



UNIVERSITY OF NEVADA RENO

Nevada Bureau of Mines and Geology
University of Nevada Reno
Reno, Nevada 89557-0088
(702) 784-6691

14 Dec 84

NBMG OPEN FILE REPORT 84-6

RECONNAISSANCE GEOCHEMICAL ASSESSMENT OF MINERAL RESOURCES IN THE SOUTH FORK, LITTLE HUMBOLDT WILDERNESS STUDY AREA (NV-010-132), ELKO COUNTY, NEVADA

Prepared by J. V. Tingley, Principal Investigator
Jack Quade, Senior Geologist

Prepared for:

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ELKO DISTRICT OFFICE
ELKO, NEVADA 89801
Under Contract YA-553-CT1-1058

This information should be considered preliminary.
It has not been edited or checked for completeness
or accuracy.

NEVADA BUREAU OF MINES AND GEOLOGY

RECONNAISSANCE GEOCHEMICAL ASSESSMENT OF MINERAL RESOURCES
IN THE SOUTH FORK, LITTLE HUMBOLDT WILDERNESS STUDY AREA
(NV-010-132), ELKO COUNTY, NEVADA

Prepared for:

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ELKO DISTRICT OFFICE
ELKO, NEVADA 89801

Under Contract #YA-553-CT1-1058

By

Joseph V. Tingley

and

Jack Quade

NEVADA BUREAU OF MINES AND GEOLOGY
University of Nevada, Reno

John Schilling, Director/State Geologist
December 1984

TABLE OF CONTENTS

Summary	1
Introduction	1
Location	1
Geologic Setting	2
Mineral Resources	2
Geochemistry	2
Sample Collection and Analytical Techniques	2
Discussion of Geochemical Anomalies	6
Land Classification for G-E-M Resource Potential	6
Mineral Resource Areas	6
Recommendations and Suggestions	15
Selected References	16
Appendix	17

LIST OF ILLUSTRATIONS

Figure 1a	Sample location, generalized geologic map	3
Figure 1b	Explanation for geologic map	4
Figure 2	Limits of determination of spectrographic analysis	5
Figure 3	Geochemical map, concentration of arsenic in stream sediment	7
Figure 4	Geochemical map, concentration of barium in panned concentrate	8
Figure 5	Geochemical map, concentration of copper in panned concentrate	9
Figure 6	Geochemical map, concentration of lead in panned concentrate	10
Figure 7	Geochemical map, concentration of tin in panned concentrate	11
Figure 8	Geochemical map, concentration of zinc in stream sediment	12
Figure 9	Land Classification map	13
Figure 10	BLM Classification scheme	14

APPENDIX

Appendix A

Rock sample descriptions

Rock sample analysis

Property Descriptions

Appendix B

Data for stream sediment samples

Data for panned concentrate samples

Graphical analysis, stream sediment samples

Graphical analysis, panned concentrate samples

Correlation analysis, stream sediment samples

Correlation analysis, panned concentrate samples

SUMMARY

The South Fork Little Humboldt WSA (NV-010-132) is located northeast of the Snowstorm Mountains in western Elko County, Nevada. Access to the area is from Paradise Valley and Midas on the south and from the Diamond A Desert on the north.

Rocks exposed within the area consist mainly of Tertiary volcanics and sediments. No mineral deposits are known to occur within the WSA.

The Nevada Bureau of Mines and Geology was contracted to conduct a detailed stream sediment sampling program within the Little Humboldt WSA to provide the Bureau of Land Management with field data which would aid in assessing metallic mineral potential. During this program, 132 samples were taken from 66 sites both within and around the WSA. Samples were collected by NBMG staff, and the sample preparation and analysis were done by the Branch of Exploration Research, U.S. Geological Survey, through a cooperative agreement between that agency and the Nevada Bureau of Mines and Geology. The analytical results obtained from this program, coupled with field observations recorded by our staff, have been used to outline the Mineral Resource Potential areas shown on Figure 9.

Area M-1, near Snowstorm Creek, is felt to have the best mineral potential within the WSA. Although only rated as moderate, further work could provide data which could enhance the evaluation of the area. Area M-2 covering the largest portion of the WSA is rated as generally unfavorable for metallic mineralization while areas M-3 and M-4 have been rated to have low potential but with a low level of confidence.

INTRODUCTION

A reconnaissance geochemical survey of the South Fork of the Little Humboldt WSA was completed during August, 1984. A report on the geology, energy, and mineral (GEM) resources of this area was prepared in 1983 by Terradata, Lakewood, Colorado, and our geochemical survey is a follow-up of recommendations made in that report.

LOCATION

The South Fork of the Little Humboldt WSA (WSA NV-010-132) is located in western Elko County, Nevada, northwest of the town of Midas. The area lies generally along both banks of the South Fork of Little Humboldt River on the eastern slope of the Snowstorm Mountains. Here, the Little Humboldt has deeply incised its canyon and the canyon forms a rough boundary between the Snowstorm Mountains to the southwest and the Diamond A Desert to the northeast. Access to the WSA is very difficult, no roads transect the area. With the exception of small areas along the eastern border of the WSA, all drainage is internal, into the basin of the Little Humboldt.

GEOLOGIC SETTING

The entire project area is underlain by volcanic rocks, rhyolitic to dacitic flows and domes of Miocene age (Hope and Coats, 1976). Regional faults trending northeast and northwest cross the area. The northwest-trending faults appear to be concentrated along the southwest face of the Snowstorm range and along the drainage of the Little Humboldt to the northeast. Snowstorm Creek, First Creek, and other small creeks on the eastern slope of the Snowstorms parallel the northeast-trending faults. Locally, areas of the WSA are covered by a veneer of Tertiary sediments.

MINERAL RESOURCES

No mines or prospects are known to occur within the WSA. The northern part of the Gold Circle (Midas) district lies about two miles south of the WSA and several prospects in the First Creek-Snowstorm Creek area lie just west of the WSA boundary.

GEOCHEMISTRY

Sample collection and Analytical Techniques:

The geochemical survey included collecting stream sediment and panned concentrates from active drainage systems and rock samples from mines, prospects, and outcrops within and along the margins of the WSA (see Figure 1a). Stream sediment samples were collected from four or five places along the active portion of the stream course at each sample site then combined and sieved to minus 80 mesh. At the same location, a second sample, weighing 10 to 15 pounds, was collected in the same manner but was screened to minus 16 mesh. This second sample was then carried to a source of water where it was concentrated by panning to about 100 grams of material. Rock samples were taken from veins in mines, selected from dumps, and chipped from outcrops. Rock samples were intentionally "hi-graded", and represent the best mineralized material that could be obtained at each rock sample site. All samples were returned to Reno where they were packaged and shipped to the laboratories of the Branch of Exploration Geochemistry, U.S. Geological Survey, for preparation and analysis. Field and sampling assistance was provided by Norman L. Stevens.

At the lab, the panned samples were further concentrated using bromoform and an electromagnet to first remove remaining light minerals and then to split the remaining heavy portion of the sample into three fractions; a highly magnetic, a moderately magnetic, and a non-magnetic fraction. The non-magnetic fraction was then prepared and analyzed along with the sediment and rock samples. All three sets of samples were analyzed for 31 elements on an emission spectrograph. After reviewing the results, selected samples were further analyzed by atomic absorption to improve detection limits. Figure 2 shows the limits of determination for the spectrographic analysis.

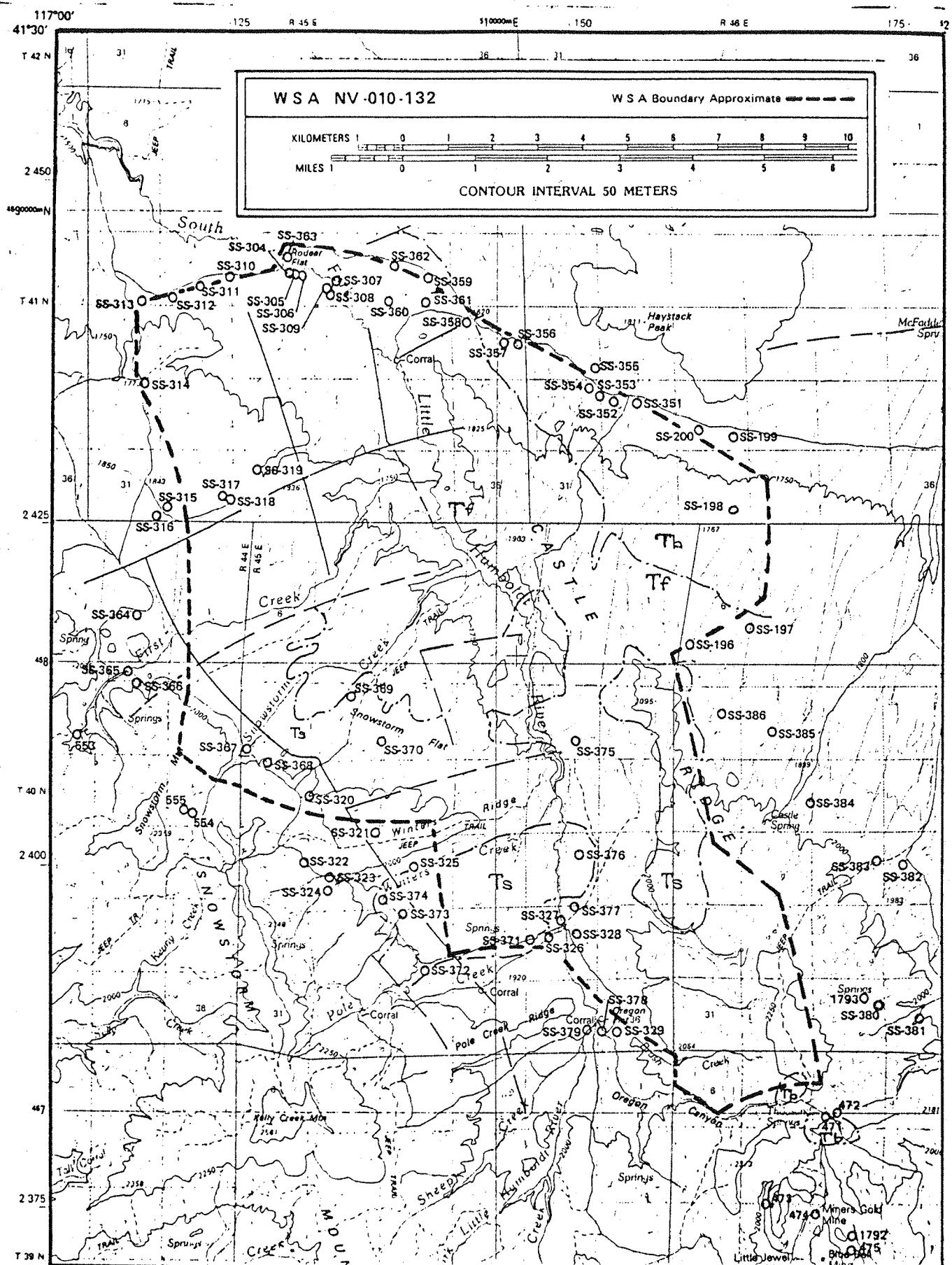


Figure 1a. Sample location map showing generalized geology, (Geology modified after Terradata, 1983)

FIGURE 1b

Geologic Map Legend For
South Fork Little Humboldt WSA
(NV-010-132)
Elko County, Nevada

- Ts - Tertiary Sediment Rocks. Dominantly tuff and welded tuff.
 Includes minor clastics and carbonates.
- Tf - Felsic Volcanic Extrusives: Dominantly rhyolites to dacities;
 flows and domes.
- Tb - Mafic Volcanic Extrusives: Dominantly andesites to basalts.
-  - Fault (dashed where inferred).
-  - Geologic contact (dashed where inferred).

modified from Terradata, 1983.

Figure 2 Limits of determination for the spectrographic analysis of rocks and stream sediments, based on a 10-mg sample.

Elements	Lower Determination Limit Percent	Upper Determination Limit
Iron (Fe)	0.05	20
Magnesium (Mg)	.02	10
Calcium (Ca)	.05	20
Titanium (Ti)	.002	1
Parts per million		
Manganese (Mn)	10	5,000
Silver (Ag)	0.5	5,000
Arsenic (As)	200	10,000
Gold (Au)	10	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20	500
Cobalt (Co)	5	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Lanthanum (La)	20	1,000
Molybdenum (Mo)	5	2,000
Niobium (Nb)	20	2,000
Nickel (Ni)	5	5,000
Lead (Pb)	10	20,000
Antimony (Sb)	100	10,000
Scandium (Sc)	5	100
Tin (Sn)	10	1,000
Strontium (Sr)	100	5,000
Vanadium (V)	10	10,000
Tungsten (W)	50	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000
Thorium (Th)	100	2,000

Discussion of Geochemical Anomalies:

In general, geochemical results from all samples within the WSA were very low. Definite patterns of geochemical associations are apparent, however, when the data are examined.

E-Spec. data from the stream sediment samples showed little activity in any of the elements except tin, and only one sample, #367, showed anomalous tin. Wet-chemical analysis of these same stream sediment samples for arsenic, (Figure 3) antimony, and zinc (Figure 8) showed low magnitude but well defined anomalies in two general areas. A weak arsenic anomaly is defined between Snowstorm and Winters Creeks along the mid-southwestern border of the WSA. Another zone of weak arsenic values was found on the southeast edge of Castle Ridge. Samples here were taken outside of the WSA but the drainages sampled originate within the WSA. Zinc values showed only minor variations but were generally highest in two areas along the northeast and southwest borders of the WSA.

Data obtained from the panned concentrate samples also outlined the same general areas pointed out by the stream sediment results. With a few notable exceptions, the values are low but there is sufficient variation within the sample results to allow good resolution of the anomalous zones. Barium values (Figure 4) were highest along the north and southeast borders of the WSA, in samples taken from drainages originating from Castle Ridge, and along the southwest border of the area in the Snowstorm Creek-Winters Ridge area. Only three values for copper (Figure 5) were in excess of 100 ppm, but these values were found within areas defined as anomalous by other metals. Lead values (Figure 6) were found to be anomalous in only two samples, both from the Snowstorm Creek area. Tin values (Figure 7) were more widespread and again defined anomalous areas north and east of Castle Ridge and in the Snowstorm Creek-Winters Creek area. Several samples (367, 380, 381, 382) reported tin values in excess of 2000 ppm.

LAND CLASSIFICATION FOR G-E-M RESOURCES POTENTIAL

Land classification areas (Figure 9) have the prefix "M" and a number which merely designates various subdivisions of the larger WSA. In addition, a BLM classification number has been assigned to each of the small areas. These numbers follow the classification scheme described in Figure 10. Land classifications have been made only on metallic resource potential based on our geochemical sampling results and on observations made by our field staff. Land classifications for non-metallic minerals, oil and gas, and geothermal areas, as well as information on leasable and saleable resources, are found in the 1983 GEM report (Mathews and Blackburn, 1983).

MINERAL RESOURCE AREAS (FIGURE 9)

Area M-1:

Area M-1 covers the drainages of Snowstorm Creek and Winters Creek, from Snowstorm Flat south to the southern border of the WSA. This area has been rated "3C" based on correlation of geochemical anomalies for barium, tin, copper, lead, zinc, and arsenic. Gold mineralization is known to occur outside the WSA

