

CRA EXPLORATION PTY. LIMITED

**MICROFILMED**

RELINQUISHMENT REPORT FOR PART OF EL 7/73,

SHEFFIELD, NORTHERN TASMANIA.

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1. SUMMARY

EL 7/73 is due for reduction from 199km<sup>2</sup> to 125km<sup>2</sup> or less. This report covers work carried out on the portion of the EL being relinquished.

Stream sediment anomalies located by Asarco and BHP have been followed up and either were satisfactorily explained or could not be repeated.

Dighem II and aeromagnetic surveys were carried out over the EL. All anomalies found have been located on the ground and satisfactorily explained. Little further potential exists at any of the EM or aeromagnetic anomaly sites.

Little potential is thought to exist for major massive sulphide bodies outcropping or buried at shallow depth within the EL area discussed in this report.

Detailed work around the margin of the Dolcoath Granite exploring for skarn type base metal and tin tungsten mineralization was unsuccessful and potential for this type of deposit has been severely downgraded in the EL.

2. INTRODUCTION

EL 7/73, Sheffield was initially granted to Asarco who carried out a drainage survey of the EL prior to entry of CRAE into a J.V. with Asarco (Carpentaria) in 1976. Carpentaria dropped out of the J.V. in 1983.

The location of EL 7/73 is shown on plan TASH 1224.

EL 7/73 is now due for reduction from 199km<sup>2</sup> to 125km<sup>2</sup> or less. Area to be relinquished is shown on plan number TASH 2430. Area retained is 124km<sup>2</sup>. The relinquished area is the subject of this report.

### 3. CONCLUSIONS

Followup of significant Asarco and BHP stream sediment geochemical anomalies has been carried out. Anomalies have been either satisfactorily explained with further work or could not be repeated on check sampling.

Followup of Dighem II and aeromagnetic anomalies have been carried out with all anomalies located on the ground and satisfactorily explained. Little further potential remains at any of these anomalies.

Detailed work around the Dolcoath Granite margin was unsuccessful in finding significant mineralisation. The target skarn type zones were intersected but did not contain significant mineralisation and the potential of the Dolcoath Granite margin has been severely downgraded in the EL area.

Little potential exists for significant mineralisation in outcrop or buried at shallow depth within the areas discussed in this report.

### 4. GEOLOGY

The Geology of EL 7/73 Sheffield, is indicated on Plans TASH 1711 and 1712 which are adapted from the Sheffield and Middlesex 1 mile sheets and the Explanatory Reports for those sheets by Jennings (1979) and Jennings (1963) respectively.

The portions of the EL which are the subject of this report are shown on plan number TASH 2430.

### 5. DIGHEM II SURVEY FOLLOWUP

A Dighem II survey was flown over the EL together with an aeromagnetic survey. Plan numbers TASH 2459 and 2460 show the interpreted EM and aeromagnetic anomalies.

The EM anomalies and their characteristics and cause are listed in Table 1. Few of the anomalies warranted detailed followup. Extracts from CRAE report number 11883 by I.M. Clementson and M.F. Flis (1983) given below describe work carried out on EM and aeromagnetic anomalies worthy of followup.

#### 5.1 E.M. Anomaly 5000xA

A very low order EM anomaly, 5000xA was only investigated because of its location above the old Washington lead-silver workings. One line of V.L.F. - E.M. was run across the main access path to the workings and a weak cross-over, indicative of the anomaly, located (Plan TASH 1149).

The Washington workings are located on the very steep slopes of the Wilmot River valley. Mineralisation appears to be confined to thin (up to 30cm) conformable bedding plane shear zone(s) and consists of disseminated to massive galena within a friable quartz-clay matrix. Hand picked samples of mineralization assayed up to 15.9% lead and 640 ppm silver. The host rocks are a suite of massive quartz arenites within the Moina Quartzite which generally dip at 30-45° to the south-east, into the steep valley side. Whilst old workings extend over a strike length of 250 metres, significant mineralisation was observed over only 130 metres strike and is exposed down dip in workings for approximately 35 metres. No other mineralisation was located in the vicinity of the workings.

Further exploration of the prospect is complicated by the steep terrain, and the dip of the mineralisation into the hill side, the effect of this being to put any down dip extensions of the mineralisation out of range of surface geophysics and geochemistry.

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Whilst the grades are of interest, the potential for significant mineralisation appears to be restricted to down dip extensions which can only satisfactorily be tested by drilling. The origin of the lead and silver is unknown, it may be "leakage" from mineralisation within the adjacent Cambrian volcanics or it may be a concentration of metals derived by leaching from within the quartzites themselves.

5.2 EM Anomalies 7A, 8A, 8B

This suite of anomalies, and all those adjacent to them, on field examination proved to be Tertiary basalt. Ground magnetics V.L.F. - E.M. were conducted over two traverses to obtain typical profiles over basalt derived anomalies, these profiles given in plans TASH 1051 - 1054.

5.3 EM Anomaly 24xN

Plans TASH 1047 - 1050 show the ground magnetic and V.L.F. - E.M. profiles of two lines cut over this low order anomaly. Nothing of interest is evident in these profiles or in the analyses of soil samples collected over the lines. No evidence of potentially conductive mineralisation was observed in the Dolcoath Granite which exists over both lines. An area of damp clays adjacent to a small creek may have been the cause of the original Dighem anomaly.

5.4 EM Anomaly 26xD

Two lines were cut over this low order anomaly located in sediments of the Roland Conglomerate formation. Plans TASH 1043 - 1046 show the ground magnetic and V.L.F. - E.M. profiles over these lines. A confused V.L.F. - E.M. anomaly is present, and is taken as representing the original Dighem anomaly. The magnetic profiles are erratic,

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reflecting cultural effects (nearby power lines) and the intense magnetic signature of nearby basalts. The geology encountered over both lines is ferruginous quartz-arenites, minor shales and grits plus some float of a basic intrusive at the north end of the west line.

As only one anomalous metal value (500 ppm copper adjacent to basic igneous float) was found in the soil samples collected over the lines, no further work was undertaken over this anomaly. The Wilmot copper anomaly is immediately adjacent to 26xD and was extensively investigated (Section 7 of this report).

#### 5.5 EM Anomaly 27xJ

Plans TASH 1039 - 1042 show the V.L.F. - E.M. and magnetic profiles of two lines cut over this low order anomaly. These profiles show a V.L.F. - E.M. anomaly slightly south-east of the anticipated location of the Dighem anomaly whilst the magnetics indicate a geological contact coincident with the V.L.F. - E.M. anomaly. The lithologies over these lines are fresh quartz-porphyrines of the Cambrian Bull Creek Volcanics, no evidence of mineralisation was observed. Analyses of soil samples collected over the lines revealed no anomalous metal concentrations. No further work is proposed.

#### 5.6 EM Anomalies 113A, 115xF

Plans TASH 1055 - 1060 show the V.L.F. - E.M. and ground magnetic profiles of the three lines cut over these anomalies. The magnetic profiles are generally flat whilst the V.L.F. - E.M. reflects the presence of a wire fence. No further work was undertaken.

5.7 Aeromagnetic Anomalies 19-2686, 24-1816, 29-1607

These anomalies were regarded as prospective because of their alignment with the postulated Bismuth Creek Fault zone, which has known mineralisation outside the EL and proximity to the Dolcoath Granite. A ground magnetic profile of 19-2686 (Plan TASH 1087) reflects, in the north, the highly magnetic Cambrian Bull Creek acid porphyries and tuffs, to the south of which less magnetic Tertiary basalts are found. The anomaly was concluded to be a product of the highly magnetic Bull Creek porphyries and no further work undertaken.

Anomaly 24-1816 (Plans TASH 1088 and 1089) was also shown to be caused by the Bull Creek porphyries which here have magnetic susceptibilities in the range  $7 \times 10^3$  cgs compared to a background of  $0.1 \times 10^3$  cgs (Dolcoath Granite) to the north.

Soil samples collected over this anomaly showed no anomalous metal concentrations (10-85 ppm Copper, 2 - 79 ppm lead, 13 - 160 ppm zinc, 5 ppm molybdenum, 50 ppm arsenic, 0.1 ppm silver). No further work was conducted.

Reconnaissance traverses over anomaly 29-1607 showed a suite of similar, highly magnetic Bull Creek porphyries and tuffs (grab samples having maximum of 49 ppm copper, 77 ppm lead and 390 ppm zinc). Again the cause of the anomaly was ascribed to the general nature of these volcanics and no further work was done.

5.8 Aeromagnetic Anomaly 14-2804 (Eribba Road Anomaly)

Two lines were cut over this anomaly to allow soil sampling, ground magnetics and V.L.F. - E.M. profiling. The magnetics successfully located the anomaly, the V.L.F. - E.M. showed little of significance, (Plans TASH 1162 - 1165).

Mapping, suggests that the anomaly is caused by a rhyolitic lava unit within the dominant intermediate - acid tuffs, shales and sandstones which occur north of a major fault, corresponding to a creek, which brings Ordovician Roland Conglomerate into contact with these Cambrian lithologies. Soil sampling over the lines gave no anomalous base metal values (48 ppm copper, 67 ppm lead, 161 ppm zinc). No further work was considered necessary in view of the lack of geochemical encouragement or other evidence of mineralisation.

5.9 Aeromagnetic Anomalies 15-2781, 2100-3643, 29-1614 (Dolcoath Margin Anomalies)

The margin of the Dolcoath Granite is marked by a series of aeromagnetic anomalies reflecting possible skarn-type mineralisation. Those on the southern margins (anomalies 19-2686, 24-1816 and 29-1607) were found to be lithology - caused.

Initial investigation of the northern margin anomalies however, revealed that they all resided within the non magnetic Ordovician Moina Sandstone or in underlying lithologies.

Anomaly 15-2781 is covered by the Dolcoath grid and was surveyed with ground magnetics and V.L.F. - E.M. (Flis, 1982). Modelling of the ground magnetics indicated a body of high susceptibility (equivalent to approximately 3% magnetite by volume) at a depth of 186 metres, dipping  $51^{\circ}$  to the south and a width of 20 metres.

Geologic mapping and geochemistry (Weber, 1982), indicated no obvious source for the anomaly with the possible exception of a quartz-porphyry dyke system. However, these are typically non-magnetic and thus can be discounted.

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Anomaly 2100-3643 has had no work done on it with the exception of examination of analogue aeromagnetic charts and an estimation of depth to source in excess of three hundred metres.

Anomaly 29-1614 lies to the east of the Cethana dam and power station. A quarry on top of the anomaly reveals pyritic Moina Sandstone with very low magnetic susceptibility. A reconnaissance ground magnetometer survey was done and the results modelled. A source at a depth of 100 metres, dipping  $85^{\circ}$  to the north-west, having a width of 120 metres and a susceptibility equivalent to 2% magnetite by volume fits the data well.

The depth of all three anomalies has lowered their priority as exploration targets. Nonetheless the concept of skarn-type mineralisation remains. As it is doubtful that any ground methods other than a gravity survey would detect massive sulphidic targets such as these, it is recommended that reconnaissance gravity lines be carried out on them.

#### 6. DOLCOATH GRANITE AND VICINITY

Work on the Dolcoath Granite margin for skarn type base metal and tin - tungsten mineralisation is fully described by Weber in CRAE Report number 11881 and M.F. Flis in CRAE Report number 11269.

Drilling of targets generated by geophysics and geochemistry severely downgraded the potential of the area and no further work is warranted.

## 7. STREAM SEDIMENT ANOMALY FOLLOWUP

### 7.1 Wilmot Copper Anomaly

#### 7.1.1 Stream Sediment Geochemistry

During their 1973-1975 stream sediment survey Asarco located anomalous base metal values (up to 106 ppm copper, 98 ppm lead and 490 ppm zinc) in two small adjacent creeks approximately 1.5 kilometres west of Wilmot. Both creeks drain from a range of low hills, mapped as Cambrian Gog Range greywacke with Tertiary basalt capping, into the Forth Falls Creek. A followup programme of sampling both creeks at 50 metre intervals was completed by Asarco in 1975 (Plan TASH 1132). This showed that anomalous metal values were only present in the lower 150 metres of the north creek, but in the south creek high copper and zinc values (up to 210 ppm copper and 960 ppm zinc) persisted, albeit erratically, to the headwaters of the creek whilst lead was only anomalous (up to 710 ppm) in the lower 400 metres. Asarco noted no evidence of mineralisation within the fine grained Cambrian sediments seen in the creeks but mentioned that BHP, who had also examined the area, believed the anomalous values were generated by "a small vein of pyritiferous shale".

In 1982 CRAE repeated the followup sampling, but at 100 metre intervals, three sample types being collected at each site: a total sediment "grab sample", a panned concentrate and a sample of clay grade material washed from the sediment. Plans TASH 1128 - 1132 detail the results of this survey. Correlation of analyses between the different sample types (Plan TASH 1133) was surprisingly close, suggesting that

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the base metal content is fairly evenly distributed between coarse and fine fractions of the total sediment. The 1982 results confirmed the pattern of spatial distribution shown by the 1975 survey.

#### 7.1.2 Follow-up Grid

##### 7.1.2.1 Geology (Plan TASH 1135)

Apart from a small area of Tertiary basalt at their headwaters, the catchment of both creeks consists of rocks belonging to the Cambrian Gog Range Greywacke. Over the grid, three broad facies types were discernable within this formation, all striking (grid) NE - SW and generally dipping steeply to the south.

Fine clastics, siltstones, shales and? tuff-shales, form the major facies unit in the area and are generally fresh, micaceous, often slightly sericitic and ferruginous when weathered. Metal contents for these rocks average approximately 265 ppm copper (20-835 ppm copper), 44 ppm lead (4-1350 ppm lead) and 170 ppm zinc (39-2200 ppm zinc).

Subordinate to this finer facies, and probably interbedded throughout it, are coarser clastics and possible volcani-clastics. Medium to coarse grained greywackes, sandy tuffs, and possibly some lithic tuffs are the recognised lithologies in this group and they tend to have a lower base metal content than the finer facies unit, (average approximately 67 ppm copper, 40 ppm lead, 128 ppm zinc).

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The third facies group is volcanic or possibly igneous intrusive, and consists of two lithologies which, in the field look intrusive into the surrounding sediments. Tentative field identification of these lithologies as a microgranite and a quartz-feldspar porphyry supported an intrusive interpretation. Petrological studies identified the "microgranite" as a brecciated tourmalinised rock, derived from a volcanic breccia or possibly a granite, and the "porphyry" was determined to be a subaerial vitric crystal tuff. The intrusive nature of these rocks is therefore in doubt, their field relationships are not conclusive despite the intrusive appearance. Neither rock is particularly enriched in base metals, fresh samples were difficult to obtain but weathered examples, contained 66-480 ppm copper, 6-150 ppm lead, 135-1050 ppm zinc.

#### 7.1.2.2 Soil Geochemistry (Plans TASH 1197 - 1201)

The copper levels are somewhat elevated over the entire grid, values of less than 50 ppm copper being unusual. This probably reflects the high background copper in the siltstones and shales which are the dominant lithologies within the area. Anomalous copper levels (200 ppm maximum 730 ppm) occur in the (grid) east and south-east and largely coincide with an area of the coarser sediments and the volcanic (?intrusive) unit.

Lead values are also slightly elevated but not to the extent of copper values. The distribution of anomalous lead (100 ppm,

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maximum 620 ppm) is coincident with the copper anomaly but is of similar area. Anomalous zinc (200 ppm, maximum 410 ppm) has a similar distribution as the copper anomaly.

7.1.2.3 Geophysics (Plans TASH 1136-1138, 1193-1196)

The grid has been covered by ground magnetic and V.L.F. - E.M. surveys. Very little information can be gained from the magnetometry: a relatively strong gradient, increasing to the (grid) south-east exists over the entire grid. This gradient seems to be related to the basalts in the north-west corner of the grid or, more fundamentally, to the Cambrian greywacke distribution locally and regionally. The V.L.F. - E.M. data appears more diagnostic of local structure; reflecting the occurrence of less resistive zones. Three such zones exist on the grid and are well defined by the maximum horizontal field strength map (TASH 1137): 1) in the (grid) north-east not correlating to Tertiary basalt occurrence, 2) in the (grid) north-east not correlating to any particular lithology but obviously a gross structure discordant to local strike representing a possible fracture zone, and 3) a moderate anomalous zone (in both dip and horizontal field strength parameters) striking at  $65^{\circ}$  GN on lines 4400mE to possibly 4800mE. The latter zone may correlate with Cambrian greywackes and so be lithology caused.

### 7.1.3 Discussion and Recommendations

The soil geochemical and highest stream sediment anomalies correlate well with the area of the coarser sediments and volcanic (igneous) facies within the Cambrian succession, the implication being that one or both of these rock groups are contributing the metal values; i.e. the anomalies are lithologically controlled. No evidence of significant mineralisation was noted in either of these facies groups and neither has particularly high background base metal contents which could explain the anomalies. The soil geochemical anomalies are open ended to the (grid) east but potential in that direction is limited by known outcrop of unmineralised shales. The narrow "tail" of these soil anomalies strike off the grid to the south-west, but in that direction must pass beneath the Ordovician Roland Conglomerate which occurs just off the grid.

The absence of any definite geophysical target, the limited strike length of the geochemical anomalies and the lack of any observed evidence of mineralisation has down-graded the potential of the prospect. As a low priority target, open hole drilling or trenching of the soil geochemical anomaly is recommended.

## 7.2 Ling 2 Anomaly

### 7.2.1 Stream Sediment Geochemistry

BHP located a sample with anomalous Pb (180 ppm), As (50 ppm) and Ag (1.2 ppm) during stream sediment sampling on EL 15/65, part of which was included in EL 7/73, Sheffield.

Four followup samples were taken in and adjacent to the creek containing the original values. Plan TASH 2463 shows the sample sites. Geochemical results are given in Appendix 3.

The results are not anomalous and no further work was undertaken. The gold value was not considered significant in view of the close proximity of outcropping deep lead gravels to the sample site.

#### 7.2.2 Geology

The original sample site was in a creek on the boundary between Cambrian volcanoclastics and Tertiary basalt. Outcrop was non existent in the creek but good exposure of the Cambrian rocks occurs at the mouth of the creek in the Wilmot River. The Cambrian rocks in the creek consisted of vertically to steep south dipping coarse lithic sandstone with conglomerate interbeds with striking  $110^{\circ}$  magnetic. The area to the south of the anomalous creek is covered by a stacked series of basalt flows with interflow sediments consisting of quartz rich gravels and sand.

8. REFERENCES

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- Weber, G.B. 1982 Exploration in the vicinity of the  
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CRAE Report No. 11881.

9. LOCATION

Burnie 1 : 250,000 Sheet SK 55-3.

10. KEYWORDS

Copper, Lead, Zinc, Tin, Tungsten, Acid Volcanics, Basalt,  
Calc Silicate, Granite, Volcanogenic, Assays Geochem., Geophys  
EM, Geophys Magnetics, Ore Potential.

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11. LIST OF PLANS

<u>Plan No.</u>	<u>Title</u>	<u>Scale</u>
TASh 1224	Sheffield EL 7/73 Location Plan	1 : 2000,000
TASh 1711	Sheffield EL 7/73 West Sheet Regional Geology	1 : 25,000
TASh 1712	Cethana EL 10/76 & Sheffield EL 7/73 East Sheet - Regional Geology	1 : 25,000
TASh 2430	Renewal Application Sheffield EL 7/73 Showing Area to be Relinquished	1 : 100,000
TASh 1149	Sheffield EL 7/73 Washington Ag-Pb V.L.F. - E.M.	As shown
TASh 1051	Sheffield EL 7/73 V.L.F. - E.M. 7A, 8A, 8B, East Line	As shown
TASh 1052	Sheffield EL 7/73 Ground Magnetics 7A, 8A, 8B, East Line	As shown
TASh 1053	Sheffield EL 7/73 V.L.F. - E.M. 7A, 8A, 8B, West Line	As shown
TASh 1054	Sheffield EL 7/73 Ground Magnetics 7A, 8A, 8B, West Line	As shown
TASh 1047	Sheffield EL 7/73 V.L.F. - E.M. 24xN Line A	As shown
TASh 1048	Sheffield EL 7/73 Ground Magnetics 24xN Line A	As shown
TASh 1049	Sheffield EL 7/73 V.L.F. - E.M. 24xN Line B	As shown

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TASh 1050	Sheffield EL 7/73 Ground Magnetics 24xN Line B	As shown
TASh 1043	Sheffield EL 7/73 V.L.F. - E.M. 26xD East Line	As shown
TASh 1044	Sheffield EL 7/73 Ground Magnetics 26xD East Line	As shown
TASh 1045	Sheffield EL 7/73 V.L.F. - E.M. 26xD West Line	As shown
TASh 1046	Sheffield EL 7/73 Ground Magnetics 26xD West Line	As shown
TASh 1039	Sheffield EL 7/73 V.L.F. - E.M. 27xJ Line A	As shown
TASh 1040	Sheffield EL 7/73 Ground Magnetics 27xJ Line A	As shown
TASh 1041	Sheffield EL 7/73 V.L.F. - E.M. 27xJ Line B	As shown
TASh 1042	Sheffield EL 7/73 Ground Magnetics 27xJ Line B	As shown
TASh 1055	Sheffield EL 7/73 V.L.F. - E.M. 113A, 115xF, Line 1	As shown
TASh 1056	Sheffield EL 7/73 Ground Magnetics 113A, 115xF, Line 1	As shown
TASh 1057	Sheffield EL 7/73 V.L.F. - E.M. 113A, 115xF, Line 2	As shown
TASh 1058	Sheffield EL 7/73 Ground Magnetics 113A, 115xF, Line 2	As shown

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TASh 1059	Sheffield EL 7/73 V.L.F. - E.M. 113A, 115xF, Line 3	As shown
TASh 1060	Sheffield EL 7/73 Ground Magnetics 113A, 115xF, Line 3	As shown
TASh 1087	Sheffield EL 7/73 Ground Magnetics Aeromagnetic Anomaly 19-2686	As shown
TASh 1088	Sheffield EL 7/73 Ground Magnetics Aeromagnetic Anomaly 24-1816 North End	As shown
TASh 1089	Sheffield EL 7/73 Ground Magnetics Aeromagnetic Anomaly 24-1816 South End	As shown
TASh 1162	Sheffield EL 7/73 Ground Magnetics Aeromagnetic Anomaly 14-2804 West Line	As shown
TASh 1163	Sheffield EL 7/73 V.L.F. - E.M. Aeromagnetic Anomaly 14-2804 West Line	As shown
TASh 1164	Sheffield EL 7/73 Ground Magnetics Aeromagnetic Anomaly 14-2804 East Line	As shown
TASh 1165	Sheffield EL 7/73 V.L.F. - E.M. Aeromagnetic Anomaly 14-2804 East Line	As shown
TASh 1126	Sheffield EL 7/73 Wilmot Copper Anomaly - Location Plan	1 : 25,000
TASh 1128	Sheffield EL 7/73 Wilmot Copper Anomaly - Stream Sediment Sample Location Plan	1 : 7500

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TASh 1129	Sheffield EL 7/73 Wilmot Copper Anomaly - 1982 Analyses of Stream Sediment Grab Samples	As shown
TASh 1130	Sheffield EL 7/73 Wilmot Copper Anomaly - 1982 Analyses of Stream Sediment Suspended Clay Samples	1 : 7500
TASh 1131	Sheffield EL 7/73 Wilmot Copper Anomaly - 1982 Analyses of Stream Sediment Panned Concentrates	1 : 7500
TASh 1132	Sheffield EL 7/73 Wilmot Copper Anomaly - 1975 Analyses of Stream Sediment Samples	1 : 7500
TASh 1133	Sheffield EL 7/73 Wilmot Copper Anomaly - Comparison of Base Metal Content of Different Stream Sediment Sample Types	As shown
TASh 1135	Sheffield EL 7/73 Wilmot Copper Anomaly - Geology Plan	1 : 2500
TASh 1197	Sheffield EL 7/73 Wilmot Copper Prospect - Sample Location Plan	1 : 2500
TASh 1198	Sheffield EL 7/73 Wilmot Copper Prospect - Copper Geochemistry	1 : 2500
TASh 1199	Sheffield EL 7/73 Wilmot Copper Prospect - Lead Geochemistry	1 : 2500
TASh 1200	Sheffield EL 7/73 Wilmot Copper Prospect - Zinc Geochemistry	1 : 2500

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TASh 1201	Sheffield EL 7/73 Wilmot Copper Prospect	1 : 2500
TASh 1136	Sheffield EL 7/73 Wilmot Copper Prospect V.L.F. - E.M. Normalised Dip	1 : 2500
TASh 1137	Sheffield EL 7/73 Wilmot Copper Prospect V.L.F. - E.M. Horizontal Field Strength	1 : 2500
TASh 1138	Sheffield EL 7/73 Wilmot Copper Prospect - Total Intensity Ground Magnetics	1 : 2500
TASh 1193	Sheffield EL 7/73 Wilmot Copper Prospect V.L.F. - E.M. Line 4400mE	As shown
TASh 1194	Sheffield EL 7/73 Wilmot Copper Prospect V.L.F. - E.M. Line 4500mE	As shown
TASh 1195	Sheffield EL 7/73 Wilmot Copper Prospect V.L.F. - E.M. Line 4600mE	As shown
TASh 1196	Sheffield EL 7/73 Wilmot Copper Prospect V.L.F. - E.M. Line 4800mE	As shown
TASh 2463	Sheffield EL 7/73 Ling 2 Anomaly Sample Sites	1 : 15 000
TASh 2462	Sheffield EL 7/73 Ling 2 Anomaly Geology	1 : 15 000
TASh 2459	Dighem Anomaly Followup - Western Sheet	1 : 25 000
TASh 2460	Dighem Anomaly Followup - Eastern Sheet	1 : 25 000

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12. LIST OF TABLES

Table 1 Dighem II EM Anomaly Characteristics and Observations

13. LIST OF APPENDICES

Appendix 1 Geochemical Sample Sheets - Dighem Anomalies

Appendix 2 Geochemical Sample Sheets - Wilmot Copper Prospect

Appendix 3 Geochemical Sample Sheets - Ling 2 Anomaly

KEY TO TABLE 1

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Mapped Lithologies

- Qra - Recent river alluvium
- Qtb - Basalt talus
- Qg - Marsh deposits & residual gravels
- Qt - Surficial deposits, unspecified
- Tb - Tertiary basalt
- Pbb - Permian basal beds
- Om - Ordovician Moira Quartzite
- Or - Ordovician Roland Conglomerate
- Ebp - Cambrian Bull Creek Formation
- Emk - Cambrian Minnow Keratophyre
- Egg - Cambrian Gog Range Greywacke
- Ebf - Cambrian Beulah Formation
- € - Cambrian, unassigned

Magnetic Activity

- Br - broad
- PC - point
- F - flank
- Tr - trend
- ve - negative
- +ve - positive
- G - gradient
- r - residual
- L - flight line
- Pl - plateau
- nT - nano Tesla

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TABLE 1

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS.

025

ANOMALY	COAXIAL COIL		COPLANAR COIL		VERTICAL OYKE		HORIZONTAL SHEET		CONDUCTIVE EARTH		CONDUCTOR QUALITY		ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
	PPM	PPM	PPM	PPM	MHOS	FEET	MHOS	FEET	OHM-M	FEET	CX	CP			
1500xA					20	178	2	136	43	38	∞	∞	150nT Pt	Om	All Nations Mine (MExcluded from EL)
16E	4	0	4	0	12	195	1	127	54	32	1.5	2	G	Tb	Basalt (field checked)
20M	3	2	4	2										Tb	Basalt (previous mapping)
20 x R														Om	
21G	1	0	0	-5	2	117	1	174	119	52		0	+ve Tr G	Tb	Basalt (field checking)
22A	3	0	7	8	9	108	2	145	39	43	∞	0.9	200nT 4L	Tb	Basalt (field checked) outside EL.
24G	2	0	4	4	12	221	1	176	71	58	∞	1.0	G	Tb	"
24J	1	1	0	0	3	198	1	111	930	0	1.0	0	r +ve	Om - Cmk	"
24xN														Og	Refer Section 5.3
32A	2	0	0	0	4	110	1	129	945	0	∞	∞	G	Or	Culture - fence and powerline
32H	0	3	4	0	4	131	1	426	379	179	0	0	G	Om	Culture - electric fence
34A	3	0	0	0	5	141	1	142	174	2		0	-ve Tr		Basalt (field checking)
34K	2	1	0	1	4	181	1	110	87	0	2.0	0	G	Qra	"
34xB														Qtb	Basalt (field checked)
27xJ														Cbp	Refer Section 5.5
28A	2	0	0	0	4	200	1	252	410	69	∞	0	G	Tb	Basalt (previous mapping) Outside EL
28C	3	1	1	7	5	159	1	147	99	33	3.0	0.1	200nT 3L F	Or	Basalt (field checking)
28F	4	0	0	0	7	178	1	115	64	18		0	100nT r F	Tb	"
28Q	2	1	5	5	8	162	2	219	45	107	2.0	1.0	G	Tb-Cqq	" (previous mapping)
31G	2	0	0	0	3	128	2	195	45	83	∞	0	G	Tb	Basalt - (field checking)
25U	1	0	8	1	11	235	1	161	64	41		8.0	-ve Tr F	Tb/Cmk?	Basalt (previous mapping)
25xO														Tb	Culture - powerline
26xO														Or	Refer Section 5.4
2600V	5	1	0	0	9	192	1	369	1035	0	5.0	0	50nT 3L PtF	Tb/Cmk?	Basalt (field checking)
2A	3	2	5	2	12	174	1	391	108	223	1.5	2.5	40nT Pt	Om	Outside EL. Probably culture (damsite)
2B	7	1	20	0	230	123	7	362	5	295	7.0		90nT Pt	Og - Om	"
5A	4	6	9	16	4	31	1	142	71	31	0.7	0.6	700nT Br F	Qtb/Or-Cmk	Basalt (photo interp. and previous mapping)
5B	1	0	2	2	8	291	1	225	85	94	∞	1.0	G	Tb-QCb/Om	"
5000xA														Or	Refer Section 5.1
6A	5	8	2	8	3	16	1	155	176	17	0.6	0.3	+ -ve	Cmk - Or	"
7A	3	11	5	22	2	0	1	94	156	0	0.3	0.2	G	Om - Or	Basalt (field checked) Refer Section 5.2
8A	2	5	3	9	2	45	1	133	110	20	0.4	0.3	350nT Tr	Qtb/Cmk-Or	" " " Refer Section 5.2
8B	7	15	9	28	3	0	1	80	34	0	0.5	0.3	+ve Tr	Qtb - Or	" " " Refer Section 5.2
8xA														Qtb	" " " plus swamp
8xB														Qtb	" " " plus swamp
8000B	2	10	6	21	2	1	1	97	182	0	0.2	0.3	G	Qtb/Om	Basalt
8000D	2	23	2	44	1	0	1	82	392	0	0.1	0.05	G	Qtb/Om - Or	"
8000F	6	7	4	9	5	47	1	140	74	23	0.9	0.4	+ve Tr	Qtb/Or	"
8000G	1	6	9	15	3	34	2	160	54	56	0.2	0.6	G	Qtb/Or-Om	"
8000H	3	0	0	0	18	267	1	192	180	55	∞	0	-	Tb/Om-Og?	"
10C	4	5	8	10	6	118	2	137	50	85	0.8	0.8	G	Qtb/Om	Basalt (field checked)
121	8	25	10	33	3	10	1	111	53	28	0.3	0.3	G	Qtb/Om	Basalt (previous mapping) Outside EL.
13B	2	2	0	0	2	69	1	140	1035	0	1.0	0		Or-Cmk	Basalt (field checked)
14F	0	J	5	0	35	303	1	127	78	21	0	∞	G	Tb	Basalt (previous mapping) plus culture (powerline)
14G	1	0	0	0	2	120	1	55	746	0	∞	0	G	Cmk - Or	Basalt & Culture (powerline)
36G	1	0	4	0	14	250	1	153	55	47			-75nT	Tb/Om	Basalt (field checked)
36I	4	1	1	14	3	78	1	114	84	12	4.0	0.1	-ve P1	Tb/Om	"
113A	2	5	0	3	1	59	1	177	1035	0	0.4	0	-	Qt	Refer Section 5.6
115xF														Qt	Refer Section 5.6

238026

APPENDIX I

GEOCHEMICAL SAMPLE SHEETS - DIGHEM ANOMALIES

027

C.R.A. E. ORATION . GEOCHEMICAL SAMPLE LE: ER

Tenement name SHEFFIELD EL 7/73

No. Sample numbers 972351 - 362

Collected by GBW - IC

Sheet no. ONE

Area / Prospect WASHINGTON Ag mine

Date 30-06-82

Map / Photo reference A 02143

Analysed by ANALABS (COOEK)

DPO no. 30

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations	
		ss	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au			As
		oc	o/c sample type ***																
		f	s sample type ****																
972351	oc	gs						40	3650	11450	90					200	1 <sup>st</sup> ADIT DOWN INCLINE. FAULT - QTR VIEW PUG ZONE. ST 345° DIP 55° & 75°.		
972352	oc	rc	0.5m					30	6400	5150	13.5					100	A side of fault zone 0.5m wide channel sample hard indurated slate.		
972353	oc	rc	0.5m					45	2900	1500	8.5					x	S side of fault zone 0.5m wide channel sample hard indurated slate rock.		
972354	gs							10	885	1200	3.5					x	Small pit N <sup>th</sup> side Th 8m down hill from 1 <sup>st</sup> ADIT - CUDDY. Shaded dk gy slate.		
972355	gs	%						15	3250	890	13.5					100	Ogg side of Th % channel brecciated slate qtz veined sl. gossanous.		
972357	%	rc	1m					40	530	510	0.5					200	Adit 2' approach 40m N <sup>th</sup> near old mine th. 7m long small caddy N <sup>th</sup> . Med. dk gy coarse grained qtzite - N <sup>th</sup> sample		
972358	%	rc	2m					40	535	345	1.0					x	med gy - med-coarse q. qtzite min Pb - veins 2 <sup>nd</sup> (middle) sample.		
972359	%	rc	1m					35	1100	320	3.0					x	med gy med-coarse q. qtzite min Pb - veins S <sup>th</sup> sample		
972360	%	rc	0.5m					30	2100	520	7.5					100	3 <sup>rd</sup> ADIT ABOUT 50m N <sup>th</sup> 0.5m rc sample		
972356	%	rc	0.5m					25	1950	480	6.0					200	3 <sup>rd</sup> ADIT 50m TO S <sup>th</sup> ADIT SAMPLE.		
972361	%	gs						1200	159%	125%	640					x	Small caddy high grade Pb. 40m N <sup>th</sup> of 3 <sup>rd</sup> Adit		
972362	%	gs						20	2950	255	8.0					x	ditto background sample 2m. N <sup>th</sup> .		

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
fl = float m = m al = alluvial co = colluvial ca = catchment km2

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Tenement name SHEFFIELD EL7173 No. 987297-987312 Sample numbers 987297-987312 Collected by J.M. CLEMENTSON Sheet no. 1/2  
 Area / Prospect DISHAM 24xN Date 11 May 88  
 Map / Photo reference LINE A Analysed by ANALABS DPO no. 30048  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		ss*	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi		
		oc	o/c sample type ***																	
		f	s sample type ****																	
187297	S	A	0.60	B <sub>2</sub>				10	18	29	x	12				<del>50</del>	54	350mN	Sandy clay, rich red brown. Mainly granite float.	
187298	S	A	0.70	B <sub>2</sub>				28	<del>260</del>	<del>310</del>	0.6	14				x	60	325mN	Lt brown-ochre sandy soil. Worth granite float.	
187299	SS	2	1.0	10%	10%			16	29	<del>100</del>		8				x	16	300mN	Mudstone perl/dog jam trap. Granite float.	
187300	S	A	0.40	B <sub>2</sub>				9	24	44	x	14				x	6	300mN	Lt brown - sandy clay soil.	
987301	S	A	0.80	B <sub>2</sub> -C				10	23	26	x	6				x	<del>110</del>	275mN	Sandy brown soil with walth. granite float at site of gneiss.	
987302	S	A	0.60	B <sub>2</sub> -C				8	40	27	0.1	4				x	20	250mN	Lt brown sandy soil with weathered granite. o/c of fine grained weathered granite.	
987303	S	A	0.30	B/C				6	18	22	x	x				x	12	225mN	Amongst scree. Abundant float of fine red gr. granite	
987304	S	A	0.70	B/C				5	15	14	x	10				x	12	200mN	Red sandy soil amongst granite scree.	
987305	S	A	0.60	B <sub>2</sub> -C				5	27	15	0.2	16				x	12	175mN	Lt brown sandy soil adjacent to granite etc	
987306	S	A	0.30	B <sub>2</sub> -C				4	13	14	x	10				x	16	150mN	As above.	
987307	S	A	0.70	B <sub>2</sub> -C				5	12	15	0.1	6				x	6	125mN	" "	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

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C.R.A. PLORATION . GEOCHEMICAL SAMPLE REGISTER

Tenement name: SHEFFIELD EL7/73 No. Sample numbers: 987297 - 987319 Collected by: I.M. CLEMENTON Sheet no. 2/2  
 Area / Prospect: DISNEY RYAN Date: 11-May-82  
 Map / Photo reference: LINE A Analysed by: DPO no. 30042  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations	
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Bi
		o/c sample type ***																	
		s sample type ****																	
987308	S	A	0.70	B <sub>2</sub>	C			6	15	22	X	4				X	34	100mN V. sandy lt brown. Worth granite.	
987309	S	A	0.60	B <sub>2</sub>	C			7	19	16	0.1	10				X	16	75mN V. sandy lt brown. Granite block.	
987310	S	A	0.60	B <sub>2</sub>	C			6	5	13	0.2	10				X	16	50mN Sandy lt brown-grey.	
987311	S	A	0.50	B <sub>2</sub>				7	20	14	0.2	16				X	30	25mN Rich orange-brown sandy clay.	
987312	S	A	0.60	B <sub>2</sub>				12	29	26	0.2	22				X	8	00mN As above.	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl flow m3/sec wi width m al alluvial co colluvial ca = catchment km2

238030

C.R.A. FLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD EL 7/73 No. 987313-987330 Collected by I.M. Clementson Sheet no. 1/2  
 Area / Prospect DISHEN 24xN Date 11 May 82  
 Map / Photo reference LINE 3 Analysed by Analabs DPO no. 30042  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations	
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Bi
		o/c sample type ***																	
		s sample type ****																	
987313	S	A	0.30	C				12	20	18	X	12				X	92	500mN	Weathered granite.
987314	S	A	0.30	C				17	20	13	0.2	8				X	24	475mN	Weathered granite.
987315	S	A	0.60	C				20	59	16	X	12				X	58	450mN	Weathered granite.
987316	S	A	0.30	B <sub>2</sub> /C				11	18	16	0.2	8				X	50	425mN	Red sandy-brown clay.
987317	S	A	0.20	B <sub>2</sub> /C				13	25	28	0.1	8				50	66	400mN	(Bulldozed area); dark red-brown sandy soil. Abundant granite float, plus some poorly developed gneiss.
987318	S	A	0.40	B <sub>2</sub> /C				14	24	35	0.2	6				X	38	375mN	" " Granite o/c at 360mN: med. gr. weathered.
987319	SS		2.0	1.5	90%			6	14	21		6				X	10	325mN	Plunge pool trap site. Float all granite. Granite exposed at 300mN. Slightly chloritic.
987320	S	A	0.30	B <sub>2</sub> /C				7	13	18	X	6				X	4	275mN	Sandy, lt brown soil. Weathered granite obvious. Soil extensively disturbed by logging.
987321	S	A	0.30	B <sub>2</sub>				18	31	29	0.2	12				X	32	250mN	DK red brown sandy soil.

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

\*\* Stream sed sample description fl = flow m<sup>2</sup>/s, c wi = width m al = alluvial co = colluvial ca = catchment km<sup>2</sup>

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Tenement name SHEFFIELD EL7/73 No. 987313-987330 C.R.A. PLORATION GEOCHEMICAL SAMPLE L GER Collected by I.M. Clementson Sheet no. 2/2  
 Area / Prospect DIGNEM 24xN Date 11 May 80  
 Map / Photo reference LINE B Analysed by Analabs DPO no. 30022  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi			
		o/c sample type ***																		
		s sample type ****																		
987322	S	A	0.70	B <sub>2</sub> c				9	44	61	X	6				X	22	225-N	Lk brown sandy soil	
187323	S	A	0.50	B <sub>2</sub>				8	18	28	0.2	4				X	24	200-N	Rich brown clay. Minor gneiss block	
187324	S	A	0.50	B <sub>2</sub>				5	10	16	X	2				X	10	175-N	As above	
187325	S	A	0.60	B <sub>2</sub> c				6	14	30	0.2	4				X	8	150-N	Lk brown sandy soil.	
187326	S	A	0.50	B <sub>2</sub> k				6	13	26	0.1	6				X	2	125-N	As above.	
187327	S	A	0.50	B <sub>2</sub> c				5	12	26	X	10				X	6	100-N	Lk brown sandy soil. Minor granite - gneiss block	
987328	S	A	0.50	B <sub>2</sub> c				7	18	26	0.1	12				X	10	75-N	As above, but slightly more clay rich.	
187329	S	A	0.60	B <sub>2</sub>				9	21	26	X	18				X	20	50-N	Rich red-brown sandy clay	
187330	S	A	0.50	B <sub>2</sub>				6	11	19	X	12				X	6	25-N	Rich brown silty-sand clay - minor weathered granitic block.	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* channel type fl = fluvial wi = wind-blown al = alluvial co = colluvial ca = catchment km?

2000

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL7/73 No. Sample numbers: 987790-987799 Collected by: I. M. ELEMENTSON Sheet no. 1/1  
 Area / Prospect: WILMOT DISSEM. (GTD) Date: 20/7/82  
 Map / Photo reference: EAST RECCY LINE Analysed by: ANALABS DPO no. 30312  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations			
		ss*	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au			Fe%	As	Sn
		oc	o/c sample type ***																		
		f	s sample type ****																		
987790	S	A	0.4	AK				7	1	19				17				4625N	Black humic sandy soil above dc		
987791	S	A	0.4	Ba				10	15	27				38				4650N	Mid br sandy soil with qz: L + red chert frag		
987792	S	A	0.5	Ba				9	9	25				44				4675N	lt-mid br sandy soil plus " " "		
987793	S	A	0.7	Ba				19	19	27				65				4700N	So above		
987794	o/c	gs						5	45	70	x			85	2.45	x	x	4710N	Purple ferruginous gritty qz: Lc		
987795	S	A	0.7	Ba				20	15	25				50				4725N	Red brown sandy clay		
987796	S	A	0.6	ABa				31	17	40				70				4750N	Dr brown-black soil		
987797	S	A	0.9	ABa				45	11	25				59				4775N	" " clay soil phosphate frags		
987798	S	A	0.4	Ba				36	11	35				96				4800N	Br sandy soil		
987799	S	A	0.8	Ba				44	8	123				1220				4825N	Mid brown silty soil		
<p>Creek at 4850N: no soils collected between 4850-5000N because area is an alluvial flat: no meaningful soils anticipated.</p>																					

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* fl = float, wi = mica, al = alluvial, co = colluvial, ca = calcareous, pH = pH

20/7/82

Tenement name SHEFFIELD 17/73 No. 987800 + 987807 - Sample numbers 987822 Collected by I.M. CLEMENTSON Sheet no. 1/II  
 Area / Prospect WEST DIGNEN BXD Date 20/7/82  
 Map / Photo reference WEST REEVE LINE Analysed by ANALABS DPO no. 30312  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %						Grid ref	Geological Observations				
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn			Au	Fe%	As	Sn
		o/c sample type ***																		
		s sample type ****																		
987800	S	A	0.7	B <sub>2</sub>				500	31	168				197				4950N	Grey br matk clay at junc of photo on a 200 page	
987807	S	A	0.5	B <sub>2</sub>				46	6	185				990				4965N	Sticky br clay plus silt frags.	
987808	S	A	0.6	B <sub>2</sub>			*	87	36	123				1460				4900N	Red-bk clay (looks like basal Looi 2)	
987809	S	A	0.5	B <sub>2</sub>			†	74	62	89				610				4875N	" " " "	
987810	S	A	0.6	B <sub>2</sub>				60	26	40				139				4850N	Brown clay distinct from previous.	
987811	S	A	0.6	B <sub>2</sub>				76	16	44				123				4825N	" " (not basaltic in appearance).	
987812	F							60	30	60	0.5			115	6.40	x	x	4900N	Red-buff spotted rock looks like a partly ferruginised quartzite (i.e. irregular Fe <sub>2</sub> O <sub>3</sub> replacement - but spotting is very irregular) - Maybe volcanic??	
987813	F							100	30	35	x			325	4.50	x	x	4850N	A ? brecciated? siltstone with extensive FeOxides in irregular pockets slight granular appearance. Probable Looi 2	
987814	S	A	0.4	A/B <sub>2</sub>				75	14	33				94				4800N	Black-brown humic clay	
987815	S	A	0.4	A/B <sub>2</sub>				75	10	25				115				4775N	" " " "	
987816	F							115	50	100	x			235	48.0%	100	x	4760N	Massive Fe <sub>2</sub> O <sub>3</sub> (plus Fe <sub>3</sub> O <sub>4</sub> ) replacing siltstone	
987817	S	A	0.9	B <sub>2</sub>				17	7	21				40				4750N	Mid br clay - silt frags.	
987818	S	A	0.5	A-C				10	5	16				25				4725N	Humic black soil	
987819	S	A	0.4	A-C				7	3	14				58				4700N	Humic sandy soil (weath qz. lo).	
987820	S	A	0.4	A-C				4	1	11				24				4675N	" " " "	
987821	S	A	0.8	B <sub>2</sub>				7	8	21				28				4650N	Mid brown silt clay	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

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C.R.A. PLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. .... Sample numbers 987341 - 987364 Collected by J.M. Clementson

Sheet no. 1/3

Area / Prospect DIGHAM 27X5

Date 13 May 1982

Map / Photo reference LINE B

Analysed by Analabs

DPO no. ....

