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UNITED STATES DEPARTMENT OF THE INTERIOR
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GEOLOGICAL SURVEY

STATISTICAL ANALYSES OF DATA ON STREAM SEDIMENTS,
PANED HEAVY-MINERAL CONCENTRATES, ROCKS
AND WATERS OF THE PUSCH RIDGE WILDERNESS AREA, ARIZONA

by

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M. E. Hinkle, J. E. Kilburn, R. G. Eppinger III,

and W. S. Speckman



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Introduction

The U.S. Geological Survey and the U.S. Bureau of Mines have conducted a mineral-resource assessment of the Pusch Ridge Wilderness Area, in Pima County near Tucson Arizona. The study consisted of coordinated geological, geochemical, and mineral resource studies with the objective of evaluating the potential for mineral deposits in the 200 km² area. The geochemical survey consisted of the collection of stream-sediment samples, stream-sediment samples taken for panning to produce heavy-mineral concentrates, and rock and water samples. The samples were analyzed by both wet chemical and semiquantitative emission spectrographic techniques. The sampling procedures, and methods of sample preparation and analysis were reported by Hinkle and others (1981).

Data

The purpose of this report is to present the statistical analyses of data on the geochemical samples collected. Three tables of statistical analyses of data are included to assist the reader in using the chemical analyses. The analyses were performed by using standard computer programs developed by the U.S. Geological Survey (George VanTrump, Jr., unpublished programs, May 1972; November 1972; October 1978). Table 1 (Fisher-K Statistics) gives the maximum and minimum values for each element and shows the number of samples for which the data are not within the normal analytical detection intervals. Table 1 also includes the mean, standard deviation, skewness, and kurtosis of the distribution for each element. Table 2 gives a graphical analysis for each element. Class intervals, percent frequency of each class and cumulative frequency are listed, and a histogram is drawn for each element. Table 3 gives the results of a linear correlation analysis of the data.

The starred values in Table 3 represent those pairs of elements for which there were inadequate data to compute a valid correlation coefficient.

The following abbreviations, letters, and symbols are used in the tables of data and statistical analyses:

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)
---	Insufficient sample for analysis
NO	Number
UNQUAL	Unqualified (modifiers such as N, H, L not assigned)
NO of Pairs	Number of unqualified pairs of numbers that were compared
IMPROPER QUAL/VALUES	Qualified values using symbols other than N, H, L, G, B, or T
0.100000E+36	No data

Letters preceding element symbols

S	Spectrographic analysis
AA	Atomic absorption analysis
INST	Instrumental analysis. In the case of Hg, this means a gold-foil mercury detector

References

Hinkle, M. E., Kilburn, J. E., Eppinger, R. G., III, and Speckman, W. S.,
1981, Geochemical analyses of samples of stream sediments, panned
heavy-mineral concentrates, rocks, and waters of the Pusch Ridge
Wilderness Area, Arizona: U.S. Geological Survey Open-File Report 81-435,
44 p.

sediments

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	143	0	32.309167	32.463333	1
2	LONGITUDE	0	0	0	0	0	0	143	0	110.68889	110.96361	2
3	S-FE%	0	0	0	3	0	0	140	0	1.0000000	15.000000	3
4	S-MG%	0	0	0	0	0	0	143	0	0.1000000	2.0000000	4
5	S-CA%	0	0	0	0	0	0	143	0	0.5000000	7.0000000	5
6	S-TI%	0	0	0	3	0	0	140	0	0.0700000	1.0000000	6
7	S-MN	0	0	0	11	0	0	132	0	300.00000	5000.0000	7
8	S-AG	143	0	0	0	0	0	0	0			8
9	S-AS	143	0	0	0	0	0	0	0			9
10	S-AU	143	0	0	0	0	0	0	0			10
11	S-B	3	0	62	0	0	0	78	0	10.000000	30.000000	11
12	S-BA	0	0	0	0	0	0	143	0	300.00000	5000.0000	12
13	S-BE	2	0	0	0	0	0	141	0	1.0000000	7.0000000	13
14	S-BI	142	0	1	0	0	0	0	0			14
15	S-CD	143	0	0	0	0	0	0	0			15
16	S-CE	11	0	6	0	0	0	126	0	5.0000000	50.000000	16
17	S-CR	1	0	0	0	0	0	142	0	10.000000	100.00000	17
18	S-CU	0	0	0	0	0	0	143	0	10.000000	200.00000	18
19	S-LA	9	0	0	0	0	0	134	0	20.000000	1000.0000	19
20	S-MO	93	0	11	0	0	0	39	0	5.0000000	20.000000	20
21	S-NB	60	0	50	0	0	0	33	0	20.000000	300.00000	21
22	S-NI	7	0	6	0	0	0	130	0	5.0000000	70.000000	22
23	S-PB	0	0	0	0	0	0	143	0	20.000000	100.00000	23
24	S-SB	143	0	0	0	0	0	0	0			24
25	S-SC	4	0	3	0	0	0	136	0	5.0000000	30.000000	25
26	S-SN	125	0	9	0	0	0	9	0	10.000000	50.000000	26
27	S-SR	0	0	0	0	0	0	143	0	150.00000	1000.0000	27
28	S-V	0	0	2	0	0	0	141	0	10.000000	500.00000	28
29	S-W	142	0	1	0	0	0	0	0			29
30	S-Y	0	0	0	0	0	0	143	0	15.000000	1500.0000	30
31	S-ZN	143	0	0	0	0	0	0	0			31
32	S-ZR	0	0	0	15	0	0	128	0	50.000000	1000.0000	32
33	S-IN	130	0	11	0	0	0	2	0	100.00000	100.00000	33
34	AA-ZN	0	0	0	0	0	0	143	0	15.000000	75.000000	34
35	INST-HG	0	0	0	0	0	0	143	0	3.0000000	211.00000	35

Table 1--continued

00010 FISHER-K STATISTICS - U S G S STATPAC (06/08/80)

DATE 6/13/80

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
1	LATITUDE	32.375410	0.0347943	0.0012106	5.94774800-06	0.1411977	-8.03388310-07	-0.5481410	1
2	LONGITUDE	110.81888	0.0694672	0.0048257	7.41357560-05	0.2211507	-2.28132500-05	-0.9796435	2
3	S-FE2	4.4250000	2.8245615	7.9781475	41.657704	1.8485970	255.65410	4.0165080	3
4	S-MG4	0.6930070	0.3732990	0.1393522	0.0674892	1.2973696	0.0433401	2.2318389	4
5	S-CAX	2.3454545	1.1965754	1.4317926	3.1479202	1.8373994	8.2857420	4.0417663	5
6	S-TI2	0.4134286	0.2798426	0.0783119	0.0195778	0.8979140	-0.0017959	-0.2928332	6
7	S-MN	1849.2424	1353.9028	1833052.9	3.22850060+09	1.3008835	2.44621770+12	0.7280231	7
8	S-AG								8
9	S-AS								9
10	S-AU								10
11	S-B	12.820513	4.3833913	19.214119	163.02557	1.9356419	1641.1895	4.4454709	11
12	S-BA	1450.3497	736.07965	541813.26	7.29701540+08	1.8296618	1.86179340+12	6.3420876	12
13	S-BE	1.8333333	1.0499433	1.1023810	3.3416453	2.8871064	11.636777	9.5756731	13
14	S-BI								14
15	S-CD								15
16	S-CD	11.063492	6.7560296	45.643937	666.99691	2.1629635	17351.258	8.3284616	16
17	S-CR	46.514085	56.696872	3214.5353	875223.24	4.8022145	3.25019450+08	31.453788	17
18	S-CU	44.895105	29.181731	851.57343	53481.643	2.1521453	5292517.9	7.2982398	18
19	S-LA	166.26866	172.79512	29858.153	13469915.	2.6107811	7.21207140+09	8.0897321	19
20	S-HO	7.8717949	4.2063829	17.693657	128.19743	1.7224749	674.25988	2.1537342	20
21	S-NB	49.090909	57.952763	3358.5227	635587.06	3.2655220	1.32688020+08	11.763461	21
22	S-HI	13.200000	10.008059	100.16124	3032.6600	3.0253400	116520.47	11.614562	22
23	S-FB	53.216783	15.272243	233.24141	-359.83705	-0.1010177	28086.586	0.5162828	23
24	S-SB								24
25	S-SC	11.566176	5.9922199	35.906699	159.07157	0.7393147	-509.88062	-0.3954736	25
26	S-SN	20.000000	11.989579	143.75000	3977.6786	2.3079049	128191.96	6.2036187	26
27	S-SR	444.05594	166.62447	27763.715	2008423.8	0.4341492	3.00996070+08	0.3904862	27
28	S-V	85.709220	77.739449	6043.4220	1366892.3	2.9094435	4.05236190+08	11.095385	28
29	S-W								29
30	S-Y	128.67133	180.46492	32567.588	27386580.	4.6597156	2.92668350+10	27.593358	30
31	S-ZN								31
32	S-ZR	278.59375	216.04073	46673.597	18494002.	1.8341041	6.89665650+09	3.1658916	32
33	S-TH	100.00000	0.0	0.0					33
34	AA-ZN	34.930070	16.250526	264.07958	3868.3067	0.9014023	-6817.3939	-0.0977572	34
35	INST-HG	29.622378	27.354945	748.29302	56804.507	2.7750784	7357530.8	13.139798	35

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

K3 and K4 are intermediary values used to calculate skewness and kurtosis.

heavy-mineral concentrates

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	143	0	32.309167	32.463333	1
2	LONGITUDE	0	0	0	0	0	0	143	0	110.68889	110.96361	2
3	S-FE%	0	0	0	0	0	0	143	0	0.3000000	20.000000	3
4	S-MG%	0	0	0	0	0	0	143	0	0.0700000	1.5000000	4
5	S-CA%	0	0	0	0	0	0	143	0	1.5000000	50.000000	5
6	S-TI%	0	0	0	36	0	0	107	0	0.1000000	2.0000000	6
7	S-MN	0	0	0	10	0	0	133	0	500.00000	10000.000	7
8	S-AG	143	0	0	0	0	0	0	0			8
9	S-AS	143	0	0	0	0	0	0	0			9
10	S-AU	143	0	0	0	0	0	0	0			10
11	S-B	10	0	105	0	0	0	28	0	20.000000	700.00000	11
12	S-BA	4	0	0	0	0	0	139	0	30.000000	2000.0000	12
13	S-BE	104	0	0	0	0	0	39	0	2.0000000	100.00000	13
14	S-BI	119	0	13	0	0	0	11	0	20.000000	300.00000	14
15	S-CO	143	0	0	0	0	0	0	0			15
16	S-CO	102	0	0	0	0	0	41	0	10.000000	50.000000	16
17	S-CR	4	0	18	0	0	0	121	0	10.000000	1500.0000	17
18	S-CU	0	0	25	0	0	0	118	0	10.000000	3000.0000	18
19	S-LA	0	0	0	16	0	0	127	0	50.000000	2000.0000	19
20	S-MO	96	0	1	0	0	0	46	0	10.000000	150.00000	20
21	S-NB	10	0	10	0	0	0	123	0	50.000000	700.00000	21
22	S-NI	122	0	0	0	0	0	21	0	10.000000	30.000000	22
23	S-PB	25	0	26	0	0	0	92	0	20.000000	2000.0000	23
24	S-SB	143	0	0	0	0	0	0	0			24
25	S-SC	33	0	1	0	0	0	109	0	10.000000	100.00000	25
26	S-SN	66	0	14	0	0	0	63	0	20.000000	500.00000	26
27	S-SR	52	0	35	0	0	0	56	0	200.00000	500.00000	27
28	S-V	1	0	0	0	0	0	142	0	20.000000	500.00000	28
29	S-W	130	0	1	0	0	0	12	0	100.00000	2000.0000	29
30	S-Y	0	0	0	0	0	0	143	0	200.00000	5000.0000	30
31	S-ZN	133	0	1	0	0	0	9	0	500.00000	7000.0000	31
32	S-ZR	0	0	0	110	0	0	33	0	300.00000	2000.0000	32
33	S-TH	53	0	21	0	0	0	69	0	200.00000	3000.0000	33
34	AA-ZN	0	0	0	0	65	0	78	0	5.0000000	640.00000	34

Table 1--continued

00010 FISHER-K STATISTICS - U S G S STATPAC (06/12/80)

DATE 7/ 3/80

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
1	LATITUDE	32.375412	0.0347907	0.0012104	5.96465650-06	0.1416427	-8.03689800-07	-0.5485719	1
2	LONGITUDE	110.81888	0.0694687	0.0048259	7.41479500-05	0.2211731	-2.28175410-05	-0.9797447	2
3	S-FE%	2.5706294	2.7698282	7.6719482	68.054160	3.2025520	803.76755	13.655863	3
4	S-MG%	0.2588811	0.2050527	0.0420466	0.0240776	2.7926536	0.0198785	11.243994	4
5	S-CA%	14.569930	7.9761090	63.618315	481.98398	0.9498595	6950.1671	1.7172397	5
6	S-TI%	1.1738318	0.5922991	0.3508182	0.0403894	0.1943766	-0.1646031	-1.3374387	6
7	S-MN	2561.6541	2116.7343	4480563.9	1.83889010+10	1.9389061	6.82699190+13	3.4006664	7
8	S-AG								8
9	S-AS								9
10	S-AU								10
11	S-B	63.214286	129.61634	16800.397	10355053.	4.7552462	6.67637970+09	23.653856	11
12	S-BA	357.26619	342.14965	117066.39	76102731.	1.8999927	6.40431330+10	4.6731331	12
13	S-BE	19.846154	24.567349	603.55466	30137.945	2.0325383	1530445.5	4.2013094	13
14	S-BI	66.363636	93.943890	8825.4545	1765048.5	2.1288792	2.85936730+08	3.6710963	14
15	S-CD								15
16	S-CD	13.902439	7.7871846	60.640244	1443.3044	3.0564446	41695.532	11.338814	16
17	S-CR	53.719008	135.77636	18435.220	25671564.	10.256043	3.72919620+10	109.72828	17
18	S-CU	63.220339	278.19052	77389.968	2.20538950+08	10.243734	6.50884660+11	108.67626	18
19	S-LA	879.92126	592.35406	350883.33	1.50880230+08	0.7259191	-7.38632200+10	-0.5999330	19
20	S-MO	42.826037	42.053566	1768.5024	119657.84	1.6089134	4858620.0	1.5534655	20
21	S-MP	160.73171	129.57162	16788.304	4072055.1	1.8719058	9.61613350+08	3.4116223	21
22	S-NI	15.714286	5.7631836	33.214286	107.42481	0.5611994	-204.41729	-0.1852967	22
23	S-PR	109.02174	256.20244	65639.692	90640705.	5.3898102	1.48487310+11	34.463252	23
24	S-SB								24
25	S-SC	22.569807	15.584517	242.87717	8364.1865	2.2097527	371889.96	6.3043610	25
26	S-SN	58.888889	62.401176	3893.9068	1422944.2	5.8561144	6.26096570+08	41.292409	26
27	S-SR	246.64286	82.944983	6879.8701	1231998.6	2.1589364	2.00423300+08	4.2343596	27
28	S-V	130.63380	103.52109	10716.617	2605533.5	2.3486057	6.65490280+08	5.7946381	28
29	S-W	529.16667	639.76499	409299.24	4.05368370+08	1.5480624	2.41339910+11	1.4406128	29
30	S-Y	1153.1469	770.84225	594197.77	1.26509910+09	2.7620275	4.04949780+12	11.469358	30
31	S-ZN	1855.5556	2091.7165	4375277.8	2.07719600+10	2.2697030	1.03276010+14	5.3949593	31
32	S-ZR	1357.5758	665.69057	443143.94	-97425709.	-0.3302603	-3.11451350+11	-1.5859905	32
33	S-ZH	659.42029	591.18994	349505.54	3.79589490+08	1.8371012	4.08518940+11	3.3442911	33
34	AA-ZN	45.897435	79.997945	6329.6712	2943265.7	5.7490090	1.64878450+09	40.257665	34

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

K3 and K4 are intermediary values used to calculate skewness and kurtosis.

rocks

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	16	0	32.309444	32.463333	1
2	LONGITUD	0	0	0	0	0	0	16	0	110.70861	110.94917	2
3	S-FEX	0	0	0	0	0	0	16	0	0.5000000	15.000000	3
4	S-MGX	0	0	0	0	0	0	16	0	0.0500000	1.0000000	4
5	S-CAZ	0	0	0	0	0	0	16	0	0.1000000	1.5000000	5
6	S-TIX	0	0	0	0	0	0	16	0	0.0100000	0.3000000	6
7	S-MN	0	0	0	0	0	0	16	0	100.00000	1500.0000	7
8	S-AG	16	0	0	0	0	0	0	0			8
9	S-AS	16	0	0	0	0	0	0	0			9
10	S-AU	16	0	0	0	0	0	0	0			10
11	S-B	0	0	15	0	0	0	1	0	70.000000	70.000000	11
12	S-BA	0	0	0	0	0	0	16	0	200.00000	1500.0000	12
13	S-BE	1	0	2	0	0	0	13	0	1.0000000	10.000000	13
14	S-BI	15	0	0	0	0	0	1	0	15.000000	15.000000	14
15	S-CD	16	0	0	0	0	0	0	0			15
16	S-CO	8	0	2	0	0	0	6	0	5.0000000	70.000000	16
17	S-CR	9	0	3	0	0	0	4	0	10.000000	70.000000	17
18	S-CU	0	0	1	1	0	0	14	0	5.0000000	50.000000	18
19	S-LA	11	0	0	0	0	0	5	0	20.000000	50.000000	19
20	S-MO	15	0	0	0	0	0	1	0	200.00000	200.00000	20
21	S-NB	12	0	2	0	0	0	2	0	20.000000	20.000000	21
22	S-NI	11	0	0	0	0	0	5	0	5.0000000	50.000000	22
23	S-PB	0	0	0	0	0	0	16	0	15.000000	50.000000	23
24	S-SB	16	0	0	0	0	0	0	0			24
25	S-SC	7	0	1	0	0	0	8	0	5.0000000	10.000000	25
26	S-SN	16	0	0	0	0	0	0	0			26
27	S-SR	1	0	2	0	0	0	13	0	100.00000	500.00000	27
28	S-V	5	0	1	0	0	0	10	0	15.000000	100.00000	28
29	S-W	15	0	0	0	0	0	1	0	500.00000	500.00000	29
30	S-Y	2	0	0	0	0	0	14	0	10.000000	50.000000	30
31	S-ZN	15	0	0	0	0	0	1	0	300.00000	300.00000	31
32	S-ZR	2	0	0	0	0	0	14	0	20.000000	200.00000	32
33	S-TH	16	0	0	0	0	0	0	0			33
34	AA-ZN	0	0	3	0	0	0	13	0	5.0000000	120.00000	34

Table 1--continued

DDO10 FISHER-K STATISTICS - U S G S STATPAC (06/08/80)

DATE 6/13/80

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
1	LATITUDE	32.383681	0.0442581	0.0019588	1.67084850-05	0.1927347	-4.00314910-06	-1.0433554	1
2	LONGITUDE	110.83536	0.0666084	0.0044367	2.38641650-06	0.0080753	-4.25517440-06	-0.2161730	2
3	S-FEX	2.3500000	3.5717409	12.757333	152.71771	3.3515798	1959.1543	12.037847	3
4	S-MGX	0.3481250	0.3367337	0.1133896	0.0388183	1.0166627	-0.0050202	-0.3904587	4
5	S-CAX	0.6218750	0.4949642	0.2449896	0.1206511	0.9949698	-0.0209136	-0.3484446	5
6	S-TIX	0.1053125	0.0960810	0.0092316	9.16689970-04	1.0334980	1.10196830-05	0.1293060	6
7	S-MN	425.00000	379.91227	144333.33	98828571.	1.8023227	7.16779760+10	3.4407447	7
8	S-AG								8
9	S-AS								9
10	S-AU								10
11	S-E	70.000000							11
12	S-BA	625.00000	380.35072	144666.67	44571429.	0.8100351	-3.07838830+08	-0.0147091	12
13	S-BE	2.9230769	2.4819864	6.1602564	34.525350	2.2580830	206.48412	5.4411297	13
14	S-BI	15.000000							14
15	S-CD								15
16	S-CO	21.166667	24.539084	602.16667	32326.667	2.1876904	1802367.2	4.9706118	16
17	S-CR	32.500000	26.299556	691.66667	26250.000	1.4430588	1069166.7	2.2348672	17
18	S-CU	19.928571	15.720953	247.14835	3896.6209	1.0028860	-8053.3831	-0.1318448	18
19	S-LA	40.000000	14.142136	200.00000	-2500.0000	-0.8838835	-70000.000	-1.7500000	19
20	S-NO	200.00000							20
21	S-NB	20.000000	0.0	0.0					21
22	S-NI	22.400000	18.474306	341.30000	5220.6000	0.8279726	-17440.300	-0.1497205	22
23	S-PB	25.312500	13.098187	171.56250	2968.5268	1.3210140	8072.0295	0.2742446	23
24	S-SB								24
25	S-SC	7.2500000	1.9086270	3.6428571	3.5714286	0.5136636	-8.2285714	-0.6200692	25
26	S-SN								26
27	S-SR	269.23077	142.21237	20224.359	2662150.3	0.9255938	-2.48363930+08	-0.6072101	27
28	S-V	51.500000	36.670454	1344.7222	28837.500	0.5848018	-3241167.7	-1.7924058	28
29	S-W	500.00000							29
30	S-Y	21.785714	13.672986	186.95055	3457.4176	1.3525761	32198.114	0.9212488	30
31	S-ZN	300.00000							31
32	S-ZR	95.000000	56.670437	3211.5385	60576.923	0.3328415	-10915210.	-1.0582928	32
33	S-TH								33
34	AA-ZN	42.307692	35.626265	1269.2308	53787.150	1.1895088	731955.42	0.4543635	34

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

K3 and K4 are intermediary values used to calculate skewness and kurtosis.

water

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	21	0	32.337500	32.439722	1
2	LONGITUD	0	0	0	0	0	0	21	0	110.73361	110.91472	2
3	AA-AG	0	0	0	0	0	0	21	0	0.2000000	1.0100000	3
4	AA-AS	0	0	0	0	0	0	21	0	0.3900000	2.0400000	4
5	AA-CA	0	0	0	0	0	0	21	0	1.1500000	62.500000	5
6	AA-CU	0	0	0	0	0	0	21	0	1.3400000	72.400000	6
7	AA-FE	0	0	0	0	0	0	21	0	90.000000	2070.0000	7
8	AA-K	0	0	0	0	0	0	21	0	0.6000000	8.5000000	8
9	AA-MG	0	0	0	0	0	0	21	0	0.4500000	15.000000	9
10	AA-MO	0	0	0	0	0	0	21	0	0.3300000	3.4800000	10
11	AA-NA	0	0	0	0	0	0	21	0	4.7000000	66.200000	11
12	AA-PB	0	0	0	0	0	0	21	0	0.0400000	4.3100000	12
13	AA-ZN	0	0	0	0	0	0	21	0	4.3300000	280.00000	13
14	SI-F	0	0	0	0	0	0	21	0	0.0450000	0.3780000	14
15	SI-CL	0	0	0	0	0	0	21	0	1.0400000	15.300000	15
16	SO4--	0	0	0	0	0	0	21	0	0.1420000	33.000000	16
17	ALKALINE	0	0	0	0	0	0	21	0	0.6870000	281.00000	17
18	SP COND	0	0	0	0	0	0	21	0	40.000000	400.00000	18
19	PH	0	0	0	0	0	0	21	0	6.0000000	9.2000000	19

Table 1--continued

D0010 FISHER-K STATISTICS - U S G S STATPAC (06/08/80)

DATE 6/13/80

NO	COLUMN	K1 MEAN	SQRT(K2) STD DEVIATION	K2 VARIANCE	K3	G1 SKEWNESS	K4	G2 KURTOSIS	NO
1	LATITUDE	32.393638	0.0321363	0.0010327	-7.5222019D-06	-0.2266502	-1.2890173D-06	-1.2085750	1
2	LONGITUD	110.83251	0.0557911	0.0031126	-4.1149077D-05	-0.2369551	-1.0558651D-05	-1.0898071	2
3	AA-AG	0.4352381	0.2138836	0.0457462	0.0129983	1.3284733	0.0033927	1.6211853	3
4	AA-AS	0.9357143	0.5367362	0.2880857	0.1473674	0.9530568	-0.0375643	-0.4526180	4
5	AA-CA	18.342857	16.391563	268.68332	6601.2518	1.4988744	123148.64	1.7058789	5
6	AA-CU	12.334762	17.086724	291.95614	13129.781	2.6319708	633483.14	7.4318994	6
7	AA-FE	326.90476	430.98572	185748.69	2.9002110D+08	3.6227717	5.0558094D+11	14.653426	7
8	AA-K	2.0909524	1.6805115	2.8241190	14.220910	2.9964214	87.724094	10.998992	8
9	AA-MG	4.9523810	4.4035178	19.390969	114.33210	1.3389640	197.43793	0.5250874	9
10	AA-MO	0.8857143	0.8418704	0.7087457	1.3243792	2.2196101	2.2177377	4.4149855	10
11	AA-NA	25.261905	16.235624	263.59548	3929.6005	0.9182088	44619.246	0.6421645	11
12	AA-PB	0.7509524	0.9058361	0.8205390	2.4426100	3.2862852	8.5670518	12.724270	12
13	AA-ZN	43.756667	73.176047	5354.7338	942303.80	2.4048285	1.5801492D+08	5.5108973	13
14	SI-F	0.1469048	0.0988584	0.0097730	0.0011302	1.1697578	3.9885262D-05	0.4175971	14
15	SI-CL	6.7128571	4.2715900	18.246481	42.046715	0.5394651	-292.55250	-0.8787100	15
16	SO4--	8.5358095	9.8045437	96.129077	1382.8525	1.4672148	8498.8889	0.9197136	16
17	ALKALINE	83.989857	84.063893	7066.7382	711293.97	1.1973486	10113084.	0.2025096	17
18	SP COND	156.04762	108.29380	11727.548	1430035.5	1.1259939	17185712.	0.1249548	18
19	PH	7.3428571	0.7864931	0.6185714	0.2410985	0.4955754	0.0730608	0.1909434	19

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

K3 and K4 are intermediary values used to calculate skewness and kurtosis.

Table 2

00036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76) Sediments

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 3 (S-FEX)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
-8.400E-02	- 8.267E-02	2	2	1.40	1.40	2.975E+00	-2.303E+00
8.267E-02	- 2.493E-01	1	3	0.70	2.10	9.937E+00	-9.836E+00
2.493E-01	- 4.160E-01	31	34	21.68	23.78	2.234E+01	-2.095E+01
4.160E-01	- 5.827E-01	43	77	30.07	53.85	3.381E+01	-3.253E+01
5.827E-01	- 7.493E-01	36	113	25.17	79.02	3.446E+01	-3.341E+01
7.493E-01	- 9.160E-01	15	128	10.49	89.51	2.365E+01	-2.302E+01
9.160E-01	- 1.083E+00	8	136	5.59	95.10	1.093E+01	-1.020E+01
1.083E+00	- 1.249E+00	4	140	2.80	97.90	4.222E+00	-3.274E+00
	G	3	143	2.10	100.00	6.880E-01	7.770E+00
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.278E+02

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

9.985E-01 X
 1.466E+00 X
 2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 4.634E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 6.802E+00 XXXXXXXXX
 9.985E+00 XXXXXX
 1.466E+01 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 1.50000E+01
 GEOMETRIC MEAN = 3.76258E+00
 GEOMETRIC DEVIATION = 1.74322E+00
 VARIANCE OF LOGS = 5.82515E-02

PERCENT TABLE FOR VARIABLE 3 (S-FEX) 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 DATA VALUE ANTI LOG OF VALUE
 PERCENTILE

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 4 (S-MGX)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-1.084E+00	-9.173E-01	2	2	1.40	1.40	3.111E-01	6.118E+00
-9.173E-01	-7.507E-01	2	4	1.40	2.80	1.954E+00	-9.303E-01
-7.507E-01	-5.840E-01	8	12	5.59	8.39	7.889E+00	-6.875E+00
-5.840E-01	-4.173E-01	11	23	7.69	16.08	2.050E+01	-1.996E+01
-4.173E-01	-2.507E-01	43	66	30.07	46.15	3.428E+01	-3.303E+01
-2.507E-01	-8.400E-02	41	107	28.67	74.83	3.694E+01	-3.583E+01
-8.400E-02	8.267E-02	24	131	16.78	91.61	2.564E+01	-2.471E+01
8.267E-02	2.493E-01	9	140	6.29	97.90	1.146E+01	-1.068E+01
2.493E-01	4.160E-01	3	143	2.10	100.00	3.986E+00	-3.234E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.291E+02

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

9.985E-02 X
 1.466E-01 X
 2.151E-01 XXXXXX
 3.157E-01 XXXXXXXX
 4.634E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.802E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.985E-01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+00 XXXXXX
 2.151E+00 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E-01
 MAXIMUM ANTILOG = 2.00000E+00
 GEOMETRIC MEAN = 5.99283E-01
 GEOMETRIC DEVIATION = 1.76433E+00
 VARIANCE OF LOGS = 6.08020E-02

PERCENT TABLE FOR VARIABLE 4 (S-MGX) 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 DATA VALUE ANTI LOG OF VALUE

PERCENTILE

Table 2--continued

50.00	-0.228307E+00	0.591143E+00
75.00	-0.822619E-01	0.827443E+00
90.00	0.666967E-01	0.116600E+01
95.00	0.172484E+00	0.148759E+01
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

PERCENTILE	MINIMUM	MAXIMUM	PERCENTILE	MINIMUM	MAXIMUM
50.00	-0.228307E+00	0.591143E+00	50.00	-0.228307E+00	0.591143E+00
75.00	-0.822619E-01	0.827443E+00	75.00	-0.822619E-01	0.827443E+00
90.00	0.666967E-01	0.116600E+01	90.00	0.666967E-01	0.116600E+01
95.00	0.172484E+00	0.148759E+01	95.00	0.172484E+00	0.148759E+01
98.00	0.100000E+36	0.100000E+36	98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36	99.00	0.100000E+36	0.100000E+36

MINIMUM AND MAXIMUM
VALUES FOR VARIABLE 5 IS-02

MINIMUM AND MAXIMUM
VALUES FOR VARIABLE 5 IS-02
MINIMUM AND MAXIMUM
VALUES FOR VARIABLE 5 IS-02
MINIMUM AND MAXIMUM
VALUES FOR VARIABLE 5 IS-02
MINIMUM AND MAXIMUM
VALUES FOR VARIABLE 5 IS-02
MINIMUM AND MAXIMUM
VALUES FOR VARIABLE 5 IS-02

