UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Prepared in cooperation with the
Bureau of Land Management

Chemical and Statistical Analysis of Stream Sediments, Panned Heavy-Mineral Concentrates, and Rocks of the Coxcomb Mountains Wilderness Study Area (CDCA-328), Riverside and San Bernardino Counties, California

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Open-File Report 83-12

1983

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Studies Related to Wilderness

The Federal Land Policy and Management Act (Public Law 94-579, October 21, 1976) requires the U.S. Geological Survey and the U.S. Bureau of Mines to conduct mineral surveys on certain areas to determine their mineral resource potential. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of geochemical sampling done as part of a mineral survey of the Coxcomb Mountains Wilderness Study Area (CDCA 328), California Desert Conservation Area, Riverside and San Bernardino Counties, California.

Introduction

A geochemical reconnaissance study was conducted in the Coxcomb Mountains, in Riverside and San Bernardino Counties, California in the fall of 1981, with the intention of evaluating the mineral resource potential of the area. The sample media consisted of rocks, stream sediments, and heavy-mineral concentrates from stream sediments. This report presents the chemical and statistical analysis of the geochemical samples gathered. Sample localities are shown on plate 1. Tabulation of the lower limits of analytical determination are listed in table 1. The chemical and statistical analysis of stream sediments, heavy-mineral concentrates, and rocks are shown in tables 2, 3, and 4, respectively.

Location and Geologic Setting

The Coxcomb Mountain Wilderness Study Area occupies 42,296 acres in southeastern California, bordering Joshua Tree National Monument to the north and east. The study area included parts of the Cadiz Valley, Dale Lake, and Coxcomb Mountains 15-minute quadrangle maps.

The principal rock types are the Coxcomb Granodiorite which include both Jurassic and Cretaceous rocks, and the McCoy Mountains Formation tentatively assigned a Jurassic age. The former is subdivided into four intrusive facies based on textural, modal, and chemical data. These facies include biotite-hornblende granodiorite, porphyritic biotite granodiorite and monzogranite, biotite-muscovite monzogranite, and porphyritic biotite granodiorite. The McCoy Mountains Formation which is intruded by the Coxcomb Granodiorite, consists of fine-grained metasandstone and metasiltstone that in areas becomes schist and phyllite (Calzia, 1982).

Sample Collection and Preparation

A total of 114 stream-sediment, 82 heavy-mineral concentrate, and 20 rock samples were collected in the study area. Generally a heavy-mineral concentrate sample is collected at each site that a stream sediment is gathered. In the Coxcomb Mountains, however, the geochemical sampling was done by two geologists working independently, and as a result, heavy-mineral concentrates were not sampled at many stream-sediment sites (CX-003 through CX-012, CS-014 through CX-037).

Stream Sediments

A composite stream-sediment sample was gathered at each site from active alluvium. The samples were later sieved to 0.18 mm (-80 mesh) and pulverized prior to analysis.

Heavy-Mineral Concentrates

A bulk sample of active alluvium sediment was collected and sieved through a 2.0 mm (-10 mesh) screen to remove the coarse material. Care was taken to collect the samples from around boulders, rocks, and sand bars (the areas where heavy minerals tend to congregate), in order to maximize the amount of heavy-mineral concentrate in the sample. The samples were later wet panned, air dried, and passed through a 0.50 mm (-35 mesh) sieve to remove most of the lighter nonheavy-mineral portion of the sample. The remaining light materials were then removed using bromoform (specific gravity 2.86) and

discarded. Magnetite was removed from the heavy-mineral concentrate with a hand magnet. The remaining concentrate was separated into two fractions based on their magnetic susceptibility using the Frantz isodynamic magnetic separator set at 0.6 amperes. The nonmagnetic fraction was split into two fractions. One fraction was hand ground with an agate mortar and pestle prior to emission spectrographic analysis and the other fraction was saved for mineralogical study.

Rock Samples

Rock samples were taken from bedrock, mine dumps, and adits. The samples were crushed and split. One split was pulverized to 0.15 mm (-100 mesh) for analysis and the other split was saved for future study.

Chemical Analysis

All of the prepared sediment, heavy-mineral concentrate, and rock samples were analyzed by a six-step semiquantitative emission spectrographic method (Grimes and Marranzino, 1968) for 31 elements (Fe, Mg, Ca, Ti, Mn, Ag, As, Au, B, Ba, Be, Bi, Cd, Co, Cr, Cu, La, Mo, Nb, Ni, Pb, Sb, Sc, Sn, Sr, V, W, Y, Zn, Zr, and Th).

Spectrographic results are reported as the approximate geometric midpoints (0.15, 0.2, 0.3, 0.5, 0.7, and 1.0 or relevant powers of ten of these values) of concentration ranges whose respective boundaries are 0.12, 0.18, 0.26, 0.38, 0.56, 0.83, and 1.2 (or relevant powers of ten of these values). The precision of a reported value is plus or minus one reporting value approximately 83 percent of the time and plus or minus two reporting values approximately 96 percent of the time (Motooka and Grimes, 1976).

The lower limits of determination for all the elements analyzed for this report are given in table 1. Due to problems dealing with matrix interference, the spectrographic method was modified for analysis of the heavy-mineral concentrate samples, and the lower limits of determination were raised two reporting values above the normal lower limit value (table 1).

Analytical and Statistical Summary

Tables 2a, 3a, and 4a list the latitudes, longitudes, and measured concentrations of each element. The values listed for Fe, Mg, Ca, and Ti are reported in percent; all others in parts per million (ppm). All statistics in this report are based on the data found in these tables.

The results of spectrographic analysis found in tables 2a, 3a, and 4a are classified into two kinds of data values, qualified and unqualified. Unqualified data can be expressed in terms of a specific number. Sometimes, however, an actual value for a certain element cannot be expressed as an exact number and is therefore given a qualitative value. If an element was looked for and not detected, the letter "N" is entered in the tables in place of a numerical value. If an element was observed but was below the lower limit of detection, a "less than" (<) was entered in the tables. If an element was detected at a concentration greater than the upper limit of detection, a "greater than" (>) was entered in the tables. If no analysis was performed

for a particular element, two dashes (--) are entered in the tables in place of an analytical value.

The Fisher K statistics (tables 2b, 3b, and 4b) give summary statistics for samples that have undergone spectrographic analysis. The number of qualified and unqualified values are listed (along with the minimum and maximum values for the unqualified data). A qualified value is designated by the following symbols:

N = Not detected at the limit of detection

L = Detected, but below limit of reproducible determination for standards used

H = Interference prevented determination of value

G = Greater than value shown

B = No analysis

T = Trace (term not used in this data set)

The mean, standard deviation, variance, skewness, and kurtosis for each element are also listed. All data values are expressed as percent (Fe, Mg, Ca, and Ti) or parts per million and ignore all qualified values. The Fisher K statistics are useful in giving the reader a general background on the average abundance of an element and the nature of its distribution for a particular area.

The graphical analysis (tables 2c, 3c, and 4c) calculates the frequency distribution for each element and presents graphical displays (histograms and contingency tables) that express these frequency distributions. The lower boundary and class intervals used in the histograms are those boundaries and intervals commonly used for spectrographic data. This program also gives percentiles which rank data values and the geometric mean. Computations in this program ignore all qualified values.

A graphical display will not be shown for an element if any of the following is true:

- No unqualified values are detected
- Unqualified values are detected at only one sample site
- Unqualified values are detected at two or more sites, but the minimum and maximum values are the same
- No analysis was performed for that particular element

When interpreting the statistics given in this report, care should be taken to note the percentage of data that is qualified. The greater the number of qualified data, the less significant the statistics become.

Graphical analysis gives the reader a more specific breakdown on how the different concentrations of an element are distributed. It can be used to determine threshold values and anomalous populations within an area.

All data listed in tables 2, 3, and 4 were entered into the U.S. Geological Survey Rock Analysis Storage System (RASS), recovered and analyzed statistically by Chris M. McDougal and Barbara Chazin, using the U.S. Geological Survey STATPAC Program Library (Van Trump and Miesch, 1977).

References Cited

Calzia, L. P., 1982, Geology of granodiorite in the Coxcomb Mountains, southeastern California, in Frost, E. G., and Martin, D. L., Mesozoic-Cenozoic Tectonic Evolution of the Colorado River Region, California, Arizona, and Nevada: San Diego, California, Cordilleran Publishing Company, p. 173-180.

Grimes, D. J., and Marranzino, A. P., 1968, Direct-current arc and alternating-current spark emission spectrographic field methods for the semiquantitative analysis of geologic materials: U.S. Geological Survey Circular 591, 6 p.

Motooka, J. M., and Grimes, D. J., 1976, Analytical precision of one-sixth order semiquantitative spectrographic analysis: U.S. Geological Survey Circular 738, 3 p.

VanTrump, George, Jr., and Miesch, A. T., 1977, The U.S. Geological Survey RASS-STATPAC System for management and statistical reduction of geochemical data: Computers and Geosciences, v. 3, p. 475-488.

Table 1.--Lower limits of analytical determination for rock, stream sediments, and heavy-mineral concentrates

[The values listed for Fe, Mg, Ca, and Ti are in percent; all others in parts per million]

Element	Rock and stream sediment	Heavy-mineral concentrate	Element	Rock and stream sediment	Heavy-mineral concentrate
Iron	0.05	0.1	Lanthum	20	50
Magnesium	0.02	0.05	Molybdenum	5	10
Calcium	0.05	0.1	Niobium	20	50
Titanium	0.002	0.005	Nickle	5	10
Manganese	10	20	Lead	10	20
Silver	0.5	1.0	Antimony	100	200
Arsenic	200	500	Scandium	100	10
Gold	10	20	Tin	10	20
Boron	10	20	Strontium	50	200
Barium	20	50	Vanadium	10	20
Beryllium	1	2	Tungsten	200	100
Bismuth	10	20	Yttrium	10	20
Cadmiun	20	50	Zinc	200	500
Cobalt	5	10	Zirconium	10	20
Chromium	10	20	Thorium	200	500
Copper	5	10			

Table 2A -- Geochemical Data for Stream Sediment Samples

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
CX001S	33 54 55	115 23 50	3.0	1.0	3.0	.70	700	N	N	N	10	700
CX002S	33 53 55	115 23 5	5.0	1.0	3.0	.70	700	N	N	N	10	1,000
CX003S	33 53 25	115 22 35	5.0	.7	2.0	.70	1,000	N	N	N	<10	700
CX004S	33 52 45	115 21 55	3.0	1.0	3.0	.70	700	N	N	N	10	1,000
CX005S	33 52 25	115 21 25	5.0	.7	2.0	.70	700	N	N	N	<10	700
CX006S	33 53 25	115 17 50	5.0	1.0	3.0	.70	700	N	N	N	10	1,000
CX007S	33 54 5	115 17 45	10.0	1.0	3.0	.70	700	N	N	N	N	700
CX008S	33 54 40	115 17 20	3.0	1.5	2.0	.70	700	N	N	N	10	1,000
CX009S	33 54 45	115 19 10	5.0	1.5	3.0	.70	1,000	N	N	N	10	1,000
CX010S	33 55 15	115 18 40	3.0	1.0	3.0	1.00	1,000	N	N	N	<10	1,000
CX011S	33 56 25	115 17 35	5.0	1.0	3.0	1.00	700	N	N	N	<10	700
CX012S	33 56 55	115 16 55	2.0	1.0	2.0	.50	700	N	N	N	10	700
CX013S	33 57 20	115 16 50	3.0	1.0	3.0	.70	1,000	N	N	N	10	1,000
CX014S	33 58 45	115 18 20	10.0	1.0	3.0	.70	1,000	N	N	N	10	1,000
CX015S	33 57 45	115 16 35	7.0	1.0	3.0	1.00	1,000	N	N	N	10	1,000
CX016S	33 58 45	115 16 0	3.0	1.5	2.0	.50	1,000	N	N	N	10	700
CX017S	33 59 55	115 15 40	3.0	1.5	7.0	.50	700	N	N	N	15	700
CX018S	34 2 20	115 16 30	2.0	.7	2.0	.50	500	N	N	N	N	1,000
CX019S	34 3 55	115 17 0	1.5	1.0	1.5	.20	700	N	N	N	10	700
CX020S	34 4 30	115 20 0	3.0	1.5	1.5	.50	700	N	N	N	15	700
CX021S	34 4 35	115 21 5	3.0	1.0	2.0	1.00	1,000	N	N	N	10	700
CX022S	34 0 20	115 42 25	3.0	1.5	2.0	.50	700	N	N	N	30	700
CX023S	34 3 30	115 37 50	5.0	1.0	2.0	1.00	1,000	N	N	N	10	700
CX024S	34 3 40	115 37 40	3.0	1.0	2.0	.70	700	N	N	N	15	700
CX025S	34 4 20	115 34 0	3.0	1.5	3.0	.50	700	N	N	N	20	700
CX026S	34 3 20	115 34 40	7.0	1.0	2.0	.70	1,000	N	N	N	15	700
CX027S	34 5 5	115 32 20	3.0	1.0	2.0	.70	700	N	N	N	20	700
CX028S	34 3 35	115 30 30	5.0	1.0	2.0	.70	700	N	N	N	15	700
CX029S	34 3 25	115 30 25	3.0	1.0	2.0	.70	500	N	N	N	20	700
CX030S	34 1 30	115 28 45	3.0	1.0	2.0	.70	700	N	N	N	10	700
CX031S	34 6 55	115 31 30	5.0	1.0	2.0	.70	1,000	N	N	N	10	700
CX032S	34 6 15	115 28 0	2.0	1.0	2.0	.50	700	N	N	N	15	700
CX033S	34 5 30	115 25 15	3.0	1.5	2.0	.70	1,000	N	N	N	30	1,000
CX034S	34 5 15	115 24 10	3.0	1.0	1.5	.70	1,000	N	N	N	30	700
CX035S	34 4 55	115 22 10	2.0	1.0	2.0	.50	700	N	N	N	20	700
CX036S	34 3 20	115 20 50	5.0	1.5	1.5	.50	1,000	N	N	N	30	700
CX037S	34 3 0	115 19 55	7.0	1.0	2.0	1.00	1,500	N	N	N	10	700
CX038	33 53 59	115 21 18	5.0	.7	3.0	.50	500	N	N	N	10	2,000
CX039	33 53 21	115 20 56	5.0	.7	5.0	.70	700	N	N	N	10	1,000
CX040	33 52 52	115 20 55	3.0	.7	5.0	.50	500	N	N	N	20	2,000
CX041	33 51 44	115 20 46	5.0	1.5	5.0	.50	1,000	N	N	N	150	1,000
CX042	33 51 15	115 20 41	5.0	2.0	5.0	.50	1,500	N	N	N	100	1,000
CX043	33 50 46	115 20 9	5.0	2.0	5.0	.50	1,000	N	N	N	100	500
CX044	33 50 3	115 19 32	7.0	2.0	7.0	.50	1,500	N	N	N	150	1,000
CX045	33 49 42	115 18 36	5.0	2.0	7.0	.50	1,500	N	N	N	100	700

Table 2A -- Geochemical Data for Stream Sediment Samples

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
CX001S	1.5	N	N	7	50	20	150	N	<20	10	30	N	10
CX002S	1.5	N	N	7	50	15	100	N	<20	10	30	N	10
CX003S	1.5	N	N	7	50	20	150	N	20	5	30	N	10
CX004S	1.5	N	N	7	50	20	150	N	<20	15	30	N	10
CX005S	1.5	N	N	7	50	20	70	N	<20	7	30	N	10
CX006S	1.5	N	N	10	50	30	150	N	N	10	30	N	10
CX007S	<1.0	N	N	10	70	30	150	N	N	10	30	N	7
CX008S	1.5	N	N	7	50	20	100	N	<20	15	30	N	7
CX009S	1.5	N	N	10	70	30	150	N	<20	20	30	N	10
CX010S	1.5	N	N	7	50	20	150	N	20	7	30	N	7
CX011S	1.5	N	N	7	50	20	200	N	20	7	30	N	10
CX012S	1.5	N	N	5	50	30	70	N	N	5	30	N	7
CX013S	1.5	N	N	7	50	20	100	N	<20	15	30	N	10
CX014S	1.0	N	N	10	70	30	150	N	<20	10	50	N	15
CX015S	1.5	N	N	10	70	30	150	N	<20	10	30	N	10
CX016S	1.5	N	N	7	70	30	100	N	<20	10	30	N	10
CX017S	1.5	N	N	7	50	20	70	N	N	15	30	N	10
CX018S	1.5	N	N	5	50	10	50	N	<20	5	30	N	7
CX019S	1.5	N	N	5	30	10	30	N	N	5	30	N	7
CX020S	1.5	N	N	7	70	20	50	N	<20	15	30	N	10
CX021S	1.5	N	N	7	50	20	100	N	<20	7	30	N	10
CX022S	1.5	N	N	10	50	30	50	N	<20	15	30	N	10
CX023S	1.5	N	N	10	70	20	200	N	20	15	30	N	10
CX024S	1.5	N	N	7	50	15	70	N	<20	15	30	N	10
CX025S	1.5	N	N	10	70	20	50	N	N	15	50	N	10
CX026S	1.5	N	N	10	70	20	150	N	20	15	50	N	15
CX027S	1.5	N	N	10	50	20	70	N	<20	15	30	N	15
CX028S	1.5	N	N	10	70	20	100	N	<20	10	30	N	15
CX029S	1.5	N	N	7	30	15	70	N	<20	10	30	N	10
CX030S	1.5	N	N	7	50	15	70	N	<20	7	30	N	10
CX031S	1.5	N	N	10	50	20	150	N	20	10	50	N	10
CX032S	1.5	N	N	7	30	15	50	N	N	7	50	N	7
CX033S	1.5	N	N	10	70	20	70	N	<20	20	50	N	10
CX034S	1.5	N	N	7	50	20	50	N	<20	10	50	N	10
CX035S	1.5	N	N	7	30	15	50	N	<20	10	50	N	7
CX036S	1.5	N	N	10	70	20	100	N	<20	15	50	N	10
CX037S	1.5	N	N	10	70	30	200	N	30	7	50	N	10
CX038	<5.0	N	N	5	20	10	200	N	<20	5	30	N	--
CX039	<5.0	N	N	10	10	15	200	N	<20	10	20	N	--
CX040	<5.0	N	N	7	20	10	100	15	N	15	70	N	--
CX041	N	N	N	15	100	15	100	<5	<20	30	20	N	--
CX042	<5.0	N	N	15	70	15	100	<5	<20	30	50	N	--
CX043	<5.0	N	N	15	70	20	100	N	<20	20	50	N	--
CX044	<5.0	N	N	15	100	20	70	<5	<20	30	50	N	--
CX045	<5.0	N	N	15	70	20	100	N	<20	20	30	N	--

Table 2A -- Geochemical Data for Stream Sediment Samples

Sample	Sn-ppm S	Sr-ppm S	V-ppm S	W-ppm S	Y-ppm S	Zn-ppm S	Zr-ppm S	Th-ppm S
CX001S	N	500	100	N	70	N	200	N
CX002S	N	700	100	N	70	N	500	N
CX003S	N	500	100	N	70	N	500	N
CX004S	N	500	100	N	30	N	300	N
CX005S	N	500	100	N	50	N	300	N
CX006S	N	700	150	N	50	N	300	N
CX007S	N	500	300	N	50	N	500	N
CX008S	N	500	70	N	30	N	300	N
CX009S	N	700	100	N	50	N	200	N
CX010S	N	500	100	N	70	N	700	N
CX011S	N	500	150	N	70	N	300	N
CX012S	N	500	70	N	30	N	200	N
CX013S	N	500	100	N	30	N	300	N
CX014S	N	500	200	N	50	N	500	N
CX015S	N	500	150	N	70	N	500	N
CX016S	N	500	100	N	30	N	300	N
CX017S	N	500	100	N	30	N	150	N
CX018S	N	500	70	N	30	N	300	N
CX019S	N	500	50	N	20	N	200	N
CX020S	N	500	70	N	30	N	300	N
CX021S	N	500	100	N	70	N	300	N
CX022S	N	500	100	N	30	N	300	N
CX023S	N	500	150	N	100	N	>1,000	N
CX024S	N	500	150	N	50	N	300	N
CX025S	N	500	100	N	30	N	150	N
CX026S	N	500	150	N	70	N	700	N
CX027S	N	500	150	N	50	N	200	N
CX028S	N	500	150	N	50	N	200	N
CX029S	N	500	100	N	30	N	300	N
CX030S	N	500	150	N	50	N	300	N
CX031S	N	500	150	N	70	N	300	N
CX032S	N	500	100	N	150	N	200	N
CX033S	N	500	100	N	50	N	200	N
CX034S	N	500	100	N	50	N	300	N
CX035S	N	500	70	N	20	N	200	N
CX036S	N	500	100	N	50	N	500	N
CX037S	N	500	150	N	70	N	>1,000	<100
CX038	N	1,500	100	N	20	<200	--	N
CX039	N	1,500	100	N	30	N	--	N
CX040	N	1,500	100	50	20	<200	--	N
CX041	N	500	150	N	50	200	--	N
CX042	N	500	100	N	50	<200	--	N
CX043	N	500	100	N	30	<200	--	N
CX044	N	700	150	N	50	<200	--	N
CX045	N	700	100	N	50	N	--	N

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
CX046	33 49 8	115 17 37	5.0	1.5	7.0	.50	1,000	N	N	N	100	700
CX047	33 49 48	115 16 16	3.0	1.0	5.0	.30	1,000	N	N	N	70	700
CX048	33 49 29	115 16 11	5.0	1.5	7.0	.70	1,000	<.5	N	N	150	1,000
CX049	33 50 33	115 16 14	5.0	1.5	5.0	.70	1,500	N	N	N	150	1,000
CX050	33 50 59	115 17 13	5.0	1.5	7.0	.50	1,000	N	N	N	150	1,000
CX051	33 50 28	115 17 7	5.0	1.0	5.0	.50	1,000	N	N	N	100	1,000
CX052	33 50 35	115 17 34	5.0	1.5	7.0	.50	1,000	N	N	N	150	1,000
CX053	33 51 36	115 16 59	5.0	1.0	5.0	.50	1,500	N	N	N	100	500
CX054	33 52 3	115 16 25	5.0	1.5	7.0	.50	1,000	N	N	N	100	1,000
CX055	33 52 8	115 18 20	5.0	1.5	7.0	.50	1,500	.5	N	N	150	1,500
CX056	33 52 8	115 19 5	7.0	2.0	7.0	.50	1,000	N	N	N	100	2,000
CX057	33 52 11	115 19 1	5.0	1.5	7.0	.50	1,000	N	N	N	100	2,000
CX058	33 52 48	115 18 9	7.0	.5	3.0	.50	500	N	N	N	20	1,500
CX059	33 53 38	115 18 33	3.0	.7	3.0	.50	500	N	N	N	30	1,000
CX060	33 54 34	115 18 22	10.0	.7	5.0	.70	700	N	N	N	20	700
CX061	33 54 20	115 19 49	7.0	.7	5.0	.70	700	N	N	N	20	700
CX062	33 54 29	115 19 51	5.0	1.0	5.0	.50	700	N	N	N	20	1,000
CX063	33 55 48	115 17 55	7.0	.7	3.0	.70	700	N	N	N	20	1,000
CX064	33 56 38	115 18 25	2.0	1.0	5.0	.70	500	N	N	N	10	1,000
CX065	33 56 59	115 18 50	5.0	.7	3.0	.50	500	N	N	N	20	1,000
CX066	33 56 54	115 16 59	7.0	1.0	3.0	.70	>5,000	N	N	N	30	1,000
CX067	33 57 50	115 18 22	10.0	.7	3.0	.50	1,000	N	N	N	20	1,000
CX068	33 58 40	115 19 27	2.0	.5	5.0	.30	700	N	N	N	20	1,000
CX069	33 59 20	115 18 10	1.0	.5	3.0	.30	500	N	N	N	10	500
CX070	34 0 16	115 18 17	5.0	.5	2.0	.50	500	N	N	N	10	700
CX071	34 0 24	115 20 13	2.0	.7	2.0	.50	500	<.5	N	N	15	700
CX072	34 1 23	115 18 49	5.0	.7	3.0	1.00	1,000	N	N	N	10	500
CX073	34 1 32	115 19 19	5.0	1.0	5.0	.70	1,000	N	N	N	20	700
CX074	34 2 10	115 20 21	1.0	.5	3.0	.20	500	N	N	N	15	1,000
CX075	34 2 2	115 21 19	2.0	.3	3.0	.20	1,000	N	N	N	20	300
CX076	34 3 17	115 22 20	1.5	.3	2.0	.50	1,000	N	N	N	10	700
CX077	34 4 29	115 23 48	1.5	.5	2.0	.30	1,000	N	N	N	10	1,500
CX078	34 4 9	115 23 52	1.0	.5	3.0	.20	500	N	N	N	15	1,000
CX079	34 4 9	115 37 40	.5	.2	1.5	.10	100	N	N	N	15	1,000
CX080	34 5 2	115 37 27	.5	.2	1.0	.15	300	N	N	N	10	1,500
CX081	34 5 5	115 36 55	2.0	.7	3.0	.70	1,000	N	N	N	15	700
CX082	34 4 40	115 36 48	1.5	.7	5.0	.70	700	N	N	N	10	1,000
CX083	34 5 9	115 36 10	3.0	1.5	5.0	.70	700	N	N	N	30	1,500
CX084	34 3 49	115 35 18	10.0	1.0	2.0	1.00	1,000	N	N	N	100	1,500
CX085	34 3 59	115 34 40	7.0	1.0	3.0	.70	1,000	N	N	N	150	1,000
CX086	34 3 12	115 35 46	1.5	.1	1.0	.30	200	N	N	N	10	1,000
CX087	34 2 30	115 35 25	2.0	.2	1.0	.20	500	N	N	N	10	1,000
CX088	34 2 28	115 34 28	2.0	1.5	5.0	.70	1,500	N	N	N	15	1,500
CX089	34 2 30	115 33 42	7.0	1.5	2.0	1.00	1,000	N	N	N	150	1,000
CX090	34 2 49	115 32 19	1.5	1.0	2.0	.70	700	N	N	N	50	1,000