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations						
		ss*	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi								
																					o/c sample type ***					
																					s sample type ****					
987341	F							5	14	63	X	X			X	X	600m S	Highly magnetic chert like.								
987342	S	A	0.60	B <sub>2</sub>				20	65	110	X	X			X	X	700 S	Rich brown silty clay, slight ochre mottling.								
987343	S	A	0.70	B <sub>2</sub>				23	52	88	X	X			X	X	675 S	Red brown silty clay. Rhy float at site.								
987344	S	A	0.60	B <sub>2</sub>				16	43	84	X	X			X	X	650 S	Very reddish brown silty clay. Abundant highly magnetic a.v. float, often weathered.								
987345	S	A	0.50	B <sub>2</sub>				21	37	72	X	X			X	X	625 S	As above.								
987346	S	A	0.50	B <sub>2</sub>				13	27	53	X	X			X	X	600 S	As above. Highly magnetic a.v. (rhy) float - very fine grained and with virtually no visible qz.								
987347	S	A	0.30	B <sub>2</sub>				17	36	72	X	X			X	X	575 S	Rich red brown silty clay with greenish yellow weathered buff fragments.								
987348	S	A	0.60	B <sub>0</sub>				18	44	59	X	X			X	X	550 S	Rich red brown silty clay.								
987349	S	A	0.50	B <sub>0</sub>				18	28	29	X	X			X	X	525 S	Brown clay rich soil.								
987350	S S	0.1	1.0	3%	7%			12	34	150					X	X	510 S	Abundant organic material in soil. Poor trap site.								

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

C.R.A. PLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name: SHEFFIELD EL 7173

No. Sample numbers: 987341-987364

Collected by: I.M. Clementson

Sheet no. 2/3

Area / Prospect: DIGNEM 27X1

Date: 13-May-82

Map / Photo reference: LINE B

Analysed by: Analabs

DPO no.:

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations	
		ss*	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi			
		oc	o/c sample type ***																		
		f	s sample type ****																		
987351	S	A	0.50	B <sub>2</sub>					18	40	92	X	X				X	X	500 S	Light brown clay no. 2.	
987369	F								71	25	125	0.2	2				X	X	510 S	Very pyroclastic a.v. Dark grey green, med. v. ungrained. Either a clay or very light tuff. Minor py.	
987352	S								20	70	53	X	2								
987353	S/S	A	0.1	2m	5%	50%			13	54	125		X				X	X	475 S	Very organic rich sediment. Flank all weathered a.v. - sh. and tuff.	
987354	S	A	0.50	B <sub>2</sub>					20	65	81	X	X				X	X	450 S	Lt. brown clay.	
987355	S	A	0.80	B <sub>2</sub>					20	72	88	X	4				X	X	425 S	Lt. brown silty clay.	
987356	S	A	0.80	B <sub>2</sub>					23	48	76	X	X				X	X	400 S	Rich red brown sand. Weathered a.v. float.	
987357	S	A	0.60	B <sub>2</sub>					24	61	82	X	X				X	X	375 S	As above.	
987358	S	A	0.40	B <sub>2</sub> lc					-										325 S	Dk brown clay plus weathered tuff.	
987359	S	A	0.70	B <sub>2</sub>					16	72	96	X	X				X	X	350	Red-brown silty clay.	
987360	S	A	0.50	B <sub>2</sub>					22	39	65	0.1	X				X	X	300	Rich red brown silty clay.	
987361	S	A	0.55	B <sub>2</sub>					24	52	87	X	X				X	X	275	As above.	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

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Tenement name 3 SHEFFIELD EL7/73 C.R.A. PLORATION GEOCHEMICAL SAMPLE LOGGER  
 Area / Prospect DIGHAM 27x5 No. 987373-987401 Sample numbers 987373-987401 Collected by L.M. Clementson Sheet no. 1/3  
 Map / Photo reference LINE A Analysed by A. ... Date 14-5-42  
 A 02143 DPO no. .....

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi			
		o/c sample type ***																		
		s sample type ****																		
987373	S	A	0.70	B <sub>2</sub>				25	61	96	X	X			50	X	50.3	Rich red clay soil. Worth buff clods		
987374	S	A	0.9	B <sub>2</sub>				21	72	88	X	X			X	X	75.3	" " " " " "		
987375	S	A	1.0	B <sub>2</sub>				18	52	94	X	X			X	X	100.3	As above but slightly lighter in color		
987376	S	A	0.60					15	82	120	X	X			X	2	125.3	Washed layers gravelly clay in thick channel. Lt grey-brown		
987377	S	A	1.0	B <sub>2</sub>				24	61	81	0.1	X			50	X	150.3	Rich red silty clay		
987378	S	A	1.0	B <sub>2</sub>				24	53	80	X	X			X	2	175.3	As above.		
987379	S	A	1.0	B <sub>2</sub>				24	49	74	X	X			X	X	200.3	Rich red silty clay.		
987380	S	A	1.0	B <sub>2</sub>				25	32	78	X	X			X	X	225.3	" " " "		
987381	S	A	0.4	C				13	53	140	0.1	X			X	X	250.3	Weathered a v tuff? Distally fragmental. Little or no g <sub>2</sub>		
987382	S	A	1.0	B <sub>2</sub>				18	69	66	X	2			X	X	275.3	Rich red brown clay rich soil		
987383	S	A	0.90	B <sub>2</sub>				18	53	89	X	X			X	2	300.3	As above.		

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

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Tenement name SHEFFIELD EL 7173 No. 987373-987401 Sample numbers 987373-987401 Collected by I.M. Clementson Sheet no. 2/3  
 Area / Prospect DIGNEM 27x3 Date 14-5-82  
 Map / Photo reference LINE A Analysed by Analyabo DPO no. \_\_\_\_\_  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref.	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi			
		o/c sample type ***																		
		s sample type ****																		
987384	S	A	1.0	B <sub>2</sub>				21	50	120	0.1	2				x	4	325mS	Rich red brown clay - with charcoal fragments.	
987385	S	A	0.40	B <sub>2</sub>				17	64	71	x	x				x	x	350mS	Clots of qz in a rich red brown clay	
987386	S	A	1.0	B <sub>2</sub>				20	77	97	0.1	x				x	x	375mS	Rich red clay soil	
987387	P							18	55	12	0.1	10				x	x	375mS	Highly magnetic siltstone/tuff Fine grained. Dominant pyr. ke (fine) and coarser, blebby pyr. ke.	
987388	SS	1.0	4.0	70%	30%			11	52	14		x				x	x	400mS	Lugjam trap site. Floc is weathered a.v. Kuffs. Moderate Mn staining of fragments.	
987389	S	A	0.90	B <sub>2</sub> /C				18	63	92	0.1	x				x	x	425mS	Red brown soil with weath a.v. fragments - magnetic tuffs.	
987390	S	A	0.40	B <sub>2</sub>				14	40	68	x	x				x	x	450mS	Rich red brown clay rich soil	
987391	S	A	0.70	B <sub>2</sub>				19	31	60	x	x				x	x	475mS	As above.	
987392	S	A	0.70	B <sub>2</sub>				19	50	73	x	2				50	x	500	" "	
987393	S	A	0.50	B <sub>2</sub>				15	50	82	x	x				x	x	525mS	" "	

C.C.C.

Tenement name SHEFFIELD EL 7/73 C.R.A. PLORATION GEOCHEMICAL SAMPLE LOGGER  
 No. 987373-987401 Sample numbers 987373-987401 Collected by J.M. Clementson Sheet no. 3/3  
 Area / Prospect DIGHEM 27x3 Date 14-May-87  
 Map / Photo reference LINE A Analysed by Analabo DPO no. \_\_\_\_\_  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	sl	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi			
		o/c sample type ***																		
		s sample type ****																		
987394	S	A	0.60	B <sub>2</sub>				15	64	54	X	X					X	X	550mS	Ochre-milky clay rich soil.
987395	S	A	0.35	B <sub>2</sub>				21	79	46	X	X					X	X	575mS	Red-brown silty clay.
987396	S	A	1.0	B <sub>2</sub>				19	40	89	X	X					X	X	600S	" " " "
987397	S	A	0.30	B <sub>2</sub>				23	28	58	X	X					X	X	625mS	" " " "
987398	S	A	1.0	B <sub>2</sub>				20	69	92	X	X					50	X	630mS	Red-ochre mottled clay.
987399	S	A	0.40					18	36	95	0.1	X					X	X	700mS	V wet "gley" m. swamp around ck.
987400	S	A	1.0	B <sub>2</sub>				10	35	58	X	X					X	X	675mS	Rich red-brown silty clay. Flanking S. exposed buffaceous looking ochreous.
987401	SS	-	1.0	S <sub>0</sub>	S <sub>0</sub>			10	26	130		X					X	X	700mS	Swampy m. ck. Abundant Mn staining of magnetic fine grained rhy block.

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

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Tenement name SHEFFIELD EL7/73 No. 987624 Sample numbers 987624 Collected by I. M. Clementon Sheet no. 11  
 Area / Prospect FRIBBARD MAG ANOMALY Date 25-6-80  
 Map / Photo reference EAST R.F. LINE Analysed by Analabo DPO no. 30309  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations		
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Sr	Ba
		o/c sample type ***							s sample type ****											
987624	S	A	0.50	Ba				8	7	21			45		50	X	700	5150N	Light grey sandy clay.	
987625	o/c	gs						13	X	23	X		43		X	4	580	5155N	Pale greenish grey slightly chloritic and altered, poorly sorted (but dominantly fine) buff to fango (rounded) prominent fine gr. uniform matrix.	
187626	S	A	0.50	Ba				19	X	24			25		X	3	630	5125N	Lt brown-grey clay soil. Fango as above.	
187627	S	A	0.40	Ba				16	4	26			30		X	9	650	5100N	Lt buff-grey sandy clay.	
187628	S	A	0.40	A-C (soona)				29	9	29			25		X	7	710	5075N	Black-brown clay plus humus plus weath. buff(?) clasts.	
187629	S	A	0.70	A-C				23	14	20			19		X	7	630	5050N	As above but waterlogged	
187630	o/c	gs						8	2	28	0.2		49		X	20	1150	5025N	Foliated, chloritic tuff. Greenish. Not well sorted	
187631	S	A	0.45	A-B				31	9	29			30		X	3	550	5025N	Black-brown clay plus some weath. calc fragments.	

\* Sample type ss = stream sediment oc = outcrop f = flow s = soil

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. .... Sample numbers 987633-987650 Collected by I.M. Clementon Sheet no. 1/1  
 Area / Prospect FRIGGA ROAD MAG ANOMALY + 987702. Date 26-6-82  
 Map / Photo reference EAST RECT. LINE Analysed by ANALABS DPO no. 30309  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations	
		ss *	fl	wi	sl	co	cs		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Sr			Ba
		oc	o/c sample type ***																		
		f	s sample type ****																		
987633	S	A	1.0	B <sub>2</sub>				5	5	25			55		X	4	180	4700N	lt br. silty clay. Moira type soil		
987634	S	A	0.8	B <sub>1</sub> C				6	3	10			24		X	X	35	4675N	leached grey sandy clay. Moira type		
987635	S	A	0.3	A-C				4	X	6			22		X	X	X	4650N	Grey sand + qz pebbles. Some humus. Some		
987636	S	A	0.4	AK				7	1	8			25		X	6	X	4625N	" " " " " "		
987637	S	A	0.7	C				5	2	9			28		X	6	X	4600N	leached grey sand		
987638	S	A	0.3	A/C				5	X	9			32		50	6	X	4575N	Humic grey sand at foot of dc of qz ls gr:ls and conglomerates		
987639	S	A	0.4	C				4	X	7			16		X	X	35	4725N	Wenth grey qz:ls - sand only left		
987640	S	A	0.4	AK				8	4	15			40		50	5	80	4750N	Humic grey sand on scree		
987641	S	A	0.7	B <sub>2</sub>				7	23	29			79		X	6	150	4775N	Light br-grey sandy soil.		
987642	S/S	1	0.5	50	50			8	13	33	0.2	2	140		X	6	600	4780N	Flout incl = 50% volca 50% qz:ls/gr:ls.		
987643	F	gs																4780N	Green, slightly chloritic, ? int tuft or possibly shored lava. Typical of of N. side of creek		
987644	S	A	0.3	A-B <sub>2</sub>				11	11	50			1570		X	10	400	4800N	Rich mid brown slightly humic clay + volca		
987645	S	A	0.3	B <sub>2</sub> C				10	15	59			200		X	8	380	4825N	" " " " " "		
187646	S	A	0.5	B <sub>2</sub> C				19	24	61			135		X	4	420	4850N	" " " " " "		
187647	S	A	0.4	A-C				47	26	35			260		X	7	560	4875N	Brown sandy humic soil on scree.		
187648	S	A	0.4	B-C				18	11	32			58		X	3	640	4900N	Milk-brown gr:ly (volc frags) soil on		
187649	S	A	0.5	A/C				16	17	31			103		X	7	690	4925N	Mid brown humic gritty soil		
987650	S	A	0.3	A-C				41	16	26			320		50	4	370	4950N	" " " " " "		
987702	S	A	0.7	B <sub>2</sub>				45	18	27			81		X			4975N	Br sandy clay plus volc fragments.		

\* Sample type ss = stream sediment oc = outcrop f = floor s = soil

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD ELT/73 No. 98703 Sample numbers 98703 Collected by J.M. Clementson Sheet no. 1  
 Area / Prospect ESGAR R. MAG ANOM. Date 29-6-82  
 Map / Photo reference WEST LINE Analysed by A. V. L. H. DPO no. 30309  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	Ba	As		
		o/c sample type ***							s sample type ****											
98703	S	A	0.2	A-B				31	66	50			28		9	700	X	5000N	Some slope - black to brown humic soil	
98704	S	A	0.4	B-C				13	8	16			16		5	420	X	5025N	Grey, leached soil.	
98705	S	A	0.5	B <sub>2</sub> -C				4	8	14			14		4	380	X	5050N	light buff grey sandy soil; volc frags	
98706	S	A	0.4	B/C				2	7	11			13		4	420	X	5075N	light grey sandy soil - weath. volc frags	
98707	S	A	0.5	B <sub>2</sub>				4	8	22			13		5	850	X	5100N	Lt grey - brown mottled silt clay	
98708	F	gs						15	25	160		X	50		5	430	X	5125N	Purple, fine grained slightly foliated buff or (possibly) quartzite. Prob. close to dc	
98709	S	A	0.3	B/C				3	3	16			9		3	350	X	5150N <sup>25</sup>	sandy grey soil plus qz fragments	
98710	S	A	0.6	B <sub>2</sub> /C				4	7	13			19		5	660	X	5150N	Lt buff grey sandy soil	
98711	S	A	0.4	B <sub>2</sub> /C				6	4	14			17		X	650	X	5175N	" " " "	
98712	S	A	0.4	B <sub>2</sub>				7	3	15			16		4	600	X	5200N	Mottled buff-ochre silt clay	
98713	S	A	0.8	B <sub>2</sub> -C				7	30	58			87		7	290	X	4825N	Mid brown silt clay plus weath. volc (rky) frags	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name: SHEFFIELD E17/33 No. Sample numbers: 987703- Collected by: J.M. Clementson Sheet no. 2  
 Area / Prospect: ERIOBA R.D. MAG ANOMALY Date: 29-6-82  
 Map / Photo reference: WEST LINE Analysed by: Analabo DPO no. 30310  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations
		fl	wl	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	Ba	W/A			
		o/c sample type ***																			
		s sample type ****																			
987714	S	A	0.6	B <sub>2</sub>				8	24	42				192		7	500	/x	4850N	Aspicious	
987715	S/S		1.0	1.0	7%	20%										15	520	x	4863N	Ab. Mark of volcaniclastic (slightly tuffe).	
987716	S	A	0.3	0.3	A-B <sub>2</sub>			10	12	45				580		4	640	/50	4875N	Lt greenish brown clay plus volc frags	
987717	S	A	0.7					21	32	43				560		4	520	/x	4910N	"Earthy" brown soil plus volc frags	
987718	o/c	gs						10	20	145		x		515		8	980	/x	4912N	Coarse-grained massive volcanic. Mixture of foliation (vertical n-s) minor quartz chert or phenocrysts? hydrothermal? <span style="float:right">20 50 0</span>	
987719	S	A	0.3					20	23	44						8	657	/x	4925N	Brown earthy soil incrust. Tuff hor	
987720	S	A	0.4	A-B <sub>2</sub>				24	33	30						10	570	/x	4950N	Brown humic soil plus volc cherts	
987721	S	A	0.6	B <sub>2</sub>				17	32	35						7	510	/x	4975N	Med brown silt clay <span style="float:right">20</span>	
987722	o/c	gs						20	25	85		x		115		4	890	/x	5000N	Foliated grey-green porphyritic? tuff <span style="float:right">50 20 0</span> Fresh. N.V.M.	
987723	o/c	cs	0.6					15	15	75		x		105		7	520	/x	25m east of 5000N	Soft, ferruginous weathered tuff. <span style="float:right">50 20 0</span>	

\* Sample type ss = siltstone, wl = claystone, al = argillite, co = calcarenite, ca = calcarenite, pH = soil



Tenement name: SHEFFIELD No. 7173 Sample numbers: 987116 - 987143 Collected by: L. M. CLEMENTE Sheet no. 1/2  
 Area / Prospect: SOUTH DORSETH MAG. ANOMALIES Date: April 26<sup>th</sup> 1982  
 Map / Photo reference: Anomaly 24-1816 Analysed by: \_\_\_\_\_ DPO no. \_\_\_\_\_  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Bi	Au	As	W	Sn		
		o/c sample type ***																		
		s sample type ****																		
987116	BS	2	0.75	50%	50%			11	33	140	0.1	4	-		X	X	X		High priority [central] mag anomaly, main north-south cut line, 350 m S. Flak in ek. cherty acid volcanics.	
																			SAMPLING: N-S line High Priority Anomaly.	
987117	S	avg	0.50	AB				35	36	88	x	x	-		x	x	x	1800S	Mid brown, sandy. Acidic (rhy?) Flak - low mag. suscept.	
987118	S	avg	0.80	B				38	32	92	x	2			x	x	x	1775S	Brown, weathers rhy. clasts.	
987119	S	avg	0.50	O/C				39	46	95	x	6			50	53	28	1750S	Mid brown. Rhy Flak at site	
987120	S	avg	0.75	AB				31	36	60	x	x			x	13	7	1725S		
987121	F							15	2	13	x	4			x	12	12	1725S	Highly weathered rhy? Slightly ferruginous, strong clay alteration.	
987122	S	avg	0.30	AB				35	29	48	x	2			x	x	x	1700S	Fine, slightly pyritic rhy Flak at site. (Low mag suscept)	
987123	S	avg	0.45	B				71	31	82	x	x			50	x	x	1675S	Rich brown clay.	
987124	S	avg	0.20	AB				38	35	54	x	2			x	16	6	1650S	Minor rhy Flak at site.	
987125	S	avg	0.40	B				38	35	71	x	x			50	9	x	1625S	Pyritic rhy Flak at site.	
987126	S	avg	0.45	B				41	28	73	x	x			x	9	x	1600S	Mid brown clay soil.	
987127	S	avg	0.40	B				85	27	74	x	x			x	x	x	1575S	Rich brown clayey soil.	
987128	S	avg	0.80	B				49	30	82	x	2			x	x	x	1550S	Red brown sandy soil.	
987129	S	avg	0.80	B				55	25	68	x	x			x	x	x	1525S	" " " "	
987130	SS	0.1	1.0	50%	50%			28	14	75	x	x			x	7	x	1520S	Abundant rhy Flak in stream.	
987131	S	avg	0.50	B				45	35	95	x	x			x	x	x	1500S	Pale grey brown clay. No Flak.	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed. sample collection: fl = fluvial, al = alluvial, ol = olivial, ca = catchment km2

No. 0000000000

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD EL 7173 No. 987116-987143 Sample numbers. 987116-987143 Collected by I.M. Clementson Sheet no. 212  
 Area / Prospect S. DALCOATH MAG ANOMALIES Date April 26<sup>th</sup> 1982  
 Map / Photo reference Anomaly 24-1816 Analysed by \_\_\_\_\_ DPO no. \_\_\_\_\_  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %							Grid ref	Geological Observations				
		ss *	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Bi			Au	As	W	Sn
		oc	o/c sample type ***																		
		f	s sample type ****																		
987132	S	avg	0.60	B				50	30	100	X	2			50	X	X	1475S	V. compact, brown clay.		
987133	S	avg	0.50	B/C				22	29	80	X	X			X	X	X	1430S	Lt. olive-brown, sandy Rhy. fragments.		
987134	S	avg	0.80	B				17	36	95	X	X			X	X	X	1425S	Olive-brown clay Rhy. block on site.		
987135	S	avg		B				18	43	120	X	X			X	X	X	1325S	Sandy mud clay from roots of up turned tree.		
987136	F							14	15	160	X	X			X	10	8	1325S	Fine gr. qz-eye rhy. Dk grey High mag amount (7.0-7.4)		
987137	S	avg	0.30	A/B				10	30	97	X	X			X	X	X	1275S	Amogok rhyolite area - variable mag amount (0.4 - 6.0)		
987138	S	avg	0.25	B				15	79	140	X	4			X	X	X	1250S	qz of rhy (mag amount 4.0-7.0) next to site		
987139	gs							34	72	140	X	4			X	10	7	1250S	Dk grey rhy + sulphides (?? some cap).		
987140	gs							28	30	120	X	4			X	8	10	1200S	Rhy - fine grained. Sig. dissemin py + app. ?		
987141	S	avg	0.30	A/B				19	50	120	X	X			X	X	X	1050S			
987142	S	avg	0.60	B				18	53	110	X	X			X	X	X	1025S	V. red sandy soil. Rhy block at site.		
987143	S	avg	0.50	A/B				27	57	88	X	X			X	X	X	1000S	Dk brown, sandy soil.		
																			(Baseline)		

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

238048

C.R. EXPLORATION GEOCHEMICAL SAMPLE RIDGER

Tenement name SHEFFIELD EL 7/73 No. 987144-987151 Sample numbers 987144-987151 Collected by J. M. CLEMENTSON Sheet no. 1/1

Area / Prospect S. DOLLBATH MAG ANOMALIES Date 26 April 82

Map / Photo reference ANOMALY 29-1607 Analysed by Analabs DPO no. \_\_\_\_\_

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %							Grid ref	Geological Observations			
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Bi	Au			As	W	Sn
		o/c sample type ***																		
		s sample type ****																		
987144	F							42	30	110	x	2			y			Acidulcanic with coarse magnetite.		
987146	gs							49	30	96	x	12			x			A.V. : Fine grained. Sulphides - py. 2 app. Minor chlorite. Mag except. 6-6.2		
987147	r.c.	Approx 30cm at 5-10cm intervals							2	6	13	x	x			x		Qtz segregations within foliated a.v. (Strike 320°, approx vertical).		
987148	F							20	9	94	x	4			x			Rhy + large clb. qtz. Chloritic, slightly ferruginous.		
987149	F							29	51	390	x	x			x			V. Fe/Mn rich weathered tuff?		
987150	F							28	77	290	x	x			x			" "		
987151	F							36	20	180	x	2			x			" "		
<p>Samples collected at random sites over area of the anomaly (not actually on the follow-up lines).</p>																				

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

APPENDIX II

GEOCHEMICAL SAMPLE SHEETS - WILMOT COPPER PROSPECT

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 No. 987823- Sample numbers 987823- Collected by I.M. CLEMENTSON Sheet no. 1  
 Area / Prospect WILMST. C. / PH. / ZA. S / ANOMALIES Date 21-7-82  
 Map / Photo reference NORTHERN STREAM (GENERAL AREA) Analysed by ANALYSIS DPO no. 30318  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %							Grid ref	Geological Observations	
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au			Wt (g)
		o/c sample type ***							s sample type ****									
987823	o/c	gs						77	8	175			470				Quarry on W. end of RD 200m N of Narrawa RD (Luna-)	
987824	f							SPUR AT HEAD OF BOTH ANOMALOUS STREAMS.									Mn/Fe rich brecciated alluvial gravel shale with 1.00 Mn rich veinlets.	
987825	f							20	4	103			440				Nugget, 1.10g, 0.00092 in shale alluvial stream	
987826	f							57	29	270			530				Tarry, low quartz conc. tabularitic ? tuff	
NORTH STREAM RESAMPLES FOLLOW-UP.																		
														*	DISTANCE UP FROM CONFLUENCE	*		
987827	SUSPENDED CLAYS FROM ALLUVIUM							97	39	250			2500			100m	Flow 50-60 alluv./coll. Mod. Mn staining Ch approx 0.5m wide. Flow 1.5m <sup>3</sup> /min	
987828	PAN CONCENTRATE							88	69	280			1000			100m	Mod. good trap site. Flow 20m <sup>3</sup> /min fine grey shales (? tuff).	
987829	GRAB SAMPLE S/SED (RPT 98310)							97	57	360			1820			100m	Same site as 79310. ? PbS visible in pan conc.	
987830	SUSPENDED CLAYS FROM ALLUVIUM							80	37	310			5700			200m	At foot of extensive pt. stream character above. Mod. good trap site	
987831	PAN CONCENTRATE							60	39	265			580			200m	? PbS vis in pan conc.	
987832	GRAB SAMPLE S/SED							72	36	330			330			200m	o/c is of grey shales (? tuff) vertical	
987833	o/c	gs						152	7	380			780			200m	No vis min. Strike 290-110° M	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m<sup>3</sup>/sec wi = width m al = alluvial co = colluvial ca = catchment km<sup>2</sup>

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL7/73 No. Sample numbers: 987823- Collected by: I.M. CLEMENTON Sheet no. 2  
 Area / Prospect: WILMOT Cu/Pb/Zn S/S ANOMALIE Date: 21-7-82  
 Map / Photo reference: NORTH STREAM FOLLOW-UP Analysed by: ANALABS DPO no. 30312  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref DISTANCE UP FROM CONFLUENCE	Geological Observations	
		ss *	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au			WE (g)
		oc	o/c sample type ***																
		s	s sample type ****																
987834	SUSPENDED CLAYS FROM ALLUVIUM								47	20	280					3800		300m	Str. character as previous.
987835	PAN CONCENTRATE								30	20	200				400		19.75	300m	Mod trap site.
987836	GRAB SAMPLE S/S								50	24	330				4900			300m	
987837	SUSPENDED CLAYS FROM ALLUVIUM								46	17	230				1450			400m	Str. character as previous
987838	PAN CONCENTRATE								21	19	150				320		36.80	400m	Poor - moderate trap site.
987839	GRAB SAMPLE S/S								52	34	310				2700			400m	
987840	SUSPENDED CLAYS FROM ALLUVIUM								40	17	250				1700			600m	Str. char. as previous. East to tributal
841	GRAB SAMPLE S/S								46	36	290				5800			600m	confluence (main stream). Minor basalt
842	PAN CONCENTRATE								35	27	290				630		13.67	600m	float, whole dominant.
987843	SUSPENDED CLAYS FROM ALLUVIUM								41	15	240				5400			600m	Str. char as previous. West tributal confluence
844	PAN CONCENTRATE								43	19	470				910		13.49	600m	Shale float
845	GRAB SAMPLE								46	18	290				4600			600m	
987846	SUSPENDED CLAYS								44	19	290				5300			500m	Str. char. as previous.
47	PAN CONC								27	20	270				500		45.78	500m	
48	GRAB SAMPLE								46	29	320				3600			500m	
987849	Rock								57	10	60				1500			500m	Tight, very compact cherty grey L. Tr. site
987850	Rock								74	13	150				870			500m	Shale, grey, fresh.

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl flow m<sup>3</sup>/sec wi width m al alluvial co colluvial ca catchment km<sup>2</sup>

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL7/13 No. 987823- Sample numbers 987823- Collected by B. MORLEY Sheet no. 3  
 Area / Prospect WILMOT Cr./Pb/Zn d/s Date 21-7-82  
 Map / Photo reference SOUTHERN STREAM Analysed by ANALABS DPO no. 30312/303  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref Approx distance upstream where panned in stream mesh.	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	wt (g)		
		o/c sample type ***																
		s sample type ****																
987851	FLOAT SAMPLE							45	19	370				6700			} 400m upstream where panned in stream mesh. 500m.	from confluence of 1m wide, 1m <sup>3</sup> /min. Shales
852	PAN CONC						36	16	590				5400	32.56				
853	G. SAMPLE						56	28	1360				1.26%					
987854	FLOAT SAMPLE							61	22	1420				1170			400m	
855	PAN CONC							34	15	158				260	87.12			
856	G. SAMPLE							67	30	320				1280				
987857	FLOAT SAMPLE							210	33	670				3500			300m	
858	PAN CONC							55	16	270				1100	93.91			
859	G. SAMPLE							166	40	620				3000				
987860	FLOAT							230	81	920				3200			200m	of strikes 300m. Vertical. Limestone shales.
861	PAN CONC							152	101	760				2700	27.63			
862	GRAB							200	83	1030				4500				
987863	o/c g/s							200	40	205				205			200m	Grey slightly cherty shale. Tr. pyrite.
987864	o/c g/s							145	30	755				505			250m	Weathered fragment of cone volc.
987865	f g/s							190	55	890				205			250m	Dk grey fine gr qz. ls.

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m<sup>3</sup>/sec wi = width m al = alluvial co = colluvial ca = catchment km<sup>2</sup>

2380053



C.R.A. 'PLORATION . GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD EL7/73 No. 988035-988061 Collected by J.M. Clementson Sheet no. 1/3

Area / Prospect Wilmut Cu Date 7.10.83

Map / Photo reference LINE 4400E Analysed by Analabs DPO no. 30317

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As		
		o/c sample type ***																
		s sample type ****																
988035	S	A	1.0	B <sub>2</sub>				81	15	144				730			4400E 5275N	Rich, mid brown clay soil. (Basalt derived)
988036	S	A	1.0	B <sub>2</sub>				85	9	200				500			5250N	Or-br clay soil, probably basalt derived. ? walk float
988037	S	A	1.0	B <sub>2</sub>				45	7	185				860			5225N	Mid brown clayey soil. Probably basalt derived. Basalt float at site but may be transported
988038	S	A	0.4	B <sub>2-C</sub>				34	5	99				1200			5200N	Dark brown sandy clay with weak basalt
988039	S	A	0.7	B <sub>2</sub>				56	10	109				1400			5175N	Rich red-brown basalt derived soil
988040	S	A	0.3	B <sub>2</sub>				114	13	240				2000			5150N	Silty mid br clay + clasts of weathered siltstone-shale. Probably just above dc.
988041	S	A	0.3	B <sub>2-C</sub>				39	23	65				850			5125N	Transported basalt type rich red soil over siltstone-shale bedrock (90% of which is 40m to west).
988042	S	A	0.4	B <sub>2-C</sub>				63	14	35				400			5100N	Red-br soil plus frogs with silty micaceous shales
988043	F	g/s						56	7	86	X			172		X	5075N	Very coarse, gritty qz rich tuff. Well sorted. Slightly chloritic & oxidized. Traces pyrite. Felsic frogs larger & less mature than qz.
988044	S	A	0.2	B <sub>2-C</sub>				49	14	42				187			5075N	Red silty soil plus silty frogs.

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m<sup>3</sup>/sec wi = width m al = alluvial co = colluvial ca = catchment for ?

C.R.A. 'PLORATION . GEOCHEMICAL SAMPLE I DGER

Tenement name SHEFFIELD EL7173

No. .... Sample numbers 988035-988061 ..... Collected by I.M. Clementson

Sheet no. 2/3

Area / Prospect WILMOT Cu

Date 7-10-82

Map / Photo reference LINE 4400E

Analysed by Analyabo

DPO no. 30317

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As		
		o/c sample type ***																
		s sample type ****																
988045	S	A	0.7	B <sub>2</sub>				79	31	63				5900			4400E 5050N	Weathered buff-grey shale frags in mid br silty soil.
988046	S	A	0.5	B <sub>2-C</sub>				66	44	47				1370			5025N	Lt. br silty clay plus abundant 2. ty shale fragments
988047	S	A	0.7	B <sub>2-C</sub>				59	32	48				240			5000N	Lt or - br silty clay + frag weather shale.
988048	S	A	0.8	B <sub>2</sub>				270	380	460				142			4700N	Lt or - br silty soil. Ab frag weather shale, some of which are talcoses and chlor. Etc
988049	S	A	0.8	B <sub>2</sub>				144	200	365				660			4725N	As above.
988050	S	A	0.5	B <sub>2-C</sub>				71	25	75				410			4750N	Mid or - br clay tab shale fragments. Surface float is a laminated grey micc. shale bi med gr. pink weathering buff with shale clasts to 0.5cm.
988051	S	A	0.7	B <sub>2-C</sub>				107	69	157				400			4775N	No prev. obs but somewhat reddish. Surface float is no prev. obs but buff is sandy & well sorted.
988052	F	g/s						130	11	158	X			320	X	approx 4600E 4750N	Greenish-blastic buff, talic to bluish shale clasts to 0.5cm.	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

\*\* Stream sed sample description fl flow m3/sec wi width m al alluvial co collection ca catchment L 2

G.C.

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name SNEFFIELD E 1713 No. 988035-988061 Sample numbers 988035-988061 Collected by I.M. Clementon Sheet no. 3/3  
 Area / Prospect WILMOT Cu Date 7-10-83  
 Map / Photo reference LINE 4400E Analysed by Analabs DPO no. 30317  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	cn	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As		
		o/c sample type ***																
		s sample type ****																
988053	S	A	0.6	B <sub>2</sub> -C				76	34	87				2100			4400E 4800N	Mid red-br clay with ab. slt/shale frag. Sur. float dom shales/slt.
988054	S	A	0.7	B <sub>2</sub> -C				80	24	55				470			4825N	As previous
988055	S	A	0.9	B <sub>2</sub>				41	16	74				1150			4850N	Red brown silt clay frag. sh. shale.
988056	S	A	0.8	B <sub>2</sub>				60	14	73				3400			4875N	2-br clay. Frag. float ash/ore
988057	S	A	0.9	B <sub>2</sub>				70	18	38				1400			4900N	Mottled red yellow clay with shale frag
988058	S	A	0.6	B <sub>2</sub>				92	18	54				1480			4925N	Mid red b silt clay with sh frags (Faded)
988059	F	g <sub>2</sub>						143	4	39	x			240		x	4925N	Brcc. sub. sh. with fine blackwork Fe, Mn, Zn, Pb, Cu, Mo, Ni, Co, Ag, Au Also some chert silt. sh.
988060	S	A	0.6	B <sub>2</sub>				123	24	41				169			4950N	Lt. - mid. silt clay
988061	S	A	0.9	B <sub>2</sub> -C				73	31	43				117			4975N	Ochre-red clay + sh. highly weathered shale Fragments Surface float is omig mixture of ochre - grey shales, ss

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD EL 7/73 No. 988062-988085 Collected by L.M. Clementson Sheet no. 1/3

Area / Prospect WILMOT Cu Date 7-10-82

Map / Photo reference BASE LINE (500M) Analysed by Analyte DPO no. 30317

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As		
		o/c sample type ***																
		s sample type ****																
988062	S	A	0.5	B <sub>0</sub> C				86	19	41				103			500N 4425E	Light ochre clay with shales. (On small ridge beside gully draining to N. stream.
988063	F	g/s						52	4	59	x			1.25%		x	4450E	Gossanous siliceous silt also boggy with 2 <sup>nd</sup> ly Fe/Mn. On edge of gully draining to S. stream.
988064	S	A	0.8	B <sub>2</sub>				102	26	46				1250			4450E	Rich red brown silt clay.
988065	S	A	0.9	B <sub>2</sub>				77	18	102				470			4475E	In gully draining to S. stream. Abundant gossanous weathering shale/silt, sometimes highly (alt) micaceous. So. D is rich red-brown clay with shale frags.
988066	S	A	0.4	B <sub>0</sub> -C				109	22	117				3200			4500L	E side of gully. Float is 90% lt grey micaceous siltstone, sometimes v. ferruginous on weathered surface. 10% is a black argillitic conglomerate with angular shale/silt clasts. So. D is mottled black-red silt clay with shale fragments.
988067	S	A	0.2	A-C				51	15	39				1660			4525E	Red humic clay & shale frags - just above dc
988068	S	A	0.4	B <sub>2</sub>				52	13	40				240			4550E	Mottled red-black-ochre silt clay + shale! Svr float is mica. silt-shales.
988069	S	A	0.4	B <sub>0</sub> -C				43	11	30				121				At or-br silt clay + weath shale frags. Float is a: largely buff-grey mic. shales b: minor sandy buff s. well sorted.

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

\*\* Stream sed sample description fl flow m<sup>3</sup>/sec wi width m al alluvial ca channel

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD EL7173 No. sample numbers 988062 - 988085 Collected by L.M. Clementson Sheet no. 2/3  
 Area / Prospect WILMOT Cu Date 7-10-82  
 Map / Photo reference BASE LINE (5000N) Analysed by Analabs DPO no. 30317  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As		
988070	S	A	0.4	B <sub>2</sub> C				34	8	31			340			5000N		
																4600E		Wet red-black silty clay plus ab. sh. frags. Float is all shale-silt
988071	S	A	0.2	B <sub>2</sub>				60	15	52			800			4625E		lt. br. clay + ab. shale frags. Float is all gray shale - close to o/c.
988072	S	A	0.3	B <sub>2</sub>				37	10	33			185			4650E		As above. Surface float is shale-silt plus minor sandy red gr. tuff.
988073	S	A	0.5	B <sub>2</sub>				38	17	107			99			4675E		Red-br clay + ab. gray shale fragments
988074	S	A	0.2	A-C				36	62	138			600			4700E		Black to humic clay plus shale frags
988075	S	A	0.3	Some				26	44	160			400			4725E		Humic clay in core of gray shale.
988076	S	A	0.2	Some				138	60	131			400			4750E		As above. core dominantly shale plus minor silty to fine sandy well sorted tuff and some well sorted med gr. qz. ls.
988077	S	A	0.2	Some				200	89	300			560			4775E		As above.
988078	S	A	0.3	Some				580	54	270			430			4800E		lt. red-br silty clay in shale core
988079	S	A	0.3	Some				450	39	184			490			4825E		As above
988080	S	A	0.4	Some				139	157	250			161			4850E		As above. in core of shale plus some silty ls. a arenitic

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD EL7/73 No. 988062 - 988085 Collected by I.M. Clementson Sheet no. 3/3  
 Area / Prospect WILMOT Cu Date 7-10-82  
 Map / Photo reference BASE LINE (5000M) Analysed by Analabo DPO no. 30317  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %							Grid ref	Geological Observations	
		ss *	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn			Au
		oc	o/c sample type ***															
		f	s sample type ****															
988081	S	A	0.9	62				175	131	210			147		4875E	Rich clay in shale zone.		
988082	S	A	0.7	52				280	68	330			310		4900E	As above		
988083	S	A	0.5	52				186	66	230			310		4925E	As above.		
988084	S	A	0.9	52				171	65	260			510		4950E	Rich red clay + shale float.		
988085	S	A	1.2	c				196	63	320			230		4975E	Weath red shale. (Top of quarry).		

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

Tenement name SHEFFIELD E17/73 No. 988095-988124 Sample numbers 988095-988124 Collectors by I.M. Clementson Sheet no. 1/3  
 Area / Prospect WILMOT Cu Date 19-10-82  
 Map / Photo reference LINE 4800E Analysed by Analabs DPO no. 30318  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations	
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As				
		o/c sample type ***																			
		s sample type ****																			
988095	S	A	0.9	B <sub>2</sub> C				33	107	135					290				4800E	5125N	Lt greenish brown silt/clay with shale frags. Surf. float o/c very tight buff
988096	S	A	0.5	B <sub>2</sub>				78	31	78					520				5150N	5175N	Mid br sandy clay + shale fragments
988097	S	A	0.6	B <sub>2</sub>				85	26	91					645				5175N	5175N	Dk brown gritty soil
988098	F	gls						45	34	155	0.6				460			x	5175N	5175N	Mid grey, fine grained but poorly sorted buffaceous argillite or greywacke. Fe/Mn staining. Similar to Nout at 5150N.
988099	S	A	0.3	B <sub>2</sub>				160	46	100					880				5200N	5200N	Mid brown silt/clay + shale frags
988100	F	gls						155	245	400	0.3				150			x	5200N	5200N	Weathered buff, fine grained well sorted silt. buff with chert? some work along joints.
988101	S	A	0.9	B <sub>2</sub>				79	80	120					2900				5225N	5225N	Mid brown silt/clay plus shale frags
988102	S	A	1.0	B <sub>2</sub>				86	25	215					475				5250N	5250N	No above
988103	S	A	0.8	B <sub>2</sub>				15	7	16					46				5275N	5275N	Lt grey br - ochre mottled sandy clay.
988104	S	A	0.9	B <sub>2</sub>				92	18	57					315				5300N	5300N	Lt mid brown clay with weathered shale

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

Tenement name SHEFFIELD EL7/73 No. 988095-988124 R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER  
 Area / Prospect W.M.A.T. Cu Sample numbers 988095-988124 Collector J.L.M. Clementson Sheet no. 2/3  
 Map / Photo reference LINE 4800E Analysed by Analeba Date 19-10-82  
 A 02143 DPO no. 30318

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	sl	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As			
		o/c sample type ***																		
988105	S	A	1.0	B <sub>2</sub> -C				460	42	280			2650				5100N	Mid-br silt clay + weak shale frags.		
(adjacent to o/c 987834-987836)																				
988106	S	A	1.0	B <sub>2</sub>				230	80	205			480				5075N	Mid-br silt clay		
988107	S	A	0.8	B <sub>2</sub>				215	81	270			500				5050N	ochre-brown silt clay + shale frags.		
988108	S	A	1.0	B <sub>2</sub> -C				225	88	300			395				5025N	Mid brown clay + shale frags		
988109	S	A	1.1	B <sub>2</sub>				105	28	165			95				4700N	Mid or. brown sandy soil		
988110	S	A	0.8	B <sub>2</sub>				82	25	160			115				4725N	As above.		
988111	S	A	1.1	B <sub>2</sub>				65	17	165			165				4750N	As above		
988112	F	g/s						160	17	685	X		255			X	4775N	Highly weathered qz-chlorite-sericite rock. Presumably a high grade volcanic. Lava or tuff interconcrete. Refered in notes as facies a' I.D. req. req.		
988113	S	A	1.1	B <sub>2</sub>				145	25	245			470				4775N	Mid ochre-brown sandy soil.		

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m<sup>3</sup>/sec wi = width m sl = alluvial co = "

Tenement name SHEFFIELD H/7/73 No. 988095-988124 Sample numbers 988095-988124 Collected by I.M. Clementson Sheet no. 3/3  
 Area / Prospect WILMOT Ck Date 19-10-82  
 Map / Photo reference 4800E Analysed by Analabs DPO no. 30318  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As			
988114	S	A	1.1	Ba				205	41	230			2100				4800E	4800N	Mid-br sandy clay	
988115	oc	gs						250	960	290	0.3		200			X	4815N		Partly laminated mid greenish grey silty shale, suggests secondary brecciation.	
988116	S	A	1.0	Ba				395	260	345			520				4825N		Mid brown silty oo. & shale frags.	
988117	S	A	0.8	Ba				295	182	255			175				4850N		Mid reddish brown oo. &	
988118	S	A	0.5	Ba				420	350	320			555				4875N		Mid br sandy oo. &	
988119	S	A	0.2	Scm				730	620	260			755				4900N			
988120	F	g/s						835	1350	590	0.6		255			650	4900N		Brachioid & gascony sandy tuff with clasts of bleached shale & qz-Fe-Mn bands	
988121	S	A	0.8	Ba				470	90	305			120				4925N		Mid brownish red sandy clay	
988122	S	A	0.5	Ba				300	52	170			265				4950N		Mid br sandy clay	
988123	o/c	gs						480	35	135	0.6		110			100	4950N		V. tight, prob vck., fine gr rock (Facies "b")	
988124	S	A	0.4	Ba				525	174	125			325				4975N		Mid br sandy clay	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

\*\* Stream and sample description fl = flow m<sup>3</sup>/sec wi = width m al = alluvial co = colluvial ca = catchment & c

R.A. EXPLORATION . GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD 117/13 No. 988125 - 988126 - 127 Sample numbers 988125 - 988126 - 127 Collected by I.M. Clementson Sheet no. 1/1  
 Area / Prospect WILMOT Cu Date 19-10-82  
 Map / Photo reference A 02143 Analysed by Amalabo DPO no. 30318

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As			
		o/c sample type ***							s sample type ****											
188125	F	g/s							29	10	68	0.3		110				X	4600E 5165N	Porphyritic "ashy" looking tuff. Fine matrix with angular frags of white volcanic material & black shales.
188126	F	g/s							22	14	60	0.4		475				50	4500E 4800N	Greenish slightly chloritic shales / siltstone, poorly sorted tuff. Fine matrix (chlor. tic) with angular clasts to 2mm minor Fe/Mn staining.
188127	F	g/s							165	23	1600			3500				290	4500E 4775N	Qz - hematite - magnetite rock. Uuggy. Prob. fracture filling. Fract (N.3 - small sample only).

