

REPORT ON
GEOCHEMICAL SURVEY

by
J.M. Newell, P.Eng.

on the
ROSE PROPERTY
situated north of Ealue Lake
in the Liard Mining Division

57°47'N; 129°53'W
N.T.S. 104H/13W

owned by
Texasgulf Canada Ltd.

7375

June, 1979

Vancouver, B.C.

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GEOCHEMICAL REPORT
Rose Property
Liard Mining Division, B.C.

INTRODUCTION

The Rose Property, consisting of 15 contiguous mineral claims aggregating 93 units, was staked on behalf of Texasgulf Canada Ltd. during the summers of 1975 and 1976. The claims cover areas containing copper-gold mineralization in monzonitic intrusive rocks and associated Upper Triassic volcanic and volcanoclastic rocks.

This report summarizes the results of additional geochemical analyses for lead, gold and silver, made on samples collected in 1976-77 and previously analysed for copper, zinc and molybdenum.

LOCATION, ACCESS & TERRAIN

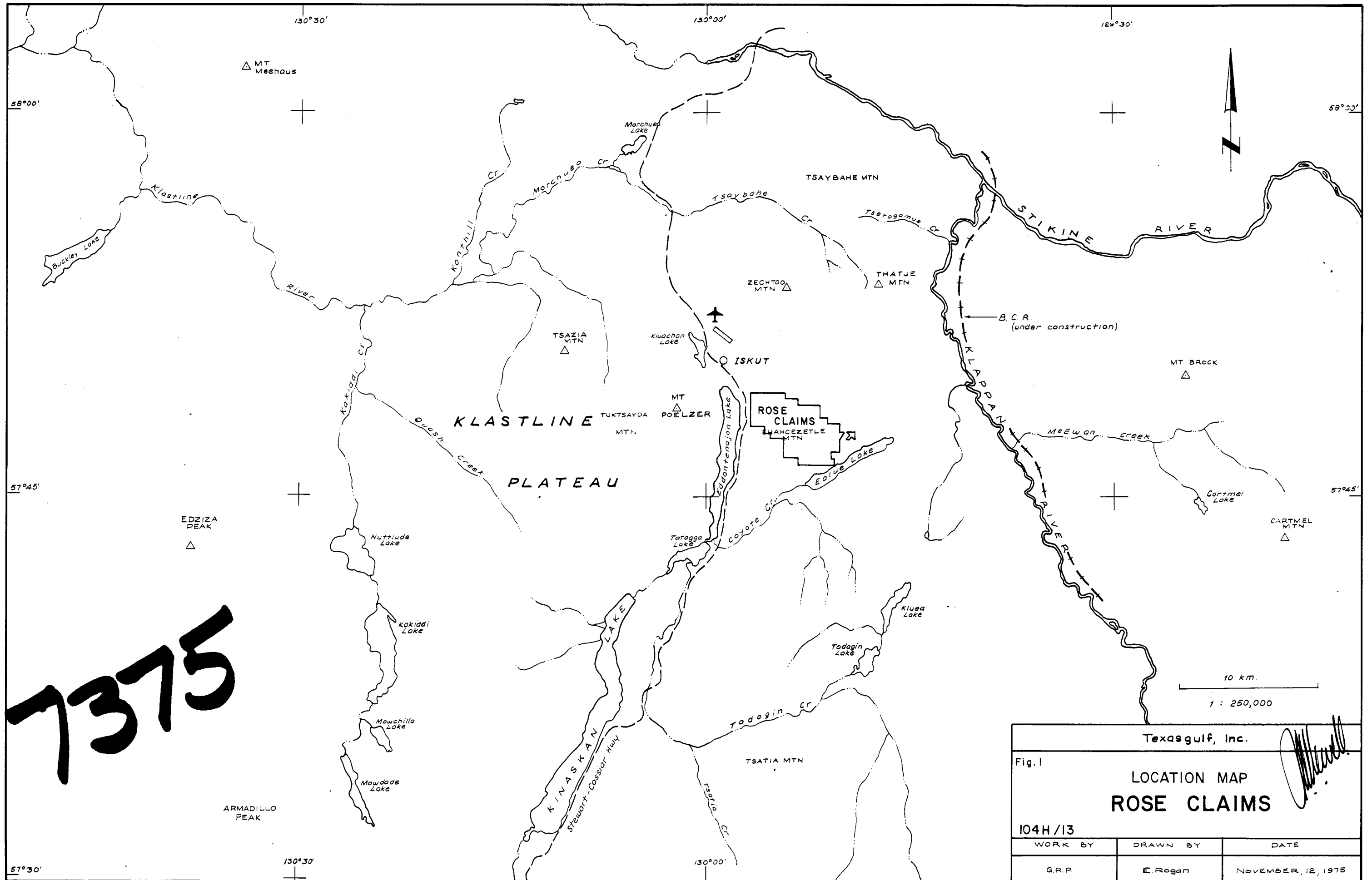
The property lies immediately north of Ealue Lake and is centred some seven kilometres south-east of the village of Iskut, at 57°47'N, 129°53'W (see fig. 1). It is accessible by helicopter from the Stewart-Cassiar Highway or the "Keen Access Road" following the north shore of Ealue Lake.

The terrain is mountainous, with a relief of approximately 1000 metres on the property. An upland surface of moderate relief has been deeply incised by streams which now flow in steep-walled canyons. Much of the property lies above timberline, but the lower mountain slopes and deeper canyons are heavily timbered.

HISTORY

The earliest recorded work in the general area was in 1929, when eight claims were staked on the Klapan Rose showing, a copper-bearing skarn prospect which lies on adverse ground immediately east of the Rose Property.

During the 1960's, a prominent limonite stain zone, on Ehahcezetle Mountain, above Eddontenajon, was examined by a number of companies and the ground was staked at least once. Copper showings were discovered in



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Texasgulf, Inc.		
Fig. 1 LOCATION MAP ROSE CLAIMS		
104H/13		
WORK BY	DRAWN BY	DATE
G.R.P.	E. Rogan	NOVEMBER, 12, 1975

the northwest flowing creek east of the stain zone, but little work was done.

In the late 1960's, Yukonadian Mineral Explorations Ltd. acquired a 35-claim block covering the Klapan Rose prospect and adjacent ground to the northwest. Granduc Mines Ltd. examined these claims in 1970 and the results of their work are presented in Assessment Work Report #3128. The claims were allowed to lapse in 1974 and Texasgulf Canada Ltd. began acquiring the Rose Property in the summer of 1975.

Subsequent work has included geological, geochemical and geophysical surveys and limited programmes of hand-trenching and diamond drilling.