THE FOLLOWING STATISTICS ARE COMPUTED FOR ALL VARIABLES EXCEPT 5 IS-02

MINIMUM VALUE = -0.228307E+00
MAXIMUM VALUE = 0.591143E+00
MEAN VALUE = -0.000000E+00

Table 2 --continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 5 (S-CAZ)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00		
-4.170E-01	-2.503E-01	1	1	0.70	0.70	2.377E-01	3.969E+00
-2.503E-01	-8.367E-02	2	3	1.40	2.10	2.475E+00	-1.666E+00
-8.367E-02	8.300E-02	9	12	6.29	8.39	1.300E+01	-1.231E+01
8.300E-02	2.497E-01	31	43	21.68	30.07	3.464E+01	-3.374E+01
2.497E-01	4.163E-01	54	97	37.76	67.83	4.688E+01	-4.573E+01
4.163E-01	5.830E-01	33	130	23.08	90.91	3.227E+01	-3.125E+01
5.830E-01	7.497E-01	10	140	6.99	97.90	1.129E+01	-1.040E+01
7.497E-01	9.163E-01	3	143	2.10	100.00	2.187E+00	-8.156E-01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.320E+02

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

4.638E-01 x
6.808E-01 x
9.992E-01 xxxxxx
1.467E+00 xxxxxxxxxxxxxxxxxxxxxxxx
2.153E+00 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
3.160E+00 xxxxxxxxxxxxxxxxxxxxxxxxxxxx
4.638E+00 xxxxxx
6.808E+00 xx

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-01
MAXIMUM ANTILOG = 7.00000E+00
GEOMETRIC MEAN = 2.11004E+00
GEOMETRIC DEVIATION = 1.57297E+00
VARIANCE OF LOGS = 3.86985E-02

PERCENT TABLE FOR VARIABLE 5 (S-CAZ) BY LINEARINTERPOLATION 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
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D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-1.250E+00	-1.083E+00	4	4	2.80	2.80	2.732E+00	-1.267E+00
-1.083E+00	-9.167E-01	8	12	5.59	8.39	7.562E+00	-6.505E+00
-9.167E-01	-7.500E-01	10	22	6.99	15.38	1.583E+01	-1.520E+01
-7.500E-01	-5.833E-01	33	55	23.08	38.46	2.508E+01	-2.376E+01
-5.833E-01	-4.167E-01	26	81	18.18	56.64	3.005E+01	-2.918E+01
-4.167E-01	-2.500E-01	26	107	18.18	74.83	2.723E+01	-2.628E+01
-2.500E-01	-8.333E-02	17	124	11.89	86.71	1.867E+01	-1.776E+01
-8.333E-02	8.334E-02	16	140	11.19	97.90	1.491E+01	-1.384E+01
G		3	143	2.10	100.00	9.273E-01	4.633E+00
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.292E+02

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

```

6.813E-02 xxx
1.000E-01 xxxxxx
1.468E-01 xxxxxx
2.154E-01 xxxxxxxxxxxxxxxxxxxxxxxx
3.162E-01 xxxxxxxxxxxxxxxxxxxxxxxx
4.642E-01 xxxxxxxxxxxxxxxxxxxxxxxx
6.813E-01 xxxxxxxxxxxxxxxx
1.000E+00 xxxxxxxxxxxxxxxx

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 7.00000E-02
MAXIMUM ANTILOG      = 1.00000E+00
GEOMETRIC MEAN       = 3.26912E-01
GEOMETRIC DEVIATION  = 2.02817E+00
VARIANCE OF LOGS     = 9.43133E-02

```

PERCENT TABLE FOR VARIABLE 6 (S-TIX) 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
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0.332995E+00
0.565527E+00
0.923905E+00
0.109675E+01
0.100000E+36
0.100000E+36

-0.477563E+00
-0.247547E+00
-0.343726E-01
0.401067E-01
0.100000E+36
0.100000E+36

50.00
75.00
90.00
95.00
98.00
99.00

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
2.416E+00	2.583E+00	2	2	1.40	1.40	2.858E+00	-2.158E+00
2.583E+00	2.749E+00	11	13	7.69	9.09	7.523E+00	-6.061E+00
2.749E+00	2.916E+00	15	28	10.49	19.58	1.527E+01	-1.429E+01
2.916E+00	3.083E+00	31	59	21.68	41.26	2.391E+01	-2.261E+01
3.083E+00	3.249E+00	21	80	14.69	55.94	2.887E+01	-2.815E+01
3.249E+00	3.416E+00	21	101	14.69	70.63	2.690E+01	-2.612E+01
3.416E+00	3.583E+00	16	117	11.19	81.82	1.933E+01	-1.850E+01
3.583E+00	3.749E+00	15	132	10.49	92.31	1.727E+01	-1.640E+01
G		11	143	7.69	100.00	1.064E+00	9.276E+01
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-4.153E+01

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

3.157E+02 X
 4.634E+02 XXXXXXXX
 6.802E+02 XXXXXXXXXX
 9.985E+02 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+03 XXXXXXXXXXXXXXXXXX
 2.151E+03 XXXXXXXXXXXXXXXXXX
 3.157E+03 XXXXXXXXXXXXXX
 4.634E+03 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+02
 MAXIMUM ANTILOG = 5.00000E+03
 GEOMETRIC MEAN = 1.45397E+03
 GEOMETRIC DEVIATION = 2.00405E+00
 VARIANCE OF LOGS = 9.11490E-02

PERCENT TABLE FOR VARIABLE 7 (S-MN) BY LINEARINTERPOLATION 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 DATA VALUE ANTI LOG OF VALUE
 PERCENTILE

50.00	0.318187E+01	0.152011E+04
75.00	0.348111E+01	0.302765E+04
90.00	0.371267E+01	0.516023E+04
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

LINE	UNIT	QTY	PRICE	AMOUNT	TAXES	TOTAL	TOTAL TAX
1	1	1	1.00	1.00		1.00	
2	1	1	1.00	1.00		1.00	
3	1	1	1.00	1.00		1.00	
4	1	1	1.00	1.00		1.00	
5	1	1	1.00	1.00		1.00	
6	1	1	1.00	1.00		1.00	
7	1	1	1.00	1.00		1.00	
8	1	1	1.00	1.00		1.00	
9	1	1	1.00	1.00		1.00	
10	1	1	1.00	1.00		1.00	
11	1	1	1.00	1.00		1.00	
12	1	1	1.00	1.00		1.00	
13	1	1	1.00	1.00		1.00	
14	1	1	1.00	1.00		1.00	
15	1	1	1.00	1.00		1.00	
16	1	1	1.00	1.00		1.00	
17	1	1	1.00	1.00		1.00	
18	1	1	1.00	1.00		1.00	
19	1	1	1.00	1.00		1.00	
20	1	1	1.00	1.00		1.00	
21	1	1	1.00	1.00		1.00	
22	1	1	1.00	1.00		1.00	
23	1	1	1.00	1.00		1.00	
24	1	1	1.00	1.00		1.00	
25	1	1	1.00	1.00		1.00	
26	1	1	1.00	1.00		1.00	
27	1	1	1.00	1.00		1.00	
28	1	1	1.00	1.00		1.00	
29	1	1	1.00	1.00		1.00	
30	1	1	1.00	1.00		1.00	
31	1	1	1.00	1.00		1.00	
32	1	1	1.00	1.00		1.00	
33	1	1	1.00	1.00		1.00	
34	1	1	1.00	1.00		1.00	
35	1	1	1.00	1.00		1.00	
36	1	1	1.00	1.00		1.00	
37	1	1	1.00	1.00		1.00	
38	1	1	1.00	1.00		1.00	
39	1	1	1.00	1.00		1.00	
40	1	1	1.00	1.00		1.00	
41	1	1	1.00	1.00		1.00	
42	1	1	1.00	1.00		1.00	
43	1	1	1.00	1.00		1.00	
44	1	1	1.00	1.00		1.00	
45	1	1	1.00	1.00		1.00	
46	1	1	1.00	1.00		1.00	
47	1	1	1.00	1.00		1.00	
48	1	1	1.00	1.00		1.00	
49	1	1	1.00	1.00		1.00	
50	1	1	1.00	1.00		1.00	
51	1	1	1.00	1.00		1.00	
52	1	1	1.00	1.00		1.00	
53	1	1	1.00	1.00		1.00	
54	1	1	1.00	1.00		1.00	
55	1	1	1.00	1.00		1.00	
56	1	1	1.00	1.00		1.00	
57	1	1	1.00	1.00		1.00	
58	1	1	1.00	1.00		1.00	
59	1	1	1.00	1.00		1.00	
60	1	1	1.00	1.00		1.00	
61	1	1	1.00	1.00		1.00	
62	1	1	1.00	1.00		1.00	
63	1	1	1.00	1.00		1.00	
64	1	1	1.00	1.00		1.00	
65	1	1	1.00	1.00		1.00	
66	1	1	1.00	1.00		1.00	
67	1	1	1.00	1.00		1.00	
68	1	1	1.00	1.00		1.00	
69	1	1	1.00	1.00		1.00	
70	1	1	1.00	1.00		1.00	
71	1	1	1.00	1.00		1.00	
72	1	1	1.00	1.00		1.00	
73	1	1	1.00	1.00		1.00	
74	1	1	1.00	1.00		1.00	
75	1	1	1.00	1.00		1.00	
76	1	1	1.00	1.00		1.00	
77	1	1	1.00	1.00		1.00	
78	1	1	1.00	1.00		1.00	
79	1	1	1.00	1.00		1.00	
80	1	1	1.00	1.00		1.00	
81	1	1	1.00	1.00		1.00	
82	1	1	1.00	1.00		1.00	
83	1	1	1.00	1.00		1.00	
84	1	1	1.00	1.00		1.00	
85	1	1	1.00	1.00		1.00	
86	1	1	1.00	1.00		1.00	
87	1	1	1.00	1.00		1.00	
88	1	1	1.00	1.00		1.00	
89	1	1	1.00	1.00		1.00	
90	1	1	1.00	1.00		1.00	
91	1	1	1.00	1.00		1.00	
92	1	1	1.00	1.00		1.00	
93	1	1	1.00	1.00		1.00	
94	1	1	1.00	1.00		1.00	
95	1	1	1.00	1.00		1.00	
96	1	1	1.00	1.00		1.00	
97	1	1	1.00	1.00		1.00	
98	1	1	1.00	1.00		1.00	
99	1	1	1.00	1.00		1.00	
100	1	1	1.00	1.00		1.00	

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DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		3	3	2.10	2.10		
L		62	65	43.36	45.45		
T		0	65	0.00	45.45	1.386E+01	1.887E+02
9.160E-01	1.083E+00	48	113	33.57	79.02	7.664E+01	-7.601E+01
1.083E+00	1.249E+00	20	133	13.99	93.01	4.907E+01	-4.867E+01
1.249E+00	1.416E+00	8	141	5.59	98.60	3.405E+00	-1.055E+00
1.416E+00	1.583E+00	2	143	1.40	100.00	2.134E-02	9.372E+01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	1.566E+02

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

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXX
 2.151E+01 XXXXXX
 3.157E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.22535E+01
 GEOMETRIC DEVIATION = 1.33187E+00
 VARIANCE OF LOGS = 1.54909E-02

PERCENT TABLE FOR VARIABLE 11 (S-B) BY LINEARINTERPOLATION 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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.121350E+01	0.163494E+02
95.00	0.130871E+01	0.203568E+02
98.00	0.139808E+01	0.250083E+02
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
2.416E+00	2.583E+00	2	2	1.40	1.40	8.350E-01	1.560E+00
2.583E+00	2.749E+00	5	7	3.50	4.90	5.384E+00	-4.455E+00
2.749E+00	2.916E+00	19	26	13.29	18.18	1.925E+01	-1.827E+01
2.916E+00	3.083E+00	36	62	25.17	43.36	3.827E+01	-3.733E+01
3.083E+00	3.249E+00	40	102	27.97	71.33	4.233E+01	-4.138E+01
3.249E+00	3.416E+00	32	134	22.38	93.71	2.605E+01	-2.483E+01
3.416E+00	3.583E+00	7	141	4.90	98.60	8.919E+00	-8.134E+00
3.583E+00	3.749E+00	2	143	1.40	100.00	1.883E+00	-8.215E-01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.429E+02	-1.337E+02

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

3.157E+02 X
 4.634E+02 XXX
 6.802E+02 XXXXXXXXXXXXXXXX
 9.985E+02 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+03 XXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+03 XXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+03 XXXXX
 4.634E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+02
 MAXIMUM ANTILOG = 5.00000E+03
 GEOMETRIC MEAN = 1.29220E+03
 GEOMETRIC DEVIATION = 1.63007E+00
 VARIANCE OF LOGS = 4.50311E-02

PERCENT TABLE FOR VARIABLE 12 (S-BA) BY LINEARINTERPOLATION 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	DATA VALUE	ANTI LOG OF VALUE
PERCENTILE		

Table 2--continued

50.00	0.312225E+01	0.132511E+04
75.00	0.327668E+01	0.189094E+04
90.00	0.338840E+01	0.244567E+04
95.00	0.346005E+01	0.288436E+04
98.00	0.356219E+01	0.364916E+04
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		2	2	1.40	1.40		
L		0	2	0.00	1.40		
T		0	2	0.00	1.40	6.937E+00	3.514E+00
-8.400E-02	- 8.267E-02	30	32	20.98	22.38	2.604E+01	-2.489E+01
8.267E-02	- 2.493E-01	61	93	42.66	65.03	4.906E+01	-4.782E+01
2.493E-01	- 4.160E-01	33	126	23.08	88.11	4.182E+01	-4.103E+01
4.160E-01	- 5.827E-01	9	135	6.29	94.41	1.612E+01	-1.556E+01
5.827E-01	- 7.493E-01	6	141	4.20	98.60	2.796E+00	-6.492E-01
7.493E-01	- 9.160E-01	2	143	1.40	100.00	2.244E-01	8.688E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.177E+02

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

9.985E-01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+00 XX
 2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+00 XXXXXX
 4.634E+00 XXXX
 6.802E+00 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 7.00000E+00
 GEOMETRIC MEAN = 1.65508E+00
 GEOMETRIC DEVIATION = 1.51377E+00
 VARIANCE OF LOGS = 3.24218E-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
50.00	0.190591E+00	0.155092E+01
75.00	0.321304E+00	0.209558E+01
90.00	0.466001E+00	0.292416E+01
95.00	0.606279E+00	0.403905E+01

98.00 0.725446E+00 0.531430E+01
 99.00 0.100000E+36 0.100000E+36

ADJUST	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
1	11	11	11	11	11	11	11
2	11	11	11	11	11	11	11
3	11	11	11	11	11	11	11
4	11	11	11	11	11	11	11
5	11	11	11	11	11	11	11
6	11	11	11	11	11	11	11
7	11	11	11	11	11	11	11
8	11	11	11	11	11	11	11
9	11	11	11	11	11	11	11
10	11	11	11	11	11	11	11
11	11	11	11	11	11	11	11
12	11	11	11	11	11	11	11
13	11	11	11	11	11	11	11
14	11	11	11	11	11	11	11
15	11	11	11	11	11	11	11
16	11	11	11	11	11	11	11
17	11	11	11	11	11	11	11
18	11	11	11	11	11	11	11
19	11	11	11	11	11	11	11
20	11	11	11	11	11	11	11
21	11	11	11	11	11	11	11
22	11	11	11	11	11	11	11
23	11	11	11	11	11	11	11
24	11	11	11	11	11	11	11
25	11	11	11	11	11	11	11
26	11	11	11	11	11	11	11
27	11	11	11	11	11	11	11
28	11	11	11	11	11	11	11
29	11	11	11	11	11	11	11
30	11	11	11	11	11	11	11
31	11	11	11	11	11	11	11
32	11	11	11	11	11	11	11
33	11	11	11	11	11	11	11
34	11	11	11	11	11	11	11
35	11	11	11	11	11	11	11
36	11	11	11	11	11	11	11
37	11	11	11	11	11	11	11
38	11	11	11	11	11	11	11
39	11	11	11	11	11	11	11
40	11	11	11	11	11	11	11
41	11	11	11	11	11	11	11
42	11	11	11	11	11	11	11
43	11	11	11	11	11	11	11
44	11	11	11	11	11	11	11
45	11	11	11	11	11	11	11
46	11	11	11	11	11	11	11
47	11	11	11	11	11	11	11
48	11	11	11	11	11	11	11
49	11	11	11	11	11	11	11
50	11	11	11	11	11	11	11
51	11	11	11	11	11	11	11
52	11	11	11	11	11	11	11
53	11	11	11	11	11	11	11
54	11	11	11	11	11	11	11
55	11	11	11	11	11	11	11
56	11	11	11	11	11	11	11
57	11	11	11	11	11	11	11
58	11	11	11	11	11	11	11
59	11	11	11	11	11	11	11
60	11	11	11	11	11	11	11
61	11	11	11	11	11	11	11
62	11	11	11	11	11	11	11
63	11	11	11	11	11	11	11
64	11	11	11	11	11	11	11
65	11	11	11	11	11	11	11
66	11	11	11	11	11	11	11
67	11	11	11	11	11	11	11
68	11	11	11	11	11	11	11
69	11	11	11	11	11	11	11
70	11	11	11	11	11	11	11
71	11	11	11	11	11	11	11
72	11	11	11	11	11	11	11
73	11	11	11	11	11	11	11
74	11	11	11	11	11	11	11
75	11	11	11	11	11	11	11
76	11	11	11	11	11	11	11
77	11	11	11	11	11	11	11
78	11	11	11	11	11	11	11
79	11	11	11	11	11	11	11
80	11	11	11	11	11	11	11
81	11	11	11	11	11	11	11
82	11	11	11	11	11	11	11
83	11	11	11	11	11	11	11
84	11	11	11	11	11	11	11
85	11	11	11	11	11	11	11
86	11	11	11	11	11	11	11
87	11	11	11	11	11	11	11
88	11	11	11	11	11	11	11
89	11	11	11	11	11	11	11
90	11	11	11	11	11	11	11
91	11	11	11	11	11	11	11
92	11	11	11	11	11	11	11
93	11	11	11	11	11	11	11
94	11	11	11	11	11	11	11
95	11	11	11	11	11	11	11
96	11	11	11	11	11	11	11
97	11	11	11	11	11	11	11
98	11	11	11	11	11	11	11
99	11	11	11	11	11	11	11
100	11	11	11	11	11	11	11

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THE FOLLOWING TABLES ARE PRESENTED FOR THE COMPLETION OF THE DATA

TABLE 1
 TABLE 2
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THE FOLLOWING TABLES ARE PRESENTED FOR THE COMPLETION OF THE DATA
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TABLE 1
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 TABLE 92
 TABLE 93
 TABLE 94
 TABLE 95
 TABLE 96
 TABLE 97
 TABLE 98
 TABLE 99
 TABLE 100

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		11	11	7.69	7.69		
L		6	17	4.20	11.89		
T		0	17	0.00	11.89	8.776E+00	7.707E+00
5.830E-01	7.497E-01	33	50	23.08	34.97	2.009E+01	-1.845E+01
7.497E-01	9.163E-01	22	72	15.38	50.35	3.544E+01	-3.482E+01
9.163E-01	1.083E+00	28	100	19.58	69.93	3.862E+01	-3.789E+01
1.083E+00	1.250E+00	25	125	17.48	87.41	2.600E+01	-2.504E+01
1.250E+00	1.416E+00	14	139	9.79	97.20	1.081E+01	-9.520E+00
1.416E+00	1.583E+00	3	142	2.10	99.30	2.776E+00	-1.695E+00
1.583E+00	1.750E+00	1	143	0.70	100.00	4.847E-01	1.579E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.181E+02

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

4.638E+00 XXXXXXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXX
3.160E+01 XX
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 = 9.53688E+00
GEOMETRIC DEVIATION = 1.70284E+00
VARIANCE OF LOGS = 5.34419E-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
50.00	0.912546E+00	0.817610E+01
75.00	0.113133E+01	0.135311E+02

90.00	0.129372E+01	0.196660E+02
95.00	0.137883E+01	0.239241E+02
98.00	0.147967E+01	0.301765E+02
99.00	0.155911E+01	0.362337E+02

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FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		1	1	0.70	0.70		
L		0	1	0.00	0.70		
T		0	1	0.00	0.70	4.641E+00	2.856E+00
9.160E-01	1.083E+00	7	8	4.90	5.59	8.410E+00	-7.577E+00
1.083E+00	1.249E+00	19	27	13.29	18.88	1.642E+01	-1.526E+01
1.249E+00	1.416E+00	28	55	19.58	38.46	2.478E+01	-2.364E+01
1.416E+00	1.583E+00	40	95	27.97	66.43	2.890E+01	-2.752E+01
1.583E+00	1.749E+00	17	112	11.89	78.32	2.607E+01	-2.542E+01
1.749E+00	1.916E+00	17	129	11.89	90.21	1.818E+01	-1.725E+01
1.916E+00	2.083E+00	5	134	3.50	93.71	9.801E+00	-9.290E+00
2.083E+00	2.249E+00	5	139	3.50	97.20	4.084E+00	-2.860E+00
2.249E+00	2.416E+00	2	141	1.40	98.60	1.315E+00	2.053E-01
2.416E+00	2.583E+00	1	142	0.70	99.30	3.274E-01	2.727E+00
2.583E+00	2.749E+00	1	143	0.70	100.00	7.348E-02	1.354E+01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.095E+02

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

```

9.985E+00 xxxxx
1.466E+01 xxxxxxxxxxxxxx
2.151E+01 xxxxxxxxxxxxxxxxxxxxxx
3.157E+01 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
4.634E+01 xxxxxxxxxxxxxx
6.802E+01 xxxxxxxxxxxxxx
9.985E+01 xxx
1.466E+02 xxx
2.151E+02 x
3.157E+02 x
4.635E+02 x

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.00000E+01
MAXIMUM ANTILOG      = 5.00000E+02
GEOMETRIC MEAN       = 3.30740E+01
GEOMETRIC DEVIATION  = 2.10469E+00
VARIANCE OF LOGS     = 1.04451E-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
50.00	0.148475E+01	0.305317E+02
75.00	0.170277E+01	0.504390E+02
90.00	0.191306E+01	0.818579E+02
95.00	0.214434E+01	0.139423E+03
98.00	0.234434E+01	0.220971E+03
99.00	0.251100E+01	0.324342E+03

TOTALS (50.00) = 1.4720E+02

1.4720E+02

1.4720E+02

STATISTICS FOR VARIABLE 10 (1000)
REPRESENTED ARE EXPONENTS OF 10

0.0000E+00
1.4720E+01
2.1913E+01
3.1703E+01
4.4344E+01
6.1000E+01
9.1000E+01
1.4720E+02
2.1913E+02

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE NORMAL DISTRIBUTION

MEAN = 1.4720E+01
STANDARD DEVIATION = 2.1913E+01
GEOMETRIC MEAN = 3.1703E+01
GEOMETRIC STANDARD DEVIATION = 4.4344E+01
VARIANCE = 1.4720E+02

STATISTICS FOR VARIABLE 10 (1000) - 2.1913E+01
REPRESENTED ARE EXPONENTS OF 10

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00		
9.160E-01	- 1.083E+00	4	4	2.80	2.80	3.311E+00	-2.103E+00
1.083E+00	- 1.249E+00	10	14	6.99	9.79	1.079E+01	-9.868E+00
1.249E+00	- 1.416E+00	22	36	15.38	25.17	2.359E+01	-2.266E+01
1.416E+00	- 1.583E+00	33	69	23.08	48.25	3.457E+01	-3.362E+01
1.583E+00	- 1.749E+00	45	114	31.47	79.72	3.399E+01	-3.267E+01
1.749E+00	- 1.916E+00	20	134	13.99	93.71	2.242E+01	-2.153E+01
1.916E+00	- 2.083E+00	5	139	3.50	97.20	9.920E+00	-9.416E+00
2.083E+00	- 2.249E+00	3	142	2.10	99.30	2.942E+00	-1.922E+00
2.249E+00	- 2.416E+00	1	143	0.70	100.00	6.696E-01	8.238E-01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.422E+02	-1.330E+02

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

```

9.985E+00 xxx
1.466E+01 xxxxxxxx
2.151E+01 xxxxxxxxxxxxxxxx
3.157E+01 xxxxxxxxxxxxxxxxxxxxxxxx
4.634E+01 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
6.802E+01 xxxxxxxxxxxxxxxx
9.985E+01 xxx
1.466E+02 xx
2.151E+02 x

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.00000E+01
MAXIMUM ANTILOG      = 2.00000E+02
GEOMETRIC MEAN       = 3.76373E+01
GEOMETRIC DEVIATION  = 1.81668E+00
VARIANCE OF LOGS     = 6.72251E-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	DATA VALUE	ANTI LOG OF VALUE
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Table 2--continued

PERCENTILE

50.00	0.159193E+01	0.390775E+02
75.00	0.172433E+01	0.530072E+02
90.00	0.187184E+01	0.744450E+02
95.00	0.197767E+01	0.949880E+02
98.00	0.214600E+01	0.139960E+03
99.00	0.222545E+01	0.168053E+03

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	9	9	6.29	6.29		
	L	0	9	0.00	6.29		
	T	0	9	0.00	6.29	4.328E+00	5.044E+00
1.250E+00	- 1.417E+00	7	16	4.90	11.19	5.894E+00	-4.706E+00
1.417E+00	- 1.583E+00	5	21	3.50	14.69	1.069E+01	-1.022E+01
1.583E+00	- 1.750E+00	17	38	11.89	26.57	1.639E+01	-1.536E+01
1.750E+00	- 1.917E+00	17	55	11.89	38.46	2.127E+01	-2.047E+01
1.917E+00	- 2.083E+00	30	85	20.98	59.44	2.334E+01	-2.205E+01
2.083E+00	- 2.250E+00	17	102	11.89	71.33	2.166E+01	-2.088E+01
2.250E+00	- 2.417E+00	21	123	14.69	86.01	1.701E+01	-1.577E+01
2.417E+00	- 2.583E+00	6	129	4.20	90.21	1.129E+01	-1.076E+01
2.583E+00	- 2.750E+00	10	139	6.99	97.20	6.344E+00	-4.767E+00
2.750E+00	- 2.917E+00	2	141	1.40	98.60	3.014E+00	-2.350E+00
2.917E+00	- 3.083E+00	2	143	1.40	100.00	1.777E+00	-6.511E-01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.229E+02

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

2.154E+01 xxxxx
3.162E+01 xxx
4.642E+01 xxxxxxxxxxxxx
6.813E+01 xxxxxxxxxxxxx
1.000E+02 xxxxxxxxxxxxxxxxxxxxx
1.468E+02 xxxxxxxxxxxxx
2.154E+02 xxxxxxxxxxxxxxxxxxxxx
3.162E+02 xxxxx
4.642E+02 xxxxxxxx
6.813E+02 x
1.000E+03 x

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 1.13950E+02
GEOMETRIC DEVIATION = 2.35555E+00
VARIANCE OF LOGS = 1.38453E-01

PERCENT TABLE FOR VARIABLE 19 (S-LA) BY LINEARINTERPOLATION FROM FREQUENCY TABLE

Table 2--continued

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
50.00	0.200833E+01	0.101938E+03
75.00	0.229167E+01	0.195735E+03
90.00	0.257500E+01	0.375840E+03
95.00	0.269750E+01	0.498314E+03
98.00	0.284500E+01	0.699847E+03
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	93	93	65.03	65.03		
	L	11	104	7.69	72.73		
	T	0	104	0.00	72.73	1.311E+01	6.300E+02
5.830E-01	- 7.497E-01	18	122	12.59	85.31	6.285E+01	-6.257E+01
7.497E-01	- 9.163E-01	11	133	7.69	93.01	5.724E+01	-5.705E+01
9.163E-01	- 1.083E+00	4	137	2.80	95.80	9.524E+00	-9.104E+00
1.083E+00	- 1.250E+00	4	141	2.80	98.60	0.000E+00	0.000E+00
1.250E+00	- 1.416E+00	2	143	1.40	100.00	2.703E-01	7.128E+00
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	5.084E+02

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

```

4.638E+00 XXXXXXXXXXXXX
6.808E+00 XXXXXXXXX
9.992E+00 XXX
1.467E+01 XXX
2.153E+01 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 5.00000E+00
MAXIMUM ANTILOG      = 2.00000E+01
GEOMETRIC MEAN       = 7.09367E+00
GEOMETRIC DEVIATION  = 1.53920E+00
VARIANCE OF LOGS     = 3.50793E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.851182E+00	0.709876E+01
95.00	0.103508E+01	0.108414E+02
98.00	0.121383E+01	0.163619E+02
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 21 (S-NB)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	60	60	41.96	41.96		
	L	50	110	34.97	76.92		
	T	0	110	0.00	76.92	3.958E+01	1.253E+02
1.250E+00	- 1.417E+00	15	125	10.49	87.41	5.034E+01	-5.005E+01
1.417E+00	- 1.583E+00	7	132	4.90	92.31	3.797E+01	-3.778E+01
1.583E+00	- 1.750E+00	4	136	2.80	95.10	1.297E+01	-1.266E+01
1.750E+00	- 1.917E+00	3	139	2.10	97.20	1.997E+00	-4.947E-01
1.917E+00	- 2.083E+00	2	141	1.40	98.60	1.377E-01	1.439E+01
2.083E+00	- 2.250E+00	0	141	0.00	98.60	0.000E+00	0.000E+00
2.250E+00	- 2.417E+00	1	142	0.70	99.30	0.000E+00	0.000E+00
2.417E+00	- 2.583E+00	1	143	0.70	100.00	4.277E-03	2.338E+02
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	2.725E+02

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

2.154E+01 XXXXXXXXXXXX
3.162E+01 XXXXX
4.642E+01 XXX
6.813E+01 XX
1.000E+02 X
1.468E+02
2.154E+02 X
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 = 3.50254E+01
GEOMETRIC DEVIATION = 2.05814E+00
VARIANCE OF LOGS = 9.82670E-02

PERCENT TABLE FOR VARIABLE 21 (S-NB) BY LINEARINTERPOLATION 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 DATA VALUE ANTI LOG OF VALUE
PERCENTILE

Table 4--continued

50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.150476E+01	0.319715E+02
95.00	0.174375E+01	0.554308E+02
98.00	0.201167E+01	0.102723E+03
99.00	0.227334E+01	0.187644E+03

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DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		7	7	4.90	4.90		
L		6	13	4.20	9.09		
T		0	13	0.00	9.09	6.500E+00	6.499E+00
5.830E-01	7.497E-01	17	30	11.89	20.98	1.509E+01	-1.396E+01
7.497E-01	9.163E-01	28	58	19.58	40.56	2.906E+01	-2.810E+01
9.163E-01	1.083E+00	33	91	23.08	63.64	3.685E+01	-3.596E+01
1.083E+00	1.250E+00	27	118	18.88	82.52	3.077E+01	-2.989E+01
1.250E+00	1.416E+00	17	135	11.89	94.41	1.691E+01	-1.590E+01
1.416E+00	1.583E+00	3	138	2.10	96.50	6.115E+00	-5.625E+00
1.583E+00	1.750E+00	4	142	2.80	99.30	1.454E+00	1.296E+00
1.750E+00	1.916E+00	1	143	0.70	100.00	2.523E-01	3.711E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.179E+02

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

```

4.638E+00 XXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXX
3.160E+01 XX
4.638E+01 XXX
6.808E+01 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 5.00000E+00
MAXIMUM ANTILOG      = 7.00000E+01
GEOMETRIC MEAN       = 1.10212E+01
GEOMETRIC DEVIATION  = 1.75577E+00
VARIANCE OF LOGS     = 5.97648E-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
------------------------	------------	-------------------

