	0.0 N	200.0000	300.0000	0.0 N	30.0000	200.0000L	1000.0000
219	0.0 N	20.0000	0.0 N	150.0000	300.0000	0.0 N	30.0000	200.0000L	500.0000
220	0.0 N	20.0000	0.0 N	300.0000	300.0000	0.0 N	30.0000	200.0000L	300.0000
221	0.0 N	20.0000	0.0 N	300.0000	300.0000	0.0 N	30.0000	200.0000L	700.0000
222	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	20.0000	200.0000L	200.0000
223	0.0 N	15.0000	0.0 N	300.0000	200.0000	0.0 N	20.0000	200.0000L	300.0000
224	0.0 N	15.0000	0.0 N	200.0000	300.0000	0.0 N	20.0000	200.0000L	300.0000
225	0.0 N	20.0000	0.0 N	200.0000	300.0000	0.0 N	30.0000	200.0000L	300.0000
226	0.0 N	20.0000	0.0 N	300.0000	300.0000	0.0 N	30.0000	200.0000L	300.0000
227	0.0 N	20.0000	0.0 N	200.0000	500.0000	0.0 N	30.0000	200.0000L	700.0000
228	0.0 N	15.0000	0.0 N	200.0000	200.0000	0.0 N	30.0000	300.0000	200.0000
229	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	20.0000	300.0000	200.0000
230	0.0 N	15.0000	0.0 N	300.0000	300.0000	0.0 N	50.0000	300.0000	300.0000
231	100.0000L	15.0000	0.0 N	200.0000	200.0000	0.0 N	30.0000	300.0000	300.0000
232	100.0000L	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	300.0000	200.0000
233	100.0000L	15.0000	0.0 N	100.0000	150.0000	0.0 N	30.0000	300.0000	300.0000
234	100.0000L	15.0000	0.0 N	100.0000	150.0000	0.0 N	30.0000	300.0000	300.0000
235	100.0000L	15.0000	0.0 N	50.0000L	500.0000	0.0 N	20.0000	200.0000L	300.0000
236	0.0 N	15.0000	0.0 N	300.0000	200.0000	0.0 N	30.0000	200.0000L	300.0000
237	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	300.0000
238	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	200.0000
239	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	200.0000
240	0.0 N	20.0000	0.0 N	500.0000	150.0000	0.0 N	30.0000	200.0000L	300.0000
241	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	200.0000
242	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	150.0000
243	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	300.0000
244	0.0 N	20.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	300.0000
245	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	200.0000
246	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	300.0000
247	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	200.0000
248	0.0 N	15.0000	0.0 N	200.0000	150.0000	0.0 N	30.0000	200.0000L	200.0000
249	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	300.0000
250	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	30.0000	200.0000L	300.0000

TABLE 1.---SPECTRA SHOWN SAMPLE PAGE

SAMPLE	FF PCT	MG PCT	CA PCT	TI PCT	AS PPM _{ti}	AS PPM	AU PPM	R PPM	RA PPM
251	7.0000	1.0000	1.0000	0.7000	0.5000L	200.0000L	0.0	N	100.0000
252	5.0000	0.7000	0.5000	0.5000	0.5000L	200.0000L	0.0	N	70.0000
253	7.0000	1.5000	0.5000	0.7000	0.5000L	0.0	N	N	100.0000
254	15.0000	3.0000	1.0000	1.0000	0.5000L	0.0	N	N	100.0000
255	10.0000	1.5000	1.5000	0.7000	0.5000L	0.0	N	N	200.0000
256	15.0000	2.0000	1.5000	1.0000	0.0	0.0	N	N	200.0000
257	15.0000	2.0000	1.5000	1.0000	0.0	0.0	N	N	200.0000
258	20.0000	3.0000	1.5000	1.0000	0.0	0.0	N	N	300.0000
259	15.0000	3.0000	2.0000	1.0000	0.0	200.0000L	0.0	N	100.0000
260	15.0000	3.0000	1.0000	1.0000	0.5000L	0.0	N	N	100.0000
261	15.0000	3.0000	1.5000	1.0000	0.5000L	0.0	N	N	150.0000
262	20.0000	3.0000	1.5000	1.0000	0.0	0.0	N	N	150.0000
263	15.0000	3.0000	1.5000	1.0000	0.0	0.0	N	N	200.0000
264	15.0000	2.0000	1.5000	1.0000	0.0	0.0	N	N	200.0000
265	20.0000	2.0000	1.0000	1.0000	0.5000L	0.0	N	N	300.0000
266	15.0000	3.0000	1.5000	1.0000	0.5000L	0.0	N	N	200.0000
267	20.0000	2.0000	1.5000	1.0000	0.5000L	0.0	N	N	300.0000
268	10.0000	1.0000	1.0000	1.0000	0.5000L	0.0	N	N	200.0000
269	5.0000	1.5000	1.5000	0.7000	0.0	200.0000L	0.0	N	70.0000
270	5.0000	1.5000	0.7000	0.7000	0.5000L	200.0000L	0.0	N	150.0000
271	15.0000	3.0000	1.5000	1.0000	0.0	0.0	N	N	150.0000
272	15.0000	3.0000	2.0000	0.7000	0.5000L	0.0	N	N	150.0000
273	5.0000	1.5000	2.0000	0.5000	0.0	0.0	N	N	30.0000
274	3.0000	2.0000	2.0000	0.3000	0.0	200.0000L	0.0	N	30.0000
275	10.0000	3.0000	3.0000	0.7000	0.0	0.0	N	N	150.0000
276	15.0000	5.0000	5.0000	1.0000	0.5000L	0.0	N	N	70.0000
277	3.0000	2.0000	1.0000	0.2000	0.5000L	0.0	N	N	30.0000
278	5.0000	3.0000	1.5000	0.7000	0.5000L	0.0	N	N	70.0000
279	5.0000	2.0000	2.0000	0.5000	0.5000L	0.0	N	N	50.0000
280	5.0000	3.0000	2.0000	0.5000	0.0	0.0	N	N	50.0000
281	5.0000	2.0000	1.0000	0.7000	0.0	0.0	N	N	70.0000
282	10.0000	5.0000	3.0000	1.0000	0.5000L	0.0	N	N	70.0000
283	15.0000	5.0000	5.0000	1.0000	0.5000L	0.0	N	N	70.0000
284	15.0000	7.0000	7.0000	1.0000	0.5000L	0.0	N	N	70.0000
285	10.0000	10.0000	7.0000	0.7000	0.5000L	0.0	N	N	30.0000
286	7.0000	3.0000	2.0000	0.7000	0.0	0.0	N	N	50.0000
287	5.0000	3.0000	2.0000	0.5000	0.0	0.0	N	N	50.0000
288	5.0000	1.0000	2.0000	0.5000	0.0	0.0	N	N	50.0000
289	15.0000	5.0000	2.0000	1.0000	0.5000L	0.0	N	N	70.0000
290	15.0000	5.0000	3.0000	1.0000	0.5000L	0.0	N	N	70.0000
291	15.0000	7.0000	3.0000	1.0000	0.0	0.0	N	N	20.0000
292	3.0000	1.5000	0.7000	0.7000	0.0	0.0	N	N	20.0000
293	1.5000	10.0000	5.0000	1.0000	0.5000L	0.0	N	N	20.0000
294	15.0000	7.0000	5.0000	1.0000	0.0	0.0	N	N	70.0000
295	10.0000	3.0000	3.0000	1.0000	0.5000L	0.0	N	N	30.0000
296	10.0000	5.0000	5.0000	1.0000	0.0	0.0	N	N	70.0000
297	7.0000	2.0000	1.5000	0.5000	0.0	0.0	N	N	70.0000
298	3.0000	2.0000	2.0000	0.3000	0.0	0.0	N	N	30.0000
299	5.0000	2.0000	2.0000	0.2000	0.0	200.0000L	0.0	N	50.0000
300	3.0000	1.0000	1.0000	0.1500	0.0	200.0000L	0.0	N	30.0000

TABLE 1. -- STP-R, SHD, SAMP, FALG-LF

SAMPLE	SR PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	Z/N PPM	ZR PPM
251	0.0	15.0000	0.0	200.0000	300.0000	0.0	30.0000	200.0000	500.0000
252	0.0	10.0000	0.0	200.0000	200.0000	0.0	20.0000	200.0000	150.0000
253	0.0	15.0000	0.0	100.0000	300.0000	0.0	15.0000	200.0000	300.0000
254	0.0	30.0000	0.0	50.0000L	700.0000	0.0	30.0000	200.0000L	500.0000
255	0.0	15.0000	0.0	100.0000	300.0000	0.0	30.0000	200.0000L	700.0000
256	0.0	15.0000	0.0	100.0000	500.0000	0.0	30.0000	200.0000L	700.0000
257	0.0	20.0000	0.0	100.0000	300.0000	0.0	50.0000	200.0000L	500.0000
258	0.0	20.0000	0.0	100.0000	500.0000	0.0	30.0000	200.0000L	700.0000
259	0.0	15.0000	0.0	500.0000	200.0000	0.0	30.0000	200.0000L	300.0000
260	0.0	30.0000	0.0	150.0000	700.0000	0.0	30.0000	200.0000L	300.0000
261	0.0	30.0000	0.0	100.0000	700.0000	0.0	30.0000	200.0000L	700.0000
262	0.0	20.0000	0.0	100.0000	500.0000	0.0	30.0000	500.0000	700.0000
263	0.0	15.0000	0.0	100.0000	500.0000	0.0	30.0000	200.0000L	700.0000
264	0.0	15.0000	0.0	100.0000	500.0000	0.0	30.0000	200.0000L	700.0000
265	0.0	15.0000	0.0	100.0000	500.0000	0.0	30.0000	300.0000	1000.0000
266	0.0	15.0000	0.0	100.0000	500.0000	0.0	30.0000	200.0000L	1000.0000
267	0.0	15.0000	0.0	100.0000	700.0000	0.0	30.0000	200.0000L	1000.0000
268	0.0	15.0000	0.0	300.0000	200.0000	0.0	30.0000	300.0000	500.0000
269	0.0	15.0000	0.0	300.0000	200.0000	0.0	30.0000	200.0000L	300.0000
270	0.0	15.0000	0.0	200.0000	200.0000	0.0	50.0000	200.0000	300.0000
271	0.0	30.0000	0.0	100.0000	500.0000	0.0	30.0000	200.0000L	500.0000
272	0.0	20.0000	0.0	150.0000	500.0000	0.0	30.0000	200.0000L	700.0000
273	0.0	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0	150.0000
274	0.0	15.0000	0.0	300.0000	150.0000	0.0	30.0000	200.0000L	200.0000
275	0.0	30.0000	0.0	100.0000	300.0000	0.0	30.0000	0.0	500.0000
276	0.0	30.0000	0.0	100.0000	300.0000	0.0	30.0000	0.0	200.0000
277	0.0	20.0000	0.0	200.0000	150.0000	0.0	30.0000	200.0000L	150.0000
278	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	200.0000L	200.0000
279	0.0	15.0000	0.0	150.0000	150.0000	0.0	20.0000	200.0000L	200.0000
280	0.0	15.0000	0.0	200.0000	150.0000	0.0	20.0000	200.0000L	150.0000
281	0.0	20.0000	0.0	100.0000	200.0000	0.0	30.0000	200.0000L	200.0000
282	0.0	30.0000	0.0	100.0000	300.0000	0.0	30.0000	0.0	150.0000
283	0.0	50.0000	0.0	100.0000	300.0000	0.0	50.0000	200.0000L	100.0000
284	0.0	30.0000	0.0	100.0000	200.0000	0.0	30.0000	200.0000L	100.0000
285	0.0	20.0000	0.0	100.0000	150.0000	0.0	30.0000	0.0	100.0000
286	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	0.0	300.0000
287	0.0	30.0000	0.0	200.0000	150.0000	0.0	30.0000	0.0	200.0000
288	0.0	7.0000	0.0	100.0000	300.0000	0.0	15.0000	0.0	300.0000
289	0.0	50.0000	0.0	100.0000	150.0000	0.0	30.0000	200.0000L	300.0000
290	0.0	50.0000	0.0	100.0000	300.0000	0.0	30.0000	0.0	150.0000
291	0.0	30.0000	0.0	50.0000L	300.0000	0.0	20.0000	0.0	100.0000
292	0.0	10.0000	0.0	100.0000	70.0000	0.0	20.0000	0.0	300.0000
293	0.0	50.0000	0.0	100.0000	300.0000	0.0	30.0000	0.0	70.0000
294	0.0	50.0000	0.0	150.0000	300.0000	0.0	30.0000	0.0	300.0000
295	0.0	15.0000	0.0	100.0000	500.0000	0.0	20.0000	200.0000L	700.0000
296	0.0	50.0000	0.0	200.0000	200.0000	0.0	30.0000	0.0	300.0000
297	0.0	15.0000	0.0	200.0000	150.0000	0.0	30.0000	200.0000L	300.0000
298	0.0	15.0000	0.0	500.0000	100.0000	0.0	20.0000	200.0000L	150.0000
299	0.0	15.0000	0.0	300.0000	150.0000	0.0	20.0000	0.0	100.0000
300	0.0	10.0000	0.0	100.0000	100.0000	0.0	30.0000	200.0000L	100.0000

TABLE 1.--S_{TRM} S_{FD} S_{AMP} F_{ALST} F

S _{AMP} LF	F _F PCT	M _G PCT	C _A PCT	T _I PCT	M _N PPM	A _G PPM	A _S PPM	A _U PPM	R PPM	R _A PPM
301	2.0000	1.0000	0.5000	0.2000	300.0000	0.5000L	200.0000L	0.0 N	15.0000	1000.0000
302	3.0000	1.0000	0.5000	0.2000	200.0000	0.0 N	200.0000L	0.0 N	20.0000	1500.0000
303	3.0000	1.0000	0.7000	0.2000	200.0000	0.0 N	200.0000L	0.0 N	20.0000	1500.0000
304	3.0000	1.0000	0.7000	0.2000	200.0000	0.5000L	0.0 N	0.0 N	20.0000	1500.0000
305	3.0000	0.7000	0.5000	0.2000	300.0000	0.5000L	0.0 N	0.0 N	30.0000	1500.0000
306	3.0000	1.0000	0.3000	0.3000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	1500.0000
307	5.0000	1.5000	2.0000	0.5000	1500.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
308	3.0000	1.0000	0.5000	0.3000	300.0000	0.0 N	0.0 N	0.0 N	30.0000	1000.0000
309	5.0000	1.5000	0.5000	0.3000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	1500.0000
310	7.0000	3.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
311	5.0000	3.0000	2.0000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	15.0000	700.0000
312	5.0000	3.0000	2.0000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	30.0000	1000.0000
313	7.0000	3.0000	3.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	30.0000	1000.0000
314	3.0000	3.0000	2.0000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
315	5.0000	2.0000	2.0000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
316	5.0000	1.0000	1.0000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
317	5.0000	1.5000	1.0000	0.5000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	2000.0000
318	5.0000	1.5000	2.0000	0.5000	300.0000	0.5000L	0.0 N	0.0 N	100.0000	5000.0000G
319	5.0000	1.5000	2.0000	0.7000	500.0000	0.5000L	0.0 N	0.0 N	70.0000	5000.0000G
320	5.0000	1.0000	1.5000	0.5000	500.0000	0.5000L	200.0000L	0.0 N	50.0000	2000.0000
321	10.0000	3.0000	3.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0200	70.0000	1500.0000
322	10.0000	1.5000	2.0000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000

TABLE 1.--SAMPLING SITE SAMPLING FACTOR

SAMPLING SITE	RT PPM	RI PPM	CU PPM	CR PPM	CU PPM	LA PPM	MI PPM	NR PPM	NI PPM	PR PPM
301	1.0000	0.0	1.0000	30.0000	15.0000	50.0000	0.0	2.0000L	15.0000	15.0000
302	1.0000	0.0	1.0000	70.0000	5.0000L	50.0000	0.0	2.0000L	20.0000	10.0000
303	1.0000	0.0	1.0000	50.0000	5.0000L	30.0000	5.0000L	10.0000	20.0000	10.0000
304	1.0000L	0.0	7.0000	50.0000	5.0000L	50.0000	0.0	2.0000L	15.0000	15.0000
305	1.0000L	0.0	10.0000	50.0000	30.0000	30.0000	5.0000L	10.0000	15.0000	20.0000
306	1.0000L	0.0	0.0	10.0000	7.0000	20.0000L	0.0	2.0000L	5.0000L	10.0000L
307	1.5000	0.0	15.0000	70.0000	70.0000	30.0000	0.0	15.0000	70.0000	20.0000
308	1.0000L	0.0	5.0000L	15.0000	70.0000	20.0000	0.0	2.0000L	10.0000	10.0000
309	1.0000L	0.0	5.0000L	50.0000	20.0000	20.0000L	0.0	2.0000L	7.0000	15.0000
310	1.0000L	0.0	15.0000	100.0000	30.0000	20.0000	0.0	2.0000L	100.0000	10.0000L
311	5.0000	0.0	20.0000	300.0000	50.0000	20.0000L	5.0000L	10.0000	150.0000	15.0000
312	2.0000	0.0	15.0000	150.0000	30.0000	100.0000	0.0	10.0000	100.0000	10.0000
313	0.0	0.0	20.0000	700.0000	50.0000	20.0000L	5.0000L	10.0000	150.0000	10.0000L
314	1.0000	0.0	20.0000	200.0000	20.0000	20.0000L	0.0	10.0000	100.0000	10.0000L
315	1.0000L	0.0	15.0000	200.0000	50.0000	50.0000	0.0	15.0000	100.0000	30.0000
316	1.5000	0.0	10.0000	70.0000	20.0000	30.0000	5.0000L	2.0000L	70.0000	20.0000
317	1.0000L	0.0	10.0000	150.0000	100.0000	30.0000	5.0000L	2.0000L	70.0000	50.0000
318	2.0000	0.0	10.0000	100.0000	70.0000	50.0000	5.0000	10.0000	70.0000	30.0000
319	2.0000	0.0	15.0000	150.0000	30.0000	30.0000	5.0000L	10.0000	70.0000	20.0000
320	1.0000	0.0	15.0000	150.0000	50.0000	50.0000	5.0000	10.0000	70.0000	15.0000
321	0.0	0.0	20.0000	300.0000	50.0000	50.0000	0.0	10.0000	200.0000	10.0000
322	1.5000	0.0	15.0000	100.0000	15.0000	30.0000	0.0	10.0000	100.0000	30.0000

TABLE 1.-- STEEL, SFD, SAMP, FACLT

SAMPLE	SR	SC	SW	SR	V	W	Y	ZN	ZR
301	0.0	7.00000	0.0	50.00000L	70.00000	0.0	20.0000	0.0	150.0000
302	0.0	15.00000	0.0	50.00000L	70.00000	0.0	20.0000	0.0	150.0000
303	0.0	10.00000	0.0	50.00000L	70.00000	0.0	20.0000	200.0000L	150.0000
304	0.0	7.00000	0.0	50.00000L	70.00000	0.0	20.0000	0.0	200.0000
305	0.0	10.00000	0.0	50.00000L	70.00000	0.0	30.0000	0.0	200.0000
306	0.0	5.00000	0.0	50.00000L	30.00000	0.0	15.0000	0.0	100.0000
307	0.0	20.00000	0.0	100.00000	200.00000	0.0	30.0000	0.0	300.0000
308	0.0	5.00000	0.0	50.00000L	30.00000	0.0	10.0000	0.0	150.0000
309	0.0	7.00000	0.0	50.00000L	50.00000	0.0	15.0000	0.0	300.0000
310	0.0	20.00000	0.0	150.00000	150.00000	0.0	30.0000	0.0	300.0000
311	0.0	30.00000	0.0	200.00000	100.00000	0.0	30.0000	200.0000L	100.0000
312	0.0	30.00000	0.0	200.00000	100.00000	0.0	30.0000	200.0000L	150.0000
313	0.0	50.00000	0.0	200.00000	150.00000	0.0	30.0000	200.0000L	100.0000
314	0.0	20.00000	0.0	100.00000	100.00000	0.0	20.0000	200.0000L	150.0000
315	0.0	20.00000	0.0	200.00000	150.00000	0.0	30.0000	0.0	200.0000
316	0.0	15.00000	0.0	100.00000	200.00000	0.0	20.0000	200.0000L	200.0000
317	0.0	15.00000	0.0	50.00000L	200.00000	0.0	20.0000	500.0000	150.0000
318	0.0	15.00000	0.0	150.00000	200.00000	0.0	30.0000	300.0000	300.0000
319	0.0	15.00000	0.0	150.00000	200.00000	0.0	50.0000	500.0000	300.0000
320	0.0	15.00000	0.0	200.00000	150.00000	0.0	30.0000	500.0000	100.0000
321	0.0	20.00000	0.0	150.00000	200.00000	0.0	30.0000	0.0	200.0000
322	0.0	20.00000	0.0	100.00000	150.00000	0.0	20.0000	0.0	150.0000

FREQUENCY TABLE FOR COLUMN 2 (PG PCT)

LIMITS		PERCENT	PERCENT	PERCENT
LOWER	UPPER	PERCENT	PERCENT	PERCENT
1.8F-02	2.6F-02	0	0.0	0.0
2.6F-02	3.8F-02	0	0.0	0.0
3.8F-02	5.6F-02	0	0.0	0.0
5.6F-02	8.3F-02	0	0.0	0.0
8.3F-02	1.2F-01	0	0.0	0.0
1.2F-01	1.8F-01	0	0.0	0.0
1.8F-01	2.6F-01	0	0.0	0.0
2.6F-01	3.8F-01	0	0.0	0.0
3.8F-01	5.6F-01	3	0.93	0.93
5.6F-01	8.3F-01	17	5.28	6.21
8.3F-01	1.2F 00	25	7.76	13.94
1.2F 00	1.8F 00	86	26.71	40.68
1.8F 00	2.6F 00	62	19.25	59.94
2.6F 00	3.8F 00	71	22.05	81.99
3.8F 00	5.6E 00	43	13.35	95.34
5.6F 00	8.3F 00	13	4.04	99.38
8.3F 00	1.2F 01	2	0.62	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, 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)

5.0F-01 X
7.0E-01 XXXXX
1.0E 00 XXXXXXXX
1.5F 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0F 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 00 XXXXXXXXXXXXXXXX
7.0E 00 XXXX
1.0F 01 X

ANALYTICAL

VALUES

322

G 0.0

T 0.0

MAXIMUM = 1.00000E 01

MINIMUM = 5.00000E-01

GEOMETRIC MEAN = 2.15218E 00

GEOMETRIC DEVIATION = 1.82066E 00

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	0.0
5.6E-02 - 8.3E-02	0	0	0.0	0.0	0.0
8.3E-02 - 1.2E-01	0	0	0.0	0.0	0.0
1.2E-01 - 1.8E-01	0	0	0.0	0.0	0.0
1.8E-01 - 2.6E-01	1	1	0.31	0.31	0.31
2.6E-01 - 3.8E-01	8	9	2.48	2.80	2.80
3.8E-01 - 5.6E-01	9	18	5.59	5.59	5.59
5.6E-01 - 8.3E-01	18	36	11.18	11.18	11.18
8.3E-01 - 1.2E 00	26	62	19.25	19.25	19.25
1.2E 00 - 1.8E 00	65	127	39.44	39.44	39.44
1.8E 00 - 2.6E 00	68	195	60.56	60.56	60.56
2.6E 00 - 3.8E 00	64	259	80.43	80.43	80.43
3.8E 00 - 5.6E 00	40	299	92.86	92.86	92.86
5.6E 00 - 8.3E 00	21	320	99.38	99.38	99.38
8.3E 00 - 1.2E 01	2	322	100.00	100.00	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, 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)

3.0E-01 XX

5.0E-01 XXX

7.0E-01 XXXXXX

1.0E 00 XXXXXXXX

1.5E 00 XXXXXXXXXXXXXXXXXX

2.0E 00 XXXXXXXXXXXXXXXXXX

3.0E 00 XXXXXXXXXXXXXXXXXX

5.0E 00 XXXXXXXXXXXXXXXX

7.0E 00 XXXXXXXX

1.0E 01 X

ANALYTICAL

VALUES

322

T

0

0.0

R

0

0.0

H

0

0.0

L

0

0.0

N

0

0.0

MAXIMUM = 1.00000E 01

MINIMUM = 2.00000E-01

GEOMETRIC MEAN = 2.04110E 00

GEOMETRIC DEVIATION = 2.07577E 00

FREQUENCY TABLE FOR COLUMN 5 (MIN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	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	5	5	1.55	1.55
2.6E 02	3.8E 02	25	30	7.76	9.32
3.8E 02	5.6E 02	25	55	7.76	17.08
5.6E 02	8.3E 02	73	128	22.67	39.75
8.3E 02	1.2E 03	47	175	14.60	54.35
1.2E 03	1.8E 03	102	277	31.68	86.02
1.8E 03	2.6E 03	25	302	7.76	93.79
2.6E 03	3.8E 03	16	318	4.97	98.76
3.8E 03	5.6E 03	3	321	0.93	99.69

HISTOGRAM FOR COLUMN 5 (MN PPM)

[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, 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

321

0.31

MAXIMUM = 5.0000E 03

MINIMUM = 2.00000E 02

GEOMETRIC MFAN = 9.98543F 02

GEOMETRIC DEVIATION = 1.87689E 00

FREQUENCY TABLE FOR COLUMN 6 (AG PPM)

LIMITS		FREQ	CUM	PERCENT	PERCENT
LOWER - UPPER				FREQ	CUM
3.8E-01	5.6E-01	7	7	2.17	2.17
5.6E-01	8.3E-01	4	11	1.24	3.42
8.3E-01	1.2E 00	1	12	0.31	3.73
1.2E 00	1.8E 00	2	14	0.62	4.35

HISTOGRAM FOR COLUMN 6 (AG PPM)

- 5.0E-01 XX
- 7.0E-01 X
- 1.0E 00
- 1.5E 00 X

		ANALYTICAL	
		VALUES	
N	L	H	T
193	115	0	0
59.94	35.71	0	0.0

MAXIMUM = 1.50000E 00

MINIMUM = 5.00000E-01

GEOMETRIC MEAN = 6.76681E-01

GEOMETRIC DEVIATION = 1.48972E 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, 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.

LIMITS	FREQ	FREQ	PERCENT	PERCENT	PERCENT
LOWER - UPPER	CUM	FREQ	FREQ	FREQ	CUM
3.3E 00 - 1.2E 01	4	1.24	1.24	1.24	1.24
1.2E 01 - 1.8E 01	13	17	4.04	5.28	5.28
1.8E 01 - 2.6E 01	28	45	8.70	13.98	13.98
2.6E 01 - 3.8E 01	37	82	11.49	25.47	25.47
3.8E 01 - 5.6E 01	35	117	10.87	36.34	36.34
5.6E 01 - 8.3E 01	103	220	31.99	68.32	68.32
8.3E 01 - 1.2E 02	44	264	13.66	81.99	81.99
1.2E 02 - 1.8E 02	26	290	8.07	90.06	90.06
1.8E 02 - 2.6E 02	16	306	4.97	95.03	95.03
2.6E 02 - 3.8E 02	5	311	1.55	96.58	96.58
3.8E 02 - 5.6E 02	1	312	0.31	96.89	96.89
5.6E 02 - 8.3E 02	0	312	0.0	96.89	96.89
8.3E 02 - 1.2E 03	0	312	0.0	96.89	96.89
1.2E 03 - 1.8E 03	1	313	0.31	97.20	97.20

HISTOGRAM FOR COLUMN 9 (R PPM)

```

1.0E 01 X
1.5E 01 XXXX
2.0E 01 XXXXXXXXX
3.0E 01 XXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXX
1.5E 02 XXXXXXXXX
2.0E 02 XXXXX
3.0E 02 XX
5.0E 02
7.0E 02
1.0E 03
1.5E 03

```

ANALYTICAL
VALUES
313
0.0
0.0
0.0

MAXIMUM = 1.50000E 03

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 6.13447E 01

GEOMETRIC DEVIATION = 2.12665E 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, 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.

FREQUENCY TABLE FOR COLUMN 10 (HA PPM)

LIMITS		PREO	PREO CUM	PERCENT	PERCENT
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	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	1	1	0.31	0.31	
1.8E 02 - 2.6E 02	0	1	0.0	0.31	
2.6E 02 - 3.8E 02	1	2	0.31	0.62	
3.8E 02 - 5.6E 02	0	2	0.0	0.62	
5.6E 02 - 8.3E 02	21	23	6.52	7.14	
8.3E 02 - 1.2E 03	39	62	12.11	19.25	
1.2E 03 - 1.8E 03	166	228	51.55	70.81	
1.8E 03 - 2.6E 03	38	266	11.80	82.61	
2.6E 03 - 3.8E 03	34	300	10.56	93.17	
3.8E 03 - 5.6E 03	15	315	4.66	97.83	

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, 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 (HA PPM)

7.0E 02 XXXXXXXX
 1.0E 03 XXXXXXXXXXXXXXXX
 1.5E 03 XX
 2.0E 03 XXXXXXXXXXXXXXXX
 3.0E 03 XXXXXXXXXXXXXXXX
 5.0E 03 XXXXX

ANALYTICAL			
N	L	H	T
0	0	0	0
0.0	0.0		0.0
			2.17

MAXIMUM = 5.00000E 03

MINIMUM = 1.50000E 02

GEOMETRIC MEAN = 1.58214E 03

GEOMETRIC DEVIATION = 1.58807E 00

FREQUENCY TABLE FOR COLUMN 11 (RE PPM)

LIMITS		FREQ	CUM	PERCENT	PERCENT
LOWER - UPPER				FREQ	CUM
8.3E-01 -	1.2E 00	102	102	31.68	31.68
1.2E 00 -	1.8E 00	122	224	37.89	69.57
1.8E 00 -	2.6E 00	16	240	4.97	74.53
2.6E 00 -	3.8E 00	2	242	0.62	75.16
3.8E 00 -	5.6E 00	1	243	0.31	75.47

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, 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 (RE PPM)

1.0E 00 XX
 1.5E 00 XX
 2.0E 00 XXXXX
 3.0E 00 X
 5.0E 00

ANALYTICAL
VALUES

N	L	H	H	T	G
4	75	0	0	0	0
1.24	23.29			0.0	0.0

MAXIMUM = 5.00000E 00
 MINIMUM = 1.00000E 00
 GEOMETRIC MEAN = 1.30326E 00
 GEOMETRIC DEVIATION = 1.29009E 00

FREQUENCY TABLE FOR COLUMN 13 (C(0 PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
4.8E 00	5.6E 00	2	2	0.62	0.62
5.6E 00	8.3E 00	4	6	1.24	1.86
8.3E 00	1.2E 01	50	56	15.54	17.39
1.2E 01	1.8E 01	136	192	42.24	59.63
1.8E 01	2.6E 01	45	237	13.98	73.60
2.6E 01	3.8E 01	35	272	10.87	84.47
3.8E 01	5.6E 01	26	298	8.07	92.55
5.6E 01	8.3E 01	18	316	5.59	98.14
8.3E 01	1.2E 02	1	317	0.31	98.45

HISTOGRAM FOR COLUMN 13 (C(0 PPM)

5.0E 00 X
7.0E 00 X
1.0E 01 XXXXXXXXXXXXXXXX
1.5E 01 XX
2.0E 01 XXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXX
7.0E 01 XXXXXXXX
1.0E 02

N	L	H	H	T	G
1	4	0	0	0	0
0.31	1.24			0.0	0.0

MAXIMUM = 1.00000E 02

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.88597E 01

GEOMETRIC DEVIATION = 1.75961E 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, 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 1.0×10^0 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.