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
CX046	<5.0	N	N	15	50	15	100	10	<20	20	20	N	--
CX047	<5.0	N	N	15	50	15	70	5	<20	30	50	N	--
CX048	<5.0	N	N	15	70	15	100	15	<20	30	20	N	--
CX049	N	N	N	15	70	15	70	N	<20	20	20	N	--
CX050	N	N	N	15	100	20	70	10	<20	50	20	N	--
CX051	<5.0	N	N	15	70	15	70	<5	<20	30	20	N	--
CX052	N	N	N	15	70	15	100	N	<20	20	20	N	--
CX053	5.0	N	N	15	70	15	100	N	<20	30	50	N	--
CX054	<5.0	N	N	15	70	15	100	N	<20	30	20	N	--
CX055	<5.0	N	N	15	100	30	100	N	<20	20	70	N	--
CX056	N	N	N	20	100	20	100	N	N	20	50	N	--
CX057	N	N	N	10	70	20	100	N	<20	20	30	N	--
CX058	<5.0	N	N	10	20	15	100	N	N	5	30	N	--
CX059	<5.0	N	N	10	10	10	150	N	N	5	50	N	--
CX060	<5.0	N	N	15	30	15	200	N	<20	7	20	N	--
CX061	<5.0	N	N	10	30	10	100	10	<20	10	50	N	--
CX062	<5.0	N	N	10	10	7	300	N	N	5	30	N	--
CX063	<5.0	N	N	10	30	20	200	N	<20	5	50	N	--
CX064	<5.0	N	N	7	10	15	70	N	N	7	50	N	--
CX065	<5.0	N	N	10	10	20	70	N	N	7	70	N	--
CX066	N	N	N	10	50	15	100	N	<20	10	20	N	--
CX067	<5.0	N	N	10	30	20	150	N	<20	7	20	N	--
CX068	<5.0	N	N	5	30	7	50	7	N	7	70	N	--
CX069	<5.0	N	N	N	N	5	50	N	N	5	70	N	--
CX070	<5.0	N	N	5	N	15	50	N	<20	5	50	N	--
CX071	<5.0	N	N	5	10	10	20	N	N	5	70	N	--
CX072	<5.0	N	N	5	20	50	200	N	<20	10	50	N	--
CX073	5.0	N	N	5	20	70	300	N	<20	10	50	N	--
CX074	5.0	N	N	N	N	<5	70	N	N	N	50	N	--
CX075	5.0	N	N	N	N	<5	70	N	N	5	70	N	--
CX076	5.0	N	N	N	N	<5	70	N	N	5	100	N	--
CX077	<5.0	N	N	N	N	<5	100	N	N	5	50	N	--
CX078	5.0	N	N	N	N	<5	50	N	N	5	100	N	--
CX079	<5.0	N	N	N	10	<5	70	N	N	5	70	N	--
CX080	<5.0	N	N	N	10	<5	100	N	N	5	30	N	--
CX081	<5.0	N	N	5	30	7	100	N	<20	10	70	N	--
CX082	<5.0	N	N	5	20	5	100	N	<20	7	50	N	--
CX083	<5.0	N	N	20	30	10	70	10	<20	10	20	N	--
CX084	<5.0	N	N	30	70	20	200	N	20	15	30	N	--
CX085	<5.0	N	N	15	50	20	150	N	<20	15	50	N	--
CX086	<5.0	N	N	5	20	<5	150	N	N	10	30	N	--
CX087	N	N	N	5	20	10	50	7	N	10	50	N	--
CX088	<5.0	N	N	150	30	10	100	N	N	20	30	N	--
CX089	<5.0	N	N	30	50	30	70	5	<20	20	70	N	--
CX090	<5.0	N	N	10	10	15	70	N	<20	7	30	N	--

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
CX046	N	500	150	<50	50	N	--	N
CX047	N	500	100	<50	50	<200	--	N
CX048	N	500	150	<50	70	<200	--	N
CX049	N	700	150	N	50	200	--	N
CX050	N	700	150	N	50	<200	--	N
CX051	N	500	150	N	30	N	--	N
CX052	N	500	100	N	50	N	--	N
CX053	N	500	150	N	30	<200	--	N
CX054	N	700	100	N	30	<200	--	N
CX055	N	700	150	N	50	<200	--	N
CX056	N	700	150	N	50	N	--	N
CX057	N	500	100	N	30	N	--	N
CX058	N	1,000	150	N	20	<200	--	N
CX059	N	1,000	100	N	20	<200	--	N
CX060	N	700	200	N	30	200	--	N
CX061	N	1,000	150	N	30	<200	--	N
CX062	N	1,000	100	N	15	<200	--	N
CX063	N	1,000	200	N	20	200	--	N
CX064	N	1,500	100	N	20	N	--	N
CX065	N	1,000	100	N	15	N	--	N
CX066	N	200	100	N	100	N	--	N
CX067	N	500	200	N	20	<200	--	N
CX068	N	700	70	N	15	N	--	N
CX069	N	700	20	N	10	N	--	N
CX070	N	500	70	N	15	N	--	N
CX071	N	500	50	N	15	N	--	N
CX072	N	700	150	N	50	<200	--	N
CX073	N	700	200	N	50	N	--	N
CX074	N	1,000	20	N	15	<200	--	N
CX075	N	1,000	50	N	10	N	--	N
CX076	N	1,000	20	N	15	N	--	N
CX077	N	700	70	N	30	N	--	N
CX078	N	700	20	N	10	N	--	N
CX079	N	500	20	N	10	N	--	N
CX080	N	300	20	N	15	N	--	N
CX081	N	500	100	N	50	N	--	N
CX082	N	500	70	N	30	N	--	N
CX083	N	500	100	N	50	N	--	N
CX084	N	300	150	N	70	N	--	N
CX085	N	300	150	N	50	N	--	N
CX086	N	500	70	N	20	N	--	N
CX087	N	300	100	N	20	N	--	N
CX088	N	500	150	N	50	N	--	N
CX089	N	700	100	N	30	N	--	N
CX090	N	500	70	N	30	N	--	N

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
CX091	34 1 40	115 31 50	7.0	1.5	3.0	1.00	1,500	N	N	N	150	1,000
CX092	34 1 58	115 31 25	5.0	2.0	5.0	.70	1,500	N	N	N	70	1,000
CX093	34 5 6	115 30 41	1.0	.7	2.0	.30	500	N	N	N	10	700
CX094	34 5 51	115 31 25	5.0	.7	3.0	.70	700	N	N	N	20	1,000
CX095	34 6 15	115 30 32	1.5	1.0	5.0	.50	500	N	N	N	10	500
CX096	34 5 33	115 30 5	1.5	1.0	5.0	.50	500	N	N	N	15	1,000
CX097	34 3 52	115 28 58	2.0	1.0	3.0	.50	500	N	N	N	10	700
CX098	34 4 10	115 27 38	1.5	1.0	2.0	.30	700	N	N	N	10	1,500
SH022	34 5 11	115 32 52	5.0	.7	1.5	.20	200	N	N	N	10	2,000
SH023	34 5 29	115 33 40	2.0	.7	2.0	.20	200	N	N	N	10	2,000
SH024	34 6 1	115 34 1	5.0	.7	2.0	.30	200	N	N	N	10	1,500
SH025	34 6 57	115 34 42	5.0	.7	1.5	.50	300	N	N	N	15	1,500
SH092	34 5 5	115 44 1	.7	.5	.5	.05	70	N	N	N	10	2,000
SH093	34 4 12	115 42 57	.7	2.0	1.5	.20	150	N	N	N	30	700
SH094	34 4 37	115 41 44	1.0	2.0	2.0	.15	200	.5	N	N	20	500
SH095	34 4 24	115 41 1	1.0	2.0	2.0	.20	300	N	N	N	10	700
SH096	34 3 44	115 40 41	1.5	2.0	2.0	.20	200	N	N	N	10	1,000
SH097	34 3 31	115 38 38	1.5	2.0	2.0	.30	300	N	N	N	10	1,500
SH099	34 3 28	115 36 47	1.0	1.0	.7	.15	100	N	N	N	10	1,500
SH107	34 4 20	115 38 58	5.0	1.0	1.0	.10	150	N	N	N	10	1,500
SH108	34 4 25	115 39 54	3.0	1.5	.5	.30	300	N	N	N	30	2,000
SH109	34 3 42	115 44 38	.7	1.0	.7	.05	100	N	N	N	<10	2,000
SH110	34 2 36	115 43 1	3.0	2.0	1.0	.30	300	.5	N	N	10	2,000
SH111	34 1 16	115 42 51	3.0	2.0	1.0	.30	300	N	N	N	10	2,000

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
CX091	<5.0	N	N	20	50	30	100	N	<20	15	30	N	--
CX092	<5.0	N	N	15	50	30	100	N	<20	15	100	N	--
CX093	<5.0	N	N	5	N	<5	150	N	N	5	50	N	--
CX094	<5.0	N	N	10	10	7	100	N	N	5	100	N	--
CX095	<5.0	N	N	5	N	<5	50	N	<20	5	30	N	--
CX096	<5.0	N	N	5	N	<5	70	N	N	N	70	N	--
CX097	<5.0	N	N	5	N	<5	100	N	N	N	30	N	--
CX098	<5.0	N	N	N	N	<5	20	N	N	5	150	N	--
SH022	1.5	N	N	7	10	10	100	N	N	5	20	N	<5
SH023	2.0	N	N	5	<10	10	150	N	N	5	20	N	<5
SH024	2.0	N	N	7	10	15	100	N	N	5	20	N	<5
SH025	2.0	N	N	7	10	20	70	N	N	5	50	N	5
SH092	1.0	N	N	N	N	5	20	N	N	10	30	N	N
SH093	1.5	N	N	15	15	10	70	N	N	7	30	N	7
SH094	2.0	70	N	10	10	100	70	N	N	10	30	N	7
SH095	2.0	N	N	15	<10	50	100	N	N	5	10	N	10
SH096	1.5	N	N	5	15	20	100	N	N	7	10	N	7
SH097	1.0	N	N	7	15	20	100	N	N	N	10	N	7
SH099	1.0	N	N	N	<10	5	20	N	N	N	20	N	N
SH107	1.0	N	N	10	<10	10	50	N	N	15	20	N	5
SH108	1.5	N	N	15	10	20	70	5	20	7	10	N	7
SH109	1.5	N	N	<5	<10	5	50	N	N	<5	30	N	<5
SH110	1.0	N	N	15	20	50	70	N	20	10	30	N	7
SH111	1.0	N	N	15	20	15	100	N	20	10	20	N	7

Table 2A -- Geochemical Data for Stream Sediment Samples--continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
CX091	N	500	150	N	30	N	--	N
CX092	N	500	100	N	30	N	--	N
CX093	N	1,000	30	N	10	N	--	N
CX094	N	1,000	100	N	20	N	--	N
CX095	N	1,000	50	N	10	N	--	N
CX096	N	1,000	50	N	15	N	--	N
CX097	N	1,000	70	N	15	N	--	N
CX098	N	700	10	N	15	N	--	N
SH022	N	500	50	N	10	N	100	N
SH023	N	500	30	N	15	N	100	N
SH024	N	500	70	N	15	N	150	N
SH025	N	500	50	N	20	N	100	N
SH092	N	200	15	N	10	N	70	N
SH093	N	200	50	N	20	N	100	N
SH094	N	200	50	N	20	N	70	N
SH095	N	200	50	N	20	N	150	N
SH096	N	200	70	N	20	N	100	N
SH097	N	200	70	N	20	N	150	N
SH099	N	300	20	N	10	N	100	N
SH107	N	200	300	N	15	200	50	N
SH108	N	100	50	N	20	N	200	N
SH109	N	300	15	N	10	N	50	N
SH110	N	200	70	N	20	N	150	N
SH111	N	300	70	N	20	N	100	N

Table 2B -- FISHER-K Statistics for Stream Sediment Samples

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
1	LATITUDE	0	0	0	0	0	0	114	0	33.818889	34.115833	1
2	LONGITUD	0	0	0	0	0	0	114	0	115.26111	115.74389	2
3	S-FE%	0	0	0	0	0	0	114	0	0.5000000	10.000000	3
4	S-MG%	0	0	0	0	0	0	114	0	0.1000000	2.0000000	4
5	S-CA%	0	0	0	0	0	0	114	0	0.5000000	7.0000000	5
6	S-TI%	0	0	0	0	0	0	114	0	0.0500000	1.0000000	6
7	S-MN	0	0	0	1	0	0	113	0	70.000000	1500.0000	7
8	S-AG	109	0	2	0	0	0	3	0	0.5000000	0.5000000	8
9	S-AS	114	0	0	0	0	0	0	0			9
10	S-AU	114	0	0	0	0	0	0	0			10
11	S-B	2	0	5	0	0	0	107	0	10.000000	150.00000	11
12	S-BA	0	0	0	0	0	0	114	0	300.00000	2000.0000	12
13	S-BE	8	0	48	0	0	0	58	0	1.0000000	5.0000000	13
14	S-BI	113	0	0	0	0	0	1	0	70.000000	70.000000	14
15	S-CD	114	0	0	0	0	0	0	0			15
16	S-CO	11	0	1	0	0	0	102	0	5.0000000	150.00000	16
17	S-CR	13	0	5	0	0	0	96	0	10.000000	100.00000	17
18	S-CU	0	0	13	0	0	0	101	0	5.0000000	100.00000	18
19	S-LA	0	0	0	0	0	0	114	0	20.000000	300.00000	19
20	S-MO	99	0	4	0	0	0	11	0	5.0000000	15.000000	20
21	S-NB	45	0	58	0	0	0	11	0	20.000000	30.000000	21
22	S-NI	5	0	1	0	0	0	108	0	5.0000000	50.000000	22
23	S-PB	0	0	0	0	0	0	114	0	10.000000	150.00000	23
24	S-SB	114	0	0	0	0	0	0	0			24
25	S-SC	2	0	4	0	61	0	47	0	5.0000000	15.000000	25
26	S-SN	114	0	0	0	0	0	0	0			26
27	S-SR	0	0	0	0	0	0	114	0	100.00000	1500.0000	27
28	S-V	0	0	0	0	0	0	114	0	10.000000	300.00000	28
29	S-W	110	0	3	0	0	0	1	0	50.000000	50.000000	29
30	S-Y	0	0	0	0	0	0	114	0	10.000000	150.00000	30
31	S-ZN	91	0	18	0	0	0	5	0	200.00000	200.00000	31
32	S-ZR	0	0	0	2	61	0	51	0	50.000000	700.00000	32
33	S-TH	113	0	1	0	0	0	0	0			33

Table 28 -- FISHER-K Statistics for Stream Sediment Samples

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
1	LATITUDE	33.992673	0.0899835	0.0080970	-3.52740950-04	-0.4841354	-8.36585310-05	-1.2760220	1
2	LONGITUD	115.43249	0.1452541	0.0210987	0.0018051	0.5890112	-4.88750170-04	-1.0979281	2
3	S-FE%	3.8912281	2.2822346	5.2085949	8.5641491	0.7204492	7.3518002	0.2709895	3
4	S-MG%	1.0807018	0.4768772	0.2274119	0.0454754	0.4193312	-0.0208452	-0.4030696	4
5	S-CA%	3.1526316	1.7784955	3.1630461	4.8352457	0.9684166	-2.1181749	-0.2117146	5
6	S-TI%	0.5372807	0.2360077	0.0556996	2.81735070-04	0.0214320	-0.0011116	-0.3582942	6
7	S-MN	749.29204	362.25168	131226.28	11864306.	0.2495808	-3.90613050+09	-0.2268324	7
8	S-AG	0.5000000	0.0	0.0	0.0	0.0			8
9	S-AS								9
10	S-AU								10
11	S-P	36.915888	44.924700	2018.2287	153393.22	1.6918061	5635067.2	1.3834337	11
12	S-BA	1015.7895	418.71674	175323.71	85690132.	1.1672660	1.84016760+10	0.5986543	12
13	S-BE	1.8448276	1.1050399	1.2211131	3.3182525	2.4590966	6.9521718	4.6623910	13
14	S-BI	70.000000							14
15	S-CD								15
16	S-CO	11.519608	14.671134	215.24219	26897.306	8.5176089	3723880.1	80.378685	16
17	S-CR	44.635417	25.300768	640.12884	3825.9498	0.2362317	-315244.60	-0.7693304	17
18	S-CU	19.584158	12.926150	167.08535	7233.8809	3.3493753	460047.18	16.478802	18
19	S-LA	101.49123	51.991021	2703.0663	186782.65	1.3290811	18386872.	2.5164857	19
20	S-MO	2.0000000	3.6331804	13.200000	27.866667	0.5810642	-103.40000	-0.5934343	20
21	S-NB	20.909091	3.0151134	9.0909091	90.909091	3.3166248	909.09091	11.000000	21
22	S-NI	12.074074	7.9797685	63.676705	905.15337	1.7813584	17369.339	4.2837305	22
23	S-PB	40.263158	22.080325	487.54075	19578.024	1.8186640	1244877.6	5.2372680	23
24	S-SB								24
25	S-SC	9.2553191	2.3725613	5.6290472	10.055813	0.7529477	32.370672	1.0216025	25
26	S-SN								26
27	S-SR	590.35088	275.54268	75923.770	28188816.	1.3474423	1.44927190+10	2.5141682	27
28	S-V	102.45614	53.153833	2825.3299	126868.25	0.8447909	15646887.	1.9601514	28
29	S-W	50.000000							29
30	S-Y	36.140351	23.033595	530.54650	19231.040	1.5736842	1251972.3	4.4478262	30
31	S-ZN	200.00000	0.0	0.0	0.0	0.0	0.0	0.0	31
32	S-ZR	247.84314	147.44916	21741.255	4069497.1	1.2694448	9.48800640+08	2.0072698	32
33	S-TH								33

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

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 3 (S-FE%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.12	0.12
-4.170E-01	-2.503E-01	2	2	1.75	1.75	0.56	3.67
-2.503E-01	-8.367E-02	3	5	2.63	4.39	2.20	0.29
-8.367E-02	8.300E-02	7	12	6.14	10.53	6.35	0.07
8.300E-02	2.497E-01	11	23	9.65	20.18	13.55	0.48
2.497E-01	4.163E-01	13	36	11.40	31.58	21.39	3.29
4.163E-01	5.830E-01	24	60	21.05	52.63	24.97	0.04
5.830E-01	7.497E-01	37	97	32.46	85.09	21.57	11.03
7.497E-01	9.163E-01	12	109	10.53	95.61	13.78	0.23
9.163E-01	1.083E+00	5	114	4.39	100.00	9.51	2.14
G		0	114	0.00	100.00	0.12	0.12
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

```
 4.638E-01 XX
 6.808E-01 XXX
 9.992E-01 XXXXXX
 1.467E+00 XXXXXXXXXX
 2.153E+00 XXXXXXXXXXX
 3.160E+00 XXXXXXXXXXXXXXXXXXXXX
 4.638E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.808E+00 XXXXXXXXXXX
 9.992E+00 XXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E-01
MAXIMUM ANTILOG	=	1.00000E+01
GEOMETRIC MEAN	=	3.17749E+00
GEOMETRIC DEVIATION	=	1.99355E+00
VARIANCE OF LOGS	=	8.97762E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.201810E-01	2.090167E+00

50.00	5.621686E-01	3.648956E+00
75.00	6.978671E-01	4.987318E+00
90.00	8.274469E-01	6.721202E+00
95.00	9.066138E-01	8.065174E+00
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 4 (S-MG%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
-1.084E+00	- -9.173E-01	1	1	0.88	0.88	0.01	156.55
-9.173E-01	- -7.507E-01	0	1	0.00	0.88	0.09	0.09
-7.507E-01	- -5.840E-01	3	4	2.63	3.51	0.76	6.63
-5.840E-01	- -4.173E-01	2	6	1.75	5.26	4.04	1.03
-4.173E-01	- -2.507E-01	8	14	7.02	12.28	13.15	2.01
-2.507E-01	- -8.400E-02	22	36	19.30	31.58	26.14	0.66
-8.400E-02	- 8.267E-02	42	78	36.84	68.42	31.80	3.27
8.267E-02	- 2.493E-01	23	101	20.18	88.60	23.67	0.02
2.493E-01	- 4.160E-01	13	114	11.40	100.00	14.34	0.13
G		0	114	0.00	100.00	0.00	0.00
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

```
9.985E-02 X
1.466E-01
2.151E-01 XXX
3.157E-01 XX
4.634E-01 XXXXXXX
6.802E-01 XXXXXXXXXXXXXXXXXX
9.985E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+00 XXXXXXXXXXXXXXXXXX
2.151E+00 XXXXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E-01
MAXIMUM ANTILOG	=	2.00000E+00
GEOMETRIC MEAN	=	9.60501E-01
GEOMETRIC DEVIATION	=	1.70904E+00
VARIANCE OF LOGS	=	5.41737E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-1.408163E-01	7.230756E-01

