

SOIL GEOCHEM SURVEY
EAST 86 GROUP

LONG 127° 24' W. Lat. 50° 35' N.

NANAIMO, M.D.
FOR ASSESSMENT CREDIT

9/87

UTAH MINES LTD.

DECEMBER, 1986

15367

VICTORIA

86-802-15367



Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

| | |
|---|--------------------------|
| TYPE OF REPORT/SURVEY(S) GEOCHEMICAL | TOTAL COST \$3,808.00 |
|---|--------------------------|

AUTHOR(S) J.A. FLEMING SIGNATURE(S) *J.A. Fleming*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED SEPT. 24, 1986 YEAR OF WORK 1986

PROPERTY NAME(S) HAR, EXPO

COMMODITIES PRESENT CU

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN 92L-173

MINING DIVISION NANAIMO NTS 92L/11W

LATITUDE 50°34.3' LONGITUDE 127°24.5'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)];

EXPO 53-56 (4 units total), EXPO 31 (1 unit), EXPO 1 Fr. (1 unit), EXPO 30 (1 unit), EXPO 32 (1 unit), APR 17 (1 unit), Rupert 1-7, 11-13 (9 units total), EXPO 51 (1 unit), SIM 10 (1 unit), SIM 12 (1 unit), SIM 14 (1 unit), SIM 16 (1 unit), Lamb (3 units), Star (15 units), Sun (20 units), Mary (16 units), Moon (16 units)

OWNER(S)

(1) Utah Mines Ltd. (2) Gordon Milbourne

MAILING ADDRESS

Box 370 c/o Ladner Downs
Port Hardy, B.C. V0N 2P0 2100 - 700 West Georgia Street
Vancouver, B.C.

GEOLOGICAL BRANCH ASSESSMENT REPORT

OPERATOR(S) (that is, Company paying for the work)

(1) Utah Mines Ltd. (2)

MAILING ADDRESS

Box 370
Port Hardy, B.C. V0N 2P0

15,367

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

The Upper Triassic and Lower Jurassic volcanic and sedimentary succession of the Vancouver and Bonanza Groups underlie the area. Porphyry dykes believed linked to the Rupert Stock extend east from Rupert Inlet. From south to north the underlying succession, dipping gently southward, from top to bottom, is the Bonanza Group pyroclastic volcanics, Parson Bay Formation calcareous siltstones, shales and limestone with shaley interbeds, Quatsino Formation limestone and Karmutsen Formation amygdaloidal basalt. Soil geochemistry identified a large number of low to moderate single element molybdenum anomalies.

REFERENCES TO PREVIOUS WORK

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1.0 INTRODUCTION

Between July 7 and August 5, 1986, a two-person sampling crew spent twelve crew-days collecting soil samples from cut lines in the East 86 Group of Claims, east of Rupert Inlet. This was part of a soil sampling program at the east end of the mineral property. The plan was to sample the reddish-brown soil underlying the organic cover, but to collect a sample anyway if that horizon could not be reached or was absent. Samples were collected on lines at stations set 30.5 meters apart. A total of 398 samples were collected. A total of 190 were given a DCP analysis for copper, molybdenum, lead, zinc, silver, arsenic and manganese. Generally, only every second sample (odd numbers) were submitted for assay. Alternate samples will be submitted as follow-up in anomalous areas.

The objective of the survey was to provide geochemical coverage in a part of the claim group adequate to detect the presence of a near surface porphyry copper-moly deposit where the overburden was less than about 50 feet thick. The elements selected for study are considered to be the most suitable for detecting the target deposit and could possibly detect underlying lead-zinc vein type mineralization under favourable conditions of overburden thickness. By using a multi-element approach, new information could be gained about the area.

2.0 LOCATION AND ACCESS

The survey area is located in the Nanaimo Mining Division with co-ordinates 50° 35'N and 127° 24'W. It is located on the NTS map sheet 92L/11W and borders on claims contiguous with the Utah Mines Ltd. mineral leases some 8 km south of Port Hardy. Access is provided part way by paved highway from Port Hardy and the remainder by logging roads suitable for two wheel drive vehicles.

3.0 CLIMATE

Precipitation at the Port Hardy airport is normally about 160 cm per year including 42 cm of snow. Minimum and maximum temperatures are usually in the range of -12° and 27° C.

4.0 GEOLOGY

The Upper Triassic and Lower Jurassic sedimentary and volcanic succession of the Vancouver and Bonanza Groups respectively, and the Jurassic "Rupert" Stock underlie the area east of Rupert Inlet (Map 2). The succession strikes

4.0 GEOLOGY (cont'd)

approximately west-northwest and dips gently southward becoming younger to the south. From south to north the formations are: (1) Bonanza Volcanics andesitic tuffs and flows underlain by (2) Parson Bay calcareous siltstone with interbedded shales and andesitic and cherty tuffs, and limestone with shaley interbeds underlain by (3) Quatsino limestone and (4) Karmutsen amygdaloidal basalt flows. The Rupert Stock underlies the northwest corner of Rupert Inlet and the uplands cutting the Bonanza Volcanics. It is a porphyritic granodiorite.

5.0 PHYSIOGRAPHY AND VEGETATION

a) Topography and Landscape

The area is in the coastal lowland of the Suguash Basin forming part of the Nahwitti Lowlands of the Central Trough physiographic subdivision. The area is characterized by rounded, gently rolling hills with a maximum relief of about 125 meters. Washlawlis Hill, to the north of the survey area, has an elevation of 173 meters. The survey area straddles the Waukwaas Creek with the land rising to the north and south of the creek.

b) Drainage

i) Stream Drainage

Waukwaas Creek and tributaries drain west across the survey area, with a low gradient, into Rupert Inlet.

ii) Lakes

A small lake occurs on line 75E, between stations 55S and 59S.

iii) Bogs

Marshy ground occurs in various parts of the survey area as indicated on the field notes.

c) Overburden, Soils and Vegetation

i) Overburden

The area has a variable cover of glacial till, peat and moss. Outcrop exposure in the area is sparse. Overburden thickness over the survey area is unknown, but probably exceeds 15 meters. A drill hole on the west edge of the area has 63 meters of overburden.

5.0 PHYSIOGRAPHY AND VEGETATION (cont'd)

c) Overburden, Soils and Vegetation (cont'd)

ii) Soil Development

The B horizon is well developed on the North Island, but it is not always possible to observe because of the accumulation of organic waste which varies from forest litter to well fermented material. A high proportion of the samples have been taken from the A horizon as the B horizon could not be reached.

iii) Vegetation

The vegetation consists mainly of coniferous, virgin forest.

6.0 SAMPLE COLLECTION AND PREPARATION

a) Collection

i) Sampling Plan

Samples were collected using a narrow trenching shovel at stations spaced at 30.5 meter intervals along the cut lines, with alternate samples analyzed.

ii) Sample Medium Collected

The objective was to sample, whenever possible, the reddish-brown soil underlying the organic cover. Roots, twigs and leaves were avoided, as much as possible. If the sought horizon could not be reached, or was not present, a sample of the available material was taken and the horizon recorded.

iii) Sample Collection

About 50 to 60 grams of soil were collected at each station and placed in kraft paper envelopes.

iv) Sample Handling

Samples were dried in a drying oven at a temperature of 80° C for about 12 hours for drying prior to shipping to lab.

6.0 SAMPLE COLLECTIONS AND PREPARATION (cont'd)

b) Laboratories

The samples were sent to one lab, Utah International's Lab in Sunnyvale, California, for the DCP analyses. Assay sheets are included in Appendix A.

c) Sample Analysis

Methods of sample analysis are provided in Appendix A with the assay sheets.

d) Data Handling

Cumulative probability plots and histograms were computer generated for all elements. Assays below detection limits were not included in the statistical analysis. These assays probably constitute a separate population. Assays are included in Appendix A. The probability curves for copper, zinc and manganese (Appendix C) suggest the presence of more than one data population, but do not allow partitioning. Thus, the thresholds were determined on the basis of slope breaks at high concentration tails and previous experience in the area. The medium and high anomaly levels were selected at approximately two and four times the standard deviation respectively above the lower threshold values. Probability plots for other elements are not suitable for interpretation. Thresholds for these elements were taken at the mean value and multiples of the standard deviations. These values and the basic distribution parameters are given in the following table. All silver values above detection level are considered anomalous.

TABLE 1: STATISTICAL PARAMETERS

| NAME | # OF VALUES | ARITHMETIC (ppm) | | THRESHOLDS (ppm) | | |
|------|-------------|------------------|-----------|------------------|------|------|
| | | MEAN | STD. DEV. | LOW | MEAN | HIGH |
| Cu | 192 | 47.1 | 21.5 | 60 | 100 | 140 |
| Mo | 178 | 5.4 | 2.1 | 5 | 7 | 9 |
| Pb | 55 | 4.1 | 2.2 | 4 | 6 | 8 |
| Zn | 192 | 44.5 | 24.9 | 60 | 110 | 160 |
| Ag | 5 | 0.2 | 0.06 | 0.2 | 0.4 | 0.6 |
| As | 44 | 5.3 | 2.6 | 5 | 9 | 13 |
| Mn | 190 | 355.3 | 314.1 | 600 | 1200 | 1800 |

The assay values for all elements are plotted on the 1:4800 scale maps. The station symbols are sized according to the threshold levels the assays fall in.

7.0 RESULTS

Most of the anomalies are in the low anomaly range. The few moderate and high anomalies, other than moly, are in the organic A horizon which has probably enhanced the values relative to those low level anomalies in the horizon. About half of the anomalies are single element anomalies, excluding manganese and arsenic. Manganese anomalies are not interpreted as significant on their own, but in support of anomalies of lead, zinc and silver anomalies. Arsenic anomalies are regarded as indicators for follow-up assaying for gold. Low level copper-zinc and copper-moly anomalies are the most common of the multi-element anomalies.

Two main anomaly groupings are apparent. One occurs at the north ends of lines 59, 67 and 65. The second anomaly area lies to the west of the first and occurs at the north end of lines 27 and 35 east. The first anomaly area is comprised of two sections. The first is an east-west trending belt of copper-lead and lead anomalies. All of these anomalies occur in the high organic A horizon and are discounted. Some swampy ground occurs at station 8N on line 75E. To the north of this, on lines 67E and 75E, occur a series of low level copper, +/- moly, +/- lead, +/- zinc anomalies. All but one of these anomalies occur in the B horizon and are probably valid, albeit weak anomalies. The second anomaly area consists mainly of a series of low level copper-zinc anomalies with moderate moly in the B horizon. Again, this is probably a valid but weak anomaly.

Spot anomalies of single and multi-elements occur scattered over the survey area. Most of these are either in the A horizon and are discounted, or are weak anomalies in the B horizon. There are several exceptions. Station L19E 19S has a moderate copper anomaly with low manganese and moly anomalies. The sample is from the B horizon. A low copper-zinc-moly anomaly occurs at station 15N on the same line and may be related. This anomaly is interesting because the overburden is projected to be very thick in this area. Station 13S on line 67E has a high zinc and low copper anomaly from the B horizon. This station is at the top of a cliff and therefore, overburden thickness is probably thin. The anomaly may be caused by a combination of moderate organic content and thin overburden. A moderate-high copper, lead-zinc anomaly occurs at station 69S on line 43E. Although this is from the organic A horizon beside a creek, the anomaly is interesting as it is one of only two moderate-high copper-lead-zinc anomalies. The other is in the first anomaly area described above. Silver and arsenic anomalies are scattered over the area and occur as single anomalies or as part of multi-element anomalies. No pattern of distribution is apparent.

7.0 RESULTS (cont'd)

A large number of low-moderate single element moly anomalies occur in the B horizon on lines 43E and 75E south of Waukwaas Creek. These may reflect a separate population of higher background moly levels from those north of the creek.

8.0 DISCUSSION

The low assay values reflect the thick overburden cover in the area. With the thicknesses projected it is questionable whether the anomalies could reflect underlying mineralization. The high organic content of most of the anomalous samples probably enhanced the metal concentrations.

9.0 RECOMMENDATIONS

The samples with arsenic and/or silver anomalies should be assayed for gold. The alternate samples (even numbered samples) should be submitted for assay to better define and validate the two main anomaly areas and several anomalies described above.

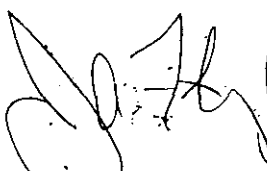
10.0 COST STATEMENT

| | | |
|----------------|--|------------------|
| ASSAYS | 190 samples @ \$5.00 | \$ 950.00 |
| COLLECTION | 6 days (2 person crew) @ \$215/day | \$ 1,290.00 |
| SUPERVISION | | \$ 120.00 |
| OVERHEAD | 25% supervision & labour | \$ 352.50 |
| VEHICLE | 6 days @ \$19.75 | \$ 118.50 |
| | Gas | \$ 12.00 |
| SUPPLIES | Flagging, tags, bags | \$ 75.00 |
| SHIPPING | Samples to Sunnyvale Lab (\$1.00/sample est.) | \$ 190.00 |
| REPORT WRITING | | \$ <u>700.00</u> |
| TOTAL | | \$ 3,808.00 |

STATEMENT OF QUALIFICATIONS

I submit that I am qualified to prepare and present this report for assessment credit. My qualifications are as follows:

- 1) I have a B.Sc., (Major Geology) 1971 from McGill University.
- 2) I have been employed as a geologist continuously since June, 1968, and am presently Chief Geologist, Island Copper Mine, Utah Mines Ltd.
- 3) I have been a Fellow of the Geological Association of Canada since 1974.


J.A. Fleming, B.Sc.,
Chief Geologist.



Island Copper Mine,
Utah Mines Ltd.

Appendix A

SAMPLE PREPARATION

Samples are dried and screened to -80 mesh. A 500 mg sample of the fine fraction is dissolved in a solution of 2 ml nitric/2 ml perchloric acid diluted to 10 ml in 20% hydrochloric acid for 3 - 4 hours. The solution was subjected to DC plasma analysis using a Specmin SpectraSpan 6 system, with the instrument programmed and calibrated for the elements reported.

REPORT OF CHEMICAL ANALYSIS

UTAH INTERNATIONAL INC. MINERALS LABORATORY
 1190 BORDEAUX DRIVE
 SUNNYVALE, CALIFORNIA 94809
 PHONE: (408) 744-1600

PROJECT ISLAND COPPER RECON.
 CHARGE: ISLAND CU GEO.

SUBMITTED BY J. FLEMING
 MINERALS LAB NO. 86- 620

| SAMPLE ID | PPM CU | PPM MO | PPM PB | PPM ZN | PPM AG | PPM MN | PPM AS |
|-----------|--------|--------|--------|--------|--------|--------|--------|
| 19E-23S | 48 | 7 | -2 | 23 | -0.2 | 140 | -2 |
| 19E-21S | 59 | 6 | -2 | 39 | -0.2 | 178 | -2 |
| 19E-19S | 110 | 7 | -2 | 50 | -0.2 | 670 | -2 |
| 19E-17S | 62 | 8 | -2 | 50 | -0.2 | 570 | -2 |
| 19E-15S | 67 | 8 | -2 | 61 | -0.2 | 385 | -2 |
| 19E-13S | 38 | 8 | -2 | 36 | -0.2 | 250 | -2 |
| 19E-11S | 45 | 7 | -2 | 48 | -0.2 | 835 | 8 |
| 19E-9S | 54 | 4 | -2 | 50 | -0.2 | 635 | -2 |
| 19E-7S | 59 | 5 | -2 | 51 | -0.2 | 725 | -2 |
| 19E-5S | 59 | 6 | -2 | 56 | -0.2 | 1100 | -2 |
| 19E-3S | 51 | 5 | -2 | 61 | -0.2 | 890 | -2 |
| 19E-1S | 61 | 5 | -2 | 55 | -0.2 | 495 | -2 |
| 19E-1N | 58 | 4 | 5 | 64 | -0.2 | 815 | -2 |
| 19E-3N | 26 | 5 | 3 | 23 | -0.2 | 164 | -2 |
| 19E-5N | 40 | 7 | -2 | 55 | -0.2 | 440 | -2 |
| 19E-7N | 28 | 6 | 2 | 46 | -0.2 | 210 | -2 |
| 27E-23S | 68 | 6 | -2 | 42 | -0.2 | 460 | -2 |
| 27E-21S | 61 | 5 | -2 | 46 | -0.2 | 355 | -2 |
| 27E-19S | 42 | 9 | -2 | 27 | -0.2 | 192 | -2 |
| 27E-17S | 44 | 3 | 6 | 45 | -0.2 | 220 | -2 |
| 27E-15S | 38 | 4 | -2 | 41 | -0.2 | 285 | -2 |
| 27E-13S | 62 | 5 | -2 | 55 | -0.2 | 905 | -2 |
| 27E-11S | 60 | 5 | -2 | 57 | -0.2 | 835 | -2 |
| 27E-7S | 46 | 4 | -2 | 44 | -0.2 | 610 | 5 |
| 27E-5S | 64 | 4 | -2 | 56 | -0.2 | 915 | -2 |
| 27E-3S | 53 | 5 | -2 | 49 | -0.2 | 750 | -2 |
| 27E-1S | 54 | 6 | -2 | 58 | -0.2 | 645 | -2 |
| 27E-1N | 35 | 5 | -2 | 37 | -0.2 | 215 | -2 |
| 27E-3N | 53 | 8 | -2 | 58 | -0.2 | 1300 | 9 |
| 27E-5N | 75 | 6 | -2 | 44 | -0.2 | 385 | -2 |
| 27E-7N | 99 | 8 | -2 | 80 | -0.2 | 345 | -2 |
| 35E-21S | 17 | 2 | 3 | 22 | -0.2 | 100 | -2 |
| 35E-19S | 27 | 1 | 5 | 14 | -0.2 | 53 | -2 |
| 35E-15S | 21 | 5 | -2 | 40 | -0.2 | 205 | -2 |
| 35E-13S | 38 | 6 | -2 | 50 | -0.2 | 680 | -2 |
| 35E-11S | 45 | 3 | -2 | 43 | -0.2 | 505 | -2 |
| 35E-7S | 56 | 5 | -2 | 49 | -0.2 | 650 | -2 |
| 35E-5S | 64 | 5 | -2 | 67 | -0.2 | 265 | -2 |
| 35E-3S | 82 | 6 | 2 | 100 | -0.2 | 440 | 6 |
| 35E-1S | 43 | 6 | -2 | 57 | -0.2 | 365 | -2 |
| 35E-1N | 86 | 6 | -2 | 100 | -0.2 | 430 | -2 |
| 35E-3N | 65 | 12 | -2 | 65 | -0.2 | 290 | -2 |
| 35E-5N | 61 | 8 | -2 | 35 | -0.2 | 270 | -2 |
| 35E-7N | 66 | 9 | -2 | 66 | -0.2 | 235 | -2 |
| 35E-9N | 26 | -1 | 3 | 21 | -0.2 | 138 | 4 |
| 43BE-69S | 110 | 6 | 12 | 210 | -0.2 | 22 | -2 |
| 43BE-67S | 37 | 4 | 5 | 35 | -0.2 | 23 | 6 |

REPORT OF CHEMICAL ANALYSIS

UTAH INTERNATIONAL INC. MINERALS LABORATORY
 1190 BORDEAUX DRIVE
 SUNNYVALE, CALIFORNIA 94809
 PHONE: (408) 744-1600

PROJECT ISLAND COPPER RECON.
 CHARGE: ISLAND CU GEO.