LIMITS		FREQUENCY		PERCENT		PERCENT	
LOWER	UPPER	CR	PPM	CR	PPM	CR	PPM
3.8E 00	5.6E 00	0	0	0.0	0.0	0.0	0.0
5.6E 00	8.3E 00	1	1	0.31	0.31	0.31	0.31
8.3E 00	1.2E 01	1	2	0.31	0.62	0.62	0.62
1.2E 01	1.8E 01	4	6	1.25	1.87	1.87	1.87
1.8E 01	2.6E 01	2	8	0.62	2.49	2.49	2.49
2.6E 01	3.8E 01	15	23	4.67	7.17	7.17	7.17
3.8E 01	5.6E 01	13	36	4.05	11.21	11.21	11.21
5.6E 01	8.3E 01	50	86	15.58	26.79	26.79	26.79
8.3E 01	1.2E 02	41	127	12.77	39.56	39.56	39.56
1.2E 02	1.8E 02	83	210	25.86	65.42	65.42	65.42
1.8E 02	2.6E 02	23	233	6.17	72.59	72.59	72.59
2.6E 02	3.8E 02	58	291	18.07	90.65	90.65	90.65
3.8E 02	5.6E 02	13	304	4.05	94.70	94.70	94.70
5.6E 02	8.3E 02	11	315	3.43	98.13	98.13	98.13
8.3E 02	1.2E 03	3	318	0.93	99.07	99.07	99.07
1.2E 03	1.8E 03	1	319	0.31	99.38	99.38	99.38
1.8E 03	2.6E 03	0	319	0.0	99.38	99.38	99.38
2.6E 03	3.8E 03	1	320	0.31	99.69	99.69	99.69

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, 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 (CR PPM)

```

1.5E 01 X
2.0E 01 X
3.0E 01 XXXXX
5.0E 01 XXXX
7.0E 01 XXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXXX
7.0E 02 XXX
1.0E 03 X
1.5E 03
2.0E 03
3.0E 03

```

MAXIMUM = 3.00000E 03
 MINIMUM = 7.00000E 00
 GEOMETRIC MEAN = 1.40121E 02
 GEOMETRIC DEVIATION = 2.35905E 00

ANALYTICAL

VALUES

320

N	L	H	T	G
0	1	0	0	0
0.0	0.31	0	0.0	0.0

PERCENTILE TABLE FOR COLUMN 15 (CU PPM)

LIMITS		PERCENT	PERCENT	PERCENT
LOWER	UPPER	CU	PERCENT	PERCENT
4.8E 00	5.6E 00	0	0.0	0.0
5.6E 00	8.3E 00	6	1.86	1.86
8.3E 00	1.2E 01	6	1.86	3.73
1.2E 01	1.8E 01	25	7.76	11.49
1.8E 01	2.6E 01	19	5.90	17.39
2.6E 01	3.8E 01	24	7.45	24.84
3.8E 01	5.6E 01	53	16.46	41.30
5.6E 01	8.3E 01	128	39.75	81.06
8.3E 01	1.2E 02	44	13.66	94.72
1.2E 02	1.8E 02	11	3.42	98.14
1.8E 02	2.6E 02	2	0.62	98.76

HISTOGRAM FOR COLUMN 15 (CU PPM)

7.0E 00 XX
1.0E 01 XX
1.5E 01 XXXXXXXX
2.0E 01 XXXXX
3.0E 01 XXXXXXXX
5.0E 01 XXXXXXXXXXXXXXXX
7.0E 01 XX
1.0E 02 XXXXXXXXXXXXXXXX
1.5E 02 XXX
2.0E 02 X

ANALYTICAL					
N	L	H	R	T	G
0	4	0	0	0	0
0.0	1.24			0.0	0.0

MAXIMUM = 2.00000E 02

MINIMUM = 7.00000E 00

GEOMETRIC MEAN = 5.11379E 01

GEOMETRIC DEVIATION = 1.98978E 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, 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.

FREQUENCY TABLE FOR COLUMN 16 (1A PP4)

LIMITS		FREQ	PERCENT	PERCENT
LOWER - UPPER		CUM	FREQ	FREQ CUM
1.8F 01 -	2.6F 01	120	37.27	37.27
2.6F 01 -	3.8F 01	114	35.40	72.67
3.8F 01 -	5.6F 01	43	13.35	86.02
5.6F 01 -	8.3F 01	7	2.17	88.20
8.3F 01 -	1.2F 02	2	0.62	88.82
1.2F 02 -	1.8F 02	3	0.93	89.75
1.8F 02 -	2.6F 02	2	0.62	90.37
2.6F 02 -	3.8F 02	0	0.0	90.37
3.8F 02 -	5.6F 02	0	0.0	90.37
5.6F 02 -	8.3F 02	1	0.31	90.68

HISTOGRAM FOR COLUMN 16 (1A PP4)

2.0E 01 XX
 3.0E 01 XX
 5.0E 01 XXXXXXXXXXXXXXXX
 7.0E 01 XX

1.0F 02 X

1.5E 02 X

2.0F 02 X

3.0E 02

5.0E 02

7.0E 02

ANALYTICAL
VALUES
292

N	L	H	R	T	G
1	29	0	0	0	0
0.31	9.01			0.0	0.0

MAXIMUM = 7.00000F 02

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 2.93285E 01

GEOMETRIC DEVIATION = 1.59715E 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, 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.

FREQUENCY TABLE FOR COLUMN 17 (001 PPM)

LIMITS		FRFQ	PERCENT	PERCENT
LOWER - UPPER		CUM	FRFQ	FRFQ CUM
4.8E 00 -	5.6E 00	7	2.17	2.17
5.6E 00 -	8.3E 00	6	1.86	4.04

HISTOGRAM FOR COLUMN 17 (001 PPM)

5.0E 00 XX
7.0E 00 XX

278 31
86.34 9.63

MAXIMUM = 7.00000E 00

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 5.84000E 00

GEOMETRIC DEVIATION = 1.19075E 00

ANALYTICAL
VALUES
13

T 6
0 0
0.0 0.0

Explanation

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, 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.

FREQUENCY TABLE FOR COLUMN 18 (NH PPM)

LIMITS		FRFQ	FRFQ CUM	PERCENT	PERCENT FRFQ CUM
LOWER	UPPER				
1.8E 00 -	2.6E 00	0	0	0.0	0.0
2.6E 00 -	3.8E 00	0	0	0.0	0.0
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	136	136	42.24	42.24
1.2E 01 -	1.8E 01	113	249	35.09	77.33
1.8E 01 -	2.6E 01	25	274	7.76	85.09
2.6E 01 -	3.8E 01	4	278	1.24	86.34

HISTOGRAM FOR COLUMN 18 (NH PPM)

1.0E 01 XX
 1.5E 01 XX
 2.0E 01 XXXXXXXX
 3.0E 01 X

N	L	H	H	T	G
0	44	0	0	0	0
0.0	13.66			0.0	0.0

ANALYTICAL
VALUES
278

MAXIMUM = 3.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.27490E 01

GEOMETRIC DEVIATION = 1.29978E 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, 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.

FREQUENCY TABLE FOR COLUMN 19 (MI PPM)

LIMITS	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.4E 00 - 5.6E 00	0	0	0.0	0.0
5.6E 00 - 8.3E 00	5	5	1.55	1.55
8.3E 00 - 1.2E 01	5	10	1.55	3.11
1.2E 01 - 1.8E 01	5	15	1.55	4.66
1.8E 01 - 2.6E 01	13	28	4.04	8.70
2.6E 01 - 3.8E 01	18	46	5.59	14.29
3.8E 01 - 5.6E 01	41	87	12.73	27.02
5.6E 01 - 8.3E 01	130	217	40.37	67.39
8.3E 01 - 1.2E 02	54	271	16.77	84.16
1.2E 02 - 1.8E 02	33	304	10.25	94.41
1.8E 02 - 2.6E 02	10	314	3.11	97.52
2.6E 02 - 3.8E 02	2	316	0.62	98.14
3.8E 02 - 5.6E 02	1	317	0.31	98.45
5.6E 02 - 8.3E 02	1	318	0.31	98.76
8.3E 02 - 1.2E 03	1	319	0.31	99.07
1.2E 03 - 1.8E 03	1	320	0.31	99.38

HISTOGRAM FOR COLUMN 19 (NI PPM)

```

7.0E 00 XX
1.0E 01 XX
1.5F 01 XX
2.0F 01 XXXX
3.0E 01 XXXXXX
5.0E 01 XXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

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, 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 1.0×10^0 or 1.0, 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
320

MINIMUM = 7.00000E 00

GEOMETRIC MEAN = 6.85905E 01

GEOMETRIC DEVIATION = 2.04095E 00

MAXIMUM = 1.50000E 03

FREQUENCY TABLE FOR COLUMN 20 (PH PPM)

LIMITS		FREQ		PERCENT	
LOWER	UPPER	FREQ	CUM	FREQ	CUM
8.3F 00 -	1.2F 01	35	35	10.87	10.87
1.2F 01 -	1.8F 01	78	113	24.22	35.09
1.8F 01 -	2.6F 01	60	173	18.63	53.73
2.6F 01 -	3.8F 01	75	248	23.29	77.02
3.8F 01 -	5.6F 01	27	275	8.39	85.40
5.6F 01 -	8.3F 01	22	297	6.83	92.24
8.3F 01 -	1.2F 02	6	303	1.86	94.10
1.2F 02 -	1.8F 02	10	313	3.11	97.20

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, 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 20 (PH PPM)

```

1.0E 01 XXXXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXX
5.0F 01 XXXXXXXXX
7.0E 01 XXXXXXXX
1.0E 02 XX
1.5E 02 XXX

```

ANALYTICAL

VALUES

313
0
0.0

MAXIMUM = 1.50000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.46780E 01

GEOMETRIC DEVIATION = 1.93153E 00

FREQUENCY TABLE FOR COLUMN 22 (SC PPM)

LIMITS		FRFQ	CUM	PERCENT	PERCENT
LOWER - UPPER				FRFQ	CUM
3.8E 00 -	5.6E 00	2	2	0.62	0.62
5.6E 00 -	8.3E 00	5	7	1.55	2.17
8.3E 00 -	1.2E 01	7	14	2.17	4.35
1.2E 01 -	1.8E 01	102	116	31.68	36.02
1.8E 01 -	2.6E 01	80	196	24.84	60.87
2.6E 01 -	3.8E 01	92	288	28.57	89.44
3.8E 01 -	5.6E 01	30	318	9.32	98.76
5.6E 01 -	8.3E 01	3	321	0.93	99.69

HISTOGRAM FOR COLUMN 22 (SC PPM)

5.0E 00 X
 7.0E 00 XX
 1.0E 01 XX
 1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXXX
 7.0E 01 X

ANALYTICAL
 VALUES
 321

MAXIMUM = 7.00000E 01
 MINIMUM = 5.00000E 00
 GEOMETRIC MEAN = 2.17079E 01
 GEOMETRIC DEVIATION = 1.56448E 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, 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.

FREQUENCY TABLE FOR COLUMN 24 (SR PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER	CUM	FREQ	FREQ	CUM
3.8E 01 -	5.6E 01	0	0.0	0.0	0.0
5.6E 01 -	8.3E 01	0	0.0	0.0	0.0
8.3E 01 -	1.2E 02	73	73	22.67	22.67
1.2E 02 -	1.8E 02	52	125	16.15	38.82
1.8E 02 -	2.6E 02	67	192	20.81	59.63
2.6E 02 -	3.8E 02	78	270	24.22	83.85
3.8E 02 -	5.6E 02	9	279	2.80	86.65
5.6E 02 -	8.3E 02	7	286	2.17	88.82
8.3E 02 -	1.2E 03	0	286	0.0	88.82
1.2E 03 -	1.8E 03	1	287	0.31	89.13

HISTOGRAM FOR COLUMN 24 (SR PPM)

1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 02 XXX
 7.0E 02 XX
 1.0E 03
 1.5E 03

ANALYTICAL		VALUES	
N	L	H	G
0	35	0	0
0.0	10.87	0	0.0

MAXIMUM = 1.50000E 03

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 1.89868E 02

GEOMETRIC DEVIATION = 1.66387E 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, 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, \bar{x} value 1.0E-01 means 1.0×10^{-1} or 0.1, \bar{x}_2 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.

FREQUENCY TABLE FOR COLUMN 25 (V PPM)

LIMITS		FREQ	PERCENT	PERCENT	PERCENT
LOWER - UPPER		COUNT	FREQ	FREQ	FREQ
4.3E 00 -	1.2E 01	0	0.0	0.0	0.0
1.2E 01 -	1.8E 01	0	0.0	0.0	0.0
1.8E 01 -	2.6E 01	0	0.0	0.0	0.0
2.6E 01 -	3.8E 01	3	0.93	0.93	0.93
3.8E 01 -	5.6E 01	2	0.62	1.55	1.55
5.6E 01 -	8.3E 01	8	2.48	4.04	4.04
8.3E 01 -	1.2E 02	19	5.90	9.94	9.94
1.2E 02 -	1.8E 02	93	28.88	38.82	38.82
1.8E 02 -	2.6E 02	80	24.84	63.66	63.66
2.6E 02 -	3.8E 02	79	24.53	88.20	88.20
3.8E 02 -	5.6E 02	29	9.01	97.20	97.20
5.6E 02 -	8.3E 02	9	2.80	100.00	100.00

HISTOGRAM FOR COLUMN 25 (V PPM)

3.0E 01 X
5.0E 01 X
7.0E 01 XX
1.0E 02 XXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXX
7.0E 02 XXX

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

MAXIMUM = 7.00000E 02

MINIMUM = 3.00000E 01

GEOMETRIC MEAN = 2.08275E 02

GEOMETRIC DEVIATION = 1.70563E 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, 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.

FREQUENCY TABLE FOR COLUMN 27 (Y PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
1.3E 00 - 1.2E 01	1	1	1	0.31	0.31
1.2E 01 - 1.8E 01	11	12	12	3.42	4.73
1.8E 01 - 2.6E 01	47	59	59	14.60	18.32
2.6E 01 - 3.8E 01	145	244	244	57.45	75.74
3.8E 01 - 5.6E 01	50	294	294	15.53	91.30
5.6E 01 - 8.3E 01	23	317	317	7.14	98.44
8.3E 01 - 1.2E 02	3	320	320	0.93	99.38
1.2E 02 - 1.8E 02	0	320	320	0.0	99.38
1.8E 02 - 2.6E 02	2	322	322	0.62	100.00

HISTOGRAM FOR COLUMN 27 (Y PPM)