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

R.A. EXPLORATION, GEOCHEMICAL SAMPLE REGISTER

Tenement name SMEFFIELD EL 7/73

No. 988151-988174

Collected by A. D. RICKS

Sheet no. 1/2

Area / Prospect WILMOT Cu

Date 19-10-82

Map / Photo reference LINE 4500E

Analysed by Analyzo

DPO no. 30313

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	sl	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba		
		o/c sample type ***																
		s sample type ****																
988151	S	A	0.3					94	51	160			130		1400	4700N	Yell-br loose clay	
988152	S	A	0.5					100	50	190			275		340	4725N	Red-br loose clay	
988153	S	A	0.4					58	131	220			320		410	4750N	Tan br loose clay	
988154	S	A	1.0					90	102	290			215		420	4775N	Or-brown compact clay	
988155	S	A	0.7					78	146	370			720		510	4800N	Choc-br loose clay	
988156	S	A	0.7					85	69	220			2300		350	4825N	Tan-br loose clay	
988157	S	A	0.8					110	85	260			1900		210	4850N	R-br loose clay	
988158	S	A	1.0					105	40	210			2050		300	4875N	Or-br loose clay	
988159	S	A	0.4					50	41	120			6700		480	4900N	Choc-br loose clay	
988160	S	A	1.3					94	63	205			400		380	4925N	Or-br medium compact clay	
988161	S	A	0.4					83	80	195			480		380	4950N	Choc-br loose clay	
988162	S	A	0.4					72	73	170			1650		760	4975N	Choc-br loose clay	

\* Sample type s = stream sediment oc = outcrop f = float s = soil

Tenement name SHEFFIELD EL7/74 No. 988151-988174 R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER  
 Area / Prospect WILMAT Cu Collecte by A. Crisk Sheet no. 2/2  
 Map / Photo reference LINE 4500E Analysed by A. Andabo Date 19-10-82  
 A 02143 DPO no. 30318

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba		
		o/c sample type ***																
		s sample type ****																
988163	S	A	1.1					125	60	115			210		220	5025N	Or-br loose clay	
988164	S	A	1.0					36	40	83			140		300	5050N	Chocolate-brown loose clay	
988165	S	A	0.8					36	45	110			1350		540	5075N	Ao above	
988166	S	A	1.4					29	43	105			1800		730	5100N	Rocked black-ll br clay	
988167	S	A	1.1					61	60	165			660		440	5125N	Or-br loose clay	
988168	S	A	1.0					63	59	92			460		270	5150N	llo above	
988169	S	A	1.2					65	58	105			350		220	5175N	Tan-br loose clay	
988170	S	A	1.0					54	49	110			110		250	5200N	Choc-br loose clay	
988171	S	A	1.1					61	48	125			200		330	5225N	Tan-br loose clay	
988172	S	A	1.1					46	45	96			135		210	5250N	Choc-br compact clay	
988173	S	A	1.1					62	47	145			680		230	5275N	ll br loose clay	
988174	S	A	0.7					80	50	200			2550		240	5300N	Yellow-br gritty sand	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample ch fl flow m<sup>3</sup>/sec wi width m al alluvial co colluvial

R.A. EXPLORATION GEOCHEMICAL SA LEDGER

Tenement name SHEFFIELD EL7/73 No. 988175-988198 Sample numbers 988175-988198 Collect. by A. C. Clark Sheet no. 1/II  
 Area / Prospect WILMOT Cu Date 19-10-82  
 Map / Photo reference LINE 4600E Analysed by Analaba DPO no. 30318  
 A 02143

Sample No.	Type	ss channel **							Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH	Cu		Pb	Zn	Ag	Mo	Mn	Au	Ba			
		o/c sample type ***																	
		s sample type ****																	
988175	S	A	0.4						86	63	130			1700		340	4700N	Lt choc-br loose humic oo. s	
988176	S	A	0.4						51	49	140			260		520	4725N	Red-br compact oo. s	
988177	S	A	1.1						250	79	170			110		250	4750N	Or-br compact clay oo. s	
988178	S	A	1.1						230	65	130			190		220	4775N	As above	
988179	S	A	1.1						125	48	160			170		180	4800N	Choc-br compact clay oo. s	
988180	S	A	0.7						110	61	135			560		190	4825N	As above	
988181	S	A	0.9						190	24	190			2600		210	4850N	As above	
988182	S	A	0.4						470	62	250			8900		540	4875N	Dark brown loose clay oo. s	
988183	S	A	1.1						35	37	93			590		870	4900N	Tan-br loose clay oo. s	
988184	S	A	0.7						64	36	110			300		290	4925N	Or-br gritty clay oo. s	
988185	S	A	0.5						69	38	84			760		250	4950N	Choc-br loose clay oo. s	
988186	S	A	0.5						38	28	54			250		310	4975N	Yellow-br loose gritty oo. s	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = contact

Tenement name SHEFFIELD EL7173 No. 988175-988198 R.A. EXPLORATION, GEOCHEMICAL SAMPLER LEADER  
 Area / Prospect WILMOT Cu Collect. by A. CRICK Sheet no. 2/II  
 Map / Photo reference LINE 4600E Analysed by ANALABS Date 19-10-82  
 A 32143 DPO no. 30318

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations	
		ss*	fl	wi	al	co	ca		pH	Cu	Pb	Zn	Ag	Mo	Mn	Au			Ba
		oc	o/c sample type ***																
		f	s sample type ****																
188187	S	A	0.4						39	35	42			85		410	5025N	Or-br loose clay soil	
188188	S	A	0.4						51	58	145			760		340	5050N	As above	
188189	S	A	1.1						80	42	120			245		180	5075N	Or-br fine clay soil	
188190	S	A	1.1						59	40	95			470		240	5100N	As above	
188191	S	A	0.8						15	21	70			230		580	5125N	Lt br loose clay soil	
188192	S	A	1.1						22	40	86			135		610	5150N	Or-br loose clay soil	
188193	S	A	1.2						80	66	150			255		240	5175N	As above	
188194	S	A	1.1						83	44	140			190		240	5200N	As above	
188195	S	A	1.1						74	34	145			230		250	5225N	As above.	
188196	S	A	1.1						95	36	190			1700		200	5250N	Choc-br gritty soil	
188197	S	A	0.5						72	36	145			225		200	5275N	As above	
188198	S	A	1.1						72	25	130			2650		300	5300N	Red-br clay soil	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name SHEFFIELD EL7/73 No. 988210-988217 Sample numbers 988210-988217 Collector v. I.M. Clementson Sheet no. 1  
 Area / Prospect WILMOT Cu Date 17-11-82  
 Map / Photo reference LINE 4805E Analysed by Ana Labs DPO no. 30320/30321  
 A 02143 (Type determination carried out when shown)

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %							Grid ref	Geological Observations	
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au			Ao
		o/c sample type ***																
s sample type ****																		
988210	F	gls						570/235	71/115	510/130				395		X	4905N	At foot of o/c of grey phaleo. dipping very steeply to N. This sample is an o/c but with minor Fe staining. Micaceous.
988211	F	gls						430/235	96/105	237/210				215		X	4995N	Thin (4-5cm) bed of brecciated grey phaleo. Not a tectonic breccia, a sed. feature. V. poorly sorted. Abundant original Fe in matrix & clasts. Surrounding beds are totally normal grey phaleo.
988212	oc	gs						FOR PETROLOGY				Brecciated then four medium and granitic felsic porphyry			4985N	Coarsely porphyritic (felsic) intermediate lava (trachytic?).		
988213	o/c	gs						290/220	58/70	138/100				140	X	X	4985N	As above. Traces py + ? ep. diam.
988214	o/c	gs						FOR PETROLOGY				Tuff - probably autochthonous possibly welded. Peruvitic alteration			4980N	Fine grained facies of above? (P. in situ)		
988215	oc	rc (general)						230/250	30/20	96/115				200		X	4950N	As above: repeat of sample 988213 which assayed 100 ppm Ao. This sample for Au.
988216	oc	gs						153/280	14/25	590/1000				85		X	5 bank of creek 1/2000	? Depth: intermediate dyke or lava.
988217	F	gs						440/75	190/580	330/90				500	X	X	4900N	Repeat of 988210 (Geo No) (1350 Pb) - greenish buff

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km<sup>2</sup>

238070 069

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7/73 No. .... Sample numbers 988210, 216, 217 Collected by I.M.C Sheet no. 1/1  
 Area / Prospect Wilmut Cu Date 17-12-82  
 Map / Photo reference LINE 4800E Analysed by ZINC CORP DPO no. 30320  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %							Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au		
		o/c sample type ***															
		s sample type ****															
988210	A							770	86	600		380					Repeat analyses to check apparent discrepancies in Analabo determinations A = HCl-HNO <sub>3</sub> digestion B = Perchloric
	B							850	93	660		380					
988216	A							210	21	760		760					
	B							290	25	920		770					
988217	A							660	520	660		500					
	B							740	570	760		500					

\* Sample type ss stream sediment oc outcrop f float s soil

Tenement name: SHEFFIELD PL773 No. 988294-988312 Sample numbers: 988294-988312 Collector: J. L. CLEMENTSON Sheet no. 1/2  
 Area / Prospect: WILMOT Cr. Date: 4-12-82  
 Map / Photo reference: LINE 4700E Analysed by: ANALYST DPO no. 30327  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	sl	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As		
		o/c sample type ***																
		s sample type ****																
188294	S	A	1.2	B <sub>2</sub>				91	19	168			450			4700E	Mid red-brown clay	
188295	S	A	1.0	B <sub>2</sub>				165	27	171			1160			4725N	Mid brown silty clay + frags of hematitic breccio-conglomerate (qzone).	
188296	F	gs						114	150	550			405	50		4725N	Fine grained red pink-yellow weathered intermediate lava or very light tuff with large biotite (going to chlorite) phen crystals (porphyrobl)	
188297	S	A	0.5	B				185	22	270			755			4750N	Mid brown clay, g'wacke float	
188298	S	A	1.0	B <sub>2</sub>				260	46	172			125			4775N	Rich brown, mottled yellow clay with frags of weathered siltstone & silty g'wacke. Also seen at surface	
188299	S	A	1.0	B <sub>2</sub>				203	59	191			155			4800N	Red-brown clay - as above	
188300	S	A	1.1	B <sub>2</sub>				220	65	250			735			4825N	Flot: shales & silts	
188301	S	A	0.5	Some				240	250	360			1900			4850N	Mid brown humic clays in some of fine, gray laminated silt & shales	
188302	S	A	0.8	B <sub>2</sub>				330	120	250			170			4875N	Rich red-brown silty clay. Surface float of silts by light, siliceous coarse grained poorly sorted tuff & g'wacke (tuff) med gr, weather red or green.	
188303	F	gs						78	208	140			80			4875N	Qz rich g'wacke - prob fairly fresh tuff. Some Fe oxides? an-pyr:ke	
188304	S	A	0.5	Some				147	69	76			55			4900N	Gr. silty humic clays in some of fine-med grained, poorly sorted g'wackes or reworked silts plus minor white qz:ke.	

\* Sample type ss = stream sediment oc = outcrop f float s = soil

R.A. EXPLORATION GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7/73

No. 988294-988312

Collector J. D. CLEMENTSON

Sheet no. 2/2

Area / Prospect WILMOT Cu

Date 4-12-82

Map / Photo reference LINE 4700E

Analysed by ANALABS

DPO no. 30322

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As		
		o/c sample type ***																
		s sample type ****																
188305	S	A	0.8	B <sub>2</sub>				230	44	134				80			4925N	Light brown - white sandy soil. Surface float of quartz & g'wacks.
188306	S	A	0.9	B <sub>2</sub>				184	54	350				145			4950N	Mid brown clay
188307	F	g <sub>2</sub>						114	270	230				130		x	4950N	Tight grey-green g'wacke but with veins containing ??? secondary Pb carbonates
188308	S	A	0.5	B				69	35	410				260			4975N	LE br - sandy soil + weathered g'wacke fragments (also at surface).
188309	S	A	1.3	B <sub>2</sub>				41	31	123				1950			5100N	Dark red brown clay with siltstone fragments. Abundant silt/shale float
188310	S	A	1.0	B <sub>2</sub>				88	24	72				1200			5075N	As above
188311	S	A	0.8	B <sub>2</sub>				117	35	250				2000			5050N	" "
188312	S	A	0.5	B <sub>2</sub>				54	10	130				570			5025N	Mid br sandy soil in series of weathered greywackes (some sericitic).

\* Sample type ss = stream sediment oc = outcrop f = float s = soil

\*\* Stream sed sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km<sup>2</sup>

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7/A3 No. 988313-988323 Sample numbers 988313-988323 Collector V.M. CLEMENTSON Sheet no. 1/1  
 Area / Prospect WILMOT Cu Date 4-12-82  
 Map / Photo reference LINE 4900E Analysed by ANALABS DPO no. 30322  
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As				
		o/c sample type ***																		
		s sample type ****																		
988313	S	A	1.0	B <sub>2</sub>				21	21	105			520			4800N	Red-brown clay. Surface block of weathered "a" facies - porphyritic intermediate volcanic.			
988314	S	A	1.0	B <sub>2</sub>				78	11	290			580			4825N	Bright red, mottled yellow clays - weathered "a" facies			
988315	S	A	0.6	B <sub>1</sub> C				197	25	350			1250			4850N	As above			
988316	F	gs						450	6	270			370			4850N	"a" type - close to o/c in creek			
988317	S	A	0.6	S <sub>1</sub> me				370	250	300			500			4875N	Mid br sandy soil in series of fine shales & siltstones.			
988318	S	A	0.7	B <sub>2</sub>				200	50	230			250			4900N	Mid brown clay silt fragments			
988319	F	gs						47	15	400			275	50		4900N	V. poorly sorted agglomerate or breccia. Angular frags (rarely qz - distinct from previous breccia-congo seen in the grid) - dominantly siltstone clasts in quartz/hematite matrix			
988320	o/c	gs						66	50	165			75	X		4920N	Typical "b" facies: fine int. volc.			
988321	S	A	0.7	B				220	157	360			295			4925N	Mid brown sandy clay			
988322	S	A	0.8	B				71	24	230			600			4950N	Rich ultra-brown clays + frags weathered "a" type facies			
988323	S	A	0.6	B				370	37	131			720			4975N	As above, plus block of g'wackes & silts			

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = car / vent km2

APPENDIX III

GEOCHEMICAL SAMPLE SHEET - LING 2 ANOMALY

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name EL 7/73 Sheffield No. 1197543 - 48 Sample numbers. 1197543 - 48 Collected by P.A. Tenby Sheet no. 1 of 1  
 Area / Prospect Ling 2 Anomaly Map / Photo reference Wilmot 1:25000 Sheet Plan No TASH 2463 Analysed by ALS Date 30/10/84 DPO no. 31918  
 A 02143

074

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Ba	Fe %		
		o/c sample type ***							s sample type ****											
1197543	SS	Yes	1.5					30	30	145	2	10	990	5	5	450	6.38	423900E 5412250N	No o/c, g 80% S 15% S 15% float basalt >> volcanlastic sst, chlor. ep. vein. volc. sst. minor Ore, @. High gradient.	
1197544																		as above	bulk sample not analysed.	
1197545	SS	Yes	1.5					45	25	155	2	10	1450	165	2	320	9.96	423780E 5411800N	No o/c g 90% S 9% S 1+C=1% float basalt >> gty. High gradient.	
1197546	SS	Yes	1.5					60	30	105	2	5	1000	50	1	270	11.6	423780E 5411820N	No o/c g 90% S 9% S 1+C=1% float basalt >> gty, high gradient.	
1197547	SS	Yes	0.5					15	45	140	1	15	1200	5	<1	400	3.85	423490E 5412300N	No o/c g 30% S 55% S 14% Cl 1% Float @m type gty. >> basalt > volcanclastics. moderate gradient.	
1197548	SS																	as above	bulk sample not analysed.	

\* Sample type ss = stream sediment oc = outcrop f = float s = soil  
 \*\* Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2  
 \*\*\* Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)  
 \*\*\*\* Soil sample type auger hole or pit depth m A, B or C horizon

238073

075

APPLICATION FOR REDUCTION OF EL 7/73 SHEFFIELD

From 199 Sq Km to 124 Sq Km

SCHEDULE

Commencing at a North East angle of the area whose grid co-ordinates are 433 100 Metres E. 5 416 700 Metres N. Thence Grid South to 5 412 850 Metres N. Grid East to 443 100 Metres E. Again Grid South to 5 410 500 Metres N. Again Grid East to 446 500 Metres E. Again Grid South to 5 409 400 Metres N. Again Grid East to 453 000 Metres E. Again Grid South to 5 407 200 Metres N. Grid West to 449 500 Metres E. Again Grid South to 5 404 250 Metres N. Again Grid West to 445 000 Metres E. Grid North to 5 405 000 Metres N. Again Grid West to 443 000 Metres E. Again Grid North to 5 406 000 Metres N. Again Grid West to 442 000 Metres E. Again Grid North to 5 409 000 Metres N. Again Grid West to 441 300 Metres E. Again Grid North to 5 409 300 Metres N. Again Grid West to 441 000 Metres E. Again Grid North to 5 410 000 Metres N. Again Grid West to 438 000 Metres E. Again Grid South to 5 407 000 Metres N. Again Grid West to 435 000 Metres E. Again Grid South to 5 406 000 Metres N. Aforesaid, again Grid West to 432 010 Metres E. Northerly to Grid Co-ordinates 431 979 Metres E. 5 408 526 Metres N. Again Grid East to 432 000 Metres E. Again Grid North to 5 410 000 Metres N. Again Grid West to 429 000 Metres E. Again Grid South to 5 408 494 Metres N. Westerly to Grid Co-ordinates 428 325 Metres E. 5 408 485 Metres N. Southerly to 428 355 Metres E. 5 406 000 Metres N. Aforesaid, again Grid South to 5 405 000 Metres N. Aforesaid, again Grid West to 428 000 Metres E. Again Grid North to 5 408 000 Metres N. Again Grid West to 426 000 Metres E. Again Grid North to 5 409 000 Metres N. Aforesaid, again Grid East to 428 000 Metres E. Aforesaid, again Grid North to 5 412 000 Metres N. Again Grid East to 429 000 Metres E. Aforesaid, again Grid North to 5 413 000 Metres N. Again Grid East to 430 000 Metres E. Again Grid North to 5 415 000 Metres N. Again Grid East to 431 000 Metres E. Again Grid North to 5 416 700 Metres N. Aforesaid, thence again Grid East to the point of commencement.

EXCLUSIONS

The area embraced by this line excluded the following 3 areas:-

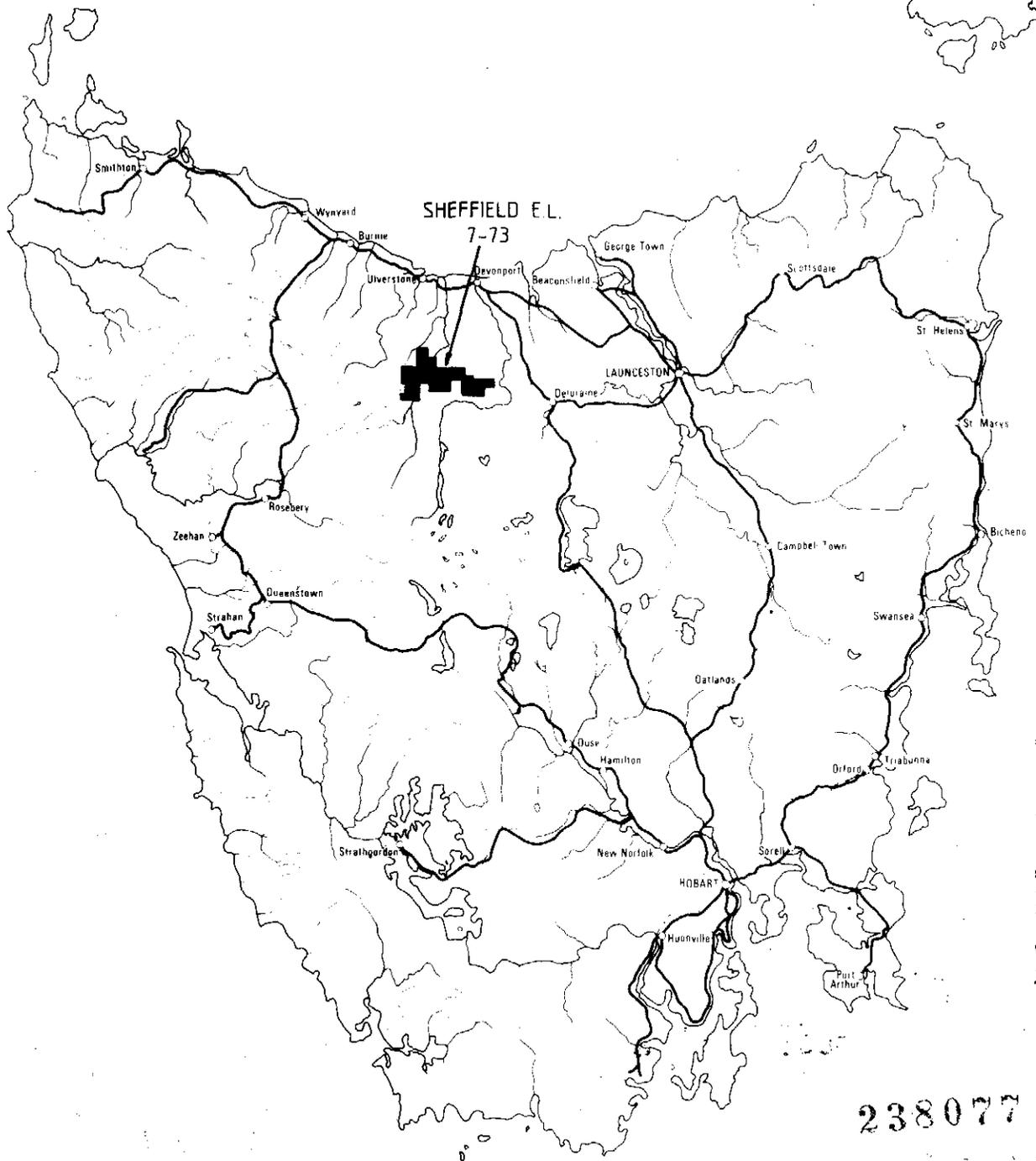
- (1) Cethana Dam and Power Station .2 Sq Km
- (2) Gowrie Park Hydro Reserve .4 Sq Km
- (3) Lake Barrington 2.6 Sq Km

238076

# TASMANIA

Scale 1:2 000 000

0 50 100 Kilometres



238077

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7-73

LOCALITY PLAN

4633

REF. SK55

SCALE 1:2 000 000

AUTHOR MF

DATE JAN 1983

DRAWN R.G.

REPORT NO. 43060

TASh No. 1224

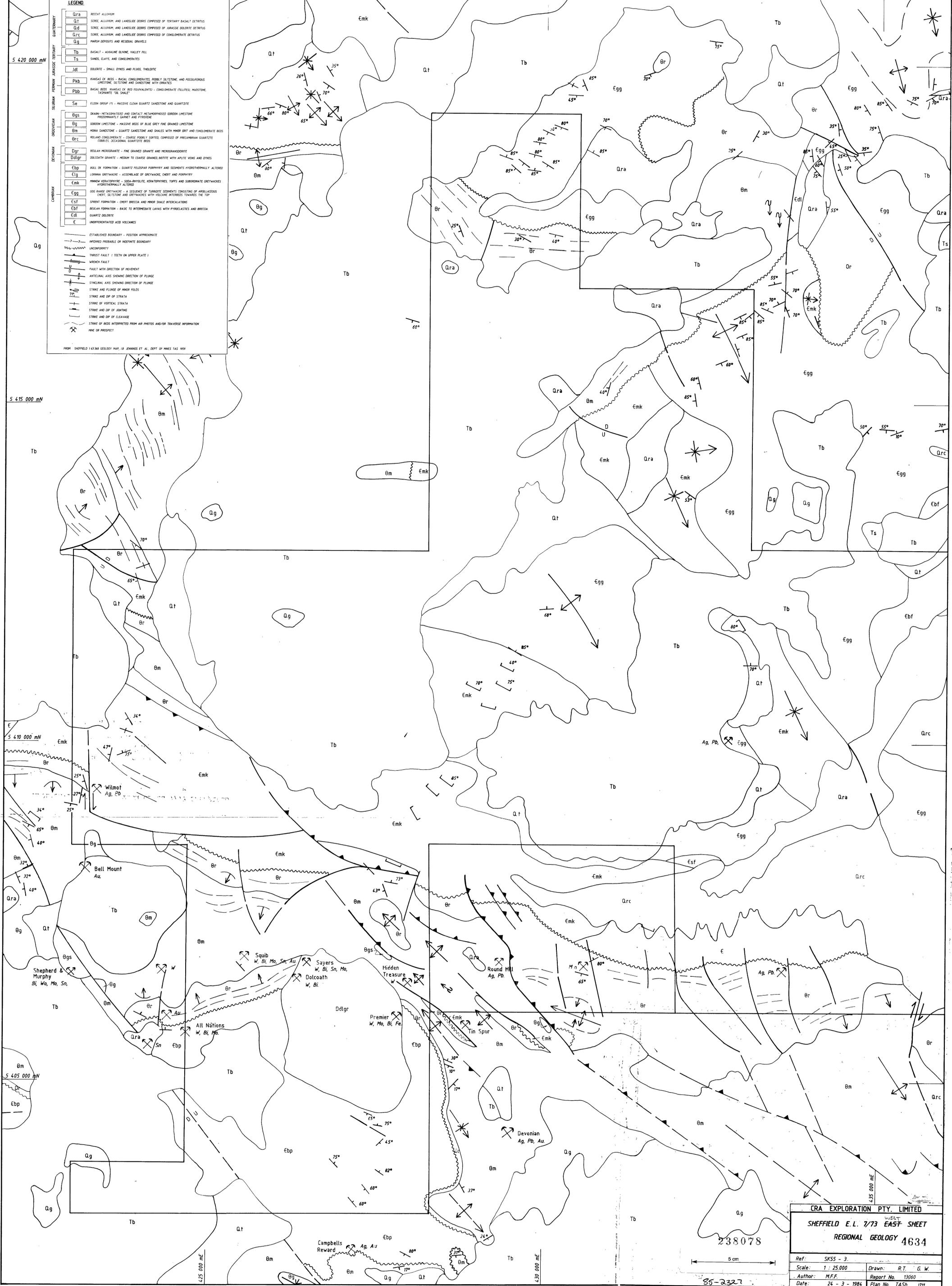
85-2327

**LEGEND**

Qra	RECENT ALLUVIUM
Qt	SCREE, ALLUVIUM AND LANDSLIDE DEBRIS COMPOSED OF TERTIARY BASALT DETRITUS
Qd	SCREE, ALLUVIUM AND LANDSLIDE DEBRIS COMPOSED OF JURASSIC DOLOMITE DETRITUS
Qrc	SCREE, ALLUVIUM AND LANDSLIDE DEBRIS COMPOSED OF CONGLOMERATE DETRITUS
Qg	MARSH DEPOSITS AND RESIDUAL GRAVELS
Tb	BASALT - ALKALINE OLIVINE VALLEY FILL
Ts	SANDS, CLAYS, AND CONGLOMERATES
Jd	DOLOMITE - SMALL DYKES AND PLUGS, THOLEIITE
Pkb	KANSAS OF BEDS - BASAL CONGLOMERATES, POORLY SILTSTONE, AND MISSISSIPPIAN LIMESTONE, SILTSTONE AND SANDSTONE WITH ERATICS
Pbb	BASAL BEDS (KANSAS OF BED FOURVALENTS) - CONGLOMERATE (FALGATES), MUDSTONE, SANDSTONE, AND SHALES
Se	FELDON GROUP (?) - MASSIVE CLEAN QUARTZ SANDSTONE AND QUARTZITE
Bgs	SKINN - METASANDSTONED AND CONTACT METAMORPHOSSED GARDON LIMESTONE (PREDOMINANTLY GARNET AND PYROXENE)
Bg	GARDON LIMESTONE - MASSIVE BEDS OF BLUE GREY FINE GRAINED LIMESTONE
Bm	MORNA SANDSTONE - QUARTZ SANDSTONE AND SHALES WITH MINOR GYTT AND CONGLOMERATE BEDS
Brc	ROSLAND CONGLOMERATE - COARSE POORLY SORTED COMPOSED OF PRECAMBRIAN QUARTZITE (CORALS, OCCASIONAL QUARTZITE BEDS)
Dgr	DELAN HERCYNITE - FINE GRAINED GRANITE AND MICROGRANODIORITE
Ddigr	DOLOMITE GRANITE - MEDIUM TO COARSE GRAINED BIOTITE WITH APHLE VENS AND DYKES
Ebp	BASE OF FORMATION - QUARTZ FELDSPAR PORPHYRY AND SEDIMENTS HYDROTHERMALLY ALTERED
Elg	LOVINA GREYTALE - ASSEMBLAGE OF GREYTALE, CHERT AND PORPHYRY
Emk	MINNOW KROTOPYRE - SOGA-PHYLLITE, KROTOPYRES, TUFFS AND SUBORDINATE GREYTALES (HYDROTHERMALLY ALTERED)
Egg	GOO RANGE GREYTALE - A SEQUENCE OF TURBIDITE SEDIMENTS CONSISTING OF ARGILLACEOUS CHERT, SILTSTONE AND GREYTALES WITH VOLCANIC INTERBEDS TOWARDS THE TOP
Esf	SPRENT FORMATION - CHERT BRECCIA AND MINOR SHALE INTERCALATIONS
Ebf	DELAN FORMATION - BASIC TO INTERMEDIATE LAVAS WITH PYROCLASTICS AND BRECCIA
Ebl	QUARTZ DOLOMITE
E	UNDIFFERENTIATED ACID VOLCANICS

ESTABLISHED BOUNDARY - POSITION APPROXIMATE  
 INFERRED PROBABLE OR INDEFINITE BOUNDARY  
 UNCONFORMITY  
 THRUST FAULT (TEETH ON UPPER PLATE)  
 WRENCH FAULT  
 FAULT WITH DIRECTION OF MOVEMENT  
 ANTICLINAL AXIS SHOWING DIRECTION OF PLUNGE  
 SYMBLICAL AXIS SHOWING DIRECTION OF PLUNGE  
 STRIKE AND PLUNGE OF HORIZONTAL FOLDS  
 STRIKE AND DIP OF STRATA  
 STRIKE OF VERTICAL STRATA  
 STRIKE AND DIP OF JOINTING  
 STRIKE AND DIP OF LEAVISE  
 STRIKE OF BEDS INTERPRETED FROM AIR PHOTOS AND/OR TRAVERSE INFORMATION  
 HNE OR PROSPECT

FROM SHEPPARD 1:43 340 GEOLOGY MAP, 18, JENNINGS ET AL., DEPT. OF MINES, TAS, 1959



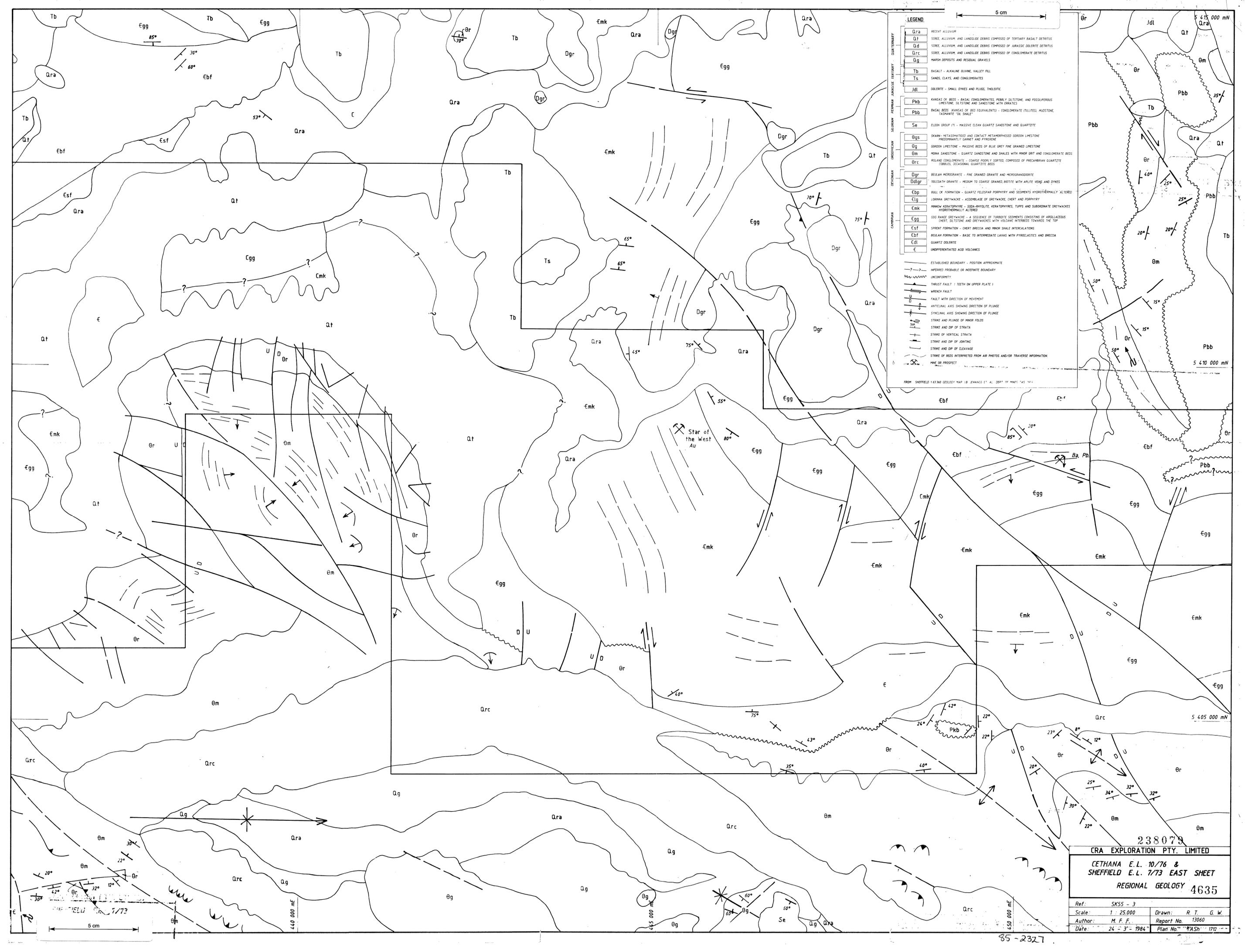
**CRA EXPLORATION PTY. LIMITED**  
 SHEFFIELD E.L. 7/73 EAST SHEET  
 REGIONAL GEOLOGY 4634

238078

5 cm

85-2327

Ref:	SK55 - 3
Scale:	1 : 25 000
Author:	M.F.F.
Date:	24 - 3 - 1984
Drawn:	R.T. G. W.
Report No.:	13060
Plan No.:	TASH 1711



**LEGEND**

Qra	RECENT ALLUVIUM
Qt	SENE. ALLUVIUM, AND LANDSLIDE DEBRIS COMPOSED OF TERTIARY BASALT DETRITUS
Qd	SENE. ALLUVIUM, AND LANDSLIDE DEBRIS COMPOSED OF JURASSIC DOLERITE DETRITUS
Qrc	SENE. ALLUVIUM, AND LANDSLIDE DEBRIS COMPOSED OF CONGLOMERATE DETRITUS
Qg	MARSH DEPOSITS AND RESIDUAL GRAVELS
Tb	BASALT - ALKALINE OLIVINE, VALLEY FILL
Ts	SANDS, CLAYS, AND CONGLOMERATES
Jdl	DOLERITE - SMALL DYKES AND PLUGS, THOLEIIC
Pkb	KANSAS CK BEDS - BASAL CONGLOMERATES, PEBBLY SLTSTONE, AND FOSSILIFEROUS LIMESTONE, SILTSTONE AND SANDSTONE WITH GRABATS
Pbb	BASAL BEDS (KANSAS CK BED EQUIVALENTS) - CONGLOMERATE (ILLITES), MUDSTONE, TASHMANTIE "OL SHALE"
Se	FLOOD GROUP (?) - MASSIVE CLEAN QUARTZ SANDSTONE AND QUARTZITE
Bgs	SKARN - METAMORPHOSIZED AND CONTACT METAMORPHOSIZED GORDON LIMESTONE - PREDOMINANTLY GARNET AND PYROXENE
Bg	GORDON LIMESTONE - MASSIVE BEDS OF BLUE GREY FINE GRAINED LIMESTONE
Bm	HOMA SANDSTONE - QUARTZ SANDSTONE AND SHALES WITH MINOR GRIT AND CONGLOMERATE BEDS
Brc	HILAND CONGLOMERATE - COARSE POORLY SORTED, COMPOSED OF PRECAMBRIAN QUARTZITE (BOBLES), OCCASIONAL QUARTZITE BEDS
Dgr	BELLAH MICROGRANITE - FINE GRAINED GRANITE AND MICROGRANODIORITE
Ddigr	HOLCATHY GRANITE - MEDIUM TO COARSE GRAINED, BIOTITE WITH APULITE VENS AND DYKES
Ebp	BULL CK FORMATION - QUARTZ FELDSPAR PORPHYRY AND SEDIMENTS HYDROTHERMALLY ALTERED
Elg	LORNA GREYWACKE - ASSEMBLAGE OF GREYWACKE, CHERT AND PORPHYRY
Emk	MINNOW KERATOZYME - SOGA-BIVOLVITE, KERATOZYMES, TUFFS AND SUBORDINATE GREYWACKES HYDROTHERMALLY ALTERED
Egg	EGG RANGE GREYWACKE - A SEQUENCE OF TURBIDITE SEDIMENTS CONSISTING OF ARGILLACEOUS CHERT, SILTSTONE AND GREYWACKES WITH VOLCANIC INTERBEDS TOWARDS THE TOP
Esf	SPRINT FORMATION - CHERT BRECCIA AND MINOR SHALE INTERCALATIONS
Ebf	BELLAH FORMATION - BASIC TO INTERMEDIATE LAVAS WITH PYROCLASTICS AND BRECCIA
Ecl	QUARTZ DOLERITE
E	UNDIFFERENTIATED ACID VOLCANICS

