

UTAH MINES LTD.

ISLAND COPPER MINE

GEOCHEM SURVEY WEST END CLAIMS

(FAME REPORT)

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

J.A. Fleming

February 23, 1987

15,707

PART 2 OF 6

FILMED

TABLE OF CONTENTS

	<u>page</u>	
1.0	INTRODUCTION	1
2.0	LOCATION AND ACCESS	1
3.0	CLIMATE	1
4.0	GEOLOGY	1
5.0	PHYSIOGRAPHY AND VEGETATION	2
	a) Topography and Landscape	
	b) Drainage	
	i) Stream Drainage	
	ii) Lakes	
	iii) Bogs	
	c) Overburden, Soils and Vegetation	
	i) Overburden	
	ii) Soil Development	
	iii) Vegetation	
6.0	SAMPLE COLLECTION AND PREPARATION	3
	a) Collection	
	i) Sampling Plan	
	ii) Sample Medium Collected	
	iii) Sample Collection	
	iv) Sample Handling	
	b) Laboratories	
	c) Sample Analysis	
	d) Data Handling	
7.0	RESULTS	5
8.0	CONCLUSIONS	5
9.0	COST STATEMENT	6
10.0	STATEMENT OF QUALIFICATIONS	7

TABLE OF CONTENTS

page

Tables

1	STATISTICAL PARAMETERS FOR DATA SETS	4
---	--------------------------------------	---

Appendices

A	LAB ASSAY SHEETS	
B	FIELD SHEETS	
C	CUMULATIVE PROBABILITY PLOTS AND HISTOGRAMS	

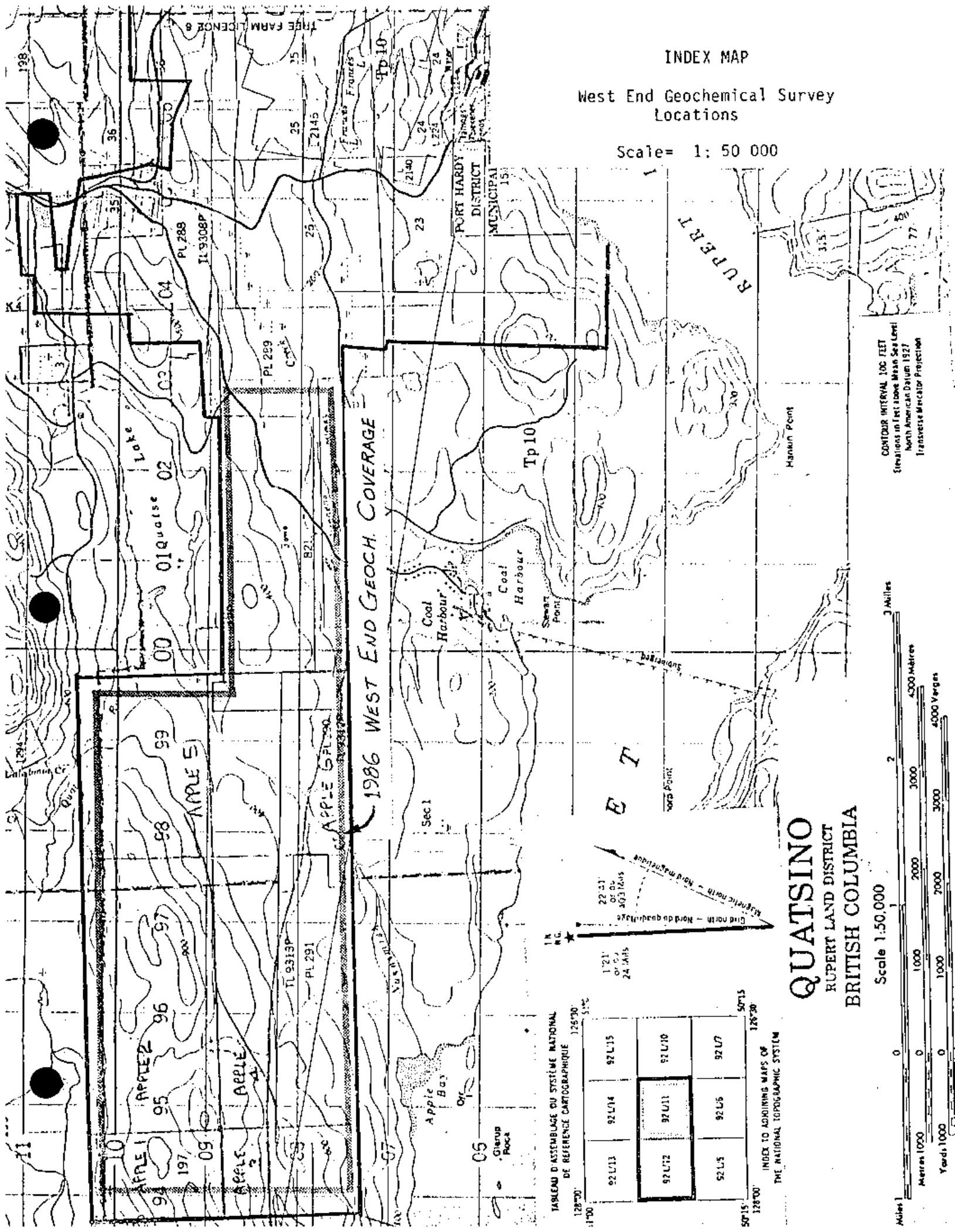
Maps

INDEX MAP	1:50000	Overleaf
STATION POSTINGS	1:4800	Back Pocket 1
COPPER ANOMALY MAP	1:4800	" " 1
MOLY ANOMALY MAP	1:4800	" " 2
LEAD ANOMALY MAP	1:4800	" " 23
ZINC ANOMALY MAP	1:4800	" " 24
SILVER ANOMALY MAP	1:4800	" " 35
ARSENIC ANOMALY MAP	1:4800	" " 36
MANGANESE ANOMALY MAP	1:4800	" " 37

INDEX MAP

West End Geochemical Survey Locations

Scale = 1: 50 000



1986 WEST END GEOCH. COVERAGE

QUATSINO
RUPERT LAND DISTRICT
BRITISH COLUMBIA

Scale 1:50,000

CONTOUR INTERVAL 100 FEET
(Elevations in Feet above Mean Sea Level)
North American Datum 1927
Transverse Mercator Projection

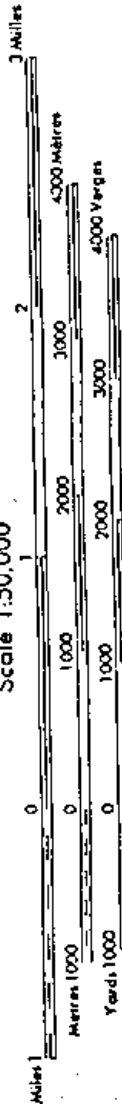


TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE

92L73	92L74	92L75	5015
92L72	92L71	92L70	128°30'
92L75	92L76	92L77	5015
128°30'	128°30'	128°30'	5015

INDEX TO ADJOINING MAPS OF THE NATIONAL TOPOGRAPHIC SYSTEM

1.0 INTRODUCTION

Between August 8 and August 28, 1986, a two-person sampling crew spent 12 crew-days collecting soil samples in the Apple, Mimas and Juno Claims, north of Holberg Inlet. This was part of an ongoing soil sampling program on the Island Copper 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 road edges at stations set 30.5 meters apart. A total of 765 samples were collected. A total of 376 were given a DCP analysis for copper, molybdenum, lead, zinc, silver, arsenic and manganese. Generally, only every second sample (odd numbers) have been submitted for assay. Alternate samples will be submitted as follow-up in anomalous areas.

The objective of the survey was to provide broad geochemical coverage over the claims adequate to establish background parameters and possibly to detect the presence of a near surface porphyry copper-moly deposit where the overburden is 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. Manganese was included to evaluate possible base metal scavenging effects.

Geochemical survey grids had been previously run on the Apple 3 and Apple 1 claims (Assessment Report submitted on Apple 1 work). The present road survey provided follow-up data in these areas.

2.0 LOCATION AND ACCESS

The survey area is located in the Nanaimo Mining Division with co-ordinates 50° 38'N & 127° 40'E. It is located on the NTS map sheet 92L/12 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 "Wanokana" Stock underlie the area north of Holberg Inlet (Map 2). The succession strikes 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 Wanokana Stock underlies the northwest corner of Quatse Lake and the uplands cutting the Bonanza Volcanics. It is a mesozonal granodiorite.

5.0 PHYSIOGRAPHY AND VEGETATION

a) Topography and Landscape

The area is in the coastal lowland of the Suquash 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 275 meters.

b) Drainage

i) Stream Drainage

Nuknimish Creek and tributaries drain south across the survey area, with a moderate gradient, into Holberg Inlet.

ii) Lakes

A small lake occurs on CH 1000 Road, from stations 61 to 78. Another small lake occurs to the north of WN 730 Road and drains to the west into Wanokana Creek.

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.

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 B horizon, as the B horizon could be reached easily from the road-cuts.

iii) Vegetation

The vegetation consists mainly of coniferous, virgin forest, with abundant salal and alder second-growth on the roadsides.

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 road edges.

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.

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 generated for all elements (Appendix C). 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, lead, zinc, silver, manganese and arsenic suggest the presence of more than one population. In each of these the upper population is only partially represented. Therefore, partitioning of the curves into separate populations was not attempted. The plot for molybdenum appears to represent a single population. Anomaly thresholds for copper, zinc and arsenic were selected at slope breaks at high concentration tails. The thresholds for the remainder of the elements where slope breaks are not definitive were selected arbitrarily at between the upper two and five cumulative percent levels. These values and the basic distribution parameters are given in the following table.

TABLE - 1 Statistical Parameters

<u>Name</u>	<u># of Values</u>	<u>Arithmetic (ppm)</u>		<u>Anomaly Thresholds (ppm)</u>
		<u>Mean</u>	<u>Std. Dev.</u>	
Cu	376	49.2	24.4	100
Mo	375	6.9	2.3	12
Pb	375	8.0	7.0	22
Zn	376	64.2	35.7	125
Ag	227	0.35	0.2	0.8
Mn	376	376.4	321.9	1000
As	276	9.0	8.0	25

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. A. Reeves, A.Sc.T., of the Geology Department prepared the maps and did a preliminary evaluation of the anomalies.

7.0 RESULTS

Metal levels are low overall, and most anomalies are at or just above the selected threshold levels. This suggests that the anomalies do not represent anomalous populations, but are the result of threshold levels that are too low. In addition, most of the anomalies are single element and/or single station anomalies. Some of the anomalies are in samples collected from the A-horizon and are probably enhanced due to the effects of metal scavenging by the organic material.

Overburden thickness is unknown. Thus, multielement and multistation anomalies, albeit weak, that are not explained by possible enhancement by organic material are considered of potential interest.

The areas/samples of interest from east to west are as follow:

1) CH300 - #'s 1 - 13

A string of six samples with low to moderate zinc anomalies, a low-moderate copper anomaly and an arsenic high of 61 ppm As occur near a garbage cache. These may not necessarily be accounted for by contamination.

2) CH1000 - #'s 3, 5, 7.

Three adjacent zinc anomalies in the 140 - 170 ppm Zn range. A quarry on the north side of the road may have caused contamination.

3) WN Main - #25

A single station multielement anomaly with 320 ppm Cu, 18 ppm Mo, 94 ppm Pb, 255 ppm Zn, and 1.3 ppm Ag. The sample was collected from a rocky "B" horizon and may have contained rock fragments. Some swampy ground lies to the south of the road.

4) WN 800 - WN 840 - Junction Area

Silver anomalies ranging from threshold to 2.2 ppm Ag occur as single or multielement anomalies with low copper, zinc and arsenic anomalies. To the west spot highs of silver arsenic, lead and zinc were detected on the previous grid survey. This constitutes a fairly broad area of low level anomalies that may reflect anomalous mineralization below.

5) CH 1000 - #'s 69 - 81

A series of low level single and multielement molybdenum, zinc and low to moderate arsenic anomalies. Survey ground north of the road may have caused the anomalies.

8.0 CONCLUSIONS

Anomalies are too low to suggest a strong possibility of a hidden mineral deposit in the area. However, such deposit(s) may be masked by the attenuating effect of thick and/or compact tills. Follow-up assaying and sampling is therefore warranted in the anomalous areas described above.

9.0

COST STATEMENT

Labour (2 Person Crew)

Prorated on 765 Samples (45%) \$5,705.67

Assays (Sunnyvale Lab)

Prorated on 367 DCP Assays (43%) 1,733.59

Truck Rental

Prorated on 765 Samples (45%) 618.19

Total Cost: \$8,057.45
=====

STATEMENT OF QUALIFICATIONS

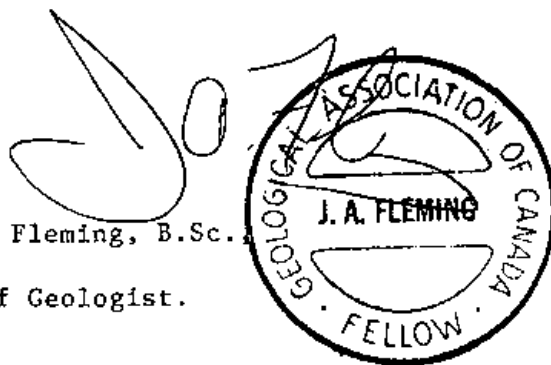
I submit that I am qualified to prepare and present this report for assessment credit. My qualifications are as follows:

- 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.



Date: February 23, 1987.

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 94089
 Phone: (408) 744-1500

Project: Island Copper Recon.
 Charge: Island Cu Geo.

Submitted by: J. Fleming
 Minerals Lab No. 36-020

SAMPLE ID	ppm CU	ppm MO	ppm FE	ppm ZN	ppm AS	ppm MN	ppm AG
CHMAIN-1	44	11	10	138	0.4	2050	-2
CHMAIN-3	52	8	7	75	-0.2	255	5
CHMAIN-5	44	7	12	85	-0.2	250	7
CHMAIN-7	63	8	8	96	0.2	510	-2
CHMAIN-9	50	8	8	71	-0.2	330	3
CHMAIN-11	48	8	3	44	-0.2	235	3
CHMAIN-13	56	8	10	56	-0.2	255	11
CHMAIN-15	33	9	4	57	0.3	245	-2
CHMAIN-17	43	7	7	36	-0.2	180	6
CHMAIN-19	35	7	6	50	0.2	215	5
CHMAIN-21	61	7	5	69	-0.2	325	4
CHMAIN-23	55	7	5	87	0.3	470	8
CHMAIN-25	38	8	6	61	0.2	290	11
CHMAIN-27	44	9	4	69	0.3	270	5
CHMAIN-29	60	6	4	50	-0.2	275	9
CHMAIN-31	18	7	7	61	-0.2	154	3
CHMAIN-33	58	8	4	59	0.3	295	4
CHMAIN-35	40	8	5	40	-0.2	210	-2
CHMAIN-37	85	9	6	61	0.2	340	9
CHMAIN-39	50	8	10	47	-0.2	290	15
CHMAIN-41	46	7	6	42	-0.2	435	2
CHMAIN-43	42	8	11	42	0.4	225	3
CHMAIN-45	47	8	16	40	0.3	315	2
CHMAIN-47	28	8	7	23	0.4	148	-2
CHMAIN-49	66	7	9	51	-0.2	355	3
CHMAIN-51	45	11	7	55	0.3	350	-2
CHMAIN-53	38	13	7	66	-0.2	1380	6
CHMAIN-55	29	9	9	40	0.3	275	4
CHMAIN-57	39	12	10	55	0.5	215	-2
CHMAIN-59	34	8	6	39	0.4	245	7
CHMAIN-61	41	8	9	33	0.4	235	-2
CHMAIN-63	62	8	9	76	0.5	245	8
CHMAIN-65	57	8	5	67	0.3	415	3
CHMAIN-67	62	7	4	76	0.4	335	2
CHMAIN-69	36	8	8	49	0.4	230	-2
CHMAIN-71	45	8	4	74	0.3	240	-2
CHMAIN-73	64	8	9	72	0.3	230	5
CH1000-1	49	8	4	55	-0.2	270	11
CH1000-3	43	8	8	142	0.2	460	18
CH1000-5	52	9	8	162	0.5	330	12
CH1000-7	68	8	10	164	-0.2	360	9
CH1000-9	31	8	15	42	0.4	210	3
CH1000-11	57	9	23	90	-0.2	390	11
CH1000-13	37	9	11	56	0.2	280	-2
CH1000-15	77	8	11	84	0.2	320	6
CH1000-17	43	8	7	70	0.3	280	5
CH1000-19	49	8	3	59	0.4	235	6

Report of Chemical Analysis

UTAH International Inc. Minerals Laboratory
 1190 Bordeaux Drive
 Sunnyvale, California 94089
 Phone: (408) 744-1800

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
CH1000-21	53	8	4	67	-0.2	275	2
CH1000-23	66	10	5	58	0.3	335	3
CH1000-25	35	10	7	47	0.3	1930	8
CH1000-27	47	11	5	46	0.3	390	5
CH1000-29	56	15	7	80	-0.2	1080	8
CH1000-31	53	7	7	57	-0.2	365	6
CH1000-33	69	10	6	68	-0.2	415	8
CH1000-35	34	13	7	46	-0.2	440	8
CH1000-37	53	12	6	63	0.3	1230	5
CH1000-39	48	11	7	40	0.4	245	4
CH1000-41	55	11	6	69	-0.2	1750	7
CH1000-43	53	10	6	60	0.3	270	4
CH1000-45	58	8	7	45	0.3	315	12
CH1000-47	42	9	6	45	0.2	285	5
CH1000-49	36	8	6	41	0.3	225	3
CH1000-51	27	7	6	29	-0.2	200	-2
CH1000-53	79	7	5	47	-0.2	345	11
CH1000-55	60	8	5	29	-0.2	225	5
CH1000-57	74	8	7	43	0.3	255	3
CH1000-59	38	10	5	31	-0.2	350	10
CH1000-61	45	9	5	46	-0.2	490	13
CH1000-63	33	9	5	35	0.2	168	64
CH1000-65	38	8	6	37	-0.2	225	11
CH1000-67	45	8	5	40	-0.2	290	10
CH1000-69	31	15	4	71	0.3	215	35
CH1000-71	24	12	4	100	0.4	225	27
CH1000-73	34	15	6	152	0.6	265	32
CH1000-75	29	12	6	78	0.3	225	21
CH1000-77	31	12	6	55	0.3	205	9
CH1000-79	34	21	11	158	0.3	490	15
CH1000-81	53	10	5	82	0.4	275	32
CH1000-83	41	7	6	49	0.4	215	11
CH1000-85	13	9	9	24	-0.2	120	2
CH1000-87	39	9	7	73	0.2	315	14
CH1000-89	25	10	7	31	-0.2	166	9
CH1000-91	18	10	6	25	-0.2	186	26
CH1000-93	13	8	5	26	-0.2	245	15
CH1000-95	49	8	4	33	0.3	280	6
CH1000-97	26	10	6	25	0.5	168	-2
CH1000-99	58	9	6	52	0.3	370	9
CH1000-101	33	6	5	32	0.3	220	-2
CH1000-103	28	7	8	63	-0.2	405	11
CH1000-105	48	7	6	36	-0.2	295	6
CH1000-107	66	8	6	70	0.4	440	6
CH1000-109	55	8	7	65	-0.2	490	10
CH1000-111	26	8	9	30	0.3	760	3
H1010-1	46	7	6	41	0.2	245	10

Report of Chemical Analysis

UTAH International Inc. Minerals Laboratory
 1190 Bordeaux Drive
 Sunnyvale, California 94089
 Phone: (415) 744-1630

Project: Island Copper Recon.
 Charge: Island Cu Fed.

Submitted by: J. Fleming
 Minerals Lab No. 86- 628

SAMPLE ID	ppm CU	ppm MO	ppm PB	ppm ZN	ppm AG	ppm MN	ppm AS
CH1010-3	60	9	8	63	0.5	270	32
CH1010-5	47	11	11	96	0.5	270	11
CH1010-7	45	8	6	102	-0.2	510	11
CH1040-1	20	12	11	25	-0.2	122	6
CH1040-3	45	8	8	124	0.2	305	-2
CH1040-5	36	8	8	36	-0.2	260	8
CH1040-7	15	4	3	26	0.2	118	5
CH1040-9	52	9	11	53	0.4	198	17
CH1040-11	26	12	8	43	0.5	290	11
CH1080-1	46	10	7	48	-0.2	245	24
CH1080-3	32	6	5	26	-0.2	130	6
CH1080-5	38	11	11	45	-0.2	325	28
CH1080-7	35	8	4	36	-0.2	205	14
CH1080-9	33	9	5	39	-0.2	188	16
CH1080-11	37	8	6	33	-0.2	178	7
CH1080-13	54	7	4	37	-0.2	245	11
CH1080-15	37	9	5	35	-0.2	260	10
CH1080-17	37	8	6	36	0.2	265	3
CH1080-19	35	8	7	28	0.3	176	7
CH1080-21	30	7	7	31	-0.2	205	6
CH1081-1	47	6	4	30	0.3	225	14
CH1081-3	38	7	8	34	-0.2	194	8
CH1081-5	35	6	5	32	0.2	184	20
CH1081-7	42	6	6	38	-0.2	146	17
CH1081-9	26	10	5	24	-0.2	102	8
CH1081-11	23	11	4	35	-0.2	290	10
CH1082-1	35	7	7	35	-0.2	240	7
CH1082-3	38	8	6	41	-0.2	400	12
CH1082-5	34	7	6	25	0.2	205	12
CH1082-7	34	7	6	32	-0.2	225	7
CH1082-9	46	5	5	41	-0.2	300	7
CH300-1	52	6	6	72	-0.2	425	4
CH300-3	118	7	9	290	0.7	490	-2
CH300-5	64	8	9	128	0.8	350	-2
CH300-7	60	6	12	270	0.2	580	-2
CH300-9	89	5	19	310	0.2	475	2
CH300-11	76	7	14	148	0.5	2000	61
CH300-13	172	9	17	124	0.5	485	17
CH300-17	44	4	17	93	-0.2	1080	15
CH300-19	54	7	9	60	0.3	265	-2
CH300-21	100	12	12	89	0.6	650	4
CH300-23	132	10	12	106	0.3	445	4
CH300-25	72	10	12	75	0.5	530	14
CH300-27	65	8	12	87	0.4	280	5
CH300-29	87	10	12	112	0.4	470	5
CH300-31	43	4	10	81	0.2	785	4
CH300-33	55	8	14	67	0.4	560	9

Report of Chemical Analysis

ITAH International Inc. Minerals Laboratory
 1190 Bordeaux Drive
 Sunnyvale, California 94087
 Phone: (408) 744-1500

Project Island Copper Recon.
 Charge: Island Cu Geo.

Submitted by J. Fleming
 Minerals Lab No. 86- 620

SAMPLE ID	ppm CU	ppm MO	ppm FE	ppm ZN	ppm AG	ppm MN	ppm AS
CH300-35	58	7	10	100	0.2	1190	8
CH300-37	76	8	12	66	0.3	285	-2
CH300-39	91	8	10	78	0.3	345	-2
CH800-1	68	7	14	49	-0.2	495	5
CH800-3	79	8	2	63	-0.2	300	4
CH800-5	63	7	4	39	0.2	200	4
CH800-7	55	7	5	47	-0.2	265	-2
CH800-9	66	8	29	80	0.3	420	-2
CH800-11	89	8	16	58	-0.2	325	4
CH800-13	39	7	3	31	0.2	210	-2
CH800-15	158	10	31	56	0.3	745	14
CH800-17	27	7	13	23	0.2	152	7
CH800-19	34	8	4	46	0.2	235	-2
CH900-1	49	8	6	43	-0.2	385	-2
CH900-3	51	6	8	40	0.3	380	2
CH900-5	43	7	11	39	-0.2	280	-2
WNMAIN-1	58	6	9	55	-0.2	255	-2
WNMAIN-3	40	5	8	56	-0.2	260	-2
WNMAIN-5	67	5	9	49	0.2	220	6
WNMAIN-7	47	4	4	50	0.3	136	4
WNMAIN-9	43	7	5	51	0.3	136	4
WNMAIN-11	45	8	7	96	-0.2	360	2
WNMAIN-13	49	7	7	69	0.2	230	8
WNMAIN-15	34	6	8	58	-0.2	215	8
WNMAIN-17	48	5	8	42	-0.2	164	-2
WNMAIN-19	33	7	7	54	0.4	150	-2
WNMAIN-21	57	5	6	60	-0.2	270	-2
WNMAIN-23	60	5	4	53	0.2	166	20
WNMAIN-25	320	18	94	255	1.3	300	12
WNMAIN-27	106	5	9	112	0.2	245	10
WNMAIN-29	69	6	8	64	0.2	210	3
WNMAIN-31	79	5	7	78	-0.2	285	7
WNMAIN-33	40	6	8	45	0.3	154	-2
WNMAIN-35	23	7	4	32	-0.2	215	-2
WNMAIN-37	68	5	4	53	-0.2	390	-2
WNMAIN-39	28	5	3	42	0.2	200	-2
WNMAIN-41	42	6	7	66	-0.2	315	8
WNMAIN-43	52	5	5	59	0.4	280	9
WNMAIN-45	38	7	3	61	0.3	360	-2
WNMAIN-47	43	6	5	42	0.6	500	5
WNMAIN-49	60	6	5	72	0.6	990	11
WNMAIN-51	70	6	5	74	0.3	295	17
WNMAIN-53	35	4	3	48	0.3	215	10
WNMAIN-55	35	6	4	63	-0.2	275	6
WNMAIN-57	47	5	4	61	-0.2	260	7
WNMAIN-59	59	6	7	73	-0.2	255	6
WNMAIN-61	34	4	4	51	0.3	200	-2

Report of Chemical Analysis

UTAH International Inc. Minerals Laboratory
 1190 Bordeaux Drive
 Sunnyvale, California 94084
 Phone: (408) 744-1600

Project Island Copper Recon.
 Charge: Island Cu Geo.