```

1.5E 01 XXX
2.0E 01 XXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXXXXX
7.0E 01 XXXXXXXX
1.0E 02 X
1.5E 02
2.0E 02 X

```

N	L	H	R	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	322
0.0	0.0			0.0	0.0	

MAXIMUM = 2.00000E 02
 MINIMUM = 1.00000E 01
 GEOMETRIC MEAN = 3.23842E 01
 GEOMETRIC DEVIATION = 1.50482E 00

Explanation

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, 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.

FREQUENCY TABLE FOR COLUMN 28 (7N PPM)

LIMITS		FREQUENCY		PERCENT	
LOWER	UPPER	FREQ	CUM	FREQ	CUM
1.8E 02	2.6E 02	8	8	2.48	2.48
2.6E 02	3.8E 02	10	18	3.11	5.59
3.8E 02	5.6E 02	4	22	1.24	6.83
5.6E 02	8.3E 02	1	23	0.31	7.14

HISTOGRAM FOR COLUMN 28 (7N PPM)

2.0E 02 XX
 3.0E 02 XXX
 5.0E 02 X
 7.0E 02

ANALYTICAL		VALUES	
N	L	H	G
146	153	0	0
45.34	47.52	0	0.0

MAXIMUM = 7.00000E 02

MINIMUM = 2.00000E 02

GEOMETRIC MEAN = 2.95424E 02

GEOMETRIC DEVIATION = 1.45331E 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, 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.

FREQUENCY TABLE FOR COLUMN 29 (7R PPM)

LIMITS		FRF0	FRF0	CUM	PERCENT	PERCENT
LOWER - UPPER					FRF0	CUM
1.8E 01 -	2.6E 01	0	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0	0.0	0.0
5.6E 01 -	8.3E 01	7	7	7	2.17	2.17
8.3E 01 -	1.2E 02	26	33	33	8.07	10.25
1.2E 02 -	1.8E 02	50	83	83	15.53	25.78
1.8E 02 -	2.6E 02	57	140	140	17.70	43.48
2.6E 02 -	3.8E 02	99	239	239	30.75	74.22
3.8E 02 -	5.6E 02	46	285	285	14.29	88.51
5.6E 02 -	8.3E 02	22	307	307	6.83	95.34
8.3E 02 -	1.2E 03	12	319	319	3.73	99.07

HISTOGRAM FOR COLUMN 29 (7R PPM)

7.0E 01 XX
 1.0E 02 XXXXXXXX
 1.5E 02 XXXXXXXXXXXXXXXX
 2.0E 02 XXXXXXXXXXXXXXXX
 3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 02 XXXXXXXXXXXXXXXX
 7.0E 02 XXXXXXXX
 1.0E 03 XXXX

ANALYTICAL			
N	L	H	T
0	1	0	0
0.0	0.31		0.0

MAXIMUM = 1.00000E 03
 MINIMUM = 7.00000E 01
 GEOMETRIC MEAN = 2.64665E 02
 GEOMETRIC DEVIATION = 1.84908E 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, 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.

A470 STATISTICAL SUMMARY

DATE 5/23/69

FLU-MENT	N	L	H	R	T	G	ANALYTICAL VALUES
FF PCT	0	0	0	0	0	0	322
MG PCT	0	0	0	0	0	0	322
CA PCT	0	0	0	0	0	0	322
TI PCT	0	0	0	0	0	54	268
MN PPM	0	0	0	0	0	1	321
AG PPM	193	115	0	0	0	0	14
AS PPM	281	41	0	0	0	0	0
AI PPM	315	0	0	1	0	0	6
R PPM	4	5	0	0	0	0	313
KA PPM	0	0	0	0	0	7	315
RF PPM	4	75	0	0	0	0	243
HT PPM	322	0	0	0	0	0	0
CI PPM	1	4	0	0	0	0	317
CR PPM	0	1	0	1	0	0	320
CU PPM	4	4	0	0	0	0	318
LA PPM	1	29	0	0	0	0	292
MT PPM	278	31	0	0	0	0	13
NH PPM	0	44	0	0	0	0	278
NI PPM	0	2	0	0	0	0	320
PR PPM	0	9	0	0	0	0	313
SR PPM	317	5	0	0	0	0	0
SC PPM	0	1	0	0	0	0	321
SN PPM	316	5	0	0	0	0	1
SR PPM	0	35	0	0	0	0	287
V PPM	0	0	0	0	0	0	322
W PPM	321	1	0	0	0	0	0
Y PPM	0	0	0	0	0	0	322
ZN PPM	146	153	0	0	0	0	23
ZR PPM	0	1	0	0	0	2	319

FLU-MENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS
FF PCT	7.270533	1.80	322 SAMPLES AND 322 ANALYTICAL VALUES.
MG PCT	2.152182	1.82	322 SAMPLES AND 322 ANALYTICAL VALUES.
CA PCT	2.041099	2.04	322 SAMPLES AND 322 ANALYTICAL VALUES.
TI PCT	*****	*****	54 GREATER THAN VALUES. NO COMPUTATIONS.
MN PPM	*****	*****	1 GREATER THAN VALUES. NO COMPUTATIONS.
AG PPM	*****	*****	308 NOT DETECTED, LESS THAN, OR TRACE VALUES.
AS PPM	*****	*****	322 NOT DETECTED, LESS THAN, OR TRACE VALUES.
AI PPM	*****	*****	315 NOT DETECTED, LESS THAN, OR TRACE VALUES.
R PPM	57.541672	2.31	9 NOT DETECTED, LESS THAN, OR TRACE VALUES.
KA PPM	*****	*****	7 GREATER THAN VALUES. NO COMPUTATIONS.
RF PPM	1.105384	1.45	79 NOT DETECTED, LESS THAN, OR TRACE VALUES.
HT PPM	*****	*****	322 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CI PPM	18.364070	1.83	5 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CR PPM	138.464569	2.42	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CU PPM	49.398148	2.12	4 NOT DETECTED, LESS THAN, OR TRACE VALUES.
LA PPM	27.266922	1.66	30 NOT DETECTED, LESS THAN, OR TRACE VALUES.
MT PPM	*****	*****	309 NOT DETECTED, LESS THAN, OR TRACE VALUES.
NH PPM	9.330670	2.29	44 NOT DETECTED, LESS THAN, OR TRACE VALUES.
NI PPM	67.294907	2.12	2 NOT DETECTED, LESS THAN, OR TRACE VALUES.
PR PPM	23.734131	1.99	9 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SR PPM	*****	*****	322 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SC PPM	21.543328	1.54	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SN PPM	*****	*****	321 NOT DETECTED, LESS THAN, OR TRACE VALUES.
SR PPM	*****	*****	14 REPORTED VALUES. NO COMPUTATIONS.
			0 REPORTED VALUES. NO COMPUTATIONS.
			6 REPORTED VALUES. NO COMPUTATIONS.
			313 REPORTED VALUES.
			243 REPORTED VALUES.
			0 REPORTED VALUES. NO COMPUTATIONS.
			317 REPORTED VALUES.
			320 REPORTED VALUES.
			318 REPORTED VALUES.
			292 REPORTED VALUES.
			13 REPORTED VALUES. NO COMPUTATIONS.
			278 REPORTED VALUES.
			320 REPORTED VALUES.
			313 REPORTED VALUES.
			0 REPORTED VALUES. NO COMPUTATIONS.
			321 REPORTED VALUES.
			1 REPORTED VALUES. NO COMPUTATIONS.

SR PPM	154.264938	2.16	35 NOT DETECTED, LESS THAN, OR TRACE VALUES.	287 REPORTED VALUES.
V PPM	208.274658	1.71	322 SAMPLES AND 322 ANALYTICAL VALUES.	
W PPM	*****	*****	322 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
Y PPM	32.384171	1.50	322 SAMPLES AND 322 ANALYTICAL VALUES.	
Zn PPM	*****	*****	299 NOT DETECTED, LESS THAN, OR TRACE VALUES.	23 REPORTED VALUES. NO COMPUTATIONS.
Zr PPM	*****	*****	? GREATER THAN VALUES. NO COMPUTATIONS.	

TABLE 2.--ROCK SAMP EAGLF

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	H PPM	HA PPM
F0 1A	20.0000	10.0000G	0.0700	0.1500	2000.0000	0.5000L	0.0 N	0.0 N	70.0000	0.0 N
F 2A	20.0000	5.0000	1.0000	1.0000G	1500.0000	0.0 N	0.0 N	0.0 N	30.0000	5.0000L
F0 3A	20.0000	5.0000	5.0000	1.0000G	1500.0000	0.0 N	0.0 N	0.0 N	15.0000	1500.0000
CN 4A	7.0000	5.0000	20.0000G	0.5000	1500.0000	0.0 N	0.0 N	0.0 N	0.0 N	5.0000L
F0 5A	15.0000	10.0000G	0.3000	0.0300	1500.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
F0 6A	7.0000	10.0000	1.0000	0.0200	300.0000	0.5000L	700.0000	0.0200	5.0000L	300.0000
YS 7A	1.5000	1.5000	5.0000	0.1500	300.0000	0.5000L	1500.0000	0.9000	30.0000	1500.0000
F0 8A	3.0000	10.0000	7.0000	0.0300	700.0000	0.5000	0.0 N	0.4000	0.0 N	2000.0000
YS 9A	20.0000	5.0000	7.0000	1.0000	1000.0000	0.5000L	700.0000	0.5000	30.0000	2000.0000
F0 10A	20.0000	10.0000G	0.1000	0.0100	500.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
CN 11A	20.0000	7.0000	5.0000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	15.0000	1500.0000
W 12A	2.0000	1.0000	3.0000	0.0300	300.0000	0.0 N	10000.0000G	6.0000	10.0000L	1500.0000
W 13A	3.0000	2.0000	3.0000	0.3000	700.0000	0.5000L	10000.0000G	6.0000	30.0000	300.0000
W 14A	3.0000	3.0000	7.0000	0.1500	700.0000	0.0 N	10000.0000G	2.3000	20.0000	150.0000
CP 15A	15.0000	10.0000G	20.0000	0.3000	2000.0000	0.0 N	0.0 N	0.0 N	20.0000	150.0000
W 16A	3.0000	7.0000	20.0000G	0.1000	3000.0000	0.0 N	0.0 N	0.7000	0.0 N	70.0000
CP 17A	15.0000	10.0000	10.0000	0.7000	1500.0000	0.0 N	1500.0000	0.3000	30.0000	300.0000
H0 18A	2.0000	0.5000	0.3000	0.2000	150.0000	0.7000	200.0000L	6.0000	30.0000	1500.0000
IJ 19A	5.0000	1.5000	0.7000	0.5000	500.0000	0.5000	0.0 N	0.0600	200.0000	2000.0000
HS 20A	3.0000	1.5000	0.3000	0.3000	300.0000	0.7000	0.0 N	0.0 N	100.0000	1500.0000
L 21A	20.0000	10.0000	10.0000	1.0000G	1500.0000	0.5000L	0.0 N	0.0 N	15.0000	300.0000
LS 22A	20.0000	7.0000	20.0000	1.0000G	1500.0000	0.5000L	0.0 N	0.0 N	10.0000	70.0000
L 23A	15.0000	7.0000	10.0000	1.0000G	1500.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
IJ 24A	7.0000	2.0000	0.5000	0.3000	500.0000	0.5000L	0.0 N	0.0 N	50.0000	2000.0000
CS 25A	15.0000	5.0000	3.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
CS 26A	15.0000	10.0000G	0.3000	0.0300	1500.0000	0.0 N	700.0000	0.0200	15.0000	50.0000
Y 27A	15.0000	10.0000G	1.5000	0.0500	700.0000	0.0 N	10000.0000	0.0600	15.0000	70.0000
Y 27A	10.0000	10.0000	7.0000	0.1500	700.0000	1.5000	1000.0000	11.0000	30.0000	150.0000
F0 28A	1.5000	0.5000	0.0500L	0.1500	150.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
F0 28A	7.0000	1.5000	0.7000	0.7000	500.0000	0.5000L	0.0 N	0.2000	70.0000	700.0000
CL 29A	20.0000	5.0000	7.0000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	50.0000	150.0000
F0 30A	20.0000	10.0000G	0.3000	0.0300	700.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
W 31A	15.0000	3.0000	3.0000	1.0000G	700.0000	0.0 N	0.0 N	0.0 N	30.0000	5.0000L
F0 32A	15.0000	7.0000	20.0000	1.0000G	1500.0000	0.5000L	0.0 N	0.0 N	30.0000	700.0000
RN 33A	0.7000	0.3000	0.0500L	0.5000	10.0000	0.5000L	0.0 N	0.0 N	30.0000	1500.0000
RN 34A	1.0000	0.3000	0.0500L	0.3000	30.0000	0.5000L	0.0 N	0.0 N	30.0000	700.0000
IK 35A	3.0000	0.7000	0.0500L	0.3000	150.0000	0.5000	0.0 N	0.0 N	30.0000	1500.0000
M 36A	20.0000	10.0000	20.0000	1.0000G	2000.0000	0.5000L	0.0 N	0.0 N	100.0000	3000.0000
AL 37A	5.0000	2.0000	0.2000	0.7000	500.0000	0.0 N	0.0 N	0.0 N	20.0000	5.0000L
IK 38A	3.0000	0.7000	0.1500	0.5000	300.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
W 39A	3.0000	0.7000	0.1500	0.5000	300.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
IK 40A	3.0000	0.5000	0.0500L	0.3000	150.0000	0.0 N	0.0 N	0.0 N	70.0000	2000.0000
DL 41A	7.0000	7.0000	3.0000	1.0000	1000.0000	0.5000L	0.0 N	0.0 N	50.0000	1500.0000
RX 42A	0.7000	0.2000	0.0700	0.3000	70.0000	0.0 N	0.0 N	0.0 N	50.0000	2000.0000
FX 43A	5.0000	1.5000	3.0000	0.7000	1000.0000	0.0 L	0.0 N	0.0 N	50.0000	1500.0000
L 44A	10.0000	5.0000	10.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	10.0000	3000.0000
U 45A	0.3000	0.3000	0.2000	0.3000	70.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
F0 46A	10.0000	10.0000G	0.5000	0.0200	500.0000	0.0 N	0.0 N	0.0 N	30.0000	5.0000L
N 47A	10.0000	3.0000	1.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	15.0000	100.0000
L 48A	15.0000	1.0000	7.0000	1.0000	2000.0000	0.5000L	0.0 N	0.0 N	15.0000	3000.0000

TABLE 2.--RUICK SAMP EAGLE

SAMPLE	RE PPM	RI PPM	CU PPM	CR PPM	CU PPM	LA PPM	MO PPM	NR PPM	NI PPM	PR PPM
FN 1A	0.0	N	300.0000	5000.0000G	70.0000	20.0000L	0.0	N	2.0000L	10.0000
F 2A	0.0	N	70.0000	20.0000	200.0000	20.0000L	0.0	N	2.0000L	10.0000L
FN 3A	0.0	N	70.0000	70.0000	100.0000	20.0000L	0.0	N	2.0000L	15.0000
CN 4A	0.0	N	15.0000	70.0000	70.0000	20.0000L	0.0	N	2.0000L	10.0000L
FN 5A	0.0	N	150.0000	3000.0000	15.0000	20.0000L	0.0	N	10.0000	10.0000L
FN 6A	0.0	N	100.0000	1500.0000	50.0000	20.0000L	0.0	N	2.0000L	10.0000
YS 7A	0.0	N	5.0000L	50.0000	15.0000	20.0000L	0.0	N	2.0000L	10.0000L
FN 8A	0.0	N	70.0000	1500.0000	15.0000	20.0000L	0.0	N	2.0000L	10.0000
YS 9A	0.0	N	70.0000	50.0000	100.0000	20.0000L	0.0	N	10.0000	10.0000
FN 10A	0.0	N	200.0000	5000.0000	30.0000	20.0000L	0.0	N	2.0000L	10.0000L
CN 11A	0.0	N	70.0000	70.0000	70.0000	20.0000L	0.0	N	2.0000L	10.0000
W 12A	0.0	N	5.0000L	5.0000L	15.0000	20.0000L	0.0	N	2.0000L	10.0000L
W 13A	0.0	N	20.0000	7.0000	20.0000	20.0000L	0.0	N	2.0000L	10.0000L
W 14A	0.0	N	5.0000	100.0000	50.0000	20.0000L	0.0	N	2.0000L	10.0000L
CP 15A	0.0	N	70.0000	2000.0000	100.0000	20.0000L	0.0	N	2.0000L	10.0000L
W 16A	0.0	N	5.0000	150.0000	50.0000	20.0000L	0.0	N	2.0000L	10.0000
CP 17A	0.0	N	70.0000	700.0000	70.0000	20.0000L	0.0	N	2.0000L	15.0000
HJ 18A	0.0	N	5.0000L	70.0000	50.0000	20.0000	5.0000	N	2.0000L	15.0000
IJ 19A	1.5000	N	15.0000	100.0000	70.0000	20.0000	0.0	N	15.0000	15.0000
HS 20A	1.5000	N	10.0000	30.0000	300.0000	20.0000	0.0	N	10.0000	10.0000L
L 21A	1.0000L	N	70.0000	700.0000	70.0000	20.0000L	0.0	N	10.0000	10.0000
LS 22A	0.0	N	100.0000	300.0000	100.0000	20.0000L	0.0	N	2.0000L	10.0000L
L 23A	1.0000L	N	70.0000	150.0000	70.0000	20.0000L	0.0	N	10.0000	10.0000L
IJ 24A	1.5000	N	10.0000	70.0000	50.0000	50.0000	0.0	N	15.0000	10.0000L
CI 25A	1.0000L	N	70.0000	20.0000	150.0000	20.0000L	0.0	N	0.0	10.0000L
CS 26A	0.0	N	150.0000	2000.0000	70.0000	20.0000L	0.0	N	2.0000L	10.0000L
Y 27A	1.0000L	N	150.0000	5000.0000	70.0000	20.0000L	0.0	N	10.0000	10.0000L
Y 27A	1.0000L	N	150.0000	3000.0000	150.0000	20.0000L	0.0	N	10.0000	10.0000L
FN 28A	1.5000	N	0.0	30.0000	15.0000	50.0000	0.0	N	10.0000	30.0000
FN 28A	1.5000	N	10.0000	150.0000	50.0000	30.0000	0.0	N	15.0000	100.0000
CL 29A	0.0	N	70.0000	20.0000	100.0000	0.0	0.0	N	2.0000L	30.0000
FN 30A	0.0	N	300.0000	5000.0000	50.0000	0.0	0.0	N	2.0000L	10.0000L
W 31A	1.0000	N	150.0000	150.0000	200.0000	30.0000	0.0	N	20.0000	15.0000
FN 32A	0.0	N	70.0000	500.0000	300.0000	20.0000L	0.0	N	10.0000	10.0000L
RN 33A	0.0	N	5.0000L	10.0000	30.0000	20.0000L	0.0	N	2.0000L	50.0000
RN 34A	0.0	N	5.0000	5.0000	50.0000	20.0000L	0.0	N	2.0000L	50.0000
IK 35A	1.0000	N	5.0000	70.0000	70.0000	20.0000L	0.0	N	2.0000L	10.0000
W 36A	0.0	N	100.0000	700.0000	70.0000	0.0	0.0	N	2.0000L	100.0000
AL 37A	1.5000	N	15.0000	150.0000	50.0000	30.0000	0.0	N	15.0000	20.0000
IK 38A	1.5000	N	10.0000	70.0000	150.0000	20.0000	0.0	N	10.0000	10.0000L
W 39A	1.5000	N	10.0000	70.0000	150.0000	20.0000	0.0	N	10.0000	10.0000L
IK 40A	1.5000	N	5.0000	70.0000	30.0000	20.0000	0.0	N	15.0000	10.0000L
DL 41A	1.0000	N	30.0000	300.0000	70.0000	30.0000	0.0	N	10.0000	30.0000
RX 42A	1.0000L	N	5.0000L	15.0000	70.0000	30.0000	0.0	N	2.0000L	20.0000
RX 43A	1.5000	N	30.0000	700.0000	70.0000	30.0000	0.0	N	10.0000	30.0000
L 44A	0.0	N	70.0000	100.0000	30.0000	20.0000L	0.0	N	10.0000	10.0000L
U 45A	1.0000L	N	5.0000L	30.0000	70.0000	20.0000L	0.0	N	2.0000L	10.0000L
FN 46A	1.0000L	N	100.0000	3000.0000	30.0000	20.0000L	0.0	N	2.0000L	10.0000L
N 47A	1.0000L	N	50.0000	15.0000	70.0000	20.0000L	0.0	N	10.0000	10.0000L
L 48A	1.0000L	N	50.0000	15.0000	150.0000	20.0000L	0.0	N	10.0000	10.0000

TABLE 2.-ROCK SAMP EAGLE

SAMPLE	SR PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
F0 1A	0.0	20.0000	0.0	50.0000L	100.0000	0.0	10.0000L	0.0	20.0000L
F 2A	0.0	50.0000	0.0	150.0000	500.0000	0.0	30.0000	200.0000L	70.0000
F0 3A	0.0	70.0000	0.0	100.0000	500.0000	0.0	50.0000	0.0	70.0000
CN 4A	0.0	15.0000	0.0	50.0000L	150.0000	0.0	15.0000	0.0	150.0000
F0 5A	0.0	15.0000	0.0	50.0000L	50.0000	0.0	10.0000L	200.0000L	20.0000L
F0 6A	0.0	7.0000	0.0	50.0000L	30.0000	0.0	10.0000L	200.0000L	20.0000L
YS 7A	0.0	5.0000L	0.0	150.0000	70.0000	0.0	10.0000L	200.0000L	150.0000
F0 8A	0.0	10.0000	0.0	300.0000	30.0000	0.0	10.0000L	0.0	30.0000
YS 9A	0.0	70.0000	0.0	100.0000	500.0000	0.0	30.0000	0.0	70.0000
F0 10A	0.0	15.0000	0.0	50.0000L	30.0000	0.0	10.0000L	200.0000L	20.0000L
CN 11A	0.0	70.0000	0.0	100.0000	500.0000	0.0	30.0000	0.0	70.0000
W 12A	0.0	5.0000L	0.0	50.0000L	50.0000	0.0	10.0000L	200.0000L	20.0000L
W 13A	100.0000L	30.0000	0.0	100.0000	300.0000	0.0	15.0000	200.0000L	50.0000
W 14A	0.0	10.0000	0.0	100.0000	100.0000	0.0	10.0000L	0.0	20.0000L
CP 15A	0.0	50.0000	0.0	150.0000	200.0000	0.0	10.0000L	0.0	20.0000L
W 16A	0.0	15.0000	0.0	300.0000	70.0000	0.0	20.0000	0.0	20.0000L
CP 17A	0.0	50.0000	0.0	200.0000	200.0000	0.0	30.0000	0.0	50.0000
H0 18A	100.0000L	15.0000	0.0	50.0000L	300.0000	0.0	0.0	200.0000L	70.0000
IJ 19A	0.0	20.0000	0.0	100.0000	150.0000	0.0	20.0000	200.0000L	100.0000
HS 20A	0.0	15.0000	0.0	100.0000	150.0000	0.0	15.0000	200.0000L	70.0000
L 21A	0.0	100.0000	0.0	200.0000	300.0000	0.0	50.0000	200.0000L	150.0000
LS 22A	0.0	100.0000	0.0	200.0000	1000.0000	0.0	70.0000	200.0000L	100.0000
L 23A	0.0	70.0000	10.0000L	100.0000	500.0000	0.0	30.0000	0.0	100.0000
IJ 24A	0.0	15.0000	0.0	150.0000	150.0000	0.0	30.0000	200.0000L	200.0000
CO 25A	0.0	70.0000	0.0	50.0000L	700.0000	0.0	30.0000	0.0	70.0000
CS 26A	0.0	15.0000	0.0	50.0000L	30.0000	0.0	10.0000L	0.0	20.0000L
Y 27A	0.0	10.0000	0.0	50.0000L	70.0000	0.0	10.0000L	0.0	20.0000L
Y 27A	0.0	15.0000	0.0	50.0000L	100.0000	0.0	0.0	200.0000L	20.0000
EH 28A	0.0	5.0000L	10.0000L	50.0000L	30.0000	0.0	30.0000	0.0	200.0000
EN28A	0.0	15.0000	0.0	50.0000L	200.0000	0.0	30.0000	0.0	500.0000
CL 29A	0.0	70.0000	0.0	50.0000L	700.0000	0.0	30.0000	200.0000L	50.0000
F0 30A	0.0	20.0000	0.0	50.0000L	50.0000	0.0	10.0000L	0.0	20.0000L
W 31A	0.0	30.0000	0.0	150.0000	300.0000	0.0	30.0000	0.0	1000.0000
F0 32A	0.0	50.0000	0.0	700.0000	300.0000	0.0	30.0000	0.0	70.0000
RN 33A	0.0	7.0000	10.0000L	50.0000L	15.0000	0.0	10.0000	0.0	100.0000
RN 34A	0.0	7.0000	10.0000L	50.0000L	- 20.0000	0.0	10.0000	0.0	100.0000
IK 35A	0.0	15.0000	0.0	50.0000L	200.0000	0.0	10.0000L	0.0	100.0000
M 36A	0.0	100.0000G	0.0	300.0000	1000.0000	0.0	30.0000	0.0	150.0000
AL 37A	0.0	30.0000	0.0	150.0000	150.0000	0.0	10.0000	0.0	100.0000
IK 38A	0.0	15.0000	0.0	50.0000L	150.0000	0.0	30.0000	200.0000L	150.0000
W 39A	0.0	15.0000	0.0	50.0000L	150.0000	0.0	30.0000	200.0000L	150.0000
IK 40A	0.0	15.0000	0.0	50.0000L	200.0000	0.0	15.0000	200.0000L	100.0000
DL 41A	0.0	30.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0	200.0000
RX 42A	0.0	7.0000	0.0	50.0000L	30.0000	0.0	30.0000	0.0	150.0000
RY 43A	0.0	30.0000	0.0	150.0000	200.0000	0.0	30.0000	0.0	100.0000
L 44A	0.0	50.0000	0.0	200.0000	300.0000	0.0	50.0000	200.0000L	70.0000
U 45A	0.0	5.0000	0.0	50.0000L	200.0000	0.0	10.0000	0.0	70.0000
F0 46A	0.0	10.0000	0.0	50.0000L	30.0000	0.0	10.0000L	0.0	20.0000L
N 47A	0.0	30.0000	0.0	200.0000	200.0000	0.0	15.0000	200.0000L	150.0000
L 48A	0.0	30.0000	0.0	300.0000	200.0000	0.0	50.0000	200.0000L	150.0000

TABLE 2.--RUCK SAMP EAGLE

SAMPLE	FF PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	RA PPM
I, 49A	3.0000	0.7000	0.7000	0.5000	700.0000	0.5000L	0.0 N	0.0 N	150.0000	2000.0000
O 50A	1.5000	0.7000	20.0000G	0.3000	700.0000	0.5000L	0.0 N	0.0 N	70.0000	1000.0000
L 51A	15.0000	7.0000	15.0000	1.0000G	2000.0000	0.5000L	0.0 N	0.0 N	15.0000	300.0000
L 52A	7.0000	7.0000	10.0000	0.5000	1500.0000	0.5000L	0.0 N	0.0 N	10.0000L	0.0 N
H 53A	1.5000	1.5000	0.1500	0.1000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	5.0000L
HS 54A	7.0000	3.0000	2.0000	1.0000G	3000.0000	0.5000L	0.0 N	0.0 N	70.0000	20.0000
HS 55A	20.0000	3.0000	3.0000	1.0000	300.0000	0.5000L	0.0 N	0.0 N	30.0000	150.0000
H 56A	5.0000	2.0000	1.5000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	50.0000	300.0000
AR 57A	3.0000	0.3000	0.2000	0.1000	500.0000	0.0 N	0.0 N	0.0 N	10.0000L	700.0000
RU 58A	1.5000	0.2000	0.0700	0.1500	150.0000	0.0 N	0.0 N	0.0 N	10.0000L	300.0000
F 59A	15.0000	10.0000	15.0000	0.5000	2000.0000	0.0 N	0.0 N	0.0 N	10.0000	100.0000
I, 60A	20.0000	5.0000	0.3000	1.0000	3000.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
M 61A	5.0000	2.0000	1.5000	0.2000	300.0000	0.0 N	0.0 N	0.0 N	50.0000	5000.0000G
G 62A	3.0000	0.1000	0.3000	0.0100	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	5000.0000
AA 63A	0.7000	0.1000	0.3000	0.0100	1000.0000	0.0 N	0.0 N	0.0 N	0.0 N	5.0000L
AA 64A	3.0000	0.1000	0.3000	0.0100	5000.0000	0.0 N	0.0 N	0.0 N	0.0 N	1500.0000
RP 65A	1.0000	0.5000	0.0700	0.3000	100.0000	0.5000L	0.0 N	0.0 N	0.0 N	3000.0000
IK 66A	3.0000	1.0000	0.0500L	0.3000	70.0000	0.5000L	0.0 N	0.0 N	70.0000	1000.0000
F, 67A	15.0000	10.0000G	0.3000	0.0300	1500.0000	0.0 N	0.0 N	0.0 N	200.0000	150.0000
C 68A	3.0000	1.5000	3.0000	0.2000	300.0000	0.0 N	200.0000L	0.0 N	30.0000	3000.0000
C 69A	5.0000	0.7000	0.0700	0.1500	150.0000	0.5000L	200.0000L	0.0 N	50.0000	2000.0000
F 70A	2.0000	0.7000	0.7000	0.1500	100.0000	0.0 N	200.0000L	0.0 N	30.0000	3000.0000
R 71A	2.0000	0.3000	0.0700	0.3000	70.0000	0.0 N	200.0000L	0.0 N	30.0000	5000.0000G
C 72A	7.0000	1.5000	0.3000	0.7000	500.0000	0.5000L	0.0 N	0.0 N	30.0000	5000.0000
D 73A	10.0000	1.5000	0.7000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	2000.0000
H 74A	7.0000	1.5000	0.5000	0.3000	2000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
AR 75A	20.0000	7.0000	10.0000	1.0000G	3000.0000	0.0 N	0.0 N	0.0 N	15.0000	5000.0000G
AR 76A	10.0000	5.0000	10.0000	1.0000	1500.0000	0.0 N	0.0 N	0.0 N	10.0000	1500.0000
H 77A	5.0000	3.0000	0.7000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	30.0000	3000.0000
NQ 78A	10.0000	7.0000	10.0000	1.0000G	2000.0000	0.0 N	0.0 N	0.0 N	10.0000L	700.0000
H 79A	20.0000	7.0000	7.0000	1.0000G	3000.0000	0.5000L	0.0 N	0.0 N	15.0000	1500.0000
QL 80A	7.0000	5.0000	20.0000	0.7000	3000.0000	0.5000L	0.0 N	0.0 N	15.0000	1500.0000
HS 81A	7.0000	5.0000	10.0000	1.0000G	1500.0000	0.5000L	0.0 N	0.0 N	70.0000	3000.0000
FD 82A	7.0000	7.0000	0.0700	0.5000	300.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
U 83A	0.7000	0.2000	0.0700	0.1500	70.0000	0.0 N	0.0 N	0.0 N	30.0000	1000.0000
U 84A	0.3000	0.2000	0.1000	0.1500	50.0000	0.0 N	200.0000L	0.0 N	30.0000	1000.0000
IK 85A	15.0000	3.0000	0.0500	1.0000	700.0000	0.0 N	0.0 N	0.0 N	300.0000	5000.0000
I, 86A	5.0000	0.5000	0.0500	0.2000	200.0000	0.0 N	0.0 N	0.0 N	10.0000L	1000.0000
N 87A	10.0000	1.5000	0.7000	1.0000	1500.0000	0.5000L	0.0 N	0.0 N	20.0000	1500.0000
NS 88A	3.0000	3.0000	10.0000	0.5000	1500.0000	0.0 N	0.0 N	0.0 N	10.0000L	3000.0000
NS 89A	3.0000	3.0000	1.5000	0.3000	300.0000	0.7000	0.0 N	0.0 N	10.0000	3000.0000
NS 90A	3.0000	2.0000	2.0000	0.5000	300.0000	1.0000	0.0 N	0.0 N	10.0000L	3000.0000
NS 91A	0.1000	0.7000	0.0500L	0.1500	150.0000	0.5000L	0.0 N	0.0 N	0.0 N	2000.0000
FF 92A	20.0000	7.0000	7.0000	1.0000G	2000.0000	0.5000L	0.0 N	0.0 N	10.0000	50.0000
DS 93A	10.0000	5.0000	20.0000	1.0000G	1500.0000	0.7000	0.0 N	0.0 N	10.0000L	150.0000
FD 94A	20.0000	5.0000	5.0000	1.0000G	2000.0000	0.5000L	0.0 N	0.0 N	10.0000	1500.0000
N 95A	0.3000	1.0000	0.1000	0.1500	500.0000	0.5000L	0.0 N	0.0 N	10.0000L	700.0000
H 96A	3.0000	1.5000	0.0500L	0.3000	300.0000	0.0 N	0.0 N	0.0 N	20.0000	1500.0000
H 97A	5.0000	3.0000	10.0000	0.1500	5000.0000G	0.5000L	0.0 N	0.0 N	0.0 N	5000.0000
NS 98A	3.0000	0.3000	0.1500	0.1500	300.0000	1.0000	0.0 N	0.0 N	10.0000L	150.0000

TABLE 2.-- ROCK SAMP EAGLE

SAMPLE	RE PPM	RI PPM	CU PPM	CR PPM	CU PPM	LA PPM	MO PPM	NR PPM	NI PPM	PR PPM
IJ 49A	1.5000	0.0 N	5.0000L	70.0000	70.0000	20.0000	0.0 N	15.0000	10.0000	15.0000
O 50A	0.0 N	0.0 N	5.0000L	150.0000	70.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
L 51A	0.0 N	0.0 N	70.0000	150.0000	70.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
L 52A	0.0 N	0.0 N	70.0000	300.0000	30.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
H 53A	3.0000	0.0 N	5.0000L	5.0000L	10.0000	20.0000L	0.0 N	10.0000	5.0000L	15.0000
HS 54A	1.0000L	0.0 N	70.0000	200.0000	70.0000	20.0000	0.0 N	30.0000	100.0000	10.0000
HS 55A	1.0000L	0.0 N	100.0000	700.0000	150.0000	20.0000	15.0000	10.0000	300.0000	10.0000
H 56A	1.0000	0.0 N	15.0000	20.0000	70.0000	20.0000L	0.0 N	2.0000L	50.0000	10.0000
AR 57A	1.5000	0.0 N	5.0000L	10.0000	20.0000	30.0000	0.0 N	15.0000	5.0000	70.0000
RU 58A	1.0000L	0.0 N	5.0000L	7.0000	15.0000	50.0000	0.0 N	15.0000	5.0000	15.0000
F 59A	0.0 N	0.0 N	70.0000	200.0000	50.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
IJ 60A	3.0000	0.0 N	30.0000	300.0000	30.0000	50.0000	0.0 N	20.0000	50.0000	50.0000
M 61A	2.0000	0.0 N	5.0000L	30.0000	15.0000	50.0000	0.0 N	15.0000	7.0000	70.0000
G 62A	3.0000	0.0 N	15.0000	150.0000	50.0000	30.0000	0.0 N	15.0000	70.0000	20.0000
AA 63A	5.0000	0.0 N	0.0 N	5.0000L	30.0000	0.0 N	0.0 N	10.0000	5.0000L	10.0000
AA 64A	7.0000	0.0 N	0.0 N	30.0000	20.0000	0.0 N	0.0 N	2.0000L	5.0000L	10.0000
AP 65A	1.5000	0.0 N	5.0000L	50.0000	30.0000	30.0000	0.0 N	20.0000	50.0000	10.0000
IK 66A	1.5000	0.0 N	5.0000L	70.0000	50.0000	0.0 N	0.0 N	2.0000L	20.0000	10.0000L
FN 67A	1.0000L	0.0 N	200.0000	5000.0000	20.0000	20.0000L	0.0 N	15.0000	3000.0000	10.0000L
C 68A	3.0000	0.0 N	5.0000L	15.0000	7.0000	20.0000	0.0 N	10.0000	7.0000	15.0000
C 69A	1.5000	0.0 N	5.0000L	70.0000	30.0000	30.0000	0.0 N	15.0000	50.0000	30.0000
F 70A	2.0000	0.0 N	5.0000L	15.0000	20.0000	20.0000	0.0 N	10.0000	30.0000	70.0000
R 71A	1.5000	0.0 N	5.0000L	5.0000	50.0000	20.0000	7.0000	2.0000L	5.0000	70.0000
C 72A	1.5000	0.0 N	20.0000	70.0000	50.0000	50.0000	0.0 N	20.0000	50.0000	30.0000
O 73A	1.5000	0.0 N	10.0000	150.0000	50.0000	30.0000	0.0 N	2.0000L	20.0000	15.0000
H 74A	1.0000L	0.0 N	15.0000	50.0000	150.0000	20.0000	0.0 N	10.0000	50.0000	10.0000L
AR 75A	1.0000L	0.0 N	30.0000	20.0000	30.0000	30.0000	0.0 N	30.0000	7.0000	10.0000
AR 76A	1.0000L	0.0 N	20.0000	30.0000	15.0000	20.0000	0.0 N	2.0000L	7.0000	10.0000L
H 77A	1.0000	0.0 N	5.0000L	70.0000	20.0000	70.0000	0.0 N	20.0000	30.0000	50.0000
NO 78A	0.0 N	0.0 N	20.0000	500.0000	70.0000	20.0000L	0.0 N	10.0000	70.0000	10.0000L
H 79A	0.0 N	0.0 N	100.0000	150.0000	300.0000	30.0000	0.0 N	30.0000	70.0000	15.0000
QL 80A	0.0 N	0.0 N	15.0000	150.0000	20.0000	30.0000	0.0 N	10.0000	50.0000	150.0000
HS 81A	1.0000L	0.0 N	70.0000	300.0000	150.0000	20.0000	0.0 N	30.0000	100.0000	150.0000
ED 82A	1.5000	0.0 N	5.0000	70.0000	50.0000	30.0000	0.0 N	15.0000	50.0000	15.0000
U 83A	1.0000L	0.0 N	5.0000L	15.0000	15.0000	20.0000	0.0 N	2.0000L	7.0000	10.0000L
U 84A	1.0000L	0.0 N	0.0 N	30.0000	15.0000	20.0000L	7.0000	2.0000L	7.0000	10.0000L
IK 85A	2.0000	0.0 N	10.0000	150.0000	50.0000	20.0000	0.0 N	15.0000	70.0000	10.0000L
IJ 86A	1.5000	0.0 N	0.0 N	20.0000	50.0000	20.0000	0.0 N	2.0000L	20.0000	10.0000L
NS 87A	1.5000	0.0 N	50.0000	70.0000	100.0000	30.0000L	0.0 N	15.0000	70.0000	10.0000L
NS 88A	1.0000L	0.0 N	5.0000L	70.0000	70.0000	20.0000L	0.0 N	2.0000L	70.0000	1500.0000
NS 89A	1.5000	0.0 N	10.0000	100.0000	300.0000	20.0000	7.0000	10.0000	100.0000	10.0000
NS 90A	1.0000L	0.0 N	10.0000	150.0000	70.0000	20.0000	30.0000	2.0000L	150.0000	15.0000
NS 91A	1.0000L	0.0 N	5.0000L	5.0000L	50.0000	50.0000	0.0 N	15.0000	5.0000L	30.0000
FF 92A	0.0 N	0.0 N	70.0000	100.0000	500.0000	20.0000	0.0 N	15.0000	70.0000	10.0000L
DS 93A	1.0000L	0.0 N	50.0000	100.0000	500.0000	30.0000	0.0 N	15.0000	50.0000	30.0000
FD 94A	0.0 N	0.0 N	70.0000	15.0000	150.0000	20.0000	0.0 N	15.0000	50.0000	10.0000L
N 95A	0.0 N	0.0 N	15.0000	700.0000	300.0000	20.0000	0.0 N	2.0000L	70.0000	10.0000L
H 96A	1.0000L	0.0 N	10.0000	50.0000	30.0000	20.0000L	0.0 N	10.0000	30.0000	10.0000L
H 97A	1.5000	0.0 N	30.0000	30.0000	100.0000	20.0000	0.0 N	2.0000L	100.0000	15.0000
NS 98A	1.0000L	0.0 N	5.0000	150.0000	70.0000	20.0000	0.0 N	10.0000	30.0000	150.0000

TABLE 2.-- RUCK SAMP EAGLE

SAMPLE	SR PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
IJ 49A	0.0	20.0000	0.0	N	150.0000	0.0	N	0.0	N
J 50A	0.0	10.0000	0.0	N	100.0000	0.0	N	0.0	N
L 51A	0.0	100.0000	0.0	N	500.0000	0.0	N	200.0000L	100.0000
L 52A	0.0	50.0000	0.0	N	150.0000	0.0	N	200.0000L	50.0000
H 53A	0.0	5.0000	10.0000	50.0000L	15.0000	0.0	N	200.0000L	200.0000
HS 54A	0.0	50.0000	0.0	N	200.0000	0.0	N	200.0000L	150.0000
HS 55A	0.0	50.0000	0.0	N	300.0000	0.0	N	200.0000L	100.0000
HA 56A	0.0	30.0000	0.0	N	200.0000	0.0	N	200.0000L	150.0000
HA 57A	0.0	5.0000	15.0000	100.0000	15.0000	0.0	N	0.0	N
RI 58A	0.0	5.0000	10.0000L	50.0000L	15.0000	0.0	N	0.0	N
F 59A	0.0	100.0000	0.0	N	500.0000	0.0	N	200.0000L	0.0
I 60A	0.0	30.0000	0.0	N	300.0000	0.0	N	200.0000	150.0000
M 61A	0.0	15.0000	0.0	N	30.0000	0.0	N	0.0	N
G 62A	0.0	15.0000	0.0	N	150.0000	0.0	N	200.0000	300.0000
AA 63A	0.0	0.0	30.0000	0.0	10.0000	0.0	N	0.0	N
AA 64A	0.0	0.0	20.0000	0.0	10.0000	0.0	N	0.0	N
HP 65A	0.0	7.0000	0.0	N	30.0000	0.0	N	0.0	N
IK 66A	0.0	15.0000	0.0	N	200.0000	0.0	N	0.0	N
FN 67A	0.0	15.0000	0.0	N	70.0000	0.0	N	0.0	N
C 68A	0.0	7.0000	0.0	N	30.0000	0.0	N	0.0	N
C 69A	0.0	7.0000	10.0000L	50.0000L	150.0000	0.0	N	200.0000L	300.0000
F 70A	0.0	5.0000	10.0000L	50.0000L	70.0000	0.0	N	200.0000L	100.0000
R 71A	0.0	7.0000	10.0000	50.0000L	70.0000	0.0	N	0.0	N
C 72A	0.0	20.0000	10.0000L	50.0000L	150.0000	0.0	N	200.0000L	300.0000
D 73A	0.0	15.0000	0.0	N	150.0000	0.0	N	0.0	N
H 74A	0.0	15.0000	0.0	N	150.0000	0.0	N	0.0	N
AR 75A	0.0	70.0000	0.0	N	1000.0000	0.0	N	200.0000L	100.0000
AK 76A	0.0	30.0000	0.0	N	300.0000	0.0	N	0.0	N
H 77A	0.0	10.0000	10.0000L	50.0000L	70.0000	0.0	N	0.0	N
NO 78A	0.0	100.0000	30.0000	500.0000	700.0000	0.0	N	200.0000L	500.0000
H 79A	0.0	70.0000	0.0	N	1000.0000	0.0	N	200.0000L	500.0000
QL 80A	0.0	20.0000	0.0	N	100.0000	0.0	N	200.0000L	300.0000
HS 81A	0.0	30.0000	0.0	N	300.0000	0.0	N	200.0000L	300.0000
FN 82A	0.0	15.0000	0.0	N	150.0000	0.0	N	200.0000L	200.0000
U 83A	0.0	5.0000L	10.0000L	50.0000L	150.0000	0.0	N	0.0	N
U 84A	0.0	5.0000	0.0	N	200.0000	0.0	N	200.0000L	70.0000
IK 85A	0.0	30.0000	10.0000L	50.0000L	500.0000	0.0	N	200.0000L	300.0000
I 86A	0.0	7.0000	0.0	N	200.0000	0.0	N	200.0000L	70.0000
N 87A	0.0	30.0000	0.0	N	300.0000	0.0	N	200.0000L	150.0000
NS 88A	0.0	10.0000	0.0	N	200.0000	0.0	N	500.0000	300.0000
NS 89A	0.0	15.0000	0.0	N	200.0000	0.0	N	200.0000L	200.0000
NS 90A	0.0	15.0000	0.0	N	500.0000	0.0	N	200.0000L	150.0000
NS 91A	0.0	7.0000	0.0	N	15.0000	0.0	N	0.0	N
FE 92A	0.0	50.0000	0.0	N	500.0000	0.0	N	200.0000L	200.0000
DS 93A	0.0	70.0000	0.0	N	500.0000	0.0	N	200.0000L	200.0000
FN 94A	0.0	50.0000	0.0	N	300.0000	0.0	N	200.0000L	200.0000