——— ESTABLISHED BOUNDARY - POSITION APPROXIMATE  
 - - - - - INFERRED PROBABLE OR INDEFINITE BOUNDARY  
 ~~~~~ UNCONFORMITY  
 ——— THURST FAULT (TEETH ON UPPER PLATE)  
 ——— WRENCH FAULT  
 ——— FAULT WITH DIRECTION OF MOVEMENT  
 ——— ANTICLINAL AXIS SHOWING DIRECTION OF PLUNGE  
 ——— SYNCLINAL AXIS SHOWING DIRECTION OF PLUNGE  
 ——— STRIKE AND PLUNGE OF MINOR FOLDS  
 ——— STRIKE AND DIP OF STRATA  
 ——— STRIKE OF VERTICAL STRATA  
 ——— STRIKE AND DIP OF JOINTING  
 ——— STRIKE AND DIP OF CLEAVAGE  
 ——— STRIKE OF BEDS INTERPRETED FROM AIR PHOTOS AND/OR TRAVERSE INFORMATION  
 ——— MINE OR PROSPECT

FROM SHEFFIELD 1:63,360 GEOLOGY MAP 1:8, JENNINGS ET AL. DEPT. OF MINES '45 '46

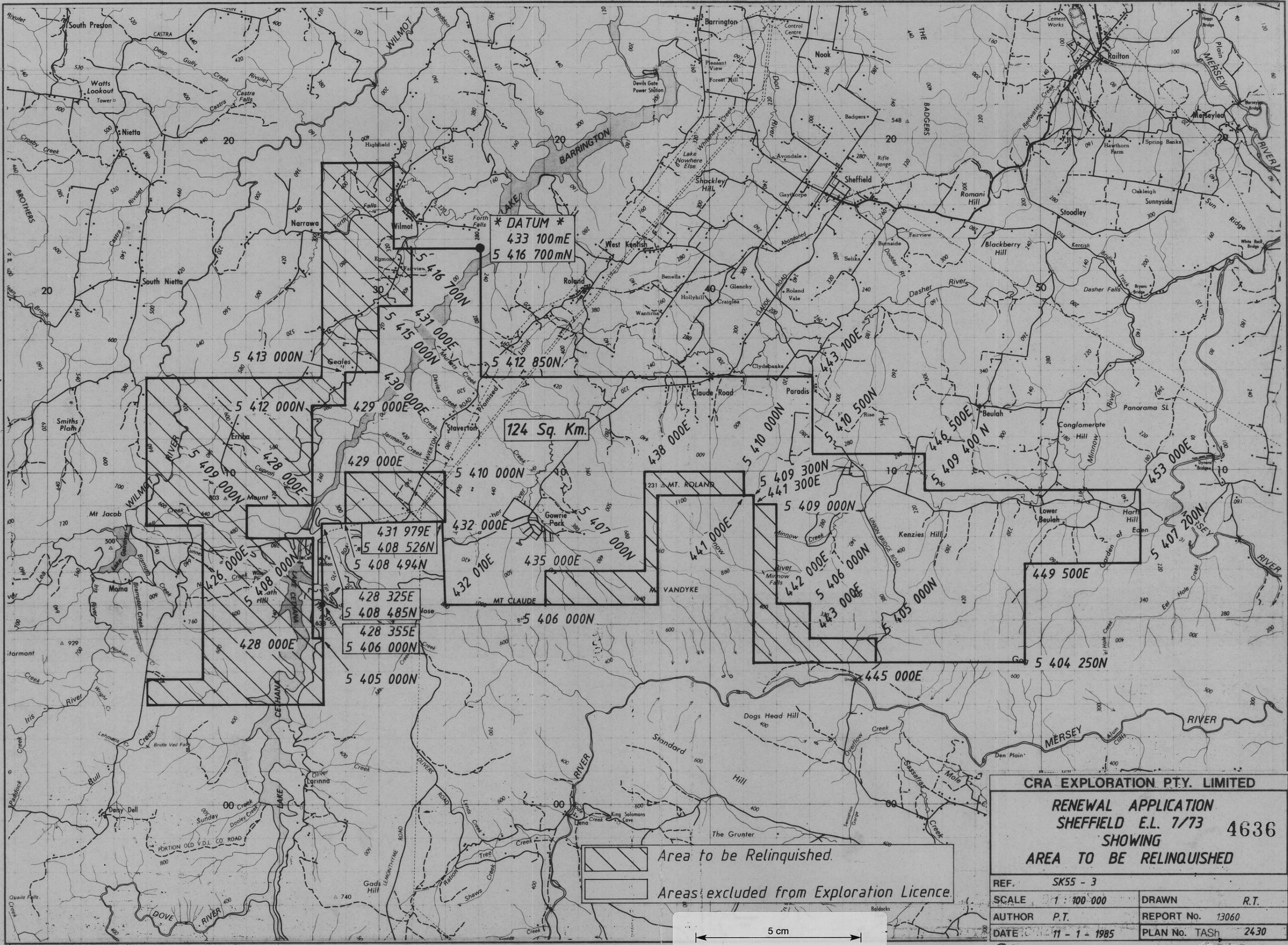
238079

**CRA EXPLORATION PTY. LIMITED**

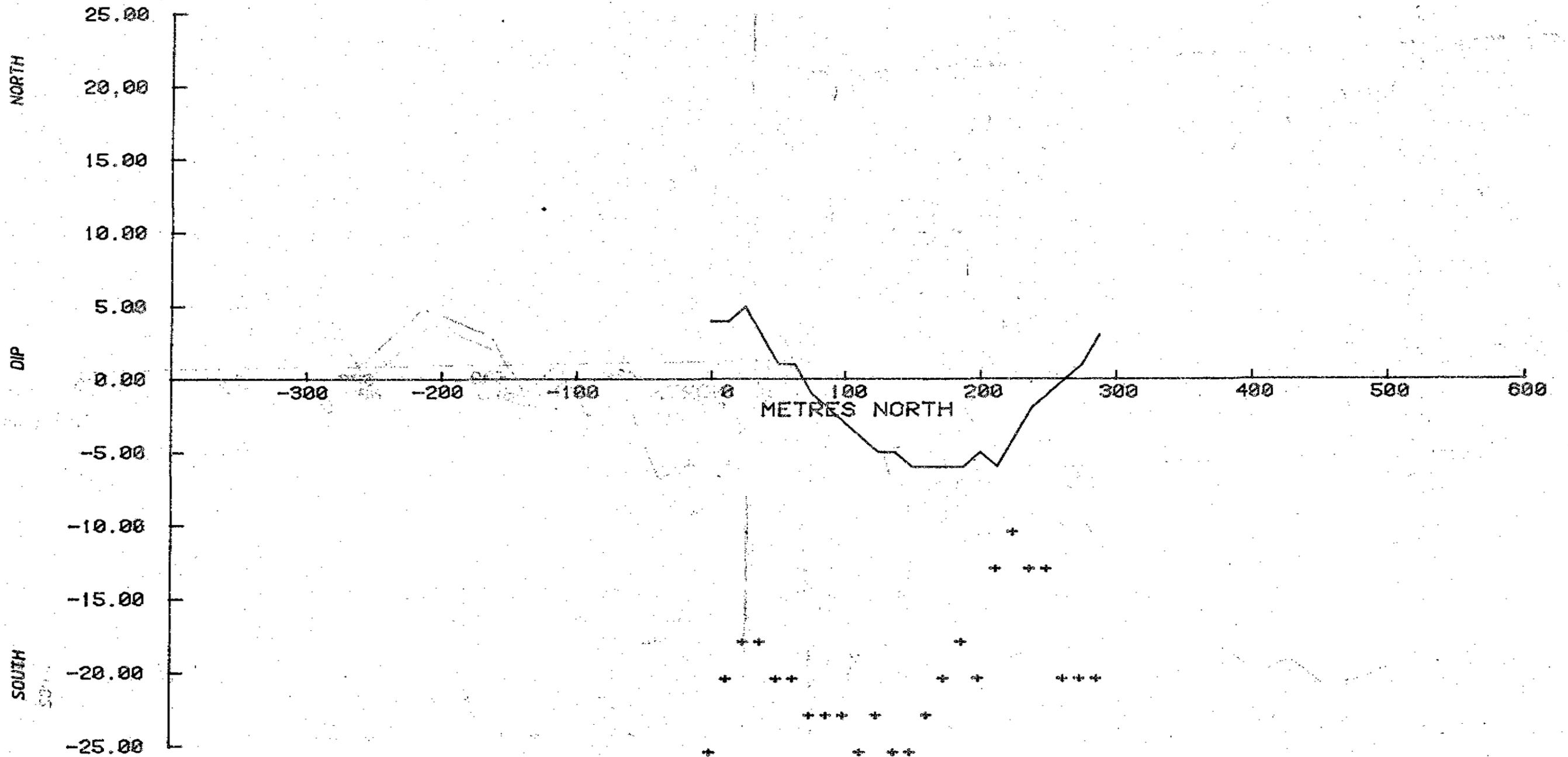
**CETHANA E.L. 10/76 & SHEFFIELD E.L. 7/73 EAST SHEET**

**REGIONAL GEOLOGY 4635**

|             |                 |
|-------------|-----------------|
| Ref:        | SK55 - 3        |
| Scale:      | 1 : 25,000      |
| Author:     | M. F. F.        |
| Date:       | 24 - 3 - 1984   |
| Drawn:      | R. T. G. W.     |
| Report No.: | 13060           |
| Plan No.:   | "WASH" 1712 - 1 |



|                                     |                    |
|-------------------------------------|--------------------|
| <b>CRA EXPLORATION PTY. LIMITED</b> |                    |
| <b>RENEWAL APPLICATION</b>          |                    |
| <b>SHEFFIELD E.L. 7/73 4636</b>     |                    |
| <b>SHOWING</b>                      |                    |
| <b>AREA TO BE RELINQUISHED</b>      |                    |
| REF. SK55 - 3                       |                    |
| SCALE 1 : 100 000                   | DRAWN R.T.         |
| AUTHOR P.T.                         | REPORT No. 13060   |
| DATE 11 - 1 - 1985                  | PLAN No. TASH 2430 |



DIP ANGLE ( DEGREES )

+ + + + +

MAXIMUM HORIZONTAL FIELD STRENGTH  
( 100 % RANGE WITH ARBITRARY GAIN )

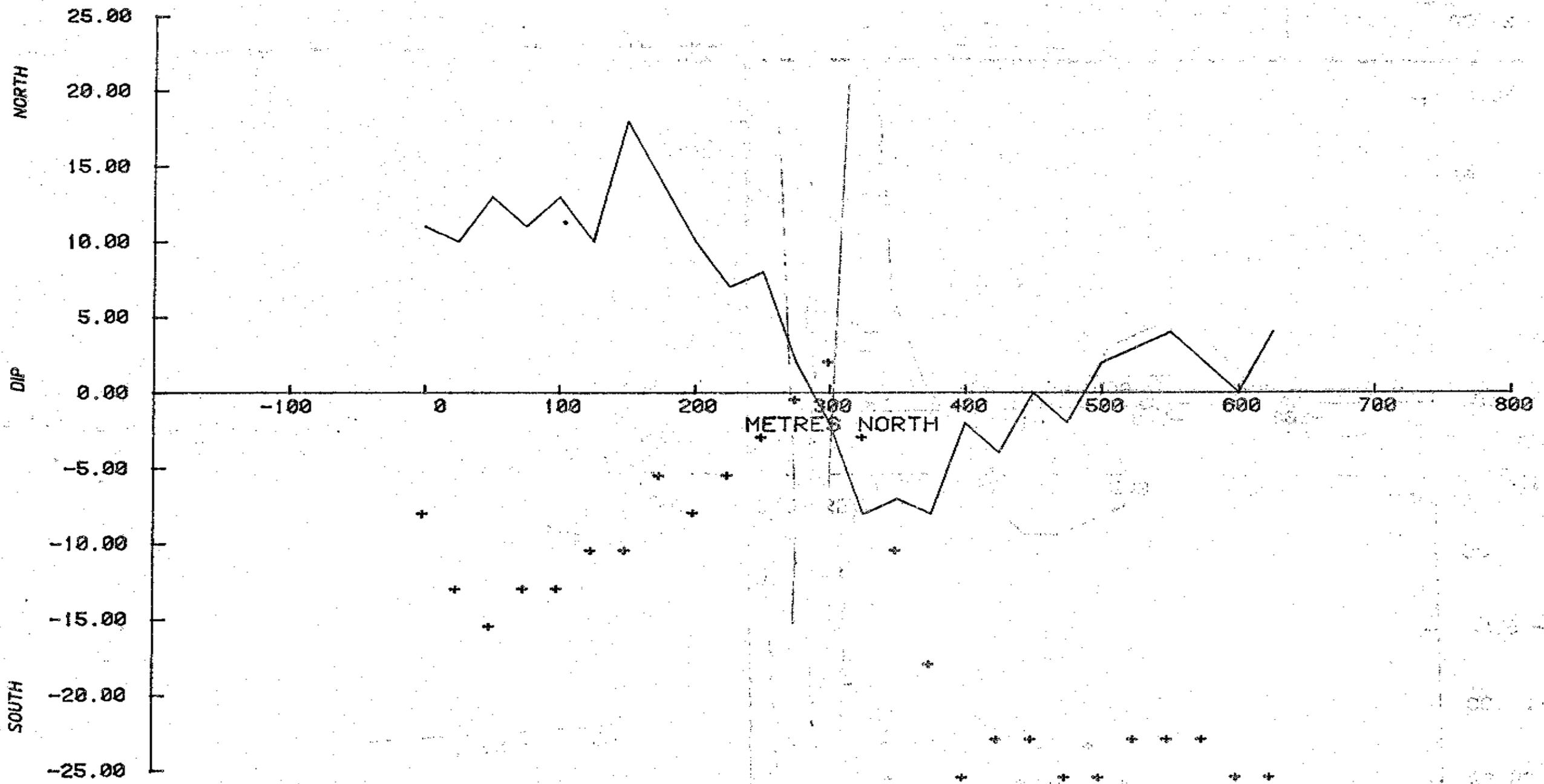
5 cm

PHOENIX V.L.F. - 2 METER

238081

|                              |            |           |       |
|------------------------------|------------|-----------|-------|
| CRA EXPLORATION PTY. LIMITED |            |           |       |
| SHEFFIELD E.L. 7/73          |            |           |       |
| V.L.F. - E.M.                |            |           |       |
| Washington Track             |            |           | 4637  |
| REF                          | SK55 - 3   |           |       |
| SCALE                        | AS SHOWN   | DRAWN     | M. F. |
| AUTHOR                       | M. F.      | REPORT N° | 13060 |
| DATE                         | SEPT. 1982 | TASK N°   | 1169  |

85-2327



————— DIP ANGLE ( DEGREES )

+ + + + + MAXIMUM HORIZONTAL FIELD STRENGTH  
( 100 % RANGE WITH ARBITRARY GAIN )

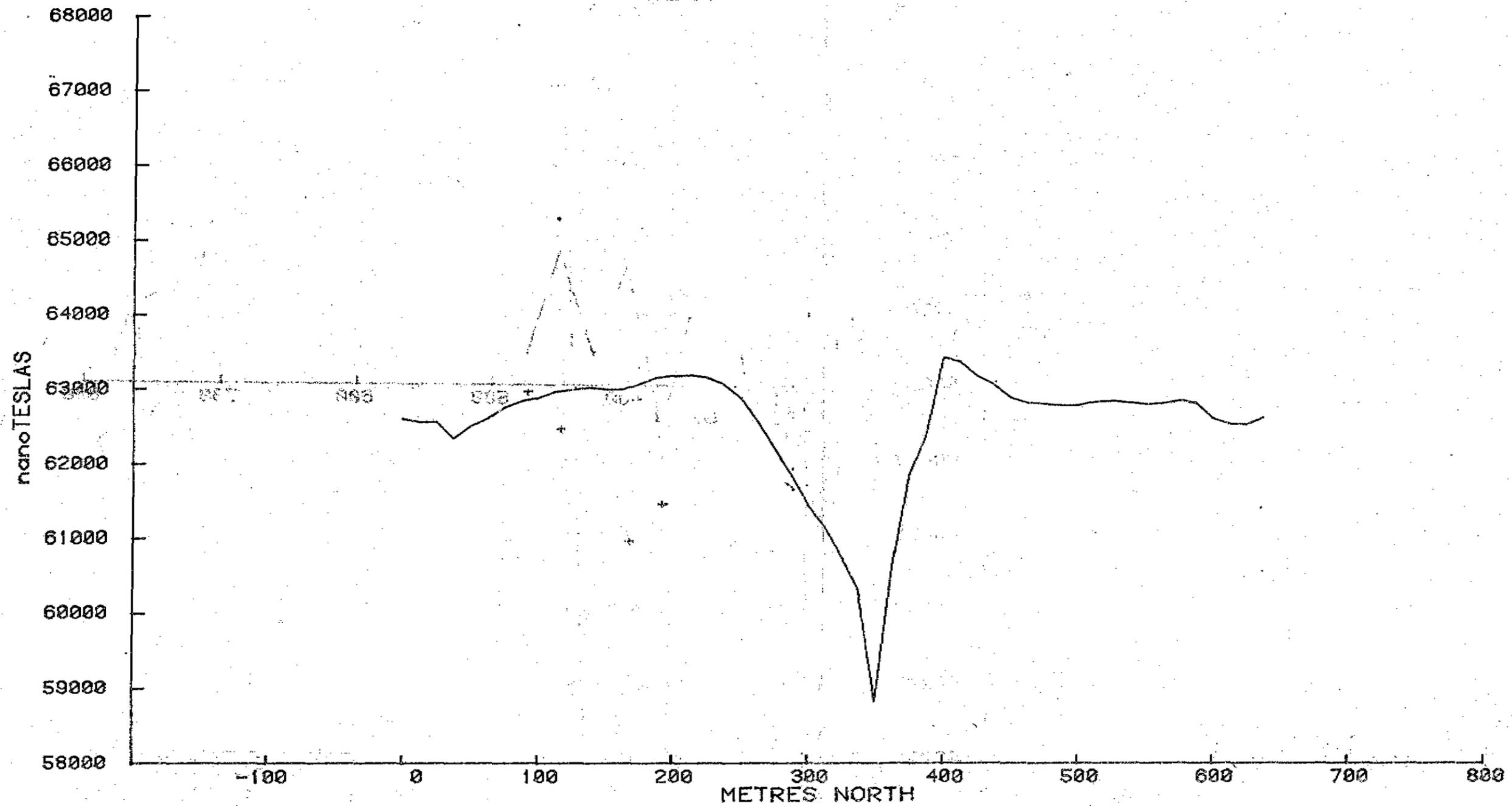
5 cm

PHOENIX V.L.F. - 2 METER

238082

|                              |            |                    |       |
|------------------------------|------------|--------------------|-------|
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| SHEPHERD E.L. 7/73           |            | V.L.F. - E.M. 7/73 |       |
|                              |            | 4638               |       |
| 7A, 8A, 8B EAST LINE         |            |                    |       |
| REF                          | SK55 - 3   |                    |       |
| SCALE                        | AS SHOWN   | DRAWN              | M.F.  |
| AUTHOR                       | M.F.       | REPORT N°          | 13000 |
| DATE                         | SEPT. 1982 | TASK N°            | 1051  |

85-2327



238083

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73  
GROUND MAGNETICS  
7A, 8A, 8B, EAST LINE

|            |            |
|------------|------------|
| REF        | SK55 - 3   |
| SCALE      | AS SHOWN   |
| AUTHOR     | M. F.      |
| DATE       | SEPT. 1982 |
| DRAWN      | M. F.      |
| REPORT NO. | 13060      |
| TASK NO.   | 1052       |

G 826 MAGNETOMETER

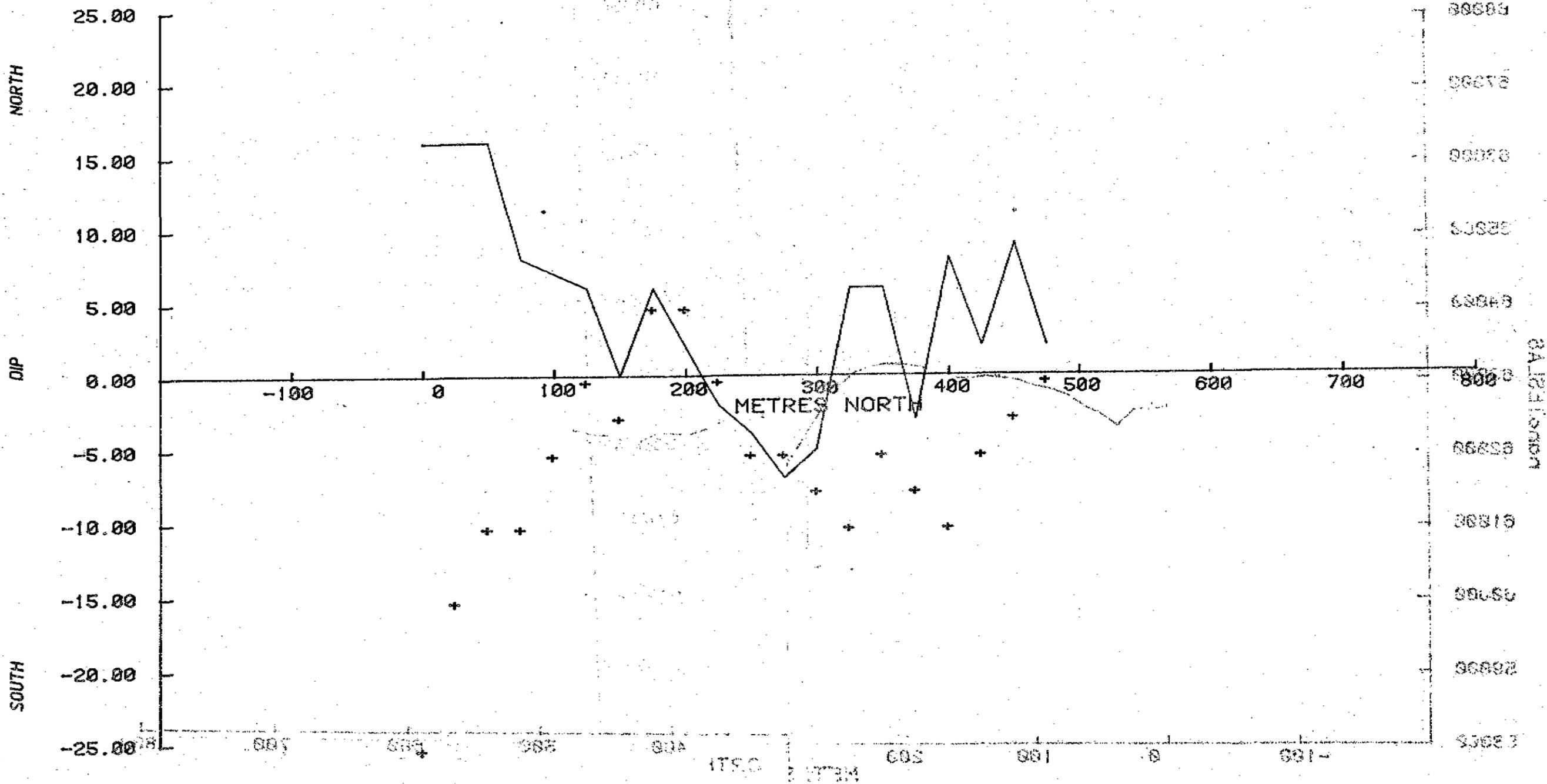
85-2327

076

CRA EXPLORATION PTY. LIMITED  
SHEFFIELD E.L. 7/73  
GROUND MAGNETICS  
7A, 8A, 8B, EAST LINE

5 cm

5 cm



CRA EXPLORATION PTY. (LIMITED)  
 SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 TA, BA, BB, WEST LINE

———— DIP ANGLE ( DEGREES )  
 + + + + + MAXIMUM HORIZONTAL FIELD STRENGTH  
 ( 100 % RANGE WITH ARBITRARY GAIN )

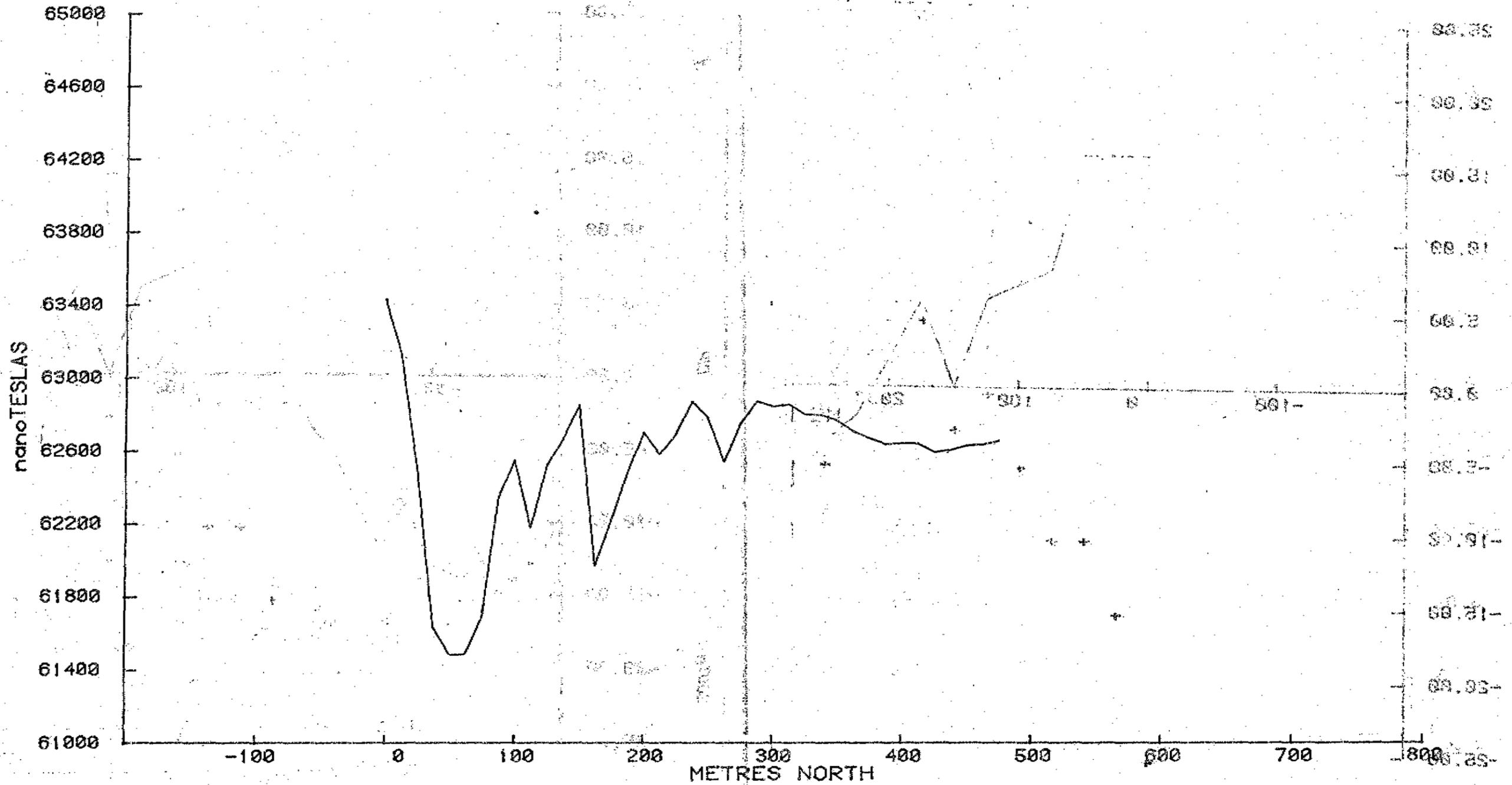
5 cm

PHOENIX V.L.F. - 2 METER

85-2321

238085

|                              |                 |
|------------------------------|-----------------|
| CRA EXPLORATION PTY. LIMITED |                 |
| SHEFFIELD E.L. 7/73          |                 |
| V.L.F. - E.M.                |                 |
| 7A, 8A, 8B, WEST LINE        |                 |
| REF. SK55 - 3                |                 |
| SCALE AS SHOWN               | DRAWN M. F.     |
| AUTHOR. M. F.                | REPORT NO 13060 |
| DATE SEPT. 1982              | TASD NO 1053    |



238084

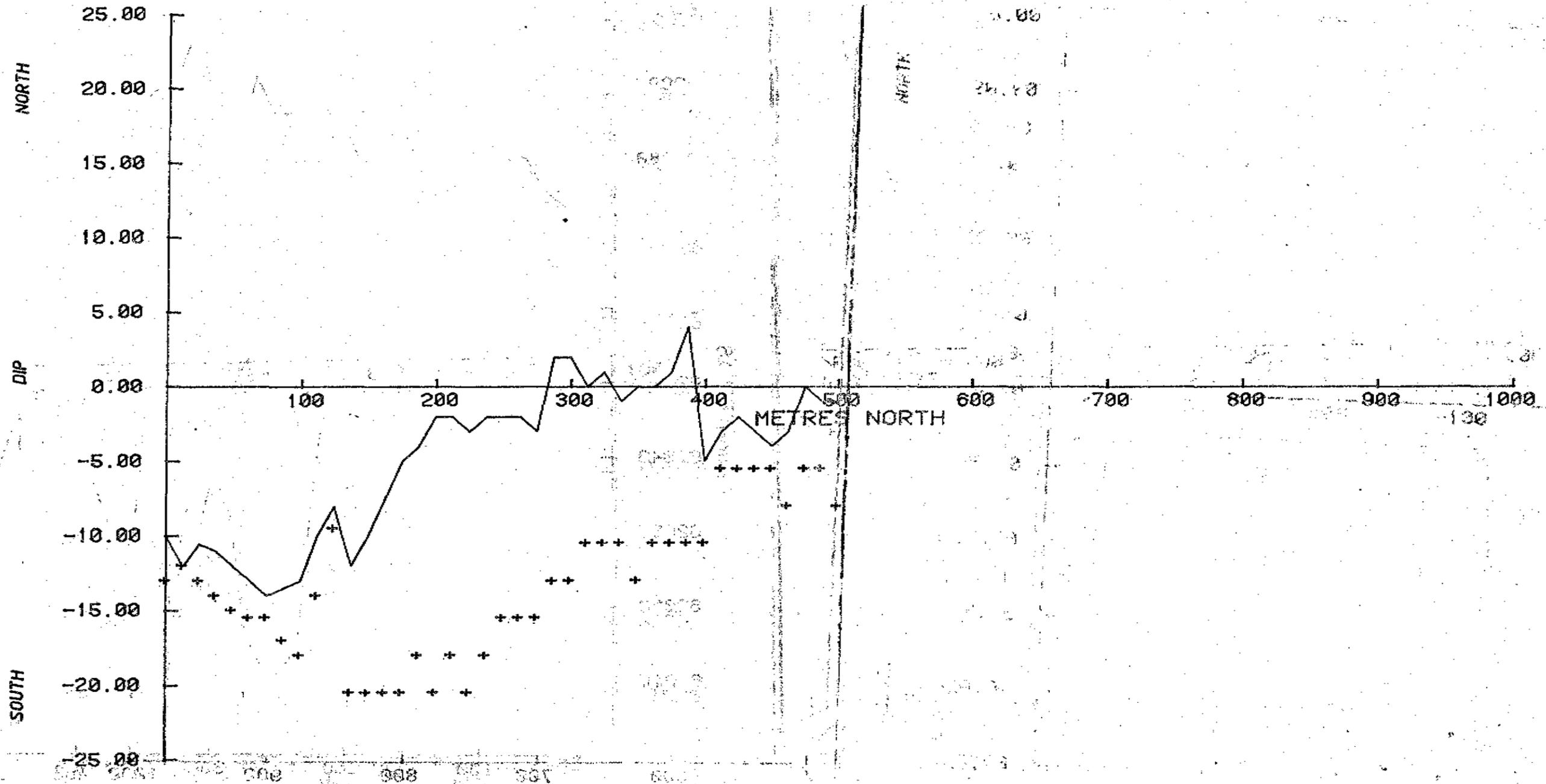
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|------------------------------|----------|-------------------|
| CRA EXPLORATION PTY. LIMITED |          |                   |
| SHEFFIELD E.L. 7/73          |          |                   |
| GROUND MAGNETICS             |          |                   |
| 7A, 8A, 8B WEST LINE         |          |                   |
| SCALE                        | AS SHOWN | DRAWN M.F.        |
| REPORT N° 13060              |          | DATE 7 SEPT. 1982 |
| TASH N° 1054                 |          |                   |

5 cm

VERTICAL FIELD STRENGTH

86-2327

078



CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.E. 7/73  
 V.L.F. - E.M.  
 26xN LINE A

DIP ANGLE ( DEGREES )

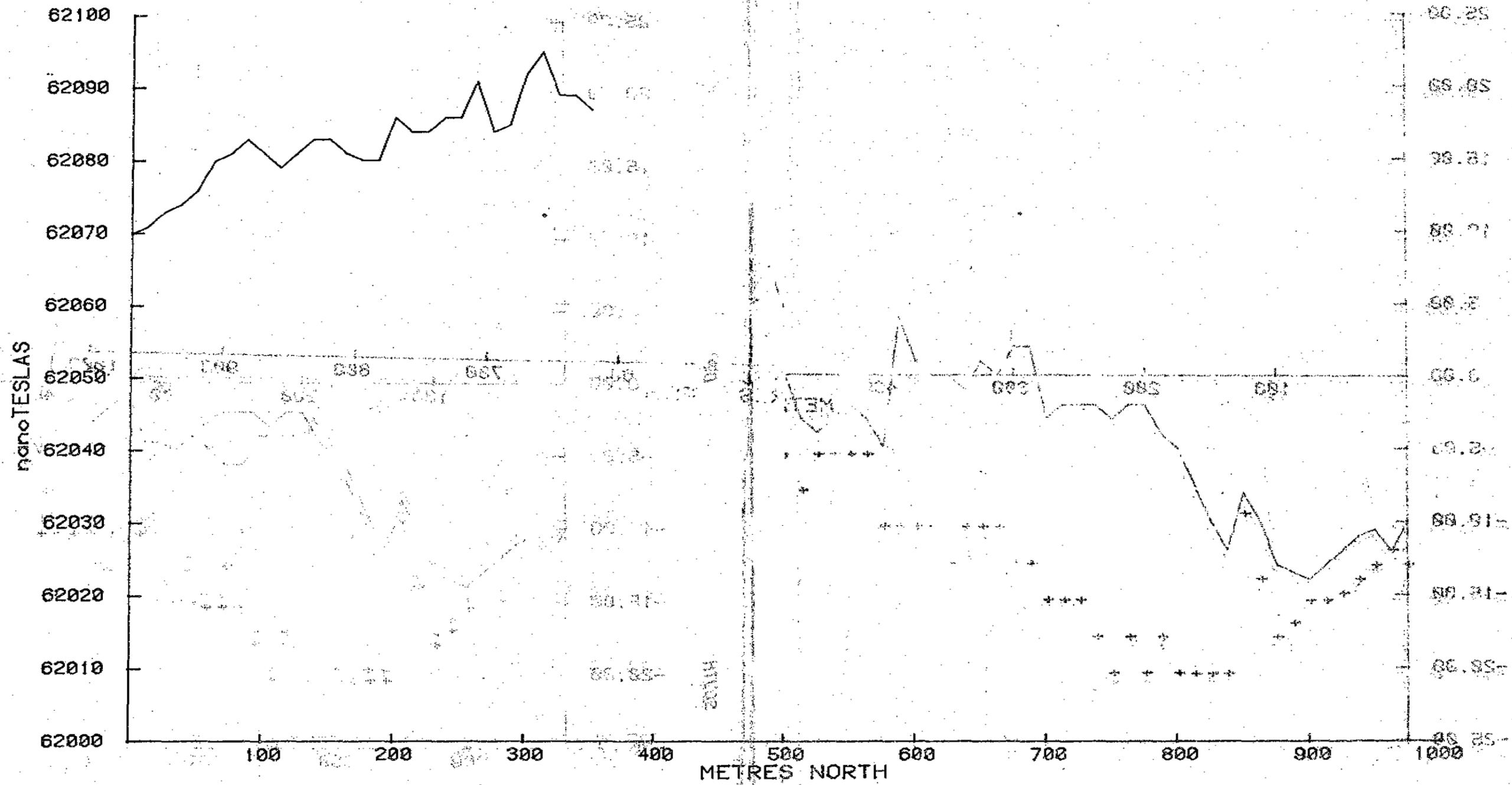
MAXIMUM HORIZONTAL FIELD STRENGTH  
 ( 100% RANGE WITH ARBITRARY GAIN )

238086

|                                                                      |                            |
|----------------------------------------------------------------------|----------------------------|
| CRA EXPLORATION PTY. LIMITED                                         |                            |
| SHEFFIELD E.E. 7/73                                                  |                            |
| V.L.F. - E.M.                                                        |                            |
| 26xN LINE A                                                          |                            |
| DEGREES                                                              | AS SHOWN                   |
| REP                                                                  | SKSS - 3                   |
| MAXIMUM HORIZONTAL FIELD STRENGTH ( 100% RANGE WITH ARBITRARY GAIN ) | PHOENIX - V.L.F. - 2 METER |
| AUTHOR                                                               | M.F.                       |
| DATE                                                                 | SEPT. 1982                 |
| DRAWN                                                                | M.F.                       |
| REPORT NO                                                            | 13060                      |
| TASK NO                                                              | 1047                       |

5 cm

85-23273 100% RANGE WITH ARBITRARY GAIN



UNIVERSITY OF TORONTO

STATIONER  
 43  
 8 3001 1000

SHEFFIELD EL. 7/73  
 GROUND MAGNETICS  
 24XN LINE A

238087

CRA EXPLORATION PTY. LIMITED

SHEFFIELD EL. 7/73  
 GROUND MAGNETICS  
 24XN LINE A

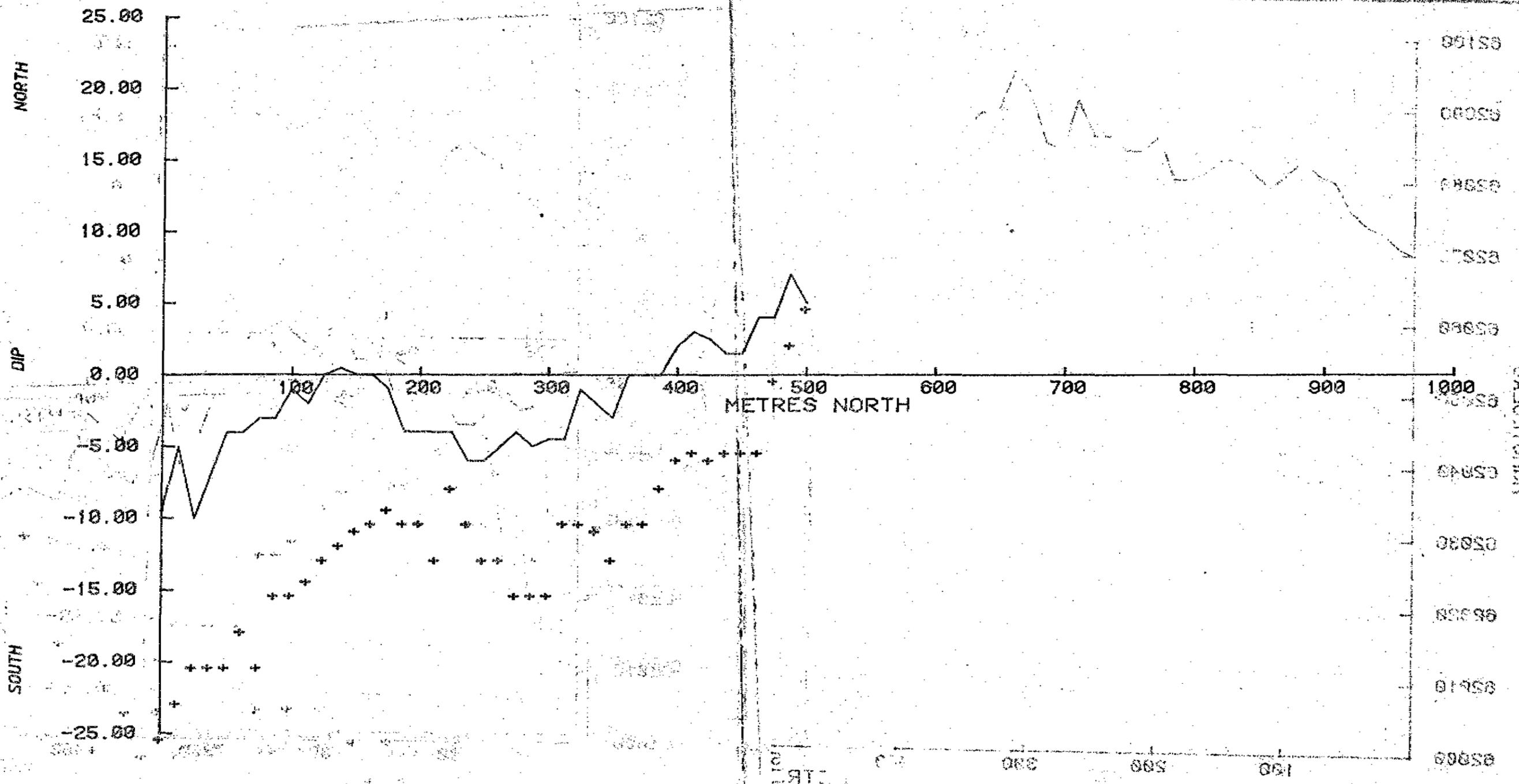
5 cm

AS SHOWN  
 (WAS YRATISRA NTIW 3017  
 G 826 MAGNETOMETER

|      |            |            |       |
|------|------------|------------|-------|
| REF  | SK55-3     | DRAWN      | M. F. |
| DATE | SEPT. 1982 | REPORT NO. | 13060 |
|      |            | TASK NO.   | 1048  |

85-2327

080



CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.L. 7/73  
 V.L.F. - E.M.  
 SHEFFIELD E.L. 7/73  
 7/1, 0A, 0B EASTON LINE

238088

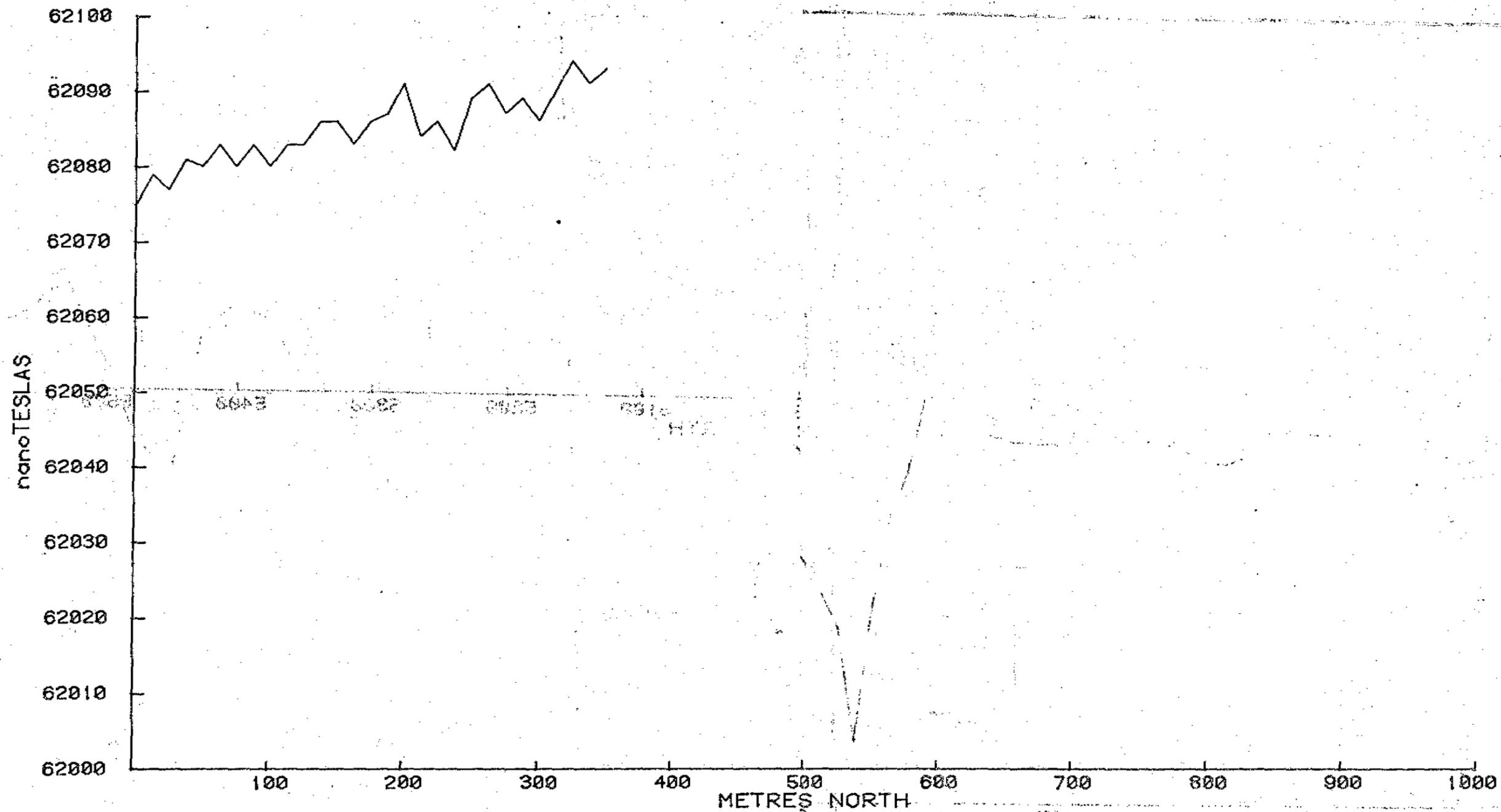
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|------------------------------|------------|-----------|-------|
| CRA EXPLORATION PTY. LIMITED |            |           |       |
| SHEFFIELD E.L. 7/73          |            |           |       |
| V.L.F. - E.M.                |            |           |       |
| 24xN LINE B                  |            |           |       |
| REF                          | SK55 - 3   |           |       |
| SCALE                        | AS SHOWN   | DRAWN     | M.F.  |
| AUTHOR                       | M.F.       | REPORT N° | 13060 |
| DATE                         | SEPT. 1982 | TASK N°   | 1049  |

DIP ANGLE (DEGREES)  
 MAXIMUM HORIZONTAL FIELD STRENGTH  
 (100% RANGE WITH ARBITRARY GAIN)

5 cm

PHOENIX V.L.F. - 2 METER

85-2327



238089

CRONIN LTD  
 SHEFFIELD  
 13-013-3342  
 V.P.  
 1982

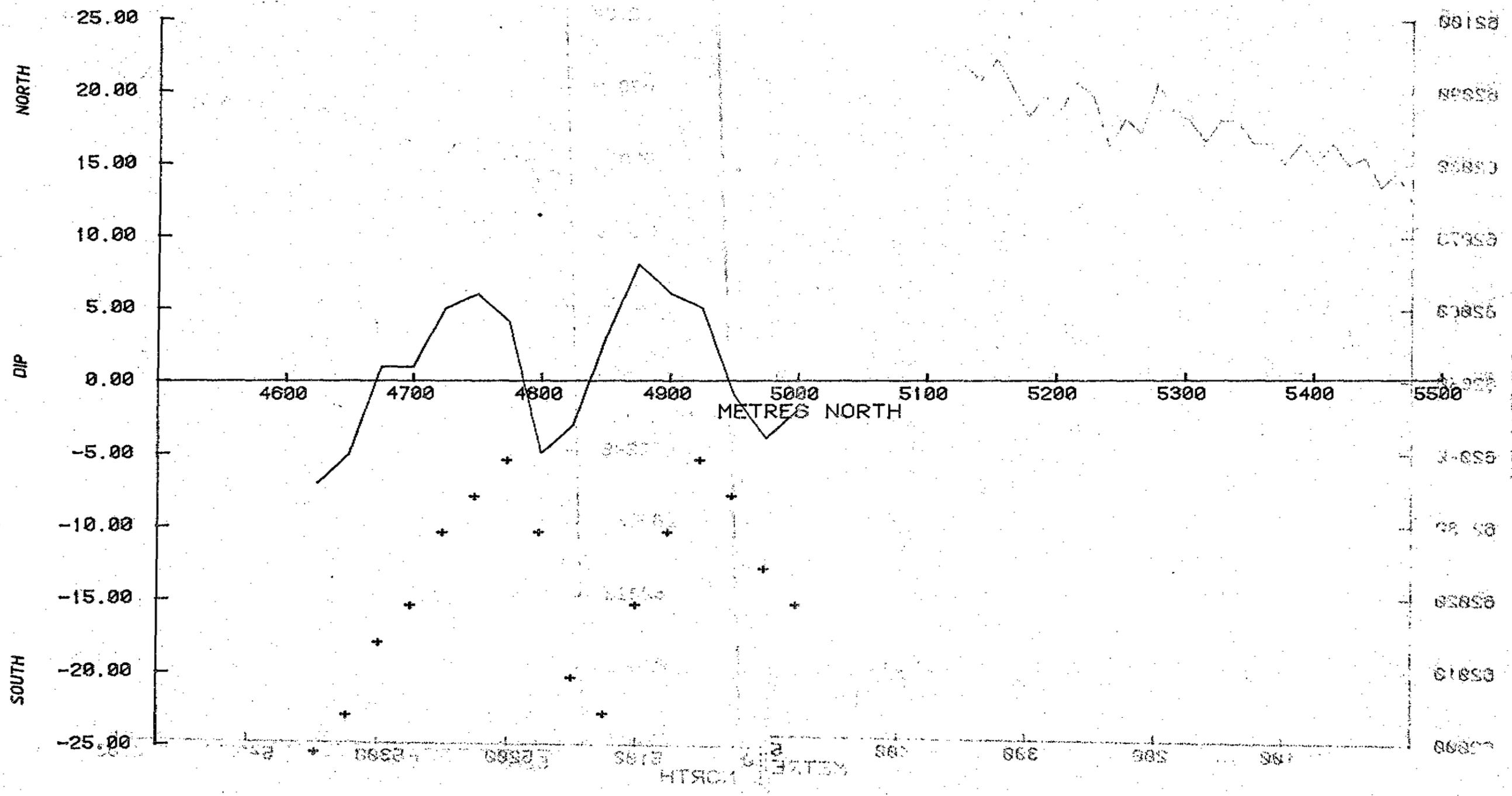
|                              |           |
|------------------------------|-----------|
| CRA EXPLORATION PTY. LIMITED |           |
| SHEFFIELD - E.L. 7/73        |           |
| GROUND MAGNETICS             |           |
| SHEFFIELD - E.L. 7/73        |           |
| GROUND MAGNETICS             |           |
| REF.                         | SK55 - 3  |
| SCALE                        | AS SHOWN  |
| AUTHOR                       | M.F.      |
| DATE                         | SEPT 1982 |
| DRAWN                        | M.F.      |
| REPORT NO.                   | 13060     |
| PLANT NO.                    | 1050      |

5 cm

G 826 MAGNETOMETER

85-2327

082

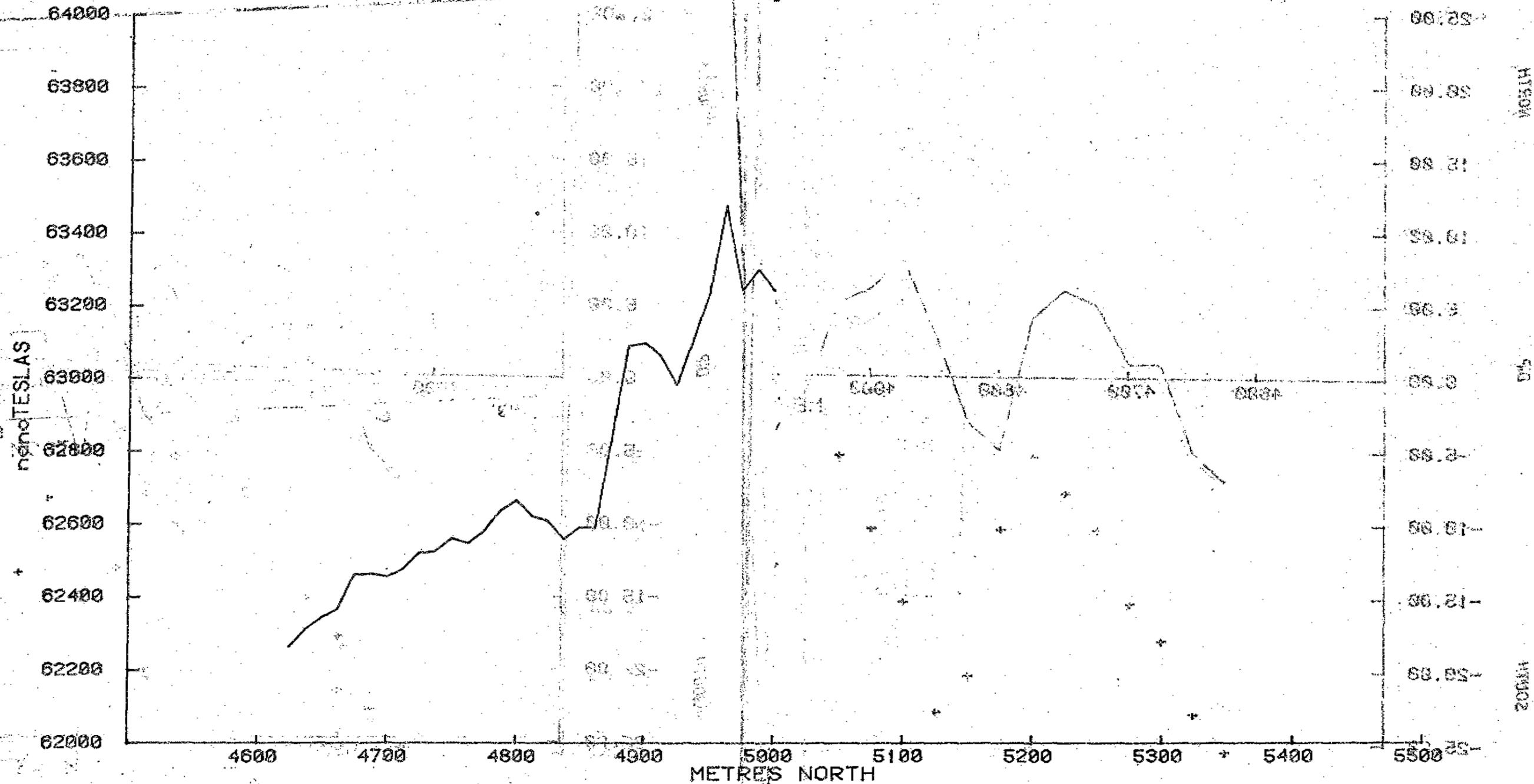