Submitted by J. Fleming
 Minerals Lab No. 85- 620

SAMPLE ID	ppm CU	ppm MO	ppm PB	ppm ZN	ppm AG	ppm MN	ppm AS
WNMAIN-63	38	5	5	38	-0.2	198	-2
WNMAIN-65	39	5	3	61	-0.2	450	19
WNMAIN-67	27	4	3	37	-0.2	146	3
WNMAIN-69	32	6	6	41	-0.2	148	-2
WNMAIN-71	41	5	6	42	-0.2	205	-2
WNMAIN-73	49	5	4	56	0.3	225	13
WNMAIN-75	52	6	-2	57	0.5	220	-2
WNMAIN-77	42	6	5	59	0.3	505	7
WNMAIN-79	25	5	2	45	-0.2	144	-2
WNMAIN-81	45	6	9	48	0.4	178	-2
WNMAIN-83	46	5	4	49	-0.2	240	2
WNMAIN-85	39	5	2	43	-0.2	142	-2
WNMAIN-87	40	7	7	43	0.6	215	6
WNMAIN-89	52	5	3	51	-0.2	186	4
WNMAIN-91	56	5	5	47	-0.2	295	-2
WNMAIN-93	36	6	6	62	0.3	245	5
WNMAIN-95	58	8	6	63	-0.2	245	3
WNMAIN-97	28	7	6	38	-0.2	174	-2
WNMAIN-99	29	6	7	29	-0.2	94	6
WNMAIN-101	22	5	3	37	-0.2	168	4
WNMAIN-103	72	6	6	73	-0.2	385	5
WNMAIN-105	49	5	4	48	-0.2	370	7
WNMAIN-107	43	6	4	47	0.3	205	6
WNMAIN-109	52	3	6	85	-0.2	290	2
WNMAIN-111	46	6	11	38	0.5	122	-2
WNMAIN-113	75	7	9	80	0.4	250	8
WNMAIN-115	57	5	6	60	0.3	194	13
WNMAIN-117	66	6	24	186	-0.2	390	25
WNMAIN-119	28	4	6	56	-0.2	495	-2
WNMAIN-121	59	8	20	118	0.5	2050	14
WNMAIN-123	66	8	13	74	0.8	460	-2
WNMAIN-125	30	5	8	54	0.2	230	-2
WNMAIN-127	38	6	10	54	0.3	315	-2
WNMAIN-129	57	4	5	63	0.2	225	3
WNMAIN-131	45	6	3	59	-0.2	295	11
WNMAIN-133	43	6	6	49	0.3	290	-2
WNMAIN-135	73	7	6	52	-0.2	220	-2
WNMAIN-137	18	-2	2	38	-0.2	95	11
WNMAIN-139	36	6	4	74	-0.2	1770	15
WNMAIN-141	50	5	5	69	-0.2	355	3
WNMAIN-143	52	7	10	83	0.3	240	-2
WNMAIN-145	29	5	9	46	-0.2	270	-2
WNMAIN-147	30	6	9	57	0.4	230	2
WNMAIN-149	58	7	3	51	-0.2	134	5
WNMAIN-151	59	6	4	74	-0.2	315	10
WNMAIN-153	118	5	9	78	0.7	275	11
WNMAIN-155	48	6	7	77	-0.2	260	2

Report of Chemical Analysis

TAH International Inc. Minerals Laboratory
 1190 Bordeaux Drive
 Sunnyvale, California 94309
 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
WNMAIN-157	45	7	8	77	-0.2	245	7
WNMAIN-159	27	6	6	46	-0.2	200	3
WNMAIN-161	59	5	4	92	-0.2	340	5
WNMAIN-163	62	5	8	85	-0.2	325	12
WNMAIN-165	69	5	8	77	0.2	280	8
WNMAIN-167	43	6	4	48	-0.2	210	2
WNMAIN-169	64	5	5	90	0.5	490	5
WNMAIN-171	53	8	6	76	0.3	310	-2
WNMAIN-173	56	6	8	71	-0.2	275	14
WN100-1	54	8	8	48	-0.2	255	6
WN100-3	72	9	9	55	0.2	215	4
WN100-5	84	9	10	58	0.2	400	15
WN100-7	53	6	9	57	0.2	840	4
WN100-9	52	7	7	55	-0.2	260	4
WN100-11	44	8	6	44	0.3	220	3
WN100-13	68	8	8	58	0.3	425	-2
WN100-15	56	7	5	41	0.3	188	-2
WN100-17	33	7	4	42	0.3	215	4
WN100-19	33	7	6	41	0.3	345	7
WN100-21	29	8	6	50	0.2	600	-2
WN101-1	48	5	4	68	-0.2	535	-2
WN101-3	36	6	3	59	0.5	445	-2
WN101-5	51	5	5	68	0.3	295	3
WN101-7	35	5	5	59	-0.2	230	5
WN101-9	28	5	3	36	-0.2	205	-2
WN101-11	28	8	5	32	0.3	210	-2
WN101-13	29	5	4	50	0.3	345	-2
WN101-15	31	9	5	51	0.2	445	-2
WN101-17	24	7	6	33	0.2	235	-2
WN101-19	35	3	5	41	-0.2	92	-2
WN101-21	54	7	6	51	0.3	250	-2
WN101-23	41	6	7	41	-0.2	370	8
WN400-1	46	5	5	48	0.2	245	-2
WN400-3	30	4	4	37	-0.2	198	3
WN400-5	52	4	4	50	-0.2	390	5
WN400-7	45	5	4	47	-0.2	260	-2
WN400-9	51	4	4	53	0.3	225	3
WN400-11	66	6	5	70	-0.2	380	9
WN400-13	52	5	3	57	0.4	235	-2
WN400-15	45	3	4	55	0.3	420	10
WN400-17	25	4	4	40	-0.2	960	2
WN400-19	24	6	4	40	0.2	196	-2
WN400-21	42	5	7	65	-0.2	450	-2
WN400-23	46	5	6	72	0.3	845	-2
WN400-25	33	6	5	57	-0.2	995	-2
WN700-1	38	6	5	52	0.2	275	6
WN700-3	66	6	5	57	-0.2	220	6

Report of Chemical Analysis

UTAH International Inc. Minerals Laboratory
 1190 Bonanza Drive
 Sunnyvale, California 94024
 Phone: (408) 744-1400

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
WN700-5	39	6	4	43	0.4	250	4
WN700-7	41	6	4	48	0.3	250	-2
WN700-9	65	6	14	87	0.3	410	13
WN700-11	71	5	12	66	-0.2	330	9
WN700-13	59	4	9	60	0.4	245	8
WN700-15	40	6	6	43	0.2	186	6
WN700-17	40	4	7	57	-0.2	270	4
WN700-19	54	5	10	61	-0.2	200	13
WN700-21	41	6	6	38	0.3	150	3
WN700-23	52	6	5	69	0.3	325	3
WN700-25	26	6	8	37	0.2	210	-2
WN700-27	34	6	5	46	-0.2	160	-2
WN700-29	73	7	16	194	-0.2	720	8
WN700-31	46	6	5	64	-0.2	240	6
WN700-33	45	6	4	54	0.2	200	2
WN700-35	49	6	8	100	0.4	410	5
WN700-37	46	4	9	64	0.3	450	5
WN700-39	33	6	7	63	-0.2	285	7
WN700-41	55	6	6	61	0.3	260	11
WN700-43	39	5	6	62	0.3	620	8
WN700-45	48	6	5	60	0.2	360	6
WN700-47	34	6	7	51	0.3	365	5
WN700-49	28	5	7	44	-0.2	360	-2
WN700-51	26	7	7	37	-0.2	200	4
WN730-1	56	7	4	91	0.4	1600	7
WN730-3	62	4	5	81	0.5	305	-2
WN730-5	32	5	5	62	-0.2	265	21
WN730-7	40	6	7	60	0.2	290	14
WN730-9	64	5	5	66	-0.2	250	9
WN730-11	35	5	3	52	0.2	245	3
WN730-13	33	3	5	47	0.3	370	-2
WN730-15	108	5	18	200	0.2	1570	6
WN730-17	26	5	5	52	0.3	1120	8
WN800-1	91	4	4	72	-0.2	605	5
WN800-3	53	4	4	53	0.5	260	2
WN800-5	128	6	10	74	0.4	640	5
WN800-7	57	6	7	77	0.5	2600	-2
WN800-9	57	4	6	71	-0.2	420	-2
WN800-11	46	4	7	55	-0.2	255	-2
WN800-13	30	5	7	57	0.2	330	6
WN800-15	33	6	7	68	0.3	230	2
WN800-17	39	5	11	48	0.3	166	14
WN800-19	59	5	14	120	0.3	370	-2
WN800-21	58	7	23	92	0.3	480	5
WN800-23	45	6	8	74	0.3	270	3
WN800-25	50	7	14	92	0.6	1880	3
WN800-29	65	6	21	91	-0.2	405	4

Report of Chemical Analysis

UTAH International Inc. Minerals Laboratory
 1190 Bordeaux Drive
 Sunnyvale, California 94007
 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 FE	ppm ZN	ppm AG	ppm MN	ppm AS
WN800-31	30	8	11	39	0.4	190	-2
WN800-33	40	6	5	61	0.5	785	11
WN800-35	43	5	25	96	-0.2	325	5
WN800-37	35	5	9	93	0.3	335	-2
WN800-39	56	5	24	83	0.3	395	4
WN800-41	43	6	9	61	0.8	370	7
WN800-43	42	6	7	66	0.9	350	31
WN800-45	106	5	12	134	0.4	910	10
WN800-47	49	5	3	69	0.3	405	4
WN810-1	14	5	10	46	-0.2	430	4
WN810-3	67	4	7	69	-0.2	350	7
WN810-5	36	7	7	50	0.2	235	-2
WN810-7	32	5	5	53	0.3	270	11
WN810-9	45	4	7	62	0.3	190	-2
WN810-11	34	5	7	62	0.4	184	-2
WN810-13	39	7	10	60	-0.2	390	-2
WN810-15	27	5	6	59	0.3	820	2
WN810-17	49	6	12	81	-0.2	350	-2
WN810-19	34	6	10	51	0.3	790	-2
WN810-21	57	5	6	93	0.4	650	31
WN810-23	23	6	6	46	0.3	335	3
WN810-25	10	6	5	31	0.2	295	-2
WN810-27	27	6	11	93	0.3	685	-2
WN820-1	56	5	5	57	0.2	655	7
WN820-3	48	6	10	55	0.2	520	-2
WN820-5	66	8	10	94	-0.2	320	6
WN820-7	35	6	8	60	0.4	280	15
WN820-9	77	5	6	83	0.3	365	5
WN820-11	12	4	6	30	-0.2	335	-2
WN820-13	35	7	13	70	0.3	635	-2
WN820-15	60	6	16	108	0.4	400	9
WN820-17	61	8	30	116	0.3	410	10
WN820-19	59	6	57	128	0.6	435	17
WN820-21	60	8	17	112	0.7	560	4
WN820-23	63	5	10	67	0.5	275	10
WN820-25	51	5	9	66	0.4	255	18
WN820-27	34	8	27	65	1.1	400	12
WN820-29	46	5	9	72	0.3	225	9
WN820-31	69	5	6	80	0.2	275	8
WN820-33	80	7	13	84	0.4	385	16
WN820-35	71	5	8	78	0.4	365	30
WN820-37	41	7	8	67	0.3	240	-2
WN840-1	18	14	9	54	0.5	260	48
WN840-3	51	5	4	68	0.4	320	8
WN840-5	37	6	5	48	0.4	196	9
WN840-7	77	8	45	182	2.2	525	3
WN840-9	59	7	7	87	0.4	1240	14

APPENDIX B
FIELD NOTES

CH300 Aug 20, 1986 (1)

STN	NOB	DEP	ES	CL	CS	CM	REM
0	A	12	SY	BK	H	L	CH MAIN
1	B	12	L	GO	L	L	DITCH
2	B	12	L	GO	L	H	"
3	B	14	L	LBR	H	H	"
4	A	20	L	BC	H	M	SWAMP
5	B	10	L	ROB	L	L	2-1/2'
6	B	12	L	GB	H	L	LOT OF GARBAGE
7	B	10	L	GB	L	M	DITCH
8	AB	12	L	BBK	H	L	
9	BC	12	L	OR	L	L	
10	B	14	L	BR	H	L	SANDY
11	BC	6	L	GB	H	L	Rocky
12	A	12	L	LBR	H	L	
13	B	14	L	OB	M	L	
14	B	12	L	OR	M	L	Rocky
15	NO SAMPLE						SWAMP
16	C	12	L	BK	H	L	GARBAGE
17	A	12	SY	BC	H	M	Rocky water table
18	A	18	SY	BK	H	L	
19	A	14	SY	BK	H	L	
20	B	8	L	OR	L	L	
21	B	10	L	OR	L	L	
22	B	10	L	OR	M	L	
23	B	12	L	OB	H	L	

CH 300 Aug 20, 1986 (2)

STN	NOB	DEP	ES	CL	CS	CM	REM
24	B	10	L	OB	L	L	
25	B	10	L	OR	M	L	
26	B	12	L	OB	H	L	
27	B	12	L	OB	H	L	
28	B	10	L	OB	L	H	
29	B	8	L	OR	H	L	
30	B	10	L	BOG	M	L	
31	A	16	SY	BK	H	L	
32	B	14	L	GOB	H	M	
33	B	14	L	OB	H	L	
34	B	10	L	OR	M	L	
35	B	10	L	OB	M	L	
36	B	8	S	OR	L	L	
37	B	12	S	OB	M	L	
38	B	10	S	RO	M	L	BAG
39	B	8	S	OR	H	M	
40	B	10	S	OR	H	M	

C-M-N

July 28, 66

STN	HOR	DEP	TOP	CO	ORG	CLY	REMARKS
0	B	10	N	BR	M	L	Spur Levise
1	B	12	N	OS	M	L	
2	B	10	N	OR	L	L	
3	B	10	NE	RO	L	M	
4	B	12	NE	RO	L	L	
5	B	10	NE	RO	L	L	
6	B	10	NE	OR	L	L	
7	B	10	NE	OR	L	L	Post with ribbon
8	B	12	NE	RO	L	L	
9	B	14	NE	OB	M	M	
10	B	10	E	OR	L	L	
11	B	12	SE	OB	M	M	
12	B	16	SE	GOB	L	M	ROAD
13	B	14	N	OB	L	L	CREEK
14	B	10	NE	R	L	L	
15	B	10	E	RO	L	L	
16	A	16	E	BK	H	L	
17	B	10	NE	RO	L	L	
18	B	8	NE	RO	L	L	
19	B	10	NE	OR	L	L	
20	B	12	NE	RO	L	L	
21	B	12	NE	OR	L	L	
22	B	16	NE	BR	H	L	
23	B	8	E	GOB	M	L	Creek narrow
24	B	10	E	RO	L	L	

C-M-N

July 28/66

STN	HOR	DEP	TOP	CO	ORG	CLY	REMARKS
25	B	10	E	OB	M	M	
26	B	12	E	OB	M	L	
27	B	12	SE	OR	L	M	
28	B	10	SE	OB	L	L	
29	B	12	SE	GB	L	H	
30	A	14	S	BK	H	M	CH1000
31	A	12	E	SYB	M	L	SANDY
32	B	10	NE	OR	L	L	
33	B	14	E	OR	L	L	
34	B	10	E	GB	L	L	ROCKY
35	B	10	E	OB	M	L	
36	B	12	E	RO	L	L	
37	B	12	L	ROB	L	L	
38	B	10	S	RO	L	L	
39	B	10	S	ROB	L	L	
40	A	20	SY	BK	H	L	
41	B	10	S	GB	L	L	WFB sign steel cable
42	A	10	S	RO	L	L	steel cable
43	B	10	S	OB	M	L	
44	B	12	N	OR	L	L	
45	B	10	N	OB	L	L	
46	B	10	N	OB	L	L	
47	B	14	N	RO	L	L	
48	B	10	N	OB	L	L	
49	B	10	SE	OB	L	L	Junction CH700 CH800

CHMAIN Aug 28 1986
 STN HOR DEP TOP COL DEP CIV REMARKS

STN	HOR	DEP	TOP	COL	DEP	CIV	REMARKS
50	B	10	S	RO	L	L	
51	B	10	S	RO	L	L	
52	B	8	J	OR	L	L	
53	B	12	S	OG	L	M	
54	B	14	S	GBR	M	M	
55	B	12	S	G08	M	L	
56	B	10	S	RO	L	L	
57	B	8	S	RO	L	L	
58	B	10	NE	GB	L	L	
59	B	10	NE	RO	L	L	
60	B	12	NE	RO	L	L	
61	B	12	E	RO	L	L	
62	B	10	F	OB	L	L	
63	B	10	SE	OB	L	L	
64	B	10	SE	OR	L	M	
65	B	12	SE	OR	L	M	
66	B	12	E	OR	L	L	
67	B	10	E	RO	L	M	
68	B	12	E	RB	L	L	
69	B	14	E	OB	M	L	white door
70	B	10	E	RO	L	L	
71	B	12	E	RO	L	L	
72	B	8	SE	RO	L	L	
73	B	10	SE	RO	L	L	
74	B	16	SE	B04	H	H	

25

CH300 Aug 26 1986

STN	HOR	DEP	TOP	COL	DEP	CIV	REMARKS
0	B	10	L	OR	L	L	Cable
1	B	10	E	GO	L	L	
2	B	8	E	OR	L	L	
3	B	12	E	OR	M	L	
4	B	10	SE	RO	L	L	
5	B	10	SE	OR	M	L	
6	B	12	SE	RO	L	L	
7	B	10	L	RO	L	L	
8	B	10	SE	GO	L	L	Rocky
9	B	8	SE	RO	L	L	
10	B	8	SE	B08	M	L	
11	B	12	W	OR	L	L	
12	B	14	W	OR	L	L	
13	B	12	E	OB	L	L	step cable

CN 800 Aug 27, 17 EC

Gen. Hox. Dr. Top. col. 0.9. 0.9. 0.9. 0.9.

14 B 10 S OR L L

15 B 10 L GO M L Peck

16 B 10 L Ro L L

17 B 12 L YOR L L

18 B 12 S OR L L

19 B 10 S Ro L L

20 B 12 S Ro L L

CH 900

Aug 26 / 86

0 B 10 SE OR L L

1 B 10 SE OR M L

2 B 12 SE OR L L Steel
coll.

3 B 14 SE OB M L

4 B 12 SE OB H L

5 B 12 L OR L L
FINIS

CH 1000 Aug 25, 1986

STN	DIR	DEPTH	COL	ORG	CLV	REMARKS
0	B	12	E	OB	M M	CH MAIN
1	B	10	E	OB	L L	
2	B	8	E	OG	L L	50° OFF QUARRY STAIRS ROAD
3	B	12	E	OR	L L	QUARRY
4	B	10	E	OR	L L	QUARRY ends ROCKY
5	B	8	S	OR	L L	
6	B	10	S	RO	L L	
7	B	10	S	RO	M L	
8	B	12	E	RO	L L	
9	B	12	E	RO	L L	
10	B	10	S	OB	H L	
11	B	8	E	RO	L L	
12	B	8	S	RO	M L	ROAD CHANGED
13	B	10	S	RO	L M	
14	B	8	S	RO	L L	
15	B	12	S	OR	H L	
16	B	10	S	RO	H L	
17	B	12	S	OR	L L	
18	B	14	S	RO	M M	
19	B	12	S	RO	M L	
20	B	10	S	OR	L L	
21	B	8	S	RO	L M	
22	B	14	S	OG	H M	
23	B	12	S	OB	L L	NEW ROAD?

CH 1000 Aug 25, 1986

STN	DIR	DEPTH	COL	ORG	CLV	REMARKS
24	B	10	S	OG	M L	NEW ROAD?
25	B	10	S	OR	H L	
26	B	12	S	OG	M M	
27	B	14	S	OR	H L	
28	B	10	S	RO	H L	
29	BC	12	S	OR	M L	
30	B	12	S	RO	M L	
31	B	8	S	OG	H L	
32	B	12	S	OB	M L	
33	B	8	S	OG	L L	STEEL ROCKY CABLE
34	B	12	S	RO	L H	
35	B	14	S	OR	H L	STEEL CABLE
36	AB	14	S	RO	M M	STEEL TANK MURRAY
37	B	12	S	OR	H L	
38	A	12	S	RO	M H	
39	B	8	S	OR	H L	
40	B	10	S	RO	M L	
41	B	12	S	RO	H L	
42	BC	10	S	OG	L L	
43	B	12	S	RO	M L	ROCKY
44	B	10	S	OR	M L	
45	B	10	S	OB	M L	
46	B	10	S	RO	M L	
47	B	10	S	OB	M L	

CH 1000 Aug 25, 1980

STN	IDR	DEPTOP	COL	ORIG	CLY	REMARKS	
48	A	16	S4	BK	N	H	LN 10.40
49	B	8	L	OB	H	L	
50	B	8	L	OR	L	L	
51	B	10	L	OB	H	L	STEEL CABLE
52	A	20	L	BR	M	H	
53	B	12	L	GR	L	L	
54	B	12	L	OB	L	L	
55	B	10	L	OR	L	L	
56	B	8	L	OG	M	H	Rocky
57	B	12	L	RO	L	L	
58	B	9	L	RO	H	L	
59	AB	12	N	OB	H	L	Quarry
60	B	6	N	GR	L	L	Quarry
61	B	12	N	BK	M	L	Quarry
62	B	10	N	RO	H	L	
63	B	12	N	RO	L	L	Rocky
64	B	10	N	RG	L	M	
65	B	12	N	RO	L	L	
66	B	14	N	GO	H	H	
67	B	12	N	RO	L	L	Rocky
68	B	10	N	OR	M	L	
69	B	10	N	RO	M	L	
70	B	12	N	RO	L	L	
71	B	10	N	RO	L	L	

CH 1000

Aug 26/86

STN	IDR	DEPTOP	COL	ORIG	CLY	REMARKS	
72	B	8	N	OB	M	L	
73	B	12	N	OR	M	M	
74	B	10	N	GB	M	L	
75	B	10	N	OR	L	L	
76	B	8	N	OB	L	L	
77	B	10	N	OB	L	L	swampy ditch
78	B	12	N	OR	L	L	gasoline/oil ditch leads
79	AB	18	S	GB	M	H	Spur in road
80	B	8	S	OB	H	L	
81	B	10	N	RO	L	L	
82	B	12	N	OB	H	L	
83	B	12	N	RO	L	L	steel cable on roadside
84	B	10	S	RO	L	L	
85	AB	20	L	GB	M	M	junction? at 10.10.
86	A	22	SE	BK	H	M	Steel cable
87	B	14	N	OR	L	L	
88	B	12	SE	OR	L	L	Rocky
89	B	12	SE	OR	L	L	steel cable
90	B	10	SE	OR	L	L	
91	B	10	SE	OR	L	L	Steel cable
92	B	8	SE	OR	L	L	
93	B	12	SE	OR	L	L	
94	B	12	S	OR	L	L	
95	B	12	S	OR	M	L	
96	B	10	S	RO	M	L	

CH1010 Aug. 26/86

STN	HCR	DEP	TIP	COL	ORG	CLY	REMARKS
97	B	10	S	OR	L	L	
98	B	12	T	OR	M	L	
99	B	10	S	OR	L	L	
100	B	12	S	OGY	L	M	ROAD TO LEFT
101	B	14	S	OR	L	L	
102	B	12	S	OR	L	L	
103	B	12	L	OR	L	L	SHORT ROAD TO RIGHT
104	B	10	NE	RD	L	L	
105	B	10	NE	OR	L	L	
106	B	12	NE	OR	M	L	Steel Cable
107	B	8	SW	OB	L	L	
108	B	8	H	OR	L	L	Steel Drum plate
109	B	12	L	RD	L	L	
110	B	10	H	RD	M	L	Steel Cable
111	B	10	N	OR	L	L	
FIB							

CH1010 Aug. 26/86

STN	HCR	DEP	TIP	COL	ORG	CLY	REMARKS
0	AB	12	S	OB	M	L	
1	B	10	T	OR	L	L	
2	B	12	N	OR	L	L	
3	B	8	SE	RD	L	L	ROCKY
4	B	8	E	OR	L	L	ROCKY
5	B	12	L	RD	L	L	
6	B	10	NE	OR	M	L	
7	B	12	NE	OR	M	L	
FIBS							

CH 1040 Aug 22, 1986

STN	HOR	DEP	TOP	COL	ORG	CLY	REMARKS
0	B	8	S	OB	L	L	CH 1040
1	B	12	L	OB	H	L	
2	B	8	L	OB	L	L	
3	B	10	L	OR	L	L	Rocky
4	B	10	L	OB	H	L	
5	B	8	L	OB	L	L	
6	A	20	S	B	H	L	STEEL CABLE
7	A	18	S	B	H	M	
8	B	8	S	OR	L	L	
9	B	10	S	OR	H	L	
10	B	10	S	OR	L	L	
11	B	10	S	OR	L	L	
12	B	12	S	OB	H	L	
FINIS							

CH 1080 Aug 22, 1986

STN	HOR	DEP	TOP	COL	ORG	CLY	REMARKS
0	B	10	L	OR	L	L	Rocky
1	B	8	L	OR	L	L	
2	B	10	L	OR	L	M	
3	B	12	W	OR	M	L	
4	B	10	W	OR	L	M	STEEL CABLE
5	B	6	W	OR	L	L	Rocky
6	B	12	W	OR	L	L	
7	B	8	W	OR	L	L	Rocky
8	B	12	W	OB	L	L	
9	B	8	W	OR	L	L	
10	B	8	W	OR	L	L	
11	B	12	W	OR	L	H	
12	AB	14	W	GB	L	H	Rocky
13	B	8	S	OR	M	L	
14	B	10	S	OB	L	L	CH 1082
15	B	10	T	OR	M	L	
16	B	12	L	OB	L	L	
17	B	14	L	OR	H	L	
18	B	12	L	OR	H	L	
19	B	12	L	OR	H	L	
20	AB	20	L	OB	H	L	
21	B	8	L	OB	L	L	SANDY
FINIS							

WIN MAIN (2) Aug 13/82

STN	HCR	DEP	TOP	COL	ORG	CLY	REMARKS
0	B	8	L	OR	L	L	sample on right side.
1	B	12	L	OR	M	L	ROCKY
2	B	6	L	OB	L	L	" "
3	B	8	W	OR	L	L	
4	B	6	W	OR	L	L	
5	B	10	W	OR	L	L	ROCKY
6	B	8	W	RO	L	L	
7	B	14	W	OB	L	L	
8	B	8	L	OR	L	L	
9	B	10	L	OR	M	L	
10	B	14	FT	OR	M	L	
11	B	10	E	ROB	L	L	ROCKY
12	B	8	E	OR	L	L	
13	B	12	E	RO	M	L	
14	AB	10	E	OB	M	L	Stone @ water
15	B	10	L	OR	L	L	
16	B	12	L	OB	L	L	
17	B	18	L	OR	L	M	
18	B	12	L	OR	L	L	
19	B	14	L	OR	L	L	
20	B	12	L	OR	M	L	
21	B	10	L	OR	L	L	
22	B	10	L	OR	L	L	WN 100
23	B	12	L	OR	L	L	Above swamp.
24	A	14	S	BK	H	L	Ditch Swamp

WIN MAIN (2) Aug 13/82

STN	HCR	DEP	TOP	COL	ORG	CLY	REMARKS
25	B	6	L	RO	L	L	ROCKY
26	B	8	L	OR	L	L	
27	B	10	W	RO	L	L	
28	B	10	W	RO	L	L	
29	B	8	L	OR	M	L	
30	B	12	L	OB	M	L	
31	B	10	L	OR	L	L	
32	B	14	L	OR	M	L	
33	B	12	L	RO	M	L	
34	B	10	L	OR	L	L	ROCKY
35	B	6	W	OR	H	L	CREEK BED
36	B	6	L	OR	L	L	ROAD TO RIGHT
37	B	8	L	YO	L	L	SIDE WALL
38	B	10	L	G	M	L	" "
39	B	6	L	RO	L	L	
40	B	6	SW	RO	L	L	
41	B	10	SW	RO	L	L	ROCKY
42	B	10	S	RO	L	L	
43	B	12	S	RO	L	L	
44	B	6	S	RO	L	L	RAVINE ON SIDE
45	B	8	S	OR	L	L	" "
46	B	6	S	OR	L	L	ROCK QUARRY
47	B	8	S	OR	L	L	
48	B	6	SW	RO	L	L	
49	B	6	SW	RO	L	L	

	N	HOR	PT	LOC	DIR	CL	CH	CLY	REM
	50	B	10	S	RO	L	L		
(	51	B	12	S	RO	L	L		
	52	B	10	SW	RO	L	L		
	53	B	8	SW	RO	L	L		
(	54	B	10	SW	RO	L	L		
	55	B	6	SW	RO	L	L		
	56	B	8	S	RO	L	L		
(	57	B	10	S	RO	L	L		
	58	B	6	S	RO	L	L		
	59	B	12	S	RO	L	L		
	60	B	10	L	OG	L	L		
	61	B	6	L	ROB	L	L		
	62	B	8	L	RO	L	L		
	63	B	10	L	RO	M	L	Beaver Creek	
	64	B	12	SE	RO	M	L		
(	65	A	12	S	GY	H	L	SANDY	
	66	A	14	SE	BR	H	L		
	67	B	10	E	OR	L	L		
(	68	B	6	SE	OB	L	L	SANDY	
	69	A	14	SE	SK	H	L		
	70	A	20	SE	BK	H	L		
(	71	B	8	SE	OR	L	L		
	72	B	8	SE	OR	L	L		
	73	B	10	SE	RO	M	L		
	74	B	10	SE	ER	L	L		

