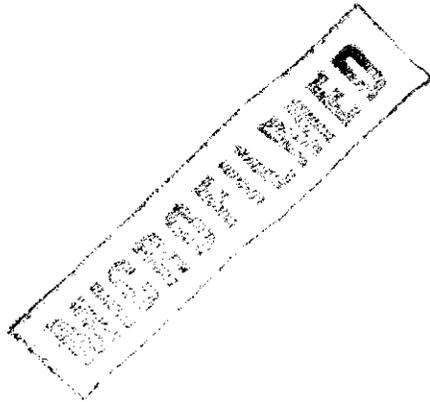


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646001



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of M	A.G.	C.G.	EO	D.M.E
- 1 DEC 1982				E & U
DEPT. OF MINES				
REF. No. 10,072/82				

PROJECT NAME: COMSTAFF PROPRIETARY LIMITED

TITLE: INTERIM REPORT ON HEAZLEWOOD GRID 19C

EL 1/68

AREA NAME/S, STATE 1:250,000 SHEET NO/S & COORDINATES: 1:250 000 sheet Burnie SK 55-03

COMMODITY/IES: Sn, Cu, Pb, Zn, Ni, As, W.

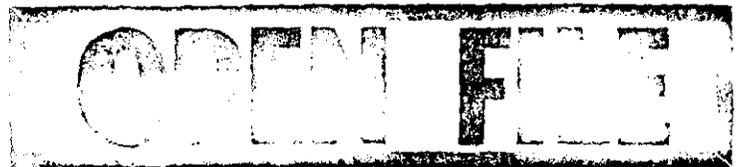
TEXT PAGES NO: 3
PLAN NOS: See List of Plans

TABLE NOS:

APPENDICES: 1

AUTHOR/S: C M Jones

DATE: 26 November 1982



83-1900

AUSTRALIAN ANGLO AMERICAN LIMITED

Incorporated in the State of Victoria

001

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2.1 Geology	
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3.1 Geology	
3.2 Geochemistry	
3.3 Geophysics	
4. CONCLUSIONS	3

APPENDIX 1 - LIST OF PLANS

INTERIM REPORT ON HEAZLEWOOD GRID 19CEL 1/681. INTRODUCTION

During the first quarter of 1982, a grid was established over Dighem anomaly 19C, situated in Nineteen Mile Creek. The grid consists of four lines, each line 120m apart and 1 000m long, in a northwest-southeast trend. Detailed and intense explorational activities were then carried out over the grid.

2. WORK COMPLETED2.1 Geology

Detailed geological mapping was carried out over all lines along the grid. The geology was plotted onto a 1:2 500 base plan, which is appended.

2.2 Geochemistry

Using a hand auger, soil samples were collected along each line of the grid, at 20m intervals. In the southern part of the grid, soil development is often negligible, and rock chip samples were collected instead.

These samples were despatched to Analabs in Cooe for assay.

Using the results obtained from Analabs, composite sections of each line were drawn up, showing values for Cu, Pb, Zn, As, Ni, Sn, and W. Surface contour plans were drawn up for Cu, Zn, Pb, and Ni on a scale of 1:2 500. All of the above plans are appended.

2.3 Geophysics

Both a ground magnetic and a crone electromagnetic survey were carried out along all lines of the grid. All resultant profiles were then plotted and are appended.

3. RESULTS ACHIEVED

3.1 Geology

Geologically, the grid is made up of Cambrian sediments of the Crimson Creek Formation to the north, and ultramafic lithologies of the Heazlewood Igneous Complex to the south. This main geological boundary was tentatively ascertained by mapping, and then confirmed using the very high Ni values in the ultramafics, which drop off suddenly in the sediments.

The Crimson Creek Formation consists of red cherts and very fractured, siliceous argillites, with minor tuffaceous sandstones.

The dominant lithology of the ultramafic complex is a dunite, known as the Nineteen Mile Creek Dunites, as well as some peridotites which sometimes contain pyroxenes. These ultramafics are extensively sheared, especially in a zone around the contact with the Crimson Creek. They are very altered, mostly to serpentine. Some talc development is evident.

There is a thin veneer of tertiary olivine-alkali basalt at the northern end of the grid. This basalt forms a capping on the crest of the ridge and results in much basalt float down the slope and in Nineteen Mile Creek.

3.2 Geochemistry

Geochemical results were generally poor, with only Cu, Pb and Zn having values of a sufficient amount for contouring.

From the contour maps, and the composite sections appended, it can be seen that the ultramafic Complex has very high inherent values of Ni and Zn (300 ppm average). The sudden drop off of these values to 10 ppm and 100ppm respectively plus the increase in Cu from 15 to 100 ppm average gives a good indication of where the ultramafic/sediment contact lies on each line.

There is a weak Cu-Pb-Zn anomaly along this sheared geological contact.

3.3 Geophysics

The Senior Geophysicist, D B Trussell, has indicated the following responses which may be due to some conductive source:

Line	5000 N	at	5425 E
	5120 N	at	5400 E
	5240 N	at	5350 E
	5360 N	at	5450 E

Any quantitative estimation of the source geometry, however, is precluded due to high noise level. Dr Trussell recommends repeating the survey using a 140m coil separation, not the 100m separation previously used.

The magnetometer survey is also difficult to interpret. The only confirmation of the anomalies indicated by the CEM, was on line 5360N.

The magnetometer gives small kicks along the sediment/igneous contact.

4. CONCLUSIONS

It seems that there may be some conductive source associated with Dighem anomaly 19C. This conductor is probably situated at some reasonable depth, as there is no geochemical information to suggest its presence.

It is concluded, therefore, that while a conductor's presence is acknowledged, its exact nature or importance cannot be ascertained.

J. J. Rigott

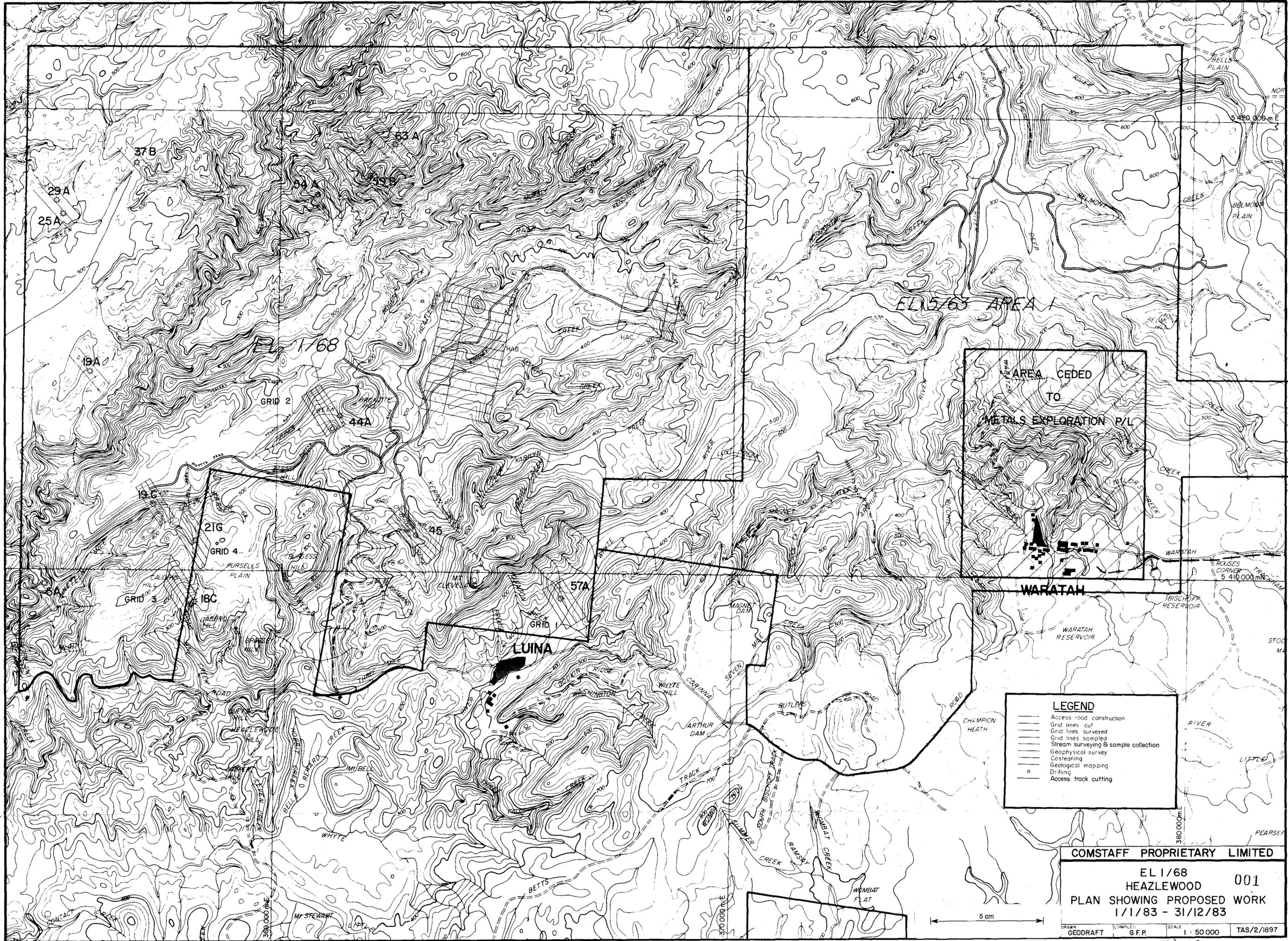
For C M JONES

005

APPENDIX 1

LIST OF PLANS

<u>Plan</u>	<u>Description</u>	<u>Scale</u>
TAS/2/1897	Grid 19C Locality Plan	1:50 000
TAS/2/2854	Grid 19C Base Plan	1: 2 500
TAS/2/2843	Grid 19C Detailed Geology	1: 2 500
TAS/2/2846	Grid 19C Cu results	1: 2 500
TAS/2/2847	Grid 19C Pb results	1: 2 500
TAS/2/2848	Grid 19C Zn results	1: 2 500
TAS/2/2849	Grid 19C Ni results	1: 2 500
TAS/2/2850	Grid 19C As results	1: 2 500
TAS/2/2851	Grid 19C Ag results	1: 2 500
TAS/2/2852	Grid 19C Sn results	1: 2 500
TAS/2/2853	Grid 19C W results	1: 2 500
TAS/2/2855	Composite Section - Line 5000N	1: 2 500
TAS/2/2856	Composite Section - Line 5120N	1: 2 500
TAS/2/2857	Composite Section - Line 5240N	1: 2 500
TAS/2/2858	Composite Section - Line 5360N	1: 2 500



AREA CEDED
TO
METALS EXPLORATION P/L

LEGEND

- Access road construction
- Grid lines cut
- Grid lines surveyed
- Grid lines sampled
- Stream surveying & sample collection
- Geophysical survey
- Costeering
- Geological mapping
- Drilling
- Access track cutting