238090

|                              |            |           |       |
|------------------------------|------------|-----------|-------|
| CRA EXPLORATION PTY. LIMITED |            |           |       |
| SHEFFIELD E.L. 7/73          |            |           |       |
| V.L.F. - E.M.                |            |           |       |
| 26x0 EAST LINE               |            |           |       |
| REF                          | SK55 - 3   | DRAWN     | M. F. |
| SCALE                        | AS SHOWN   | REPORT N° | 13060 |
| AUTHOR                       | M. F.      | TASH N°   | 1043  |
| DATE                         | SEPT. 1982 |           |       |

85-2327

083

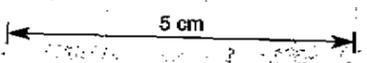


CRA EXPLORATION LIMITED  
 SHEFFIELD E.L. 7/73  
 VI.F. 2 EM  
 TA, DA, GC, WEST L/W

DATE: SEPT. 1982

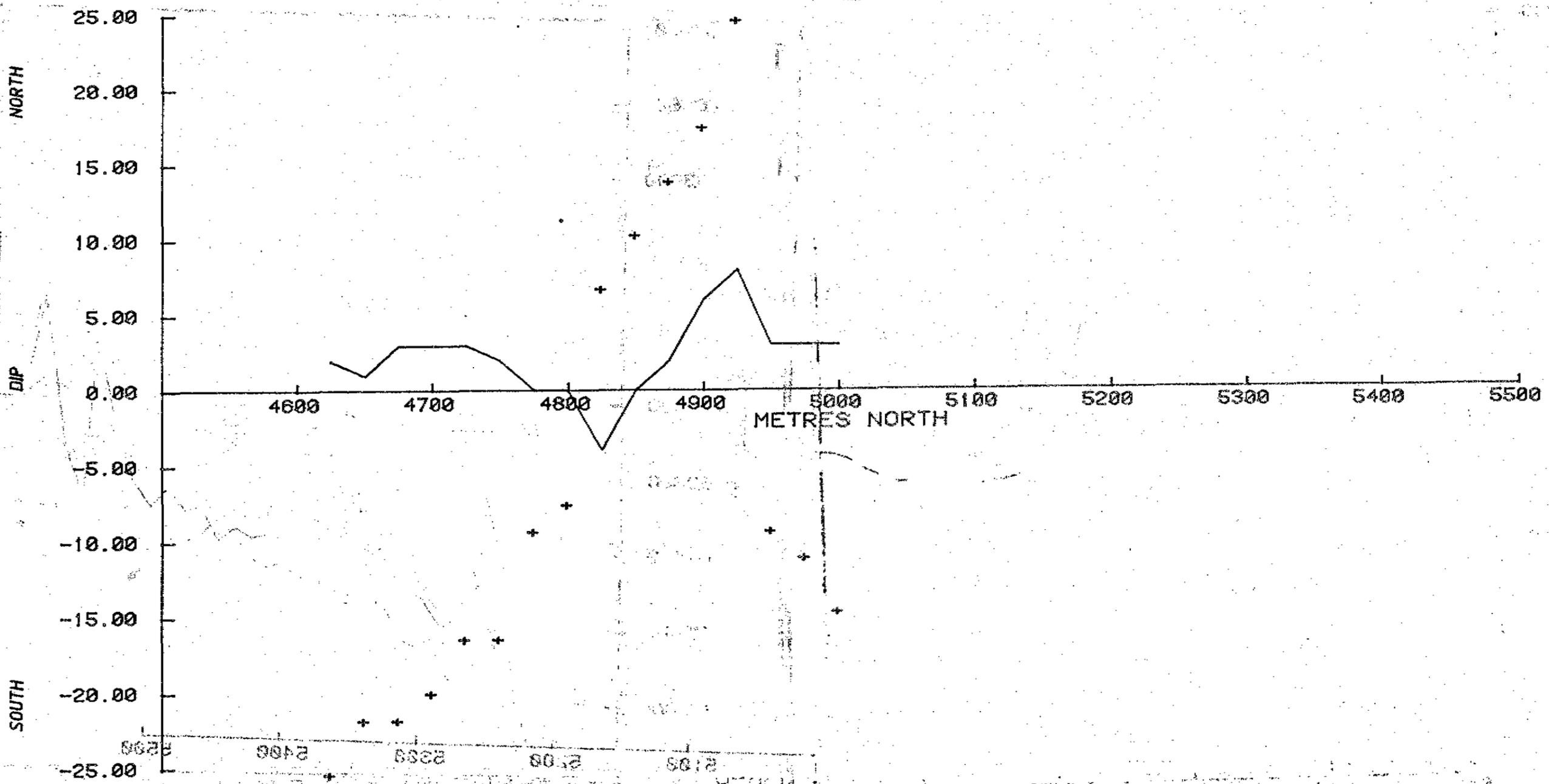
238091

|                                                           |            |
|-----------------------------------------------------------|------------|
| CRA EXPLORATION PTY. LIMITED                              |            |
| SHEFFIELD E.L. 7/73<br>GROUND MAGNETICS<br>26x0 EAST LINE |            |
| REF.                                                      | SK55 - 3   |
| SCALE                                                     | AS SHOWN   |
| AUTHOR                                                    | M. F.      |
| DATE                                                      | SEPT. 1982 |
| DRAWN                                                     | M. F.      |
| REPORT NO.                                                | 13060      |
| TASK NO.                                                  | 1044       |



HORIZONTAL FIELD STRENGTH  
 (MAG. YRABTIRRA HTOW 30MAR)  
 G 826 MAGNETOMETER

85-2327

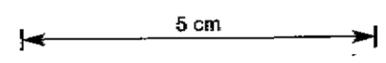


238092

CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 28RD WEST LINE

CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 28RD WEST LINE

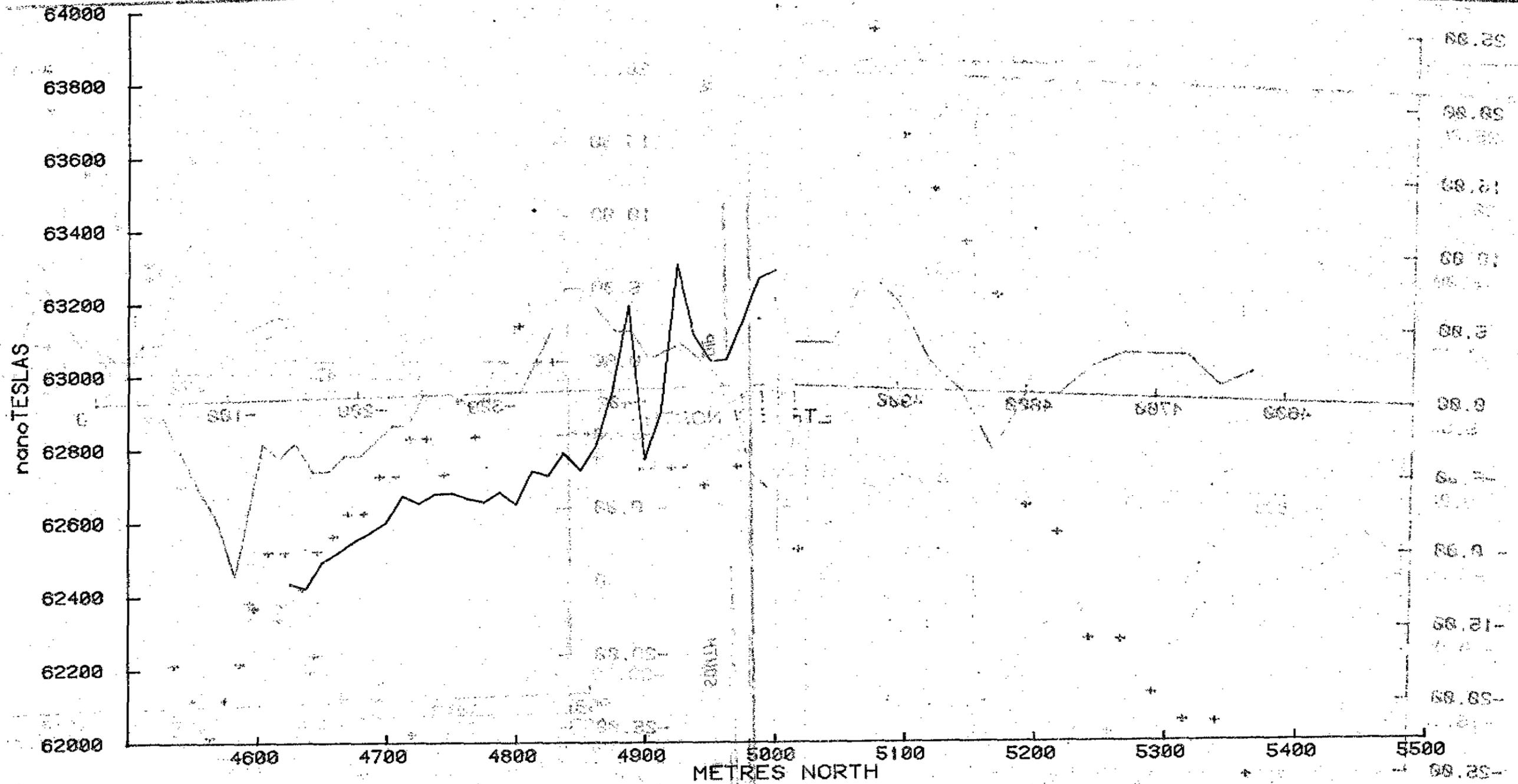
DIP ANGLE ( DEGREES )  
 MAXIMUM HORIZONTAL FIELD STRENGTH  
 ( 100 % RANGE WITH ARBITRARY GAIN )



PHOENIX V.L.F. 2 METER  
 85-2327

|        |            |            |       |
|--------|------------|------------|-------|
| SCALE  | AS SHOWN   | DRAWN      | M.E.  |
| AUTHOR | S. MERRILL | REPORT NO. | 13060 |
| DATE   | SEPT. 1982 |            |       |

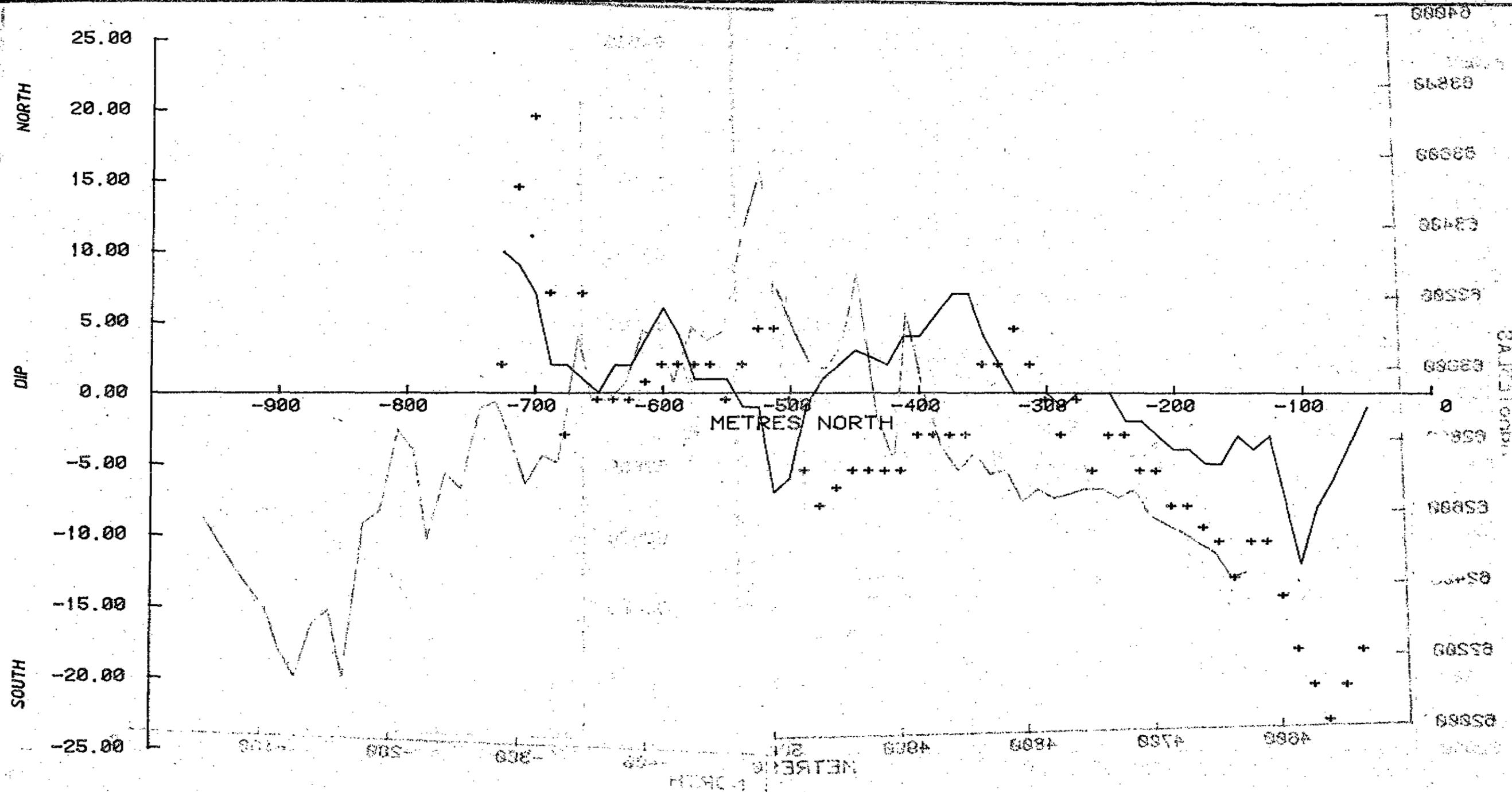
085



SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 26xD WEST LINE  
 85-2327

238093

|                                                           |            |            |       |
|-----------------------------------------------------------|------------|------------|-------|
| CRA EXPLORATION PTY. LIMITED                              |            |            |       |
| SHEFFIELD E.L. 7/73<br>GROUND MAGNETICS<br>26xD WEST LINE |            |            |       |
| REF.                                                      | SK55 - 3   |            |       |
| SCALE                                                     | AS SHOWN   | DRAWN      | M. F. |
| AUTHOR                                                    | M. F.      | REPORT NO. | 13000 |
| DATE                                                      | SEPT. 1982 | PAGE NO.   | 1046  |



238094

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73  
 V.L.F. - E.M.  
 27x) LINE A

|            |            |
|------------|------------|
| REF.       | SK55 - 3   |
| SCALE      | AS SHOWN   |
| AUTHOR     | M.F.       |
| DATE       | SEPT. 1982 |
| DRAWN      | M.F.       |
| REPORT NO. | 13069      |
| TASK NO.   | 1039       |

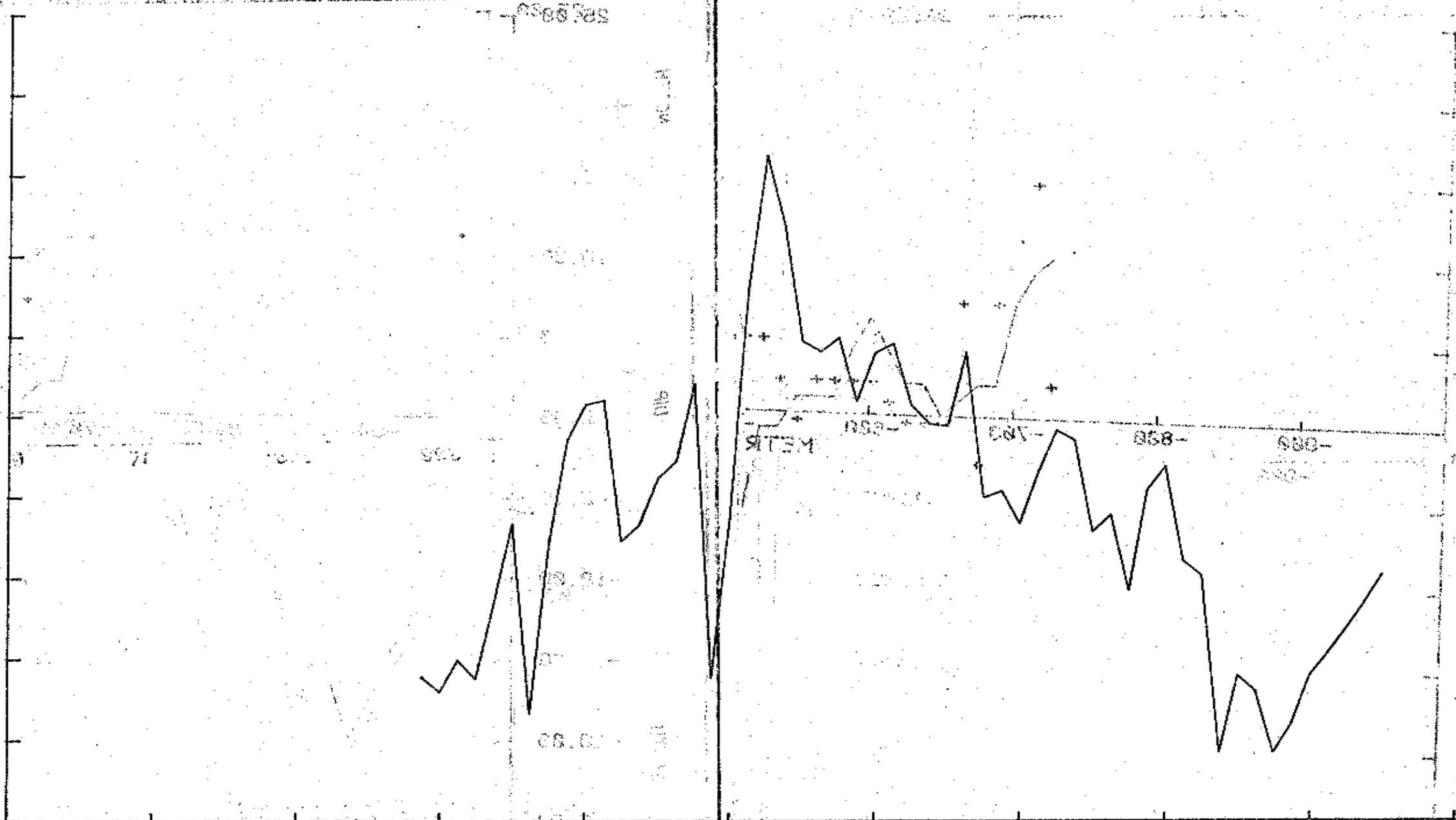
DIP ANGLE ( DEGREES )  
 MAXIMUM HORIZONTAL FIELD STRENGTH  
 ( 100 % RANGE WITH ARBITRARY GAIN )

PHOENIX V.L.F. - 2 METER

85-2327

nanoteslas

62800  
62700  
62600  
62500  
62400  
62300  
62200  
62100  
62000  
61900  
61800



60.25  
60.05  
60.97  
60.61  
60.8  
60.6  
60.2  
60.01  
60.21  
60.05  
60.25

NORTH  
DIP  
NORTH

METRES NORTH

238095

|                              |          |            |       |
|------------------------------|----------|------------|-------|
| CRA EXPLORATION PTY. LIMITED |          |            |       |
| SHEFFIELD E.L. 7/73          |          |            |       |
| V.L.F. - E.M.                |          |            |       |
| 24-H LINE                    |          |            |       |
| REF.                         | SK55-3   |            |       |
| SCALE                        | AS SHOWN | DRAWN      | M.F.  |
| AUTHOR                       | C.L.     | REPORT NO. | 13050 |
|                              |          |            | 1947  |

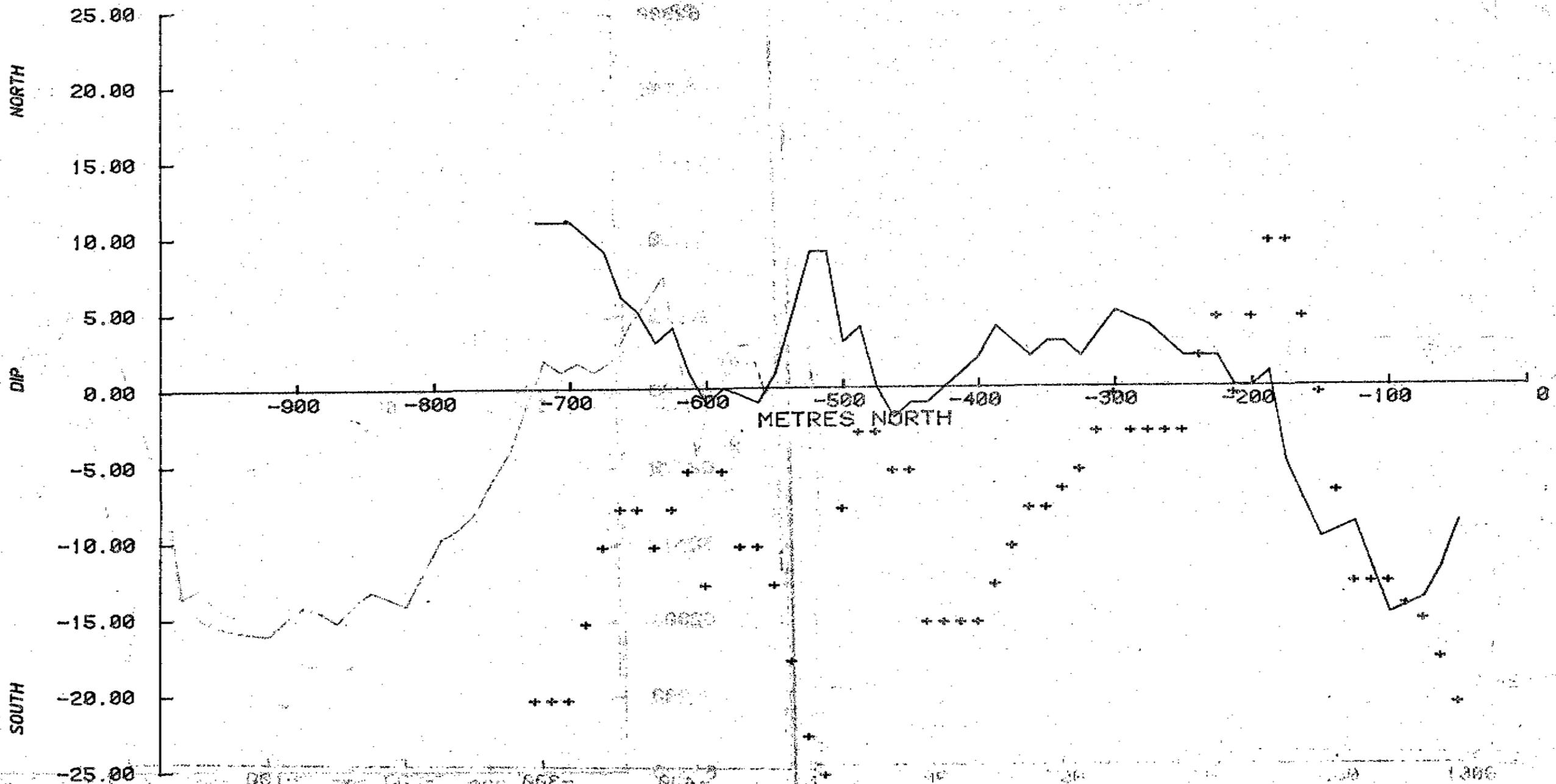
|                              |            |          |                  |
|------------------------------|------------|----------|------------------|
| CRA EXPLORATION PTY. LIMITED |            |          |                  |
| SHEFFIELD E.L. 7/73          |            |          |                  |
| GROUND MAGNETICS             |            |          |                  |
| 27XJ LINE A                  |            |          |                  |
| SCALE                        | AS SHOWN   | DRAWN    | M.F.             |
|                              |            |          | REPORT NO. 13050 |
| DATE                         | SEPT. 1982 | TASK NO. | 1040             |

5 cm

HORIZONTAL FIELD STRENGTH  
RANGE WITH ARBITRARY GAIN  
G 826 MAGNETOMETER

88-2327

088



238096

|                              |                  |
|------------------------------|------------------|
| CRA EXPLORATION PTY. LIMITED |                  |
| SHEFFIELD E.L. 7/73          |                  |
| PHOENIX V.L.A. EM            |                  |
| LINE B                       |                  |
| REF. SK55 - 3                |                  |
| SCALE: AS SHOWN              | DRAWN: M. F.     |
| AUTHOR: M. F.                | REPORT NO. 13060 |
| DATE: SEPT 1992              | TASK NO. 1047    |

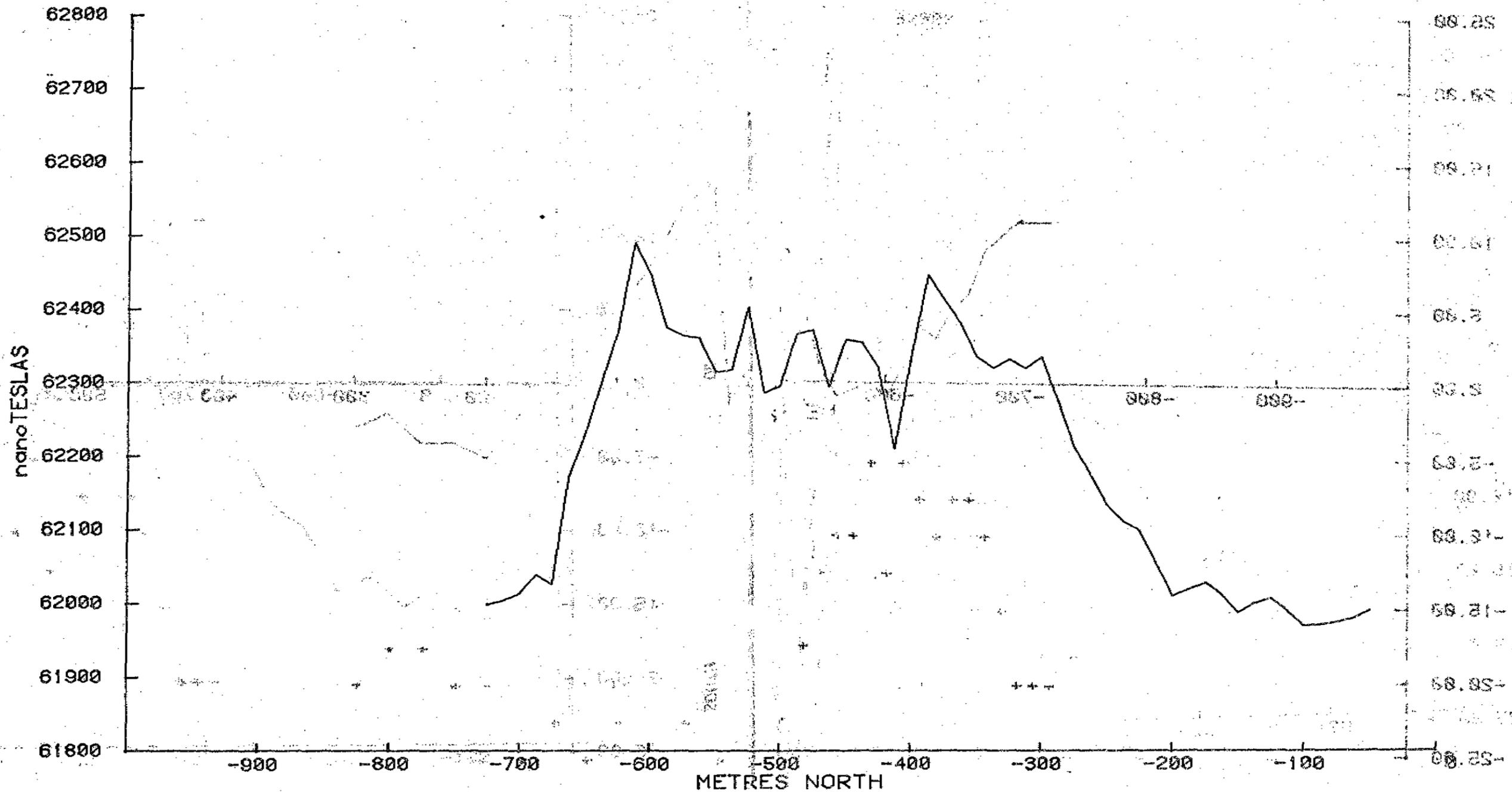
DIP ANGLE ( DEGREES )

+ + + + + MAXIMUM HORIZONTAL FIELD STRENGTH  
( 100 % RANGE WITH ARBITRARY GAIN )

5 cm

PHOENIX V.L.A. 2 METER

85-2327



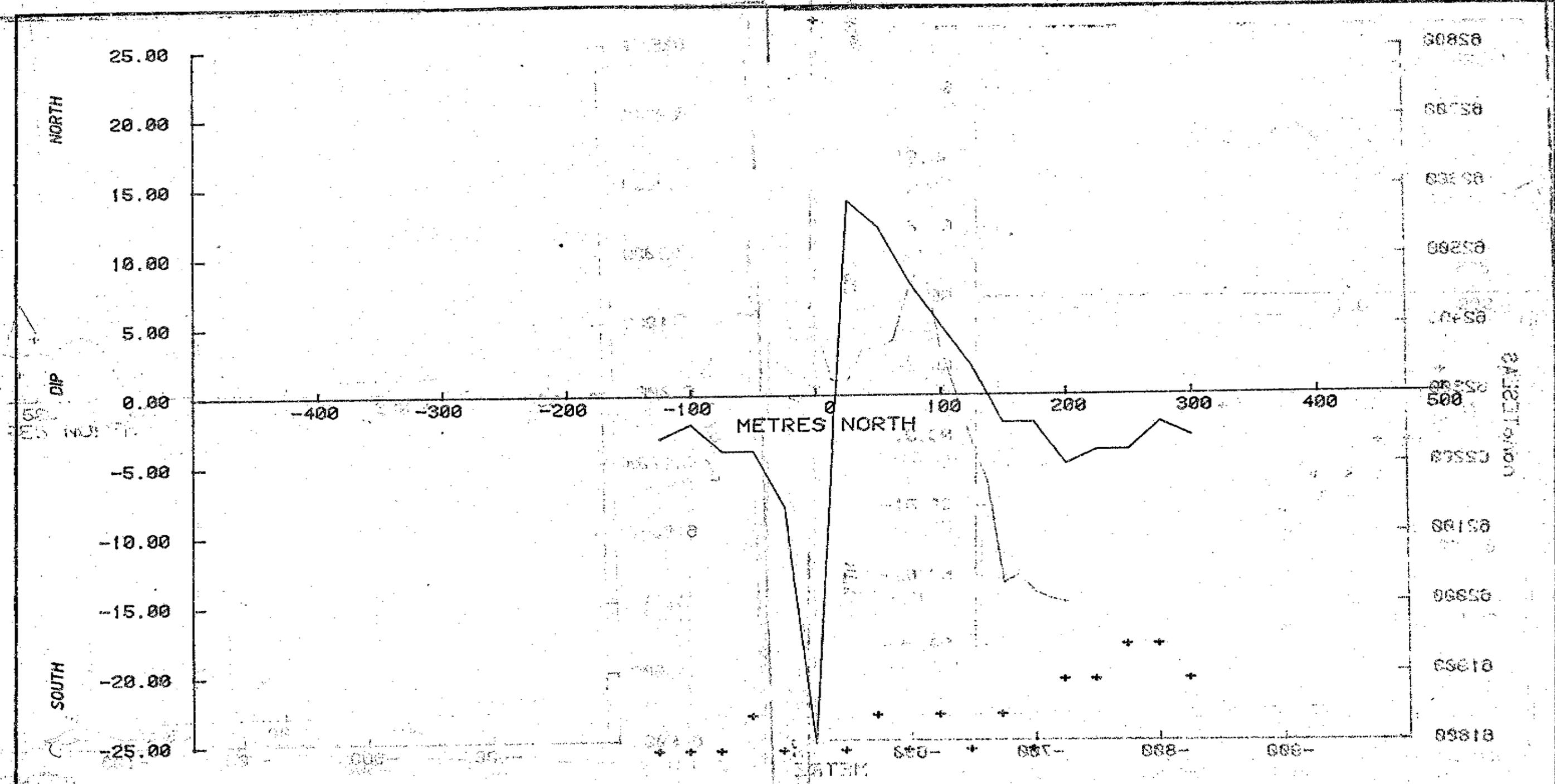
238097

|                              |            |            |       |
|------------------------------|------------|------------|-------|
| CRA EXPLORATION PTY. LIMITED |            |            |       |
| SHEFFIELD E.L. 7/73          |            |            |       |
| GROUND MAGNETICS             |            |            |       |
| 27xJ LINE B                  |            |            |       |
| REF.                         | SK55 - 3   | DRAWN      | H. F. |
| SCALE                        | AS SHOWN   | REPORT NO. | 13060 |
| AUTHOR                       | M. F.      | TASK NO.   | 1042  |
| DATE                         | SEPT. 1982 |            |       |

5 cm  
 HORIZONTAL FIELD INTENSITY  
 G 826 MAGNETOMETER

85-2327

050



238098

CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD EL. 7/73  
 V.L.F. - E.M.  
 113A, 115x F LINE 1

REF SK55 - 3  
 GRAVE  
 REPORT N° 13060  
 TASH N° 1049  
 DATE SEPT. 1982

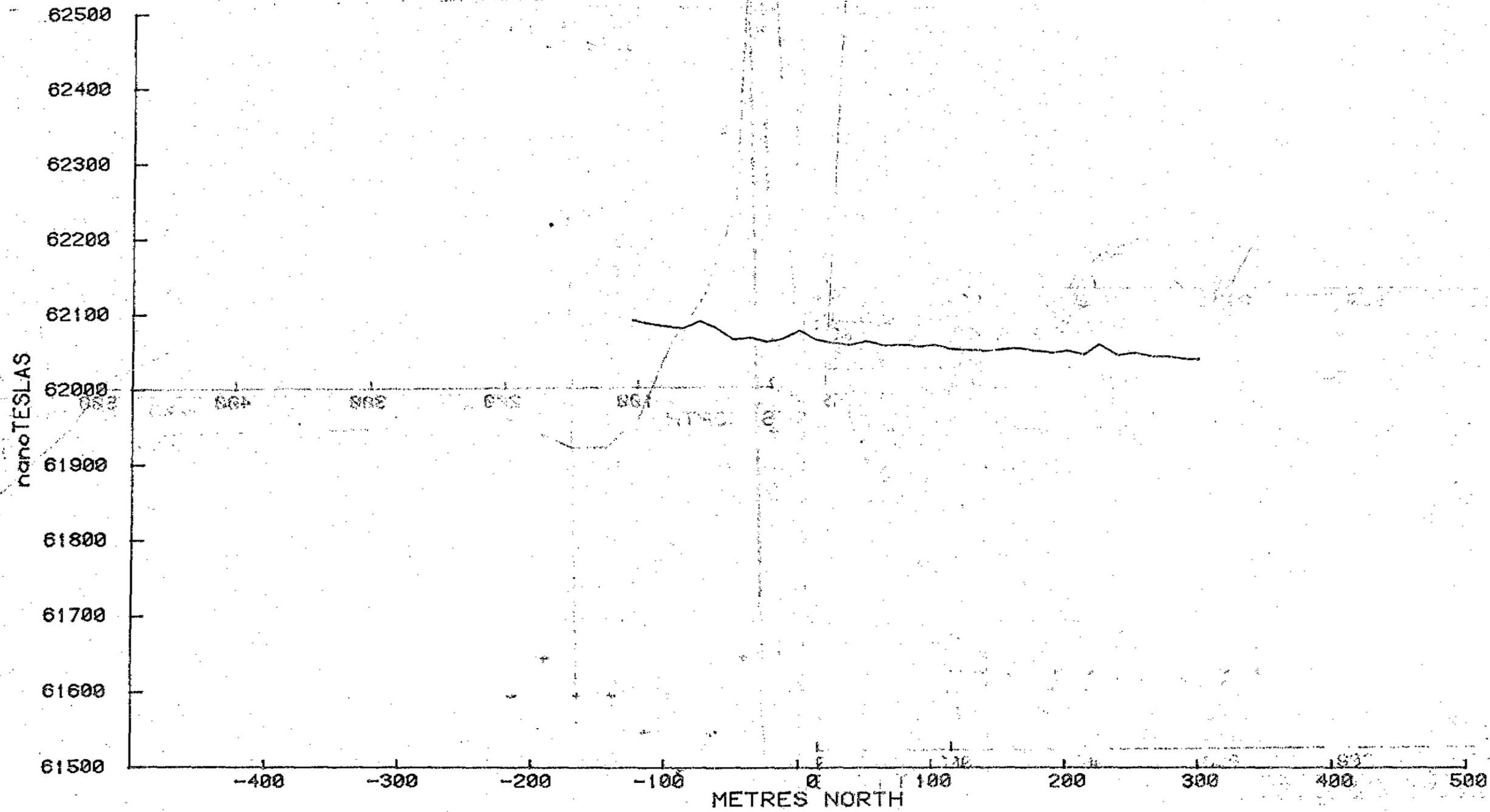
|                                                            |            |
|------------------------------------------------------------|------------|
| CRA EXPLORATION PTY. LIMITED                               |            |
| SHEFFIELD EL. 7/73<br>V.L.F. - E.M.<br>113A, 115x F LINE 1 |            |
| REF                                                        | SK55 - 3   |
| SCALE                                                      | AS SHOWN   |
| AUTHOR                                                     | M. F.      |
| DATE                                                       | SEPT. 1982 |
| DRAWN                                                      | M. F.      |
| REPORT N°                                                  | 13060      |
| TASH N°                                                    | 1055       |

DIP ANGLE (DEGREES)  
 \* \* \* \* \*  
 MAXIMUM HORIZONTAL FIELD STRENGTH  
 (100 % RANGE WITH ARBITRARY GAIN)  
 PHOENIX V.L.F. - 2 METER

5 cm

PHOENIX V.L.F. - 2 METER

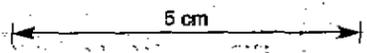
85-2327



238099

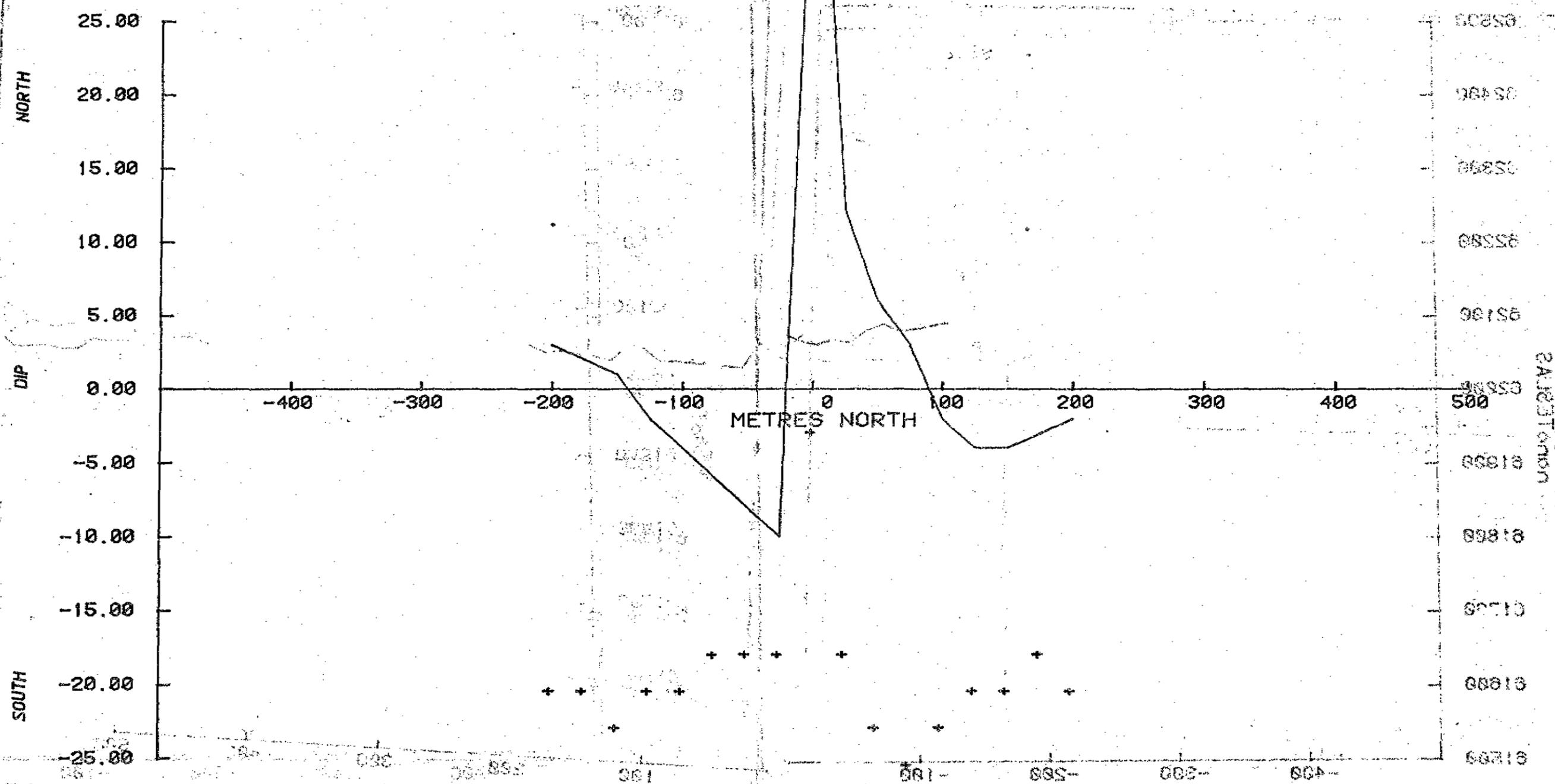
CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.L. 7273.5  
 AIR. EM. - 7/19  
 113A, 115xF, 100mW LINE 1  
 E. 2007  
 M. F. 1982  
 REPORT NO. 13060

|                              |                     |
|------------------------------|---------------------|
| CRA EXPLORATION PTY. LIMITED |                     |
| SHEFFIELD E.L. 7273.5        |                     |
| GROUND MAGNETICS             |                     |
| 113A, 115xF, 100mW LINE 1    |                     |
| REF                          | SK55                |
| REPSCAL                      | SK55R 30M           |
| SCALE: 1:1000 AS SHOWN       | DRAWN BY M. F. 1982 |
| AUTHOR: M. F. 1982           | REPORTS NO. 13060   |
| DATE: SEPT. 1982             | TASK NO. 1056       |



85-2327

092



238100

|                              |            |                 |
|------------------------------|------------|-----------------|
| CRA EXPLORATION PTY. LIMITED |            |                 |
| SHEFFIELD E.L. 7/73          |            |                 |
| V.L.F. - E.M.                |            |                 |
| 113A, 115x F, LINE 2         |            |                 |
| REF                          | SK55 - 3   |                 |
| SCALE                        | AS SHOWN   | DRAWN M. F.     |