50.00	-6.645109E-04	9.984711E-01
75.00	1.370169E-01	1.370935E+00
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 5 (S-CA%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.06	0.06
-4.170E-01	-2.503E-01	2	2	1.75	1.75	0.41	6.19
-2.503E-01	-8.367E-02	2	4	1.75	3.51	2.15	0.01
-8.367E-02	8.300E-02	6	10	5.26	8.77	7.54	0.31
8.300E-02	2.497E-01	8	18	7.02	15.79	17.54	5.19
2.497E-01	4.163E-01	35	53	30.70	46.49	27.15	2.27
4.163E-01	5.830E-01	29	82	25.44	71.93	27.97	0.04
5.830E-01	7.497E-01	21	103	18.42	90.35	19.17	0.17
7.497E-01	9.163E-01	11	114	9.65	100.00	12.00	0.08
G		0	114	0.00	100.00	0.06	0.06
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

```
 4.638E-01 XX
 6.808E-01 XX
 9.992E-01 XXXXX
 1.467E+00 XXXXXXX
 2.153E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.160E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 4.638E+00 XXXXXXXXXXXXXXXXX
 6.808E+00 XXXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E-01
MAXIMUM ANTILOG	=	7.00000E+00
GEOMETRIC MEAN	=	2.68198E+00
GEOMETRIC DEVIATION	=	1.80542E+00
VARIANCE OF LOGS	=	6.58326E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.996681E-01	1.993738E+00
50.00	4.393235E-01	2.749942E+00
75.00	6.107798E-01	4.081124E+00

90.00	7.464944E-01	5.578204E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 6 (S-TI%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
-1.417E+00	- -1.250E+00	2	2	1.75	1.75	0.02	197.79
-1.250E+00	- -1.084E+00	0	2	0.00	1.75	0.18	0.18
-1.084E+00	- -9.170E-01	2	4	1.75	3.51	1.12	0.70
-9.170E-01	- -7.503E-01	3	7	2.63	6.14	4.59	0.55
-7.503E-01	- -5.837E-01	10	17	8.77	14.91	12.64	0.55
-5.837E-01	- -4.170E-01	12	29	10.53	25.44	23.29	5.47
-4.170E-01	- -2.503E-01	38	67	33.33	58.77	28.77	2.96
-2.503E-01	- -8.366E-02	37	104	32.46	91.23	23.82	7.30
-8.366E-02	- 8.300E-02	10	114	8.77	100.00	19.57	4.68
G		0	114	0.00	100.00	0.00	0.00
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

```
4.638E-02 XX
6.808E-02
9.992E-02 XX
1.467E-01 XXX
2.153E-01 XXXXXXXXX
3.160E-01 XXXXXXXXXXX
4.638E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
9.992E-01 XXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E-02
MAXIMUM ANTILOG	=	1.00000E+00
GEOMETRIC MEAN	=	4.68789E-01
GEOMETRIC DEVIATION	=	1.81539E+00
VARIANCE OF LOGS	=	6.70657E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-4.239425E-01	3.767537E-01

50.00	-2.941907E-01	5.079363E-01
75.00	-1.669975E-01	6.807733E-01
90.00	-8.997032E-02	8.128861E-01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.02	0.02
1.750E+00	-	1.917E+00	1	1	0.88	0.88	0.11	7.16
1.917E+00	-	2.083E+00	3	4	2.63	3.51	0.60	9.53
2.083E+00	-	2.250E+00	2	6	1.75	5.26	2.40	0.07
2.250E+00	-	2.417E+00	6	12	5.26	10.53	6.95	0.13
2.417E+00	-	2.583E+00	7	19	6.14	16.67	14.69	4.03
2.583E+00	-	2.750E+00	18	37	15.79	32.46	22.65	0.96
2.750E+00	-	2.917E+00	31	68	27.19	59.65	25.48	1.20
2.917E+00	-	3.083E+00	35	103	30.70	90.35	20.91	9.50
3.083E+00	-	3.250E+00	10	113	8.77	99.12	20.19	5.15
	G		1	114	0.88	100.00	0.02	59.35
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
6.813E+01 X
1.000E+02 XXX
1.468E+02 XX
2.154E+02 XXXXX
3.162E+02 XXXXXX
4.642E+02 XXXXXXXXXXXXXXX
6.813E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXX
1.000E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.468E+03 XXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E+01
MAXIMUM ANTILOG = 1.50000E+03
GEOMETRIC MEAN = 6.37207E+02
GEOMETRIC DEVIATION = 1.91331E+00
VARIANCE OF LOGS = 7.94027E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.671298E+00	4.691353E+02

50.00	2.857529E+00	7.203260E+02
75.00	3.000003E+00	1.000006E+03
90.00	3.081431E+00	1.206233E+03
95.00	3.171670E+00	1.484805E+03
98.00	3.228670E+00	1.693049E+03
99.00	3.247670E+00	1.768763E+03

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		2	2	1.75	1.75		
	L		5	7	4.39	6.14		
	T		0	7	0.00	6.14	18.32	18.32
9.160E-01	-	1.083E+00	44	51	38.60	44.74	13.77	66.37
1.083E+00	-	1.249E+00	14	65	12.28	57.02	17.43	0.67
1.249E+00	-	1.416E+00	17	82	14.91	71.93	18.64	0.14
1.416E+00	-	1.583E+00	9	91	7.89	79.82	16.85	3.66
1.583E+00	-	1.749E+00	1	92	0.88	80.70	12.87	10.95
1.749E+00	-	1.916E+00	2	94	1.75	82.46	8.31	4.79
1.916E+00	-	2.083E+00	10	104	8.77	91.23	4.53	6.59
2.083E+00	-	2.249E+00	10	114	8.77	100.00	3.27	13.85
	G		0	114	0.00	100.00	0.00	0.00
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
     9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
     1.466E+01 XXXXXXXXXXXX
     2.151E+01 XXXXXXXXXXXXXX
     3.157E+01 XXXXXXXX
     4.634E+01 X
     6.802E+01 XX
     9.985E+01 XXXXXXXXX
     1.466E+02 XXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+01
MAXIMUM ANTILOG	=	1.50000E+02
GEOMETRIC MEAN	=	2.17120E+01
GEOMETRIC DEVIATION	=	2.55837E+00
VARIANCE OF LOGS	=	1.66434E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.154096E+00	1.425922E+01
75.00	1.480816E+00	3.025631E+01

90.00	2.059336E+00	1.146399E+02
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.04	0.04
2.416E+00	-	2.583E+00	1	1	0.88	0.88	0.99	0.00
2.583E+00	-	2.749E+00	6	7	5.26	6.14	8.91	0.95
2.749E+00	-	2.916E+00	40	47	35.09	41.23	31.37	2.38
2.916E+00	-	3.083E+00	43	90	37.72	78.95	43.44	0.00
3.083E+00	-	3.249E+00	13	103	11.40	90.35	23.73	4.85
3.249E+00	-	3.416E+00	11	114	9.65	100.00	5.53	5.42
	G		0	114	0.00	100.00	0.04	0.04
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
3.157E+02 X
4.634E+02 XXXXX
6.802E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
9.985E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+03 XXXXXXXXXXX
2.151E+03 XXXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+02
MAXIMUM ANTILOG = 2.00000E+03
GEOMETRIC MEAN = 9.42639E+02
GEOMETRIC DEVIATION = 1.46446E+00
VARIANCE OF LOGS = 2.74490E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.838918E+00	6.901087E+02
50.00	2.954761E+00	9.010747E+02
75.00	3.065226E+00	1.162053E+03
90.00	3.244207E+00	1.754716E+03
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		8	8	7.02	7.02		
	L		48	56	42.11	49.12		
	T		0	56	0.00	49.12	2.97	2.97
-8.400E-02	-	8.267E-02	7	63	6.14	55.26	7.40	0.02
8.267E-02	-	2.493E-01	40	103	35.09	90.35	16.24	34.75
2.493E-01	-	4.160E-01	5	108	4.39	94.74	24.93	15.93
4.160E-01	-	5.827E-01	0	108	0.00	94.74	26.76	26.76
5.827E-01	-	7.493E-01	6	114	5.26	100.00	35.70	24.71
	G		0	114	0.00	100.00	0.00	0.00
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
9.985E-01 XXXXXX
1.466E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.151E+00 XXXX
3.157E+00
4.634E+00 XXXXX
```

30

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+00
MAXIMUM ANTILOG	=	5.00000E+00
GEOMETRIC MEAN	=	1.65844E+00
GEOMETRIC DEVIATION	=	1.50989E+00
VARIANCE OF LOGS	=	3.20213E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.764172E-01	1.501126E+00
90.00	2.476673E-01	1.768754E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ.- OBS FREQ)**2/THEOR FREQ
N		11	11	9.65	9.65		
L		1	12	0.88	10.53		
T		0	12	0.00	10.53	6.38	6.38
5.830E-01 -	7.497E-01	19	31	16.67	27.19	15.83	0.64
7.497E-01 -	9.163E-01	25	56	21.93	49.12	28.84	0.51
9.163E-01 -	1.083E+00	29	85	25.44	74.56	31.61	0.21
1.083E+00 -	1.250E+00	23	108	20.18	94.74	20.83	0.23
1.250E+00 -	1.416E+00	3	111	2.63	97.37	8.25	3.34
1.416E+00 -	1.583E+00	2	113	1.75	99.12	1.96	0.00
1.583E+00 -	1.750E+00	0	113	0.00	99.12	0.28	0.28
1.750E+00 -	1.916E+00	0	113	0.00	99.12	0.02	0.02
1.916E+00 -	2.083E+00	0	113	0.00	99.12	0.00	0.00
2.083E+00 -	2.250E+00	1	114	0.88	100.00	0.00	795.66
G		0	114	0.00	100.00	0.00	0.00
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

```
4.638E+00 XXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXX
2.153E+01 XXX
3.160E+01 XX
4.638E+01
6.808E+01
9.992E+01
1.467E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+00
MAXIMUM ANTILOG	=	1.50000E+02
GEOMETRIC MEAN	=	9.44944E+00
GEOMETRIC DEVIATION	=	1.67628E+00
VARIANCE OF LOGS	=	5.03313E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE

25.00	1.000000E+35	1.000000E+35
50.00	9.220811E-01	8.357591E+00
75.00	1.086624E+00	1.220743E+01
90.00	1.210537E+00	1.623819E+01
95.00	1.266335E+00	1.846438E+01
98.00	1.476335E+00	2.994575E+01
99.00	1.571335E+00	3.726794E+01

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		13	13	11.40	11.40		
	L		5	18	4.39	15.79		
	T		0	18	0.00	15.79	6.66	6.66
9.160E-01	-	1.083E+00	15	33	13.16	28.95	8.93	4.13
1.083E+00	-	1.249E+00	3	36	2.63	31.58	14.84	9.45
1.249E+00	-	1.416E+00	10	46	8.77	40.35	19.81	4.86
1.416E+00	-	1.583E+00	12	58	10.53	50.88	21.23	4.01
1.583E+00	-	1.749E+00	27	85	23.68	74.56	18.27	4.17
1.749E+00	-	1.916E+00	24	109	21.05	95.61	12.62	10.26
1.916E+00	-	2.083E+00	5	114	4.39	100.00	11.64	3.79
	G		0	114	0.00	100.00	0.00	0.00
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
9.985E+00 XXXXXXXXXXXX
1.466E+01 XXX
2.151E+01 XXXXXXXXX
3.157E+01 XXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXXXXXXXXXXXXXXXX
9.985E+01 XXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+01
MAXIMUM ANTILOG	=	1.00000E+02
GEOMETRIC MEAN	=	3.60117E+01
GEOMETRIC DEVIATION	=	2.05837E+00
VARIANCE OF LOGS	=	9.82966E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.568779E+00	3.704922E+01
75.00	1.752807E+00	5.659880E+01
90.00	1.871557E+00	7.439735E+01
95.00	1.911141E+00	8.149686E+01

98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		13	13	11.40	11.40		
T		0	13	0.00	11.40	1.97	1.97
5.830E-01	- 7.497E-01	5	18	4.39	15.79	5.50	0.04
7.497E-01	- 9.163E-01	4	22	3.51	19.30	13.30	6.50
9.163E-01	- 1.083E+00	14	36	12.28	31.58	22.61	3.28
1.083E+00	- 1.250E+00	25	61	21.93	53.51	27.02	0.15
1.250E+00	- 1.416E+00	35	96	30.70	84.21	22.68	6.69
1.416E+00	- 1.583E+00	13	109	11.40	95.61	13.38	0.01
1.583E+00	- 1.750E+00	3	112	2.63	98.25	5.55	1.17
1.750E+00	- 1.916E+00	1	113	0.88	99.12	1.61	0.23
1.916E+00	- 2.083E+00	1	114	0.88	100.00	0.38	1.00
G		0	114	0.00	100.00	0.00	0.00
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

```
4.638E+00 XXXX
6.808E+00 XXXX
9.992E+00 XXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXXXX
4.638E+01 XXX
6.808E+01 X
9.992E+01 X
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 1.00000E+02
GEOMETRIC MEAN = 1.68775E+01
GEOMETRIC DEVIATION = 1.70898E+00
VARIANCE OF LOGS = 5.41661E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	9.937151E-01	9.856327E+00

50.00	1.223001E+00	1.671096E+01
75.00	1.366335E+00	2.324529E+01
90.00	1.500951E+00	3.169207E+01
95.00	1.574028E+00	3.749969E+01
98.00	1.734113E+00	5.421424E+01
99.00	1.893003E+00	7.816327E+01

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.11	0.11
1.250E+00	-	1.417E+00	4	4	3.51	3.51	0.92	10.28
1.417E+00	-	1.583E+00	1	5	0.88	4.39	4.88	3.09
1.583E+00	-	1.750E+00	15	20	13.16	17.54	15.35	0.01
1.750E+00	-	1.917E+00	28	48	24.56	42.11	28.74	0.02
1.917E+00	-	2.083E+00	38	86	33.33	75.44	32.04	1.11
2.083E+00	-	2.250E+00	17	103	14.91	90.35	21.27	0.86
2.250E+00	-	2.417E+00	9	112	7.89	98.25	8.41	0.04
2.417E+00	-	2.583E+00	2	114	1.75	100.00	2.28	0.03
	G		0	114	0.00	100.00	0.11	0.11
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
2.154E+01 XXXX
3.162E+01 X
4.642E+01 XXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.468E+02 XXXXXXXXXXXXXX
2.154E+02 XXXXXXXX
3.162E+02 XX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	2.00000E+01
MAXIMUM ANTILOG	=	3.00000E+02
GEOMETRIC MEAN	=	8.94599E+01
GEOMETRIC DEVIATION	=	1.68407E+00
VARIANCE OF LOGS	=	5.12389E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.800596E+00	6.318243E+01
50.00	1.956142E+00	9.039445E+01
75.00	2.081142E+00	1.205430E+02

90.00	2.246080E+00	1.762302E+02
95.00	2.348150E+00	2.229207E+02
98.00	2.411484E+00	2.579193E+02
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		99	99	86.84	86.84		
L		4	103	3.51	90.35		
T		0	103	0.00	90.35	5.93	5.93
5.830E-01 -	7.497E-01	3	106	2.63	92.98	66.47	60.61
7.497E-01 -	9.163E-01	2	108	1.75	94.74	40.43	36.53
9.163E-01 -	1.083E+00	4	112	3.51	98.25	0.00	0.00
1.083E+00 -	1.250E+00	2	114	1.75	100.00	1.17	0.59
G		0	114	0.00	100.00	0.00	0.00
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

```
4.638E+00 XXX
6.808E+00 XX
9.992E+00 XXXX
1.467E+01 XX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	= 5.00000E+00
MAXIMUM ANTILOG	= 1.50000E+01
GEOMETRIC MEAN	= 8.35129E+00
GEOMETRIC DEVIATION	= 1.50434E+00
VARIANCE OF LOGS	= 3.14515E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	9.288340E-01	8.488560E+00
98.00	1.071334E+00	1.178513E+01
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 21 (S-NB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		45	45	39.47	39.47		
L		58	103	50.88	90.35		
T		0	103	0.00	90.35	0.08	0.08
1.250E+00 -	1.417E+00	10	113	8.77	99.12	0.00	0.00
1.417E+00 -	1.583E+00	1	114	0.88	100.00	113.92	111.93
G		0	114	0.00	100.00	0.00	0.00
H		0	114				
B		0	114				

TOTALS LESS H AND B 114

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

2.154E+01 XXXXXXXXX
3.162E+01 X

40

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 3.00000E+01
GEOMETRIC MEAN = 2.07510E+01
GEOMETRIC DEVIATION = 1.13004E+00
VARIANCE OF LOGS = 2.81889E-03

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

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

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		5	5	4.39	4.39		
	L		1	6	0.88	5.26		
	T		0	6	0.00	5.26	6.34	6.34
5.830E-01	-	7.497E-01	27	33	23.68	28.95	13.49	13.53
7.497E-01	-	9.163E-01	17	50	14.91	43.86	24.40	2.24
9.163E-01	-	1.083E+00	25	75	21.93	65.79	29.20	0.60
1.083E+00	-	1.250E+00	18	93	15.79	81.58	23.13	1.14
1.250E+00	-	1.416E+00	12	105	10.53	92.11	12.12	0.00
1.416E+00	-	1.583E+00	8	113	7.02	99.12	4.20	3.43
1.583E+00	-	1.750E+00	1	114	0.88	100.00	1.13	0.01
	G		0	114	0.00	100.00	0.00	0.00
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
4.638E+00 XXXXXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXX
3.160E+01 XXXXXXX
4.638E+01 X
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+00
MAXIMUM ANTILOG	=	5.00000E+01
GEOMETRIC MEAN	=	1.01151E+01
GEOMETRIC DEVIATION	=	1.78743E+00
VARIANCE OF LOGS	=	6.36190E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	9.630008E-01	9.183342E+00
75.00	1.180223E+00	1.514340E+01
90.00	1.383002E+00	2.415470E+01
95.00	1.485085E+00	3.055520E+01

98.00	1.556335E+00	3.600272E+01
99.00	1.580085E+00	3.802641E+01

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.22	0.22
9.160E-01	-	1.083E+00	4	4	3.51	3.51	1.69	3.15
1.083E+00	-	1.249E+00	0	4	0.00	3.51	7.88	7.88
1.249E+00	-	1.416E+00	19	23	16.67	20.18	21.19	0.23
1.416E+00	-	1.583E+00	45	68	39.47	59.65	32.87	4.47
1.583E+00	-	1.749E+00	30	98	26.32	85.96	29.46	0.01
1.749E+00	-	1.916E+00	11	109	9.65	95.61	15.25	1.19
1.916E+00	-	2.083E+00	4	113	3.51	99.12	4.56	0.07
2.083E+00	-	2.249E+00	1	114	0.88	100.00	0.87	0.02
	G		0	114	0.00	100.00	0.22	0.22
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

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

```
9.985E+00 XXXX
1.466E+01
2.151E+01 XXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXXXXXX
9.985E+01 XXXX
1.466E+02 X
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+01
MAXIMUM ANTILOG	=	1.50000E+02
GEOMETRIC MEAN	=	3.54321E+01
GEOMETRIC DEVIATION	=	1.65829E+00
VARIANCE OF LOGS	=	4.82510E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.436371E+00	2.731313E+01
50.00	1.541927E+00	3.482789E+01
75.00	1.679890E+00	4.785093E+01

90.00	1.819032E+00	6.592226E+01
95.00	1.905396E+00	8.042590E+01
98.00	2.029336E+00	1.069881E+02
99.00	2.076836E+00	1.193536E+02

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		2	2	3.77	3.77		
	L		4	6	7.55	11.32		
	T		0	6	0.00	11.32	0.26	0.26
5.830E-01	-	7.497E-01	2	8	3.77	15.09	4.67	1.52
7.497E-01	-	9.163E-01	15	23	28.30	43.40	20.35	1.40
9.163E-01	-	1.083E+00	26	49	49.06	92.45	21.70	0.85
1.083E+00	-	1.250E+00	4	53	7.55	100.00	6.03	0.68
	G		0	53	0.00	100.00	0.00	0.00
	H		0	53				
	B		61	114				

TOTALS LESS H AND B 53

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

```
4.638E+00 XXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXX
```

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+00
MAXIMUM ANTILOG	=	1.50000E+01
GEOMETRIC MEAN	=	8.96891E+00
GEOMETRIC DEVIATION	=	1.28931E+00
VARIANCE OF LOGS	=	1.21786E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	8.080004E-01	6.426884E+00
50.00	9.387699E-01	8.685002E+00
75.00	1.023706E+00	1.056102E+01
90.00	1.074668E+00	1.187593E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.00	0.00
1.916E+00 - 2.083E+00	1	1	0.88	0.88	0.09	8.75
2.083E+00 - 2.249E+00	0	1	0.00	0.88	1.06	1.06
2.249E+00 - 2.416E+00	9	10	7.89	8.77	6.32	1.14
2.416E+00 - 2.583E+00	7	17	6.14	14.91	20.19	8.62
2.583E+00 - 2.749E+00	60	77	52.63	67.54	34.52	18.80
2.749E+00 - 2.916E+00	19	96	16.67	84.21	31.62	5.04
2.916E+00 - 3.083E+00	14	110	12.28	96.49	15.51	0.15
3.083E+00 - 3.249E+00	4	114	3.51	100.00	4.68	0.10
G	0	114	0.00	100.00	0.00	0.00
H	0	114				
B	0	114				

TOTALS LESS H AND B 114

HISTOGRAM FOR VARIABLE 27 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 X
1.466E+02
2.151E+02 XXXXXXXX
3.157E+02 XXXXXX
4.634E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+02 XXXXXXXXXXXXXXXXX
9.985E+02 XXXXXXXXXXXX
1.466E+03 XXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
MAXIMUM ANTILOG = 1.50000E+03
GEOMETRIC MEAN = 5.31942E+02
GEOMETRIC DEVIATION = 1.60419E+00
VARIANCE OF LOGS = 4.21304E-02

PERCENT TABLE FOR VARIABLE 27 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION, THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.614613E+00	4.117300E+02
50.00	2.693779E+00	4.940596E+02
75.00	2.823897E+00	6.666480E+02

90.00	2.994574E+00	9.875830E+02
95.00	3.062431E+00	1.154598E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.02	0.02
9.160E-01	-	1.083E+00	1	1	0.88	0.88	0.13	6.00
1.083E+00	-	1.249E+00	2	3	1.75	2.63	0.72	2.30
1.249E+00	-	1.416E+00	7	10	6.14	8.77	2.88	5.91
1.416E+00	-	1.583E+00	2	12	1.75	10.53	8.25	4.73
1.583E+00	-	1.749E+00	11	23	9.65	20.18	16.89	2.05
1.749E+00	-	1.916E+00	17	40	14.91	35.09	24.69	2.40
1.916E+00	-	2.083E+00	39	79	34.21	69.30	25.78	6.78
2.083E+00	-	2.249E+00	28	107	24.56	93.86	19.23	4.01
2.249E+00	-	2.416E+00	5	112	4.39	98.25	10.24	2.68
2.416E+00	-	2.583E+00	2	114	1.75	100.00	5.18	1.95
	G		0	114	0.00	100.00	0.02	0.02
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

HISTOGRAM FOR VARIABLE 28 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 X
1.466E+01 XX
2.151E+01 XXXXXX
3.157E+01 XX
4.634E+01 XXXXXXXXXX
6.802E+01 XXXXXXXXXXXXXX
9.985E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
2.151E+02 XXXX
3.157E+02 XX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+01
MAXIMUM ANTILOG	=	3.00000E+02
GEOMETRIC MEAN	=	8.65683E+01
GEOMETRIC DEVIATION	=	1.91924E+00
VARIANCE OF LOGS	=	8.01624E-02

PERCENT TABLE FOR VARIABLE 28 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE

25.00	1.803257E+00	6.357065E+01
50.00	1.988652E+00	9.742081E+01
75.00	2.121360E+00	1.322390E+02
90.00	2.223145E+00	1.671651E+02
95.00	2.292669E+00	1.961866E+02
98.00	2.406670E+00	2.550760E+02
99.00	1.000000E+35	1.000000E+35

Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	2.19	2.19
9.160E-01	-	1.083E+00	10	10	8.77	8.77	6.13	2.45
1.083E+00	-	1.249E+00	14	24	12.28	21.05	14.58	0.02
1.249E+00	-	1.416E+00	21	45	18.42	39.47	24.05	0.39
1.416E+00	-	1.583E+00	25	70	21.93	61.40	27.46	0.22
1.583E+00	-	1.749E+00	29	99	25.44	86.84	21.73	2.43
1.749E+00	-	1.916E+00	12	111	10.53	97.37	11.91	0.00
1.916E+00	-	2.083E+00	2	113	1.75	99.12	4.52	1.40
2.083E+00	-	2.249E+00	1	114	0.88	100.00	1.43	0.13
	G		0	114	0.00	100.00	2.19	2.19
	H		0	114				
	B		0	114				

TOTALS LESS H AND B 114

HISTOGRAM FOR VARIABLE 30 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXXXXX
1.466E+01 XXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXXXXXXX
9.985E+01 XX
1.466E+02 X
```

