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RECONNAISSANCE GEOCHEMICAL ASSESSMENT OF MINERAL RESOURCES IN ROUGH HILLS WSA (NV-010-151) ELKO COUNTY, NEVADA

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J. V. Tingley, Principal Investigator

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

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By

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and

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NEVADA BUREAU OF MINES AND GEOLOGY
University of Nevada Reno

John Schilling, Director/State Geologist
December 1984

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Correlation Analysis, Panned Concentrate Samples

SUMMARY

The Rough Hills Wilderness Study Area (NV-010-151) is in northeastern Nevada about 60 miles north-northeast of Elko and about 1.5 miles northwest of Charleston within the Elko Resource Area (see Figure 1). This study reports on the metallic mineral potential as well as the degree of favorability for metallic mineralization within the WSA. No mineral deposits are known to occur within the WSA.

The Rough Hills area is along the northern edge of the Basin and Range physiographic province but here the typical Basin and Range pattern of fault block mountains separated by wide intermontane basins has been somewhat modified. In this part of the province, mountains are less parallel and the basins are narrower and less pronounced. Cornwall Basin, in the northwest corner of the WSA, actually is circular in shape and is limited to only a few square miles in area. The Rough Hills WSA consists primarily of a succession of Mid-Tertiary rhyolite flows and tuffs. Along the margins of the WSA, Paleozoic and Triassic limestones, calcarenites, quartzites and siltstones and small areas of early Tertiary tuffs crop out (Coash, 1967).

INTRODUCTION

The Nevada Bureau of Mines and Geology was contracted to conduct a detailed stream sediment sampling program within the Rough Hills WSA to provide the Bureau of Land Management with field data which would aid in assessing metallic mineral potential. This sampling program should be considered as a follow up of the GEM report (Geology, Energy, Mineral) prepared by Terradata in 1983. The Terradata report should be consulted for a complete review of the literature on this area and for recommendations concerning oil and gas, geothermal, and non-metallic resources.

The field work and sample preparation of the geochemical survey were carried out in August of 1984 by the Nevada Bureau of Mines and Geology, while the sample analysis was 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 data from the National Uranium Resource Evaluation (NURE) program and field observations, have been used to outline and to rank areas for their resource potential using the BLM Land Classification system.

LOCATION

The Rough Hills WSA (NV-010-151) comprises about 6,685 acres within Townships 43N and 44N and Ranges 56E and 57E, Elko County, Nevada. The entire area is within the boundaries of the Mount Velma 15' topographic quadrangle map. Vehicular access to the WSA is impossible without crossing private property or first obtaining keys to the existing locked gates. Currently all the roads leading into the area are washed out except for one which comes from the west. The one remaining access route follows the Williams Creek drainage from the west and ends at the Goodwin Ranch on the west side of the WSA. It is a four-wheel drive road that is dangerously undercut in places and is impassible when wet. Access within the WSA is entirely by unimproved trails.

Topographic Map
Rough Hills GRA
(NV-010-03)
Elko County, NV

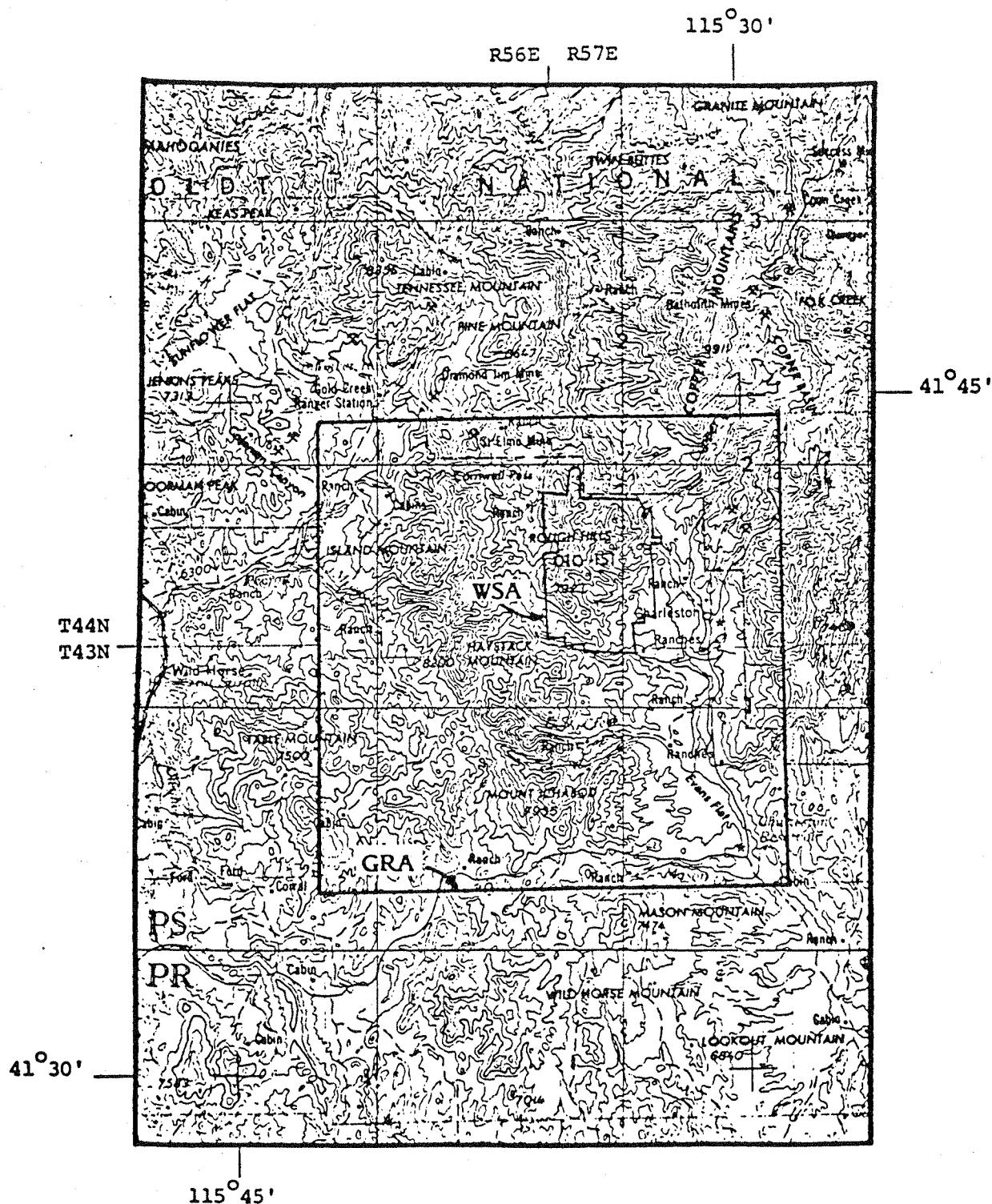


Figure: 1 Location Map

GEOLOGIC SETTING

The Rough Hills are a rugged mountainous area of mid-Tertiary rhyolite flows and tuffs that have been incised by eastward-flowing tributaries of the the Bruneau River. Older Tertiary volcanics crop out along the southeastern portion of the Rough Hills while Triassic siltstones extend along the southwest boundary. Paleozoic limestones and quartzites of the Sun Flower Formation follow the westward margin of the WSA and older Tertiary Volcanics, along with Paleozoic and Cambrian quartzites, can be traced across the north and northwest portions of the study area (Coash, 1967). Headward erosion along Cornwall Creek has captured the stream flow into Cornwall Basin diverting it into the Bruneau River. Currently the stream is down-cutting the older volcanics at that form the floor of the basin exposing white rhyolite tuffs (see Figures 2 and 3).

A complete description of the Rough Hills geology and comments concerning mining claim coverage, non-metallic and energy mineral potential can be found in the GEM report prepared for the BLM by Terradata (Mathews and Blackburn, March 1983).

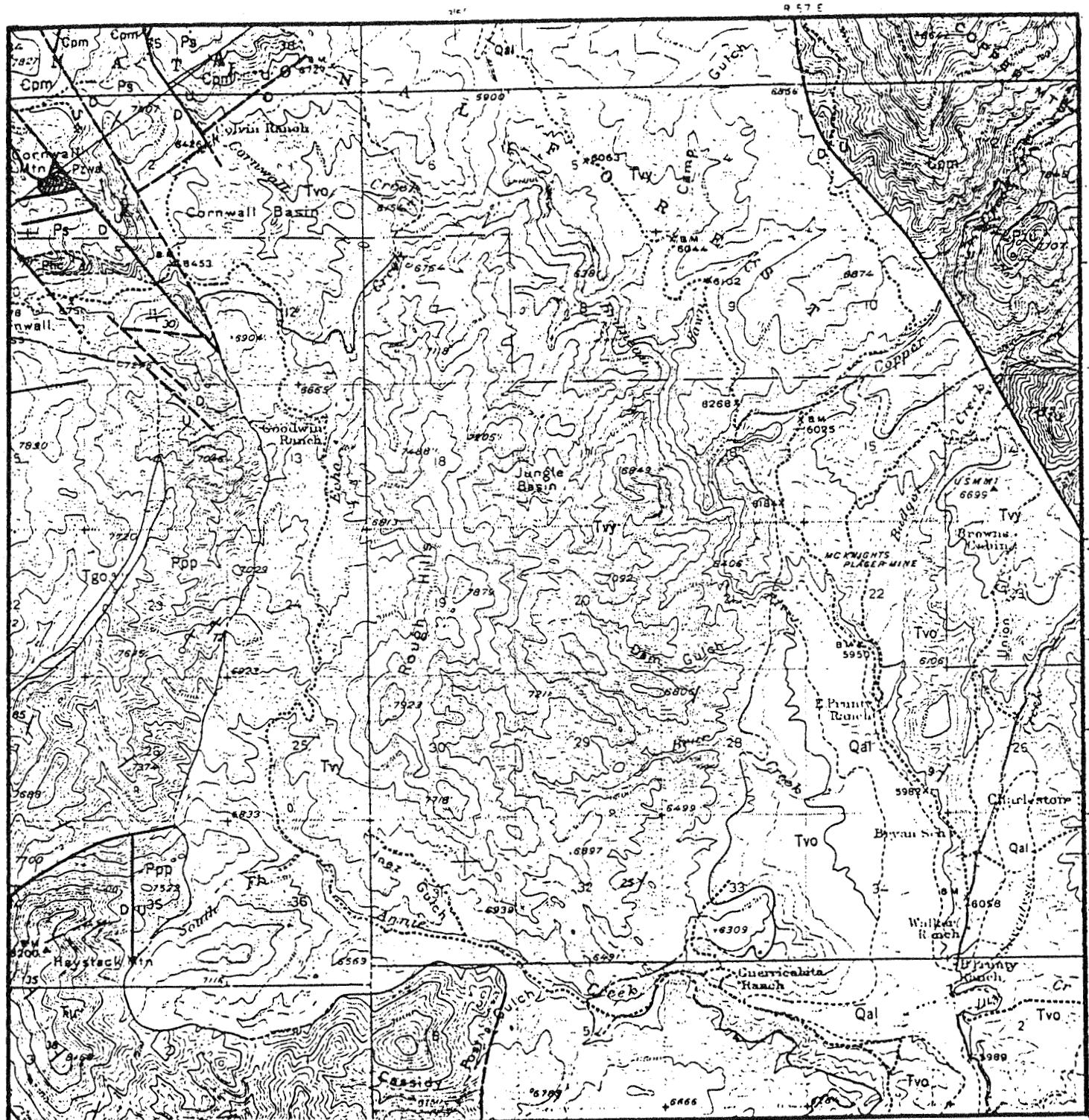
SAMPLE COLLECTION AND ANALYTICAL TECHNIQUES

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 Figures 4 and 5). 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.

During this study, 38 sediment samples were collected from 19 separate sites along with 3 rock samples (see Figure 4). In addition, 7 rock samples collected from the same study area during the earlier NURE program and are presented in Figure 5 along with the chemical results. Results of samples taken by NBMG in 1981 and 1982 from mines and prospects in mining districts along the margins of the WSA are also included (see Figures 4 and 6).

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. Table 1 shows the limits of

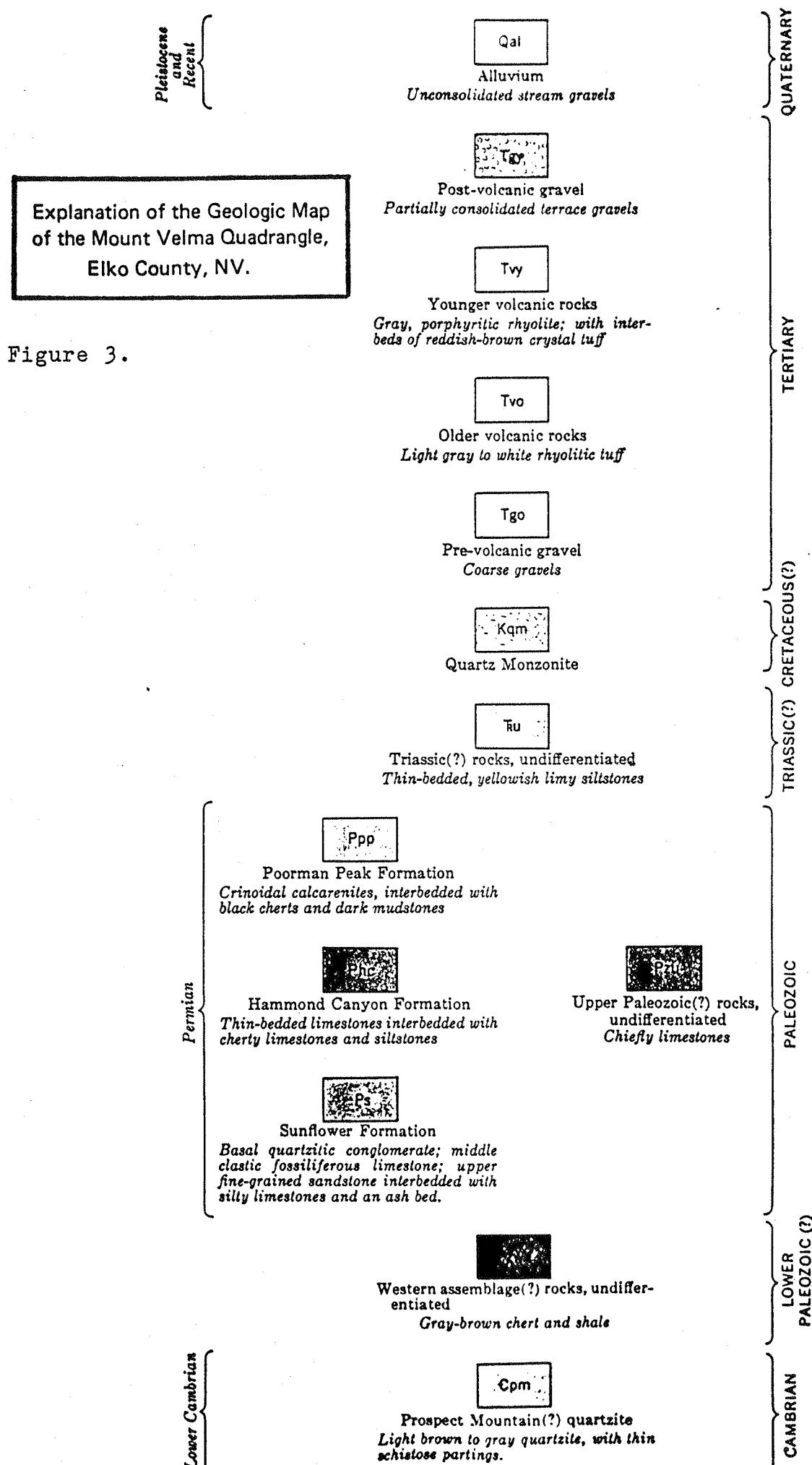
Geologic Map of the Mount Velma Quadrangle Elko County, NV



Geology by John R. Coash

Figure 2.

EXPLANATION



NEVADA
(ELKO COUNTY)
MT. VELMA QUADRANGLE
15-MINUTE SERIES

1967 N
JARICCEI

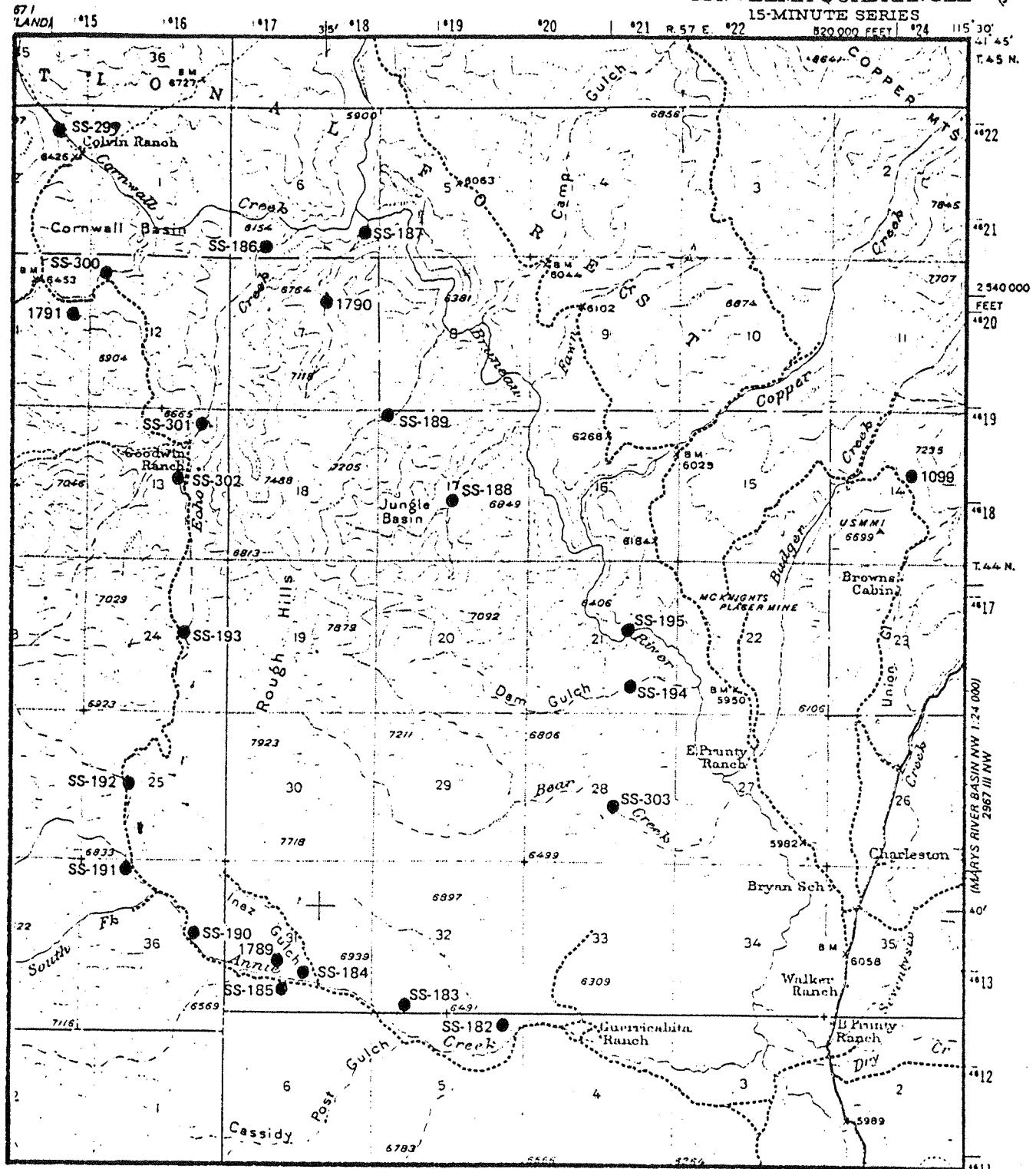


Figure: 4 Sample Location Map

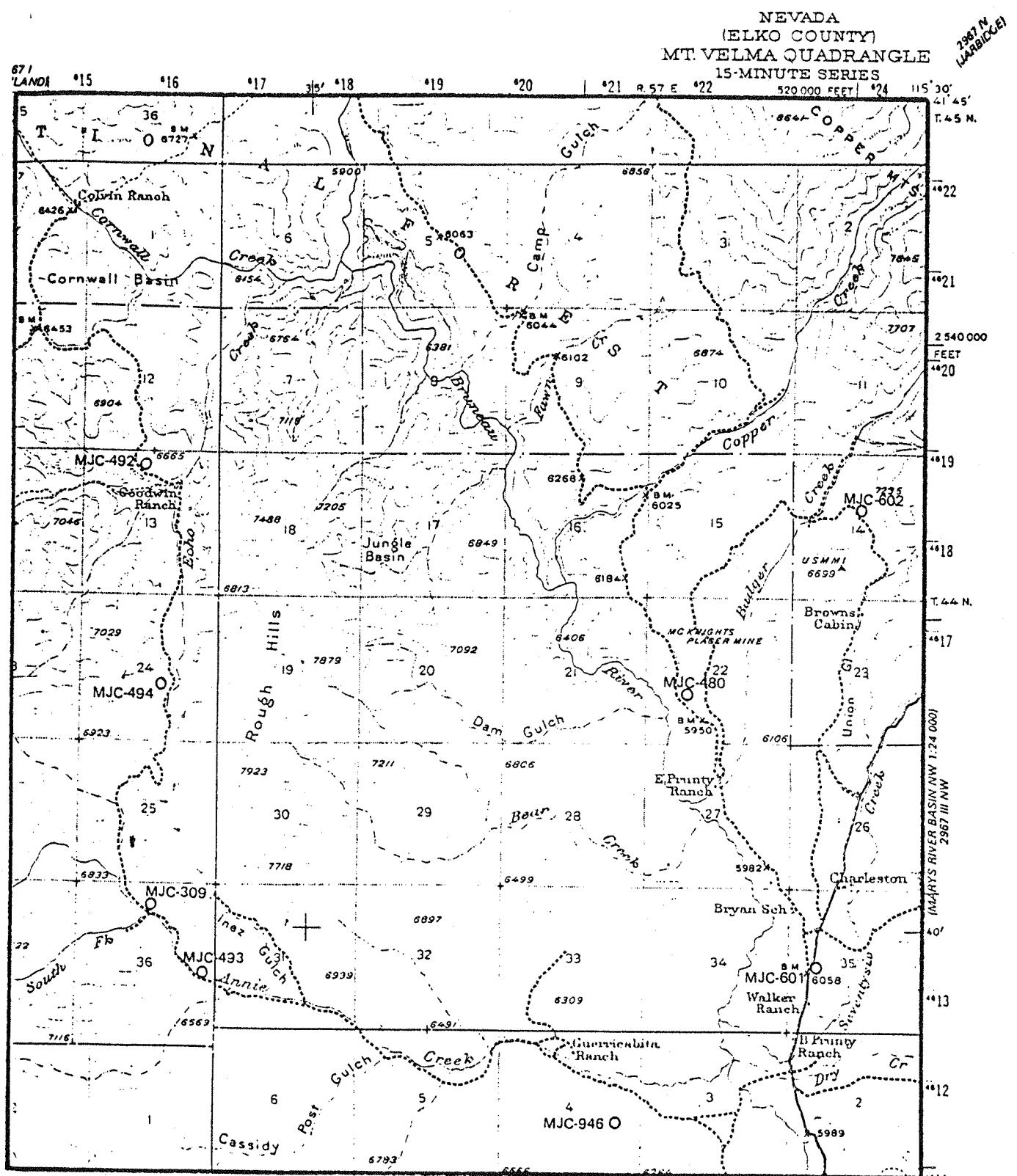


Figure: 5 NURE Rock Sample Location Map

Mary's River Basin NW 7½' Quadrangle
R. 57 E.