GEOCHEMISTRY

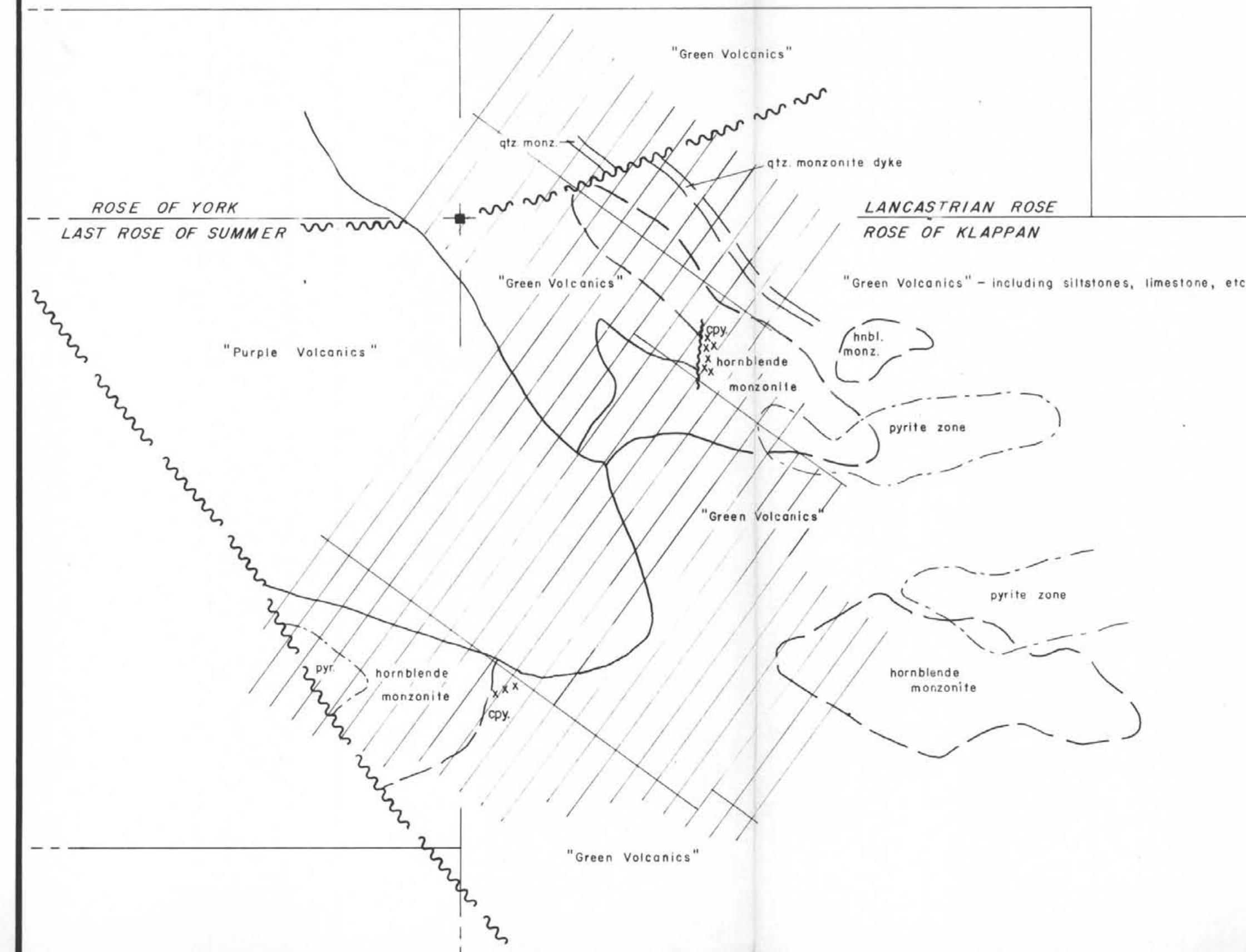
Sample Collection

Extensive soil sampling surveys were completed, on two grids, during the summers of 1976-77. The samples consisted mainly of talus fines, lying beneath a humus layer ranging from 5-50 cm. in thickness. The samples were shipped to Bondar-Clegg and Co. Ltd. Laboratory in North Vancouver, where the -80 fraction was analysed for total copper, zinc and molybdenum, using a hot acid extraction and standard analytical techniques. A series of composite sketch maps, summarizing the results of earlier work not submitted for assessment credit are included in this report for convenience (see fig. 2).

