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21 JUN 1985			
DEPT. OF MINES			
REF. No. 6385/85			

PROJECT NAME: COMSTAFF PROPRIETARY LIMITED

TITLE: FINAL REPORT ON AREAS SURRENDERED
TO THE DEPARTMENT OF MINES, TASMANIA
EXPLORATION LICENCE 5/63 AREA 6 EAST RENISON

AREA NAME/S, STATE 1:250,000 SHEET NO/S & COORDINATES: 1:250 000 sheets K55 03 (Burnie)
K55 05 (Queenstown)

COMMODITY/IES: Cu, Pb, Zn, Ag, Au, Ba, Ni

TEXT PAGES NO: 4
PLAN NOS: See List of Plans

TABLE NOS: -
APPENDICES: 5

AUTHOR/S: R W L SHAW, M P EVERETT

DATE: June, 1985.

OPEN FILE

AUSTRALIAN ANGLO AMERICAN LIMITED

Incorporated in the State of Victoria

COMSTAFF PROPRIETARY LIMITEDFINAL REPORT ON AREAS SURRENDERED
TO THE DEPARTMENT OF MINES, TASMANIAEXPLORATION LICENCE 5/63 AREA 6 EAST RENISONINTRODUCTION

In accordance with the directives from the Department of Mines, Tasmania, EL 5/63 has been reduced from 364 square kilometres to 125 square kilometres. A portion of Area 6, East Renison, has been selected for relinquishment in order to achieve the objective. The following report summarises the work done to 1979, details of which are already on open file in the Department. Details of the work done since that date are included and appended.

SUMMARY OF WORK DONE TO 1979

- 1970 The licence area south of the Pieman River was drainage sampled and reconnaissance mapped. Samples were analysed for Sn, Cu, As, Ni, Zn, Ag, Bi and Sb. The samples included both silt and heavy mineral concentrates. They provided anomalous responses in Sn, Cu, Zn, Ni and Bi.
- 1971 The above programme was completed by sampling and mapping the Ring River. As a result of contamination it proved anomalous in all the above elements. Five anomalies were delineated south of the Pieman River for follow-up work.
- 1971/72 The area north of the Pieman River was drainage sampled and reconnaissance mapped. This constituted an extension of the work done to the north in the Huskisson Grid area (EL 5/63 Area 5). The ultramafic belt was successfully traced south to the Pieman River and was found to be set in a sequence of Cambrian sediments. No mineralisation was observed apart from the ubiquitous presence of pyrite in black shales. The geochemical results were disappointing and failed to provide anomalies worthy of substantial follow up. However, slight enhancement of values in Ag, Zn, Cu and As occurred in the north bank tributaries of the Pieman on strike from the old Fenton's/Salmon mineral shows to the south. The anomalies do not extend on strike as far north as the Huskisson River.
- 1972/74 The five anomalies designated from the reconnaissance work south of the Pieman River were followed up. Detailed work included grid extensions, additional mapping and costeaning accompanied by IP geophysical surveys. Drilling of RBE 1 was principally targeted at an IP anomaly. It failed to intersect mineralisation.

Attention towards this area waned for some time but it still remains in the portion of East Renison being retained. Considerable additional work including drilling took place - but in view of the fact that this ground is being renewed further reference to results will be omitted.

North of the Pieman River, an area known as the Pieman South project, was gridded and mapped. Owing to extensive glacial cover the results failed to provide either geological or geochemical encouragement. An extensive grid to the west of the Pieman South grid was partly cut and was known as the Pieman West grid.

1975/79 An INPUT EM survey was flown over the whole of the East Renison block. The data were interpreted and ground follow up of the anomalies commenced. Anomalies in the area being relinquished are GAG, GAJ, GAH, GAI, GAO and GAN. All except GAJ, and GAN were gridded, mapped and subjected to ground EM and magnetic surveys. Costeans were excavated at CAG without intersecting mineralisation. None of the anomalies were tested by drilling as all failed to provide evidence that mineralisation was the cause of the EM effect. The INPUT anomaly GAP immediately south of the licence area stimulated cutting and exploration of a large grid known as grid GAP. The eastern selvedge of this grid falls within the area being surrendered. Work done and results obtained from this grid are already on open file in the Department of Mines and are therefore not repeated with this surrender document.

A number of extensions to and infillings of the GAP grid were done as grids X Proprietary, GAP West, GAS, GAT and GAR or the Fenton's grid. These in fact supercede the previous grids of the early 1970's. All these activities and the drilling they later engendered are in the part of Area 6 being retained and therefore will not be detailed here.

POST 1979 - SOUTH OF THE PIEMAN RIVER

No work took place in the area selected for surrender until the DIGHEM survey of 1983. The detailed results of the airborne geophysical survey are appended in the following reports:-

D. B. Trussell 1984 - A14 Interpretation of Renison East Area DIGHEM survey (Appendix 2).

D.B. Trussell - Report A18 Status of Input Anomalies in EL 5/63 Area 6 (Appendix 3).

"Survey of the North Pieman Area, Tasmania for Comstaff Pty. Ltd." by DIGHEM Ltd (Appendix 4).

Only one anomaly was selected for follow up work (1140B). It is located under the Pieman River adjacent to the Emu Bay Railway line. The former INPUT anomaly GAN was manifested in a number of DIGHEM effects as can be seen in the raw data. No work was done on these targets before surrender date.

POST 1979 NORTH OF THE PIEMAN RIVER

In the area to be surrendered north of the Pieman River no work was done additional to that reported above until the DIGHEM survey of 1983. The results of the survey are appended in the documents listed above.

Many of the DIGHEM responses coincide with former INPUT anomalies - though the definition of the targets appears to be sharper in the DIGHEM data. In view of the lack of success in the work done on the INPUT targets a fairly coarse selection method was used for determination of a short list of targets from the multitude of conductors recognised in the DIGHEM results. These targets were anomalies 120AX, 60D and 180H. They were all gridded, geologically mapped, and geochemically sampled. 120AX and 180H were subjected to ground magnetic and EM surveys. Two of the anomalies provided geophysical results which were tested by drilling. Three holes were completed and each provided intersections of conductive black shales which are regarded as the source of the EM effects. No evidence of mineralisation was identified in the geochemical results from the soils or the core.

Ground work done on these grids is as follows:-

- a) 120AX - Four lines, each approximately 1 km long and 160m apart were cut with station intervals at 20m. Soil samples were collected by auger at 20m intervals and analysed for Cu, Pb, Zn, Ag, As and Sn (see attached profiles TAS/2/4075-4078). A 1 km² UTEM transmitter loop was cut on the eastern end of the lines.

Grid lines were surveyed with a magnetometer (see TAS/2/3932) and stream sediment samples were collected from creeks wherever they crossed lines (see Plans TAS/2/4028, 4253 and 3934). All lines were geologically mapped.

DIGHEM anomalies 120AX and 110XA, 140XA (covered by the 120AX grid) are "poorly defined but broad which tends to suggest their possible deep bedrock origin." Because of this comment and the location of the anomalies close to the axis of the Huskisson Syncline, it was decided that the anomalies had to be followed up by use of a deep penetrating EM system. A UTEM survey was done by Lamontagne Geophysics on the four lines, (see attached UTEM profiles - Appendix 5).

- b) 60D - Three lines varying in length from 560m to 638m and 160m apart were cut with station intervals at 20m. Auger samples were collected at 20m intervals and analysed for Cu, Pb, Zn, Ag, As and Ni. A magnetometer survey was done. The 60D group are part of a 5.6 km linear belt of conductors on the eastern flanks of a prominent magnetic trend. DIGHEM 60D was chosen because of the objective criterion of width. 60D occurs east of Input GAG.

The conductor lies to the east of a serpentinite belt and on the western margin of a silicified unit (silicified serpentinite). Ground magnetics indicate the conductor to lie in a trough. Gabbro dykes intrude undifferentiated sediments in this trough. A geochemical pattern high for Cu, Pb, Zn from soil auger samples occurs to the west of the conductor and lies in the magnetic trough zone. Refer to TAS/2/3856 (Geology), TAS/2/3859 (Magnetics) and TAS/2/3857 (Geochemistry). Rock sample results are shown on TAS/2/4028. A costean excavated during the follow up of Input GAG (1977) extended across the zone of gabbros, sediments, magnetic trough and the Cu, Pb, Zn geochemical highs but does not extend to the east far enough to expose the conductive zone.

- c) 180H - Five lines, 1 km long and 160m apart were cut with stations at 20m intervals. Soil samples were collected only on the southern two lines (overlaps old GAO grid lines, 1979) and analysed for Cu, Pb, Zn, Ag, As and Sn (see attached profiles TAS/2/4153 and 4157). A magnetometer survey was completed. Within the area of the 180H grid, three groups of DIGHEM conductors exist. It appeared that the DIGHEM survey provided greater resolution than the previous INPUT survey.

The preceding data extracted from a comprehensive report on DIGHEM follow-up for the whole of Area 6 (Thynne 1984), indicate a reliance on geophysics for target definition. The results of the GENIE and the UTEM surveys are discussed in detail and the results of the drilling that was done are described in the appended report:-

Everett M.P. East Renison (EL 5/63), PART 6, INTERIM REPORT (Appendix 1).

CONCLUSION

The above data present a summary of the work done prior to 1979 in Area 6 (EL 5/63). All the results are on open file at the Department of Mines. Since 1979 exploration has been reliant on geophysics as a lead-in to targets in this area, especially in view of the large percentage of the ground which is masked to geological and geochemical observation by thick glacial cover. Although the ground follow up is not total it is concluded that a sufficient spectrum of geological environments has been tested to cause belief that the bulk of the geophysical anomalies are attributable to conductive black shales or contact effects. There has been a singular lack of encouragement from geochemistry and mapping - despite the saturation gridding prior to 1979 - and no targets have accrued from this approach. The geophysical targets which were drilled failed to provide further encouragement either to proceed or to retain the ground. They contained no geochemically anomalous core values, no evidence of alteration effects attributable to mineralising systems and no lithotypes which would suggest a host or mineraliser exists in the sequence. The eastern selvedge of the area being surrendered appears to be equally lacking in potential despite the known mineralisation of Colebrook Hill across the boundary.

No further work was planned for the area surrendered.

A P P E N D I X 2

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REPORT A14

INTERPRETATION OF RENISON EAST DIGHEM SURVEY

By: D B Trussell
1984

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REPORT A14

INTERPRETATION OF RENISON EAST
DIGHEM SURVEY

INTRODUCTION

In April 1983 DIGHEM carried out an airborne EM survey over the EL 5/63 area 6. The line spacing was 200m. The EM bird height was 35m. The magnetometer altitude was 50m. The DIGHEM EM system consisted of 3 coil pairs - one operating at 900Hz, with the axis in the direction of flight and the other two operating at 900Hz and 385Hz with vertical axis. The coil separation was 9m. The EM data were recorded with a sensitivity of .25 ppm. The magnetic data were recorded with a sensitivity of 1nT.

The contractor has prepared a report on the DIGHEM work. All significant anomalies were selected using objective criteria. The depth and conductivity width of horizontal and vertical sources which would generate the observed anomalies are presented in tabular form in the DIGHEM report. In addition the contractor has given descriptive comments on those anomalies believed to be due to genuine bedrock conductors. Accompanying the DIGHEM report are five 1:10 000 scale plans - Electromagnetic anomalies, probable bedrock conductors, resistivity, and two magnetic plans. All except one of the magnetic plans are plotted showing both the flight lines and the topographic base.

WORK DONE

The DIGHEM survey was carried out over an area which in 1975 had been covered by the Input EM method. The DIGHEM survey, it was hoped, would detect small conductors missed by the Input survey. Where relevant the Input follow up programme is referred to in this report.

Much of the area was flown with north south oriented lines as well as east west lines. This was done to better delineate possible east west striking conductors. Previous geological work indicated that east west structures may be interesting.

Considerable ground geophysics has been carried out south of the Pieman River. The whole area has been covered by a ground magnetic survey. The interpretation of this data will be the subject of a separate report. A substantial amount of dipole dipole IP has also been done. The results of this work are summarised in "Geophysics of the Renison Grid" by D Trussell, June 1978. The IP information will not be covered again here except as it directly relates to DIGHEM follow up targets.

The DIGHEM magnetic and resistivity plans were used to prepare a geological interpretation of the DIGHEM survey results.

DISCUSSION

A. Geology Interpreted from Geophysical Information

The aeromagnetic contour map and the resistivity contour plan were studied to obtain geological information. Faults, major magnetic bodies, formational conductors and the conductors discussed in the following section have been marked on the base plans for the area.

North of the Pieman River

North of the Pieman River the dominant feature are two ultrabasics. These delineate the Huskisson syncline. They are semi-continuous magnetic anomalies striking NNW in the western and central eastern part of the area. They are generally quite conductive as well as being highly magnetic. East of the eastern ultrabasic body is a formational conductor which is continuous (except for fault off-sets) from the Pieman River to the northern boundary of the survey. From the Pieman River to halfway to the northern boundary there is another conductor 150m to the east of the first. There is also a conductor on the western flank of the eastern ultrabasic from the Pieman River halfway to the northern boundary. South of the Pieman River Electrolytic Zinc has intensively explored the eastern conductors. For this reason this conductor merits serious examination.

East of the eastern ultrabasic there is a north-south striking magnetic anomaly which is due to a weakly magnetic marker horizon.

South of the Pieman River

The Pieman River coincides with a major interruption in the continuity of magnetic anomalies.

B. Geophysical Targets

The Renison East area records contain an unusually large number of conductors. In the following discussion the DIGHEM anomalies of possible economic interest are described. The anomaly labelling used in the DIGHEM report is used.

1. Anomalies North of the Pieman River

60D. This anomaly is part of the major conductor flanking the east side of the eastern ultrabasic located north of the Pieman River. This conductor which stretches from line 300 north to line 10 (where it is open to the north) is undoubtedly due to conductive sediments. However, carbonaceous shales are excellent hosts for economic sulphides. It is therefore recommended that this major conductor be carefully investigated. The southern portion of the conductor has been extensively tested by Electrolytic Zinc. On line 60 the conductor is atypical in character. DIGHEM interprets it to be a thick conductor on this line. The conductivity width product is 15 Siemens. The depth of burial is 16m. A Genie EM survey is recommended over this anomaly.

90xB. This anomaly is in the vicinity of Input anomaly GAG. The follow up of GAG was inconclusive. A complete report on the GAG work is contained in "Interim Report on Ground Follow Up Work on Input Anomaly GAG" by G F Pigott, April 14, 1977. The DIGHEM analysis indicates the conductor comes to surface. However, the amplitude of the anomaly is very small so this calculation can be in serious error. A Genie ground EM survey is recommended to pin point the anomaly location.

90B, 100C. This anomaly lies within serpentinite. DIGHEM analysis indicates the conductor comes to surface. Previous regional geochemical work should have responded if the conductor was of interest. The most probable cause of the anomaly is a conductive shear within the serpentinite. However, a field inspection of the area by a geologist is recommended.

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130E, 1140D, (130F, 130G). These anomalies are the most promising ones in the formational conductor located on the western flank of the major eastern ultrabasic. Input anomaly GAI is located 400m south of the selected DIGHEM target. Ground EM was done at GAI and it was written off as a surface conductor. The DIGHEM analysis places the conductor at a depth of 12m and gives it a conductivity width of 30 Siemens. If work is done on this anomaly the grid lines should be extended sufficiently far east so that anomalies 130F and 130G are also covered. These anomalies are coincident with Input anomaly GAH. Follow up on GAH was never carried out. It remains a "low priority" INPUT anomaly. DIGHEM places the source of 130F and 130G at a depth of 40m.

A Genie survey of the area is recommended. One kilometer long lines are necessary to cover both 130E and 130G.

160E, 170E, 180G, 170F, 180H and 190K. There are three separate conductors in this area which is in the vicinity of Input anomaly GAO. In the Input follow up a conductor was not found. There is considerable doubt that the grid was correctly located. The area has substantial glacial cover. Anomaly 190K is likely due to an outcropping conductor and it is this which was probably thought to be the source of GAO. Anomalies 170F and 180H are ascribed to a source which is at a depth of 27m and therefore unlikely to have any obvious surface manifestation. Finally, a conductor formed by anomalies 160E, 170E and 180G is at a depth of 20m. It is recommended the area be covered with a large grid and surveyed with Genie EM method.

190H. This response is in the same general position as 60D. That is, it is on the east flank of the eastern ultrabasic. It is selected for further work on the basis of the response is due to a thick conductor. The predicted depth of burial is 20m. A Genie survey would therefore accurately locate the position of the conductor.

2. Anomalies South of the Pieman River

190G, 1140B, and 200C. This isolated conductor crosses the Pieman River. It is best examined south of the River where the 1140B response indicates a thick source. EM methods will not be effective in the area since the HEC power line is nearby.

The anomalies in the far south eastern corner of the licence area coincide with graphitic sediments. These gave strong IP and SP anomalies. Further work is therefore not recommended.

SUMMARY OF RECOMMENDATIONS

Genie EM follow up (7 total)

60D*
90xB*
130E - 130G group*
160E - 190K group*
190H*

Deep Penetration EM (5 total)

120xA* and magnetic anomaly

Field Inspection or Review (4 total)

100C*

Anomalies adjacent to power line (3 total)

1140B

Anomalies marked * are north of the Pieman River.

The above anomalies have been plotted on the 1:50,000 plan of the EL 5/63 Area 6.

PLANS

TAS-2-3787 EL 5/63 AREA 6 SUMMARY OF RECOMMENDATIONS 1:50 000
FOR DIGHEM GROUND FOLLOW UP

TAS-2-3788 EL 5/63 AREA 6 NORTHERN PORTION. GEOLOGY 1:10 000
INTERPRETED FROM DIGHEM SURVEY

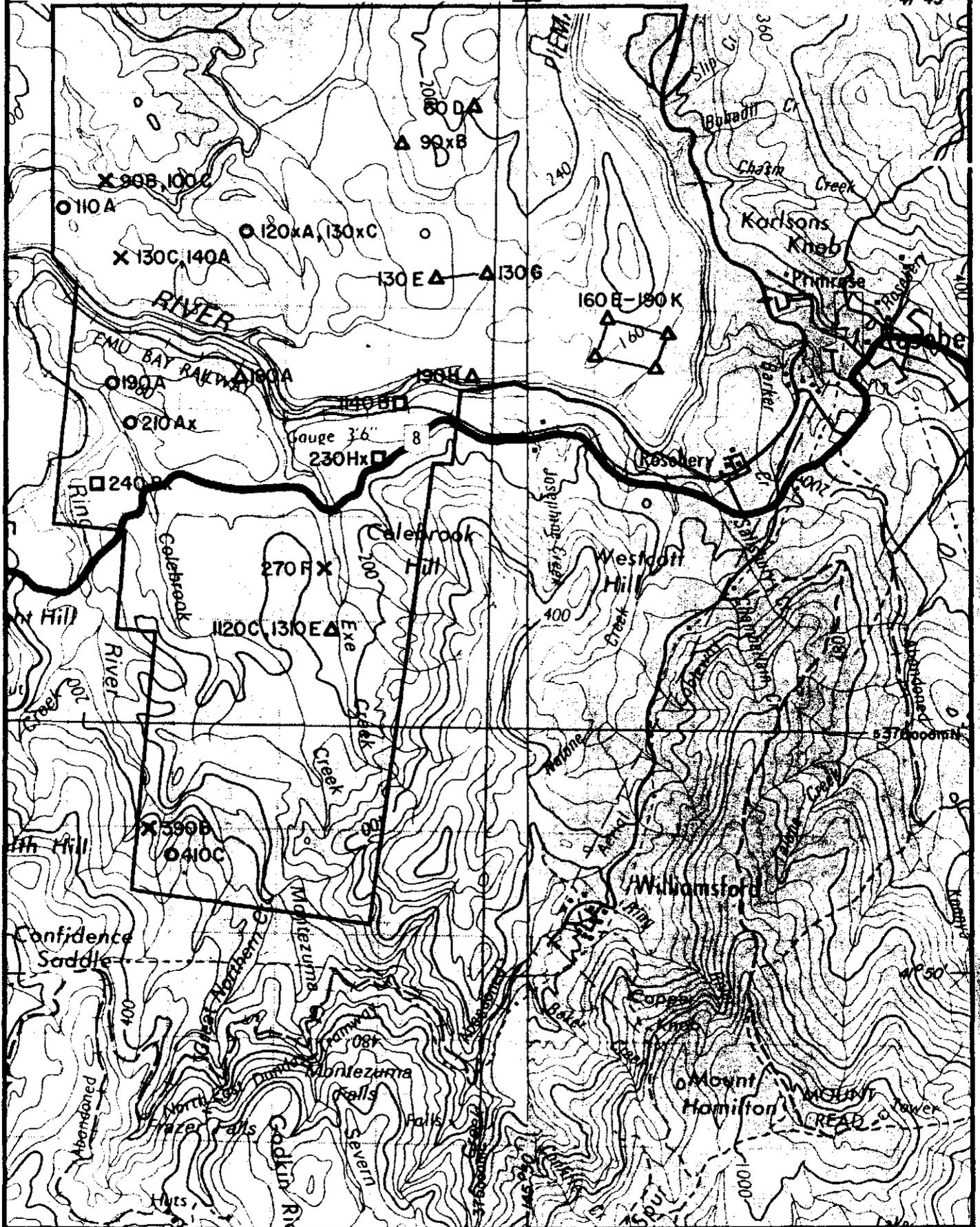
TAS-2-3789 EL 5/63 AREA 6 SOUTHERN PORTION. GEOLOGY 1:10 000
INTERPRETED FROM DIGHEM SURVEY

NOTE: PLANS TAS-2-3788 & 3789
SEE FICHE NUMBER 5.