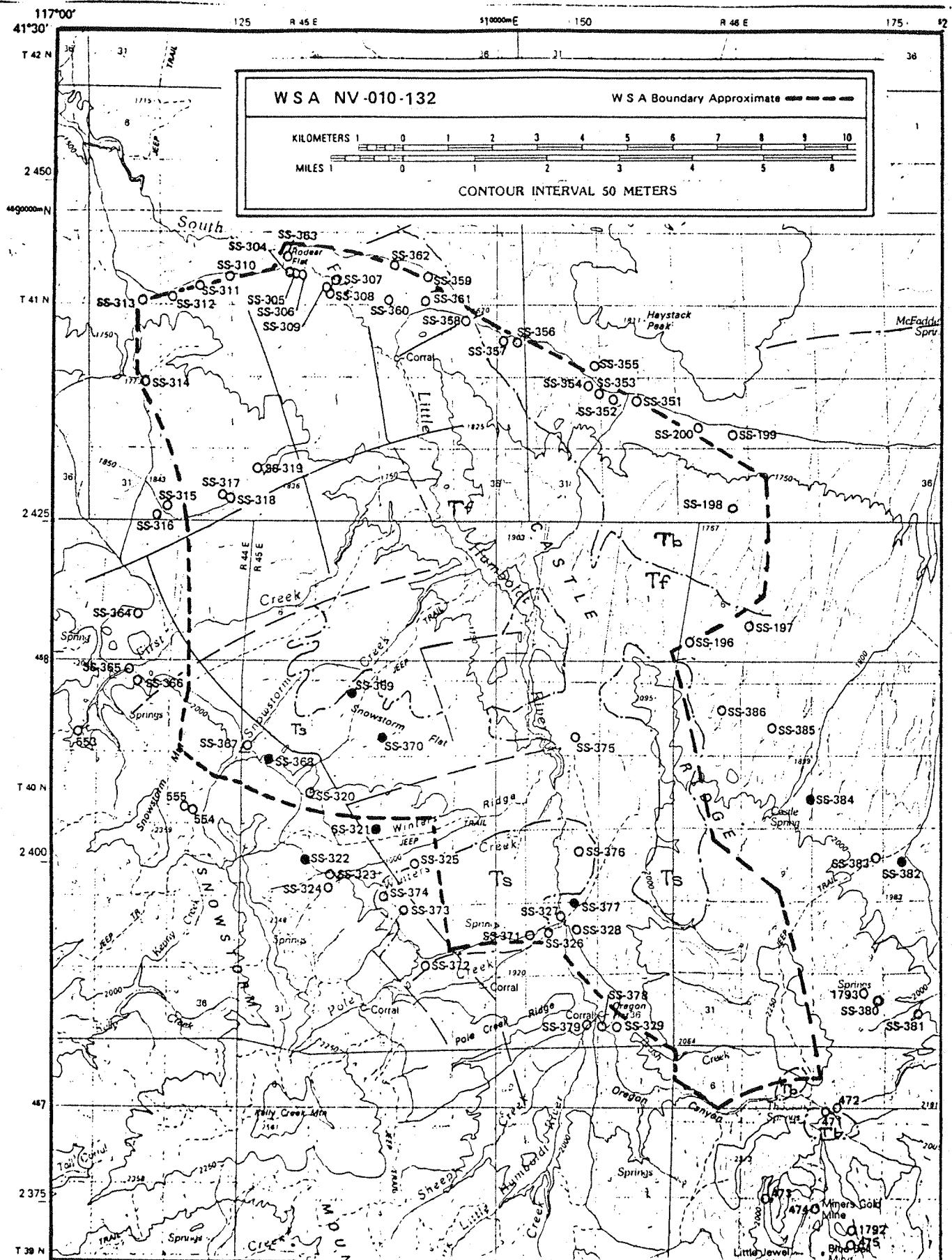


Figure 3. Geochemical map, ARSENIC in stream sediments

● + 10 ppm

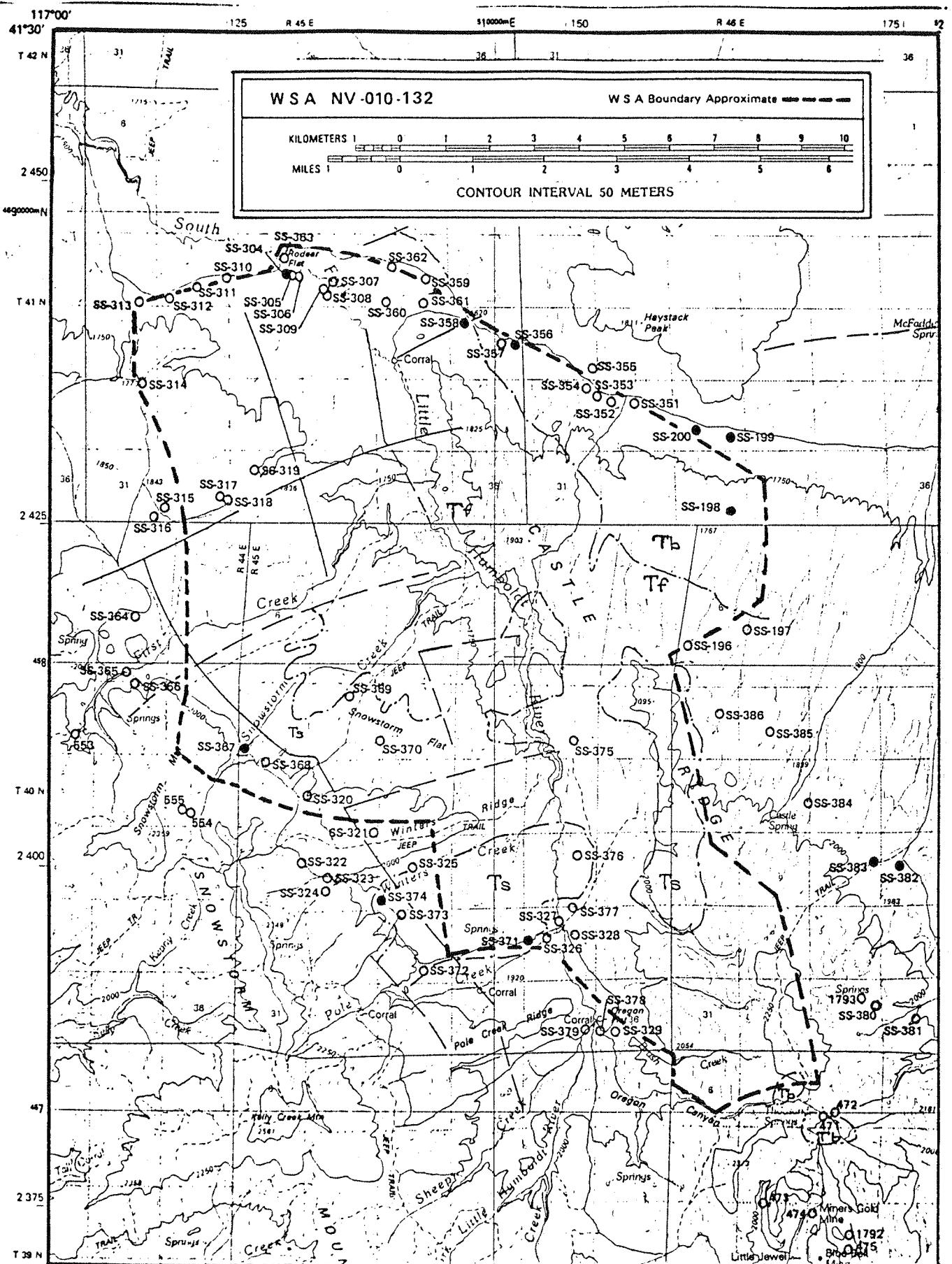


Figure 4. Geochemical map, BARIUM in panned concentrates

● + 2000 ppm

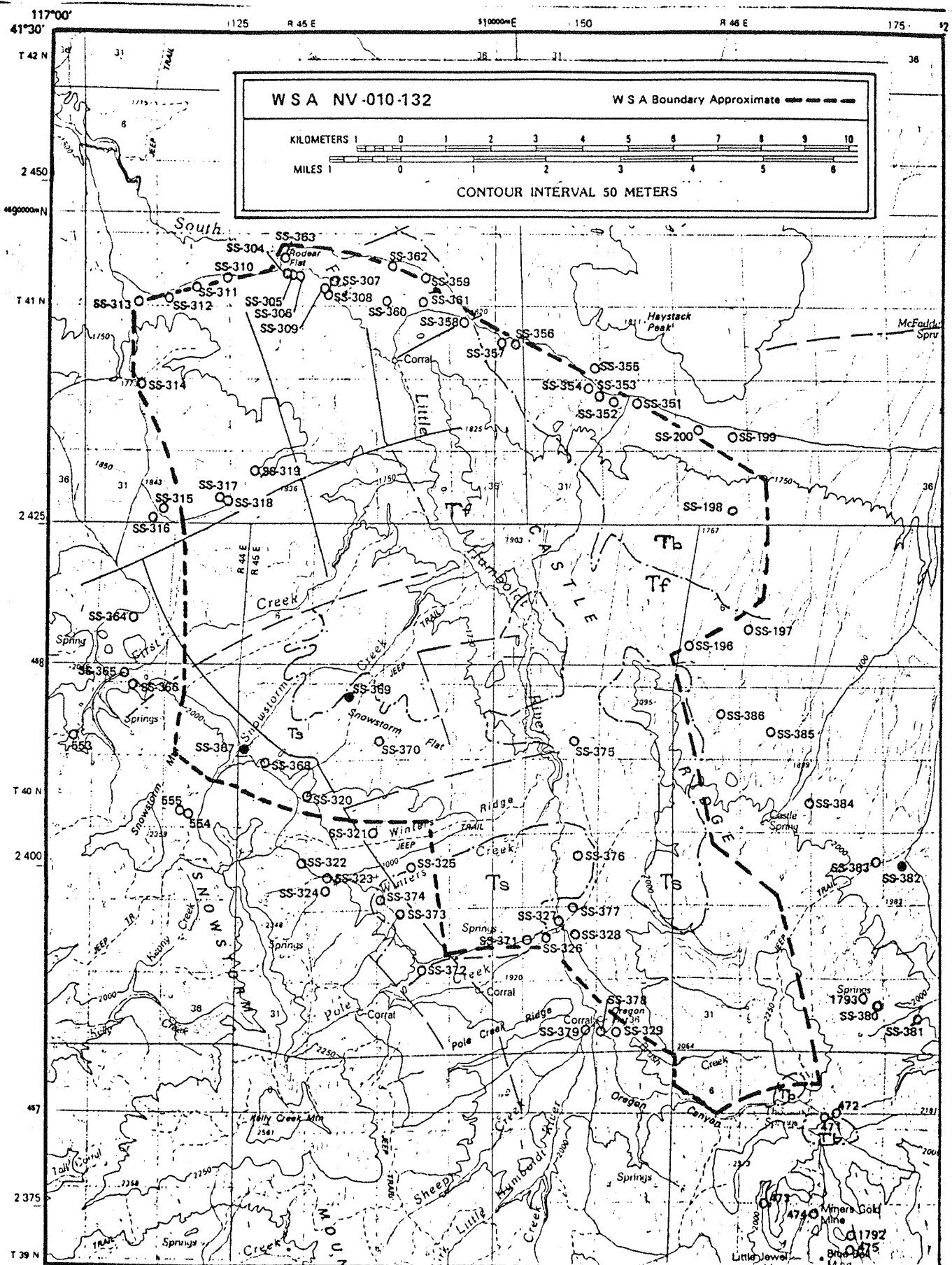


Figure 5. Geochemical map, COPPER in panned concentrates

● + 100 ppm

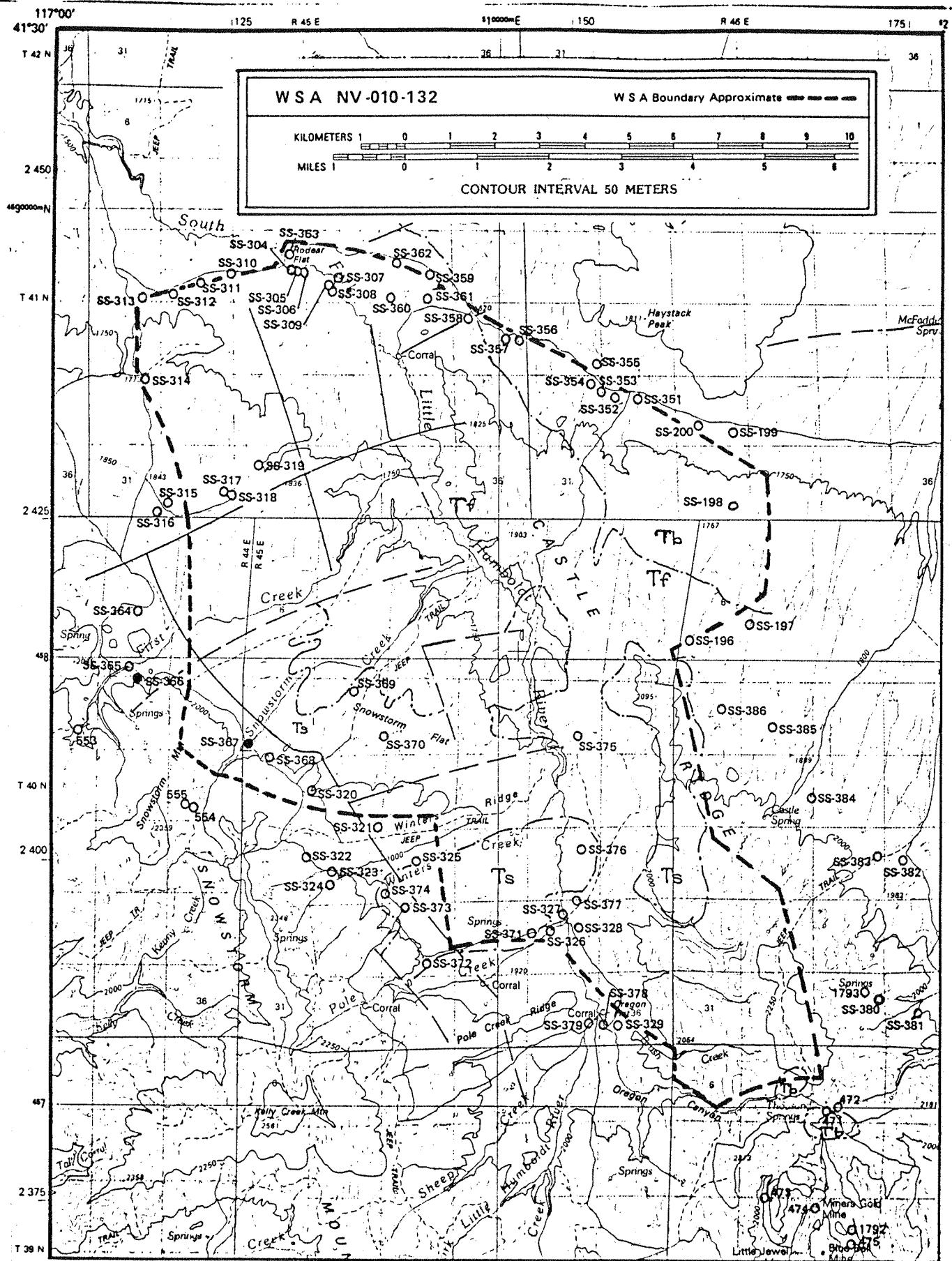


Figure 6. Geochemical map, LEAD in panned concentrates

● + 200 ppm

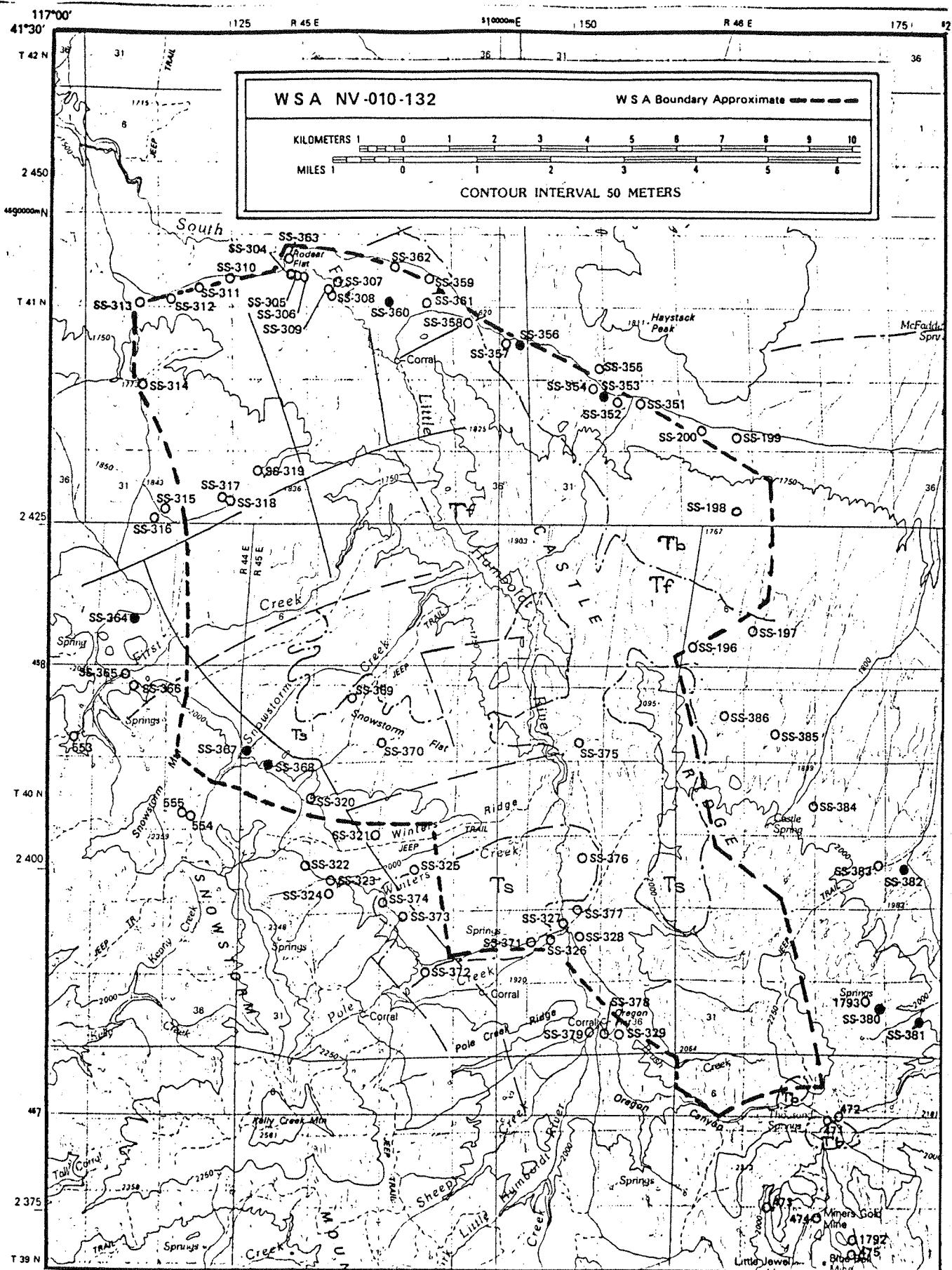


Figure 7. Geochemical map, TIN in panned concentrates

● + 200 ppm

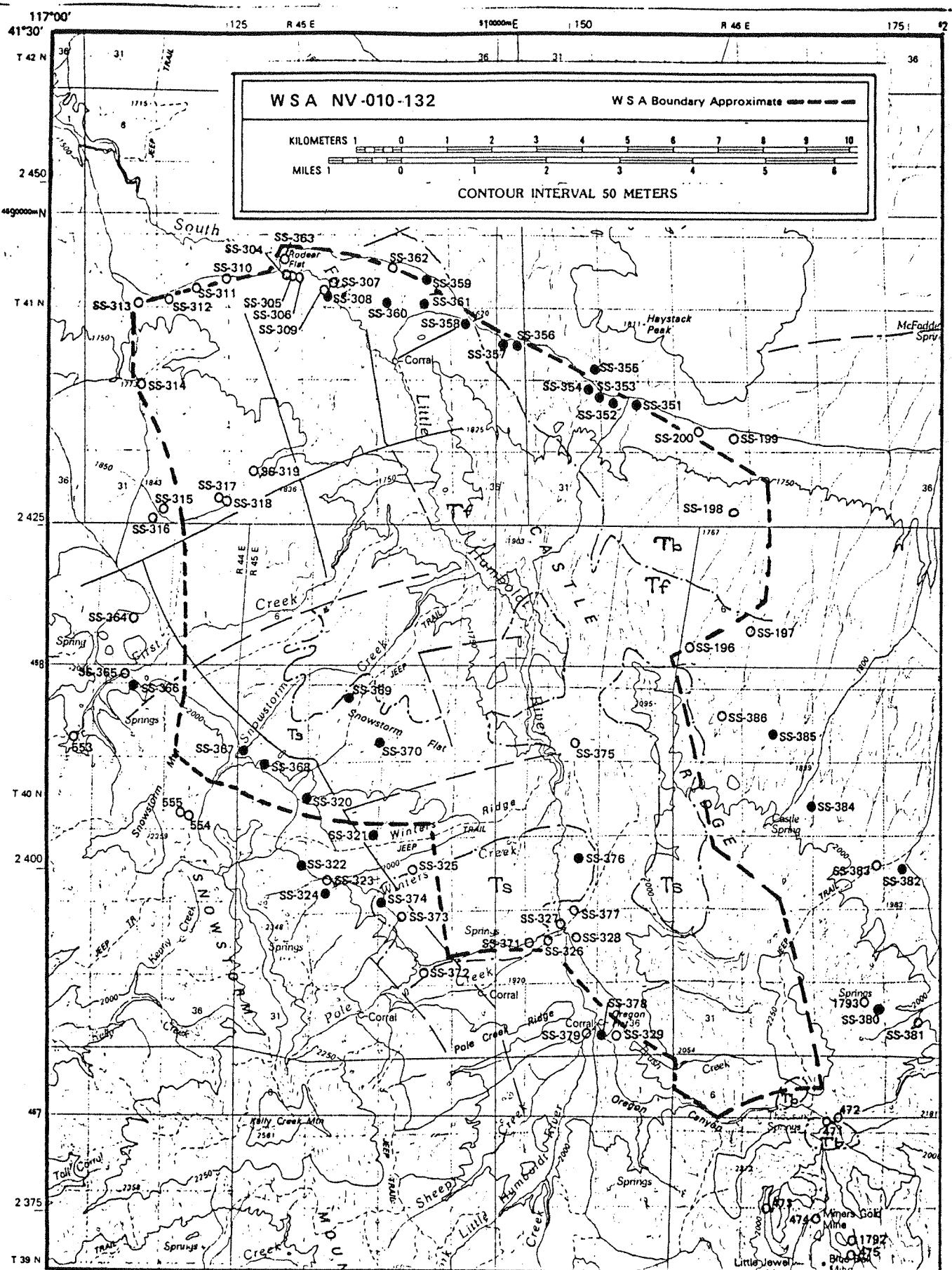


Figure 8. Geochemical map, ZINC in stream sediments

● ≥ 50 ppm

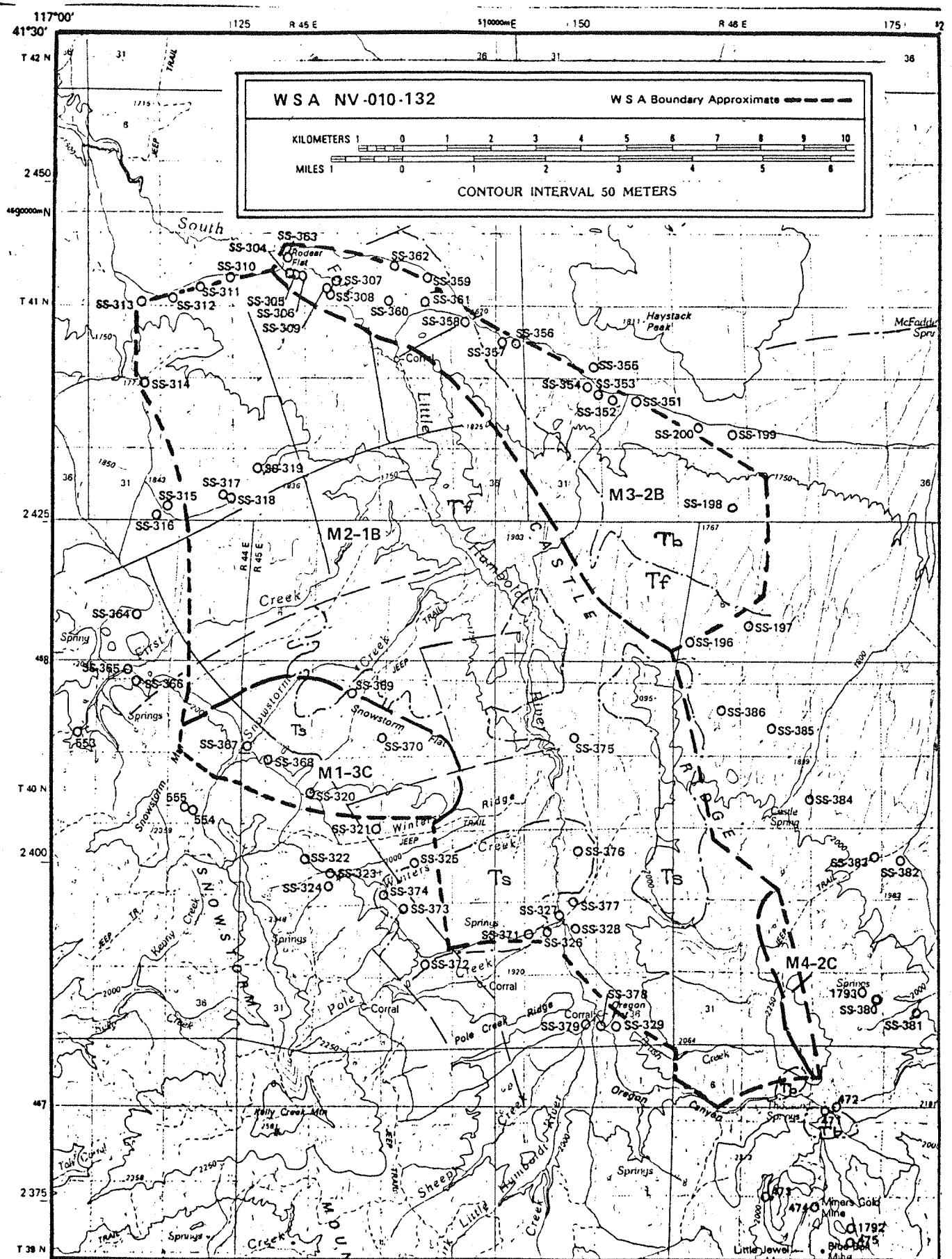


Figure 9. Land Classification map

Figure 10

CLASSIFICATION SCHEME

1. The geologic environment and the inferred geologic processes do not indicate favorability for accumulation of mineral resources.
2. The geologic environment and the inferred geologic processes indicate low favorability for accumulation of mineral resources.
3. The geologic environment, the inferred geologic processes, and the reported mineral occurrences indicate moderate favorability for accumulation of mineral resources.
4. The geologic environment, the inferred geologic processes, and the reported mineral occurrences, and the known mines or deposits indicate high favorability for accumulation of mineral resources.

LEVEL OF CONFIDENCE SCHEME

- A. The available data are either insufficient and/or cannot be considered as direct evidence to support or refute the possible existence of mineral resources within the respective area.
- B. The available data provide indirect evidence to support or refute the possible existence of mineral resources.
- C. The available data provide direct evidence, but are quantitatively minimal to support or refute the possible existence of mineral resources.
- D. The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

in the Snowstorm Creek drainage, and it is felt that there may be moderate potential for precious metals in area M-1.

Area M-2:

The large central portion of the WSA, lying along both sides of the Little Humboldt river, has been classified "1B". This classification was based largely on the low values obtained from samples from this area.

Area M-3:

Area M-3 includes the north slope of Castle Ridge along the northeastern border of the WSA. The "2B" classification was based on the broad but low-level anomalies in barium, tin, and zinc were obtained from drainages which have origins in this area. The Midas district is just to the south of here, outside of the WSA, and prospects exist to the east also.

RECOMMENDATIONS AND SUGGESTIONS

1. Additional field work should be done in areas M-1, M-3, and M-4 to check for signs of alteration or mineralization. Aerial reconnaissance may be a good first step for this work, as coloration due to alteration may be obvious from the air.
2. Check samples should be taken in areas where high tin values were found in panned concentrates. This work would be done to identify the tin mineral, to pinpoint its source, and thereby assess its significance.
3. As a general comment, it should be noted that since the WSA covers what is essentially a large basin (drainage is into the Little Humboldt), some of the sediment sampled in these drainages could actually be originating outside of the WSA. It is very important, therefore, to field check outcrops upstream from anomalous values to trace the source of the anomalies.

SELECTED REFERENCES

- Bentz, J. L. and Tingley, J. V. (1983) A mineral inventory of the Elko resource area, Elko district, Nevada: NBMG OF83-9.
- Bentz, J. L. and Tingley. J.V. (1983) Results of geochemical sampling within the Elko resource area, Elko, Eureka, and Lander counties, Nevada (portions of the Elko, McDermitt, Wells, and Winnemucca 2° sheets): NBMG OF83-10.
- Hope, R. A. and Coats, R. R. (1976) Preliminary geologic map of Elko County, Nevada: USGS open-file 76-779.
- Granger, A. E., Bell, M. M., Simmons, G. C., and Lee F. (1957) Geology and mineral resources of Elko County, Nevada: NBMG Bull. 54.
- Mathews, G. W. and Blackburn, W. H. (1983) Assessment of Geology, Energy, and Minerals (GEM) resources, South Fork Little Humboldt GEM resource area, final report, unpublished, prepared by Terradata for the BLM.
- Rott, E. H. Jr. (1931) Ore deposits of the Gold Circle mining district, Elko County, Nevada: NBMG Bull. 12.
- Smith, R. M. (1976) Mineral resource of Elko County, Nevada: USGS open-file report 76-56.

APPENDIX

APPENDIX A

PROPERTY NAME: Elko Prince Mine
OTHER NAMES:
MINERAL COMMODITY(IES): Au-Ag?
TYPE OF DEPOSIT: Epithermal
ACCESSIBILITY: Fair roads NE of Midas
OWNERSHIP: Unknown
PRODUCTION: Some ore was treated locally
HISTORY: From the early 1900's

County: Elko
Mining District: NE of Midas
AMS Sheet: Mc Dermitt
Quad Sheet: Oregon Canyon 7 $\frac{1}{2}$
Sec. 16, T 39N, R 46E
Coordinate (UTM):
North 4567200 m
East 0518200 m
Zone

DEVELOPMENT: One very large open stope and other prospects

ACTIVITY AT TIME OF EXAMINATION: None

GEOLOGY: An open stope trending N70W, 85SE is along a 10-15 foot vein system with quartz vienlets in altered rhyolite in a fault vein system. The stope cuts off an adit that trends further along the strike of the structure. Sample 1792 is from the vein inside the stope.

REMARKS:

REFERENCES:

EXAMINER: Jack Quade

DATE VISITED: 8-25-84

PROPERTY NAME: Sample Site 1793

OTHER NAMES:

MINERAL COMMODITY(IES): Possible prec-metals

TYPE OF DEPOSIT: Quartz veins

ACCESSIBILITY: No roads

OWNERSHIP: Unknown

PRODUCTION: None

HISTORY:

DEVELOPMENT: None

ACTIVITY AT TIME OF EXAMINATION: None

GEOLOGY: Quartz vein up to 10 feet wide trending NE and dipping close to vertical outcrops on the southeast slope of the E-W drainage. Additional and possible parallel veins to the east. The vein is vuggy, iron-stained and has possible sulfides in it. Sample 1793

Sample 1793

REMARKS:

REFERENCES:

EXAMINER: Jack Quade

Elko

County: Elko

Mining District: NE of Midas

AMS Sheet: Mc Dermitt

Quad Sheet: Oregon Canyon 7½

Sec. NE¹ 33, T 40N, R 46E

Coordinate (UTM):

North 45 72 90 0 m

East 05 18 70 0 m

Zone

DATE VISITED: 8-25-84

Sample Description

Sample Number	Location	Description
471	Quad: Oregon Canyon 7 1/2' Sec: 4 T: 39N R: 46E UTM: 4569980 N 0517620 E Sample location 471 & 472 Gold Circle District	Sample described as silicified ash bed. Rock is Fe-stained & wholly composed of opaline to finely crystalline quartz which has replaced volcanic. Minor pyrite observed.
472	Quad: Oregon Canyon 7 1/2' Sec: 4 T: 39N R: 46E UTM: 4569980 N 0517620 E Sample locations 471 & 472 Gold Circle District	Orange-pink, clay-altered volcanic? & Fe-rich gossany breccia. Breccia contains many small vug fillings of white opaline silica.
473	Quad: Oregon Canyon 7 1/2' Sec: Unsurveyed T: 39N R: 46E UTM: 4568080 N 0516160 E Fairview Claims Gold Circle District	Altered andesitic(?) volcanic & Fe-stained, brecciated, cavernous (solution riddled?) quartz vein material.
474	Quad: Oregon Canyon 7 1/2' Sec: 16? T: 39N R: 46E UTM: 4567810 N 0517220 E Miners Gold Mine Gold Circle District	Silicified & pyritized fine-grained volcanic rock. Some fine andesitic breccia also. Unoxidized, fine-grained pyrite disseminated throughout rock.
475	Quad: Oregon Canyon 7 1/2' Sec: 16? T: 39N R: 46E UTM: 4567020 N 0518200 E (Near) June Bell Mine Gold Circle District	Silicified & Fe-stained volcanic & fine volcanic breccia with fine-grain pyrite. Also vitreous grey-white quartz vein (some brecciated) & quartz veinlets.
553	Quad: Snowstorm Mtn. 7 1/2' Sec: Unsurveyed T: 40N R: 44E UTM: 4578440 N 0500640 E First Creek Prospect Snowstorm Mtn. Area	Non-welded tuff, ash, FeOx-MnO on fracture surfaces, dull-green alteration mineral along fracture(?).
554	Quad: Snowstorm Mtn. 7 1/2' Sec: Unsurveyed T: 40N R: 44E UTM: 4576660 N 0503320 E Snowstorm Claims Snowstorm Mtn. Area	Mod. kaolinized, silicified rhyolite tuff, brecciated, quartz veining, FeOx-stained.
555	Quad: Snowstorm Mtn. 7 1/2' Sec: Unsurveyed T: 40N R: 44E UTM: 4576750 N 0503250 E Snow Claims Snowstorm Mtn. Area	Sample consists of silicified & Fe-stained rhyolite (some flow banded) & quartz vein breccia. Also some vuggy, Fe-stained quartz veins 1/4-1" in width, milky white to vitreous in appearance. No apparent sulfide.
	Quad: Sec: UTM:	Continued....

Sample Description

Sample Number	Location	Description
1792	Quad: Oregon Canyon 7 1/2' Sec: 6 T: 39N R: 46E UTM: 4567200 N 0518200 E Elko Prince Mine Mine Gold Circle District	Open-stope trending N75°W dipping 85 S. Vein system is 10-15 ft. wide in altered rhyolite. Quartz veinlets in altered rhyolite along a vein/fault structure.
1793	Quad: Oregon Canyon 7 1/2' Sec: NE 1/4 33 T: 40N R: 46E UTM: 4572900 N 0518700 E Outcrop North of the Gold Circle	Quartz vein outcrop - vuggy Fe- stained. Trending NE dipping close to vertical. Quartz strewn along the southern slope of E-W Canyon.
	Quad: Sec: _____ T: _____ R: _____ UTM: _____ N _____ E _____ _____	_____ _____ _____ _____
	Quad: Sec: _____ T: _____ R: _____ UTM: _____ N _____ E _____ _____	_____ _____ _____ _____
	Quad: Sec: _____ T: _____ R: _____ UTM: _____ N _____ E _____ _____	_____ _____ _____ _____
	Quad: Sec: _____ T: _____ R: _____ UTM: _____ N _____ E _____ _____	_____ _____ _____ _____
	Quad: Sec: _____ T: _____ R: _____ UTM: _____ N _____ E _____ _____	_____ _____ _____ _____
	Quad: Sec: _____ T: _____ R: _____ UTM: _____ N _____ E _____ _____	_____ _____ _____ _____
	Quad: Sec: _____ T: _____ R: _____ UTM: _____ N _____ E _____ _____	_____ _____ _____ _____

Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	471	472	473	474	475	553	554	555	
Fe % (.05)	.3	15	.7	1	.7	7	5	5	
Mg % (.02)	.02	.03	.03	L	.02	1	.05	.03	
Ca % (.05)	L	.05	.05	.1	.3	3	.1	.07	
Ti % (.002)	.03	.07	.05	.15	.1	.5	.3	.1	
Mn (10)	20	500	100	30	70	G5000	300	150	
Ag (.5)	N	N	500	3	150	N	3	50	
As (200)	N	N	N	N	N	N	N	N	
Au (10)	N	N	15	N	1	N	N	N	
B (10)	N	N	N	L	N	N	10	10	
Ba (20)	100	500	300	1500	700	5000	1500	700	
Be (1)	3	3	10	2	3	5	3	5	
Bi (10)	N	N	N	N	N	N	N	N	
Cd (20)	N	N	N	N	N	N	N	N	
Co (5)	L	L	L	N	L	30	N	5	
Cr (10)	L	10	L	L	L	N	N	N	
Cu (5)	5	15	15	20	15	30	20	10	
La (20)	L	L	20	20	20	30	N	L	
Mo (5)	L	N	N	N	N	10	N	N	
Nb (20)	N	L	L	L	L	N	L	L	
Ni (5)	5	5	5	L	L	L	L	5	
Pb (10)	70	30	100	150	100	500	200	20	
Sb (100)	N	N	N	N	N	N	N	N	
Sc (5)	N	5	N	L	L	20	7	5	
Sn (10)	N	N	N	N	N	20	N	N	
Sr (100)	N	N	N	N	N	300	N	N	
V (10)	15	L	15	L	L	100	L	15	
W (50)	N	N	N	N	N	N	N	N	
Y (10)	N	20	20	50	30	30	30	20	
Zn (200)	N	1000	N	N	N	L	N	300	
Zr (10)	30	100	100	300	300	150	300	100	
Th (100)	N	N	N	N	N	N	N	N	

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado

Fe, Mg, Ti reported in %, all other elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

Element	Sample Number
Fe (.05)	1792 .5
Mg (.02)	.07 .05
Ca (.05)	.15 .05
Ti (.002)	.2 .15
Mn (10)	100 50
Ag (.5)	50 N
As (200)	N N
Au (10)	N N
B (10)	10 10
Ba (20)	1000 700
Be (1)	3 1.5
Bi (10)	N N
Cd (20)	N N
Co (5)	N N
Cr (10)	N N
Cu (5)	15 5
La (20)	50 50
Mo (5)	N N
Nb (20)	20 20
Ni (5)	L L
Pb (10)	20 N
Sb (100)	N N
Sc (5)	5 5
Sn (10)	N N
Sr (100)	N N
V (10)	20 20
W (50)	N N
Y (10)	50 20
Zn (200)	N N
Zr (10)	500 700
Th (100)	N N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado

Fe, Mg, Ti reported in %, all other elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Atomic-Absorption Analysis

Element

Sample Number

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

Atomic-Absorption Analysis

Element

Sample Number

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

a = greater than value shown; N = not detected at limit of detection; -< detected, but below value shown.

APPENDIX B

Table 1--Data for stream-sediment samples, South Fork of the Little Humboldt WSA, Nevada

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CAX	S-TIX	S-MN	S-AG	S-AS	S-AU	S-B	S-BA	S-BE
196SS	51,470	458,145	5	1.0	2.0	.5	1,000	N	N	N	70	1,000	2
197SS	51,590	458,190	5	1.0	2.0	.5	1,000	N	N	N	70	1,000	2
198SS	51,590	458,340	5	1.0	2.0	.5	1,000	N	N	N	70	1,000	2
199SS	51,520	458,520	5	1.0	1.5	.5	1,000	N	N	N	70	1,000	2
200SS	51,430	458,550	5	1.0	1.5	.3	1,000	N	N	N	50	1,000	2
351SS	51,300	458,590	5	1.0	1.5	.5	1,000	N	N	N	50	1,000	1
352SS	51,200	458,610	15	1.0	1.5	1.0	1,000	N	N	N	70	700	2
353SS	51,150	458,660	15	1.5	2.0	1.0	1,500	N	N	N	50	1,000	2
354SS	51,130	458,690	5	.7	1.5	1.0	1,000	N	N	N	50	700	2
355SS	51,040	458,720	10	1.0	2.0	1.0	1,000	N	N	N	50	1,000	2
356SS	51,040	458,730	10	1.0	2.0	1.0	1,000	N	N	N	50	1,000	2
357SS	50,990	458,740	10	1.0	1.5	1.0	1,000	N	N	N	50	1,000	2
358SS	50,940	458,750	5	1.0	1.5	.7	1,000	N	N	N	50	1,000	2
359SS	50,850	458,850	10	1.0	1.5	1.0	1,500	N	N	N	30	700	2
360SS	50,760	458,800	5	1.0	1.5	1.0	1,500	N	N	N	50	1,000	2
361SS	50,840	458,820	5	1.0	1.5	1.0	1,000	N	N	N	50	1,000	2
362SS	50,780	458,880	10	1.0	1.5	1.0	1,000	N	N	N	50	1,000	2
363SS	50,540	458,960	5	1.0	2.0	.5	1,000	N	N	N	50	1,000	2
364SS	50,210	458,100	10	1.0	1.5	.7	1,000	N	N	N	70	1,000	2
365SS	50,160	457,990	3	.7	1.5	.7	700	N	N	N	50	1,000	2
366SS	50,200	457,970	5	2.0	2.0	.5	1,000	N	N	N	20	500	2
367SS	50,460	457,820	7	2.0	3.0	.5	1,500	<.5	N	N	20	500	2
368SS	50,450	457,790	5	.7	1.5	.5	1,500	N	N	N	50	1,000	2
369SS	50,670	457,900	5	1.0	1.0	.5	1,000	N	N	N	50	700	2
370SS	50,770	457,830	5	1.0	1.5	.5	1,000	N	N	N	50	1,000	2
371SS	51,060	457,390	5	1.0	2.0	.7	1,000	N	N	N	50	1,000	3
372SS	50,890	457,340	3	1.0	1.5	.3	700	N	N	N	50	1,000	2
373SS	50,820	457,450	5	2.0	3.0	.7	1,500	N	N	N	30	1,000	2
374SS	50,760	457,470	5	2.0	2.0	.7	1,500	N	N	N	20	1,000	2
375SS	51,190	457,850	3	1.0	1.5	.5	1,000	N	N	N	50	1,000	2
376SS	51,180	457,580	5	1.5	2.0	.5	1,000	N	N	N	50	1,000	2
377SS	51,200	457,460	5	1.5	1.5	.5	1,000	N	N	N	50	1,000	2
378SS	51,260	457,170	5	1.5	1.5	.5	1,000	N	N	N	50	1,000	2
379SS	51,230	457,190	5	1.0	2.0	.5	1,000	N	N	N	50	1,000	2
380SS	51,840	457,260	3	.7	1.0	.5	500	N	N	N	50	700	2
381SS	51,920	457,200	7	1.0	1.5	.7	1,000	N	N	N	70	1,000	2
382SS	51,950	457,560	5	.7	1.5	.5	1,000	N	N	N	50	1,000	2
383SS	51,850	457,570	5	1.0	1.5	.5	1,500	N	N	N	70	1,000	2
384SS	51,710	457,700	5	1.0	1.5	.5	1,000	N	N	N	50	1,000	2
385SS	51,620	457,840	3	1.0	1.5	.5	1,000	N	N	N	70	1,000	2
386SS	51,510	457,910	5	1.0	1.5	.5	1,000	N	N	N	100	1,000	2
304SS	50,520	458,870	3	1.0	1.5	.5	1,500	N	N	N	100	1,000	2
305SS	50,540	458,880	5	1.0	1.5	.5	1,000	N	N	N	70	1,000	2
306SS	50,570	458,870	5	1.0	1.5	.5	1,000	N	N	N	50	1,000	2
307SS	50,630	458,850	3	1.5	1.5	.3	1,000	N	N	N	50	1,000	2

Table 1--Data for stream-sediment samples, South Fork of the Little Humboldt WSA, Nevada