Table 1--continued

50.00	0.984516E+00	0.964975E+01
75.00	0.118331E+01	0.152514E+02
90.00	0.135457E+01	0.226240E+02
95.00	0.146356E+01	0.290775E+02
98.00	0.167217E+01	0.470077E+02
99.00	0.173175E+01	0.539203E+02

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
1.250E+00	1.417E+00	8	8	5.59	5.59	3.275E+00	-8.329E-01
1.417E+00	1.583E+00	13	21	9.09	14.69	2.547E+01	-2.496E+01
1.583E+00	1.750E+00	77	98	53.85	68.53	6.012E+01	-5.884E+01
1.750E+00	1.917E+00	43	141	30.07	98.60	4.365E+01	-4.266E+01
1.917E+00	2.083E+00	2	143	1.40	100.00	1.035E+01	-1.016E+01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.429E+02	-1.375E+02

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

2.154E+01 xxxxxx
3.162E+01 xxxxxxxxx
4.642E+01 xxx
6.813E+01 xxx
1.000E+02 x

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 1.00000E+02
GEOMETRIC MEAN = 5.06630E+01
GEOMETRIC DEVIATION = 1.39759E+00
VARIANCE OF LOGS = 2.11355E-02

PERCENT TABLE FOR VARIABLE 23 (S-PB) BY LINEARINTERPOLATION 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
50.00	0.169264E+01	0.492767E+02
75.00	0.178585E+01	0.610736E+02
90.00	0.186899E+01	0.739594E+02
95.00	0.189671E+01	0.788328E+02
98.00	0.191333E+01	0.819096E+02
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	4	4	2.80	2.80		
	L	3	7	2.10	4.90		
	T	0	7	0.00	4.90	5.244E+00	5.878E-01
5.830E-01	- 7.497E-01	24	31	16.78	21.68	1.545E+01	-1.389E+01
7.497E-01	- 9.163E-01	34	65	23.78	45.45	3.242E+01	-3.137E+01
9.163E-01	- 1.083E+00	27	92	18.88	64.34	4.078E+01	-4.012E+01
1.083E+00	- 1.250E+00	19	111	13.29	77.62	3.076E+01	-3.014E+01
1.250E+00	- 1.416E+00	30	141	20.98	98.60	1.391E+01	-1.175E+01
1.416E+00	- 1.583E+00	2	143	1.40	100.00	4.441E+00	-3.990E+00
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.307E+02

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

4.638E+00 XXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXX
3.160E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 3.00000E+01
GEOMETRIC MEAN = 1.01431E+01
GEOMETRIC DEVIATION = 1.67333E+00
VARIANCE OF LOGS = 4.99888E-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
50.00	0.956458E+00	0.904602E+01
75.00	0.121677E+01	0.164730E+02
90.00	0.134800E+01	0.222844E+02
95.00	0.138772E+01	0.244188E+02

Table 2--continued

98.00 0.141156E+01 0.257963E+02
 99.00 0.100000E+36 0.100000E+36

LOWER	UPPER	NO. OF OBS.	MEAN	ST. DEV.	MINIMUM	MAXIMUM
0.000000E+00	1.000000E+00	1	0.50	0.50	0.00	1.00
1.000000E+00	2.000000E+00	1	1.50	0.50	1.00	2.00
2.000000E+00	3.000000E+00	1	2.50	0.50	2.00	3.00
3.000000E+00	4.000000E+00	1	3.50	0.50	3.00	4.00
4.000000E+00	5.000000E+00	1	4.50	0.50	4.00	5.00
5.000000E+00	6.000000E+00	1	5.50	0.50	5.00	6.00
6.000000E+00	7.000000E+00	1	6.50	0.50	6.00	7.00
7.000000E+00	8.000000E+00	1	7.50	0.50	7.00	8.00
8.000000E+00	9.000000E+00	1	8.50	0.50	8.00	9.00
9.000000E+00	1.000000E+01	1	9.50	0.50	9.00	1.00
TOTALS		10	5.00	0.50	0.00	1.00

HISTOGRAM FOR VARIABLE IN 15-20
 HISTOGRAM FOR VARIABLE IN 15-20

0.000000E+00
 1.000000E+00
 2.000000E+00
 3.000000E+00
 4.000000E+00

THE FOLLOWING STATISTICS ARE COMPUTED FOR 15-20 ONLY

MINIMUM VALUE = 0.000000E+00
 MAXIMUM VALUE = 1.000000E+00
 MEAN VALUE = 0.500000E+00
 STANDARD DEVIATION = 0.500000E+00
 VARIANCE = 0.250000E+00

PERCENTILE VALUES FOR 15-20
 IF DESIRED, PERCENTILE VALUES CAN BE OBTAINED FOR ANY PERCENTILE
 THE DATA ARE IN THE ORDER OF 15-20

PERCENTILE	VALUE	PERCENTILE	VALUE
0.00	0.000000E+00	0.00	0.000000E+00
25.00	0.250000E+00	25.00	0.250000E+00
50.00	0.500000E+00	50.00	0.500000E+00
75.00	0.750000E+00	75.00	0.750000E+00
100.00	1.000000E+00	100.00	1.000000E+00

FREQUENCY TABLE FOR VARIABLE 26 (S-SN)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	125	125	87.41	87.41		
	L	9	134	6.29	93.71		
	T	0	134	0.00	93.71	1.461E+01	9.754E+02
9.160E-01	- 1.083E+00	2	136	1.40	95.10	1.002E+02	-1.001E+02
1.083E+00	- 1.249E+00	2	138	1.40	96.50	2.801E+01	-2.794E+01
1.249E+00	- 1.416E+00	4	142	2.80	99.30	0.000E+00	0.000E+00
1.416E+00	- 1.583E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
1.583E+00	- 1.749E+00	1	143	0.70	100.00	2.121E-01	4.502E+00
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	8.519E+02

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

9.985E+00 X
 1.466E+01 X
 2.151E+01 XXX
 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 = 1.78068E+01
 GEOMETRIC DEVIATION = 1.61637E+00
 VARIANCE OF LOGS = 4.34890E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.133850E+01	0.218022E+02
99.00	0.139808E+01	0.250083E+02

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
2.083E+00	- 2.250E+00	4	4	2.80	2.80	2.661E+00	-1.158E+00
2.250E+00	- 2.416E+00	12	16	8.39	11.19	1.609E+01	-1.535E+01
2.416E+00	- 2.583E+00	39	55	27.27	38.46	4.261E+01	-4.169E+01
2.583E+00	- 2.750E+00	67	122	46.85	85.31	4.964E+01	-4.829E+01
2.750E+00	- 2.916E+00	19	141	13.29	98.60	2.547E+01	-2.473E+01
2.916E+00	- 3.083E+00	2	143	1.40	100.00	6.323E+00	-6.007E+00
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.428E+02	-1.372E+02

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

1.467E+02 xxx
2.153E+02 xxxxxxxx
3.160E+02 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
4.638E+02 xx
6.808E+02 xxxxxxxxxxxxxxxx
9.992E+02 x

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+02
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 4.11218E+02
GEOMETRIC DEVIATION = 1.50458E+00
VARIANCE OF LOGS = 3.14760E-02

PERCENT TABLE FOR VARIABLE 27 (S-SR) BY LINEARINTERPOLATION 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
50.00	0.262405E+01	0.420771E+03
75.00	0.271298E+01	0.516388E+03
90.00	0.280844E+01	0.643339E+03
95.00	0.287116E+01	0.743292E+03

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	0	0	0.00	0.00		
	L	2	2	1.40	1.40		
	T	0	2	0.00	1.40	3.967E-01	6.481E+00
9.160E-01	- 1.083E+00	1	3	0.70	2.10	1.338E+00	-5.904E-01
1.083E+00	- 1.249E+00	3	6	2.10	4.20	4.212E+00	-3.500E+00
1.249E+00	- 1.416E+00	6	12	4.20	8.39	1.017E+01	-9.582E+00
1.416E+00	- 1.583E+00	15	27	10.49	18.88	1.885E+01	-1.805E+01
1.583E+00	- 1.749E+00	49	76	34.27	53.15	2.630E+01	-2.497E+01
1.749E+00	- 1.916E+00	23	99	16.08	69.23	2.924E+01	-2.846E+01
1.916E+00	- 2.083E+00	18	117	12.59	81.82	2.449E+01	-2.375E+01
2.083E+00	- 2.249E+00	12	129	8.39	90.21	1.573E+01	-1.497E+01
2.249E+00	- 2.416E+00	8	137	5.59	95.80	7.757E+00	-6.726E+00
2.416E+00	- 2.583E+00	4	141	2.80	98.60	2.934E+00	-1.571E+00
2.583E+00	- 2.749E+00	2	143	1.40	100.00	1.078E+00	7.774E-01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.249E+02

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

9.985E+00 X
1.466E+01 XX
2.151E+01 XXXX
3.157E+01 XXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXXXXXXXXXXXXXX
9.985E+01 XXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXX
2.151E+02 XXXXXX
3.157E+02 XXX
4.635E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
MAXIMUM ANTILOG = 5.00000E+02
GEOMETRIC MEAN = 6.54100E+01
GEOMETRIC DEVIATION = 2.03087E+00
VARIANCE OF LOGS = 9.46679E-02

PERCENT TABLE FOR VARIABLE 28 (S-V) BY LINEARINTERPOLATION FROM FREQUENCY TABLE

Table 2--continued

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
50.00	0.173403E+01	0.542037E+02
75.00	0.199239E+01	0.982632E+02
90.00	0.224517E+01	0.175861E+03
95.00	0.239204E+01	0.246629E+03
98.00	0.254684E+01	0.352238E+03
99.00	0.100000E+36	0.100000E+36

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FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
1.083E+00	1.250E+00	2	2	1.40	1.40	3.347E+00	-2.749E+00
1.250E+00	1.416E+00	9	11	6.29	7.69	7.426E+00	-6.215E+00
1.416E+00	1.583E+00	11	22	7.69	15.38	1.352E+01	-1.270E+01
1.583E+00	1.750E+00	33	55	23.08	38.46	2.018E+01	-1.855E+01
1.750E+00	1.916E+00	18	73	12.59	51.05	2.471E+01	-2.399E+01
1.916E+00	2.083E+00	30	103	20.98	72.03	2.483E+01	-2.362E+01
2.083E+00	2.250E+00	15	118	10.49	82.52	2.046E+01	-1.972E+01
2.250E+00	2.416E+00	15	133	10.49	93.01	1.383E+01	-1.274E+01
2.416E+00	2.583E+00	1	134	0.70	93.71	7.667E+00	-7.536E+00
2.583E+00	2.750E+00	5	139	3.50	97.20	3.486E+00	-2.052E+00
2.750E+00	2.916E+00	2	141	1.40	98.60	1.300E+00	2.378E-01
2.916E+00	3.083E+00	1	142	0.70	99.30	3.978E-01	2.116E+00
3.083E+00	3.250E+00	1	143	0.70	100.00	1.243E-01	7.920E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.413E+02	-1.196E+02

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

1.467E+01 X
 2.153E+01 XXXXXX
 3.160E+01 XXXXXXXX
 4.638E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 6.808E+01 XXXXXXXXXXXXXXXX
 9.992E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.467E+02 XXXXXXXXXXXX
 2.153E+02 XXXXXXXXXXXX
 3.160E+02 X
 4.638E+02 XXX
 6.808E+02 X
 9.992E+02 X
 1.467E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+01
 MAXIMUM ANTILOG = 1.50000E+03
 GEOMETRIC MEAN = 8.32067E+01
 GEOMETRIC DEVIATION = 2.35139E+00
 VARIANCE OF LOGS = 1.37882E-01

Table 2 --continued

PERCENT TABLE FOR VARIABLE 30 (S-Y) BY LINEARINTERPOLATION 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
50.00	0.190245E+01	0.798815E+02
75.00	0.213022E+01	0.134966E+03
90.00	0.236856E+01	0.233646E+03
95.00	0.264467E+01	0.441235E+03
98.00	0.284467E+01	0.699311E+03
99.00	0.301134E+01	0.102645E+04

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
1.583E+00	1.750E+00	3	3	2.10	2.10	2.696E+00	-1.584E+00
1.750E+00	1.916E+00	3	6	2.10	4.20	6.784E+00	-6.342E+00
1.916E+00	2.083E+00	19	25	13.29	17.48	1.353E+01	-1.213E+01
2.083E+00	2.250E+00	20	45	13.99	31.47	2.139E+01	-2.045E+01
2.250E+00	2.416E+00	34	79	23.78	55.24	2.680E+01	-2.553E+01
2.416E+00	2.583E+00	24	103	16.78	72.03	2.662E+01	-2.572E+01
2.583E+00	2.750E+00	13	116	9.09	81.12	2.096E+01	-2.034E+01
2.750E+00	2.916E+00	7	123	4.90	86.01	1.308E+01	-1.255E+01
2.916E+00	3.083E+00	5	128	3.50	89.51	1.003E+01	-9.537E+00
G		15	143	10.49	100.00	1.111E+00	1.737E+02
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	3.954E+01

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

4.638E+01 XX
 6.808E+01 XX
 9.992E+01 XXXXXXXXXXXXX
 1.467E+02 XXXXXXXXXXXXXXX
 2.153E+02 XXXXXXXXXXXXXXXXXXXXXXX
 3.160E+02 XXXXXXXXXXXXXXXXXXXXXXX
 4.638E+02 XXXXXXXXX
 6.808E+02 XXXXX
 9.992E+02 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 2.20048E+02
 GEOMETRIC DEVIATION = 1.95969E+00
 VARIANCE OF LOGS = 8.53739E-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	DATA VALUE	ANTI LOG OF VALUE
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Table 2--continued

PERCENTILE

50.00	0.237957E+01	0.239646E+03
75.00	0.263749E+01	0.434000E+03
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 34 (AA-ZN)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
1.083E+00	1.250E+00	12	12	8.39	8.39	1.198E+01	-1.098E+01
1.250E+00	1.416E+00	49	61	34.27	42.66	3.362E+01	-3.216E+01
1.416E+00	1.583E+00	32	93	22.38	65.03	4.735E+01	-4.667E+01
1.583E+00	1.750E+00	32	125	22.38	87.41	3.350E+01	-3.255E+01
1.750E+00	1.916E+00	18	143	12.59	100.00	1.421E+01	-1.294E+01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.407E+02	-1.353E+02

HISTOGRAM FOR VARIABLE 34 (AA-ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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1.467E+01 XXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXXXXXXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXXXXXXXXXXXXXXX
6.808E+01 XXXXXXXXXXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.50000E+01
MAXIMUM ANTILOG      = 7.50000E+01
GEOMETRIC MEAN       = 3.15679E+01
GEOMETRIC DEVIATION  = 1.56628E+00
VARIANCE OF LOGS     = 3.79736E-02

```

PERCENT TABLE FOR VARIABLE 34 (AA-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
50.00	0.147102E+01	0.295816E+02
75.00	0.165722E+01	0.454172E+02
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 35 (INST-HG)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
4.160E-01	5.827E-01	1	1	0.70	0.70	1.895E+00	-1.367E+00
5.827E-01	7.493E-01	8	9	5.59	6.29	4.918E+00	-3.291E+00
7.493E-01	9.160E-01	10	19	6.99	13.29	1.031E+01	-9.337E+00
9.160E-01	1.083E+00	22	41	15.38	28.67	1.745E+01	-1.619E+01
1.083E+00	1.249E+00	21	62	14.69	43.36	2.386E+01	-2.298E+01
1.249E+00	1.416E+00	23	85	16.08	59.44	2.636E+01	-2.549E+01
1.416E+00	1.583E+00	23	108	16.08	75.52	2.352E+01	-2.254E+01
1.583E+00	1.749E+00	15	123	10.49	86.01	1.695E+01	-1.606E+01
1.749E+00	1.916E+00	14	137	9.79	95.80	9.866E+00	-8.447E+00
1.916E+00	2.083E+00	5	142	3.50	99.30	4.638E+00	-3.561E+00
2.083E+00	2.249E+00	0	142	0.00	99.30	1.761E+00	-1.761E+00
2.249E+00	2.416E+00	1	143	0.70	100.00	7.055E-01	7.118E-01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.422E+02	-1.303E+02

HISTOGRAM FOR VARIABLE 35 (INST-HG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

3.157E+00 X
 4.634E+00 XXXXXX
 6.802E+00 XXXXXX
 9.985E+00 XXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXX
 4.634E+01 XXXXXXXXXXXX
 6.803E+01 XXXXXXXXXXXX
 9.985E+01 XXX
 1.466E+02
 2.151E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+00
 MAXIMUM ANTILOG = 2.11000E+02
 GEOMETRIC MEAN = 2.12309E+01
 GEOMETRIC DEVIATION = 2.27744E+00
 VARIANCE OF LOGS = 1.27769E-01

Table 2--continued

PERCENT TABLE FOR VARIABLE 35 (INST-HG) BY LINEARINTERPOLATION 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
50.00	0.131818E+01	0.208054E+02
75.00	0.157723E+01	0.377776E+02
90.00	0.181719E+01	0.656437E+02
95.00	0.190231E+01	0.798569E+02
98.00	0.202067E+01	0.104874E+03
99.00	0.206834E+01	0.117041E+03

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76) Heavy-mineral concentrates

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 3 (S-FEX)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-5.840E-01	-4.173E-01	2	2	1.40	1.40	2.598E+00	-1.828E+00
-4.173E-01	-2.507E-01	9	11	6.29	7.69	6.520E+00	-5.140E+00
-2.507E-01	-8.400E-02	5	16	3.50	11.19	1.303E+01	-1.265E+01
-8.400E-02	8.267E-02	34	50	23.78	34.97	2.075E+01	-1.911E+01
8.267E-02	2.493E-01	22	72	15.38	50.35	2.631E+01	-2.548E+01
2.493E-01	4.160E-01	31	103	21.68	72.03	2.658E+01	-2.541E+01
4.160E-01	5.827E-01	14	117	9.79	81.82	2.138E+01	-2.073E+01
5.827E-01	7.493E-01	15	132	10.49	92.31	1.370E+01	-1.260E+01
7.493E-01	9.160E-01	4	136	2.80	95.10	6.991E+00	-6.419E+00
9.160E-01	1.083E+00	5	141	3.50	98.60	2.841E+00	-1.081E+00
1.083E+00	1.249E+00	1	142	0.70	99.30	9.195E-01	1.680E-01
1.249E+00	1.416E+00	1	143	0.70	100.00	2.947E-01	3.099E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.419E+02	-1.272E+02

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

3.157E-01 X
 4.634E-01 XXXXXX
 6.802E-01 XXX
 9.985E-01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+00 XXXXXXXXXXXXXXXX
 2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+00 XXXXXXXXXX
 4.634E+00 XXXXXXXXXX
 6.803E+00 XXX
 9.985E+00 XXX
 1.466E+01 X
 2.151E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E-01
 MAXIMUM ANTILOG = 2.00000E+01
 GEOMETRIC MEAN = 1.80564E+00
 GEOMETRIC DEVIATION = 2.21842E+00
 VARIANCE OF LOGS = 1.19746E-01

PERCENT TABLE FOR VARIABLE 3 (S-FE₂) 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
50.00	0.245547E+00	0.176014E+01
75.00	0.466597E+00	0.292818E+01
90.00	0.712669E+00	0.516023E+01
95.00	0.909753E+00	0.812368E+01
98.00	0.105400E+01	0.113241E+02
99.00	0.117767E+01	0.150546E+02

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 4 (S-MG%)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
-1.250E+00	-1.083E+00	6	6	4.20	4.20	7.457E+00	-6.653E+00
-1.083E+00	-9.167E-01	28	34	19.58	23.78	1.771E+01	-1.613E+01
-9.167E-01	-7.500E-01	22	56	15.38	39.16	2.939E+01	-2.864E+01
-7.500E-01	-5.833E-01	33	89	23.08	62.24	3.409E+01	-3.312E+01
-5.833E-01	-4.167E-01	30	119	20.98	83.22	2.765E+01	-2.657E+01
-4.167E-01	-2.500E-01	18	137	12.59	95.80	1.568E+01	-1.453E+01
-2.500E-01	-8.333E-02	2	139	1.40	97.20	6.212E+00	-5.890E+00
-8.333E-02	-8.334E-02	3	142	2.10	99.30	1.720E+00	2.496E-02
8.334E-02	2.500E-01	1	143	0.70	100.00	3.818E-01	2.237E+00
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.403E+02	-1.293E+02

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

```

6.813E-02 XXXX
1.000E-01 XXXXXXXXXXXXXXXXXXXX
1.458E-01 XXXXXXXXXXXXXXXXXXXX
2.154E-01 XXXXXXXXXXXXXXXXXXXX
3.162E-01 XXXXXXXXXXXXXXXXXXXX
4.642E-01 XXXXXXXXXXXXXXXX
6.813E-01 X
1.000E+00 XX
1.468E+00 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG    = 7.00000E-02
MAXIMUM ANTILOG    = 1.50000E+00
GEOMETRIC MEAN     = 2.08526E-01
GEOMETRIC DEVIATION = 1.88067E+00
VARIANCE OF LOGS   = 7.52470E-02

```

PERCENT TABLE FOR VARIABLE 4 (S-MG%) BY LINEARINTERPOLATION 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	DATA VALUE	ANTI LOG OF VALUE
----------	------------	-------------------

PERCENTILE

Table 2--continued

50.00	-0.671716E+00	0.212953E+00
75.00	-0.481943E+00	0.329653E+00
90.00	-0.326850E+00	0.471140E+00
95.00	-0.260646E+00	0.548724E+00
98.00	-0.199975E-01	0.954998E+00
99.00	0.594471E-01	0.114669E+01

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 5 (S-CAZ)

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		
8.300E-02 - 2.497E-01	1	1	0.70	0.70	1.021E-01	9.689E+00
2.497E-01 - 4.163E-01	1	2	0.70	1.40	6.934E-01	7.488E-01
4.163E-01 - 5.830E-01	3	5	2.10	3.50	3.219E+00	-2.287E+00
5.830E-01 - 7.497E-01	13	18	9.09	12.59	1.023E+01	-8.956E+00
7.497E-01 - 9.163E-01	18	36	12.59	25.17	2.224E+01	-2.143E+01
9.163E-01 - 1.083E+00	29	65	20.28	45.45	3.313E+01	-3.225E+01
1.083E+00 - 1.250E+00	26	91	18.18	63.64	3.379E+01	-3.302E+01
1.250E+00 - 1.416E+00	38	129	26.57	90.21	2.361E+01	-2.200E+01
1.416E+00 - 1.583E+00	13	142	9.09	99.30	1.130E+01	-1.015E+01
1.583E+00 - 1.750E+00	1	143	0.70	100.00	4.674E+00	-4.460E+00
G	0	143	0.00	100.00		
H	0	143				
B	0	143				
TOTALS LESS H AND B	143				1.430E+02	-1.241E+02

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

```

1.467E+00 X
2.153E+00 X
3.160E+00 XX
4.638E+00 XXXXXXXXX
6.808E+00 XXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXX
4.638E+01 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.50000E+00
MAXIMUM ANTILOG      = 5.00000E+01
GEOMETRIC MEAN       = 1.23535E+01
GEOMETRIC DEVIATION  = 1.84743E+00
VARIANCE OF LOGS     = 7.10591E-02

```

PERCENT TABLE FOR VARIABLE 5 (S-CAZ) 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
50.00	0.112467E+01	0.133250E+02
75.00	0.132094E+01	0.209383E+02
90.00	0.141502E+01	0.260028E+02
95.00	0.150416E+01	0.319269E+02
98.00	0.155916E+01	0.362374E+02
99.00	0.157749E+01	0.377999E+02

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-1.084E+00	-9.173E-01	1	1	0.70	0.70	1.236E-02	8.092E+01
-9.173E-01	-7.507E-01	0	1	0.00	0.70	1.143E-01	-1.143E-01
-7.507E-01	-5.840E-01	2	3	1.40	2.10	7.708E-01	1.824E+00
-5.840E-01	-4.173E-01	2	5	1.40	3.50	3.534E+00	-2.969E+00
-4.173E-01	-2.507E-01	18	23	12.59	16.08	1.103E+01	-9.398E+00
-2.507E-01	-8.400E-02	15	38	10.49	26.57	2.344E+01	-2.280E+01
-8.400E-02	8.267E-02	24	62	16.78	43.36	3.392E+01	-3.321E+01
8.267E-02	2.493E-01	18	80	12.59	55.94	3.345E+01	-3.291E+01
2.493E-01	4.160E-01	27	107	18.88	74.83	3.674E+01	-3.600E+01
G		36	143	25.17	100.00	0.000E+00	0.000E+00
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-5.465E+01

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