149016

5 cm

41°45'



- ▲ Genie EM follow up
- Deep probing EM follow up
- Near powerline
- × Field inspection or review

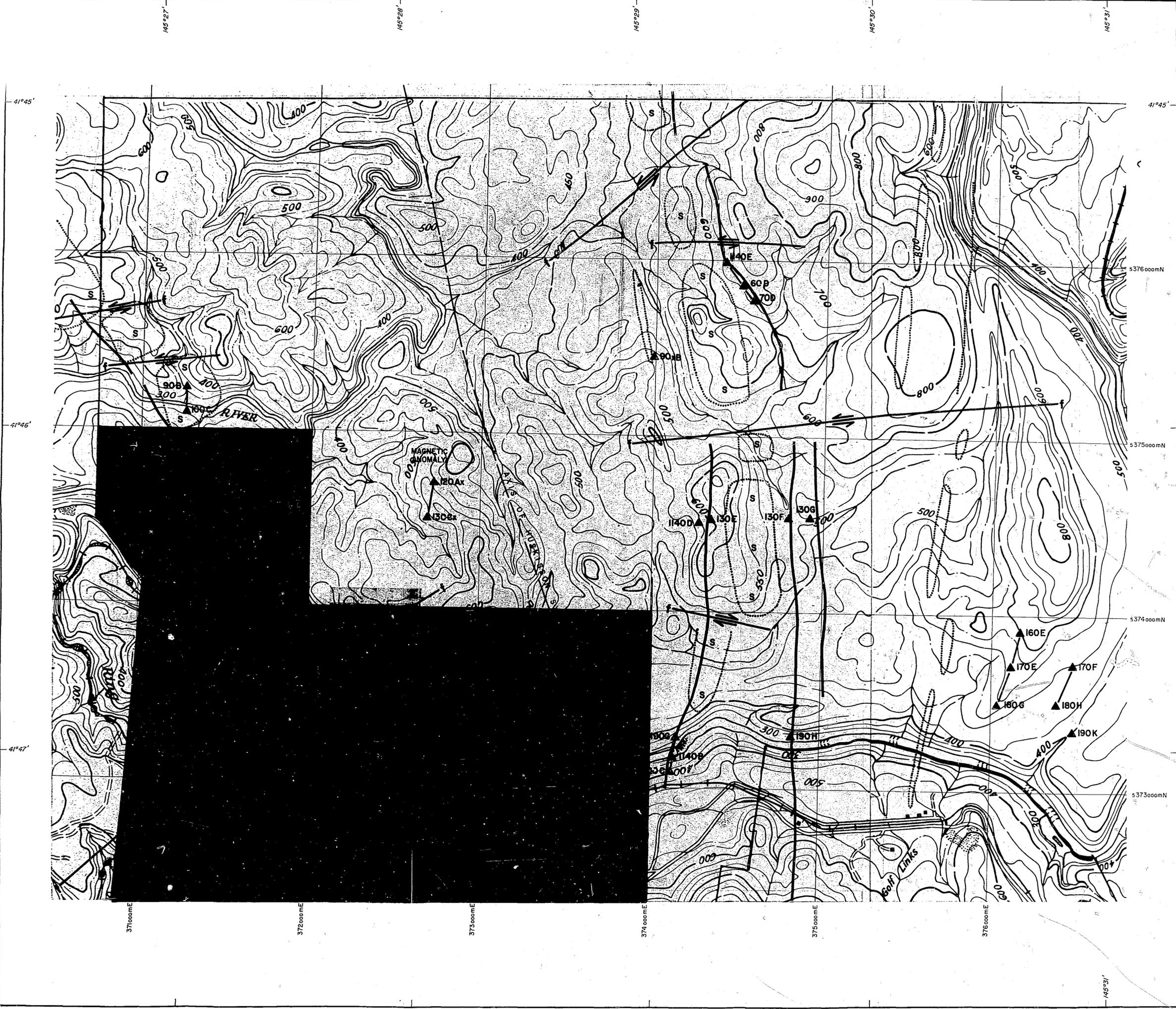
COMSTAFF PROPRIETARY LIMITED

EL 5/63 AREA 6

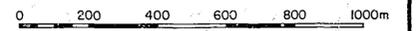
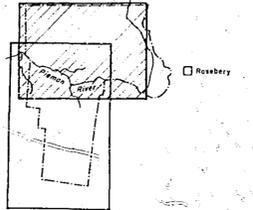
SUMMARY OF RECOMMENDATIONS FOR DIGHEM GROUND FOLLOW UP

85-2418

COMPILED D.B. Trussel	DRAWN January 1984	SCALE 1:50 000	TAS-2-3787
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- Area relinquished
- ▲ Important EM anomalies
- ⋯ Magnetic anomalies
- S Serpentine
- Formational conductors



COMSTAFF PROPRIETARY LIMITED			
PROJECT	EL 5/63 - AREA 6		
AREA	NORTHERN PORTION		
DATA	GEOLOGY INTERPRETED FROM DIGHEM SURVEY		
COMPILED	D.B. Trussel	SCALE	1:10000
DRAWN	January 1984	REF No	TAS-2-3788
AMENDED			



5 370 000
5 370 000
5 370 000
5 370 000
5 370 000
5 370 000
5 370 000
5 370 000
5 370 000
5 370 000

0 200 400 600 800 1000m

Area: relinquished
▲ Important EM anomalies
○ Magnetic anomalies
S Serpentine
— Formational conductors
P Power lines

COMSTAFF PROPRIETARY LIMITED

SOUTHERN PORTION OF COMSTAFF LEASE EL 5/63 AREA 6'

**GEOLOGY INTERPRETED
FROM DIGHEM SURVEY 022**

DRAWN	DATE
1/84	
SCALE	
1:10000	
PLANNING	
TAS/2/3789	

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A P P E N D I X 3

REPORT A18

STATUS OF INPUT ANOMALIES IN

EL 5/63 AREA 6

By: Devin Trussell
February 1984

REPORT A18

STATUS OF INPUT ANOMALIES IN
EL 5/63 Area

The Comstaff Monthly Reports for 1976-1982 have been studied to determine the present status of the EM anomalies obtained in the 1975 INPUT survey of EL 5/63.

Ten INPUT anomalies were originally selected for follow up. They were: GAG, GAH, GAI, GAK, GAL, GAM, GAN, GAO, and GAP. GAJ is in the Rosebery rubbish tip and confidently rejected as being caused by surface culture. The status of the other anomalies is as follows:-

GAG - No cause for the anomaly was discovered by the ground EM surveys. The INPUT response is low amplitude. Crone EM may not have been sensitive enough to detect it. The anomaly is the subject of a report by G Pigott (14/4/77).

GAH - Remains in the Comstaff files as a low priority target. Crone EM work was done. INPUT anomaly is due to a source of intermediate conductivity.

GAI - Written off as a surface conductor. Crone EM has been carried out. No geochem response was found. INPUT response results from a source of low conductivity so it is reasonable to believe the anomaly is due to a surface conductor.

GAN - No field work was done. INPUT response is due to a source of intermediate conductivity.

GAO - No conductor was found by ground EM work. The grid was possibly mislocated. The INPUT response is due to a source of intermediate conductivity.

GAP - No conductor was found. The anomaly is located at the south end of the East Renison grid and may actually lie outside the EL. EM and IP have been done. The INPUT response is low amplitude. Consequently the Crone EM method may not have had sufficient sensitivity to detect the source.

DISCUSSION

Anomalies GAI and GAL have been adequately explained and no further work is necessary on them. Anomalies GAK and GAP have been thoroughly investigated by the routine East Renison exploration programme and so further work on them is also not merited.

Anomalies GAG, GAH, GAM and GAO all require further work. Recommendations given in Report A14 (Interpretation of Renison East Area DIGHEM Survey) cover the areas in which these anomalies are located.

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A P P E N D I X

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Notes on North Pleman

1204X

1. Conductors picked on profiles.
2. Line spacing somewhat wide to be sure, but strike appears to be at $\sim 45^\circ$ to grid?

If so, a broad, weak conductive feature is interpreted to lie between zones A and B on map. Hardest to correlate between L5740 and L5540.

"Targets"

- a. around line 5740N, depth ~ 30 m to top. Moderate conductor, considerable strike/depth extent.
- b. Conductor at a contact? Extensive size, depth to conductor 30-100m, best developed on 3 southern lines. *more specific? Dip?*
- c. limited anomaly extent - small size or end of larger conductor.
- d. small size, depth ~ 20 m.
- e. small, poor conductor, interpreted to be flat lying.
- f. small, near surface feature, poor conductor.
- g. small, poor conductor near surface.
- h. near surface poor conductor with some evidence of width-correlated with e?
- i. small near surface - same as f?

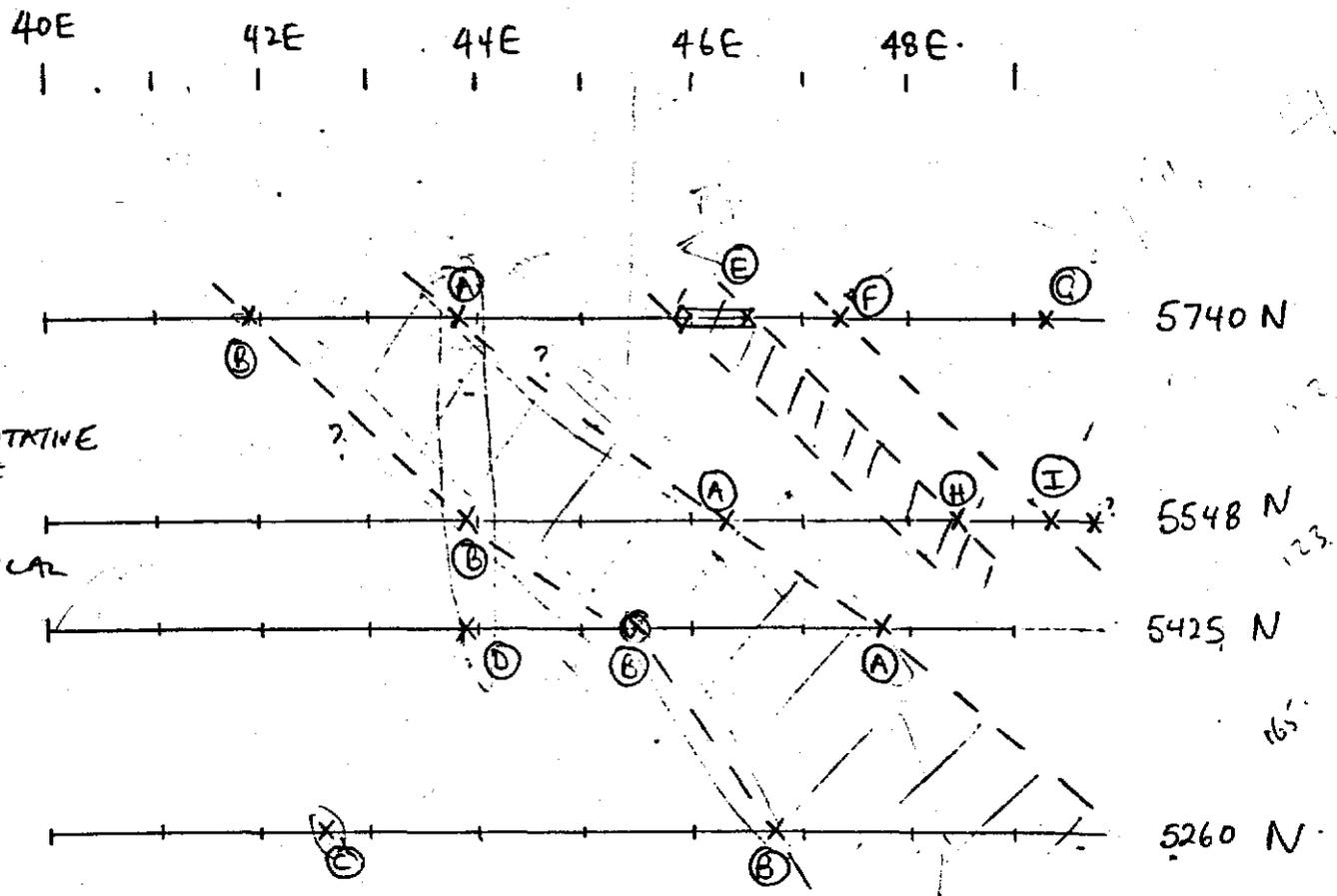
by J. McNae
Lamontagne Geophysics

- *Timing* before 10 am

1100

Jim McNae

149024



CORRELATIONS TENTATIVE
 BASED SOLELY OF
 EM RESPONSE
 WITHOUT GEOLOGICAL
 KNOWLEDGE

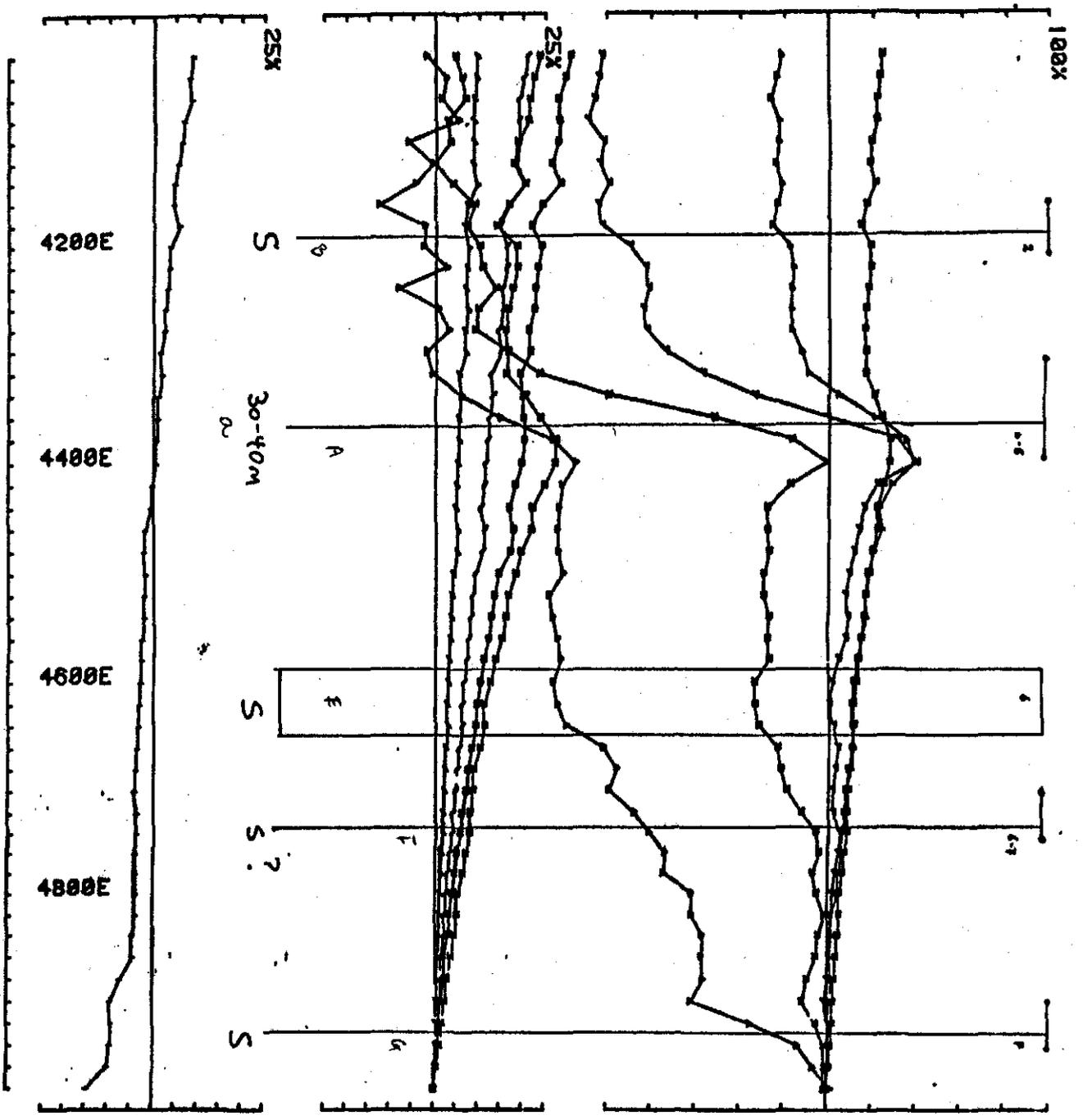
APPENDIX 1 MTEM INTERPRETATION BY J MCNAE
 GRID 180M
 120Ax

For estimated depths to
 source see profiles

NORTH PLEMAN
 COMPILATION

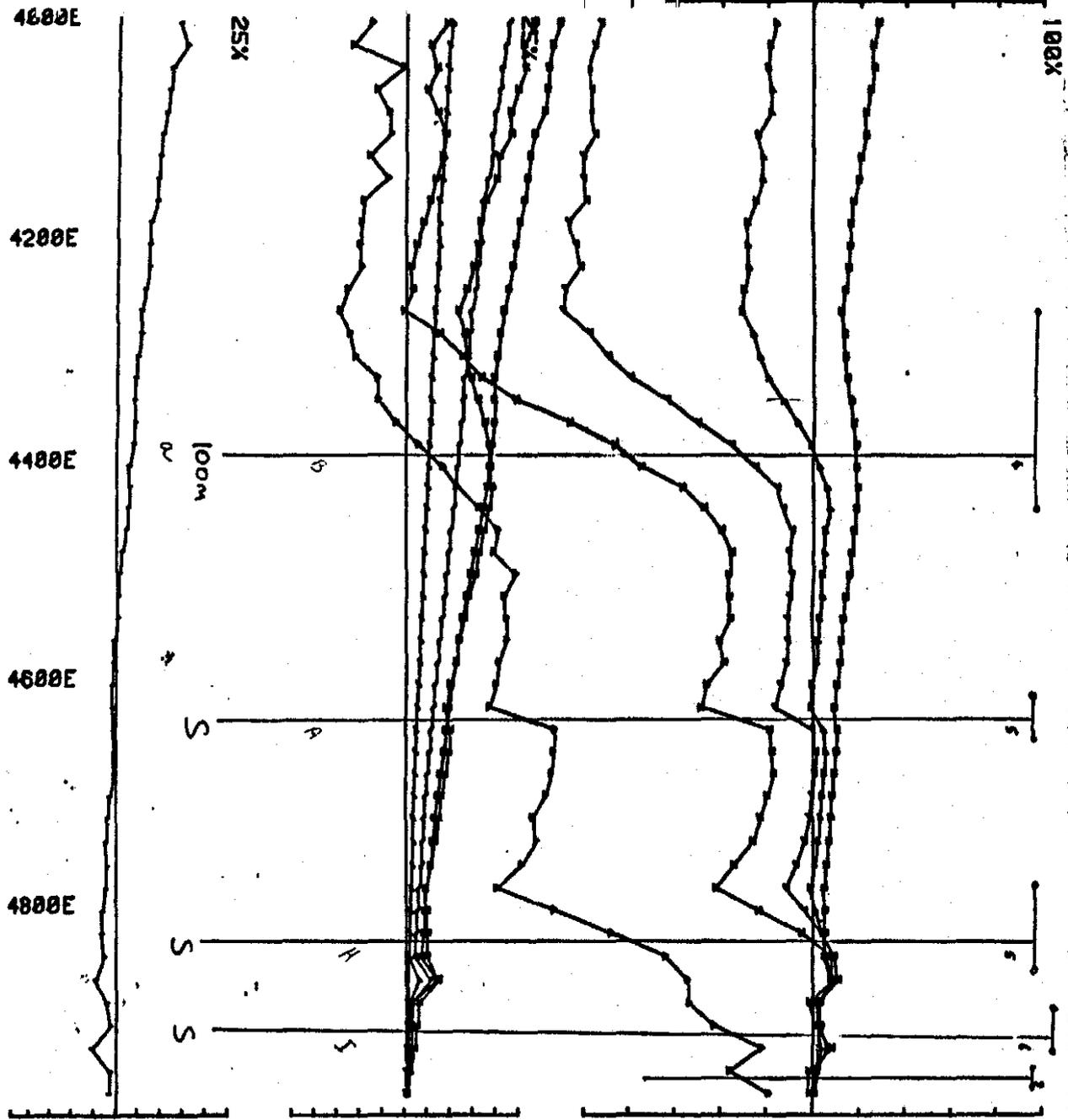
Handwritten notes on the right side of the page, including '123', '165', and '173' near the profile labels, and some illegible scribbles at the bottom right.

020



UTEM SURVEY conducted by PMM BM Job 8410
 Project Area North Plaman - 120AX Survey for Comstaff Pty. Ltd. freq(hz) 26.
 Loopno 0001 Line 5740N component Hz secondary Ch 1.

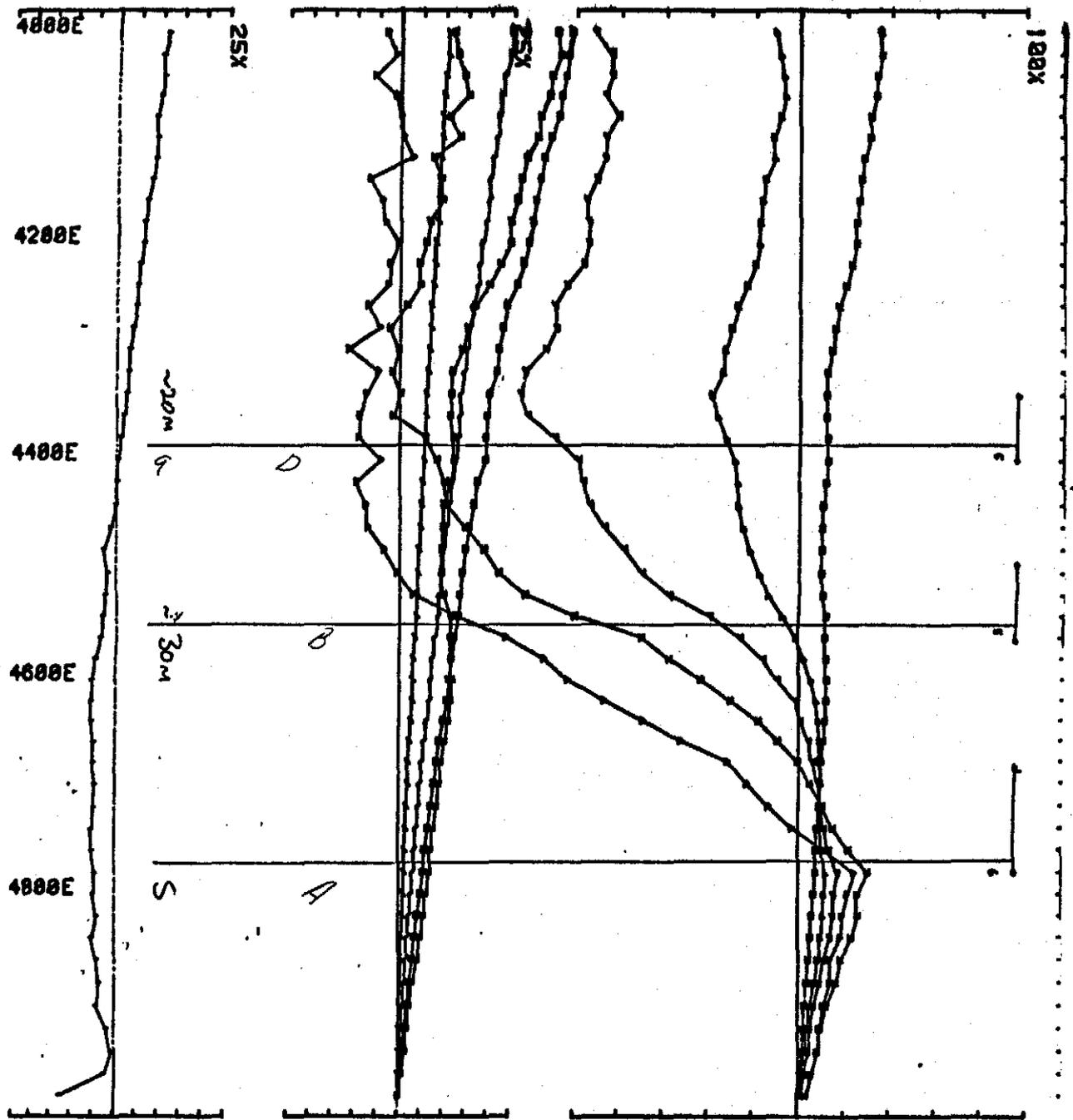
022



UTEM SURVEY conducted by PMM BM Job 8418
 Project Area North Plaman - 120AX Survey for Comstaff Ply. Ltd. freq(hz) 26.2
 Depth 8001 Line 5548N component Hz secondary Ch 1.