| AUTHOR                       | M. F.      | REPORT N° 13060 |
| DATE                         | SEPT. 1982 | PKS# N° 1057    |

5 cm

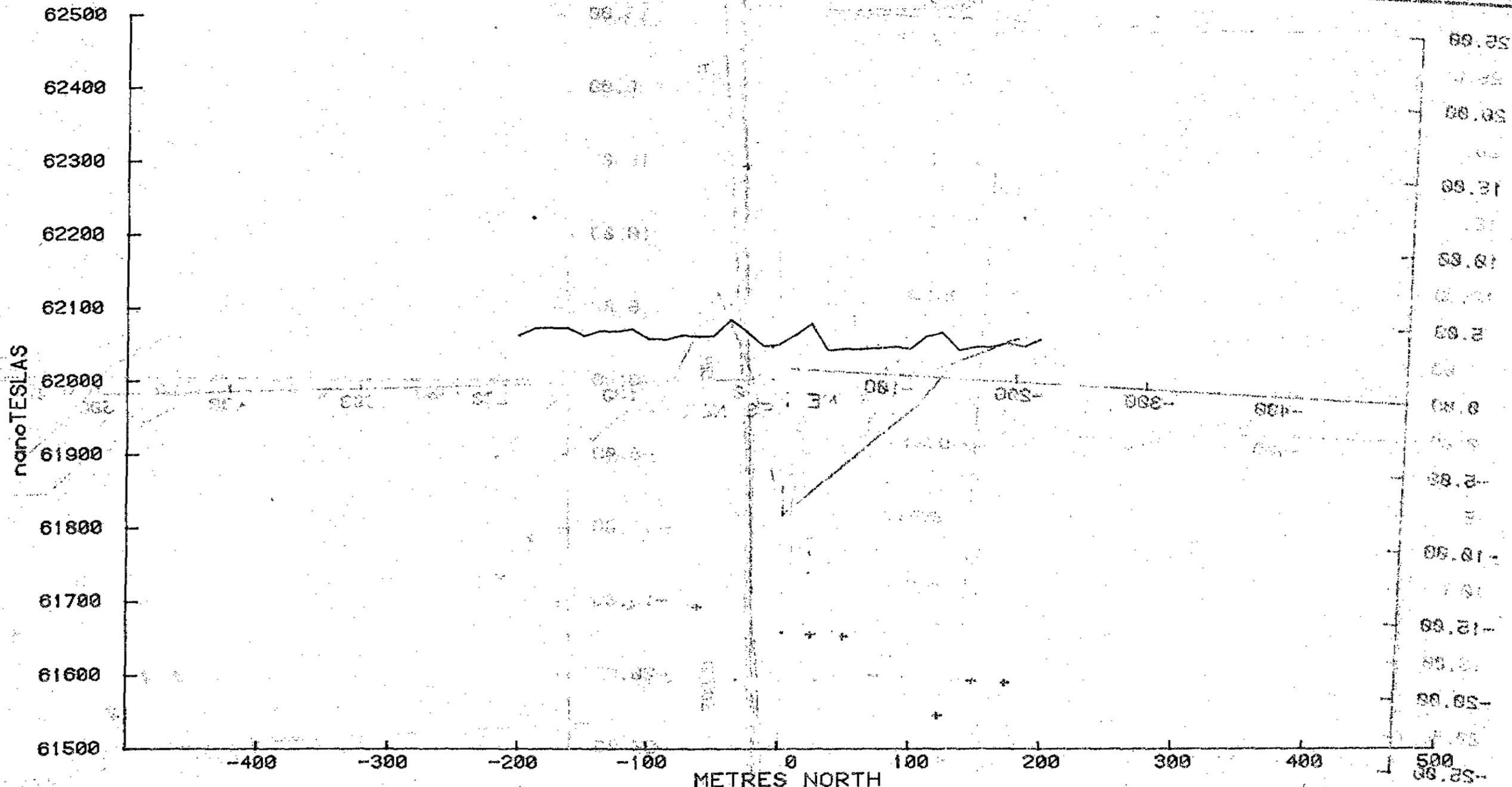
PHOENIX V.L.F. - 2 METER

DIP ANGLE ( DEGREES )

MAXIMUM HORIZONTAL FIELD STRENGTH  
( 100 % RANGE WITH ARBITRARY GAIN )

65-2327

093



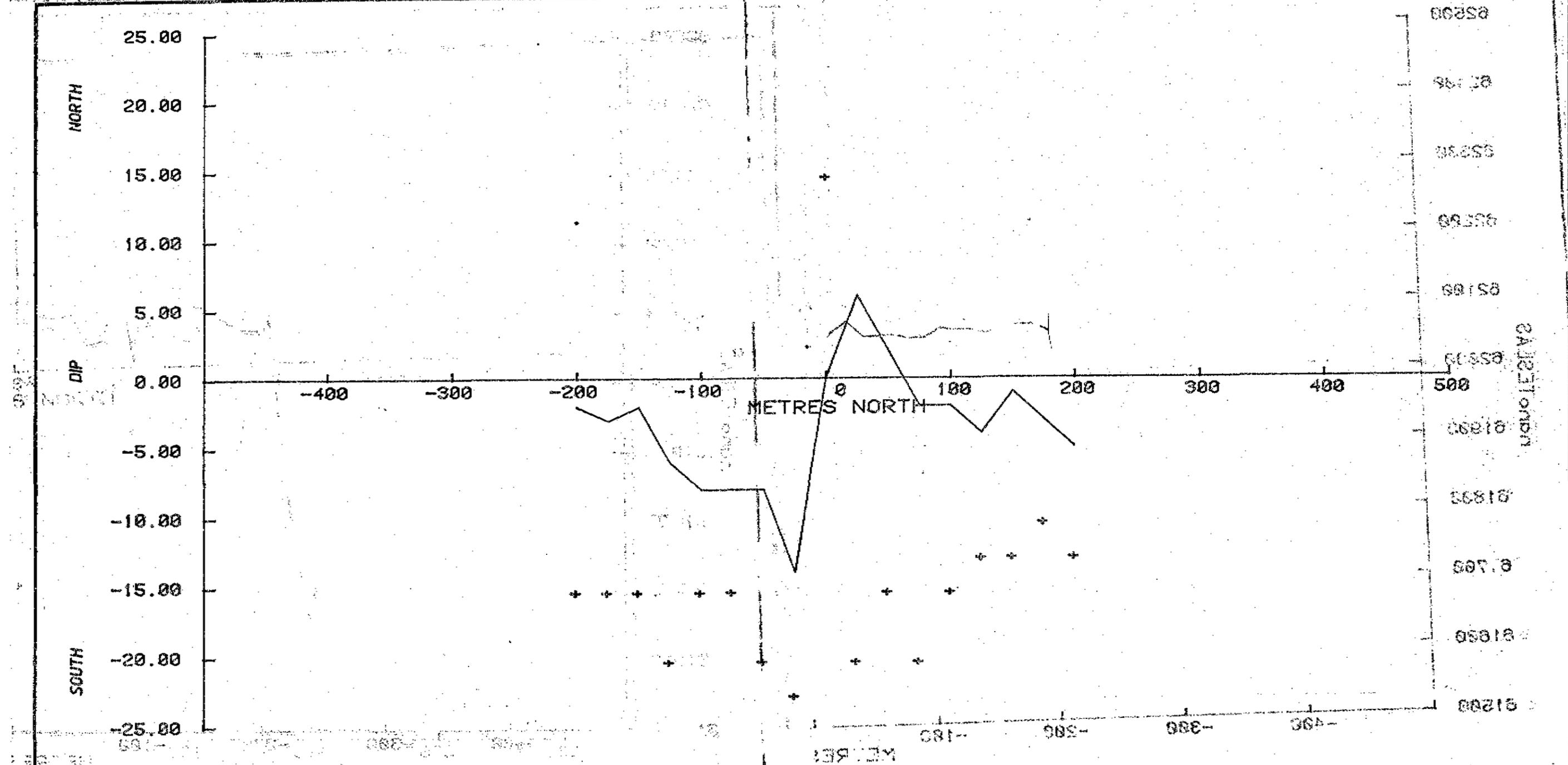
238101

CRA EXPLORATION PTY. LTD.  
 SHEFFIELD E.L. 7/73  
 M.S. 238101  
 LINE 2

|                              |          |           |       |
|------------------------------|----------|-----------|-------|
| CRA EXPLORATION PTY. LIMITED |          |           |       |
| SHEFFIELD E.L. 7/73          |          |           |       |
| GROUND MAGNETICS             |          |           |       |
| 113A, 115xF, LINE 2          |          |           |       |
| DATE                         | SCALE    | DRAWN     | M.F.  |
| SEPT. 1982                   | AS SHOWN | M.F.      |       |
|                              |          | REPORT NO | 10050 |
|                              |          | TASK NO   | 1058  |

5 cm

HORIZONTAL SCALE  
 1 CM = 10 METRES



CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD EL. 7/73  
 V.L.F. - E.M.  
 113A, 115xP, LINE 3

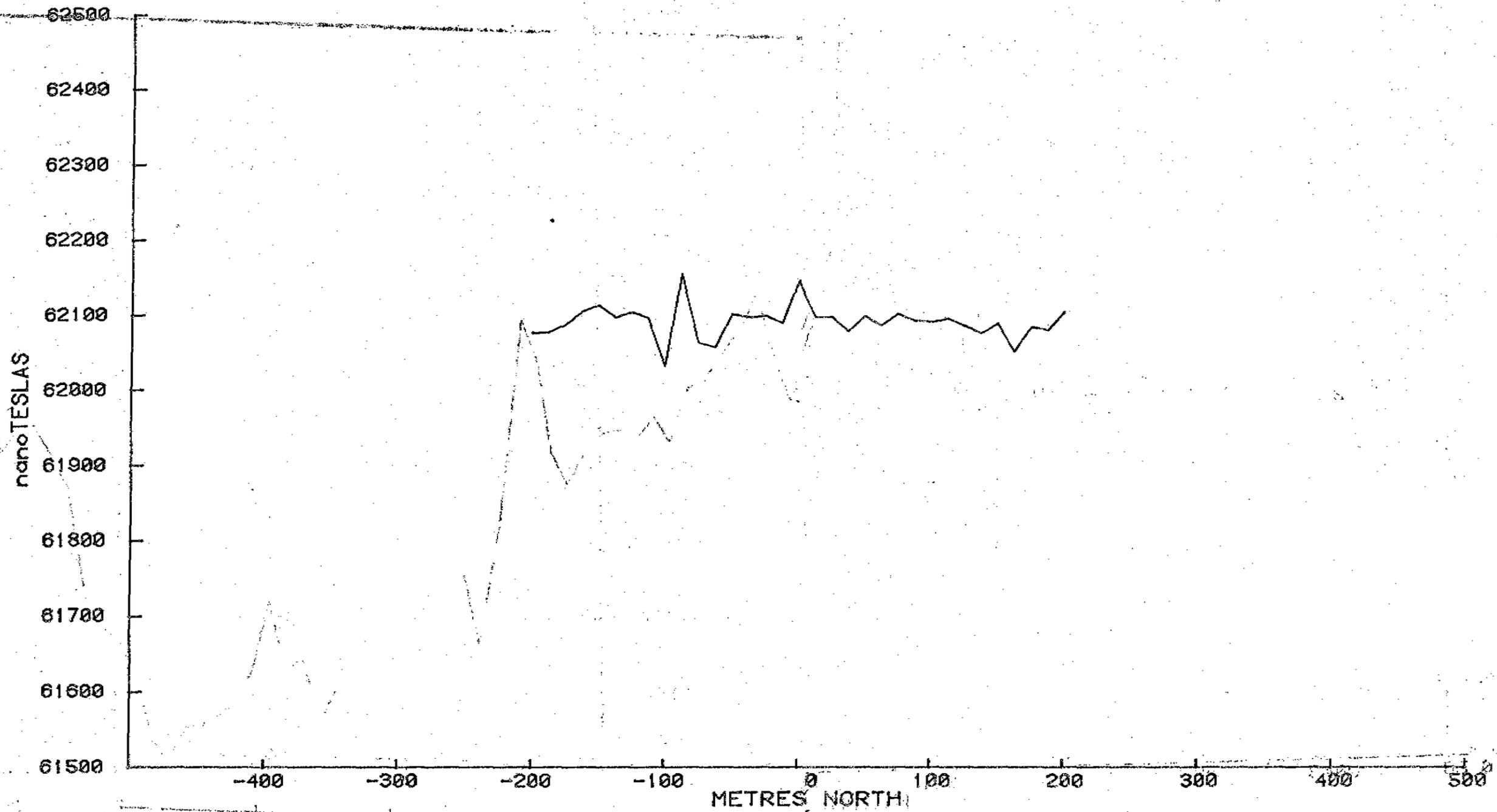
DRAWN M.F.  
 REPORT N° 13060  
 DATE SEPT. 1983

PHOENIX V.L.F. - 2 METER  
 85-2327

238102

|                              |          |           |            |
|------------------------------|----------|-----------|------------|
| CRA EXPLORATION PTY. LIMITED |          |           |            |
| SHEFFIELD EL. 7/73           |          |           |            |
| V.L.F. - E.M.                |          |           |            |
| 113A, 115xP, LINE 3          |          |           |            |
| REF                          | SK55 - 3 | DRAWN     | M.F.       |
| SCALE                        | AS SHOWN | REPORT N° | 13060      |
| AUTHOR                       | M.F.     | DATE      | SEPT. 1983 |
|                              |          | TASK N°   | 1060       |

2A J221 0000



238103

|                                                                 |                   |
|-----------------------------------------------------------------|-------------------|
| CRA EXPLORATION PTY. LIMITED                                    |                   |
| SHEFFIELD, E.L. 2/73<br>GROUND MAGNETICS<br>113A, 115XF, LINE 3 |                   |
| REF. SK55-3                                                     | DATE M.F.         |
| SCALE AS SHOWN                                                  | DRAWN M. F. JONES |
| AUTHOR M. E.                                                    | REPORT NO. 13060  |
| DATE SEPT 1992                                                  | TASK NO. 1060     |

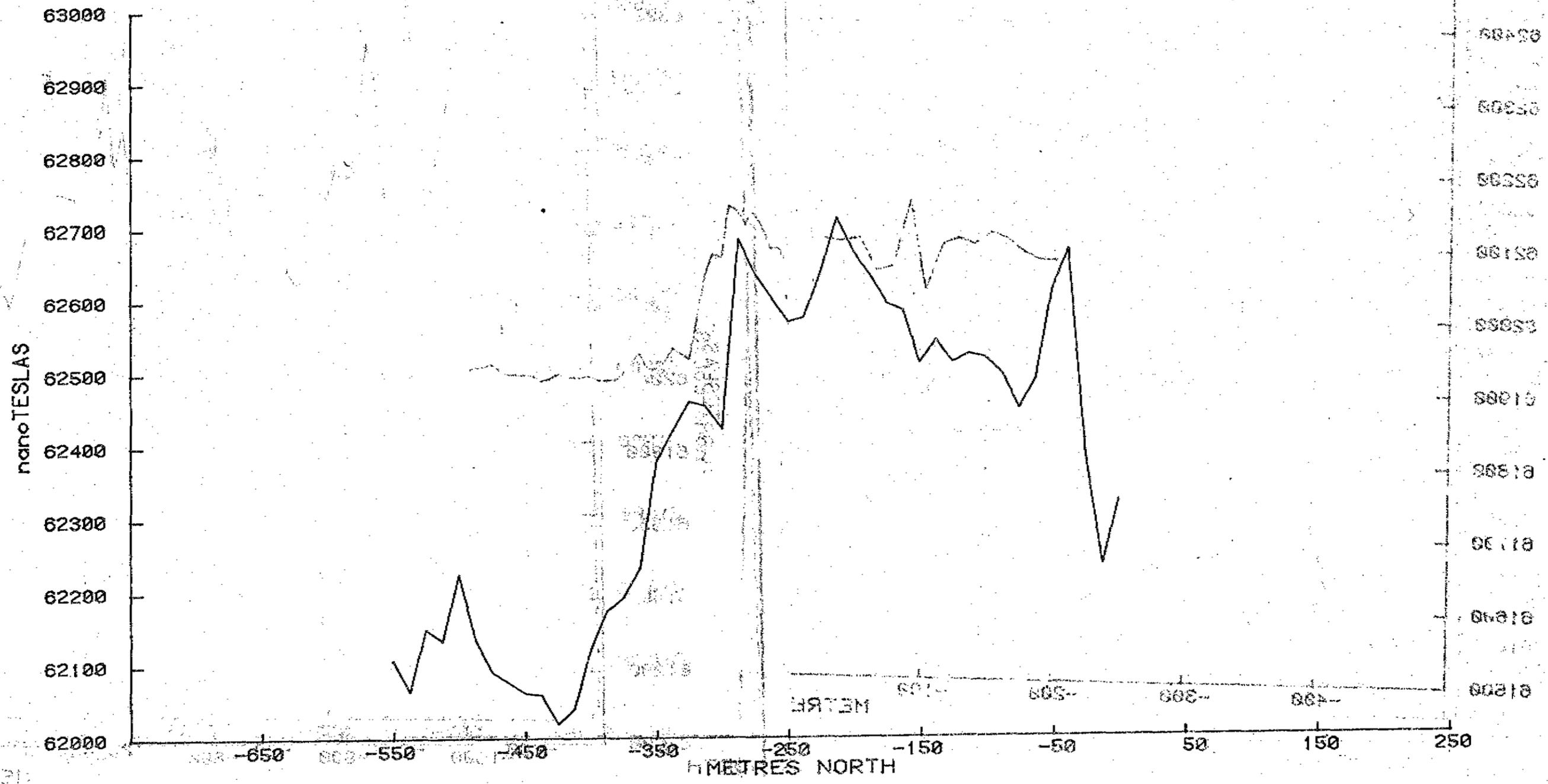
5 cm

G 826 MAGNETOMETER

85-2327

096

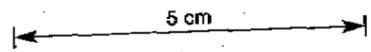
|                                                                         |                   |
|-------------------------------------------------------------------------|-------------------|
| CRA EXPLORATION PTY. LIMITED                                            |                   |
| SHEFFIELD, E.L. 2/73<br>GROUND MAGNETICS<br>ANOMALY 113A, 115XF, LINE 3 |                   |
| REF. SK55-3                                                             | DATE M.F.         |
| SCALE AS SHOWN                                                          | DRAWN M. F. JONES |
| AUTHOR M. E.                                                            | REPORT NO. 13060  |
| DATE SEPT 1992                                                          | TASK NO. 1060     |



238104

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 AEROMAGNETIC ANOMALY  
 ANOMALY 19-2686



G 826 MAGNETOMETER

|        |            |                 |
|--------|------------|-----------------|
| REF.   | SK55 - 3   |                 |
| SCALE  | AS SHOWN   | DRAWN. M. F.    |
| AUTHOR | M. F.      | REPORT N° 13060 |
| DATE   | SEPT. 1982 | TASK N° 1087    |

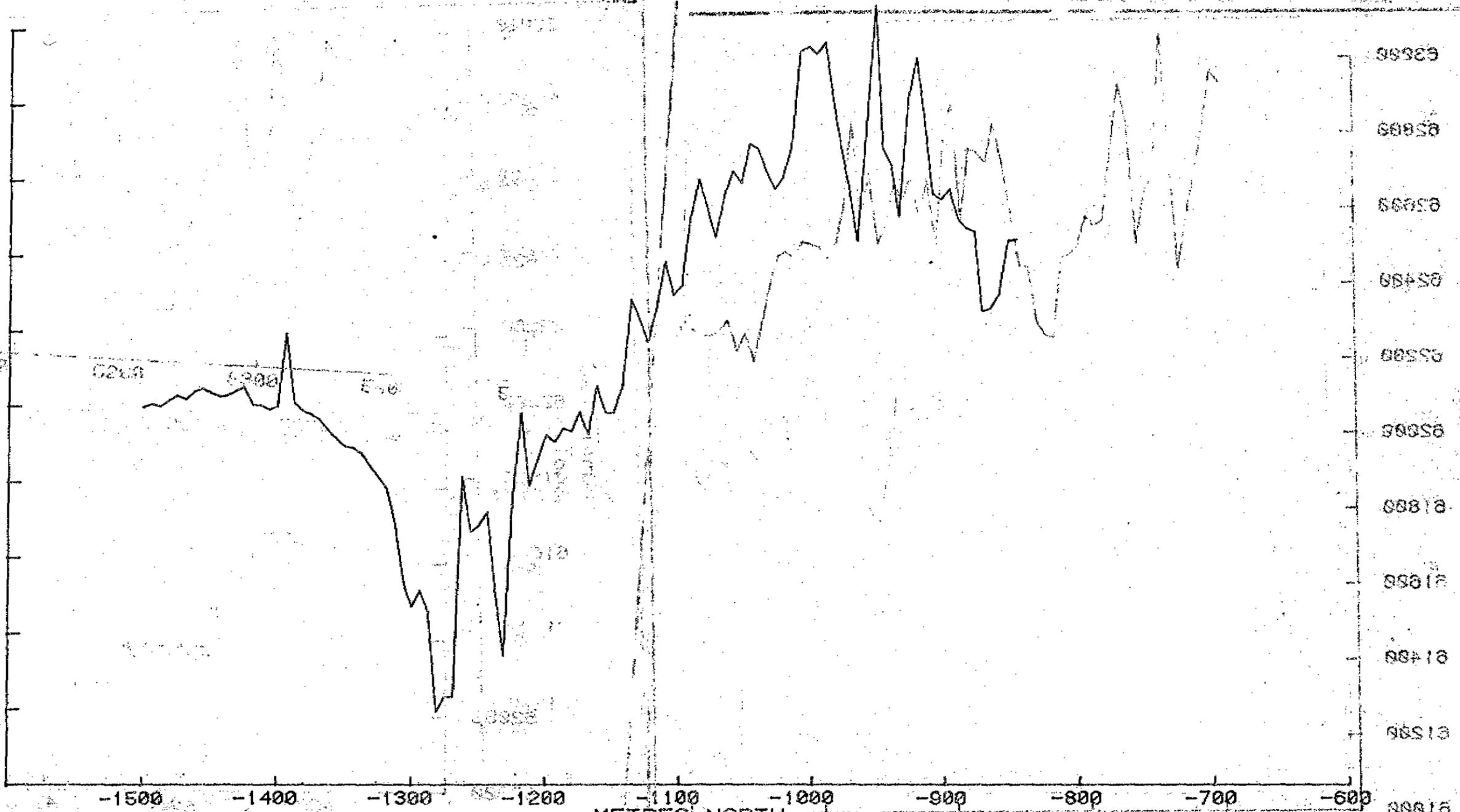
85-2327

097



63000  
62800  
62600  
62400  
62200  
62000  
61800  
61600  
61400  
61200  
61000

nanoTESLAS



METRES NORTH  
-1500 -1400 -1300 -1200 -1100 -1000 -900 -800 -700 -600

CRA EXPLORATION PTY. LIMITED

SHEFFIELD EL. 7/73

GROUND MAGNETICS

24-1016 Sth. END

REF. SKSS - 3

SCALE AS SHOWN

AUTHOR M. F.

DATE SEPT. 1982

TASH N° 1089

238106

CRA EXPLORATION PTY. LIMITED

SHEFFIELD EL. 7/73

GROUND MAGNETICS

24-1016 Sth. END

|        |            |           |       |
|--------|------------|-----------|-------|
| REF.   | SKSS - 3   | DRAWN     | M. F. |
| SCALE  | AS SHOWN   | REPORT N° | 13060 |
| AUTHOR | M. F.      | TASH N°   | 1089  |
| DATE   | SEPT. 1982 |           |       |

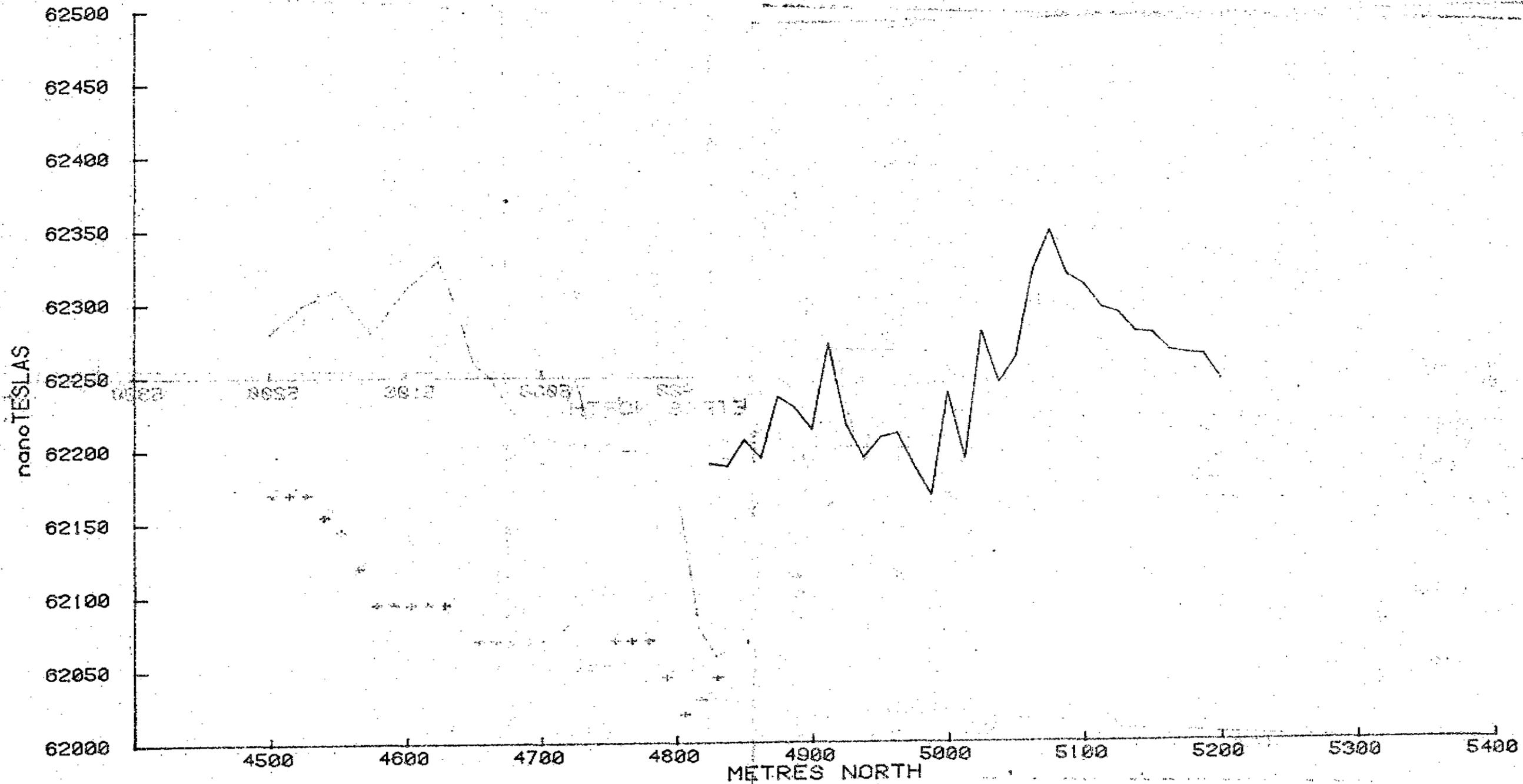
5 cm

G 826 MAGNETOMETER

85-2327

CRA EXPLORATION PTY. LIMITED

099



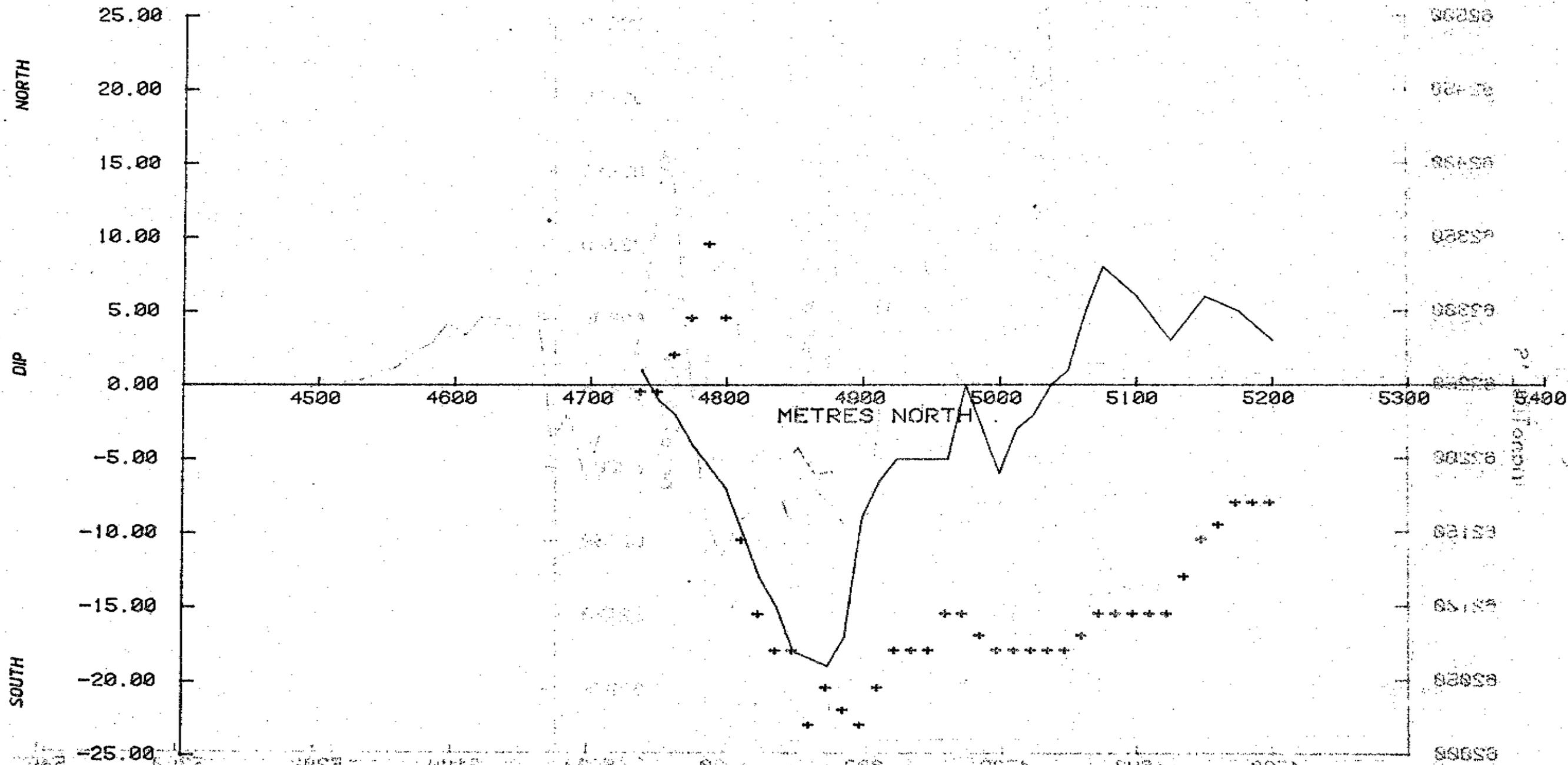
238107

SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 AEROMAGNETIC ANOMALY  
 14-2804 WEST LINE  
 REF. SKSS 5  
 SCALE AS SHOWN  
 AUTHOR M.F.  
 DATE SEPT. 1982

|                              |            |
|------------------------------|------------|
| CRA EXPLORATION PTY. LIMITED |            |
| SHEFFIELD E.L. 7/73          |            |
| GROUND MAGNETICS             |            |
| AEROMAGNETIC ANOMALY         |            |
| 14-2804 WEST LINE            |            |
| REF.                         | SKSS 5     |
| SCALE                        | AS SHOWN   |
| AUTHOR                       | M.F.       |
| DATE                         | SEPT. 1982 |
| DRAWN                        | M.F.       |
| REPORT NO                    | 13060      |
| TASK NO                      | 182        |

G 826 MAGNETOMETER

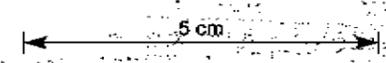
65-2327



238108

CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 AEROMAGNETIC ANOMALY  
 14-2804 West Line

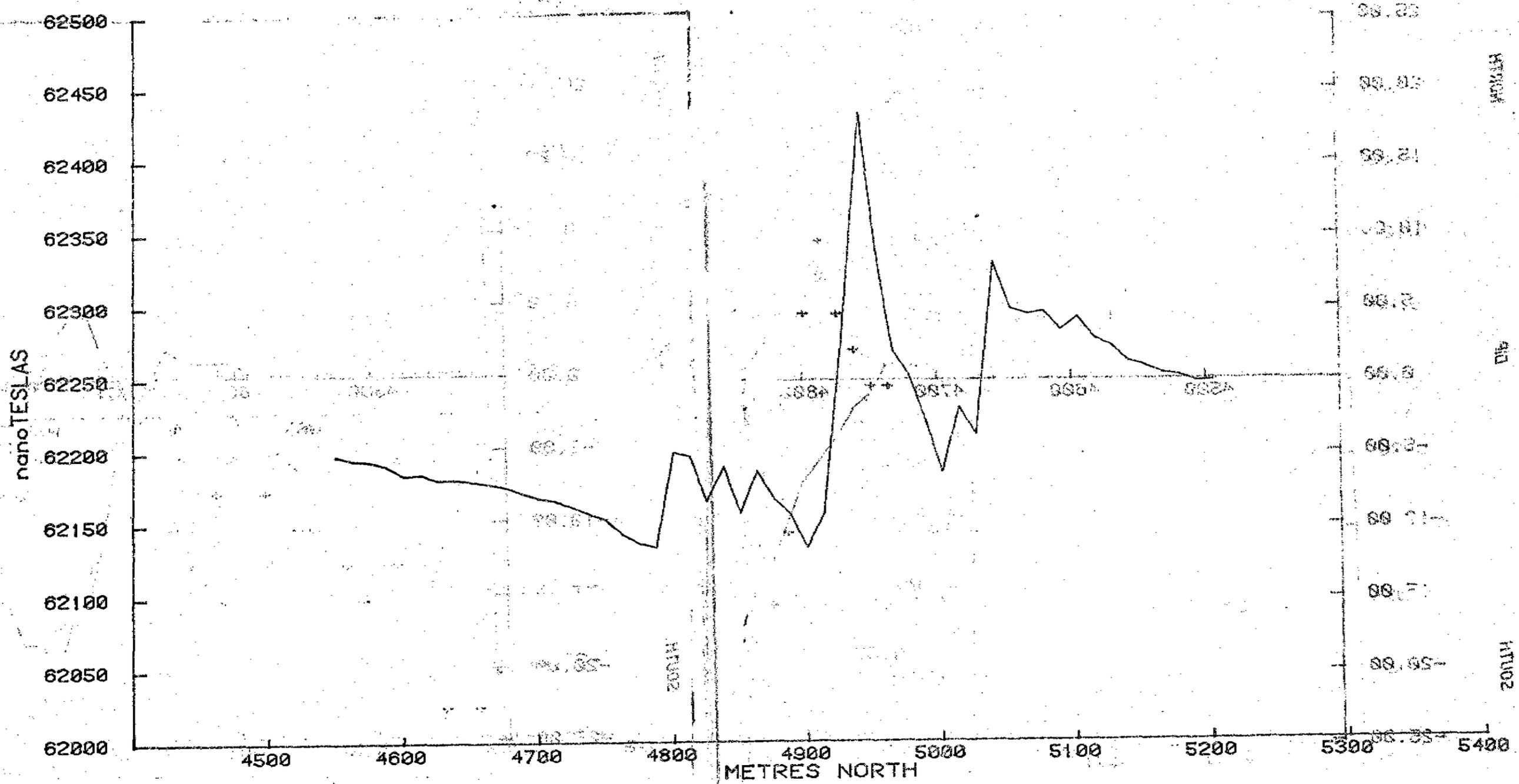
DIP ANGLE ( DEGREES )  
 MAXIMUM HORIZONTAL FIELD STRENGTH  
 ( 100% RANGE WITH ARBITRARY GAIN )



PHOENIX V.L.F. - 2 METER

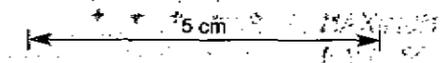
|                                                                                   |            |
|-----------------------------------------------------------------------------------|------------|
| CRA EXPLORATION PTY. LIMITED                                                      |            |
| SHEFFIELD E.L. 7/73<br>V.L.F. - E.M.<br>AEROMAGNETIC ANOMALY<br>14-2804 West Line |            |
| REF.                                                                              | SKSS - 3   |
| SCALE.                                                                            | AS SHOWN   |
| AUTHOR.                                                                           | M.F.       |
| DATE.                                                                             | SEPT. 1982 |
| DRAWN.                                                                            | M.F.       |
| REPORT NO.                                                                        | 13080      |
| TASK NO.                                                                          | 1163       |

85-2327

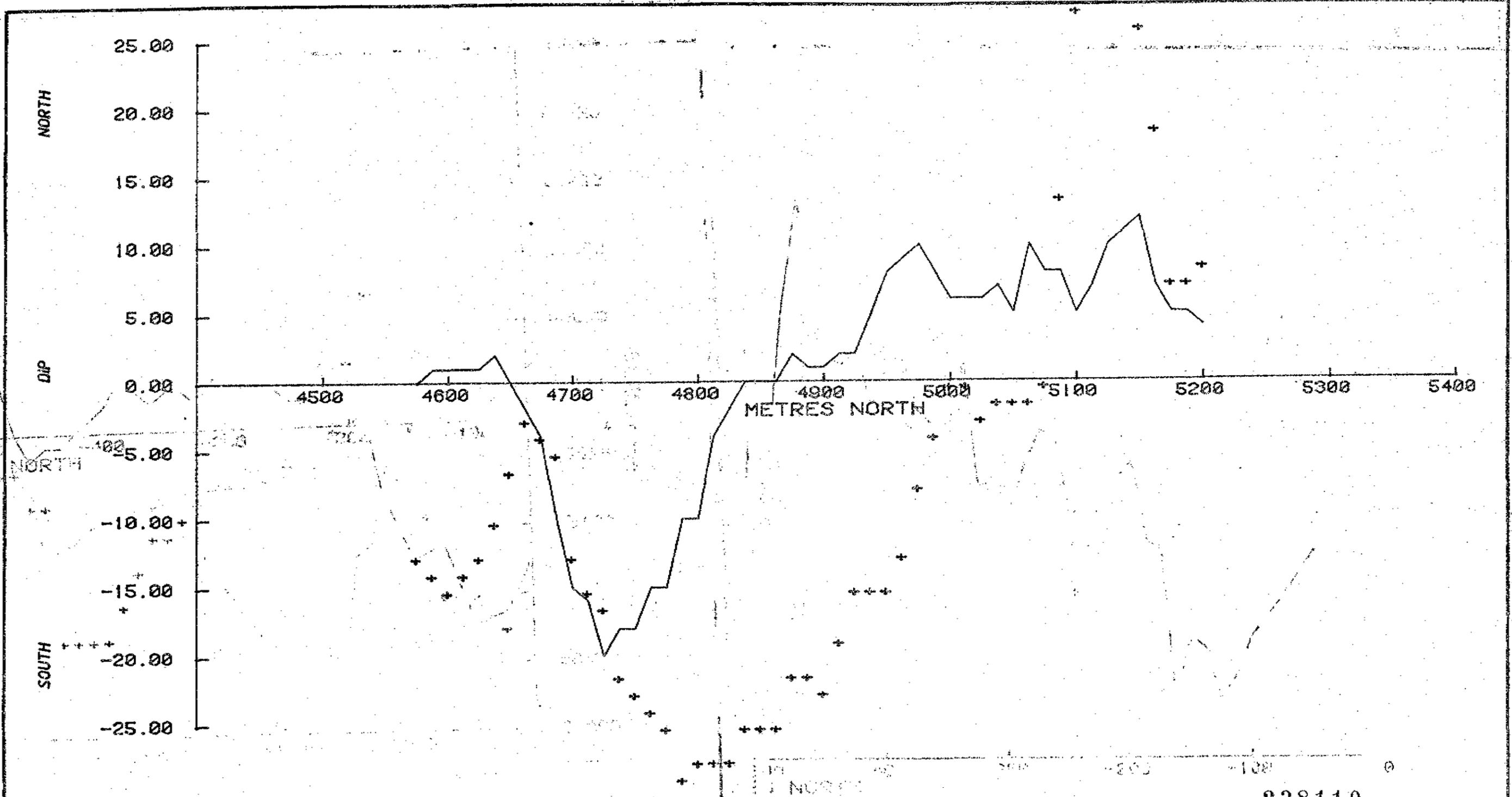


CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.L. 7/73  
 GROUND MAGNETICS  
 AEROMAGNETIC ANOMALY  
 14-2804 East Line  
 SCALE 1:5000  
 DATE SEPT 1982

|                              |            |  |
|------------------------------|------------|--|
| 238109                       |            |  |
| CRA EXPLORATION PTY. LIMITED |            |  |
| SHEFFIELD E.L. 7/73          |            |  |
| GROUND MAGNETICS             |            |  |
| AEROMAGNETIC ANOMALY         |            |  |
| 14-2804 East Line            |            |  |
| REF.                         | SK55-3     |  |
| DRAWN BY                     | M.F.       |  |
| REPORT NO.                   | 13080      |  |
| DATE                         | SEPT. 1982 |  |
| TASK NO.                     | 1164       |  |



85-2327

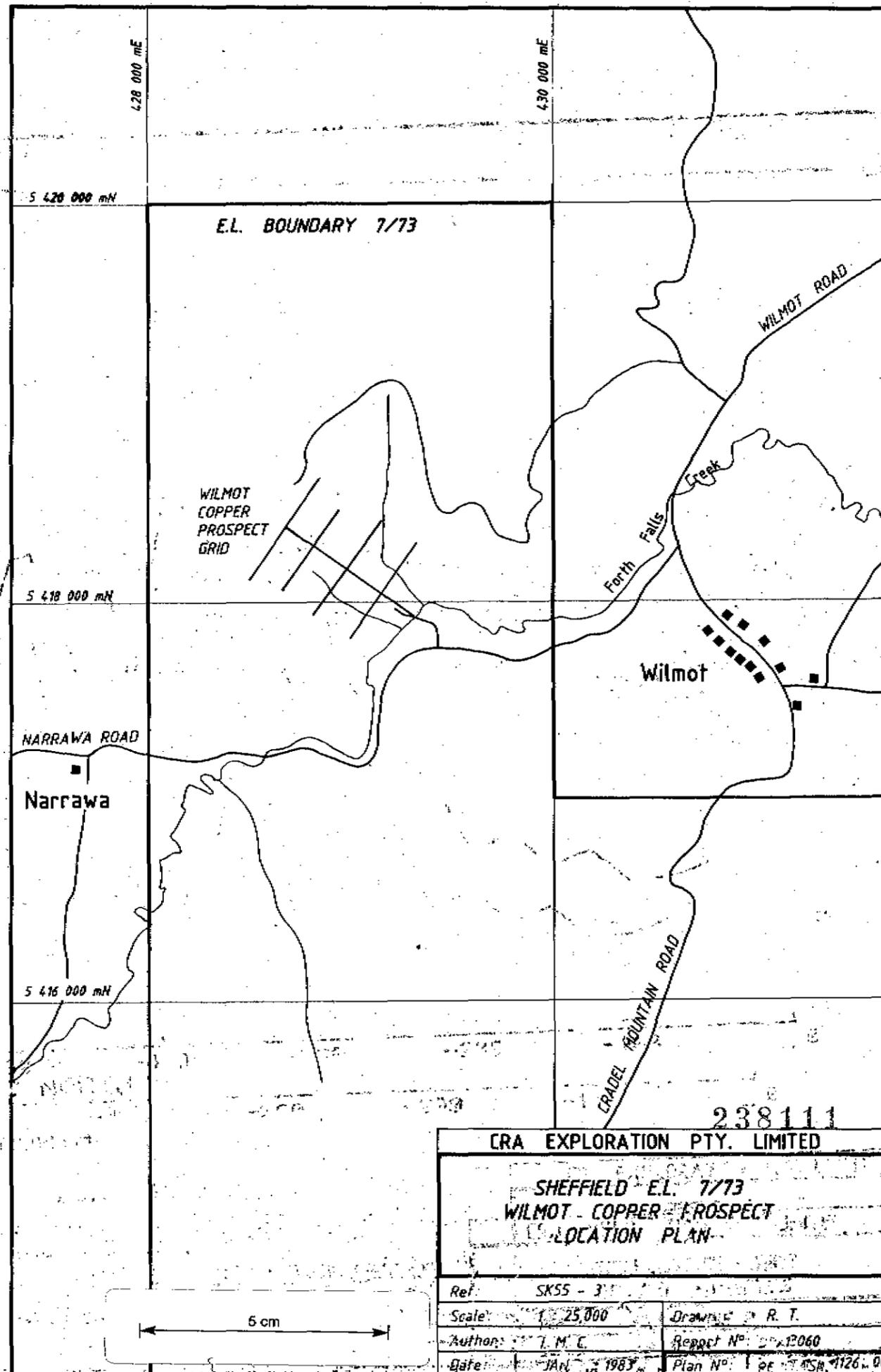


|                                                                    |                |
|--------------------------------------------------------------------|----------------|
| CRA EXPLORATION PTY. LIMITED                                       |                |
| SHEFFIELD E.L. 7/73                                                |                |
| V.L.F. - 2 METER                                                   |                |
| DIP ANGLE (DEGREES) 27x1 LINE B                                    |                |
| MAXIMUM HORIZONTAL FIELD STRENGTH (200% RANGE WITH ARBITRARY GAIN) |                |
| SCALE AS SHOWN                                                     | DRAWN M.F.     |
| AUTHOR M.F.                                                        | REPORT # 13060 |

238110

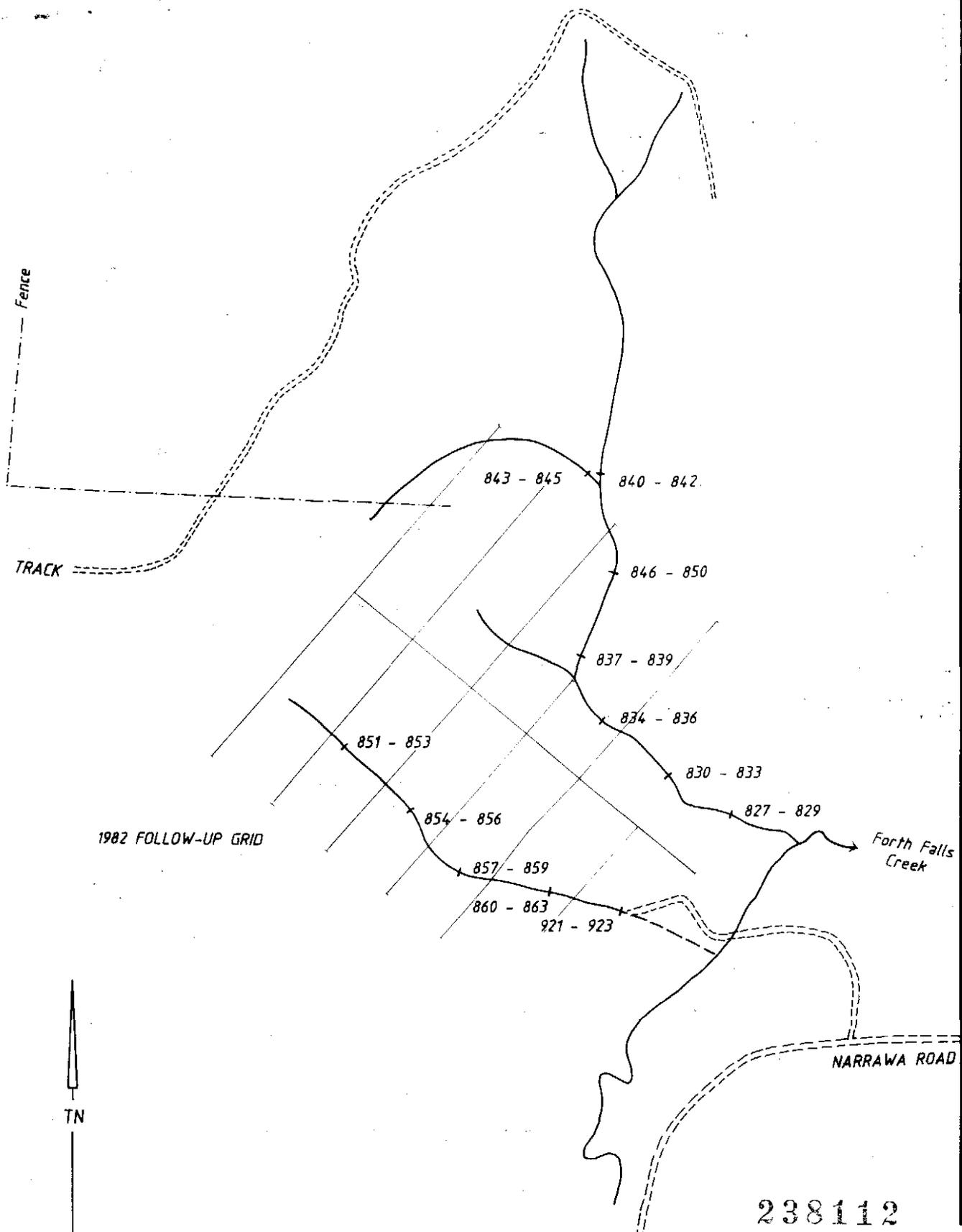
|                              |                |
|------------------------------|----------------|
| CRA EXPLORATION PTY. LIMITED |                |
| SHEFFIELD E.L. 7/73          |                |
| V.L.F. - 2 METER             |                |
| AEROMAGNETIC ANOMALY         |                |
| 14-2804 East Line            |                |
| REF SK88-13 LINE 4           |                |
| SCALE AS SHOWN               | DRAWN M.F.     |
| AUTHOR M.F.                  | REPORT # 13060 |
| DATE SEPT. 1982              | TASK # 1185    |
| AUTHOR M.F.                  | REPORT # 13060 |

PHOENIX V.L.F. - 2 METER  
85-2327



85-2327

104



238112

**\*\* NOTE \*\***  
 All samples prefixed  
 by '987'

5 cm

