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E.L. 7/73, SHEFFIELD, NORTH TASMANIA

REPORT ON EXPLORATION DURING 1982

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CONTENTS

		Page
1.	SUMMARY	1
2.	INTRODUCTION	1
3.	CONCLUSIONS	2
4.	RECOMMENDATIONS	2
5.	GENERAL	3
	5.1. Geology	3
	5.2 Exploration 1982	4
	5.2.1. Dighem II Survey	4
	5.2.2. Geochemical Anomalies/Mineral Occurrences	4
6.	DIGHEM II FOLLOW-UP RESULTS	5
	6.1 E.M. Anomaly 5000xA	5
	6.2 E.M. Amomalies 7A,8A,8B	6
	6.3 E.M. Anomaly 24xN	6
	6.4 E.M. Anomaly 26xD	6
	6.5 E.M. Anomaly 27xJ	7
	6.6 E.M. Anomaly 47xA, Aeromagnetic Anomaly 47-1767 (Promised Land Prospect)	7
	6.7 E.M. Anomalies 56xF, 59xG, 60xD	8
	6.8 E.M. Anomaly 63C	8
	6.9 E.M. Anomaly 64xD	8
	6.10 E.M. Anomaly 66xC	9
	6.11 E.M. Anomaly 73xA	9
	6.12 E.M. Anomaly 75A	9
	6.13 E.M. Anomalies 98xG, 100xE, 1000E, 1010M	10
	6.14 E.M. Anomalies 102xD, 103xF, 104xB	10
	6.15 E.M. Anomalies 113A, 115xF	10
	6.16 E.M. Anomalies 118xA, 119xC	10

613003

6.17 E.M.Anomalies 119xB, 121xA 11

6.18 E.M.Anomaly 132xD 11

6.19 E.M.Anomalies 143xA, 146xB (Garden of Eden Prospect) 12

6.20 E.M.Anomaly 145xA 12

6.21 E.M.Anomaly 146xC 13

6.22 E.M.Anomaly 126xB 13

6.23 Aeromagnetic Anomalies 19-2686, 24-1816, 29-1607 13

6.24 Aeromagnetic Anomaly 14-2804 (Eribba Road Anomaly) 14

6.25 Aeromagnetic Anomaly 2600-3695 (Cethana Picnic Area Grid) 14

6.26 Aeromagnetic Anomaly 113-0518 14

6.27 Aeromagnetic Anomalies 15-2781, 2100-3643, 29-1614 (Dolcoath Margin Anomalies) 14

7. WILMOT COPPER ANOMALY 16

7.1 Stream Sediment Geochemistry 16

7.2 Follow-up Grid 16

7.2.1. Geology 16

7.2.2. Soil Geochemistry 18

7.2.3. Geophysics 18

7.3 Discussion and Recommendations 19

8. STAVERTON PROSPECT 19

8.1 Introduction 19

8.2 Geology 20

8.3 Geochemistry 20

8.4 Geophysics 21

8.5 Discussion and Recommendations 21

9. GOG RANGE PROSPECTS 22

9.1 Introduction 22

9.2 Geology 22

9.3 Geochemistry 22

9.4 Geophysics 23

9.5 Discussion and Recommendations 25
10. BEULAH BARYTE 25
10.1 Introduction 25
10.2 Geology 26
10.3 Geochemistry 26
10.4 Geophysics 27
10.5 Discussion and Recommendations 27
11.STONEBRIDGE PROSPECT 28
11.1 Introduction 28
11.2 Stream Sediment Geochemistry 28
11.3 Geology 28
11.4 Soil Geochemistry 28
11.5 Discussion and Recommendations 29
12.STAR OF THE WEST GOLD PROSPECT 29
12.1 Introduction 29
12.2 Geology 29
12.3 Geochemistry 30
12.4 Discussion 30
13.1982 DRILLING 30
13.1 Dolcoath Granite & Vicinity 30
13.2 Lake Barrington Copper Prospect 30
14.DISCUSSION 31
15.REFERENCES 33
16.LOCATION 33
17.KEYWORDS 34
18.LIST OF PLANS 34
19.LIST OF TABLES 42
20.LIST OF APPENDICES 42

613005

1. SUMMARY

Detailed examination of Dighem electromagnetic (E.M.) anomalies failed to locate a target worthy of drilling. Some additional follow-up is required but the work is of low priority. Of the Dighem aeromagnetic anomalies examined, interesting results have been obtained from the Cethana Picnic anomaly which is still under examination. Further evaluation of several other aeromagnetic anomalies is suggested.

Geochemical and geophysical anomalies at Gog Range and Staverton are recommended for trenching or percussion drilling. A surface E.M. survey is suggested to investigate geophysical anomalies in an interesting geological environment at the Beulah baryte occurrence. The baryte occurrence and geochemical anomalies at Stonebridge are also worthy of further examination.

2. INTRODUCTION

Sheffield EL 7/73 lies 25 kilometres south of Devonport, North Tasmania. It is held in joint venture with Carpentaria Exploration Company.

This report summarises most of the exploration completed during 1982 plus some earlier, previously unreported, work. Seperate reports have been prepared for the Lake Barrington and Dolcoath Granite prospects which were drilled during 1982; the reports are referenced in the text.

The main exploration effort, other than drilling, was directed towards the follow-up of E.M. and aeromagnetic anomalies detected by a Dighem II multicoil frequency domain electromagnetic survey flown in February 1981. The follow-up generally consisted of location of the anomaly on the ground using Very Low Frequency Electromagnetics (V.L.F. - E.M.) then lithology identification and, if warranted, soil sampling and ground magnetics.

Some exploration was also directed to further investigation of known geochemical anomalies at Wilmot, Staverton, and Gog Range. Additional sampling was undertaken and, where required, ground magnetic, V.L.F. - E.M. and Self Potential (S.P.) surveys were conducted.

Known mineralisation at the Stonebridge baryte, Beulah baryte and Star of the West gold prospects was investigated by soil sampling, mapping and, at Beulah, ground magnetics and V.L.F. - E.M.

3. CONCLUSIONS

1. The follow-up exploration of the Dighem II E.M. anomalies failed to locate a target worthy of drilling. Only limited additional follow-up is recommended.

2. Because of the failure of the Dighem survey to locate any significant anomalies, it would appear that conductive, relatively shallow mineralisation is unlikely to exist within the E.L. However, significant mineralisation, undetected by Dighem is known to exist within the EL (e.g. Lake Barrington copper prospect) and there is still potential to discover economic mineralisation within the Licence.

3. A number of current prospects require additional exploration, however, much of this is of low priority.

4. New prospect generation should be based on a study of existing stream sediment geochemistry and aeromagnetic data.

4. RECOMMENDATIONS

1. Statistical evaluation of existing stream sediment geochemistry to identify anomalies and correlation of this data with the Dighem aeromagnetics to pick out new targets for exploration.

2. A ground E.M. survey of the Beulah baryte occurrence to test at depth the slightly anomalous V.L.F. - E.M. and magnetic responses which occur in this favourable geological environment.

3. Trenching of the soil geochemical anomalies at Staverton. If encouraging this would be followed by percussion drilling.

4. Trenching over soil geochemical anomalies 1, 3, and 4 (Gog Range West) at Gog Range. As a low priority target, percussion drilling of the P.E.M./S.P./V.L.F. - E.M. anomalies at Gog Range West is also recommended.

5. As low priority targets, bedrock sampling (trenching or percussion drilling) of Dighem anomalies 56xF - 59xG - 60xD, 143xA - 146xB and soil geochemical anomalies at the Wilmot copper prospect.

6. Continue investigation of aeromagnetic anomaly 2600-3695 (Cethana Picnic Area Grid) and the Star of the West gold prospect by additional soil and rock sampling.

7. Further assessment of the Stonebridge baryte occurrence and associated anomalous stream sediment geochemistry is required.

8. Reconnaissance gravity surveys over aeromagnetic anomalies 15-2781, 2100-3643, 29-1614.

5. GENERAL

5.1 Geology

The geology of the EL is well described by Plans Tv 240 and 241, the Sheffield 1 Mile sheet and the Explanatory Report for that sheet (Jennings, 1979).

The EL has been extensively explored largely because it contains a suite of Cambrian volcanics considered to be the northern extension of the Mt.Reid volcanic belt and hence prospective for volcanogenic mineralisation. Lying unconformably above the Cambrian volcanics are the Roland Conglomerate then the Moina Quartzite and Gordon Limestone. The Moina Quartzites are prospective for tin and lead-silver mineralisation and the Gordon Limestone for skarn style mineralisation. Intrusive into both the Cambrian and Ordovician formations is the Devonian Dolcoath granite which has associated with it base metal and tin-tungsten mineralisation.

5.2 Exploration 1982

5.2.1. Dighem II Survey

The details and results of this survey are contained in the contractors report (Dvorak & Vergos, 1982)in brief the results were disappointing, relatively few of the large number of anomalies located were significant (i.e. non-cultural or not caused by, or lying over, Tertiary basalt). Table I lists all the anomalies, their characteristics and their probable explanation. The significant anomalies were investigated by ground follow-up, generally consisting of V.L.F.-E.M. to locate and define the Dighem anomaly, plus ground magnetics, soil geochemistry and geological mapping. Some of the aeromagnetic anomalies located by the survey were also examined,but several remain to be ground checked. Plans TASh 1119 and 1120 show the location of the follow-up surveys and Section 6 of this report details the results of this work. Appendix I contains the geochemical analyses of all samples collected during the follow-up programme.

5.2.2. Geochemical Anomalies/Mineral Occurrences

Included on Plans Tv 240 and 241 are the results of a regional stream sediment survey conducted by Asarco and CRAE in the mid 1970's.

A number of the geochemical anomalies located by that survey have been explored and one such anomaly, the Lake Barrington copper prospect has been drilled (Purvis, 1981 and Weber, 1983). During 1982 exploration of several of these anomalies and some areas of known mineralisation continued. Sections 7 - 13 of this report detail the results of this work.

6. DIGHEM II FOLLOW-UP RESULTS

6.1 E.M. Anomaly 5000xA

A very low order E.M. 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 mineralisation assayed up to 15.9 percent 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.

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.

6.2 E.M. 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.

6.3 E.M. 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.

6.4 E.M. 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, 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 immediatley adjacent to 26xD and was extensively investigated (Section 7 this report).

6.5 E.M. 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-porphyries 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.

6.6 E.M. Anomaly 47xA, Aeromagnetic Anomaly 47-1767 (Promised Land Prospect)

Dighem anomaly 47xA although a low order "x-type" anomaly was considered interesting because of its proximity to both aero-magnetic anomaly (47-1767) and the Lake Barrington copper prospect where significant copper mineralisation has been drilled.

A grid was cut over the anomalies to allow V.L.F.-E.M. ground magnetics and soil sampling (Plans TASh 893-899). Both the V.L.F.-E.M. and magnetic surveys delineated their respective target anomalies which were found to be highly correlative... However, these anomalies were generally constricted and of near - surface character. They are possibly due to faulting or shearing.

Soil sample analyses showed no anomalous base metal concentrations. Geological mapping showed a suite of very coarse greywackes (probably of volcanic derivation) with minor tuff horizons over-lain by fine sandstone and siltstones.

The only evidence of mineralisation was occassional fragments of float (generally tuffaceous) with coarse baryte veination.

In view of the lack of geochemical and geophysical encouragement, no further work was undertaken.

6.7 E.M. Anomalies 56xF, 59xG, 60xD

These anomalies lie to the south of Gowrie Park and underlain by Quaternary talus of Roland Conglomerate debris. Two of the anomalies, 56xF and 59xG fall on the Gowrie Park grid investigated previously by CRAE (Purvis, 1978).

Plans TASh 1096-1103 show the V.L.F.-E.M. and ground magnetic profiles obtained on lines over the anomalies. The V.L.F.-E.M. responses do show minor cross-overs correlated with the Dighem anomalies but are not very significant. The ground magnetics show a strong anomaly. A gradient array induced polarisation(I.P.) survey conducted over the Gowrie Park grid showed a moderate, but broad, resistivity low corresponding to anomalies 56xF and 59xG which strikes towards 60xD. The E.M. responses and magnetic signature are probably caused by a more conductive lithology beneath the Quaternary cover.

These anomalies are a low priority target which would best be explored by bedrock geochemistry (trenching or auger drilling).

6.8 E.M.Anomaly 63C

Two V.L.F.-E.M. and ground magnetic profiles (Plans TASh 1035-1038) over the plotted position of this anomaly failed to locate it. The area involved is a flat paddock of river alluvium, as no anomaly could be located, it is considered possible that a temporary electric fence may have caused the Dighem anomaly.

6.9 E.M. Anomaly 64xD

Strong V.L.F.-E.M. crossovers (Plans TASh 1150-1151) on two lines located this anomaly. Lithologies present are fairly coarse sericitic volcaniclastics but no evidence of mineralisation was noted.

Soil samples collected over the area of the V.L.F.-E.M. anomalies did not produce any anomalous metal concentrations.

No further work is considered necessary.

6.10 E.M. Anomaly 66xC

Three lines were cut over this anomaly which is underlain by Quaternary talus of Roland Conglomerate debris. V.L.F.- E.M. and ground magnetic profiles (Plans TASh 1156-1161) show pronounced, coincident, anomalies which correlate with a low ridge covered by boulders of Roland Conglomerate. This ridge presumably reflects an underlying resistant lithology, possibly a basic dyke which may account for the magnetic and the Dighem / V.L.F.-E.M. anomalies.

Further follow-up by bedrock geochemistry (auger or trenching) is recommended.

6.11 E.M. Anomaly 73xA

V.L.F.-E.M. and ground magnetic anomalies (Plans TASh 1081-1086) located this anomaly over three lines.

Soil geochemistry revealed no unusual base metal concentrations. Mapping showed that the anomalies were all located over a small inlier of fairly fresh Cambrian shales and tuffs surrounded by a cover of Quaternary scree of Roland Conglomerate. The lack of encouraging soil geochemistry and evidence of mineralisation suggests that the E.M. and magnetic anomalies (both of which indicate a shallow source) are a contrast effect caused by the "window" within the scree cover revealing more conductive and magnetic Cambrian lithologies.

No further work is recommended.

6.12 E.M. Anomaly 75A

Three lines of V.L.F.-E.M. and ground magnetics (Plans TASh 1104-1109) defined a relatively noisy anomalous zone.

The area is covered by alluvium adjacent to a Tertiary basalt occurrence. The anomalies are considered to be caused by a basalt edge effect.

No further work is recommended.

6.13 E.M. Anomalies 98xG, 100xE, 1000E, 1010M

Field checking revealed small outliers of Tertiary basalt at the sites of these anomalies and no further work was carried out. Acid volcanics were also noted in the vicinity, but no evidence of mineralisation was recorded. Further follow-up by soil geochemistry is recommended (low priority).

6.14 E.M. Anomalies 102xD, 103xF, 104xB

Plans TASh 1090-1095 detail the V.L.F.-E.M. and ground magnetic profiles of three lines cut over these anomalies. V.L.F.-E.M. cross-overs located the Dighem anomalies, but mapping indicates that they all occur in an area of extensive Roland Conglomerate scree with only traces of float of the underlying Cambrian volcaniclastics being seen. One line of soil samples was collected; analyses showed no anomalous metal content. The V.L.F.-E.M. and magnetic profiles suggest that the anomalous zone is due to a contact effect. No further work was undertaken.

6.15 E.M. 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.

6.16 E.M. Anomalies 118xA, 119xC

Four traverse lines were completed over these anomalies. The V.L.F.-E.M. and magnetic profiles (Plans TASh 1061-1068) show little of interest except to locate, by the V.L.F.-E.M. cross-overs, the approximate position of the Dighem anomalies. A limited number of soil samples were collected, the maximum values obtained being 70 ppm copper, 270 ppm lead and 295 ppm zinc.

No outcrops were located but float of quartz porphyry and a variety of volcaniclastics was found, none showing evidence of mineralisation. The anomalies correlate with an area of marsh adjacent to a creek.

In view of the unimpressive geophysical and geochemical results, no further work was undertaken.

6.17 E.M.Anomalies 119xB, 121xA

These anomalies, marginal to a Cambrian granite intruding Cambrian volcanics fall outside the EL (but on "vacant" ground).

In total four lines were cut over these anomalies; Plans TASh 1069-1076 give the V.L.F.-E.M. and ground magnetic profiles of these lines.

Anomaly 119xB occurs over a series of fine silts and tuffs with no discernable magnetic signature but with an associated relative V.L.F.-E.M. crossover. The maximum soil sample analyses obtained were 110 ppm copper, 32 ppm lead and 147 ppm zinc.

Anomaly 121xA was located by V.L.F.-E.M. cross-overs and an associated steep magnetic gradient. Both of these are ascribed to the granite contact which was mapped coincident to these features. Soil samples taken over the slatey tuffs/shales and hornfels country rock contained up to 70 ppm copper, 58 ppm lead, and 130 ppm zinc.

No further work was undertaken, the ground has now been pegged by Amax (Aust.) Pty.Ltd.

6.18 Anomaly 132xD

Basalt float was recognised amongst sparse float of tuffaceous sandstones. Two V.L.F.-E.M. and ground magnetic profiles (Plans TASh 1077-1080) showed generally noisy and characterless responses.

The presence of basalt float, which possibly explains the Dighem anomaly, plus the discouraging ground geophysics down graded the anomaly and no further work was undertaken.

6.19 E.M. Anomalies 143xA, 146xB (Garden of Eden Prospect)

A reconnaissance P.E.M. survey located a significant, but very minor, near surface anomaly adjacent to these Dighem anomalies. Because of this, and the presence of the Beulah baryte occurrence along strike to the west, a small grid was cut over 143xA/146xB to allow soil sampling, V.L.F.-E.M. and ground magnetic surveys (Plans TASh 886-891).

Attempts at mapping were hampered by the almost total lack of exposure and the disturbed nature of the ground caused by forestry and farming activity. The lithologies identified in float and the few outcrops were all volcaniclastic; lithic tuffs, phyllitic tuffs and highly sheared tuffs. Slight sericitic alteration is common and most facies had a noticeable ferruginous nature.

Both the V.L.F.-E.M. and the ground magnetics confirmed the anticipated E-W strike but revealed no anomalies, the ground magnetics in particular being very "noisy" and fairly uninformative. The results of the soil sampling showed some areas of elevated geochemistry (up to 230 ppm copper, 360 ppm lead, 290 ppm zinc), one lead-zinc rich anomaly being close to the P.E.M. anomaly. Although elevated,the base metal values are not as high as would be anticipated from significant near surface mineralisation.

As a low priority target, trenching or open hole drilling is recommended over the P.E.M anomaly and associated lead-zinc soil anomaly.

6.20 E.M. Anomaly 145xA

A moderate V.L.F.-E.M. cross-over and slightly erratic ground magnetics on the follow-up traverse (Plans TASh 1152-1153) located this anomaly at the contact between fine foliated phyllitic rocks to the north and coarse manganiferous sandstones to the south. Soil sample analyses peaked at 61 ppm copper, 341 ppm lead and 146 ppm zinc.

Considered to be a contact effect anomaly, and having no encouraging lithologies or geochemistry, no further work was undertaken.

6.21 E.M.Anomaly 146xC

A short follow-up line of V.L.F.-E.M. and ground magnetics Plans (TASh 1154-1155) was sufficient to indicate that this anomaly is probably caused by accumulation of clays, and possibly detrital magnetite, in a narrow gulley. No further work was undertaken.

6.22 E.M. Anomaly 126xB

This anomaly was not followed-up specifically as it falls on the Gog Range grid. Refer to Section 9 of this report.

6.23 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 E.L. 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 7×10^{-3} cgs to 20×10^{-3} cgs compared to a background of 0.1×10^{-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.

6.24 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.

6.25 Aeromagnetic Anomaly 2600-3695 (Cethana Picnic Area Grid)

Located in a very steepsided valley north of the Cethana dam, this pronounced aeromagnetic anomaly has had a small grid cut over it. Only initial sampling has been completed, and some interesting base metal values have been noted in soil samples (up to 310 ppm copper, 410 ppm lead).

6.26 Aeromagnetic Anomaly 113-0518 (Plans TASh 1166-1167)

Anomaly 113-0518 was followed up with two ground magnetic traverses, stream sediment geochemistry and lithology identification. Geochemistry results are presented as Appendix I . It was concluded that the magnetic anomaly is caused by a Cambrian basalt occurrence. Elevated geochemistry is probably due to agricultural contamination and lateritic development. No more work is recommended.

6.27 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 (see section 6.23).

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° 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.

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° 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.

7. WILMOT COPPER ANOMALY

7.1 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 follow-up 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 erractically, 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 follow-up 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 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.

7.2 Follow-up Grid

7.2.1. 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 volcaniclastics. 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).

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-felspar 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.

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

7.2.3. 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 fundementally, 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° GN on lines 4400mE to possibly 4800mE. The latter zone may correlate with Cambrian greywackes and so be lithology caused.

7.3 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.

8. STAVERTON PROSPECT

8.1 Introduction

Asarco detected stream sediment anomalies, (up to 80 ppm copper, 400 ppm lead, 760 ppm zinc) in two creeks draining into Lake Barrington, west of Staverton. CRAE cut a grid over the catchment of these creeks in 1977 and 1978 to allow mapping, soil geochemistry and ground geophysics to be carried out. The initial exploration is detailed in a CRAE Reports (Purvis, 1978).

During 1980-1982 the sampling coverage of the grid was increased and I.P. and P.E.M. surveys conducted.

8.2 Geology (Plan TASh 1140)

Mapping was carried out for CRAE by J.Couper, contract geologist, and indicated an extensive suite of highly sericitic schists and phyllites striking (grid) E-W, with both bedding (where discernable) and schistosity dipping steeply northwards.

Recognisable units within this altered and deformed succession were restricted to minor, relatively fresh rhyolite bands, breccia horizons and quartzites grits. A three fold division of the schists and phyllites is shown on Plan TASh 1140. The quartz sericite schists are medium to coarse grained and quartz rich, probably after crystal tuffs and lavas. The sericitic schists phyllite division is finer grained and quartz poor, has limonite after pyrite and is probably respresentative of altered fine grained tuffs. The sericitic slates and schists are also limonitic after pyrite and are regarded as being after tuff-shales.

8.3 Geochemistry (Plans TASh 1141 - 1147)

Soil sampling located a strong lead anomaly with coincident anomalous zinc, and to a lesser degree, copper values striking (grid) NE-SW, parllel to the trend of the mapped geology. The lead anomaly, defined by values greater than 1000 ppm, is narrow, well defined and has a strike length of approximately 400 metres. Zinc values in excess of 200 ppm define a slightly broader zone than the lead anomaly, probably representing the higher degree of dispersion because of zincs greater mobility in the weathering environment. In comparison to lead and zinc, the copper values are relatively low, the 50 ppm copper contour does define an anomalous zone coincident with the lead and zinc anomalies.

Rock chip geochemistry basically reflects the soil geochemistry. High lead (up to 9100 ppm) and high zinc (up to 2600 ppm) values were obtained from samples of coarse and fine grained sericite and quartz-sericite schists from a zone coincident with the soil geochemical anomalies. As in the soil geochemistry, copper values in the rock samples were low.

8.4 Geophysics

The grid was covered by a dipole-dipole I.P. survey in June of 1980. Results and interpretation are presented as Appendix V.

Anomalous I.P. responses generally correlate to geochemical anomalies, however, they indicate shallow, bottom limited polarizable zones.

A Pulse Electromagnetic survey was carried out over selected lines (600mE, 700mE, 900mE, and 1000mE) on which geochemistry and I.P. anomalies coincided. The survey was with a large loop/ roving receiver configuration. No anomalous responses were detected. Appendix V contains the raw data from this survey.

The area is magnetically flat, as witnessed by the Dighem - aeromagnetic survey. No ground magnetometry has been attempted.

8.5 Discussion and Recommendations

The correlation of the soil geochemical anomalies with a zone of rocks of high background base metal content indicates that these rocks are the source of the soil anomalies. The strike extent of this anomalous (soil and rock) zone has been defined and is small, the I.P. and P.E.M. surveys indicate that improvement in mineralisation with depth is unlikely. However, the geochemistry is sufficiently interesting to warrant trenching and possible percussion drilling if the trenching is encouraging.

9. GOG RANGE PROSPECTS

9.1 Introduction

During their 1973-1975 regional stream sampling programme, Asarco located anomalous copper (up to 260 ppm), lead (up to 260 ppm) and zinc (up to 1600 ppm) values in four creeks draining the west end of the Gog Range. In 1975, Asarco cut an extensive grid over the catchment of these creeks and completed a mapping and soil sampling programme. Four soil geochemistry anomalies were recognised (Williamson 1975). CRAE remapped the Asarco grid in 1976 and completed additional soil sampling.

In 1982 reconnaissance P.E.M. was conducted over the best copper geochemistry, the results were disappointing but a slight anomalous response in the west of the grid was follow-up by ground magnetics, V.L.F.-E.M. an S.P. survey and additional soil sampling. (Gog Range West).

9.2 Geology (Plan TASh 1226)

A varied succession of Cambrian volcanics and sediments, all striking ENE-WSW and generally dipping steeply to the south, underlie the various geochemical anomalies. Acid to intermediate tuffs, rhyolitic lavas and shales, some chloritic and sericitic are present. Although outcrop is good, most of these lithologies occur as massive horizons and little structural interpretation has been attempted. The southern limit of the prospect is marked by Ordovician Roland Conglomerate which lies unconformably above the Cambrian.

9.3 Geochemistry (Plans TASh 1227 - 1230)

The soil sampling programme conducted to follow-up the anomalous stream sediment geochemistry, discovered a belt of coincident copper, lead and zinc anomalies extending for over 2.5 kilometres. The anomalous belt, and the axes of the individual anomalies parallels the strike of the underlying Cambrian rocks. Four major anomalies were recognised.

Anomaly 1 (4800E/4750N-5000E/4750N) has copper in soils up to 910 ppm lead to 440 ppm and zinc to 420 ppm. This anomaly overlies rhyolitic lavas and lithic tuffs, no evidence of mineralisation or cause for the anomaly has been observed.

Anomaly 2 (4000E/5100 - 5225N) has copper to 540 ppm,lead to 360 ppm and zinc to 1470 ppm in a restricted zone within a small valley. Asarco concluded that this anomaly was caused by stream sediment contamination derived from Anomaly 3 which occurs up-slope from Anomaly 2.

Anomaly 3 (3600E/4825N - 4200E/4825N) shows copper values up to 960 ppm, lead to 1080 ppm and zinc to 680 ppm. Quartz crystal tuffs, rhyolite lavas and fine tuffs outcrop over the anomaly, their rock geochemistry is however generally too low in base metals to account for the high soil geochemistry. Two pieces of gossanous float sampled by Asarco contained up to 520 ppm copper, 800 ppm lead, 2400 ppm zinc and 22 ppm silver. The source of this float was not located.

Anomaly 4 (2580E/4675N - 2100E/4900N) (Gog Range West) is a strong copper anomaly (up to 1800 ppm) with associated lead values up to 680 ppm and zinc up to 640 ppm. The anomaly, particularly the copper component is probably exaggerated in area by down slope dispersion to the south; gradients here are very steep. Outcrop over the anomaly is good. Fine tuffs, tuff shales and ash flow tuffs, sometimes chloritic and sericitic, are exposed but no evidence of mineralisation has been observed. In general, the base metal content of these rocks is too low to account for the soil anomalies; Asarco did locate isolated high lead values (up to 1320 ppm) in float of fine tuffs and shales but no high copper values.

9.4 Geophysics (Plans TASh 882-883, 949-950, 1110-1113, 1202-1208)

Reconnaissance ground magnetic and P.E.M. surveys were conducted over the best geochemical anomalies and to investigate Dighem anomaly 126xB. The only interesting responses were from Anomaly 4 where a slight P.E.M. anomaly and magnetic anomaly coincident with the high copper and zinc soil geochemistry were discovered.

This resulted in the extension of the gridding in this area, referred to as Gog Range West, to allow detailed ground magnetics, V.L.F.-E.M. and an S.P. survey to be conducted.

Ground magnetometry resulted in the delineation of two anomalous zones exhibiting near-surface characteristics.

These zones correlate well with Cambrian ash flow and crystal ash flow tuff distribution and can therefore be explained as lithology caused. A small, intense anomaly on line 2700mE at 5050mN has no obvious cause but is too constricted to be of interest.

V.L.F.-E.M. revealed the strong character change between the Cambrian volcanics and sediments in the north and the Ordovician Roland Conglomerate in the south. The contact produces a relatively strong dip and maximum horizontal field strength anomaly indicating its conductive nature; an effect typical of faulted or unconformable contacts. Responses over the rest of the grid are more incoherent, however a number of interesting responses are worth noting:-

a) moderate V.L.F.-E.M. cross-overs on lines 2400mE to 2700mE (continuing off the grid to the east) around 4800mN,

b) conductive area mapped by the maximum horizontal field strength centred on line 2400mE at 5050mN, and

c) conductive unit on line 2700mE at 4825mN coincident with cross-overs.

The Self Potential survey results are dominated by the Cambrian-Ordovician contact. Responses in the Cambrian are fairly noisy due to electrode contact problems (scree). The most significant response occurs on lines 2500mE and 2580mE at 4850mN where a moderate S.P. anomaly occurs coincident with the V.L.F.-E.M., geochemistry and the P.E.M. anomalies. Little else can be concluded from the survey.

9.5 Discussion and Recommendations

There are at least three soil geochemical anomalies on the Gog Range Grid for which the source has not been located. One of these anomalies (Anomaly 4/Gog Range West) also has associated low order P.E.M. S.P. and V.L.F.-E.M. anomalies. The great strike length of the anomalous belt of geochemistry suggests lithological control rather than mineralisation as the source, however, this needs to be tested.

It is recommended that trenching should be carried out over Anomalies 1,3, and 4 (Gog Range West) to test the high points of these anomalies to see if there is any evidence of mineralisation. Anomaly 4 (Gog Range West) should also have a percussion drill-hole sited over the most promising S.P./P.E.M. targets.

10. BEULAH BARYTE

10.1 Introduction

The Beulah Baryte is located 0.8 kilometres east of the settlement of Lower Beulah and occurs as veins parallel to schistostiy in a broad sheared zone encompassing the boundary between andesites of the Cambrian Beulah Formation and sericitic schists of the Cambrian Gog Range Greywacke.

In 1973 the then licence holders of EL 11/70, the McClarm Syndicate, requested CRAE to examine the prospect. Mapping and geochemical sampling was completed (Porter 1973). In 1979 four lines of ground magnetics were completed over the prospect and modelling (Appendix VIII) of this data resulted in a recommendation that two extra lines of sampling and ground magnetics be put in at the east end of the prospect. This was carried out in 1982, the target being primary stratiform base metal mineralisation associated with the baryte.

10.2 Geology (Plan TASh 1121)

The baryte veins range from 0.01 - 1.30 metres in width, are conformable to the general E & W strike of the schistosity which is very well developed in the meta sediments and volcanics of the Beulah Formation and Gog Range Greywacke. The veins carry varying, but usually small, amounts of galena, sphalerite and subordinate chalcopyrite and tetrahedrite. Mineralisation is restricted to the E-W striking shear zone.

Of importance to the target model is the original mode of occurrence of the baryte. If originally bedded, stratiform baryte, subsequently remobilised to its present position by tectonics, then the target model of stratiform volcanogenic base metal mineralisation is valid and worthy of exploration. If not originally a stratiform occurrence, then the significance of the baryte as an indicator of major base metal mineralisation is diminished. Examination of some schists in the vicinity of baryte veins shows that they have a very saccharoidal texture, are highly deformed and have a high baryte content. This might indicate that these horizons were originally baryte bearing and could have been an original stratiform baryte occurrence.

10.3 Geochemistry (Plan TASh 1121)

The 1982 soil sampling confirmed the results of the 1973 survey. Elevated lead and to a lesser extent zinc values were obtained from the shear zone where the barytes veins occur, reflecting their sulphide content. No anomalous copper-content was noted.

One high zinc value (1200 ppm) was obtained from above less deformed silts and sandstones in the south east of the grid.

Drainage sampling (Scamander Mining Corp. - 1970) in the vicinity of the baryte occurrence reflected the sulphide content of the baryte but did not locate any adjacent or related anomalies which might have indicated associated base metal mineralisation.

10.4 Geophysics (Plans TASh 1209-1223)

The Tasmanian Department of Mines carried out a limited gravity survey in 1973 (Leaman, 1975) to ascertain baryte tonnage potential. Whilst this survey indicated a relatively small potential resource, it was not extensive enough to test possible base metal mineralisation along strike and to the north of the baryte deposit.

CRAE ground magnetometry mapped an intense, near surface magnetic zone trending 130° GN on the west side of the grid but swinging to 75° GN on the eastern side. It is in this zone that the main baryte workings occurred. The zone is probably related to shearing along the Beulah Formation/Gog Range Greywacke boundary.

A V.L.F.-E.M. survey conducted over the grid mapped two major conductive zones. The first occurs to the north of the above-mentioned magnetic zone, trending transgressively to it at 100°GN. This zone is characterised by a narrow V.L.F.-E.M. dip anomaly, but a broad maximum horizontal field strength (M.H.F.S.) anomaly.

The second zone occurs at the southern end of the grid. It is stronger than the first and is characterised by both narrow dip and M.H.F.S. anomalies. This southern zone is located within Cambrian green shales and feldspathic sandstones and adjacent to a faulted contact with sheared quartz-feldspar sandstone (Cambrian). A very minor magnetic response is associated with this anomaly.

10.5 Discussion and Recommendations

The possibility of the baryte having been originally stratiform and therefore possibly associated with base metal mineralisation, together with the significant V.L.F.-E.M. responses obtained leads to a recommendation that a more diagnostic and deeper penetrating E.M. survey be carried out.

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11. STONEBRIDGE PROSPECT

11.1 Introduction

Located 1.5 kilometres south east of Paradise, the Stonebridge prospect is of interest because of anomalous lead values in a stream draining Cambrian volcanics and because of its proximity to the Stonebridge baryte occurrence. During 1980 and 1982 a limited reconnaissance traversing and sampling programme was conducted.

11.2 Stream Sediment Geochemistry (Plan TASh 1168)

Lead values up to 760 ppm were obtained by Asarco and CRAE sampling from middle reaches of Stonebridge Creek. The associated copper values were low and the zinc values only slightly elevated.

11.3 Geology

No detailed mapping has been carried out. The lithologies noted during sampling included acid lavas and tuffs, intermediate to basic basic volcanics, quartz-sericite schistose tuffs and quartzite, the latter possibly being float derived from nearby talus off Mt. Roland. Traces of disseminated galena have been observed in the rhyolites from the creek, this may explain the stream sediment anomaly.

The Stonebridge baryte occurrence is reported to be very close to the anomalous creek but has not been located in the field.

11.4 Soil Geochemistry (Plan TASh 1168)

Three lines of soil sampling were completed over the anomalous zones of the creek. These lines were not extended for any distance to the south west once the Mt.Roland talus was reached.

The only anomalous lead zone discovered was on Line 1 between 250-450 metres south where lead values of 154-4650 ppm were present.

Copper and zinc values in this zone were low. One high lead value (480 ppm) was obtained from adjacent to the creek on Line 3. Slightly elevated copper was obtained between 150-800 metres south on line 2, some of this might be explained by contamination from copper additives known to have been put down on the adjacent paddocks.

11.5 Discussion and Recommendations

The spotty nature of the stream geochemistry and the lack of a more extensive lead anomaly in the soils suggests that the traces of sulphide observed in the volcanics are sufficient to explain the geochemistry. However, before the prospect is abandoned, the baryte occurrence should be located and the prospect re-evaluated after determining whether the baryte might have been of stratiform origin and therefore possibly associated with significant base metal mineralisation.

12. STAR OF THE WEST GOLD PROSPECT

12.1 Introduction

The Star of the West gold occurrence has been known since the late 1800's. Numerous shallow pits, trenches and adits have, at various times been used to explore the Cambrian quartz-porphyry and slates on which the gold is reported to occur but economic exploitation never commenced. In 1980 and 1981 CRAE carried out a very limited reconnaissance sampling programme to assess the prospect.

12.2 Geology (Plan TASh 1169)

Mapping by the Tasmanian Mines Department indicates that the prospect is occupied by a succession of Cambrian slates, shales, greywackes and fine ?tuffs which are intruded by quartz porphyry dykes. The gold is reported as occurring in quartz veins within these porphyries, usually close to the porphyry - slate contact. Gold is also reported as occurring within the porphyries themselves.

12.3 Geochemistry (Plan TASh 1169)

One line of soil samples was collected over the prospect. The only interesting results were over a 200 metre zone (5375N-5175N) where gold values ranged between 12-56 ppb (average 33 ppb). The low arsenic content associated with this zone suggests that the gold is not sulphide associated. Base metal values were uniformly low. Rock samples collected over the line reflected higher background gold content (16-80 ppb) over the same interval as the soil samples.

Sampling of one of the adits produced a maximum gold value of 380 ppb (from a dark grey shale) and adjacent to the adit a sample of quartz-porphyry returned an assay of 1.18 ppm gold.

12.4 Discussion

As only minimal work has been completed, a meaningful evaluation of the prospect is not possible. To be of interest this prospect would have to have potential for a fairly large tonnage of better than indicated grade at surface. Whether this exists can only be determined by further work; a limited programme of rock and soil sampling is recommended.

13. 1982 DRILLING

13.1 Dolcoath Granite & Vicinity

Two drill hole were sited marginal to the Dolcoath Granite to test the Moina Quartzites for base metal mineralisation, and nearby calc-silicate skarns for tungsten-tin. One drill hole was sited to test greisens within the granite (Weber, 1982).

13.2 Lake Barrington Copper Prospect

One drill hole was sited to test copper mineralisation intersected in earlier drilling (Weber, 1983)

14. DISCUSSION

During 1982 the major exploration effort within the Sheffield EL has been directed towards the follow-up of Dighem II E.M. anomalies and, to a lessor extent, aeromagnetic anomalies. The rationale behind conducting the Dighem survey was simple; it was expected that the E.M. system would locate any conductive mineralisation, of significant size, which was at less than say 70 metres depth. As it is believed that the survey was conducted correctly, the conclusion that should be reached after examining the 1982 follow-up programme is that the existance of such mineralisation is improbable within the EL. Although some low priority follow-up is outstanding, none of the Dighem E.M. anomalies have proved to be, or seem likely to be, targets worthy of drilling.

The implications of this are that mineralisation of potential economic interest is going to be relatively deep and therefore difficult to target and expensive to explore. Dighem did not give an anomaly over the Lake Barrington prospect yet that prospect is regarded as a worthy exploration target. So, whilst the Dighem E.M. results are disappointing, it is unwise to write-off the Sheffield EL as having no potential on the results of that survey alone, but those results must be kept in mind when planning future exploration within the EL.

Past exploration by CRAE (and Asarco) has been greatly influenced by the results of Asarco's regional stream sediment survey. Virtually all of the many prospects examined by CRAE within the EL were originally targeted on stream sediment anomalies. The fact that at least one, the Lake Barrington - Cu prospect, resulted in the intersection of significant mineralisation is evidence that this is a valid approach. To date, however, only the most outstanding geochemical anomalies have been investigated, largely because they were the easiest to select, whilst no effort has been made to identify more subtle but possibly equally significant anomalies. The geological control and stream sediment coverage of the EL is sufficient to allow a sophisticated statistical analyses of the data in order to pick out these less obvious anomalies, which could then be the basis of continued exploration.

Another valuable aid to target identification is the Dighem II aeromagnetic data. To date only a few of these anomalies have been examined and one problem in continuing the follow-up is assigning priorities to the remaining anomalies. Obviously favourable geology and computer modelling assist in picking out interesting anomalies but it is suggested that the proposed stream sediment data processing could provide additional parameters to aid in anomaly selection.

After completing the outstanding Dighem E.M. follow-up, the proposals for Lake Barrington, Gog Range and the various lower priority recommendations, it is suggested that future targets within EL 7/73 be those aeromagnetic anomalies which have suitable geology, modelling characteristics and which have anomalous stream sediment geochemistry.

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16. LOCATION

Burnie 1:250 000 Sheet SK 55-3

17. KEYWORDS

Lead-zinc-copper-silver-gold-barytes, Cambrian volcanics, Moina Quartzite, Dolcoath Granite, geochemistry - soil, stream sed., rock, geophysics - Dighem II, aeromag., ground mag., V.L.F.-E.M., S.P. I.P., P.E.M..

18. LIST OF PLANS

(In order as referenced in text)

Plan No.	Title	Scale
Section 5		
TASh 1224	Sheffield E.L. 7/73 Location Plan	1:2 000 000
Tv 240	E.L.7/73 Sheffield N-W Tas. Mt.Roland - Gog Range Area. Geological Geochemical Plan.	1:25 000
Tv 241	E.L.7/73 Sheffield N-W Tas. Lake Barrington Cethana Area. Geological - Geochemical Plan	1:25 000
Section 6		
TASh 1119	Sheffield EL 7/73 Dighem Follow-up Western Sheet	1:25 000
TASh 1120	Sheffield EL 7/73 Dighem Follow-up Eastern Sheet	1:25 000
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
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.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 893	Promised Land Prospect EL 7/73 Sample Locations	1:5000
TASh 894	Promised Land Prospect EL 7/73 Zinc Geochemistry	1:5000
TASh 895	Promised Land Prospect EL 7/73 Copper Geochemistry	1:5000
TASh 896	Promised Land Prospect EL 7/73 Lead Geochemistry	1:5000
TASh 897	Promised Land Prospect EL 7/73 Manganese Geochemistry	1:5000
TASh 898	Promised Land Prospect EL 7/73 Normalised V.L.F.-E.M.	1:5000
TASh 899	Promised Land Prospect EL 7/73 Total Magnetic Intensity	1:5000
TASh 1096	Sheffield EL 7/73 Ground Magnetics 56xF, 59xG Line 1700mE	As shown
TASh 1097	Sheffield EL 7/73 V.L.F.-E.M. 56xF, 59xG, Line 1700mE	As shown
TASh 1098	Sheffield EL 7/73 Ground Magnetics 56xF, 59xG Line 1900mE	As shown
TASh 1099	Sheffield EL 7/73 V.L.F.-E.M. 56xF, 59xG Line 1900mE	As shown
TASh 1100	Sheffield EL 7/73 V.L.F.-E.M. 56xF, 59xG, 60xD Line 2	As shown
TASh 1101	Sheffield EL 7/73 Ground Magnetics 56xF, 59xG, 60xD Line 2	As shown
TASh 1102	Sheffield EL 7/73 V.L.F.-E.M. 56xF, 59xG, 60xD Line 1	As shown
TASh 1103	Sheffield EL 7/73 Ground Magnetics 56xF, 59xG, 60xD Line 1	As shown
TASh 1035	Sheffield EL 7/73 V.L.F.-E.M. 63C East Line	As shown
TASh 1036	Sheffield EL 7/73 Ground Magnetics 63C East Line	As shown
TASh 1037	Sheffield EL 7/73 V.L.F.-E.M. 63C Line 100mW	As shown

TASh 1038	Sheffield EL7/73 Ground Magnetics 63C Line 100mW	As shown
TASh 1150	Sheffield EL7/73 V.L.F.-E.M. 64xD Line 1	As shown
TASh 1151	Sheffield EL7/73 V.L.F.-E.M. 64xD Line 2	As shown
TASh 1156	Sheffield EL7/73 V.L.F.-E.M. 66xC Line 0	As shown
TASh 1157	Sheffield EL7/73 Ground Magnetics 66xC Line 0	As shown
TASh 1158	Sheffield EL7/73 V.L.F.-E.M.66xC Line 1	As shown
TASh 1159	Sheffield EL7/73 Ground Magnetics 66xC Line 1	As shown
TASh 1160	Sheffield EL7/73 V.L.F.-E.M. 66xC Line 2	As shown
TASh 1161	Sheffield EL7/73 Ground Magnetics 66xC Line 2	As shown
TASh 1081	Sheffield EL7/73 V.L.F.-E.M. 73xA Line 5100mW	As shown
TASh 1082	Sheffield EL7/73 V.L.F.-E.M. 73xA Line 4900mW	As shown
TASh 1083	Sheffield EL7/73 V.L.F.-E.M. 73xA Line 5000mW	As shown
TASh 1084	Sheffield EL7/73 Ground Magnetics 73xA 4900mW	As shown
TASh 1085	Sheffield EL7/73 Ground Magnetics 73xA 5000mW	As shown
TASh 1086	Sheffield EL7/73 Ground Magnetics 73xA 5100mW	As shown
TASh 1104	Sheffield EL7/73 V.L.F.-E.M. Line 100mW	As shown
TASh 1105	Sheffield EL7/73 Ground Magnetics 75A Line 100mW	As shown
TASh 1106	Sheffield EL7/73 V.L.F.-E.M. 75A Line 0	As shown
TASh 1107	Sheffield EL7/73 Ground Magnetics 75A Line 0	As shown
TASh 1108	Sheffield EL7/73 V.L.F.-E.M. Line 100mE	As shown
TASh 1109	Sheffield EL7/73 Ground Magnetics 75A Line 100mE	As shown
TASh 1090	Sheffield EL7/73 V.L.F.-E.M. 102xD,103xF, 104xB Line 1	As shown
TASh 1091	Sheffield EL7/73 Ground Magnetics 102xD, 103xF, 104xB Line 1	As shown
TASh 1092	Sheffield EL7/73 V.L.F.-E.M. 102xD,103xF, 104xB Line 2	As shown
TASh 1093	Sheffield EL7/73 Ground Magnetics 102xD, 103xF, 104xB Line 2	As shown
TASh 1094	Sheffield EL7/73 V.L.F.-E.M. 102xD, 103xF, 104xB Line 3	As shown

TASh 1095	Sheffield EL7/73 Ground Magnetics 102xD, 103xF, 104xB Line 3	As shown
TASh 1055	Sheffield EL7/73 V.L.F.-E.M. 113A, 115xF Line 1	As shown
TASh 1056	Sheffield EL7/73 Ground Magnetics 113A, 115xF Line 1	As shown
TASh 1057	Sheffield EL7/73 V.L.F.-E.M. 113A, 115xF Line 2	As shown
TASh 1058	Sheffield EL7/73 Ground Magnetics 113A, 115xF Line 2	As shown
TASh 1059	Sheffield EL7/73 V.L.F.-E.M. 113A, 115xF Line 3	As shown
TASh 1060	Sheffield EL7/73 Ground Magnetics 113A, 115xF Line 3	As shown
TASh 1061	Sheffield EL7/73 V.L.F.-E.M. 118xA,119xC, Line 1	As shown
TASh 1062	Sheffield EL7/73 Ground Magnetics 118xA, 119xC Line 1	As shown
TASh 1063	Sheffield EL7/73 V.L.F.-E.M. 118xA,119xC Line 2	As shown
TASh 1064	Sheffield EL7/73 Ground Magnetics 118xA, 119xC Line 2	As shown
TASh 1065	Sheffield EL7/73 V.L.F.-E.M. 118xA,119xC Line 3	As shown
TASh 1066	Sheffield EL7/73 Ground Magnetics 118xA, 119xC Line 3	As shown
TASh 1067	Sheffield EL7/73 V.L.F.-E.M. 118xA,119xC, Line 4	As shown
TASh 1068	Sheffield EL7/73 Ground Magnetics 118xA, 119xC Line 4	As shown
TASh 1069	Sheffield EL7/73 V.L.F.-E.M. 119xB	As shown
TASh 1070	Sheffield EL7/73 Ground Magnetics 119xB	As shown
TASh 1071	Sheffield EL7/73 V.L.F.-E.M. Line 100mW	As shown
TASh 1072	Sheffield EL7/73 Ground Magnetics 121xA Line 100mW	As shown
TASh 1073	Sheffield EL7/73 V.L.F.-E.M. 121xA Line 200mW	As shown
TASh 1074	Sheffield EL7/73 Ground Magnetics 121xA Line 200mW	As shown
TASh 1075	Sheffield EL7/73 V.L.F.-E.M. 121xA Line 0mW	As shown
TASh 1076	Sheffield EL7/73 Ground Magnetic 121xA Line 0mW	As shown
TASh 1077	Sheffield EL7/73 V.L.F.-E.M. 132xD Line 100mW	As shown
TASh 1078	Sheffield EL7/73 Ground Magnetic 132xD Line 100mW	As shown
TASh 1079	Sheffield EL7/73 V.L.F.- E.M. 132xD Line 0mW	As shown

TASh 1080	Sheffield EL7/73 V.L.F.- E.M. 132xD Line OmW	As shown
TASh 886	Garden of Eden Propsect EL7/73 Sample Locations	1:5000
TASh 887	Garden of Eden Prospect EL7/73 Normalised V.L.F.	1:5000
TASh 888	Garden of Eden Prospect EL7/73 Zinc Geochemistry	1:5000
TASh 889	Garden of Eden Prospect EL7/73 Copper Geochemistry	1:5000
TASh 890	Garden of Eden Propsect EL7/73 Lead Geochemistry	1:5000
TASh 891	Garden of Eden Prospect EL7/73 Manganese Geochemistry	1:5000
TASh 1231	Garden of Eden Prospect EL7/73 Total Field Magnetic Intensity	1:5000
TASh 1152	Sheffield EL7/73 V.L.F.- E.M. 145xA	As shown
TASh 1153	Sheffield EL7/73 Ground Magnetics 145xA	As shown
TASh 1154	Sheffield EL7/73 V.L.F.- E.M. 146xC	As shown
TASh 1155	Sheffield EL7/73 Ground Magnetics 146xC	As shown
TASh 1087	Sheffield EL7/73 Ground Magnetics Aeromagnetic Anomaly 19-2686	As shown
TASh 1088	Sheffield EL7/73 Ground Magnetics Aeromagnetic Anomaly 24-1816 North End	As shown
TASh 1089	Sheffield EL7/73 Ground Magnetics Aeromagnetic Anomaly 24-1816 South End	As shown
TASh 1162	Sheffield EL7/73 Ground Magnetics Aeromagnetic Anomaly 14-2804 West Line	As shown
TASh 1163	Sheffield EL7/73 V.L.F.-E.M. Aeromagnetic Anomaly 14-2804 West Line	As shown
TASh 1164	Sheffield EL7/73 Ground Magnetics Aeromagnetic Anomaly 1402804 East Line	As shown
TASh 1165	Sheffield EL7/73 V.L.F.-E.M. Aeromagnetic Anomaly 14-2804 East Line	As shown
TASh 1166	Sheffield EL7/73 Ground Magnetics Aeromagnetic Anomaly 113-0518 E-W Line	As shown
TASh 1167	Sheffield EL7/73 Ground Magnetics Aeromagnetic Anomaly 113-0518 N-S Line	As shown
Section 7		
TASh 1126	Sheffield EL7/73 Wilmot Cooper Anomaly Location Plan	1:25 000
TASh 1128	Sheffield EL7/73 Wilmot Copper Anomaly Stream Sediment Sample Location Plan	1:7500
TASh 1129	Sheffield EL7/73 Wilmot Copper Anomaly 1982 Analyses of Stream Sed. Grab Samples	1:7500

TASh 1130	Sheffield EL7/73 Wilmot Copper Anomaly 1982 Analyses of Stream Sediment Suspended Clay Samples	1:7500
TASh 1131	Sheffield EL7/73 Wilmot Copper Anomaly 1982 Analyses of Stream Sediment Panned Concentrates	1:7500
TASh 1132	Sheffield EL7/73 Wilmot Copper Anomaly 1975 Analyses of Stream Sed. Samples	1:7500
TASh 1133	Sheffield EL7/73 Wilmot Copper Anomaly Comparison of Base Metal Content of Different Stream Sediment Sample Types	As shown
TASh 1135	Sheffield EL7/73 Wilmot Copper Anomaly Geology Plan	1:2500
TASh 1197	Sheffield EL7/73 Wilmot Copper Prospect Sample Location Plan	1:2500
TASh 1198	Sheffield EL7/73 Wilmot Copper Prospect Copper Geochemistry	1:2500
TASh 1199	Sheffield EL7/73 Wilmot Copper Prospect Lead Geochemistry	1:2500
TASh 1200	Sheffield EL7/73 Wilmot Copper Prospect Zinc Geochemistry	1:2500
TASh 1201	Sheffield EL7/73 Wilmot Copper Prospect	1:2500
TASh 1136	Sheffield EL7/73 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 EL7/73 Wilmot Copper Prospect Total Intensity Ground Magnetics	1:2500
TASh 1193	Sheffield EL7/73 Wilmot Copper Prospect V.L.F.- E.M. Line 4400mE	As shown
TASh 1194	Sheffield EL7/73 Wilmot Copper Prospect V.L.F. - E.M. Line 4500mE	As shown
TASh 1195	Sheffield EL7/73 Wilmot Copper Prospect V.L.F. - E.M. Line 4600mE	As shown
TASh 1196	Sheffield EL7/73 Wilmot Copper Prospect V.L.F. - E.M. Line 4800mE	As shown
Section 8		
TASh 1140	Sheffield EL7/73 Staverton Grid Geological Plan	1:2500
TASh 1141	Sheffield EL7/73 Staverton Grid Sample Locations	1:2500
TASh 1142	Sheffield EL7/73 Staverton Grid Copper Soil Geochemistry	1:2500
TASh 1143	Sheffield EL7/73 Staverton Grid Lead Soil Geochemistry	1:2500
TASh 1144	Sheffield EL7/73 Staverton Grid Zinc Soil Geochemistry	1:2500

TASh 1145	Sheffield EL7/73 Staverton Grid Copper Rock Geochemistry	1:2500
TASh 1146	Sheffield EL7/73 Staverton Grid Lead Rock Geochemistry	1:2500
TASh 1147	Sheffield EL7/73 Staverton Grid Zinc Rock Geochemistry	1:2500
Section 9		
TASh 1226	Sheffield EL7/73 Gog Range Prospect Geological Plan	1:5000
TASh 1227	Sheffield EL7/73 Gog Range Prospect Sample Location Plan	1:5000
TASh 1228	Sheffield EL7/73 Gog Range Prospect Copper Soil Sample Results	1:5000
TASh 1229	Sheffield EL7/73 Gog Range Prospect Lead Soil Sample Results	1:5000
TASh 1230	Sheffield EL7/73 Gog Range Prospect Zinc Soil Sample Results	1:5000
TASh 882	Sheffield EL7/73 Gog Range West Self Potential	1:2500
TASh 883	Sheffield EL7/73 Gog Range West Contours of Self Potential	1:2500
TASh 949	Sheffield EL7/73 Gog Range West Total Intensity Ground Magnetics	1:2500
TASh 950	Sheffield EL7/73 Gog Range West Total Intensity Ground Mag.Contours	1:2500
TASh 1110	Sheffield EL7/73 Gog Range West Normalised V.L.F.- E.M. Dip	1:2500
TASh 1111	Sheffield EL7/73 Gog Range West V.L.F.- E.M. Max.Horizontal Field Strength	1:2500
TASh 1112	Sheffield EL7/73 Gog Range West Contours of Normalised V.L.F. - E.M. Dip	1:2500
TASh 1113	Sheffield EL7/73 Gog Range West Contours of V.L.F. - E.M. Max. Horizontal Field Strength	1:2500
TASh 1202	Sheffield EL7/73 Gog Range West V.L.F. - E.M. Line 2100mE	As shown
TASh 1203	Sheffield EL7/73 Gog Range West V.L.F. - E.M. Line 2200mE	As shown
TASh 1204	Sheffield EL7/73 Gog Range West V.L.F. - E.M. Line 2300mE	As shown
TASh 1205	Sheffield EL7/73 Gog Range West V.L.F. - E.M. Line 2400mE	As shown
TASh 1206	Sheffield EL7/73 Gog Range West V.L.F. - E.M. Line 2500mE	As shown
TASh 1207	Sheffield EL7/73 Gog Range West V.L.F. - E.M. Line 2580mE	As shown

TASh 1208	Sheffield EL7/73 Gog Range West V.L.F. - E.M. Line 2700mE	As shown
Section 10		
TASh 1121	Sheffield EL7/73 Beulah Baryte Prospect Geological - Geochemical Plan	1:1000
TASh 1209	Sheffield EL7/73 Beulah Baryte Prospect Ground Magnetics Line 0	As shown
TASh 1210	Sheffield EL7/73 Beulah Baryte Prospect Ground Magnetics Line 1 East	As shown
TASh 1211	Sheffield EL7/73 Beulah Baryte Prospect Ground Magnetics Line 2 East	As shown
TASh 1212	Sheffield EL7/73 Beulah Baryte Prospect Ground Magnetics LIne 3 West	As shown
TASh 1213	Sheffield EL7/73 Beulah Baryte Prospect Ground Magnetics Line 2 West	As shown
TASh 1214	Sheffield EL7/73 Beulah Baryte Prospect Ground Magnetics Line 1 West	As shown
TASh 1215	Sheffield EL7/73 Beulah Baryte Prospect V.L.F.-E.M. Line 3 West	As shown
TASh 1216	Sheffield EL7/73 Beulah Baryte Prospect V.L.F. - E.M. Line 2 West	As shown
TASh 1217	Sheffield EL7/73 Beulah Baryte Prospect V.L.F. - E.M. Line 1 West	As shown
TASh 1218	Sheffield EL7/73 Beulah Baryte Prospect V.L.F. - E.M. Line 0	As shown
TASh 1219	Sheffield EL7/73 Beulah Baryte Prospect V.L.F. - E.M. Line 1 East	As shown
TASh 1220	Sheffield EL7/73 Beulah Baryte Prospect V.L.F. - E.M. Line 2 East	As shown
TASh 1221	Sheffield EL7/73 Beulah Baryte Prospect Ground Magnetics Total Field Intensity	1:2500
TASh 1222	Sheffield EL7/73 Beulah Baryte Prospect V.L.F. - E.M. Max. Horizontal Field Strength	1:2500
TASh 1223. ---> Section 11	Sheffield EL 7/73 Beulah Baryte Prospect Grid VLF-EM1 Normalised D.ps.	1:2500
TASh 1168	Sheffield EL7/73 Stonebridge Prospect Stream Sediment and Soil Geochemistry	1:5000
Section 12		
TASh 1169	Sheffield EL7/73 Star of the West Gold Prospect Reconnaissance Sampling	1:5000

613046

19 LIST OF TABLES

Table I Dighem II EM Anomaly Characteristics and Observations

20. LIST OF APPENDICES

Appendix I Geochemical Sample Sheets - Dighem Anomalies.

II Modelling of Dolcoath Granite Margin Magnetic Anomalies by M.F.Flis

III Geochemical Sample Sheets - Wilmot Copper Prospect.

IV Geochemical Sample Sheets - Staverton Prospect.

V Staverton I.P.Survey by M.F.Flis.

VI Staverton Grid P.E.M. Survey Data.

VII Staverton Prospect, Notes on Geological Mapping by J.Couper.

VIII Geochemical Sample Sheets - Gog Range Prospects.

IX Gog Range Grid P.E.M. Survey Data

X Geochemical Sample Sheets - Beulah Baryte.

XI Beulah Baryte Magnetics by M.F.Flis.

XII Geochemical Sample Sheets - Stonebridge Prospect.

XIII Stonebridge Prospect by J.Couper.

XIV Geochemical Sample Sheets - Star of The West Gold Prospect.

XV Star of the West by J.Couper.

XVI Thin Section Descriptions.

KEY TO TABLE 1

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 Moina Quartzite
Or	-	Ordovician Roland Conglomerate
Cbp	-	Cambrian Bull Creek Formation
Cmk	-	Cambrian Minnow Keratophyre
Cgg	-	Cambrian Gog Range Greywacke
Cbf	-	Cambrian Beulah Formation
C	-	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

613041

TABLE 1

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
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	" " " " "
3A	4	8	10	17	4	20	2	133	52	30	0.5	0.6	G	Tb/Om-Or	Basalt (photo interp.and previous mapping)
4A	2	4	4	5	4	82	2	194	55	77	0.5	0.8	G	Tb/Om	" " " " "
5A	4	6	9	16	4	31	1	142	71	31	0.7	0.6	700nT Br F	Qtb/Or-Cmk	" " " " "
5B	1	0	2	2	8	291	1	225	85	94	∞	1.0	G	Tb-QCb/Om Or	" " " " "
5000xA															Refer Section 6.1
6A	5	8	2	8	3	16	1	155	176	17	0.6	0.3	+ -ve	Cmk - Or	" " " " "
6xE														Tb	" " " " "
7A	3	11	5	22	2	0	1	94	156	0	0.3	0.2	G	Om - Or	Basalt (field checked)Refer Section 6.2
8A	2	5	3	9	2	45	1	133	110	20	0.4	0.3	350nT Tr	Qtb/Cmk-Or	" " " Refer Section 6.2
8B	7	15	9	28	3	0	1	80	34	0	0.5	0.3	+ve Tr	Qtb - Or	" " " Refer Section 6.2
8xA														Qtb	" " " plus swamp
8xB														Qtb	" " " plus swamp
8000A	2	13	8	26	2	0	1	85	157	0	0.2	0.3	G	Tb/Om	Basalt " "
8000B	2	10	6	21	2	1	1	97	182	0	0.2	0.3	G	Qtb/Om	Basalt " "
8000C	5	0	0	4	9	202	1	135	291	1	∞	0	450nT Br F	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?	" " "
10A	2	36	9	63	1	0	1	66	123	0	0.1	0.1	+ve Tr F	Tb/Om	Basalt (field checked)
10B	2	10	3	21	1	1	1	138	158	19	0.2	0.1	G	Tb/Qtb	" " "
10C	4	5	8	10	6	118	2	137	50	85	0.8	0.8	G	Qtb/Om	" " "
10D	1	25	1	40	1	0	1	67	189	0	0.04	0.03	450nT Tr F	Om/Qtb	Basalt (previous mapping) Outside EL.
10E	2	3	3	3	3	132	2	235	52	119	0.7	0.1	G	Tb	" " "
1100xA														Tb	Basalt (previous mapping).
12A	5	21	8	36	2	0	1	79	87	0	0.2	0.2	-	Tb	Basalt (previous mapping) Outside EL.
12B	2	6	2	9	2	40	1	84	126	0	0.3	0.2	60nT Br F	Tb	" " " " "
12D	2	23	1	43	1	0	1	55	118	0	0.1	0.02	30nT Pt	Tb	" " " " "
12E	4	35	10	57	1	0	1	68	77	0	0.1	0.2	300nT Pt 2L	Tb	" " " " "
12H	4	22	7	40	2	0	1	73	80	0	0.2	0.2	G	Tb	" " "
12I	8	25	10	33	3	10	1	111	53	28	0.3	0.3	G	Qtb/Om	" " "
13A	4	9	4	10	3	25	1	134	62	30	0.4	0.4	G	Tb-Qtb	Basalt(field checked)
13B	2	2	0	0	2	69	1	140	1035	0	1.0	0		Or-Cmk	" "
14A	4	13	3	23	1	0	1	69	123	0	0.3	0.1	-	Tb	Basalt (previous mapping)
14B	4	20	4	24	1	0	1	69	135	0	0.2	0.2	G	Tb	" "
14D	3	3	4	1	8	192	1	136	37	32	1.0	4.0	20nT Pt	Tb	" "
14E	0	0	5	0	35	303	1	127	78	21	0	∞	G	Tb	" " plus culture(powerline)
14F	0	10	1	25	1	3	1	71	119	0	0	0.04	G	Tb-Or	" "
14G	1	0	0	0	2	120	1	55	746	0	∞	0	G	Cmk - Or	Basalt & Culture (powerline)
14H	0	3	0	3	2	104	1	249	78	116	0	0	G	Tb	Outside EL.

613048

TABLE 1 (Cont'd.)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
15A	6	2	1	0	15	159	1	112	99	5	3.0	1.0	G	Tb	Basalt (previous mapping)
15B	3	2	2	0	5	137	1	154	58	44	1.5	00	G	Tb	" " "
15C	4	5	3	2	5	86	1	104	57	3	0.8	1.5	25nT Pt	Tb	" " "
15D	2	14	1	25	1	0	1	99	106	0	0.1	0.04	-250nT Tr F	Tb -Or- Cmk	" " "
15F	3	3	6	7	5	70	2	272	47	153	1.0	0.9	150nT Tr F	Tb	" " "
1500xA														Om	All Nations Mine (MLexcluded from EL).
1500 B	2	5	4	11	2	73	1	208	80	93	0.4	0.4	G	Tb	Basalt (previous mapping)
16A	3	17	6	31	1	0	1	32	76	0	0.2	0.2	+ve Tr F	Tb	Basalt (field checked)
16C	8	33	7	46	2	0	1	68	85	0	0.2	0.2	G	Tb	" " "
16D	1	4	1	1	2	123	1	120	88	23	0.3	1.0	+ve Tr	Tb	" " "
16E	4	0	4	0	20	178	2	136	43	38	∞	∞	150nT Pt	Tb	" " "
16F	4	6	7	11	4	46	2	230	37	124	0.7	0.6	G	Tb/Cmk	Basalt (previous mapping)
17A	4	7	1	0	4	98	1	91	78	0	0.6	∞	+ve Tr	Tb	Basalt (field checked)
17B	1	3	5	7	3	70	2	250	35	146	0.3	0.7	90nT PC		Outside EL
18A	8	10	0	13	1	0	1	105	88	7	0.8	0	G	Tb-Qg	Basalt (field checked)
18C	4	20	2	22	1	0	1	124	72	23	0.2	0.1	G	Tb	" "
18D	8	14	18	29	5	20	2	146	30	53	0.6	0.6	G	Tb	" (previous mapping outside EL)
18E	3	4	4	8	4	72	2	206	35	104	0.8	0.5	50nT Tr F	Tb	" " " "
18F	1	4	1	5	1	53	2	214	43	106	0.3	0.2	50nT Tr F	Tb	" " " "
19B	2	19	2	29	1	0	1	86	90	0	0.1	0.1	G	Tb	" " " "
19C	1	1	0	0	2	171	1	145	94	43	1.0	0	G	Tb	" " " "
19D	3	13	5	28	1	0	1	80	93	0	0.2	0.2	G	Tb	" " " "
19E	7	18	8	26	3	5	1	108	94	6	0.4	0.3	G	Tb/Om?	" " " "
19F	3	16	9	33	2	0	1	78	69	0	0.2	0.3	50nT Tr	Tb	" (field checking)
19G	4	11	6	18	2	17	1	154	59	52	0.4	0.3	75nT 2L Pt	Tb/Or-Cmk	" " "
19H	1	15	0	25	1	2	1	126	424	0	0.1	0	-ve Tr	Tb - Cmk	" " "
19I	1	7	0	7	1	13	1	261	1035	0	0.1	0	-100nT Tr	Om	Refer CRAE Report 11268
19J	0	0	0	0	2	85	1	216	284	46	0	0	G	Tb	Basalt (previous mapping)
19K	3	11	13	25	3	0	2	125	39	31	0.3	0.5	-ve Tr F	Tb	" " "
20A	12	17	33	41	8	0	2	96	22	19	0.7	0.8	G	Tb-Qtb	" " "
20B	1	5	0	0	3	69	2	173	53	68	0.2	0	G	Tb	" " "
20C	4	8	4	17	2	0	1	155	154	23	0.5	0.2	25nT Pt(?)	Tb	" " "
20D	2	8	1	7	1	9	1	32	232	0	0.3	0.1	G	Tb	" " "
20E	2	0	0	0	5	221	1	94	153	0	∞	0	G	Tb	" " "
20G	2	1	0	0	2	74	2	180	53	69	2	0	-40nT Br F	Tb	" " "
20H	1	12	6	11	1	0	2	141	51	40	0.1	0.5	-400nT Br F	Tb	" " "
20I	0	0	5	4	6	278	2	212	48	111	0	1.3	G	Tb	" " "
20J	5	3	5	0	13	128	2	154	50	49	1.7		G	Tb	" " "
20M	3	2	4	2	12	195	1	127	54	32	1.5	2	G	Tb	" " "
20O	6	15	7	27	3	0	1	100	96	0	0.4	0.3	G	Tb	" " "
20Q	1	1	3	0	8	301	1	228	68	110	1.0		G	Tb	" " "
20R	2	5	4	9	2	39	1	149	62	40	0.4	0.4	G	Tb	" " "
20T	0	7	4	19	1	0	1	150	123	35	0	0.2	G	Tb-Or/Cmk	" " "
20 x R														Om	Refer CRAE Report 11268
21A	21	42	40	80	6	0	2	67	27	0	0.5	0.5	+ve Pl	Tb - Qtb	Basalt (previous mapping)
21B	8	2	0	0	6	123	1	94	115	0	4.0	0	r Pt F	Tb	" " "
21C	6	18	19	36	4	20	2	111	33	30	0.5	0.5	r Pt F	Tb	" " "
21D	1	11	0	13	1	0	1	119	58	28	0.1	0	-400nT Br F	Tb	" " "
21E	2	4	1	0	2	69	2	148	42	51	0.5	∞	G	Tb	" " "

6130449

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
21F	0	4													
21G	1	0	4	10	1	23	1	146	39	39	0	2.5	G	Tb	Basalt (field checking)
			0	5	2	117	1	174	119	52		0	+ve Tr G	Tb	" " "
21H	2	4	8	6	3	112	1	203	63	91	0.5	1.3	G	Tb?	" (previous mapping) outside EL.
2100A	8	7	5	9	3	22	2	193	41	85	1.1	0.6	G	Tb	" " " "
2100B	3	2	2	5	6	171	1	199	199	59	1.5	0.4	G -ve r	Tb	" " " "
2100E	2	2	1	3	5	227	1	162	309	24	1.0	0.3	G	Tb	" " " "
2100F	1	8	0	4	1	55	1	141	258	19	0.1	0	+ve Tr F	Tb	" (field checking)
2100G	2	24	5	37	1	0	1	85	169	0	0.1	0.1	G	Tb	" (previous mapping)
2100H	3	2	7	7	8	133	1	171	112	49	1.5	1.0	-ve Tr	Tb	" (field checked)
2100I	5	11	7	18	3	31	1	148	126	33	0.5	0.4	-ve Tr F	Tb	" " "
2100xJ														Cmk	
22A	3	0	7	8	9	108	2	145	39	43	∞	0.9	200nT 4L	Tb	" " " outside EL.
22B	2	0	0	0	5	177	2	155	46	56	∞	0	+ve Tr	Tb	" (previous mapping) "
22C	3	22	7	36	1	0	1	67	104	0	0.1	0.2	G	Tb	" " " "
22D	2	5	1	13	1	0	1	95	115	0	0.4	0.1	G	Tb	" (field checking)
22E	4	4	0	5	3	100	1	197	425	26	1.0	0	-300nT Tr F	Tb?	" (previous mapping) outside EL.
22F	3	3	0	2	3	115	1	217	166	64	1.0	0	100nT 2L	Tb?	" " " "
2200A	1	6	0	3	1	42	1	99	865	0	0.2	0	G	Tb	" " " "
2200B	3	9	6	17	3	0	2	159	45	55	0.3	0.4	-	Tb	" " " "
2200C	1	7	0	11	2	0	1	133	58	27	0.1	0	G	Tb	" " " "
2200D	2	4	0	3	2	69	1	115	266	0	0.5	0	G	Tb/Om	" (field checked)
23A	0	0	0	0	1	20	1	231	287	61	0	0	G	Tb/Or - Cgg	" " "
23B	0	1	0	0	2	97	1	166	265	7	0	0	G	Tb	" " "
23C	9	14	10	22	4	0	1	100	60	0	0.6	0.5	G	Tb	" " "
23D	0	3	3	9	1	50	2	209	55	97	0	0.3	G	Tb	" " "
23E	5	7	6	9	5	67	2	117	25	37	0.7	0.7	50nT 2L PtF	Tb	" " "
23G	7	28	12	46	2	0	1	77	87	0	0.3	0.3	G	Tb	" " "
23H	2	5	0	10	1	54	1	161	165	37	0.4	0	G	Tb	" " "
23J	2	4	2	0	4	101	1	650	130	450	0.5	∞	60nT Tr	Om	Culture - power station
24B	4	4	0	3	3	79	1	110	230	0	1.0	0	G	Tb/Cgg?	Basalt (field checked)
24C	0	0	0	5	1	0	1	148	156	9	0	0	G	Tb	" " "
24D	10	18	7	18	4	0	1	111	78	5	0.6	0.4	G	Tb	" " "
24E	1	8	1	7	1	0	1	106	78	5	0.1	0.1	G	Tb	" " "
24F	9	19	15	31	4	13	2	127	27	46	0.5	0.5	r +ve	Tb	" " "
24G	2	0	4	4	12	221	1	176	71	58	∞	1.0	G	Tb	" " "
24H	1	0	1	5	1	57	1	143	178	15	∞	0.2	G	Tb	" " "
24I	1	11	3	20	3	18	1	1	603	0	0.1	0.2	G	Tb	" " "
24J	1	1	0	0	3	198	1	111	930	0	1.0	0	r +ve	Om -Cmk	" " "
24K	1	2	3	2	4	163	2	242	34	139	0.5	1.5	G	Tb	" " "
24M	2	5	2	1	3	30	1	626	645	161	0.4	2.0	G	Om	Culture - power station
24xN														Dg	Refer Section 6.3
25C	9	7	5	9	7	147	2	213	50	114	1.3	0.6	-75nT Pt F	Tb	Basalt (previous mapping) Outside EL.
25D	2	12	4	24	1	0	1	119	78	24	0.2	0.2	G	Tb	" " "
25E	2	1	2	0	4	135	1	103	95	3	2.0	∞	-50nT Pt	Tb	" " "
25F	5	20	13	39	3	0	1	60	76	0	0.3	0.3	-50nT Pt F	Tb	" " "
25H	4	10	5	22	2	0	1	126	114	13	0.4	0.2	r -ve	Qra/Tb	" (field checking)
25I	2	8	0	7	2	32	2	96	48	10	0.3	0	G	Tb	" " "

613050

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
25J	7	33	15	56	2	0	2	90	30	20	0.2	0.3	G	Tb	Basalt (field checking)
25K	2	2	0	0	5	76	1	138	154	8	1.0	0	-200nT Pt F	Tb/Cmk?	" " "
25M	1	8	0	15	1	12	1	137	220	8	0.1	0		Tb	" " "
25N	7	42	17	72	2	0	1	51	70	0	0.2	0.2	r -ve	Tb	" " "
25O	1	0	4	19	2	48	1	33	120	0	∞	0.2	r -ve	Tb	" " "
25Q	5	11	10	18	4	15	2	170	33	74	0.5	0.6	G	Tb/Cgg?	Basalt (previous mapping)
25R	3	5	8	10	4	83	2	189	43	85	0.6	0.8	G	Tb/Cmk?	" " "
25U	1	0	8	1	11	235	1	161	64	41		8.0	-ve Tr F	Tb/Cmk?	" " "
25xO														Tb	Culture - powerline
26A	4	0	0	0	9	173	1	169	60	56	∞	0	-50nT 2L F	Tb	Basalt (previousmapping) Outside EL
26B	3	6	0	0	2	73	1	102	102	0	0.5	0	G	Tb	" " " " "
26C	9	20	11	29	4	7	1	72	81	0	0.5	0.4	60nT Pt F	Tb	" " "
26D	3	8	9	22	3	9	1	63	95	0	0.4	0.4	60nT Pt F	Tb	" " "
26E	0	0	0	0	2	115	1	205	741	4	0	0	250nT Pt	Or-Tb	" (field checking)
26G	13	56	26	96	3	0	2	64	43	0	0.2	0.3	300nT 3L Tr	Tb	" " "
26H	0	5	3	15	1	0	2	95	28	15	0	0.2	G	Tb/Cmk?	" " "
26I	4	16	0	24	3	1	1	96	76	4	0.3	0	G	Tb/Cmk	" " "
26J	1	2	0	0	2	68	1	158	122	42	0.5	0	G	Cmk-Tb	" " "
26K	4	23	8	42	1	0	1	76	97	0	0.2	0.2	G	Tb/Cmk	" (previous mapping)
26N	11	31	23	55	4	0	2	77	35	0	0.4	0.4	25nT Tr F	Tb/Cgg?	" " "
26O	0	0	2	3	4	270	1	185	76	63	0	0.7	75nT Tr F	Tb	" " "
26xD														Or	Refer Section 6.4
26xJ														Tb	(Basalt field checking)
2600B	11	12	3	12	6	44	1	143	128	25	0.9	0.3	G	Tb	(Basalt previous mapping)
2600D	5	5	0	2	4	14	1	286	1035	0	1.0	0	G	Or(-Cgg)	Culture - powerline and fences.
2600E	3	7	0	9	2	34	1	134	452	0	0.4	0	250nT Pt	Tb-Or	Basalt (field checking)
2600G	9	40	18	70	2	0	1	69	51	0	0.2	0.3	300nT 3L Tr	Tb	" " "
2600I	3	3	0	0	4	145	2	156	28	66	1.0	0	G	Tb/Cmk?	" " "
2600M	1	1	2	0	5	179	1	277	110	121	1.0	∞	G	Tb	" " "
2600N	2	1	1	3	5	176	1	246	142	95	2.0	0.3	G 70nT r	Tb	" (previous mapping)
2600D	13	53	40	112	4	0	2	71	45	0	0.2	0.4	G	Tb-Qt-Cgg	" " "
2600Q	1	2	0	1	4	194	1	129	379	0	0.5	0	G	Tb/Cmk?	" " "
2600T	1	3	9	15	3	42	1	178	70	59	0.3	0.6	G	Tb/Cmk?	" " "
2600U	3	3	4	6	4	77	1	202	89	63	1.0	0.7	75nT 2L Pt	Tb/Cmk?	" " "
2600V	5	1	0	0	9	192	1	369	1035	0	5.0	0	50nT 3L PtF	Tb/Cmk?	" " "
27A	5	8	2	13	3	0	1	80	473	0	0.6	0.2	G	Tb/Cgg	" " " Outside EL
27B	3	4	1	6	3	0	1	90	477	0	0.8	0.2	G	Or	Culture - powerline and fences
27C	0	3	2	5	2	94	1	201	70	85	0	0.4	G	Tb	Basalt (field checking)
27D	8	28	17	49	3	0	2	101	45	21	0.3	0.3	G	Tb	" " "
27E	2	0	0	0	5	225	1	120	76	19	∞	0	G	Tb	" (previous mapping)
27F	12	29	23	50	4	0	2	92	29	13	0.4	0.5	200nT 2L F	Tb	" (field checking)
27G	3	10	9	15	3	12	2	131	27	46	0.3	0.6	100nT 2L F	Tb	" " "
27H	5	9	9	14	5	15	2	126	26	41	0.6	0.6	G	Tb	" " "
27J	1	12	4	23	1	0	1	95	98	0	0.1	0.2	G	Tb	" " "
27K	1	15	2	27	1	0	1	75	168	0	0.1	0.1	G	Tb	" " "
27M	1	4	3	7	2	56	1	137	66	72	0.3	0.4	70nT r F	Tb/Cgs	" " "
27N	10	36	20	67	3	0	1	68	67	0	0.3	0.3	G	Tb (-Qtb-Cgg)	" " "
27P	0	2	0	0	3	124	1	180	241	23	0	0	G	Tb/Cgg	" (previous mapping)
27Q	3	2	5	6	7	129	1	183	59	70	1.5	0.8	G	Tb/Cgg	" " "

613051

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
27xJ														Cbp	Refer Section 6.5
28A	2	0	0	0	4	200	1	252	410	69	∞	0	G	Tb	Basalt (previous mapping)Outside EL
28B	4	4	0	7	4	36	1	120	536	0	1.0	0	G	Or	Culture - power line and fences
28C	3	1	1	7	5	159	1	147	99	33	3.0	0.1	200nT 3L F	Or	Basalt (field checking)
28D	0	8	3	16	1	0	1	126	94	26	0	0 2	G	Or-Tb	" "
28E	3	6	5	9	4	107	1	158	65	60	0.5	0.6	G	Tb	" "
28F	4	0	0	0	7	178	1	115	64	18		0	100nT r F	Tb	" "
28G	3	22	5	23	1	0	1	91	65	9	0.1	0.2	G	Tb	" "
28H	4	12	1	4	2	45	1	114	55	28	0.3	0.3	G	Tb	" "
28I	2	7	3	13	1	27	1	118	88	22	0.3	0.2	G	Tb	" "
28J	8	15	21	25	6	18	2	107	32	23	0.5	0.8	G	Tb	" "
28K	11	26	24	59	4	0	2	84	38	6	0.4	0.4	G	Tb	Basalt (field checking)
28N	3	15	0	8	4	73	1	125	91	29	0.2	0	100nT 2L F	Tb	" "
28O	7	17	19	33	4	15	2	79	31	6	0.4	0.6	100nT 2L F	Tb	" "
28P	2	5	1	8	1	72	1	217	66	106	0.4	0.1	G	Tb	" "
28Q	2	1	5	5	8	162	2	219	45	107	2.0	1.0	G	Tb-Cgg	" (previous mapping)
28U	6	30	19	60	3	0	1	93	75	5	0.2	0.3	G(Low)	Tb-Cmk	" "
29A	2	14	6	27	1	0	1	120	97	19	0.1	0.2	G	Tb	" "
29C	5	3	0	7	4	41	1	208	1035	0	1.7	0	2000nT Tr F	Cgg-Or	Culture - power line and fences
29G	0	10	3	20	1	0	1	134	66	35	0	0.2	200nT 2L F	Tb	Basalt (field checking)
29I	3	8	0	2	2	103	1	166	61	68	0.4	0	G	Tb	" "
29J	8	19	11	32	3	21	2	115	45	32	0.4	0.3	G	Tb	" "
29K	2	6	0	2	2	102	1	132	81	36	0.3	0	-150nT F	Tb	" "
29M	2	6	2	9	2	50	1	141	57	44	0.3	0.2	G	Tb	" "
29N	3	5	2	6	3	85	2	150	40	56	0.6	0.3	200nT F	Tb	" "
29P	13	52	27	90	3	0	2	93	42	22	0.3	0.3	G	Tb	" "
29R	2	1	0	0	6	177	1	247	62	132	2.0	0	G	Tb/Cmk?	" (previous mapping)
29T	4	11	14	19	4	57	2	151	30	67	0.4	0.7	G	Tb	" "
29U	2	1	0	0	6	175	2	147	39	56	2.0	0	G	Tb	" "
29V	2	2	0	3	2	162	3	214	24	123	1.0	0	-ve Br F	Tb	" "
29W	15	26	25	39	6	6	3	123	20	49	0.6	0.6	G	Tb-Qtb	" "
29X	2	0	0	0	8	269	1	235	1035	0	∞	0	G(low)	Tb-Cmk	" "
29Y	2	0	0	2	7	227	1	511	1035	0	∞	0	G(low)	Tb/Cmk	" "
30B	4	15	16	34	3	0	1	131	57	34	0.3	0.5	200nT 4L F	Tb/Or	Basalt (field checking)
30C	3	8	8	17	3	35	1	128	56	33	0.4	0.5	G	Tb	" "
30D	0	0	2	0	1	63	1	235	59	114	0		150nT Pt	Tb	" "
30F	10	29	23	50	4	0	2	105	29	29	0.3	0.5	50nT F 2L	Tb	" "
30G	5	5	6	8	6	60	2	135	25	49	1.0	0.8	G	Tb	" "
30H	1	4	0	8	2	56	1	110	89	11	0.3	0	-50nT Pt	Tb	" "
30J	1	3	1	3	2	103	2	119	40	33	0.3	0.3	G	Tb	" "
31A	5	0	1	6	6	118	1	175	948	0	∞	0.2	1000nT Br Tr F	Cgg	Culture - fences
31C	7	18	10	29	3	18	1	124	58	34	0.4	0.3	G	Tb/Or?	Basalt - (field checking)
31E	7	24	7	40	2	5	1	111	67	26	0.3	0.2	G	Tb	" "
31F	7	12	8	13	4	53	2	155	40	63	0.6	0.6	-ve r	Tb	" "
31G	2	0	0	0	3	128	2	195	45	83	∞	0	G	Tb	" "
31H	9	16	12	25	5	15	2	101	30	21	0.6	0.5	50nT 2LF	Tb	" "
31I	4	2	0	0	12	207	2	140	36	49	2.0	0	+ve Tr F	Tb	" "
31K	2	1	0	0	6	97	1	141	168	3	2.0	0	G	Tb/Om?	" "
31N	0	5	13	17	3	20	2	134	36	38	0	0.8	G	Tb	" "
31O	2	0	0	0	5	222	2	206	43	100	∞	0	r +ve	Tb	" "

613052

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
31P	6	13	15	25	5	64	2	183	32	94	0.5	0.6	G	Tb	Basalt (previous mapping)
31Q	14	17	7	16	6	28	1	129	103	22	0.8	0.4	+ve r	Tb	" " "
31T	9	16	17	33	5	0	2	129	49	30	0.6	0.5	+ve r	Ɛgg - Qtb	" " "
32A	2	0	0	0	4	110	1	129	945	0	∞	0	G	Or	Culture - fence and powerline
32B	5	4	5	7	7	79	1	131	65	22	1.3	0.7	G	Tb	Basalt (field checking)
32C	7	6	7	18	5	23	2	113	40	19	1.2	0.4	G	Tb	" "
32D	0	4	0	2	4	91	1	127	56	19	0	0	+ve r	Tb	" "
32E	6	5	1	4	7	61	1	134	62	22	1.2	0.3	G	Tb	" "
32F	1	11	8	30	1	0	1	116	115	8	0.1	0.3	G	Tb	" "
32G	0	24	7	45	1	0	1	54	248	0	0	0.2	G	Tb	" "
32H	0	3	4	0	4	131	1	426	379	179	0	∞	G	Om	Culture - electric fence
32J	0	10	8	21	1	0	1	113	64	13	0	0.4	+ve Tr Br F	Tb	Basalt (field checked)
32K	4	8	10	21	4	25	2	120	52	24	0.5	0.5	450nT F	Tb	" (previous mapping)
32M	3	17	12	34	2	0	1	108	54	20	0.2	0.4	450nT F	Tb	" "
32N	1	11	2	17	3	37	1	121	112	17	0.1	0.1	450nT F	Tb	" "
32Q	1	6	0	8	2	18	1	152	30	39	0.5	0	+ve r F	Qtb/Ɛgg	" "
33A	11	21	5	30	3	0	1	92	96	0	0.5	0.2	-ve Tr	Tb	" (field checked)
33D	3	0	0	0	5	208	1	125	74	30	∞	0	+ve r	Tb	" "
33F	3	11	0	17	2	19	1	109	55	23	0.3	0	+ve r	Tb	" "
33G	17	42	31	70	5	0	2	86	26	14	0.4	0.4	150nT Pt F	Tb	" "
33I	4	16	15	32	3	0	2	107	41	13	0.3	0.5	G	Qra	" "
33J	9	24	14	38	4	0	1	102	74	11	0.4	0.4	-150nT Pt	Qra	" "
33K	1	6	2	6	1	28	1	60	800	0	0.2	0.3	-ve r	Tb	" "
33M	6	4	2	11	5	81	1	189	528	5	1.5	0.2	G	Om	Culture - power line
33O	6	9	6	17	4	29	1	115	147	0	0.7	0.4	G		Basalt - (field checked)
33P	1	11	5	22	1	0	1	116	129	6	0.1	0.2	1800nT Br F	Tb	" "
33Q	8	13	8	16	4	2	2	129	49	28	0.6	0.5	G	Tb-Qtb	" "
33T	1	2	2	0	2	137	2	249	58	126	0.5	∞	550nT PtBrF	Tb-Qtb	" (previous mapping)
33V	3	5	3	6	3	89	1	258	66	131	0.6	0.5	G	Qt	" "
33W	3	1	2	0	6	125	1	229	172	73	3.0	∞	G	Ɛgg-Qtb	" (field checking)
33Z	6	10	11	23	4	21	1	185	96	60	0.6	0.5	G	?	Outside EL
33xG														Qtb	Basalt (field checked)
34A	3	0	0	0	5	141	1	142	174	2		0	-ve Tr		Basalt (field checking)
34B	1	8	1	10	1	0	1	116	54	23	0.1	0.1	G	Tb	" "
34C	4	15	8	23	2	0	1	93	54	6	0.3	0.3	G	Tb	" "
34E	3	10	5	12	2	15	1	114	57	13	0.3	0.4	+ve Tr	Tb	" "
34F	0	0	1	0	4	329	2	180	41	79	0	∞	-	Tb	" "
34G	1	9	13	33	2	0	2	95	36	10	0.1	0.4	-	Tb	" "
34H	9	2	15	16	14	70	3	131	22	52	4.5	0.9	G	Tb	" "
34I	6	3	16	20	9	59	2	113	24	34	2.0	0.8	G	Tb	" "
34J	0	8	5	0	2	23	2	103	30	16	0	∞	G	Tb	" "
34K	2	1	0	1	4	181	1	110	87	0	2.0	0	G	Qra	" "
34M	3	4	2	0	6	142	1	696	517	257	0.8	∞	G	Om	Culture - electric fences
34x8														Qtb	Basalt (field checked)
3400A	1	1	10	5	12	189	1	230	58	115	1.0	2.0	1800nT Br	?	Outside EL
3400B	5	1	5	1	31	217	1	216	72	102	5.0	5.0	1800nT Br F	?	" "
35A	6	13	9	23	3	0	1	105	63	5	0.5	0.4	tre r	Tb	Basalt (field checking)
35B	0	2	0	0	1	0	1	205	77	79	0	0	280nT F	Tb	" "
35C	1	0	4	10	3	97	2	128	48	27	∞	0.4	G	Tb	" "
35D	13	7	20	0	39	71	3	203	17	129	1.9		G	Tb	" "

613053

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	PPM	COPLANAR COIL PPM	PPM	VERTICAL DYKE MHOS	FEET	HORIZONTAL SHEET MHOS	FEET	CONDUCTIVE EARTH OHM-M	FEET	CONDUCTOR QUALITY CX	CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
35E	0	0	20	25	6	63	2	131	25	43	0	0.8	G	Tb	Basalt (field checking)
35F	26	21	16	27	11	26	2	100	30	21	1.2	0.6	G	Tb	" " "
35G	4	15	4	32	2	0	2	97	38	18	0.3	0.1	+ve Tr	Tb - Qra	" " "
35J	6	19	14	42	3	0	1	91	107	0	0.3	0.3	G	Tb	" " "
35K	1	0	0	0	3	66	1	113	296	0	∞	0	G (low)	Tb / €gg	" (previous mapping)
35M	19	45	49	97	6	0	2	58	27	0	0.4	0.5	G	Tb/€gg	" " "
35O	5	35	12	67	2	0	1	57	123	0	0.1	0.2	G	Tb/€gg	" " "
35Q	6	4	0	0	11	52	1	602	1035	0	1.5	0	G	€mk	Culture - power line. Outside EL
36A	10	13	0	0	4	0	1	171	253	3	0.8	0	G	€gg-Or-Tb	Culture - fences
36D	5	9	3	11	3	26	1	146	74	36	0.6	0.3	+ve r	Tb	Basalt (field checked)
36E	3	0	0	0	3	120	1	212	139	67	∞	0	G	Tb	" "
36F	4	4	3	5	4	80	1	141	77	32	1.0	0.6	G	Tb	" "
36G	1	0	4	0	14	250	1	153	55	47			-75nT	Tb/Om	" "
36H	3	13	8	18	2	7	1	121	63	25	0.2	0.4	-ve Pl	Tb/Om	Basalt (field checked)
36I	4	1	1	14	3	78	1	114	84	12	4.0	0.1	-ve Pl	Tb/Om	" "
36K	4	18	8	24	2	0	1	125	161	2	0.2	0.3	G	Tb	" "
36M	8	21	13	36	3	0	2	67	42	0	0.4	0.4	G	Tb	" "
36N	0	0	0	1	3	111	1	79	62	0	0	0	+ve r	Qtb	" "
36O	3	3	0	0	5	27	1	566	1035	0	1.0	0	G (low)	€mk	Culture - power line. Outside EL.
36xd														Tb	Basalt (previous mapping)
37A	17	2	0	0	51	104	1	205	217	53	8.5	0	G	€gg-Tb	Culture - power lines & fences.Outside EL.
37C	6	27	16	52	3	0	1	81	85	0	0.2	0.3	G	Tb/€mk	Basalt - (previous mapping)
37D	4	11	6	19	2	13	1	135	61	37	0.4	0.3	-50nT Pt	Tb	" "
37E	3	8	0	1	7	94	1	707	1035	0	0.4	0	G (low)	Qt-€mk	Culture - powerline & fences.Outside El.
38A	9	16	20	31	6	0	2	105	50	0	0.6	0.6	G?	Qra/Or	" fences. Outside EL.
38C	2	8	0	15	1	0	1	86	122	0	0.3	0	G	Tb	" " "
38D	0	1	2	3	5	230	1	75	150	0	0	0.7	G	Tb/Om	" " "
38F	1	7	0	22	3	31	1	71	855	0	0.1	0	-ve Tr F	Tb/€mk	Basalt (previous mapping)
38G	8	29	17	55	3	0	1	72	86	0	0.3	0.3	-ve Tr F	Tb	" " "
38H	9	5	1	0	15	43	1	129	507	0	1.8	∞	G	Tb	" " "
39A	4	3	2	5	5	0	1	175	289	0	1.3	0.4	G?	Qra/Or	Culture - fences. Outside EL.
39B	3	22	6	38	1	0	1	80	124	0	0.1	0.2	G	Tb	Basalt (previous mapping). Outside EL.
39C	8	21	14	34	4	13	2	126	38	41	0.4	0.4	-ve Tr	Qra/Tb	Basalt " "
39E	7	26	9	45	2	0	1	64	132	0	0.3	0.2	-125nT Tr	Tb/€mk	"
39F	4	6	0	0	3	0	1	157	248	0	0.7	0	G	Tb	" " "
39G	3	5	0	1	4	116	1	647	1035	0	0.6	0	G(low)	Qt/€mk	Culture - Powerline. Outside EL
3900B	3	9	9	19	3	0	1	122	81	2	0.3	0.5	-125nT Tr F	Tb/€mk	Basalt (previous mapping)
3900C	3	4	2	2	4	0	1	234	132	58	0.8	1.0	G	Tb/€mk	" " "
3900xA														€mk	Not checked
3900xH														Om	Outside EL.
3900xC														Om	Outside EL.
40B	6	16	11	32	3	0	1	97	78	4	0.4	0.3	G	Tb	Basalt (previous mapping) Outside EL.
40C	4	13	7	28	2	0	1	111	97	5	0.3	0.3	-ve Tr F	Qra/Tb	" " "
40D	2	10	0	13	1	0	1	117	290	0	0.2	0	-ve Tr F	Qra/Tb	" " "
40E	2	9	1	0	2	0	1	671	1035	0	0.2	∞	G (low)	Qt/€mk	Culture - Powerline. Outside EL.
41B	10	26	22	53	4	2	2	38	35	14	0.4	0.4	+ve r	Tb	Basalt (previous mapping) Outside EL.
41C	3	14	3	22	1	0	1	125	119	13	0.2	0.1	+ve Tr	Qra/Om-Tb	" " "

613054

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS.