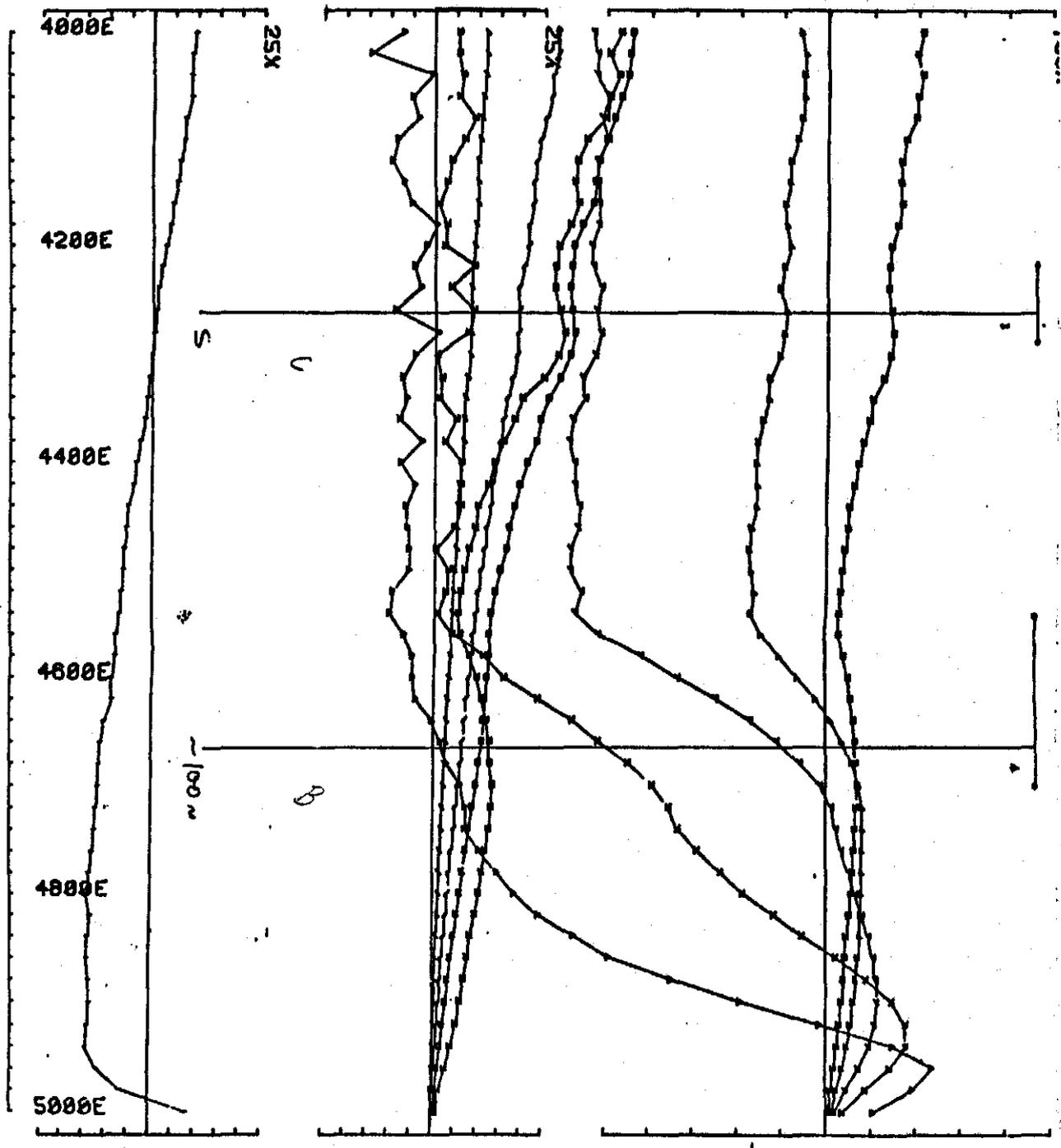
149026

023



UTEM SURVEY conducted by PHM BM Job 8418
 Project Area North Pieman - 120AX Survey for Comstaff Pty. Ltd. freq(hz) 26.2
 Depth 0001 Line 5452N component Hz secondary Ch 1.

024

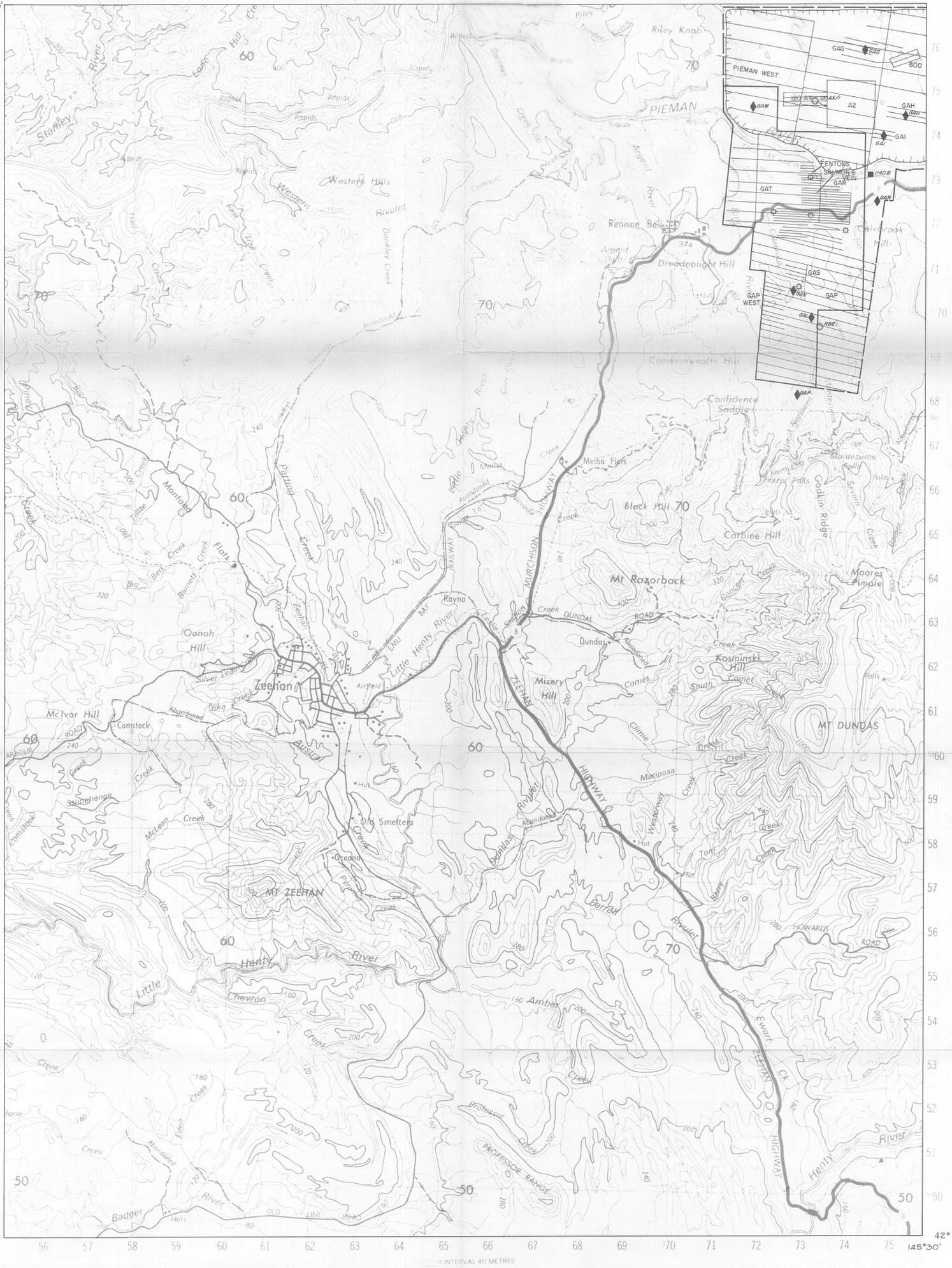


UTEM SURVEY conducted by PMM BM Job 8419

Project Area North Plaman - 120AX Survey for Comstaff Pty. Ltd. freq(hz) 26.

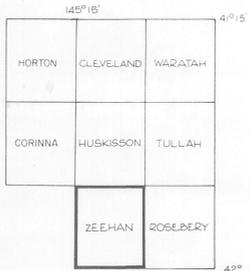
Loopno 0001 Line 5260N component Hz secondary Ch 1.

145°15'
41°45'



LEGEND

- Existing lease boundary
- - - Proposed lease boundary
- ☆ 1971 Geochemical anomalies
- 1971/72 Stream sediment sampling coverage
- ◆ 1975 AEM anomalies
- ◆ 1140 B 1983 DIGHEM anomalies
- GAP Gridlines
- RBE 1 Diamond drillhole



149029
5000 METRES

COMSTAFF PROPRIETARY LIMITED

EL 5/63 AREA 6 - EAST RENISON

PLAN TO ACCOMPANY SURRENDER REPORT

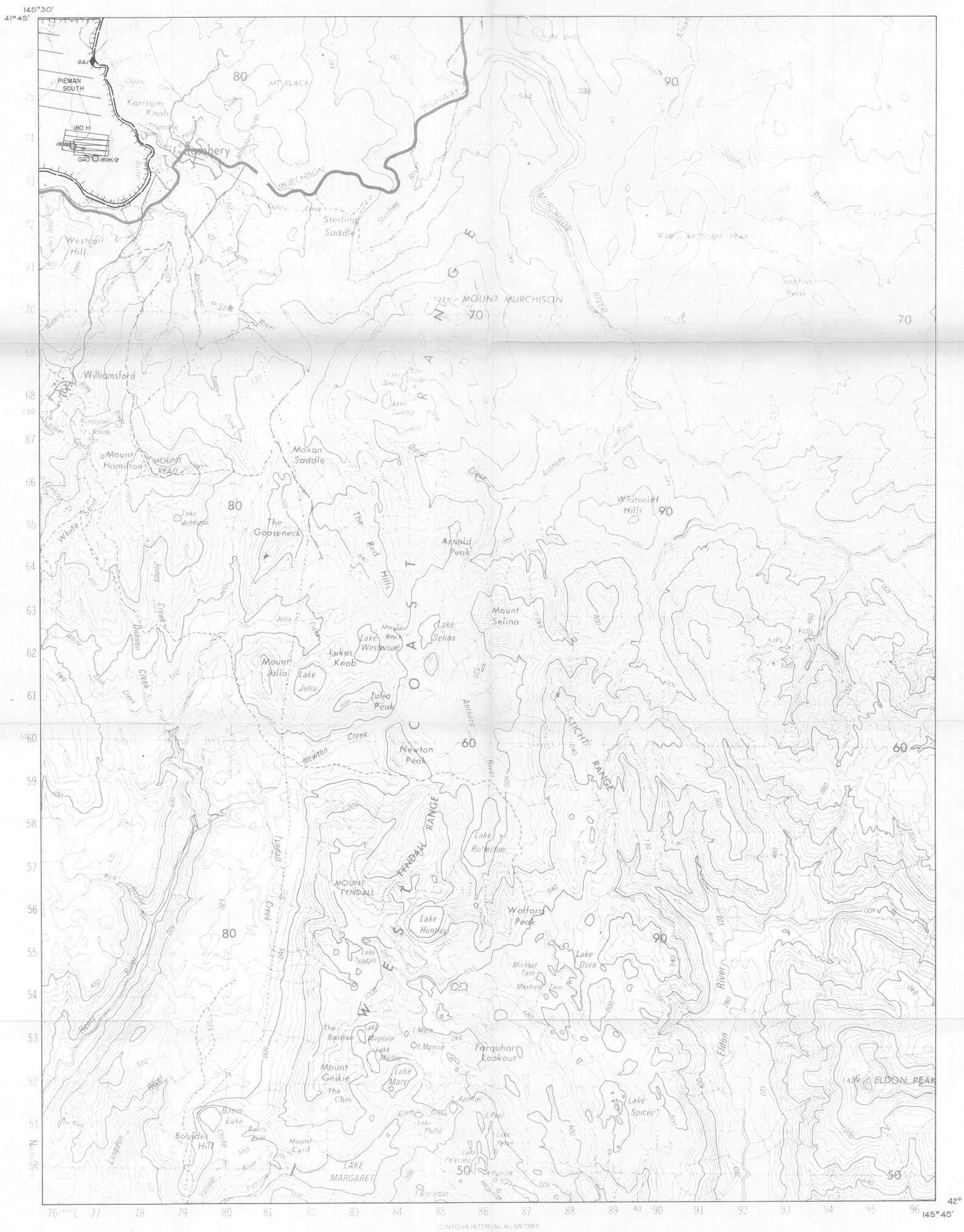
149029

5000 METRES

DATE 1/50000

SCALE 1:50000

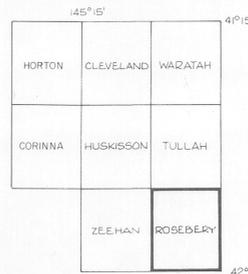
PROJECT T/S/2/4243



CONTOUR INTERVAL 40 METRES

NOTE: FOR LEGEND SEE TAS/2/4243

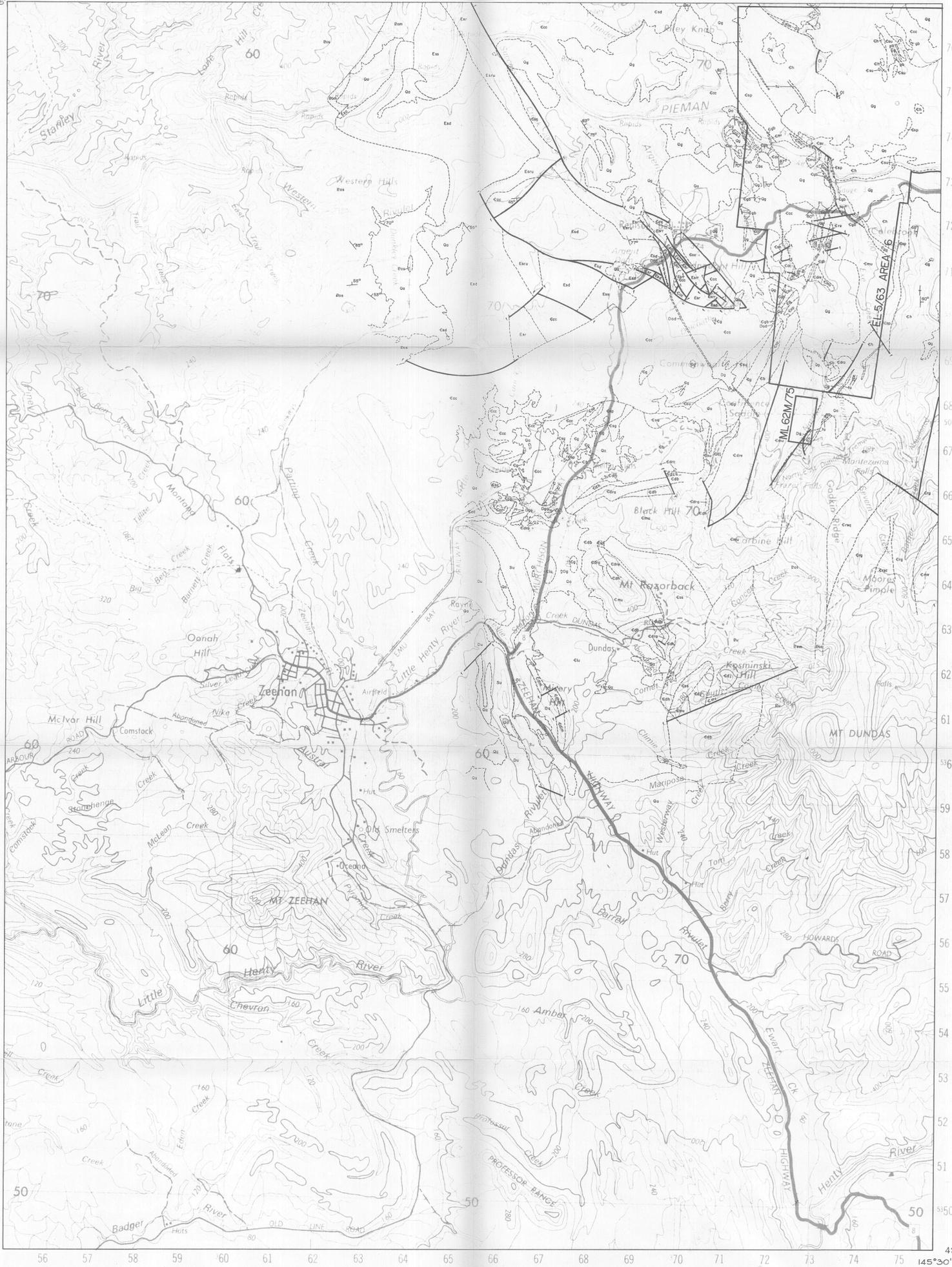
149030
 5km



COMSTAFF PROPRIETARY LIMITED
 EL 5/63 AREA 6 - EAST RENISON
 PLAN TO ACCOMPANY SURRENDER REPORT

85-2418

RWLS, MPE
 J HARDISTY 13/6/88
 TAS/2/4244
 002



CONTOUR INTERVAL 40 METRES

149031



55-2415

COMSTAFF PROPRIETARY LIMITED

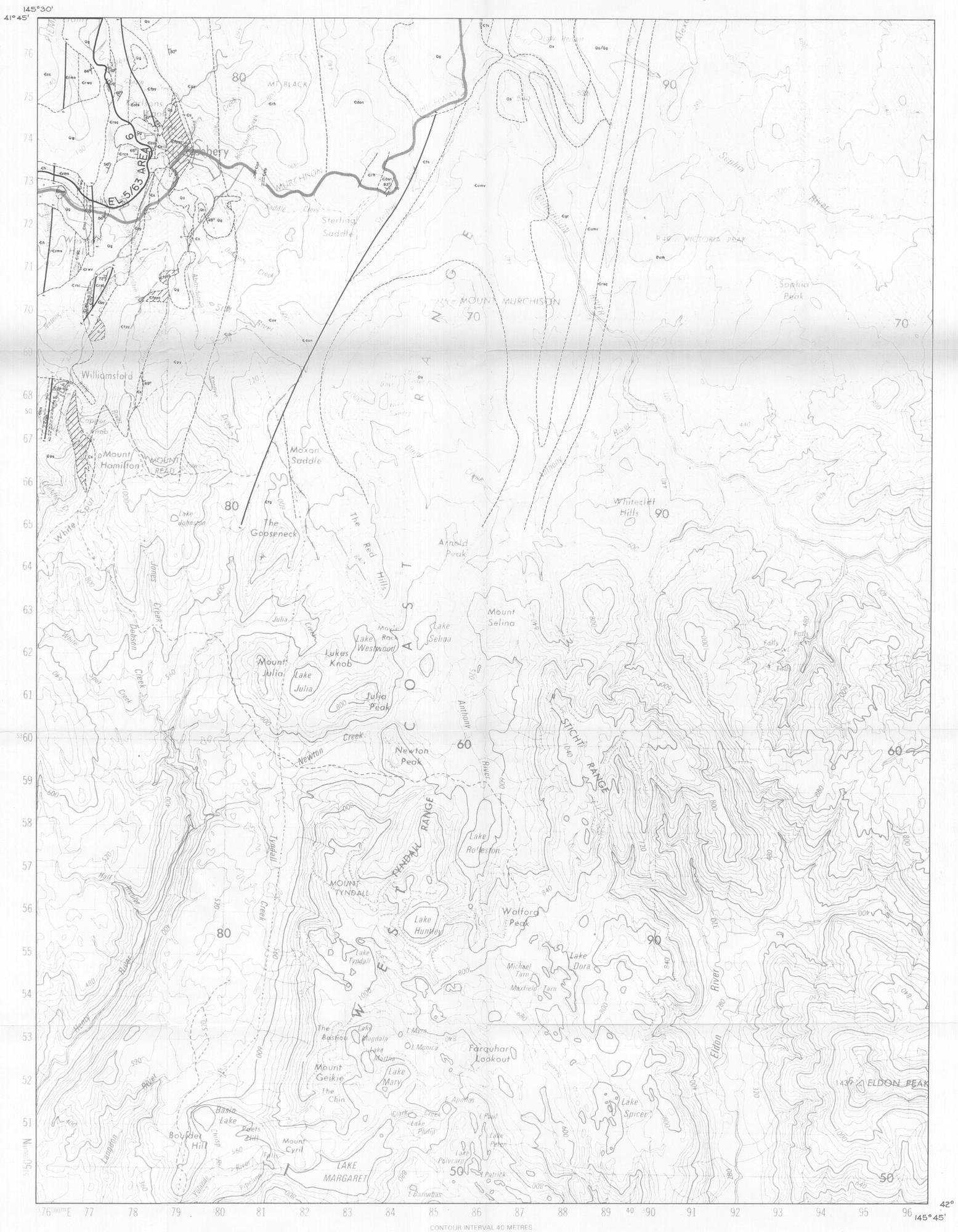
1 : 50 000

REGIONAL GEOLOGICAL INTERPRETATION

ZEEHAN PLAN

HORTON TAS/2/3072	CLEVELAND TAS/2/3073	WARATAH TAS/2/3074
CORINNA TAS/2/3075	HUSKISSON TAS/2/3076	TULLAH TAS/2/3077
ZEEHAN TAS/2/3078	ROSEBURY TAS/2/3079	