	N	HOR	PT	LOC	DIR	CL	CH	CLY	REM
	75	B	6	SE	OR	M	L		
(	76	B	8	SE	OB	L	L	SANDY	
	77	B	6	SE	RO	L	L		
	78	B	10	SE	OR	L	L		
(	79	B	10	SE	RO	L	L		
	80	B	26	SE	OR	L	L		
	81	B	8	SE	OR	M	L		
(	82	B	10	SE	OB	L	L		
	83	B	10	SE	ROB	M	L		
	84	B	10	SE	OR	L	L		
	85	B	8	SE	RO	L	L		
	86	B	10	SE	OB	L	L		
	87	B	6	SE	OB	L	L		
	88	B	20	S	OB	L	L		
	89	B	10	S	RO	L	L		
(	90	B	6	S	OR	L	L	deep creek bed	
	91	B	6	S	OR	L	L	" "	
	92	B	8	SE	RO	L	L	" "	
(	93	B	10	S	RO	L	L	WAN HOO	
	94	B	10	S	RO	L	L	ROCKY	
	95	B	8	S	RO	L	L		
	96	B	8	S	ROB	M	L		
(	97	B	8	S	RO	L	L		
	98	B	10	S	RO	L	L		
	99	B	8	S	OB	M	L	DRY RIVER BED	

WAN MAIN

Aug 13, 1985

STN HOR DEP TOP COL GRG CHY REMARKS

100 B 6 S RD L L

(101 B 8 S ROB L L

102 B 8 S ROB L L

103 B 10 S OR L L dry creek

(104 B 12 S OB M L

105 AB 10 S OB M L

WAN MAIN

Aug 14, 1986

STN HOR DEP TOP COL GRG CHY REMARKS

106 B 10 S RO L L

(107 B 14 S YB M M

108 B 8 S GO L L Rocky

109 A 14 S BK H L Ditch

(110 A 20 S BK H L Ditch

111 B 10 S OB M L

112 B 8 S GOB L L Rocky

(113 B 10 SE RD L L

114 B 8 SE RD L L

115 B 12 SE RD L L Rocky

116 B 12 SE RD L L

117 B 8 S BOY L L Rocky

118 B 14 S OB L L

119 A 14 SY BK H L Ditch VALLEY

120 A 16 SY BK H M STEEL CABLE

(121 B 10 V OK L L

122 B 8 V OB L L W 700 Rocky SUTTER MARK

123 AB 8 V OB M M

(124 A 22^{SV} V BK H L GRASS STAIN IN DITCH125 A 18^{SV} V BK H L Ditch

126 A 20 V BK H L SWAMPY

(127 B 12 V OK L L 70' to Rocky South

128 A 18 V BK H L QUADRY TO South

129 BC 24 V SY L H Ditch

WAN MAIN

Aug 14, 1986

STN	HOR	DEP	TOP	LOC	DIR	REMARKS
130	B	10	V	OB	M	H Ditch
131	B	8	V	OR	L	L Rocky
132	B	6	V	OB	L	H Ditch
133	B	10	V	OB	H	L
134	B	8	V	RO	L	L
135	B	10	V	OR	L	L Rocky CABLE
136	B	10	V	RO	L	L Rocky
137	A	20	V	BK	H	L Ditch
138	A	26	V	BK	N	L
139	B	8	V	OR	M	L CABLE WAN SDB
140	B	12	V	RO	L	L
141	AB	12	V	BR	H	L
142	A	18	V	BR	N	L SWAMP
143	B	8	V	OB	M	L
144	A	18	V	BK	H	M SWAMP
145	A	12	^{SV} V	BK	H	M
146	A	16	^{SV} V	BK	N	L
147	A	20	^{SV} V	BK	M	H
148	AD	22	V	GR	M	H STOCK CABLE
149	B	10	V	GR	L	L
150	B	10	S	OB	L	L
151	B	12	S	OB	L	L SWAMP
152	B	6	S	OR	L	L L2756 RRWAN
153	B	12	S	OB	M	H

WAN MAIN

Aug 14, 1986

STN	HOR	DEP	TOP	LOC	DIR	REMARKS
154	B	10	S	OR	M	H
155	B	8	S	OR	L	L
156	B	14	S	GR	H	H Rocky
157	B	12	S	RO	L	M CABLE
158	B	8	S	OR	L	L
159	B	10	S	OR	M	L
160	B	12	S	GR	M	H Rocky
161	B	11	S	OR	L	L
162	B	10	S	GR	L	L
163	B	8	S	OR	M	L Rocky
164	B	8	S	OR	M	L
165	B	12	S	OB	L	M
166	B	8	S	OB	L	H
167	B	10	S	RO	L	M
168	B	8	S	RO	M	H
169	B	10	S	OB	H	L
170	B	8	S	GR	A	M
171	B	10	S	GR	L	H Rocky
172	B	10	S	GR	L	H
173	B	12	S	GR	L	H SE LOCATION LINE

WAN 100

Aug 21/86

STN	LEN	DIR	OR	BR	M	REMARKS
0	B	12 N	OR	L	L	WANMA IN
1	B	10 NE	OR	L	L	
2	B	10 L	OR	L	L	
3	B	14 L	OR	L	L	
4	B	12 N	OR	L	L	
5	B	10 N	OR	M	L	
6	B	6 L	YQ	M	L	ROAD SPLITS INTHREE
7	B	10 L	OR	L	L	
8	B	10 L	OR	L	L	
9	B	14 L	OR	L	L	
10	B	8 W	OR	L	L	ROCKY
11	B	10 W	OR	L	L	
12	B	12 W	OB	M	L	
13	B	12 W	OR	L	L	
14	B	6 W	OR	L	L	
15	AB	14 W	OB	M	L	
16	AB	8 W	OB	M	L	
17	B	16 W	OB	L	L	
18	B	12 W	OB	L	L	
19	B	10 W	OB	M	L	see cable
20	B	10 E	OR	L	L	
21	B	12 E	OR	L	L	ROCKY
22	B	12 E	BR	M	L	ROCKY
FINIS						

WAN 101

Aug 14, 1986

STN	LEN	DIR	OR	BR	M	REMARKS
0	B	10 L	BR	M	L	
1	B	12 L	YQ	L	L	Fenced in area (loop)
2	B	8 S	OR	L	L	Rocky
3	B	8 S	OB	M	L	Rocky
4	B	8 S	OR	M	L	
5	B	8 S	OR	M	L	Rocky
6	B	6 N	OR	L	L	Rocky
7	B	10 N	OR	L	L	"
8	B	10 N	OR	L	L	"
9	B	12 E	OB	L	L	
10	B	8 E	OR	M	L	Rocky
11	B	8 L	OR	L	L	Rocky
12	AB	20 S	BE	H	E	
13	AB	12 W	OR	H	L	Rocky

401
S/N

Aug 2, 1966

LINE	DEP.	TOP	COL	ORG	KEY	REMARKS
14	B	12	W	OR	H	L
15	B	16	SW	OB	L	L
16	B	10	SW	OR	L	L
17	B	12	S	OB	H	L
18	B	16	S	OR	L	L
19	A	20	SY	BK	H	L
20	B	12	S	OR	L	L
21	B	16	S	OB	M	L
22	B	8	S	OR	L	L ROCKY
23	B	6	S	OB	M	L ROCKY
24	B	8	N	YO	L	L ROCKY
FINIS						

400

Aug 12, 1966

STN	LINE	DEP.	TOP	COL	ORG	KEY	REMARKS
0	B	10	S	OR	L	L	
1	B	8	S	OR	L	L	
2	B	12	S	OR	M	M	Rocky
3	B	10	S	OB	M	M	
4	B	12	W	OR	M	L	
5	B	8	W	OR	H	L	Rocky
6	B	14	W	OR	H	L	
7	AB	14	L	OB	H	L	
8	B	10	L	OB	M	L	
9	B	17	L	OB	M	L	STEEL CASE
10	AB	8	L	OB	H	L	
11	B	12	L	OR	M	L	
12	AB	10	L	OB	H	L	STEEL CASE
13	B	12	L	OB	L	L	
14	B	10	L	YO	L	L	
15	AB	14	L	OB	H	L	
16	AB	10	L	OB	H	L	
17	AB	10	L	OB	H	L	
18	AB	12	L	OB	H	L	
19	B	12	L	OR	H	L	
20	AB	8	L	OB	L	L	STEEL CASE
21	B	10	L	OR	L	L	
22	B	6	E	OR	L	L	
23	B	12	E	OR	H	M	

W.A. 2100 Aug 12/86

STN	HGT	DEPTH	COL	OR	REMARKS
84	A	8	L	RD	L L STEEL CABLE
(	25	BC	22	L	OB L L

W780 Aug 11/86

STN	HGT	DEPTH	COL	OR	REMARKS
0	B	8	S	OB M	L
(	1	B	12	SW	OB M L
	2	B	12	SW	OR L L ROCKY
	3	B	10	SW	OR L L
(	4	A	16	SY	BK H L
	5	AB	8	SW	OB H L
	6	B	12	SW	OR M L
(	7	B	8	SW	OR H L
	8	B	14	SW	RD L L
	9	B	8	SW	OR L L
	10	B	10	SW	RD L L
	11	B	10	SW	OR L L

RECYCLED PAPER

WN700

Aug 12, 1980

STN	HOR	DEP	TOP	COL	USE	CLY	REMARKS
12	B	10	E	OR	M	L	
(	13	B	14	L	ROB	M	L ROCKY
	14	B	12	E	ROB	H	L
	15	B	12	SE	OR	M	L
(	16	AB	10	S	OB	M	L
	17	B	12	S	OR	L	L
	18	B	10	SW	OR	H	L
(	19	B	10	W	RO	L	L
	20	B	8	W	RO	L	L
	21	AB	18	W	OB	M	L OIL FILTER
	22	B	14	W	OB	M	L
	23	B	12	E	OR	L	L
	24	AR	14	V	RO	H	L
	25	AB	14	W	OB	M	L
	26	B	8	W	OR	L	L ROCKY
(	27	B	14	S	OB	L	L
	28	AR	10	SE	RO	H	L
	29	B	6	SE	GO	L	L ROCKY QUARRY
(	30	B	8	SE	OR	L	L
	31	B	10	SE	OR	M	L
	32	R	10	SE	OR	M	L ROCKY
(	33	B	12	SE	RO	H	L
	34	B	10	SE	GO	M	M
	35	B	10	S	GO	H	L

WN700

Aug 12, 1980

STN	HOR	DEP	TOP	COL	USE	CLY	REMARKS
	36	AB	14	S	OB	H	M
(	37	B	8	S	OR	M	L STEEL CHAINS
	38	B	8	S	RO	L	L
	39	B	8	SW	RO	L	L
(	40	R	10	SW	OR	L	L STEEL CABLE
	41	B	8	SW	OR	L	L "
	42	B	10	W	OB	H	L "
(	43	B	8	S	OB	L	L "
	44	B	8	S	OB	L	L
	45	B	10	W	OR	L	L
	46	B	8	NW	OB	H	L
	47	B	6	NW	RO	L	L
	48	B	8	N	OR	L	L
	49	B	8	N	OR	M	L
	50	B	10	N	OR	L	L
(	51	B	10	W	GO	M	L
	52	B	6	W	OR	H	L

W730

Aug 11/86

STN	DIR	DEP	TOP	COL	ORG	CLY	REMARKS
0	B	6	S	R3	L	L	
1	B	10	S	RO	L	L	
2	B	14	S	OB	H	L	
3	B	12	S	OR	M	L	Rocky
4	B	12	S	OB	H	L	Rocky
5	B	8	S	OR	L	L	
6	B	12	S	OB	H	L	
7	B	10	S	OR	L	L	Rocky
8	AB	8	L	BR	H	L	
9	B	10	W	OR	M	L	
10	B	12	W	OR	M	L	
11	B	10	S	OR	L	L	
12	B	8	SE	OR	M	L	
13	A	18	SE	BR	H	L	
14	AB	18	SE	OB	H	L	
15	C	16	S	GY	H	L	Rocky
16	B	10	S	BR	M	L	
17	B	14	S	OB	H	L	

W7300

Aug 9/86

STN	DIR	DEP	TOP	COL	ORG	CLY	REMARKS
0	B	6	L	G	M	L	STEEL CABLE
1	B	10	L	G	M	L	CRACK
2	B	8	N	OR	M	L	
3	B	12	NE	OR	L	L	
4	B	10	N	OR	M	L	Hill
5	B	12	N	OB	L	L	
6	B	14	T	OR	L	L	CARRY
7	A	20	Sy	BR	H	L	Swamp
8	R	10	W	OR	L	L	L277.2E
9	AB	12	N	OB	L	L	
10	B	10	N	OR	L	L	
11	B	8	N	OB	L	L	
12	B	10	N	OR	H	L	
13	B	8	N	OB	H	L	
14	A	8	N	OR	L	L	
15	R	6	N	OR	L	L	WN 810
16	B	10	W	OR	H	L	
17	B	14	N	OR	L	L	
18	AB	16	N	BR	H	L	
19	B	10	N	OR	L	L	STEEL CABLE
20	AB	16	N	OB	H	L	"
21	B	8	N	OR	L	L	"
22	B	8	N	OB	M	L	
23	B	14	NW	OB	L	L	

WAN 800 Aug 8, 1986

STN	W	N	E	S	OR	M	L	REMARKS
24	B	10	W	OR	L	L		
25	B	12	W	OR	H	L		
26	B	8	W	OR	L	L		CABLE
27	B	8	S	OR	M	L		"
28	B	6	S	OR	L	L		"
29	B	10	S	OR	H	L		
30	B	10	S	OR	L	L		
31	B	8	S	OR	L	L		
32	B	6	S	OR	M	L		L27566
33	B	9	S	OR	M	L		STN 27431 ROAD CROSSING
34	B	10	S	OR	L	L		
35	B	8	S	OR	L	L		
36	B	12	S	OR	M	L		SAW 4 POINT
37	B	10	S	OR	M	L		DEER 100'
38	B	10	S	OR	M	L		NUMBER 5000
39	B	8	S	OR	L	L		
40	B	10	S	OR	L	L		ROCKY
41	B	10	S	OR	L	L		
42	B	8	S	OR	L	L		ROAD
43	B	6	SE	OR	L	L		W 840 CABLES
44	B	8	SE	OR	L	L		
45	B	6	S	OR	L	L		
46	B	8	NW	OR	L	L		
47	B	10	NW	OR	H	L		ROCKY
48	B	10	S	OR	M	L		

STN 27431

WN 810 Aug 8, 1986

STN	W	N	E	S	OR	M	L	REMARKS
0	B	10	W	OR	L	L		L27645 CST BRICKS
1	B	10	NW	OR	L	L		
2	B	8	W	OR	M	L		ROCKY
3	B	12	W	OR	L	L		
4	B	14	W	OR	L	L		
5	B	8	W	OR	M	L		
6	B	12	T	OR	M	L		
7	AB	12	E	OR	H	L		ROCKY
8	B	8	V	OR	L	L		
9	B	12	W	OR	L	L		
10	B	8	T	OR	L	L		
11	B	10	N	OR	M	L		
12	B	8	N	OR	L	L		SAG
13	B	8	N	OR	M	L		
14	B	10	NW	OR	H	L		
15	AB	12	W	OR	H	L		
16	B	10	W	OR	H	L		
17	OR	14	W	OR	M	L		
18	B	8	T	OR	L	L		SURVEY MARK 50 NW
19	B	10	T	OR	L	L		L2772E
20	B	10	E	OR	H	L		ROCKY
21	B	12	L	OR	L	L		ROCKY
22	B	10	L	OR	H	L		ROCKY
23	B	8	W	OR	L	L		

STN 27431

WB20

(2)

STN	DIR	DIS	TOP	ROF	ONS	SWY	RE TM
25	B	6	W	OR	L	L	
(26	B	10	W	RO	L	L	
27	B	8	W	RO	L	L	
28	B	6	W	RO	M	L	
(29	B	8	W	RO	L	L	
30	B	10	SW	OR	L	L	
31	B	8	S	OB	L	L	
(32	B	10	S	RO	B	L	
33	B	10	SW	OR	L	L	
34	B	8	S	OB	L	L	
35	B	6	S	YO	L	L	ROCKY
36	B	10	SW	OR	M	L	
37	B	8	S	RO	L	L	
38	B	8	W	OR	L	L	ROCKY
(
(
(
(

WAN 240

OUG 11/66

STN	DIR	DIS	TOP	ROF	ONS	SWY	RE TM
0	B	10	S	OR	L	L	
(1	B	10	S	OR	M	L	ROCKY
2	B	8	E	RO	H	L	
3	B	10	E	RO	M	L	
(4	B	10	SE	OG	L	L	ROCKY
5	B	6	S	OR	M	L	ROCKY
6	B	10	S	RO	L	L	
(7	B	6	S	RO	L	L	ROCKY
8	B	8	T	DR	L	L	ROCKY
9	B	8	T	OR	M	L	
(
(
(
(

STATISTICAL SUMMARY

NAME	NO. OF VALUES	ARITHMETIC		LOGARITHMIC	
		MEAN	STD. DEV.	MEAN	STD. DEV.
CU	376	49.223	24.433	1.655	0.176
MO	375	6.955	2.253	0.822	0.129
PB	375	7.992	6.987	0.832	0.222
ZN	376	64.250	35.686	1.764	0.185
AG	227	0.352	0.196	-0.491	0.169
MN	376	376.417	321.862	2.494	0.237
AS	276	9.036	8.030	0.844	0.301

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: CU NUMBER OF VALUES IS 376
 CALCULATED PARAMETERS: MEAN = 49.2234 STD.DEV. = 24.4333 VARIANCE = 596.9856

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

ICELL	LOWER LIMIT	NO	PCT	LOG LIMIT
1	-24.0765	0	0.0	0.0000
2	-17.9681	0	0.0	0.0000
3	-11.8598	0	0.0	0.0000
4	-5.7515	0	0.0	0.0000
5	0.3568	0	0.0	0.4475
6	6.4651	2	0.5	0.8106
7	12.5735	8	2.1	1.0995
8	18.6818	8	2.1	1.2714
9	24.7901	36	9.6	1.3943
10	30.8984	59	15.7	1.4899
11	37.0068	53	14.1	1.5683
12	43.1151	57	15.2	1.6346
13	49.2234	41	10.9	1.6922
14	55.3317	42	11.2	1.7430
15	61.4400	25	6.6	1.7885
16	67.5484	16	4.3	1.8296
17	73.6567	10	2.7	1.8672
18	79.7650	3	0.8	1.9018
19	85.8733	5	1.3	1.9339
20	91.9817	0	0.0	1.9637
21	98.0900	1	0.3	1.9916
22	104.1983	3	0.8	2.0179
23	110.3066	0	0.0	2.0426
24	116.4149	2	0.5	2.0660

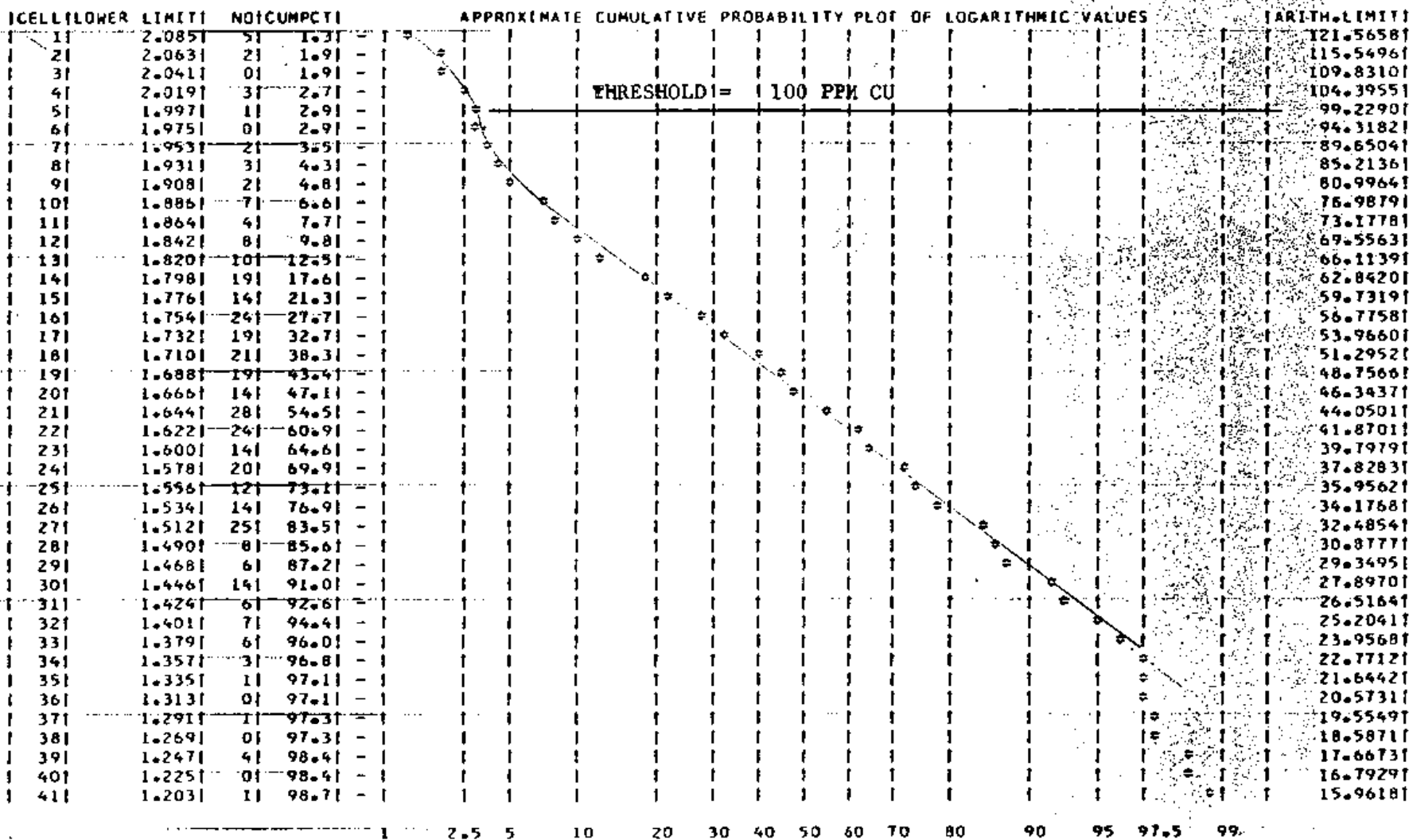
LOG VALUES.....: MEAN = 1.6550 STD.DEV. = 0.1761 VARIANCE = 0.0311

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

ICELL	LOWER LIMIT	NO	PCT	ARITH. LIMIT
1	1.1260	1	0.3	13.3645
2	1.1700	1	0.3	14.7923
3	1.2141	4	1.1	16.3728
4	1.2582	1	0.3	18.1221
5	1.3023	1	0.3	20.0583
6	1.3464	6	1.6	22.2013
7	1.3905	16	4.3	24.5733
8	1.4346	20	5.3	27.1988
9	1.4786	19	5.1	30.1048
10	1.5227	35	9.3	33.3212
11	1.5668	32	8.5	36.8813
12	1.6109	47	12.5	40.8218
13	1.6550	40	10.6	45.1832
14	1.6991	37	9.8	50.0107
15	1.7431	42	11.2	55.3539
16	1.7872	25	6.6	61.2680
17	1.8313	18	4.8	67.8140
18	1.8754	9	2.4	75.0594
19	1.9195	7	1.9	83.0788
20	1.9636	1	0.3	91.9551
21	2.0077	3	0.8	101.7797
22	2.0517	2	0.5	112.6540
23	2.0958	2	0.5	124.6902
24	2.1399	0	0.0	138.0173

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: CU



APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: MD
 CALCULATED PARAMETERS: MEAN = 6.9547 NUMBER OF VALUES IS 375
 STD.DEV. = 2.2529 VARIANCE = 5.0755

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

ICELL	LOWER LIMIT	NO	PCT	LOG LIMIT
1	0.1960	0	0.0	-0.7077
2	0.7592	0	0.0	-0.1196
3	1.3225	0	0.0	0.1214
4	1.8857	0	0.0	0.2755
5	2.4489	4	1.1	0.3890
6	3.0121	0	0.0	0.4789
7	3.5753	24	6.4	0.5533
8	4.1385	0	0.0	0.6168
9	4.7018	73	19.5	0.6723
10	5.2650	0	0.0	0.7214
11	5.8282	81	21.6	0.7655
12	6.3914	0	0.0	0.8056
13	6.9547	61	16.3	0.8423
14	7.5179	73	19.5	0.8761
15	8.0811	0	0.0	0.9075
16	8.6443	20	5.3	0.9367
17	9.2075	0	0.0	0.9641
18	9.7708	15	4.0	0.9899
19	10.3340	0	0.0	1.0143
20	10.8972	8	2.1	1.0373
21	11.4604	8	2.1	1.0592
22	12.0237	0	0.0	1.0800
23	12.5869	2	0.5	1.0999
24	13.1501	0	0.0	1.1189

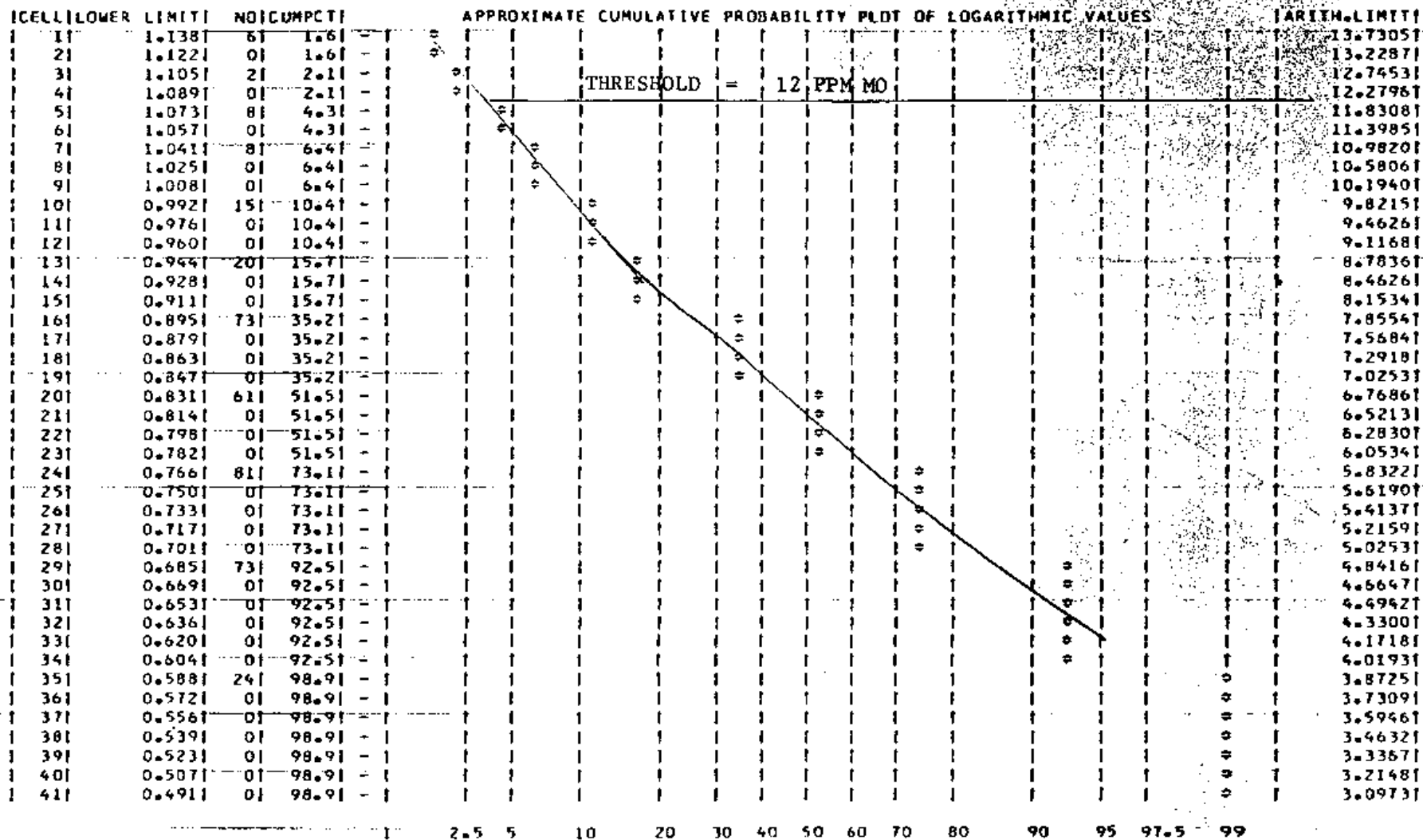
LOG VALUES.....: MEAN = 0.8224 STD.DEV. = 0.1293 VARIANCE = 0.0167