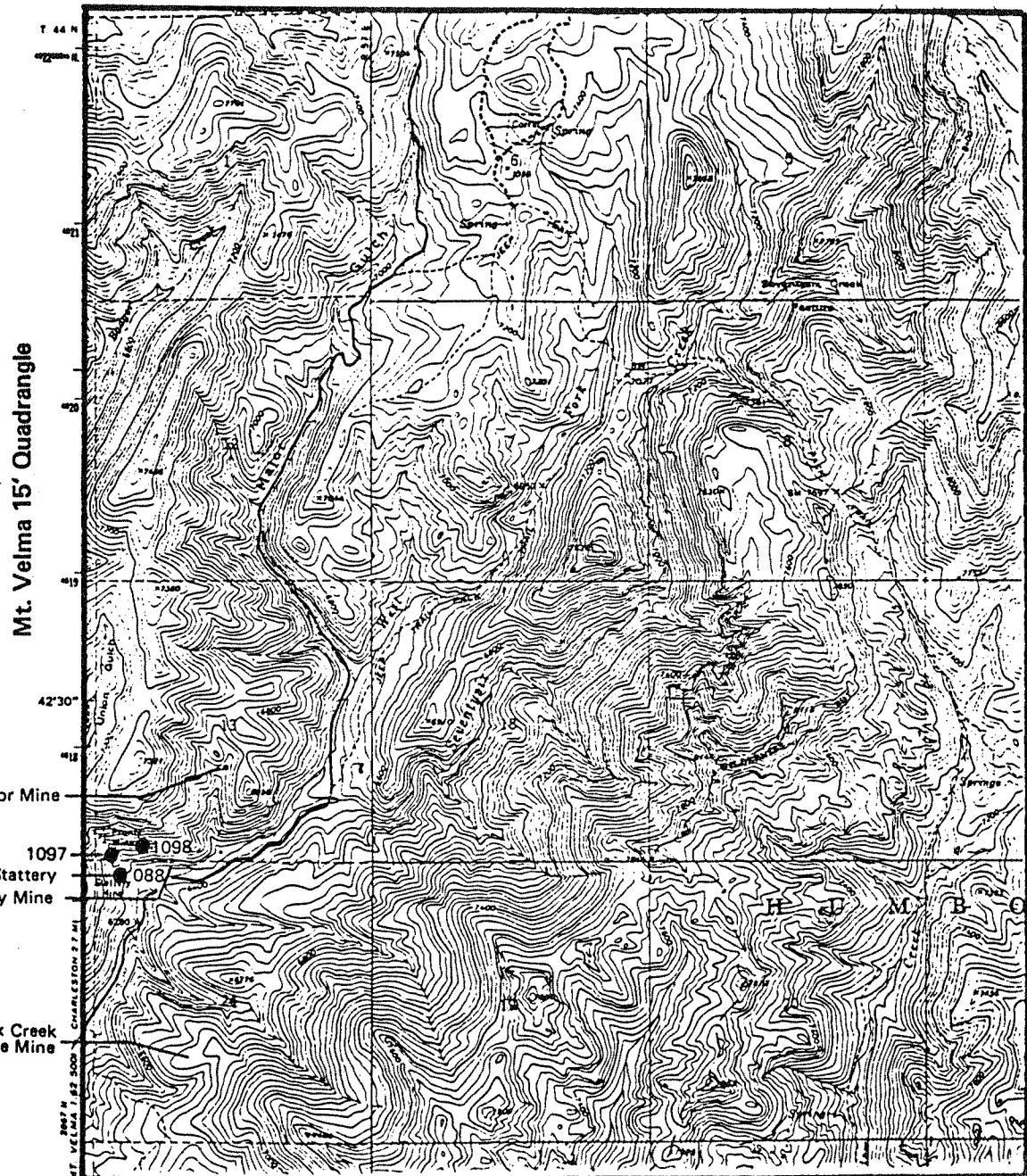


Figure: 6 Sample Location Map

Table 1 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

determination for the spectrographic analysis.

Geochemical anomalies were established using the following criteria: the detection limit of the analysis, geologic setting, and a tertiary examination of cumulative frequency tables and percent frequency tables. For visual inspection and to observe spatial and geochemical relationships see Figures 2, 3, 4, 5, and 6.

LAND CLASSIFICATION FOR G-E-M RESOURCE POTENTIAL

Land classification areas 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 7. Land classifications have been made only on metallic resource potential based on NURE data, our geochemical sampling results and on observations made by our field staff. Land classifications for non-metallic mineral potential, for oil and gas and geothermal areas, as well as information on leasable and saleable resources are found in the 1983 GEM report by Terradata.

Figure 7

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 date 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 date provide indirect evidence to support or refute the possible existence of mineral resources.
- C. The available data provide indirect 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.

MINES AND MINING DISTRICTS ADJACENT TO THE WSA

The Island Mountain district derives its name from a prominent hill about 5 miles west of the WSA where gold was discovered in placer gravels near the junction of Gold and Martin Creeks in 1873. The gravels were worked continuously until 1902 with the greatest period of production coming between 1895 and 1898. The lack of water in this part of the district was one of the main reasons for the decline in placer activities (Coash, 1967).

The first lode deposits in the district were discovered on Rosebud Mountain where joints and faults in the Prospect Mountain quartzite of Cambrian age were found to be mineralized. The initial discovery was made at the headwaters of Rosebud Creek several miles northwest of the WSA. The veins are characterized by high silver-lead content with minor gold and in some places, copper-iron sulfides. Similar mineralization was found in the same rocks and structures on Pine Mountain several miles to the north of the WSA. The gold bearing placers of Gold Creek, Martin Creek and Rosebud Creek all originate on the sides of Rosebud Mountain and flow to the west (Bushnell, 1967). A fourth stream (Cornwall Creek) flows southeast between Rosebud and Pine Mountains into Cornwall Basin and eastward along the northern margin of the WSA and into the Bruneau River. Interestingly enough, a sample from this stream (site 299), taken just north of the Colvin Ranch, ran 70 ppm silver, 100 ppm gold, 3000 ppm lead and 700 ppm tungsten. There is no evidence that this stream has ever been worked for placers (see Figure 4).

About three quarters of a mile to the west of Cornwall Basin on the eastside of Cornwall Mountain is the site of the St. Elmo mine. The mine was opened in 1940 and closed in 1950 during which time extensive tunnels and workings explored gold and silver bearing quartz veins, but there is no record of production. Roads leading to the mine and adjacent prospects are inaccessible from either the east or west due to washouts.

The Charleston district extends along the entire eastern boundary of the WSA and includes the Bruneau River drainage from Dry Creek south of Charleston to Coon Creek about 11 miles to the north. The history of the district has been well documented by Schrader (1923, pp 78-83) and by Vanderburg (1923, p 7). Briefly, the earliest discoveries were gold placers at Seventy-Six Creek in about 1876 with later placer discoveries at Badger, Pennsylvania, Union and Dry Creeks, all tributaries of the Bruneau River.

Lode mining included gold, silver, copper, antimony and barite production from the Prunty, Graham, Rescue, Slattery and Seventy-Six mines beginning in 1905 and continuing, intermittently, until the present (see Figures 4, 5 and 6). The host rocks are cherts, limestones, quartzites, sandstone and claystones of probable Ordovician age.

MINERAL RESOURCE AREAS, LAND CLASSIFICATION

M1-3C This classification covers all the area within the WSA (see Figure 8). The high level of confidence is based on the presence of known minerals and mines on all sides of the WSA. The highly favorable mineralization associated with veins along structures in the surrounding Paleozoic rocks has

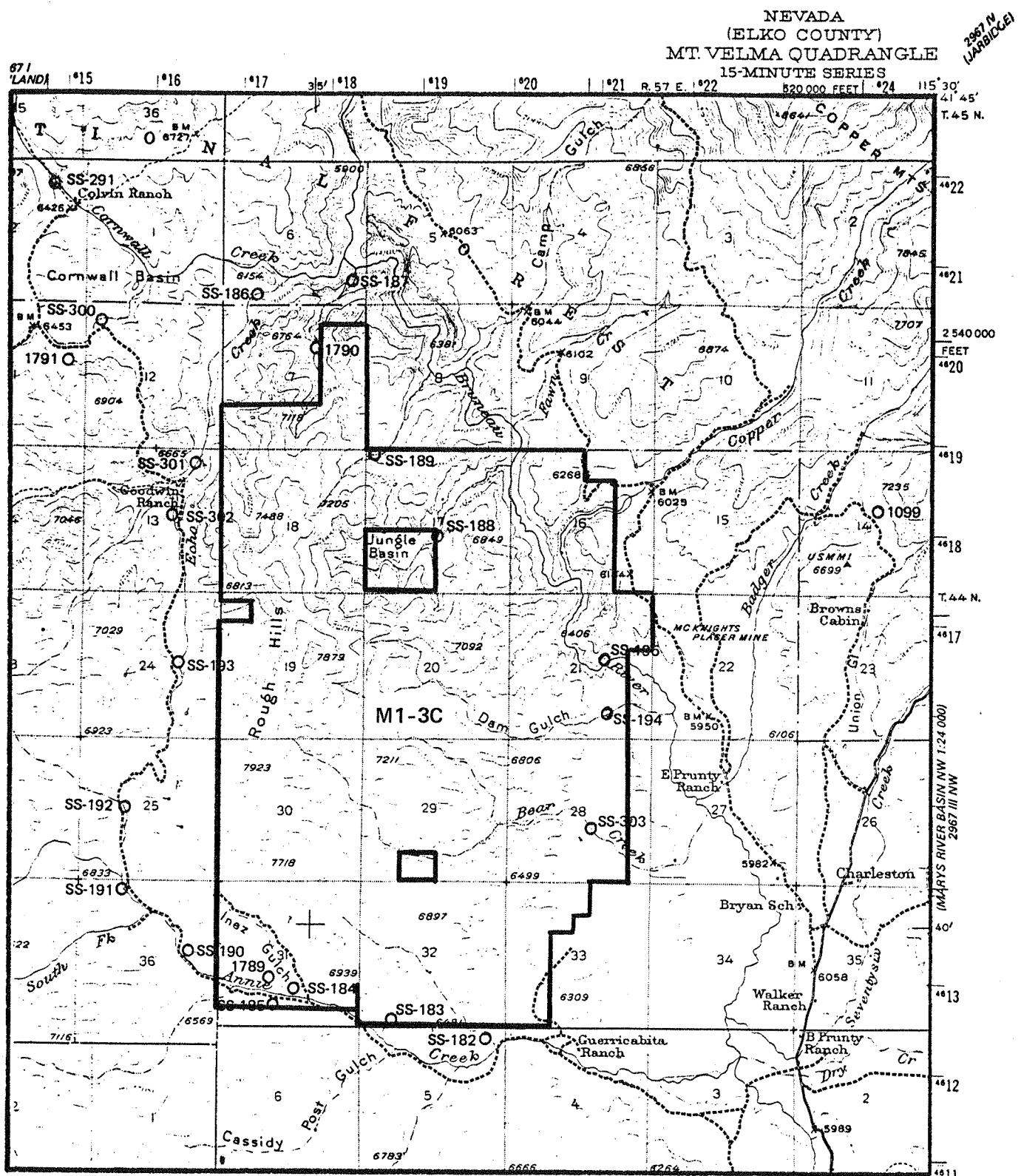


Figure: 8 Land Classification Map

already been documented. However, the presence of 70 ppm silver, 100 ppm gold, 3000 ppm lead and 700 ppm tungsten in a panned concentrate sample (299) from Cornwall Creek is strong evidence that valuable minerals may have been deposited along this tributary which crosses Cornwall Basin before emptying into the Bruneau River. The mineralized Paleozoic highland to the northwest of the WSA has been the source for the materials in Cornwall Creek. In addition, a panned concentrate sample (182) from a drainage flowing from the southeast side of the WSA reported a silver value of 150 ppm and 200 ppm lead. Sample 182 was collected near the contact between the older and younger volcanics, but the stream was flowing from the younger volcanic materials. Another sample (189) from the younger volcanics on the north-eastern side of the WSA had a lower show of 20 ppm silver.

Clearly, ranking the metallic mineral potential of the WSA is something of a dilemma. The youthful volcanic pile that makes up the Little Rough Hills does not appear to be highly mineralized but the rocks surrounding and underlying the volcanics may contain metallic mineralization. The potential is hard to deny, but it may never be economically feasable.

SUGGESTIONS AND RECOMMENDATIONS

1. Investigate the silver anomalies within the WSA by exploring the upper portions of the drainages.
2. Examine the Cornwall Creek drainage from its source to where it empties into the Bruneau River, collecting additional samples.
3. Examine the upper drainages of Cornwall Mountain especially in the vicinity of the St. Elmo Mine and surrounding prospects.

SELECTED REFERENCES

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- Schrader, F. C. (1923) The Jarbridge Mining District, Nevada, (with a note on the Charleston district) U. S. Geological Survey, Bull. 741.
- Vanderburg, W. O. (1936) Placer Mining in Nevada: NMBG Bull. 27.

APPENDIX

APPENDIX A

PROPERTY NAME: Sample Site 1789

OTHER NAMES:

MINERAL COMMODITY(IES): Possible Precious metals

TYPE OF DEPOSIT: Epithermal

ACCESSIBILITY: Most roads are washed

OWNERSHIP: Unknown

PRODUCTION: None

HISTORY: _____

DEVELOPMENT: None

County: Elko

Mining District: Charleston

AMS Sheet: Wells

Quad Sheet: Mt Velma

Sec. SW^{1/4} T 31, R 44N, E 57E

Coordinate (UTM):
North 4 6 1 3 0 0 0 m
East 0 6 1 7 1 0 0 m
Zone _____

ACTIVITY AT TIME OF EXAMINATION: None

GEOLOGY: Outcrop sample from strong vuggy, iron-stained, partly brecciated vein in andesite of Tertiary age.

Sample 1789

REMARKS: _____

REFERENCES: _____

EXAMINER: Jack Quade DATE VISITED: 8-11-84

PROPERTY NAME:	Sample Site 1790	County:	Elko
OTHER NAMES:		Mining District:	Charleston
MINERAL COMMODITY(IES):	Possible uranium	AMS Sheet:	Wells
TYPE OF DEPOSIT:	secondary enrichment in coarse volcanics	Quad Sheet:	Mt Velma 15'
ACCESSIBILITY:	4-5 miles on foot	Sec.	NE ¹ 7 T 44N R 57E
OWNERSHIP:	Unknown	Coordinate (UTM):	
PRODUCTION:	Unknown	North	4620000 m
HISTORY:		East	0617900 m
		Zone	

DEVELOPMENT: Dozer-cuts and road which maybe twenty years old and need of repair.

ACTIVITY AT TIME OF EXAMINATION: None

GEOLOGY: Mineralization is in coarse-grained, deeply weathered, iron-stained tuffs along fractures. The mineralization was prospected by dozer-cuts and where exposed it is a yellow-green secondary mineral. Nearby claim post are from the 1950's. The workings extend over an area of about a quarter-mile along the ridge of the basin.

Sample 1790

REMARKS:

REFERENCES:

EXAMINER: Jack Quade

DATE VISITED: 8-12-84

PROPERTY NAME: Sample Site 1791

OTHER NAMES:

MINERAL COMMODITY(IES): Au ?

TYPE OF DEPOSIT: Quartz vein

ACCESSIBILITY: Very poor

OWNERSHIP: Unknown

PRODUCTION:

HISTORY:

County: Elko

Mining District: Charleston

AMS Sheet: Wells

Quad Sheet: Mt Velma 15"

Sec. NE $\frac{1}{4}$ 11, T 44N, R 56E

Coordinate (UTM):

North 4620000m

East 0614900m

Zone

DEVELOPMENT: None

ACTIVITY AT TIME OF EXAMINATION: None

GEOLOGY: An outcrop in silicified limestone of Paleozoic age. The sample was taken from a portion of the outcrop that was silicified, vuggy and partly brecciated. It may be a calcarenite. The bed of the sediments strike N35E, and dip to the NW.

Sample 1791

REMARKS:

REFERENCES:

EXAMINER: Jack Quade

DATE VISITED: 8-13-84

PROPERTY NAME: Batholith
OTHER NAMES: Mission Cross
MINERAL COMMODITY(IES): W, Mo
TYPE OF DEPOSIT: Intrusive contact
ACCESSIBILITY:
OWNERSHIP: George Altaide (1980), North Fork, NV
PRODUCTION: Unknown, evidence of small production
HISTORY:

Elko
County: Charleston
Mining District: Wells
AMS Sheet: Jarbridge 15'
Quad Sheet:
Sec. 24 T 45N R 57E
Coordinate (UTM):
North 4 6 2 6 4 7 0 m
East 0 6 2 5 5 0 0 m
Zone +11

DEVELOPMENT: Several adits and cuts, open stopes.

ACTIVITY AT TIME OF EXAMINATION: Claims current, watchman living on property.

GEOLOGY: Small hill composed of garnetized limestones interbedded with partially silicated beds of shale and quartzite. Sediment strike N40°E, dip 35°SW. A set of quartz veins, striking N15°W, 85°NE dip cut east face of the hill. Tactite is composed of light brown garnet, epidote, calcite, partially repalced beds show knots of garnet. Scheelite and molybdenite are present. Some hematite - after magnetite was noted.

Sample 087
Photo

REMARKS:

REFERENCES: Smith, R.M. (1976) Mineral Resources of Elko Co., NV USGS OFR 76-56

EXAMINER: J. V. Tingley

DATE VISITED: 8/25/80

PROPERTY NAME: Seventysix Creek Barite Mine
OTHER NAMES: Barite group, Sandie Group

MINERAL COMMODITY(IES): Ba
TYPE OF DEPOSIT: Bedded

ACCESSIBILITY:

OWNERSHIP: The Sandie Claims, located in Oct 1979, are held by Sanburnite Corp.

PRODUCTION: +1,000 - 25,000 tons produced following this examination

County: Elko
Charleston
Mining District:
AMS Sheet: Wells
Quad Sheet: Marys River Basin NW
SW 1/4 24 1 1/2'
Sec. _____, T 44N, R 57E

Coordinate (UTM):

North	<u>4 6 1 6 1 8 0</u> m
East	<u>0 6 2 5 4 4 0</u> m
Zone	<u>+11</u>

DEVELOPMENT: Scattered, shallow bulldozer excavations.

ACTIVITY AT TIME OF EXAMINATION:

GEOLOGY: The area is underlain by rubbly float of chert, argillite & limestone of the Ordovician Vinini Fm(?). Bedded deposits are exposed in the dozer cuts & appear to dip 20-30° to W or SW. The host rocks are Fe-stained. The barite deposits are generally conformable with the bedding & reach up to observed thicknesses of 12'.

The barite is grey, laminated to thin bedded, somewhat Fe-stained, & may contain white recrystallized pods of barite, & minor amounts of quartz & mica.

REMARKS:

REFERENCES: Information from Papke, K., to be published in NBMG Bull., Barite Deposits in Nevada.

EXAMINER: Papke, K. (by Bentz, J.)

DATE VISITED: 9/80

PROPERTY NAME:	Prunty Mine	County:	Elko
OTHER NAMES:	Graham	Mining District:	Charleston
MINERAL COMMODITY(IES):	Sb, Zn, Ag, Pb, Au?, Cu, Ba	AMS Sheet:	Wells
TYPE OF DEPOSIT:	Vein	Quad Sheet:	Marys River Basin NW 1/2'
ACCESSIBILITY:		Sec.	13 T 44N R 57E
OWNERSHIP:	San Rafael Exploration Co., Louis Koncher, Lessee, P.O. Box 101, Elko, NV 89801 (as of 1981)	Coordinate (UTM):	
PRODUCTION:		North	4 6 1 7 4 0 0 m
HISTORY:		East	0 6 2 5 0 2 0 m
		Zone	+11

DEVELOPMENT: The Prunty Mine is located on the north side of a draw. It is less well developed than the Slattery Mine workings which consist of several adits. See below for description of Prunty Mine workings.

ACTIVITY AT TIME OF EXAMINATION: There was evidence for some recent underground activity in the mines. Mine is listed in 1981 NBMG Special Publication MI-1981 as active underground mine ^{mining} ~~mine~~ by ^{A/Hg} 3 persons.

GEOLOGY: The main Prunty Mine working is an adit which bears N45W & has water running out of the portal. Another adit occurs at same elevation to north. Several other workings (not visited) occur above the main adit in the small draw. The orientation of the workings suggest that the vein is oriented in a N20-30W direction.

Adit (sample location 1097) appears to be located along contact of intrusive & slatey sedimentary rocks. A section of the sediments is exposed between sample locations 1097 & 1098. The sediments are hornfelsed & contain interveining segments of intrusive rock. Two types of intrusive rock were observed; (1) sulfide-bearing plagioclase-rich monzonite(?) cut by 1/2-1" wide quartz veins & (2) medium crystalline, dark-green gabbro(?) or diorite.

Sample 1097 was derived from a pile of vein material in front of the main adit. The vein gangue is vitreous grey to milky white, massive quartz. The quartz carries coarse clots & lenses of pyrite, arsenopyrite, galena, chalcopyrite, sphalerite, stibnite, & possibly pyrrhotite. Sample 1098 is composed of quartz vein with fine-grained sulfides & some vein breccia. Part of the sample is composed of coarse calcite (& possibly barite) with coarse needles of stibnite. Some ^{light} ~~light~~ ^{yellow} ~~yellow~~ ^{green} ~~green~~ ^{grey} ~~grey~~ ^{black} ~~black~~ ^{white} ~~white~~ ^{red} ~~red~~ ^{blue} ~~blue~~ ^{purple} ~~purple~~ ^{yellow} ~~yellow~~ ^{orange} ~~orange~~ ^{pink} ~~pink~~ ^{grey} ~~grey~~ ^{yellow} ~~yellow~~ ^{green} ~~green~~ ^{blue} ~~blue~~ ^{purple} ~~purple~~ ^{yellow} ~~yellow~~ ^{orange} ~~orange~~ ^{pink} ~~pink~~ ^{grey} ~~grey~~ ^{yellow} ~~yellow~~ ^{green} ~~green~~ ^{blue} ~~blue~~ ^{purple} ~~purple~~ ^{yellow} ~~yellow~~ ^{orange} ~~orange~~ ^{pink} ~~pink~~ ^{grey} ~~grey~~ ^{yellow} ~~yellow~~ ^{green} ~~green~~ ^{blue} ~~blue~~ ^{purple} ~~purple~~ ^{yellow} ~~yellow~~ ^{orange} ~~orange~~ ^{pink} ~~pink~~ ^{grey} ~~grey~~ ^{yellow} ~~yellow~~ ^{green} ~~green~~ ^{blue} ~~blue~~ ^{purple} ~~purple~~ ^{yellow} ~~yellow~~ ^{orange} ~~orange~~ ^{pink} ~~pink~~ ^{grey} ~~grey~~ ^{yellow} ~~yellow~~ ^{green} ~~green~~ ^{blue} ~~blue~~ ^{purple} ~~purple~~ ^{yellow} ~~yellow~~ ^{orange} ~~orange~~ ^{pink} ~~pink~~ 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PROPERTY NAME: Rescue Mine
OTHER NAMES: Erl - Jak Mines, Cleveland?

MINERAL COMMODITY(IES): Cu, W?, Sb? Ag?
TYPE OF DEPOSIT: Vein, contact, fault?

ACCESSIBILITY:

OWNERSHIP: E. Johnson & J. Mumbower (from plat)

PRODUCTION:

HISTORY:

County: Elko
Mining District: Charleston

AMS Sheet: Wells
Quad Sheet: Mt. Velma 15'

Sec. 14, T 44N, R 57E

Coordinate (UTM):
North 4 6 1 8 2 0 0 m
East 0 6 2 4 2 0 0 m
Zone +11

DEVELOPMENT: Sampled working consists of NE-SW oriented trench approximately 100-125' in length.
Other areas nearby are also trenched.

ACTIVITY AT TIME OF EXAMINATION: Trenching probably was completed in last year or so.

GEOLOGY: Trench explores contact between highly altered intrusive & marly red-brown limestone.
The intrusive is sheared & cut by calcite & quartz veins. The intrusive is composed mostly
of plagioclase, boitite & dark green hornblende & thus is probably chemically a diorite. It
is heavily stained by limonite & altered to FeOxs & clays. The limestone/contac^t roughly
lighter or peridotitic to the trench & observed at the NW portion of the trench. The limestone is notably
recrystallized, red-brown in color, marly+limonite stained. Some breccia noted in zone
indicating contact may occur along a fault.

Sample 1099 is composed of white to grey quartz vein & quartz vein breccia
containing small clots of pyrite, chalcopyrite & gossan. The vein material is Fe-stained.
No sulfides were observed in the intrusive rock, but weathering may have removed or
oxidized any metals which once did exist, as most of the quartz vein was hosted by the
intrusive rock.

*Note:

No Sb or sign of older workings were observed. This may not be the exact location
of the Rescue Mine cited in Lawerence, 1963, Sb deposits of Nevada, NBMG Bull 61. p. 45.

REMARKS:

Sample 1099

Photo

REFERENCES: See last paragraph above.

