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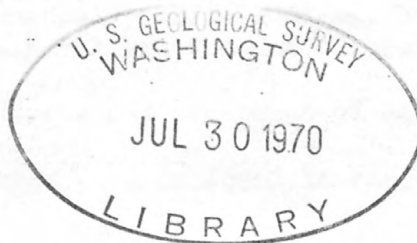
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ANALYSES OF ROCK AND STREAM-SEDIMENT SAMPLES FROM THE
SUNDUM C-4 QUADRANGLE, ALASKA

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ANALYSES OF ROCK AND STREAM-SEDIMENT SAMPLES FROM THE

SUMDUM C-4 QUADRANGLE, ALASKA

By

Allen L. Clark, David A. Brew, Donald A. Grybeck, .

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INTRODUCTION

Analytical data for 31 rock and 33 stream-sediment samples from the Sumdum C-4 , 1:63,360 scale quadrangle are presented in this report, together with a statistical treatment of the data. The samples were collected in 1969 as part of the Heavy Metals Program of the U.S. Geological Survey.

The most comprehensive discussion of the geology of the study area is a report by A. F. Buddington and Theodore Chapin (1929). Known metalliferous lodes of the area are described and additional references to specific areas are given by Berg and Cobb (1967). Additional data is given in reports by Herbert and Race (1964) and Alaska Department of Mines (1950). Supplemental publications are being prepared on the general geology and mineral occurrences of the study area.

Procedures and treatment of data

Standard procedures were followed in the collection and preparation of samples.

Rock samples are primarily grab samples from mineral occurrences and outcrops. They were chosen for analysis to provide data on background, because they were in the area of mineral occurrences or stream-sediment anomalies, because they were strongly iron stained, or contained visible sulfides.

Stream-sediment samples were generally collected from the active stream channel; where this was not possible, samples were collected from bank or terrace deposits adjacent to the channel.

Rock samples were crushed and pulverized and the minus 80 mesh fraction analyzed. Stream-sediment samples were dried, sieved, and the minus 80 mesh fraction analyzed. 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. Analyses for gold by the atomic absorption method are accurate to ± 100 percent. Minimum limits of determination for each element are given on page 4. Semi-quantitative spectrographic analyses were done by K. J. Curry and atomic absorption analyses were done by R. L. Miller, R. B. Tripp, H. D. King, and A. L. Meier.

Locations of the rock and stream-sediment samples are shown on Plate 1. Rock sample descriptions are given in table 1 and rock sample analyses are tabulated in table 2 and stream-sediment analyses are tabulated in table 3.

The results of the analyses of the rock and stream-sediment analyses have been processed by means of a computer program known as GEOSUM and are presented in tables 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 program output consists of: (a) a tabulation of the data, (b) histograms and cumulative frequency distributions for all elements except tungsten, and (c) a statistical summary which includes geometric means and geometric deviations.

^{1/}Analyses for 29 elements by semiquantitative analyses and for gold by atomic absorption are given in the tables. Semiquantitative analyses for gold are omitted.

Table 1.--Description of rock, vein, and altered zone samples from the Sumdum C-4 quadrangle. (All samples are of representative material.) Sample localities are shown by sample number plotted on the accompanying map, Plate 1.

<u>Sample No.</u>	<u>Lab. No.</u>	<u>Sample Description</u>
1	AKD-892	Biotite feldspar quartz
2	-894	Sheared granodiorite and quartz fragments
2	-895	Sheared granodiorite and quartz fragments
2	-896	Quartz vein with minor pyrite
2	-897	Quartz vein with minor pyrite
2	-898	Euhedral quartz crystals
2	-899	Sheared and bleached granodiorite
2	-900	Pyrite quartz vein
2	-901	Pyrite quartz vein
2	-902	Pyrite quartz vein
3	-891	Biotite feldspar quartz gneiss
4	-890	Biotite hornblende granodiorite
5	-908	Biotite hornblende granodiorite
6	-893	Biotite feldspar quartz gneiss
7	-903	Massive fibrous serpentine
7	-904	Serpentinized dunite
8	-906	Serpentinized dunite
9	-907	Foliated granodiorite
10	-909	Quartz vein
10	-910	Quartz vein
11	-912	Biotite hornblende granodiorite
12	-913	Biotite hornblende granodiorite
13	-914	Biotite quartzite
14	-870	Biotite hornblende schist
14	-871	Quartz vein
15	-883	Pyritized quartz vein
16	-872	Biotite hornblende schist
16	-873	Iron-stained aplite dike
17	-874	Biotite hornblende gneiss
17	-875	Iron-stained biotite hornblende gneiss
18	-876	Iron-stained biotite hornblende gneiss

Explanation of Tables 2 and 3

Analytical results from rock and stream-sediment samples are given in Tables 2 and 3 as analytical values such as 7.0000 ppm, 10.0000 percent, etc., or as qualified values expressed as a letter. These letter codes are N = not detected, L = less than specified limit of detection, G = greater than value shown, B = no data, H = interference. The term T = trace, but does 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	20.00000	0.10000
AS PPM	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	2.00000	20.00000	2.00000	10.00000
NI PPM	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM
2.00000	10.00000	0.50000	5.00000	10.00000	50.00000
V PPM	W PPM	Y PPM	ZN PPM	ZR PPM	
5.00000	50.00000	5.00000	25.00000	10.00000	

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

On the histograms decimal numbers 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 (309) of samples.

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, C, T, or H codes are present. (See the histogram and statistics below it for tin, which are calculated from only one sample.) Statistical estimates that are unbiased in this regard are given at the end of Table 1. The geometric means is the antilogarithm of the arithmetic mean of the logs of the analyses and an estimate of "central tendency," or of 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. The geometric deviation is the antilogarithm of the standard deviation of the logs of the analyses. See USGS Professional Paper 574-B for further discussion and USGS Bulletin 1147E, p. 20-23, for further discussion and explanation of geometric deviation.

In the computations performed to produce the statistical summary at the end of Tables 2 and 3, 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 of 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.

Selected References

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- Miesch, A. T., 1963, Distribution of elements in Colorado Plateau uranium deposits--A preliminary report: U.S. Geol. Survey Bull. 1147-E, 57 p.
- _____, 1967, Methods of computation for estimating geochemical abundance: U.S. Geol. Survey Prof. Paper 574-B, 15 p.

TABLE 2. SUNDUM C-4 ROCK SAMPLES

MAP NUMBER	SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
1	AKD892	2.0000	0.5000	1.0000	0.2000	300.0000	1.0000	0.0 N	0.0 N	0.0 N	1500.0000
2	AKD894	1.5000	0.3000	0.7000	0.1500	70.0000	3.0000	0.0 N	0.0 N	0.0 N	700.0000
2	AKD895	2.0000	0.7000	1.0000	0.2000	200.0000	0.0 N	0.0 N	0.0 N	0.0 N	700.0000
2	AKD896	0.2000	0.0700	0.0 L	0.0300	30.0000	0.0 N	0.0 N	0.0 N	0.0 N	100.0000
2	AKD897	1.0000	0.1500	0.0 L	0.2000	70.0000	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L
2	AKD898	0.0 L	0.0 L	0.0 L	0.0 L	0.0 L	1.5000	0.0 N	0.0 N	0.0 N	0.0 L
2	AKD899	1.0000	0.5000	0.0 L	0.1000	70.0000	0.0 L	0.0 N	0.0 N	20.0000	700.0000
2	AKD900	1.5000	0.1000	0.0 L	0.2000	30.0000	15.0000	0.0 N	0.0 N	0.0 N	300.0000
2	AKD901	1.0000	0.3000	0.5000	0.1000	150.0000	0.0 N	0.0 N	0.0 N	0.0 N	1500.0000
2	AKD902	3.0000	1.0000	1.0000	0.3000	300.0000	0.7000	0.0 N	0.0 N	0.0 L	1000.0000
3	AKD891	3.0000	0.5000	0.3000	0.1500	150.0000	0.7000	0.0 N	0.0 N	0.0 N	1500.0000
4	AKD890	5.0000	1.5000	1.5000	0.3000	700.0000	15.0000	0.0 N	0.0 N	0.0 N	1000.0000
5	AKD908	3.0000	1.5000	1.5000	0.3000	500.0000	0.0 N	0.0 N	0.0 N	0.0 N	300.0000
6	AKD893	3.0000	0.7000	15.0000	0.1500	1500.0000	0.0 L	0.0 N	0.0 N	10.0000	300.0000
7	AKD903	0.3000	0.3000	0.7000	0.0300	50.0000	0.0 N	0.0 N	0.0 N	0.0 N	150.0000
7	AKD904	7.0000	10.0000	1.0000	0.0300	1500.0000	0.0 N	0.0 N	0.0 N	0.0 L	100.0000
8	AKD906	10.0000	3.0000	5.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	0.0 L	0.0 L
9	AKD907	5.0000	2.0000	2.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	0.0 L	700.0000
10	AKD909	1.0000	0.5000	0.7000	0.1500	100.0000	0.0 N	0.0 N	0.0 N	0.0 N	1000.0000
10	AKD910	10.0000	0.0700	0.0 L	0.0150	70.0000	20.0000	0.0 N	0.0 N	0.0 L	300.0000
11	AKD912	0.7000	0.7000	0.7000	0.1000	100.0000	0.0 N	0.0 N	0.0 N	15.0000	300.0000
12	AKD913	10.0000	1.5000	1.5000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	0.0 N	700.0000
13	AKD914	3.0000	1.0000	0.2000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	0.0 L	200.0000
14	AKD870	3.0000	3.0000	10.0000	0.2000	1000.0000	0.0 N	0.0 N	0.0 N	20.0000	200.0000
14	AKD871	1.5000	0.7000	7.0000	0.1500	200.0000	0.0 N	0.0 N	0.0 N	20.0000	200.0000
15	AKD883	5.0000	1.5000	5.0000	0.5000	700.0000	0.0 L	0.0 N	0.0 N	10.0000	300.0000
16	AKD872	5.0000	3.0000	3.0000	0.2000	1000.0000	0.0 N	0.0 N	0.0 N	0.0 L	700.0000
16	AKD873	3.0000	1.0000	3.0000	0.3000	300.0000	0.0 L	0.0 N	0.0 N	10.0000	700.0000
17	AKD874	0.7000	0.1500	0.7000	0.0700	200.0000	0.0 N	0.0 N	0.0 N	0.0 N	300.0000
17	AKD875	1.5000	0.3000	0.3000	0.0700	70.0000	0.0 N	0.0 N	0.0 N	0.0 N	700.0000
18	AKD876	10.0000	1.0000	1.0000	0.2000	1500.0000	0.0 L	0.0 N	0.0 N	0.0 L	500.0000