N 95A	0.0	7.0000	0.0	N	100.0000	0.0	N	200.0000L	70.0000
H 96A	0.0	7.0000	10.0000L	50.0000L	70.0000	0.0	N	0.0	N
H 97A	0.0	10.0000	0.0	N	100.0000	0.0	N	300.0000	100.0000
NS 98A	0.0	10.0000	0.0	N	70.0000	0.0	N	200.0000L	70.0000

TABLE 2.--RUCK SAMP EAGLE

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	HA PPM
HJ 99A	7.0000	5.0000	7.0000	1.0000	700.0000	0.7000	0.0	0.0	200.0000	2000.0000
Q1100A	15.0000	5.0000	15.0000	0.7000	700.0000	0.0	0.0	0.0	20.0000	1500.0000
HS101A	7.0000	3.0000	5.0000	0.5000	700.0000	0.5000	0.0	0.0	15.0000	500.0000
UL102A	15.0000	3.0000	0.1500	1.0000	700.0000	0.0	0.0	0.0	70.0000	1000.0000
H 103A	20.0000	3.0000	0.0500L	1.0000	300.0000	0.0	0.0	0.0	150.0000	1000.0000
L1104A	3.0000	1.0000	0.7000	0.3000	300.0000	0.0	0.0	0.0	0.0	300.0000
W 105A	1.5000	0.2000	0.0500	0.0100	200.0000	0.0	0.0	0.0	0.0	5.0000L
HK106A	3.0000	0.7000	0.0700	0.1500	700.0000	0.0	0.0	0.0	0.0	500.0000
N 107A	5.0000	3.0000	7.0000	0.7000	2000.0000	0.5000L	0.0	0.0	10.0000L	3000.0000
DP108A	3.0000	3.0000	15.0000	1.0000G	300.0000	0.5000L	0.0	0.0	0.0	3000.0000
DP109A	5.0000	3.0000	5.0000	1.0000G	300.0000	0.5000L	0.0	0.0	10.0000N	5000.0000
DP110A	7.0000	7.0000	5.0000	1.0000G	500.0000	0.0	0.0	0.0	10.0000L	1000.0000
DP111A	5.0000	3.0000	5.0000	0.7000	500.0000	0.7000	0.0	0.0	15.0000	1500.0000
DL112A	5.0000	3.0000	5.0000	0.7000	500.0000	0.5000	0.0	0.0	10.0000L	2000.0000
F 113A	10.0000	10.0000G	0.1000	0.0200	700.0000	0.5000L	0.0	0.0	70.0000	5.0000L
P 114A	3.0000	3.0000	7.0000	0.7000	300.0000	0.5000L	0.0	0.0	10.0000L	700.0000
P 115A	5.0000	5.0000	3.0000	0.5000	700.0000	0.5000L	0.0	0.0	20.0000	2000.0000
HK116A	2.0000	1.0000	0.0500L	0.2000	300.0000	0.0	0.0	0.0	100.0000	3000.0000
N 117A	3.0000	1.5000	0.1500	0.2000	200.0000	0.0	0.0	0.0	0.0	3000.0000
L 118A	5.0000	2.0000	5.0000	0.7000	5000.0000	0.0	0.0	0.0	20.0000	3000.0000
AH119A	15.0000	3.0000	7.0000	0.7000	2000.0000	0.0	0.0	0.0	10.0000	2000.0000
NS120A	20.0000	1.5000	1.5000	1.0000G	5000.0000	0.0	0.0	0.0	300.0000	3000.0000
LT121A	7.0000	3.0000	3.0000	0.7000	2000.0000	0.0	0.0	0.0	50.0000	1500.0000
NJ122A	1.0000	0.2000	0.0500L	0.1000	20.0000	0.5000L	0.0	0.0	30.0000	700.0000
AR123A	3.0000	0.3000	5.0000	0.5000	1000.0000	0.0	0.0	0.0	0.0	2000.0000
AR124A	7.0000	0.3000	7.0000	0.7000	1500.0000	0.0	0.0	0.0	10.0000	2000.0000
AR125A	5.0000	0.7000	7.0000	0.5000	1000.0000	0.0	0.0	0.0	15.0000	1000.0000
AR126A	7.0000	1.0000	7.0000	0.5000	1500.0000	0.0	0.0	0.0	10.0000L	1500.0000
H 127A	1.5000	2.0000	0.3000	0.3000	300.0000	0.0	0.0	0.0	0.0	3000.0000
AR128A	10.0000	3.0000	7.0000	1.0000G	1500.0000	0.5000L	0.0	0.0	10.0000	2000.0000
MS129A	7.0000	5.0000	10.0000	1.0000G	1500.0000	0.5000L	0.0	0.0	70.0000	3000.0000
N 130A	10.0000	3.0000	0.3000	0.7000	300.0000	0.0	0.0	0.0	30.0000	1500.0000
I 131A	7.0000	2.0000	0.3000	0.5000	300.0000	0.5000L	0.0	0.0	70.0000	700.0000
L 132A	7.0000	1.5000	0.0500	0.7000	300.0000	0.5000	0.0	0.4000	70.0000	1500.0000
M 133A	7.0000	2.0000	7.0000	0.5000	1500.0000	0.5000L	0.0	0.0	10.0000	1500.0000
N 134A	7.0000	3.0000	10.0000	0.5000	2000.0000	0.5000L	0.0	0.0	10.0000	1500.0000
P 135A	7.0000	1.5000	5.0000	0.7000	2000.0000	0.5000L	0.0	0.2000	10.0000	1500.0000
C 136A	7.0000	1.0000	2.0000	0.3000	1000.0000	0.0	200.0000L	0.0	20.0000	1500.0000
N 137A	15.0000	5.0000	5.0000	0.7000	1500.0000	0.0	200.0000L	0.0	30.0000	5000.0000
N 138A	7.0000	5.0000	7.0000	1.0000	1500.0000	0.5000L	200.0000L	0.0	70.0000	1500.0000
NS139A	15.0000	7.0000	1.5000	1.0000	1000.0000	0.5000L	0.0	0.0	1000.0000	3000.0000
AR140A	3.0000	3.0000	5.0000	0.5000	1000.0000	0.0	0.0	0.0	0.0	1500.0000
FN141A	20.0000G	10.0000G	0.0500L	0.0200	1000.0000	0.5000L	0.0	0.0400	70.0000	5.0000L
N 142A	10.0000	3.0000	2.0000	0.7000	700.0000	0.0	0.0	0.0	30.0000	2000.0000
M 143A	10.0000	7.0000	7.0000	1.0000	3000.0000	0.5000	0.0	0.0	10.0000L	700.0000
NC144A	3.0000	3.0000	0.1000	1.0000	150.0000	0.7000	0.0	0.0	70.0000	5000.0000
HJ145A	1.5000	0.3000	0.0500L	0.3000	150.0000	0.5000L	0.0	0.0	100.0000	1500.0000
N 146A	1.5000	0.2000	0.0500L	0.2000	100.0000	0.0	200.0000L	0.0	70.0000	300.0000
AR147A	10.0000	1.5000	2.0000	0.7000	1500.0000	0.0	0.0	0.0	20.0000	1500.0000
IK148A	0.1000	0.3000	0.0500L	0.1000	70.0000	0.0	0.0	0.0	10.0000L	700.0000

TABLE 2.---BUCK SAMP EAGLF

SAMPLE	BE PPM	HI PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NR PPM	NI PPM	PH PPM
HL 99A	1.5000	0.0 N	20.0000	200.0000	100.0000	30.0000	30.0000	15.0000	100.0000	70.0000
QJ100A	1.0000	0.0 N	15.0000	150.0000	50.0000	30.0000	0.0 N	15.0000	70.0000	15.0000
HS101A	1.0000	0.0 N	15.0000	50.0000	150.0000	30.0000	20.0000	10.0000	70.0000	10.0000L
UL102A	1.0000	0.0 N	70.0000	150.0000	70.0000	30.0000	0.0 N	20.0000	100.0000	10.0000L
H 103A	1.0000	0.0 N	50.0000	150.0000	50.0000	50.0000	0.0 N	20.0000	150.0000	10.0000L
LJ104A	1.0000L	0.0 N	10.0000	70.0000	70.0000	20.0000L	0.0 N	2.0000L	50.0000	70.0000
W 105A	1.0000L	0.0 N	5.0000L	5.0000L	50.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
HK106A	1.0000	0.0 N	5.0000L	50.0000	50.0000	20.0000L	0.0 N	2.0000L	10.0000	10.0000L
N 107A	1.0000	0.0 N	20.0000	30.0000	100.0000	20.0000L	0.0 N	2.0000L	30.0000	10.0000L
DP108A	1.0000L	0.0 N	5.0000L	300.0000	70.0000	30.0000	0.0 N	15.0000	50.0000	15.0000
DP109A	0.0 N	0.0 N	15.0000	300.0000	70.0000	20.0000	0.0 N	30.0000	70.0000	50.0000
DP110A	1.0000L	0.0 N	10.0000	300.0000	70.0000	30.0000	0.0 N	30.0000	70.0000	15.0000
DP111A	1.5000	0.0 N	30.0000	150.0000	150.0000	30.0000	70.0000	15.0000	100.0000	20.0000
DL112A	1.0000	0.0 N	20.0000	150.0000	100.0000	20.0000L	50.0000	10.0000	100.0000	15.0000
F 113A	1.0000L	0.0 N	150.0000	500.0000	50.0000	20.0000L	0.0 N	2.0000L	300.0000	70.0000
P 114A	1.5000	0.0 N	30.0000	200.0000	100.0000	30.0000	30.0000	10.0000	150.0000	70.0000
P 115A	1.0000L	0.0 N	15.0000	150.0000	70.0000	20.0000L	70.0000	2.0000L	100.0000	50.0000
HK116A	1.5000	0.0 N	5.0000L	70.0000	70.0000	20.0000L	0.0 N	10.0000	10.0000	10.0000L
N 117A	3.0000	0.0 N	5.0000L	5.0000	70.0000	150.0000	0.0 N	30.0000	5.0000L	10.0000
L 118A	1.0000	0.0 N	30.0000	30.0000	200.0000	20.0000	0.0 N	2.0000L	50.0000	10.0000L
AR119A	1.0000L	0.0 N	50.0000	20.0000	50.0000	20.0000L	0.0 N	10.0000	5.0000	10.0000L
NS120A	1.0000	0.0 N	70.0000	700.0000	150.0000	20.0000	70.0000	10.0000	300.0000	15.0000
IT121A	1.0000L	0.0 N	15.0000	20.0000	200.0000	20.0000	0.0 N	10.0000	10.0000	10.0000L
NU122A	1.0000L	0.0 N	5.0000L	15.0000	15.0000	20.0000L	0.0 N	10.0000	7.0000	10.0000L
AR123A	1.0000	0.0 N	10.0000	30.0000	30.0000	30.0000	0.0 N	15.0000	5.0000	30.0000
AR124A	1.0000L	0.0 N	15.0000	30.0000	30.0000	30.0000	0.0 N	15.0000	7.0000	10.0000L
AR125A	1.5000	0.0 N	20.0000	50.0000	15.0000	70.0000	0.0 N	20.0000	5.0000	30.0000
AR126A	1.0000	0.0 N	15.0000	20.0000	20.0000	50.0000	0.0 N	10.0000	5.0000	50.0000
H 127A	1.5000	0.0 N	5.0000L	100.0000	15.0000	30.0000	0.0 N	15.0000	5.0000L	150.0000
AR128A	1.0000L	0.0 N	20.0000	15.0000	70.0000	20.0000	0.0 N	20.0000	5.0000L	15.0000
MS129A	1.0000L	0.0 N	70.0000	300.0000	150.0000	20.0000	0.0 N	30.0000	100.0000	150.0000
N 130A	1.5000	0.0 N	15.0000	150.0000	100.0000	50.0000	0.0 N	20.0000	70.0000	10.0000
J 131A	1.5000	0.0 N	15.0000	70.0000	70.0000	30.0000	0.0 N	15.0000	70.0000	50.0000
L 132A	1.5000	0.0 N	5.0000L	100.0000	70.0000	20.0000	0.0 N	15.0000	20.0000	10.0000
M 133A	1.0000L	0.0 N	15.0000	30.0000	100.0000	20.0000L	0.0 N	2.0000L	20.0000	15.0000
N 134A	1.0000	0.0 N	15.0000	30.0000	150.0000	20.0000L	0.0 N	10.0000	30.0000	10.0000
P 135A	1.5000	0.0 N	70.0000	30.0000	200.0000	30.0000	0.0 N	30.0000	50.0000	10.0000
C 136A	2.0000	0.0 N	5.0000L	10.0000	70.0000	30.0000	0.0 N	30.0000	5.0000L	15.0000
N 137A	1.0000	0.0 N	50.0000	30.0000	100.0000	20.0000L	5.0000L	10.0000	10.0000	50.0000
N 138A	1.5000	0.0 N	50.0000	200.0000	70.0000	20.0000	7.0000	10.0000	100.0000	50.0000
NS139A	1.5000	0.0 N	20.0000	700.0000	150.0000	20.0000	0.0 N	10.0000	700.0000	15.0000
AR140A	1.5000	0.0 N	0.0 N	5.0000	30.0000	20.0000	0.0 N	10.0000	5.0000L	70.0000
FR141A	0.0 N	0.0 N	200.0000	500.0000	70.0000	20.0000	0.0 N	2.0000L	500.0000	10.0000L
N 142A	1.0000L	0.0 N	10.0000	70.0000	70.0000	20.0000L	0.0 N	2.0000L	50.0000	10.0000L
M 143A	1.0000	0.0 N	30.0000	70.0000	70.0000	20.0000	0.0 N	2.0000L	50.0000	50.0000
DC144A	2.0000	0.0 N	70.0000	200.0000	100.0000	150.0000	7.0000	10.0000	70.0000	150.0000
HJ145A	1.0000L	0.0 N	5.0000L	30.0000	70.0000	20.0000L	7.0000	10.0000	5.0000L	10.0000L
N 146A	0.0 N	0.0 N	5.0000L	30.0000	70.0000	20.0000	0.0 N	2.0000L	5.0000L	70.0000
AR147A	1.0000	0.0 N	10.0000	15.0000	300.0000	30.0000	0.0 N	15.0000	5.0000	30.0000
IK148A	1.5000	0.0 N	5.0000L	30.0000	70.0000	20.0000	0.0 N	2.0000L	50.0000	10.0000L

TABLE 2.--RICK SAMP EAGLE

SAMPLE	SR	SC	SN	SR	V	W	Y	ZN	ZR
HJ 49A	0.0	50.0000	0.0	300.0000	300.0000	0.0	50.0000	200.0000L	300.0000
0L100A	0.0	20.0000	0.0	500.0000	150.0000	0.0	15.0000	200.0000L	150.0000
HS101A	0.0	15.0000	0.0	150.0000	300.0000	0.0	30.0000	200.0000L	100.0000
HL102A	0.0	30.0000	0.0	0.0	200.0000	0.0	50.0000	200.0000L	150.0000
H 103A	0.0	50.0000	0.0	0.0	300.0000	0.0	50.0000	200.0000L	700.0000
L1104A	0.0	7.0000	0.0	50.0000L	70.0000	0.0	10.0000	0.0	150.0000
W 105A	0.0	5.0000L	0.0	50.0000L	15.0000	0.0	10.0000L	0.0	20.0000L
HK106A	0.0	5.0000	0.0	50.0000L	100.0000	0.0	10.0000	0.0	70.0000
N 107A	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	0.0	150.0000
OP108A	0.0	70.0000	0.0	300.0000	300.0000	0.0	50.0000	0.0	300.0000
OP109A	0.0	30.0000	0.0	300.0000	200.0000	0.0	20.0000	0.0	150.0000
OP110A	0.0	70.0000	0.0	300.0000	300.0000	0.0	50.0000	0.0	300.0000
OP111A	0.0	30.0000	0.0	300.0000	300.0000	0.0	30.0000	200.0000L	300.0000
OL112A	0.0	15.0000	0.0	300.0000	300.0000	0.0	30.0000	2000.0000	200.0000
F 113A	0.0	5.0000	0.0	50.0000L	50.0000	0.0	10.0000L	0.0	20.0000L
P 114A	0.0	30.0000	10.0000L	500.0000	300.0000	0.0	30.0000	200.0000L	300.0000
P 115A	0.0	15.0000	10.0000L	150.0000	500.0000	0.0	15.0000	0.0	150.0000
HK116A	0.0	10.0000	0.0	50.0000L	150.0000	0.0	10.0000L	0.0	70.0000
N 117A	0.0	15.0000	0.0	50.0000L	10.0000	0.0	50.0000	0.0	1000.0000
L 118A	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	0.0	150.0000
AR119A	0.0	30.0000	0.0	1500.0000	300.0000	0.0	30.0000	0.0	150.0000
NS120A	0.0	30.0000	0.0	50.0000L	300.0000	0.0	30.0000	0.0	700.0000
IT121A	0.0	20.0000	0.0	50.0000L	300.0000	0.0	30.0000	200.0000L	200.0000
NU122A	0.0	5.0000L	0.0	50.0000L	70.0000	0.0	10.0000L	0.0	70.0000
AR123A	0.0	20.0000	0.0	700.0000	150.0000	0.0	30.0000	0.0	150.0000
AR124A	0.0	30.0000	0.0	300.0000	150.0000	0.0	50.0000	0.0	200.0000
AR125A	0.0	30.0000	0.0	700.0000	150.0000	0.0	30.0000	200.0000L	100.0000
AR126A	0.0	15.0000	0.0	500.0000	150.0000	0.0	30.0000	0.0	300.0000
H 127A	0.0	5.0000L	0.0	50.0000L	30.0000	0.0	20.0000	0.0	500.0000
AR128A	0.0	50.0000	0.0	300.0000	300.0000	0.0	50.0000	0.0	200.0000
MS129A	0.0	30.0000	0.0	300.0000	300.0000	0.0	50.0000	200.0000L	300.0000
N 130A	0.0	30.0000	0.0	50.0000L	150.0000	0.0	30.0000	0.0	300.0000
I 131A	0.0	15.0000	10.0000L	50.0000L	150.0000	0.0	30.0000	0.0	100.0000
L 132A	0.0	20.0000	0.0	50.0000L	150.0000	0.0	20.0000	0.0	150.0000
M 133A	0.0	20.0000	0.0	700.0000	200.0000	0.0	30.0000	0.0	70.0000
N 134A	0.0	30.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0	100.0000
P 135A	0.0	30.0000	0.0	300.0000	150.0000	0.0	50.0000	0.0	300.0000
C 136A	0.0	15.0000	10.0000L	200.0000	15.0000	0.0	50.0000	0.0	700.0000
N 137A	0.0	30.0000	0.0	300.0000	500.0000	0.0	20.0000	0.0	100.0000
N 138A	0.0	30.0000	0.0	100.0000	300.0000	0.0	30.0000	200.0000L	700.0000
NS139A	0.0	30.0000	0.0	50.0000L	300.0000	0.0	30.0000	200.0000L	700.0000
AR140A	0.0	15.0000	10.0000L	300.0000	100.0000	0.0	20.0000	0.0	200.0000
F0141A	0.0	15.0000	0.0	50.0000L	100.0000	0.0	10.0000L	0.0	20.0000L
N 142A	0.0	15.0000	0.0	50.0000L	150.0000	0.0	15.0000	0.0	200.0000
M 143A	0.0	30.0000	10.0000L	500.0000	200.0000	0.0	30.0000	200.0000L	100.0000
DC144A	0.0	30.0000	10.0000	50.0000L	150.0000	0.0	30.0000	0.0	150.0000
HJ145A	0.0	7.0000	0.0	50.0000L	150.0000	0.0	20.0000	0.0	70.0000
N 146A	0.0	5.0000L	0.0	50.0000L	150.0000	0.0	10.0000	0.0	70.0000
AR147A	0.0	7.0000	0.0	200.0000	100.0000	0.0	30.0000	0.0	700.0000
IK148A	0.0	20.0000	0.0	150.0000	200.0000	0.0	30.0000	0.0	150.0000

TABLE 2.-- RUCK SAMP EAGLE

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	R PPM	BA PPM
IH149A	2.0000	0.7000	0.0700	0.3000	200.0000	0.7000	0.0	0.0	50.0000	1500.0000
F 150A	10.0000	7.0000	10.0000	1.0000	1500.0000	0.0	0.0	0.0	10.0000	300.0000
FX151A	7.0000	1.5000	0.1500	0.7000	3000.0000	0.5000L	0.0	0.0	70.0000	1500.0000
J1152A	1.5000	0.3000	0.1000	0.1500	300.0000	0.5000L	0.0	0.0	30.0000	3000.0000
DF153A	7.0000	1.5000	0.7000	0.1500	1000.0000	0.0	200.0000L	0.0	30.0000	1500.0000
RF154A	10.0000	1.5000	1.5000	0.3000	1500.0000	0.5000L	0.0	0.0	10.0000L	5000.0000
GP155A	5.0000	1.5000	0.1500	0.3000	1500.0000	0.0	0.0	0.0	20.0000	5000.0000G
FO156A	10.0000	10.0000G	0.2000	0.0300	1000.0000	0.0	0.0	0.0	20.0000	5.0000L
FO157A	15.0000	10.0000G	1.5000	0.0200	1000.0000	0.0	0.0	0.0	20.0000	5.0000L
WS158A	15.0000	3.0000	10.0000	1.0000	2000.0000	0.0	0.0	0.0	10.0000L	200.0000
MS159A	20.0000	3.0000	7.0000	1.0000G	1500.0000	0.0	0.0	0.0	30.0000	150.0000
AI160A	7.0000	2.0000	0.3000	0.7000	700.0000	0.0	0.0	0.0	150.0000	200.0000
LS161A	15.0000	5.0000	7.0000	1.0000	1000.0000	0.0	0.0	0.0	30.0000	700.0000
LT162A	15.0000	3.0000	7.0000	1.0000	1500.0000	0.0	0.0	0.0	10.0000	300.0000
LI163A	0.2000	0.3000	15.0000	0.0200	150.0000	0.0	200.0000L	0.0	0.0	150.0000
NO164A	3.0000	2.0000	5.0000	0.0300	3000.0000	0.0	0.0	0.0	0.0	150.0000
T 165A	10.0000	0.7000	0.0700	0.3000	300.0000	0.0	200.0000L	0.0	30.0000	1000.0000
S 166A	20.0000	0.2000	3.0000	0.1500	150.0000	0.0	0.0	0.0	200.0000	300.0000
DS167A	15.0000	7.0000	7.0000	1.0000	1000.0000	0.0	0.0	0.0	50.0000	700.0000
MT168A	15.0000	5.0000	15.0000	1.0000	700.0000	0.0	0.0	0.0	5.0000L	300.0000
MR169A	15.0000	5.0000	15.0000	1.0000G	1000.0000	0.0	0.0	0.0	5.0000L	1500.0000
GS170A	5.0000	1.5000	3.0000	0.3000	150.0000	1.5000	0.0	0.0	10.0000	1500.0000
W 171A	0.7000	0.7000	5.0000	0.1500	300.0000	0.0	0.0	0.0	0.0	5.0000L
MS172A	7.0000	3.0000	7.0000	0.5000	700.0000	0.0	0.0	0.0	10.0000L	70.0000
MR173A	10.0000	3.0000	7.0000	0.7000	700.0000	0.5000L	0.0	0.0	20.0000	1500.0000
IR174A	5.0000	2.0000	7.0000	0.1500	2000.0000	0.5000L	0.0	0.0	30.0000	700.0000
L 175A	15.0000	5.0000	5.0000	0.7000	1000.0000	0.0	0.0	0.0	10.0000	5.0000L
M 176A	15.0000	7.0000	5.0000	0.3000	1000.0000	0.0	0.0	0.0	15.0000	150.0000
MR177A	7.0000	5.0000	5.0000	0.2000	1000.0000	0.0	200.0000L	0.0	15.0000	700.0000
Z0178A	20.0000	0.2000	20.0000	0.1500	300.0000	0.5000L	0.0	0.1000	20.0000	70.0000
MS179A	3.0000	3.0000	15.0000	0.0200	3000.0000	0.0	200.0000L	0.0	0.0	70.0000
MR180A	15.0000	7.0000	20.0000	0.2000	5000.0000G	0.0	0.0	0.0	70.0000	100.0000
M 181A	15.0000	3.0000	7.0000	0.5000	1000.0000	0.0	0.0	0.0	15.0000	100.0000
MS182A	20.0000	7.0000	20.0000	1.0000	3000.0000	0.0	0.0	0.0	10.0000	300.0000
M 183A	5.0000	3.0000	3.0000	0.1500	700.0000	0.0	0.0	0.0	0.0	150.0000
GT184A	3.0000	7.0000	15.0000	0.0500	1000.0000	0.0	0.0	0.0	30.0000	300.0000
GT185A	5.0000	5.0000	7.0000	0.3000	1000.0000	0.0	0.0	0.0	30.0000	700.0000
MU186A	10.0000	7.0000	10.0000	0.2000	3000.0000	1.5000	0.0	0.0	30.0000	300.0000
MR187A	20.0000	5.0000	0.1500	1.0000G	700.0000	0.5000L	0.0	0.0	30.0000	5.0000L
YS188A	20.0000	7.0000	20.0000	0.3000	3000.0000	0.7000	0.0	0.0	300.0000	1500.0000
IR189A	20.0000	7.0000	15.0000	1.0000	500.0000	0.5000L	0.0	0.0	100.0000	700.0000
M 190A	15.0000	5.0000	10.0000	0.0200	5000.0000	0.0	0.0	0.0	10.0000	5.0000L
Y 191A	15.0000	3.0000	5.0000	0.7000	1500.0000	0.0	0.0	0.0	20.0000	200.0000
MS192A	15.0000	3.0000	5.0000	0.7000	1500.0000	0.0	0.0	0.0	10.0000	300.0000
M 193A	20.0000	3.0000	3.0000	1.0000	500.0000	0.5000L	0.0	0.0	15.0000	50.0000
Y 194A	5.0000	3.0000	10.0000	0.3000	5000.0000	0.0	0.0	0.0	30.0000	150.0000
MS195A	20.0000	3.0000	7.0000	1.0000	1000.0000	0.0	0.0	0.0	15.0000	5.0000L
MT196A	20.0000	0.2000	3.0000	0.1500	150.0000	0.0	0.0	0.0	200.0000	300.0000
MS197A	20.0000	5.0000	5.0000	0.5000	1500.0000	0.0	0.0	0.0	15.0000	150.0000
MS198A	15.0000	2.0000	15.0000	0.2000	1000.0000	0.0	0.0	0.0	15.0000	150.0000

TABLE 2.--KUCK SAMP EAGLE

SAMPLE	HF PPM	HI PPM	CU PPM	CR PPM	CU PPM	LA PPM	MO PPM	NR PPM	NI PPM	PR PPM
IH149A	1.5000	0.0 N	5.0000L	70.0000	100.0000	20.0000L	0.0 N	10.0000	10.0000	10.0000L
F 150A	0.0 N	0.0 N	70.0000	700.0000	100.0000	20.0000L	0.0 N	2.0000L	100.0000	10.0000L
FX151A	1.0000	0.0 N	15.0000	150.0000	70.0000	30.0000	0.0 N	15.0000	100.0000	15.0000
J1152A	1.0000	0.0 N	5.0000L	50.0000	30.0000	20.0000L	0.0 N	15.0000	20.0000	10.0000L
NE153A	1.5000	0.0 N	10.0000	70.0000	70.0000	20.0000L	0.0 N	2.0000L	50.0000	15.0000
RE154A	10.0000	0.0 N	7.0000	10.0000	100.0000	150.0000	5.0000	20.0000	5.0000L	300.0000
GP155A	1.0000	0.0 N	15.0000	20.0000	30.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
FI156A	0.0 N	0.0 N	150.0000	5000.0000G	7.0000	20.0000L	0.0 N	2.0000L	5000.0000G	10.0000L
FO157A	0.0 N	0.0 N	200.0000	5000.0000G	15.0000	20.0000L	0.0 N	2.0000L	5000.0000	10.0000L
WS158A	0.0 N	0.0 N	50.0000	300.0000	70.0000	0.0 N	0.0 N	2.0000L	70.0000	10.0000L
WS159A	0.0 N	0.0 N	100.0000	15.0000	70.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
AU160A	1.0000	0.0 N	10.0000	100.0000	100.0000	0.0 N	0.0 N	10.0000	100.0000	20.0000
LS161A	0.0 N	0.0 N	100.0000	700.0000	150.0000	20.0000L	5.0000L	2.0000L	150.0000	10.0000L
LT162A	0.0 N	0.0 N	20.0000	500.0000	30.0000	20.0000L	0.0 N	2.0000L	100.0000	15.0000
Q 163A	1.0000L	0.0 N	0.0 N	5.0000	7.0000	20.0000L	0.0 N	2.0000L	5.0000L	10.0000L
NO164A	1.0000L	0.0 N	7.0000	5.0000L	10.0000	20.0000L	0.0 N	2.0000L	7.0000	10.0000L
T 165A	1.0000L	0.0 N	10.0000	100.0000	70.0000	20.0000	5.0000	10.0000	70.0000	10.0000
S 166A	0.0 N	0.0 N	7.0000	50.0000	10.0000	20.0000	5.0000L	10.0000	30.0000	10.0000
OS167A	1.0000L	0.0 N	100.0000	1000.0000	150.0000	70.0000	5.0000L	20.0000	500.0000	30.0000
MT168A	1.0000	0.0 N	20.0000	500.0000	30.0000	150.0000	10.0000	15.0000	150.0000	15.0000
MR169A	2.0000	0.0 N	50.0000	500.0000	50.0000	150.0000	0.0 N	30.0000	300.0000	20.0000
GS170A	1.0000L	0.0 N	7.0000	150.0000	150.0000	50.0000	7.0000	10.0000	70.0000	10.0000
W 171A	0.0 N	0.0 N	5.0000L	5.0000	50.0000	20.0000L	0.0 N	10.0000	7.0000	10.0000L
MS172A	0.0 N	0.0 N	20.0000	70.0000	30.0000	20.0000	5.0000L	2.0000L	50.0000	10.0000L
MR173A	0.0 N	0.0 N	100.0000	150.0000	1000.0000	20.0000L	5.0000L	2.0000L	150.0000	10.0000L
IR174A	1.0000L	0.0 N	100.0000	150.0000	1500.0000	20.0000L	0.0 N	2.0000L	50.0000	10.0000L
L 175A	0.0 N	0.0 N	15.0000	20.0000	10.0000	20.0000L	5.0000L	2.0000L	50.0000	10.0000L
M 176A	0.0 N	0.0 N	70.0000	700.0000	30.0000	20.0000L	5.0000L	2.0000L	100.0000	10.0000L
MR177A	0.0 N	0.0 N	50.0000	100.0000	1500.0000	20.0000L	5.0000L	2.0000L	70.0000	700.0000
ZQ178A	0.0 N	0.0 N	70.0000	15.0000	70.0000	20.0000	7.0000	2.0000L	50.0000	15.0000
MS179A	0.0 N	0.0 N	5.0000L	10.0000	150.0000	20.0000L	0.0 N	2.0000L	5.0000	10.0000L
MR180A	0.0 N	0.0 N	70.0000	70.0000	70.0000	20.0000L	0.0 N	2.0000L	50.0000	0.0 N
M 181A	0.0 N	0.0 N	70.0000	30.0000	150.0000	20.0000L	5.0000L	2.0000L	70.0000	10.0000L
MS182A	0.0 N	0.0 N	100.0000	300.0000	300.0000	20.0000L	0.0 N	2.0000L	100.0000	10.0000L
M 183A	0.0 N	0.0 N	15.0000	70.0000	70.0000	0.0 N	0.0 N	2.0000L	50.0000	10.0000L
GT184A	1.0000L	0.0 N	5.0000L	30.0000	7.0000	20.0000	0.0 N	2.0000L	7.0000	20.0000
GT185A	0.0 N	0.0 N	20.0000	200.0000	150.0000	20.0000L	5.0000L	2.0000L	70.0000	15.0000
MU186A	0.0 N	0.0 N	20.0000	300.0000	200.0000	30.0000	5.0000L	2.0000L	70.0000	1500.0000
MR187A	0.0 N	0.0 N	200.0000	50.0000	10000.0000G	20.0000	0.0 N	2.0000L	150.0000	10.0000L
YS188A	2.0000	0.0 N	70.0000	300.0000	300.0000	20.0000	15.0000	15.0000	150.0000	30.0000
MR189A	0.0 N	0.0 N	2000.0000	200.0000	700.0000	20.0000L	5.0000L	2.0000L	150.0000	10.0000L
M 190A	1.0000L	0.0 N	15.0000	7.0000	150.0000	20.0000L	0.0 N	2.0000L	50.0000	10.0000L
Y 191A	0.0 N	0.0 N	30.0000	150.0000	200.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
MS192A	0.0 N	0.0 N	20.0000	30.0000	200.0000	20.0000L	5.0000L	2.0000L	70.0000	10.0000L
M 193A	0.0 N	0.0 N	150.0000	30.0000	15.0000	20.0000	0.0 N	10.0000	50.0000	10.0000L
Y 194A	0.0 N	0.0 N	10.0000	30.0000	30.0000	20.0000L	5.0000L	2.0000L	10.0000	10.0000L
MS195A	0.0 N	0.0 N	70.0000	50.0000	70.0000	20.0000L	5.0000L	2.0000L	70.0000	10.0000L
MT196A	0.0 N	0.0 N	7.0000	50.0000	10.0000	20.0000	5.0000L	10.0000	30.0000	10.0000
MS197A	0.0 N	0.0 N	100.0000	150.0000	150.0000	20.0000L	0.0 N	2.0000L	70.0000	10.0000L
MS198A	0.0 N	0.0 N	20.0000	100.0000	150.0000	20.0000L	0.0 N	2.0000L	50.0000	10.0000L

TABLE 2.--RUCK SAMP EAGLE

SAMPLE	SR	SC	SN	SR	V	W	Y	ZN	ZR
JH149A	0.0	15.0000	0.0	50.0000L	300.0000	0.0	10.0000L	0.0	70.0000
F 150A	0.0	50.0000	0.0	0.0	300.0000	0.0	50.0000	0.0	70.0000
FX151A	0.0	30.0000	0.0	50.0000L	200.0000	0.0	30.0000	200.0000L	300.0000
JH152A	0.0	7.0000	0.0	50.0000L	200.0000	0.0	10.0000	0.0	70.0000
DF153A	0.0	7.0000	0.0	50.0000	150.0000	0.0	10.0000	200.0000L	150.0000
RF154A	0.0	7.0000	10.0000	700.0000	150.0000	0.0	50.0000	200.0000L	5000.0000
GP155A	0.0	7.0000	0.0	50.0000L	50.0000	0.0	10.0000L	200.0000L	70.0000
FI156A	0.0	30.0000	0.0	50.0000L	70.0000	0.0	10.0000	200.0000L	0.0
FI157A	0.0	15.0000	0.0	0.0	50.0000	0.0	0.0	0.0	0.0
MS158A	0.0	30.0000	0.0	300.0000	300.0000	0.0	30.0000	0.0	50.0000
MS159A	0.0	100.0000	0.0	200.0000	500.0000	0.0	100.0000	200.0000L	300.0000
AI160A	0.0	30.0000	0.0	50.0000L	300.0000	0.0	30.0000	200.0000L	150.0000
LS161A	0.0	50.0000	0.0	50.0000L	200.0000	0.0	30.0000	0.0	70.0000
LT162A	0.0	30.0000	0.0	300.0000	200.0000	0.0	30.0000	0.0	70.0000
U 163A	0.0	5.0000L	0.0	300.0000	15.0000	0.0	10.0000	0.0	20.0000L
AI164A	0.0	5.0000L	0.0	50.0000L	15.0000	0.0	10.0000L	0.0	30.0000
T 165A	0.0	10.0000	0.0	50.0000L	150.0000	0.0	15.0000	200.0000L	100.0000
S 166A	0.0	20.0000	0.0	700.0000	150.0000	50.0000L	10.0000L	300.0000	70.0000
PS167A	0.0	15.0000	0.0	1000.0000	100.0000	0.0	30.0000	200.0000L	100.0000
MT168A	0.0	20.0000	0.0	300.0000	150.0000	0.0	50.0000	200.0000	150.0000
ML169A	0.0	15.0000	0.0	100.0000	300.0000	0.0	30.0000	200.0000L	200.0000
GS170A	0.0	5.0000L	0.0	20.0000	20.0000	0.0	10.0000L	0.0	70.0000
W 171A	0.0	30.0000	0.0	50.0000L	200.0000	0.0	30.0000	200.0000L	30.0000
MS172A	0.0	50.0000	0.0	50.0000L	300.0000	0.0	20.0000	0.0	70.0000
MR173A	0.0	15.0000	0.0	50.0000L	100.0000	0.0	15.0000	200.0000L	70.0000
LR174A	0.0	30.0000	0.0	50.0000L	500.0000	0.0	15.0000	200.0000L	50.0000
L 175A	0.0	50.0000	0.0	200.0000	200.0000	0.0	20.0000	1500.0000	30.0000
M 176A	0.0	20.0000	0.0	50.0000L	150.0000	0.0	15.0000	0.0	30.0000
MR177A	0.0	5.0000	0.0	50.0000L	70.0000	0.0	10.0000L	0.0	20.0000L
Z0178A	0.0	10.0000	0.0	50.0000L	30.0000	0.0	15.0000	0.0	20.0000L
MS179A	0.0	20.0000	0.0	50.0000L	200.0000	0.0	20.0000	200.0000L	50.0000
MR180A	0.0	50.0000	0.0	100.0000	500.0000	0.0	30.0000	1000.0000	70.0000
M 181A	0.0	100.0000	0.0	300.0000	300.0000	0.0	30.0000	0.0	70.0000
MS182A	0.0	20.0000	0.0	50.0000L	150.0000	0.0	15.0000	700.0000	300.0000
M 183A	0.0	7.0000	0.0	200.0000	150.0000	0.0	50.0000	0.0	70.0000
GT184A	0.0	30.0000	0.0	50.0000L	700.0000	0.0	50.0000	0.0	300.0000
GT185A	0.0	50.0000	0.0	50.0000L	300.0000	0.0	30.0000	0.0	70.0000
MI186A	0.0	70.0000	0.0	50.0000L	300.0000	0.0	30.0000	0.0	70.0000
MR187A	0.0	30.0000	500.0000	500.0000	300.0000	0.0	30.0000	700.0000	300.0000
YS188A	0.0	100.0000	0.0	50.0000L	700.0000	0.0	30.0000	0.0	70.0000
LR189A	0.0	20.0000	0.0	50.0000L	20.0000	0.0	15.0000	200.0000L	20.0000L
M 190A	0.0	30.0000	0.0	50.0000L	300.0000	0.0	30.0000	0.0	70.0000
Y 191A	0.0	50.0000	0.0	50.0000L	300.0000	0.0	30.0000	200.0000L	70.0000
MS192A	0.0	50.0000	0.0	50.0000L	300.0000	0.0	30.0000	0.0	70.0000
M 193A	0.0	30.0000	0.0	50.0000L	150.0000	0.0	50.0000	0.0	70.0000
Y 194A	0.0	70.0000	0.0	50.0000L	500.0000	0.0	30.0000	200.0000L	70.0000
MS195A	0.0	10.0000	0.0	50.0000L	150.0000	0.0	10.0000L	300.0000	50.0000
MT196A	0.0	50.0000	0.0	50.0000L	200.0000	0.0	15.0000	200.0000L	20.0000
MS197A	0.0	30.0000	0.0	300.0000	200.0000	0.0	15.0000	0.0	20.0000
MS198A	0.0		0.0			0.0			

TABLE 2.-- RUCK SAMP EAGLF

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AIJ PPM	H PPM	HA PPM
Y 199A	7.0000	3.0000	5.0000	0.7000	2000.0000	0.0 N	3000.0000	0.0 N	30.0000	300.0000
Y 200A	7.0000	3.0000	10.0000	0.5000	3000.0000	0.0 N	0.0 N	0.0 N	15.0000	300.0000
MS201A	7.0000	2.0000	7.0000	0.3000	3000.0000	0.0 N	0.0 N	0.0 N	30.0000	200.0000
XSP02A	15.0000	0.2000	7.0000	0.0300	300.0000	7.0000	0.0 N	0.1000	10.0000	100.0000
M 203A	20.0000	5.0000	7.0000	1.0000G	1500.0000	0.5000L	0.0 N	0.0 N	10.0000	700.0000
LT204A	7.0000	0.3000	0.3000	0.2000	300.0000	1.5000	200.0000L	0.0 N	0.0 N	150.0000
M 205A	20.0000	7.0000	7.0000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	10.0000	700.0000

TABLE 2.--RUCK SAMP EAGLE

SAMPLE	RF PPM	RI PPM	CU PPM	CR PPM	CU PPM	LA PPM	MO PPM	NR PPM	NI PPM	PB PPM
Y 194A	0.0 N	0.0 N	500.0000	150.0000	7.0000	20.0000L	0.0 N	2.0000L	5000.0000G	10.0000L
Y 200A	0.0 N	0.0 N	500.0000	30.0000	30.0000	20.0000L	5.0000L	2.0000L	50.0000	10.0000L
MS201A	0.0 N	0.0 N	20.0000	70.0000	100.0000	20.0000L	5.0000L	2.0000L	30.0000	10.0000L
XS202A	0.0 N	0.0 N	5.0000L	15.0000	1000.0000G	20.0000L	30.0000	2.0000L	5.0000L	10.0000L
M 203A	0.0 N	0.0 N	70.0000	70.0000	500.0000	20.0000L	0.0 N	10.0000	70.0000	10.0000L
LT204A	0.0 N	0.0 N	5.0000	10.0000	1000.0000G	20.0000L	0.0 N	2.0000L	7.0000	10.0000L
M 205A	0.0 N	0.0 N	100.0000	700.0000	300.0000	20.0000L	0.0 N	2.0000L	150.0000	10.0000L

TABLE 2.--KICK SAMP EAGLE

SAMPLE	SR PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
Y 199A	0.0 N	70.0000	0.0 N	50.0000L	300.0000	0.0 N	15.0000	0.0 N	70.0000
Y 200A	0.0 N	50.0000	0.0 N	50.0000L	200.0000	0.0 N	30.0000	0.0 N	50.0000
MS201A	0.0 N	30.0000	0.0 N	50.0000L	200.0000	0.0 N	15.0000	0.0 N	70.0000
XS202A	0.0 N	5.0000L	0.0 N	50.0000L	30.0000	0.0 N	10.0000L	0.0 N	20.0000L
M 203A	0.0 N	70.0000	0.0 N	150.0000	500.0000	0.0 N	50.0000	0.0 N	200.0000
LT204A	0.0 N	5.0000	0.0 N	50.0000L	70.0000	0.0 N	10.0000L	200.0000L	50.0000
M 205A	0.0 N	70.0000	0.0 N	50.0000L	500.0000	0.0 N	30.0000	200.0000L	50.0000

FREQUENCY TABLE FOR COLUMN 1 (FE PCT)

LIMITS		FREQ	CUM	PERCENT	PERCENT	FREQ	CUM	PERCENT
LOWER - UPPER								
3.8F-02	5.6E-02	0	0	0.0	0.0	0.0	0.0	0.0
5.6F-02	8.3F-02	0	0	0.0	0.0	0.0	0.0	0.0
8.3F-02	1.2F-01	2	2	0.97	0.97	0.97	0.97	0.97
1.2F-01	1.8E-01	0	2	0.0	0.97	0.97	0.97	0.97
1.8F-01	2.6F-01	1	3	0.48	1.45	1.45	1.45	1.45
2.6F-01	3.8F-01	3	6	1.45	2.90	2.90	2.90	2.90
3.8F-01	5.6F-01	0	6	0.0	2.90	2.90	2.90	2.90
5.6F-01	8.3F-01	5	11	2.42	5.31	5.31	5.31	5.31
8.3F-01	1.2F 00	3	14	1.45	6.76	6.76	6.76	6.76
1.2F 00	1.8F 00	10	24	4.83	11.59	11.59	11.59	11.59
1.8F 00	2.6E 00	6	30	2.90	14.49	14.49	14.49	14.49
2.6E 00	3.8F 00	30	60	14.49	28.99	28.99	28.99	28.99
3.8E 00	5.6F 00	21	81	10.14	39.13	39.13	39.13	39.13
5.6F 00	8.3E 00	36	117	17.39	56.52	56.52	56.52	56.52
8.3F 00	1.2F 01	22	139	10.63	67.15	67.15	67.15	67.15
1.2F 01	1.8E 01	35	174	16.91	84.06	84.06	84.06	84.06
1.8F 01	2.6F 01	32	206	15.46	99.52	99.52	99.52	99.52

HISTOGRAM FOR COLUMN 1 (FE PCT)

1.0E-01 X
1.5E-01
2.0F-01
3.0E-01 X
5.0E-01
7.0E-01 XX
1.0F 00 X
1.5E 00 XXXX
2.0E 00 XXX
3.0E 00 XXXXXXXXXXXX
5.0E 00 XXXXXXXXXXXX
7.0E 00 XXXXXXXXXXXXXXXX
1.0E 01 XXXXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXX

MAXIMUM = 2.00000E 01
0.0 0.0
N L H R T
0 0 0 0 0
0.0 0.0

ANALYTICAL
VALUES
1
206
0.48

MINIMUM = 1.00000E-01
GEOMETRIC MEAN = 6.16562E 00
GEOMETRIC DEVIATION = 2.87428E 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, 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.

FREQUENCY TABLE FOR COLUMN 2 (MG PCT)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER	CUM	CUM	FREQ	FREQ CUM
1.8F-02	2.6F-02	0	0	0.0	0.0
2.6F-02	3.8F-02	0	0	0.0	0.0
3.8F-02	5.6F-02	0	0	0.0	0.0
5.6F-02	8.3F-02	0	0	0.0	0.0
8.3F-02	1.2F-01	2	2	0.97	0.97
1.2F-01	1.8F-01	0	2	0.0	0.97
1.8F-01	2.6F-01	11	13	5.31	6.28
2.6F-01	3.8F-01	13	26	6.28	12.56
3.8F-01	5.6F-01	5	31	2.42	14.98
5.6F-01	8.3F-01	13	44	6.28	21.26
8.3F-01	1.2F 00	8	52	3.86	25.12
1.2F 00	1.8E 00	22	74	10.63	35.75
1.8E 00	2.6F 00	15	89	7.25	43.00
2.6F 00	3.8E 00	44	133	21.26	64.25
3.8E 00	5.6E 00	28	161	13.53	77.78
5.6E 00	8.3E 00	26	187	12.56	90.34
8.3E 00	1.2F 01	7	194	3.38	93.72

Explanation

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, 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-01 X
1.5E-01
2.0E-01 XXXX
3.0E-01 XXXXX
5.0E-01 XX
7.0E-01 XXXXXX
1.0E 00 XXXX
1.5E 00 XXXXXXXXXXXX
2.0E 00 XXXXXX
3.0E 00 XXXXXXXXXXXXXXXXXXXX
5.0E 00 XXXXXXXXXXXXXXXX
7.0E 00 XXXXXXXXXXXXXXXX
1.0E 01 XXX