50

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 1.50000E+02
GEOMETRIC MEAN = 2.99458E+01
GEOMETRIC DEVIATION = 1.86532E+00
VARIANCE OF LOGS = 7.33075E-02

PERCENT TABLE FOR VARIABLE 30 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.285048E+00	1.927740E+01
50.00	1.496001E+00	3.133294E+01
75.00	1.671749E+00	4.696222E+01

90.00	1.799335E+00	6.299921E+01
95.00	1.878502E+00	7.559654E+01
98.00	1.976002E+00	9.462419E+01
99.00	2.071002E+00	1.177612E+02

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Table 2C-Sediment Analysis

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.26	0.26
1.583E+00	-	1.750E+00	2	2	3.77	3.77	0.91	1.32
1.750E+00	-	1.916E+00	2	4	3.77	7.55	2.74	0.20
1.916E+00	-	2.083E+00	7	11	13.21	20.75	6.08	0.14
2.083E+00	-	2.250E+00	6	17	11.32	32.08	9.88	1.52
2.250E+00	-	2.416E+00	10	27	18.87	50.94	11.77	0.27
2.416E+00	-	2.583E+00	18	45	33.96	84.91	10.29	5.78
2.583E+00	-	2.750E+00	4	49	7.55	92.45	6.59	1.02
2.750E+00	-	2.916E+00	2	51	3.77	96.23	4.49	1.38
	G		2	53	3.77	100.00	0.26	11.44
	H		0	53				
	B		61	114				

TOTALS LESS H AND B 53

HISTOGRAM FOR VARIABLE 32 (S-ZR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+01 XXXX
6.808E+01 XXXX
9.992E+01 XXXXXXXXXXXX
1.467E+02 XXXXXXXXXX
2.153E+02 XXXXXXXXXXXXXXXXXX
3.160E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.638E+02 XXXXXXXX
6.808E+02 XXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.00000E+01
MAXIMUM ANTILOG	=	7.00000E+02
GEOMETRIC MEAN	=	2.08075E+02
GEOMETRIC DEVIATION	=	1.86085E+00
VARIANCE OF LOGS	=	7.27439E-02

PERCENT TABLE FOR VARIABLE 32 (S-ZR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.145501E+00	1.397981E+02
50.00	2.408002E+00	2.558596E+02
75.00	2.534391E+00	3.422873E+02

90.00	2.695502E+00	4.960235E+02
95.00	2.862169E+00	7.280635E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3A -- Geochemical Data for Concentrate Samples

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
CX038C	33 53 59	115 21 18	1.0	.20	15	>2.0	1,000	N	N	N	20	500
CX039C	33 53 21	115 20 56	1.0	.20	15	>2.0	1,000	N	N	N	<20	100
CX040C	33 52 52	115 20 55	1.0	.30	15	>2.0	1,000	N	N	N	20	700
CX041C	33 51 44	115 20 46	3.0	1.50	10	>2.0	1,500	N	N	N	150	200
CX042C	33 51 15	115 20 41	.7	1.00	15	>2.0	1,000	N	N	N	30	150
CX043C	33 50 46	115 20 9	5.0	1.00	10	>2.0	2,000	N	N	N	100	500
CX044C	33 50 3	115 19 32	7.0	1.50	10	>2.0	2,000	N	N	N	100	500
CX045C	33 49 42	115 18 36	3.0	1.00	15	>2.0	2,000	N	N	N	50	100
CX046C	33 49 8	115 17 37	5.0	1.00	10	>2.0	2,000	N	N	N	150	200
CX047C	33 49 48	115 16 16	3.0	1.00	10	>2.0	1,500	N	N	N	50	100
CX048C	33 49 29	115 16 11	2.0	.70	10	>2.0	1,500	N	N	N	30	500
CX049C	33 50 33	115 16 14	2.0	.70	15	>2.0	2,000	N	N	N	100	150
CX050C	33 50 59	115 17 13	2.0	.70	10	>2.0	1,500	N	N	N	100	200
CX051C	33 50 28	115 17 7	1.5	.50	10	>2.0	1,000	N	N	N	50	200
CX052C	33 50 35	115 17 34	3.0	1.00	10	>2.0	1,500	N	N	N	70	500
CX053C	33 51 36	115 16 59	10.0	1.50	10	>2.0	2,000	N	N	N	200	700
CX054C	33 52 3	115 16 25	1.5	1.00	15	>2.0	1,500	N	N	N	70	200
CX055C	33 52 8	115 18 20	1.0	1.00	10	>2.0	1,000	N	N	N	20	300
CX056C	33 52 8	115 19 5	1.5	1.00	10	>2.0	1,000	N	N	N	50	200
CX057C	33 52 11	115 19 1	2.0	1.50	15	>2.0	2,000	N	N	N	50	200
CX058C	33 52 48	115 18 9	.7	.20	15	>2.0	1,000	N	N	N	<20	500
CX059C	33 53 38	115 18 33	.7	.15	10	>2.0	700	N	N	N	<20	500
CX060C	33 54 34	115 18 22	.7	.30	10	>2.0	700	N	N	N	30	500
CX061C	33 54 20	115 19 49	.5	.15	7	>2.0	500	N	N	N	<20	700
CX062C	33 54 29	115 19 51	.5	.30	10	>2.0	500	N	N	N	20	500
CX063C	33 55 48	115 17 55	.7	.30	7	>2.0	500	N	N	N	20	700
CX064C	33 56 38	115 18 25	1.5	.70	20	>2.0	1,000	N	N	N	20	100
CX065C	33 56 59	115 18 50	1.0	.20	15	>2.0	500	N	N	N	20	100
CX066C	33 56 54	115 16 59	1.5	.70	10	>2.0	1,500	N	N	N	150	700
CX067C	33 57 50	115 18 22	1.0	.50	10	>2.0	700	N	N	N	30	1,000
CX068C	33 58 40	115 19 27	2.0	1.00	10	>2.0	1,500	N	N	N	70	5,000
CX069C	33 59 20	115 18 10	1.0	.20	15	>2.0	1,000	N	N	N	20	150
CX070C	34 0 16	115 18 17	.7	.20	15	>2.0	1,500	N	N	N	20	<50
CX071C	34 0 24	115 20 13	1.0	.50	15	>2.0	1,500	N	N	N	20	<50
CX072C	34 1 23	115 18 49	1.5	1.00	15	>2.0	1,000	N	N	N	<20	100
CX073C	34 1 32	115 19 19	1.0	1.50	15	>2.0	1,000	N	N	N	20	50
CX074C	34 2 10	115 20 21	1.0	.50	20	>2.0	1,500	N	N	N	20	50
CX075C	34 2 2	115 21 19	2.0	1.00	15	>2.0	2,000	N	N	N	20	150
CX076C	34 3 17	115 22 20	2.0	.70	30	>2.0	3,000	N	N	N	30	100
CX077C	34 4 29	115 23 48	.7	.20	15	>2.0	1,000	N	N	N	20	200
CX078C	34 4 9	115 23 52	.7	.20	30	>2.0	1,500	N	N	N	<20	<50
CX079C	34 4 9	115 37 40	1.0	.50	10	>2.0	1,500	N	N	N	<20	500
CX080C	34 5 2	115 37 27	.7	.50	10	>2.0	1,000	N	N	N	20	150
CX081C	34 5 5	115 36 55	1.0	.70	15	>2.0	1,500	N	N	N	20	<50
CX082C	34 4 40	115 36 48	1.0	.50	10	>2.0	1,000	N	N	N	20	100

Table 3A -- Geochemical Data for Concentrate Samples

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
CX038C	N	N	N	20	50	<10	1,500	N	100	N	N	N	--
CX039C	N	N	N	10	50	10	>2,000	N	100	N	N	N	--
CX040C	N	N	N	20	50	10	1,500	N	100	N	N	N	--
CX041C	N	N	N	20	150	20	2,000	15	150	20	50	N	--
CX042C	N	N	N	10	70	20	2,000	N	50	N	100	N	--
CX043C	N	N	N	10	100	20	1,500	10	200	10	50	N	--
CX044C	N	N	N	20	200	50	2,000	10	150	15	50	N	--
CX045C	N	N	N	15	150	20	2,000	10	150	10	20	N	--
CX046C	N	N	N	15	200	20	1,500	N	200	15	30	N	--
CX047C	N	N	N	20	150	15	2,000	15	200	10	300	N	--
CX048C	N	N	N	15	150	10	2,000	10	150	N	20	N	--
CX049C	N	N	N	15	200	15	2,000	<10	100	N	200	N	--
CX050C	N	N	N	10	100	20	1,500	70	150	10	70	N	--
CX051C	N	N	N	15	100	10	1,500	10	100	N	20	N	--
CX052C	N	N	N	10	100	20	1,500	10	100	10	100	N	--
CX053C	N	N	N	20	150	50	1,000	10	200	20	70	N	--
CX054C	N	N	N	15	100	100	1,500	10	150	10	100	N	--
CX055C	N	N	N	20	70	10	1,500	<10	70	20	100	N	--
CX056C	N	N	N	15	100	10	1,000	10	100	10	30	N	--
CX057C	N	N	N	15	100	15	700	N	150	10	20	N	--
CX058C	N	N	N	20	70	15	1,500	N	70	N	20	N	--
CX059C	N	N	N	20	50	10	1,500	N	70	N	N	N	--
CX060C	N	N	N	15	50	15	1,000	N	100	N	20	N	--
CX061C	N	N	N	10	20	10	700	N	150	N	N	N	--
CX062C	N	N	N	10	20	<10	1,000	N	100	N	30	N	--
CX063C	N	300	N	10	70	20	700	20	100	N	700	N	--
CX064C	N	N	N	20	70	30	1,500	10	200	N	20	N	--
CX065C	N	N	N	20	50	10	1,000	30	100	N	50	N	--
CX066C	N	N	N	20	70	10	700	N	70	N	150	N	--
CX067C	N	N	N	10	50	15	1,000	150	150	10	N	N	--
CX068C	N	N	N	50	70	<10	>2,000	70	150	10	70	N	--
CX069C	N	N	N	20	50	70	1,500	10	150	N	30	N	--
CX070C	N	N	N	20	50	<10	1,000	N	200	N	N	N	--
CX071C	N	N	N	30	70	15	1,500	<10	150	N	70	N	--
CX072C	N	N	N	20	100	15	1,000	10	200	10	N	N	--
CX073C	N	N	N	20	150	10	700	N	50	10	N	N	--
CX074C	N	N	N	10	50	10	1,000	N	100	10	N	N	--
CX075C	N	N	N	20	100	10	>2,000	N	50	10	70	N	--
CX076C	N	N	N	20	70	15	>2,000	N	100	10	30	N	--
CX077C	N	N	N	15	20	10	>2,000	N	150	N	20	N	--
CX078C	N	N	N	15	20	10	2,000	<10	100	N	N	N	--
CX079C	N	N	N	20	150	10	>2,000	10	50	10	200	N	--
CX080C	N	N	N	20	100	<10	>2,000	N	50	10	30	N	--
CX081C	N	N	N	15	200	10	2,000	15	100	15	30	N	--
CX082C	N	N	N	20	200	20	2,000	15	100	10	500	N	--

Table 3A -- Geochemical Data for Concentrate Samples

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
CX038C	70	N	500	N	700	N	--	N
CX039C	100	N	700	N	700	N	--	N
CX040C	100	N	500	N	1,000	N	--	N
CX041C	50	700	300	N	1,500	N	--	200
CX042C	50	N	500	N	2,000	N	--	N
CX043C	50	3,000	300	N	1,500	N	--	N
CX044C	50	2,000	500	N	2,000	N	--	N
CX045C	70	500	700	N	2,000	N	--	N
CX046C	50	200	500	N	1,500	N	--	N
CX047C	50	N	500	N	2,000	N	--	N
CX048C	50	N	700	N	2,000	N	--	N
CX049C	100	N	700	N	3,000	N	--	200
CX050C	70	200	500	N	2,000	N	--	200
CX051C	70	N	500	N	2,000	N	--	<200
CX052C	20	500	300	N	1,500	N	--	<200
CX053C	20	1,000	300	N	1,000	N	--	N
CX054C	50	200	300	N	2,000	500	--	<200
CX055C	70	N	500	N	1,500	1,000	--	<200
CX056C	70	500	300	N	1,000	N	--	<200
CX057C	50	200	500	N	1,000	N	--	<200
CX058C	100	N	700	N	1,000	N	--	N
CX059C	20	200	500	N	700	N	--	200
CX060C	20	500	500	N	500	N	--	<200
CX061C	N	500	300	N	300	N	--	N
CX062C	20	500	200	N	500	N	--	N
CX063C	30	700	300	2,000	300	N	--	200
CX064C	100	200	700	100	1,000	N	--	N
CX065C	70	200	700	200	700	N	--	N
CX066C	20	200	500	500	1,000	N	--	<200
CX067C	N	500	300	1,000	500	N	--	N
CX068C	N	700	300	300	1,000	N	--	500
CX069C	100	N	700	N	1,500	N	--	N
CX070C	100	N	500	N	2,000	N	--	N
CX071C	100	N	700	N	1,500	N	--	200
CX072C	100	N	700	N	700	N	--	N
CX073C	50	N	1,000	N	700	N	--	N
CX074C	100	N	700	N	1,500	N	--	N
CX075C	20	N	300	N	3,000	N	--	1,000
CX076C	20	N	300	N	3,000	N	--	700
CX077C	50	500	200	N	1,000	N	--	<200
CX078C	70	200	500	N	1,500	N	--	N
CX079C	50	N	1,000	N	5,000	N	--	<200
CX080C	70	N	700	N	5,000	N	--	200
CX081C	50	N	1,000	N	3,000	N	--	500
CX082C	20	N	700	N	2,000	N	--	300

Table 3A -- Geochemical data for Concentrate Samples--continued

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
CX083C	34 5 9	115 36 10	1.0	.70	20	>2.0	500	N	N	N	<20	100
CX084C	34 3 49	115 35 18	.7	.30	3	>2.0	1,000	N	N	N	30	300
CX085C	34 3 59	115 34 40	2.0	1.00	15	>2.0	1,500	N	N	N	100	200
CX086C	34 3 12	115 35 46	1.0	.50	10	>2.0	1,500	N	N	N	<20	70
CX087C	34 2 30	115 35 25	2.0	1.00	15	>2.0	2,000	N	N	N	20	<50
CX088C	34 2 28	115 34 28	.7	1.00	15	>2.0	700	N	N	N	<20	<50
CX089C	34 2 30	115 33 42	3.0	1.00	20	>2.0	2,000	N	N	N	30	200
CX090C	34 2 49	115 32 19	2.0	.70	10	>2.0	1,000	N	N	N	50	500
CX091C	34 1 40	115 31 50	3.0	1.00	15	>2.0	1,000	N	N	N	70	200
CX092C	34 1 58	115 31 25	3.0	1.00	10	>2.0	1,500	N	N	N	50	200
CX093C	34 5 6	115 30 41	2.0	.50	20	>2.0	1,500	N	N	N	20	300
CX094C	34 5 51	115 31 25	1.0	.50	20	>2.0	1,000	N	N	N	<20	100
CX095C	34 6 15	115 30 32	2.0	.70	30	>2.0	1,500	N	N	N	<20	70
CX096C	34 5 33	115 30 5	1.5	.50	20	>2.0	1,500	N	N	N	20	50
CX097C	34 3 52	115 28 58	1.5	.50	30	>2.0	2,000	N	N	N	20	100
CX098C	34 4 10	115 27 38	1.0	.70	7	>2.0	1,000	N	N	N	30	200
CX001C	33 54 55	115 23 50	1.0	.50	15	>2.0	1,000	N	N	N	<20	100
CX002C	33 53 55	115 23 5	5.0	.70	10	>2.0	2,000	N	N	N	150	1,500
CX013C	33 57 20	115 16 50	3.0	.50	20	>2.0	2,000	N	N	N	30	300
SH022C	34 5 11	115 32 52	2.0	.70	15	>2.0	700	N	N	N	N	100
SH023C	34 5 29	115 33 40	1.5	.30	15	>2.0	700	N	N	N	N	100
SH024C	34 6 1	115 34 1	1.0	.50	10	>2.0	500	N	N	N	N	<50
SH025C	34 6 57	115 34 42	1.5	.20	10	>2.0	700	N	N	N	20	1,500
SH092C	34 5 5	115 44 1	3.0	1.50	3	>2.0	1,000	N	N	N	30	2,000
SH093C	34 4 12	115 42 57	5.0	3.00	10	2.0	1,000	N	N	N	70	500
SH094C	34 4 37	115 41 44	3.0	3.00	15	1.5	1,000	10	N	N	20	700
SH095C	34 4 24	115 41 1	5.0	3.00	15	1.0	1,000	N	N	N	20	1,000
SH096C	34 3 44	115 40 41	3.0	3.00	10	1.0	700	N	N	N	30	700
SH097C	34 3 31	115 38 38	3.0	2.00	10	1.0	500	N	N	N	20	700
SH098C	34 3 20	115 37 51	1.5	.50	7	>2.0	500	N	N	N	<20	1,000
SH099C	34 3 28	115 36 47	1.0	.50	5	>2.0	700	N	N	N	<20	500
SH104C	34 3 45	115 30 11	2.0	2.00	10	>2.0	10,000	N	N	N	<20	200
SH107C	34 4 20	115 38 58	1.5	2.00	3	>2.0	2,000	N	N	N	20	>10,000
SH108C	34 4 25	115 39 54	2.0	3.00	3	>2.0	5,000	N	N	N	30	>10,000
SH109C	34 3 42	115 44 38	2.0	3.00	5	>2.0	5,000	N	N	N	20	300
SH110C	34 2 36	115 43 1	5.0	1.50	5	>2.0	5,000	N	N	N	<20	500
SH111C	34 1 16	115 42 51	2.0	3.00	5	>2.0	7,000	N	N	N	20	500

Table 3A -- Geochemical Data for Concentrate Samples--continued

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
CX083C	N	N	N	50	300	<10	2,000	N	150	15	20	N	--
CX084C	N	N	N	20	70	<10	2,000	N	70	10	20	N	--
CX085C	N	N	N	30	150	20	2,000	10	150	15	30	N	--
CX086C	N	N	N	20	100	10	>2,000	N	100	10	70	N	--
CX087C	N	N	N	50	150	20	>2,000	15	100	15	50	N	--
CX088C	N	N	N	20	150	<10	2,000	N	70	15	30	N	--
CX089C	N	N	N	20	100	15	>2,000	N	100	15	30	N	--
CX090C	N	N	N	20	100	10	1,500	10	100	10	20	N	--
CX091C	N	N	N	20	150	15	2,000	N	50	10	300	N	--
CX092C	N	N	N	30	150	20	1,500	10	70	20	50	N	--
CX093C	N	N	N	15	100	10	1,500	<10	100	15	20	N	--
CX094C	N	N	N	10	50	10	2,000	N	100	N	N	N	--
CX095C	N	30	N	20	100	15	1,500	N	70	10	N	N	--
CX096C	N	N	N	10	70	30	1,500	N	150	10	5,000	N	--
CX097C	N	N	N	20	70	15	>2,000	15	100	10	70	N	--
CX098C	N	N	N	30	150	20	2,000	N	50	10	150	N	--
CX001C	N	N	N	10	70	20	1,500	50	70	10	N	N	--
CX002C	N	N	N	100	70	100	>2,000	<10	50	50	2,000	N	--
CX013C	N	N	N	20	70	15	>2,000	N	150	N	100	N	--
SH022C	N	N	N	N	50	70	700	<10	150	N	20	N	20
SH023C	N	N	N	N	50	50	700	20	200	N	20	N	20
SH024C	N	N	N	N	50	50	1,500	20	200	N	50	N	30
SH025C	N	N	N	N	30	50	500	20	300	N	20	N	20
SH092C	<2	N	N	N	70	50	1,000	15	200	N	150	N	50
SH093C	2	N	N	15	70	20	500	<10	100	N	1,000	N	50
SH094C	2	200	N	15	30	700	500	N	50	N	200	N	30
SH095C	3	N	N	20	N	70	1,000	N	70	N	100	N	70
SH096C	2	N	N	15	50	15	500	N	50	N	20	N	20
SH097C	<2	N	N	10	50	15	1,000	N	50	N	50	N	20
SH098C	<2	N	N	N	50	20	1,000	20	100	N	50	N	30
SH099C	<2	N	N	N	50	50	1,000	20	150	N	50	N	30
SH104C	N	N	N	N	100	30	1,000	20	200	N	50	N	70
SH107C	<2	N	N	N	70	30	1,000	20	200	<10	50	N	50
SH108C	<2	N	N	N	100	50	1,000	30	200	<10	70	N	70
SH109C	N	N	N	N	70	50	1,500	20	100	<10	70	N	70
SH110C	2	70	N	50	70	200	1,000	50	100	N	200	N	70
SH111C	5	N	N	50	100	100	700	30	100	N	150	N	100

Table 5A -- Geochemical data for Concentrate Samples--continued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
CX083C	20	300	2,000	N	1,000	N	--	N
CX084C	N	200	300	N	700	N	--	700
CX085C	50	200	700	N	2,000	N	--	200
CX086C	20	N	700	N	3,000	N	--	300
CX087C	50	N	500	N	3,000	N	--	N
CX088C	20	N	1,000	N	1,000	N	--	N
CX089C	20	N	300	N	3,000	N	--	500
CX090C	70	N	700	N	1,500	N	--	N
CX091C	50	N	700	200	1,500	N	--	<200
CX092C	30	N	700	<100	1,000	N	--	N
CX093C	20	300	500	N	1,000	N	--	N
CX094C	50	500	500	700	1,500	N	--	N
CX095C	50	500	500	100	1,500	N	--	N
CX096C	50	300	300	N	1,000	N	--	N
CX097C	50	500	500	N	1,500	N	--	N
CX098C	50	N	700	N	2,000	N	--	N
CX001C	50	N	700	100	700	N	--	N
CX002C	70	200	700	N	1,500	N	--	500
CX013C	50	200	300	N	2,000	N	--	700
SH022C	70	N	200	N	500	N	>2,000	N
SH023C	50	N	200	N	500	N	>2,000	700
SH024C	100	<200	200	N	700	N	>2,000	1,000
SH025C	70	<200	200	N	500	N	>2,000	200
SH092C	100	<200	200	N	1,000	N	>2,000	300
SH093C	<20	1,000	500	N	200	N	>2,000	N
SH094C	N	500	500	N	200	N	1,000	N
SH095C	N	500	200	N	150	N	1,000	N
SH096C	N	700	200	N	150	N	700	N
SH097C	30	500	200	N	200	N	1,000	N
SH098C	50	<200	150	N	1,000	N	>2,000	300
SH099C	100	N	200	N	1,000	N	>2,000	200
SH104C	100	<200	150	N	20	N	>2,000	200
SH107C	100	<200	300	N	20	N	>2,000	<200
SH106C	100	500	300	N	20	N	>2,000	500
SH109C	150	200	300	N	30	N	>2,000	200
SH110C	150	200	300	N	20	N	>2,000	200
SH111C	150	1,000	500	N	30	N	>2,000	N

