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CHEMICAL ANALYSES OF STREAM SEDIMENT SAMPLES FROM THE
SADLEROCHIT-JAGO RIVERS AREA, MT. MICHELSON AND
DEMARCATION POINT QUADRANGLES, ALASKA

Compiled by

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Open-file report

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

Analytical data for 144 stream sediment samples from the southeastern part of the Mt. Michelson quadrangle and the southwestern part of the Demarcation Point quadrangle are given on Table 1. Statistical data on the frequency distribution of 30 elements are given in Tables 2 and 3. The sample localities are shown on Figure 1.

Most of the samples were collected in 1969 by H. N. Reiser, R. L. Detterman, W. P. Brosge, E. G. Sable and J. T. Dutro, Jr.; six samples were collected in 1958 and 1968. Samples were collected from the active stream channel wherever possible; where this was not possible, samples were collected from bank or terrace deposits adjacent to the channel. Samples that may include sediments derived from granitic outcrops or granitic glacial debris are identified by the letters "gr" following the sample number.

Analyses for gold, silver and zinc were by the atomic absorption method and are accurate to \pm 100 percent. Arsenic and antimony analyses were by field colorimetric methods, and are accurate to \pm 30 to 50 percent. Mercury analyses were by the atomic absorption (instrumental) method. The data for the other elements are by six-step semiquantitative spectrographic analysis. 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 detection for each element are given on pages 2 and 3. Analyses were done by L. W. Bailey, E. F. Cooley, K. J. Curry, J. G. Friskin, C. L. Jacobson, H. D. King, R. W. Leinz, R. L. Miller, E. L. Mosier, D. J. Muffler, D. G. Murrey, S. L. Noble, M. S. Rickard, R. B. Tripp and J. G. Viets.

The analytical data have been processed by means of a computer program known as GEOSUM. The GEOSUM program is designed primarily for summarizing and tabulating geochemical data from semiquantitative spectrographic analyses (commonly referred to as six-step spectrographic analyses) by the laboratories of the U.S. Geological Survey.

The program output consists of: (a) a tabulation of the data (Table 1), (b) histograms and cumulative frequency distributions for all elements (Table 2), and (c) a statistical summary which includes geometric means and geometric deviations (Table 3).

Explanation of Table 1

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

Specified limits of detection

FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM
0.05000	0.02000	0.05000	0.00200	10.00000	0.50000
AS PPM	<u>1/</u> AU PPM	B PPM	BA PPM	BE PPM	BI PPM
0.20000	0.02000	10.00000	20.00000	1.00000	10.00000
CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM
5.00000	5.00000	5.00000	20.00000	5.00000	10.00000

1/ Because of insufficient sample material the lower limit for Au was 0.04 in 2 samples, and 0.1 in 2 samples.

Specified limits of detection (Continued)

NI PPM	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM
5.00000	10.00000	0.50000	5.00000	10.00000	100.00000
V PPM	W PPM	Y PPM	ZN PPM	ZR PPM	HG PPM
10.00000	50.00000	10.00000	25.00000	10.00000	0.01000

Explanation of Table 2

Histograms showing the frequency distribution of the reported elements in all of the samples are given in Table 2. The histograms for bismuth, gold, molybdenum, silver and tungsten have been omitted because so few values for these metals were reported. Data for gold, silver, arsenic, antimony, and zinc that were determined by atomic absorption and colorimetric methods have been recast by the GEOSUM program into the six-step form of the spectrographic analyses.

In addition to the histograms representing all 144 samples separate sets of histograms were computed for the group of 75 samples from streams that drain the granitic terrane and the group of 69 samples from streams that drain the sedimentary and metamorphic terrane of the rest of the area. These additional histograms are given for arsenic, beryllium, copper, lead, tin and zinc. Statistical data for all the metals from each of the different provenances are summarized in Table 3.

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 distribution 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

On the histograms the analytical values are shown as powers of 10, for example:

7.0E-01 means 7.0×10^{-1} or 0.7

7.0E 00 means 7.0×10^0 or 7.0

7.0E 01 means 7.0×10^1 or 70.0

7.0E 02 means 7.0×10^2 or 700.0

7.0E 03 means 7.0×10^3 or 7,000.0

The histograms are constructed of X's, each of which represents 1 percent of the total number of samples (144 in most cases, 75 or 69 in the others).

The geometric mean is the antilogarithm of the arithmetic mean of the logs of the analyses and is an estimate of "central tendency," or of a characteristic value, for 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. The geometric deviation is the antilogarithm of the standard deviation of the logs of the analyses. See Miesch (1967 and 1963, p. 20-23) for further discussion and explanation of geometric deviation. The validity of these statistics as estimates of geochemical distribution in the

area depends on how representative the samples are. The statistics may change when more samples are collected.

The histograms and the statistics given below them are derived only from data values within the ranges of analytical determination ("analytical values"). The histograms are, therefore, incomplete, and the statistics are 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 in Table 3.

Explanation of Table 3

In the computations performed to produce the statistical summaries in Table 3 all elements are ignored where one or more of the unqualified data values is 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 Table 2. Where data are qualified with the codes N, L, or T, the estimates of geometric mean and deviation are based on a method by A. J. Cohen for treating censored distributions. The application of this method to geochemical problems is described in USGS Professional Paper 574-B. The estimates are unbiased in a strict sense only where the data are derived from a lognormal parent population, but experiments have shown that large departures from this requirement may not greatly invalidate the results. Acceptance and use of the estimates, however, is the responsibility of the individual.

REFERENCES

Miesch, A. T., 1963, Distribution of elements in Colorado Plateau uranium deposits---a preliminary report: U.S. Geol. Survey Bull. 1147-E, p. E1-E57.

- Miesch, A. T., 1967, Methods of Computation for estimating geochemical abundance: U.S. Geol. Survey Prof. Paper 574B, p. B1-B15.
- Reed, B. L., 1968, Geology of the Lake Peters area, Northeastern Brooks Range, Alaska: U.S. Geol. Survey Bull. 1236, 132 p.
- Reiser, H. N., and Tailleur, I. L., 1969, Preliminary geologic map of Mt. Michelson Quadrangle, Alaska: U.S. Geol. Survey open-file report, 1:250,000 map.
- Sable, E. G., 1965, Geology of the Romanzof Mountains, Brooks Range, northeastern Alaska: U.S. Geol. Survey open-file report, 218 p.

Map
No

Table 1

SADLEROCHIT-JAGO STR SEDS Analyses of 194 samples

SAMPLE	FE PCT.	MG PCT.	CA PCT.	TI PCT.	MN PPM.	AG PPM.	AS PPM.	AU PPM.	B PPM.	BA PPM.
1 69ADT33	3.0000	2.0000	10.0000	0.0700	150.0000	0.0	L	0.0	30.0000	300.0000
2 69ADT32	5.0000	0.7000	1.5000	0.7000	150.0000	0.0	N	10.0000	0.0200L	100.0000
3 69ADT45	3.0000	0.5000	0.5000	0.3000	150.0000	0.0	N	0.0	0.0200L	100.0000
4 69ADT50	5.0000	1.0000	5.0000	0.5000	100.0000	0.0	N	0.0	0.0200L	100.0000
5 69ADT49	5.0000	1.0000	0.7000	0.5000	100.0000	0.0	N	0.0	0.1000L	100.0000
6 69ADT107	5.0000	0.5000	0.7000	0.5000	100.0000	0.0	N	10.0000	0.0200L	100.0000
7 69ADT68	5.0000	0.7000	0.5000	0.5000	200.0000	0.0	N	10.0000	0.1000L	50.0000
8 69ADT67	2.0000	1.5000	10.0000	0.1500	150.0000	0.0	N	10.0000	0.0400L	30.0000
9 69ADT135	3.0000	1.0000	5.0000	0.5000	300.0000	0.0	N	10.0000	0.0200L	100.0000
10 69ADT139	3.0000	2.0000	20.0000	0.3000	150.0000	0.0	N	10.0000	0.0200L	150.0000
11 69ADT87	3.0000	1.0000	5.0000	0.3000	500.0000	0.0	N	10.0000	0.0200L	70.0000
12 69ARR79 gr	1.5000	0.7000	1.5000	0.2000	150.0000	0.0	N	10.0000	0.0200L	50.0000
13 69ARR152 gr	3.0000	1.0000	1.5000	0.5000	300.0000	0.0	N	15.0000	0.0200L	70.0000
14 69ARR78	7.0000	1.5000	7.0000	0.5000	200.0000	0.0	N	15.0000	0.0200L	70.0000
15 69ABE26	3.0000	5.0000	7.0000	0.3000	150.0000	0.0	L	20.0000	0.0200L	70.0000
16 69ABE25	5.0000	3.0000	7.0000	0.5000	200.0000	0.0	N	20.0000	0.0200L	50.0000
17 69ARR153 gr	3.0000	0.7000	0.7000	0.5000	300.0000	0.0	N	10.0000	0.0200L	100.0000
18 69ARR162 gr	5.0000	0.7000	0.2000	0.7000	300.0000	0.0	N	10.0000	0.0200L	150.0000
19 69ADU32	5.0000	1.0000	0.1000	0.5000	700.0000	0.0	N	10.0000L	0.0200L	70.0000
20 69ADT11	7.0000	1.5000	15.0000	0.7000	1000.0000	0.0	N	10.0000	0.0200L	70.0000
21 69ABE5	5.0000	0.7000	0.0700	0.5000	1000.0000	0.0	N	20.0000	0.0200L	70.0000
22 69ABE73	2.0000	1.0000	3.0000	0.2000	70.0000	0.0	N	10.0000	0.0200L	30.0000
23 69ABE74	3.0000	1.0000	3.0000	0.3000	200.0000	0.0	N	10.0000	0.0200L	50.0000
24 69ABE79	1.5000	1.0000	7.0000	0.1000	100.0000	0.0	N	10.0000L	0.0200L	50.0000
25 69ARR143 gr	3.0000	1.0000	1.5000	0.5000	300.0000	0.0	N	10.0000	0.0200L	50.0000
26 69ASA95 gr	0.5000	0.1000	0.7000	0.1500	300.0000	0.0	N	10.0000	0.0200L	20.0000
27 69ASA85 gr	1.5000	1.5000	20.0000	0.1500	1000.0000	0.0	L	10.0000	0.0200L	70.0000
28 69ASA105 gr	1.0000	0.5000	0.7000	0.1500	300.0000	0.0	N	10.0000	0.0200L	70.0000
29 69ASA115 gr	2.0000	1.5000	20.0000	0.1500	300.0000	0.0	N	10.0000	0.0200L	20.0000
30 69ARR154	5.0000	0.7000	0.3000	0.7000	300.0000	0.0	N	15.0000	0.0200L	100.0000
31 69ARR155 gr	2.0000	1.5000	15.0000	0.3000	200.0000	0.0	N	15.0000	0.0200L	100.0000
32 69ARR163 gr	3.0000	1.0000	0.7000	0.5000	150.0000	0.0	N	10.0000	0.0200L	150.0000
33 69ARR164 gr	5.0000	1.0000	0.7000	0.7000	300.0000	0.0	L	10.0000	0.0200L	100.0000
34 69ARR165 gr	5.0000	1.0000	2.0000	0.7000	300.0000	0.0	N	40.0000	0.0200L	70.0000
35 69ARR166 gr	3.0000	3.0000	3.0000	0.3000	500.0000	0.0	N	50.0000	0.0200L	70.0000
36 69ARR156 gr	1.5000	0.3000	0.7000	0.2000	1000.0000	0.0	N	10.0000	0.0200L	150.0000
37 69ARR157 gr	3.0000	0.7000	0.5000	0.3000	1500.0000	0.0	L	10.0000	0.0200L	70.0000
38 69ASA107 gr	5.0000	0.7000	0.0 L	0.5000	70.0000	0.0	L	40.0000	0.0200L	150.0000
39 69ASA145 gr	1.5000	1.0000	7.0000	0.2000	300.0000	0.0	N	20.0000	0.0200L	30.0000
40 69ASA135 gr	1.5000	3.0000	5.0000	0.3000	500.0000	0.0	N	20.0000	0.0200L	20.0000
41 58ASA105 gr	3.0000	2.0000	2.0000	0.3000	700.0000	0.0	N	20.0000	0.0200L	1000.0000
42 69ADT140	5.0000	1.0000	0.1500	0.7000	1000.0000	0.0	N	40.0000	0.0200L	50.0000
43 69ADT141	3.0000	0.7000	0.0500	0.5000	700.0000	0.0	N	10.0000	0.0200L	500.0000
44 69ARR202	3.0000	0.7000	0.1500	0.5000	1000.0000	0.0	N	20.0000	0.0200L	70.0000
45 69ADT17	3.0000	0.7000	0.0 L	0.7000	300.0000	0.0	N	10.0000	0.0200L	30.0000
46 69ARR3	5.0000	1.0000	0.0700	0.7000	500.0000	0.0	N	10.0000	0.0200L	50.0000
47 69ADT116	5.0000	0.7000	0.1500	0.5000	500.0000	0.0	N	0.0	0.0200L	50.0000
48 69ARR6	5.0000	0.7000	0.0700	0.7000	300.0000	0.0	N	10.0000	0.0200L	50.0000
49 69ADT117	5.0000	1.0000	0.2000	0.7000	500.0000	0.0	N	10.0000	0.0200L	70.0000
50 69ADT118	5.0000	1.0000	0.0700	0.7000	300.0000	0.0	N	10.0000	0.0200L	70.0000