Sample	S-BI	S-CD	S-CO	S-CR	S-CU	S-LA	S-MU	S-NB	S-NI	S-PB	S-SB	S-SC	S-SN
196SS	N	N	15	50	20	70	N	20	20	30	N	20	N
197SS	N	N	15	70	20	100	N	20	20	30	N	20	N
198SS	N	N	15	50	20	50	N	20	20	20	N	20	N
199SS	N	N	20	50	20	50	N	20	20	20	N	15	N
200SS	N	N	15	50	15	50	N	20	20	20	N	15	N
351SS	N	N	15	50	15	70	N	20	15	20	N	15	N
352SS	N	N	20	50	15	100	N	20	20	20	N	20	N
353SS	N	N	20	20	15	100	N	20	10	50	N	20	N
354SS	N	N	10	30	15	50	N	20	10	30	N	15	N
355SS	N	N	20	20	15	70	N	20	10	30	N	20	N
356SS	N	N	15	10	15	70	N	20	5	30	N	20	N
357SS	N	N	15	20	15	70	N	20	10	30	N	20	N
358SS	N	N	10	50	15	70	N	20	5	30	N	15	N
359SS	N	N	20	50	15	100	N	20	15	30	N	20	N
360SS	N	N	15	30	15	100	N	20	10	30	N	20	N
361SS	N	N	15	30	15	100	N	20	10	20	N	20	N
362SS	N	N	20	50	15	100	N	20	20	30	N	20	N
363SS	N	N	10	50	15	100	N	20	10	20	N	15	N
364SS	N	N	15	50	15	100	N	20	20	10	N	20	N
365SS	N	N	10	10	15	50	N	20	5	20	N	10	N
366SS	N	N	30	150	15	50	N	<20	30	10	N	20	N
367SS	N	N	30	150	15	50	N	20	30	70	N	30	150
368SS	N	N	15	70	15	70	N	<20	15	20	N	15	N
369SS	N	N	10	50	15	50	N	20	10	20	N	15	N
370SS	N	N	15	70	15	70	N	20	20	30	N	15	N
371SS	N	N	15	50	15	70	N	20	20	50	N	15	N
372SS	N	N	10	20	15	50	N	20	15	20	N	10	N
373SS	N	N	20	200	15	70	N	20	20	20	N	30	N
374SS	N	N	20	200	15	50	N	20	20	20	N	30	N
375SS	N	N	10	100	20	50	N	20	20	20	N	10	N
376SS	N	N	15	100	15	70	N	20	20	20	N	15	N
377SS	N	N	15	70	15	70	N	20	20	30	N	15	N
378SS	N	N	20	100	15	50	N	20	20	20	N	20	N
379SS	N	N	20	50	15	70	N	20	15	20	N	20	N
380SS	N	N	10	50	15	70	N	20	10	10	N	10	N
381SS	N	N	20	50	20	70	N	20	30	20	N	20	N
382SS	N	N	15	50	15	70	N	20	20	20	N	15	N
383SS	N	N	15	50	15	100	N	20	20	50	N	15	N
384SS	N	N	15	70	15	70	N	20	20	30	N	15	N
385SS	N	N	10	50	15	50	N	20	5	20	N	10	N
386SS	N	N	15	50	20	100	N	20	20	20	N	15	N
304SS	N	N	10	20	15	100	N	20	5	20	N	15	N
305SS	N	N	10	50	15	100	N	20	5	20	N	15	N
306SS	N	N	15	50	15	70	N	20	15	30	N	15	N
307SS	N	N	15	50	10	50	N	20	15	20	N	10	N

Table 1--Data for stream-sediment samples, South Fork of the Little Humboldt WSA, Nevada

Sample	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
196SS	500	100	N	50	N	300	N	5	50	<2
197SS	500	100	N	50	N	500	N	5	45	<2
198SS	500	100	N	50	N	300	N	5	45	<2
199SS	300	100	N	50	N	200	N	5	50	<2
200SS	300	100	N	50	N	200	N	<5	50	<2
351SS	300	100	N	50	N	200	N	<5	75	<2
352SS	300	150	N	70	<200	700	N	<5	120	N
353SS	300	150	N	100	<200	1,000	N	<5	120	N
354SS	200	100	N	50	N	300	N	<5	60	N
355SS	300	150	N	70	N	300	N	<5	65	N
356SS	200	100	N	70	N	500	N	N	60	N
357SS	300	100	N	50	<200	200	N	<5	80	N
358SS	300	100	N	50	N	>1,000	N	<5	75	N
359SS	200	150	N	50	<200	700	N	<5	130	N
360SS	300	100	N	50	N	>1,000	N	<5	55	N
361SS	500	100	N	50	N	1,000	N	5	60	N
362SS	300	100	N	50	N	700	N	<5	30	N
363SS	300	100	N	50	N	200	N	N	40	N
364SS	300	100	N	50	N	300	N	5	40	N
365SS	300	50	N	50	N	300	N	<5	40	N
366SS	300	100	N	50	N	100	N	N	70	N
367SS	300	150	N	50	N	100	N	<5	80	N
368SS	300	100	N	50	N	300	N	10	75	<2
369SS	200	100	N	30	N	200	N	10	75	<2
370SS	300	100	N	50	N	300	N	10	75	<2
371SS	500	100	N	50	N	500	N	5	40	<2
372SS	300	50	N	30	N	200	N	5	45	N
373SS	500	150	N	50	N	300	N	<5	60	N
374SS	300	150	N	30	N	200	N	<5	85	N
375SS	300	100	N	30	N	200	N	5	50	<2
376SS	300	100	N	30	N	200	N	<5	55	<2
377SS	500	100	N	50	N	300	N	10	45	<2
378SS	300	150	N	50	N	500	N	5	60	N
379SS	500	100	N	50	N	200	N	<5	45	<2
380SS	200	100	N	50	N	200	N	<5	65	N
381SS	300	100	N	50	N	500	N	5	45	<2
382SS	300	100	N	50	N	500	N	10	70	<2
383SS	300	100	N	50	N	500	N	5	50	N
384SS	300	100	N	30	N	300	N	10	55	<2
385SS	300	100	N	50	N	700	N	5	60	<2
386SS	300	100	N	50	N	200	N	5	50	N
387SS	300	100	N	50	<200	300	N	5	40	<2
388SS	300	100	N	50	N	1,000	N	5	45	<2
389SS	300	100	N	50	N	300	N	<5	40	<2
390SS	500	100	N	30	N	200	N	N	45	N

Table 1--Data for stream-sediment samples, South Fork of the Little Humboldt WSA, Nevada--continued

Sample	X-COORD.	Y-COORD.	S-FEX	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-AU	S-B	S-BA	S-BE	
308SS	50,620	458,840	5	1.5	1.5	.5	1,000	N	N	N	50	1,000	2	
309SS	50,610	458,835	2	1.0	2.0	.5	1,000	N	N	N	50	1,000	2	
310SS	50,400	458,860	2	.7	1.5	.5	1,000	N	N	N	70	1,000	2	
311SS	50,330	458,845	2	1.0	1.5	.5	1,500	N	N	N	50	1,000	2	
312SS	50,270	458,810	2	.7	1.5	.5	1,000	N	N	N	50	1,000	2	
313SS	50,210	458,813	2	.7	1.5	.5	1,000	N	N	N	50	1,000	2	
314SS	50,195	458,615	3	1.0	1.5	.5	1,000	N	N	N	50	1,000	2	
315SS	50,260	458,340	3	1.0	1.5	.5	1,000	N	N	N	50	1,000	2	
316SS	50,240	483,220	2	1.0	1.5	.5	1,000	N	N	N	70	1,000	2	
317SS	50,391	458,370	2	.7	1.5	.5	1,000	N	N	N	50	1,000	2	
318SS	50,400	458,360	7	1.0	1.5	.5	1,000	N	N	N	70	1,500	2	
319SS	50,450	458,450	5	1.0	1.5	.5	1,000	N	N	N	50	1,000	2	
320SS	50,588	457,700	2	1.0	1.5	.5	1,000	N	N	N	50	1,000	2	
321SS	50,730	457,610	5	1.0	1.5	.5	1,000	N	N	N	50	1,000	2	
322SS	50,710	457,560	5	1.0	2.0	.5	1,000	N	N	N	50	1,000	2	
323SS	50,640	457,530	5	2.0	2.0	.5	1,500	N	N	N	20	700	2	
324SS	50,640	457,500	2	1.0	2.0	.5	1,000	N	N	N	30	1,000	2	
325SS	50,810	457,540	2	1.0	1.5	.5	1,000	N	N	N	50	1,000	2	
326SS	51,150	457,400	2	.7	1.5	.5	1,000	N	N	N	50	1,000	2	
327SS	51,160	457,420	2	1.0	1.5	.5	700	N	N	N	50	1,000	2	
328SS	51,190	457,410	3	1.0	1.5	.5	1,000	N	N	N	50	1,000	2	
329SS	51,200	457,180	3	1.0	1.5	.5	1,000	N	N	N	30	1,000	2	

Table 1--Data for stream-sediment samples, South Fork of the Little Humboldt WSA, Nevada--continued

Sample	S-BI	S-CD	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SC	S-SN
308SS	N	N	20	50	15	100	N	20	20	20	N	15	N
309SS	N	N	10	70	15	50	N	20	15	20	N	15	N
310SS	N	N	10	50	15	50	N	20	15	20	N	10	N
311SS	N	N	15	50	15	50	N	20	20	20	N	10	N
312SS	N	N	10	50	15	50	N	20	20	30	N	10	N
313SS	N	N	15	50	15	50	N	20	20	20	N	10	N
314SS	N	N	15	50	15	50	N	20	20	20	N	15	N
315SS	N	N	15	50	15	50	N	20	20	30	N	15	N
316SS	N	N	10	50	15	50	N	20	20	20	N	10	N
317SS	N	N	10	50	15	50	N	20	15	20	N	15	N
318SS	N	N	20	50	20	70	N	20	20	30	N	20	N
319SS	N	N	20	50	15	50	N	20	20	30	N	15	N
320SS	N	N	20	50	15	50	N	20	15	20	N	10	N
321SS	N	N	20	50	15	70	N	20	20	30	N	20	N
322SS	N	N	15	100	20	50	N	20	20	30	N	20	N
323SS	N	N	30	150	15	50	N	20	30	20	N	30	N
324SS	N	N	10	100	15	50	N	20	20	20	N	15	N
325SS	N	N	10	70	15	50	N	20	10	30	N	15	N
326SS	N	N	10	50	15	50	N	20	10	20	N	10	N
327SS	N	N	10	70	15	50	N	20	15	20	N	10	N
328SS	N	N	15	70	20	50	N	20	20	20	N	15	N
329SS	N	N	15	70	15	50	N	20	15	20	N	10	N

Table 1--Data for stream-sediment samples, South Fork of the Little Humboldt WSA, Nevada--continued

Sample	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
308SS	300	100	N	50	N	200	N	5	70	<2
309SS	300	70	N	50	N	200	N	<5	45	N
310SS	500	70	N	30	N	200	N	<5	30	<2
311SS	300	100	N	50	N	200	N	N	35	N
312SS	300	100	N	20	N	300	N	<5	45	N
313SS	300	70	N	20	N	200	N	5	40	N
314SS	300	100	N	30	N	300	N	5	50	N
315SS	300	100	N	50	N	200	N	5	45	<2
316SS	300	100	N	20	N	200	N	5	45	<2
317SS	500	100	N	50	N	300	N	5	50	N
318SS	300	150	N	50	N	500	N	5	50	<2
319SS	300	100	N	50	N	300	N	5	50	N
320SS	300	100	N	50	N	200	N	5	55	N
321SS	500	100	N	50	N	300	N	10	85	N
322SS	300	100	N	50	N	200	N	10	80	N
323SS	300	150	N	50	N	100	N	<5	70	N
324SS	300	100	N	70	<200	70	N	<5	110	N
325SS	500	100	N	50	N	1,000	N	5	65	<2
326SS	300	100	N	50	N	500	N	<5	50	<2
327SS	300	100	N	50	N	200	N	<5	50	N
328SS	300	100	N	50	N	200	N	<5	60	<2
329SS	300	100	N	50	N	300	N	5	65	<2

TABLE 2

Table 2--Data for concentrate samples, South Fork of the Little Humboldt WSA, Nevada

Sample	X-COORD.	Y-COORD.	S-FEX	S-MG%	S-CAX	S-TIX	S-MN	S-AG	S-AS	S-AU	S-B	S-BA	S-BE
196C	51,470	458,145	2.0	.20	5	>2.00	300	N	N	N	20	500	2
197C	51,590	458,190	2.0	.30	5	>2.00	300	N	N	N	30	1,000	2
198C	51,590	458,340	2.0	.50	5	>2.00	500	N	N	N	50	3,000	2
199C	51,520	458,520	1.0	.50	5	>2.00	500	N	N	N	30	2,000	2
200C	51,430	458,550	1.0	.50	5	2.00	300	N	N	N	20	2,000	2
351C	51,300	458,590	.7	.30	7	2.00	500	N	N	N	20	500	2
352C	51,200	458,610	2.0	.30	3	.70	200	N	N	N	20	1,000	2
353C	51,150	458,660	2.0	.50	5	.70	300	N	N	N	30	1,000	2
354C	51,130	458,690	1.5	.20	5	.70	200	N	N	N	20	1,000	2
355C	51,040	458,720	1.5	.20	5	.20	150	N	N	N	20	1,000	2
356C	51,040	458,730	1.5	.20	5	.20	150	N	N	N	20	1,500	2
357C	50,990	458,740	2.0	.20	5	.20	150	N	N	N	20	2,000	2
358C	50,940	458,750	1.5	.20	5	.30	200	N	N	N	20	3,000	2
359C	50,850	458,850	1.5	.50	5	.50	200	N	N	N	20	1,000	2
360C	50,700	458,800	1.0	.20	5	.70	200	N	N	N	20	700	2
361C	50,840	458,820	1.5	.20	5	.15	200	N	N	N	20	3,000	2
362C	50,780	458,880	1.5	.30	5	1.00	200	N	N	N	20	700	2
363C	50,540	458,900	1.5	.30	5	1.00	500	N	N	N	30	2,000	2
364C	50,210	458,100	1.0	.10	2	.70	200	N	N	N	20	1,000	2
365C	50,100	457,990	1.5	.10	5	.70	200	N	N	N	<20	700	2
366C	50,200	457,970	.5	.20	3	.50	300	N	N	N	<20	300	2
367C	50,400	457,820	2.0	.50	5	.50	150	20	N	N	<20	2,000	2
368C	50,450	457,790	.5	.05	2	.50	150	N	N	N	<20	300	2
369C	50,670	457,900	1.5	.50	5	2.00	300	N	N	N	50	700	3
370C	50,770	457,830	1.0	.05	3	1.00	150	N	N	N	<20	1,500	5
371C	51,060	457,390	1.5	.10	3	1.00	150	N	N	N	20	<1,000	2
372C	50,890	457,340	--	--	--	--	--	--	--	--	--	--	--
373C	50,820	457,450	1.5	.20	5	1.50	200	N	N	N	20	500	2
374C	50,760	457,470	2.0	.30	5	.70	200	N	N	N	20	2,000	2
375C	51,190	457,850	2.0	.30	5	2.00	300	3	N	N	20	1,500	2
376C	51,180	457,580	2.0	.30	7	1.00	200	N	N	N	20	700	2
377C	51,200	457,460	1.5	.30	7	.70	200	N	N	N	20	700	2
378C	51,260	457,170	2.0	.30	5	.70	200	N	N	N	20	1,000	2
379C	51,230	457,190	1.5	.30	3	1.50	200	N	N	N	20	700	2
380C	51,840	457,260	1.5	.20	3	1.00	200	N	N	N	20	700	50
381C	51,920	457,200	2.0	.30	3	1.00	200	N	N	N	50	>10,000	5
382C	51,950	457,560	1.5	.20	3	.70	200	N	N	N	20	3,000	5
383C	51,850	457,570	1.5	.20	3	1.00	200	N	N	N	20	3,000	2
384C	51,710	457,700	1.5	.20	3	1.00	300	N	N	N	20	1,000	5
385C	51,620	457,840	1.5	.20	3	1.00	500	N	N	N	<20	700	20
386C	51,510	457,910	1.5	.20	3	1.00	500	N	N	N	20	300	10
304C	50,520	458,870	1.0	.20	3	.20	<20	N	N	N	20	3,000	2
305C	50,540	458,860	2.0	.30	3	.30	100	N	N	N	30	1,000	2
306C	50,570	458,870	1.5	.30	3	.30	100	N	N	N	20	1,500	2
307C	50,630	458,850	2.0	.30	3	.50	200	N	N	N	20	1,500	2

Table 2--Data for concentrate samples, South Fork of the Little Humboldt WSA, Nevada

Sample	S-BI	S-CD	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SC	S-SN	
196C	N	N	N	50	70	200	N	<50	20	N	N	100	N	
197C	N	N	N	50	30	200	N	<50	20	N	N	100	50	
198C	N	N	N	100	70	300	N	<50	20	50	N	70	50	
199C	N	N	N	100	20	200	N	<50	20	<20	N	70	N	
200C	N	N	N	50	50	100	N	<50	20	N	N	20	N	
351C	N	N	N	50	10	300	N	<50	<10	N	N	20	N	
352C	N	N	N	50	10	200	N	N	20	N	N	<10	N	
353C	N	N	N	50	10	200	N	N	20	N	N	N	N	
354C	N	N	N	20	10	200	N	N	20	N	N	N	200	
355C	N	N	N	<20	<10	100	N	<50	20	N	N	N	N	
356C	N	N	N	<20	<10	100	N	N	20	<20	N	N	300	
357C	N	N	N	<20	10	200	N	N	20	<20	N	N	N	
358C	N	N	N	<20	10	100	N	N	20	N	N	N	N	
359C	N	N	N	<20	10	150	N	N	20	N	N	N	N	
360C	N	N	N	<20	<10	300	N	N	20	N	N	N	500	
361C	N	N	N	<20	10	200	N	N	20	N	N	N	N	
362C	N	N	N	<20	20	200	N	N	20	<20	N	N	N	
363C	N	N	N	<20	20	300	N	N	20	N	N	N	N	
364C	N	N	N	<20	10	100	N	N	20	N	N	N	500	
365C	N	N	N	<20	<10	100	N	N	20	N	N	N	N	
366C	N	N	N	<20	<10	100	N	<50	<10	15,000	N	N	N	
367C	N	N	N	<20	1,000	<50	N	<50	20	10,000	N	N	>2,000	
368C	N	N	N	<20	<10	<50	N	<50	<10	<20	N	N	200	
369C	N	N	N	<20	100	50	N	<50	10	<20	N	<10	100	
370C	N	N	N	<20	<10	50	N	N	10	N	N	<10	N	
371C	N	N	N	<20	30	50	N	N	10	N	N	<10	50	
372C	--	--	--	--	--	--	--	--	--	--	--	--	--	
373C	N	N	N	<20	10	50	N	N	20	N	N	<10	<20	
374C	N	N	N	<20	10	50	N	N	20	N	N	<10	<20	
375C	N	N	N	<20	10	100	N	N	20	N	N	<10	N	
376C	N	N	N	<20	10	100	N	N	10	<20	N	<10	N	
377C	N	N	N	<20	30	150	N	N	20	N	N	<10	N	
378C	N	N	N	20	<10	<50	N	N	50	N	N	<10	N	
379C	N	N	N	<20	30	50	N	N	30	N	N	<10	N	
380C	N	N	N	20	20	100	N	N	20	N	N	<10	>2,000	
381C	N	N	N	20	100	50	N	N	20	N	N	<10	>2,000	
382C	N	N	N	20	<10	50	N	N	10	N	N	<10	2,000	
383C	N	N	N	20	<10	50	N	N	20	N	N	<10	100	
384C	N	N	N	<20	<10	50	N	N	N	N	N	<10	N	
385C	N	N	N	<20	<10	50	N	N	20	N	N	70	N	
386C	N	N	N	<20	<10	50	N	N	<10	N	N	70	N	
304C	N	N	N	<20	<10	50	N	N	<10	N	N	<10	N	
305C	N	N	N	<20	50	50	N	N	<10	N	N	<10	N	
306C	N	N	N	<20	10	50	N	N	<10	N	N	<10	N	
307C	N	N	N	<20	10	150	N	N	<10	N	N	<10	N	

Table 2--Data for concentrate samples, South Fork of the Little Humboldt WSA, Nevada

Sample	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
196C	<200	200	N	5,000	N	>2,000	N	--	--	--
197C	<200	300	N	5,000	N	>2,000	N	--	--	--
198C	<200	200	N	3,000	N	>2,000	N	--	--	--
199C	<200	200	N	2,000	N	>2,000	N	--	--	--
200C	200	150	N	700	N	>2,000	N	--	--	--
351C	<200	150	N	2,000	N	>2,000	N	--	--	--
352C	200	100	N	700	N	>2,000	N	--	--	--
353C	<200	100	N	1,000	N	>2,000	N	--	--	--
354C	<200	100	N	1,000	N	>2,000	N	--	--	--
355C	200	50	N	500	N	>2,000	N	--	--	--
356C	200	30	N	500	N	>2,000	N	--	--	--
357C	200	20	N	500	N	>2,000	N	--	--	--
358C	200	50	N	700	N	>2,000	N	--	--	--
359C	200	70	N	1,000	N	>2,000	N	--	--	--
360C	200	70	N	1,000	N	>2,000	N	--	--	--
361C	200	50	N	1,000	N	>2,000	N	--	--	--
362C	<200	100	N	1,000	N	>2,000	N	--	--	--
363C	200	100	N	1,500	N	>2,000	N	--	--	--
364C	200	100	N	1,000	N	>2,000	N	--	--	--
365C	200	100	N	1,000	N	>2,000	N	--	--	--
366C	<200	70	N	200	N	>2,000	N	--	--	--
367C	500	50	N	100	N	>2,000	N	--	--	--
368C	<200	30	N	100	N	>2,000	N	--	--	--
369C	<200	150	N	1,000	N	>2,000	N	--	--	--
370C	<200	70	N	1,000	N	>2,000	N	--	--	--
371C	<200	70	N	1,000	N	>2,000	N	--	--	--
372C	--	--	--	--	--	--	--	--	--	--
373C	<200	100	N	1,000	N	>2,000	N	--	--	--
374C	300	70	N	500	N	>2,000	N	--	--	--
375C	200	150	N	1,000	N	>2,000	N	--	--	--
376C	200	100	N	700	N	>2,000	N	--	--	--
377C	200	70	N	700	N	>2,000	N	--	--	--
378C	200	70	N	500	N	>2,000	N	--	--	--
379C	<200	150	N	700	N	>2,000	N	--	--	--
380C	<200	100	N	2,000	N	>2,000	N	--	--	--
381C	500	100	N	1,000	N	>2,000	N	--	--	--
382C	200	70	N	700	N	>2,000	N	--	--	--
383C	<200	100	N	500	N	>2,000	N	--	--	--
384C	<200	100	N	2,000	N	>2,000	N	--	--	--
385C	<200	100	N	2,000	N	>2,000	N	--	--	--
386C	N	100	N	2,000	N	>2,000	N	--	--	--
304C	500	<20	N	500	N	>2,000	N	--	--	--
305C	<200	50	N	1,000	N	>2,000	N	--	--	--
306C	<200	50	N	700	N	>2,000	N	--	--	--
307C	200	50	N	200	N	>2,000	N	--	--	--

Table 2--Data for concentrate samples, South Fork of the Little Humboldt WSA, Nevada--continued

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-AS	S-AU	S-B	S-BA	S-BE
308C	50,620	458,840	2.0	1.00	7	>2.00	1,000	N	N	N	50	1,000	2
309C	50,610	458,835	--	--	--	--	--	--	--	--	--	--	--
310C	50,400	458,860	1.5	.50	5	2.00	500	N	N	N	70	700	2
311C	50,330	458,845	1.5	.50	5	1.50	200	N	N	N	50	1,000	2
312C	50,270	458,810	1.5	.20	3	1.00	200	N	N	N	20	700	3
313C	50,210	458,813	--	--	--	--	--	--	--	--	--	--	--
314C	50,195	458,615	--	--	--	--	--	--	--	--	--	--	--
315C	50,260	458,340	--	--	--	--	--	--	--	--	--	--	--
316C	50,240	483,220	--	--	--	--	--	--	--	--	--	--	--
317C	50,391	458,370	--	--	--	--	--	--	--	--	--	--	--
318C	50,400	458,360	--	--	--	--	--	--	--	--	--	--	--
319C	50,450	458,450	1.5	.30	5	2.00	200	N	N	N	20	700	2
320C	50,568	457,700	2.0	.30	3	>2.00	500	N	N	N	50	700	5
321C	50,730	457,610	2.0	.50	5	2.00	500	N	N	N	50	1,000	3
322C	50,710	457,560	--	--	--	--	--	--	--	--	--	--	--
323C	50,640	457,530	--	--	--	--	--	--	--	--	--	--	--
324C	50,640	457,500	--	--	--	--	--	--	--	--	--	--	--
325C	50,810	457,540	1.5	.30	3	1.00	200	N	N	N	20	500	3
326C	50,150	457,400	1.5	.20	3	1.00	200	N	N	N	20	500	2
327C	50,160	457,420	1.0	.20	3	1.00	150	20	N	N	20	700	2
328C	51,190	457,410	2.0	.30	3	1.00	500	N	N	N	50	700	2
329C	51,280	457,180	1.5	.30	5	1.00	300	N	N	N	30	700	2

Table 2--Data for concentrate samples, South Fork of the Little Humboldt WSA, Nevada--continued

Sample	S-BI	S-CD	S-CO	S-CR	S-CU	S-LA	S-MO	S-NB	S-NI	S-PB	S-SB	S-SC	S-SN
308C	N	N	N	50	15	70	N	N	<10	<20	N	<10	N
309C	--	--	--	--	--	--	--	--	--	--	--	--	--
310C	N	N	N	100	15	50	N	N	10	200	N	<10	N
311C	N	N	N	50	15	50	N	N	10	N	N	<10	N
312C	N	N	N	<20	15	50	N	N	10	N	N	<10	<20
313C	--	--	--	--	--	--	--	--	--	--	--	--	--
314C	--	--	--	--	--	--	--	--	--	--	--	--	--
315C	--	--	--	--	--	--	--	--	--	--	--	--	--
316C	--	--	--	--	--	--	--	--	--	--	--	--	--
317C	--	--	--	--	--	--	--	--	--	--	--	--	--
318C	--	--	--	--	--	--	--	--	--	--	--	--	--
319C	N	N	N	<20	20	50	N	N	10	N	N	<10	N
320C	50	N	N	<20	10	100	N	N	10	20	N	<10	N
321C	N	N	N	<20	150	50	N	70	20	N	N	<10	N
322C	--	--	--	--	--	--	--	--	--	--	--	--	--
323C	--	--	--	--	--	--	--	--	--	--	--	--	--
324C	--	--	--	--	--	--	--	--	--	--	--	--	--
325C	N	N	N	<20	10	50	N	N	10	N	N	<10	N
326C	N	N	N	<20	<10	50	N	<50	10	N	N	<10	N
327C	N	N	N	<20	<10	50	N	N	10	N	N	<10	N
328C	N	N	N	<20	10	50	N	N	10	N	N	<10	N
329C	N	N	N	<20	50	50	N	N	10	N	N	<10	N

Table 2--Data for concentrate samples, South Fork of the Little Humboldt WSA, Nevada--continued

Sample	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
308C	<200	200	N	700	N	>2,000	N	--	--	--
309C	--	--	--	--	--	--	--	--	--	--
310C	200	150	N	1,000	N	>2,000	N	--	--	--
311C	200	100	N	700	N	>2,000	N	--	--	--
312C	200	100	N	1,000	N	>2,000	N	--	--	--
313C	--	--	--	--	--	--	--	--	--	--
314C	--	--	--	--	--	--	--	--	--	--
315C	--	--	--	--	--	--	--	--	--	--
316C	--	--	--	--	--	--	--	--	--	--
317C	--	--	--	--	--	--	--	--	--	--
318C	--	--	--	--	--	--	--	--	--	--
319C	<200	150	N	1,500	N	>2,000	N	--	--	--
320C	<200	200	N	200	N	>2,000	N	--	--	--
321C	<200	200	N	700	N	>2,000	N	--	--	--
322C	--	--	--	--	--	--	--	--	--	--
323C	--	--	--	--	--	--	--	--	--	--
324C	--	--	--	--	--	--	--	--	--	--
325C	<200	100	N	3,000	N	>2,000	N	--	--	--
326C	<200	70	N	2,000	N	>2,000	N	--	--	--
327C	<200	50	N	700	N	>2,000	N	--	--	--
328C	<200	70	N	700	N	>2,000	N	--	--	--
329C	<200	70	N	700	N	>2,000	N	--	--	--

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

TITLE	INPUT ID	N	M	***** OPTIONS *****
so fork sediments	-sf_seds -	67	36	1 0 0 U 2 1 0 0 0

VARIABLE NO. 8 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 9 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 10 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 14 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 15 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 20 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

THE MAX AND MIN 0.13C10E+01 FOR VARIABLE NO. 21 ARE THE SAME. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 24 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

THE MAX AND MIN 0.21701E+01 FOR VARIABLE NO. 26 ARE THE SAME. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 29 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 31 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 33 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

VARIABLE NO. 36 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

TITLE	INPUT ID	N	M	***** OPTIONS *****
so fork sediments	-sf_seds -	67	36	1 0 0 0 2 1 0 0 0

NUMBER OF SELECTED VARIABLES = 21

SELECTED VARIABLE INDICES

3 4 5 6 7 11 12 13 16 17
 18 19 22 23 25 27 28 30 32 34
 35

SELECTED VARIABLE IDENTIFIERS

S-FEX S-MGX S-CAX S-TIX S-MN S-B S-BA S-BE S-CO S-CR
 S-CU S-LA S-NI S-PB S-SC S-SR S-V S-Y S-ZR AA-AS-P

SELECTED ROW PAIRS

110 67

CLASS INTERVALS

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/62)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 3 (S-FEX)