COMSTAFF PROPRIETARY LIMITED
 85-2418



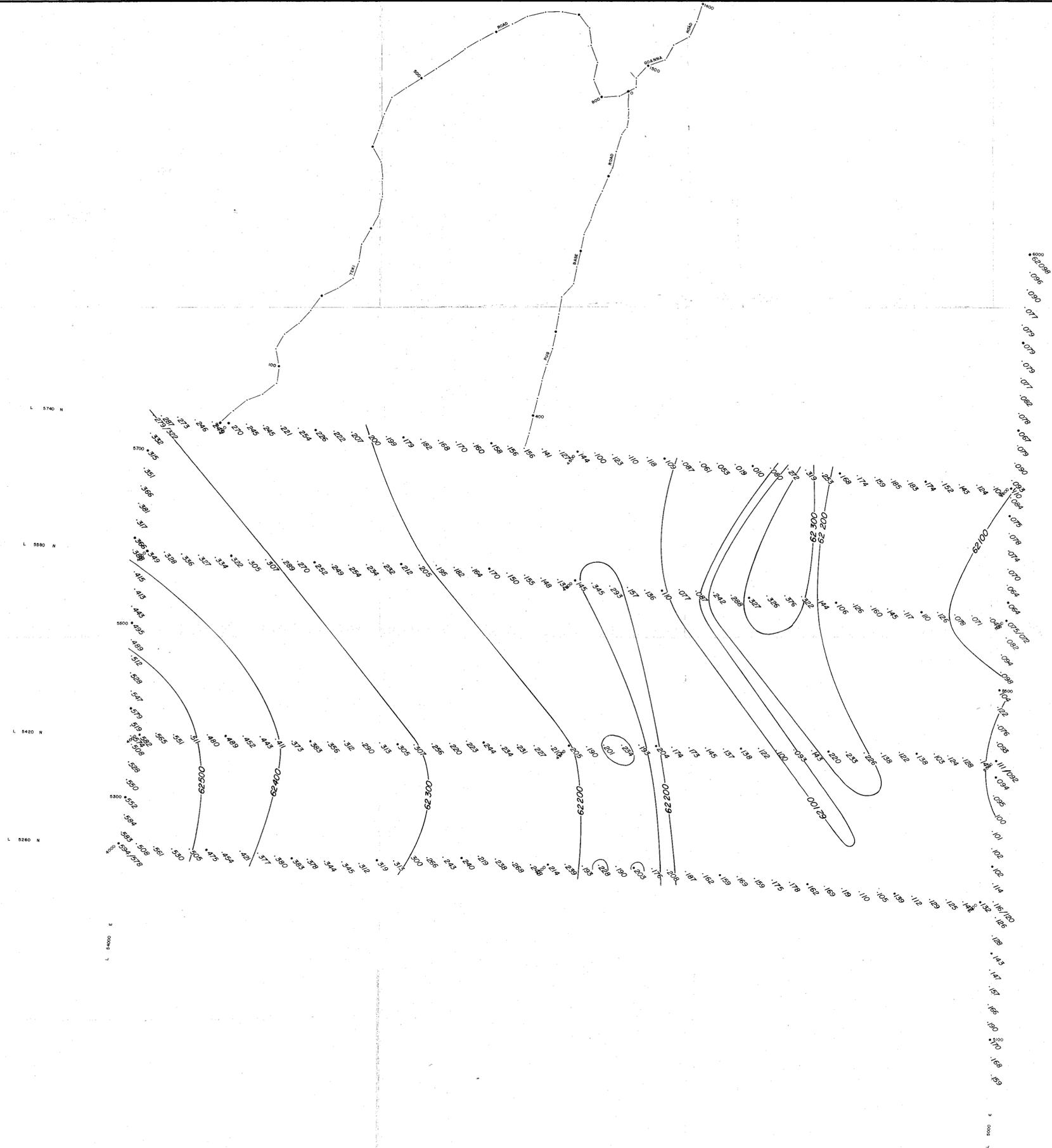
149032

REGIONAL GEOLOGICAL INTERPRETATION
 ROSEBERY PLAN

HORTON TAS/2/3072	CLEVELAND TAS/2/3073	WAZATAH TAS/2/3074
CORINNA TAS/2/3075	HUSKISSON TAS/2/3076	TULLAH TAS/2/3077
ZEEHAN TAS/2/3078	ROSEBERY TAS/2/3079	



1 : 50 000
 27/9/82
 004



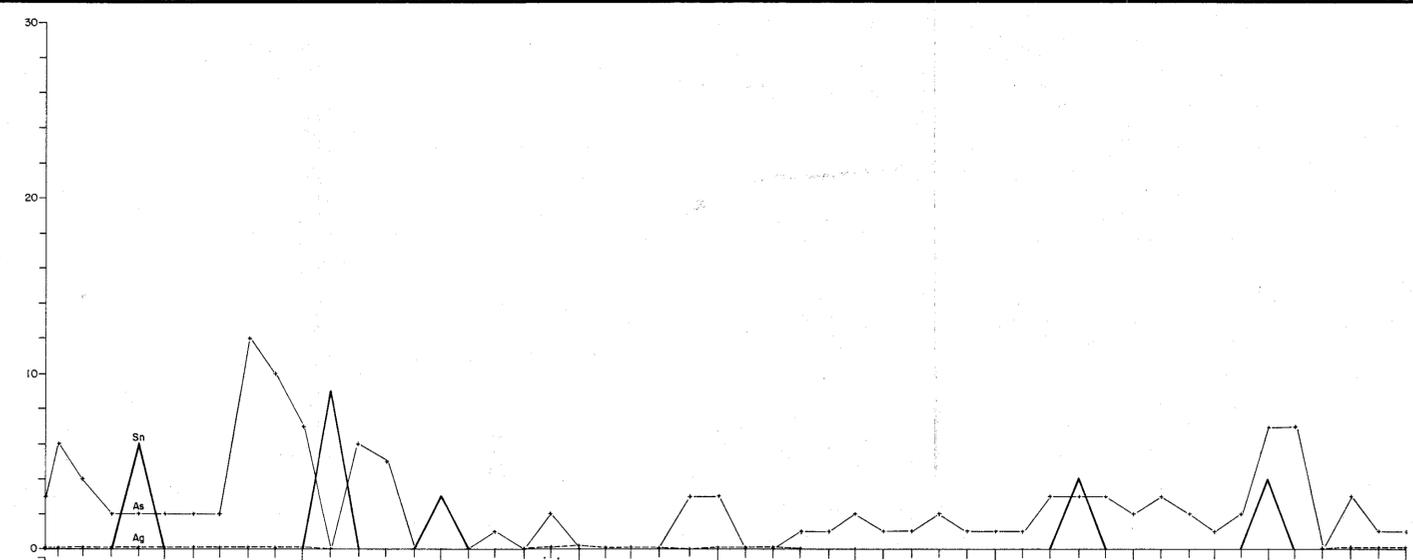
149033

DATE: Grid 5/84, Loop 4/84
 CORRECTIONS Grid Line 5260N, 4080E to 5015E
 Line 5450N, all
 Line 5580N, 3984E to 4260E
 7nT added to field data
 Loop Line 6000N, 5860E to 6000E
 7nT added to field data
 RANGE 62010 to 62829nT (loop 8.grd)

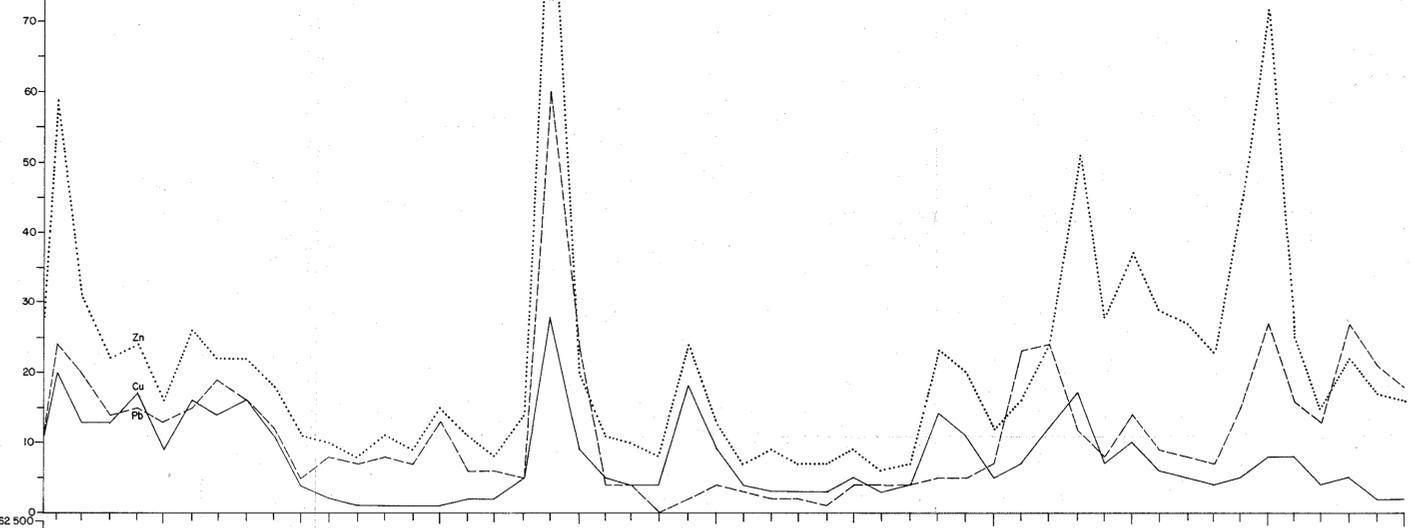


COMSTAFF PROPRIETARY LIMITED		85-2448
LEASE NO. EL 5 / 63	NORTH PIEMAN GRID - I20 AX	COMPILED D.S. THYNNE, R. MUNRO
AREA 6		DRAWN H. ROWLEY
AMENDMENTS 8 9 10 11 12 13 14	GROUND MAGNETIC CONTOUR PLAN	DATE 6 / 84
		SCALE 1 : 2500
		REF. NO. TAS/2/3932

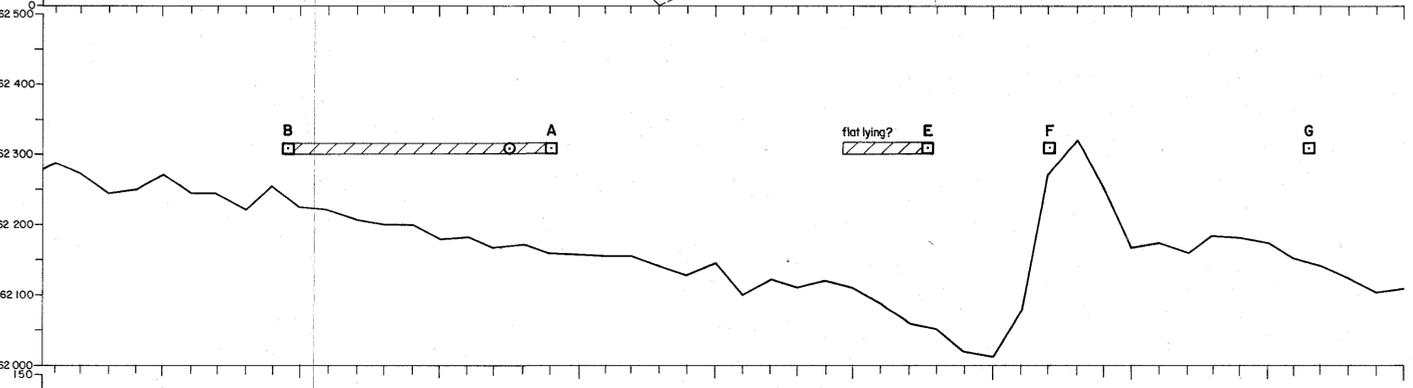
SOIL GEOCHEMISTRY ppm



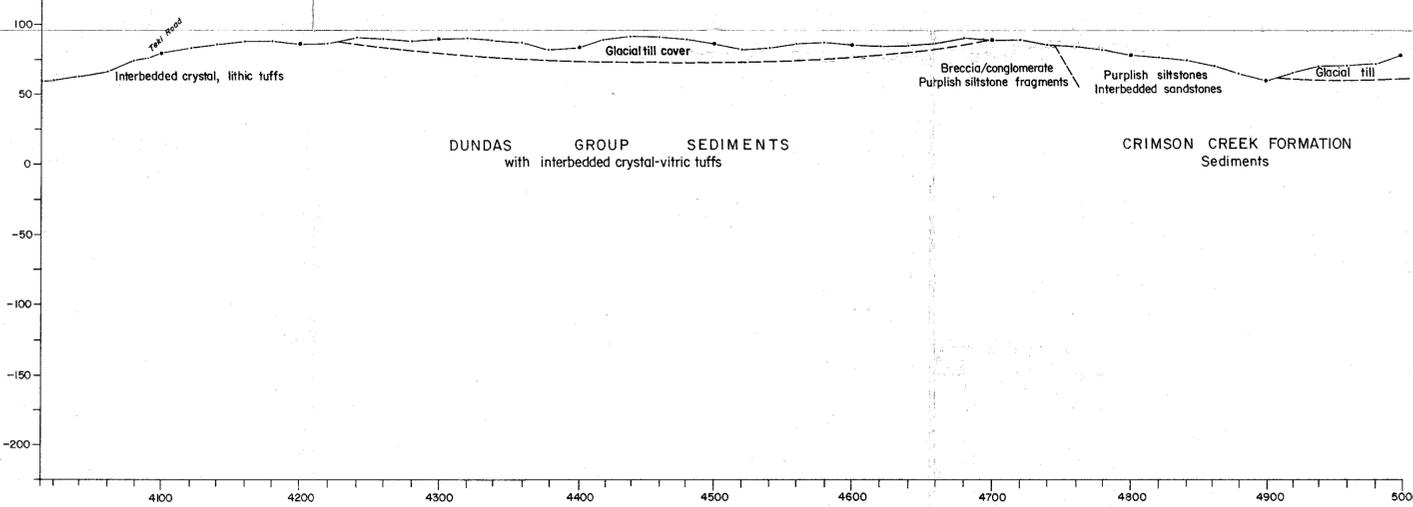
SOIL GEOCHEMISTRY ppm



GROUND MAGNETICS nT



GEOLOGY & TOPOGRAPHY m



- A to F Lamontaigne Geophysics- UTEM anomalies.
- Comstaff geophysicists' UTEM anomalies.
- Broad, weak conductive features.

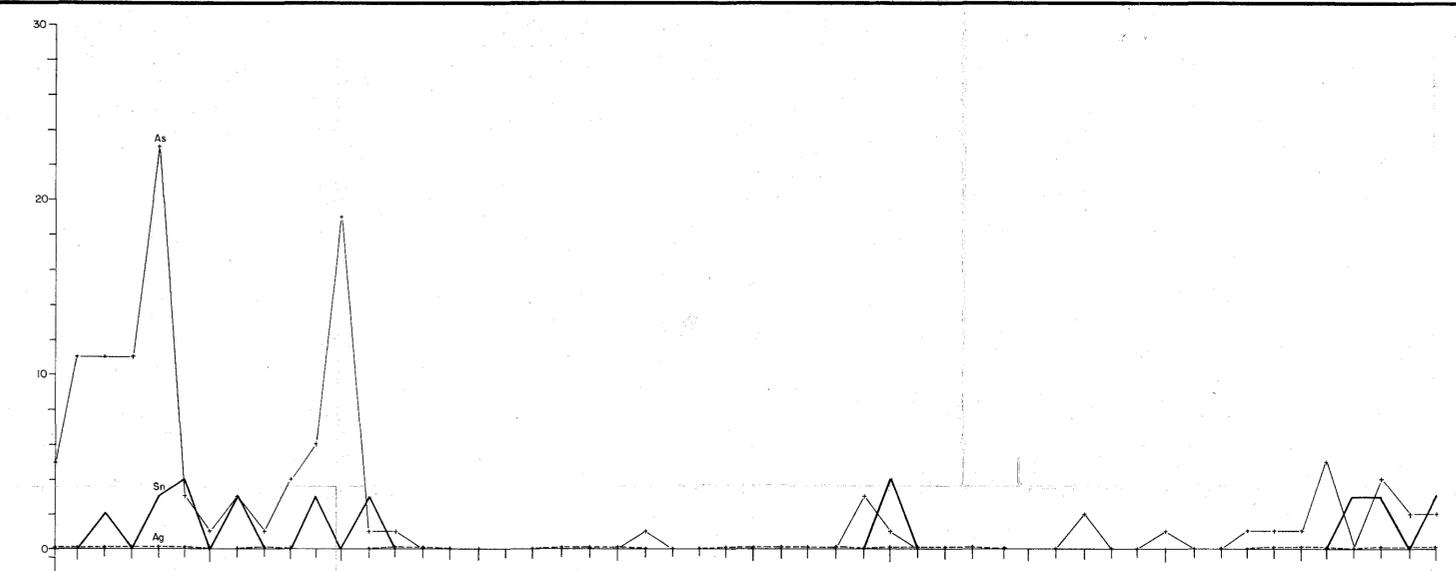
5 cm

140035

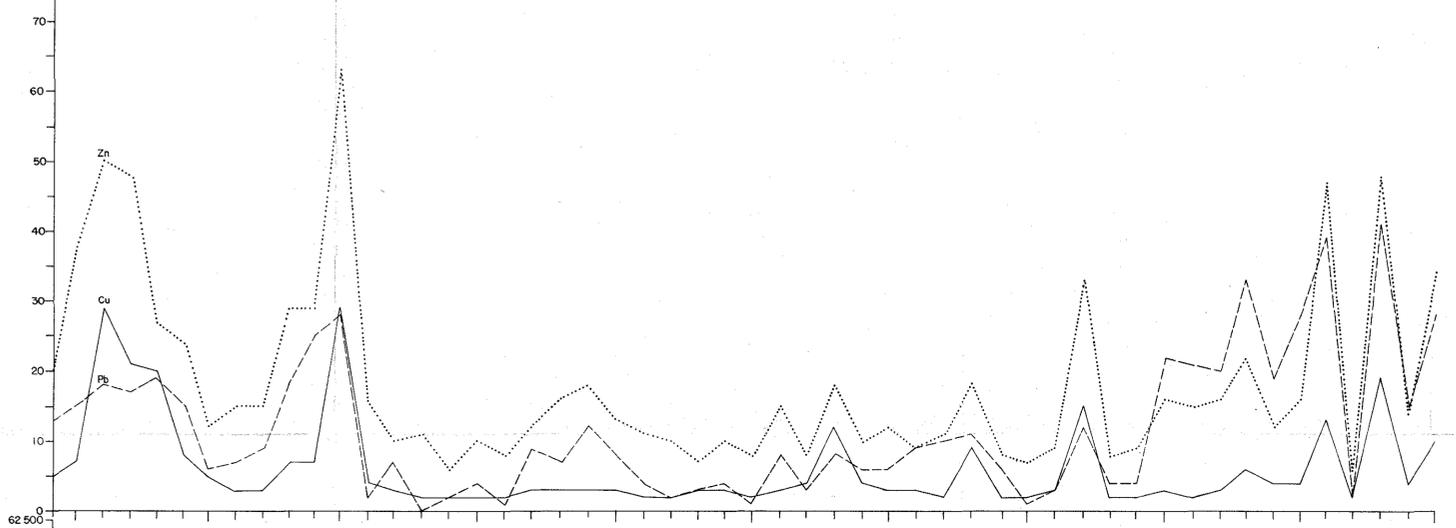
85-2418

COMSTAFF PROPRIETARY LIMITED		COMPILED D. S. Thynne
LEASE No 5/63	NORTH PIEMAN GRID - I20 AX LINE 5740N	DRAWN H. Rowley
AREA 6		DATE 7/84
AMENDMENTS	GEOLOGY, SOIL GEOCHEMISTRY, GROUND MAG, TOPO	SCALE 1:2500
1 8		REF No TAS/2/4075
2 9		
3 10		
4 11		
5 12		
6 13		
7 14		

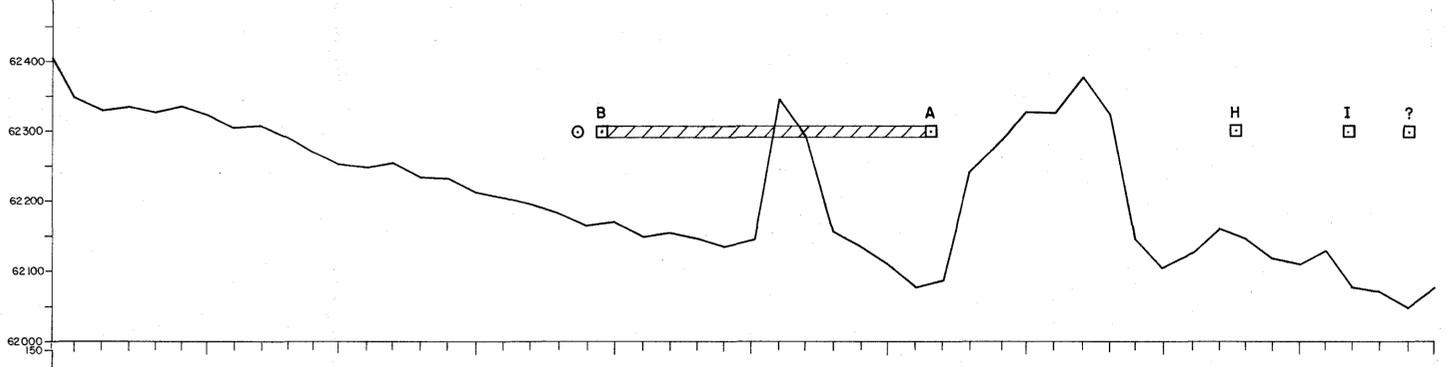
SOIL GEOCHEMISTRY ppm



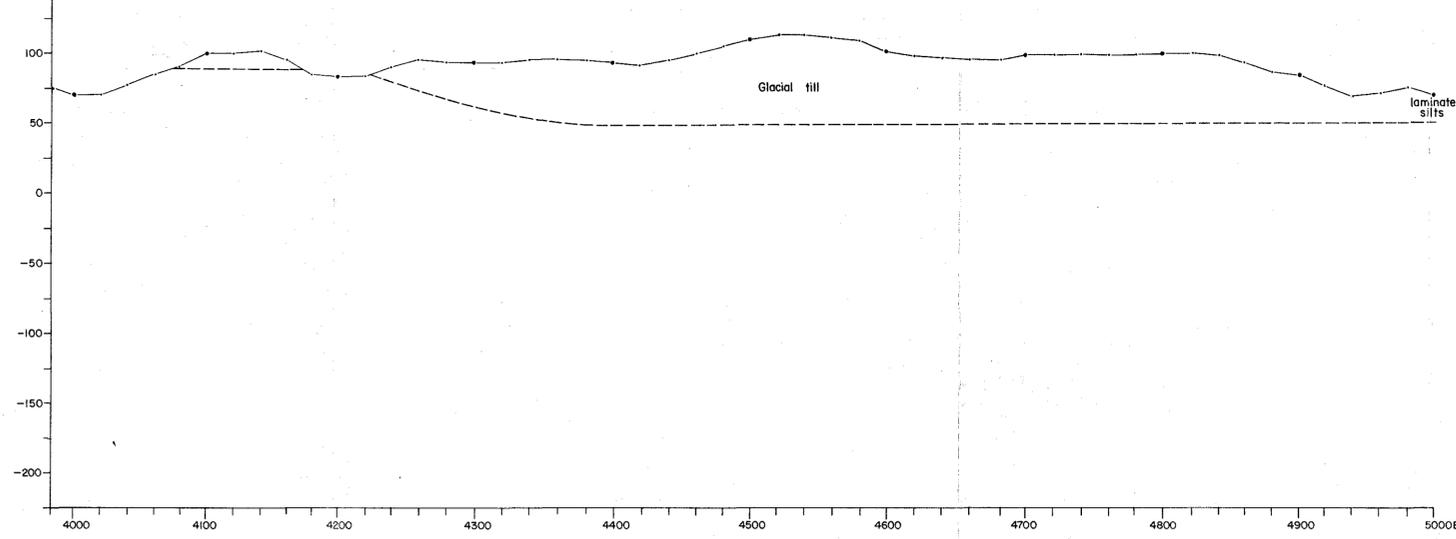
SOIL GEOCHEMISTRY ppm



GROUND MAGNETICS nT



GEOLOGY & TOPOGRAPHY m



- A to I Lamontaigne Geophysics UTEM anomalies.
- Comstaff geophysicist's UTEM anomalies.
- Broad, weak conductive features.