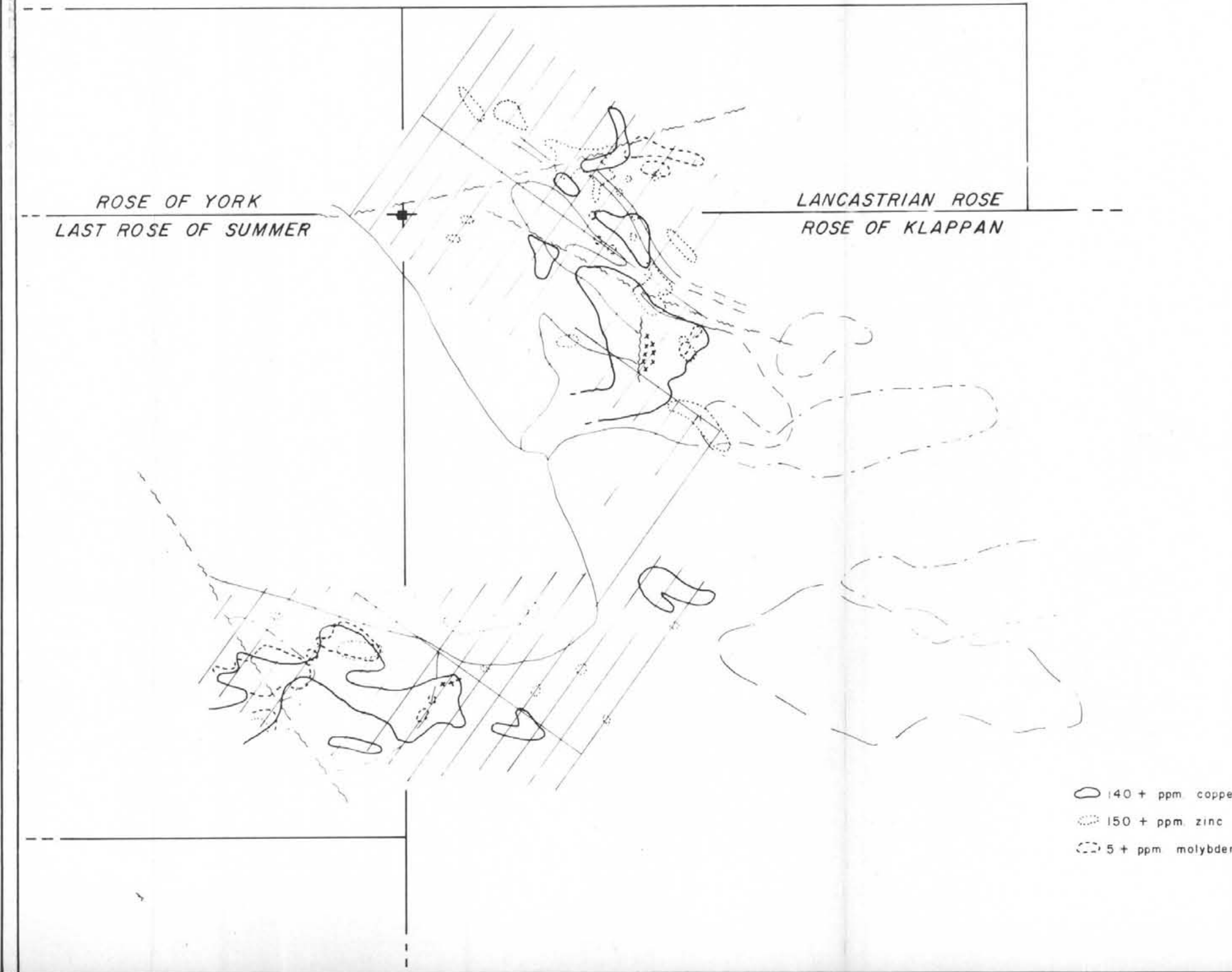
Sample Analysis

Current work involved the reanalysis of 1,142 samples for lead, silver and gold. 148 samples were taken from the Cirque Grid, the remainder from the Main Grid. In 26, cases, insufficient sample material remained to complete all three analyses and these samples were not reanalysed for gold. A number of other gold analyses were made on samples of reduced size, these are indicated on the accompanying maps.

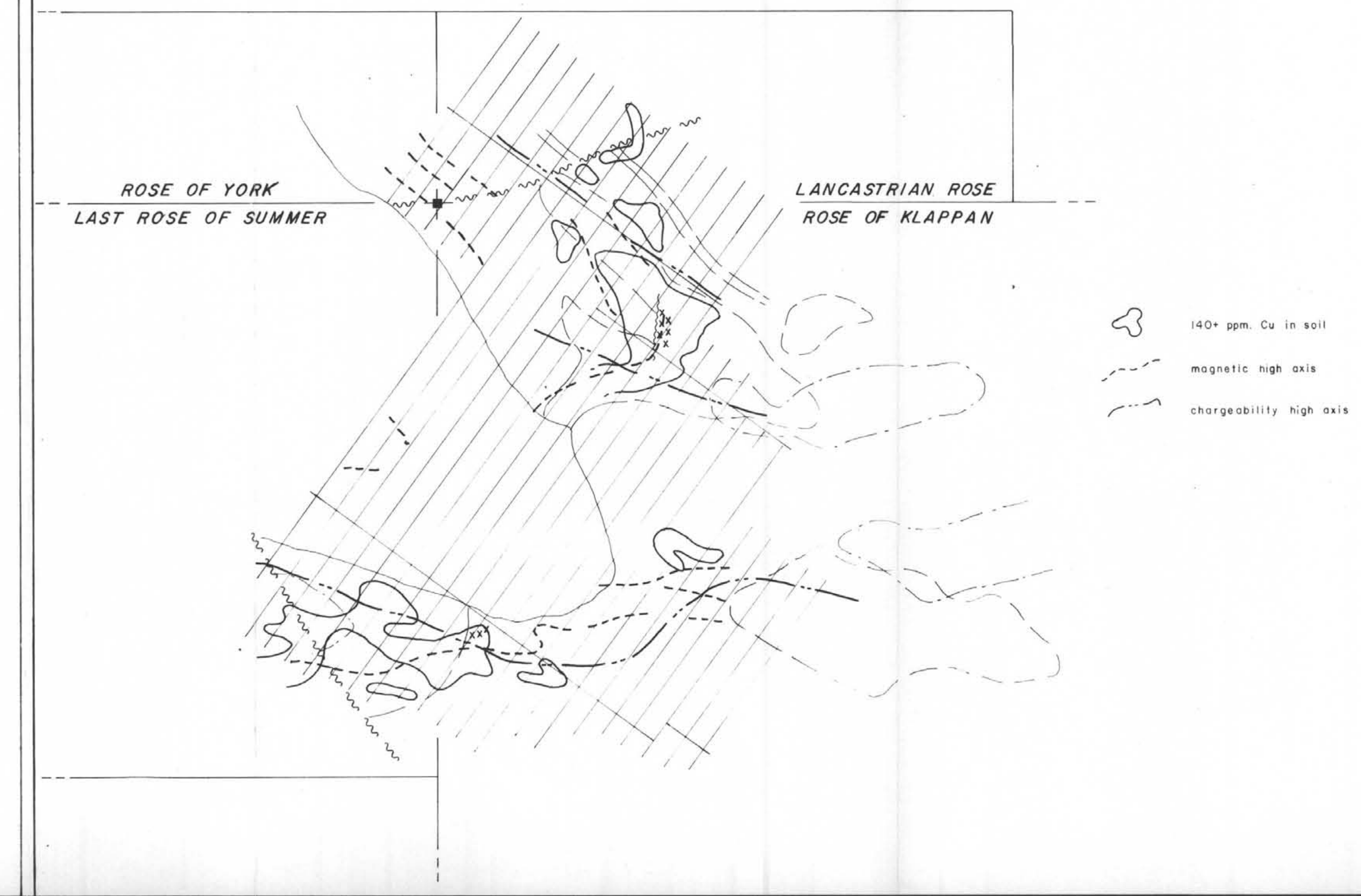
SIMPLIFIED GEOLOGIC SKETCH (MAIN GRID)



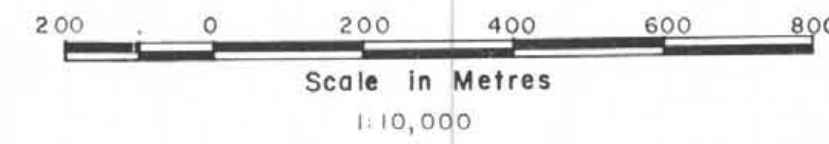
COMPOSITE PLAN (GEOCHEMISTRY) (MAIN GRID)



COMPOSITE PLAN (GEOCHEMISTRY & GEOPHYSICS) (MAIN GRID)



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Fig. 2
OVERALL GRID COMPOSITE
(Geology, Geochemistry, Geophysics)
ROSE CLAIMS

104 H/13 Proj. 983

WORK BY	DRAWN BY	DATE	DRW,G NO.
G.R.P.	G.R.P.	JUNE 1979	

Analytical work was done by Bondar-Clegg and Co. Ltd. of North Vancouver using a hot aqua regia extraction and standard atomic absorption analytical techniques for lead and silver. Gold analyses involved a fire assay preconcentration, followed by dissolution of the resultant bead with hot aqua regia, and atomic absorption analysis. Results are quoted in p.p.m. Pb and Ag and in p.p.b. Au.