|                                                                                         |                    |
|-----------------------------------------------------------------------------------------|--------------------|
| <b>CRA EXPLORATION PTY. LIMITED</b>                                                     |                    |
| <b>SHEFFIELD E.L. 7/73<br/>WILMOT COPPER PROSPECT<br/>SAMPLE LOCATION PLAN<br/>1982</b> |                    |
| Ref: SK55 - 3                                                                           | Drawn: R. T        |
| Scale: 1 : 7500 ( approx )                                                              | Report N°: 13060   |
| Author: I. M. C.                                                                        | Plan N°: TASH 1128 |
| Date: JAN. 1983                                                                         |                    |

88-2327

105

Fence

TRACK

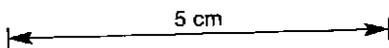
1982 FOLLOW-UP GRID

Forth Falls Creek

NARRAWA ROAD



Sample Point  
46,29,320  
Cu,Pb,Zn ppm



85-2327

46,18,290

46,36,290

46,29,320

54,34,310

50,24,330

56,28,1360

72,36,330

69,30,320

97,57,360

165,40,620

200,83,1030

260,86,1180

238113

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73  
WILMOT COPPER PROSPECT  
1982 ANALYSES OF STREAM SEDIMENT  
GRAB SAMPLES

Ref: SK55 - 3

Scale: 1 : 7500 ( approx

Drawn: R. T

Author: I. M. C.

Report N°: 13060

Date: JAN. 1983

Plan N°: TASH 1129

Fence

TRACK

1982 FOLLOW-UP GRID

Forth Falls Creek

NARRAWA ROAD

TN

Sample Point  
45,19,870  
( Cu,Pb,Zn ) ppm

5 cm

238114

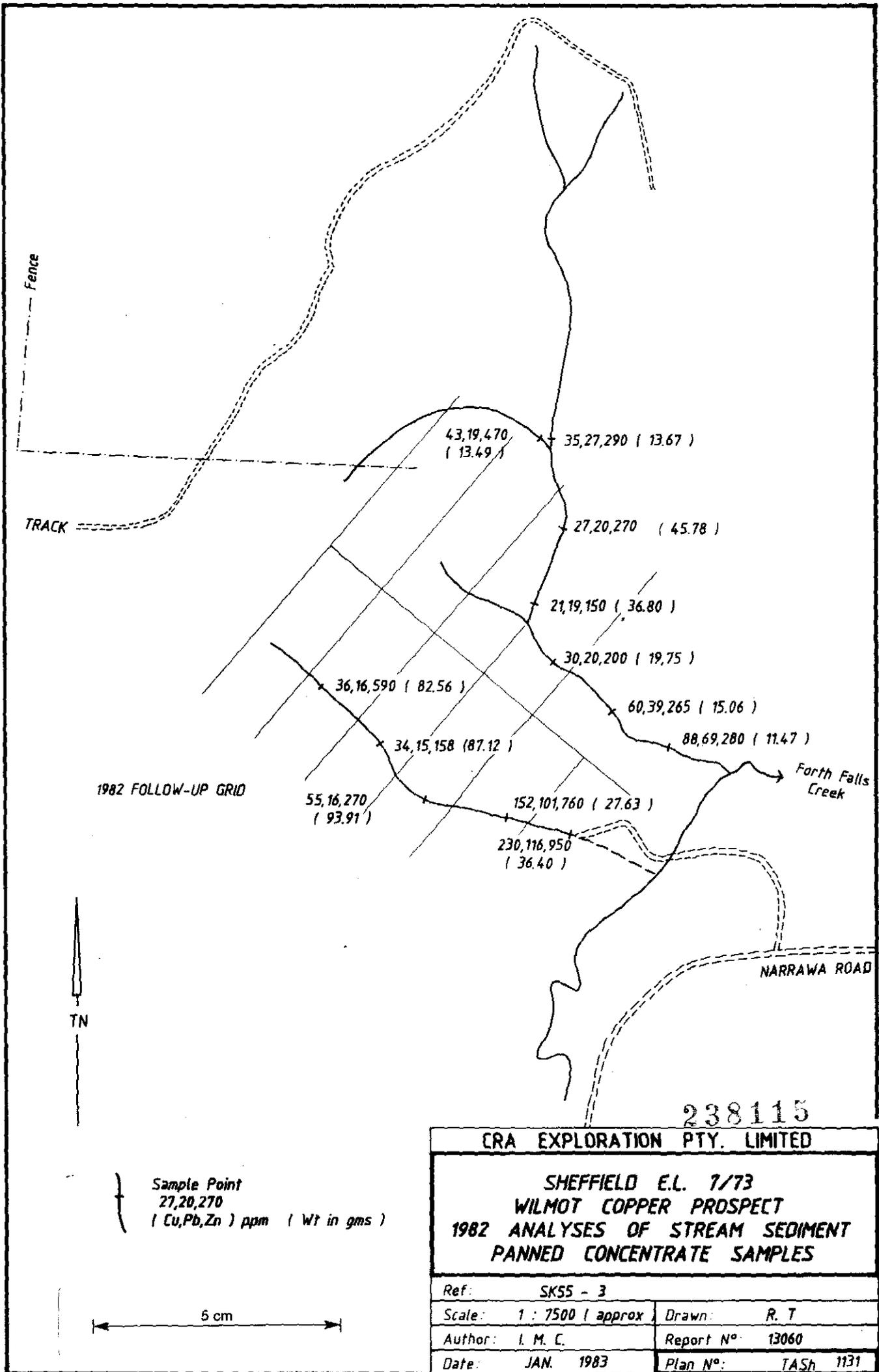
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73  
WILMOT COPPER PROSPECT  
1982 ANALYSES OF STREAM SEDIMENT  
SUSPENDED CLAY SAMPLES

|                        |                    |
|------------------------|--------------------|
| Ref: SK55-3            | Drawn: R. T        |
| Scale: 1:7500 (approx) | Report N°: 13060   |
| Author: J.M.E.         | Plan N°: TASH 1130 |
| Date: JAN. 1983        |                    |

86-2327

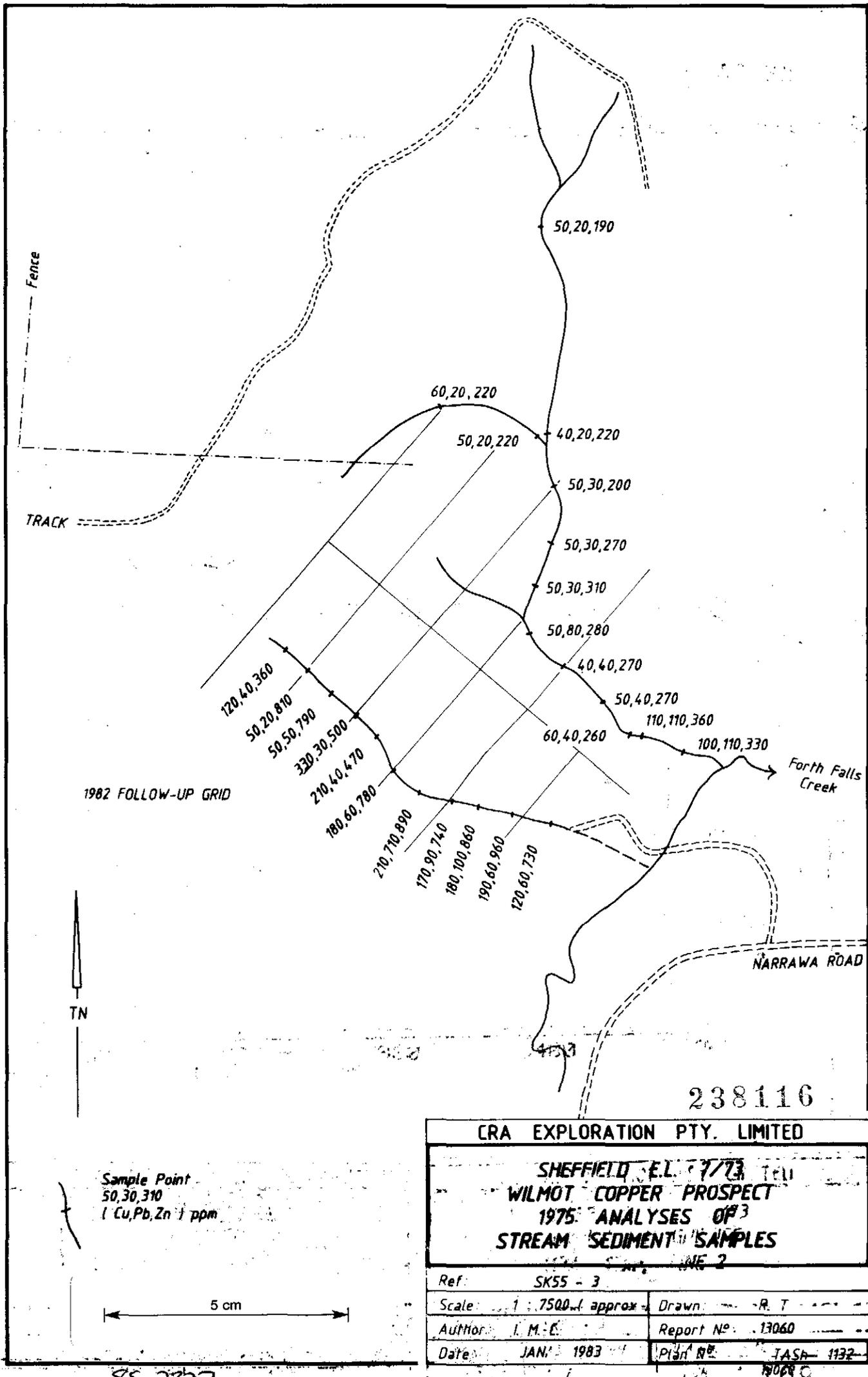
107



238115

|                                                                                                                 |                     |
|-----------------------------------------------------------------------------------------------------------------|---------------------|
| ERA EXPLORATION PTY. LIMITED                                                                                    |                     |
| SHEFFIELD E.L. 7/73<br>WILMOT COPPER PROSPECT<br>1982 ANALYSES OF STREAM SEDIMENT<br>PANNED CONCENTRATE SAMPLES |                     |
| Ref:                                                                                                            | SK55 - 3            |
| Scale:                                                                                                          | 1 : 7500 ( approx ) |
| Author:                                                                                                         | I. M. C.            |
| Date:                                                                                                           | JAN. 1983           |
| Drawn:                                                                                                          | R. T                |
| Report N°:                                                                                                      | 13060               |
| Plan N°:                                                                                                        | TASH 1131           |

85-2327



1982 FOLLOW-UP GRID

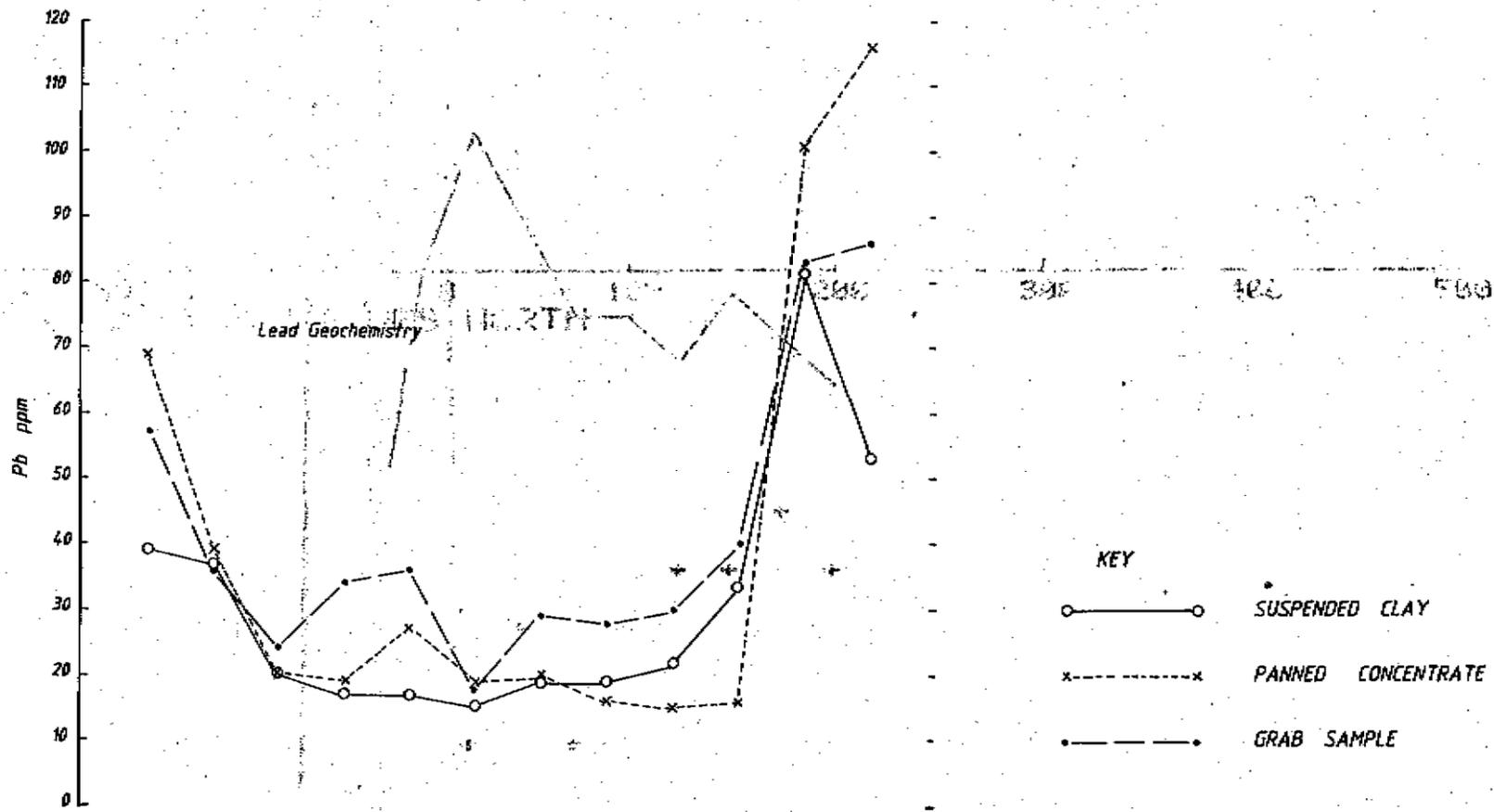
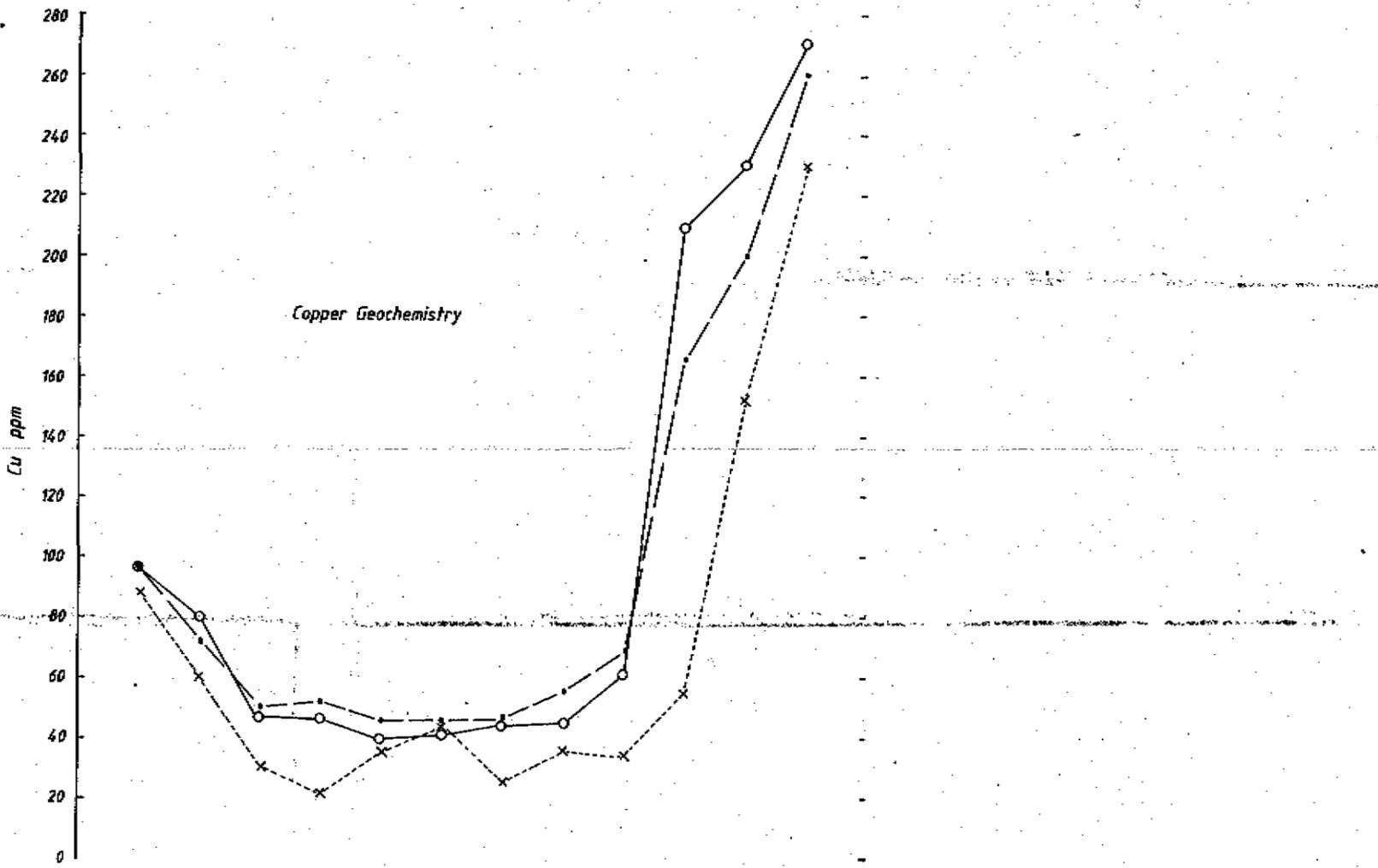


Sample Point  
50,30,310  
(Cu,Pb,Zn) ppm

5 cm

238116

|                                                                                                                              |                    |
|------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>CRA EXPLORATION PTY. LIMITED</b>                                                                                          |                    |
| SHEFFIELD E.L. 7/73 TEL<br>WILMOT COPPER PROSPECT<br>1975 ANALYSES OF <sup>3</sup><br>STREAM SEDIMENT SAMPLES<br>SHEET NO. 2 |                    |
| Ref: SK55 - 3                                                                                                                | Drawn: R. T.       |
| Scale: 1 : 7500 (approx)                                                                                                     | Report No: 13060   |
| Author: J. M. C.                                                                                                             | Plan No: TASH-1132 |
| Date: JAN. 1983                                                                                                              |                    |

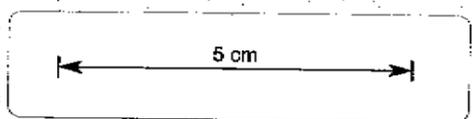


**KEY**

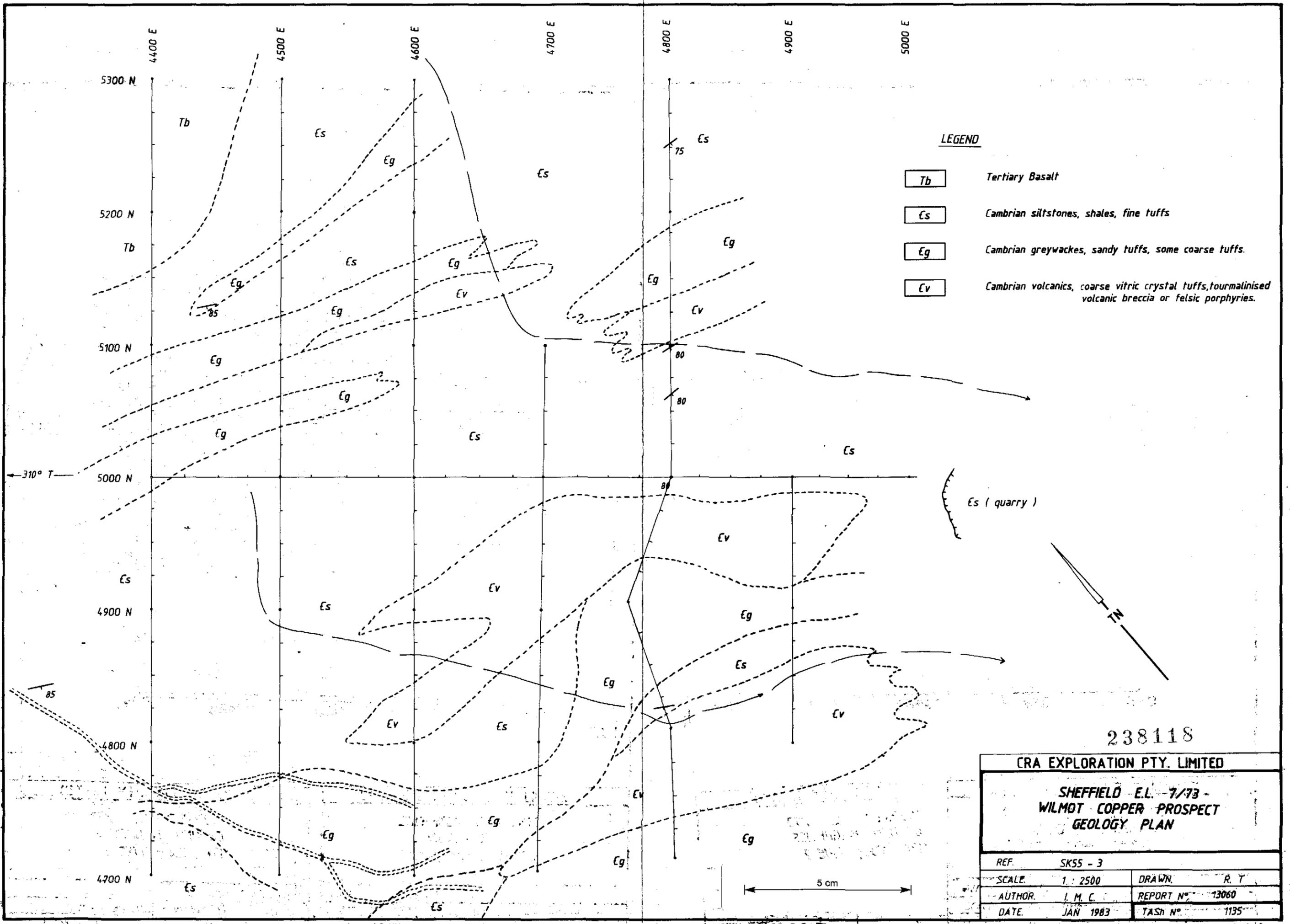
- — ○ SUSPENDED CLAY
- × — × PANNED CONCENTRATE
- — ● GRAB SAMPLE

238117

|                                                                             |                    |
|-----------------------------------------------------------------------------|--------------------|
| CRA EXPLORATION PTY. LIMITED                                                |                    |
| SHEFFIELD E.L. 7/73                                                         |                    |
| WILMOT COPPER PROSPECT                                                      |                    |
| Comparison of Base Metal Contents of Different Stream Sediment Sample Types |                    |
| Ref: SK55 - 3                                                               |                    |
| Scale: AS SHOWN                                                             | Drawn: R. T.       |
| Author: J. M. C.                                                            | Report No: 1306Q   |
| Date: JAN 83                                                                | Plan No: TASH 1133 |
| SCALE: AS SHOWN                                                             | DRAWN: 110         |



85-2327

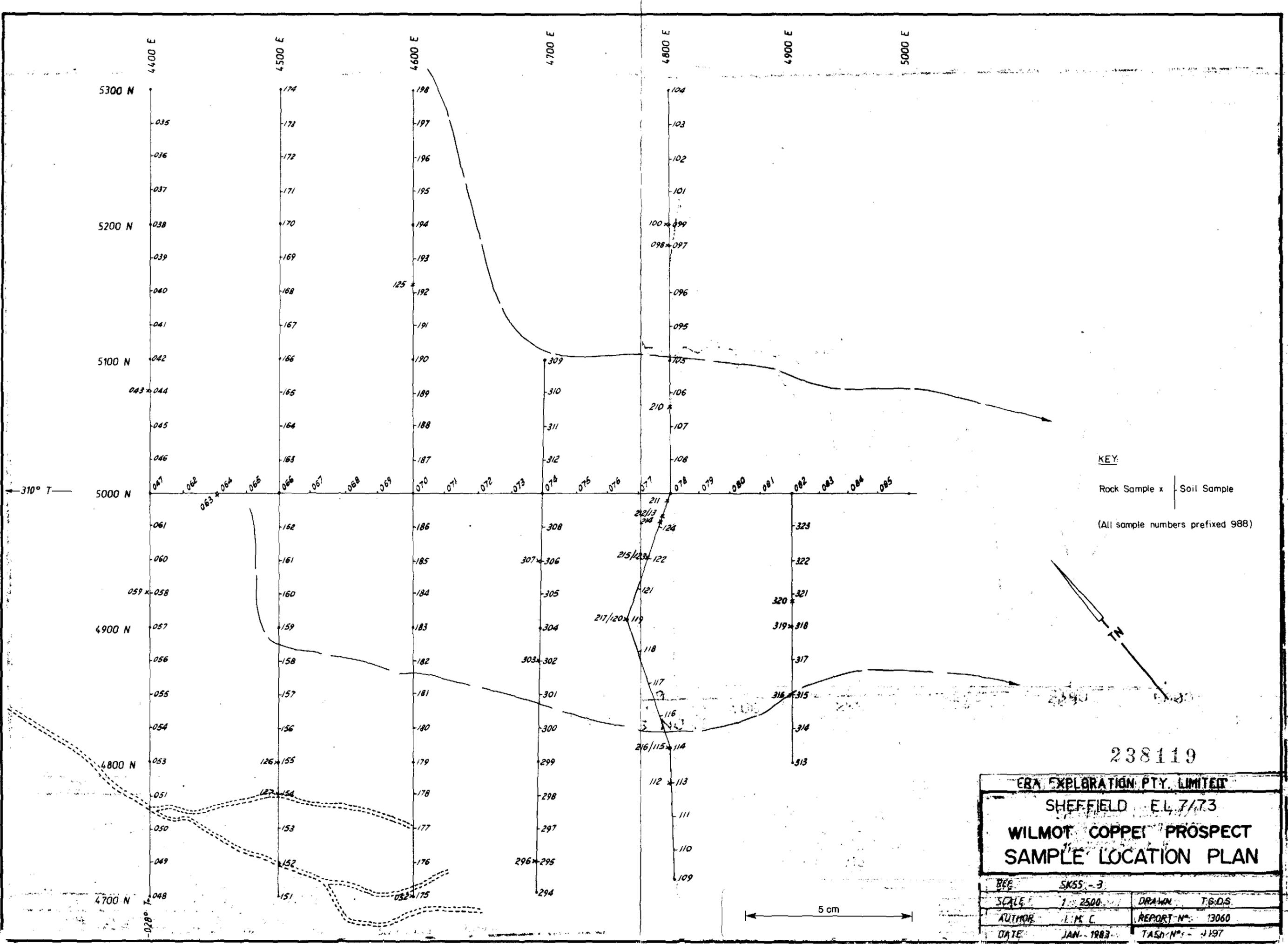


**LEGEND**

- Tb Tertiary Basalt
- Es Cambrian siltstones, shales, fine tuffs
- Eg Cambrian greywackes, sandy tuffs, some coarse tuffs.
- Ev Cambrian volcanics, coarse vitric crystal tuffs, tourmalinised volcanic breccia or felsic porphyries.

|                                                                              |          |           |       |
|------------------------------------------------------------------------------|----------|-----------|-------|
| <b>CRA EXPLORATION PTY. LIMITED</b>                                          |          |           |       |
| <b>SHEFFIELD - E.L. - 7/73 -<br/>WILMOT COPPER PROSPECT<br/>GEOLOGY PLAN</b> |          |           |       |
| REF.                                                                         | SK55 - 3 | DRAWN.    | R. Y. |
| SCALE.                                                                       | 1 : 2500 | REPORT N° | 13060 |
| AUTHOR.                                                                      | I. M. C. | TASK N°   | 1135  |
| DATE.                                                                        | JAN 1983 |           |       |

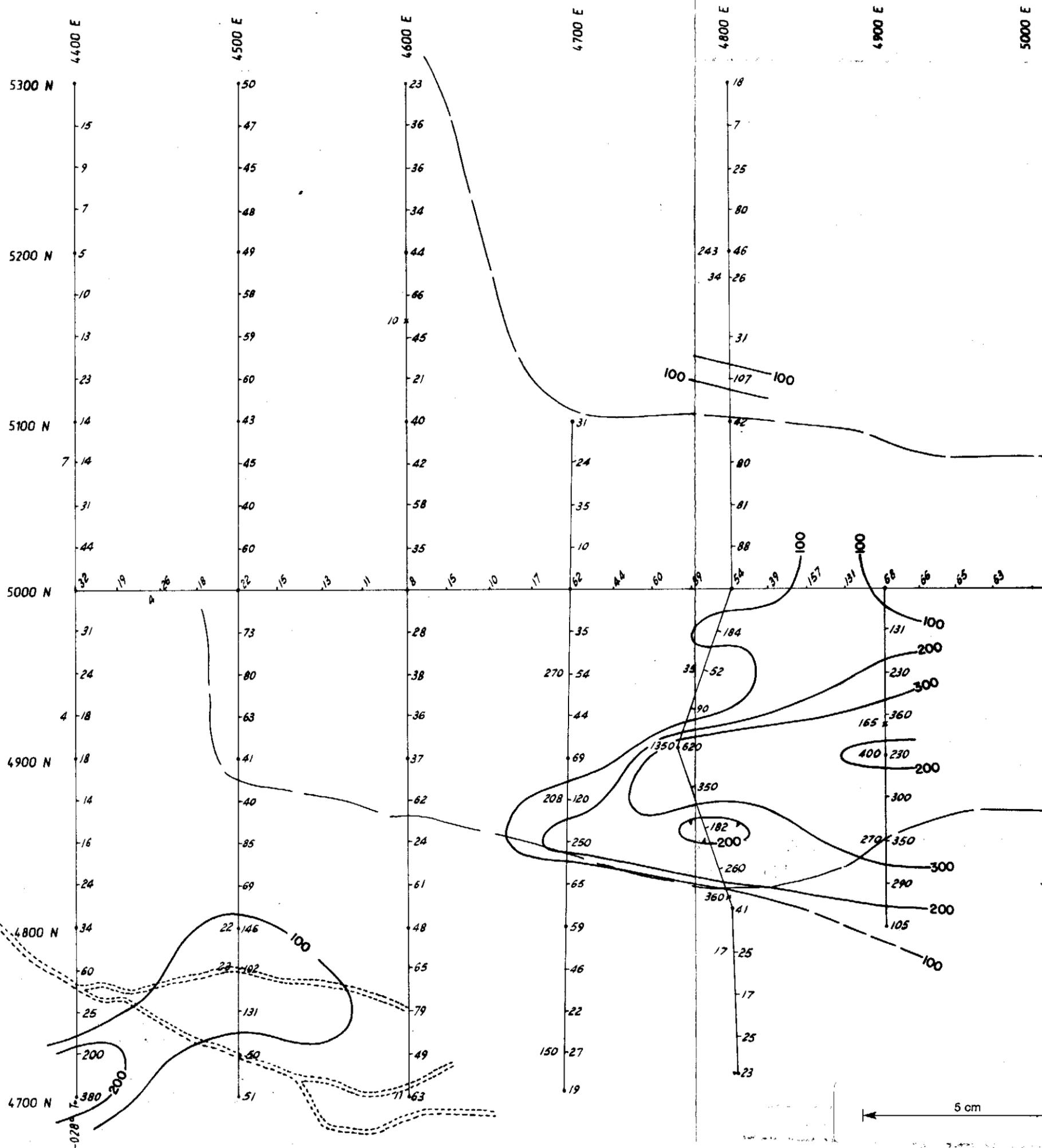
85-2327



KEY:  
 Rock Sample x | Soil Sample  
 (All sample numbers prefixed 988)

238119

|                              |          |
|------------------------------|----------|
| ERA EXPLORATION PTY. LIMITED |          |
| SHEFFIELD E.L. 7/73          |          |
| WILMOT COPPER PROSPECT       |          |
| SAMPLE LOCATION PLAN         |          |
| BEE                          | SK55-3   |
| SCALE                        | 1:2500   |
| AUTHOR                       | I.M.C.   |
| DATE                         | JAN-1983 |
| DRAWN                        | T.G.D.S. |
| REPORT NO.                   | 13060    |
| TASK NO.                     | 4197     |



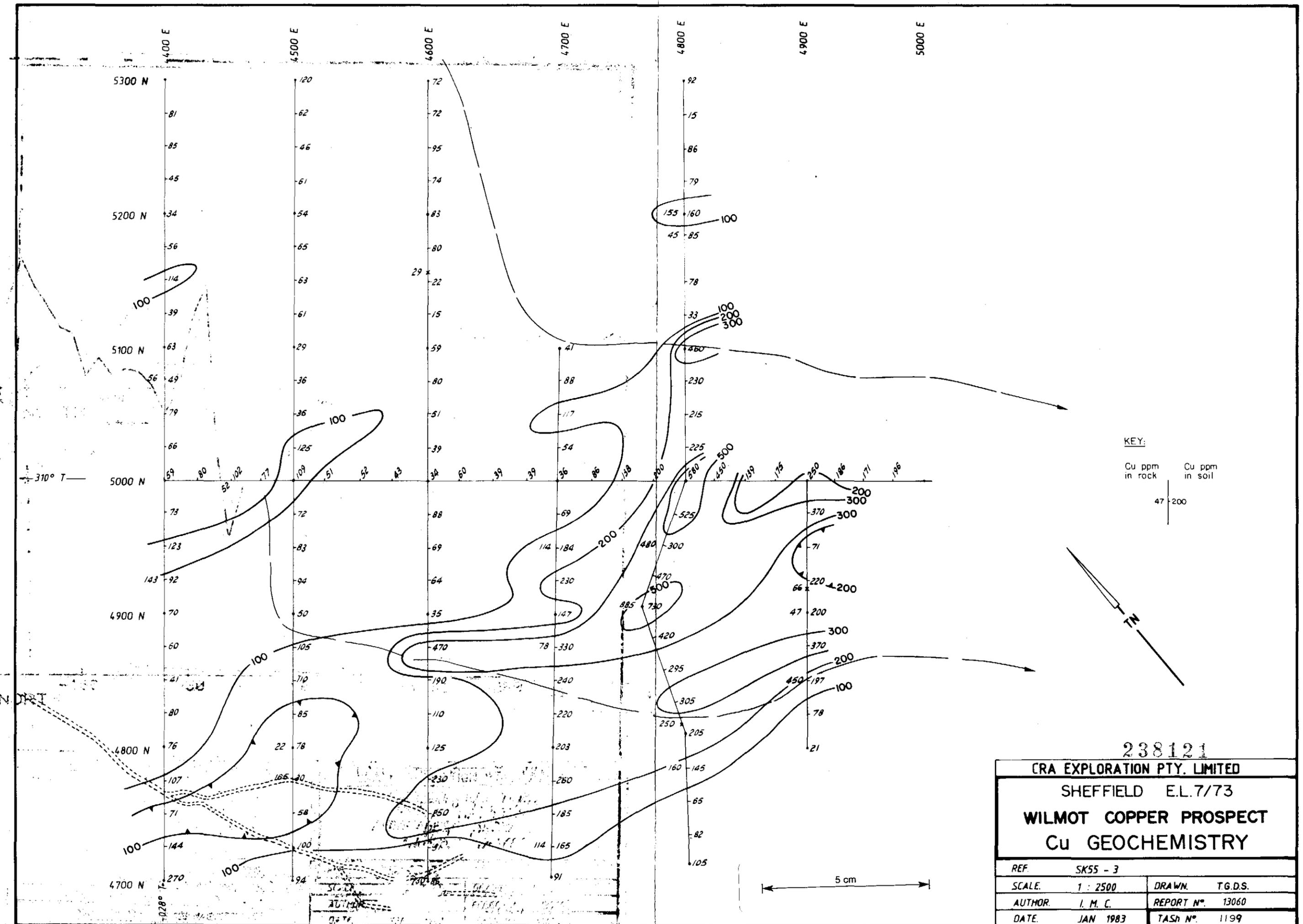
KEY:  
 Pb ppm in rock    Pb ppm in soil  
 35    52

238120

|                              |          |             |          |
|------------------------------|----------|-------------|----------|
| CRA EXPLORATION PTY. LIMITED |          |             |          |
| SHEFFIELD EL.7/73            |          |             |          |
| WILMOT COPPER PROSPECT       |          |             |          |
| Pb GEOCHEMISTRY              |          |             |          |
| REF.                         | SK55 - 3 |             |          |
| SCALE.                       | 1 : 2500 | DRAWN.      | T.G.D.S. |
| AUTHOR.                      | J. M. C. | REPORT. N°. | 13060    |
| DATE.                        | JAN 1983 | TASK N°.    | 1198     |

5 cm

85-2322

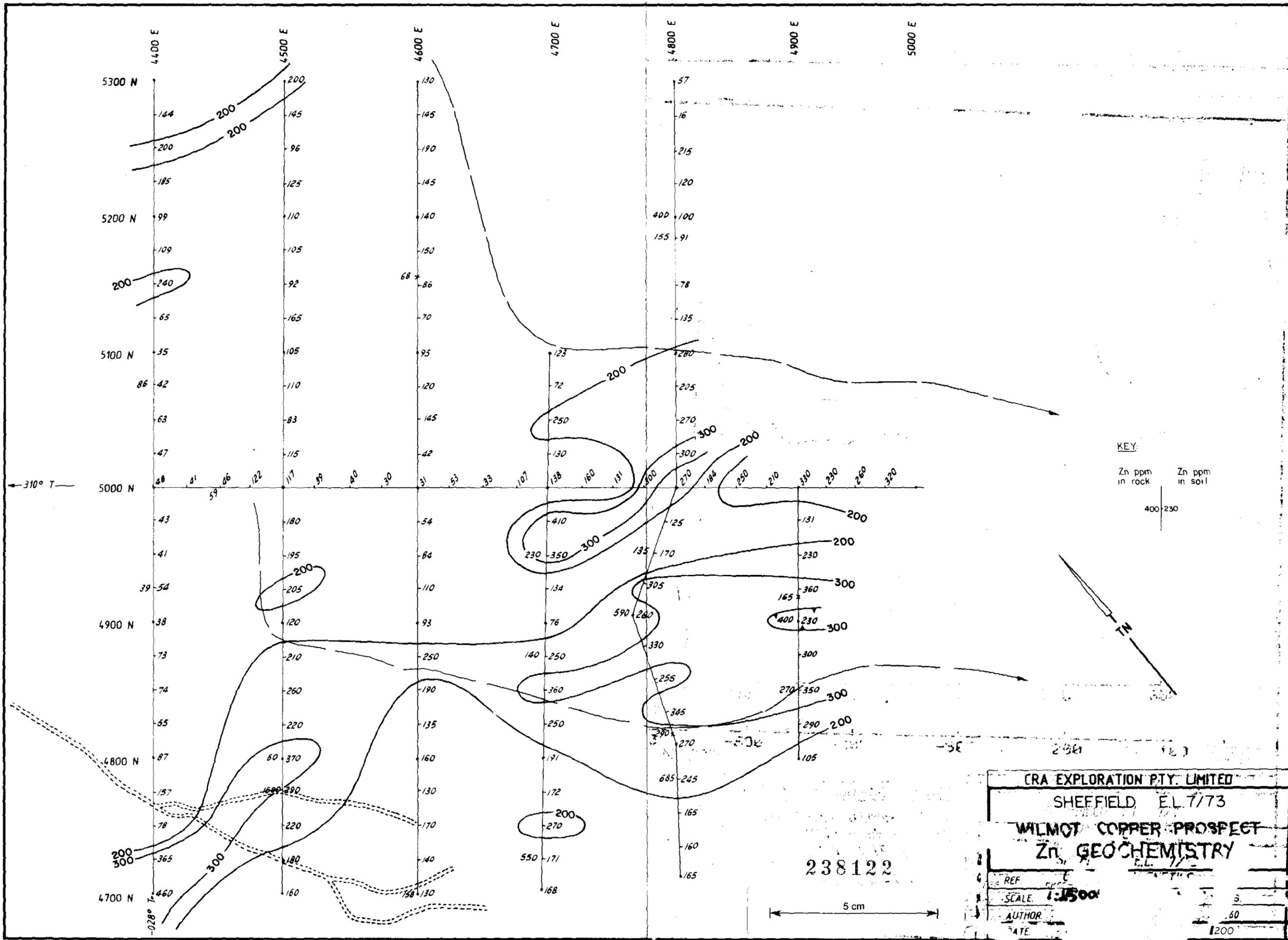


KEY:  
 Cu ppm in rock | Cu ppm in soil  
 47 | 200

238121

|                                     |          |
|-------------------------------------|----------|
| <b>CRA EXPLORATION PTY. LIMITED</b> |          |
| SHEFFIELD E.L.7/73                  |          |
| <b>WILMOT COPPER PROSPECT</b>       |          |
| <b>Cu GEOCHEMISTRY</b>              |          |
| REF.                                | SK55 - 3 |
| SCALE.                              | 1 : 2500 |
| AUTHOR.                             | I. M. C. |
| DATE.                               | JAN 1983 |
| DRAWN.                              | T.G.D.S. |
| REPORT N°.                          | 13060    |
| TASH N°.                            | 1199     |

85-2327



KEY:  
 Zn ppm in rock    Zn ppm in soil  