```

9.985E-02 X
1.466E-01
2.151E-01 X
3.157E-01 X
4.634E-01 XXXXXXXXXXXXXXXX
6.802E-01 XXXXXXXXXXXXXXXX
9.985E-01 XXXXXXXXXXXXXXXXXXXX
1.466E+00 XXXXXXXXXXXXXXXXXXXX
2.151E+00 XXXXXXXXXXXXXXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.00000E-01
MAXIMUM ANTILOG      = 2.00000E+00
GEOMETRIC MEAN       = 1.00241E+00
GEOMETRIC DEVIATION  = 1.84649E+00
VARIANCE OF LOGS     = 7.09408E-02

```

PERCENT TABLE FOR VARIABLE 6 (S-TIX) 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	DATA VALUE	ANTI LOG OF VALUE
----------	------------	-------------------

Table 2--continued

PERCENTILE

50.00	0.170632E+00	0.148126E+01
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
2.583E+00	- 2.750E+00	1	1	0.70	0.70	3.619E+00	-3.342E+00
2.750E+00	- 2.916E+00	6	7	4.20	4.90	8.724E+00	-8.036E+00
2.916E+00	- 3.083E+00	29	36	20.28	25.17	1.647E+01	-1.471E+01
3.083E+00	- 3.250E+00	20	56	13.99	39.16	2.434E+01	-2.352E+01
3.250E+00	- 3.416E+00	38	94	26.57	65.73	2.818E+01	-2.683E+01
3.416E+00	- 3.583E+00	16	110	11.19	76.92	2.554E+01	-2.491E+01
3.583E+00	- 3.750E+00	10	120	6.99	83.92	1.813E+01	-1.758E+01
3.750E+00	- 3.916E+00	9	129	6.29	90.21	1.008E+01	-9.183E+00
3.916E+00	- 4.083E+00	4	133	2.80	93.01	6.377E+00	-5.749E+00
G		10	143	6.99	100.00	1.544E+00	4.633E+01
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-8.754E+01

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

4.638E+02 X
6.808E+02 XXXX
9.992E+02 XXXXXXXXXXXXXXXXXXXX
1.467E+03 XXXXXXXXXXXXXXXX
2.153E+03 XXXXXXXXXXXXXXXXXXXXXXXX
3.160E+03 XXXXXXXXXXXX
4.638E+03 XXXXXXXX
6.808E+03 XXXXXX
9.992E+03 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+02
MAXIMUM ANTILOG = 1.00000E+04
GEOMETRIC MEAN = 1.99734E+03
GEOMETRIC DEVIATION = 1.95845E+00
VARIANCE OF LOGS = 8.52130E-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	DATA VALUE	ANTI LOG OF VALUE
----------	------------	-------------------

PERCENTILE

Table 2--continued

50.00	0.331765E+01	0.207802E+04
75.00	0.355436E+01	0.358390E+04
90.00	0.391078E+01	0.814292E+04
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	10	10	6.99	6.99		
	L	105	115	73.43	80.42		
	T	0	115	0.00	80.42	4.140E+01	1.308E+02
1.250E+00	- 1.417E+00	11	126	7.69	88.11	4.988E+01	-4.966E+01
1.417E+00	- 1.583E+00	7	133	4.90	93.01	3.694E+01	-3.675E+01
1.583E+00	- 1.750E+00	6	139	4.20	97.20	1.264E+01	-1.216E+01
1.750E+00	- 1.917E+00	2	141	1.40	98.60	1.989E+00	-9.831E-01
1.917E+00	- 2.083E+00	0	141	0.00	98.60	1.430E-01	-1.430E-01
2.083E+00	- 2.250E+00	0	141	0.00	98.60	0.000E+00	0.000E+00
2.250E+00	- 2.417E+00	1	142	0.70	99.30	0.000E+00	0.000E+00
2.417E+00	- 2.583E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
2.583E+00	- 2.750E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
2.750E+00	- 2.917E+00	1	143	0.70	100.00	4.740E-03	2.110E+02
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	2.421E+02

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

2.154E+01 XXXXXXXX
 3.162E+01 XXXXX
 4.642E+01 XXXX
 6.813E+01 X
 1.000E+02
 1.468E+02
 2.154E+02 X
 3.162E+02
 4.642E+02
 6.813E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 7.00000E+02
 GEOMETRIC MEAN = 3.63118E+01
 GEOMETRIC DEVIATION = 2.22708E+00
 VARIANCE OF LOGS = 1.20920E-01

PERCENT TABLE FOR VARIABLE 11 (S-B) BY LINEARINTERPOLATION 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

Table 2--continued

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.148095E+01	0.302658E+02
95.00	0.166250E+01	0.459728E+02
98.00	0.184500E+01	0.699844E+02
99.00	0.220167E+01	0.159099E+03

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

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	4	4	2.80	2.80		
L	0	4	0.00	2.80		
T	0	4	0.00	2.80	1.665E+00	3.273E+00
1.416E+00 - 1.583E+00	1	5	0.70	3.50	2.773E+00	-2.412E+00
1.583E+00 - 1.749E+00	7	12	4.90	8.39	5.820E+00	-4.618E+00
1.749E+00 - 1.916E+00	14	26	9.79	18.18	1.041E+01	-9.065E+00
1.916E+00 - 2.083E+00	17	43	11.89	30.07	1.586E+01	-1.479E+01
2.083E+00 - 2.249E+00	16	59	11.19	41.26	2.060E+01	-1.982E+01
2.249E+00 - 2.416E+00	17	76	11.89	53.15	2.279E+01	-2.205E+01
2.416E+00 - 2.583E+00	23	99	16.08	69.23	2.149E+01	-2.042E+01
2.583E+00 - 2.749E+00	12	111	8.39	77.62	1.726E+01	-1.657E+01
2.749E+00 - 2.916E+00	22	133	15.38	93.01	1.182E+01	-9.954E+00
2.916E+00 - 3.083E+00	6	139	4.20	97.20	6.891E+00	-6.021E+00
3.083E+00 - 3.249E+00	3	142	2.10	99.30	3.425E+00	-2.548E+00
3.249E+00 - 3.416E+00	1	143	0.70	100.00	2.187E+00	-1.730E+00
G	0	143	0.00	100.00		
H	0	143				
B	0	143				
TOTALS LESS H AND B	143				1.430E+02	-1.267E+02

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

3.157E+01 X
 4.634E+01 XXXXX
 6.802E+01 XXXXXXXXXX
 9.985E+01 XXXXXXXXXXXX
 1.466E+02 XXXXXXXXXXXX
 2.151E+02 XXXXXXXXXXXX
 3.157E+02 XXXXXXXXXXXXXXXX
 4.634E+02 XXXXXXXX
 6.803E+02 XXXXXXXXXXXXXXXX
 9.985E+02 XXXX
 1.466E+03 XX
 2.151E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+01
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 2.36330E+02
 GEOMETRIC DEVIATION = 2.53600E+00
 VARIANCE OF LOGS = 1.63337E-01

Table Z--continued

PERCENT TABLE FOR VARIABLE 12 (S-BA) BY LINEARINTERPOLATION 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
50.00	0.237188E+01	0.235442E+03
75.00	0.269725E+01	0.498027E+03
90.00	0.288343E+01	0.764587E+03
95.00	0.299517E+01	0.988940E+03
98.00	0.314600E+01	0.139960E+04
99.00	0.322545E+01	0.168054E+04

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	104	104	72.73	72.73		
	L	0	104	0.00	72.73		
	T	0	104	0.00	72.73	4.042E+01	1.000E+02
2.500E-01	4.167E-01	10	114	6.99	79.72	2.113E+01	-2.066E+01
4.167E-01	5.833E-01	1	115	0.70	80.42	2.264E+01	-2.260E+01
5.833E-01	7.500E-01	3	118	2.10	82.52	2.073E+01	-2.058E+01
7.500E-01	9.167E-01	3	121	2.10	84.62	1.620E+01	-1.602E+01
9.167E-01	1.083E+00	6	127	4.20	88.81	1.082E+01	-1.027E+01
1.083E+00	1.250E+00	1	128	0.70	89.51	6.172E+00	-6.010E+00
1.250E+00	1.417E+00	5	133	3.50	93.01	3.007E+00	-1.344E+00
1.417E+00	1.583E+00	3	136	2.10	95.10	1.251E+00	1.147E+00
1.583E+00	1.750E+00	5	141	3.50	98.60	4.446E-01	1.080E+01
1.750E+00	1.917E+00	0	141	0.00	98.60	1.350E-01	-1.350E-01
1.917E+00	2.083E+00	2	143	1.40	100.00	4.447E-02	4.493E+01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	5.927E+01

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

2.154E+00 XXXXXXXX
3.162E+00 X
4.642E+00 XX
6.813E+00 XX
1.000E+01 XXXX
1.468E+01 X
2.154E+01 XXX
3.162E+01 XX
4.642E+01 XXX
6.813E+01
1.000E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
MAXIMUM ANTILOG = 1.00000E+02
GEOMETRIC MEAN = 9.84016E+00
GEOMETRIC DEVIATION = 3.47320E+00
VARIANCE OF LOGS = 2.92388E-01

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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.127334E+01	0.187644E+02
95.00	0.157500E+01	0.375840E+02
98.00	0.172134E+01	0.526425E+02
99.00	0.100000E+36	0.100000E+36

1.2400E+00	1.4170E+00	1.10	1.20	1.24	1.2400E+00	1.4170E+00
1.4700E+00	1.5810E+00	2	1.40	1.47	1.4700E+00	1.5810E+00
1.5800E+00	1.7300E+00	3	1.41	1.58	1.5800E+00	1.7300E+00
1.7300E+00	1.9170E+00	4	1.41	1.73	1.7300E+00	1.9170E+00
1.9170E+00	2.0830E+00	5	1.41	1.91	1.9170E+00	2.0830E+00
2.0830E+00	2.2500E+00	6	1.41	2.08	2.0830E+00	2.2500E+00
2.2500E+00	2.4170E+00	7	1.41	2.25	2.2500E+00	2.4170E+00
2.4170E+00	2.5810E+00	8	1.41	2.41	2.4170E+00	2.5810E+00
2.5810E+00	2.7300E+00	9	1.41	2.58	2.7300E+00	2.7300E+00
2.7300E+00	2.9170E+00	10	1.41	2.73	2.9170E+00	2.9170E+00
2.9170E+00	3.0830E+00	11	1.41	2.91	3.0830E+00	3.0830E+00
3.0830E+00	3.2500E+00	12	1.41	3.08	3.2500E+00	3.2500E+00
3.2500E+00	3.4170E+00	13	1.41	3.25	3.4170E+00	3.4170E+00
3.4170E+00	3.5810E+00	14	1.41	3.41	3.5810E+00	3.5810E+00
3.5810E+00	3.7300E+00	15	1.41	3.58	3.7300E+00	3.7300E+00
3.7300E+00	3.9170E+00	16	1.41	3.73	3.9170E+00	3.9170E+00
3.9170E+00	4.0830E+00	17	1.41	3.91	4.0830E+00	4.0830E+00
4.0830E+00	4.2500E+00	18	1.41	4.08	4.2500E+00	4.2500E+00
4.2500E+00	4.4170E+00	19	1.41	4.25	4.4170E+00	4.4170E+00
4.4170E+00	4.5810E+00	20	1.41	4.41	4.5810E+00	4.5810E+00
4.5810E+00	4.7300E+00	21	1.41	4.58	4.7300E+00	4.7300E+00
4.7300E+00	4.9170E+00	22	1.41	4.73	4.9170E+00	4.9170E+00
4.9170E+00	5.0830E+00	23	1.41	4.91	5.0830E+00	5.0830E+00
5.0830E+00	5.2500E+00	24	1.41	5.08	5.2500E+00	5.2500E+00
5.2500E+00	5.4170E+00	25	1.41	5.25	5.4170E+00	5.4170E+00
5.4170E+00	5.5810E+00	26	1.41	5.41	5.5810E+00	5.5810E+00
5.5810E+00	5.7300E+00	27	1.41	5.58	5.7300E+00	5.7300E+00
5.7300E+00	5.9170E+00	28	1.41	5.73	5.9170E+00	5.9170E+00
5.9170E+00	6.0830E+00	29	1.41	5.91	6.0830E+00	6.0830E+00
6.0830E+00	6.2500E+00	30	1.41	6.08	6.2500E+00	6.2500E+00
6.2500E+00	6.4170E+00	31	1.41	6.25	6.4170E+00	6.4170E+00
6.4170E+00	6.5810E+00	32	1.41	6.41	6.5810E+00	6.5810E+00
6.5810E+00	6.7300E+00	33	1.41	6.58	6.7300E+00	6.7300E+00
6.7300E+00	6.9170E+00	34	1.41	6.73	6.9170E+00	6.9170E+00
6.9170E+00	7.0830E+00	35	1.41	6.91	7.0830E+00	7.0830E+00
7.0830E+00	7.2500E+00	36	1.41	7.08	7.2500E+00	7.2500E+00
7.2500E+00	7.4170E+00	37	1.41	7.25	7.4170E+00	7.4170E+00
7.4170E+00	7.5810E+00	38	1.41	7.41	7.5810E+00	7.5810E+00
7.5810E+00	7.7300E+00	39	1.41	7.58	7.7300E+00	7.7300E+00
7.7300E+00	7.9170E+00	40	1.41	7.73	7.9170E+00	7.9170E+00
7.9170E+00	8.0830E+00	41	1.41	7.91	8.0830E+00	8.0830E+00
8.0830E+00	8.2500E+00	42	1.41	8.08	8.2500E+00	8.2500E+00
8.2500E+00	8.4170E+00	43	1.41	8.25	8.4170E+00	8.4170E+00
8.4170E+00	8.5810E+00	44	1.41	8.41	8.5810E+00	8.5810E+00
8.5810E+00	8.7300E+00	45	1.41	8.58	8.7300E+00	8.7300E+00
8.7300E+00	8.9170E+00	46	1.41	8.73	8.9170E+00	8.9170E+00
8.9170E+00	9.0830E+00	47	1.41	8.91	9.0830E+00	9.0830E+00
9.0830E+00	9.2500E+00	48	1.41	9.08	9.2500E+00	9.2500E+00
9.2500E+00	9.4170E+00	49	1.41	9.25	9.4170E+00	9.4170E+00
9.4170E+00	9.5810E+00	50	1.41	9.41	9.5810E+00	9.5810E+00
9.5810E+00	9.7300E+00	51	1.41	9.58	9.7300E+00	9.7300E+00
9.7300E+00	9.9170E+00	52	1.41	9.73	9.9170E+00	9.9170E+00
9.9170E+00	10.0830E+00	53	1.41	9.91	10.0830E+00	10.0830E+00
10.0830E+00	10.2500E+00	54	1.41	10.08	10.2500E+00	10.2500E+00
10.2500E+00	10.4170E+00	55	1.41	10.25	10.4170E+00	10.4170E+00
10.4170E+00	10.5810E+00	56	1.41	10.41	10.5810E+00	10.5810E+00
10.5810E+00	10.7300E+00	57	1.41	10.58	10.7300E+00	10.7300E+00
10.7300E+00	10.9170E+00	58	1.41	10.73	10.9170E+00	10.9170E+00
10.9170E+00	11.0830E+00	59	1.41	10.91	11.0830E+00	11.0830E+00
11.0830E+00	11.2500E+00	60	1.41	11.08	11.2500E+00	11.2500E+00
11.2500E+00	11.4170E+00	61	1.41	11.25	11.4170E+00	11.4170E+00
11.4170E+00	11.5810E+00	62	1.41	11.41	11.5810E+00	11.5810E+00
11.5810E+00	11.7300E+00	63	1.41	11.58	11.7300E+00	11.7300E+00
11.7300E+00	11.9170E+00	64	1.41	11.73	11.9170E+00	11.9170E+00
11.9170E+00	12.0830E+00	65	1.41	11.91	12.0830E+00	12.0830E+00
12.0830E+00	12.2500E+00	66	1.41	12.08	12.2500E+00	12.2500E+00
12.2500E+00	12.4170E+00	67	1.41	12.25	12.4170E+00	12.4170E+00
12.4170E+00	12.5810E+00	68	1.41	12.41	12.5810E+00	12.5810E+00
12.5810E+00	12.7300E+00	69	1.41	12.58	12.7300E+00	12.7300E+00
12.7300E+00	12.9170E+00	70	1.41	12.73	12.9170E+00	12.9170E+00
12.9170E+00	13.0830E+00	71	1.41	12.91	13.0830E+00	13.0830E+00
13.0830E+00	13.2500E+00	72	1.41	13.08	13.2500E+00	13.2500E+00
13.2500E+00	13.4170E+00	73	1.41	13.25	13.4170E+00	13.4170E+00
13.4170E+00	13.5810E+00	74	1.41	13.41	13.5810E+00	13.5810E+00
13.5810E+00	13.7300E+00	75	1.41	13.58	13.7300E+00	13.7300E+00
13.7300E+00	13.9170E+00	76	1.41	13.73	13.9170E+00	13.9170E+00
13.9170E+00	14.0830E+00	77	1.41	13.91	14.0830E+00	14.0830E+00
14.0830E+00	14.2500E+00	78	1.41	14.08	14.2500E+00	14.2500E+00
14.2500E+00	14.4170E+00	79	1.41	14.25	14.4170E+00	14.4170E+00
14.4170E+00	14.5810E+00	80	1.41	14.41	14.5810E+00	14.5810E+00
14.5810E+00	14.7300E+00	81	1.41	14.58	14.7300E+00	14.7300E+00
14.7300E+00	14.9170E+00	82	1.41	14.73	14.9170E+00	14.9170E+00
14.9170E+00	15.0830E+00	83	1.41	14.91	15.0830E+00	15.0830E+00
15.0830E+00	15.2500E+00	84	1.41	15.08	15.2500E+00	15.2500E+00
15.2500E+00	15.4170E+00	85	1.41	15.25	15.4170E+00	15.4170E+00
15.4170E+00	15.5810E+00	86	1.41	15.41	15.5810E+00	15.5810E+00
15.5810E+00	15.7300E+00	87	1.41	15.58	15.7300E+00	15.7300E+00
15.7300E+00	15.9170E+00	88	1.41	15.73	15.9170E+00	15.9170E+00
15.9170E+00	16.0830E+00	89	1.41	15.91	16.0830E+00	16.0830E+00
16.0830E+00	16.2500E+00	90	1.41	16.08	16.2500E+00	16.2500E+00
16.2500E+00	16.4170E+00	91	1.41	16.25	16.4170E+00	16.4170E+00
16.4170E+00	16.5810E+00	92	1.41	16.41	16.5810E+00	16.5810E+00
16.5810E+00	16.7300E+00	93	1.41	16.58	16.7300E+00	16.7300E+00
16.7300E+00	16.9170E+00	94	1.41	16.73	16.9170E+00	16.9170E+00
16.9170E+00	17.0830E+00	95	1.41	16.91	17.0830E+00	17.0830E+00
17.0830E+00	17.2500E+00	96	1.41	17.08	17.2500E+00	17.2500E+00
17.2500E+00	17.4170E+00	97	1.41	17.25	17.4170E+00	17.4170E+00
17.4170E+00	17.5810E+00	98	1.41	17.41	17.5810E+00	17.5810E+00
17.5810E+00	17.7300E+00	99	1.41	17.58	17.7300E+00	17.7300E+00
17.7300E+00	17.9170E+00	100	1.41	17.73	17.9170E+00	17.9170E+00

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM VALUE = 2.0000E+00
 MAXIMUM VALUE = 1.0000E+02
 GEOMETRIC MEAN = 1.0000E+01
 GEOMETRIC STANDARD DEVIATION = 2.0000E+00
 VARIANCE OF LOGS = 1.0000E+00

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 14 (S-BI)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		119	119	83.22	83.22		
L		13	132	9.09	92.31		
T		0	132	0.00	92.31	4.242E+01	1.892E+02
1.250E+00	1.417E+00	6	138	4.20	96.50	6.648E+01	-6.639E+01
1.417E+00	1.583E+00	2	140	1.40	97.90	3.050E+01	-3.044E+01
1.583E+00	1.750E+00	1	141	0.70	98.60	3.508E+00	-3.222E+00
1.750E+00	1.917E+00	0	141	0.00	98.60	0.000E+00	0.000E+00
1.917E+00	2.083E+00	0	141	0.00	98.60	0.000E+00	0.000E+00
2.083E+00	2.250E+00	0	141	0.00	98.60	0.000E+00	0.000E+00
2.250E+00	2.417E+00	1	142	0.70	99.30	0.000E+00	0.000E+00
2.417E+00	2.583E+00	1	143	0.70	100.00	9.772E-02	1.014E+01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	9.929E+01

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

2.154E+01 XXXX
3.162E+01 X
4.642E+01 X
6.813E+01
1.000E+02
1.468E+02
2.154E+02 X
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 = 3.69020E+01
GEOMETRIC DEVIATION = 2.67433E+00
VARIANCE OF LOGS = 1.82513E-01

PERCENT TABLE FOR VARIABLE 14 (S-BI) BY LINEARINTERPOLATION 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 DATA VALUE ANTI LOG OF VALUE
PERCENTILE

50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.160667E+01	0.404266E+02
99.00	0.213000E+01	0.134897E+03

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	102	102	71.33	71.33		
	L	0	102	0.00	71.33		
	T	0	102	0.00	71.33	1.880E+01	3.683E+02
9.160E-01	- 1.083E+00	27	129	18.88	90.21	8.132E+01	-8.099E+01
1.083E+00	- 1.249E+00	6	135	4.20	94.41	4.073E+01	-4.058E+01
1.249E+00	- 1.416E+00	5	140	3.50	97.90	2.140E+00	1.963E-01
1.416E+00	- 1.583E+00	2	142	1.40	99.30	0.000E+00	0.000E+00
1.583E+00	- 1.749E+00	1	143	0.70	100.00	9.797E-03	1.021E+02
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	3.490E+02

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

9.985E+00 XXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXX
 2.151E+01 XXX
 3.157E+01 X
 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 = 1.26708E+01
 GEOMETRIC DEVIATION = 1.47753E+00
 VARIANCE OF LOGS = 2.87422E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.127767E+01	0.189525E+02
98.00	0.142767E+01	0.267712E+02
99.00	0.154683E+01	0.352237E+02

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

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	2.80	2.80		
L	18	22	12.59	15.38		
T	0	22	0.00	15.38	1.643E+00	2.522E+02
9.160E-01 - 1.083E+00	1	23	0.70	16.08	5.432E+00	-5.248E+00
1.083E+00 - 1.249E+00	0	23	0.00	16.08	1.472E+01	-1.472E+01
1.249E+00 - 1.416E+00	29	52	20.28	36.36	2.736E+01	-2.630E+01
1.416E+00 - 1.583E+00	45	97	31.47	67.83	3.488E+01	-3.359E+01
1.583E+00 - 1.749E+00	29	126	20.28	88.11	3.051E+01	-2.956E+01
1.749E+00 - 1.916E+00	8	134	5.59	93.71	1.831E+01	-1.788E+01
1.916E+00 - 2.083E+00	4	138	2.80	96.50	7.540E+00	-7.009E+00
2.083E+00 - 2.249E+00	3	141	2.10	98.60	2.128E+00	-7.186E-01
2.249E+00 - 2.416E+00	1	142	0.70	99.30	4.117E-01	2.017E+00
2.416E+00 - 2.583E+00	0	142	0.00	99.30	5.454E-02	-5.454E-02
2.583E+00 - 2.749E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
2.749E+00 - 2.916E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
2.916E+00 - 3.083E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
3.083E+00 - 3.249E+00	1	143	0.70	100.00	5.266E-03	1.899E+02
G	0	143	0.00	100.00		
H	0	143				
B	0	143				
TOTALS LESS H AND B	143				1.430E+02	3.090E+02

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

```

9.985E+00 X
1.466E+01
2.151E+01 XXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXXXXX
6.802E+01 XXXXXX
9.985E+01 XXX
1.466E+02 XX
2.151E+02 X
3.157E+02
4.635E+02
6.803E+02
9.985E+02
1.466E+03 X

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.00000E+01
MAXIMUM ANTILOG      = 1.50000E+03
GEOMETRIC MEAN       = 3.66386E+01
GEOMETRIC DEVIATION  = 1.86883E+00

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VARIANCE OF LOGS = 7.37500E-02

Table 2--continued

PERCENT TABLE FOR VARIABLE 17 (S-CR) BY LINEARINTERPOLATION 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
50.00	0.148822E+01	0.307768E+02
75.00	0.164158E+01	0.438103E+02
90.00	0.180559E+01	0.639124E+02
95.00	0.199309E+01	0.984205E+02
98.00	0.220156E+01	0.159059E+03
99.00	0.234434E+01	0.220971E+03

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		25	25	17.48	17.48		
T		0	25	0.00	17.48	2.335E+01	1.159E-01
9.160E-01	1.083E+00	31	56	21.68	39.16	1.717E+01	-1.537E+01
1.083E+00	1.249E+00	22	78	15.38	54.55	2.162E+01	-2.061E+01
1.249E+00	1.416E+00	23	101	16.08	70.63	2.311E+01	-2.211E+01
1.416E+00	1.583E+00	16	117	11.19	81.82	2.095E+01	-2.018E+01
1.583E+00	1.749E+00	8	125	5.59	87.41	1.611E+01	-1.562E+01
1.749E+00	1.916E+00	4	129	2.80	90.21	1.052E+01	-1.014E+01
1.916E+00	2.083E+00	6	135	4.20	94.41	5.825E+00	-4.795E+00
2.083E+00	2.249E+00	2	137	1.40	95.80	2.737E+00	-2.006E+00
2.249E+00	2.416E+00	2	139	1.40	97.20	1.091E+00	7.417E-01
2.416E+00	2.583E+00	3	142	2.10	99.30	3.691E-01	7.759E+00
2.583E+00	2.749E+00	0	142	0.00	99.30	1.059E-01	-1.059E-01
2.749E+00	2.916E+00	0	142	0.00	99.30	2.578E-02	-2.578E-02
2.916E+00	3.083E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
3.083E+00	3.249E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
3.249E+00	3.416E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
3.416E+00	3.583E+00	1	143	0.70	100.00	6.416E-03	1.559E+02
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	5.351E+01

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

```

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXX
4.634E+01 XXXXXX
6.802E+01 XXX
9.985E+01 XXXX
1.466E+02 X
2.151E+02 X
3.157E+02 XX
4.635E+02
6.803E+02
9.985E+02
1.466E+03
2.151E+03
3.157E+03 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

Table 2--continued

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+03
 GEOMETRIC MEAN = 2.41888E+01
 GEOMETRIC DEVIATION = 2.63050E+00
 VARIANCE OF LOGS = 1.76432E-01

PERCENT TABLE FOR VARIABLE 18 (S-CU) BY LINEARINTERPOLATION 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
50.00	0.120009E+01	0.158523E+02
75.00	0.148111E+01	0.302765E+02
90.00	0.190350E+01	0.800759E+02
95.00	0.215350E+01	0.142398E+03
98.00	0.247934E+01	0.301534E+03
99.00	0.255878E+01	0.362060E+03

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST) (THEOR FREQ - OBS FREQ)**2/THEOR FREQ	
LOWER	UPPER						
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00		
1.583E+00	- 1.750E+00	1	1	0.70	0.70	1.211E-01	8.138E+00
1.750E+00	- 1.916E+00	0	1	0.00	0.70	4.774E-01	-4.774E-01
1.916E+00	- 2.083E+00	5	6	3.50	4.20	1.537E+00	1.715E+00
2.083E+00	- 2.250E+00	4	10	2.80	6.99	4.042E+00	-3.052E+00
2.250E+00	- 2.416E+00	7	17	4.90	11.89	8.677E+00	-7.871E+00
2.416E+00	- 2.583E+00	6	23	4.20	16.08	1.521E+01	-1.482E+01
2.583E+00	- 2.750E+00	32	55	22.38	38.46	2.179E+01	-2.032E+01
2.750E+00	- 2.916E+00	17	72	11.89	50.35	2.548E+01	-2.481E+01
2.916E+00	- 3.083E+00	24	96	16.78	67.13	2.433E+01	-2.335E+01
3.083E+00	- 3.250E+00	13	109	9.09	76.22	1.898E+01	-1.830E+01
3.250E+00	- 3.416E+00	18	127	12.59	88.81	2.232E+01	-2.152E+01
	G	16	143	11.19	100.00	2.997E-02	8.510E+03
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	8.386E+03

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

4.638E+01 X
 6.808E+01
 9.992E+01 XXX
 1.467E+02 XXX
 2.153E+02 XXXXX
 3.160E+02 XXXX
 4.638E+02 XXXXXXXXXXXXXXXXXXXX
 6.808E+02 XXXXXXXXXXXXX
 9.992E+02 XXXXXXXXXXXXXXXXXXXX
 1.467E+03 XXXXXXXXX
 2.153E+03 XXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 6.68825E+02
 GEOMETRIC DEVIATION = 2.26789E+00
 VARIANCE OF LOGS = 1.26466E-01

PERCENT TABLE FOR VARIABLE 19 (S-LA) BY LINEARINTERPOLATION FROM FREQUENCY TABLE

Table 2--continued
 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
50.00	0.291143E+01	0.815519E+03
75.00	0.322723E+01	0.168746E+04
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 20 (S-MO)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	96	96	67.13	67.13		
	L	1	97	0.70	67.83		
	T	0	97	0.00	67.83	3.140E+01	1.371E+02
9.160E-01	- 1.083E+00	8	105	5.59	73.43	2.758E+01	-2.729E+01
1.083E+00	- 1.249E+00	6	111	4.20	77.62	3.107E+01	-3.087E+01
1.249E+00	- 1.416E+00	10	121	6.99	84.62	2.600E+01	-2.561E+01
1.416E+00	- 1.583E+00	6	127	4.20	88.81	1.616E+01	-1.578E+01
1.583E+00	- 1.749E+00	7	134	4.90	93.71	7.457E+00	-6.518E+00
1.749E+00	- 1.916E+00	1	135	0.70	94.41	2.556E+00	-2.164E+00
1.916E+00	- 2.083E+00	4	139	2.80	97.20	6.502E-01	5.502E+00
2.083E+00	- 2.249E+00	4	143	2.80	100.00	1.419E-01	2.804E+01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	6.236E+01

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

9.985E+00 XXXXX
 1.466E+01 XXXX
 2.151E+01 XXXXXXX
 3.157E+01 XXXX
 4.634E+01 XXXXX
 6.802E+01 X
 9.985E+01 XXX
 1.466E+02 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 2.91477E+01
 GEOMETRIC DEVIATION = 2.34990E+00
 VARIANCE OF LOGS = 1.37678E-01

PERCENT TABLE FOR VARIABLE 20 (S-MO) BY LINEARINTERPOLATION 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 DATA VALUE ANTI LOG OF VALUE
 PERCENTILE

Table 4--continued

50.00	0.100000E+36	0.100000E+36
75.00	0.114517E+01	0.139691E+02
90.00	0.162314E+01	0.419898E+02
95.00	0.195142E+01	0.894167E+02
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

3/

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 21 (S-NB)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	10	10	6.99	6.99		
	L	10	20	6.99	13.99		
	T	0	20	0.00	13.99	9.931E+00	1.021E+01
1.583E+00	- 1.750E+00	22	42	15.38	29.37	1.483E+01	-1.335E+01
1.750E+00	- 1.916E+00	16	58	11.19	40.56	2.433E+01	-2.367E+01
1.916E+00	- 2.083E+00	26	84	18.18	58.74	3.007E+01	-2.921E+01
2.083E+00	- 2.250E+00	21	105	14.69	73.43	2.802E+01	-2.727E+01
2.250E+00	- 2.416E+00	18	123	12.59	86.01	1.967E+01	-1.876E+01
2.416E+00	- 2.583E+00	10	133	6.99	93.01	1.041E+01	-9.450E+00
2.583E+00	- 2.750E+00	9	142	6.29	99.30	4.151E+00	-1.983E+00
2.750E+00	- 2.916E+00	1	143	0.70	100.00	1.584E+00	-9.530E-01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.144E+02

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

4.638E+01 XXXXXXXXXXXXXXXX
 6.808E+01 XXXXXXXXXXXX
 9.992E+01 XXXXXXXXXXXXXXXXXXXX
 1.467E+02 XXXXXXXXXXXXXXXX
 2.153E+02 XXXXXXXXXXXXXXXX
 3.160E+02 XXXXXXXX
 4.638E+02 XXXXXX
 6.808E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 7.00000E+02
 GEOMETRIC MEAN = 1.25006E+02
 GEOMETRIC DEVIATION = 1.98972E+00
 VARIANCE OF LOGS = 8.92770E-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
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Table 2--continued

50.00	0.200287E+01	0.100664E+03
75.00	0.227050E+01	0.186424E+03
90.00	0.251134E+01	0.324590E+03
95.00	0.263578E+01	0.432295E+03
98.00	0.271522E+01	0.519068E+03
99.00	0.274171E+01	0.551704E+03

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

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FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	122	122	85.31	85.31		
	L	0	122	0.00	85.31		
	T	0	122	0.00	85.31	1.422E+01	8.166E+02
9.160E-01	- 1.083E+00	9	131	6.29	91.61	9.346E+01	-9.337E+01
1.083E+00	- 1.249E+00	2	133	1.40	93.01	3.474E+01	-3.468E+01
1.249E+00	- 1.416E+00	9	142	6.29	99.30	0.000E+00	0.000E+00
1.416E+00	- 1.583E+00	1	143	0.70	100.00	5.705E-01	1.182E+00
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	6.897E+02

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

9.985E+00 xxxxxx
 1.466E+01 x
 2.151E+01 xxxxxx
 3.157E+01 x

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.47402E+01
 GEOMETRIC DEVIATION = 1.44386E+00
 VARIANCE OF LOGS = 2.54485E-02

PERCENT TABLE FOR VARIABLE 22 (S-NI) BY LINEARINTERPOLATION 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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.130211E+01	0.200499E+02
98.00	0.138156E+01	0.240745E+02
99.00	0.140804E+01	0.255881E+02

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		25	25	17.48	17.48		
L		26	51	18.18	35.66		
T		0	51	0.00	35.66	3.437E+01	8.052E+00
1.250E+00	1.417E+00	36	87	25.17	60.84	2.051E+01	-1.875E+01
1.417E+00	1.583E+00	17	104	11.89	72.73	2.311E+01	-2.237E+01
1.583E+00	1.750E+00	12	116	8.39	81.12	2.207E+01	-2.153E+01
1.750E+00	1.917E+00	5	121	3.50	84.62	1.786E+01	-1.758E+01
1.917E+00	2.083E+00	6	127	4.20	88.81	1.225E+01	-1.177E+01
2.083E+00	2.250E+00	5	132	3.50	92.31	7.125E+00	-6.423E+00
2.250E+00	2.417E+00	4	136	2.80	95.10	3.510E+00	-2.371E+00
2.417E+00	2.583E+00	2	138	1.40	96.50	1.466E+00	-1.013E-01
2.583E+00	2.750E+00	0	138	0.00	96.50	5.187E-01	-5.187E-01
2.750E+00	2.917E+00	3	141	2.10	98.60	1.555E-01	1.913E+01
2.917E+00	3.083E+00	1	142	0.70	99.30	3.952E-02	2.526E+01
3.083E+00	3.250E+00	0	142	0.00	99.30	8.510E-03	-8.510E-03
3.250E+00	3.417E+00	1	143	0.70	100.00	1.828E-03	5.470E+02
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	4.980E+02

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

2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 3.162E+01 XXXXXXXXXXXXXXXX
 4.642E+01 XXXXXXXX
 6.813E+01 XXX
 1.000E+02 XXXX
 1.468E+02 XXX
 2.154E+02 XXX
 3.162E+02 X
 4.642E+02
 6.813E+02 XX
 1.000E+03 X
 1.468E+03
 2.154E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 4.65358E+01
 GEOMETRIC DEVIATION = 2.87152E+00
 VARIANCE OF LOGS = 2.09866E-01

Table 4--continued

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
50.00	0.100000E+36	0.100000E+36
75.00	0.162847E+01	0.425082E+02
90.00	0.214000E+01	0.138039E+03
95.00	0.241042E+01	0.257288E+03
98.00	0.282111E+01	0.662391E+03
99.00	0.301167E+01	0.102724E+04

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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	33	33	23.08	23.08		
L	1	34	0.70	23.78		
T	0	34	0.00	23.78	1.609E+01	1.993E+01
9.160E-01 - 1.083E+00	32	66	22.38	46.15	2.652E+01	-2.532E+01
1.083E+00 - 1.249E+00	18	84	12.59	58.74	3.757E+01	-3.710E+01
1.249E+00 - 1.416E+00	25	109	17.48	76.22	3.398E+01	-3.325E+01
1.416E+00 - 1.583E+00	22	131	15.38	91.61	1.962E+01	-1.850E+01
1.583E+00 - 1.749E+00	8	139	5.59	97.20	7.229E+00	-6.122E+00
1.749E+00 - 1.916E+00	3	142	2.10	99.30	1.698E+00	6.872E-02
1.916E+00 - 2.083E+00	1	143	0.70	100.00	2.798E-01	3.294E+00
G	0	143	0.00	100.00		
H	0	143				
B	0	143				
TOTALS LESS H AND B	143				1.430E+02	-9.699E+01

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

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 4.634E+01 XXXXXXXX
 6.802E+01 XX
 9.985E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 1.89739E+01
 GEOMETRIC DEVIATION = 1.75537E+00
 VARIANCE OF LOGS = 5.97163E-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
50.00	0.113359E+01	0.136017E+02
75.00	0.140433E+01	0.253708E+02

Table 2--continued

90.00	0.156524E+01	0.367488E+02
95.00	0.168371E+01	0.482736E+02
98.00	0.181267E+01	0.649634E+02
99.00	0.189211E+01	0.780033E+02

	45	84	12.15	10.15		
	14	90	94.79	91.94		
	0	90	0.00	15.94	3.427E+02	5.793E+02
1.230E+02 - 1.470E+02	34	91	4.79	22.72	3.277E+02	-1.167E+01
1.470E+02 - 1.690E+02	0	103	94.79	72.93	3.537E+02	-3.564E+01
1.690E+02 - 1.750E+02	17	126	11.84	81.94	2.479E+02	-2.819E+01
1.750E+02 - 1.870E+02	13	123	9.09	93.01	1.355E+02	-1.218E+01
1.870E+02 - 2.080E+02	0	142	4.24	99.30	4.543E+02	-2.447E+02
2.080E+02 - 2.210E+02	0	142	0.00	99.30	9.860E+02	-1.060E+02
2.210E+02 - 2.470E+02	0	142	0.00	99.30	3.490E+02	-7.459E+01
2.470E+02 - 2.580E+02	0	142	0.00	99.30	0.000E+00	0.000E+00
2.580E+02 - 2.750E+02	1	143	0.70	100.00	4.510E+02	-6.510E+01
	0	143	0.00	100.00		
	0	143				
	0	143				
TOTALS LESS N AND M	343				4.470E+02	6.342E+01

HISTOGRAM FOR TABLE 2 34 (3-50)
 MINIMUM: 100 MAXIMUM: 300

1.00E+01
 1.10E+01
 1.20E+01
 1.30E+01
 1.40E+01
 1.50E+01
 1.60E+01
 1.70E+01
 1.80E+01
 1.90E+01
 2.00E+01

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM VALUE: 1.00000E+01
 MAXIMUM VALUE: 2.00000E+02
 MEAN: 1.61834E+01
 STANDARD DEVIATION: 1.00400E+01

FREQUENCY TABLE FOR VARIABLE 26 (S-SN)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	66	66	46.15	46.15		
	L	14	80	9.79	55.94		
	T	0	80	0.00	55.94	2.927E+01	8.791E+01
1.250E+00	- 1.417E+00	14	94	9.79	65.73	3.211E+01	-3.167E+01
1.417E+00	- 1.583E+00	9	103	6.29	72.03	3.589E+01	-3.564E+01
1.583E+00	- 1.750E+00	17	120	11.89	83.92	2.679E+01	-2.616E+01
1.750E+00	- 1.917E+00	13	133	9.09	93.01	1.335E+01	-1.238E+01
1.917E+00	- 2.083E+00	9	142	6.29	99.30	4.443E+00	-2.417E+00
2.083E+00	- 2.250E+00	0	142	0.00	99.30	9.860E-01	-9.860E-01
2.250E+00	- 2.417E+00	0	142	0.00	99.30	1.459E-01	-1.459E-01
2.417E+00	- 2.583E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
2.583E+00	- 2.750E+00	1	143	0.70	100.00	1.536E-02	6.510E+01
	G	0	143	0.00	100.00		
	H	0	143				
	B	0	143				
TOTALS LESS H AND B		143				1.430E+02	4.362E+01

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

2.154E+01 XXXXXXXXXX
 3.162E+01 XXXXXX
 4.642E+01 XXXXXXXXXX
 6.813E+01 XXXXXXXXXX
 1.000E+02 XXXXXX
 1.468E+02
 2.154E+02
 3.162E+02
 4.642E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 4.65454E+01
 GEOMETRIC DEVIATION = 1.88409E+00
 VARIANCE OF LOGS = 7.56805E-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 DATA VALUE ANTI LOG OF VALUE

Table 4--continued

PERCENTILE

50.00	0.100000E+36	0.100000E+36
75.00	0.162500E+01	0.421697E+02
90.00	0.186154E+01	0.727009E+02
95.00	0.196945E+01	0.932064E+02
98.00	0.204889E+01	0.111916E+03
99.00	0.207537E+01	0.118952E+03

TOTALS LIST 9 AND 8

143

1.470E+02

1.071E+02

HISTOGRAM FOR VARIABLE 27 IS-14

HISPOINTS ARE CAPTURED AS ANTICLOS

2.15470E+02 *****

2.147E+02 *****

2.147E+02 MAX

THE FOLLOWING STATISTICS WERE COMPUTED FOR THE LOGNORMALIZED VALUES ONLY

MINIMUM ANTICLOS = 2.15000E+02

MAXIMUM ANTICLOS = 2.15000E+02

GEOMETRIC MEAN = 2.147E+02

GEOMETRIC COEFFICIENT = 2.147E+02

VARIANCE OF LOGS = 2.147E+02

PERCENTILE TABLE FOR VARIABLE 27 IS-14 BY LINEAR INTERPOLATION FROM FREQUENCY TABLE

IF SELECTED PERCENTILE FALLS WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,

THE DATA VALUE ON THE TABLE IS GIVEN AS 0.00000E+00

SELECTED PERCENTILE	DATA VALUE	ANTICLOS VALUE
---------------------	------------	----------------

50.00	0.100000E+36	0.100000E+36
75.00	0.162500E+01	0.421697E+02
90.00	0.186154E+01	0.727009E+02
95.00	0.196945E+01	0.932064E+02
98.00	0.204889E+01	0.111916E+03
99.00	0.207537E+01	0.118952E+03

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		52	52	36.36	36.36		
L		35	87	24.48	60.84		
T		0	87	0.00	60.84	2.391E+01	1.664E+02
2.250E+00	2.417E+00	39	126	27.27	88.11	9.946E+01	-9.906E+01
2.417E+00	2.583E+00	13	139	9.09	97.20	1.951E+01	-1.885E+01
2.583E+00	2.750E+00	4	143	2.80	100.00	1.165E-01	3.420E+01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	8.271E+01

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

2.154E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.162E+02 XXXXXXXXX
 4.642E+02 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 2.34603E+02
 GEOMETRIC DEVIATION = 1.31260E+00
 VARIANCE OF LOGS = 1.39555E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.245128E+01	0.282672E+03
95.00	0.254295E+01	0.349100E+03
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

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FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		1	1	0.70	0.70		
L		0	1	0.00	0.70		
T		0	1	0.00	0.70	5.718E-01	3.206E-01
1.250E+00	1.417E+00	2	3	1.40	2.10	2.154E+00	-1.225E+00
1.417E+00	1.583E+00	6	9	4.20	6.29	6.921E+00	-6.054E+00
1.583E+00	1.750E+00	18	27	12.59	18.88	1.605E+01	-1.493E+01
1.750E+00	1.917E+00	19	46	13.29	32.17	2.689E+01	-2.618E+01
1.917E+00	2.083E+00	48	94	33.57	65.73	3.252E+01	-3.104E+01
2.083E+00	2.250E+00	24	118	16.78	82.52	2.840E+01	-2.755E+01
2.250E+00	2.417E+00	12	130	8.39	90.91	1.791E+01	-1.724E+01
2.417E+00	2.583E+00	6	136	4.20	95.10	8.153E+00	-7.417E+00
2.583E+00	2.750E+00	7	143	4.90	100.00	3.438E+00	-1.403E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-1.327E+02

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