Map
No

SADLEROCHIT-JAGO STR SEDS

SAMPLE	BE PPM.	SI PPM.	CO PPM.	CR PPM.	CU PPM.	LA PPM.	Mn PPM.	NB PPM.	NI PPM.	PB PPM.
1 69ADT33	0.0	L	0.0 N	0.0 N	70.0000	0.0 L	0.0 N	0.0 N	0.0 L	30.0000
2 69ADT32	1.0000	0.0	N	7.0000	150.0000	30.0000	0.0 L	10.0000	70.0000	15.0000
3 69ADT45	1.0000	0.0	N	7.0000	150.0000	20.0000	0.0 L	0.0 L	70.0000	0.0 L
4 69ADT50	0.0	L	0.0 N	7.0000	150.0000	10.0000	20.0000	0.0 L	0.0 L	15.0000
5 69ADT49	0.0	L	0.0 N	10.0000	150.0000	30.0000	20.0000	0.0 L	10.0000	100.0000
6 69ADT107	1.5000	0.0	N	15.0000	150.0000	70.0000	20.0000	0.0 L	10.0000	50.0000
7 69ADT68	1.0000	0.0	N	20.0000	150.0000	20.0000	0.0 L	0.0 L	70.0000	0.0 L
8 69ADT67	0.0	N	0.0 N	0.0 N	70.0000	0.0 L	0.0 N	0.0 N	0.0 L	30.0000
9 69ADT135	2.0000	0.0	N	30.0000	100.0000	20.0000	20.0000	0.0 L	15.0000	100.0000
10 69ADT139	1.5000	0.0	N	15.0000	150.0000	30.0000	20.0000	0.0 L	10.0000	70.0000
11 69ADT87	1.0000	0.0	N	10.0000	150.0000	70.0000	20.0000	0.0 L	10.0000	50.0000
12 69ARR79 gr	1.5000	0.0	N	0.0 L	15.0000	0.0 L	30.0000	0.0 N	0.0 L	15.0000
13 69ARR152 gr	2.0000	0.0	N	20.0000	70.0000	30.0000	20.0000	0.0 N	15.0000	50.0000
14 69ARR78	1.0000	0.0	N	20.0000	150.0000	20.0000	0.0 L	0.0 L	0.0 L	100.0000
15 69ABE26	1.5000	0.0	N	7.0000	150.0000	10.0000	0.0 L	0.0 N	0.0 L	50.0000
16 69ABE25	1.0000	0.0	N	10.0000	150.0000	15.0000	30.0000	0.0 L	10.0000	100.0000
17 69ARR153 gr	5.0000	0.0	N	10.0000	30.0000	15.0000	70.0000	0.0 N	20.0000	30.0000
18 69ARR162 gr	3.0000	0.0	N	20.0000	150.0000	30.0000	50.0000	0.0 L	15.0000	100.0000
19 69ADU32	2.0000	0.0	N	15.0000	70.0000	30.0000	50.0000	0.0 N	10.0000	30.0000
20 69ADT11	1.5000	0.0	N	15.0000	150.0000	50.0000	30.0000	0.0 L	10.0000	70.0000
21 69ABE5	1.0000	0.0	N	20.0000	150.0000	70.0000	30.0000	0.0 L	10.0000	70.0000
22 69ABE73	1.0000	0.0	N	5.0000	70.0000	15.0000	0.0 L	0.0 N	0.0 L	30.0000
23 69ABE74	0.0	L	0.0 N	10.0000	70.0000	15.0000	20.0000	0.0 L	10.0000	30.0000
24 69ABE79	1.0000	0.0	N	0.0 N	30.0000	0.0 L	0.0 L	0.0 L	20.0000	20.0000
25 69ARR143 gr	1.0000	0.0	N	10.0000	30.0000	30.0000	0.0 L	0.0 L	0.0 L	30.0000
26 69ASA95 gr	2.0000	0.0	N	0.0 N	10.0000	5.0000	0.0 L	0.0 N	10.0000	5.0000
27 69ASA88 gr	3.0000	0.0	L	0.0 L	20.0000	7.0000	0.0 L	0.0 N	0.0 L	20.0000
28 69ASA105 gr	7.0000	0.0	N	0.0 N	10.0000	0.0 L	0.0 L	0.0 N	15.0000	15.0000
29 69ASA115 gr	1.5000	0.0	N	7.0000	70.0000	0.0 L	0.0 L	0.0 N	0.0 L	30.0000
30 69ARR154	2.0000	0.0	N	20.0000	150.0000	15.0000	20.0000	0.0 L	20.0000	100.0000
31 69ARR155 gr	3.0000	0.0	N	5.0000	70.0000	7.0000	20.0000	0.0 N	15.0000	30.0000
32 69ARR163 gr	2.0000	0.0	N	20.0000	100.0000	20.0000	30.0000	0.0 N	10.0000	50.0000
33 69ARR164 gr	3.0000	0.0	N	20.0000	150.0000	30.0000	30.0000	0.0 L	15.0000	70.0000
34 69ARR165 gr	3.0000	0.0	N	15.0000	150.0000	20.0000	70.0000	0.0 L	15.0000	150.0000
35 69ARR166 gr	3.0000	0.0	N	10.0000	70.0000	7.0000	150.0000	0.0 L	15.0000	30.0000
36 69ARR156 gr	15.0000	0.0	N	0.0 L	0.0 L	5.0000	70.0000	0.0 L	150.0000	5.0000
37 69ARR157 gr	10.0000	0.0	L	10.0000	10.0000	7.0000	50.0000	0.0 L	30.0000	15.0000
38 69ASA107 gr	5.0000	0.0	N	0.0 N	10.0000	0.0 L	100.0000	0.0 L	30.0000	0.0 N
39 69ASA145 gr	1.5000	0.0	N	0.0 N	15.0000	0.0 L	50.0000	0.0 L	10.0000	5.0000
40 69ASA135 gr	1.5000	0.0	N	0.0 N	30.0000	0.0 L	0.0 L	0.0 L	15.0000	10.0000
41 69ASA105 gr	2.0000	0.0	N	10.0000	50.0000	150.0000	70.0000	0.0 N	20.0000	15.0000
42 69ADT140	1.5000	0.0	N	20.0000	70.0000	70.0000	50.0000	0.0 L	10.0000	50.0000
43 69ADT141	2.0000	0.0	N	15.0000	70.0000	20.0000	70.0000	0.0 L	10.0000	30.0000
44 69ARR202	3.0000	0.0	N	15.0000	50.0000	50.0000	50.0000	0.0 L	10.0000	30.0000
45 69ADT17	0.0	N	0.0 N	10.0000	100.0000	30.0000	20.0000	0.0 N	0.0 L	30.0000
46 69ARR3	1.0000	0.0	N	10.0000	150.0000	20.0000	50.0000	0.0 N	10.0000	50.0000
47 69ADT116	1.5000	0.0	N	15.0000	70.0000	15.0000	20.0000	0.0 N	10.0000	30.0000
48 69ARR6	1.0000	0.0	N	10.0000	70.0000	15.0000	20.0000	0.0 N	10.0000	30.0000
49 69ADT117	1.5000	0.0	N	10.0000	70.0000	15.0000	30.0000	0.0 L	10.0000	30.0000
50 69ADT118	1.5000	0.0	N	15.0000	70.0000	15.0000	30.0000	0.0 N	10.0000	30.0000

Map
No

SADLEROCHIT-JAGO STR SEDS

SAMPLE	SB PPM.	SC PPM.	SN PPM.	SR PPM.	V PPM.	W PPM.	Y PPM.	ZN PPM.	ZR PPM.	HG PPM.
1 69ADT33	1.0000	0.0 L	0.0 N	100.0000	70.0000	0.0 N	10.0000	25.0000L	70.0000	0.0100
2 69ADT32	1.0000	15.0000	0.0 N	0.0 L	150.0000	0.0 N	20.0000	60.0000	200.0000	0.0400
3 69ADT45	2.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	70.0000	200.0000	0.0900
4 69ADT50	1.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	50.0000	100.0000	0.1500
5 69ADT49	1.0000	15.0000	0.0 N	0.0 L	150.0000	0.0 N	20.0000	70.0000	100.0000	0.0900
6 69ADT107	3.0000	10.0000	0.0 N	150.0000	200.0000	0.0 N	15.0000	90.0000	100.0000	0.2000
7 69ADT68	2.0000	15.0000	0.0 N	0.0 L	200.0000	0.0 N	15.0000	100.0000	300.0000	0.0300
8 69ADT67	2.0000	5.0000	0.0 N	200.0000	50.0000	0.0 N	15.0000	34.0000	70.0000	0.0300
9 69ADT135	0.0 B	15.0000	0.0 N	150.0000	150.0000	0.0 N	30.0000	25.0000L	200.0000	0.0600
10 69ADT139	0.0 B	10.0000	0.0 N	500.0000	150.0000	0.0 N	50.0000	25.0000L	70.0000	0.1300
11 69ADT87	0.0 B	10.0000	0.0 N	150.0000	150.0000	0.0 N	20.0000	0.0 B	100.0000	0.0600
12 69ARR79	gr 1.0000	5.0000	0.0 N	0.0 L	30.0000	0.0 N	30.0000	25.0000L	70.0000	0.0100L
13 69ARR152	gr 1.0000L	10.0000	0.0 N	100.0000	100.0000	0.0 N	15.0000	85.0000	500.0000	0.0600
14 69ARR78	4.0000	15.0000	0.0 N	150.0000	200.0000	0.0 N	20.0000	27.0000	150.0000	0.0500
15 69ABE26	6.0000	10.0000	0.0 N	150.0000	150.0000	0.0 N	20.0000	50.0000	100.0000	0.0600
16 69ABE25	3.0000	15.0000	0.0 N	300.0000	200.0000	0.0 N	20.0000	50.0000	150.0000	0.0900
17 69ARR153	gr 2.0000	5.0000	0.0 N	100.0000	50.0000	0.0 N	50.0000	60.0000	500.0000	0.0200
18 69ARR162	gr 0.0 B	15.0000	70.0000	150.0000	200.0000	0.0 N	30.0000	60.0000	500.0000	0.2200
19 69ADU32	1.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	15.0000	40.0000	500.0000	0.0300
20 69ADT11	2.0000	15.0000	0.0 N	0.0 L	200.0000	0.0 N	15.0000	50.0000	300.0000	0.0400
21 69ABE5	2.0000	15.0000	0.0 N	0.0 L	150.0000	0.0 N	15.0000	60.0000	150.0000	0.0800
22 69ABE73	1.0000L	5.0000	0.0 N	150.0000	50.0000	0.0 N	10.0000	70.0000	70.0000	0.1200
23 69ABE74	1.0000	5.0000	0.0 N	150.0000	50.0000	0.0 N	15.0000	50.0000	100.0000	0.0700
24 69ABE79	1.0000	0.0 L	0.0 N	150.0000	20.0000	0.0 N	15.0000	25.0000L	50.0000	0.0300
25 69ARR143	gr 1.0000L	7.0000	0.0 N	100.0000	70.0000	0.0 N	15.0000	65.0000	100.0000	0.0800
26 69ASA95	gr 1.0000L	0.0 N	10.0000	0.0 L	20.0000	0.0 N	20.0000	25.0000L	100.0000	0.2000L
27 69ASA85	gr 2.0000	0.0 L	0.0 N	200.0000	30.0000	0.0 N	50.0000	44.0000	100.0000	0.0100L
28 69ASA105	gr 1.0000	0.0 N	15.0000	0.0 L	20.0000	0.0 N	30.0000	25.0000L	300.0000	0.0100L
29 69ASA115	gr 2.0000	10.0000	0.0 N	200.0000	30.0000	0.0 N	20.0000	40.0000L	70.0000	0.0100L
30 69ARR154	1.0000	15.0000	0.0 N	100.0000	200.0000	0.0 N	30.0000	160.0000	1000.0000	0.0500
31 69ARR155	gr 1.0000	5.0000	0.0 L	150.0000	70.0000	0.0 N	30.0000	40.0000	300.0000	0.0100L
32 69ARR163	gr 0.0 B	15.0000	0.0 N	150.0000	200.0000	0.0 N	20.0000	50.0000	300.0000	0.2600
33 69ARR164	gr 0.0 B	15.0000	0.0 N	150.0000	200.0000	0.0 N	30.0000	30.0000	300.0000	0.0200
34 69ARR165	gr 2.0000	10.0000	0.0 N	100.0000	150.0000	0.0 N	30.0000	150.0000	1000.0000	0.0500
35 69ARR166	gr 3.0000	7.0000	0.0 L	100.0000	70.0000	0.0 N	30.0000	100.0000	150.0000	0.0100L
36 69ARR156	gr 1.0000L	5.0000	10.0000	0.0 L	15.0000	0.0 L	150.0000	30.0000	1000.0000	0.0200
37 69ARR157	gr 0.0 B	10.0000	30.0000	-0.0 L	30.0000	0.0 L	70.0000	40.0000	70.0000	0.0200
38 69ASA107	3.0000	15.0000	30.0000	0.0 L	70.0000	50.00000	70.0000	25.0000L	300.0000	0.0100
39 69ASA145	gr 1.0000	0.0 L	10.0000	150.0000	20.0000	0.0 N	70.0000	25.0000L	300.0000	0.0100L
40 69ASA135	gr 1.0000	0.0 L	0.0 N	0.0 L	30.0000	0.0 N	30.0000	80.0000	300.0000	0.0100L
41 58ASA105	gr 0.0 N	15.0000	0.0 L	300.0000	70.0000	0.0 N	30.0000	0.0 N	200.0000	0.0 B
42 69ADT140	4.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	76.0000	150.0000	0.0800
43 69ADT141	2.0000	15.0000	0.0 N	0.0 L	150.0000	0.0 N	15.0000	54.0000	150.0000	0.0300
44 69ARR202	2.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	30.0000	70.0000	500.0000	0.1000
45 69ADT117	1.0000	15.0000	0.0 N	0.0 N	100.0000	0.0 N	15.0000	36.0000	300.0000	0.0100
46 69ARR3	1.0000	15.0000	0.0 N	0.0 L	150.0000	0.0 N	20.0000	25.0000	300.0000	0.0200
47 69ADT116	2.0000	10.0000	0.0 N	0.0 L	100.0000	0.0 N	10.0000	40.0000	100.0000	0.0300
48 69ARR6	1.0000	15.0000	0.0 N	0.0 L	70.0000	0.0 N	10.0000	25.0000	300.0000	0.0200
49 69ADT117	1.0000	10.0000	0.0 N	100.0000	100.0000	0.0 N	15.0000	40.0000	300.0000	0.0300
50 69ADT118	3.0000	10.0000	0.0 N	100.0000	100.0000	0.0 N	15.0000	40.0000	100.0000	0.0200