LOG LIMITS LOWER - UPPER	GHS 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		
2.500E-01 - 4.167E-01	12	12	17.91	17.91	2.69	2.69
4.167E-01 - 5.833E-01	11	23	16.42	34.33	7.94	2.07
5.833E-01 - 7.500E-01	33	56	49.25	83.58	16.24	1.69
7.500E-01 - 9.167E-01	3	59	4.48	88.06	19.43	9.48
9.167E-01 - 1.083E+00	0	65	8.96	97.01	13.60	8.26
1.083E+00 - 1.250E+00	2	67	2.99	100.00	5.56	0.03
6	0	67	0.00	100.00	1.53	0.14
H	0	67			2.69	2.69
B	0	67				

TOTALS LESS H AND B 67

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

2.154E+00 XXXXXXXXXXXXXXXXXXXX
 3.162E+00 XXXXXXXXXXXXXXXXXXXX
 4.642E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.813E+00 XXXX
 1.000E+01 XXXXXXXXX
 1.466E+01 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
 MAXIMUM ANTILOG = 1.50000E+01
 GEOMETRIC MEAN = 4.35530E+00
 GEOMETRIC DEVIATION = 1.66871E+00
 VARIANCE OF LOGS = 4.94531E-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 PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	4.886368E-01	3.080611E+00
50.00	6.363644E-01	4.328769E+00
75.00	7.209605E-01	5.259695E+00
90.00	9.527792E-01	8.969726E+00
95.00	1.045835E+00	1.111309E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D6036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 4 (S-MG%)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	G	0	0	0.00	0.00		
L	G	0	0	0.00	0.00		
T	G	0	0	0.00	0.00	0.69	0.69
-2.500E-01	-8.333E-02	10	10	14.93	14.93	12.36	0.45
-8.333E-02	8.333E-02	40	50	68.66	83.58	35.49	3.11
8.333E-02	2.500E-01	6	62	8.96	92.54	17.12	7.22
2.500E-01	4.167E-01	5	67	7.46	100.00	1.34	9.97
G	G	0	67	0.00	100.00	0.69	0.69
H	G	0	67				
B	G	0	67				

TOTALS LESS H AND B 67

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

6.815E-01 XXXXXXXXXXXXXXXX
 1.000E+00 XXX
 1.468E+00 XXXXXXXXX
 2.154E+00 XXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E-01
 MAXIMUM ANTILOG = 2.00000E+00
 GEOMETRIC MEAN = 1.03542E+00
 GEOMETRIC DEVIATION = 1.30137E+00
 VARIANCE OF LOGS = 1.30876E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-5.887643E-02	8.732198E-01
50.00	1.812097E-03	1.004181E+00
75.00	6.250062E-02	1.154784E+00
90.00	2.027787E-01	1.595066E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (U2/U7/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE S (S-CA%)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	G	0	0	0.00	0.00		
L	G	0	0	0.00	0.00		
T	0	0	0	0.00	0.00	0.01	0.01
-8.400E-02	0.267E-02	2	2	2.99	2.99	3.69	0.77
8.267E-02	2.493E-01	47	49	70.15	73.13	42.60	0.45
2.493E-01	4.100E-01	16	65	23.88	97.01	20.38	0.94
4.100E-01	5.027E-01	2	67	2.99	100.00	0.32	0.92
G	0	67	67	0.00	100.00	0.01	0.01
H	0	67	67				
B	0	67	67				

TOTALS LESS H AND B 67

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

5.985E-01 XXX
 1.460E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+00 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 3.00000E+00
 GEOMETRIC MEAN = 1.62053E+00
 GEOMETRIC DEVIATION = 1.20098E+00
 VARIANCE OF LOGS = 0.32610E-03

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.349721E-01	1.364495E+00
50.00	1.943694E-01	1.564478E+00
75.00	2.623549E-01	1.829595E+00
90.00	3.670426E-01	2.328319E+00
95.00	4.019385E-01	2.523123E+00
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.26	0.26
-5.840E-01	-4.173E-01	3	3	4.48	4.48	5.88	1.41
-4.173E-01	-2.507E-01	47	50	70.15	74.63	27.38	14.06
-2.507E-01	-8.400E-02	7	57	10.45	85.07	27.36	15.15
-8.400E-02	8.267E-02	10	67	14.93	100.00	6.12	2.46
G		0	67	0.00	100.00	0.26	0.26
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

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

3.157E-01 XXXX
 4.654E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.862E-01 XXXXXXXXXX
 9.985E-01 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E-01
 MAXIMUM ANTILOG = 1.00000E+00
 GEOMETRIC MEAN = 5.61350E-01
 GEOMETRIC DEVIATION = 1.33404E+00
 VARIANCE OF LOGS = 1.56674E-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
25.00	-3.685740E-01	4.279824E-01
50.00	-3.091768E-01	4.907081E-01
75.00	-2.447136E-01	5.692282E-01
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D6036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.00	0.00
2.583E+00 - 2.750E+00	1	1	1.49	1.49	0.06	15.13
2.750E+00 - 2.916E+00	3	4	4.48	5.97	7.89	3.03
2.916E+00 - 3.083E+00	52	56	77.61	83.56	44.19	1.38
3.083E+00 - 3.250E+00	11	67	16.42	100.00	14.67	1.01
G	0	67	0.00	100.00	0.00	0.00
H	0	67				
B	0	67				

TOTALS LESS H AND B 67

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

4.638E+02 X
 6.808E+02 XXXX
 9.992E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.467E+03 XXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+02
 MAXIMUM ANTILOG = 1.50000E+03
 GEOMETRIC MEAN = 1.04107E+03
 GEOMETRIC DEVIATION = 1.21777E+00
 VARIANCE OF LOGS = 7.32123E-03

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 5U

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.957199E+00	9.061487E+02
50.00	3.010885E+00	1.025382E+03
75.00	3.064571E+00	1.160303E+03
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		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	4	4	5.97	5.97	0.04	0.04
1.417E+00	- 1.583E+00	4	8	5.97	11.94	1.40	4.82
1.583E+00	- 1.750E+00	44	52	65.67	77.61	29.36	5.49
1.750E+00	- 1.917E+00	13	65	19.40	97.01	20.00	7.29
1.917E+00	- 2.083E+00	2	67	2.99	100.00	4.02	2.45
G		0	67	0.00	100.00	0.04	1.01
H		0	67				0.04
B		0	67				

TOTALS LESS H AND B 67

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

2.154E+01 XXXXX
 3.162E+01 XXXXX
 4.642E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.813E+01 XXXXXXXXXXXXXXXXXXXXXXXXXX
 1.000E+02 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 5.0386E+01
 GEOMETRIC DEVIATION = 1.37961E+00
 VARIANCE OF LOGS = 1.95322E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.616478E+00	4.135024E+01
50.00	1.679925E+00	4.785476E+01
75.00	1.743372E+00	5.538245E+01
90.00	1.856411E+00	7.184747E+01
95.00	1.899360E+00	7.931590E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DCU36 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.00	0.00
2.583E+00 - 2.750E+00	2	2	2.99	2.99	0.04	103.28
2.750E+00 - 2.916E+00	6	8	8.96	11.94	12.32	3.24
2.916E+00 - 3.083E+00	58	66	86.57	98.51	49.84	1.34
3.083E+00 - 3.250E+00	1	67	1.49	100.00	4.81	3.02
G	0	67	0.00	100.00	0.00	0.00
H	0	67				
B	0	67				

TOTALS LESS H AND B 67

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

4.630E+02 XXX
 6.806E+02 XXXXXXXXX
 9.992E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.467E+03 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+02
 MAXIMUM ANTILOG = 1.50000E+03
 GEOMETRIC MEAN = 9.54488E+02
 GEOMETRIC DEVIATION = 1.17647E+00
 VARIANCE OF LOGS = 4.98145E-03

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.941478E+00	8.739322E+02
50.00	2.989610E+00	9.763601E+02
75.00	3.037742E+00	1.090793E+03
90.00	3.066622E+00	1.165794E+03
95.00	3.076248E+00	1.191923E+03
98.00	3.082024E+00	1.207881E+03
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
-8.40CE-02	- 8.267E-02	1	1	1.49	1.49	0.00	0.00
8.267E-02	- 2.493E-01	0	1	0.00	1.49	8.22	8.22
2.493E-01	- 4.160E-01	65	66	97.01	98.51	58.57	6.71
4.160E-01	- 5.827E-01	1	67	1.49	100.00	6.22	2.85
G		0	67	0.00	100.00	0.00	0.00
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

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

9.985E-01 X
 1.466E+00
 2.151E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+00 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 3.00000E+00
 GEOMETRIC MEAN = 1.99143E+00
 GEOMETRIC DEVIATION = 1.10379E+00
 VARIANCE OF LOGS = 1.83932E-03

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.634364E-01	1.456922E+00
50.00	2.493340E-01	1.775554E+00
75.00	3.352316E-01	2.163872E+00
90.00	3.867702E-01	2.436521E+00
95.00	4.039497E-01	2.534835E+00
98.00	4.142574E-01	2.595717E+00
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 16 (S-CO)

LOG LIMITS LOWER	LOG LIMITS 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	0.00	0.00		
L	0	0	0	0.00	0.00		
T	0	0	0	0.00	0.00		
9.16CE-01	- 1.083E+00	20	20	29.65	29.65	1.87	1.87
1.083E+00	- 1.249E+00	28	48	41.79	71.44	15.59	1.25
1.249E+00	- 1.416E+00	16	64	23.88	95.52	31.80	0.45
1.416E+00	- 1.583E+00	3	67	4.48	100.00	15.81	0.00
G	0	67	67	0.00	100.00	1.93	0.60
H	0	67	67			1.87	1.87
B	0	67	67				

TOTALS LESS H AND B 67

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

9.965E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXXXXXXXXX
 3.157E+01 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.46839E+01
 GEOMETRIC DEVIATION = 1.35269E+00
 VARIANCE OF LOGS = 1.72128E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.163024E+00	1.455541E+01
75.00	1.272772E+00	1.874008E+01
90.00	1.377459E+00	2.384840E+01
95.00	1.412355E+00	2.584373E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS LOWER	LOG LIMITS 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		
9.160E-01	- 1.083E+00	2	2	2.99	2.99	0.03	0.03
1.083E+00	- 1.249E+00	0	2	0.00	2.99	0.27	11.17
1.249E+00	- 1.416E+00	5	7	7.46	10.45	1.49	1.49
1.416E+00	- 1.583E+00	3	10	4.48	14.93	5.28	0.02
1.583E+00	- 1.749E+00	37	47	55.22	70.15	11.99	6.74
1.749E+00	- 1.916E+00	10	57	14.93	85.07	17.41	22.05
1.916E+00	- 2.083E+00	5	62	7.46	92.54	9.63	2.23
2.083E+00	- 2.249E+00	3	65	4.48	97.01	3.67	0.12
2.249E+00	- 2.416E+00	2	67	2.99	100.00	1.05	0.87
G		0	67	0.00	100.00	0.03	0.03
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

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

9.985E+00 XXX
 1.466E+01
 2.151E+01 XXXXXXXX
 3.157E+01 XXXX
 4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.802E+01 XXXXXXXXXXXXXXXXX
 9.985E+01 XXXXXXXX
 1.466E+02 XXXX
 2.151E+02 XXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 2.00000E+02
 GEOMETRIC MEAN = 5.27333E+01
 GEOMETRIC DEVIATION = 1.75713E+00
 VARIANCE OF LOGS = 5.99264E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.613073E+00	4.102735E+01

50.00	1.688524E+00	4.881172E+01
75.00	1.803502E+00	6.360654E+01
90.00	2.026002E+00	1.061701E+02
95.00	2.174336E+00	1.493949E+02
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS LOWER	LOG LIMITS 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		
9.160E-01	- 1.083E+00	1	1	1.49	1.49	0.00	0.00
1.083E+00	- 1.249E+00	56	57	83.58	85.07	1.04	0.00
1.249E+00	- 1.416E+00	10	67	14.93	100.00	57.27	0.03
G		0	67	0.00	100.00	8.69	0.20
H		0	67			0.00	0.00
B		0	67				

TOTALS LESS H AND B 67

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

9.965E+00 X
 1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 2.00000E+01
 GEOMETRIC MEAN = 1.55636E+01
 GEOMETRIC DEVIATION = 1.12393E+00
 VARIANCE OF LOGS = 2.57460E-03

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.129542E+00	1.347541E+01
50.00	1.179393E+00	1.511449E+01
75.00	1.229245E+00	1.695293E+01
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DD036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0	0.00	0.00		
L	0	0	0	0.00	0.00		
T	0	0	0	0.00	0.00	2.07	2.07
1.583E+00	- 1.750E+00	33	33	49.25	49.25	19.35	9.64
1.750E+00	- 1.910E+00	20	53	29.85	79.10	33.80	5.64
1.910E+00	- 2.063E+00	14	67	20.90	100.00	11.79	0.42
G	0	67	67	0.00	100.00	2.07	2.07
H	0	67	67				
B	0	67	67				

TOTALS LESS H AND B 67

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

4.638E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.806E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.992E+01 XXXXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 6.38987E+01
 GEOMETRIC DEVIATION = 1.31539E+00
 VARIANCE OF LOGS = 1.41743E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.753834E+00	5.673273E+01
75.00	1.893417E+00	7.623792E+01
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DCC36 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	LOG LIMITS 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		
5.83GE-01	- 7.497E-01	6	6	8.96	8.96	0.08	0.08
7.497E-01	- 9.163E-01	0	6	0.00	8.96	0.86	30.69
9.163E-01	- 1.083E+00	11	17	16.42	25.37	4.95	4.95
1.083E+00	- 1.250E+00	13	30	19.40	44.78	21.80	0.86
1.250E+00	- 1.416E+00	33	63	49.25	94.03	16.74	3.55
1.416E+00	- 1.583E+00	4	67	5.97	100.00	8.04	15.79
G		0	67	0.00	100.00	0.08	2.03
H		0	67				0.08
B		0	67				

TOTALS LESS H AND B 67

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

4.638E+00 XXXXXXXXX
 6.808E+00
 9.992E+00 XXXXXXXXXXXXXXXXXXXX
 1.407E+01 XXXXXXXXXXXXXXXXXXXXXXX
 2.153E+01 XX
 3.16UE+01 XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.52743E+01
 GEOMETRIC DEVIATION = 1.57663E+00
 VARIANCE OF LOGS = 3.90970E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.075425E+00	1.189666E+01
50.00	1.267345E+00	1.850737E+01
75.00	1.351941E+00	2.248749E+01
90.00	1.402699E+00	2.527543E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LCG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.06	0.06
9.16E+01	- 1.063E+02	3	3	4.48	4.48	1.57	1.31
1.083E+02	- 1.249E+02	0	3	0.00	4.48	12.12	12.12
1.249E+02	- 1.416E+02	39	42	58.21	62.69	28.32	4.03
1.416E+02	- 1.583E+02	21	63	31.34	94.03	20.24	0.03
1.583E+02	- 1.749E+02	3	66	4.48	98.51	4.40	0.45
1.749E+02	- 1.916E+02	1	67	1.49	100.00	0.29	1.74
G		0	67	0.00	100.00	0.06	0.06
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

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

9.985E+00 XXXX
 1.466E+01
 2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
 4.634E+01 XXXX
 6.802E+01 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 7.00000E+01
 GEOMETRIC MEAN = 2.33713E+01
 GEOMETRIC DEVIATION = 1.39634E+00
 VARIANCE OF LOGS = 2.10220E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.200189E+00	1.585582E+01
50.00	1.343351E+00	2.204709E+01
75.00	1.481477E+00	3.030242E+01
90.00	1.561239E+00	3.641157E+01
95.00	1.618779E+00	4.156992E+01
98.00	1.730446E+00	5.375837E+01
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS LOWER	LOG LIMITS 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	0.00	0.00		
L	0	0	0	0.00	0.00		
T	0	0	0	0.00	0.00	1.15	1.15
9.160E-01	- 1.083E+00	15	15	22.39	22.39	12.32	0.58
1.083E+00	- 1.249E+00	28	43	41.79	64.18	31.42	0.37
1.249E+00	- 1.416E+00	20	63	29.65	94.03	19.23	0.03
1.416E+00	- 1.583E+00	4	67	5.97	100.00	2.88	0.44
G	0	67	67	0.00	100.00	1.15	1.15
H	0	67	67				
B	0	67	67				

TOTALS LESS H AND B 67

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

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

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.55573E+01
 GEOMETRIC DEVIATION = 1.35033E+00
 VARIANCE OF LOGS = 1.70148E-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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.093084E+00	1.239035E+01
50.00	1.192786E+00	1.558785E+01
75.00	1.309751E+00	2.040567E+01
90.00	1.393501E+00	2.474577E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DOU36 GRAPHICAL ANALYSIS - O S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 27 (S-SR)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.31	0.31
2.250E+00	- 2.417E+00	5	5	7.46	7.46	13.44	5.30
2.417E+00	- 2.583E+00	53	58	79.10	86.57	41.89	2.95
2.583E+00	- 2.750E+00	9	67	13.43	100.00	11.36	0.49
G		0	67	0.00	100.00	0.31	0.31
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

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

2.154E+02 XXXXXXXX
 3.162E+02 XXX
 4.642E+02 XXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 3.11732E+02
 GEOMETRIC DEVIATION = 1.24078E+00
 VARIANCE OF LOGS = 8.77892E-03

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.453617E+00	2.841952E+02
50.00	2.506290E+00	3.208410E+02
75.00	2.558963E+00	3.622120E+02
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DG036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.00	0.00
1.583E+00	- 1.750E+00	2	2	2.99	2.99	0.15	22.62
1.750E+00	- 1.916E+00	3	5	4.48	7.46	10.09	4.98
1.916E+00	- 2.083E+00	52	57	77.61	85.07	42.40	2.17
2.083E+00	- 2.250E+00	10	67	14.93	100.00	14.36	1.33
G		0	67	0.00	100.00	0.00	0.00
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

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

4.638E+01 XXX
 6.865E+01 XXXX
 9.992E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.467E+02 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 1.02414E+02
 GEOMETRIC DEVIATION = 1.23536E+00
 VARIANCE OF LOGS = 8.42578E-03

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.953994E+00	8.994858E+01
50.00	2.007660E+00	1.017842E+02
75.00	2.061366E+00	1.151772E+02
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

LOG LIMITS LOWER =	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.03	0.03
1.250E+00 -	1.417E+00	3	3	4.48	4.48	1.50	1.50
1.417E+00 -	1.583E+00	9	12	13.43	17.91	15.64	2.82
1.583E+00 -	1.750E+00	50	62	74.63	92.54	33.39	8.26
1.750E+00 -	1.917E+00	4	66	5.97	98.51	15.03	8.10
1.917E+00 -	2.083E+00	1	67	1.49	100.00	1.41	0.12
G		0	67	0.00	100.00	0.03	0.03
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

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

2.154E+01 XXXX
 3.162E+01 XXXXXXXXXXXXXXXX
 4.642E+01 XXX
 6.813E+01 XXXXXX
 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 = 4.61922E+01
 GEOMETRIC DEVIATION = 1.33045E+00
 VARIANCE OF LOGS = 1.53754E-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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.599167E+00	3.973446E+01
50.00	1.655001E+00	4.518568E+01
75.00	1.710834E+00	5.138475E+01
90.00	1.744334E+00	5.550528E+01
95.00	1.818751E+00	6.587963E+01
98.00	1.902501E+00	7.989163E+01
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.17	0.17
1.750E+00	1.917E+00	1	1	1.49	1.49	0.86	0.02
1.917E+00	2.083E+00	3	4	4.48	5.97	3.28	0.02
2.083E+00	2.250E+00	0	4	0.00	5.97	8.39	8.39
2.250E+00	2.417E+00	25	29	37.31	43.28	14.45	7.71
2.417E+00	2.583E+00	19	48	28.36	71.64	16.76	0.30
2.583E+00	2.750E+00	9	57	13.43	85.07	13.09	1.25
2.750E+00	2.917E+00	4	61	5.97	91.04	6.89	1.21
2.917E+00	3.083E+00	4	65	5.97	97.01	3.12	0.25
G		2	67	2.99	100.00	0.17	19.41
H		0	67				
B		0	67				