SUBMITTED BY J. FLEMING
 MINERALS LAB NO. 86- 620

| SAMPLE ID | PPM CU | PPM MO | PPM PB | PPM ZN | PPM AG | PPM MN | PPM AS |
|-----------|--------|--------|--------|--------|--------|--------|--------|
| 43BE-65S | 19 | 2 | 2 | 33 | -0.2 | 7 | -2 |
| 43BE-61S | 31 | 2 | 3 | 27 | -0.2 | 26 | 3 |
| 43BE-59S | 89 | 7 | 8 | 98 | -0.2 | 625 | -2 |
| 43BE-57S | 26 | 8 | 3 | 50 | 0.2 | 160 | 2 |
| 43BE-55S | 71 | 7 | 4 | 85 | -0.2 | 595 | 7 |
| 43BE-53S | 34 | 6 | -2 | 45 | -0.2 | 225 | 3 |
| 43BE-51S | 12 | -1 | 4 | 29 | -0.2 | 47 | -2 |
| 43BE-47S | 39 | 5 | 3 | 20 | -0.2 | 40 | -2 |
| 43BE-45S | 16 | -1 | 3 | 14 | -0.2 | 35 | -2 |
| 43BE-43S | 50 | 8 | -2 | 60 | -0.2 | 168 | -2 |
| 43BE-41S | 47 | 2 | 5 | 22 | -0.2 | 49 | -2 |
| 43BE-39S | 54 | 8 | -2 | 36 | -0.2 | 134 | -2 |
| 43BE-38S | 36 | 7 | -2 | 41 | -0.2 | 445 | 3 |
| 43BE-37S | 81 | 7 | -2 | 64 | -0.2 | 220 | -2 |
| 43BE-35S | 71 | 9 | -2 | 59 | -0.2 | 405 | -2 |
| 43BE-33S | 38 | -1 | 3 | 21 | -0.2 | 44 | -2 |
| 43BE-31S | 59 | 8 | -2 | 35 | -0.2 | 126 | -2 |
| 43BE-29S | 79 | 8 | -2 | 43 | -0.2 | 225 | -2 |
| 43BE-27S | 47 | 9 | -2 | 35 | -0.2 | 166 | -2 |
| 43BE-25S | 72 | 8 | -2 | 55 | -0.2 | 255 | -2 |
| 43BE-23S | 42 | 1 | 5 | 21 | -0.2 | 136 | -2 |
| 43BE-21S | 36 | 10 | -2 | 28 | -0.2 | 102 | -2 |
| 43BE-19S | 57 | 9 | -2 | 39 | -0.2 | 265 | -2 |
| 43BE-17S | 50 | 9 | -2 | 33 | -0.2 | 166 | -2 |
| 43BE-15S | 53 | 7 | -2 | 33 | -0.2 | 385 | -2 |
| 43BE-13S | 31 | 6 | -2 | 17 | -0.2 | 104 | -2 |
| 43BE-11S | 56 | 7 | -2 | 60 | -0.2 | 385 | -2 |
| 43BE-9S | 33 | 8 | -2 | 27 | -0.2 | 108 | -2 |
| 43BE-7S | 65 | 5 | -2 | 28 | -0.2 | 320 | -2 |
| 43BE-5S | 31 | 8 | -2 | 20 | -0.2 | 230 | -2 |
| 43BE-3SA | 41 | 4 | -2 | 46 | -0.2 | 490 | -2 |
| 43BE-1SA | 46 | 6 | -2 | 32 | -0.2 | 265 | -2 |
| 43BE-1NA | 49 | 5 | -2 | 35 | -0.2 | 280 | 5 |
| 43BE-3NA | 30 | 4 | -2 | 25 | -0.2 | 150 | -2 |
| 43BE-5NA | 82 | 6 | -2 | 64 | -0.2 | 425 | -2 |
| 43BE-7NA | 79 | 6 | -2 | 75 | -0.2 | 810 | -2 |
| 43BE-9NA | 88 | 7 | -2 | 98 | -0.2 | 1080 | 3 |
| 43BE-11NA | 30 | 5 | -2 | 43 | -0.2 | 170 | -2 |
| 43BE-13N | 42 | 4 | -2 | 49 | -0.2 | 590 | 3 |
| 43E-3SB | 45 | 5 | -2 | 39 | -0.2 | 320 | -2 |
| 43E-1SB | 35 | 5 | -2 | 60 | -0.2 | 960 | -2 |
| 43E-1NB | 12 | -1 | 3 | 17 | -0.2 | 23 | 2 |
| 43E-3NB | 48 | 5 | -2 | 35 | -0.2 | 275 | -2 |
| 43E-5NB | 42 | 7 | -2 | 40 | -0.2 | 2300 | -2 |
| 43E-7NB | 34 | 2 | 3 | 16 | -0.2 | 122 | -2 |
| 43E-9NB | 16 | -1 | 2 | 14 | -0.2 | 71 | -2 |
| 43E-11NB | 51 | 6 | -2 | 52 | -0.2 | 400 | -2 |

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SUBMITTED BY J. FLEMING
 MINERALS LAB NO. 86- 620

| SAMPLE ID | PPM CU | PPM MO | PPM PB | PPM ZN | PPM AG | PPM MN | PPM AS |
|-----------|--------|--------|--------|--------|--------|--------|--------|
| 51E-19S | 54 | 5 | -2 | 26 | -0.2 | 170 | -2 |
| 51E-17S | 66 | 7 | -2 | 35 | -0.2 | 520 | -2 |
| 51E-15S | 46 | 6 | -2 | 28 | -0.2 | 310 | -2 |
| 51E-13S | 56 | 8 | -2 | 28 | -0.2 | 162 | -2 |
| 51E-11S | 43 | 8 | -2 | 25 | -0.2 | 220 | 8 |
| 51E-9S | 63 | 6 | 3 | 40 | -0.2 | 166 | -2 |
| 51E-7S | 64 | 6 | -2 | 43 | -0.2 | 515 | -2 |
| 51E-5S | 31 | 4 | -2 | 41 | -0.2 | 480 | -2 |
| 51E-3S | 50 | 5 | -2 | 47 | -0.2 | 645 | 7 |
| 51E-1S | 15 | 1 | -2 | 17 | -0.2 | 45 | 6 |
| 51E-1N | 26 | 5 | -2 | 50 | -0.2 | 1730 | -2 |
| 51E-3N | 37 | 5 | -2 | 54 | -0.2 | 370 | -2 |
| 51E-5N | 46 | 5 | -2 | 65 | -0.2 | 425 | 3 |
| 51E-7N | 30 | 3 | 4 | 28 | -0.2 | 450 | -2 |
| 51E-9N | 38 | 7 | -2 | 41 | -0.2 | 385 | -2 |
| 51E-11N | 53 | 5 | -2 | 48 | -0.2 | 725 | -2 |
| 59E-15S | 58 | 6 | -2 | 48 | -0.2 | 365 | -2 |
| 59E-13S | 55 | 5 | -2 | 33 | -0.2 | 220 | -2 |
| 59E-11S | 42 | 4 | -2 | 37 | -0.2 | 500 | -2 |
| 59E-9S | 59 | 4 | -2 | 54 | -0.2 | 675 | 6 |
| 59E-7S | 46 | 4 | -2 | 46 | -0.2 | 615 | -2 |
| 59E-5S | 49 | 4 | -2 | 42 | -0.2 | 375 | -2 |
| 59E-3S | 68 | 4 | -2 | 63 | -0.2 | 830 | -2 |
| 59E-1S | 38 | 4 | -2 | 52 | -0.2 | 790 | 10 |
| 59E-3N | 28 | 5 | -2 | 55 | -0.2 | 355 | -2 |
| 59E-5N | 30 | 3 | 3 | 33 | -0.2 | 98 | 3 |
| 59E-7N | 11 | -1 | -2 | 35 | -0.2 | 19 | 7 |
| 59E-9N | 28 | 2 | 5 | 23 | -0.2 | 85 | 3 |
| 59E-11N | 88 | 3 | 4 | 52 | -0.2 | 190 | -2 |
| 59E-13N | 18 | 1 | -2 | 21 | -0.2 | 67 | 12 |
| 67E-13S | 84 | 9 | -2 | 194 | 0.3 | 410 | 4 |
| 67E-9S | 49 | 3 | -2 | 50 | -0.2 | 660 | -2 |
| 67E-7S | 48 | 4 | -2 | 63 | -0.2 | 860 | -2 |
| 67E-5S | 40 | 4 | -2 | 58 | -0.2 | 660 | -2 |
| 67E-3S | 52 | 5 | -2 | 61 | -0.2 | 770 | -2 |
| 67E-1S | 47 | 5 | -2 | 59 | -0.2 | 660 | -2 |
| 67E-1N | 48 | 5 | -2 | 56 | -0.2 | 240 | -2 |
| 67E-3N | 29 | 5 | -2 | 38 | -0.2 | 176 | 7 |
| 67E-5N | 47 | 3 | 4 | 33 | -0.2 | 99 | 13 |
| 67E-7N | 50 | 2 | 6 | 37 | -0.2 | 97 | 4 |
| 67E-9N | 150 | 1 | 13 | 112 | -0.2 | 95 | -2 |
| 67E-11N | 88 | 2 | 7 | 52 | -0.2 | 68 | 6 |
| 67E-13N | 64 | 2 | 4 | 42 | -0.2 | 43 | -2 |
| 67E-15N | 60 | 6 | -2 | 58 | -0.2 | 285 | -2 |
| 67E-17N | 63 | 5 | -2 | 67 | -0.2 | 240 | -2 |
| 67E-19N | 88 | 5 | -2 | 87 | -0.2 | 355 | -2 |
| 75BE-71S | 39 | 7 | -2 | 27 | -0.2 | 124 | -2 |

REPORT OF CHEMICAL ANALYSIS

UTAH INTERNATIONAL INC. MINERALS LABORATORY
 1190 BORDEAUX DRIVE
 SUNNYVALE, CALIFORNIA 94809
 PHONE: (408) 744-1600

PROJECT ISLAND COPPER RECON.
 CHARGE: ISLAND CU GEO.

SUBMITTED BY J. FLEMING
 MINERALS LAB NO. 86- 620

| SAMPLE ID | PPM CU | PPM MO | PPM PB | PPM ZN | PPM AG | PPM MN | PPM AS |
|-----------|--------|--------|--------|--------|--------|--------|--------|
| 75BE-69S | 50 | 8 | -2 | 43 | -0.2 | 140 | -2 |
| 75BE-67S | 57 | 7 | -2 | 43 | -0.2 | 280 | -2 |
| 75BE-65S | 39 | 8 | -2 | 30 | -0.2 | 130 | -2 |
| 75BE-63S | 56 | 5 | 5 | 25 | -0.2 | 38 | -2 |
| 75BE-61S | 26 | 9 | 2 | 21 | -0.2 | 106 | -2 |
| 75BE-59S | 41 | 3 | 6 | 19 | -0.2 | 31 | 5 |
| 75BE-55S | 14 | 1 | 2 | 14 | -0.2 | 53 | -2 |
| 75BE-53S | 18 | 2 | 3 | 16 | -0.2 | 22 | -2 |
| 75BE-51S | 84 | 6 | -2 | 32 | -0.2 | 430 | -2 |
| 75BE-49S | 52 | 7 | -2 | 40 | -0.2 | 325 | -2 |
| 75BE-47S | 12 | 6 | 4 | 14 | -0.2 | 63 | 4 |
| 75BE-45S | 34 | 7 | -2 | 42 | -0.2 | 200 | -2 |
| 75BE-43S | 32 | 6 | -2 | 31 | -0.2 | 124 | -2 |
| 75BE-41S | 56 | 7 | 2 | 30 | -0.2 | 166 | -2 |
| 75BE-39S | 33 | 8 | 2 | 28 | -0.2 | 112 | -2 |
| 75BE-37S | 76 | 7 | -2 | 49 | 0.2 | 320 | -2 |
| 75BE-35S | 39 | 8 | 2 | 40 | -0.2 | 205 | -2 |
| 75BE-33S | 47 | 6 | -2 | 38 | -0.2 | 168 | -2 |
| 75BE-31S | 35 | 3 | 3 | 15 | -0.2 | 230 | -2 |
| 75BE-29S | 33 | 7 | 7 | 34 | -0.2 | 77 | -2 |
| 75BE-25S | 26 | 3 | 4 | 19 | 0.3 | 285 | -2 |
| 75BE-23S | 21 | 5 | 5 | 16 | -0.2 | 210 | 3 |
| 75BE-21S | 10 | -1 | 3 | 17 | -0.2 | 18 | -2 |
| 75BE-1S | 50 | 5 | -2 | 60 | -0.2 | 695 | -2 |
| 75E-5S | 36 | 5 | -2 | 62 | -0.2 | 745 | -2 |
| 75E-3S | 51 | 4 | -2 | 58 | -0.2 | 820 | -2 |
| 75E-1S | 32 | 3 | -2 | 51 | -0.2 | 184 | -2 |
| 75E-1N | 27 | 6 | 4 | 24 | -0.2 | 102 | 6 |
| 75E-3N | 6 | -1 | -2 | 6 | -0.2 | 22 | 5 |
| 75E-5N | 17 | -1 | 7 | 21 | -0.2 | 42 | -2 |
| 75E-7N | 8 | -1 | -2 | 18 | -0.2 | 116 | -2 |
| 75E-9N | 19 | 1 | 4 | 39 | -0.2 | 295 | 3 |
| 75E-11N | 35 | 7 | -2 | 31 | -0.2 | 325 | -2 |
| 75E-13N | 64 | 5 | -2 | 58 | -0.2 | 410 | 8 |
| 75E-15N | 63 | 6 | 4 | 88 | -0.2 | 515 | 4 |
| 75E-17N | 50 | 6 | 4 | 70 | -0.2 | 430 | 3 |
| 75E-19N | 70 | 6 | -2 | 71 | -0.2 | 425 | 5 |
| 83E-7S | 58 | 5 | -2 | 55 | -0.2 | 675 | -2 |
| 83E-5S | 60 | 4 | -2 | 58 | 0.2 | 795 | -2 |
| 83E-3S | 38 | 4 | -2 | 40 | -0.2 | 480 | 3 |
| 83E-1S | 35 | 6 | -2 | 54 | -0.2 | 270 | -2 |
| 83E-1N | 40 | 7 | -2 | 31 | -0.2 | 144 | -2 |
| 83E-3N | 23 | 1 | 3 | 15 | -0.2 | 50 | 8 |
| 83E-5N | 11 | -1 | -2 | 15 | -0.2 | 30 | 4 |
| 83E-7N | 13 | -1 | -2 | 14 | -0.2 | 20 | -2 |
| 83E-9N | 36 | 5 | -2 | 42 | -0.2 | 156 | -2 |
| 83E-11N | 47 | 5 | -2 | 56 | -0.2 | 625 | -2 |

REPORT OF CHEMICAL ANALYSIS

UTAH INTERNATIONAL INC. MINERALS LABORATORY
1190 BORDEAUX DRIVE
SUNNYVALE, CALIFORNIA 94809
PHONE: (408) 744-1600

PROJECT ISLAND COPPER RECON.
CHARGE: ISLAND CU GEO.

SUBMITTED BY J. FLEMING
MINERALS LAB NO. 86- 620

| SAMPLE ID | PPM CU | PPM MO | PPM PB | PPM ZN | PPM AG | PPM MN | PPM AS |
|-----------|--------|--------|--------|--------|--------|--------|--------|
| 83E-13N | 36 | 7 | -2 | 41 | -0.2 | 460 | -2 |
| 83E-15N | 48 | 7 | -2 | 51 | -0.2 | 330 | -2 |
| 83E-17N | 28 | 5 | -2 | 42 | -0.2 | 186 | -2 |
| 83E-19N | 7 | -1 | 2 | 19 | -0.2 | 255 | 3 |

Appendix B

12

438E

L43E

Aug 5/86

| STN | HOR | DEP | TOP | COL | ORG | CLV | REMARKS |
|------|-----|-----|-----|-----|-----|-----|---------------|
| 58S | B | 18 | L | OR | H | L | Cut Bush |
|) 59 | A | 24 | SY | BK | H | L | SWAMP |
| 60 | AB | 22 | SY | GB | H | H | SWAMP |
| 61 | A | 16 | SY | BR | H | L | |
|) 62 | A | 20 | L | DB | H | L | |
| 63 | A | 22 | L | BR | H | L | |
| 64 | A | 18 | SY | BR | H | L | |
|) 65 | A | 20 | SY | BBK | H | L | |
| 66 | AB | 22 | SY | BR | H | L | send check |
| 67 | A | 20 | SY | BR | H | L | " " |
| 68 | A | 22 | SY | BK | H | L | " " |
| 69 | AB | 20 | SY | B0 | H | L | " " |

NEVILLE CROSBY INC.