SUMDUM C-4 ROCK SAMPLES

	SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
1	AKD892	0.0 L	0.0 N	0.0 N	0.0 N	0.0 L	30.0000	0.0 N	0.0 N	0.0 L	5.0000
2	AKD894	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	5.0000	0.0 L	0.0 N	0.0 L	5.0000
2	AKD895	0.0 N	0.0 N	0.0 N	0.0 N	15.0000	7.0000	0.0 N	0.0 N	0.0 L	10.0000
2	AKD896	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	0.0 L	0.0 N	0.0 N	0.0 L	15.0000
2	AKD897	0.0 N	0.0 N	0.0 N	0.0 N	20.0000	15.0000	0.0 N	0.0 N	0.0 L	15.0000
2	AKD898	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	0.0 L	0.0 N	0.0 N	0.0 L	10.0000
2	AKD899	1.0000	0.0 N	0.0 N	0.0 N	0.0 L	5.0000	0.0 N	0.0 N	0.0 L	5.0000
2	AKD900	0.0 N	0.0 N	0.0 N	0.0 N	10.0000	3000.0000	0.0 N	0.0 L	0.0 L	5.0000
2	AKD901	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	0.0 L	0.0 N	0.0 N	0.0 L	0.0 L
2	AKD902	1.0000	0.0 N	0.0 N	20.0000	70.0000	70.0000	0.0 N	0.0 L	0.0 L	70.0000
3	AKD891	0.0 N	0.0 N	0.0 N	5.0000	50.0000	100.0000	0.0 N	0.0 L	0.0 L	30.0000
4	AKD890	0.0 N	0.0 N	0.0 N	15.0000	10.0000	150.0000	0.0 N	0.0 N	10.0000	5.0000
5	AKD908	0.0 L	0.0 N	0.0 N	5.0000	10.0000	5.0000	0.0 N	0.0 N	10.0000	5.0000
6	AKD893	0.0 N	0.0 N	0.0 N	5.0000	10.0000	70.0000	0.0 N	0.0 L	10.0000	30.0000
7	AKD903	0.0 L	0.0 N	0.0 N	0.0 N	0.0 L	0.0 L	0.0 N	0.0 N	0.0 L	30.0000
7	AKD904	0.0 N	0.0 N	0.0 N	50.0000	2000.0000	0.0 L	0.0 N	0.0 N	10.0000	1500.0000
8	AKD906	0.0 N	0.0 N	0.0 N	50.0000	200.0000	70.0000	0.0 N	0.0 L	10.0000	70.0000
9	AKD907	0.0 L	0.0 N	0.0 N	15.0000	20.0000	10.0000	0.0 N	0.0 N	10.0000	20.0000
10	AKD909	0.0 L	0.0 N	0.0 N	0.0 N	0.0 L	5.0000	0.0 N	0.0 N	0.0 L	0.0 L
10	AKD910	0.0 N	1000.0000	0.0 N	100.0000	0.0 L	15001.0000	0.0 N	5.0000	0.0 L	10.0000
11	AKD912	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	30.0000	0.0 N	0.0 N	0.0 L	0.0 L
12	AKD913	0.0 L	0.0 N	0.0 N	20.0000	20.0000	10.0000	0.0 N	0.0 N	10.0000	20.0000
13	AKD914	0.0 L	0.0 N	0.0 N	10.0000	30.0000	70.0000	0.0 N	0.0 L	0.0 L	30.0000
14	AKD870	0.0 N	0.0 N	0.0 N	30.0000	100.0000	20.0000	0.0 L	0.0 N	10.0000	50.0000
14	AKD871	0.0 L	0.0 N	0.0 N	0.0 N	0.0 N	10.0000	0.0 N	0.0 N	0.0 L	0.0 L
15	AKD883	2.0000	0.0 N	0.0 N	30.0000	10.0000	70.0000	0.0 L	0.0 N	0.0 L	15.0000
16	AKD872	0.0 N	0.0 N	0.0 N	30.0000	150.0000	10.0000	0.0 N	0.0 N	0.0 L	50.0000
16	AKD873	1.0000	0.0 N	0.0 N	30.0000	0.0 L	700.0000	0.0 L	0.0 N	0.0 L	15.0000
17	AKD874	1.5000	0.0 N	0.0 N	0.0 N	0.0 L	0.0 L	0.0 N	0.0 N	0.0 L	5.0000
17	AKD875	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	20.0000	0.0 N	0.0 L	0.0 L	5.0000
18	AKD876	0.0 L	0.0 N	0.0 N	5.0000	0.0 L	300.0000	20.0000	0.0 L	0.0 L	0.0 L

SUMDUM C-4 ROCK SAMPLES

	SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
1	AKD892	50.0000	0.0 N	0.0 N	0.0 N	200.0000	30.0000	0.0 N	0.0 L	0.0 L	70.0000
2	AKD894	10.0000	0.0 N	0.0 N	0.0 N	150.0000	20.0000	0.0 N	10.0000	0.0 N	100.0000
2	AKD895	15.0000	0.0 N	0.0 L	0.0 N	150.0000	30.0000	0.0 N	10.0000	0.0 N	150.0000
2	AKD896	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	30.0000	0.0 N	0.0 L	0.0 N	0.0 L
2	AKD897	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	50.0000	0.0 N	0.0 L	0.0 N	0.0 L
2	AKD898	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	20.0000	0.0 N	0.0 L	0.0 N	0.0 L
2	AKD899	30.0000	0.0 N	0.0 N	0.0 N	0.0 L	20.0000	0.0 N	0.0 L	0.0 N	70.0000
2	AKD900	20.0000	0.0 N	0.0 L	0.0 N	0.0 L	100.0000	0.0 N	15.0000	0.0 N	50.0000
2	AKD901	10.0000	0.0 N	0.0 N	0.0 N	100.0000	15.0000	0.0 N	0.0 L	0.0 N	70.0000
2	AKD902	15.0000	0.0 N	10.0000	0.0 N	100.0000	100.0000	0.0 N	15.0000	0.0 L	70.0000
3	AKD891	50.0000	0.0 N	0.0 L	0.0 N	150.0000	150.0000	0.0 N	0.0 L	0.0 L	70.0000
4	AKD890	150.0000	0.0 N	15.0000	0.0 N	150.0000	150.0000	0.0 N	10.0000	0.0 L	100.0000
5	AKD908	10.0000	0.0 N	15.0000	0.0 N	300.0000	70.0000	0.0 N	10.0000	0.0 N	70.0000
6	AKD893	0.0 N	0.0 N	0.0 N	0.0 N	0.0 L	150.0000	0.0 N	10.0000	0.0 N	70.0000
7	AKD903	0.0 L	0.0 N	0.0 N	0.0 N	100.0000	15.0000	0.0 N	10.0000	0.0 N	50.0000
7	AKD904	0.0 N	0.0 N	10.0000	0.0 N	0.0 L	15.0000	0.0 N	15.0000	0.0 N	0.0 L
8	AKD906	0.0 N	0.0 N	30.0000	0.0 N	100.0000	200.0000	0.0 N	20.0000	0.0 N	70.0000
9	AKD907	0.0 L	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	15.0000	0.0 L	200.0000
10	AKD909	0.0 L	0.0 N	0.0 N	0.0 N	300.0000	30.0000	0.0 N	0.0 L	0.0 N	70.0000
10	AKD910	30.0000	0.0 N	0.0 N	0.0 N	0.0 L	20.0000	0.0 N	0.0 L	0.0 N	0.0 L
11	AKD912	10.0000	0.0 N	0.0 N	0.0 N	300.0000	20.0000	0.0 N	0.0 L	0.0 N	70.0000
12	AKD913	10.0000	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	10.0000	0.0 L	30.0000
13	AKD914	0.0 N	0.0 N	7.0000	0.0 N	0.0 L	70.0000	0.0 N	10.0000	0.0 N	70.0000
14	AKD870	0.0 L	0.0 N	30.0000	0.0 N	300.0000	150.0000	0.0 (15.0000	0.0 N	70.0000
14	AKD871	10.0000	0.0 N	7.0000	0.0 N	300.0000	30.0000	0.0 N	15.0000	0.0 N	100.0000
15	AKD883	0.0 N	0.0 N	15.0000	0.0 N	1000.0000	150.0000	0.0 N	20.0000	300.0000	70.0000
16	AKD872	0.0 N	0.0 N	30.0000	0.0 N	100.0000	150.0000	0.0 N	15.0000	200.0000	70.0000
16	AKD873	10.0000	0.0 N	10.0000	0.0 N	200.0000	50.0000	0.0 N	15.0000	0.0 N	70.0000
17	AKD874	20.0000	0.0 N	0.0 L	0.0 N	100.0000	20.0000	0.0 N	70.0000	0.0 N	70.0000
17	AKD875	20.0000	0.0 N	0.0 L	0.0 N	100.0000	20.0000	0.0 N	10.0000	0.0 N	70.0000
18	AKD876	10.0000	0.0 N	15.0000	0.0 N	100.0000	30.0000	0.0 N	30.0000	1500.0000	200.0000

SUMDUM C-4 ROCK SAMPLES

	SAMPLE	AU PPM
1	AKD892	0.0200L
2	AKD894	0.0200L
2	AKD895	0.0200L
2	AKD896	0.0200L
2	AKD897	0.0200L
2	AKD898	0.0400
2	AKD899	0.0400
2	AKD900	0.0200L
2	AKD901	0.0200L
2	AKD902	0.0200L
3	AKD891	0.0200L
4	AKD890	0.0200L
5	AKD908	0.0200L
6	AKD893	0.0200L
7	AKD903	0.0200L
7	AKD904	0.0200L
8	AKD906	0.0200L
9	AKD907	0.0200L
10	AKD909	0.0200L
10	AKD910	60.0000
11	AKD912	0.0200L
12	AKD913	0.0200L
13	AKD914	0.0200L
14	AKD870	0.0200L
14	AKD871	0.0200L
15	AKD883	0.0200L
16	AKD872	0.0200L
16	AKD873	0.0200L
17	AKD874	0.0200L
17	AKD875	0.0200L
18	AKD876	0.0200L

FREQUENCY TABLE FOR COLUMN 1 (FE PCT)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	1	1	3.23	3.23
2.6E-01	3.8E-01	1	2	3.23	6.45
3.8E-01	5.6E-01	0	2	0.0	6.45
5.6E-01	8.3E-01	2	4	6.45	12.90
8.3E-01	1.2E 00	4	8	12.90	25.81
1.2E 00	1.8E 00	4	12	12.90	38.71
1.8E 00	2.6E 00	2	14	6.45	45.16
2.6E 00	3.8E 00	7	21	22.58	67.74
3.8E 00	5.6E 00	4	25	12.90	80.65
5.6E 00	8.3E 00	1	26	3.23	83.87
8.3E 00	1.2E 01	4	30	12.90	96.77

HISTOGRAM FOR COLUMN 1 (FE PCT)

2.0E-01 XXX
3.0E-01 XXX
5.0E-01
7.0E-01 XXXXXX
1.0E 00 XXXXXXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXXXXXX
2.0E 00 XXXXXX
3.0E 00 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 00 XXXXXXXXXXXXXXXX
7.0E 00 XXX
1.0E 01 XXXXXXXXXXXXXXXX

N	L	H	B	T	G
0	1	0	0	0	0
0.0	3.23			0.0	0.0

ANALYTICAL
VALUES
30

MAXIMUM = 1.00000E 01

MINIMUM = 2.00000E-01

GEOMETRIC MEAN = 2.28307E 00

GEOMETRIC DEVIATION = 2.73103E 00

FREQUENCY TABLE FOR COLUMN 2 (MG PCT)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ 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	2	2	6.45	6.45
8.3E-02	1.2E-01	1	3	3.23	9.68
1.2E-01	1.8E-01	2	5	6.45	16.13
1.8E-01	2.6E-01	0	5	0.0	16.13
2.6E-01	3.8E-01	4	9	12.90	29.03
3.8E-01	5.6E-01	4	13	12.90	41.94
5.6E-01	8.3E-01	4	17	12.90	54.84
8.3E-01	1.2E 00	4	21	12.90	67.74
1.2E 00	1.8E 00	4	25	12.90	80.65
1.8E 00	2.6E 00	1	26	3.23	83.87
2.6E 00	3.8E 00	3	29	9.68	93.55
3.8E 00	5.6E 00	0	29	0.0	93.55
5.6E 00	8.3E 00	0	29	0.0	93.55
8.3E 00	1.2E 01	1	30	3.23	96.77

HISTOGRAM FOR COLUMN 2 (MG PCT)

7.0E-02 XXXXXX
1.0E-01 XXX
1.5E-01 XXXXXX
2.0E-01
3.0E-01 XXXXXXXXXXXXX
5.0E-01 XXXXXXXXXXXXX
7.0E-01 XXXXXXXXXXXXX
1.0E 00 XXXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXXX
2.0E 00 XXX
3.0E 00 XXXXXXXXXXXX
5.0E 00
7.0E 00
1.0E 01 XXX

N	L	H	B	T	G
0	1	0	0	0	0
0.0	3.23			0.0	0.0

ANALYTICAL
VALUES
30

MAXIMUM = 1.00000E 01

MINIMUM = 7.00000E-02

GEOMETRIC MEAN = 6.58866E-01

GEOMETRIC DEVIATION = 3.22257E 00

FREQUENCY TABLE FOR COLUMN 3 (CA PCT)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	1	1	3.23	3.23
2.6E-01	3.8E-01	2	3	6.45	9.68
3.8E-01	5.6E-01	1	4	3.23	12.90
5.6E-01	8.3E-01	5	9	16.13	29.03
8.3E-01	1.2E 00	5	14	16.13	45.16
1.2E 00	1.8E 00	3	17	9.68	54.84
1.8E 00	2.6E 00	1	18	3.23	58.06
2.6E 00	3.8E 00	2	20	6.45	64.52
3.8E 00	5.6E 00	2	22	6.45	70.97
5.6E 00	8.3E 00	1	23	3.23	74.19
8.3E 00	1.2E 01	1	24	3.23	77.42
1.2E 01	1.8E 01	1	25	3.23	80.65

HISTOGRAM FOR COLUMN 3 (CA PCT)

2.0E-01 XXX
3.0E-01 XXXXXX
5.0E-01 XXX
7.0E-01 XXXXXXXXXXXXXXXX
1.0E 00 XXXXXXXXXXXXXXXX
1.5E 00 XXXXXXXXXXXX
2.0E 00 XXX
3.0E 00 XXXXXX
5.0E 00 XXXXXX
7.0E 00 XXX
1.0E 01 XXX
1.5E 01 XXX