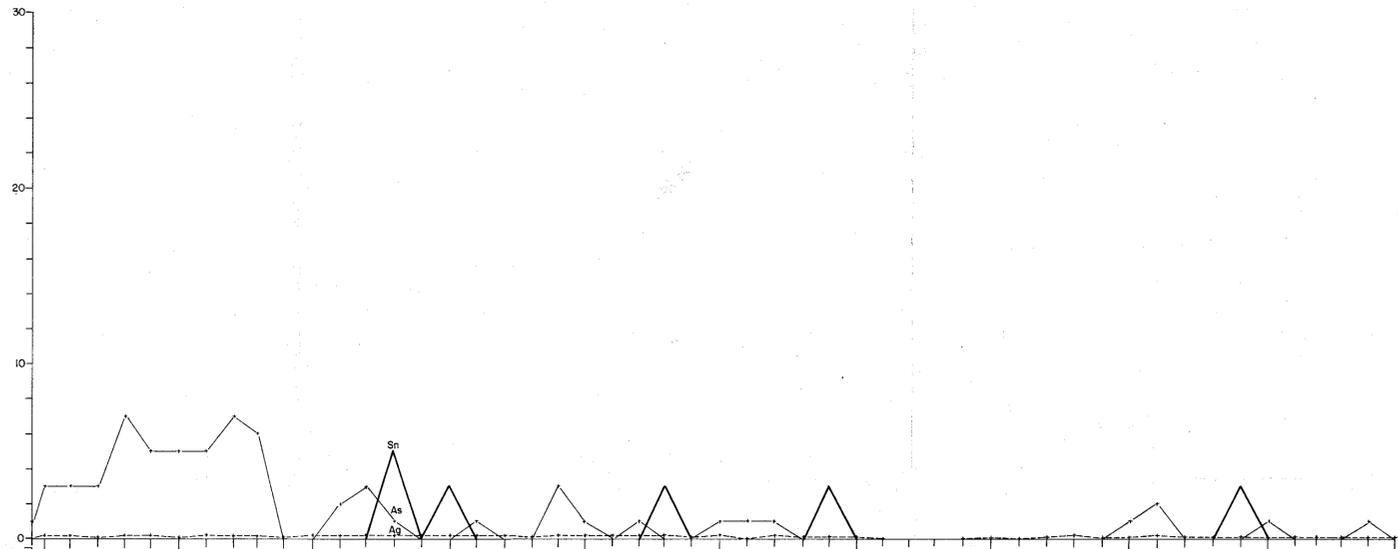
5 cm

149036

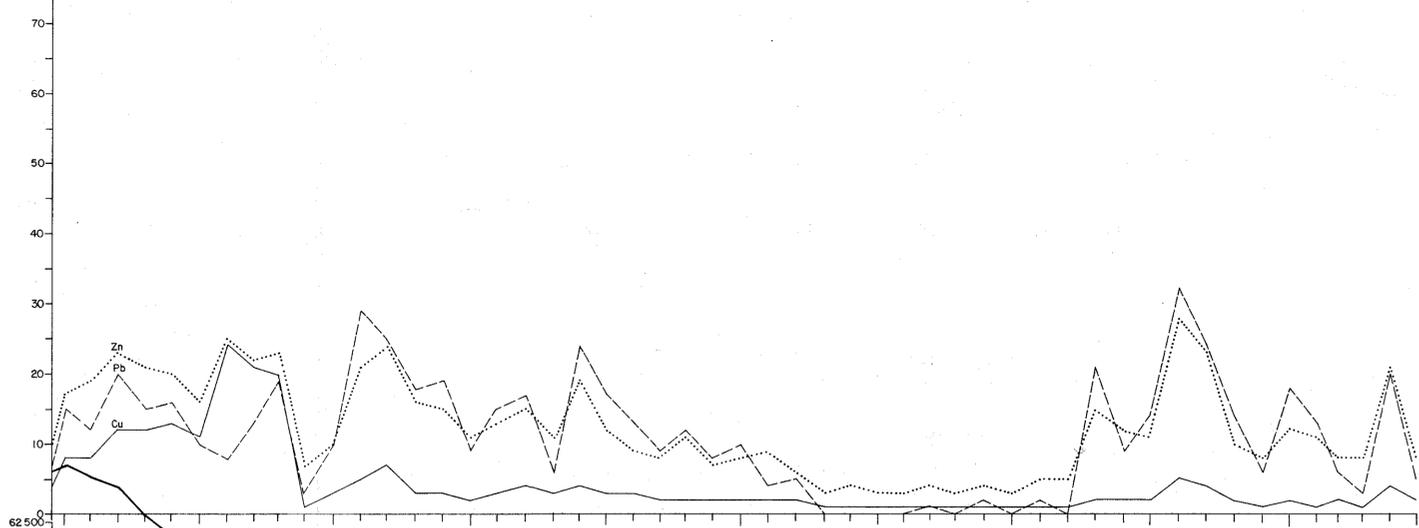
85-2418

COMSTAFF PROPRIETARY LIMITED		
LEASE No	5 / 63	COMPILED
AREA	6	D. S. Thynne
NORTH PIEMAN GRID - 120 AX LINE 5580N		DRAWN
		H. M. Rowley
		DATE
		7 / 84
		SCALE
		1:2500
		REF No
		TAS/2/4076

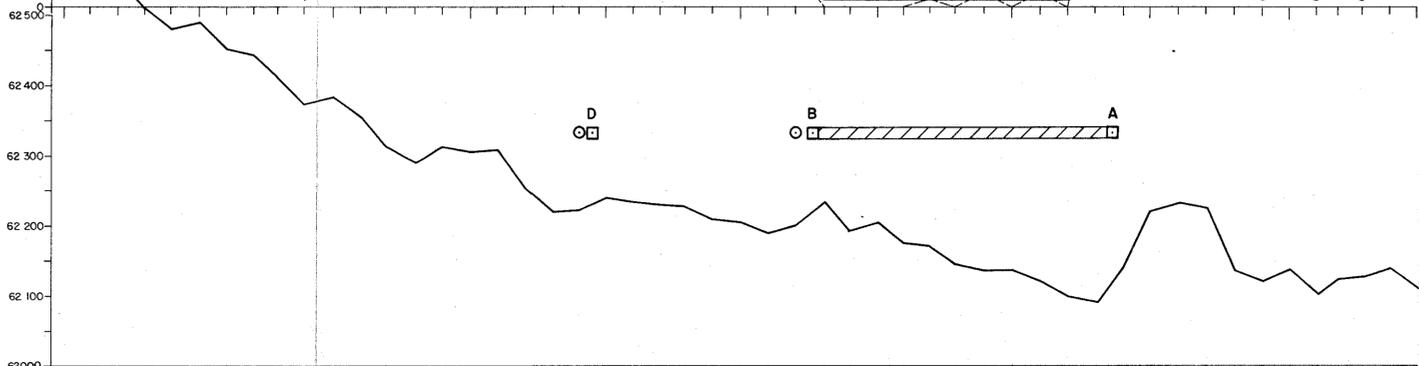
SOIL GEOCHEMISTRY ppm



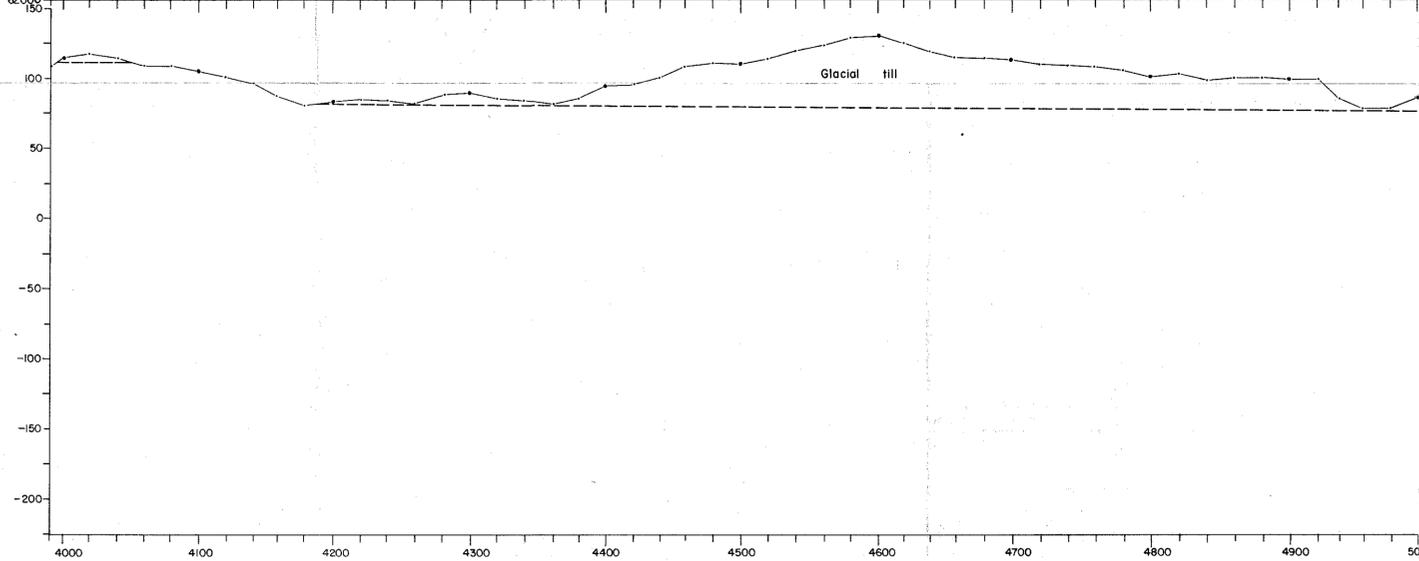
SOIL GEOCHEMISTRY ppm



GROUND MAGNETICS nT



GEOLOGY & TOPOGRAPHY m



- A to D
□ Lamontaigne Geophysics - UTEM anomalies
- Comstaff geophysicist's UTEM anomalies
- ▨ Broad, weak conductive features

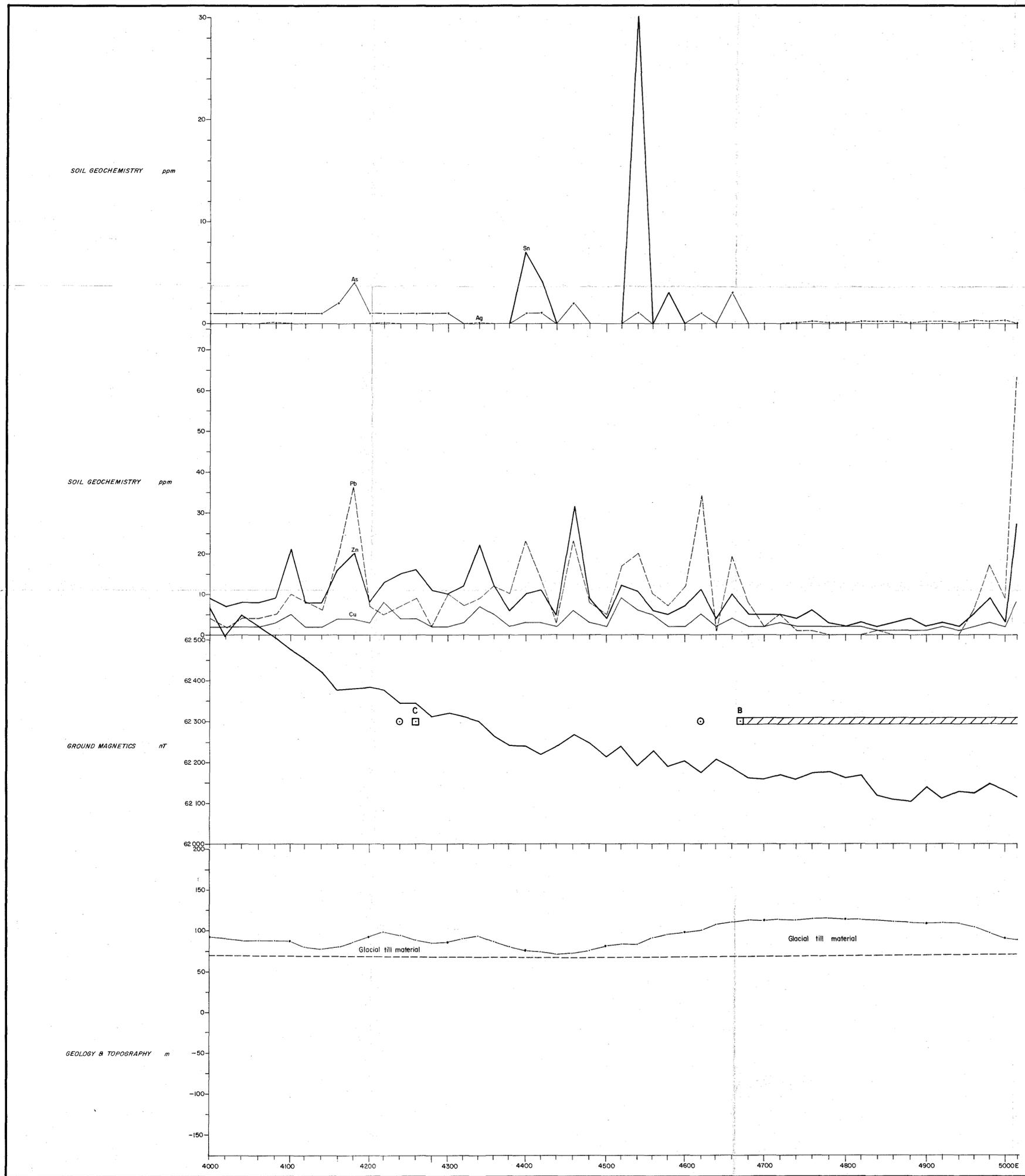
5 cm

149037

85-2418

COMSTAFF PROPRIETARY LIMITED		NORTH PIEMAN GRID - I20 AX LINE 5420N	COMPILED D S Thynne
LEASE No	5 / 63	GEOLOGY, SOIL GEOCHEMISTRY, GROUND MAG, TOPO	DRAWN HM Rowley
AREA	6		DATE 8 / 84
AMENDMENTS	1 8 2 9 3 10 4 11 5 12 6 13 7 14	SCALE 1 : 2500	REF No TAS/2/4077

009

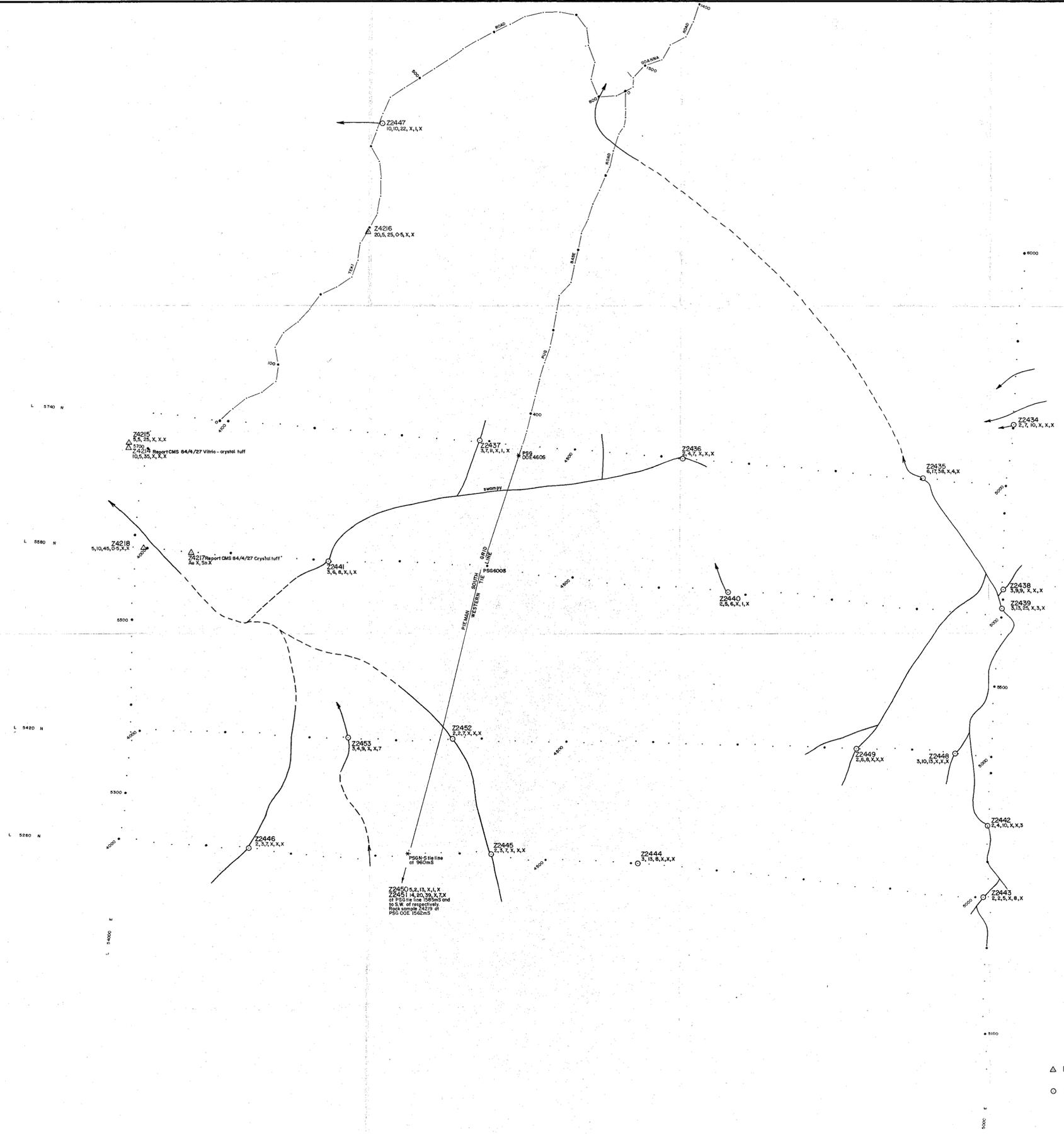


- A to C
□ Lamontagne Geophysics UTEM anomalies.
- Comstaff geophysicist's UTEM anomalies.
- ▨ Broad, weak conductive features.

5 cm

149038
85-2418

COMSTAFF PROPRIETARY LIMITED		COMPILED D. S. Thymne
LEASE No 5/63	NORTH PIEMAN GRID - 120AX	DRAWN H. M. Rowley
AREA 6	LINE 5260N	DATE 8/84
AMENDMENTS	GEOLOGY, SOIL GEOCHEMISTRY, GROUND MAG, TOPO	SCALE 1:2500
1 8		REF No TAS/2/4078
2 9		
3 10		
4 11		
5 12		
6 13		
7 14		



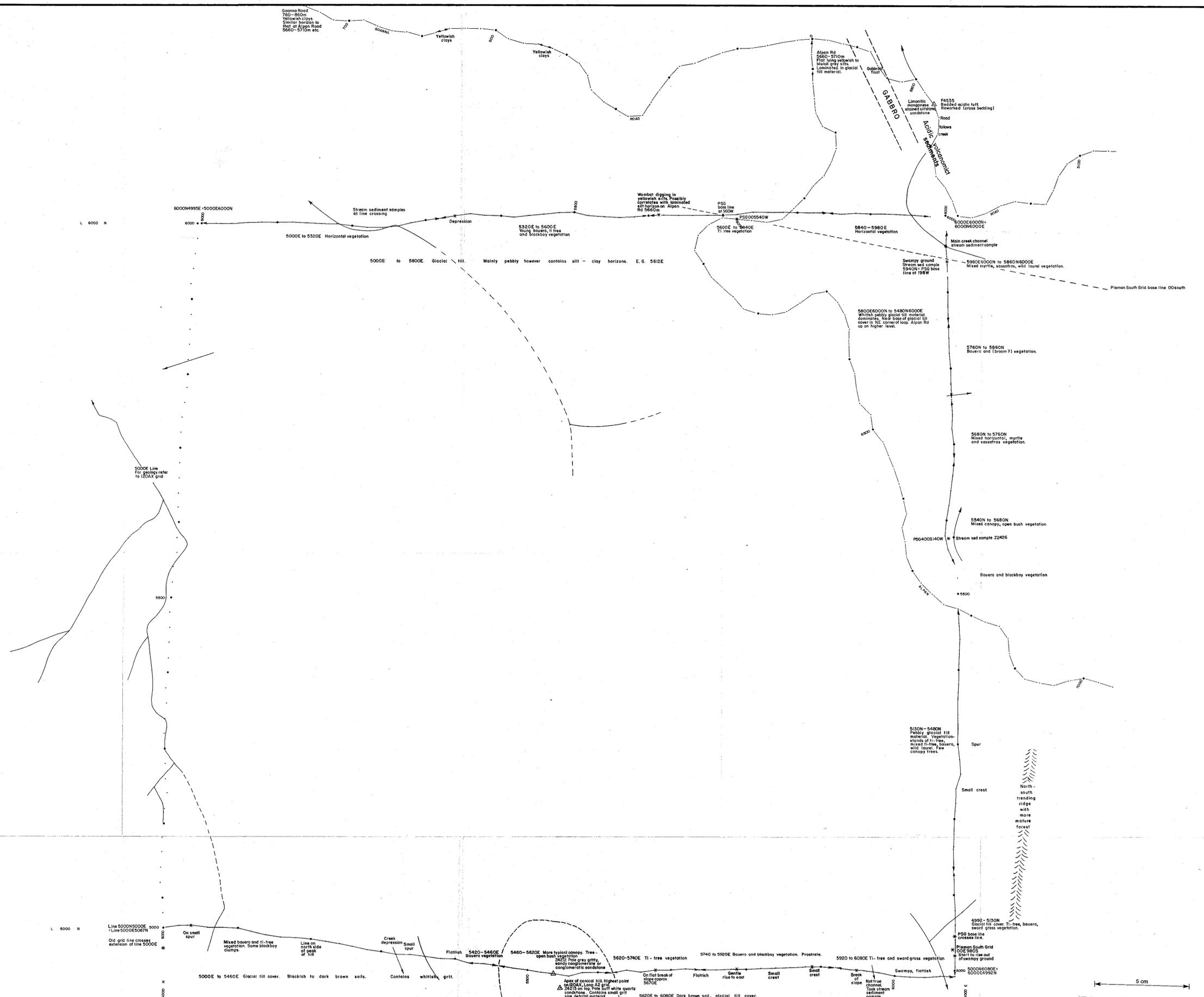
▲ Rock sample, prefixed Z42--; results expressed Cu, Pb, Zn, Ag, Au, Sn
 ○ Stream sediment sample, prefixed Z24--; results expressed, Cu, Pb, Zn, Ag, As, Sn