23 2 N/S

438E

L43E

JULY 14

| STN | HOR | DEP | TOP | COL | ORG | CLV | REMARKS |
|-----|-----------------|-----|-----|-----|-----|-----|-------------------------|
| 33S | AB | 16 | SY | BK | M | L | |
| 34 | A | 18 | SY | BK | H | H | |
| 35 | B | 12 | N | OR | M | M | |
| 36 | B | 22 | S | OB | L | L | |
| 37 | B | 12 | S | O | M | L | |
| 38 | AB | 13 | S | OB | M | L | |
| 39 | B | 14 | S | OR | M | L | |
| 40 | A | 16 | SY | BK | H | L | |
| 41 | A | 20 | SY | BK | H | M | |
| 42 | A | 18 | N | BK | H | L | |
| 43 | B | 26 | L | OR | L | L | |
| 44 | B | 18 | L | O | H | L | |
| 45 | A | 30 | SY | DB | H | L | |
| 46 | B | 18 | L | O | H | L | |
| 47 | A | 10 | L | BK | M | L | |
| 48 | A | 20 | L | BK | H | L | |
| 49 | NO SAMPLE RIVER | | | | | | |
| 50 | NO SAMPLE RIVER | | | | | | |
| 51 | A | 20 | L | BK | H | L | Cut area goes to 69. |
| 52 | A | 22 | L | BK | H | L | |
| 53 | AB | 14 | L | OB | L | L | |
| 54 | B | 14 | L | OR | L | L | |
| 55 | B | 8 | L | O | L | L | |
| 56 | AB | 22 | L | OB | H | L | |
| 57 | AB | 20 | L | OB | L | L | |

NEVILLE CROSBY INC.

25

938

L43E

July 14

| STN | HR | DEP | TOP | COL | ORG | CLY | REMARKS |
|-----|----|-----|-----|-----|-----|-----|--------------|
| 85 | B | 8 | L | OR | L | L | off Castrail |
| 95 | B | 12 | L | OR | M | L | |
| 105 | A | 26 | SY | BK | H | L | |
| 115 | B | 14 | N | OB | L | L | |
| 125 | AB | 20 | N | OB | L | H | |
| 135 | AB | 6 | SY | GY | L | H | |
| 145 | B | 22 | N | OR | L | L | |
| 155 | B | 16 | N | OR | L | L | |
| 165 | B | 8 | L | OR | L | L | |
| 175 | B | 12 | L | OR | L | L | |
| 185 | B | 10 | L | OR | M | L | |
| 195 | B | 14 | L | OR | H | L | |
| 205 | B | 14 | E | OR | H | M | |
| 215 | B | 18 | L | OR | M | L | |
| 225 | B | 18 | L | OR | M | L | |
| 235 | A | 20 | SY | BK | M | L | |
| 245 | B | 10 | N | OR | L | L | |
| 255 | B | 14 | S | OR | L | L | |
| 265 | B | 26 | S | ROB | L | L | |
| 275 | B | 14 | S | ROB | L | L | |
| 285 | B | 10 | S | OR | M | L | |
| 295 | AB | 20 | V | OB | M | M | |
| 305 | B | 20 | S | O | L | L | |
| 315 | B | 11 | V | CB | H | M | |
| 32 | E | 15 | L | OS | M | L | |

NEVILLE CROSBY INC.

22 IN/3

L43E

July 15, 1976

| STN | HR | DEP | TOP | COL | ORG | CLY | REMARKS |
|-----|----|-----|-----|-----|-----|-----|---------|
| 75 | AB | 12 | N | OB | M | L | CREEK |
| 65 | BC | 20 | N | GB | L | L | " |
| 5 | AB | 18 | W | OB | H | L | |
| 4 | B | 8 | W | GOB | M | M | |
| 3 | B | 12 | W | GOB | L | L | |
| 2 | B | 14 | W | OR | L | L | |
| 1 | B | 16 | W | OR | L | L | |
| 0 | B | 6 | W | OR | L | L | |
| 1 | B | 10 | W | OR | L | L | |
| 2 | A | 16 | N | BK | H | L | |
| 3 | AB | 20 | N | OB | L | L | Sandy |
| 4 | B | 6 | N | OR | L | L | |
| 5 | A | 18 | SY | OR | L | L | |
| 6 | A | 20 | SY | BK | H | L | |
| 7 | A | 22 | SY | OR | H | L | |
| 8 | AB | 26 | SY | OR | M | M | |
| 9 | A | 50 | SY | OR | H | L | |
| 10 | A | 26 | SY | BK | M | H | |
| 11 | AB | 20 | SY | GB | L | H | |
| 12 | A | 14 | V | GY | H | L | Sandy |
| 13 | B | 12 | L | OR | L | M | |
| 14 | AD | 26 | L | GB | L | H | |
| 15 | N | 0 | S | AIN | OR | E | CREEK |
| 16 | | | | | | | |
| 17 | | | | | | | |

NEVILLE CROSBY INC.

22

1 N/S

LS 1E
July 18/86

| STN | HOR | DEP | TCP | COL | ORG | CLY | REMARKS |
|-----|-----|--------|-------|-----|-----|-----|-----------|
| 10S | B | 12 | E | OR | L | L | |
| 9S | B | 8 | F | OR | L | L | |
| 8S | B | 10 | E | OR | L | L | |
| 7S | B | 12 | N | OB | L | L | |
| 6S | AB | 10 | E | OB | L | L | |
| 5S | AB | 26 | L | GA | L | L | |
| 4S | BC | 10 | SY | GY | L | H | CREEK BED |
| 3S | A | 8 | L | GB | H | L | |
| 2S | NO | SAMPLE | RIVER | | | | |
| 1S | A | 15 | L | DB | H | L | |
| 0N | AB | 18 | L | GB | M | L | |
| 1N | AB | 8 | L | DB | H | L | |
| 2N | BC | 10 | L | GB | L | L | |
| 3N | B | 10 | L | OR | M | L | |
| 4N | B | 14 | L | GOB | M | L | |
| 5N | B | 10 | L | OB | L | M | |
| 6N | AB | 20 | SY | DB | H | M | |
| 7N | A | 10 | SY | GB | H | L | Creek |
| 8N | B | 12 | S | OR | L | L | |
| 9N | B | 16 | L | OB | L | L | |
| 10 | B | 14 | S | OB | E | L | |
| 11 | B | 12 | S | OB | M | L | |
| 2N | B | 10 | S | O | L | L | |

MEVILLE CROSSBY INC

16 1 N/S

LS 9E
July 17, 1986

| STN | HOR | DEP | TCP | COL | ORG | CLY | REMARKS |
|-----|-----|--------|-------|-----|-----|-----|---------|
| 15S | B | 10 | E | OB | L | M | |
| 14S | B | 10 | L | OB | L | L | |
| 13 | B | 14 | T | OR | M | L | |
| 12 | AB | 16 | V | GB | H | L | |
| 11 | A | 20 | L | GY | M | L | |
| 10 | A | 10 | L | GY | M | L | |
| 9 | AB | 14 | L | GB | H | L | |
| 8 | A | 6 | L | GY | H | L | CREEK |
| 7 | AB | 20 | L | GB | M | L | |
| 6 | NO | SAMPLE | RIVER | | | | |
| 5 | B | 10 | S | OR | H | L | |
| 4 | B | 10 | L | OR | M | L | |
| 3 | BC | 10 | L | GB | M | L | |
| 2 | AB | 14 | L | GB | L | L | |
| 1 | B | 10 | L | OB | M | L | |
| 0 | 9 | 14 | L | OR | M | L | |

MEVILLE CROSSBY INC

L 59E July 21/1986

STN HOR DEP TOP CCL GRG CLY REMARKS

| STN | HOR | DEP | TOP | CCL | GRG | CLY | REMARKS |
|-----|-----|-----|-----|-----|-----|-----|----------|
| 13 | A | 14 | L | BR | H | L | |
| 12 | A | 20 | Sy | BK | H | L | |
| 11 | A | 15 | Sy | DB | H | L | |
| 10 | AB | 20 | Sy | BR | H | L | |
| 9 | AB | 14 | Sy | BR | H | L | |
| 8 | A | 14 | Sy | BK | H | L | |
| 7 | A | 26 | L | DB | H | L | |
| 6 | A | 18 | Sy | GY | H | M | |
| 5 | AB | 14 | Sy | BK | H | L | |
| 4 | AB | 18 | Sy | GR | H | H | |
| 3 | AB | 10 | Sy | BR | L | H | |
| 2 | | | | | | | RAN into |
| 1 | | | | | | | 00° |
| 0 | | | | | | | |

L 67E July 17/86

STN HOR DEP TOP CCL GRG CLY REMARKS

| STN | HOR | DEP | TOP | CCL | GRG | CLY | REMARKS |
|-----|-----|-----|-----|-----|-----|-----|-----------------|
| 15 | B | 12 | L | DL | M | L | |
| 25 | B | 8 | L | OB | L | L | |
| 3 | B | 8 | L | OB | H | L | |
| 4 | L | 8 | L | OB | M | L | |
| 5 | B | 12 | V | RR | L | L | |
| 6 | AB | 10 | L | GY | M | H | |
| 7 | B | 12 | L | GR | L | L | |
| 8 | B | 12 | L | GR | M | M | CREEK |
| 9 | A | 12 | L | GY | H | L | SANDY |
| 10 | | | | | | | NO SAMPLE RIVER |
| 11 | | | | | | | NO SAMPLE RIVER |
| 12 | | | | | | | NO SAMPLE RIVER |
| 13 | B | 12 | T | OK | M | L | Top of cliff |
| 14 | | | | | | | |
| 15 | | | | | | | |

July 12, 1986

L 67E

| STN | HT | DEP | TOP | COL | ORG | CLY | Remarks |
|-----|----|-----|-----|-----|-----|-----|---------|
| 0 | B | 10 | L | OR | L | L | |
| 1 | N | 8 | Sy | OB | H | L | |
| 2 | N | 10 | Sy | GC | H | H | |
| 3 | N | AB | 12 | Sy | BR | H | H |
| 4 | AB | 14 | Sy | OB | L | L | |
| 5 | AB | 20 | Sy | BR | L | M | |
| 6 | AB | 20 | Sy | BK | L | L | |
| 7 | A | 22 | Sy | BK | A | L | |
| 8 | A | 20 | Sy | BK | H | L | |
| 9 | A | 24 | Sy | BK | H | L | |
| 10 | A | 22 | Sy | BK | H | L | |
| 11 | AB | 30 | Sy | BK | H | L | |
| 12 | A | 24 | Sy | BK | H | L | |
| 13 | A | 20 | Sy | BK | H | L | |
| 14 | B | 6 | L | OR | L | L | |
| 15 | B | 8 | L | OG | L | L | |
| 16 | B | 10 | L | OR | L | L | |
| 17 | B | 10 | L | OB | M | L | |
| 18 | B | 8 | L | OR | L | L | |
| 19 | B | 8 | L | OB | L | L | |

MEYILLE CROSSING

July 24, 1986

75E

| STN | HT | DEP | TOP | COL | ORG | CLY | Remarks |
|-----|----|--------|-----|-----|-----|-----|---------------|
| 72 | S | 14 | N | OR | M | L | |
| 71 | S | 16 | N | OB | L | L | |
| 70 | B | 20 | N | OG | L | H | |
| 69 | B | 14 | H | ROB | L | L | |
| 68 | B | 14 | H | OR | L | L | |
| 67 | B | 10 | H | OR | M | L | |
| 66 | B | 8 | S | OR | L | L | |
| 65 | B | 20 | S | OR | L | L | |
| 64 | B | 12 | L | OR | M | L | |
| 63 | A | 18 | L | BK | M | L | |
| 62 | A | 18 | Sy | BK | M | L | |
| 61 | AB | 18 | L | OG | M | H | |
| 60 | A | 16 | L | GB | M | H | |
| 59 | A | 20 | L | GOB | M | H | Edge LAKE |
| 58 | NO | SAMPLE | | | | | } LAKE |
| 57 | NO | SAMPLE | | | | | |
| 56 | NO | SAMPLE | | | | | |
| 55 | A | 14 | L | BR | H | L | Edge LAKE |
| 54 | A | 16 | S | DB | H | L | |
| 53 | A | 24 | L | BR | H | L | |
| 52 | A | 14 | L | BR | H | L | |
| 51 | AB | 16 | L | GOB | L | L | |
| 50 | B | 14 | L | OB | L | L | PROPOSED ROAD |
| 49 | B | 10 | L | OR | L | L | |
| 48 | B | 14 | L | OR | L | L | |

MEYILLE CROSSING

L75BE

July 24, 1986

L75L

| STN. | DIR | DEP | TOP | COL | ORG | CLY | REMARKS |
|-------|-----|-----|-----|-----|-----|-----|---------|
| 475A | 14 | L | GBK | H | M | | |
| 465A | 18 | SY | BK | M | M | | |
| 455B | 10 | L | OR | L | L | | |
| 445A | 18 | L | BR | H | L | | |
| 435AB | 18 | L | OB | L | L | | |
| 425A | 24 | L | BK | M | M | | |
| 41B | 14 | L | OR | L | L | | |
| 40A | 10 | SY | BK | H | M | | |
| 39B | 8 | L | OR | M | L | | |
| 38B | 14 | L | OR | L | L | | |
| 37B | 14 | L | OR | M | L | | |
| 36B | B | L | OR | M | L | | |
| 35B | 8 | L | OR | M | L | | |
| 34B | 6 | L | OR | L | L | | |
| 33B | 12 | L | OR | L | L | | |
| 32AB | 18 | L | OB | L | L | | |
| 31A | 20 | SY | BK | H | L | | |
| 26 | | | | | | | |
| 25 | | | | | | | |
| 24 | | | | | | | |
| 23 | | | | | | | |

L75BE

L75L

July 23, 1986

| STN. | DIR | DEP | TOP | COL | ORG | CLY | REMARKS |
|------|-----|-----|-----|-----|-----|-----|----------------|
| 05 | AR | 12 | L | OB | H | L | RIVER |
| 16 | BC | 15 | SY | GB | L | L | REEF |
| 2 | B | 16 | L | OB | A | M | |
| 3 | B | 8 | N | BK | L | L | |
| 4 | B | M | N | DD | M | L | |
| 5 | B | 8 | L | OR | L | L | |
| 6 | B | 10 | L | OR | L | L | |
| 7 | B | 14 | L | OR | L | L | |
| 8 | B | 6 | L | OR | L | L | |
| 9 | B | 6 | L | OB | M | L | |
| 10 | B | 10 | L | OR | L | L | |
| 11 | B | 10 | L | OR | M | L | |
| 12 | B | 6 | L | OR | L | L | |
| 13 | B | 8 | L | OR | M | L | |
| 14 | B | 8 | L | OR | M | L | |
| 15 | B | 10 | L | OR | M | L | BAG |
| 16 | B | 14 | L | OR | M | L | |
| 17 | B | 10 | L | OR | M | L | |
| 18 | A | 10 | SY | BK | L | L | |
| 19 | A | 14 | SY | GY | M | M | |
| 20 | B | 10 | L | OR | L | L | |
| 21 | A | 10 | L | BK | H | L | |
| 22 | A | 18 | L | BK | H | L | SHALL RIDGE |
| 23 | A | 16 | SY | GY | H | A | |

B
L7SE July 23, 1986

| | HT | DEP | TOP | COL | ORG | CLY | REMARKS |
|----|----|-----|-----|-----|-----|-----|------------|
| 24 | A | 14 | SY | BK | H | L | SMALL TIPS |
| 25 | A | 18 | SY | BK | H | L | |
| 26 | A | 20 | SY | BK | H | L | |
| 27 | A | 16 | SY | BK | H | L | |
| 28 | A | 14 | SY | GY | L | H | |
| 29 | A | 20 | SY | BK | H | L | |
| 30 | A | 20 | SY | BK | H | L | |
| 31 | | | | | | | |

NEVILL-CROSBY INC.

L7SE July 11, 1986

| | HT | DEP | TOP | COL | ORG | CLY | REMARKS |
|----|----|-----|-----|-----|-----|-----|-----------------|
| 19 | B | 8 | L | DB | L | L | |
| 18 | B | 8 | L | OR | L | L | |
| 17 | B | 10 | L | OR | H | L | |
| 16 | B | 14 | L | OR | L | L | |
| 15 | B | 16 | L | OR | L | L | |
| 14 | B | 10 | N | GB | L | L | |
| 13 | B | 10 | N | OR | L | L | |
| 12 | B | 12 | N | OR | H | L | |
| 11 | B | 9 | L | AB | H | L | |
| 10 | B | 12 | L | OR | M | L | |
| 9 | A | 18 | SY | BK | H | L | |
| 8 | | | | | | | NO SAMPLE Swamp |
| 7 | A | 6 | SY | BK | H | L | |
| 6 | A | 14 | L | BK | H | L | |
| 5 | A | 18 | SY | BK | H | L | |
| 4 | A | 24 | SY | BK | H | L | |
| 3 | A | 26 | SY | BK | H | L | |
| 2 | A | 14 | SY | GY | H | L | |
| 1 | B | 20 | L | OR | L | H | |
| 0 | A | 22 | SY | BK | M | H | |

NEVILL-CROSBY INC.