Analytical Results

Lead values vary from less than 2 ppm to 310 ppm, with background in the 0-50 ppm range. Silver values vary from 0.2 to 1.8 ppm. The majority of samples returned values of 0.2 - 0.4 ppm Ag and values up to 0.9 ppm can probably be regarded as within the background range. Gold values vary from less than 5 ppb to a high of 6065 ppb, but the high result was obtained from a sample of reduced size. Background values are in the 0-25 ppb range.

Interpretation

Separate maps have been prepared showing the distribution of values in each of the three metals. Contour intervals have been arbitrarily chosen and in the case of lead and silver values in the Main Grid, no contours have been drawn. Higher values are scattered and an attempt at contouring produced no coherent anomalies of significance.

Copper values on the Main Grid show good correlation with known copper mineralization, making due allowance for down-slope and down-ice dispersion. The only significant molybdenum anomaly correlates closely with intrusive rocks, believed to be a faulted segment of the Ehahcezetle intrusion. Scattered zinc anomalies occur generally peripheral to copper mineralization, but no coherent pattern is present. A very loose correlation can be inferred between zinc values and a quartz-monzonite dyke trending northwestward through the northern part of the grid.

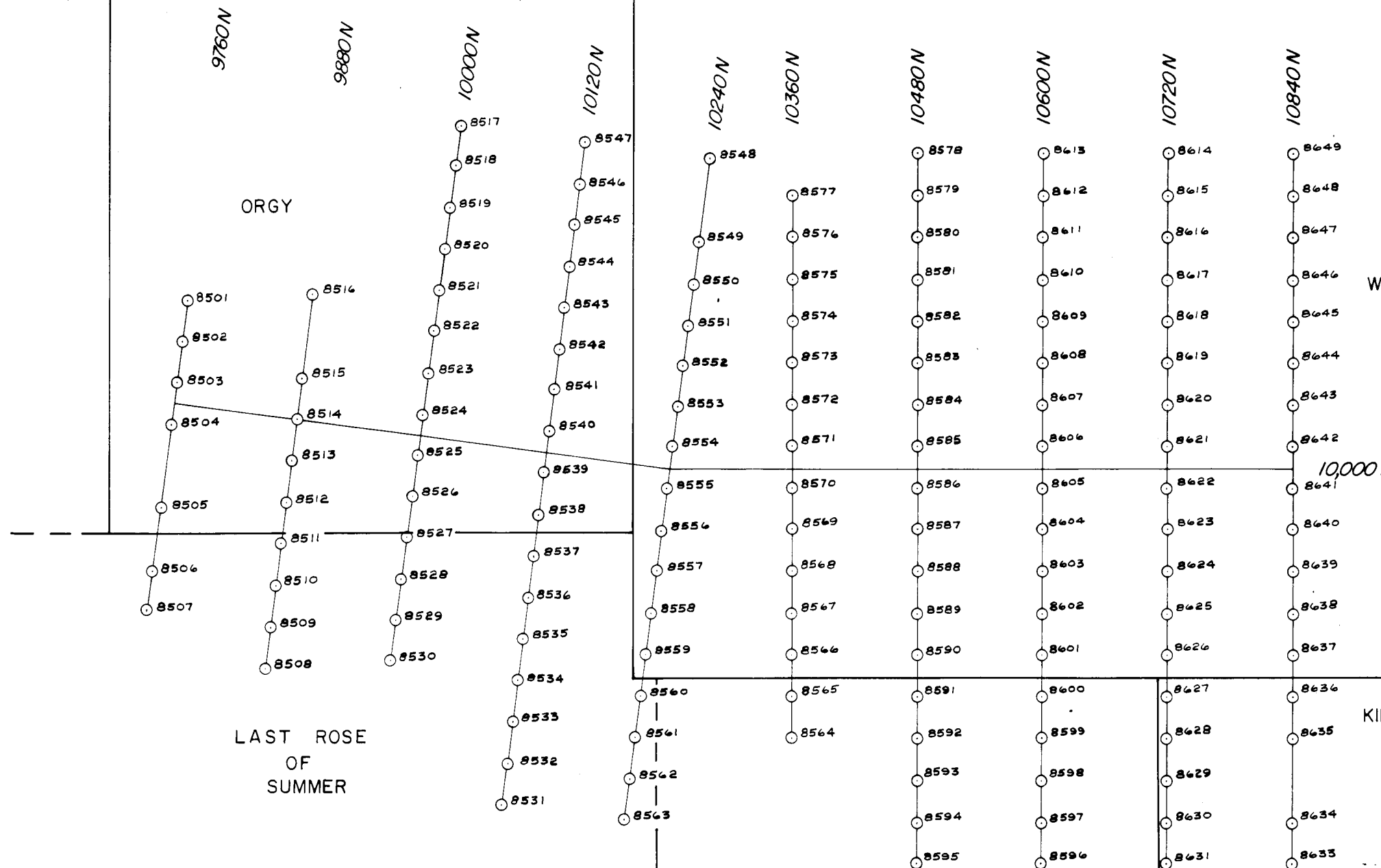
As already noted, lead and silver values yield a "scatter plot"; there are no coherent anomalies of significance, though higher lead values tend to follow the zinc.

The gold results yield a well-defined anomaly correlating closely with known mineralization at the Main Showing. A second anomaly (values 30-150 ppm) lies near the northern extremity of the grid. There is no correlation with high values in other metals, with the possible exception of zinc.

In the southern portion of the Main Grid, copper and gold values show fair correlation, though copper appears to have moved further down slope than gold, as might be expected.

Copper, zinc and molybdenum analyses on samples from the Cirque Grid, indicated the presence of very weak to moderately anomalous values in all three elements. Copper values in the 150-720 ppm range partially outline an anomaly in the southwestern portion of the grid, associated with weak to moderate pyritization of andesitic volcanic rocks, close to the contact with the Ehahcezetle intrusion. A linear anomaly extends northwards from this feature, along the base line. The same features are reflected in the lead and zinc values and, to a lesser extent, in gold and silver. There is no correlating molybdenum anomaly.

Values on the western flank of the grid are weakly anomalous in copper, gold and silver, reflecting the outer edge of the strong pyritic alteration zone within the Ehahcezetle. Background lead and zinc values were obtained in this area. Anomalous molybdenum values are largely confined to a linear zone trending northeastwards through the grid area and possibly reflecting the intrusive contact. A very weak, two-sample lead anomaly reinforces this trend.