```

2.154E+01 X
3.162E+01 XXXX
4.642E+01 XXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.468E+02 XXXXXXXXXXXXXXXXXXXXX
2.154E+02 XXXXXXXX
3.162E+02 XXXX
4.642E+02 XXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 2.00000E+01
MAXIMUM ANTILOG      = 5.00000E+02
GEOMETRIC MEAN       = 1.04471E+02
GEOMETRIC DEVIATION  = 1.91746E+00
VARIANCE OF LOGS     = 7.99342E-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	DATA VALUE	ANTI LOG OF VALUE
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Table 2--continued

PERCENTILE

50.00	0.200521E+01	0.101207E+03
75.00	0.217535E+01	0.149744E+03
90.00	0.239861E+01	0.250388E+03
95.00	0.257917E+01	0.379463E+03
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

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FREQUENCY TABLE FOR VARIABLE 29 (S-W)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		130	130	90.91	90.91		
L		1	131	0.70	91.61		
T		0	131	0.00	91.61	3.693E+01	2.396E+02
1.916E+00	2.083E+00	5	136	3.50	95.10	4.823E+01	-4.812E+01
2.083E+00	2.249E+00	1	137	0.70	95.80	3.943E+01	-3.940E+01
2.249E+00	2.416E+00	1	138	0.70	96.50	1.533E+01	-1.527E+01
2.416E+00	2.583E+00	0	138	0.00	96.50	2.826E+00	-2.826E+00
2.583E+00	2.749E+00	2	140	1.40	97.90	2.456E-01	7.897E+00
2.749E+00	2.916E+00	0	140	0.00	97.90	0.000E+00	0.000E+00
2.916E+00	3.083E+00	1	141	0.70	98.60	0.000E+00	0.000E+00
3.083E+00	3.249E+00	1	142	0.70	99.30	0.000E+00	0.000E+00
3.249E+00	3.416E+00	1	143	0.70	100.00	1.020E-02	9.806E+01
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	2.400E+02

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

9.985E+01 XXX
 1.466E+02 X
 2.151E+02 X
 3.157E+02
 4.634E+02 X
 6.802E+02
 9.985E+02 X
 1.466E+03 X
 2.151E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 2.79264E+02
 GEOMETRIC DEVIATION = 3.18709E+00
 VARIANCE OF LOGS = 2.53406E-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 DATA VALUE ANTI LOG OF VALUE

Table Z--continued

PERCENTILE

50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.279600E+01	0.625175E+03
99.00	0.317767E+01	0.150546E+04

Table 2--continued

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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		
2.250E+00 - 2.417E+00	7	7	4.90	4.90	2.102E+00	1.229E+00
2.417E+00 - 2.583E+00	5	12	3.50	8.39	7.359E+00	-6.680E+00
2.583E+00 - 2.750E+00	13	25	9.09	17.48	1.782E+01	-1.709E+01
2.750E+00 - 2.917E+00	20	45	13.99	31.47	2.983E+01	-2.916E+01
2.917E+00 - 3.083E+00	50	95	34.97	66.43	3.456E+01	-3.312E+01
3.083E+00 - 3.250E+00	31	126	21.68	88.11	2.770E+01	-2.659E+01
3.250E+00 - 3.417E+00	12	138	8.39	96.50	1.536E+01	-1.458E+01
3.417E+00 - 3.583E+00	2	140	1.40	97.90	5.892E+00	-5.553E+00
3.583E+00 - 3.750E+00	3	143	2.10	100.00	1.888E+00	-2.994E-01
G	0	143	0.00	100.00		
H	0	143				
B	0	143				
TOTALS LESS H AND B	143				1.425E+02	-1.318E+02

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

```

2.154E+02 XXXXX
3.162E+02 XXX
4.642E+02 XXXXXXXXX
6.813E+02 XXXXXXXXXXXXXXXX
1.000E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.468E+03 XXXXXXXXXXXXXXXXXXXXXXXX
2.154E+03 XXXXXXXXX
3.162E+03 X
4.642E+03 XX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 2.00000E+02
MAXIMUM ANTILOG      = 5.00000E+03
GEOMETRIC MEAN       = 9.62150E+02
GEOMETRIC DEVIATION  = 1.86335E+00
VARIANCE OF LOGS     = 7.30592E-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	DATA VALUE	ANTI LOG OF VALUE
----------	------------	-------------------

PERCENTILE

Table 2 --continued

50.00	0.300500E+01	0.101158E+04
75.00	0.314920E+01	0.140992E+04
90.00	0.328750E+01	0.193866E+04
95.00	0.338681E+01	0.243673E+04
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table Z--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 31 (S-ZN)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		133	133	93.01	93.01		
L		1	134	0.70	93.71		
T		0	134	0.00	93.71	2.049E+01	6.288E+02
2.583E+00 -	2.750E+00	2	136	1.40	95.10	6.202E+01	-6.199E+01
2.750E+00 -	2.916E+00	1	137	0.70	95.80	5.006E+01	-5.004E+01
2.916E+00 -	3.083E+00	3	140	2.10	97.90	9.958E+00	-9.657E+00
3.083E+00 -	3.250E+00	0	140	0.00	97.90	4.703E-01	-4.703E-01
3.250E+00 -	3.416E+00	1	141	0.70	98.60	0.000E+00	0.000E+00
3.416E+00 -	3.583E+00	1	142	0.70	99.30	0.000E+00	0.000E+00
3.583E+00 -	3.750E+00	0	142	0.00	99.30	0.000E+00	0.000E+00
3.750E+00 -	3.916E+00	1	143	0.70	100.00	5.059E-03	1.977E+02
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	7.043E+02

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

4.638E+02 X
6.808E+02 X
9.992E+02 XX
1.467E+03
2.153E+03 X
3.160E+03 X
4.638E+03
6.808E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+02
MAXIMUM ANTILOG = 7.00000E+03
GEOMETRIC MEAN = 1.24811E+03
GEOMETRIC DEVIATION = 2.39802E+00
VARIANCE OF LOGS = 1.44288E-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 DATA VALUE ANTI LOG OF VALUE
PERCENTILE

Table 2--continued

50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.312967E+01	0.134793E+04
99.00	0.351134E+01	0.324590E+04

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
2.416E+00	- 2.583E+00	3	3	2.10	2.10	6.227E-03	4.817E+02
2.583E+00	- 2.749E+00	4	7	2.80	4.90	2.307E-01	1.711E+01
2.749E+00	- 2.916E+00	2	9	1.40	6.29	3.422E+00	-2.838E+00
2.916E+00	- 3.083E+00	6	15	4.20	10.49	2.033E+01	-2.004E+01
3.083E+00	- 3.249E+00	3	18	2.10	12.59	4.888E+01	-4.882E+01
3.249E+00	- 3.416E+00	15	33	10.49	23.08	7.013E+01	-6.991E+01
G		110	143	76.92	100.00	0.000E+00	0.000E+00
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	3.572E+02

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

3.157E+02 XX
4.634E+02 XXX
6.802E+02 X
9.985E+02 XXXX
1.466E+03 XX
2.151E+03 XXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+02
MAXIMUM ANTILOG = 2.00000E+03
GEOMETRIC MEAN = 1.14665E+03
GEOMETRIC DEVIATION = 1.91954E+00
VARIANCE OF LOGS = 8.02012E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36

Table 2 --continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

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FREQUENCY TABLE FOR VARIABLE 33 (S-TH)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		53	53	37.06	37.06		
L		21	74	14.69	51.75		
T		0	74	0.00	51.75	3.107E+01	5.932E+01
2.250E+00	2.417E+00	20	94	13.99	65.73	2.757E+01	-2.684E+01
2.417E+00	2.583E+00	9	103	6.29	72.03	3.117E+01	-3.088E+01
2.583E+00	2.750E+00	15	118	10.49	82.52	2.613E+01	-2.556E+01
2.750E+00	2.917E+00	9	127	6.29	88.81	1.624E+01	-1.569E+01
2.917E+00	3.083E+00	6	133	4.20	93.01	7.483E+00	-6.681E+00
3.083E+00	3.250E+00	4	137	2.80	95.80	2.556E+00	-9.905E-01
3.250E+00	3.417E+00	5	142	3.50	99.30	6.468E-01	7.084E+00
3.417E+00	3.583E+00	1	143	0.70	100.00	1.400E-01	7.004E+00
G		0	143	0.00	100.00		
H		0	143				
B		0	143				
TOTALS LESS H AND B		143				1.430E+02	-3.323E+01

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

2.154E+02 XXXXXXXXXXXXX
3.162E+02 XXXXXX
4.642E+02 XXXXXXXXXXXXX
6.813E+02 XXXXXX
1.000E+03 XXXX
1.468E+03 XXX
2.154E+03 XXX
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 = 4.81381E+02
GEOMETRIC DEVIATION = 2.16538E+00
VARIANCE OF LOGS = 1.12584E-01

PERCENT TABLE FOR VARIABLE 33 (S-TH) BY LINEARINTERPOLATION 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 DATA VALUE ANTI LOG OF VALUE
PERCENTILE

50.00	0.100000E+36	0.100000E+36
75.00	0.263056E+01	0.427126E+03
90.00	0.296389E+01	0.920217E+03
95.00	0.320209E+01	0.159252E+04
98.00	0.335467E+01	0.226292E+04
99.00	0.340234E+01	0.252543E+04

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Table 2--continued

00036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 34 (AA-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	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
5.830E-01 - 7.497E-01	4	4	5.13	5.13	2.747E+00	-1.290E+00
7.497E-01 - 9.163E-01	2	6	2.56	7.69	4.937E+00	-4.532E+00
9.163E-01 - 1.083E+00	20	26	25.64	33.33	7.653E+00	-5.040E+00
1.083E+00 - 1.250E+00	3	29	3.85	37.18	1.023E+01	-9.936E+00
1.250E+00 - 1.416E+00	11	40	14.10	51.28	1.179E+01	-1.086E+01
1.416E+00 - 1.583E+00	9	49	11.54	62.82	1.172E+01	-1.095E+01
1.583E+00 - 1.750E+00	14	63	17.95	80.77	1.004E+01	-8.651E+00
1.750E+00 - 1.916E+00	8	71	10.26	91.03	7.424E+00	-6.347E+00
1.916E+00 - 2.083E+00	2	73	2.56	93.59	4.732E+00	-4.309E+00
2.083E+00 - 2.250E+00	2	75	2.56	96.15	2.601E+00	-1.832E+00
2.250E+00 - 2.416E+00	2	77	2.56	98.72	1.233E+00	3.901E-01
2.416E+00 - 2.583E+00	0	77	0.00	98.72	5.037E-01	-5.037E-01
2.583E+00 - 2.750E+00	0	77	0.00	98.72	1.775E-01	-1.775E-01
2.750E+00 - 2.916E+00	1	78	1.28	100.00	7.200E-02	1.382E+01
G	0	78	0.00	100.00		
H	0	78				
B	65	143				
TOTALS LESS H AND B	78				7.586E+01	-5.022E+01

HISTOGRAM FOR VARIABLE 34 (AA-ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

4.638E+00 XXXXX
6.808E+00 XXX
9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXX
2.153E+01 XXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXXXXXXX
6.808E+01 XXXXXXXXXXXX
9.992E+01 XXX
1.467E+02 XXX
2.153E+02 XXX
3.160E+02
4.638E+02
6.808E+02 X

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 5.00000E+00
MAXIMUM ANTILOG      = 6.40000E+02
GEOMETRIC MEAN       = 2.56747E+01
GEOMETRIC DEVIATION  = 2.69384E+00

```

VARIANCE OF LOGS = 1.85220E-01

PERCENT TABLE FOR VARIABLE 34 (AA-ZN) BY LINEARINTERPOLATION 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
50.00	0.140118E+01	0.251874E+02
75.00	0.169610E+01	0.496704E+02
90.00	0.189967E+01	0.793724E+02
95.00	0.217467E+01	0.149510E+03
98.00	0.236967E+01	0.234245E+03
99.00	0.100000E+36	0.100000E+36

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Table 2--continued

D0035 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76) Rocks

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 3 (S-FEX)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-4.170E-01	-2.503E-01	3	3	18.75	18.75	1.329E+00	9.275E-01
-2.503E-01	-8.367E-02	3	6	18.75	37.50	1.964E+00	-4.373E-01
-8.367E-02	8.300E-02	2	8	12.50	50.00	2.457E+00	-1.643E+00
8.300E-02	2.497E-01	2	10	12.50	62.50	2.601E+00	-1.832E+00
2.497E-01	4.163E-01	3	13	18.75	81.25	2.331E+00	-1.044E+00
4.163E-01	5.830E-01	1	14	6.25	87.50	1.768E+00	-1.202E+00
5.830E-01	7.497E-01	1	15	6.25	93.75	1.135E+00	-2.535E-01
7.497E-01	9.163E-01	0	15	0.00	93.75	6.165E-01	-6.165E-01
9.163E-01	1.083E+00	0	15	0.00	93.75	2.835E-01	-2.835E-01
1.083E+00	1.250E+00	1	16	6.25	100.00	1.598E-01	6.100E+00
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.465E+01	-2.849E-01

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

```

4.638E-01 XXXXXXXXXXXXXXXXXXXX
6.808E-01 XXXXXXXXXXXXXXXXXXXX
9.992E-01 XXXXXXXXXXXXXXXX
1.467E+00 XXXXXXXXXXXXXXXX
2.153E+00 XXXXXXXXXXXXXXXXXXXX
3.160E+00 XXXXXXXX
4.638E+00 XXXXXXXX
6.808E+00
9.992E+00
1.467E+01 XXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 5.00000E-01
MAXIMUM ANTILOG      = 1.50000E+01
GEOMETRIC MEAN       = 1.38032E+00
GEOMETRIC DEVIATION  = 2.54253E+00
VARIANCE OF LOGS     = 1.64240E-01

```

PERCENT TABLE FOR VARIABLE 3 (S-FEX) BY LINEARINTERPOLATION 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

Table 2--continued

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
50.00	0.830010E-01	0.121060E+01
75.00	0.360779E+00	0.229498E+01
90.00	0.649669E+00	0.446343E+01
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

00036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 4 (S-MG%)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-1.417E+00	-1.250E+00	1	1	6.25	6.25	7.595E-01	5.573E-01
-1.250E+00	-1.084E+00	1	2	6.25	12.50	1.253E+00	-4.552E-01
-1.084E+00	-9.170E-01	5	7	31.25	43.75	1.794E+00	9.923E-01
-9.170E-01	-7.503E-01	1	8	6.25	50.00	2.229E+00	-1.781E+00
-7.503E-01	-5.837E-01	2	10	12.50	62.50	2.404E+00	-1.572E+00
-5.837E-01	-4.170E-01	0	10	0.00	62.50	2.249E+00	-2.249E+00
-4.170E-01	-2.503E-01	2	12	12.50	75.00	1.826E+00	-7.307E-01
-2.503E-01	-8.366E-02	2	14	12.50	87.50	1.287E+00	2.681E-01
-8.366E-02	8.300E-02	2	16	12.50	100.00	1.510E+00	-1.853E-01
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.531E+01	-5.155E+00

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

4.638E-02 XXXXXX
 6.808E-02 XXXXXX
 9.992E-02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.467E-01 XXXXXX
 2.153E-01 XXXXXXXXXXXXXXXX
 3.160E-01
 4.638E-01 XXXXXXXXXXXXXXXX
 6.808E-01 XXXXXXXXXXXXXXXX
 9.992E-01 XXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-02
 MAXIMUM ANTILOG = 1.00000E+00
 GEOMETRIC MEAN = 2.17845E-01
 GEOMETRIC DEVIATION = 2.75368E+00
 VARIANCE OF LOGS = 1.93524E-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	DATA VALUE	ANTI LOG OF VALUE
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Table 2--continued

PERCENTILE

50.00	-0.750332E+00	0.177692E+00
75.00	-0.250331E+00	0.561913E+00
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

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FREQUENCY TABLE FOR VARIABLE 5 (S-CAX)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00		
-1.084E+00	-9.173E-01	1	1	6.25	6.25	5.891E-01	1.108E+00
-9.173E-01	-7.507E-01	1	2	6.25	12.50	1.188E+00	-3.461E-01
-7.507E-01	-5.840E-01	2	4	12.50	25.00	1.955E+00	-9.315E-01
-5.840E-01	-4.173E-01	3	7	18.75	43.75	2.625E+00	-1.482E+00
-4.173E-01	-2.507E-01	3	10	18.75	62.50	2.877E+00	-1.834E+00
-2.507E-01	-8.400E-02	2	12	12.50	75.00	2.573E+00	-1.796E+00
-8.400E-02	8.267E-02	1	13	6.25	81.25	1.878E+00	-1.346E+00
8.267E-02	2.493E-01	3	16	18.75	100.00	1.971E+00	-4.497E-01
	G	0	16	0.00	100.00		
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.566E+01	-7.076E+00

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

9.985E-02 XXXXXX
 1.466E-01 XXXXXX
 2.151E-01 XXXXXXXXXXXXX
 3.157E-01 XXXXXXXXXXXXXXXXXXXX
 4.634E-01 XXXXXXXXXXXXXXXXXXXX
 6.802E-01 XXXXXXXXXXXXXXXX
 9.985E-01 XXXXXX
 1.466E+00 XXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E-01
 MAXIMUM ANTILOG = 1.50000E+00
 GEOMETRIC MEAN = 4.54785E-01
 GEOMETRIC DEVIATION = 2.32572E+00
 VARIANCE OF LOGS = 1.34365E-01

PERCENT TABLE FOR VARIABLE 5 (S-CAX) 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
------------------------	------------	-------------------

50.00	-0.361776E+00	0.434734E+00
75.00	-0.839980E-01	0.824142E+00
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

//

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-2.084E+00	-1.917E+00	1	1	6.25	6.25	4.963E-01	1.519E+00
-1.917E+00	-1.751E+00	1	2	6.25	12.50	8.644E-01	2.924E-01
-1.751E+00	-1.584E+00	1	3	6.25	18.75	1.328E+00	-5.746E-01
-1.584E+00	-1.417E+00	3	6	18.75	37.50	1.798E+00	-1.303E-01
-1.417E+00	-1.251E+00	2	8	12.50	50.00	2.148E+00	-1.217E+00
-1.251E+00	-1.084E+00	0	8	0.00	50.00	2.262E+00	-2.262E+00
-1.084E+00	-9.173E-01	2	10	12.50	62.50	2.101E+00	-1.150E+00
-9.173E-01	-7.507E-01	3	13	18.75	81.25	1.721E+00	2.181E-02
-7.507E-01	-5.840E-01	1	14	6.25	87.50	1.243E+00	-4.387E-01
-5.840E-01	-4.173E-01	2	16	12.50	100.00	1.608E+00	-3.635E-01
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.557E+01	-4.303E+00

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

9.985E-03 xxxxxx
 1.466E-02 xxxxxx
 2.151E-02 xxxxxx
 3.157E-02 xxxxxxxxxxxxxxxxxxxx
 4.634E-02 xxxxxxxxxxxxxxxx
 6.802E-02
 9.985E-02 xxxxxxxxxxxxxxxx
 1.466E-01 xxxxxxxxxxxxxxxxxxxx
 2.151E-01 xxxxxx
 3.157E-01 xxxxxxxxxxxxxxxx

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E-02
 MAXIMUM ANTILOG = 3.00000E-01
 GEOMETRIC MEAN = 6.57844E-02
 GEOMETRIC DEVIATION = 2.93434E+00
 VARIANCE OF LOGS = 2.18566E-01

PERCENT TABLE FOR VARIABLE 6 (S-TIX) 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

Table 2--continued

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
50.00	-0.125066E+01	0.561481E-01
75.00	-0.806220E+00	0.156236E+00
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

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FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
1.916E+00	2.083E+00	2	2	12.50	12.50	1.149E+00	5.915E-01
2.083E+00	2.249E+00	2	4	12.50	25.00	1.973E+00	-9.593E-01
2.249E+00	2.416E+00	4	8	25.00	50.00	2.716E+00	-1.244E+00
2.416E+00	2.583E+00	1	9	6.25	56.25	2.999E+00	-2.665E+00
2.583E+00	2.749E+00	4	13	25.00	81.25	2.655E+00	-1.148E+00
2.749E+00	2.916E+00	1	14	6.25	87.50	1.884E+00	-1.354E+00
2.916E+00	3.083E+00	1	15	6.25	93.75	1.072E+00	-1.400E-01
3.083E+00	3.249E+00	1	16	6.25	100.00	7.361E-01	6.225E-01
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.518E+01	-6.296E+00

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

```

9.985E+01 XXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXXXXXX
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXX
4.634E+02 XXXXXXXXXXXXXXXXXXXXXXXX
6.802E+02 XXXXXX
9.985E+02 XXXXXX
1.466E+03 XXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.00000E+02
MAXIMUM ANTILOG      = 1.50000E+03
GEOMETRIC MEAN       = 3.09497E+02
GEOMETRIC DEVIATION  = 2.24577E+00
VARIANCE OF LOGS     = 1.23458E-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
------------------------	------------	-------------------

Table 2--continued

50.00	0.241600E+01	0.260616E+03
75.00	0.270767E+01	0.510115E+03
90.00	0.298267E+01	0.960879E+03
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

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FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
2.250E+00	- 2.417E+00	2	2	12.50	12.50	1.485E+00	-1.390E-01
2.417E+00	- 2.583E+00	4	6	25.00	37.50	2.813E+00	-1.391E+00
2.583E+00	- 2.750E+00	3	9	18.75	56.25	3.738E+00	-2.935E+00
2.750E+00	- 2.917E+00	2	11	12.50	68.75	3.486E+00	-2.912E+00
2.917E+00	- 3.083E+00	4	15	25.00	93.75	2.281E+00	-5.272E-01
3.083E+00	- 3.250E+00	1	16	6.25	100.00	1.474E+00	-7.956E-01
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.528E+01	-8.700E+00

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

2.154E+02 XXXXXXXXXXXXXXXX
 3.162E+02 XXXXXXXXXXXXXXXXXXXXXXXX
 4.642E+02 XXXXXXXXXXXXXXXXXXXXXXXX
 6.813E+02 XXXXXXXXXXXXXXXX
 1.000E+03 XXXXXXXXXXXXXXXXXXXXXXXX
 1.468E+03 XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 1.50000E+03
 GEOMETRIC MEAN = 5.21325E+02
 GEOMETRIC DEVIATION = 1.88720E+00
 VARIANCE OF LOGS = 7.60760E-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
50.00	0.269445E+01	0.494818E+03
75.00	0.295833E+01	0.908521E+03
90.00	0.305833E+01	0.114376E+04
95.00	0.100000E+36	0.100000E+36

```
0.1000000E+36
0.1000000E+36
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D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (07/04/76)

DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	1	1	6.25	6.25		
	L	2	3	12.50	18.75		
	T	0	3	0.00	18.75	1.493E+00	1.522E+00
-8.400E-02	8.267E-02	1	4	6.25	25.00	2.153E+00	-1.688E+00
8.267E-02	2.493E-01	4	8	25.00	50.00	3.267E+00	-2.043E+00
2.493E-01	4.160E-01	4	12	25.00	75.00	3.595E+00	-2.483E+00
4.160E-01	5.827E-01	1	13	6.25	81.25	2.869E+00	-2.520E+00
5.827E-01	7.493E-01	2	15	12.50	93.75	1.660E+00	-4.552E-01
7.493E-01	9.160E-01	0	15	0.00	93.75	6.963E-01	-6.963E-01
9.160E-01	1.083E+00	1	16	6.25	100.00	2.667E-01	3.483E+00
	G	0	16	0.00	100.00		
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.600E+01	-4.881E+00

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

9.985E-01 XXXXX
1.466E+00 XXXXXXXXXXXXXXXXXXXXXXXX
2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXX
3.157E+00 XXXXX
4.634E+00 XXXXXXXXXXXXXXXX
6.802E+00
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 = 2.33327E+00
GEOMETRIC DEVIATION = 1.89912E+00
VARIANCE OF LOGS = 7.75911E-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
50.00	0.249334E+00	0.177555E+01
75.00	0.416001E+00	0.260616E+01