Appendix C

STATISTICAL SUMMARY

| NAME | NO. OF VALUES | ARITHMETIC | | LOGARITHMIC | |
|------|------------------|------------|----------|-------------|----------|
| | | MEAN | STD.DEV. | MEAN | STD.DEV. |
| CU | 192 | 47.078 | 21.533 | 1.620 | 0.232 |
| MO | 178 | 5.449 | 2.072 | 0.693 | 0.220 |
| PB | 55 | 4.145 | 2.206 | 0.571 | 0.194 |
| ZN | 192 | 44.526 | 24.942 | 1.593 | 0.222 |
| AG | 5 | 0.240 | 0.055 | -0.629 | 0.096 |
| MN | 192 | 355.198 | 314.124 | 2.366 | 0.452 |
| AS | 44 | 5.273 | 2.573 | 0.675 | 0.202 |

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: CU
CALCULATED PARAMETERS:

NUMBER OF VALUES IS 192

MEAN = 47.0781 STD.DEV. = 21.5326 VARIANCE = 463.6536

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

| ICELL | LOWER LIMIT | NO | PCT | LOG LIMIT |
|-------|-------------|----|-----------|-----------|
| 1 | -17.5199 | 0 | 0.0 | ***** |
| 2 | -12.1367 | 0 | 0.0 | ***** |
| 3 | -6.7536 | 0 | 0.0 | ***** |
| 4 | -1.3704 | 0 | 0.0 | ***** |
| 5 | 4.0127 | 3 | 1.6** | 0.6034 |
| 6 | 9.3959 | 8 | 4.2**** | 0.9729 |
| 7 | 14.7791 | 9 | 4.7***** | 1.1696 |
| 8 | 20.1622 | 3 | 1.6** | 1.3045 |
| 9 | 25.5454 | 17 | 8.9***** | 1.4073 |
| 10 | 30.9285 | 22 | 11.5***** | 1.4904 |
| 11 | 36.3117 | 18 | 9.4***** | 1.5600 |
| 12 | 41.6949 | 22 | 11.5***** | 1.6201 |
| 13 | 47.0780 | 20 | 10.4***** | 1.6728 |
| 14 | 52.4612 | 16 | 8.3***** | 1.7198 |
| 15 | 57.8444 | 19 | 9.9***** | 1.7623 |
| 16 | 63.2275 | 12 | 6.3***** | 1.8009 |
| 17 | 68.6107 | 4 | 2.1** | 1.8364 |
| 18 | 73.9939 | 4 | 2.1** | 1.8692 |
| 19 | 79.3770 | 5 | 2.6*** | 1.8997 |
| 20 | 84.7602 | 6 | 3.1*** | 1.9282 |
| 21 | 90.1433 | 0 | 0.0 | 1.9549 |
| 22 | 95.5265 | 1 | 0.5* | 1.9801 |
| 23 | 100.9097 | 0 | 0.0 | 2.0039 |
| 24 | 106.2928 | 2 | 1.0* | 2.0265 |

LOG VALUES.....: MEAN = 1.6203 STD.DEV. = 0.2322 VARIANCE = 0.0539

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

| ICELL | LOWER LIMIT | NO | PCT | ARITH. LIMIT |
|-------|-------------|----|-----------|--------------|
| 1 | 0.9235 | 0 | 0.0 | 8.3858 |
| 2 | 0.9816 | 1 | 0.5* | 9.5852 |
| 3 | 1.0397 | 5 | 2.6*** | 10.9562 |
| 4 | 1.0977 | 2 | 1.0* | 12.5233 |
| 5 | 1.1558 | 3 | 1.6** | 14.3145 |
| 6 | 1.2138 | 4 | 2.1** | 16.3620 |
| 7 | 1.2719 | 4 | 2.1** | 18.7023 |
| 8 | 1.3300 | 1 | 0.5* | 21.3773 |
| 9 | 1.3880 | 8 | 4.2**** | 24.4350 |
| 10 | 1.4461 | 13 | 6.8***** | 27.9300 |
| 11 | 1.5041 | 18 | 9.4***** | 31.9249 |
| 12 | 1.5622 | 18 | 9.4***** | 36.4913 |
| 13 | 1.6202 | 22 | 11.5***** | 41.7107 |
| 14 | 1.6783 | 28 | 14.6***** | 47.6767 |
| 15 | 1.7364 | 24 | 12.5***** | 54.4960 |
| 16 | 1.7944 | 18 | 9.4***** | 62.2908 |
| 17 | 1.8525 | 6 | 3.1*** | 71.2004 |
| 18 | 1.9105 | 10 | 5.2**** | 81.3844 |
| 19 | 1.9686 | 1 | 0.5* | 93.0250 |
| 20 | 2.0267 | 2 | 1.0* | 106.3306 |
| 21 | 2.0847 | 0 | 0.0 | 121.5394 |
| 22 | 2.1428 | 1 | 0.5* | 138.9235 |
| 23 | 2.2008 | 0 | 0.0 | 158.7942 |
| 24 | 2.2589 | 0 | 0.0 | 181.5070 |

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: CU

| CELL | LOWER LIMIT | NO | CUMPCY | APPROXIMATE CUMULATIVE PROBABILITY PLOT OF LOGARITHMIC VALUES | | | | | | | | | | ARITH. LIMIT | | | |
|------|-------------|----|--------|---|---|--|--|--|--|--|--|--|--|--------------|--|--|----------|
| 1 | 2.186 | 0 | 0.0 | * | | | | | | | | | | | | | 153.5750 |
| 2 | 2.157 | 1 | 0.5 | * | | | | | | | | | | | | | 143.6450 |
| 3 | 2.128 | 0 | 0.5 | * | | | | | | | | | | | | | 134.3572 |
| 4 | 2.099 | 0 | 0.5 | * | | | | | | | | | | | | | 125.6698 |
| 5 | 2.070 | 0 | 0.5 | * | | | | | | | | | | | | | 117.5442 |
| 6 | 2.041 | 2 | 1.6 | - | | | | | | | | | | | | | 109.9440 |
| 7 | 2.012 | 0 | 1.6 | - | * | | | | | | | | | | | | 102.8351 |
| 8 | 1.983 | 1 | 2.1 | - | * | | | | | | | | | | | | 96.1859 |
| 9 | 1.954 | 0 | 2.1 | - | * | | | | | | | | | | | | 89.9668 |
| 10 | 1.925 | 6 | 5.2 | - | * | | | | | | | | | | | | 84.1496 |
| 11 | 1.896 | 7 | 8.9 | - | * | | | | | | | | | | | | 78.7086 |
| 12 | 1.867 | 2 | 9.9 | - | * | | | | | | | | | | | | 73.6194 |
| 13 | 1.838 | 4 | 12.0 | - | * | | | | | | | | | | | | 68.8593 |
| 14 | 1.809 | 7 | 15.6 | - | * | | | | | | | | | | | | 64.4069 |
| 15 | 1.780 | 13 | 22.4 | - | * | | | | | | | | | | | | 60.2425 |
| 16 | 1.751 | 13 | 29.2 | - | * | | | | | | | | | | | | 56.3473 |
| 17 | 1.722 | 14 | 36.5 | - | * | | | | | | | | | | | | 52.7039 |
| 18 | 1.693 | 12 | 42.7 | - | * | | | | | | | | | | | | 49.2962 |
| 19 | 1.664 | 14 | 50.0 | - | * | | | | | | | | | | | | 46.1088 |
| 20 | 1.635 | 9 | 54.7 | - | * | | | | | | | | | | | | 43.1274 |
| 21 | 1.606 | 9 | 59.4 | - | * | | | | | | | | | | | | 40.3389 |
| 22 | 1.577 | 14 | 66.7 | - | * | | | | | | | | | | | | 37.7306 |
| 23 | 1.548 | 7 | 70.3 | - | * | | | | | | | | | | | | 35.2910 |
| 24 | 1.519 | 8 | 74.5 | - | * | | | | | | | | | | | | 33.0092 |
| 25 | 1.490 | 9 | 79.2 | - | * | | | | | | | | | | | | 30.8748 |
| 26 | 1.461 | 5 | 81.8 | - | * | | | | | | | | | | | | 28.8785 |
| 27 | 1.432 | 4 | 83.9 | - | * | | | | | | | | | | | | 27.0112 |
| 28 | 1.403 | 8 | 88.0 | - | * | | | | | | | | | | | | 25.2648 |
| 29 | 1.373 | 0 | 88.0 | - | * | | | | | | | | | | | | 23.6312 |
| 30 | 1.344 | 1 | 88.5 | - | * | | | | | | | | | | | | 22.1032 |
| 31 | 1.315 | 2 | 89.6 | - | * | | | | | | | | | | | | 20.6740 |
| 32 | 1.286 | 0 | 89.6 | - | * | | | | | | | | | | | | 19.3373 |
| 33 | 1.257 | 2 | 90.6 | - | * | | | | | | | | | | | | 18.0870 |
| 34 | 1.228 | 4 | 92.7 | - | * | | | | | | | | | | | | 16.9175 |
| 35 | 1.199 | 2 | 93.8 | - | * | | | | | | | | | | | | 15.8236 |
| 36 | 1.170 | 1 | 94.3 | - | * | | | | | | | | | | | | 14.8005 |
| 37 | 1.141 | 1 | 94.8 | - | * | | | | | | | | | | | | 13.8435 |
| 38 | 1.112 | 1 | 95.3 | - | * | | | | | | | | | | | | 12.9484 |
| 39 | 1.083 | 0 | 95.3 | - | * | | | | | | | | | | | | 12.1112 |
| 40 | 1.054 | 3 | 96.9 | - | * | | | | | | | | | | | | 11.3281 |
| 41 | 1.025 | 2 | 97.9 | - | * | | | | | | | | | | | | 10.5956 |

THRESHOLD APPROX 60 PPM

1 2.5 5 10 20 30 40 50 60 70 80 90 95 97.5 99

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: MO
 CALCULATED PARAMETERS: MEAN = 5.4494 NUMBER OF VALUES IS 178
 STD.DEV. = 2.0722 VARIANCE = 4.2940

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

| CELL | LOWER LIMIT | NO | PCT | LOG LIMIT |
|------|-------------|----|------------|-----------|
| 1 | -0.7672 | 0 | 0.0 | ***** |
| 2 | -0.2491 | 0 | 0.0 | ***** |
| 3 | 0.2689 | 0 | 0.0 | -0.5704 |
| 4 | 0.7870 | 8 | 4.5 **** | -0.1040 |
| 5 | 1.3050 | 0 | 0.0 | 0.1156 |
| 6 | 1.8231 | 10 | 5.6 ***** | 0.2608 |
| 7 | 2.3411 | 0 | 0.0 | 0.3694 |
| 8 | 2.8592 | 11 | 6.2 ***** | 0.4562 |
| 9 | 3.3772 | 0 | 0.0 | 0.5286 |
| 10 | 3.8953 | 21 | 11.8 ***** | 0.5905 |
| 11 | 4.4133 | 0 | 0.0 | 0.6448 |
| 12 | 4.9314 | 42 | 23.6 ***** | 0.6930 |
| 13 | 5.4494 | 0 | 0.0 | 0.7364 |
| 14 | 5.9675 | 31 | 17.4 ***** | 0.7758 |
| 15 | 6.4855 | 25 | 14.0 ***** | 0.8119 |
| 16 | 7.0036 | 0 | 0.0 | 0.8453 |
| 17 | 7.5216 | 20 | 11.2 ***** | 0.8763 |
| 18 | 8.0397 | 0 | 0.0 | 0.9052 |
| 19 | 8.5578 | 8 | 4.5 **** | 0.9324 |
| 20 | 9.0758 | 0 | 0.0 | 0.9579 |
| 21 | 9.5939 | 1 | 0.6 * | 0.9820 |
| 22 | 10.1119 | 0 | 0.0 | 1.0048 |
| 23 | 10.6300 | 0 | 0.0 | 1.0265 |
| 24 | 11.1480 | 0 | 0.0 | 1.0472 |

LOG VALUES.....: MEAN = 0.6926 STD.DEV. = 0.2197 VARIANCE = 0.0483

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

| CELL | LOWER LIMIT | NO | PCT | ARITH. LIMIT |
|------|-------------|----|------------|--------------|
| 1 | 0.0335 | 0 | 0.0 | 1.0802 |
| 2 | 0.0884 | 0 | 0.0 | 1.2259 |
| 3 | 0.1434 | 0 | 0.0 | 1.3911 |
| 4 | 0.1983 | 0 | 0.0 | 1.5787 |
| 5 | 0.2532 | 10 | 5.6 ***** | 1.7915 |
| 6 | 0.3081 | 0 | 0.0 | 2.0330 |
| 7 | 0.3631 | 0 | 0.0 | 2.3071 |
| 8 | 0.4180 | 0 | 0.0 | 2.6181 |
| 9 | 0.4729 | 11 | 6.2 ***** | 2.9710 |
| 10 | 0.5278 | 0 | 0.0 | 3.3715 |
| 11 | 0.5827 | 21 | 11.8 ***** | 3.8260 |
| 12 | 0.6377 | 0 | 0.0 | 4.3418 |
| 13 | 0.6926 | 42 | 23.6 ***** | 4.9271 |
| 14 | 0.7475 | 31 | 17.4 ***** | 5.5913 |
| 15 | 0.8024 | 25 | 14.0 ***** | 6.3451 |
| 16 | 0.8574 | 20 | 11.2 ***** | 7.2005 |
| 17 | 0.9123 | 8 | 4.5 **** | 8.1711 |
| 18 | 0.9672 | 1 | 0.6 * | 9.2727 |
| 19 | 1.0221 | 0 | 0.0 | 10.5227 |
| 20 | 1.0771 | 1 | 0.6 * | 11.9413 |
| 21 | 1.1320 | 0 | 0.0 | 13.5511 |
| 22 | 1.1869 | 0 | 0.0 | 15.3779 |
| 23 | 1.2418 | 0 | 0.0 | 17.4510 |
| 24 | 1.2967 | 0 | 0.0 | 19.8035 |

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: MO

| CELL | LOWER LIMIT | NO | CUMPT | APPROXIMATE CUMULATIVE PROBABILITY PLOT OF LOGARITHMIC VALUES | | | | | | | | | | | | ARITH. LIMIT | | |
|------|-------------|----|-------|---|---|---|---|---|---|---|---|---|---|---|---|--------------|---|---------|
| 1 | 1.228 | 0 | 0.0 | + | | | | | | | | | | | | | | 16.9079 |
| 2 | 1.201 | 0 | 0.0 | + | | | | | | | | | | | | | | 15.8719 |
| 3 | 1.173 | 0 | 0.0 | + | | | | | | | | | | | | | | 14.8993 |
| 4 | 1.146 | 0 | 0.0 | + | | | | | | | | | | | | | | 13.9864 |
| 5 | 1.118 | 0 | 0.0 | + | | | | | | | | | | | | | | 13.1293 |
| 6 | 1.091 | 0 | 0.0 | + | | | | | | | | | | | | | | 12.3248 |
| 7 | 1.063 | 1 | 0.6 | + | | | | | | | | | | | | | | 11.5696 |
| 8 | 1.036 | 0 | 0.6 | + | | | | | | | | | | | | | | 10.8607 |
| 9 | 1.008 | 0 | 0.6 | + | | | | | | | | | | | | | | 10.1952 |
| 10 | 0.981 | 1 | 1.1 | - | * | | | | | | | | | | | | | 9.5705 |
| 11 | 0.953 | 8 | 5.6 | - | | * | | | | | | | | | | | | 8.9840 |
| 12 | 0.926 | 0 | 5.6 | - | | * | | | | | | | | | | | | 8.4336 |
| 13 | 0.899 | 20 | 16.9 | - | | | * | | | | | | | | | | | 7.9168 |
| 14 | 0.871 | 0 | 16.9 | - | | | * | | | | | | | | | | | 7.4317 |
| 15 | 0.844 | 25 | 30.9 | - | | | | * | | | | | | | | | | 6.9763 |
| 16 | 0.816 | 0 | 30.9 | - | | | | * | | | | | | | | | | 6.5489 |
| 17 | 0.789 | 0 | 30.9 | - | | | | * | | | | | | | | | | 6.1476 |
| 18 | 0.761 | 31 | 48.3 | - | | | | | * | | | | | | | | | 5.7709 |
| 19 | 0.734 | 0 | 48.3 | - | | | | | * | | | | | | | | | 5.4173 |
| 20 | 0.706 | 0 | 48.3 | - | | | | | * | | | | | | | | | 5.0853 |
| 21 | 0.679 | 42 | 71.9 | - | | | | | | * | | | | | | | | 4.7737 |
| 22 | 0.651 | 0 | 71.9 | - | | | | | | * | | | | | | | | 4.4812 |
| 23 | 0.624 | 0 | 71.9 | - | | | | | | * | | | | | | | | 4.2067 |
| 24 | 0.596 | 21 | 83.7 | - | | | | | | | * | | | | | | | 3.9489 |
| 25 | 0.569 | 0 | 83.7 | - | | | | | | | * | | | | | | | 3.7069 |
| 26 | 0.542 | 0 | 83.7 | - | | | | | | | * | | | | | | | 3.4798 |
| 27 | 0.514 | 0 | 83.7 | - | | | | | | | * | | | | | | | 3.2666 |
| 28 | 0.487 | 0 | 83.7 | - | | | | | | | * | | | | | | | 3.0664 |
| 29 | 0.459 | 11 | 89.9 | - | | | | | | | | * | | | | | | 2.8785 |
| 30 | 0.432 | 0 | 89.9 | - | | | | | | | | * | | | | | | 2.7021 |
| 31 | 0.404 | 0 | 89.9 | - | | | | | | | | * | | | | | | 2.5366 |
| 32 | 0.377 | 0 | 89.9 | - | | | | | | | | * | | | | | | 2.3811 |
| 33 | 0.349 | 0 | 89.9 | - | | | | | | | | * | | | | | | 2.2352 |
| 34 | 0.322 | 0 | 89.9 | - | | | | | | | | * | | | | | | 2.0983 |
| 35 | 0.294 | 10 | 95.5 | - | | | | | | | | | * | | | | | 1.9697 |
| 36 | 0.267 | 0 | 95.5 | - | | | | | | | | | | * | | | | 1.8490 |
| 37 | 0.239 | 0 | 95.5 | - | | | | | | | | | | | * | | | 1.7357 |
| 38 | 0.212 | 0 | 95.5 | - | | | | | | | | | | | | * | | 1.6294 |
| 39 | 0.185 | 0 | 95.5 | - | | | | | | | | | | | | | * | 1.5295 |
| 40 | 0.157 | 0 | 95.5 | - | | | | | | | | | | | | | | 1.4358 |
| 41 | 0.130 | 0 | 95.5 | - | | | | | | | | | | | | | | 1.3478 |

1 2.5 5 10 20 30 40 50 60 70 80 90 95 97.5 99

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: PB
 CALCULATED PARAMETERS: MEAN = 4.1455 NUMBER OF VALUES IS 55
 STD.DEV. = 2.2062 VARIANCE = 4.8673