N L H B T G
0 6 0 0 0 0
0.0 19.35 0.0 0.0

ANALYTICAL
VALUES
25

MAXIMUM = 1.50000E 01

MINIMUM = 2.00000E-01

GEOMETRIC MEAN = 1.36551E 00

GEOMETRIC DEVIATION = 3.01155E 00

FREQUENCY TABLE FOR COLUMN 4 (TI PCT)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			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	1	1	3.23	3.23
1.8E-02	2.6E-02	0	1	0.0	3.23
2.6E-02	3.8E-02	3	4	9.68	12.90
3.8E-02	5.6E-02	0	4	0.0	12.90
5.6E-02	8.3E-02	2	6	6.45	19.35
8.3E-02	1.2E-01	3	9	9.68	29.03
1.2E-01	1.8E-01	5	14	16.13	45.16
1.8E-01	2.6E-01	7	21	22.58	67.74
2.6E-01	3.8E-01	5	26	16.13	83.87
3.8E-01	5.6E-01	3	29	9.68	93.55
5.6E-01	8.3E-01	1	30	3.23	96.77

HISTOGRAM FOR COLUMN 4 (TI PCT)

1.5E-02 XXX
2.0E-02
3.0E-02 XXXXXXXXXX
5.0E-02
7.0E-02 XXXXXX
1.0E-01 XXXXXXXXXX
1.5E-01 XXXXXXXXXXXXXXXXXX
2.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXX
3.0E-01 XXXXXXXXXXXXXXXXXXXXXXXXXX
5.0E-01 XXXXXXXXXX
7.0E-01 XXX

N	L	H	B	T	G
0	1	0	0	0	0
0.0	3.23			0.0	0.0

ANALYTICAL
VALUES
30

MAXIMUM = 7.00000E-01

MINIMUM = 1.50000E-02

GEOMETRIC MEAN = 1.53851E-01

GEOMETRIC DEVIATION = 2.50300E 00

FREQUENCY TABLE FOR COLUMN 5 (MN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	2	2	6.45	6.45
3.8E 01 -	5.6E 01	1	3	3.23	9.68
5.6E 01 -	8.3E 01	5	8	16.13	25.81
8.3E 01 -	1.2E 02	2	10	6.45	32.26
1.2E 02 -	1.8E 02	2	12	6.45	38.71
1.8E 02 -	2.6E 02	3	15	9.68	48.39
2.6E 02 -	3.8E 02	3	18	9.68	58.06
3.8E 02 -	5.6E 02	1	19	3.23	61.29
5.6E 02 -	8.3E 02	4	23	12.90	74.19
8.3E 02 -	1.2E 03	4	27	12.90	87.10
1.2E 03 -	1.8E 03	3	30	9.68	96.77

HISTOGRAM FOR COLUMN 5 (MN PPM)

3.0E 01 XXXXXX

5.0E 01 XXX

7.0E 01 XXXXXXXXXXXXXXXX

1.0E 02 XXXXXX

1.5E 02 XXXXXX

2.0E 02 XXXXXXXXXXXX

3.0E 02 XXXXXXXXXXXX

5.0E 02 XXX

7.0E 02 XXXXXXXXXXXXXXXX

1.0E 03 XXXXXXXXXXXXXXXX

1.5E 03 XXXXXXXXXXXX

N	L	H	B	T	G
0	1	0	0	0	0
0.0	3.23			0.0	0.0

ANALYTICAL
VALUES
30

MAXIMUM = 1.50000E 03

MINIMUM = 3.00000E 01

GEOMETRIC MEAN = 2.54543E 02

GEOMETRIC DEVIATION = 3.43519E 00

FREQUENCY TABLE FOR COLUMN 6 (AG PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
3.8E-01	5.6E-01	0	0	0.0	0.0
5.6E-01	8.3E-01	2	2	6.45	6.45
8.3E-01	1.2E 00	1	3	3.23	9.68
1.2E 00	1.8E 00	1	4	3.23	12.90
1.8E 00	2.6E 00	0	4	0.0	12.90
2.6E 00	3.8E 00	1	5	3.23	16.13
3.8E 00	5.6E 00	0	5	0.0	16.13
5.6E 00	8.3E 00	0	5	0.0	16.13
8.3E 00	1.2E 01	0	5	0.0	16.13
1.2E 01	1.8E 01	2	7	6.45	22.58
1.8E 01	2.6E 01	1	8	3.23	25.81

HISTOGRAM FOR COLUMN 6 (AG PPM)

7.0E-01 XXXXXX
1.0E 00 XXX
1.5E 00 XXX
2.0E 00
3.0E 00 XXX
5.0E 00
7.0E 00
1.0E 01
1.5E 01 XXXXXX
2.0E 01 XXX

N	L	H	B	T	G	ANALYTICAL
18	5	0	0	0	0	VALUES
58.06	16.13			0.0	0.0	8

MAXIMUM = 2.00000E 01

MINIMUM = 7.00000E-01

GEOMETRIC MEAN = 3.15920E 00

GEOMETRIC DEVIATION = 4.25552E 00

FREQUENCY TABLE FOR COLUMN 7 (AS PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G
31	0	0	0	0	0
*****	0.0			0.0	0.0

ANALYTICAL
VALUES
0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 8 (AU PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G
31	0	0	0	0	0
*****	0.0			0.0	0.0

ANALYTICAL
VALUES
0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 9 (B PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
8.3E 00	1.2E 01	3	3	9.68	9.68
1.2E 01	1.8E 01	1	4	3.23	12.90
1.8E 01	2.6E 01	3	7	9.68	22.58

HISTOGRAM FOR COLUMN 9 (B PPM)

1.0E 01 XXXXXXXXXXXX

1.5E 01 XXX

2.0E 01 XXXXXXXXXXXX

N	L	H	B	T	G	ANALYTICAL VALUES
16	8	0	0	0	0	7
51.61	25.81			0.0	0.0	

MAXIMUM = 2.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.42615E 01

GEOMETRIC DEVIATION = 1.41523E 00

FREQUENCY TABLE FOR COLUMN 10 (BA PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	2	2	6.45	6.45
1.2E 02	1.8E 02	1	3	3.23	9.68
1.8E 02	2.6E 02	3	6	9.68	19.35
2.6E 02	3.8E 02	7	13	22.58	41.94
3.8E 02	5.6E 02	1	14	3.23	45.16
5.6E 02	8.3E 02	8	22	25.81	70.97
8.3E 02	1.2E 03	3	25	9.68	80.65
1.2E 03	1.8E 03	3	28	9.68	90.32

HISTOGRAM FOR COLUMN 10 (BA PPM)

1.0E 02 XXXXXX
1.5E 02 XXX
2.0E 02 XXXXXXXXXXXX
3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
5.0E 02 XXX
7.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
1.0E 03 XXXXXXXXXX
1.5E 03 XXXXXXXXXX

N	L	H	B	T	G	ANALYTICAL
0	3	0	0	0	0	VALUES
0.0	9.68			0.0	0.0	28

MAXIMUM = 1.50000E 03

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 4.54348E 02

GEOMETRIC DEVIATION = 2.19512E 00

FREQUENCY TABLE FOR COLUMN 11 (BE PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E-01	1.2E 00	3	3	9.68	9.68
1.2E 00	1.8E 00	1	4	3.23	12.90
1.8E 00	2.6E 00	1	5	3.23	16.13

HISTOGRAM FOR COLUMN 11 (BE PPM)

1.0E 00 XXXXXXXXXX

1.5E 00 XXX

2.0E 00 XXX

N	L	H	B	T	G
17	9	0	0	0	0
54.84	29.03			0.0	0.0

ANALYTICAL
VALUES
5

MAXIMUM = 2.00000E 00

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 1.24573E 00

GEOMETRIC DEVIATION = 1.37382E 00

FREQUENCY TABLE FOR COLUMN 12 (BI PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER -	UPPER				
8.3E 00 -	1.2E 01	0	0	0.0	0.0
1.2E 01 -	1.8E 01	0	0	0.0	0.0
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0
5.6E 01 -	8.3E 01	0	0	0.0	0.0
8.3E 01 -	1.2E 02	0	0	0.0	0.0
1.2E 02 -	1.8E 02	0	0	0.0	0.0
1.8E 02 -	2.6E 02	0	0	0.0	0.0
2.6E 02 -	3.8E 02	0	0	0.0	0.0
3.8E 02 -	5.6E 02	0	0	0.0	0.0
5.6E 02 -	8.3E 02	0	0	0.0	0.0
8.3E 02 -	1.2E 03	1	1	3.23	3.23

HISTOGRAM FOR COLUMN 12 (BI PPM)

1.0E 03 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
30	0	0	0	0	0	
96.77	0.0			0.0	0.0	1

MAXIMUM = 1.00000E 03

MINIMUM = 1.00000E 03

GEOMETRIC MEAN = 9.99999E 02

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 13 (CD PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G
31	0	0	0	0	0
*****	0.0			0.0	0.0

ANALYTICAL
VALUES
0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 14 (CO PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			FREQ	FREQ CUM
3.8E 00	5.6E 00	4	4	12.90	12.90
5.6E 00	8.3E 00	0	4	0.0	12.90
8.3E 00	1.2E 01	1	5	3.23	16.13
1.2E 01	1.8E 01	2	7	6.45	22.58
1.8E 01	2.6E 01	2	9	6.45	29.03
2.6E 01	3.8E 01	4	13	12.90	41.94
3.8E 01	5.6E 01	2	15	6.45	48.39
5.6E 01	8.3E 01	0	15	0.0	48.39
8.3E 01	1.2E 02	1	16	3.23	51.61

HISTOGRAM FOR COLUMN 14 (CO PPM)

5.0E 00 XXXXXXXXXXXXX

7.0E 00

1.0E 01 XXX

1.5E 01 XXXXXX

2.0E 01 XXXXXX

3.0E 01 XXXXXXXXXXXXX

5.0E 01 XXXXXX

7.0E 01

1.0E 02 XXX

N	L	H	B	T	G
15	0	0	0	0	0
48.39	0.0			0.0	0.0

ANALYTICAL
VALUES
16

MAXIMUM = 1.00000E 02

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.79280E 01

GEOMETRIC DEVIATION = 2.54321E 00

FREQUENCY TABLE FOR COLUMN 15 (CR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
3.8E 00	5.6E 00	0	0	0.0	0.0
5.6E 00	8.3E 00	0	0	0.0	0.0
8.3E 00	1.2E 01	6	6	19.35	19.35
1.2E 01	1.8E 01	1	7	3.23	22.58
1.8E 01	2.6E 01	3	10	9.68	32.26
2.6E 01	3.8E 01	1	11	3.23	35.48
3.8E 01	5.6E 01	1	12	3.23	38.71
5.6E 01	8.3E 01	1	13	3.23	41.94
8.3E 01	1.2E 02	1	14	3.23	45.16
1.2E 02	1.8E 02	1	15	3.23	48.39
1.8E 02	2.6E 02	1	16	3.23	51.61
2.6E 02	3.8E 02	0	16	0.0	51.61
3.8E 02	5.6E 02	0	16	0.0	51.61
5.6E 02	8.3E 02	0	16	0.0	51.61
8.3E 02	1.2E 03	0	16	0.0	51.61
1.2E 03	1.8E 03	0	16	0.0	51.61
1.8E 03	2.6E 03	1	17	3.23	54.84

HISTOGRAM FOR COLUMN 15 (CR PPM)

1.0E 01 XXXXXXXXXXXXXXXXXXXX
1.5E 01 XXX
2.0E 01 XXXXXXXXXX
3.0E 01 XXX
5.0E 01 XXX
7.0E 01 XXX
1.0E 02 XXX
1.5E 02 XXX
2.0E 02 XXX
3.0E 02
5.0E 02
7.0E 02
1.0E 03
1.5E 03
2.0E 03 XXX

N L H B T G
0 14 0 0 0 0
0.0 45.16 0.0 0.0

ANALYTICAL
VALUES
17

MAXIMUM = 2.00000E 03

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 3.32861E 01

GEOMETRIC DEVIATION = 4.32273E 00

FREQUENCY TABLE FOR COLUMN 16 (CU PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
3.8E 00	5.6E 00	4	4	12.90	12.90
5.6E 00	8.3E 00	1	5	3.23	16.13
8.3E 00	1.2E 01	4	9	12.90	29.03
1.2E 01	1.8E 01	1	10	3.23	32.26
1.8E 01	2.6E 01	2	12	6.45	38.71
2.6E 01	3.8E 01	2	14	6.45	45.16
3.8E 01	5.6E 01	0	14	0.0	45.16
5.6E 01	8.3E 01	5	19	16.13	61.29
8.3E 01	1.2E 02	1	20	3.23	64.52
1.2E 02	1.8E 02	1	21	3.23	67.74
1.8E 02	2.6E 02	0	21	0.0	67.74
2.6E 02	3.8E 02	1	22	3.23	70.97
3.8E 02	5.6E 02	0	22	0.0	70.97
5.6E 02	8.3E 02	1	23	3.23	74.19
8.3E 02	1.2E 03	0	23	0.0	74.19
1.2E 03	1.8E 03	0	23	0.0	74.19
1.8E 03	2.6E 03	0	23	0.0	74.19
2.6E 03	3.8E 03	1	24	3.23	77.42
3.8E 03	5.6E 03	0	24	0.0	77.42
5.6E 03	8.3E 03	0	24	0.0	77.42
8.3E 03	1.2E 04	0	24	0.0	77.42
1.2E 04	1.8E 04	1	25	3.23	80.65