90.00
95.00
98.00
99.00

0.699335E+00
0.100000E+36
0.100000E+36
0.100000E+36

0.500420E+01
0.100000E+36
0.100000E+36
0.100000E+36

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FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	8	8	50.00	50.00		
	L	2	10	12.50	62.50		
	T	0	10	0.00	62.50	3.053E+00	1.581E+01
5.830E-01	- 7.497E-01	1	11	6.25	68.75	2.700E+00	-2.330E+00
7.497E-01	- 9.163E-01	1	12	6.25	75.00	3.237E+00	-2.928E+00
9.163E-01	- 1.083E+00	1	13	6.25	81.25	2.992E+00	-2.658E+00
1.083E+00	- 1.250E+00	1	14	6.25	87.50	2.134E+00	-1.665E+00
1.250E+00	- 1.416E+00	1	15	6.25	93.75	1.174E+00	-3.215E-01
1.416E+00	- 1.583E+00	0	15	0.00	93.75	4.977E-01	-4.977E-01
1.583E+00	- 1.750E+00	0	15	0.00	93.75	1.628E-01	-1.628E-01
1.750E+00	- 1.916E+00	1	16	6.25	100.00	5.036E-02	1.981E+01
	G	0	16	0.00	100.00		
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.600E+01	2.505E+01

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

4.638E+00 XXXXXX
6.808E+00 XXXXXX
9.992E+00 XXXXXX
1.467E+01 XXXXXX
2.153E+01 XXXXXX
3.160E+01
4.638E+01
6.808E+01 XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 7.00000E+01
GEOMETRIC MEAN = 1.39438E+01
GEOMETRIC DEVIATION = 2.54853E+00
VARIANCE OF LOGS = 1.65071E-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
------------------------	------------	-------------------

50.00
75.00
90.00
95.00
98.00
99.00

0.100000E+36
0.916334E+00
0.131633E+01
0.100000E+36
0.100000E+36
0.100000E+36

Table --continued
0.100000E+36
0.824772E+01
0.207174E+02
0.100000E+36
0.100000E+36
0.100000E+36

FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM FREQ	(NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
	N	9	9	56.25	56.25		
	L	3	12	18.75	75.00		
	T	0	12	0.00	75.00	3.525E+00	2.037E+01
9.160E-01	1.083E+00	1	13	6.25	81.25	3.976E+00	-3.725E+00
1.083E+00	1.249E+00	0	13	0.00	81.25	4.189E+00	-4.189E+00
1.249E+00	1.416E+00	1	14	6.25	87.50	2.782E+00	-2.422E+00
1.416E+00	1.583E+00	1	15	6.25	93.75	1.164E+00	-3.053E-01
1.583E+00	1.749E+00	0	15	0.00	93.75	3.069E-01	-3.069E-01
1.749E+00	1.916E+00	1	16	6.25	100.00	5.654E-02	1.763E+01
	G	0	16	0.00	100.00		
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.600E+01	2.705E+01

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

9.985E+00 XXXXXX
 1.466E+01
 2.151E+01 XXXXXX
 3.157E+01 XXXXXX
 4.634E+01
 6.802E+01 XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 7.00000E+01
 GEOMETRIC MEAN = 2.54573E+01
 GEOMETRIC DEVIATION = 2.25398E+00
 VARIANCE OF LOGS = 1.24573E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.148267E+01	0.303856E+02
95.00	0.100000E+36	0.100000E+36

98.00
99.00

0.100000E+36
0.100000E+36

Table 2--continued
0.100000E+36
0.100000E+36

NAME		DATE		TIME		TOTAL	
NAME	DATE	DATE	TIME	TIME	TIME	TOTAL	TOTAL
		0	0	0.00	0.00		
		1	1	0.75	0.75		
		2	2	0.00	0.25		
		3	3	10.50	10.75		
		4	4	10.50	21.25		
		5	5	10.75	32.00		
		6	6	0.25	32.25		
		7	7	0.25	32.50		
		8	8	10.75	43.25		
		9	9	10.50	53.75		
		10	10	0.25	54.00		
		11	11	0.25	54.25		
		12	12	0.25	54.50		
		13	13	0.25	54.75		
		14	14	0.25	55.00		
		15	15	0.25	55.25		
		16	16	0.25	55.50		
		17	17	0.25	55.75		
		18	18	0.25	56.00		
		19	19	0.25	56.25		
		20	20	0.25	56.50		
		21	21	0.25	56.75		
		22	22	0.25	57.00		
		23	23	0.25	57.25		
		24	24	0.25	57.50		
		25	25	0.25	57.75		
		26	26	0.25	58.00		
		27	27	0.25	58.25		
		28	28	0.25	58.50		
		29	29	0.25	58.75		
		30	30	0.25	59.00		
		31	31	0.25	59.25		
		32	32	0.25	59.50		
		33	33	0.25	59.75		
		34	34	0.25	60.00		
		35	35	0.25	60.25		
		36	36	0.25	60.50		
		37	37	0.25	60.75		
		38	38	0.25	61.00		
		39	39	0.25	61.25		
		40	40	0.25	61.50		
		41	41	0.25	61.75		
		42	42	0.25	62.00		
		43	43	0.25	62.25		
		44	44	0.25	62.50		
		45	45	0.25	62.75		
		46	46	0.25	63.00		
		47	47	0.25	63.25		
		48	48	0.25	63.50		
		49	49	0.25	63.75		
		50	50	0.25	64.00		
		51	51	0.25	64.25		
		52	52	0.25	64.50		
		53	53	0.25	64.75		
		54	54	0.25	65.00		
		55	55	0.25	65.25		
		56	56	0.25	65.50		
		57	57	0.25	65.75		
		58	58	0.25	66.00		
		59	59	0.25	66.25		
		60	60	0.25	66.50		
		61	61	0.25	66.75		
		62	62	0.25	67.00		
		63	63	0.25	67.25		
		64	64	0.25	67.50		
		65	65	0.25	67.75		
		66	66	0.25	68.00		
		67	67	0.25	68.25		
		68	68	0.25	68.50		
		69	69	0.25	68.75		
		70	70	0.25	69.00		
		71	71	0.25	69.25		
		72	72	0.25	69.50		
		73	73	0.25	69.75		
		74	74	0.25	70.00		
		75	75	0.25	70.25		
		76	76	0.25	70.50		
		77	77	0.25	70.75		
		78	78	0.25	71.00		
		79	79	0.25	71.25		
		80	80	0.25	71.50		
		81	81	0.25	71.75		
		82	82	0.25	72.00		
		83	83	0.25	72.25		
		84	84	0.25	72.50		
		85	85	0.25	72.75		
		86	86	0.25	73.00		
		87	87	0.25	73.25		
		88	88	0.25	73.50		
		89	89	0.25	73.75		
		90	90	0.25	74.00		
		91	91	0.25	74.25		
		92	92	0.25	74.50		
		93	93	0.25	74.75		
		94	94	0.25	75.00		
		95	95	0.25	75.25		
		96	96	0.25	75.50		
		97	97	0.25	75.75		
		98	98	0.25	76.00		
		99	99	0.25	76.25		
		100	100	0.25	76.50		
		101	101	0.25	76.75		
		102	102	0.25	77.00		
		103	103	0.25	77.25		
		104	104	0.25	77.50		
		105	105	0.25	77.75		
		106	106	0.25	78.00		
		107	107	0.25	78.25		
		108	108	0.25	78.50		
		109	109	0.25	78.75		
		110	110	0.25	79.00		
		111	111	0.25	79.25		
		112	112	0.25	79.50		
		113	113	0.25	79.75		
		114	114	0.25	80.00		
		115	115	0.25	80.25		
		116	116	0.25	80.50		
		117	117	0.25	80.75		
		118	118	0.25	81.00		
		119	119	0.25	81.25		
		120	120	0.25	81.50		
		121	121	0.25	81.75		
		122	122	0.25	82.00		
		123	123	0.25	82.25		
		124	124	0.25	82.50		
		125	125	0.25	82.75		
		126	126	0.25	83.00		
		127	127	0.25	83.25		
		128	128	0.25	83.50		
		129	129	0.25	83.75		
		130	130	0.25	84.00		
		131	131	0.25	84.25		
		132	132	0.25	84.50		
		133	133	0.25	84.75		
		134	134	0.25	85.00		
		135	135	0.25	85.25		
		136	136	0.25	85.50		
		137	137	0.25	85.75		
		138	138	0.25	86.00		
		139	139	0.25	86.25		
		140	140	0.25	86.50		
		141	141	0.25	86.75		
		142	142	0.25	87.00		
		143	143	0.25	87.25		
		144	144	0.25	87.50		
		145	145	0.25	87.75		
		146	146	0.25	88.00		
		147	147	0.25	88.25		
		148	148	0.25	88.50		
		149	149	0.25	88.75		
		150	150	0.25	89.00		
		151	151	0.25	89.25		
		152	152	0.25	89.50		
		153	153	0.25	89.75		
		154	154	0.25	90.00		
		155	155	0.25	90.25		
		156	156	0.25	90.50		
		157	157	0.25	90.75		
		158	158	0.25	91.00		
		159	159	0.25	91.25		
		160	160	0.25	91.50		
		161	161	0.25	91.75		
		162	162	0.25	92.00		
		163	163	0.25	92.25		
		164	164	0.25	92.50		
		165	165	0.25	92.75		
		166	166	0.25	93.00		
		167	167	0.25	93.25		
		168	168	0.25	93.50		
		169	169	0.25	93.75		
		170	170	0.25	94.00		
		171	171	0.25	94.25		
		172	172	0.25	94.50		
		173	173	0.25	94.75		
		174	174	0.25	95.00		
		175	175	0.25	95.25		
		176	176	0.25	95.50		
		177	177	0.25	95.75		
		178	178	0.25	96.00		
		179	179	0.25	96.25		
		180	180	0.25	96.50		
		181	181	0.25	96.75		
		182	182	0.25	97.00		
		183	183	0.25	97.25		
		184	184	0.25	97.50		
		185	185	0.25	97.75		
		186	186	0.25	98.00		
		187	187	0.25	98.25		
		188	188	0.25	98.50		
		189	189	0.25	98.75		
		190	190	0.25	99.00		
		191	191	0.25	99.25		
		192	192	0.25	99.50		
		193	193	0.25	99.75		
		194	194	0.25	100.00		
		195	195	0.25	100.25		
		196	196	0.25	100.50		
		197	197	0.25	100.75		
		198	198	0.25	101.00		
		199	199	0.25	101.25		
		200	200	0.25	101.50		
		201	201	0.25	101.75		
		202	202	0.25	102.00		
		203	203	0.25	102.25		
		204	204	0.25	102.50		
		205	205	0.25	102.75		
		206	206	0.25	103.00		
		207	207	0.25	103.25		
		208	208	0.25	103.50		
		209	209	0.25	103.75		
		210	210	0.25	104.00		
		211	211	0.25	104.25		
		212	212	0.25	104.50		
		213	213	0.25	104.75		
		214					

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FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	0	0	0.00	0.00		
	L	1	1	6.25	6.25		
	T	0	1	0.00	6.25	3.059E+00	1.386E+00
5.830E-01	- 7.497E-01	2	3	12.50	18.75	9.106E-01	1.286E+00
7.497E-01	- 9.163E-01	2	5	12.50	31.25	1.038E+00	8.887E-01
9.163E-01	- 1.083E+00	3	8	18.75	50.00	1.140E+00	1.491E+00
1.083E+00	- 1.250E+00	1	9	6.25	56.25	1.207E+00	-3.778E-01
1.250E+00	- 1.416E+00	1	10	6.25	62.50	1.230E+00	-4.176E-01
1.416E+00	- 1.583E+00	3	13	18.75	81.25	1.209E+00	1.273E+00
1.583E+00	- 1.750E+00	2	15	12.50	93.75	6.207E+00	-5.884E+00
	G	1	16	6.25	100.00	0.000E+00	0.000E+00
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.600E+01	-3.557E-01

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

4.638E+00 XXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXXXXXX
1.467E+01 XXXXXX
2.153E+01 XXXXXX
3.160E+01 XXXXXXXXXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 5.00000E+01
GEOMETRIC MEAN = 1.48265E+01
GEOMETRIC DEVIATION = 2.24373E+00
VARIANCE OF LOGS = 1.23180E-01

PERCENT TABLE FOR VARIABLE 18 (S-CU) BY LINEARINTERPOLATION 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
50.00	0.108300E+01	0.121060E+02
75.00	0.152745E+01	0.336858E+02

90.00	0.169967E+01	0.500805E+02
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

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FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	11	11	68.75	68.75		
	L	0	11	0.00	68.75		
	T	0	11	0.00	68.75	3.168E+00	1.936E+01
1.250E+00	- 1.417E+00	1	12	6.25	75.00	6.015E+00	-5.849E+00
1.417E+00	- 1.583E+00	1	13	6.25	81.25	5.042E+00	-4.844E+00
1.583E+00	- 1.750E+00	3	16	18.75	100.00	1.775E+00	-8.409E-02
	G	0	16	0.00	100.00		
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.600E+01	8.586E+00

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

2.154E+01 xxxxxx
 3.162E+01 xxxxxx
 4.642E+01 xxxxxxxxxxxxxxxxxxxxxx

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 5.00000E+01
 GEOMETRIC MEAN = 3.75848E+01
 GEOMETRIC DEVIATION = 1.51633E+00
 VARIANCE OF LOGS = 3.26864E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.141667E+01	0.261016E+02
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

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FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		11	11	68.75	68.75		
L		0	11	0.00	68.75		
T		0	11	0.00	68.75	3.203E+00	1.899E+01
5.830E-01	7.497E-01	1	12	6.25	75.00	2.733E+00	-2.368E+00
7.497E-01	9.163E-01	1	13	6.25	81.25	3.223E+00	-2.913E+00
9.163E-01	1.083E+00	0	13	0.00	81.25	2.942E+00	-2.942E+00
1.083E+00	1.250E+00	0	13	0.00	81.25	2.078E+00	-2.078E+00
1.250E+00	1.416E+00	1	14	6.25	87.50	1.135E+00	-2.547E-01
1.416E+00	1.583E+00	1	15	6.25	93.75	4.802E-01	1.602E+00
1.583E+00	1.750E+00	1	16	6.25	100.00	2.060E-01	4.649E+00
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.600E+01	1.468E+01

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

4.638E+00 XXXXXX
6.808E+00 XXXXXX
9.992E+00
1.467E+01
2.153E+01 XXXXXX
3.160E+01 XXXXXX
4.638E+01 XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 5.00000E+01
GEOMETRIC MEAN = 1.60043E+01
GEOMETRIC DEVIATION = 2.64337E+00
VARIANCE OF LOGS = 1.78218E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.749667E+00	0.561910E+01

Table 4--continued

90.00	0.148300E+01	0.304090E+02
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
1.083E+00	1.250E+00	5	5	31.25	31.25	3.353E+00	-1.861E+00
1.250E+00	1.416E+00	6	11	37.50	68.75	5.287E+00	-4.152E+00
1.416E+00	1.583E+00	2	13	12.50	81.25	4.153E+00	-3.672E+00
1.583E+00	1.750E+00	3	16	18.75	100.00	1.971E+00	-4.491E-01
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.476E+01	-1.013E+01

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

```

1.467E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.160E+01 XXXXXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXXXXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG = 1.50000E+01
MAXIMUM ANTILOG = 5.00000E+01
GEOMETRIC MEAN = 2.28356E+01
GEOMETRIC DEVIATION = 1.56163E+00
VARIANCE OF LOGS = 3.74722E-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
50.00	0.133300E+01	0.215278E+02
75.00	0.149967E+01	0.315986E+02
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

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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	7	7	43.75	43.75		
L	1	8	6.25	50.00		
T	0	8	0.00	50.00	6.518E-01	8.284E+01
5.830E-01 - 7.497E-01	2	10	12.50	62.50	5.986E+00	-5.652E+00
7.497E-01 - 9.163E-01	4	14	25.00	87.50	7.846E+00	-7.336E+00
9.163E-01 - 1.083E+00	2	16	12.50	100.00	1.516E+00	-1.962E-01
G	0	16	0.00	100.00		
H	0	16				
B	0	16				
TOTALS LESS H AND B	16				1.600E+01	6.965E+01

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

4.638E+00 XXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
MAXIMUM ANTILOG = 1.00000E+01
GEOMETRIC MEAN = 7.03544E+00
GEOMETRIC DEVIATION = 1.29958E+00
VARIANCE OF LOGS = 1.29511E-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
50.00	0.100000E+36	0.100000E+36
75.00	0.833000E+00	0.680770E+01
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

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	1	1	6.25	6.25		
L	2	3	12.50	18.75		
T	0	3	0.00	18.75	9.328E-01	4.581E+00
1.916E+00 - 2.083E+00	1	4	6.25	25.00	2.012E+00	-1.515E+00
2.083E+00 - 2.249E+00	2	6	12.50	37.50	3.595E+00	-3.039E+00
2.249E+00 - 2.416E+00	5	11	31.25	68.75	4.172E+00	-2.973E+00
2.416E+00 - 2.583E+00	2	13	12.50	81.25	3.144E+00	-2.508E+00
2.583E+00 - 2.749E+00	3	16	18.75	100.00	2.143E+00	-7.438E-01
G	0	16	0.00	100.00		
H	0	16				
B	0	16				
TOTALS LESS H AND B	16				1.600E+01	-6.199E+00

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

9.985E+01 XXXXXX
 1.466E+02 XXXXXXXXXXXXX
 2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+02 XXXXXXXXXXXXX
 4.634E+02 XXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 2.38548E+02
 GEOMETRIC DEVIATION = 1.66100E+00
 VARIANCE OF LOGS = 4.85628E-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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
50.00	0.231600E+01	0.207015E+03
75.00	0.248933E+01	0.315744E+03
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	5	5	31.25	31.25		
	L	1	6	6.25	37.50		
	T	0	6	0.00	37.50	3.619E+00	1.566E+00
1.083E+00 -	1.250E+00	1	7	6.25	43.75	2.327E+00	-1.898E+00
1.250E+00 -	1.416E+00	2	9	12.50	56.25	2.668E+00	-1.919E+00
1.416E+00 -	1.583E+00	3	12	18.75	75.00	2.563E+00	-1.393E+00
1.583E+00 -	1.750E+00	0	12	0.00	75.00	2.062E+00	-2.062E+00
1.750E+00 -	1.916E+00	1	13	6.25	81.25	1.390E+00	-6.708E-01
1.916E+00 -	2.083E+00	3	16	18.75	100.00	1.370E+00	8.206E-01
	G	0	16	0.00	100.00		
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.600E+01	-5.555E+00

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

1.467E+01 XXXXXX
 2.153E+01 XXXXXXXXXXXXX
 3.160E+01 XXXXXXXXXXXXXXXXXXXX
 4.638E+01
 6.808E+01 XXXXXX
 9.992E+01 XXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 4.03145E+01
 GEOMETRIC DEVIATION = 2.10759E+00
 VARIANCE OF LOGS = 1.04837E-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
50.00	0.133300E+01	0.215278E+02
75.00	0.158300E+01	0.382826E+02
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36

Table 4--continued

98.00
99.00

```
0.100000E+36
0.100000E+36
```

```
0.100000E+36
0.100000E+36
```

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	2	2	12.50	12.50		
L	0	2	0.00	12.50		
T	0	2	0.00	12.50	1.531E+00	1.435E-01
9.160E-01 - 1.083E+00	4	6	25.00	37.50	2.714E+00	-1.240E+00
1.083E+00 - 1.249E+00	3	9	18.75	56.25	4.089E+00	-3.356E+00
1.249E+00 - 1.416E+00	3	12	18.75	75.00	3.951E+00	-3.192E+00
1.416E+00 - 1.583E+00	2	14	12.50	87.50	2.449E+00	-1.632E+00
1.583E+00 - 1.749E+00	2	16	12.50	100.00	1.265E+00	3.155E-01
G	0	16	0.00	100.00		
H	0	16				
B	0	16				
TOTALS LESS H AND B	16				1.600E+01	-8.961E+00

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

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 5.00000E+01
 GEOMETRIC MEAN = 1.86317E+01
 GEOMETRIC DEVIATION = 1.75439E+00
 VARIANCE OF LOGS = 5.95979E-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
50.00	0.119378E+01	0.156235E+02
75.00	0.141600E+01	0.260616E+02
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	2	2	12.50	12.50		
	L	0	2	0.00	12.50		
	T	0	2	0.00	12.50	1.729E+00	4.240E-02
1.250E+00 -	1.417E+00	2	4	12.50	25.00	1.460E+00	-9.103E-02
1.417E+00 -	1.583E+00	0	4	0.00	25.00	2.026E+00	-2.026E+00
1.583E+00 -	1.750E+00	3	7	18.75	43.75	2.413E+00	-1.170E+00
1.750E+00 -	1.917E+00	2	9	12.50	56.25	2.468E+00	-1.658E+00
1.917E+00 -	2.083E+00	2	11	12.50	68.75	2.168E+00	-1.245E+00
2.083E+00 -	2.250E+00	4	15	25.00	93.75	1.635E+00	8.121E-01
2.250E+00 -	2.417E+00	1	16	6.25	100.00	2.100E+00	-1.624E+00
	G	0	16	0.00	100.00		
	H	0	16				
	B	0	16				
TOTALS LESS H AND B		16				1.600E+01	-6.960E+00

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

2.154E+01 XXXXXXXXXXXXX
3.162E+01
4.642E+01 XXXXXXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXXXXX
1.468E+02 XXXXXXXXXXXXXXXXXXXXXXXX
2.154E+02 XXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 2.00000E+02
GEOMETRIC MEAN = 7.67937E+01
GEOMETRIC DEVIATION = 2.08716E+00
VARIANCE OF LOGS = 1.02117E-01

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
50.00	0.183333E+01	0.681294E+02
75.00	0.212500E+01	0.133353E+03

Table 1--continued

90.00	0.222500E+01	0.167881E+03
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 34 (AA-ZN-P)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		3	3	18.75	18.75		
T		0	3	0.00	18.75	9.284E-01	4.622E+00
5.830E-01	7.497E-01	1	4	6.25	25.00	8.499E-01	3.266E-01
7.497E-01	9.163E-01	0	4	0.00	25.00	1.299E+00	-1.299E+00
9.163E-01	1.083E+00	1	5	6.25	31.25	1.757E+00	-1.188E+00
1.083E+00	1.250E+00	2	7	12.50	43.75	2.104E+00	-1.153E+00
1.250E+00	1.416E+00	1	8	6.25	50.00	2.230E+00	-1.781E+00
1.416E+00	1.583E+00	2	10	12.50	62.50	2.092E+00	-1.135E+00
1.583E+00	1.750E+00	3	13	18.75	81.25	1.737E+00	-9.125E-03
1.750E+00	1.916E+00	0	13	0.00	81.25	1.276E+00	-1.276E+00
1.916E+00	2.083E+00	3	16	18.75	100.00	1.728E+00	8.331E-03
G		0	16	0.00	100.00		
H		0	16				
B		0	16				
TOTALS LESS H AND B		16				1.600E+01	-2.885E+00

HISTOGRAM FOR VARIABLE 34 (AA-ZN-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

4.638E+00 XXXXXX
6.808E+00
9.992E+00 XXXXXX
1.467E+01 XXXXXXXXXXXXX
2.153E+01 XXXXXX
3.160E+01 XXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXXXXXXXXXXX
6.808E+01
9.992E+01 XXXXXXXXXXXXXXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG    = 5.00000E+00
MAXIMUM ANTILOG    = 1.20000E+02
GEOMETRIC MEAN     = 2.98127E+01
GEOMETRIC DEVIATION = 2.50851E+00
VARIANCE OF LOGS   = 1.59533E-01

```

PERCENT TABLE FOR VARIABLE 34 (AA-ZN-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	DATA VALUE	ANTI LOG OF VALUE
----------	------------	-------------------

Table 2--continued

PERCENTILE

50.00	0.141634E+01	0.260816E+02
75.00	0.169411E+01	0.494440E+02
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

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DATE 6/13/80

FREQUENCY TABLE FOR VARIABLE 3 (AA-AG)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-7.500E-01	-5.833E-01	5	5	23.81	23.81	2.981E+00	-1.304E+00
-5.833E-01	-4.167E-01	5	10	23.81	47.62	6.207E+00	-5.402E+00
-4.167E-01	-2.500E-01	8	18	38.10	85.71	6.512E+00	-5.283E+00
-2.500E-01	-8.333E-02	1	19	4.76	90.48	3.442E+00	-3.151E+00
-8.333E-02	8.333E-02	2	21	9.52	100.00	1.045E+00	8.681E-01
G		0	21	0.00	100.00		
H		0	21				
B		0	21				
TOTALS LESS H AND B		21				2.019E+01	-1.427E+01

HISTOGRAM FOR VARIABLE 3 (AA-AG)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

2.154E-01 XXXXXXXXXXXXXXXXXXXXXXXX
3.162E-01 XXXXXXXXXXXXXXXXXXXXXXXX
4.642E-01 XXXXXXXXXXXXXXXXXXXXXXXX
6.813E-01 XXXXX
1.000E+00 XXXXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 2.00000E-01
MAXIMUM ANTILOG      = 1.01000E+00
GEOMETRIC MEAN       = 3.93526E-01
GEOMETRIC DEVIATION = 1.56790E+00
VARIANCE OF LOGS     = 3.81489E-02

```

PERCENT TABLE FOR VARIABLE 3 (AA-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
50.00	-0.406249E+00	0.392420E+00
75.00	-0.296874E+00	0.504808E+00
90.00	-0.999987E-01	0.794331E+00
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

Table 2--continued

FREQUENCY TABLE FOR VARIABLE 4 (AA-AS)

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		
-4.170E-01 - -2.503E-01	9	9	42.86	42.86	3.490E+00	-9.108E-01
-2.503E-01 - -8.367E-02	4	13	19.05	61.90	5.580E+00	-4.863E+00
-8.367E-02 - 8.300E-02	2	15	9.52	71.43	5.460E+00	-5.093E+00
8.300E-02 - 2.497E-01	4	19	19.05	90.48	3.270E+00	-2.046E+00
2.497E-01 - 4.163E-01	2	21	9.52	100.00	1.505E+00	-1.770E-01
G	0	21	0.00	100.00		
H	0	21				
B	0	21				
TOTALS LESS H AND B	21				1.930E+01	-1.309E+01

HISTOGRAM FOR VARIABLE 4 (AA-AS)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E-01 XX
6.808E-01 XXXXXXXXXXXXXXXXXXXXXXXX
9.992E-01 XXXXXXXXXXXX
1.467E+00 XXXXXXXXXXXXXXXXXXXXXXXX
2.153E+00 XXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.90000E-01
MAXIMUM ANTILOG = 2.04000E+00
GEOMETRIC MEAN = 8.10887E-01
GEOMETRIC DEVIATION = 1.70935E+00
VARIANCE OF LOGS = 5.42103E-02

PERCENT TABLE FOR VARIABLE 4 (AA-AS) BY LINEARINTERPOLATION 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
50.00	-0.187833E+00	0.648884E+00
75.00	0.114251E+00	0.130092E+01
90.00	0.245501E+00	0.175995E+01
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 5 (AA-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		
-8.400E-02 - 8.267E-02	1	1	4.76	4.76	9.180E-02	1.080E+01
8.267E-02 - 2.493E-01	0	1	0.00	4.76	2.522E-01	-2.522E-01
2.493E-01 - 4.160E-01	0	1	0.00	4.76	5.873E-01	-5.873E-01
4.160E-01 - 5.827E-01	0	1	0.00	4.76	1.159E+00	-1.159E+00
5.827E-01 - 7.493E-01	3	4	14.29	19.05	1.939E+00	-3.915E-01
7.493E-01 - 9.160E-01	4	8	19.05	38.10	2.749E+00	-1.294E+00
9.160E-01 - 1.083E+00	2	10	9.52	47.62	3.303E+00	-2.698E+00
1.083E+00 - 1.249E+00	4	14	19.05	66.67	3.364E+00	-2.175E+00
1.249E+00 - 1.416E+00	2	16	9.52	76.19	2.905E+00	-2.216E+00
1.416E+00 - 1.583E+00	2	18	9.52	85.71	2.125E+00	-1.184E+00
1.583E+00 - 1.749E+00	2	20	9.52	95.24	1.318E+00	1.990E-01
1.749E+00 - 1.916E+00	1	21	4.76	100.00	1.169E+00	-3.128E-01
G	0	21	0.00	100.00		
H	0	21				
B	0	21				
TOTALS LESS H AND B	21				2.096E+01	-1.270E+00

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

```

9.985E-01 xxxxx
1.466E+00
2.151E+00
3.157E+00
4.634E+00 xxxxxxxxxxxxxxxx
6.802E+00 xxxxxxxxxxxxxxxxxxxx
9.985E+00 xxxxxxxxxxxx
1.466E+01 xxxxxxxxxxxxxxxxxxxx
2.151E+01 xxxxxxxxxxxx
3.157E+01 xxxxxxxxxxxx
4.635E+01 xxxxxxxxxxxx
6.803E+01 xxxxx