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Figure 6

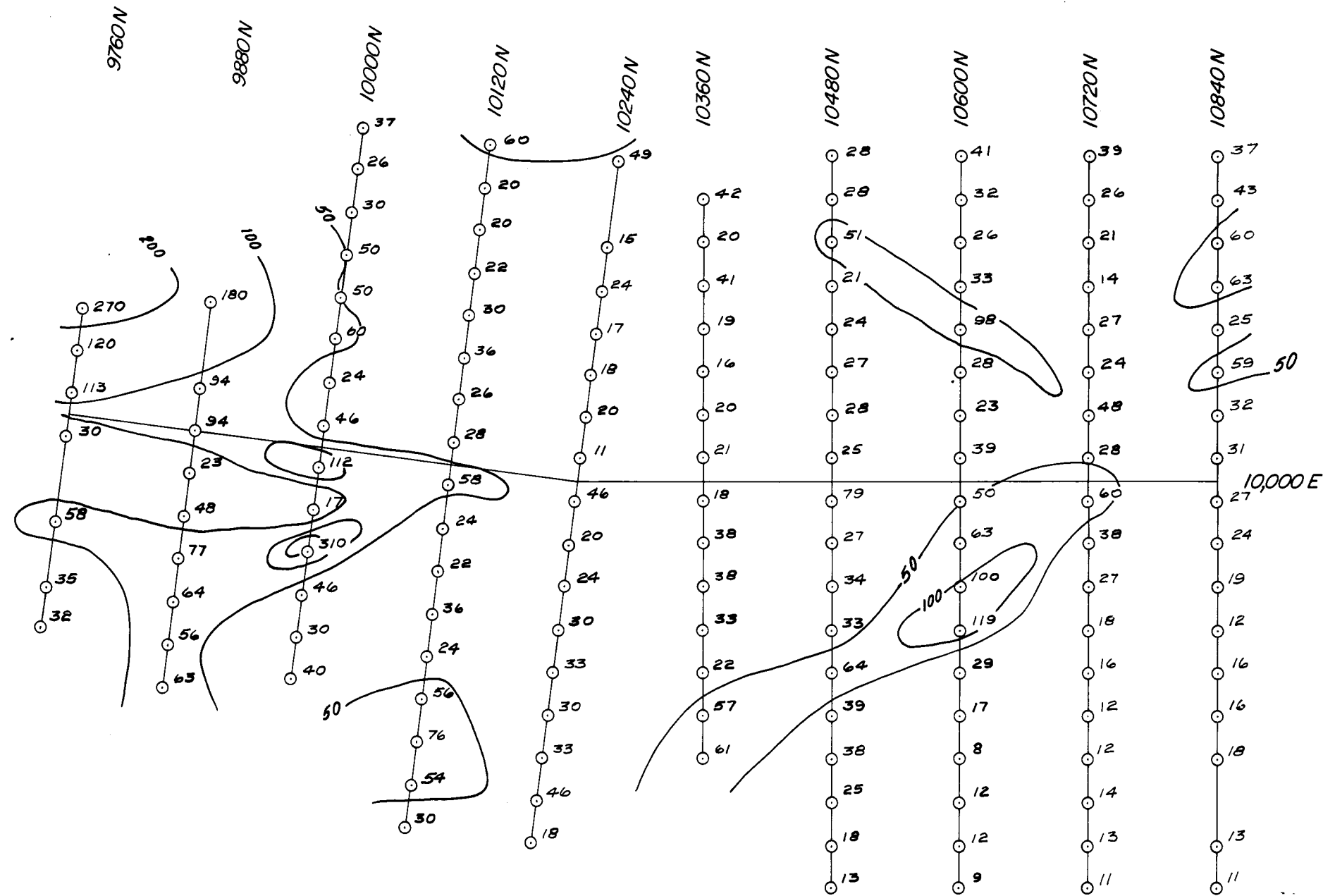
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ROSE PROPERTY
LANCASTER GROUP

SOIL GEOCHEMISTRY
LOCATION MAP

WORK BY	DRAWN BY	DATE	DRW,G NO.
G.D.	E.R.	JUNE 1979	

100 50 0 100 200 300 400
Scale in Metres 1 : 5,000



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Figure 7

Texasgulf Inc.			
ROSE PROPERTY CIRQUE GRID			
SOIL GEOCHEMISTRY (Pb ppm)			
WORK BY	DRAWN BY	DATE	DRW,G NO.
G.D.	E.R.	June 1979	
<p>Scale in Metres 1 : 5,000</p>			

[Handwritten Signature]