HISTOGRAM FOR COLUMN 16 (CU PPM)

28

5.0E 00 XXXXXXXXXXXXXXXX
7.0E 00 XXX
1.0E 01 XXXXXXXXXXXXXXXX
1.5E 01 XXX
2.0E 01 XXXXXX
3.0E 01 XXXXXX
5.0E 01
7.0E 01 XXXXXXXXXXXXXXXX
1.0E 02 XXX
1.5E 02 XXX
2.0E 02
3.0E 02 XXX
5.0E 02
7.0E 02 XXX
1.0E 03
1.5E 03

2.0E 03

3.0E 03 XXX

5.0E 03

7.0E 03

1.0E 04

1.5E 04 XXX

N
0
0.0

L
6
19.35

H
0

B
0

T
0
0.0

G
0
0.0

ANALYTICAL
VALUES
25

MAXIMUM = 1.50010E 04

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 4.26589E 01

GEOMETRIC DEVIATION = 7.71448E 00

FREQUENCY TABLE FOR COLUMN 17 (LA PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
1.8E 01 -	2.6E 01	1	1	3.23	3.23

HISTOGRAM FOR COLUMN 17 (LA PPM)

2.0E 01 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
26	4	0	0	0	0	1
83.87	12.90			0.0	0.0	

MAXIMUM = 2.00000E 01

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 1.99999E 01

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 18 (MO PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
3.8E 00	5.6E 00	1	1	3.23	3.23

HISTOGRAM FOR COLUMN 18 (MO PPM)

5.0E 00 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
22	8	0	0	0	0	1
70.97	25.81			0.0	0.0	

MAXIMUM = 5.00000E 00

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 5.00000E 00

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 19 (NB PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E 00	1.2E 01	8	8	25.81	25.81

HISTOGRAM FOR COLUMN 19 (NB PPM)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXX

N	L	H	B	T	G	ANALYTICAL VALUES
0	23	0	0	0	0	8
0.0	74.19			0.0	0.0	

MAXIMUM = 1.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 9.99997E 00

GEOMETRIC DEVIATION = 1.00208E 00

FREQUENCY TABLE FOR COLUMN 20 (NI PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
3.8E 00	5.6E 00	8	8	25.81	25.81
5.6E 00	8.3E 00	0	8	0.0	25.81
8.3E 00	1.2E 01	3	11	9.68	35.48
1.2E 01	1.8E 01	4	15	12.90	48.39
1.8E 01	2.6E 01	2	17	6.45	54.84
2.6E 01	3.8E 01	4	21	12.90	67.74
3.8E 01	5.6E 01	2	23	6.45	74.19
5.6E 01	8.3E 01	2	25	6.45	80.65
8.3E 01	1.2E 02	0	25	0.0	80.65
1.2E 02	1.8E 02	0	25	0.0	80.65
1.8E 02	2.6E 02	0	25	0.0	80.65
2.6E 02	3.8E 02	0	25	0.0	80.65
3.8E 02	5.6E 02	0	25	0.0	80.65
5.6E 02	8.3E 02	0	25	0.0	80.65
8.3E 02	1.2E 03	0	25	0.0	80.65
1.2E 03	1.8E 03	1	26	3.23	83.87

HISTOGRAM FOR COLUMN 20 (NI PPM)

5.0E 00 XXXXXXXXXXXXXXXXXXXXXXXX
7.0E 00
1.0E 01 XXXXXXXXXX
1.5E 01 XXXXXXXXXXXXXXXX
2.0E 01 XXXXXX
3.0E 01 XXXXXXXXXXXXXXXX
5.0E 01 XXXXXX
7.0E 01 XXXXXX
1.0E 02
1.5E 02
2.0E 02
3.0E 02
5.0E 02
7.0E 02
1.0E 03
1.5E 03 XXX

N L H B T G
0 5 0 0 0 0
0.0 16.13 0.0 0.0

ANALYTICAL
VALUES
26

MAXIMUM = 1.50000E 03

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 1.71195E 01

GEOMETRIC DEVIATION = 3.57839E 00

FREQUENCY TABLE FOR COLUMN 21 (PB PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E 00 -	1.2E 01	8	8	25.81	25.81
1.2E 01 -	1.8E 01	2	10	6.45	32.26
1.8E 01 -	2.6E 01	3	13	9.68	41.94
2.6E 01 -	3.8E 01	2	15	6.45	48.39
3.8E 01 -	5.6E 01	2	17	6.45	54.84
5.6E 01 -	8.3E 01	0	17	0.0	54.84
8.3E 01 -	1.2E 02	0	17	0.0	54.84
1.2E 02 -	1.8E 02	1	18	3.23	58.06

HISTOGRAM FOR COLUMN 21 (PB PPM)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXX

1.5E 01 XXXXXX

2.0E 01 XXXXXXXXXX

3.0E 01 XXXXXX

5.0E 01 XXXXXX

7.0E 01

1.0E 02

1.5E 02 XXX

N	L	H	B	T	G
9	4	0	0	0	0
29.03	12.90			0.0	0.0

ANALYTICAL
VALUES
18

MAXIMUM = 1.50000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.84394E 01

GEOMETRIC DEVIATION = 2.14981E 00

FREQUENCY TABLE FOR COLUMN 22 (SB PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G
31	0	0	0	0	0
*****	0.0			0.0	0.0

ANALYTICAL
VALUES
0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 23 (SC PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
3.8E 00	5.6E 00	0	0	0.0	0.0
5.6E 00	8.3E 00	2	2	6.45	6.45
8.3E 00	1.2E 01	3	5	9.68	16.13
1.2E 01	1.8E 01	6	11	19.35	35.48
1.8E 01	2.6E 01	0	11	0.0	35.48
2.6E 01	3.8E 01	3	14	9.68	45.16

HISTOGRAM FOR COLUMN 23 (SC PPM)

7.0E 00 XXXXXX

1.0E 01 XXXXXXXXXXXX

1.5E 01 XXXXXXXXXXXXXXXXXXXX

2.0E 01

3.0E 01 XXXXXXXXXXXX

N	L	H	B	T	G
12	5	0	0	0	0
38.71	16.13			0.0	0.0

ANALYTICAL
VALUES
14

MAXIMUM = 3.00000E 01

MINIMUM = 7.00000E 00

GEOMETRIC MEAN = 1.43079E 01

GEOMETRIC DEVIATION = 1.62509E 00

FREQUENCY TABLE FOR COLUMN 24 (SN PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT	ANALYTICAL VALUES
LOWER	UPPER		CUM	FREQ	FREQ CUM	
N	L	H	B	T	G	
31	0	0	0	0	0	0
*****	0.0			0.0	0.0	

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 25 (SR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			FREQ	FREQ CUM
8.3E 01	1.2E 02	8	8	25.81	25.81
1.2E 02	1.8E 02	4	12	12.90	38.71
1.8E 02	2.6E 02	2	14	6.45	45.16
2.6E 02	3.8E 02	7	21	22.58	67.74
3.8E 02	5.6E 02	0	21	0.0	67.74
5.6E 02	8.3E 02	0	21	0.0	67.74
8.3E 02	1.2E 03	1	22	3.23	70.97

HISTOGRAM FOR COLUMN 25 (SR PPM)

1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX

1.5E 02 XXXXXXXXXXXXX

2.0E 02 XXXXXX

3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX

5.0E 02

7.0E 02

1.0E 03 XXX

N	L	H	B	T	G
0	9	0	0	0	0
0.0	29.03			0.0	0.0

ANALYTICAL
VALUES
22

MAXIMUM = 1.00000E 03

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 1.80570E 02

GEOMETRIC DEVIATION = 1.83130E 00

FREQUENCY TABLE FOR COLUMN 26 (V PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
8.3E 00	1.2E 01	0	0	0.0	0.0
1.2E 01	1.8E 01	3	3	9.68	9.68
1.8E 01	2.6E 01	7	10	22.58	32.26
2.6E 01	3.8E 01	6	16	19.35	51.61
3.8E 01	5.6E 01	2	18	6.45	58.06
5.6E 01	8.3E 01	2	20	6.45	64.52
8.3E 01	1.2E 02	2	22	6.45	70.97
1.2E 02	1.8E 02	8	30	25.81	96.77
1.8E 02	2.6E 02	1	31	3.23	100.00

HISTOGRAM FOR COLUMN 26 (V PPM)

1.5E 01 XXXXXXXXXXXX
 2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
 5.0E 01 XXXXXX
 7.0E 01 XXXXXX
 1.0E 02 XXXXXX
 1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 02 XXX

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

ANALYTICAL
 VALUES
 31

MAXIMUM = 2.00000E 02

MINIMUM = 1.50000E 01

GEOMETRIC MEAN = 4.86369E 01

GEOMETRIC DEVIATION = 2.47025E 00

FREQUENCY TABLE FOR COLUMN 27 (W PPM)

LIMITS
LOWER - UPPER

FREQ

FREQ
CUM

PERCENT
FREQ

PERCENT
FREQ CUM

ANALYTICAL
VALUES

N
30

L
0
0.0

H
0

B
0

T
0
0.0

G
0
0.0

0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 28 (Y PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E 00 -	1.2E 01	9	9	29.03	29.03
1.2E 01 -	1.8E 01	8	17	25.81	54.84
1.8E 01 -	2.6E 01	2	19	6.45	61.29
2.6E 01 -	3.8E 01	1	20	3.23	64.52
3.8E 01 -	5.6E 01	0	20	0.0	64.52
5.6E 01 -	8.3E 01	1	21	3.23	67.74

HISTOGRAM FOR COLUMN 28 (Y PPM)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX

1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX

2.0E 01 XXXXXX

3.0E 01 XXX

5.0E 01

7.0E 01 XXX

N	L	H	B	T	G
0	10	0	0	0	0
0.0	32.26			0.0	0.0

ANALYTICAL
VALUES
21

MAXIMUM = 7.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.44116E 01

GEOMETRIC DEVIATION = 1.60400E 00

FREQUENCY TABLE FOR COLUMN 29 (ZN PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
1.8E 02	2.6E 02	1	1	3.23	3.23
2.6E 02	3.8E 02	1	2	3.23	6.45
3.8E 02	5.6E 02	0	2	0.0	6.45
5.6E 02	8.3E 02	0	2	0.0	6.45
8.3E 02	1.2E 03	0	2	0.0	6.45
1.2E 03	1.8E 03	1	3	3.23	9.68

HISTOGRAM FOR COLUMN 29 (ZN PPM)

2.0E 02 XXX

3.0E 02 XXX

5.0E 02

7.0E 02

1.0E 03

1.5E 03 XXX

N
22
70.97

L
6
19.35

H
0

B
0

T
0
0.0

G
0
0.0

ANALYTICAL
VALUES
3

MAXIMUM = 1.50000E 03

MINIMUM = 2.00000E 02

GEOMETRIC MEAN = 4.48139E 02

GEOMETRIC DEVIATION = 2.90291E 00

FREQUENCY TABLE FOR COLUMN 30 (ZR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			FREQ	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	1	1	3.23	3.23
3.8E 01 -	5.6E 01	2	3	6.45	9.68
5.6E 01 -	8.3E 01	17	20	54.84	64.52
8.3E 01 -	1.2E 02	3	23	9.68	74.19
1.2E 02 -	1.8E 02	1	24	3.23	77.42
1.8E 02 -	2.6E 02	2	26	6.45	83.87

HISTOGRAM FOR COLUMN 30 (ZR PPM)