TOTALS LESS H AND B

67

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

W
67

```

6.813E+01 X
1.000E+02 XXXXX
1.468E+02
2.154E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.102E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.042E+02 XXXXXXXXXX
6.813E+02 XXXXXX
1.000E+03 XXXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E+01
MAXIMUM ANTILOG = 1.00000E+03
GEOMETRIC MEAN = 2.90529E+02
GEOMETRIC DEVIATION = 1.76843E+00
VARIANCE OF LOGS = 0.12993E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.253334E+00	1.791985E+02
50.00	2.456142E+00	2.858524E+02
75.00	2.625002E+00	4.216982E+02

90.00	2.887502E+00	7.717956E+02
95.00	3.027086E+00	1.064354E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

95

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

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

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		5	5	7.46	7.46		
L		27	32	40.30	47.76		
T		0	32	0.00	47.76	4.10	4.10
5.83CE-01	- 7.497E-01	27	59	40.30	88.06	33.39	1.22
7.497E-01	- 9.163E-01	0	59	0.00	88.06	27.32	27.32
9.163E-01	- 1.083E+00	8	67	11.94	100.00	2.18	15.53
G		0	67	0.00	100.00	0.00	0.00
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

HISTOGRAM FOR VARIABLE 34 (AA-AS-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS4.636E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.808E+00
9.992E+00 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 1.00000E+01
 GEOMETRIC MEAN = 5.85837E+00
 GEOMETRIC DEVIATION = 1.34354E+00
 VARIANCE OF LOGS = 1.64485E-02

PERCENT TABLE FOR VARIABLE 34 (AA-AS-P) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 50

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

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork sediments

FREQUENCY TABLE FOR VARIABLE 35 (AA-ZN-P)

LOG LIMITS LOWER	LOG LIMITS 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		
1.416E+00	- 1.583E+00	3	3	4.48	4.48	0.45	0.45
1.583E+00	- 1.749E+00	35	38	52.24	56.72	25.90	2.03
1.749E+00	- 1.916E+00	23	61	34.33	91.04	26.39	3.19
1.916E+00	- 2.083E+00	5	66	7.46	98.51	7.08	0.44
2.083E+00	- 2.249E+00	1	67	1.49	100.00	0.49	0.61
G		0	67	0.00	100.00		
H		0	67				
B		0	67				

TOTALS LESS H AND B 67

HISTOGRAM FOR VARIABLE 35 (AA-ZN-P)
MIDPOINTS ARE EXPRESSED AS ANTILOGS

3.157E+01 XXXX
 4.634E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.802E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.965E+01 XXXXXXX
 1.406E+02 X

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+01
 MAXIMUM ANTILOG = 1.30000E+02
 GEOMETRIC MEAN = 5.64501E+01
 GEOMETRIC DEVIATION = 1.36682E+00
 VARIANCE OF LOGS = 1.84178E-02

PERCENT TABLE FOR VARIABLE 35 (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 PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.648143E+00	4.447780E+01
50.00	1.727905E+00	5.344479E+01
75.00	1.838102E+00	6.688145E+01
90.00	1.910929E+00	8.145702E+01
95.00	2.004335E+00	1.010031E+02
98.00	2.071335E+00	1.178514E+02
99.00	1.000000E+35	1.000000E+35

DCG36 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

TITLE	INPUT ID	N	M	***** OPTIONS *****
so fork conc	-sf_conc -	67	36	1 0 0 0 2 1 0 0 0 0

VARIABLE NO. 9 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 10 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
THE MAX AND MIN 0.16990E+01 FOR VARIABLE NO. 14 ARE THE SAME. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 15 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 16 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 20 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
THE MAX AND MIN 0.18451E+01 FOR VARIABLE NO. 21 ARE THE SAME. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 24 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 29 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 31 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 32 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 33 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 34 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 35 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 36 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.

00036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

TITLE	INPUT ID	N	M	*****	OPTIONS	*****
so fork conc	-sf_conc -	67	36	1 0 0 0 2 1 0 0 0 0		

NUMBER OF SELECTED VARIABLES = 19

SELECTED VARIABLE INDICES

3 4 5 6 7 8 11 12 13 17
18 19 22 23 25 26 27 28 30

SELECTED VARIABLE IDENTIFIERS

S-FEX S-MG% S-CA% S-TIX S-MN S-AG S-B S-BA S-BE S-CR
S-CU S-LA S-NI S-PB S-SC S-SN S-SR S-V S-Y

SELECTED ROW PAIRS

1 TO 67

LOWER BOUNDARIES OF THE LOWEST CLASSES

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork conc

FREQUENCY TABLE FOR VARIABLE 4 (S-MGX)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.01	0.01
-1.417E+00 - -1.250E+00	2	2	3.57	3.57	0.11	32.46
-1.250E+00 - -1.084E+00	0	2	0.00	3.57	0.81	0.81
-1.084E+00 - -9.170E-01	3	5	5.36	8.93	3.61	0.10
-9.170E-01 - -7.503E-01	0	5	0.00	8.93	9.59	9.59
-7.503E-01 - -5.837E-01	20	25	35.71	44.64	15.28	1.46
-5.837E-01 - -4.170E-01	22	47	39.29	83.93	14.62	3.73
-4.170E-01 - -2.503E-01	8	55	14.29	98.21	8.40	0.02
-2.503E-01 - -8.366E-02	0	55	0.00	98.21	2.89	2.89
-8.366E-02 - 8.300E-02	1	56	1.79	100.00	0.68	0.15
G	0	56	0.00	100.00	0.01	0.01
H	0	56				
B	11	67				

TOTALS LESS H AND B 56

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

4.638E-02 XXXX
 6.808E-02
 9.992E-02 XXXXX
 1.467E-01
 2.153E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.160E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 4.638E-01 XXXXXXXXXX
 6.808E-01
 9.992E-01 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-02
 MAXIMUM ANTILOG = 1.00000E+00
 GEOMETRIC MEAN = 2.52296E-01
 GEOMETRIC DEVIATION = 1.69128E+00
 VARIANCE OF LOGS = 5.20818E-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 PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-7.669987E-01	1.710020E-01

50.00	-5.609377E-01	2.748289E-01
75.00	-4.548769E-01	3.508513E-01
90.00	-3.461645E-01	4.506460E-01
95.00	-2.878311E-01	5.154291E-01
98.00	-2.528310E-01	5.586876E-01
99.00	1.000000E+35	1.000000E+35

eh

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

SO FORK CONC

FREQUENCY TABLE FOR VARIABLE S (S-CAX)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.24	0.24
2.500E-01 - 4.167E-01	2	2	3.57	3.57	4.25	1.19
4.167E-01 - 5.833E-01	22	24	39.29	42.86	19.48	0.33
5.833E-01 - 7.500E-01	28	52	50.00	92.86	23.69	0.78
7.500E-01 - 9.167E-01	4	56	7.14	100.00	8.33	2.25
G	0	56	0.00	100.00	0.24	0.24
H	0	56				
B	11	67				

TOTALS LESS H AND B 56

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

2.154E+00 XXXX
 3.162E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 4.642E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.813E+00 XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
 MAXIMUM ANTILOG = 7.00000E+00
 GEOMETRIC MEAN = 4.05547E+00
 GEOMETRIC DEVIATION = 1.36870E+00
 VARIANCE OF LOGS = 1.85796E-02

PERCENT TABLE FOR VARIABLE S (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
25.00	5.075763E-01	3.217928E+00
50.00	6.071436E-01	4.047097E+00
75.00	6.904771E-01	4.903171E+00
90.00	7.404772E-01	5.501450E+00
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

SO FORK CONC

FREQUENCY TABLE FOR VARIABLE 6 (S-TIX)

LOG LIMITS LOWER	LOG LIMITS 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	1.79	1.79	0.16	0.16
-7.503E-01	-5.837E-01	4	5	7.14	8.93	1.66	2.47
-5.837E-01	-4.170E-01	3	8	5.36	14.29	4.54	0.52
-4.170E-01	-2.503E-01	5	13	8.93	23.21	8.32	1.32
-2.503E-01	-8.367E-02	10	23	17.86	41.07	11.41	0.17
-8.367E-02	8.300E-02	17	40	30.36	71.43	11.73	2.37
8.300E-02	2.497E-01	3	43	5.36	76.79	9.03	4.03
2.497E-01	-4.163E-01	7	50	12.50	69.29	8.40	0.23
G		6	56	10.71	100.00	0.16	219.20
H		6	56				
B		11	67				

TOTALS LESS H AND B 50

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

1.467E-01 XX
 2.153E-01 XXXXXX
 3.160E-01 XXXXX
 4.636E-01 XXXXXXXX
 6.808E-01 XXXXXXXXXXXXXXXX
 9.992E-01 XXXXXXXXXXXXXXXXXXXXXXXX
 1.467E+00 XXXX
 2.153E+00 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E-01
 MAXIMUM ANTILOG = 2.00000E+00
 GEOMETRIC MEAN = 7.72428E-01
 GEOMETRIC DEVIATION = 1.96938E+00
 VARIANCE OF LOGS = 8.66301E-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
25.00	-2.336653E-01	5.638949E-01
50.00	-3.464530E-02	9.233252E-01
75.00	1.941133E-01	1.563556E+00

90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

51

so forth conc

FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	1	1	1.79	1.79		
T	0	1	0.00	1.79	1.98	1.98
1.916E+00 - 2.083E+00	2	3	5.57	5.36	5.16	1.93
2.083E+00 - 2.249E+00	6	11	14.29	19.64	10.74	0.70
2.249E+00 - 2.416E+00	25	36	44.64	64.29	14.53	7.54
2.416E+00 - 2.583E+00	9	45	16.07	80.36	12.79	1.12
2.583E+00 - 2.749E+00	10	55	17.86	98.21	7.31	0.99
2.749E+00 - 2.916E+00	0	55	0.00	98.21	2.72	2.72
2.916E+00 - 3.083E+00	1	56	1.79	100.00	0.77	0.07
G	0	56	0.00	100.00	0.00	0.00
H	0	56				
B	11	67				

TOTALS LESS H AND B 56

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

9.965E+01 XXXX
 1.466E+02 XXXXXXXXXXXXXXXX
 2.151E+02 XXX
 3.157E+02 XXXXXXXXXXXXXXXXXX
 4.634E+02 XXXXXXXXXXXXXXXXXX
 6.802E+02 XX
 9.985E+02 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 2.43101E+02
 GEOMETRIC DEVIATION = 1.60205E+00
 VARIANCE OF LOGS = 4.18925E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.269334E+00	1.859234E+02
50.00	2.362668E+00	2.304982E+02
75.00	2.527112E+00	3.365986E+02
90.00	2.672668E+00	4.706176E+02
95.00	2.719335E+00	5.240044E+02

98.00
99.00

2.747335E+00
1.000000E+35

5.589011E+02
1.000000E+35

t/h

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork conc

FREQUENCY TABLE FOR VARIABLE 8 (S-AG)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	53	53	94.64	94.64		
L	0	53	0.00	94.64		
T	0	53	0.00	94.64	51.83	51.83
4.160E-01 - 5.827E-01	1	54	1.79	96.43	3.20	1.51
5.827E-01 - 7.493E-01	0	54	0.00	96.43	0.82	0.82
7.493E-01 - 9.160E-01	0	54	0.00	96.43	0.14	0.14
9.160E-01 - 1.083E+00	0	54	0.00	96.43	0.02	0.02
1.083E+00 - 1.249E+00	0	54	0.00	96.43	0.00	0.00
1.249E+00 - 1.416E+00	2	56	3.57	100.00	0.00	3558.61
G	0	56	0.00	100.00	0.00	0.00
H	0	56				
B	11	67				

TOTALS LESS H AND B 56

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

3.157E+00 XX
 4.634E+00
 6.802E+00
 9.985E+00
 1.466E+01
 2.151E+01 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+00
 MAXIMUM ANTILOG = 2.00000E+01
 GEOMETRIC MEAN = 1.06266E+01
 GEOMETRIC DEVIATION = 2.99009E+00
 VARIANCE OF LOGS = 2.26275E-01

PERCENT TABLE FOR VARIABLE 8 (S-AG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

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

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

SO FORK CONC

FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	6	6	10.71	10.71		
T	0	6	0.00	10.71	10.70	10.70
1.250E+00 - 1.417E+00	35	41	62.50	73.21	21.00	6.31
1.417E+00 - 1.583E+00	6	47	10.71	83.93	17.90	7.91
1.583E+00 - 1.750E+00	8	55	14.29	98.21	5.25	1.45
1.750E+00 - 1.917E+00	1	56	1.79	100.00	0.56	0.35
G	0	56	0.00	100.00	0.00	0.00
H	0	56				
B	11	67				

TOTALS LESS H AND B 56

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

2.154E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.162E+01 XXXXXXXXXX
 4.642E+01 XXXXXXXXXX
 6.813E+01 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 7.00000E+01
 GEOMETRIC MEAN = 2.49295E+01
 GEOMETRIC DEVIATION = 1.45320E+00
 VARIANCE OF LOGS = 2.63500E-02

PERCENT TABLE FOR VARIABLE 11 (S-B) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 5U

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.444445E+00	2.782562E+01
90.00	1.654167E+00	4.509906E+01
95.00	1.712501E+00	5.158232E+01
98.00	1.747501E+00	5.591148E+01
99.00	1.000000E+35	1.000000E+35

DCOSE GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork conc

FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
2.416E+00 - 2.583E+00	3	3	5.36	5.36	1.11	1.11
2.583E+00 - 2.749E+00	5	8	8.93	14.29	2.68	0.04
2.749E+00 - 2.916E+00	16	24	28.57	42.86	6.10	0.20
2.916E+00 - 3.083E+00	13	37	23.21	66.07	10.17	3.34
3.083E+00 - 3.249E+00	5	42	8.93	75.00	12.42	0.03
3.249E+00 - 3.416E+00	7	49	12.50	87.50	7.29	3.37
3.416E+00 - 3.583E+00	6	55	10.71	98.21	5.12	0.01
G	1	56	1.79	100.00	1.11	0.01
H	0	56				
B	11	67				

TOTALS LESS H AND B 56

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

3.157E+02 XXXXX
 4.634E+02 XXXXXXXXX
 6.802E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.985E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.406E+03 XXXXXXXXX
 2.151E+03 XXXXXXXXXXXXXXX
 3.157E+03 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+02
 MAXIMUM ANTILOG = 3.00000E+03
 GEOMETRIC MEAN = 1.01256E+03
 GEOMETRIC DEVIATION = 1.84353E+00
 VARIANCE OF LOGS = 7.05700E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.811834E+00	6.483867E+02
50.00	2.967283E+00	9.274343E+02
75.00	3.249335E+00	1.775559E+03
90.00	3.454891E+00	2.850303E+03
95.00	3.532669E+00	3.409329E+03

98.00

3.579336E+00

3.796083E+03

99.00

1.000000E+35

1.000000E+35

so fork conc

FREQUENCY TABLE FOR VARIABLE 13 (S-BE)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
2.500E-01	- 4.167E-01	44	44	78.57	78.57	15.53	15.53
4.167E-01	- 5.833E-01	4	48	7.14	85.71	13.51	68.79
5.833E-01	- 7.500E-01	5	53	8.93	94.64	8.61	6.35
7.500E-01	- 9.167E-01	0	53	0.00	94.64	3.81	1.51
9.167E-01	- 1.083E+00	1	54	1.79	96.43	1.14	3.81
1.083E+00	- 1.250E+00	0	54	0.00	96.43	0.23	0.02
1.250E+00	- 1.417E+00	1	55	1.79	98.21	0.03	0.23
1.417E+00	- 1.583E+00	0	55	0.00	98.21	0.00	0.00
1.583E+00	- 1.750E+00	1	56	1.79	100.00	0.00	328.04
G		0	56	0.00	100.00	15.53	15.53
H		0	56				
B		11	67				

TOTALS LESS H AND B

56

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

2.154E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.162E+00 XXXXXX
 4.642E+00 XXXXXXXX
 6.813E+00 XX
 1.000E+01 XX
 1.468E+01 XX
 2.154E+01 XX
 3.162E+01 XX
 4.642E+01 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
 MAXIMUM ANTILOG = 5.00000E+01
 GEOMETRIC MEAN = 2.53770E+00
 GEOMETRIC DEVIATION = 1.82581E+00
 VARIANCE OF LOGS = 6.83593E-02

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

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

50.00 1.000000E+35 1.000000E+35
75.00 1.000000E+35 1.000000E+35
90.00 6.633342E-01 4.006108E+00
95.00 8.166677E-01 6.556435E+00
98.00 1.376669E+00 2.380504E+01
99.00 1.000000E+35 1.000000E+35

50

so fork conc

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
L	T	0	0	0.00	0.00		
39	39	39	39	69.64	69.64	13.19	
U	U	39	0.00	69.64	69.64	7.27	
6	6	45	10.71	80.36	17.18		
45	45	0.00	45.00	80.36	15.81		
8	53	14.29	94.64			0.02	
53	53	0.00	94.64	1.93		1.93	
0	56	5.36	100.00	0.00		27.42	
56	0.00	100.00				0.00	
H	U	56	67				
B		11					
TOTALS LESS H AND B		56					

HISTOGRAM FOR VARIABLE 17 (S-CR)

MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+01 XXXXXXXXXX
 3.62E+01 XXXXXXXXXX
 4.642E+01 XXXXXXXXXX
 6.815E+01 XXXXXXXXXX
 1.000E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 4.08925E+01
 GEOMETRIC DEVIATION = 1.82511E+00
 VARIANCE OF LOGS = 6.82722E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.641667E+00	4.381950E+01
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

SO FORK CONC

FREQUENCY TABLE FOR VARIABLE 18 (S-CU)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	10	16	28.57	28.57		
T	0	16	0.00	28.57	11.89	11.89
9.16E-01 - 1.083E+00	18	34	32.14	60.71	7.83	13.21
1.083E+00 - 1.249E+00	4	38	7.14	67.66	9.16	2.91
1.249E+00 - 1.416E+00	5	43	8.93	76.79	9.01	1.78
1.416E+00 - 1.583E+00	4	47	7.14	83.93	7.46	1.60
1.583E+00 - 1.749E+00	3	50	5.36	89.29	5.19	0.93
1.749E+00 - 1.916E+00	2	52	3.57	92.86	3.04	0.36
1.916E+00 - 2.083E+00	2	54	3.57	96.43	1.50	0.17
2.083E+00 - 2.249E+00	1	55	1.79	98.21	0.62	0.23
2.249E+00 - 2.416E+00	0	55	0.00	98.21	0.22	0.22
2.416E+00 - 2.583E+00	0	55	0.00	98.21	0.06	0.06
2.583E+00 - 2.749E+00	0	55	0.00	98.21	0.02	0.02
2.749E+00 - 2.916E+00	0	55	0.00	98.21	0.00	0.00
2.916E+00 - 3.083E+00	1	56	1.79	100.00	0.00	1511.10
G	0	56	0.00	100.00	0.00	0.00
H	0	56				
B	11	67				

TOTALS LESS H AND B

56

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

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.400E+01 XXXXXX
 2.151E+01 XXXXXXXX
 3.157E+01 XXXXXX
 4.634E+01 XXXX
 6.802E+01 XXX
 9.985E+01 XXX
 1.466E+02 XX
 2.151E+02
 3.157E+02
 4.635E+02
 6.803E+02
 9.985E+02 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 2.12339E+01
 GEOMETRIC DEVIATION = 2.74252E+00
 VARIANCE OF LOGS = 1.91975E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.382668E+00	2.413613E+01
90.00	1.782668E+00	6.062733E+01
95.00	2.016002E+00	1.037534E+02
98.00	2.229336E+00	1.695649E+02
99.00	1.000000E+35	1.000000E+35

56

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so forth conc

FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		3	3	5.36	5.36		
T		0	3	0.00	5.36	5.50	5.50
1.583E+00	- 1.750E+00	25	28	44.64	50.00	8.29	33.69
1.750E+00	- 1.916E+00	1	29	1.79	51.79	12.40	10.48
1.916E+00	- 2.083E+00	11	40	19.04	71.43	13.01	0.31
2.083E+00	- 2.250E+00	3	43	5.36	76.79	9.56	4.56
2.250E+00	- 2.416E+00	9	52	16.07	92.86	4.92	3.37
2.416E+00	- 2.583E+00	4	56	7.14	100.00	2.32	1.22
G		0	56	0.00	100.00	0.00	0.00
H		0	56				
B		11	67				

TOTALS LESS H AND B 56

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

4.638E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.808E+01 XX
 9.992E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.467E+02 XXXXX
 2.155E+02 XXXXXXXXXXXXXXXXX
 3.160E+02 XXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 3.00000E+02
 GEOMETRIC MEAN = 8.95729E+01
 GEOMETRIC DEVIATION = 1.69197E+00
 VARIANCE OF LOGS = 7.66818E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.749667E+00	5.619103E+01
75.00	2.194112E+00	1.563552E+02
90.00	2.386705E+00	2.436157E+02
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork conc

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		1	1	1.79	1.79		
L		9	10	16.07	17.86		
T		0	10	0.00	17.86		
9.10CE-01	- 1.083E+00	15	25	26.79	44.04	3.50	3.50
1.083E+00	- 1.249E+00	0	25	0.00	44.04	12.73	0.41
1.249E+00	- 1.416E+00	29	54	51.79	96.43	21.00	21.00
1.416E+00	- 1.583E+00	1	55	1.79	98.21	14.29	15.14
1.583E+00	- 1.749E+00	1	56	1.79	100.00	4.00	2.25
G		0	56	0.00	100.00	0.48	0.57
H		0	56			0.00	0.00
B		11	67				

TOTALS LESS H AND B 56

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

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+01 XX
 4.634E+01 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 5.00000E+01
 GEOMETRIC MEAN = 1.64190E+01
 GEOMETRIC DEVIATION = 1.45895E+00
 VARIANCE OF LOGS = 2.69097E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.117150E+00	1.309634E+01
75.00	1.278070E+00	1.697010E+01
90.00	1.374622E+00	2.369309E+01
95.00	1.406806E+00	2.551559E+01
98.00	1.562668E+00	3.653154E+01
99.00	1.000000E+35	1.000000E+35

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so forth conc

FREQUENCY TABLE FOR VARIABLE 23 (S-PB)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	43	43	76.79	76.79		
L	8	51	14.29	91.07		
T	0	51	0.00	91.07	20.82	20.82
1.250E+00 - 1.417E+00	1	52	1.79	92.86	6.81	4.96
1.417E+00 - 1.583E+00	0	52	0.00	92.86	6.84	6.84
1.583E+00 - 1.750E+00	1	53	1.79	94.64	6.25	4.41
1.750E+00 - 1.917E+00	0	53	0.00	94.64	5.19	5.19
1.917E+00 - 2.083E+00	0	53	0.00	94.64	3.91	3.91
2.083E+00 - 2.250E+00	0	53	0.00	94.64	2.68	2.68
2.250E+00 - 2.417E+00	1	54	1.79	96.43	1.67	0.27
2.417E+00 - 2.583E+00	0	54	0.00	96.43	0.95	0.95
2.583E+00 - 2.750E+00	0	54	0.00	96.43	0.49	0.49
2.750E+00 - 2.917E+00	0	54	0.00	96.43	0.23	0.23
2.917E+00 - 3.083E+00	0	54	0.00	96.43	0.10	0.10
3.083E+00 - 3.250E+00	0	54	0.00	96.43	0.04	0.04
3.250E+00 - 3.417E+00	0	54	0.00	96.43	0.01	0.01
3.417E+00 - 3.583E+00	0	54	0.00	96.43	0.00	0.00
3.583E+00 - 3.750E+00	0	54	0.00	96.43	0.00	0.00
3.750E+00 - 3.917E+00	0	54	0.00	96.43	0.00	0.00
3.917E+00 - 4.083E+00	1	55	1.79	98.21	0.00	0.00
4.083E+00 - 4.250E+00	1	56	1.79	100.00	0.00	613.34
G	0	56	0.00	100.00	0.00	0.00
H	0	56				
B	11	67				

TOTALS LESS H AND B

56

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

2.154E+01 XX
 3.162E+01
 4.642E+01 XX
 6.813E+01
 1.000E+02
 1.468E+02
 2.154E+02 XX
 3.162E+02
 4.642E+02
 6.813E+02
 1.000E+03
 1.468E+03
 2.154E+03
 3.162E+03
 4.642E+03
 6.813E+03
 1.000E+04 XX
 1.468E+04 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 1.50000E+04
GEOMETRIC MEAN = 4.95934E+02
GEOMETRIC DEVIATION = 2.09728E+01
VARIANCE OF LOGS = 1.74677E+00

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.883334E+00	7.644243E+01
98.00	3.883336E+00	7.644313E+03
99.00	1.000000E+35	1.000000E+35

60

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork conc

FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		16	16	28.57	28.57		
L		32	48	57.14	85.71		
T		0	48	0.00	85.71	38.84	38.84
1.25CE+00	- 1.417E+00	2	50	3.57	89.29	9.50	5.92
1.417E+00	- 1.583E+00	0	50	0.00	89.29	5.08	5.08
1.583E+00	- 1.750E+00	0	50	0.00	89.29	1.93	1.93
1.750E+00	- 1.917E+00	4	54	7.14	96.43	6.53	22.98
1.917E+00	- 2.083E+00	2	56	3.57	100.00	0.12	30.22
G		0	56	0.00	100.00	0.00	0.00
H		0	56				
B		11	67				

TOTALS LESS H AND B 56

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

2.154E+01 XXXX
 3.162E+01
 4.642E+01
 6.813E+01 XXXXXXXX
 1.0000E+02 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 5.59508E+01
 GEOMETRIC DEVIATION = 1.92275E+00
 VARIANCE OF LOGS = 8.66120E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.466667E+00	2.928647E+01
95.00	1.816668E+00	0.556435E+01
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DC036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so forth conc

FREQUENCY TABLE FOR VARIABLE 26 (S-SN)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ) * 2 / THEOR FREQ
N	39	39	69.64	69.64		
L	3	42	5.36	75.00		
T	0	42	0.00	75.00	27.49	27.49
1.583E+00 - 1.750E+00	3	45	5.36	80.36	6.14	1.60
1.750E+00 - 1.916E+00	0	45	0.00	80.36	5.72	5.72
1.916E+00 - 2.083E+00	2	47	3.57	83.93	4.94	1.75
2.083E+00 - 2.250E+00	0	47	0.00	83.93	3.95	3.95
2.250E+00 - 2.416E+00	2	49	3.57	87.50	2.93	0.30
2.416E+00 - 2.583E+00	1	50	1.79	89.29	2.01	0.51
2.583E+00 - 2.750E+00	2	52	3.57	92.86	1.28	0.41
2.750E+00 - 2.916E+00	0	52	0.00	92.86	0.75	0.75
2.916E+00 - 3.083E+00	0	52	0.00	92.86	0.41	0.41
3.083E+00 - 3.250E+00	0	52	0.00	92.86	0.21	0.21
3.250E+00 - 3.416E+00	1	53	1.79	94.64	0.17	4.19
G	3	56	5.36	100.00	0.00	0.00
H	0	56				
B	11	67				

TOTALS LESS H AND B 56

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

4.638E+01 XXXXX
 6.808E+01
 9.992E+01 XXXXX
 1.467E+02
 2.153E+02 XXXXX
 3.160E+02 XX
 4.638E+02 XXXX
 6.808E+02
 9.992E+02
 1.467E+03
 2.153E+03 XX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 1.82545E+02
 GEOMETRIC DEVIATION = 3.23454E+00
 VARIANCE OF LOGS = 2.59908E-01

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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	2.016335E+00	4.133666E+02
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DCU36 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

SO FORK CONC

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	1.79	1.79		
L	30	.31	.31	53.57	55.36		
T	0	.31	0.00	55.36			
2.250E+00	- 2.417E+00	21	.52	37.50	92.86	11.63	11.63
2.417E+00	- 2.583E+00	1	.53	1.79	94.64	35.26	5.77
2.583E+00	- 2.750E+00	3	.56	5.36	100.00	8.96	7.07
G	0	.56	0.00	100.00		0.15	53.60
H	0	.56				0.00	0.00
B	11	.67					

TOTALS LESS H AND B 56

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

2.154E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.162E+02 XX
 4.642E+02 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 2.26896E+02
 GEOMETRIC DEVIATION = 1.36147E+00
 VARIANCE OF LOGS = 1.79565E-02

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

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

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so fork conc

FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER -	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
H		0	0	0.00	0.00		
L		1	1	1.79	1.79		
T		0	1	0.00	1.79	0.14	0.14
1.250E+00 -	1.417E+00	1	2	1.79	3.57	0.78	0.06
1.417E+00 -	1.583E+00	2	4	3.57	7.14	3.13	0.41
1.583E+00 -	1.750E+00	8	12	14.29	21.43	8.10	0.00
1.750E+00 -	1.917E+00	12	24	21.43	42.66	13.48	0.16
1.917E+00 -	2.083E+00	16	42	32.14	75.00	14.44	0.88
2.083E+00 -	2.250E+00	7	49	12.50	87.50	9.97	0.89
2.250E+00 -	2.417E+00	6	55	10.71	98.21	4.43	0.55
2.417E+00 -	2.583E+00	1	56	1.79	100.00	1.53	0.18
G		0	56	0.00	100.00	0.00	0.00
H		0	56				
B		11	67				

TOTALS LESS H AND B 56

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

65

```

2.154E+01 XX
3.162E+01 XXXX
4.642E+01 XXXXXXXXXXXXXXXX
6.813E+01 XXXXXXXXXXXXXXXXXXXXXXXX
1.000E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.466E+02 XXXXXXXXXXXXXXXX
2.154E+02 XXXXXXXXXXXXXXXX
3.162E+02 XX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
MAXIMUM ANTILOG = 3.00000E+02
GEOMETRIC MEAN = 9.00785E+01
GEOMETRIC DEVIATION = 1.70873E+00
VARIANCE OF LOGS = 5.41370E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.777779E+00	5.994857E+01
50.00	1.953705E+00	8.988870E+01
75.00	2.083335E+00	1.211532E+02

90.00	2.286891E+00	1.944872E+02
95.00	2.366669E+00	2.326317E+02
98.00	2.413336E+00	2.590214E+02
99.00	1.000000E+35	1.000000E+35

66

D0036 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

so forth conc

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		
1.916E+00 - 2.083E+00	2	2	3.57	3.57	0.07	0.07
2.083E+00 - 2.249E+00	0	2	0.00	3.57	0.26	11.69
2.249E+00 - 2.416E+00	3	5	5.30	8.93	0.87	0.87
2.416E+00 - 2.583E+00	0	5	0.00	8.93	2.30	0.21
2.583E+00 - 2.749E+00	7	12	12.50	21.43	4.82	4.82
2.749E+00 - 2.916E+00	14	26	25.00	46.43	7.96	0.12
2.916E+00 - 3.083E+00	17	43	30.36	76.79	10.37	1.27
3.083E+00 - 3.249E+00	2	45	3.57	80.36	0.68	3.74
3.249E+00 - 3.416E+00	7	52	12.50	92.86	5.57	5.14
3.416E+00 - 3.583E+00	2	54	3.57	96.43	2.82	0.37
3.583E+00 - 3.749E+00	2	56	3.57	100.00	1.59	0.24
G	0	56	0.00	100.00	0.07	0.10
H	0	56				
B	11	67				0.07

TOTALS LESS H AND B 56

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

9.905E+01 XXXX
 1.466E+02
 2.151E+02 XXXXXX
 3.157E+02
 4.634E+02 XXXXXXXXXXXXXXXX
 6.802E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.905E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+03 XXXX
 2.151E+03 XXXXXXXXXXXXXXXX
 3.157E+03 XXXX
 4.635E+03 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 5.00000E+03
 GEOMETRIC MEAN = 8.63769E+02
 GEOMETRIC DEVIATION = 2.18509E+00
 VARIANCE OF LOGS = 1.15240E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.773145E+00	5.931227E+02
50.00	2.935610E+00	6.622037E+02
75.00	3.072665E+00	1.182674E+03
90.00	3.377908E+00	2.387304E+03
95.00	3.516003E+00	3.280977E+03
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

64

DC101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

TITLE
so fork sediments INPUT ID N M ***** OPTIONS ***** OUTPUT ID N M
-sf_seas - 67 36 1 0 1 1 0 0 0 0 0 0 -sf_seds - 34 34

NUMBER OF SELECTED COLUMNS 34

SELECTED COLUMN INDICES

3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32
33	34	35	36						

SELECTED COLUMN IDENTIFIERS

S-FEZ	S-MGX	S-CAX	S-TI%	S-MN	S-AG	S-AS	S-AU	S-B	S-6A
S-6E	S-BI	S-CD	S-CO	S-CR	S-CU	S-LA	S-KO	S-NB	S-N1
S-Po	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR
S-TH	AA-AS-P	AA-ZN-P	AA-SB-P						

NUMBER OF SELECTED ROW PAIRS 1

SELECTED ROW PAIRS

1- 07

PHASE TWO RESULTS

WARNING *** THE RESULTS FROM THIS PHASE "SHOULD NOT" BE ENTERED INTO D0096-FACTOR ANALYSIS.
THE CORRELATION MATRIX FROM THIS PHASE DOES NOT HAVE THE GRAMIAN PROPERTIES
WHICH ARE REQUIRED FOR FACTOR ANALYSIS.

b9

ARRAY OF MEANS -

	3 S-FEX	4 S-MGX	5 S-CAX	6 S-TIX	7 S-MN	8 S-AG	9 S-AS	10 S-AU	11 S-B	12 S-BA
1 S-FEZ	0.6390	0.6390	0.6390	0.6390	0.6390	*****	*****	*****	0.6390	0.6390
2 S-MG4	0.0151	0.0151	0.0151	0.0151	0.0151	*****	*****	*****	0.0151	0.0151
3 S-CAZ	0.2097	0.2097	0.2097	0.2097	0.2097	*****	*****	*****	0.2097	0.2097
4 S-TI4	-0.2508	-0.2508	-0.2508	-0.2508	-0.2508	*****	*****	*****	-0.2508	-0.2508
5 S-MN	3.0175	3.0175	3.0175	3.0175	3.0175	*****	*****	*****	3.0175	3.0175
6 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-E	1.6993	1.6993	1.6993	1.6993	1.6993	*****	*****	*****	1.6993	1.6993
10 S-eA	2.9798	2.9798	2.9798	2.9798	2.9798	*****	*****	*****	2.9798	2.9798
11 S-EE	0.2992	0.2992	0.2992	0.2992	0.2992	*****	*****	*****	0.2992	0.2992
12 S-EI	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CO	1.1668	1.1668	1.1668	1.1668	1.1668	*****	*****	*****	1.1668	1.1668
15 S-CR	1.7221	1.7221	1.7221	1.7221	1.7221	*****	*****	*****	1.7221	1.7221
16 S-CU	1.1921	1.1921	1.1921	1.1921	1.1921	*****	*****	*****	1.1921	1.1921
17 S-LA	1.8055	1.8055	1.8055	1.8055	1.8055	*****	*****	*****	1.8055	1.8055
18 S-MO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-NB	1.3010	1.3010	1.3010	1.3010	1.3010	*****	*****	*****	1.3010	1.3010
20 S-NI	1.1840	1.1840	1.1840	1.1840	1.1840	*****	*****	*****	1.1840	1.1840
21 S-FB	1.3687	1.3687	1.3687	1.3687	1.3687	*****	*****	*****	1.3687	1.3687
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	1.1919	1.1919	1.1919	1.1919	1.1919	*****	*****	*****	1.1919	1.1919
24 S-SN	2.1761	2.1761	2.1761	2.1761	2.1761	*****	*****	*****	2.1761	2.1761
25 S-SR	2.4938	2.4938	2.4938	2.4938	2.4938	*****	*****	*****	2.4938	2.4938
26 S-V	2.0104	2.0104	2.0104	2.0104	2.0104	*****	*****	*****	2.0104	2.0104
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	1.6646	1.6646	1.6646	1.6646	1.6646	*****	*****	*****	1.6646	1.6646
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	2.4632	2.4632	2.4632	2.4632	2.4632	*****	*****	*****	2.4632	2.4632
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	0.7678	0.7678	0.7678	0.7678	0.7678	*****	*****	*****	0.7678	0.7678
33 AA-ZN-P	1.7517	1.7517	1.7517	1.7517	1.7517	*****	*****	*****	1.7517	1.7517
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

at

DC101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

ARRAY OF MEANS - CONT.

DC101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

ARRAY OF MEANS - CONT.

ARRAY OF MEANS - CONT.

	33	34	35	36	
	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P	
1	S-FE2	*****	0.6147	0.6390	*****
2	S-MG2	*****	-0.0026	0.0151	*****
3	S-CA2	*****	0.1889	0.2097	*****
4	S-TIX	*****	-0.2662	-0.2508	*****
5	S-PA	*****	3.0107	3.0175	*****
6	S-AG	*****	*****	*****	*****
7	S-AS	*****	*****	*****	*****
8	S-AU	*****	*****	*****	*****
9	S-B	*****	1.7558	1.6993	*****
10	S-DA	*****	3.0006	2.9798	*****
11	S-BE	*****	0.3061	0.2992	*****
12	S-DI	*****	*****	*****	*****
13	S-CD	*****	*****	*****	*****
14	S-CO	*****	1.1594	1.1668	*****
15	S-CR	*****	1.7249	1.7221	*****
16	S-CU	*****	1.2082	1.1921	*****
17	S-LA	*****	1.8095	1.8055	*****
18	S-PC	*****	*****	*****	*****
19	S-NB	*****	1.3010	1.3010	*****
20	S-NI	*****	1.2108	1.1840	*****
21	S-PB	*****	1.3705	1.3687	*****
22	S-SB	*****	*****	*****	*****
23	S-SC	*****	1.1706	1.1919	*****
24	S-SN	*****	*****	2.1761	*****
25	S-SR	*****	2.5101	2.4938	*****
26	S-V	*****	1.9970	2.0104	*****
27	S-W	*****	*****	*****	*****
28	S-Y	*****	1.6645	1.6646	*****
29	S-ZN	*****	*****	*****	*****
30	S-ZR	*****	2.5215	2.4632	*****
31	S-TH	*****	*****	*****	*****
32	AA-AS-P	*****	0.7678	0.7678	*****
33	AA-ZN-P	*****	1.7290	1.7517	*****
34	AA-SB-P	*****	*****	*****	*****

S-4

DC101 CORRELATION ANALYSIS - USGS STATPAC (U1/15/82)

DATE 11/29/84

ARRAY OF VARIANCES -

DC101 CORRELATION ANALYSIS - USGS STATPAC (61/15/82)

DATE 11/29/84

ARRAY OF VARIANCES - CONT.

DC101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

ARRAY CF VARIANCES - CONT.

	25	24	25	26	27	28	29	30	31	32
	S-Pu	S-SB	S-SC	S-SD	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR
1 S-FEX	U-U49	*****	U-U49	*****	0-049	0-049	0-049	0-049	0-051	C
2 S-PG%	0-013	*****	0-013	*****	0-013	0-013	0-013	0-013	0-013	C
3 S-CAX	U-Uuo	*****	0-006	*****	0-006	0-006	0-006	0-006	0-006	C
4 S-TIZ	U-U16	*****	0-016	*****	0-016	0-016	0-016	0-016	0-015	C
5 S-MN	U-U07	*****	0-007	*****	0-007	0-007	0-007	0-007	0-007	C
6 S-AG	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
b S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
9 S-b	U-U2L	*****	U-U20	*****	0-020	0-020	0-020	0-020	0-020	C
10 S-BA	U-U05	*****	U-U05	*****	0-005	0-005	0-005	0-005	0-005	C
11 S-bE	U-U02	*****	U-U02	*****	0-002	0-002	0-002	0-002	0-002	C
12 S-3I	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
13 S-CO	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
14 S-CO	U-U17	*****	0-017	*****	0-017	0-017	0-017	0-017	0-017	C
15 S-CR	U-U60	*****	0-060	*****	0-060	0-060	0-060	0-060	0-061	C
16 S-CU	U-U03	*****	0-003	*****	0-003	0-003	0-003	0-003	0-003	C
17 S-LA	U-U14	*****	U-U14	*****	0-014	0-014	0-014	0-014	0-014	C
18 S-KU	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
19 S-NB	U-U00	*****	U-U00	*****	0-000	0-000	0-000	0-000	0-000	C
20 S-NI	U-U59	*****	U-U39	*****	0-039	0-039	0-039	0-039	0-039	C
21 S-PB	U-U21	*****	U-U21	*****	0-021	0-021	0-021	0-021	0-021	C
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
23 S-SC	U-U17	*****	U-U17	*****	0-017	0-017	0-017	0-017	0-017	C
24 S-SN	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
25 S-SR	U-U09	*****	U-U09	*****	0-009	0-009	0-009	0-009	0-009	C
26 S-V	U-U08	*****	U-U08	*****	0-008	0-008	0-008	0-008	0-009	C
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
28 S-Y	U-U15	*****	U-U15	*****	0-015	0-015	0-015	0-015	0-016	C
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
30 S-ZR	U-U01	*****	U-U01	*****	0-061	0-061	0-061	0-061	0-061	C
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	C
32 AA-AS-P	U-U10	*****	0-016	*****	0-016	0-016	0-016	0-016	0-016	C
33 AA-ZN-P	U-U18	*****	0-018	*****	0-018	0-018	0-018	0-018	0-019	C
34 AA-Sb-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	C

9t

ARRAY OF VARIANCES - CONT.