EXAMINER: Bentz/Brooks/Smith

DATE VISITED: 9/14/82

PROPERTY NAME:	Badger Claims		
OTHER NAMES:			
MINERAL COMMODITY(IES):	Ba		
TYPE OF DEPOSIT:	Vein		
ACCESSIBILITY:			
OWNERSHIP:	Alfred Norris, Harold Woolard & Neww Enterprises.		
PRODUCTION:	Probably none.		
HISTORY:	1st claims were located in Sept., 1975.		
DEVELOPMENT:	Bulldozing & drilling		
ACTIVITY AT TIME OF EXAMINATION:			

County:	Elko		
Mining District:	Charleston		
AMS Sheet:	Wells		
Quad Sheet:	Marys River Basin NW		
SE/4	7 1/2		
Sec. 1	T 44N	R 57E	
Coordinate (UTM):			
North	4 6 2 1 1 5 0 m		
East	0 6 2 5 9 8 0 m		
Zone	+11		

GEOLOGY: The host rocks are cherts, limestones, quartzites sandstones, & claystones of probable Ordovician age. The host rocks are poorly exposed. The main vein is also poorly exposed but appears to strike N45W for a distance of 130'. The vein is probably less than 12' thick & steeply inclined. Other more minor veins & barite replaced host rocks occur in the area. The barite-rich material contains minor quartz & mica & nearly no FeOxs.

REMARKS:

REFERENCES: Information from Papke, K., to be published in NBMG Bull., Barite Deposits in Nevada.

Papke, K. (by Bentz, J.)

9/80

EXAMINER: DATE VISITED:

Rock Sample Description

Sample Number	Location	Description
1789	Quad: Mt. Velma 15' Sec: SW $\frac{1}{4}$ 31 T: 30N R: 57E UTM: 4613000 N 0617100 E Outcrop Charleston District	Chip from outcrop volcanic tuffs-andestite (?). Vuggy, brecciated in bold relief-strong hydrothermal alteration
1790	Quad: Mt. Velma 15' Sec: NE $\frac{1}{4}$ 7 T: 44N R: 57E UTM: 4620000 N 0617900 E Outcrop Charleston District	Coarse-grained, lithicrich tuff with sphalerites, some flow banding from dozer-cuts. Yellow-green oxides (?).
1791	Quad: Mt. Velma 15' Sec: NE $\frac{1}{4}$ 11 T: 44N R: 57E UTM: 4620000 N 0614900 E Outcrop Charleston District	Outcrop-highly silicified, vuggy brecciated, calcarenite beds.. striking N35E dip NW.
087	Quad: Jarbridge 15' Sec: 24 T: 45N R: 57E UTM: 4626470 N 0625500 E Batholith Mine Charleston District	Massive garnet tactite, banded along bedding, disseminated MoS ₂ some pyrite.
088	Quad: Marys River Basin NW 7 $\frac{1}{2}$ Sec: 24 T: 44N R: 57E UTM: 4626480 N 0625490 E Slattery Mine Charleston District	Dump, vein material, quartz, pyrite, galena, arsenopyrite.
1097	Quad: Marys River Basin NW 7 $\frac{1}{2}$ Sec: 13 T: 44N R: 57E UTM: 4617400 N 0625020 E Prunty Mine Charleston District	Sugary white quartz vein with pod lense-shaped veins of pyrite, chalcopyrite, arsenopyrite. Coarse calcite, barite(?) vein with oxidized..unoxidized..stibnite.
1098	Quad: Marys River Basin NW 7 $\frac{1}{2}$ Sec: 13 T: 44N R: 57E UTM: 4617420 N 0625120 E Prunty Mine Charleston District	Gray-white quartz vein, some brecciated, containing abundant fine grained sulfides, mostly pyrite also chalcopyrite.
1099	Quad: Marys River Basin NW 7 $\frac{1}{2}$ Sec: 14 T: 44N R: 57E UTM: 4618200 N 0624200 E Rescue Mine Charleston District	Glassy gray quartz vein material with some clots sulfides & Cuoxs. Also some Fe-carbonate cemented quartz breccia.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	_____

Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	1789	1790	1791	087	088	1097	1098	1099	
Fe % (.05)	5	3	.5	7	1.5	2	7	.7	
Mg % (.02)	.2	.1	.15	1.5	.7	.5	.7	.15	
Ca % (.05)	.2	.5	L	10	5	7	2	5	
Ti % (.002)	.2	.3	.15	.2	.1	.03	.05	.03	
Mn (10)	200	150	100	3000	1000	2000	1000	700	
Ag (.5)	N	N	N	N	5	10	10	5	
As (200)	N	N	N	N	N	G10000	G10000	L	
Au (10)	N	N	N	.05	4.5	N	N	N	
B (10)	100	10	50	N	20	10	150	30	
Ba (20)	1000	1500	1000	30	1000	150	100	150	
Be (1)	1.5	3	1.5	1	L	N	L	N	
Bi (10)	N	N	N	N	N	G10000	70	300	
Cd (20)	N	N	N	N	N	N	N	N	
Co (5)	5	N	N	N	15	7	5	L	
Cr (10)	200	N	N	70	100	15	30	30	
Cu (5)	30	5	7	50	700	5000	150	700	
La (20)	50	100	50	30	N	30	N	L	
Mo (5)	L	N	N	1000	N	N	N	N	
Nb (20)	L	20	L	N	N	N	N	N	
Ni (5)	50	N	L	30	50	N	20	20	
Pb (10)	L	50	N	50	50	1000	500	30	
Sb (100)	N	N	N	N	N	10000	200	N	
Sc (5)	10	5	5	10	5	L	5	N	
Sn (10)	N	N	N	20	N	N	N	N	
Sr (100)	200	100	1	L	100	200	100	N	
V (10)	100	L	20	70	30	10	30	15	
W (50)	N	N	N	50	N	N	N	N	
Y (10)	20	20	15	20	L	N	10	N	
Zn (200)	N	N	N	L	N	500	300	N	
Zr (10)	100	500	1000	70	50	N	15	10	
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.

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.

APPENDIX B

Table 1--Data for stream-sediment samples, Little Rough Hills WSA, Nevada

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
182SS	61,980	461,250	2.0	.20	1.0	.15	500	N	N	N	10	1,000	3
183SS	61,900	461,260	2.0	.20	1.0	.20	500	N	N	N	10	1,000	3
184SS	61,760	461,270	2.0	.70	1.5	.30	700	N	N	N	50	1,000	2
185SS	61,740	461,250	2.0	.70	1.5	.30	500	N	N	N	100	1,000	2
186SS	61,710	462,050	7.0	.70	1.5	.30	1,000	N	N	N	100	1,000	2
187SS	61,810	462,050	5.0	.70	1.5	.50	1,000	N	N	N	30	1,000	5
188SS	61,790	461,790	3.0	.30	1.0	.50	1,000	N	N	N	20	700	3
189SS	61,840	461,890	5.0	.50	1.0	.30	1,000	N	N	N	30	1,500	2
190SS	61,660	461,310	3.0	1.00	2.0	.30	1,500	N	N	N	20	1,000	2
191SS	61,590	461,380	1.5	.50	1.5	.20	500	N	N	N	30	1,000	2
192SS	61,590	461,480	1.5	.50	1.5	.20	500	N	N	N	30	1,000	2
193SS	61,630	461,630	5.0	.70	2.0	.30	1,000	N	N	N	50	1,000	2
194SS	62,100	461,590	2.0	.15	1.0	.15	700	N	N	N	20	1,000	2
195SS	62,110	461,680	1.5	.20	1.0	.20	300	N	N	N	30	1,000	2
299SS	61,490	462,260	2.0	.70	1.0	.30	700	1.0	N	N	70	500	2
300SS	61,530	462,010	2.0	.70	1.0	.20	300	.5	N	N	100	500	2
301SS	61,640	461,880	3.0	1.00	1.5	.30	300	.5	N	N	100	1,000	2
302SS	61,610	461,810	2.0	.50	.7	.30	700	N	N	N	100	3,000	2
303SS	62,100	461,480	5.0	.70	1.0	.30	1,000	N	N	N	50	1,000	2

Table 1--Data for stream-sediment samples, Little Rough Hills 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
182SS	N	N	5	<10	10	70	N	<20	<5	20	N	5	N
183SS	N	N	5	<10	10	70	N	<20	<5	30	N	5	N
184SS	N	N	5	30	10	50	N	<20	5	20	N	10	N
185SS	N	N	5	100	20	50	N	<20	30	10	N	10	N
186SS	N	N	10	50	10	70	N	<20	10	20	N	10	N
187SS	N	N	5	20	20	100	N	<20	10	30	N	10	N
188SS	N	N	5	<10	10	100	N	<20	<5	30	N	10	N
189SS	N	N	5	20	10	100	N	<20	10	20	N	10	N
190SS	N	N	10	50	10	50	N	<20	10	20	N	10	N
191SS	N	N	5	20	10	50	N	<20	5	10	N	5	N
192SS	N	N	5	20	10	70	N	<20	5	10	N	5	N
193SS	N	N	10	50	10	100	N	<20	7	20	N	10	N
194SS	N	N	<5	<10	5	100	N	<20	<5	20	N	5	N
195SS	N	N	<5	<10	10	150	N	<20	<5	20	N	5	N
299SS	N	N	10	100	30	70	N	<20	20	30	N	10	N
300SS	N	N	10	100	30	70	N	<20	20	10	N	10	N
301SS	N	N	15	100	30	50	N	<20	20	10	N	10	N
302SS	N	N	10	100	30	50	N	<20	30	<10	N	10	N
303SS	N	N	15	50	30	100	N	<20	15	20	N	10	N

Table 1--Data for stream-sediment samples, Little Rough Hills 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
182SS	200	30	N	30	N	300	N	5	75	N
183SS	200	30	N	30	N	300	N	5	70	N
184SS	300	70	N	20	<200	500	N	10	75	N
185SS	300	150	N	20	N	100	N	10	65	N
186SS	300	100	N	30	<200	1,000	N	5	100	N
187SS	200	70	N	70	<200	500	N	5	95	N
188SS	200	30	N	50	<200	700	N	10	160	N
189SS	200	50	N	50	<200	200	N	10	95	N
190SS	500	100	N	10	N	100	N	5	35	N
191SS	300	50	N	10	N	100	N	5	30	N
192SS	500	50	N	15	N	300	N	5	25	N
193SS	300	100	N	15	N	300	N	N	35	N
194SS	100	20	N	30	N	500	N	<5	65	N
195SS	100	30	N	20	N	500	N	5	35	N
299SS	100	70	N	30	<200	200	N	25	140	N
300SS	100	70	N	20	<200	150	N	15	110	N
301SS	200	100	N	30	<200	200	N	5	90	N
302SS	200	100	N	20	<200	200	N	5	110	N
303SS	200	100	N	50	<200	200	N	5	75	N

Table 2--Data for concentrate samples, Little Rough Hills WSA, Nevada

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
182C	61,980	461,250	3.0	.10	3	.30	500	150	N	N	20	3,000	2
183C	61,900	461,260	2.0	.20	5	1.00	500	N	N	N	30	>10,000	2
184C	61,760	461,270	2.0	.30	5	.70	500	N	N	N	30	3,000	2
185C	61,740	461,250	2.0	.20	3	1.00	200	N	N	N	30	>10,000	2
186C	61,710	462,050	2.0	.20	5	.50	500	N	N	N	30	>10,000	2
187C	61,810	462,050	2.0	.10	5	.20	300	N	N	N	20	3,000	2
188C	61,790	461,790	2.0	.10	5	.15	1,000	N	N	N	20	<2,000	2
189C	61,840	461,890	2.0	.10	5	.20	1,000	20	N	N	<20	3,000	2
190C	61,660	461,310	2.0	.20	5	.70	500	N	N	N	100	>10,000	2
191C	61,590	461,380	2.0	.30	7	.70	500	N	N	N	100	>10,000	2
192C	61,590	461,480	2.0	.70	10	1.00	700	N	N	N	50	10,000	2
193C	61,630	461,630	1.5	.50	5	.70	500	N	N	N	50	<2,000	2
194C	62,100	461,590	1.5	.05	5	.15	500	N	N	N	<20	1,000	2
195C	62,110	461,660	1.5	.50	7	2.00	700	N	N	N	100	3,000	3
299C	61,490	462,200	1.0	.20	15	>2.00	200	70	N	100	100	3,000	2
300C	61,550	462,010	1.0	.20	15	1.00	200	N	N	N	100	>10,000	2
301C	61,640	461,880	1.5	.20	15	1.00	300	N	N	N	50	>10,000	2
302C	61,610	461,810	10.0	.20	7	.50	200	N	N	N	50	>10,000	2
303C	62,100	461,480	1.0	.15	1	.30	200	N	N	N	20	>10,000	2

Table 2--Data for concentrate samples, Little Rough Hills 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
182C	N	N	N	<20	20	200	N	<50	<10	200	N	<10	50
183C	N	N	N	<20	<10	300	N	<50	<10	20	N	<10	N
184C	N	N	N	<20	10	300	N	<50	<10	<20	N	<10	N
185C	N	N	N	<20	10	200	N	<50	<10	<20	N	<10	N
186C	H	N	N	<20	<10	200	N	<50	<10	N	N	<10	<20
187C	N	N	N	<20	<10	200	N	<50	<10	N	N	<10	<20
188C	N	N	N	<20	10	500	N	<50	<10	N	N	<10	<20
189C	N	N	N	<20	10	300	N	N	<10	<20	N	<10	200
190C	H	N	N	<20	50	200	N	N	<10	N	N	<10	N
191C	N	N	N	20	10	300	N	N	<10	N	N	<10	20
192C	N	N	N	50	10	500	N	N	<10	N	N	<10	200
193C	N	N	N	<20	10	200	N	N	<10	<20	N	20	<20
194C	N	N	N	<20	<10	500	N	N	<10	N	N	50	N
195C	N	N	N	50	10	500	N	N	<10	N	N	50	30
299C	N	N	N	300	20	700	N	100	20	3,000	N	<10	N
300C	N	N	N	200	30	700	N	<50	20	20	N	<10	N
301C	N	N	50	70	20	500	20	<50	100	<20	N	<10	N
302C	N	N	N	<20	100	100	N	<50	<10	<20	N	<10	N
303C	N	N	N	<20	10	100	N	<50	<10	<20	N	<10	50

Table 2--Data for concentrate samples, Little Rough Hills 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
182C	200	20	N	700	N	>2,000	N	--	--	--
183C	500	100	N	1,000	N	>2,000	N	--	--	--
184C	500	100	N	700	N	>2,000	N	--	--	--
185C	500	100	N	200	N	>2,000	N	--	--	--
186C	500	70	N	500	N	>2,000	N	--	--	--
187C	200	20	N	1,000	N	>2,000	N	--	--	--
188C	200	20	N	1,000	N	>2,000	N	--	--	--
189C	200	50	N	500	N	>2,000	N	--	--	--
190C	1,000	100	N	500	N	>2,000	N	--	--	--
191C	1,000	100	N	500	N	>2,000	N	--	--	--
192C	1,000	200	N	700	N	>2,000	N	--	--	--
193C	1,000	100	N	700	N	>2,000	N	--	--	--
194C	200	50	N	700	N	>2,000	N	--	--	--
195C	200	150	N	1,000	N	>2,000	N	--	--	--
299C	2,000	100	700	700	N	>2,000	N	--	--	--
300C	2,000	100	N	700	N	>2,000	N	--	--	--
301C	1,500	100	N	700	N	>2,000	N	--	--	--
302C	1,500	70	N	200	N	>2,000	N	--	--	--
303C	500	50	N	700	N	>2,000	N	--	--	--

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

DATE 11/29/84

TITLE	INPUT ID	N	M	***** OPTIONS *****
rough hills secs	-lrb_seas-	19	36	1 0 0 0 2 1 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.
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.
VARIABLE NO. 21 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 24 CONTAINS NO VALID DATA POINTS. THEREFORE THIS VARIABLE WILL BE SKIPPED.
VARIABLE NO. 26 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. 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.

DCU36 GRAPHICAL ANALYSIS - U S G S STATPAC (02/L7/82)

DATE 11/29/84

TITLE	INPUT ID	N	M	***** OPTIONS *****
rough hills seas	-lrh_seas-	19	36	1 U U L 2 1 0 0 0 0

NUMBER OF SELECTED VARIABLES = 22

SELECTED VARIABLE INDICES

3 4 5 6 7 8 11 12 13 16
 17 16 19 22 23 25 27 28 30 34
 34 35

SELECTED VARIABLE IDENTIFIERS

S-FEZ S-HG4 S-CAZ S-TIX S-HA S-AG S-B S-BA S-DE S-CU
S-CR S-LU S-LA S-NI S-PO S-SC S-SR S-V S-Y S-ZK
AA-AS-P AA-ZL-P

SELECTED RCW PAINS

1 TO 14

LOWER BOUNDARIES OF THE LOWEST CLASSES

0.03000	-0.91700	-0.45000	-0.91700	2.41600	-0.41700	0.91600	2.58300	0.25000	0.58300
1.25000	0.58300	1.58300	0.58300	0.91600	0.50300	1.91600	1.25000	0.91600	1.91600
C.58300	1.25000								

CLASS INTERVALS

rough hills sedes

FREQUENCY TABLE FOR VARIABLE 3 (S-FER)

TECHNICAL LESSONS AND

1

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

.40/E+UJ XXXXXXXXXXXXXXXXXX
2.155E+UJ XXXXXXXXXXXXXXXXXX
-10U+E+UJ XXXXXXXXXXXXXXXXXX
4.630E+UJ XXXXXXXXXXXXXXXXXX
6.8L0E+UJ XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY.

MINIMUM ANTI LOG	=	1.5500E+000
MAXIMUM ANTI LOG	=	7.0620E+000
GEOMETRIC MEAN	=	2.03948E+000
GEOMETRIC DEVIATION _i	=	1.62104E+000
VARIANCE OF LOGS	=	4.46814E-022

PERCENT TABLE FOR VARIABLE 3 (S-FER₁) 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 0.9999995 SU

SELECTED PERCENTILE DATA VALUE ANTI LOG OF VALUE

25.00	2.801254E-01	1.932526E+0000
5L.00	3.850835E-01	4.427079E+0000
5L.00	3.934178E-01	3.921180E+0000
4L.00	7.121679E-01	5.154279E+0000
9L.00	1.000000E+35	1.000000E+35
9L.00	1.000000E+35	1.000000E+35
9L.00	1.000000E+35	1.000000E+35

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

DATE 11/29/84

rough hills seds

FREQUENCY TABLE FOR VARIABLE 4 (S-MG%)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0	0.00	0.00		
L	0	0	0	0.00	0.00		
T	0	0	0	0.00	0.00		
-9.17E-01	-7.50E-01	1	1	5.26	5.26	0.15	0.15
-7.50E-01	-5.03E-01	3	4	15.79	21.05	0.02	0.24
-5.03E-01	-4.17E-01	1	5	5.26	26.32	1.67	0.68
-4.17E-01	-2.50E-01	4	9	21.05	47.37	3.73	2.00
-2.50E-01	-0.507E-01	8	17	42.11	89.47	4.89	0.16
-0.507E-01	0.30E-02	2	19	10.53	100.00	4.21	3.41
0	0	0	0	0.00	100.00	3.52	0.66
H	0	0	0	0.00	100.00	0.15	0.15
B	0	0	0	0.00	100.00		

TOTALS LESS H AND B 19

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

1.467E-01 XXXXX
 2.153E-01 XXXXXXXXXXXXXXXX
 3.161E-01 XXXXX
 4.036E-01 XXXXXXXXXXXXXXXXXXXX
 6.808E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.592E-01 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E-01
 MAXIMUM ANTILOG = 1.00000E+00
 GEOMETRIC MEAN = 4.69955E-01
 GEOMETRIC DEVIATION = 1.76885E+00
 VARIANCE OF LOGS = 0.37932E-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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-4.586658E-01	3.478037E-01
50.00	-2.399153E-01	5.755522E-01
75.00	-1.419566E-01	7.226417E-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

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

DATE 11/29/84

rough hills seds

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	0.06	0.36
-2.500E-01 - -8.333E-02	1	1	5.26	5.26	1.50	0.17
-8.333E-02 - 3.333E-02	9	10	47.37	52.63	7.63	0.25
3.333E-02 - 2.500E-01	7	17	30.84	89.47	8.61	0.13
2.500E-01 - 4.167E-01	2	19	10.53	100.00	1.81	0.02
G	0	19	0.00	100.00	0.06	0.06
H	0	19				
S	0	19				