*Map
No*

SADLEROCHIT-JAGO STR SEDS

SAMPLE	BE PPM.	BI PPM.	CO PPM.	CR PPM.	CU PPM.	LA PPM.	MO PPM.	NB PPM.	NI PPM.	PB PPM.
51 69ABE75	1.0000	0.0 N	7.0000	30.0000	20.0000	30.0000	0.0 N	10.0000	30.0000	10.0000
52 69ABE78	1.0000	0.0 N	10.0000	50.0000	20.0000	20.0000	0.0 L	0.0 L	30.0000	10.0000
53 69ABE76	1.5000	0.0 N	7.0000	50.0000	15.0000	30.0000	0.0 L	10.0000	30.0000	15.0000
54 69ARR120	gr 0.0 N	0.0 N	15.0000	100.0000	30.0000	0.0 L	0.0 L	10.0000	30.0000	15.0000
55 68ARR45	gr 5.0000	20.0000	20.0000	70.0000	20.0000	50.0000	10.0000	10.0000	50.0000	150.0000
56 69ABE104	gr 3.0000	0.0 N	10.0000	50.0000	10.0000	30.0000	0.0 N	10.0000	30.0000	20.0000
57 69ABE80	gr 7.0000	0.0 N	5.0000	30.0000	15.0000	30.0000	0.0 L	10.0000	20.0000	100.0000
58 69ASA25	gr 5.0000	0.0 N	20.0000	150.0000	50.0000	70.0000	0.0 L	10.0000	50.0000	150.0000
59 69ASA35	gr 5.0000	0.0 N	0.0 L	10.0000	30.0000	50.0000	0.0 N	30.0000	15.0000	150.0000
60 69ASA125	gr 3.0000	0.0 N	15.0000	300.0000	70.0000	20.0000	0.0 L	15.0000	70.0000	150.0000
61 69ASA13	gr 1.5000	0.0 L	10.0000	50.0000	30.0000	0.0 L	0.0 L	10.0000	20.0000	300.0000
62 68ARR42	gr 0.0 L	0.0 N	20.0000	150.0000	10.0000	70.0000	0.0 L	10.0000	50.0000	20.0000
63 69ABE82	gr 3.0000	0.0 N	0.0 L	30.0000	7.0000	0.0 L	0.0 L	10.0000	20.0000	30.0000
64 69ASA45	gr 1.5000	0.0 N	0.0 L	50.0000	15.0000	0.0 N	0.0 L	0.0 L	15.0000	70.0000
65 69ASA65	gr 3.0000	0.0 N	10.0000	70.0000	15.0000	20.0000	0.0 L	15.0000	30.0000	30.0000
66 69ABE81	gr 5.0000	0.0 N	0.0 L	15.0000	5.0000	50.0000	0.0 L	0.0 L	15.0000	50.0000
67 69ASA55	gr 7.0000	0.0 L	0.0 N	10.0000	7.0000	20.0000	0.0 L	20.0000	15.0000	70.0000
68 69ASA75	gr 2.0000	0.0 N	10.0000	50.0000	30.0000	30.0000	0.0 N	15.0000	30.0000	30.0000
69 69ABE83	gr 5.0000	0.0 N	0.0 L	30.0000	7.0000	20.0000	0.0 N	0.0 L	20.0000	70.0000
70 69ABE108	gr 3.0000	0.0 N	15.0000	50.0000	15.0000	30.0000	0.0 N	10.0000	30.0000	15.0000
71 69ARR158	gr 7.0000	0.0 N	0.0 N	0.0 L	0.0 L	150.0000	0.0 N	30.0000	5.0000	70.0000
72 69ARR159	gr 70.0000	0.0 N	0.0 L	10.0000	5.0000	100.0000	0.0 L	20.0000	5.0000	70.0000
73 69ARR182	gr 1.0000	0.0 N	15.0000	30.0000	50.0000	50.0000	0.0 N	10.0000	30.0000	15.0000
74 69ARR171	gr 5.0000	0.0 N	0.0 L	30.0000	30.0000	70.0000	0.0 N	15.0000	20.0000	30.0000
75 69ARR170	gr 3.0000	0.0 L	0.0 L	15.0000	10.0000	100.0000	0.0 L	15.0000	10.0000	200.0000
76 69ARR168	gr 10.0000	0.0 N	0.0 L	10.0000	5.0000	30.0000	0.0 L	30.0000	5.0000	70.0000
77 69ARR169	gr 10.0000	0.0 N	0.0 L	15.0000	5.0000	0.0 L	0.0 L	20.0000	10.0000	70.0000
78 69ARR167	gr 3.0000	0.0 N	20.0000	50.0000	50.0000	50.0000	0.0 L	15.0000	30.0000	150.0000
79 69ARR172	gr 7.0000	0.0 N	5.0000	10.0000	10.0000	100.0000	7.0000	15.0000	10.0000	150.0000
80 69ARR173	gr 15.0000	0.0 L	10.0000	10.0000	30.0000	100.0000	7.0000	20.0000	10.0000	300.0000
81 69ARR174	gr 15.0000	0.0 N	5.0000	10.0000	7.0000	50.0000	0.0 N	15.0000	15.0000	100.0000
82 68ARR11A	gr 0.0 L	0.0 N	20.0000	150.0000	30.0000	100.0000	5.0000	10.0000	70.0000	50.0000
83 68ARR11B	gr 0.0 L	0.0 N	20.0000	70.0000	10.0000	100.0000	0.0 L	10.0000	30.0000	100.0000
84 69ARR135	gr 2.0000	0.0 N	15.0000	70.0000	30.0000	50.0000	0.0 L	15.0000	50.0000	30.0000
85 69ADT130	1.0000	0.0 N	0.0 L	30.0000	10.0000	0.0 L	0.0 N	10.0000	15.0000	10.0000
86 69ADT132	7.0000	0.0 N	15.0000	30.0000	10.0000	20.0000	0.0 L	10.0000	30.0000	15.0000
87 69ADT131	1.0000	0.0 N	15.0000	50.0000	30.0000	0.0 L	0.0 L	10.0000	50.0000	10.0000
88 69ADT120	1.0000	0.0 N	20.0000	70.0000	20.0000	30.0000	0.0 L	10.0000	50.0000	30.0000
89 69ADT119	1.5000	0.0 N	15.0000	100.0000	15.0000	50.0000	0.0 N	15.0000	30.0000	15.0000
90 69ADT125	3.0000	0.0 N	20.0000	70.0000	30.0000	20.0000	0.0 L	15.0000	30.0000	30.0000
91 69ADT124	1.5000	0.0 N	15.0000	30.0000	15.0000	20.0000	0.0 N	15.0000	30.0000	15.0000
92 69ADT121	1.0000	0.0 N	10.0000	70.0000	30.0000	20.0000	0.0 N	10.0000	30.0000	10.0000
93 69ADT127	1.5000	0.0 N	30.0000	70.0000	20.0000	30.0000	0.0 N	10.0000	50.0000	30.0000
94 69ADT126	2.0000	0.0 N	20.0000	70.0000	15.0000	50.0000	0.0 L	10.0000	50.0000	20.0000
95 68ARR47A	2.0000	0.0 L	20.0000	70.0000	20.0000	70.0000	5.0000	15.0000	30.0000	150.0000
96 69ABE107A	gr 2.0000	0.0 N	30.0000	100.0000	30.0000	50.0000	0.0 N	10.0000	70.0000	30.0000
97 69ABE107	gr 2.0000	0.0 N	10.0000	50.0000	10.0000	50.0000	0.0 N	10.0000	30.0000	20.0000
98 69ABE106	gr 2.0000	0.0 N	15.0000	150.0000	30.0000	30.0000	0.0 N	10.0000	70.0000	15.0000
99 69ABE105	gr 1.5000	0.0 N	10.0000	50.0000	10.0000	30.0000	0.0 N	10.0000	30.0000	15.0000
100 69ABE115	gr 5.0000	0.0 N	15.0000	30.0000	10.0000	50.0000	0.0 N	15.0000	30.0000	30.0000

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SADLEROCHIT-JAGO STR SEDS

SAMPLE	SB PPM.	SC PPM.	SN PPM.	SR PPM.	V PPM.	W PPM.	Y PPM.	ZN PPM.	ZR PPM.	HG PPM.
57 69ABE75	1.0000L	7.0000	0.0 N	0.0 L	30.0000	0.0 N	15.0000	45.0000	300.0000	0.0200
52 69ABE78	1.0000	7.0000	0.0 N	0.0 L	70.0000	0.0 N	10.0000	50.0000	100.0000	0.0300
53 69ABE76	2.0000	7.0000	0.0 N	100.0000	70.0000	0.0 N	15.0000	80.0000	300.0000	0.0600
54 69ARR120 gr	1.0000	10.0000	0.0 N	0.0 L	100.0000	0.0 N	30.0000	25.0000L	500.0000	0.0300
55 68ARR45 gr	2.0000	15.0000	70.0000	500.0000	70.0000	0.0 N	20.0000	270.0000	20.0000	0.3000
56 69ABE104 gr	2.0000	7.0000	0.0 N	0.0 L	30.0000	0.0 N	200.0000G	26.0000	700.0000	0.0200
57 69ABE80 gr	1.0000	0.0 L	15.0000	100.0000	20.0000	0.0 L	50.0000	25.0000L	100.0000	0.0300
58 69ASA2S gr	6.0000	15.0000	300.0000	100.0000	0.0 N	70.0000	44.0000	70.0000	70.0000	0.0100L
59 69ASA3S gr	1.0000	0.0 L	30.0000	0.0 L	30.0000	0.0 N	200.0000	60.0000	70.0000	0.0200
60 69ASA12S gr	1.0000	15.0000	15.0000	100.0000	150.0000	0.0 N	20.0000	88.0000	200.0000	0.1200
61 69ASA1S gr	1.0000L	7.0000	30.0000	700.0000	30.0000	100.0000	30.0000	150.0000	70.0000	0.0100L
62 68ARR42 gr	3.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	400.0000	300.0000	0.2200
63 69ABE82 gr	2.0000	5.0000	30.0000	300.0000	50.0000	0.0 L	70.0000	25.0000	70.0000	0.0800
64 69ASA4S gr	2.0000	0.0 L	30.0000	300.0000	30.0000	0.0 N	15.0000	100.0000	30.0000	0.0100L
65 69ASA6S gr	1.0000	7.0000	10.0000	0.0 L	70.0000	0.0 N	20.0000	30.0000	300.0000	0.0100L
66 69ABE81 gr	1.0000	0.0 L	15.0000	0.0 L	20.0000	0.0 L	50.0000	25.0000L	70.0000	0.0300
67 69ASA5S gr	1.0000	0.0 N	15.0000	0.0 L	30.0000	50.0000	50.0000	25.0000	300.0000	0.0100L
68 69ASA5S gr	1.0000	10.0000	0.0 L	0.0 L	50.0000	0.0 N	20.0000	30.0000	150.0000	0.0100L
69 69ABE83 gr	1.0000L	5.0000	300.0000	0.0 L	30.0000	0.0 N	20.0000	25.0000L	300.0000	0.0200
70 69ABE108 gr	1.0000	7.0000	0.0 N	0.0 L	50.0000	0.0 N	20.0000	70.0000	300.0000	0.0100L
71 69ARR158 gr	1.0000L	0.0 L	15.0000	0.0 L	15.0000	0.0 L	50.0000	30.0000	100.0000	0.0200
72 69ARR159 gr	1.0000L	0.0 L	10.0000	0.0 L	15.0000	0.0 N	70.0000	35.0000	500.0000	0.0100
73 69ARR182 gr	0.0 B	10.0000	0.0 N	100.0000	50.0000	0.0 N	50.0000	60.0000	1000.0000	0.0100L
74 69ARR171 gr	0.0 B	7.0000	0.0 L	150.0000	70.0000	0.0 N	30.0000	55.0000	300.0000	0.0400
75 69ARR170 gr	0.0 B	7.0000	15.0000	0.0 L	30.0000	0.0 L	30.0000	60.0000	300.0000	0.0200
76 69ARR168 gr	0.0 B	5.0000	15.0000	100.0000	20.0000	0.0 L	50.0000	65.0000	70.0000	0.0100L
77 69ARR169 gr	0.0 B	5.0000	10.0000	0.0 L	20.0000	0.0 N	70.0000	60.0000	70.0000	1.3000
78 69ARR167 gr	0.0 B	7.0000	20.0000	0.0 L	70.0000	0.0 N	30.0000	30.0000	1000.0000	0.0100L
79 69ARR172 gr	2.0000	7.0000	15.0000	0.0 L	20.0000	0.0 N	70.0000	100.0000	150.0000	0.0100L
80 69ARR173 gr	2.0000	15.0000	30.0000	0.0 L	50.0000	0.0 N	100.0000	190.0000	70.0000	0.0500
81 69ARR174 gr	2.0000	7.0000	0.0 L	100.0000	30.0000	0.0 N	70.0000	65.0000	200.0000	0.0400
82 68ARR11A gr	3.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	100.0000	200.0000	0.5000
83 68ARR11B gr	2.0000	15.0000	0.0 N	100.0000	70.0000	0.0 N	20.0000	70.0000	200.0000	0.2800
84 69ARR135 gr	2.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	60.0000	300.0000	0.0100L
85 69ADT130	1.0000L	7.0000	0.0 N	0.0 L	30.0000	0.0 N	20.0000	30.0000	150.0000	0.1600
86 69ADT132	1.0000L	7.0000	0.0 N	100.0000	30.0000	0.0 N	15.0000	40.0000	200.0000	0.1200
87 69ADT131	1.0000L	10.0000	0.0 N	0.0 L	150.0000	0.0 N	15.0000	25.0000L	100.0000	0.2000
88 69ADT120	1.0000L	10.0000	0.0 N	0.0 L	100.0000	0.0 N	15.0000	40.0000	200.0000	0.0300
89 69ADT119	1.0000L	15.0000	0.0 N	100.0000	100.0000	0.0 N	15.0000	35.0000	300.0000	0.0100L
90 69ADT125	2.0000	15.0000	0.0 N	100.0000	100.0000	0.0 N	30.0000	50.0000	300.0000	0.1300
91 69ADT124	2.0000	10.0000	0.0 N	100.0000	70.0000	0.0 N	15.0000	40.0000	300.0000	0.0300
92 69ADT121	1.0000L	7.0000	0.0 N	0.0 L	50.0000	0.0 N	15.0000	40.0000	300.0000	0.0300
93 69ADT127	1.0000L	10.0000	0.0 N	0.0 L	100.0000	0.0 N	15.0000	60.0000	200.0000	0.0400
94 69ADT126	2.0000	15.0000	0.0 N	300.0000	100.0000	0.0 N	20.0000	60.0000	200.0000	0.0700
95 68ARR47A	1.0000	15.0000	70.0000	300.0000	70.0000	0.0 N	30.0000	70.0000	150.0000	0.2600
96 69ABE107A gr	1.0000	15.0000	0.0 N	150.0000	150.0000	0.0 N	50.0000	80.0000	200.0000	0.0900
97 69ABE107 gr	2.0000	7.0000	0.0 N	0.0 L	30.0000	0.0 N	30.0000	28.0000	700.0000	0.0200
98 69ABE106 gr	2.0000	15.0000	0.0 N	150.0000	150.0000	0.0 N	15.0000	60.0000	300.0000	0.0800
99 69ABE105 gr	2.0000	7.0000	0.0 N	0.0 L	30.0000	0.0 N	15.0000	26.0000	150.0000	0.0100L
100 69ABE115 gr	3.0000	7.0000	0.0 N	0.0 L	30.0000	0.0 N	30.0000	25.0000	500.0000	0.0100

Map
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SADLEROCHEM-JAGO STR SEDS

	SAMPLE	FE PCT.	MG PCT.	CA PCT.	Tl PCT.	MN PPM.	AG PPM.	AS PPM.	AU PPM.	B PPM.	BA PPM.
101	69ABE116 gr	3.0000	0.7000	0.1500	0.5000	300.0000	0.0 N	20.0000	0.0200L	30.0000	300.0000
102	69ABE116A gr	3.0000	1.0000	0.2000	0.7000	300.0000	0.0 N	100.0000	0.0200L	50.0000	300.0000
*106	69ABE112 gr	5.0000	1.0000	0.2000	0.7000	1000.0000	0.0 N	30.0000	0.0200L	100.0000	700.0000
107	9A8E112J gr	5.0000	1.0000	0.1000	0.5000	700.0000	0.0 N	40.0000	0.0200L	50.0000	500.0000
108	69ABE113 gr	3.0000	0.7000	0.1000	0.5000	200.0000	0.0 N	30.0000	0.0200L	30.0000	300.0000
109	9A8E113A gr	5.0000	1.0000	0.1500	0.7000	500.0000	0.0 N	50.0000	0.0200L	70.0000	700.0000
110	69ABE84	3.0000	0.7000	0.1500	0.3000	150.0000	0.0 N	30.0000	0.0200L	50.0000	300.0000
111	69ABE86	3.0000	0.7000	0.1000	0.5000	200.0000	0.0 N	30.0000	0.0200L	30.0000	300.0000
112	69ABE85	3.0000	0.7000	0.2000	0.3000	200.0000	0.0 N	15.0000	0.0200L	70.0000	300.0000
113	69ARR179 gr	2.0000	0.7000	0.7000	0.7000	500.0000	0.0 N	0.0 N	0.0200L	100.0000	300.0000
114	69ARR181 gr	3.0000	0.7000	0.7000	0.7000	300.0000	0.0 N	10.0000L	0.0200L	100.0000	300.0000
115	69ARR180 gr	3.0000	1.0000	0.7000	0.7000	500.0000	0.0 N	10.0000	0.0200L	100.0000	500.0000
116	69ARR161 gr	3.0000	0.7000	0.7000	0.7000	300.0000	0.0 N	0.0 N	0.0200L	100.0000	500.0000
117	69ARR160 gr	5.0000	1.0000	0.5000	0.7000	300.0000	0.0 N	0.0 N	0.0200L	100.0000	700.0000
118	69ARR175 gr	3.0000	1.0000	0.1500	0.3000	1000.0000	0.0 N	80.0000	0.0200L	100.0000	700.0000
119	69ARR176 gr	5.0000	1.0000	0.2000	0.7000	1000.0000	0.0 N	10.0000L	0.0200L	70.0000	700.0000
120	69ARR177	3.0000	1.0000	0.2000	0.7000	300.0000	0.0 N	10.0000	0.0200L	50.0000	300.0000
121	69ARR178	3.0000	0.5000	0.1500	0.5000	300.0000	0.0 N	10.0000	0.0200L	70.0000	300.0000
122	69ARR133	5.0000	0.7000	0.0700	0.5000	300.0000	0.0 N	10.0000	0.0200L	30.0000	300.0000
123	69ARR134	5.0000	1.5000	1.0000	0.5000	1000.0000	0.0 L	10.0000	0.0200L	70.0000	700.0000
124	69ARR132	15.0000	1.5000	0.0700	1.0000	700.0000	0.0 N	20.0000	0.0200L	70.0000	700.0000
125	69ARR131 gr	1.5000	1.0000	0.7000	0.3000	500.0000	0.0 L	30.0000	0.0200L	10.0000	300.0000
126	9ARR131A gr	5.0000	1.5000	1.0000	0.7000	1500.0000	0.0 L	40.0000	0.0200L	70.0000	300.0000
127	69ARR129 gr	2.0000	0.7000	0.5000	0.3000	700.0000	0.0 N	10.0000	0.0200L	30.0000	300.0000
128	69ADT129	3.0000	1.0000	0.2000	0.5000	300.0000	0.0 N	10.0000L	0.0200L	100.0000	500.0000
129	69ABE87	3.0000	1.5000	0.7000	0.3000	500.0000	0.0 N	10.0000	0.0200L	50.0000	300.0000
130	69ABE43A	5.0000	1.0000	0.7000	1.0000	700.0000	0.0 N	20.0000	0.0200L	30.0000	500.0000
131	69ABE88	5.0000	2.0000	1.5000	0.7000	500.0000	0.0 N	15.0000	0.0200L	30.0000	300.0000
132	69ABE99	5.0000	1.5000	0.7000	0.7000	700.0000	0.0 N	40.0000	0.0200L	70.0000	700.0000
133	69ABE92	5.0000	0.7000	0.1500	0.7000	1500.0000	0.0 N	30.0000	0.0200L	150.0000	300.0000
134	69ABE93	3.0000	0.7000	0.0700	0.7000	700.0000	0.0 N	10.0000	0.0200L	70.0000	300.0000
135	69ABE98	5.0000	1.0000	0.3000	0.7000	500.0000	0.0 N	20.0000	0.0200L	70.0000	700.0000
136	69ABE94	7.0000	1.5000	1.0000	1.0000	1500.0000	0.0 N	20.0000	0.0200L	150.0000	700.0000
137	69ABE97	5.0000	1.0000	0.3000	0.7000	300.0000	0.0 N	10.0000	0.0200L	100.0000	700.0000
138	69ABE95	3.0000	1.5000	0.7000	0.7000	1500.0000	0.0 N	10.0000	0.0200L	70.0000	700.0000
139	69ABE96	7.0000	1.5000	2.0000	0.7000	1500.0000	0.0 N	20.0000	0.0200L	70.0000	300.0000
140	69ARR130	3.0000	1.0000	5.0000	0.7000	300.0000	0.0 N	20.0000	0.0200L	70.0000	500.0000
141	69ABE40	3.0000	3.0000	15.0000	0.3000	300.0000	0.0 N	10.0000	0.0200L	20.0000	150.0000
142	69ABE89	3.0000	2.0000	20.0000	0.3000	300.0000	0.0 N	10.0000L	0.0200L	50.0000	150.0000
143	69ABE91	10.0000	1.5000	0.5000	1.0000	1000.0000	0.0 N	10.0000L	0.0200L	70.0000	700.0000
144	69ABE90	10.0000	1.5000	0.7000	1.0000	1000.0000	0.0 N	10.0000L	0.0200L	70.0000	700.0000
*103	69ABE110 gr	3.0000	0.7000	0.1500	0.5000	300.0000	0.0 N	30.0000	0.0200L	70.0000	300.0000
104	69ABE114 gr	3.0000	0.7000	0.1500	0.7000	500.0000	0.0 N	60.0000	0.0200L	70.0000	700.0000
105	69ABE111 gr	5.0000	0.7000	0.1000	0.7000	300.0000	0.0 N	40.0000	0.0200L	70.0000	700.0000