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
41F	5	18	7	36	2	0	1	85	123	0	0.3	0.2	G	Tb	Basalt (previous mapping) Outside EL.
41G	4	7	0	0	4	0	1	143	212	0	0.6	0	G	Tb	" " "
41H	3	3	0	1	6	136	1	688	1035	0	1.0	0	G(low)	Qt/Cmk	Culture - powerline. Outside EL.
42A	9	25	16	48	3	0	2	67	47	0	0.4	0.3	G	Tb	Basalt (previous mapping) Outside EL.
42B	4	13	2	17	2	0	1	97	55	6	0.3	0.1	-ve r	Tb/Om?	" " " " "
42D	3	4	0	0	4	133	1	70	760	0	0.8	0	G	Tb	" (field checked)
42E	0	0	6	0	3	128	1	250	65	121	0	∞	G	Tb	" " "
42F	6	9	13	12	6	46	2	177	46	71	0.6	1.1	G	Tb	" " "
42xC														Qra/Tb	
43B	6	18	17	38	4	0	2	96	39	10	0.3	0.4	-ve r F	Tb/Om?	" (previous mapping) Outside EL.
43E	0	4	1	1	1	1	1	148	224	7	0	1.0	50nT F	Tb	" (field checking)
43G	6	1	5	3	19	148	1	90	1035	0	6.0	1.7	+ve r ?	Tb	" " "
43I	5	13	4	23	2	19	1	117	158	5	0.4	0.2	+ve r F	Tb	" " "
43J	1	0	0	0	5	117	1	218	134	69	1.0	0	+ve r F	Tb	" " "
43N	2	2	0	0	3	124	1	671	1035	0	1.0	0	+ve r	0	Culture - powerline. Outside EL.
44A	5	21	11	40	2	0	1	90	75	0	0.2	0.3	150nT 2L F	Tb	Basalt (previous mapping) Outside EL.
44B	3	21	7	36	1	0	1	94	81	3	0.1	0.2	G	Tb/Cgg	Basalt (field check)
44C	4	2	8	0	16	155	1	123	58	25	2.0	∞	G	Tb/Cgg?	" " "
44D	2	10	0	15	1	0	1	82	498	0	0.2	0	G	Tb	" " "
44E	3	4	0	0	5	97	1	664	1035	0	0.8	0	+ve r	Or	Culture - powerline. Outside EL.
4400A	1	0	1	0	3	160	1	68	836	0			G	Tb	Basalt (fieldcheck)
45A	0	9	3	14	1	0	1	101	166	0	0	0.2	G	Tb/Om	" (previous mapping) Outside EL.
45C	2	4	9	8	5	93	1	113	54	20	0.5	1.1	G	Tb/Cgg?	" (fieldcheck)
45D	6	10	14	19	5	45	2	112	44	24	0.6	0.7	G	Tb/Cgg?	" "
45E	6	12	7	8	4	65	1	98	91	3	0.5	0.9	50nT F Pt	Tb	" "
45F	4	11	5	19	2	19	1	98	105	0	0.4	0.3	G (low)	Tb	" "
45G	2	4	1	1	3	159	1	67	370	0	0.5	1.0	G	Tb	" "
45H	3	7	0	5	2	20	1	67	748	0	0.4	0	G	Tb	" "
45I	13	3	1	0	48	56	1	295	1019	0	4.3	∞	G	Tb	" "
45J	0	6	0	0	1	52	1	72	743	0	0	0	-ve r	Tb	" (previous mapping)
45K	4	9	10	28	3	17	1	101	150	0	0.4	0.4	G	Tb	" " Outside EL.
46A	1	0	1	0	48	355	1	125	103	10			G (low)	Tb	" " "
4600A	3	16	8	29	2	0	1	102	79	7	0.2	0.3	+ve r	Tb	" "
4600B	9	5	4	0	8	95	1	165	57	60	1.8	∞	G	Tb	" "
4600C	2	5	1	10	2	61	1	125	86	25	0.4	0.1	G	Tb	" "
4600E	2	7	0	9	1	23	1	99	115	0	0.3	0	200nT Pt F	Tb	" "
4600G	0	0	1	0	7	433	1	210	107	93	0	∞	60nT Pt	Tb	" "
4600H	4	16	5	24	2	0	1	102	131	0	0.3	0.2	25nT Pt	Tb	" "
4600I	4	12	9	25	3	0	1	39	139	0	0.3	0.4	G	Tb	" " Outside EL.
47A	3	6	1	11	2	0	1	106	77	0	0.5	0.1	-ve r	Tb	" "
47C	6	4	4	10	5	77	2	129	53	30	1.5	0.4	G	Tb	" "
47D	3	5	1	6	2	57	1	106	62	13	0.6	0.2	G	Tb	" "
47E	2	23	4	35	1	0	1	72	142	0	0.1	0.1	25nT Pt	Tb	" "
47F	2	10	1	11	1	0	1	47	753	0	0.2	0.1	G	Tb	" "
47G	1	0	2	0	8	156	1	602	401	193			G	Tb	" "
47xA													Cgg		Refer Section 6.6
48A	1	1	0	0	3	76	1	165	156	20	1.0	0	G	Tb	Basalt (previous mapping)
48B	8	8	9	2	12	111	2	116	36	31	1.0	4.5	+ve r	Tb	" "

613055

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS.

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
48D	2	0	0	0	5	197	1	159	129	36	∞	0	-50nT Pt	Tb	Basalt (previous mapping)
49A	5	16	2	20	2	0	1	125	253	0	0.3	0.1	G	Tb-Qt-€mk	" " "
49C	3	12	6	19	2	8	2	115	49	26	0.3	0.3	G	Tb/€mk	" " "
49D	2	3	7	9	5	109	2	107	42	19	0.7	0.8	G	Tb	" " "
49E	4	3	0	0	4	0	1	142	169	0	1.3	0	G	Tb	" " "
49G	1	12	0	17	1	0	1	92	163	0	0.1	0	G	Tb	" " "
50A	5	7	0	0	4	57	1	91	128	0	0.7	0	G	€gg-€mk-Tb	" " "
50B	3	1	6	5	14	167	1	141	62	34	3.0	1.2	G	Tb/€mk-€gg	" " "
50C	2	12	6	9	2	0	1	144	71	36	0.2	0.7	G	Tb	" " "
50D	1	3	0	1	2	90	1	125	359	0	0.3	0	G	Tb/€gg-€mk	" " "
51A	5	7	1	0	3	61	1	207	442	20	0.7		-ve P1	€gg	" (field check) Outside EL.
51B	3	6	4	7	3	39	1	191	134	50	0.5	0.6	G (low)	€gg Tb	Culture powerline.
51C	3	14	2	11	2	0	1	58	61	0	0.2	0.2	G	Tb/€gg-€mk	Basalt (field check)
51D	12	28	26	43	5	0	2	66	42	0	0.4	0.5	G	Tb/€gg-€mk	" (previous mapping) Outside EL.
51E	0	1	0	0	4	98	1	77	146	0	0	0	+ve R	Tb/€gg-€mk	" " " " "
51F	2	21	5	39	1	0	1	37	188	0	0.1	0.1	G	Tb/€mk-€gg	" " "
51G	3	15	6	29	2	0	1	84	100	0	0.2	0.2	G	Tb/€gg	Basalt (field check)
51H	2	4	0	3	2	20	1	203	431	0	0.5	0	G	Tb/€gg	" "
5100A	3	25	6	44	1	0	1	90	124	0	0.1	0.1	G	Tb/€gg?	" "
5100B	3	10	2	19	2	11	1	146	128	32	0.3	0.1	G	Tb/€gg?	" " "
5100D	3	12	5	25	2	0	1	107	118	0	0.3	0.2	G	Tb/€gg	" " "
5100E	2	2	0	0	3	60	1	85	687	0	1.0	0	P1	Tb/€gg	" " "
52A	3	34	4	43	1	0	1	25	413	0	0.1	0.1	G	Tb/€gg	" "
52C	2	7	4	9	2	33	1	119	105	13	0.3	0.4	+ve r	Tb/€gg	" "
52D	8	12	11	14	6	43	1	70	89	0	0.7	0.8	+ve r	Tb/€gg	" "
52G	3	5	0	0	7	27	1	634	1035	0	0.6	0	G	Qt/Tb-€mk	" (previous mapping)
52H	17	5	0	0	16	11	1	640	1035	0	3.4	0	G	Qt/Tb-€mk	" "
52I	1	23	8	44	1	0	1	94	216	0	0.04	0.2	G	Qt/Tb-€mk	" "
52K	1	1	1	2	4	186	1	120	306	0	1.0	0.5		Tb/gg-€mk	" (field checking)
5200A	2	7	2	14	1	0	1	129	220	0	0.3	0.3	G	Tb/€gg	" "
5200B	3	4	0	6	2	19	1	149	236	0	0.8	0	G(low)	Tb/€gg	" "
53A	0	2	0	0	2	52	1	92	318	0	0	0	P1	Qg/€gg	Culture - powerline.Outside EL.
53B	2	19	2	28	1	0	1	23	402	0	0.1	0.1	G	Tb/€gg	Basalt (previous mapping) "
53C	2	1	2	0	3	125	1	140	133	12	2.0	∞	60nT 3L F	Tb/€gg	" " "
53D	3	11	3	19	2	0	1	111	139	0	0.3	0.2	G-P1	Tb/€gg	" " "
53E	4	3	3	0	13	152	1	158	153	27	1.3	∞	-ve r	Tb/€gg-€mk	" " "
53F	4	8	0	0	5	0	1	589	1035	0	0.5	0	G(Low)	€mk	" " "
52G	16	14	0	0	7	0	1	611	1035	0	1.1	0	G(Low)	Qt/€mk	" " "
53I	0	3	0	3	2	121	1	252	1035	0	0	0	-ve r F	Qt/Tb-€mk	" " "
53J	1	4	0	7	2	66	1	151	1035	0	0.3	0	+ve r	Qt/Tb-€mk	" " "
53K	2	6	1	10	1	0	1	141	171	5	0.3	0.1	+ve Tr	Tb/€gg	" (field checking)
53M	2	2	0	0	4	145	1	302	1035	0	1.0	0	P1	Qt/Tb-€gg	" " "
5300A	1	22	5	37	1	0	1	81	143	0	0.05	0.1	P1	Qg/€gg	Culture - powerline. Outside.
5300C	3	7	1	9	2	64	1	141	175	26	0.4	0.1	75nT 4L F	Tb/€gg	Basalt (previous mapping)

613056

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
5300E	0	0	0	0	1	60	1	139	344	31	0	0	+ve Tr	Tb-Qt/Cgg	Basalt (previous mapping)
5300F	9	51	31	100	3	0	1	65	61	0	0.2	0.3	-50nT Pt F	Qt/Cgg	" " "
54A	0	5	0	0	1	0	1	119	243	0	0	0	Pl	Qg/Cgg	Culture - fences.
54B	3	12	2	15	1	0	1	65	315	0	0.3	0.1	Pl	Qg/Cgg	" "
54E	6	0	1	1	102	227	1	177	227	33		1.0	75nT 4L F	Tb-Cgg	Basalt (previous mapping)
54G	4	0	1	0	6	65	1	309	127	133			G	Tb/Cgg	" "
55A	4	17	6	30	2	0	1	66	166	0	0.2	0.2	G	Tb/Cgg	" "
55B	2	15	6	34	1	0	1	64	204	0	0.1	0.2	-50nT Pt	Qt/Cgg	" "
55C	1	1	0	0	1	78	1	123	535	0	1.0	0	Pl	Cgg	" (field check)
56A	3	2	0	2	4	181	1	234	1035	0	1.5	0	-25nT Pt	Tb/Cgg	" "
56B	1	1	1	0	5	163	1	225	1035	0	1.0	1.0	+ve Tr	Tb/Cgg	" "
56C	4	7	0	11	2	0	1	76	1035	0	0.6	0	G	Tb/Cgg	" "
56D	9	11	0	0	6	10	1	526	1035	0	0.8	0	G	Tb/Cgg	" "
56F	4	5	2	2	5	95	1	209	341	31	0.8	1.0	Pl	Qt/C?	Culture - powerline.
56xF														Qt	Refer Section 6.7
57B	7	12	0	0	7	0	1	580	1035	0	0.6	0	G	Tb/Cgg	Basalt (previous mapping)
57xC														Tb	" (field check)
5700A	3	2	0	0	13	65	1	539	1035	0	1.5	0	25nT Pt	Tb/Cgg	" " "
5700B	1	2	0	0	5	47	1	548	1035	0	0.5	0	G	Tb/Cgg	" " "
58B	10	6	0	0	8	0	1	579	1035	0	1.7	0	G	Tb/Cgg	" " "
58D	2	2	9	3	16	121	2	346	41	232	1.0	3.0	Pl	Qt	Culture - power lines.
59A	3	3	0	0	6	0	1	498	1035	0	1.0	0	+ve Tr	Cgg	" " " Outside EL.
59C	7	3	0	0	23	148	1	251	361	59	2.3	0	Pl	Qt	" " "
59xG															Refer Section 6.7
60A	7	12	0	1	8	48	1	144	427	0	0.6	0	G(low)	Qt	Culture - powerlines.
60xD														Qt	Refer Section 6.7
61A	22	0	54	22	51	23	5	167	6	109	∞	2.5	50nT F	Qt	Culture - powerlines.
61xA														Tb	Basalt (previous mapping) Outside EL.
6100A	3	2	4	6	5	121	1	216	207	64	1.5	0.7		Qt	Culture - powerlines and fences.
6100B	3	1	2	2	15	187	1	243	216	75	3.0	1.0		Qt	" " "
62A	3	9	4	10	2	13	1	108	235	0	0.3	0.4	G	Tb/Cgg-Cbf	Basalt (previous mapping) Outside EL.
62B	5	7	2	6	8	55	1	136	151	7	0.7	0.3	Pl	Qt	Culture - telephone cables.
62D	6	3	2	6	9	122	1	149	152	22	2.0	0.3	G	Qt	" "
63A	0	25	0	42	1	3	1	44	286	0	0	0	G	Tb/Cbf	Basalt (previous mapping) Outside EL.
63B	1	2	0	1	2	121	1	63	931	0	0.5	0	+ve Tr	Qra/Cbf	Culture - fences and powerlines.
63C	3	1	3	0	7	175	1	71	211	0	3.1	∞	120nT Pt F	Qra	Refer Section 6.8
63D	1	4	5	6	3	83	1	190	110	61	0.3	0.8	G	Qra	Culture - telephone cable.
63E	3	1	0	0	4	65	1	162	241	8	3.0	0	+ve r	Qt	" fences.
64A	3	3	2	0	6	198	1	310	276	133	1.0	∞	G	Cgg-Qt	" powerline.
64xD														Cgg	Refer Section 6.9.
65A	2	15	3	24	1	0	1	20	571	0	0.1	0.1	Pl	Qra	Culture - fences.
65B	2	6	1	12	1	0	1	104	242	0	0.3	0.1	G(low)	Qt	" powerline.
65C	4	5	1	0	5	100	1	177	202	30	0.8	∞	G(low)	Qt	" "

91305-1

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
66A	2	6	2	10	2	0	1	84	457	0	0.3	0.2	150nT Br F	Qt/Cgg?	Culture - fences/telephone line.
66xC														Qt/Cgg	Refer Section 6.10
66xE														Cgg/Cmk	Culture - electric fences.
67B	4	11	0	12	4	26	1	699	1035	0	0.4	0	150nT Br F	Qt/Cgg	" house.
67xA														Qt	Basalt - fieldcheck.
68A	2	3	3	6	3	70	1	234	297	54	0.8	0.5	150nT Br F	Qt/Cgg	
69A	3	2	0	4	4	107	1	370	1035	0	1.5	0	150nT Br	Qt	Basalt - fieldcheck
6900xA	2	6	2	7	2	33	1	231	1035	0	0.3	0.3	+ve r	Qt	" "
71xA														Qt/Cgg	Surficial clay
73xA														Qt	Refer Section 6.11
75A	0	11	0	17	1	0	1	71	874	0	0	0	-ve Pl	Cbf-Csf	Refer Section 6.12
75B	3	4	2	0	5	170	1	214	150	79	0.8	∞	G(low)	Qt	Culture - Powerlines.
76A	4	6	4	7	4	82	1	185	154	54	0.7	0.6	G(low)	Qt	Culture - powerline.
77A	4	0	0	0	8	162	1	224	107	79	∞	0	-ve Pl	Qt	" "
80xB														Qt/Cgg	Probably culture (fences). Not checked.
81A	2	14	0	11	1	0	1	28	614	0	0.1	0	Pl	Qra	Not checked; probably surficial clays.
81B	1	5	7	9	3	55	1	111	99	5	0.2	0.8	G(low)	Qt	Culture - powerline.
81C	20	11	6	0	19	61	1	180	108	55	1.8	∞	G(low)	Qt	" "
82A	1	6	0	3	1	32	1	31	694	0	0.2	0	G(low)	Qra	Culture - fences.
82B	17	10	11	12	15	65	1	120	84	20	1.7	0.9	-ve Tr/G	Qt	" - powerline.
83A	14	17	11	20	6	16	1	125	75	21	0.8	0.6	G(low)	Qra	" "
84A	9	15	6	10	5	25	1	137	127	18	0.6	0.6	G(low)	Qra	" "
85A	6	9	5	1	7	64	1	183	189	37	0.8	5.0	Pl	Qra-Qt	" "
86A	3	10	0	0	3	43	1	270	1035	0	0.3	0	G(low)	Qra-Qt	" "
8700A	1	4	0	0	1	26	1	205	1035	0	0.3	0	Pl	Qra-Qt	" "
88A	2	3	0	0	2	42	1	133	1035	0	0.8	0	Pl	Qra-Qt	" "
89A	4	2	3	2	14	161	1	280	188	110	2.0	1.5	G	Qra-Qt	" "
89xA														C	" electric fence.
90A	0	4	0	1	1	6	1	108	978	0	0	0	G	Qra	" fences.
92A	1	14	4	15	1	3	1	128	398	0	0.1	0.3	-ve r	Qra	" powerline.
93A	4	4	2	0	5	68	1	398	225	174	1.0	∞	100nT F 2L	Qra - C	" "
97A	5	27	9	46	2	0	1	59	120	0	0.2	0.2	-ve Tr	Tb	Basalt (previous mapping)
97B	2	12	0	21	1	0	1	63	452	0	0.2	0	25nT 2L	Tb-C	" "
97C	1	4	1	4	2	71	1	128	930	0	0.3	0.3	+ve r	C	Culture - electric fences.
98A	7	24	14	42	3	0	1	78	111	0	0.3	0.3	-75nT Pt	Tb-C	Basalt - fieldcheck.

613058

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
9800A	1	4	2	1	4	123	1	79	956	0	0.3	2.0	Pl	Tb-€	Basalt -(field check)
98xG														Tb	Basalt -(field check) Refer Section 6.13
99A	1	6	0	5	1	0	1	164	157	30	0.2	0	+ve Tr F	Tb	" "
99B	2	4	1	1	3	140	1	115	157	0	0.5	1.0	G	Tb	" "
100A	5	1	3	0	28	215	1	154	295	12	5.1	∞	100nT Pt F	Tb	" "
100B	2	4	0	1	3	150	1	78	434	0	0.5	0	G	Tb-Ts	" "
100D	0	22	0	41	1	6	1	50	143	0	0	0	+ve Tr	Tb-Ts	" "
100E	5	0	5	0	15	162	1	126	78	25			100nT Br F	Tb	" "
100xE														Tb	" " Refer Section 6.13
1000A	2	3	10	16	3	44	1	171	63	63	0.8	0.6	Pl	Tb	Basalt -(field check)
1000B	3	6	5	3	3	87	1	148	85	33	0.5	1.7	+ve Tr	Tb	" "
1000C	5	7	4	13	3	21	1	103	112	0	0.7	0.3	+ve Tr	Tb-Ts	" "
1000D	2	0	3	0	20	220	2	177	54	61			100nT Pt F	Tb	" "
1000E	5	19	8	35	2	0	1	95	89	0	0.3	0.2	-ve r	Tb	" " Refer Section 6.13
101A	6	8	1	3	4	73	1	166	212	22	0.8	0.3	100nT Pt F	Tb	" "
1010A	1	0	4	0	728	330	1	156	77	50			G(low)	Tb	" " Outside EL.
1010B	3	28	6	51	1	0	1	58	109	0	0.1	0.1	Pl	Tb	" "
1010C	2	21	4	42	1	0	1	34	145	0	0.1	0.1	G(low)	Tb	" "
1010E	5	26	6	42	1	0	1	88	107	0	0.2	0.1	G	Ts/Tb	" "
1010F	4	16	6	31	2	0	1	31	92	0	0.3	0.2	G	Ts/Tb	" "
1010H	5	26	12	45	2	0	1	32	67	0	0.2	0.3	-ve r	Tb	" "
1010J	2	10	0	11	1	21	1	142	102	36	0.2	0	Pl	Tb/€mk	" "
1010M	3	5	8	13	4	103	1	244	64	126	0.6	0.6	G	Qt/€mk-€gg?	Refer Section 6.13
102A	6	3	0	0	11	142	1	138	157	3	2.0	0	G(low)	Tb	Basalt -(field check)
102B	2	5	6	9	4	108	1	131	93	31	0.4	0.7	Pl	Ts/Tb	" "
102C	2	12	1	21	1	0	1	68	106	0	0.2	0.05	G(low)	Tb	" "
102D	2	3	3	13	2	74	1	119	86	31	0.3	0.2	Pl	Tb	" "
102E	2	9	1	10	1	10	1	85	92	0	0.2	0.1	-ve r	Tb	" "
102xD														Qt/€gg	Refer Section 6.14
103A	1	14	0	35	1	8	1	44	297	0	0.1	0	G	Tb	Basalt - field check)
103C	7	10	14	34	4	43	1	36	72	1	0.7	0.4	G	Ts/Tb	" "
103D	9	14	15	40	4	21	1	89	76	0	0.6	0.4	G(low)	Ts/Tb	" "
103F	5	0	0	0	6	125	1	135	1035	0		0	G	Ts/Tb	" "
103G	2	7	1	8	1	12	1	103	179	0	0.3	0.1	G	Tb	" "
103H	2	2	0	0	3	221	1	468	1035	0	1.0	0	G	Qt	" "
103xF														Qt/€gg	Refer Section 6.14
104A	2	6	3	1	3	74	1	184	102	54	0.3	3.1	125nT Pt	Ts-Tb	Basalt (previous mapping)
104C	2	19	11	18	2	0	1	170	56	62	0.1	0.6	G	Ts-Tb	" " "
104xB														Qt/€gg	Refer Section 6.14
105A	3	14	5	27	1	0	1	104	129	0	0.2	0.2	+ve Tr	Tb/€mk	Basalt - field check)

613059

TABLE 1 (Cont'd)

DIGHEM II EM ANOMALY CHARACTERISTICS AND OBSERVATIONS

ANOMALY	COAXIAL COIL PPM	COAXIAL COIL PPM	COPLANAR COIL PPM	COPLANAR COIL PPM	VERTICAL DYKE MHOS	VERTICAL DYKE FEET	HORIZONTAL SHEET MHOS	HORIZONTAL SHEET FEET	CONDUCTIVE EARTH OHM-M	CONDUCTIVE EARTH FEET	CONDUCTOR QUALITY CX	CONDUCTOR QUALITY CP	ASSOCIATED MAGNETIC ACTIVITY	MAPPED LITHOLOGY (REGIONAL)	REMARKS
105B	5	0	6	7	10	112	1	117	91	10	∞	0.9	G	Tb/€mk	Basalt (field check)
105C	2	2	3	1	9	115	1	97	225	0	1.0	8.1	G	Tb/€mk	" "
105E	1	2	2	0	7	206	1	130	314	0	0.5	∞	G	Tb/€mk	" "
113A	2	5	0	3	1	59	1	177	1035	0	0.4	0	-	Qt	Refer Section 6.15
114A	2	5	0	0	2	119	1	249	810	4	0.4	0	Pl	€mk	Culture - electric fence.
115A	1	9	2	18	1	0	1	78	325	0	0.1	0.1	G(low)	Qra	" fences.
115xF														Qt	Refer Section 6.15
116A	2	3	0	2	5	140	1	249	338	62	0.8	0	G(low)	€gg	Culture - powerline.
118xA														€gg	Refer Section 6.16
119xB														€gg	" " 6.17
119xC														€gg	" " 6.16
121xA														€gg	" " 6.17
126A	2	7	0	10	1	17	1	119	1035	0	0.3	0	-ve Br	Qra-€bf	Culture - electric fence.
126xB														€mk	Refer Section 6.22
129A	0	11	0	22	1	4	1	54	732	0	0	0	280nT PtF	€bf	Outside EL.
132xD														€bf	Refer Section 6.18
133A	0	4	0	0	1	77	1	120	1010	0	0	0	G	€bf	Outside EL.
136A	2	4	0	0	2	116	1	139	1035	0	0.5	0	+ve Br F	€bf	Culture - fences & powerline.
136xA															Surficial clays in swamp
143xA														€bf	Refer Section 6.19
145xA														€gg	Refer Section 6.20
146xB														€gg	Refer Section 6.19
146x€														€gg	Refer Section 6.21
147xA														Pbb	Outside EL.

613060

APPENDIX I

GEOCHEMICAL SAMPLE SHEETS - DIGHEM ANOMALIES

613062

C.R.A. E[illegible].ORATION . GEOCHEMICAL SAMPLE LE[illegible]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 ..... Analysed by ANALABS (COOEE) DPO no. 30

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	c/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
																						WASHINGTON Ag MINE
972351	oc.	gs									40	3650	1450	9.0				200				1ST ADIT DOWN INCLINE. FAULT- QTZ VEIN
																						PUG ZONE. ST 345° DIP 55° W 75°.
972352	oc.	rc	05m								30	6400	5150	13.5				400				E 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	815	1200	3.5				x				Small pit Nth side Th 8m down hill from
																						1ST ADIT — CUDDY. Sheared dk gy slate.
972355	gs.	%									15	3250	890	13.5				100				Opp side of Th % sheared brecciated slate
																						qtz veined sl. gossanous.
972356	%	rc	1m								40	530	510	0.5				200				Adit 2 approx 40m N of MAIN OLD MINE Th.
																						7m long small cuddy N. Med-dk gy coarse
																						grained qfzite — N end sample
972358	%	rc	2m								40	535	345	1.0				x				med gy - med-coarse g. qfzite minor Pb in veins
																						2nd (middle) sample.
972359	%	rc	1m								35	1100	320	3.0				x				med gy med-c.g. qfzite minor Pb in veins S end sample
972360	%	rc	0.5m								30	2100	520	7.5				100				3rd ADIT ABOUT 50m N 0.5m rc sample
972356	%	rc	0.5m								25	1950	480	6.0				200				3rd ADIT 50m TO S OF PIT SAMPLE.
972361	%	gs									1200	15.9%	1.25%	640				x				Small cuddy high grade Pb. 40m N of 3rd Adit
972362	%	gs									20	2950	255	8.0				x				ditto background sample 2m. N end.

* 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

613063

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. Sample numbers 987297 - 987312 Collected by I.M. CLEMENTSON Sheet no. 1/2

Area / Prospect DIGHEM 24 x N Date 11-May-88

Map / Photo reference LINE A" Analysed by ANALABS DPO no. 30048

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi		Grid ref	Geological Observations
987297	S	A	0.60	B_2						10	18	29	x	12			~~50~~	54		350mN	Sandy clay rich red brown. Mainly qtz float
987298	S	A	0.70	B_2						~~28~~	~~260~~	~~310~~	0.6	14			x	60		325mN	Lt brown-ochre sandy soil. Wealth granite float.
987299	SS	2	1.0	90%	10%					16	29	~~180~~		8			x	16		300mN	Plunge pool/ log jam trap. Granite float.
987300	S	A	0.40	B_2						9	24	44	x	14			x	6		300mN	Lt brown - sandy clay soil.
987301	S	A	0.80	B_2-C						10	23	26	x	6			x	~~110~~		275mN	Sandy brown soil with weath. granite float at site of gneiss.
987302	S	A	0.60	B_2-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 ocres. Abundant float of fine-med. gr. granite
987304	S	A	0.70	B/C						5	15	14	x	10			x	12		200N	Red sandy soil amongst granite scree.
987305	S	A	0.60	B_2-C						5	27	15	0.2	16			x	12		175mN	Lt brown sandy soil adjacent to granite o/c
987306	S	A	0.70	B_2-C						4	13	14	x	10			x	16		150mN	As above.
987307	S	A	0.70	B_2-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

***

613064

C.R.A. PLORATION . GEOCHEMICAL SAMPLE L GER

Tenement name SHEFFIELD EL7/73 No. Sample numbers 987297 - 987312. Collected by I.M. CLEMENTSON Sheet no. 2/2

Area / Prospect DIGNEM 24xN Date 11-May-82

Map / Photo reference LINE A' Analysed by DPO no. 30042

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi	Grid ref	Geological Observations
987308	S	A	0.70	B_2/C							6	15	22	x	4			x	34	100mN	V. sandy lt brown. Weath. granite.
987309	S	A	0.50	B_2/C							7	19	16	0.1	10			x	16	75mN	V. sandy lt brown. Granite float.
987310	S	A	0.60	B/C							6	5	13	0.2	10			x	16	50mN	Sandy lt brown-grey.
987311	S	A	0.50	B_2							7	20	14	0.2	16			x	30	25mN	Rich orange-brown sandy clay.
987312	S	A	0.50	B_2							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 = [illegible]

613065

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987313-987330 Collected by I.M. Clementson Sheet no. 1/2

Area / Prospect DISMEM 24xN Date 11-May-82

Map / Photo reference LINE 'B' Analysed by Analabs DPO no. 30042

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ao	Bi		Grid ref	Geological Observations
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/C							11	18	16	0.2	8			X	80		425mN	Red, sandy-brown clay.
987317	S	A	0.20	B/C							13	25	28	0.1	8			50	66		400mN	(Bulldozed area) : dark red-brown sandy soil. Abundant granite float, plus some poorly developed gri. zone.
987318	S	A	0.40	B/C							14	24	35	0.2	6			<	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/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	B2							18	31	29	0.2	18			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 m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample [illegible]

613066

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987313-987330 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. 30042

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %									Grid ref	Geological Observations
	ss * / oc / f / s	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_2/C					9	44	61	x	6			x	22	225mN	LL brown, sandy soil
987323	S	A	0.50	B_0					8	18	28	0.2	4			x	24	200mN	Rich brown clay. Minor granitic Rock
987324	S	A	0.50	B_2					5	10	16	x	2			x	10	175mN	As above
987325	S	A	0.60	B_2/C					6	14	30	0.2	4			x	8	150mN	LL brown, sandy soil.
987326	S	A	0.50	B_2/C					6	13	26	0.1	6			x	2	125mN	As above.
987327	S	A	0.50	B/C					5	12	26	x	10			x	6	100mN	LL brown, sandy soil Minor granite -gneissic Rock
987328	S	A	0.50	B/C					7	18	26	0.1	12			x	10		
																		75mN	As above, but slightly more clay rich.
987329	S	A	0.60	B_2					9	21	26	x	18			x	20	50mN	Rich red-brown sandy clay.
987330	S	A	0.50	B_2					6.	11	19	x	12			x	6	25mN	Rich brown silty-sandy clay - minor weathered granitic Rock.

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

** Stream sed[illegible]mple description fl = flow m3/sec [illegible] = width m

613067

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987790- 987799 ..... Collected by I. M CLEMENTSON ..... Sheet no. 1/1

Area / Prospect WILMOT DIGHEM AGRD ..... Date 20/7/82

Map / Photo reference EAST RECCY LINE ..... Analysed by ANALABS ..... DPO no 30312

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Fe %	Ao	Sn	Grid ref	Geological Observations
987790	S	A	0.4	A/C							7	1	19			17					4625N	Black, humic sandy soil above o/c
987791	S	A	0.4	B_2							10	15	27			38					4650N	Mid br sandy soil with qz. Le + red shale frags
987792	S	A	0.5	B_2							9	9	25			44					4675N	Lt-mid br sandy soil plus " " " "
987793	S	A	0.7	B_2							19	19	27			65					4700N	Ao above
987794	o/c	gs									5	45	70	x		85		2.45	x	x	4710N	Purple ferruginous gritty qz. Le
987795	S	A	0.7	B_2							20	15	25			50					4725N	Red brown sandy clay
987796	S	A	0.6	A/B_2							31	17	40			70					4750N	Dk brown-black soil
987797	S	A	0.9	A/B_2							45	11	25			59					4775N	" " dry soil plus qz. Le frags
987798	S	A	0.4	B_2							36	11	35			96					4800N	Br sandy soil
987799	S	A	0.8	B_2							44	8	123			1220					4825N	Mid brown silty soil.

Creek at 4850N : no soil to collected between 4850-5000N because area is an alluvial flat : no meaningful soils anticipated.

* 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

613068

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD 7/73 No. Sample numbers 987800 + 987807 — 987822 Collected by I.M. CLEMENTSON Sheet no. 1/II

Area / Prospect WILMOT, DAGMEN & KD Date 20/7/82

Map / Photo reference WEST ROCKY LINE Analysed by ANALABS DPO no. 30312

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Fe%	As	Sn	Grid ref	Geological Observations
987800	S	A	0.7	B_2						500	31	168			197					4950N	Grey br mottled clay at incl" d/stream seepage
987807	S	A	0.5	B_2						46	6	185			990					4985N	Sticky brn clay from silt frags.
987808	S	A	0.6	B_2					*	87	36	123			1460					4900N	Red-Br clay (looks like basal Loc. 2)
987809	S	A	0.5	B_2					*	74	62	89			610					4875N	" " " " " "
987810	S	A	0.6	B_2						60	26	40			139					4850N	Brown clay, distinct from previous.
987811	S	A	0.6	B_2						76	16	44			123					4825N	" " (not basaltic in appearance)
987812	F									60	30	60	0.5		115		6.40	x	x	4800N	Red-buff spotted rock. Looks like a partly ferruginised qz-ite (ie irregular Fe_2O_3 replacement - but spotting is very uniform) - Maybe volcanic ??
987813	F									100	30	35	x		325		4.50	x	x	4800N	A ? brecciated ? siltstone with extensive FeOxides in irregular pockets Slight gossanous appearance. ? Proximal to o/c
987814	S	A	0.4	A/B_2						75	14	33			94					4800N	Black-brown humic clay
987815	S	A	0.4	A/B_2						75	10	25			115					4775N	" " " "
987816	F									115	50	100	x		235		48.0%	100	x	4760N	Massive Fe_2O_3 (plus Fe_3O_4) replacing ? silty ss
987817	S	A	0.9	B_2						27	7	21			40					4750N	Md 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_2						7	8	21			28					4650N	Md brown silty clay

* 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

613069

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L. .GER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987822 Collected by I.M. CLEMENTSON Sheet no. 2/II

Area / Prospect HUNOT 26RD Date 29/7/82

Map / Photo reference WEST REGGY LINE Analysed by ANALABS DPO no. 30312

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
987822	S	A	0.3	A/C							4	3	16			30					N625N	Humic grey sand (weath qz. fe).

* 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 = colluv | ca = catchment km2

613070

C.R.A. PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987341 – 987364 Collected by I.M. Clementson Sheet no. 1/3

Area / Prospect DIGHEM 27 x 5 Date 13-May-1988

Map / Photo reference LINE "B" Analysed by Analabs DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi		Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
987341	f								5	14	63	x	x			x	x		600mS	Highly magnetic rhyolite.
987342	S	A	0.60	B_2					20	65	110	x	x			x	x		700S	Rich brown silty clay, slight ochre mottling
987343	S	A	0.70	B_2					23	52	88	x	x			x	x		675S	Red brown silty clay. Rhy float at site.
987344	S	A	0.60	B_2					16	43	84	x	x			x	x		650S	Very red/ch brown silty clay. Abundant highly magnetic a.v. float. Often weathered
987345	S	A	0.50	B_2					21	37	72	x	x			x	x		625S	As above.
987346	S	A	0.80	B_2					13	17	53	x	x			x	x		600S	As above. Highly magnetic a.v. (rhy) float - very fine grained and with virtually no visible qz.
987347	S	A	0.30	B_2					17	36	72	x	x			x	x		575S	Rich red brown silty clay with greenish yellow weathered tuff fragments.
987348	S	A	0.60	B_2					18	49	59	x	x			x	x		550S	Rich red brown silty clay.
987349	S	A	0.60	B_2					18	28	89	x	x			x	x		525S	Brown clay rich soil.
987350	S S	0.1	1.0	3%	7%				12	39	150					x	x		510S	Abundant organic material in sediment. Poor trap site

* 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 = c

613071

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987341 - 987364 Collected by I.M. Clementson Sheet no. 2/3

Area / Prospect DIGHEM 27 x 5 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 * oc f s	fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi		
		o/c sample type ***																	
		s sample type ****																	
987351	S	A	0.50	B_2					18	40	92	x	x			x	x	500mS	Light brown clay soil.
987369	f								71	25	125	0.2	2			x	x	510 S	Very pyrhotitic a.v. Dark grey green, med. v. m grained. Either a clay or very tight tuff. Minor py.
987362	S								80	70	53	x	2						
987353	S/S	0.1	2m	50%	50%				13	54	125		x			x	x	4755	Very organic rich sediment. Float all weathered a.v. - chy and tuffs.
987354	S	A	0.50	B_2					20	65	81	x	x			x	x	450 S	Lt brown clay.
987355	S	A	0.80	B_2					20	72	88	x	4			x	x	4255	Lt brown silty clay.
987356	S	A	0.80	B_2					23	48	76	x	x			x	x	4005	Rich red brown soil. Weathered a.v. float.
987357	S	A	0.60	B_2					24	61	82	x	x			x	x	3755	As above.
987358	S	A	0.40	B_2/C					-									3255	Dk brown clay plus weathered tuff.
987359	S	A	0.70	B_2					16	72	96	x	x			x	x	350	Red-brown silty clay.
987360	S	A	0.50	B_2					22	39	65	0.1	x			x	x	300	Rich red brown silty clay
987361	S	A	0.55	B_2					24	52	87	x	x			x	x	275	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

613072

C.R.A. PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987341 - 987364 Collected by I.M Clemenson Sheet no. 3/3

Area / Prospect DIGNAM 27 x 5 Date 13 - May - 1982

Map / Photo reference LINE B' Analysed by Analabs DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	A_0	B_i		Grid ref	Geological Observations
987362	S	A	0.30	B_2							23	61	73	0.1	X			50	2		250 S	Dark brown silty clay
987363	S	A	0.40	B_2							17	67	77	0.1	X			X	X		225 S	" " " "
987364	S	A	0.30	B_2							27	53	83	0.2	X			X	2		175 S	Reddish brown sandy clay with fragments of weathered a.v.

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

** Stream sed sample [illegible] fl = flow [illegible] wi = [illegible]

613073

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 987373 - 987401 Collected by I. M. Clementson Sheet no. 1/3

Area / Prospect DIGHEM 27x5 Date 14-3-82

Map / Photo reference LINE A Analysed by Analabs DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi	Grid ref	Geological Observations
987373	S	A	0.20	B_2						25	61	96	x	x			50	x	50 m S	Rich red clay soil. Worth tuff beds.
987374	S	A	0.9	B_2						21	72	88	x	x			x	x	75 S	" " " " " "
987375	S	A	1.0	B_2						18	52	94	x	x			x	x	100 S	As above but slightly lighter in colour
987376	S	A	0.60							15	82	120	x	x			x	2	125 S	Waterlogged gravelly clay in ?old creek channel. Lt grey-brown
987377	S	A	1.0	B_2						24	61	81	0.1	x			50	x	150 S	Rich red silty clay
987378	S	A	1.0	B_2						24	53	80	x	x			x	2	175 S	As above.
987379	S	A	1.0	B_2						24	49	74	x	x			x	x	200 S	Rich red silty clay.
987380	S	A	1.0	B_2						25	52	78	x	x			x	x	225 S	" " " "
987381	S	A	0.4	C						13	53	140	0.1	x			x	x	250 S	Weathered a.v. tuff? Distinctly fragmental. Little v.s. qz.
987382	S	A	1.0	B_2						18	69	66	x	2			x	x	275 S	Rich red brown clay rich soil
987383	S	A	0.90	B_2						18	53	89	x	x			x	2	300 S	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 = [illegible]

613074

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L GER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987373 - 987401 Collected by I. M. Clementson Sheet no. 2/3

Area / Prospect DIGHEM 27 x 5 Date 14-5-82

Map / Photo reference LINE 'A' Analysed by Analabo DPO no.....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi	Grid ref	Geological Observations
		o/c sample type ***																	
		s sample type ****																	
987384	S	A	1.10	B_2					21	50	120	0.1	2			x	4	325mS	Rich red brown clay - with charcoal fragments.
987385	S	A	0.40	B_2					17	64	71	x	x			x	x	350mS	Clusters of qz in a rich red brown clay
987386	S	A	1.0	B_2					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 rhyolite / tuff Fine grained disseminated pyrite (fine) and coarser blebby pyrite.
987388	SS	1.0	4.0	70%	30%				11	52	14		x			x	x	1400mS	Log jam trap site. Float is weathered a.v tuffs. Moderate Mn staining of fragments.
987389	S	A	0.90	B_2/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_2					14	40	68	x	x			x	x	450mS	Rich red brown clay rich soil
987391	S	A	0.70	B_2					19	31	60	x	x			x	x	475mS	As above.
987392	S	A	0.70	B_2					19	50	73	x	2			50	x	500	" "
987393	S	A	0.50	B_2					15	50	82	x	x			x	x	525mS	" "

* 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 = [illegible] pH = [illegible]

613075

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 987373-987401 Collected by I.M. Clementson Sheet no. 3/3

Area / Prospect DIGHEM 27 x 5 Date 14-May-80

Map / Photo reference LINE A Analysed by Analabs DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Bi	Grid ref	Geological Observations
987394	S	A	0.60	Ba							15	64	54	X	X			X	X	550mS	Ochre-reddish clay rich soil.
987395	S	A	0.85	Ba							21	79	46	X	X			X	X	575mS	Red-brown silty clay.
987396	S	A	1.0	Ba							19	40	89	X	X			X	X	600S	" " " "
987397	S	A	0.80	Ba							23	88	58	X	X			X	X	625mS	" " " "
987398	S	A	1.0	Ba							20	69	92	X	X			50	X	650mS	Red-ochre mottled clay.
987399	S	A	0.40								18	36	95	0.1	X			X	X	700mS	V. wet "gley" in swamp around ck.
987400	S	A	1.0	Ba							10	35	58	X	X			X	X	675mS	Rich red-brown silty clay. Floaty fine grained tuffaceous looking volcanics.
987401	SS	-	1.0	50	50						10	26	130		X			X	X	700mS	Seepage in ck. Abundant Mn staining of magnetic fine grained mafic float.

* 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

613076

C.R.A. . PLORATION GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 9876652 - 9876664 Collected by A. Crick Sheet no. 1

Area / Prospect PROMISED LAND (EAST BARRINGTON). 9876686 - 9876689 Date 26-5-89

Map / Photo reference LINE 4300E Analysed by Analabs DPO no 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref 4300E	Geological Observations
9876652	S	A	1.1							14	16	63			410					5000N	Or-tan clay + rock frags
9876653	S	A	1.1							10	15	72			1180					5025N	Dk or-br clay + black rock fragments
9876654	S	A	1.0							10	13	61			3800					5050N	Choc-br loose clay soil
9876655	S	A	1.1							13	15	75			8200					5075N	" " " " "
9876656	S	A	1.0							7	4	57			1650					5100N	Dk or-br gritty clay soil
9876657	S	A	1.1							10	6	75			2400					5125N	" " "
9876658	S	A	0.50							19	3	73			3600					5150N	Dk choc brown clay soil
9876659	S	A	1.1							24	2	58			1170					5175N	Dk br gritty clay soil, orange mottling
9876660	S	A	1.1							21	2	53			260					5200N	Or-br fine gr clay soil
9876661	S	A	0.60							8	x	23			91					5225N	Dk br-grey gritty soil, tan mottling
9876662	S	A	0.70							14	1	21			72					5250N	Lt tan gritty soil + small rock frags
9876663	S	A	0.50							10	x	17			34					5275N	Lt grey-tan gritty soil
9876664	S	A	0.70							9	x	19			30					5300N	" " "
9876686	S	A	0.40							12	16	45			8700					4975N	Black-brown sandy-humic.
9876687	S	A	0.40							9	8	23			153					4950N	Sandy grey soil
9876688	S	A	0.80							22	10	46			130					4925N	Yellow-brown clay soil, gritty.
9876689	S	A	1.1							11	11	39			180					4900N	Yellow-brown gritty clay soil

* 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 [illegible]

613077

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 1733 No. ..... Sample numbers 972481-972500 Collected by DANIELS CREEK Sheet no. 1

Area / Prospect PROMISED LAND (EAST BARRINGTON). + 987651 Date 25-6-82

Map / Photo reference LINE 4400E Analysed by ANALABS DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref 4400E	Geological Observations
972481	S	A	0.80							11	9	141			2900					5000N	Lt br gritty soil, mottled yell-or.
972482	S	A	1.0							12	9	93			1390					5025N	" " " " " "
972483	S	A	1.1							12	6	62			3000					5050N	Dk br clay soil
972484	S	A	1.1							12	5	46			2500					5075N	Mid br clay soil
972485	S	A	0.60							13	7	48			2400					5100N	Choc-br clay soil, mottled yellow-white
972486	S	A	1.1							11	6	68			1300					5125N	Lt br clay soil " " "
972487	S	A	0.50							10	9	64			1880					5150N	Red clay soil, mottled choc-br.
972488	S	A	0.80							9	5	41			1170					5175N	Brown loam!
972489	S	A	0.50							6	7	41			810					5200N	Mid br clay soil, mottled yellow-white
972490	S	A	0.50							8	3	45			190					5225N	Yell-tan gritty soil
972491	S	A	1.1							11	10	42			100					5250N	Or-tan clay soil + rock frags
972492	S	A	1.1							34	3	31			41					5275N	Yel-or clay soil
972493	S	A	1.0							12	8	43			119					5300N	Or-tan clay soil
972494	S	A	0.60							4	1	31			82					5325N	Tan clay soil.
972495	S	A	0.60							15	3	59			112					5350N	" " "
972496	S	A	0.70							11	4	38			850					5375N	Yel-br clay loam!
972497	S	A	1.1							7	7	50			930					5400N	Or-br v. clay rich soil
972498	S	A	0.80							8	9	65			1670					5425N	Yel-br soil + wht + mottling + rock frags.
972499	S	A	1.1							8	4	47			100					5450N	Lt tan clay soil
972500	S	A	0.60							28	4	37			370					5475N	Yell-brown clay
987651	S	A	0.60							20	5	25			205					5500N	Tan-orange soil.

* 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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613078

16

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L ..GER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987690-98701 Collected by A. Crick / I. Rogers Sheet no. 1

Area / Prospect PROMISED LAND (E. BARRINGTON). Date 26-6-89

Map / Photo reference LINE 4400E Analysed by Analabs DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																	4400E	
987690	S	A	1.1							8	15	91			2070		4700N	Yell-brown gritty clay.
987691	S	A	0.70							14	18	101			2600		4725N	Mid br gritty clay
987692	S	A	1.1							20	8	135			930		4750N	" " " "
987693	S	A	0.80							14	5	92			950		4775N	Lt br gritty clay soil
987694	S	A	1.1							16	9	193			970		4800N	Tan-br, mottled or, gritty clay.
987695	S	A	0.5							36	8	340			2800		4825N	Mid br gravelly clay
987696	S	A	1.1							11	11	200			1390		4850N	Mid br gritty clay soil.
987697	S	A	1.1							14	10	122			1080		4875N	R-br gritty clay
987698	S	A	0.8							18	13	150			1040		4900N	Mid br silty clay
987699	S	A	0.8							25	28	182			600		4925N	" " " "
987700	S	A	0.8							16	14	173			3100		4950N	Dk tan silty clay soil
987701	S	A	1.1							14	11	115			2700		4975N	R-br silty clay soil

* 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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613079

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD E.L. 7/73 No. ..... Sample numbers 987665- 987685 Collected by A. Crick / I. Rogers Sheet no. 1 of 2

Area / Prospect PROMISED LAND (E. BARRINGTON) Date 26-6-82

Map / Photo reference BASE LINE (5000N) Analysed by Analabs DPO no 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	Ba	W	Grid ref 5000N	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
987665	S	A	0.75						5	x	26			230		6	290	x	4000E	Lt-mid br humic clay.
987666	S	A	0.40						10	8	38			2200		6	700	x	4025E	Mid brown " clay
987667	S	A	0.80						7	1	34			460		7	430	x	4050E	Or-br clay with dk br mottling
987668	S	A	0.40						8	10	38			5100		7	1000	x	4075E	Loose blak-br humic soil
987669	S	A	0.60						5	4	38			1750		6	510	x	4100E	Mid br gritty humic clay.
987670	S	A	0.70						4	3	39			920		x	410	x	4125E	Mid br clay, yellow mottling, some humus.
987671	S	A	1.1						7	2	25			670		6	390	x	4150E	Mid br gritty soil
987672	S	A	1.0						6	x	29			240		6	810	x	4175E	Mid-br gritty clay soil
987673	S	A	1.0						6	2	38			760		6	540	x	4200E	Or. br - gritty clay
987674	S	A	0.50						4	x	23			1040		7	810	x	4225E	Dk br gritty clay
987675	S	A	1.1						7	2	40			580		x	460	x	4250E	Mid br gritty clay
987676	S	A	0.90						13	2	43			780		x	840	x	4275E	Yell-br clay soil
987677	S	A	1.0						15	7	76			450		x	700	x	4325E	Mid br mottled yellow-red gritty clay
987678	S	A	0.70						8	7	81			540		x	720	x	4350E	Yell- or - br gritty clay
987679	S	A	1.1						14	7	73			3400		4	690	x	4375E	Reddish br, mottled yellow, gritty clay
987680	S	A	?						11	8	62			2500		6	1400	x	4425E	Grey gritty loose soil
987681	S	A	0.90						9	7	39			550		6	900	x	4450E	Brown, black - yellow mottled gritty clay
987682	S	A	0.60						9	5	40			710		x	770	x	4475E	Or - br gritty clay
987683	S	A	1.0						8	4	30			1580		3	410	x	4525E	Loose grey sandy soil
987684	S	A	0.40						14	6	37			195		x	360	x	4550E	Grey-yellow mottled clay-gritty soil

* 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

613080

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987665-987685 Collected by A.Crick / I.Rogano Sheet no. 2 of 2

Area / Prospect PROMISED LAND (E. BARRINGTON) Date 26-6-82

Map / Photo reference BASE LINE (5000N) Analysed by Analabs DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	Ba	W	Grid ref	Geological Observations
987685	S	A	0.6								12	8	55			880		3	370	x	5000N 4575E	Mid-br, mottled grey, gritty clay soil.

* 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

613081

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987565-987574 Collected by I.M. Clementson Sheet no. 1/2

Area / Prospect PROMISED LAND Date 9: JUNE 82

Map / Photo reference BASE LINE (5000N) Analysed by R MALAND DPO no. 30308

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Ba	Mn	Au	Ao	Fe%	Sn	Grid ref 5000N	Geological Observations
987565	oc	gs								10	x	25	x	890	1100		x	3.00	x	4030E	Light-mid grey silty mudstone/shale. Finely micaceous, poorly fissile
987566	f	gs								10	x	20	x	190	145		x	2.00	5	4060E	Sub greywacke - sub-arkosic qz-wacke Med gr., faintly ferruginous
987567	f	gs								10	x	20	x	550	80		x	2.10	x	4160E	Somewhat sheared, slightly chloritic ferruginous greyshale.
987568	o/c	gs								15	5	75	x	390	225		x	5.80	15	4405 4505	Green fine-med. grained tuff. Poorly sorted lithic(?) clasts visible.
* 987569	f	gs								10	x	15	x	17.7%	115		x	7500ppm	9	4225E	Volcanic dysmictaini affinity. Small ? $BaSO_4$ veinlets.
* 987570	f	gs								35	10	30	x	6650	550		x	2.80	4	4450E	Volcani-clastic, highly weathered. ? Tr $BaSO_4$
987571	oc	gs								15	5	140	x	290	565		x	7.90	3	4580E	Foliated volcani-clastic (rhy-andesitic tuff). Fine gr. matrix with small clasts a ? phenocrysts.
987572	f	gs								15	x	30	x	570	225		x	1.10	x	4680E	Lt grey buff silty lithology. ? a sediment (sic) or a fine gr. well sorted tuff.

* 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

613082

R.A. EXPLORATION . GEOCHEMICAL SA[illegible]LE LEDGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987505- 987574 Collected by I.M. Clemenson Sheet no. 2/2

Area / Prospect PROMISED LAND Date 9 JUNE 89

Map / Photo reference BASE LINE (5000N) Analysed by ANALABS DPO no. 30308

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	~~Mo~~ Ba	Mn	Au	Ao	Fe%	Sn	Grid ref	Geological Observations
987573	f	gs								10	16	225	x	320	530		x	8.15	x		Dark grey-red volcanic. Frag-Lato appearance but fairly coarse. Strongly magnetic Very ferruginous.
987574	f	gs								20	x	125	x	550	3000		x	8.75	3		Highly weathered extremely ferruginous brecciated + qz veined volcanic - acoarse sandy tuff?

* 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 = c[illegible]hment km2

613083

R.A. EXPLORATION . GEOCHEMICAL SA[illegible]LE LEDGER

Tenement name SHEFFIELD EL 7/73 ..... No. ..... Sample numbers 987575-987632 ..... Collected by I.M.Clementson ..... Sheet no. 1/3

Area / Prospect PROMISED LAND ..... Date 10: JUNE: 80

Map / Photo reference LINE 4500E ..... Analysed by Analabs ..... DPO no. 30308

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 4500E	Geological Observations
987575	S	A	0.80	Ba/c						10	10	43			495		5300N	Gritty red soil. Weath tuff + qz frags
987576	S	A	0.90	Ba/c						11	7	32			420		5275N	Ochre-brown v. gritty soil + volc. frags.
987577	S	A	0.75	Ba/c						20	15	46			91		5250N	Ochre gritty soil as above.
987578	S	A	0.70	Ba/c						8	11	35			135		5225N	Ochre-brown gritty soil.
987579	S	A	0.45	Ba/c						5	7	32			900		5200N	" " " "
987580	S	A	0.50	Ba/c						5	8	32			400		5175N	Sandy-gritty mid brown soil plus weath volc / volc-clast / qz frags
987581	S	A	0.85	Ba/c						10	14	48			4450		5150N	Dk brown gritty soil plus weath volc. frags
987582	S	A	0.60	Ba						11	15	54			730		5125N	Mid brown sandy clay
987583	S	A	1.00	Ba						6	11	54			2950		5100N	" " " "
987584	S	A	0.90	Ba						8	9	42			950		5075N	Lt-mid brown silty clay.
987585	S	A	0.60	Ba						5	11	52			1250		5050N	Red/ch brown sandy clay, frags weath tuff.
987586	S	A	0.80	Ba						4	8	34			105		5025N	Lt yell-brown sandy clay. Frags weath volc

* 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 = c[illegible]ment km2

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R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 987575-987608 Collected by I.M. Clementson Sheet no. 2/3

Area / Prospect PROMISED LAND Date 10 JUNE 88

Map / Photo reference LINE 4500E. Analysed by ANALABS DPO no. 30308

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo / Ba	Mn	Au	As	Fe	Sn	Grid ref 4500E	Geological Observations
987587	S	A	0.25	A-C						5	5	24			490					5000N	Sandy lt br soil amongst screed volcs and volc-clast float.
987588	S	A	0.25	A2/B						3	2	19			73					4975N	lt buff-brown sandy soil amongst scree as above.
987589	f	gs								10	x	35	x	780	100		100	1.55%	x	"	Weathered slightly foliated volcanic Probably a tuff.
987590	S	A	0.80	B2						37	5	51			120					4950N	Ochre sandy soil plus volc frags.
987591	S	A	0.50	B2/C						12	9	91			640					4925N	Lt green-yellow brown sandy soil plus weathered tuff.
				(N.B. "Line" now follows track ends : not accurate)																	
987592	S	A	0.40	B2/C						22	9	44			280					4900N	Ochre-brown soil plus weathered tuffs.
987593	f	gs								55	x	20	x	16.6%	225		x	6500	3	4900N	Altered(chloritic) volcanic (andesitic) with Ferruginous cavities and Ba SO4(?) veinlets.
987594	f	gs								40	x	175	x	1650	865		x	3.80%	x	4900N	Weathered feldsparphyry. Limonitic adjacent Locmollqz veins cutting the sample.
987595	S	A	0.40	B2/C						22	6	90			330					4875N	ochre-brown sandy clay plus frags of various volcs.
987596	S	A	0.40	B2/C						20	11	71			1600					4850N	Dk red-brown soil plus clasts silt & fine tuff
987597	S	A	0.50	B2/C						35	10	120			660					4825N	R-br soil + frags 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

613085

R.A. EXPLORATION . GEOCHEMICAL SA 'LE LEDGER

Tenement name SHEFFIELD EL7/73 No. Sample numbers 987575-987602 Collected by I.M. Clementson Sheet no. 3/3

Area / Prospect PROMISED LAND Date 10 JUNE 82

Map / Photo reference LINE 4500E Analysed by ANALABS DPO no. 30308

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 4500E	Geological Observations
		o/c sample type ***															
		s sample type ****															
987598	S	A	0.50	B/C					43	166	330			1450		4800N	Reddish-brown silty sand plus ab. frags silt
987599	S	A	0.80	B					61	24	190			270		4775N	orange-ochre brown clay.
987600	S	A	0.60	B/C					51	46	160			395		4750N	V. bright orange-brown clay and weathered siltstone (? tuff).
987601	S	A	0.30	B/C					6	3	20			70		4725N	Light pinkish brown sandy clay
987602	S	A	0.60	B/C					9	21	76			440		4700N	Orange-brown sandy clay plus weathered volc / tuff fragments.

* 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

613086

R.A. EXPLORATION . GEOCHEMICAL SA[illegible]LE LEDGER

Tenement name SHEFFIELD EL7/73 Sample numbers 987603 Collected by I.M. Clementson. Sheet no. 1/1

Area / Prospect PROMISED LAND (EAST BARRINGTON) Date 13:6:82

Map / Photo reference LINE 4600E Analysed by Analabo DPO no. 30308

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 4600E	Geological Observations
		o/c sample type ***															
		s sample type ****															
987603	S	A	0.40	B_2/C					7	5	25			320		5300N	Light brown-grey soil
987604	S	A	0.50	B_2/C					8	5	32			740		5275N	Reddish brown gritty soil. Weath vole clasts.
987605	S	A	0.60	B_2/C					6	7	42			280		5250N	" " "
987606	S	A	0.50	B_2/C					11	16	41			910		5225N	" " "
987607	S	A	060	B_2/C					15	19	29			860		5200N	Grey gritty Ab. frags weath. clastics
987608	S	A	0.50	B_2/C					69	37	77			930		5175N	Ochre-brown soil plus ab. weath fine gr. vole?
987609	S	A	100	B_2/C					10	9	35			930		5150N	Weath. fine silty tuffs mixed grey clay.
987610	S	A	0.70	B_2					14	12	45			750		5125N	Orange-brown clay plus? weath. vole frags.
987611	S	A	0.80	B_2					10	8	53			1500		5100N	" " " " " " "
987612	S	A	0.60	B_2/C					36	26	53			1180		5075N	Lt brown + ab weath lt buff vole frags.
987613	S	A	0.35						7	11	36			740		5050N	Mid brown silty clay + ? vole-tuff frags.
9876614	S	A	0.30	A-C					7	16	50			1250		5025N	" " " " " " "
987615	S	A	0.50	B_2/C					9	11	51			255		5000N	Mid brown silty clay + fine clastic frags

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

** Stream sed. sample description fl = flow m3/sec wi = width m al = [illegible]vial co = colluvial ca = c[illegible]

613087

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987618 - 987621 Collected by I.M. Clemenson Sheet no. 1

Area / Prospect PROMISED LAND Date 29-6-82

Map / Photo reference LINE 4300E Analysed by Analabs DPO no. 30309

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
	ss * / oc / f / s	fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Sn	Sb		
		o/c sample type ***																		
		s sample type ****																		
987618	f.								25	20	40			280		x	x	650	5250N	Micaceous, grey (weathering) silty shale. Possibly some volcanic component.
987619	ok	(prob).							15	20	40			330			5	400	5175N	Major, fairly well sorted greywacke. Disseminated secondary Fe Oxides prob ex-pyrite. May have a volc component
987620	ss	-	In	80	80				11	6	183	x	x	2900		50	6	760	5135N.	Trickle. Sub amongst boulders of greywacke some shales.
987621	f								15	15	30			405		x	x	330	5125N	Ferruginous, slightly chloritic tuffaceous greywacke.

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

** Stream sed sample description fl = flow m3/sec wi = width m l = fluvial co = colluvial

613088

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name Shaffrath 7/73 No. ..... Sample numbers 987622 Collected by I.M. Clementson Sheet no. 1

Area / Prospect Prenn Head Date 25-6-82

Map / Photo reference Line 4400E Analysed by Analabs DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Sn	Ba	Grid ref	Geological Observations
																					4400E	
987622	f	gs									30	25	60			1050		x	b	580	4725N	Highly chloritic pale green, dacite volcanics Probably a tuff.
987623	f	gs									10	25	585			2350		x	x	660	4825N	Dk green porphyritic lithology

* 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 %

613089

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD 7/73 No. ..... Sample numbers 987745 - 987775 + 987801 - 987806. Collected by A. CRICK Sheet no. 1

Area / Prospect PROMISED LAND Date 15-7-82

Map / Photo reference LINE 46000E Analysed by Analabs DPO no.....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 46000E	Geological Observations
		o/c sample type ***															
		s sample type ****															
987745	S	A	0.5						10	10	86			300		N975N	Choc-br loose soil + rock chips.
987746	S	A	0.8						9	10	114			2000		N950N	M:d brown gritty soil
987747	S	A	1.0						21	9	135			1770		N925N	Choc-brown gritty, slightly humic soil
987748	S	A	1.0						20	12	200			1570		N900N	Mustard-brown gritty soil with rock frags
987749	S	A	1.0						20	9	132			2500		N875N	M:d brown coarse soil
987750	S	A	1.0						18	12	140			350		N850N	Black br, slightly humic, gritty soil
987801	S	A	0.8						27	16	183			1310		N825N	M:d br, mottled yellow, soil
987802	S	A	0.4						29	36	390			N400		N800N	" " " "
987803	S	A	0.8						53	84	280			1810		N775N	" " " "
987804	S	A	0.5						20	23	124			1920		N750N	Dk brown, gritty soil
987805	S	A	0.6						12	18	95			960		N725N	Or-br clay
987806	S	A	0.5						11	12	60			1450		N700N	M:d br "fine" clay + rock chips.

* 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 c = catchment km2

613090

28+

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LODGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 972308 Collected by GBL Sheet no. ONE

Area / Prospect GOWRIE PARK AREA - RECONNAISSANCE Date 28:02:82

Map / Photo reference Analysed by ANALABS (COOKE) DPO no

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu ✓	Pb ✓	Zn ✓	Ag ✓	Mo	Mn	Au	As ✓	Fe ✓	Ni ✓	Grid ref	Geological Observations
																					ALONG TK WHICH CROSSES CK N° OF GOWRIE PARK AND WINDS UP HILL TO W.
972308	f	gs.								130	180	85	x				x	6·2%	50		lt yellow weathered tuff with yellow br goss veins veinlets through it. 50m down Tk ST 275°m DIP 75°E 185°m.
972309	o/c	gs.											CRYSTAL TUFF (FANDER)								Volc. fragmental – magnetite also with chlorite veining – V. unusual rock.
972310	o/c	gs								10	x	20	x				x	1·55%	60		15m below gate red iron stained qtz eye tuff.

* S

613091

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7173 No. Sample numbers 988143- Collected by I.M. Clementson Sheet no. 1

Area / Prospect Derwent 73 A Date 05 / Nov / 82

Map / Photo reference LINE 4900 W Analysed by ANALABS DPO no. 30319

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
988143	S	A	0.9	B_2							11	9	106			620		4900N	brown mid brown silty clay. Surface float : R/c plus amygdaloidal tuffs (fresh)
988144	S	A	0.5	B_2							6	10	34			195		4925N	As above
988145	S	A	0.9	B_2							10	11	60			400		4950N	Mid ochre-brown mottled silty clay Float : fine gr. well sorted sandy tuff foliated/sheared purple tuff & fine massive int. lava. R/c
988146	S	A	1.0	B_2							37	8	81			240		4975N	Mottled ochre-brown silty clay plus clasts highly weathered shale/tuff. Float as above.
988147	S	A	0.4	B_1							5	4	8			25		5000N	Mid grey leached silty clay. R/c float
988148	S	A	0.3	B_1							5	13	43			1150		5025N	" " " " " in R/c area
988149	S	A	0.5	B_1							8	5	11			35		5050N	" " " " " " " "

* 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

613092

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988150/988199-205 Collected by I.M. Clementson Sheet no. 1

Area / Prospect DISHEM 73xA Date 5-Nov-82

Map / Photo reference LINE 5100 W Analysed by Analabo. DPO no. 30319

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
988150	S	A	0.2	A/B$_1$							8	12	22			95		4900N	Lt grey leached humic sandy soil in R/C scree
988199	S	A	0.3	A/B$_1$							8	9	25			75		4925N	As above
988200	S	A	0.4	A/B$_1$							4	5	5			25		4950N	" "
988201	S	A	0.7	B$_2$							6	10	47			60		4975N	Ochre-brown silty clay beneath R/C scree
988202	S	A	0.4	B$_1$							6	6	14			40		5000N	Leached grey brown silty clay
988203	S	A	0.3	A/B$_1$							11	4	16			40		5025N	Lt grey leached humic sandy soil in R/C scree
988204	S	A	0.4	A/B$_1$							6	3	7			35		5050N	As above
988205	S	A	0.3	A/B$_1$							11	10	26			75		5075N	" "

* 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

613093

R.A. EXPLORATION - GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 988206-988209 Collected by I.M. Clementson Sheet no. 1

Area / Prospect DIGHEM 73xA Date 5-11-82

Map / Photo reference LINE 5000 W Analysed by Analabs DPO no 30319

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %									Grid ref	Geological Observations
	ss * oc f s	fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au				
		o/c sample type ***																	
		s sample type ****																	
988206	S	A	0.5	B_2					9	8	44			360				4950N	Mottled ochre - red brown silty clay with weath vdc clasts
988207	S	A	0.5	B_2					10	10	40			810				4975N	M-d br silty clay wt weath vdc frags
988208	S	A	0.5	B_2					41	12	51			170				5000N	Mottled br-ochre silty clay
988209	S	A	0.5	B_2					7	14	38			80				5025N	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

*** Outcrop sample [illegible]

613094

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988128 - 988135 Collected by I.M. CLEMENTSON Sheet no. 1/1

Area / Prospect DIGHEM 64xD Date 4.:.

Map / Photo reference LINE 1 Analysed by Analabs DPO no. 30319

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
988128	S	A	0.5	B_0						7	16	45			455		350mS	Loose, mid brown silt, clay
988129	S	A	0.3	B_0						6	24	45			390		325mS	... plus abundant ochre/tan tuff - shale fragments Subcrop float of grey-purple argill. lic tuff with clasts to 0.5cm (also argillitic)
988130	S	A	0.5	B_0						5	17	37			1150		300mS	As above - similar float
988131	S	A	0.8	B_0						11	22	66			860		275mS	Mid red-brown silt, clay Subcrop tuff / tuff shale float
988132	S	A	0.8	B_2						37	75	133			530		250mS	As above
988133	S	A	0.4	B_2						NO SAMPLE SUBMITTED							225mS	Mid br loose silty clay
988134	S	A	0.3	A/B_1						5	15	10			70		200mS	Lt grey-br leached clays
988135	S	A	0.4	A/B_1						4	8	13			25		175mS	As above plus float of massive grey, compact ? a.v. tuff or lava?

* 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 [illegible]

613095

32

R.A. EXPLORATION GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 988136-988142 Collected by I.M. CLEMENTSON Sheet no. 1

Area / Prospect DIGMEN 64XD Date 05-11-82

Map / Photo reference LINE 2 Analysed by ANALABS DPO no. 30319

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
988136	S	A	0.6	B_2							6	17	39			60		375mS	Silty mid brown clay
988137	S	A	0.5	B_1							1	4	4			20		350mS	V. lt grey leached clay
988138	S	A	0.7	B_2							5	15	35			35		325mS	ochre red sandy clay with frags of weathered quartzitic volcanics
988139	S	A	0.8	B_2							6	24	65			65		300mS	Dr-ochre mottled clay
988140	S	A	1.0	B_2							7	24	67			35		275mS	Mottled black-ochre clay beneath sandy grey clay
988141	S	A	0.7	B_2							15	120	142			105		250mS	Loose mid Dr silty clay
988142	S	A	0.6	B_1							6	16	23			40			Gritty mid grey-brown clay.

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

613096

32 -

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 972300 – 302 Collected by GBD Sheet no. ONE

Area / Prospect DIGEM ANOMALIES 98XG, 1000XE 1010M Date 27:02:82

Map / Photo reference Reeny Analysed by ANALABS (COOKE) DPO no

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Fe	Ni	Grid ref	Geological Observations
		o/c sample type ***																		middle traverse along track
		s sample type ****							✓	✓	✓	✓				✓	✓	✓		
972300	f	gs								PORPHYRITIC TRACHYANDESITE.										mid grey volcanic — andesite? f. grained irreg. reaction to acid.
972301.	f	gs.								AGGLOMERATE LAVA										In clearing, purple siliceous sh/mudstone with large volc 'clasts' but only 20% — but V. irregular look to be segregations within the purple matrix.
972302	ss	✓	lm	✓	✓				25	10	130	X				x	6.15%	95		E side of road. R/c float + greenish tuffs coarse but not lithic.

613097

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 773 No. ..... Sample numbers 972106 – 119 Collected by G.B.W. Sheet no. ONE

Area / Prospect MINNOW FALLS DIGEM ANOMALY 102XD, 103XF 104XB. Date 25:01:82

Map / Photo reference Line 1 Analysed by ANALABS (COOEE) DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Fe	Ni	Grid ref	Geological Observations LINE ONE – TRAVERSE S' FROM TRACK.
										✓	✓	✓	✓				✓	✓	✓		
972106	S	A	40cm	A/B						15	x	15	x				x	6350	30	0 S.	Sandy blackish Rol. Emg Frags & float.
972107	S	A	15cm	A/c						10	x	45	x				x	5550	25	25 S	Black organic rich abund. R/c float.
972108	S	A	60cm	A/c						10	x	95	x				x	4500	25	50 S	Black sandy R/c. Talus.
972109	S	A	40cm	A/c						5	x	35	x				x	2200	15	75m S	Black sandy R/c Talus.
972110	S	A	20cm	A/c						10	x	105	x				x	5050	25	100m S	Sandy. gy R/c clasts.
972111	S	A	30cm	A/c						10	x	120	0.5				x	4600	25	125m S	Grey, sandy R/c clasts.
972112	S	A	40cm	A/c						10	x	35	x				x	3150	15	150m S	ditto.
972113	S	A	35cm	A/c						10	x	15	x				x	4200	20	175m S	ditto.
972114	S	A	40cm	A/c						10	x	75	x				x	4350	25	200m S	Black – gy sandy R/c clasts.
972115	F	qs								PORPHYRITIC TRACHYANDESITE (FANDER)										225m S	Greenish gy int? vol. Flow banded.
972116	S	A	1m	B.						25	30	120	x				200	3.75%	40	225m S	Ochre, some limonitic patches Frags w. volc.
972117	S	A	1m	B.						20	5	85	x				x	3.25%	30	250m S	Ochre clayey volc. frags.
972118	S	A	75cm	B.						20	15	80	x				x	3.25%	30	275m S	Ochre limonitic clayey Frags lightly weathered volc. + abundant R/c clasts.
972119	S	A	20cm	A/c						10	x	10	x				x	2250	15	300m S	R.C talus sandy gy soil.

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

613098

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LODGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 972120 – 132 Collected by GBS Sheet no. TWO

Area / Prospect MINNOW FALLS IDGEM ANOMALIES 102XD 103XF 104XB. Date 25.01.82

Map / Photo reference LINE 1 Analysed by ANALABS (COOEE) DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Fe	Ni	Grid ref	Geological Observations
										✓	✓	✓	✓				✓	✓	✓		LINE TWO – TRAVERSE S' FROM Track.
972120	S	A	70cm	A/c						5	x	10	x				x	5650	30	0S.	Grey sandy R/c. Talus
972121	S	A	20cm	A/c						10	x	30	x				x	6350	30	25S	as above.
972122	S	A	30cm	A/c						15	x	60	x				x	7100	30	50mS	as above.
972123	S	A	30cm	C						10	x	40	x				x	3650	25	75mS.	Grey sandy R/c. weathered.
972124	S	A	30cm	C						15	x	15	0.5				x	6700	30	100mS	as above R/c cl. haematitic.
972125	S	A	25cm	A/c						10	x	10	x				x	4000	25	125mS	as above.
972126	S	A	40cm	A/c						10	x	45	x				x	3600	25	150mS	as above.
972127	S	A	50cm	A/c						20	x	10	x				x	3450	20	175mS	Grey sandy R/c scree.
972128	F	gs										PORPHYRITIC TRACHYANDESITE (FINDER)								170mS	Basaltic? – Int. Volc? almost 9/c highly magnetic Fresh.
972129	S	A	65cm	B.						10	x	20	x				x	3.9%	25	200mS	Red-ochre clay rich (basaltic?) soil.
972130	SS	?	?	?	?					15	x	15	x				x	1.15%	285	225mS	Abundant basaltic? float.
972131	S	A	20cm	A/c						10	x	10	x				x	4700	25	250mS	R/Gong scree
972132	SS	>1m²	?	?	?					15	x	10	x				x	7050	230	275mS	Abundant R/c scree + o/c ?

* 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

613099

3.4

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 972133 -150 Collected by G.B.O. Sheet no. ONE

Area / Prospect EAST STAR OF WEST DIGEM ANOMALY 119XC. Date 26.01.82

Map / Photo reference ..... Analysed by ANALABS (COOKE) DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Fe	Ni	Grid ref	Geological Observations
											✓	✓	✓	✓				✓	✓	✓		LINE ONE – ALONG TRACK.
972133	s	A	0·75m	B							25	10	70	x				100	3·55%	75	75mS.	Yellow-ochre soil frags weathered volc.
972134	s	A	60cm	B							25	x	70	x				x	3·95%	75	100mS	Yellow-ochre frags - silty arenite poss. tuffaceous.
972135	s	A	35cm	B.							25	x	60	x				x	2·25%	60	125mS	as above no clasts.
972136	s	A	35cm	B/C							20	10	130	x				200	2·15%	65	150mS	Buff-ochre mottled frags tuffaceous? arenite.
972137	s	A	50cm	BC							25	5	65	x				100	3·45%	55	175mS.	Buff-ochre-sandy frags volc. – lava.
972138	s	A	50cm	BC							25	x	95	x				100	2·30%	70	200mS	as above. float qtz porphyry.
972139	s	A	15cm	B/BC							20	x	65	x				x	1·95%	50	225mS.	Buff soil – float qtz. porphyry
972140	s	A	30cm	BC							30	5	85	x				x	2·85%	70	250mS	Buff ochre float - frags qtz porphyry
																						LINE TWO – 200m W.
972141	s	A	40cm	BC							35	x	50	x				x	2·9%	140	250mS.	Buff-sandy frags qtz porphyry
972142	s	A	1·1m	B.							30	5	105	x				x	2·45%	135	225mS.	Lt buff-clayey mottled ochre.
972143	s	A	1·1m	B							35	20	155	0·5				x	4·0%	175	200mS	as above.
972144	s	A	30cm	BC.							25	10	85	x				x	2·45%	90	175mS.	Sandy buff frags poss. weathered arenite.
972145	s	A	90cm	C							20	x	105	x				x	1·55%	95	150mS	Weathered tuff - arkosic arenite.
972146	s	A	30cm	B-C							15	x	85	0·5				x	3·35%	95	125mS.	White-ochre mottled soil – sl. haematitic weathered tuff f. qtz. porphyry frags.
972147	s	A	1·1m	B							70	5	140	0·5				100	9·20%	425	100mS	Ochre-buff clayey frags highly weathered volc.
972148	s	A	70cm	B.							55	130	225	0·5				x	5·3%	220	75mS.	Buff-ochre sandy qtz porph. + fresh tuff.
972149	s	A	50cm	B-C							40	270	295	0·5				x	2·25%	145	50mS	Pinkish buff. Abundant tuff float. not altered.
972150	s	A	60cm	B-BC							50	55	115	x				x	5·4%	325	25mS	Ochre – clasts of weathered f.g. tuffs.

* 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

613100

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987753-987765 Collected by I.M.Clemenson Sheet no. 1/1

Area / Prospect Dighem 119×8 Date 15-7-82

Map / Photo reference Recon. line (10° magnetic 119×8 from paddock) Analysed by ANALABS DPO no. 30311

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987753	S	A	1.0	B_a							64	32	84			550		300N	Mottled ochre-brown-grey clay.
987754	S	A	1.1	$B_a C$							27	11	47			300		275N	Ltgrn-grey clay + weath shaley tuff
987755	S	A	0.4	$B_a C$							75	17	97			790		250N	Mid-Ltgrey brown clay + weath. shaley tuff
987756	S	A	1.0	B_a							98	18	147			280		225N	Ochre-br clay + silty tuff frags.
987757	S	A	0.8	B_a							110	13	43			82		200N	Yell-ochre " " " "
987758	S	A	0.7	$B_2 C$							31	10	24			54		175N	Ochre-br " " " "
987759	S	A	0.6	B_a							52	13	33			147		150N	Mottled mid-light br clay + silt/shale frags.
987760	S	A	0.9	B_2							89	20	63			210		125N	Ochre br clay plus sl grn frags.
987761	S	A	0.7	B_2							40	9	71			300		100N	" " " " " " "
987762	S	A	0.6	B_a							43	6	71			200		075N	" " " " " " "
987763	S	A	0.9	B							51	13	71			260		050N	Mottled mid brown-ochre clay.
987764	S	A	0.7	B_2							52	12	109			440		025N	" " " " "
987765	S	A	1.0	B_a							42	29	139			440		000N	Rich mid brown clay (at edge of paddock).