Table 38 -- FISHER-K Statistics for Concentrate Samples

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
1	LATITUDE	0	0	0	0	0	0	82	0	33.818889	34.115833	1
2	LONGITUD	0	0	0	0	0	0	82	0	115.26972	115.74389	2
3	S-FE%	0	0	0	0	0	0	82	0	0.5000000	10.000000	3
4	S-MG%	0	0	0	0	0	0	82	0	0.1500000	3.0000000	4
5	S-CA%	0	0	0	0	0	0	82	0	3.0000000	30.000000	5
6	S-TI%	0	0	0	77	0	0	5	0	1.0000000	2.0000000	6
7	S-MN	0	0	0	0	0	0	82	0	500.00000	10000.000	7
8	S-AG	81	0	0	0	0	0	1	0	10.000000	10.000000	8
9	S-AS	82	0	0	0	0	0	0	0			9
10	S-AU	82	0	0	0	0	0	0	0			10
11	S-B	3	0	17	0	0	0	62	0	20.000000	200.00000	11
12	S-BA	0	0	7	2	0	0	73	0	50.000000	5000.0000	12
13	S-BE	70	0	6	0	0	0	6	0	2.0000000	5.0000000	13
14	S-BI	78	0	0	0	0	0	4	0	30.000000	300.00000	14
15	S-CD	82	0	0	0	0	0	0	0			15
16	S-CO	11	0	0	0	0	0	71	0	10.000000	100.00000	16
17	S-CR	1	0	0	0	0	0	81	0	20.000000	300.00000	17
18	S-CU	0	0	8	0	0	0	74	0	10.000000	700.00000	18
19	S-LA	0	0	0	13	0	0	69	0	500.00000	2000.0000	19
20	S-MO	34	0	8	0	0	0	40	0	10.000000	150.00000	20
21	S-NB	0	0	0	0	0	0	82	0	50.000000	300.00000	21
22	S-NI	38	0	3	0	0	0	41	0	10.000000	50.000000	22
23	S-PB	14	0	0	0	0	0	68	0	20.000000	5000.0000	23
24	S-SB	82	0	0	0	0	0	0	0			24
25	S-SC	0	0	0	0	64	0	18	0	20.000000	100.00000	25
26	S-SN	7	0	1	0	0	0	74	0	20.000000	150.00000	26
27	S-SR	34	0	6	0	0	0	42	0	200.00000	3000.0000	27
28	S-V	0	0	0	0	0	0	82	0	150.00000	2000.0000	28
29	S-W	71	0	1	0	0	0	10	0	100.00000	2000.0000	29
30	S-Y	0	0	0	0	0	0	82	0	20.000000	5000.0000	30
31	S-ZN	80	0	0	0	0	0	2	0	500.00000	1000.0000	31
32	S-ZR	0	0	0	14	64	0	4	0	700.00000	1000.0000	32
33	S-TH	42	0	12	0	0	0	28	0	200.00000	1000.0000	33

Table 3B -- FISHER-K Statistics for Concentrate Samples

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
1	LATITUDE	33.987493	0.0943299	0.0038981	-3.8186414D-04	-0.4549465	-1.1072319D-04	-1.3984293	1
2	LONGITUD	115.44990	0.1512718	0.0228832	0.0014083	0.4068406	-7.1335952D-04	-1.3623116	2
3	S-FE%	1.9963415	1.5756202	2.4825790	9.6272818	2.4612122	51.168170	8.3022100	3
4	S-MG%	0.9390244	0.7698815	0.5927176	0.7378188	1.6168809	0.7129977	2.0295164	4
5	S-CA%	12.865854	5.8092353	33.747215	202.00440	1.0303955	2117.7574	1.8595178	5
6	S-TI%	1.3000000	0.4472136	0.2000000	0.1125000	1.2577882	0.0125000	0.3125000	6
7	S-MN	1564.6341	1425.8090	2032931.3	1.0965797D+10	3.7831725	7.1902399D+13	17.397945	7
8	S-AG	10.000000							8
9	S-AS								9
10	S-AU								10
11	S-B	47.096774	41.779558	1745.5315	137499.42	1.3854253	9416819.9	3.0906434	11
12	S-BA	449.86301	652.73249	426059.70	1.4223217D+09	5.1143701	6.0377856D+12	33.261112	12
13	S-BE	2.6666667	1.2110601	1.4666667	3.4666667	1.9517085	7.8666667	3.6570248	13
14	S-BI	150.00000	123.55835	15266.667	840000.00	0.4453105	-6.1039333D+08	-2.6189146	14
15	S-CD								15
16	S-CO	20.704225	13.661619	186.63984	8923.2652	3.5015518	567143.99	16.281133	16
17	S-CR	92.469136	51.998338	2703.8272	179718.91	1.3282782	15895128.	2.1742334	17
18	S-CU	37.162162	83.641772	6995.9459	4163634.5	7.1154591	2.7292300D+09	55.763144	18
19	S-LA	1342.0290	487.31129	237472.29	-4485749.0	-0.0387628	-6.7418577D+10	-1.1955113	19
20	S-MO	23.125000	25.512378	650.88141	60672.761	3.6537679	6710381.9	15.839574	20
21	S-NB	119.51220	52.444031	2750.3764	102347.29	0.7088651	2288712.9	0.3025569	21
22	S-NI	13.048780	6.7895185	46.097561	1342.9644	4.2904918	47615.483	22.407443	22
23	S-PB	200.73529	653.11496	426559.15	1.7963832D+09	6.4480751	8.2684222D+12	45.442699	23
24	S-SB								24
25	S-SC	45.555556	24.548205	602.61438	9011.4379	0.6091649	-227209.15	-0.6256722	25
26	S-SN	61.891892	32.799753	1075.8238	25001.172	0.7085144	266772.92	0.2304939	26
27	S-SR	528.57143	514.32443	264529.62	4.6218920D+08	3.3971001	9.6902175D+11	13.847932	27
28	S-V	496.34146	274.96133	75603.734	45143880.	2.1716209	5.5971579D+10	9.7922179	28
29	S-W	520.00000	599.62952	359555.56	4.2496667D+08	1.9710873	5.2344413D+11	4.0489119	29
30	S-Y	1310.2439	1001.4545	1002911.1	1.4018998D+09	1.3958005	3.0023607D+12	2.9849567	30
31	S-ZN	750.00000	353.55339	125000.00					31
32	S-ZR	925.00000	150.00000	22500.000	-6750000.0	-2.0000000	2.0250000D+09	4.0000000	32
33	S-TH	396.42857	250.15868	62579.365	18152320.	1.1595391	1.6141013D+09	0.4121625	33

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

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Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 3 (S-FE%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00	1.09	1.09
-4.170E-01	-2.503E-01	2	2	2.44	2.44	3.20	0.45
-2.503E-01	-8.367E-02	11	13	13.41	15.85	8.20	0.96
-8.367E-02	8.300E-02	20	33	24.39	40.24	14.84	1.79
8.300E-02	2.497E-01	12	45	14.63	54.88	19.04	2.60
2.497E-01	4.163E-01	17	62	20.73	75.61	17.31	0.01
4.163E-01	5.830E-01	12	74	14.63	90.24	11.15	0.07
5.830E-01	7.497E-01	6	80	7.32	97.56	5.09	0.16
7.497E-01	9.163E-01	1	81	1.22	98.78	1.64	0.25
9.163E-01	1.083E+00	1	82	1.22	100.00	0.44	0.70
	G	0	82	0.00	100.00	1.09	1.09
	H	0	82				
	B	0	82				

TOTALS LESS H AND B 82

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

```
4.638E-01 XX
6.809E-01 XXXXXXXXXXXX
9.992E-01 XXXXXXXXXXXXXXXXXXXXXXXX
1.467E+00 XXXXXXXXXXXXXXX
2.153E+00 XXXXXXXXXXXXXXXXXXXXX
3.160E+00 XXXXXXXXXXXXXXX
4.638E+00 XXXXXXX
6.809E+00 X
9.992E+00 X
```

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.000000E-01
MAXIMUM ANTILOG = 1.000000E+01
GEOMETRIC MEAN = 1.597816+00
GEOMETRIC DEVIATION = 1.904316+00
VARIANCE OF LOGS = 7.82527E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-2.116588E-02	9.524323E-01

50.00	1.941123E-01	1.563552E+00
75.00	4.114330E-01	2.578991E+00
90.00	5.802242E-01	3.803857E+00
95.00	6.913355E-01	4.912873E+00
98.00	8.096691E-01	6.451624E+00
99.00	1.000000E+35	1.000000E+35

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Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 4 (S-MG%)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	1.02	1.02
-9.170E-01 - -7.503E-01	2	2	2.44	2.44	2.25	0.03
-7.503E-01 - -5.837E-01	9	11	10.98	13.41	5.23	2.72
-5.837E-01 - -4.170E-01	6	17	7.32	20.73	9.58	1.34
-4.170E-01 - -2.503E-01	17	34	20.73	41.46	13.88	0.70
-2.503E-01 - -8.367E-02	13	47	15.85	57.32	15.88	0.52
-8.367E-02 - 8.300E-02	18	65	21.95	79.27	14.35	0.93
8.300E-02 - 2.497E-01	7	72	8.54	87.80	10.24	1.03
2.497E-01 - 4.163E-01	3	75	3.66	91.46	5.78	1.33
4.163E-01 - 5.830E-01	7	82	8.54	100.00	3.79	2.71
G	0	82	0.00	100.00	1.02	1.02
H	0	82				
B	0	82				

TOTALS LESS H AND B 82

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

```
1.467E-01 XX
2.153E-01 XXXXXXXXXXX
3.160E-01 XXXXXXX
4.638E-01 XXXXXXXXXXXXXXXXXXXX
6.808E-01 XXXXXXXXXXXXXXX
9.992E-01 XXXXXXXXXXXXXXXXXXXXX
1.467E+00 XXXXXXXXX
2.153E+00 XXXX
3.160E+00 XXXXXXXXX
```

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E-01
MAXIMUM ANTILOG = 3.00000E+00
GEOMETRIC MEAN = 6.99420E-01
GEOMETRIC DEVIATION = 2.18682E+00
VARIANCE OF LOGS = 1.15472E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-3.826852E-01	4.142999E-01

50.00	-1.605382E-01	6.908945E-01
75.00	5.059452E-02	1.123555E+00
90.00	3.496592E-01	2.237017E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 5 (S-CA%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.10	0.10
4.160E-01 -	5.827E-01	4	4	4.88	4.88	0.91	10.50
5.827E-01 -	7.493E-01	4	8	4.88	9.76	4.83	0.14
7.493E-01 -	9.160E-01	4	12	4.88	14.63	14.33	7.45
9.160E-01 -	1.083E+00	31	43	37.80	52.44	23.85	2.14
1.083E+00 -	1.249E+00	27	70	32.93	85.37	22.27	1.00
1.249E+00 -	1.416E+00	8	78	9.76	95.12	11.66	1.15
1.416E+00 -	1.583E+00	4	82	4.88	100.00	4.04	0.00
G		0	82	0.00	100.00	0.10	0.10
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

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

```
3.157E+00 XXXXX
4.634E+00 XXXXX
6.802E+00 XXXXX
9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXX
3.157E+01 XXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	3.00000E+00
MAXIMUM ANTILOG	=	3.00000E+01
GEOMETRIC MEAN	=	1.15579E+01
GEOMETRIC DEVIATION	=	1.63585E+00
VARIANCE OF LOGS	=	4.56667E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	9.617000E-01	9.155878E+00
50.00	1.071915E+00	1.180090E+01
75.00	1.196866E+00	1.573496E+01
90.00	1.328502E+00	2.130600E+01
95.00	1.413919E+00	2.593694E+01

98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 6 (S-TI%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
-8.400E-02 -	8.267E-02	3	3	3.66	3.66	0.02	532.54
8.267E-02 -	2.493E-01	1	4	1.22	4.88	20.53	18.58
2.493E-01 -	4.160E-01	1	5	1.22	6.10	61.45	59.47
G		77	82	93.90	100.00	0.00	0.00
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

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

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

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      =  1.00000E+00
MAXIMUM ANTILOG      =  2.00000E+00
GEOMETRIC MEAN       =  1.24573E+00
GEOMETRIC DEVIATION  =  1.37382E+00
VARIANCE OF LOGS     =  1.90246E-02
```

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

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

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	1.81	1.81
2.583E+00 -	2.750E+00	8	8	9.76	9.76	5.24	1.45
2.750E+00 -	2.916E+00	9	17	10.98	20.73	12.29	0.88
2.916E+00 -	3.083E+00	25	42	30.49	51.22	19.26	1.71
3.083E+00 -	3.250E+00	20	62	24.39	75.61	20.16	0.00
3.250E+00 -	3.416E+00	14	76	17.07	92.68	14.10	0.00
3.416E+00 -	3.583E+00	1	77	1.22	93.90	6.58	4.74
3.583E+00 -	3.750E+00	3	80	3.66	97.56	2.05	0.44
3.750E+00 -	3.916E+00	1	81	1.22	98.78	0.43	0.77
3.916E+00 -	4.083E+00	1	82	1.22	100.00	0.07	13.44
G		0	82	0.00	100.00	1.81	1.81
U		0	82				
B		0	82				

TOTALS LESS U AND B 82

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

```
4.639E+02 XXXXXXXXXX
6.808E+02 XXXXXXXXXXX
9.992E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+03 XXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+03 XXXXXXXXXXXXXXXXX
3.160E+03 X
4.639E+03 XXXX
6.808E+03 X
9.992E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.000000E+02
MAXIMUM ANTILOG = 1.000000E+04
GEOMETRIC MEAN = 1.26435E+03
GEOMETRIC DEVIATION = 1.81080E+00
VARIANCE OF LOGS = 6.64972E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.939667E+00	8.702968E+02

50.00	3.076334E+00	1.192159E+03
75.00	3.245501E+00	1.759954E+03
90.00	3.390144E+00	2.455526E+03
95.00	3.633002E+00	4.295385E+03
98.00	3.809669E+00	6.451624E+03
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		3	3	3.66	3.66		
I		17	20	20.73	24.39		
T		0	20	0.00	24.39	16.15	16.15
1.250E+00 -	1.417E+00	28	48	34.15	58.54	16.31	8.37
1.417E+00 -	1.583E+00	12	60	14.63	73.17	18.97	2.56
1.583E+00 -	1.750E+00	7	67	8.54	81.71	15.76	4.87
1.750E+00 -	1.917E+00	5	72	6.10	87.80	9.35	2.02
1.917E+00 -	2.083E+00	5	77	6.10	93.90	3.96	0.27
2.083E+00 -	2.250E+00	4	81	4.88	98.78	1.20	6.57
2.250E+00 -	2.417E+00	1	82	1.22	100.00	0.30	1.61
G		0	82	0.00	100.00	0.00	0.00
O		0	82				
B		0	82				

TOTALS LESS H AND B 82

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

```
2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXX
4.642E+01 XXXXXXXXX
6.813E+01 XXXXXX
1.000E+02 XXXXXX
1.468E+02 XXXXX
2.154E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 2.00000E+02
GEOMETRIC MEAN = 3.57166E+01
GEOMETRIC DEVIATION = 2.00079E+00
VARIANCE OF LOGS = 9.07227E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.619048E+00	4.159569E+01
90.00	1.976662E+00	9.476940E+01
95.00	2.120835E+00	1.320794E+02

98.00	2.223335E+00	1.672381E+02
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		7	7	8.54	8.54		
T		0	7	0.00	8.54	4.25	4.25
1.583E+00 -	1.750E+00	3	10	3.66	12.20	3.69	0.13
1.750E+00 -	1.916E+00	2	12	2.44	14.63	5.62	2.33
1.916E+00 -	2.083E+00	14	26	17.07	31.71	7.71	5.14
2.083E+00 -	2.250E+00	5	31	6.10	37.80	9.50	2.13
2.250E+00 -	2.416E+00	14	45	17.07	54.88	10.53	1.14
2.416E+00 -	2.583E+00	5	50	6.10	60.98	10.50	2.88
2.583E+00 -	2.750E+00	15	65	18.29	79.27	9.42	3.31
2.750E+00 -	2.916E+00	8	73	9.76	89.02	7.59	0.02
2.916E+00 -	3.083E+00	3	76	3.66	92.68	5.51	1.14
3.083E+00 -	3.250E+00	2	78	2.44	95.12	3.59	0.70
3.250E+00 -	3.416E+00	1	79	1.22	96.34	2.11	0.58
3.416E+00 -	3.583E+00	0	79	0.00	96.34	1.11	1.11
3.583E+00 -	3.750E+00	1	80	1.22	97.56	0.88	0.02
G		2	82	2.44	100.00	0.00	0.00
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

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

```
4.638E+01 XXXX
6.808E+01 XX
9.992E+01 XXXXXXXXXXXXXXXXX
1.467E+02 XXXXXX
2.153E+02 XXXXXXXXXXXXXXXX
3.160E+02 XXXXXX
4.638E+02 XXXXXXXXXXXXXXXXX
6.808E+02 XXXXXXXXXX
9.992E+02 XXXX
1.467E+03 XX
2.153E+03 X
3.160E+03
4.638E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
MAXIMUM ANTILOG = 5.00000E+03
GEOMETRIC MEAN = 2.73217E+02
GEOMETRIC DEVIATION = 2.59612E+00
VARIANCE OF LOGS = 1.71664E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.017525E+00	1.041177E+02
50.00	2.368716E+00	2.337308E+02
75.00	2.710780E+00	5.137834E+02
90.00	2.960781E+00	9.136514E+02
95.00	3.241337E+00	1.743158E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

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Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		70	70	85.37	85.37		
L		6	76	7.32	92.68		
T		0	76	0.00	92.68	0.84	0.84
2.500E-01 -	4.167E-01	4	80	4.88	97.56	7.55	1.67
4.167E-01 -	5.833E-01	1	81	1.22	98.78	25.42	23.66
5.833E-01 -	7.500E-01	1	82	1.22	100.00	49.19	46.21
G		0	82	0.00	100.00	0.00	0.00
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

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

```
2.154E+00 XXXXX
3.162E+00 X
4.642E+00 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
MAXIMUM ANTILOG = 5.00000E+00
GEOMETRIC MEAN = 2.49288E+00
GEOMETRIC DEVIATION = 1.45874E+00
VARIANCE OF LOGS = 2.68891E-02

PERCENT TABLE FOR VARIABLE 13 (S-BE) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	4.766671E-01	2.996864E+00
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 14 (S-BI)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		78	78	95.12	95.12		
	L		0	78	0.00	95.12		
	T		0	78	0.00	95.12	55.06	55.06
1.416E+00	-	1.583E+00	1	79	1.22	96.34	19.98	18.03
1.583E+00	-	1.749E+00	0	79	0.00	96.34	6.09	6.09
1.749E+00	-	1.916E+00	1	80	1.22	97.56	0.82	0.04
1.916E+00	-	2.083E+00	0	80	0.00	97.56	0.05	0.05
2.083E+00	-	2.249E+00	0	80	0.00	97.56	0.00	0.00
2.249E+00	-	2.416E+00	1	81	1.22	98.78	0.00	0.00
2.416E+00	-	2.583E+00	1	82	1.22	100.00	0.00	761.79
	G		0	82	0.00	100.00	0.00	0.00
	H		0	82				
	B		0	82				

TOTALS LESS H AND B 82

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

```
3.157E+01 X
4.634E+01
6.802E+01 X
9.985E+01
1.466E+02
2.151E+02 X
3.157E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	3.000000E+01
MAXIMUM ANTILOG	=	3.000000E+02
GEOMETRIC MEAN	=	1.059248E+02
GEOMETRIC DEVIATION	=	2.831946E+00
VARIANCE OF LOGS	=	2.043381E-01

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

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

98.00
99.00

2.026001E+00
1.010000E+35

1.247387E+02
1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		11	11	13.41	13.41		
L		0	11	0.00	13.41		
T		0	11	0.00	13.41	5.47	5.47
9.160E-01 -	1.083E+00	14	25	17.07	30.49	14.51	0.02
1.083E+00 -	1.249E+00	16	41	19.51	50.00	24.67	3.04
1.249E+00 -	1.416E+00	31	72	37.80	87.80	22.65	3.08
1.416E+00 -	1.583E+00	4	76	4.88	92.68	11.23	4.66
1.583E+00 -	1.749E+00	5	81	6.10	98.78	3.00	1.33
1.749E+00 -	1.916E+00	0	81	0.00	98.78	0.43	0.43
1.916E+00 -	2.083E+00	1	82	1.22	100.00	0.03	26.81
G		0	82	0.00	100.00	0.00	0.00
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

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

```
9.995E+00 XXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXX
4.634E+01 XXXXXX
6.802E+01
9.985E+01 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.000000E+01
MAXIMUM ANTILOG = 1.000000E+02
GEOMETRIC MEAN = 1.825188E+01
GEOMETRIC DEVIATION = 1.58629E+00
VARIANCE OF LOGS = 4.01537E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.249334E+00	1.775554E+01
75.00	1.359549E+00	2.288491E+01
90.00	1.491001E+00	3.097427E+01
95.00	1.646001E+00	4.425899E+01

99.00
99.00

1.728002E+00
1.000000E+35

5.345664E+01
1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	M		1	1	1.22	1.22		
	L		0	1	0.00	1.22		
	T		0	1	0.00	1.22	0.47	0.47
1.250E+00	-	1.417E+00	4	5	4.88	6.10	2.04	1.83
1.417E+00	-	1.583E+00	7	7	2.44	8.54	6.66	3.26
1.583E+00	-	1.750E+00	18	25	21.95	30.49	14.38	0.91
1.750E+00	-	1.917E+00	20	45	24.39	54.88	20.50	0.01
1.917E+00	-	2.083E+00	18	63	21.95	76.83	19.33	0.09
2.083E+00	-	2.250E+00	13	76	15.85	92.68	12.04	0.08
2.250E+00	-	2.417E+00	5	81	6.10	98.78	4.96	0.00
2.417E+00	-	2.583E+00	1	82	1.22	100.00	1.62	0.24
	G		0	82	0.00	100.00	0.00	0.00
	H		0	82				
	P		0	82				

TOTALS LESS H AND P 82

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

```
2.154E+01 XXXXX
3.162E+01 XX
4.642E+01 XXXXXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXXXXXXXXX
1.468E+02 XXXXXXXXXXXXXXX
2.154E+02 XXXXXX
3.162E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 3.00000E+02
GEOMETRIC MEAN = 7.94627E+01
GEOMETRIC DEVIATION = 1.76684E+00
VARIANCE OF LOGS = 6.11066E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.708334E+00	5.108981E+01
50.00	1.883335E+00	7.644245E+01
75.00	2.069446E+00	1.173400E+02

90.00	2.221797E+00	1.666667E+02
95.00	2.313335E+00	2.057479E+02
98.00	2.395336E+00	2.485053E+02
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		8	8	9.76	9.76		
T		0	8	0.00	9.76	11.47	11.47
9.160E-01 -	1.083E+00	21	29	25.61	35.37	10.73	9.82
1.083E+00 -	1.249E+00	16	45	19.51	54.88	14.23	0.22
1.249E+00 -	1.416E+00	16	61	19.51	74.39	15.18	0.04
1.416E+00 -	1.583E+00	4	65	4.88	79.27	13.03	6.26
1.583E+00 -	1.749E+00	9	74	10.98	90.24	9.00	0.00
1.749E+00 -	1.916E+00	3	77	3.66	93.90	5.00	0.80
1.916E+00 -	2.083E+00	3	80	3.66	97.56	2.24	0.26
2.083E+00 -	2.249E+00	0	80	0.00	97.56	0.81	0.81
2.249E+00 -	2.416E+00	1	81	1.22	98.78	0.23	2.52
2.416E+00 -	2.583E+00	0	81	0.00	98.78	0.05	0.05
2.583E+00 -	2.749E+00	0	81	0.00	98.78	0.01	0.01
2.749E+00 -	2.916E+00	1	82	1.22	100.00	0.00	573.73
G		0	82	0.00	100.00	0.00	0.00
U		0	82				
B		0	82				

TOTALS LESS U AND B 82

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