5 cm

149039

35-2418

COMSTAFF PROPRIETARY LIMITED		COMPILED D. S. Thynne
TEAM NO EL 5 / 63	NORTH PIEMAN GRID - 120 AX	DRAWN H. Rowley
AREA 6		DATE 9 / 84
AMENDMENTS	STREAM SEDIMENT AND ROCK GEOCHEMISTRY	SCALE 1 : 2500
8		REF NO TAS/2/3934
9		
10		
11		
12		
13		
14		



140040

55-2418

COMSTAFF PROPRIETARY LIMITED		COMPILED D. S. Thynne
LEASE No EL 5/63	AREA 6	DRAWN H. Rowley
NORTH PIEMAN GRID - A2		
GEOLOGY - DETAIL & INTERPRETATION		DATE 9/84
AMENDMENTS 1 8 2 9 3 10 4 11 5 12 6 13 7 14		SCALE 1 : 2500
		REF No TAS/2/4253

5376 000 m N

149041



-  Siltstones
-  Serpentinite
-  Siltstones, volcanomict sandstones
-  Gabbro
-  Khaki psammopelite
-  Silicified serpentinite
-  Volcanomict sandstones
-  Glacial till
-  Dighem anomaly
-  Dighem conductor

COMSTAFF PROPRIETARY LIMITED
 PIEMAN NORTH GRID - 60D
 GEOLOGICAL INTERPRETATION PLAN
 013

COMPILED BY D. S. Thynne	DRAWN BY H. Rowley	DATE /6/84	SCALE 2500
DATE EL 5/63	SHEET 6	OF SHEETS 1	PROJECT TAS/2/3856

5 cm

85-2418



374 000 m E

375 000 m E

5 376 000 m N

374 000 m E

375 000 m E



- Cu +80 ppm
- Pb +80 ppm
- Zn +94 ppm

149042

COMSTAFF PROPRIETARY LIMITED

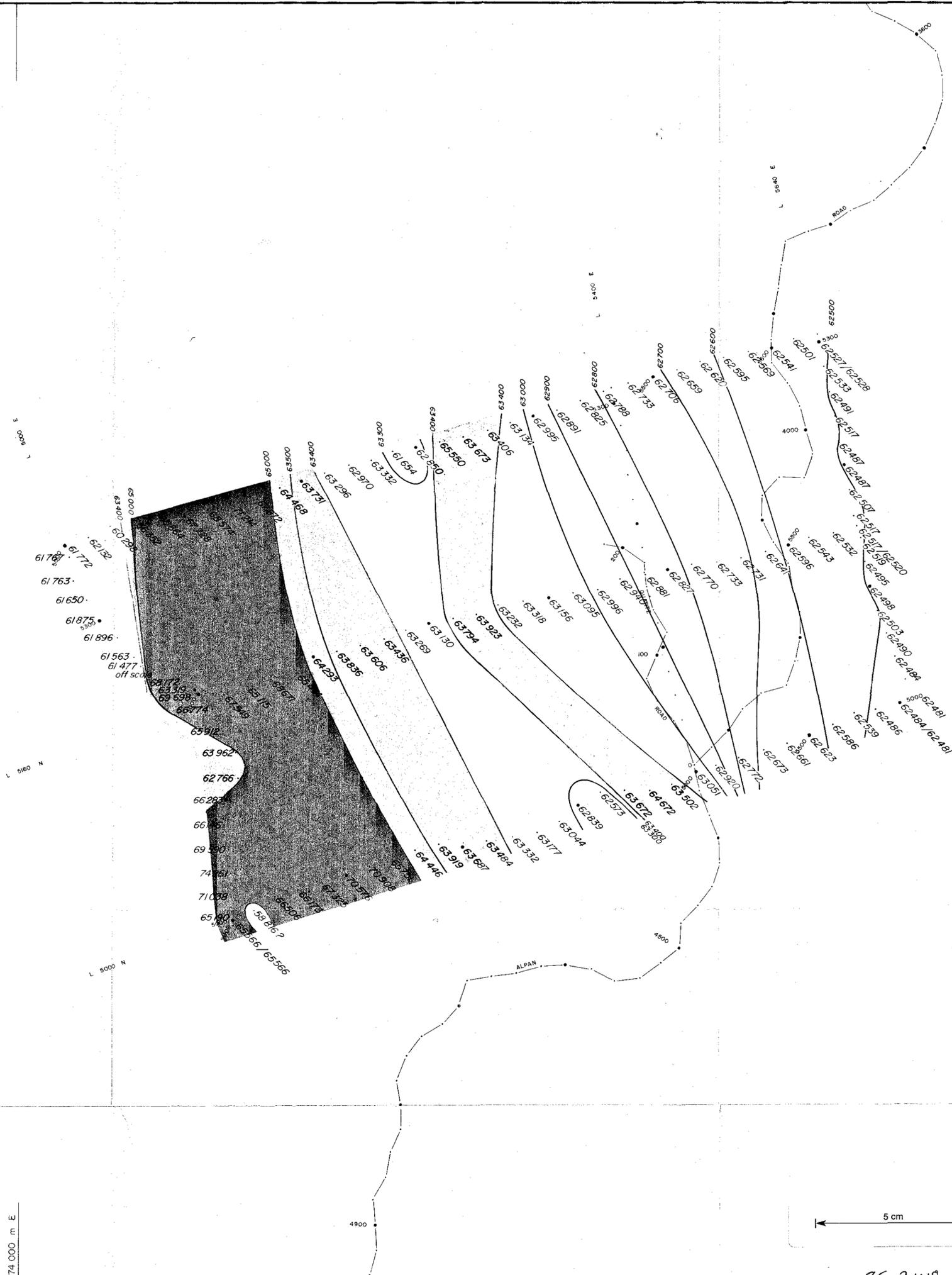
PIEMAN NORTH GRID - 60D
GEOCHEMICAL GRID AUGER SAMPLING
COPPER/LEAD/ZINC RESULTS in ppm

5 cm

COMP. BY D. S. Thynne	DRAWN BY H. Rowley	DATE 5 / 84	REVISED BY EL 5/63	AREA 6	SHEET 1	SCALE 2500	PLAN NO. TAS/2/3857
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85-2418 014

5376000 m N



149043

COMSTAFF PROPRIETARY LIMITED					
PIEMAN NORTH GRID - 60D					
GROUND MAGNETIC CONTOUR PLAN					
015					
COMP. BY	RM.	DRAWN	DATE	AMENDED	
DST		H.Rowley	5/84		
REVISED BY	DATE	SCALE	PL. NO.	TAS/2/3859	
EL 5/63	6	1 : 2500			