* 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

613101

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD EL7/77 No. Sample numbers 987766-987775 Collected by I.M. Clementson Sheet no. 1/1

Area / Prospect Dysham 121xA Date 15-7-82

Map / Photo reference LINE 0 mW Analysed by Analabs DPO no 30301

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
987766	S	A	0.9	B_2					38	22	84			200					000N	Lt-mid br clay.
987767	S	A	0.9	B_2					41	32	78			156					025N	Rich red-br clay
987768	S	A	0.6	B_2					21	17	60			250					050N	Rich red-br clay } Ab. fine gr granite ft
987769	S	A	0.8	B_2					39	22	82			181					075N	" " " " }
987770	S	A	0.8	B_2					42	26	88			280					100N	Grey brown clay with red & black mottling
987771	S	A	1.2	B_2					56	43	91			161					125N	Slightly gritty red-br clay
987772	S	A	0.7	B_2					34	45	97			190					150N	Mid br clay + granite frags.
987773	S	A	1.2	B_2					52	56	114			127					175N	Red-br clay. Minor granite float
987774	S	A	0.9	B_2					53	58	130			1860					200N	Mottled red-ochre clay + granite float
987775	S	A	0.7	B_2					39	43	94			1580					225N	" " " " " "

* 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

613102

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987901 - 987913 Collected by A. CAICK Sheet no. 1/1

Area / Prospect Dighem 181xA Date 22/7/82

Map / Photo reference LINE 100 m W Analysed by ANNLABS DPO no. 30313

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
987901	S	A	0.9							48	13	83			380					000mN	Light tan clay soil. Shiloh to frago.
987902	S	A	0.6							40	11	71			650					025N	Tan-br clay
987903	S	A	0.7							54	14	64			360					050N	Red-br crumbly clay
987904	S	A	0.6							83	11	67			111					075N	Tan clay. Slightly humic
987905	S	A	0.7							34	6	80			20					100N	Tan clay - br crumbly clay
987906	S	A	0.6							33	12	64			570					125N	Brown gritty clay
987907	S	A	0.3							33	21	76			2800					150N	Choc-br humic clay
987908	S	A	0.6							44	12	96			950					175N	Tan gritty clay
987909	S	A	0.9							35	10	61			290					200N	Grey-yellow micaceous soil.
987910	S	A	0.8							39	13	80			730					225N	Lt grey-br clay soil
987911	S	A	0.4							46	19	83			2300					250N	Br - red brown clay.
987912	S	A	0.7							54	12	100			250					275N	Orange clay, mottled white
987913	S	A	0.6							35	11	90			1060					300N	Loose mid brown clay.

* 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 = c[illegible]

613103

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name Sherlock EL 7173 No. Sample numbers 987943-987946 Collected by I.M. Clementson Sheet no. 1/1

Area / Prospect Dugan 12 x A Date 28-7-82

Map / Photo reference [redacted] Analysed by Analabs DPO no 30313

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987943	S	A	10	B_2							70	11	94			300		325N	M:d brown clay. Surface float of Cambrian shales / silts / fine sands
987944	S	A	0.9	B_2							36	20	47			280		350N	M:d brown clay. Surface float of dk grey-green fine grained granite
987945	S	A	0.7	B_2-C							18	23	55			127		375N	Bright orange-brown clay + qzo Rb specking: - weathered granite
987946	S	A	0.6	B_2-C							38	23	54			240		400N.	As above - weathered granite

* 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

613104

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987947-987956 Collected by I.M. Clementson Sheet no. 1/1

Area / Prospect DISHER 121xA Date 28-7-82

Map / Photo reference... Line 200mW Analysed by Analabs DPO no. 30313

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987947	S	A	0.5	B_2							38	7	46			370		25mN	LL Buff-Br. Clay, Shale fragments
987948	S	A	0.9	B_2							36	9	66			210		50mN	LL Buff-Br clay + shale frags
987949	S	A	0.5	B_2							45	7	72			178		75mN	" " " " - very fg.
987950	S	A	0.7	B_2							40	7	56			168		100mN	As above. Mb. dk-mid grey micaceous shale at surface
987951	S	A	0.5	B_2							46	15	76			570		125mN	Mid br - red br mottled clay. Shale frags.
987952	S	A	0.8	B_2							78	20	76			22		150mN	V. sticky, kinked textured LL br-buff clay Shale frags at site
987953	S	A	0.8	B_2							46	14	72			182		175mN	As above.
987954	S	A	0.5	B_2							22	25	57			130		200mN	Red br clay. Granite float.
987955	S	A	0.5	B_2							47	27	63			130		225mN	Mottled red br + yellow clay. Granite float
987956	S	A	0.4	B							16	40	55			310		250mN	As above. Mb. granite float.

* 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

613105

39-

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 972296 – 299 Collected by G.B.D Sheet no. ONE

Area / Prospect SOUTH LOWER BEULAH. DIGEM ANOMALY 136xA. Date 27:02:82

Map / Photo reference Analysed by ANALABS (PERTH) DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu ✓	Pb ✓	Zn ✓	Ag ✓	Mo	Mn	Au	As ✓	Fe ✓	Ni ✓	Grid ref	Geological Observations ALONG BOUNDARY TRACK. FLAGGED START.
972296	F	gs.								80	200	815	0·5				x	36·5%	355	215mS	Sandstone limonitic arenite. Mn rich
972297	F	gs.								70	25	170	x				x	28·5%	165	215mS.	Similar rock less Mn less Lithic sandstone appearance.
972298	F	gs.										OLIVINE DOLERITE								325mS	Basalt? ~ meta gabbro? (Spilite?)
972299	F	gs										OLIVINE DOLERITE.								325mS	" " " "

* Sample ... ** = ... *** = ... **** = ...

613106

40+

C.R.A. PLORATION . GEOCHEMICAL SAMPLE I OGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 972151 - 293 Collected by I.C. + G.B.W. Sheet no. ONE.

Area / Prospect EAST BEULAH DIGEM 146×8. Date 26:01:82

Map / Photo reference Analysed by ANALABS (GOOEE) DPO no

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu ✓	Pb ✓	Zn ✓	Ag ✓	Mo	Mn	Au	As ✓	Fe ✓	Ni ✓	Grid ref	Geological Observations
																					LINE ONE.
																					(BASE LINE MARKED 300mN).
972151	s	A	1m	B.						35	50	100	x				x	6.2%	35	250mN	Reddish-brn + ochre mottled. Weathered tuffaceous material
972152	s	A	50cm	B/c						65	70	110	x				x	5.15%	45	275mN	as above more tuff frags + ferrug. vein qtz.
972153	s	A	40cm	B/c						40	25	50	x				x	4.05%	30	300mN	(BASE LINE) as above
972154	s	A	50cm	B/c						95	75	150	0.5				100	7.35%	30	325mN	Brown - ochre, abund. weathered limonitic tuffo - argillaceous
972155	s	A	35cm	B-c						60	30	75	x				x	6.45%	35	350mN	Pinkish brown + ochre spotted 'lithic tuffo'.
972156	s	A	50cm	B.						75	25	80	x				x	6.30%	40	375mN	As above - v. clayey
972157	s	A	80cm	B.						55	20	80	x				x	5.85%	40	400mN	Mid - brn. Few volc frags v. weathered.
972158	s	A	75cm	B.						60	10	65	x				x	5.85%	35	425mN	light ochre - brn. V. few clasts. light compact soil.
972159	s	A	30cm	B.						25	20	55	x				x	4.3%	25	450mN	ditto.
972287	f	gs.								65	25	260	x				x	12.0%	100	127m E along base	Red + lt brn sl. gossanous mod alt. lithic tuff.
972288	f	gs.								60	65	90	x				x	5.85%	65	350mN	Red + grey v. foliated mod. alt. lithic tuff gossanous in part.
972289	f	gs								125	45	135	x				x	7.6%	80	350mN	lithic tuff with goethite gossanous zone - almost call it a gossan.
972290	f	gs.										SHEARED	ALTERED	BASALT		(FANGER)				350mN	Fresh, mod alt. purple lithic tuff.
972291	f/c	gs.								145	15	90	x				x	6.9%	75	346mN	Lithic tuff c/ ST° 110° dip 64°S. - gossanous.
972292	f	gs.								110	20	230	x				x	10.5%	90	330mN	Dk. red, Mn + Fe gossanous lithic tuff
972293	f	gs.								45	20	120	x				x	9.0%	65	88m E along base line	Gossanous pieces from within a lithic tuff.

613107

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L)GER

Tenement name SHEFFIELD No. ..... Sample numbers 972455-972467 Collected by ANDREW CRUM Sheet no. 1/1

Area / Prospect EAST BEULAH (GARDEN OF EDEN). Date 25-6-88

Map / Photo reference LINE 5500E Analysed by ANALABS DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 5500E	Geological Observations
972455	S	A	1.1								95	20	78			1040		5300N	Dk br + yellow/tan mottling
972456	S	A	1.1								93	11	112			520		5275N	Med-dk br-tan clay
972457	S	A	1.1								97	23	74			1300		5250N	Dk red-br soil, black flecks
972458	S	A	1.1								92	11	75			330		5225N	Lt br, mottled yellow-black.
972459	S	A	1.1								67	16	52			196		5200N	Or-br clay, mottled white-grey
972460	S	A	1.0								65	16	60			170		5175N	Or-br clay soil
972461	S	A	0.80								73	19	56			199		5150N	Reddish orange-br.
972462	S	A	0.60								59	26	37			330		5125N	Med-dk br with yellow-or flecks
972463	S	A	1.1								72	65	44			260		5100N	Yell-tan clay
972464	S	A	1.0								27	15	39			3400		5075N	Dk choc brown loose soil
972465	S	A	1.0								28	12	38			1420		5050N	Med dk tan brown loam clay soil
972466	S	A	1.1								46	10	46			67		5025N	Lt tan clay soil
972467	S	A									30	12	43			46		5000N	Mustard-brown clay soil

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

** Stream sed sample description fl = flow m3/sec wi = width m al = alluvial

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L . GER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 972468–972480 Collected by Andrew Crick Sheet no. 1/1

Area / Prospect EAST BENLAN (GARDEN OF EDEN) Date 25-6-82

Map / Photo reference LINE 5300E Analysed by Analabs DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 5300E	Geological Observations
972468	S	A	1.0								73	14	53			108		5000N	Or-br loose clay soil
972469	S	A	0.70								42	13	38			575		5025N	Lt br loose soil
972470	S	A	1.10								44	14	43			250		5050N	Lt tan clay soil
972471	S	A	1.10								36	11	33			95		5075N	Lt yel-mottled orange soil
972472	S	A	1.10								116	47	112			41		5100N	Lt mustard-br clay soil
972473	S	A	0.80								36	13	56			54		5125N	Lt y-br clay soil
972474	S	A	1.1								66	200	72			96		5150N	Lt y-br clay soil
972475	S	A	1.1								82	65	290			34		5175N	Br-yellow clay
972496	S	A	1.0								71	63	142			740		5200N	Br-or coarse clay
972477	S	A	1.1								85	55	174			640		5225N	Red-br clay
972478	S	A	1.1								83	28	148			3400		5250N	Red-br coarse clay
972479	S	A	1.1								110	26	135			450		5275N	Red-br clay.
972480	S	A	1.1								71	21	77			300		5300N.	Brown clay

* 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

613109

R.A. EXPLORATION . GEOCHEMICAL SA .LE LEDGER

Tenement name SHEFFIELD EL7173 No. Sample numbers 987501 - 987522 Collected by I. M. CLEMENTSON Sheet no. 1 | 3

Area / Prospect EAST BELLAH (GARDEN OF EDEN) Date 3:6:82

Map / Photo reference LINE 5000E Analysed by ANALABS DPO no. 35307

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
987501	S	A	0.80	B_2						95	40	110			970					5000N	Red-brown silty soil.
987502	S	A	0.80	B_2						90	45	145			240					5025N	LL - mid brown silty clay.
987503	S	A	1.10	B_2						105	160	60			950					4975N	R-br silty clay plus frags of ? tuff.
987504	S	A	0.60	B_2						45	95	160			135					4950N	LL brown.
987505	S	A	0.80	B_2						30	80	155			4850					4925N	LL - mid brown mottled
987506	S	A	0.90	B_2/C						80	40	80			120					5175N	LL brown silty clay plus weathered slightly sheared/foliated grey ? tuff.
987507	S	A	0.60	B_2						45	30	60			875					5150N	LL brown soil as above + similar frags.
987508	S	A	0.60	B_2						25	25	75			335					5125N	As above
987509	F									20	25	35	x		255		x			"	Purple sheared or foliated poorly sorted (or possibly porphyritic) volcanic.
987510	F									55	25	420	100		985		x			"	Weathered buff-green coarser volcanic with secondary Fe spotting
987511	S	A	0.70	B_2/C						40	45	50			3150					5100N	LL brown silty soil plus weathered Mn/Fe rich volcanic - tuff?
987518	S	A	0.70	B_2						100	25	105			900					5075N	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

613110

R.A. EXPLORATION . GEOCHEMICAL SA[illegible]LE LEDGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987501 - 987524 Collected by I.M. Clemanton Sheet no. 1/3

Area / Prospect EAST BEULAH (GARDEN OF EDEN) Date 3 June 82

Map / Photo reference LINE 5000E Analysed by ANALABS DPO no 30307

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref 5000E	Geological Observations
987513	S	A	0.90	B_a							60	35	120			250					5050N	Lt reddish brown silty clay plus ? tuff frags.
987514	S	A	1.10	B_2							40	145	85			245					4700N	Mid rich red-brown silty clay plus frags of buff weathered volc. ? tuff.
987515	F										30	90	75	x		100		x			"	Limonitic weathered volcanic - appears fragmental with lge argillitic clasts. Not foliated.
987516	S	A	0.70	B_2							35	125	105			235					4725N	Rich red brown silty clay with fairly fresh purplish grey volc (tuff) frags.
987517	S	A	1.00	B_a							35	190	105			200					4750N	Rich red-brown silty clay.
987518	S	A	1.00	B_a							90	95	140			615					4775N	" " " " "
987519	S	A	0.40	A/B/C							55	70	100			415					4800N	Amongst subsurface scree (containing a: weathered buff-green sandy ? fragmental foliated volcanic (? a sheared porphyry) b: a non-foliated slightly porphyritic intermediate volcanic; red but highly weathered.
987520	S	A	0.40	A/B/C							85	60	180			155					4825N	As above.
987521	S	A	0.80	B_2							35	60	75			80					4850N	Mid reddish brown silty clay

* 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 [illegible]

613111

R.A. EXPLORATION . GEOCHEMICAL SA[illegible]LE LEDGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 987501 – 987524 Collected by I. M. Clemenson Sheet no. III/3

Area / Prospect EAST BEULAH (GARDEN OF EDEN) Date 3 June 1989

Map / Photo reference LINE 5000E Analysed by Analabo DPO no 30307

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref 5000E	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
987522	S	A	0.40	B/C					40	185	130			2000					4875N	Dk brown soil taken from adjacent to possible o/c of greenish weathered volcanics, extending in a low ridge E-W. Well foliated (? strike 100°, ± vertical). Appears to be a sheared fragmental (a poorly sorted – possibly lithic, tuff) or a sheared porphyritic intr. volc.
987523	gs								85	1750	400	x		1450		x			"	As above but with Mn/Fe staining.
987524	S	A	0.40	B/C					50	150	275			725					4900N	Ltoshire-brown soil with abundant frags as described above.
98																				

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

** S[illegible] = [illegible]

613112

R.A. EXPLORATION . GEOCHEMICAL SA PLE LEDGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987525-987552 Collected by I.M.C. Lamerton Sheet no. 1

Area / Prospect EAST BENLAH (GARDEN OF EDEN) Date 6 June 88

Map / Photo reference LINE 4800E Analysed by Analabs DPO no 30307

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 4800E	Geological Observations
		o/c sample type ***															
		s sample type ****															
987525	S	A	0.90	Ba					25	70	55			35		4700N	Rich red brown clay soil
987526	S	A	0.50	Ba					55	75	90			85		4725N	LT mid brown-yellow soil. Some frags & purplish shaley tuff.
987527	S	A	0.60	Ba/c					35	360	85			2830		4750N	LT brown clay + ab. frags of pale cream-buff fine grained qz. tuff with Mn staining
987528	S	A	0.70	Ba/c					40	100	85			50		4775N	Ochre clay plus highly weathered foliated sandy tuffs - ochre-red in colour.
987529	S	A	0.40						40	60	85			520		4800N	Disturbed (by roadwork). Mid brown soil plus numerous tuff lithotypes Possible o/c of foliated (vertical striking 190° M) volcanic - tuff with lithic clasts (argillitic) - or sheared porphyry.
987530	S	A	0.80	Ba					35	90	100			380		4825N	Fe. rich red brown-red silty clay. Frags of ochre weathered tuff plus some v. hematitic more shaley vole.
987531	S	A	1.00	Ba					15	80	50			45		4850N	Sandy clay, yellow. V. distinct from rest of grid. (N.B. 4850-4950 in shallow depression with distinct vegetation - sword grass - and distinct soils.)
987532	S	A	0.90	Ba					50	65	95			45		4875N	Ao above
987533	S	A	1.00	Ba					25	100	55			15		4900N	" "

* 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

*** O...

R.A. EXPLORATION . GEOCHEMICAL SA[illegible]LE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987525-987552 Collected by I.M. Clemanton Sheet no. II

Area / Prospect EAST BEILAH (GARDEN OF EDEN) Date 6th June 82

Map / Photo reference LINE 4800E Analysed by Analabo DPO no. 30307

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Grid ref 4800E	Geological Observations
987534	S	A	0.90	B_2							25	90	115			20			4925N	Mottled ochre-grey soft silty clay.
987535	S	A	1.10	B_2/C							10	30	120			355			4950N	Buff-grey-white sandy clay - leached
987536	S	A	1.00	B_2							10	40	90			115			4975N	Lt buff - clay. No fragments at all.
987537	S	A	0.20	A/C							25	55	185			3500			5000N	Humic sandy clay. Abundant lge pieces sheared tuff or porphyry
987538	F										30	40	190	X		390		X	"	Foliated tuff / porphyry. Mottled grey green
987539	S	A	1.0	B_2							35	60	95			265			5025N	Buff-brown clay + tuff(?) and qz fragments
987540	S	A	0.90	B_2/C							145	130	170			3600			5050N	Weathered ferruginous volcanics: typical of the area.
987541	S	A	0.40	B_2/C							50	55	70			205			5075N	Crest of minor E-W ridge with abundant float of highly weathered porphyry (Not foliated or sheared). Soil is weathered equivalent.
987542	S	A	0.30	B_2/C							40	35	60			390			5100N	Weathered foliated volcanic. Abundant float of same type - proto. dacite look.
987543	S	A	0.40	C							55	35	40			195			5125N	Ferruginous weathered volcanic
987544	F	gs									100	45	180	X		330		X	"	Highly ferruginous peaty foliated volcanic. Either tuff or sheared intermediate porphyry.

* 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

613114

R.A. EXPLORATION . GEOCHEMICAL SA 'LE LEDGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987525-987552 Collected by I.M. Clementson Sheet no. III

Area / Prospect EAST BEULAH (GARDEN OF EDEN) Date 3 JUNE 1982

Map / Photo reference LINE 4800E Analysed by Analabs DPO no 30307

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Ba	Grid ref	Geological Observations
											Metal content ppm or %										
987545	S	A	0.70	B_2/C							80	30	50			210				5150N	R-brown soil plus frago hematite red foliated ? tuff.
987546	S	A	0.70	B_2/C							45	25	30			80				5175N	Red clay with frago goethite, highly weathered volc.
987547	S	A	1.00	B_2							55	25	40			115				5200N	R-br-ochre mottled clay. Minor v.gz at surface
987548	S	A	0.40	B_2/C							195	30	115			2850				5225N	R-br sandy clay
987549	S	A	0.60	B_2							40	15	35			335				5250N	R-br clay plus fine tuff frago.
												N.S	5200 - 5225N = Paddock								
987550	S	A	1.00	B_2							55	35	55			515				5275N	LL br clay
987551	S	A	1.00	B_2							80	40	45			2000				5300N	LL-mid br clay.
987552	SS	Seep	1.0								60	55	90	X		1650		X	410.	5325N	Mud organic matter from seepage style creek.

* 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 = carbonaceous ?

613115

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SHEFFIELD EL 7/73 No. Sample numbers: 9875557 - 9875644 Collected by: I.M. Clementson Sheet no. 1 | 2

Area / Prospect: EASTBENLAH (GARDEN OF EDEN) Date: 6-6-82

Map / Photo reference: Analysed by: ANALABS DPO no. 30308

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Grid ref	Geological Observations
9875557	f	gs									225	55	150	1.5		160		300	5500E 4950N	Highly ferruginous, very weathered ? arenite. Stained brown by Fe oxides but is whitish where less affected. Either unaltered, limonitic qz-arenite or a very altered volcanic.
9875558	f	gs									205	25	175	x		765		100	5800E 4825N	Foliated fine grained argillite or very fine tuff. Highly ferruginous, especially along folia, also slight talcose/chloritic alteration. Similar to foliated purple facies of the area except in colour.
9875559	f	gs									20	10	60	x		280		x	5300E 4775N	(Float is v. lge blocks, probably close to o/c) Variegated purple (dominant), green gray + weathered brown highly foliated lithology. "Phyllite" would be a suitable field term (though little mica visible) - could be a foliated meta argillite or tuff.
9875560	f	gs	(For Petrology)								Not Done								"	As above.
9875561	f	gs									310	10	555	x		215		x	5300E 5200N	Hematitic "Rubarite" - looks like volcanic scoria.

* 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

613116

R.A. EXPLORATION . GEOCHEMICAL SA[illegible]LE LEDGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 9875657 - 9875664 Collected by I.M. Clementson Sheet no. 2/2

Area / Prospect EAST BENLAM (GARDEN OF EDEN) Date 6-6-89

Map / Photo reference ..... Analysed by Analabs DPO no. 30308

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
9875662	f	gs							190	360	135	x		175	x	x			5360E 5225N	Veinqz with extensive goethite-limonite including gossanous looking boxworks (Sample approx 2kg).
9875663	f	gs							165	225	355	x		2900		x			5100E 4920N	Very weathered, non-foliated? gossanous tuff or int. lava. Has a vesicular appearance but cavities are all occupied by Fe oxides and are fairly regular in size & orientation - probably weathered clasts or phenocrysts.
9875664	f	gs							185	105	215	x		1350		x			5000N 4925E	Ferruginous, highly altered volcanic. Soft, red. ? andesitic.

* 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

613117

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL 7/73 No. Sample numbers: 987402 - 987430 Collected by: I.M. CLEMENTSON Sheet no. 1/3

Area / Prospect: EAST BENLAH (GARDEN OF EDEN) Date: 26 MAY 82

Map / Photo reference: LINE 5600E Analysed by: Analabs DPO no. 30305

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %									Grid ref	Geological Observations
	ss * oc f s	fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au				
		o/c sample type ***																	
		s sample type ****																	
987402	S	A	0.50	B_2					30	20	20			135				5000N	ochre-brown slightly sandy soil. No surface float
987403	S	A	0.80	B_2					70	30	30			125				4975N	Lt brown-ochre slightly sandy soil No recognisable fragments.
987404	S	A	0.40	C					10	x	10			570				4950N	Sandy leached grey ?Lt ff
987405	S	A	0.90	B_2					35	25	35			470				4925N	M.J brown slightly silty to sandy clay. Fragments of red-black manganiferous shaley tuff - well laminated with much Mn along laminae. No surface float noted.
987406	S	A	1.00	B_2					50	25	75			7000				4900N	Dk reddish-brown silty clay with v. small Mn stained fragments as above.
987407	S	A	0.95	B_2					60	40	95			8950				4875N	As above.
987408	S	A	1.00	B_2					70	40	90			4050				4850N	As above plus very small fragments of red-black mottled shale/shale-grade tuff.
987409	S	A	0.90	B_2					70	35	75			3950				4825N	Dk brown-red brown clay with fragments as above. Noticeably qz deficient - even in soil.
987410	S	A	0.60	B_2					100	40	90			1300				4800N	Slightly light brown soil. Fragments of chloritic fine grained tuff.

* 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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613118

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L GER

Tenement name: SHEFFIELD EL 7/73 No. ..... Sample numbers: 13740 - 987430 Collected by: I. I. CLEMENTSON Sheet no. 2/3

Area / Prospect: EAST BERLAH (GARDEN OF EDEN) Date: 26 May 82

Map / Photo reference: LINE 5600E Analysed by: Analabs DPO no: 30305

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Grid ref	Geological Observations
987411	F									70	215	180	0.5		125		600	4800N	Lt buff brown shaley tuff well
																			foliated, few clasts up to 1mm Very
																			ferruginous and Mn stained in parts
987412	S	A	1.0	B_2						70	200	70			2000			4775N	Reddish-brown soil with fragments
																			of weathered tuff. Abundant float
987																			of fine, highly weathered, well foliated
																			tuffs.
9874413	S	A	0.50	B_2/C						15	35	50			220			4750N	Abundant fragments of lt brown-grey
																			tuff in brown silty soil.
9874414	S	A	1.0	B_2						20	25	55			765			4725N	Mid brown silty soil plus tuff fragments
9874415	S	A	0.80	B_2						30	45	110			3000			4700N	As above
9874416	F									25	85	260	X		1700		200	4700N	Brown weathered tuff with abundant 2° iron
																			in discrete patches and mica generally slightly
																			chloritic
9874417	S	A	0.80	B_2						20	15	85			970			5025N	Mid brown slightly silty soil with
																			fragments of brown chloritic shaley tuff
																			(very Mn stained) and a sandy tuff which
																			is very ferruginous & Mn rich.
9874418	S	A	0.50	B_2						15	15	20			1400			5050N	Sandy lt brown-ochre soil
9874419	S	A	0.50	B_2						25	15	25			940			5075N	As above plus fine gr. red-grey tuff fragments

* 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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613119

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name: SHEFFIELD EL 7/73 No. Sample numbers: 987402-987430 Collected by: I.M.C. Lamerton Sheet no: 3/3

Area / Prospect: EAST BEULAH (GARDEN OF EDEN) Date: 26-May-1988

Map / Photo reference: LINE 5600E Analysed by: Analabs DPO no: 30805

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
987420	S	A	0.50	B_2						20	25	25			2450					5100N	Lt brown soil plus tuffaceous - fragments.
987421	S	A	0.90	B_2						35	35	35			2650					5125N	Lt brown, silty fragments of tuff.
987422	S	A	0.70	B_2						40	45	60			4000					5150N	Mid-dk brown tan-brown silty clay
987423	S	A	0.80	B_2						55	40	75			510					5175N	Reddish brown silty clay. Tuff fragments plus Mn/Fe rich qz.
987424	S	A	0.60	B_2						150	30	65			520					5200N	Reddish brown silty clay, frags as above.
								N.B. PADDOCK (Poss. CONTAMINATION, ESP Cu) 5220N - 5300N.												
987425	S	A	0.60	B_2						90	35	75			420					5225N	As above plus ochre patches in soil
987426	S	A	0.90	B_2						145	25	80			505					5250N	Mid red-brown, mottled ochre soil.
987427	S	A	0.50	B_2						110	40	95			1900					5275N	Dk brown silty clay plus abund. frags. of Fe/Mn rich weathered tuff (red gr.)
987428	S	A	0.60	B_2						130	35	110			1300					5300N	" "
987429	F									50	35	125	X		745		X			"	Slightly weathered volcanic. Purplish with green alt^n / weathering. Porphyritic. Magnetic.
987430	F									45	45	140	X		1100		300			"	Dk purplish volcanic. Fresh. No free qz visible. Doesn't appear to be a tuff. ??? Andesite.

* 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

613120

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L ..GER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987431 - 987463 Collected by I.M.Clementson Sheet no. 1 / 2

Area / Prospect EAST BENLAM (GARDEN OF EDEN) Date 27-May-88

Map / Photo reference LINE 5400E Analysed by Analabs DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
987431	S	A	0.60	B_2/c							25	30	60			2250					4700N	Weathered chloritic and ferruginous shaley tuff
																						in mid brown sandy soil.
987432	S	A	0.70	B_2/c							40	30	75			860					4725N	" "
987433	S	A	0.40	B_2/c							105	60	170			850					4750N	As above, abundant tuff fragments also.
9874434	S	A	0.60	B_2/c							60	290	95			405					4775N	Ochre sandy soil with tuff fragments.
987435	F										25	85	50	0.5		390		300			"	Purplish fine grained well foliated (almost schistose) tuff. Ferruginous weathering
987436	S	A	0.40	B_2/c							40	120	60			100					4800N	Ochre sandy soil with tuff fragments
987437	S/F										40	100	180	x		300		300			"	Purplish weathered tuff - with lge rounded lithic (argillitic?) clasts in fine grained foliated matrix.
987438	S	A	0.30	B_2							55	60	95			200					4825N	Mid brown, ochre mottled soil. Tuff frags.
987439	F										150	125	80	0.5		175		400				Purplish tuff, probably close to o/c. Less foliated than previously also slightly coarser.
987440	S	A	0.40	B_2/C							55	75	55			135					4850N	LT buff-brown silty soil plus tuff frags.
9874441	S	A	0.80	B_2							100	45	65			55					4875N	Orange-brown clay.
987442	F										20	20	40	x		225		x			"	V. qz with secondary Fe oxides
9874443	S	A	0.80	B_2-B_2C							65	40	70			65					4900N	Orange brown clay plus frags of weathered tuff.

* 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

613121

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987431 - 987463 Collected by I.M. Clementson Sheet no. 2/3

Area / Prospect EAST BEULAH (GARDEN OF EDEN) Date 27-May-82

Map / Photo reference LINE 5400E Analysed by Analabs DPO no 30385

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
9874444	S	A	1.00	B_2							125	50	55			75					4925N	Rich ochre clay.
9874445	S	A	0.75	B_2							40	30	35			135					4950N	LL brown sandy soil + qz fragments.
9874446	S	A	0.80	B_2							90	35	50			190					4975N	Mid brown, slightly reddish clay
9874447	F										40	35	75	X		750		200			"	Foliated, weathered tuff. Grey green but with abundant secondary Fe oxide staining along small, sinuate, tenuous "foliation". Also patches of chlorite along foliation.
9874448	S	A	0.55	B_2/C							45	50	30			120					5000N	Brown soil plus tuff fragments.
9874449	S	A		B_2/C							60	40	50			205					5025N	Ochre-brown silty soil plus tuff frags.
(9874450 NOT USED - LOST)								N/S 5050N - 5300N - PADDOCK ∴ POSSIBLE CONTAMINATION.														
9874451	S	A	0.75	B							45	30	80			125					5050N	Mid brown silty soil.
9874452	S	A	0.30								80	50	50			50					5075N	Ochre-brown silty clay.
9874453	S	A	1.00	B_2							100	45	50			40					5100N	Ochre-brown silty clay. More qz frags.
9874454	S	A	1.00	B_2							40	35	45			155					5125N	As above.
9874455	S	A	1.00	B_2/C							45	95	55			690					5150N	Rich ochre clays with qz fragments.

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

** Stream sed sample description fl = flow m3/sec wi = width m

613122

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD EL7773 No. ..... Sample numbers 987431 - 987463 Collected by I. M. Clementson Sheet no. 3/3

Area / Prospect EAST BEULAH (GARDEN OF EDEN) Date 27-May-82

Map / Photo reference LINE S'TOOE Analysed by ANALABS DPO no 30305

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
987456	S	A	0.85	B_2						100	105	160			335					5175N	Brown clay s.s. & abundant fragments of weathered tuff
987457	S	A	1.6	B_2/C						185	120	95			2550					5200N	Ochre clay with dendritic, highly weathered tuff fragments
987458	S	A	1.00	B_2						120	45	100			585					5225N	Dk brown clay-silty + weathered tuff fragments
987459	S	A	0.50	B_2/C						230	25	100			460					5250N	" "
987460	F									210	120	530	X		410		200			"	Highly weathered ? int vein?
987461	S	A	1.10	B_2						110	45	85			1700					5275N	Dk red brown silty soil + frags highly ferruginous red tuff.
987462	S	A	0.70	B_2/C						150	55	75			1500					5300N	Dk red brown s.s. & plus frags v highly weath. volcanic.

* 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

613123

C.R.A. . PLORATION . GEOCHEMICAL SAMPLE L JGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 987461 - 987488 Collected by I. M. Clementson Sheet no. 1/3

Area / Prospect EAST BENLAM (GARDEN OF EDEN) Date 27/5/82

Map / Photo reference LINE 5200E Analysed by Analabo DPO no 30305

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Grid ref	Geological Observations
											N 3 - 5300N - 5000 N = PADDOCK								5200E	
987463	S	A	0.70	B_2							100	45	80			7500			5300N	V. wet sandy clay in hollow
987464	S	A	0.85	B_2/C							90	40	80			870			5275N	Dk brown oc. s with ab. qz. frags
987465	S	A	0.50	B_2							110	60	170			1400			5250N	Dk brown soil + qz fragments
987466	F										265	1100	210	x		1800	x	x	"	V. qz with hematite/limonite staining & geothite vugs
987467	S	A	0.50	B_2							95	105	150			840			5225N	Brown - ochre silty clay
987468	S	A	0.80	B_2							100	120	145			2600			5200N	Mid brown - ochre clay with tuff fragments
987469	S	A	0.90	B_2							75	50	70			855			5175N	Light brown - ochre silty clay + tuff fragments
987470	S	A	1.20	B_2							65	70	60			50			5150N	Lt ochre - yellow clay soil
987471	S	A	0.70	B_2							50	40	50			2450			5125N	Dk red brown clay s.c.
987472	S	A	0.30	B_3							65	35	60			140			5100N	Lt ochre - yellow clay + tuff fragments
987473	S	A	0.60	B_2							70	45	85			6100			5075N	Dk brown clay with weathered Mt rich tuff fragments.
987474	S	A	0.50	B_2/C							70	55	250			5300			5050N	Dk to red grey-brown - ochre soil with abundant qz + tuff fragments.

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

** Stream sed. sample clo. or atum fl = flow m3/sec wi = wet h m

613124

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987463 – 987488 Collected by I.M. Clemmeson Sheet no. 2/3

Area / Prospect EAST BEULAH (GARDEN OF EDEN) Date 27/May/89

Map / Photo reference LINE 5200E Analysed by Analabs DPO no 30308

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref 5200E	Geological Observations
987475	S	A	1.0	B_2							170	50	60			360					5025N	ochre-yellow clay soil.
987476	S	A	0.50	B_2							85	50	65			105					5000N	Lt ochre-yellow clay.
987477	S	A	0.50	C							40	85	100			175					4700N	Weathered schistose, lithic tuff.
987478	S	A	0.50	B_2							30	50	95			215					4725N	Mid brown soil with weathered greenish tuffs.
987479	S	A	0.95	B_2							120	45	60			1700					4750N	Dk reddish brown soil + tuffaceous frags
987480	S	A	0.50	B_2							40	50	130			410					4775N	Brown-ochre soil + purple schistose tuff fragments
9874481	S	A	0.50	B_2							25	50	115			335					4800N	" "
987482	S	A	0.50	B_2							10	30	35			1700					4825N	" "
987483	S	A	0.70	B_2							45	70	40			20					4850N	Lt ochre silty clay
987484	S	A	0.70	B_2							90	60	80			40					4875N	Br-ochre clay soil
987485	S	A	0.90	B_2							75	75	115			50					4900N	Mottled yellow-ochre-brown silty clay
987486	S	A	0.50	B_2							45	55	50			30					4925N	Lt buff-brown silty clay.

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

** Stream sediment ... = Flow m³/sec wi = width m

613125

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987463 - 987488 Collected by I.M. Clementson Sheet no. 3/3

Area / Prospect EAST BENLHAM (GARDEN OF EDEN) Date 27 May 88

Map / Photo reference LINE S200E Analysed by Analabo DPO no 30805

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987487	S	A	0.35	B_2							15	10	35			50		4950N	Buff-ochre silty clay
987488	S	A	0.70	B_2							50	45	55			90		4975N	LL buff-ochre-brown clay

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

** Stream sed sample description fl = flow m3/sec wi = width m [illegible]

613126

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L ..GER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987489-987493 Collected by I.M. Clementson Sheet no. 1/1

Area / Prospect EAST BENLAN (GARDEN OF EDEN). Date 27 May 82

Map / Photo reference LINE 5000E Analysed by Analabs DPO no 3939

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref 5000E	Geological Observations
987489	S	A	0.50	Ba							30	40	60			540		5300N	Dk brown clay soil
987490	S	A	0.70	Ba							80	60	100			525		5275N	Red-brown clay with abundant prange clay (+ Fe on joints Mn) & weathered purple tuff
987491	S	A	0.90	Ba							90	70	115			150		5250N	Dk red-brown silty clay + ochre mottling
987492	S	A	0.70	Ba							60	65	80			180		5225N	As prev. rec
987493	S	A	0.60	Ba							70	95	105			410.		5200N	Dk red brown silty clay plus Mn rich weathered tuff fragments.

* 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

613127

584

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 972294 - 295 Collected by GBW ..... Sheet no. ONE

Area / Prospect HARTS RANGE DIGEM ANOMALIES 145xA 146xC. Date 26·01·82

Map / Photo reference Zeeny Analysed by ANALABS (COOEE) DPO no.....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
																						SAMPLES OF BASALT? (TERT + €)
972294												PORPHYRITIC TRACHYANDESITE.										? FRESH COARSE BASALT? (TERTIARY)
972295												MICROSYENITE										SL. WEATHERED BASALT/DIORITE (CAMBRIAN).

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

613128

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL 7173 No. ..... Sample numbers: 987624- Collected by: I.M. Clemantson Sheet no. 1/
Area / Prospect: EAIBBARD MAG. ANOMALY Date: 25-6-80
Map / Photo reference: EAST REG. LINE Analysed by: Analabs DPO no. 30309
A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ao	Sn	Ba	Grid ref	Geological Observations
		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	5135N	Pale greenish grey slightly chloritic and sheared, poorly sorted (but dominantly fine) tuff & frags (rounded) prominent in fine gr. uniform matrix.
987626	S	A	0.60	Ba					19	x	24			25		x	3	630	5125N	Lt brown - grey clay soil. Frags as above.
987627	S	A	0.40	Ba					16	4	26			30		x	9	650	5100N	Lt buff-grey sandy clay. ⅔.
987628	S	A	0.40	A-C	(some)				29	9	29			25		x	7	710	5075N	Black-brown clay plus humus plus weath. tuff(?) clasts.
987629	S	A	0.70	A-C	"				23	14	20			19		x	7	630	5050N	As above but waterlogged
987630	o/c	gs							8	2	28	0.2		49		x	20	1150	5025N	Foliated, chloritic tuff. Greenish. Not well sorted
987631	S	A	0.45	A-Ba					31	9	29			30		x	3	550	5000N	Black-brown clay plus some weath vole fragments.

* 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 = catchm[illegible]

613129

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987633-987650 + 987702. Collected by I.M. Clementson Sheet no. 1/1

Area / Prospect FRIBBA ROAD MAG ANOMALY Date 26-6-82

Map / Photo reference EAST REECH LINE Analysed by ANALABS DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ao	Sn	Ba	Grid ref	Geological Observations
987633	S	A	1.0	B_a						5	5	25			55		x	4	180	4700N	LL br, silty clay. Moina type soil
987634	S	A	0.8	B/C						6	3	10			24		x	x	35	4675N	Leached grey sandy clay. Moina type
987635	S	A	0.3	A-C						4	x	6			22		x	x	x	4650N	Grey sand + qz pebbles. Some humus. Scree
987636	S	A	0.4	A/C						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 o/c of qz leo grits and conglomerates
987639	S	A	0.4	C						4	x	7			16		x	x	35	4725N	Weath grey qz:te - sand only left
987640	S	A	0.4	A/C						8	4	15			40		50	5	80	4750N	Humic grey sand on scree
987641	S	A	0.7	B_a						7	23	29			79		x	6	150	4775N	Light br-grey sandy soil.
987642	S/S	1	0.5-1	50	50					8	13	33	0.2	2	140		x	6	600	4780N	Float in ck = 50% volc, 50% qz:te/grits-
987643	F	gs																		4780N	Green, slightly chloritic, ? int tuff or possibly sheared lava. Typical of floats
																					of N. side of creek
987644	S	A	0.3	A-B_a						11	11	50			1570		x	10	400	4800N	Rich mid brown, slightly humic clay + volc frags
987645	S	A	0.3	B_a-C						10	15	69			200		x	8	380	4825N	" " " " " " "
987646	S	A	0.5	B_a-C						19	24	61			135		x	4	420	4850N	" " " " " " "
987647	S	A	0.4	A-C						47	26	35			260		x	7	560	4875N	Brown, sandy humic soil on scree.
987648	S	A	0.4	B-C						18	11	32			58		x	3	640	4900N	Mid-br brown gritty (volc frags) soil on scree
987649	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_a						44	18	27			81		x			4975N	Br sandy clay plus volc fragments.

* 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

613130

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name Sheffield EL3/73 No. ..... Sample numbers 98703- Collected by J.M.Clementson Sheet no. 1

Area / Prospect Emmaroo Mag Anom. Date 29-6-82

Map / Photo reference West Line Analysed by Analabs DPO no. 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	Ba	Ag	Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
987703	S	A	0.2	A-B					31	66	50			28		9	700	X	5000N	Soil colour - black to brown humic soil
987704	S	A	0.4	B-C					13	8	16			16		5	420	X	5025N	Grey, leached soil.
987705	S	A	0.5	B_2-C					4	8	14			14		4	380	X	5050N	Light buff grey sandy soil; vole frags
987706	S	A	0.4	B/C					2	7	11			13		4	420	X	5075N	Light grey sandy soil - weathd vole frags
987707	S	A	0.5	B_2					4	8	22			13		5	850	X	5100N	LL grey-brown mottled silty clay
987708	F	gs							15	25	160		X	50		5	430	X	5125N	Purple, fine grained slightly foliated buff or (possibly) qz-ite. Prob. dolerite
987709	S	A	0.3	B/C					3	3	16			9		3	350	X	5125N	Sandy grey soil plus qz fragments
987710	S	A	0.6	B_2/C					4	7	13			19		5	660	X	5150N	LL buff grey sandy soil
987711	S	A	0.4	B_2/C					6	4	14			17		X	650	X	5175N	" " " " "
987712	S	A	0.4	B_2					7	3	15			16		4	600	X	5200N	Mottled buff-ochre silty clay.
987713	S	A	0.8	B_2-C					7	30	58			87		7	290	X	4825N	Mid brown silty clay plus weathered vole (rhy) frags

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

** Stream sed sample description fl = flow m3/sec wi = width m al = alluvi c = colluvial ca = catchment km2

613131

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987703- Collected by I.M. Clementson Sheet no. 2

Area / Prospect ERIBBA RD MAG ANOMALY Date 29-6-82

Map / Photo reference WEST LINE Analysed by Analabs DPO no. 30310

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	Ba	W/As	Grid ref	Geological Observations
987714	S	A	0.6	B_2/C						8	24	42			192		7	500	/x	4850N	Aeoprenano
987715	o/s	1.0	1.0	70%	30%												15	520	x	4863N	Ab. float. volcaeclastic (slightly) tuffo.
987716	S	A 0.3	0.3	A-B_2						10	12	45			580		4	640	/60	4875N	Lt greenish brown clay plus vole frags
987717	S	A	07							21	32	43			560		4	520	/x	4900N	"Earthy" brown soil plus vole frags
987718	o/c	gs								10	20	145		x	515		8	980	/x	4912N	Grey-green, massive volcanic. Minor (only) foliation (vertical N-S) Minor qz eyes or phenocrysts ? rhyolitic ash/tuff
987719	S	A	0.3							20	23	44					8	657	/x	4925N	Brown "earthy" soil in areas. Tuff frags
987720	S	A	0.4	A-B_2						24	33	30					10	570	/x	4950N	Brown humic soil plus vole clasts
987721	S	A	0.6	B_2						17	32	35					7	510	/x	4975N	M.b brown silty clay
987722	o/c	gs								20	25	85		x	115		4	890	/x	5000N	Foliated grey-green porphyritic ? tuff Fresh. N.V.M.
987723	o/c	cs	0.40							15	15	75		x	105		7	520	/x	25m east of 5000N	Soft, ferruginous weathered tuff.

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

** Stream sed simple description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = [illegible] m2

613132

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL7173 No. ..... Sample numbers: 987724 - 987727 Collected by: A. CRICK Sheet no: 1

Area / Prospect: ERIBAS ROAD MAG ANOMALY Date: 30-6-82

Map / Photo reference: WEST LINE Analysed by: Analabs DPO no: 30310

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	Ba	Ag	Grid ref	Geological Observations
987724	S	A	1.0								6	17	92			53		8	730	x	4800N	Brown-yellow coarse gritty soil
987725	S	A	0.6								2	x	5			10		3	25	x	4775N	Grey, pebbly, sandy soil
987726	S	A	0.5								2	x	19			16		x	x	x	4750N	Black humic soil with qz. le fragments
987727	S	A	0.5								1	1	9			14		x	x	x	4775N	" - - - - -

* 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

613133

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L OGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 987776-987781 Collected by I.M. Clementson Sheet no. 1/1

Area / Prospect Dugan 145xA Date 15-7-82

Map / Photo reference Rockyhaven-Watalom 8233-0.145xA . Analysed by Analabo DPO no 30311

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
987776	S	A	0.9	B_{21}							61	34	54			172					125N	M.dbr clay plus tuff / tuff-chalc frags
987777	S	A	1.0	$B_{21}C$							43	17	116			660					100N	Lt yell-br-ochre clays + tuff frags.
987778	S	A	1.1	B_{22}							39	13	57			126					075N	Ochre-br silty clay
987779	S	A	0.8	$B_{22}C$							64	8	93			740					050N	Br-grey green clay plus phyllite (foliated fine gr tuff) frags
987780	S	A	0.8	B_{23}							57	24	146			630					025N	As above.
987781	S	A	0.9	$B_{23}C$							25	7	65			2900					000N.	Br clay plus weath tuff fragments

* 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 = colluvi[illegible]

613134

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD No 7173 Sample numbers 987116 – 987143 Collected by I.M. SILVERSTEIN Sheet no. 1/2

Area / Prospect SOUTH DOLCOATH MAG. ANOMALIES. Date April 26th 1982

Map / Photo reference Anomaly 24-1816 Analysed by DPO no

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Bi	Au	As	W	Sn	Grid ref	Geological Observations
987116	SS	2	0.75	50%	50%					11	33	140	0.1	4	–		X	X	X		"High priority [central] maganomaly, main north-south cut line. 350 m S. Float in ck. chalcedonic. SAMPLING:- N-S LINE HIGH PRIORITY ANOMALY.
987117	S	aug	0.50	A/B						35	36	88	X	X	–		X	X	X	18005	Mid brown, sandy. Acidvole (rhy?) float - low mag. anomaly.
987118	S	aug	0.80	B						38	32	92	X	2			X	X	X	17755	Brown, weathered rhy. elastic.
987119	S	aug	0.50	B/C						39	46	95	X	6			50	53	28	17505	Mid brown. Rhy float at site
987120	S	aug	0.75	A/B						31	36	60	X	X			X	13	7	17255	
987121	f									15	2	13	X	4			X	12	12	17255	Highly weathered rhy? Slightly ferruginous, strong clay alteration.
987122	S	aug	0.30	A/B						35	29	48	X	2			X	X	X	17005	Fresh, slightly pyritic rhy float at site. (Low mag anomaly)
987123	S	aug	0.45	B						71	31	82	X	X			50	X	X	16755	Rich brown clay.
987124	S	aug	0.30	A/B						38	35	54	X	2			X	16	6	16505	Minor rhy float at site.
987125	S	aug	0.40	B						38	35	71	X	X			50	9	X	16255	Pyritic rhy float at site.
987126	S	aug	0.45	B						41	28	73	X	X			X	9	X	16005	Mid brown clayey soil.
987127	S	aug	0.40	B						85	27	74	X	X			X	X	X	15755	Rich brown clayey soil.
987128	S	aug	0.80	B						49	30	82	X	2			X	X	X	15505	Red brown sandy soil.
987129	S	aug	0.80	B						55	25	68	X	X			X	X	X	15255	" " " "
987130	SS	0.1	1.0	50%	50%					28	14	75	X	X			X	7	X	15205	Abundant rhy float in stream.
987131	S	aug	0.50	B						45	35	95	X	X			X	X	X	15005	Pale grey brown clay. No float.

* 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

*** O/C

613135

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE RECORDER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 9871116-9871143 Collected by I.M. Clementson. Sheet no. 2/2

Area / Prospect S DOLCOATH MAG ANOMALIES. Date April 26th 1982.

Map / Photo reference Anomaly 24-1816 Analysed by DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Bi	Au	As	W	Sn	Grid ref	Geological Observations
987132	S	aug	0.60	B						50	30	100	X	2			50	x	x	14755	V. compact, brown clay.
987133	S	aug	0.50	B/C						22	29	80	x	x			x	x	x	14805	LT. ochre-brown, sandy Rhy. fragments.
987134	S	aug	0.80	B						17	36	95	x	x			x	x	x	14255	Ochre-brown clay Rhy float on site.
987135	S	aug		B						18	43	120	x	x			x	x	x	13255	Sandy/clay from roots of upturned tree.
987136	f									14	15	160	x	x			x	10	8	13255	Fine gr, qz-eye rhy. Dk grey. High mag susceptibility (7.0-7.4)
987137	S	aug	0.30	A/B						10	30	97	x	x			x	x	x	12755	Amongst rhyolite ochres - variable mag susceptibility (0.4 - 6.0)
987138	S	aug	0.25	B						15	79	140	x	4			x	x	x	12505	d/c of rhy (mag susceptibility 4.0-7.0) next to site
987139	gs									34	72	140	x	4			x	10	7	12505	Dk grey rhy + sulphides (?? concentrate).
987140	gs									28	30	120	x	4			x	8	10	12005	Rhy - fine grained. Sig. diseam py + ?apy + ?cp
987141	S	aug	0.30	A/B						19	50	120	x	x			x	x	x	10505	
987142	S	aug	0.60	B						18	53	110	x	x			x	x	x	10255	V. red sandy soil. Rhy float at site.
987143	S	aug	0.50	A/B						27	57	88	x	x			x	x	x	10005	Dk brown, sandy soil.
																			(Baseline)		

* 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

613136

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 9871144-9871151 Collected by I.M. CLEMENTSON Sheet no. 1/1

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

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

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Bi	Au	As	W	Sn	Grid ref	Geological Observations
9871144	f										42	30	110	x	2			v				Acidvolcanic with coarse magnetite.
9871146	g s										49	30	96	x	12			x				A.V. : Finegrained. Sulphides - py + ?apy. Minor chlorite. Mag suscept. 6-6.2
9871147	r.c.	Approx 30cm at 5-10cm intervals									2	6	13	x	x			x				Qz segregations within foliated a.v. (Strike 320°, approx vertical).
9871148	f										20	9	94	x	4			x				Rhy + large clasts qz. Chloritic, slightly ferruginous.
9871149	f										29	51	390	x	x			x				V. Fe/Mn rich weathered tuff?
9871150	f										28	77	290	x	x			x				" "
9871151	f										36	20	180	x	2			x				" "
											Samples collected at random sites over area of the anomaly (not actually on the follow-up lines).											

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

** Stream sed sample description fl = flow m3/sec wi = width m [illegible]

613137

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name Somerfield E17/73 No. ..... Sample numbers As shown Collected by I.M. Clarkson / M.F. Fitz Sheet no. 1

Area / Prospect Arnoman Arnoman 113-0518 Date May-June 82

Map / Photo reference Sheffield 1:250000 Analysed by ANALABS DPO no. 30207 / 30309

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Sb	Ba	Grid ref	Geological Observations
988365	f										640	2160	770		x			50	x		445970E 5410950N	Laterite ? Cambrian basalt.
988366	ss										210	160	350		x			x	x		"	
988367	ss										26	27	79		x			x	x		445650E 5411025N	
988368	ss										28	14	88		x			x	x		445760E 5411120N	
987563	ss										40	50	140	x		1050		x		240	446025E 5410810N	
987564	ss										1200	40	80	x				x		185	445910E 5410800N	
987565	ss										170	40	110	x				100		195	445950E 5410920N	
987616	ss										137	108	330		2	900				520	445970E 5410950N	Repeat of 987366
987617	o/c	g/s									510	105	810			4800		x		980	"	Fine grained ? Cambrian basalt.

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

** S

613138

APPENDIX II

MODELLING OF DOLCOATH GRANITE MARGIN MAGNETIC ANOMALIES

BY M.F.FLIS

WEIGHTED LEAST SQUARES FIT - TABULAR

1 SHEFFIELD EL 7/73 ANOMALY 15-2781

ITERATION NUMBER 5
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0760

ITERATION NUMBER 10
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0760

ITERATION NUMBER 15
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0760

ITERATION NUMBER 20
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0760

ITERATION NUMBER 25
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0760

ITERATION NUMBER 30
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0760
INCOMPLETE FIT - UNABLE TO IMPROVE LAST ITERATION

ITERATION NUMBER 30
****

PARAMETER	KEY	START	LIMITS		FITTED	TOLERANCE	RANGE
MAGNET	1	2.000E+03	1.0E+01	3.0E+03	2.996E+03	1.0E+00	0.0E-01
DIP	1	1.200E+02	7.5E+01	1.8E+02	1.293E+02	1.0E+00	0.0E-01
BASE LEVEL	1	2.400E+02	0.0E-01	0.0E-01	1.742E+02	1.0E+00	0.0E-01
BASE SLOPE	1	1.000E-02	0.0E-01	0.0E-01	1.162E-02	1.0E+00	0.0E-01
POSITION	1	8.200E+02	6.2E+02	1.0E+03	8.305E+02	2.0E+01	0.0E-01
HALF WIDTH	1	1.000E+01	5.0E+00	2.0E+02	9.293E+00	1.0E+00	0.0E-01
DEPTH	1	1.500E+02	5.0E+01	5.0E+02	1.866E+02	1.0E+01	0.0E-01
INCLNATN	0	-7.200E+01	0.0E-01	0.0E-01	-7.200E+01	0.0E-01	0.0E-01
DECLNATN	0	8.600E+01	0.0E-01	0.0E-01	8.600E+01	0.0E-01	0.0E-01
VERTICAL	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01
TRAV DIR	0	1.700E+01	0.0E-01	0.0E-01	1.700E+01	0.0E-01	0.0E-01

6131139

POSITION	WEIGHT	OBS	FITTED
0.0000	10.00	209.	195.
20.0000	10.00	212.	196.
40.0000	10.00	190.	198.
60.0000	10.00	238.	199.
80.0000	10.00	207.	201.
100.0000	10.00	194.	203.
120.0000	10.00	171.	205.
140.0000	10.00	174.	207.
160.0000	10.00	178.	210.
180.0000	10.00	206.	212.
200.0000	10.00	234.	215.
220.0000	10.00	203.	218.
240.0000	10.00	210.	221.
260.0000	10.00	216.	224.
280.0000	10.00	248.	228.
300.0000	5.00	170.	232.
320.0000	5.00	198.	236.
340.0000	3.00	351.	241.
360.0000	1.00	640.	246.
380.0000	3.00	335.	252.
400.0000	10.00	260.	258.
420.0000	10.00	277.	265.
440.0000	10.00	297.	273.
460.0000	10.00	257.	281.
480.0000	10.00	291.	291.
500.0000	10.00	305.	301.
520.0000	10.00	328.	313.
540.0000	10.00	310.	327.
560.0000	10.00	327.	342.
580.0000	10.00	348.	359.
600.0000	10.00	375.	377.
620.0000	10.00	407.	398.
640.0000	10.00	432.	422.
660.0000	10.00	447.	447.
680.0000	10.00	472.	475.
700.0000	10.00	504.	504.
720.0000	10.00	534.	534.
740.0000	10.00	514.	563.
760.0000	10.00	599.	590.
780.0000	10.00	624.	612.
800.0000	10.00	611.	628.
820.0000	10.00	702.	635.
840.0000	10.00	646.	633.
860.0000	10.00	598.	621.
880.0000	10.00	582.	601.
900.0000	10.00	585.	576.
920.0000	10.00	516.	546.
940.0000	10.00	498.	515.
960.0000	10.00	468.	483.
980.0000	10.00	454.	454.
1000.0000	10.00	415.	426.
1020.0000	10.00	451.	400.
1040.0000	10.00	416.	378.
1060.0000	10.00	408.	357.
1080.0000	10.00	315.	339.
1100.0000	10.00	336.	323.
1120.0000	10.00	289.	309.
1140.0000	10.00	270.	297.
1160.0000	10.00	269.	286.
1180.0000	10.00	254.	276.
1200.0000	10.00	266.	268.
1220.0000	10.00	255.	260.

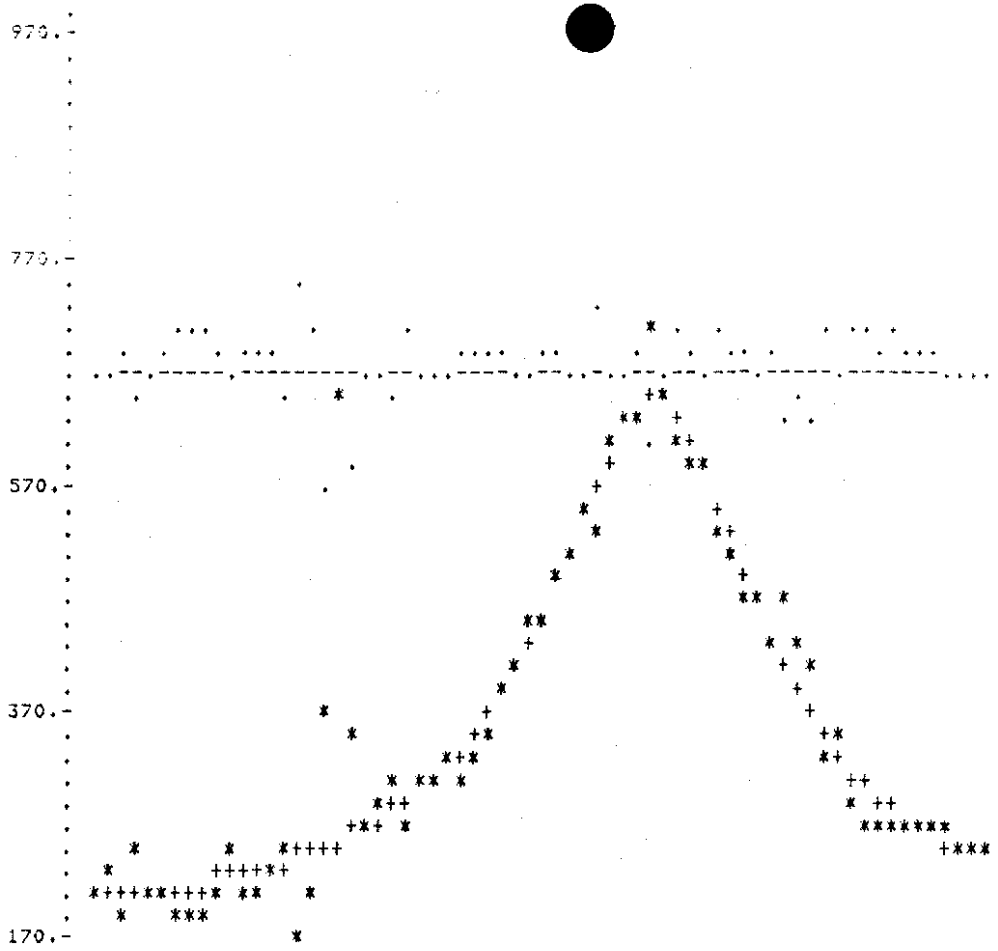
613140

1240.0000	10.00	252.	254.
1260.0000	10.00	252.	248.
1280.0000	10.00	247.	243.
1300.0000	10.00	240.	238.
1320.0000	10.00	248.	234.

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0760

3

613141



MODEL TABULAR TITLE SHEFFIELD EL 7/73 ANOMAL

NUMBER OF STATIONS 67 MAX AMPLITUDE 532. X INCREMENT 1 COLUMNS PER STATION. Y INCREMENT OF 20. GAMMAS PER LINE.
FIELD DATA CURVE...%*% FITTED CURVE...%+% ERROR CURVE...%.%
NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT .0760 PARFIT FLAG -1 ERROR CURVE DATUM 670.000

DERIVATIVE MATRIX

0.10E+00 0.13E+02 0.10E+02 -.83E+04 -.73E+00 0.32E+02 0.11E+01
0.10E+00 0.14E+02 0.10E+02 -.81E+04 -.77E+00 0.34E+02 0.12E+01
0.11E+00 0.14E+02 0.10E+02 -.79E+04 -.82E+00 0.35E+02 0.12E+01
0.11E+00 0.14E+02 0.10E+02 -.77E+04 -.87E+00 0.37E+02 0.13E+01

WEIGHTED LEAST SQUARES FIT - TABULAR

1 SHEFFIELD EL 7/73 ANOMALY 29-1614

ITERATION NUMBER 5
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0443

ITERATION NUMBER 10
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0354

ITERATION NUMBER 11
****

PARAMETER	KEY	START	LIMITS		FITTED	TOLERANCE	RANGE
MAGNET	1	3.000E+01	1.0E+01	3.0E+03	2.035E+02	1.0E+00	1.1E+01
DIP	1	1.200E+02	7.5E+01	1.6E+02	9.024E+01	1.0E+00	3.6E+00
BASE LEVEL	1	3.170E+02	0.0E-01	0.0E-01	3.471E+02	1.0E+00	1.0E+01
BASE SLOPE	1	-1.800E-01	0.0E-01	0.0E-01	-2.998E-01	1.0E+00	2.7E-02
POSITION	1	2.200E+02	1.2E+02	3.2E+02	1.870E+02	1.0E+01	8.6E+00
HALF WIDTH	1	3.600E+01	1.0E+01	1.0E+03	6.116E+01	1.0E+00	3.3E+00
DEPTH	1	3.400E+01	5.0E+00	1.2E+02	1.000E+02	2.0E+00	8.4E+00
INCLNATN	0	-7.200E+01	0.0E-01	0.0E-01	-7.200E+01	0.0E-01	0.0E-01
DECLNATN	0	6.800E+01	0.0E-01	0.0E-01	6.800E+01	0.0E-01	0.0E-01
VERTICAL	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01
TRAV DIR	0	-2.200E+01	0.0E-01	0.0E-01	-2.200E+01	0.0E-01	0.0E-01

POSITION	WEIGHT	OBS	FITTED
0.0000	10.00	389.	396.
20.0000	10.00	432.	405.
40.0000	10.00	438.	419.
60.0000	10.00	440.	441.
80.0000	10.00	431.	472.
100.0000	10.00	465.	512.
120.0000	10.00	595.	560.
140.0000	10.00	625.	613.
160.0000	10.00	684.	662.
180.0000	10.00	724.	704.
200.0000	10.00	706.	732.
220.0000	10.00	734.	743.
240.0000	10.00	736.	737.
260.0000	10.00	716.	716.
280.0000	10.00	686.	684.
300.0000	10.00	646.	647.
320.0000	10.00	608.	608.
340.0000	10.00	574.	572.
360.0000	10.00	535.	538.
380.0000	10.00	514.	508.
400.0000	10.00	495.	481.
420.0000	10.00	472.	457.
440.0000	10.00	446.	435.
460.0000	10.00	418.	416.
480.0000	10.00	402.	398.
500.0000	10.00	383.	382.
520.0000	10.00	366.	367.
540.0000	10.00	352.	353.
560.0000	10.00	337.	340.
580.0000	10.00	321.	328.

5

6131143

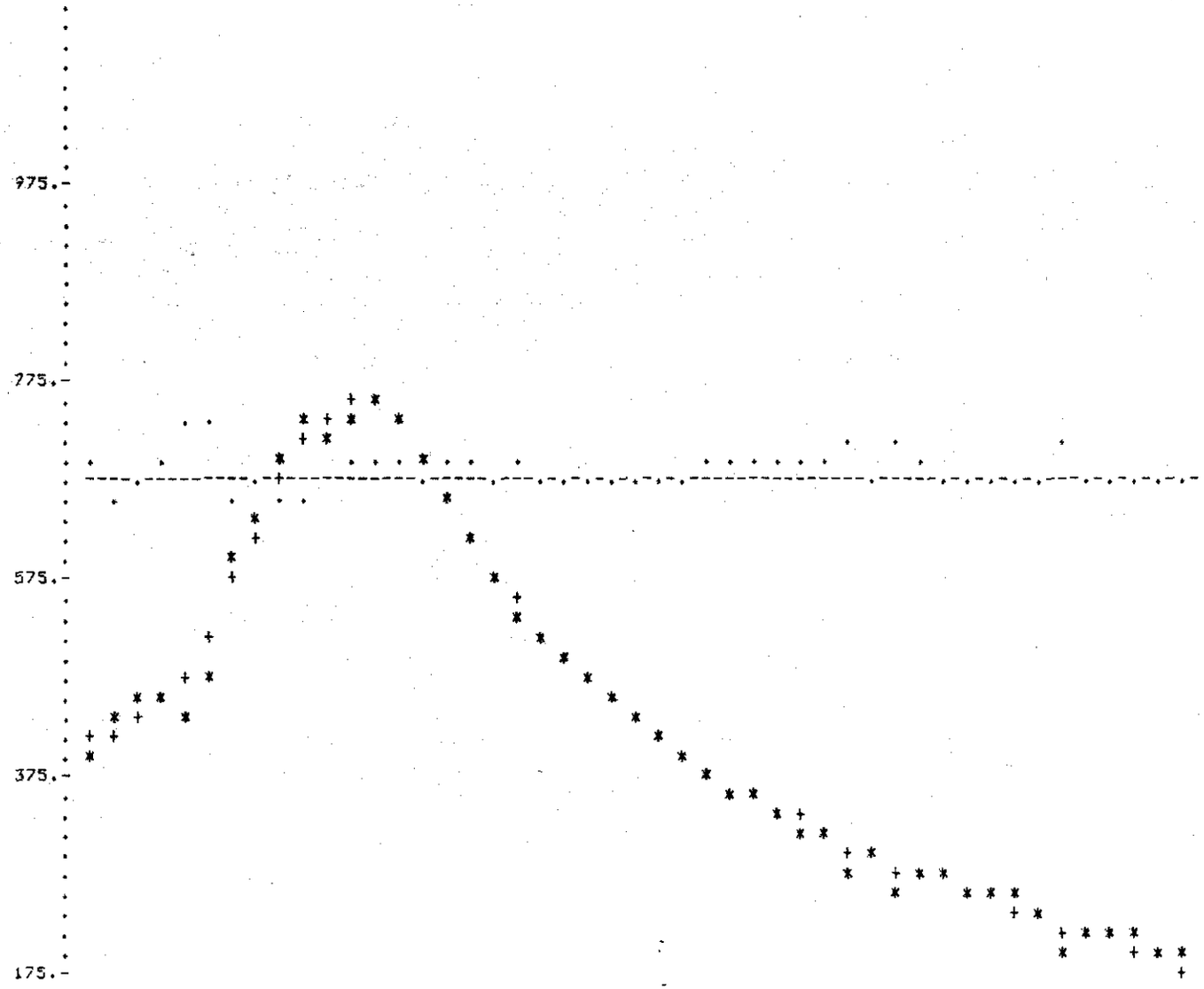
600.0000	10.00	309.	316.
620.0000	10.00	297.	305.
640.0000	10.00	270.	295.
660.0000	5.00	290.	285.
680.0000	10.00	248.	275.
700.0000	10.00	263.	265.
720.0000	10.00	258.	256.
740.0000	10.00	248.	247.
760.0000	10.00	248.	239.
780.0000	10.00	237.	230.
800.0000	10.00	233.	222.
820.0000	10.00	180.	214.
840.0000	10.00	212.	206.
860.0000	10.00	207.	198.
880.0000	10.00	198.	190.
900.0000	10.00	195.	183.
920.0000	10.00	187.	175.

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0353

MAGMOD PLOT OF FIT 1

613144

MAGMOD PLOT OF FIT 1



MODEL TABULAR TITLE SHEFFIELD EL 7/73 ANOMAL

NUMBER OF STATIONS 47 MAX AMPLITUDE 568. X INCREMENT 2 COLUMNS PER STATION. Y INCREMENT OF 20. GAMMAS PER LINE.
FIELD DATA CURVE...%*% FITTED CURVE...%+% ERROR CURVE...%.%
NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT .0353 PARFIT FLAG 2 ERROR CURVE DATUM 675.080

613145

APPENDIX III

GEOCHEMICAL SAMPLE SHEETS - WILMOT COPPER PROSPECT

613147

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL 7/73 No. ..... Sample numbers: 987823– Collected by: I.M. CLEMENTSON Sheet no.: 1

Area / Prospect: WILMOT Cu/Pb/Zn S/S ANOMALIES Date: 21-7-82

Map / Photo reference: NORTHERN STREAM (1 GENERAL AREA) Analysed by: ANALABS DPO no: 30318

A 02143

Sample No.	Type (ss * / oc / f / s)	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au			Wt (g)	Grid ref	Geological Observations
987823	o/c	gs								77	8	175			490					Quarry on Wilmot Rd 200m N of Narrawa Rd turn-off. Light grey-buff Cambrian shale.
										SPUR AT HEAD OF BOTH ANOMALOUS STREAMS.										
987824	f									165	36	2200			1.05%					Mn/Fe rich breccia/boulder in shale. Stockwork of Mn rich veinlets.
987825	f									20	4	103			440					Vuggy, ferruginous qz in shale alluvium/S stream
987826	f									57	29	270			530					Ferruginous quartzose, ?siliceous ?tuff.
										NORTH STREAM RESAMPLES OF FOLLOW-UP.										
																		*	DISTANCE UP FROM CONFLUENCE	*
987827	SUSPENDED CLAYS FROM ALLUVIUM									97	39	280			2500				100m	Float 50:50 alluv./coll. Mod. Mn staining Clk approx 0.5m wide. Flow 1.5 m³/min.
987828	PAN CONCENTRATE									88	69	280			1000			11.47	100 m	Mod good trap site. Float dominantly fine grey shales (? tuffs).
987829	GRAB SAMPLE S/SED (RPT79S310)									97	57	360			1820				100 m	Same site as 79810. ?PbS visible in pan conc.
987830	SUSPENDED CLAYS FROM ALLUVIUM									80	37	310			3700				200m	At foot of extensive qc. Stream characteristics above. Mod-good trap site
987831	PAN CONCENTRATE									60	39	265			580			15.06	200 m	?PbS vis in pan conc.
987832	GRAB SAMPLE S/SED									72	36	330			330				200m	o/c's of greyshales (?tuff) Vertical.
987833	o/c	gs								152	7	380			780				800 m	No vis min. Strike 290°-110°M

* 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

613148

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .GER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987823- Collected by I.M. CLEMENTSON 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 * oc f s	ss channel ** fl wi al co ca pH; o/c sample type ***; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au		Wt. (g)	Grid ref Distance up from confluence	Geological Observations
9878 34	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				300 m	
987837	SUSPENDED CLAYS FROM ALLUVIUM			46	17	230			1450				400 m	Str. character as previous
987838	PAN CONCENTRATE			21	19	150			320			36.80	400 m	Poor – moderate Trap site.
987839	GRAB SAMPLE S/S.			52	34	310			2700				400 m	
987840	SUSPENDED CLAYS FROM ALLUVIUM			40	17	250			1700				(600m)	Str char as previous. East Trib at
841	GRAB SAMPLE S/S			46	36	290			5800				600 m	confluence (main stream). Minor basalt
842	PAN CONCENTRATE			35	27	290			630			13.67	600 m	float, shale dominant.
987843	SUSPENDED CLAYS FROM ALLUVIUM			41	15	240			5400				600 m	Str. char as previous. West Trib at 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				500 m	Str char. as previous.
47	PAN CONC			27	20	270			500			45.78	500 m	
48	GRAB SAMPLE			46	29	320			3600				500 m	
987849	f o/c gs			37	10	60			1500				500 m	Tight, very compact chert gyril. Tr pyrite.
987850	f o/c gs			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 m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

613149

C.R.A. . .PLORATION . GEOCHEMICAL SAMPLE L .JGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 987823- ..... Collected by B. MORLET ..... Sheet no. 2

Area / Prospect WILMOT Cu/Pb/Zn S/S ..... Date 21-7-82

Map / Photo reference SOUTHERN STREAM ..... Analysed by ANALABS ..... DPO no. 30312/3031

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au		wt (g)	Grid ref approx distance upstream where pebble outcrop meet.	Geological Observations
987851	FLOAT SAMPLE										45	19	870			6700					from confluence Ck 1m wide, 1 m³/min. Shales
852	PAN CONC										36	15	590			5400			82.5g	500m.	
853	G. SAMPLE										56	28	1360			1.25%					
987854	FLOAT SAMPLE										61	22	420			1170				400m	
55	PAN CONC										34	15	158			250			87.12		
56	G. SAMPLE										69	30	320			1280					
987857	FLOAT SAMPLE										210	33	670			3300				300m	
858	PAN CONC										55	16	270			1100			93.91		
859	G. SAMPLE										166	40	620			3000					
987860	FLOAT										230	81	920			3200				200m	o/c Strikes 300°m. Vertical.
861	PAN CONC										152	101	760			2700			27.63		kinzaite + shales.
862	GRAB										200	83	1030			4500					
987863	o/c g/s										200	40	205			205				200m	Grey slightly sandy shale. Tr pyrite.
987864	o/c g/s										145	30	755			505				250m	Weathered fragmentals or coarse volc.
987865	f g/s										190	55	890			205				250m	Dk grey fine gr qz. Le.

* 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 = [illegible]

613150

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD 7/73 No. Sample numbers 987921-923 Collected by B. Morley Sheet no. 1/1

Area / Prospect WILMOT Cu Anomaly Date 22/7/82

Map / Photo reference Southern stream Analysed by Analabs DPO no. 30313

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au		wk (g)	Grid ref	Geological Observations
987921	Floated clay										270	53	1110			3200				100m upstream from	
922	Panned concentrate										230	116	950			2500			36.40	confluence	
923	Grab s/s.										260	86	1180			3500					
987924	F s/s										335	30	160			180				250m	Wauth? vdc + ?? cp? May be altered sediment

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

** S

613151

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

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 988035 - 988061 Collected by I.M. Clementson Sheet no. 1 / 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 * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Grid ref 4400E	Geological Observations
988035	S	A	1.0	B_2							81	15	144			7??			5275N	Rich, mid brown clay soil. (Basalt derived)
988036	S	A	1.0	B_2							85	9	200			5100			5250N	Or-br clay soil, probably basalt derived. ? walk float
988037	S	A	1.0	B_2							45	7	185			860			5225N	Mid brown clay soil. Probably basalt derived. Basalt float at site but may be transported
988038	S	A	0.4	B_2-C							34	5	99			1200			5200N	Dark brown-sandy clay with weath basalt
988039	S	A	0.7	B_2							56	10	109			1400			5175N	Rich red-brown basalt derived soil
988040	S	A	0.3	B_2							114	13	240			2000			5150N	Silty mid br clay + clasts of weathered siltstone-shale. Probably just above dc.
988041	S	A	0.3	B_2-C							39	23	65			850			5125N	Transported basalt type rich red soil over siltstone-shale bedrock (dc of which is 40m to west).
988042	S	A	0.4	B_2-C							63	14	35			400			5100N	Red-br soil plus frago weath silty micaceous shales
988043	F	g/s									56	7	86	X		172		X	5075N	Very coarse, gritty qz rich tuff. Well sorted. Slightly chloritic + silicified. Trace pyrite Felsic frags larger + less mature than qz.
988044	S	A	0.2	B_2-C							49	14	42			187			5075N	Red silty soil plus abs frags.

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

** Stream sed sample description fl = flow m3/sec wi = width m al = alluvi

613152

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

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 Analabs DPO no. 30317

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ao	Grid ref	Geological Observations
																			4400E	
988045	S	A	0.7	B_2							79	31	63			5200			5050N	Weathered buff-grey shale ? frags in mid br silty soil.
988046	S	A	0.5	B_2-C							66	44	47			1370			5025N	Lt br silty clay plus abundant silty shale fragments
988047	S	A	0.7	B_2-C							59	32	48			240			5000N	Lt or-br silty clay + frags weath shale.
988048	S	A	0.8	B_2							270	380	460			148			4700N	Lt br-br silty soil. Ab frags weath shale, some of which are talcose and chloritic
988049	S	A	0.8	B_2							144	200	365			660			4725N	Ao above.
988050	S	A	0.5	B_2-C							71	25	75			440			4750N	Mid or-br clay + tab. shale frags. Surface float is a: luminated grey micaceous shale b: med gr. pinkweathering tuff with shale clasts to 0.5cm.
988051	S	A	0.7	B_2-C							167	69	157			400			4775N	Ao previous but somewhat reddish. Surface float is as previous but tuff is sandy & well sorted.
988052	f	g/s									130	11	158	X		320		X	approx 4600E 4750N	Greenish chloritic tuff, foliation Bleached shale clasts to c. 5cms

* 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 = ... ca = ... pH

613153

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 988035 – 988061 Collected by I.M. Clementson Sheet no. 3/3

Area / Prospect WILMOT Cu Date 7-10-83

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

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ag	Grid ref 4400E	Geological Observations
988053	S	A	0.6	B_A-C							76	34	87			2100			4800N	M-D red-br clay with ab. slo/shale frag. Sav. float dom shale/silt.
988054	S	A	0.7	B_A-C							80	24	55			470			4825N	Ao previous
988055	S	A	0.9	B_2							41	16	74			1150			4850N	Red brown silty clay + Frago slo-shale.
988056	S	A	0.8	B_D							60	14	73			3400			4875N	R-br clay. Frago + float as before
988057	S	A	0.9	B_A							70	18	38			1400			4900N	Mottled red yellow clay with shale frago
988058	S	A	0.6	B_A							92	18	54			1480			4925N	M-D red-br silty clay with slo frags (Paddock).
988059	F	gl.									143	4	39	X		240		X	4925N	Brecciated slo with fine stockworks Fe, Mn veinlets + Mn staining. Also somewhat silicified.
988060	S	A	0.6	B_2							123	24	41			169			4950N	Lt - mdb silty clay
988061	S	A	0.9	B_A-C							73	31	43			159			4975N	Ochre-red clay + highly weathered shale fragments. Surface float is sandy mud or tuff + ochre-grey shales.

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

** c

613154

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

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

Area / Prospect WILMOT CSM Date 7-10-82

Map / Photo reference BASE LINE (5000N) Analysed by Analabs DPO no 30317

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref 5000N	Geological Observations
988062	S	A	0.5	B2C							86	19	41			103					4425E	Light ochre-clay+weath. shales. (On small ridge beside gully leading to N. stream.
988063	F	g/s									52	4	59	x		1.25%		x			4450E	Gossanous silicified & vuggy with 2ndry Fe/Mn. On edge of gulley draining to S. stream.
988064	S	A	0.8	B2							102	26	46			1250					4450E	Rich red-brown silty clay.
988065	S	A	0.9	B2							77	18	182			470					4475E	In gully draining to S. stream. Abundant gossanous weathering shale/silts, sometimes highly (alt°) micaceous. Soil is rich red-brown clay with shale frags.
988066	S	A	0.4	B2-C							109	22	117			3200					4500E	E side of gulley. Float is 90% lt grey micaceous siltstone, sometimes v. ferruginous on weathered surfaces. 10% is a black argillitic agglomerate with angular shale/silt clasts. Soil is mottled black-red silty clay with shale fragments.
988067	S	A	0.2	A-C							51	15	39			1660					4525E	Red humic clay + shale frags - just above qc
988068	S	A	0.4	B2							52	13	40			240					4550E	Mottled red-black-ochre silty clay + shale frags. Sm float is mica. silt-shales.
988069	S	A	0.4	B2-C							43	11	30			121						Lt or-br silty clay + weath shale frags. Float is a: buff-grey mic. shales b: m-c grey sandy tuffs with visible crystals

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

** Stream sed

613155

9

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 988062 - 988085 Collected by I.M. Clementson Sheet no. 2/3

Area / Prospect WILMOT Cu Date 7-10-83

Map / Photo reference BASE LINE (5000N) Analysed by Analabs DPO no. 30317

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref 5000N	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
988070	S	A	0.4	B-C					314	8	31			340					4600E	Mottled red-black silty clay plus ab. oho frags. Float is all shale-silt
988071	S	A	0.2	B2					60	15	53			800					4625E	LL or-br clay + ab. shale frags. Float is all grey shale - close to o/c.
988072	S	A	0.3	B2					39	10	33			185					4650E	As above. Surface float is shale-silt plus minor sandy, red gr. tuffs.
988073	S	A	0.5	B2					38	17	107			99					4675E	Red-br clay + ab. grey shale fragments
988074	S	A	0.2	A-C					36	62	138			620					4700E	Black-br humic clay plus shale frags
988075	S	A	0.3	Scree					86	44	160			400					4725E	Humic clay in scree of grey shale.
988076	S	A	0.2	Scree					138	60	131			400					4750E	As above : scree dominantly shale plus minor silty to fine sandy well sorted tuff and some weakly sorted med gr qz:ite.
988077	S	A	0.2	Scree					200	89	300			560					4775E	As above.
988078	S	A	0.3	Scree					580	54	270			430					4800E	LL red-br silty clay in shale scree
988079	S	A	0.3	Scree					450	39	184			490					4825E	As above
988080	S	A	0.4	Scree					139	157	250			161					4850E	As above: in scree of shale plus some coarser tuffs & argillite

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

613156

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 988062 - 988085 Collected by I.M Clementson Sheet no. 3/3

Area / Prospect WILLMOT Cu Date 7-10-82

Map / Photo reference BASE LINE (5000N) Analysed by Analabo DPO no 30317

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
988081	S	A	0.9	B_2							175	131	810			148		A875E	R-br clay+shale scree.
988082	S	A	0.7	Scree							280	68	330			310		4900E	As above
988083	S	A	0.5	Scree							186	66	230			310		4925E	As above.
988084	S	A	0.9	Scree							171	65	860			510		4950E	R-ch 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

613157

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL7/73 No. Sample numbers 988095 - 988124 Collected by I.M. Clemenson 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 * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As		Grid ref 4800E	Geological Observations
988095	S	A	0.9	B_2-C							33	107	135			390					5125N	Lt greenish brown silty clay with shale frags. Surf. float o/c very tight Ltff
988096	S	A	0.5	B_2							78	31	78			520					5150N	Mid br sandy clay + shale fragments
9880097	S	A	0.6	B_2							85	26	91			645					5175N	Dk brown gritty soil
988098	F	g/s									45	34	155	0.6		460			x		5175N	Mid grey, fine grained but porphyritic textured arenite or greywacke. Fe/Mn staining. Similar to float at 5150N.
988099	S	A	0.3	B_2							160	46	100			880					5200N	Mid brown silty clay + shale frags
988100	F	g/s									155	245	400	0.3		150			x		5200N	Weathered buff, fine grained well sorted silty tuff with chlorite ± ? bornite bearing joints.
988101	S	A	0.9	B_2							79	80	120			2900					5225N	Mid brown silty clay plus shale frags
988102	S	A	1.0	B_2							86	25	215			1475					5250N	As above
988103	S	A	0.8	B_2							15	7	16			46					5275N	Lt grey br - ochre mottled sandy clay.
988104	S	A	0.8	B_2							92	18	57			315					5300N	Lt mid brown clay with weathered shale

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

613158

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7/73 No. Sample numbers 988095-988124 Collected by I.M. Clamenson Sheet no. 2/3

Area / Prospect WILMOT CK Date 19-10-82

Map / Photo reference LINE 4800E Analysed by Analabs DPO no. 30318

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As	Grid ref	Geological Observations
		o/c sample type ***																	
		s sample type ****																	
988105	S	A	1.0	B_2-C					460	42	280			2650				5100N	M.dbr silty clay + weath shale frags.
(adjacent to	o/c	9878334	-9878336)																
988106	S	A	1.0	B_2					230	80	205			480				5075N	M.d-dk br silty clay
988107	S	A	0.8	B_2					215	81	270			500				5050N	Ochre-brown silty clay + shale frags.
988108	S	A	1.0	B_2-C					225	88	300			395				5025N	M.dbrown clay + shale frags
988109	S	A	1.1	B_2					105	28	165			95				4700N	M.d or.brown sandy soil
988110	S	A	0.8	B_2					82	25	160			115				4725N	As above.
988111	S	A	1.1	B_2					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 gallered volcanic. Lava or tuff interbedded. Refer to notes re facies at I.D. required.
988113	S	A	1.1	B_2					145	25	245			470				4775N	M.d ochre-brown sandy soil.

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

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial

613159

N.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 988095-988124 Collected by I.M. Clementson Sheet no. 3/3

Area / Prospect WILMOT Cr Date 19-10-82

Map / Photo reference 4800E Analysed by Analabs. DPO no. 30318

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As	Grid ref 4800E	Geological Observations
988114	S	A	1.1	Ba							205	41	270			2100				4800N	Mid or-br sandy clay
988115	oc	gs									250	960	290	0.3		200			x	4815N	Poorly laminated mid greenish grey silty shale, sugn sed. venting brecciation.
988116	S	A	1.0	Ba							395	260	345			520				4825N	Mid brown silty oo. l + shale frags.
988117	S	A	0.8	Ba_2							295	182	255			175				4850N	M:l reddish brown oo. l
988118	S	A	0.5	Ba							420	350	320			555				4875N	M:l br. sandy oo. l
988119	S	A	0.2	Scree							730	620	260			755				4900N.	
988120	f	g/s									835	1350	590	0.6		255			650	4900N	Brecciated + garnetiferous sandy tuff with clasts of bleached shale + qz-Fe-Mn bands
988121	S	A	0.8	Ba							470	90	305			120				4925N	M:l brownish red sandy clay
988122	S	A	0.5	Ba							300	82	170			265				4950N	M:l br sandy clay
988123	oc	gs									480	35	135	0.6		110			100	4950N	V. tight, prob. vcic., Finegr rock (Facies 'b')
988124	S	A	0.4	Ba							525	184	125			325				4975N	M:l br sandy clay

* 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 = [illegible]

613160

14

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. 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 Analysed by Analabs DPO no. 30318

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	As	Grid ref	Geological Observations
988125	F	g/s									29	10	68	0.3		110			X	4600E 5165N	Porphyritic "ashy" looking tuffo. Fine matrix with angular frags of felsic volcanic material & black shales.
																				4500	
988126	F	g/s									22	14	60	~~0.5~~ 0.4		495			50	4500E 4800N	Greenish slightly chloritic sheared/ schistose, poorly sorted tuff. Fine matrix (chlor. rich) with angular clasts 1 to 2mm. Minor Fe/Mn staining.
988127	F	g/s									165	23	1600			3500		290		4500E 4775N	Qz - hematite - magnetite rock. Vuggy. Prob. fracture filling. Fresh (N.S - small sample only).