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

ICELL	LOWER LIMIT	NO	PCT	ARITH. LIMIT
1	0.4344	0	0.0	2.7189
2	0.4667	4	1.1	2.9291
3	0.4991	0	0.0	3.1555
4	0.5314	0	0.0	3.3994
5	0.5637	0	0.0	3.6621
6	0.5961	24	6.4	3.9452
7	0.6284	0	0.0	4.2502
8	0.6607	0	0.0	4.5787
9	0.6931	73	19.5	4.9326
10	0.7254	0	0.0	5.3139
11	0.7577	81	21.6	5.7246
12	0.7901	0	0.0	6.1671
13	0.8224	61	16.3	6.6438
14	0.8548	0	0.0	7.1573
15	0.8871	73	19.5	7.7106
16	0.9194	0	0.0	8.3066
17	0.9518	20	5.3	8.9486
18	0.9841	15	4.0	9.6403
19	1.0164	8	2.1	10.3855
20	1.0488	8	2.1	11.1883
21	1.0811	0	0.0	12.0531
22	1.1134	2	0.5	12.9847
23	1.1458	4	1.1	13.9884
24	1.1781	0	0.0	15.0697

APPLE GROUP 1986 SOIL GEDCHEM SURVEY

VARIABLE NAME IS: MO



APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: MO

CELL	LOWER LIMIT	NO	CUMPCT	APPROXIMATE CUMULATIVE PROBABILITY PLOT OF ARITHMETIC VALUES											LOG LIMIT			
1	12.446	8	2.1															1.0950
2	12.164	0	2.1															1.0851
3	11.883	8	4.3															1.0749
4	11.601	0	4.3															1.0645
5	11.320	0	4.3															1.0538
6	11.038	0	4.3															1.0429
7	10.756	8	6.4															1.0317
8	10.475	0	6.4															1.0201
9	10.193	0	6.4															1.0083
10	9.912	15	10.4															0.9961
11	9.630	0	10.4															0.9836
12	9.348	0	10.4															0.9707
13	9.067	0	10.4															0.9575
14	8.785	20	15.7															0.9437
15	8.504	0	15.7															0.9296
16	8.222	0	15.7															0.9150
17	7.940	73	35.2															0.8998
18	7.659	0	35.2															0.8842
19	7.377	0	35.2															0.8679
20	7.095	0	35.2															0.8510
21	6.814	61	51.5															0.8334
22	6.532	0	51.5															0.8151
23	6.251	0	51.5															0.7959
24	5.969	81	73.1															0.7759
25	5.687	0	73.1															0.7549
26	5.406	0	73.1															0.7329
27	5.124	0	73.1															0.7096
28	4.843	73	92.5															0.6851
29	4.561	0	92.5															0.6591
30	4.279	0	92.5															0.6314
31	3.998	24	98.9															0.6018
32	3.716	0	98.9															0.5701
33	3.435	0	98.9															0.5359
34	3.153	0	98.9															0.4987
35	2.871	4	100.0															0.4581
36	2.590	0	100.0															0.4132
37	2.308	0	100.0															0.3633
38	2.026	0	100.0															0.3067
39	1.745	0	100.0															0.2418
40	1.463	0	100.0															0.1653
41	1.182	0	100.0															0.0725
				2.5	5	10	20	30	40	50	60	70	80	90	95	97.5	99	

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: PB
 CALCULATED PARAMETERS: MEAN = 7.9920 NUMBER OF VALUES IS 375
 STD.DEV. = 6.9872 VARIANCE = 48.8208

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

ICELL	LOWER LIMIT	NO	PCT	LOG LIMIT
1	-12.9697	0	0.0	0.0020
2	-11.2229	0	0.0	0.4396
3	-9.4761	0	0.0	0.6530
4	-7.7293	0	0.0	0.7955
5	-5.9825	0	0.0	0.9026
6	-4.2357	0	0.0	0.9885
7	-2.4889	0	0.0	1.0601
8	-0.7421	0	0.0	1.1216
9	1.0047	4	1.1	1.1755
10	2.7515	67	17.9	1.2234
11	4.4983	120	32.0	1.2665
12	6.2451	49	13.1	1.3058
13	7.9919	58	15.5	1.3418
14	9.7387	32	8.5	1.3750
15	11.4855	15	4.0	1.4059
16	13.2323	6	1.6	1.4347
17	14.9791	4	1.1	
18	16.7259	5	1.3	
19	18.4727	2	0.5	
20	20.2195	1	0.3	
21	21.9663	2	0.5	
22	23.7131	3	0.8	
23	25.4599	1	0.3	
24	27.2067	0	0.0	

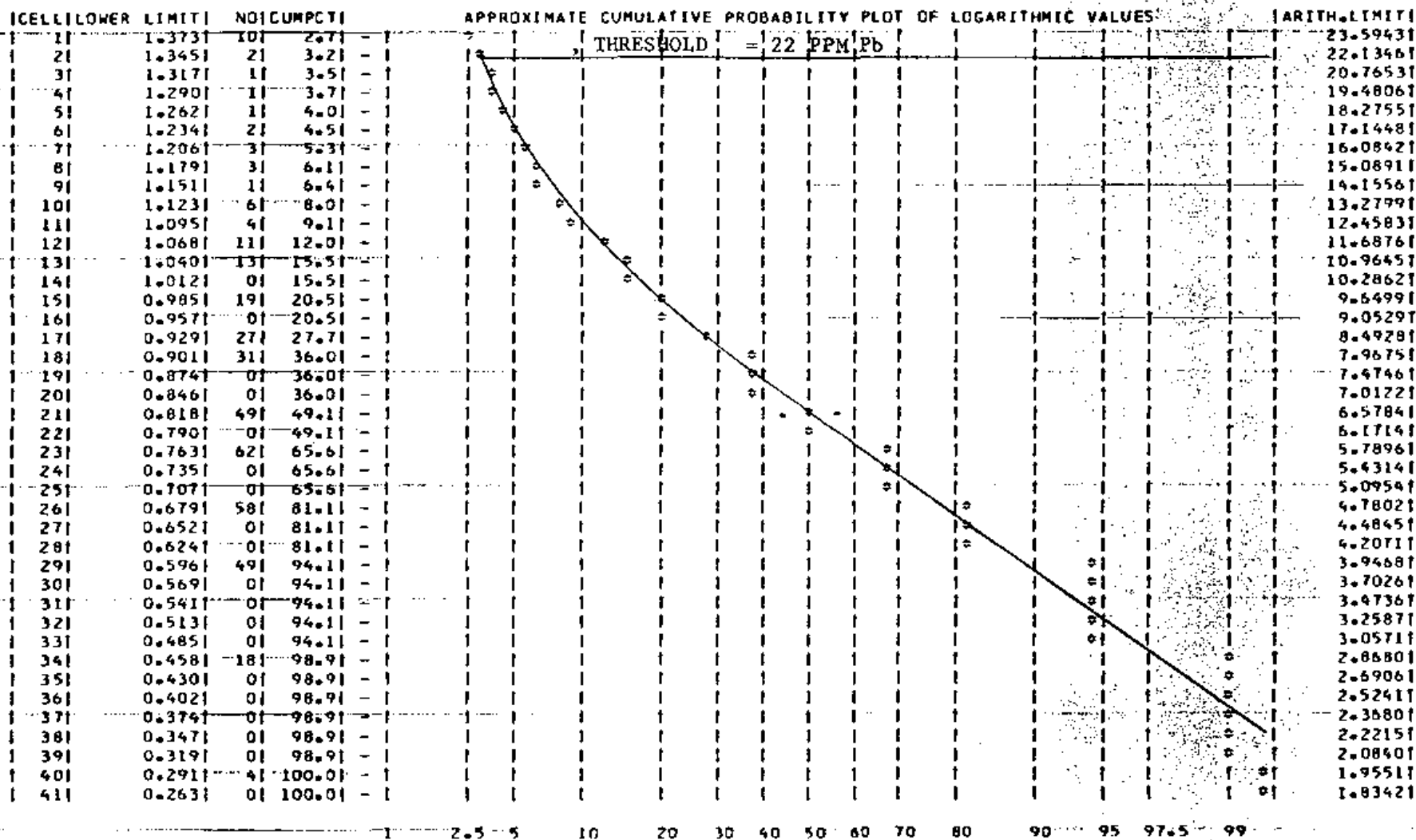
LOG VALUES.....: MEAN = 0.8320 STD.DEV. = 0.2219 VARIANCE = 0.0492

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

ICELL	LOWER LIMIT	NO	PCT	ARITH. LIMIT
1	0.1664	0	0.0	1.4668
2	0.2218	0	0.0	1.6668
3	0.2773	4	1.1	1.8937
4	0.3328	0	0.0	2.1517
5	0.3882	0	0.0	2.4448
6	0.4437	18	4.8	2.7779
7	0.4992	0	0.0	3.1563
8	0.5547	49	13.1	3.5863
9	0.6101	0	0.0	4.0749
10	0.6656	58	15.5	4.6301
11	0.7211	0	0.0	5.2608
12	0.7765	62	16.5	5.9775
13	0.8320	49	13.1	6.7919
14	0.8875	31	8.3	7.7172
15	0.9429	27	7.2	8.7685
16	0.9984	32	8.5	9.9631
17	1.0539	11	2.9	11.3204
18	1.1093	10	2.7	12.8626
19	1.1648	4	1.1	14.6150
20	1.2203	5	1.3	16.6061
21	1.2757	3	0.8	18.8584
22	1.3312	4	1.1	21.4390
23	1.3867	2	0.5	24.3597
24	1.4421	3	0.8	27.6784

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: PB



APPLC GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: PB

CELL	LOWER LIMIT	NO	CUMPCT	APPROXIMATE	CUMULATIVE PROBABILITY PLOT OF ARITHMETIC VALUES												LOG LIMIT									
1	25.023	7	1.9																						1.3983	
2	24.150	1	2.1																							1.3829
3	23.276	2	2.7																							1.3669
4	22.403	2	3.2																							1.3503
5	21.530	0	3.2																							1.3330
6	20.656	1	3.5																							1.3151
7	19.783	1	3.7																							1.2983
8	18.909	1	4.0																							1.2767
9	18.036	0	4.0																							1.2561
10	17.163	2	4.5																							1.2346
11	16.289	3	5.3																							1.2119
12	15.416	3	6.1																							1.1880
13	14.542	1	6.5																							1.1626
14	13.669	6	8.0																							1.1357
15	12.796	4	9.1																							1.1071
16	11.922	11	12.0																							1.0764
17	11.049	0	12.0																							1.0433
18	10.175	13	15.5																							1.0076
19	9.302	19	20.5																							0.9686
20	8.429	27	27.7																							0.9258
21	7.555	31	36.0																							0.8783
22	6.682	49	49.1																							0.8249
23	5.808	62	65.6																							0.7641
24	4.935	58	81.1																							0.6933
25	4.062	0	81.1																							0.6087
26	3.188	49	94.1																							0.5036
27	2.315	10	98.9																							0.3645
28	1.441	4	100.0																							0.1588
29	0.568	0	100.0																							-0.2456
30	-0.305	0	100.0																							#####
31	-1.179	0	100.0																							#####
32	-2.052	0	100.0																							#####
33	-2.925	0	100.0																							#####
34	-3.799	0	100.0																							#####
35	-4.672	0	100.0																							#####
36	-5.546	0	100.0																							#####
37	-6.419	0	100.0																							#####
38	-7.292	0	100.0																							#####
39	-8.166	0	100.0																							#####
40	-9.039	0	100.0																							#####
41	-9.913	0	100.0																							#####

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

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: ZN
 CALCULATED PARAMETERS: MEAN = 64.2500 STD.DEV. = 35.6858 VARIANCE = 1273.4746
 NUMBER OF VALUES IS 376

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

ICELL	LOWER LIMIT	NO	PCT	LOG LIMIT
1	-42.8074	0	0.0	0.2552
2	-33.8859	0	0.0	1.0302
3	-24.9645	0	0.0	1.2932
4	-16.0431	0	0.0	1.4558
5	-7.1216	0	0.0	1.5739
6	1.7998	0	0.0	1.6666
7	10.7213	0	0.0	1.7429
8	19.6427	12	3.2	1.8079
9	28.5642	38	10.1	1.8643
10	37.4856	60	16.0	1.9143
11	46.4071	68	17.6	1.9591
12	55.3285	65	17.3	1.9997
13	64.2500	45	12.0	2.0369
14	73.1714	30	8.0	2.0711
15	82.0928	16	4.3	2.1028
16	91.0143	12	3.2	2.1323
17	99.9357	6	1.6	2.1600
18	108.8572	4	1.1	2.1860
19	117.7786	4	1.1	2.2105
20	126.7001	3	0.8	
21	135.6215	2	0.5	
22	144.5430	2	0.5	
23	153.4644	2	0.5	
24	162.3859	1	0.3	

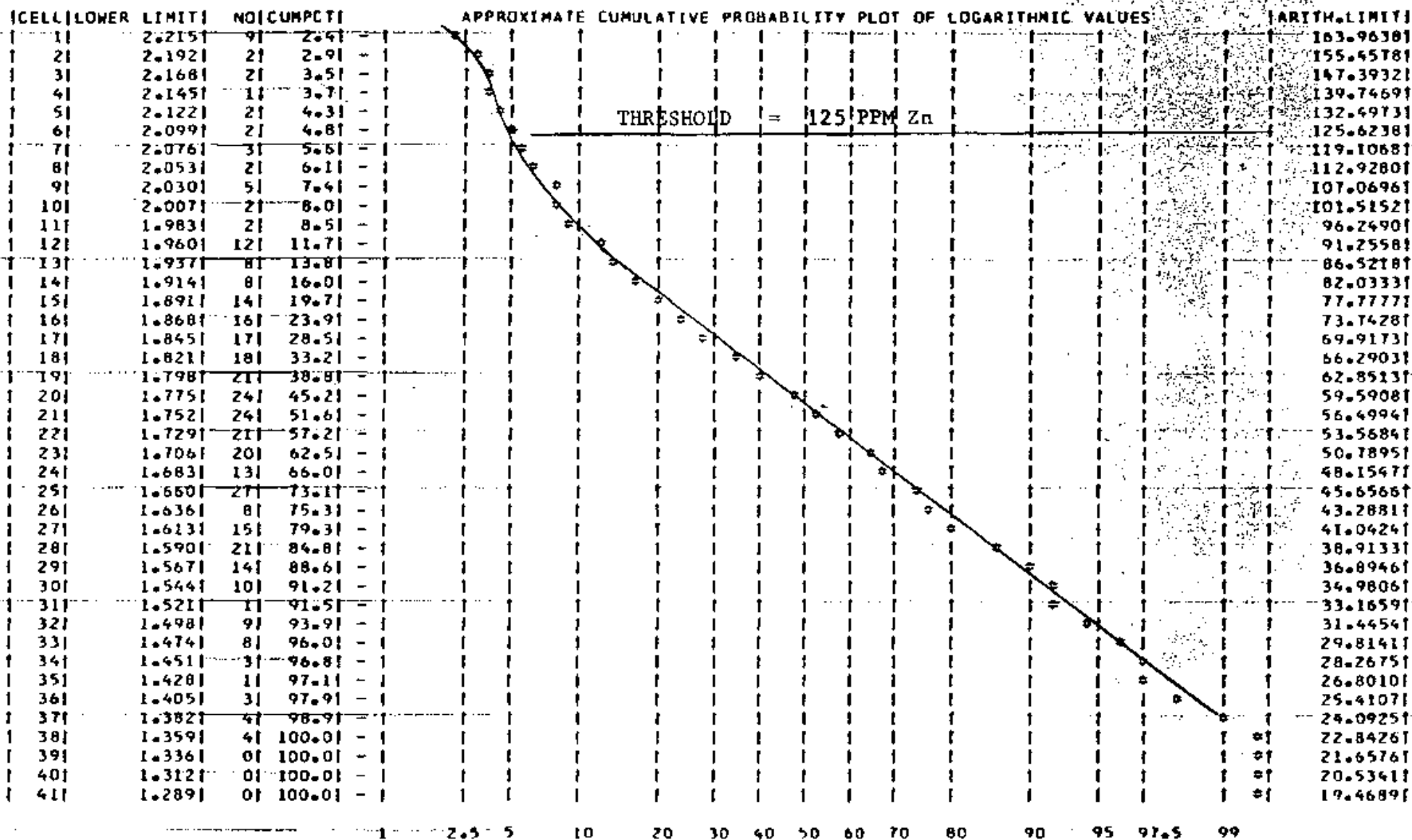
LOG VALUES: MEAN = 1.7636 STD.DEV. = 0.1851 VARIANCE = 0.0343

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

ICELL	LOWER LIMIT	NO	PCT	ARITH. LIMIT
1	1.2084	0	0.0	16.1572
2	1.2546	0	0.0	17.9736
3	1.3009	0	0.0	19.9943
4	1.3472	4	1.1	22.2422
5	1.3934	7	1.9	24.7427
6	1.4397	7	1.9	27.5244
7	1.4860	15	4.0	30.6188
8	1.5323	17	4.5	34.0611
9	1.5785	36	9.6	37.8904
10	1.6248	24	6.4	42.1502
11	1.6711	45	12.0	46.8889
12	1.7173	43	11.4	52.1603
13	1.7636	43	11.4	58.0243
14	1.8099	36	9.6	64.5477
15	1.8562	30	8.0	71.8044
16	1.9024	21	5.6	79.8770
17	1.9487	16	4.3	88.8570
18	1.9950	6	1.6	98.8467
19	2.0412	6	1.6	109.9594
20	2.0875	5	1.3	122.3215
21	2.1338	3	0.8	136.0734
22	2.1800	4	1.1	151.3712
23	2.2263	2	0.5	168.3890
24	2.2726	2	0.5	187.3200

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: ZN



APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: ZN

CELL	LOWER LIMIT	NO	CUMPT	APPROXIMATE CUMULATIVE PROBABILITY PLOT OF ARITHMETIC VALUES											LOG LIMIT		
1	151.234	12	3.2	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	2.1796
2	146.773	11	3.5	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	2.1666	
3	142.313	10	3.5	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	2.1532	
4	137.852	9	4.0	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	2.1394	
5	133.391	8	4.3	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	2.1251	
6	128.930	7	4.3	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	2.1104	
7	124.470	6	4.8	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	2.0951	
8	120.009	5	5.3	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	2.0792	
9	115.548	4	6.1	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	2.0628	
10	111.088	3	6.9	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	2.0457	
11	106.627	2	7.4	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	2.0279	
12	102.166	1	7.7	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	2.0093	
13	97.705	0	8.5	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	1.9899	
14	93.245	0	9.8	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	1.9696	
15	88.784	0	12.8	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	1.9483	
16	84.323	0	14.6	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	1.9259	
17	79.862	0	18.4	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	1.9023	
18	75.402	0	21.5	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	1.8774	
19	70.941	0	27.4	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	1.8509	
20	66.480	0	33.2	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	1.8227	
21	62.020	0	38.0	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	1.7925	
22	57.559	0	48.7	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	1.7601	
23	53.098	0	57.2	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	1.7251	
24	48.637	0	66.0	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	1.6870	
25	44.177	0	74.5	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	1.6452	
26	39.716	0	83.8	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	1.5990	
27	35.255	0	90.2	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	1.5472	
28	30.795	0	95.2	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	1.4885	
29	26.334	0	97.1	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	1.4205	
30	21.873	0	100.0	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	1.3399	
31	17.412	0	100.0	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	1.2409	
32	12.952	0	100.0	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	1.1123	
33	8.491	0	100.0	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.9290	
34	4.030	0	100.0	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.6053	
35	-0.431	0	100.0	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.0000000000	
36	-4.891	0	100.0	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.0000000000	
37	-9.352	0	100.0	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.0000000000	
38	-13.813	0	100.0	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.0000000000	
39	-18.273	0	100.0	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.0000000000	
40	-22.734	0	100.0	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.0000000000	
41	-27.195	0	100.0	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.0000000000	

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

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: AG
 CALCULATED PARAMETERS: MEAN = 0.3524 NUMBER OF VALUES IS 227
 STO.DEV. = 0.1956 VARIANCE = 0.0383

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

ICELL	LOWER LIMIT	NOI	PCTI	LOG LIMIT
1	-0.2344	0	0.0	-----
2	-0.1855	0	0.0	-----
3	-0.1366	0	0.0	-----
4	-0.0877	0	0.0	-----
5	-0.0388	0	0.0	-----
6	0.0101	0	0.0	-1.9948
7	0.0590	0	0.0	-1.2290
8	0.1079	0	0.0	-0.9669
9	0.1568	55	24.2	-0.8046
10	0.2057	0	0.0	-0.6867
11	0.2546	93	41.0	-0.5941
12	0.3035	0	0.0	-0.5178
13	0.3524	41	18.1	-0.4529
14	0.4013	0	0.0	-0.3965
15	0.4502	0	0.0	-0.3466
16	0.4991	21	9.3	-0.3018
17	0.5480	0	0.0	-0.2612
18	0.5969	7	3.1	-0.2241
19	0.6458	0	0.0	-0.1899
20	0.6947	3	1.3	-0.1582
21	0.7436	0	0.0	-0.1287
22	0.7925	3	1.3	-0.1010
23	0.8414	0	0.0	-0.0750
24	0.8903	1	0.4	-0.0505

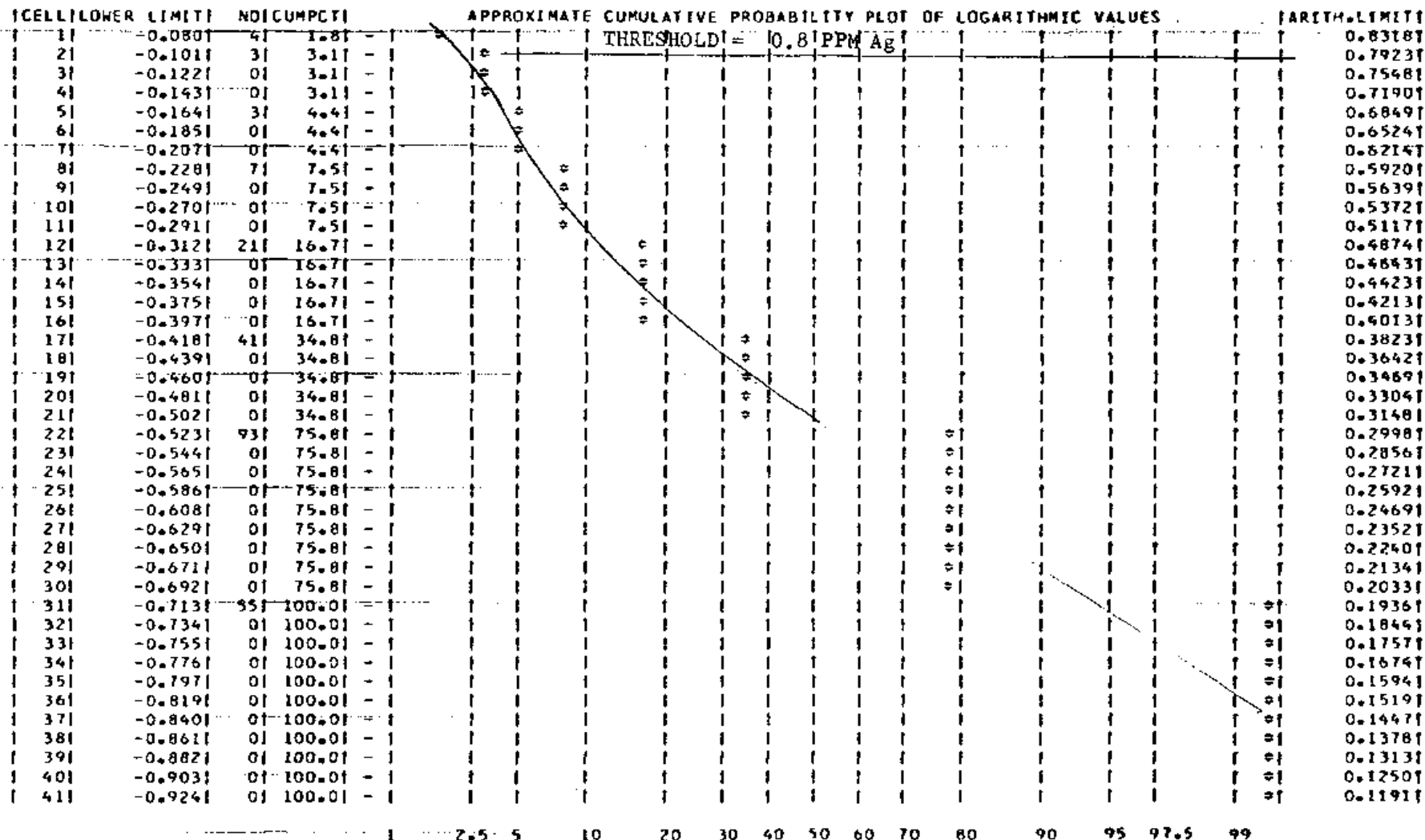
LOG VALUES.....: MEAN = -0.4915 STO.DEV. = 0.1688 VARIANCE = 0.0285

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

ICELL	LOWER LIMIT	NOI	PCTI	ARITH. LIMIT
1	-0.9979	0	0.0	0.1005
2	-0.9571	0	0.0	0.1107
3	-0.9135	0	0.0	0.1220
4	-0.8713	0	0.0	0.1345
5	-0.8291	0	0.0	0.1482
6	-0.7869	0	0.0	0.1633
7	-0.7447	0	0.0	0.1800
8	-0.7025	55	24.2	0.1985
9	-0.6603	0	0.0	0.2186
10	-0.6181	0	0.0	0.2409
11	-0.5759	0	0.0	0.2655
12	-0.5337	93	41.0	0.2926
13	-0.4915	0	0.0	0.3225
14	-0.4493	0	0.0	0.3554
15	-0.4071	41	18.1	0.3917
16	-0.3649	0	0.0	0.4317
17	-0.3227	21	9.3	0.4757
18	-0.2805	0	0.0	0.5243
19	-0.2382	7	3.1	0.5778
20	-0.1960	3	1.3	0.6367
21	-0.1538	0	0.0	0.7017
22	-0.1116	3	1.3	0.7733
23	-0.0694	1	0.4	0.8522
24	-0.0272	0	0.0	0.9197