Map
No

SABLEROCHIT-JAGO STR SEDS

SAMPLE	BE PPM.	BI PPM.	CO PPM.	CR PPM.	CU PPM.	LA PPM.	MO PPM.	NB PPM.	NI PPM.	PB PPM.
101 69ABE116 gr	3.0000	0.0 N	15.0000	30.0000	15.0000	150.0000	0.0 N	15.0000	30.0000	30.0000
102 69ABE116A gr	1.5000	0.0 N	20.0000	70.0000	15.0000	30.0000	0.0 N	15.0000	30.0000	20.0000
*106 69ABE112 gr	5.0000	0.0 N	20.0000	70.0000	30.0000	50.0000	0.0 N	10.0000	50.0000	150.0000
107 69ABE112J gr	3.0000	0.0 N	20.0000	70.0000	20.0000	50.0000	0.0 N	10.0000	50.0000	150.0000
108 69ABE113 gr	1.5000	0.0 N	15.0000	30.0000	10.0000	50.0000	0.0 N	10.0000	30.0000	30.0000
109 69ABE113A gr	1.5000	0.0 N	20.0000	70.0000	20.0000	50.0000	0.0 N	10.0000	50.0000	20.0000
110 69ABE84	1.0000	0.0 N	5.0000	30.0000	10.0000	0.0 L	0.0 N	10.0000	30.0000	20.0000
111 69ABE86	1.0000	0.0 N	10.0000	30.0000	7.0000	0.0 L	0.0 N	0.0 L	30.0000	15.0000
112 69ABE85	1.0000	0.0 N	10.0000	30.0000	15.0000	20.0000	0.0 L	10.0000	30.0000	15.0000
113 69ARR179 gr	1.0000	0.0 N	50.0000	20.0000	30.0000	0.0 L	0.0 N	15.0000	30.0000	20.0000
114 69ARR181 gr	1.0000	0.0 N	15.0000	30.0000	10.0000	30.0000	0.0 N	15.0000	30.0000	10.0000
115 69ARR180 gr	1.0000	0.0 N	10.0000	70.0000	15.0000	30.0000	0.0 N	15.0000	30.0000	0.0 L
116 69ARR161 gr	1.0000	0.0 N	20.0000	50.0000	20.0000	20.0000	0.0 N	15.0000	30.0000	10.0000
117 69ARR160 gr	1.5000	0.0 N	20.0000	70.0000	15.0000	50.0000	0.0 N	20.0000	30.0000	15.0000
118 69ARR175 gr	3.0000	0.0 L	15.0000	70.0000	30.0000	30.0000	0.0 L	15.0000	30.0000	150.0000
119 69ARR176 gr	1.5000	0.0 N	20.0000	70.0000	30.0000	30.0000	0.0 L	10.0000	50.0000	30.0000
120 69ARR177	1.5000	0.0 N	15.0000	70.0000	50.0000	70.0000	0.0 N	10.0000	30.0000	20.0000
121 69ARR178	1.5000	0.0 N	15.0000	30.0000	15.0000	0.0 L	0.0 N	10.0000	30.0000	10.0000
122 69ARR133	0.0 L	0.0 N	10.0000	70.0000	10.0000	30.0000	0.0 L	10.0000	30.0000	20.0000
123 69ARR134	1.0000	0.0 N	15.0000	100.0000	50.0000	20.0000	0.0 L	10.0000	50.0000	30.0000
124 69ARR132	1.0000	0.0 N	20.0000	150.0000	30.0000	50.0000	0.0 L	10.0000	50.0000	30.0000
125 69ARR131 gr	1.5000	0.0 N	5.0000	100.0000	7.0000	30.0000	0.0 L	0.0 L	7.0000	150.0000
126 69ARR131A gr	1.5000	0.0 N	15.0000	70.0000	100.0000	20.0000	0.0 L	10.0000	50.0000	30.0000
127 69ARR129 gr	0.0 L	0.0 N	10.0000	50.0000	50.0000	0.0 N	0.0 N	0.0 L	30.0000	20.0000
128 69ADT129	1.5000	0.0 N	10.0000	70.0000	30.0000	20.0000	0.0 N	0.0 L	30.0000	20.0000
129 69ABE87	1.0000	0.0 N	10.0000	70.0000	30.0000	20.0000	0.0 N	10.0000	50.0000	15.0000
130 69ABE43A	1.5000	0.0 N	15.0000	100.0000	30.0000	50.0000	0.0 L	15.0000	30.0000	30.0000
131 69ABE88	1.0000	0.0 N	20.0000	150.0000	50.0000	0.0 L	0.0 L	10.0000	70.0000	10.0000
132 69ABE99	2.0000	0.0 N	30.0000	150.0000	50.0000	70.0000	0.0 L	15.0000	100.0000	20.0000
133 69ABE92	2.0000	0.0 N	30.0000	70.0000	100.0000	20.0000	5.0000	10.0000	100.0000	20.0000
134 69ABE93	2.0000	0.0 N	20.0000	70.0000	70.0000	20.0000	0.0 L	15.0000	70.0000	15.0000
135 69ABE98	1.5000	0.0 N	30.0000	100.0000	50.0000	30.0000	0.0 L	15.0000	70.0000	15.0000
136 69ABE94	3.0000	0.0 N	30.0000	150.0000	70.0000	70.0000	0.0 L	20.0000	150.0000	20.0000
137 69ABE97	1.5000	0.0 N	20.0000	70.0000	15.0000	50.0000	0.0 N	15.0000	70.0000	0.0 L
138 69ABE95	2.0000	0.0 N	20.0000	100.0000	100.0000	50.0000	0.0 L	15.0000	70.0000	15.0000
139 69ABE96	1.5000	0.0 N	30.0000	100.0000	70.0000	30.0000	0.0 L	10.0000	100.0000	20.0000
140 69ARR130	1.0000	0.0 N	10.0000	100.0000	15.0000	30.0000	0.0 N	10.0000	30.0000	30.0000
141 69ABE40	0.0 N	0.0 N	7.0000	150.0000	0.0 L	0.0 L	0.0 L	0.0 L	50.0000	0.0 L
142 69ABE89	1.0000	0.0 N	10.0000	150.0000	10.0000	20.0000	0.0 N	10.0000	70.0000	10.0000
143 69ABE91	2.0000	0.0 N	30.0000	200.0000	50.0000	50.0000	0.0 L	15.0000	150.0000	20.0000
144 69ABE90	2.0000	0.0 N	30.0000	200.0000	30.0000	50.0000	0.0 L	15.0000	150.0000	30.0000
*103 69ABE110 gr	3.0000	0.0 N	10.0000	30.0000	15.0000	50.0000	0.0 N	10.0000	30.0000	50.0000
104 69ABE114 gr	2.0000	0.0 N	20.0000	50.0000	15.0000	50.0000	0.0 N	15.0000	50.0000	30.0000
105 69ABE111 gr	1.5000	0.0 N	20.0000	70.0000	20.0000	50.0000	0.0 N	10.0000	50.0000	30.0000

Map
No

SADLEROCHIT-JAGO STR SEDS

	SAMPLE	SB PPM.	SC PPM.	SN PPM.	SR PPM.	V PPM.	W PPM.	Y PPM.	ZN PPM.	ZR PPM.	HG PPM.
101	69ABE116 gr	1.0000L	7.0000	0.0 N	0.0 L	30.0000	0.0 L	20.0000	34.0000	500.0000	0.0100L
102	69ABE116A gr	1.0000L	7.0000	0.0 N	0.0 L	70.0000	0.0 N	15.0000	44.0000	700.0000	0.0200
*106	69ABE112 gr	1.0000L	15.0000	0.0 L	0.0 L	100.0000	0.0 N	30.0000	90.0000	150.0000	0.0200
107	69ABE112J gr	1.0000L	15.0000	10.0000	0.0 L	70.0000	0.0 N	20.0000	90.0000	150.0000	0.0200
108	69ABE113 gr	1.0000L	7.0000	0.0 L	0.0 L	30.0000	0.0 N	20.0000	34.0000	500.0000	0.0100L
109	69ABE113A gr	1.0000	15.0000	0.0 N	0.0 L	100.0000	0.0 N	20.0000	32.0000	500.0000	0.0100L
110	69ABE84	1.0000L	5.0000	0.0 N	0.0 L	30.0000	0.0 N	10.0000	120.0000	300.0000	0.0100L
111	69ABE86	1.0000	5.0000	0.0 N	0.0 L	50.0000	0.0 N	10.0000	80.0000	300.0000	0.0100L
112	69ABE85	1.0000	5.0000	0.0 N	0.0 L	50.0000	0.0 N	10.0000	70.0000	200.0000	0.0100L
113	69ARR179 gr	0.0 B	7.0000	0.0 N	100.0000	50.0000	0.0 N	20.0000	60.0000	1000.0000	0.0100L
114	69ARR181 gr	0.0 B	10.0000	0.0 N	100.0000	50.0000	0.0 N	20.0000	50.0000	1000.0000	0.0100L
115	69ARR180 gr	0.0 B	10.0000	0.0 N	100.0000	70.0000	0.0 N	30.0000	40.0000	1000.0000G	0.0100L
116	69ARR161 gr	1.0000L	7.0000	0.0 N	100.0000	30.0000	0.0 N	20.0000	70.0000	1000.0000	0.0100L
117	69ARR160 gr	1.0000L	15.0000	0.0 N	0.0 L	100.0000	0.0 N	20.0000	75.0000	1000.0000	0.0100L
118	69ARR175 gr	0.0 B	10.0000	15.0000	100.0000	100.0000	0.0 N	50.0000	65.0000	200.0000	0.0500
119	69ARR176 gr	0.0 B	15.0000	0.0 N	100.0000	150.0000	0.0 N	15.0000	60.0000	200.0000	0.0100L
120	69ARR177	3.0000	15.0000	0.0 N	0.0 L	70.0000	0.0 N	20.0000	56.0000	300.0000	0.0100L
121	69ARR178	2.0000	7.0000	0.0 N	0.0 L	50.0000	0.0 N	20.0000	40.0000	700.0000	0.0100
122	69ARR133	2.0000	10.0000	0.0 N	0.0 L	70.0000	0.0 N	15.0000	25.0000	300.0000	0.0200
123	69ARR134	3.0000	10.0000	0.0 N	0.0 L	150.0000	0.0 N	15.0000	46.0000	200.0000	0.1200
124	69ARR132	1.0000L	15.0000	0.0 N	0.0 L	150.0000	0.0 N	15.0000	25.0000	500.0000	0.0100L
125	69ARR131 gr	1.0000	0.0 L	0.0 N	100.0000	50.0000	0.0 N	10.0000	25.0000L	70.0000	0.0100
126	69ARR131A gr	3.0000	15.0000	0.0 N	0.0 L	150.0000	0.0 N	10.0000	40.0000	200.0000	0.0500
127	69ARR129 gr	3.0000	5.0000	0.0 N	0.0 L	50.0000	0.0 N	10.0000	25.0000	70.0000	0.0900
128	69ADT129	0.0 B	10.0000	0.0 N	0.0 L	70.0000	0.0 N	15.0000	50.0000	200.0000	0.0900
129	69ABE87	4.0000	7.0000	0.0 N	100.0000	100.0000	0.0 N	10.0000	75.0000	70.0000	0.0800
130	69ABE43A	1.0000L	15.0000	0.0 N	0.0 L	150.0000	0.0 N	20.0000	25.0000L	500.0000	0.0300
131	69ABE88	3.0000	15.0000	0.0 N	150.0000	150.0000	0.0 N	15.0000	80.0000	70.0000	0.1300
132	69ABE99	6.0000	20.0000	0.0 N	100.0000	200.0000	0.0 N	30.0000	30.0000	300.0000	0.1100
133	69ABE92	4.0000	15.0000	0.0 N	100.0000	300.0000	0.0 N	30.0000	70.0000	200.0000	0.4000
134	69ABE93	5.0000	15.0000	0.0 N	100.0000	200.0000	0.0 N	20.0000	40.0000	200.0000	0.2000
135	69ABE98	1.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	60.0000	1000.0000	0.0100L
136	69ABE94	4.0000	20.0000	0.0 N	100.0000	300.0000	0.0 N	70.0000	70.0000	300.0000	0.2400
137	69ABE97	1.0000	15.0000	0.0 N	100.0000	150.0000	0.0 N	20.0000	40.0000	700.0000	0.0200
138	69ABE95	3.0000	15.0000	0.0 N	100.0000	200.0000	0.0 N	30.0000	50.0000	500.0000	0.1000
139	69ABE96	1.0000L	20.0000	0.0 N	200.0000	200.0000	0.0 N	20.0000	30.0000	100.0000	0.0500
140	69ARR130	2.0000	10.0000	0.0 N	700.0000	70.0000	0.0 N	15.0000	25.0000L	150.0000	0.0400
141	69ABE40	1.0000	10.0000	0.0 N	300.0000	150.0000	0.0 N	15.0000	25.0000L	70.0000	0.0600
142	69ABE89	4.0000	10.0000	0.0 N	300.0000	100.0000	0.0 N	15.0000	60.0000	70.0000	0.0600
143	69ABE91	4.0000	20.0000	0.0 N	100.0000	200.0000	0.0 N	30.0000	80.0000	500.0000	0.2200
144	69ABE90	3.0000	20.0000	0.0 N	150.0000	200.0000	0.0 N	30.0000	50.0000	300.0000	0.1400
*103	69ABE110 gr	1.0000	7.0000	0.0 N	0.0 L	50.0000	0.0 N	20.0000	36.0000	500.0000	0.0100
104	69ABE114 gr	1.0000	10.0000	0.0 N	0.0 L	50.0000	0.0 N	20.0000	30.0000	700.0000	0.0100
105	69ABE111 gr	1.0000L	10.0000	0.0 N	0.0 L	100.0000	0.0 N	15.0000	36.0000	1000.0000G	0.0100L

Table 2 Histograms

FREQUENCY TABLE FOR COLUMN 1 (FE PCT.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT 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	1	1	0.69	0.69
5.6E-01 - 8.3E-01	0	1	0.0	0.69
8.3E-01 - 1.2E 00	2	3	1.39	2.08
1.2E 00 - 1.8E 00	9	12	6.25	8.33
1.8E 00 - 2.6E 00	16	28	11.11	19.44
2.6E 00 - 3.8E 00	56	84	38.89	58.33
3.8E 00 - 5.6E 00	50	134	34.72	93.06
5.6E 00 - 8.3E 00	7	141	4.86	97.92
8.3E 00 - 1.2E 01	2	143	1.39	99.31
1.2E 01 - 1.8E 01	1	144	0.69	100.00

FREQUENCY TABLE FOR COLUMN 2 (MG PCT.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
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	2	2	1.39	1.39
1.2E-01 - 1.8E-01	0	2	0.0	1.39
1.8E-01 - 2.6E-01	3	5	2.08	3.47
2.6E-01 - 3.8E-01	5	10	3.47	6.94
3.8E-01 - 5.6E-01	7	17	4.86	11.81
5.6E-01 - 8.3E-01	46	63	31.94	43.75
8.3E-01 - 1.2E 00	47	110	32.64	76.39
1.2E 00 - 1.8E 00	18	128	12.50	88.89
1.8E 00 - 2.6E 00	10	138	6.94	95.83
2.6E 00 - 3.8E 00	5	143	3.47	99.31
3.8E 00 - 5.6E 00	1	144	0.69	100.00

HISTOGRAM FOR COLUMN 2 (MG PCT.)