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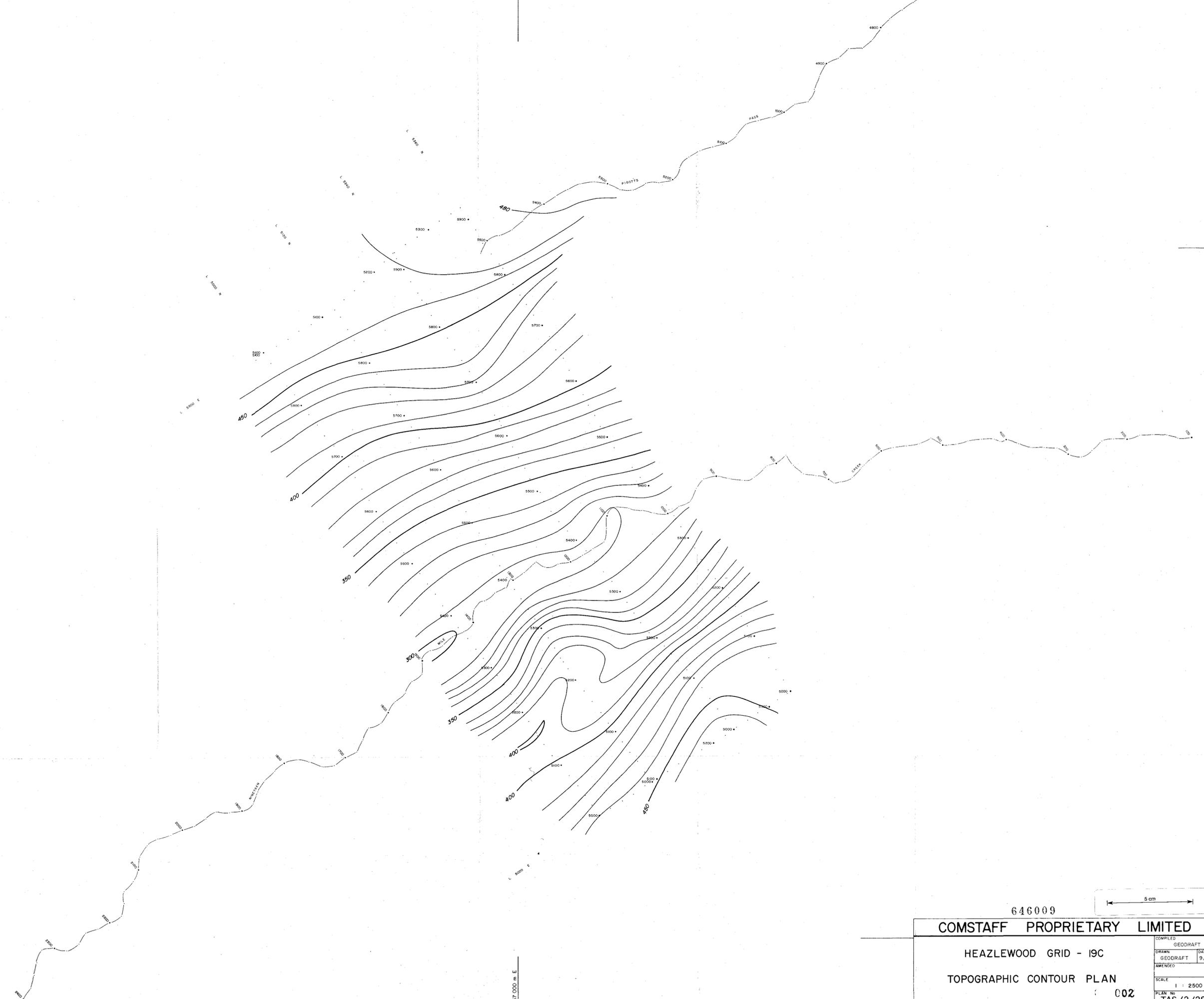
EL 1/68 001
HEAZLEWOOD
PLAN SHOWING PROPOSED WORK
1/1/83 - 31/12/83

5 cm

DRAWN: GEODRAFT, COMPILED: G.F.P., SCALE: 1:50 000, TAS/2/1897

5 412 000 m N.

5 411 000 m N.



646009



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HEAZLEWOOD GRID - 19C

TOPOGRAPHIC CONTOUR PLAN

002

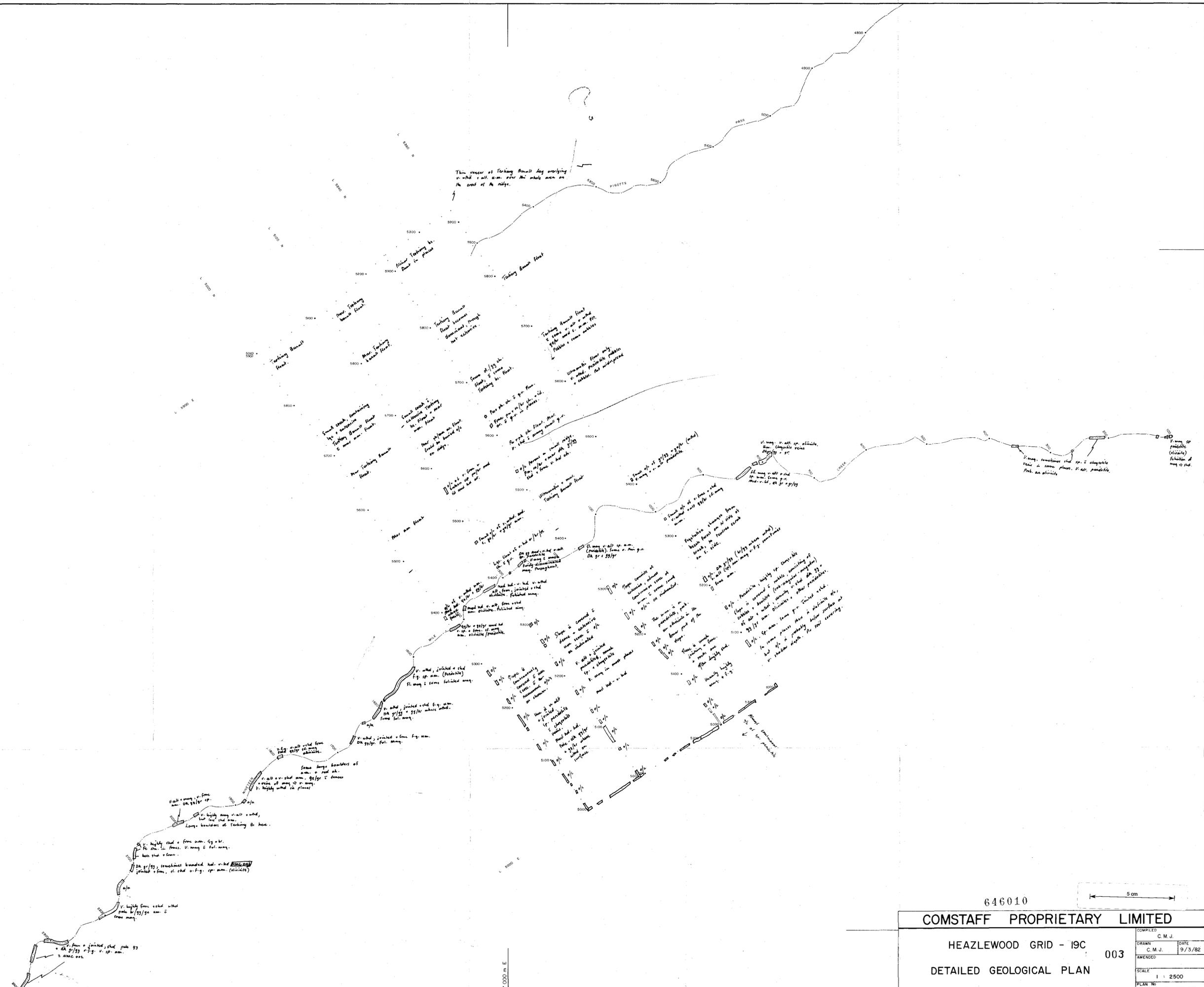
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AMENDED	
SCALE	
	1 : 2500
PLAN No	
	TAS/2/2854

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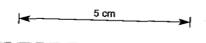
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5 411 000 m N

357 000 m E



646010

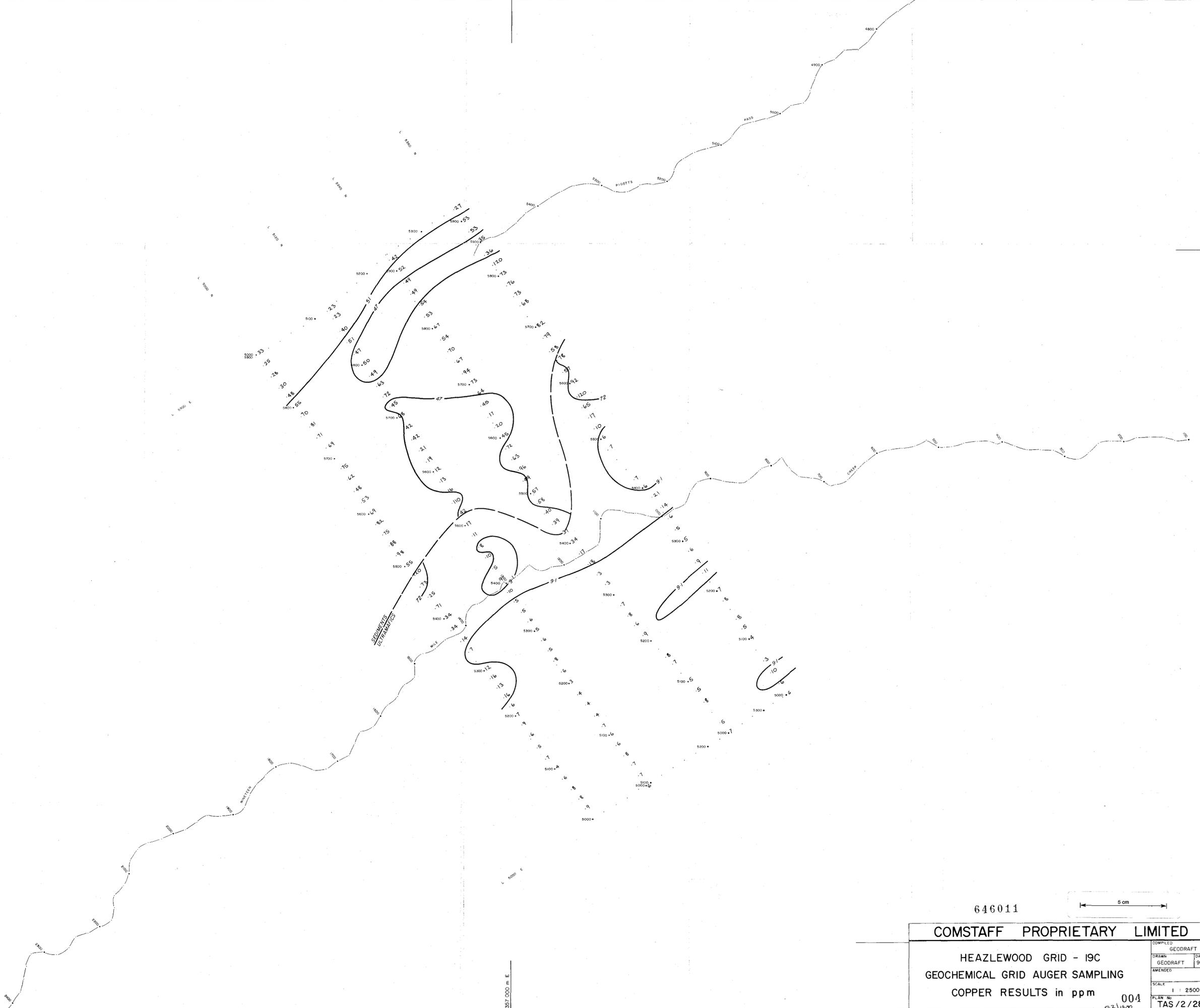


COMSTAFF PROPRIETARY LIMITED	
HEAZLEWOOD GRID - 19C 003	
DETAILED GEOLOGICAL PLAN	
COMPILED C. M. J.	DATE 9/3/82
DRAWN C. M. J.	AMENDED
SCALE 1 : 2500	PLAN NO. TAS/2/2843