 400    230

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73

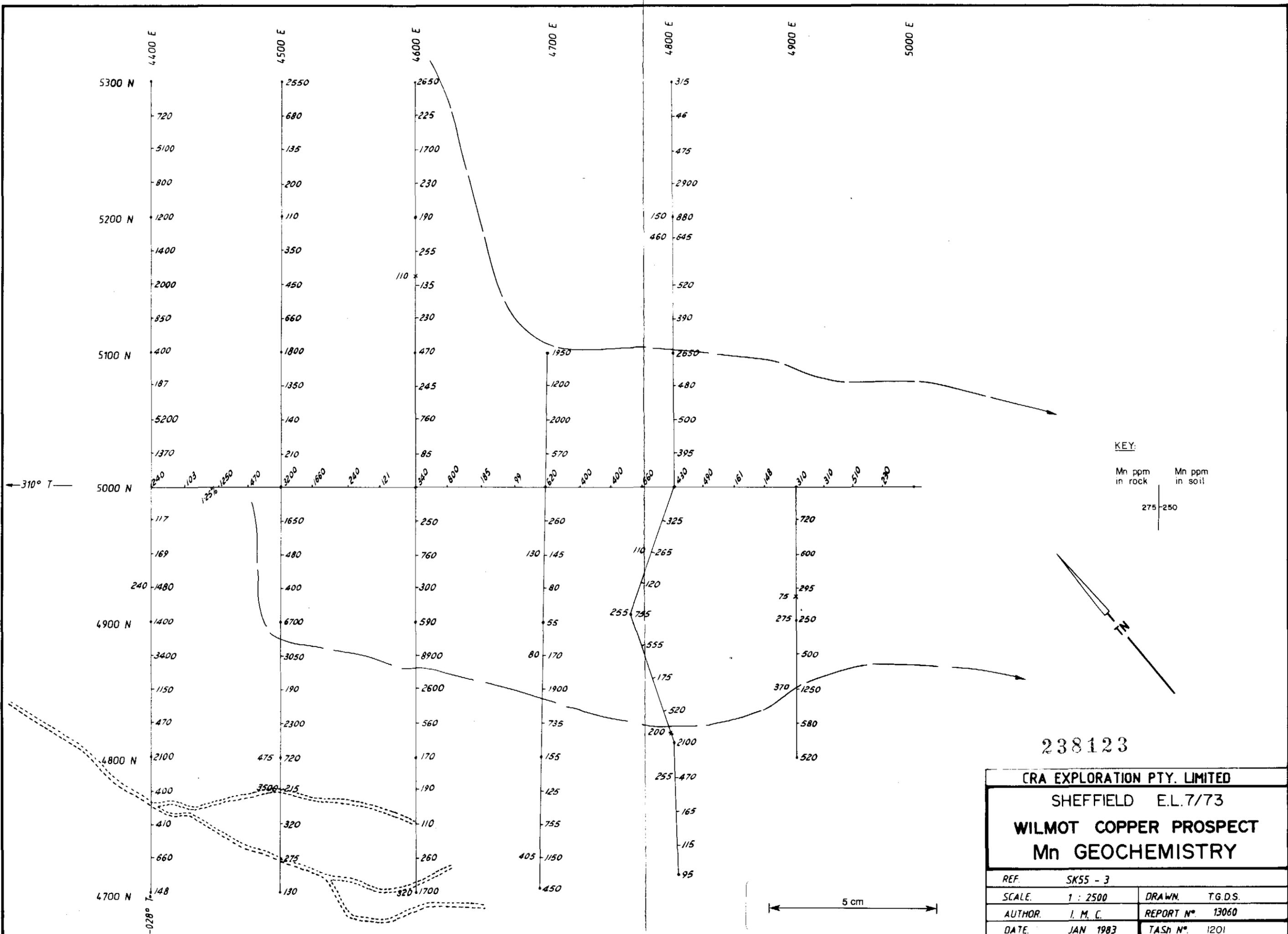
WILMOT COPPER PROSPECT

Zn GEOCHEMISTRY

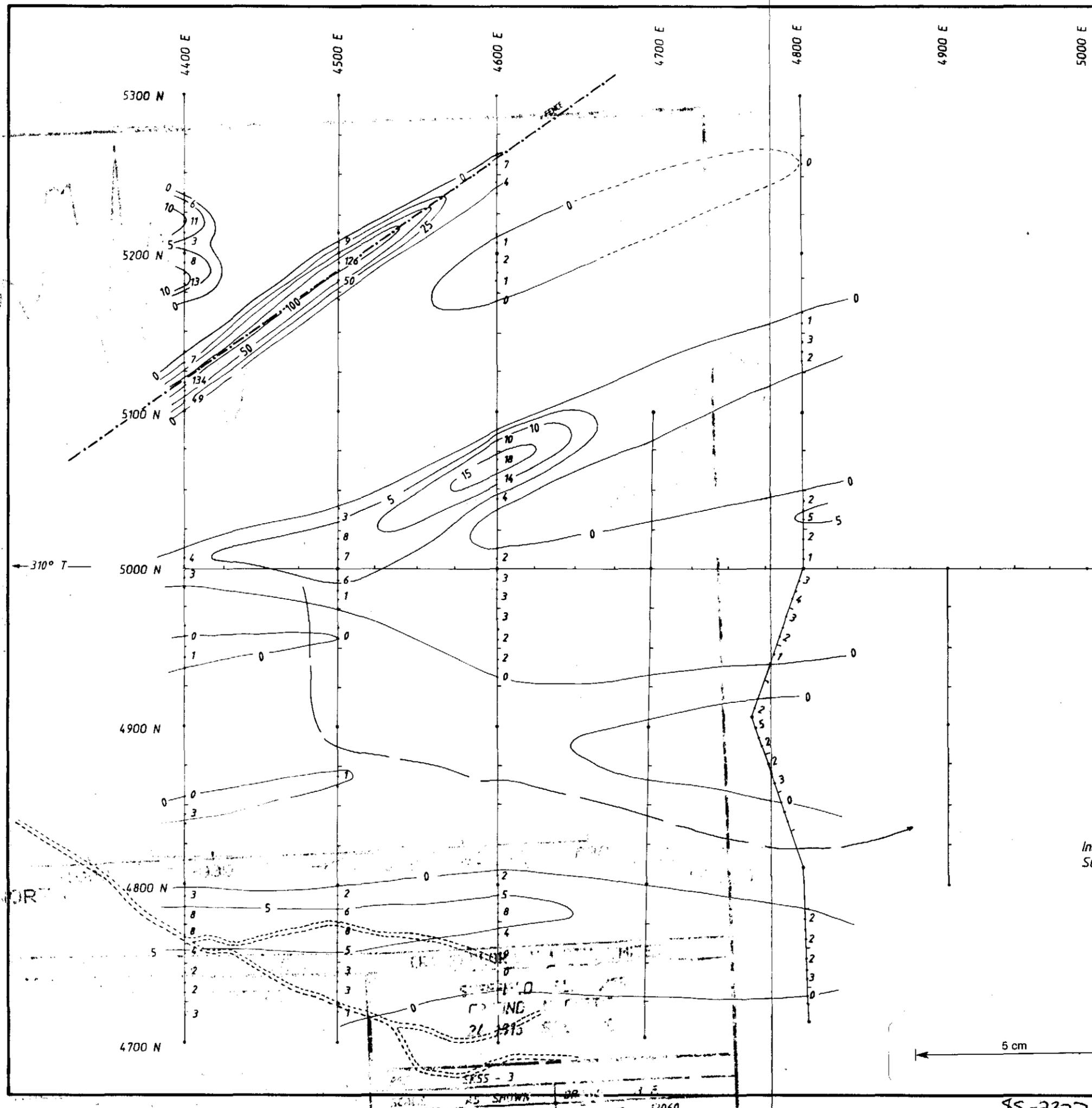
|         |        |
|---------|--------|
| REF.    |        |
| SCALE.  | 1:2500 |
| AUTHOR. |        |
| DATE.   |        |

5 cm

238122



25 237



Instrument: PHOENIX V.L.F. - 2  
 Surveyor: A. CRICK

238124

CRA EXPLORATION PTY. LIMITED

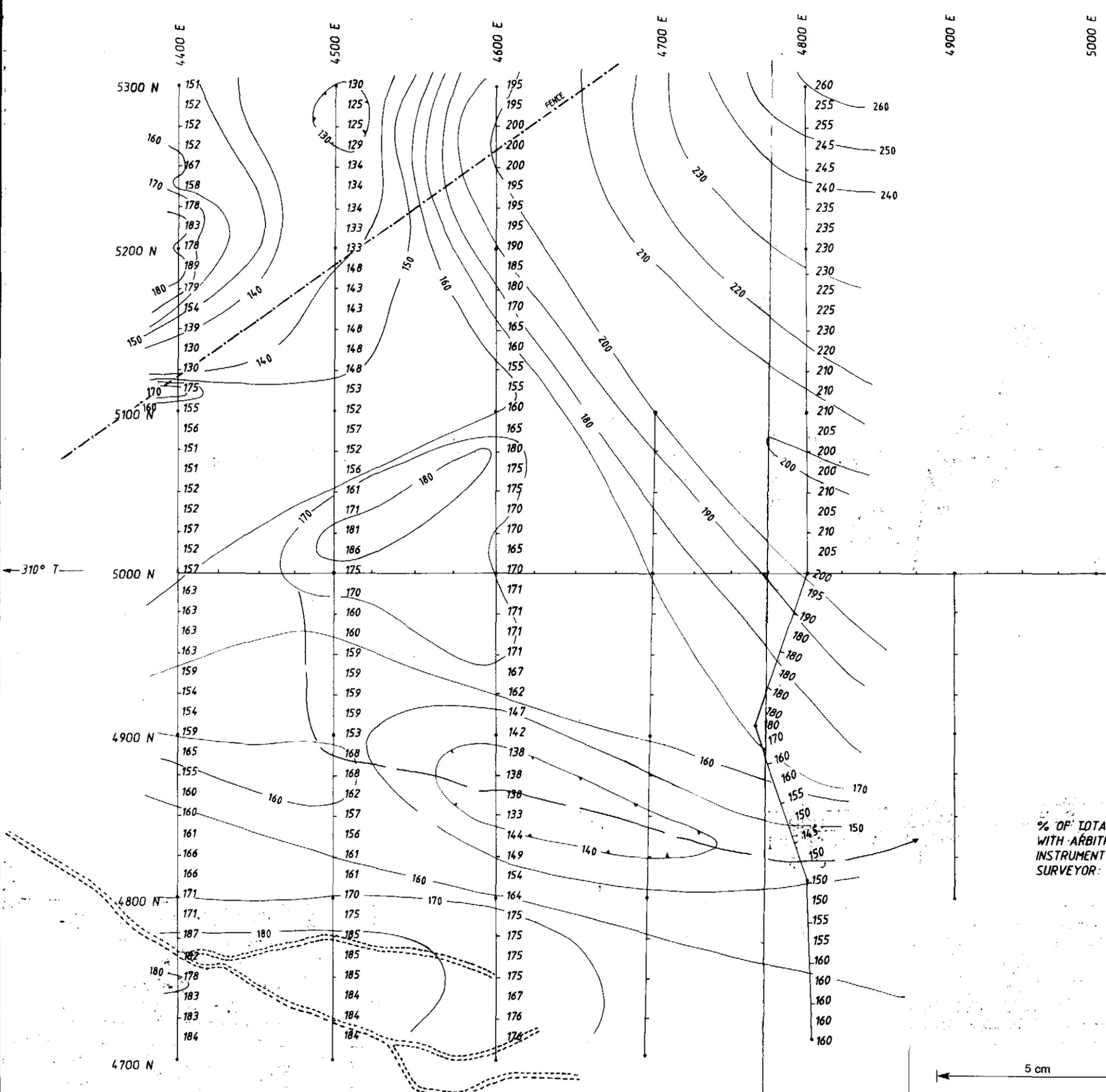
SHEFFIELD E.L. 7/73  
 WILMOT COPPER ANOMALY  
 V.L.F. - E.M.  
 NORMALIZED DIP ANGLE

|         |          |                  |
|---------|----------|------------------|
| REF.    | SK55 - 3 |                  |
| SCALE.  | 1 : 2500 | DRAWN. R. T      |
| AUTHOR. | M.F.F.   | REPORT N°. 11883 |
| DATE.   | JAN 1983 | TASK N°. 1136    |

5 cm

85-2327

117

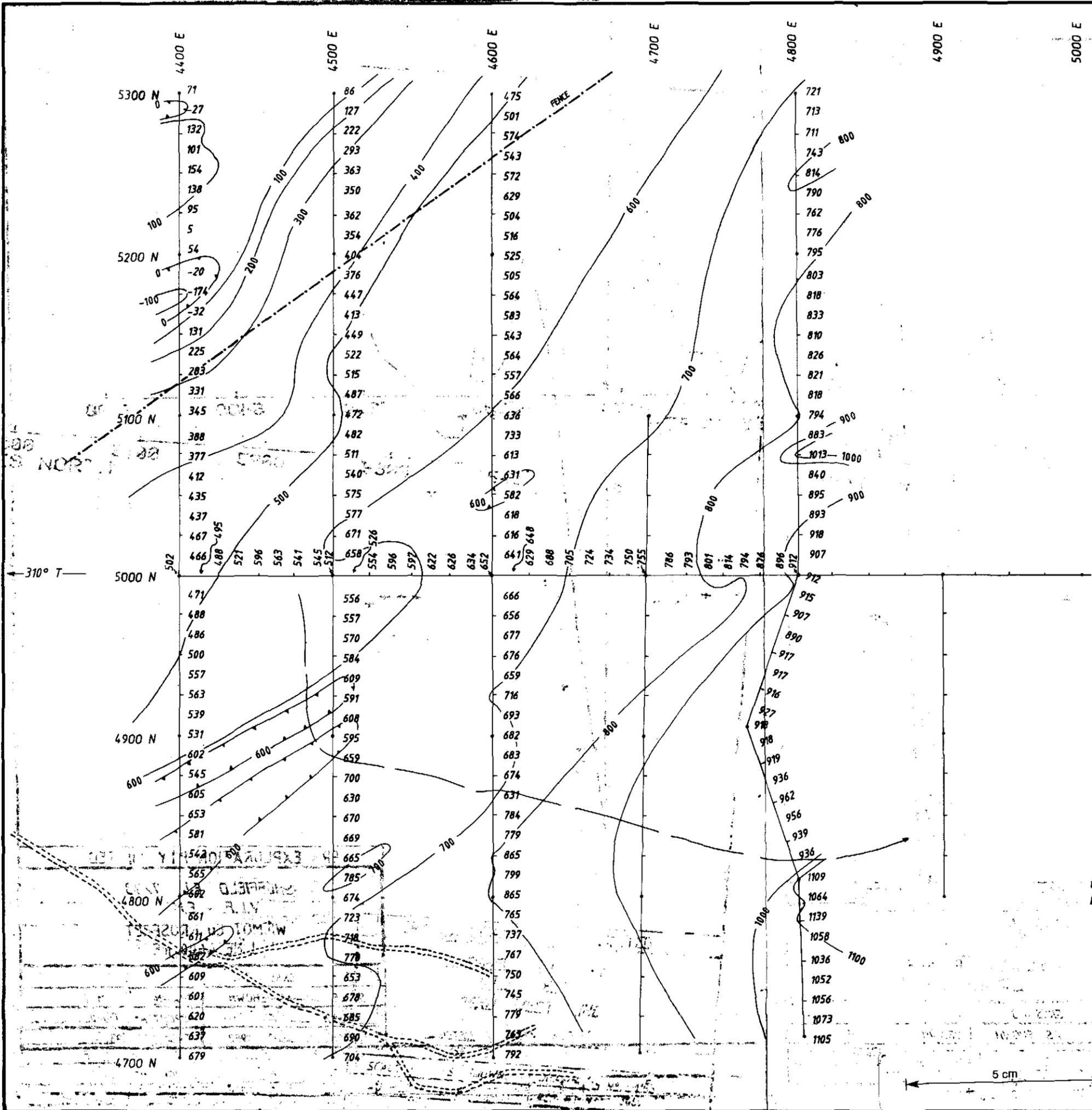


% OF TOTAL FIELD STRENGTH  
 WITH ARBITRARY GAIN.  
 INSTRUMENT: PHOENIX V.L.F. - 2  
 SURVEYOR: A. CRICK

238125

|                                |          |            |          |
|--------------------------------|----------|------------|----------|
| CRA EXPLORATION PTY. LIMITED   |          |            |          |
| SHEFFIELD E.L. 7/83            |          |            |          |
| WILMOT COPPER PROSPECT         |          |            |          |
| V.L.F. - E.M.                  |          |            |          |
| MAX. HORIZONTAL FIELD STRENGTH |          |            |          |
| REF.                           | SK55-3   | DRAWN      | R. I.    |
| SCALE                          | 1:2500   | REPORT NO. | 13060    |
| ALITHDR.                       | M. F. F. | DATE       | JAN 1983 |
|                                |          | TASK NO.   | 1137     |

85-2321



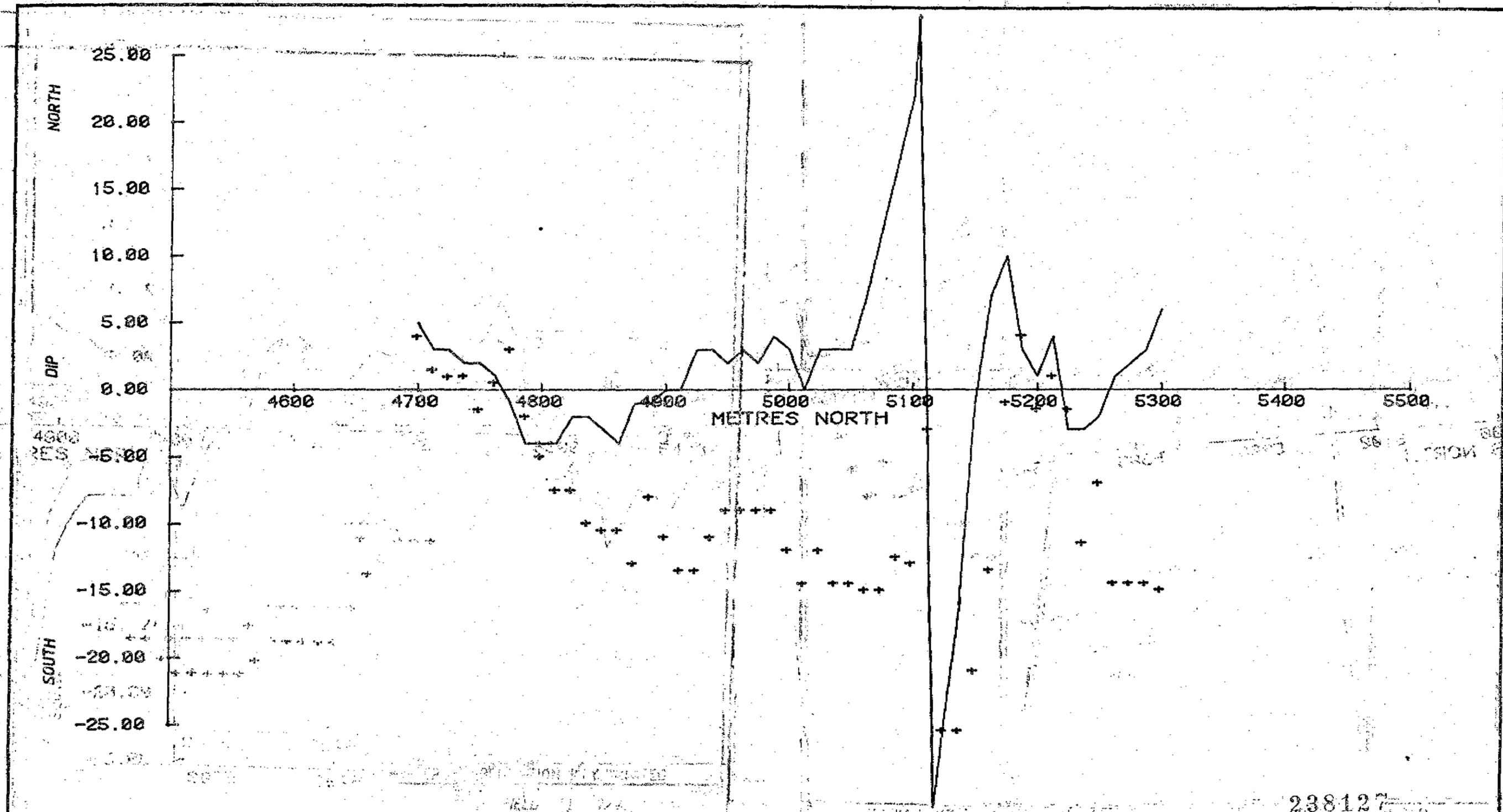
CONTOURS: 100 nT  
 BASE: 62,000 nT

238126

|                                                                                      |          |
|--------------------------------------------------------------------------------------|----------|
| CRA EXPLORATION PTY. LIMITED                                                         |          |
| SHEFFIELD E.L. 7/73<br>WILMOT COPPER PROSPECT<br>TOTAL INTENSITY<br>GROUND MAGNETICS |          |
| REF                                                                                  | SK55 - 3 |
| SCALE                                                                                | 1 : 2500 |
| AUTHOR                                                                               | M. F. F. |
| DATE                                                                                 | JAN 1983 |
| DRAWN                                                                                | R. T     |
| REPORT N°                                                                            | 13060    |
| TASH N°                                                                              | 1138     |

5 cm

85-2327



CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD, E.L. 7/73  
 V.L.F. - E.M.  
 WILMOT Cu PROSPECT  
 LINE 4400 mE

|                              |                 |
|------------------------------|-----------------|
| CRA EXPLORATION PTY. LIMITED |                 |
| SHEFFIELD, E.L. 7/73         |                 |
| V.L.F. - E.M.                |                 |
| WILMOT Cu PROSPECT           |                 |
| LINE 4400 mE                 |                 |
| REF. SK55 - 3                |                 |
| SCALE - AS SHOWN             | DRAWN M.F.      |
| AUTHOR M.F.                  | REPORT N° 15060 |
| DATE SEPT. 1982              | TASK N° 1193    |

DIP ANGLE ( DEGREES )  
 + + + + + MAXIMUM HORIZONTAL FIELD STRENGTH  
 ( 100 % RANGE WITH ARBITRARY GAIN )

5 cm

PHOENIX V.L.F. - 2 METER

85-2327

238127

120

NORTH  
25.00  
20.00  
15.00  
10.00  
5.00  
0.00  
-5.00  
-10.00  
-15.00  
-20.00  
-25.00  
DIP  
SOUTH

4600 4700 4800 4900 5000 5100 5200 5300 5400 5500  
METRES NORTH

4900 5200 238128

CRA EXPLORATION PTY. LIMITED  
SHEFFIELD E.L. 7/73  
V.L.F. - E.M.  
WILMOT CU PROSPECT  
LINE 4500 ME

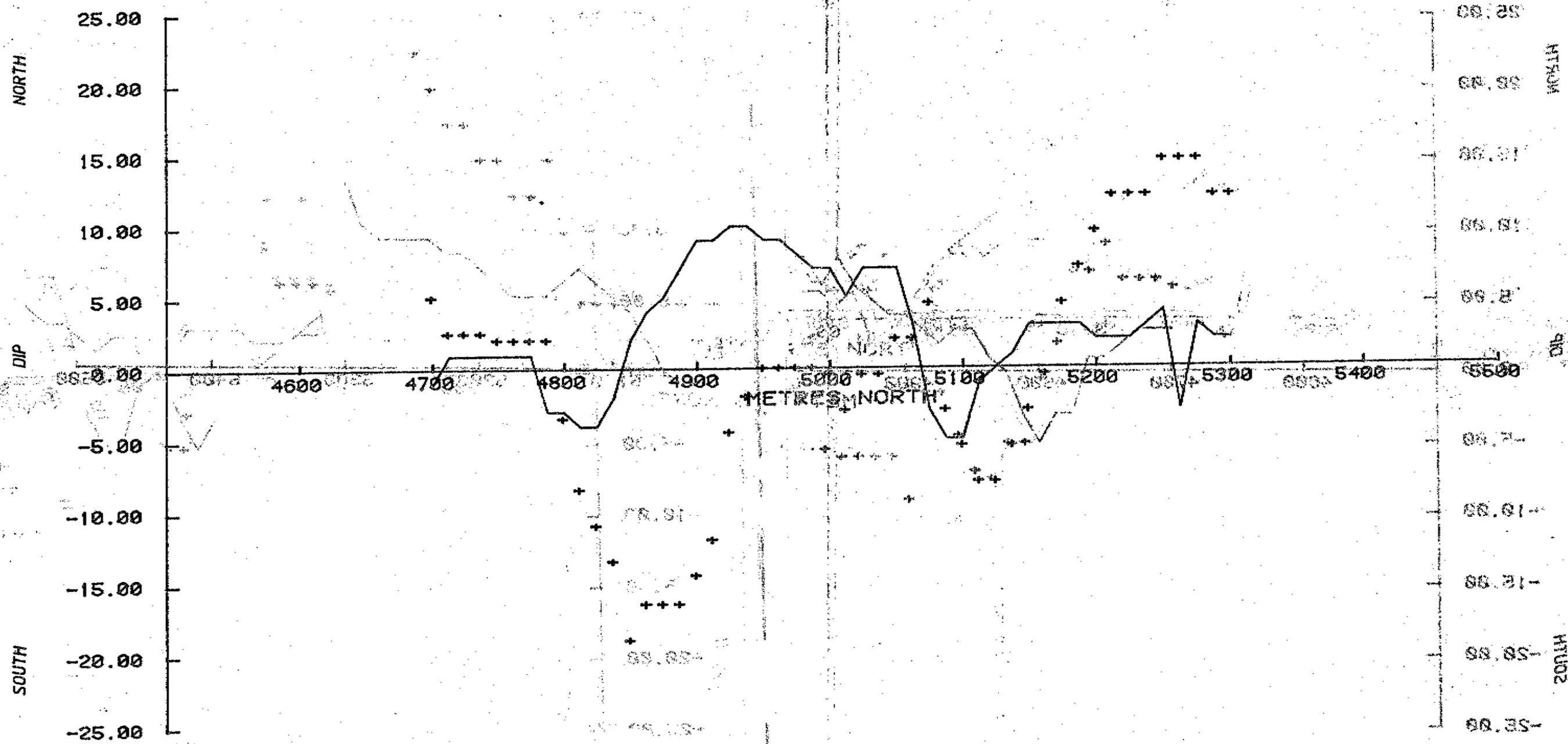
|                              |            |
|------------------------------|------------|
| CRA EXPLORATION PTY. LIMITED |            |
| SHEFFIELD E.L. 7/73          |            |
| V.L.F. - E.M.                |            |
| WILMOT CU PROSPECT           |            |
| LINE 4500 ME                 |            |
| REF                          | SK55 - 3   |
| SCALE                        | AS SHOWN   |
| AUTHOR                       | M.F.       |
| DATE                         | SEPT. 1982 |
| DRAWN                        | M.F.       |
| REPORT N°                    | 13080      |
| TASK N°                      | 1194       |

DIP ANGLE ( DEGREES )  
MAXIMUM HORIZONTAL FIELD STRENGTH  
( 100 % RANGE WITH ARBITRARY GAIN )

PHOENIX V.L.F. - 7 METER

85-2327

121



238129

|                              |                 |
|------------------------------|-----------------|
| CRA EXPLORATION PTY. LIMITED |                 |
| SHEFFIELD E.L. 7/73          |                 |
| V.L.F. - E.M.                |                 |
| WILMOT Cu PROSPECT           |                 |
| LINE 4600 mE                 |                 |
| REF. SK55-3                  |                 |
| SCALE AS SHOWN               | DRAWN M.F.      |
| ASSEMBLED M.F.               | REPORT NO 13060 |
| DATE SEPT. 1982              | TASK NO 1195    |

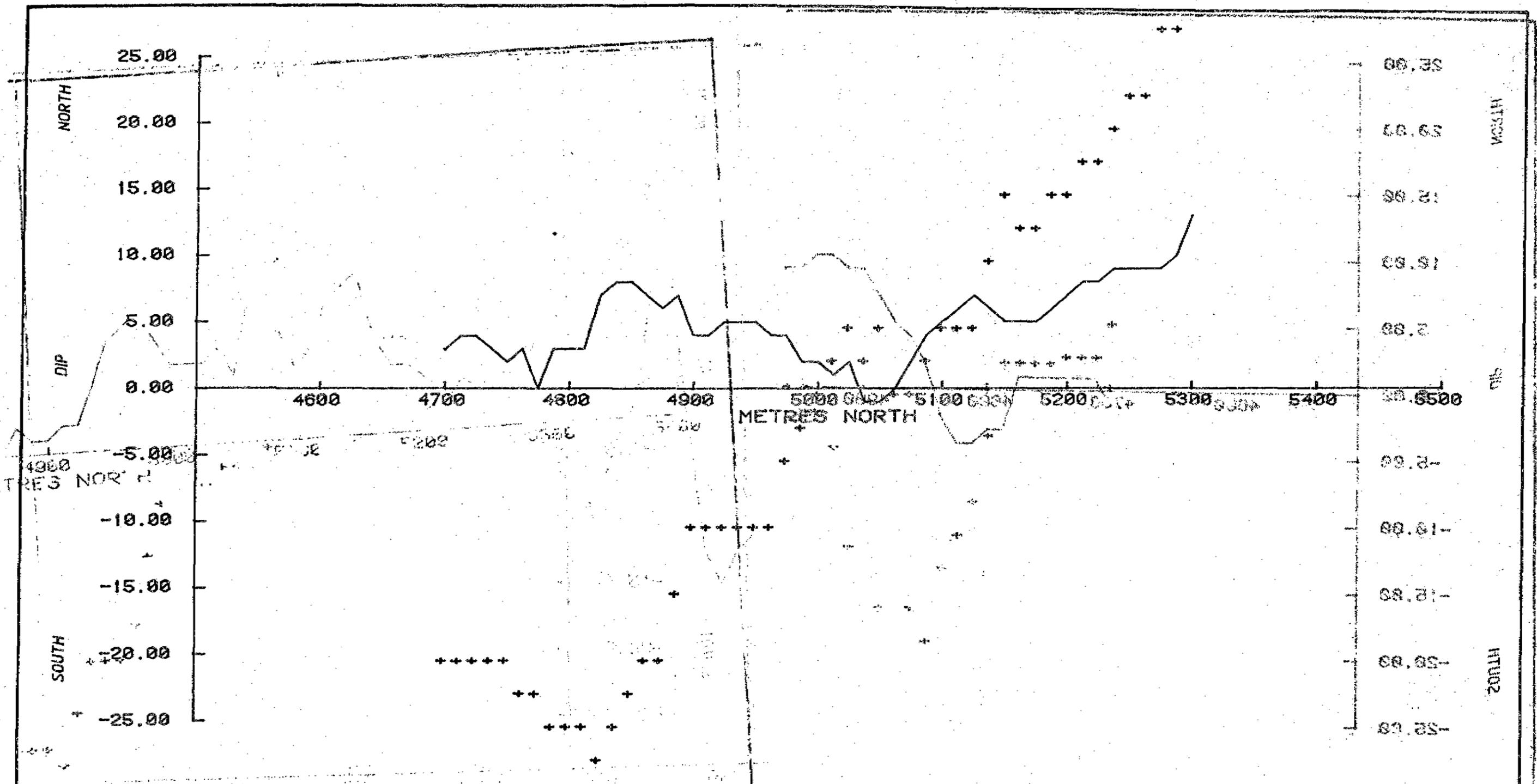
CRA EXPLORATION PTY. LIMITED  
 SHEFFIELD E.L. 7/73  
 V.L.F. - E.M.  
 WILMOT Cu PROSPECT  
 LINE 4600 mE

DIP ANGLE (DEGREES)  
 MAXIMUM HORIZONTAL FIELD STRENGTH  
 (100% RANGE WITH ARBITRARY GAIN)

5 cm

(WAD YRANTIRRA HTIW EDW  
 PHOENIX V.L.F. - 2 METER

85-2321



238130

CRA EXPLORATION PTY LIMITED  
 SHEFFIELD C.L. 7/73  
 V.L.F. - E.M.  
 DIP ANGLE (DEGREES) ROUAGNETT ANOMALY  
 16-280' 100' 100' 100' 100'  
 MAXIMUM HORIZONTAL FIELD STRENGTH  
 (100 % RANGE WITH ARBITRARY GAIN)  
 SCALE AS SHOWN DRAWN M.F.  
 AUTHOR M.F. REPORT NO. 13060  
 TAGS NO. 1196

|                                                                            |           |
|----------------------------------------------------------------------------|-----------|
| CRA EXPLORATION PTY. LIMITED                                               |           |
| SHEFFIELD C.L. 7/73<br>V.L.F. - E.M.<br>WILMOT Cu PROSPECT<br>LINE 4800 ME |           |
| SCALE                                                                      | AS SHOWN  |
| DRAWN                                                                      | M.F.      |
| REPORT NO.                                                                 | 13060     |
| DATE                                                                       | SEPT 1982 |
| TASK NO.                                                                   | 1196      |

5 cm

PHOENIX V.L.F. - 7 METER

85-2327

5 414 000 mN

238131

5 413 000 mN

**LEGEND**

- B697 Anomalous BHP Sample
- 1197547 Follow up Sample

5 cm

5 412 000 mN

5 411 000 mN

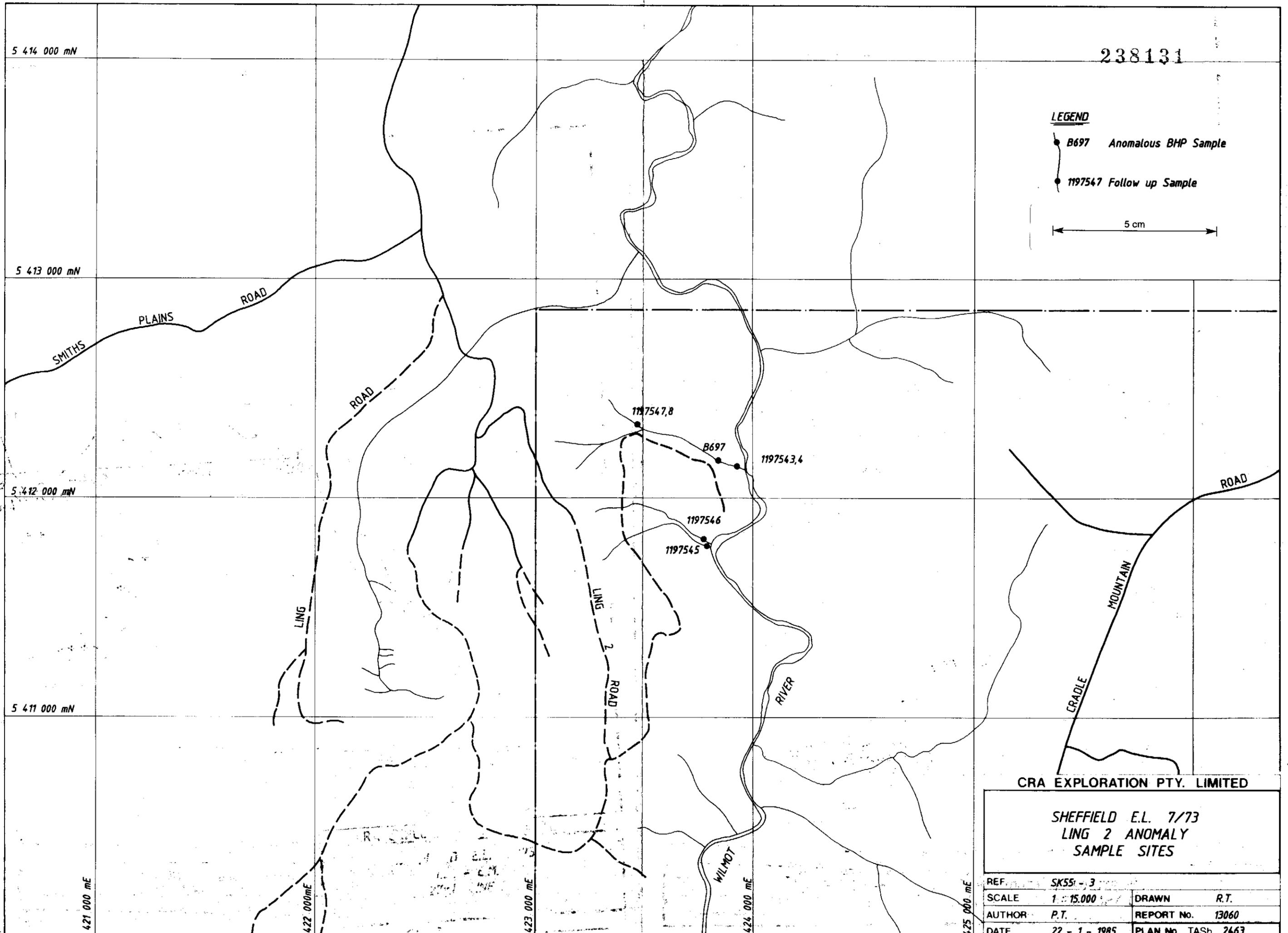
421 000 mE

422 000 mE

423 000 mE

424 000 mE

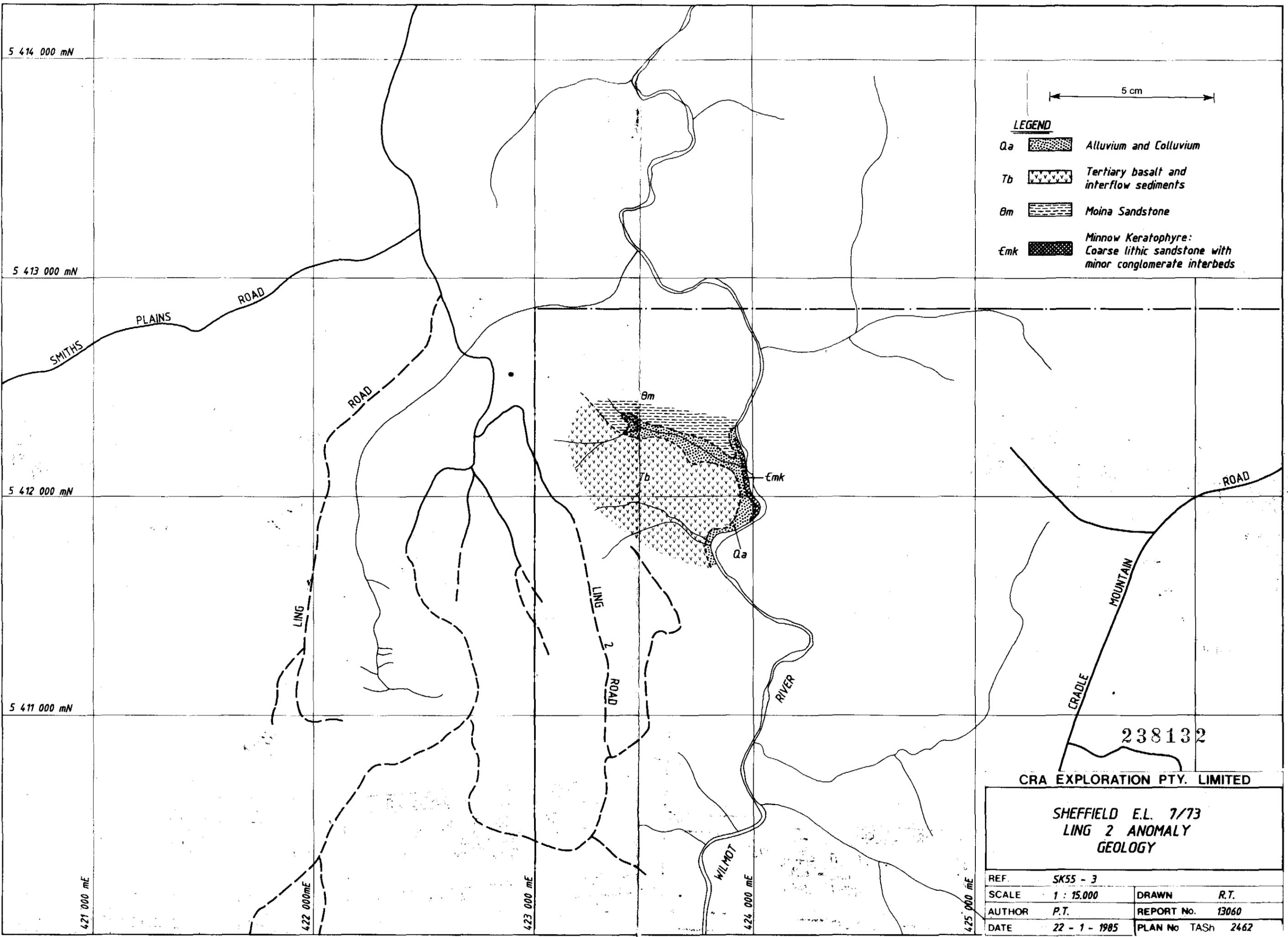
425 000 mE



CRA EXPLORATION PTY. LIMITED

**SHEFFIELD E.L. 7/73  
LING 2 ANOMALY  
SAMPLE SITES**

|        |               |            |           |
|--------|---------------|------------|-----------|
| REF    | SK55 - 3      | DRAWN      | R.T.      |
| SCALE  | 1 : 15,000    | REPORT No. | 13060     |
| AUTHOR | P.T.          | PLAN No    | TASh 2463 |
| DATE   | 22 - 1 - 1985 |            |           |



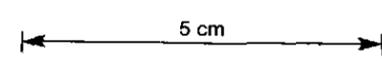
**LEGEND**

Qa Alluvium and Colluvium

Tb Tertiary basalt and interflow sediments

θm Moina Sandstone

Emk Minnow Keratophyre: Coarse lithic sandstone with minor conglomerate interbeds

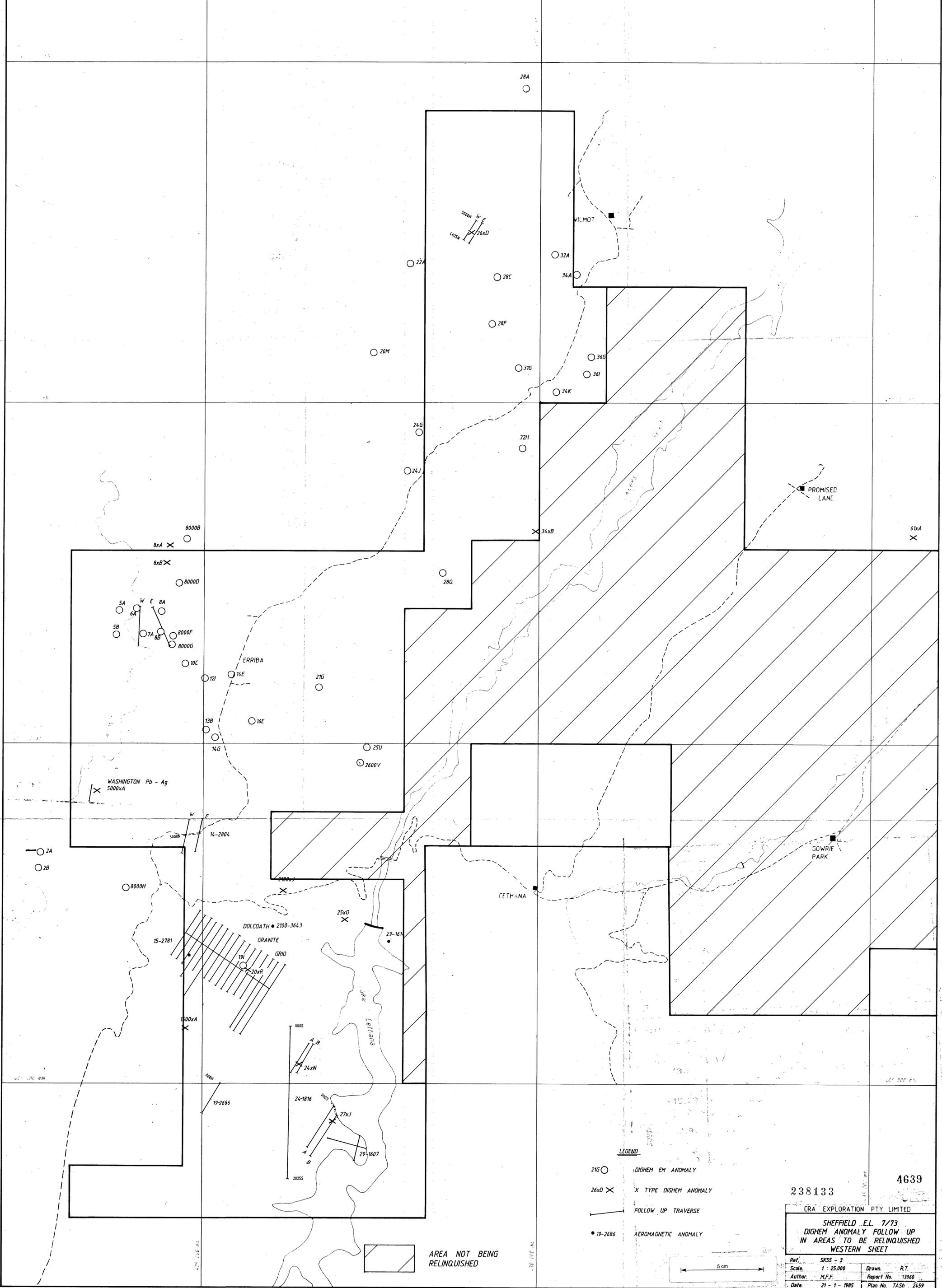


238132

CRA EXPLORATION PTY. LIMITED

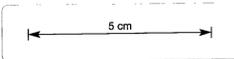
SHEFFIELD E.L. 7/73  
LING 2 ANOMALY  
GEOLOGY

|        |               |            |           |
|--------|---------------|------------|-----------|
| REF.   | SK55 - 3      | DRAWN      | R.T.      |
| SCALE  | 1 : 15,000    | REPORT No. | 13060     |
| AUTHOR | P.T.          | PLAN No    | TASH 2462 |
| DATE   | 22 - 1 - 1985 |            |           |



- LEGEND**
- 21G DIGHEM EM ANOMALY
  - × 26xD X TYPE DIGHEM ANOMALY
  - FOLLOW UP TRAVERSE
  - 19-2686 AEROMAGNETIC ANOMALY

AREA NOT BEING RELINQUISHED



4639

238133

CRA EXPLORATION PTY. LIMITED

SHEFFIELD .E.L. 7/73  
DIGHEM ANOMALY FOLLOW UP  
IN AREAS TO BE RELINQUISHED  
WESTERN SHEET

|                     |                    |
|---------------------|--------------------|
| Ref. SK55 - 3       | Drawn. R.T.        |
| Scale. 1 : 25,000   | Report No. 13060   |
| Author. M.F.F.      | Plan No. TASH 2459 |
| Date. 21 - 1 - 1985 |                    |

5 415 000 mN

5 415 000 mN

440 000 mE

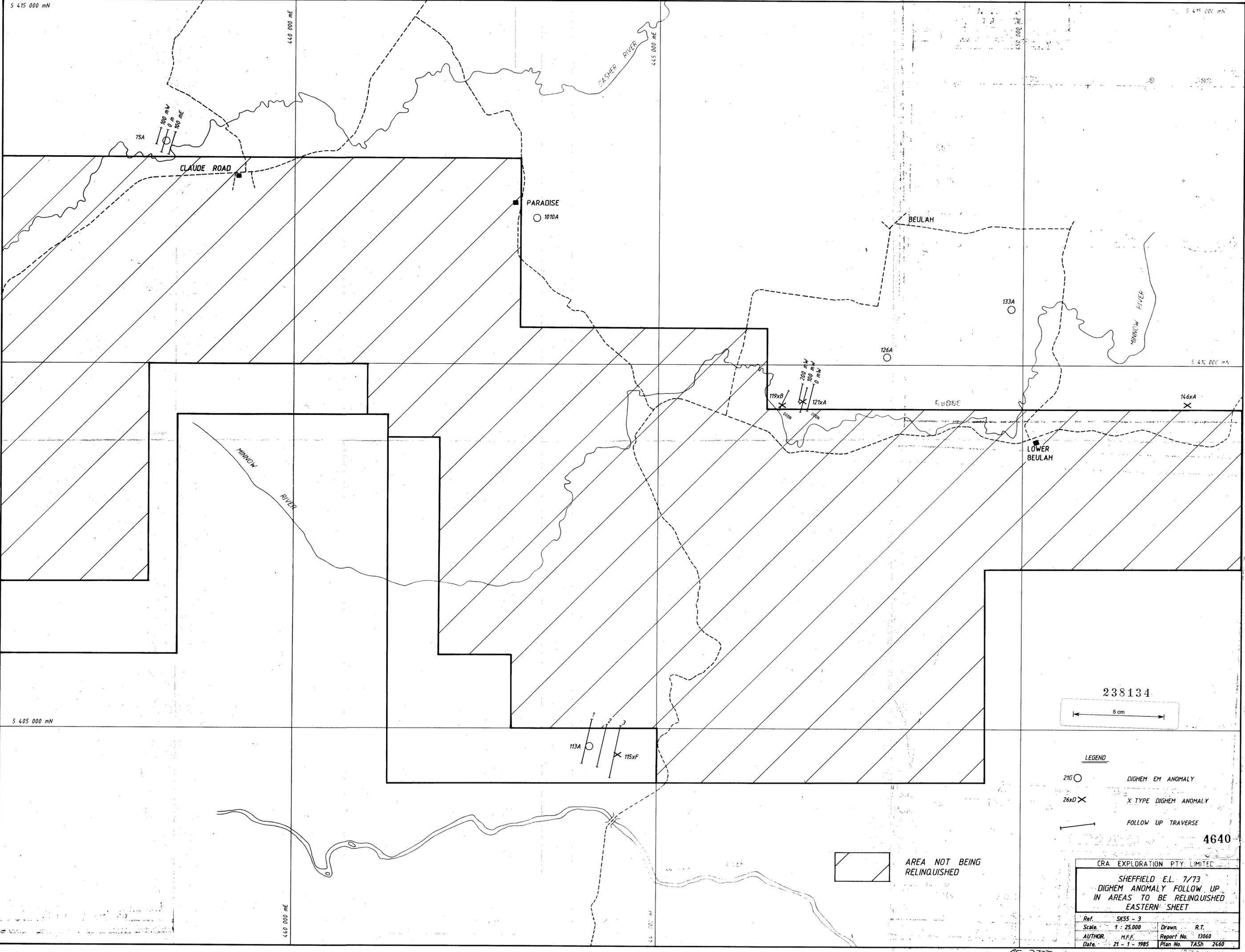
445 000 mE

450 000 mE

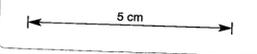
5 405 000 mN

440 000 mE

445 000 mE



238134



LEGEND

- 21G ○ DIGHEM EM ANOMALY
- 26xD X X TYPE DIGHEM ANOMALY
- FOLLOW UP TRAVERSE

4640

AREA NOT BEING RELINQUISHED

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73  
 DIGHEM ANOMALY FOLLOW UP  
 IN AREAS TO BE RELINQUISHED  
 EASTERN SHEET

|        |            |            |               |
|--------|------------|------------|---------------|
| Ref.   | SK55 - 3   | Drawn      | R.T.          |
| Scale  | 1 : 25,000 | Report No. | 13060         |
| AUTHOR | M.F.F.     | Date       | 21 - 1 - 1985 |
|        |            | Plan No.   | TASH 2460     |