```

ANALYTICAL

VALUES

T G
0 13
0.0 6.28

MAXIMUM = 1.00000F 01

MINIMUM = 1.00000F-01

GEOMETRIC MEAN = 1.98865F 00

GEOMETRIC DEVIATION = 3.06648E 00

FREQUENCY TABLE FOR COLUMN 3 (CA PCT)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM	Explanation
LOWER	UPPER					
3.8E-02	5.6E-02	4	4	1.93	1.93	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, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.
5.6E-02	8.3E-02	11	15	5.31	7.25	
8.3E-02	1.2E-01	6	21	2.90	10.14	
1.2E-01	1.8E-01	9	30	4.35	14.49	
1.8E-01	2.6E-01	4	34	1.93	16.43	
2.6E-01	3.8E-01	15	49	7.25	23.67	
3.8E-01	5.6E-01	3	52	1.45	25.12	
5.6E-01	8.3E-01	9	61	4.35	29.47	
8.3E-01	1.2E 00	2	63	0.97	30.43	
1.2E 00	1.8E 00	9	72	4.35	34.78	
1.8E 00	2.6E 00	5	77	2.42	37.20	
2.6E 00	3.8E 00	15	92	7.25	44.44	
3.8E 00	5.6E 00	23	115	11.11	55.56	
5.6E 00	8.3E 00	34	149	16.43	71.98	
8.3E 00	1.2E 01	19	168	9.18	81.16	
1.2E 01	1.8E 01	11	179	5.31	86.47	
1.8E 01	2.6E 01	10	189	4.83	91.30	

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, $1.0E-01$ means 1.0×10^{-1} or 0.1, $1.0E 01$ 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)

```

5.0E-02 XX
7.0E-02 XXXXX
1.0E-01 XXX
1.5E-01 XXXX
2.0E-01 XX
3.0E-01 XXXXXXX
5.0E-01 X
7.0E-01 XXXX
1.0E 00 X
1.5E 00 XXXX
2.0E 00 XX
3.0E 00 XXXXXXX
5.0E 00 XXXXXXXXXXXX
7.0E 00 XXXXXXXXXXXXXXXX
1.0E 01 XXXXXXXXXXXX
1.5E 01 XXXXX
2.0E 01 XXXXX

```

ANALYTICAL VALUES					
N	L	H	T	G	
0	15	0	0	3	189
0.0	7.25		0.0	1.45	
MAXIMUM = 2.00000E 01					
MINIMUM = 5.00000E-02					
GEOMETRIC MEAN = 1.97215E 00					
GEOMETRIC DEVIATION = 6.02945E 00					

FREQUENCY TABLE FOR COLUMN 4 (TI PCT)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
8.3F-04 - 1.2F-03		0	0	0.0	0.0
1.2F-03 - 1.8F-03		0	0	0.0	0.0
1.8F-03 - 2.6F-03		0	0	0.0	0.0
2.6F-03 - 3.8F-03		0	0	0.0	0.0
3.8F-03 - 5.6F-03		0	0	0.0	0.0
5.6F-03 - 8.3F-03		0	0	0.0	0.0
8.3F-03 - 1.2F-02		4	4	1.93	1.93
1.2F-02 - 1.8F-02		0	4	0.0	1.93
1.8F-02 - 2.6F-02		8	12	3.86	5.80
2.6F-02 - 3.8F-02		9	21	4.35	10.14
3.8F-02 - 5.6F-02		2	23	0.97	11.11
5.6F-02 - 8.3F-02		0	23	0.0	11.11
8.3F-02 - 1.2F-01		5	28	2.42	13.53
1.2F-01 - 1.8F-01		23	51	11.11	24.64
1.8F-01 - 2.6F-01		12	63	5.80	30.43
2.6F-01 - 3.8F-01		30	93	14.49	44.93
3.8F-01 - 5.6F-01		25	118	12.08	57.00
5.6F-01 - 8.3F-01		34	152	16.43	73.43
8.3F-01 - 1.2E 00		28	180	13.53	86.96

HISTOGRAM FOR COLUMN 4 (TI PCT)

1.0E-02 XX

1.5E-02

2.0E-02 XXXX

3.0E-02 XXXX

5.0E-02 X

7.0E-02

1.0E-01 XX

1.5E-01 XXXXXXXXXXXX

2.0E-01 XXXXXX

3.0E-01 XXXXXXXXXXXXXXXX

5.0E-01 XXXXXXXXXXXXXXXX

7.0E-01 XXXXXXXXXXXXXXXXXX

1.0E 00 XXXXXXXXXXXXXXXX

N	L	H	R	T	G	ANALYTICAL VALUES
0.0	0	0	0	0	27	180
0.0	0.0			0.0	13.04	

MAXIMUM = 1.00000E 00

MINIMUM = 1.00000E-02

GEOMETRIC MEAN = 2.82868E-01

GEOMETRIC DEVIATION = 3.25279E 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, 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.

FREQUENCY TABLE FOR COLUMN 5 (MN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
8.3E 00 - 1.2E 01	1	1	0.48	0.48	
1.2E 01 - 1.8E 01	0	1	0.0	0.48	
1.8E 01 - 2.6E 01	1	2	0.48	0.97	
2.6E 01 - 3.8E 01	1	3	0.48	1.45	
3.8E 01 - 5.6E 01	1	4	0.48	1.93	
5.6E 01 - 8.3E 01	6	10	2.90	4.83	
8.3E 01 - 1.2E 02	3	13	1.45	6.28	
1.2E 02 - 1.8E 02	13	26	6.28	12.56	
1.8E 02 - 2.6E 02	4	30	1.93	14.49	
2.6E 02 - 3.8E 02	33	63	15.94	30.43	
3.8E 02 - 5.6E 02	14	77	6.76	37.20	
5.6E 02 - 8.3E 02	25	102	12.08	49.28	
8.3E 02 - 1.2E 03	24	126	11.59	60.87	
1.2E 03 - 1.8E 03	37	163	17.87	78.74	
1.8E 03 - 2.6E 03	22	185	10.63	89.37	
2.6E 03 - 3.8E 03	15	200	7.25	96.62	
3.8E 03 - 5.6E 03	5	205	2.42	99.03	

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, 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, $1.0E-01$ means 1.0×10^{-1} or 0.1, $1.0E 01$ 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)

```

7.0E 01 XXX
1.0E 02 X
1.5E 02 XXXXXX
2.0E 02 XX
3.0E 02 XXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXX
7.0E 02 XXXXXXXXXXXXXXXX
1.0E 03 XXXXXXXXXXXXXXXX
1.5E 03 XXXXXXXXXXXXXXXXXXXX
2.0E 03 XXXXXXXXXXXXXXXX
3.0E 03 XXXXXXXX
5.0E 03 XX

```

ANALYTICAL
VALUES
205
0.97
0.0
0.0
0.0

MAXIMUM = 5.00000E 03

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 7.01450E 02

GEOMETRIC DEVIATION = 3.04689E 00

FREQUENCY TABLE FOR COLUMN 6 (AG PPM)

LIMITS		FREQ	CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER - UPPER					
3.8F-01 -	5.6F-01	9	9	4.35	4.35
5.6F-01 -	8.3F-01	9	18	4.35	8.70
8.3F-01 -	1.2F 00	2	20	0.97	9.66
1.2F 00 -	1.8F 00	4	24	1.93	11.59
1.8F 00 -	2.6F 00	0	24	0.0	11.59
2.6F 00 -	3.8F 00	0	24	0.0	11.59
3.8F 00 -	5.6F 00	0	24	0.0	11.59
5.6F 00 -	8.3F 00	1	25	0.48	12.04

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, 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 1.0×10^0 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 6 (AG PPM)

5.0F-01 XXXX

7.0E-01 XXXX

1.0F 00 X

1.5E 00 XX

2.0F 00

3.0F 00

5.0E 00

7.0E 00

ANALYTICAL VALUES		G		T	
N	L	H			
122	60	0		0	
58.94	28.99	0		0.0	

MAXIMUM = 7.00000E 00

MINIMUM = 5.00000E-01

GEOMETRIC MEAN = 7.90394E-01

GEOMETRIC DEVIATION = 1.81514E 00

FREQUENCY TABLE FOR COLUMN 7 (AS PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
1.8F 02 -	2.6F 02	0	0	0.0	0.0
2.6F 02 -	3.8F 02	0	0	0.0	0.0
3.8F 02 -	5.6F 02	0	0	0.0	0.0
5.6F 02 -	8.3F 02	3	3	1.46	1.46
8.3F 02 -	1.2F 03	2	5	0.97	2.43
1.2F 03 -	1.8F 03	2	7	0.97	3.40
1.8F 03 -	2.6F 03	0	7	0.0	3.40
2.6F 03 -	3.8F 03	1	8	0.49	3.88
3.8F 03 -	5.6F 03	0	8	0.0	3.88
5.6F 03 -	8.3F 03	1	9	0.49	4.37

HISTOGRAM FOR COLUMN 7 (AS PPM)

7.0E 02 X
1.0E 03 X
1.5E 03 X
2.0E 03
3.0E 03
5.0E 03
7.0E 03

ANALYTICAL VALUES				
N	L	H	R	T
178	16	1	0	0
86.41	7.77			0.0

MAXIMUM = 7.00000F 03

MINIMUM = 7.00000F 02

GEOMETRIC MEAN = 1.36272F 03

GEOMETRIC DEVIATION = 2.17716E 00

Explanation

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, 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.

FREQUENCY TABLE FOR COLUMN 9 (R PPM)

LIMITS		FRFQ	CUM	PERCENT	PERCENT	PERCENT
LOWER	UPPER			FRFQ	FRFQ	CUM
8.3F 00	1.2F 01	27	27	13.04		13.04
1.2F 01	1.8F 01	22	49	10.63		23.67
1.8F 01	2.6F 01	17	66	8.21		31.88
2.6F 01	3.8F 01	38	104	18.36		50.24
3.8F 01	5.6F 01	11	115	5.31		55.56
5.6F 01	8.3F 01	21	136	10.14		65.70
8.3F 01	1.2F 02	9	145	4.35		70.05
1.2F 02	1.8F 02	3	148	1.45		71.50
1.8F 02	2.6F 02	5	153	2.42		73.91
2.6F 02	3.8F 02	3	156	1.45		75.36
3.8F 02	5.6F 02	0	156	0.0		75.36
5.6F 02	8.3F 02	0	156	0.0		75.36
8.3F 02	1.2F 03	1	157	0.48		75.85

HISTOGRAM FOR COLUMN 9 (R PPM)

```

1.0E 01 XXXXXXXXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXX
7.0E 01 XXXXXXXXXXXXXXXX
1.0E 02 XXXX
1.5E 02 X
2.0E 02 XX
3.0E 02 X
5.0E 02
7.0E 02
1.0F 03

```

ANALYTICAL			
N	L	H	T
25	25	0	0
12.08	12.08	0	0.0

MAXIMUM = 1.00000E 03

MINIMUM = 1.00000F 01

GEOMETRIC MEAN = 3.14015F 01

GEOMETRIC DEVIATION = 2.49647E 00

Explanation

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, 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.

FREQUENCY TABLE FOR COLUMN 10 (HA PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
3.4F 00 -	5.6F 00	0	0	0.0	0.0
4.6F 00 -	8.3E 00	0	0	0.0	0.0
4.3F 00 -	1.2F 01	0	0	0.0	0.0
1.2F 01 -	1.8E 01	0	0	0.0	0.0
1.8F 01 -	2.6F 01	1	1	0.48	0.48
2.6F 01 -	3.8F 01	0	1	0.0	0.48
3.8F 01 -	5.6F 01	3	4	1.45	1.93
5.6F 01 -	8.3E 01	6	10	2.90	4.83
8.3E 01 -	1.2F 02	5	15	2.42	7.25
1.2F 02 -	1.8E 02	17	32	8.21	15.46
1.8F 02 -	2.6F 02	4	36	1.93	17.39
2.6F 02 -	3.8F 02	22	58	10.63	28.02
3.8F 02 -	5.6F 02	2	60	0.97	28.99
5.6F 02 -	8.3E 02	23	83	11.11	40.10
8.3E 02 -	1.2E 03	12	95	5.80	45.89
1.2F 03 -	1.8F 03	41	136	19.81	65.70
1.8F 03 -	2.6E 03	18	154	8.70	74.40
2.6F 03 -	3.8E 03	22	176	10.63	85.02
3.8F 03 -	5.6E 03	8	184	3.86	88.89

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, 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 (HA PPM)

```

5.0E 01 X
7.0E 01 XXX
1.0E 02 XX
1.5E 02 XXXXXXXX
2.0E 02 XX
3.0E 02 XXXXXXXXXXXX
5.0E 02 X
7.0E 02 XXXXXXXXXXXX
1.0E 03 XXXXX
1.5E 03 XXXXXXXXXXXXXXXXXXXX
2.0E 03 XXXXXXXXXXXX
3.0E 03 XXXXXXXXXXXXXXXX
5.0E 03 XXXX

```

ANALYTICAL

VALUES
184
4
1.93

T
0
0.0

H
0

H
0

L
8.21

N
2
0.97

MAXIMUM = 5.00000E 03

MINIMUM = 2.00000E 01

GEOMFTRIC MEAN = 7.66177E 02

GEOMFTRIC DEVIATION = 3.35619E 00

FREQUENCY TABLE FOR COLUMN 11 (RE PPM)

LIMITS		FREQUENCY		PERCENT	
LOWER	UPPER	FREQ	CUM	FREQ	CUM
8.3E-01	1.2E 00	26	26	12.56	12.56
1.2E 00	1.8E 00	39	65	18.84	31.40
1.8E 00	2.6E 00	7	72	3.38	34.78
2.6E 00	3.8E 00	5	77	2.42	37.20
3.8E 00	5.6E 00	1	78	0.48	37.68
5.6E 00	8.3E 00	1	79	0.48	38.16
8.3E 00	1.2E 01	1	80	0.48	38.65

HISTOGRAM FOR COLUMN 11 (RE PPM)

1.0E 00 XXXXXXXXXXXXXXXX
 1.5E 00 XXXXXXXXXXXXXXXXXXXX
 2.0E 00 XXX
 3.0E 00 XX
 5.0E 00
 7.0E 00

ANALYTICAL		VALUES	
N	L	H	T
80	47	0	0
38.65	22.71		0.0

MAXIMUM = 1.00000E 01
 MINIMUM = 1.00000E 00
 GEOMETRIC MEAN = 1.49213E 00
 GEOMETRIC DEVIATION = 1.53880E 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, 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.