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: AG



APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: AG

CELL	LOWER	LIMIT	NO	CUMPT			APPROXIMATE CUMULATIVE PROBABILITY PLOT OF ARITHMETIC VALUES											LOG LIMIT
1	0.829	4	1.8	*														-0.0813
2	0.805	0	1.8	*														-0.0943
3	0.780	3	3.1															-0.1077
4	0.756	0	3.1															-0.1216
5	0.731	0	3.1															-0.1359
6	0.707	0	3.1															-0.1506
7	0.682	3	4.4															-0.1659
8	0.658	0	4.4															-0.1817
9	0.634	0	4.4															-0.1982
10	0.609	0	4.4															-0.2153
11	0.585	7	7.5		*													-0.2331
12	0.560	0	7.5		*													-0.2516
13	0.536	0	7.5		*													-0.2710
14	0.511	0	7.5		*													-0.2913
15	0.487	21	16.7		*													-0.3126
16	0.462	0	16.7		*													-0.3349
17	0.438	0	16.7		*													-0.3585
18	0.414	0	16.7		*													-0.3835
19	0.389	41	34.8															-0.4099
20	0.365	0	34.8															-0.4381
21	0.340	0	34.8															-0.4683
22	0.316	0	34.8															-0.5007
23	0.291	93	75.8															-0.5357
24	0.267	0	75.8															-0.5737
25	0.242	0	75.8															-0.6155
26	0.218	0	75.8															-0.6617
27	0.193	55	100.0															-0.7133
28	0.169	0	100.0															-0.7720
29	0.145	0	100.0															-0.8399
30	0.120	0	100.0															-0.9203
31	0.096	0	100.0															-1.0191
32	0.071	0	100.0															-1.1472
33	0.047	0	100.0															-1.3298
34	0.022	0	100.0															-1.6508
35	-0.002	0	100.0															*****
36	-0.027	0	100.0															*****
37	-0.051	0	100.0															*****
38	-0.075	0	100.0															*****
39	-0.100	0	100.0															*****
40	-0.124	0	100.0															*****
41	-0.149	0	100.0															*****

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

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: MN
 CALCULATED PARAMETERS: MEAN = 376.4175 STD.DEV. = 321.8616 VARIANCE = *****

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

ICELL	LOWER LIMIT	NO	PCT	LOG LIMIT
1	-589.1692	0	0.0	*****
2	-508.7039	0	0.0	*****
3	-428.2385	0	0.0	*****
4	-347.7732	0	0.0	*****
5	-267.3079	0	0.0	*****
6	-186.8427	0	0.0	*****
7	-106.3773	0	0.0	*****
8	-25.9119	0	0.0	*****
9	54.5535	10	2.7	1.7368
10	135.0189	74	19.7	2.1304
11	215.4843	129	34.3	2.3334
12	295.9497	58	15.4	2.4712
13	376.4153	40	10.6	2.5757
14	456.8809	21	5.6	2.6598
15	537.3464	7	1.9	2.7303
16	617.8120	7	1.9	2.7909
17	698.2776	3	0.8	2.8440
18	778.7432	6	1.6	2.8914
19	859.2087	1	0.3	2.9341
20	939.6743	3	0.8	2.9730
21	1020.1399	2	0.5	3.0087
22	1100.6055	1	0.3	3.0416
23	1181.0710	3	0.8	3.0723
24	1261.5366	0	0.0	3.1009

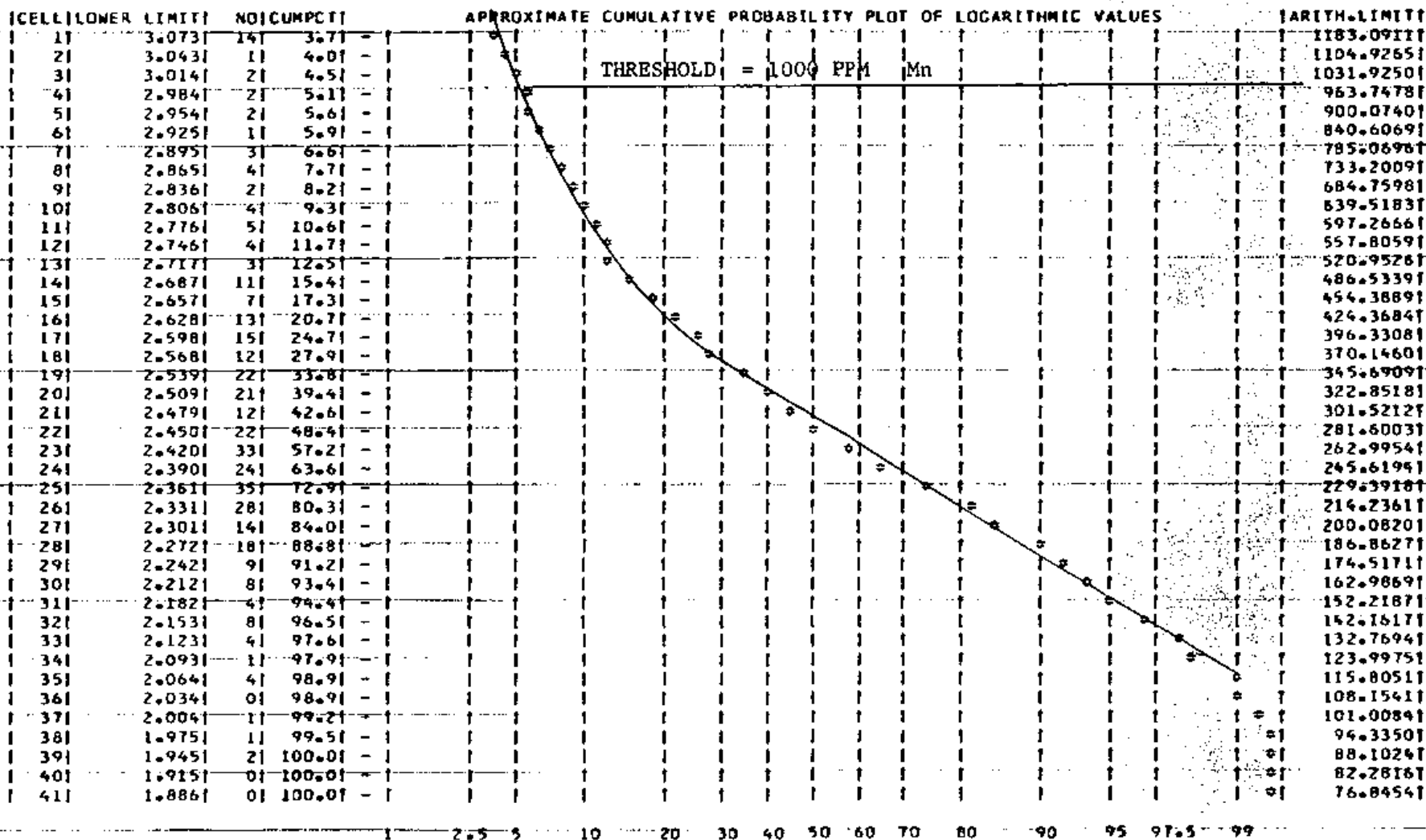
LOG VALUES: MEAN = 2.4942 STD.DEV. = 0.2375 VARIANCE = 0.0564

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

ICELL	LOWER LIMIT	NO	PCT	ARITH. LIMIT
1	1.7817	0	0.0	60.4949
2	1.8411	0	0.0	69.3568
3	1.9005	0	0.0	79.5168
4	1.9598	4	1.1	91.1651
5	2.0192	1	0.3	104.5198
6	2.0786	7	1.9	119.8309
7	2.1379	11	2.9	137.3848
8	2.1973	14	3.7	157.5102
9	2.2567	30	8.0	180.5839
10	2.3160	49	13.0	207.0375
11	2.3754	60	16.0	237.3663
12	2.4348	43	11.4	272.1379
13	2.4942	38	10.1	312.0032
14	2.5535	36	9.6	357.7083
15	2.6129	22	5.9	410.1086
16	2.6723	17	4.5	470.1853
17	2.7316	7	1.9	539.0623
18	2.7910	7	1.9	618.0291
19	2.8504	6	1.6	708.5645
20	2.9097	4	1.1	812.3616
21	2.9691	3	0.8	931.3638
22	3.0285	4	1.1	1067.7986
23	3.0879	3	0.8	1224.2195
24	3.1472	2	0.5	1403.5544

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: MN



APPLE GROUP 1986 SDIC GEOCHEM SURVEY

VARIABLE NAME IS: MN

CELL	LOWER LIMIT	NO	CUMPT	APPROXIMATE CUMULATIVE PROBABILITY	LOG LIMIT
1	1160.955	14	3.7		3.0648
2	1120.722	0	3.7		3.0495
3	1080.489	1	4.0		3.0336
4	1040.256	2	4.5		3.0171
5	1000.023	0	4.5		3.0000
6	959.790	3	5.3		2.9822
7	919.557	0	5.3		2.9636
8	879.324	1	5.6		2.9441
9	839.092	2	6.1		2.9238
10	798.859	1	6.4		2.9025
11	758.626	4	7.4		2.8800
12	718.393	2	8.0		2.8564
13	678.160	1	8.2		2.8313
14	637.927	4	9.3		2.8048
15	597.694	5	10.6		2.7765
16	557.461	4	11.7		2.7462
17	517.228	4	12.8		2.7137
18	476.995	12	16.0		2.6785
19	436.762	13	19.4		2.6402
20	396.530	20	24.7		2.5983
21	356.297	26	31.6		2.5518
22	316.064	32	40.2		2.4998
23	275.831	39	50.5		2.4406
24	235.598	70	69.1		2.3722
25	195.365	68	81.2		2.2988
26	155.133	25	93.9		2.1907
27	114.900	19	98.9		2.0603
28	74.667	4	100.0		1.8731
29	34.435	0	100.0		1.5370
30	-5.798	0	100.0		
31	-46.031	0	100.0		
32	-86.263	0	100.0		
33	-126.496	0	100.0		
34	-166.729	0	100.0		
35	-206.962	0	100.0		
36	-247.194	0	100.0		
37	-287.427	0	100.0		
38	-327.659	0	100.0		
39	-367.892	0	100.0		
40	-408.125	0	100.0		
41	-448.357	0	100.0		

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

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: AS
 CALCULATED PARAMETERS: MEAN = 9.0362 NUMBER OF VALUES IS 276
 STD.DEV. = 8.0299 VARIANCE = 64.4787

PERCENTAGE HISTOGRAM OF ARITHMETIC VALUES

ICELL	LOWER LIMIT	NOI	PCTI	LOG LIMIT
1	-15.0535	0	0.0	0.0027
2	-13.0460	0	0.0	0.4791
3	-11.0385	0	0.0	0.7008
4	-9.0311	0	0.0	0.8469
5	-7.0236	0	0.0	0.9560
6	-5.0161	0	0.0	1.0431
7	-3.0087	0	0.0	1.1156
8	-1.0012	0	0.0	1.1778
9	1.0063	47	17.0	1.2321
10	3.0137	56	20.3	1.2804
11	5.0212	46	16.7	1.3239
12	7.0287	37	13.4	1.3634
13	9.0361	32	11.6	1.3996
14	11.0436	12	4.3	1.4330
15	13.0511	17	6.2	1.4641
16	15.0585	7	2.5	1.4930
17	17.0660	3	1.1	
18	19.0735	4	1.4	
19	21.0809	0	0.0	
20	23.0884	2	0.7	
21	25.0959	2	0.7	
22	27.1034	1	0.4	
23	29.1109	3	1.1	
24	31.1183	3	1.1	

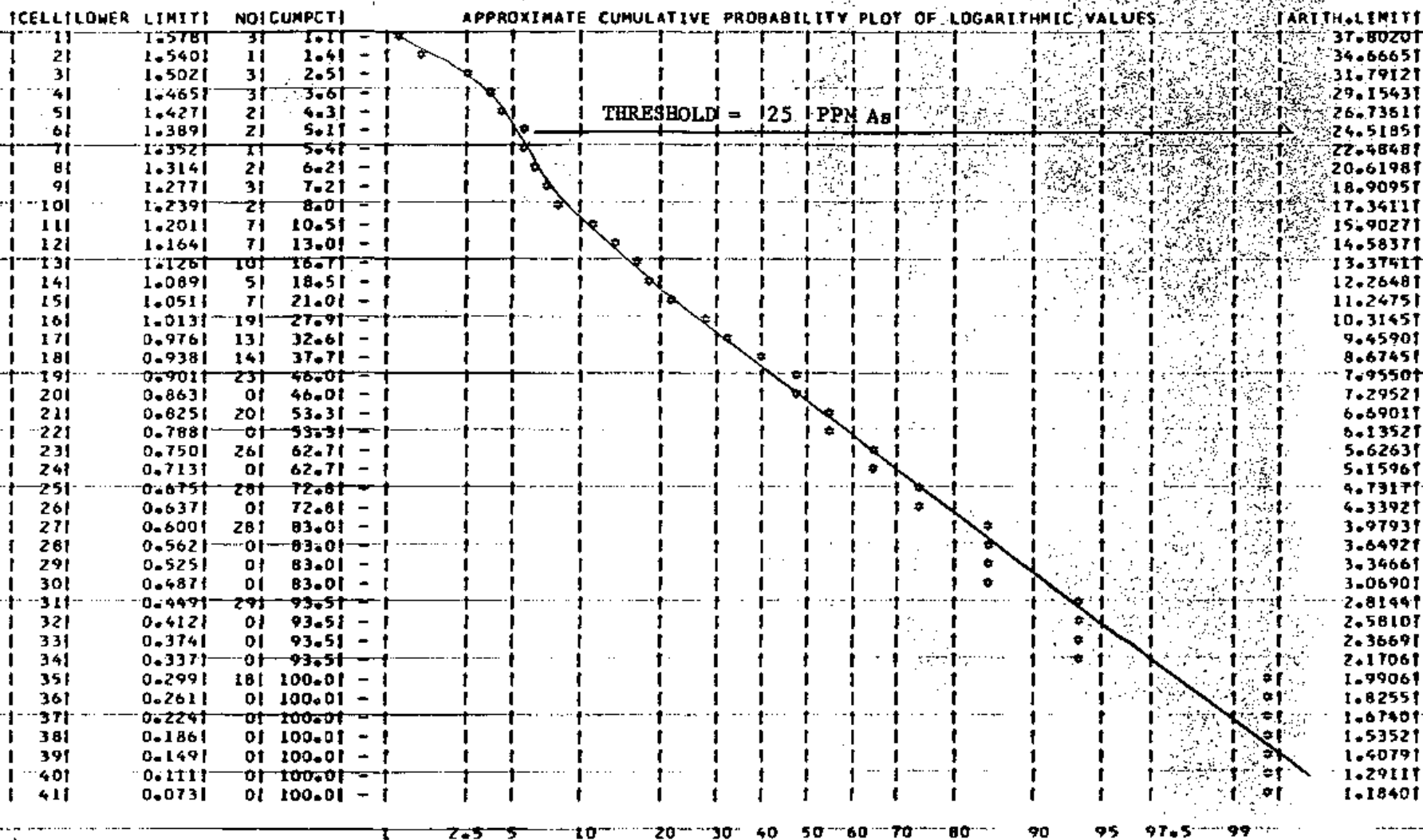
LOG VALUES: MEAN = 0.8442 STD.DEV. = 0.3008 VARIANCE = 0.0905

PERCENTAGE HISTOGRAM OF LOGARITHMIC VALUES

ICELL	LOWER LIMIT	NOI	PCTI	ARITH. LIMIT
1	-0.0583	0	0.0	0.8745
2	0.0169	0	0.0	1.0398
3	0.0922	0	0.0	1.2364
4	0.1674	0	0.0	1.4701
5	0.2426	18	6.5	1.7481
6	0.3178	0	0.0	2.0786
7	0.3930	0	0.0	2.4716
8	0.4682	29	10.5	2.9390
9	0.5434	28	10.1	3.4946
10	0.6186	0	0.0	4.1554
11	0.6938	28	10.1	4.9410
12	0.7690	26	9.4	5.8752
13	0.8442	43	15.6	6.9861
14	0.9194	14	5.1	8.3069
15	0.9946	32	11.6	9.8775
16	1.0699	12	4.3	11.7451
17	1.1451	19	6.9	13.9657
18	1.2203	8	2.9	16.6063
19	1.2955	4	1.4	19.7461
20	1.3707	4	1.4	23.4796
21	1.4459	7	2.5	27.9189
22	1.5211	1	0.4	33.1976
23	1.5963	0	0.0	39.4744
24	1.6715	1	0.4	46.9380

APPLE GROUP 1986 SOIL GEOCHEM SURVEY

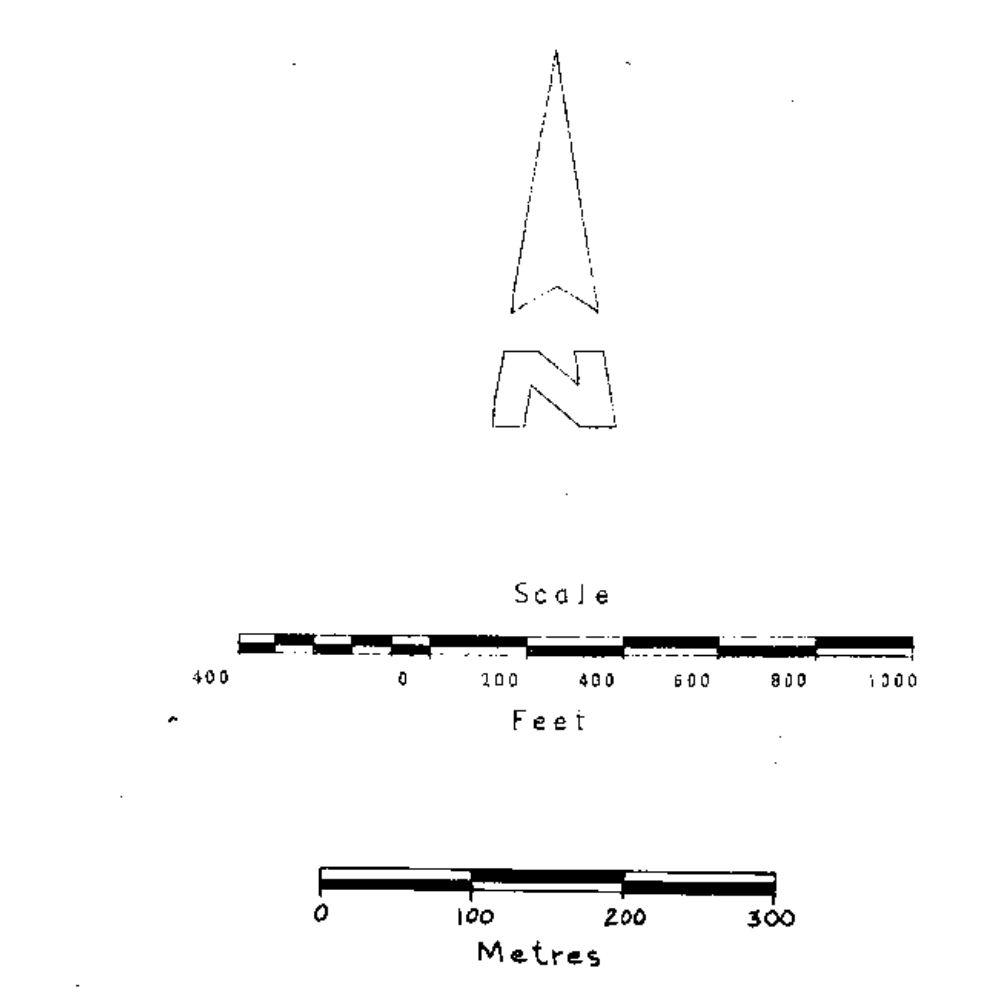
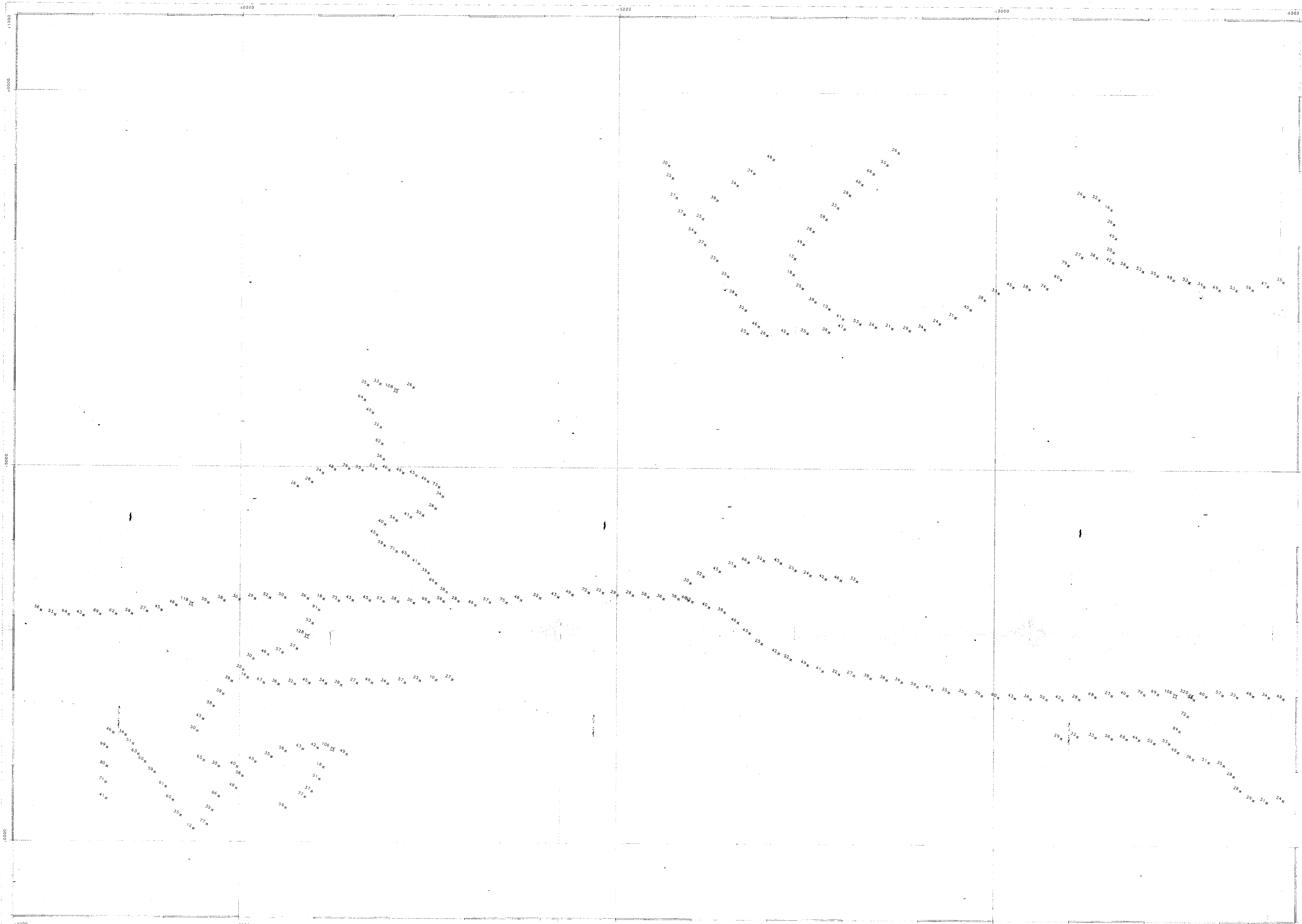
VARIABLE NAME IS: AS



APPLE GROUP 1986 SOIL GEOCHEM SURVEY

VARIABLE NAME IS: AS

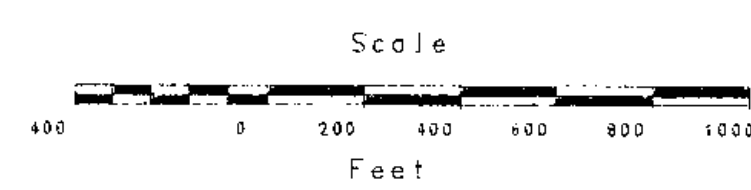
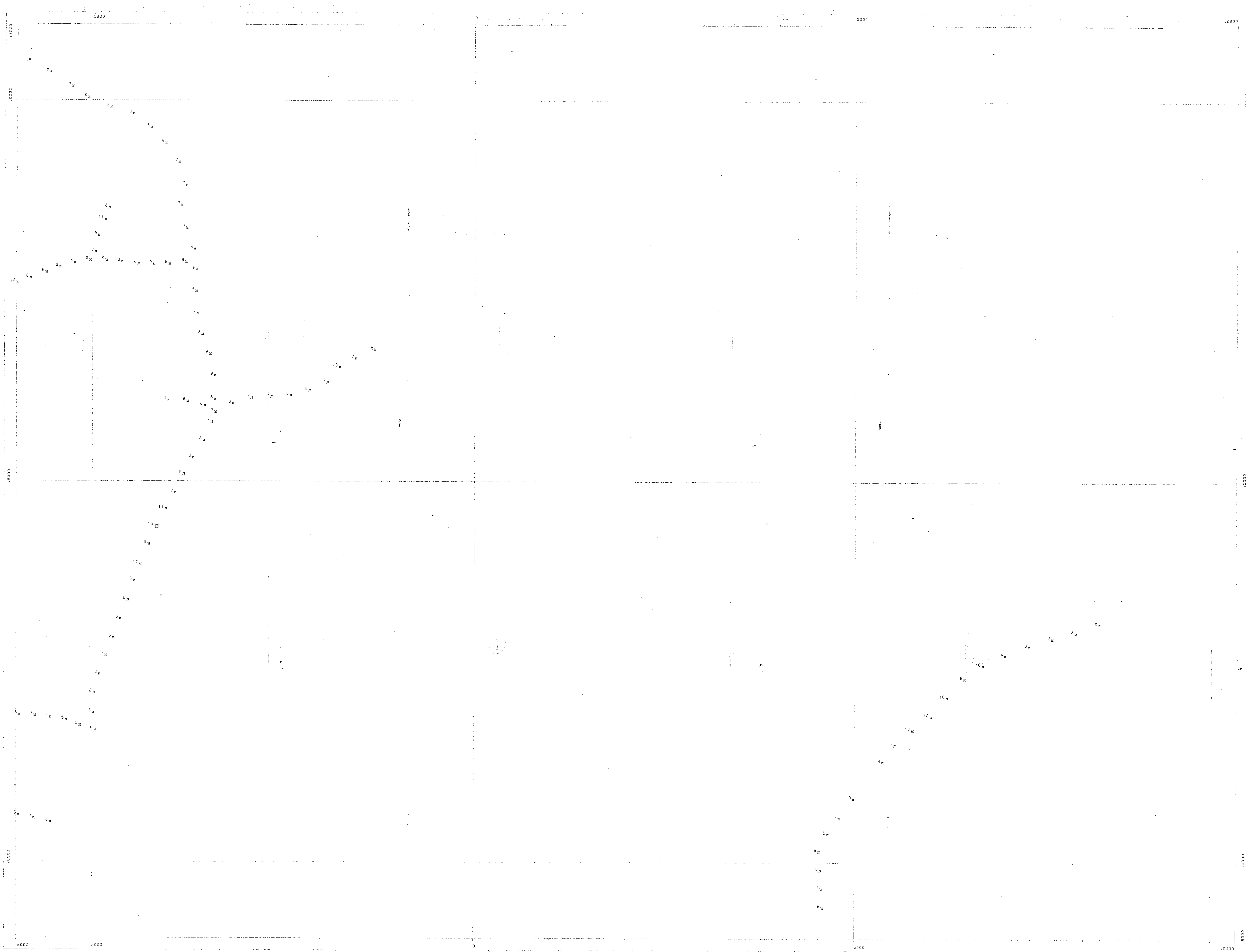
(CELL	LOWER LIMIT)	NO	CUM PCT)	APPROXIMATE CUMULATIVE PROBABILITY PLOT OF ARITHMETIC VALUES										LOG LIMIT)									
1	28.809	10	3.8																				1.4585
2	27.605	1	4.0	*																			1.4410
3	26.602	1	4.3	*																			1.4249
4	25.598	1	4.7	*																			1.4082
5	24.594	1	5.1	*																			1.3908
6	23.590	1	5.4	*																			1.3727
7	22.587	0	5.4	*																			1.3538
8	21.583	0	5.4	*																			1.3341
9	20.579	2	6.2	*																			1.3134
10	19.575	2	6.9	*																			1.2917
11	18.572	1	7.2	*																			1.2688
12	17.568	2	8.0	*																			1.2447
13	16.564	5	9.8	*																			1.2192
14	15.560	2	10.5	*																			1.1920
15	14.557	7	13.0	*																			1.1631
16	13.553	10	16.7	*																			1.1320
17	12.549	5	18.5	*																			1.0986
18	11.545	7	21.0	*																			1.0624
19	10.542	19	27.9	*																			1.0229
20	9.538	13	32.6	*																			0.9795
21	8.534	14	37.7	*																			0.9312
22	7.531	23	48.0	*																			0.8768
23	6.527	20	53.3	*																			0.8147
24	5.523	26	62.7	*																			0.7422
25	4.519	28	72.8	*																			0.6551
26	3.516	28	83.0	*																			0.5460
27	2.512	29	93.5	*																			0.4000
28	1.508	18	100.0	*																			0.1784
29	0.504	0	100.0	*																			-0.2972
30	-0.499	0	100.0	*																			0.00000000
31	-1.503	0	100.0	*																			0.00000000
32	-2.507	0	100.0	*																			0.00000000
33	-3.511	0	100.0	*																			0.00000000
34	-4.514	0	100.0	*																			0.00000000
35	-5.518	0	100.0	*																			0.00000000
36	-6.522	0	100.0	*																			0.00000000
37	-7.525	0	100.0	*																			0.00000000
38	-8.529	0	100.0	*																			0.00000000
39	-9.533	0	100.0	*																			0.00000000
40	-10.537	0	100.0	*																			0.00000000
41	-11.540	0	100.0	*																			0.00000000
					1	2.5	5	10	20	30	40	50	60	70	80	90	95	97.5	99				