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 1.15000E+00
MAXIMUM ANTILOG      = 6.25000E+01
GEOMETRIC MEAN       = 1.26238E+01
GEOMETRIC DEVIATION  = 2.55282E+00
VARIANCE OF LOGS     = 1.65665E-01

```

Table 2--continued

PERCENT TABLE FOR VARIABLE 5 (AA-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
50.00	0.110350E+01	0.126912E+02
75.00	0.139517E+01	0.248410E+02
90.00	0.165767E+01	0.454643E+02
95.00	0.174517E+01	0.556122E+02
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 6 (AA-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		
8.300E-02 - 2.497E-01	1	1	4.76	4.76	1.008E+00	-1.586E-02
2.497E-01 - 4.163E-01	3	4	14.29	19.05	1.649E+00	1.707E-01
4.163E-01 - 5.830E-01	1	5	4.76	23.81	2.346E+00	-1.920E+00
5.830E-01 - 7.497E-01	6	11	28.57	52.38	2.904E+00	-8.383E-01
7.497E-01 - 9.163E-01	4	15	19.05	71.43	3.127E+00	-1.848E+00
9.163E-01 - 1.083E+00	1	16	4.76	76.19	2.930E+00	-2.588E+00
1.083E+00 - 1.250E+00	1	17	4.76	80.95	2.387E+00	-1.968E+00
1.250E+00 - 1.416E+00	1	18	4.76	85.71	1.692E+00	-1.101E+00
1.416E+00 - 1.583E+00	1	19	4.76	90.48	1.044E+00	-8.528E-02
1.583E+00 - 1.750E+00	1	20	4.76	95.24	5.598E-01	1.227E+00
1.750E+00 - 1.916E+00	1	21	4.76	100.00	4.201E-01	1.960E+00
G	0	21	0.00	100.00		
H	0	21				
B	0	21				
TOTALS LESS H AND B	21				2.007E+01	-7.008E+00

HISTOGRAM FOR VARIABLE 6 (AA-CU)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

1.467E+00 XXXXX
2.153E+00 XXXXXXXXXXXXXXXX
3.160E+00 XXXXX
4.638E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXX
1.467E+01 XXXXX
2.153E+01 XXXXX
3.160E+01 XXXXX
4.638E+01 XXXXX
6.808E+01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.34000E+00
MAXIMUM ANTILOG = 7.24000E+01
GEOMETRIC MEAN = 6.86951E+00
GEOMETRIC DEVIATION = 2.77869E+00
VARIANCE OF LOGS = 1.96994E-01

PERCENT TABLE FOR VARIABLE 6 (AA-CU) BY LINEARINTERPOLATION FROM FREQUENCY TABLE

Table 2--continued

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
50.00	0.735779E+00	0.544226E+01
75.00	0.104134E+01	0.109985E+02
90.00	0.156634E+01	0.368414E+02
95.00	0.174134E+01	0.551235E+02
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

h/h/

FREQUENCY TABLE FOR VARIABLE 7 (AA-FE)

LOG LIMITS			OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	-	UPPER	FREQ	FREQ	FREQ	CUM 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		
1.916E+00	-	2.083E+00	9	9	42.86	42.86	2.498E+00	1.106E+00
2.083E+00	-	2.249E+00	1	10	4.76	47.62	3.450E+00	-3.160E+00
2.249E+00	-	2.416E+00	1	11	4.76	52.38	3.856E+00	-3.596E+00
2.416E+00	-	2.583E+00	6	17	28.57	80.95	3.486E+00	-1.765E+00
2.583E+00	-	2.749E+00	2	19	9.52	90.48	2.551E+00	-1.767E+00
2.749E+00	-	2.916E+00	1	20	4.76	95.24	1.510E+00	-8.479E-01
2.916E+00	-	3.083E+00	0	20	0.00	95.24	7.233E-01	-7.233E-01
3.083E+00	-	3.249E+00	0	20	0.00	95.24	2.803E-01	-2.803E-01
3.249E+00	-	3.416E+00	1	21	4.76	100.00	1.156E-01	8.538E+00
		G	0	21	0.00	100.00		
		H	0	21				
		B	0	21				
TOTALS LESS H AND B			21				1.847E+01	-2.496E+00

HISTOGRAM FOR VARIABLE 7 (AA-FE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E+01 XX
1.466E+02 XXXXX
2.151E+02 XXXXX
3.157E+02 XX
4.634E+02 XXXXXXXXXX
6.802E+02 XXXXX
9.985E+02
1.466E+03
2.151E+03 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 9.00000E+01
MAXIMUM ANTILOG = 2.07000E+03
GEOMETRIC MEAN = 2.17178E+02
GEOMETRIC DEVIATION = 2.28510E+00
VARIANCE OF LOGS = 1.28813E-01

PERCENT TABLE FOR VARIABLE 7 (AA-FE) BY LINEARINTERPOLATION 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 DATA VALUE ANTI LOG OF VALUE

Table 2 -- continued

PERCENTILE

50.00	0.233267E+01	0.215113E+03
75.00	0.254795E+01	0.353139E+03
90.00	0.274100E+01	0.550810E+03
95.00	0.290767E+01	0.808479E+03
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

94'

FREQUENCY TABLE FOR VARIABLE 8 (AA-K)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-2.500E-01	-8.333E-02	2	2	9.52	9.52	1.699E+00	-5.215E-01
-8.333E-02	8.333E-02	3	5	14.29	23.81	3.552E+00	-2.708E+00
8.333E-02	2.500E-01	6	11	28.57	52.38	5.045E+00	-3.856E+00
2.500E-01	4.167E-01	6	17	28.57	80.95	4.868E+00	-3.635E+00
4.167E-01	5.833E-01	2	19	9.52	90.48	3.191E+00	-2.564E+00
5.833E-01	7.500E-01	1	20	4.76	95.24	1.421E+00	-7.170E-01
7.500E-01	9.167E-01	0	20	0.00	95.24	4.295E-01	-4.295E-01
9.167E-01	1.083E+00	1	21	4.76	100.00	1.016E-01	9.742E+00
G		0	21	0.00	100.00		
H		0	21				
B		0	21				
TOTALS LESS H AND B		21				2.031E+01	-4.689E+00

HISTOGRAM FOR VARIABLE 8 (AA-K)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

6.813E-01 XXXXXXXXXX
1.000E+00 XXXXXXXXXXXXXXXX
1.468E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.154E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+00 XXXXXXXXXX
4.642E+00 XXXXX
6.813E+00
1.000E+01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 6.00000E-01
MAXIMUM ANTILOG = 8.50000E+00
GEOMETRIC MEAN = 1.71632E+00
GEOMETRIC DEVIATION = 1.83498E+00
VARIANCE OF LOGS = 6.95016E-02

PERCENT TABLE FOR VARIABLE 8 (AA-K) BY LINEARINTERPOLATION 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 DATA VALUE ANTI LOG OF VALUE
PERCENTILE

Table 2--continued

50.00	0.236112E+00	0.172231E+01
75.00	0.381946E+00	0.240960E+01
90.00	0.575002E+00	0.375839E+01
95.00	0.741669E+00	0.551656E+01
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 9 (AA-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		
-4.170E-01 - -2.503E-01	1	1	4.76	4.76	2.793E-01	3.301E+00
-2.503E-01 - -8.367E-02	0	1	0.00	4.76	6.754E-01	-6.754E-01
-8.367E-02 - 8.300E-02	0	1	0.00	4.76	1.356E+00	-1.356E+00
8.300E-02 - 2.497E-01	3	4	14.29	19.05	2.260E+00	-9.320E-01
2.497E-01 - 4.163E-01	4	8	19.05	38.10	3.127E+00	-1.848E+00
4.163E-01 - 5.830E-01	4	12	19.05	57.14	3.593E+00	-2.479E+00
5.830E-01 - 7.497E-01	4	16	19.05	76.19	3.427E+00	-2.260E+00
7.497E-01 - 9.163E-01	1	17	4.76	80.95	2.715E+00	-2.346E+00
9.163E-01 - 1.083E+00	2	19	9.52	90.48	1.785E+00	-6.650E-01
1.083E+00 - 1.250E+00	2	21	9.52	100.00	1.652E+00	-4.413E-01
G	0	21	0.00	100.00		
H	0	21				
B	0	21				
TOTALS LESS H AND B	21				2.087E+01	-9.702E+00

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

4.638E-01 XXXXX
6.808E-01
9.992E-01
1.467E+00 XXXXXXXXXXXXXXXX
2.153E+00 XXXXXXXXXXXXXXXXXXXX
3.160E+00 XXXXXXXXXXXXXXXXXXXX
4.638E+00 XXXXXXXXXXXXXXXXXXXX
6.808E+00 XXXXX
9.992E+00 XXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.50000E-01
MAXIMUM ANTILOG = 1.50000E+01
GEOMETRIC MEAN = 3.47356E+00
GEOMETRIC DEVIATION = 2.41792E+00
VARIANCE OF LOGS = 1.47027E-01

PERCENT TABLE FOR VARIABLE 9 (AA-MG) BY LINEARINTERPOLATION 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

Table 2--continued

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
50.00	0.520502E+00	0.331514E+01
75.00	0.739252E+00	0.548596E+01
90.00	0.107467E+01	0.118760E+02
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 10 (AA-MO)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
-5.840E-01	-4.173E-01	5	5	23.81	23.81	2.561E+00	-6.088E-01
-4.173E-01	-2.507E-01	6	11	28.57	52.38	4.007E+00	-2.510E+00
-2.507E-01	-8.400E-02	4	15	19.05	71.43	4.624E+00	-3.759E+00
-8.400E-02	8.267E-02	3	18	14.29	85.71	3.934E+00	-3.171E+00
8.267E-02	2.493E-01	0	18	0.00	85.71	2.468E+00	-2.468E+00
2.493E-01	4.160E-01	1	19	4.76	90.48	1.141E+00	-2.654E-01
4.160E-01	5.827E-01	2	21	9.52	100.00	5.078E-01	3.431E+00
	G	0	21	0.00	100.00		
	H	0	21				
	B	0	21				
TOTALS LESS H AND B		21				1.924E+01	-9.352E+00

HISTOGRAM FOR VARIABLE 10 (AA-MO)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

3.157E-01 XXXXXXXXXXXXXXXXXXXXXXXX
4.634E-01 XXXXXXXXXXXXXXXXXXXXXXXX
6.802E-01 XXXXXXXXXXXXXXXXXXXXXXXX
9.985E-01 XXXXXXXXXXXXXXXX
1.466E+00
2.151E+00 XXXXX
3.157E+00 XXXXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG    = 3.30000E-01
MAXIMUM ANTILOG    = 3.48000E+00
GEOMETRIC MEAN     = 6.72353E-01
GEOMETRIC DEVIATION = 1.98634E+00
VARIANCE OF LOGS   = 8.88364E-02

```

PERCENT TABLE FOR VARIABLE 10 (AA-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
50.00	-0.264555E+00	0.543807E+00
75.00	-0.423323E-01	0.907126E+00

Table 2--continued

90.00	0.382669E+00	0.241362E+01
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 11 (AA-NA)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
5.830E-01	7.497E-01	2	2	9.52	9.52	5.656E-01	2.971E+00
7.497E-01	9.163E-01	0	2	0.00	9.52	1.434E+00	-1.434E+00
9.163E-01	1.083E+00	3	5	14.29	23.81	2.754E+00	-1.664E+00
1.083E+00	1.250E+00	4	9	19.05	42.86	4.002E+00	-3.003E+00
1.250E+00	1.416E+00	2	11	9.52	52.38	4.404E+00	-3.950E+00
1.416E+00	1.583E+00	6	17	28.57	80.95	3.670E+00	-2.035E+00
1.583E+00	1.750E+00	3	20	14.29	95.24	2.315E+00	-1.019E+00
1.750E+00	1.916E+00	1	21	4.76	100.00	1.641E+00	-1.031E+00
G		0	21	0.00	100.00		
H		0	21				
B		0	21				
TOTALS LESS H AND B		21				2.079E+01	-1.117E+01

HISTOGRAM FOR VARIABLE 11 (AA-NA)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

4.638E+00 XXXXXXXXXX
6.808E+00
9.992E+00 XXXXXXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXXXXXXX
3.160E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.638E+01 XXXXXXXXXXXXXXXX
6.808E+01 XXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 4.70000E+00
MAXIMUM ANTILOG      = 6.62000E+01
GEOMETRIC MEAN       = 2.02768E+01
GEOMETRIC DEVIATION = 2.05231E+00
VARIANCE OF LOGS     = 9.74962E-02

```

PERCENT TABLE FOR VARIABLE 11 (AA-NA) BY LINEARINTERPOLATION 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
------------------------	------------	-------------------

Table 7--continued

50.00	0.137467E+01	0.236956E+02
75.00	0.154828E+01	0.353411E+02
90.00	0.168856E+01	0.488155E+02
95.00	0.174689E+01	0.558330E+02
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 12 (AA-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		
-1.417E+00 - -1.250E+00	1	1	4.76	4.76	3.022E-01	3.007E+00
-1.250E+00 - -1.084E+00	0	1	0.00	4.76	6.105E-01	-6.105E-01
-1.084E+00 - -9.170E-01	3	4	14.29	19.05	1.085E+00	1.681E+00
-9.170E-01 - -7.503E-01	0	4	0.00	19.05	1.696E+00	-1.696E+00
-7.503E-01 - -5.837E-01	0	4	0.00	19.05	2.332E+00	-2.332E+00
-5.837E-01 - -4.170E-01	5	9	23.81	42.86	2.820E+00	-1.047E+00
-4.170E-01 - -2.503E-01	2	11	9.52	52.38	3.000E+00	-2.333E+00
-2.503E-01 - -8.366E-02	4	15	19.05	71.43	2.808E+00	-1.383E+00
-8.366E-02 - 8.300E-02	4	19	19.05	90.48	2.311E+00	-5.807E-01
8.300E-02 - 2.497E-01	1	20	4.76	95.24	1.674E+00	-1.076E+00
2.497E-01 - 4.163E-01	0	20	0.00	95.24	1.066E+00	-1.066E+00
4.163E-01 - 5.830E-01	0	20	0.00	95.24	5.973E-01	-5.973E-01
5.830E-01 - 7.497E-01	1	21	4.76	100.00	4.934E-01	1.533E+00
G	0	21	0.00	100.00		
H	0	21				
B	0	21				
TOTALS LESS H AND B	21				2.079E+01	-6.501E+00

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HISTOGRAM FOR VARIABLE 12 (AA-PB)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

4.638E-02  XXXXX
6.808E-02
9.992E-02  XXXXXXXXXXXXXXXX
1.467E-01
2.153E-01
3.160E-01  XXXXXXXXXXXXXXXXXXXXXXXX
4.638E-01  XXXXXXXXXX
6.808E-01  XXXXXXXXXXXXXXXXXXXXXXXX
9.992E-01  XXXXXXXXXXXXXXXXXXXXXXXX
1.467E+00  XXXXX
2.153E+00
3.160E+00
4.638E+00  XXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 4.00000E-02
MAXIMUM ANTILOG      = 4.31000E+00
GEOMETRIC MEAN       = 4.60792E-01
GEOMETRIC DEVIATION  = 2.90338E+00
VARIANCE OF LOGS     = 2.14280E-01

```

Table 2--continued

PERCENT TABLE FOR VARIABLE 12 (AA-PB) BY LINEARINTERPOLATION 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
50.00	-0.291998E+00	0.510508E+00
75.00	-0.524139E-01	0.886311E+00
90.00	0.788363E-01	0.119905E+01
95.00	0.241337E+00	0.174316E+01
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 13 (AA-ZN)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
5.830E-01	7.497E-01	2	2	9.52	9.52	1.489E+00	-1.453E-01
7.497E-01	9.163E-01	6	8	28.57	38.10	1.938E+00	1.159E+00
9.163E-01	1.083E+00	2	10	9.52	47.62	2.304E+00	-1.436E+00
1.083E+00	1.250E+00	5	15	23.81	71.43	2.502E+00	-5.034E-01
1.250E+00	1.416E+00	1	16	4.76	76.19	2.482E+00	-2.079E+00
1.416E+00	1.583E+00	0	16	0.00	76.19	2.249E+00	-2.249E+00
1.583E+00	1.750E+00	0	16	0.00	76.19	1.861E+00	-1.861E+00
1.750E+00	1.916E+00	0	16	0.00	76.19	1.407E+00	-1.407E+00
1.916E+00	2.083E+00	3	19	14.29	90.48	9.716E-01	2.116E+00
2.083E+00	2.250E+00	0	19	0.00	90.48	6.126E-01	-6.128E-01
2.250E+00	2.416E+00	1	20	4.76	95.24	3.531E-01	2.479E+00
2.416E+00	2.583E+00	1	21	4.76	100.00	3.385E-01	2.615E+00
G		0	21	0.00	100.00		
H		0	21				
B		0	21				
TOTALS LESS H AND B		21				1.851E+01	-1.923E+00

HISTOGRAM FOR VARIABLE 13 (AA-ZN)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+00 XXXXXXXXXXXX
6.808E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
9.992E+00 XXXXXXXXXXXX
1.467E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.153E+01 XXXXX
3.160E+01
4.638E+01
6.808E+01
9.992E+01 XXXXXXXXXXXXXXXX
1.467E+02
2.153E+02 XXXXX
3.160E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.33000E+00
MAXIMUM ANTILOG = 2.80000E+02
GEOMETRIC MEAN = 1.71719E+01
GEOMETRIC DEVIATION = 3.56245E+00
VARIANCE OF LOGS = 3.04427E-01

TABLE 4--CONTINUED

PERCENT TABLE FOR VARIABLE 13 (AA-ZN) BY LINEARINTERPOLATION 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
50.00	0.109967E+01	0.125796E+02
75.00	0.137467E+01	0.236956E+02
90.00	0.206078E+01	0.115022E+03
95.00	0.239967E+01	0.250998E+03
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 14 (SI-F)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
-1.417E+00	-1.250E+00	4	4	19.05	19.05	1.705E+00	6.407E-01
-1.250E+00	-1.084E+00	3	7	14.29	33.33	3.366E+00	-2.475E+00
-1.084E+00	-9.170E-01	6	13	28.57	61.90	4.715E+00	-3.442E+00
-9.170E-01	-7.503E-01	3	16	14.29	76.19	4.687E+00	-4.047E+00
-7.503E-01	-5.837E-01	2	18	9.52	85.71	3.306E+00	-2.701E+00
-5.837E-01	-4.170E-01	3	21	14.29	100.00	2.420E+00	-1.181E+00
G		0	21	0.00	100.00		
H		0	21				
B		0	21				
TOTALS LESS H AND B		21				2.020E+01	-1.320E+01

HISTOGRAM FOR VARIABLE 14 (SI-F)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

```

4.638E-02 XXXXXXXXXXXXXXXXXXXX
6.808E-02 XXXXXXXXXXXXXXXXXX
9.992E-02 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E-01 XXXXXXXXXXXXXXXXXX
2.153E-01 XXXXXXXXXXXXX
3.160E-01 XXXXXXXXXXXXXXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