3.0E 01 XXX

5.0E 01 XXXXXX

7.0E 01 XXX

1.0E 02 XXXXXXXXXXXX

1.5E 02 XXX

2.0E 02 XXXXXX

N	L	H	B	T	G
0	5	0	0	0	0
0.0	16.13			0.0	0.0

ANALYTICAL
VALUES
26

MAXIMUM = 2.00000E 02

MINIMUM = 3.00000E 01

GEOMETRIC MEAN = 7.68025E 01

GEOMETRIC DEVIATION = 1.48346E 00

FREQUENCY TABLE FOR COLUMN 31 (AU PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
1.8E-02	2.6E-02	0	0	0.0	0.0
2.6E-02	3.8E-02	0	0	0.0	0.0
3.8E-02	5.6E-02	2	2	6.45	6.45
5.6E-02	8.3E-02	0	2	0.0	6.45
8.3E-02	1.2E-01	0	2	0.0	6.45
1.2E-01	1.8E-01	0	2	0.0	6.45
1.8E-01	2.6E-01	0	2	0.0	6.45
2.6E-01	3.8E-01	0	2	0.0	6.45
3.8E-01	5.6E-01	0	2	0.0	6.45
5.6E-01	8.3E-01	0	2	0.0	6.45
8.3E-01	1.2E 00	0	2	0.0	6.45
1.2E 00	1.8E 00	0	2	0.0	6.45
1.8E 00	2.6E 00	0	2	0.0	6.45
2.6E 00	3.8E 00	0	2	0.0	6.45
3.8E 00	5.6E 00	0	2	0.0	6.45
5.6E 00	8.3E 00	0	2	0.0	6.45
8.3E 00	1.2E 01	0	2	0.0	6.45
1.2E 01	1.8E 01	0	2	0.0	6.45
1.8E 01	2.6E 01	0	2	0.0	6.45
2.6E 01	3.8E 01	0	2	0.0	6.45
3.8E 01	5.6E 01	0	2	0.0	6.45
5.6E 01	8.3E 01	1	3	3.23	9.68

HISTOGRAM FOR COLUMN 31 (AU PPM)

5.0E-02 XXXXXX

7.0E-02

1.0E-01

1.5E-01

2.0E-01

3.0E-01

5.0E-01

7.0E-01

1.0E 00

1.5E 00

2.0E 00

3.0E 00

5.0E 00

7.0E 00

1.0E 01

1.5E 01

2.0E 01

3.0E 01

5.0E 01

7.0E 01 XXX

N
0
0.0

L
28
90.32

H
0

B
0

T
0
0.0

G
0
0.0

ANALYTICAL
VALUES
3

MAXIMUM = 6.00000E 01

MINIMUM = 4.00000E-02

GEOMETRIC MEAN = 4.57886E-01

GEOMETRIC DEVIATION = 6.81891E 01

A470 STATISTICAL SUMMARY

DATE 4/20/70

ELEMENT	N	L	H	B	T	G	ANALYTICAL VALUES
FE PCT	0	1	0	0	0	0	30
MG PCT	0	1	0	0	0	0	30
CA PCT	0	6	0	0	0	0	25
TI PCT	0	1	0	0	0	0	30
MN PPM	0	1	0	0	0	0	30
AG PPM	18	5	0	0	0	0	8
AS PPM	31	0	0	0	0	0	0
AU PPM	31	0	0	0	0	0	0
B PPM	16	8	0	0	0	0	7
BA PPM	0	3	0	0	0	0	28
BE PPM	17	9	0	0	0	0	5
BI PPM	30	0	0	0	0	0	1
CD PPM	31	0	0	0	0	0	0
CO PPM	15	0	0	0	0	0	16
CR PPM	0	14	0	0	0	0	17
CU PPM	0	6	0	0	0	0	25
LA PPM	26	4	0	0	0	0	1
MO PPM	22	8	0	0	0	0	1
NB PPM	0	23	0	0	0	0	8
NI PPM	0	5	0	0	0	0	26
PB PPM	9	4	0	0	0	0	18
SB PPM	31	0	0	0	0	0	0
SC PPM	12	5	0	0	0	0	14
SN PPM	31	0	0	0	0	0	0
SR PPM	0	9	0	0	0	0	22
V PPM	0	0	0	0	0	0	31
W PPM	30	0	0	0	0	0	0
Y PPM	0	10	0	0	0	0	21
ZN PPM	22	6	0	0	0	0	3
ZR PPM	0	5	0	0	0	0	26
AU PPM	0	28	0	0	0	0	3

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS
FE PCT	1.978743	3.53	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.
MG PCT	0.578295	3.88	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CA PCT	0.564127	8.10	6 NOT DETECTED, LESS THAN, OR TRACE VALUES.
TI PCT	0.131897	3.44	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.
MN PPM	224.465714	4.05	1 NOT DETECTED, LESS THAN, OR TRACE VALUES.
AG PPM	0.043489	28.15	23 NOT DETECTED, LESS THAN, OR TRACE VALUES.
AS PPM	*****	*****	31 NOT DETECTED, LESS THAN, OR TRACE VALUES.
AU PPM	*****	*****	31 NOT DETECTED, LESS THAN, OR TRACE VALUES.
B PPM	4.255919	2.42	24 NOT DETECTED, LESS THAN, OR TRACE VALUES.
BA PPM	317.109619	3.80	3 NOT DETECTED, LESS THAN, OR TRACE VALUES.
BE PPM	0.375585	2.16	26 NOT DETECTED, LESS THAN, OR TRACE VALUES.
BI PPM	*****	*****	30 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CD PPM	*****	*****	31 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CO PPM	4.447355	5.69	15 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CR PPM	5.462089	11.70	14 NOT DETECTED, LESS THAN, OR TRACE VALUES.
CU PPM	20.170502	11.53	6 NOT DETECTED, LESS THAN, OR TRACE VALUES.
LA PPM	*****	*****	30 NOT DETECTED, LESS THAN, OR TRACE VALUES.
MO PPM	*****	*****	30 NOT DETECTED, LESS THAN, OR TRACE VALUES.
NB PPM	7.053754	1.30	23 NOT DETECTED, LESS THAN, OR TRACE VALUES.
NI PPM	11.704411	4.40	5 NOT DETECTED, LESS THAN, OR TRACE VALUES.
PB PPM	9.395220	2.89	13 NOT DETECTED, LESS THAN, OR TRACE VALUES.

30 REPORTED VALUES.
 30 REPORTED VALUES.
 25 REPORTED VALUES.
 30 REPORTED VALUES.
 30 REPORTED VALUES.
 8 REPORTED VALUES.
 0 REPORTED VALUES. NO COMPUTATIONS.
 0 REPORTED VALUES. NO COMPUTATIONS.
 7 REPORTED VALUES.
 28 REPORTED VALUES.
 5 REPORTED VALUES.
 1 REPORTED VALUES. NO COMPUTATIONS.
 0 REPORTED VALUES. NO COMPUTATIONS.
 16 REPORTED VALUES.
 17 REPORTED VALUES.
 25 REPORTED VALUES.
 1 REPORTED VALUES. NO COMPUTATIONS.
 1 REPORTED VALUES. NO COMPUTATIONS.
 8 REPORTED VALUES.
 26 REPORTED VALUES.
 18 REPORTED VALUES.

SB PPM	*****	*****
SC PPM	3.706535	4.14
SN PPM	*****	*****
SR PPM	123.545486	2.26
V PPM	48.636841	2.47
W PPM	*****	*****
Y PPM	10.484584	1.88
ZN PPM	*****	*****
ZR PPM	49.934845	2.88
AU PPM	*****	*****

31	NOT DETECTED, LESS THAN, OR TRACE VALUES.
17	NOT DETECTED, LESS THAN, OR TRACE VALUES.
31	NOT DETECTED, LESS THAN, OR TRACE VALUES.
9	NOT DETECTED, LESS THAN, OR TRACE VALUES.
31	SAMPLES AND 31 ANALYTICAL VALUES.
30	NOT DETECTED, LESS THAN, OR TRACE VALUES.
10	NOT DETECTED, LESS THAN, OR TRACE VALUES.
28	NOT DETECTED, LESS THAN, OR TRACE VALUES.
5	NOT DETECTED, LESS THAN, OR TRACE VALUES.
28	NOT DETECTED, LESS THAN, OR TRACE VALUES.

0	REPORTED VALUES. NO COMPUTATIONS.
14	REPORTED VALUES.
0	REPORTED VALUES. NO COMPUTATIONS.
22	REPORTED VALUES.
0	REPORTED VALUES. NO COMPUTATIONS.
21	REPORTED VALUES.
3	REPORTED VALUES. NO COMPUTATIONS.
26	REPORTED VALUES.
3	REPORTED VALUES. NO COMPUTATIONS.

TABLE 3. SUMDUM C-4 STREAM SEDIMENTS

MAP NUMBER	SAMPLE	FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
19	AKD829	15.0000	2.0000	2.0000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	0.0 L	300.0000
20	AKD797	5.0000	1.5000	1.5000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	0.0 L	300.0000
21	AKD799	5.0000	2.0000	2.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	1000.0000
22	AKD798	5.0000	2.0000	2.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	0.0 L	1000.0000
23	AKD830	5.0000	2.0000	1.5000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	0.0 L	1500.0000
23	AKD831	3.0000	1.5000	2.0000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	0.0 N	700.0000
24	AKD832	3.0000	1.5000	1.5000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	0.0 N	700.0000
25	AKD800	5.0000	3.0000	2.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	1500.0000
26	AKD801	3.0000	2.0000	1.5000	0.3000	500.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
27	AKD802	3.0000	1.5000	1.5000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	0.0 L	700.0000
28	AKD803	3.0000	1.5000	1.5000	0.2000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	500.0000
29	AKD804	3.0000	1.5000	1.0000	0.3000	500.0000	0.0 N	0.0 N	0.0 N	10.0000	700.0000
30	AKD805	3.0000	1.5000	1.5000	0.3000	700.0000	0.0 N	0.0 N	0.0 N	15.0000	300.0000
31	AKD806	3.0000	1.5000	1.5000	0.3000	300.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
32	AKD807	5.0000	3.0000	2.0000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	15.0000	300.0000
33	AKD824	10.0000	3.0000	1.5000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
34	AKD828	5.0000	1.5000	0.7000	0.7000	500.0000	0.0 N	0.0 N	0.0 N	15.0000	700.0000
35	AKD808	5.0000	3.0000	2.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	150.0000
36	AKD809	5.0000	3.0000	1.5000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	15.0000	300.0000
37	AKD823	10.0000	2.0000	1.5000	0.5000	1000.0000	0.0 L	0.0 N	0.0 N	10.0000	700.0000
38	AKD825	10.0000	2.0000	1.5000	1.0000	700.0000	0.0 N	0.0 N	0.0 N	20.0000	700.0000
39	AKD826	5.0000	2.0000	1.5000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	0.0 L	300.0000
40	AKD827	7.0000	2.0000	1.0000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
41	AKD810	3.0000	2.0000	1.5000	0.5000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
42	AKD811	3.0000	1.5000	1.5000	0.3000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	150.0000
43	AKD812	3.0000	1.5000	1.5000	0.3000	500.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
44	AKD821	10.0000	2.0000	2.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	15.0000	300.0000
45	AKD820	10.0000	2.0000	1.0000	0.7000	1000.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
46	AKD822	10.0000	2.0000	1.5000	0.7000	1500.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000
47	AKD816	3.0000	1.0000	1.0000	0.3000	300.0000	0.0 N	0.0 N	0.0 N	0.0 L	300.0000
48	AKD817	3.0000	1.0000	1.0000	0.3000	300.0000	0.0 N	0.0 N	0.0 N	0.0 N	150.0000
49	AKD818	5.0000	1.5000	0.7000	0.3000	300.0000	0.0 N	0.0 N	0.0 N	0.0 L	300.0000
50	AKD819	7.0000	2.0000	0.7000	0.5000	700.0000	0.0 N	0.0 N	0.0 N	10.0000	300.0000