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

ANALYTICAL
VALUES

N	L	H	B	T	G
0	0	0	0	0	144
0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM = 1.50000E 01

MINIMUM = 5.00000E-01

GEOMETRIC MEAN = 3.41773E 00

GEOMETRIC DEVIATION = 1.62484E 00

N	L	H	B	T	G
0	0	0	0	0	144
0.0	0.0	0.0	0.0	0.0	0.0

MAXIMUM = 5.00000E 00

MINIMUM = 1.00000E-01

GEOMETRIC MEAN = 8.98700E-01

GEOMETRIC DEVIATION = 1.80190E 00

FREQUENCY TABLE FOR COLUMN 3 (CA PCT.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E-02 - 5.6E-02	1	1	0.69	0.69
5.6E-02 - 8.3E-02	14	15	9.72	10.42
8.3E-02 - 1.2E-01	8	23	5.56	15.97
1.2E-01 - 1.8E-01	26	49	18.06	34.03
1.8E-01 - 2.6E-01	9	58	6.25	40.28
2.6E-01 - 3.8E-01	3	61	2.08	42.36
3.8E-01 - 5.6E-01	8	69	5.56	47.92
5.6E-01 - 8.3E-01	21	90	14.58	62.50
8.3E-01 - 1.2E 00	6	96	4.17	66.67
1.2E 00 - 1.8E 00	11	107	7.64	74.31
1.8E 00 - 2.6E 00	4	111	2.78	77.08
2.6E 00 - 3.8E 00	3	114	2.08	79.17
3.8E 00 - 5.6E 00	8	122	5.56	84.72
5.6E 00 - 8.3E 00	7	129	4.86	89.58
8.3E 00 - 1.2E 01	4	133	2.78	92.36
1.2E 01 - 1.8E 01	3	136	2.08	94.44
1.8E 01 - 2.6E 01	5	141	3.47	97.92

HISTOGRAM FOR COLUMN 3 (CA PCT.)

5.0E-02 X	N	L	H	B	T	G	ANALYTICAL VALUES
7.0E-02 XXXXXXXXXX							
1.0E-01 XXXXXX							
1.5E-01 XXXXXXXXXXXXXXXXXXXX							
2.0E-01 XXXXXX	0		3	0	0	0	141
3.0E-01 XX	0.0		2.08			0.0	
5.0E-01 XXXXXX				MAXIMUM = 2.00000E 01			
7.0E-01 XXXXXXXXXXXXXXXXXXXX				MINIMUM = 5.00000E-02			
1.0E 00 XXXX				GEOMETRIC MEAN = 6.09705E-01			
1.5E 00 XXXXXX				GEOMETRIC DEVIATION = 5.26495E 00			
2.0E 00 XXX							
3.0E 00 XX							
5.0E 00 XXXXXX							
7.0E 00 XXXXX							
1.0E 01 XXX							
1.5E 01 XX							
2.0E 01 XXX							

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FREQUENCY TABLE FOR COLUMN 4 (TI PCT.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-03 - 2.6E-03	0	0	0.0	0.0
2.6E-03 - 3.8E-03	0	0	0.0	0.0
3.8E-03 - 5.6E-03	0	0	0.0	0.0
5.6E-03 - 8.3E-03	0	0	0.0	0.0
8.3E-03 - 1.2E-02	0	0	0.0	0.0
1.2E-02 - 1.8E-02	0	0	0.0	0.0
1.8E-02 - 2.6E-02	0	0	0.0	0.0
2.6E-02 - 3.8E-02	0	0	0.0	0.0
3.8E-02 - 5.6E-02	0	0	0.0	0.0
5.6E-02 - 8.3E-02	1	1	0.69	0.69
8.3E-02 - 1.2E-01	3	4	2.08	2.78
1.2E-01 - 1.8E-01	9	13	6.25	9.03
1.8E-01 - 2.6E-01	11	24	7.64	16.67
2.6E-01 - 3.8E-01	29	53	20.14	36.81
3.8E-01 - 5.6E-01	38	91	26.39	63.19
5.6E-01 - 8.3E-01	46	137	31.94	95.14
8.3E-01 - 1.2E 00	7	144	4.86	100.00

FREQUENCY TABLE FOR COLUMN 5 (MN PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
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	2	2	1.39	1.39
8.3E 01 - 1.2E 02	4	6	2.78	4.17
1.2E 02 - 1.8E 02	14	20	9.72	13.89
1.8E 02 - 2.6E 02	11	31	7.64	21.53
2.6E 02 - 3.8E 02	40	71	27.78	49.31
3.8E 02 - 5.6E 02	26	97	18.06	67.36
5.6E 02 - 8.3E 02	18	115	12.50	79.86
8.3E 02 - 1.2E 03	21	136	14.58	94.44
1.2E 03 - 1.8E 03	8	144	5.56	100.00

HISTOGRAM FOR COLUMN 5 (MN PPM.)

7.0E 01 X
 1.0E 02 XXX
 1.5E 02 XXXXXXXXXX
 2.0E 02 XXXXXXXXXX
 3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 02 XXXXXXXXXXXXXXXXXXXXXXX
 7.0E 02 XXXXXXXXXXXXXXX
 1.0E 03 XXXXXXXXXXXXXXX
 1.5E 03 XXXXXX

HISTOGRAM FOR COLUMN 4 (TI PCT.)

7.0E-02 X
 1.0E-01 XX
 1.5E-01 XXXXXX
 2.0E-01 XXXXXXXX
 3.0E-01 XXXXXXXXXXXXXXXXXXXX
 5.0E-01 XXXXXXXXXXXXXXXXXXXXXXX
 7.0E-01 XXXXXXXXXXXXXXXXXXXXXXX
 1.0E 00 XXXXX

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

ANALYTICAL
VALUES
0.0 144

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

ANALYTICAL
VALUES
0.0 144

MAXIMUM = 1.00000E 00

MAXIMUM = 1.50000E 03

MINIMUM = 7.00000E-02

MINIMUM = 7.00000E 01

GEOMETRIC MEAN = 4.28589E-01

GEOMETRIC MEAN = 4.10653E 02

GEOMETRIC DEVIATION = 1.77016E 00

GEOMETRIC DEVIATION = 2.05669E 00

FREQUENCY TABLE FOR COLUMN 7 (AS PPM.) *194 samples*

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
1.8E-01 - 2.6E-01	0	0	0.0	0.0
2.6E-01 - 3.8E-01	0	0	0.0	0.0
3.8E-01 - 5.6E-01	0	0	0.0	0.0
5.6E-01 - 8.3E-01	0	0	0.0	0.0
8.3E-01 - 1.2E 00	0	0	0.0	0.0
1.2E 00 - 1.8E 00	0	0	0.0	0.0
1.8E 00 - 2.6E 00	0	0	0.0	0.0
2.6E 00 - 3.8E 00	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	52	52	36.11	36.11
1.2E 01 - 1.8E 01	7	59	4.86	40.97
1.8E 01 - 2.6E 01	23	82	15.97	56.94
2.6E 01 - 3.8E 01	7	89	4.86	61.81
3.8E 01 - 5.6E 01	21	110	14.58	76.39
5.6E 01 - 8.3E 01	5	115	3.47	79.86
8.3E 01 - 1.2E 02	3	118	2.08	81.94

HISTOGRAM FOR COLUMN 7 (AS PPM.)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

1.5E 01 XXXXX

2.0E 01 XXXXXXXXXXXXXXXXXX

3.0E 01 XXXXX

5.0E 01 XXXXXXXXXXXXXXXXX

7.0E 01 XXX

1.0E 02 XX

N	L	H	B	F	G	ANALYTICAL VALUES
4	22	0	0	0	0	118
2.78	15.28			0.0	0.0	

MAXIMUM = 1.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.84357E 01

GEOMETRIC DEVIATION = 1.93859E 00

*69 samples,
sed-metased.
sources*

FREQUENCY TABLE FOR COLUMN 7 (AS PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
1.8E-01 - 2.6E-01	0	0	0.0	0.0
2.6E-01 - 3.8E-01	0	0	0.0	0.0
3.8E-01 - 5.6E-01	0	0	0.0	0.0
5.6E-01 - 8.3E-01	0	0	0.0	0.0
8.3E-01 - 1.2E 00	0	0	0.0	0.0
1.2E 00 - 1.8E 00	0	0	0.0	0.0
1.8E 00 - 2.6E 00	0	0	0.0	0.0
2.6E 00 - 3.8E 00	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	34	34	49.28	49.28
1.2E 01 - 1.8E 01	5	39	7.25	56.52
1.8E 01 - 2.6E 01	10	49	14.49	71.01
2.6E 01 - 3.8E 01	3	52	4.35	75.36
3.8E 01 - 5.6E 01	2	54	2.90	78.26

HISTOGRAM FOR COLUMN 7 (AS PPM.)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 01 XXXXXX
 2.0E 01 XXXXXXXXXX
 3.0E 01 XXXX
 5.0E 01 XXX

N	L	H	S	T	G	ANALYTICAL VALUES
1	14	0	0	0	0	54
1.45	20.29			0.0		0.0

MAXIMUM = 4.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.32083E 01

GEOMETRIC DEVIATION = 1.50692E 00

*75 samples,
granitic sources*

FREQUENCY TABLE FOR COLUMN 7 (AS PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
1.8E-01 - 2.6E-01	0	0	0.0	0.0
2.6E-01 - 3.8E-01	0	0	0.0	0.0
3.8E-01 - 5.6E-01	0	0	0.0	0.0
5.6E-01 - 8.3E-01	0	0	0.0	0.0
8.3E-01 - 1.2E 00	0	0	0.0	0.0
1.2E 00 - 1.8E 00	0	0	0.0	0.0
1.8E 00 - 2.6E 00	0	0	0.0	0.0
2.6E 00 - 3.8E 00	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	18	18	24.00	24.00
1.2E 01 - 1.8E 01	2	20	2.67	26.67
1.8E 01 - 2.6E 01	13	33	17.33	44.00
2.6E 01 - 3.8E 01	4	37	5.33	49.33
3.8E 01 - 5.6E 01	19	56	25.33	74.67
5.6E 01 - 8.3E 01	5	61	6.67	81.33
8.3E 01 - 1.2E 02	3	64	4.00	85.33

HISTOGRAM FOR COLUMN 7 (AS PPM.)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 01 XXX
 2.0E 01 XXXXXXXXXX
 3.0E 01 XXXXX
 5.0E 01 XXXXXXXXX
 7.0E 01 XXXXXX
 1.0E 02 XXXX

N	L	H	S	T	G	ANALYTICAL VALUES
3	8	0	0	0	0	64
4.00	10.67			0.0		0.0

MAXIMUM = 1.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.44257E 01

GEOMETRIC DEVIATION = 2.02322E 00

FREQUENCY TABLE FOR COLUMN 9 (B PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	1	1	0.69	0.69
1.2E 01 - 1.8E 01	0	1	0.0	0.69
1.8E 01 - 2.6E 01	5	6	3.47	4.17
2.6E 01 - 3.8E 01	19	25	13.19	17.36
3.8E 01 - 5.6E 01	30	55	20.83	38.19
5.6E 01 - 8.3E 01	51	106	35.42	73.61
8.3E 01 - 1.2E 02	25	131	17.36	90.97
1.2E 02 - 1.8E 02	13	144	9.03	100.00

HISTOGRAM FOR COLUMN 9 (B PPM.)

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

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	144
0.0	0.0					

MAXIMUM = 1.50000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 6.28215E 01

GEOMETRIC DEVIATION = 1.67124E 00

FREQUENCY TABLE FOR COLUMN 10 (BA PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
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	11	11	7.64	7.64
1.2E 02 - 1.8E 02	19	30	13.19	20.83
1.8E 02 - 2.6E 02	3	33	2.08	22.92
2.6E 02 - 3.8E 02	46	79	31.94	54.86
3.8E 02 - 5.6E 02	16	95	11.11	65.97
5.6E 02 - 8.3E 02	42	137	29.17	95.14
8.3E 02 - 1.2E 03	6	143	4.17	99.31

HISTOGRAM FOR COLUMN 10 (BA PPM.)

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

N	L	H	B	T	G	ANALYTICAL VALUES
0	1	0	0	0	0	143
0.0	0.69					

MAXIMUM = 1.00000E 03

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 3.56064E 02

GEOMETRIC DEVIATION = 1.93438E 00

FREQUENCY TABLE FOR COLUMN 11 (BE PPM.) 144 samples

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
		CUM	FREQ	FREQ CUM
8.3E-01 - 1.2E 00	32	32	22.22	22.22
1.2E 00 - 1.8E 00	34	66	23.61	45.83
1.8E 00 - 2.6E 00	22	88	15.28	61.11
2.6E 00 - 3.8E 00	20	108	13.89	75.00
3.8E 00 - 5.6E 00	10	118	6.94	81.94
5.6E 00 - 8.3E 00	6	124	4.17	86.11
8.3E 00 - 1.2E 01	3	127	2.08	88.19
1.2E 01 - 1.8E 01	3	130	2.08	90.28
1.8E 01 - 2.6E 01	0	130	0.0	90.28
2.6E 01 - 3.8E 01	0	130	0.0	90.28
3.8E 01 - 5.6E 01	0	130	0.0	90.28
5.6E 01 - 8.3E 01	1	131	0.69	90.97

HISTOGRAM FOR COLUMN 11 (BE PPM.)

1.0E 00 XXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 00 XXXXXXXXXXXXXXXXX
 3.0E 00 XXXXXXXXXXXXXXXXX
 5.0E 00 XXXXXXXX
 7.0E 00 XXXX
 1.0E 01 XX
 1.5E 01 XX
 2.0E 01
 3.0E 01
 5.0E 01
 7.0E 01 X

ANALYTICAL VALUES					
N	L	H	B	T	G
4	9	0	0	0	0
2.78	6.25			0.0	131

MAXIMUM = 7.00000E 01

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 2.11388E 00

GEOMETRIC DEVIATION = 2.09908E 00

*69 samples,
sed.-metased.
sources*

FREQUENCY TABLE FOR COLUMN 11 (BE PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
8.3E-01 - 1.2E 00	26	26	37.68	37.68
1.2E 00 - 1.8E 00	19	45	27.54	65.22
1.8E 00 - 2.6E 00	12	57	17.39	82.61
2.6E 00 - 3.8E 00	3	60	4.35	86.96
3.8E 00 - 5.6E 00	0	60	0.0	86.96
5.6E 00 - 8.3E 00	1	61	1.45	88.41

HISTOGRAM FOR COLUMN 11 (BE PPM.)