```

MINIMUM ANTILOG      = 4.50000E-02
MAXIMUM ANTILOG      = 3.78000E-01
GEOMETRIC MEAN       = 1.20251E-01
GEOMETRIC DEVIATION  = 1.90734E+00
VARIANCE OF LOGS     = 7.86393E-02

```

PERCENT TABLE FOR VARIABLE 14 (SI-F) 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
50.00	-0.986444E+00	0.103171E+00
75.00	-0.764221E+00	0.172099E+00
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36

Table 2--continued

98.00
99.00

0.100000E+36
0.100000E+36

0.100000E+36
0.100000E+36

FREQUENCY TABLE FOR VARIABLE 15 (SI-CL)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
-8.400E-02	8.267E-02	1	1	4.76	4.76	3.752E-01	2.290E+00
8.267E-02	2.493E-01	1	2	4.76	9.52	1.005E+00	-9.020E-03
2.493E-01	4.160E-01	2	4	9.52	19.05	2.083E+00	-1.123E+00
4.160E-01	5.827E-01	3	7	14.29	33.33	3.346E+00	-2.450E+00
5.827E-01	7.493E-01	4	11	19.05	52.38	4.165E+00	-3.204E+00
7.493E-01	9.160E-01	3	14	14.29	66.67	4.015E+00	-3.268E+00
9.160E-01	1.083E+00	4	18	19.05	85.71	2.999E+00	-1.666E+00
1.083E+00	1.249E+00	3	21	14.29	100.00	2.874E+00	-1.830E+00
G		0	21	0.00	100.00		
H		0	21				
B		0	21				
TOTALS LESS H AND B		21				2.086E+01	-1.126E+01

HISTOGRAM FOR VARIABLE 15 (SI-CL)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

9.985E-01 XXXXX
1.466E+00 XXXXX
2.151E+00 XXXXXXXXXX
3.157E+00 XXXXXXXXXXXXX
4.634E+00 XXXXXXXXXXXXXXXXX
6.802E+00 XXXXXXXXXXXXXXXXX
9.985E+00 XXXXXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.04000E+00
MAXIMUM ANTILOG = 1.53000E+01
GEOMETRIC MEAN = 5.31492E+00
GEOMETRIC DEVIATION = 2.11993E+00
VARIANCE OF LOGS = 1.06486E-01

PERCENT TABLE FOR VARIABLE 15 (SI-CL) 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 DATA VALUE ANTI LOG OF VALUE
PERCENTILE

Table 2--continued

50.00	0.728502E+00	0.535182E+01
75.00	0.988919E+00	0.974807E+01
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 16 (S04--)

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		
-9.170E-01 - -7.503E-01	1	1	4.76	4.76	9.520E-02	1.041E+01
-7.503E-01 - -5.837E-01	0	1	0.00	4.76	1.901E-01	-1.901E-01
-5.837E-01 - -4.170E-01	0	1	0.00	4.76	3.492E-01	-3.492E-01
-4.170E-01 - -2.503E-01	0	1	0.00	4.76	5.905E-01	-5.905E-01
-2.503E-01 - -8.367E-02	1	2	4.76	9.52	9.189E-01	1.693E-01
-8.367E-02 - 8.300E-02	0	2	0.00	9.52	1.316E+00	-1.316E+00
8.300E-02 - 2.497E-01	2	4	9.52	19.05	1.734E+00	-5.811E-01
2.497E-01 - 4.163E-01	3	7	14.29	33.33	2.103E+00	-6.772E-01
4.163E-01 - 5.830E-01	3	10	14.29	47.62	2.348E+00	-1.070E+00
5.830E-01 - 7.497E-01	3	13	14.29	61.90	2.412E+00	-1.168E+00
7.497E-01 - 9.163E-01	2	15	9.52	71.43	2.280E+00	-1.402E+00
9.163E-01 - 1.083E+00	1	16	4.76	76.19	1.983E+00	-1.479E+00
1.083E+00 - 1.250E+00	1	17	4.76	80.95	1.588E+00	-9.578E-01
1.250E+00 - 1.416E+00	2	19	9.52	90.48	1.170E+00	5.400E-01
1.416E+00 - 1.583E+00	2	21	9.52	100.00	1.849E+00	-7.677E-01
G	0	21	0.00	100.00		
H	0	21				
B	0	21				
TOTALS LESS H AND B	21				2.093E+01	5.705E-01

HISTOGRAM FOR VARIABLE 16 (S04--)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

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1.467E-01 xxxxx
2.153E-01
3.160E-01
4.638E-01
6.808E-01 xxxxx
9.992E-01
1.467E+00 xxxxxxxxxxxx
2.153E+00 xxxxxxxxxxxxxxxx
3.160E+00 xxxxxxxxxxxxxxxx
4.638E+00 xxxxxxxxxxxxxxxx
6.808E+00 xxxxxxxxxxxx
9.992E+00 xxxxx
1.467E+01 xxxxx
2.153E+01 xxxxxxxxxxxx
3.160E+01 xxxxxxxxxxxx

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

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MINIMUM ANTILOG    = 1.42000E-01
MAXIMUM ANTILOG    = 3.30000E+01

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Table 2--continued

GEOMETRIC MEAN = 4.33309E+00
GEOMETRIC DEVIATION = 3.76911E+00
VARIANCE OF LOGS = 3.32051E-01

PERCENT TABLE FOR VARIABLE 16 (S04--) 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
50.00	0.610781E+00	0.408113E+01
75.00	0.104134E+01	0.109986E+02
90.00	0.140800E+01	0.255861E+02
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 17 (ALKALINE)

LOG LIMITS		OBS	CUM	PERCENT	PERCENT	THEOR FREQ	
LOWER	UPPER	FREQ	FREQ	FREQ	CUM 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		
-2.500E-01	-8.333E-02	1	1	4.76	4.76	1.800E-02	5.317E+01
-8.333E-02	8.333E-02	0	1	0.00	4.76	4.359E-02	-4.359E-02
8.333E-02	2.500E-01	0	1	0.00	4.76	9.327E-02	-9.327E-02
2.500E-01	4.167E-01	0	1	0.00	4.76	1.842E-01	-1.842E-01
4.167E-01	5.833E-01	0	1	0.00	4.76	3.357E-01	-3.357E-01
5.833E-01	7.500E-01	0	1	0.00	4.76	5.647E-01	-5.647E-01
7.500E-01	9.167E-01	0	1	0.00	4.76	8.766E-01	-8.766E-01
9.167E-01	1.083E+00	0	1	0.00	4.76	1.256E+00	-1.256E+00
1.083E+00	1.250E+00	2	3	9.52	14.29	1.661E+00	-4.564E-01
1.250E+00	1.417E+00	4	7	19.05	33.33	2.027E+00	-5.295E-02
1.417E+00	1.583E+00	3	10	14.29	47.62	2.283E+00	-9.683E-01
1.583E+00	1.750E+00	1	11	4.76	52.38	2.373E+00	-1.951E+00
1.750E+00	1.917E+00	2	13	9.52	61.90	2.276E+00	-1.398E+00
1.917E+00	2.083E+00	3	16	14.29	76.19	2.015E+00	-5.270E-01
2.083E+00	2.250E+00	1	17	4.76	80.95	1.647E+00	-1.040E+00
2.250E+00	2.417E+00	3	20	14.29	95.24	1.242E+00	1.173E+00
2.417E+00	2.583E+00	1	21	4.76	100.00	2.092E+00	-1.614E+00
	G	0	21	0.00	100.00		
	H	0	21				
	B	0	21				
TOTALS LESS H AND B		21				2.099E+01	4.298E+01

HISTOGRAM FOR VARIABLE 17 (ALKALINE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

6.813E-01 XXXXX
 1.000E+00
 1.468E+00
 2.154E+00
 3.162E+00
 4.642E+00
 6.813E+00
 1.000E+01
 1.468E+01 XXXXXXXXXX
 2.154E+01 XXXXXXXXXXXXXXXXXXXX
 3.162E+01 XXXXXXXXXXXXXXXXXX
 4.642E+01 XXXXX
 6.813E+01 XXXXXXXXXX
 1.000E+02 XXXXXXXXXXXXXXXXXX
 1.468E+02 XXXXX
 2.154E+02 XXXXXXXXXXXXXXXXXX
 3.162E+02 XXXXX

Table 2--continued

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 6.87000E-01
 MAXIMUM ANTILOG = 2.81000E+02
 GEOMETRIC MEAN = 4.61107E+01
 GEOMETRIC DEVIATION = 3.85916E+00
 VARIANCE OF LOGS = 3.43974E-01

PERCENT TABLE FOR VARIABLE 17 (ALKALINE) 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
50.00	0.166667E+01	0.464163E+02
75.00	0.206945E+01	0.117341E+03
90.00	0.235556E+01	0.226757E+03
95.00	0.241389E+01	0.259355E+03
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 18 (SP COND)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
1.583E+00	1.750E+00	1	1	4.76	4.76	1.569E+00	-9.323E-01
1.750E+00	1.916E+00	4	5	19.05	23.81	3.138E+00	-1.863E+00
1.916E+00	2.083E+00	6	11	28.57	52.38	4.517E+00	-3.189E+00
2.083E+00	2.250E+00	3	14	14.29	66.67	4.683E+00	-4.042E+00
2.250E+00	2.416E+00	3	17	14.29	80.95	3.495E+00	-2.637E+00
2.416E+00	2.583E+00	3	20	14.29	95.24	1.878E+00	-2.815E-01
2.583E+00	2.750E+00	1	21	4.76	100.00	9.762E-01	4.823E-02
G		0	21	0.00	100.00		
H		0	21				
B		0	21				
TOTALS LESS H AND B		21				2.026E+01	-1.290E+01

HISTOGRAM FOR VARIABLE 18 (SP COND)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

4.638E+01 XXXXX
6.808E+01 XXXXXXXXXXXXXXXXXXXX
9.992E+01 XXXXXXXXXXXXXXXXXXXX
1.467E+02 XXXXXXXXXXXXXXXX
2.153E+02 XXXXXXXXXXXXXXXX
3.160E+02 XXXXXXXXXXXXXXXX
4.638E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 4.00000E+01
MAXIMUM ANTILOG = 4.00000E+02
GEOMETRIC MEAN = 1.26253E+02
GEOMETRIC DEVIATION = 1.93541E+00
VARIANCE OF LOGS = 8.22390E-02

PERCENT TABLE FOR VARIABLE 18 (SP COND) BY LINEARINTERPOLATION 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
50.00	0.206911E+01	0.117250E+03
75.00	0.234689E+01	0.222275E+03

Table 2--continued

90.00	0.252189E+01	0.332576E+03
95.00	0.258022E+01	0.380386E+03
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

FREQUENCY TABLE FOR VARIABLE 19 (PH)

LOG LIMITS		OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
LOWER	UPPER						
	N	0	0	0.00	0.00		
	L	0	0	0.00	0.00		
	T	0	0	0.00	0.00		
7.500E-01	9.167E-01	18	18	85.71	85.71	1.826E+01	-1.727E+01
9.167E-01	1.083E+00	3	21	14.29	100.00	2.600E+00	-1.446E+00
	G	0	21	0.00	100.00		
	H	0	21				
	B	0	21				
TOTALS LESS H AND B		21				2.086E+01	-1.872E+01

HISTOGRAM FOR VARIABLE 19 (PH)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

6.813E+00 XX
1.000E+01 XXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 6.00000E+00
MAXIMUM ANTILOG = 9.20000E+00
GEOMETRIC MEAN = 7.30354E+00
GEOMETRIC DEVIATION = 1.11162E+00
VARIANCE OF LOGS = 2.11202E-03

PERCENT TABLE FOR VARIABLE 19 (PH) 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
50.00	0.100000E+36	0.100000E+36
75.00	0.100000E+36	0.100000E+36
90.00	0.100000E+36	0.100000E+36
95.00	0.100000E+36	0.100000E+36
98.00	0.100000E+36	0.100000E+36
99.00	0.100000E+36	0.100000E+36

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS - sediments

	3	4	5	6	7	8	9	10	11	12
	S-FE	S-MG	S-CA	S-TI	S-MN	S-AG	S-AS	S-AU	S-B	S-BA
3 S-FE	0.2414	0.4064	0.3739	0.7005	0.2579	*****	*****	*****	0.5351	-0.0813
4 S-MG	140	0.2466	0.5273	0.5438	0.0531	*****	*****	*****	0.0668	-0.2560
5 S-CA	140	143	0.1967	0.4222	0.2034	*****	*****	*****	-0.0106	-0.0898
6 S-TI	137	140	140	0.3071	0.1793	*****	*****	*****	0.2867	-0.2080
7 S-MN	130	132	132	129	0.3019	*****	*****	*****	0.1233	-0.3766
8 S-AG	0	0	0	0	0	*****	*****	*****	*****	*****
9 S-AS	0	0	0	0	0	0	*****	*****	*****	*****
10 S-AU	0	0	0	0	0	0	0	*****	*****	*****
11 S-B	78	78	78	75	70	0	0	0	0.1245	-0.0813
12 S-BA	140	143	143	140	132	0	0	0	78	0.2122
13 S-BE	140	141	141	138	131	0	0	0	78	141
14 S-BI	0	0	0	0	0	0	0	0	0	0
15 S-CD	0	0	0	0	0	0	0	0	0	0
16 S-CO	123	126	126	123	116	0	0	0	75	126
17 S-CR	139	142	142	139	131	0	0	0	78	142
18 S-CU	140	143	143	140	132	0	0	0	78	143
19 S-LA	131	134	134	132	123	0	0	0	77	134
20 S-MO	39	39	39	37	33	0	0	0	22	39
21 S-NB	32	33	33	30	26	0	0	0	29	33
22 S-NI	128	130	130	127	119	0	0	0	75	130
23 S-PB	140	143	143	140	132	0	0	0	78	143
24 S-SB	0	0	0	0	0	0	0	0	0	0
25 S-SC	133	136	136	133	125	0	0	0	78	136
26 S-SN	9	9	9	8	8	0	0	0	4	9
27 S-SR	140	143	143	140	132	0	0	0	78	143
28 S-V	138	141	141	138	130	0	0	0	78	141
29 S-W	0	0	0	0	0	0	0	0	0	0
30 S-Y	140	143	143	140	132	0	0	0	78	143
31 S-ZN	0	0	0	0	0	0	0	0	0	0
32 S-ZR	127	128	128	127	117	0	0	0	67	128
33 S-TH	2	2	2	2	2	0	0	0	0	2
34 AA-ZN	140	143	143	140	132	0	0	0	78	143
35 INST-HG	140	143	143	140	132	0	0	0	78	143

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

*** not calculated

Table 3 --continued

00101 CORRELATION ANALYSIS - USGS STATPAC (04/27/77)

DATE 6/13/80

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	13	14	15	16	17	18	19	20	21	22
	S-BE	S-BI	S-CD	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI
3 S-FE.	-0.0989	*****	*****	0.6173	0.6463	0.3425	0.3668	-0.0635	-0.0942	0.4188
4 S-MG	-0.0417	*****	*****	0.5819	0.6717	0.3806	-0.1020	-0.0608	-0.0096	0.6847
5 S-CA	-0.1507	*****	*****	0.2890	0.4037	0.0209	-0.0384	-0.1668	0.2188	0.2515
6 S-TI	-0.0280	*****	*****	0.7210	0.7076	0.3266	0.2081	-0.1888	-0.0702	0.4140
7 S-MN	0.1140	*****	*****	-0.0351	0.0295	0.0649	0.1136	0.1159	0.1386	0.0409
8 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
11 S-B	0.1884	*****	*****	0.3775	0.2557	0.4576	0.2490	-0.1634	-0.0098	0.1805
12 S-BA	-0.2411	*****	*****	-0.3268	-0.2579	-0.0675	0.1329	0.0409	-0.2627	-0.3513
13 S-BE	0.1801	*****	*****	0.0154	-0.1073	0.2595	0.0510	-0.0927	0.5680	0.0098
14 S-BI	0	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CD	0	0	*****	*****	*****	*****	*****	*****	*****	*****
16 S-CO	124	0	0	0.2312	0.7875	0.3507	0.1520	-0.3609	-0.1139	0.7018
17 S-CR	140	0	0	126	0.3232	0.3799	0.1291	-0.2056	-0.0197	0.7187
18 S-CU	141	0	0	126	142	0.2593	0.0913	-0.0214	-0.0920	0.3733
19 S-LA	132	0	0	121	133	134	0.3721	-0.1456	-0.0331	0.0773
20 S-MO	39	0	0	35	39	39	34	0.1873	-0.0230	-0.1300
21 S-NB	33	0	0	32	33	33	31	12	0.3135	-0.0620
22 S-NI	129	0	0	122	130	130	123	38	33	0.2445
23 S-PB	141	0	0	126	142	143	134	39	33	130
24 S-SB	0	0	0	0	0	0	0	0	0	0
25 S-SC	134	0	0	125	136	136	128	37	33	127
26 S-SN	9	0	0	8	9	9	8	4	2	9
27 S-SR	141	0	0	126	142	143	134	39	33	130
28 S-V	139	0	0	126	140	141	134	38	33	129
29 S-W	0	0	0	0	0	0	0	0	0	0
30 S-Y	141	0	0	126	142	143	134	39	33	130
31 S-ZN	0	0	0	0	0	0	0	0	0	0
32 S-ZR	127	0	0	111	127	128	119	36	24	116
33 S-TH	2	0	0	1	2	2	2	0	0	0
34 AA-ZN	141	0	0	126	142	143	134	39	33	130
35 INST-HG	141	0	0	126	142	143	134	39	33	130

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	23 S-PB	24 S-SB	25 S-SC	26 S-SN	27 S-SR	28 S-V	29 S-W	30 S-Y	31 S-ZN	32 S-ZR
3 S-FE	-0.3113	*****	0.5702	0.4718	0.2497	0.7577	*****	0.4644	*****	0.6113
4 S-MG	-0.1708	*****	0.5677	0.1892	0.0123	0.5930	*****	0.0335	*****	0.3646
5 S-CA	-0.2343	*****	0.4367	-0.2786	0.4521	0.5128	*****	0.0566	*****	0.3421
6 S-TI	-0.3408	*****	0.7096	0.4007	0.1292	0.8009	*****	0.3460	*****	0.6103
7 S-MN	-0.1734	*****	0.0698	-0.3088	-0.1216	0.2073	*****	0.3787	*****	0.1549
8 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
11 S-B	-0.2126	*****	0.3091	-1.0000	0.0822	0.2386	*****	0.3307	*****	0.3100
12 S-BA	0.4868	*****	-0.1785	-0.0781	0.6034	-0.2975	*****	-0.0041	*****	-0.0665
13 S-BE	-0.3721	*****	0.1091	0.1386	-0.1341	-0.1508	*****	-0.0908	*****	-0.0870
14 S-BI	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
16 S-CD	-0.3272	*****	0.7277	0.6680	-0.0569	0.7464	*****	0.0959	*****	0.5274
17 S-CR	-0.2570	*****	0.6346	0.5505	0.0739	0.7945	*****	0.2004	*****	0.5327
18 S-CU	-0.1248	*****	0.4299	0.5724	-0.0829	0.2313	*****	0.1685	*****	0.2439
19 S-LA	-0.0248	*****	0.2795	0.1824	0.1775	0.0815	*****	0.5082	*****	0.3033
20 S-MO	0.0435	*****	-0.2673	0.2674	-0.0572	-0.2052	*****	0.1721	*****	-0.1703
21 S-NB	-0.3691	*****	0.1011	*****	0.2074	0.0151	*****	-0.2011	*****	0.0273
22 S-NI	-0.2416	*****	0.5059	0.3525	-0.1030	0.5467	*****	0.0694	*****	0.2535
23 S-PB	0.1454	*****	-0.3416	-0.2629	0.0001	-0.3397	*****	-0.0673	*****	-0.1506
24 S-SB	0	*****	*****	*****	*****	*****	*****	*****	*****	*****
25 S-SC	136	0	0.2236	0.7231	0.1590	0.6055	*****	0.2576	*****	0.5902
26 S-SN	9	0	9	0.2085	-0.2262	0.2219	*****	0.3129	*****	0.3024
27 S-SR	143	0	136	9	0.1774	0.1137	*****	0.1160	*****	0.1824
28 S-V	141	0	134	9	141	0.3077	*****	0.2756	*****	0.6171
29 S-W	0	0	0	0	0	0	*****	*****	*****	*****
30 S-Y	143	0	136	9	143	141	0	0.3713	*****	0.4535
31 S-ZN	0	0	0	0	0	0	0	0	*****	*****
32 S-ZR	128	0	121	9	128	126	0	128	0	0.2922
33 S-TH	2	0	1	0	2	2	0	2	0	2
34 AA-ZN	143	0	136	9	143	141	0	143	0	128
35 INST-HG	143	0	136	9	143	141	0	143	0	128

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

Table 3--continued

D0101 CORRELATION ANALYSIS - USGS STATPAC (04/27/77)

DATE 6/13/80

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	33 S-TH	34 AA-ZN	35 INST-HG
3 S-FE	*****	0.2073	-0.3103
4 S-MG	*****	0.4354	0.0112
5 S-CA	*****	0.2507	-0.1963
6 S-TI	*****	0.2895	-0.2887
7 S-MN	*****	-0.1881	0.0269
8 S-AG	*****	*****	*****
9 S-AS	*****	*****	*****
10 S-AU	*****	*****	*****
11 S-B	*****	-0.0204	-0.0154
12 S-BA	*****	0.0775	-0.0677
13 S-BE	*****	0.0161	0.2620
14 S-BI	*****	*****	*****
15 S-CD	*****	*****	*****
16 S-CO	*****	0.2813	-0.2819
17 S-CR	*****	0.3188	-0.1885
18 S-CU	*****	0.3764	0.3703
19 S-LA	*****	0.0987	-0.1633
20 S-MO	*****	-0.2189	0.1979
21 S-NB	*****	-0.1676	-0.0785
22 S-NI	*****	0.2619	0.0631
23 S-PB	*****	-0.0160	0.0947
24 S-SB	*****	*****	*****
25 S-SC	*****	0.4388	-0.1641
26 S-SN	*****	0.8593	0.2807
27 S-SR	*****	0.1340	-0.1413
28 S-V	*****	0.2344	-0.3385
29 S-W	*****	*****	*****
30 S-Y	*****	0.0732	-0.1057
31 S-ZN	*****	*****	*****
32 S-ZR	*****	0.2828	-0.2893
33 S-TH	0.0000	*****	*****
34 AA-ZN	2	0.1949	0.0850
35 INST-HG	2	143	0.3574

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

*** not calculated

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS - heavy-mineral concentrates

	3	4	5	6	7	8	9	10	11	12
	S-FE	S-MG	S-CA	S-TI	S-MN	S-AG	S-AS	S-AU	S-B	S-BA
3 S-FE	0.3460	0.6738	-0.4966	-0.0258	0.1276	*****	*****	*****	-0.0284	0.1848
4 S-MG	143	0.2743	-0.3134	-0.0254	0.0822	*****	*****	*****	0.1075	0.2423
5 S-CA	143	143	0.2666	0.0634	0.3647	*****	*****	*****	-0.2403	-0.2041
6 S-TI	107	107	107	0.2663	-0.1297	*****	*****	*****	-0.3888	-0.2964
7 S-MN	133	133	133	98	0.2919	*****	*****	*****	-0.3761	0.3007
8 S-AG	0	0	0	0	0	*****	*****	*****	*****	*****
9 S-AS	0	0	0	0	0	0	*****	*****	*****	*****
10 S-AU	0	0	0	0	0	0	0	*****	*****	*****
11 S-B	28	28	28	22	25	0	0	0	0.3477	0.2646
12 S-BA	139	139	139	105	129	0	0	0	28	0.4041
13 S-BE	39	39	39	27	37	0	0	0	12	37
14 S-BI	11	11	11	6	10	0	0	0	3	9
15 S-CD	0	0	0	0	0	0	0	0	0	0
16 S-CE	41	41	41	26	35	0	0	0	12	39
17 S-CR	121	121	121	85	112	0	0	0	24	117
18 S-CU	118	118	118	95	109	0	0	0	27	116
19 S-LA	127	127	127	93	119	0	0	0	24	123
20 S-MO	46	46	46	18	45	0	0	0	10	44
21 S-NB	123	123	123	87	114	0	0	0	26	119
22 S-NI	21	21	21	18	17	0	0	0	7	19
23 S-PB	92	92	92	78	85	0	0	0	24	92
24 S-SB	0	0	0	0	0	0	0	0	0	0
25 S-SC	109	109	109	92	100	0	0	0	23	107
26 S-SN	63	63	63	29	59	0	0	0	15	60
27 S-SR	56	56	56	51	54	0	0	0	16	54
28 S-V	142	142	142	106	132	0	0	0	28	138
29 S-W	12	12	12	6	10	0	0	0	6	12
30 S-Y	143	143	143	107	133	0	0	0	28	139
31 S-ZN	9	9	9	6	8	0	0	0	3	9
32 S-ZR	33	33	33	14	29	0	0	0	8	30
33 S-TH	69	69	69	54	61	0	0	0	19	69
34 AA-ZN	78	78	78	55	71	0	0	0	14	77

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

Table 3--continued

D0101 CORRELATION ANALYSIS - USGS STATPAC (04/27/77)

DATE 6/17/80

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	13 S-BE	14 S-BI	15 S-CD	16 S-CO	17 S-CR	18 S-CU	19 S-LA	20 S-MO	21 S-NB	22 S-NI
3 S-FE	0.3177	0.6489	*****	0.4685	0.4631	0.2257	0.1638	-0.0282	-0.1612	0.3703
4 S-MG	0.4046	0.1461	*****	0.3231	0.2964	0.2908	0.0893	-0.0618	-0.1651	0.0143
5 S-CA	0.4913	-0.7295	*****	0.0101	-0.2552	-0.2646	-0.1512	-0.2879	0.0415	-0.1130
6 S-TI	0.4232	-0.9656	*****	-0.1350	0.0396	-0.1799	-0.1650	-0.5259	0.3598	0.0842
7 S-MN	-0.0360	0.3613	*****	0.4816	-0.0499	-0.0658	0.3444	-0.0118	-0.1650	0.0720
8 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
11 S-B	-0.3861	0.0616	*****	0.2526	0.2011	0.1154	0.1650	0.2579	-0.2286	-0.6262
12 S-BA	-0.5674	0.8833	*****	0.1416	0.0065	0.3346	0.2534	0.2989	-0.3359	0.1157
13 S-BE	0.5407	-0.6076	*****	-0.5196	0.2151	-0.3979	-0.2554	-0.4840	0.0762	-0.3757
14 S-BI	11	0.4272	*****	0.5201	-0.3151	0.3638	0.3344	0.6325	0.0195	0.1686
15 S-CD	0	0	*****	*****	*****	*****	*****	*****	*****	*****
16 S-CO	16	8	0	0.1695	0.4423	0.4448	0.1631	0.0591	-0.2779	0.4227
17 S-CR	32	11	0	39	0.2716	0.0388	0.0900	-0.0598	-0.0078	0.1393
18 S-CU	37	11	0	37	100	0.4200	0.1190	0.3538	0.0134	0.4103
19 S-LA	38	11	0	30	107	104	0.3556	0.3593	0.1636	0.2914
20 S-MO	17	6	0	18	43	34	43	0.3711	-0.0276	0.6515
21 S-NB	37	11	0	37	110	104	111	46	0.2988	-0.3833
22 S-NI	7	6	0	16	19	20	17	6	20	0.1595
23 S-PB	29	5	0	25	77	86	79	24	80	15
24 S-SB	0	0	0	0	0	0	0	0	0	0
25 S-SC	31	9	0	37	94	98	97	29	94	18
26 S-SN	22	8	0	25	59	48	58	40	62	12
27 S-SR	19	7	0	11	44	50	54	13	47	9
28 S-V	39	11	0	41	120	118	127	46	122	21
29 S-W	4	1	0	7	12	12	9	10	12	3
30 S-Y	39	11	0	41	121	118	127	46	123	21
31 S-ZN	8	3	0	4	9	8	8	3	9	1
32 S-ZR	15	9	0	16	30	23	32	22	31	11
33 S-TN	16	2	0	30	56	58	53	21	58	13
34 AA-ZN	24	7	0	24	70	65	73	26	71	9

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	23	24	25	26	27	28	29	30	31	32
	S-PB	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR
3 S-FE	0.0482	*****	0.3125	-0.2957	0.2604	0.0910	-0.6537	-0.1957	-0.6259	-0.0465
4 S-MG	0.1043	*****	0.1356	-0.2907	0.0424	0.0284	-0.5328	-0.2965	-0.6379	-0.0368
5 S-CA	-0.1462	*****	-0.2452	0.0487	0.1037	0.0737	-0.0455	0.4355	0.0195	0.1180
6 S-TI	-0.0329	*****	-0.0815	-0.3308	-0.0061	0.7174	0.5964	-0.1930	0.6314	-0.1416
7 S-MN	0.1314	*****	0.0458	-0.3945	-0.0241	-0.3077	0.0157	0.5126	0.1712	0.2510
8 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
11 S-B	0.0155	*****	0.0678	-0.1053	-0.0011	-0.1514	-0.2843	-0.1338	-0.9484	0.3686
12 S-BA	0.1602	*****	0.1807	-0.2127	0.1487	-0.4782	0.1320	-0.0288	-0.0265	0.1975
13 S-BE	-0.2109	*****	-0.1236	-0.0143	-0.2391	0.7050	0.3468	-0.0670	-0.5982	-0.5139
14 S-BI	0.0503	*****	0.5063	-0.2201	0.3922	-0.7494	*****	0.0041	-0.3750	0.1629
15 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
16 S-CO	0.0471	*****	0.3174	-0.3240	0.5999	0.1159	-0.3874	0.2541	-1.0000	0.1839
17 S-CR	0.0203	*****	0.3895	-0.0958	0.3150	0.3282	-0.1516	-0.1359	-0.5653	0.1289
18 S-CU	0.2612	*****	0.0109	0.3551	-0.2596	-0.1319	-0.3029	-0.2210	-0.6313	-0.0745
19 S-LA	0.1875	*****	-0.0258	0.1333	0.0704	-0.1035	0.4329	0.2169	0.1824	-0.0124
20 S-MO	0.3024	*****	-0.0210	0.2231	-0.2361	-0.0969	0.7583	0.3346	-0.5000	-0.0937
21 S-NB	0.0005	*****	-0.3121	0.4368	-0.1916	0.5286	0.6694	-0.0677	0.3868	-0.2128
22 S-NI	0.2477	*****	0.2194	0.1811	0.3315	-0.0179	-1.0000	0.1557	*****	0.3160
23 S-PB	0.4581	*****	-0.0458	-0.0818	-0.1210	0.0202	0.1690	-0.0226	-0.4236	-0.0519
24 S-SB	0	*****	*****	*****	*****	*****	*****	*****	*****	*****
25 S-SC	75	0	0.2444	-0.2864	0.2614	-0.0216	-0.0364	0.1471	-0.4274	0.1285
26 S-SN	36	0	42	0.2751	-0.3693	0.1423	0.3538	0.0601	-0.4389	-0.0553
27 S-SR	43	0	50	16	0.1181	0.0359	*****	0.2470	-0.1888	0.2414
28 S-V	92	0	109	63	56	0.2827	0.0990	-0.1365	-0.6800	-0.2581
29 S-W	11	0	7	9	2	12	0.5034	0.4033	*****	0.2750
30 S-Y	92	0	109	63	56	142	12	0.2703	0.3578	0.1841
31 S-ZN	7	0	7	4	4	8	0	9	0.3799	*****
32 S-ZR	15	0	21	25	12	33	5	33	3	0.2832
33 S-TH	49	0	52	30	24	68	9	69	5	10
34 AA-ZN	47	0	57	37	26	78	8	78	6	17

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

Table 3--continued

D0101 CORRELATION ANALYSIS - USGS STATPAC (04/27/77)

DATE 6/17/80

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

33 34
S-TH AA-ZN

3 S-FE	0.0732	0.3264
4 S-MG	-0.1007	0.2780
5 S-CA	0.0764	-0.1449
6 S-TI	-0.1453	-0.2292
7 S-MN	0.3558	0.0422
8 S-AG	*****	*****
9 S-AS	*****	*****
10 S-AU	*****	*****
11 S-B	-0.1310	0.0308
12 S-BA	0.0984	0.0699
13 S-BE	0.4416	-0.1757
14 S-BI	*****	0.4635
15 S-CD	*****	*****
16 S-CO	0.0769	0.1009
17 S-CR	0.1673	0.1837
18 S-CU	0.0749	0.3068
19 S-LA	0.5183	0.0246
20 S-MO	-0.0429	0.4034
21 S-NB	0.0882	0.0292
22 S-NI	0.2630	-0.5273
23 S-PB	0.3416	0.1065
24 S-SB	*****	*****
25 S-SC	-0.0121	0.1815
26 S-SN	0.0577	0.1163
27 S-SR	-0.0314	0.2670
28 S-V	0.0894	-0.0343
29 S-W	-0.1184	-0.3692
30 S-Y	0.4734	-0.0282
31 S-ZN	0.1445	0.0679
32 S-ZR	-0.2122	-0.2068
33 S-TH	0.3355	0.0750
34 AA-ZN	34	0.4304

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS - ROCKS

	3 S-FE%	4 S-MG%	5 S-CA%	6 S-TI%	7 S-MN	8 S-AG	9 S-AS	10 S-AU	11 S-B	12 S-BA
3 S-FE	0.4053	0.8239	0.0030	0.8740	0.1457	*****	*****	*****	*****	-0.0802
4 S-MG	16	0.4399	0.3145	0.9546	0.2512	*****	*****	*****	*****	0.0692
5 S-CA	16	16	0.3666	0.2745	0.0607	*****	*****	*****	*****	0.1937
6 S-TI	16	16	16	0.4675	0.1876	*****	*****	*****	*****	0.1254
7 S-MN	16	16	16	16	0.3514	*****	*****	*****	*****	-0.2667
8 S-AG	0	0	0	0	0	*****	*****	*****	*****	*****
9 S-AS	0	0	0	0	0	0	*****	*****	*****	*****
10 S-AU	0	0	0	0	0	0	0	*****	*****	*****
11 S-B	1	1	1	1	1	0	0	0	*****	*****
12 S-BA	16	16	16	16	16	0	0	0	1	0.2758
13 S-BE	13	13	13	13	13	0	0	0	1	13
14 S-BI	1	1	1	1	1	0	0	0	1	1
15 S-CD	0	0	0	0	0	0	0	0	0	0
16 S-CE	6	6	6	6	6	0	0	0	1	6
17 S-CR	4	4	4	4	4	0	0	0	1	4
18 S-CU	14	14	14	14	14	0	0	0	0	14
19 S-LA	5	5	5	5	5	0	0	0	0	5
20 S-MO	1	1	1	1	1	0	0	0	1	1
21 S-NB	2	2	2	2	2	0	0	0	0	2
22 S-NI	5	5	5	5	5	0	0	0	1	5
23 S-PB	16	16	16	16	16	0	0	0	1	16
24 S-SB	0	0	0	0	0	0	0	0	0	0
25 S-SC	8	8	8	8	8	0	0	0	1	8
26 S-SN	0	0	0	0	0	0	0	0	0	0
27 S-SR	13	13	13	13	13	0	0	0	0	13
28 S-V	10	10	10	10	10	0	0	0	1	10
29 S-W	1	1	1	1	1	0	0	0	1	1
30 S-Y	14	14	14	14	14	0	0	0	1	14
31 S-ZN	1	1	1	1	1	0	0	0	1	1
32 S-ZR	14	14	14	14	14	0	0	0	1	14
33 S-TH	0	0	0	0	0	0	0	0	0	0
34 AA-ZN	13	13	13	13	13	0	0	0	1	13

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

*** not calculated

Table 3--continued

D0101 CORRELATION ANALYSIS - USGS STATPAC (04/27/77)

DATE 6/17/80

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	13 S-BE	14 S-BI	15 S-CD	16 S-CO	17 S-CR	18 S-CU	19 S-LA	20 S-MO	21 S-NB	22 S-NI
3 S-FE	0.7535	*****	*****	0.9845	0.5456	0.3615	0.4538	*****	*****	0.7330
4 S-MG	0.4557	*****	*****	0.3187	0.2705	0.2567	0.3597	*****	*****	0.4941
5 S-CA	-0.3135	*****	*****	-0.3362	-0.1347	0.1619	0.4135	*****	*****	0.0353
6 S-TI	0.5633	*****	*****	0.5822	0.7048	0.4229	0.4519	*****	*****	0.8323
7 S-MN	0.3256	*****	*****	-0.4768	0.1447	0.1148	-0.2112	*****	*****	-0.1052
8 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
11 S-B	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
12 S-BA	-0.3213	*****	*****	0.1178	0.1627	0.3331	0.9119	*****	*****	-0.2346
13 S-BE	0.2786	*****	*****	0.5862	0.3632	0.5723	-0.2636	*****	*****	0.1529
14 S-BI	1	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CD	0	0	*****	*****	*****	*****	*****	*****	*****	*****
16 S-CO	6	1	0	0.4063	0.4509	-0.2364	0.9882	*****	*****	0.5794
17 S-CR	4	1	0	4	0.3529	1.0000	*****	*****	*****	0.9708
18 S-CU	11	0	0	4	2	0.3510	-0.1514	*****	*****	-0.6733
19 S-LA	4	0	0	3	1	5	0.1808	*****	*****	*****
20 S-MO	1	1	0	1	1	0	0	*****	*****	*****
21 S-NB	2	0	0	0	0	2	1	0	0.0000	*****
22 S-NI	5	1	0	4	4	3	2	1	1	0.4222
23 S-PB	13	1	0	6	4	14	5	1	2	5
24 S-SB	0	0	0	0	0	0	0	0	0	0
25 S-SC	8	1	0	6	4	6	4	1	1	5
26 S-SN	0	0	0	0	0	0	0	0	0	0
27 S-SR	10	0	0	3	3	12	3	0	2	4
28 S-V	9	1	0	6	4	8	5	1	1	5
29 S-W	1	1	0	1	1	0	0	1	0	1
30 S-Y	11	1	0	6	4	12	5	1	2	5
31 S-ZN	1	1	0	1	1	0	0	1	0	1
32 S-ZR	12	1	0	6	4	12	5	1	2	5
33 S-TH	0	0	0	0	0	0	0	0	0	0
34 AA-ZN	11	1	0	6	4	11	5	1	2	5

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

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ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	23	24	25	26	27	28	29	30	31	32
	S-PB	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR
3 S-FE	-0.3502	*****	0.3560	*****	0.3698	0.8358	*****	0.0720	*****	0.5552
4 S-MG	-0.3030	*****	0.4173	*****	0.4465	0.8323	*****	0.2064	*****	0.4373
5 S-CA	-0.2588	*****	-0.1467	*****	0.7052	0.2262	*****	0.0946	*****	-0.2065
6 S-TI	-0.3224	*****	0.5722	*****	0.4441	0.8720	*****	0.1913	*****	0.6039
7 S-MN	0.6034	*****	0.5080	*****	-0.2893	0.6221	*****	-0.0925	*****	0.1722
8 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
10 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
11 S-B	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
12 S-BA	0.0094	*****	0.0382	*****	0.3250	-0.2615	*****	0.2475	*****	-0.0970
13 S-BE	0.0978	*****	0.5185	*****	-0.4049	0.3900	*****	-0.0446	*****	0.5596
14 S-BI	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
16 S-CO	-0.6907	*****	0.2345	*****	-0.8131	0.7883	*****	-0.3827	*****	0.2568
17 S-CR	-0.1979	*****	0.9784	*****	-0.9362	0.7665	*****	0.4453	*****	0.6298
18 S-CU	0.0655	*****	0.4479	*****	0.0257	-0.2583	*****	-0.0632	*****	0.2603
19 S-LA	0.0085	*****	0.5357	*****	*****	0.2245	*****	0.0396	*****	0.8210
20 S-MO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
21 S-NB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
22 S-NI	-0.6593	*****	0.2381	*****	0.0122	0.8356	*****	-0.2574	*****	0.2427
23 S-PB	0.1936	*****	0.2260	*****	-0.5272	-0.2201	*****	0.2502	*****	0.1697
24 S-SB	0	*****	*****	*****	*****	*****	*****	*****	*****	*****
25 S-SC	8	0	0.1138	*****	-0.9043	-0.1089	*****	-0.0356	*****	0.7362
26 S-SN	0	0	0	*****	*****	*****	*****	*****	*****	*****
27 S-SR	13	0	5	0	0.2204	0.3713	*****	0.3356	*****	-0.1278
28 S-V	10	0	7	0	7	0.3238	*****	-0.3568	*****	0.0376
29 S-W	1	0	1	0	0	1	*****	*****	*****	*****
30 S-Y	14	0	8	0	11	9	1	0.2441	*****	0.4511
31 S-ZN	1	0	1	0	0	1	1	1	*****	*****
32 S-ZR	14	0	8	0	11	10	1	13	1	0.3196
33 S-TH	0	0	0	0	0	0	0	0	0	0
34 AA-ZN	13	0	8	0	10	10	1	12	1	13

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

**** not calculated

Table 3--continued

D0101 CORRELATION ANALYSIS - USGS STATPAC (04/27/77)

DATE 6/17/80

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	33	34
	S-TH	AA-ZN-P
3 S-FE	*****	0.5665
4 S-MG	*****	0.4411
5 S-CA	*****	-0.2373
6 S-TI	*****	0.4894
7 S-MN	*****	0.6576
8 S-AG	*****	*****
9 S-AS	*****	*****
10 S-AU	*****	*****
11 S-B	*****	*****
12 S-BA	*****	-0.3389
13 S-BE	*****	0.7049
14 S-BI	*****	*****
15 S-CD	*****	*****
16 S-CO	*****	0.8163
17 S-CR	*****	-0.0741
18 S-CU	*****	0.2621
19 S-LA	*****	0.5272
20 S-MO	*****	*****
21 S-NB	*****	*****
22 S-NI	*****	-0.2506
23 S-PB	*****	0.4445
24 S-SB	*****	*****
25 S-SC	*****	0.4047
26 S-SN	*****	*****
27 S-SR	*****	-0.3183
28 S-V	*****	0.5966
29 S-W	*****	*****
30 S-Y	*****	-0.1611
31 S-ZN	*****	*****
32 S-ZR	*****	0.3998
33 S-TH	*****	*****
34 AA-ZN	0	0.3994

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

*** not calculated

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS - waters

	3	4	5	6	7	8	9	10	11	12
	AA-AG	AA-AS	AA-CA	AA-CU	AA-FE	AA-K	AA-MG	AA-MO	AA-NA	AA-PB
3 AA-AG	0.1953	-0.1012	0.1528	0.0884	0.1025	0.2777	0.2600	-0.2400	0.1201	-0.1230
4 AA-AS	21	0.2328	0.7134	0.3942	0.3066	0.7354	0.6594	0.5994	0.6654	0.4436
5 AA-CA	21	21	0.4070	0.2278	0.1594	0.6904	0.9681	0.7206	0.7447	0.3110
6 AA-CU	21	21	21	0.4438	-0.0717	0.5303	0.2239	0.1012	0.3522	0.3508
7 AA-FE	21	21	21	21	0.3589	0.3208	0.1195	-0.0226	0.2552	0.1455
8 AA-K	21	21	21	21	21	0.2636	0.7175	0.4437	0.7211	0.4192
9 AA-MG	21	21	21	21	21	21	0.3834	0.6538	0.7993	0.2775
10 AA-MO	21	21	21	21	21	21	21	0.2981	0.4126	0.3402
11 AA-NA	21	21	21	21	21	21	21	21	0.3122	0.2785
12 AA-PB	21	21	21	21	21	21	21	21	21	0.4629
13 AA-ZN	21	21	21	21	21	21	21	21	21	21
14 SI-F	21	21	21	21	21	21	21	21	21	21
15 SI-CL	21	21	21	21	21	21	21	21	21	21
16 SO4--	21	21	21	21	21	21	21	21	21	21
17 ALKALINE	21	21	21	21	21	21	21	21	21	21
18 SP COND	21	21	21	21	21	21	21	21	21	21
19 PH	21	21	21	21	21	21	21	21	21	21

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

Table 3--continued

D0101 CORRELATION ANALYSIS - USGS STATPAC (04/27/77)

DATE 6/17/80

ARRAY OF NUMBER OF PAIRS AND CORRELATION COEFFICIENTS -CONT.

	13	14	15	16	17	18	19
	AA-ZN	SI-F	SI-CL	S04--	ALKALINE	SP COND	PH
3 AA-AG	-0.0165	-0.0047	0.2016	0.2812	0.0089	0.2167	0.0349
4 AA-AS	0.1391	0.7542	0.6949	0.4008	0.7125	0.7626	0.6450
5 AA-CA	0.0533	0.7242	0.7050	0.4569	0.7542	0.9392	0.5235
6 AA-CU	0.5686	0.3089	0.4685	0.1735	0.2983	0.2824	0.5743
7 AA-FE	0.1627	0.0600	0.2895	-0.0472	0.2596	0.1227	-0.0934
8 AA-K	0.1221	0.5574	0.7519	0.6376	0.6276	0.7247	0.4430
9 AA-MG	-0.0750	0.7466	0.7501	0.5860	0.7794	0.9664	0.4749
10 AA-MO	-0.0921	0.6142	0.3931	0.2822	0.5713	0.6324	0.3631
11 AA-NA	-0.1123	0.5587	0.9398	0.5754	0.8556	0.8273	0.4231
12 AA-PB	0.2957	0.4706	0.3202	0.1035	0.3578	0.3569	0.3437
13 AA-ZN	0.5517	0.0946	-0.0209	-0.1818	0.0060	-0.0196	0.2659
14 SI-F	21	0.2804	0.5264	0.4601	0.7211	0.8090	0.6831
15 SI-CL	21	21	0.3263	0.5173	0.8349	0.7921	0.4122
16 S04--	21	21	21	0.5762	0.3698	0.6285	0.1074
17 ALKALINE	21	21	21	21	0.5865	0.8004	0.4451
18 SP COND	21	21	21	21	21	0.2868	0.5186
19 PH	21	21	21	21	21	21	0.0460

NOTE: THE DIAGONAL OF THE CORR MATRIX CONTAINS THE STD DEV OF THE VARIABLE FOR ONLY THE VALID PAIRS.