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

613161

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL 7173 No. Sample numbers: 988151 - 988174 Collected by: A. DAVIS Sheet no. 1 | 2

Area / Prospect: WILMOT Cr Date: 19-10-82

Map / Photo reference: LINE 4500E Analysed by: Analabo DPO no: 30318

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	cs	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	Grid ref	Geological Observations
988151	S	A	0.3								94	51	160			130		1400	4700N	Yell-br loose clay soil
988152	S	A	0.5								100	50	180			275		340	4725N	Red-br loose clay
988153	S	A	0.4								58	131	280			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		360	4825N	Tan-br loose clay
988157	S	A	0.8								110	85	260			1900		310	4850N	R-br loose clay
988158	S	A	1.0								105	40	210			3050		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		320	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	180			1650		760	4975N	Choc-br loose clay

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

613162

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7174 No. ... Sample numbers 988151 - 988174 Collected by A. Crisk Sheet no. 2/2

Area / Prospect WILMOT Cr Date 19-10-82

Map / Photo reference LINE 4500E Analysed by Analabo DPO no. 30318

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba			Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
988163	S	A	1.1						125	60	115			210		230			5025N	Or-br loose clay
988164	S	A	1.0						36	40	83			140		300			5050N	Choc-brown loose clay
988165	S	A	0.8						36	45	110			1350		540			5075N	As above
988166	S	A	1.4						29	43	105			1800		730			5100N	Mottled black-lt 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	As 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	Lt br loose clay
988174	S	A	0.7						120	50	200			2550		240			5300N	Yellow-br gritty soil

* 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

613163

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988175-988198 Collected by A. Crick Sheet no. 1/II

Area / Prospect WILMOT Cu Date 19-10-82

Map / Photo reference LINE 4600E Analysed by Analabo DPO no. 30318

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba	Grid ref	Geological Observations
988175	S	A	0.4								86	63	130			1700		340	4700N	bk choc-br loose humic soil
988176	S	A	0.4								51	49	140			2600		520	4725N	Red-br compact soil
988177	S	A	1.1								250	79	170			110		250	4750N	Or-br compact clay soil
988178	S	A	1.1								280	65	130			190		220	4775N	As above
988179	S	A	1.1								125	48	160			170		180	4800N	Choc-br compact clay soil
988180	S	A	0.7								110	61	135			560		190	4825N	As above
988181	S	A	0.9								190	24	190			8600		210	4850N	As above
988182	S	A	0.4								470	62	250			8900		540	4875N	Dark brown loam clay soil
988183	S	A	1.1								35	37	93			590		870	4900N	Tan-br loose clay soil
988184	S	A	0.7								64	36	110			300		290	4925N	Or-br gritty clay soil
988185	S	A	0.5								69	38	84			760		250	4950N	Choc-br loose clay soil
988186	S	A	0.5								38	28	54			260		310	4975N	Yellow-br loose gritty soil

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

** Stream sed sample description fl = flow m3/sec wi = width m

613164

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7173 No. ..... Sample numbers 988175 - 988198 Collect. by A. CRICK Sheet no. 2/II

Area / Prospect WILMOT CK Date 19-10-82

Map / Photo reference LINE 4600E Analysed by ANALABS DPO no. 30318

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba			Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
988187	S	A	0.4						39	35	42			85		410			5025N	Or-br loose clay soil
988188	S	A	0.4						51	58	145			760		340			5050N	As above
988189	S	A	1.1						80	42	120			245		180			5075N	Or-br Fine clay soil
988190	S	A	1.1						59	40	95			470		240			5100N	As above
988191	S	A	0.8						15	21	70			230		580			5125N	Lt br loose clay soil
988192	S	A	1.1						22	40	86			135		610			5150N	Or-br loose clay soil
988193	S	A	1.2						80	66	150			255		240			5175N	As above
988194	S	A	1.1						83	44	140			190		240			5200N	As above
988195	S	A	1.1						74	34	145			230		250			5225N	As above.
988196	S	A	1.1						95	36	190			1700		200			5250N	Choc-br gritty soil
988197	S	A	0.5						72	36	145			225		200			5275N	As above
988198	S	A	1.1						72	25	130			2650		300			5300N	Red-br compact clay soil

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

613165

R.A. EXPLORATION - GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988210-988217 Collected by I.M. Clementson Sheet no. 1

Area / Prospect WILMOT Cu Date 17-11-82

Map / Photo reference LINE 4800E Analysed by Analabs DPO no. 30320/30321

(Two determinations carried out where shown)

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As	Grid ref 4800E	Geological Observations
988210	f	g/s								570/850	71/115	510/770			395		X	5065N	At foot of o/c of greyshales dipping very steeply to N. This sample is as o/c but with minor Fe staining of fractures
988211	f	g/s								820/235	90/105	230/210			215		X	4995N	Thin (4-5cm) bed of brecciated greyshale. Not a tectonic breccia, a sed. feature. V. poorly sorted. Abundant original Fe in matrix + clasts. Surrounding beds are totally normal greyshales.
988212	o/c	gs								FOR PETROLOGY			Brecciated then tourmalinised granitoid porphyry					4985N	Coarsely porphyritic (feldspar) intermediate lava (trachytic?).
988213	o/c	gs						Analabs method 101/102		290/320	58/70	138/140			140	X	X	4985N	As above. Trace py + ? cp disseminations
988214	o/c	gs								FOR PETROLOGY			Tuff - probably subaerial, possibly welded. Pervasive chloritisation					4980N	Finer grained facies of above? (Fiamme)
988215	o/c	rc (general)						101/102		220/250	20/20	96/115			200		X	4950N	As above : repeat of sample 988123 which assayed 100 ppm As. This sample for Au.
988216	o/c	gs						101/102		153/280	14/25	590/1090			815		X	S. bank of creek 4980N	?Weathered intermediate dyke or lava.
988217	f	gs								240/715	190/580	330/910			500	X	X	4900N	Repeat of 988120 (650 As) (1350 Pb) - gossanous tuff

* 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

613166

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 WILMOT Cu Date 17.12.82

Map / Photo reference LINE 4800E Analysed by ZINC CORP. DPO no. 30320

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
988210	'A'										770	86	600		380							Repeat analyses to check
	'B'										850	93	660		380							apparent discrepancies in
																						Analabs determinations
																						'A' = HCl-HNO_3 digestion
988216	'A'										210	21	760		760							'B' = Perchloric "
	'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

613167

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7173 No. ..... Sample numbers 988294 - 988312 Collected by J. CLEMENTSON Sheet no. 1/2

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 * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref 4700E	Geological Observations
988294	S	A	1.2	B_2							91	19	168			450					4700N	Mid red-brown clay
988295	S	A	1.0	B_2							165	27	171			1150					4725N	Mid brown silty clay + frags of hematitic breccio-conglomerate (qzose).
988296	F	gs									114	150	550			405		50			4725N	Fine grained pink-yellow weathered intermediate lava or very tight tuff with large biotite (going to chlorite) phenocrysts (and yellow)
988297	S	A	0.5	B							185	22	270			755					4750N	Mid brown clays. G'wacke float
988298	S	A	1.0	B_2							260	46	172			125					4775N	Rich brown, mottled yellow clay with frags of weathered siltstone & silty g'wacke. Also seen at surface
988299	S	A	1.0	B_2							203	59	191			155					4800N	Red-brown clay - as above
988300	S	A	1.1	B_2							220	65	250			735					4825N	" " - Float: shales & silts
988301	S	A	0.5	Sama							240	250	360			1900					4850N	Mid brown humic clays in scree of fine, grey laminated silts & shales
988302	S	A	0.8	B_2							330	120	250			170					4875N	Rich red-brown silty clay. Surface float of a/ Silts b/ light, silicic coarse grained poorly sorted tuffs b/ g'wacke (tuff?) med gr, weather red or green.
988303	F	gs									78	208	140			80					4875N	Qz rich g'wacke - prob fairly fresh tuff Some Fe oxides ? an - pyrite
988304	S	A	0.5	Sama							147	69	76			55					4900N	Gritty humic clays in scree of fine - med grained, poorly sorted g'wackes or reworked tuffs plus minor white qz: te.

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

613168

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988294-988312 Collector I.M.CLEMENTSON Sheet no. 2 / 2

Area / Prospect WILMOT CK Date 4-12-82

Map / Photo reference LINE 4700E Analysed by ANALABS DPO no. 30322

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
988305	S	A	0.8	B_2					230	44	134			80					4925N	Light brown-white sandy soil.
																				Surface float of qzites & g'wackes.
988306	S	A	0.9	B_2					184	54	350			145					4950N	Mid brown clay
988307	F	gs							114	270	230			130		x			4950N	Tight grey-green g'wacke but with vugs containing ??? secondary Pb carbonates
988308	S	A	0.5	B					69	35	410			260					4975N	Lt br sandy soil + weathered g'wacke frags (also at surface).
988309	S	A	1.3	B_2					41	31	123			1950					5100N	Dark red brown clay with siltstone fragments. Abundant silt/shale float
988310	S	A	1.0	B_2					88	24	72			1200					5075N	As above
988311	S	A	0.8	B_2					117	35	250			2000					5050N	" "
988312	S	A	0.5	B_2					54	10	130			570					5025N	Mid br sandy soil in scree of weathered greywackes (some sericite).

* 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

613169

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 988313-988323 Collected by I.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 * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
988313	S	A	1.0	Br						21	21	105			520					4800N	Red-brown clay. Surface float of weathered "a" facies - porphyritic intermediate volcanic.
988314	S	A	1.0	B/C						78	11	290			580					4825N	Bright red, mottled yellow clays - weathered "a" facies
988315	S	A	0.6	B/C						197	25	350			1250					4850N	As above
988316	F	gs								450	6	270			370		x			4850N	"a" type - close to dolerite/creek
988317	S	A	0.6	Sand						370	250	300			500					4875N	Mid br sandy soil & in areas of fine shales & siltstones.
988318	S	A	0.7	B2						200	50	230			250					4900N	Mid brown clay & silt fragments
988319	F	gs								47	15	400			275		50			4900N	V. poorly sorted agglomerate orbreccia. Angular frags (rarely qz - distinct from previous breccio-conglo seen in the grid) - dominantly siltstone clasts in qz vein / hematite matrix
988320	o/c	gs								66	50	165			75		x			4920N	Typical "b" facies: fine int. vole.
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	Richochre-brown clays + frags weathered "a" type facies
988323	S	A	0.6	B						370	37	131			720					4975N	As above plus float of g'wacke & 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 = catchment t km²

613170

Central Mineralogical Services

39 Beulah Road
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Mr. I.M. Clementson
Geologist
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
ROSNY PARK / TAS. 7018

30th December, 1982

REPORT CMS 82/12/10

YOUR REFERENCE:	D.P.O. No. 30321
DATE RECEIVED:	10th December, 1982
SAMPLE NOS.:	4 Samples
SUBMITTED BY;	I.M. Clementson
WORK REQUESTED:	Petrology

H.W. Fander, M. Sc.

Copy to:
The Chief Geologist
C.R.A. Exploration Pty. Ltd.
G.P.O. Box 384D
MELBOURNE / VIC. 3001

Copy & Invoice to:
Administration Officer
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
ROSNY PARK / TAS. 7018

REPORT CMS 82/12/10

Four rock samples were received for thin-section preparation and petrological examination; offcuts were subjected to K-stain tests and were studied in conjunction with the thin-sections; brief descriptions are presented in the accompanying table.

Summary

988212 is an unusual rock consisting of relatively coarse quartz and feldspar fragments in a completely tourmalinised matrix (i.e. in which tourmaline has replaced all the original matrix and has marginally corroded the framework components). The framework grains are not abraded, or bedded, but several interpretations are possible regarding the rock's origin; it could have been a granite or phenocryst-rich porphyritic microgranite, or even volcanic, though this is considered less likely.

The other rocks are more clearly-defined, even if alteration has made precise classification difficult. 988225 is the most severely altered of the three, but is thought to have been an intermediate glassy tuff; such rocks are prone to deuteric alteration.

H.W. Fander, M. Sc.

CENTRAL MINERALOGICAL SERVICES

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	Comments
988212 (T.S. 44756) *	Tourmalinised Breccia. Mostly coarse fragments of orthoclase crystals with subordinate stressed quartz splinters, phenocrysts. Matrix of fine granular dark tourmaline.	Stressed, fractured, angular grains and cleavage fragments; replacive matrix.	Chlorite patches. Quartz veins. Small anatase crystals.	Origin uncertain. Could be a brecciated, then thoroughly tourmalinised, granite or felsic porphyry, or a volcanic breccia.
988214 *	Vitric Crystal Tuff. Large and small splinters and cleavage fragments of K-feldspar and quartz in matrix of small shards and pale chlorite.	Poorly-sized/sorted framework grains, vaguely bedded. Microfractured.	Sericite and quartz veinlets. Trace introduced tourmaline.	Clearly a tuff, probably subaerial, may have been welded, but textures obscured by pervasive chloritisation.
988225	Altered ?Vitric Tuff. Mostly small streaks and irregular patches of fine sericite-quartz (?altered glass fragments); introduced siderite, chlorite, abundant.	Fabric is fragmental, appears welded and possibly flow-banded.	Leucoxenised oxide opaques. Quartz and altered ?feldspar fragments.	Extensive alteration precludes exact classification; possibly trachytic composition. Certainly volcanic, probably pyroclastic.
988247 (T.S. 44759)	Altered Porphyritic Rhyolite. Whole and flow-brecciated phenocrysts of inverted beta quartz, sericitised and carbonated albite, in fine devitrified groundmass of sericite and quartz.	Strongly flow-banded, especially around phenocrysts. Flow-fragmented phenocrysts.	Leucoxene pseudomorphs after oxide opaques.	Because groundmass is altered glass, its composition is not known and rock could range from rhyolite to rhyodacite (toscanite).
	* 988212 (Wilmot Cu Anomaly Line 4800E/4985N)			
	988214 (" " " " 4980N)			

613172

APPENDIX IV

GEOCHEMICAL SAMPLE SHEETS - STAVERTON PROSPECT

C.R.A EXPLORATION . GEOCHEMICAL SAMPLE LODGER

Tenement name SHEFFIELD E17/73 No. ..... Sample numbers 988348-988377 Collected by M.Brunker Sheet no. 1

Area / Prospect STANHERTON Date 17.12.82

Map / Photo reference LINE 400E Analysed by ANALABS DPO no 30323

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba			Grid ref 400E	Geological Observations
988348	S	A									35	185	100					1150			350N	
349	S	A									30	205	80					1250			325N	
350	S	A									30	205	85					820			300N	
351	S	A									25	55	65					780			275N	
352	S	A									10	40	60					800			250N	
353	S	A									15	105	165					830			225N	
354	S	A									50	1200	355					880			200N	
355	S	A									20	210	160					900			175N	
356	S	A									20	285	220					640			150N	
357	S	A									40	245	195					650			125N	
358	S	A									35	185	100					570			100N	
359	S	A									5	5	35					590			075N	
360	S	A									10	40	45					550			050N	
361	S	A									5	10	20					620			025N	
362	S	A									X	X	20					350			000N	

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

** Stream sed sample description fl = flow m3/sec w = width m

613175

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LODGER

Tenement name SHEFFIELD EL7173 No. ..... Sample numbers 988348-988377 Collected by M.Brooks Sheet no. 2

Area / Prospect STANNERTON Date 17.12.82

Map / Photo reference LINE 300E Analysed by AMDLABS DPO no. 30323

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ba			Grid ref	Geological Observations
988363	S	A	0.4	B/C							5	5	45					550			000N	
364	S	A	0.8	B/C							5	20	25					800			025N	
365	S	A	0.5	B							20	10	80					630			050N	
366	o/c	gs									10	40	45					690			075N	Ferruginous, cumous, sericitic schist.
367	S	A	0.4	B							5	15	45					730			075N	
368	S	A	0.4	B							10	35	110					810			100N	
369	S	A	0.4	B							10	30	75					1100			125N	
370	S	A	0.5	B							30	105	110					670			150N	
371	S	A	0.6	B							15	100	110					580			175N	
372	S	A	0.8	B							20	70	125					600			200N	
373	S	A	0.6	B							20	75	100					560			225N	
374	S	A	0.5	B							10	15	55					520			250N	
375	S	A	0.5	B							55	370	105					720			275N	
376	S	A	0.4	B							75	30	135					1000			300N	
377	S	A	0.2	A/B							165	120	145					950			325N	

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

** S

613176

3

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name EL 7/73 No. ... Sample numbers ... Collec. by J Conner Sheet no. 1/19

Area / Prospect STAVERTON Date DEC 1980

Map / Photo reference ... Analysed by Enclorp DPO no. 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
816901	f										3	12	139	<1							1200E 22N	fg schist - sericitic
902	o/c										5	14	35	<1							69N	mg schist Rite clasts mod ferruginous
903	o/c										7	9	12	<1							75N	fg schist Red ferruginous
904	o/c										4	13	11	<1							105N	fg schist - sericitic
905	f										9	12	29	<1							95N	fg schist - sericitic with shale clasts
906	o/c										5	8	29	<1							150N	fg schist ?Rite clasts yellow ferruginous
907	o/c										5	13	144	<1							185N	fg schist red ferruginous
908	o/c										2	12	120	1							225N	fg schist - sericitic
909	f										1	9	91	<1							230N	mg schist - Qtz-sericite with 3cm clast (?rhyolite)
910	f										1	10	78	<1							280N	fg schist sericitic slight ferruginous
911	f										2	9	50	<1							290N	fg schist qtz-sericitic, mod qtz.
912	f										21	94	21	<1							330N	vfg tuff shale/slate - 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 km2

613177

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name EL 7/73 No. Sample numbers Collec. by J. Cowper Sheet no. 2

Area / Prospect STANBARTON Date DEC 180

Map / Photo reference Analysed by ZincCorp DPO no. 26477

A 02143

Sample No.	Type (ss * / oc / f / s)	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
8/6 913	f										6	8	40	<1				1200E	
																		30$	f-mg schist - sericitic, minor Qtz, sl ferrug.
914	f										12	6	67	<1				55$	fg tuff/shale/siltstone sl ferrug.
915	f										6	6	19	<1				125$	v/fg tuff/shale/slate - mod. sl sericitic
916	f										14	26	45	<1				75$	fg schist & v/fg tuff/shale. sl ferrug.
917	f										7	18	15	<1				175$	fg schist red, mod ferrug.
918	f										8	10	2	<1				200$	fg-v/fg schist - sericitic
919	o/c										5	11	45	<1				230$	fg-v/fg schist sericitic
920	o/c										4	19	112	<1				250$	as above
921	f										77	210	10	<1				255$	as above limonitic clasts in foliation.
—	f																	300$	mg schist - Qtz-sericite
—	f																	325$	mg schist - Qtz-sericite
—	o/c																	326$	mg-cg Qtz sericite
—	o/c																	340$	mg Qtz sericite sl ferrug.

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

613178

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name EL 7/73 No. ..... Sample numbers ..... Collec. by J. Cooper Sheet no. 3

Area / Prospect STAVERTON Date Dec '80

Map / Photo reference ..... Analysed by Zinc Corp DPO no. 26477

A 02143

Sample No.	Type (ss * oc f s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
		o/c sample type ***														1980E	
916 920	o/c								19	24	108	<1				300S	fg schist sericitic
923	f								10	27	129	<1				200-225S	fg schist ferruginous.
924	o/c								4	12	16	<1				175S	as above ferruginous
925	f								5	10	12	<1				150S	as above v.cl ferruginous.
926	f								28	13	64	<1				75S	as above limonitic, minor Qtz.
927	f								8	19	28	<1				25-50N	as above / mod ferruginous, minor Qtz
928	f								5	10	34	<1				50-75N	as above
929	f								11	12	20	<1				75-100N	as above, and v/fg sericitic hyd shale
931	o/c								1	4	3	<1				125N	fg schist - sericitic minor Qtz.
930	o/c								3	6	10	<1				115N	mg schist - Q-sericite with Qtz veinlets/ phen v/fg hyd shale - sericitic
932	f								2	7	37	<1				125-150N	f-mg schist - sericitic vnr Q-stringers
933	f								1	6	48	<1				150-175N	f-mg schist sericitic - interbed clasts.
934	f								7	7	65	<1				175-200N	fg schist sericitic — vnr Q-sericitic schist
935	f								28	7	40	<1				200-225	v/fg hyd shale sericitic phen fg. sericitic schist)
936	f								7	20	27	<1				225N	f-mg Qtz sericitic schist
937	f								37	10	70	<1				250-275N	fg sericitic schist v. ferrug
—																"	v/fg hyd shale-sericitic

613179

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD E.L. 7/73 Sample numbers Collec. by J. COUPER Sheet no. 4

Area / Prospect STAVERTON Date DEC 80

Map / Photo reference Analysed by ZINC CORP. DPO no 26477

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																		1000E	
816938	f										8	14	130	<1				200-275S	fg sericitic schist - mod ferruginous.
939	f										15	17	80	<1				225-250S	fg schist red ferruginous.
940	f										18	23	102	<1				200-225S	fg sericitic schist - mod fg Q-sec schist
941	f										9	37	53	<1				175-200S	fg to aphanic pink red ferruginous.
942	f										15	24	50	<1				150-175S	v/fg sericitic shale blended.
943	f										6	10	23	<1				125-150S	fg - v/fg sericitic schist blended
944	f										23	80	480	<1				125S	fg schist limonitic
945	f										6	78	178	<1				125-120S	fg sericitic schist red/pink minor Qtz.
946	f										33	360	570	<1				120-100S	mg-fg. Qtz-sericitic schist possible fragmental (pink to red) small clasts.
947	f										8	470	72	<1				100-75S	m-cg Qtz-sericitic schist possible fragmental. (SI pink-red)
948	f										36	270	62	<1				50-25S	fg sericitic schist sil mnr/v mod red/ferrug.
949	f										1	16	7	<1				50-25S	mg Qtz-sericitic schist sl. ferrug.
950	oc										45	190	61	<1				25S-00N	m-cg Q-sericitic schist
951	f										44	82	67	<1				00-25N	fg sericitic schist red/ferruginous
952	f										8	25	6	<1				00-25N	mg Q-sericitic schist cf 816950

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

** Stream sediment description fl = flow m3/sec wi = width m

613180

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LODGER

Tenement name SHEFFIELD EL 7/78 Sample numbers Collec. by J. COUPER Sheet no. 5

Area / Prospect Date DEC 180

Map / Photo reference Analysed by Zinc Corp. DPO no 26477

A 02143

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
		o/c sample type ***														1000E	
816953	o/c								46	26	80	<1				25-50N	f-mg sericite schist, small clasts (quartz) limonitic
954	f								17	22	64	1				50-75N	fg schist gritty ferruginous red-yellow.
955	o/c								4	15	15	<1				75-100N	fg schist red ferruginous
956	o/c								5	12	26	<1				100-125N	m-fg schist sericitic mottled red/yellow/green.
957	o/c								6	46	88	<1				125-150N	fg sericitic schist pale green (limonitized)
958	f								5	13	29	<1				150-175	f-mg schist - var Qtz schist ferruginous.
959	f								11	40	53	<1				175-200N	as above : fg small clasts - limonitic
960	f								2	17	3	<1				175-200N	m-cg Qtz-sericite schist sl. ferrug.
961	o/c								36	400	132	<1				200-225N	fg schist ferruginous - dapped-yellow.
962	f								66	310	220	<1				225-250N	as above
963	f								25	250	118	<1				250-275N	as above
964	f								27	310	176	<1				275-300N	fg schist sl gritty - ferruginous.
																"	fg sericitic schist. limonitic pits
965	f								6	59	21	<1				330N	fg sericitic schist limonitic pits minor Qtz.
966	f								95	21	54	<1				375N	fg sericitic schist sl gritty.

* 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

613181

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/78 Sample numbers Collected by J. COUPER Sheet no. 6

Area / Prospect STANLEY Date DEC 80

Map / Photo reference Analysed by Zinc Corp. DPO no 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																		900E	
816967	of										15	25	38	<1				325S	fg Sericitic schist sl gritty, sl ferruginous
968	f										84	620	68	1				275-300S	V/fg sericitic shale sl ferruginous
969	f										23	85	26	<1				275-250S	fg sericitic schist ferrug, pink-red
970	f										10	14	58	1				250-225S	as above ferruginous
971	f										8	26	37	<1				200-225S	as above dark red
972	f										7	12	43	<1				175-200S	as above variably ferruginous
973	f										35	28	127	<1				150-175S	as above red ferruginous (var - gtzose - gritty)
974	f										3	2	9	<1				125-150S	f-mg Qtz-sericitic schist sl ferrug to bleached limonitic shale
975	f										9	200	58	<1				100-125S	V/fg Sericitic shale-schist, banded, ferrug large ferrug shale
976	f										69	360	168	1				50-75S	fg schist sl massive dark red ferruginous
977	f										95	190	115	<1				25-50S	fg schist as above red ferrug
978	f										95	550	270	<1				00-25S	as above variable red/yellow
979	o/c										130	340	210	<1				00-25N	as above limonite
980	f										32	78	10	<1				25-50N	mg Q-Sric schist and V/fg sericite - bleached
—	f																	50-75N	fg sericite schist red/pink - limonite pisolitic
981	f										32	190	6	<1				75-100N	mg Q-sitic schist (pink) weathered limonite
982	f										10	23	7	<1				100-125N	mg as above limonite
983	f.										28	180	31	<1				125-150N	fg schist ferrug. & mg Q-sericite schist

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

613182

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7193 Sample numbers Collected by J. COUTTAR Sheet no. 7

Area / Prospect STOURTON. Date DEC 80

Map / Photo reference Analysed by Zinc Corp. DPO no 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type ***; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
											BOOE	
816984	f			5	10	133	1				300S	fg Src schist sl qtz. vn foreground.
985	f			4	9	31	<1				275S	as above
986	o/c			10	8	25	<1				260S	V/fg. Sericitic slate - bleached
987	f			5	13	32	<1				275S	fg-v/fg src schist mod ferrug
988	f			6	390	22	<1				280S	fg Src schist sl gritty mod ferrug.
989	f			5	14	20	<1				175S	fg Src schist bleached
990	f			8	85	40	<1				125S	V/fg Src clast-schist, bleached, lox clasts.
991	f			17	1600	112	<1				125S	mg Qtz-Src schist mod ferrug.
992	f			6	640	66	<1				125S	mg Q-felspar schist ferrug & bleached
993	o/c			5	9	5	<1				100S	V/fg. Src slate (bleached)
994	f			29	45	81	<1				75S	V/fg Src slate - tuffaceous slate.
—	f										"	mg Q-Src schist
995	o/c			19	8	93	1				60S	fg Src schist sl frosted.
996	o/c			19	8	13	<1				60S	V/fg Src slate - weathered
997	f			55	3900	1800	3				00N	LIMONITE - goethite to massive brown/yellow
998	o/c			6	38	18	<1				00N	fg Src schist - minor Q. pale
999	f			31	9100	380	2				0-25N	fg Src schist & Q Src schist sl ferrug-limo.
817000	f			6	90	360	<1				25-50N	fg schist ferruginous - limonitic

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

** Sample material

613183

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL 7/73 ..... Sample numbers ..... Collected by: J. COUPER ..... Sheet no. 8

Area / Prospect: STAVERTON ..... Date: DEC '80

Map / Photo reference ..... Analysed by: Zinc Corp ..... DPO no. 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
																					800E	
816554	f										58	36	143	1							50 N	limonite - massive to earthy.
555	f										5	830	91	<1							50 N	fg src schist var Q-src schist
556	f										160	780	260	<1							75-100N	as above - limonitic
557	o/c										22	19	23	<1							100-125N	as above - limonitic
558	f										4	15	50	<1							125-150N	as above dark ferruginous.
559	f										5	7	27	<1							150-175N	m-fg Q-src schist sl lim.
560	f										4	7	22	<1							175-200N	mg Q-vitric schist - dark.
561	f										4	8	56	<1							200-225N	mg Q-Vitric semi schist dark
562	f										13	360	490	<1							225-250N	f-mg sericitic schist sl fg.
563	f										3	11	64	<1							300-315N	f-mg Q-src schist mod lim.
564	f										2	9	32	<1							325N	fg-mg Q-src schist mod lim.
565	f										4	56	40	<1							375N	fg src schist sl lim.

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

613184

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 Sample numbers Collected by V. COUPER Sheet no. 9

Area / Prospect STANLEY TON Date Dec '80

Map / Photo reference Analysed by Zinc Corp DPO no. 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
																				700E.	
—	o/c																			250-275N	mg Qtz Sericite schist - fresh
816886	o/c									3	6	21	<1							225-250N	mg Qtz-Sric schist rel foliation. diff
887	f									7	11	30	<1							200-225N	mg Qtz-Sric schist var Sric schist mod foliation
888	f									3	14	38	<1							175-200N	m-cg. Qtz-Sric schist sl fe.
889	f.									6	23	42	<1							150-175N	m-cg Qtz-felspar schist
—																				125-150N	mg Qtz-Sric schist sl fe.
890	o/c									2	5	7	<1							100-125N	m-fg Q-Sric schist (? clast)
891	f									3	12	28	<1							75-100N	as above.
892	f									21	3300	220	2							50-75N	as above.
—	f																			"	vfg Sric slate (bleached)
—	f																			25-50N	m-fg Qtz-Sric schist sl fe. sil patch.
893	f.									4	140	21	<1							0-25N	m-fg Qtz-Sric schist
894	f									6	19	168	<1							0-25N	mg Qtz-Sric schist
895	o/c									4	7	64	<1							25-50N	Vfg Sric-schist-slate
896	o/c									4	53	21	<1							75-100N	fg Sric schist
897	f									6	7	16	<1							100-125N	f-mg Sric schist var fg Qtz-Sric schist
898	f									2	5	8	<1							125-150N	fg Sric schist
899	f									3	8	4	<1							150-175N	fg Sric schist - var Qtz-Sric schist
816900	f									2	10	6	<1							175-200N	fg Qtz-Sric schist.

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

** Stream sed sample (A/N) ion fl = flow m3/sec wi = wi =

613185

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tènement name: SHEFFIELD EL 7/83 Sample numbers: Collected by: J. COUPER Sheet no.: 10

Area / Prospect: STANLEIGH Date: DEC '80

Map / Photo reference: Analysed by: Zinc Corp. DPO no: 26.4.77

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
																					600E	
B16846	o/c										2	9	18	<1							300-275S	mg Qtz-fsc schist sl limonitic
847	o/c										1	4	22	<1							275-250S	as above
848	o/c										1	4	20	<1							250-225S	as above
849	o/c										3	11	10	<1							225-200S	as above
850	o/c										2	4	4	<1							200-175S	m-fg fsc-Qtz schist
851	f										2	12	12	<1							150-125S	m-fg Qtz-fsc schist blended
852	o/c										<1	6	30	<1							125-100S	mg Qtz-fsc schist blended & limonitic
853	o/c										2	3	10	<1							100-75S	m-fg Qtz-fsc schist and fg. shale
B16854	o/c										2	6	18	<1							75-50S	m-fg Qtz-fsc schist sl limo.

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

613186

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 Sample numbers Collected by J. COOPER Sheet no. 11

Area / Prospect STANLTON Date DEC 80

Map / Photo reference Analysed by Zinc Corp DPO no 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
																					600E	
816877	f										3	320	35	<1							75-100N	Vfg Sericitic shale
878	f										3	130	1	<1							100-125N	as above limonite clots.
879	f										14	1210	75	1							125-150N	Vfg ? sericitic - siliceous - shaly.
880	f										35	47	80	<1							125-150N	fg Qz-sericite schist - Rock Lbd
"																					"	Vfg Sericitic schist.
881	f										140	1690	1300	<1							150-175N	LIMONITE - ammonium to earthy
882	f										48	130	166	<1							175-200N	mg Qz-sericite schist sl ferrug.
883	f										62	120	74	<1							200-225N	as above.
884	f										11	59	83	<1							225-250N	fg Qz-ser schist sel frags.
885	f.										81	860	780	<1							250-275N	mg Qz ser schist @ fg ser schist ? Carbonaceous material - reddish purple clots.

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

** Stream sediment [illegible]

613187

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/78 ..... Sample numbers ..... Collector J. COUPER ..... Sheet no. 12

Area / Prospect STAVERTON ..... Date DEC '80

Map / Photo reference ..... Analysed by ZINC CORP ..... DPO no. 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																		500E	
816077	o/c										12	30	93	<1				265S	mg Qtz-Seriate schist
078	o/c										13	26	83	<1				225S	as above
079	o/c										9	18	59	<1				200S	Qtz eye rhyolite mesonic-sl schistose.
080	f										7	20	37	<1				190S	mg Qtz-fsc schist
081	f										9	14	31	<1				175S	as above
082	f										6	16	39	<1				120S	as above
083	o/c										4	9	42	<1				70S	as above
084	o/c										3	15	16	<1				40S	Vfg-fg Seriate schist.
085	o/c										6	9	20	<1				00N	mg Qtz-Seriate schist sl ferrug.
086	f										6	6	40	<1				25N	m-cg Qtz-Seriate schist
087	f										4	8	30	<1				50N	mg Qtz-Seriate schist
088	f										7	9	48	<1				75N	mg as above
089	f										5	26	48	<1				100N	as above ? grilly
090	f										20	98	290	<1				125N	m-cg Qtz-fsc schist
091	o/c										9	330	41	<1				150N	Vfg Seriatic shale-schist
092	o/c										22	1220	350	<1				170N	fg Seriate schist - limonite shots & pits
093	o/c										39	800	580	<1				200N	m-fg Qtz-fsc schist
094	o/c										51	4000	2600	3				225N	fg fsc schist sl ferrug.
095	f										13	76	440	1				250N	as above sl limonitic
096	f										130	130	192	<1				275N	as above "
816097	f										46	54	370	<1				300N	as above limonite shots

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

** Stream sed sample de[illegible]

613188

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/73 Sample numbers Collected by J. COOPER Sheet no. 13

Area / Prospect STANLEY TON Date DEC 180

Map / Photo reference Analysed by Zinc Corp. DPO no 26477

A 02143

Sample No.	Type (ss * / oc / f / s)	ss channel ** (fl / wi / al / co / ca / pH)	Carbon	Metal content ppm or % (Cu / Pb / Zn / Ag / Mo / Mn / Au)	Grid ref	Geological Observations
					500E	
816098	o/c			3 / 13 / 61 / <1	325N	fg sericitic schist minor Qtz. limonitic
099	o/c			7 / 100 / 63 / <1	350N	as above
816100	f			8 / 18 / 49 / <1	350N	as above dark red/brown.

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

613189

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SHEFFIELD EL 7/73 Sample numbers: Collected by: V. COOPER Sheet no. 14

Area / Prospect: STAVERTON Date: DEC 1980

Map / Photo reference: Analysed by: ZINCORP DPO no: 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																		400E	
816855	o/c										2	2	4	<1				10N	mg Qtz-sericitic schist
856	o/c										2	4	2	<1				25N	as above
																		"	v/fg Src Shale-schist
857	o/c										2	1	3	<1				50N	mg Qtz-Src Schist
858	o/c										5	220	72	1				215N	fg Src schist
859	o/c										3	9	12	<1				225N	v-fg Q-Src schist
860	f										10	12	48	<1				260N	v-fg Src schist
861	f										7	15	48	<1				270N	V fg Src Shale
862	f										4	9	33	<1				263N	f mg Src schist ver Q-Src schist
863	o/c										10	1	3	<1				275N	m-cg Qtz-Vitric semi schist
864	f										21	40	61	<1				300N	as above
																			V fg. sericitic shale-shale (possible bedding)

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

613190

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LODGER

Tenement name: SHERWOOD EL 7/83 Sample numbers: Collected by: J. COOPER Sheet no. 15

Area / Prospect: STAVERTON Date: DEC 80

Map / Photo reference: Analysed by: ZINC COLP DPO no. 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																		300E	
866B65	f										2	11	22	<1				0-25N	mg Qtz-fsp schist sl foliated.
866	f										39	22	10	<1				25-50N	fg fsp schist ∅ V/fg stalk fossil cross.
867	f										12	51	98	<1				50-75N	V/fg fsp slate sl foliated.
868	o/c										2	20	102	<1				75-100N	fg fsp schist sl foliated
869	f										11	11	35	<1				100-125N	as above
870	o/c										28	29	21	<1				125-150N	V-fg Qtz-fsp schist ∅ fg fsp schist
871	o/c										6	57	17	<1				150-175N	mg Qtz-fsp schist
872	o/c										2	9	16	<1				200-225N	as above
	f.																	"	Massive qtz eye rhyolite (pink) slight altered
873	f										2	15	14	<1				225-250N	mg Qtz-Vitric schist slt sericitic
874	o/c										2	17	7	<1				250-275N	f-mg Qtz-sericitic schist sl foliated.
875	o/c										3	10	13	<1				275-300N	vf-fg Qtz-sericitic schist (pink)
876	f										25	46	52	<1				300-325N	fg sericitic schist vor fg Q-fsp bleached

* 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

613191

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SHEFFIELD E.L. 7/78 ..... Sample numbers ..... Collected by: J. COOPER ..... Sheet no. 16

Area / Prospect: STAUNTON

Date: DEC 1980

Map / Photo reference .....

Analysed by: ZINC CORP ..... DPO no. 26477

A 02143

Sample No.	Type (ss * / oc / f / s)	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																		100 E	
816834	f																	50-80N	mg Qtz-sericite schist sl foliated.
835	f										9	21	95	<1				320-340S	fg fsr schist gritty mod foliated.
836	f										7	68	85	<1				275-300S	fg fsr schist
837	f										7	62	114	<1				250-275S	fg arenaceous sl foliated.
838	f										3	180	85	<1				225-250S	fg arenaceous mod foliated.
839	o/c										8	140	37	<1				200-225S	fg-Vfg fsr schists
840	o/c										12	58	47	<1				175-200S	fg fsr schist limonitic clasts & gtzose
841	o/c										10	25	100	<1				150-175S	fg fsr schist mod foliated.
842	f										4	19	29	<1				125-150S	fg-Vfg fsr schist sl gtzose
843	f										10	60	29	<1				100-125S	fg fsr schist & gtzose
844	f										4	42	14	<1				100S	fg fsr schist sl foliated Qtz-fsr schist.
816845	f										6	19	85	<1				340-400S	fg fsr schist sl foliated minor fg Qtz-fsr schist

* 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

613192

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: SHEFFIELD EL 7/78 ..... Sample numbers ..... Collected by: V. COUPER ..... Sheet no. 17

Area / Prospect: STANLEY CK. ..... Date: DEC/80

Map / Photo reference ..... Analysed by: ZINC CORP ..... DPO no. 26477

A 02143

Sample No.	Type (ss * / oc / f / s)	ss channel ** (fl / wi / al / co / ca / pH)	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
													00N.	
816566	f					38	100	143	2				300-270E	Ferruginous massive red-purple ? goethite
567	f					5	20	52	<1				300-270E	fg fine schist sl fe
														? mg Qtz-fine schist
568	f					2	12	22	<1				250-220E	mg Qtz-fine schist bleached
														? fg fine schist
569	f					3	18	64	<1				325E	fg fine schist - var q-fine schist
570	f					3	140	23	<1				710E	mg Qtz-felspar ? Qtz-fine schist sl ferrug.
571	o/c					31	760	1520	2				763E	fg Ferruginous - deeply oxidised
572	o/c					70	870	940	1				802E	fg limonitic material.
573	o/c					5	40	30	<1				815E	fg fine schist sl limonitic
574	o/c					6	67	82	<1				876E	as above "
575	o/c					45	290	110	<1				830E	as above ferrug red/yellow.
576	o/c					97	200	270	<1				856E	fg Ferruginous - bleached
577	f					95	310	197	<1				920-930E	fg [illegible] schist deep red ferrug.
578	f o/c					27	200	18	<1				970E	fg schist red mottled ferrug.
579	f.					22	600	340	<1				1020E	mg Qtz-vitric schist (pink)

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

** Sieve ...

613193

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHEFFIELD EL 7/78 ..... Sample numbers ..... Collected by J. COUPER ..... Sheet no. 18

Area / Prospect STANLEY TOR ..... Date DEC/80

Map / Photo reference ..... Analysed by ZINC CORP ..... DPO no. 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type ***; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
											00N	
B16580	oc			13	5	3	<1				1030E	mg Qtz-felspar schist sl ferrug, mod alteration.
581	oc			8	150	25	<1				1040	fg src schist bleached
582	oc			7	11	59	<1				1150	fg src schist mottled.
583	oc			29	24	13	<1				1250	V/fg src slate-schist
584				9	58	110	<1				X3	fg src schist mod ferrug
585				6	63	42	<1				X4	V/fg src slate
586	f			6	9	22	<1				X6	V/fg src siltst sl ferrug.
587	f			8	37	18	<1				X9	fg src schist sl ferrug.
588	oc			8	9	59	<1				X9A	as above
589	oc			2	7	14	<1				X12B	mg Qtz src schist - felsh.
590	oc			13	13	36	<1				X12A	as above with limonitic clots and bands
591	oc			2	5	9	<1				X14	mg Qtz sericite schist
592	oc			2	12	9	<1				X11	m-cg Qtz-src schist (bleached) Var qtz eye volcanic
593	oc			3	4	10	<1				X18	mg Qtz-src schist
594	oc			12	32	42	<1				X5-X20	fg & V/fg schist/slate.
595	oc			130	470	90	<1				X20-21	fg src schist

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

** Stream sed... = float ...

613194

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name SHERFIELD EL 7/88 Sample numbers Collected by J. COUPER Sheet no. 19

Area / Prospect STANERTON Date DEC 1990

Map / Photo reference Analysed by ZINC CORP. DPO no. 26477

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
816596											4	30	32	<1							X20-21	Vfg feldsitic slate
597											29	8	22	<1							X21-22	fg src schist and porp.
598											4	14	11	<1							X24	as above
599											6	11	45	<1							X24-25	as above
816600											15	19	5	<1							X24-25	Vfg src slate & schist

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

** S[illegible]

613195

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers ..... Collector ..... Sheet no. 1 of 3

Area / Prospect STANLEIGH

Date 12/80

Map / Photo reference ..... Analysed by ZINC CORP. DPO no 26456

A 02143

Sample No.	Type ss * oc f s	~~ss channel~~ ** ~~di~~ ~~wi~~ ~~al~~ ~~co~~ ~~ca~~ ~~pbl~~ ~~o/c sample type ***~~ s sample type ****					Carbon	Metal content ppm ~~or %~~ Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
816651	S	a	·40	?c	DK BROWN			34	440	135	<1							600E.	250N.
652	"	"	·41	"	"			71	840	210	<1							"	225N
653	"	"	·60	"	"			21	400	96	<1							"	200N
654	"	"	·42	"	LT BROWN			46	130	94	<1							"	175N
655	"	"	·50	"	"	"		120	970	240	1			<0.04				"	150N.
656	"	"	·40	"	"	"		56	1140	108	2							"	125N
657	"	"	·40	"	DK BROWN.			7	200	72	1							"	100N.
658	"	"	·50	"	"	"		5	38	54	<1							"	75N
659	"	"	·40	"	"	"		4	37	33	1							"	50N.
660	"	"	·45	"	"	"		6	22	20	<1			<0.04				700E	200N
661	"	"	·38	"	"	"		7	19	19	<1							"	175N
662	"	"	·33	"	-	BROWN		3	7	9	<1							"	150N
663	"	"	·35	"	-	BLACK		2	80	15	<1							"	125N
664	"	"	·35	"	DK -	BROWN		3	6	11	<1							"	100N
665	"	"	·37	"	"	"		6	67	27	1			<0.04				"	75N
666	"	"	·67	"	"	"		110	970	124	1							"	50N
667	"	"	·40	"	"	"		5	95	42	<1							"	25N
668	"	"	·36	"	"	"		9	120	42	<1							"	00N
669	"	"	·60	"	RED -	BROWN		17	42	25	<1							800E	150N
670	"	"	·40	"	"	"		18	45	34	1			<0.04				"	125N
671	"	"	·60	"	CLAY -	BROWN		130	130	53	1							"	100N
672	"	"	·90	"	YEL -	BROWN		9	110	11	<1							"	75N
816673	"	"	·40	"	CLAY	BROWN		34	110	250	<1							"	50N

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

** Stream sed sample [illegible]

613196

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers ..... Collec by ..... Sheet no. 2 of 3

Area / Prospect STANLEY TON Date 12/80

Map / Photo reference ..... Analysed by ZINC CORP DPO no. 26456

A 02143

Sample No.	Type	~~ss channel~~ ** fl	wi	al	co	~~ss~~	~~pbl~~	~~o/c sample type **~~ s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
816674	S	a	.70	7C	RED	BROWN				25	240	67	1							800E	25N
675	"	"	.82	"		BROWN				58	1120	197	2			<0.04				"	00N
676	"	"	.55	"		"				14	110	174	<1							"	25S
677	"	"	.45	"		"				20	42	106	<1							"	50S
678	"	"	.50	"		"				17	110	69	<1							900E	300S
679	"	"	.55	"	RED	BROWN				6	18	13	<1							"	275S
680	"	"	.65	"	"	"				12	59	66	<1			0.05				"	250S
681	"	"	.70	"	"	"				12	39	42	<1							"	225S
682	"	"	.90	"	"	"				6	24	39	<1							"	200S
683	"	"	.90	"	"	"				5	20	32	<1							"	175S
684	"	"	.60	"	DK	BROWN				7	59	139	<1							"	150S
685	"	"	.50	"	"	"				7	73	47	<1			0.06				"	125S
686	"	"	.40	"		BROWN				86	540	240	1							"	100S
687	"	"	.60	"	RED	BROWN				150	540	240	1							"	75S
688	"	"	.50	"	DK	BROWN				97	160	71	1							"	50S
689	"	"	.35	"	"	"				57	500	77	<1							"	25S
690	"	"	.50	"	LT	BROWN				72	400	94	<1			<0.04				"	00N
691	"	"	.60	"	DK	BROWN				11	36	25	<1							1000E	50N
692	"	"	.45	"	LT	BROWN				23	30	34	<1							"	25N
693	"	"	.35	"		BLACK				13	120	58	<1							"	00N
694	"	"	.40	"	DK	BROWN				9	120	27	<1							"	25S
816 695	"	"	.90	"		BROWN				44	420	69	<1			<0.04				"	50S

* 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

613197

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers ..... Collec. by ..... Sheet no. 3 of 3

Area / Prospect STAVERTON ..... Date 12/80

Map / Photo reference ..... Analysed by ZINC CORP. DPO no. 26461

A 02143

Sample No.	Type	~~ss channel~~ fl	wi	al	co	ca	pH	~~o/c sample type~~ *** s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
B16696	S	a	.30	?C	DK	BROWN				16	350	95	1			<0.04				1000E	75S
697	"	"	.30	"	ORANGE	BROWN				29	2300	130	1							"	100S
698	"	"	.60	"	DK	BROWN				26	350	158	1			<0.04				"	125S
699	"	"	.50	"		BROWN				5	20	38	<1							"	150S
700	"	"	.35	"	RED	BROWN				13	38	56	1			<0.04				"	175S
B16740	"	"	.46	"	"	"				8	38	38	<1			<0.04				"	200S
741	"	"	.50	"	"	"				12	22	57	1							"	225S
742	"	"	.47	"	"	"				13	16	74	1			<0.04				"	250S
743	"	"	.40	"	OLG	BROWN				8	12	45	<1							"	275S
744	"	"	.70	"	"	L BROWN				2	6	19	<1			<0.04				"	300S
745	"	"	.42	"	RED	BROWN				9	9	18	<1							1100E	150S
746	"	"	.54	"		BROWN				8	14	29	<1			<0.04				"	125S
747	"	"	.46	"	DK	BROWN				8	20	14	<1							"	100S
748	"	"	.45	"	CHOC	BROWN				23	16	30	<1			<0.04				"	75S
749	"	"	.30	"	RED	BROWN				24	62	38	1							"	50S
750	"	"	.50	"	OR	BROWN				14	50	12	<1			<0.04				"	25S
751	"	"	.83	"	RED	BROWN				31	45	25	1							"	00N
752	"	"	.40	"		BROWN				12	18	17	1			<0.04				"	25N
753	"	"	.34	"	RED	BROWN				9	14	12	<1							"	50N
754	"	"	.40	"	YEL-L	BROWN				14	12	8	1			<004				"	75N
755	"	"	.32	"	RED	BROWN				15	16	26	1							"	100N
756	"	"	.50	"	DK	BROWN				17	11	34	1			<0.04				"	125N
B16757	"	"	.44	"	"	"				14	12	34	1							"	150N

* 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

APPENDIX V

STAVERTON I.P. SURVEY BY M.F.FLIS

613199

C.R.A. EXPLORATION PTY. LIMITED
(INC. IN N.S.W.)
54 RAGLAN STREET, PRESTON, VICTORIA 3072, AUSTRALIA

P.O. BOX 99
NORTHLAND CENTRE 3072
TELEGRAMS CRAEX
TELEX AA37474
TELEPHONE 480 5866
AREA CODE 03
IN REPLY PLEASE QUOTE

July 7, 1980

MEMORANDUM TO : J.G. PURVIS

COPIES : R.L. BRUNKER
R.J. SMITH

FROM : M.F. FLIS

STAVERTON IP SURVEY

INTRODUCTION

An induced polarization survey was carried out in June 1980 on the Staverton grid. The survey was designed to test promising Pb-Zn geochem anomalies and to define previously obtained gradient IP anomalies (refer to CRAE 9067). The target was presumed to be massive sulphides.

Geoterrex was contracted to undertake the survey; supplying a three-man crew, a 1.5 KVa Elliot transmitter and a Scintrex IPR-7 receiver. A dipole-dipole spread of 25 m was used initially, but was changed to 50 m dipoles when it was felt that penetration was not sufficient. An average of one spread was completed per day - the large spread size (nine or eleven electrode spreads instead of the usual seven), noisy conditions and awkward terrain contributing to this slow production rate. All pseudo-sections are included in this report.

DISCUSSION

The area has had a reputation of being a noisy environment for IP surveys. This problem was added to by unusually dry weather conditions and unique ground characteristics; being evidenced by both highly resistive and highly chargeable overburden. The latter problem diminished uphill from the lake's edge. The high resistivities probably result from the accumulation of desalinated soils whilst the high chargeabilities may be due to surface manganese concentrates (R.J. Smith, pers.com.).

A further point which must be noted is the effects of topography and geologic noise. Whilst topographical effects can, at this stage, only be guessed at, major sources of geologic noise were obvious - e.g. the chargeability lows associated with either weathered rock or accumulated sediments along the creeks such as witnessed on line 400 E at 175 - 200 m N.

A line by line interpretation follows:

Line 100 E (25 m dipoles)

This line was designed to cover a strong manganese geochem anomaly and a weak lead anomaly. The section exhibits almost uniform resistivities and chargeabilities, with the exception of the chargeability low centred around the creek at 125 S and the high surface chargeabilities probably due to the manganese concentration.

Line 300 E (25 m dipoles)

Designed to test the westerly extension of the Pb-Zn geochem anomaly. The line shows a very weak decrease in resistivity at 180 N. Chargeabilities are obscured by high surface chargeabilities and the low centred on the creek at 240 N.

Line 400 E (25 m dipoles)

The resistivity low encountered on the previous line has strengthened and split into two distinct units centred on 120 N and 240 N. A slight increase in chargeability is coincident with the latter low, however it can only be graded as a possible anomaly. The chargeability low centred on the creek at 180 N continues.

Line 500 E (25 m dipoles, 25 N to 350 N)

The above resistivity low is breaking up with a remnant still remaining at 250 N. Although this is coincident with high Pb values no chargeability high exists. Any high which might have been present is obscured by the chargeability lows centred on the creeks at 125 N and 365 N. The gradient IP traverse exhibited a similar low amplitude resistivity low with no chargeability high association.

Line 500 E (50 m dipoles, 250 S to 350 N)

Designed to test the gradient IP anomaly at 175 S this line showed no appreciably conductive body; in fact only background values are obvious with a slight resistivity low at 100 S. A zone of low-amplitude chargeability highs is consistent with geochem data (disseminated Pb-Zn).

Line 600 E (25 m dipoles)

A weak definite anomaly, labelled A, is apparent at 150 N. This anomaly is caused by a shallow body (around 20 to 30 metres deep). Possibly a weak resistivity low is associated with it, but is by no means significant. It is coincident with high Pb and Zn values.

Line 700 E (25 m dipoles)

Anomaly A continues on this line although it is now less discrete and forms a broader zone of deeper dissemination. The zone, from 50 N to 175 N has an associated resistivity low at 00 to 75 N but not elsewhere. As usual, complications from the creek at 25 N effect the cleanliness of this anomaly.

Line 800 E (25 m dipoles)

Anomaly A breaks up into a broader zone continuing from 25 S to 100 N and associated with slightly elevated chargeabilities and depressed resistivities.

Line 900 E (25 m dipoles)

An increase in chargeability from 125 S to 50 N marks out the development of a second major zone of disseminated mineralization (zone B). Resistivities remain unimpressive except for an 80% decrease at 235 S where a shallow body is indicated. No chargeability high is associated with this low although it may be suppressed by the chargeability low centred on the creek at 150 S. The gradient IP mapped out a similar anomaly at this location (showing a 50% drop in resistivity and a 55% rise in chargeability). A manganese geochem anomaly is located at this position.

Line 1000 E (25 m dipoles)

Anomaly B develops into a more distinct anomaly here centred on 25 S to 50S; a weak resistivity low is present. The strong resistivity low seen at 235 S on 900 E continues here at 215 S. A low amplitude, possible anomaly, exists at 175 N to 200 N but appears to be associated with mapped limonite occurrences.

Line 1000 E (50 m dipoles)

Measured to test anomaly B this line reveals the body to be a poor conductor of only weak chargeability.

Line 1100 E (50 m dipoles)

Anomaly B continues at 00 but is becoming weaker. Only a slight resistivity low is associated with it.

CONCLUSION

Survey results were very disappointing. Chargeability and resistivity axis tended to reflect lithological trends and, not surprisingly, mapped pyritic, limonitic and sulphidic concentrations. In addition, all lines exhibited large interference effects from both topography and overburden.

Anomalous zones were found to be attributable to areas of high geochem values. Anomalies A and B plot along the axis of both lead and copper geochem anomalies and, to a lesser extent, the zinc anomaly. The IP anomalies indicate a disseminated source and I would conclude that the area contains rocks high in Pb-Zn but not in a concentrated form. The area surveyed does not appear to contain any attractive conductors, however, keeping in mind that a sphalerite body may be present we must be careful in the downgrading of the area.

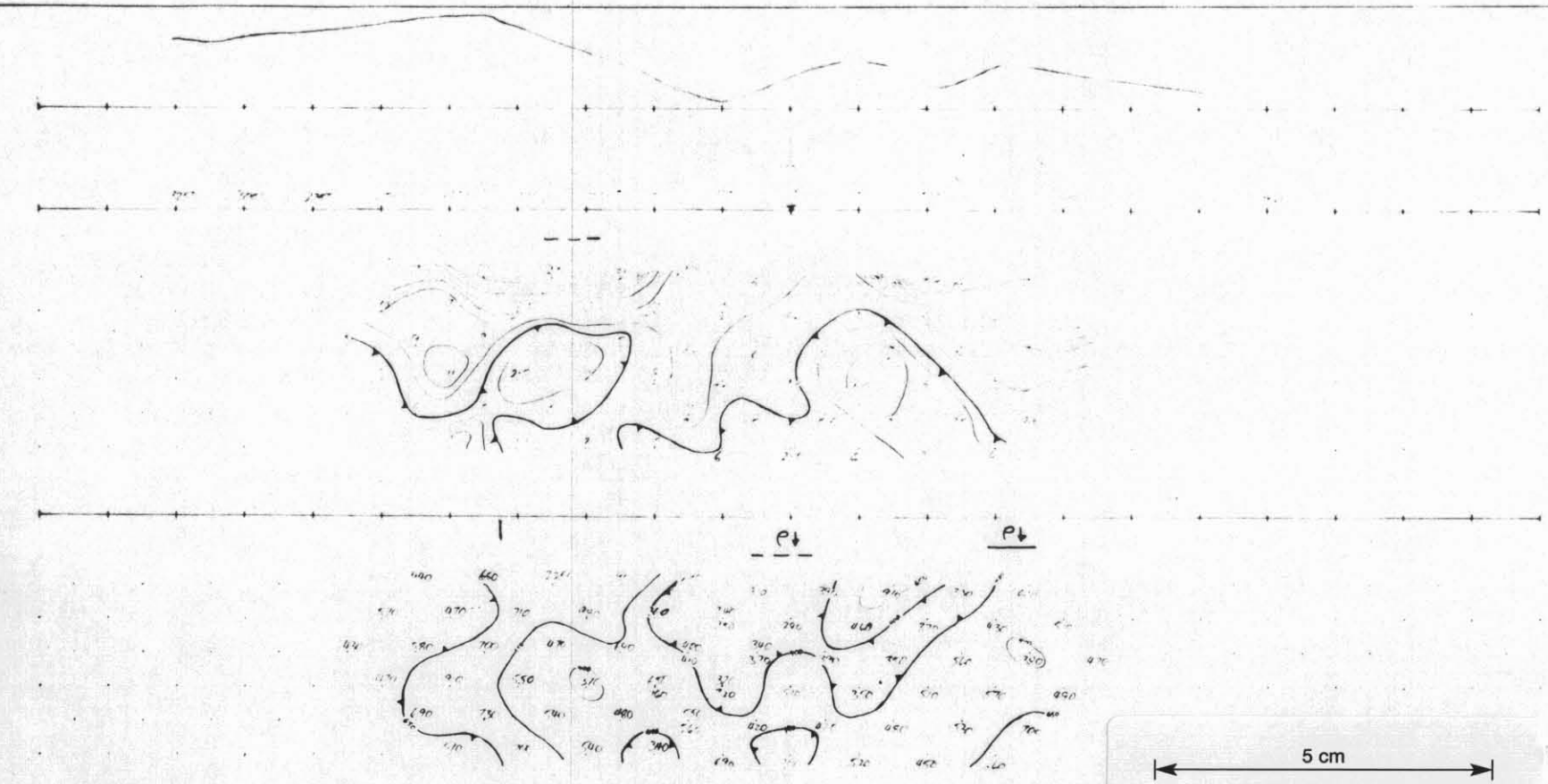
All major anomalies of the previous gradient array IP survey were reproduced and better defined; none have been upgraded.

RECOMMENDATIONS

The area contains no drillable targets. At the most, I would recommend shallow exploration in the form of further fill-in geochem sampling and costeaning of the more interesting areas outlined by this survey. In particular, geochem should be carried out over the two zones outlined (A and B); i.e. on 600 E between 100 N to 200 N, on 700 E between 00 and 175 N, on 800 E between 50 S and 125 N, on 900 E between 300 S and 00, on 900 E between 300 S and 25 N and on 1100 E between 150 S and 150 N. In addition, deeper sampling (costeans or jacro) should be carried out on 600 E at 150 N, and on 900 E at 235 N.

As a ground magnetic survey is sufficiently cheap to carry out as a matter of routine, I suggest this grid be covered. A twenty five metre station spacing should be sufficient to indicate any major body.

MARCUS FLIS



Transmitter type	Elliot 15 KVa
Timing sequence	2 sec on / 2 sec off
Receiver type	Scintrex IPR-7
Integration time	450 To 1100 m SECS
I.P. measured over one current cycle	

geoterrex limited

C. P. A. EXPLORATION

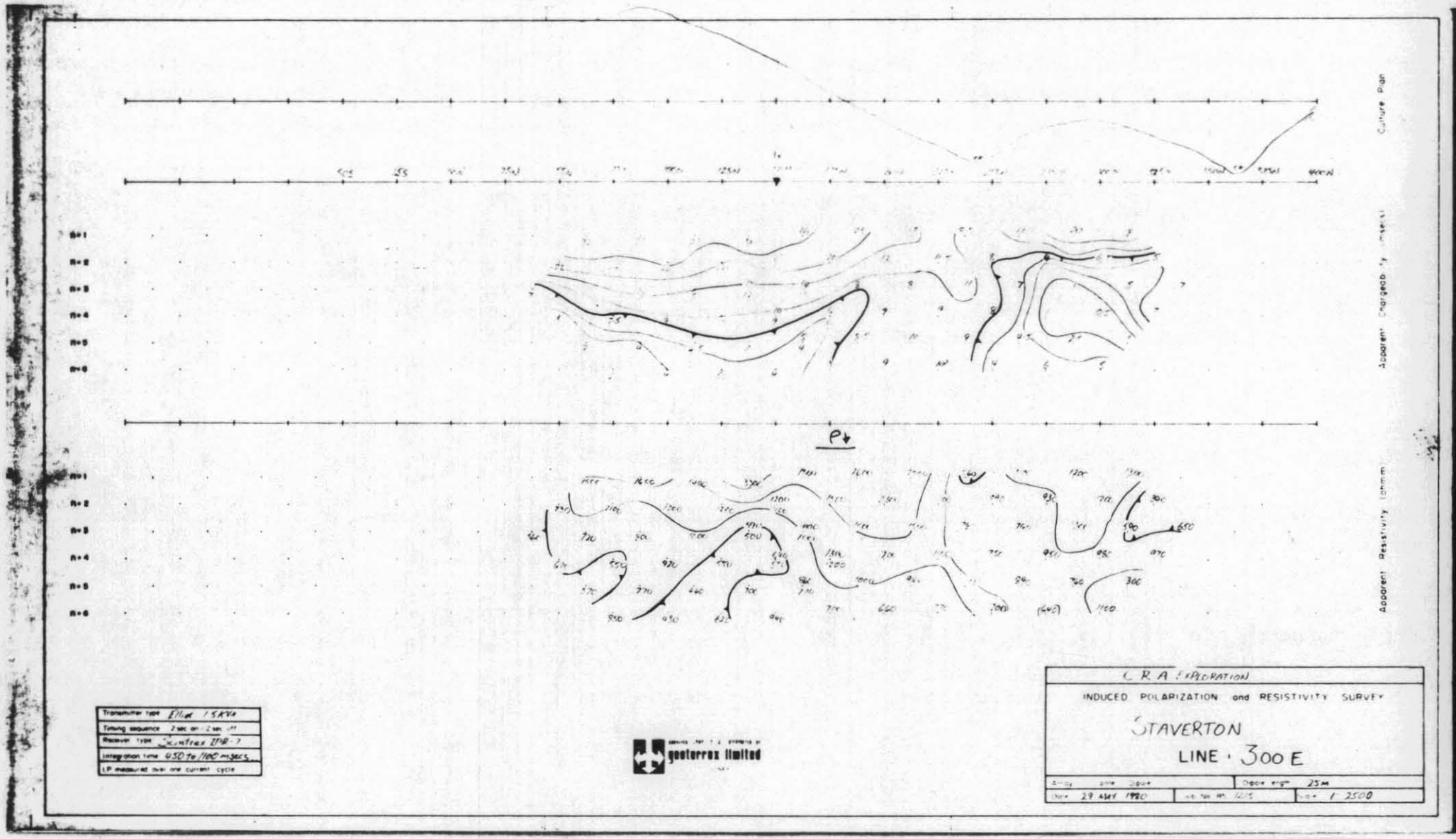
INDUCED POLARIZATION and RESISTIVITY SURVEY

STAVERTON PROSPECT

LINE : 100E

Array	Dipole Dipole	Dipole length	25m
Date	28th, May 1980	Job No.	B5-12/5
Scale	1 / 2500		

6132204



Transmitter type	Elliot 1.5KVA
Timing sequence	2 sec on : 2 sec off
Receiver type	Scintrex IPR-7
Integration time	450 to 1100 msecs.
I.P. measured over one current cycle	

geoterrex limited

C.R.A. EXPLORATION

INDUCED POLARIZATION and RESISTIVITY SURVEY

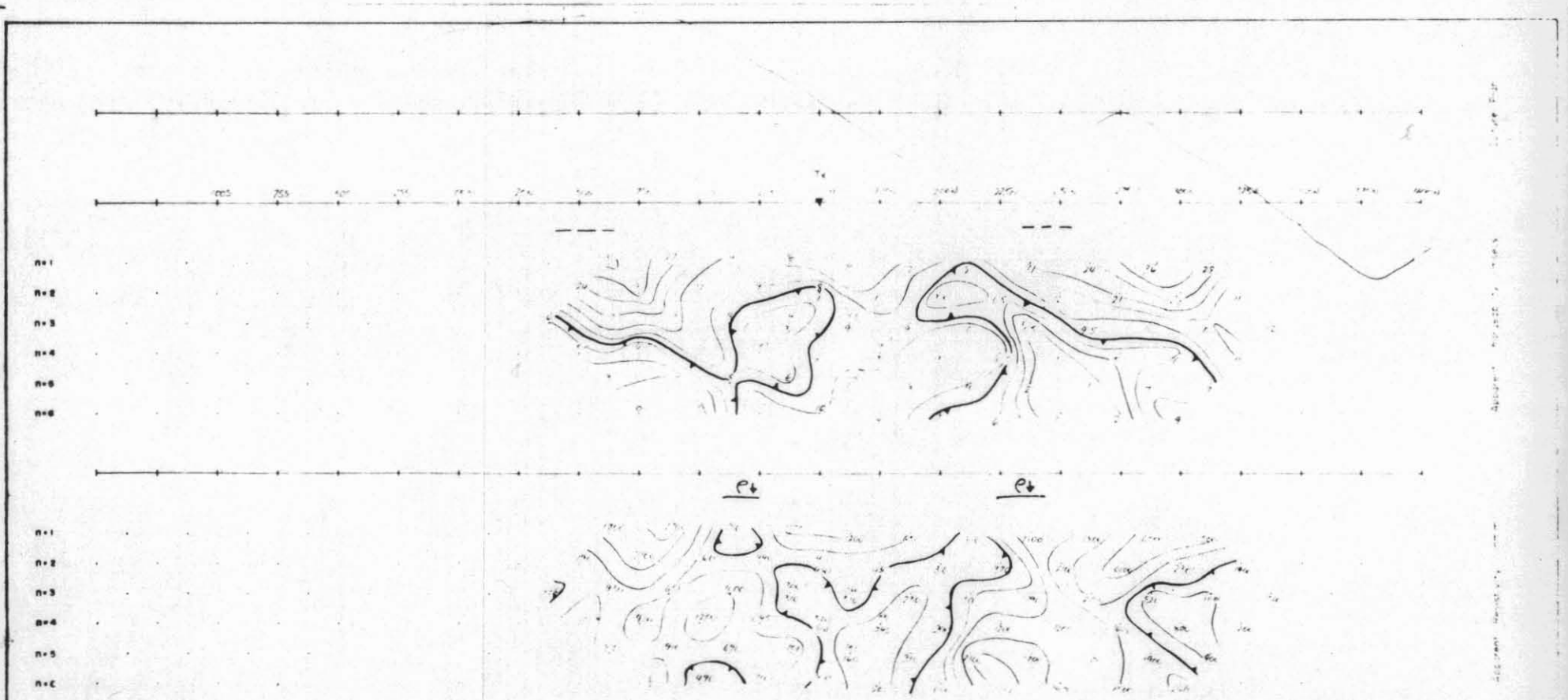
STAVERTON

LINE · 300 E

Array	Date	Depth origin 25M
Date 29 MAY 1980	Job No. 80-5	Scale 1:2500

5 cm

613205



Transmitter type	Elliot 15 KVA
Timing sequence	2 sec on / 2 sec off
Receiver type	Scintrex IPR-7
Integration time	450 to 1100 msecs.
I.P measured over one current cycle	

5 cm

geoterrex limited

JASU 1225

EXPLORATION

INDUCED POLARIZATION and RESISTIVITY SURVEY

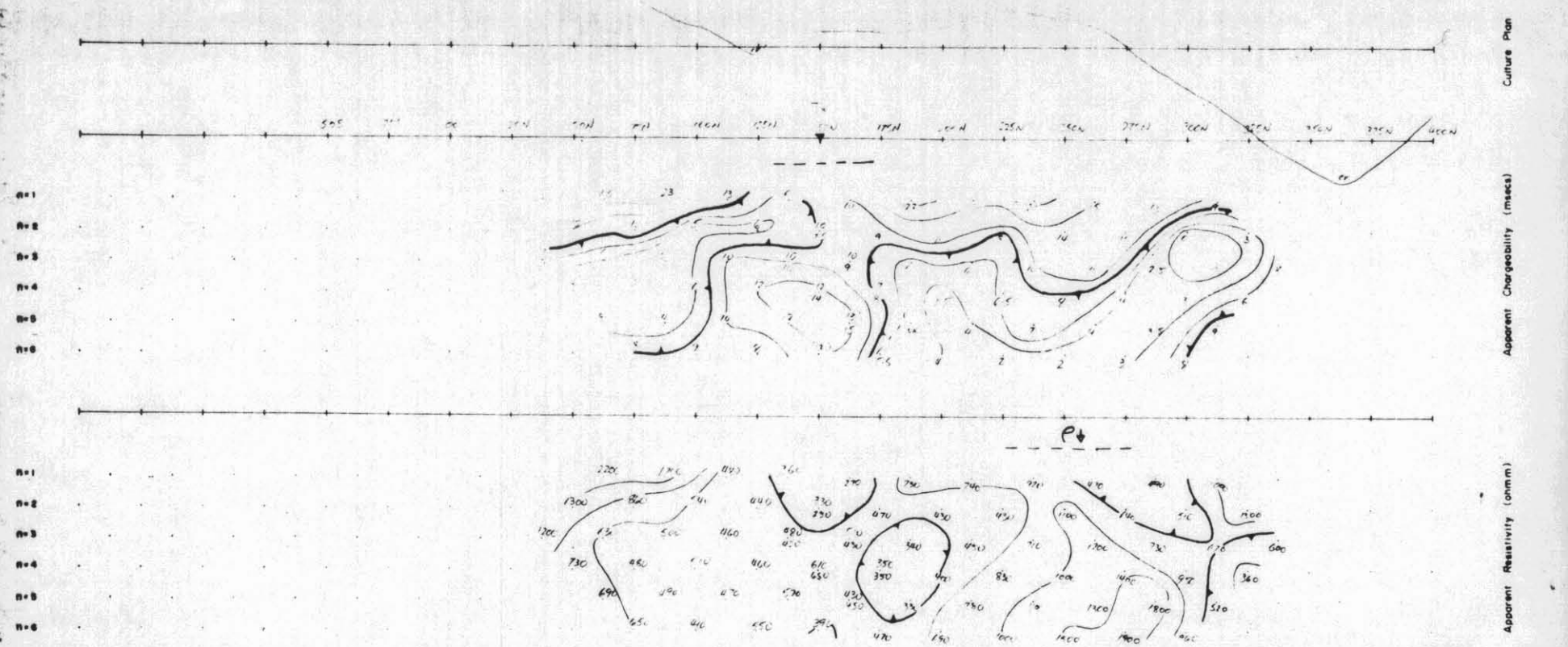
STAVERTON

LINE : 400E

25m

1 : 2500

613206



Transmitter type	Elliot 15 KVA
Timing sequence	2 sec on / 2 sec off
Receiver type	Scintrex IPR-7
Integration time	450 to 1100 msecs
I.P. measured over one current cycle per	1/4

5 cm

geoterrex limited

C R A EXPLORATION

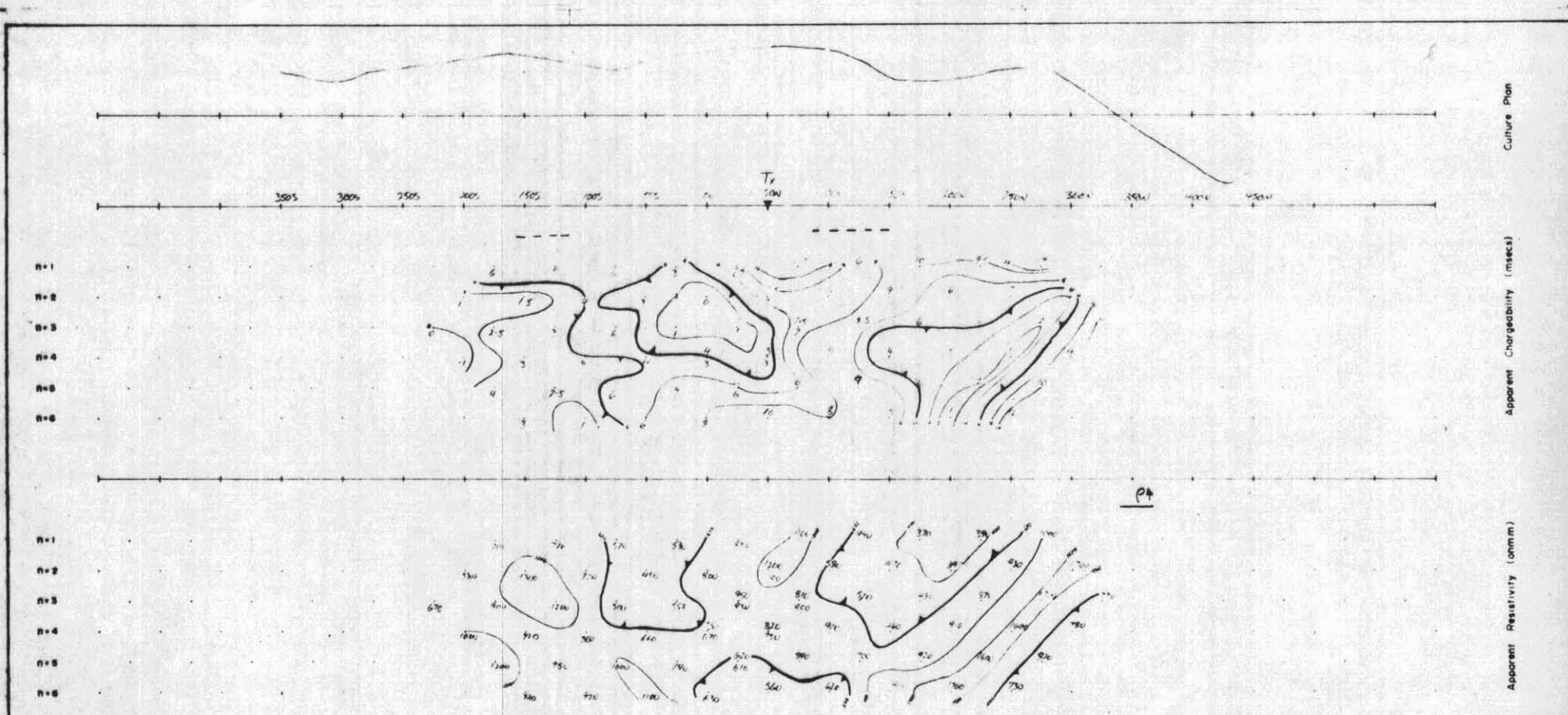
INDUCED POLARIZATION and RESISTIVITY SURVEY

STAVERTON

LINE : 500 E

Array: Dipole-Dipole		Dipole length: 25m	
Date: 4th JUNE 1980	Job No: 85-1215	Scale: 1:2500	

61320



Transmitter type	Elliot 15 KVA
Timing sequence	2 sec on / 2 sec off
Receiver type	Scintrex IPR-7
Integration time	950 to 1100 msecs
I.P measured over one current	pulse

5 cm

geoterrex limited

I.P. A. EXPLORATION

INDUCED POLARIZATION and RESISTIVITY SURVEY

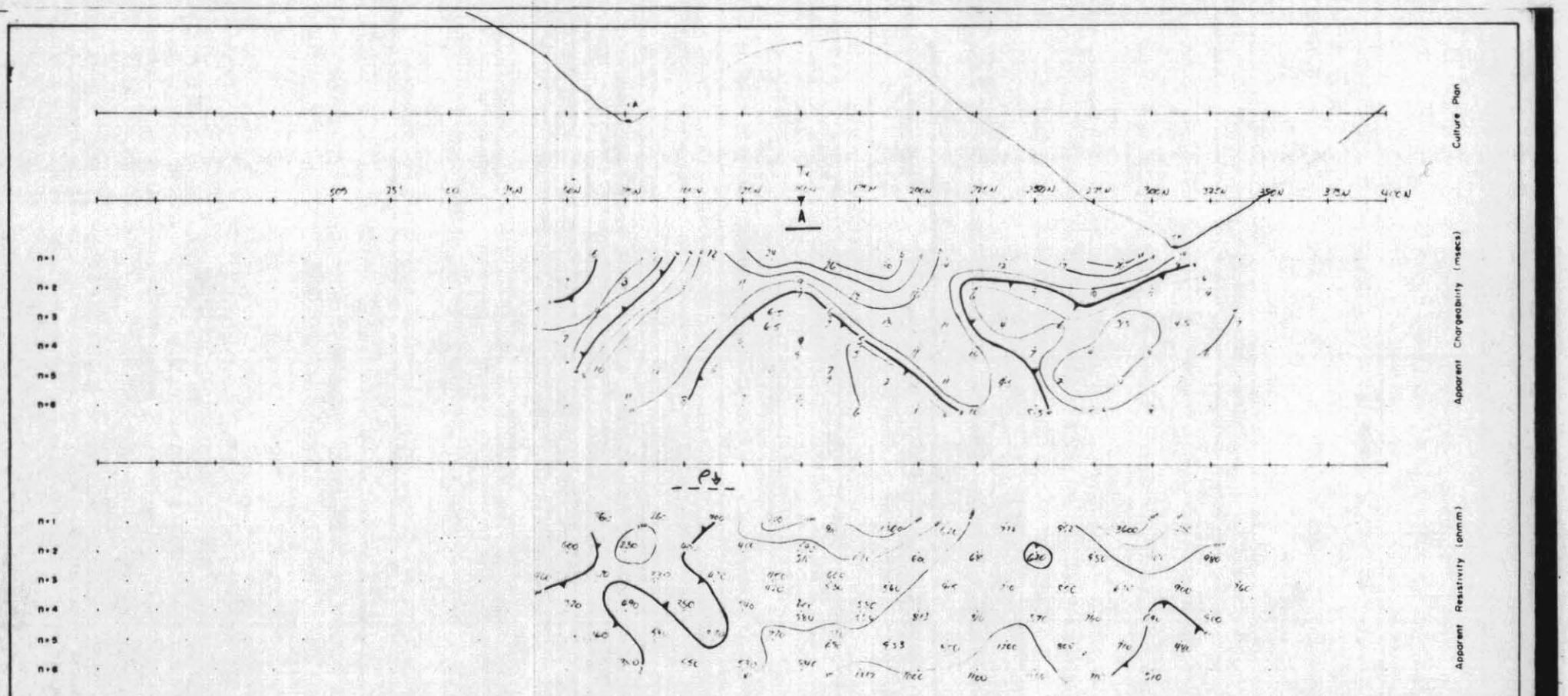
STAVERTON

LINE : 500E

Dipole ength 50m

Scale 1/2500

613208



TASH 1234

C R A EXPLORATION

INDUCED POLARIZATION and RESISTIVITY SURVEY

STAVERTON

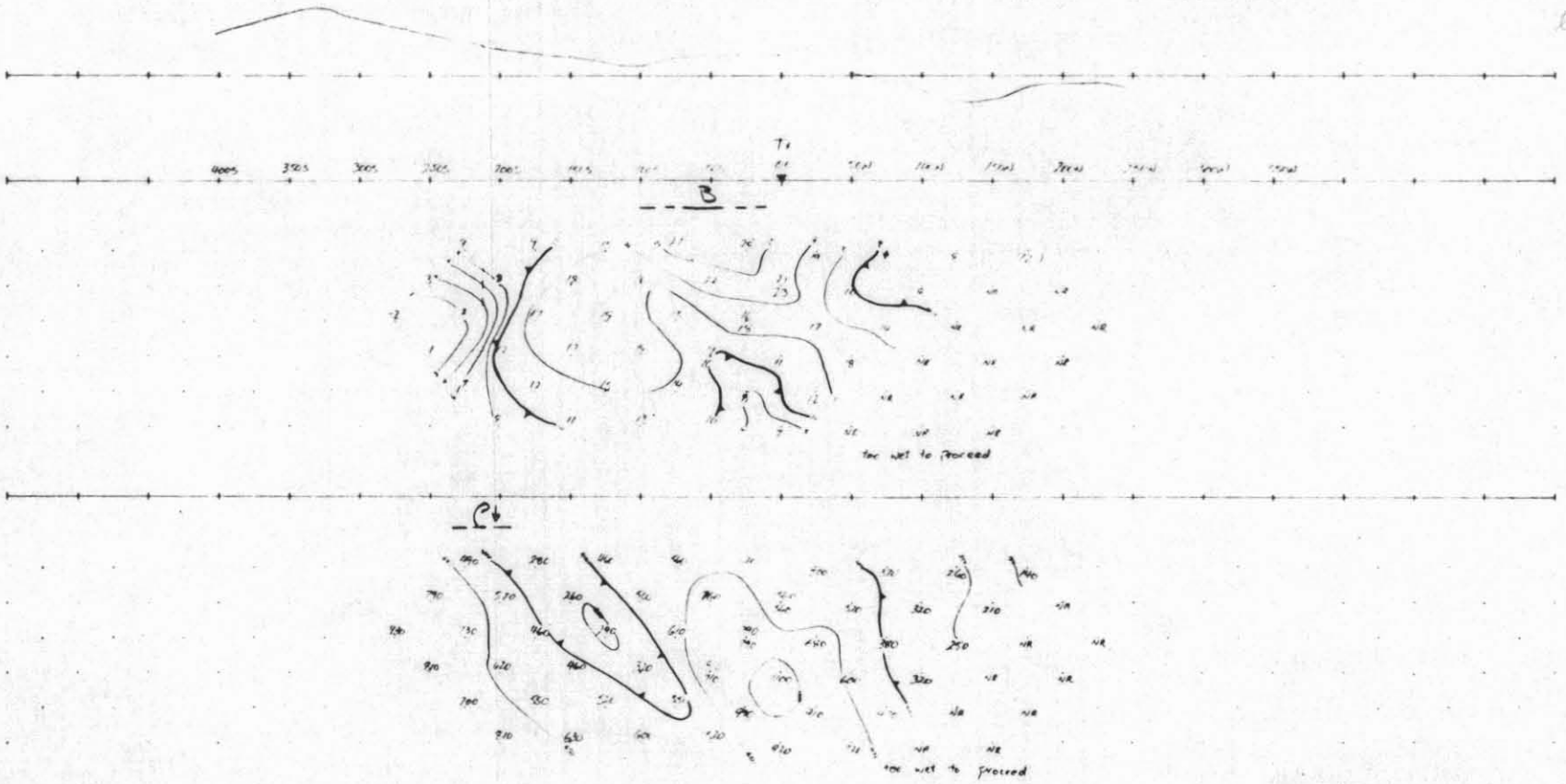
LINE : 600E

Dipole angle 25m

Scale 1 : 2500

geoterrex limited

6132O9



ASN 1236

CRA EXPLORATION

INDUCED POLARIZATION and RESISTIVITY SURVEY

STAVERTON

LINE : 1000E

Transmitter type	
Timing sequence	
Receiver type	Scintrex IPR-7
Integration time	450 to 1100 msecs
I.P. measured over	pulse

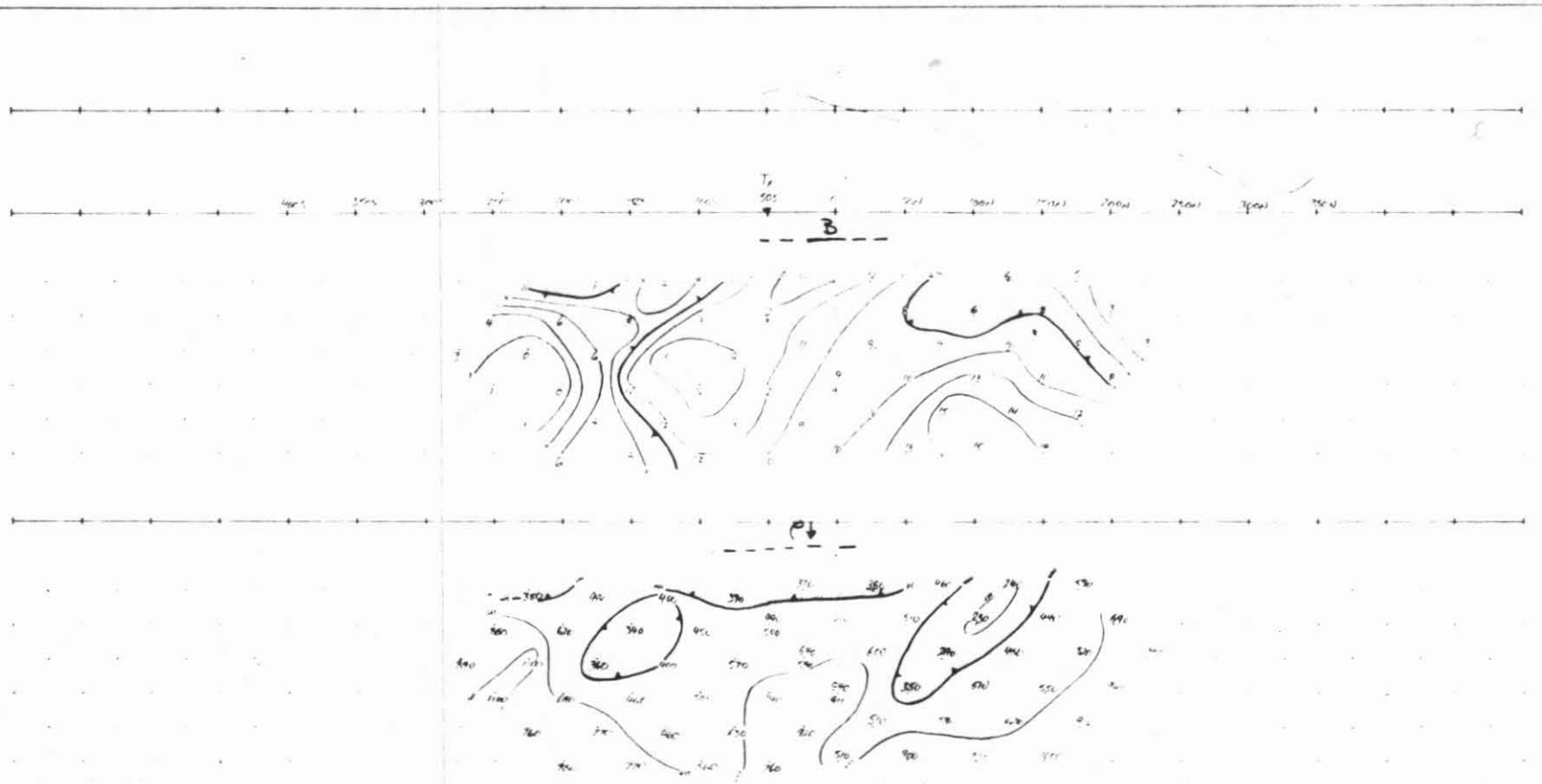
5 cm

geoterrex limited

	Date	Dipole angle	30°
	6TH JUNE 1980		

613210

613211



Transmitter type	
Timing sequence	
Receiver type	
Integration time	
I.P. measured over one current	

5 cm

geoterrex limited

(P A EXPLORATION)

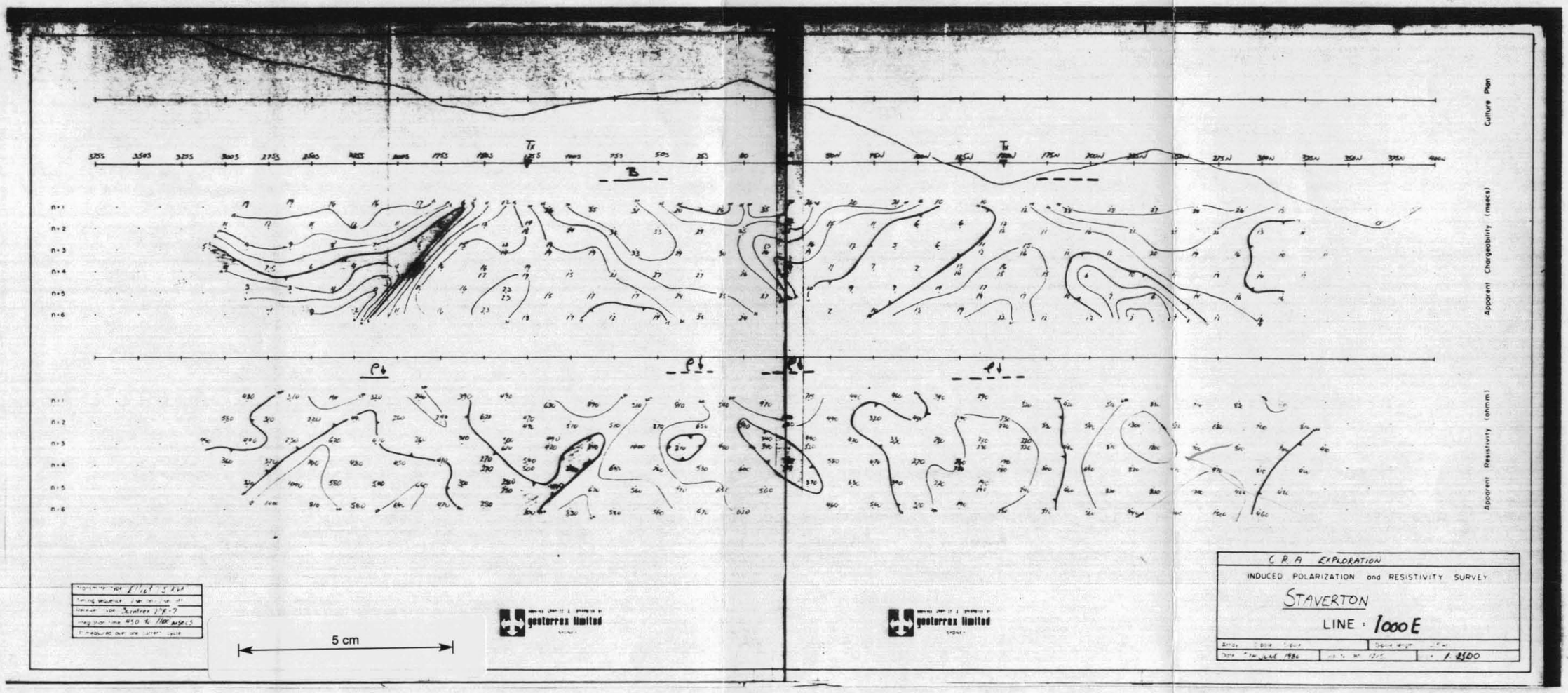
INDUCED POLARIZATION and RESISTIVITY SURVEY

STAVERTON

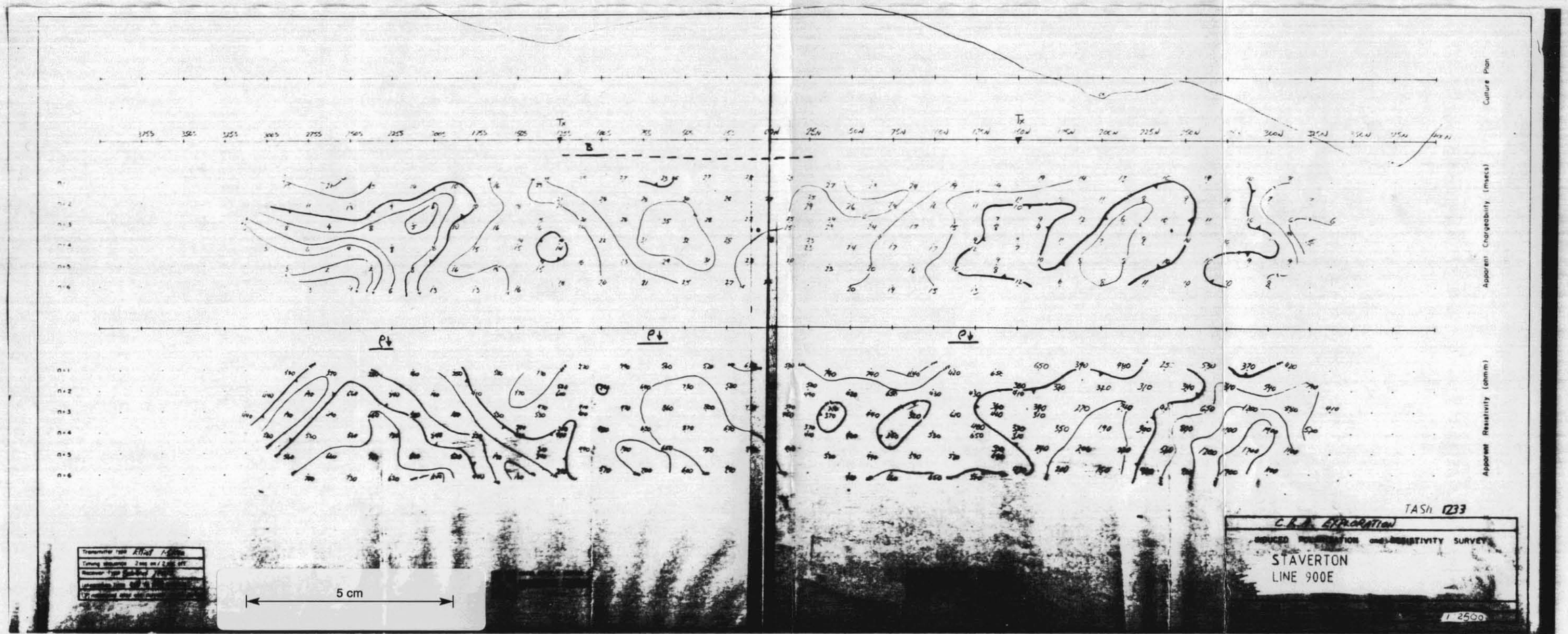
LINE : 1100E

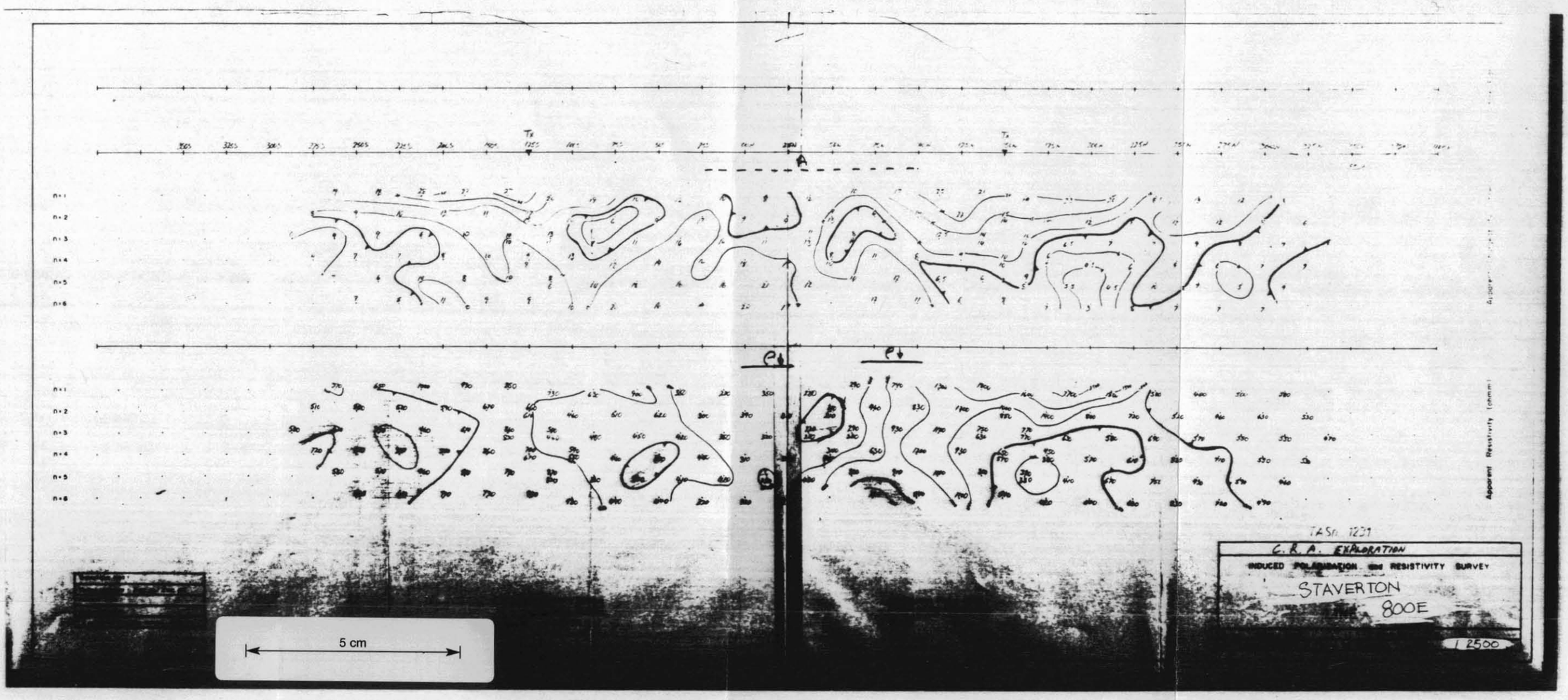
Array	Dipole	Dipole	Dipole length 50m
Date		W.O. No.	Scale 1:2500

613212

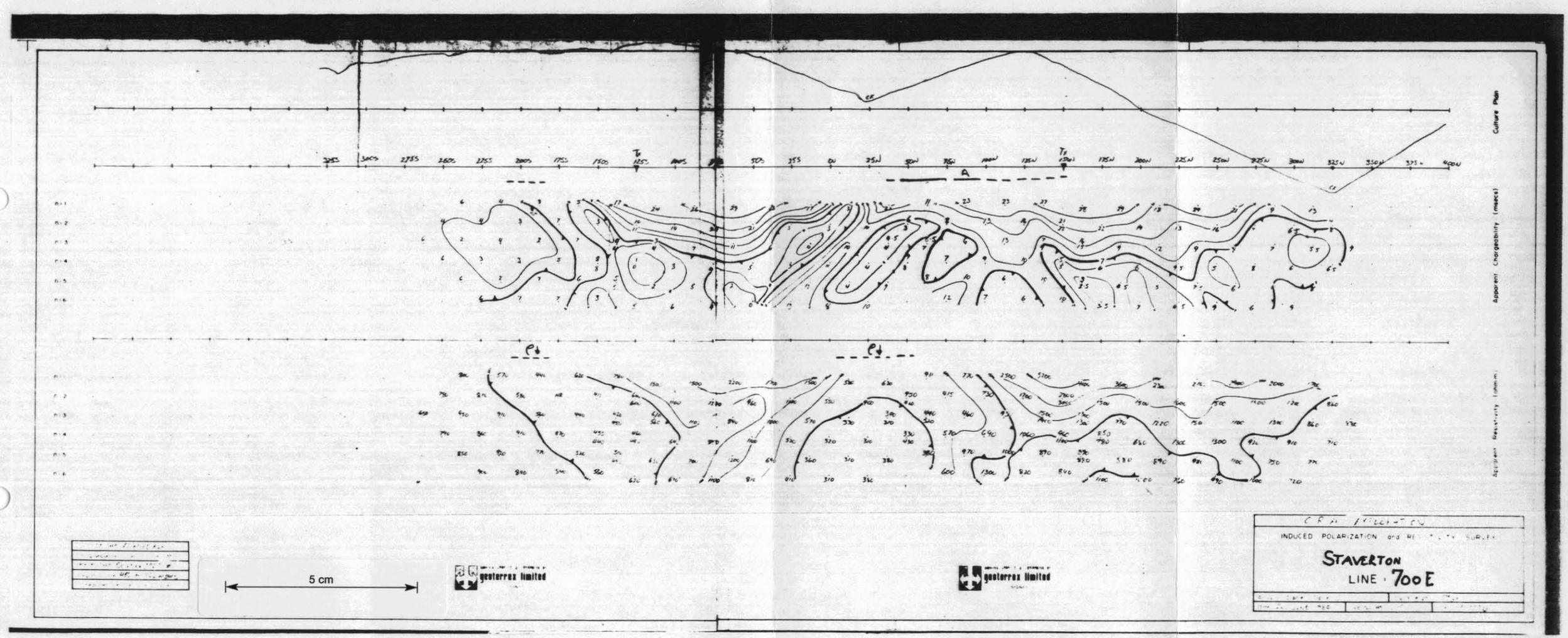

Apparent Chargeability (msecs)
Apparent Resistivity (ohm-m)
Culture Plan
n=1
n=2
n=3
n=4
n=5
n=6
5 cm
geoterrex limited
geoterrex limited
C.R.A. EXPLORATION
INDUCED POLARIZATION and RESISTIVITY SURVEY
STAVERTON
LINE : 1000 E
1:2500

613213


Tx
B
P↓
Culture Plan
Apparent Chargeability (msecs)
Apparent Resistivity (ohm-m)
5 cm
TASH 1233
C.R.A. EXPLORATION
INDUCED POLARIZATION and RESISTIVITY SURVEY
STAVERTON
LINE 900E
1:2500


A
n=1
n=2
n=3
n=4
n=5
n=6
5 cm
Apparent Resistivity (ohm-m)
TASK 1237
C.R.A. EXPLORATION
INDUCED POLARIZATION and RESISTIVITY SURVEY
STAVERTON
800E
1:2500

613215


Culture Plan
Apparent Chargeability (msecs)
A
5 cm
geoterrex limited
geoterrex limited
INDUCED POLARIZATION and RESISTIVITY SURVEY
STAVERTON
LINE : 700E

APPENDIX VI

STAVERTON P.E.M. DATA

STAVERTON GRID P.E.M. SURVEY

Loop Geometry:- Tx: 100m x 100m Horizontal Loop

Rx: Roving receiver reading vertical and horizontal Components.