FREQUENCY TABLE FOR COLUMN 13 (CO PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
LOWER	UPPER				
3.8F 00 -	5.6F 00	8	8	3.86	3.86
5.6F 00 -	8.3F 00	5	13	2.62	6.48
8.3F 00 -	1.2F 01	19	32	9.18	15.66
1.2F 01 -	1.8F 01	24	56	11.59	27.25
1.8F 01 -	2.6F 01	18	74	8.70	35.95
2.6F 01 -	3.8F 01	10	84	4.83	40.78
3.8F 01 -	5.6F 01	11	95	5.31	46.09
5.6F 01 -	8.3F 01	33	128	15.94	61.84
8.3F 01 -	1.2F 02	14	142	6.66	68.60
1.2F 02 -	1.8F 02	8	150	3.86	72.46
1.8F 02 -	2.6F 02	5	155	2.42	74.88
2.6F 02 -	3.8F 02	2	157	0.97	75.85
3.8F 02 -	5.6F 02	2	159	0.97	76.81
5.6F 02 -	8.3F 02	0	159	0.0	76.81
8.3F 02 -	1.2F 03	0	159	0.0	76.81
1.2F 03 -	1.8F 03	0	159	0.0	76.81
1.8F 03 -	2.6F 03	1	160	0.48	77.29

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, 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 13 (CO PPM)

```

5.0E 00 XXXX
7.0F 00 XX
1.0E 01 XXXXXXXXXX
1.5E 01 XXXXXXXXXXXX
2.0E 01 XXXXXXXXXX
3.0F 01 XXXXX
5.0F 01 XXXXX
7.0E 01 XXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXX
1.5F 02 XXXX
2.0E 02 XX
3.0F 02 X
5.0F 02 X
7.0F 02
1.0F 03
1.5F 03
2.0F 03

```

ANALYTICAL VALUES

N L H T G

7 40 0 0 0

3.38 19.32 0.0 0.0 0.0

MAXIMUM = 2.00000E 03

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 3.41665E 01

GEOMETRIC DEVIATION = 3.07493E 00

FREQUENCY TABLE FOR COLUMN 14 (CR PPM)

LIMITS		FREQ	FREQ	CUM	PERCENT	FREQ	PERCENT	FREQ	PERCENT
LOWER	UPPER								
3.8F 00 -	5.6E 00	6	6	6	2.90	2.90	2.90	2.90	2.90
5.6F 00 -	8.3E 00	3	9	9	1.45	4.35	4.35	4.35	4.35
8.3F 00 -	1.2E 01	6	15	15	2.90	7.25	7.25	7.25	7.25
1.2F 01 -	1.8E 01	13	28	28	6.28	13.53	13.53	13.53	13.53
1.8F 01 -	2.6E 01	11	39	39	5.31	18.84	18.84	18.84	18.84
2.6F 01 -	3.8E 01	23	62	62	11.11	29.95	29.95	29.95	29.95
3.8F 01 -	5.6E 01	13	75	75	6.28	36.23	36.23	36.23	36.23
5.6F 01 -	8.3E 01	31	106	106	14.98	51.21	51.21	51.21	51.21
8.3F 01 -	1.2F 02	12	118	118	5.40	57.00	57.00	57.00	57.00
1.2F 02 -	1.8E 02	28	146	146	13.53	70.53	70.53	70.53	70.53
1.8F 02 -	2.6E 02	8	154	154	3.86	74.40	74.40	74.40	74.40
2.6F 02 -	3.8E 02	13	167	167	6.28	80.68	80.68	80.68	80.68
3.8F 02 -	5.6E 02	5	172	172	2.42	83.09	83.09	83.09	83.09
5.6F 02 -	8.3E 02	12	184	184	5.40	88.49	88.49	88.49	88.49
8.3F 02 -	1.2E 03	1	185	185	0.48	89.97	89.97	89.97	89.97
1.2F 03 -	1.8E 03	2	187	187	0.97	90.94	90.94	90.94	90.94
1.8F 03 -	2.6E 03	2	189	189	0.97	91.90	91.90	91.90	91.90
2.6F 03 -	3.8E 03	3	192	192	1.45	92.75	92.75	92.75	92.75
3.8F 03 -	5.6E 03	6	198	198	2.90	95.65	95.65	95.65	95.65

HISTOGRAM FOR COLUMN 14 (CR PPM)

```

5.0E 00 XXX
7.0F 00 X
1.0F 01 XXX
1.5F 01 XXXXXX
2.0F 01 XXXXX
3.0E 01 XXXXXXXXXXXX
5.0E 01 XXXXXX
7.0E 01 XXXXXXXXXXXXXXXX
1.0E 02 XXXXXX
1.5E 02 XXXXXXXXXXXXXXXX
2.0F 02 XXXX
3.0E 02 XXXXXX
5.0E 02 XX
7.0E 02 XXXXXX
1.0F 03
1.5E 03 X
2.0E 03 X
3.0F 03 X
5.0F 03 XXX

```

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, 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 $1.0 \times 10^{+1}$ or 10.0, a value 1.0E-02 means 1.0×10^{-2} or .01, a value 1.0E 02 means $1.0 \times 10^{+2}$ or 100, etc.

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

ANALYTICAL
VALUES
1988

```

MAXIMUM = 5.00000E 03
MINIMUM = 5.00000E 00
GEOMETRIC MEAN = 9.041
GEOMETRIC DEVIATION =

```

FREQUENCY TABLE FOR COLUMN 15 (CU PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
3.8E 00 -	5.6E 00	0	0	0.0	0.0
5.6E 00 -	8.3E 00	5	5	2.42	2.42
8.3E 00 -	1.2E 01	5	10	2.42	4.83
1.2E 01 -	1.8E 01	15	25	7.75	12.08
1.8E 01 -	2.6E 01	8	33	3.86	15.94
2.6E 01 -	3.8E 01	23	56	11.11	27.05
3.8E 01 -	5.6E 01	27	83	13.04	40.10
5.6E 01 -	8.3E 01	53	136	25.60	65.70
8.3E 01 -	1.2E 02	20	156	9.66	75.36
1.2E 02 -	1.8E 02	24	180	11.59	86.96
1.8E 02 -	2.6E 02	8	188	3.86	90.82
2.6E 02 -	3.8E 02	9	197	4.35	95.17
3.8E 02 -	5.6E 02	3	200	1.45	96.62
5.6E 02 -	8.3E 02	1	201	0.48	97.10
8.3E 02 -	1.2E 03	1	202	0.48	97.58
1.2E 03 -	1.8E 03	2	204	0.97	98.55

HISTOGRAM FOR COLUMN 15 (CU PPM)

```

7.0E 00 XX
1.0E 01 XX
1.5E 01 XXXXXXXX
2.0E 01 XXXX
3.0E 01 XXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXX
2.0E 02 XXXX
3.0E 02 XXXX
5.0E 02 X
7.0E 02
1.0E 03
1.5E 03 X

```

ANALYTICAL
VALUES
T G
0 3
0.0 1.45

MAXIMUM = 1.50000E 03

MINIMUM = 7.00000E 00

GEOMETRIC MEAN = 6.37595E 01

GEOMETRIC DEVIATION = 2.68871E 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, 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.

FREQUENCY TABLE FOR COLUMN 16 (LA PPM)

LIMITS		FREQ	FREQ	CUM	PERCENT	FREQ	PERCENT	FREQ	CUM
LOWER - UPPER									
1.8E 01 -	2.6E 01	49		49	23.67				
2.6E 01 -	3.8E 01	33		82	15.94				
3.8E 01 -	5.6E 01	11		93	5.31				
5.6E 01 -	8.3E 01	3		96	1.45				
8.3E 01 -	1.2E 02	0		96	0.0				
1.2E 02 -	1.8E 02	5		101	2.42				

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, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 16 (LA PPM)

2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

5.0E 01 XXXXX

7.0E 01 X

1.0E 02

1.5E 02 XX

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		G	
101			
N	L	H	T
9	97	0	0
4.35	46.86		0.0

MAXIMUM = 1.50000E 02

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 2.89319E 01

GEOMETRIC DEVIATION = 1.66358E 00

FREQUENCY TABLE FOR COLUMN 17 (MU PPM)

LIMITS		FREQ	CUM	PERCENT	PERCENT
LOWER	UPPER			FREQ	CUM
3.8E 00 -	5.6E 00	3	3	1.45	1.45
5.6E 00 -	8.3E 00	8	11	3.46	5.31
8.3E 00 -	1.2E 01	1	12	0.48	5.80
1.2E 01 -	1.8E 01	2	14	0.97	6.76
1.8E 01 -	2.6E 01	1	15	0.48	7.25
2.6E 01 -	3.8E 01	4	19	1.93	9.18
3.8E 01 -	5.6E 01	1	20	0.48	9.66
5.6E 01 -	8.3E 01	3	23	1.45	11.11

HISTOGRAM FOR COLUMN 17 (MU PPM)

5.0E 00 X

7.0E 00 XXXX

1.0E 01

1.5E 01 X

2.0E 01

3.0E 01 XX

5.0E 01

7.0E 01 X

ANALYTICAL		VALUES	
N	L	H	T
165	19	0	0
79.71	9.18	0	0.0

MAXIMUM = 7.00000E 01

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.44162E 01

GEOMETRIC DEVIATION = 2.53090E 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, 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.

FREQUENCY TABLE FOR COLUMN 18 (NR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
1.8E 00 - 2.6E 00	0	0	0	0.0	0.0
2.6E 00 - 3.8E 00	0	0	0	0.0	0.0
3.8E 00 - 5.6E 00	0	0	0	0.0	0.0
5.6E 00 - 8.3E 00	0	0	0	0.0	0.0
8.3E 00 - 1.2E 01	50	50	50	24.15	24.15
1.2E 01 - 1.8E 01	33	83	83	15.94	40.10
1.8E 01 - 2.6E 01	12	95	95	5.80	45.89
2.6E 01 - 3.8E 01	12	107	107	5.80	51.69

HISTOGRAM FOR COLUMN 18 (NR PPM)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 01 XXXXX
 3.0E 01 XXXXXX

N	L	H	R	T	G
1	99	0	0	0	0
0.48	47.83			0.0	0.0

MAXIMUM = 3.00000E 01
 MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.38538E 01

GEOMETRIC DEVIATION = 1.44398E 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, 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
107

LIMITS		FREQ	CUM	PERCENT	PERCENT	PERCENT	CUM
LOWER	UPPER						
3.8E 00	5.6E 00	14	14	6.76	6.76	6.76	6.76
5.6E 00	8.3E 00	13	27	6.28	13.04	13.04	13.04
8.3E 00	1.2E 01	8	35	3.86	16.91	16.91	16.91
1.2E 01	1.8E 01	1	36	0.48	17.39	17.39	17.39
1.8E 01	2.6E 01	7	43	3.38	20.77	20.77	20.77
2.6E 01	3.8E 01	13	56	6.28	27.05	27.05	27.05
3.8E 01	5.6E 01	37	93	17.87	44.93	44.93	44.93
5.6E 01	8.3E 01	44	137	21.26	66.18	66.18	66.18
8.3E 01	1.2E 02	20	157	9.66	75.85	75.85	75.85
1.2E 02	1.8E 02	13	170	6.28	82.13	82.13	82.13
1.8E 02	2.6E 02	0	170	0.0	82.13	82.13	82.13
2.6E 02	3.8E 02	5	175	2.42	84.54	84.54	84.54
3.8E 02	5.6E 02	1	176	0.48	85.02	85.02	85.02
5.6E 02	8.3E 02	1	177	0.48	85.51	85.51	85.51
8.3E 02	1.2E 03	1	178	0.48	85.99	85.99	85.99
1.2E 03	1.8E 03	1	179	0.48	86.47	86.47	86.47
1.8E 03	2.6E 03	3	182	1.45	87.92	87.92	87.92
2.6E 03	3.8E 03	4	186	1.93	89.86	89.86	89.86
3.8E 03	5.6E 03	4	190	1.93	91.79	91.79	91.79

HISTOGRAM FOR COLUMN 19 (NI PPM)

```

5.0E 00 XXXXXXXX
7.0E 00 XXXXXX
1.0E 01 XXXX
1.5E 01
2.0E 01 XXX
3.0E 01 XXXXXX
5.0E 01 XXXXXXXXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXX
1.5E 02 XXXXXX
2.0E 02
3.0E 02 XX
5.0E 02
7.0E 02
1.0E 03
1.5E 03
2.0E 03 X
3.0E 03 XX
5.0E 03 XX

```

ANALYTICAL			
N	L	H	T
0	14	0	0
0.0	6.76	0.0	0.0
			3
			1.45

MAXIMUM = 5.00000E 03

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 5.67814E 01

GEOMETRIC DEVIATION = 4.47802E 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, 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.

FREQUENCY TABLE FOR COLUMN 20 (PR PPM)

LIMITS		FRQ	FRQ CUM	PERCENT	PERCENT	PERCENT
LOWER - UPPER						FRQ CUM
8.3E 00 -	1.2E 01	27	27	13.04		13.04
1.2E 01 -	1.8E 01	28	55	13.53		26.57
1.8E 01 -	2.6E 01	7	62	3.38		29.95
2.6E 01 -	3.8E 01	13	75	6.28		36.23
3.8E 01 -	5.6E 01	11	86	5.31		41.55
5.6E 01 -	8.3E 01	10	96	4.83		46.38
8.3E 01 -	1.2E 02	1	97	0.48		46.86
1.2E 02 -	1.8E 02	6	103	2.90		49.76
1.8E 02 -	2.6E 02	0	103	0.0		49.76
2.6E 02 -	3.8E 02	1	104	0.48		50.24
3.8E 02 -	5.6E 02	0	104	0.0		50.24
5.6E 02 -	8.3E 02	1	105	0.48		50.72
8.3E 02 -	1.2E 03	0	105	0.0		50.72
1.2E 03 -	1.8E 03	2	107	0.97		51.69

HISTOGRAM FOR COLUMN 20 (PR PPM)

1.0E 01 XXXXXXXXXXXXX
 1.5E 01 XXXXXXXXXXXXXXX
 2.0E 01 XXX
 3.0E 01 XXXXXX
 5.0E 01 XXXXX
 7.0E 01 XXXXX
 1.0E 02
 1.5E 02 XXX
 2.0E 02
 3.0E 02
 5.0E 02
 7.0E 02
 1.0E 03
 1.5E 03 X

ANALYTICAL
 VALUES
 107
 0
 0.0

MAXIMUM = 1.50000E 03

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.63991E 01

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, 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.

FREQUENCY TABLE FOR COLUMN 22 (SC PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
3.8E 00 -	5.6E 00	10	10	4.83	4.83
5.6E 00 -	8.3E 00	20	30	9.66	14.49
8.3E 00 -	1.2E 01	14	44	6.76	21.26
1.2E 01 -	1.8E 01	38	82	18.36	39.61
1.8E 01 -	2.6E 01	20	102	9.66	49.28
2.6E 01 -	3.8E 01	43	145	20.77	70.05
3.8E 01 -	5.6E 01	23	168	11.11	81.16
5.6E 01 -	8.3E 01	16	184	7.73	88.89
8.3E 01 -	1.2E 02	8	192	3.86	92.75

HISTOGRAM FOR COLUMN 22 (SC PPM)

```

5.0E 00 XXXXX
7.0E 00 XXXXXXXXXXXX
1.0E 01 XXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXX
7.0E 01 XXXXXXXX
1.0E 02 XXXX

```

N	L	H	R	T	G	ANALYTICAL VALUES
2	12	0	0	0	1	192
0.97	5.80			0.0	0.48	

MAXIMUM = 1.00000E 02
 MINIMUM = 5.00000E 00
 GEOMETRIC MFAN = 2.17302E 01
 GEOMETRIC DEVIATION = 2.22395E 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, 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, $1.0E-01$ means 1.0×10^{-1} or 0.1, $1.0E 01$ 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.

FREQUENCY TABLE FOR COLUMN 23 (SN PPM)

LIMITS		FREQ	CUM	PERCENT	PERCENT
LOWER	UPPER			FREQ	FREQ CUM
8.3F 00 -	1.2E 01	4	4	1.93	1.93
1.2F 01 -	1.8F 01	1	5	0.48	2.42
1.8F 01 -	2.6E 01	1	6	0.48	2.90
2.6F 01 -	3.8E 01	2	8	0.97	3.86
3.8F 01 -	5.6F 01	0	8	0.0	3.86
5.6F 01 -	8.3F 01	0	8	0.0	3.86
8.3F 01 -	1.2F 02	0	8	0.0	3.86
1.2F 02 -	1.8F 02	0	8	0.0	3.86
1.8F 02 -	2.6F 02	0	8	0.0	3.86
2.6F 02 -	3.8F 02	0	8	0.0	3.86
3.8F 02 -	5.6F 02	1	9	0.48	4.35

HISTOGRAM FOR COLUMN 23 (SN PPM)

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

ANALYTICAL				
N	L	H	R	T
180	18	0	0	0
86.96	8.70			0.0

MAXIMUM = 5.00000F 02

MINIMUM = 1.00000F 01

GEOMETRIC MEAN = 2.22748E 01

GEOMETRIC DEVIATION = 3.50606E 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, 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 1.0×10^0 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.

FREQUENCY TABLE FOR COLUMN 24 (SR PPM)

LIMITS		FREQ	CUM	PERCENT	PERCENT
LOWER - UPPER				FREQ	CUM
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	18	18	8.70	8.70
1.2E 02 -	1.8E 02	15	33	7.25	15.94
1.8E 02 -	2.6E 02	15	48	7.25	23.19
2.6E 02 -	3.8E 02	29	77	14.01	37.20
3.8E 02 -	5.6E 02	8	85	3.86	41.06
5.6E 02 -	8.3E 02	8	93	3.86	44.93
8.3E 02 -	1.2E 03	1	94	0.48	45.41
1.2E 03 -	1.8E 03	2	96	0.97	46.38
1.8E 03 -	2.6E 03	2	98	0.97	47.34

HISTOGRAM FOR COLUMN 24 (SR PPM)

1.0E 02 XXXXXXXXX
 1.5E 02 XXXXXXXX
 2.0E 02 XXXXXXXX
 3.0E 02 XXXXXXXXXXXXXXXX
 5.0E 02 XXXX
 7.0E 02 XXXX
 1.0E 03
 1.5E 03 X
 2.0E 03 X

ANALYTICAL		VALUES	
N	L	H	T
8	101	0	0
3.86	48.79	0	0.0

MAXIMUM = 2.00000E 03

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 2.51506E 02

GEOMETRIC DEVIATION = 2.04453E 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, 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.

FREQUENCY TABLE FOR COLUMN 25 (V PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ
8.3F 00	1.2F 01	3	3	1.45	1.45
1.2F 01	1.8E 01	9	12	4.35	5.80
1.8E 01	2.6F 01	3	15	1.45	7.25
2.6F 01	3.8F 01	14	29	6.76	14.01
3.8F 01	5.6E 01	6	35	2.90	16.91
5.6E 01	8.3F 01	14	49	6.76	23.67
8.3F 01	1.2F 02	13	62	6.28	29.95
1.2F 02	1.8F 02	43	105	20.77	50.72
1.8F 02	2.6E 02	36	141	17.39	68.12
2.6E 02	3.8E 02	38	179	18.36	86.47
3.8E 02	5.6E 02	19	198	9.18	95.65
5.6E 02	8.3E 02	5	203	2.42	98.07
8.3E 02	1.2E 03	4	207	1.93	100.00

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, 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, # value 1.0E-01 means 1.0×10^{-1} or 0.1, #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 25 (V PPM)

[illegible]

	N	L	H	B	T	G	
ANALYTICAL	0	0	0	0	0	0	
VALUES	0	0	0	0	0	0	
207	0	0	0	0	0	0	

MAXIMUM = 1.00000E 03

MINIMUM = 1.00000E 01

GEOMFTRIC MEAN = 1.46341E 02

GEOMETRIC DEVIATION = 2.74924E 00

FREQUENCY TABLE FOR COLUMN 27 (Y PPM)

LIMITS		FREQ	CUM	PERCENT	FREQ	CUM	PERCENT
LOWER - UPPER							
8.3E 00 -	1.2E 01	16	16	7.73			
1.2E 01 -	1.8E 01	29	45	14.01			7.73
1.8E 01 -	2.6E 01	20	65	9.66			21.74
2.6E 01 -	3.8E 01	70	135	33.82			31.40
3.8E 01 -	5.6E 01	25	160	12.08			65.22
5.6E 01 -	8.3E 01	9	169	4.35			77.29
8.3E 01 -	1.2E 02	1	170	0.48			81.64
							82.13

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, 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 27 (Y PPM)

```

1.0E 01 XXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXX
7.0E 01 XXXX
1.0E 02

```

ANALYTICAL

VALUES

G 0.0
T 0.0
R 0
H 0
L 34
N 3

MAXIMUM = 1.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.60208E 01

GEOMETRIC DEVIATION = 1.69941E 00

FREQUENCY TABLE FOR COLUMN 28 (ZN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
1.8E 02 -	2.6E 02	2	2	0.97	0.97
2.6E 02 -	3.8E 02	3	5	1.45	2.42
3.8E 02 -	5.6E 02	1	6	0.48	2.90
5.6E 02 -	8.3E 02	1	7	0.48	3.38
8.3E 02 -	1.2E 03	1	8	0.48	3.86
1.2E 03 -	1.8E 03	1	9	0.48	4.35
1.8E 03 -	2.6E 03	1	10	0.48	4.83

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, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

HISTOGRAM FOR COLUMN 28 (ZN PPM)

2.0E 02 X

3.0E 02 X

5.0E 02

7.0E 02

1.0E 03

1.5E 03

2.0E 03

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 1.0×10^0 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

10
0
0.0

T

H

H

L

110
53.14
42.03

MAXIMUM = 2.00000E 03

MINIMUM = 2.00000E 02

GEOMETRIC MEAN = 5.07527E 02

GEOMETRIC DEVIATION = 2.29063E 00

FREQUENCY TABLE FOR COLUMN 29 (7R PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
1.8F 01	2.6F 01	2	2	0.97	0.97
2.6F 01	3.8E 01	5	7	2.42	3.38
3.8F 01	5.6F 01	13	20	6.28	9.66
5.6F 01	8.3E 01	48	68	23.19	32.85
8.3F 01	1.2F 02	24	92	11.54	44.44
1.2F 02	1.8E 02	32	124	15.46	59.90
1.8F 02	2.6F 02	19	143	9.18	69.08
2.6F 02	3.8E 02	21	164	10.14	79.23
3.8F 02	5.6F 02	6	170	2.90	82.13
5.6F 02	8.3E 02	7	177	3.38	85.51
8.3F 02	1.2F 03	2	179	0.97	86.47
1.2F 03	1.8F 03	0	179	0.0	86.47
1.8F 03	2.6F 03	0	179	0.0	86.47
2.6F 03	3.8E 03	0	179	0.0	86.47
3.8E 03	5.6E 03	1	180	0.48	86.96

HISTOGRAM FOR COLUMN 29 (7R PPM)

```

2.0E 01 X
3.0E 01 XX
5.0E 01 XXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXX
5.0E 02 XXX
7.0E 02 XXX
1.0F 03 X
1.5E 03
2.0E 03
3.0E 03
5.0E 03

```

ANALYTICAL VALUES				
N	L	H	T	G
3	24	0	0	0
1.45	11.59	0	0.0	0.0

MAXIMUM = 5.00000E 03
 MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 1.28848E 02
 GEOMETRIC DEVIATION = 2.27563E 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, 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.

A470 STATISTICAL SUMMARY

DATE 5/26/69

ELEMENT	N	L	H	R	T	G	ANALYTICAL	
							VALUES	VALUES
FF PCT	0	0	0	0	0	1	206	
MG PCT	0	0	0	0	0	13	194	
CA PCT	0	15	0	0	0	3	189	
TI PCT	0	0	0	0	0	27	180	
MN PPM	0	0	0	0	0	2	205	
AG PPM	122	60	0	0	0	0	25	
AS PPM	178	16	1	0	0	3	9	
AI PPM	187	0	0	0	0	0	20	
H PPM	25	25	0	0	0	0	157	
RA PPM	2	17	0	0	0	4	184	
RE PPM	80	47	0	0	0	0	80	
RI PPM	207	0	0	0	0	0	0	
CI PPM	7	40	0	0	0	0	160	
CR PPM	0	6	0	0	0	3	198	
CU PPM	0	0	0	0	0	3	204	
LA PPM	9	97	0	0	0	0	101	
MI PPM	165	19	0	0	0	0	23	
NR PPM	1	99	0	0	0	0	107	
NI PPM	0	14	0	0	0	3	190	
PR PPM	1	99	0	0	0	0	107	
SH PPM	205	2	0	0	0	0	0	
SC PPM	2	12	0	0	0	1	192	
SN PPM	180	18	0	0	0	0	9	
SR PPM	8	101	0	0	0	0	98	
V PPM	0	0	0	0	0	0	207	
W PPM	205	2	0	0	0	0	0	
Y PPM	3	34	0	0	0	0	0	
ZN PPM	110	87	0	0	0	0	170	
ZR PPM	3	24	0	0	0	0	10	
							180	

GEOMETRIC MEAN
GEOMETRIC DEVIATION

ELEMENT	MEAN	DEVIATION	REMARKS	
			1 GREATER THAN VALUES.	NO COMPUTATIONS.
FF PCT	*****	*****	13 GREATER THAN VALUES.	NO COMPUTATIONS.
MG PCT	*****	*****	3 GREATER THAN VALUES.	NO COMPUTATIONS.
CA PCT	*****	*****	27 GREATER THAN VALUES.	NO COMPUTATIONS.
TI PCT	*****	*****	2 GREATER THAN VALUES.	NO COMPUTATIONS.
MN PPM	*****	*****	182 NOT DETECTED, LESS THAN, OR TRACE VALUES.	25 REPORTED VALUES.
AG PPM	0.069088	4.29	3 GREATER THAN VALUES.	NO COMPUTATIONS.
AS PPM	*****	*****	187 NOT DETECTED, LESS THAN, OR TRACE VALUES.	20 REPORTED VALUES.
AI PPM	*****	*****	50 NOT DETECTED, LESS THAN, OR TRACE VALUES.	157 REPORTED VALUES.
R PPM	19.055710	3.41	4 GREATER THAN VALUES.	NO COMPUTATIONS.
RE PPM	0.656484	2.27	127 NOT DETECTED, LESS THAN, OR TRACE VALUES.	80 REPORTED VALUES.
RI PPM	*****	*****	207 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES.
CI PPM	16.842422	5.34	47 NOT DETECTED, LESS THAN, OR TRACE VALUES.	160 REPORTED VALUES.
CR PPM	*****	*****	3 GREATER THAN VALUES.	NO COMPUTATIONS.
CU PPM	*****	*****	3 GREATER THAN VALUES.	NO COMPUTATIONS.
LA PPM	0.150662	13.85	106 NOT DETECTED, LESS THAN, OR TRACE VALUES.	101 REPORTED VALUES.
MI PPM	2.656682	6.54	184 NOT DETECTED, LESS THAN, OR TRACE VALUES.	23 REPORTED VALUES.
NR PPM	*****	*****	100 NOT DETECTED, LESS THAN, OR TRACE VALUES.	107 REPORTED VALUES.
NI PPM	8.180086	4.83	100 NOT DETECTED, LESS THAN, OR TRACE VALUES.	107 REPORTED VALUES.
PR PPM	*****	*****	207 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES.
SC PPM	*****	*****	1 GREATER THAN VALUES.	NO COMPUTATIONS.
SN PPM	*****	*****	198 NOT DETECTED, LESS THAN, OR TRACE VALUES.	9 REPORTED VALUES.

SR PPM	41.050919	7.25	109 NOT DETECTED, LESS THAN, OR TRACE VALUES.	98 REPORTED VALUES.
V PPM	146.341202	2.75	207 SAMPLES AND 207 ANALYTICAL VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
W PPM	*****	*****	207 NOT DETECTED, LESS THAN, OR TRACE VALUES.	170 REPORTED VALUES.
Y PPM	19.763794	2.17	37 NOT DETECTED, LESS THAN, OR TRACE VALUES.	10 REPORTED VALUES. NO COMPUTATIONS.
7N PPM	*****	*****	197 NOT DETECTED, LESS THAN, OR TRACE VALUES.	180 REPORTED VALUES.
ZR PPM	92.939880	3.16	27 NOT DETECTED, LESS THAN, OR TRACE VALUES.	