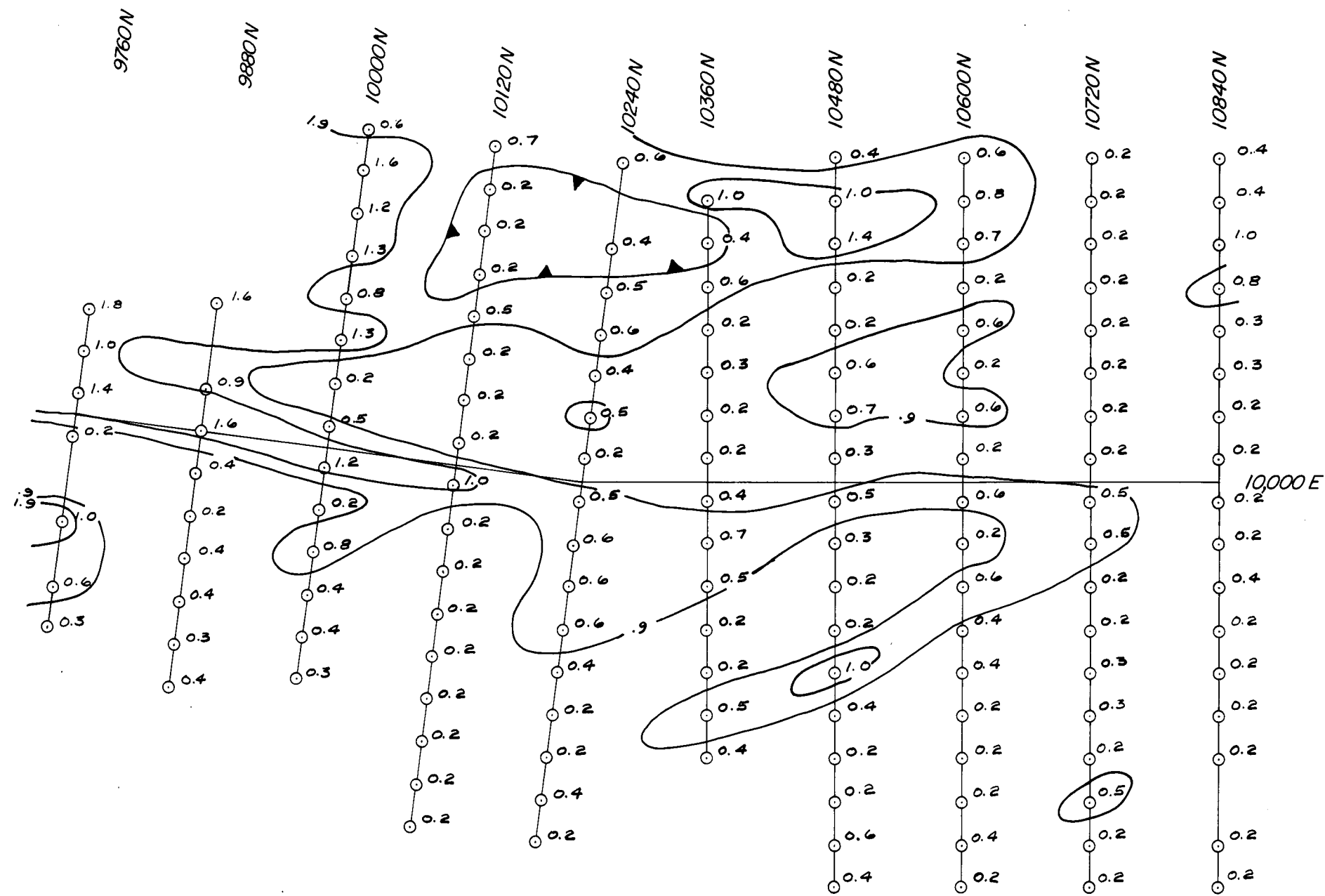


Figure 8

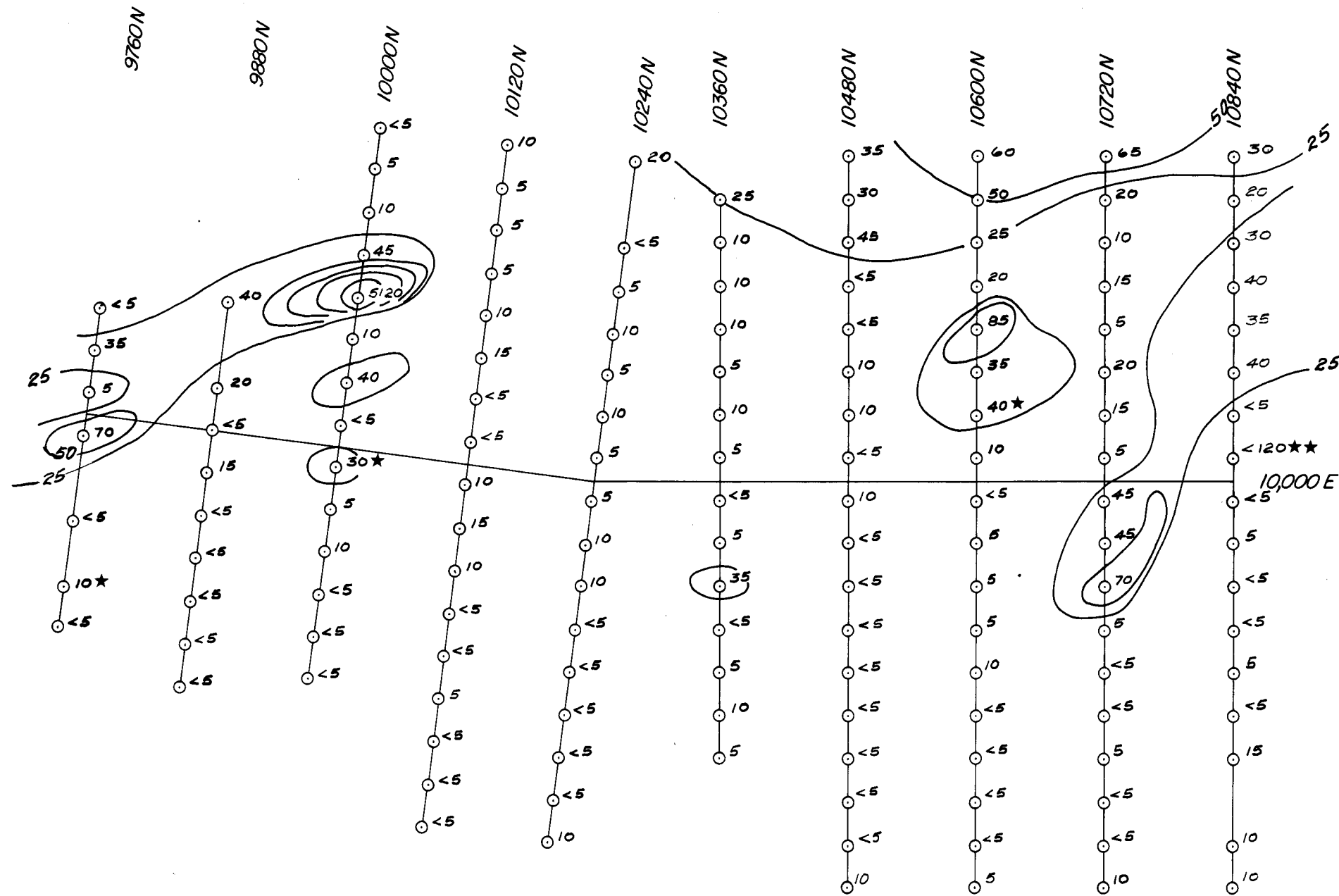
Texasgulf Inc.

ROSE PROPERTY
CIRQUE GRID
SOIL GEOCHEMISTRY
(Ag ppm)

[Signature]

WORK BY	DRAWN BY	DATE	DRW,G NO.
G.D.	E.R.	June 1979	


100 50 0 100 200 300 400
Scale in Metres 1:5,000



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Figure 9

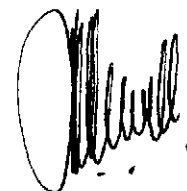
★★ detection limit on a small sample
 ★ result calculated on a small weight

Texasgulf Inc.			
ROSE PROPERTY CIRQUE GRID SOIL GEOCHEMISTRY (Au ppb)			
WORK BY	DRAWN BY	DATE	DRW,G NO.
G.D.	E.R.	June 1979	
 Scale in Metres 1:5,000			

A linear copper anomaly, trending northwestwards through the northern part of the grid, correlates very closely with a major fault, inferred to follow the valley of Black's Creek. This trend is weakly reflected in the lead, zinc and silver values, but not by molybdenum and only very crudely by gold.

Conclusions

1. Lead and silver geochemistry has little or no application in exploring for porphyry copper-gold deposits on the Rose Property or, by inference, other similar properties in the Stikine District.
2. While copper remains the best pathfinder element, gold geochemistry offers the possibility of defining anomalous areas more sharply.
3. The gold anomaly on the northern part of the main grid, though unsupported by other metals, requires further investigation.
4. The southwestern corner of the Cirque Grid is anomalous in copper, lead, zinc, silver and gold, and is the likely source area for a well-mineralized float boulder found several hundred metres down slope.
5. Geochemical results suggest a fundamental difference in character between the Ehahcazette intrusion and the monzonite body exposed at the Main Showing. The "Ehah" Stock, and its inferred faulted extension, are anomalous in molybdenum; the Main Showing is not.
6. Previous work has led to the conclusion that the uppermost parts of a sub-volcanic porphyry copper-gold system are exposed on the Rose Property. The recently developed geochemical data are compatible with this model.