Gain: 800

Time Base: 20msec

Loop 1: 5050mN to 5150mN, 900mE to 1000mE

	VERTICAL COMPONENT								HORIZONTAL COMPONENT							
Channel	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Line 100E																
5000mN	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4950mN	-2	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0
4900mN	-5	-2	-1	0	0	0	0	0	-1	-1	0	0	0	0	0	0
4850mN	-4	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4800mN	-4	-2	-1	0	0	0	0	0	1	1	0	0	0	0	0	0
4750mN	-4	-2	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Line 900E																
5000mN	-2	0	0	0	0	-1	-1	-1	-3	-2	-1	-1	-1	0	0	0
4950mN	-4	-2	-1	0	0	0	0	0	-2	-1	0	0	0	0	0	0
4900mN	-3	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
4850mN	-4	-1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4800mN	-4	-2	0	0	0	0	0	0	1	1	0	0	0	0	0	0
4750mN	-3	-2	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0
Loop 2: 4950mN to 4850mN, 600mE to 700mE																
Line 700E																
5000mN	-4	-1	-1	-1	0	0	0	0	-1	0	0	0	0	0	0	0
5050mN	-3	-1	0	0	0	0	0	0	-2	-1	0	0	0	0	0	0
5100mN	-4	-2	-2	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0
5150mN	-4	-1	-1	0	0	0	0	0	-1	0	0	0	0	0	0	0
Line 600E																
5150mN	-4	-1	-1	0	0	0	0	0	-3	-1	-1	-1	0	0	0	0
5100mN	-1	-1	-1	-1	-1	-1	-1	0	-2	-2	-1	0	0	0	0	0
5050mN	-4	-1	0	0	0	0	0	0	-3	-2	-1	-1	0	0	0	0

APPENDIX VII

STAVERTON PROSPECT, NOTES ON GEOLOGICAL MAPPING

BY J.COUPER

613219

MEMO TO: G.PURVIS
FROM: J.COUPER
SUBJECT: STAVERTON PROSPECT

NOTES ON GEOLOGICAL MAPPING

Mapping and rock chip sampling on the extended grid was done over 8 field days in Oct/Nov 1980. Compass and clinometer survey was done simultaneously.

The mapping and limited interpretation is detailed on the geological plan at a scale of 1:2500.
Geochemical plans are re-drawn also at 1:2500 scale and include the latest soil sampling.
Geochemical plans showing rock sample results are pending.

ROCK TYPE-UNITS
Variations between rock types in the Staverton area are subtle and to a great extent outcrop is poor; so that most of the mapping is based on the float.

Rock type-units are set out in the map legend.

The rocks are a complex of quartz-sericite schists, sericitic schists and phyllites, and sericitic slates.
Small remnants of unaltered rhyolite are the principal evidence that the quartz rich schists are mainly derived from acid crystal tuffs and lavas.
The other rocktypes are regarded as essentially pyro--clastic but the demarcation is not strict.
Stratigraphy is obscure and interpreted lithological trends nowhere represent physical geological boundaries.

DISCUSSION

The soil geochem anomaly is now better defined; but remains open to the west.
The contoured values for lead zinc and copper follow similar trends; and clearly relate to the same bedrock source.
Peak values are:
2300ppmPb, 1100ppmZn, 210ppmCu
The potential mineralization is probably essentially Pb-Zn with subordinate Cu.

The mapping shows that the principal geochem trend follows a zone of very fine grained sericitic slates and schists; which are considered to be metamorphosed fine tuffs and tuff shales.
Assuming some downhill movement of the metals the source resides in the northern flank of the finer grained lithology.

Limonite, in the form of pits and clots after sulphides is ubiquitous in the schists- - especially the fine grained (Type 2) types.
Within the zone of the soil anomaly scattered float of highly limonitic material occurs -see plan- and samples of these occurrences appear in the rock sample results.

Highly ferruginous zones, mapped on the basis of conspic-uous red to red yellow rock and soil colouration occurs mainly in Type 2 lithology; and is largely restricted to the eastern part of the grid
The ferruginous zones are related to greater depths of weathering; but also reflect the higher iron content of this lithology.
In the field , the deep red hematitic materials were thought to be derived from essentially chloritic alteration
To some extent these zones form a halo around the eastern end of the geochem anomaly.
Further interpretation is hypothetical

613221

The principal geochem anomaly terminates rather abruptly on line 1000E, where the peak lead value occurs (1000E, 100S) A possible acid fragmental occurs at this location; and the association is obscure; an emanative source may exist in this general area. On very weak evidence, we have the suggestion of a volvanic high, turned on it's side, facing to the south; which helps to explain the apparent wedge outs in the interpretation Basemetal mobilization is entirely to the west. However the metal source may also have migrated. This is pure hypothesis and may not stand as factual data improves; but the ideas are presented to satisfy the question of the style and localization of mineralization

The I.P. results show a good coincidence with the geochem trend; the possible anomalies are relatively weak and may reflect disseminated pyritic zones.

AS POINTED OUT BY FLIS THE I.P. TRENDS TO REFLECT LITHOLOGICAL TRENDS. THIS IS VERY CLEAR ON LINE 1000E WHERE THE BROAD ZONES OF SERICITIC SLATES (3) SHOW MARKED CONTRAST IN CHARGEABILITY & RESISTIVITY

CONCLUSIONS

The area of interest has been more closely defined by the soil geochem.

Geological and I.P. interpretat-ion is obscure.

Further surficial work does not seem warranted at this stage, notwithstanding that large gaps exist, and the geochem is open ended on the west.

The prospect is arbitrarily rated as 'moderately significant' There is enough interest to hang in for drilling, yet the target remains obscure.

The prospect is at a stage where drilling is the only feasible next step. A relatively low angle hole in the viscinity of 900-1000E is suggested...in part for the reason that this area is reasonably accessible, and in part because this area gives the best I.P. response, while geological and geo-chem factors are favourable.

APPENDIX VIII

GEOCHEMICAL SAMPLE SHEETS - GOG RANGE PROSPECTS

GEOCHEMICAL SOIL SAMPLING LEDGER

Page No. 1

TENEMENT E.L. 7173 SHEFFIELD - TAS. D.P.O. No. 7777

AREA/PROSPECT GOG RANGE PROSPECT SAMPLE Nos. 293437 – 293465 GEOLOGIST [illegible] DATE JAN '76

PLAN REFERENCE GOG RANGE PROSPECT, E.L. 7173 SHEFFIELD N.W. TAS. 1:5000 SHEET. ANALYSED BY ZINC CORP. BROKEN HILL.

A 9006

Grid Co-ordinate	Sample No.	Soil Composition: Rock %	Organic %	Sand %	Silt %	Clay %	Soil Horizon	Sample: Depth cm.	Colour	Bedrock: Outcrop	Concealed	Est. Depth to	Metal Content in ppm: Pb	Zn	Cu	Ag			Geological observations
LINE G19E																			
1900mE																			
5120mN	293437	20	6	20	40	6	B	30	brown	–	✓	50	32	42	6	<1			Rock ash flow tuff.
5040 N	38	30	5	20	35	6	"	30	"	✓	–	–	12	19	4	<1			clc qtz crystal ash flow tuff.
5000 N	39	15	6	10	55	10	A/B	30	"	–	✓	60	18	37	9	<1			Rock ash flow tuff
4980 N	293440	10	20	10	55	5	"	30	"	–	✓	60	14	91	150	<1			As above
4960 N	41	20	6	10	50	10	B/C	30	"	–	✓	200	*139	190	75	<1			Rock Ordovician + E volcanics.
4940 N	42	–	20	5	70	5	A/B	30	"	–	✓	60	32	42	10	1			?
4920 N	293443	5	10	5	70	10	B	40	"	–	✓	120	22	26	6	<1			Rock fine tuff.
LINE G21E																			
2100mE																			
5000mN	293444	50	–	30	20	–	B?	30	brown	✓	–	–	14	44	17	<1			clc ash flow tuff.
4980 N	45	70	–	20	10	–	[illegible]	40	"	–	✓	150	18	52	13	<1			Rock as above
4960 N	46	40	–	30	30	–	A/B	30	"	✓	–	–	18	42	35	<1			clc as above
4940 N	47	10	–	20	30	40	B	40	"	–	✓	80	32	28	52	<1			Rock as above
4920 N	48	20	–	10	40	30	"	30	"	–	✓	60	30	50	68	<1			Rock fine tuff?
4900 N	49	20	–	10	50	20	"	40	"	–	✓	80	50	117	260	<1			Rock fine tuff to lithic tuff.
4880 N	293450	30	10	30	30	–	"	30	"	✓	–	–	54	136	200	1			clc fine tuff.
4860 N	51	10	20	10	50	10	"	40	"	–	✓	120	76	210	95	1			Rock qtz crystal rock flow tuff.
4840 N	293452	20	20	20	40	–	"	30	"	–	✓	120	26	164	53	<1			Rock scree – mixture of volcanics
LINE G23E																			
2300mE																			
5000mN	293453	30	–	30	30	10	B/C	40	Brown	–	✓	60	34	86	330	1			Rock fine tuff to shale
4980 N	54	40	–	30	30	–	A	30	"	✓	–	–	120	52	19	1			clc fine tuff.
4960 N	55	40	–	30	30	–	"	30	"	✓	–	–	*52 50	100 99	370 350	4 3			As above
4940 N	56	60	–	30	10	–	A/B	30	"	✓	–	–	24	82	72	<1			As above
4920 N	57	60	–	30	10	–	A/B	30	"	✓	–	–	18	82	100	1			As above
4900 N	58	30	–	20	40	10	B	30	"	✓	–	–	22	136	200	1			As above
4880 N	59	40	5	30	25	–	"	30	"	–	✓	60	270	167	55	1			Rock fine tuff.
4860 N	293460	40	10	20	20	10	"	40	"	–	✓	80	230	142	100	2			As above
4840 N	61	30	–	30	40	–	"	40	"	–	✓	80	42	96	78	1			Rock ash flow tuff
4820 N	62	30	10	20	40	–	"	30	"	–	✓	80	54	164	19	1			Rock qtz crystal tuff or lavas.
4800 N	63	30	–	20	40	10	"	40	"	–	✓	80	32	166	43	1			As above
4780 N	64	40	10	20	30	–	"	40	"	✓	–	–	18	50	22	<1			clc fine tuff.
4760 N	293465	40	5	30	25	–	"	40	"	✓	–	–	94	97	60	2			clc qtz crystal ash flow tuff.

613223

TENEMENT E.L. 7/75 SHEFFIELD — TR. — GEOCHEMICAL SOIL SAMPLING LEDGER — Page No. 2

AREA/PROSPECT GOG RANGE PROSPECT — SAMPLE Nos. 29?466 – 29?497 — D.P.O. No. 7777

PLAN REFERENCE 4s 4w 41 — GEOLOGIST [illegible] DATE JAN 76

A 9006 — ANALYSED BY ZINC CORP. BROKEN HILL

Grid Co-ordinate	Sample No.	Soil Composition: Rock %	Organic %	Sand %	Silt %	Clay %	Soil Horizon	Sample: Depth cm.	Colour	Bedrock: Outcrop	Concealed	Est. Depth to	Metal Content in ppm: Pb	Zn	Cu	Ag	Geological observations
LINE G25E	(Cont.).																
	29?466	30	-	20	40	10	B.	30	BROWN	✓	—	-	80	140	5	<1	dc ash flow tuff.
LINE G25E																	
2500mE																	
A700mN	29?467	20	10	20	40	10	B	60	BROWN	✓	-	-	18	44	100	<1	dc ash flow tuff or crystal tuff?
A720 N	68	20	-	10	30	40	B	40	"	✓	-	-	2	85	23	1	As above
A740 N	69	30	-	30	30	10	B	50	"	-	✓	60	26	50	100	<1	Rock fine tuff.
A760 N	29?470	20	-	20	20	40	B/c	40	"	✓	-	-	40	74	180	2	dc fine altered ash flow tuff.
A780 N	71	30	-	20	20	30	B/c	30	"	✓	-	-	18	21	76	<1	As above
A800 N	72	30	20	20	30	20	B	30	"	✓	-	-	10	20	51	<1	dc fine silic tuff to fine ash flow tuff
A820N	73	30	-	30	30	10	B/c	40	"	✓	-	-	26	39	100	1	dc fine tuff.
A840 N	74	30	-	30	30	10	B	30	"	✓	-	-	6	12	12	<1	As above
A860 N	75	30	10	20	40	-	A/B	30	"	✓	-	-	88	50	51	2	As above
A880 N	76	20	-	30	40	10	B	30	"	✓	-	-	*350	102	170	1	As above
A900 N	77	50	20	20	10	-	"	30	"	-	✓	60	90	64	100	1	Rock fine crystal tuff to silic shale.
A920 N	78	30	-	20	40	10	"	30	"	✓	-	-	100	54	29	1	dc fine tuff.
A940 N	79	30	-	30	40	-	A	20	"	✓	-	-	86	47	12	1	dc fine tuff to crystal tuff
A960 N	29?480	10	-	10	40	40	B	30	"	✓	-	-	*140	240	140	3	dc fine tuff.
A980 N	81	50	-	30	20	-	A	5	"	✓	-	-	600	330	150	5	As above
5000 N	29?482	30	20	20	30	-	B	40	"	✓	-	-	200	64	30	2	dc ash flow tuff.
LINE G25E									"								
2700mE																	
5000mN	29?485	30	20	30	20	-	A/B	30	BROWN	✓	-	-	2	14	9	<1	dc coarse to medium lithic tuff.
A980	84	20	10	10	40	20	B	40	RED	✓	-	-	22	12	9	1	dc fine bedded vitric tuff.
A960	85	15	5	10	60	10	"	50	BROWN	-	✓	80	38	16	23	<1	Rock fine tuff to shale
A940	86	20	5	10	35	30	"	40	"	-	✓	60	34	15	19	<1	Rock fine tuff.
A920	87	30	5	15	20	30	"	30	"	✓	-	-	32	34	15	<1	Rock fine tuff + lithic tuff.
A900	88	20	5	15	40	20	B	40	"	✓	-	-	54	76	34	1	dc fine tuff to shale
A880	89	30	5	20	30	15	B	30	"	-	✓	60	32	68	12	1	Rock fine tuff.
A860	29?490	30	5	20	25	20	"	30	"	✓	-	-	34	57	27	1	dc ash flow tuff.
A840	91	20	5	10	55	10	"	30	"	✓	-	-	46	142	37	2	As above
A820	92	20	20	20	35	5	"	30	"	✓	-	-	50	110	34	<1	As above
A800	93	20	-	10	10	60	B/c	50	RED	-	✓	60	46	100	30	1	Rock as above
A780	94	10	-	5	20	65	B/c	90	"	✓	-	-	46	92	70	1	dc fine tuff.
A760	95	20	20	5	50	5	B	20	BROWN	✓	-	-	60	70	55	1	dc ash flow tuff.
A740	96	15	-	30	50	5	B	30	"	✓	-	-	*60	210	120	*1	dc altered quite crystal tuff (to lava?).
A720	29?497	5	5	5	70	10	"	50	"	-	✓	120	68	420	31	<1	Rock fine tuff to shale.

6132224

TENEMENT E.L. 7/73 SHEFFIELD TCE

AREA/PROSPECT GOG RANGE PROSPECT

PLAN REFERENCE Fig 1 to 12

GEOCHEMICAL SOIL SAMPLING LEDGER

SAMPLE Nos. 293495 – 293500

296501 – 296526

Page No. 3

D.P.O. No. 17777

GEOLOGIST [redacted] DATE JAN '76

ANALYSED BY ZINC CORP. BROKEN HILL

A 9006

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.				Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag	
LINE 62E																	
2900mE																	
5000mN	293495	10	5	5	60	20	B	30	Brown	–	✓	50	38	47	15	1	Rock fine tuff
4980 N	96	10	5	10	35	40	"	40	"	✓	–	–	22	44	28	1	dc lithic tuff.
4960 N	293500	20	–	20	20	40	B/C	40	RED	–	✓	60	18	56	20	1	Rock fine tuff + lithic tuff
4940 N	296501	20	–	10	40	30	B	30	Brown	✓	–	–	22	54	12	<1	dc lithic tuff (+ qtz crystal tuff?)
4920 N	02	30	–	20	40	10	"	30	"	–	✓	60	14	21	5	<1	Rock fine tuff.
4900 N	03	20	20	20	30	10	"	30	"	–	✓	40	18	34	6	1	As above
4880 N	04	30	20	20	20	10	"	30	"	✓	–	–	22	44	16	1	As above
4860 N	05	20	5	15	40	20	"	30	"	✓	–	–	38	53	11	<1	As above
4840 N	06	5	40	10	35	10	"	30	"	✓	–	–	24	31	16	1	dc fine bedded lithic tuff.
4820 N	07	15	30	10	35	10	"	30	"	✓	–	–	10	19	24	1	As above
4800 N	08	20	5	10	55	10	"	20	"	✓	–	–	630	23	22	3	dc grey-buff lam. siltstone. shale
4780 N	09	20	30	10	40	–	A	30	"	✓	–	–	26	10	9	<1	dc qtz crystal tuff.
4760 N	296510	30	10	20	40	–	A/B	30	"	✓	–	–	16	9	16	<1	As above
LINE 63E																	
3100mE																	
5000mN	296511	20	5	10	40	25	B	40	Brown	–	✓	100	30	43	16	1	Rock fine tuff + lithic tuff.
4980 N	12	20	5	10	60	5	"	30	"	✓	–	–	18	32	8	<1	dc lithic tuff.
4960 N	13	20	20	5	40	15	"	30	"	–	✓	60	18	19	6	<1	Rock lithic tuff.
4940 N	14	20	5	10	45	20	"	30	"	–	✓	60	18	21	9	<1	Rock fine tuff.
4920 N	15	15	5	10	60	10	"	40	"	–	✓	80	30	21	14	<1	Rock lithic tuff + fine tuff.
4900 N	16	20	5	10	55	10	"	30	"	✓	–	–	22	21	16	<1	dc lithic tuff.
4880 N	17	30	5	10	40	15	"	30	"	✓	–	–	28	24	13	<1	dc fine tuff.
4860 N	18	20	5	10	40	25	"	30	"	✓	–	–	58	46	35	<1	As above
4840 N	19	10	40	5	40	5	A/B	30	"	✓	–	–	64	37	23	<1	As above
4820 N	296520	5	45	5	40	5	A	30	"	–	✓	90	30	21	18	<1	Rock fine tuff.
4800 N	21	15	30	5	40	10	A/B	40	"	–	✓	90	6	19	23	1	As above
4780 N	22	30	40	20	10	–	"	40	"	–	✓	90	34	13	18	<1	As above
4760 N	23	20	40	10	30	–	A	30	"	–	✓	80	18	16	23	<1	Rock altered qtz crystal tuff.
4740 N	296524	10	50	20	20	–	A/B	30	"	–	✓	90	22	16	11	<1	As above
LINE 64E																	
3300mE																	
5000mN	296525	10	–	5	35	50	B	60	RED	–	✓	120	22	100	13	<1	Rock fine tuff.
4980 N	296526	10	–	5	65	20	"	30	Brown	–	✓	120	38	70	19	<1	As above.

6133225

TENEMENT EL 7773 SHEFFIELD TFS

AREA/PROSPECT GOG RANGE PROSPECT SAMPLE Nos. 296527 – 296559

PLAN REFERENCE As Dgr 63

A 9006

GEOCHEMICAL SOIL SAMPLING LEDGER

Page No. 4

D.P.O. No. 17777

GEOLOGIST [illegible] DATE JAN '76

ANALYSED BY ZINC CORP. BROKEN HILL

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.				Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag	
LINE G35E	(Cont.)																
A6500N	296527	10	-	5	75	10	B	30	BROWN	-	✓	60	42	53	19	<1	Rock fine tuff.
A6440 N	28	15	-	5	40	40	B/C	50	"	-	✓	60	50	73	28	<1	As above
A6320 N	29	15	5	5	40	35	B	40	"	✓	-	-	72	50	25	1	clc fine tuff to shale
A6000 N	296530	30	10	10	40	10	"	30	"	-	✓	60	94	50	18	1	Rock fine tuff.
A5880 N	31	15	10	5	65	5	"	30	"	✓	-	-	68	56	15	2	clc lithic tuff.
A5860 N	32	15	-	10	65	10	"	40	"	✓	-	-	230	161	32	2	As above.
A5640 N	33	5	10	5	75	5	"	30	"	✓	-	-	250	3200	43	2	clc fine tuff to shale.
A5420 N	34	5	30	5	60	-	A	40	"	✓	-	-	260	1410	78	2	clc lithic tuff?
A5200 N	35	5	30	5	60	-	"	30	"	✓	-	-	1500	4000	71	1	clc fine silic tuff
A4980 N	36	5	30	5	60	-	"	40	"	✓	-	-	* 510 550	* 1510 1520	180 180	2 1	As above
A4760 N	37	5	40	5	50	-	"	50	"	✓	-	-	* 1100 1060	290 500	120 130	4 3	As above
A4540 N	38	20	40	5	35	-	"	40	"	✓	-	-	* 540 560	240 230	270 250	<1 <1	As above
A4320 N	39	20	10	10	50	10	B	30	"	-	✓	60	76	500	72	2	As above.
A4100 N	296540	40	20	30	10	-	A	30	"	✓	-	-	50	162	59	<1	clc fine tuff
A3880 N	41	20	10	10	30	30	"	20	"	✓	-	-	22	32	19	1	clc gritty crystal tuff (or lava?)
A3660 N	42	20	40	30	10	-	A/Min	30	"	-	✓	120	* 96 64	300 880	10 15	1 1	Rock as above
A3440 N	43	-	80	15	5	-	A	50	"	-	✓	150	6	3200	6	<1	
A3220 N	44	30	40	20	10	-	"	50	"	-	✓	150	12	22	14	<1	Rock gritty crystal tuff (or lava?).
A3000 N	45	5	40	20	35	-	"	30	"	-	✓	120	60	173	19	1	As above.
A2780 N	46	15	-	15	60	20	B	60	"	✓	-	-	28	76	18	1	clc gritty crystal tuff.
A2560 N	47	20	-	10	10	60	B/C	60	RED	✓	-	-	30	64	17	<1	As above
A2340 N	48	10	5	10	65	10	B	30	BROWN	-	✓	60	18	16	6	<1	Rock as above.
A2120 N	49	5	40	5	50	-	A	50	"	-	✓	80	6	7	4	<1	As above
A1900 N	296550	-	30	10	60	-	"	30	"	-	✓	150	16	5	3	<1	Ordovician conglomerate scree
A1680 N	51	-	25	5	20	-	"	30	"	-	✓	200	8	6	3	<1	As above
A1460 N	52	-	75	15	10	-	"	40	"	-	✓	200	6	<1	3	<1	As above
A1240 N	296553	-	75	15	10	-		30	"	✓	-	-	6	2	3	<1	clc Ordovician conglomerate
LINE G35E 3500mE																	
5000mN	296554	20	5	10	40	25	B	30	RED	-	✓	60	26	26	9	<1	Rock fine tuff
A4980 N	55	20	5	5	40	30	"	30	"	-	✓	40	24	64	11	1	As above
A4760 N	56	20	5	10	40	25	"	40	"	✓	-	-	30	60	13	1	clc fine tuff to shale.
A4540 N	57	5	35	10	45	5	"	40	BROWN	✓	-	-	86	86	15	1	clc very lithic tuff
A4320 N	58	5	40	5	40	10	A/B	30	"	✓	-	-	30	80	15	<1	clc lithic tuff (or fine ash tuff?)
A4100 N	296559	15	40	5	40	-	"	40	"	✓	-	-	38	98	22	<1	clc lithic tuff

6132226

TENEMENT E.L. 773 SHEFFIELD Tas. — GEOCHEMICAL SOIL SAMPLING LEDGER — Page No. 5

AREA/PROSPECT GOG RANGE PROSPECT — SAMPLE Nos. 29656 – 29692 — D.P.O. No. 17777

PLAN REFERENCE As Above + A. — GEOLOGIST [illegible] — DATE JAN '76

ANALYSED BY ZINC COR. BROKEN HILL

A 9006

Grid Co-ordinate	Sample No.	Soil Composition: Rock %	Organic %	Sand %	Silt %	Clay %	Soil Horizon	Sample: Depth cm.	Colour	Bedrock: Outcrop	Concealed	Est. Depth to	Metal Content in ppm: Pb	Zn	Cu	Ag	Geological observations
LINE G 35E (Cont.)																	
4880mN	29656	20	20	10	40	10	B	30	Brown	✓	–	–	90	320	24	1	dc fine tuff to shale
4860 N	61	20	40	5	35	–	A	40	"	✓	–	–	54	310	27	1	As above
4840 N	62	20	5	10	35	30	B	60	"	✓	–	–	46	380	38	1	dc lithic tuff.
4820 N	63	20	30	10	40	–	"	30	"	✓	–	–	54	183	16	1	As above
4800 N	64	20	30	10	40	–	A/B	30	"	✓	–	–	130	189	16	1	dc fine tuff to shale.
4780 N	65	20	5	10	20	45	B	40	"	✓	–	–	26	210	36	1	Rock fine tuff.
4760 N	66	20	5	10	20	45	"	30	"	✓	–	–	22	75	55	1	dc gritty crystal tuff (or lava?)
4740 N	67	15	20	10	50	5	"	40	"	✓	–	–	# 34 / 29	59 / 95	85 / 80	1	As above
4720 N	68	20	5	15	20	40	B/C	30	"	–	✓	40	16	15	26	<1	Rock as above
4700 N	69	20	15	15	40	10	B	30	"	✓	–	–	16	12	16	<1	dc gritty crystal tuff.
4680 N	29670	30	30	30	10	–	A/B	30	"	✓	–	–	14	15	16	1	As above
4660 N	71	30	30	30	10	–	"	30	"	✓	–	–	6	16	6	1	As above
4640 N	72	30	10	20	30	10	B	40	"	✓	–	–	6	11	11	<1	As above
4620 N	73	10	10	40	40	–	"	30	"	–	✓	80	16	12	8	<1	Rock as above
4600 N	74	20	–	10	10	60	C	40	"	–	✓	40	10	24	6	1	Rock gritty crystal tuff or lava.
4580 N	75	20	10	20	40	10	B	30	"	–	✓	60	6	29	6	<1	As above
4560 N	29676	20	–	10	10	60	C	50	"	✓	–	–	12	16	4	1	As above.
LINE G 37E																	
3700mE																	
5000mN	29677	10	10	10	60	10	B	50	Brown	–	✓	80	140	114	110	1	Rock fine tuff to shale.
4980 N	78	10	–	10	20	60	"	40	"	✓	–	–	46	37	15	1	Rock gritty crystal tuff or lava.
4960 N	79	5	35	10	50	–	A	70	"	–	✓	120	26	16	12	1	Rock fine tuff?
4940 N	29680	20	–	30	30	20	B	50	"	✓	–	–	54	45	30	<1	Rock fine tuff + gritty crystal tuff or lava
4920 N	81	30	20	30	20	–	A/B	30	"	–	✓	80	130	50	15	<1	Rock gritty crystal tuff or lava.
4900 N	82	30	20	20	30	–	A	30	"	–	✓	80	170	86	41	1	As above
4880 N	83	20	30	10	40	–	A	40	"	✓	–	–	140	73	35	2	Rock fine tuff
4860 N	84	15	5	20	40	20	B	30	"	–	✓	60	170	83	46	1	Rock gritty crystal tuff (or lava?)
4840 N	85	10	30	20	40	–	"	30	"	✓	–	–	150	165	78	<1	dc fine tuff
4820 N	86	5	5	10	20	60	"	50	"	–	✓	70	250	175	238	2	Rock gritty crystal tuff - probably flow?
4800 N	87	10	30	20	40	–	"	30	"	✓	–	–	# 420 / 330	126	83	1	dc crystal tuff (may be flow)
4780 N	88	20	–	10	10	60	"	40	"	✓	–	–	# 140 / 130	360 / 350	390 / 390	2 / 2	dc gritty crystal tuff (or lava?)
4760 N	89	30	5	10	30	25	"	50	"	✓	–	–	# 140 / 130	270	180	4	As above
4740 N	29690	30	30	20	20	–	A	30	"	✓	–	–	290	73	41	1	As above
4720 N	91	15	30	20	35	–	"	30	"	✓	–	–	# 380 / 370	180	210	2	As above
4700 N	29692	5	60	5	30	–	"	5	"	✓	–	–	# 350 / 330	340	130	2	As above

613227

TENEMENT EL 1113 SKEETER TR. **GEOCHEMICAL SOIL SAMPLING LEDGER** Page No. 6

AREA/PROSPECT GRS RANGE PROSPECT SAMPLE Nos. 296592 - 296623 D.P.O. No. 17777

PLAN REFERENCE As for 4-5 GEOLOGIST [redacted] DATE JAN '76

A 9006 ANALYSED BY ZINC CORP., RISDON HILL

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.				Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag	
LINE 6.5E	(Cont.)																
A680mN	296592	10	10	10	55	15	A?	30	BROWN	✓	-	-	190	120	55	2	As above
A660 N	94	30	20	30	20	-	A/B	30	"	✓	-	-	58	45	15	<1	As above
A640 N	95	30	10	20	20	20	B	20	RED	✓	-	-	42	26	15	<1	As above
A620 N	296596	20	40	30	10	-	A	5	BROWN	✓	-	-	36	53	16	<1	As above
LINE 6.5E																	
3900mE																	
5020mN	296597	5	10	5	75	5	B	30	BROWN	-	✓	80	58	190	78	<1	Rock shyo lava.
5040 N	98	5	5	15	70	5	"	30	"	-	✓	80	34	75	29	<1	As above
5060 N	99	5	10	5	75	5	A/B	40	"	-	✓	80	30	118	30	<1	As above
5080 N	296600	10	-	10	40	40	B/C	40	"	-	✓	50	46	160	68	<1	Rock fine tuff to shale
5100 N	01	5	-	5	75	15	B	30	"	-	✓	60	26	29	15	<1	Rock lava.
5120 N	02	10	30	10	50	-	A	30	"	✓	-	-	18	19	5	<1	clc ash fine tuff.
5140 N	03	15	-	10	40	35	B	30	"	✓	-	-	12	12	3	<1	As above
5160 N	04	40	30	20	10	-	A	30	"	✓	-	-	6	6	3	<1	As above
5180 N	05	10	-	5	60	25	B	40	"	-	✓	60	30	59	46	<1	Rock fine tuff.
4980 N	06	20	5	10	50	15	"	30	"	-	✓	80	54	81	56	<1	As above
4960 N	07	30	5	10	55	-	"	30	"	-	✓	80	52	67	29	<1	Rock fine tuff to shale
4940 N	08	20	-	10	10	60	C	80	RED	-	✓	80	46	89	100	<1	As above
4920 N	09	20	-	5	40	35	B/C	100	BROWN	-	✓	120	88	67	46	<1	Rock shale
4900 N	296610	25	10	10	45	10	A/B	30	"	✓	-	-	190	70	68	<1	dc shale to soft schistose fine tuff
4880 N	11	15	-	5	20	60	B/C	50	"	-	✓	80	190	53	90	<1	Rock fine tuff
4860 N	12	25	25	10	40	-	A	30	"	-	✓	60	60	80	130	<1	Rock fine tuff to shale
4840 N	13	10	30	5	55	-	"	40	"	-	✓	100	84	144	62	1	Rock gritty crystal tuff.
4820 N	14	10	30	10	50	-	"	30	"	-	✓	160	94	178	83	1	As above
4800 N	15	20	40	10	30	-	"	40	"	✓	-	-	170	230	130	1	clc gritty crystal tuff.
4780 N	16	30	30	15	25	-	A/B	30	"	✓	-	-	58	50	43	1	As above
4760 N	17	20	40	10	30	-	A	30	"	✓	-	-	78	98	100	2	As above
4740 N	18	15	40	10	35	-	A/B	30	"	✓	-	-	68	134	100	1	As above
4720 N	19	20	10	20	40	10	B	40	"	✓	-	-	30	36	16	<1	As above
4700 N	296620	30	40	10	20	-	A	30	"	✓	-	-	18	19	11	<1	As above
4680 N	296621	20	30	10	40	-	"	30	"	-	✓	120	26	29	14	<1	Rock fine tuff to shale
LINE 6.4E																	
4100mE																	
5000mN	296622	20	-	15	40	25	B	30	BROWN	✓	-	-	26	24	11	<1	clc fine tuff to shale
4980 N	296623	10	15	10	65	-	A/B	30	"	-	✓	80	50	19	19	<1	Rock shale.

6132228

TENEMENT E.L. 7/72 SHEFFIELD TIN. GEOCHEMICAL SOIL SAMPLING LEDGER Page No. 7

AREA/PROSPECT GOO RANGE PROSPECT SAMPLE Nos. 29662A – 29666 D.P.O. No. 7777

PLAN REFERENCE As for A6. GEOLOGIST [illegible] DATE JAN '76.

A 9006 ANALYSED BY ZINC CORP. BROKEN HILL.

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.				Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag	
LINE G4E	(Cont.).																
A960mN	29662A	25	-	20	25	30	B/C	50	Brown	✓	-	-	50	47	55	<1	a/c shale
A940 N	25	20	-	10	60	10	B	40	"	-	✓	80	66	33	23	<1	Rock shale
A920 N	26	20	-	15	40	25	B	50	"	-	✓	80	70	42	62	<1	Rock fine tuff to shale
A900 N	27	10	-	20	60	10	"	50	"	-	✓	80	84	45	58	1	Rock as above shale + fine tuff
A880 N	28	15	-	15	60	10	"	50	"	-	✓	70	140	115	200	2	a/c silic (intric) fine tuff.
A860 N	29	10	-	10	60	20	"	30	"	-	✓	60	91	86	100	1	As above
A840 N	29663D	10	-	10	60	20	"	50	"	✓	-	-	26	210	300	2	As above
A820 N	31	10	-	20	60	10	"	40	"	✓	-	-	*330 310	100 186	160 50	1 2	As above
A800 N	32	20	10	10	50	10	"	70	"	✓	-	-	*290 310	84 144	340 530	1½ 2	a/c fine tuff.
A780 N	33	10	-	15	40	35	"	30	"	✓	-	-	72	26	36	1	a/c quite crystal tuff.
A760 N	34	10	-	10	40	40	"	60	"	✓	-	-	240	76	210	1	As above
A740 N	35	10	-	10	60	20	"	30	"	✓	-	-	*350 330	57 76	500 510	1½ 2	As above
A720 N	29663G	10	-	15	40	35	"	60	"	✓	-	-	58	78	53	1	As above
LINE G4E A300mE																	
5000mN	29663J	10	-	20	40	30	B/C	100	Brown	-	✓	110	*34 30	155 46	43 38	1	Rock shale to fine tuff.
A980 N	38	10	-	10	60	20	B	80	"	-	✓	100	24	88	13	1	As above
A960 N	39	10	-	10	70	10	"	40	"	-	✓	100	26	42	16	1	As above
A940 N	29664C	15	-	10	65	10	"	50	"	-	✓	100	22	32	9	1	As above
A920 N	41	15	-	10	60	15	"	70	"	-	✓	100	28	19	9	<1	As above
A900 N	42	10	10	10	70	-	A/B	30	"	✓	-	-	44	41	35	<1	a/c shale
A880 N	43	10	-	10	70	10	B	50	"	✓	-	-	42	29	29	<1	a/c ash flow tuff
A860 N	44	10	10	10	70	-	"	30	"	-	✓	80	72	40	35	<1	Rock fine tuff to shale
A840 N	45	10	10	10	70	-	A/B	40	"	✓	-	-	50	32	18	<1	a/c as above
A820 N	46	10	5	15	70	-	B	30	"	-	✓	60	86	47	30	<1	Rock as above
A800 N	47	10	5	15	70	-	"	30	"	✓	-	-	50	53	36	<1	a/c ash flow tuff.
A780 N	48	10	-	15	65	10	"	50	"	✓	-	-	22	21	28	<1	As above
A760 N	49	20	10	10	60	-	A/B	30	"	-	✓	80	24	21	18	<1	Rock lava or quite crystal tuff?
A740 N	29665D	20	10	10	60	-	B	30	"	✓	-	-	34	26	20	<1	a/c as above.
A720 N	51	20	-	15	65	-	"	30	"	✓	-	-	22	12	10	<1	a/c. flow lava (or quite crystal tuff)
A700 N	52	15	-	20	65	-	"	40	"	-	✓	80	22	11	6	<1	Rock as above
A680 N	53	20	-	10	60	10	"	50	"	✓	-	-	34	19	26	<1	a/c as above.
A660 N	54	10	-	10	80	-	"	30	"	✓	-	-	6	12	6	<1	As above
A640 N	55	15	-	10	65	10	"	30	"	✓	-	-	6	6	9	<1	As above
A620 N	29665G	15	-	10	65	10	"	30	"	✓	-	-	12	10	9	<1	As above

6113229

TENEMENT E.L. 7/75 SHEFFIELD, TAS. **GEOCHEMICAL SOIL SAMPLING LEDGER** Page No. 8

AREA/PROSPECT GOG RANGE PROJECT SAMPLE Nos. 29657 – 29687 D.P.O. No. 17777 to 29677, 17778

PLAN REFERENCE As Box 47 GEOLOGIST DEED DATE JAN 76

A 9006 ANALYSED BY ZINC CORP. BROKEN HILL

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.				Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag	
LINE G45E																	
4500mE																	
5000mN	29657	10	–	15	35	40	B/C	90	RED	–	✓	100	35	6	11	1	Rock fine tuff
4980 N	58	20	10	10	60	–	B	30	Brown	✓	–	–	22	34	18	<1	a/c fine tuff to shale
4960 N	59	5	10	10	75	–	A/B	30	"	–	✓	100	18	21	15	<1	Rock as above
4940 N	29660	15	5	10	60	10	B	40	"	–	✓	100	34	42	10	1	As above
4920 N	61	10	–	10	70	10	"	40	"	–	✓	80	54	29	13	1	Rock shale
4900 N	62	20	–	10	60	10	"	40	"	–	✓	100	76	53	35	1	As above
4880 N	63	5	–	10	75	10	"	30	"	✓	–	–	470	117	280	1	a/c as above
4860 N	64	15	–	15	45	25	"	50	"	✓	–	–	110	71	140	1	a/c ash lapilli tuff.
4840 N	65	20	10	20	50	–	A	30	"	–	✓	100	230	56	62	<1	Rock as above + lava.
4820 N	66	10	–	15	60	15	B	40	"	✓	–	–	32	34	230	1	a/c ash lapilli tuff.
4800 N	67	5	–	5	75	15	"	30	"	✓	–	–	180	30	190	1	a/c lava (or crystal tuff ?)
4780 N	68	5	25	10	60	–	A/B	30	"	✓	–	–	26	50	120	1	As above
4760 N	69	10	10	10	70	–	B	30	"	✓	–	–	30	31	390	1	As above
4740 N	29670	–	40	10	50	–	A	5	"	✓	–	–	36	31	280	<1	As above
4720 N	71	–	40	10	50	–	A	5	"	✓	–	–	30	26	54	1	As above
4700 N	72	–	40	10	50	–	A	10	"	✓	–	–	32	21	36	<1	As above
4680 N	73	–	40	10	50	–	A	10	"	✓	–	–	55	50	64	<1	As above
4660 N	74	10	10	10	70	–	A/B	30	"	✓	–	–	30	24	41	<1	As above
4640 N	75	20	5	10	65	–	B	30	"	✓	–	–	10	10	6	<1	As above
4620 N	76	15	–	15	60	10	"	30	"	✓	–	–	12	13	9	<1	As above
4600 N	29677	15	–	15	60	10	"	30	"	✓	–	–	32	14	11	<1	As above
LINE G47E																	
4700mE																	
5000mN	29678	10	–	15	65	10	B	30	BROWN	✓	–	–	34	23	2	<1	a/c fine tuff to shale
4980 N	79	40	–	20	30	10	"	30	"	✓	–	–	28	27	4	<1	As above
4960 N	29680	15	–	20	45	20	B/C	40	"	✓	–	–	44	40	12	<1	As above
4940 N	81	15	–	10	60	15	"	50	"	✓	–	–	100	45	19	<1	As above
4920 N	82	15	–	10	65	10	B	40	"	✓	–	–	56	38	7	<1	a/c shale
4900 N	83	15	–	15	60	10	"	30	"	✓	–	–	28	16	23	<1	a/c ash lapilli tuff
4880 N	84	15	10	10	65	–	A/B	30	"	✓	–	–	50	50	170	1	As above
4860 N	85	40	10	20	30	–	"	30	"	✓	–	–	36	59	48	1	a/c fine schi (intric) tuff.
4840 N	86	30	10	10	50	–	A	30	"	–	✓	100	150	108	54	<1	Rock flow lava
4820 N	29687	10	5	10	75	–	"	30	"	✓	–	–	280	186	210	<1	a/c flow lava

6132230

TENEMENT EL 7/73 SHEFFIELD TAS. GEOCHEMICAL SOIL SAMPLING LEDGER Page No. 9.

AREA/PROSPECT 66 KANGE PROSPECT. SAMPLE Nos. 296685 - 296718 D.P.O. No. 17775

PLAN REFERENCE As for 48. GEOLOGIST CRD DATE JAN '76.

A 9006 ANALYSED BY ZINC CORP. RISDON HILL

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.				Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag	
LINE G47E	(cont).																
4800mN	296685	15	-	10	60	15	B	70	BROWN	✓	-	-	*300 *310	260	610	6	platy lava
4780 N	89	60	5	5	30	-	A	30	"	✓	-	-	220	122	27	1	As above
4760 N	296690	-	40	20	40	-	"	20	"	✓	-	-	170	124	25	1	As above
4740 N	91	15	-	10	65	10	B	30	"	✓	-	-	140	165	20	1	As above
4720 N	92	10	5	10	75	-	"	30	"	✓	-	-	150	240	13	<1	As above
4700 N	93	15	-	10	65	10	"	30	"	✓	-	-	130	141	14	1	As above
4680 N	94	10	10	10	70	-	A/B	30	"	✓	-	-	52	59	4	1	As above
4660 N	95	10	-	10	65	15	B	30	"	✓	-	-	120	61	5	<1	As above
4640 N	96	10	-	10	65	15	"	30	"	✓	-	-	44	53	6	<1	As above
4620 N	97	10	-	10	65	15	"	30	"	✓	-	-	18	42	7	<1	As above
4600 N	98	20	-	10	60	10	"	30	"	✓	-	-	14	25	4	<1	As above
4580 N	296699	15	-	10	65	10	"	30	"	✓	-	-	46	27	9	1	As above
LINE G49E																	
4900mE																	
5000mN	296700	10	10	10	70	-	A/B	60	BROWN	✓	-	-	34	27	5	<1	a/c fine bedded tuff.
4980 N	01	10	10	10	70	-	B	30	"	✓	-	-	32	23	4	<1	As above
4960 N	02	15	-	10	60	15	"	30	"	✓	-	-	58	24	4	<1	As above.
4940 N	03	20	-	20	60	-	"	30	"	-	✓	80	10	13	1	<1	Rock crystal tuff or ash flow tuff??
4920 N	04	10	20	10	60	-	A	30	"	✓	-	-	28	20	1	<1	a/c as above
4900 N	05	40	-	20	40	-	A/B	30	"	✓	-	-	50	47	4	<1	As above
4880 N	06	10	10	10	70	-	"	30	"	✓	-	-	180	220	7	1	As above
4860 N	07	10	15	10	65	-	A	30	"	✓	-	-	130	69	7	<1	As above
4840 N	08	15	-	10	65	10	B	30	"	✓	-	-	44	17	4	<1	As above
4820 N	09	20	-	10	40	30	"	30	"	✓	-	-	76	56	9	1	a/c flow lava
4800 N	296710	10	-	15	35	40	"	30	RED	✓	-	-	58	95	20	1	As above
4780 N	11	-	60	5	35	-	A	5	BROWN	✓	-	-	130	112	17	<1	As above
4760 N	12	10	-	10	65	15	B	35	"	✓	-	-	*420 440	30	130	2	As above.
4740 N	13	20	-	10	40	30	"	40	"	-	✓	200	130	34	31	<1	Rock Ash conglomerate + crystal tuff.
4720 N	14	20	-	10	40	30	"	60	"	-	✓	120	16	37	5	<1	As above.
4700 N	15	10	-	15	35	40	C	130	"	-	✓	120	22	64	5	<1	Rock crystal tuff.
4680 N	16	20	10	40	30	-	B	30	GREY	✓	-	-	8	16	1	<1	a/c Ordovician conglomerate.
4660 N	296717	20	10	40	30	-	"	30	"	✓	-	-	2	<1	<1	<1	As above
LINE G51E																	
5100mE																	
5000mN	296718	10	-	5	65	20	B	30	BROWN	-	✓	80	26	17	4	<1	Rock ash flow tuff.

6132231

TENEMENT EL 7/73 SHEFFIELD TAS

AREA/PROSPECT Coo Range Prospect. SAMPLE Nos. 296719 – 296749

PLAN REFERENCE As for 719

A 9006

GEOCHEMICAL SOIL SAMPLING LEDGER

Page No. 10

D.P.O. No. 17777R

GEOLOGIST [redacted] DATE Jan '76

ANALYSED BY Zinc Corp. Broken Hill

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.				Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag	
LINE G SE	(Cont.)																
4980mN	296719	10	10	5	60	15	B	30	BROWN	–	✓	100	20	17	4	<1	Rock as above Flow tuff
4960 N	296720	10	–	10	70	10	"	30	"	✓	–	–	20	20	4	1	d/c as above
4940 N	21	10	5	10	65	10	"	50	"	✓	–	–	14	13	3	<1	d/c bedded fine silic. tuff
4920 N	22	10	–	10	60	20	"	30	"	✓	–	–	26	43	3	1	As above
4900 N	23	10	–	15	65	10	"	30	"	✓	–	–	32	50	4	1	Rock lava.
4880 N	24	20	–	15	40	25	B/C	140	"	–	✓	60	40	53	15	1	As above.
4860 N	25	15	–	10	65	10	B	30	"	–	✓	60	28	43	5	<1	Rock: rhyo lava (plus some of flow?)
4840 N	26	10	5	10	65	10	"	30	"	–	✓	100	40	47	5	<1	Rock rhyo lava
4820 N	27	10	10	10	70	–	A/B	30	"	–	✓	100	36	50	6	<1	As above
4800 N	28	10	–	10	70	10	B	30	"	–	✓	80	34	45	5	1	As above.
4780 N	29	10	5	10	75	–	"	30	"	✓	–	–	50	48	5	1	d/c rhyo lava.
4760 N	296730	10	15	10	65	–	"	30	"	–	✓	100	46	43	7	<1	Rock as above
LINE G SSE																	
5300mN	296731	20	–	10	40	30	B	30	BROWN	✓	–	–	56	44	3	<1	d/c ash flow tuff?
4940 N	32	30	40	10	20	–	A	30	"	✓	–	–	210	270	66	1	As above
4760 N	33	5	60	10	25	–	"	30	"	✓	–	–	660	270	66	1	As above.
4940 N	34	40	20	10	30	–	"	30	"	✓	–	–	9660 240	300	43	1	d/c rhyo lava
4920 N	35	50	10	10	30	–	B/C	50	"	✓	–	–	210	133	18	1	As above
4900 N	36	5	–	20	60	15	B	50	"	–	✓	100	190	146	4	1	Rock as above + Old scree
4880 N	37	5	15	10	70	–	A/B	30	"	✓	–	–	30	175	2	1	d/c rhyo lava + Old Gangl. scree.
4860 N	38	5	15	10	70	–	B	40	"	✓	–	–	34	23	1	<1	As above
4840 N	39	10	–	15	60	15	"	50	"	–	✓	100	8	46	3	<1	As above
4820 N	296740	10	–	20	60	10	"	30	"	–	✓	200	10	8	14	<1	Old gangl. scree
4800 N	41	5	–	15	65	15	"	30	"	✓	–	–	24	16	1	<1	d/c bedded tuff below Old gangl. scree
4780 N	42	10	–	10	60	20	"	40	"	✓	–	–	8	37	3	1	As above
4760 N	296743	20	20	20	40	–	A	60	"	–	✓	300	3	11	3	<1	Old gangl. scree
LINE G SSE																	
5500mN	296744	5	–	5	60	30	B	50	BROWN	–	✓	80	12	9	14	<1	Rock old gangl. scree (+ shale?)
4980 N	45	10	–	10	40	40	"	60	"	–	✓	80	10	7	10	<1	Rock rhyo lava
4960 N	46	20	–	10	10	60	C	70	BEIGE	–	✓	80	10	7	19	<1	Rock fine tuff
4940 N	47	10	5	10	65	10	A	30	BROWN	–	✓	150	16	5	12	<1	Rock rhyo lava + Old gangl. scree
4920 N	48	10	–	10	40	40	B	50	"	–	✓	80	28	17	7	<1	Rock fine tuff??
4900 N	296749	20	–	40	40	–	"	30	GREY	–	✓	300	22	7	1	<1	Old. gangl. scree

613232

TENEMENT E.L. 773 SHEFFIELD TAS. **GEOCHEMICAL SOIL SAMPLING LEDGER** Page No. 11

AREA/PROSPECT GOG RANGE PROSPECT SAMPLE Nos. 29675 - 29754 D.P.O. No. 17775

PLAN REFERENCE As for L10 GEOLOGIST [redacted] DATE JAN '76

ANALYSED BY ZINC CORP. BROKEN HILL

A 9006

Grid Co-ordinate	Sample No.	Soil Composition					Soil Horizon	Sample		Bedrock			Metal Content in ppm.						Geological observations
		Rock %	Organic %	Sand %	Silt %	Clay %		Depth cm.	Colour	Outcrop	Concealed	Est. Depth to	Pb	Zn	Cu	Ag			
LINE 6 SSE	(Cont)																		
5020 mN	29750	-	-	20	40	40	B	80	Brown	-	✓	200	34	40	130	41			Ord comgl. scree.
5040 N	51	-	-	10	30	60	"	30	"	-	✓	200	14	18	14	41			As above.
5060 N	52	5	-	10	25	60	"	90	"	-	✓	120	12	18	19	41			As above + Rhyolite, tuff + rock flour
5080 N	53	20	5	20	45	10	"	30	Grey	-	✓	100	41	3	41	41			Ord comgl scree + Rhyolite + flow tuff.
5100 N	29754	20	5	30	35	10	"	30	"	-	✓	200	12	9	8	41			Rhyolite, Ord. comgl. scree.

613233

613234

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 773 No. ..... Sample numbers 987998- Collected by I.M.S. Sheet no. 1

Area / Prospect SOG RANGE WEST Date 21-8-82

Map / Photo reference LIME CO. 24E Analysed by Analabs DPO no. 30314

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
		o/c sample type ***															
		s sample type ****															
987998 S300N	S	A	0.7	B_a					7	5	32			300		S300N	Lt-m.b br gritty clay L. litter surface float.
987999	S	A	0.6	B_2					8	6	77			1800			
																	Soil low above. Float in drainage
																S295N	light, poorly sorted tuff. Almost vitric
988000	S	A	0.4	AB					26	11	165			2.4%		S250N	Black-dk br. humic clay adjacent
																	to o/c of coarse poorly sorted "light
																	tuff". Minor chlorite.
988001	o/c	gs							11	2	42			230		S225N	Tight coarse poorly sorted tuff. Slightly
																	chloritic. Massive but the
																	impression of dip to the S-SW
																	No soil developed.
988002	S	A	0.2	A/B					5	1	22			205		S200N	Humic gritty clay same as o/c as above
																	No soils S200-S160-o/c " "
988003	S	A	0.2	B_2					97	9	48			380		S150N	Or-br clay in small depression at
																	base of small scree derived from debris
																	S175N.
988004	S	A	0.3	B_a					8	9	22			70		S125N	Lt br sandy clay in scree of coarse
																	tuffs.

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

** S

613235

R.A. EXPLORATION . GEOCHEMICAL SA LE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988005 - 988015 Collected by I.M. Clementson Sheet no. 1/2.

Area / Prospect GOG RANGE WEST Date 25-8-82

Map / Photo reference LINE G23E Analysed by Analabs DPO no 30315

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
		o/c sample type ***															
		s sample type ****															
988005	S	A	0.2	A/B					17	21	83			4550		5300N	Humic br gritty clay in extensive scree of dk green - red - grey coarse grained tuff. Slightly chloritic & ferruginous.
988006	S	A	0.3	A/B					25	15	94			5400		5275N	As above : similar float.
~~988007~~																5250N	Mod. l. Extensive o/c (crest of hill) of coarse, occasionally chloritic tuffs. Also minor vitric, fine gr. tuffs.
988007	S	A	0.2	A/B					13	11	38			3150		5225N	Br humic clay amongst o/c & scree as previous
																5200N	Scree & o/c as previous (coarse
																5175N	tuffs) No soil development
988008	S	A	0.3	Scree					9	7	39			1490		5150N	V. gritty brown clays. Coarse chloritic tuffs in scree, originating from top of hill
988009	S	A	0.3	A/B_2					8	6	20			860		5125N	Humic or-br gritty clay in scree of coarse tuffs
988010	S	A	0.3	B_2					23	7	34			1130		5100N	Mid br - or. br. gritty clay in scree.

* 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

613236

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SHEFFIELD EL 7/73 No. ..... Sample numbers: 988005 - 988015 Collected by: I.M. Clementson Sheet no. 2/2

Area / Prospect: GOS RANGE WEST Date: 25/8/82

Map / Photo reference: LINE G23E Analysed by: ANALABS DPO no. 30315

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
988011	S	A	0.4	B_2							260	12	62			600					5075N	Gritty mid or-br clayey mixture of a) Coarse tuffs (no previous). b) Med gr, bnk poorly sorted, slightly chloritic tuffs. c) Fine gr, well sorted (almost shaley) tuffs. Mid grey.
988012	S	A	0.2	B_2K							31	18	29			74					5050N	Lt buff-br silty clay. Surface float is dominantly a fine tuff plus minor coarser tuffs.
988013	S	A	0.5	Ba							470	21	197			500					5025N	Or-br gritty clay in areas of finer grained tuffs, some of which are faintly ferruginous.
988014	S	A	0.3	Ba							450	24	146			193						Mid or-br gritty clay above dk grey fine gr. tuffs. At base of ole is a dk grey-green vitric med-fine grained tuff - very light but slightly chloritic - abundant Fe/Mn staining. Fol of ole suggests a southerly dip at 30-45°.
988015	o/c	gs									37	12	280			3100						

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

613237

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SHEFFIELD EL 3773 No. Sample numbers: 988016 - Collected by: I.M. Clemenson Sheet no: 1

Area / Prospect: GOS RANGE WEST Date: 25-8-82

Map / Photo reference: LINE G 22E Analysed by: ANALABS DPO no: 30315

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
																		5125N	o/c of v. coarse tuffs and screes of same. "Ash flow tuffs" of Noranco mapping.
988016	S	A	0.2	A/B							20	8	56			1290		5150N	Br humic clay of scree type at foot slope and above.
																		5175N	V. extensive o/c boulder screes of coarse gr, slightly to moderately chloritic "ash flow tuff". No pebbles
988017	S	A	0.4	B							11	4	20			56		5200N	Lt buff brown sandy clay amongst screes + o/c of coarse tuffs.
																		5200N - 5300N	Boulder screes + o/c of chloritic green-grey "ash flow" tuff.

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

613238

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 988018-988025 Collected by I.M. Clementson Sheet no. 1

Area / Prospect GOORANGE WEST Date 25-8-82

Map / Photo reference Line 6 27E Analysed by Analabs DPO no. 30315

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
988018	S	A	0.7	B_a/C							8	4	9			22					4550N	Buff-grey sandy clay - weathered Roland Conglomerate.
988019	S	A	0.7	B_a							14	16	29			41		Creek bed & adjacent flats Mn/Fe contact between R/C Low values to north.			4575N	V. sticky mid br - mottled or. clay No surface float other than R/C.
988020	S	A	0.6								12	18	52			40					4600N	Gritty ochre - mid br clay - probably alluvial
988021	S	A	0.3	A/B							17	17	39			460					4625N	Mid br humic clay. Minor float of fine tuffs and qz crystal tuff (possibly a weathered rhyolite).
988022	S	A	0.4	B_a							19	11	39			122					4650N	Mid br gritty clay. Minor float of qz crystal tuff (buff-cream colour)
988023	S	A	1.1	B_a							41	15	84			169					4675N	Rich or-br clay. Surface float of qz crystal tuff plus qz deficient gritty tuff
988024	S	A	0.3	A/B_a							31	25	130			3600					4700N	Rich mid br humic clay. Float of coarse grained tuff and qz crystal tuff.
988025	S	A	0.5	B_2							74	61	400			760					4725N	Gritty ochre - mid br clays Surface float dominantly qz xtal tuffs & other coarse grained tuffs.

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

613239

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SOMERFIELD EL 7173 No. Sample numbers: 988026-988032 Collected by: J. M. Clementson Sheet no. 1

Area / Prospect: GOO RANGE WEST Date: 26-8-82

Map / Photo reference: LINE 21 Analysed by: Analabs DPO no: 30315

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
		o/c sample type ***															
		s sample type ****															
																5300N–5150N	o/c ve boulder area of fairly coarse tuffs. Much is an ash flow tuff (according to Asarco mapping elsewhere on the grid) but also present are gritty non-foliated tuffs. Both slightly to moderately chloritic.
988026	S	A	0.2	A/B$_1$					14	15	45			2800		5150N	Red-brown humic clay in areas as above.
988027	S	A	0.2	A/B$_2$					82	75	76			860		5125N	Humic gritty in mid grey fine gr (shaley) tuff areas
988028	S/F								109	102	96			400		5125N	M.D grey shaley tuff. Minor Fe/Mn staining on joints
988029	S	A	0.2	A/B					25	13	56			2950		5100N	Gritty brown soil in areas of a) shaley tuffs b). Gritty tuffs (more of a lithic tuff)
988030	S	A	0.7	B$_a$					22	8	76			1110		5075N	R-br silty clay. Surface float of gritty tuffs with flow tuffs & minor shaley tuffs
988031	S	A	0.4	B$_2$					14	6	57			3700		5050N	As above. Float mainly gritty tuffs.
988032	S	A	0.5	B$_2$					18	6	66			1430		5025N	R-br silty clay. Float dominantly fine gr tuffs & gr lithic tuffs

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

** c

613240

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987977 – 987989 Collected by I.M. Clementson Sheet no. 1/2

Area / Prospect COOBRANGE WEST Date 19-8-82

Map / Photo reference Line G 25E Analysed by Analabs DPO no. 30314

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987977	S	A	0.4	B_2						15	6	250			5900		5300N	M.d br gritty clay from scree. Float of coarse tuffs
987978	S	A	0.5	B_2						15	5	184			2050		5275N	"
987979	S	A	0.2	A/B						22	13	143			1.30%		5250N	Humic clays amongst scree of coarse
987980	S	A	0.3	A/B_2						16	5	149			3700		5225N	M.d humic clay on top of o/c of v. light fresh vitric tuff
987981	S	A	0.2	A/B						18	9	119			5200		5200N	Dk br humic clays in gully on o/c.
987982	S	A	0.4	A-C						7	1	20			171		5175N	Gritty buff grey clay amongst o/c & scree Rotted tuffs
98983	S	A	0.3	B						4	X	27			230		5150N	Gritty m.d br soil & scree of light vitric tuffs
987984	S	A	0.4	B						35	25	93			370		5000N	M.d br gritty soil. Fine vitric tuff float.
987985	S	A	0.3	B						15	63	40			880		5025N	"
987986	S	A	0.5	B_2						18	8	65			91		5050N	Or-br clay with ab. tuff frags.
987987	S	A	0.2	A/C						6	2	36			124		5075N	Humic grits in scree

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

** Stream sed

613241

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7173 No. ..... Sample numbers 9879977-987989 Collected by I.M. Clementson Sheet no. 2/2

Area / Prospect GOG RANGE WEST Date 19-8-82

Map / Photo reference LINE G 250E Analysed by Analabs DPO no 30314

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
987988	S	A	0.2	A/B							19	14	114			1080					510ON	M.Sl br humic gritty clay at foot of o/c of foliated (? Mons) comp ltf.
987989	S	A	0.2	A/B							9	X	37			1740					512SN	LL br. gritty clay in ocres

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

** S

613242

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7173 No. ..... Sample numbers 987980 - 987993 Collected by I.M. Clementson Sheet no. 1

Area / Prospect GOG RANGE WEST Date 19-8-82

Map / Photo reference LINE 25E (SS:1a) Analysed by Analabs DPO no 30314

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987990	S	A	0.5	B_2							158	10	82			1050		4700N	Rich oc-br silty clay (v. good soil development - unusual in this area).
987991	S	A	0.5	B_2							145	5	61			1700		4675N 4772	Dk br silty clay. Surface float of white qz-porph rhyolite and a coarse fragmental tuff.
987992	S	A	0.4	Scree							5	3	15			31		4650N	Gritty grey gravel - typical weathering of Roland Cong - float of which abounds at this site
987993	S	A	0.4	C							2	9	6			9		4625N	Pinkish grey weathered Roland Cong
																		4625 - 4500N	Old scree of Roland Cong. No sig soil development. Not sampled because considered un-prospective nature of R/C.

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

**

613243

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/77 No. ..... Sample numbers 987994-987997 Collected by I.M. Clementson Sheet no. 1

Area / Prospect GOG RANGE WEST Date 19-8-82

Map / Photo reference LINE 24 E Analysed by Analabs DPO no 30314

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
987994	S	A	0.4	A/C							2	1	5			19					4575N	All black-grey humic sandy-weathered Roland Cong. Extensive o/c & float of R/C.
995	S	A	0.4	A/C							2	3	10			25					4600N	
996	S	A	0.3	A/C							2	4	8			9					4625N	
997	S	A	0.3	A/C							9	8	14			15					4650N	

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

613244

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 987957 - 987968 Collected by I.M. Cirmanbon Sheet no. 1

Area / Prospect WEST GOG RANGE Date 18:8:82

Map / Photo reference LINE G 27E Analysed by Analabs DPO no 30314

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH — o/c sample type *** — s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987957	S	A	0.5	B_2					18	8	76			3100		5300N	Mid brown silty clay in areas of coarse tuff's.
987958	S	A	0.7	B_2					10	3	135			910		5275N	Or-br silty soil. Float of coarse ash (?) - xtal tuff's.
987959	S	A	0.4	A/B_2					15	5	75			520		5250N	Or-br gritty clay
987960	S	A	0.5	C					12	3	52			2600		5225N	Weathered coarse grit. tuff
987961	S	A	0.4	B_2					17	5	101			530		5200N	Or-br gritty soil amongst ?o/c of coarse v. Eric tuff.
987962	S	A	0.2	A-C					8	8	48			4850		5175N	Humic gritty soil in areas of lithic-crystal tuff
987963	S	A	0.4	B_2-C					7	1	27			800		5150N	Gritty buff-br soil - weathered tuff? (Crest of hill).
987964	S	A	0.4	B					15	11	60			7700		5125N	Mid-dk br gritty clay. Float of coarse gr lithic tuffs
987965	S	A	0.7	B_2					12	6	48			1680		5100N	Or-br gritty soil. Float of fine tuffs and coarse lithic slightly foliated tuffs.
987966	S	A	0.4	B_2					27	12	46			3550		5075N	Mottled mid brown-orange clay Float of fine, tight tuff.
987967	S	A	0.6	B_2					19	8	175			3250		5050N	As above
987968	S	A	0.4	A/B_2					29	26	111			5000		5025N	Humic mid-br clay.

* 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

613245

R.A. EXPLORATION . GEOCHEMICAL SA LE LEDGER

Tenement name SHEFFIELD EL7/73 No. Sample numbers 987969 - 987976 Collected by I.M. Clementson Sheet no. 1

Area / Prospect GOG RANGE WEST Date 18-8-82

Map / Photo reference LINE 25/8E Analysed by Analabo DPO no. 30314

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
987969	S	A	0.4	B_2						14	2	156			470		5300N	Lt ochre brown clay incorp of very coarse tuff
987970	S	A	0.4	A/C						12	8	176			1.15%		5275N	Humic, gritty weathered tuff.
987971	S	A	0.3	A/C						12	9	82			8500		5250N	As previous
987972	S	A	0.4	B_2						15	5	116			1860		5225N	Gritty mid brown clays
987973	S	A	0.2	B_2						17	9	134			5850		5200N	Dk brown silty clay incorp coarse tuffs
987974	S	A	0.2	A/B						10	12	53			5350		5175N	Humic gritty clay in coarse tuffs
987975	S	A	0.4	B_2						19	6	100			2400		5150N	Brown-gritty soil (at fire trail)
987976	S	A	0.5	B_2						20	5	53			490		5125N	" "

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

** wi = width m al = alluvial

613246

APPENDIX IX

GOG RANGE GRID P.E.M. SURVEY DATA

GOG RANGE GRID P.E.M. SURVEY

DIPOLE - DIPOLE Tx - Rx 100m SEPARATION

STATION SPACING : 50m TIME BASE : 10msec

LINE G22E

Channel:	1	2	3	4	5	6	7	8
4800mN	-9	-1	-1	0	0	0	0	0
4850mN	-7	-2	-1	-1	-1	-1	-1	-1
4900mN	-10	-2	-2	-1	-1	-1	0	0
4950mN	-8	0	0	0	0	0	0	0
5000mN	-4	-2	-1	0	0	0	0	0

LINE G24E

4700mN	-4	-1	0	0	0	0	0	0
4750mN	-6	-1	-1	-1	0	0	0	0
4800mN	-6	-1	0	0	0	0	0	0
4850mN	-8	-2	-1	-1	0	0	0	0
4900mN	-4	-1	0	0	0	0	0	0
4950mN	-4	-1	0	0	0	0	0	0

LINE G25/8E

4700mN	-11	-2	-2	-1	-1	-1	-1	-1
4750mN	-9	-1	0	0	0	0	0	0
4800mN	-11	-1	-1	-1	-1	-1	-1	-1
4850mN	-9	0	0	0	0	0	0	0
4900mN	-6	0	0	0	0	0	0	0
4950mN	-9	0	0	0	0	0	0	0
5000mN	-5	0	0	0	0	0	0	0
5050mN	-6	-1	0	0	0	0	0	0
5100mN	-8	0	0	0	0	0	0	0
5150mN	-6	-4	-3	-3	-3	-1	-1	-1

LINE G33E

Channel:	1	2	3	4	5	6	7	8
4700mN	-7	-1	-1	-1	-1	-1	-2	-2
4750mN	-13	-1	-1	0	0	0	0	0
4800mN	-9	0	0	0	0	0	0	0
4850mN	-4	0	0	0	0	0	0	0
4900mN	-7	0	0	0	0	0	0	0
4950mN	-7	0	0	0	0	0	0	0

LINE G36E

4750mN	-7	0	0	0	0	0	0	0
4800mN	-9	0	0	0	0	0	0	0
4850mN	-11	0	0	0	0	0	0	0
4900mN	-8	0	0	0	0	0	0	0
4950mN	-7	0	0	0	0	0	0	0
5000mN	-4	-1	0	0	0	0	0	0
5050mN	-10	-2	-1	0	0	0	0	0

LINE G38E

4810mN	-8	0	0	0	0	0	0	0
4850mN	-6	0	0	0	0	0	0	0
4900mN	-10	0	0	0	0	0	0	0
4950mN	-7	0	0	0	0	0	0	0
5000mN	-7	0	0	0	0	0	0	0
5050mN	-7	2	0	0	0	0	0	0

LINE G40E

4750mN	-8	0	0	0	-1	0	-1	-2
4800mN	-6	0	-1	-1	-1	-1	-1	0
4850mN	-6	-1	-1	0	0	0	0	0
4900mN	-7	-1	0	0	0	0	0	0
4950mN	-5	0	0	0	0	0	0	0
5000mN	-6	-1	-1	-1	-1	-1	-1	-1
5050mN	-6	-1	-1	-1	-1	0	0	0
5100mN	-6	-1	0	0	0	0	0	0
5150mN	-5	-1	-1	-1	0	0	0	0

APPENDIX X

GEOCHEMICAL SAMPLE SHEETS - BEULAH BARYTE

613250

R.A. EXPLORATION GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 988218 - 988240 Collected by I. M. Clementson Sheet no. 1 of 3

Area / Prospect BENHAM BARYTES Date 4-12-82

Map / Photo reference LINE 1 EAST Analysed by ANALABS DPO no. 30322

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
988218	F	gs							14	80	106	x		425		x			500 N	Foliated weathered andesitic lavas
988219	S	A	0.6	B_2					29	37	109			380					500 N	V. light silty red brown clay
988220	S	A	0.4	B_2					18	35	46			1500					475 N	" " " "
988221	S	A	0.3	B_2/C					26	29	118			1050					450 N	M.l br. mottled grey br sandy soil with abundant float of andesitic lava. Close to qc
988222	S	A	0.3	A/B					26	30	125			4650					425 N	M.l br. humic silty clays
988223	F	gs							6	10	74	0.2		1800		x			410 N	Mouth. buff-br schistose, pert, porf. tuff. Chloritic stockwk. Minor Fe oxides in vugs.
988224	S	A	0.3	A/B					45	82	112			3650					400 N	M.l brown silty clay with fine grained shaley tuffs
988225	o/c	gs							FOR PETROLOGY			(DPO 303221)				Altered vitric tuff.			380mN	As below
988226	o/c	gs							21	25	230			1850					380mN	- a fine grained slightly foliated purple grey lavas. Trace pyrite. Not well bedded but grain of qc strikes 100° mag probably dips 60° to 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 = catchment km2

*** O...

613251

R.A. EXPLORATION . GEOCHEMICAL SA LE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988218 - 988240 Collected by I.M. Clementson Sheet no. 2 of 3

Area / Prospect BEULAH BARITE Date 4-12-82

Map / Photo reference LINE 1 EAST. Analysed by Analabo DPO no. 30322

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	As			Grid ref	Geological Observations
988227	S	A	0.6	B_2							26	36	113			600					375N	Or-br silty clay + float as previous (in creek) + fine grained well sorted g'wacke.
988228	S	A	0.3	A/B_2							34	79	72			2150					350N	Mid brown silty clay; minor sls/schistose shale float
988229	S	A	0.8	B_2/C							28	35	100			610					325N	Brick red silty clay plus fragments of schistose shale/tuff shale
988230	S	A	0.3	B_2							23	35	46			1250					300N	As above plus minor veinqz float and sandy tuffs/g'wackes
988231	S	A	0.5	B_2							57	73	56			490					275N	As above
988232	S	A	0.5	B_2							34	40	41			730					250N	Mottled ochre brown - yellow brown clay. Schistose tuff/shale float
988233	S	A	0.4	B_2							34	25	39			615					225N	As above
988234	F ? o/c	gs									7	8	220	0.1		2450		×			200N	Red schistose shale or shale-tuff. Maybe o/c in which case strikes 140° m a dips SW (60°).
988235	S	A	0.3	A/B							7	10	41			600					200N	[Small sample]: sandy light brown soil. Abundant schist & poorly sorted foliated sst/g'wacke float
988236	F	gs									4	9	91	x		4050		x			175N	Foliated, weathered silty schistose tuff with sandy laminae. Talcose in part.

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

** Size fraction

613252

R.A. EXPLORATION . GEOCHEMICAL SA LE LEDGER

Tenement name: SHEFFIELD EL7/73 No. ..... Sample numbers: 988218 - 988240 Collected by: Iain Clamenson Sheet no: 3 of 3

Area / Prospect: BENLOMAN BARITES Date: 4 Dec 1982

Map / Photo reference: LINE 1 EAST. Analysed by: Analabs DPO no: 30322

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au				Grid ref	Geological Observations
988237	S	A	0.2	A/B							43	13	26			280					175N	Lt brown sandy clay. Abundant qz:ite/
																						greacke float
988238	S	A	0.4	B_2							53	27	71			115					150N	Lt ochre - yellow clay.
988239	S	A	0.4	B_2-C							32	15	33			405					125N	Silty weathered yellow-ochre soil.
																						Micaceous, buff silty rock float.
988240	S	A	0.4	B_2							49	11	94			305					100N	As above

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

** Stream sed sample classification fl = [illegible]

613253

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 3173 No. ..... Sample numbers 988241 - 988246 Collected by I.M. CLEMENTSON Sheet no. 1

Area / Prospect BOULDER BASIN Date 4 - Dec - 1982

Map / Photo reference LINE 2 EAST Analysed by AMDEL Lab DPO no. 30322

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
	ss * oc f s	fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn	Au	Ao				
		o/c sample type ***																		
		s sample type ****																		
988241	S	A	0.5	B_2					31	55	89			2150					500N	Mid red-brown clay. Float (close to o/c) of red weathering sandy tuff or possibly andesitic lava
988242	S	A	0.5	B_2					30	63	117			2900					475N	[v. small sample] : as above. Float of red massive, weathered int. lava.
988243	f	gs							24	36	470			2300					460N	Weathered (buff) schistose or strongly sheared intermediate lava or fine xtal tuff. All clasts or phenocrysts v. altered by weathering
988244	f	gs	(close to o/c)						45	26	250	x		510		x			440N	Fresher version of above. Foliated/sheared andesite.
988245	f	gs	(possibly o/c)						17	10	230	x		1450		x			400N	Slightly foliated, fine grained purple-grey facies - very similar to float in creek at Line 1 East. If o/c, strikes 110°M with steep S. dip.
988246	o/c	gs							6	7	125	x		2500		x			Approx 50m W of 405N	o/c in creek of same facies as above. Strikes 120°M.

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

** Sample type

613254

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL3/73 No. ..... Sample numbers 988247 - 988266 Collected by I.M. CLEMENTSON Sheet no. 1 of 1

Area / Prospect BENHAM GRANITE Date 4 DEC 82

Map / Photo reference LINE 2 EAST Analysed by ANALABS DPO no. 30322

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Grid ref	Geological Observations
988247	S	A	0.6	B_2							25	62	114			1500		475N	Mid red-brown silty clay
988248	S	A	0.6	B_2							31	71	133			1100		450N	As above, slightly mottled
988249	S	A	0.7	B_2							30	92	141			1100		425N	Mid brown silty clay
988250	S	A	0.6	B_2							20	50	105			1150		400N	Mottled ochre-brown silty clay at foot of o/c (988245)
988251	S	A	0.6	B_2							34	500	71			230		375N	Mottled ochre-brown silty clay
988252	S	A	0.7	B_2							24	32	60			395		350N	Mid brown-ochre brown fine sticky clay
988253	S	A	0.7	B_2							8	27	114			425		325N	Light ochre-brown clays
988254	S	A	0.7	B_2							19	50	73			405		300N	Silty, lt ochre-brown clay plus frags of weathered schist.
988255	S	A	0.7	B_2							110	130	62			130		275N	Mid ochre-brown clay
988256	S	A	0.7	B_2/C							18	380	107			155		250N	Lt ochre-yellow clay + weathered shale
988257	S	A	0.6	B_2/C							35	450	161			1200		225N	As above but shale more ochre tone
988258	S	A	0.5	B_2/C							71	47	47			2150		200N	Ochre-yellow-brown sandy clay plus frags of weathered schist
988259	S	A	0.7	B_2							96	83	113			560		175N	As above
988260	S	A	0.7	B_2							106	13	45			130		150N	As above
988261	S	A	0.7	B_2							83	19	47			115		125N	As above
988262	S	A	0.7	B_2							76	35	49			70		100N	As above
988263	S	A	0.7	B_2							61	18	62			130		075N	Mid ochre brown silty clay
988264	S	A	0.4	B_2/C							112	380	1200			750		050N	Lt br sandy clay plus frags grey-green mic.
988265	S	A	0.7	B_2							32	11	32			425		025N	Lt ochre-grey clay plus frags grey shale
988266	S	A	0.7	B_2							18	5	26			785		000N	As above.