Grid File: ILC10CHM CUC
 Grid Size: 100 000
 Technique: TRIANGULATION
 Control Points: 382
 Control Order: 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99
 100 000 150 000 (100 000 101 000)
 X X
 Value #1 : -0.000000 0.100

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**
15,707
PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale 100
1986 SOIL GEOCH	Date 17-FEB-87
COPPER ANOMALIES MAP A	Project
	Drawn By A.T.R.
	Checked
	Approved J.A.P.
	Drawing No
	APCC CIN

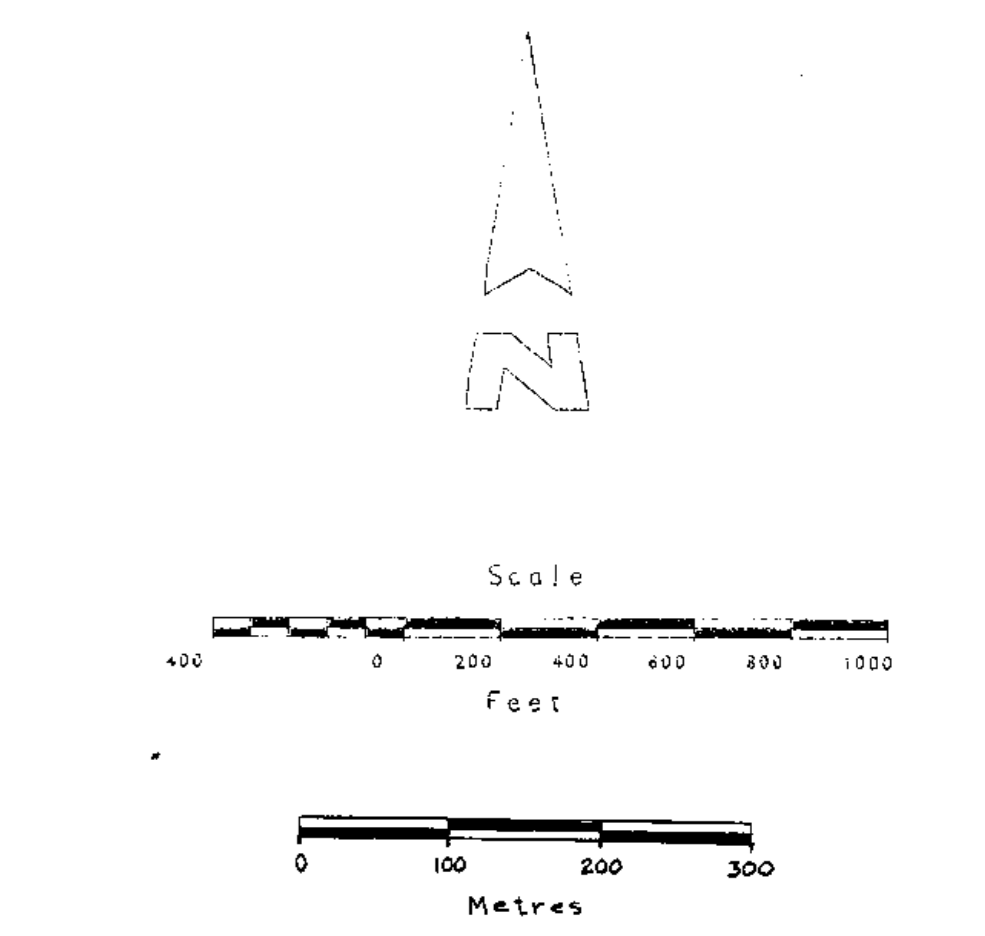
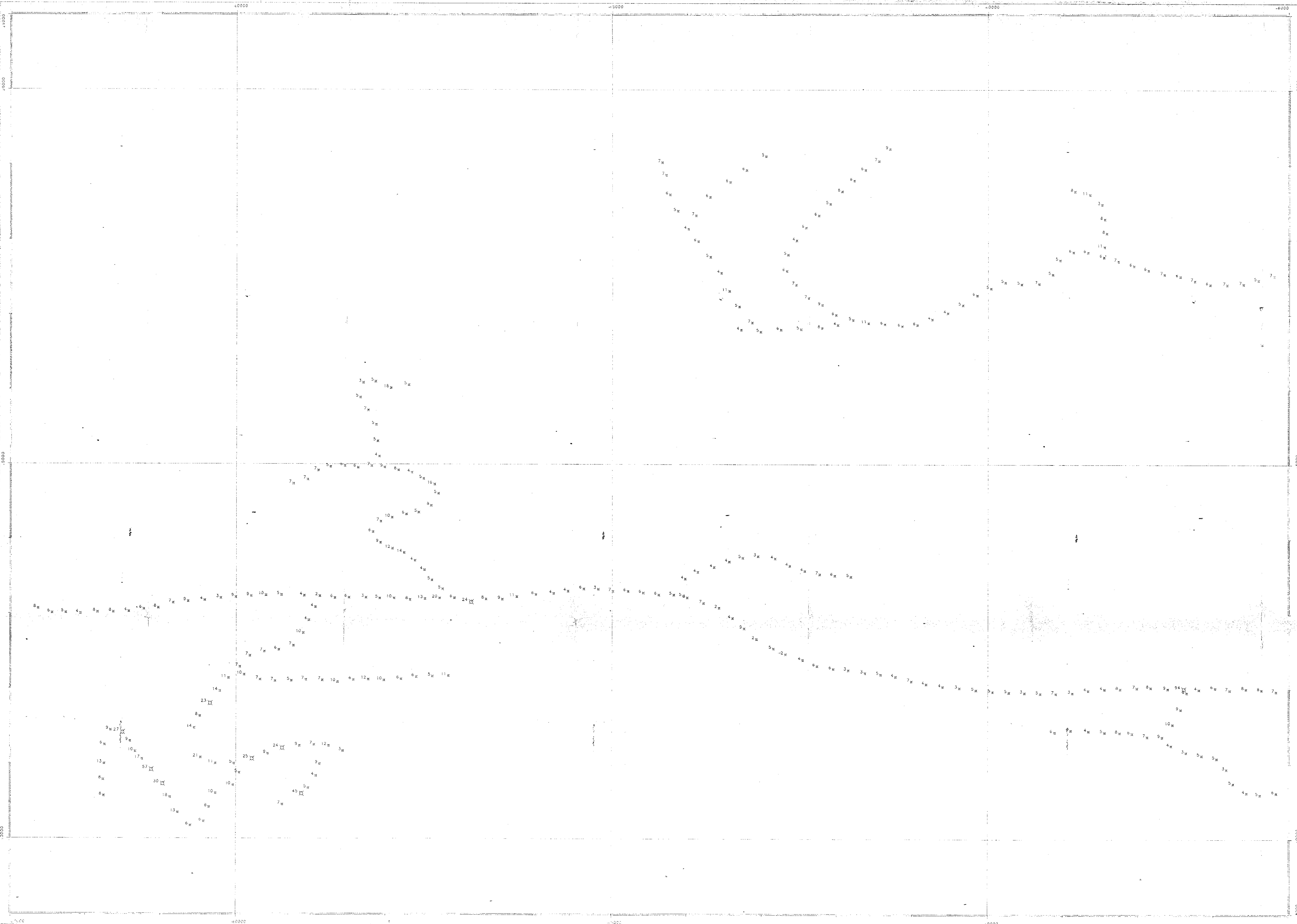


Grid Size: 100,000
 Technique: TRIANGULATION
 Points plotted: 92
 Contour Interval:
 500,000 100,000 (0.000 to 70000.000)
 Value #1: 223333.213

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707
PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale: 1:50
1986 SOIL GEOCHEM	Date: 7-25-87
MOLYBDENUM ANOMALIES	Project:
MAP 5	Drawn By: ATR
	Checked:
	Approved: JAF
	Drawing No:
	APGC: VZN



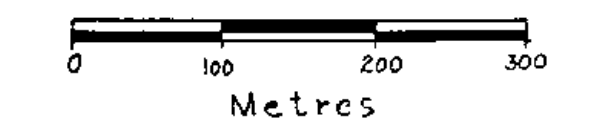
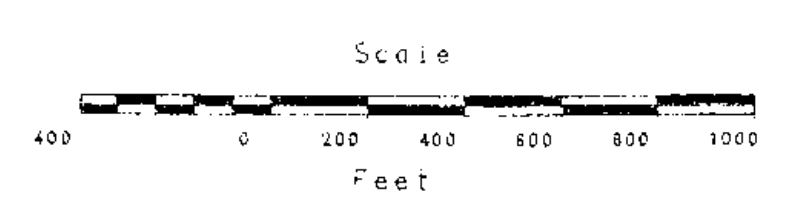
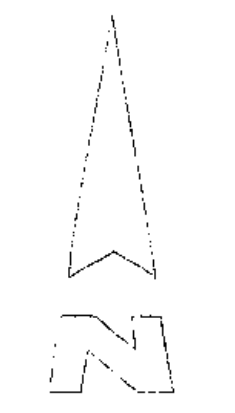
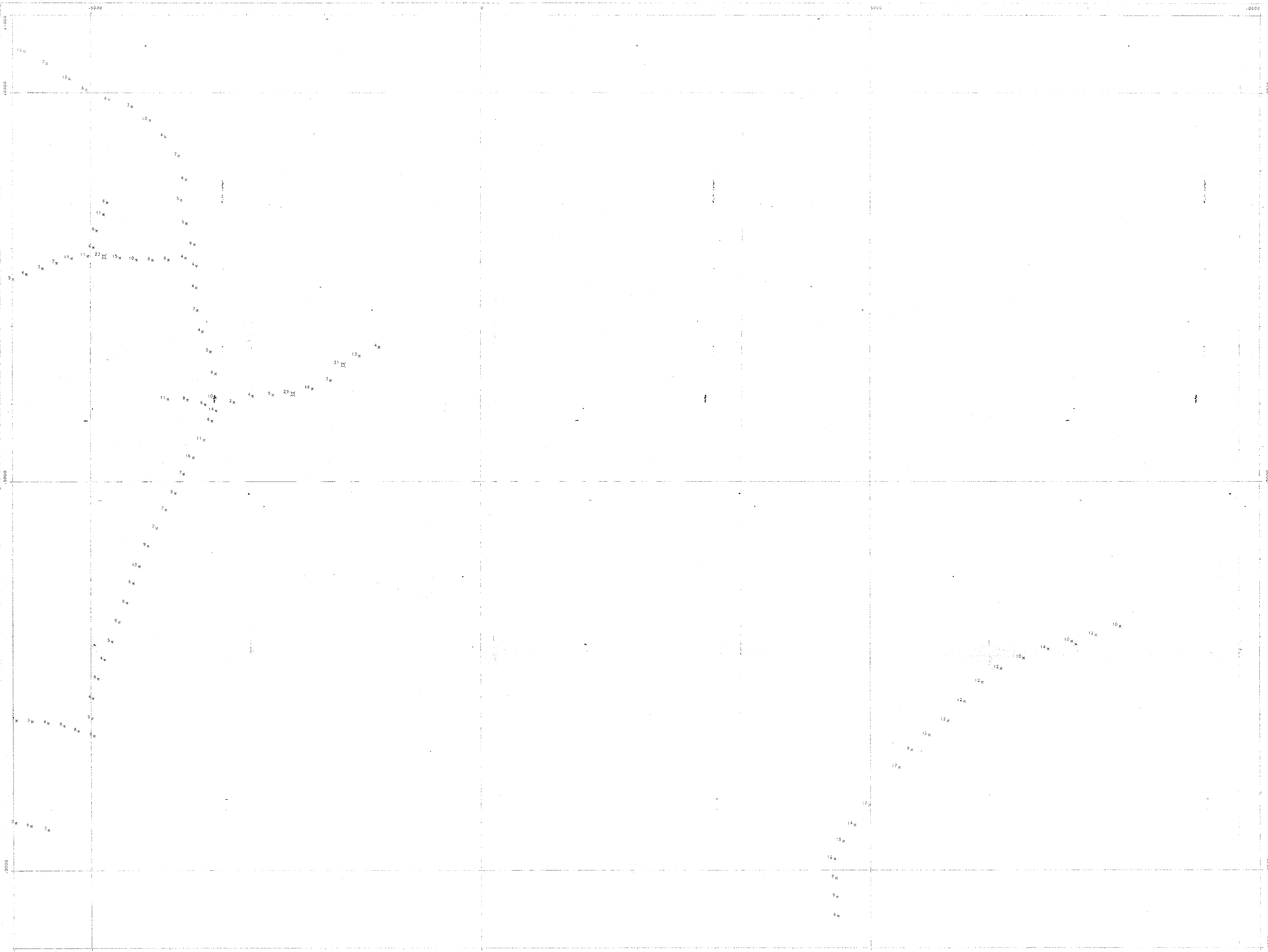
Grid File: TLCTDGM CUG
 Grid Size: 100,000
 Technique: TRIANGULATION
 Points Plotted: 282
 Contour Interval:
 100,000 50,000 (0,000 to 101,000)
 200,000 150,000 (101,000 to 201,000)
 Value #1: 15,707.02

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707.

PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale: 400
1986 SOIL GEOCH.	Date: 17-FEB-87
LEAD ANOMALIES MAP A	Project
	Drawn By: A.F.R.
	Checked
	Approved: J.A.F.
	Drawing No.
	APCC 01X



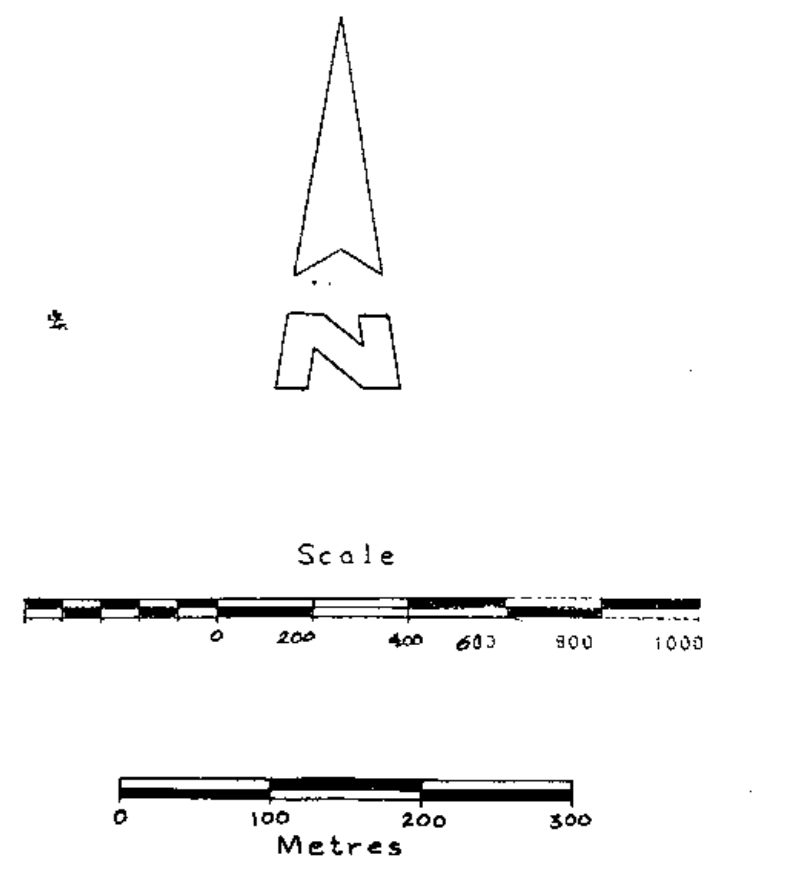
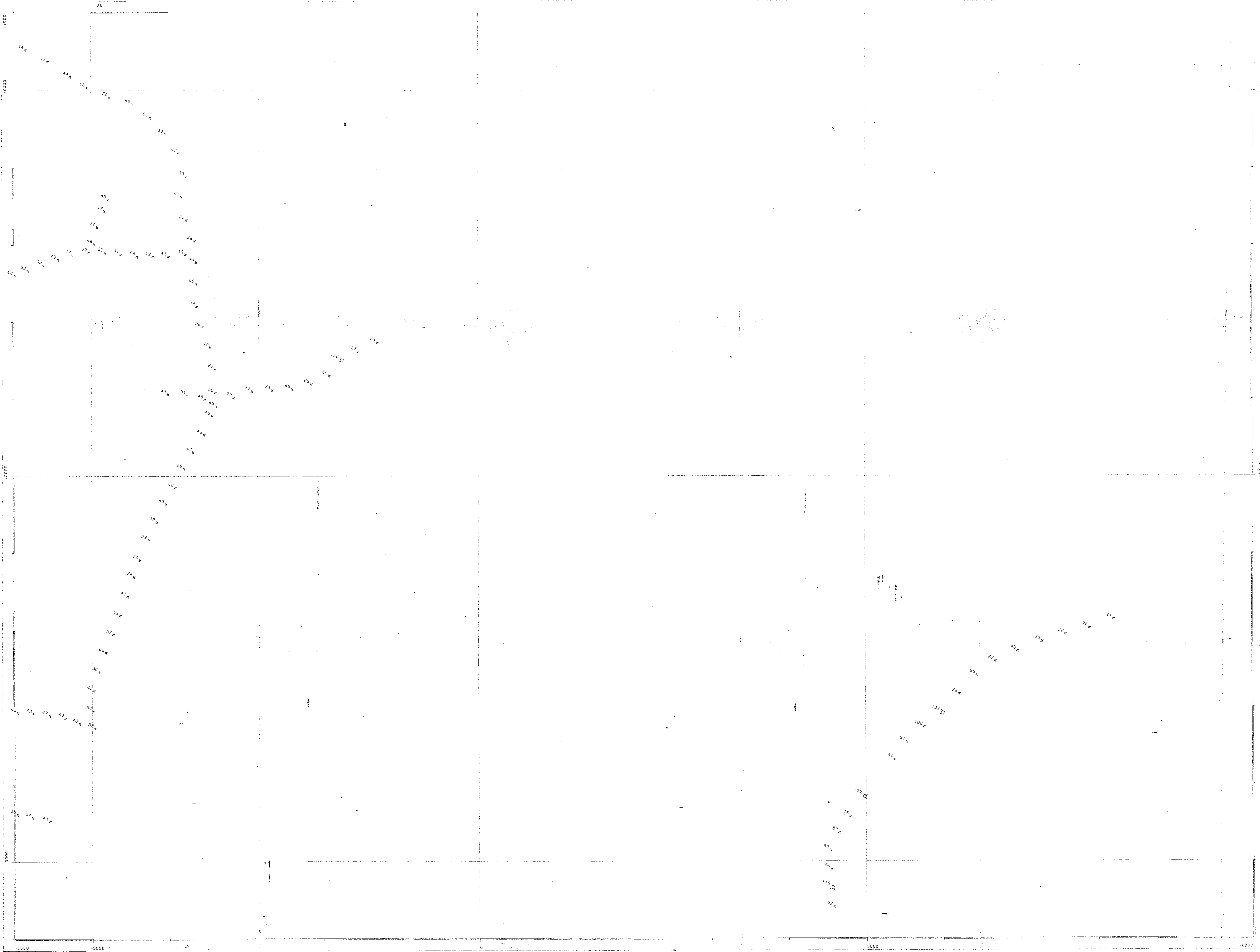
Grid Size: 100 000
 Technique: TRIANGULATION
 Points plotted: 94
 Contour Interval:
 500 000 100 000 (0 000 to 70000 000)
 Value #1: 200000 221

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707

PART 2 OF 6

UTAH MINES LIMITED	
Scale: 400	Date: 17-FEB-87
Project:	Drawn By: ATR
1986 SOIL GEOCHEM	Checked:
LEAD ANOMALIES MAP B	Approved: JAF
	Drawing No:
	APGC #2N

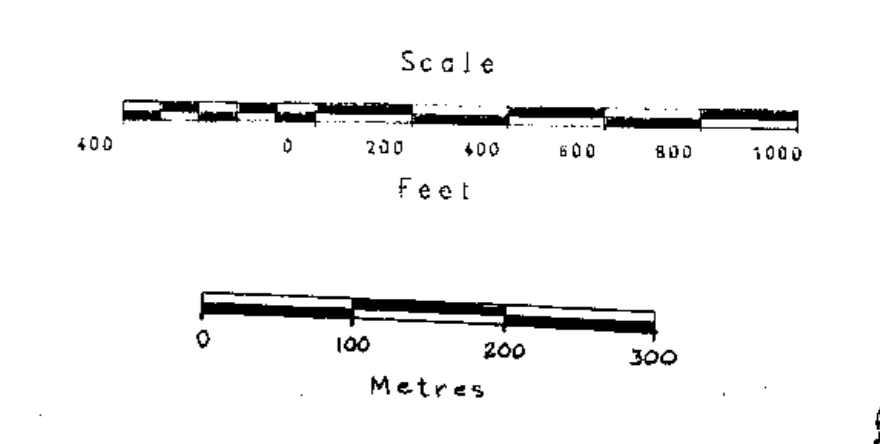
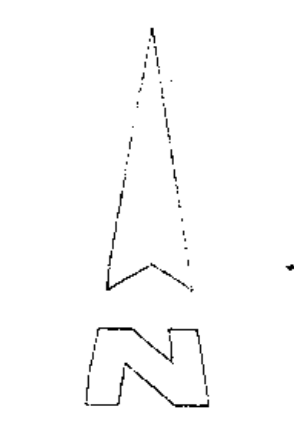
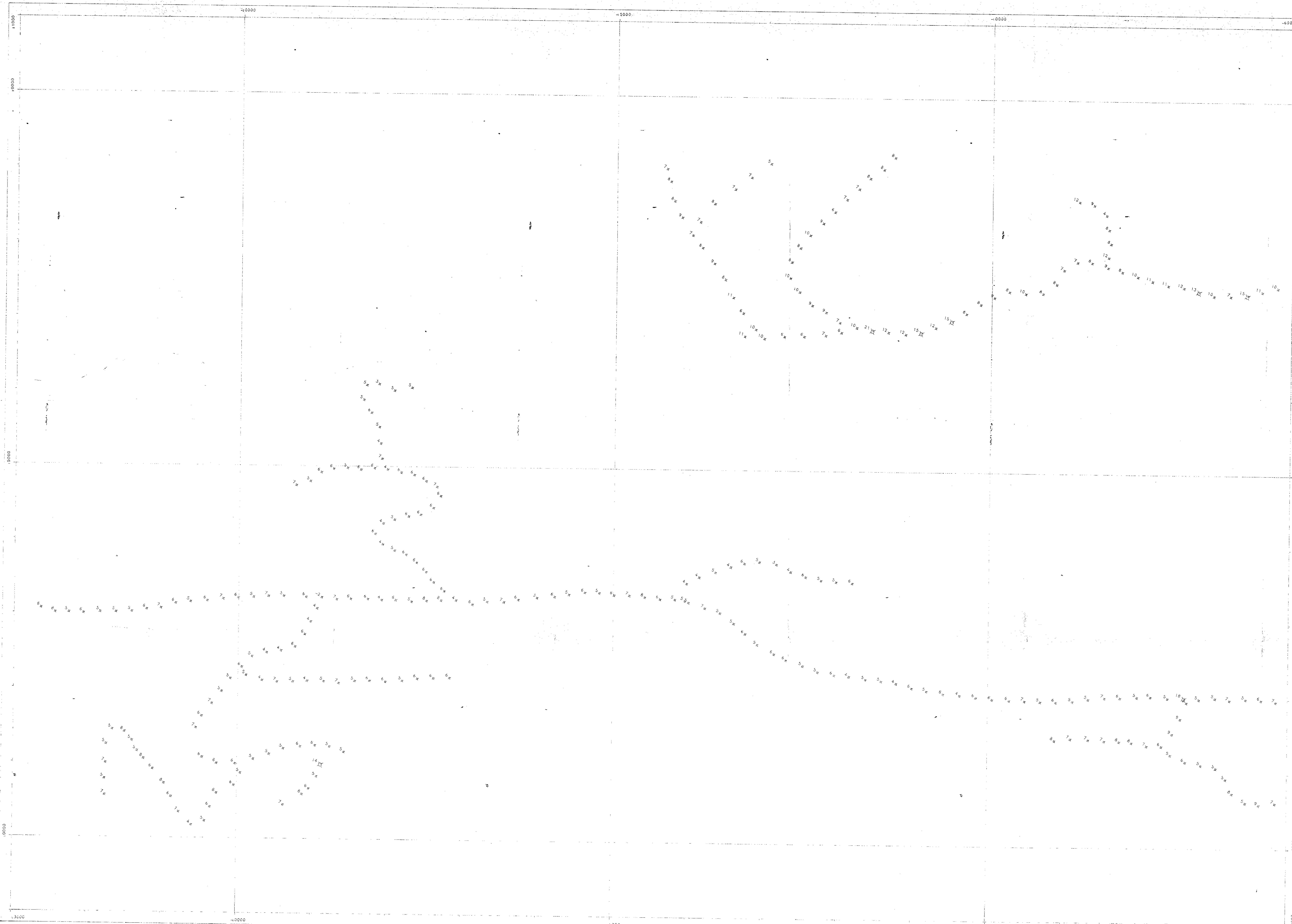


Grid File: TLG1GCHM.CUG
 Grid Size: 100 000
 Technique: TRIANGULATION
 Points plotted: 54
 Contour Intervals:
 100 000 50 000 (0 000 000 101 000)
 200 000 150 000 (101 000 201 000)
 Value #1 --200000 100

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707
PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale: 400
1986 SOIL GEOCH.	Date: 17-FEB-87
COPPER ANOMALIES MAP B	Project:
	Drawn By: A.I.R.
	Checked:
	Approved: J.A.F.
	Drawing No.
	APGC: C2N