TOTALS LESS H AND S 19

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

```

0.815E-01 XXXXX
1.000E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.400E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2.154E+00 XXXXXXXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 7.00000E-01
 MAXIMUM ANTILOG = 2.00000E+00
 GEOMETRIC MEAN = 1.22577E+00
 GEOMETRIC DEVIATION = 1.32844E+00
 VARIANCE OF LOGS = 1.52699E-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	-1.388642E-02	9.685267E-01
50.00	7.407472E-02	1.185973E+00
75.00	1.845247E-01	1.529413E+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

DLO36 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

rough hills seas

FREQUENCY TABLE FOR VARIABLE O (S-TIX)

LOG LIMITS LOWER	LOG LIMITS UPPER	OBS FREQ	CUM FREQ	PERCENT FREQU.	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ) * 2 / THEOR FREQ
H	L	0	0	0.00	0.00		
L	T	0	0	0.00	0.00		
T		0	0	0.00	0.00		
-9.17CE-01	-7.503E-01	2	2	10.53	10.53	6.18	0.18
-7.503E-01	-5.637E-01	5	7	20.32	30.84	2.03	0.00
-5.637E-01	-4.170E-01	10	17	52.03	89.47	6.97	0.55
-4.170E-01	-2.503E-01	2	19	10.53	100.00	7.28	1.02
G		0	19	0.00	100.00	2.54	0.12
H		0	19			0.18	0.16
D		0	19				

TOTALS LESS H AND G 19

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

1.467E-01 XXXXXXXXXXXXXXX
 2.153E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.100E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 4.055E-01 XXXXXXXXXXA

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.56000E-01
 MAXIMUM ANTILOG = 5.66666E-01
 GEOMETRIC MEAN = 2.64513E-01
 GEOMETRIC DEVIATION = 1.39604E+00
 VARIANCE OF LOGS = 2.69953E-02

PERCENT TABLE FOR VARIABLE O (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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-6.586662E-01	2.194491E-01
50.00	-5.619993E-01	2.870765E-01
75.00	-4.628324E-01	3.444828E-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

D0030 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

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		
2.410E+00	- 2.585E+00	3	3	15.79	15.79	0.48	0.48
2.585E+00	- 2.749E+00	5	8	26.32	42.11	4.68	6.58
2.749E+00	- 2.910E+00	4	12	21.05	63.16	6.00	6.67
2.910E+00	- 3.083E+00	6	18	31.58	94.74	4.09	6.89
3.083E+00	- 3.249E+00	1	19	5.26	100.00	1.80	6.35
G		0	19	0.00	100.00	0.48	6.48
H		0	19				
B		0	19				

TOTALS LESS N AND 0 19

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

3.157E+02 XXXXXXXXXXXXXXXXXX
 4.634E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
 6.602E+02 XXXXXXXXXXXXXXXXXXXXXXXX
 9.965E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.460E+03 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 3.00000E+02
 MAXIMUM ANTILOG = 1.50000E+03
 GEOMETRIC MEAN = 6.52948E+02
 GEOMETRIC DEVIATION = 1.59959E+00
 VARIANCE OF LOGS = 4.16199E-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	2.641000E+00	4.375226E+02
50.00	2.811834E+00	6.483867E+02
75.00	2.978501E+00	9.517023E+02
90.00	3.057668E+00	1.142005E+03
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

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

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE E (S-AG)

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		10	10	64.21	64.21		
L		0	10	0.00	64.21		
T		0	10	0.00	64.21	0.53	0.53
-6.17E-01	-2.503E-01	2	10	10.53	94.74	12.03	0.95
-2.503E-01	-6.307E-02	0	10	0.00	94.74	5.80	5.80
-8.307E-02	0.300E-02	1	10	5.20	100.00	0.03	27.91
G		0	10	0.00	100.00	0.00	0.00
H		0	10				
B		0	10				

TOTALS LESS H AND B 19

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

4.636E-01 XXXXXXXXXX
 6.600E-01
 9.92E-01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-01
 MAXIMUM ANTILOG = 1.00000E+00
 GEOMETRIC MEAN = 0.29961E-01
 GEOMETRIC DEVIATION = 1.49211E+00
 VARIANCE OF LOGS = 3.02064E-02

PERCENT TABLE FOR VARIABLE E (S-AG) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 56

SELECTED DATA VALUE ANTI LOG OF VALUE
PERCENTILE

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

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

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 11 (S-B)

LOG LIMITS LCL=ER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ) == Z/ THEOR FREQ
H		6	6	0.00	0.00		
L		6	6	0.00	0.00		
T		6	6	0.00	0.00		
9.10CE+01	- 1.163E+02	2	2	10.53	10.53	0.38	0.38
1.163E+02	- 1.249E+02	6	2	0.00	10.53	0.78	1.46
1.249E+02	- 1.416E+02	3	5	15.79	26.32	1.68	1.68
1.416E+02	- 1.583E+02	5	10	26.32	52.03	2.81	0.61
1.583E+02	- 1.749E+02	3	13	15.79	68.42	3.65	0.50
1.749E+02	- 1.916E+02	1	14	0.26	75.08	2.92	1.20
1.916E+02	- 2.083E+02	5	19	26.32	100.00	3.08	1.26
G		6	19	0.00	100.00	0.38	0.30
H		6	19				
D		6	19				

TOTALS LESS H AND D 19

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

9.965E+01 XXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXXXXXXXXXX
 3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 4.634E+01 XXXXXXXXXXXXXXXXXXXXXXX
 6.812E+01 XXXXX
 9.965E+01 XXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.60000E+01
 MAXIMUM ANTILOG = 1.16000E+02
 GEOMETRIC MEAN = 3.90023E+01
 GEOMETRIC DEVIATION = 2.13440E+00
 VARIANCE OF LOGS = 1.66422E-01

PERCENT TABLE FOR VARIABLE 11 (S-B) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.388223E+00	2.444686E+01
50.00	1.566001E+00	3.661301E+01
75.00	1.000000E+35	1.000000E+35
90.00	1.000000E+35	1.000000E+35
95.00	1.000000E+35	1.000000E+35

98.00
99.00

1.000000E+35
1.000000E+35

1.000000E+35
1.000000E+35

DC03c GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR (NORMAL DIST) FREQ	(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		
2.583E+00 - 2.750E+00	2	2	10.53	10.53	0.10	0.10
2.750E+00 - 2.910E+00	1	3	5.26	15.79	1.11	0.72
2.910E+00 - 3.083E+00	14	17	73.08	89.47	4.74	2.95
3.083E+00 - 3.250E+00	1	18	5.26	94.74	7.53	5.50
3.250E+00 - 3.416E+00	0	18	0.00	94.74	4.46	2.64
3.416E+00 - 3.583E+00	1	19	5.26	100.00	0.08	0.96
G	0	19	0.00	100.00	0.10	10.37
H	0	19				0.10
B	0	19				

TOTALS LESS H AND B 19

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

4.630E+02 XXXXXXXXXX
 6.868E+02 XXXXX
 9.992E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.407E+03 XXXXX
 2.125E+03 XXXXX
 3.101E+03 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.10000E+02
 MAXIMUM ANTILOG = 3.11111E+03
 GEOMETRIC MEAN = 9.67505E+02
 GEOMETRIC DEVIATION = 1.44689E+00
 VARIANCE OF LOGS = 2.57400E-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 5U

SELECTED PERCENTILE DATA VALUE ANTI LOG OF VALUE

25.00	2.937167E+00	8.653013E+02
50.00	2.993715E+00	9.650327E+02
75.00	3.050263E+00	1.122698E+03
90.00	3.099668E+00	1.257963E+03
95.00	1.000000E+35	1.000000E+35
98.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

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

DATE 11/29/64

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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
R	U	0	0	0.00	0.00		
L	U	0	0	0.00	0.00		
T	C	0	0	0.00	0.00	3.34	3.34
2.5LCE-L1 -	4.167L-U1	15	15	78.95	78.95	10.01	1.62
4.167E-U1 -	5.635E-U1	3	18	15.79	94.74	4.76	0.06
5.853E-L1 -	7.5UUE-L1	1	19	5.26	100.00	0.28	1.69
G	C	0	19	0.00	100.00	3.34	3.34
H	U	0	19				
B	U	0	19				

TOTALS LESS H AND D 19

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

2.154E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.102E+00 XXXXXXXXXX
 4.642E+00 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
 MAXIMUM ANTILOG = 5.60000E+00
 GEOMETRIC MEAN = 2.23756E+00
 GEOMETRIC DEVIATION = 1.27949E+00
 VARIANCE OF LOGS = 1.14572E-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	5.333339E-01	3.414553E+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

DCU3c GRAFICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 10 (S-CO)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
R	0	0	0.00	0.00		
L	2	2	10.53	10.53		
T	0	2	0.00	10.53	1.44	1.44
5.830E+01 - 7.497E+01	9	11	47.37	57.69	4.29	5.10
7.497E+01 - 9.103E+01	0	11	0.00	57.69	0.69	0.69
9.103E+01 - 1.003E+02	0	17	31.58	89.47	4.77	0.52
1.003E+02 - 1.250E+02	2	19	10.53	100.00	1.81	0.02
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

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4.650E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.830E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
5.992E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.007E+02 XXXXXXXXXXXXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNGUARDED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 1.50000E+01
 GEOMETRIC MEAN = 7.26666E+00
 GEOMETRIC DEVIATION = 1.55297E+00
 VARIANCE OF LOGS = 3.44233E-02

PERCENT TABLE FOR VARIABLE 10 (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	1.000000E+35	1.000000E+35
75.00	9.302229E-01	8.515750E+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

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

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N		0	0	0.00	0.00		
L		5	5	26.32	26.32		
T		0	5	0.00	26.32		
1.25LE+00	- 1.417E+00	4	9	21.05	47.37	5.03	5.03
1.417E+00	- 1.563E+00	1	10	5.26	52.63	2.91	0.41
1.563E+00	- 1.750E+00	4	14	21.05	73.08	3.17	1.49
1.750E+00	- 1.917E+00	0	14	0.00	73.08	2.90	0.42
1.917E+00	- 2.163E+00	5	19	26.32	100.00	2.23	2.23
G		0	19	0.00	100.00	2.76	1.61
H		0	19			0.00	0.00
B		0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXXXXXXXXXXXXXXXXXXXX
 3.102E+01 XXXXX
 4.042E+01 XXXXXXXXXXXXXXXXXXXXXXX
 5.013E+01 XXXXXXXXXXXXXXXXXXXXXXX
 1.00LE+02 XXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.10000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 4.75267E+01
 GEOMETRIC DEVIATION = 1.97101E+00
 VARIANCE OF LOGS = 6.68410E-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
5L.00	1.500000E+00	3.162281E+01
75.00	1.000000E+35	1.000000E+35
9L.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

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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		6	6	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
5.830E-01	- 7.497E-01	1	1	5.26	5.26	0.19	0.19
7.497E-01	- 9.105E-01	0	1	0.00	5.26	0.78	0.66
9.105E-01	- 1.030E+00	11	12	57.89	63.16	2.33	2.33
1.083E+00	- 1.250E+00	0	12	0.00	63.16	4.37	10.04
1.250E+00	- 1.410E+00	2	14	10.53	73.69	5.15	5.15
1.410E+00	- 1.583E+00	5	19	26.32	100.00	3.80	0.86
G		0	19	0.00	100.00	2.38	2.09
H		0	19			0.19	0.19
B		0	19				

TOTALS LESS H AND B 19

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

21

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4.630E+00 XXXXX
6.800E+00
9.792E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1.467E+01
2.153E+01 XXXXXXXXXX
3.100E+01 XXXXXXXXXXXXXXXXXXXXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.36485E+01
 GEOMETRIC DEVIATION = 1.73473E+00
 VARIANCE OF LOGS = 5.72325E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	8.633036E-01	7.299676E+00
50.00	1.007243E+00	1.016818E+01
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

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FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM PERCENT 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		
1.583E+00	- 1.750E+00	0	0	31.58	31.58	0.48	0.48
1.750E+00	- 1.916E+00	0	12	31.58	63.10	3.54	1.72
1.916E+00	- 2.083E+00	0	10	31.58	94.74	8.12	0.55
2.083E+00	- 2.250E+00	1	19	5.20	100.00	5.03	0.02
G		0	19	0.00	100.00	1.24	0.05
H		0	19			0.48	
B		0	19			0.48	

TOTALS LESS H AND G 19

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

4.635E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.806E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.992E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.407E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+01
 MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 7.33313E+01
 GEOMETRIC DEVIATION = 1.39350E+00
 VARIANCE OF LOGS = 2.67721E-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	1.646869E+00	7.026933E+01
75.00	1.978834E+00	9.524323E+01
90.00	2.058601E+00	1.142687E+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

rough hills seas

FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ) * = 2 / THEOR FREQ
N		0	0	0.00	0.00		
L		5	5	20.32	20.32		
T		0	5	0.00	20.32		
5.830E-01	- 7.497E-01	3	8	15.79	42.11	1.68	1.68
7.497E-01	- 9.163E-01	1	9	5.20	47.37	2.50	0.10
9.163E-01	- 1.063E+00	4	13	21.05	68.42	3.86	2.12
1.063E+00	- 1.250E+00	1	14	5.26	73.66	4.31	0.02
1.250E+00	- 1.410E+00	3	17	15.79	89.47	2.02	1.76
1.410E+00	- 1.583E+00	2	19	10.53	100.00	1.17	0.48
G		0	19	0.00	100.00	0.00	0.59
H		0	19				0.00
B		0	19				

TOTALS LESS H AND G 19

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

4.630E+00 XXXXXXXXXXXXXXXXXX
 5.800E+00 XXXXX
 9.992E+00 XXXXXXXXXXXXXXXXXXXXXXXX
 1.407E+01 XXXXX
 2.155E+01 XXXXXXXXXXXXXXXXXX
 3.100E+01 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.11100E+00
 MAXIMUM ANTILOG = 5.11110E+01
 GEOMETRIC MEAN = 1.17402E+01
 GEOMETRIC DEVIATION = 1.68542E+00
 VARIANCE OF LOGS = 7.56495E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	9.371674E-01	8.653013E+00
75.00	1.263557E+00	1.834666E+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

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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	L	0	0	0.00	0.00		
L	T	1	1	5.26	5.26		
T		0	1	0.00	5.26	0.70	0.70
9.100E+01	- 1.083E+02	5	6	20.32	31.58	2.92	1.49
1.083E+02	- 1.249E+02	0	6	0.00	31.58	0.14	0.14
1.249E+02	- 1.416E+02	9	15	47.37	78.95	5.96	1.55
1.416E+02	- 1.583E+02	4	19	21.05	100.00	3.28	0.16
G	H	0	19	0.00	100.00	0.00	0.00
H	S	0	19				
S		0	19				

TOTALS LESS H AND S 19

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

9.905E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
 1.460E+02
 2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+02 XXXXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 3.00000E+01
 GEOMETRIC MEAN = 1.80527E+01
 GEOMETRIC DEVIATION = 1.56255E+00
 VARIANCE OF LOGS = 3.18531E-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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.00000E+35
50.00	1.212297E+00	1.630410E+01
75.00	1.388223E+00	2.444686E+01
90.00	1.00000E+35	1.00000E+35
95.00	1.00000E+35	1.00000E+35
98.00	1.00000E+35	1.00000E+35
99.00	1.00000E+35	1.00000E+35

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

DATE 11/29/64

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FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS LOWER = UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ) * Z / THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
5.830E-01 - 7.497E-01	6	6	31.58	31.58	0.24	0.24
7.497E-01 - 9.103E-01	0	0	0.00	31.58	2.42	5.26
9.103E-01 - 1.063E+00	13	19	68.42	100.00	7.44	7.44
G	0	19	0.00	100.00	6.90	1.89
H	0	19	0.00	100.00	0.24	0.24
E	0	19				

TOTALS LESS N AND B 19

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

4.033E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.861E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 9.592E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 1.00000E+01
 GEOMETRIC MEAN = 8.03411E+00
 GEOMETRIC DEVIATION = 1.39234E+00
 VARIANCE OF LOGS = 2.06675E-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	1.000000E+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

D0030 GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

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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	0.42	0.42
1.916E+00 - 2.085E+00	4	4	21.05	21.05	1.88	2.40
2.083E+00 - 2.249E+00	0	4	0.00	21.05	4.76	4.70
2.249E+00 - 2.410E+00	8	12	42.11	63.16	6.16	0.54
2.410E+00 - 2.565E+00	6	18	31.56	94.74	4.11	0.87
2.563E+00 - 2.749E+00	1	19	5.26	100.00	1.66	0.20
G	0	19	0.00	100.00	0.42	0.42
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

26

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9.925E+01 XXXXXXXXXXXXXXXXXXXXXXXXX
1.460E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+02 XXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 5.00000E+02
 GEOMETRIC MEAN = 2.06161E+02
 GEOMETRIC DEVIATION = 1.57654E+00
 VARIANCE OF LOGS = 3.96877E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.113917E+00	1.299921E+02
50.00	2.311634E+00	2.050379E+02
75.00	2.478501E+00	3.009547E+02
90.00	2.557668E+00	3.611336E+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

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FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER = UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
1.250E+00 - 1.417E+00	1	1	5.26	5.26	6.28	6.28
1.417E+00 - 1.583E+00	4	5	21.05	26.32	1.01	0.00
1.583E+00 - 1.750E+00	3	6	15.79	42.11	2.67	0.00
1.750E+00 - 1.917E+00	4	12	21.05	63.16	4.55	0.53
1.917E+00 - 2.083E+00	0	12	31.58	94.74	4.95	0.16
2.083E+00 - 2.250E+00	1	13	5.26	100.00	3.46	1.07
G	0	13	0.00	100.00	2.68	0.50
H	0	13			6.28	
B	0	13			6.28	

TOTALS LESS H AND B 19

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

2.154E+01 XXXXX
 3.102E+01 XXXXXXXXXXXXXXXXXXXXXXXX
 4.642E+01 XXXXXXXXXXXXXXXXXX
 6.813E+01 XXXXXXXXXXXXXXXXXX
 1.066E+02 XXXXXXXXXXXXXXXXXX
 1.408E+02 XXXAA

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 1.50000E+02
 GEOMETRIC MEAN = 6.05761E+01
 GEOMETRIC DEVIATION = 1.75781E+00
 VARIANCE OF LOGS = 6.61107E-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	1.572917E+00	3.740394E+01
50.00	1.812501E+00	6.493633E+01
75.00	1.979166E+00	9.531651E+01
90.00	2.058335E+00	1.143760E+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

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

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 30 (S-Y)

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
H		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00		
9.100E+01	- 1.083E+02	2	2	10.53	10.53	0.34	0.34
1.083E+01	- 1.249E+01	2	4	10.53	21.15	1.25	0.45
1.249E+01	- 1.416E+01	5	9	20.32	47.37	3.23	0.47
1.416E+01	- 1.583E+01	6	15	31.58	78.95	5.09	0.00
1.583E+01	- 1.749E+01	3	18	15.79	94.74	4.91	0.24
1.749E+01	- 1.916E+01	1	19	5.26	100.00	2.88	0.00
G		0	19	0.00	100.00	1.29	0.07
H		0	19	0.00	100.00	0.34	0.34
B		0	19	0.00	100.00		

TOTALS LESS H AND B 19

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

2
8

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9.985E+01 XXXXXXXXXXXXXX
1.466E+01 XXXXXXXXXX
2.151E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+01 XXXXXXXXXXXXXXXXX
6.802E+01 XXXXX

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THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 7.00000E+01
 GEOMETRIC MEAN = 2.53065E+01
 GEOMETRIC DEVIATION = 1.76710E+00
 VARIANCE OF LOGS = 5.39439E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.274334E+00	1.060703E+01
50.00	1.429690E+00	2.690853E+01
75.00	1.561835E+00	3.046151E+01
90.00	1.699335E+00	5.004203E+01
95.00	1.000000E+35	1.000000E+35
96.00	1.000000E+35	1.000000E+35
99.00	1.000000E+35	1.000000E+35

DGS3C GRAPHICAL ANALYSIS - U S G S STATPAC (02/07/82)

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 32 (S-ZR)

LOG LIMITS LOWER	UPPER	CBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	L	0	0	0.00	0.00		
L	L	0	0	0.00	0.00		
T	L	0	0	0.00	0.00		
1.916E+00	- 2.003E+00	3	3	15.79	15.79	0.69	0.09
2.083E+00	- 2.249E+00	1	4	5.26	21.05	1.44	1.70
2.249E+00	- 2.416E+00	5	9	26.32	47.37	2.65	1.20
2.416E+00	- 2.583E+00	4	13	21.05	68.42	4.07	0.21
2.583E+00	- 2.749E+00	4	17	21.05	89.47	4.21	0.01
2.749E+00	- 2.916E+00	1	18	5.26	94.74	3.15	0.23
2.916E+00	- 3.083E+00	1	19	5.26	100.00	1.70	0.29
G	L	19	0.00	100.00		0.89	0.61
H	L	19	0.00	100.00		0.09	0.09
D	L	19					

TOTALS LESS H AND D 19

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

29

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9.985E+01 XXXXXXXXXXXXXXXXXX
1.460E+02 XXXXX
2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.157E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.634E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
6.802E+02 XXXXX
9.985E+02 XXXXX

```

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 2.71141E+02
 GEOMETRIC DEVIATION = 1.94287E+00
 VARIANCE OF LOGS = 8.32003E-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	2.274334E+00	1.860763E+02
50.00	2.436834E+00	2.734226E+02
75.00	2.634751E+00	4.312722E+02
90.00	2.766002E+00	5.034474E+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

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

LOG LIMITS LOWER = UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	1	1	5.26	5.26		
L	1	2	5.26	10.53		
T	0	2	0.00	10.53		
5.83E-01 - 7.497E-01	11	13	57.89	68.42	2.34	2.34
7.497E-01 - 9.103E-01	0	13	0.00	68.42	4.50	4.59
9.103E-01 - 1.083E+00	4	17	21.05	89.47	5.90	5.90
1.083E+00 - 1.251E+00	1	18	5.26	94.74	4.22	0.01
1.251E+00 - 1.410E+00	1	19	5.26	100.00	1.64	0.25
G	0	19	0.00	100.00	0.39	0.95
H	0	19			0.00	0.00
B	0	19				

TOTALS LESS H AND B 19

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

4.636E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.802E+00 XXXXXXXXXXXXXXXXXXXXXXX
 9.592E+00 XXXXXXXXXXXXXXXXXXXXXXX
 1.467E+01 XXXXX
 2.155E+01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E+00
 MAXIMUM ANTILOG = 2.50000E+01
 GEOMETRIC MEAN = 0.90212E+00
 GEOMETRIC DEVIATION = 1.04376E+00
 VARIANCE OF LOGS = 4.65868E-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 0.999999E 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	8.538339E-01	7.142231E+00
90.00	1.699668E+00	1.457963E+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

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DATE 11/29/84

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

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	$(\text{THEOR FREQ} - \text{OBS FREQ})^2 / \text{THEOR FREQ}$
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00		
1.25LE+01 - 1.417E+01	1	1	5.26	5.26	0.11	0.11
1.417E+01 - 1.583E+01	4	5	21.05	26.32	1.92	0.36
1.583E+01 - 1.750E+01	0	5	0.00	26.32	4.08	2.24
1.750E+01 - 1.917E+01	6	11	31.58	57.89	5.30	0.09
1.917E+01 - 2.083E+01	0	17	51.58	89.47	4.22	0.75
2.083E+01 - 2.250E+01	2	19	10.53	100.00	2.81	0.23
G	0	19	0.00	100.00		
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXX
 3.162E+01 XXXXXXXXXXXXXXXXXXXXXXX
 4.642E+01
 6.813E+01 XXXXXXXXXXXXXXXXXXXXXXX
 1.000E+02 XXXXXXXXXXXXXXXXXXXXXXX
 1.468E+02 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.50000E+01
 MAXIMUM ANTILOG = 1.60000E+02
 GEOMETRIC MEAN = 6.96666E+01
 GEOMETRIC DEVIATION = 1.71060E+00
 VARIANCE OF LOGS = 5.43889E-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	1.572917E+00	3.740394E+01
50.00	1.633335E+00	6.612939E+01
75.00	2.006946E+00	1.016122E+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

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DATE 11/29/89

TITLE INPUT ID N M ***** OPTIONS *****
rough hills conc -lrb-conc- 19 36 1 0 0 0 2 1 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

FEZ S-MGZ S-CAX S-TIX S-MN S-AG S-U S-BA S-BE S-CA
CU S-LA S-NI S-PB S-SC S-SN S-SR S-V S-Y

SELECTED ROW PAIRS

LOWER BOUNDARIES OF THE LOWEST CLASSES

~~GENERAL SUMMARY OF THE LOWEST CARRIERS~~

CLASS INTERVALS

U.10007 **U.10007** **0.16067** **0.16007** **U.16667** **0.16667** **0.16667** **0.16667** **0.16667** **0.16667** **U.16667**

98.00
99.00

1.000000E+35
1.000000E+35

1.000000E+35
1.000000E+35

24

rough hills 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	0.11	0.11
-1.417E+00 - -1.250E+00	1	1	5.26	5.26	0.41	0.87
-1.250E+00 - -1.084E+00	0	1	0.00	5.26	1.23	1.23
-1.084E+00 - -9.170E-01	4	5	21.05	26.32	2.65	0.68
-9.170E-01 - -7.503E-01	1	6	5.26	31.58	4.05	2.30
-7.503E-01 - -5.837E-01	8	14	42.11	73.68	4.39	2.97
-5.837E-01 - -4.170E-01	2	16	10.53	84.21	3.37	0.56
-4.170E-01 - -2.503E-01	2	18	10.53	94.74	1.84	0.01
-2.503E-01 - -8.366E-02	1	19	5.26	100.00	0.95	0.00
G	0	19	0.00	100.00	0.11	0.11
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

4.638E-02 XXXXX
 6.800E-02
 9.992E-02 XXXXXXXXXXXXXXXXXXXXXXX
 1.467E-01 XXXXX
 2.155E-01 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.10UE-01 XXXXXXXXXX
 4.650E-01 XXXXXXXXXX
 6.800E-01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 5.00000E-02
 MAXIMUM ANTILOG = 7.00000E-01
 GEOMETRIC MEAN = 1.94291E-01
 GEOMETRIC DEVIATION = 1.90594E+00
 VARIANCE OF LOGS = 7.84606E-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 SU

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	-9.378324E-01	1.153899E-01
50.00	-6.774152E-01	2.101768E-01
75.00	-5.628316E-01	2.736329E-01

90.00	-3.253312E-01	4.727906E-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

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FREQUENCY TABLE FOR VARIABLE S (S-CAZ)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.02	0.02
-8.400E-02 - 8.207E-02	1	1	5.26	5.26	0.12	6.44
8.267E-02 - 2.493E-01	0	1	0.00	5.26	0.50	0.50
2.493E-01 - 6.160E-01	0	1	0.00	5.26	1.46	1.46
6.160E-01 - 5.827E-01	2	3	10.53	15.79	2.99	0.33
5.827E-01 - 7.493E-01	9	12	47.37	63.16	4.30	5.14
7.493E-01 - 9.160E-01	3	15	15.79	78.95	4.33	0.41
9.160E-01 - 1.083E+00	1	16	5.26	84.21	3.07	1.39
1.083E+00 - 1.249E+00	3	19	15.79	100.00	2.20	0.29
G	0	19	0.00	100.00	0.02	0.02
H	0	19				
B	0	19				

TOTALS LESS H AND B

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

9.985E-01 XXXXX
 1.460E+00
 2.151E+00
 3.157E+00 XXXXXXXXXXXXXXX
 4.634E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.802E+00 XXXXXXXXXXXXXXX
 9.985E+00 XXXXX
 1.466E+01 XXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+00
 MAXIMUM ANTILOG = 1.50000E+01
 GEOMETRIC MEAN = 5.06345E+00
 GEOMETRIC DEVIATION = 1.80703E+00
 VARIANCE OF LOGS = 7.60541E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	6.150755E-01	4.121691E+00
50.00	7.630386E-01	5.047062E+00
75.00	8.743352E-01	7.487473E+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