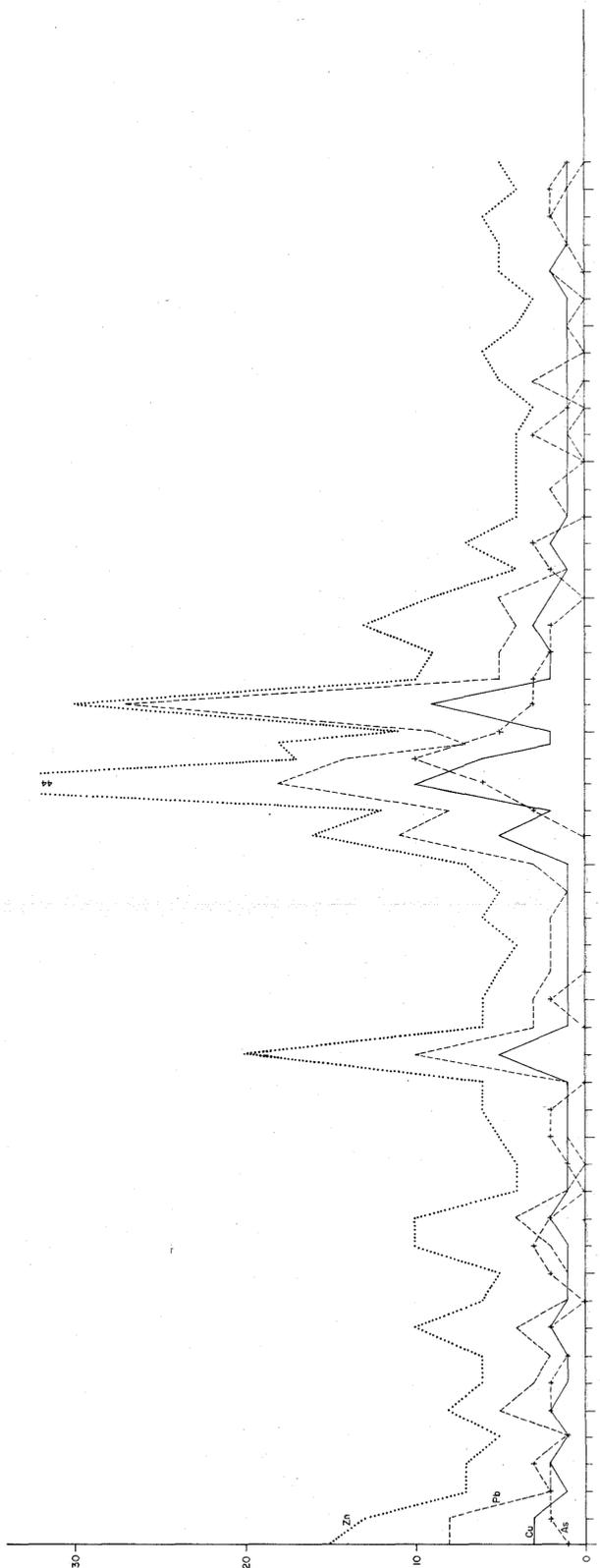
5 cm

85-2418

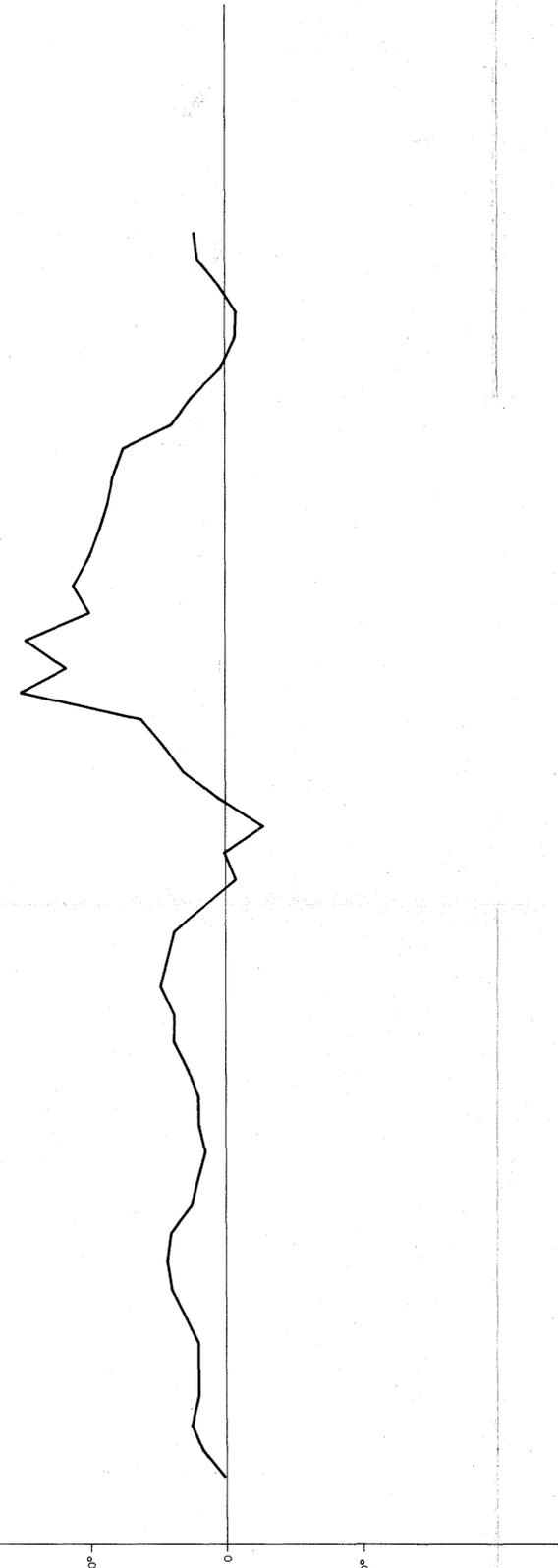


374 000 m E

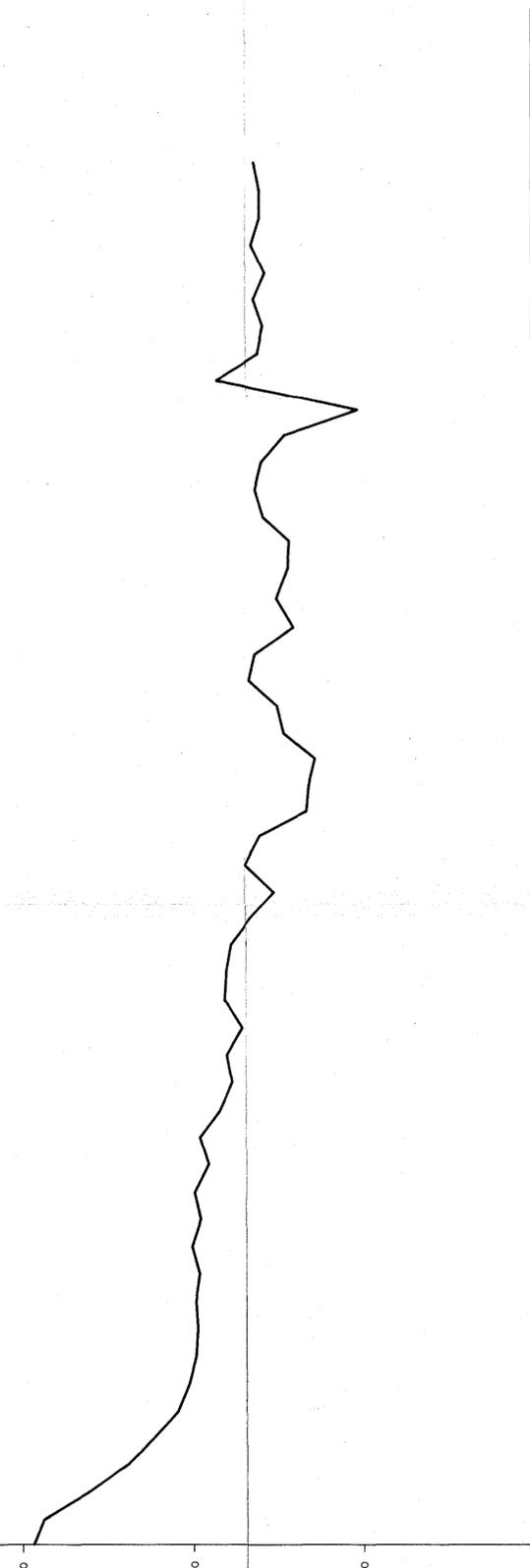
375 000 m E



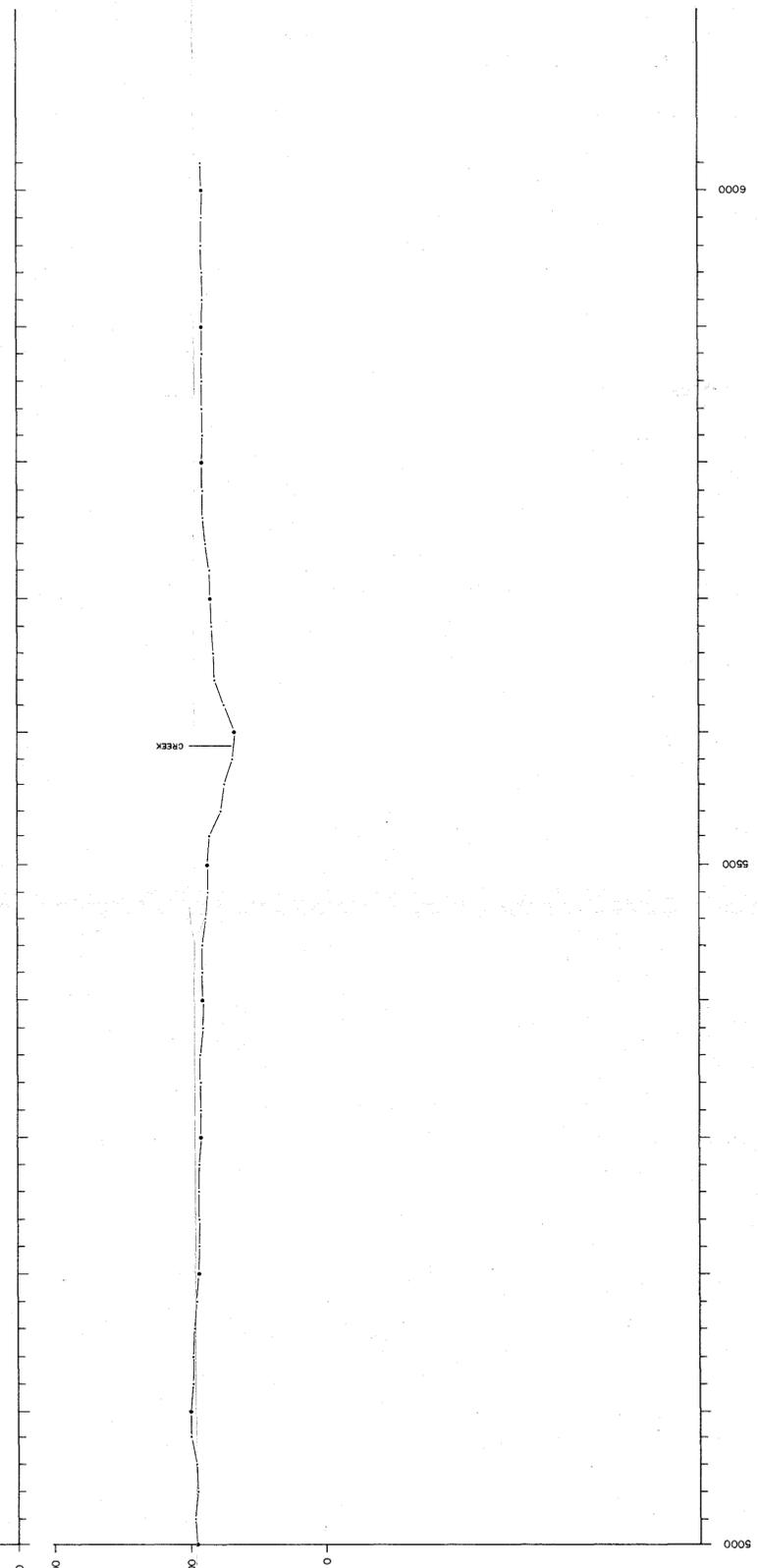
GEOCHEMISTRY
ppm



GENIE
apparent dip angle

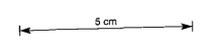


GROUND MAGNETICS
nT

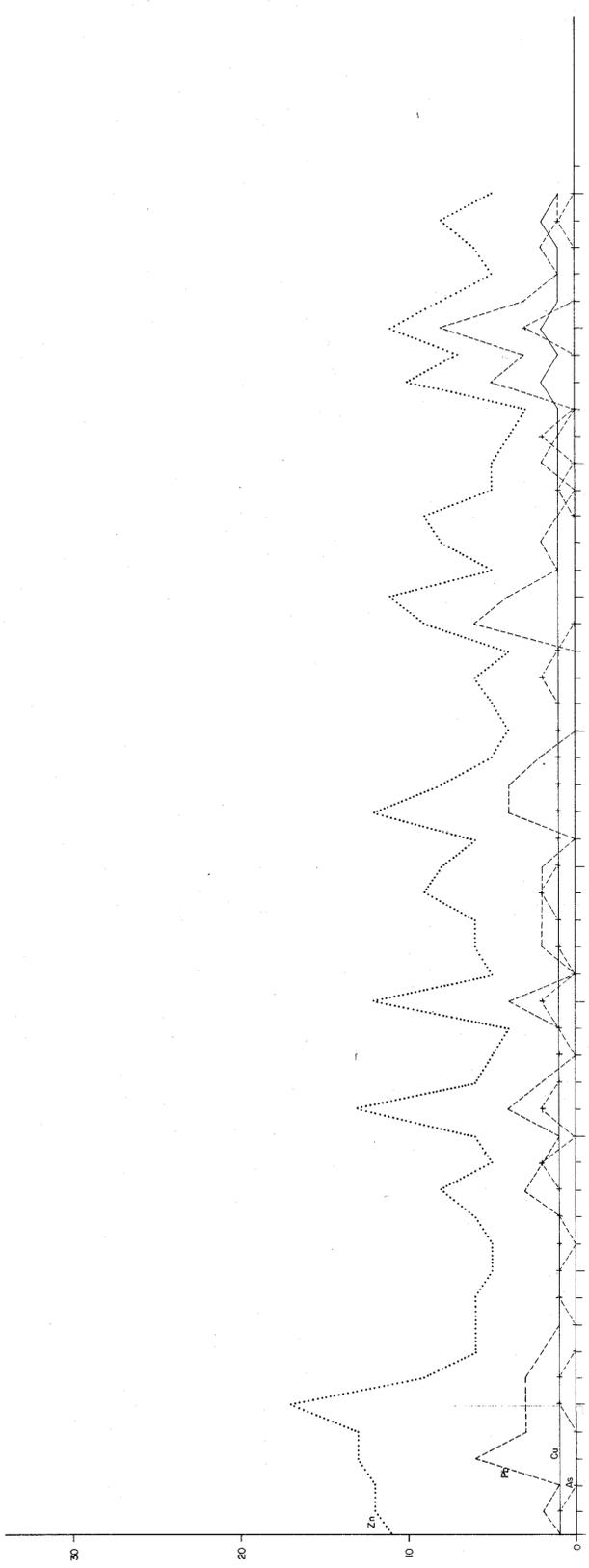


TOPOGRAPHY/GEOLOGY

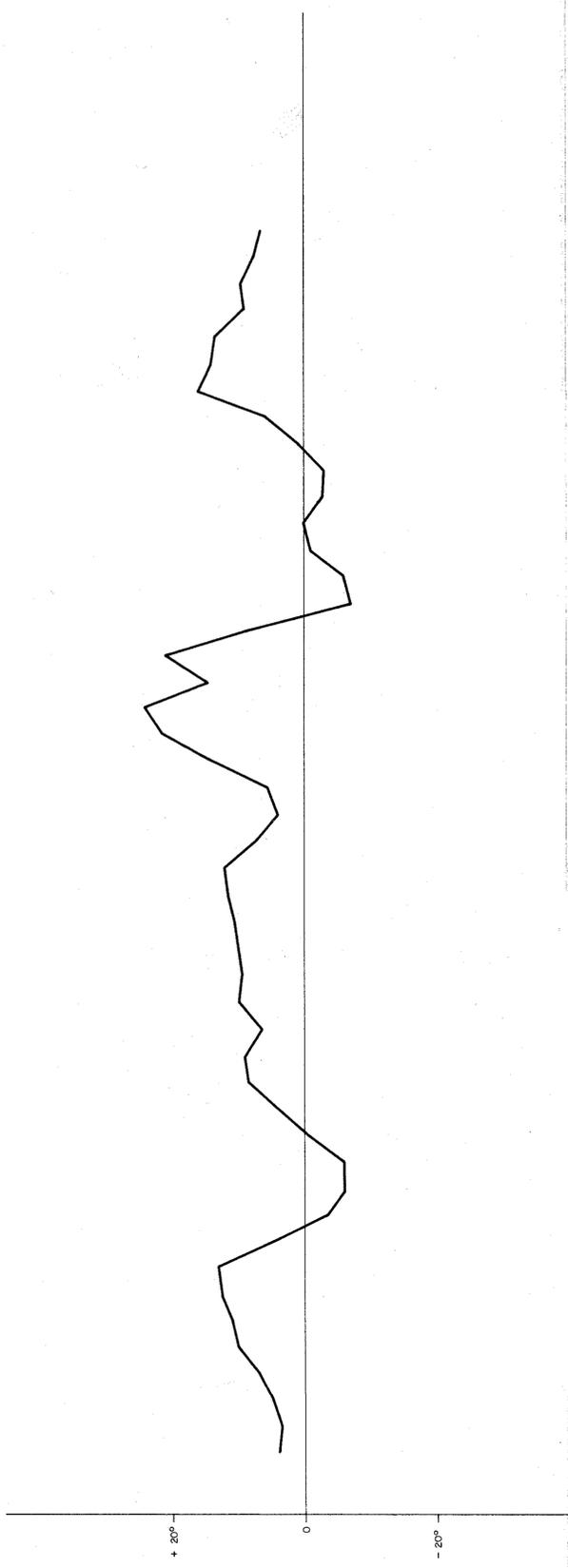
149044



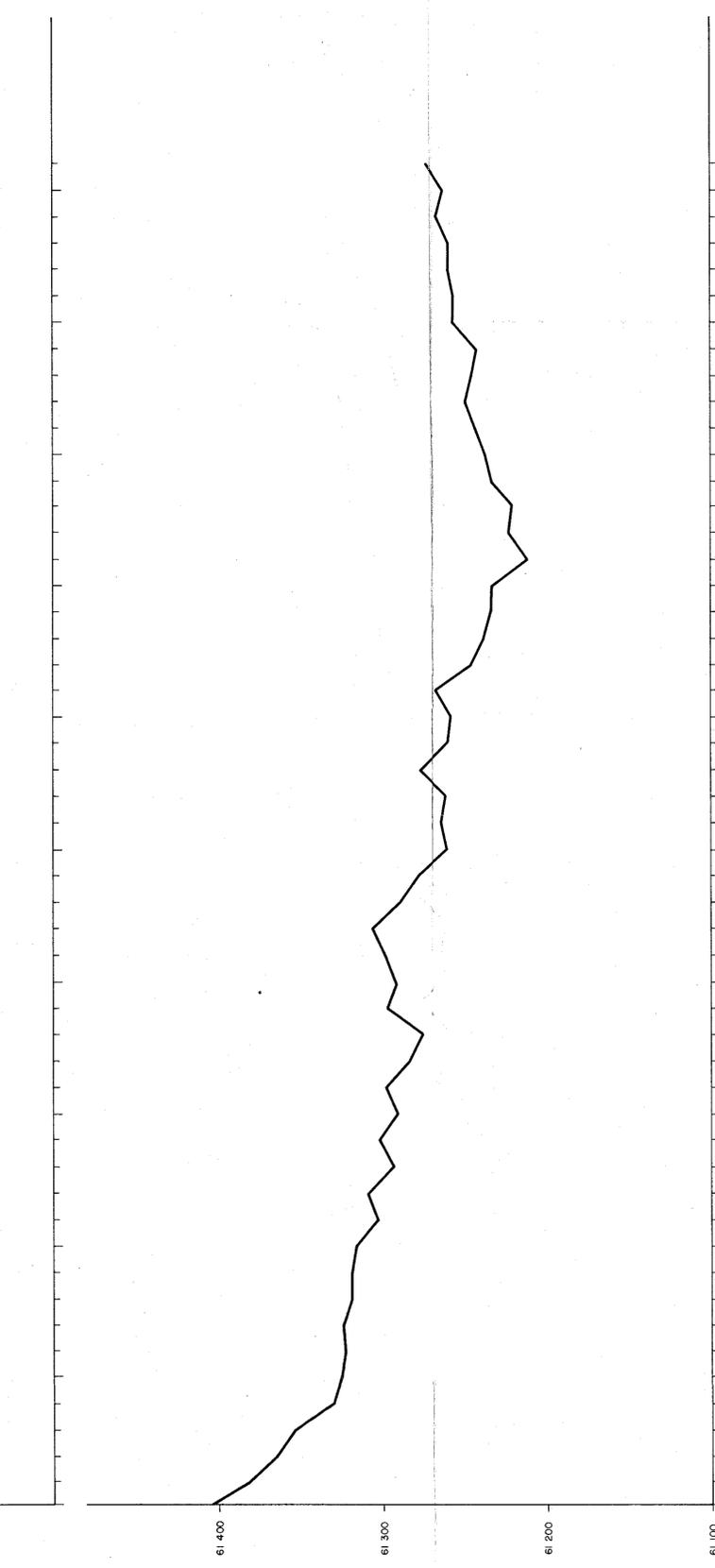
COMSTAFF PROPRIETARY LIMITED	
CLASS NO EL 5/63	COMPILED M. P. EVERETT
AREA 6	DRAWN J. HARDISTY
AMENDMENTS	DATE
1	8
2	9
3	10
4	11
5	12
6	13
7	14
NORTH PIEMAN GRID - 180 H COMPOSITE SECTION OF L 5000 N TOPO, MAG, GENIE, GEOCHEM, GEOLOGY	
SCALE 1 : 2500	REP NO TAS/2/4153



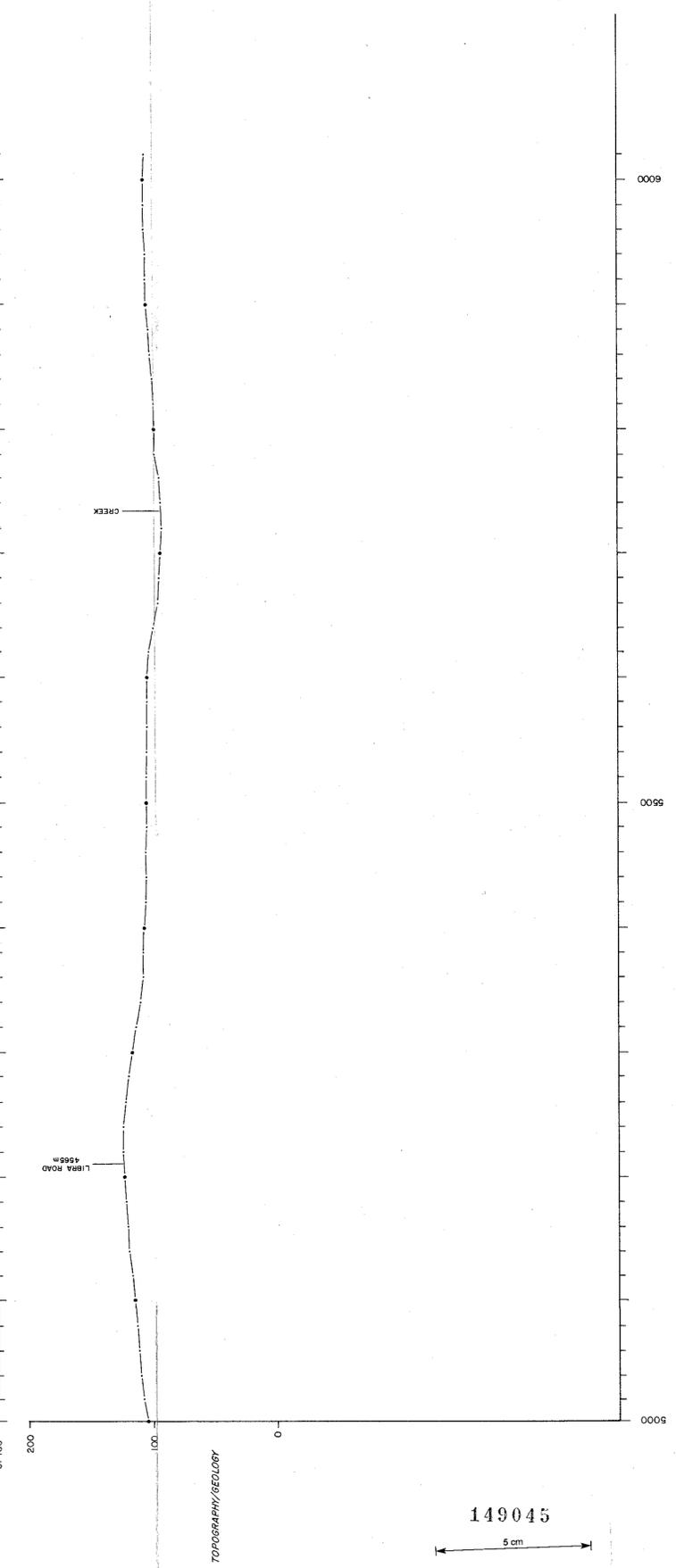
GEOCHEMISTRY
ppm



GENIE
apparent dip angle



GROUND MAGNETICS
nT



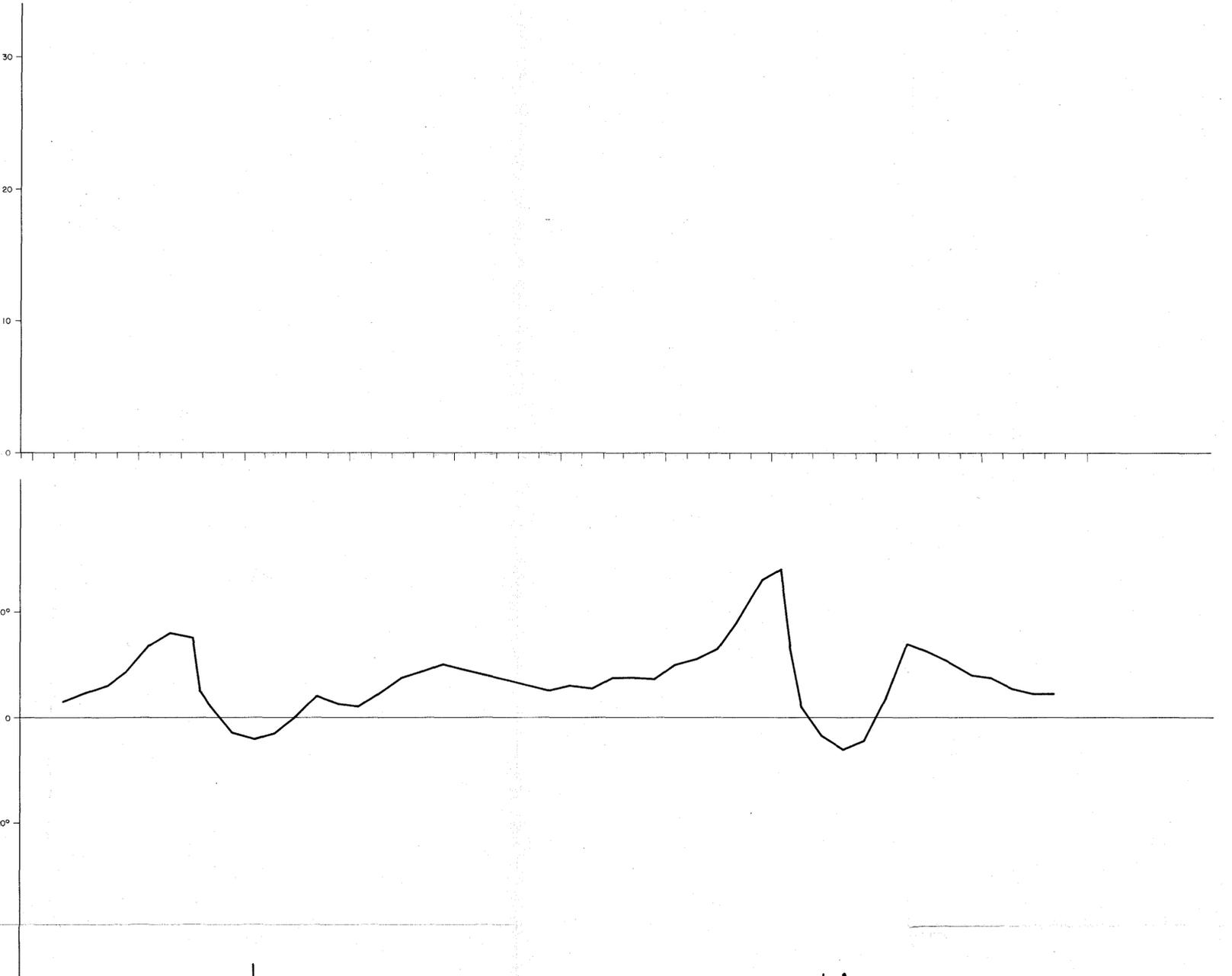
TOPOGRAPHY/GEOLGY

149045
5 cm

COMSTAFF PROPRIETARY LIMITED		COMPILED M. P. EVERETT
LEASE NO. EL 5/63	AREA 6	DRAWN J. HARDISTY
AMENDMENTS 1 8 2 9 3 10 4 11 5 12 6 13 7 14		DATE 12/11/84
NORTH PIEMAN GRID - 180 H COMPOSITE SECTION OF L 5160 N TOPO, MAG, GENIE, GEOCHEM, GEOLOGY		SCALE 1 : 2500
017		REF NO. TAS/2/4154

85-2448

GEOCHEMISTRY
ppm



TRUSSELL - 35m deep steep to West
SCINTREX - close to surface steep to west

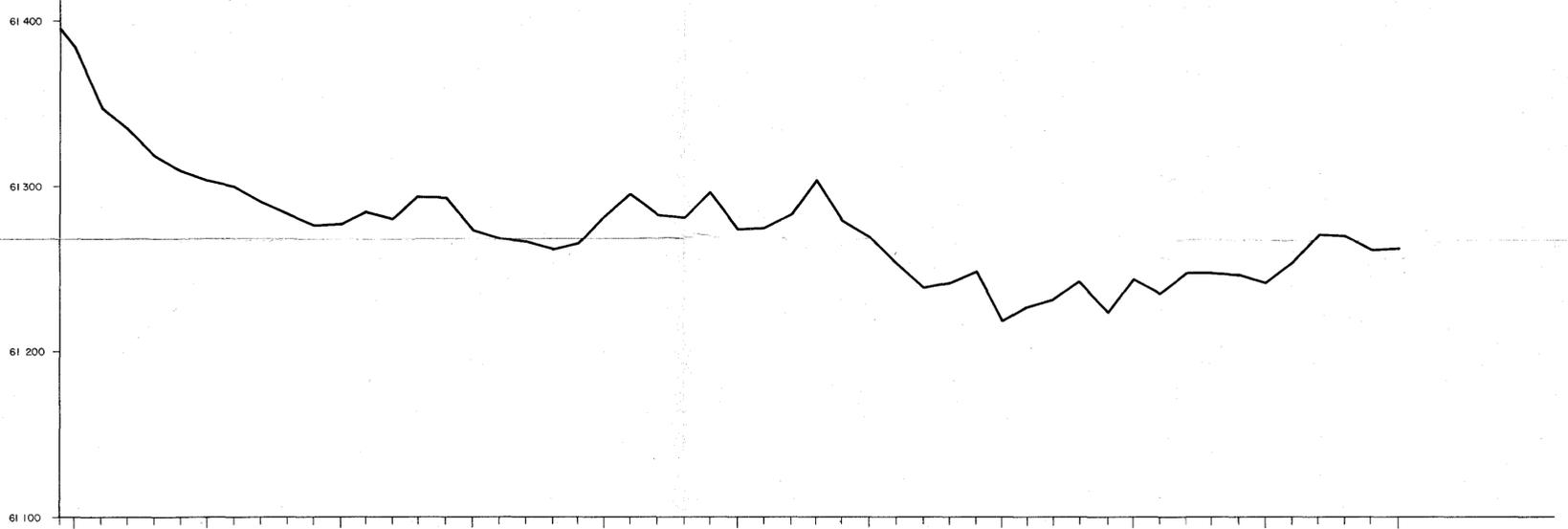
▲ DIGHEM anomaly 170E-180G

DIGHEM anomaly 170F-180H ▲

TRUSSELL - 20m deep horizontal or 2 vertical

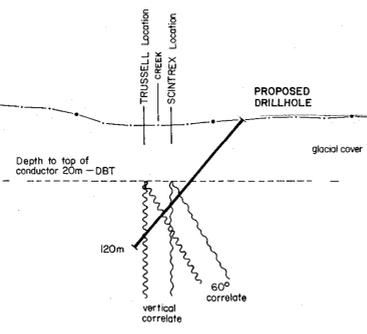
SCINTREX - steep easterly, plate like

GROUND MAGNETICS
nT



TOPOGRAPHY / GEOLOGY

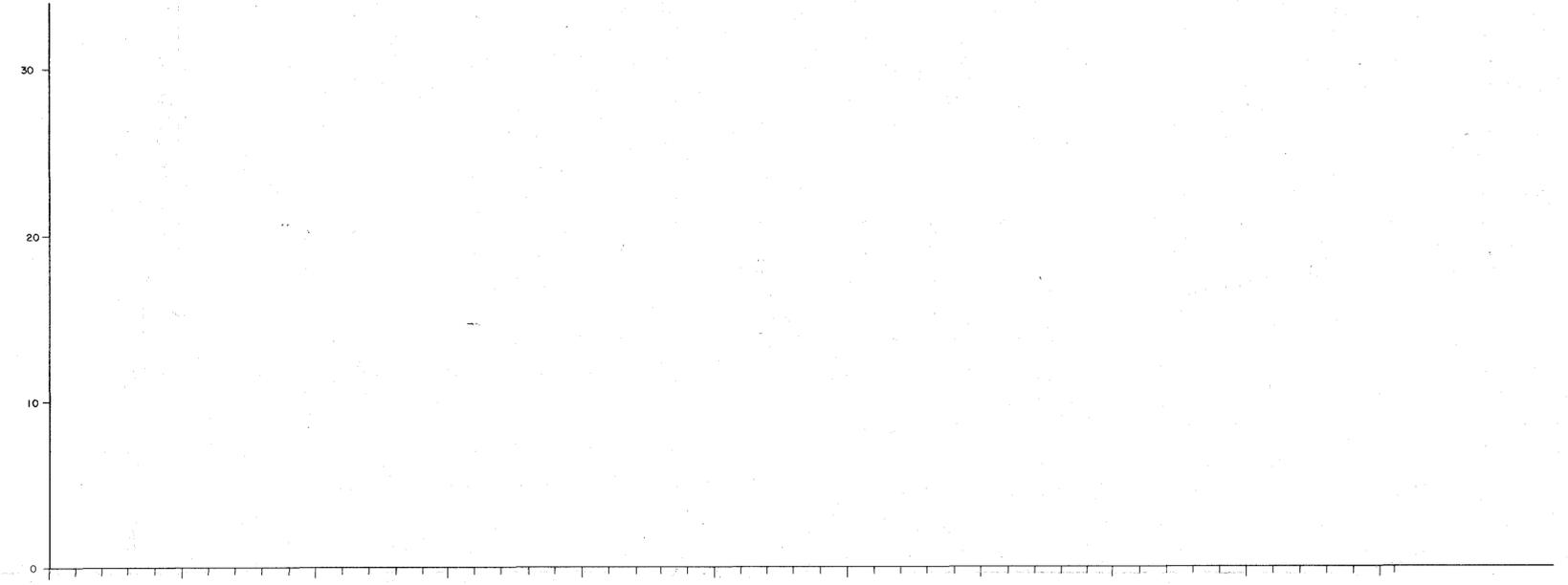
1:49046
5 cm



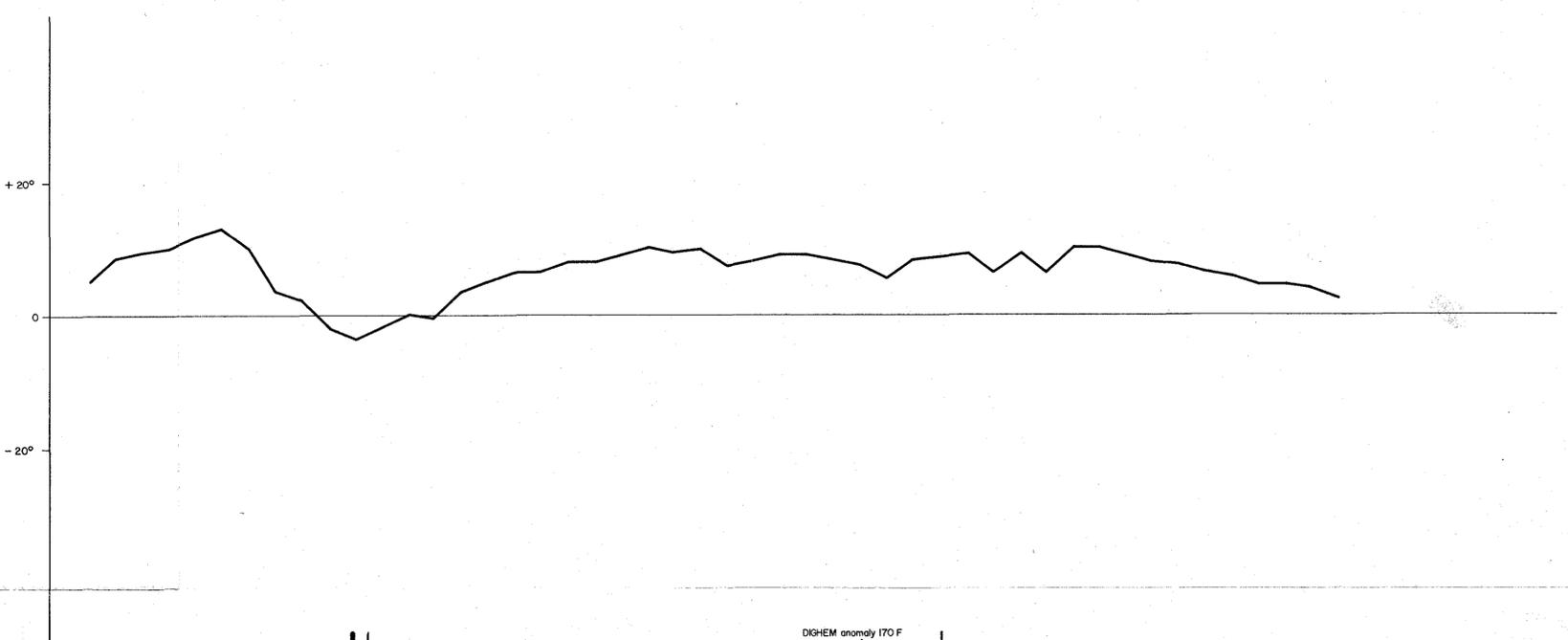
COMSTAFF PROPRIETARY LIMITED	
PROJECT EL 5/63	NO. OF SHEETS 6
DATE 12/11/84	SCALE 1:2500
NORTH PIEMAN GRID - 180 H COMPOSITE SECTION OF L 5320 N	
TOPO, MAG, GENIE, GEOCHEM, GEOLOGY	
018	
DESIGNED BY M. P. EVERETT	DRAWN BY J. HAINSTY
TAS/2/4155	