TABLE 3.--SOIL SAMP FAGLF

SAMPLE	FF PCT	MG PCT	CA PCT	LI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	HA PPM
1S	7.0000	3.0000	0.7000	0.7000	300.0000	0.5000L	0.0 N	0.0 N	100.0000	700.0000
2S	3.0000	1.0000	0.5000	0.7000	500.0000	0.5000	0.0 N	0.0 N	100.0000	700.0000
3S	15.0000	3.0000	1.5000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
4S	10.0000	5.0000	2.0000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
5S	7.0000	1.5000	1.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	50.0000	1000.0000
6S	0.7000	0.7000	0.7000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
7S	3.0000	1.5000	0.7000	0.7000	500.0000	0.0 N	200.0000L	0.0 N	50.0000	700.0000
8S	3.0000	1.0000	0.5000	0.3000	2000.0000	0.5000	0.0 N	0.0 N	50.0000	700.0000
9S	5.0000	1.0000	0.3000	0.3000	500.0000	0.7000	0.0 N	0.0 N	70.0000	1000.0000
10S	10.0000	7.0000	0.7000	0.3000	700.0000	0.0 N	200.0000L	0.1000	30.0000	700.0000
11S	15.0000	10.0000G	1.5000	0.2000	2000.0000	0.5000L	500.0000	7.0000	30.0000	300.0000
14S	7.0000	1.0000	0.7000	0.5000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
15S	7.0000	1.5000	0.7000	1.0000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
16S	10.0000	0.7000	0.1000	1.0000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
17S	15.0000	3.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	50.0000	1500.0000
18S	5.0000	1.0000	1.5000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
23S	15.0000	3.0000	1.5000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
24S	20.0000	7.0000	1.5000	0.7000	2000.0000	0.5000L	3000.0000	0.0 N	2000.0000G	700.0000
25S	15.0000	5.0000	2.0000	0.7000	700.0000	0.0 N	200.0000L	0.0 N	150.0000	1000.0000
26S	3.0000	1.5000	1.5000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	150.0000	700.0000
27S	15.0000	5.0000	3.0000	1.0000G	700.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
28S	15.0000	5.0000	1.5000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	150.0000	1000.0000
29S	5.0000	1.5000	1.0000	0.5000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
30S	7.0000	3.0000	1.5000	0.5000	700.0000	0.5000L	0.0 N	0.0 N	70.0000	1000.0000
31S	7.0000	0.5000	0.1000	0.2000	300.0000	0.0 N	200.0000L	0.0 N	50.0000	700.0000
32S	10.0000	2.0000	0.1500	0.5000	300.0000	0.0 N	0.0 N	0.0 N	150.0000	500.0000
33S	5.0000	0.5000	0.1500	0.1500	300.0000	0.0 N	200.0000	0.0 N	0.0 N	500.0000
34S	1.0000	0.2000	0.3000	0.2000	200.0000	0.0 N	200.0000L	0.0 N	50.0000	1000.0000
35S	5.0000	1.5000	0.7000	0.5000	500.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
36S	10.0000	1.0000	0.1500	0.7000	1000.0000	0.0 N	200.0000L	0.0 N	50.0000	1500.0000
37S	10.0000	1.5000	0.3000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
38S	10.0000	3.0000	2.0000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
39S	10.0000	2.0000	2.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
40S	5.0000	2.0000	1.0000	0.5000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
41S	5.0000	1.5000	0.7000	0.7000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
42S	5.0000	1.5000	1.0000	0.5000	500.0000	0.0 N	0.0 N	0.0 N	50.0000	1000.0000
43S	5.0000	1.0000	0.5000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	50.0000	700.0000
44S	10.0000	3.0000	3.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	15.0000	500.0000
45S	10.0000	1.5000	2.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
46S	7.0000	5.0000	3.0000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	200.0000	1500.0000
47S	10.0000	3.0000	3.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
48S	10.0000	2.0000	0.3000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
49S	5.0000	2.0000	1.0000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
50S	7.0000	3.0000	2.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
51S	7.0000	2.0000	1.0000	0.7000	1000.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
52S	7.0000	2.0000	1.5000	1.0000	700.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
53S	7.0000	3.0000	1.0000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
54S	15.0000	10.0000	2.0000	1.0000G	1000.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
55S	5.0000	2.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
56S	7.0000	3.0000	1.5000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000

TABLE 3.--SOIL SAMP FAGLE

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
1S	7.0000	3.0000	0.7000	0.7000	300.0000	0.5000L	0.0 N	0.0 N	100.0000	700.0000
2S	3.0000	1.0000	0.5000	0.7000	500.0000	0.5000	0.0 N	0.0 N	100.0000	700.0000
3S	15.0000	3.0000	1.5000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
4S	10.0000	5.0000	2.0000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
5S	1.5000	1.5000	1.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	50.0000	1000.0000
6S	3.0000	0.7000	0.7000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
7S	3.0000	1.5000	0.7000	0.7000	500.0000	0.0 N	200.0000L	0.0 N	50.0000	700.0000
8S	3.0000	1.0000	0.5000	0.3000	2000.0000	0.5000	0.0 N	0.0 N	50.0000	700.0000
9S	5.0000	1.0000	0.3000	0.3000	500.0000	0.7000	0.0 N	0.0 N	70.0000	1000.0000
10S	10.0000	7.0000	0.7000	0.3000	700.0000	0.0 N	200.0000L	0.1000	30.0000	700.0000
11S	15.0000	10.0000G	1.5000	0.2000	2000.0000	0.5000L	500.0000	7.0000	30.0000	300.0000
14S	7.0000	1.0000	0.7000	0.5000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
15S	7.0000	1.5000	0.7000	1.0000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
16S	10.0000	0.7000	0.1000	1.0000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
17S	15.0000	3.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	50.0000	1500.0000
18S	5.0000	1.0000	1.5000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	30.0000	700.0000
23S	15.0000	3.0000	1.5000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
24S	20.0000	7.0000	1.5000	0.7000	2000.0000	0.5000L	3000.0000	0.0 N	2000.0000G	700.0000
25S	15.0000	5.0000	2.0000	0.7000	700.0000	0.0 N	200.0000L	0.0 N	150.0000	1000.0000
26S	3.0000	1.5000	1.5000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	150.0000	700.0000
27S	15.0000	5.0000	1.5000	1.0000G	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
28S	15.0000	5.0000	1.5000	1.0000	500.0000	0.0 N	0.0 N	0.0 N	150.0000	1000.0000
29S	5.0000	1.5000	1.0000	0.5000	300.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
30S	7.0000	3.0000	1.5000	0.5000	700.0000	0.5000L	0.0 N	0.0 N	70.0000	1000.0000
31S	7.0000	0.5000	0.1000	0.2000	300.0000	0.0 N	0.0 N	0.0 N	50.0000	700.0000
32S	10.0000	2.0000	0.1500	0.5000	300.0000	0.0 N	200.0000L	0.0 N	150.0000	500.0000
33S	5.0000	0.5000	0.1500	0.1500	300.0000	0.0 N	200.0000	0.0 N	0.0 N	500.0000
34S	5.0000	0.2000	0.3000	0.2000	200.0000	0.0 N	200.0000L	0.0 N	50.0000	1000.0000
36S	10.0000	1.0000	0.1500	0.7000	1000.0000	0.0 N	200.0000L	0.0 N	100.0000	1500.0000
37S	10.0000	1.5000	0.3000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
38S	10.0000	3.0000	2.0000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
39S	10.0000	2.0000	2.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
40S	5.0000	2.0000	1.0000	0.5000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	700.0000
41S	5.0000	1.5000	0.7000	0.7000	500.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
42S	5.0000	1.5000	1.0000	0.5000	500.0000	0.0 N	0.0 N	0.0 N	50.0000	1000.0000
43S	5.0000	1.0000	0.5000	0.7000	300.0000	0.0 N	0.0 N	0.0 N	50.0000	700.0000
44S	10.0000	3.0000	3.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	15.0000	500.0000
45S	10.0000	1.5000	2.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
46S	7.0000	5.0000	3.0000	0.7000	2000.0000	0.0 N	0.0 N	0.0 N	200.0000	1500.0000
47S	10.0000	3.0000	3.0000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
48S	10.0000	2.0000	0.3000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000
49S	5.0000	2.0000	1.0000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1000.0000
50S	7.0000	3.0000	2.0000	0.7000	700.0000	0.0 N	0.0 N	0.0 N	100.0000	1500.0000
51S	7.0000	2.0000	1.0000	0.7000	1000.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
52S	7.0000	2.0000	1.5000	1.0000	700.0000	0.5000L	0.0 N	0.0 N	100.0000	1500.0000
53S	7.0000	3.0000	1.0000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1500.0000
54S	15.0000	10.0000	2.0000	1.0000G	1000.0000	0.5000L	0.0 N	0.0 N	70.0000	1500.0000
55S	5.0000	2.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	70.0000	1000.0000
56S	7.0000	3.0000	1.5000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	30.0000	1500.0000

TABLE 3.---SOIL SAMP FAGE

SAMPLE	RF PPM	RI PPM	CU PPM	CR PPM	LA PPM	MO PPM	NR PPM	NI PPM	PR PPM
1S	1.5000	0.0	15.0000	300.0000	20.0000	0.0	15.0000	100.0000	20.0000
2S	1.0000	0.0	15.0000	100.0000	20.0000	10.0000	10.0000	70.0000	30.0000
3S	1.5000	0.0	30.0000	300.0000	30.0000	0.0	20.0000	150.0000	30.0000
4S	1.5000	0.0	30.0000	700.0000	30.0000	0.0	20.0000	300.0000	15.0000
5S	1.5000	0.0	30.0000	150.0000	30.0000	0.0	15.0000	70.0000	30.0000
6S	1.0000	0.0	5.0000	70.0000	20.0000	0.0	10.0000	7.0000	15.0000
7S	1.5000	0.0	5.0000	70.0000	30.0000	0.0	15.0000	20.0000	15.0000
8S	1.0000	0.0	15.0000	200.0000	30.0000	5.0000	10.0000	100.0000	20.0000
9S	1.5000	0.0	10.0000	70.0000	20.0000	0.0	10.0000	70.0000	20.0000
10S	1.0000	0.0	100.0000	1500.0000	20.0000	0.0	10.0000	1500.0000	10.0000
11S	1.0000	0.0	200.0000	5000.0000	20.0000	0.0	2.0000	3000.0000	10.0000
14S	1.5000	0.0	10.0000	70.0000	30.0000	0.0	15.0000	50.0000	20.0000
15S	1.0000	0.0	15.0000	150.0000	30.0000	0.0	30.0000	70.0000	20.0000
16S	1.0000	0.0	10.0000	150.0000	50.0000	10.0000	50.0000	70.0000	15.0000
17S	1.0000	0.0	50.0000	150.0000	20.0000	5.0000	2.0000	70.0000	20.0000
18S	1.0000	0.0	10.0000	70.0000	20.0000	0.0	2.0000	30.0000	15.0000
23S	1.0000	0.0	10.0000	300.0000	20.0000	0.0	15.0000	70.0000	50.0000
24S	1.5000	0.0	150.0000	500.0000	50.0000	0.0	15.0000	200.0000	500.0000
25S	1.0000	0.0	50.0000	300.0000	20.0000	0.0	15.0000	70.0000	30.0000
26S	1.0000	0.0	5.0000	70.0000	20.0000	0.0	10.0000	30.0000	10.0000
27S	1.5000	0.0	70.0000	500.0000	30.0000	0.0	30.0000	100.0000	30.0000
28S	1.0000	0.0	50.0000	500.0000	30.0000	0.0	20.0000	100.0000	30.0000
29S	1.0000	0.0	15.0000	150.0000	70.0000	0.0	10.0000	100.0000	15.0000
30S	1.5000	0.0	50.0000	300.0000	20.0000	0.0	15.0000	150.0000	70.0000
31S	1.5000	0.0	5.0000	20.0000	30.0000	0.0	15.0000	10.0000	100.0000
32S	1.0000	0.0	15.0000	150.0000	50.0000	5.0000	15.0000	30.0000	50.0000
33S	1.0000	0.0	5.0000	20.0000	20.0000	0.0	2.0000	10.0000	100.0000
34S	1.0000	0.0	0.0	50.0000	20.0000	0.0	2.0000	10.0000	20.0000
35S	1.0000	0.0	20.0000	300.0000	20.0000	10.0000	10.0000	100.0000	15.0000
36S	1.5000	0.0	20.0000	70.0000	30.0000	0.0	20.0000	15.0000	70.0000
37S	2.0000	0.0	20.0000	70.0000	50.0000	0.0	20.0000	30.0000	100.0000
38S	0.0	0.0	70.0000	300.0000	20.0000	0.0	2.0000	150.0000	10.0000
39S	0.0	0.0	15.0000	200.0000	20.0000	0.0	2.0000	100.0000	10.0000
40S	2.0000	0.0	15.0000	100.0000	50.0000	5.0000	10.0000	50.0000	15.0000
41S	1.0000	0.0	15.0000	100.0000	30.0000	0.0	2.0000	70.0000	15.0000
42S	2.0000	0.0	15.0000	100.0000	30.0000	5.0000	15.0000	50.0000	15.0000
43S	1.0000	0.0	10.0000	150.0000	30.0000	0.0	10.0000	50.0000	15.0000
44S	1.0000	0.0	20.0000	150.0000	20.0000	0.0	2.0000	50.0000	10.0000
45S	0.0	0.0	15.0000	200.0000	20.0000	0.0	2.0000	100.0000	10.0000
46S	0.0	0.0	30.0000	700.0000	20.0000	0.0	2.0000	500.0000	10.0000
47S	1.0000	0.0	20.0000	300.0000	30.0000	0.0	2.0000	150.0000	10.0000
48S	1.0000	0.0	20.0000	100.0000	20.0000	0.0	10.0000	100.0000	30.0000
49S	1.0000	0.0	15.0000	150.0000	50.0000	0.0	2.0000	30.0000	20.0000
50S	1.0000	0.0	15.0000	100.0000	30.0000	0.0	10.0000	100.0000	10.0000
51S	1.0000	0.0	20.0000	150.0000	20.0000	0.0	10.0000	70.0000	30.0000
52S	1.0000	0.0	10.0000	150.0000	30.0000	0.0	2.0000	70.0000	15.0000
53S	1.0000	0.0	15.0000	150.0000	30.0000	0.0	10.0000	70.0000	10.0000
54S	1.0000	0.0	70.0000	1000.0000	20.0000	0.0	15.0000	1000.0000	15.0000
55S	1.0000	0.0	15.0000	100.0000	20.0000	0.0	15.0000	70.0000	10.0000
56S	1.5000	0.0	15.0000	70.0000	20.0000	0.0	0.0	50.0000	15.0000

TABLE 3.-SOIL SAMPLE EAGLE

SAMPLE	SR PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM		
1S	0.0	30.0000	0.0	N	200.0000	0.0	N	0.0	N	200.0000	
2S	0.0	15.0000	0.0	N	700.0000	0.0	N	0.0	N	150.0000	
3S	0.0	30.0000	0.0	N	200.0000	0.0	N	0.0	N	500.0000	
4S	0.0	20.0000	0.0	N	200.0000	0.0	N	0.0	N	300.0000	
5S	0.0	20.0000	0.0	N	200.0000	0.0	N	0.0	N	200.0000	
6S	0.0	10.0000	0.0	N	150.0000	0.0	N	0.0	N	300.0000	
7S	0.0	15.0000	0.0	N	200.0000	0.0	N	0.0	N	300.0000	
8S	0.0	15.0000	0.0	N	200.0000	0.0	N	0.0	N	100.0000	
9S	0.0	15.0000	0.0	N	300.0000	0.0	N	15.0000	200.0000L	200.0000	
10S	0.0	15.0000	0.0	N	150.0000	0.0	N	15.0000	200.0000L	100.0000	
11S	0.0	20.0000	0.0	N	150.0000	0.0	N	10.0000	200.0000L	50.0000	
14S	0.0	20.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	300.0000
15S	0.0	20.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	300.0000
16S	0.0	20.0000	0.0	N	200.0000	0.0	N	50.0000	200.0000L	500.0000	
17S	0.0	20.0000	0.0	N	300.0000	0.0	N	30.0000	0.0	N	500.0000
18S	0.0	10.0000	0.0	N	200.0000	0.0	N	15.0000	0.0	N	1500.0000
23S	0.0	30.0000	0.0	N	500.0000	0.0	N	30.0000	0.0	N	500.0000
24S	0.0	50.0000	10.0000L	100.0000	300.0000	0.0	N	50.0000	200.0000	100.0000	
25S	0.0	30.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	200.0000
26S	0.0	15.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	200.0000
27S	0.0	30.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	200.0000
28S	0.0	30.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	200.0000
29S	0.0	20.0000	0.0	N	150.0000	0.0	N	20.0000	0.0	N	300.0000
30S	0.0	30.0000	0.0	N	100.0000	0.0	N	30.0000	0.0	N	500.0000
31S	0.0	15.0000	20.0000	50.0000L	50.0000	0.0	N	50.0000	0.0	N	100.0000
32S	0.0	20.0000	0.0	N	100.0000	0.0	N	20.0000	0.0	N	500.0000
33S	0.0	5.0000	10.0000	0.0	30.0000	0.0	N	10.0000L	0.0	N	70.0000
34S	0.0	7.0000	0.0	N	100.0000	0.0	N	50.0000	0.0	N	150.0000
35S	0.0	30.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	300.0000
36S	0.0	20.0000	0.0	N	100.0000	0.0	N	20.0000	0.0	N	500.0000
37S	0.0	30.0000	0.0	N	100.0000	0.0	N	30.0000	0.0	N	500.0000
38S	0.0	50.0000	0.0	N	500.0000	0.0	N	30.0000	0.0	N	300.0000
39S	0.0	30.0000	0.0	N	50.0000L	0.0	N	15.0000	0.0	N	500.0000
40S	0.0	20.0000	0.0	N	150.0000	0.0	N	20.0000	0.0	N	300.0000
41S	0.0	15.0000	0.0	N	200.0000	0.0	N	20.0000	0.0	N	500.0000
42S	0.0	15.0000	0.0	N	150.0000	0.0	N	30.0000	0.0	N	300.0000
43S	0.0	20.0000	0.0	N	200.0000	0.0	N	20.0000	0.0	N	200.0000
44S	0.0	20.0000	0.0	N	200.0000	0.0	N	15.0000	0.0	N	150.0000
45S	0.0	15.0000	0.0	N	500.0000	0.0	N	30.0000	0.0	N	700.0000
46S	0.0	30.0000	0.0	N	50.0000L	0.0	N	15.0000	0.0	N	300.0000
47S	0.0	30.0000	0.0	N	300.0000	0.0	N	30.0000	0.0	N	500.0000
48S	0.0	30.0000	0.0	N	200.0000	0.0	N	15.0000	0.0	N	300.0000
49S	0.0	20.0000	0.0	N	150.0000	0.0	N	30.0000	0.0	N	200.0000
50S	0.0	20.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	500.0000
51S	0.0	20.0000	10.0000	50.0000L	200.0000	0.0	N	20.0000	0.0	N	200.0000
52S	0.0	15.0000	15.0000	100.0000	200.0000	0.0	N	20.0000	0.0	N	300.0000
53S	0.0	20.0000	0.0	N	200.0000	0.0	N	30.0000	0.0	N	300.0000
54S	0.0	30.0000	10.0000	200.0000	200.0000	0.0	N	30.0000	0.0	N	200.0000
55S	0.0	15.0000	0.0	N	150.0000	0.0	N	20.0000	0.0	N	300.0000
56S	0.0	20.0000	10.0000L	50.0000L	200.0000	0.0	N	30.0000	0.0	N	200.0000

TABLE 3.--OIL SAMP EAGLE

SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AJ PPM	B PPM	HA PPM
57S	10.0000	3.0000	2.0000	0.7000	1000.0000	0.0	0.0	0.0	100.0000	700.0000
58S	7.0000	3.0000	0.5000	0.7000	700.0000	0.0	0.0	0.0	70.0000	1500.0000
59S	10.0000	1.5000	2.0000	1.0000	700.0000	0.0	0.0	0.0	100.0000	1000.0000
60S	7.0000	15.0000	1.5000	0.2000	500.0000	0.0	0.0	0.0	50.0000	1500.0000
61S	10.0000	2.0000	0.2000	0.7000	700.0000	0.0	0.0	0.0	20.0000	2000.0000
62S	10.0000	2.0000	0.2000	0.3000	700.0000	0.0	0.0	0.0	30.0000	2000.0000
63S	3.0000	1.0000	0.2000	0.2000	500.0000	0.0	200.0000L	0.0	50.0000	2000.0000
64S	5.0000	1.5000	0.5000	0.5000	300.0000	0.0	0.0	0.0	100.0000	1000.0000
65S	5.0000	1.5000	1.0000	0.5000	300.0000	0.0	200.0000L	0.0	50.0000	700.0000
66S	5.0000	1.5000	1.0000	0.5000	300.0000	0.0	0.0	0.0	50.0000	1000.0000
67S	5.0000	2.0000	1.5000	0.5000	500.0000	0.0	0.0	0.0	70.0000	1000.0000
68S	5.0000	1.0000	0.5000	0.5000	300.0000	0.0	0.0	0.0	30.0000	700.0000
69S	5.0000	1.5000	0.7000	0.5000	500.0000	0.0	0.0	0.0	70.0000	1000.0000
70S	5.0000	1.5000	0.5000	0.5000	500.0000	0.0	0.0	0.0	30.0000	700.0000
71S	3.0000	1.5000	2.0000	0.7000	500.0000	0.0	200.0000L	0.0	30.0000	1500.0000
72S	3.0000	1.5000	0.7000	0.5000	700.0000	0.0	200.0000L	0.0	30.0000	1000.0000
73S	7.0000	1.5000	1.5000	0.7000	700.0000	0.0	0.0	0.0	50.0000	1500.0000
74S	3.0000	1.0000	1.0000	0.3000	300.0000	0.0	200.0000L	0.0	30.0000	1000.0000
75S	3.0000	1.5000	1.0000	0.3000	300.0000	0.0	200.0000L	0.0	30.0000	1500.0000
76S	7.0000	0.7000	0.7000	0.7000	300.0000	0.0	0.0	0.0	200.0000	1000.0000
77S	5.0000	1.0000	1.5000	0.5000	500.0000	0.0	0.0	0.0	150.0000	700.0000
78S	10.0000	0.7000	0.3000	0.5000	300.0000	0.0	0.0	0.0	200.0000	1000.0000
79S	10.0000	0.7000	0.0500L	0.5000	100.0000	3.6000	200.0000L	0.0	200.0000	700.0000
80S	5.0000	1.0000	0.0500L	0.5000	70.0000	0.7000	200.0000L	0.0	500.0000	1000.0000
81S	20.0000	0.7000	5.0000	0.1500	300.0000	0.0	0.0	0.0	200.0000	500.0000
82S	5.0000	1.5000	3.0000	0.3000	300.0000	0.7000	0.0	0.0	15.0000	700.0000

TABLE 3.-- SOIL SAMP EAGLE

SAMPLE	BE PPM	RT PPM	CU PPM	CR PPM	CU PPM	LA PPM	MI PPM	NR PPM	NI PPM	PR PPM
57S	0.0 N	0.0 N	15.0000	500.0000	50.0000	20.0000L	0.0 N	2.0000L	150.0000	20.0000
58S	0.0 N	0.0 N	15.0000	150.0000	50.0000	20.0000L	0.0 N	2.0000L	150.0000	30.0000
59S	0.0 N	0.0 N	10.0000	150.0000	50.0000	20.0000	0.0 N	2.0000L	70.0000	10.0000L
60S	1.5000	0.0 N	15.0000	150.0000	50.0000	50.0000	0.0 N	10.0000	70.0000	30.0000
61S	1.5000	0.0 N	15.0000	30.0000	15.0000	30.0000	0.0 N	10.0000	30.0000	30.0000
62S	1.0000	0.0 N	10.0000	50.0000	10.0000	50.0000	0.0 N	2.0000L	20.0000	10.0000
63S	2.0000	0.0 N	15.0000	50.0000	10.0000	300.0000	0.0 N	10.0000	30.0000	15.0000
64S	1.0000	0.0 N	10.0000	150.0000	20.0000	30.0000	0.0 N	10.0000	50.0000	30.0000
65S	1.0000	0.0 N	15.0000	150.0000	30.0000	70.0000	5.0000L	10.0000	50.0000	70.0000
66S	1.0000	0.0 N	15.0000	150.0000	20.0000	70.0000	0.0 N	10.0000	50.0000	30.0000
67S	1.5000	0.0 N	15.0000	150.0000	30.0000	50.0000	5.0000L	10.0000	30.0000	30.0000
68S	1.5000	0.0 N	15.0000	100.0000	10.0000	30.0000	5.0000L	10.0000	50.0000	10.0000L
69S	1.0000	0.0 N	20.0000	200.0000	20.0000	30.0000	5.0000L	15.0000	100.0000	15.0000
70S	1.5000	0.0 N	15.0000	100.0000	15.0000	30.0000	5.0000L	10.0000	50.0000	20.0000
71S	1.0000	0.0 N	10.0000	70.0000	10.0000	50.0000	0.0 N	10.0000	30.0000	30.0000
72S	1.0000L	0.0 N	7.0000	70.0000	7.0000	30.0000	0.0 N	2.0000L	30.0000	10.0000
73S	1.0000	0.0 N	10.0000	150.0000	30.0000	30.0000	0.0 N	15.0000	50.0000	30.0000
74S	1.5000	0.0 N	10.0000	70.0000	10.0000	30.0000	0.0 N	10.0000	30.0000	15.0000
75S	1.0000	0.0 N	15.0000	200.0000	10.0000	20.0000	0.0 N	15.0000	50.0000	15.0000
76S	0.0 N	0.0 N	10.0000	70.0000	50.0000	30.0000	0.0 N	2.0000L	70.0000	10.0000L
77S	1.0000L	0.0 N	10.0000	70.0000	30.0000	30.0000	0.0 N	2.0000L	50.0000	30.0000
78S	1.0000L	0.0 N	15.0000	150.0000	50.0000	30.0000	0.0 N	2.0000L	100.0000	30.0000
79S	1.0000	0.0 N	5.0000L	150.0000	50.0000	70.0000	15.0000	10.0000	7.0000	150.0000
80S	1.0000	0.0 N	5.0000L	150.0000	10.0000	70.0000	5.0000	10.0000	7.0000	150.0000
81S	0.0 N	0.0 N	15.0000	200.0000	200.0000	20.0000L	15.0000	10.0000	100.0000	150.0000
82S	5.0000	0.0 N	15.0000	100.0000	100.0000	70.0000	15.0000	2.0000L	70.0000	150.0000

TABLE 3.--SOIL SAMP EAGLE

SAMPLE	SR	SC	SN	SR	V	W	Y	ZN	ZR
57S	0.0	30.0000	0.0	50.0000L	500.0000	0.0	10.0000	0.0	500.0000
58S	0.0	50.0000	0.0	0.0	300.0000	0.0	15.0000	0.0	500.0000
59S	0.0	5.0000	0.0	100.0000	300.0000	0.0	10.0000L	0.0	500.0000
60S	0.0	15.0000	0.0	150.0000	150.0000	0.0	30.0000	0.0	300.0000
61S	0.0	20.0000	0.0	0.0	150.0000	0.0	50.0000	0.0	500.0000
62S	0.0	20.0000	0.0	50.0000L	100.0000	0.0	30.0000	0.0	300.0000
63S	0.0	15.0000	0.0	150.0000	100.0000	0.0	30.0000	0.0	200.0000
64S	0.0	15.0000	0.0	150.0000	200.0000	0.0	20.0000	0.0	300.0000
65S	0.0	15.0000	0.0	200.0000	150.0000	0.0	30.0000	0.0	200.0000
66S	0.0	20.0000	0.0	200.0000	150.0000	0.0	30.0000	0.0	300.0000
67S	0.0	15.0000	0.0	150.0000	150.0000	0.0	30.0000	0.0	300.0000
68S	0.0	15.0000	0.0	200.0000	100.0000	0.0	20.0000	0.0	150.0000
69S	0.0	15.0000	0.0	150.0000	150.0000	0.0	20.0000	0.0	300.0000
70S	0.0	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0	200.0000
71S	0.0	15.0000	0.0	300.0000	150.0000	0.0	30.0000	0.0	300.0000
72S	0.0	10.0000	0.0	50.0000L	150.0000	0.0	15.0000	200.0000L	300.0000
73S	0.0	15.0000	0.0	100.0000	200.0000	0.0	30.0000	0.0	300.0000
74S	0.0	15.0000	0.0	200.0000	150.0000	0.0	20.0000	0.0	200.0000
75S	0.0	15.0000	0.0	200.0000	150.0000	0.0	20.0000	200.0000L	150.0000
76S	0.0	10.0000	0.0	200.0000	200.0000	0.0	15.0000	0.0	300.0000
77S	0.0	15.0000	0.0	200.0000	150.0000	0.0	15.0000	0.0	300.0000
78S	0.0	20.0000	0.0	150.0000	300.0000	0.0	15.0000	200.0000L	300.0000
79S	0.0	15.0000	0.0	50.0000L	700.0000	0.0	50.0000	0.0	300.0000
80S	0.0	15.0000	0.0	50.0000L	500.0000	0.0	30.0000	0.0	300.0000
81S	0.0	5.0000	0.0	100.0000	200.0000	0.0	15.0000	700.0000	50.0000
82S	0.0	15.0000	0.0	200.0000	200.0000	0.0	30.0000	200.0000L	100.0000

FREQUENCY TABLE FOR COLUMN 1 (FF PCT)

LIMITS		FREQ	CUM	PERCENT	PERCENT
LOWER	UPPER			FREQ	CUM
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	1.32	1.32
1.2E 00	1.8E 00	0	1	0.0	1.32
1.8E 00	2.6E 00	0	1	0.0	1.32
2.6E 00	3.8E 00	10	11	13.16	14.47
3.8E 00	5.6E 00	21	32	27.63	42.11
5.6E 00	8.3E 00	16	48	21.05	63.16
8.3E 00	1.2E 01	18	66	23.68	86.84
1.2E 01	1.8E 01	8	74	10.53	97.37
1.8E 01	2.6E 01	2	76	2.63	100.00

HISTOGRAM FOR COLUMN 1 (FF PCT)

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

ANALYTICAL
VALUES
76

N	L	H	R	T	G
0	0	0	0	0	0
0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM = 2.00000E 01
MINIMUM = 1.00000E 00
GEOMETRIC MEAN = 6.74065E 00
GEOMETRIC DEVIATION = 1.72675E 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, 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.