	33	34	35	36
	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
1 S-FEZ	*****	0.030	0.049	*****
2 S-MGX	*****	0.006	0.013	*****
3 S-CAZ	*****	0.003	0.006	*****
4 S-TI4	*****	0.006	0.016	*****
5 S-MH	*****	0.003	0.007	*****
6 S-AG	*****	*****	*****	*****
7 S-AS	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****
9 S-B	*****	0.010	0.026	*****
10 S-EA	*****	0.002	0.005	*****
11 S-EE	*****	0.001	0.002	*****
12 S-eI	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****
14 S-CO	*****	0.012	0.017	*****
15 S-CR	*****	0.022	0.060	*****
16 S-CU	*****	0.003	0.003	*****
17 S-LA	*****	0.015	0.014	*****
18 S-MO	*****	*****	*****	*****
19 S-NB	*****	0.000	0.000	*****
20 S-NI	*****	0.035	0.039	*****
21 S-PB	*****	0.017	0.021	*****
22 S-SO	*****	*****	*****	*****
23 S-SC	*****	0.011	0.017	*****
24 S-SN	*****	*****	*****	*****
25 S-SR	*****	0.008	0.009	*****
26 S-V	*****	0.005	0.008	*****
27 S-w	*****	*****	*****	*****
28 S-Y	*****	0.014	0.015	*****
29 S-ZN	*****	*****	*****	*****
30 S-ZR	*****	0.046	0.001	*****
31 S-TH	*****	*****	*****	*****
32 AA-AS-P	*****	0.016	0.016	*****
33 AA-ZN-P	*****	0.009	0.018	*****
34 AA-SB-P	*****	*****	*****	*****

DC101 CORRELATION ANALYSIS - USGS STATPAC (U1/15/82)

DATE 11/29/84

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-FE%	)	2 (S-MG%	)	0.3136 67
1 (S-FE%)	)	3 (S-CA%)	)	0.2170 67
1 (S-FE%)	)	4 (S-TI%)	)	0.5844 67
1 (S-FE%)	)	5 (S-MN)	)	0.2556 67
1 (S-FE%)	)	6 (S-AG)	)	***** 0
1 (S-FE%)	)	7 (S-AS)	)	***** 0
1 (S-FE%)	)	8 (S-AU)	)	***** 0
1 (S-FE%)	)	9 (S-B)	)	-0.0220 67
1 (S-FE%)	)	10 (S-BA)	)	-0.1792 67
1 (S-FE%)	)	11 (S-BE)	)	-0.0119 67
1 (S-FE%)	)	12 (S-BI)	)	***** 0
1 (S-FE%)	)	13 (S-CU)	)	***** 0
1 (S-FE%)	)	14 (S-CU)	)	0.5664 67
1 (S-FE%)	)	15 (S-CR)	)	-0.1591 67
1 (S-FE%)	)	16 (S-CU)	)	0.1135 67
1 (S-FE%)	)	17 (S-LA)	)	0.6080 67
1 (S-FE%)	)	18 (S-HO)	)	***** 0
1 (S-FE%)	)	19 (S-NB)	)	***** 65
1 (S-FE%)	)	20 (S-NI)	)	0.0263 67
1 (S-FE%)	)	21 (S-PO)	)	0.2955 67
1 (S-FE%)	)	22 (S-SB)	)	***** 0
1 (S-FE%)	)	23 (S-SC)	)	0.6911 67
1 (S-FE%)	)	24 (S-SN)	)	***** 1
1 (S-FE%)	)	25 (S-SR)	)	-0.0358 67
1 (S-FE%)	)	26 (S-V)	)	0.5089 67
1 (S-FE%)	)	27 (S-W)	)	***** 0
1 (S-FE%)	)	28 (S-Y)	)	0.4754 67
1 (S-FE%)	)	29 (S-ZN)	)	***** 0
1 (S-FE%)	)	30 (S-ZR)	)	0.3352 65
1 (S-FE%)	)	31 (S-TH)	)	***** 0
1 (S-FE%)	)	32 (AA-AS-P)	)	0.2685 35
1 (S-FE%)	)	33 (AA-ZN-P)	)	0.3911 67
1 (S-FE%)	)	34 (AA-SB-P)	)	***** 0
2 (S-MGX)	)	3 (S-CA%)	)	0.5518 67
2 (S-MGX)	)	4 (S-TI%)	)	-0.0193 67
2 (S-MGX)	)	5 (S-MN)	)	0.4159 67
2 (S-MGX)	)	6 (S-AG)	)	***** 0
2 (S-MGX)	)	7 (S-AS)	)	***** 0
2 (S-MGX)	)	8 (S-AU)	)	***** 0
2 (S-MGX)	)	9 (S-B)	)	-0.5391 67
2 (S-MGX)	)	10 (S-BA)	)	-0.2991 67
2 (S-MGX)	)	11 (S-BE)	)	0.0058 67
2 (S-MGX)	)	12 (S-BI)	)	***** 0
2 (S-MGX)	)	13 (S-CB)	)	***** 0
2 (S-MGX)	)	14 (S-CO)	)	0.6192 67
2 (S-MGX)	)	15 (S-CR)	)	0.5146 67
2 (S-MGX)	)	16 (S-CU)	)	-0.1233 67
2 (S-MGX)	)	17 (S-LA)	)	0.0286 67
2 (S-MGX)	)	18 (S-HO)	)	***** 0
2 (S-MGX)	)	19 (S-NB)	)	***** 65

COLUMN	VERSUS COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
2 (S-MGZ)	20 (S-NI)	0.3307	67
2 (S-MGZ)	21 (S-PB)	0.0693	67
2 (S-MGZ)	22 (S-SB)	*****	0
2 (S-MGZ)	23 (S-SC)	0.5693	67
2 (S-MGZ)	24 (S-SN)	*****	1
2 (S-MGZ)	25 (S-SR)	0.2581	67
2 (S-MGZ)	26 (S-V)	0.5168	67
2 (S-MGZ)	27 (S-W)	*****	0
2 (S-MGZ)	28 (S-Y)	0.1074	67
2 (S-MGZ)	29 (S-ZN)	*****	0
2 (S-MGZ)	30 (S-ZR)	-0.2274	65
2 (S-MGZ)	31 (S-TH)	*****	0
2 (S-MGZ)	32 (AA-AS-P)	-0.1045	35
2 (S-MGZ)	33 (AA-ZN-P)	0.2531	67
2 (S-MGZ)	34 (AA-SU-P)	*****	0
3 (S-CAZ)	4 (S-TIX)	0.1222	67
3 (S-CAZ)	5 (S-MN)	0.4135	67
3 (S-CAZ)	6 (S-AG)	*****	0
3 (S-CAZ)	7 (S-AS)	*****	0
3 (S-CAZ)	8 (S-AU)	*****	0
3 (S-CAZ)	9 (S-B)	-0.4218	67
3 (S-CAZ)	10 (S-BA)	-0.1283	67
3 (S-CAZ)	11 (S-BE)	0.1164	67
3 (S-CAZ)	12 (S-BI)	*****	0
3 (S-CAZ)	13 (S-CB)	*****	0
3 (S-CAZ)	14 (S-CO)	0.4105	67
3 (S-CAZ)	15 (S-CR)	0.3345	67
3 (S-CAZ)	16 (S-CU)	0.0992	67
3 (S-CAZ)	17 (S-LA)	0.0017	67
3 (S-CAZ)	18 (S-MO)	*****	0
3 (S-CAZ)	19 (S-NB)	*****	65
3 (S-CAZ)	20 (S-NI)	0.2380	67
3 (S-CAZ)	21 (S-PB)	0.3107	67
3 (S-CAZ)	22 (S-SB)	*****	0
3 (S-CAZ)	23 (S-SC)	0.5730	67
3 (S-CAZ)	24 (S-SN)	*****	1
3 (S-CAZ)	25 (S-SR)	0.4227	67
3 (S-CAZ)	26 (S-V)	0.3141	67
3 (S-CAZ)	27 (S-W)	*****	0
3 (S-CAZ)	28 (S-Y)	0.2356	67
3 (S-CAZ)	29 (S-ZN)	*****	0
3 (S-CAZ)	30 (S-ZR)	-0.1818	65
3 (S-CAZ)	31 (S-TH)	*****	0
3 (S-CAZ)	32 (AA-AS-P)	-0.1925	35
3 (S-CAZ)	33 (AA-ZN-P)	0.1109	67
3 (S-CAZ)	34 (AA-SB-P)	*****	0
4 (S-TIX)	5 (S-MN)	0.2311	67
4 (S-TIX)	6 (S-AG)	*****	0
4 (S-TIX)	7 (S-AS)	*****	0
4 (S-TIX)	8 (S-AU)	*****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
4 (S-TIX )	)	9 (S-B)	-0.0622	67
4 (S-TIX )	)	10 (S-BA)	-0.1231	67
4 (S-TIX )	)	11 (S-BE)	0.0904	67
4 (S-TIX )	)	12 (S-BI)	*****	0
4 (S-TIX )	)	13 (S-CD)	*****	0
4 (S-TIX )	)	14 (S-CO)	0.1924	67
4 (S-TIX )	)	15 (S-CR)	-0.3391	67
4 (S-TIX )	)	16 (S-CU)	0.0081	67
4 (S-TIX )	)	17 (S-LA)	0.4538	67
4 (S-TIX )	)	18 (S-MO)	*****	0
4 (S-TIX )	)	19 (S-NB)	*****	65
4 (S-TIX )	)	20 (S-NI)	-0.2835	67
4 (S-TIX )	)	21 (S-PB)	0.2529	67
4 (S-TIX )	)	22 (S-SB)	*****	0
4 (S-TIX )	)	23 (S-SC)	0.4286	67
4 (S-TIX )	)	24 (S-SH)	*****	1
4 (S-TIX )	)	25 (S-SK)	-0.1715	67
4 (S-TIX )	)	26 (S-V)	0.3315	67
4 (S-TIX )	)	27 (S-W)	*****	0
4 (S-TIX )	)	28 (S-Y)	0.3948	67
4 (S-TIX )	)	29 (S-ZN)	*****	0
4 (S-TIX )	)	30 (S-ZR)	0.4420	65
4 (S-TIX )	)	31 (S-TH)	*****	0
4 (S-TIX )	)	32 (AA-AS-P)	-0.1075	35
4 (S-TIX )	)	33 (AA-ZN-P)	0.3292	67
4 (S-TIX )	)	34 (AA-SB-P)	*****	0
5 (S-MN )	)	6 (S-AG)	*****	0
5 (S-MN )	)	7 (S-AS)	*****	0
5 (S-MN )	)	8 (S-AU)	*****	0
5 (S-MN )	)	9 (S-B)	-0.2661	67
5 (S-MN )	)	10 (S-BA)	-0.0934	67
5 (S-MN )	)	11 (S-BE)	0.0090	67
5 (S-MN )	)	12 (S-BI)	*****	0
5 (S-MN )	)	13 (S-CD)	*****	0
5 (S-MN )	)	14 (S-CO)	0.4166	67
5 (S-MN )	)	15 (S-CR)	0.2508	67
5 (S-MN )	)	16 (S-CU)	-0.0655	67
5 (S-MN )	)	17 (S-LA)	0.2198	67
5 (S-MN )	)	18 (S-MO)	*****	0
5 (S-MN )	)	19 (S-NB)	*****	65
5 (S-MN )	)	20 (S-NI)	0.1484	67
5 (S-MN )	)	21 (S-PB)	0.3778	67
5 (S-MN )	)	22 (S-SB)	*****	0
5 (S-MN )	)	23 (S-SC)	0.4932	67
5 (S-MN )	)	24 (S-SN)	*****	1
5 (S-MN )	)	25 (S-SR)	0.0785	67
5 (S-MN )	)	26 (S-V)	0.5154	67
5 (S-MN )	)	27 (S-W)	*****	0
5 (S-MN )	)	28 (S-Y)	0.1265	67
5 (S-MN )	)	29 (S-ZN)	*****	0

DC101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
5 (S-MN )	)	30 (S-ZR)	0.0652	65
5 (S-MN )	)	31 (S-TH)	*****	0
5 (S-MN )	)	32 (AA-AS-P)	0.1087	35
5 (S-MN )	)	33 (AA-ZN-P)	0.2300	67
5 (S-MN )	)	34 (AA-SH-P)	*****	0
6 (S-AG )	)	7 (S-AS)	*****	0
6 (S-AG )	)	8 (S-AU)	*****	0
6 (S-AG )	)	9 (S-d)	*****	0
6 (S-AG )	)	10 (S-BA)	*****	0
6 (S-AG )	)	11 (S-BE)	*****	0
6 (S-AG )	)	12 (S-BI)	*****	0
6 (S-AG )	)	13 (S-CD)	*****	0
6 (S-AG )	)	14 (S-CO)	*****	0
6 (S-AG )	)	15 (S-CR)	*****	0
6 (S-AG )	)	16 (S-CU)	*****	0
6 (S-AG )	)	17 (S-LA)	*****	0
6 (S-AG )	)	18 (S-HO)	*****	0
6 (S-AG )	)	19 (S-NB)	*****	0
6 (S-AG )	)	20 (S-NI)	*****	0
6 (S-AG )	)	21 (S-Pb)	*****	0
6 (S-AG )	)	22 (S-SB)	*****	0
6 (S-AG )	)	23 (S-SC)	*****	0
6 (S-AG )	)	24 (S-SN)	*****	0
6 (S-AG )	)	25 (S-SR)	*****	0
6 (S-AG )	)	26 (S-V)	*****	0
6 (S-AG )	)	27 (S-w)	*****	0
6 (S-AG )	)	28 (S-Y)	*****	0
6 (S-AG )	)	29 (S-ZN)	*****	0
6 (S-AG )	)	30 (S-ZR)	*****	0
6 (S-AG )	)	31 (S-TH)	*****	0
6 (S-AG )	)	32 (AA-AS-P)	*****	0
6 (S-AG )	)	33 (AA-ZN-P)	*****	0
6 (S-AG )	)	34 (AA-SH-P)	*****	0
7 (S-AS )	)	8 (S-AU)	*****	0
7 (S-AS )	)	9 (S-B)	*****	0
7 (S-AS )	)	10 (S-BA)	*****	0
7 (S-AS )	)	11 (S-BE)	*****	0
7 (S-AS )	)	12 (S-BI)	*****	0
7 (S-AS )	)	13 (S-CD)	*****	0
7 (S-AS )	)	14 (S-CO)	*****	0
7 (S-AS )	)	15 (S-CR)	*****	0
7 (S-AS )	)	16 (S-CU)	*****	0
7 (S-AS )	)	17 (S-LA)	*****	0
7 (S-AS )	)	18 (S-MO)	*****	0
7 (S-AS )	)	19 (S-NB)	*****	0
7 (S-AS )	)	20 (S-NI)	*****	0
7 (S-AS )	)	21 (S-Pb)	*****	0
7 (S-AS )	)	22 (S-SB)	*****	0
7 (S-AS )	)	23 (S-SC)	*****	0
7 (S-AS )	)	24 (S-SN)	*****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
7 (S-AS)	)	25 (S-SR)	*****	0
7 (S-AS)	)	26 (S-V)	*****	0
7 (S-AS)	)	27 (S-W)	*****	0
7 (S-AS)	)	28 (S-Y)	*****	0
7 (S-AS)	)	29 (S-ZN)	*****	0
7 (S-AS)	)	30 (S-ZK)	*****	0
7 (S-AS)	)	31 (S-TH)	*****	0
7 (S-AS)	)	32 (AA-AS-P)	*****	0
7 (S-AS)	)	33 (AA-ZN-P)	*****	0
7 (S-AS)	)	34 (AA-SB-P)	*****	0
8 (S-AU)	)	9 (S-B)	*****	0
8 (S-AU)	)	10 (S-BA)	*****	0
8 (S-AU)	)	11 (S-BE)	*****	0
8 (S-AU)	)	12 (S-BI)	*****	0
8 (S-AU)	)	13 (S-CO)	*****	0
8 (S-AU)	)	14 (S-CO)	*****	0
8 (S-AU)	)	15 (S-CR)	*****	0
8 (S-AU)	)	16 (S-CU)	*****	0
8 (S-AU)	)	17 (S-LA)	*****	0
8 (S-AU)	)	18 (S-MO)	*****	0
8 (S-AU)	)	19 (S-NB)	*****	0
8 (S-AU)	)	20 (S-NI)	*****	0
8 (S-AU)	)	21 (S-PB)	*****	0
8 (S-AU)	)	22 (S-SB)	*****	0
8 (S-AU)	)	23 (S-SC)	*****	0
8 (S-AU)	)	24 (S-SN)	*****	0
8 (S-AU)	)	25 (S-ZK)	*****	0
8 (S-AU)	)	26 (S-V)	*****	0
8 (S-AU)	)	27 (S-W)	*****	0
8 (S-AU)	)	28 (S-Y)	*****	0
8 (S-AU)	)	29 (S-ZN)	*****	0
8 (S-AU)	)	30 (S-ZK)	*****	0
8 (S-AU)	)	31 (S-TH)	*****	0
8 (S-AU)	)	32 (AA-AS-P)	*****	0
8 (S-AU)	)	33 (AA-ZN-P)	*****	0
8 (S-AU)	)	34 (AA-SB-P)	*****	0
9 (S-B)	)	10 (S-BA)	0.5209	67
9 (S-B)	)	11 (S-BE)	0.0001	67
9 (S-B)	)	12 (S-BI)	*****	0
9 (S-B)	)	13 (S-CO)	*****	0
9 (S-B)	)	14 (S-CO)	-0.4199	67
9 (S-B)	)	15 (S-CR)	-0.5053	67
9 (S-B)	)	16 (S-CU)	0.3136	67
9 (S-B)	)	17 (S-LA)	0.3311	67
9 (S-B)	)	18 (S-MO)	*****	0
9 (S-B)	)	19 (S-NB)	*****	65
9 (S-B)	)	20 (S-NI)	-0.2752	67
9 (S-B)	)	21 (S-PB)	-0.0344	67
9 (S-B)	)	22 (S-SB)	*****	0
9 (S-B)	)	23 (S-SC)	-0.3443	67

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
9 (S-B	)	24 (S-SN	) *****	1
9 (S-B	)	25 (S-SR	) 0.1004	67
9 (S-B	)	26 (S-V	) -0.3068	67
9 (S-E	)	27 (S-W	) *****	0
9 (S-B	)	28 (S-Y	) -0.0110	67
9 (S-B	)	29 (S-ZN	) *****	0
9 (S-B	)	30 (S-ZK	) 0.3922	65
9 (S-B	)	31 (S-TH	) *****	0
9 (S-E	)	32 (AA-AS-P	) -0.3080	35
9 (S-B	)	33 (AA-ZN-P	) -0.4341	67
9 (S-B	)	34 (AA-SB-P	) *****	0
10 (S-BA	)	11 (S-DE	) -0.0127	67
10 (S-BA	)	12 (S-BI	) *****	0
10 (S-BA	)	13 (S-CD	) *****	0
10 (S-BA	)	14 (S-CU	) -0.2868	67
10 (S-BA	)	15 (S-CR	) -0.2591	67
10 (S-BA	)	16 (S-CU	) 0.1849	67
10 (S-BA	)	17 (S-LA	) 0.0978	67
10 (S-BA	)	18 (S-ID	) *****	0
10 (S-BA	)	19 (S-NB	) *****	65
10 (S-BA	)	20 (S-NI	) -0.1441	67
10 (S-BA	)	21 (S-PB	) 0.0616	67
10 (S-BA	)	22 (S-SB	) *****	0
10 (S-BA	)	23 (S-SC	) -0.2350	67
10 (S-BA	)	24 (S-SN	) *****	1
10 (S-BA	)	25 (S-SR	) 0.3017	67
10 (S-BA	)	26 (S-V	) -0.2100	67
10 (S-BA	)	27 (S-W	) *****	0
10 (S-BA	)	28 (S-Y	) -0.0604	67
10 (S-BA	)	29 (S-ZN	) *****	0
10 (S-BA	)	30 (S-ZR	) 0.2838	65
10 (S-BA	)	31 (S-TH	) *****	0
10 (S-BA	)	32 (AA-AS-P	) -0.2742	35
10 (S-BA	)	33 (AA-ZN-P	) -0.4055	67
10 (S-BA	)	34 (AA-SB-P	) *****	0
11 (S-BE	)	12 (S-BI	) *****	0
11 (S-BE	)	13 (S-CD	) *****	0
11 (S-BE	)	14 (S-CO	) -0.0031	67
11 (S-BE	)	15 (S-CR	) 0.0042	67
11 (S-BE	)	16 (S-CU	) 0.0139	67
11 (S-BE	)	17 (S-LA	) -0.0147	67
11 (S-BE	)	18 (S-MO	) *****	0
11 (S-BE	)	19 (S-NB	) *****	65
11 (S-BE	)	20 (S-NI	) 0.0411	67
11 (S-BE	)	21 (S-PB	) 0.1913	67
11 (S-BE	)	22 (S-SB	) *****	0
11 (S-BE	)	23 (S-SC	) 0.0054	67
11 (S-BE	)	24 (S-SN	) *****	1
11 (S-BE	)	25 (S-SR	) 0.1551	67
11 (S-BE	)	26 (S-V	) 0.0050	67

58

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
11 (S-BE )	)	27 (S-W)	*****	0
11 (S-EE )	)	28 (S-Y)	-0.0122	67
11 (S-EE )	)	29 (S-ZN)	*****	0
11 (S-EE )	)	30 (S-ZR)	0.1309	65
11 (S-BE )	)	31 (S-TH)	*****	0
11 (S-BE )	)	32 (AA-AS-P)	-0.0934	35
11 (S-EE )	)	33 (AA-ZN-P)	-0.1653	67
11 (S-EE )	)	34 (AA-SB-P)	*****	0
12 (S-BI )	)	13 (S-CO)	*****	0
12 (S-BI )	)	14 (S-CO)	*****	0
12 (S-BI )	)	15 (S-CR)	*****	0
12 (S-BI )	)	16 (S-CU)	*****	0
12 (S-BI )	)	17 (S-LA)	*****	0
12 (S-BI )	)	18 (S-MO)	*****	0
12 (S-BI )	)	19 (S-NB)	*****	0
12 (S-BI )	)	20 (S-NI)	*****	0
12 (S-BI )	)	21 (S-PB)	*****	0
12 (S-BI )	)	22 (S-SU)	*****	0
12 (S-BI )	)	23 (S-SC)	*****	0
12 (S-BI )	)	24 (S-SN)	*****	0
12 (S-BI )	)	25 (S-SR)	*****	0
12 (S-BI )	)	26 (S-V)	*****	0
12 (S-BI )	)	27 (S-W)	*****	0
12 (S-BI )	)	28 (S-Y)	*****	0
12 (S-BI )	)	29 (S-ZN)	*****	0
12 (S-BI )	)	30 (S-ZR)	*****	0
12 (S-BI )	)	31 (S-TH)	*****	0
12 (S-BI )	)	32 (AA-AS-P)	*****	0
12 (S-BI )	)	33 (AA-ZN-P)	*****	0
12 (S-BI )	)	34 (AA-SB-P)	*****	0
13 (S-CO )	)	14 (S-CO)	*****	0
13 (S-CO )	)	15 (S-CR)	*****	0
13 (S-CO )	)	16 (S-CU)	*****	0
13 (S-CO )	)	17 (S-LA)	*****	0
13 (S-CO )	)	18 (S-MO)	*****	0
13 (S-CO )	)	19 (S-NB)	*****	0
13 (S-CO )	)	20 (S-NI)	*****	0
13 (S-CO )	)	21 (S-PB)	*****	0
13 (S-CO )	)	22 (S-SH)	*****	0
13 (S-CO )	)	23 (S-SC)	*****	0
13 (S-CO )	)	24 (S-SN)	*****	0
13 (S-CO )	)	25 (S-SR)	*****	0
13 (S-CO )	)	26 (S-V)	*****	0
13 (S-CO )	)	27 (S-W)	*****	0
13 (S-CO )	)	28 (S-Y)	*****	0
13 (S-CO )	)	29 (S-ZN)	*****	0
13 (S-CO )	)	30 (S-ZR)	*****	0
13 (S-CO )	)	31 (S-TH)	*****	0
13 (S-CO )	)	32 (AA-AS-P)	*****	0
13 (S-CO )	)	33 (AA-ZN-P)	*****	0

	COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
16	13 (S-CO)	)	54 (AA-SB-P)	*****	0
16	14 (S-CO)	)	15 (S-CR)	0.3080	67
16	14 (S-CO)	)	16 (S-CU)	0.0791	67
16	14 (S-CO)	)	17 (S-LA)	0.1485	67
16	14 (S-CO)	)	18 (S-MO)	*****	0
16	14 (S-CO)	)	19 (S-NB)	*****	65
16	14 (S-CO)	)	20 (S-NI)	0.5517	67
16	14 (S-CO)	)	21 (S-PB)	0.1798	67
17	14 (S-CO)	)	22 (S-SB)	*****	0
17	14 (S-CO)	)	23 (S-SC)	0.6623	67
17	14 (S-CO)	)	24 (S-SN)	*****	1
17	14 (S-CO)	)	25 (S-SR)	0.1686	67
17	14 (S-CO)	)	26 (S-V)	0.5649	67
17	14 (S-CO)	)	27 (S-W)	*****	0
17	14 (S-CO)	)	28 (S-Y)	0.2755	67
17	14 (S-CO)	)	29 (S-ZN)	*****	0
17	14 (S-CO)	)	30 (S-ZR)	-0.0759	65
17	14 (S-CO)	)	31 (S-TH)	*****	0
17	14 (S-CO)	)	32 (AA-AS-P)	0.0530	35
17	14 (S-CO)	)	33 (AA-ZN-P)	0.2749	67
17	14 (S-CO)	)	34 (AA-SB-P)	*****	0
17	15 (S-CR)	)	16 (S-CU)	0.1060	67
17	15 (S-CR)	)	17 (S-LA)	-0.2574	67
17	15 (S-CR)	)	18 (S-HO)	*****	0
17	15 (S-CR)	)	19 (S-NB)	*****	65
18	15 (S-CR)	)	20 (S-NI)	0.6282	67
18	15 (S-CR)	)	21 (S-PB)	-0.1310	67
18	15 (S-CR)	)	22 (S-SB)	*****	0
18	15 (S-CR)	)	23 (S-SC)	0.2729	67
18	15 (S-CR)	)	24 (S-SN)	*****	1
18	15 (S-CR)	)	25 (S-SR)	0.1886	67
18	15 (S-CR)	)	26 (S-V)	0.3941	67
18	15 (S-CR)	)	27 (S-W)	*****	0
18	15 (S-CR)	)	28 (S-Y)	-0.1967	67
18	15 (S-CR)	)	29 (S-ZN)	*****	0
18	15 (S-CR)	)	30 (S-ZR)	-0.3465	65
18	15 (S-CR)	)	31 (S-TH)	*****	0
18	15 (S-CR)	)	32 (AA-AS-P)	0.3123	35
18	15 (S-CR)	)	33 (AA-ZN-P)	0.1569	67
18	15 (S-CR)	)	34 (AA-SB-P)	*****	0
18	16 (S-CU)	)	17 (S-LA)	0.0393	67
19	16 (S-CU)	)	18 (S-MO)	*****	0
19	16 (S-CU)	)	19 (S-NB)	*****	65
19	16 (S-CU)	)	20 (S-NI)	0.2562	67
19	16 (S-CU)	)	21 (S-PB)	0.0317	67
19	16 (S-CU)	)	22 (S-SB)	*****	0
19	16 (S-CU)	)	23 (S-SC)	0.1961	67
19	16 (S-CU)	)	24 (S-SN)	*****	1
19	16 (S-CU)	)	25 (S-SR)	0.0835	67
19	16 (S-CU)	)	26 (S-V)	0.0354	67