J.M. Newell, P.Eng.

APPENDIX A

APPENDIX A

ROSE CLAIMS

Statement of Expenditures

LANCASTRIAN GROUP

Geochemical Analyses

544 samples for Pb/Ag @ \$2.45	1,332.80
531 samples for Au @ \$3.75	<u>1,991.25</u>
	3,324.05

YORKIST GROUP

Geochemical Analyses

598 samples for Pb/Ag @ \$2.45	1,465.10
585 samples for Au @ \$3.75	<u>2,193.75</u>
	3,658.85

REPORT REPARATION (pro-rated 50/50 Lancastrian & Yorkist Groups)

Sample recovery, collation etc.

H.R. Schmitt May 3 - 7 2 days @ \$65	130.00
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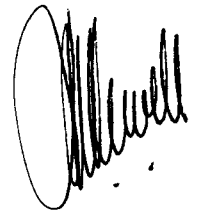
Report Preparation, Drafting etc.

J.M. Newell 2 days @ \$190	380.00
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E. Rogan 10 days @ \$ 80	800.00
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Reproduction	<u>50.00</u>
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1,360.00



11,500 N

11,250 N

11,000 N

ROSE OF YORK
LAST ROSE OF SUMMER

10,750 N

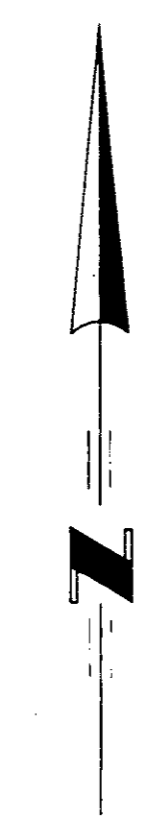
10,500 N

10,250 N

10,000 N

9,750 N

9,500 N



LANCASTRIAN ROSE
ROSE OF KLAPPAN

9,250 E

9,500 E

9,750 E

10,000 E

10,250 E

10,500 E

LEGEND

- soil sample 1976
- soil sample 1977
- rock chip (talus fines)
- △ silt sample

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Scale 1:2000

To Accompany
Report on Geochemical Surveys
ROSE PROPERTY (Yorkist & Lanastrian Groups)
Edu Lake Area - Lord Mining Division
by
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Fig. 3
GRID GEOCHEMISTRY (Pb)
ROSE CLAIMS

104/413 Proj. 953
WORK BY DRAWN BY DATE DRWG. NO.
var. E. R. June 1979 80

Scale in Metres
0 40 80 120 160

11,500 N

11,250 N

11,000 N

ROSE OF YORK
LAST ROSE OF SUMMER

10,750 N

10,500 N

10,250 N

10,000 N

9,750 N

9,500 N

9,250 E

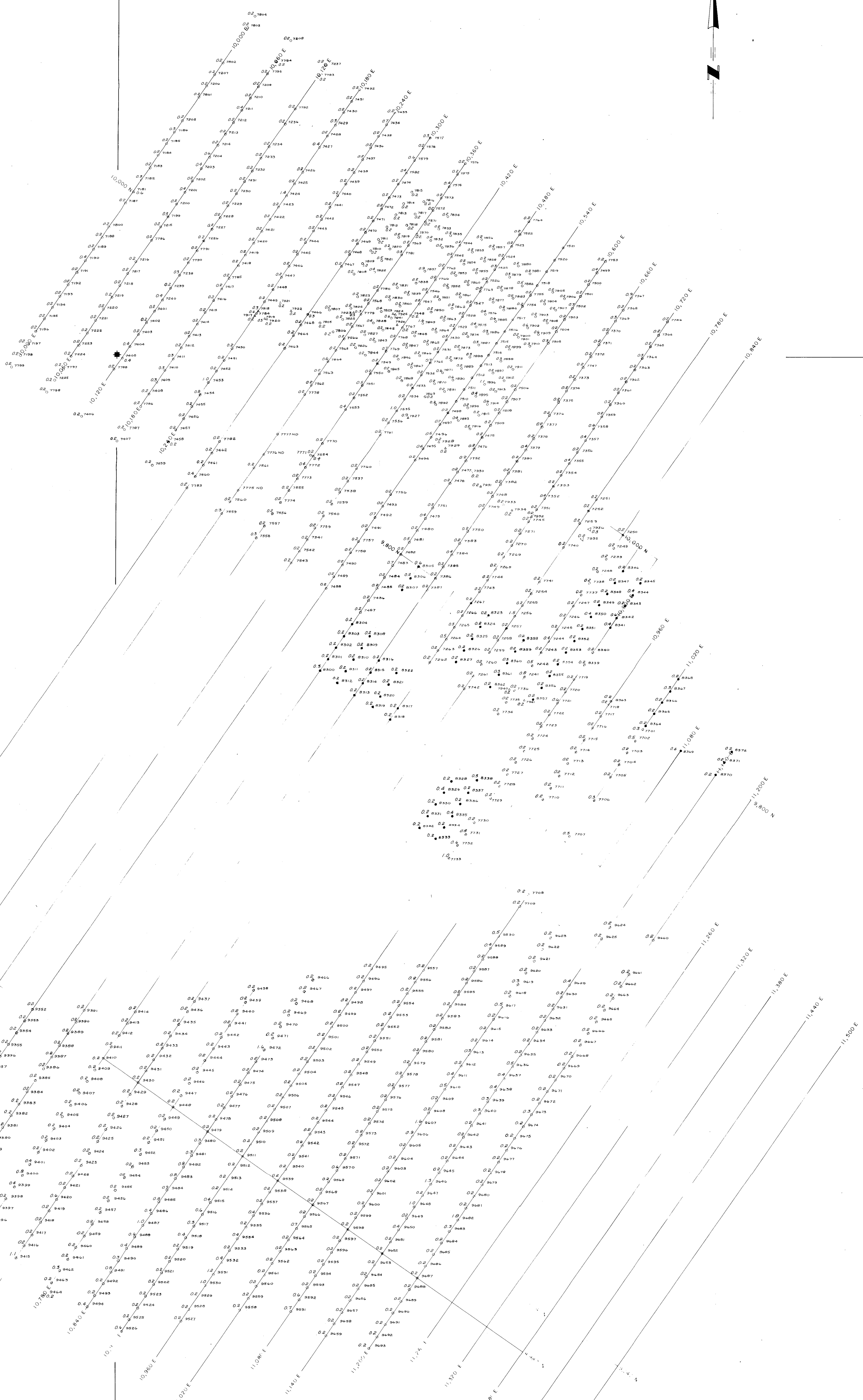
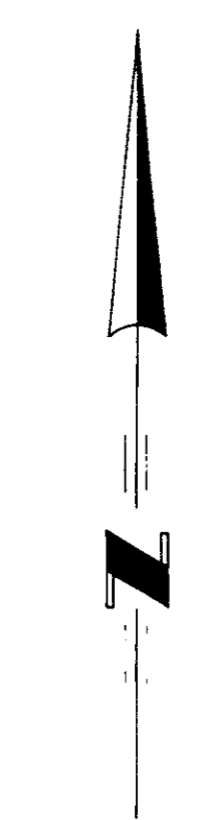
9,400 E