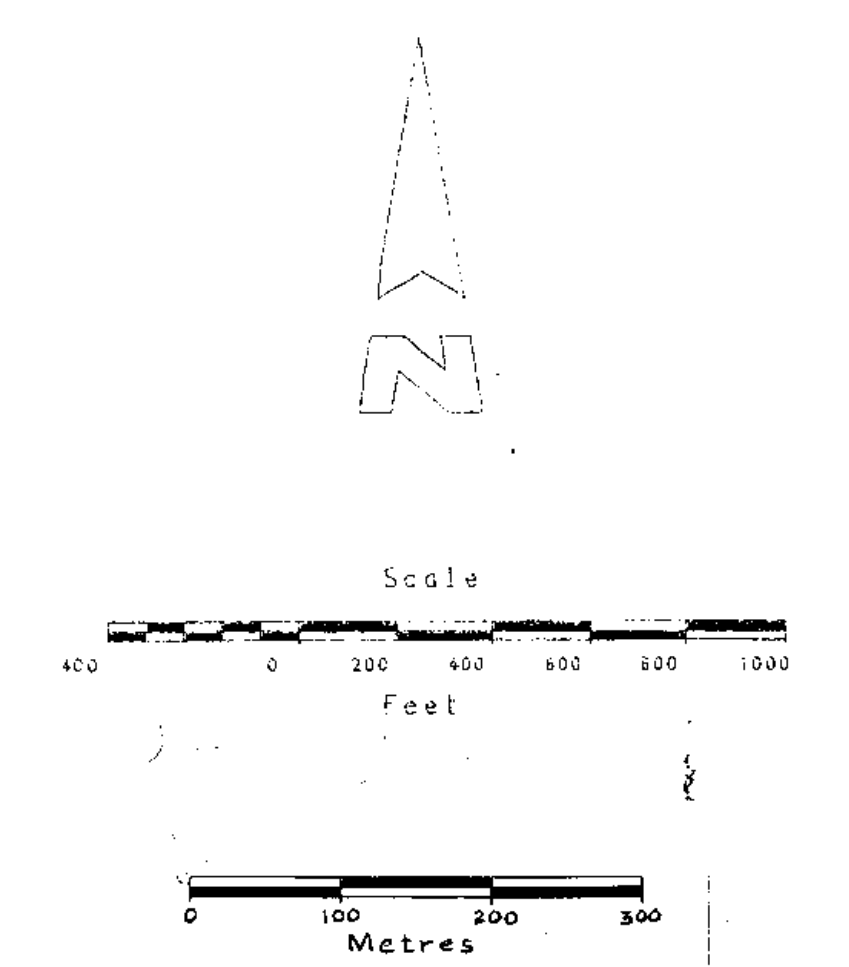
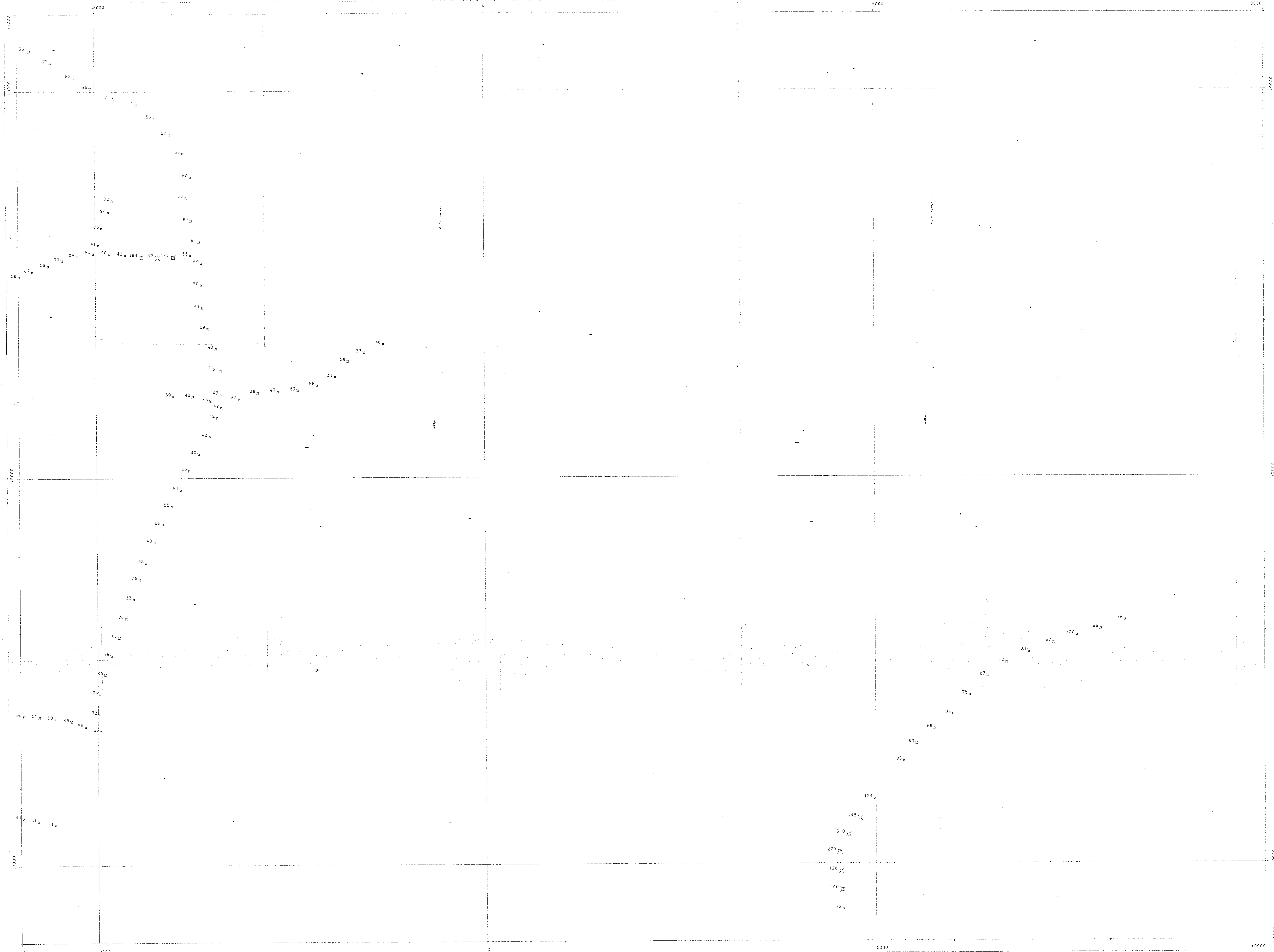


Grid Size: 100 000
 Technique: TRIANGULATION
 Points Plotted: 282
 Contour Interval: 100 (0.000 to 70000.000)
 Value #1: 100000000

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707
PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale: 1:500
1986 SOIL GEOCHEM	Date: 17-FEB-87
MOLYBDENUM ANOMALIES	Drawn By: ATH
MAP A	Checked: []
	Approved: []
	Drawn: []
	APGC MIN



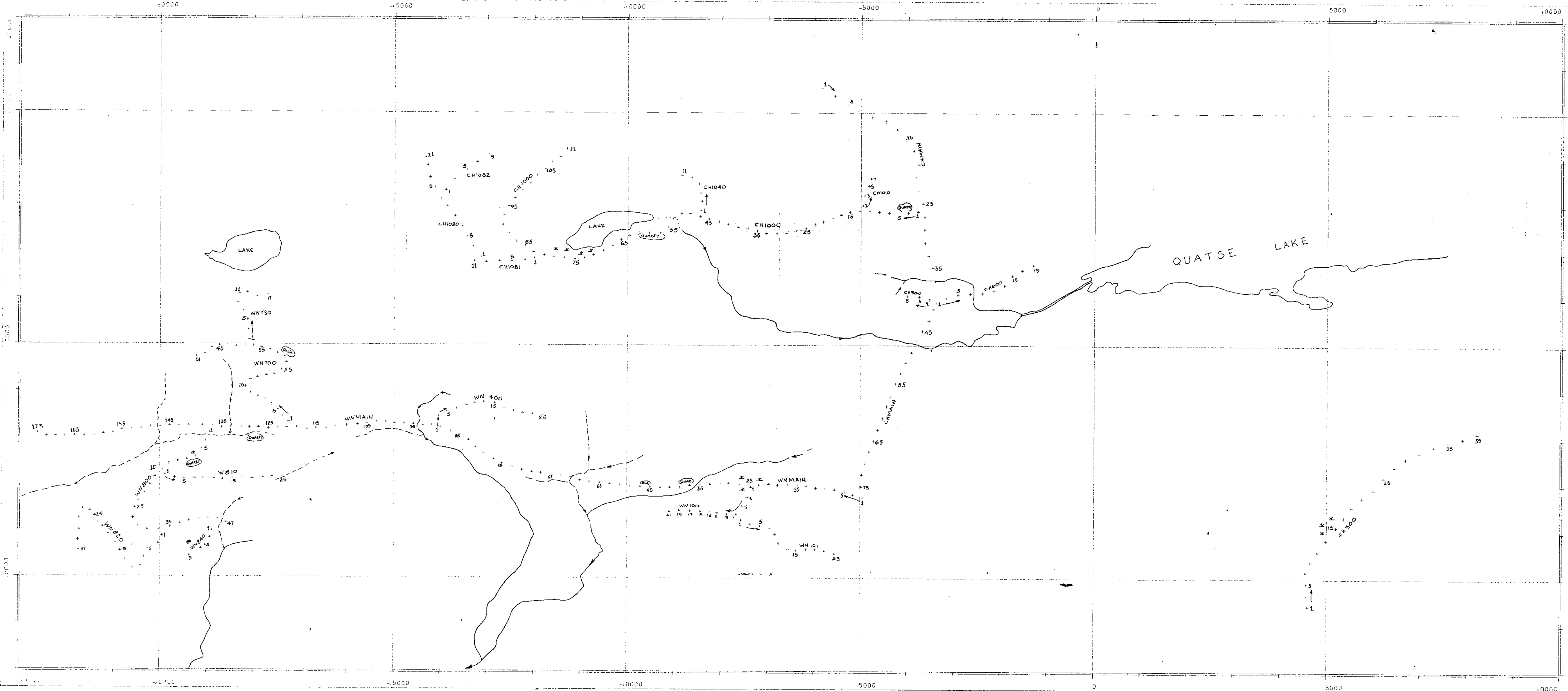
Grid Size: 100 000
 Technique: TRIANGULATION
 Points Plotted: 94
 Contour Intervals:
 500 000 100 000 (0 000 to 70000 000)
 K
 Value #1: 100000 1000

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707

PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale 400
1986 SOIL GEOCHEM	Date 17-FEB-87
ZINC ANALYSES MAP B	Project
	Drawn By: JAF
	Checked
	Approved: JAF
	Drawing No.
	APGC 22N



Grid File: ILSIGCHM.DWG
 Grid Size: 100 000
 Technique: TRIANGULATION
 Points plotted: 376
 Contour Intervals:
 100 000 50 000 (0 000 to 101 000)
 200 000 150 000 (101 000 to 201 000)

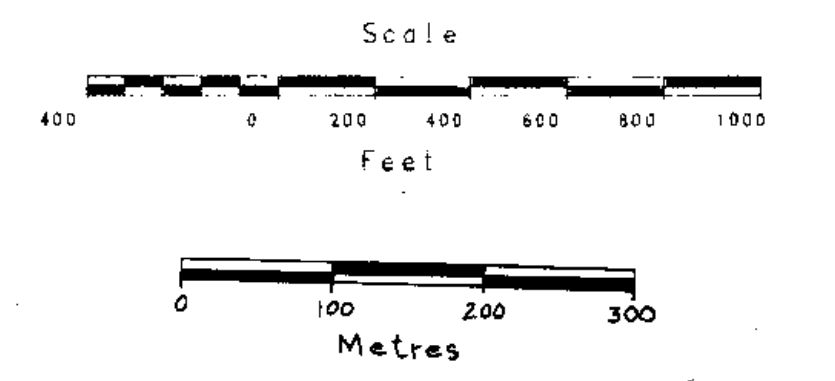
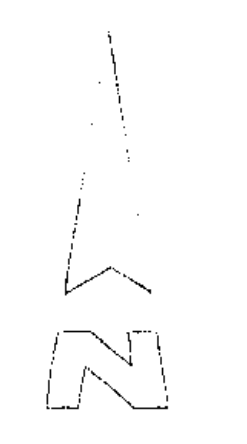
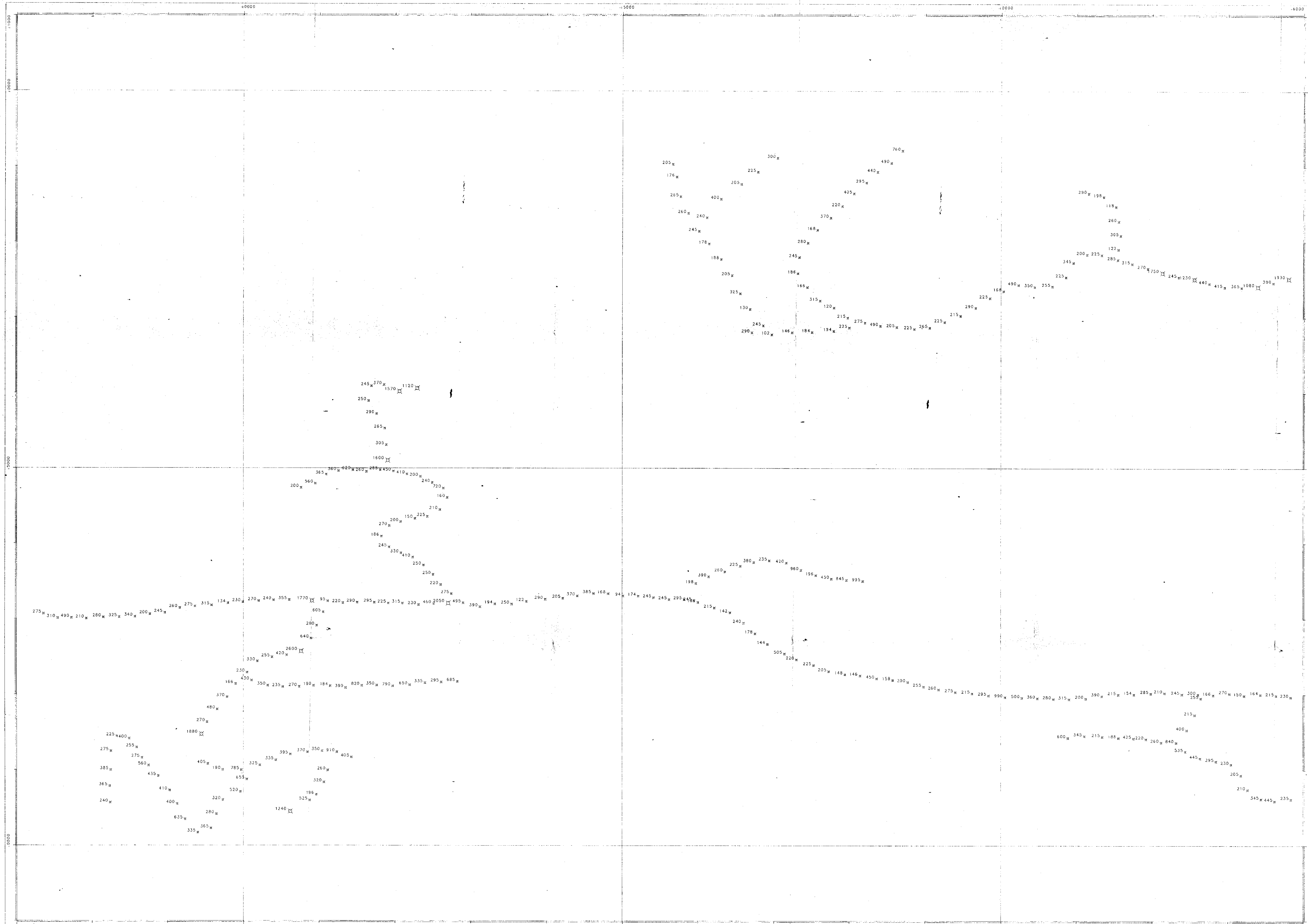
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

**15,707 PART
2 OF 6**

UTAH MINES LIMITED

ISLAND COPPER MINE
 WEST END 1986 GEOCH.
 STATION LOCATION POSTER

Scale	1:500
Date	17-FEB-87
Project	
Drawn By	ATR
Checked	
Approved	JAF
Drawing No.	
APGC	LC

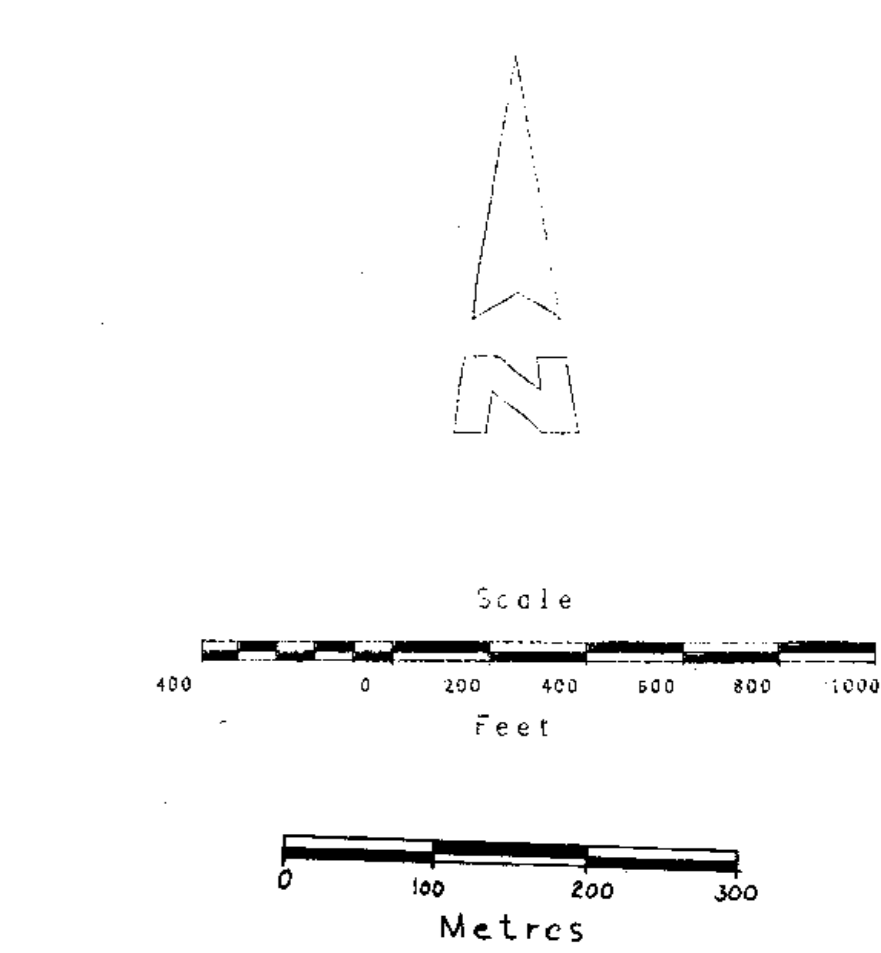
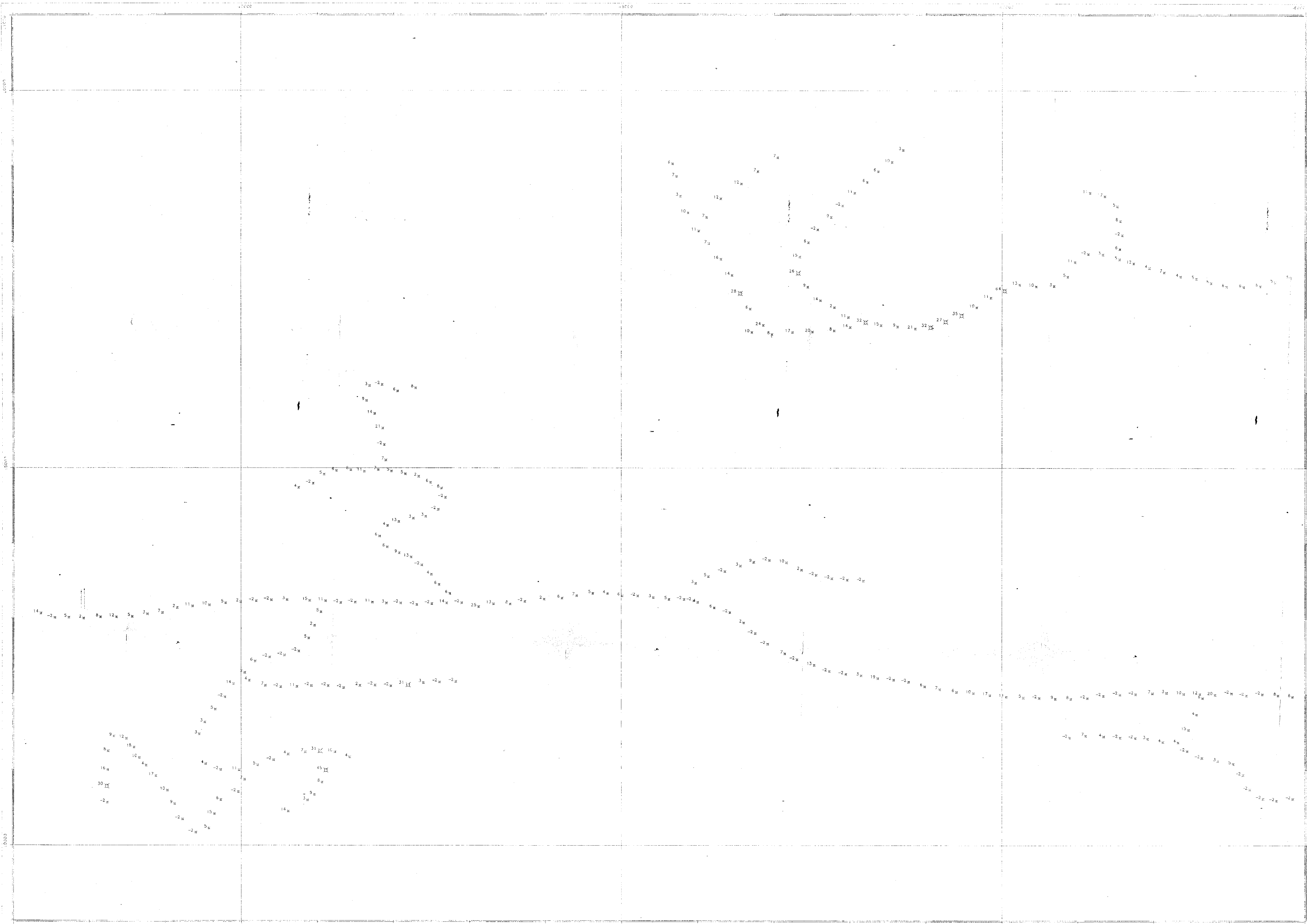


Grid File ILC1GCHM.CUG
 Grid Size 100,000
 Technique TRIANGULATED
 Points Plotted 282
 Contour Interval 5
 100,000 10,000 (0,000 to 101,000)
 200,000 150,000 (101,000 to 201,000)
 Value #1 - - - - -

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707
PART 2 OF 6

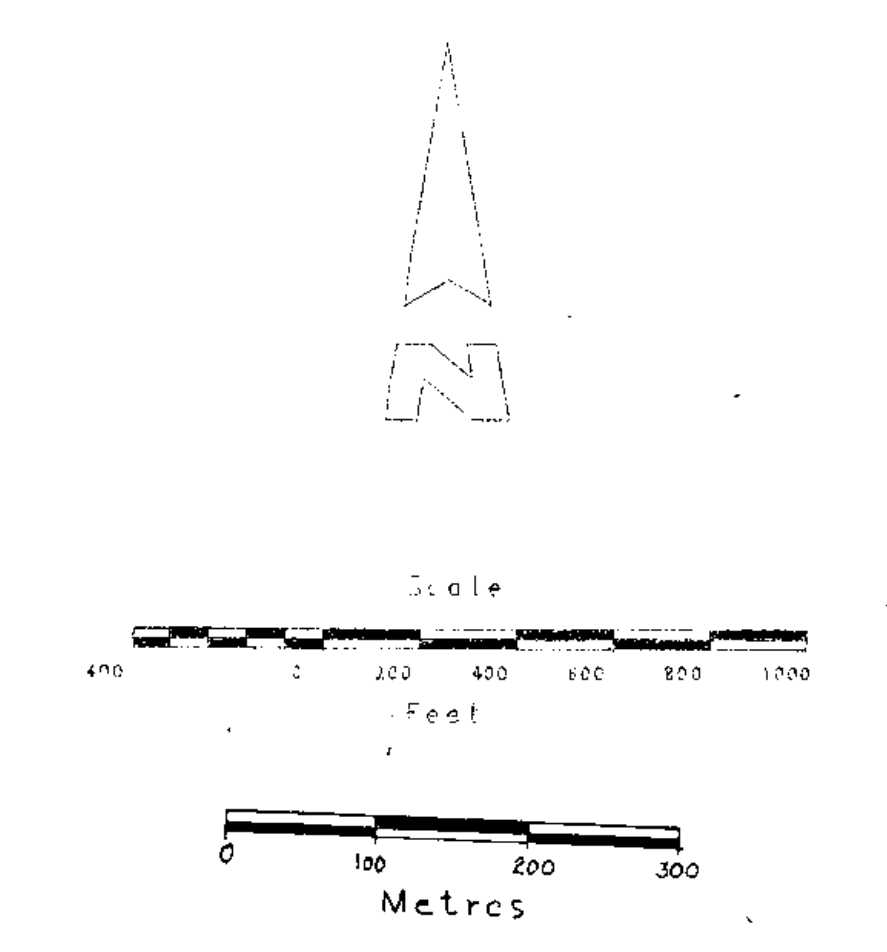
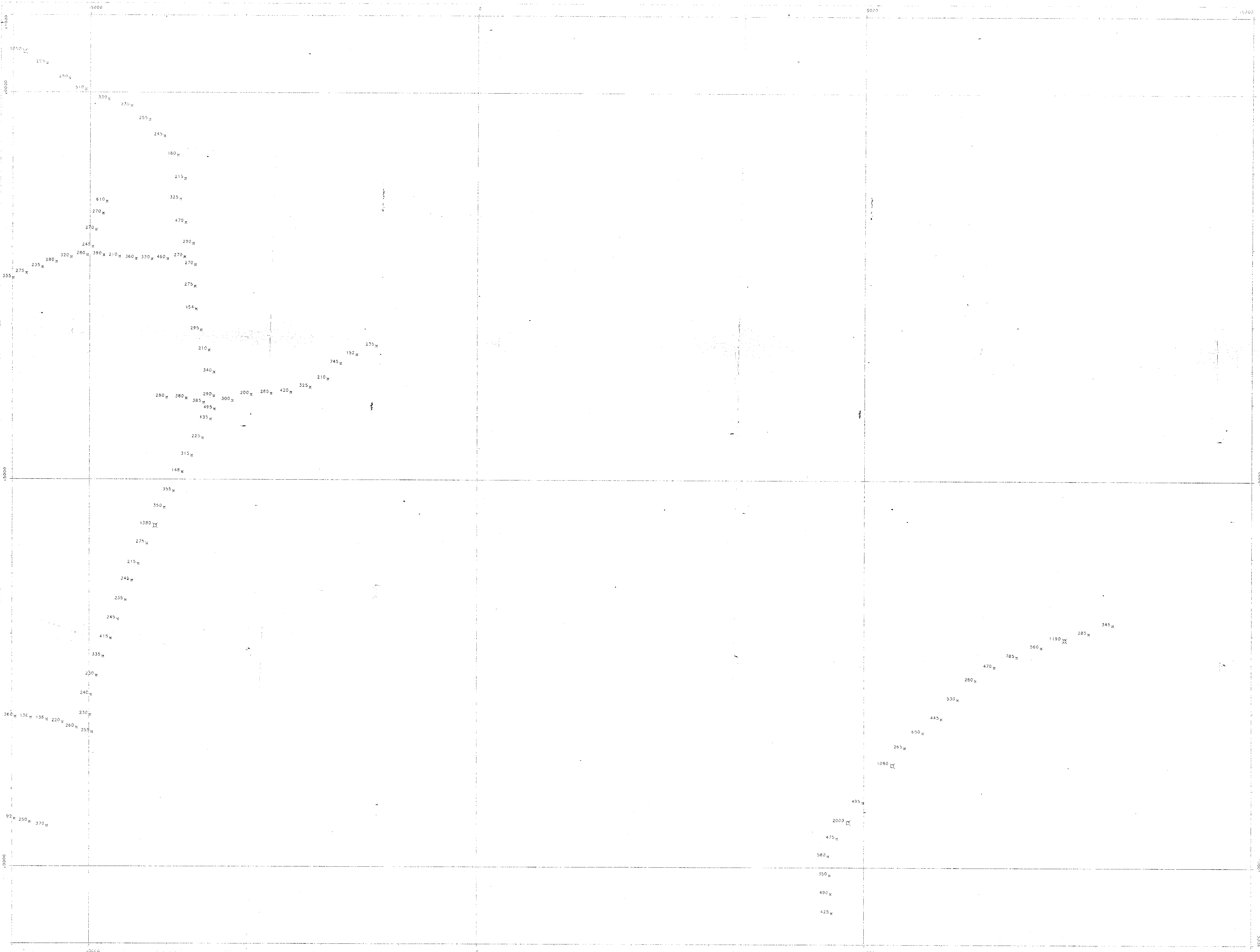
JTAH MINES LIMITED	
ISLAND COPPER MINE	Scale 400
1986 SOIL GEOCH.	Date 17-FEB-87
MANGANESE ANOMALIES MAP A	Project
	Drawn By A.T.R.
	Checked
	Approved J.A.F.
	Drawing No.
	APCC.MN1