1.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

2.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXX

3.0E 00 XXXX

5.0E 00

7.0E 00 X

N	L	H	B	T	G	ANALYTICAL VALUES
3	5	0	0	0	0	61
4.35	7.25			0.0	0.0	

MAXIMUM = 7.00000E 00

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 1.41705E 00

GEOMETRIC DEVIATION = 1.46933E 00

*75 samples,
granitic sources*

FREQUENCY TABLE FOR COLUMN 11 (BE PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
8.3E-01 - 1.2E 00	6	6	8.00	8.00
1.2E 00 - 1.8E 00	15	21	20.00	28.00
1.8E 00 - 2.6E 00	10	31	13.33	41.33
2.6E 00 - 3.8E 00	17	48	22.67	64.00
3.8E 00 - 5.6E 00	10	58	13.33	77.33
5.6E 00 - 8.3E 00	5	63	6.67	84.00
8.3E 00 - 1.2E 01	3	66	4.00	88.00
1.2E 01 - 1.8E 01	3	69	4.00	92.00
1.8E 01 - 2.6E 01	0	69	0.0	92.00
2.6E 01 - 3.8E 01	0	69	0.0	92.00
3.8E 01 - 5.6E 01	0	69	0.0	92.00
5.6E 01 - 8.3E 01	1	70	1.33	93.33

HISTOGRAM FOR COLUMN 11 (BE PPM.)

1.0E 00 XXXXXXXX

1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXX

2.0E 00 XXXXXXXXXXXXXXXXX

3.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXX

5.0E 00 XXXXXXXXXXXXXXXXX

7.0E 00 XXXXXXXX

1.0E 01 XXXX

1.5E 01 XXXX

2.0E 01

3.0E 01

5.0E 01

7.0E 01 X

N	L	H	B	T	G	ANALYTICAL VALUES
1	4	0	0	0	0	70
1.33	5.33			0.0	0.0	

MAXIMUM = 7.00000E 01

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 2.99532E 00

GEOMETRIC DEVIATION = 2.22902E 00

FREQUENCY TABLE FOR COLUMN 13 (CO PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	7	7	4.86	4.86
5.6E 00 - 8.3E 00	8	15	5.56	10.42
8.3E 00 - 1.2E 01	32	47	22.22	32.64
1.2E 01 - 1.8E 01	29	76	20.14	52.78
1.8E 01 - 2.6E 01	33	109	22.92	75.69
2.6E 01 - 3.8E 01	10	119	6.94	82.64
3.8E 01 - 5.6E 01	1	120	0.69	83.33

HISTOGRAM FOR COLUMN 13 (CO PPM.)

5.0E 00 XXXXX

7.0E 00 XXXXX

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

1.5E 01 XXXXXXXXxxxxxxxxxxxxxx

2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

3.0E 01 XXXXXX

5.0E 01 X

N	L	H	B	T	G	ANALYTICAL VALUES
10	14	0	0	0	0	120
6.94	9.72			0.0	0.0	

MAXIMUM = 5.00000E 01

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.39004E 01

GEOMETRIC DEVIATION = 1.60520E 00

FREQUENCY TABLE FOR COLUMN 14 (CR PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
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	11	11	7.64	7.64
1.2E 01 - 1.8E 01	5	16	3.47	11.11
1.8E 01 - 2.6E 01	2	18	1.39	12.50
2.6E 01 - 3.8E 01	22	40	15.28	27.78
3.8E 01 - 5.6E 01	16	56	11.11	38.89
5.6E 01 - 8.3E 01	42	98	29.17	68.06
8.3E 01 - 1.2E 02	13	111	9.03	77.08
1.2E 02 - 1.8E 02	28	139	19.44	96.53
1.8E 02 - 2.6E 02	2	141	1.39	97.92
2.6E 02 - 3.8E 02	1	142	0.69	98.61

HISTOGRAM FOR COLUMN 14 (CR PPM.)

1.0E 01 XXXXXXXX

1.5E 01 XXX

2.0E 01 X

3.0E 01 XXXXXXXXXXXXXXXX

5.0E 01 XXXXXXXXXX

7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

1.0E 02 XXXXXXXX

1.5E 02 XXXXXXXXXXXXXXXX

2.0E 02 X

3.0E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
0	2	0	0	0	0	142
0.0	1.39			0.0	0.0	

MAXIMUM = 3.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 5.82438E 01

GEOMETRIC DEVIATION = 2.23994E 00

FREQUENCY TABLE FOR COLUMN 15 (CU PPM.) 144 samples

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	6	6	4.17	4.17
5.6E 00 - 8.3E 00	10	16	6.94	11.11
8.3E 00 - 1.2E 01	17	33	11.81	22.92
1.2E 01 - 1.8E 01	27	60	18.75	41.67
1.8E 01 - 2.6E 01	18	78	12.50	54.17
2.6E 01 - 3.8E 01	31	109	21.53	75.69
3.8E 01 - 5.6E 01	12	121	8.33	84.03
5.6E 01 - 8.3E 01	8	129	5.56	89.58
8.3E 01 - 1.2E 02	3	132	2.08	91.67
1.2E 02 - 1.8E 02	1	133	0.69	92.36

HISTOGRAM FOR COLUMN 15 (CU PPM.)

5.0E 00 XXXX
 7.0E 00 XXXXXXXX
 1.0E 01 XXXXXXXXXXXX
 1.5E 01 XXXXXXXXXXXXXXXXXX
 2.0E 01 XXXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXXX
 7.0E 01 XXXXXX
 1.0E 02 XX
 1.5E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
0	11	0	0	0	0	133
0.0	7.64		0.0	0.0	0.0	

MAXIMUM = 1.50000E 02

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 2.03123E 01

GEOMETRIC DEVIATION = 2.09813E 00

*69 samples,
sed-metased
sources*

FREQUENCY TABLE FOR COLUMN 15 (CU PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	0	0	0.0	0.0
5.6E 00 - 8.3E 00	1	1	1.45	1.45
8.3E 00 - 1.2E 01	7	8	10.14	11.59
1.2E 01 - 1.8E 01	16	24	23.19	34.78
1.8E 01 - 2.6E 01	11	35	15.94	50.72
2.6E 01 - 3.8E 01	13	48	18.84	69.57
3.8E 01 - 5.6E 01	8	56	11.59	81.16
5.6E 01 - 8.3E 01	7	63	10.14	91.30
8.3E 01 - 1.2E 02	2	65	2.90	94.20

HISTOGRAM FOR COLUMN 15 (CU PPM.)

7.0E 00 X
1.0E 01 XXXXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXXXXXXXXX
2.0E 01 XXXXXXXXXXXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXXX
7.0E 01 XXXXXXXXXX
1.0E 02 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
0	4	0	0	0	0	65
0.0	5.80			0.0	0.0	

MAXIMUM = 1.00000E 02

MINIMUM = 7.00000E 00

GEOMETRIC MEAN = 2.48388E 01

GEOMETRIC DEVIATION = 1.93210E 00

*75 samples,
granitic sources*

FREQUENCY TABLE FOR COLUMN 15 (CU PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
3.8E 00 - 5.6E 00	6	6	8.00	8.00
5.6E 00 - 8.3E 00	9	15	12.00	20.00
8.3E 00 - 1.2E 01	10	25	13.33	33.33
1.2E 01 - 1.8E 01	11	36	14.67	48.00
1.8E 01 - 2.6E 01	7	43	9.33	57.33
2.6E 01 - 3.8E 01	18	61	24.00	81.33
3.8E 01 - 5.6E 01	4	65	5.33	86.67
5.6E 01 - 8.3E 01	1	66	1.33	88.00
8.3E 01 - 1.2E 02	1	67	1.33	89.33
1.2E 02 - 1.8E 02	1	68	1.33	90.67

HISTOGRAM FOR COLUMN 15 (CU PPM.)

5.0E 00 XXXXXXXX
7.0E 00 XXXXXXXXXXXXXXX
1.0E 01 XXXXXXXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXX
2.0E 01 XXXXXXXX
3.0E 01 XXXXXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXX
7.0E 01 X
1.0E 02 X
1.5E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
0	7	0	0	0	0	68
0.0	9.33			0.0	0.0	

MAXIMUM = 1.50000E 02

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.67589E 01

GEOMETRIC DEVIATION = 2.15676E 00

FREQUENCY TABLE FOR COLUMN 16 (LA PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
1.8E 01 - 2.6E 01	31	31	21.53	21.53
2.6E 01 - 3.8E 01	30	61	20.83	42.36
3.8E 01 - 5.6E 01	33	94	22.92	65.28
5.6E 01 - 8.3E 01	12	106	8.33	73.61
8.3E 01 - 1.2E 02	7	113	4.86	78.47
1.2E 02 - 1.8E 02	3	116	2.08	80.56

HISTOGRAM FOR COLUMN 16 (LA PPM.)

2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 7.0E 01 XXXXXXXX
 1.0E 02 XXXXX
 1.5E 02 XX

N	L	H	B	T	G	ANALYTICAL VALUES
4	24	0	0	0	0	116
2.78	16.67			0.0	0.0	

MAXIMUM = 1.50000E 02

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 3.80946E 01

GEOMETRIC DEVIATION = 1.71729E 00

FREQUENCY TABLE FOR COLUMN 18 (NB PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	68	68	47.22	47.22
1.2E 01 - 1.8E 01	39	107	27.08	74.31
1.8E 01 - 2.6E 01	10	117	6.94	81.25
2.6E 01 - 3.8E 01	5	122	3.47	84.72
3.8E 01 - 5.6E 01	0	122	0.0	84.72
5.6E 01 - 8.3E 01	0	122	0.0	84.72
8.3E 01 - 1.2E 02	0	122	0.0	84.72
1.2E 02 - 1.8E 02	1	123	0.69	85.42

HISTOGRAM FOR COLUMN 18 (NB PPM.)

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

N	L	H	B	T	G	ANALYTICAL VALUES
0	21	0	0	0	0	123
0.0	14.58			0.0	0.0	

MAXIMUM = 1.50000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.28604E 01

GEOMETRIC DEVIATION = 1.44939E 00

FREQUENCY TABLE FOR COLUMN 19 (NI PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT CUM
3.8E 00 - 5.6E 00	6	6	4.17	4.17
5.6E 00 - 8.3E 00	1	7	0.69	4.86
8.3E 00 - 1.2E 01	5	12	3.47	8.33
1.2E 01 - 1.8E 01	10	22	6.94	15.28
1.8E 01 - 2.6E 01	7	29	4.86	20.14
2.6E 01 - 3.8E 01	57	86	39.58	59.72
3.8E 01 - 5.6E 01	26	112	18.06	77.78
5.6E 01 - 8.3E 01	18	130	12.50	90.28
8.3E 01 - 1.2E 02	9	139	6.25	96.53
1.2E 02 - 1.8E 02	4	143	2.78	99.31

HISTOGRAM FOR COLUMN 19 (NI PPM.)

5.0E 00 XXXX
 7.0E 00 X
 1.0E 01 XXX
 1.5E 01 XXXXXX
 2.0E 01 XXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXXXXXXXXXXXX
 7.0E 01 XXXXXXXXXXXXXXXX
 1.0E 02 XXXXXX
 1.5E 02 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
1	0	0	0	0	0	143

MAXIMUM = 1.5000E 02

MINIMUM = 5.0000E 00

GEOMETRIC MEAN = 3.41040E 01

GEOMETRIC DEVIATION = 2.05974E 00

FREQUENCY TABLE FOR COLUMN 20 (PB PPM.) *144 samples*

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
		CUM	FREQ	FREQ CUM
8.3E 00 - 1.2E 01	15	15	10.42	10.42
1.2E 01 - 1.8E 01	25	40	17.36	27.78
1.8E 01 - 2.6E 01	24	64	16.67	44.44
2.6E 01 - 3.8E 01	34	98	23.61	68.06
3.8E 01 - 5.6E 01	5	103	3.47	71.53
5.6E 01 - 8.3E 01	13	116	9.03	80.56
8.3E 01 - 1.2E 02	5	121	3.47	84.03
1.2E 02 - 1.8E 02	12	133	8.33	92.36
1.8E 02 - 2.6E 02	1	134	0.69	93.06
2.6E 02 - 3.8E 02	3	137	2.08	95.14
3.8E 02 - 5.6E 02	2	139	1.39	96.53

HISTOGRAM FOR COLUMN 20 (PB PPM.)

1.0E 01 XXXXXXXXXXXX
 1.5E 01 XXXXXXXXXXXXXXXXX
 2.0E 01 XXXXXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXX
 7.0E 01 XXXXXXXXX
 1.0E 02 XXX
 1.5E 02 XXXXXX
 2.0E 02 X
 3.0E 02 XX
 5.0E 02 X

N	I	H	B	T	G	ANALYTICAL VALUES
0	5	0	0	0	0	139
0.0	3.47			0.0	0.0	

MAXIMUM = 5.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 3.21897E 01

GEOMETRIC DEVIATION = 2.51793E 00

*6.9 samples,
sed-metased.
sources*

FREQUENCY TABLE FOR COLUMN 20 { PB PPM. }

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
	CUM	FREQ	FREQ CUM	
8.3E 00 - 1.2E 01	13	13	18.84	18.84
1.2E 01 - 1.8E 01	16	29	23.19	42.03
1.8E 01 - 2.6E 01	16	45	23.19	65.22
2.6E 01 - 3.8E 01	18	63	26.09	91.30
3.8E 01 - 5.6E 01	0	63	0.0	91.30
5.6E 01 - 8.3E 01	1	64	1.45	92.75
8.3E 01 - 1.2E 02	0	64	0.0	92.75
1.2E 02 - 1.8E 02	1	65	1.45	94.20

HISTOGRAM FOR COLUMN 20 { PB PPM. }

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

N	L	H	B	T	G	ANALYTICAL VALUES
0	4	0	0	0	0	65
0.0	5.80		0.0	0.0		

MAXIMUM = 1.50000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.90835E 01

GEOMETRIC DEVIATION = 1.64921E 00

*75 samples,
granitic sources*

FREQUENCY TABLE FOR COLUMN 20 { PB PPM. }

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
	CUM	FREQ	FREQ CUM	
8.3E 00 - 1.2E 01	2	2	2.67	2.67
1.2E 01 - 1.8E 01	9	11	12.00	14.67
1.8E 01 - 2.6E 01	8	19	10.67	25.33
2.6E 01 - 3.8E 01	16	35	21.33	46.67
3.8E 01 - 5.6E 01	5	40	6.67	53.33
5.6E 01 - 8.3E 01	12	52	16.00	69.33
8.3E 01 - 1.2E 02	5	57	6.67	76.00
1.2E 02 - 1.8E 02	11	68	14.67	90.67
1.8E 02 - 2.6E 02	1	69	1.33	92.00
2.6E 02 - 3.8E 02	3	72	4.00	96.00
3.8E 02 - 5.6E 02	2	74	2.67	98.67

HISTOGRAM FOR COLUMN 20 { PB PPM. }

1.0E 01 XXX
 1.5E 01 XXXXXXXXXXXXXXX
 2.0E 01 XXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXX
 7.0E 01 XXXXXXXXXXXXXXX
 1.0E 02 XXXXXXXX
 1.5E 02 XXXXXXXXXX
 2.0E 02 X
 3.0E 02 XXXXX
 5.0E 02 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
0	1	0	0	0	0	74
0.0	1.33		0.0	0.0		

MAXIMUM = 5.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 5.09519E 01

GEOMETRIC DEVIATION = 2.63059E 00

* FREQUENCY TABLE FOR COLUMN 21 (SB PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
	CUM	FREQ	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 00	38	38	30.40	30.40
1.2E 00 - 1.8E 00	0	38	0.0	30.40
1.8E 00 - 2.6E 00	31	69	24.80	55.20
2.6E 00 - 3.8E 00	16	85	12.80	68.00
3.8E 00 - 5.6E 00	7	92	5.60	73.60
5.6E 00 - 8.3E 00	3	95	2.40	76.00

HISTOGRAM FOR COLUMN 21 (SB PPM.)