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

** Stream sediment ... f = fine m = medium c = coarse

C.R.A. 21.

C.R.A. EXPLORATION PTY. LIMITED

D.P.O. 16708

GEOCHEMICAL SOIL SAMPLING LEDGER

AREA BEULAH.

MAP OR PHOTO REFERENCE

SAMPLE Nos. 245001 — 246103

COLLECTED BY P.J.A.

ANALYSED BY Zinc Corp Broken Hill.

Grid Coordinates	Sample No.	Soil composition					Sample				Bedrock			Metal content p.p.m.											Geological observations
		Rock %	Laterite %	Sand %	Silt %	Clay %	Soil Colour	Depth cm	Colour	Moisture	Outcrop	Consolidated	Rock Type	Ni	Zn	Co	Mn	Cu	Cr	Mo	Ag	Pb	Sb	As	
LINE 1																									
0S	245001	-	-	5	5	90	WB	70	T	-	-			84	28	28	7	6			41				Rock possibly ordovician.
10S	245002	-	-	5	5	90	WB	70	"	-	-			130	36	39	11	9			1				as above.
20S	245003	-	-	80	5	75	WB	70	"	-	-			140	51	39	7	6			1				as above.
30S	245004	20	-	10	5	65	"	85	"	-	-	✓	85	190	24	42	6	9			1				as above.
40S	245005	30	-	20	5	55	"	65	"	-	-			97 100	21 32	13	9 6	8 5			41				as above.
50S	245006	25	-	10	5	60	"	80	"	-	-			230	64	22	5	9			41				Bedrock ferruginous schist.
60S	245007	20	-	20	5	55	"	70	"	-	-			280	51	34	6	9			1				Near residual brownish - fe schist.
70S	245008	5	-	45	5	45	"	90	"	-	-	✓	90	120	21	18	4	6			41				Bedrock weathered brownschist ?
80S	245009	20	-	25	5	50	"	55	"	-	-			180	97	34	13	15			41				as above.
90S	245010	10	-	10	20	60	B	70	"	-	-			32 23	180 191	13 15	39 29	24 35			41				Weathered bedrock not reached.
100S	245011	60	-	10	5	85	B-WB	60	"	-	-	✓	60	77	184	29	17	19			41				Bedrock brownschist.
110S	245012	30	-	20	5	65	B-WB	50	"	-	-	✓	50	60	96	19	15	28			1				Bedrock brownschist, ferr.
120S	245013	15	-	10	10	65	B	60	"	-	-	✓	60	80	70	13	15	32			1				Bedrock probably brownschist.
130S	245014	10	-	20	5	65	WB	95	"	-	-	✓	95	61	65	47	10	29			1				Bedrock brownschist.
140S	245015	20	-	20	5	55	"	90	"	-	-	✓	90	86	60	20	11	34			1				—
150S	245016	30	-	10	5	55	"	100	"	-	-	✓	100	38	74	13	15	29			1				Bedrock brownschist.
160S	245017	20	-	30	5	45	"	65	"	-	-	✓	65	24	73	15	17	32			41				as above.
170S	245018	60	-	20	5	25	"	90	"	-	-	✓	90	16	77	10	17	31			41				as above.
190S	245019	50	-	10	5	35	"	70	"	-	-	✓	70	15	82	8	19	35			1				qtz brownschist at 190S. Bfe. brownschist
200S	245020	65	-	10	5	20	"	60	"	-	-	✓	60	15	79	5	20	32			1				Bedrock brownschist.
210S	245021	50	-	10	5	35	"	60	"	-	-	✓	60	90	70	12	15	32			1				as above.
220S	245022	10	-	30	5	55	"	75	"	-	-	✓	75	20	96	13	20	37			1				as above.
LINE 2																									
0S	245023	5	-	70	5	20	WB	90	T	-	-	✓	90	56	56	15	11	12			41				Bedrock weathered ordovician.
10S	245024	10	-	70	5	15	"	110	"	-	-	✓	100	66	114	11	11	14			1				Bedrock ferruginous material, qtz.
20S	245025	50	-	20	5	25	"	50	"	-	-			160	56	13	10	21			41				Bedrock ferruginous material.
60S	245026	3	-	50	5	40	"	85	"	-	-	✓	95	45	19	7	5	6			41				Bedrock possibly ferruginous schist.
40S	245027	60	-	20	5	15	"	70	"	-	-	✓	70	44	91	21	10	15			1				Bedrock possibly brownschist.
60S	245028	65	-	10	5	20	"	50	"	-	-	✓	50	27	91	6	9	9			41				Bedrock brownschist.
80S	245029	70	-	10	5	15	"	30	"	-	-			12	34	4	9	20			41				Bedrock weathered ordovic.
70S	245030	50	-	25	5	20	"	60	"	-	-			18 41	55 95	14 31	16 19	49 42			1 41				as above.
80S	245031	40	-	25	5	35	"	45	"	-	-	✓	45	48	96	52	19	42			41				Bedrock brownschist.
90S	245032	55	-	15	5	25	"	85	"	-	-	✓	45	33	85	15	14	20			41				as above.
100S	245033	50	-	30	5	15	"	60	"	-	-			27	94	14	13	17			41				as above.
110S	245034	65	-	20	5	10	"	65	"	-	-	✓	65	30	115	18	16	44			41				as above.

613255

C.R.A. 21.

C.R.A. EXPLORATION PTY. LIMITED

D.P.O. 14903.

GEOCHEMICAL SOIL SAMPLING LEDGER

AREA BULAN.

SAMPLE Nos. 245001 - 245103

COLLECTED BY P. J. A.

MAP OR PHOTO REFERENCE

ANALYSED BY Zinc Corp. Broken Hill.

Grid Coordinates	Sample No.	Soil composition: Rock %	Lateritic %	Sand %	Silt %	Clay %	Soil Colour	Sample: Depth cm	Sample: Colour/Munsell	Sample: Texture	Bedrock: Outcrop	Bedrock: Contoured	Bedrock: Depth cm	Metal content p.p.m.: Ni	Pb	Co	Mn	Cu	Cr	Mo	As	Mo	As			Geological observations
LINE 2.																										
120 S	245015	60	-	20	5	15	MB	90		-		●	●	60	84	12	60	23			41					Bedrock brown schist.
130 S	245016	65	-	15	5	15	"	70		-		✓	70	68	56	16	15	23			41					" " above.
140 S	245017	70	-	10	5	15	"	130	"	-				340	124	29	24	40			41					" " above.
160 S	245018	70	-	20	5	5	"	60	"	-		✓	60	160	46	11	9	10			41					" " above ?
170 S	245019	50	-	20	5	25	"	70	"	-		✓	70	610	86	24	11	17			1					Brownish, black
180 S	245020	75	-	10	5	10	"	60	"	-		✓	60	1040	69	68	11	5			2					Chalky black.
190 S	245044	70	-	50	5	35	"	100		-		✓	100	390	132	20	12	7			1					" " above.
210 S	245042	30	-	40	5	25	"	70		-		✓	70	110	250	41	130	26			1					Mudstone.
220 S	245043	10	-	20	10	60	"	110	"	-		✓	110	44	68	20	79	13			1					Mudstone.
230 S	245044	-	-	50	5	45	"	90	"	-		✓	90	15	63	30	57	22			41					Mudstone.
240 S	245045	30	-	30	5	35	"	60	"	-		✓	60	22	63	80	218	68			41					Mudstone.
250 S	245046	20	-	40	5	35	"	70	"	-		✓	70	27	56	56	170	48			41					Micaceous mudstone.
260 S	245047	60	-	10	10	20	"	70		-		✓	70	12	61	45	560	63			41					Mudstone.
LINE 3																										
100 S	245048	5	-	85	10	30	S-MB	90		-		✓	90	66	51	30	27	29			41					Bedrock fine-grained material.
90 S	245049	10	-	35	5	50	S-MB	80	"	-		✓	80	46	43	17	43	26			41					" " above.
80 S	245050	-	-	25	5	70	S	120	"	-		✓	120	27	31	61	15	13			41					" " above.
70 S	245051	5	-	20	5	70	S	120	"	-		✓	120	49	48	44	24	26			41					" " above.
60 S	245052	-	-	10	10	80	S	125	"	-		✓	125	48	57	50	31	32			41					" " above.
50 S	245053	10	-	50	5	35	MB	110		-		✓	110	18	27	6	11	14			41					Bedrock weathered mudstone.
40 S	245054	8	-	60	5	30	-	110		-		✓	110	43	48	14	15	19			41					Bedrock possibly mudstone.
110 S	245055	6	-	30	5	60	S-MB	110		-		✓	110	66	53	19	16	23			1					Bedrock fine-grained material.
120 S	245056	5	-	45	5	45	S-MB	90	"	-		✓	90	62	69	22	27	37			41					Bedrock fine-grained schist.
130 S	245057	5	-	45	5	45	S-MB	100	"	-		✓	100	27	81	16	16	13			1					Bedrock altered mudstone.
140 S	245058	-	-	50	5	45	MB	105		-		✓	105	52	58	31	15	13			1					Possibly mudstone bedrock.
150 S	245059	-	-	40	5	55	"	90		-		✓	90	27	33	16	10	9			41					As above. Fragments also.
160 S	245060	-	-	40	5	55	"	100		-		✓	100	34	89	7	10	9			41					Bedrock possibly mudstone.
170 S	245061	-	-	40	5	50	"	120		-		✓	120	18	19	7	5	1			-					-
180 S	245062	-	-	50	5	45	"	100		-		✓	100	59	38	13	5	17			41					Bedrock possibly mudstone
190 S	245063	-	-	50	5	45	"	110		-		✓	110	63	62	25	10	16			1					Bedrock - fragmental material? brownish?
200 S	245064	30	-	15	5	50	S-MB	100		-		✓	100	96	48	19	11	17			41					Bedrock brownish ?
210 S	245065	60	-	20	5	15	MB	70		-		✓	70	61	66	10	19	40			41					Bedrock altered mudstone.
220 S	245066	10	-	75	5	10	MB	70		-		✓	100	15	84	14	6	6			1					Bedrock brownish ?
230 S	245067	50	-	25	5	15	MB	90		-		✓	90	34	63	13	12	22			1					Bedrock mudstone ?
240 S	245068	5	-	70	5	20	MB	90		-		✓	90	29	83	14	10	9			41					Bedrock brownish.

613256

Form
CRAE 16

C.R.A. EXPLORATION PTY. LIMITED
GEOCHEMICAL DRAINAGE SAMPLING LEDGER

O.P.O. 16903 (244501-6)
O.P.O. 13666 (213665-6)

AREA Bullan E.L. 11/78. SAMPLE Nos. 213665-66, 244501-244506. COLLECTED BY P.J.A. SHEET No.

MAP OR PHOTO REFERENCE ANALYSED BY Zinc Corp. Broken Hill. DATE

Map or photo ref.	Sample No.	Sediment: Quartz	Sediment: Lith	Sediment: Mn/Fe ppt	Sediment: Organic	Channel: Type	Channel: Width	Channel: Depth	Channel: Collected	Silt	Metal content, p.p.m.: Pb	Zn	Cu	Ni	Co	Cr	Mn	Ag	Mo	As	Sb	Biological observations
S	213666	5	10	65	20	S	2	-	✓	-	19	69	6	55	20	60	190	41	3	5	1	o/c grey sedimentaneous mud/s, shaled acid volcanics?
"	213666	-	60	35	-	S	2	✓	-	-	23	89	6	58	18	40	190	41	3	5	1	Float same plus rhyo-dac. lavas and tuff.
																						o/c nil. Float mudstone and acid tuff?
S	244501	-	10	80	10	M	1.0	✓	-	-	23	75	23	29	34	30	1290	41	42	15	2	o/c nil. Float nil
"	244502	5	10	75	10	M	0.4	✓	✓	-	14	56	17	81	22	130	690	41	42	5	1	o/c mudstone, Float mudstone
"	244503	40	50	10	-	F	2.5	✓	-	-	7	20	6	8	3	30	110	41	42	45	1	o/c nil. Float mud/s. Sand/s. Volcanic, qtz, sandstone
"	244504	65	25	10	-	M	0.5	✓	-	-	14	75	11	45	24	50	1140	41	42	5	1	o/c nil. Float marly andesite
"	244505	10	65	20	5	M	1.0	✓	-	-	14	76	8	33	13	50	390	41	42	65	1	o/c mudstone, fine acid volcanics. Float mudstone,
"	244506	5	45	45	5	M	1.0	1	✓	-	82	92	20	150	28	180	930	41	42	65	1	volcanics and fine micaceous sandstone
																						o/c andesite. Float shaled andesite?

613257

APPENDIX XI

BEULAH BARYTE MAGNETICS BY M.F.FLIS

613259

CRA EXPLORATION PTY. LIMITED
(INC. IN N.S.W.)

LEVEL 4, BELLERIVE QUAY,
CAMBRIDGE ROAD, BELLERIVE, 7018, TASMANIA, AUSTRALIA

P.O. BOX 138
BELLERIVE 7018
TELEGRAMS: CRAEX
TELEX: AA57144
TELEPHONE: 44 3533
AREA CODE: (002)

IN REPLY PLEASE QUOTE

22nd July, 1982.

Memorandum To: I.CLEMENTSON

Copy: T.W.DICKSON

From: M.FLIS

BEULAH BARYTE MAGNETICS

INTRODUCTION

Line 0 of the reconnaissance ground magnetic survey on the Beulah Baryte grid was modelled using the MAGMOD inversion programme on the P.D.P. 11/23. The data was inverted using the TABULAR (infinite depth 2-D dyke), STEP (fault) and RIBBON (depth limited thin 2-D dyke) models. Programme outputs are attached.

DISCUSSION

The data seems to be equally well fitted by all three models used, although the RIBBON model is fitted best statistically speaking. All models indicate that the causitive body is at surface (one metre deep) at 288 to 299mN on line 0. The STEP and RIBBON models have fitted a very high magnetic susceptibility flat lying body or fault; the two being equivalent in this case.

Results from the TABULAR model, on the other hand, give a totally different picture. This model suggests a 24 metre wide dyke type body of low susceptibility dipping 74° to the north.

CONCLUSIONS AND RECOMMENDATIONS

One line of widely spaced data is certainly not conclusive enough to favour any model at this stage, although I am biased towards accepting the fault (or flat lying thin ribbon) model.

Further ground mag work would, perhaps, shed a little more light on the situation. I suggest resurveying lines 0 and 1 with closer spaced magnetics and V.L.F. and establishing a further two lines to the east (lines -1 and -2) to be similarly surveyed.

MARCUS FLIS

613261

WEIGHTED LEAST SQUARES FIT - RIBBON

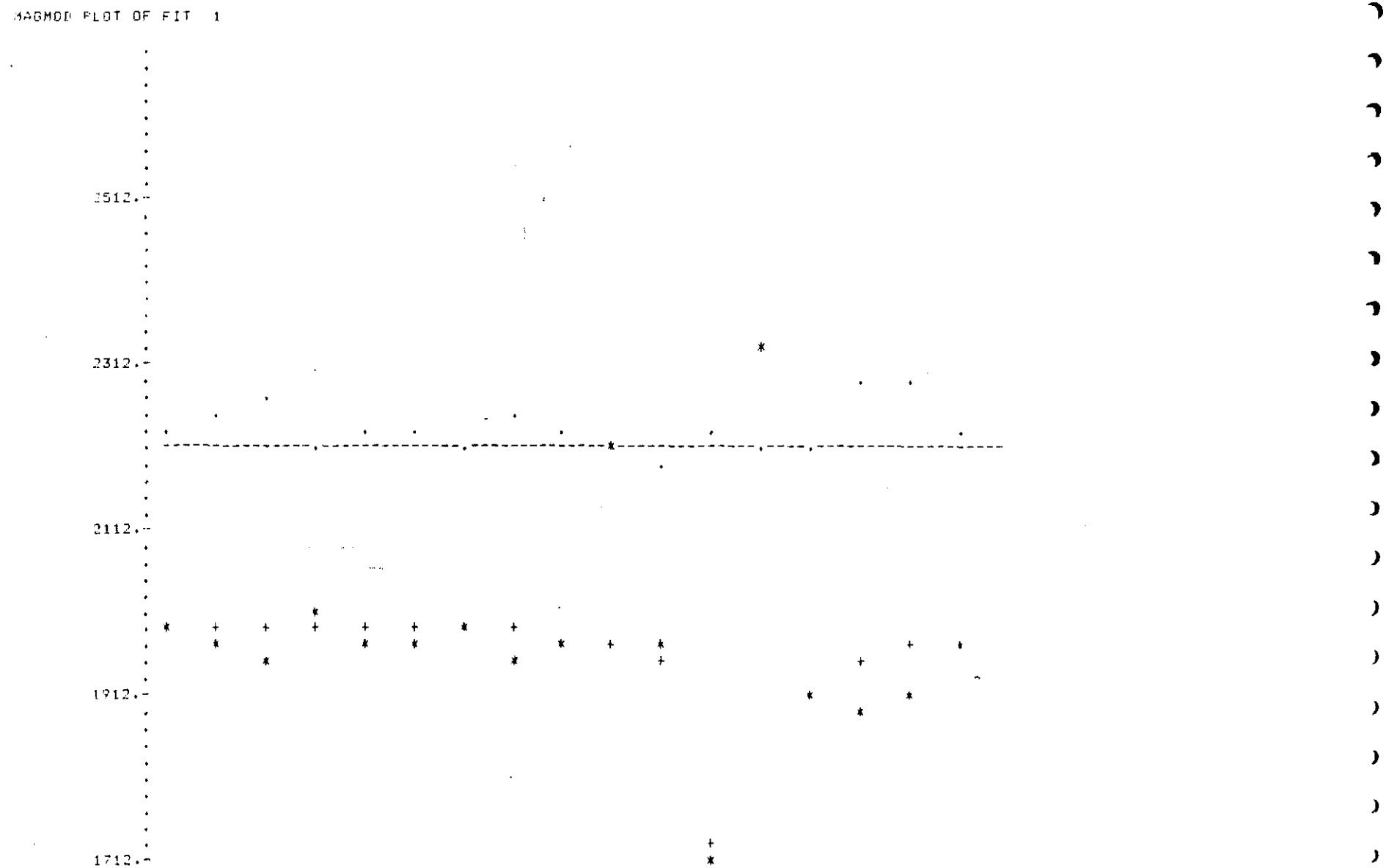
ITERATION NUMBER 42
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PARAMETER	KEY	START	LIMITS		FITTED	TOLERANCE	RANGE
MAGNET	2	3.151E+03	1.0E+01	4.0E+03	3.999E+03	1.0E+00	0.0E-01
DIP	2	8.700E+01	2.5E+01	1.8E+02	1.799E+02	1.0E-01	0.0E-01
BASE LEVEL	1	1.935E+03	1.0E+03	2.0E+03	1.974E+03	1.0E+00	1.6E+03
BASE SLOPE	1	-2.600E-01	0.0E-01	0.0E-01	-4.339E-02	1.0E-01	2.9E+00
POSITION	1	2.930E+02	2.0E+02	4.0E+02	2.959E+02	1.0E+00	4.2E+01
WIDTH	1	1.200E+00	1.0E+00	5.0E+02	1.078E+01	1.0E-01	2.7E-01
DEPTH	1	1.000E+00	1.0E+00	1.0E+02	1.440E+00	1.0E-01	9.3E-02
INCLNATN	0	-7.200E+01	0.0E-01	0.0E-01	-7.200E+01	0.0E-01	0.0E-01
DECLNATN	0	9.000E+01	0.0E-01	0.0E-01	9.000E+01	0.0E-01	0.0E-01
VERTICAL	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01
TRAV DIR	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01

POSITION	WEIGHT	OBS	FITTED
0.0000	10.00	1973.	1987.
25.0000	10.00	1956.	1985.
50.0000	10.00	1936.	1984.
75.0000	10.00	1993.	1983.
100.0000	10.00	1969.	1981.
125.0000	10.00	1968.	1979.
150.0000	10.00	1985.	1977.
175.0000	10.00	1945.	1975.
200.0000	10.00	1965.	1970.
225.0000	10.00	2208.	1962.
250.0000	10.00	1972.	1936.
275.0000	10.00	1712.	1721.
300.0000	10.00	2318.	2318.
325.0000	10.00	1911.	1905.
350.0000	10.00	1877.	1951.
375.0000	10.00	1894.	1961.
400.0000	10.00	1957.	1964.

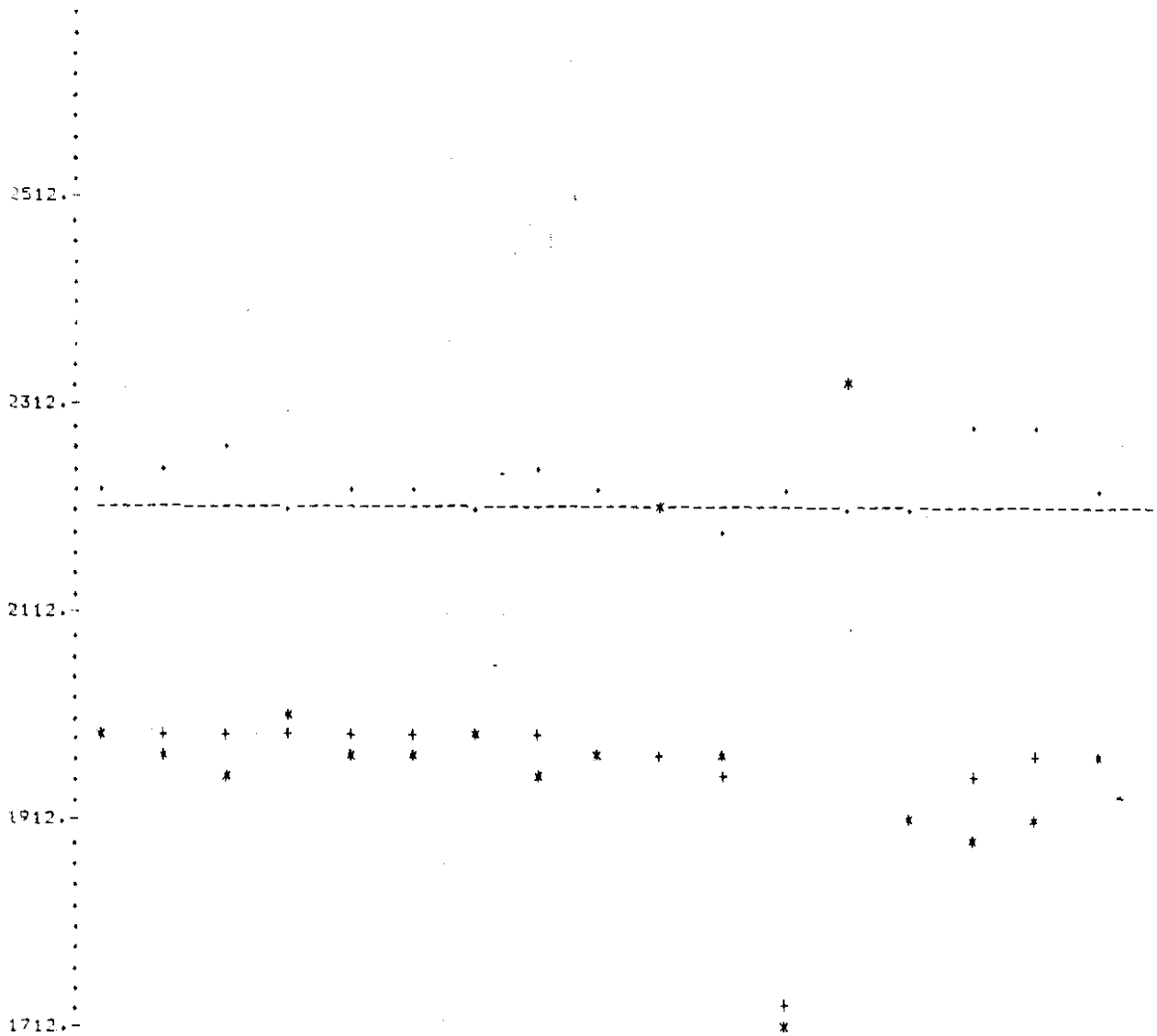
NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0340

613262


MAGMOD PLOT OF FIT 1
3512.
2312.
2112.
1912.
1712.
MODEL RIBBON
TITLE REULAH BARITE LINE 0 REC
NUMBER OF STATIONS 17 MAX AMPLITUDE 606. X INCREMENT 5 COLUMNS PER STATION. Y INCREMENT OF 20. GAMMAS PER LINE.
FIELD DATA CURVE...%*%
FITTED CURVE...%*%
ERROR CURVE...%.%
NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT
PARFIT FLAG 2
ERROR CURVE D
2312.000

613263

MAGMOD PLOT OF FIT 1



MODEL RIBBON TITLE BEULAH BARITE LINE 0 REC

NUMBER OF STATIONS 17 MAX AMPLITUDE 606. X INCREMENT 5 COLUMNS PER STATION. Y INCREMENT OF 20. GAMMAS PER LINE.
FIELD DATA CURVE...%*% FITTED CURVE...%+% ERROR CURVE...%.%
NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT [redacted]340 PARFIT FLAG 2 ERROR CURVE D[redacted]4 2212.500

WEIGHTED LEAST SQUARES FIT - STEP

1 BEULAH BARITE LINE 0 RECON MAG.

ITERATION NUMBER 5
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0438

ITERATION NUMBER 10
****

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0438

ITERATION NUMBER 11
****

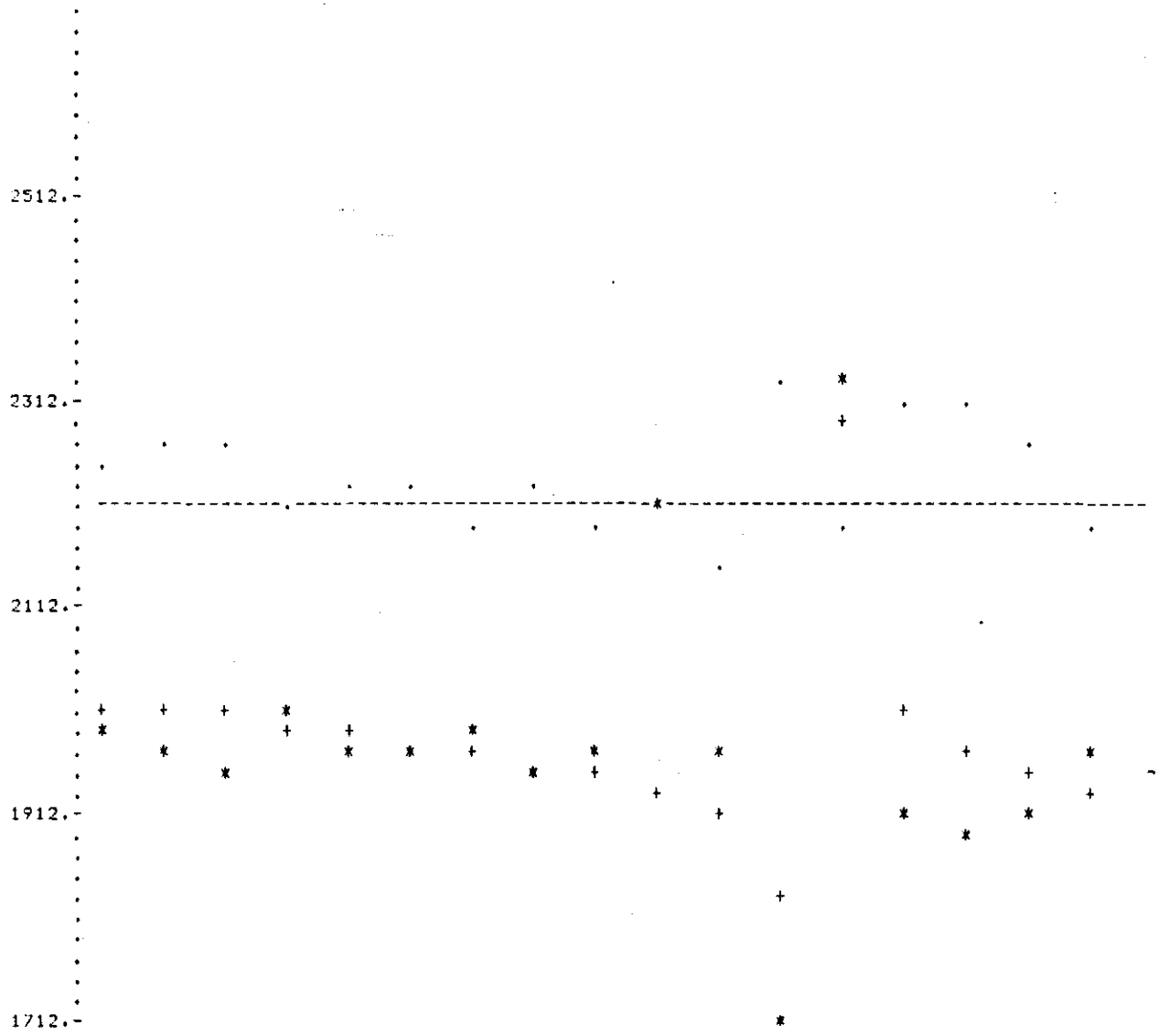
PARAMETER	KEY	START	LIMITS		FITTED	TOLERANCE	RANGE
MAGNET	1	1.151E+03	1.0E+01	3.0E+03	1.168E+03	1.0E+00	6.8E+02
DIP	1	1.670E+02	2.5E+01	1.8E+02	1.681E+02	1.0E+00	3.5E+01
BASE LEVEL	1	1.935E+03	1.0E+03	2.0E+03	1.935E+03	5.0E+00	5.5E+01
BASE SLOPE	1	-2.600E-01	0.0E-01	0.0E-01	-2.676E-01	1.0E+00	3.5E-01
POSITION	1	2.980E+02	2.0E+02	4.0E+02	2.983E+02	1.0E+00	8.9E+00
THICKNESS	2	1.200E+00	1.0E+00	5.0E+01	1.199E+00	1.0E-01	0.0E-01
DEPTH	2	1.000E+00	1.0E+00	1.0E+02	1.000E+00	1.0E-01	0.0E-01
INCLNATN	0	-7.200E+01	0.0E-01	0.0E-01	-7.200E+01	0.0E-01	0.0E-01
DECLNATN	0	9.000E+01	0.0E-01	0.0E-01	9.000E+01	0.0E-01	0.0E-01
VERTICAL	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01
TRAV DIR	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01

POSITION	WEIGHT	OBS	FITTED
0.0000	10.00	1973.	2007.
25.0000	10.00	1956.	2000.
50.0000	10.00	1936.	1992.
75.0000	10.00	1993.	1984.
100.0000	10.00	1969.	1976.
125.0000	10.00	1968.	1968.
150.0000	10.00	1985.	1959.
175.0000	10.00	1945.	1949.
200.0000	10.00	1965.	1937.
225.0000	10.00	2208.	1922.
250.0000	10.00	1972.	1897.
275.0000	10.00	1712.	1824.
300.0000	10.00	2318.	2287.
325.0000	10.00	1911.	2002.
350.0000	10.00	1877.	1962.
375.0000	10.00	1894.	1943.
400.0000	10.00	1957.	1929.

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0438

613265

MAGMOD PLOT OF FIT 1



MODEL STEP TITLE BEULAH BARITE LINE 0 REC

NUMBER OF STATIONS 17 MAX AMPLITUDE 606. X INCREMENT 5 COLUMNS PER STATION. Y INCREMENT OF 20. GAMMAS PER LINE.
FIELD DATA CURVE...%*% FITTED CURVE...% ERROR CURVE...%.%
NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT .[redacted]8 PARFIT FLAG 2 ERROR CURVE DA[redacted] 2212.000

WEIGHTED LEAST SQUARES FIT - TABULAR

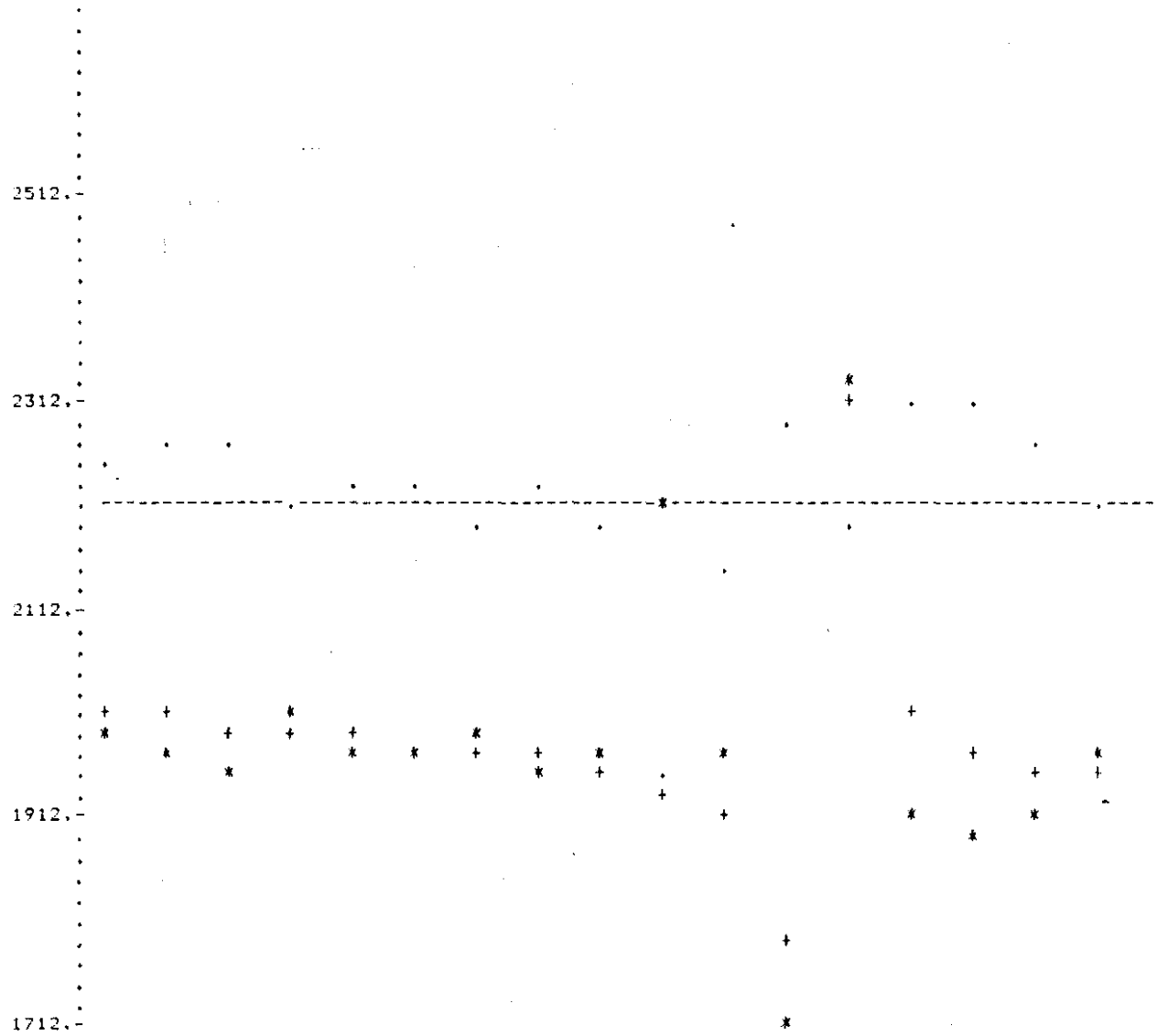
1 BEULAH BARITE LINE 0 RECON MAG.

PARAMETER	KEY	START	LIMITS		FITTED	TOLERANCE	RANGE
MAGNET	1	1.000E+02	1.0E+01	3.0E+03	5.279E+01	1.0E+00	0.0E-01
DIP	1	7.700E+01	2.5E+01	1.5E+02	7.442E+01	1.0E+00	0.0E-01
BASE LEVEL	1	1.940E+03	1.0E+03	2.0E+03	1.945E+03	5.0E+00	0.0E-01
BASE SLOPE	1	-3.000E-01	0.0E-01	0.0E-01	-2.271E-01	1.0E+00	0.0E-01
POSITION	1	2.900E+02	2.0E+02	4.0E+02	2.884E+02	1.0E+00	0.0E-01
HALF WIDTH	1	5.000E+00	1.0E+00	5.0E+01	1.199E+01	1.0E+00	0.0E-01
DEPTH	2	1.000E+00	1.0E+00	1.0E+02	1.167E+00	1.0E-01	0.0E-01
INCLNATN	0	-7.200E+01	0.0E-01	0.0E-01	-7.200E+01	0.0E-01	0.0E-01
DECLNATN	0	9.000E+01	0.0E-01	0.0E-01	9.000E+01	0.0E-01	0.0E-01
VERTICAL	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01
TRAV DIR	0	0.000E-01	0.0E-01	0.0E-01	0.000E-01	0.0E-01	0.0E-01

POSITION	WEIGHT	OBS	FITTED
0.0000	10.00	1973.	2004.
25.0000	10.00	1956.	1998.
50.0000	10.00	1936.	1992.
75.0000	10.00	1993.	1985.
100.0000	10.00	1969.	1978.
125.0000	10.00	1968.	1971.
150.0000	10.00	1985.	1963.
175.0000	10.00	1945.	1954.
200.0000	10.00	1965.	1944.
225.0000	10.00	2208.	1930.
250.0000	10.00	1972.	1904.
275.0000	10.00	1712.	1780.
300.0000	10.00	2318.	2295.
325.0000	10.00	1911.	1993.
350.0000	10.00	1877.	1963.
375.0000	10.00	1894.	1948.
400.0000	10.00	1957.	1937.

NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT 0.0410

MAGMOD PLOT OF FIT 1



MODEL TABULAR TITLE BEULAH BARITE LINE 0 REC

NUMBER OF STATIONS 17 MAX AMPLITUDE 606. X INCREMENT 5 COLUMNS PER STATION. Y INCREMENT OF 20. GAMMAS PER LINE.
FIELD DATA CURVE...%*% FITTED CURVE...%+% ERROR CURVE...%.%
NORMALIZED WEIGHTED STANDARD DEVIATION OF FIT .0410 PARFIT FLAG -1 ERROR CURVE DATUM 2212.000

APPENDIX XII

GEOCHEMICAL SAMPLE SHEETS - STONEBRIDGE PROSPECT

613269

R.A. EXPLORATION . GEOCHEMICAL SA LE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988267 - 988285 Collected by I. CLEMENTSON Sheet no. 1/2

Area / Prospect STONEBRIDGE BARITE Date 4:12:82

Map / Photo reference LINE ONE (heading 210°m from dairy) Analysed by ANALABS DPO no 30327

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ni	As		Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
988267	S	A	1.1	B_2					28	37	107			345					50m S	Mid brown, slightly orange clay. Basalt derived
988268	S	A	1.1	B_2					33	34	111			255		23			100m S	As above but less typically basaltic
988269	S	A	0.7	B_2					20	90	138			530		27			150m S	Ochre sandy (non basaltic) soil Coarse biotite fragments visible
988270	o/c	gs							18	32	94	0.2		1300		68	x		175m S	Pinkish-buff coarse grained intermediate volcanic with large (3mm) mica phenocrysts. Strongly magnetic
988271	S	A	1.1	B_2					16	30	40			2200		24			200m S	Mid br sandy soil, obviously derived from o/c at 175m S
988272	S	A	1.1	B_2					30	260	92			365		28			250m S	Mid br clay with frags of coarse chlor. to sericitic tuff-o
988273	S	A	0.8	B_2					12	260	31			90		15			300m S	Mid br clay plus Rel. Cong. frags
988274	S	A	1.1	B_2					30	770	71			100		26			350m S	Mid br clay (beneath then R/C scree) looks to be weathered Relatic volcanic
988275	S	A	1.3	Bz					21	4650	45			15		30			400m S	Lt brown silty clay
988276	F	gs							17	154	72	0.2		310		16	x		400m S	Foliated or sheared dark grey rock resembling a whole tuff but being much more microcrystalline in fine texture
988277	S	A	1.2	B_2					19	450	35			25		13			450m S	Dry weathered ochre clay ex. volcanic
988278	S	A	1.3	B_2					17	26	29			5		16			500m S	Lt yellow-brown silty soil - ex volcanic

* S = stream sediment oc = outcrop f = float s = soil

613270

R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL7/73 No. ..... Sample numbers 988267 - 988285 Collected by I. Clementson Sheet no. 2/2

Area / Prospect STONEHENGE BARYTE Date 4-12-82

Map / Photo reference LINE ONE Analysed by Analabs DPO no. 30322

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ni			Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
988279	S	A	1.2	B_2					21	85	46			185		21			550mS	Rich red-brown clay (maybe ex-basalt valley hill) Surface float of int-basic lavas or welded tuffs. Some v. fresh, some highly weathered.
988280	S	A	0.6	A-B					23	80	46			215		16			600mS	Amongst scree of int/felsic coarse tuffs
988281	S	A	0.8	B					24	29	29			110		18			650mS	Mid brown silty clay on steep slope. Weathered schistose tuffs at surface.
988282	S	A	1.0	B_2					9	11	14			70		10			700mS	Mid-light brown silty clay with fragments of purple schist. Surface float is poorly sorted purple schistose tuff.
988283	S	A	0.9	B_2					6	11	25			50		15			750mS	Lt-mid brown silty clay plus schist frags
988284	S	A	0.5	Scree					15	14	86			1250		28			800mS	As above.
988285	S	A	0.8	B_2					11	12	64			515		20			825mS	Mid brown-ochre mottled clay amidst extensive scree of shale-silt grade schistose (or well foliated) tuffs.

613271

R.A. EXPLORATION . GEOCHEMICAL SA LE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 988286-988293 Collected by I. CLEMENTSON Sheet no. 1/1
Area / Prospect STONEBRIDGE BARYTE 988324-988328 Date 4-12-82
Map / Photo reference LINE TWO Analysed by ANALABS DPO no. 30322
A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ni	As	Grid ref	Geological Observations
988286	S	A	1.3	B_2						44	61	38			300		29		50mS	Rich red-brown clay, possibly ex-basalt though some shale remnants seen.
988287	S	A	1.0	B_2						26	41	27			85		14		100mS	Yellow-ochre-brown silty clay, ex volcanic
988288	S	A	1.2	B_2						113	58	31			70		27		150mS	Mid or-brown silty clay. Sericitic qz:te float at surface
988289	S	A	0.5	B/C						147	20	36			115		24		200mS	Lt brn sandy soil. Ab frags + surface float of a pale qz:te, medium grained tight saccharoidal, slightly sericitic
988290	S	A	0.5	(Possibly mixed)						148	9	23			300		17		250mS	Mid br silt clay. Frags qz:te + poorly sorted int. tuff.
988291	S	A	1.0	B_2						210	11	23			245		17		300mS	Mottled ochre-yellow brown silty clay plus highly weathered frags of ? int or mediate volcs - prob. felsic tuffs.
988292	S	A	0.5	(Possibly mixed)						177	89	38			745		21		350mS	As above
988293	S	A	0.6	"		"				270	13	64			165		15		400mS	As above
988324	S	A	1.0	B_2						330	25	22			115		18		430mS	Mid brown, mottled yellow clay (in bush)
988325	S	A	1.0	B_2						197	7	24			105		12		460mS	Ochre clays - weath. felsic volc
988326	S	A	0.5	A/B						113	12	15			45		11		500mS	Dk brown-black humic soil.
988327	F	gs								240	23	13	x		25		17	x	500mS	Weathered, ochreous felsic volc.
988328	S	A	0.5	Scree						52	15	49			110		21		550mS	Brown-yellow clays in scree of R/C float

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

613272

R.A. EXPLORATION . GEOCHEMICAL SA LE LEDGER

Tenement name SHEFFIELD EL 3/73 No. ..... Sample numbers 988329-988341 Collected by I.M. CLEMENTSON Sheet no. 1/1

Area / Prospect STONEBRIDGE BARITE Date 4-12-82

Map / Photo reference LINE 3 Analysed by ANALABS DPO no. 30327

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Ni	As	Grid ref	Geological Observations
988329	S	A	1.0	B_2	(Paddock)						56	18	46			315		30		000 E	Mid brown slight ochre mottling
988330	S	A	1.0	B_2	"						68	6	72			240		77		50mS	Mid yellow brown silty clay
											(75mS = edge of paddock)										
988331	S	A	1.1	B_2							44	9	55			340		22		100mS	Mid brown, mottled ochre clay with weathered andesitic(?) float
988332	S	A	1.0	B_2/C							54	3	60			310		23		150mS	Mid brown - ochre silty soil - obviously weathered fabric, qz poor volcanic.
988333	S	A	0.7	B_2							79	11	35			430		24		200mS	Mid brown silty clay - basalt (or v. dark andesite) float
988334	F	g/s	(close to gk)								20	6	280	x		530		1700	x	220mS	Greenish (weathers pink) felsic-micaceous volcanic (= facies a" from Wilmot - see relevant petrography)
988335	S	A	1.2	B_2							84	6	20			285		21		250mS	Mid - light brown silty soil. No float
988336	S	A	0.5	B_2							91	3	10			260		16		300mS	" " " " " in sense of dk - mid grey andesitic volcanics
											(325m - Creek)										
988337	S	A	0.5	Scree							41	480	80			1200		16		350mS	Brown silty soil in sense of highly weathered micaceous porphyritic andesite
988338	F	g.s	(close to gk)								5	205	78	0.6		425		300	x	375mS	Fresh "a" type facies: mica porph andesite
988339	S	A	1.0	Scree							27	96	44	0.8		150		19	x	400mS	Br - brclays in scree of with andesites
988340	S	A	1.0	B_2							38	26	52	0.4		105		20	x	450mS	" " " " " "
988341	S	A	0.7	A/B							1	2	6	0.5		10		4	x	500mS	Leached grey white sandy soil - Eldad Conq derived

* S = ... = ... = ... = ...

613273

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LODGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 972303 – 972307 Collected by G.B.C. Sheet no. ONE

Area / Prospect STONE BRIDGE Ba Date 27.02.82

Map / Photo reference A 02143 Analysed by ANALABS (COOKE) DPO no

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mo ppm	Mn ppm	Au ppb	As ppm	Fe %	Ni ppm	Grid ref	Geological Observations
											✓	✓	✓	✓				✓	✓	✓		ONE TRAVERSE 150m W OF MILK SHED THE TRAVERSE AT 010°m.
972303	f	gs.									1200	15	20	x				x	6.95%	50	270mN	Limonitic A.V. float.
972304	f	gs.									545	710	95	x				x	15.5%	55	325mN	Highly ferruginous garnetous tuff.
972305	oc	gs.											SHEARED	ALTERED		RHYOLITE			(FAN OFF)		400mN	Andesite?–
972306	oc	gs									955	10	60	1.0				x	19.5%	55	380mN	oc. Pink-red. garnet A/t. oc. 306 highly
972307	oc	gs.									1550	30	75	0.5				x	34.5%	90	50mE	Ferruginous clean zone. 307 – thin chippings from ferruginous zones.

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

APPENDIX XIII

STONEBRIDGE PROSPECT BY J.COUPER

613275

MEMO TO : G. PURVIS
FROM : J. COUPER
SUBJECT: 'STONEBRIDGE' PROSPECT

Inspected on Nov 28 1980

Stream sediment and rock sample details set out in attached log sheets and sketch map.

Traversing was essentially along the main creek between points A & B (see map) approx 2km. The creek is confined to a narrow steep and heavily forrested valley except for the upper 200 and lower 200 metres traversed which sections are in cleared pasture. The high ground on the east is pasture with some open forest while the west side is dense forest. Sections of dense blackberry occur in the creek and side gullies on the east

Stream sediment samples were taken to check and supplement the Asarco sampling; while rock samples include all rock types encountered.

GEOLOGY
Acid lavas and tuffs exist on the eastern side i.e. sample locns 816824 to 828 and quartz-sericite schist occurs in scattered float on the west at 816820

The rocktypes in the steep section of the creek downstream of 816811 to approx 807 consist of fine to medium grained rocks of probable basic composition (petrographic descriptions pending) which in the case of the large boulders in the creek was initially thought to be Tertiary basalt detritus. 816821-23 are significantly carbonated and carry trace amounts of disseminated pyrite and chalcopyrite. Medium grained float at 816829-31 contain traces of disseminated galena in addition.

Apart from the disseminated sulphides, the only other indication of possible mineralization was ferruginous slime sampled at 816803 & 804

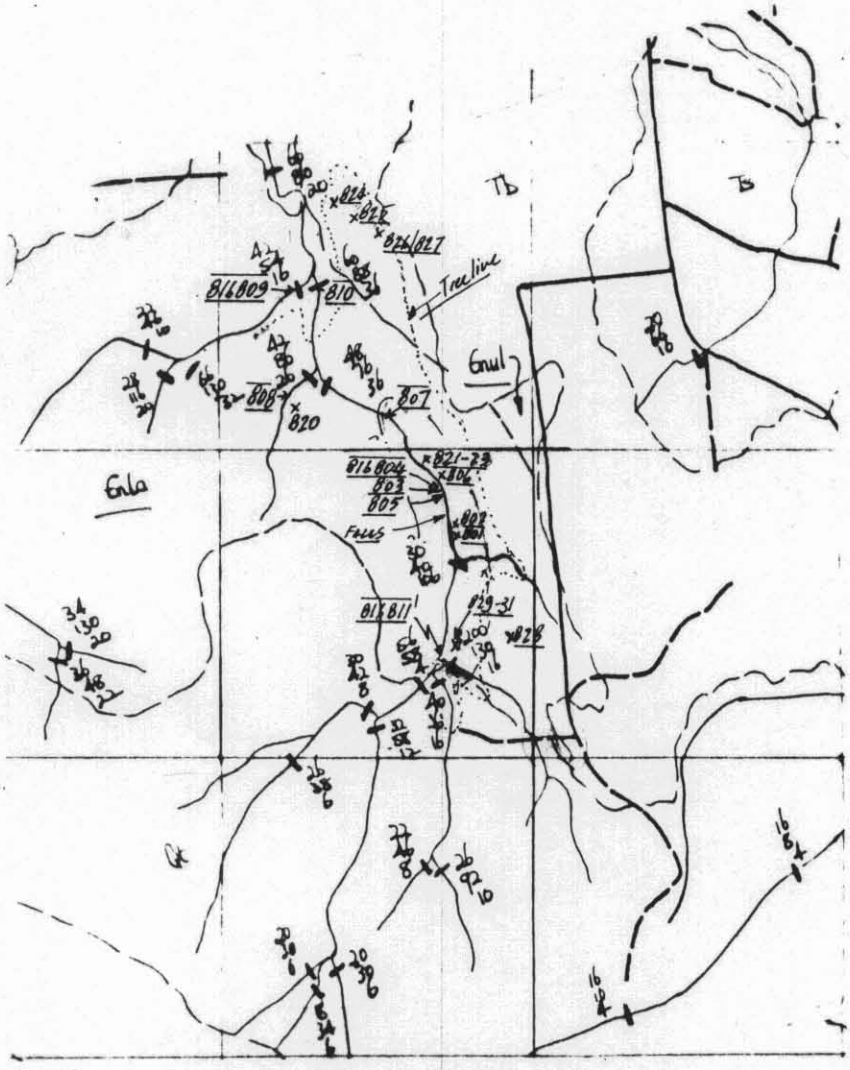
SAMPLE ASSAY RESULTS (Stream Sed's)
Assays generally show good agreement with the Asarco values where the sample points are approximately duplicated. Sample 816811 reports the same lead value (200ppm) as the previous sample while zinc and copper are comparable. Sample 816811 is within 15m of observed disseminated galena in rock sample 816829

Sample 816805 is clearly anomalous for lead (760) and possibly zinc (117); while sample 816807 is possibly anomalous for zinc (160)

DISCUSSION
The geochem anomaly may be explained by the observed disseminated sulphides; however the geological relationships are obscure. Pending petrographic description and rock sample assays classification of the mineralized rock is uncertain

Further work in the form of say 3 or 4 soil sample-mapping lines would be helpful.

613276



816811 — STREAM SEDIMENT SAMPLE
820 × ROCK SAMPLE.

SCALE 1 : 25000
PART "MT COLLAND - COB RANGE GEOLOGICAL - GEOCHEMICAL MAP"

5 cm

SHEFFIELD EL 7/73
STONE BRIDGE AREA.
SHOWING
SAMPLE LOCATIONS.

JKL. DEC '80

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SHEFFIELD EL 7/73 No. ... sample numbers ... Collected by: V Cooper Sheet no. 1
Area / Prospect: "STONE BRIDGE"
Map / Photo reference: Mt Lucano - Boolaroo - 1:25000 Analysed by: Zinc Corp. DPO no: 26478
A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Pb	Zn	Cu	Ag	Mo	Mn	Au	Grid ref	Geological Observations
816803	SS		-	-							45	37	7	3			<0.2*		YELLOW FLOCCULENT SCUM SEEPAGE IN WEST BANK.
804	SS		-	-							38	35	17	3			<0.2*		AS ABOVE - DOWNSTREAM (2m) OF 803
805	SS		2-3	al							760	117	41	1			<0.04		BED U/STREAM OF 803 (2m)
807	SS		2-3	al							29	160	17	<1			<0.04		
808	SS		1	al							36	67	13	<1			<0.04		
809	SS		5	al							36	80	13	<1			<0.04		
810	SS		5	al							46	85	20	<1			<0.04		
811	SS		1	al							200	186	13	<1			0.4		~15m above confluence.

Note:- Preliminary Telephone Results only.

*Small samples

61324

* Sample type ss = stream sediment oc = outcrop f = float s = soil
** Stream sed. sample description fi = 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

613278

GEOCHEMICAL ROCK SAMPLING LEDGER

Page No. 1

TENEMENT Sparfield EL 7/73 D.P.O. No. 26480

AREA/PROSPECT "Stone Bridge" SAMPLE No's. GEOLOGIST VRC DATE Dec 80

PLAN REFERENCE McDonald-Goa Creek 1:25000 ANALYSED BY Zinc Corp.

Sample No.		Metal Content in ppm.							Geological observations
		Pb	Zn	Cu	Ag				
816801	(P)				PORPHYRITIC		ANDESITE		fg ? intermediate igneous, high angle cleavage, minor quartz.
802		24	140	18	<1				very fg. dark, carbonate rich rock slight schistosity. ? basic lava
806		11	81	15	<1				fg dark carbonated as above.
820		60	130	19	<1				mg. Quartz-Sericite schist sl. ferruginous
821	(P)	PORPHYRITIC			ANDESITE				fg dark carbonated ? basic lava - cf 816806 Trace disseminated Pyrite
822		20	97	256	<1				as above Disseminated Pyrite & Chalcopyrite with carbonate
823		18	84	51	<1				as above Trace Py & Cpy
824		18	48	14	<1				Porphyritic - Quartz eye Rhyolite (pink-red) band
825		51	53	36	<1				Tuff shale slight ferruginous weak slaty cleavage.
826		5	21	17	<1				fg Tuff - limonitic & leached var. Qz-sericite schist.
816827		23	52	29	<1				fg Tuff - ferruginous, weathered quartzose

A 11343

GEOCHEMICAL ROCK SAMPLING LEDGER

Page No. 2

TENEMENT SHEFFIELD EL 7/73 D.P.O. No. 26480

AREA/PROSPECT "STONE BRIDGE" SAMPLE No's. GEOLOGIST VKC DATE DEC '80

PLAN REFERENCE MT ROLAND–GOGLANGE 1:25000 ANALYSED BY ZINC CORP.

Sample No.		Metal Content in ppm. Pb	Zn	Cu	Ag				Geological observations
816828		33	112	35	<1				f-mg. acid ? tuffs
									Highly weathered. kaolinitic
									s/f foliation.
									Biotite Rich in part
816829	(P)			PORPHYRITIC		ANDESITE.			mg dark, fresh
									? basic igneous lava/dyke
									Traces of disseminated
									Galena > Cpy > Py.
816830		12	56	83	<1				
									as above
816831									
									as above but weathered.

(P) – INDICATES PETROGRAPHIC SAMPLE

A 11343

APPENDIX XIV

GEOCHEMICAL SAMPLE SHEETS - STAR OF THE WEST GOLD PROSPECT

613281

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 972001 → 972021 Collected by IAN CLEMENTSON Sheet no. ONE

Area / Prospect STAR OF WEST Au Date 20.07.81

Map / Photo reference ..... Analysed by ANALABS (COOKE) DPO no 30016

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	As	Au	Sb	Ba	Sr	Grid ref 5000E	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
972001	S	A	1.0m	B/C					59	33	66	0.2		16	x	8	163	x	5400N	Yellow-ochre clay frags 20% highly weathered slates/tuff frags.
972002	F	gs.							49	10	86	0.1		5	x	5	104	3	5400N	Highly weathered tuff greenish where not fe stained
972003	S	A	90cm	B/C					68	29	83	0.2		18	0.024	3	44	3	5375N	Yellow-ochre fairly clayey 10-20% fe tuff.
972004	F	gs.							13	4	5	x		3	0.004	2	3	x	5375N	Float Vein qtz.
972005	S	A	70cm	B					66	27	46	0.1		26	0.040	5	47	x	5350N	Reddish-ochre clay rich. Float ferruginous tuff clasts minor qtz
972006	F	gs							3	3	59	0.1		3	0.056	4	1090	84	5350N	Float qtz porphyry-rhyolitic V.F matrix qtz eyes to 3mm fresh lt gy.
972007	S	A	90cm	B					40	17	38	0.1		10	0.056	7	100	x	5325N	Yellow ochre ferruginous weathered tuff clasts.
972008	F	gs.							42	24	20	x		6	0.080	11	98	3	5325N	Weathered tuff.
972009	S	A	30cm	C					39	9	26	0.2		9	0.012	2	55	7	5300N	Soil 70% tuff frags.
972010	F	gs							76	18	49	0.1		19	0.024	x	147	6	5300N	Highly weathered ferruginous tuff.
972011	S	A	70cm	B/C					78	21	48	x		12	0.028	3	85	x	5275N	Yellow ochre sandy 30% weathered tuffs.
972012	F	gs.							58	13	38	0.1		12	0.016	x	50	3	5275N	Sandy weathered ferruginised tuffs.
972013	S	A	80cm	B/C					75	19	33	0.2		14	0.028	2	103	25	5250N	Ochre soil 50% sandy tuff clasts.
972014	F	gs.							50	11	37	0.2		6	0.032	x	361	9	5240N	Highly weathered pale ochre sandy tuff.
972015	S	A	30cm	B/C					30	17	31	0.2		10	0.028	x	221	8	5225N	Ochre-fairly sandy 20% sandy fe tuffs.
972016	F	gs.							11	x	4	0.1		2	0.032	x	7	x	5200N	Qtz vein N.V.M.
972017	S	A	70cm	B					10	12	21	0.1		5	0.052	2	367	2	5200N	Lt buff clayey V. few clasts mainly shaley
972019	S	A	60cm	B/C					41	14	46	x		8	0.032	3	201	5	5175N	Lt yellow ochre 50% lt buff silty-shaley tuffs
972020	F	gs.							15	19	21	0.1		16	x	x	113	2	5150N	Agglomerate + chert bands (1cm)
972021	S	A	1m	B/C					12	9	22	0.2		7	x	x	385	2	5150	Yellow-buff 30% weathered tuff clasts

613282

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 972022 – 972043 Collected by IAN CLEMENTSON Sheet no. TWO

Area / Prospect STAR OF WEST Au Date 29 : 07 - 81

Map / Photo reference ..... Analysed by ANALABS (COOEE) DPO no 30016

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	As	Au	Sb	Ba	Sr	Grid ref 5000E	Geological Observations
972022	S	A	1m	B.							28	13	40	0·1		11	x	2	145	5	5125N	Mid ochre - bn. few clasts - fe. tuffaceous shale.
972023	S	A	1m	B/c							68	36	53	x		2	x	5	151	5	5100N	lt buff ochre float weathered sandy tuff.
972024	F	gs.									49	11	47	0·1		3	x	2	204	7	5100N	weathered fe sandy tuff.
972025	S	A	1·5m	B.							47	28	47	0·1		8	0·012	x	200	6	5075N	Ochre - frags sandy - shaley tuff.
972026	F	gs.									9	77	131	0·1		5	0·012	x	1120	83	5062N	float qtz porphyry.
972027	S	A	1·0m	B.							7	33	63	0·2		3	x	x	464	17	5050N	mid Ochre - float qtz porphyry
972028	F	gs.									5	6	43	x		x	x	x	1220	65	5050N	dk gy qtz porphyry.
972029	S	A	1·5m	B/c							4	12	52	0·2		5	x	x	156	11	5025N	mottled gy+ochre soil. few clasts.
972030	F	gs.									5	4	37	0·1		2	x	5	1130	71	5025N	Mid gy weathered qtz porphyry.
972031	S	A	1·1m	B.							7	24	41	0·1		4	x	8	338	15	5007N	Reddish - ochre. Tuff clasts.
972032	F	gs									6	38	186	0·1		5	x	2	1570	100	5000N	Dk gy f.g. rhyolitic porphyry – andesite comp?
972033	F	gs									4	4	100	x		2	x	2	1310	87	5000N	Pale weathered qtz-porphyry – rhyolite.
972034	S	A	1·0m	B/c							43	17	50	x		13	x	2	165	10	4975N	mottled gy - ochre silty - shaley frags. minor weathered porphyry + tuff float also.
972035	S	A	1·0m	B.							13	21	47	0·1		8	x	9	65	8	4950N	Reddish bn v. clayey - frags tuff-shales?
972036	S	A	1·0m	B							5	14	47	x		5	x	5	54	11	4925N	mottled pale cream - gy+red clayey frags shale+qtz+
972037	S	A	90cm	B/c							4	8	42	0·1		5	x	2	168	14	4900N	Mottled lt. buff - ochre clayey few shale clasts.
972038	F	gs.									6	1	34	0·1		1	x	4	460	14	4900N	highly weathered qtz-porphyry. ferruginous.
972039	S	A	90cm	C.							3	4	28	0·1		6	x	x	422	19	4875N	lt buff - rd-bn. Frags tuff.
972040	F	gs.									5	2	21	0·3		4	0·008	3	1250	76	4875N	Dk gy f.g. hornfelsic material.
972041	F	gs.									5	8	47	0·1		6	x	x	1190	79	4865N	Qtz porphyry.
972042	S	A	90cm	B							3	10	58	0·2		11	x	x	311	15	4850N	lt ochre v. clayey
972043	F	gs.									4	4	77	0·1		2	x	5	1270	70	4850N	Qtz porphyry.

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

613283

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. ..... Sample numbers 972044 - 972075 Collected by IAN CLEMENTSON Sheet no. THREE

Area / Prospect STAR OF WEST Au Date 28.7.81

Map / Photo reference ..... Analysed by ANALABS (COOEE) DPO no. 30016

A 02143

Sample No.	Type ss * oc f s	ss channel ** ft	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	As	Au	Sb	Ba	Sr	Grid ref 5000E	Geological Observations
972044	S	A		'B'							2	7	25	0·1		3	x	3	754	28	4825N	Ochre-red float Qtz porphyry
972045	F	gs.									6	4	95	0·1		9	x	4	1190	120	4825N	Dk gy fine grained porphyry
972046	F	gs									4	5	59	0·1		9	x	x	1290	93	4800N	Rhyolite - qtz porphyry
972047	F	gs									6	7	144	x		7	x	x	1230	107	4775N	Dk gy fines of porphyritic rhyolite.
972048	S	A	20cm	A							2	11	21	0·1		7	x	6	542	20	4750N	Yellows - sandy - in scree.
972049	F	gs.									5	14	29	0·1		8	x	6	1160	33	4750N	Weathered rhyolitic qtz porphyry.
972050	F	gs									5	2	10	0·1		7	x	3	993	62	4725N	Weathered qtz porphyry - rhyolite.
972051	S	A	40cm	B.							3	32	44	0·1		8	x	x	476	16	4700N	Yellow-ochre 50% rhyolite fragments.
972052	F	gs									4	10	29	0·1		9	x	x	1170	78	4700N	Pinkish rhyolite - porphyritic - fairly weathered
972053	F	gs									4	3	44	x		9	x	x	833	52	4675N	Pinkish rhyolite - porphyritic.
972054	S	A	30cm	B							5	200	54	0·1		7	x	2	850	20	4650N	Buff - yellowish 50% rhyolite fragments
972055	F	gs									8	4	35	x		4	x	x	1220	83	4625N	Porphyritic rhyolite in scree.
972056	S	A	40cm	B.							2	9	18	0·1		2	x	x	713	26	4600N	Yellow - ochre in scree slope
972066	S	A	30cm	B.							2	9	285	0·1		x	x	x	343	42	4575N	Mid - lt ochre sandy 50% rhyolite frags
972067	S	A	30cm	A_2							2	4	56	0·1		x	x	x	365	18	4550N	Sandy buff - ochre abundant rhyolite clasts.
972068	S	A	60cm	B.							2	2	31	0·1		2	x	2	420	16	4525N	V. sandy 50% porphyry rhyolite clasts.
972069	S	A	60cm	B.							2	1	31	0·1		1	x	3	549	25	4500N	V sandy 50% porphyry rhyolite clasts.
972070	S	A	40cm	B.							1	2	15	0·1		1	x	3	690	37	4475N	Lt buff sandy abundant rhyolite clasts.
972071	S	A	30cm	B							1	1	28	0·1		2	x	x	690	47	4450N	Lt buff sandy abundant rhyolite clasts
972072	S	A	40cm	B							2	x	35	0·1		x	x	x	495	27	4425N	Lt yellow - ochre frags rhyolite over qtz.
972073	Pc	gs.									5	2	73	x		x	x	x	622	83	4400N	Pinkish grey porphyritic rhyolite N.V.M.
972074	S	A	70cm	B							2	1	38	0·2		x	x	5	552	28	4400N	Ochre. Abundant frags of rhyolite.
972075	S	A	90cm	B							2	7	43	0·1		2	x	2	706	30	4375N	Buff-ochre mottled Abundant rhyolite clasts

* Sample type _ s = stream sediment _ oc = outcrop _ f = float _ o = oil

613284

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SHEFFIELD EL 7/73 No. Sample numbers 972076 – 972084 Collected by IAN CLEMENTSON Sheet no. FOUR

Area / Prospect STAR OF WEST Au Date 21.7.81

Map / Photo reference A 02143 Analysed by ANALABS (COOEE) DPO no. 30016

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	As	Au	Sb	Ba	Sr	Grid ref 5000N	Geological Observations
		o/c sample type *** / s sample type ****																		
972076	f	gs							4	2	54	x		3	x	2	716	67	4350N	Gy rhyolite
972077	s	A	80cm	B					3	7	69	0·1		7	x	3	176	17	4325N	Reddish ochre abundant rhyolite, occ tuff.
972078	s	A	50cm	B					3	x	28	0·1		5	x	3	569	24	4300N	Ochre – abundant rhyolite clasts.
972079	s	A	80cm	B					3	3	39	0·1		8	x	5	294	8	4275N	Reddish ochre clayey Rhyolite + tuff clasts.
972080	s	A	80cm	B					3	2	37	0·2		3	x	2	444	15	4250N	Dk brownish ochre clayey few rhyolite clasts
972081	s	A	40cm	B					2	3	35	0·1		1	x	x	470	16	4225N	Lt gy-bn mottled - abund rhyolite frags
972082	s	A	90cm	B					2	3	57	0·1		x	x	x	428	12	4200N	Lt gy-ochre clayey frags rhyolite – minor qtz.
972083	s	A	1m	B/C					2	6	74	0·1		4	x	2	485	11	4175N	Ochre Frags rhyolite and tuff.
972084	s	A	80cm	B					2	3	53	0·1		x	x	x	502	14	4150N	Ochre Abundant rhyolite occ tuff.

APPENDIX XV

STAR OF THE WEST BY J.COUPER

613286

MEMO TO : G.PURVIS
FROM: J.COUPER
SUBJECT : 'STAR OF THE WEST'

Inspected on Nov 14 & 29 1980

On the first visit the workings were not found; but a useful reconnaissance of the area was possible using the numerous logging tracks.

The workings found on the second visit are completely overgrown and consist of two parallel adits on the lower slope of the main rhyolite ridge and heading approx southwest
The larger opening is approx 4x4 metres at the portal and access--able for approx 15 metres.
The smaller adit is the normal size of approx 2x1 metre and is accessible for approx 60m.

Both adits are excavated in slig htly to moderately weathered porphyritic rhyolite; primary rock alteration is probably only slight.
The long adit enters softer weat hered tuffs at it's accessible limit where the back has completely caved in

Other evidence of working in the area consists of small pits and trenches to the west of the adits.

There is no evidence of actual mining operations in the working s found.

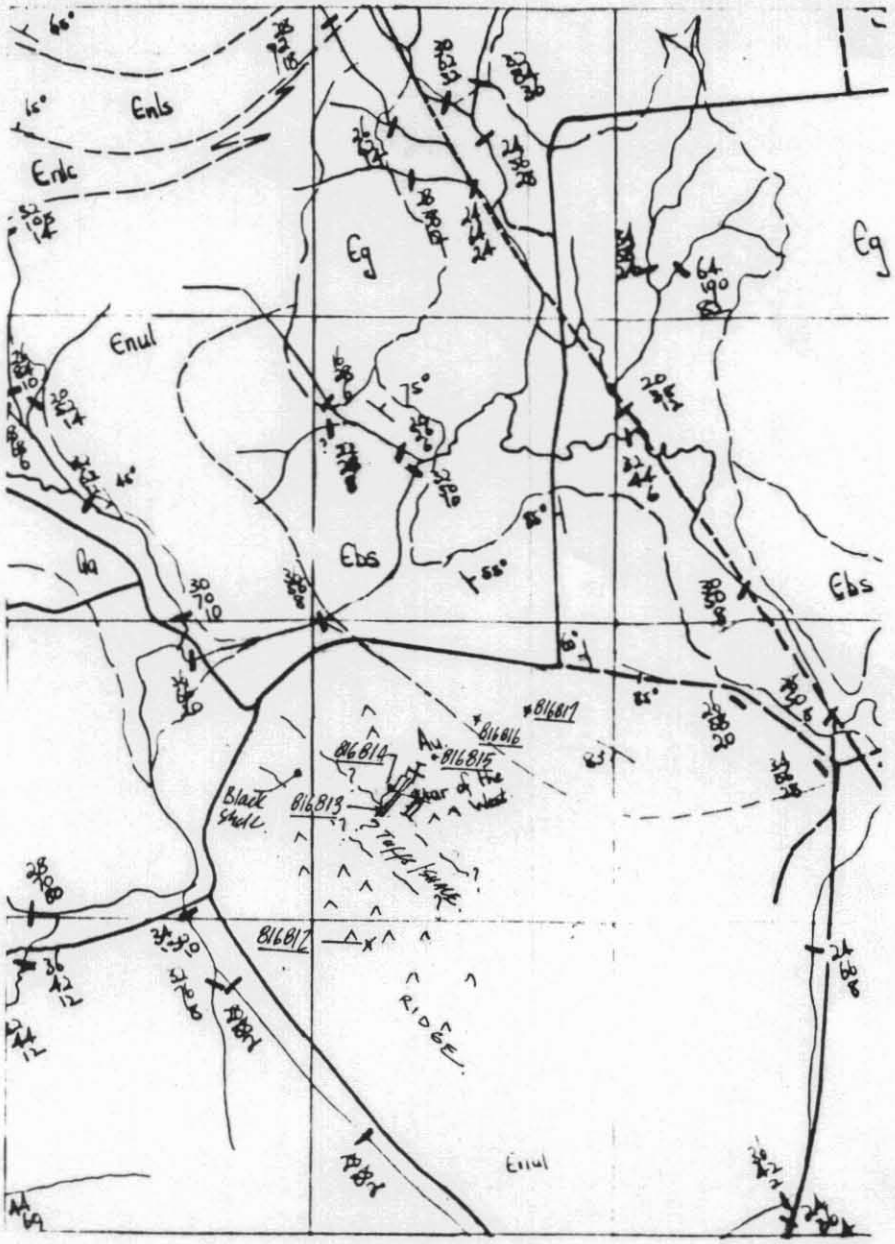
No evidence of mineralization or of vein quartz was found.

SAMPLING
Nominal rock sampling only.... see locality map and ledger sheet.
The longer adit was sampled at approx. 5m intervals and bulked.

DISCUSSION
The adit chip sample assay should give some indication of the possibility of dissem--inated gold values in the rhyolite.
The main zone of interest to the old explorers could have been beyond the present limit of the adit.

Auger sampling traverses seems to be the logical next step to making a meaningful assessment of this prospect.

613287



SCALE 1:25000

PART "MT ROLAND-GOG RANGE: GEOLOGICAL-GEOCHEMICAL MAP"

5 cm

SOFFIELD EL 7/73

STAR OF THE WEST AREA.

SHOWING

SAMPLE LOCATIONS.

JKL, DEC '80

613288

GEOCHEMICAL ROCK SAMPLING LEDGER

Page No. 1

TENEMENT SHEFFIELD EL 7/73 D.P.O. No. 26481

AREA/PROSPECT STAR OF THE WEST SAMPLE No's. GEOLOGIST JKC DATE DEC 80

PLAN REFERENCE MT LEONARD 1:25000 ANALYSED BY ZINC CORP

Sample No.		Metal Content in ppm. Pb	Zn	Cu	Ag	Au ppm.			Geological observations
816812	OUTCROP	3	63	6	<1	1·18			Porphyritic Q-Feldspar Rhyolite
	TOP HILL								Hard, fresh
	SOUTH OF ADIT.								
816813	COLLAPSE HEAD OF ADIT.	63	97	63	<1	<0·04			Tuff: [redacted] weathered ± soft, lithic/XL.
									porphyritic ± adit.
816814	CHIPS AT APPROX. 5m INTERVALS OVER 60m.	5	44	5	<1	<0·04			Porphyritic Q Rhyolite.
									SL - mod weathered.
	WEST WALL ADIT.								
816815	FLOAT	17	72	36	<1	0·38			Dk grey shale.
	NEAR ADIT								Shaly ± cremulation cleavage.
	PROBABLY FROM DUMP.								
816816	FLOAT	17	27	65	<1	0·17			Tuff - fg shale weathered.
	NORTH OF ADIT								micaceous soft limonitic.
816817	FLOAT	16	20	35	<1	<0·04			Tuff - fg. weathered, micaceous
	NORTH OF ADIT								silty, sl manganiferous, mod limonitic

A 11343

APPENDIX XVI

THIN SECTION DESCRIPTIONS

613290

Central Mineralogical Services

39 Beulah Road
Norwood, S.A. 5067
Telephone 42 5659

Mr. I.M. Clementson
Geologist
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
ROSNY PARK / TAS. 7018

30th December, 1982

REPORT CMS 82/12/10

YOUR REFERENCE:	D.P.O. No. 30321
DATE RECEIVED:	10th December, 1982
SAMPLE NOS.:	4 Samples
SUBMITTED BY;	I.M. Clementson
WORK REQUESTED:	Petrology

H.W. Fander, M. Sc.

Copy to:
The Chief Geologist
C.R.A. Exploration Pty. Ltd.
G.P.O. Box 384D
MELBOURNE / VIC. 3001

Copy & Invoice to:
Administration Officer
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
ROSNY PARK / TAS. 7018

REPORT CMS 82/12/10

Four rock samples were received for thin-section preparation and petrological examination; offcuts were subjected to K-stain tests and were studied in conjunction with the thin-sections; brief descriptions are presented in the accompanying table.

Summary

988212 is an unusual rock consisting of relatively coarse quartz and feldspar fragments in a completely tourmalinised matrix (i.e. in which tourmaline has replaced all the original matrix and has marginally corroded the framework components). The framework grains are not abraded, or bedded, but several interpretations are possible regarding the rock's origin; it could have been a granite or phenocryst-rich porphyritic microgranite, or even volcanic, though this is considered less likely.

The other rocks are more clearly-defined, even if alteration has made precise classification difficult. 988225 is the most severely altered of the three, but is thought to have been an intermediate glassy tuff; such rocks are prone to deuteric alteration.

H.W. Fander, M. Sc.

CENTRAL MINERALOGICAL SERVICES

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	Comments
988212 (T.S. 44756)	Tourmalinised Breccia. Mostly coarse fragments of orthoclase crystals with subordinate stressed quartz splinters, phenocrysts. Matrix of fine granular dark tourmaline.	Stressed, fractured, angular grains and cleavage fragments; replacive matrix.	Chlorite patches. Quartz veins. Small anatase crystals.	Origin uncertain. Could be a brecciated, then thoroughly tourmalinised, granite or felsic porphyry, or a volcanic breccia.
988214	Vitric Crystal Tuff. Large and small splinters and cleavage fragments of K-feldspar and quartz in matrix of small shards and pale chlorite.	Poorly-sized/sorted framework grains, vaguely bedded. Microfractured.	Sericite and quartz veinlets. Trace introduced tourmaline.	Clearly a tuff, probably subaerial may have been welded, but textures obscured by pervasive chloritisation.
988225	Altered ?Vitric Tuff. Mostly small streaks and irregular patches of fine sericite-quartz (?altered glass fragments); introduced siderite, chlorite, abundant.	Fabric is fragmental, appears welded and possibly flow-banded.	Leucoxenised oxide opaques. Quartz and altered ?feldspar fragments.	Extensive alteration precludes exact classification; possibly trachytic composition. Certainly volcanic, probably pyroclastic.
988247 (T.S. 44759)	Altered Porphyritic Rhyolite. Whole and flow-brecciated phenocrysts of inverted beta quartz, sericitised and carbonated albite, in fine devitrified groundmass of sericite and quartz.	Strongly flow-banded, especially around phenocrysts. Flow-fragmented phenocrysts.	Leucoxene pseudomorphs after oxide opaques.	Because groundmass is altered glas its composition is not known and rock could range from rhyolite to rhyodacite (toscanite).

SAMPLE LOCATIONS - 988212/214 - WILMOT COPPER

988225 - BEULAH BARYTE

988247 - T.M.D. DRILL HOLE CLAUDE ROAD.

613292

613293 Copy

Central Mineralogical Services

39 Beulah Road
Norwood, S.A. 5067
Telephone 42 5659

Mr. G.B. Weber
Senior Geologist
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
BURNIE / TAS. 7320

3rd March, 1982

REPORT CMS 82/2/7

YOUR REFERENCE:	D.P.O. No. 30037
DATE RECEIVED:	9th February, 1982
SAMPLE NOS.:	13 Samples
SUBMITTED BY:	G.B. Weber
WORK REQUESTED:	Petrology

Copy to:
The Chief Geologist
C.R.A. Exploration Pty. Ltd.
G.P.O. Box 384D
MELBOURNE / VIC. 3001

Copy & Invoice to:
Administration Officer
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
BELLERIVE / TAS. 7018

H.W. Fander, M. Sc.

REPORT CMS 82/2/7

Sheffield E.L. Rock Samples

Thirteen rock samples were received for petrological examination; thin-sections were prepared, and the offcuts were subjected to potash stain tests. The rocks are briefly described in the accompanying table.

Summary

All the rocks, except 972224, are igneous and in-clude a wide variety of types from basic to acid, intrusive to extrusive and pyroclastic.

972224 is a banded calc silicate rock, thought to have been a banded impure limestone subjected to high-grade contact-metamorphism (pyroxene hornfels facies), though pyrometasomatism may also have played a part.

The igneous rocks comprise a series of distinctive porphyritic trachyandesites, probably all intrusive, and related microsyenite (972295) and volcanics (972301, 972309), as well as an unrelated spherulitic rhyolite and sheared acid rock (972305). There are two fresh olivine dolerites correlatable with other Tertiary dolerites/basalts in Tasmania, and a sheared ?basalt (97229)) of unknown origin, but seemingly unrelated to the others.

Trachyandesites are defined as fine-grained equivalents of monzonites, with both alkali feldspar and calcic plagioclase; their affinities are thus with intermediate rather than basic rocks.

H.W. Fander, M. Sc.

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	Central Mineralogical Servic Comments
972 115 (T.S. 40885)	Porphyritic Trachyandesite. Small well-formed oligoclase and a few augite phenocrysts set in fine mass of matted K-feldspar; chloritised hornblende. LOCATION : MINNOW FALLS DIGHEM 102RD/LINE 1 - 225mS.	Uniform and without flow-features; minor intrusive fabric.	Accessory magnetite (1-2 %) and apatite; secondary epidote.	An intermediate rock, probably a minor intrusive; no particular affinity with basalts.
972 128	Porphyritic Trachyandesite. Small, partly argillised oligoclase phenocrysts, minor hornblende and augite; fine K-feldspar groundmass. LOCATION	Random arrangement and distribution of phenocrysts; uniform, fine-grained.	Accessory magnetite (2-3 %), apatite. Chlorite patches.	Closely resembles 972115 in all respects, with a little more magnetite.
972 290	Sheared, Altered ?Basalt. Lenses of ?basalt, with altered ferromagnesian phenocrysts in fine hematite-sericite groundmass; many sericite streaks. LOCATION : DIGHEM 146xB : GARDEN OF EDEN.	Strong preferred orientation, almost schistose; relict igneous textures preserved.	Veins and patches of oxidised chlorite with goethite (altered ?carbonate).	Termed ?basalt on basis of relic textures; contrasts with 115, 12 Totally altered.
972 294	Porphyritic Trachyandesite. Partly argillised oligoclase phenocrysts, fresh augite, in a fine mass of felted K-feldspar laths with leucoxene and chlorite. LOCATION : DIGHEM ANOMALY 145xA (FLOAT)	Phenocrysts up to 4 mm. Orientated, "trachytic" fabric in places.	About 1 % magnetite. Quartz-epidote veins, carbonate veinlets.	Clearly related to the others (115, 128) with minor difference in composition, textures.
972 295	Microsyenite. Random laths of extensively argillised albite, with interstitial K-feldspar, aggregates of chlorite/biotite with magnetite. LOCATION : DIGHEM ANOMALY 145xA (FLOAT)	Random, medium-grained, typical minor intrusive fabric.	3-4 % magnetite; accessory apatite.	Believed to be related to the trachyandesites, simply coarser-grained and more alkalic.
972 298	Olivine Dolerite. Many small subhedral phenocrysts of fresh olivine set in groundmass of microgranular augite and subparallel labradorite laths. LOCATION : DIGHEM ANOMALY 136xA	Good flow-orientation in groundmass. Phenocrysts are < 1 mm in size.	Accessory ilmenite and magnetite (1-2 % each). Rare small quartz-filled amygdales.	Fresh rock, strongly contrasting with the others. Freshness and composition indicate Tertiary ag
972 299	Olivine Dolerite. Olivine phenocrysts, incipiently serpentinised, set in random, medium-grained mass of fresh labradorite and titanaugite. DIGHEM ANOMALY 136xA.	Random distribution, orientation of minerals. Medium-grained.	Accessory magnetite (2 %) and ilmenite (1 %). Small zeolite patches.	A coarser version of 298, but compositionally closely similar. Regarded as Tertiary.
972 300	Porphyritic Trachyandesite. Fairly closely packed small oligoclase phenocrysts, with interstitial K-feldspar, secondary carbonate, chloritised hornblende. DIGHEM ANOMALY : 1000xE	Phenocrysts mostly < 0.5 mm. Random orientation; fine-grained.	Relict augite; 2-3 % hematitised magnetite. Secondary quartz.	Similar to the other trachy-andesites; though fairly extensively altered. Leucocratic due to abundant feldspars.