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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		
-9.17CE-01 - -7.503E-01	2	2	10.53	10.53	0.51	0.51
-7.503E-01 - -5.837E-01	2	4	10.53	21.05	0.89	1.37
-5.837E-01 - -4.170E-01	2	6	10.53	31.58	1.76	0.03
-4.170E-01 - -2.503E-01	2	8	10.53	42.11	2.78	0.22
-2.503E-01 - -8.367E-02	4	12	21.05	63.16	3.50	0.64
-8.367E-02 - 8.300E-02	5	17	26.32	89.47	3.51	0.07
8.300E-02 - 2.497E-01	0	17	0.00	89.47	2.81	1.71
2.497E-01 - 4.163E-01	1	18	5.26	94.74	1.79	1.79
G	1	19	5.26	100.00	0.51	0.14
H	0	19				0.46
B	0	19				

TOTALS LESS H AND B 19

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

1.407E-01 XXXXXXXXXX
 2.153E-01 XXXXXXXXXXXX
 3.160E-01 XXXXXXXXXXXX
 4.030E-01 XXXXXXXXXXXX
 6.800E-01 XXXXXXXXXXXXXXXXXXXXXXX
 9.992E-01 XXXXXXXXXXXXXXXXXXXXXXX
 1.407E+00
 2.153E+00 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.50000E-01
 MAXIMUM ANTILOG = 2.00000E+00
 GEOMETRIC MEAN = 5.266856E-01
 GEOMETRIC DEVIATION = 2.13904E+00
 VARIANCE OF LOGS = 1.69045E-01

PERCENT TABLE FOR VARIABLE 6 (S-TIX) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 5U

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.CU	-5.211659E-01	3.011855E-01
50.CU	-1.678319E-01	6.486656E-01
75.CU	-8.664856E-03	9.802461E-01

1.000000E+35
1.000000E+35
1.000000E+35

0h

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FREQUENCY TABLE FOR VARIABLE 7 (S-MN)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	1.11	1.11
2.250E+00 - 2.417E+00	5	5	26.32	26.32	2.60	2.21
2.417E+00 - 2.583E+00	2	7	10.53	36.84	4.67	1.53
2.583E+00 - 2.750E+00	8	15	42.11	78.95	5.17	1.55
2.750E+00 - 2.917E+00	2	17	10.53	89.47	3.52	0.06
2.917E+00 - 3.083E+00	2	19	10.53	100.00	1.93	0.00
G	0	19	0.00	100.00	1.11	1.11
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

HISTOGRAM FOR VARIABLE 7 (S-MN)

MIDPOINTS ARE EXPRESSED AS ANTILOGS

2.154E+02 XXXXXXXXXXXXXXXXXXXXXXXXX
 3.102E+02 XXXXXXXXXX
 4.642E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 6.813E+02 XXXXXXXXXX
 1.000E+03 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 4.14921E+02
 GEOMETRIC DEVIATION = 1.71577E+00
 VARIANCE OF LOGS = 5.49712E-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	1.000000E+35	1.000000E+35
50.00	2.635417E+00	4.319340E+02
75.00	2.734376E+00	5.424703E+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

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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	16	16	84.21	84.21		
L	0	16	0.00	84.21		
T	0	16	0.00	84.21	17.53	17.53
1.250E+00 - 1.417E+00	1	17	5.26	89.47	0.56	0.34
1.417E+00 - 1.583E+00	0	17	0.00	89.47	0.37	0.37
1.583E+00 - 1.750E+00	0	17	0.00	89.47	0.24	0.24
1.750E+00 - 1.917E+00	1	18	5.26	94.74	0.14	5.34
1.917E+00 - 2.083E+00	0	18	0.00	94.74	0.08	0.08
2.083E+00 - 2.250E+00	1	19	5.26	100.00	0.08	11.11
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXX
 3.102E+01
 4.642E+01
 6.813E+01 XXXXX
 1.000E+02
 1.466E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.11000E+01
 MAXIMUM ANTILOG = 1.51000E+02
 GEOMETRIC MEAN = 5.94392E+01
 GEOMETRIC DEVIATION = 2.76586E+00
 VARIANCE OF LOGS = 1.95210E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.000000E+35	1.000000E+35
90.00	1.400067E+00	2.928647E+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

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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	2	2	10.53	10.53		
T	0	2	0.00	10.53	1.97	1.97
1.250E+00 - 1.417E+00	4	6	21.05	31.58	2.81	0.51
1.417E+00 - 1.583E+00	4	10	21.05	52.63	4.12	0.00
1.583E+00 - 1.750E+00	4	14	21.05	73.68	4.31	0.02
1.750E+00 - 1.917E+00	0	14	0.00	73.68	3.22	3.22
1.917E+00 - 2.083E+00	5	19	26.32	100.00	2.57	2.29
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXXXXXXXXXXXXXXXXXXXX
 3.162E+01 XXXXXXXXXXXXXXXXXXXXXXX
 4.642E+01 XXXXXXXXXXXXXXXXXXXXXXX
 6.813E+01
 1.000E+02 XXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 4.36203E+01
 GEOMETRIC DEVIATION = 1.09230E+00
 VARIANCE OF LOGS = 7.07239E-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 SU

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	1.562501E+00	3.651747E+01
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

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FREQUENCY TABLE FOR VARIABLE 12 (S-BA)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
M		0	0	0.00	0.00		
L		0	0	0.00	0.00		
T		0	0	0.00	0.00	0.17	0.17
2.916E+00	- 3.083E+00	1	1	5.26	5.26	0.41	0.85
3.083E+00	- 3.249E+00	0	1	0.00	5.26	1.03	1.03
3.249E+00	- 3.416E+00	2	3	10.53	15.79	2.01	0.00
3.416E+00	- 3.583E+00	6	9	31.58	47.37	3.09	2.74
3.583E+00	- 3.749E+00	0	9	0.00	47.37	3.72	3.72
3.749E+00	- 3.916E+00	0	9	0.00	47.37	3.50	3.50
3.916E+00	- 4.083E+00	1	10	5.26	52.63	5.08	3.27
G		9	19	47.37	100.00	0.17	468.12
H		0	19				
B		0	19				

TOTALS LESS H AND B 19

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

9.985E+02 XXXXX
 1.460E+03
 2.151E+03 XXXXXXXXXXXX
 3.157E+03 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 4.634E+03
 6.802E+03
 9.985E+03 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+03
 MAXIMUM ANTILOG = 1.00000E+04
 GEOMETRIC MEAN = 2.79562E+03
 GEOMETRIC DEVIATION = 1.77023E+00
 VARIANCE OF LOGS = 6.15193E-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 0.999999E 50

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	3.464612E+00	2.914823E+03
50.00	3.832669E+00	6.802499E+03
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

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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	1.29	1.29
2.500E-01 - 4.167E-01	18	18	94.74	94.74	17.63	0.01
4.167E-01 - 5.833E-01	1	19	5.26	100.00	0.08	10.52
G	0	19	0.00	100.00	1.29	1.29
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

HISTOGRAM FOR VARIABLE 13 (S-BE)
MIDPOINTS ARE EXPRESSED AS ANTILOGS2.154E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.162E+00 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+00
 MAXIMUM ANTILOG = 3.00000E+00
 GEOMETRIC MEAN = 2.04314E+00
 GEOMETRIC DEVIATION = 1.09748E+00
 VARIANCE OF LOGS = 1.03261E-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 0.999999E 5U

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	1.00000E+35	1.000000E+35
75.00	1.00000E+35	1.000000E+35
90.00	1.00000E+35	1.000000E+35
95.00	1.00000E+35	1.000000E+35
98.00	1.00000E+35	1.000000E+35
99.00	1.00000E+35	1.000000E+35

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FREQUENCY TABLE FOR VARIABLE 17 (S-CR)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	13	13	68.42	68.42		
T	0	13	0.00	68.42	4.87	4.87
1.250E+00 - 1.417E+00	1	14	5.26	73.68	3.18	1.49
1.417E+00 - 1.583E+00	0	14	0.00	73.68	3.47	3.47
1.583E+00 - 1.750E+00	2	16	10.53	84.21	3.07	0.37
1.750E+00 - 1.917E+00	1	17	5.26	89.47	2.20	0.66
1.917E+00 - 2.083E+00	0	17	0.00	89.47	1.28	1.28
2.083E+00 - 2.250E+00	0	17	0.00	89.47	0.61	0.61
2.250E+00 - 2.417E+00	1	18	5.26	94.74	0.23	2.55
2.417E+00 - 2.583E+00	1	19	5.26	100.00	0.09	8.69
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXX
 3.162E+01
 4.042E+01 XXXXXXXXXXXX
 6.813E+01 XXXXX
 1.000E+02
 1.400E+02
 2.154E+02 XXXXX
 3.162E+02 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 3.16000E+02
 GEOMETRIC MEAN = 7.77906E+01
 GEOMETRIC DEVIATION = 2.70738E+00
 VARIANCE OF LOGS = 1.07098E-01

PERCENT TABLE FOR VARIABLE 17 (S-CR) BY LINEAR INTERPOLATION FROM FREQUENCY TABLE
 IF SELECTED PERCENTILES FALL WITHIN DATA EITHER ABOVE OR BELOW THE LIMITS OF DETECTION,
 THE DATA VALUE ON THE TABLE IS GIVEN AS 0.9999991E 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	1.458334E+00	2.872966E+01

90.00 1.966668E+00 9.261217E+01
95.00 1.600000E+35 1.600000E+35
98.00 1.000000E+35 1.000000E+35
99.00 1.000000E+35 1.000000E+35

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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	4	4	21.05	21.05		
T	0	4	0.00	21.05	3.73	3.73
9.160E-01 - 1.063E+00	9	13	47.37	68.42	3.71	7.50
1.083E+00 - 1.249E+00	0	13	0.00	68.42	4.33	4.33
1.249E+00 - 1.416E+00	3	16	15.79	84.21	3.65	0.12
1.416E+00 - 1.563E+00	1	17	5.26	89.47	2.22	0.67
1.563E+00 - 1.749E+00	1	18	5.26	94.74	0.97	0.00
1.749E+00 - 1.916E+00	0	18	0.00	94.74	0.31	0.31
1.916E+00 - 2.083E+00	1	19	5.26	100.00	0.08	10.10
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

9.985E+00 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.466E+01 XXXXXXXXXXXXXXX
 2.151E+01 XXXXXXXXXXXXXXX
 3.157E+01 XXXXX
 4.634E+01 XXXXX
 6.802E+01 XXXXX
 9.985E+01 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNGUARDED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+01
 MAXIMUM ANTILOG = 1.00000E+02
 GEOMETRIC MEAN = 1.60427E+01
 GEOMETRIC DEVIATION = 2.04746E+00
 VARIANCE OF LOGS = 9.68550E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.000000E+35	1.000000E+35
50.00	1.000000E+35	1.000000E+35
75.00	1.221556E+00	1.065544E+01
90.00	1.599335E+00	3.974978E+01
95.00	1.600000E+35	1.000000E+35

98.00
99.00

1.000000E+35
1.000000E+35

1.000000E+35
1.000000E+35

05

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FREQUENCY TABLE FOR VARIABLE 19 (S-LA)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.28	0.28
1.916E+00 - 2.083E+00	2	2	10.53	10.53	0.94	1.20
2.083E+00 - 2.249E+00	0	2	0.00	10.53	2.46	2.46
2.249E+00 - 2.416E+00	6	8	31.58	42.11	4.26	0.71
2.416E+00 - 2.583E+00	4	12	21.05	63.16	4.86	0.15
2.583E+00 - 2.749E+00	5	17	26.32	89.47	3.65	0.50
2.749E+00 - 2.916E+00	2	19	10.53	100.00	2.54	0.12
G	0	19	0.00	100.00	0.28	0.28
H	0	19				
B	0	19				

TOTALS LESS H AND B

19

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

9.945E+01 XXXXXXXXXXXX
 1.400E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 2.151E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.157E+02 XXXXXXXXXXXXXXXXXXXXXXX
 4.054E+02 XXXXXXXXXXXXXXXXXXXXXXX
 6.802E+02 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 1.00000E+02
 MAXIMUM ANTILOG = 7.00000E+02
 GEOMETRIC MEAN = 2.94040E+02
 GEOMETRIC DEVIATION = 1.79270E+00
 VARIANCE OF LOGS = 0.42003E-02

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

SELECTED PERCENTILE DATA VALUE ANTI LOG OF VALUE

25.00	2.235445E+00	1.719670E+02
50.00	2.478501E+00	3.009547E+02
75.00	2.657608E+00	4.546405E+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

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FREQUENCY TABLE FOR VARIABLE 22 (S-NI)

LOG LIMITS LOWER	UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0	0.00	0.00		
L	16	16	16	84.21	84.21		
T	0	16	16	0.00	84.21	14.33	14.33
1.250E+00 - 1.417E+00	1.417E+00	2	18	10.53	94.74	3.08	0.38
1.417E+00 - 1.583E+00	1.583E+00	0	18	0.00	94.74	1.23	1.23
1.583E+00 - 1.750E+00	1.750E+00	0	18	0.00	94.74	0.31	0.31
1.750E+00 - 1.917E+00	1.917E+00	0	18	0.00	94.74	0.05	0.05
1.917E+00 - 2.083E+00	2.083E+00	1	19	5.26	100.00	0.01	187.55
G	0	19	19	0.00	100.00	0.00	0.00
H	0	19					
B	0	19					

TOTALS LESS H AND B

19

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

2.154E+01 XXXXXXXXXXXX
 5.102E+01
 6.642E+01
 8.813E+01
 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 = 3.41995E+01
 GEOMETRIC DEVIATION = 2.53251E+00
 VARIANCE OF LOGS = 1.62853E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	1.00000E+35	1.000000E+35
75.00	1.00000E+35	1.000000E+35
90.00	1.00000E+35	1.000000E+35
95.00	1.00000E+35	1.000000E+35
98.00	1.00000E+35	1.000000E+35
99.00	1.00000E+35	1.000000E+35

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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	8	8	42.11	42.11		
L	7	15	36.84	78.95		
T	0	15	0.00	78.95	6.51	6.51
1.250E+00 - 1.417E+00	2	17	10.53	89.47	2.27	0.03
1.417E+00 - 1.583E+00	0	17	0.00	89.47	2.34	2.34
1.583E+00 - 1.750E+00	0	17	0.00	89.47	2.19	2.19
1.750E+00 - 1.917E+00	0	17	0.00	89.47	1.86	1.86
1.917E+00 - 2.083E+00	0	17	0.00	89.47	1.44	1.44
2.083E+00 - 2.250E+00	0	17	0.00	89.47	1.01	1.01
2.250E+00 - 2.417E+00	1	18	5.26	94.74	0.65	0.19
2.417E+00 - 2.583E+00	0	18	0.00	94.74	0.38	0.38
2.583E+00 - 2.750E+00	0	18	0.00	94.74	0.20	0.20
2.750E+00 - 2.917E+00	0	18	0.00	94.74	0.10	0.10
2.917E+00 - 3.083E+00	0	18	0.00	94.74	0.04	0.04
3.083E+00 - 3.250E+00	0	18	0.00	94.74	0.02	0.02
3.250E+00 - 3.417E+00	0	18	0.00	94.74	0.01	0.01
3.417E+00 - 3.583E+00	1	19	5.26	100.00	0.00	360.28
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXXXXXXX
 3.162E+01
 4.642E+01
 6.813E+01
 1.000E+02
 1.400E+02
 2.154E+02 XXXXX
 3.162E+02
 4.642E+02
 6.813E+02
 1.000E+03
 1.400E+03
 2.154E+03
 3.162E+03 XXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 3.00000E+03
 GEOMETRIC MEAN = 1.24467E+02
 GEOMETRIC DEVIATION = 1.08385E+01
 VARIANCE OF LOGS = 1.67110E+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 0.999999E 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	1.516667E+00	3.285997E+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

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FREQUENCY TABLE FOR VARIABLE 25 (S-SC)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	16	16	84.21	84.21		
T	0	16	0.00	64.21	14.47	14.47
1.250E+00 - 1.417E+00	1	17	5.26	89.47	3.13	1.45
1.417E+00 - 1.583E+00	0	17	0.00	89.47	1.12	1.12
1.583E+00 - 1.750E+00	2	19	10.53	100.00	0.27	11.02
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXX
 3.162E+01
 4.642E+01 XXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNGUARDED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 5.00000E+01
 GEOMETRIC MEAN = 3.08403E+01
 GEOMETRIC DEVIATION = 1.69727E+00
 VARIANCE OF LOGS = 5.27854E-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	1.000000E+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

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DATE 11/29/84

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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	9	9	47.37	47.37		
L	4	13	21.05	68.42		
T	0	13	0.00	68.42	4.95	4.95
1.250E+00 - 1.417E+00	1	14	5.26	73.68	3.59	1.87
1.417E+00 - 1.583E+00	1	15	5.26	78.95	3.83	2.09
1.583E+00 - 1.750E+00	2	17	10.53	89.47	3.15	0.42
1.750E+00 - 1.917E+00	0	17	0.00	89.47	2.00	2.00
1.917E+00 - 2.083E+00	0	17	0.00	89.47	0.98	0.98
2.083E+00 - 2.250E+00	0	17	0.00	89.47	0.37	0.37
2.250E+00 - 2.417E+00	2	19	10.53	100.00	0.14	25.65
G	0	19	0.00	100.00	0.00	0.00
H	0	19				
B	0	19				

TOTALS LESS H AND J 19

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

2.154E+01 XXXXX
 3.162E+01 XXXXX
 4.642E+01 XXXXXXXXXX
 6.813E+01
 1.000E+02
 1.466E+02
 2.154E+02 XXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 2.00000E+02
 GEOMETRIC MEAN = 0.25089E+01
 GEOMETRIC DEVIATION = 2.62107E+00
 VARIANCE OF LOGS = 1.75124E-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	1.00000E+35	1.00000E+35
50.00	1.60000E+35	1.60000E+35
75.00	1.458334E+00	2.872989E+01
90.00	1.00000E+35	1.00000E+35
95.00	1.00000E+35	1.00000E+35

98.00

99.00

1.000000E+35

1.000000E+35

1.000000E+35

1.000000E+35

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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	1.66	1.66
2.250E+00 - 2.417E+00	6	6	31.58	31.58	1.81	9.68
2.417E+00 - 2.583E+00	0	0	0.00	31.58	2.71	2.71
2.583E+00 - 2.750E+00	5	11	26.32	57.89	3.32	0.66
2.750E+00 - 2.917E+00	0	11	0.00	57.89	3.32	3.32
2.917E+00 - 3.083E+00	4	15	21.05	78.95	2.71	0.61
3.083E+00 - 3.250E+00	2	17	10.53	89.47	1.81	0.02
3.250E+00 - 3.417E+00	2	19	10.53	100.00	1.66	0.07
G	0	19	0.00	100.00	1.66	1.66
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 3.102E+02
 4.042E+02 XXXXXXXXXXXXXXXXXXXXXXXXXX
 5.013E+02
 1.000E+03 XXXXXXXXXXXXXXXXXXXXXXX
 1.400E+03 XXXXXXXXXX
 2.154E+03 XXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 2.00000E+03
 GEOMETRIC MEAN = 5.2701E+02
 GEOMETRIC DEVIATION = 2.33557E+00
 VARIANCE OF LOGS = 1.35713E-01

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	1.00000E+35	1.000000E+35
50.00	2.05000E+02	4.466844E+02
75.00	3.020835E+00	1.049143E+03
90.00	1.00000E+35	1.000000E+35
95.00	1.00000E+35	1.000000E+35

98.00

1.000000E+35

1.000000E+35

99.00

1.000000E+35

b5

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

DATE 11/29/84

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FREQUENCY TABLE FOR VARIABLE 28 (S-V)

LOG LIMITS LOWER - UPPER	OBS FREQ	CUM FREQ	PERCENT FREQ	PERCENT CUM FREQ	THEOR FREQ (NORMAL DIST)	(THEOR FREQ - OBS FREQ)**2/THEOR FREQ
N	0	0	0.00	0.00		
L	0	0	0.00	0.00		
T	0	0	0.00	0.00	0.35	0.35
1.250E+00 - 1.417E+00	3	3	15.79	15.79	0.89	4.90
1.417E+00 - 1.583E+00	0	3	0.00	15.79	2.10	2.10
1.583E+00 - 1.750E+00	3	0	15.79	31.58	3.55	0.09
1.750E+00 - 1.917E+00	2	8	10.53	42.11	4.33	1.25
1.917E+00 - 2.083E+00	9	17	47.37	89.47	3.81	7.09
2.083E+00 - 2.250E+00	1	18	5.26	94.74	2.41	0.83
2.250E+00 - 2.417E+00	1	19	5.26	100.00	1.56	0.20
G	0	19	0.00	100.00	0.35	0.35
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+01 XXXXXXXXXXXXXXXXX
 3.162E+01 XXXXXXXXXXXXXXXXX
 4.642E+01 XXXXXXXXXXXXXXXXX
 6.813E+01 XXXXXXXXXX
 1.000E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.460E+02 XXXXX
 2.154E+02 XXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+01
 MAXIMUM ANTILOG = 2.00000E+02
 GEOMETRIC MEAN = 7.09433E+01
 GEOMETRIC DEVIATION = 1.93737E+00
 VARIANCE OF LOGS = 8.24960E-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	1.011112E+00	4.084245E+01
50.00	1.944446E+00	8.799254E+01
75.00	2.032409E+00	1.077479E+02
90.00	2.100002E+00	1.258950E+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

19

rough hills 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	0.06	0.06
2.250E+00 - 2.417E+00	2	2	10.53	10.53	0.52	4.24
2.417E+00 - 2.583E+00	0	2	0.00	10.53	2.27	2.27
2.583E+00 - 2.750E+00	4	6	21.05	31.58	5.15	0.26
2.750E+00 - 2.917E+00	9	15	47.37	78.95	6.02	1.47
2.917E+00 - 3.083E+00	4	19	21.05	100.00	4.98	0.19
G	0	19	0.00	100.00	0.06	0.06
H	0	19				
B	0	19				

TOTALS LESS H AND B 19

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

2.154E+02 XXXXXXXXXX
 3.162E+02
 4.642E+02 XXXXXXXXXXXXXXXXXXXXXXX
 6.813E+02 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
 1.000E+03 XXXXXXXXXXXXXXXXXXXXXXX

THE FOLLOWING STATISTICS ARE COMPUTED FOR THE UNQUALIFIED VALUES ONLY

MINIMUM ANTILOG = 2.00000E+02
 MAXIMUM ANTILOG = 1.00000E+03
 GEOMETRIC MEAN = 0.16134E+02
 GEOMETRIC DEVIATION = 1.58238E+00
 VARIANCE OF LOGS = 3.97248E-02

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

SELECTED PERCENTILE	DATA VALUE	ANTI LOG OF VALUE
25.00	2.645834E+00	4.424194E+02
50.00	2.814816E+00	6.526538E+02
75.00	2.902779E+00	7.994275E+02
90.00	1.00000E+35	1.00000E+35
95.00	1.00000E+35	1.00000E+35
98.00	1.00000E+35	1.00000E+35
99.00	1.00000E+35	1.00000E+35

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

DATE 11/29/84

TITLE rough hills sediments INPUT ID -lrh_seds- N 19 M 36 ***** OPTIONS ***** 1 0 1 1 0 0 0 0 0 0 OUTPUT ID -lrh_seds- N 34 M 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-MG%	S-CAX	S-T1%	S-FN	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-KO	S-NB	S-NI
S-P6	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR
S-TH	AA-AS-P	AA-ZH-P	AA-SB-P						