5 412 000 m N

5 411 000 m N

357 000 m E



646011

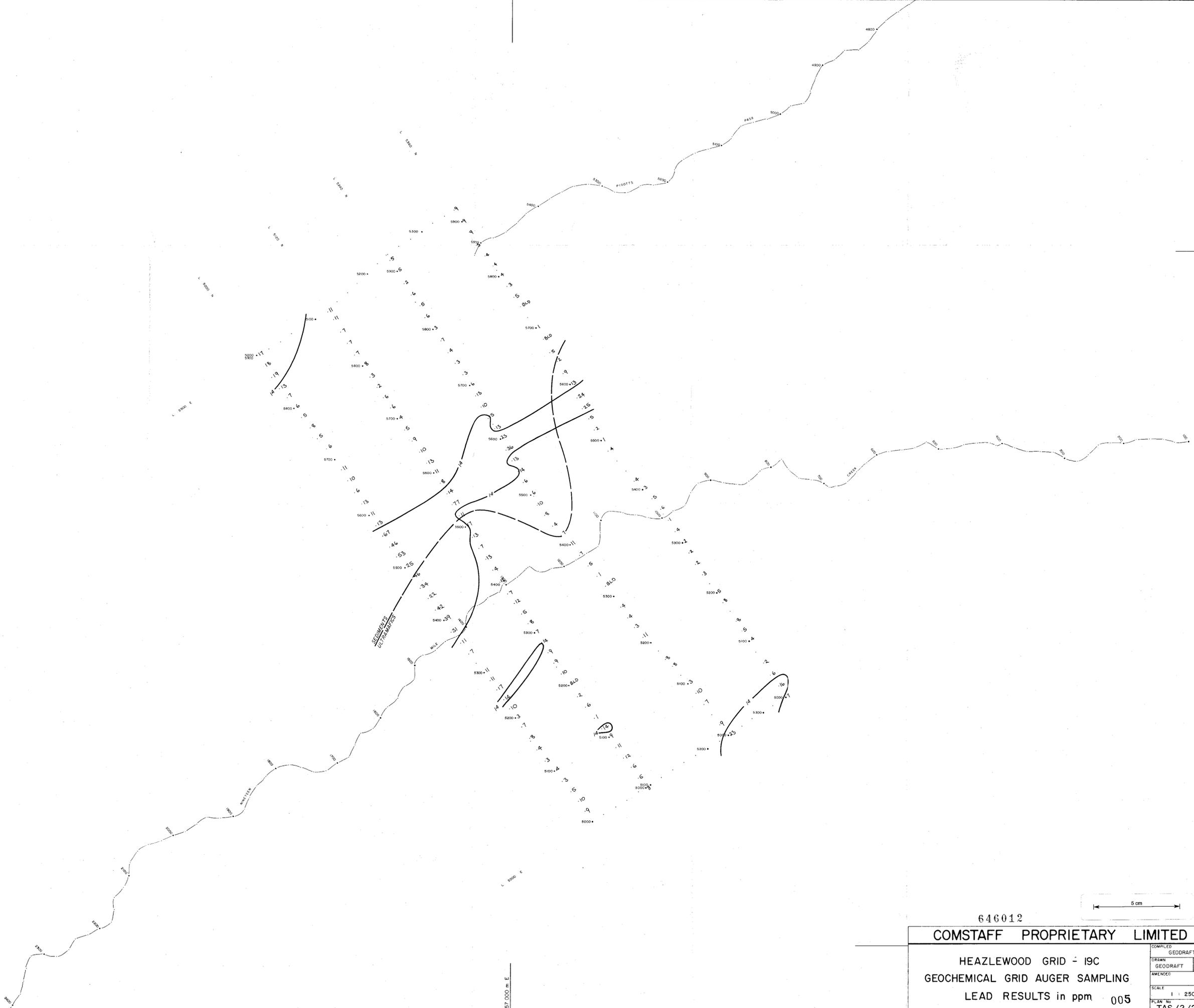


COMSTAFF PROPRIETARY LIMITED	
HEAZLEWOOD GRID - 19C GEOCHEMICAL GRID AUGER SAMPLING COPPER RESULTS in ppm	
COMPLETED GEOCRAFT	DATE 9/3/82
SCALE 1 : 2500	
PLAN No TAS/2/2846	004 231600

5 412 000 m N

5 411 000 m N

357 000 m E



646012

COMSTAFF PROPRIETARY LIMITED

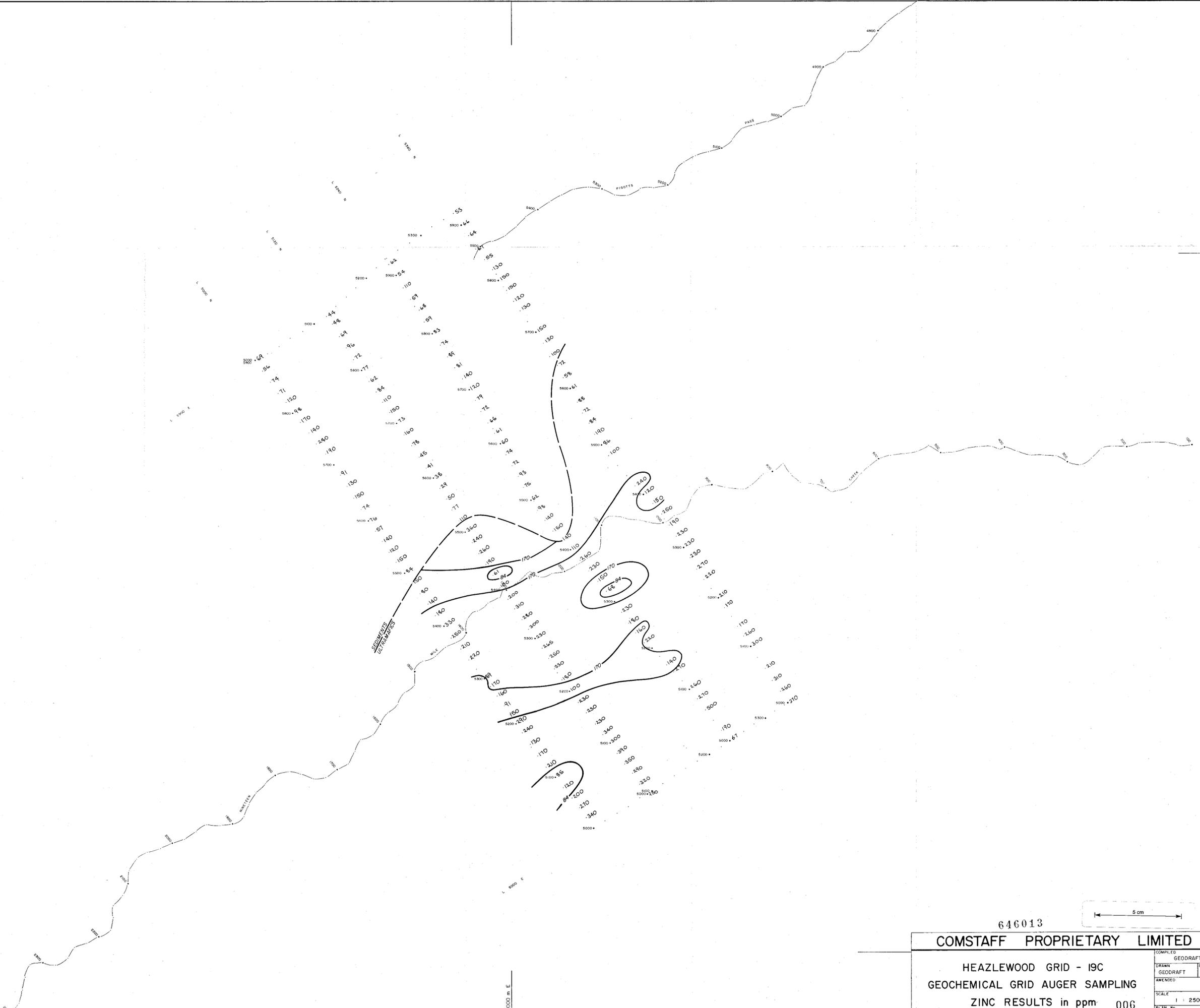
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 GEOCHEMICAL GRID AUGER SAMPLING
 LEAD RESULTS in ppm 005

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GEOGRAFT	8/3/82
AWENGEED	
SCALE	1 : 2500
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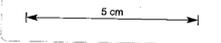
5 412 000 m N

5 411 000 m N

5 37 000 m E



646013



COMSTAFF PROPRIETARY LIMITED

HEAZLEWOOD GRID - I9C
 GEOCHEMICAL GRID AUGER SAMPLING
 ZINC RESULTS in ppm 006

COMPILED	GEOGRAFT
DRAWN	DATE
GEOGRAFT	8/3/82
AMENDED	
SCALE	1 : 2500
PLAN No	TAS/2/2848

5 412 000 m N

5 411 000 m N

357 000 m E



646014



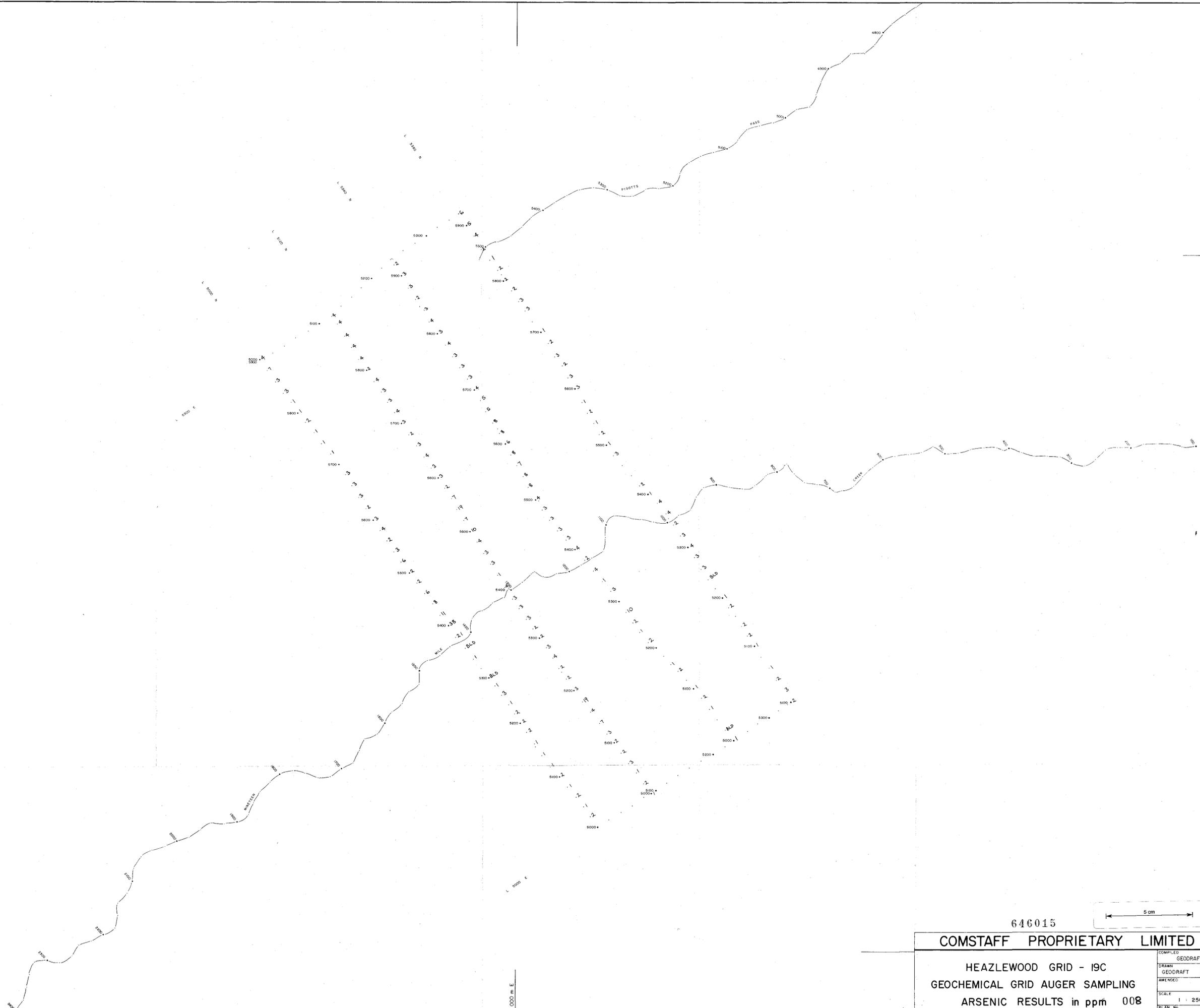
COMSTAFF PROPRIETARY LIMITED	
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GEOCHEMICAL GRID AUGER SAMPLING	
NICKEL RESULTS in ppm 007	
COMPILED	GEOGRAFT
DRAWN	DATE
GEOGRAFT	9/3/82
AMENDED	
SCALE	1 : 2500
PLAN No	TAS / 2 / 2819