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

| CELL | LOWER LIMIT | NO | PCT | LOG LIMIT |
|------|-------------|----|------|-----------|
| 1 | -2.4732 | 0 | 0.0 | ***** |
| 2 | -1.9216 | 0 | 0.0 | ***** |
| 3 | -1.3701 | 0 | 0.0 | ***** |
| 4 | -0.8185 | 0 | 0.0 | ***** |
| 5 | -0.2670 | 0 | 0.0 | ***** |
| 6 | 0.2846 | 0 | 0.0 | -0.5458 |
| 7 | 0.8361 | 0 | 0.0 | -0.0777 |
| 8 | 1.3877 | 0 | 0.0 | 0.1423 |
| 9 | 1.9392 | 10 | 18.2 | 0.2876 |
| 10 | 2.4908 | 16 | 29.1 | 0.3963 |
| 11 | 3.0423 | 0 | 0.0 | 0.4832 |
| 12 | 3.5939 | 12 | 21.8 | 0.5556 |
| 13 | 4.1454 | 0 | 0.0 | 0.6176 |
| 14 | 4.6970 | 8 | 14.5 | 0.6718 |
| 15 | 5.2486 | 0 | 0.0 | 0.7200 |
| 16 | 5.8001 | 3 | 5.5 | 0.7634 |
| 17 | 6.3517 | 0 | 0.0 | 0.8029 |
| 18 | 6.9032 | 3 | 5.5 | 0.8391 |
| 19 | 7.4548 | 1 | 1.8 | 0.8724 |
| 20 | 8.0063 | 0 | 0.0 | 0.9034 |
| 21 | 8.5579 | 0 | 0.0 | 0.9324 |
| 22 | 9.1094 | 0 | 0.0 | 0.9595 |
| 23 | 9.6610 | 0 | 0.0 | 0.9850 |
| 24 | 10.2125 | 0 | 0.0 | 1.0091 |

LOG VALUES.....: MEAN = 0.5714 STD.DEV. = 0.1939 VARIANCE = 0.0376

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

| CELL | LOWER LIMIT | NO | PCT | ARITH. LIMIT |
|------|-------------|----|------|--------------|
| 1 | -0.0103 | 0 | 0.0 | 0.9766 |
| 2 | 0.0382 | 0 | 0.0 | 1.0919 |
| 3 | 0.0867 | 0 | 0.0 | 1.2209 |
| 4 | 0.1351 | 0 | 0.0 | 1.3650 |
| 5 | 0.1836 | 0 | 0.0 | 1.5262 |
| 6 | 0.2321 | 0 | 0.0 | 1.7064 |
| 7 | 0.2806 | 10 | 18.2 | 1.9079 |
| 8 | 0.3290 | 0 | 0.0 | 2.1332 |
| 9 | 0.3775 | 0 | 0.0 | 2.3851 |
| 10 | 0.4260 | 0 | 0.0 | 2.6667 |
| 11 | 0.4744 | 16 | 29.1 | 2.9816 |
| 12 | 0.5229 | 0 | 0.0 | 3.3336 |
| 13 | 0.5714 | 12 | 21.8 | 3.7273 |
| 14 | 0.6199 | 0 | 0.0 | 4.1674 |
| 15 | 0.6683 | 8 | 14.5 | 4.6594 |
| 16 | 0.7168 | 0 | 0.0 | 5.2096 |
| 17 | 0.7653 | 3 | 5.5 | 5.8248 |
| 18 | 0.8138 | 3 | 5.5 | 6.5125 |
| 19 | 0.8622 | 1 | 1.8 | 7.2815 |
| 20 | 0.9107 | 0 | 0.0 | 8.1413 |
| 21 | 0.9592 | 0 | 0.0 | 9.1027 |
| 22 | 1.0076 | 0 | 0.0 | 10.1775 |
| 23 | 1.0561 | 1 | 1.8 | 11.3792 |
| 24 | 1.1046 | 1 | 1.8 | 12.7229 |

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: PB

| CELL | LOWER LIMIT | NO | CUMPT | APPROXIMATE CUMULATIVE PROBABILITY PLOT OF ARITHMETIC VALUES | | | | | | | | | | | | LOG LIMIT | | |
|------|-------------|----|-------|--|---|---|---|---|---|---|---|---|---|---|---|-----------|---|---------|
| 1 | 9.523 | 2 | 3.6 | * | | | | | | | | | | | | | | 0.9788 |
| 2 | 9.247 | 0 | 3.6 | * | | | | | | | | | | | | | | 0.9660 |
| 3 | 8.972 | 0 | 3.6 | * | | | | | | | | | | | | | | 0.9529 |
| 4 | 8.696 | 0 | 3.6 | * | | | | | | | | | | | | | | 0.9393 |
| 5 | 8.420 | 0 | 3.6 | * | | | | | | | | | | | | | | 0.9253 |
| 6 | 8.144 | 0 | 3.6 | * | | | | | | | | | | | | | | 0.9108 |
| 7 | 7.868 | 1 | 5.5 | * | | | | | | | | | | | | | | 0.8959 |
| 8 | 7.593 | 0 | 5.5 | * | | | | | | | | | | | | | | 0.8804 |
| 9 | 7.317 | 0 | 5.5 | * | | | | | | | | | | | | | | 0.8643 |
| 10 | 7.041 | 0 | 5.5 | * | | | | | | | | | | | | | | 0.8476 |
| 11 | 6.765 | 3 | 10.9 | * | * | | | | | | | | | | | | | 0.8303 |
| 12 | 6.490 | 0 | 10.9 | * | * | | | | | | | | | | | | | 0.8122 |
| 13 | 6.214 | 0 | 10.9 | * | * | | | | | | | | | | | | | 0.7934 |
| 14 | 5.938 | 3 | 16.4 | * | * | * | | | | | | | | | | | | 0.7736 |
| 15 | 5.662 | 0 | 16.4 | * | * | * | | | | | | | | | | | | 0.7530 |
| 16 | 5.386 | 0 | 16.4 | * | * | * | | | | | | | | | | | | 0.7313 |
| 17 | 5.111 | 0 | 16.4 | * | * | * | | | | | | | | | | | | 0.7085 |
| 18 | 4.835 | 8 | 30.9 | * | * | * | * | | | | | | | | | | | 0.6844 |
| 19 | 4.559 | 0 | 30.9 | * | * | * | * | | | | | | | | | | | 0.6589 |
| 20 | 4.283 | 0 | 30.9 | * | * | * | * | | | | | | | | | | | 0.6318 |
| 21 | 4.008 | 0 | 30.9 | * | * | * | * | | | | | | | | | | | 0.6029 |
| 22 | 3.732 | 12 | 52.7 | * | * | * | * | * | | | | | | | | | | 0.5719 |
| 23 | 3.456 | 0 | 52.7 | * | * | * | * | * | * | | | | | | | | | 0.5386 |
| 24 | 3.180 | 0 | 52.7 | * | * | * | * | * | * | * | | | | | | | | 0.5025 |
| 25 | 2.904 | 16 | 81.8 | * | * | * | * | * | * | * | * | | | | | | | 0.4631 |
| 26 | 2.629 | 0 | 81.8 | * | * | * | * | * | * | * | * | * | | | | | | 0.4197 |
| 27 | 2.353 | 0 | 81.8 | * | * | * | * | * | * | * | * | * | * | | | | | 0.3716 |
| 28 | 2.077 | 0 | 81.8 | * | * | * | * | * | * | * | * | * | * | * | | | | 0.3175 |
| 29 | 1.801 | 10 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | | | 0.2556 |
| 30 | 1.526 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | | 0.1834 |
| 31 | 1.250 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 0.0968 |
| 32 | 0.974 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | -0.0114 |
| 33 | 0.698 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | -0.1560 |
| 34 | 0.422 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | -0.3742 |
| 35 | 0.147 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | -0.8336 |
| 36 | -0.129 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | ***** |
| 37 | -0.405 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | ***** |
| 38 | -0.681 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | ***** |
| 39 | -0.956 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | ***** |
| 40 | -1.232 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | ***** |
| 41 | -1.508 | 0 | 100.0 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | ***** |

1 2.5 5 10 20 30 40 50 60 70 80 90 95 97.5 99

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: ZN
CALCULATED PARAMETERS:

NUMBER OF VALUES IS 192

MEAN = 44.5260 STD.DEV. = 24.9416 VARIANCE = 622.0833

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

| CELL | LOWER LIMIT | NO | PCT | LOG LIMIT |
|------|-------------|----|------|-----------|
| 1 | -30.2990 | 0 | 0.0 | ***** |
| 2 | -24.0636 | 0 | 0.0 | ***** |
| 3 | -17.8282 | 0 | 0.0 | ***** |
| 4 | -11.5928 | 0 | 0.0 | ***** |
| 5 | -5.3574 | 0 | 0.0 | ***** |
| 6 | 0.8780 | 1 | 0.5 | -0.0565 |
| 7 | 7.1134 | 0 | 0.0 | 0.8521 |
| 8 | 13.3488 | 20 | 10.4 | 1.1254 |
| 9 | 19.5842 | 17 | 8.9 | 1.2919 |
| 10 | 25.8197 | 19 | 9.9 | 1.4120 |
| 11 | 32.0551 | 22 | 11.5 | 1.5059 |
| 12 | 38.2905 | 29 | 15.1 | 1.5831 |
| 13 | 44.5259 | 21 | 10.9 | 1.6486 |
| 14 | 50.7613 | 20 | 10.4 | 1.7055 |
| 15 | 56.9967 | 21 | 10.9 | 1.7558 |
| 16 | 63.2321 | 8 | 4.2 | 1.8009 |
| 17 | 69.4675 | 3 | 1.6 | 1.8418 |
| 18 | 75.7030 | 1 | 0.5 | 1.8791 |
| 19 | 81.9384 | 3 | 1.6 | 1.9135 |
| 20 | 88.1738 | 0 | 0.0 | 1.9453 |
| 21 | 94.4092 | 4 | 2.1 | 1.9750 |
| 22 | 100.6446 | 0 | 0.0 | 2.0028 |
| 23 | 106.8800 | 1 | 0.5 | 2.0289 |
| 24 | 113.1154 | 0 | 0.0 | 2.0535 |

LOG VALUES.....: MEAN = 1.5932 STD.DEV. = 0.2224 VARIANCE = 0.0495

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

| CELL | LOWER LIMIT | NO | PCT | ARITH. LIMIT |
|------|-------------|----|------|--------------|
| 1 | 0.9259 | 0 | 0.0 | 8.4317 |
| 2 | 0.9815 | 0 | 0.0 | 9.5834 |
| 3 | 1.0371 | 0 | 0.0 | 10.8925 |
| 4 | 1.0927 | 6 | 3.1 | 12.3803 |
| 5 | 1.1483 | 3 | 1.6 | 14.0715 |
| 6 | 1.2039 | 8 | 4.2 | 15.9936 |
| 7 | 1.2596 | 5 | 2.6 | 18.1783 |
| 8 | 1.3152 | 11 | 5.7 | 20.6614 |
| 9 | 1.3708 | 5 | 2.6 | 23.4837 |
| 10 | 1.4264 | 13 | 6.8 | 26.6916 |
| 11 | 1.4820 | 12 | 6.3 | 30.3376 |
| 12 | 1.5376 | 19 | 9.9 | 34.4816 |
| 13 | 1.5932 | 25 | 13.0 | 39.1917 |
| 14 | 1.6488 | 21 | 10.9 | 44.5452 |
| 15 | 1.7044 | 22 | 11.5 | 50.6300 |
| 16 | 1.7600 | 24 | 12.5 | 57.5459 |
| 17 | 1.8156 | 5 | 2.6 | 65.4067 |
| 18 | 1.8712 | 2 | 1.0 | 74.3410 |
| 19 | 1.9268 | 3 | 1.6 | 84.4959 |
| 20 | 1.9824 | 4 | 2.1 | 96.0378 |
| 21 | 2.0380 | 1 | 0.5 | 109.1564 |
| 22 | 2.0937 | 0 | 0.0 | 124.0669 |
| 23 | 2.1493 | 0 | 0.0 | 141.0141 |
| 24 | 2.2049 | 0 | 0.0 | 160.2764 |

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: ZN

| CELL | LOWER LIMIT | NO | CUMPT | APPROXIMATE CUMULATIVE PROBABILITY PLOT OF LOGARITHMIC VALUES | | | | | | ARITH. LIMIT |
|------|-------------|----|-------|---|---|--|--|--|---|--------------|
| 1 | 2.135 | 2 | 1.0 | - | * | | | | | 136.5724 |
| 2 | 2.108 | 0 | 1.0 | - | * | | | | | 128.1031 |
| 3 | 2.080 | 0 | 1.0 | - | * | | | | | 120.1590 |
| 4 | 2.052 | 0 | 1.0 | - | * | | | | | 112.7074 |
| 5 | 2.024 | 1 | 1.6 | - | * | | | | | 105.7181 |
| 6 | 1.996 | 2 | 2.6 | - | * | | | | | 99.1621 |
| 7 | 1.969 | 2 | 3.6 | - | * | | | | | 93.0128 |
| 8 | 1.941 | 1 | 4.2 | - | * | | | | | 87.2447 |
| 9 | 1.913 | 2 | 5.2 | - | * | | | | | 81.8344 |
| 10 | 1.885 | 1 | 5.7 | - | * | | | | | 76.7595 |
| 11 | 1.857 | 1 | 6.3 | - | * | | | | | 71.9994 |
| 12 | 1.830 | 2 | 7.3 | - | * | | | | | 67.5345 |
| 13 | 1.802 | 8 | 11.5 | - | * | | | | | 63.3464 |
| 14 | 1.774 | 10 | 16.7 | - | * | | | | | 59.4181 |
| 15 | 1.746 | 15 | 24.5 | - | * | | | | | 55.7333 |
| 16 | 1.718 | 9 | 29.2 | - | * | | | | | 52.2771 |
| 17 | 1.691 | 14 | 36.5 | - | * | | | | | 49.0352 |
| 18 | 1.663 | 12 | 42.7 | - | * | | | | | 45.9944 |
| 19 | 1.635 | 4 | 44.8 | - | * | | | | | 43.1421 |
| 20 | 1.607 | 17 | 53.6 | - | * | | | | | 40.4667 |
| 21 | 1.579 | 12 | 59.9 | - | * | | | | | 37.9572 |
| 22 | 1.551 | 5 | 62.5 | - | * | | | | | 35.6034 |
| 23 | 1.524 | 9 | 67.2 | - | * | | | | | 33.3955 |
| 24 | 1.496 | 8 | 71.4 | - | * | | | | | 31.3245 |
| 25 | 1.468 | 5 | 74.0 | - | * | | | | | 29.3820 |
| 26 | 1.440 | 7 | 77.6 | - | * | | | | | 27.5599 |
| 27 | 1.412 | 5 | 80.2 | - | * | | | | | 25.8508 |
| 28 | 1.385 | 3 | 81.8 | - | * | | | | | 24.2477 |
| 29 | 1.357 | 4 | 83.9 | - | * | | | | | 22.7440 |
| 30 | 1.329 | 2 | 84.9 | - | * | | | | | 21.3336 |
| 31 | 1.301 | 6 | 88.0 | - | * | | | | | 20.0106 |
| 32 | 1.273 | 5 | 90.6 | - | * | | | | | 18.7697 |
| 33 | 1.246 | 1 | 91.1 | - | * | | | | | 17.6057 |
| 34 | 1.218 | 4 | 93.2 | - | * | | | | | 16.5139 |
| 35 | 1.190 | 3 | 94.8 | - | * | | | | | 15.4898 |
| 36 | 1.162 | 3 | 96.4 | - | * | | | | | 14.5293 |
| 37 | 1.134 | 6 | 99.5 | - | * | | | | * | 13.6282 |
| 38 | 1.107 | 0 | 99.5 | - | * | | | | * | 12.7831 |
| 39 | 1.079 | 0 | 99.5 | - | * | | | | * | 11.9904 |
| 40 | 1.051 | 0 | 99.5 | - | * | | | | * | 11.2468 |
| 41 | 1.023 | 0 | 99.5 | - | * | | | | * | 10.5494 |

1 2.5 5 10 20 30 40 50 60 70 80 90 95 97.5 99

THRESHOLD APPROX 60 PPM

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: AG
 CALCULATED PARAMETERS: MEAN = 0.2400 NUMBER OF VALUES IS 5
 STD.DEV. = 0.0548 VARIANCE = 0.0030

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

| ICELL | LOWER LIMIT | NO | PCT | LOG LIMIT |
|-------|-------------|----|------|-----------|
| 1 | 0.0757 | 0 | 0.0 | -1.1210 |
| 2 | 0.0894 | 0 | 0.0 | -1.0488 |
| 3 | 0.1031 | 0 | 0.0 | -0.9869 |
| 4 | 0.1168 | 0 | 0.0 | -0.9327 |
| 5 | 0.1305 | 0 | 0.0 | -0.8845 |
| 6 | 0.1441 | 0 | 0.0 | -0.8412 |
| 7 | 0.1578 | 0 | 0.0 | -0.8018 |
| 8 | 0.1715 | 0 | 0.0 | -0.7656 |
| 9 | 0.1852 | 0 | 0.0 | -0.7323 |
| 10 | 0.1989 | 3 | 60.0 | -0.7013 |
| 11 | 0.2126 | 0 | 0.0 | -0.6724 |
| 12 | 0.2263 | 0 | 0.0 | -0.6453 |
| 13 | 0.2400 | 0 | 0.0 | -0.6198 |
| 14 | 0.2537 | 0 | 0.0 | -0.5957 |
| 15 | 0.2674 | 0 | 0.0 | -0.5729 |
| 16 | 0.2811 | 0 | 0.0 | -0.5512 |
| 17 | 0.2948 | 2 | 40.0 | -0.5305 |
| 18 | 0.3085 | 0 | 0.0 | -0.5108 |
| 19 | 0.3222 | 0 | 0.0 | -0.4919 |
| 20 | 0.3359 | 0 | 0.0 | -0.4739 |
| 21 | 0.3495 | 0 | 0.0 | -0.4565 |
| 22 | 0.3632 | 0 | 0.0 | -0.4398 |
| 23 | 0.3769 | 0 | 0.0 | -0.4237 |
| 24 | 0.3906 | 0 | 0.0 | -0.4082 |