NUMBER OF SELECTED ROW PAIRS 1

SELECTED ROW PAIRS

1 - 19

PHASE TWO RESULTS

W A R N I N G * * * THE RESULTS FROM THIS PHASE "SHOULD NOT" BE ENTERED INTO DC096-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-CAX	6 S-TIX	7 S-MN	8 S-AG	9 S-AS	10 S-AU	11 S-B	12 S-BA
1 S-FEX	0.4215	0.4215	0.4215	0.4215	0.4215	0.3597	*****	*****	0.4215	0.4215
2 S-MGX	-0.3098	-0.3098	-0.3098	-0.3098	-0.3098	-0.1033	*****	*****	-0.3098	-0.3098
3 S-CAX	0.0884	0.0884	0.0884	0.0884	0.0884	0.0587	*****	*****	0.0884	0.0884
4 S-TIX	-0.5776	-0.5776	-0.5776	-0.5776	-0.5776	-0.5816	*****	*****	-0.5776	-0.5776
5 S-MN	2.8149	2.8149	2.8149	2.8149	2.8149	2.5998	*****	*****	2.8149	2.8149
6 S-AG	-0.2007	-0.2007	-0.2007	-0.2007	-0.2007	-0.2007	*****	*****	-0.2007	-0.2007
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-E	1.5911	1.5911	1.5911	1.5911	1.5911	1.9484	*****	*****	1.5911	1.5911
10 S-BA	2.9945	2.9945	2.9945	2.9945	2.9945	2.7993	*****	*****	2.9945	2.9945
11 S-BE	0.3498	0.3498	0.3498	0.3498	0.3498	0.3010	*****	*****	0.3498	0.3498
12 S-EI	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
13 S-CO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CO	0.8613	0.8613	0.8613	0.8613	0.8613	1.0587	*****	*****	0.8613	0.8613
15 S-CR	1.6769	1.6769	1.6769	1.6769	1.6769	2.0000	*****	*****	1.6769	1.6769
16 S-CU	1.1414	1.1414	1.1414	1.1414	1.1414	1.4771	*****	*****	1.1414	1.1414
17 S-LA	1.8653	1.8653	1.8653	1.8653	1.8653	1.7964	*****	*****	1.8653	1.8653
18 S-MO	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-AB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
20 S-HI	1.0697	1.0697	1.0697	1.0697	1.0697	1.3010	*****	*****	1.0697	1.0697
21 S-PB	1.2565	1.2565	1.2565	1.2565	1.2565	1.1590	*****	*****	1.2565	1.2565
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	0.9049	0.9049	0.9049	0.9049	0.9049	1.0000	*****	*****	0.9049	0.9049
24 S-SN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
25 S-SR	2.3142	2.3142	2.3142	2.3142	2.3142	2.1003	*****	*****	2.3142	2.3142
26 S-V	1.7823	1.7823	1.7823	1.7823	1.7823	1.8967	*****	*****	1.7823	1.7823
27 S-W	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	1.4033	1.4033	1.4033	1.4033	1.4033	1.4184	*****	*****	1.4033	1.4033
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	2.4332	2.4332	2.4332	2.4332	2.4332	2.2594	*****	*****	2.4332	2.4332
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	0.8390	0.8390	0.8390	0.8390	0.8390	1.0910	*****	*****	0.8390	0.8390
33 AA-ZH-P	1.8393	1.8393	1.8393	1.8393	1.8393	2.0473	*****	*****	1.8393	1.8393
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

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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-FEX	*****	0.4123	0.4215	*****
2	S-MGX	*****	-0.2687	-0.3098	*****
3	S-CAZ	*****	0.0811	0.0884	*****
4	S-TIZ	*****	-0.5663	-0.5776	*****
5	S-MN	*****	2.8022	2.8149	*****
6	S-AG	*****	-0.2007	-0.2007	*****
7	S-AS	*****	*****	*****	*****
8	S-AU	*****	*****	*****	*****
9	S-B	*****	1.6018	1.5911	*****
10	S-BA	*****	2.9939	2.9945	*****
11	S-BE	*****	0.3555	0.3498	*****
12	S-BI	*****	*****	*****	*****
13	S-CD	*****	*****	*****	*****
14	S-CO	*****	0.8527	0.8613	*****
15	S-CR	*****	1.6752	1.6769	*****
16	S-CU	*****	1.1757	1.1414	*****
17	S-LA	*****	1.8494	1.8653	*****
18	S-MO	*****	*****	*****	*****
19	S-NB	*****	*****	*****	*****
20	S-NI	*****	1.0609	1.0697	*****
21	S-PB	*****	1.2516	1.2565	*****
22	S-SB	*****	*****	*****	*****
23	S-SC	*****	0.9115	0.9049	*****
24	S-SN	*****	*****	*****	*****
25	S-SR	*****	2.3231	2.3142	*****
26	S-V	*****	1.7978	1.7823	*****
27	S-W	*****	*****	*****	*****
28	S-Y	*****	1.4123	1.4033	*****
29	S-ZN	*****	*****	*****	*****
30	S-ZR	*****	2.4150	2.4332	*****
31	S-TH	*****	*****	*****	*****
32	AA-AS-P	*****	0.8390	0.8390	*****
33	AA-ZN-P	*****	1.8582	1.8393	*****
34	AA-SB-P	*****	*****	*****	*****

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

DATE 11/29/64

ABBAY OF VARIANCES

DATE 11/29/84

ARRAY OF VARIANCES - CONT.

	13 S-BE	14 S-EI	15 S-CD	16 S-CO	17 S-CR	18 S-CU	19 S-LA	20 S-MO	21 S-NB	22 S-NI
1 S-FEX	0.044	*****	*****	0.044	0.051	0.044	0.044	*****	*****	0.051
2 S-HGX	0.064	*****	*****	0.043	0.010	0.064	0.064	*****	*****	0.010
3 S-CAZ	0.015	*****	*****	0.016	0.017	0.015	0.015	*****	*****	0.017
4 S-TIA	0.021	*****	*****	0.018	0.010	0.021	0.021	*****	*****	0.010
5 S-MN	0.042	*****	*****	0.039	0.043	0.042	0.042	*****	*****	0.043
6 S-AG	0.030	*****	*****	0.030	0.030	0.030	0.030	*****	*****	0.030
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-B	0.108	*****	*****	0.115	0.063	0.108	0.108	*****	*****	0.063
10 S-EA	0.020	*****	*****	0.029	0.034	0.026	0.026	*****	*****	0.034
11 S-BE	0.011	*****	*****	0.013	0.011	0.011	0.011	*****	*****	0.011
12 S-cl	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CO	0.034	*****	*****	0.034	0.035	0.034	0.034	*****	*****	0.035
15 S-CR	0.087	*****	*****	0.087	0.087	0.087	0.087	*****	*****	0.087
16 S-CU	0.057	*****	*****	0.050	0.052	0.057	0.057	*****	*****	0.052
17 S-LA	0.121	*****	*****	0.115	0.017	0.021	0.021	*****	*****	0.017
18 S-MD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-NB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
20 S-NI	0.070	*****	*****	0.076	0.076	0.076	0.076	*****	*****	0.076
21 S-PB	0.032	*****	*****	0.036	0.034	0.032	0.032	*****	*****	0.034
22 S-SB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	0.021	*****	*****	0.017	0.012	0.021	0.021	*****	*****	0.012
24 S-SN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
25 S-SR	0.039	*****	*****	0.030	0.036	0.039	0.039	*****	*****	0.036
26 S-V	0.060	*****	*****	0.045	0.021	0.060	0.060	*****	*****	0.021
27 S-w	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	0.054	*****	*****	0.060	0.065	0.054	0.054	*****	*****	0.065
29 S-ZN	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	0.043	*****	*****	0.064	0.085	0.083	0.083	*****	*****	0.085
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	0.047	*****	*****	0.048	0.055	0.047	0.047	*****	*****	0.055
33 AA-ZN-P	0.054	*****	*****	0.055	0.058	0.054	0.054	*****	*****	0.056
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

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ARRAY OF VARIANCES - CONT.

ARRAY OF VARIANCES - CNT.

	33	34	35	36
	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
1 S-FEX	*****	0.044	0.044	*****
2 S-FGZ	*****	0.053	0.064	*****
3 S-CA4	*****	0.014	0.015	*****
4 S-TIX	*****	0.020	0.021	*****
5 S-MN	*****	0.044	0.042	*****
6 S-AG	*****	0.030	0.030	*****
7 S-AS	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****
9 S-B	*****	0.116	0.108	*****
10 S-EA	*****	0.029	0.026	*****
11 S-BE	*****	0.013	0.011	*****
12 S-EI	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****
14 S-CO	*****	0.035	0.034	*****
15 S-CR	*****	0.094	0.087	*****
16 S-CU	*****	0.050	0.057	*****
17 S-LA	*****	0.021	0.021	*****
18 S-MO	*****	*****	*****	*****
19 S-Rd	*****	*****	*****	*****
20 S-KI	*****	0.078	0.076	*****
21 S-PB	*****	0.030	0.032	*****
22 S-Sd	*****	*****	*****	*****
23 S-SC	*****	0.020	0.021	*****
24 S-SN	*****	*****	*****	*****
25 S-SR	*****	0.030	0.039	*****
26 S-V	*****	0.050	0.060	*****
27 S-L	*****	*****	*****	*****
28 S-Y	*****	0.057	0.054	*****
29 S-ZN	*****	*****	*****	*****
30 S-ZR	*****	0.089	0.083	*****
31 S-TH	*****	*****	*****	*****
32 AA-AS-P	*****	0.047	0.047	*****
33 AA-ZN-P	*****	0.055	0.054	*****
34 AA-SB-P	*****	*****	*****	*****

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-FEX)	)	2 (S-MGX)	0.4094	19
1 (S-FEX)	)	3 (S-CA%	0.2645	19
1 (S-FEX)	)	4 (S-TIX)	0.5617	19
1 (S-FEX)	)	5 (S-HN)	0.6528	19
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)	0.1850	19
1 (S-FEX)	)	10 (S-BA)	0.0912	19
1 (S-FEX)	)	11 (S-BE)	0.1922	19
1 (S-FEX)	)	12 (S-BI)	*****	0
1 (S-FEX)	)	13 (S-CD)	*****	0
1 (S-FEX)	)	14 (S-CO)	0.3491	17
1 (S-FEX)	)	15 (S-CR)	-0.1327	14
1 (S-FEX)	)	16 (S-CU)	0.6774	19
1 (S-FEX)	)	17 (S-LA)	0.2610	19
1 (S-FEX)	)	18 (S-MO)	*****	0
1 (S-FEX)	)	19 (S-NB)	*****	0
1 (S-FEX)	)	20 (S-NI)	-0.0238	14
1 (S-FEX)	)	21 (S-P)	0.3466	18
1 (S-FEX)	)	22 (S-Sd)	*****	0
1 (S-FEX)	)	23 (S-SC)	0.6062	19
1 (S-FEX)	)	24 (S-SN)	*****	0
1 (S-FEX)	)	25 (S-SK)	0.2669	19
1 (S-FEX)	)	26 (S-V)	0.3948	19
1 (S-FEX)	)	27 (S-W)	*****	0
1 (S-FEX)	)	28 (S-Y)	0.5067	19
1 (S-FEX)	)	29 (S-ZN)	*****	0
1 (S-FEX)	)	30 (S-ZR)	0.2868	19
1 (S-FEX)	)	31 (S-TH)	*****	0
1 (S-FEX)	)	32 (AA-AS-P)	-0.1273	17
1 (S-FEX)	)	33 (AA-ZN-P)	0.2998	19
1 (S-FEX)	)	34 (AA-SB-P)	*****	0
2 (S-MGX)	)	3 (S-CA%)	0.5446	19
2 (S-MGX)	)	4 (S-TIX)	0.5551	19
2 (S-MGX)	)	5 (S-HN)	0.2454	19
2 (S-MGX)	)	6 (S-AG)	-0.5000	3
2 (S-MGX)	)	7 (S-AS)	*****	0
2 (S-MGX)	)	8 (S-AU)	*****	0
2 (S-MGX)	)	9 (S-B)	0.6778	19
2 (S-MGX)	)	10 (S-BA)	-0.0748	19
2 (S-MGX)	)	11 (S-BE)	-0.2320	19
2 (S-MGX)	)	12 (S-BI)	*****	0
2 (S-MGX)	)	13 (S-CD)	*****	0
2 (S-MGX)	)	14 (S-CO)	0.5623	17
2 (S-MGX)	)	15 (S-CR)	0.4499	14
2 (S-MGX)	)	16 (S-CU)	0.5717	19
2 (S-MGX)	)	17 (S-LA)	-0.4677	19
2 (S-MGX)	)	18 (S-MO)	*****	0
2 (S-MGX)	)	19 (S-NB)	*****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
2 (S-MGX)	20 (S-NI )	)	0.2365	14
2 (S-MGX)	21 (S-PB )	)	-0.3091	18
2 (S-MGX)	22 (S-SB )	)	*****	0
2 (S-MGX)	23 (S-SC )	)	0.7663	19
2 (S-MGX)	24 (S-SN )	)	*****	0
2 (S-MGX)	25 (S-SR )	)	0.4608	19
2 (S-MGX)	26 (S-V )	)	0.9019	19
2 (S-MGX)	27 (S-W )	)	*****	0
2 (S-MGX)	28 (S-Y )	)	-0.1611	19
2 (S-MGX)	29 (S-ZN )	)	*****	0
2 (S-MGX)	30 (S-ZR )	)	-0.3918	19
2 (S-MGX)	31 (S-TH )	)	*****	0
2 (S-MGX)	32 (AA-AS-P )	)	0.2054	17
2 (S-MGX)	33 (AA-ZN-P )	)	0.0576	19
2 (S-MGX)	34 (AA-SB-P )	)	*****	0
3 (S-CAZ)	4 (S-T1Z )	)	0.2142	19
3 (S-CAZ)	5 (S-HN )	)	0.2420	19
3 (S-CAZ)	6 (S-AG )	)	-0.5000	3
3 (S-CAZ)	7 (S-AS )	)	*****	0
3 (S-CAZ)	8 (S-AU )	)	*****	0
3 (S-CAZ)	9 (S-d )	)	0.0775	19
3 (S-CAZ)	10 (S-dA )	)	-0.1818	19
3 (S-CAZ)	11 (S-dE )	)	-0.0497	19
3 (S-CAZ)	12 (S-dI )	)	*****	0
3 (S-CAZ)	13 (S-CD )	)	*****	0
3 (S-CAZ)	14 (S-CO )	)	-0.0030	17
3 (S-CAZ)	15 (S-CR )	)	-0.3063	14
3 (S-CAZ)	16 (S-CU )	)	-0.2286	19
3 (S-CAZ)	17 (S-LA )	)	-0.2635	19
3 (S-CAZ)	18 (S-HO )	)	*****	0
3 (S-CAZ)	19 (S-NB )	)	*****	0
3 (S-CAZ)	20 (S-NI )	)	-0.5564	14
3 (S-CAZ)	21 (S-PB )	)	-0.2939	18
3 (S-CAZ)	22 (S-SB )	)	*****	0
3 (S-CAZ)	23 (S-SC )	)	0.1682	19
3 (S-CAZ)	24 (S-SN )	)	*****	0
3 (S-CAZ)	25 (S-SR )	)	0.6965	19
3 (S-CAZ)	26 (S-V )	)	0.4343	19
3 (S-CAZ)	27 (S-W )	)	*****	0
3 (S-CAZ)	28 (S-Y )	)	-0.4212	19
3 (S-CAZ)	29 (S-ZH )	)	*****	0
3 (S-CAZ)	30 (S-ZR )	)	-0.1115	19
3 (S-CAZ)	31 (S-TH )	)	*****	0
3 (S-CAZ)	32 (AA-AS-P )	)	-0.2150	17
3 (S-CAZ)	33 (AA-ZN-P )	)	-0.5330	19
3 (S-CAZ)	34 (AA-SB-P )	)	*****	0
4 (S-T1Z)	5 (S-HN )	)	0.5415	19
4 (S-T1Z)	6 (S-AG )	)	0.5000	3
4 (S-T1Z)	7 (S-AS )	)	*****	0
4 (S-T1Z)	8 (S-AU )	)	*****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
4 (S-T1Z)	)	9 (S-o)	) 0.3120	19
4 (S-T1Z)	)	10 (S-θA)	) 0.0310	19
4 (S-T1Z)	)	11 (S-θE)	) 0.3366	19
4 (S-T1Z)	)	12 (S-θI)	) *****	0
4 (S-T1Z)	)	13 (S-CO)	) *****	0
4 (S-T1Z)	)	14 (S-CO)	) 0.0948	17
4 (S-T1Z)	)	15 (S-CR)	) -0.0202	14
4 (S-T1Z)	)	16 (S-CU)	) 0.3530	19
4 (S-T1Z)	)	17 (S-LA)	) 0.0280	19
4 (S-T1Z)	)	18 (S-HO)	) *****	0
4 (S-T1Z)	)	19 (S-Nd)	) *****	0
4 (S-T1Z)	)	20 (S-NI)	) 0.2034	14
4 (S-T1Z)	)	21 (S-PB)	) 0.3550	18
4 (S-T1Z)	)	22 (S-Sb)	) *****	0
4 (S-T1Z)	)	23 (S-SC)	) 0.7655	19
4 (S-T1Z)	)	24 (S-SH)	) *****	0
4 (S-T1Z)	)	25 (S-SR)	) 0.2876	19
4 (S-T1Z)	)	26 (S-V)	) 0.4832	19
4 (S-T1Z)	)	27 (S-w)	) *****	0
4 (S-T1Z)	)	28 (S-Y)	) 0.4179	19
4 (S-T1Z)	)	29 (S-ZN)	) *****	0
4 (S-T1Z)	)	30 (S-ZR)	) 0.1547	19
4 (S-T1Z)	)	31 (S-Th)	) *****	0
4 (S-T1Z)	)	32 (AA-AS-P)	) 0.1784	17
4 (S-T1Z)	)	33 (AA-ZN-P)	) 0.4368	19
4 (S-T1Z)	)	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-o)	) -0.1589	19
5 (S-MN)	)	10 (S-θA)	) 0.1883	19
5 (S-MN)	)	11 (S-θE)	) 0.1665	19
5 (S-MN)	)	12 (S-θI)	) *****	0
5 (S-MN)	)	13 (S-CO)	) *****	0
5 (S-MN)	)	14 (S-CO)	) 0.0237	17
5 (S-MN)	)	15 (S-CR)	) -0.3434	14
5 (S-MN)	)	16 (S-CU)	) -0.2201	19
5 (S-MN)	)	17 (S-LA)	) 0.1094	19
5 (S-MN)	)	18 (S-HO)	) *****	0
5 (S-MN)	)	19 (S-Nb)	) *****	0
5 (S-MN)	)	20 (S-NI)	) -0.2617	14
5 (S-MN)	)	21 (S-PB)	) 0.5605	18
5 (S-MN)	)	22 (S-SB)	) *****	0
5 (S-MN)	)	23 (S-SC)	) 0.4397	19
5 (S-MN)	)	24 (S-SH)	) *****	0
5 (S-MN)	)	25 (S-SR)	) 0.4658	19
5 (S-MN)	)	26 (S-V)	) 0.2088	19
5 (S-MN)	)	27 (S-w)	) *****	0
5 (S-MN)	)	28 (S-Y)	) 0.2136	19
5 (S-MN)	)	29 (S-ZN)	) *****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
5 (S-MN )	)	SU (S-ZR)	0.1586	19
5 (S-MN )	)	31 (S-TH)	*****	0
5 (S-PN )	)	32 (AA-AS-P)	-0.0333	17
5 (S-MN )	)	33 (AA-ZN-P)	0.1092	19
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-d)	-1.0000	3
6 (S-AG )	)	10 (S-BA)	-0.5000	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-L0)	-0.5000	3
6 (S-AG )	)	15 (S-CR)	*****	3
6 (S-AG )	)	16 (S-CU)	*****	3
6 (S-AG )	)	17 (S-LA)	0.5000	3
6 (S-AG )	)	18 (S-M0)	*****	0
6 (S-AG )	)	19 (S-NB)	*****	0
6 (S-AG )	)	20 (S-NI)	*****	3
6 (S-AG )	)	21 (S-PB)	1.0000	3
6 (S-AG )	)	22 (S-SB)	*****	0
6 (S-AG )	)	23 (S-SC)	*****	3
6 (S-AG )	)	24 (S-SH)	*****	0
6 (S-AG )	)	25 (S-SR)	-0.5000	3
6 (S-AG )	)	26 (S-V)	-0.5000	3
6 (S-AG )	)	27 (S-W)	*****	0
6 (S-AG )	)	28 (S-Y)	0.5000	3
6 (S-AG )	)	29 (S-ZN)	*****	0
6 (S-AG )	)	SU (S-ZR)	0.5000	3
6 (S-AG )	)	31 (S-TH)	*****	0
6 (S-AG )	)	32 (AA-AS-P)	0.7442	3
6 (S-AG )	)	33 (AA-ZN-P)	0.8912	3
6 (S-AG )	)	34 (AA-SB-P)	*****	0
7 (S-AS )	)	8 (S-AU)	*****	0
7 (S-AS )	)	9 (S-d)	*****	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-CU)	*****	0
7 (S-AS )	)	15 (S-CR)	*****	0
7 (S-AS )	)	16 (S-LA)	*****	0
7 (S-AS )	)	18 (S-M0)	*****	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-SH)	*****	0

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COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
7 (S-AS))	25 (S-SK)	*****	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-ZA)	*****	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-U)	*****	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-HG)	*****	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-ZH)	*****	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)	0.6215	19
9 (S-E )	)	11 (S-BE)	-0.4801	19
9 (S-E )	)	12 (S-BI)	*****	0
9 (S-E )	)	13 (S-CU)	*****	0
9 (S-E )	)	14 (S-CO)	0.5673	17
9 (S-E )	)	15 (S-CR)	0.7978	14
9 (S-E )	)	16 (S-CU)	0.6588	19
9 (S-E )	)	17 (S-LA)	-0.3108	19
9 (S-E )	)	18 (S-HG)	*****	0
9 (S-E )	)	19 (S-NB)	*****	0
9 (S-E )	)	20 (S-NI)	0.6901	14
9 (S-E )	)	21 (S-PB)	-0.4583	18
9 (S-E )	)	22 (S-SU)	*****	0
9 (S-E )	)	23 (S-SC)	0.6409	19

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
9 (S-B)	)	24 (S-SH)	*****	0
9 (S-B)	)	25 (S-SR)	-0.0439	19
9 (S-B)	)	26 (S-V)	0.7613	19
9 (S-B)	)	27 (S-W)	*****	0
9 (S-B)	)	28 (S-Y)	-0.0930	19
9 (S-B)	)	29 (S-ZH)	*****	0
9 (S-B)	)	30 (S-ZR)	-0.1737	19
9 (S-B)	)	31 (S-TH)	*****	0
9 (S-B)	)	32 (AA-AS-P)	0.3242	17
9 (S-B)	)	33 (AA-ZN-P)	0.2732	19
9 (S-B)	)	34 (AA-Sb-P)	*****	0
10 (S-BA)	)	11 (S-DE)	-0.6719	19
10 (S-BA)	)	12 (S-DI)	*****	0
10 (S-BA)	)	13 (S-CU)	*****	0
10 (S-BA)	)	14 (S-CU)	-0.0411	17
10 (S-BA)	)	15 (S-CR)	-0.1512	14
10 (S-BA)	)	16 (S-CU)	-0.0650	19
10 (S-BA)	)	17 (S-LA)	-0.1546	19
10 (S-BA)	)	18 (S-MO)	*****	0
10 (S-BA)	)	19 (S-Nd)	*****	0
10 (S-BA)	)	20 (S-NI)	0.0651	14
10 (S-BA)	)	21 (S-Pc)	-0.0452	18
10 (S-BA)	)	22 (S-SB)	*****	0
10 (S-BA)	)	23 (S-SC)	-0.0238	19
10 (S-BA)	)	24 (S-SH)	*****	0
10 (S-BA)	)	25 (S-SR)	0.3196	19
10 (S-BA)	)	26 (S-V)	0.1395	19
10 (S-BA)	)	27 (S-W)	*****	0
10 (S-BA)	)	28 (S-Y)	-0.0506	19
10 (S-BA)	)	29 (S-ZH)	*****	0
10 (S-BA)	)	30 (S-ZR)	-0.0396	19
10 (S-BA)	)	31 (S-TH)	*****	0
10 (S-BA)	)	32 (AA-AS-P)	-0.5669	17
10 (S-BA)	)	33 (AA-ZN-P)	-0.1320	19
10 (S-BA)	)	34 (AA-Sb-P)	*****	0
11 (S-BE)	)	12 (S-DI)	*****	0
11 (S-BE)	)	13 (S-CD)	*****	0
11 (S-BE)	)	14 (S-CO)	-0.4521	17
11 (S-BE)	)	15 (S-CR)	-0.3671	14
11 (S-BE)	)	16 (S-CU)	-0.0242	19
11 (S-BE)	)	17 (S-LA)	0.2529	19
11 (S-BE)	)	18 (S-MO)	*****	0
11 (S-BE)	)	19 (S-NB)	*****	0
11 (S-BE)	)	20 (S-NI)	-0.0728	14
11 (S-BE)	)	21 (S-PB)	0.5218	18
11 (S-BE)	)	22 (S-SB)	*****	0
11 (S-BE)	)	23 (S-SC)	-0.0649	19
11 (S-BE)	)	24 (S-SN)	*****	0
11 (S-BE)	)	25 (S-SR)	-0.0320	19
11 (S-BE)	)	26 (S-V)	-0.2885	19