83/1100

5 412 000 m N

5 411 000 m N

327 000 m E



646015



COMSTAFF PROPRIETARY LIMITED

HEAZLEWOOD GRID - 19C
 GEOCHEMICAL GRID AUGER SAMPLING
 ARSENIC RESULTS in ppm 008

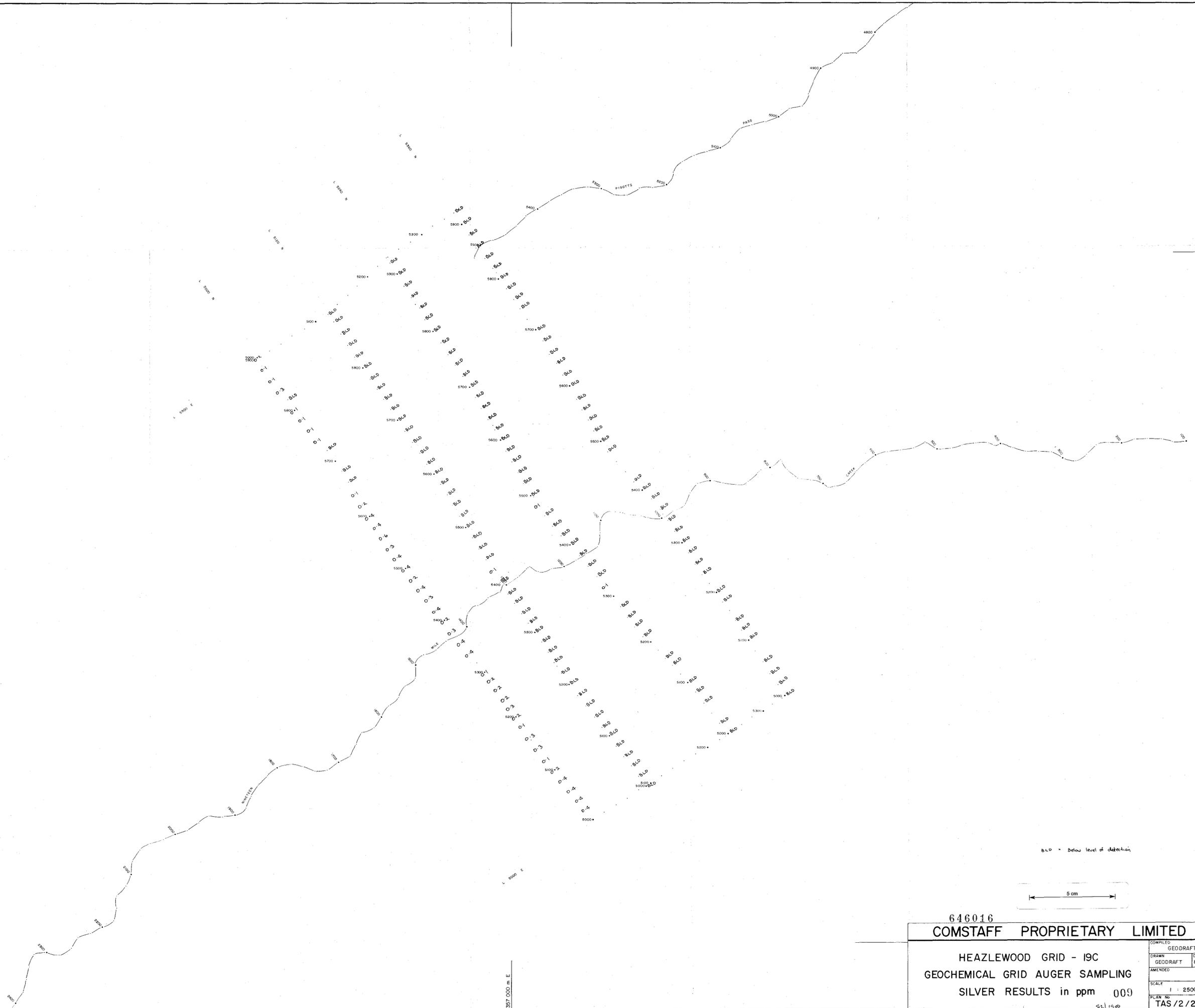
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GEOGRAFT	8/3/82
AMPLIFIED	
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31600

5 412 000 m N

5 411 000 m N

357 000 m E



B.L.D. - Below level of detection

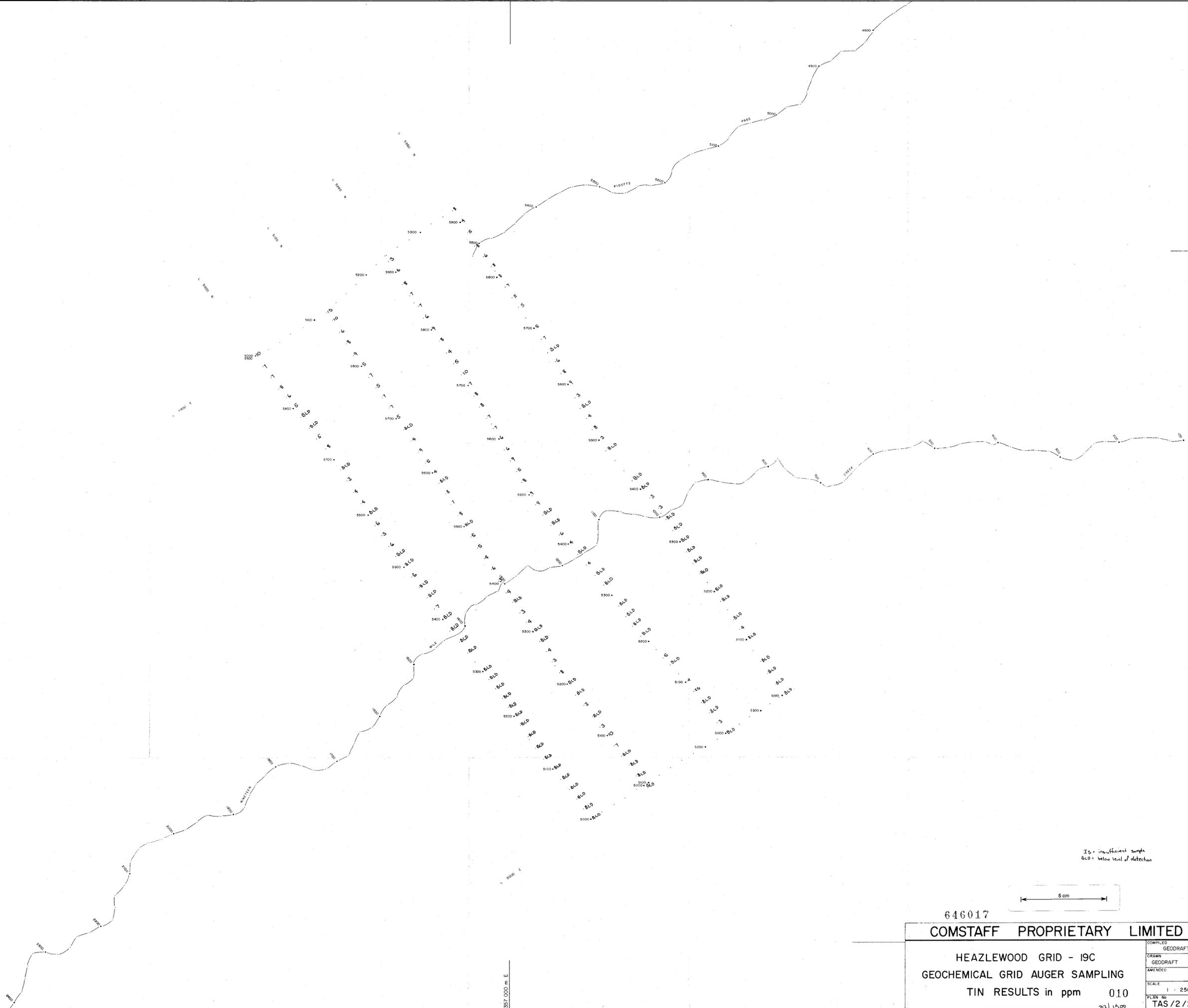


646016	
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GEOCHEMICAL GRID AUGER SAMPLING	
SILVER RESULTS in ppm 009	
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AMENDED	
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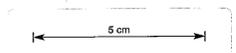
5 412 000 m N