```
9.935E+00 XXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXX
4.634E+01 XXXXXXXXXXX
6.802E+01 XXXX
9.985E+01 XXXX
1.466E+02
2.151E+02 X
3.157E+02
4.635E+02
6.803E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+01
MAXIMUM ANTILOG	=	7.00000E+02
GEOMETRIC MEAN	=	2.14426E+01
GEOMETRIC DEVIATION	=	2.28197E+00
VARIANCE OF LOGS	=	1.28386E-01

PERCENT TABLE FOR VARIABLE 18 (S-CU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.207667E+00	1.613122E+01
75.00	1.436934E+00	2.734226E+01
90.00	1.745631E+00	5.567129E+01
95.00	1.966002E+00	9.247026E+01
98.00	2.202669E+00	1.594664E+02
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.10	0.10
2.583E+00 -	2.750E+00	4	4	4.88	4.88	1.36	5.13
2.750E+00 -	2.916E+00	8	12	9.76	14.63	8.39	0.02
2.916E+00 -	3.083E+00	18	30	21.95	36.59	23.13	1.14
3.083E+00 -	3.250E+00	22	52	26.83	63.41	28.64	1.54
3.250E+00 -	3.416E+00	17	69	20.73	84.15	20.39	0.56
G		13	82	15.85	100.00	0.10	1646.72
H		0	82				
P		0	82				

TOTALS LESS H AND P 82

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

```
4.638E+02 XXXXX
6.808E+02 XXXXXXXXXX
9.992E+02 XXXXXXXXXXXXXXXXXXXXXX
1.467E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+03 XXXXXXXXXXXXXXXXXXXX
```

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.000000E+02
MAXIMUM ANTILOG = 2.000000E+03
GEOMETRIC MEAN = 1.24423E+03
GEOMETRIC DEVIATION = 1.50677E+00
VARIANCE OF LOGS = 3.17007E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.995038E+00	9.886393E+02
50.00	3.166335E+00	1.466677E+03
75.00	3.342805E+00	2.201240E+03
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	34	34	41.46	41.46		
	L	8	42	9.76	51.22		
	T	0	42	0.00	51.22	15.81	15.81
9.160E-01 -	1.083E+00	16	58	19.51	70.73	20.30	0.91
1.083E+00 -	1.249E+00	7	65	8.54	79.27	22.50	10.68
1.249E+00 -	1.416E+00	9	74	10.98	90.24	15.24	2.55
1.416E+00 -	1.583E+00	3	77	3.66	93.90	6.30	1.73
1.583E+00 -	1.749E+00	2	79	2.44	96.34	1.59	0.11
1.749E+00 -	1.916E+00	2	81	2.44	98.78	0.24	12.65
1.916E+00 -	2.083E+00	0	81	0.00	98.78	0.02	0.02
2.083E+00 -	2.249E+00	1	82	1.22	100.00	0.00	745.74
	G	0	82	0.00	100.00	0.00	0.00
	H	0	82				
	R	0	82				

TOTALS LESS H AND R 82

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

```
9.985E+00 XXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXX
2.151E+01 XXXXXXXXXXX
3.157E+01 XXXX
4.634E+01 XX
6.802E+01 XX
9.985E+01
1.466E+02 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.000000E+01
MAXIMUM ANTILOG = 1.500000E+02
GEOMETRIC MEAN = 1.74156E+01
GEOMETRIC DEVIATION = 1.93041E+00
VARIANCE OF LOGS = 8.15952E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.166301E+00	1.465550E+01

90.00	1.412297E+00	2.586028E+01
95.00	1.657668E+00	4.546405E+01
98.00	1.862669E+00	7.289010E+01
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 21 (S-NB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.88	0.88
1.583E+00 -	1.750E+00	11	11	13.41	13.41	5.13	6.72
1.750E+00 -	1.916E+00	10	21	12.20	25.61	16.37	2.48
1.916E+00 -	2.083E+00	28	49	34.15	59.76	26.52	0.08
2.083E+00 -	2.250E+00	19	68	23.17	82.93	21.83	0.37
2.250E+00 -	2.416E+00	13	81	15.85	98.78	9.13	1.65
2.416E+00 -	2.583E+00	1	82	1.22	100.00	2.15	0.62
G		0	82	0.00	100.00	0.88	0.88
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

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

```
4.634E+01 XXXXXXXXXXXX
6.809E+01 XXXXXXXXXXXX
9.922E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+02 XXXXXXXXXXXXXXXXXXXXXXXX
2.153E+02 XXXXXXXXXXXXXXXX
3.160E+02 X
```

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
MAXIMUM ANTILOG = 3.00000E+02
GEOMETRIC MEAN = 1.08411E+02
GEOMETRIC DEVIATION = 1.57253E+00
VARIANCE OF LOGS = 3.86510E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.908001E+00	8.090971E+01
50.00	2.035382E+00	1.084980E+02
75.00	2.192650E+00	1.558297E+02
90.00	2.324027E+00	2.108760E+02
95.00	2.376591E+00	2.380079E+02
98.00	2.408130E+00	2.559351E+02
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		38	38	46.34	46.34		
	L		3	41	3.66	50.00		
	T		0	41	0.00	50.00	10.27	10.27
9.160E-01	-	1.083E+00	27	68	32.93	82.93	42.40	5.59
1.083E+00	-	1.249E+00	9	77	10.98	93.90	26.86	11.88
1.249E+00	-	1.416E+00	4	81	4.88	98.78	2.44	0.99
1.416E+00	-	1.583E+00	0	81	0.00	98.78	0.00	0.00
1.583E+00	-	1.749E+00	1	82	1.22	100.00	0.03	33.21
	G		0	82	0.00	100.00	0.00	0.00
	H		0	82				
	B		0	82				

TOTALS LESS H AND B 82

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

```
 9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXX
 2.151E+01 XXXXX
 3.157E+01
 4.634E+01 X
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 5.00000E+01
GEOMETRIC MEAN = 1.21638E+01
GEOMETRIC DEVIATION = 1.39426E+00
VARIANCE OF LOGS = 2.08347E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.190375E+00	1.549083E+01
95.00	1.286334E+00	1.935682E+01
98.00	1.389334E+00	2.450949E+01
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		14	14	17.07	17.07		
L		0	14	0.00	17.07		
T		0	14	0.00	17.07	14.07	14.07
1.250E+00 -	1.417E+00	16	30	19.51	36.59	8.06	7.82
1.417E+00 -	1.583E+00	10	40	12.20	48.78	9.88	0.00
1.583E+00 -	1.750E+00	12	52	14.63	63.41	10.83	0.13
1.750E+00 -	1.917E+00	9	61	10.98	74.39	10.63	0.25
1.917E+00 -	2.083E+00	6	67	7.32	81.71	9.34	1.19
2.083E+00 -	2.250E+00	4	71	4.88	86.59	7.34	1.52
2.250E+00 -	2.417E+00	4	75	4.88	91.46	5.16	0.26
2.417E+00 -	2.583E+00	2	77	2.44	93.90	3.25	0.48
2.583E+00 -	2.750E+00	1	78	1.22	95.12	1.93	0.38
2.750E+00 -	2.917E+00	1	79	1.22	96.34	0.92	0.01
2.917E+00 -	3.083E+00	1	80	1.22	97.56	0.42	0.82
3.083E+00 -	3.250E+00	0	80	0.00	97.56	0.17	0.17
3.250E+00 -	3.417E+00	1	81	1.22	98.78	0.06	14.50
3.417E+00 -	3.583E+00	0	81	0.00	98.78	0.02	0.02
3.583E+00 -	3.750E+00	1	82	1.22	100.00	0.01	129.70
G		0	82	0.00	100.00	0.00	0.00
H		0	82				
M		0	82				

TOTALS LESS H AND M 82

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

```
2.154E+01 XXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXX
1.000E+02 XXXXXXX
1.468E+02 XXXXX
2.154E+02 XXXXX
3.162E+02 XX
4.642E+02 X
6.813E+02 X
1.000E+03 X
1.468E+03
2.154E+03 X
3.162E+03
4.642E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 5.00000E+03
GEOMETRIC MEAN = 6.43646E+01

GEOMETRIC DEVIATION = 3.12206E+00
VARIANCE OF LOGS = 2.55048E-01

PERCENT TABLE FOR VARIABLE 23 (S-P3) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.597223E+00	3.955696E+01
75.00	1.930557E+00	8.522302E+01
90.00	2.366669E+00	2.326317E+02
95.00	2.733336E+00	5.411733E+02
98.00	3.203337E+00	1.597119E+03
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIAPLE 25 (S-SC)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	1.37	1.37
1.250E+00 -	1.417E+00	5	5	27.78	27.78	2.75	1.85
1.417E+00 -	1.583E+00	4	9	22.22	50.00	4.49	0.05
1.583E+00 -	1.750E+00	3	12	16.67	66.67	4.65	0.59
1.750E+00 -	1.917E+00	5	17	27.78	94.44	3.06	1.23
1.917E+00 -	2.083E+00	1	18	5.56	100.00	1.67	0.27
G		0	18	0.00	100.00	1.37	1.37
H		0	18				
P		64	82				

TOTALS LESS H AND P 18

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

```
2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+01 XXXXXXXXXXXXXXXXXXXX
4.642E+01 XXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.000E+02 XXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 2.00000E+01
MAXIMUM ANTILOG      = 1.00000E+02
GEOMETRIC MEAN       = 3.94863E+01
GEOMETRIC DEVIATION  = 1.74643E+00
VARIANCE OF LOGS     = 5.86374E-02
```

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.583334E+00	3.831193E+01
75.00	1.800001E+00	6.309589E+01
90.00	1.890001E+00	7.762494E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 26 (S-SN)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		7	7	8.54	8.54		
	L		1	8	1.22	9.76		
	T		0	8	0.00	9.76	4.59	4.59
1.250E+00	-	1.417E+00	14	22	17.07	26.83	8.85	2.99
1.417E+00	-	1.583E+00	3	25	3.66	30.49	15.81	10.38
1.583E+00	-	1.750E+00	25	50	30.49	60.98	12.65	1.45
1.750E+00	-	1.917E+00	13	63	15.85	76.83	17.01	0.94
1.917E+00	-	2.083E+00	16	79	19.51	96.34	10.25	3.23
2.083E+00	-	2.250E+00	3	82	3.66	100.00	5.84	1.38
	G		0	82	0.00	100.00	0.00	0.00
	H		0	82				
	B		0	82				

TOTALS LESS H AND B 82

HISTOGRAM FOR VARIABLE 26 (S-SN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+01 XXXXXXXXXXXXXXXXX
3.162E+01 XXXX
4.642E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXXXXXXXX
1.468E+02 XXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 1.50000E+02
GEOMETRIC MEAN = 5.30630E+01
GEOMETRIC DEVIATION = 1.79652E+00
VARIANCE OF LOGS = 6.47360E-02

PERCENT TABLE FOR VARIABLE 26 (S-SN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.690001E+00	4.897798E+01
75.00	1.897437E+00	7.896546E+01
90.00	2.029168E+00	1.069469E+02
95.00	2.071877E+00	1.179985E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		34	34	41.46	41.46		
L		6	40	7.32	48.78		
T		0	40	0.00	48.78	17.26	17.26
2.250E+00 -	2.417E+00	15	55	18.29	67.07	18.44	0.64
2.417E+00 -	2.583E+00	3	58	3.66	70.73	20.40	14.84
2.583E+00 -	2.750E+00	15	73	18.29	89.02	15.15	0.00
2.750E+00 -	2.917E+00	4	77	4.88	93.90	7.56	1.67
2.917E+00 -	3.083E+00	3	80	3.66	97.56	2.53	0.09
3.083E+00 -	3.250E+00	0	80	0.00	97.56	0.57	0.57
3.250E+00 -	3.417E+00	1	81	1.22	98.78	0.09	9.80
3.417E+00 -	3.583E+00	1	82	1.22	100.00	0.01	106.69
G		0	82	0.00	100.00	0.00	0.00
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

HISTOGRAM FOR VARIABLE 27 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+02 XXXXXXXXXXXXXXXXX
3.162E+02 XXXX
4.642E+02 XXXXXXXXXXXXXXXXX
6.813E+02 XXXXX
1.000E+03 XXXX
1.468E+03
2.154E+03 X
3.162E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
MAXIMUM ANTILOG = 3.00000E+03
GEOMETRIC MEAN = 4.06709E+02
GEOMETRIC DEVIATION = 1.96159E+00
VARIANCE OF LOGS = 8.56201E-02

PERCENT TABLE FOR VARIABLE 27 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	2.622223E+00	4.190086E+02

90.00	2.733334E+00	6.072037E+02
95.00	2.966668E+00	9.261219E+02
98.00	3.200335E+00	1.597111E+03
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.58	0.58
2.083E+00 -	2.250E+00	2	2	2.44	2.44	2.94	0.30
2.250E+00 -	2.416E+00	11	13	13.41	15.85	9.87	0.13
2.416E+00 -	2.583E+00	20	33	24.39	40.24	19.71	0.00
2.583E+00 -	2.750E+00	23	56	28.05	68.29	23.40	0.01
2.750E+00 -	2.916E+00	21	77	25.61	93.90	16.54	1.21
2.916E+00 -	3.083E+00	4	81	4.88	98.78	6.95	1.25
3.083E+00 -	3.250E+00	0	81	0.00	98.78	1.74	1.74
3.250E+00 -	3.416E+00	1	82	1.22	100.00	0.28	1.84
G		0	82	0.00	100.00	0.58	0.58
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

HISTOGRAM FOR VARIABLE 28 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
1.467E+02 XX
2.153E+02 XXXXXXXXXXXXX
3.160E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
4.638E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E+02 XXXXXXXXXXXXXXXXXXXXXXXXXX
9.992E+02 XXXXX
1.467E+03
2.153E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```
MINIMUM ANTILOG      = 1.50000E+02
MAXIMUM ANTILOG      = 2.00000E+03
GEOMETRIC MEAN       = 4.34635E+02
GEOMETRIC DEVIATION  = 1.68333E+00
VARIANCE OF LOGS     = 5.11522E-02
```

PERCENT TABLE FOR VARIABLE 28 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.478834E+00	3.011855E+02
50.00	2.640972E+00	4.374940E+02
75.00	2.793319E+00	6.213251E+02

90.00	2.8[illegible]3E+00	7.7[illegible]
95.00	2.9[illegible]1E+00	8.9[illegible]
98.00	3.0561[illegible]	1.1[illegible]
99.00	1.0000000E+35	1.0000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 29 (S-W)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		71	71	86.59	86.59		
	L		1	72	1.22	87.80		
	T		0	72	0.00	87.80	21.21	21.21
1.916E+00	-	2.083E+00	3	75	3.66	91.46	23.11	17.50
2.083E+00	-	2.249E+00	0	75	0.00	91.46	21.49	21.49
2.249E+00	-	2.416E+00	2	77	2.44	93.90	11.70	8.04
2.416E+00	-	2.583E+00	1	78	1.22	95.12	3.72	1.99
2.583E+00	-	2.749E+00	1	79	1.22	96.34	0.69	0.14
2.749E+00	-	2.916E+00	1	80	1.22	97.56	0.07	11.43
2.916E+00	-	3.083E+00	1	81	1.22	98.78	0.00	0.00
3.083E+00	-	3.249E+00	0	81	0.00	98.78	0.00	0.00
3.249E+00	-	3.416E+00	1	82	1.22	100.00	0.00	202.45
	G		0	82	0.00	100.00	0.00	0.00
	H		0	82				
	B		0	82				

TOTALS LESS H AND B 82

HISTOGRAM FOR VARIABLE 29 (S-W)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 XXXX
1.466E+02
2.151E+02 XX
3.157E+02 X
4.634E+02 X
6.802E+02 X
9.985E+02 X
1.466E+03
2.151E+03 X
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.000000E+02
MAXIMUM ANTILOG = 2.000000E+03
GEOMETRIC MEAN = 3.10762E+02
GEOMETRIC DEVIATION = 2.86403E+00
VARIANCE OF LOGS = 2.08829E-01

PERCENT TABLE FOR VARIABLE 29 (S-W) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35

50.00	1.0000000E+35	1.0000000E+35
75.00	1.0000000E+35	1.0000000E+35
90.00	1.0000000E+35	1.0000000E+35
95.00	2.5460018+00	3.6812018+02
98.00	2.9760028+00	9.4628178+02
99.00	1.0000000E+35	1.0000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.09	0.09
1.250E+00 -	1.417E+00	4	4	4.88	4.88	0.15	100.79
1.417E+00 -	1.583E+00	2	6	2.44	7.32	0.34	8.08
1.583E+00 -	1.750E+00	0	6	0.00	7.32	0.72	0.72
1.750E+00 -	1.917E+00	0	6	0.00	7.32	1.38	1.38
1.917E+00 -	2.083E+00	0	6	0.00	7.32	2.42	2.42
2.083E+00 -	2.250E+00	2	8	2.44	9.76	3.86	0.89
2.250E+00 -	2.417E+00	3	11	3.66	13.41	5.60	1.21
2.417E+00 -	2.583E+00	2	13	2.44	15.85	7.42	3.96
2.583E+00 -	2.750E+00	6	19	7.32	23.17	8.96	0.98
2.750E+00 -	2.917E+00	9	28	10.98	34.15	9.85	0.07
2.917E+00 -	3.083E+00	17	45	20.73	54.88	9.87	5.15
3.083E+00 -	3.250E+00	15	60	18.29	73.17	9.01	3.98
3.250E+00 -	3.417E+00	13	73	15.85	89.02	7.50	4.04
3.417E+00 -	3.583E+00	7	80	8.54	97.56	5.68	0.31
3.583E+00 -	3.750E+00	2	82	2.44	100.00	9.15	5.59
G		0	82	0.00	100.00	0.09	0.09
H		0	82				
U		0	82				

TOTALS LESS U AND P 82

HISTOGRAM FOR VARIABLE 30 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+01 XXXXX
3.162E+01 XX
4.642E+01
6.813E+01
1.000E+02
1.468E+02 XX
2.154E+02 XXXX
3.162E+02 XX
4.642E+02 XXXXXXX
6.813E+02 XXXXXXXXXXX
1.000E+03 XXXXXXXXXXXXXXXXXXXX
1.468E+03 XXXXXXXXXXXXXXXXX
2.154E+03 XXXXXXXXXXXXXXX
3.162E+03 XXXXXXXXX
4.642E+03 XX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 5.00000E+03
GEOMETRIC MEAN = 8.32234E+02

GEOMETRIC DEVIATION = 3.50220E+00
VARIANCE OF LOGS = 2.96374E-01

PERCENT TABLE FOR VARIABLE 30 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.777781E+00	5.994885E+02
50.00	3.044121E+00	1.106933E+03
75.00	3.269235E+00	1.858809E+03
90.00	3.435719E+00	2.727210E+03
95.00	3.533338E+00	3.414585E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 31 (S-ZN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		80	80	97.56	97.56		
L		0	80	0.00	97.56		
T		0	80	0.00	97.56	0.01	0.01
2.583E+00 -	2.750E+00	1	81	1.22	98.78	75.55	73.57
2.750E+00 -	2.916E+00	0	81	0.00	98.78	0.00	0.00
2.916E+00 -	3.083E+00	1	82	1.22	100.00	6.43	4.59
G		0	82	0.00	100.00	0.00	0.00
H		0	82				
B		0	82				

TOTALS LESS H AND B 82

HISTOGRAM FOR VARIABLE 31 (S-ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+02 X
6.808E+02
9.992E+02 X

101

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+02
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 7.07107E+02
GEOMETRIC DEVIATION = 1.63253E+00
VARIANCE OF LOGS = 4.53094E-02

PERCENT TABLE FOR VARIABLE 31 (S-ZN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

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

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.01	0.01
2.750E+00 -	2.917E+00	1	1	5.56	5.56	0.33	1.36
2.917E+00 -	3.083E+00	3	4	16.67	22.22	17.66	12.17
G		14	18	77.78	100.00	0.01	15423.26
H		0	18				
B		64	82				

TOTALS LESS H AND B 13

HISTOGRAM FOR VARIABLE 32 (S-ZR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

6.813E+02 XXXXXX
1.000E+03 XXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.000000E+02
MAXIMUM ANTILOG = 1.000000E+03
GEOMETRIC MEAN = 9.14691E+02
GEOMETRIC DEVIATION = 1.19523E+00
VARIANCE OF LOGS = 5.99876E-03

PERCENT TABLE FOR VARIABLE 32 (S-ZR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

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

Table 3C-Concentrate Analysis

FREQUENCY TABLE FOR VARIABLE 33 (S-TH)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	42	42	51.22	51.22		
	L	12	54	14.63	65.85		
	T	0	54	0.00	65.85	19.54	19.54
2.250E+00 -	2.417E+00	13	67	15.85	81.71	28.56	8.48
2.417E+00 -	2.583E+00	4	71	4.88	86.59	23.63	16.31
2.583E+00 -	2.750E+00	5	76	6.10	92.68	8.73	1.59
2.750E+00 -	2.917E+00	4	80	4.88	97.56	1.43	4.61
2.917E+00 -	3.083E+00	2	82	2.44	100.00	0.11	33.55
	G	0	82	0.00	100.00	0.00	0.00
	H	0	82				
	B	0	82				

TOTALS LESS H AND B 82

HISTOGRAM FOR VARIABLE 33 (S-TH)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+02 XXXXXXXXXXXXXXX
3.162E+02 XXXXX
4.642E+02 XXXXXX
6.813E+02 XXXXX
1.000E+03 XX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	2.000000E+02
MAXIMUM ANTILOG	=	1.000000E+03
GEOMETRIC MEAN	=	3.34886E+02
GEOMETRIC DEVIATION	=	1.77409E+00
VARIANCE OF LOGS	=	6.19389E-02

PERCENT TABLE FOR VARIABLE 33 (S-TH) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	2.676663E+00	4.749715E+02
95.00	2.829168E+00	6.747387E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4A -- Geochemical Data for Rock Samples

Sample	Latitude	Longitude	Fe-pct. s	Mg-pct. s	Ca-pct. s	Ti-pct. s	Mn-ppm s	Ag-ppm s	As-ppm s	Au-ppm s	B-ppm s	Ba-ppm s
CX040R	33 52 20	115 21 0	1.0	.50	5.00	.150	700	1.0	N	N	70	2,000
CX040RA	33 52 20	115 21 0	1.5	.70	2.00	.100	700	N	N	N	20	200
CX042R	33 50 59	115 20 35	5.0	3.00	10.00	.500	2,000	1.5	N	N	20	300
CX042RA	33 50 59	115 20 35	1.5	.70	2.00	.300	1,000	N	N	N	30	100
CX045R	33 49 5	115 17 8	7.0	3.00	5.00	1.000	2,000	N	N	N	70	1,000
CX047R	33 49 48	115 16 16	1.5	.50	1.00	.300	700	N	N	N	30	200
CX049R	33 50 42	115 15 57	1.0	.20	.30	.070	70	5.0	N	N	200	300
CX058R	33 51 25	115 16 47	2.0	1.50	5.00	.300	1,000	N	N	N	10	1,000
CX069R	33 59 2	115 18 58	1.5	.10	.10	.050	50	50.0	2,000	70	20	200
CX069RA	33 59 2	115 18 58	1.0	.50	.20	.020	2,000	3.0	500	N	20	200
CX069RB	33 59 2	115 18 58	5.0	.05	.05	.015	150	2.0	700	N	10	100
CX069RC	33 59 2	115 18 58	2.0	.30	.70	.200	200	5.0	1,500	N	150	200
CX069RD	33 59 2	115 18 58	1.5	.10	<.05	.070	20	30.0	3,000	100	70	200
CX070R	33 59 21	115 19 22	5.0	.50	.15	.200	50	1.0	2,000	N	300	200
CX070RA	33 59 21	115 19 22	1.0	.20	20.00	.020	2,000	2.0	7,000	N	100	>5,000
CX071R	33 59 21	115 19 29	1.5	.30	.70	.150	200	3.0	200	N	50	1,500
CX080R	34 5 2	115 37 27	7.0	.30	.50	1.000	100	1.0	N	N	30	200
CX080RA	34 5 2	115 37 27	10.0	.20	.20	1.000	200	N	N	N	70	100
CX082R	34 4 40	115 36 48	3.0	.50	.20	.300	200	N	N	N	50	500
CX091R	34 1 40	115 31 49	7.0	.05	.10	.015	200	N	N	N	50	100