SUMDUM C-4 STREAM SEDIMENTS

	SAMPLE	BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
19	AKD829	0.0 N	0.0 N	0.0 N	30.0000	70.0000	7.0000	30.0000	0.0 L	10.0000	15.0000
20	AKD797	0.0 L	0.0 N	0.0 N	10.0000	70.0000	5.0000	30.0000	0.0 N	0.0 L	15.0000
21	AKD799	0.0 L	0.0 N	0.0 N	20.0000	150.0000	30.0000	50.0000	0.0 L	10.0000	70.0000
22	AKD798	0.0 L	0.0 N	0.0 N	15.0000	150.0000	10.0000	20.0000	0.0 L	0.0 L	50.0000
23	AKD830	0.0 L	0.0 N	0.0 N	20.0000	100.0000	10.0000	30.0000	0.0 L	10.0000	30.0000
23	AKD831	0.0 L	0.0 N	0.0 N	10.0000	70.0000	0.0 L	20.0000	0.0 N	10.0000	15.0000
24	AKD832	0.0 L	0.0 N	0.0 N	7.0000	10.0000	30.0000	20.0000	0.0 L	0.0 L	0.0 L
25	AKD800	0.0 L	0.0 N	0.0 N	30.0000	150.0000	50.0000	0.0 L	0.0 L	10.0000	150.0000
26	AKD801	0.0 N	0.0 N	0.0 N	20.0000	150.0000	7.0000	0.0 L	0.0 L	10.0000	70.0000
27	AKD802	0.0 N	0.0 N	0.0 N	20.0000	70.0000	10.0000	0.0 L	0.0 L	10.0000	15.0000
28	AKD803	0.0 N	0.0 N	0.0 N	10.0000	70.0000	5.0000	0.0 L	0.0 N	0.0 L	15.0000
29	AKD804	0.0 N	0.0 N	0.0 N	10.0000	30.0000	5.0000	50.0000	0.0 L	10.0000	20.0000
30	AKD805	0.0 L	0.0 N	0.0 N	15.0000	50.0000	20.0000	0.0 L	0.0 N	10.0000	20.0000
31	AKD806	0.0 L	0.0 N	0.0 N	15.0000	50.0000	15.0000	0.0 L	0.0 N	10.0000	15.0000
32	AKD807	0.0 L	0.0 N	0.0 N	30.0000	300.0000	70.0000	0.0 N	0.0 L	10.0000	150.0000
33	AKD824	1.0000	0.0 N	0.0 N	30.0000	150.0000	30.0000	20.0000	0.0 L	10.0000	70.0000
34	AKD828	0.0 L	0.0 N	0.0 N	20.0000	100.0000	30.0000	20.0000	0.0 L	10.0000	70.0000
35	AKD808	0.0 N	0.0 N	0.0 N	30.0000	150.0000	20.0000	0.0 N	0.0 L	10.0000	70.0000
36	AKD809	0.0 L	0.0 N	0.0 N	30.0000	150.0000	30.0000	0.0 N	0.0 L	10.0000	70.0000
37	AKD823	0.0 N	0.0 N	0.0 N	20.0000	30.0000	50.0000	0.0 N	0.0 L	0.0 L	20.0000
38	AKD825	0.0 L	0.0 N	0.0 N	20.0000	70.0000	50.0000	30.0000	0.0 L	10.0000	50.0000
39	AKD826	0.0 L	0.0 N	0.0 N	30.0000	70.0000	20.0000	0.0 N	0.0 L	10.0000	30.0000
40	AKD827	0.0 L	0.0 N	0.0 N	20.0000	20.0000	30.0000	20.0000	0.0 L	10.0000	15.0000
41	AKD810	0.0 L	0.0 N	0.0 N	30.0000	150.0000	10.0000	0.0 N	0.0 L	10.0000	50.0000
42	AKD811	0.0 N	0.0 N	0.0 N	20.0000	100.0000	30.0000	0.0 N	0.0 L	10.0000	50.0000
43	AKD812	0.0 N	0.0 N	0.0 N	20.0000	150.0000	30.0000	0.0 L	0.0 L	10.0000	30.0000
44	AKD821	0.0 L	0.0 N	0.0 N	30.0000	30.0000	30.0000	0.0 L	0.0 L	0.0 L	20.0000
45	AKD820	0.0 N	0.0 N	0.0 N	30.0000	30.0000	100.0000	0.0 L	0.0 L	10.0000	20.0000
46	AKD822	0.0 N	0.0 N	0.0 N	20.0000	100.0000	30.0000	0.0 N	0.0 L	0.0 L	30.0000
47	AKD816	0.0 L	0.0 N	0.0 N	15.0000	30.0000	30.0000	0.0 N	0.0 L	10.0000	20.0000
48	AKD817	0.0 N	0.0 N	0.0 N	15.0000	50.0000	20.0000	0.0 N	0.0 L	10.0000	20.0000
49	AKD818	0.0 L	0.0 N	0.0 N	20.0000	50.0000	30.0000	0.0 L	0.0 L	10.0000	20.0000
50	AKD819	0.0 L	0.0 N	0.0 N	30.0000	30.0000	30.0000	0.0 L	0.0 L	10.0000	20.0000

SUMDUM C-4 STREAM SEDIMENTS

	SAMPLE	PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
19	AKD829	10.0000	0.0 N	20.0000	0.0 N	300.0000	300.0000	0.0 N	20.0000	0.0 N	500.0000
20	AKD797	0.0 L	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	15.0000	0.0 N	300.0000
21	AKD799	15.0000	0.0 N	15.0000	0.0 N	300.0000	100.0000	0.0 N	20.0000	0.0 L	300.0000
22	AKD798	15.0000	0.0 N	20.0000	0.0 N	300.0000	150.0000	0.0 N	20.0000	0.0 N	70.0000
23	AKD830	15.0000	0.0 N	15.0000	0.0 N	200.0000	200.0000	0.0 N	15.0000	0.0 N	100.0000
23	AKD831	15.0000	0.0 N	15.0000	0.0 N	300.0000	150.0000	0.0 N	20.0000	0.0 N	100.0000
24	AKD832	15.0000	0.0 N	15.0000	0.0 N	300.0000	100.0000	0.0 N	20.0000	0.0 N	150.0000
25	AKD800	10.0000	0.0 N	20.0000	0.0 N	150.0000	150.0000	0.0 N	30.0000	0.0 L	100.0000
26	AKD801	10.0000	0.0 N	20.0000	0.0 N	200.0000	100.0000	0.0 N	20.0000	0.0 N	200.0000
27	AKD802	15.0000	0.0 N	15.0000	0.0 N	200.0000	100.0000	0.0 N	15.0000	0.0 L	70.0000
28	AKD803	10.0000	0.0 N	15.0000	0.0 N	200.0000	100.0000	0.0 N	10.0000	0.0 N	50.0000
29	AKD804	10.0000	0.0 N	15.0000	0.0 N	200.0000	150.0000	0.0 N	15.0000	0.0 N	300.0000
30	AKD805	30.0000	0.0 N	15.0000	0.0 N	300.0000	70.0000	0.0 N	15.0000	0.0 L	70.0000
31	AKD806	0.0 L	0.0 N	15.0000	0.0 N	300.0000	70.0000	0.0 N	15.0000	0.0 N	20.0000
32	AKD807	15.0000	0.0 N	30.0000	0.0 N	200.0000	150.0000	0.0 N	15.0000	0.0 N	70.0000
33	AKD824	15.0000	0.0 N	20.0000	0.0 N	300.0000	300.0000	0.0 N	20.0000	0.0 L	70.0000
34	AKD828	0.0 L	0.0 N	15.0000	0.0 N	150.0000	200.0000	0.0 N	15.0000	0.0 L	70.0000
35	AKD808	0.0 N	0.0 N	30.0000	0.0 N	200.0000	150.0000	0.0 N	20.0000	0.0 N	70.0000
36	AKD809	10.0000	0.0 N	20.0000	0.0 N	150.0000	150.0000	0.0 N	15.0000	0.0 N	70.0000
37	AKD823	50.0000	0.0 N	30.0000	0.0 N	150.0000	300.0000	0.0 N	20.0000	300.0000	70.0000
38	AKD825	0.0 L	0.0 N	20.0000	0.0 N	200.0000	300.0000	0.0 N	15.0000	0.0 L	70.0000
39	AKD826	0.0 L	0.0 N	20.0000	0.0 N	150.0000	300.0000	0.0 N	15.0000	0.0 N	70.0000
40	AKD827	10.0000	0.0 N	20.0000	0.0 N	150.0000	200.0000	0.0 N	30.0000	0.0 N	70.0000
41	AKD810	0.0 N	0.0 N	20.0000	0.0 N	150.0000	150.0000	0.0 N	15.0000	0.0 L	70.0000
42	AKD811	0.0 L	0.0 N	20.0000	0.0 N	150.0000	150.0000	0.0 N	15.0000	0.0 N	70.0000
43	AKD812	15.0000	0.0 N	20.0000	0.0 N	150.0000	100.0000	0.0 N	15.0000	0.0 N	100.0000
44	AKD821	10.0000	0.0 N	30.0000	0.0 N	200.0000	300.0000	0.0 N	30.0000	0.0 L	70.0000
45	AKD820	10.0000	0.0 N	30.0000	0.0 N	200.0000	200.0000	0.0 N	30.0000	0.0 N	70.0000
46	AKD822	10.0000	0.0 N	30.0000	0.0 N	150.0000	300.0000	0.0 N	30.0000	0.0 L	70.0000
47	AKD816	0.0 L	0.0 N	15.0000	0.0 N	150.0000	150.0000	0.0 N	10.0000	0.0 N	70.0000
48	AKD817	0.0 N	0.0 N	15.0000	0.0 N	100.0000	100.0000	0.0 N	10.0000	0.0 N	50.0000
49	AKD818	15.0000	0.0 N	15.0000	0.0 N	150.0000	150.0000	0.0 N	15.0000	0.0 N	70.0000
50	AKD819	15.0000	0.0 N	20.0000	0.0 N	150.0000	150.0000	0.0 N	20.0000	0.0 N	70.0000

SUMDUM C-4 STREAM SEDIMENTS

	SAMPLE	AU PPM
19	AKD829	0.0200L
20	AKD797	0.0200L
21	AKD799	0.0200L
22	AKD798	0.0200L
23	AKD830	0.0200L
23	AKD831	0.0200L
24	AKD832	0.0200L
25	AKD800	0.0200L
26	AKD801	0.0200L
27	AKD802	0.0200L
28	AKD803	0.0200L
29	AKD804	0.0200L
30	AKD805	0.0200L
31	AKD806	0.0200L
32	AKD807	0.0200L
33	AKD824	0.0200L
34	AKD828	0.0200L
35	AKD808	0.0200L
36	AKD809	0.0200L
37	AKD823	0.0200L
38	AKD825	2.2000
39	AKD826	0.0200L
40	AKD827	0.0200L
41	AKD810	0.0200L
42	AKD811	0.0200L
43	AKD812	0.0200L
44	AKD821	0.0200L
45	AKD820	0.0200L
46	AKD822	0.0200L
47	AKD816	0.0200L
48	AKD817	0.0200L
49	AKD818	0.0200L
50	AKD819	0.0200L

A470 GRAPHICAL ANALYSIS

DATE 4/20/70

TITLE	INPUT ID	N	M
SUMDUM C-4 STREAM SEDIMENTS	-A.CLARKS-	33	31

COLUMN IDENTIFIERS

FE PCT	MG PCT	CA PCT	TI PCT	MN PPM	AG PPM	AS PPM	AU PPM	B PPM	BA PPM
BE PPM	BI PPM	CD PPM	CO PPM	CR PPM	CU PPM	LA PPM	MO PPM	NB PPM	NI PPM
PB PPM	SB PPM	SC PPM	SN PPM	SR PPM	V PPM	W PPM	Y PPM	ZN PPM	ZR PPM
AU PPM									

FREQUENCY TABLE FOR COLUMN 1 (FE PCT)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			FREQ	PERCENT 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	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	13	13	39.39	39.39
3.8E 00	5.6E 00	11	24	33.33	72.73
5.6E 00	8.3E 00	2	26	6.06	78.79
8.3E 00	1.2E 01	6	32	18.18	96.97
1.2E 01	1.8E 01	1	33	3.03	100.00

HISTOGRAM FOR COLUMN 1 (FE PCT)

3.0E 00 XX

5.0E 00 XX

7.0E 00 XXXXXX

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX

1.5E 01 XXX

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

ANALYTICAL
VALUES
33

MAXIMUM = 1.50000E 01

MINIMUM = 3.00000E 00

GEOMETRIC MEAN = 4.89349E 00

GEOMETRIC DEVIATION = 1.63286E 00

FREQUENCY TABLE FOR COLUMN 2 (MG PCT)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ 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	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	2	2	6.06	6.06
1.2E 00	1.8E 00	12	14	36.36	42.42
1.8E 00	2.6E 00	14	28	42.42	84.85
2.6E 00	3.8E 00	5	33	15.15	100.00

HISTOGRAM FOR COLUMN 2 (MG PCT)

1.0E 00 XXXXXX
 1.5E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 00 XXXXXXXXXXXXXXXX

55 N L H B T G ANALYTICAL
 0 0 0 0 0 0 VALUES
 0.0 0.0 0 0 0.0 0.0 33

MAXIMUM = 3.00000E 00

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 1.83668E 00

GEOMETRIC DEVIATION = 1.32518E 00

FREQUENCY TABLE FOR COLUMN 3 (CA PCT)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			FREQ	PERCENT 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	3	3	9.09	9.09
8.3E-01	1.2E 00	5	8	15.15	24.24
1.2E 00	1.8E 00	17	25	51.52	75.76
1.8E 00	2.6E 00	8	33	24.24	100.00

HISTOGRAM FOR COLUMN 3 (CA PCT)