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
11 (S-EE)	)	27 (S-W)	*****	0
11 (S-eE)	)	28 (S-Y)	0.5674	19
11 (S-eE)	)	29 (S-ZN)	*****	0
11 (S-EE)	)	30 (S-ZR)	0.3487	19
11 (S-EE)	)	31 (S-TH)	*****	0
11 (S-EE)	)	32 (AA-AS-P)	-0.1981	17
11 (S-EE)	)	33 (AA-ZN-P)	0.2819	19
11 (S-EE)	)	34 (AA-SB-P)	*****	0
12 (S-eI)	)	13 (S-CD)	*****	0
12 (S-eI)	)	14 (S-CO)	*****	0
12 (S-eI)	)	15 (S-CR)	*****	0
12 (S-eI)	)	16 (S-CU)	*****	0
12 (S-eI)	)	17 (S-LA)	*****	0
12 (S-eI)	)	18 (S-MG)	*****	0
12 (S-eI)	)	19 (S-NL)	*****	0
12 (S-eI)	)	20 (S-NI)	*****	0
12 (S-eI)	)	21 (S-Pu)	*****	0
12 (S-eI)	)	22 (S-SB)	*****	0
12 (S-eI)	)	23 (S-SC)	*****	0
12 (S-eI)	)	24 (S-Siv)	*****	0
12 (S-eI)	)	25 (S-SR)	*****	0
12 (S-eI)	)	26 (S-V)	*****	0
12 (S-eI)	)	27 (S-W)	*****	0
12 (S-eI)	)	28 (S-Y)	*****	0
12 (S-eI)	)	29 (S-ZN)	*****	0
12 (S-eI)	)	30 (S-ZR)	*****	0
12 (S-eI)	)	31 (S-TH)	*****	0
12 (S-eI)	)	32 (AA-AS-P)	*****	0
12 (S-eI)	)	33 (AA-ZN-P)	*****	0
12 (S-eI)	)	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-MG)	*****	0
13 (S-CD)	)	19 (S-NL)	*****	0
13 (S-CD)	)	20 (S-NI)	*****	0
13 (S-CD)	)	21 (S-Pu)	*****	0
13 (S-CD)	)	22 (S-SB)	*****	0
13 (S-CD)	)	23 (S-SC)	*****	0
13 (S-CD)	)	24 (S-SH)	*****	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

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DC1U1 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
13 (S-CO)	)	34 (AA-SB-P)	*****	6
14 (S-CO)	)	15 (S-CR)	0.6646	14
14 (S-CO)	)	16 (S-CU)	0.6063	17
14 (S-CO)	)	17 (S-LA)	-0.0557	17
14 (S-CO)	)	18 (S-MO)	*****	0
14 (S-CO)	)	19 (S-NB)	*****	0
14 (S-CO)	)	20 (S-NI)	0.6683	14
14 (S-CO)	)	21 (S-PB)	-0.1090	16
14 (S-CO)	)	22 (S-SB)	*****	0
14 (S-CO)	)	23 (S-SC)	0.5004	17
14 (S-CO)	)	24 (S-SN)	*****	0
14 (S-CO)	)	25 (S-SR)	-0.1820	17
14 (S-CO)	)	26 (S-V)	0.6040	17
14 (S-CO)	)	27 (S-W)	*****	0
14 (S-CO)	)	28 (S-Y)	-0.4485	17
14 (S-CO)	)	29 (S-ZN)	*****	0
14 (S-CO)	)	30 (S-ZR)	-0.1669	17
14 (S-CO)	)	31 (S-TH)	*****	0
14 (S-CO)	)	32 (AA-AS-P)	-0.6191	16
14 (S-CO)	)	33 (AA-ZN-P)	0.1496	17
14 (S-CO)	)	34 (AA-SB-P)	*****	0
15 (S-CR)	)	16 (S-CU)	0.6966	14
15 (S-CR)	)	17 (S-LA)	-0.3423	14
15 (S-CR)	)	18 (S-MO)	*****	0
15 (S-CR)	)	19 (S-NB)	*****	0
15 (S-CR)	)	20 (S-NI)	0.8407	14
15 (S-CR)	)	21 (S-PB)	-0.1596	13
15 (S-CR)	)	22 (S-SB)	*****	0
15 (S-CR)	)	23 (S-SC)	0.5404	14
15 (S-CR)	)	24 (S-SN)	*****	0
15 (S-CR)	)	25 (S-SR)	-0.3947	14
15 (S-CR)	)	26 (S-V)	0.6991	14
15 (S-CR)	)	27 (S-W)	*****	0
15 (S-CR)	)	28 (S-Y)	-0.0788	14
15 (S-CR)	)	29 (S-ZN)	*****	0
15 (S-CR)	)	30 (S-ZR)	-0.2747	14
15 (S-CR)	)	31 (S-TH)	*****	0
15 (S-CR)	)	32 (AA-AS-P)	0.3574	13
15 (S-CR)	)	33 (AA-ZN-P)	0.4767	14
15 (S-CR)	)	34 (AA-SB-P)	*****	0
16 (S-CU)	)	17 (S-LA)	-0.2639	19
16 (S-CU)	)	18 (S-MO)	*****	0
16 (S-CU)	)	19 (S-NB)	*****	0
16 (S-CU)	)	20 (S-NI)	0.8269	14
16 (S-CU)	)	21 (S-PB)	-0.2029	18
16 (S-CU)	)	22 (S-SB)	*****	0
16 (S-CU))	23 (S-SC)	0.5589	19
16 (S-CU))	24 (S-SN)	*****	0
16 (S-CU))	25 (S-SR)	-0.2103	19
16 (S-CU))	26 (S-V)	0.6199	19

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D0101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
16 (S-CU)	)	27 (S-W)	*****	0
16 (S-LU)	)	28 (S-Y)	-0.1940	19
16 (S-CU)	)	29 (S-ZN)	*****	0
16 (S-CU)	)	30 (S-ZR)	-0.4068	19
16 (S-CU)	)	31 (S-TH)	*****	0
16 (S-CU)	)	32 (AA-AS-P)	0.3034	17
16 (S-CU)	)	33 (AA-ZN-P)	0.4510	19
16 (S-CU)	)	34 (AA-SR-P)	*****	0
17 (S-LA)	)	16 (S-HO)	*****	0
17 (S-LA)	)	19 (S-NB)	*****	0
17 (S-LA)	)	20 (S-NI)	-0.1597	14
17 (S-LA)	)	21 (S-PB)	0.4863	18
17 (S-LA)	)	22 (S-Sb)	*****	0
17 (S-LA)	)	23 (S-SC)	-0.1765	19
17 (S-LA)	)	24 (S-SN)	*****	0
17 (S-LA)	)	25 (S-SR)	-0.5057	19
17 (S-LA)	)	26 (S-V)	-0.4655	19
17 (S-LA)	)	27 (S-W)	*****	0
17 (S-LA)	)	28 (S-Y)	0.4981	19
17 (S-LA)	)	29 (S-ZN)	*****	0
17 (S-LA)	)	30 (S-ZR)	0.5207	19
17 (S-LA)	)	31 (S-TH)	*****	0
17 (S-LA)	)	32 (AA-AS-P)	-0.0101	17
17 (S-LA)	)	33 (AA-ZN-P)	0.0095	19
17 (S-LA)	)	34 (AA-SR-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-ZR)	*****	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-SR-P)	*****	0
19 (S-NB)	)	20 (S-NI)	*****	0
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)	*****	0
19 (S-NB)	)	27 (S-W)	*****	0
19 (S-NB)	)	28 (S-Y)	*****	0

D0101 CORRELATION ANALYSIS - USGS STATPAC (01/15/82)

DATE 11/29/84

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
19 (S-AB	)	29 (S-ZH)	*****
19 (S-NB	)	30 (S-ZR)	*****
19 (S-AB	)	31 (S-TH)	*****
19 (S-NB	)	32 (AA-AS-P)	*****
19 (S-AB	)	33 (AA-ZN-P)	*****
19 (S-NB	)	34 (AA-SB-P)	*****
20 (S-NI	)	21 (S-PB	)	-0.0804
20 (S-NI	)	22 (S-SB)	*****
20 (S-NI	)	23 (S-SC	)	0.5703
20 (S-NI	)	24 (S-SN)	*****
20 (S-NI	)	25 (S-SR	)	-0.5017
20 (S-NI	)	26 (S-V	)	0.6063
20 (S-NI	)	27 (S-W)	*****
20 (S-NI	)	28 (S-Y	)	0.2771
20 (S-NI	)	29 (S-ZH)	*****
20 (S-NI	)	30 (S-ZR	)	-0.3329
20 (S-NI	)	31 (S-TH)	*****
20 (S-NI	)	32 (AA-AS-P	)	0.2895
20 (S-NI	)	33 (AA-ZN-P	)	0.6494
20 (S-NI	)	34 (AA-SB-P)	*****
21 (S-PB	)	22 (S-SB)	*****
21 (S-FB	)	23 (S-SC	)	0.1081
21 (S-PB	)	24 (S-SN)	*****
21 (S-FB	)	25 (S-SR	)	-0.1787
21 (S-PB	)	26 (S-V	)	-0.3319
21 (S-PB	)	27 (S-W)	*****
21 (S-Pd	)	28 (S-Y	)	0.5403
21 (S-Pd	)	29 (S-ZN)	*****
21 (S-PB	)	30 (S-ZR	)	0.5301
21 (S-PB	)	31 (S-TH)	*****
21 (S-PB	)	32 (AA-AS-P	)	0.0977
21 (S-PB	)	33 (AA-ZN-P	)	0.4660
21 (S-PB	)	34 (AA-SB-P)	*****
22 (S-Sd	)	23 (S-SC)	*****
22 (S-Sd	)	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-SH)	*****
23 (S-SC	)	25 (S-SR	)	0.1935
23 (S-SC	)	26 (S-V	)	0.7423
23 (S-SC	)	27 (S-W)	*****
23 (S-SC	)	28 (S-Y	)	0.2560

DC101 CORRELATION ANALYSIS - USGS STATPAC (6/1/15/82)

DATE 11/29/84

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
23 (S-SC )	)	29 (S-ZN)	*****	0
23 (S-SC )	)	30 (S-ZR)	-0.0928	19
23 (S-SC )	)	31 (S-TH)	*****	0
23 (S-SC )	)	32 (AA-AS-P)	0.4316	17
23 (S-SC )	)	33 (AA-ZN-P)	0.5404	19
23 (S-SC )	)	34 (AA-SB-P)	*****	0
24 (S-SN )	)	25 (S-SR)	*****	0
24 (S-SN )	)	26 (S-V)	*****	0
24 (S-SN )	)	27 (S-W)	*****	0
24 (S-SN )	)	28 (S-Y)	*****	0
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)	0.4741	19
25 (S-SR )	)	27 (S-W)	*****	0
25 (S-SR )	)	28 (S-Y)	-0.3840	19
25 (S-SR )	)	29 (S-ZN)	*****	0
25 (S-SR )	)	30 (S-ZR)	-0.2064	19
25 (S-SR )	)	31 (S-TH)	*****	0
25 (S-SR )	)	32 (AA-AS-P)	-0.4563	17
25 (S-SR )	)	33 (AA-ZN-P)	-0.4065	19
25 (S-SR )	)	34 (AA-SB-P)	*****	0
26 (S-V )	)	27 (S-w)	*****	0
26 (S-V )	)	28 (S-Y)	-0.1969	19
26 (S-V )	)	29 (S-ZN)	*****	0
26 (S-V )	)	30 (S-ZR)	-0.4147	19
26 (S-V )	)	31 (S-TH)	*****	0
26 (S-V )	)	32 (AA-AS-P)	0.0747	17
26 (S-V )	)	33 (AA-ZN-P)	0.0480	19
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)	0.4716	19
28 (S-Y )	)	31 (S-TH)	*****	0
28 (S-Y )	)	32 (AA-AS-P)	0.1186	17
28 (S-Y )	)	33 (AA-ZN-P)	0.7026	19
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

DL101 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-F)	*****	0
30 (S-ZR )	)	31 (S-TH)	*****	0
30 (S-ZR )	)	32 (AA-AS-P)	-0.1340	17
30 (S-ZR )	)	33 (AA-ZN-F)	0.2564	19
30 (S-ZR )	)	34 (AA-SB-P)	*****	0
31 (S-TH )	)	32 (AA-AS-F)	*****	0
31 (S-TH )	)	33 (AA-ZN-P)	*****	0
31 (S-TH))	34 (AA-SB-P)	*****	0
32 (AA-AS-P))	33 (AA-ZN-F)	0.5174	17
32 (AA-AS-P))	34 (AA-SB-P)	*****	0
33 (AA-ZN-P))	34 (AA-SB-P)	*****	0

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DC161 CORRELATION ANALYSIS - USGS STATPAC (61/15/82)

DATE 11/29/84

TITLE
rough hills concentrates INPUT ID N M ***** OPTIONS ***** OUTPUT ID N M
-lrh_conc- 19 36 1 0 1 1 0 0 0 0 0 -lrh_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-FEW	S-MG%	S-CAZ	S-T1%	S-HN	S-AG	S-AS	S-AU	S-B	S- a A
S-BE	S-BI	S-CO	S-CO	S-CR	S-CU	S-LA	S-KO	S- b B	S- n I
S-PE	S-SB	S-SC	S-SH	S-SR	S-V	S-W	S-Y	S-ZN	S- z R
S-Th	AA-AS-P	AA-ZN-P							

NUMBER OF SELECTED ROW PAIRS 1

SELECTED ROW PAIRS
1- 19

PHASE TWO RESULTS

* A W A R N I N G * * * THE RESULTS FROM THIS PHASE "SHOULD NOT" BE ENTERED INTO DUO96-FACTOR ANALYSIS.
THE CORRELATION MATRIX FROM THIS PHASE DOES NOT HAVE THE GRAMIAN PROPERTIES
WHICH ARE REQUIRED FOR FACTOR ANALYSIS.

DC101 CORRELATION ANALYSIS - USGS STATPAC (01/15/02)

DATE 11/29/84

ARRAY OF REAS -

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

DATE 11/29/84

ARRAY OF MEANS - CONT.

DC101 CORRELATION ANALYSIS - USGS STATPAC (4/15/82)

DATE 11/29/84

ARRAY OF MEARS - CONT.

ARRAY OF MEANS - CONT.

	SS	34	35	36
	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
1 S-FE4	*****	*****	*****	*****
2 S-MGX	*****	*****	*****	*****
3 S-CAZ	*****	*****	*****	*****
4 S-TIX	*****	*****	*****	*****
5 S-FN	*****	*****	*****	*****
6 S-AG	*****	*****	*****	*****
7 S-AS	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****
9 S-e	*****	*****	*****	*****
10 S-eA	*****	*****	*****	*****
11 S-EE	*****	*****	*****	*****
12 S-eI	*****	*****	*****	*****
13 S-CD	*****	*****	*****	*****
14 S-CO	*****	*****	*****	*****
15 S-CR	*****	*****	*****	*****
16 S-LU	*****	*****	*****	*****
17 S-LA	*****	*****	*****	*****
18 S-MU	*****	*****	*****	*****
19 S-KB	*****	*****	*****	*****
20 S-KI	*****	*****	*****	*****
21 S-PB	*****	*****	*****	*****
22 S-So	*****	*****	*****	*****
23 S-SC	*****	*****	*****	*****
24 S-SK	*****	*****	*****	*****
25 S-SR	*****	*****	*****	*****
26 S-V	*****	*****	*****	*****
27 S-w	*****	*****	*****	*****
28 S-Y	*****	*****	*****	*****
29 S-ZH	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****
33 AA-ZN-P	*****	*****	*****	*****
34 AA-SB-P	*****	*****	*****	*****

ARRAY OF VARIANCES -

	³ S-FE%	⁴ S-MG%	⁵ S-CA%	⁶ S-TI%	⁷ S-MN	⁸ S-AG	⁹ S-AS	¹⁰ S-AU	¹¹ S-B	¹² S-BA
1 S-FE%	0.047	0.047	0.047	0.045	0.047	0.058	*****	*****	0.052	0.016
2 S-FG%	0.078	0.070	0.078	0.063	0.078	0.030	*****	*****	0.059	0.151
3 S-CA%	0.070	0.070	0.076	0.069	0.076	0.128	*****	*****	0.085	0.058
4 S-TI%	0.109	0.109	0.109	0.109	0.109	0.016	*****	*****	0.088	0.166
5 S-M%	0.055	0.055	0.055	0.052	0.055	0.123	*****	*****	0.052	0.047
6 S-AG	0.195	0.195	0.195	0.383	0.195	0.195	*****	*****	0.055	0.195
7 S-AS	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
8 S-AU	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
9 S-e	0.077	0.077	0.077	0.073	0.077	0.244	*****	*****	0.077	0.089
10 S-bA	0.002	0.002	0.062	0.069	0.002	0.000	*****	*****	0.047	0.002
11 S-bE	0.002	0.002	0.002	0.002	0.002	0.000	*****	*****	0.002	0.003
12 S-bI	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
13 S-bD	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
14 S-CC	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
15 S-CR	0.107	0.107	0.107	0.129	0.187	*****	*****	*****	0.187	0.202
16 S-CU	0.097	0.097	0.097	0.104	0.097	0.030	*****	*****	0.101	0.019
17 S-LA	0.004	0.004	0.004	0.059	0.064	0.077	*****	*****	0.069	0.041
18 S-MC	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
19 S-LB	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
20 S-KI	0.103	0.103	0.103	0.244	0.103	*****	*****	*****	0.163	*****
21 S-FB	1.071	1.071	1.071	0.333	1.071	0.692	*****	*****	1.071	0.692
22 S-Sd	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23 S-SC	0.053	0.053	0.053	0.053	0.053	*****	*****	*****	0.079	0.053
24 S-SH	0.175	0.175	0.175	0.175	0.175	0.161	*****	*****	0.142	0.178
25 S-SR	0.136	0.136	0.136	0.125	0.136	0.333	*****	*****	0.124	0.150
26 S-V	0.082	0.082	0.082	0.060	0.082	0.123	*****	*****	0.090	0.142
27 S-	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
28 S-Y	0.040	0.040	0.040	0.042	0.040	0.007	*****	*****	0.044	0.009
29 S-ZH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
30 S-ZR	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 S-TH	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 AA-AS-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 AA-ZN-F	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 AA-SB-P	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

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

DATE 11/29/84

ARRAY OF VARIANCES - CONT.

ARRAY OF VARIANCES - CONT.

ARRAY OF VARIANCES - CONT.

	33	34	35	36
	S-TH	AA-AS-P	AA-ZN-P	AA-SB-P
1 S-FEX	*****	*****	*****	*****
2 S-RG4	*****	*****	*****	*****
3 S-CA4	*****	*****	*****	*****
4 S-T14	*****	*****	*****	*****
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-CO	*****	*****	*****	*****
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-SN	*****	*****	*****	*****
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	*****	*****	*****	*****

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COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
1 (S-FEX))	2 (S-MG ₂)	-0.0425	19
1 (S-FEX)	)	3 (S-CA ₂)	-0.0589	19
1 (S-FEX)	)	4 (S-TI ₂)	-0.1041	18
1 (S-FEX)	)	5 (S-NH ₃)	0.0526	19
1 (S-FEX)	)	6 (S-A ₆)	0.2316	3
1 (S-FEX)	)	7 (S-AS)	*****	0
1 (S-FEX)	)	8 (S-AU)	*****	1
1 (S-FEX)	)	9 (S-d)	-0.1906	17
1 (S-FEX)	)	10 (S-BA)	0.2352	10
1 (S-FEX)	)	11 (S-BE)	-0.1090	19
1 (S-FEX)	)	12 (S-BI)	*****	0
1 (S-FEX)	)	13 (S-LA)	*****	0
1 (S-FEX)	)	14 (S-CO)	*****	1
1 (S-FEX)	)	15 (S-LR)	-0.9349	6
1 (S-FEX)	)	16 (S-CU)	0.5313	15
1 (S-FEX)	)	17 (S-LA)	-0.5156	19
1 (S-FEX)	)	18 (S-MO)	*****	1
1 (S-FEX)	)	19 (S-Nd)	*****	1
1 (S-FEX)	)	20 (S-NI)	1.0000	3
1 (S-FEX)	)	21 (S-Pd)	-0.1922	4
1 (S-FEX)	)	22 (S-SB)	*****	0
1 (S-FEX)	)	23 (S-SC)	*****	3
1 (S-FEX)	)	24 (S-SN)	0.1562	6
1 (S-FEX)	)	25 (S-SR)	-0.6487	19
1 (S-FEX)	)	26 (S-V)	-0.1826	19
1 (S-FEX)	)	27 (S-W)	*****	1
1 (S-FEX)	)	28 (S-Y)	-0.5537	19
1 (S-FEX)	)	29 (S-ZH)	*****	0
1 (S-FEX)	)	30 (S-ZR)	*****	0
1 (S-FEX)	)	31 (S-Th)	*****	0
1 (S-FEX)	)	32 (AA-AS-P)	*****	0
1 (S-FEX)	)	33 (AA-ZH-P)	*****	0
1 (S-FEX)	)	34 (AA-SB-P)	*****	0
2 (S-MG ₂)	)	3 (S-CA ₂)	0.2962	19
2 (S-MG ₂)	)	4 (S-TI ₂)	0.6167	18
2 (S-MG ₂)	)	5 (S-Hi ₂)	0.0453	19
2 (S-MG ₂)	)	6 (S-A ₆)	0.1392	3
2 (S-MG ₂)	)	7 (S-AS)	*****	0
2 (S-MG ₂)	)	8 (S-AU)	*****	1
2 (S-MG ₂)	)	9 (S-d)	0.5418	17
2 (S-MG ₂)	)	10 (S-BA)	0.6289	10
2 (S-MG ₂)	)	11 (S-BE)	0.3549	19
2 (S-MG ₂)	)	12 (S-BI)	*****	0
2 (S-MG ₂)	)	13 (S-LA)	*****	0
2 (S-MG ₂)	)	14 (S-CU)	*****	1
2 (S-MG ₂)	)	15 (S-CR)	-0.5507	6
2 (S-MG ₂)	)	16 (S-Cu)	-0.2016	15
2 (S-MG ₂)	)	17 (S-LA)	0.0799	19
2 (S-MG ₂)	)	18 (S-MO)	*****	1
2 (S-MG ₂)	)	19 (S-Nd)	*****	1

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
2 (S-MG2)	)	20 (S-NI)	*****	3
2 (S-MG4)	)	21 (S-PB)	-0.1327	4
2 (S-MG2)	)	22 (S-Sd)	*****	0
2 (S-MG4)	)	23 (S-SC)	-0.5000	3
2 (S-MG2)	)	24 (S-SN)	-0.0001	6
2 (S-MG2)	)	25 (S-SR)	0.4895	19
2 (S-MG4)	)	26 (S-V)	0.7805	19
2 (S-MG4)	)	27 (S-w)	*****	1
2 (S-MG4)	)	28 (S-Y)	-0.0205	19
2 (S-MG2)	)	29 (S-Zh)	*****	0
2 (S-MG4)	)	30 (S-ZR)	*****	0
2 (S-MG2)	)	31 (S-TH)	*****	0
2 (S-MG2)	)	32 (AA-AS-P)	*****	0
2 (S-MG2)	)	33 (AA-Zn-P)	*****	0
2 (S-MG4)	)	34 (AA-Sb-P)	*****	0
3 (S-CA4)	)	4 (S-T1a)	0.4140	18
3 (S-CA2)	)	5 (S-MN)	-0.6246	19
3 (S-CA2)	)	6 (S-AG)	-0.1752	3
3 (S-CA4)	)	7 (S-AS)	*****	0
3 (S-CA4)	)	8 (S-AU)	*****	1
3 (S-CA4)	)	9 (S-B)	0.6571	17
3 (S-CA4)	)	10 (S-DA)	0.4127	10
3 (S-CA4)	)	11 (S-DE)	0.3808	19
3 (S-CA4)	)	12 (S-DI)	*****	0
3 (S-CA4)	)	13 (S-CD)	*****	0
3 (S-CA4)	)	14 (S-CU)	*****	1
3 (S-CA4)	)	15 (S-CK)	0.8201	6
3 (S-CA2)	)	16 (S-CL)	0.2628	15
3 (S-CA4)	)	17 (S-LA)	0.7206	19
3 (S-CA2)	)	18 (S-MO)	*****	1
3 (S-CA2)	)	19 (S-nb)	*****	1
3 (S-CA2)	)	20 (S-NI)	*****	3
3 (S-CA2)	)	21 (S-Pb)	0.2153	4
3 (S-CA2)	)	22 (S-Sd)	*****	0
3 (S-CA2)	)	23 (S-SC)	0.5000	3
3 (S-CA2)	)	24 (S-SA)	0.1621	6
3 (S-CA4)	)	25 (S-SR)	0.5380	19
3 (S-CA2)	)	26 (S-V)	0.4290	19
3 (S-CA2)	)	27 (S-w)	*****	1
3 (S-CA2)	)	28 (S-Y)	0.1005	19
3 (S-CA2)	)	29 (S-Zn)	*****	0
3 (S-CA2)	)	30 (S-ZR)	*****	0
3 (S-CA2)	)	31 (S-TH)	*****	0
3 (S-CA2)	)	32 (AA-AS-P)	*****	0
3 (S-CA2)	)	33 (AA-Zn-P)	*****	0
3 (S-CA4)	)	34 (AA-Sb-P)	*****	0
4 (S-T1a)	)	5 (S-MN)	-0.1946	18
4 (S-T1a)	)	6 (S-AG)	1.0000	2
4 (S-T1a)	)	7 (S-AS)	*****	0
4 (S-T1a)	)	8 (S-AU)	*****	0