DO101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

98

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
19 (S-NB )	)	29 (S-ZN)	*****	0
19 (S-NB )	)	30 (S-ZR)	*****	63
19 (S-NB )	)	31 (S-TH)	*****	0
19 (S-NB )	)	32 (AA-AS-P)	*****	34
19 (S-NB )	)	33 (AA-ZN-P)	*****	65
19 (S-NB )	)	34 (AA-SB-P)	*****	0
20 (S-NI )	)	21 (S-PB)	0.0122	67
20 (S-NI )	)	22 (S-Sd)	*****	0
20 (S-NI )	)	23 (S-SC)	0.2525	67
20 (S-NI )	)	24 (S-Sn)	*****	1
20 (S-NI )	)	25 (S-SR)	0.2417	67
20 (S-NI )	)	26 (S-V)	0.2277	67
20 (S-NI )	)	27 (S-W)	*****	0
20 (S-NI )	)	28 (S-Y)	-0.2116	67
20 (S-NI )	)	29 (S-ZN)	*****	0
20 (S-NI )	)	30 (S-ZR)	-0.3913	65
20 (S-NI )	)	31 (S-TH)	*****	0
20 (S-NI )	)	32 (AA-AS-P)	0.1095	35
20 (S-NI )	)	33 (AA-ZN-P)	-0.0098	67
20 (S-NI )	)	34 (AA-SB-P)	*****	0
21 (S-Pd )	)	22 (S-SB)	*****	0
21 (S-PB )	)	23 (S-SC)	0.2648	67
21 (S-PB )	)	24 (S-Sn)	*****	1
21 (S-PB )	)	25 (S-SR)	0.1003	67
21 (S-PB )	)	26 (S-V)	0.2413	67
21 (S-PB )	)	27 (S-W)	*****	0
21 (S-PB )	)	28 (S-Y)	0.1838	67
21 (S-PB )	)	29 (S-ZN)	*****	0
21 (S-PB )	)	30 (S-ZR)	0.2706	65
21 (S-PB )	)	31 (S-TH)	*****	0
21 (S-PB )	)	32 (AA-AS-P)	0.1717	35
21 (S-PB )	)	33 (AA-ZN-P)	0.1537	67
21 (S-PB )	)	34 (AA-SB-P)	*****	0
22 (S-SB )	)	23 (S-SC)	*****	0
22 (S-SB )	)	24 (S-Sn)	*****	0
22 (S-SB )	)	25 (S-SR)	*****	0
22 (S-SB )	)	26 (S-V)	*****	0
22 (S-SB )	)	27 (S-W)	*****	0
22 (S-SB )	)	28 (S-Y)	*****	0
22 (S-SB )	)	29 (S-ZN)	*****	0
22 (S-SB )	)	30 (S-ZR)	*****	0
22 (S-SB )	)	31 (S-TH)	*****	0
22 (S-SB )	)	32 (AA-AS-P)	*****	0
22 (S-SB )	)	33 (AA-ZN-P)	*****	0
22 (S-SB )	)	34 (AA-SB-P)	*****	0
23 (S-SC )	)	24 (S-Sn)	*****	1
23 (S-SC )	)	25 (S-SR)	0.1681	67
23 (S-SC )	)	26 (S-V)	0.6246	67
23 (S-SC )	)	27 (S-W)	*****	0
23 (S-SC )	)	28 (S-Y)	0.4015	67

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
23 (S-SC)	)	29 (S-ZN)	*****	0
23 (S-SC)	)	30 (S-ZR)	0.0769	65
23 (S-SC)	)	31 (S-TH)	*****	0
23 (S-SC)	)	32 (AA-AS-P)	0.1621	35
23 (S-SC)	)	33 (AA-ZN-P)	0.3812	67
23 (S-SC)	)	34 (AA-SB-P)	*****	0
24 (S-SN)	)	25 (S-SR)	*****	1
24 (S-SN)	)	26 (S-V)	*****	1
24 (S-SN)	)	27 (S-W)	*****	0
24 (S-SN)	)	28 (S-Y)	*****	1
24 (S-SN)	)	29 (S-ZN)	*****	0
24 (S-SN)	)	30 (S-ZR)	*****	1
24 (S-SN)	)	31 (S-TH)	*****	0
24 (S-SN)	)	32 (AA-AS-P)	*****	0
24 (S-SN)	)	33 (AA-ZN-P)	*****	1
24 (S-SN)	)	34 (AA-SB-P)	*****	0
25 (S-SR)	)	26 (S-V)	-0.0062	67
25 (S-SR)	)	27 (S-W)	*****	0
25 (S-SR)	)	28 (S-Y)	0.0033	67
25 (S-SR)	)	29 (S-ZN)	*****	0
25 (S-SR)	)	30 (S-ZR)	0.0730	65
25 (S-SR)	)	31 (S-TH)	*****	0
25 (S-SR)	)	32 (AA-AS-P)	-0.1636	35
25 (S-SR)	)	33 (AA-ZN-P)	-0.3217	67
25 (S-SR)	)	34 (AA-SB-P)	*****	0
26 (S-V)	)	27 (S-W)	*****	0
26 (S-V)	)	28 (S-Y)	0.3356	67
26 (S-V)	)	29 (S-ZN)	*****	0
26 (S-V)	)	30 (S-ZR)	0.1061	65
26 (S-V)	)	31 (S-TH)	*****	0
26 (S-V)	)	32 (AA-AS-P)	0.0227	35
26 (S-V)	)	33 (AA-ZN-P)	0.5109	67
26 (S-V)	)	34 (AA-SB-P)	*****	0
27 (S-W)	)	28 (S-Y)	*****	0
27 (S-W)	)	29 (S-ZN)	*****	0
27 (S-W)	)	30 (S-ZR)	*****	0
27 (S-W)	)	31 (S-TH)	*****	0
27 (S-W)	)	32 (AA-AS-P)	*****	0
27 (S-W)	)	33 (AA-ZN-P)	*****	0
27 (S-W)	)	34 (AA-SB-P)	*****	0
28 (S-Y)	)	29 (S-ZN)	*****	0
28 (S-Y)	)	30 (S-ZR)	0.2673	65
28 (S-Y)	)	31 (S-TH)	*****	0
28 (S-Y)	)	32 (AA-AS-P)	-0.0049	35
28 (S-Y)	)	33 (AA-ZN-P)	0.3653	67
28 (S-Y)	)	34 (AA-SB-P)	*****	0
29 (S-ZN)	)	30 (S-ZR)	*****	0
29 (S-ZN)	)	31 (S-TH)	*****	0
29 (S-ZN)	)	32 (AA-AS-P)	*****	0
29 (S-ZN)	)	33 (AA-ZN-P)	*****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
29 (S-ZN )	)	34 (AA-SB-P)	*****	0
30 (S-ZR )	)	31 (S-TH)	*****	0
30 (S-ZR )	)	32 (AA-AS-P)	-0.1558	35
30 (S-ZR )	)	33 (AA-ZN-P)	0.0160	65
30 (S-ZR )	)	34 (AA-SB-P)	*****	0
31 (S-TH )	)	32 (AA-AS-P)	*****	0
31 (S-TH )	)	33 (AA-ZN-P)	*****	0
31 (S-TH )	)	34 (AA-SB-P)	*****	0
32 (AA-AS-P )	)	33 (AA-ZN-P)	0.6339	35
32 (AA-AS-P )	)	34 (AA-SB-P)	*****	0
33 (AA-ZN-P )	)	34 (AA-SB-P)	*****	0

98

DC101 CORRELATION ANALYSIS - USGS STATPAC (61/15/82)

DATE 11/29/84

TITLE so forth concentrates INPUT ID N M ***** OPTIONS ***** OUTPUT ID N M
-sf_conc - 67 36 1 U 1 1 0 0 0 0 0 0 -sf_conc - 34 34

NUMBER OF SELECTED COLUMNS 34

SELECTED COLUMN INDICES

3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32
33	34	35	36						

SELECTED COLUMN IDENTIFIERS

S-FEX	S-MGX	S-CAZ	S-TIX	S-MN	S-AG	S-AS	S-AU	S-B	S-BA
S-BE	S-BI	S-CD	S-CO	S-CR	S-CU	S-LA	S-MG	S-NB	S-NI
S-PB	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZK
S-TH	AA-AS-P	AA-ZN-P	AA-SB-P						

NUMBER OF SELECTED ROW PAIRS 1

SELECTED ROW PAIRS
1- 67

PHASE TWO RESULTS

68
WARNING *** THE RESULTS FROM THIS PHASE "SHOULD NOT" BE ENTERED INTO DUG90-FACTOR ANALYSIS.
THE CORRELATION MATRIX FROM THIS PHASE DOES NOT HAVE THE GRAMIAN PROPERTIES
WHICH ARE REQUIRED FOR FACTOR ANALYSIS.

ARRAY OF MEANS -

	3 S-FEX	4 S-MGX	5 S-CA%	6 S-TIX	7 S-MN	8 S-AG	9 S-AS	10 S-AU	11 S-B	12 S-BA
1 S-FEX	0.1713	0.1713	0.1713	0.1617	0.1744	0.2007	*****	*****	0.1908	0.1669
2 S-MGX	-0.5961	-0.5961	-0.5961	-0.6229	-0.5963	-0.5076	*****	*****	-0.5638	-0.5995
3 S-CA%	0.0660	0.0660	0.0680	0.5966	0.0104	0.6250	*****	*****	0.6184	0.6104
4 S-TIX	-0.1121	-0.1121	-0.1121	-0.1121	-0.1002	-0.0000	*****	*****	-0.1034	-0.1144
5 S-MN	2.3658	2.3858	2.3858	2.3503	2.3858	2.2764	*****	*****	2.3921	2.3874
6 S-AG	1.0264	1.0264	1.0264	1.0264	1.0264	1.0264	*****	*****	0.8691	1.0264
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-B	1.3967	1.3967	1.3967	1.3746	1.3987	1.3010	*****	*****	1.3967	1.3905
10 S-BA	3.0054	3.0054	3.0054	2.9945	2.9967	3.1074	*****	*****	3.0240	3.0054
11 S-EE	0.4044	0.4044	0.4044	0.4069	0.4063	0.3010	*****	*****	0.3889	0.3991
12 S-EI	1.6990	1.6990	1.6990	1.6990	1.6990	*****	*****	*****	1.6990	1.6990
13 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CR	1.6116	1.6116	1.6116	1.5201	1.6116	*****	*****	*****	1.6116	1.6311
16 S-CU	1.3276	1.3276	1.3270	1.3076	1.3270	2.0000	*****	*****	1.2641	1.3098
17 S-LA	1.9522	1.9522	1.9522	1.9200	1.9570	1.6495	*****	*****	1.9606	1.9570
18 S-PO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-NB	1.8451	1.8451	1.8451	1.8401	1.8451	*****	*****	*****	1.8451	1.8451
20 S-NI	1.2153	1.2153	1.2153	1.2122	1.2153	1.2007	*****	*****	1.2144	1.2134
21 S-PB	2.6954	2.6954	2.6954	3.4924	2.6954	4.0000	*****	*****	1.7670	2.8954
22 S-SH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	1.7476	1.7478	1.7476	1.5701	1.7478	*****	*****	*****	1.7339	1.7478
24 S-SN	2.2014	2.2014	2.2014	2.3063	2.2614	*****	*****	*****	2.2574	2.2014
25 S-SR	2.3556	2.3556	2.3556	2.3558	2.3415	2.5000	*****	*****	2.3433	2.3415
26 S-V	1.9546	1.9546	1.9546	1.9086	1.9546	1.6580	*****	*****	1.9722	1.9538
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	2.9364	2.9364	2.9364	2.9023	2.9407	2.6150	*****	*****	2.9767	2.9353
29 S-ZH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 AA-ZN-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

06

ARRAY OF MEANS - CONT.

	13 S-BE	14 S-BI	15 S-CO	16 S-CO	17 S-CR	18 S-CU	19 S-LA	20 S-MO	21 S-NB	22 S-NI
1 S-FEX	0.1713	0.3010	*****	*****	0.1947	0.2077	0.1753	*****	0.3010	0.1939
2 S-MG2	-0.5961	-0.5229	*****	*****	-0.4787	-0.5245	-0.5919	*****	-0.3010	-0.5936
3 S-CA4	0.6066	0.4771	*****	*****	0.6509	0.6371	0.6104	*****	0.6990	0.6243
4 S-TI~	-0.1121	*****	*****	*****	0.0254	-0.0673	-0.1032	*****	0.3010	-0.0795
5 S-KN	2.3858	2.6990	*****	*****	2.4772	2.4045	2.3955	*****	2.6990	2.3780
6 S-AG	1.0264	*****	*****	*****	0.6891	0.8891	*****	*****	1.0264	
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-B	1.3967	1.0990	*****	*****	1.4577	1.4237	1.3987	*****	1.6990	1.4013
10 S-GA	3.0034	2.8451	*****	*****	3.0701	3.0257	3.0100	*****	3.0000	3.0297
11 S-BE	0.4044	0.6990	*****	*****	0.4301	0.3735	0.4103	*****	0.4771	0.4031
12 S-EL	1.6990	1.0990	*****	*****	*****	1.6990	1.0990	*****	*****	1.6990
13 S-CO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CR	1.6110	1.0000	*****	*****	1.6116	1.6782	1.6311	*****	*****	1.6000
16 S-CU	1.3270	1.0000	*****	*****	1.3569	1.3270	1.2841	*****	2.1761	1.3467
17 S-LA	1.9522	2.0000	*****	*****	2.0688	1.9922	1.9522	*****	1.6990	1.9653
18 S-MU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-NB	1.8451	*****	*****	*****	*****	1.8451	1.8451	*****	1.8451	1.8451
20 S-NI	1.2153	1.0000	*****	*****	1.2674	1.2115	1.2024	*****	1.3010	1.2153
21 S-PB	2.6954	1.3010	*****	*****	2.0000	2.3253	2.3693	*****	*****	2.3253
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	1.7478	*****	*****	*****	1.7154	1.7154	1.7478	*****	*****	1.6061
24 S-SN	2.2614	*****	*****	*****	2.2000	2.0162	2.2574	*****	*****	2.2574
25 S-SR	2.3558	*****	*****	*****	2.3579	2.3550	2.3433	*****	*****	2.3433
26 S-V	1.9546	2.3010	*****	*****	2.1117	2.0020	1.9708	*****	2.3010	1.9697
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	2.9364	2.3010	*****	*****	3.0824	2.9087	2.9762	*****	2.8451	2.9664
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 AA-ZN-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 AA-Su-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

1b

ARRAY OF MEANS - CONT.

	23 S-Pd	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
1 S-FEZ	0.1556 *****		0.1375	0.1254	0.1929	0.1744	*****	0.1713	*****	*****
2 S-MGX	-0.4250 *****		-0.5335	-0.7261	-0.5978	-0.5963	*****	-0.5981	*****	*****
3 S-CAZ	0.6102 *****		0.6018	0.5661	0.6415	0.6104	*****	0.6080	*****	*****
4 S-TIX	-0.1003 *****		0.1505	-0.1465	-0.2082	-0.1002	*****	-0.1121	*****	*****
5 S-MN	2.5500 *****		2.6158	2.3351	2.3280	2.3658	*****	2.3858	*****	*****
6 S-AG	1.3010 *****		*****	*****	0.8891	1.0264	*****	1.0264	*****	*****
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-e	1.7477 *****		1.4082	1.3982	1.3669	1.3967	*****	1.3967	*****	*****
10 S-BE	2.9091 *****		2.9749	3.0978	3.1255	2.9967	*****	3.0054	*****	*****
11 S-EE	0.3606 *****		0.5134	0.3552	0.3399	0.4063	*****	0.4044	*****	*****
12 S-dI	1.6990 *****		*****	*****	*****	1.0990	*****	1.0990	*****	*****
13 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CC	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CR	2.0000 *****		1.7993	1.5204	1.5714	1.6116	*****	1.6116	*****	*****
16 S-CU	1.7553 *****		1.5279	1.4606	1.2781	1.3270	*****	1.3270	*****	*****
17 S-LA	2.0440 *****		2.1569	2.0352	2.0121	1.9576	*****	1.9522	*****	*****
18 S-MO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-NB	*****	*****	*****	*****	*****	1.8451	*****	1.8451	*****	*****
20 S-NI	1.1505 *****		1.3010	1.2107	1.2529	1.2153	*****	1.2153	*****	*****
21 S-PB	2.6954 *****		1.6990	1.6990	3.1505	2.0954	*****	2.0954	*****	*****
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	1.8451 *****		1.7478	1.9225	1.3010	1.7478	*****	1.7478	*****	*****
24 S-SF	1.6990 *****		1.6990	2.2614	2.7940	2.2614	*****	2.2614	*****	*****
25 S-SR	2.5000 *****		2.3010	2.3010	2.3558	2.3615	*****	2.3558	*****	*****
26 S-V	2.0044 *****		2.2165	1.9494	1.8697	1.9546	*****	1.9546	*****	*****
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	2.6158 *****		5.3655	2.9472	2.8235	2.9407	*****	2.9364	*****	*****
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 AA-ZN-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

2b

ARRAY OF MEANS - CNT.

	33 S-TH	34 AA-AS-P	35 AA-ZN-P	36 AA-SB-P
1 S-FEX	*****	*****	*****	*****
2 S-MGX	*****	*****	*****	*****
3 S-CAZ	*****	*****	*****	*****
4 S-TIX	*****	*****	*****	*****
5 S-MN	*****	*****	*****	*****
6 S-AG	*****	*****	*****	*****
7 S-AS	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****
9 S-B	*****	*****	*****	*****
10 S-EA	*****	*****	*****	*****
11 S-BE	*****	*****	*****	*****
12 S-OI	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****
14 S-CO	*****	*****	*****	*****
15 S-CR	*****	*****	*****	*****
16 S-CU	*****	*****	*****	*****
17 S-LA	*****	*****	*****	*****
18 S-MO	*****	*****	*****	*****
19 S-NB	*****	*****	*****	*****
20 S-MI	*****	*****	*****	*****
21 S-PB	*****	*****	*****	*****
22 S-SB	*****	*****	*****	*****
23 S-SC	*****	*****	*****	*****
24 S-SN	*****	*****	*****	*****
25 S-SR	*****	*****	*****	*****
26 S-V	*****	*****	*****	*****
27 S-K	*****	*****	*****	*****
28 S-Y	*****	*****	*****	*****
29 S-ZN	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****
33 AA-ZN-P	*****	*****	*****	*****
34 AA-SB-P	*****	*****	*****	*****

Sb

ARRAY OF VARIANCES -

	3 S-FEX	4 S-MGX	5 S-CAZ	6 S-TIX	7 S-MN	8 S-AG	9 S-AS	10 S-AU	11 S-B	12 S-BA
1 S-FEX	0.019	0.019	0.019	0.019	0.019	0.030	*****	*****	0.011	0.019
2 S-MGX	0.052	0.052	0.052	0.046	0.053	0.040	*****	*****	0.032	0.053
3 S-CAZ	0.019	0.019	0.019	0.019	0.019	0.016	*****	*****	0.017	0.019
4 S-TIX	0.087	0.087	0.087	0.067	0.081	0.091	*****	*****	0.096	0.088
5 S-MN	0.042	0.042	0.042	0.032	0.042	0.030	*****	*****	0.042	0.043
6 S-AG	0.226	0.226	0.226	0.226	0.226	0.226	*****	*****	0.339	0.226
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-B	0.026	0.026	0.026	0.023	0.027	0.000	*****	*****	0.026	0.025
10 S-BA	0.071	0.071	0.071	0.070	0.068	0.056	*****	*****	0.064	0.071
11 S-BE	0.068	0.068	0.068	0.074	0.069	0.000	*****	*****	0.057	0.068
12 S-BI	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CR	0.068	0.068	0.068	0.062	0.066	*****	*****	*****	0.068	0.066
16 S-CU	0.192	0.192	0.192	0.206	0.192	2.000	*****	*****	0.121	0.185
17 S-LA	0.077	0.077	0.077	0.071	0.077	0.045	*****	*****	0.080	0.077
18 S-MO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-NB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
20 S-NI	0.027	0.027	0.027	0.028	0.027	0.030	*****	*****	0.028	0.027
21 S-PB	1.747	1.747	1.747	1.072	1.747	*****	*****	*****	0.253	1.747
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	0.001	0.001	0.001	0.099	0.081	*****	*****	*****	0.092	0.081
24 S-SN	0.260	0.260	0.260	0.228	0.260	*****	*****	*****	0.289	0.260
25 S-SR	0.018	0.018	0.018	0.018	0.013	0.079	*****	*****	0.014	0.013
26 S-V	0.054	0.054	0.054	0.041	0.054	0.076	*****	*****	0.054	0.055
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	0.115	0.115	0.115	0.067	0.116	0.290	*****	*****	0.081	0.117
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 AA-ZN-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

hb

00101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

ARRAY OF VARIANCES - CONT.

ARRAY OF VARIANCES - 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
1 S-FE%	0.068 *****		0.036	0.029	0.011	0.019 *****		0.019 *****		
2 S-MG%	0.033 *****		0.027	0.029	0.031	0.053 *****		0.052 *****		
3 S-CA%	0.015 *****		0.016	0.027	0.017	0.019 *****		0.019 *****		
4 S-TI%	0.121 *****		0.036	0.072	0.108	0.081 *****		0.087 *****		
5 S-MN	0.053 *****		0.013	0.025	0.018	0.042 *****		0.042 *****		
6 S-AG	*****	*****	*****	*****	0.339	0.226 *****		0.226 *****		
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****		
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****		
9 S-E	0.007 *****		0.023	0.028	0.025	0.027 *****		0.026 *****		
10 S-EA	0.160 *****		0.126	0.102	0.053	0.068 *****		0.071 *****		
11 S-BE	0.032 *****		0.161	0.016	0.013	0.069 *****		0.068 *****		
12 S-EI	*****	*****	*****	*****	*****	*****	*****	*****		
13 S-CD	*****	*****	*****	*****	*****	*****	*****	*****		
14 S-CO	*****	*****	*****	*****	*****	*****	*****	*****		
15 S-CR	0.006 *****		0.024	0.102	0.075	0.068 *****		0.068 *****		
16 S-CJ	0.321 *****		0.113	0.173	0.265	0.192 *****		0.192 *****		
17 S-LA	0.104 *****		0.102	0.110	0.066	0.077 *****		0.077 *****		
18 S-MO	*****	*****	*****	*****	*****	*****	*****	*****		
19 S-NB	*****	*****	*****	*****	*****	*****	*****	*****		
20 S-NI	0.030 *****		0.000	0.021	0.025	0.027 *****		0.027 *****		
21 S-PB	1.747 *****		*****	*****	1.443	1.747 *****		1.747 *****		
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****		
23 S-SC	*****	*****	0.081	0.012 *****		0.081 *****		0.081 *****		
24 S-SN	*****	*****	0.006	0.200	0.125	0.260 *****		0.260 *****		
25 S-SR	0.079 *****	*****	*****	0.000	0.018	0.013 *****		0.018 *****		
26 S-V	0.077 *****		0.027	0.094	0.045	0.054 *****		0.054 *****		
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****		
28 S-Y	0.367 *****		0.075	0.189	0.061	0.116 *****		0.115 *****		
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****		
30 S-ZR	*****	*****	*****	*****	*****	*****	*****	*****		
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****		
32 AA-AS-P	*****	*****	*****	*****	*****	*****	*****	*****		
33 AA-ZN-F	*****	*****	*****	*****	*****	*****	*****	*****		
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****		

96

ARRAY OF VARIANCES - CONT.

	33 S-TH	34 AA-AS-P	35 AA-ZN-P	36 AA-SB-P
1 S-FEX	*****	*****	*****	*****
2 S-MGX	*****	*****	*****	*****
3 S-CAX	*****	*****	*****	*****
4 S-TIX	*****	*****	*****	*****
5 S-MN	*****	*****	*****	*****
6 S-AG	*****	*****	*****	*****
7 S-AS	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****
9 S-E	*****	*****	*****	*****
10 S-eA	*****	*****	*****	*****
11 S-EE	*****	*****	*****	*****
12 S-BI	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****
14 S-CO	*****	*****	*****	*****
15 S-CR	*****	*****	*****	*****
16 S-CU	*****	*****	*****	*****
17 S-LA	*****	*****	*****	*****
18 S-MO	*****	*****	*****	*****
19 S-NB	*****	*****	*****	*****
20 S-NI	*****	*****	*****	*****
21 S-PB	*****	*****	*****	*****
22 S-SB	*****	*****	*****	*****
23 S-SC	*****	*****	*****	*****
24 S-SW	*****	*****	*****	*****
25 S-SR	*****	*****	*****	*****
26 S-V	*****	*****	*****	*****
27 S-W	*****	*****	*****	*****
28 S-Y	*****	*****	*****	*****
29 S-ZN	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****
33 AA-ZN-P	*****	*****	*****	*****
34 AA-SB-P	*****	*****	*****	*****

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-FEX)	)	2 (S-MGX)	0.4830	56
1 (S-FEX)	)	3 (S-CAZ)	0.2692	56
1 (S-FEX)	)	4 (S-TIX)	0.0009	50
1 (S-FEX)	)	5 (S-MN)	0.0655	55
1 (S-FEX)	)	6 (S-AG)	-0.5000	3
1 (S-FEX)	)	7 (S-AS)	*****	0
1 (S-FEX)	)	8 (S-AU)	*****	0
1 (S-FEX)	)	9 (S-B)	0.3119	50
1 (S-FEX)	)	10 (S-BA)	0.2782	55
1 (S-FEX)	)	11 (S-BE)	0.0396	56
1 (S-FEX)	)	12 (S-BI)	*****	1
1 (S-FEX)	)	13 (S-CD)	*****	0
1 (S-FEX)	)	14 (S-CG)	*****	0
1 (S-FEX)	)	15 (S-CR)	-0.1548	17
1 (S-FEX)	)	16 (S-CU)	0.1744	40
1 (S-FEX)	)	17 (S-LA)	-0.0423	53
1 (S-FEX)	)	18 (S-MO)	*****	0
1 (S-FEX)	)	19 (S-NB)	*****	1
1 (S-FEX)	)	20 (S-NI)	0.1612	46
1 (S-FEX)	)	21 (S-PD)	-0.6105	5
1 (S-FEX)	)	22 (S-SB)	*****	0
1 (S-FEX)	)	23 (S-SC)	0.8337	8
1 (S-FEX)	)	24 (S-SN)	-0.3610	11
1 (S-FEX)	)	25 (S-SR)	0.0851	25
1 (S-FEX)	)	26 (S-V)	0.1704	55
1 (S-FEX)	)	27 (S-W)	*****	0
1 (S-FEX)	)	28 (S-Y)	0.1825	56
1 (S-FEX)	)	29 (S-ZN)	*****	0
1 (S-FEX)	)	30 (S-ZR)	*****	0
1 (S-FEX)	)	31 (S-TH)	*****	0
1 (S-FEX)	)	32 (AA-AS- <u>P</u>)	*****	0
1 (S-FEX)	)	33 (AA-ZN- <u>P</u>)	*****	0
1 (S-FEX)	)	34 (AA-SB- <u>P</u>)	*****	0
2 (S-MGX)	)	3 (S-CAZ)	0.5267	56
2 (S-MGX)	)	4 (S-TIX)	0.2549	50
2 (S-MGX)	)	5 (S-MN)	0.4801	55
2 (S-MGX)	)	6 (S-AG)	0.0662	3
2 (S-MGX)	)	7 (S-AS)	*****	0
2 (S-MGX)	)	8 (S-AU)	*****	0
2 (S-MGX)	)	9 (S-B)	0.6763	50
2 (S-MGX)	)	10 (S-BA)	0.1118	55
2 (S-MGX)	)	11 (S-BE)	-0.1562	56
2 (S-MGX)	)	12 (S-BI)	*****	1
2 (S-MGX)	)	13 (S-CD)	*****	0
2 (S-MGX)	)	14 (S-CG)	*****	0
2 (S-MGX)	)	15 (S-CR)	0.6527	17
2 (S-MGX)	)	16 (S-CU)	0.2847	40
2 (S-MGX)	)	17 (S-LA)	0.1090	53
2 (S-MGX)	)	18 (S-MO)	*****	0
2 (S-MGX)	)	19 (S-NB)	*****	1