7.0E-01 XXXXXXXXX

1.0E 00 XXXXXXXXXXXXXXXXX

1.5E 00 XXX

2.0E 00 XXXXXXXXXXXXXXXXXXXXXXX

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

ANALYTICAL
VALUES
33

MAXIMUM = 2.00000E 00

MINIMUM = 7.00000E-01

GEOMETRIC MEAN = 1.41126E 00

GEOMETRIC DEVIATION = 1.36540E 00

FREQUENCY TABLE FOR COLUMN 4 (TI PCT)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	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	3.03	3.03
2.6E-01	3.8E-01	13	14	39.39	42.42
3.8E-01	5.6E-01	12	26	36.36	78.79
5.6E-01	8.3E-01	6	32	18.18	96.97
8.3E-01	1.2E 00	1	33	3.03	100.00

HISTOGRAM FOR COLUMN 4 (TI PCT)

2.0E-01 XXX
3.0E-01 XX
5.0E-01 XX
7.0E-01 XXXXXXXXXXXXXXXXXXXXXXXX
1.0E 00 XXX

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

ANALYTICAL
VALUES
33

MAXIMUM = 1.00000E 00

MINIMUM = 2.00000E-01

GEOMETRIC MEAN = 4.31725E-01

GEOMETRIC DEVIATION = 1.46585E 00

FREQUENCY TABLE FOR COLUMN 5 (MN PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			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	0	0	0.0	0.0
8.3E 01	1.2E 02	0	0	0.0	0.0
1.2E 02	1.8E 02	0	0	0.0	0.0
1.8E 02	2.6E 02	0	0	0.0	0.0
2.6E 02	3.8E 02	5	5	15.15	15.15
3.8E 02	5.6E 02	4	9	12.12	27.27
5.6E 02	8.3E 02	12	21	36.36	63.64
8.3E 02	1.2E 03	11	32	33.33	96.97
1.2E 03	1.8E 03	1	33	3.03	100.00

HISTOGRAM FOR COLUMN 5 (MN PPM)

3.0E 02 XXXXXXXXXXXXXXXX
5.0E 02 XXXXXXXXXXXXX
7.0E 02 XX
1.0E 03 XX
1.5E 03 XXX

58

N	L	H	B	T	G	ANALYTICAL VALUES
0	0	0	0	0	0	33
0.0	0.0			0.0	0.0	

MAXIMUM = 1.50000E 03

MINIMUM = 3.00000E 02

GEOMETRIC MEAN = 6.81225E 02

GEOMETRIC DEVIATION = 1.54192E 00

FREQUENCY TABLE FOR COLUMN 6 (AG PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM	ANALYTICAL VALUES
LOWER	UPPER					
N	L	H	B	T	G	
32	1	0	0	0	0	0
96.97	3.03			0.0	0.0	

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 7 (AS PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G
33	0	0	0	0	0
*****	0.0			0.0	0.0

ANALYTICAL
VALUES
0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 8 (AU PPM)

LIMITS
LOWER - UPPER

FREQ

FREQ
CUM

PERCENT
FREQ

PERCENT
FREQ CUM

ANALYTICAL
VALUES
0

N	L	H	B	T	G
33	0	0	0	0	0
*****	0.0			0.0	0.0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 9 (B PPM)

LIMITS		FREQ	FREQ CUM	PERCENT	
LOWER	UPPER			FREQ	FREQ CUM
8.3E 00	1.2E 01	15	15	45.45	45.45
1.2E 01	1.8E 01	5	20	15.15	60.61
1.8E 01	2.6E 01	1	21	3.03	63.64

HISTOGRAM FOR COLUMN 9 (B PPM)

1.0E 01 XX

1.5E 01 XXXXXXXXXXXXXXXX

2.0E 01 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
4	8	0	0	0	0	
12.12	24.24			0.0	0.0	21

MAXIMUM = 2.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.13829E 01

GEOMETRIC DEVIATION = 1.24359E 00

FREQUENCY TABLE FOR COLUMN 10 (BA PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER -	UPPER				
1.8E 01 -	2.6E 01	0	0	0.0	0.0
2.6E 01 -	3.8E 01	0	0	0.0	0.0
3.8E 01 -	5.6E 01	0	0	0.0	0.0
5.6E 01 -	8.3E 01	0	0	0.0	0.0
8.3E 01 -	1.2E 02	0	0	0.0	0.0
1.2E 02 -	1.8E 02	3	3	9.09	9.09
1.8E 02 -	2.6E 02	0	3	0.0	9.09
2.6E 02 -	3.8E 02	18	21	54.55	63.64
3.8E 02 -	5.6E 02	1	22	3.03	66.67
5.6E 02 -	8.3E 02	7	29	21.21	87.88
8.3E 02 -	1.2E 03	2	31	6.06	93.94
1.2E 03 -	1.8E 03	2	33	6.06	100.00

HISTOGRAM FOR COLUMN 10 (BA PPM)

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

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

ANALYTICAL
VALUES
33

MAXIMUM = 1.50000E 03

MINIMUM = 1.50000E 02

GEOMETRIC MEAN = 4.06048E 02

GEOMETRIC DEVIATION = 1.83484E 00

FREQUENCY TABLE FOR COLUMN 11 (BE PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E-01	1.2E 00	1	1	3.03	3.03

HISTOGRAM FOR COLUMN 11 (BE PPM)

1.0E 00 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
12	20	0	0	0	0	1
36.36	60.61			0.0	0.0	

MAXIMUM = 1.00000E 00

MINIMUM = 1.00000E 00

GEOMETRIC MEAN = 1.00000E 00

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 12 (BI PPM)

LIMITS
LOWER - UPPER

FREQ

FREQ
CUM

PERCENT
FREQ

PERCENT
FREQ CUM

ANALYTICAL
VALUES

N	L	H	B	T	G
33	0	0	0	0	0
*****	0.0			0.0	0.0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 13 (CD PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G
33	0	0	0	0	0
*****	0.0			0.0	0.0

ANALYTICAL
VALUES
0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 14 (CO PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
3.8E 00	5.6E 00	0	0	0.0	0.0
5.6E 00	8.3E 00	1	1	3.03	3.03
8.3E 00	1.2E 01	4	5	12.12	15.15
1.2E 01	1.8E 01	5	10	15.15	30.30
1.8E 01	2.6E 01	12	22	36.36	66.67
2.6E 01	3.8E 01	11	33	33.33	100.00

HISTOGRAM FOR COLUMN 14 (CO PPM)

7.0E 00 XXX

1.0E 01 XXXXXXXXXXXXX

1.5E 01 XXXXXXXXXXXXXXXXX

2.0E 01 XX

3.0E 01 XX

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

ANALYTICAL
VALUES
33

MAXIMUM = 3.00000E 01

MINIMUM = 7.00000E 00

GEOMETRIC MEAN = 1.95203E 01

GEOMETRIC DEVIATION = 1.49809E 00

FREQUENCY TABLE FOR COLUMN 15 (CR PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	1	1	3.03	3.03
1.2E 01	1.8E 01	0	1	0.0	3.03
1.8E 01	2.6E 01	1	2	3.03	6.06
2.6E 01	3.8E 01	6	8	18.18	24.24
3.8E 01	5.6E 01	4	12	12.12	36.36
5.6E 01	8.3E 01	7	19	21.21	57.58
8.3E 01	1.2E 02	4	23	12.12	69.70
1.2E 02	1.8E 02	9	32	27.27	96.97
1.8E 02	2.6E 02	0	32	0.0	96.97
2.6E 02	3.8E 02	1	33	3.03	100.00

HISTOGRAM FOR COLUMN 15 (CR PPM)

1.0E 01 XXX
1.5E 01
2.0E 01 XXX
3.0E 01 XXXXXXXXXXXXXXXXXXXX
5.0E 01 XXXXXXXXXXXXXXX
7.0E 01 XXXXXXXXXXXXXXXXXXXXXXX
1.0E 02 XXXXXXXXXXXXXXX
1.5E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.0E 02
3.0E 02 XXX

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

ANALYTICAL
VALUES
33

MAXIMUM = 3.00000E 02

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 7.02389E 01

GEOMETRIC DEVIATION = 2.11579E 00

FREQUENCY TABLE FOR COLUMN 16 (CU PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT	
LOWER	UPPER				FREQ	CUM
3.8E 00	5.6E 00	3	3	9.09	9.09	
5.6E 00	8.3E 00	2	5	6.06	15.15	
8.3E 00	1.2E 01	4	9	12.12	27.27	
1.2E 01	1.8E 01	1	10	3.03	30.30	
1.8E 01	2.6E 01	4	14	12.12	42.42	
2.6E 01	3.8E 01	13	27	39.39	81.82	
3.8E 01	5.6E 01	3	30	9.09	90.91	
5.6E 01	8.3E 01	1	31	3.03	93.94	
8.3E 01	1.2E 02	1	32	3.03	96.97	

HISTOGRAM FOR COLUMN 16 (CU PPM)

5.0E 00 XXXXXXXXX
7.0E 00 XXXXXX
1.0E 01 XXXXXXXXXXXXX
1.5E 01 XXX
2.0E 01 XXXXXXXXXXXXX
3.0E 01 XX
5.0E 01 XXXXXXXXX
7.0E 01 XXX
1.0E 02 XXX

N L H B T G
0 1 0 0 0 0
0.0 3.03 0.0 0.0

ANALYTICAL
VALUES
32

MAXIMUM = 1.00000E 02

MINIMUM = 5.00000E 00

GEOMETRIC MEAN = 2.10011E 01

GEOMETRIC DEVIATION = 2.17492E 00

FREQUENCY TABLE FOR COLUMN 17 (LA PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER - UPPER			CUM	FREQ	FREQ CUM
1.8E 01 -	2.6E 01	6	6	18.18	18.18
2.6E 01 -	3.8E 01	4	10	12.12	30.30
3.8E 01 -	5.6E 01	2	12	6.06	36.36

HISTOGRAM FOR COLUMN 17 (LA PPM)

2.0E 01 XXXXXXXXXXXXXXXXXXXX

3.0E 01 XXXXXXXXXXXXXXXX

5.0E 01 XXXXXX

N	L	H	B	T	G
10	11	0	0	0	0
30.30	33.33			0.0	0.0

ANALYTICAL
VALUES
12

MAXIMUM = 5.00000E 01

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 2.66716E 01

GEOMETRIC DEVIATION = 1.41811E 00

FREQUENCY TABLE FOR COLUMN 18 (MO PPM)

LIMITS
LOWER - UPPER

FREQ

FREQ
CUM

PERCENT
FREQ

PERCENT
FREQ CUM

ANALYTICAL
VALUES

N	L	H	B	T	G
5	28	0	0	0	0
15.15	84.85			0.0	0.0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 19 (NB PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E 00	1.2E 01	26	26	78.79	78.79

HISTOGRAM FOR COLUMN 19 (NB PPM)

1.0E 01 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
0	7	0	0	0	0	26
0.0	21.21			0.0	0.0	

MAXIMUM = 1.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 9.99985E 00

GEOMETRIC DEVIATION = 1.00566E 00

FREQUENCY TABLE FOR COLUMN 20 (NI PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	0	0	0.0	0.0
1.2E 01 -	1.8E 01	7	7	21.21	21.21
1.8E 01 -	2.6E 01	9	16	27.27	48.48
2.6E 01 -	3.8E 01	4	20	12.12	60.61
3.8E 01 -	5.6E 01	4	24	12.12	72.73
5.6E 01 -	8.3E 01	6	30	18.18	90.91
8.3E 01 -	1.2E 02	0	30	0.0	90.91
1.2E 02 -	1.8E 02	2	32	6.06	96.97

HISTOGRAM FOR COLUMN 20 (NI PPM)

1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.0E 01 XXXXXXXXXXXXXXXX
 5.0E 01 XXXXXXXXXXXXXXXX
 7.0E 01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.0E 02
 1.5E 02 XXXXXXXX

N L H B T G
 0 1 0 0 0 0
 0.0 3.03 0.0 0.0

ANALYTICAL
 VALUES
 32

MAXIMUM = 1.50000E 02

MINIMUM = 1.50000E 01

GEOMETRIC MEAN = 3.17799E 01

GEOMETRIC DEVIATION = 2.01744E 00

FREQUENCY TABLE FOR COLUMN 21 (PB PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E 00 -	1.2E 01	10	10	30.30	30.30
1.2E 01 -	1.8E 01	11	21	33.33	63.64
1.8E 01 -	2.6E 01	0	21	0.0	63.64
2.6E 01 -	3.8E 01	1	22	3.03	66.67
3.8E 01 -	5.6E 01	1	23	3.03	69.70

HISTOGRAM FOR COLUMN 21 (PB PPM)

1.0E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.0E 01
 3.0E 01 XXX
 5.0E 01 XXX

N	L	H	B	T	G
3	7	0	0	0	0
9.09	21.21			0.0	0.0

ANALYTICAL
VALUES
23

MAXIMUM = 5.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.36567E 01

GEOMETRIC DEVIATION = 1.47920E 00

FREQUENCY TABLE FOR COLUMN 22 (SB PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G	ANALYTICAL
33	0	0	0	0	0	VALUES
*****	0.0			0.0	0.0	0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 23 (SC PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	0	0	0.0	0.0
1.2E 01	1.8E 01	14	14	42.42	42.42
1.8E 01	2.6E 01	13	27	39.39	81.82
2.6E 01	3.8E 01	6	33	18.18	100.00

HISTOGRAM FOR COLUMN 23 (SC PPM)

1.5E 01 XX

2.0E 01 XX

3.0E 01 XXXXXXXXXXXXXXXXXXXXXXX

N	L	H	B	T	G	ANALYTICAL
0	0	0	0	0	0	VALUES
0.0	0.0			0.0	0.0	33

MAXIMUM = 3.00000E 01

MINIMUM = 1.50000E 01

GEOMETRIC MEAN = 1.90563E 01

GEOMETRIC DEVIATION = 1.28952E 00

FREQUENCY TABLE FOR COLUMN 24 (SN PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM

N	L	H	B	T	G
33	0	0	0	0	0
*****	0.0			0.0	0.0

ANALYTICAL
VALUES
0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48.