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	Central Mineralogical Services Comments
372301	Agglomerate Lava. Fragments of porphyritic andesite (oligoclase, augite, hornblende phenocrysts, plagioclase groundmass) cemented by fine potassic trachyte. DIGHEM ANOMALY 1000KE.	Andesite fragments up to 15 mm; very irregular shapes, interlocked with trachyte.	Fine pigmenting hematite in both rocks. 3-4 % magnetite in andesite.	In a sense, the trachyandesites are homogeneous mixtures of the two types in this sample; all are genetically related.
372305	Sheared, Altered ?Rhyolite. Lenses of poorly-defined K-feldspar, with intergrown sericite, quartz. Many subparallel quartz veins with magnetite.	Primary textures almost unrecognisable; possibly originally coarsely-crystalline.	Earthy goethite. Sericite aggregates after ?feldspar.	Very poorly preserved, but quite different from the other rocks, with inferred "acid" igneous composition. Magnetite largely hematitised.
372309	Crystal Tuff. Mainly relatively coarse crystal fragments of oligoclase, with partly chloritised augite, hornblende, lava fragments, interstitial chlorite, pumpellyite. LOCATION: TRACK NORTH OF GOURIE PARK	Closely-packed; clastic textures obscured by deuteric minerals. Coarse-grained.	Magnetite grains. Vein-quartz fragments.	Tuff components largely derived from intermediate igneous source, probably related to trachy-andesites.
335862	Porphyritic, Spherulitic Rhyolite. Embayed phenocrysts of quartz and sanidine randomly set in groundmass of small K-silicate/quartz spherulites.	No flow-features; spherulites are devitrification textures; uniform.	Fine interstitial chlorite and sericite flakes. Biotite aggregates.	Fabric suggests an intrusive rock, since acid lavas frequently show flow-features (banding, brecciation).
372224 (T.S. 40897)	Banded Calc-Silicate Rock. Bands of finely-crystalline diopside with embedded garnet (grossularite), alternating with quartz-rich bands.	Crude banding is probably inherited; components are fine-grained.	Granular sphene. Goethite patches after ?sulphides.	UV-check for scheelite negative. Original rock probably banded impure limestone, essentially contact-metamorphosed.
				613296

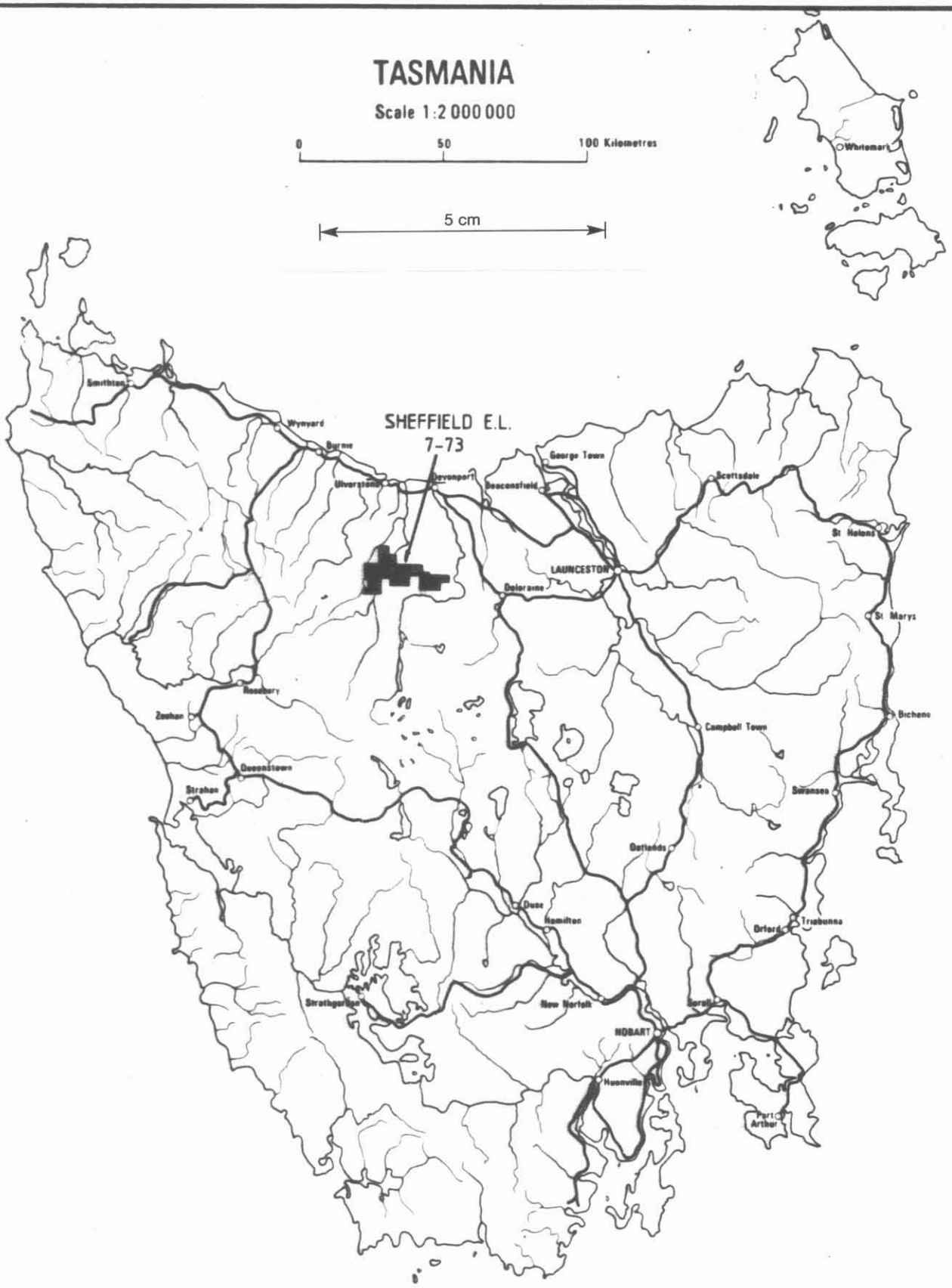
613297

TASMANIA

Scale 1:2 000 000

0 50 100 Kilometres

5 cm



CRA EXPLORATION PTY. LIMITED	
SHEFFIELD E.L. 7-73 LOCALITY PLAN	
REF. SK55	
SCALE 1 : 2000 000	DRAWN R.G.
AUTHOR M.F.	REPORT N°. 11883
DATE JAN. 1983	TASh N°. 1224

Sheffield

Claude Road

Paradise

Beulah

Roland

Star of the West

Mersey River

Union Bridge Rd.

Gnll

Au.

SR

Geochemical drainage sample location & results in ppm.
Pb
Zn
Cu

Prospect or mine working

E.L. boundary

Margin of 1:5000 sheet

Boundary of Special Reserve

Road

Track

Creek

Geological boundary

Fault

Quaternary	Qa	Alluvium
	Qg	Gravel
	Qt	Talus
Tertary	Tb	Basalt
	Ts	Sediments
Jurassic	Jd	Dolerite
Permian	P	Coal Measures etc.
Devonian	Dg	Granite
Ordovician	Og	Gordon limestone
	Om	Moina Sandstone
	Or	Roland Conglomerate
	Eg	Granite
Cambrian		Nietta Group
	Enu	Undiff.
	Enm	Shales & sediments with minor tuffs.
	Enul	Rhyolite lava - unaltered (or welded tuff?)
	Enuc	Unaltered acid crystal tuff (+ other "coarser tuffs")
	Enls	Shales, tuffaceous shales & sometimes fine tuffs.
	Enlu	Undiff. altered volcanics
	Enlc	Altered (to unaltered) crystal tuff (+ other "coarser tuffs")
	Enlg / Eng	Agglomerate (lg altered, ug unaltered)

		Nietta Grp.
Cambrian	Enla	Altered ash flow tuff.
	Enlv	Altered fine vitric tuff to tuffaceous shale.
	Enlf	Schists & schistose tuffs & agglomerates etc.
		Beulah Fm.
	Ebc	Conglomerate (to agglomerate)
	Ebs	Shale, sandstone & fine tuffs
	Eba	Andesite
		Cateena Grp.
	Ecm	Shale to mudstone, tuffaceous shale, fine tuff.
	Ecs	Sandstone, tuffaceous sandstone, lesser tuffaceous shale.
	Ecl	Coarse lithic tuff, fine tuff, tuffaceous sandstone etc.

True N. Mag. N. C.R.A.E. Grid N.

613298

5 cm

E.L.7/73

CRA EXPLORATION PTY. LIMITED

EL 7-73 SHEFFIELD N-W TASMANIA
MOUNT ROLAND-GOG RANGE
GEOLOGICAL-GEOCHEMICAL PLAN

Ref. SK55-3	
Scale 1:25 000	Drawn
Author	Report No. 11883
Date 1975	Tv 240

/4444

BARRINGTON

LAKE

CETHANA

Narrawa.

Wilmot

Falls

Erriba

Bell Mt.

Sayers

Dalcoath

Premier

All Nations

Roland

Staverton

Gowrie Park

Devonian

EL 7/73

Geochemical drainage sample location & results in ppm.
Pb Zn Cu

Prospect or mine working

E.L. boundary

Road

Track

Creek

Geological boundary

Fault

Quaternary	Qa	Alluvium
	Qg	Gravel
	Qt	Talus
Tertiary	Tb	Basalt
	Ts	Sediments
Jurassic	Jd	Dolerite
Permian	P	Coal Measures etc.
Devonian	Dg	Granite
Ordovician	Og	Gordon Limestone
	Om	Moina Sandstone
	Or	Roland Conglomerate
Cambrian	Eg	Granite
		Wells Group.
	Enu	Undiff.
	Enm	Shales & sediments with minor tuffs.
	Enul	Rhyolite lavas - unaltered (or welded tuff?).
	Enuc	Unaltered acid crystal tuff (+ other "coarser tuffs")
	Enls	Shales, tuffaceous shales & sometimes fine tuffs.
	Enlu	Undiff altered volcanics
	Enlc	Altered (to unaltered) crystal tuff (+other "coarser tuffs")
	Enlg	Agglomerate (lg altered, ug unaltered)

Wells Grp.

Enla	Altered ash flow tuff.
Enlv	Altered fine vitric tuff to tuffaceous shale
Enlf	Schists & schistose tuffs & agglomerates etc.

Beulah Fm.

Cambrian	Ebc	Conglomerate (to agglomerate)
	Ebs	Shale, sandstone & fine tuffs
	Eba	Andesite

Cotheana Grp.

Ecm	Shale to mudstone, tuffaceous shale, fine tuff.
Ecs	Sandstone, tuffaceous sandstone, lesser tuffaceous shale.
Ecl	Coarse lithic tuff, fine tuff, tuffaceous sandstone etc. altered in part.

True N. Mag. N.

C.R.A.E. Grid N.

613299

5 cm

CRA EXPLORATION PTY. LIMITED

EL 7-73 SHEFFIELD N-W TASMANIA
LAKE BARRINGTON-CETHANA AREA
GEOLOGICAL-GEOCHEMICAL PLAN

Ref. SK55,3	
Scale 1:25 000	Drawn
Author M.F.	Report No. 11883
Date 1975	Tv 241

425 000 mE
430 000 mE
435 000 mE
5 420 000 mN
5 415 000 mN
5 410 000 mN
5 405 000 mN

28A
WILMOT
32A
34A
22A
28C
28F
20M
31G
36G
36I
34K
47-1767
PROMISED LAND GRID
47xA
Lake Barrington
Weeks Reach
24G
32H
24J
PROMISED LAND
36xD
34xB
61xA
3900xA
33V
33W
28Q
31T
32Q
50B
56xC
8000B
8xA
8xB
8000D
5A
6A
W
E
8A
5B
7A
8B
8000F
8000G
10C
ERRIBA
12I
14E
21G
48B
63B
65A
63C
44C
48D
65B
63D
66xC
13B
16E
29X
14G
25U
2600V
WASHINGTON Pb - Ag
5000xA
WILMOT
RIVER
5200A
53K
52K
5300E
53M
55C
14-2804
26xJ
2A
2B
CETHANA PICNIC AREA GRID
2600-3695
64A
66xE
66A
6900A
58D
56F
GOWRIE PARK
DASHER
8000H
2100xJ
CETHANA
59xG
56xF
60xD
63E
64xD
Lake Gardiner
25xO
DOLCOATH • 2100-3643
GRANITE GRID
15-2781
29-1614
19I
20xR
Lake Cethana
1500xA
24xN
24-1816
27xJ
29-1607
19-2686

LEGEND

21G ○ DIGHEM EM ANOMALY

26xD ✕ X TYPE DIGHEM ANOMALY

FOLLOW UP TRAVERSE

• 19-2686 AEROMAGNETIC ANOMALY

5 cm

613300

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73

DIGHEM ANOMALY FOLLOW UP
WESTERN SHEET

Ref:	SK55 - 3		
Scale:	1 : 25 000	Drawn:	R. T.
Author:	M.F.F.	Report N°.	11883
Date:	JAN. 1983	Plan N°.	TASh 1119

14444

5 415 000 mN

440 000 mE

445 000 mE

450 000 mE

DASHER RIVER

CLAUDE ROAD

PARADISE

BEULAH

LOWER BEULAH

MINNOW RIVER

MERSEY RIVER

5 410 000 mN

5 405 000 mN

75A
100 mW
0 m
100 mE

80xB

89xA

67xA

71xA

1010A

97C

1000E

100xE

98xG

1010M

103H

114A

126A

133A

119xB
200 mW
100 mW
0 mW
121xA
000N

146xA

147xA

132xD
100 mW
0 mW

118xA
119xC
4
3
2
1
000S

143xA

GARDEN OF EDEN GRID

146xB

000N
145xA
146xC

136xA

6900A
5100 mW
5000 mW
4900 mW
5000N
73xA

000S
103xF
102xD
104xB
1
2
3

GOG RANGE WEST GRID

126xB

113A
1
2
3
115xF

LEGEND

613301

21G DIGHEM EM ANOMALY

26xD X TYPE DIGHEM ANOMALY

FOLLOW UP TRAVERSE

5 cm

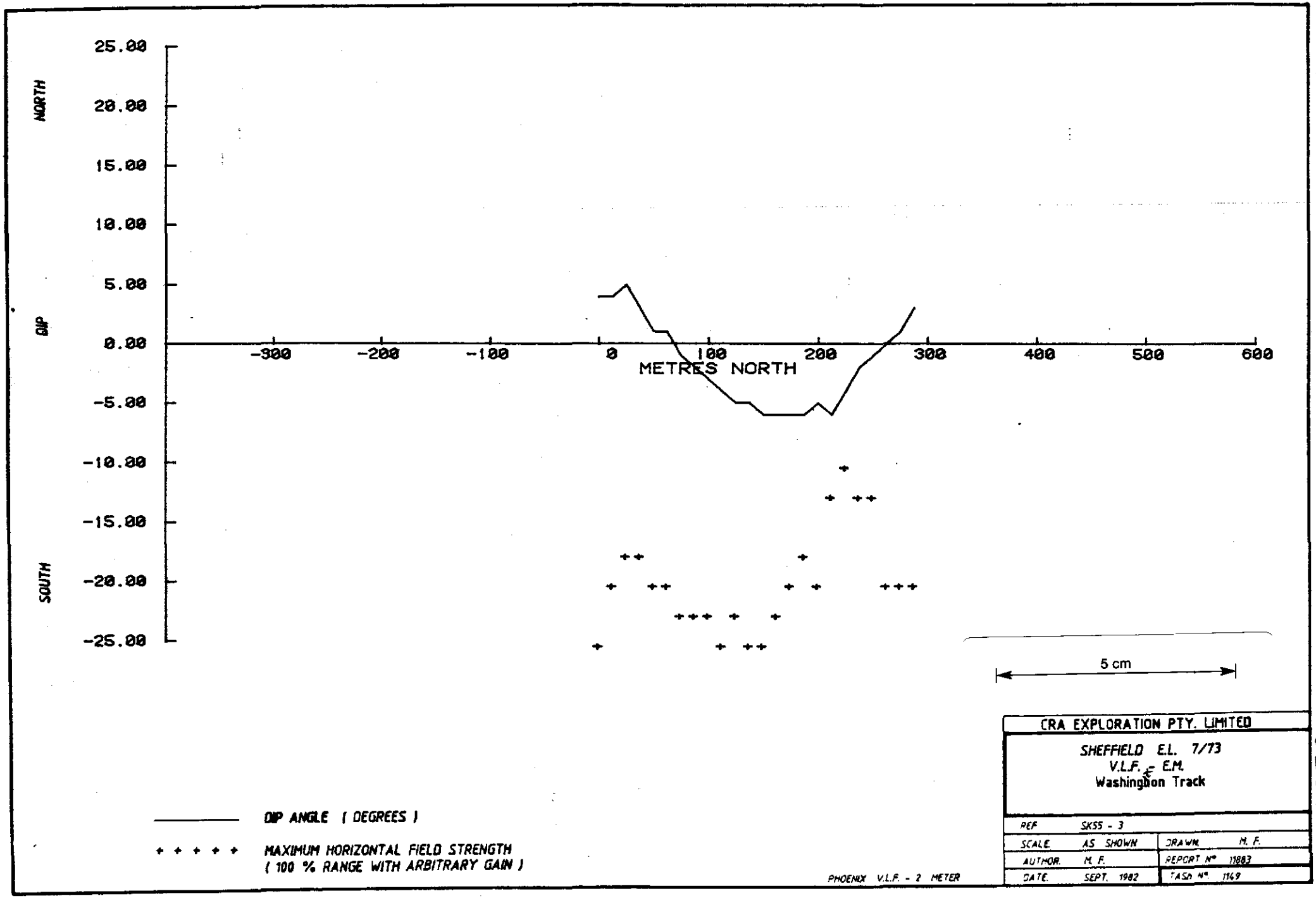
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73

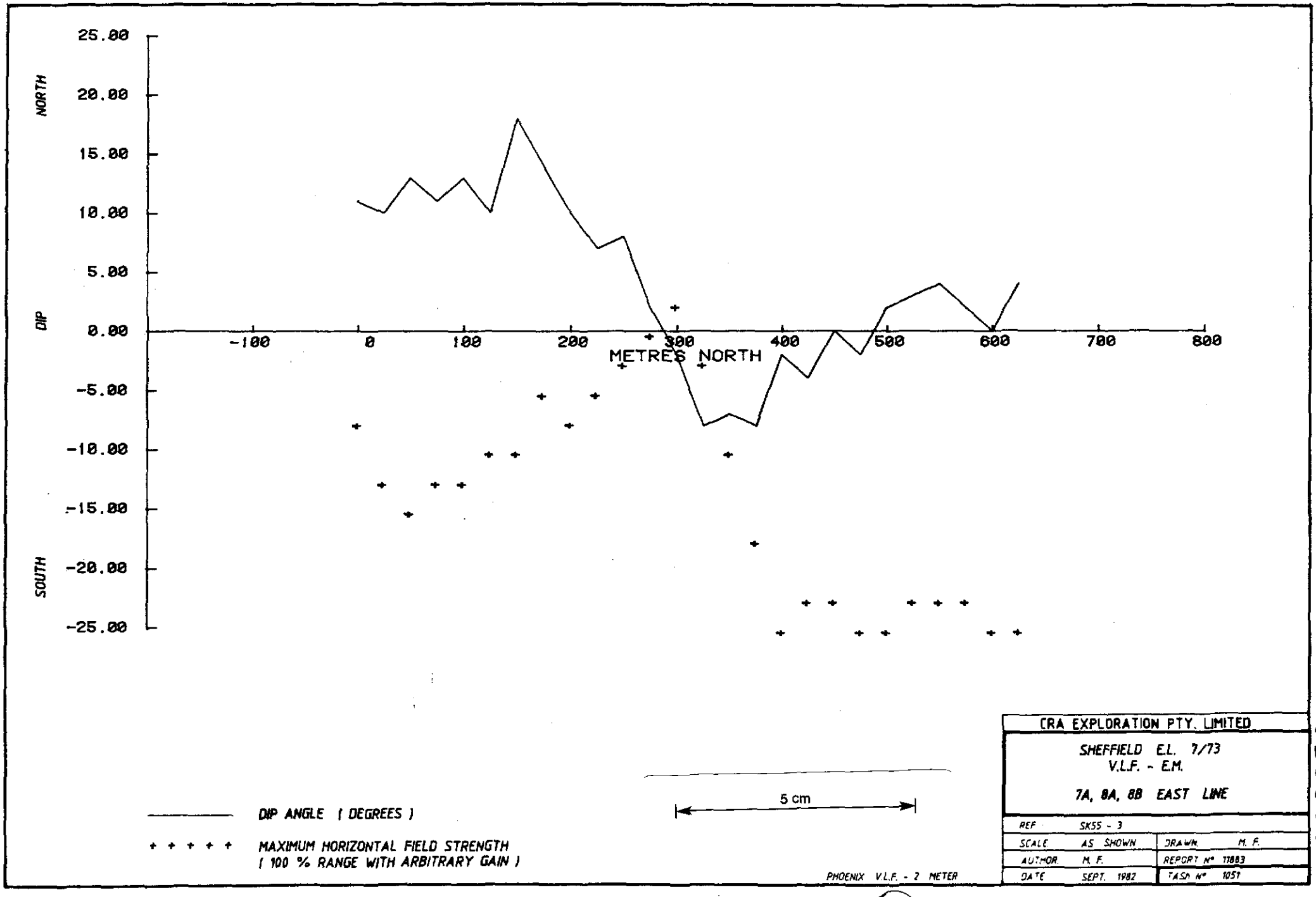
DIGHEM ANOMALY FOLLOW UP EASTERN SHEET

Ref.	SKSE - 3		
Scale	1 : 25 000	Drawn.	
Author	M.F.F.	Report No.	11883
Date	JAN. 1983	Plan No.	TASh 1120

14444


25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
NORTH
DIP
SOUTH
-300
-200
-100
0
100
200
300
400
500
600
METRES NORTH
5 cm
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
V.L.F. & E.M.
Washington Track
REF. SK55 - 3
SCALE AS SHOWN
DRAWN M. F.
AUTHOR. M. F.
REPORT N° 11883
DATE. SEPT. 1982
TASK N°. 1149

GEO 02



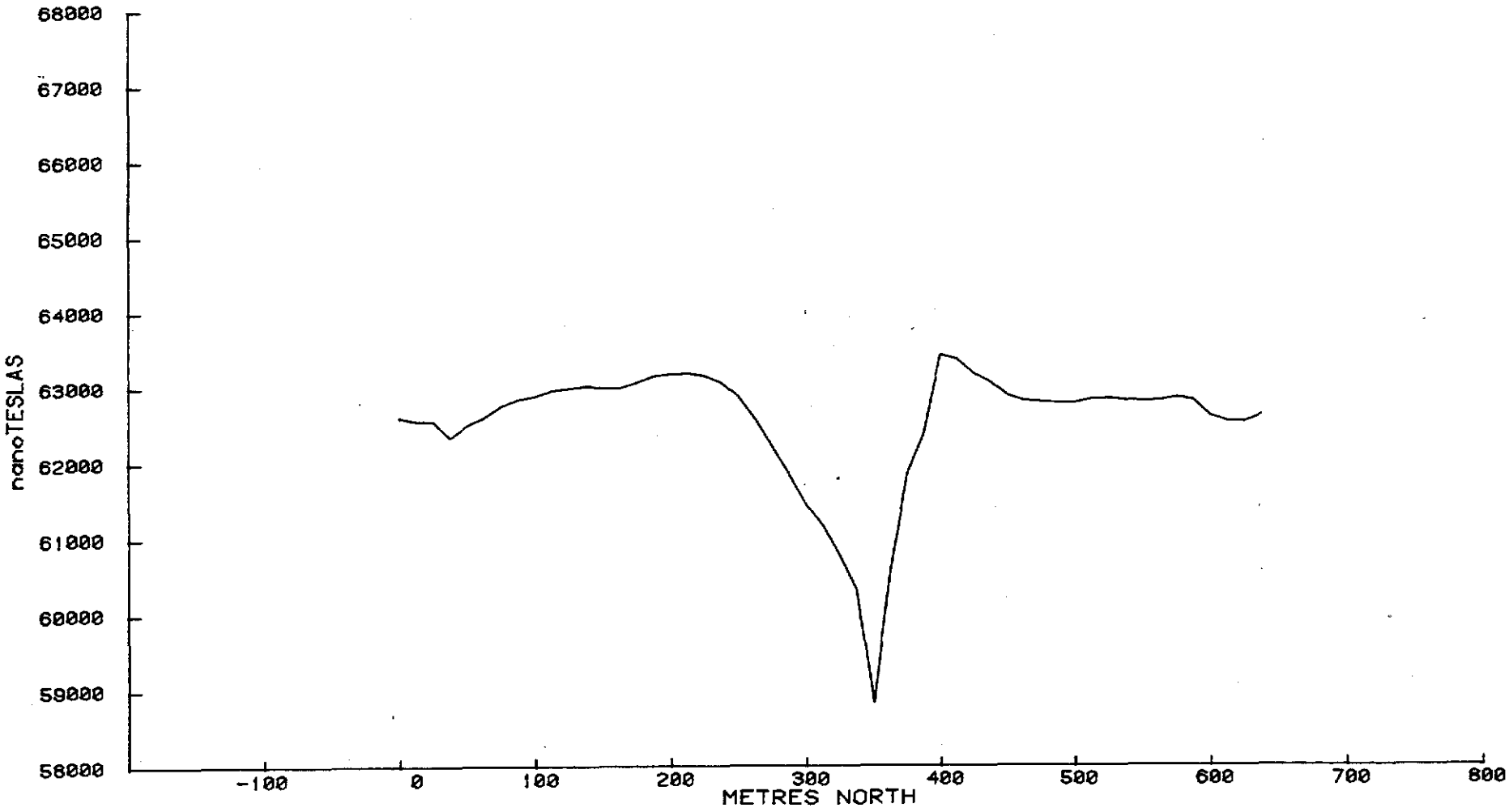
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.

7A, 8A, 8B EAST LINE

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASA N°	1051

COPY



5 cm

G 826 MAGNETOMETER

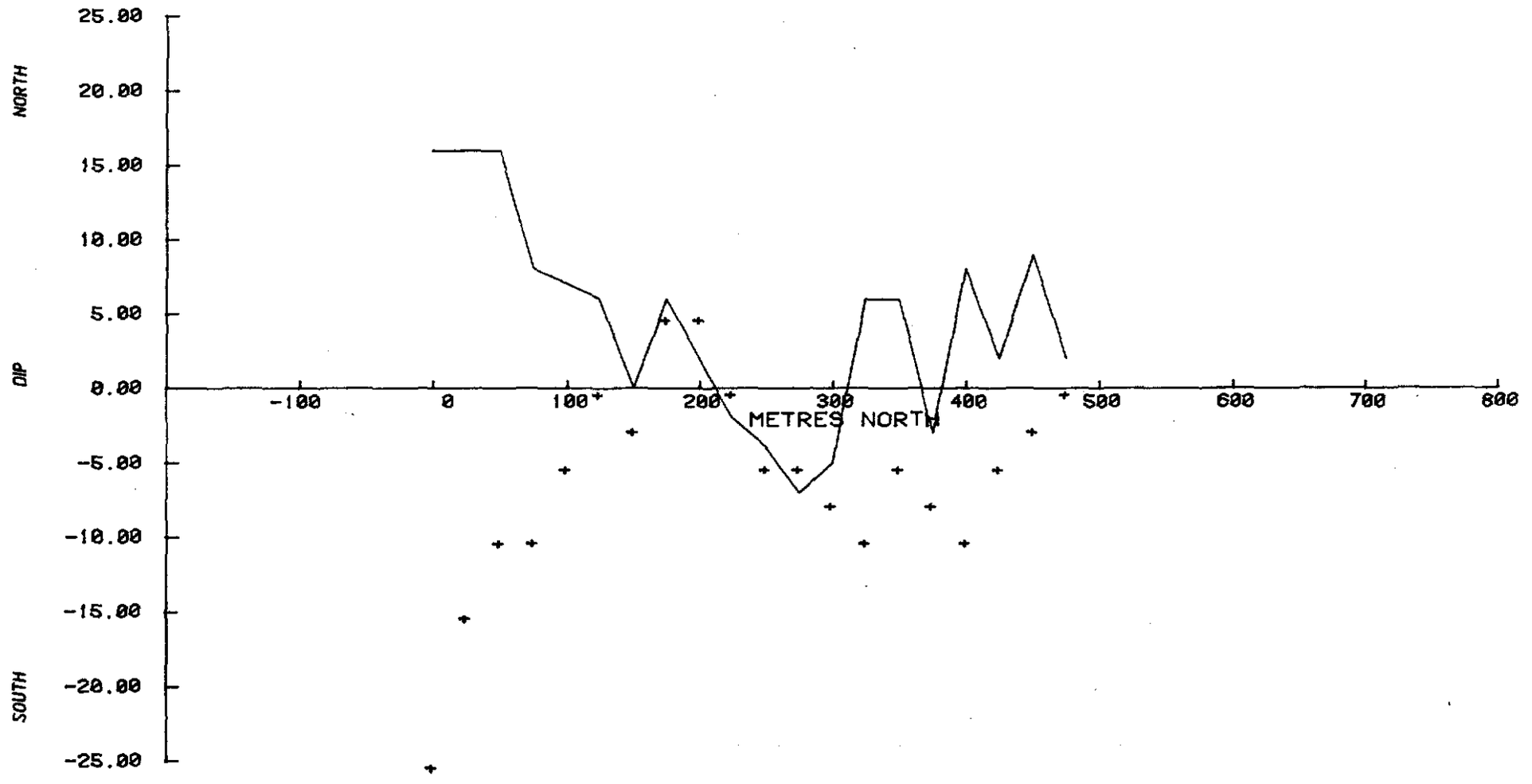
CRA EXPLORATION PTY. LIMITED

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

REF.	SKSS - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1052

013804

613305



5 cm

DIP ANGLE (DEGREES)

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

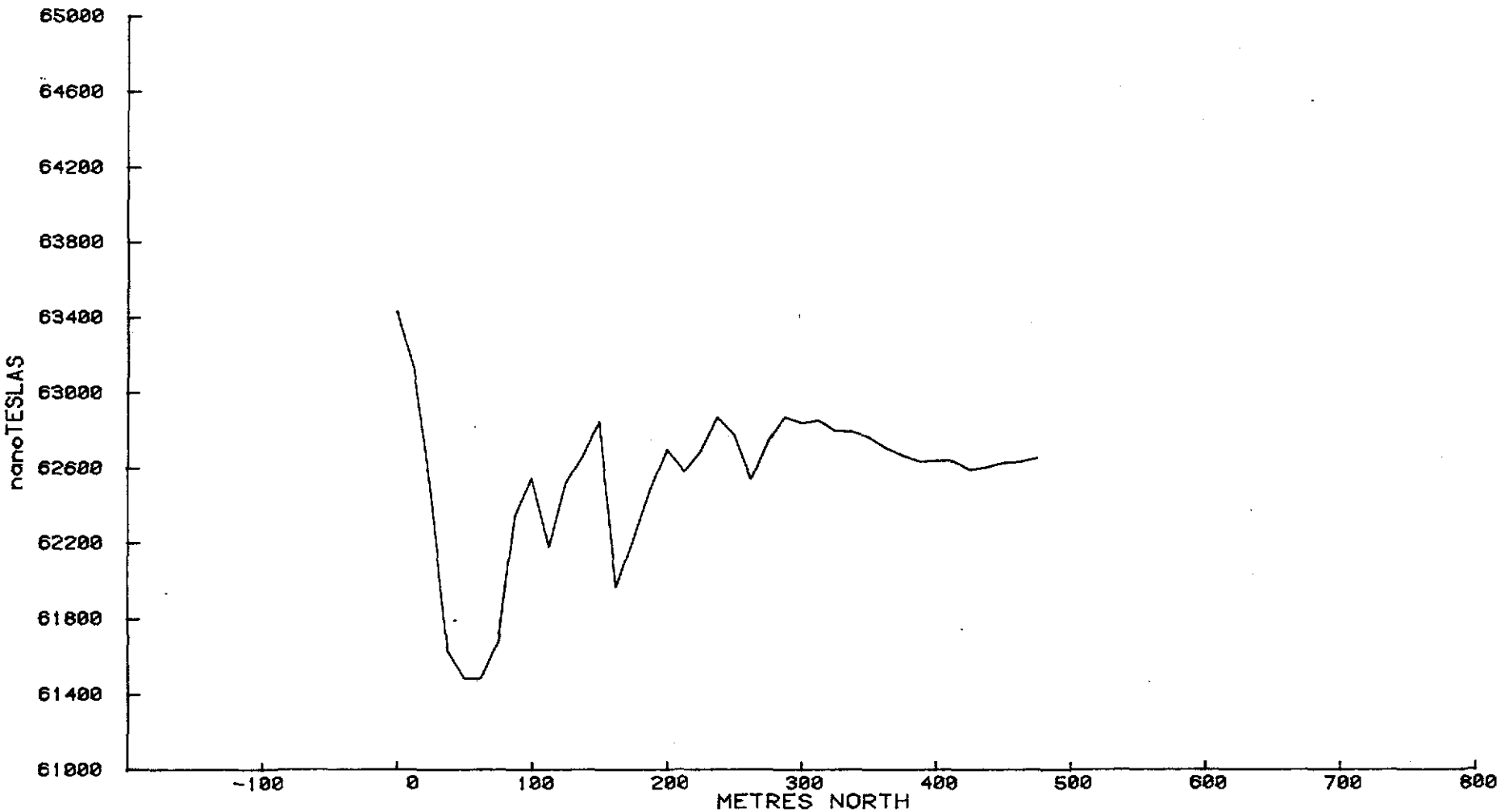
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
7A, 8A, 8B, WEST LINE

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1053

613306



5 cm

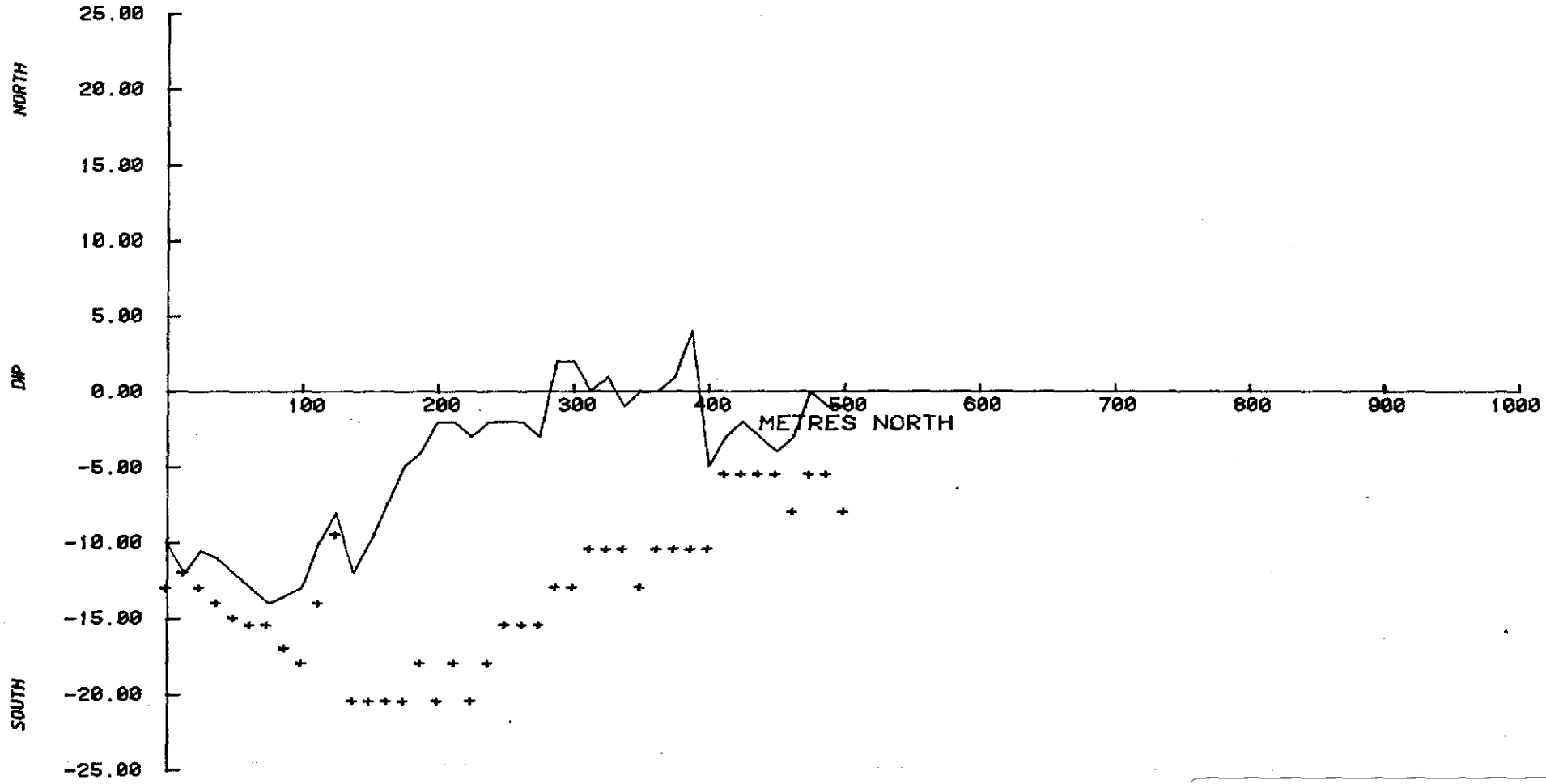
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

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

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1054

613307



5 cm

DIP ANGLE (DEGREES)

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

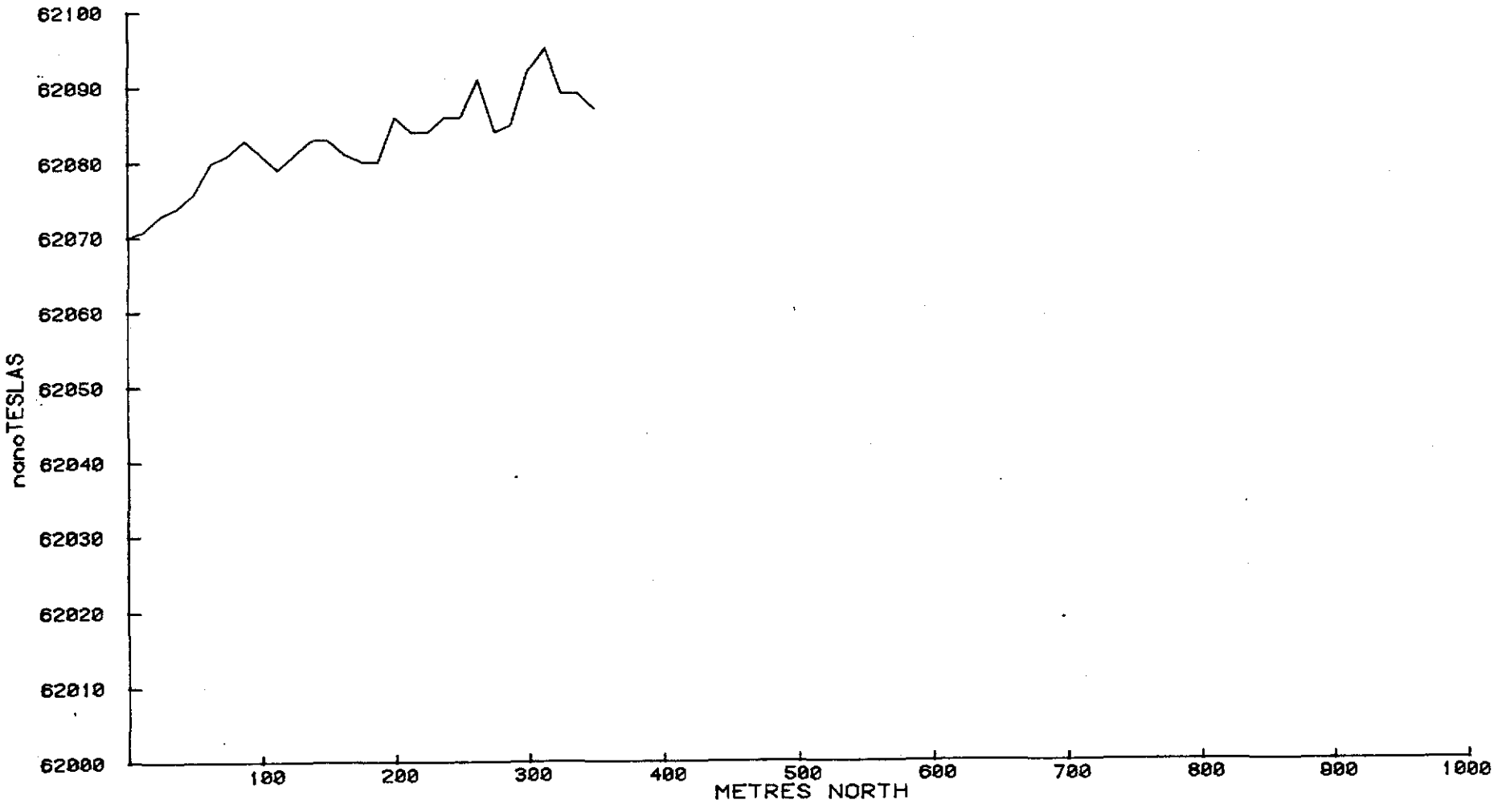
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
24xN LINE A

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1047

613308



5 cm

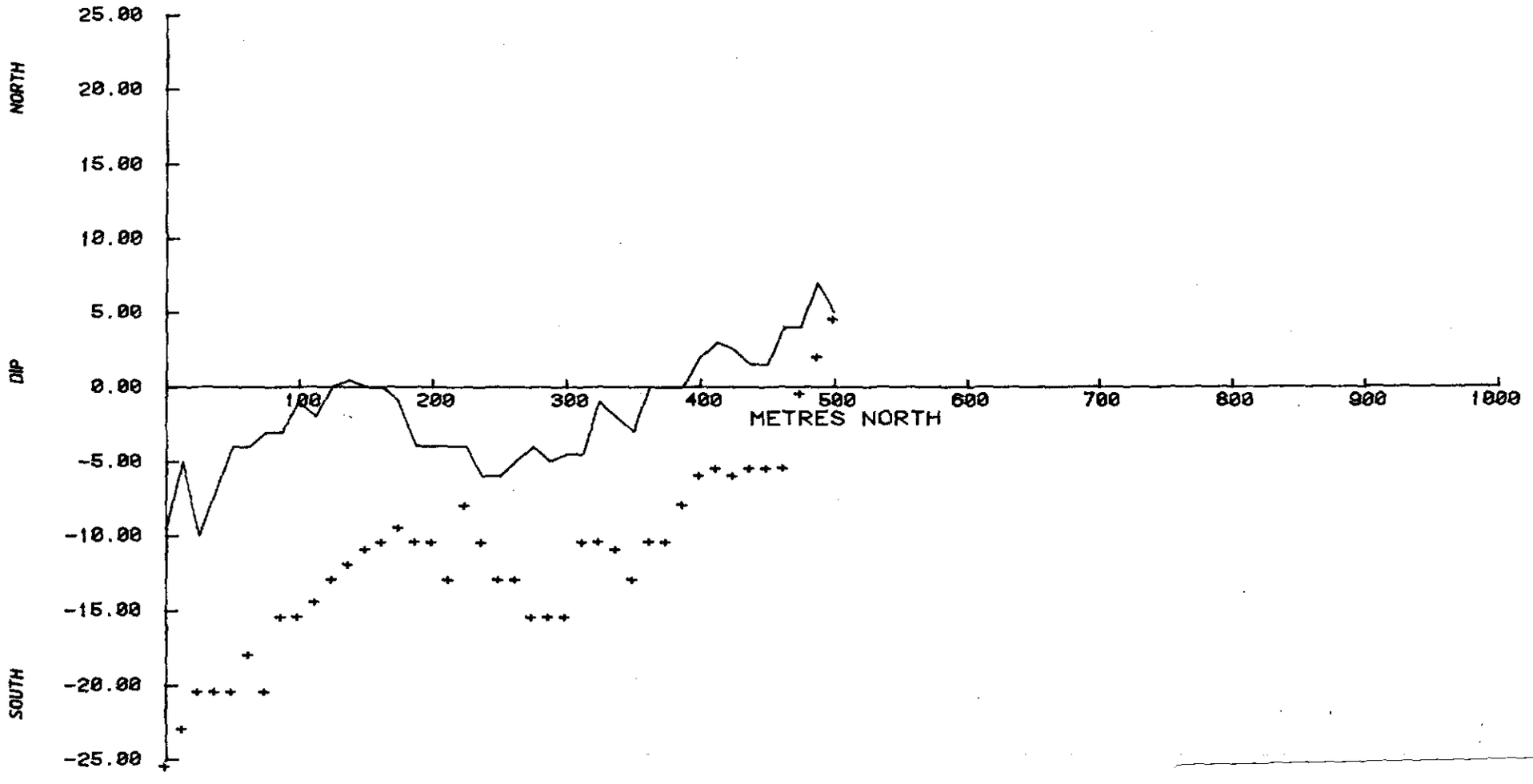
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
24xN LINE A

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASh N°	1048

613309



5 cm

DIP ANGLE (DEGREES)

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

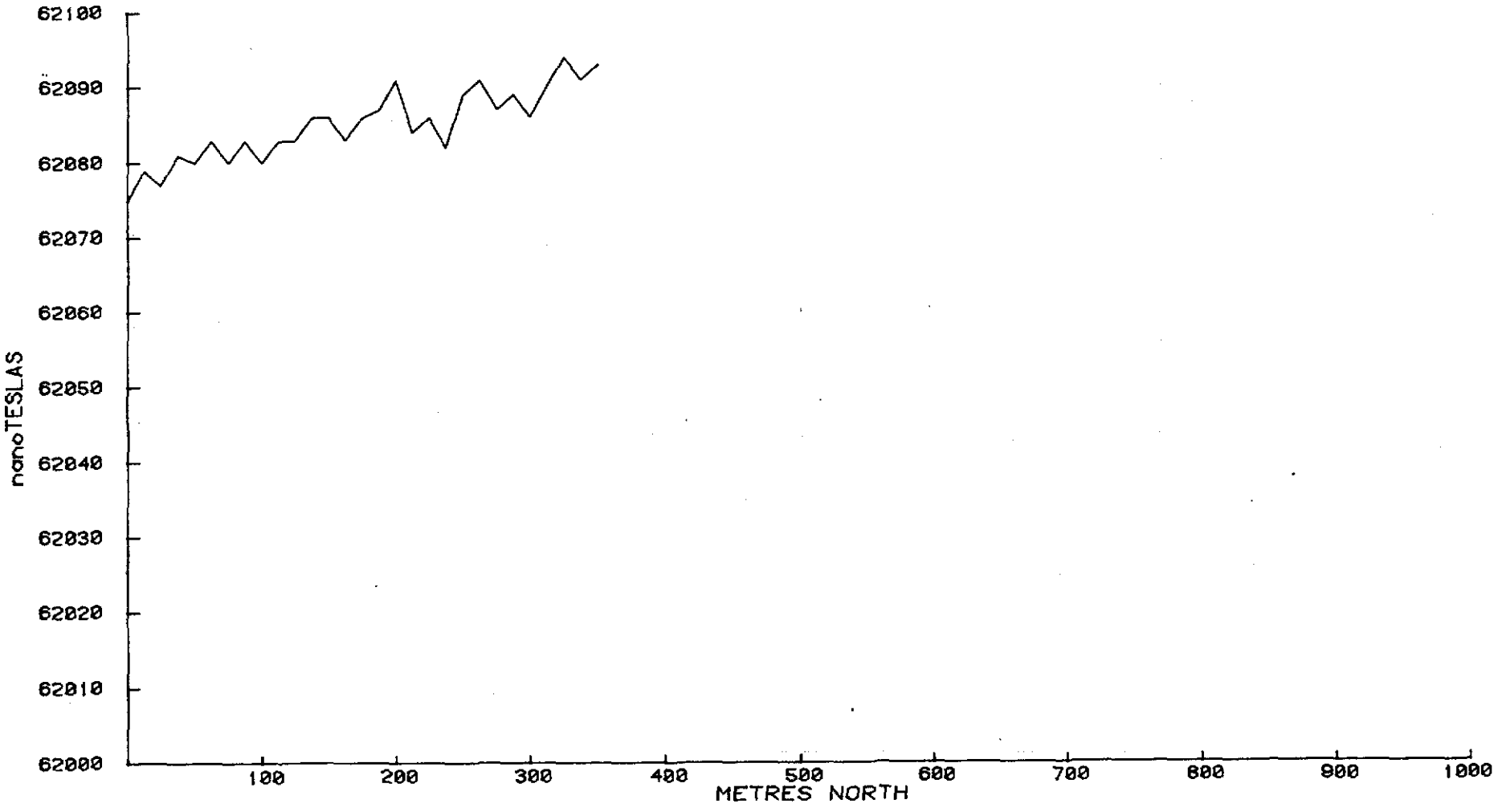
PHOENIX V.L.F. - 2 METER

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°	11883
DATE	SEPT. 1982	TASK N°	1049

613310



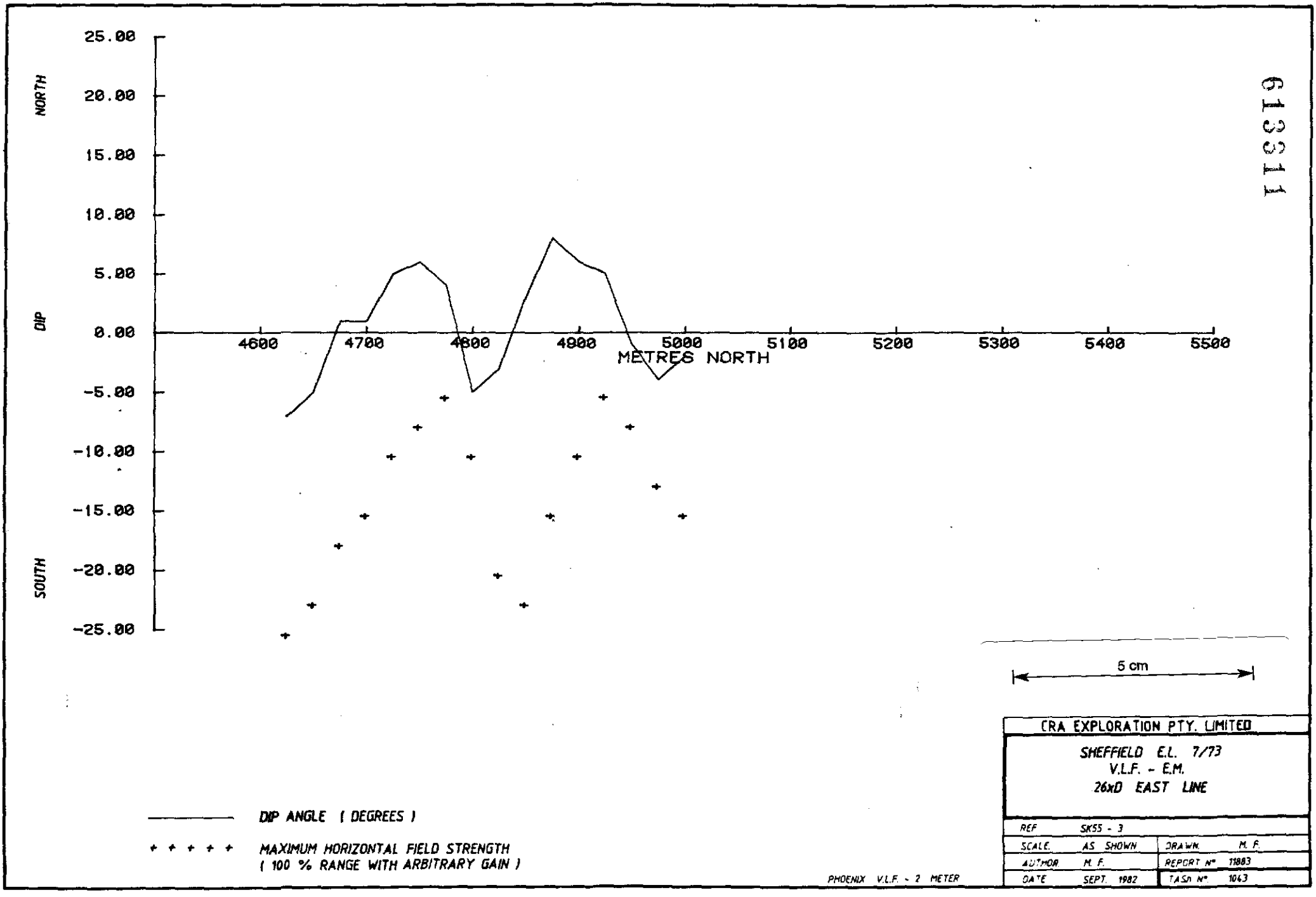
5 cm

G 826 MAGNETOMETER

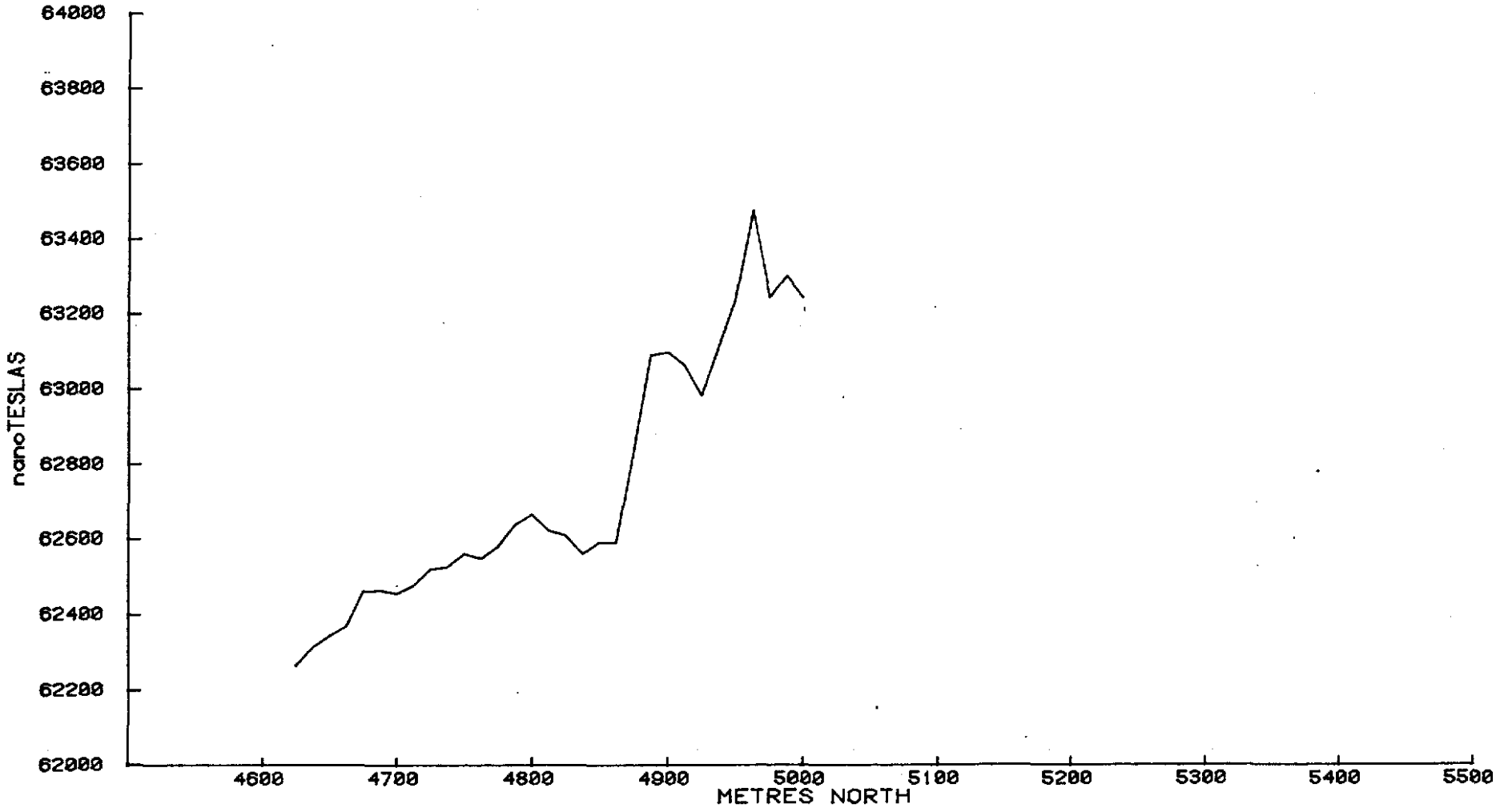
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
24xN LINE B

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1050


25.00
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NORTH
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SOUTH
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5100
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5300
5400
5500
METRES NORTH
5 cm
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
V.L.F. - E.M.
26xD EAST LINE
REF SK55 - 3
SCALE AS SHOWN
DRAWN M. F.
AUTHOR M. F.
REPORT N° 11883
DATE SEPT. 1982
TASI N° 1043

6133312



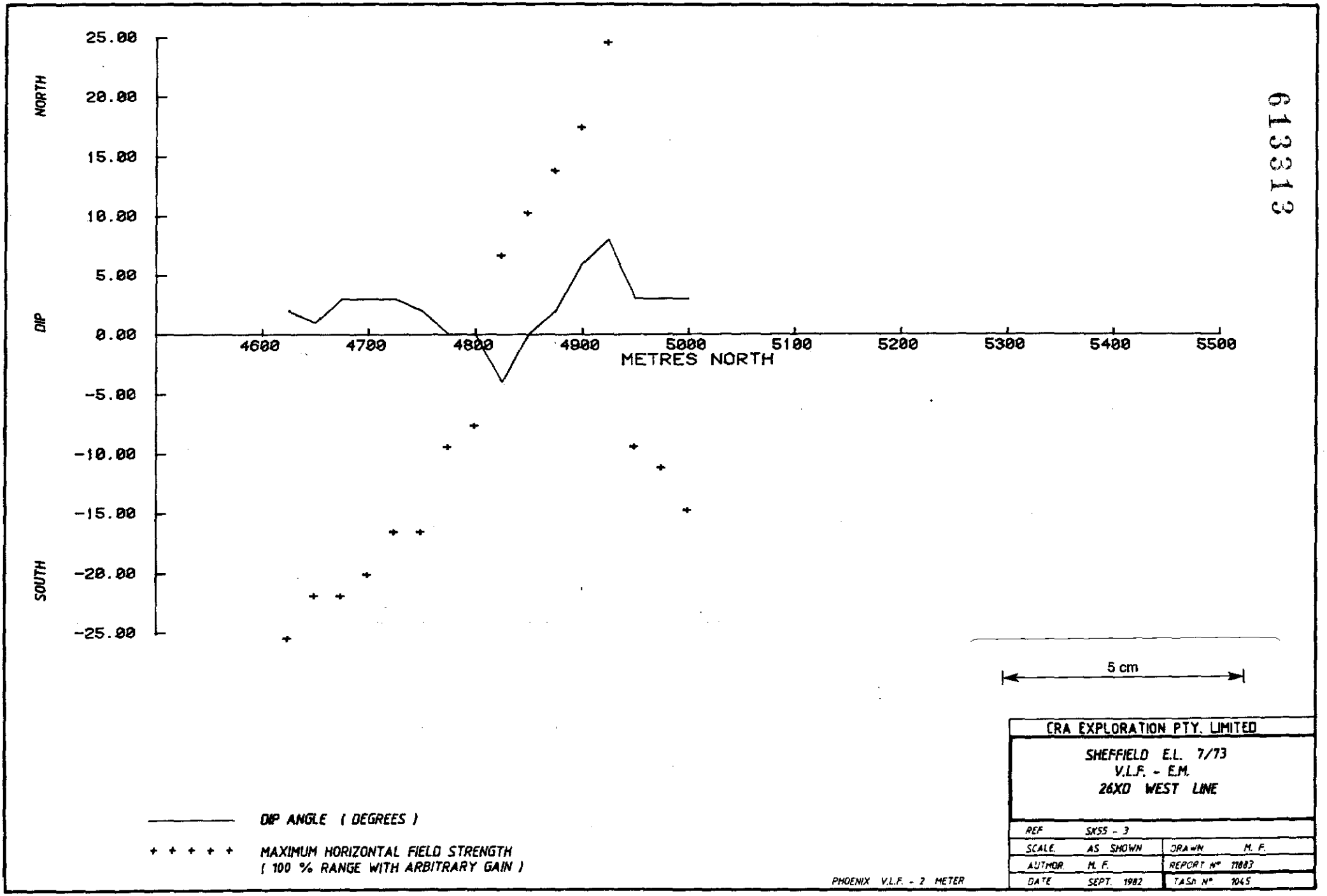
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

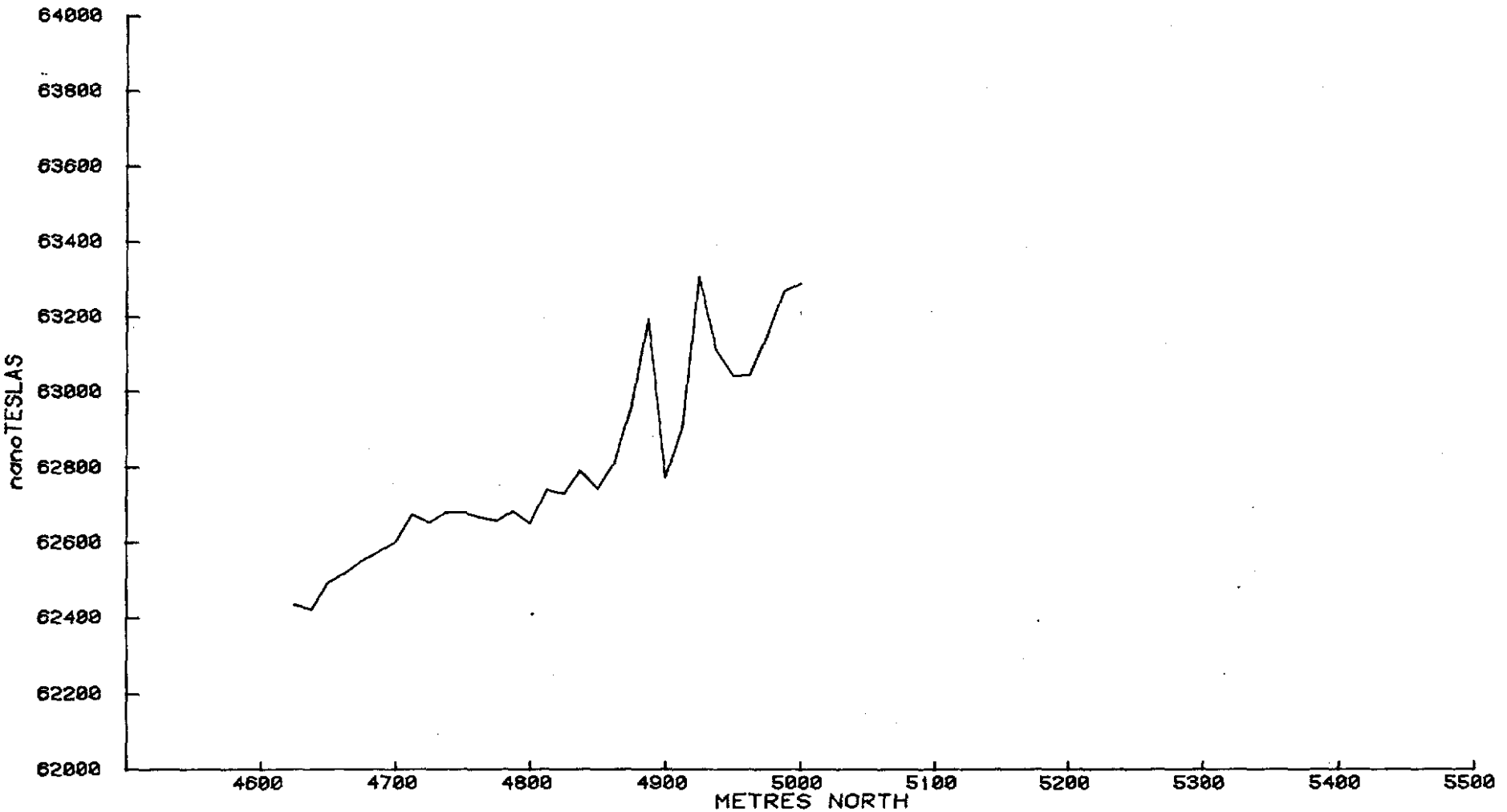
SHEFFIELD E.L. 7/73
GROUND MAGNETICS
26xD EAST LINE

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT Nº	11883
DATE.	SEPT. 1982	TASK Nº	1044


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20.00
15.00
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5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
NORTH
DIP
SOUTH
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
METRES NORTH
5 cm
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
V.L.F. - E.M.
26XD WEST LINE
REF SK55 - 3
SCALE AS SHOWN
DRAWN M. F.
AUTHOR M. F.
REPORT N° 11883
DATE SEPT. 1982
TASK N° 1045

613313

613314



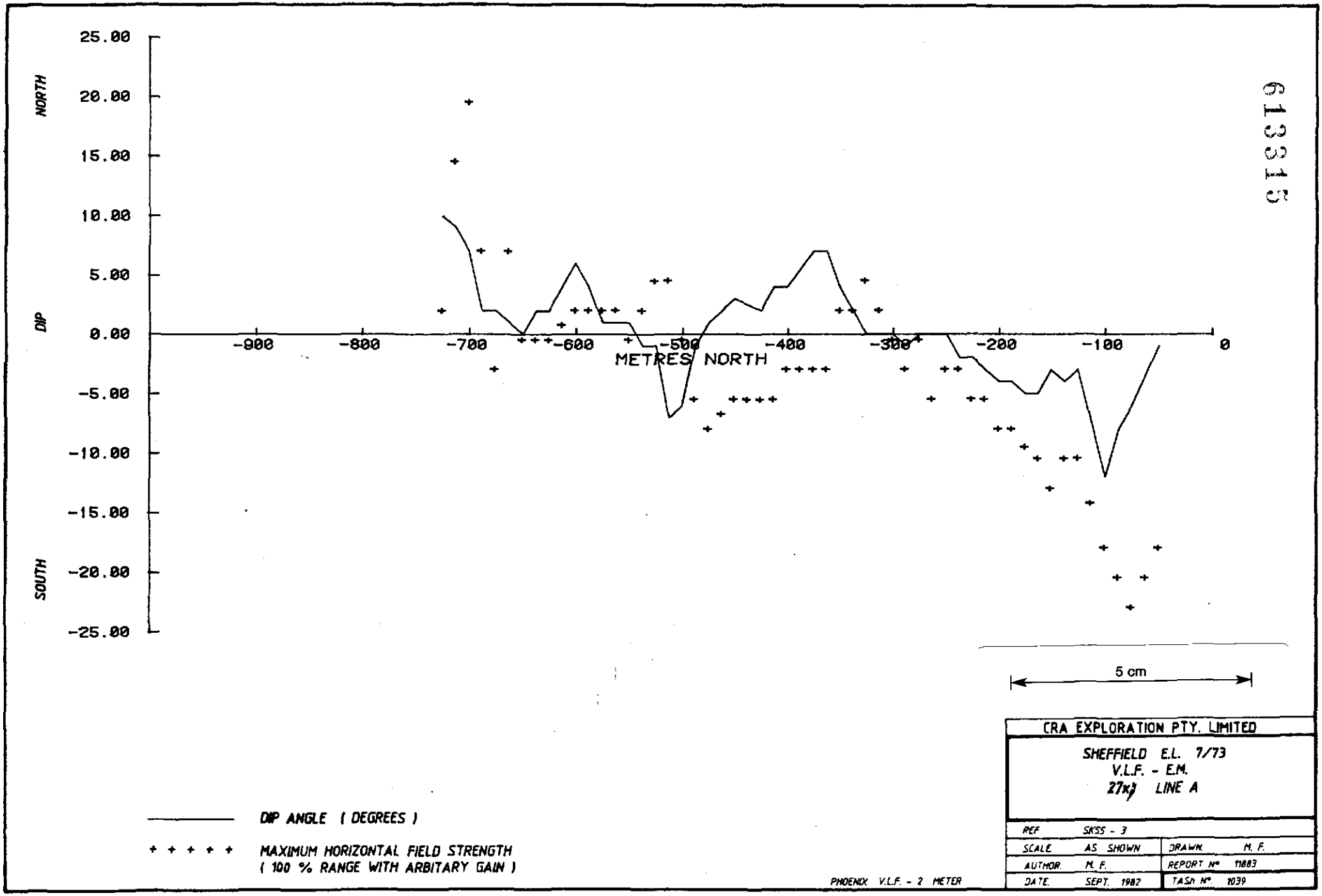
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

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

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°.	11883
DATE.	SEPT. 1982	TASh N°.	1046

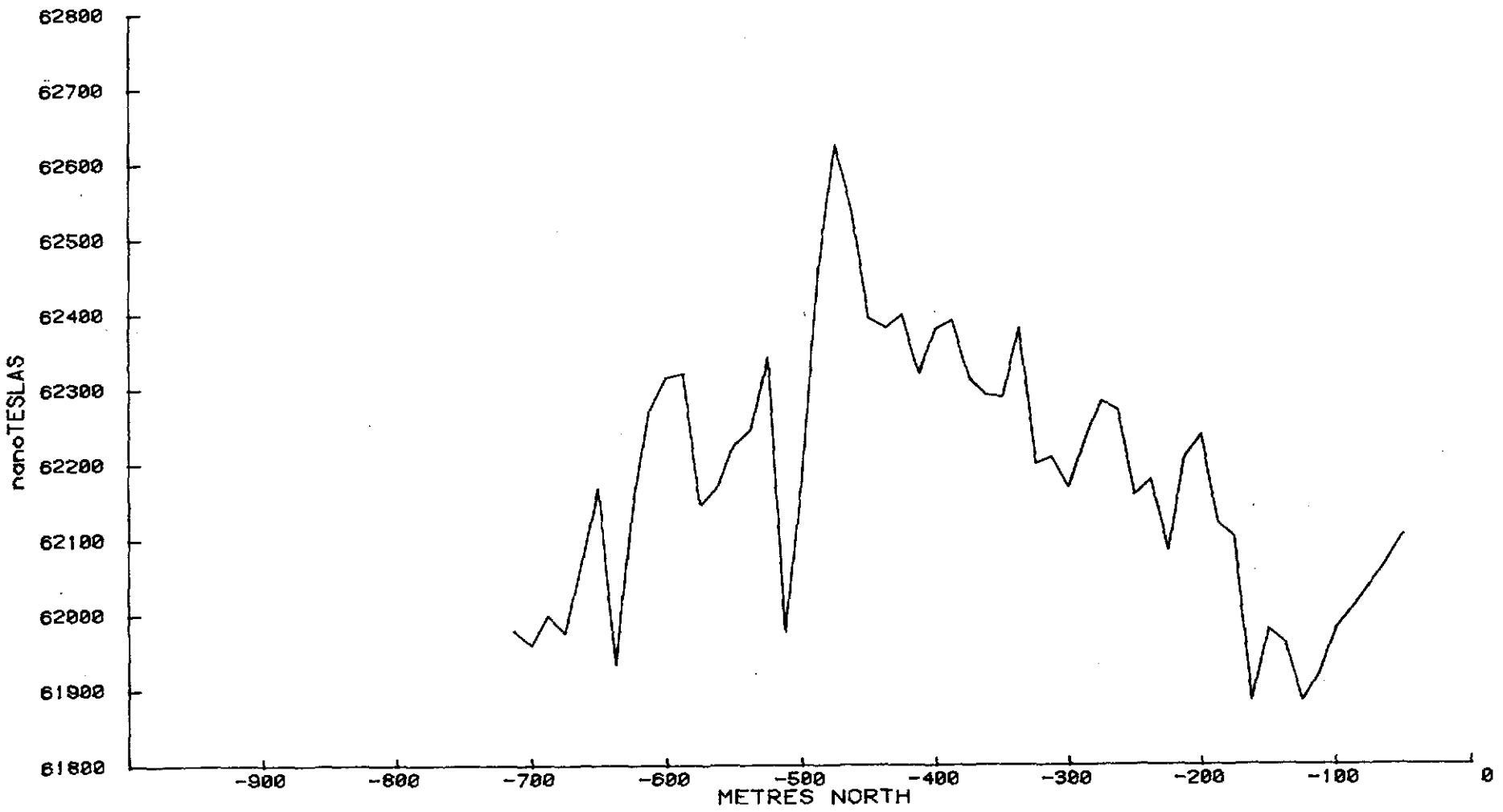


613313

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
27x1 LINE A

REF.	SKSS - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1039



613516

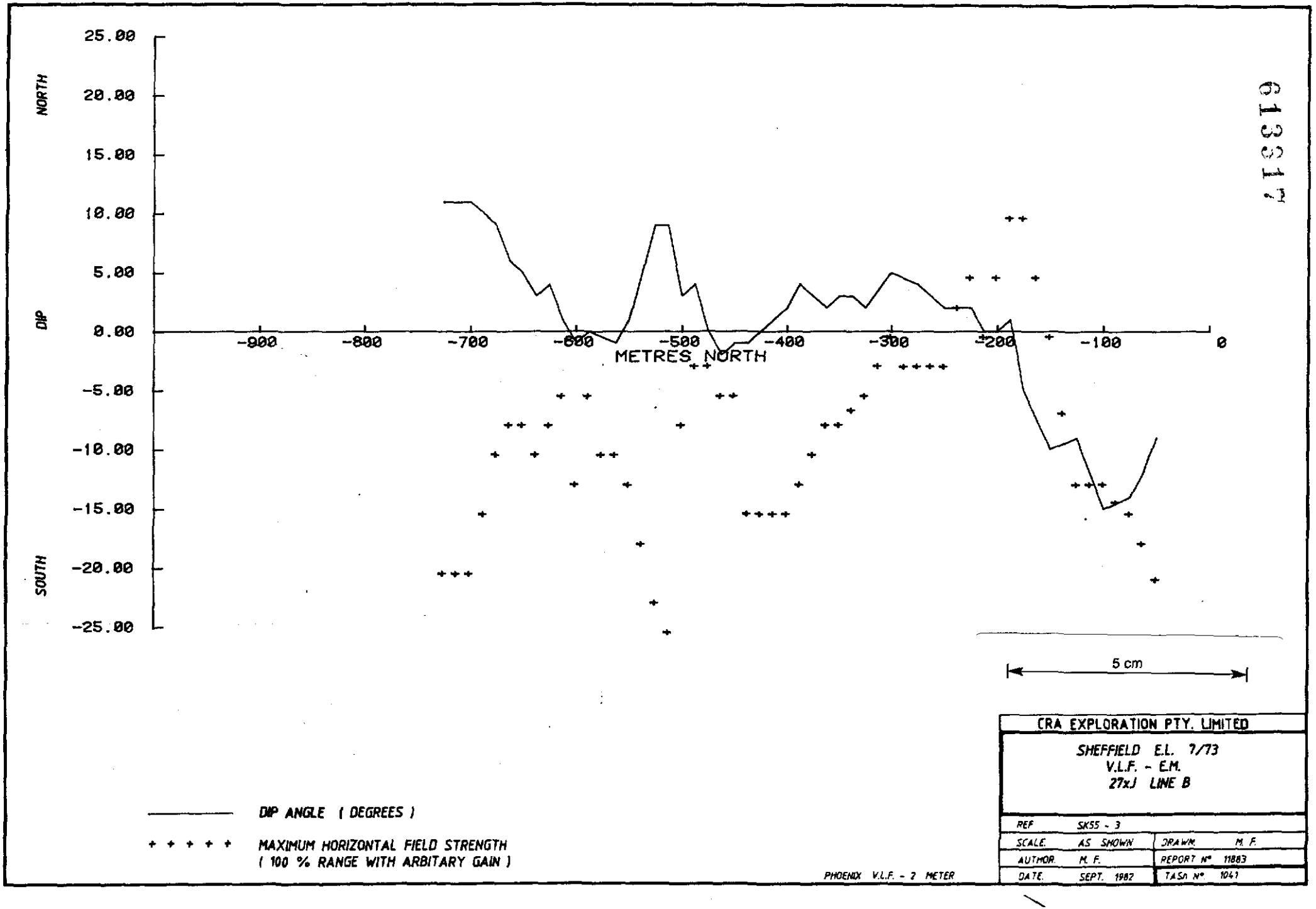
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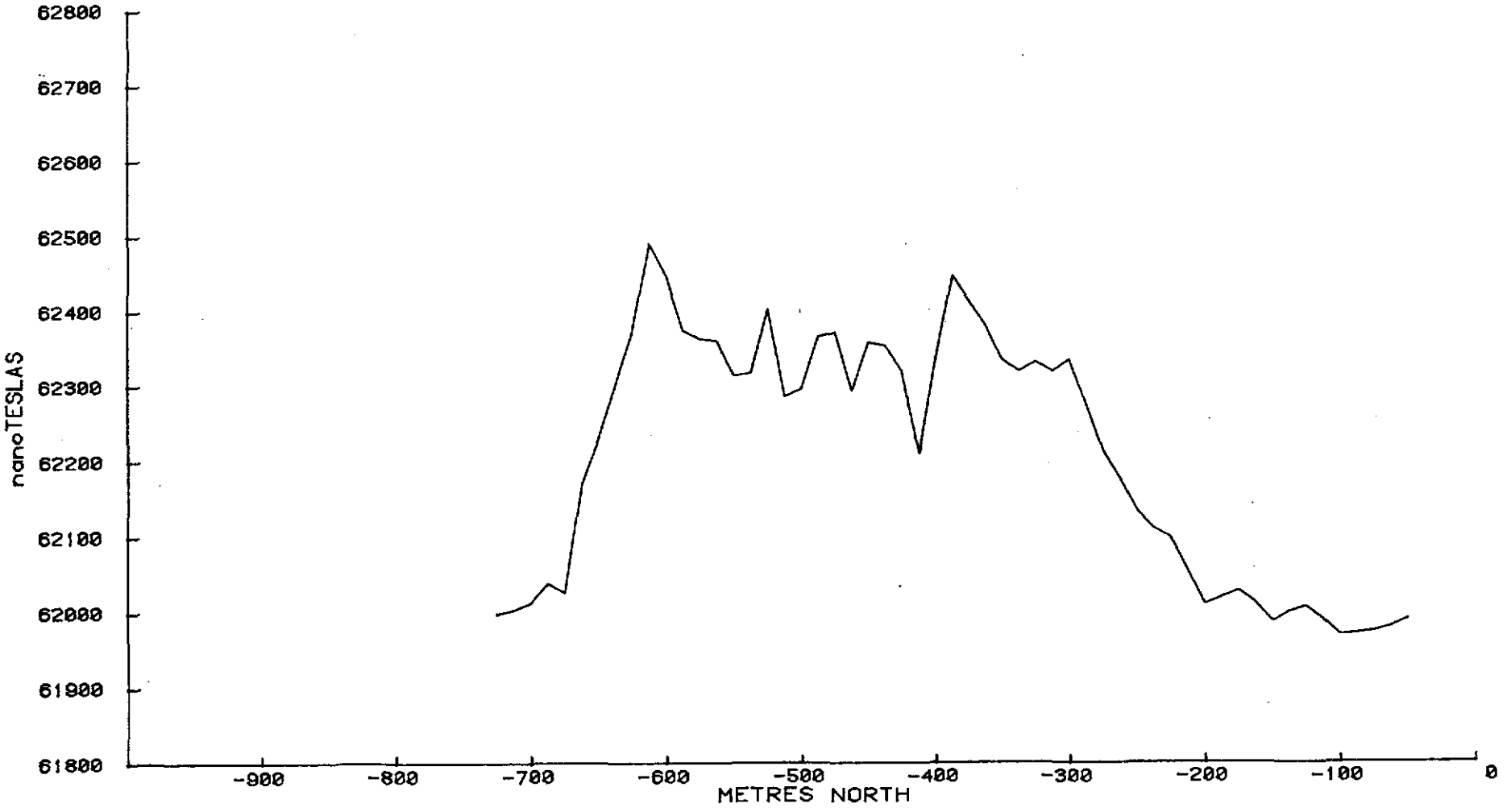
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
27xJ LINE A

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1040


25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
NORTH
DIP
SOUTH
-900
-800
-700
-600
-500
-400
-300
-200
-100
0
METRES NORTH
5 cm
DIP ANGLE (DEGREES)
MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITARY GAIN)
PHOENIX V.L.F. - 2 METER
CRA EXPLORATION PTY. LIMITED
SHEFFIELD E.L. 7/73
V.L.F. - E.M.
27xJ LINE B
REF. SK55 - 3
SCALE. AS SHOWN
DRAWN. M. F.
AUTHOR. M. F.
REPORT N° 11883
DATE. SEPT. 1982
TASA N°. 1041



613518

5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
27xJ LINE B

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1042

Lake Barrington

5000 N

4000 E

4100 E

4200 E

4300 E

4400 E

4500 E

4600 E

5400 N

5300 N

5200 N

5100 N

4900 N

4800 N

4700 N

5500 N

5 415 500 mN

5 415 000 mN

433 500 mE

433 000 mE

432 500 mE

Eg

Ev

Es

665 666 667 668 669 670 671 672 673 674 675 676 677 678 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701

70°

565x 566/7x 566x 569x 570x 571x 572x 573/4x

618x 619x 620x 621x

651 (500) (499) (498) (497) (496) (495) (494) (493) (492) (491) (490) (489) (488) (487) (486) (485) (484) (483) (482) (481)

575 576 573/4 577 578 579 580 581 582 583 584 585 586 587 588 589x 590 591 592 595 596 597 598 599 600 601 602

603 604 605 606 607 608 609 610 611 612 613 614 615

745 746 747 748 749 750 801 802 803 804 805 806

KEY

Eg Very coarse greywaches conglomerates and grits

Ev Fine tuffs and minor acid lavas

Es Siltstones and shales

750+ Soil Sample

620x Rock Sample

PREFIX: 987 604
972 (483)

To Promised Land

5 cm

CRA EXPLORATION PTY. LIMITED

PROMISED LAND PROSPECT
E.L. 7/73 NORTH TASMANIA
GEOLOGY PLAN AND SAMPLE LOCATION

Ref: SKSS - 3	
Scale: 1 : 5000	Drawn: R. T.
Author: I. M. C.	Report N°. 11883
Date: OCT. 1982	Plan N°. TASh 893

613320

Lake Barrington

5000 N

4000 E

4100 E

4200 E

4300 E

4400 E

4500 E

4600 E

4700 N

4800 N

4900 N

5100 N

5200 N

5300 N

5400 N

5500 N

5 415 500 mN

5 415 000 mN

432 500 mE

433 000 mE

433 500 mE

To Promised Land

225/125

77 Soil Sample ppm
30x Rock Sample ppm

5 cm

CRA EXPLORATION PTY. LIMITED

PROMISED LAND PROSPECT
E.L. 7/73 NORTH TASMANIA
Zn GEOCHEMISTRY

Ref: SK55 - 3	
Scale: 1 : 5000	Drawn: R. T.
Author: I. M. C.	Report N°. 11883
Date: OCT. 1982	Plan N°. TASh 894

613321

Lake Barrington

5000 N

4000 E

4100 E

4200 E

4300 E

4400 E

4500 E

4600 E

5 415 500 mN

5500 N

5400 N

5300 N

5200 N

5100 N

5 415 000 mN

4900 N

4800 N

4700 N

10/20

55/40x

To Promised Land

69 Soil Sample ppm
15x Rock Sample ppm

432 500 mE

433 000 mE

433 500 mE

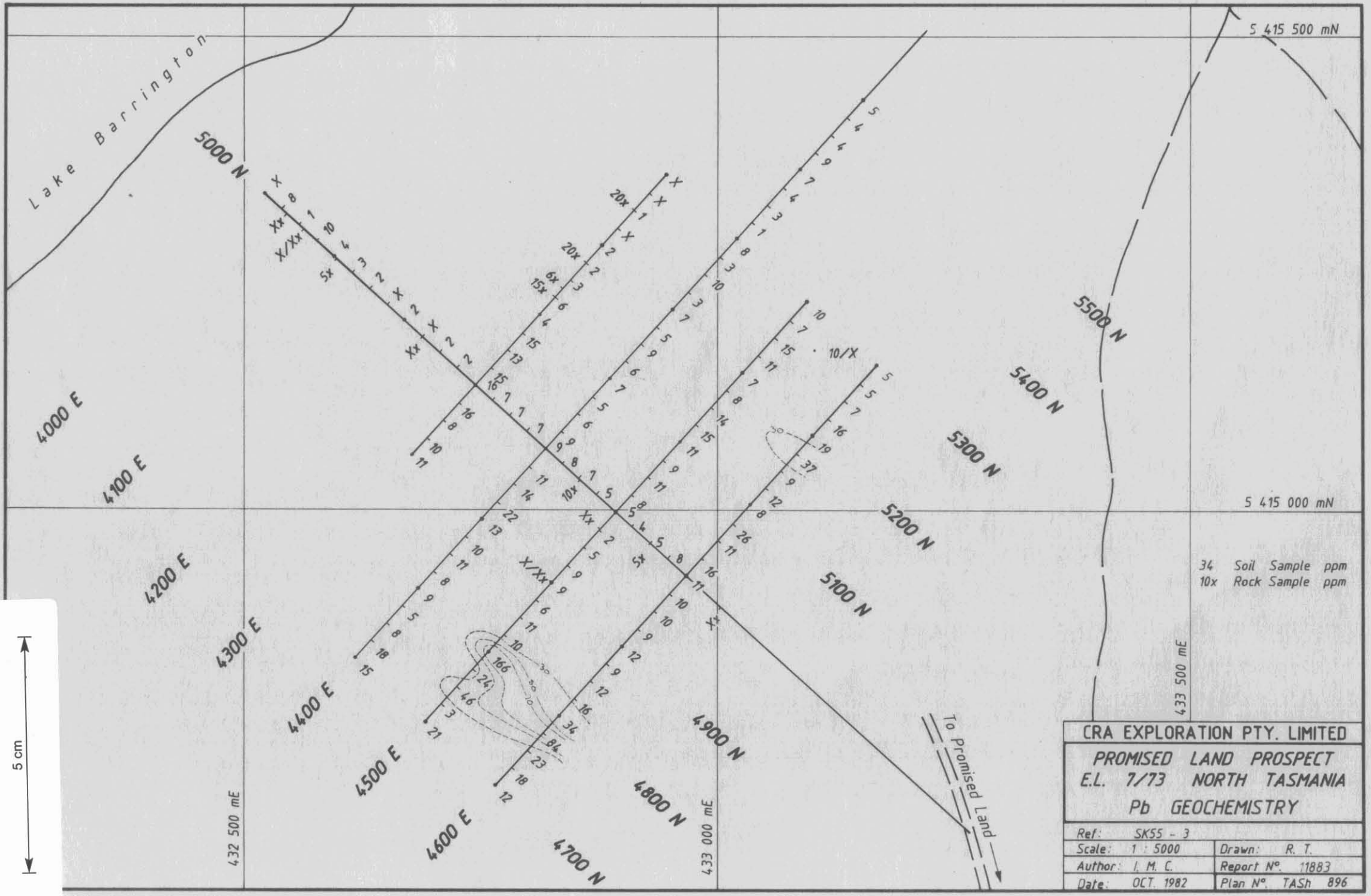
5 cm

CRA EXPLORATION PTY. LIMITED

PROMISED LAND PROSPECT
E.L. 7/73 NORTH TASMANIA
Cu GEOCHEMISTRY

Ref: SK55 - 3	
Scale: 1 : 5000	Drawn: R. T.
Author: I. M. C.	Report N°. 11883
Date: OCT. 1982	Plan N°. TASh 895

613322

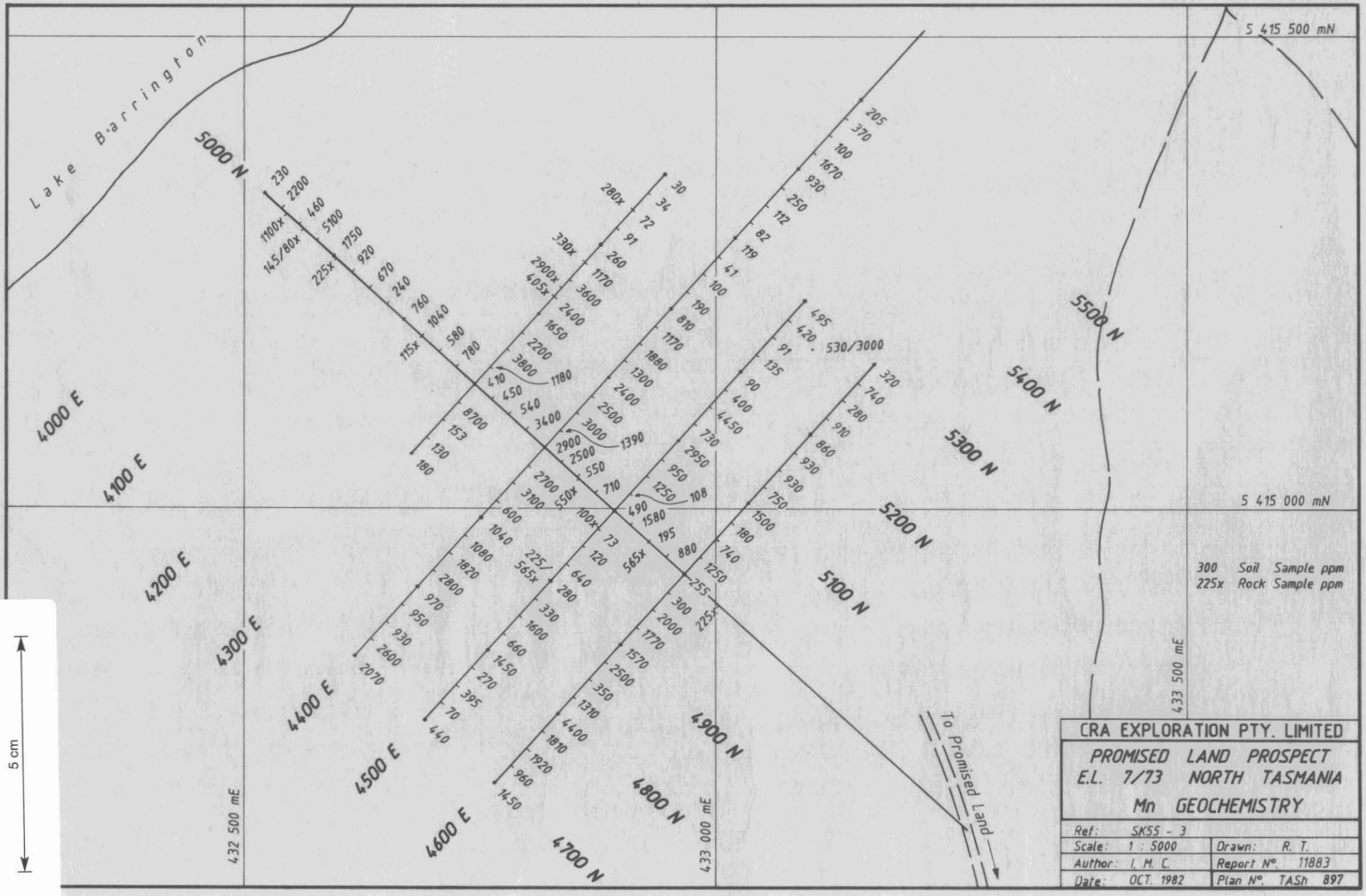


CRA EXPLORATION PTY. LIMITED

PROMISED LAND PROSPECT
E.L. 7/73 NORTH TASMANIA
Pb GEOCHEMISTRY

Ref: SK55 - 3	
Scale: 1 : 5000	Drawn: R. T.
Author: I. M. C.	Report N°. 11883
Date: OCT. 1982	Plan N°. TASh 896