LOG VALUES.....: MEAN = -0.6285 STD.DEV. = 0.0964 VARIANCE = 0.0093

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

| ICELL | LOWER LIMIT | NO | PCT | ARITH. LIMIT |
|-------|-------------|----|------|--------------|
| 1 | -0.9179 | 0 | 0.0 | 0.1208 |
| 2 | -0.8938 | 0 | 0.0 | 0.1277 |
| 3 | -0.8697 | 0 | 0.0 | 0.1350 |
| 4 | -0.8455 | 0 | 0.0 | 0.1427 |
| 5 | -0.8214 | 0 | 0.0 | 0.1509 |
| 6 | -0.7973 | 0 | 0.0 | 0.1595 |
| 7 | -0.7732 | 0 | 0.0 | 0.1686 |
| 8 | -0.7491 | 0 | 0.0 | 0.1782 |
| 9 | -0.7250 | 0 | 0.0 | 0.1884 |
| 10 | -0.7009 | 3 | 60.0 | 0.1991 |
| 11 | -0.6768 | 0 | 0.0 | 0.2105 |
| 12 | -0.6526 | 0 | 0.0 | 0.2225 |
| 13 | -0.6285 | 0 | 0.0 | 0.2352 |
| 14 | -0.6044 | 0 | 0.0 | 0.2486 |
| 15 | -0.5803 | 0 | 0.0 | 0.2628 |
| 16 | -0.5562 | 0 | 0.0 | 0.2778 |
| 17 | -0.5321 | 2 | 40.0 | 0.2937 |
| 18 | -0.5080 | 0 | 0.0 | 0.3105 |
| 19 | -0.4839 | 0 | 0.0 | 0.3282 |
| 20 | -0.4597 | 0 | 0.0 | 0.3469 |
| 21 | -0.4356 | 0 | 0.0 | 0.3667 |
| 22 | -0.4115 | 0 | 0.0 | 0.3877 |
| 23 | -0.3874 | 0 | 0.0 | 0.4098 |
| 24 | -0.3633 | 0 | 0.0 | 0.4332 |

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: MN
 CALCULATED PARAMETERS: MEAN = 355.1978 NUMBER OF VALUES IS 192
 STD.DEV. = 314.1235 VARIANCE = 98673.5625

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

| CELL | LOWER LIMIT | NO | PCT | LOG LIMIT |
|------|-------------|----|------|-----------|
| 1 | -587.1738 | 0 | 0.0 | ***** |
| 2 | -508.6431 | 0 | 0.0 | ***** |
| 3 | -430.1123 | 0 | 0.0 | ***** |
| 4 | -351.5815 | 0 | 0.0 | ***** |
| 5 | -273.0508 | 0 | 0.0 | ***** |
| 6 | -194.5200 | 0 | 0.0 | ***** |
| 7 | -115.9891 | 0 | 0.0 | ***** |
| 8 | -37.4583 | 15 | 7.8 | ***** |
| 9 | 41.0726 | 27 | 14.1 | ***** |
| 10 | 119.6035 | 30 | 15.6 | ***** |
| 11 | 198.1344 | 26 | 13.5 | ***** |
| 12 | 276.6653 | 18 | 9.4 | ***** |
| 13 | 355.1963 | 19 | 9.9 | ***** |
| 14 | 433.7273 | 12 | 6.3 | ***** |
| 15 | 512.2583 | 5 | 2.6 | *** |
| 16 | 590.7893 | 12 | 6.3 | ***** |
| 17 | 669.3203 | 8 | 4.2 | **** |
| 18 | 747.8513 | 7 | 3.6 | **** |
| 19 | 826.3823 | 5 | 2.6 | *** |
| 20 | 904.9133 | 3 | 1.6 | ** |
| 21 | 983.4443 | 0 | 0.0 | |
| 22 | 1061.9753 | 2 | 1.0 | * |
| 23 | 1140.5063 | 0 | 0.0 | |
| 24 | 1219.0374 | 0 | 0.0 | |

LOG VALUES.....: MEAN = 2.3661 STD.DEV. = 0.4523 VARIANCE = 0.2046

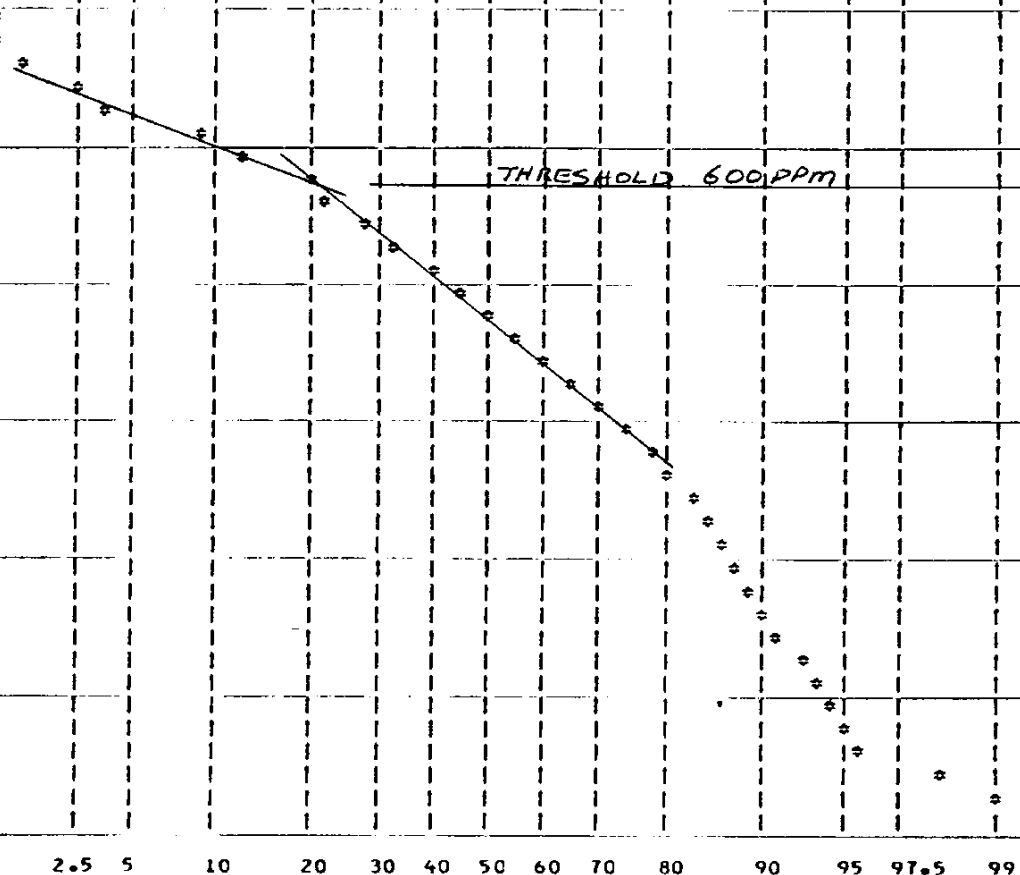
PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

| CELL | LOWER LIMIT | NO | PCT | ARITH. LIMIT |
|------|-------------|----|------|--------------|
| 1 | 1.0092 | 0 | 0.0 | 10.2140 |
| 2 | 1.1223 | 0 | 0.0 | 13.2518 |
| 3 | 1.2354 | 6 | 3.1 | 17.1929 |
| 4 | 1.3484 | 3 | 1.6 | 22.3062 |
| 5 | 1.4615 | 3 | 1.6 | 28.9403 |
| 6 | 1.5746 | 7 | 3.6 | 37.5473 |
| 7 | 1.6877 | 5 | 2.6 | 48.7141 |
| 8 | 1.8007 | 4 | 2.1 | 63.2020 |
| 9 | 1.9138 | 10 | 5.2 | 81.9987 |
| 10 | 2.0269 | 11 | 5.7 | 106.3857 |
| 11 | 2.1400 | 18 | 9.4 | 138.0257 |
| 12 | 2.2530 | 18 | 9.4 | 179.0754 |
| 13 | 2.3661 | 19 | 9.9 | 232.3336 |
| 14 | 2.4792 | 20 | 10.4 | 301.4312 |
| 15 | 2.5923 | 22 | 11.5 | 391.0789 |
| 16 | 2.7053 | 14 | 7.3 | 507.3884 |
| 17 | 2.8184 | 21 | 10.9 | 658.2891 |
| 18 | 2.9315 | 7 | 3.6 | 854.0693 |
| 19 | 3.0446 | 1 | 0.5 | 1108.0752 |
| 20 | 3.1576 | 1 | 0.5 | 1437.6243 |
| 21 | 3.2707 | 1 | 0.5 | 1865.1833 |
| 22 | 3.3838 | 0 | 0.0 | 2419.9011 |
| 23 | 3.4969 | 0 | 0.0 | 3139.5959 |
| 24 | 3.6100 | 0 | 0.0 | 4073.3364 |

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: MN

| CELL | LOWER LIMIT | NO | CUMPT | APPROXIMATE CUMULATIVE PROBABILITY | LOGARITHMIC VALUES | ARITH. LIMIT |
|------|-------------|----|-------|------------------------------------|--------------------|--------------|
| 1 | 3.469 | 0 | 0.0 | 0 | | 2941.7451 |
| 2 | 3.412 | 0 | 0.0 | 0 | | 2582.6548 |
| 3 | 3.356 | 1 | 0.5 | 5 | | 2267.3997 |
| 4 | 3.299 | 0 | 0.5 | 5 | | 1990.6248 |
| 5 | 3.242 | 0 | 0.5 | 5 | | 1747.6350 |
| 6 | 3.186 | 1 | 1.0 | 10 | | 1534.3076 |
| 7 | 3.129 | 0 | 1.0 | 10 | | 1347.0190 |
| 8 | 3.073 | 1 | 1.6 | 16 | | 1182.5923 |
| 9 | 3.016 | 2 | 2.6 | 26 | | 1038.2368 |
| 10 | 2.960 | 2 | 3.6 | 36 | | 911.5032 |
| 11 | 2.903 | 9 | 8.3 | 83 | | 800.2385 |
| 12 | 2.847 | 7 | 12.0 | 120 | | 702.5557 |
| 13 | 2.790 | 14 | 19.3 | 193 | | 616.7969 |
| 14 | 2.734 | 5 | 21.9 | 219 | | 541.5066 |
| 15 | 2.677 | 9 | 26.6 | 266 | | 475.4065 |
| 16 | 2.621 | 12 | 32.8 | 328 | | 417.3750 |
| 17 | 2.564 | 11 | 38.5 | 385 | | 366.4275 |
| 18 | 2.507 | 9 | 43.2 | 432 | | 321.6987 |
| 19 | 2.451 | 9 | 47.9 | 479 | | 282.4299 |
| 20 | 2.394 | 11 | 53.6 | 536 | | 247.9546 |
| 21 | 2.338 | 11 | 59.4 | 594 | | 217.6877 |
| 22 | 2.281 | 7 | 63.0 | 630 | | 191.1152 |
| 23 | 2.225 | 9 | 67.7 | 677 | | 167.7863 |
| 24 | 2.168 | 9 | 72.4 | 724 | | 147.3051 |
| 25 | 2.112 | 7 | 76.0 | 760 | | 129.3241 |
| 26 | 2.055 | 5 | 78.6 | 786 | | 113.5379 |
| 27 | 1.999 | 7 | 82.3 | 823 | | 99.6787 |
| 28 | 1.942 | 4 | 84.4 | 844 | | 87.5112 |
| 29 | 1.886 | 2 | 85.4 | 854 | | 76.8290 |
| 30 | 1.829 | 2 | 86.5 | 865 | | 67.4507 |
| 31 | 1.772 | 2 | 87.5 | 875 | | 59.2172 |
| 32 | 1.716 | 2 | 88.5 | 885 | | 51.9888 |
| 33 | 1.659 | 3 | 90.1 | 901 | | 45.6427 |
| 34 | 1.603 | 4 | 92.2 | 922 | | 40.0712 |
| 35 | 1.546 | 2 | 93.2 | 932 | | 35.1798 |
| 36 | 1.490 | 2 | 94.3 | 943 | | 30.8855 |
| 37 | 1.433 | 1 | 94.8 | 948 | | 27.1154 |
| 38 | 1.377 | 1 | 95.3 | 953 | | 23.8055 |
| 39 | 1.320 | 5 | 97.9 | 979 | | 20.8997 |
| 40 | 1.264 | 2 | 99.0 | 990 | | 18.3485 |
| 41 | 1.207 | 1 | 99.5 | 995 | | 16.1088 |



1 2.5 5 10 20 30 40 50 60 70 80 90 95 97.5 99

EAST86 GEOCHEM SURVEY

VARIABLE NAME IS: AS
 CALCULATED PARAMETERS: MEAN = 5.2727 NUMBER OF VALUES IS 44
 STD.DEV. = 2.5732 VARIANCE = 6.6216

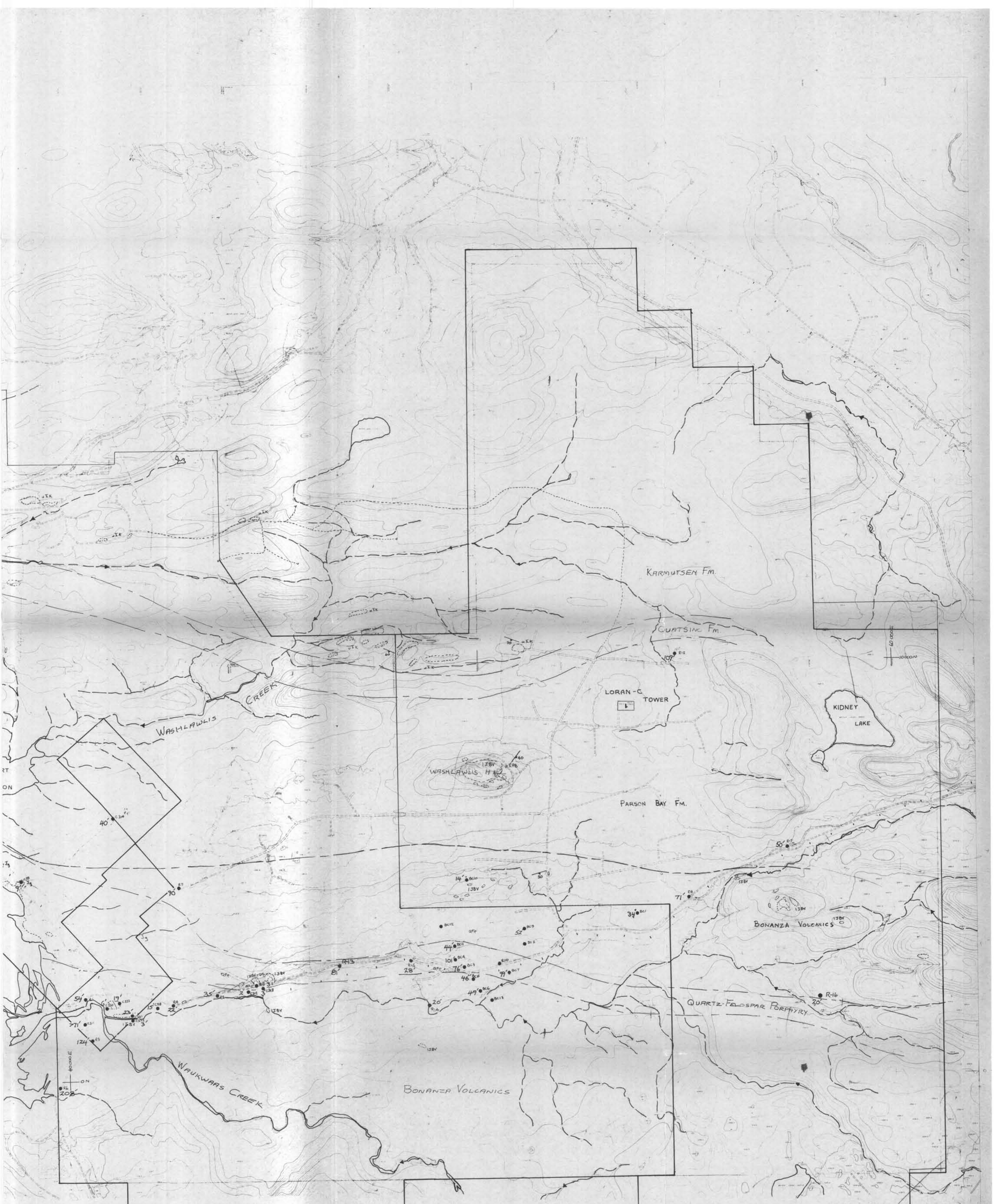
PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

| CELL | LOWER LIMIT | NO | PCT | LOG LIMIT |
|------|-------------|----|------|-----------|
| 1 | -2.4470 | 0 | 0.0 | ***** |
| 2 | -1.8037 | 0 | 0.0 | ***** |
| 3 | -1.1604 | 0 | 0.0 | ***** |
| 4 | -0.5171 | 0 | 0.0 | ***** |
| 5 | 0.1262 | 0 | 0.0 | -0.8988 |
| 6 | 0.7695 | 0 | 0.0 | -0.1138 |
| 7 | 1.4129 | 2 | 4.5 | 0.1501 |
| 8 | 2.0562 | 0 | 0.0 | 0.3131 |
| 9 | 2.6995 | 13 | 29.5 | 0.4313 |
| 10 | 3.3428 | 0 | 0.0 | 0.5241 |
| 11 | 3.9861 | 6 | 13.6 | 0.6005 |
| 12 | 4.6294 | 5 | 11.4 | 0.6655 |
| 13 | 5.2727 | 0 | 0.0 | 0.7220 |
| 14 | 5.9160 | 6 | 13.6 | 0.7720 |
| 15 | 6.5593 | 4 | 9.1 | 0.8169 |
| 16 | 7.2027 | 0 | 0.0 | 0.8575 |
| 17 | 7.8460 | 4 | 9.1 | 0.8946 |
| 18 | 8.4893 | 1 | 2.3 | 0.9289 |
| 19 | 9.1326 | 0 | 0.0 | 0.9606 |
| 20 | 9.7759 | 1 | 2.3 | 0.9902 |
| 21 | 10.4192 | 0 | 0.0 | 1.0178 |
| 22 | 11.0625 | 0 | 0.0 | 1.0439 |
| 23 | 11.7058 | 1 | 2.3 | 1.0684 |
| 24 | 12.3491 | 0 | 0.0 | 1.0916 |