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
4 (S-TIA)	)	9 (S-B)	0.7018	16
4 (S-TIA)	)	10 (S-DA)	0.5185	9
4 (S-TIA)	)	11 (S-DE)	0.4386	18
4 (S-TIA)	)	12 (S-DI)	*****	0
4 (S-TIA)	)	13 (S-CU)	*****	0
4 (S-TIA)	)	14 (S-CO)	*****	1
4 (S-TIA)	)	15 (S-CR)	0.2151	5
4 (S-TIA)	)	16 (S-CU)	0.0505	14
4 (S-TIA)	)	17 (S-LA)	0.1905	18
4 (S-TIA)	)	18 (S-MU)	*****	1
4 (S-TIA)	)	19 (S-NB)	*****	6
4 (S-TIA)	)	20 (S-NI)	*****	2
4 (S-TIA)	)	21 (S-PD)	-1.0000	3
4 (S-TIA)	)	22 (S-SD)	*****	0
4 (S-TIA)	)	23 (S-SC)	-0.1087	3
4 (S-TIA)	)	24 (S-SH)	-0.3394	6
4 (S-TIA)	)	25 (S-SR)	0.5049	18
4 (S-TIA)	)	26 (S-V)	0.8526	18
4 (S-TIA)	)	27 (S-W)	*****	0
4 (S-TIA)	)	28 (S-Y)	-0.1108	18
4 (S-TIA)	)	29 (S-ZI)	*****	0
4 (S-TIA)	)	30 (S-ZR)	*****	0
4 (S-TIA)	)	31 (S-TH)	*****	0
4 (S-TIA)	)	32 (AA-KS-P)	*****	0
4 (S-TIA)	)	33 (AA-LN-P)	*****	0
4 (S-TIA)	)	34 (AA-SD-P)	*****	0
5 (S-MN)	)	6 (S-AU)	-0.5509	3
5 (S-MN)	)	7 (S-AS)	*****	0
5 (S-MN)	)	8 (S-AU)	*****	1
5 (S-FN)	)	9 (S-DO)	-0.0854	17
5 (S-MN)	)	10 (S-DA)	0.0657	10
5 (S-MN)	)	11 (S-DE)	0.2346	19
5 (S-MN)	)	12 (S-DI)	*****	0
5 (S-MN)	)	13 (S-CU)	*****	0
5 (S-MN)	)	14 (S-CO)	*****	1
5 (S-MN)	)	15 (S-CR)	-0.0126	6
5 (S-MN)	)	16 (S-CU)	-0.4442	15
5 (S-MN)	)	17 (S-LA)	0.2477	19
5 (S-MN)	)	18 (S-MO)	*****	1
5 (S-FN)	)	19 (S-NB)	*****	1
5 (S-MN)	)	20 (S-NI)	1.0000	3
5 (S-MN)	)	21 (S-PD)	-0.3280	4
5 (S-MN)	)	22 (S-SB)	*****	0
5 (S-MN)	)	23 (S-SC)	0.5000	3
5 (S-MN)	)	24 (S-SH)	0.4357	6
5 (S-MN))	25 (S-SR)	-0.5540	19
5 (S-MN))	26 (S-V)	-0.1025	19
5 (S-MN))	27 (S-W)	*****	1
5 (S-MN))	28 (S-Y)	0.4026	19
5 (S-MN))	29 (S-ZR)	*****	0

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t6

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-F)	*****	0
5 (S-MN)	)	33 (AA-ZR-F)	*****	0
5 (S-MN)	)	34 (AA-SL-P)	*****	0
6 (S-AG)	)	7 (S-AS)	*****	0
6 (S-AG)	)	8 (S-AU)	*****	1
6 (S-AG)	)	9 (S-O)	-1.0000	2
6 (S-AG)	)	10 (S-DA)	*****	3
6 (S-AG)	)	11 (S-JE)	*****	3
6 (S-AG)	)	12 (S-JI)	*****	0
6 (S-AU)	)	13 (S-CB)	*****	0
6 (S-AG)	)	14 (S-CG)	*****	0
6 (S-AG)	)	15 (S-CR)	*****	1
6 (S-AG)	)	16 (S-CU)	0.9272	3
6 (S-AG)	)	17 (S-LA)	-0.1620	3
6 (S-AU)	)	18 (S-MU)	*****	0
6 (S-AU)	)	19 (S-TD)	*****	1
6 (S-AG)	)	20 (S-WI)	*****	1
6 (S-AG)	)	21 (S-PB)	-1.0000	2
6 (S-AG)	)	22 (S-SB)	*****	0
6 (S-AG)	)	23 (S-SC)	*****	0
6 (S-AG)	)	24 (S-SI)	-1.0000	2
6 (S-AG)	)	25 (S-SR)	0.1392	3
6 (S-AG)	)	26 (S-V)	-0.4474	3
6 (S-AU)	)	27 (S-W)	*****	1
6 (S-AG)	)	28 (S-Y)	0.9272	3
6 (S-AG)	)	29 (S-ZH)	*****	0
6 (S-AG)	)	30 (S-ZR)	*****	0
5 (S-AG)	)	31 (S-TH)	*****	0
6 (S-AG)	)	32 (AA-AS-F)	*****	0
6 (S-AG)	)	33 (AA-ZR-F)	*****	0
6 (S-AG)	)	34 (AA-SL-P)	*****	0
7 (S-AS)	)	6 (S-AU)	*****	0
7 (S-AS)	)	9 (S-O)	*****	0
7 (S-AS)	)	10 (S-DA)	*****	0
7 (S-AS)	)	11 (S-JE)	*****	0
7 (S-AS)	)	12 (S-JI)	*****	0
7 (S-AS)	)	13 (S-CB)	*****	0
7 (S-AS)	)	14 (S-CG)	*****	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-TB)	*****	0
7 (S-AS))	20 (S-WI)	*****	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

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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-Sd-P)	*****	0
8 (S-AU)	)	9 (S-p)	*****	1
8 (S-AU)	)	10 (S-DA)	*****	1
8 (S-AU)	)	11 (S-DE)	*****	1
8 (S-AU)	)	12 (S-d1)	*****	0
8 (S-AU)	)	13 (S-Cu)	*****	0
8 (S-AU)	)	14 (S-CO)	*****	0
8 (S-AU)	)	15 (S-Cn)	*****	1
8 (S-AU)	)	16 (S-Cu)	*****	1
8 (S-AU)	)	17 (S-LF)	*****	1
8 (S-AU)	)	18 (S-Mu)	*****	0
8 (S-AU)	)	19 (S-NB)	*****	1
8 (S-AU)	)	20 (S-NI)	*****	1
8 (S-AU)	)	21 (S-Pb)	*****	1
8 (S-AU)	)	22 (S-Sb)	*****	0
8 (S-AU)	)	23 (S-SC)	*****	0
8 (S-AU)	)	24 (S-SR)	*****	0
8 (S-AU)	)	25 (S-SK)	*****	1
8 (S-AU)	)	26 (S-V)	*****	1
8 (S-AU)	)	27 (S-w)	*****	1
8 (S-AU)	)	28 (S-Y)	*****	1
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-Sd-P)	*****	0
9 (S-E)	)	10 (S-DA)	0.1923	8
9 (S-E)	)	11 (S-DE)	0.3334	17
9 (S-E)	)	12 (S-d1)	*****	0
9 (S-E)	)	13 (S-CO)	*****	0
9 (S-E)	)	14 (S-CO)	*****	1
9 (S-E)	)	15 (S-CR)	0.2059	6
9 (S-E)	)	16 (S-Cu)	0.3053	14
9 (S-E)	)	17 (S-LA)	0.4586	17
9 (S-E)	)	18 (S-HU)	*****	1
9 (S-E)	)	19 (S-NB)	*****	1
9 (S-E)	)	20 (S-NI)	-1.0000	3
9 (S-E)	)	21 (S-Pb)	0.2427	4
9 (S-E)	)	22 (S-Sb)	*****	0
9 (S-E)	)	23 (S-SC)	1.0000	2

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
9 (S-E)	)	24 (S-SN)	-0.3542	5
9 (S-O)	)	25 (S-SR)	0.6398	17
9 (S-B)	)	26 (S-V)	0.6889	17
9 (S-C)	)	27 (S-W)	*****	1
9 (S-E)	)	28 (S-Y)	-0.1053	17
9 (S-B)	)	29 (S-ZN)	*****	0
9 (S-E)	)	30 (S-ZR)	*****	0
9 (S-B)	)	31 (S-TH)	*****	0
9 (S-B)	)	32 (AA-AS-P)	*****	0
9 (S-U)	)	33 (AA-ZN-P)	*****	0
9 (S-E)	)	34 (AA-SB-P)	*****	0
1L (S-EA)	)	11 (S-OE)	0.0434	10
1C (S-EA)	)	12 (S-U1)	*****	0
1C (S-EA)	)	13 (S-CU)	*****	0
1U (S-BA)	)	14 (S-CO)	*****	0
1C (S-BA)	)	15 (S-CH)	-0.3606	3
1L (S-BA)	)	16 (S-CJ)	-0.6605	8
1C (S-BA)	)	17 (S-LA)	0.6537	10
1C (S-EA)	)	18 (S-HO)	*****	0
1C (S-EA)	)	19 (S-HU)	*****	1
1U (S-CA)	)	20 (S-N1)	*****	1
1L (S-CA)	)	21 (S-PE)	*****	2
1U (S-CA)	)	22 (S-SB)	*****	0
1U (S-CA)	)	23 (S-SC)	-0.1495	3
1C (S-CA)	)	24 (S-SN)	0.5639	4
1C (S-CA)	)	25 (S-SR)	0.3789	10
1U (S-CA)	)	26 (S-V)	0.4238	10
1U (S-CA)	)	27 (S-W)	*****	1
1C (S-CA)	)	28 (S-Y)	-0.6816	10
1C (S-CA)	)	29 (S-ZI)	*****	0
1C (S-CA)	)	30 (S-ZR)	*****	0
1C (S-CA)	)	31 (S-TH)	*****	0
1C (S-CA)	)	32 (AA-AS-P)	*****	0
1L (S-CA)	)	33 (AA-ZN-P)	*****	0
1C (S-CA)	)	34 (AA-SB-P)	*****	0
11 (S-OE)	)	12 (S-B1)	*****	0
11 (S-OE)	)	13 (S-CU)	*****	0
11 (S-CE)	)	14 (S-CO)	*****	1
11 (S-BE)	)	15 (S-CR)	-0.2130	6
11 (S-BE)	)	16 (S-CU)	-0.1825	15
11 (S-BE)	)	17 (S-LA)	0.2202	19
11 (S-BE)	)	18 (S-HO)	*****	1
11 (S-BE)	)	19 (S-HU)	*****	1
11 (S-BE)	)	20 (S-N1)	*****	3
11 (S-BE)	)	21 (S-PB)	*****	4
11 (S-BE)	)	22 (S-SB)	*****	0
11 (S-BE)	)	23 (S-SC)	0.5000	3
11 (S-BE)	)	24 (S-SN)	-0.5737	6
11 (S-BE)	)	25 (S-SR)	-0.2953	19
11 (S-BE)	)	26 (S-V)	0.2742	19

bb

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
11 (S-BE)	)	27 (S-W)	*****	1
11 (S-UL)	)	28 (S-Y)	0.2555	19
11 (S-DE)	)	29 (S-ZH)	*****	0
11 (S-E)	)	30 (S-ZR)	*****	0
11 (S-DE)	)	31 (S-Th)	*****	0
11 (S-DE)	)	32 (AA-AS-P)	*****	0
11 (S-EL)	)	33 (AA-ZH-F)	*****	0
11 (S-DE)	)	34 (AA-SB-P)	*****	0
12 (S-eI)	)	15 (S-CU)	*****	0
12 (S-dI)	)	14 (S-CU)	*****	0
12 (S-El)	)	15 (S-CR)	*****	0
12 (S-eI)	)	16 (S-CL)	*****	0
12 (S-oI)	)	17 (S-LA)	*****	0
12 (S-BI)	)	18 (S-HU)	*****	0
12 (S-6I)	)	19 (S-HU)	*****	0
12 (S-6I)	)	20 (S-LI)	*****	0
12 (S-eI)	)	21 (S-Po)	*****	0
12 (S-6I)	)	22 (S-Su)	*****	0
12 (S-6I)	)	23 (S-Sc)	*****	0
12 (S-6I)	)	24 (S-SN)	*****	0
12 (S-uI)	)	25 (S-SK)	*****	0
12 (S-6I)	)	26 (S-V)	*****	0
12 (S-6I)	)	27 (S-w)	*****	0
12 (S-eI)	)	28 (S-Y)	*****	0
12 (S-eI)	)	29 (S-ZH)	*****	0
12 (S-6I)	)	30 (S-ZR)	*****	0
12 (S-eI)	)	31 (S-Th)	*****	0
12 (S-eI)	)	32 (AA-AS-F)	*****	0
12 (S-eI)	)	33 (AA-ZH-F)	*****	0
12 (S-6I)	)	34 (AA-SB-P)	*****	0
13 (S-CU)	)	14 (S-CU)	*****	0
13 (S-CU)	)	15 (S-CH)	*****	0
13 (S-CU)	)	16 (S-CU)	*****	0
13 (S-CU)	)	17 (S-LA)	*****	0
13 (S-CU)	)	18 (S-HU)	*****	0
13 (S-CU)	)	19 (S-HB)	*****	0
13 (S-CU)	)	20 (S-LI)	*****	0
13 (S-CU)	)	21 (S-Po)	*****	0
13 (S-CU)	)	22 (S-Su)	*****	0
13 (S-CU)	)	23 (S-Sc)	*****	0
13 (S-CU)	)	24 (S-SN)	*****	0
13 (S-CU)	)	25 (S-SR)	*****	0
13 (S-CU)	)	26 (S-V)	*****	0
13 (S-CU)	)	27 (S-w)	*****	0
13 (S-CU))	28 (S-Y)	*****	0
13 (S-CU))	29 (S-ZH)	*****	0
13 (S-CU))	30 (S-ZR)	*****	0
13 (S-CU))	31 (S-Th)	*****	0
13 (S-CU))	32 (AA-AS-P)	*****	0
13 (S-CU))	33 (AA-ZH-P)	*****	0

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COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
13 (S-CO)	54 (AA-Sb-F)	*****	0
14 (S-CO	)	15 (S-CR)	*****	1
14 (S-CO	)	16 (S-CU)	*****	1
14 (S-CO	)	17 (S-LA)	*****	1
14 (S-CO	)	18 (S-HC)	*****	1
14 (S-CO	)	19 (S-Ho)	*****	0
14 (S-CO	)	20 (S-HI)	*****	1
14 (S-CO	)	21 (S-Pb)	*****	0
14 (S-CO	)	24 (S-Sa)	*****	0
14 (S-CO	)	23 (S-SL)	*****	0
14 (S-CO	)	24 (S-SK)	*****	0
14 (S-CO	)	25 (S-SR)	*****	1
14 (S-CO	)	26 (S-V)	*****	1
14 (S-CO	)	27 (S-W)	*****	0
14 (S-CO	)	28 (S-Y)	*****	1
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-F)	*****	0
14 (S-CO	)	33 (AA-Zn-F)	*****	0
14 (S-CO	)	34 (AA-Sb-F)	*****	0
15 (S-CR	)	16 (S-CU)	0.3058	6
15 (S-CR	)	17 (S-LA)	0.9479	6
15 (S-CR	)	18 (S-Ho)	*****	1
15 (S-CR	)	19 (S-HI)	*****	1
15 (S-CR	)	20 (S-HI)	-0.9629	3
15 (S-CR	)	21 (S-Pb)	1.0000	2
15 (S-CR	)	22 (S-Sb)	*****	0
15 (S-CR	)	23 (S-Sc)	*****	1
15 (S-CR	)	24 (S-SR)	0.6360	3
15 (S-CR	)	25 (S-SR)	0.5269	6
15 (S-CR	)	26 (S-V)	-0.3267	6
15 (S-CR	)	27 (S-W)	*****	1
15 (S-CR	)	28 (S-Y)	0.2744	6
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-F)	*****	0
15 (S-CR	)	33 (AA-Zn-F)	*****	0
15 (S-CR	)	34 (AA-Sb-F)	*****	0
16 (S-CU	)	17 (S-LA)	-0.2458	15
16 (S-CU	)	18 (S-Mo)	*****	1
16 (S-CU	)	19 (S-No)	*****	1
16 (S-CU	)	20 (S-HI)	-0.5000	3
16 (S-CU	)	21 (S-Pb)	-0.8417	3
16 (S-CU	)	22 (S-Sb)	*****	0
16 (S-CU)	23 (S-Sc)	*****	2
16 (S-CU)	24 (S-SN)	-0.1140	6
16 (S-CU)	25 (S-SR)	0.4999	15
16 (S-CU)	26 (S-V)	-0.0170	15

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DATE 11/29/64

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
10 (S-CU)	27 (S-w)	***** 1
10 (S-CU	)	20 (S-Y	)	-0.4376 15
10 (S-CU	)	29 (S-ZH	)	***** 0
10 (S-CU	)	30 (S-ZK	)	***** 0
10 (S-CU	)	31 (S-TH	)	***** 0
10 (S-CU	)	32 (AA-AS-F	)	***** 0
10 (S-LU	)	33 (AA-ZN-F	)	***** 0
10 (S-CU	)	34 (AA-SB-F	)	***** 0
17 (S-LA	)	18 (S-HU	)	***** 1
17 (S-LA	)	19 (S-HB	)	***** 1
17 (S-LA	)	20 (S-HI	)	-1.0000 3
17 (S-LA	)	21 (S-Po	)	0.2126 4
17 (S-LA	)	22 (S-Sb	)	***** 0
17 (S-LA	)	23 (S-SC	)	1.0000 3
17 (S-LA	)	24 (S-SN	)	0.1893 0
17 (S-LA	)	25 (S-SR	)	0.0987 19
17 (S-LA	)	26 (S-V	)	0.2673 19
17 (S-LA	)	27 (S-w	)	***** 1
17 (S-LA	)	28 (S-Y	)	0.4828 19
17 (S-LA	)	29 (S-ZI	)	***** 0
17 (S-LA	)	30 (S-ZK	)	***** 0
17 (S-LA	)	31 (S-TH	)	***** 0
17 (S-LA	)	32 (AA-AS-F	)	***** 0
17 (S-LA	)	33 (AA-ZN-F	)	***** 0
17 (S-LA	)	34 (AA-SB-F	)	***** 0
18 (S-HU	)	19 (S-HB	)	***** 0
18 (S-MG	)	20 (S-HI	)	***** 1
18 (S-MG	)	21 (S-Po	)	***** 0
18 (S-MO	)	22 (S-Sb	)	***** 0
18 (S-Po	)	23 (S-SC	)	***** 0
18 (S-Po	)	24 (S-SN	)	***** 0
18 (S-PC	)	25 (S-SR	)	***** 1
18 (S-MO	)	26 (S-V	)	***** 1
18 (S-PO	)	27 (S-w	)	***** 0
18 (S-MO	)	28 (S-Y	)	***** 1
18 (S-MO	)	29 (S-ZI	)	***** 0
18 (S-MO	)	30 (S-ZK	)	***** 0
18 (S-MO	)	31 (S-TH	)	***** 0
18 (S-PO	)	32 (AA-AS-F	)	***** 0
18 (S-PC	)	33 (AA-ZN-F	)	***** 0
18 (S-MO	)	34 (AA-SB-F	)	***** 0
19 (S-NB	)	20 (S-HI	)	***** 1
19 (S-NB	)	21 (S-Po	)	***** 1
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)	***** 1
19 (S-NB)	26 (S-V)	***** 1
19 (S-NB)	27 (S-w)	***** 1
19 (S-NB)	28 (S-Y)	***** 1

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DL101 CORRELATION ANALYSIS - USGS STATPAC (U1/15/82)

DATE 11/29/84

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COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
19 (S-NB)	29 (S-ZH)	*****
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)	*****
20 (S-NI	)	22 (S-SB)	*****
20 (S-NI	)	23 (S-SC)	*****
20 (S-NI	)	24 (S-SI)	*****
20 (S-NI	)	25 (S-SR	)	-1.0000
20 (S-NI	)	26 (S-V)	*****
20 (S-NI	)	27 (S-w)	*****
20 (S-NI	)	28 (S-Y)	*****
20 (S-NI	)	29 (S-ZH)	*****
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	)	-0.1788
21 (S-PB	)	26 (S-V	)	-0.1327
21 (S-PB	)	27 (S-w)	*****
21 (S-PB	)	28 (S-Y	)	-0.5115
21 (S-PB	)	29 (S-ZH)	*****
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-SJ	)	23 (S-SC)	*****
22 (S-SJ	)	24 (S-SN)	*****
22 (S-SJ	)	25 (S-SR)	*****
22 (S-SJ	)	26 (S-V)	*****
22 (S-SJ	)	27 (S-w)	*****
22 (S-SJ	)	28 (S-Y)	*****
22 (S-SJ	)	29 (S-ZH)	*****
22 (S-SJ	)	30 (S-ZR)	*****
22 (S-SJ	)	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-SI)	*****
23 (S-SC	)	25 (S-SR	)	-1.0000
23 (S-SC	)	26 (S-V	)	-0.1495
23 (S-SC	)	27 (S-w)	*****
23 (S-SC	)	28 (S-Y	)	0.5000

COLUMN	VERSUS	COLUMN	CORRELATION COEFFICIENT	NO. OF PAIRS
23 (S-SC)	)	24 (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-SR)	)	25 (S-SR)	-0.0445	6
24 (S-SR)	)	26 (S-V)	0.0534	6
24 (S-SR)	)	27 (S-W)	*****	0
24 (S-SR)	)	28 (S-Y)	-0.2154	6
24 (S-SR)	)	29 (S-ZN)	*****	0
24 (S-SR)	)	30 (S-ZR)	*****	0
24 (S-SR)	)	31 (S-TH)	*****	0
24 (S-SR)	)	32 (AA-AS-P)	*****	0
24 (S-SR)	)	33 (AA-ZN-P)	*****	0
24 (S-SR)	)	34 (AA-SB-P)	*****	0
25 (S-SR)	)	26 (S-V)	0.0122	19
25 (S-SR)	)	27 (S-W)	*****	1
25 (S-SR)	)	28 (S-Y)	-0.3186	19
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)	*****	1
26 (S-V)	)	28 (S-Y)	-0.1896	19
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-P)	*****	0
26 (S-V)	)	33 (AA-ZN-P)	*****	0
26 (S-V)	)	34 (AA-SB-P)	*****	0
27 (S-W)	)	28 (S-Y)	*****	1
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

DC1U1 CORRELATION ANALYSIS - USGS STATPAC (U1/15/82)

DATE 11/29/84

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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
30 (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