1.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 00
 2.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 00 XXXXXXXXXX
 5.0E 00 XXXXX
 7.0E 00 XX

N	L	H	B	T	G	ANALYTICAL VALUES
1	29	0	19	0	0	95
0.80	23.20					

MAXIMUM = 6.00000E 00

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 1.76816E 00

GEOMETRIC DEVIATION = 1.69936E 00

FREQUENCY TABLE FOR COLUMN 22 (SC PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
	CUM	FREQ	FREQ CUM	
3.8E 00 - 5.6E 00	15	15	10.42	10.42
5.6E 00 - 8.3E 00	28	43	19.44	29.86
8.3E 00 - 1.2E 01	29	72	20.14	50.00
1.2E 01 - 1.8E 01	52	124	36.11	86.11
1.8E 01 - 2.6E 01	5	129	3.47	89.58

HISTOGRAM FOR COLUMN 22 (SC PPM.)

5.0E 00 XXXXXXXXXXXXXXXXX
 7.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 01 XXX
 2.5E 01 XXXX

N	L	H	B	T	G	ANALYTICAL VALUES
3	12	0	0	0	0	129
2.08	8.33					

MAXIMUM = 2.00000E 01

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.03280E 01

GEOMETRIC DEVIATION = 1.50786E 00

* Analytical values for antimony are by the colorimetric method and were reported as whole numbers only.
 Consequently, the value 1.5 ppm does not exist in the data, and the histogram appears to be bimodal when the values are recast into the six-step scale.

FREQUENCY TABLE FOR COLUMN 23 (SN PPM.) *194 samples*

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	7	7	4.86	4.86
1.2E 01 - 1.8E 01	11	18	7.64	12.50
1.8E 01 - 2.6E 01	1	19	0.69	13.19
2.6E 01 - 3.8E 01	7	26	4.86	18.06
3.8E 01 - 5.6E 01	0	26	0.0	18.06
5.6E 01 - 8.3E 01	3	29	2.08	20.14
8.3E 01 - 1.2E 02	0	29	0.0	20.14
1.2E 02 - 1.8E 02	0	29	0.0	20.14
1.8E 02 - 2.6E 02	0	29	0.0	20.14
2.6E 02 - 3.8E 02	1	30	0.69	20.83

HISTOGRAM FOR COLUMN 23 (SN PPM.)

1.0E 01 XXXXX

1.5E 01 XXXXXXXX

2.0E 01 X

3.0E 01 XXXXX

5.0E 01

7.0E 01 XX

1.0E 02

1.5E 02

2.0E 02

3.0E 02 X

N	L	H	S	T	G	ANALYTICAL VALUES
102	12	0	0	0	0	30
70.83	8.33			0.0	0.0	

MAXIMUM = 3.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.08771E 01

GEOMETRIC DEVIATION = 2.17029E 00

*69 samples,
sed.-metased.
sources*

FREQUENCY TABLE FOR COLUMN 23 (SN PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
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	1	1	1.45	1.45

HISTOGRAM FOR COLUMN 23 (SN PPM.)

7.0E 01 X

N	L	H	B	T	G	ANALYTICAL VALUES
68	0	0	0	0	0	1
98.55	0.0			0.0	0.0	

MAXIMUM = 7.00000E 01

MINIMUM = 7.00000E 01

GEOMETRIC MEAN = 6.99999E 01

GEOMETRIC DEVIATION = 9.99900E 48

*75 samples,
granitic sources*

FREQUENCY TABLE FOR COLUMN 23 (SN PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	7	7	9.33	9.33
1.2E 01 - 1.8E 01	11	18	14.67	24.00
1.8E 01 - 2.6E 01	1	19	1.33	25.33
2.6E 01 - 3.8E 01	7	26	9.33	34.67
3.8E 01 - 5.6E 01	0	26	0.0	34.67
5.6E 01 - 8.3E 01	2	28	2.67	37.33
8.3E 01 - 1.2E 02	0	28	0.0	37.33
1.2E 02 - 1.8E 02	0	28	0.0	37.33
1.8E 02 - 2.6E 02	0	28	0.0	37.33
2.6E 02 - 3.8E 02	1	29	1.33	38.67

HISTOGRAM FOR COLUMN 23 (SN PPM.)

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

N	L	H	B	T	G	ANALYTICAL VALUES
34	12	0	0	0	0	29
45.33	16.00			0.0	0.0	

MAXIMUM = 3.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.00241E 01

GEOMETRIC DEVIATION = 2.12444E 00

FREQUENCY TABLE FOR COLUMN 24 (SR PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
	CUM	FREQ	FREQ CUM	
8.3E 01 - 1.2E 02	44	44	30.56	30.56
1.2E 02 - 1.8E 02	18	62	12.50	43.06
1.8E 02 - 2.6E 02	4	66	2.78	45.83
2.6E 02 - 3.8E 02	9	75	6.25	52.08
3.8E 02 - 5.6E 02	2	77	1.39	53.47
5.6E 02 - 8.3E 02	2	79	1.39	54.86

HISTOGRAM FOR COLUMN 24 (SR PPM.)

1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXX

1.5E 02 XXXXXXXXXXXXXXXX

2.0E 02 XXX

3.0E 02 XXXXXX

5.0E 02 X

7.0E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
1	64	0	0	0	0	79

0.69 44.44 0.0 0.0

MAXIMUM = 7.00000E 02

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 1.40866E 02

GEOMETRIC DEVIATION = 1.64283E 00

FREQUENCY TABLE FOR COLUMN 25 (V PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT	PERCENT
	CUM	FREQ	FREQ CUM	
8.3E 00 - 1.2E 01	0	0	0.0	0.0
1.2E 01 - 1.8E 01	3	3	2.08	2.08
1.8E 01 - 2.6E 01	9	12	6.25	8.33
2.6E 01 - 3.8E 01	23	35	15.97	24.31
3.8E 01 - 5.6E 01	19	54	13.19	37.50
5.6E 01 - 8.3E 01	23	77	15.97	53.47
8.3E 01 - 1.2E 02	19	96	13.19	66.67
1.2E 02 - 1.8E 02	31	127	21.53	88.19
1.8E 02 - 2.6E 02	15	142	10.42	98.61
2.6E 02 - 3.8E 02	2	144	1.39	100.00

HISTOGRAM FOR COLUMN 25 (V PPM.)

1.5E 01 XX

2.0E 01 XXXXXX

3.0E 01 XXXXXXXXXXXXXXXXX

5.0E 01 XXXXXXXXXXXXXXXX

7.0E 01 XXXXXXXXXXXXXXXXX

1.0E 02 XXXXXXXXXXXXXXXX

1.5E 02 XXXXXXXXXXXXXXXXX

2.0E 02 XXXXXXXXXXXXXXX

3.0E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	144

0.0 0.0 0.0 0.0 0.0 0.0

MAXIMUM = 3.00000E 02

MINIMUM = 1.50000E 01

GEOMETRIC MEAN = 7.36303E 01

GEOMETRIC DEVIATION = 2.11997E 00

FREQUENCY TABLE FOR COLUMN 27 (Y PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
8.3E 00 - 1.2E 01	12	12	8.33	8.33
1.2E 01 - 1.8E 01	37	49	25.69	34.03
1.8E 01 - 2.6E 01	42	91	29.17	63.19
2.6E 01 - 3.8E 01	28	119	19.44	82.64
3.8E 01 - 5.6E 01	11	130	7.64	90.28
5.6E 01 - 8.3E 01	10	140	6.94	97.22
8.3E 01 - 1.2E 02	1	141	0.69	97.92
1.2E 02 - 1.8E 02	1	142	0.69	98.61
1.8E 02 - 2.6E 02	1	143	0.69	99.31

HISTOGRAM FOR COLUMN 27 (Y PPM.)

1.0E 01 XXXXXXXXX
 1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXXX
 7.0E 01 XXXXXXXX
 1.0E 02 X
 1.5E 02 X
 2.0E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	1	143
0.0	0.0			0.0	0.69	

MAXIMUM = 2.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 2.31511E 01

GEOMETRIC DEVIATION = 1.78045E 00

FREQUENCY TABLE FOR COLUMN 29 (ZR PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
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	1	1	0.69	0.69
2.6E 01 - 3.8E 01	1	2	0.69	1.39
3.8E 01 - 5.6E 01	1	3	0.69	2.08
5.6E 01 - 8.3E 01	21	24	14.58	16.67
8.3E 01 - 1.2E 02	16	40	11.11	27.78
1.2E 02 - 1.8E 02	14	54	9.72	37.50
1.8E 02 - 2.6E 02	21	75	14.58	52.08
2.6E 02 - 3.8E 02	35	110	24.31	76.39
3.8E 02 - 5.6E 02	16	126	11.11	87.50
5.6E 02 - 8.3E 02	6	132	4.17	91.67
8.3E 02 - 1.2E 03	10	142	6.94	98.61

HISTOGRAM FOR COLUMN 29 (ZR PPM.)

2.0E 01 X
 3.0E 01 X
 5.0E 01 X
 7.0E 01 XXXXXXXXXXXXXXXXX
 1.0E 02 XXXXXXXXX
 1.5E 02 XXXXXXXXX
 2.0E 02 XXXXXXXXXXXXXXXXX
 3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 02 XXXXXXXXX
 7.0E 02 XXXX
 1.0E 03 XXXXXXXX

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	2	142
0.0	0.0			0.0	0.69	

MAXIMUM = 1.00000E 03

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 2.14147E 02

GEOMETRIC DEVIATION = 2.28909E 00

FREQUENCY TABLE FOR COLUMN 28 (ZN PPM.) 144 samples

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
2.1E 01 - 3.0E 01	22	22	15.38	15.38
3.0E 01 - 4.4E 01	27	49	18.88	34.27
4.4E 01 - 6.5E 01	37	86	25.87	60.14
6.5E 01 - 9.6E 01	25	111	17.48	77.62
9.6E 01 - 1.4E 02	6	117	4.20	81.82
1.4E 02 - 2.1E 02	4	121	2.80	84.62
2.1E 02 - 3.0E 02	1	122	0.70	85.31
3.0E 02 - 4.4E 02	1	123	0.70	86.01

HISTOGRAM FOR COLUMN 28 (ZN PPM.)

2.5E 01 XXXXXXXXXXXXXXXXX

3.7E 01 XXXXXXXXXXXXXXXXXXXX

5.4E 01 XXXXXXXXXXXXXXXXXXXXXXX

7.9E 01 XXXXXXXXXXXXXXXXXXXX

1.2E 02 XXX

1.7E 02 XXX

2.5E 02 X

3.7E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
1	19	0	1	0	0	123
0.70	13.29			0.0	0.0	

MAXIMUM = 4.00000E 02

MINIMUM = 2.50000E 01

GEOMETRIC MEAN = 5.30502E 01

GEOMETRIC DEVIATION = 1.65615E 00

*69 samples,
Sed-metased.
sources*

FREQUENCY TABLE FOR COLUMN 28 (ZN PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
2.1E 01 - 3.0E 01	8	8	11.76	11.76
3.0E 01 - 4.4E 01	14	22	20.59	32.35
4.4E 01 - 6.5E 01	20	42	29.41	61.76
6.5E 01 - 9.6E 01	15	57	22.06	83.82
9.6E 01 - 1.4E 02	2	59	2.94	86.76
1.4E 02 - 2.1E 02	1	60	1.47	88.24

HISTOGRAM FOR COLUMN 28 (ZN PPM.)

2.5E 01 XXXXXXXXXXXXXXX
 3.7E 01 XXXXXXXXXXXXXXXXXXXXXXX
 5.4E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 7.9E 01 XXXXXXXXXXXXXXXXXXXXXXX
 1.2E 02 XXX
 1.7E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
0	8	0	1	0	0	60
0.0	11.76			0.0	0.0	

MAXIMUM = 1.60000E 02

MINIMUM = 2.50000E 01

GEOMETRIC MEAN = 5.11490E 01

GEOMETRIC DEVIATION = 1.48741E 00

*75 samples,
granitic sources*

FREQUENCY TABLE FOR COLUMN 28 (ZN PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ CUM	PERCENT	PERCENT FREQ CUM
2.1E 01 - 3.0E 01	14	14	18.67	18.67
3.0E 01 - 4.4E 01	13	27	17.33	36.00
4.4E 01 - 6.5E 01	17	44	22.67	58.67
6.5E 01 - 9.6E 01	10	54	13.33	72.00
9.6E 01 - 1.4E 02	4	58	5.33	77.33
1.4E 02 - 2.1E 02	3	61	4.00	81.33
2.1E 02 - 3.0E 02	1	62	1.33	82.67
3.0E 02 - 4.4E 02	1	63	1.33	84.00

HISTOGRAM FOR COLUMN 28 (ZN PPM.)

2.5E 01 XXXXXXXXXXXXXXX
 3.7E 01 XXXXXXXXXXXXXXX
 5.4E 01 XXXXXXXXXXXXXXX
 7.9E 01 XXXXXXXXXXXXXXX
 1.2E 02 XXXX
 1.7E 02 XXX
 2.5E 02 X
 3.7E 02 X

N	L	H	B	T	G	ANALYTICAL VALUES
1	11	0	0	0	0	63
1.33	14.67		0.0	0.0	0.0	

MAXIMUM = 4.00000E 02

MINIMUM = 2.50000E 01

GEOMETRIC MEAN = 5.49267E 01

GEOMETRIC DEVIATION = 1.80484E 00

FREQUENCY TABLE FOR COLUMN 30 (HG PPM.)

LIMITS LOWER - UPPER	FREQ	FREQ	PERCENT FREQ	PERCENT FREQ CUM
		CUM		
8.3E-03 - 1.2E-02	9	9	6.29	6.29
1.2E-02 - 1.8E-02	0	9	0.0	6.29
1.8E-02 - 2.6E-02	19	28	13.29	19.58
2.6E-02 - 3.8E-02	15	43	10.49	30.07
3.8E-02 - 5.6E-02	13	56	9.09	39.16
5.6E-02 - 8.3E-02	15	71	10.49	49.65
8.3E-02 - 1.2E-01	13	84	9.09	58.74
1.2E-01 - 1.8E-01	6	90	4.20	62.94
1.8E-01 - 2.6E-01	9	99	6.29	69.23
2.6E-01 - 3.8E-01	2	101	1.40	70.63
3.8E-01 - 5.6E-01	2	103	1.40	72.03
5.6E-01 - 8.3E-01	0	103	0.0	72.03
8.3E-01 - 1.2E 00	0	103	0.0	72.03
1.2E 00 - 1.8E 00	1	104	0.70	72.73

HISTOGRAM FOR COLUMN 30 (HG PPM.)