Table 4A -- Geochemical Data for Rock Samples

Sample	Be-ppm s	Bi-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
CX040R	5	N	N	N	N	1,000	200	5	<20	10	30	N	--
CX040RA	<5	N	N	10	10	15	150	10	<20	10	30	N	--
CX042R	N	N	N	20	200	100	100	<5	N	100	10	N	--
CX042RA	N	N	N	10	50	30	70	N	N	10	15	N	--
CX045R	N	N	N	30	100	300	200	N	<20	70	150	N	--
CX047R	N	N	N	10	30	10	70	N	N	5	15	N	--
CX049R	N	N	N	5	10	>20,000	100	10	N	20	N	N	--
CX058R	N	N	N	10	30	300	100	N	N	15	50	N	--
CX069R	N	N	20	5	10	1,000	100	20	N	5	2,000	100	--
CX069RA	N	N	N	15	10	200	100	20	N	15	300	N	--
CX069RB	N	N	N	N	20	150	70	15	N	10	200	N	--
CX069RC	N	N	N	5	10	100	100	10	N	5	1,000	N	--
CX069RD	N	N	N	N	10	200	70	100	N	10	2,000	N	--
CX070R	N	N	N	5	20	10	100	10	N	7	20	N	--
CX070RA	N	N	N	N	N	5	100	N	N	5	200	N	--
CX071R	<5	N	N	10	N	7	50	7	N	5	20	N	--
CX080R	N	N	N	20	N	10	50	20	20	7	20	N	--
CX080RA	N	N	N	50	10	5	20	100	20	5	10	N	--
CX082R	5	N	N	50	10	10	50	<5	20	15	15	N	--
CX091R	N	N	N	30	10	7	70	20	N	30	N	N	--

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Table 4A -- Geochemical Data for Rock Samples

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s
CX040R	N	1,000	50	N	30	N	--	N
CX040RA	N	1,000	70	N	20	N	--	N
CX042R	N	200	200	N	20	N	--	N
CX042RA	N	700	100	N	20	N	--	N
CX045R	N	700	200	N	70	300	--	N
CX047R	N	200	70	N	20	N	--	N
CX049R	N	N	200	50	10	N	--	N
CX053R	N	1,000	100	N	20	<200	--	N
CX069R	N	N	1,500	<50	N	1,500	--	N
CX069RA	N	N	100	<50	70	1,500	--	N
CX069RB	N	N	300	70	10	200	--	N
CX069RC	N	100	150	N	10	300	--	N
CX069RD	N	N	200	<50	N	1,000	--	N
CX070R	N	N	200	50	10	N	--	N
CX070RA	N	1,000	50	N	15	N	--	N
CX071R	N	200	50	<50	N	N	--	N
CX080R	N	300	200	N	10	N	--	N
CX080RA	N	100	150	N	10	N	--	N
CX082R	N	100	70	N	10	N	--	N
CX091R	N	N	100	50	N	N	--	N

Table 4B -- FISHER-K Statistics for Rock Samples

NO	COLUMN	N	H	L	G	B	T	NO OF UNQUAL VALUES	NO OF IMPROPER QUAL VALUES	MINIMUM	MAXIMUM	NO
1	LATITUDE	0	0	0	0	0	0	20	0	33.813056	34.083889	1
2	LONGITUD	0	0	0	0	0	0	20	0	115.26583	115.62417	2
3	S-FE%	0	0	0	0	0	0	20	0	1.0000000	10.000000	3
4	S-MG%	0	0	0	0	0	0	20	0	0.0500000	3.0000000	4
5	S-CA%	0	0	1	0	0	0	19	0	0.0500000	20.000000	5
6	S-TI%	0	0	0	0	0	0	20	0	0.0150000	1.0000000	6
7	S-MN	0	0	0	0	0	0	20	0	20.000000	2000.0000	7
8	S-AG	8	0	0	0	0	0	12	0	1.0000000	50.000000	8
9	S-AS	12	0	0	0	0	0	8	0	200.00000	7000.0000	9
10	S-AU	18	0	0	0	0	0	2	0	70.000000	100.00000	10
11	S-B	0	0	0	0	0	0	20	0	10.000000	300.00000	11
12	S-BA	0	0	0	1	0	0	19	0	100.00000	2000.0000	12
13	S-BE	16	0	2	0	0	0	2	0	5.0000000	5.0000000	13
14	S-BI	20	0	0	0	0	0	0	0			14
15	S-CD	19	0	0	0	0	0	1	0	20.000000	20.000000	15
16	S-CO	4	0	0	0	0	0	16	0	5.0000000	50.000000	16
17	S-CR	4	0	0	0	0	0	16	0	10.000000	200.00000	17
18	S-CU	0	0	0	1	0	0	19	0	5.0000000	1000.0000	18
19	S-LA	0	0	0	0	0	0	20	0	20.000000	200.00000	19
20	S-MO	5	0	2	0	0	0	13	0	5.0000000	100.00000	20
21	S-NB	14	0	3	0	0	0	3	0	20.000000	20.000000	21
22	S-NI	0	0	0	0	0	0	20	0	5.0000000	100.00000	22
23	S-PB	2	0	0	0	0	0	18	0	10.000000	2000.0000	23
24	S-SB	19	0	0	0	0	0	1	0	100.00000	100.00000	24
25	S-SC	0	0	0	0	20	0	0	0			25
26	S-SN	20	0	0	0	0	0	0	0			26
27	S-SR	7	0	0	0	0	0	13	0	100.00000	1000.0000	27
28	S-V	0	0	0	0	0	0	20	0	50.000000	1500.0000	28
29	S-W	12	0	4	0	0	0	4	0	50.000000	70.000000	29
30	S-Y	4	0	0	0	0	0	16	0	10.000000	70.000000	30
31	S-ZN	13	0	1	0	0	0	6	0	200.00000	1500.0000	31
32	S-ZR	0	0	0	0	20	0	0	0			32
33	S-TH	20	0	0	0	0	0	0	0			33

Table 48 -- FISHER-K Statistics for Rock Samples

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
1	LATITUDE	33.947708	0.0894933	0.0030090	-9.8173424D-06	-0.0136976	-8.7196108D-05	-1.3593646	1
2	LONGITUD	115.37156	0.1199222	0.0143813	0.0026616	1.5432481	1.7920339D-04	0.8664575	2
3	S-FE%	3.7000000	2.7018517	7.3000000	22.185965	1.1248485	12.441770	0.2334729	3
4	S-MG%	0.6600000	0.8639871	0.7464737	1.4597077	2.2633095	2.4434203	4.3849957	4
5	S-CA%	2.8000000	4.9245699	24.251389	329.64190	2.7601905	4941.5040	8.4020628	5
6	S-TI%	0.2930000	0.3326289	0.1105089	0.0564744	1.5372875	0.0148764	1.2181533	6
7	S-MN	677.00000	745.02632	555064.21	4.3560401D+08	1.0533605	-1.2570684D+11	-0.4080116	7
8	S-AG	8.7083333	15.288923	233.74811	8424.8998	2.3574506	273214.31	5.0006286	8
9	S-AS	2112.5000	2182.0289	4761250.0	1.9659268D+10	1.3922820	9.3091384D+13	4.1064592	9
10	S-AU	85.000000	21.213203	450.00000					10
11	S-B	68.500000	72.640064	5276.5789	830772.81	2.1674726	1.3759303D+08	4.9418726	11
12	S-BA	452.63158	534.75687	285964.91	3.0241589D+08	1.9775865	2.6767472D+11	3.2708245	12
13	S-BE	5.0000000	0.0	0.0					13
14	S-BI								14
15	S-CD	20.000000							15
16	S-CO	17.812500	14.940856	223.22917	4534.5982	1.3596039	66076.608	0.9246527	16
17	S-CR	33.750000	50.182998	2518.3333	362985.71	2.8722333	54809531.	8.6423064	17
18	S-CU	182.05263	305.00027	93025.164	64963386.	2.2896441	3.9267485D+10	4.5376626	18
19	S-LA	93.500000	45.914681	2108.1579	110500.88	1.1415923	6538859.1	1.4925316	19
20	S-MO	26.692308	32.960544	1086.3974	73732.486	2.0590921	3426461.1	2.9031424	20
21	S-NB	20.000000	0.0	0.0	0.0	0.0			21
22	S-NI	17.950000	24.256253	588.36579	39585.020	2.7737017	2596361.4	7.5001564	22
23	S-PB	338.05556	648.15607	420106.29	6.0274881D+08	2.2135921	6.6700756D+11	3.7793089	23
24	S-SB	100.00000							24
25	S-SC								25
26	S-SN								26
27	S-SR	507.69231	394.67611	155769.23	18895135.	0.3073455	-4.7125944D+10	-1.9422124	27
28	S-V	203.00000	313.13525	98053.684	1.2633136D+08	4.1144933	1.7062382D+11	17.746464	28
29	S-W	55.000000	10.000000	100.00000	2000.0000	2.0000000	40000.000	4.0000000	29
30	S-Y	22.187500	19.576240	383.22917	15693.973	2.0919200	512708.48	3.4910284	30
31	S-ZN	800.00000	613.18839	376000.00	68400000.	0.2966705	-3.6812000D+11	-2.6038366	31
32	S-ZR								32
33	S-TH								33

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

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 3 (S-FE%)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N			0	0	0.00	0.00		
L			0	0	0.00	0.00		
T			0	0	0.00	0.00	1.64	1.64
-8.400E-02	-	8.267E-02	4	4	20.00	20.00	2.04	1.89
8.267E-02	-	2.493E-01	6	10	30.00	50.00	3.14	2.59
2.493E-01	-	4.160E-01	2	12	10.00	60.00	3.83	0.87
4.160E-01	-	5.827E-01	1	13	5.00	65.00	3.68	1.95
5.827E-01	-	7.493E-01	3	16	15.00	80.00	2.80	0.01
7.493E-01	-	9.160E-01	3	19	15.00	95.00	1.67	1.05
9.160E-01	-	1.083E+00	1	20	5.00	100.00	1.20	0.03
G			0	20	0.00	100.00	1.64	1.64
H			0	20				
9			0	20				

TOTALS LESS H AND 9 20

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

```
 9.985E-01 XXXXXXXXXXXXXXXXXXX
 1.466E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+00 XXXXXXXXXX
 3.157E+00 XXXXX
 4.634E+00 XXXXXXXXXXXXXX
 6.802E+00 XXXXXXXXXXXXXX
 9.985E+00 XXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+00
MAXIMUM ANTILOG	=	1.00000E+01
GEOMETRIC MEAN	=	2.44566E+00
GEOMETRIC DEVIATION	=	2.18376E+00
VARIANCE OF LOGS	=	1.15060E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.104448E-01	1.289570E+00
50.00	2.493340E-01	1.775554E+00
75.00	6.937793E-01	4.940596E+00
90.00	8.604463E-01	7.251809E+00
95.00	9.160020E-01	8.241419E+00

28.00	1.000000E+35	1.000000E+35
29.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 4 (S-MG%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.50	0.50
-1.417E+00	- -1.250E+00	2	2	10.00	10.00	0.55	3.87
-1.250E+00	- -1.084E+00	0	2	0.00	10.00	0.94	0.94
-1.084E+00	- -9.170E-01	2	4	10.00	20.00	1.44	0.22
-9.170E-01	- -7.503E-01	0	4	0.00	20.00	1.98	1.98
-7.503E-01	- -5.837E-01	3	7	15.00	35.00	2.43	0.14
-5.837E-01	- -4.170E-01	3	10	15.00	50.00	2.66	0.04
-4.170E-01	- -2.503E-01	5	15	25.00	75.00	2.61	2.20
-2.503E-01	- -8.366E-02	2	17	10.00	85.00	2.28	0.03
-8.366E-02	- 8.300E-02	0	17	0.00	85.00	1.78	1.78
8.300E-02	- 2.497E-01	1	18	5.00	90.00	1.25	0.05
2.497E-01	- 4.163E-01	0	18	0.00	90.00	0.78	0.78
4.163E-01	- 5.830E-01	2	20	10.00	100.00	0.81	1.76
G		0	20	0.00	100.00	0.50	0.50
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

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

```
4.639E-02 XXXXXXXXXX
6.808E-02
9.992E-02 XXXXXXXXXX
1.467E-01
2.153E-01 XXXXXXXXXXXXXXX
3.160E-01 XXXXXXXXXXXXXXX
4.638E-01 XXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E-01 XXXXXXXXXX
9.992E-01
1.467E+00 XXXXX
2.153E+00
3.160E+00 XXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-02
MAXIMUM ANTILOG = 3.00000E+00
GEOMETRIC MEAN = 3.56770E-01
GEOMETRIC DEVIATION = 3.12456E+00
VARIANCE OF LOGS = 2.44816E-01

PERCENT TABLE FOR VARIABLE 4 (S-MG%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-8.058977E-01	1.563552E-01
50.00	-4.169980E-01	3.828765E-01
75.00	-2.503310E-01	5.619129E-01
90.00	2.496700E-01	1.776929E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 5 (S-CA%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		1	1	5.00	5.00		
T		0	1	0.00	5.00	1.14	1.14
-1.417E+00	-1.250E+00	1	2	5.00	10.00	0.58	0.31
-1.250E+00	-1.084E+00	0	2	0.00	10.00	0.77	0.77
-1.084E+00	-9.170E-01	2	4	10.00	20.00	0.98	1.05
-9.170E-01	-7.503E-01	1	5	5.00	25.00	1.20	0.03
-7.503E-01	-5.837E-01	3	8	15.00	40.00	1.40	1.82
-5.837E-01	-4.170E-01	1	9	5.00	45.00	1.56	0.20
-4.170E-01	-2.503E-01	1	10	5.00	50.00	1.67	0.27
-2.503E-01	-8.366E-02	2	12	10.00	60.00	1.70	0.05
-8.366E-02	8.300E-02	1	13	5.00	65.00	1.65	0.26
8.300E-02	2.497E-01	0	13	0.00	65.00	1.54	1.54
2.497E-01	4.163E-01	2	15	10.00	75.00	1.37	0.29
4.163E-01	5.830E-01	0	15	0.00	75.00	1.16	1.16
5.830E-01	7.497E-01	3	18	15.00	90.00	0.94	4.48
7.497E-01	9.163E-01	0	18	0.00	90.00	0.73	0.73
9.163E-01	1.083E+00	1	19	5.00	95.00	0.54	0.38
1.083E+00	1.250E+00	0	19	0.00	95.00	0.39	0.39
1.250E+00	1.416E+00	1	20	5.00	100.00	0.67	0.16
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
O		0	20				

TOTALS LESS H AND O 20

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

```
4.638E-02 XXXXX
6.808E-02
9.992E-02 XXXXXXXXXX
1.467E-01 XXXXX
2.153E-01 XXXXXXXXXXXXXX
3.160E-01 XXXXX
4.638E-01 XXXXX
6.808E-01 XXXXXXXXXX
9.992E-01 XXXXX
1.467E+00
2.153E+00 XXXXXXXXXX
3.160E+00
4.638E+00 XXXXXXXXXXXXXX
6.808E+00
9.992E+00 XXXXX
1.467E+01
2.153E+01 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.000000E-02
MAXIMUM ANTILOG = 2.000000E+01
GEOMETRIC MEAN = 7.51663E-01
GEOMETRIC DEVIATION = 5.70603E+00
VARIANCE OF LOGS = 5.72042E-01

PERCENT TABLE FOR VARIABLE 5 (S-CA%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999'E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-7.503320E-01	1.776921E-01
50.00	-2.503310E-01	5.619129E-01
75.00	4.163370E-01	2.608177E+00
90.00	7.496710E-01	5.619155E+00
95.00	1.083005E+00	1.210612E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 6 (S-TI%)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.74	0.74
-1.917E+00	- -1.750E+00	2	2	10.00	10.00	0.58	3.50
-1.750E+00	- -1.584E+00	2	4	10.00	20.00	0.88	1.42
-1.584E+00	- -1.417E+00	0	4	0.00	20.00	1.24	1.24
-1.417E+00	- -1.250E+00	1	5	5.00	25.00	1.62	0.23
-1.250E+00	- -1.084E+00	2	7	10.00	35.00	1.95	0.00
-1.084E+00	- -9.170E-01	1	8	5.00	40.00	2.17	0.63
-9.170E-01	- -7.503E-01	2	10	10.00	50.00	2.23	0.02
-7.503E-01	- -5.837E-01	2	12	10.00	60.00	2.12	0.01
-5.837E-01	- -4.170E-01	4	16	20.00	80.00	1.87	2.42
-4.170E-01	- -2.503E-01	1	17	5.00	85.00	1.52	0.18
-2.503E-01	- -8.366E-02	0	17	0.00	85.00	1.15	1.15
-8.366E-02	- 8.300E-02	3	20	15.00	100.00	1.94	0.58
G		0	20	0.00	100.00	0.74	0.74
H		0	20				
B		0	20				

TOTALS LESS H AND U 20

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

```
 1.467E-02 XXXXXXXXXX
 2.153E-02 XXXXXXXXXX
 3.160E-02
 4.638E-02 XXXXX
 6.808E-02 XXXXXXXXXX
 9.992E-02 XXXXX
 1.467E-01 XXXXXXXXXX
 2.153E-01 XXXXXXXXXX
 3.160E-01 XXXXXXXXXXXXXXXXXXXX
 4.638E-01 XXXXX
 6.808E-01
 9.992E-01 XXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E-02
MAXIMUM ANTILOG = 1.00000E+00
GEOMETRIC MEAN = 1.39712E-01
GEOMETRIC DEVIATION = 3.92241E+00
VARIANCE OF LOGS = 3.52305E-01

PERCENT TABLE FOR VARIABLE 6 (S-TI%) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-1.250332E+00	5.619116E-02
50.00	-7.503310E-01	1.776925E-01
75.00	-4.596638E-01	3.478053E-01
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.42	0.42
1.250E+00 -	1.417E+00	1	1	5.00	5.00	0.36	1.15
1.417E+00 -	1.583E+00	0	1	0.00	5.00	0.58	0.58
1.583E+00 -	1.750E+00	2	3	10.00	15.00	0.87	1.49
1.750E+00 -	1.917E+00	1	4	5.00	20.00	1.21	0.03
1.917E+00 -	2.083E+00	1	5	5.00	25.00	1.56	0.20
2.083E+00 -	2.250E+00	1	6	5.00	30.00	1.87	0.41
2.250E+00 -	2.417E+00	5	11	25.00	55.00	2.09	4.06
2.417E+00 -	2.583E+00	0	11	0.00	55.00	2.16	2.16
2.583E+00 -	2.750E+00	0	11	0.00	55.00	2.08	2.08
2.750E+00 -	2.917E+00	3	14	15.00	70.00	1.87	0.69
2.917E+00 -	3.083E+00	2	16	10.00	80.00	1.55	0.13
3.083E+00 -	3.250E+00	0	16	0.00	80.00	1.20	1.20
3.250E+00 -	3.417E+00	4	20	20.00	100.00	2.20	1.48
G		0	20	0.00	100.00	0.42	0.42
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

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

```
2.154E+01 XXXXX
3.162E+01
4.642E+01 XXXXXXXXXX
6.813E+01 XXXXX
1.000E+02 XXXXX
1.468E+02 XXXXX
2.154E+02 XXXXXXXXXXXXXXXXXXXXXXXX
3.162E+02
4.642E+02
6.813E+02 XXXXXXXXXXXXXX
1.000E+03 XXXXXXXXXX
1.468E+03
2.154E+03 XXXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 2.00000E+03
GEOMETRIC MEAN = 3.14946E+02
GEOMETRIC DEVIATION = 4.09668E+00
VARIANCE OF LOGS = 3.75074E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.083335E+00	1.211532E+02
50.00	2.383336E+00	2.417328E+02
75.00	3.000004E+00	1.000008E+03
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 8 (S-AG)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		8	8	40.00	40.00		
L		0	8	0.00	40.00		
T		0	8	0.00	40.00	6.38	6.38
-8.400E-02 -	8.267E-02	3	11	15.00	55.00	2.12	0.37
8.267E-02 -	2.493E-01	1	12	5.00	60.00	2.23	0.68
2.493E-01 -	4.160E-01	2	14	10.00	70.00	2.18	0.01
4.160E-01 -	5.827E-01	2	16	10.00	80.00	1.96	0.00
5.827E-01 -	7.493E-01	2	18	10.00	90.00	1.63	0.08
7.493E-01 -	9.160E-01	0	18	0.00	90.00	1.26	1.26
9.160E-01 -	1.083E+00	0	18	0.00	90.00	0.90	0.90
1.083E+00 -	1.249E+00	0	18	0.00	90.00	0.59	0.59
1.249E+00 -	1.416E+00	0	18	0.00	90.00	0.36	0.36
1.416E+00 -	1.583E+00	1	19	5.00	95.00	0.20	3.16
1.583E+00 -	1.749E+00	1	20	5.00	100.00	0.19	3.39
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

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

```
 9.985E-01 XXXXXXXXXXXXXXX
 1.466E+00 XXXXX
 2.151E+00 XXXXXXXXXX
 3.157E+00 XXXXXXXXXX
 4.634E+00 XXXXXXXXXX
 6.802E+00
 9.985E+00
 1.466E+01
 2.151E+01
 3.157E+01 XXXXX
 4.635E+01 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.000000E+00
MAXIMUM ANTILOG	=	5.000000E+01
GEOMETRIC MEAN	=	3.353729E+00
GEOMETRIC DEVIATION	=	3.596346E+00
VARIANCE OF LOGS	=	3.089816E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	4.993345E-01	3.157436E+00
90.00	7.493350E-01	5.614309E+00
95.00	1.582670E+00	3.825340E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 9 (S-AS)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (N)RMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		12	12	60.00	60.00		
	L		0	12	0.00	60.00		
	T		0	12	0.00	60.00	4.55	4.55
2.250E+00	-	2.417E+00	1	13	5.00	65.00	2.21	0.67
2.417E+00	-	2.583E+00	0	13	0.00	65.00	2.54	2.54
2.583E+00	-	2.750E+00	1	14	5.00	70.00	2.61	1.00
2.750E+00	-	2.917E+00	1	15	5.00	75.00	2.41	0.83
2.917E+00	-	3.083E+00	0	15	0.00	75.00	2.00	2.00
3.083E+00	-	3.250E+00	1	16	5.00	80.00	1.49	0.16
3.250E+00	-	3.417E+00	2	18	10.00	90.00	1.00	1.01
3.417E+00	-	3.583E+00	1	19	5.00	95.00	0.60	0.27
3.583E+00	-	3.750E+00	0	19	0.00	95.00	0.32	0.32
3.750E+00	-	3.917E+00	1	20	5.00	100.00	0.26	2.06
	G		0	20	0.00	100.00	0.00	0.00
	H		0	20				
	B		0	20				