LOG VALUES.....: MEAN = 0.6755 STD.DEV. = 0.2018 VARIANCE = 0.0407

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

| CELL | LOWER LIMIT | NO | PCT | ARITH. LIMIT |
|------|-------------|----|------|--------------|
| 1 | 0.0701 | 0 | 0.0 | 1.1751 |
| 2 | 0.1205 | 0 | 0.0 | 1.3199 |
| 3 | 0.1710 | 0 | 0.0 | 1.4825 |
| 4 | 0.2214 | 0 | 0.0 | 1.6651 |
| 5 | 0.2719 | 2 | 4.5 | 1.8702 |
| 6 | 0.3223 | 0 | 0.0 | 2.1005 |
| 7 | 0.3728 | 0 | 0.0 | 2.3593 |
| 8 | 0.4232 | 0 | 0.0 | 2.6499 |
| 9 | 0.4737 | 13 | 29.5 | 2.9763 |
| 10 | 0.5241 | 0 | 0.0 | 3.3429 |
| 11 | 0.5746 | 6 | 13.6 | 3.7547 |
| 12 | 0.6250 | 0 | 0.0 | 4.2172 |
| 13 | 0.6755 | 5 | 11.4 | 4.7366 |
| 14 | 0.7259 | 0 | 0.0 | 5.3201 |
| 15 | 0.7764 | 6 | 13.6 | 5.9754 |
| 16 | 0.8268 | 4 | 9.1 | 6.7114 |
| 17 | 0.8773 | 4 | 9.1 | 7.5381 |
| 18 | 0.9277 | 1 | 2.3 | 8.4666 |
| 19 | 0.9782 | 1 | 2.3 | 9.5095 |
| 20 | 1.0286 | 0 | 0.0 | 10.6809 |
| 21 | 1.0791 | 2 | 4.5 | 11.9966 |
| 22 | 1.1295 | 0 | 0.0 | 13.4743 |
| 23 | 1.1800 | 0 | 0.0 | 15.1340 |
| 24 | 1.2304 | 0 | 0.0 | 16.9981 |



EAST GROUP

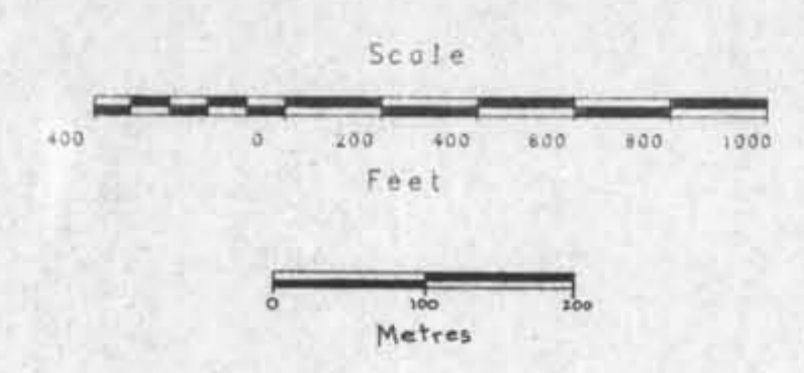
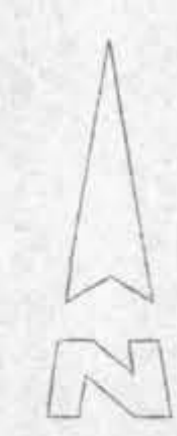
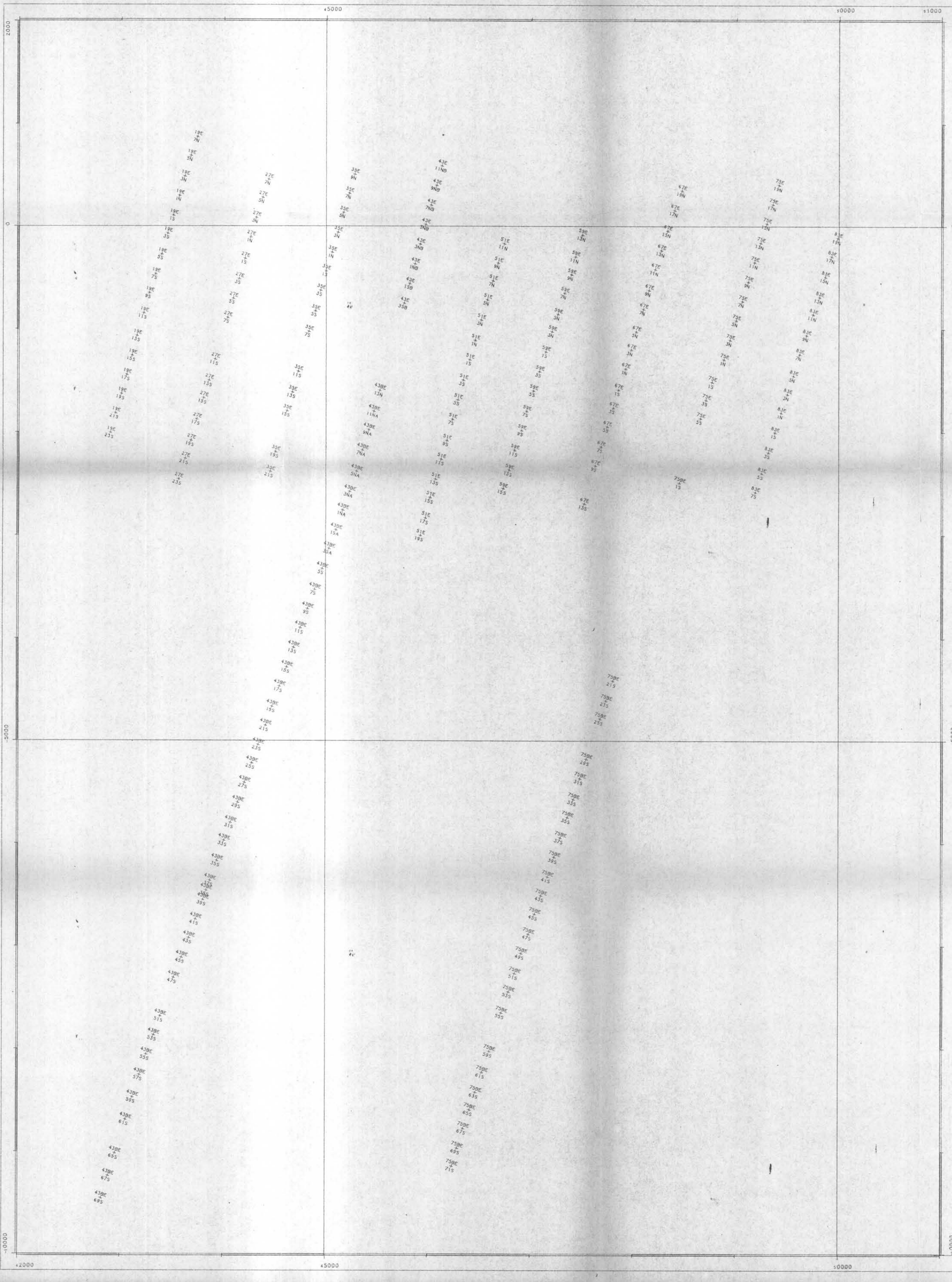
FAR EAST GROUP
GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,367

KEY

- R-13 DIAMOND DRILL HOLE
- ~ DRAINAGE - CREEKS
- 120' OVERBURDEN THICKNESS
- OUTCROPS
- 13BV - BONANZA VOLCANICS - TUFTS
- UTPB - PARSON BAY FM - SILTSTONES
- UKK - KARLUTSEN FM - BASALT
- Jg - ISLAND INTRUSIONS - GRANITOID RICS
- - - GEOLOGICAL BOUNDARIES

| | | |
|---------------------------|----------------------|------------------|
| Utah Mines Ltd. | | |
| ISLAND COPPER MINE | | |
| Port Hardy, B.C. | | |
| Drawn by JF | TOPOGRAPHIC MAP | Date Aug 1986 |
| Traced by | a) Far East 87 Group | Scale 1:12000 |
| Approved by | b) East 86 Group | Revision |
| Bench Elev. SURFACE | | Dwg. No. 2 |

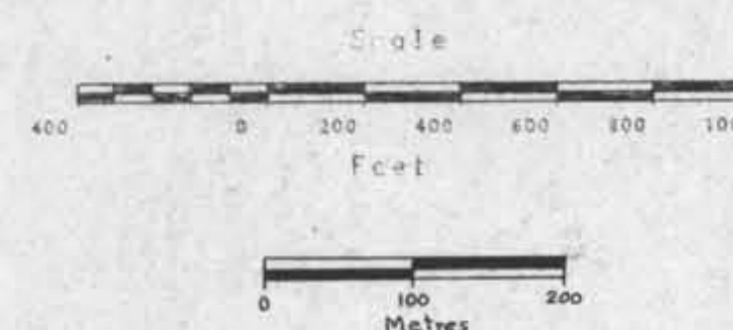
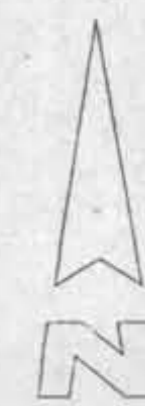
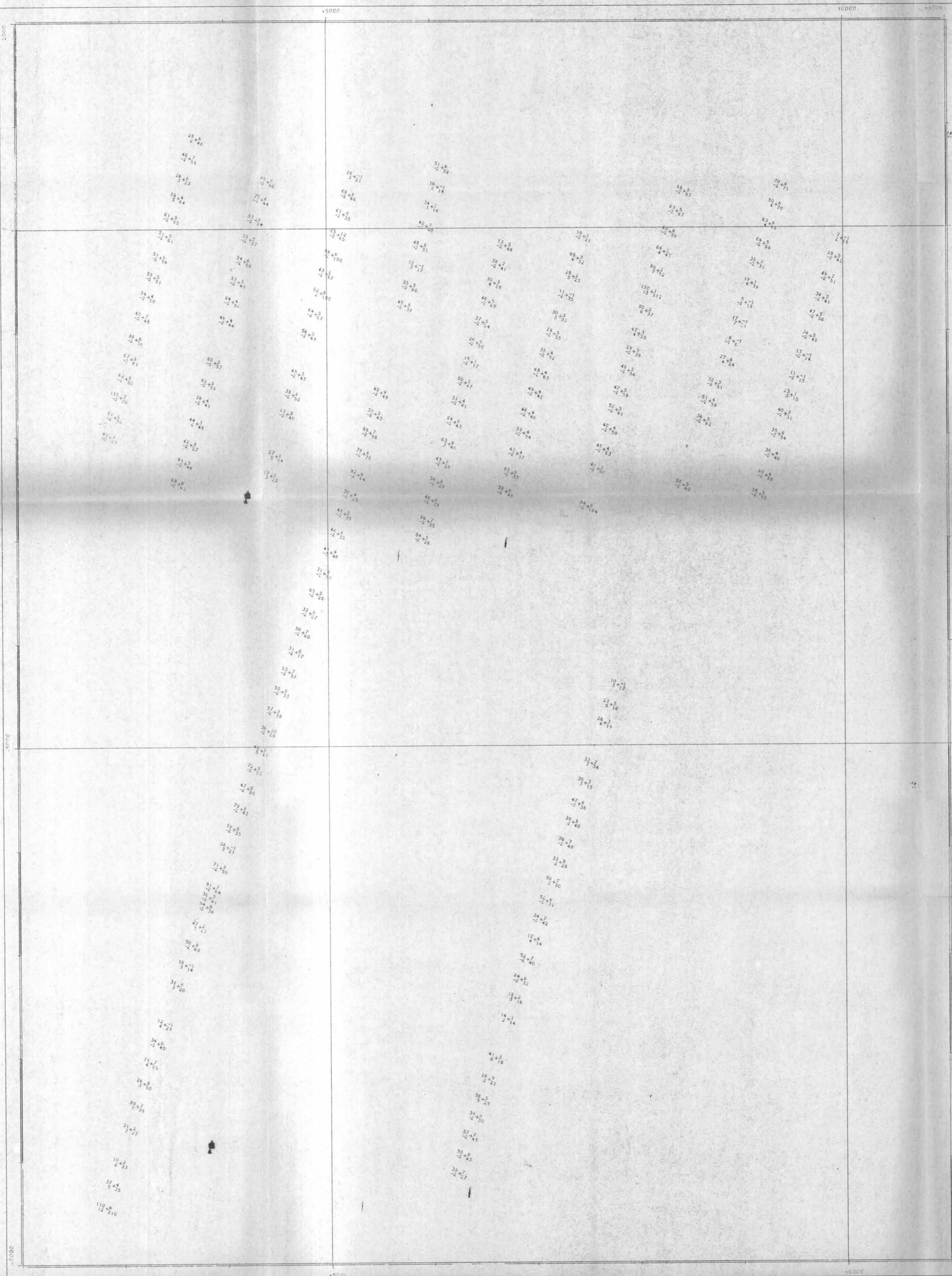


Grid File: ILCIGCHM.CUG
 Grid Size: 100,000
 Technique: TRIANGULATION
 Points plotted: 192
 Contour Interval:
 100,000 50,000 (0,000 to 101,000)
 200,000 150,000 (101,000 to 201,000)

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

15,367

| | |
|-----------------------------|----------------|
| UTAH MINES LIMITED | |
| ISLAND COPPER MINE | Scale 400 |
| EAST 86 GROUP | Date 14-DEC-86 |
| LINE AND STATION POSTER MAP | Project |
| | Drawn By: ATR |
| | Checked |
| | Approved: JAF |
| | Drawing No. 4 |
| | CC6B.LC |



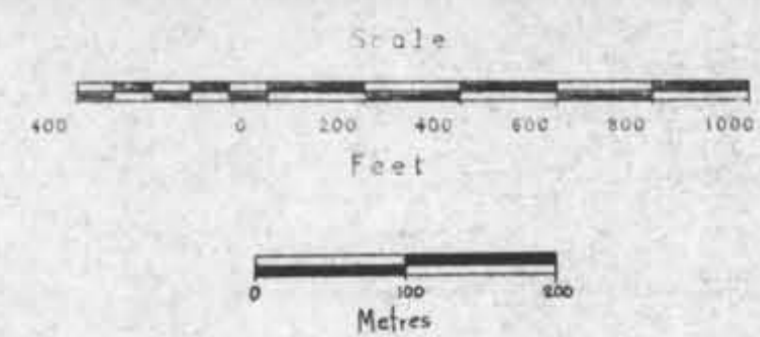
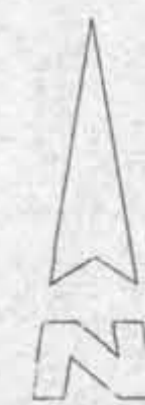
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 Grid Size: 100 000
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 Points plotted: 192
 Contour Intervals:
 100 000 50 000 (0 000 to 101 000)
 200 000 150 000 (101 000 to 201 000)

Cu | Mo
 Pb | Zn
GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,367

UTAH MINES LIMITED

| | |
|-----------------------------|-----------------|
| ISLAND COPPER MINE | Scale: 400 |
| 1986 SOIL GEOCHEM | Date: 11-DEC-86 |
| COPPER MOLYBDENUM LEAD ZINC | Project: |
| | Drawn By: ATR |
| | Checked: |
| | Approved: JAF |
| | Drawing No.: 5 |
| | GC6B L1 |



Grid File: TLC1GCHM.CUG
Grid Size: 100 000
Technique: TRIANGULATION
Points plotted: 192
Contour Interval:
100 000 50 000 (0 000 to 101 000)
200 000 150 000 (101 000 to 201 000)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,367

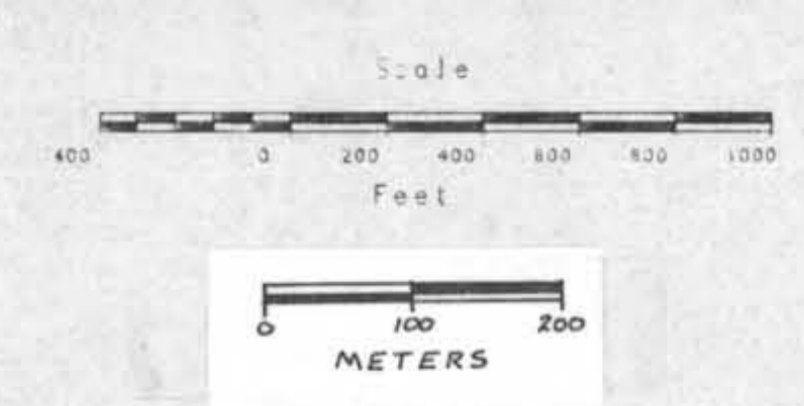
$\frac{Ag}{As} | \frac{Mn}{As}$

UTAH MINE'S LIMITED

ISLAND COPPER MINE
1986 SOIL GEOCHEM

SILVER-MANGANESE-ARSENIC
[-0.1 Ag = -0.2 As]
[0.1 Ag = 0.2 As]

Scale: 400/14800
Date: 11-DEC-86
Project:
Drawn By: ATR
Checked:
Approved: JAF
Drawing No: 6
GCB6 L2