1.0E-02 XXXXXX
 1.5E-02
 2.0E-02 XXXXXXXXXXXXXXXX
 3.0E-02 XXXXXXXXXXXX
 5.0E-02 XXXXXXXXX
 7.0E-02 XXXXXXXXX
 1.0E-01 XXXXXXXXX
 1.5E-01 XXXX
 2.0E-01 XXXXXX
 3.0E-01 X
 5.0E-01 X
 7.0E-01
 1.0E 00
 1.5E 00 X

ANALYTICAL VALUES					
N	L	H	B	T	G
0	39	0	1	0	0
0.0	27.27			0.0	104

MAXIMUM = 1.30000E 00

MINIMUM = 1.00000E-02 GEOMETRIC DEVIATION = 2.74297E 00

GEOMETRIC MEAN = 5.18910E-02

Table 3
A470 STATISTICAL SUMMARY 144 SAMPLES

DATE 4/30/70

ELEMENT	N	L	H	B	T	ANALYTICAL VALUES	
						G	
FE PCT.	0	0	0	0	0	0	144
MG PCT.	0	0	0	0	0	0	144
CA PCT.	0	3	0	0	0	0	141
TI PCT.	0	0	0	0	0	0	144
MN PPM.	0	0	0	0	0	0	144
AG PPM.	126	17	0	0	0	0	1
AS PPM.	4	22	0	0	0	0	118
AU PPM.	0	139	0	1	0	0	4
B PPM.	0	0	0	0	0	0	144
BA PPM.	0	1	0	0	0	0	143
BE PPM.	4	9	0	0	0	0	131
BI PPM.	135	8	0	0	0	0	1
CO PPM.	10	14	0	0	0	0	120
CR PPM.	0	2	0	0	0	0	142
CU PPM.	0	11	0	0	0	0	133
LA PPM.	4	24	0	0	0	0	116
MO PPM.	64	74	0	0	0	0	6
NB PPM.	0	21	0	0	0	0	123
NI PPM.	1	0	0	0	0	0	143
PB PPM.	0	5	0	0	0	0	139
SB PPM.	1	29	0	19	0	0	95
SC PPM.	3	12	0	0	0	0	129
SN PPM.	102	12	0	0	0	0	30
SR PPM.	1	64	0	0	0	0	79
V PPM.	0	0	0	0	0	0	144
W PPM.	132	9	0	0	0	0	3
Y PPM.	0	0	0	0	0	1	143
ZN PPM.	1	19	0	1	0	0	123
ZR PPM.	0	0	0	0	0	2	142
HG PPM.	0	39	0	1	0	0	104

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS			
			144 SAMPLES AND	144 ANALYTICAL VALUES.		
FE PCT.	3.417728	1.62	144 SAMPLES AND	144 ANALYTICAL VALUES.		
MG PCT.	0.898700	1.80	144 SAMPLES AND	144 ANALYTICAL VALUES.		
CA PCT.	0.566757	5.59	3 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	141 REPORTED VALUES.	
TI PCT.	0.428589	1.77	144 SAMPLES AND	144 ANALYTICAL VALUES.		
MN PPM.	410.647705	2.06	144 SAMPLES AND	144 ANALYTICAL VALUES.		
AG PPM.	*****	*****	143 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES. NO COMPUTATIONS.	
AS PPM.	6.684425	9.67	26 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	118 REPORTED VALUES.	
AU PPM.	*****	*****	139 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	4 REPORTED VALUES. NO COMPUTATIONS.	
B PPM.	62.821411	1.67	144 SAMPLES AND	144 ANALYTICAL VALUES.		
BA PPM.	348.340332	2.03	1 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	143 REPORTED VALUES.	
BE PPM.	1.868158	2.26	13 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	131 REPORTED VALUES.	
BI PPM.	*****	*****	143 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES. NO COMPUTATIONS.	
CO PPM.	10.565083	2.14	24 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	120 REPORTED VALUES.	
CR PPM.	55.891846	2.39	2 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	142 REPORTED VALUES.	
CU PPM.	17.381454	2.46	11 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	133 REPORTED VALUES.	
LA PPM.	30.459793	1.97	28 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	116 REPORTED VALUES.	
MO PPM.	*****	*****	138 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	6 REPORTED VALUES. NO COMPUTATIONS.	
NB PPM.	11.636574	1.53	21 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	123 REPORTED VALUES.	
NI PPM.	33.538223	2.11	1 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	143 REPORTED VALUES.	
PB PPM.	30.227921	2.63	5 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	139 REPORTED VALUES.	
SB PPM.	1.077336	2.77	30 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	95 REPORTED VALUES.	
SC PPM.	9.091260	1.72	15 NOT DETECTED,	LESS THAN, OR TRACE VALUES.	129 REPORTED VALUES.	

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SN PPM.	2.148636	5.19	114 NOT DETECTED, LESS THAN, OR TRACE VALUES.	30 REPORTED VALUES.
SR PPM.	86.178757	2.04	65 NOT DETECTED, LESS THAN, OR TRACE VALUES.	79 REPORTED VALUES.
V PPM.	73.629761	2.12	144 SAMPLES AND 144 ANALYTICAL VALUES.	
W PPM.	*****	*****	141 NOT DETECTED, LESS THAN, OR TRACE VALUES.	3 REPORTED VALUES. NO COMPUTATIONS.
Y PPM.	*****	*****	1 GREATER THAN VALUES. NO COMPUTATIONS.	
ZN PPM.	44.444016	1.91	20 NOT DETECTED, LESS THAN, OR TRACE VALUES.	123 REPORTED VALUES.
ZR PPM.	*****	*****	2 GREATER THAN VALUES. NO COMPUTATIONS.	
HG PPM.	0.024454	4.71	39 NOT DETECTED, LESS THAN, OR TRACE VALUES.	104 REPORTED VALUES.

A470 STATISTICAL SUMMARY 75 samples, granitic sources

DATE 4/29/70

ELEMENT	N	L	H	B	T	G	ANALYTICAL
							VALUES
FE PCT.	0	0	0	0	0	0	75
MG PCT.	0	0	0	0	0	0	75
CA PCT.	0	1	0	0	0	0	74
TI PCT.	0	0	0	0	0	0	75
MN PPM.	0	0	0	0	0	0	75
AG PPM.	60	14	0	0	0	0	1
AS PPM.	3	8	0	0	0	0	64
AU PPM.	0	72	0	0	0	0	3
B PPM.	0	0	0	0	0	0	75
BA PPM.	0	1	0	0	0	0	74
BE PPM.	1	4	0	0	0	0	70
BI PPM.	67	7	0	0	0	0	1
CO PPM.	7	13	0	0	0	0	55
CR PPM.	0	2	0	0	0	0	73
CU PPM.	0	7	0	0	0	0	68
LA PPM.	2	10	0	0	0	0	63
MO PPM.	39	32	0	0	0	0	4
N8 PPM.	0	9	0	0	0	0	66
NI PPM.	1	0	0	0	0	0	74
PB PPM.	0	1	0	0	0	0	74
SB PPM.	1	16	0	15	0	0	43
SC PPM.	3	10	0	0	0	0	62
SN PPM.	34	12	0	0	0	0	29
SR PPM.	0	38	0	0	0	0	37
V PPM.	0	0	0	0	0	0	75
W PPM.	63	9	0	0	0	0	3
Y PPM.	0	0	0	0	0	1	74
ZN PPM.	1	11	0	0	0	0	63
ZR PPM.	0	0	0	0	0	2	73
HG PPM.	0	32	0	1	0	0	42

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS			
				75 SAMPLES AND	75 ANALYTICAL VALUES.	
FE PCT.	2.910528	1.64	75 SAMPLES AND	75 ANALYTICAL VALUES.		
MG PCT.	0.803721	1.94	75 SAMPLES AND	75 ANALYTICAL VALUES.		
CA PCT.	0.602450	4.88	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.			74 REPORTED VALUES.
TI PCT.	0.385277	1.82	75 SAMPLES AND	75 ANALYTICAL VALUES.		
MN PPM.	475.055664	1.90	75 SAMPLES AND	75 ANALYTICAL VALUES.		
AG PPM.	*****	*****	74 NOT DETECTED, LESS THAN, OR TRACE VALUES.			1 REPORTED VALUES. NO COMPUTATIONS.
AS PPM.	10.495938	8.65	11 NOT DETECTED, LESS THAN, OR TRACE VALUES.			64 REPORTED VALUES.
AU PPM.	*****	*****	72 NOT DETECTED, LESS THAN, OR TRACE VALUES.			3 REPORTED VALUES. NO COMPUTATIONS.
B PPM.	61.225800	1.73	75 SAMPLES AND	75 ANALYTICAL VALUES.		
BA PPM.	271.749756	2.15	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.			74 REPORTED VALUES.
BE PPM.	2.673758	2.43	5 NOT DETECTED, LESS THAN, OR TRACE VALUES.			70 REPORTED VALUES.
BI PPM.	*****	*****	74 NOT DETECTED, LESS THAN, OR TRACE VALUES.			1 REPORTED VALUES. NO COMPUTATIONS.
CO PPM.	8.527353	2.49	20 NOT DETECTED, LESS THAN, OR TRACE VALUES.			55 REPORTED VALUES.
CR PPM.	38.469437	2.61	2 NOT DETECTED, LESS THAN, OR TRACE VALUES.			73 REPORTED VALUES.
CU PPM.	14.043765	2.52	7 NOT DETECTED, LESS THAN, OR TRACE VALUES.			68 REPORTED VALUES.
LA PPM.	37.133881	2.02	12 NOT DETECTED, LESS THAN, OR TRACE VALUES.			63 REPORTED VALUES.
MO PPM.	*****	*****	71 NOT DETECTED, LESS THAN, OR TRACE VALUES.			4 REPORTED VALUES. NO COMPUTATIONS.
N8 PPM.	12.952538	1.64	9 NOT DETECTED, LESS THAN, OR TRACE VALUES.			66 REPORTED VALUES.
NI PPM.	24.559540	2.20	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.			74 REPORTED VALUES.
PB PPM.	49.467300	2.70	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.			74 REPORTED VALUES.
SB PPM.	0.912867	2.78	17 NOT DETECTED, LESS THAN, OR TRACE VALUES.			43 REPORTED VALUES.
SC PPM.	7.543902	1.80	13 NOT DETECTED, LESS THAN, OR TRACE VALUES.			62 REPORTED VALUES.

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SN PPM.	5.572289	3.69	46 NOT DETECTED, LESS THAN, OR TRACE VALUES.	29 REPORTED VALUES.
SR PPM.	78.367493	2.12	38 NOT DETECTED, LESS THAN, OR TRACE VALUES.	37 REPORTED VALUES.
V PPM.	52.260590	2.04	75 SAMPLES AND 75 ANALYTICAL VALUES.	
W PPM.	*****	*****	72 NOT DETECTED, LESS THAN, OR TRACE VALUES.	3 REPORTED VALUES. NO COMPUTATIONS.
Y PPM.	*****	*****	1 GREATER THAN VALUES. NO COMPUTATIONS.	
ZN PPM.	44.084579	2.12	12 NOT DETECTED, LESS THAN, OR TRACE VALUES.	63 REPORTED VALUES.
ZR PPM.	*****	*****	2 GREATER THAN VALUES. NO COMPUTATIONS.	
HG PPM.	0.011506	6.66	32 NOT DETECTED, LESS THAN, OR TRACE VALUES.	42 REPORTED VALUES.

#2

A470 STASTICAL SUMMARY

69 samples, sedimentary and
metasedimentary sources

DATE 4/29/70

ELEMENT	N	L	H	S	T	ANALYTICAL	
						G	VALUES
FE PCT.	0	0	0	0	0	0	69
MG PCT.	0	0	0	0	0	0	69
CA PCT.	0	2	0	0	0	0	67
TI PCT.	0	0	0	0	0	0	69
MN PPM.	0	0	0	0	0	0	69
AG PPM.	66	3	0	0	0	0	0
AS PPM.	1	14	0	0	0	0	54
AU PPM.	0	67	0	1	0	0	1
B PPM.	0	0	0	0	0	0	69
BA PPM.	0	0	0	0	0	0	69
BE PPM.	3	5	0	0	0	0	61
BI PPM.	68	1	0	0	0	0	0
CO PPM.	3	1	0	0	0	0	65
CR PPM.	0	0	0	0	0	0	69
CU PPM.	0	4	0	0	0	0	65
LA PPM.	2	14	0	0	0	0	53
MD PPM.	25	42	0	0	0	0	2
NB PPM.	0	12	0	0	0	0	57
NI PPM.	0	0	0	0	0	0	69
PB PPM.	0	4	0	0	0	0	65
SB PPM.	0	13	0	4	0	0	52
SC PPM.	0	2	0	0	0	0	67
SN PPM.	68	0	0	0	0	0	1
SR PPM.	1	26	0	0	0	0	42
V PPM.	0	0	0	0	0	0	69
W PPM.	69	0	0	0	0	0	0
Y PPM.	0	0	0	0	0	0	69
ZN PPM.	0	8	0	1	0	0	60
ZR PPM.	0	0	0	0	0	0	69
HG PPM.	0	7	0	0	0	0	62

ELEMENT	MEAN	GEOMETRIC DEVIATION	REMARKS		
				69 SAMPLES AND	69 ANALYTICAL VALUES.
FE PCT.	4.069808	1.50	69 SAMPLES AND	69 ANALYTICAL VALUES.	
MG PCT.	1.014712	1.60	69 SAMPLES AND	69 ANALYTICAL VALUES.	
CA PCT.	0.529388	6.48	2 NOT DETECTED, LESS THAN, OR TRACE VALUES.		67 REPORTED VALUES.
TI PCT.	0.481204	1.67	69 SAMPLES AND	69 ANALYTICAL VALUES.	
MN PPM.	350.557373	2.16	69 SAMPLES AND	69 ANALYTICAL VALUES.	
AG PPM.	*****	*****	69 NOT DETECTED, LESS THAN, OR TRACE VALUES.		0 REPORTED VALUES. NO COMPUTATIONS.
AS PPM.	4.117401	9.76	15 NOT DETECTED, LESS THAN, OR TRACE VALUES.		54 REPORTED VALUES.
AU PPM.	*****	*****	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.		1 REPORTED VALUES. NO COMPUTATIONS.
B PPM.	64.603287	1.61	69 SAMPLES AND	69 ANALYTICAL VALUES.	
BA PPM.	456.114746	1.69	69 SAMPLES AND	69 ANALYTICAL VALUES.	
BE PPM.	1.295369	1.56	8 NOT DETECTED, LESS THAN, OR TRACE VALUES.		61 REPORTED VALUES.
BI PPM.	*****	*****	69 NOT DETECTED, LESS THAN, OR TRACE VALUES.		0 REPORTED VALUES. NO COMPUTATIONS.
CO PPM.	12.888070	1.79	4 NOT DETECTED, LESS THAN, OR TRACE VALUES.		65 REPORTED VALUES.
CR PPM.	83.710571	1.73	69 SAMPLES AND	69 ANALYTICAL VALUES.	
CU PPM.	21.912643	2.26	4 NOT DETECTED, LESS THAN, OR TRACE VALUES.		65 REPORTED VALUES.
LA PPM.	24.898972	1.75	16 NOT DETECTED, LESS THAN, OR TRACE VALUES.		53 REPORTED VALUES.
MD PPM.	*****	*****	67 NOT DETECTED, LESS THAN, OR TRACE VALUES.		2 REPORTED VALUES. NO COMPUTATIONS.
NB PPM.	10.481845	1.31	12 NOT DETECTED, LESS THAN, OR TRACE VALUES.		57 REPORTED VALUES.
NI PPM.	47.025986	1.69	69 SAMPLES AND	69 ANALYTICAL VALUES.	
PB PPM.	17.917374	1.73	4 NOT DETECTED, LESS THAN, OR TRACE VALUES.		65 REPORTED VALUES.
SB PPM.	1.255321	2.71	13 NOT DETECTED, LESS THAN, OR TRACE VALUES.		52 REPORTED VALUES.
SC PPM.	11.037489	1.55	2 NOT DETECTED, LESS THAN, OR TRACE VALUES.		67 REPORTED VALUES.

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SN PPM.	*****	*****	68 NOT DETECTED, LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES. NO COMPUTATIONS.
SR PPM.	94.189438	1.97	27 NOT DETECTED, LESS THAN, OR TRACE VALUES.	42 REPORTED VALUES.
V PPM.	106.878418	1.82	69 SAMPLES AND 69 ANALYTICAL VALUES.	
W PPM.	*****	*****	69 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
Y PPM.	17.718185	1.46	69 SAMPLES AND 69 ANALYTICAL VALUES.	
ZN PPM.	44.689850	1.70	8 NOT DETECTED, LESS THAN, OR TRACE VALUES.	60 REPORTED VALUES.
ZR PPM.	197.734146	2.01	69 SAMPLES AND 69 ANALYTICAL VALUES.	
HG PPM.	0.045924	3.02	7 NOT DETECTED, LESS THAN, OR TRACE VALUES.	62 REPORTED VALUES.

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