TOTALS LESS H AND B 20

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

```
2.154E+02 XXXXX
3.162E+02
4.642E+02 XXXXX
6.813E+02 XXXXX
1.000E+03
1.468E+03 XXXXX
2.154E+03 XXXXXXXXXX
3.162E+03 XXXXX
4.642E+03
6.813E+03 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.07000E+02
MAXIMUM ANTILOG = 7.00000E+03
GEOMETRIC MEAN = 1.31275E+03
GEOMETRIC DEVIATION = 3.05382E+00
VARIANCE OF LOGS = 2.35073E-01

PERCENT TABLE FOR VARIABLE 9 (S-AS) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE

25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	2.916668E+00	8.254067E+02
90.00	3.416669E+00	2.610171E+03
95.00	3.583336E+00	3.831210E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 10 (S-AU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		18	18	90.00	90.00		
L		0	18	0.00	90.00		
T		0	18	0.00	90.00	19.79	19.79
1.750E+00 -	1.917E+00	1	19	5.00	95.00	3.17	3.98
1.917E+00 -	2.083E+00	1	20	5.00	100.00	0.04	24.16
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
P		0	20				

TOTALS LESS H AND P 20

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

6.813E+01 XXXXX
1.000E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.000000E+01
MAXIMUM ANTILOG = 1.000000E+02
GEOMETRIC MEAN = 8.36660E+01
GEOMETRIC DEVIATION = 1.28686E+00
VARIANCE OF LOGS = 1.19973E-02

PERCENT TABLE FOR VARIABLE 10 (S-AU) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999999E 50

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

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 11 (S-P)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	0.67	0.67
9.160E-01	-	1.083E+00	2	2	10.00	10.00	0.90	1.36
1.083E+00	-	1.249E+00	0	2	0.00	10.00	1.59	1.59
1.249E+00	-	1.416E+00	4	6	20.00	30.00	2.40	1.07
1.416E+00	-	1.583E+00	3	9	15.00	45.00	3.05	0.00
1.583E+00	-	1.749E+00	3	12	15.00	60.00	3.27	0.02
1.749E+00	-	1.916E+00	4	16	20.00	80.00	2.97	0.36
1.916E+00	-	2.083E+00	1	17	5.00	85.00	2.28	0.72
2.083E+00	-	2.249E+00	1	18	5.00	90.00	1.48	0.15
2.249E+00	-	2.416E+00	1	19	5.00	95.00	0.81	0.05
2.416E+00	-	2.583E+00	1	20	5.00	100.00	0.59	0.29
	G		0	20	0.00	100.00	0.67	0.67
	H		0	20				
	P		0	20				

TOTALS LESS H AND P 20

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

```
9.985E+00 XXXXXXXXXX
1.466E+01
2.151E+01 XXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXX
6.802E+01 XXXXXXXXXXXXXXXXXXXX
9.985E+01 XXXXX
1.466E+02 XXXXX
2.151E+02 XXXXX
3.157E+02 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	1.00000E+01
MAXIMUM ANTILOG	=	3.00000E+02
GEOMETRIC MEAN	=	4.50144E+01
GEOMETRIC DEVIATION	=	2.53024E+00
VARIANCE OF LOGS	=	1.62539E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE

25.00	1.332668E+00	2.151134E+01
50.00	1.638224E+00	4.347341E+01
75.00	1.874335E+00	7.487473E+01
90.00	2.249336E+00	1.775563E+02
95.00	2.416003E+00	2.606171E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		0	0	0.00	0.00		
	L		0	0	0.00	0.00		
	T		0	0	0.00	0.00	2.15	2.15
1.916E+00	-	2.083E+00	4	4	20.00	20.00	1.57	3.77
2.083E+00	-	2.249E+00	0	4	0.00	20.00	2.13	2.13
2.249E+00	-	2.416E+00	8	12	40.00	60.00	2.57	11.48
2.416E+00	-	2.583E+00	2	14	10.00	70.00	2.75	0.21
2.583E+00	-	2.749E+00	1	15	5.00	75.00	2.62	1.00
2.749E+00	-	2.916E+00	0	15	0.00	75.00	2.21	2.21
2.916E+00	-	3.083E+00	2	17	10.00	85.00	1.65	0.07
3.083E+00	-	3.249E+00	1	18	5.00	90.00	1.10	0.01
3.249E+00	-	3.416E+00	1	19	5.00	95.00	1.25	0.05
	G		1	20	5.00	100.00	2.15	0.62
	H		0	20				
	B		0	20				

TOTALS LESS H AND B 20

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

```
9.295E+01 XXXXXXXXXXXXXXXXXXX
1.466E+02
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXX
4.634E+02 XXXXX
6.802E+02
9.235E+02 XXXXXXXXXX
1.466E+03 XXXXX
2.151E+03 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
MAXIMUM ANTILOG = 2.00000E+03
GEOMETRIC MEAN = 2.81448E+02
GEOMETRIC DEVIATION = 2.52291E+00
VARIANCE OF LOGS = 1.61525E-01

PERCENT TABLE FOR VARIABLE 12 (S-BA) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.124334E+00	1.331477E+02

50.00	2.332667E+00	2.151134E+02
75.00	2.749335E+00	5.614809E+02
90.00	3.249356E+00	1.775563E+03
95.00	3.416003E+00	2.606171E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		4	4	20.00	20.00		
	L		0	4	0.00	20.00		
	T		0	4	0.00	20.00	1.97	1.97
5.830E-01	-	7.497E-01	4	8	20.00	40.00	2.18	1.53
7.497E-01	-	9.163E-01	0	8	0.00	40.00	3.18	3.18
9.163E-01	-	1.083E+00	5	13	25.00	65.00	3.73	0.43
1.083E+00	-	1.250E+00	1	14	5.00	70.00	3.51	1.79
1.250E+00	-	1.416E+00	2	16	10.00	80.00	2.64	0.16
1.416E+00	-	1.583E+00	2	18	10.00	90.00	1.60	0.10
1.583E+00	-	1.750E+00	2	20	10.00	100.00	1.19	0.54
	G		0	20	0.00	100.00	0.00	0.00
	H		0	20				
	P		0	20				

TOTALS LESS H AND P 20

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

```
4.638E+00 XXXXXXXXXXXXXXXXXXX
6.808E+00
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXX
2.153E+01 XXXXXXXXXX
3.160E+01 XXXXXXXXXX
4.638E+01 XXXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 5.00000E+01
GEOMETRIC MEAN = 1.31944E+01
GEOMETRIC DEVIATION = 2.20810E+00
VARIANCE OF LOGS = 1.18349E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	8.830006E-01	7.638366E+00
75.00	1.333002E+00	2.152789E+01
90.00	1.583002E+00	3.828265E+01
95.00	1.000000E+35	1.000000E+35

98.00 1.0000000E+35 1.0000000E+35
99.00 1.0000000E+35 1.0000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		4	4	20.00	20.00		
L		0	4	0.00	20.00		
T		0	4	0.00	20.00	4.15	4.15
9.160E-01 -	1.083E+00	9	13	45.00	65.00	2.89	12.88
1.083E+00 -	1.249E+00	0	13	0.00	65.00	3.41	3.41
1.249E+00 -	1.416E+00	2	15	10.00	75.00	3.32	0.53
1.416E+00 -	1.583E+00	2	17	10.00	85.00	2.69	0.18
1.583E+00 -	1.749E+00	1	18	5.00	90.00	1.81	0.36
1.749E+00 -	1.916E+00	0	18	0.00	90.00	1.01	1.01
1.916E+00 -	2.083E+00	1	19	5.00	95.00	0.47	0.61
2.083E+00 -	2.249E+00	0	19	0.00	95.00	0.18	0.18
2.249E+00 -	2.416E+00	1	20	5.00	100.00	0.08	11.29
G		0	20	0.00	100.00	0.00	0.00
U		0	20				
B		0	20				

TOTALS LESS H AND B 20

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

```
9.995E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01
2.151E+01 XXXXXXXXXX
3.157E+01 XXXXXXXXXX
4.634E+01 XXXXX
6.802E+01
9.985E+01 XXXXX
1.466E+02
2.151E+02 XXXXX
```

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 2.00000E+02
GEOMETRIC MEAN = 1.92650E+01
GEOMETRIC DEVIATION = 2.56981E+00
VARIANCE OF LOGS = 1.69018E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35

50.00	1.000000E+35	1.000000E+35
75.00	1.416001E+00	2.606160E+01
90.00	1.749335E+00	5.614809E+01
95.00	2.082669E+00	1.209676E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	2.16	2.16
5.830E-01 -	7.497E-01	2	2	10.00	10.00	0.70	2.39
7.497E-01 -	9.163E-01	2	4	10.00	20.00	0.84	1.59
9.163E-01 -	1.083E+00	4	8	20.00	40.00	0.98	9.27
1.083E+00 -	1.250E+00	1	9	5.00	45.00	1.11	0.01
1.250E+00 -	1.416E+00	0	9	0.00	45.00	1.22	1.22
1.416E+00 -	1.583E+00	1	10	5.00	50.00	1.30	0.07
1.583E+00 -	1.750E+00	0	10	0.00	50.00	1.35	1.35
1.750E+00 -	1.916E+00	0	10	0.00	50.00	1.36	1.36
1.916E+00 -	2.083E+00	2	12	10.00	60.00	1.33	0.34
2.083E+00 -	2.250E+00	1	13	5.00	65.00	1.26	0.06
2.250E+00 -	2.416E+00	2	15	10.00	75.00	1.17	0.60
2.416E+00 -	2.583E+00	2	17	10.00	85.00	1.04	0.87
2.583E+00 -	2.750E+00	0	17	0.00	85.00	0.91	0.91
2.750E+00 -	2.916E+00	0	17	0.00	85.00	0.77	0.77
2.916E+00 -	3.083E+00	2	19	10.00	95.00	2.48	0.09
G		1	20	5.00	100.00	2.16	0.63
H		0	20				
R		0	20				

TOTALS LESS H AND R 20

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

```
4.639E+00 XXXXXXXXXX
6.803E+00 XXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXX
2.153E+01
3.160E+01 XXXXX
4.633E+01
6.803E+01
9.992E+01 XXXXXXXXXX
1.467E+02 XXXXX
2.153E+02 XXXXXXXXXX
3.160E+02 XXXXXXXXXX
4.638E+02
6.803E+02
9.992E+02 XXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 4.53433E+01

GEOMETRIC DEVIATION = 6.26477E+00
VARIANCE OF LOGS = 6.35057E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	9.580007E-01	9.078221E+00
50.00	1.583002E+00	3.828265E+01
75.00	2.416337E+00	2.608177E+02
90.00	2.833005E+00	6.807764E+02
95.00	3.083005E+00	1.210612E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.03	0.03
1.250E+00 -	1.417E+00	1	1	5.00	5.00	0.23	2.66
1.417E+00 -	1.583E+00	0	1	0.00	5.00	1.10	1.10
1.583E+00 -	1.750E+00	3	4	15.00	20.00	3.15	0.01
1.750E+00 -	1.917E+00	5	9	25.00	45.00	5.38	0.03
1.917E+00 -	2.083E+00	8	17	40.00	85.00	5.43	1.21
2.083E+00 -	2.250E+00	1	18	5.00	90.00	3.26	1.56
2.250E+00 -	2.417E+00	2	20	10.00	100.00	1.43	0.23
G		0	20	0.00	100.00	0.03	0.03
H		0	20				
P		0	20				

TOTALS LESS H AND P 20

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

```
2.154E+01 XXXXX
3.162E+01
4.642E+01 XXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.468E+02 XXXXX
2.154E+02 XXXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	2.00000E+01
MAXIMUM ANTILOG	=	2.00000E+02
GEOMETRIC MEAN	=	8.31915E+01
GEOMETRIC DEVIATION	=	1.68017E+00
VARIANCE OF LOGS	=	5.07836E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.783334E+00	6.072037E+01
50.00	1.937501E+00	8.659671E+01
75.00	2.041668E+00	1.100698E+02
90.00	2.250002E+00	1.778288E+02
95.00	1.000000E+35	1.000000E+35

98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		5	5	25.00	25.00		
L		2	7	10.00	35.00		
T		0	7	0.00	35.00	2.58	2.58
5.830E-01 -	7.497E-01	1	8	5.00	40.00	2.14	0.61
7.497E-01 -	9.163E-01	1	9	5.00	45.00	2.87	1.21
9.163E-01 -	1.083E+00	4	13	20.00	65.00	3.25	0.17
1.083E+00 -	1.250E+00	1	14	5.00	70.00	3.11	1.43
1.250E+00 -	1.416E+00	4	18	20.00	90.00	2.52	0.86
1.416E+00 -	1.583E+00	0	18	0.00	90.00	1.73	1.73
1.583E+00 -	1.750E+00	0	18	0.00	90.00	1.00	1.00
1.750E+00 -	1.916E+00	0	18	0.00	90.00	0.49	0.49
1.916E+00 -	2.083E+00	2	20	10.00	100.00	0.30	9.44
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				

TOTALS LESS H AND H 20

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

```
4.639E+00 XXXXX
6.803E+00 XXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXX
3.160E+01
4.638E+01
6.809E+01
9.992E+01 XXXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.000000E+00
MAXIMUM ANTILOG = 1.000000E+02
GEOMETRIC MEAN = 1.673592E+01
GEOMETRIC DEVIATION = 2.469966E+00
VARIANCE OF LOGS = 1.541910E-01

PERCENT TABLE FOR VARIABLE 20 (S-MO) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.0003000E+35	1.0000000E+35

50.00	9.583007E-01	9.078221E+00
75.01	1.291335E+00	1.955846E+01
90.00	1.416335E+00	2.608165E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	2.11	2.11
5.830E-01 -	7.497E-01	6	6	30.00	30.00	2.09	7.30
7.497E-01 -	9.163E-01	2	8	10.00	40.00	2.98	0.32
9.163E-01 -	1.083E+00	5	13	25.00	65.00	3.49	0.65
1.083E+00 -	1.250E+00	3	16	15.00	80.00	3.36	0.04
1.250E+00 -	1.416E+00	1	17	5.00	85.00	2.67	1.04
1.416E+00 -	1.583E+00	1	18	5.00	90.00	1.74	0.32
1.583E+00 -	1.750E+00	0	18	0.00	90.00	0.94	0.94
1.750E+00 -	1.916E+00	1	19	5.00	95.00	0.41	0.83
1.916E+00 -	2.083E+00	1	20	5.00	100.00	0.21	2.99
G		0	20	0.00	100.00	2.11	2.11
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

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

```
4.638E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.803E+00 XXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXX
2.153E+01 XXXXX
3.160E+01 XXXXX
4.638E+01
6.808E+01 XXXXX
9.992E+01 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.000000E+00
MAXIMUM ANTILOG = 1.000000E+02
GEOMETRIC MEAN = 1.12662E+01
GEOMETRIC DEVIATION = 2.36819E+00
VARIANCE OF LOGS = 1.40188E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35

50.00	9.830008E-01	9.616140E+00
75.00	1.194112E+00	1.563552E+01
90.00	1.583002E+00	3.828265E+01
95.00	1.916336E+00	8.247760E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		2	2	10.00	10.00		
L		0	2	0.00	10.00		
T		0	2	0.00	10.00	2.89	2.89
9.160E-01 -	1.083E+00	2	4	10.00	20.00	1.08	0.79
1.083E+00 -	1.249E+00	3	7	15.00	35.00	1.29	2.28
1.249E+00 -	1.416E+00	3	10	15.00	50.00	1.47	1.58
1.416E+00 -	1.583E+00	2	12	10.00	60.00	1.61	0.09
1.583E+00 -	1.749E+00	1	13	5.00	65.00	1.68	0.28
1.749E+00 -	1.916E+00	0	13	0.00	65.00	1.68	1.68
1.916E+00 -	2.083E+00	0	13	0.00	65.00	1.61	1.61
2.083E+00 -	2.249E+00	1	14	5.00	70.00	1.47	0.15
2.249E+00 -	2.416E+00	2	16	10.00	80.00	1.28	0.40
2.416E+00 -	2.583E+00	1	17	5.00	85.00	1.07	0.00
2.583E+00 -	2.749E+00	0	17	0.00	85.00	0.85	0.85
2.749E+00 -	2.916E+00	0	17	0.00	85.00	0.65	0.65
2.916E+00 -	3.083E+00	1	18	5.00	90.00	0.48	0.58
3.083E+00 -	3.249E+00	0	18	0.00	90.00	0.33	0.33
3.249E+00 -	3.416E+00	2	20	10.00	100.00	0.55	3.77
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

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

```
9.985E+00 XXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXX
4.634E+01 XXXXX
6.802E+01
9.985E+01
1.466E+02 XXXXX
2.151E+02 XXXXXXXXXX
3.157E+02 XXXXX
4.635E+02
6.803E+02
9.985E+02 XXXXX
1.466E+03
2.151E+03 XXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 2.00000E+03
GEOMETRIC MEAN = 6.76248E+01

GEOMETRIC DEVIATION = 6.07932E+00
VARIANCE OF LOGS = 6.14428E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.138223E+00	1.374747E+01
50.00	1.416001E+00	2.606160E+01
75.00	2.332669E+00	2.151144E+02
90.00	3.082671E+00	1.209681E+03
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		7	7	35.00	35.00		
L		0	7	0.00	35.00		
T		0	7	0.00	35.00	3.03	3.03
1.916E+00 -	2.083E+00	3	10	15.00	50.00	2.21	0.28
2.083E+00 -	2.249E+00	0	10	0.00	50.00	2.83	2.83
2.249E+00 -	2.416E+00	3	13	15.00	65.00	3.11	0.00
2.416E+00 -	2.583E+00	1	14	5.00	70.00	2.93	1.28
2.583E+00 -	2.749E+00	0	14	0.00	70.00	2.38	2.38
2.749E+00 -	2.916E+00	2	16	10.00	80.00	1.66	0.07
2.916E+00 -	3.083E+00	4	20	20.00	100.00	1.85	2.48
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 27 (S-SR)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+01 XXXXXXXXXXXXXXX
1.466E+02
2.151E+02 XXXXXXXXXXXXXXX
3.157E+02 XXXXX
4.634E+02
6.802E+02 XXXXXXXXXX
9.985E+02 XXXXXXXXXXXXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 3.49846E+02
GEOMETRIC DEVIATION = 2.60962E+00
VARIANCE OF LOGS = 1.73537E-01

PERCENT TABLE FOR VARIABLE 27 (S-SR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	2.082667E+00	1.209670E+02
75.00	2.749335E+00	5.614809E+02
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35

98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	1.18	1.18
1.583E+00 -	1.750E+00	3	3	15.00	15.00	1.62	1.17
1.750E+00 -	1.916E+00	3	6	15.00	30.00	2.70	0.03
1.916E+00 -	2.083E+00	4	10	20.00	50.00	3.59	0.05
2.083E+00 -	2.250E+00	2	12	10.00	60.00	3.79	0.84
2.250E+00 -	2.416E+00	6	18	30.00	90.00	3.18	2.50
2.416E+00 -	2.583E+00	1	19	5.00	95.00	2.12	0.59
2.583E+00 -	2.750E+00	0	19	0.00	95.00	1.13	1.13
2.750E+00 -	2.916E+00	0	19	0.00	95.00	0.48	0.48
2.916E+00 -	3.083E+00	0	19	0.00	95.00	0.16	0.16
3.083E+00 -	3.250E+00	1	20	5.00	100.00	0.05	16.72
G		0	20	0.00	100.00	1.18	1.18
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 28 (S-V)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+01 XXXXXXXXXXXXXX
6.808E+01 XXXXXXXXXXXXXX
9.992E+01 XXXXXXXXXXXXXXXXXXXX
1.467E+02 XXXXXXXXXX
2.153E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+02 XXXXX
4.638E+02
6.808E+02
9.992E+02
1.467E+03 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
MAXIMUM ANTILOG = 1.50000E+03
GEOMETRIC MEAN = 1.32492E+02
GEOMETRIC DEVIATION = 2.21322E+00
VARIANCE OF LOGS = 1.19042E-01

PERCENT TABLE FOR VARIABLE 28 (S-V) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE

25.00	1.860778E+00	7.257354E+01
50.00	2.083001E+00	1.210601E+02
75.00	2.333002E+00	2.152789E+02
90.00	2.416335E+00	2.608165E+02
95.00	2.583002E+00	3.828265E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 29 (S-W)

LOG LIMITS LOWER	-	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N		12	12	60.00	60.00		
	L		4	16	20.00	80.00		
	T		0	16	0.00	80.00	0.00	0.00
1.583E+00	-	1.750E+00	3	19	15.00	95.00	18.16	12.65
1.750E+00	-	1.916E+00	1	20	5.00	100.00	1.84	0.38
	G		0	20	0.00	100.00	0.00	0.00
	H		0	20				
	B		0	20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 29 (S-W)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
4.638E+01 XXXXXXXXXXXXXX
6.809E+01 XXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	5.000000E+01
MAXIMUM ANTILOG	=	7.000000E+01
GEOMETRIC MEAN	=	5.43879E+01
GEOMETRIC DEVIATION	=	1.18322E+00
VARIANCE OF LOGS	=	5.33833E-03

PERCENT TABLE FOR VARIABLE 29 (S-W) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

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

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		4	4	20.00	20.00		
L		0	4	0.00	20.00		
T		0	4	0.00	20.00	3.08	3.08
9.160E-01 -	1.083E+00	7	11	35.00	55.00	3.77	2.76
1.083E+00 -	1.249E+00	1	12	5.00	60.00	4.80	3.01
1.249E+00 -	1.416E+00	5	17	25.00	85.00	4.24	0.14
1.416E+00 -	1.583E+00	1	18	5.00	90.00	2.60	0.98
1.583E+00 -	1.749E+00	0	18	0.00	90.00	1.10	1.10
1.749E+00 -	1.916E+00	2	20	10.00	100.00	0.40	6.36
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 30 (S-Y)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXX
4.634E+01
6.802E+01 XXXXXXXXXX
```


THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.000000E+01
MAXIMUM ANTILOG = 7.000000E+01
GEOMETRIC MEAN = 1.73394E+01
GEOMETRIC DEVIATION = 1.92547E+00
VARIANCE OF LOGS = 8.09611E-02

PERCENT TABLE FOR VARIABLE 30 (S-Y) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.349334E+00	2.235292E+01
90.00	1.582668E+00	3.825322E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

Table 4C-Rock Analysis

FREQUENCY TABLE FOR VARIABLE 31 (S-ZN)

LOG LIMITS LOWER	- UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		13	13	65.00	65.00		
L		1	14	5.00	70.00		
T		0	14	0.00	70.00	5.22	5.22
2.250E+00 -	2.417E+00	1	15	5.00	75.00	4.13	2.37
2.417E+00 -	2.583E+00	2	17	10.00	85.00	4.32	1.25
2.583E+00 -	2.750E+00	0	17	0.00	85.00	3.33	3.33
2.750E+00 -	2.917E+00	0	17	0.00	85.00	1.89	1.89
2.917E+00 -	3.083E+00	1	18	5.00	90.00	0.79	0.05
3.083E+00 -	3.250E+00	2	20	10.00	100.00	0.31	9.11
G		0	20	0.00	100.00	0.00	0.00
H		0	20				
B		0	20				

TOTALS LESS H AND B 20

HISTOGRAM FOR VARIABLE 31 (S-ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```
2.154E+02 XXXXX
3.162E+02 XXXXXXXXXX
4.642E+02
6.813E+02
1.000E+03 XXXXX
1.468E+03 XXXXXXXXXX
```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG	=	2.00000E+02
MAXIMUM ANTILOG	=	1.50000E+03
GEOMETRIC MEAN	=	5.86016E+02
GEOMETRIC DEVIATION	=	2.47453E+00
VARIANCE OF LOGS	=	1.54836E-01

PERCENT TABLE FOR VARIABLE 31 (S-ZN) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	2.416667E+00	2.610159E+02
90.00	3.083335E+00	1.211532E+03
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35