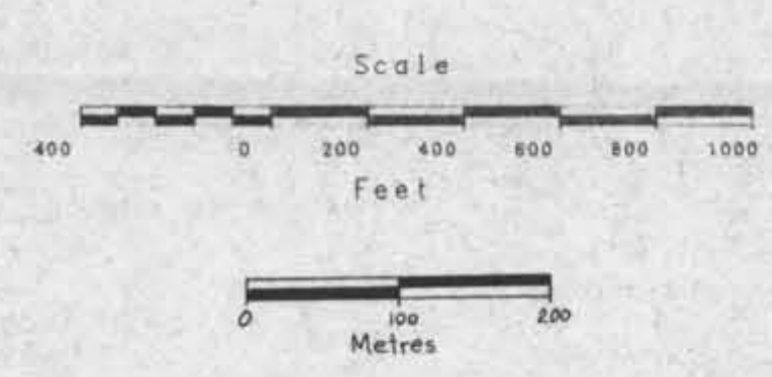
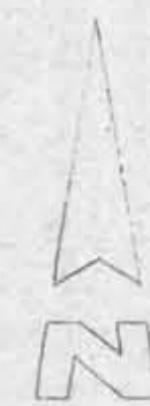
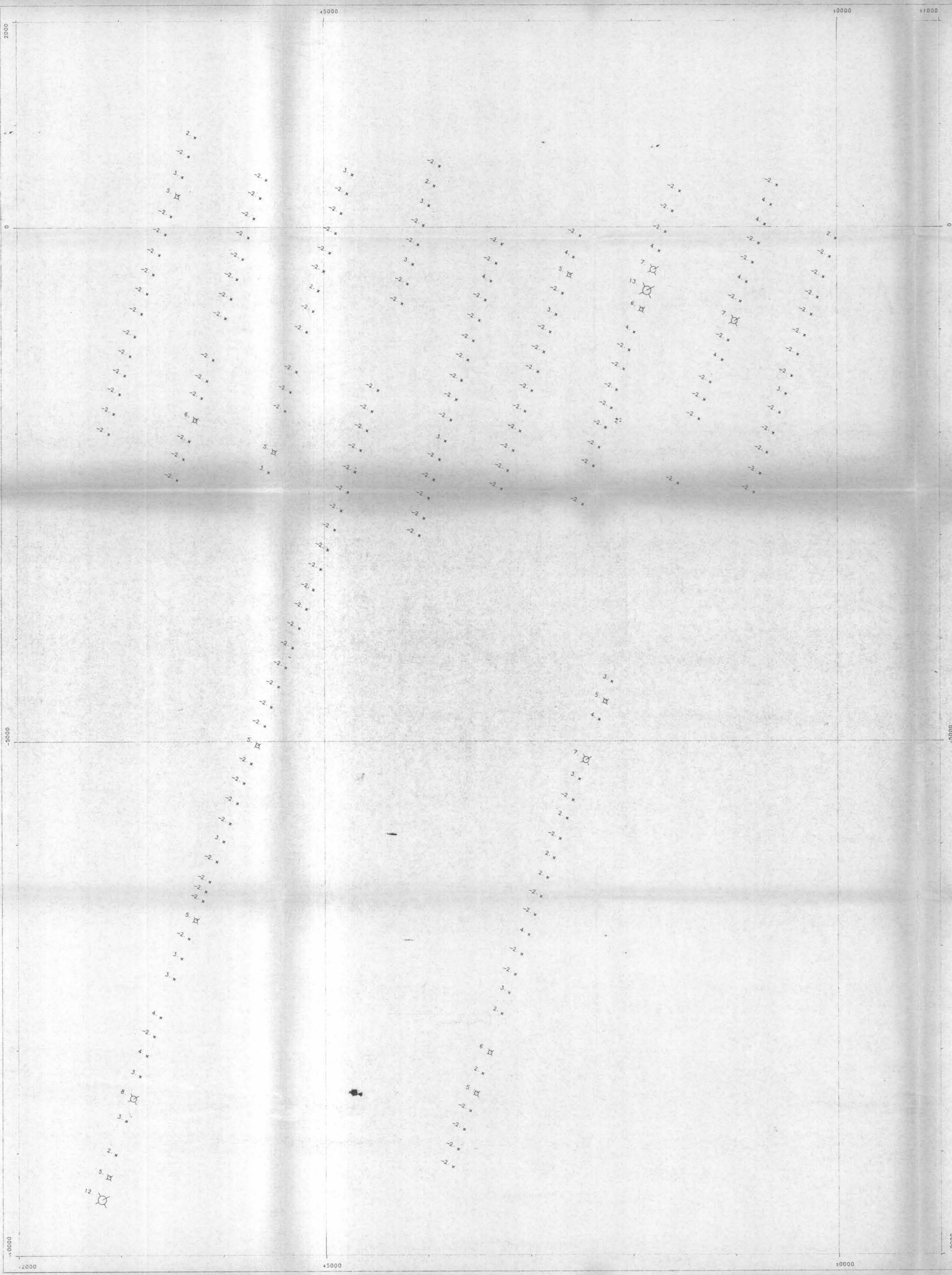
Grid Size 100 000
 Technique TRIANGULATION
 Points plotted 192
 Contour Interval 500 000 (1 000 to 70000 000)
 Value #1 1-222222 25 22 22

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

15,367

UTAH MINES LIMITED

| | |
|---|-----------------|
| ISLAND COPPER MINE MOLY IN PPM EAST GROUP 86 MOLY ANOMALIES | Scale 400/1:400 |
| | Date 11-DEC-86 |
| | Project |
| | Drawn By ATR |
| | Checked |
| | Approved JAF |
| Drawing No 8 | |
| GC68 MIN | |



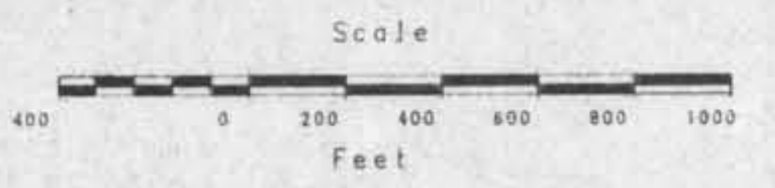
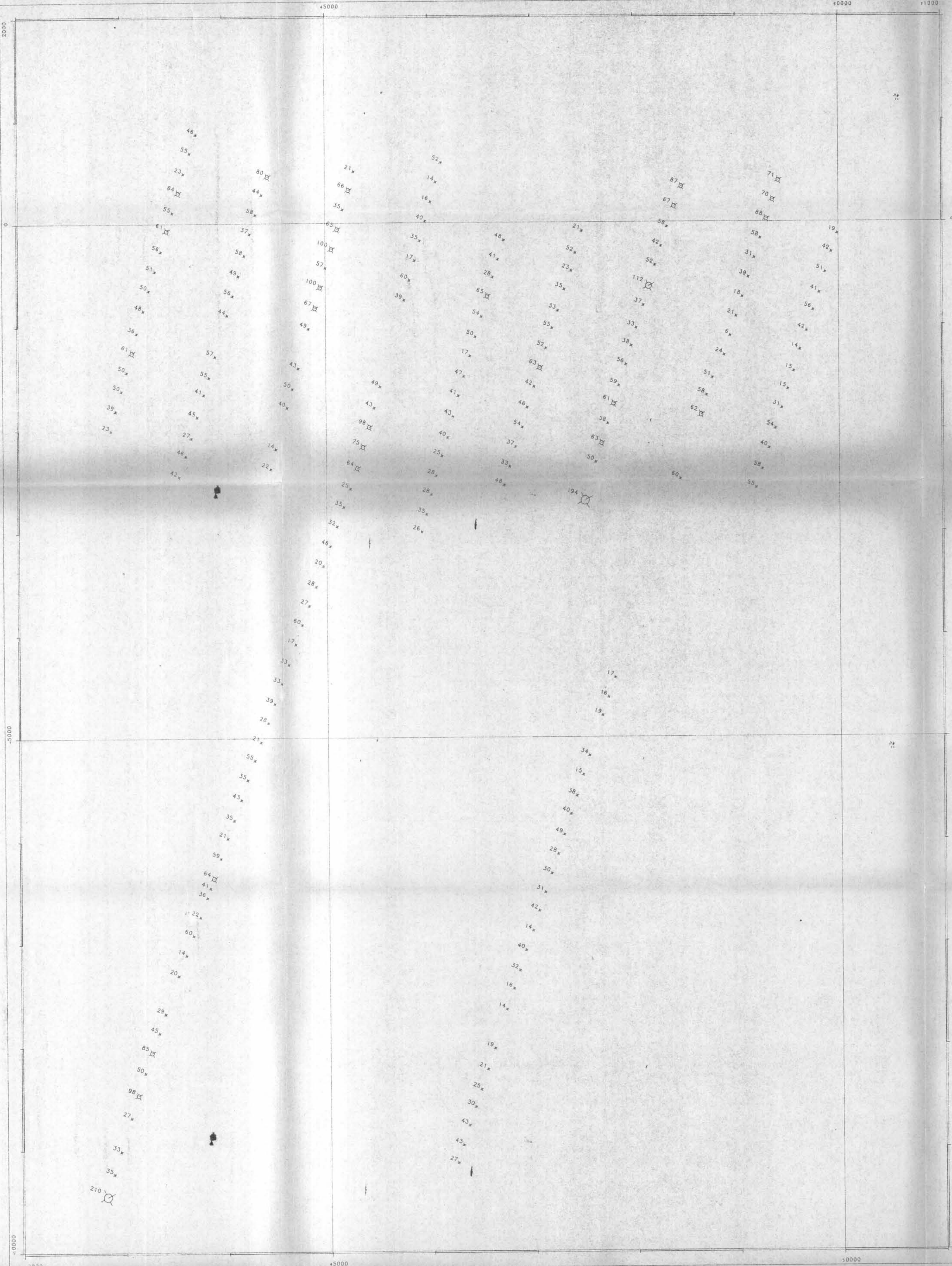
Grid File: ILC10CHM PBG
 Grid Size: 500 000
 Technique: TRIANGULATION
 Points Plotted: 192
 Contour Intervals: 100 000 50 000 (-999 000 to 70000 000)
 Value #1: -999999 00 00 00

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,367

UTAH MINES LIMITED

| | |
|-------------------------------|-----------------|
| ISLAND COPPER MINE | Scale 400/14800 |
| LEAD IN PPMS | Date 11-DEC-86 |
| EAST 86 GROUP- LEAD ANOMALIES | Project |
| | Drawn By ATR |
| | Checked |
| | Approved: JAF |
| | Drawing No. 9 |
| | GC8B.P1N |



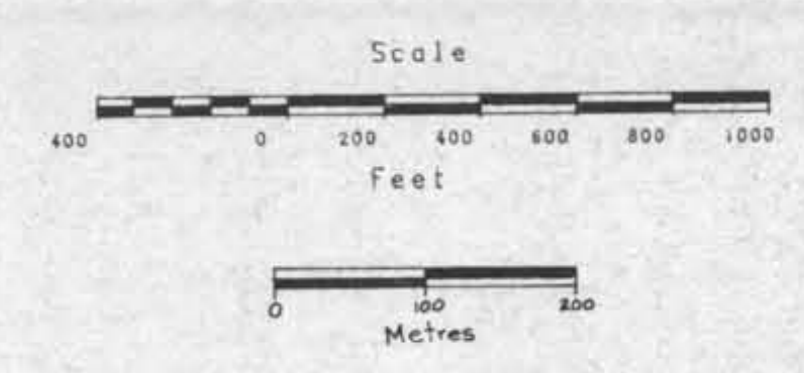
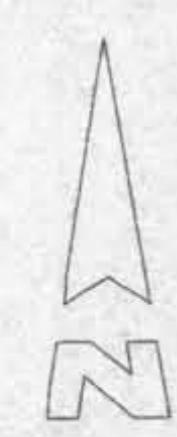
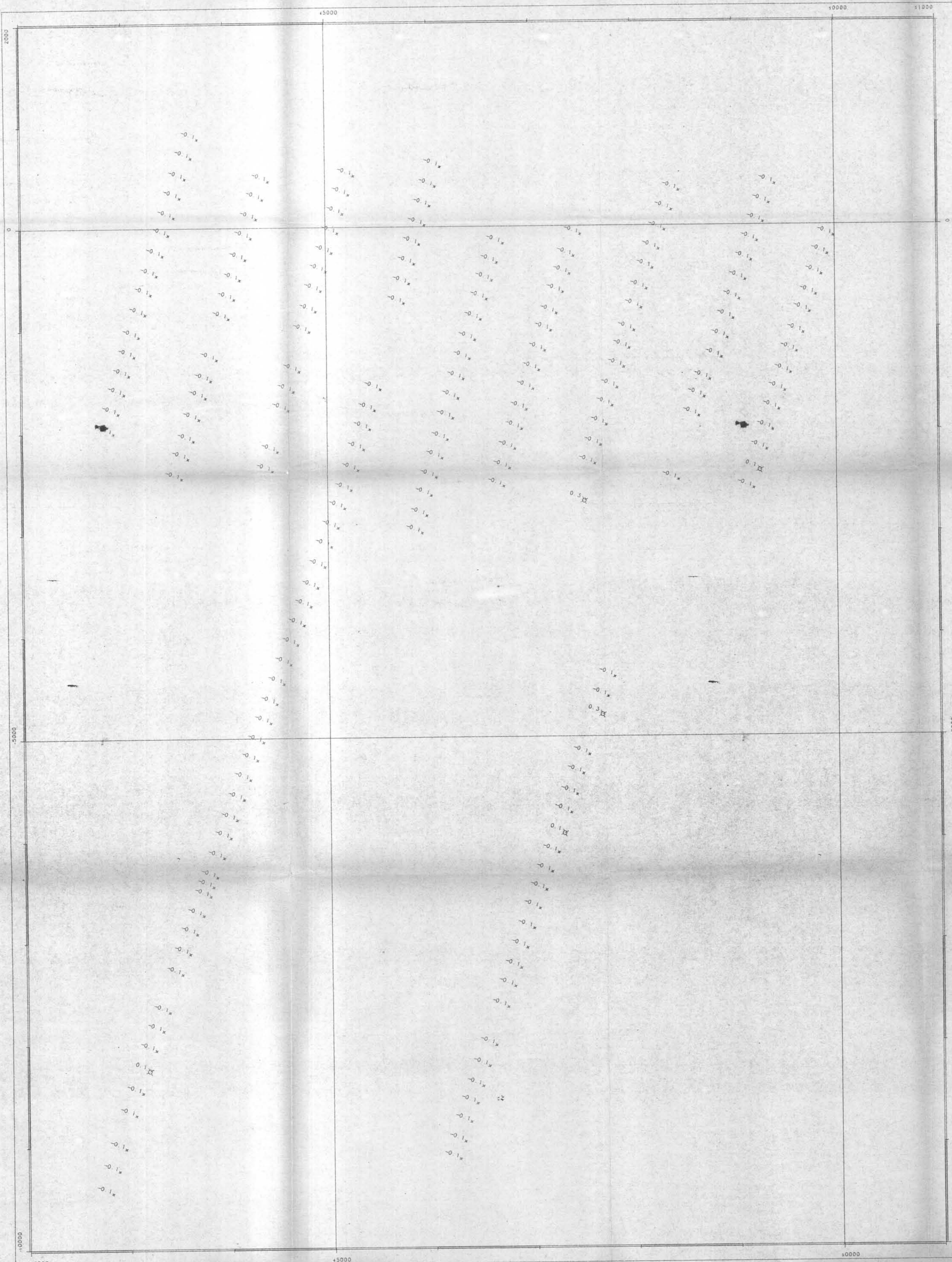
Grid File: ILC10CHM CUG
 Grid Size: 100 000
 Technique: TRIANGULATION
 Points plotted: 192
 Contour Interval:
 100 000 50 000 (0 000 to 101 000)
 200 000 150 000 (101 000 to 201 000)
 * X X X
 Value #1 10 150 210 1100

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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UTAH MINES LIMITED

| | |
|-------------------------------|-------------------|
| ISLAND COPPER MINE | Scale: 400/1:4000 |
| ZINC IN PPMS | Date: 11-DEC-86 |
| EAST 86 GROUP- ZINC ANOMALIES | Project: |
| | Drawn By: A.T.R. |
| | Checked: |
| | Approved: J.A.F. |
| | Drawing No. 10 |
| | GC6B Z1N |



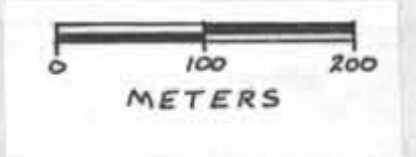
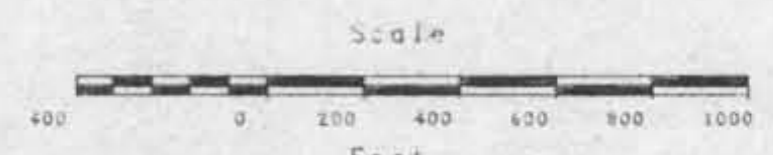
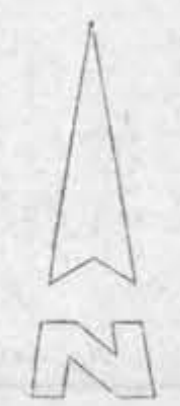
Grid File: ILCIGCHM CUG
 Grid Size: 100 000
 Technique: TRIANGULATION
 Points plotted: 192
 Contour Interval:
 100 000 50 000 (0 000 to 101 000)
 200 000 150 000 (101 000 to 201 000)
 Value #1 -10.0 to 10.4 to 1

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,367

UTAH MINES LIMITED

| | |
|------------------------------|------------------|
| ISLAND COPPER MINE | Scale: 400 |
| SILVER IN PPMS | Date: 14-DEC-86 |
| EAST 86 GROUP - AG ANOMALIES | Project: |
| $[-0.1 A_2 = -0.2 A_3]$ | Drawn By: A.T.R. |
| $[0.1 A_2 = 0.2 A_3]$ | Checked: |
| | Approved: J.A.F. |
| | Drawing No. 11 |
| | GC6B: 51N |



Grid File: ILCIGCHM CUG
 Grid Size: 100 000
 Technique: TRIANGULATION
 Points plotted: 192
 Contour Intervals:
 100 000 50 000 (0 000 to 101 000)
 200 000 150 000 (101 000 to 201 000)
 Value #1: 2-1127 25 28 213

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,367

UTAH MINES LIMITED

ISLAND COPPER MINE
 ARSENIC IN PPMS.
 EAST 86 GROUP AS ANOMALIES

Scale 400/14800
 Date 11-DEC-86
 Project
 Drawn By A. J. R.
 Checked
 Approved J. A. F.
 Drawing No. 12
 GC6B A1N