5 411 000 m N

5 327 000 m E



IS - insufficient sample
 B.D. - below level of detection



646017

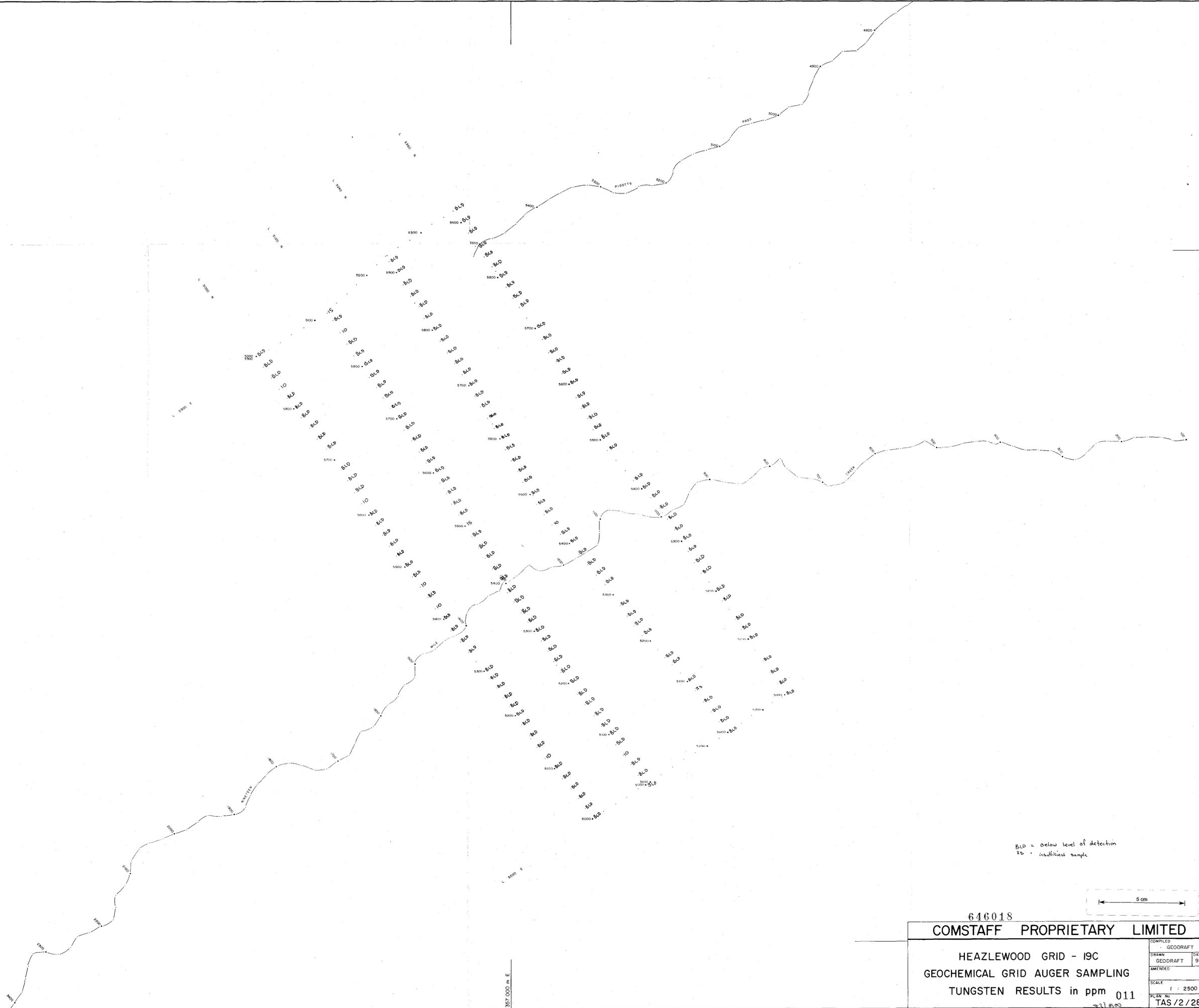
COMSTAFF PROPRIETARY LIMITED

HEAZLEWOOD GRID - 19C
 GEOCHEMICAL GRID AUGER SAMPLING
 TIN RESULTS in ppm 010

COMPILED	GEODRAFT
DRAWN	DATE
GEODRAFT	9/3/82
AMENDED	
SCALE	1 : 2500
PLAN No	TAS/2/2852

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5 411 000 m N

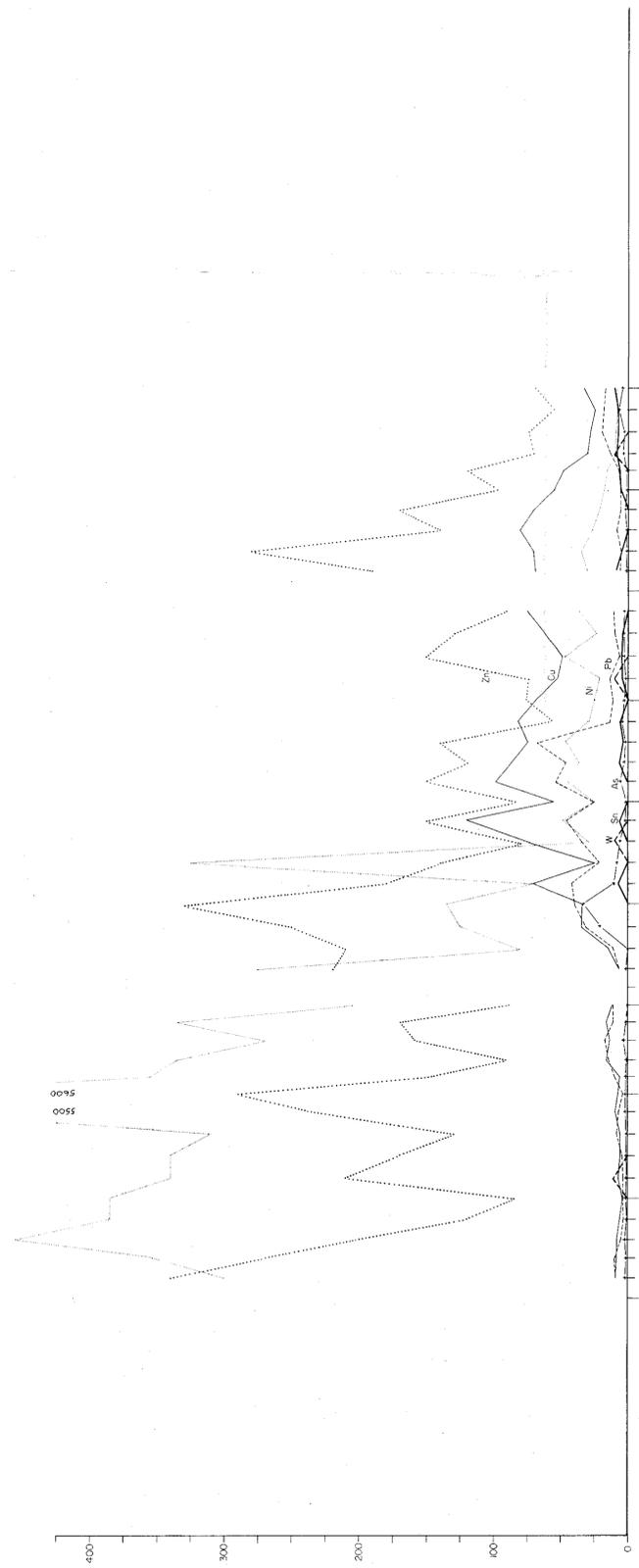


B.L.D. = below level of detection
 IS = insufficient sample

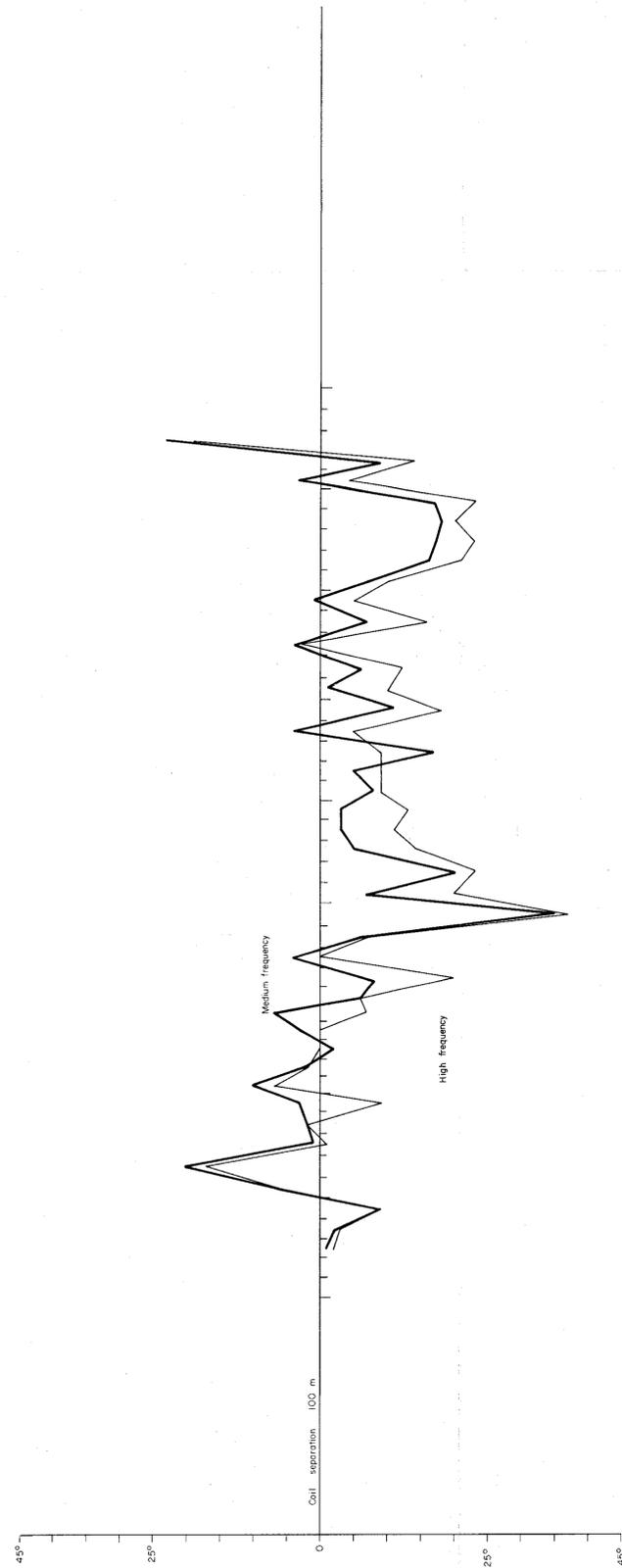


646018	
COMSTAFF PROPRIETARY LIMITED	
HEAZLEWOOD GRID - 19C	
GEOCHEMICAL GRID AUGER SAMPLING	
TUNGSTEN RESULTS in ppm 011	
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DRAWN	DATE
AMENDED	9/3/82
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PLAN NO.	TAS/2/2853