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
2 (S-MG _X)	)	20 (S-NI)	) 0.0722	46
2 (S-MG _X)	)	21 (S-P _d)	) -0.2928	5
2 (S-MG _X)	)	22 (S-SB)	) *****	0
2 (S-MG _X)	)	23 (S-SC)	) -0.1083	8
2 (S-MG _X)	)	24 (S-SN)	) -0.2722	11
2 (S-MG _X)	)	25 (S-SR)	) 0.2138	25
2 (S-MG _X)	)	26 (S-V)	) 0.4399	55
2 (S-MG _X)	)	27 (S-W)	) *****	0
2 (S-MG _X)	)	28 (S-Y)	) 0.0923	56
2 (S-MG _X)	)	29 (S-ZN)	) *****	0
2 (S-MG _X)	)	30 (S-ZR)	) *****	0
2 (S-MG _X)	)	31 (S-TH)	) *****	0
2 (S-MG _X)	)	32 (AA-AS-P)	) *****	0
2 (S-MG _X)	)	33 (AA-ZN-P)	) *****	0
2 (S-MG _X)	)	34 (AA-SB-P)	) *****	0
3 (S-CA _X)	)	4 (S-T1%)	) 0.0969	50
3 (S-CA _X)	)	5 (S-MN)	) 0.2708	55
3 (S-CA _X)	)	6 (S-AG)	) -0.5000	3
3 (S-CA _X)	)	7 (S-AS)	) *****	0
3 (S-CA _X)	)	8 (S-AU)	) *****	0
3 (S-CA _X)	)	9 (S-B)	) 0.1330	50
3 (S-CA _X)	)	10 (S-DA)	) 0.1277	55
3 (S-CA _X)	)	11 (S-BE)	) -0.3469	56
3 (S-CA _X)	)	12 (S-dI)	) *****	1
3 (S-CA _X)	)	13 (S-CD)	) *****	0
3 (S-CA _X)	)	14 (S-CO)	) *****	0
3 (S-CA _X)	)	15 (S-CR)	) 0.5397	17
3 (S-CA _X)	)	16 (S-CU)	) 0.0933	40
3 (S-CA _X)	)	17 (S-LA)	) 0.4606	53
3 (S-CA _X)	)	18 (S-MO)	) *****	0
3 (S-CA _X)	)	19 (S-NB)	) *****	1
3 (S-CA _X)	)	20 (S-NI)	) 0.2461	46
3 (S-CA _X)	)	21 (S-PB)	) -0.0298	5
3 (S-CA _X)	)	22 (S-S _d)	) *****	0
3 (S-CA _X)	)	23 (S-SC)	) -0.4379	8
3 (S-CA _X)	)	24 (S-SN)	) -0.2838	11
3 (S-CA _X)	)	25 (S-SR)	) -0.2317	25
3 (S-CA _X)	)	26 (S-V)	) 0.2344	55
3 (S-CA _X)	)	27 (S-W)	) *****	0
3 (S-CA _X)	)	28 (S-Y)	) 0.1632	56
3 (S-CA _X)	)	29 (S-ZN)	) *****	0
3 (S-CA _X)	)	30 (S-ZR)	) *****	0
3 (S-CA _X)	)	31 (S-TH)	) *****	0
3 (S-CA _X)	)	32 (AA-AS-P)	) *****	0
3 (S-CA _X)	)	33 (AA-ZN-P)	) *****	0
3 (S-CA _X)	)	34 (AA-SB-P)	) *****	0
4 (S-TIX)	)	5 (S-MN)	) 0.5490	49
4 (S-TIX)	)	6 (S-AG)	) -0.8660	3
4 (S-TIX)	)	7 (S-AS)	) *****	0
4 (S-TIX)	)	8 (S-AU)	) *****	0

bbb

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
4 (S-TIX )	)	9 (S-B )	) 0.3445	44
4 (S-TIX )	)	10 (S-BA )	) -0.3831	49
4 (S-TIX )	)	11 (S-BE )	) 0.1656	50
4 (S-TIX )	)	12 (S-BI )	) *****	0
4 (S-TIX )	)	13 (S-CD )	) *****	0
4 (S-TIX )	)	14 (S-CO )	) *****	0
4 (S-TIX )	)	15 (S-CR )	) 0.6193	12
4 (S-TIX )	)	16 (S-CU )	) 0.1747	34
4 (S-TIX )	)	17 (S-LA )	) -0.2576	47
4 (S-TIX )	)	18 (S-M0 )	) *****	0
4 (S-TIX )	)	19 (S-NB )	) *****	1
4 (S-TIX )	)	20 (S-NI )	) -0.3132	41
4 (S-TIX )	)	21 (S-PB )	) -0.9964	3
4 (S-TIX )	)	22 (S-SB )	) *****	0
4 (S-TIX )	)	23 (S-SC )	) -1.0000	4
4 (S-TIX )	)	24 (S-SN )	) -0.3710	9
4 (S-TIX )	)	25 (S-SR )	) -0.1325	25
4 (S-TIX )	)	26 (S-V )	) 0.8455	49
4 (S-TIX )	)	27 (S-W )	) *****	0
4 (S-TIX )	)	28 (S-Y )	) 0.3848	50
4 (S-TIX )	)	29 (S-ZN )	) *****	0
4 (S-TIX )	)	30 (S-ZR )	) *****	0
4 (S-TIX )	)	31 (S-TH )	) *****	0
4 (S-TIX )	)	32 (AA-AS-P )	) *****	0
4 (S-TIX )	)	33 (AA-ZN-P )	) *****	0
4 (S-TIX )	)	34 (AA-SB-P )	) *****	0
5 (S-MN )	)	6 (S-AG )	) -1.0000	3
5 (S-MN )	)	7 (S-AS )	) *****	0
5 (S-MN )	)	8 (S-AU )	) *****	0
5 (S-MN )	)	9 (S-B )	) 0.5866	49
5 (S-MN )	)	10 (S-BA )	) -0.1303	54
5 (S-MN )	)	11 (S-BE )	) 0.1597	55
5 (S-MN )	)	12 (S-BI )	) *****	1
5 (S-MN )	)	13 (S-CD )	) *****	0
5 (S-MN )	)	14 (S-CO )	) *****	0
5 (S-MN )	)	15 (S-CR )	) 0.7010	17
5 (S-MN )	)	16 (S-CU )	) 0.0052	40
5 (S-MN )	)	17 (S-LA )	) 0.1544	52
5 (S-MN )	)	18 (S-M0 )	) *****	0
5 (S-MN )	)	19 (S-NB )	) *****	1
5 (S-MN )	)	20 (S-NI )	) -0.0388	46
5 (S-MN )	)	21 (S-PB )	) -0.8310	5
5 (S-MN )	)	22 (S-SB )	) *****	0
5 (S-MN )	)	23 (S-SC )	) -0.0560	8
5 (S-MN )	)	24 (S-SN )	) -0.4065	11
5 (S-MN )	)	25 (S-SR )	) -0.2102	24
5 (S-MN )	)	26 (S-V )	) 0.6633	55
5 (S-MN )	)	27 (S-W )	) *****	0
5 (S-MN )	)	28 (S-Y )	) 0.2801	55
5 (S-MN )	)	29 (S-ZN )	) *****	0

160

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
5 (S-MN )	)	30 (S-ZR)	*****	0
5 (S-MN )	)	31 (S-TH)	*****	0
5 (S-MN )	)	32 (AA-AS-P)	*****	0
5 (S-MN )	)	33 (AA-ZN-P)	*****	0
5 (S-MN )	)	34 (AA-SB-P)	*****	0
6 (S-AG )	)	7 (S-AS)	*****	0
6 (S-AG )	)	8 (S-AU)	*****	0
6 (S-AG )	)	9 (S-B)	*****	2
6 (S-AG )	)	10 (S-BA)	-0.2525	3
6 (S-AG )	)	11 (S-BE)	*****	3
6 (S-AG )	)	12 (S-BI)	*****	0
6 (S-AG )	)	13 (S-CD)	*****	0
6 (S-AG )	)	14 (S-CO)	*****	0
6 (S-AG )	)	15 (S-CR)	*****	0
6 (S-AG )	)	16 (S-CU)	1.0000	2
6 (S-AG )	)	17 (S-LA)	-1.0000	2
6 (S-AG )	)	18 (S-MO)	*****	0
6 (S-AG )	)	19 (S-NB)	*****	0
6 (S-AG )	)	20 (S-NI)	-0.5000	3
6 (S-AG )	)	21 (S-PB)	*****	1
6 (S-AG )	)	22 (S-SB)	*****	0
6 (S-AG )	)	23 (S-SC)	*****	0
6 (S-AG )	)	24 (S-SN)	*****	0
6 (S-AG )	)	25 (S-SR)	1.0000	2
6 (S-AG )	)	26 (S-V)	-1.0000	3
6 (S-AG )	)	27 (S-W)	*****	0
6 (S-AG )	)	28 (S-Y)	-0.6194	3
6 (S-AG )	)	29 (S-ZN)	*****	0
6 (S-AG )	)	30 (S-ZR)	*****	0
6 (S-AG )	)	31 (S-TH)	*****	0
6 (S-AG )	)	32 (AA-AS-P)	*****	0
6 (S-AG )	)	33 (AA-ZN-P)	*****	0
6 (S-AG )	)	34 (AA-SB-P)	*****	0
7 (S-AS )	)	8 (S-AU)	*****	0
7 (S-AS )	)	9 (S-B)	*****	0
7 (S-AS )	)	10 (S-BA)	*****	0
7 (S-AS )	)	11 (S-BE)	*****	0
7 (S-AS )	)	12 (S-BI)	*****	0
7 (S-AS )	)	13 (S-CD)	*****	0
7 (S-AS )	)	14 (S-CO)	*****	0
7 (S-AS )	)	15 (S-CR)	*****	0
7 (S-AS )	)	16 (S-CU)	*****	0
7 (S-AS )	)	17 (S-LA)	*****	0
7 (S-AS )	)	18 (S-MO)	*****	0
7 (S-AS )	)	19 (S-NB)	*****	0
7 (S-AS )	)	20 (S-NI)	*****	0
7 (S-AS )	)	21 (S-PB)	*****	0
7 (S-AS )	)	22 (S-SB)	*****	0
7 (S-AS )	)	23 (S-SC)	*****	0
7 (S-AS )	)	24 (S-SN)	*****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
7 (S-AS)	)	25 (S-SR)	*****	0
7 (S-AS)	)	26 (S-V)	*****	0
7 (S-AS)	)	27 (S-W)	*****	0
7 (S-AS)	)	28 (S-Y)	*****	0
7 (S-AS)	)	29 (S-ZN)	*****	0
7 (S-AS)	)	30 (S-ZR)	*****	0
7 (S-AS)	)	31 (S-TH)	*****	0
7 (S-AS)	)	32 (AA-AS-P)	*****	0
7 (S-AS)	)	33 (AA-ZN-P)	*****	0
7 (S-AS)	)	34 (AA-SB-P)	*****	0
8 (S-AU)	)	9 (S-B)	*****	0
8 (S-AU)	)	10 (S-BA)	*****	0
8 (S-AU)	)	11 (S-BE)	*****	0
8 (S-AU)	)	12 (S-BI)	*****	0
8 (S-AU)	)	13 (S-CD)	*****	0
8 (S-AU)	)	14 (S-CO)	*****	0
8 (S-AU)	)	15 (S-CR)	*****	0
8 (S-AU)	)	16 (S-CU)	*****	0
8 (S-AU)	)	17 (S-LA)	*****	0
8 (S-AU)	)	18 (S-MO)	*****	0
8 (S-AU)	)	19 (S-NB)	*****	0
8 (S-AU)	)	20 (S-NI)	*****	0
8 (S-AU)	)	21 (S-PB)	*****	0
8 (S-AU)	)	22 (S-SB)	*****	0
8 (S-AU)	)	23 (S-SC)	*****	0
8 (S-AU)	)	24 (S-SN)	*****	0
8 (S-AU)	)	25 (S-SR)	*****	0
8 (S-AU)	)	26 (S-V)	*****	0
8 (S-AU)	)	27 (S-W)	*****	0
8 (S-AU)	)	28 (S-Y)	*****	0
8 (S-AU)	)	29 (S-ZN)	*****	0
8 (S-AU)	)	30 (S-ZR)	*****	0
8 (S-AU)	)	31 (S-TH)	*****	0
8 (S-AU)	)	32 (AA-AS-P)	*****	0
8 (S-AU)	)	33 (AA-ZN-P)	*****	0
8 (S-AU)	)	34 (AA-SB-P)	*****	0
9 (S-E)	)	10 (S-BA)	-0.0553	49
9 (S-B)	)	11 (S-BE)	0.0192	50
9 (S-B)	)	12 (S-BI)	*****	1
9 (S-B)	)	13 (S-CD)	*****	0
9 (S-B)	)	14 (S-CO)	*****	0
9 (S-B)	)	15 (S-CR)	0.5054	17
9 (S-B)	)	16 (S-CU)	0.3942	39
9 (S-B)	)	17 (S-LA)	-0.1390	49
9 (S-B)	)	18 (S-MO)	*****	0
9 (S-B)	)	19 (S-NB)	*****	1
9 (S-B)	)	20 (S-NI)	-0.2904	42
9 (S-B)	)	21 (S-PB)	0.9186	3
9 (S-B)	)	22 (S-SB)	*****	0
9 (S-B)	)	23 (S-SC)	0.3976	7

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
9 (S-B)	)	24 (S-SN)	-0.5215	10
9 (S-B)	)	25 (S-SR)	0.2309	23
9 (S-B)	)	26 (S-V)	0.4246	49
9 (S-B)	)	27 (S-W)	*****	0
9 (S-B)	)	28 (S-Y)	-0.0193	50
9 (S-B)	)	29 (S-ZN)	*****	0
9 (S-B)	)	30 (S-ZR)	*****	0
9 (S-B)	)	31 (S-TH)	*****	0
9 (S-B)	)	32 (AA-AS-P)	*****	0
9 (S-B)	)	33 (AA-ZN-P)	*****	0
9 (S-B)	)	34 (AA-SB-P)	*****	0
10 (S-BA)	)	11 (S-BE)	-0.1866	55
10 (S-BA)	)	12 (S-BI)	*****	1
10 (S-BA)	)	13 (S-CO)	*****	0
10 (S-BA)	)	14 (S-CO)	*****	0
10 (S-BA)	)	15 (S-CR)	-0.0542	16
10 (S-BA)	)	16 (S-CU)	0.0978	39
10 (S-BA)	)	17 (S-LA)	0.1356	52
10 (S-BA)	)	18 (S-MO)	*****	0
10 (S-BA)	)	19 (S-NB)	*****	1
10 (S-BA)	)	20 (S-NI)	0.2294	45
10 (S-BA)	)	21 (S-PB)	-0.2744	5
10 (S-BA)	)	22 (S-SB)	*****	0
10 (S-BA)	)	23 (S-SC)	-0.0937	8
10 (S-BA)	)	24 (S-SN)	-0.0469	11
10 (S-BA)	)	25 (S-SR)	0.3920	24
10 (S-BA)	)	26 (S-V)	-0.1318	54
10 (S-BA)	)	27 (S-W)	*****	0
10 (S-BA)	)	28 (S-Y)	-0.0915	55
10 (S-BA)	)	29 (S-ZN)	*****	0
10 (S-BA)	)	30 (S-ZR)	*****	0
10 (S-BA)	)	31 (S-TH)	*****	0
10 (S-BA)	)	32 (AA-AS-P)	*****	0
10 (S-BA)	)	33 (AA-ZN-P)	*****	0
10 (S-BA)	)	34 (AA-SB-P)	*****	0
11 (S-BE)	)	12 (S-BI)	*****	1
11 (S-BE)	)	13 (S-CO)	*****	0
11 (S-BE)	)	14 (S-CO)	*****	0
11 (S-BE)	)	15 (S-CR)	-0.4624	17
11 (S-BE)	)	16 (S-CU)	0.0705	40
11 (S-BE)	)	17 (S-LA)	-0.2402	53
11 (S-BE)	)	18 (S-MG)	*****	0
11 (S-BE)	)	19 (S-NB)	*****	1
11 (S-BE)	)	20 (S-NI)	-0.0587	46
11 (S-BE)	)	21 (S-PB)	-0.5898	5
11 (S-BE)	)	22 (S-SB)	*****	0
11 (S-BE)	)	23 (S-SC)	0.2072	8
11 (S-BE)	)	24 (S-SN)	0.5712	11
11 (S-BE)	)	25 (S-SR)	0.2875	25
11 (S-BE)	)	26 (S-V)	0.1037	55

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
11 (S-BE)	)	27 (S-W)	*****	0
11 (S-BE)	)	28 (S-Y)	0.2330	56
11 (S-BE)	)	29 (S-ZN)	*****	0
11 (S-BE)	)	30 (S-ZR)	*****	0
11 (S-BE)	)	31 (S-TH)	*****	0
11 (S-BE)	)	32 (AA-AS-P)	*****	0
11 (S-BE)	)	33 (AA-ZN-P)	*****	0
11 (S-BE)	)	34 (AA-SB-P)	*****	0
12 (S-EI)	)	13 (S-CD)	*****	0
12 (S-BI)	)	14 (S-CO)	*****	0
12 (S-BI)	)	15 (S-CR)	*****	0
12 (S-BI)	)	16 (S-CU)	*****	1
12 (S-EI)	)	17 (S-LA)	*****	1
12 (S-BI)	)	18 (S-MO)	*****	0
12 (S-EI)	)	19 (S-NB)	*****	0
12 (S-BI)	)	20 (S-NI)	*****	1
12 (S-BI)	)	21 (S-PB)	*****	1
12 (S-BI)	)	22 (S-SB)	*****	0
12 (S-BI)	)	23 (S-SC)	*****	0
12 (S-EI)	)	24 (S-SN)	*****	0
12 (S-BI)	)	25 (S-SR)	*****	0
12 (S-BI)	)	26 (S-V)	*****	1
12 (S-EI)	)	27 (S-W)	*****	0
12 (S-BI)	)	28 (S-Y)	*****	1
12 (S-BI)	)	29 (S-ZN)	*****	0
12 (S-BI)	)	30 (S-ZR)	*****	0
12 (S-BI)	)	31 (S-TH)	*****	0
12 (S-BI)	)	32 (AA-AS-P)	*****	0
12 (S-BI)	)	33 (AA-ZN-P)	*****	0
12 (S-BI)	)	34 (AA-SB-P)	*****	0
13 (S-CD)	)	14 (S-CO)	*****	0
13 (S-CD)	)	15 (S-CR)	*****	0
13 (S-CD)	)	16 (S-CU)	*****	0
13 (S-CD)	)	17 (S-LA)	*****	0
13 (S-CD)	)	18 (S-MO)	*****	0
13 (S-CD)	)	19 (S-NB)	*****	0
13 (S-CD)	)	20 (S-NI)	*****	0
13 (S-CD)	)	21 (S-PB)	*****	0
13 (S-CD)	)	22 (S-SB)	*****	0
13 (S-CD)	)	23 (S-SC)	*****	0
13 (S-CD)	)	24 (S-SN)	*****	0
13 (S-CD)	)	25 (S-SR)	*****	0
13 (S-CD)	)	26 (S-V)	*****	0
13 (S-CD)	)	27 (S-W)	*****	0
13 (S-CD)	)	28 (S-Y)	*****	0
13 (S-CD)	)	29 (S-ZN)	*****	0
13 (S-CD)	)	30 (S-ZR)	*****	0
13 (S-CD)	)	31 (S-TH)	*****	0
13 (S-CD)	)	32 (AA-AS-P)	*****	0
13 (S-CD)	)	33 (AA-ZN-P)	*****	0

501

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
13 (S-CO )	)	34 (AA-SB-P)	*****	0
14 (S-CO )	)	15 (S-LR)	*****	0
14 (S-CO )	)	16 (S-CU)	*****	0
14 (S-CO )	)	17 (S-LA)	*****	0
14 (S-CO )	)	18 (S-MO)	*****	0
14 (S-CO )	)	19 (S-NB)	*****	0
14 (S-CO )	)	20 (S-NI)	*****	0
14 (S-CO )	)	21 (S-PB)	*****	0
14 (S-CO )	)	22 (S-SB)	*****	0
14 (S-CO )	)	23 (S-SC)	*****	0
14 (S-CO )	)	24 (S-SN)	*****	0
14 (S-CO )	)	25 (S-SR)	*****	0
14 (S-CO )	)	26 (S-V)	*****	0
14 (S-CO )	)	27 (S-W)	*****	0
14 (S-CO )	)	28 (S-Y)	*****	0
14 (S-CO )	)	29 (S-ZN)	*****	0
14 (S-CO )	)	30 (S-ZR)	*****	0
14 (S-CO )	)	31 (S-TH)	*****	0
14 (S-CO )	)	32 (AA-AS-P)	*****	0
14 (S-CO )	)	33 (AA-ZN-P)	*****	0
14 (S-CO )	)	34 (AA-SB-P)	*****	0
15 (S-CR )	)	16 (S-CU)	-0.0145	14
15 (S-CR )	)	17 (S-LA)	0.3890	16
15 (S-CR )	)	18 (S-MO)	*****	0
15 (S-CR )	)	19 (S-NB)	*****	0
15 (S-CR )	)	20 (S-NI)	-0.2688	15
15 (S-CR )	)	21 (S-PB)	*****	2
15 (S-CR )	)	22 (S-SB)	*****	0
15 (S-CR )	)	23 (S-SC)	0.3060	6
15 (S-CR )	)	24 (S-SN)	-0.6491	5
15 (S-CR )	)	25 (S-SR)	-0.4345	7
15 (S-CR )	)	26 (S-V)	0.6953	17
15 (S-CR )	)	27 (S-W)	*****	0
15 (S-CR )	)	28 (S-Y)	0.3993	17
15 (S-CR )	)	29 (S-ZN)	*****	0
15 (S-CR )	)	30 (S-ZR)	*****	0
15 (S-CR )	)	31 (S-TH)	*****	0
15 (S-CR )	)	32 (AA-AS-P)	*****	0
15 (S-CR )	)	33 (AA-ZN-P)	*****	0
15 (S-CR )	)	34 (AA-SB-P)	*****	0
16 (S-CU )	)	17 (S-LA)	-0.1715	39
16 (S-CU )	)	18 (S-MO)	*****	0
16 (S-CU )	)	19 (S-NB)	*****	1
16 (S-CU )	)	20 (S-NI)	0.1194	35
16 (S-CU )	)	21 (S-PB)	0.8706	4
16 (S-CU )	)	22 (S-SB)	*****	0
16 (S-CU )	)	23 (S-SC)	0.4272	6
16 (S-CU )	)	24 (S-SN)	-0.6853	6
16 (S-CU )	)	25 (S-SR)	0.8005	18
16 (S-CU )	)	26 (S-V)	0.1506	40

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
16 (S-CU )	)	27 (S-W)	*****	0
16 (S-CU )	)	28 (S-Y)	-0.1033	40
16 (S-CU )	)	29 (S-ZN)	*****	0
16 (S-CU )	)	30 (S-ZR)	*****	0
16 (S-CU )	)	31 (S-TH)	*****	0
16 (S-CU )	)	32 (AA-AS-P)	*****	0
16 (S-CU )	)	33 (AA-ZN-P)	*****	0
16 (S-CU )	)	34 (AA-SB-P)	*****	0
17 (S-LA )	)	18 (S-MO)	*****	0
17 (S-LA )	)	19 (S-NB)	*****	1
17 (S-LA )	)	20 (S-NI)	0.5451	44
17 (S-LA )	)	21 (S-PB)	-0.2436	4
17 (S-LA )	)	22 (S-SB)	*****	0
17 (S-LA )	)	23 (S-SC)	-0.0698	8
17 (S-LA )	)	24 (S-SN)	-0.1261	10
17 (S-LA )	)	25 (S-SR)	-0.4563	23
17 (S-LA )	)	26 (S-V)	0.0794	52
17 (S-LA )	)	27 (S-W)	*****	0
17 (S-LA )	)	28 (S-Y)	0.1731	53
17 (S-LA )	)	29 (S-ZN)	*****	0
17 (S-LA )	)	30 (S-ZR)	*****	0
17 (S-LA )	)	31 (S-TH)	*****	0
17 (S-LA )	)	32 (AA-AS-P)	*****	0
17 (S-LA )	)	33 (AA-ZN-P)	*****	0
17 (S-LA )	)	34 (AA-SB-P)	*****	0
18 (S-MO )	)	19 (S-NB)	*****	0
18 (S-MO )	)	20 (S-NI)	*****	0
18 (S-MO )	)	21 (S-PB)	*****	0
18 (S-MO )	)	22 (S-SB)	*****	0
18 (S-MO )	)	23 (S-SC)	*****	0
18 (S-MO )	)	24 (S-SN)	*****	0
18 (S-MO )	)	25 (S-SR)	*****	0
18 (S-MO )	)	26 (S-V)	*****	0
18 (S-MO )	)	27 (S-W)	*****	0
18 (S-MO )	)	28 (S-Y)	*****	0
18 (S-MO )	)	29 (S-ZN)	*****	0
18 (S-MO )	)	30 (S-ZK)	*****	0
18 (S-MO )	)	31 (S-TH)	*****	0
18 (S-MO )	)	32 (AA-AS-P)	*****	0
18 (S-MO )	)	33 (AA-ZN-P)	*****	0
18 (S-MO )	)	34 (AA-SB-P)	*****	0
19 (S-NB )	)	20 (S-NI)	*****	1
19 (S-NB )	)	21 (S-PB)	*****	0
19 (S-NB )	)	22 (S-SB)	*****	0
19 (S-NB )	)	23 (S-SC)	*****	0
19 (S-NB )	)	24 (S-SN)	*****	0
19 (S-NB )	)	25 (S-SR)	*****	0
19 (S-NB )	)	26 (S-V)	*****	1
19 (S-NB )	)	27 (S-W)	*****	0
19 (S-NB )	)	28 (S-Y)	*****	1

1001

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
19 (S-NB	)	29 (S-ZN)	*****
19 (S-NB	)	30 (S-ZR)	*****
19 (S-NB	)	31 (S-TH)	*****
19 (S-NB	)	32 (AA-AS-P)	*****
19 (S-NB	)	33 (AA-ZN-P)	*****
19 (S-NB	)	34 (AA-SB-P)	*****
20 (S-NI	)	21 (S-PB	)	0.5086
20 (S-NI	)	22 (S-SB)	*****
20 (S-NI	)	23 (S-SC)	*****
20 (S-NI	)	24 (S-SN	)	-0.0975
20 (S-NI	)	25 (S-SR	)	0.1131
20 (S-NI	)	26 (S-V	)	-0.0175
20 (S-NI	)	27 (S-W)	*****
20 (S-NI	)	28 (S-Y	)	-0.0308
20 (S-NI	)	29 (S-ZN)	*****
20 (S-NI	)	30 (S-ZR)	*****
20 (S-NI	)	31 (S-TH)	*****
20 (S-NI	)	32 (AA-AS-P)	*****
20 (S-NI	)	33 (AA-ZN-P)	*****
20 (S-NI	)	34 (AA-SB-P)	*****
21 (S-PB	)	22 (S-SB)	*****
21 (S-PB	)	23 (S-SC)	*****
21 (S-PB	)	24 (S-SN)	*****
21 (S-PB	)	25 (S-SR	)	1.0000
21 (S-PB	)	26 (S-V	)	-0.9650
21 (S-PB	)	27 (S-W)	*****
21 (S-PB	)	28 (S-Y	)	-0.5748
21 (S-PB	)	29 (S-ZN)	*****
21 (S-PB	)	30 (S-ZR)	*****
21 (S-PB	)	31 (S-TH)	*****
21 (S-PB	)	32 (AA-AS-P)	*****
21 (S-PB	)	33 (AA-ZN-P)	*****
21 (S-PB	)	34 (AA-SB-P)	*****
22 (S-SB	)	23 (S-SC)	*****
22 (S-SB	)	24 (S-SN)	*****
22 (S-SB	)	25 (S-SR)	*****
22 (S-SB	)	26 (S-V)	*****
22 (S-SB	)	27 (S-W)	*****
22 (S-SB	)	28 (S-Y)	*****
22 (S-SB	)	29 (S-ZN)	*****
22 (S-SB	)	30 (S-ZR)	*****
22 (S-SB	)	31 (S-TH)	*****
22 (S-SB	)	32 (AA-AS-P)	*****
22 (S-SB	)	33 (AA-ZN-P)	*****
22 (S-SB	)	34 (AA-SB-P)	*****
23 (S-SC	)	24 (S-SN)	*****
23 (S-SC	)	25 (S-SR)	*****
23 (S-SC	)	26 (S-V	)	0.3006
23 (S-SC	)	27 (S-W)	*****
23 (S-SC	)	28 (S-Y	)	0.7765

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
23 (S-SC )	)	29 (S-ZN)	*****	0
23 (S-SC )	)	30 (S-ZR)	*****	0
23 (S-SC )	)	31 (S-TH)	*****	0
23 (S-SC )	)	32 (AA-AS-P)	*****	0
23 (S-SC )	)	33 (AA-ZN-P)	*****	0
23 (S-SC )	)	34 (AA-SB-P)	*****	0
24 (S-SN )	)	25 (S-SR)	*****	4
24 (S-SN )	)	26 (S-V)	-0.4856	11
24 (S-SN )	)	27 (S-W)	*****	0
24 (S-SH )	)	28 (S-Y)	-0.3827	11
24 (S-SN )	)	29 (S-ZN)	*****	0
24 (S-SN )	)	30 (S-ZR)	*****	0
24 (S-SN )	)	31 (S-TH)	*****	0
24 (S-SN )	)	32 (AA-AS-P)	*****	0
24 (S-SN )	)	33 (AA-ZN-P)	*****	0
24 (S-SN )	)	34 (AA-SB-P)	*****	0
25 (S-SR )	)	26 (S-V)	-0.6359	24
25 (S-SR )	)	27 (S-W)	*****	0
25 (S-SR )	)	28 (S-Y)	-0.4157	25
25 (S-SR )	)	29 (S-ZN)	*****	0
25 (S-SR )	)	30 (S-ZR)	*****	0
25 (S-SR )	)	31 (S-TH)	*****	0
25 (S-SR )	)	32 (AA-AS-P)	*****	0
25 (S-SR )	)	33 (AA-ZN-P)	*****	0
25 (S-SR )	)	34 (AA-SB-P)	*****	0
26 (S-V )	)	27 (S-W)	*****	0
26 (S-V )	)	28 (S-Y)	0.5226	55
26 (S-V )	)	29 (S-ZN)	*****	0
26 (S-V )	)	30 (S-ZR)	*****	0
26 (S-V )	)	31 (S-TH)	*****	0
26 (S-V )	)	32 (AA-AS-F)	*****	0
26 (S-V )	)	33 (AA-ZN-P)	*****	0
26 (S-V )	)	34 (AA-SB-P)	*****	0
27 (S-W )	)	26 (S-Y)	*****	0
27 (S-W )	)	29 (S-ZN)	*****	0
27 (S-W )	)	30 (S-ZR)	*****	0
27 (S-W )	)	31 (S-TH)	*****	0
27 (S-W )	)	32 (AA-AS-P)	*****	0
27 (S-W )	)	33 (AA-ZN-P)	*****	0
27 (S-W )	)	34 (AA-SB-P)	*****	0
28 (S-Y )	)	29 (S-ZN)	*****	0
28 (S-Y )	)	30 (S-ZR)	*****	0
28 (S-Y )	)	31 (S-TH)	*****	0
28 (S-Y )	)	32 (AA-AS-P)	*****	0
28 (S-Y )	)	33 (AA-ZN-P)	*****	0
28 (S-Y )	)	34 (AA-SB-P)	*****	0
29 (S-ZN )	)	30 (S-ZR)	*****	0
29 (S-ZN )	)	31 (S-TH)	*****	0
29 (S-ZN )	)	32 (AA-AS-P)	*****	0
29 (S-ZN )	)	33 (AA-ZN-P)	*****	0

101

DG101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
29 (S-ZN)		34 (AA-SB-P)	*****	0
30 (S-ZR)		31 (S-TH)	*****	0
3C (S-ZR)		32 (AA-AS-P)	*****	0
3C (S-ZR)		33 (AA-ZN-P)	*****	0
30 (S-ZR)		34 (AA-SB-P)	*****	0
31 (S-TH)		32 (AA-AS-P)	*****	0
31 (S-TH)		33 (AA-ZN-P)	*****	0
31 (S-TH)		34 (AA-SB-P)	*****	0
32 (AA-AS-P)		33 (AA-ZN-P)	*****	0
32 (AA-AS-P)		34 (AA-SB-P)	*****	0
33 (AA-ZN-P)		34 (AA-SB-P)	*****	0

601