Grid File: ILC150M.CUG
 Grid Size: 110 800
 Technique: TRIANGULATION
 Points Plotted: 282
 Contour Interval: 0.000 to 101.000
 200.000 150.000 (-0.01.000 to 101.000)
 Value #1: ***** x

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**
15,707
PART 2 OF 6

UTAH MINES LIMITED	
Scale: 400	Date: 17-FEB-87
Project: ISLAND COPPER MINE	Drawn By: A.T.M.
1986 SOIL GEOCH.	Checked: _____
ARSENIC ANOMALIES MAP A	Approved: J.A.P.
	Drawing No. _____
	APDC A12



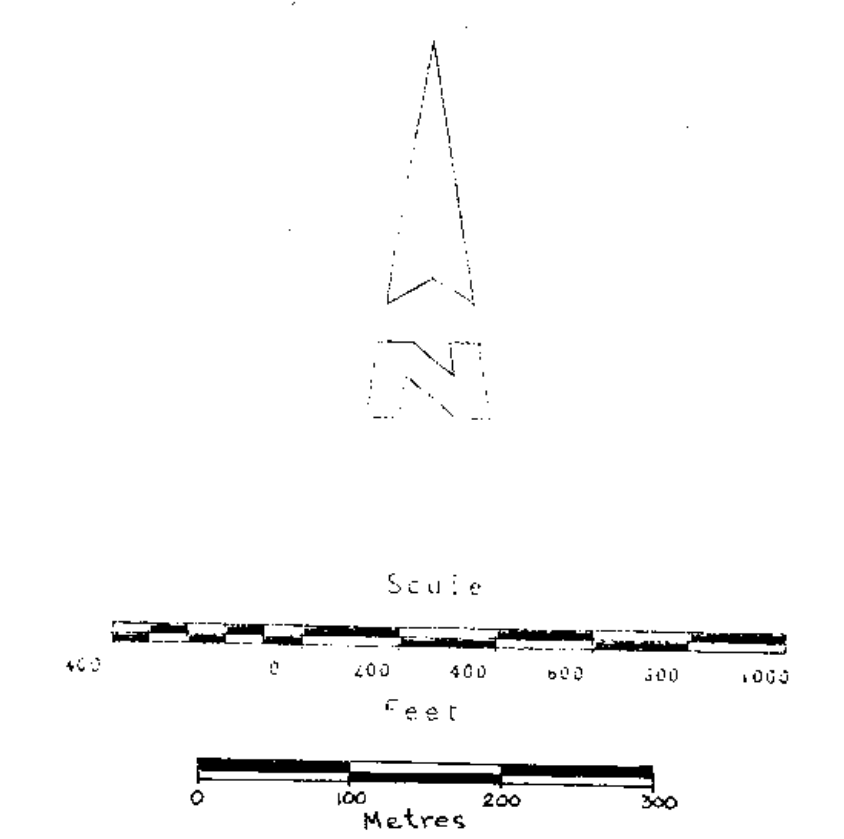
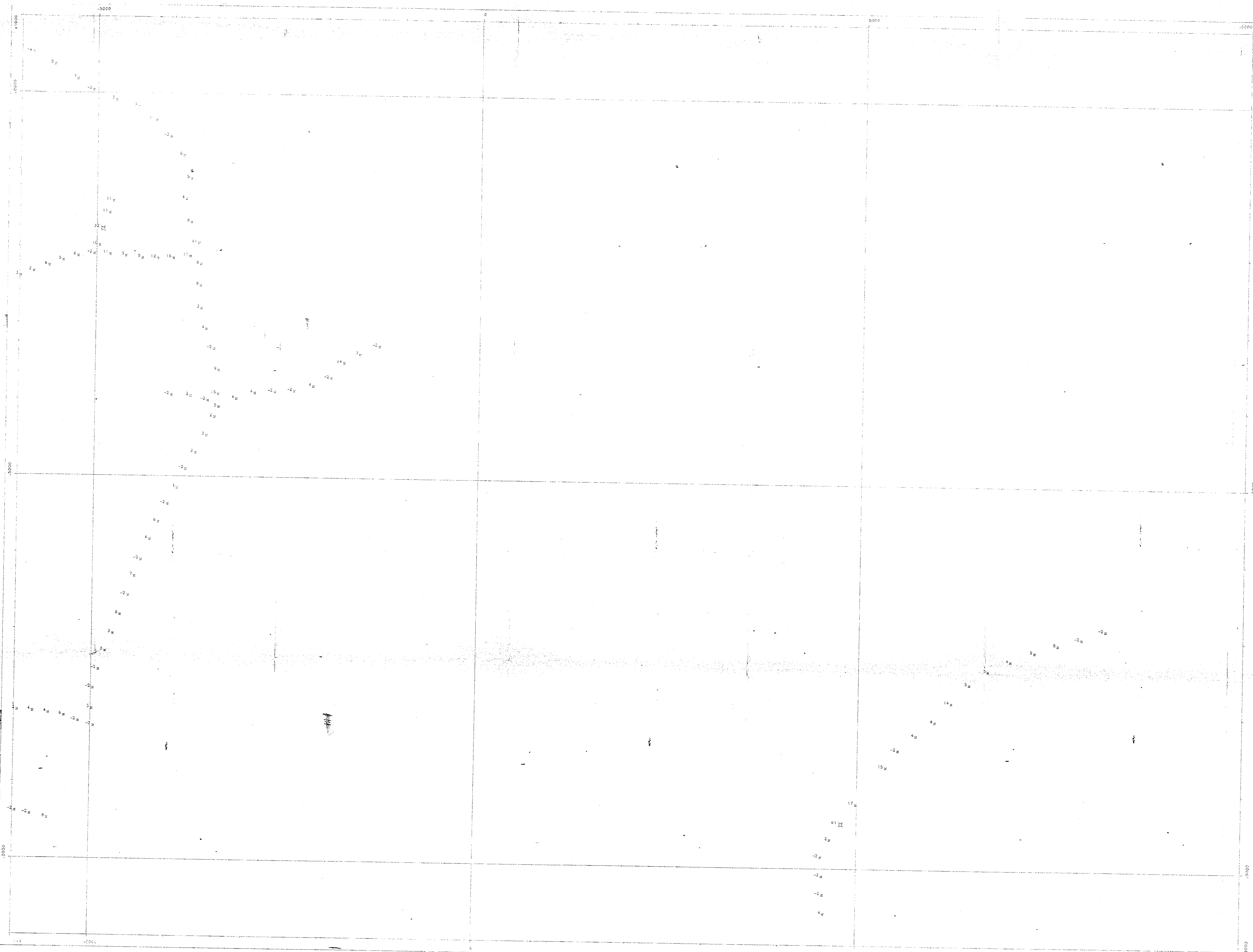
Grid Size: 100,000
 Technique: TRIANGULATION
 Points plotted: 54
 Contour interval: 100
 Scale: 500,000 100,000 (0.000 to 70000.000)
 Value #1: 2-8511111 11000

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707

PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Date: 17-FFB-87
1986 SOIL GEOCHEM	Project
MANGANESE ANOMALIES MAP B	Drawn By: AFR
	Checked
	Approved: JAF
	Drawing No.
	APCC W2



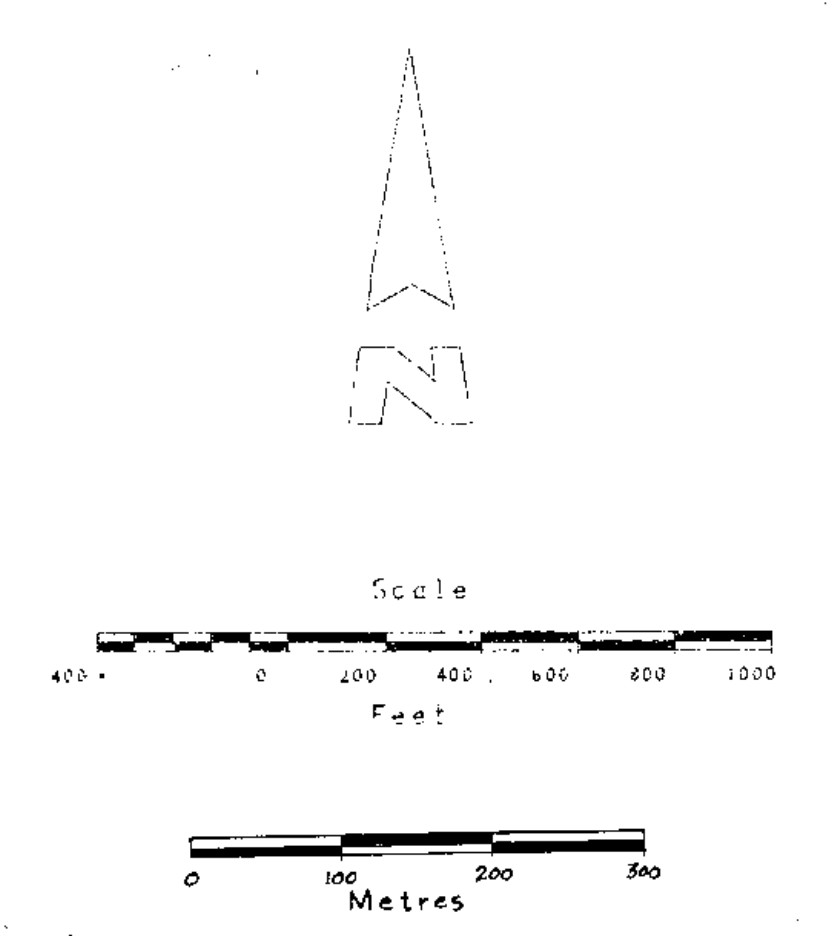
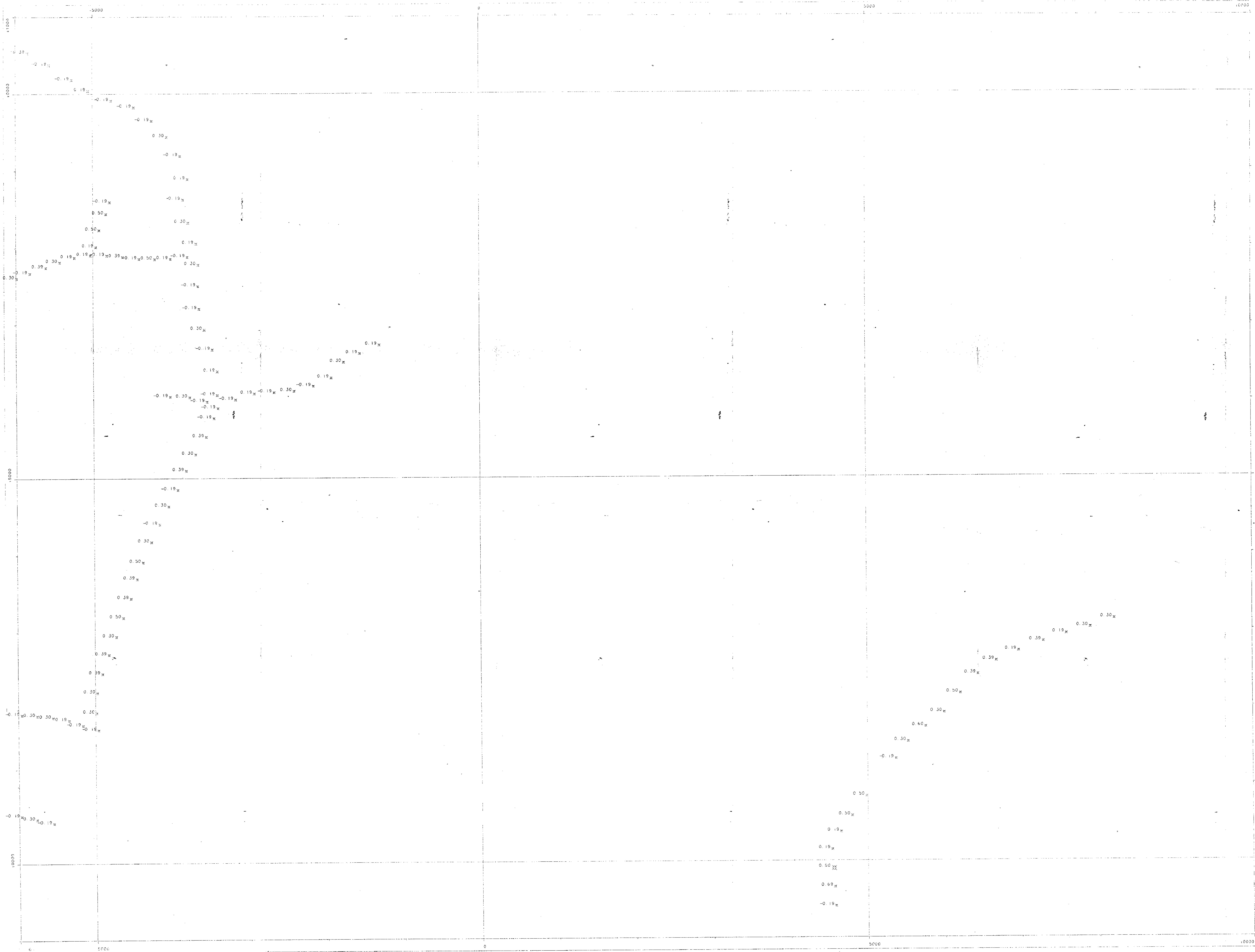
Grid Size: 100 000
 Technique: TRIANGULATION
 Points Plotted: 94
 Contour Interval: 500 000 100 000 (0 000 to 70000 000)
 Value #1: 1000000

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,707

PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale: 400
1986 SOIL GEOCHEM	Date: 17-FEB-87
ARSENIC ANOMALIES MAP B	Project
	Drawn By: ATR
	Checked
	Approved: JAP
	Drawing No.
	APGC 42N



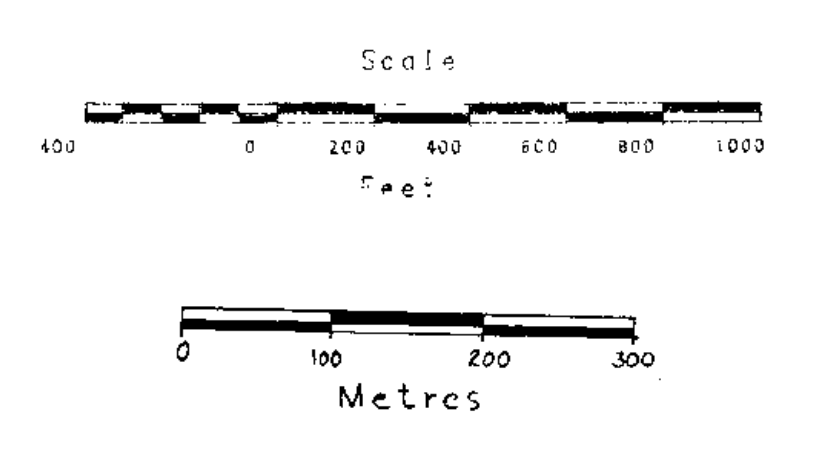
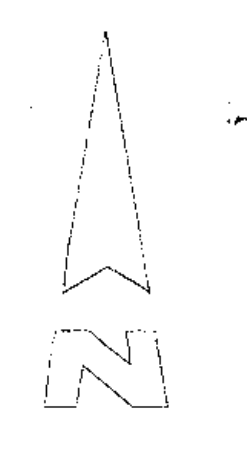
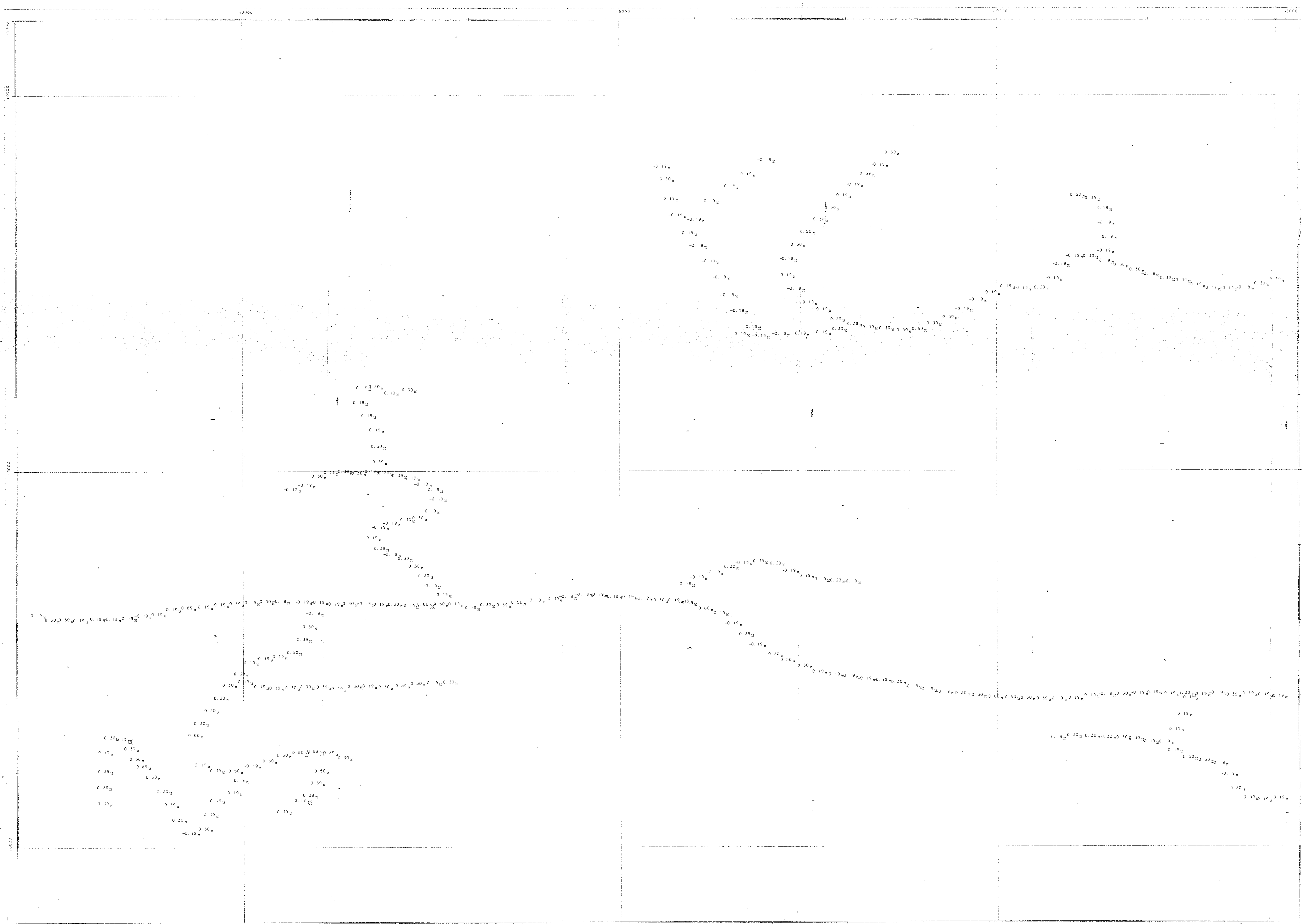
Grid Size: 100 000
 Technique: TRIANGULATION
 Points Plotted: 34
 Contour Interval: 0.10 (0.000 to 70000.000)
 Value #1: -0.0000000000000000

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707

PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale 400
1986 SOIL GEOCHEM	Date: 17-FEB-87
SILVER ANOMALIES MAP B	Drawn By: ATR
	Checked
	Approved: AF
	Drawing No.
	APGC 524

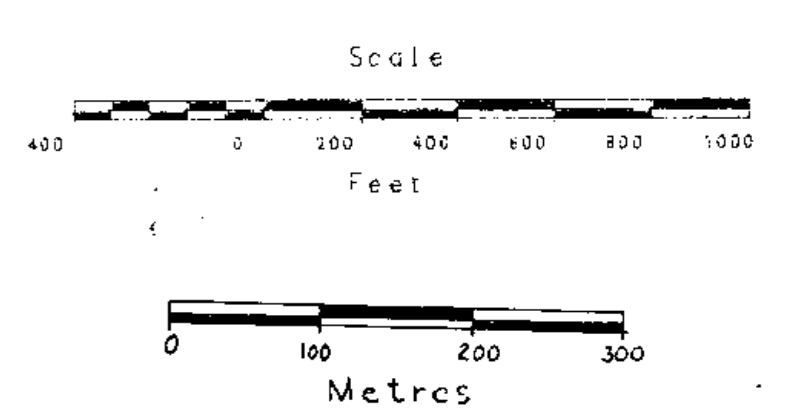
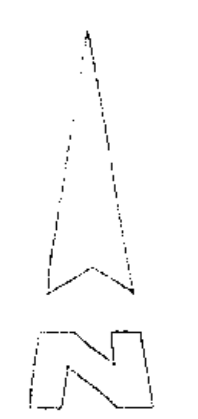
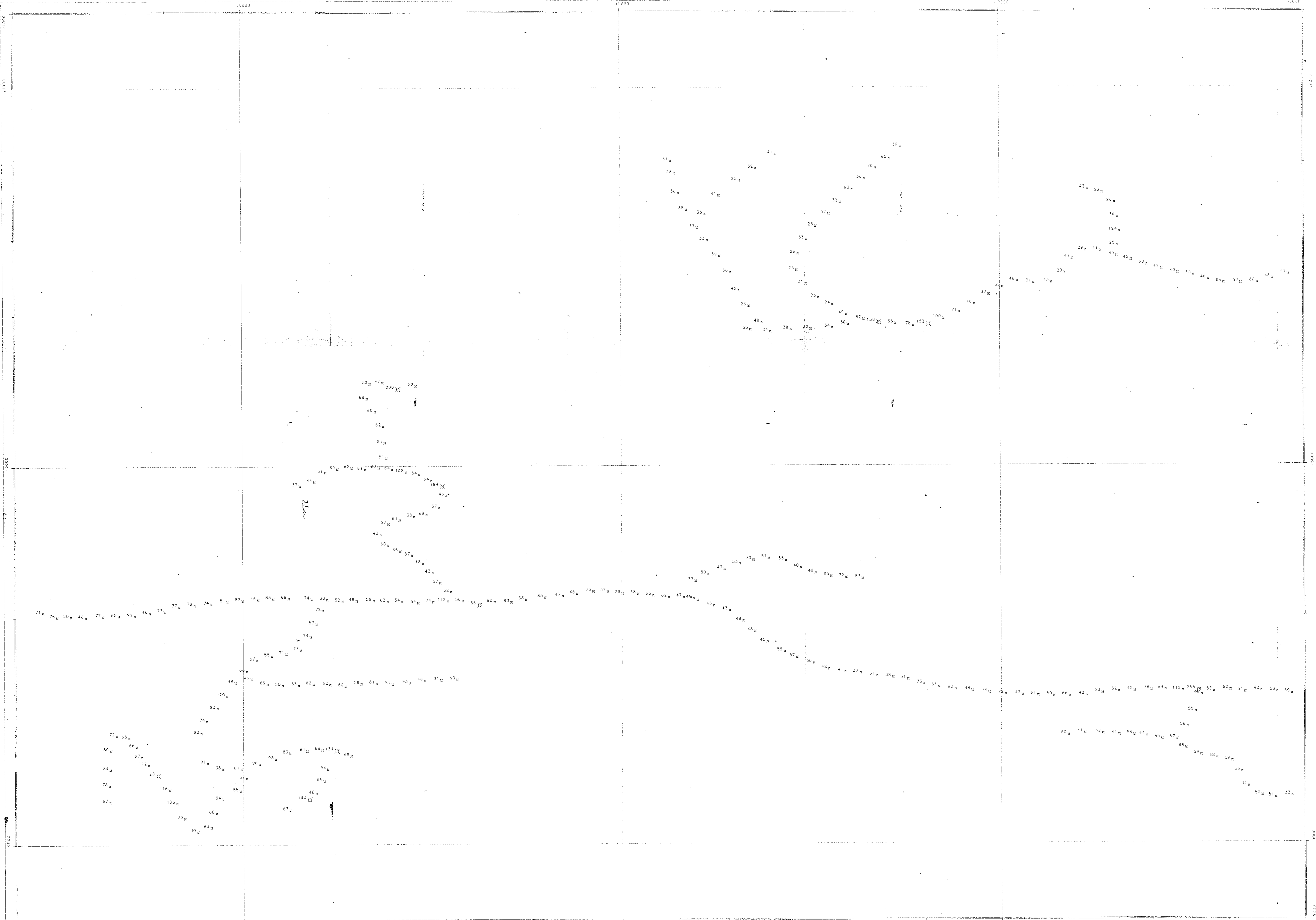


Grid File: ILCIGCHM.CUG
 Grid Size: 100 500
 Technique: TRIANGULATION
 Points Plotted: 282
 Contour Interval: 0.10
 200.000 150.000 (100.000 101.000)
 Value #1: -0.19 to 0.60

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707
PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale: 400
1986 SOIL GEOCH	Date: 17-FEB-87
SILVER ANOMALIES MAP A	Drawn By: A.T.R.
	Checked:
	Approved: J.A.F.
	Drawing No:
	APGC SIGN



Grid File: I:\GCGHM.GUD
 Grid Size: 100 000
 Contour: TRIANGULATION
 Points Plotted: 282
 Contour Interval: 5
 100 000 50 000 (0.000 to 101.000)
 200 000 150 000 (101.000 to 201.000)
 u XX
 Value #1: .000000000

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

15,707
PART 2 OF 6

UTAH MINES LIMITED	
ISLAND COPPER MINE	Scale: 400
1986 SOIL GEOCH	Date: J-FEB-87
ZINC ANOMALIES MAP A	Project
	Drawn By: A.T.R.
	Checked
	Approved: J.A.C.
	Drawing No.
	MAPGS.ZIN