FREQUENCY TABLE FOR COLUMN 2 (MG PCT)

LIMITS		FREQ	FREQ CUM	PERCENT	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	1	1	1.32	1.32
2.6E-01	3.8E-01	0	1	0.0	1.32
3.8E-01	5.6E-01	2	3	2.63	3.95
5.6E-01	8.3E-01	6	9	7.89	11.84
8.3E-01	1.2E 00	12	21	15.79	27.63
1.2E 00	1.8E 00	21	42	27.63	55.26
1.8E 00	2.6E 00	11	53	14.47	69.74
2.6E 00	3.8E 00	13	66	17.11	86.84
3.8E 00	5.6E 00	5	71	6.58	93.42
5.6E 00	8.3E 00	2	73	2.63	96.05
8.3E 00	1.2E 01	1	74	1.32	97.37
1.2E 01	1.8E 01	1	75	1.32	98.68

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, 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)

```

2.0E-01 X
3.0E-01
5.0E-01 XXX
7.0E-01 XXXXXXXX
1.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 00 XXXXXXXXXXXXXXXX
3.0E 00 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 00 XXXXXXXX
7.0E 00 XXX
1.0E 01 X
1.5E 01 X

```

ANALYTICAL
VALUES

N
 0
 0.0

L
 0
 0.0

H
 0
 0.0

R
 0
 0.0

T
 0
 0.0

G
 1
 1.32

MAXIMUM = 1.50000E 01
 MINIMUM = 2.00000E-01
 GEOMETRIC MEAN = 1.75617E 00
 GEOMETRIC DEVIATION = 2.04974E 00

FREQUENCY TABLE FOR COLUMN 3 (CA PCT)

LIMITS		FRFQ	PERCENT	PERCENT
LOWER	UPPER	CUM	FRFQ	FRFQ CUM
3.8E-02	5.6E-02	0	0.0	0.0
4.6E-02	8.3E-02	0	0.0	0.0
8.3E-02	1.2E-01	2	2.63	2.63
1.2E-01	1.8E-01	3	3.95	6.58
1.8E-01	2.6E-01	3	3.95	10.53
2.6E-01	3.8E-01	5	6.58	17.11
3.8E-01	5.6E-01	7	4.21	26.32
5.6E-01	8.3E-01	11	14.47	40.79
8.3E-01	1.2E 00	11	14.47	55.26
1.2E 00	1.8E 00	16	21.05	76.32
1.8E 00	2.6E 00	10	13.16	89.47
2.6E 00	3.8E 00	5	6.58	96.05
3.8E 00	5.6E 00	1	1.32	97.37

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, 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)

1.0E-01 XXX
1.5E-01 XXXX
2.0E-01 XXXX
3.0E-01 XXXXXXXX
5.0E-01 XXXXXXXXX
7.0E-01 XXXXXXXXXXXXXXXX
1.0E 00 XXXXXXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXXXXXXXXXX
2.0E 00 XXXXXXXXXXXXXXXX
3.0E 00 XXXXXXXX
5.0E 00 X

ANALYTICAL

VALUES

G 0.0
T 0.0
0.0

MAXIMUM = 5.00000E 00

MINIMUM = 1.00000E-01

GEOMETRIC MEAN = 8.80726E-01

GEOMETRIC DEVIATION = 2.40184E 00

FREQUENCY TABLE FOR COLUMN 4 (TI PCT)

LIMITS		FRQ	FRQ CUM	PERCENT	PERCENT FRQ CUM
LOWER - UPPER					
8.3F-04 - 1.2F-03		0	0	0.0	0.0
1.2F-03 - 1.8F-03		0	0	0.0	0.0
1.8F-03 - 2.6F-03		0	0	0.0	0.0
2.6F-03 - 3.8F-03		0	0	0.0	0.0
3.8F-03 - 5.6F-03		0	0	0.0	0.0
5.6F-03 - 8.3F-03		0	0	0.0	0.0
8.3F-03 - 1.2F-02		0	0	0.0	0.0
1.2F-02 - 1.8F-02		0	0	0.0	0.0
1.8F-02 - 2.6F-02		0	0	0.0	0.0
2.6F-02 - 3.8F-02		0	0	0.0	0.0
3.8F-02 - 5.6F-02		0	0	0.0	0.0
5.6F-02 - 8.3F-02		0	0	0.0	0.0
8.3F-02 - 1.2F-01		0	0	0.0	0.0
1.2F-01 - 1.8F-01	2	2	2	2.63	2.63
1.8F-01 - 2.6F-01	5	7	7	6.58	9.21
2.6F-01 - 3.8F-01	7	14	14	9.21	18.42
3.8F-01 - 5.6F-01	21	35	35	27.63	46.05
5.6F-01 - 8.3F-01	28	63	63	36.84	82.89
8.3F-01 - 1.2F 00	11	74	74	14.47	97.37

HISTOGRAM FOR COLUMN 4 (TI PCT)

1.5F-01 XXX
2.0F-01 XXXXXXXX
3.0E-01 XXXXXXXXXX
5.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
7.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 00 XXXXXXXXXXXXXXXX

ANALYTICAL VALUES				
N	L	H	R	T
0	0	0	0	0
0.0	0.0			0.0

MAXIMUM = 1.00000F 00

MINIMUM = 1.50000F-01

GEOMETRIC MEAN = 5.45764E-01

GEOMETRIC DEVIATION = 1.61589F 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, 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.

FREQUENCY TABLE FOR COLUMN 5 (MN PPM)

	LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
	LOWER	UPPER				
1	8.3F 00 -	1.2F 01	0	0	0.0	0.0
2	1.2F 01 -	1.8F 01	0	0	0.0	0.0
3	1.8F 01 -	2.6F 01	0	0	0.0	0.0
4	2.6F 01 -	3.8F 01	0	0	0.0	0.0
5	3.8F 01 -	5.6F 01	0	0	0.0	0.0
6	5.6F 01 -	8.3F 01	1	1	1.32	1.32
7	8.3F 01 -	1.2F 02	1	2	1.32	2.63
8	1.2F 02 -	1.8F 02	0	2	0.0	2.63
9	1.8F 02 -	2.6F 02	1	3	1.32	3.95
10	2.6F 02 -	3.8F 02	22	25	28.95	32.89
11	3.8F 02 -	5.6F 02	18	43	23.68	56.58
12	5.6F 02 -	8.3F 02	18	61	23.68	80.26
13	8.3F 02 -	1.2E 03	9	70	11.84	92.11
14	1.2E 03 -	1.8E 03	1	71	1.32	93.42
15	1.8E 03 -	2.6E 03	5	76	6.58	100.00

HISTOGRAM FOR COLUMN 5 (MN PPM)

```

7.0E 01 X
1.0E 02 X
1.5E 02
2.0E 02 X
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
7.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 03 XXXXXXXXXXXXXXX
1.5E 03 X
2.0E 03 XXXXXXXX

```

ANALYTICAL

VALUES
76

0.0

10

 α β

10

10

 $z \in$

MAXIMUM = 2.00000E 03

MINIMUM = 7.00000E 01

GEOMETRIC MEAN = 5.31154E 02

GEOMFTRIC DEVIATION = 1.88084E 00

FREQUENCY TABLE FOR COLUMN 6 (AG PPM)

LIMITS		FREQ	CUM	PERCENT	FREQ	CUM	PERCENT
LOWER - UPPER							
3.4E-01	5.6E-01	2	2	2.63			
5.6E-01	8.3E-01	3	5	3.95			
8.3E-01	1.2E 00	0	5	0.0			
1.2E 00	1.8E 00	0	5	0.0			
1.8E 00	2.6E 00	0	5	0.0			
2.6E 00	3.8E 00	1	6	1.32			

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, 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 6 (AG PPM)

5.0E-01 XXX

7.0E-01 XXXX

1.0E 00

1.5E 00

2.0E 00

3.0E 00 X

ANALYTICAL

VALUES

6
0
0.0

MAXIMUM = 3.00000E 00

MINIMUM = 5.00000E-01

GEOMETRIC MEAN = 7.97491E-01

GEOMETRIC DEVIATION = 1.95359E 00

FREQUENCY TABLE FOR COLUMN 9 (H PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
8.3E 00 - 1.2E 01	0	0	0	0.0	0.0
1.2E 01 - 1.8E 01	2	2	2	2.63	2.63
1.8E 01 - 2.6E 01	1	3	3	1.32	3.95
2.6E 01 - 3.8E 01	14	17	17	18.42	22.37
3.8E 01 - 5.6E 01	14	31	31	18.42	40.79
5.6E 01 - 8.3E 01	19	50	50	25.00	65.79
8.3E 01 - 1.2E 02	13	63	63	17.11	82.89
1.2E 02 - 1.8E 02	5	68	68	6.58	89.47
1.8E 02 - 2.6E 02	4	72	72	5.26	94.74
2.6E 02 - 3.8E 02	1	73	73	1.32	96.05
3.8E 02 - 5.6E 02	1	74	74	1.32	97.37

HISTOGRAM FOR COLUMN 9 (H PPM)

```

1.5E 01 XXX
2.0E 01 X
3.0E 01 XXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXXXXXXX
1.5E 02 XXXXXXXX
2.0E 02 XXXXX
3.0E 02 X
5.0E 02 X

```

ANALYTICAL
VALUES
74

N	L	H	R	T	G
1.32	0.0	0	0	0.0	1.32

MAXIMUM = 5.00000E 02

MINIMUM = 1.50000E 01

GEOMETRIC MEAN = 6.55687E 01

GEOMETRIC DEVIATION = 1.95065E 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, 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, 1 value 1.0E-01 means 1.0×10^{-1} or 0.1, 2 value 1.0E 01 means 1.0×10^0 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.

FREQUENCY TABLE FOR COLUMN 10 (HA PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER	UPPER				
3.8F 00 -	5.6F 00	0	0	0.0	0.0
5.6F 00 -	8.3F 00	0	0	0.0	0.0
8.3F 00 -	1.2F 01	0	0	0.0	0.0
1.2F 01 -	1.8F 01	0	0	0.0	0.0
1.8F 01 -	2.6F 01	0	0	0.0	0.0
2.6F 01 -	3.8F 01	0	0	0.0	0.0
3.8F 01 -	5.6F 01	0	0	0.0	0.0
5.6F 01 -	8.3F 01	0	0	0.0	0.0
8.3F 01 -	1.2E 02	0	0	0.0	0.0
1.2E 02 -	1.8F 02	0	0	0.0	0.0
1.8F 02 -	2.6F 02	0	0	0.0	0.0
2.6F 02 -	3.8F 02	1	1	1.32	1.32
3.8F 02 -	5.6E 02	4	5	5.26	6.58
5.6F 02 -	8.3E 02	23	28	30.26	36.84
8.3F 02 -	1.2E 03	23	51	30.26	67.11
1.2E 03 -	1.8E 03	22	73	28.95	96.05
1.8F 03 -	2.6E 03	3	76	3.95	100.00

HISTOGRAM FOR COLUMN 10 (HA PPM)

3.0E 02 X
5.0E 02 XXXXX
7.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.0E 03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.5E 03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 03 XXXX

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

MAXIMUM = 2.00000E 03
MINIMUM = 3.00000F 02
GEOMETRIC MFAN = 9.84578E 02
GEOMETRIC DEVIATION = 1.47487E 00

Explanation

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, 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.

FREQUENCY TABLE FOR COLUMN 11 (RE PPM)

LIMITS		FREQ	CUM	PERCENT	PERCENT	FREQ	CUM	PERCENT
LOWER - UPPER								
8.3F-01	- 1.2F 00	26	26	34.21				34.21
1.2F 00	- 1.8F 00	19	45	25.00				59.21
1.8F 00	- 2.6F 00	4	49	5.26				64.47
2.6F 00	- 3.8F 00	0	49	0.0				64.47
3.8F 00	- 5.6F 00	1	50	1.32				65.79

HISTOGRAM FOR COLUMN 11 (RE PPM)

1.0F 00 XX
 1.5E 00 XX
 2.0E 00 XXXXX
 3.0E 00
 5.0E 00 X

ANALYTICAL					
N	L	H	H	T	G
9	17	0	0	0	0
11.84	22.37			0.0	0.0

MAXIMUM = 5.00000E 00

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 1.27343E 00

GEOMETRIC DEVIATION = 1.36367E 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, 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.

FREQUENCY TABLE FOR COLUMN 13 (CO PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ	PERCENT FREQ CUM
LOWER	- UPPER					
3.8F 00	- 5.6F 00	2	2	2.63	2.63	2.63
5.6F 00	- 8.3E 00	1	3	1.32	3.95	3.95
8.3F 00	- 1.2E 01	15	18	19.74	23.68	23.68
1.2F 01	- 1.8E 01	30	48	39.47	63.16	63.16
1.8F 01	- 2.6F 01	8	56	10.53	73.68	73.68
2.6F 01	- 3.8F 01	4	60	5.26	78.95	78.95
3.8F 01	- 5.6F 01	4	64	5.26	84.21	84.21
5.6F 01	- 8.3E 01	3	67	3.95	88.16	88.16
8.3F 01	- 1.2F 02	1	68	1.32	89.47	89.47
1.2F 02	- 1.8E 02	1	69	1.32	90.79	90.79
1.8F 02	- 2.6E 02	1	70	1.32	92.11	92.11

HISTOGRAM FOR COLUMN 13 (CO PPM)

```

5.0E 00 XXX
7.0E 00 X
1.0F 01 XXXXXXXXXXXXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXX
3.0E 01 XXXXX
5.0E 01 XXXXX
7.0E 01 XXXX
1.0E 02 X
1.5E 02 X
2.0E 02 X

```

ANALYTICAL
VALUES
T G
0 0
0.0 0.0

MAXIMUM = 2.00000E 02
MINIMUM = 5.00000E 00
GEOMETRIC MEAN = 1.78709E 01
GEOMETRIC DEVIATION = 2.02661E 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, 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.

FREQUENCY TABLE FOR COLUMN 14 (CR PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER	CUM	CUM	FREQ	FREQ CUM
3.8F 00	5.6F 00	0	0	0.0	0.0
5.6F 00	8.3F 00	0	0	0.0	0.0
8.3F 00	1.2F 01	0	0	0.0	0.0
1.2F 01	1.8E 01	0	0	0.0	0.0
1.8E 01	2.6E 01	2	2	2.63	2.63
2.6E 01	3.8E 01	1	3	1.32	3.95
3.8E 01	5.6F 01	3	6	3.95	7.89
5.6F 01	8.3F 01	14	20	18.42	26.32
8.3F 01	1.2F 02	10	30	13.16	39.47
1.2F 02	1.8E 02	23	53	30.26	69.74
1.8E 02	2.6E 02	6	59	7.89	77.63
2.6E 02	3.8E 02	8	67	10.53	88.16
3.8E 02	5.6F 02	4	71	5.26	93.42
5.6F 02	8.3E 02	2	73	2.63	96.05
8.3E 02	1.2F 03	1	74	1.32	97.37
1.2F 03	1.8E 03	1	75	1.32	98.68
1.8E 03	2.6E 03	0	75	0.0	98.68
2.6E 03	3.8E 03	0	75	0.0	98.68
3.8E 03	5.6F 03	1	76	1.32	100.00

Explanation

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, 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 (CR PPM)

```

2.0E 01 XXX
3.0E 01 X
5.0E 01 XXXX
7.0E 01 XXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXX
5.0E 02 XXXXX
7.0E 02 XXX
1.0E 03 X
1.5E 03 X
2.0E 03
3.0E 03
5.0E 03 X

```

ANALYTICAL
VALUES

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

MAXIMUM = 5.00000E 03
MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 1.48456E 02
GEOMETRIC DEVIATION = 2.44923E 00

FREQUENCY TABLE FOR COLUMN 15 (CU PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER	UPPER				
3.8F 00 -	5.6F 00	0	0	0.0	0.0
5.6F 00 -	8.3F 00	1	1	1.32	1.32
8.3F 00 -	1.2F 01	7	8	9.21	10.53
1.2F 01 -	1.8F 01	4	12	5.26	15.79
1.8F 01 -	2.6F 01	7	19	9.21	25.00
2.6F 01 -	3.8F 01	11	30	14.47	39.47
3.8F 01 -	5.6F 01	20	50	26.32	65.79
5.6F 01 -	8.3F 01	16	66	21.05	86.84
8.3F 01 -	1.2F 02	5	71	6.58	93.42
1.2F 02 -	1.8F 02	2	73	2.63	96.05
1.8F 02 -	2.6F 02	2	75	2.63	98.68

HISTOGRAM FOR COLUMN 15 (CU PPM)

7.0F 00 X
 1.0F 01 XXXXXXXXX
 1.5E 01 XXXX
 2.0E 01 XXXXXXXXX
 3.0E 01 XXXXXXXXXXXXX
 5.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.0E 02 XXXXXXXX
 1.5E 02 XXX
 2.0E 02 XXX

ANALYTICAL
VALUES
75T
0
0.0

MAXIMUM = 2.00000F 02

MINIMUM = 7.00000F 00

GEOMETRIC MEAN = 4.02527E 01

GEOMETRIC DEVIATION = 2.15256E 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, 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.

FREQUENCY TABLE FOR COLUMN 16 (LA PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
1.8E 01 -	2.6E 01	17	17	22.37	22.37
2.6E 01 -	3.8E 01	29	46	38.16	60.53
3.8E 01 -	5.6E 01	10	56	13.16	73.68
5.6E 01 -	8.3E 01	6	62	7.89	81.58
8.3E 01 -	1.2E 02	0	62	0.0	81.58
1.2E 02 -	1.8E 02	0	62	0.0	81.58
1.8E 02 -	2.6E 02	0	62	0.0	81.58
2.6E 02 -	3.8E 02	1	63	1.32	82.89

HISTOGRAM FOR COLUMN 16 (LA PPM)

2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

5.0E 01 XXXXXXXXXXXXXXXX

7.0E 01 XXXXXXXX

1.0E 02

1.5E 02

2.0E 02

3.0E 02 X

ANALYTICAL				
N	L	H	B	T
0	13	0	0	0
0.0	17.11			0.0

VALUES
63

MAXIMUM = 3.00000E 02

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 3.27891E 01

GEOMETRIC DEVIATION = 1.62246E 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, 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.

FREQUENCY TABLE FOR COLUMN 17 (M() PPM)

LIMITS		FREQ	FRQ CUM	PERCENT	PERCENT
LOWER - UPPER				FRQ	CUM
3.8F 00 -	5.6F 00	3	3	3.95	3.95
5.6F 00 -	8.3F 00	0	3	0.0	3.95
8.3F 00 -	1.2F 01	3	6	3.95	7.89
1.2F 01 -	1.8F 01	3	9	3.95	11.84

HISTOGRAM FOR COLUMN 17 (M() PPM)

5.0E 00 XXXX

7.0F 00

1.0E 01 XXXX

1.5E 01 XXXX

N	L	H	R	T	G
59	8	0	0	0	0
77.63	10.53			0.0	0.0

MAXIMUM = 1.50000F 01

MINIMUM = 5.00000F 00

GEOMETRIC MEAN = 9.08558E 00

GEOMETRIC DEVIATION = 1.61788E 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, 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

FREQUENCY TABLE FOR COLUMN 18 (NH PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER	UPPER				
1.8F 00 -	2.6F 00	0	0	0.0	0.0
2.6F 00 -	3.8F 00	0	0	0.0	0.0
3.8F 00 -	5.6F 00	0	0	0.0	0.0
5.6F 00 -	8.3F 00	0	0	0.0	0.0
8.3F 00 -	1.2F 01	28	28	36.84	36.84
1.2F 01 -	1.8F 01	17	45	22.37	59.21
1.8F 01 -	2.6F 01	4	49	5.26	64.47
2.6F 01 -	3.8F 01	2	51	2.63	67.11
3.8F 01 -	5.6F 01	1	52	1.32	68.42

HISTOGRAM FOR COLUMN 18 (NH PPM)

1.0E 01 XX
 1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 01 XXXX
 3.0E 01 XXX
 5.0E 01 X

ANALYTICAL		VALUES	
N	L	H	G
1	23	0	0
1.32	30.26		0.0

MAXIMUM = 5.00000E 01
 MINIMUM = 1.00000F 01
 GEOMETRIC MEAN = 1.29571E 01
 GEOMETRIC DEVIATION = 1.41849E 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, 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.

FREQUENCY TABLE FOR COLUMN 19 (NI PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
3.8F 00	5.6F 00	0	0	0.0	0.0
5.6F 00	8.3E 00	3	3	3.95	3.95
8.3E 00	1.2F 01	3	6	3.95	7.89
1.2F 01	1.8F 01	1	7	1.32	9.21
1.8F 01	2.6F 01	2	9	2.63	11.84
2.6F 01	3.8F 01	11	20	14.47	26.32
3.8F 01	5.6F 01	14	34	18.42	44.74
5.6F 01	8.3F 01	17	51	22.37	67.11
8.3F 01	1.2F 02	13	64	17.11	84.21
1.2F 02	1.8F 02	6	70	7.89	92.11
1.8F 02	2.6F 02	1	71	1.32	93.42
2.6F 02	3.8F 02	1	72	1.32	94.74
3.8F 02	5.6F 02	1	73	1.32	96.05
5.6F 02	8.3F 02	0	73	0.0	96.05
8.3F 02	1.2E 03	1	74	1.32	97.37
1.2E 03	1.8F 03	1	75	1.32	98.68
1.8F 03	2.6F 03	0	75	0.0	98.68
2.6F 03	3.8E 03	1	76	1.32	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, 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 (NI PPM)

7.0E 00 XXXX
 1.0F 01 XXXX
 1.5E 01 X
 2.0E 01 XXX
 3.0E 01 XXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXXXXXXXXXXXXXX
 7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 02 XXXXXXXXX

2.0E 02 X

3.0E 02 X

5.0E 02 X

7.0E 02

1.0E 03 X

1.5E 03 X

2.0E 03

3.0E 03 X

ANALYTICAL

N	L	H	B	T	G	VALUES
0	0	0	0	0	0	76
0.0	0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM = 3.00000E 03

MINIMUM = 7.00000E 00

GEOMETRIC MEAN = 6.32879E 01

GEOMETRIC DEVIATION = 2.88696E 00

FREQUENCY TABLE FOR COLUMN 20 (PH PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER - UPPER		CUM	CUM	FREQ	FREQ CUM
4.3E 00 -	1.2E 01	5	5	6.58	6.58
1.2E 01 -	1.8E 01	18	23	23.68	30.26
1.8E 01 -	2.6E 01	10	33	13.16	43.42
2.6E 01 -	3.8E 01	18	51	23.68	67.11
3.8E 01 -	5.6E 01	2	53	2.63	69.74
5.6E 01 -	8.3E 01	3	56	3.95	73.68
8.3E 01 -	1.2E 02	3	59	3.95	77.63
1.2E 02 -	1.8E 02	4	63	5.26	82.89
1.8E 02 -	2.6E 02	0	63	0.0	82.89
2.6E 02 -	3.8E 02	0	63	0.0	82.89
3.8E 02 -	5.6E 02	1	64	1.32	84.21

HISTOGRAM FOR COLUMN 20 (PH PPM)

1.0E 01 XXXXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXX
7.0E 01 XXXX
1.0E 02 XXXX
1.5E 02 XXXXX
2.0E 02
3.0E 02
5.0E 02 X

ANALYTICAL				
N	L	H	R	T
0	12	0	0	0
0.0	15.79			0.0

MAXIMUM = 5.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.74871E 01

GEOMETRIC DEVIATION = 2.24366E 00

Explanation

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, 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 1.0×10^0 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.

FREQUENCY TABLE FOR COLUMN 22 (SC PPM)

LIMITS		FREQ		PERCENT	
LOWER - UPPER		CUM		FREQ CUM	
3.8F 00 -	5.6F 00	3	3	3.95	3.95
5.6F 00 -	8.3F 00	1	4	1.32	5.26
8.3F 00 -	1.2F 01	4	8	5.26	10.53
1.2F 01 -	1.8F 01	28	36	36.84	47.37
1.8F 01 -	2.6F 01	22	58	28.95	76.32
2.6F 01 -	3.8F 01	15	73	19.74	96.05
3.8F 01 -	5.6F 01	3	76	3.95	100.00

Explanation

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, 0.083, etc. The frequency distributions are computed using these brackets as class intervals.

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

HISTOGRAM FOR COLUMN 22 (SC PPM)

```

5.0E 00 XXXX
7.0F 00 X
1.0E 01 XXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0F 01 XXXX

```

ANALYTICAL

VALUES
76
0
0.0

MAXIMUM = 5.00000F 01
MINIMUM = 5.00000E 00
GEOMETRIC MEAN = 1.81906E 01
GEOMETRIC DEVIATION = 1.57351E 00

FREQUENCY TABLE FOR COLUMN 23 (SN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
1.3E 00 -	1.2E 01	3	3	3.95	3.95
1.2E 01 -	1.8E 01	1	4	1.32	5.26
1.8E 01 -	2.6E 01	1	5	1.32	6.58

HISTOGRAM FOR COLUMN 23 (SN PPM)

1.0E 01 XXXX

1.5E 01 X

2.0E 01 X

ANALYTICAL		VALUES	
N	L	H	R
69	2	0	0
90.79	2.63		

MAXIMUM = 2.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.24573E 01

GEOMETRIC DEVIATION = 1.37383E 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, 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.

FREQUENCY TABLE FOR COLUMN 24 (SR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
LOWER - UPPER					
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	19	19	25.00	25.00
1.2E 02 -	1.8E 02	18	37	23.68	48.68
1.8E 02 -	2.6E 02	11	48	14.47	63.16
2.6E 02 -	3.8E 02	3	51	3.95	67.11

HISTOGRAM FOR COLUMN 24 (SR PPM)

1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 02 XXXX

ANALYTICAL					
N	L	H	R	T	G
5	20	0	0	0	0
6.58	26.32			0.0	0.0

MAXIMUM = 3.00000E 02

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 1.42935E 02

GEOMETRIC DEVIATION = 1.38736E 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, 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.

FREQUENCY TABLE FOR COLUMN 25 (V PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	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	1	1	1.32	1.32
3.8E 01	5.6E 01	1	2	1.32	2.63
5.6E 01	8.3E 01	0	2	0.0	2.63
8.3E 01	1.2E 02	8	10	10.53	13.16
1.2E 02	1.8E 02	20	30	26.32	39.47
1.8E 02	2.6E 02	30	60	39.47	78.95
2.6E 02	3.8E 02	8	68	10.53	89.47
3.8E 02	5.6E 02	6	74	7.89	97.37
5.6E 02	8.3E 02	2	76	2.63	100.00

Explanation

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, 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 25 (V PPM)

```

3.0E 01 X
5.0E 01 X
7.0E 01
1.0E 02 XXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXX
5.0E 02 XXXXXXXXX
7.0E 02 XXX

```

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

ANALYTICAL

N	L	H	R	T	G
0	0	0	0	0	0
0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM = 7.00000E 02
 MINIMUM = 3.00000E 01
 GEOMETRIC MEAN = 1.91410E 02
 GEOMETRIC DEVIATION = 1.68388E 00

FREQUENCY TABLE FOR COLUMN 27 (Y PPM)

LIMITS		FRFQ	PERFQ	PERCENT	PERCENT
LOWER - UPPER		CUM	FRFQ	PERFQ	CUM
1.2F 00 -	1.2F 01	3	3	3.95	3.95
1.2F 01 -	1.8F 01	14	17	18.42	22.37
1.8F 01 -	2.6F 01	15	32	19.74	42.11
2.6F 01 -	3.8F 01	36	68	47.37	84.47
3.8F 01 -	5.6F 01	6	74	7.89	97.37

HISTOGRAM FOR COLUMN 27 (Y PPM)

1.0E 01 XXXX
1.5F 01 XXXXXXXXXXXXXXXXXXXX
2.0F 01 XXXXXXXXXXXXXXXXXXXX
3.0E 01 XX
5.0E 01 XXXXXXXX

ANALYTICAL				
N	L	H	T	G
0	2	0	0	0
0.0	2.63	0	0.0	0.0

MAXIMUM = 5.00000E 01
MINIMUM = 1.00000F 01
GEOMETRIC MEAN = 2.41609E 01
GEOMETRIC DEVIATION = 1.47213E 00

Explanation

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, 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.

FREQUENCY TABLE FOR COLUMN 29 (7R PPM)

LIMITS		FREQUENCY		PERCENT		PERCENT		FREQUENCY		PERCENT		FREQUENCY		PERCENT	
LOWER - UPPER		FREQUENCY		PERCENT		FREQUENCY		PERCENT		FREQUENCY		PERCENT		FREQUENCY	
1.8E 01 -	2.6E 01	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0
2.6E 01 -	3.8E 01	0	0	0.0	0.0	0	0	0.0	0.0	0	0	0.0	0.0	0	0
3.8E 01 -	5.6E 01	2	2	2.63	2.63	2	2	2.63	2.63	2	2	2.63	2.63	2	2
5.6E 01 -	8.3E 01	1	3	1.32	3.95	1	3	1.32	3.95	1	3	1.32	3.95	1	3
8.3E 01 -	1.2E 02	5	8	6.58	10.53	5	8	6.58	10.53	5	8	6.58	10.53	5	8
1.2E 02 -	1.8E 02	5	13	6.58	17.11	5	13	6.58	17.11	5	13	6.58	17.11	5	13
1.8E 02 -	2.6E 02	16	29	21.05	38.16	16	29	21.05	38.16	16	29	21.05	38.16	16	29
2.6E 02 -	3.8E 02	29	58	38.16	76.32	29	58	38.16	76.32	29	58	38.16	76.32	29	58
3.8E 02 -	5.6E 02	16	74	21.05	97.37	16	74	21.05	97.37	16	74	21.05	97.37	16	74
5.6E 02 -	8.3E 02	1	75	1.32	98.68	1	75	1.32	98.68	1	75	1.32	98.68	1	75
8.3E 02 -	1.2E 03	0	75	0.0	100.00	0	75	0.0	100.00	0	75	0.0	100.00	0	75
1.2E 03 -	1.8E 03	1	76	1.32		1	76	1.32		1	76	1.32		1	76

HISTOGRAM FOR COLUMN 29 (7R PPM)

5.0E 01 XXX
7.0E 01 X
1.0E 02 XXXXXXXX
1.5E 02 XXXXXXXX
2.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
7.0E 02 X
1.0E 03
1.5E 03 X

ANALYTICAL
VALUES
76

MAXIMUM = 1.50000E 03
MINIMUM = 5.00000E 01
GEOMETRIC MEAN = 2.63510E 02
GEOMETRIC DEVIATION = 1.79785E 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, 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.

SR	PPM	76.998749	2.61	25 NOT DETECTED, LESS THAN, OR TRACE VALUES.	51 REPORTED VALUES.
V	PPM	191.409576	1.68	76 SAMPLES AND 76 ANALYTICAL VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
W	PPM	*****	*****	76 NOT DETECTED, LESS THAN, OR TRACE VALUES.	74 REPORTED VALUES.
Y	PPM	23.400131	1.54	2 NOT DETECTED, LESS THAN, OR TRACE VALUES.	2 REPORTED VALUES. NO COMPUTATIONS.
Zn	PPM	*****	*****	74 NOT DETECTED, LESS THAN, OR TRACE VALUES.	
Zr	PPM	263.509033	1.80	76 SAMPLES AND 76 ANALYTICAL VALUES.	