85-2448

GEOCHEMISTRY
ppm

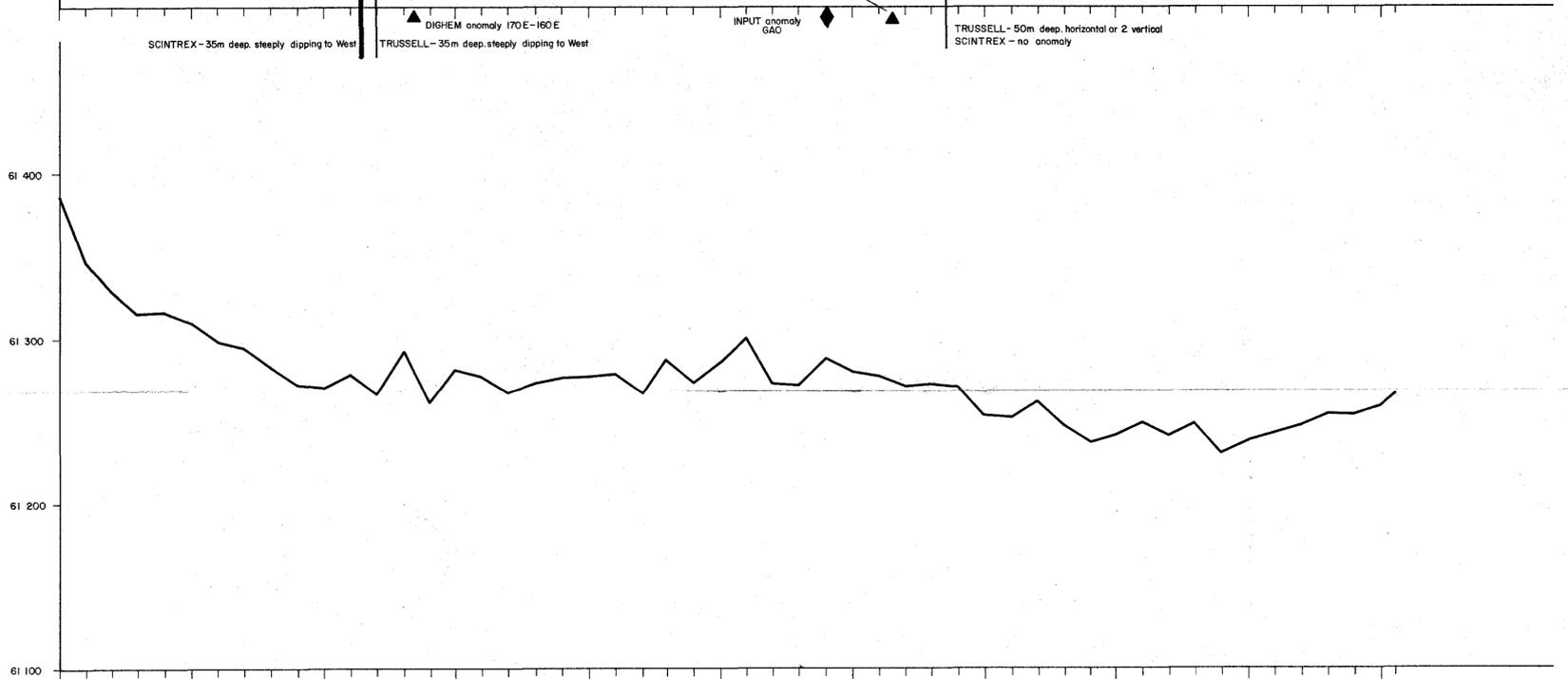


GENIE
apparent dip angle



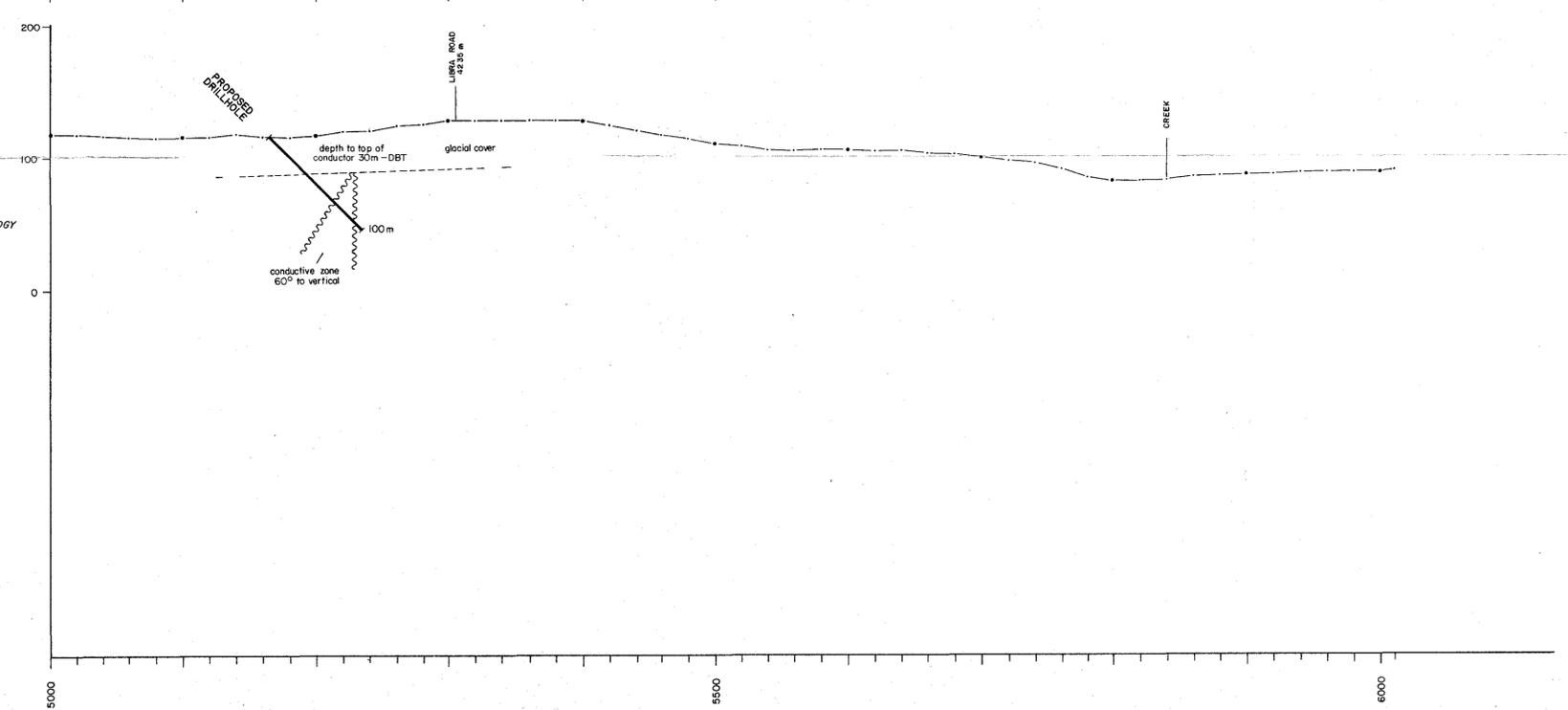
SCINTREX - 35m deep, steeply dipping to West
 TRUSSELL - 35m deep, steeply dipping to West
 DIGHEM anomaly 170 E-160 E
 INPUT anomaly GAO
 DIGHEM anomaly 170 F
 TRUSSELL - 50m deep, horizontal or 2 vertical
 SCINTREX - no anomaly

GROUND MAGNETICS
nT

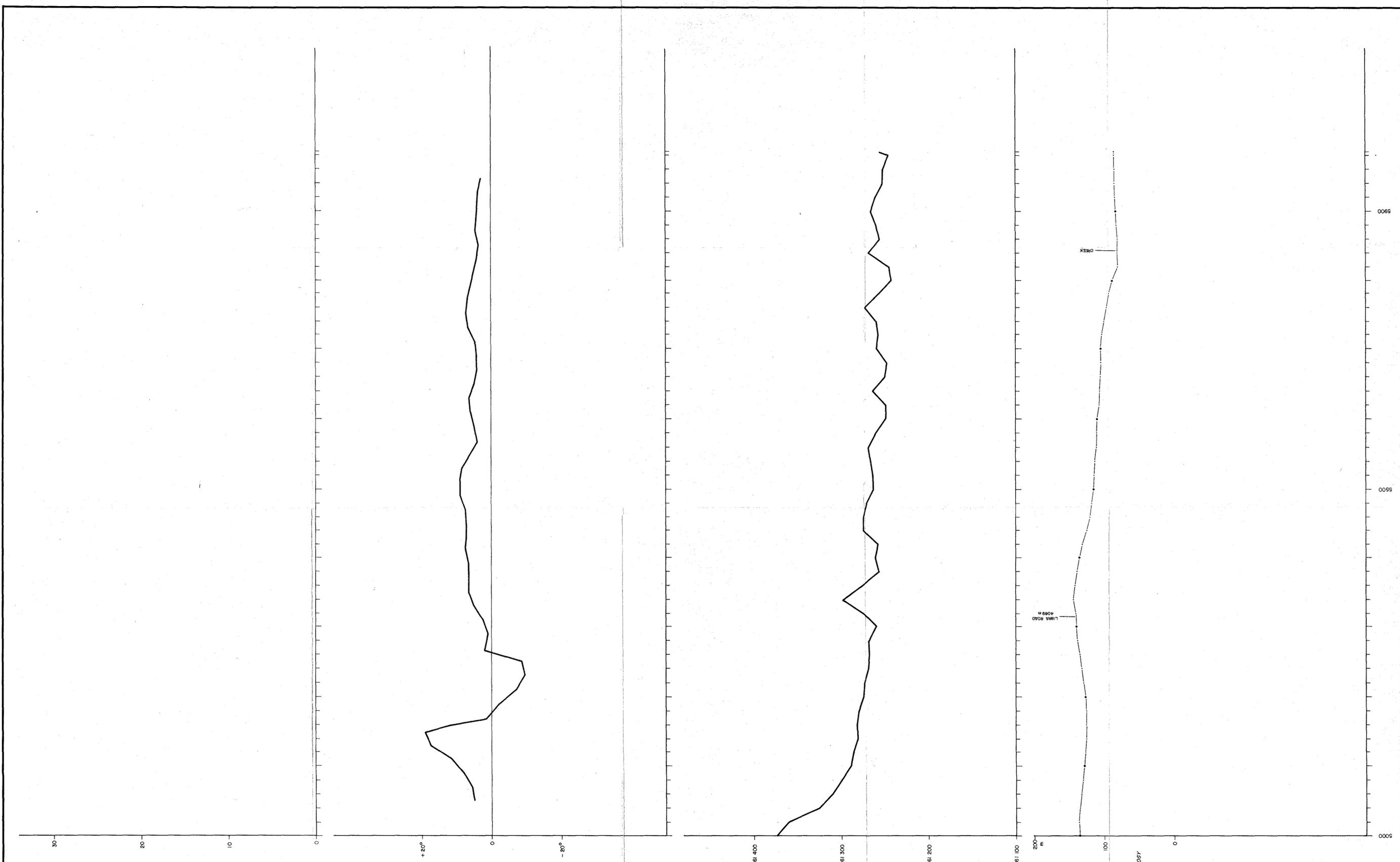


TOPOGRAPHY/GEOLGY

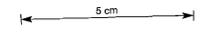
149047
 5 cm



COMSTAFF PROPRIETARY LIMITED	
DATE: EL 5/63	PROJECT: NORTH PIEMAN GRID - 180 H 019
SCALE: 1:2500	COMPILED BY: M. P. EVERETT
DATE: 12/11/84	DRAWN BY: J. HAROLDY
TOPO, MAG, GENIE, GEOCHEM, GEOLOGY	
PROJECT NO: TAS/2/4156	



149048



COMSTAFF PROPRIETARY LIMITED	
LEASE NO EL 5/63	COMPILED M. P. EVERETT
AREA 6	DRAWN J. HARDISTY
AMENDMENTS 8 9 10 11 12 13 14	DATE 12/11/84
	SCALE 1:2500
	KEY NO TAS/2/4157

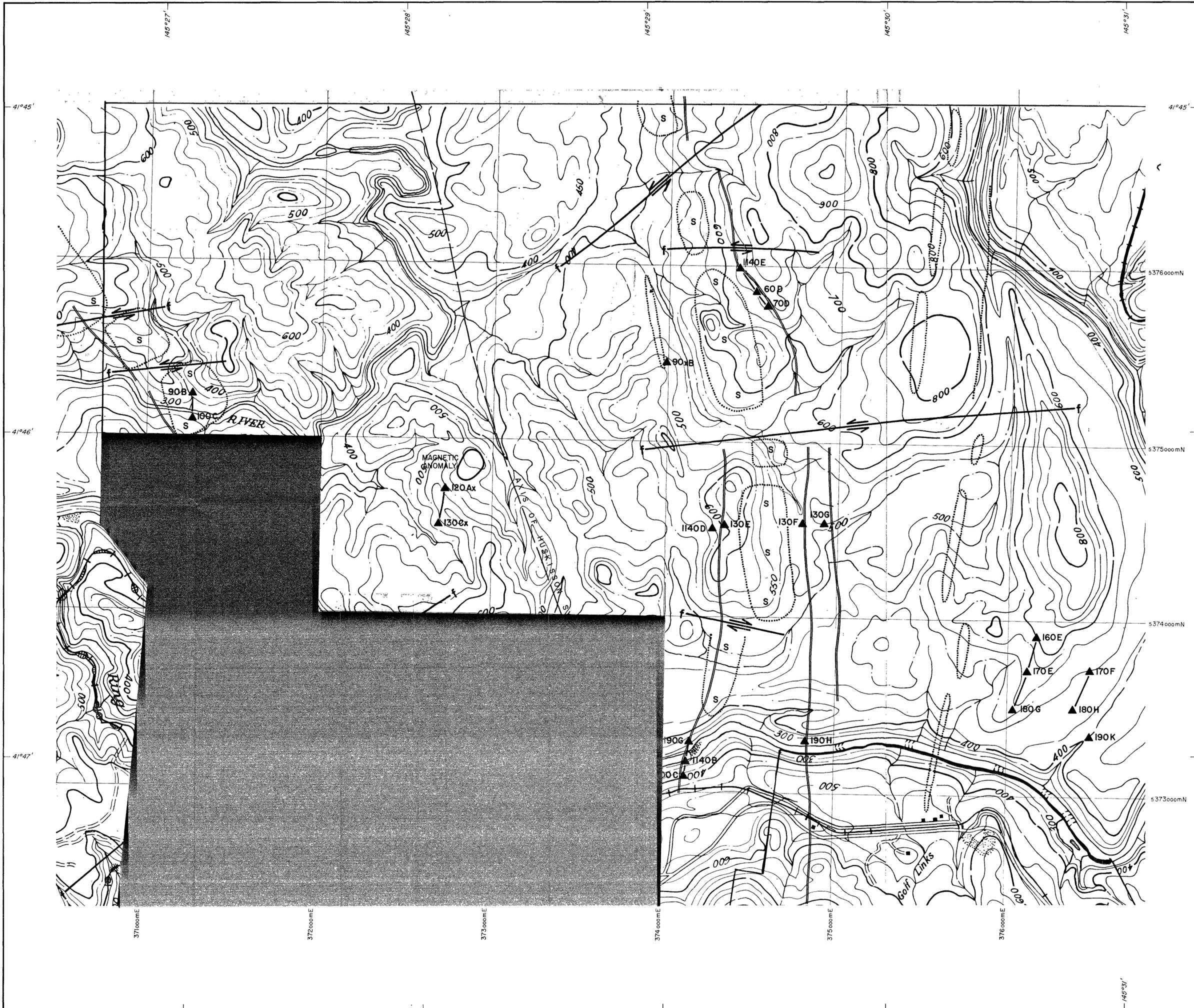
NORTH PIEMAN GRID - 180H 020
COMPOSITE SECTION OF L 5640 N
TOPO, MAG, GENIE, GEOCHEM, GEOLOGY

85-2448

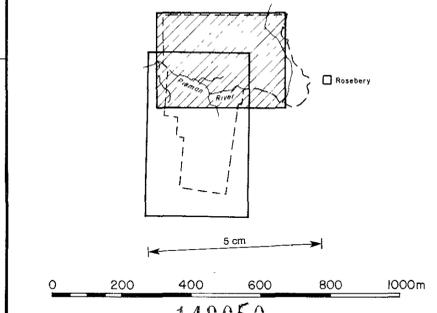
0065

0055

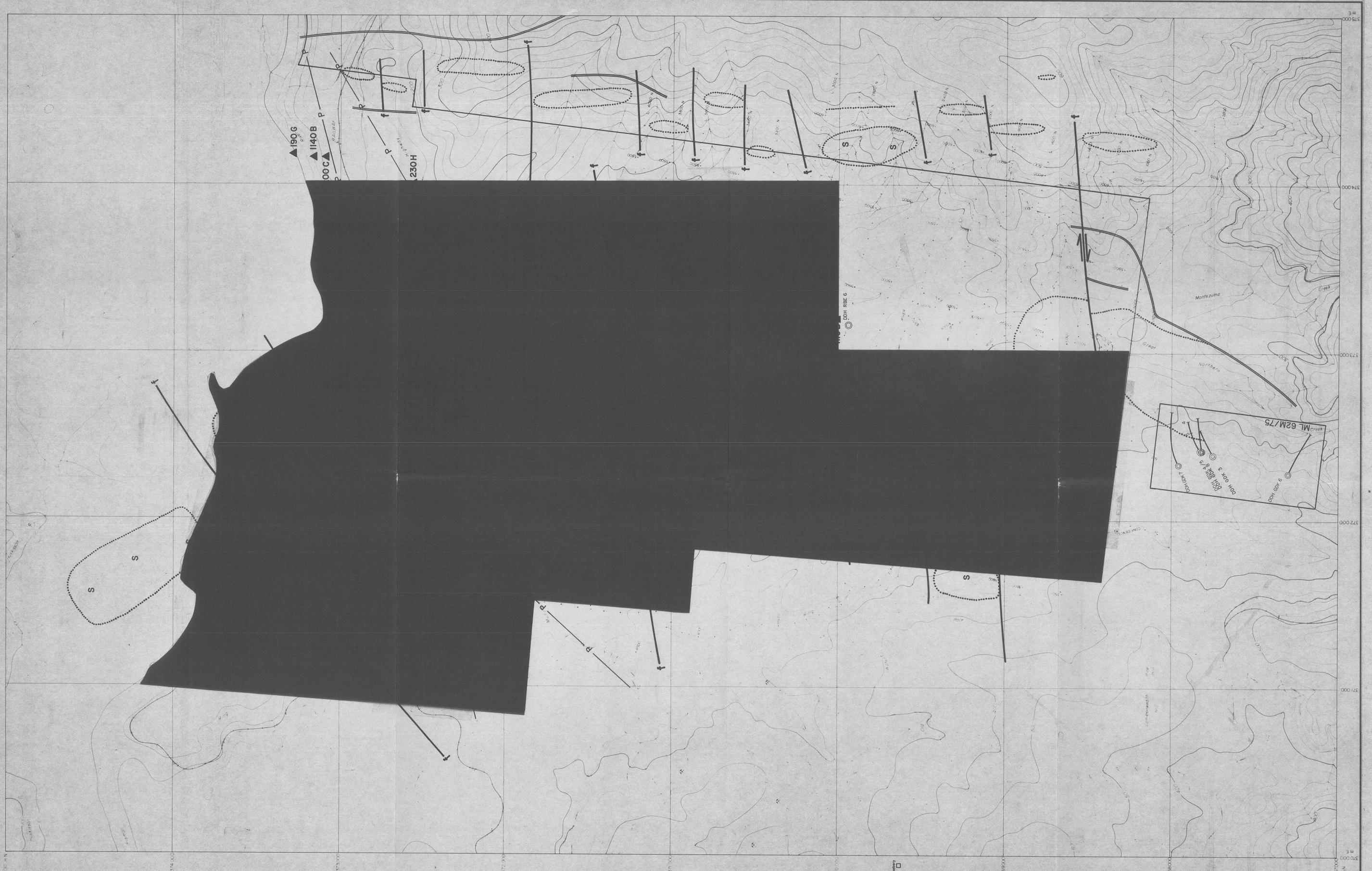
0005



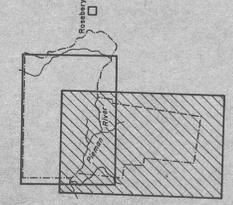
- Area relinquished
- Important EM anomalies
- Magnetic anomalies
- Serpentine
- Formational conductors



COMSTAFF PROPRIETARY LIMITED	
PROJECT	EL 5/63 - AREA 6
AREA	NORTHERN PORTION
DATA	GEOLOGY INTERPRETED FROM DIGHEM SURVEY
COMPILED	D B Trussel
DRAWN	January 1984
AMENDED	
SCALE	1:10000
REF No	TAS-2-3788



- Area relinquished
- ▲ Important EM anomalies
- Serpentine
- Formational conductors
- Power lines



COMSTAFF PROPRIETARY LIMITED

SOUTHERN PORTION OF COMSTAFF LEASE EL 5/63 AREA 6
149049

**GEOLOGY INTERPRETED
FROM DIGHEM SURVEY 07 022**

COMPLETED	D.B. Trussel
DRAWN	DATE
AMENDED	1/84
SCALE	
1 : 10000	
PLAN No.	
TAS/2/3789	

85-2418