9,750 E

10,100 E

10,500 E

10,900 E



LANCASTRIAN ROSE
ROSE OF KLAPPAN

LEGEND

- soil sample 1976
- soil sample 1977
- △ rock chip (plus fines)
- ◇ silt sample

7375

Scale 1:2000

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 ROSE PROPERTY (Yorkist & Lancastrian Groups)
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Fig 4

GRID GEOCHEMISTRY (Ag)
ROSE CLAIMS

104/H13 Proj 983

WORK BY	DRAWN BY	DATE	DRWG NO
vor	E R	197	

Scale in Metres

0 40 80 120 160

11,500 N

11,250 N

11,000 N

ROSE OF YORK
LAST ROSE OF SUMMER

10,750 N

10,500 N

10,250 N

10,000 N

9,750 N

9,500 N

9,250 E

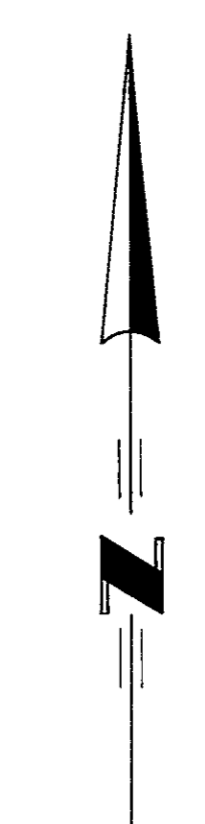
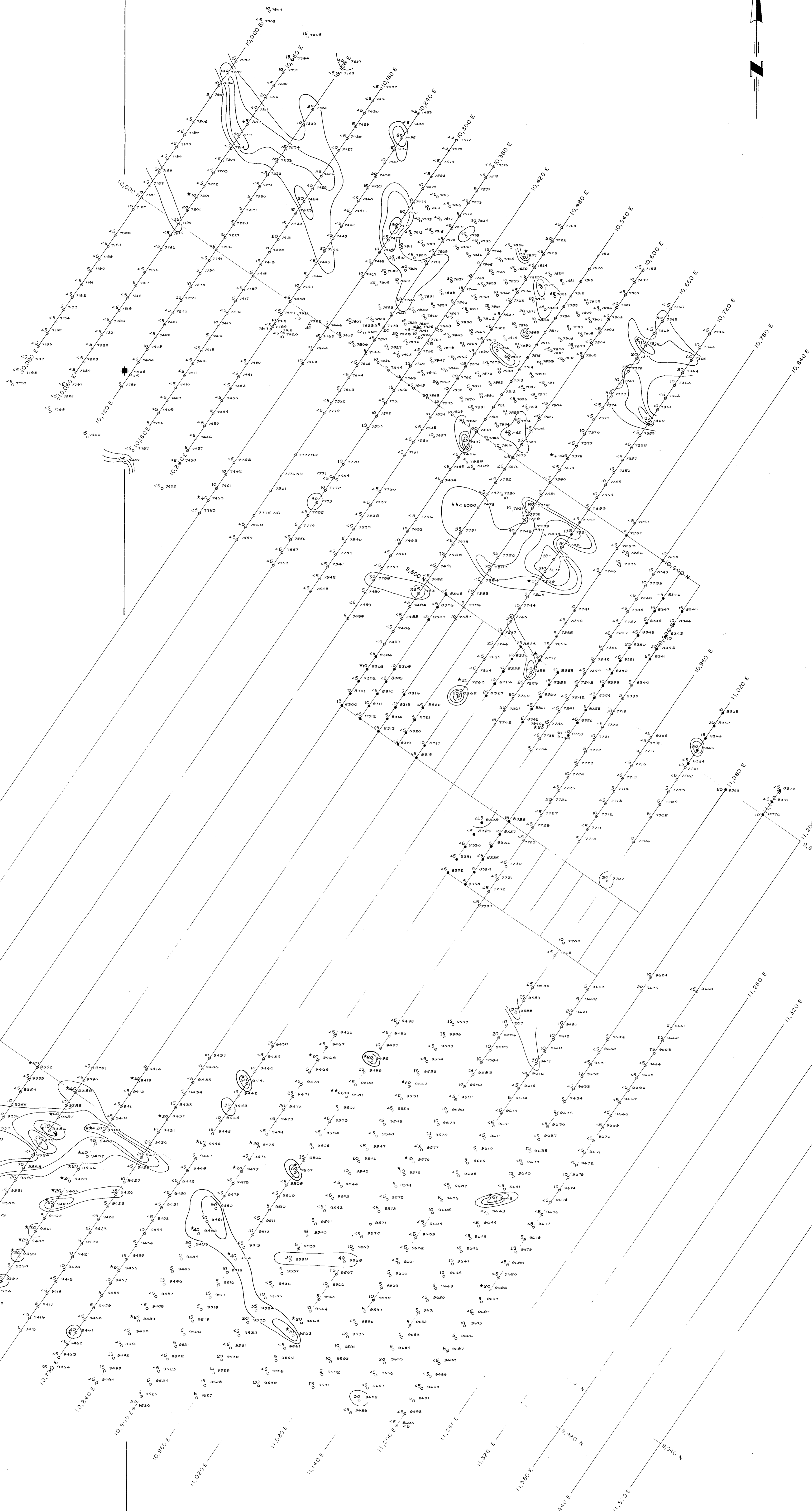
9,500 E

9,750 E

10,000 E

10,250 E

10,500 E



LANCASTRIAN ROSE
ROSE OF KLAPPAN

- LEGEND**
- soil sample 1976
 - soil sample 1977
 - rock chip (total fines)
 - △ silt sample
- | |
|---------------|
| 0 - 25 ppb |
| 26 - 50 ppb |
| 51 - 100 ppb |
| 101 - 200 ppb |
| 201 - 400 ppb |
| 401 + ppb |
- detection limit on a small sample
 - result calculated on a small weight

Scale 1:2000
7375
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Report on Geochemical Surveys
ROSE PROPERTY (Yorkist & Lancasterian Groups)
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Fig. 5
GRID GEOCHEMISTRY (Au)
ROSE CLAIMS

104/H13	DATE	Proj. 983
WORK BY	DRAWN BY	DATE
1977	E. R.	June 1979

Scale in Metres