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 25 (SR PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E 01	1.2E 02	1	1	3.03	3.03
1.2E 02	1.8E 02	13	14	39.39	42.42
1.8E 02	2.6E 02	10	24	30.30	72.73
2.6E 02	3.8E 02	9	33	27.27	100.00

HISTOGRAM FOR COLUMN 25 (SR PPM)

1.0E 02 XXX

1.5E 02 XX

2.0E 02 XX

3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

N	L	H	B	T	G	ANALYTICAL
0	0	0	0	0	0	VALUES
0.0	0.0			0.0	0.0	33

MAXIMUM = 3.00000E 02

MINIMUM = 1.00000E 02

GEOMETRIC MEAN = 1.95303E 02

GEOMETRIC DEVIATION = 1.35966E 00

FREQUENCY TABLE FOR COLUMN 26 (V PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	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	6.06	6.06
8.3E 01 -	1.2E 02	7	9	21.21	27.27
1.2E 02 -	1.8E 02	13	22	39.39	66.67
1.8E 02 -	2.6E 02	4	26	12.12	78.79
2.6E 02 -	3.8E 02	7	33	21.21	100.00

HISTOGRAM FOR COLUMN 26 (V PPM)

7.0E 01 XXXXXX
 1.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX
 1.5E 02 XX
 2.0E 02 XXXXXXXXXXXXXXXX
 3.0E 02 XXXXXXXXXXXXXXXXXXXXXXXX

79 N L H B T G ANALYTICAL
 0 0 0 0 0 0 VALUES
 0.0 0.0 0.0 0.0 33

MAXIMUM = 3.00000E 02

MINIMUM = 7.00000E 01

GEOMETRIC MEAN = 1.57642E 02

GEOMETRIC DEVIATION = 1.53783E 00

FREQUENCY TABLE FOR COLUMN 27 (W PPM)

LIMITS
LOWER - UPPER

FREQ

FREQ
CUM

PERCENT
FREQ

PERCENT
FREQ CUM

ANALYTICAL
VALUES

N
33

L
0
0.0

H
0

B
0

T
0
0.0

G
0
0.0

0

MAXIMUM = -9.99900E 48

MINIMUM = 9.99900E 48

GEOMETRIC MEAN = 9.99900E 48

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 28 (Y PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
8.3E 00 -	1.2E 01	3	3	9.09	9.09
1.2E 01 -	1.8E 01	15	18	45.45	54.55
1.8E 01 -	2.6E 01	10	28	30.30	84.85
2.6E 01 -	3.8E 01	5	33	15.15	100.00

HISTOGRAM FOR COLUMN 28 (Y PPM)

1.0E 01 XXXXXXXXX

1.5E 01 XX

2.0E 01 XX

3.0E 01 XXXXXXXXXXXXXXXX

N	L	H	B	T	G	ANALYTICAL
0	0	0	0	0	0	VALUES
0.0	0.0			0.0	0.0	33

MAXIMUM = 3.00000E 01

MINIMUM = 1.00000E 01

GEOMETRIC MEAN = 1.75206E 01

GEOMETRIC DEVIATION = 1.35318E 00

FREQUENCY TABLE FOR COLUMN 29 (ZN PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ CUM
1.8E 02	2.6E 02	0	0	0.0	0.0
2.6E 02	3.8E 02	1	1	3.03	3.03

HISTOGRAM FOR COLUMN 29 (ZN PPM)

3.0E 02 XXX

N	L	H	B	T	G	ANALYTICAL VALUES
22	10	0	0	0	0	1
66.67	30.30			0.0	0.0	

MAXIMUM = 3.00000E 02

MINIMUM = 3.00000E 02

GEOMETRIC MEAN = 2.99999E 02

GEOMETRIC DEVIATION = 9.99900E 48

FREQUENCY TABLE FOR COLUMN 30 (ZR PPM)

LIMITS		FREQ	FREQ CUM	PERCENT FREQ	PERCENT FREQ CUM
LOWER	UPPER				
8.3E 00	1.2E 01	0	0	0.0	0.0
1.2E 01	1.8E 01	0	0	0.0	0.0
1.8E 01	2.6E 01	1	1	3.03	3.03
2.6E 01	3.8E 01	0	1	0.0	3.03
3.8E 01	5.6E 01	2	3	6.06	9.09
5.6E 01	8.3E 01	20	23	60.61	69.70
8.3E 01	1.2E 02	4	27	12.12	81.82
1.2E 02	1.8E 02	1	28	3.03	84.85
1.8E 02	2.6E 02	1	29	3.03	87.88
2.6E 02	3.8E 02	3	32	9.09	96.97
3.8E 02	5.6E 02	1	33	3.03	100.00

HISTOGRAM FOR COLUMN 30 (ZR PPM)

2.0E 01 XXX
3.0E 01
5.0E 01 XXXXXX
7.0E 01 XXX
1.0E 02 XXXXXXXXXXXXX
1.5E 02 XXX
2.0E 02 XXX
3.0E 02 XXXXXXXXX
5.0E 02 XXX

N	L	H	B	T	G	ANALYTICAL
0	0	0	0	0	0	VALUES
0.0	0.0			0.0	0.0	33

MAXIMUM = 5.00000E 02

MINIMUM = 2.00000E 01

GEOMETRIC MEAN = 8.82476E 01

GEOMETRIC DEVIATION = 1.86530E 00

FREQUENCY TABLE FOR COLUMN 31 (AU PPM)

LIMITS		FREQ	FREQ	PERCENT	PERCENT
LOWER	UPPER		CUM	FREQ	FREQ 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	0	0	0.0	0.0
1.2E-01	1.8E-01	0	0	0.0	0.0
1.8E-01	2.6E-01	0	0	0.0	0.0
2.6E-01	3.8E-01	0	0	0.0	0.0
3.8E-01	5.6E-01	0	0	0.0	0.0
5.6E-01	8.3E-01	0	0	0.0	0.0
8.3E-01	1.2E 00	0	0	0.0	0.0
1.2E 00	1.8E 00	0	0	0.0	0.0
1.8E 00	2.6E 00	1	1	3.03	3.03

HISTOGRAM FOR COLUMN 31 (AU PPM)

2.0E 00 XXX

N	L	H	B	T	G	ANALYTICAL
0	32	0	0	0	0	VALUES
0.0	96.97			0.0	0.0	1

MAXIMUM = 2.20000E 00

MINIMUM = 2.20000E 00

GEOMETRIC MEAN = 2.20000E 00

GEOMETRIC DEVIATION = 9.99900E 48

ELEMENT	N	L	H	B	T	G	ANALYTICAL VALUES
FE PCT	0	0	0	0	0	0	33
MG PCT	0	0	0	0	0	0	33
CA PCT	0	0	0	0	0	0	33
TI PCT	0	0	0	0	0	0	33
MN PPM	0	0	0	0	0	0	33
AG PPM	32	1	0	0	0	0	0
AS PPM	33	0	0	0	0	0	0
AU PPM	33	0	0	0	0	0	0
B PPM	4	8	0	0	0	0	21
BA PPM	0	0	0	0	0	0	33
BE PPM	12	20	0	0	0	0	1
BI PPM	33	0	0	0	0	0	0
CD PPM	33	0	0	0	0	0	0
CO PPM	0	0	0	0	0	0	33
CR PPM	0	0	0	0	0	0	33
CU PPM	0	1	0	0	0	0	32
LA PPM	10	11	0	0	0	0	12
MO PPM	5	28	0	0	0	0	0
NB PPM	0	7	0	0	0	0	26
NI PPM	0	1	0	0	0	0	32
PB PPM	3	7	0	0	0	0	23
SB PPM	33	0	0	0	0	0	0
SC PPM	0	0	0	0	0	0	33
SN PPM	33	0	0	0	0	0	0
SR PPM	0	0	0	0	0	0	33
V PPM	0	0	0	0	0	0	33
W PPM	33	0	0	0	0	0	0
Y PPM	0	0	0	0	0	0	33
ZN PPM	22	10	0	0	0	0	1
ZR PPM	0	0	0	0	0	0	33
AU PPM	0	32	0	0	0	0	1

ELEMENT	GEOMETRIC MEAN	GEOMETRIC DEVIATION	REMARKS
FE PCT	4.893481	1.63	33 SAMPLES AND 33 ANALYTICAL VALUES.
MG PCT	1.836679	1.33	33 SAMPLES AND 33 ANALYTICAL VALUES.
CA PCT	1.411264	1.37	33 SAMPLES AND 33 ANALYTICAL VALUES.
TI PCT	0.431725	1.47	33 SAMPLES AND 33 ANALYTICAL VALUES.
MN PPM	681.222900	1.54	33 SAMPLES AND 33 ANALYTICAL VALUES.
AG PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES. 0 REPORTED VALUES. NO COMPUTATIONS.
AS PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES. 0 REPORTED VALUES. NO COMPUTATIONS.
AU PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES. 0 REPORTED VALUES. NO COMPUTATIONS.
B PPM	9.322834	1.40	12 NOT DETECTED, LESS THAN, OR TRACE VALUES. 21 REPORTED VALUES.
BA PPM	406.046875	1.83	33 SAMPLES AND 33 ANALYTICAL VALUES.
BE PPM	*****	*****	32 NOT DETECTED, LESS THAN, OR TRACE VALUES. 1 REPORTED VALUES. NO COMPUTATIONS.
BI PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES. 0 REPORTED VALUES. NO COMPUTATIONS.
CD PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES. 0 REPORTED VALUES. NO COMPUTATIONS.
CO PPM	19.520279	1.50	33 SAMPLES AND 33 ANALYTICAL VALUES.
CR PPM	70.238785	2.12	33 SAMPLES AND 33 ANALYTICAL VALUES.
CU PPM	19.753891	2.32	1 NOT DETECTED, LESS THAN, OR TRACE VALUES. 32 REPORTED VALUES.
LA PPM	14.243526	1.85	21 NOT DETECTED, LESS THAN, OR TRACE VALUES. 12 REPORTED VALUES.
MO PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES. 0 REPORTED VALUES. NO COMPUTATIONS.
NB PPM	9.510991	1.10	7 NOT DETECTED, LESS THAN, OR TRACE VALUES. 26 REPORTED VALUES.
NI PPM	29.576355	2.23	1 NOT DETECTED, LESS THAN, OR TRACE VALUES. 32 REPORTED VALUES.
PB PPM	10.554599	1.70	10 NOT DETECTED, LESS THAN, OR TRACE VALUES. 23 REPORTED VALUES.

SB PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
SC PPM	19.056198	1.29	33 SAMPLES AND 33 ANALYTICAL VALUES.	
SN PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
SR PPM	195.302475	1.36	33 SAMPLES AND 33 ANALYTICAL VALUES.	
V PPM	157.641693	1.54	33 SAMPLES AND 33 ANALYTICAL VALUES.	
W PPM	*****	*****	33 NOT DETECTED, LESS THAN, OR TRACE VALUES.	0 REPORTED VALUES. NO COMPUTATIONS.
Y PPM	17.520523	1.35	33 SAMPLES AND 33 ANALYTICAL VALUES.	
ZN PPM	*****	*****	32 NOT DETECTED, LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES. NO COMPUTATIONS.
ZR PPM	88.247421	1.87	33 SAMPLES AND 33 ANALYTICAL VALUES.	
AU PPM	*****	*****	32 NOT DETECTED, LESS THAN, OR TRACE VALUES.	1 REPORTED VALUES. NO COMPUTATIONS.