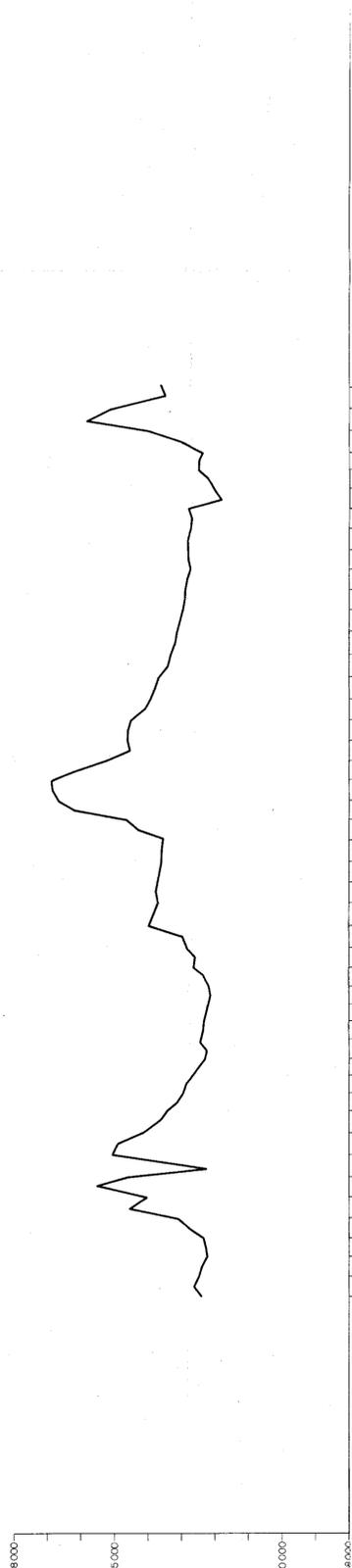
387 000 m E



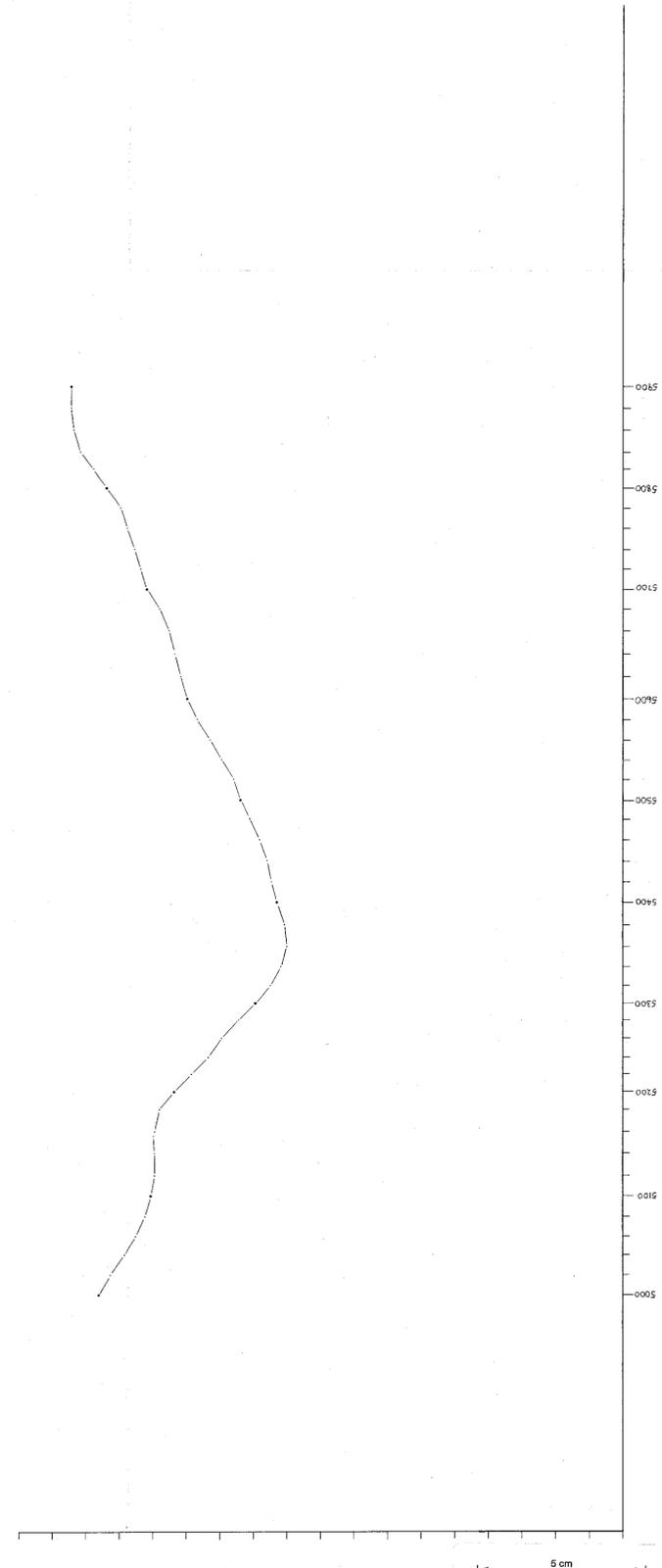
GEOCHEMISTRY ppm



CRONE apparent dip angle



GROUND MAGNETICS nT



TOPOGRAPHY & GEOLOGY

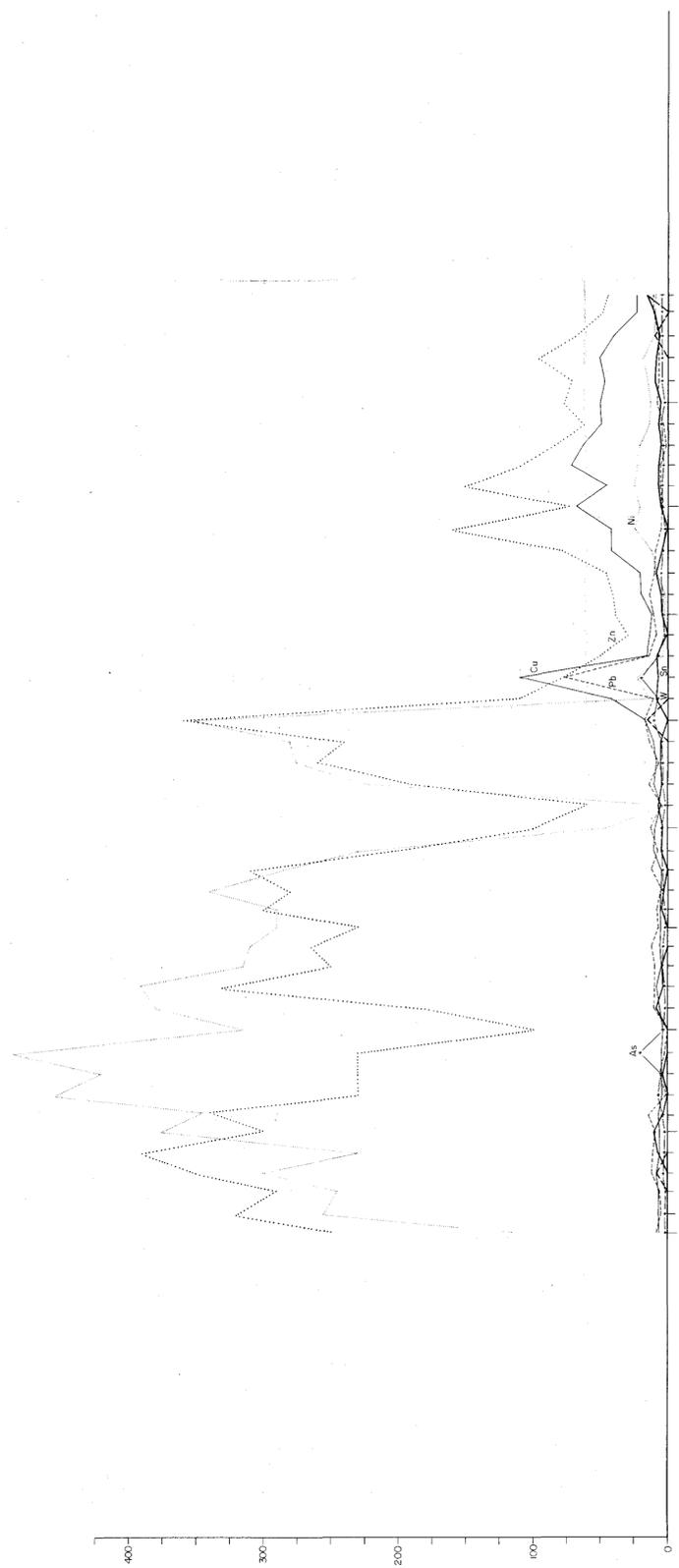
646019

5 cm

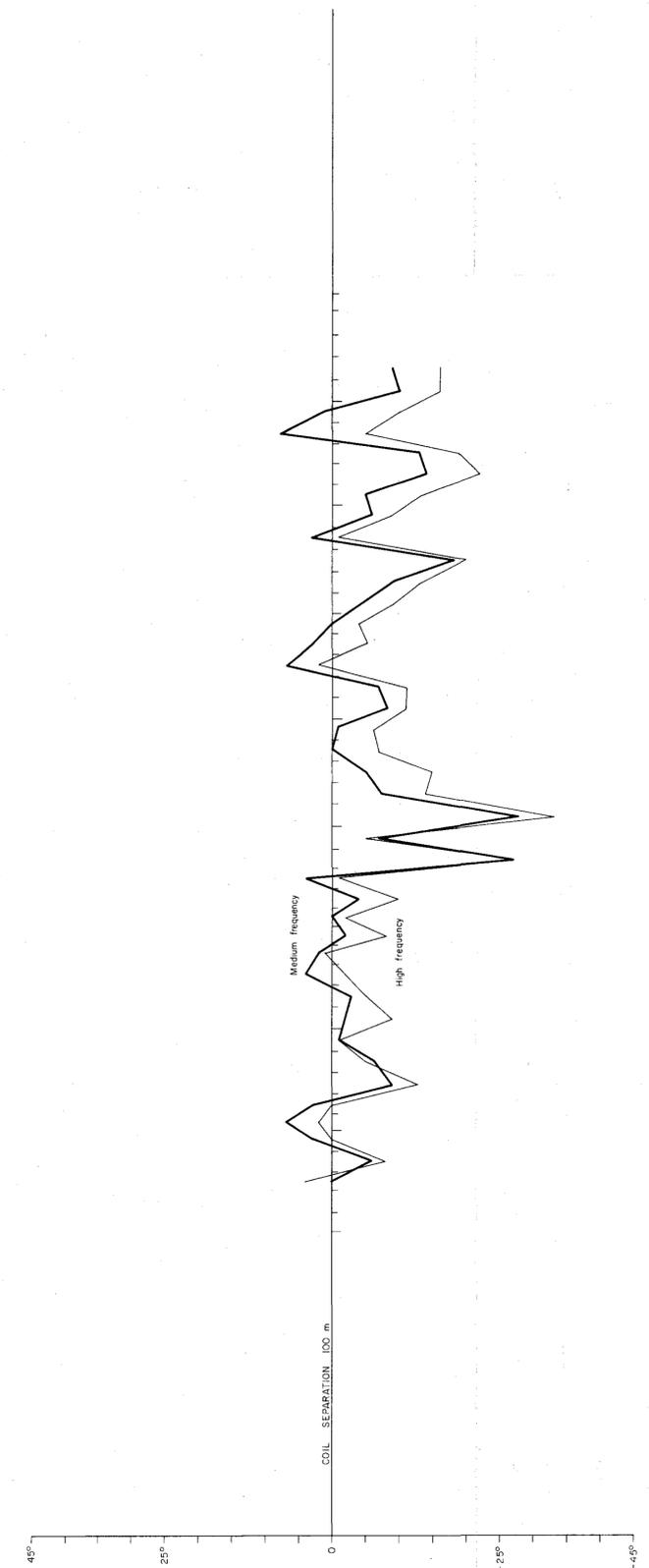
COMSTAFF PROPRIETARY LIMITED

HEAZLEWOOD GRID - 19C
 COMPOSITE SECTION OF LINE 5000 N
 TOPO, MAG, CRONE, GEOCHEM, GEOLOGY
 012

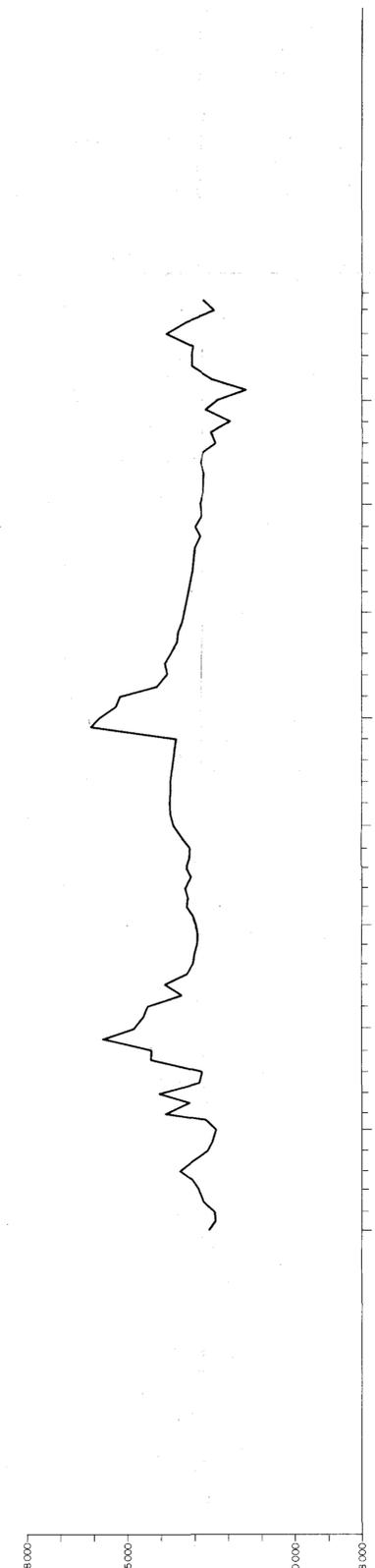
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AMENDED	26/11/82
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PLAN NO.	TAS / 2 / 2855



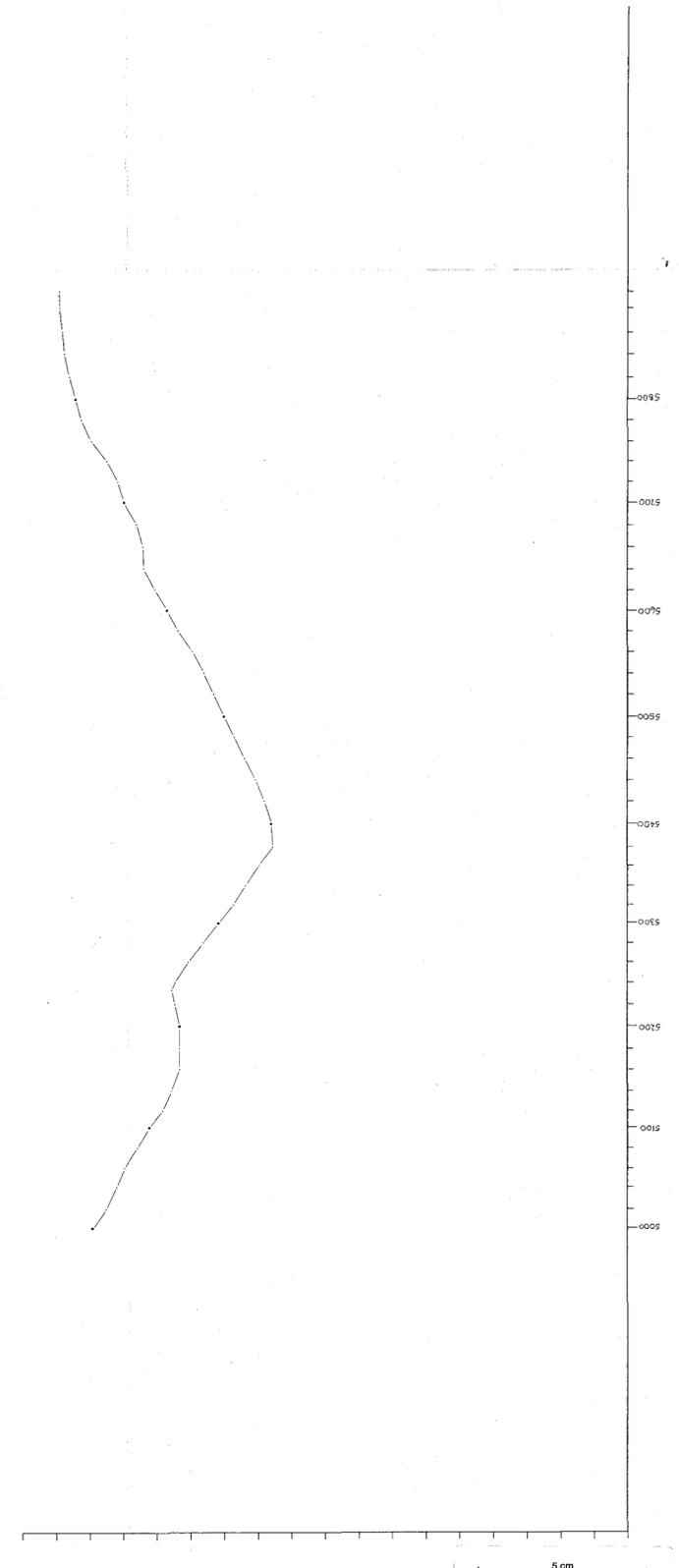
GEOCHEMISTRY ppm



CRONE apparent dip angle
COIL SEPARATION 100 m



GROUND MAGNETICS



TOPOGRAPHY & GEOLOGY

646020

5 cm

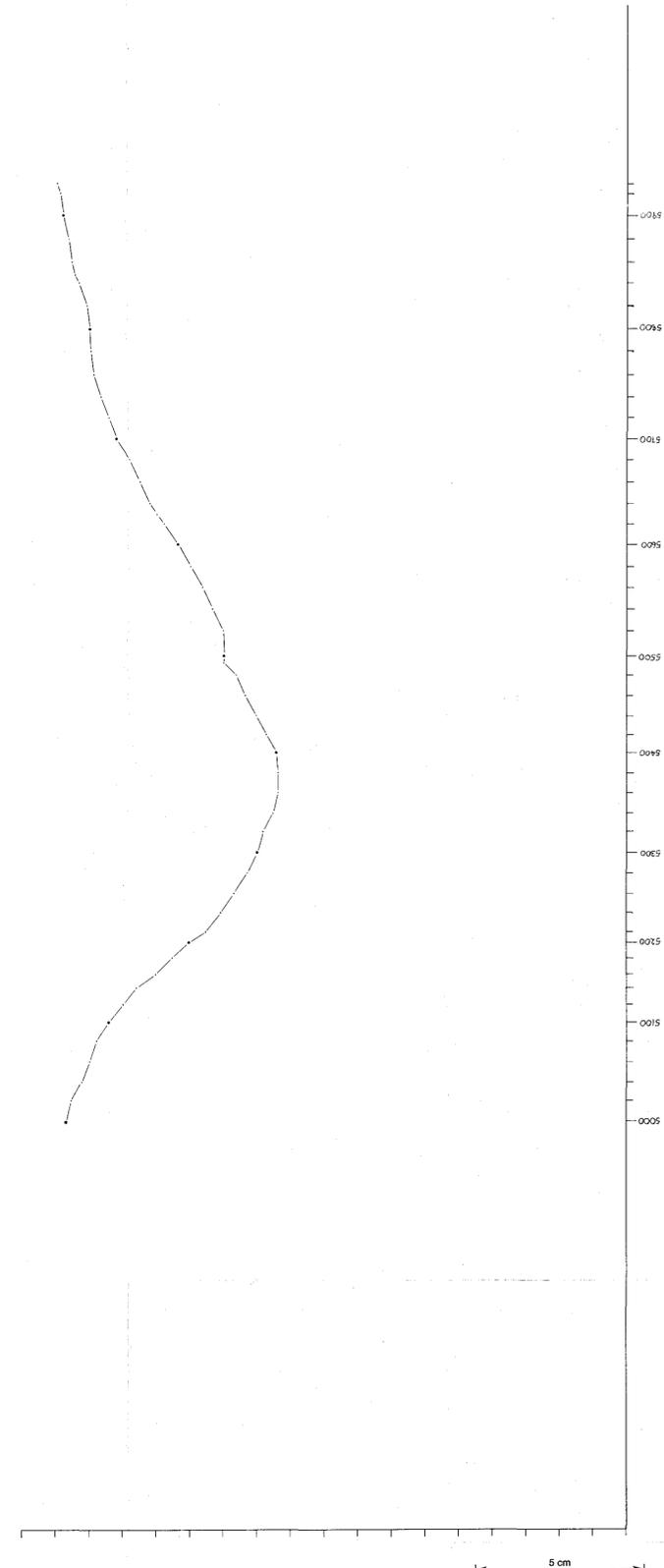
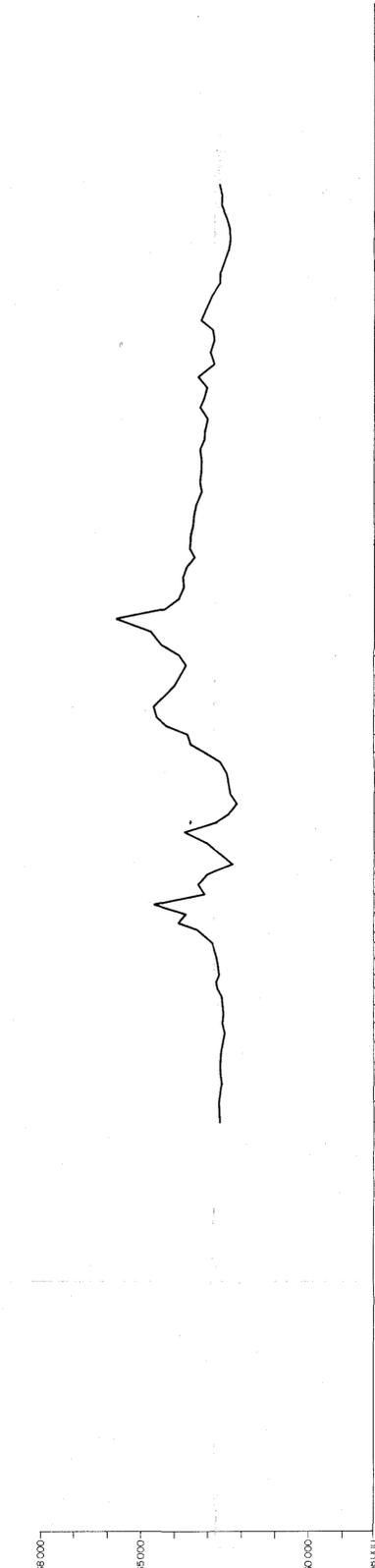
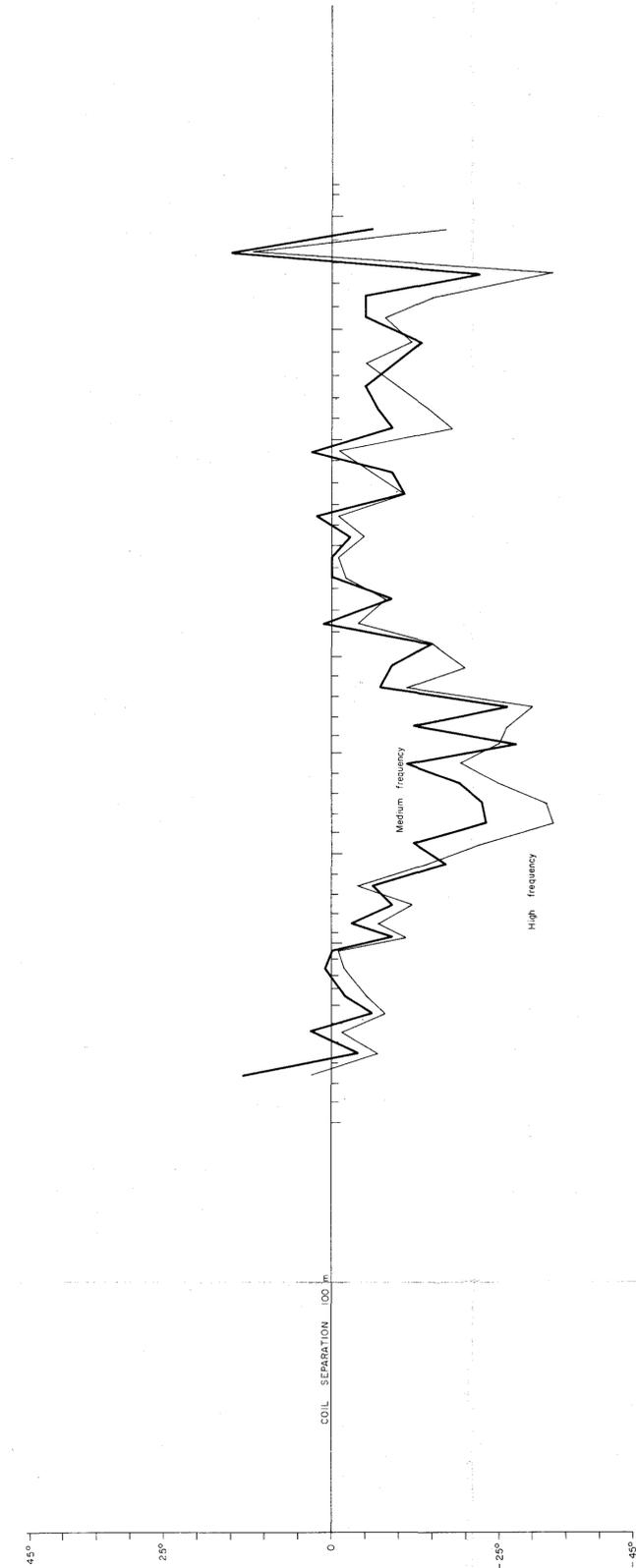
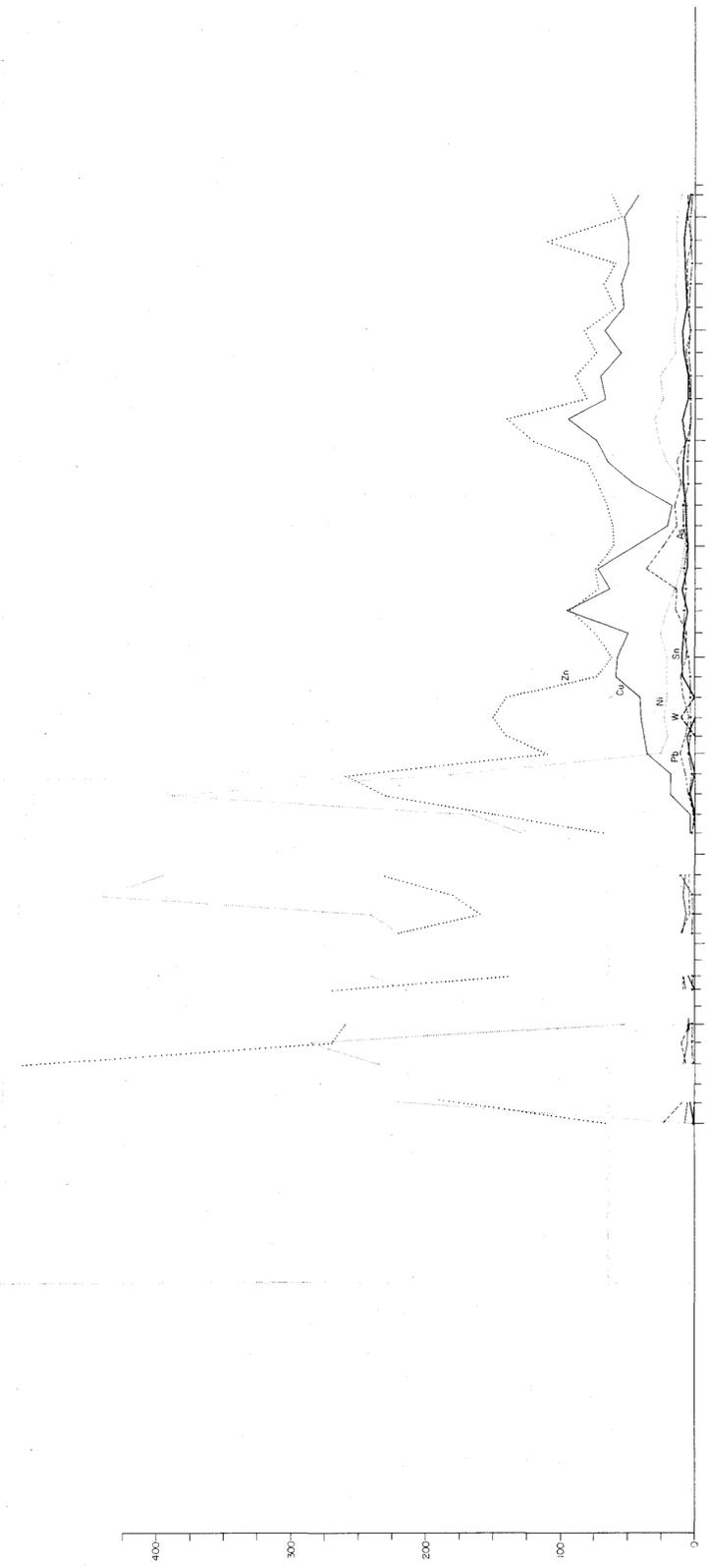
COMSTAFF PROPRIETARY LIMITED

HEAZLEWOOD GRID - 19C
 COMPOSITE SECTION OF LINE 5120 N
 TOPO, MAG, CRONE, GEOCHEM, GEOLOGY

COMPILED	C.M.J.
DRAWN	DATE
GEOGRAFT	10/3/82
AMENDED	26/11/82
SCALE	1 : 2500
PLAN No	TAS/2/2856

013

21/11/82



646021

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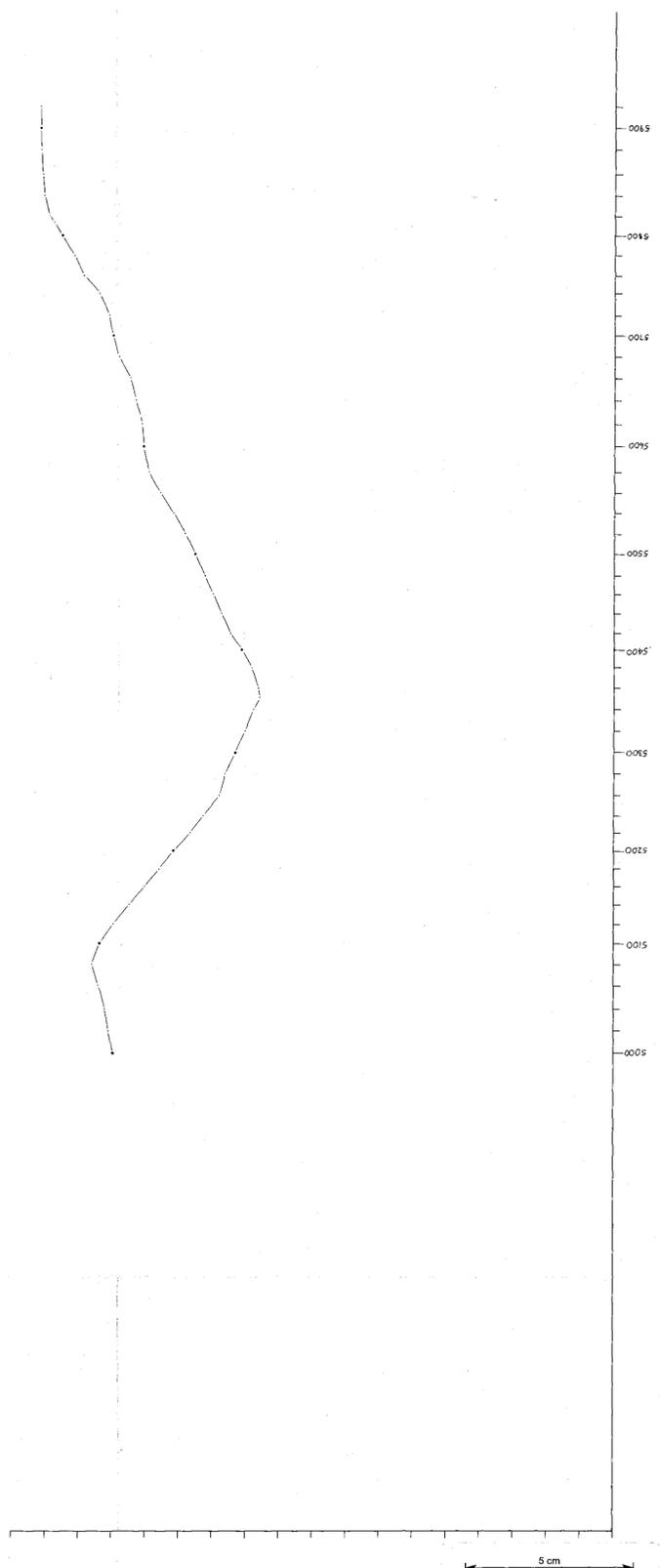
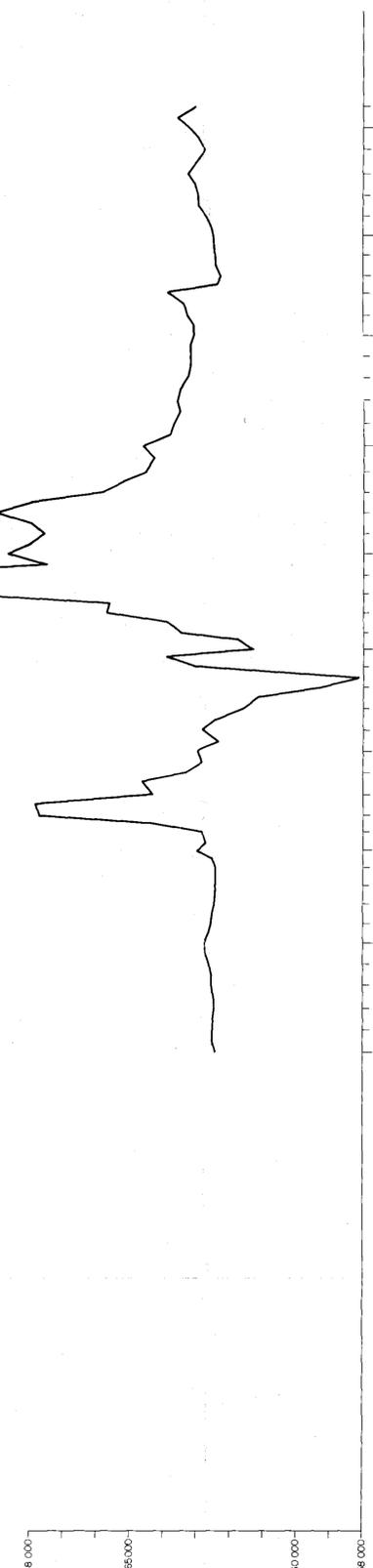
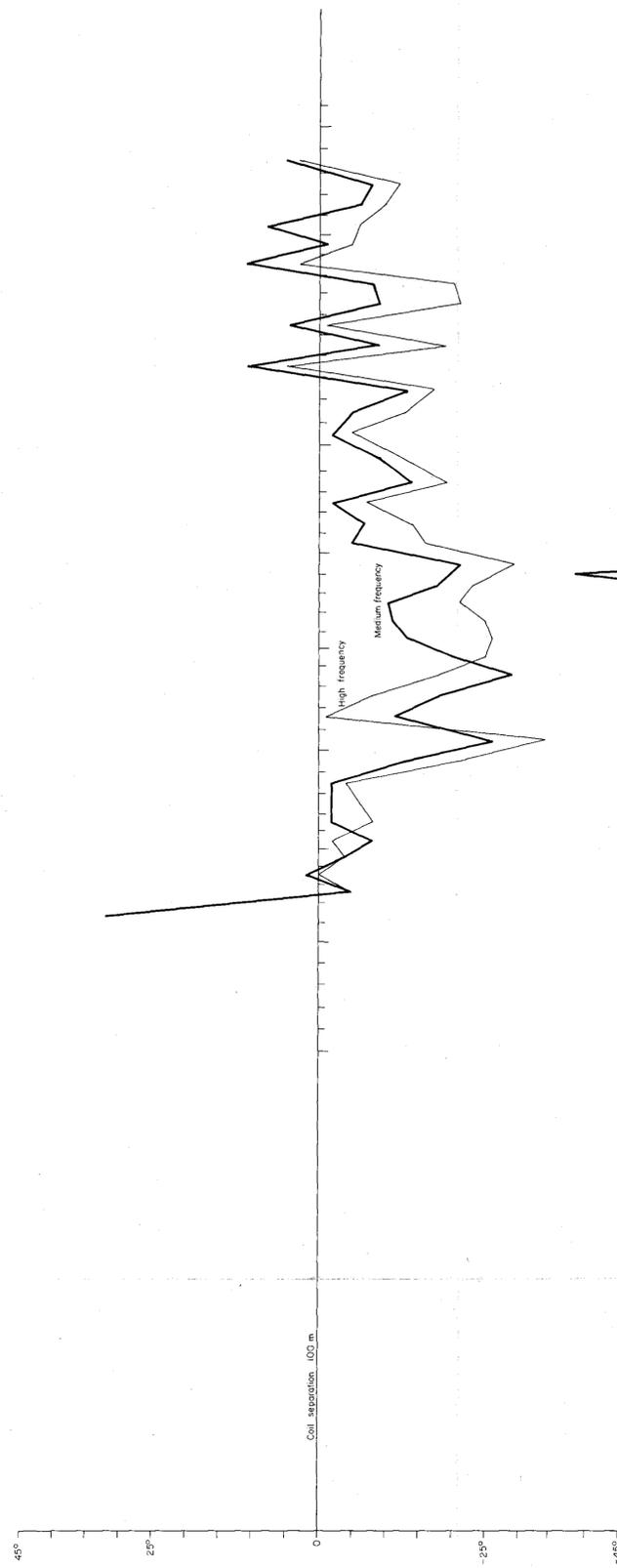
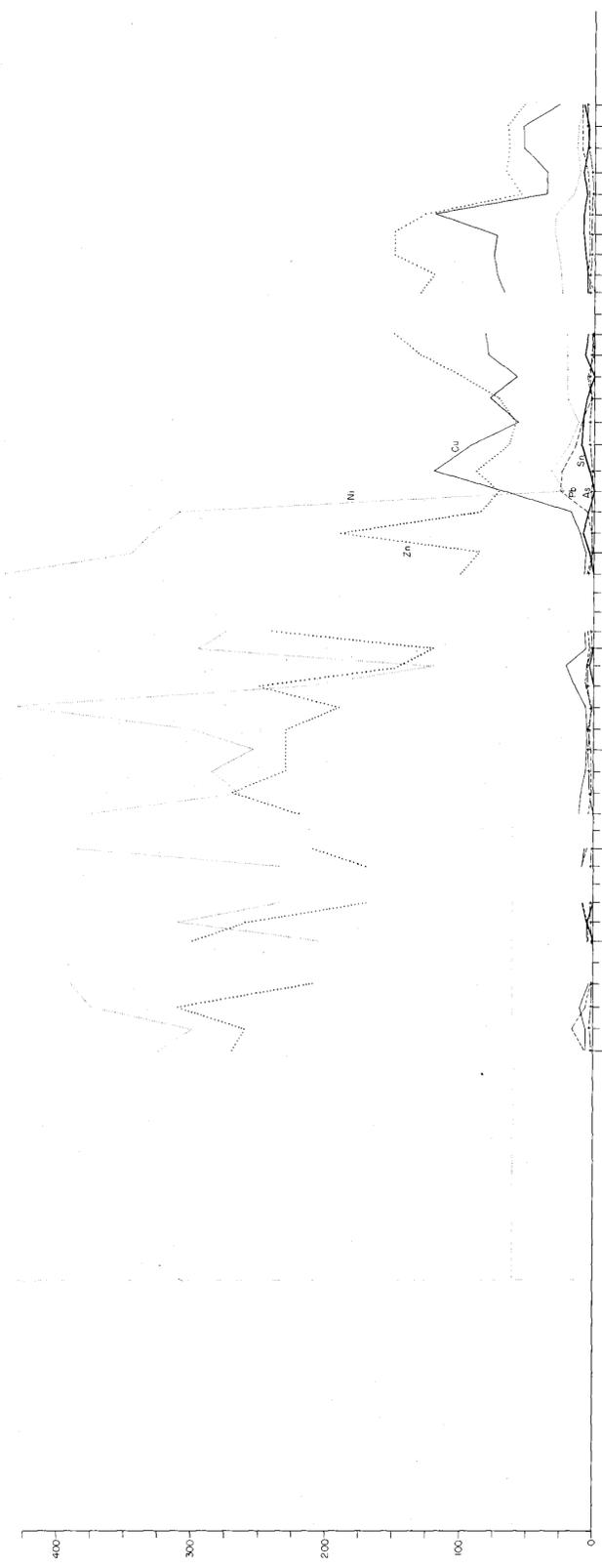
COMSTAFF PROPRIETARY LIMITED

HEAZLEWOOD GRID - 19C
COMPOSITE SECTION OF LINE 5240 N
TOPO, MAG, CRONE, GEOCHEM, GEOLOGY

COMPILED	C. M. J.
DRAWN	DATE
GEOGRAFT	10/3/82
AMENDED	26/11/82
SCALE	1 : 2500
PLAN No	TAS/2/2857

016

31/1900



646022

5 cm

COMSTAFF PROPRIETARY LIMITED	
HEAZLEWOOD GRID - 19C	
COMPOSITE SECTION OF LINE 5360 N	
TOPO, MAG, CRONE, GEOCHEM, GEOLOGY	
015	
COMPILED C.M.J.	DATE 10/3/82
DRAWN GEOGRAFT	AMENDED 26 / 11 / 82
SCALE 1 : 2500	
PLAN NO TAS / 2 / 2858	

811/1900