613323

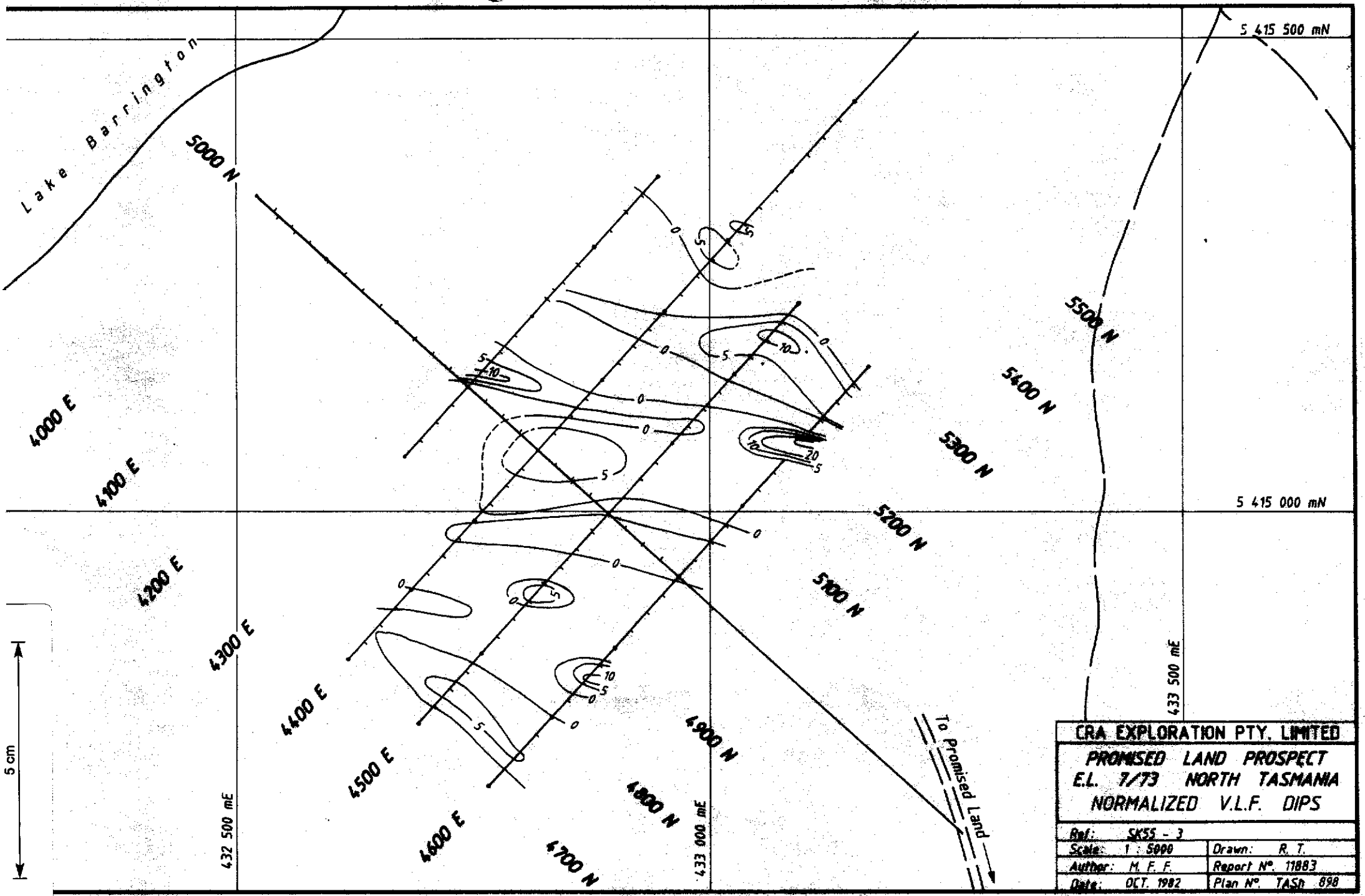


CRA EXPLORATION PTY. LIMITED

PROMISED LAND PROSPECT
E.L. 7/73 NORTH TASMANIA
Mn GEOCHEMISTRY

Ref: SK55 - 3	
Scale: 1 : 5000	Drawn: R. T.
Author: I. M. C.	Report N°. 11883
Date: OCT. 1982	Plan N°. TASh 897

613324

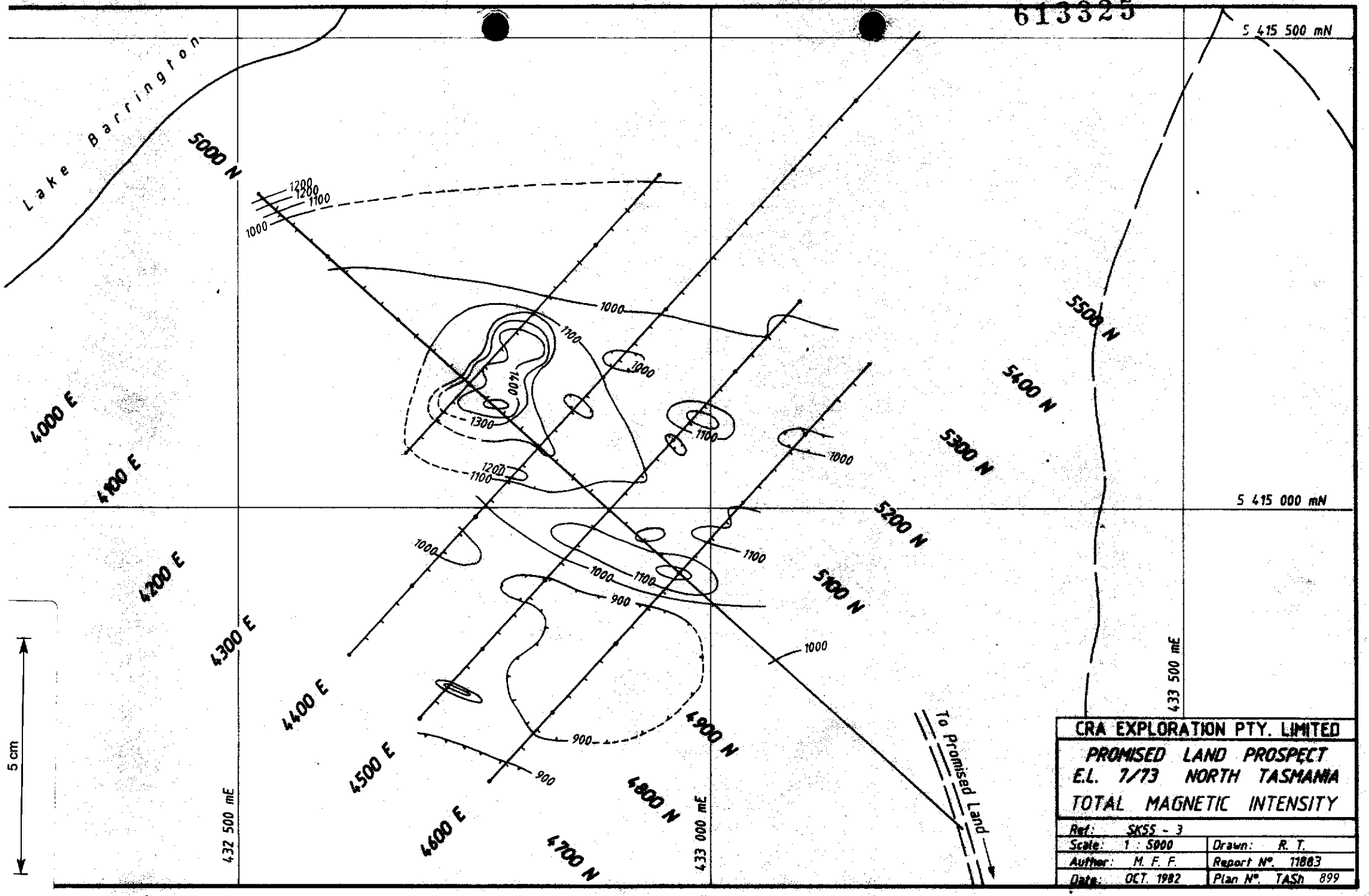


CRA EXPLORATION PTY. LIMITED

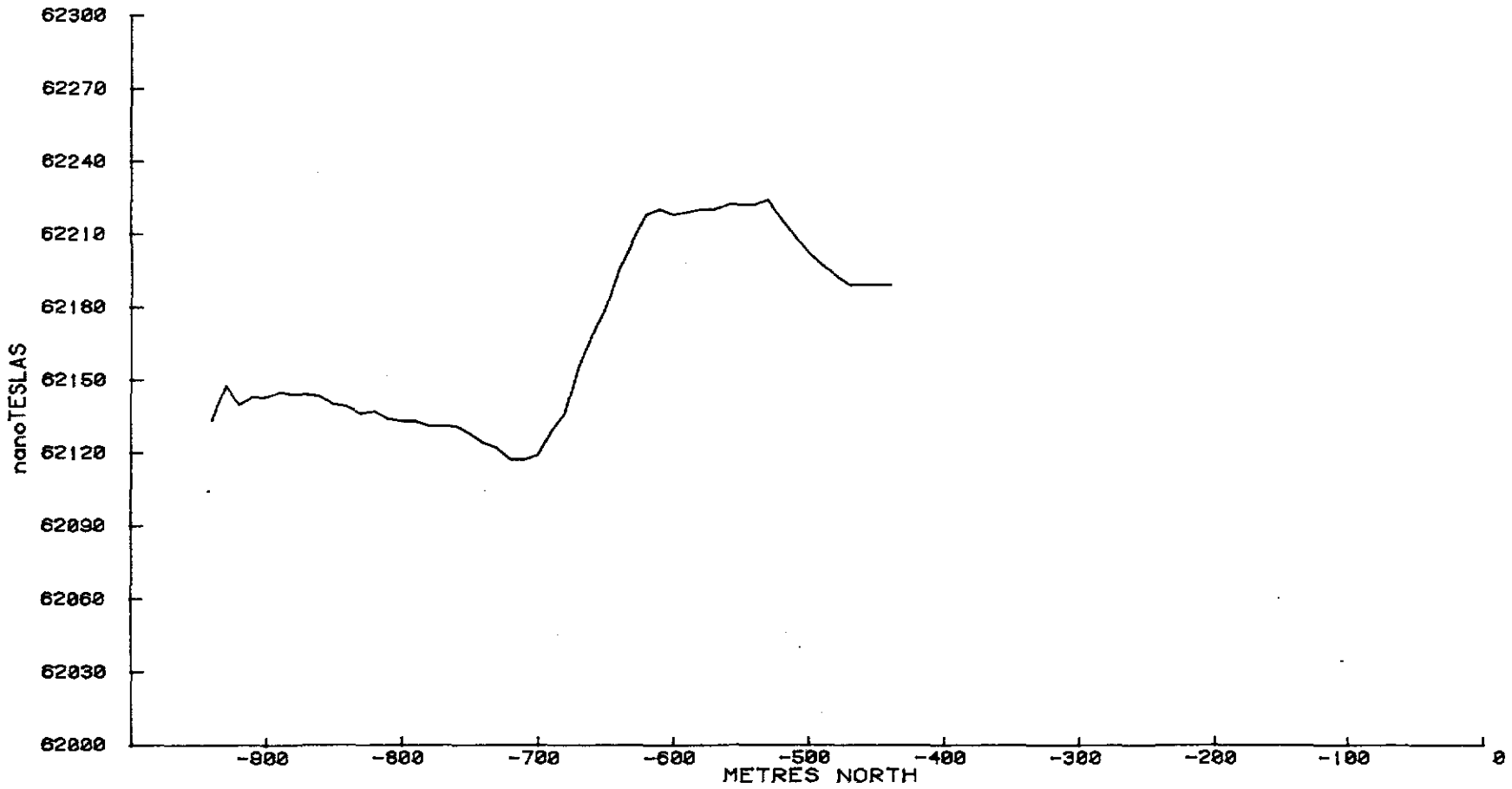
PROMISED LAND PROSPECT
E.L. 7/73 NORTH TASMANIA
NORMALIZED V.L.F. DIPS

Ref: SK55 - 3	
Scale: 1 : 5000	Drawn: R. T.
Author: M. F. F.	Report N°. 11883
Date: OCT. 1982	Plan N°. TASh 898

613325


Lake Barrington
5000 N
4000 E
4100 E
4200 E
4300 E
4400 E
4500 E
4600 E
4700 N
4800 N
4900 N
5100 N
5200 N
5300 N
5400 N
5500 N
5 415 500 mN
5 415 000 mN
432 500 mE
433 000 mE
433 500 mE
1200
1100
1000
1400
1300
900
To Promised Land
5 cm
CRA EXPLORATION PTY. LIMITED
PROMISED LAND PROSPECT
E.L. 7/73 NORTH TASMANIA
TOTAL MAGNETIC INTENSITY
Ref: SK55 - 3
Scale: 1 : 5000
Drawn: R. T.
Author: M. F. F.
Report N°. 11883
Date: OCT. 1982
Plan N°. TASh 899

613326



5 cm

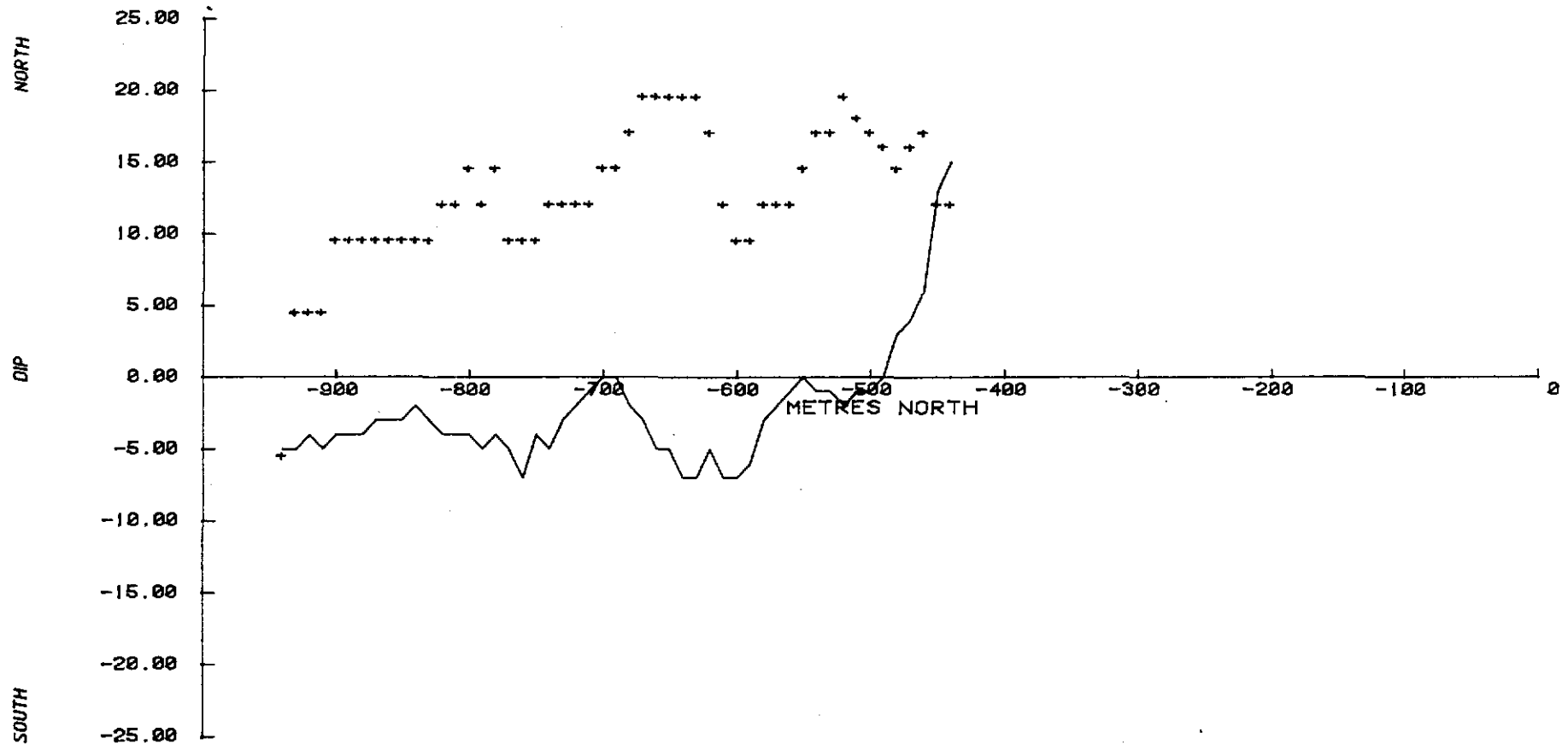
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
56xF, 59xG, LINE 1700mE

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1096

613327



5 cm

DIP ANGLE (DEGREES)

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

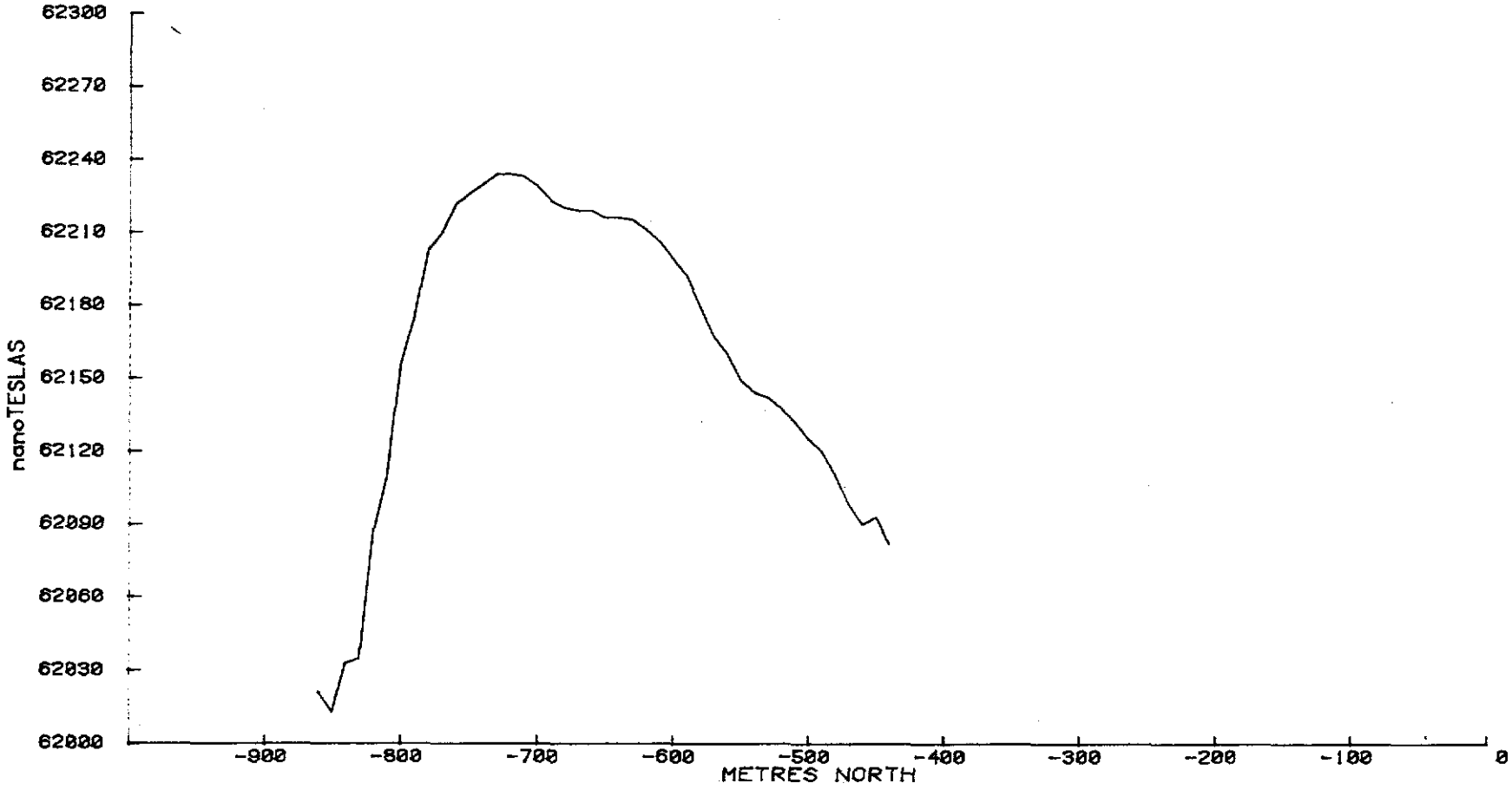
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
56xF, 59xG, LINE 1700mE

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1097

613328



5 cm

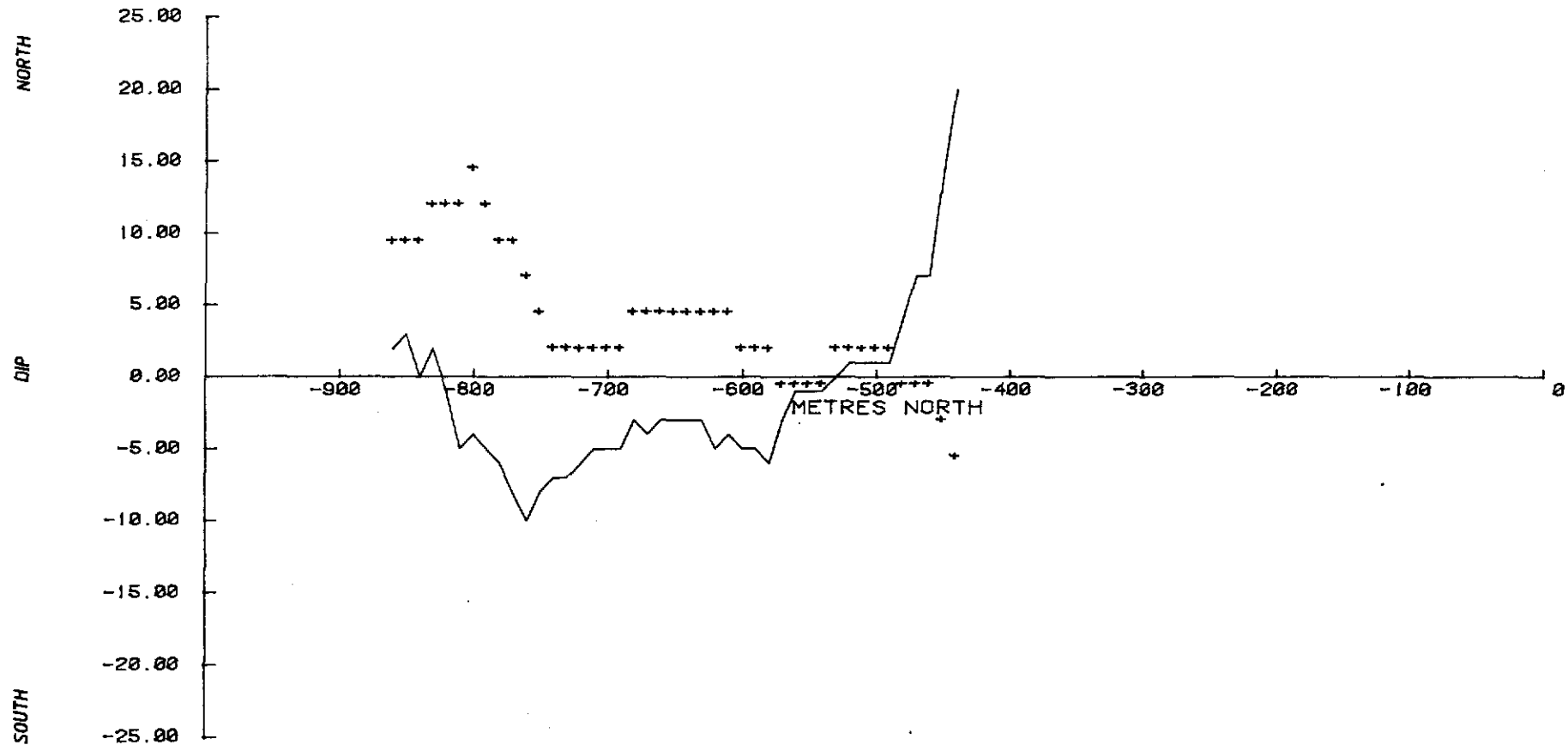
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
56xF, 59xG, LINE 1900mE

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1098

613329



5 cm

DIP ANGLE (DEGREES)

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

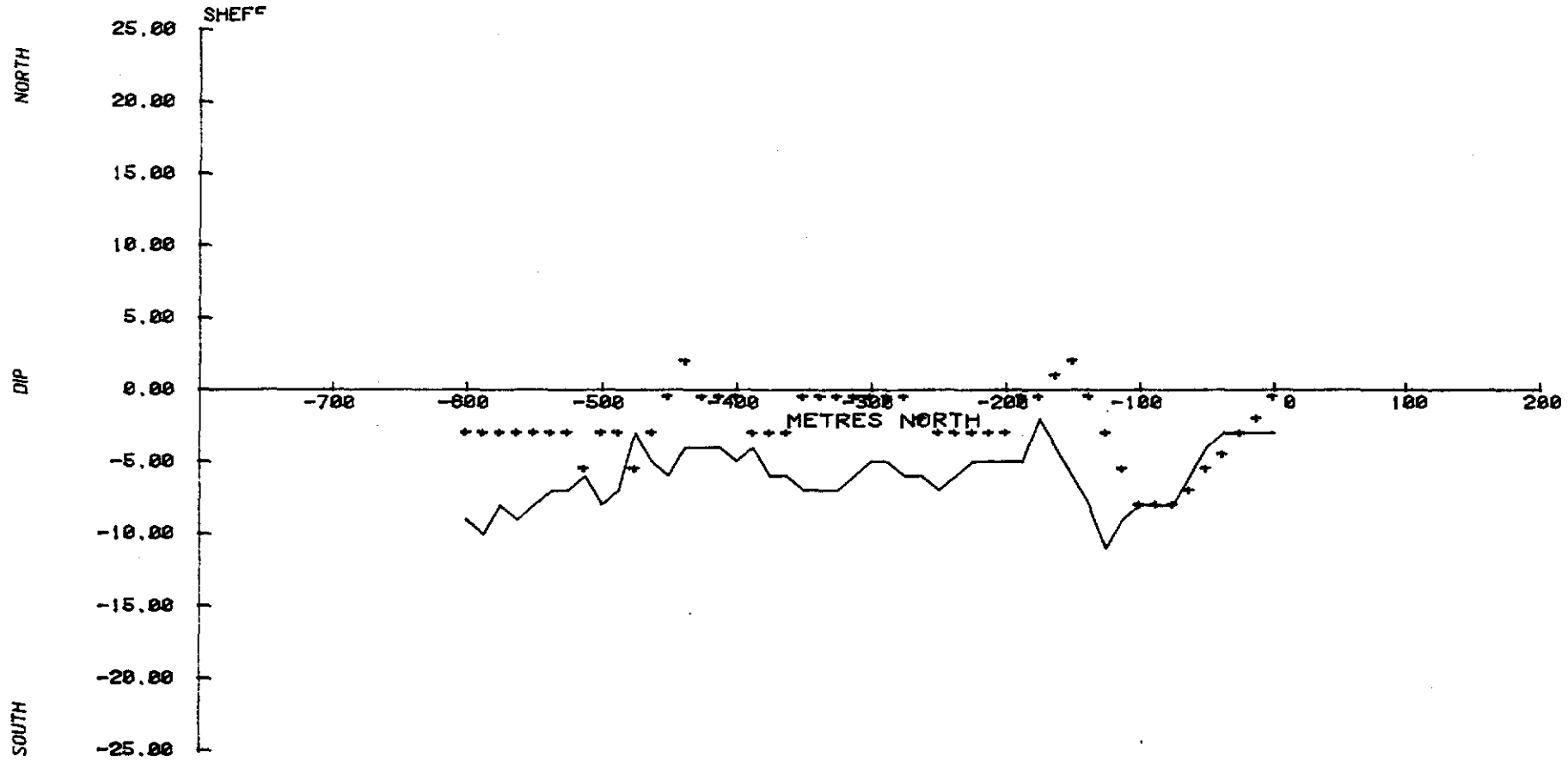
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
56xF, 59xG, LINE 1900mE

REF	SKSS - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1099

613330



5 cm

DIP ANGLE (DEGREES)

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

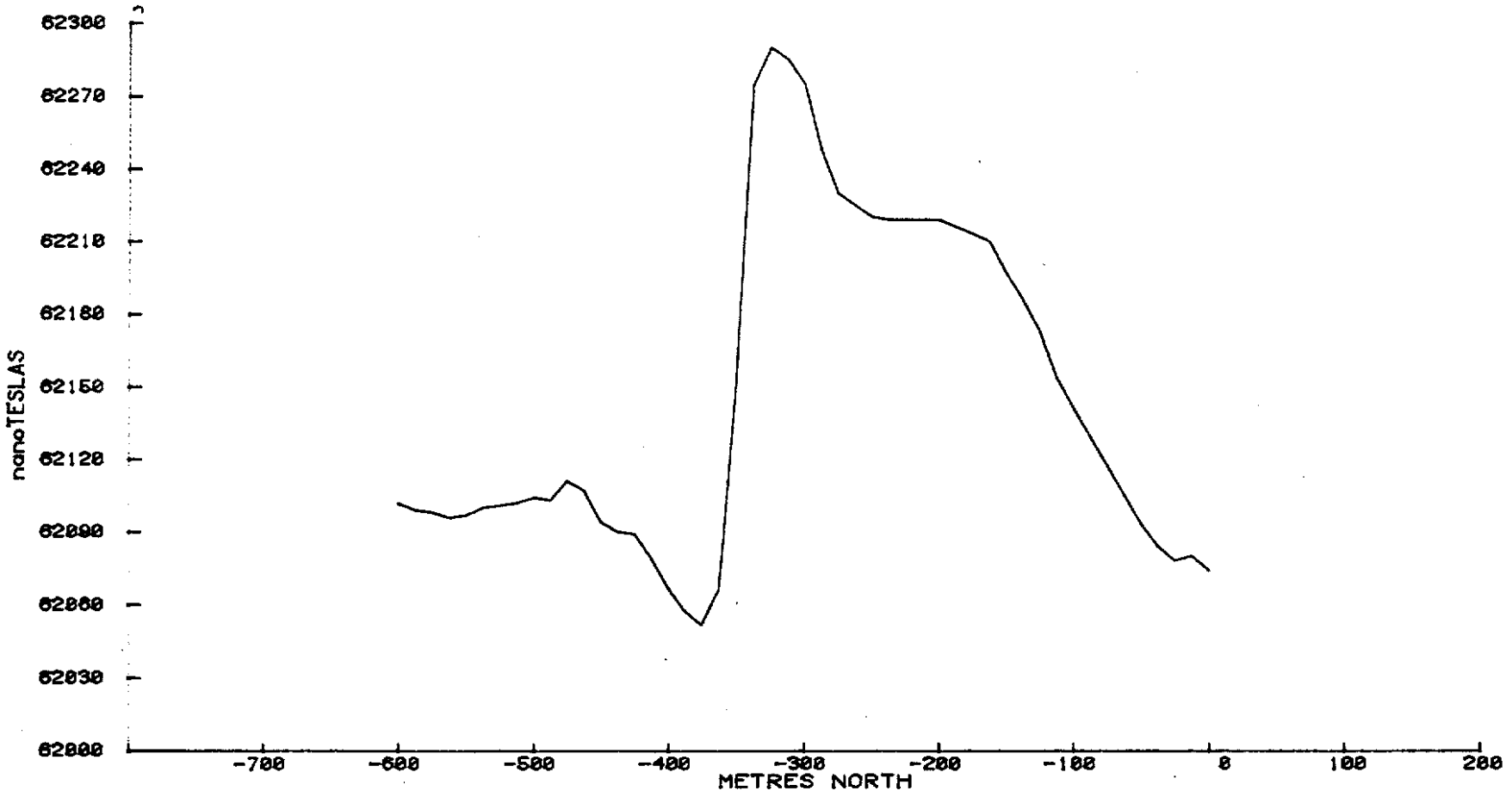
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
56xF, 59xG, 60xD LINE 2

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1100

613331



5 cm

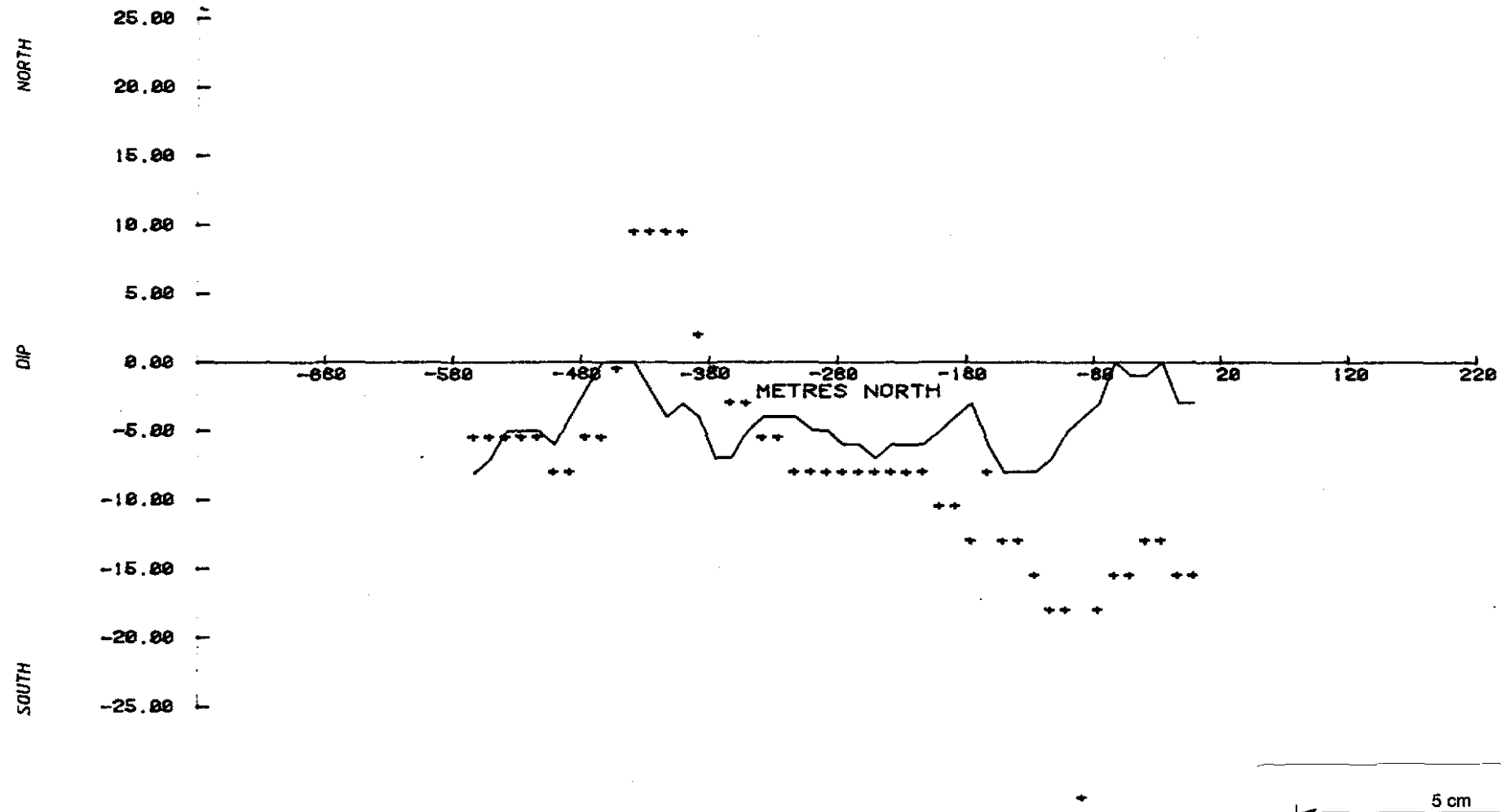
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
56xF, 59xG, 60xD, LINE 2

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1101

613332



5 cm

DIP ANGLE (DEGREES)

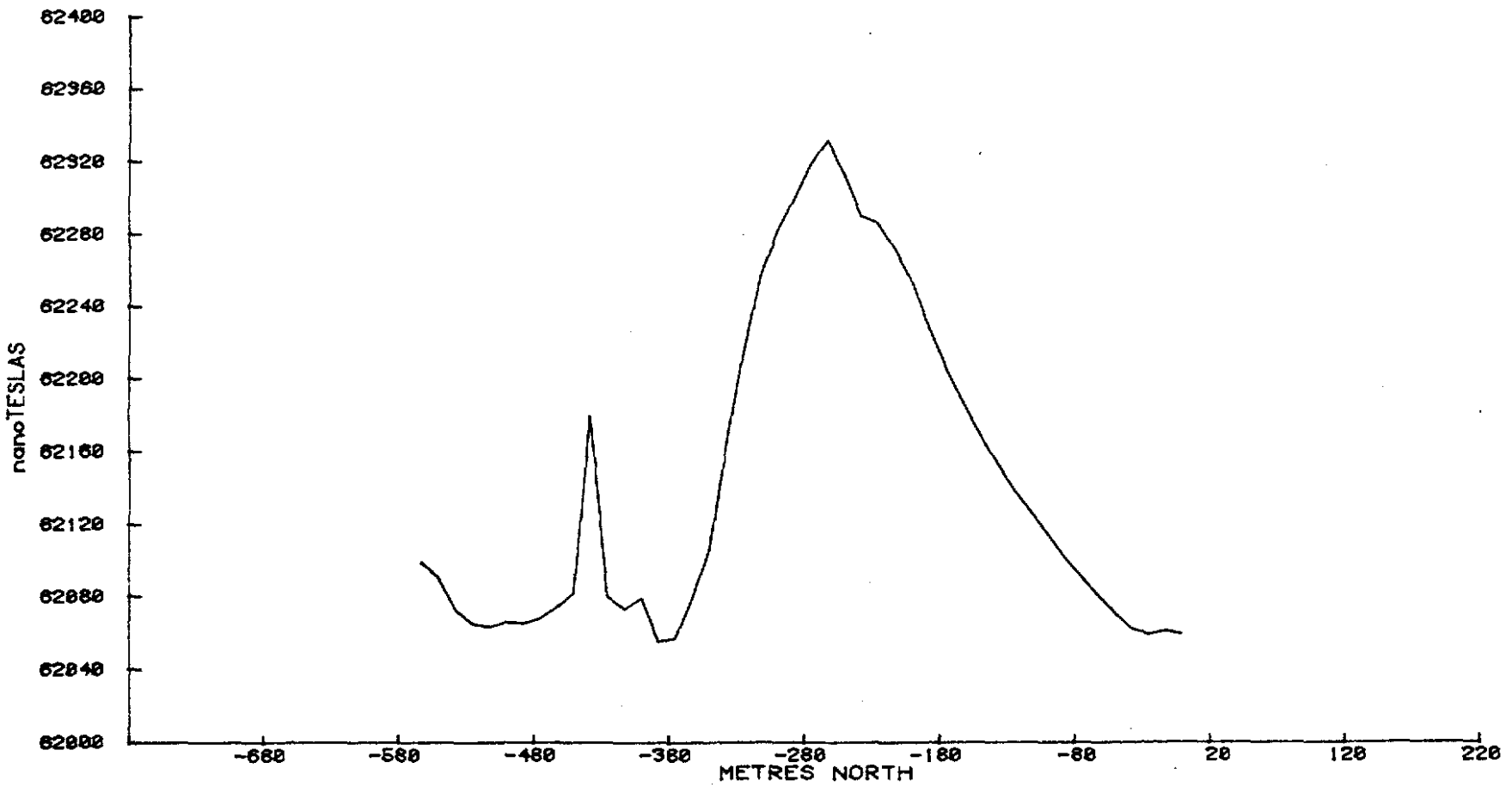
+ + + + + MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITRARY GAIN)

PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
56xF, 59xG, 60xD LINE 1

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	CASE N°	1102



5 cm

G 826 MAGNETOMETER

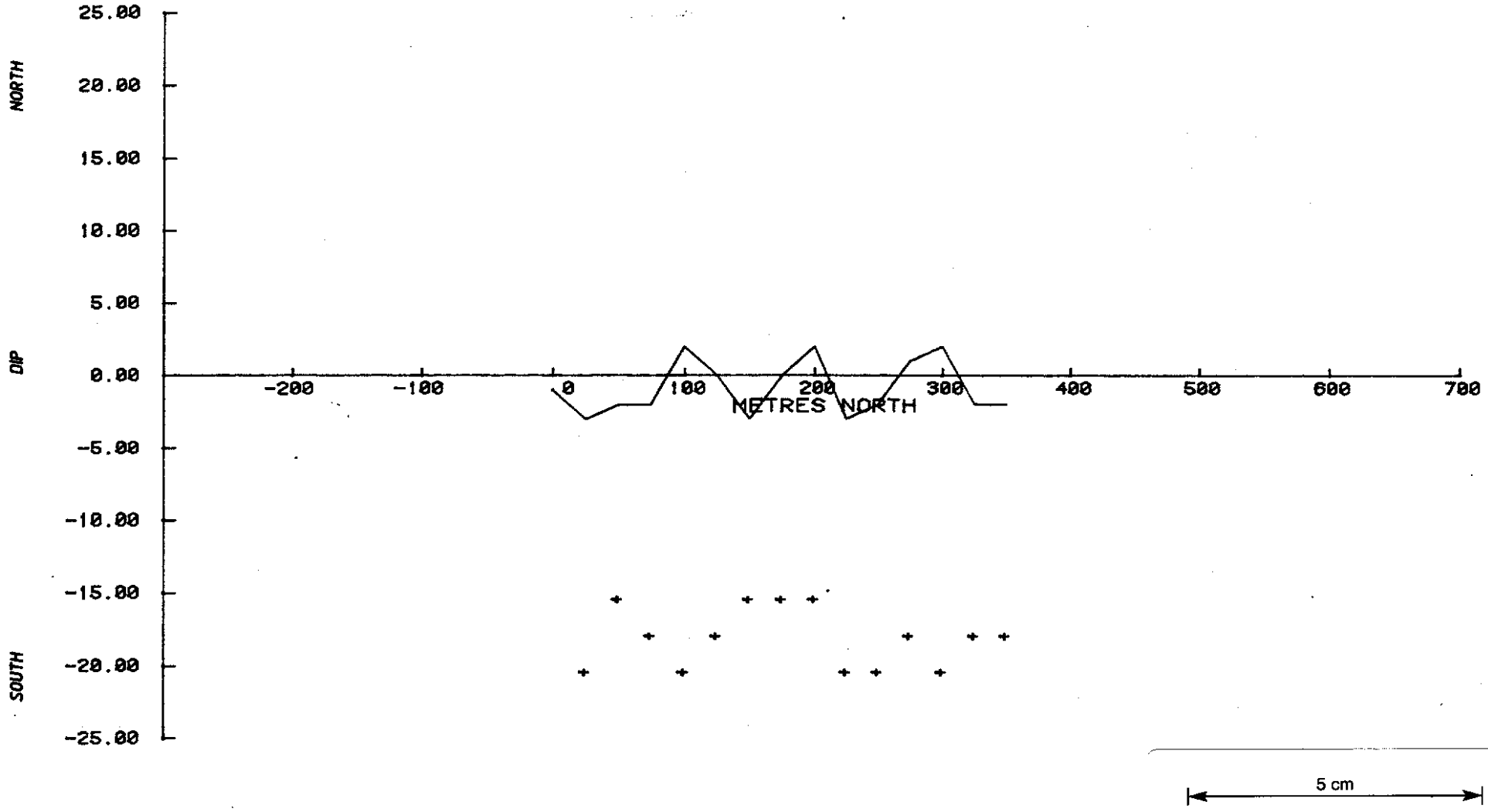
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
56xF, 59xG, 60xD, LINE 1

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1103

613333

613334



5 cm

DIP ANGLE (DEGREES)

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

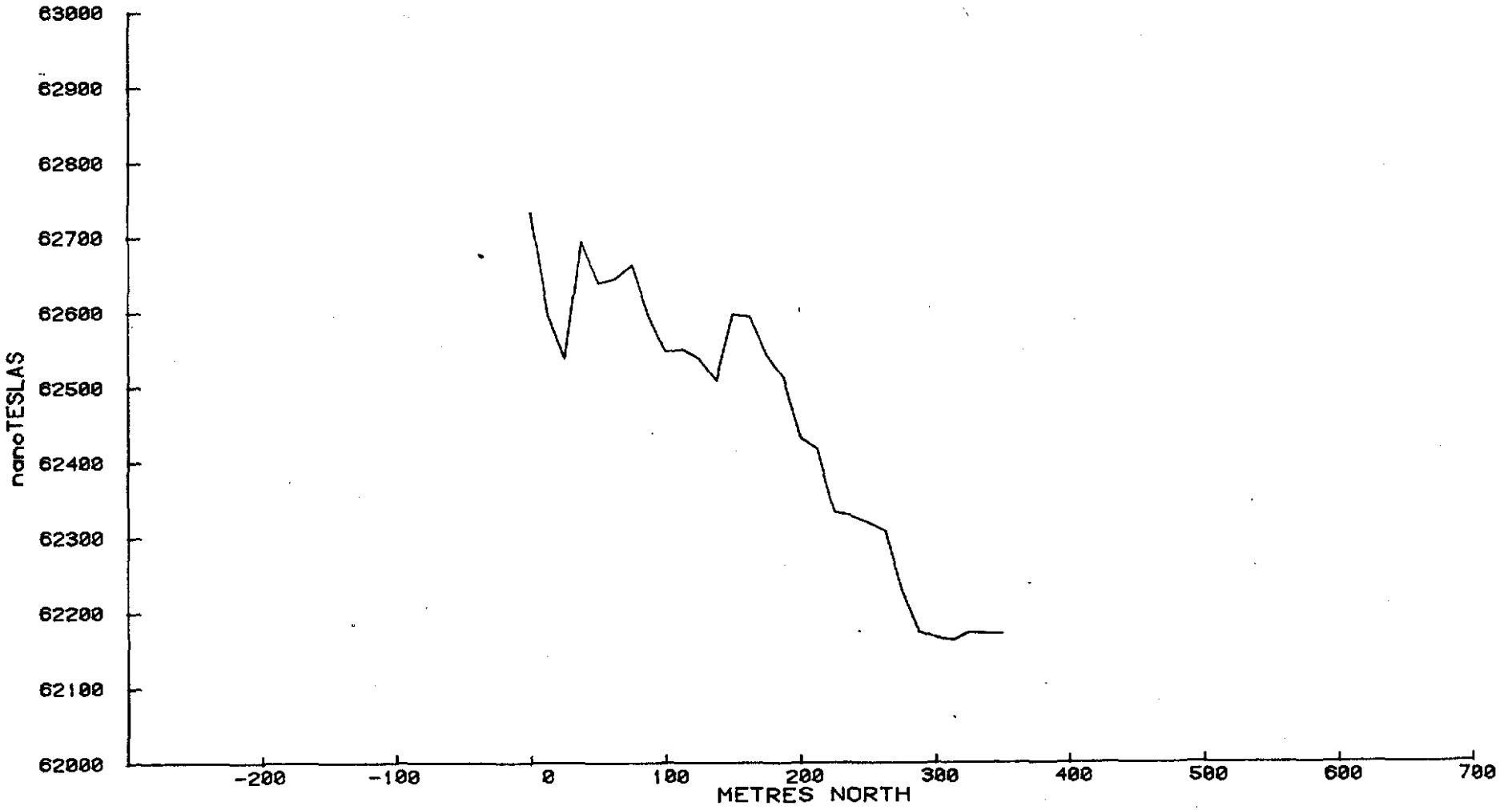
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
63C EAST LINE

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASO N°	1035

613335



5 cm

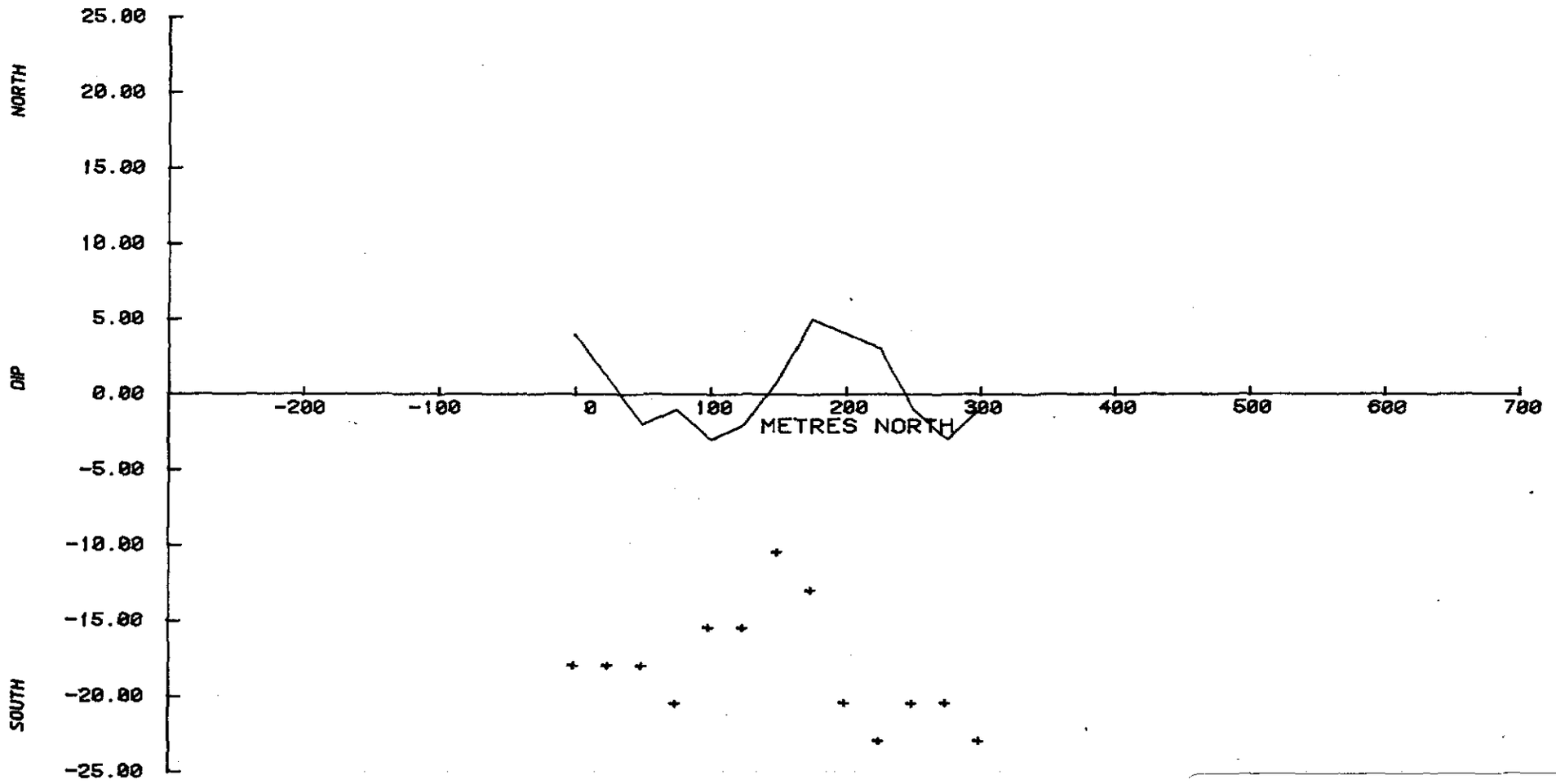
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
63C EAST LINE

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1036

613336



DIP ANGLE (DEGREES)

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

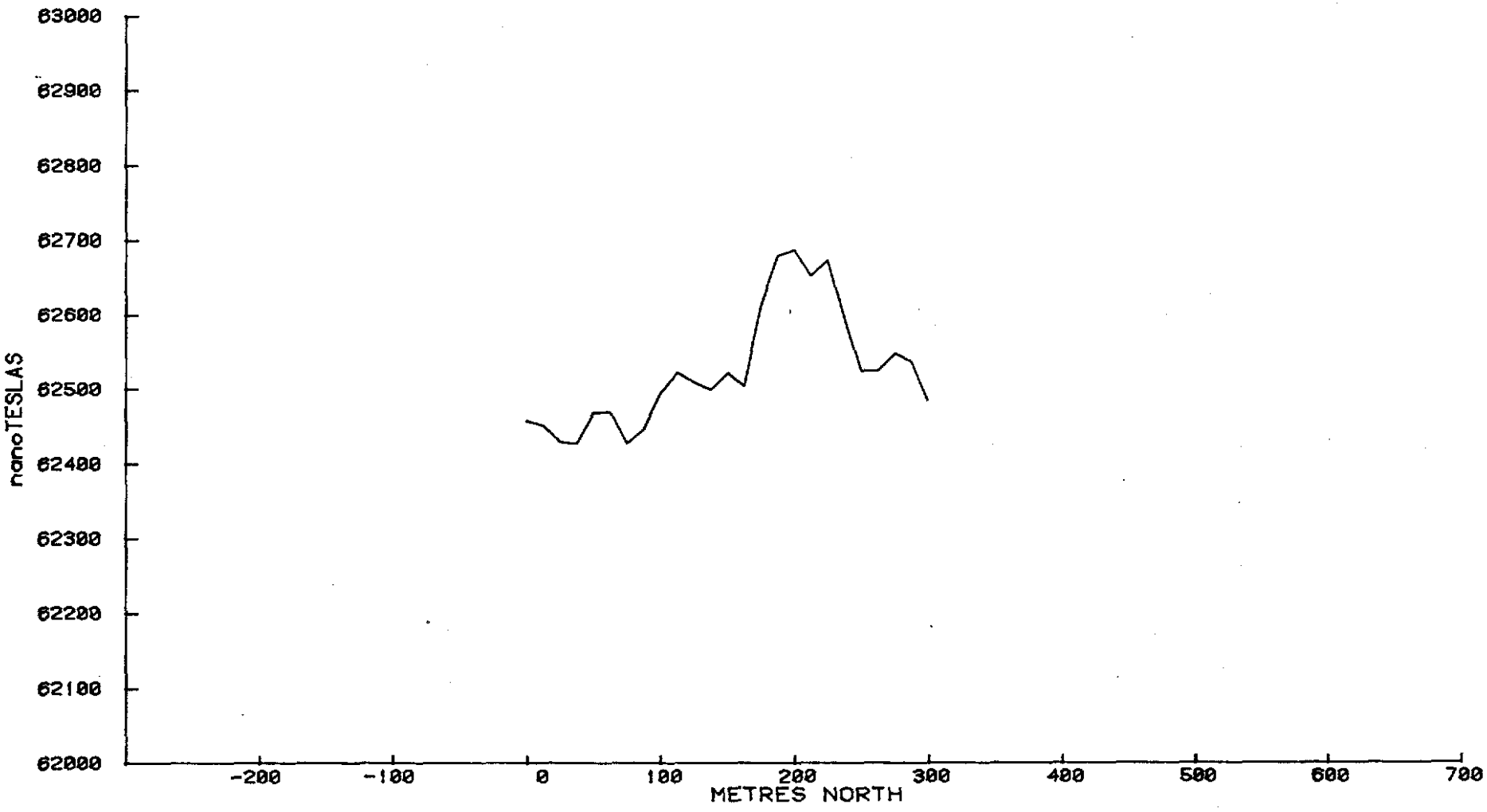
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
63C 100mW

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASO N°	1037

613331



5 cm

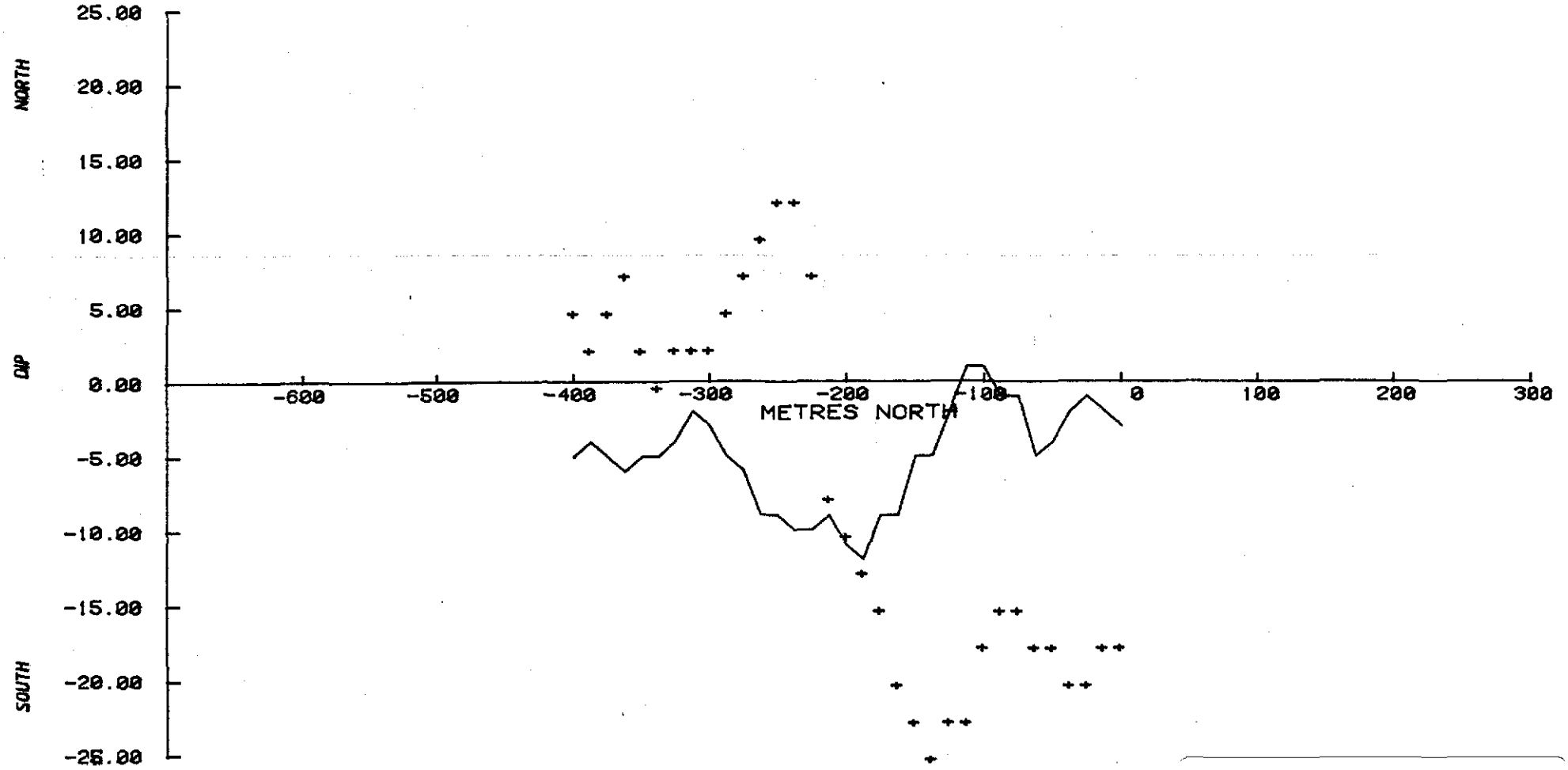
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
63C 100mW

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1038

613238



5 cm

DIP ANGLE (DEGREES)

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

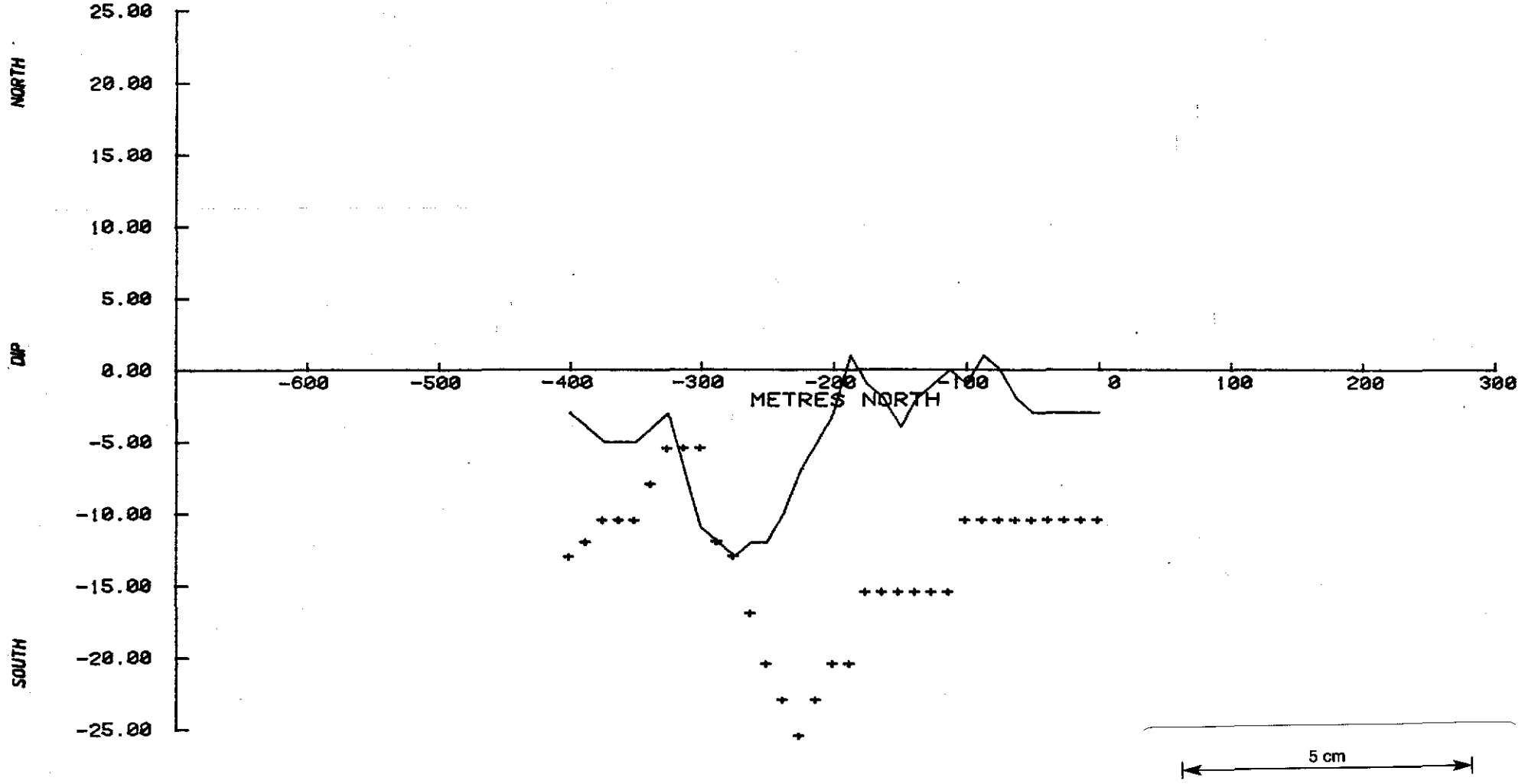
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
64xd Line1

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11683
DATE	SEPT. 1982	TASK N°	1150

613339



DIP ANGLE (DEGREES)

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

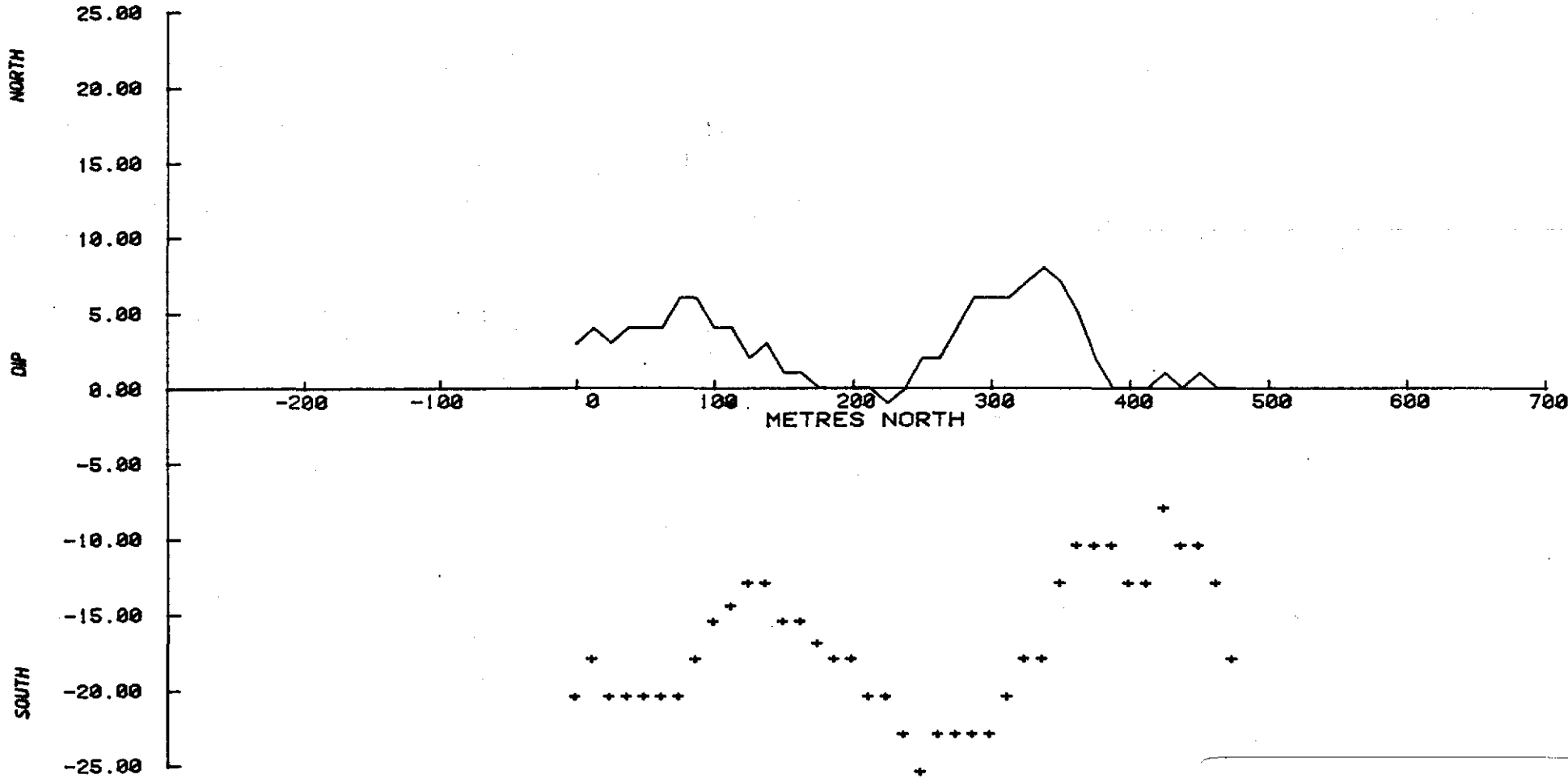
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
64xd Line 2

PEP	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1151

613340



5 cm

DIP ANGLE (DEGREES)

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

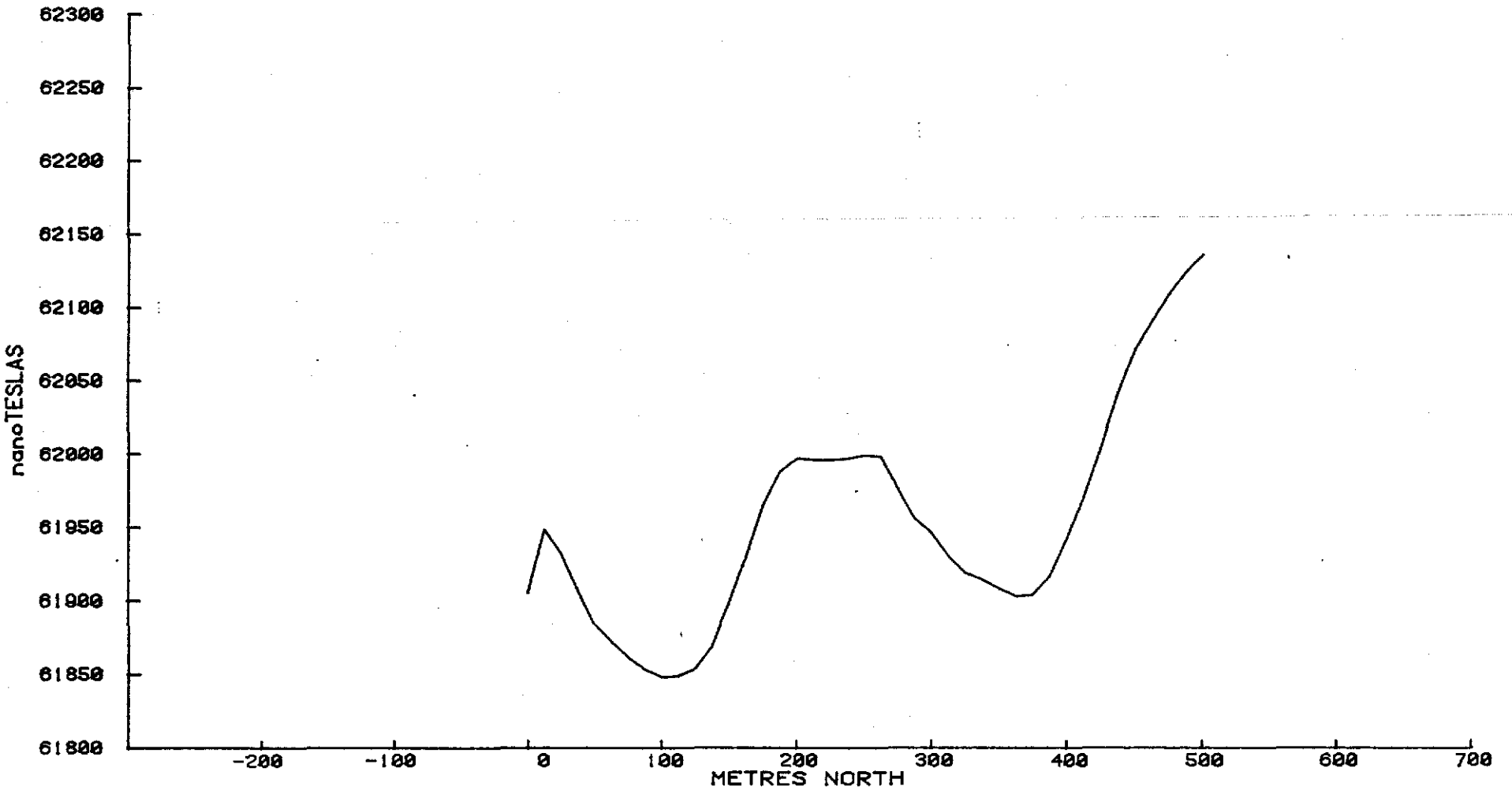
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
66xc Line 0.

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1156

613341



5 cm

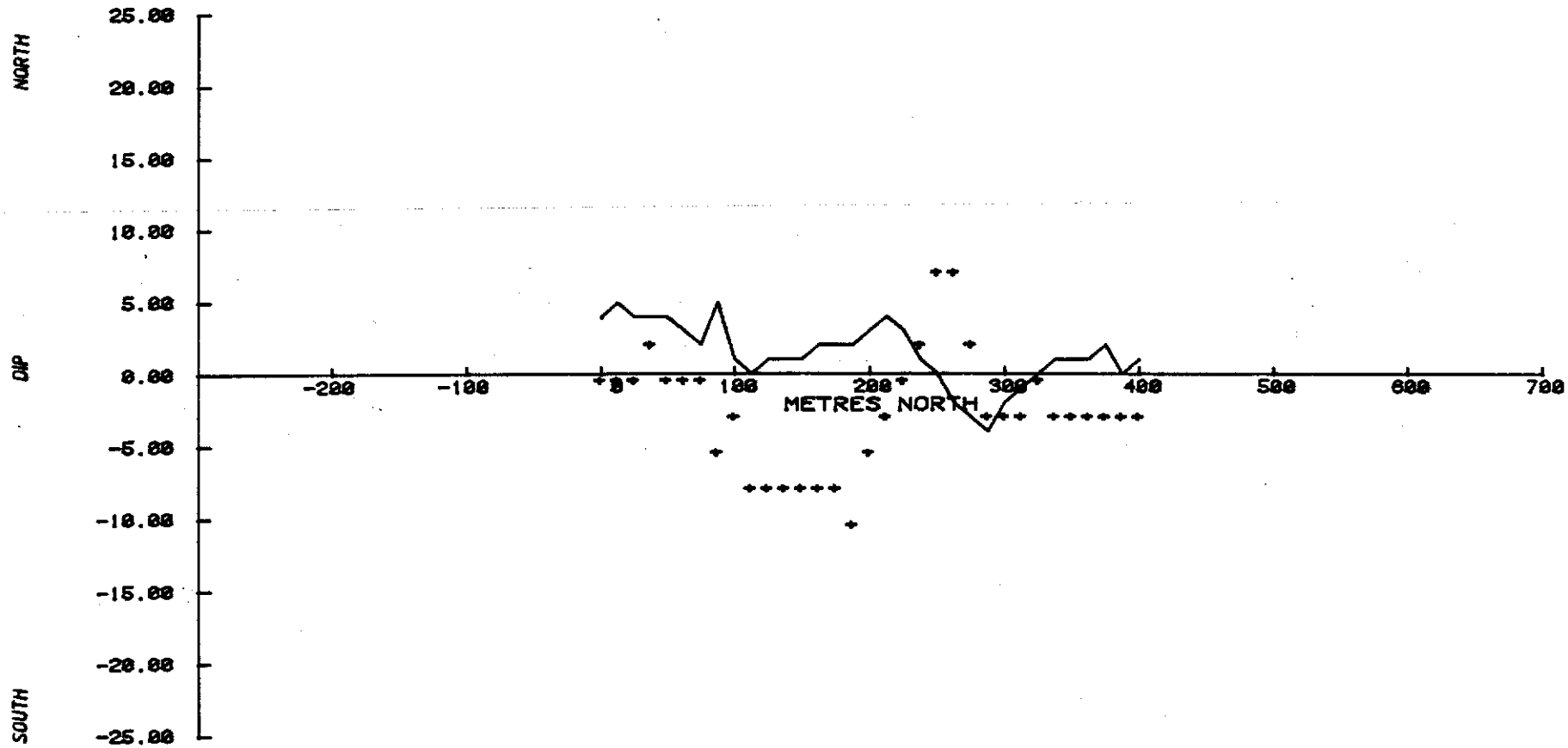
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
66xc Line 0

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1157

613342



5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
66xc Line 1

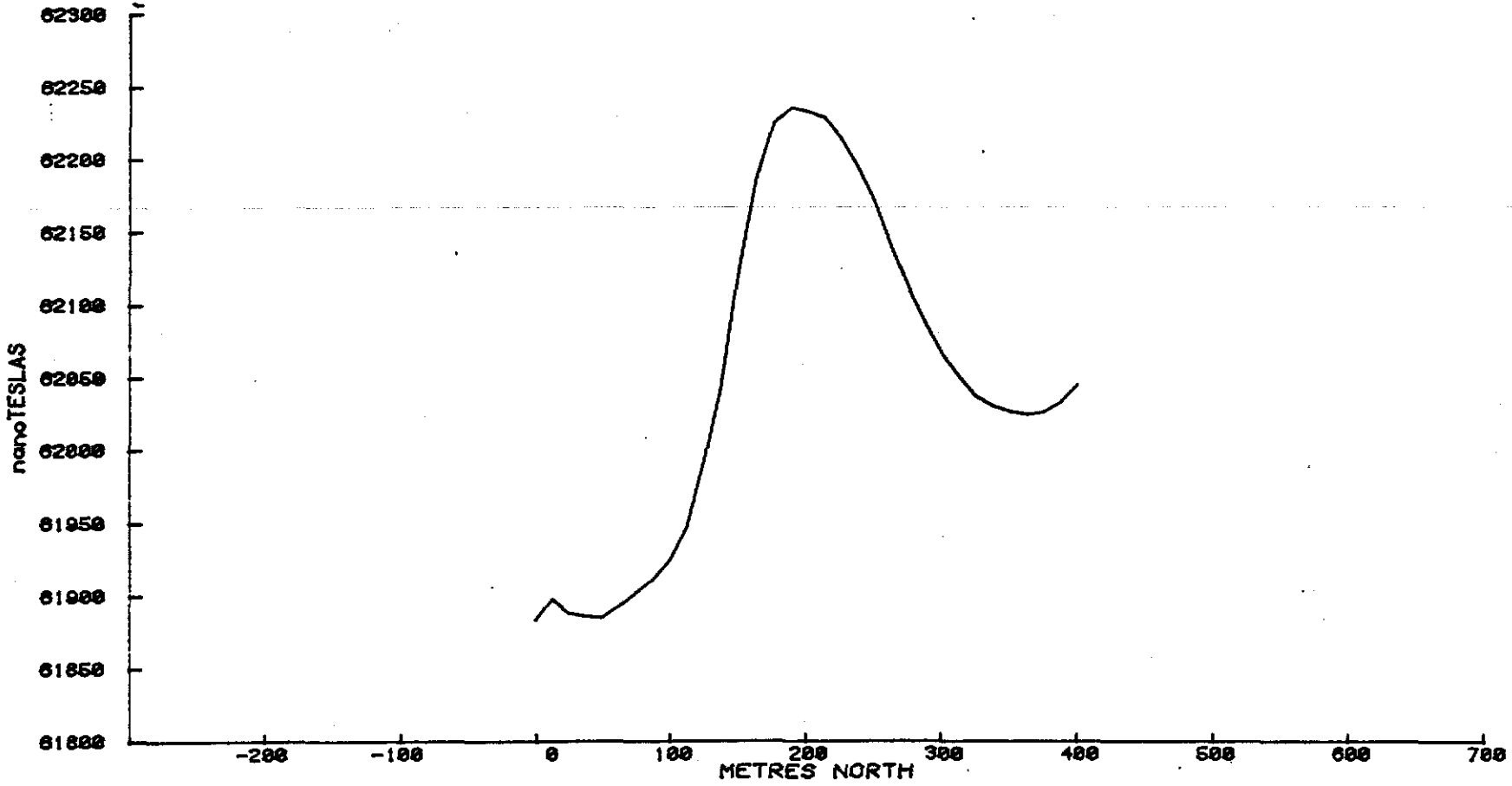
REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°.	1158

——— DIP ANGLE (DEGREES)

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

PHOENIX V.L.F. - 2 METER

613343



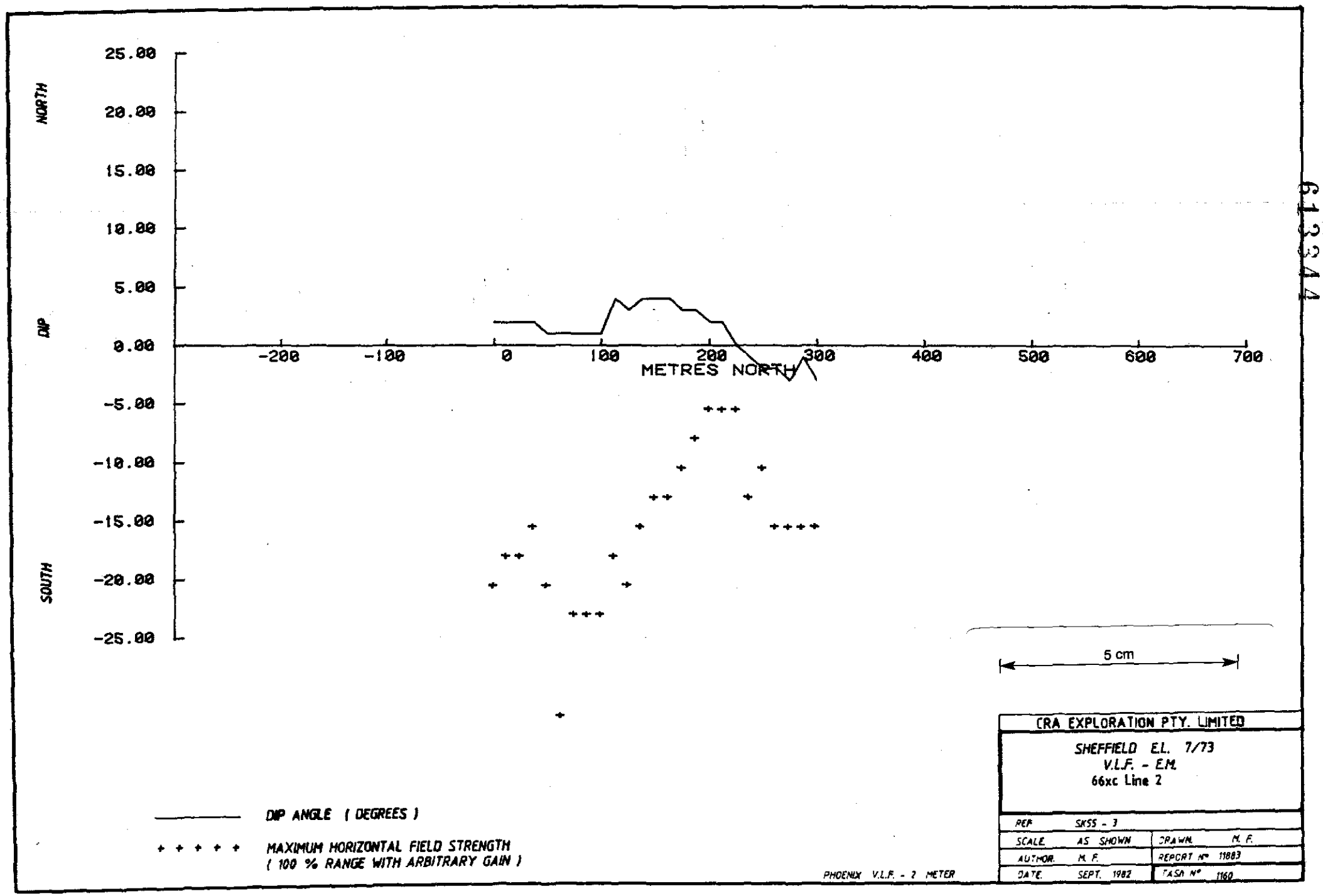
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
66xc Line 1

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°.	1159



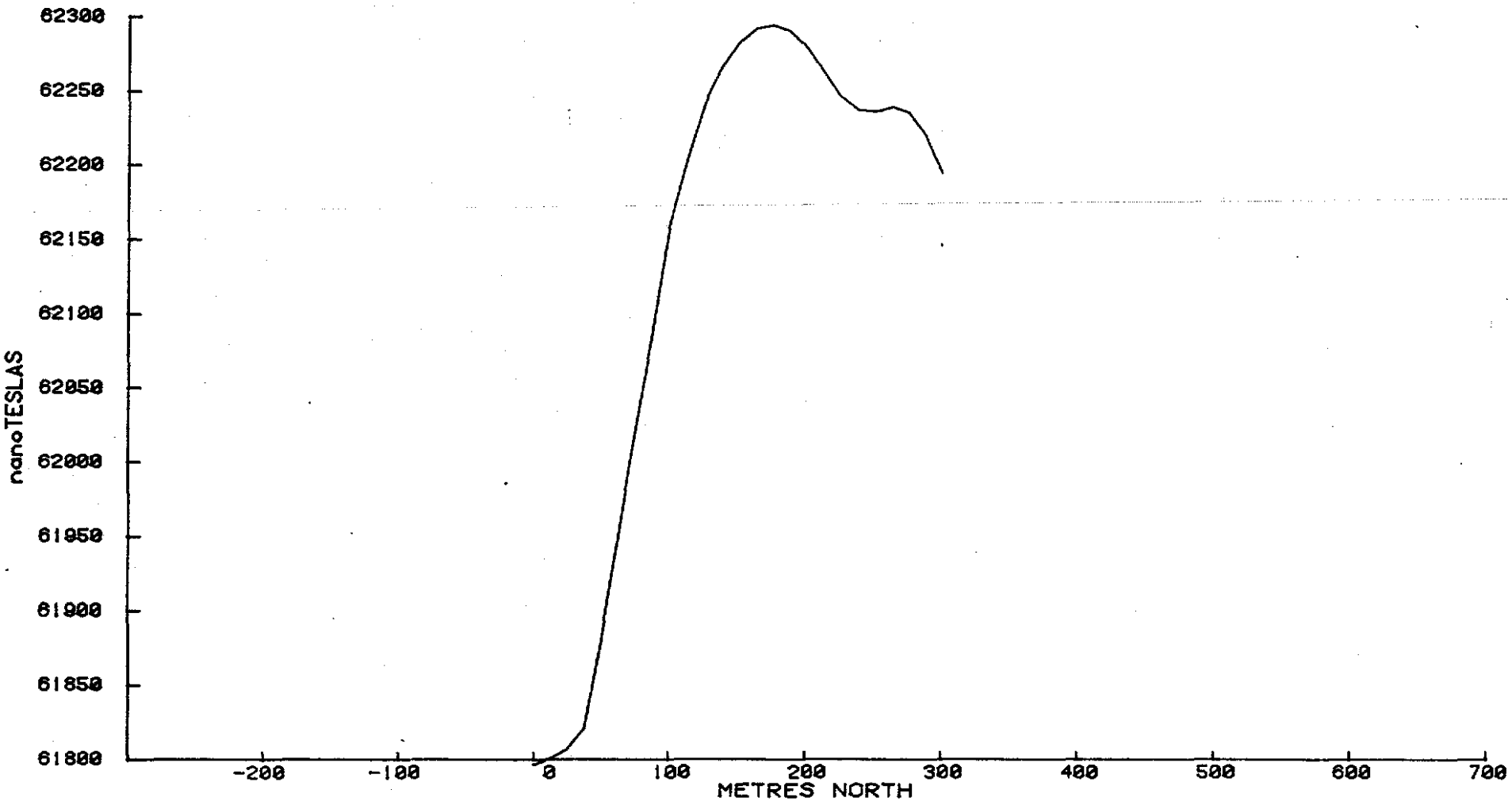
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
66xc Line 2

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	CASA N°	1160

613344

613345



5 cm

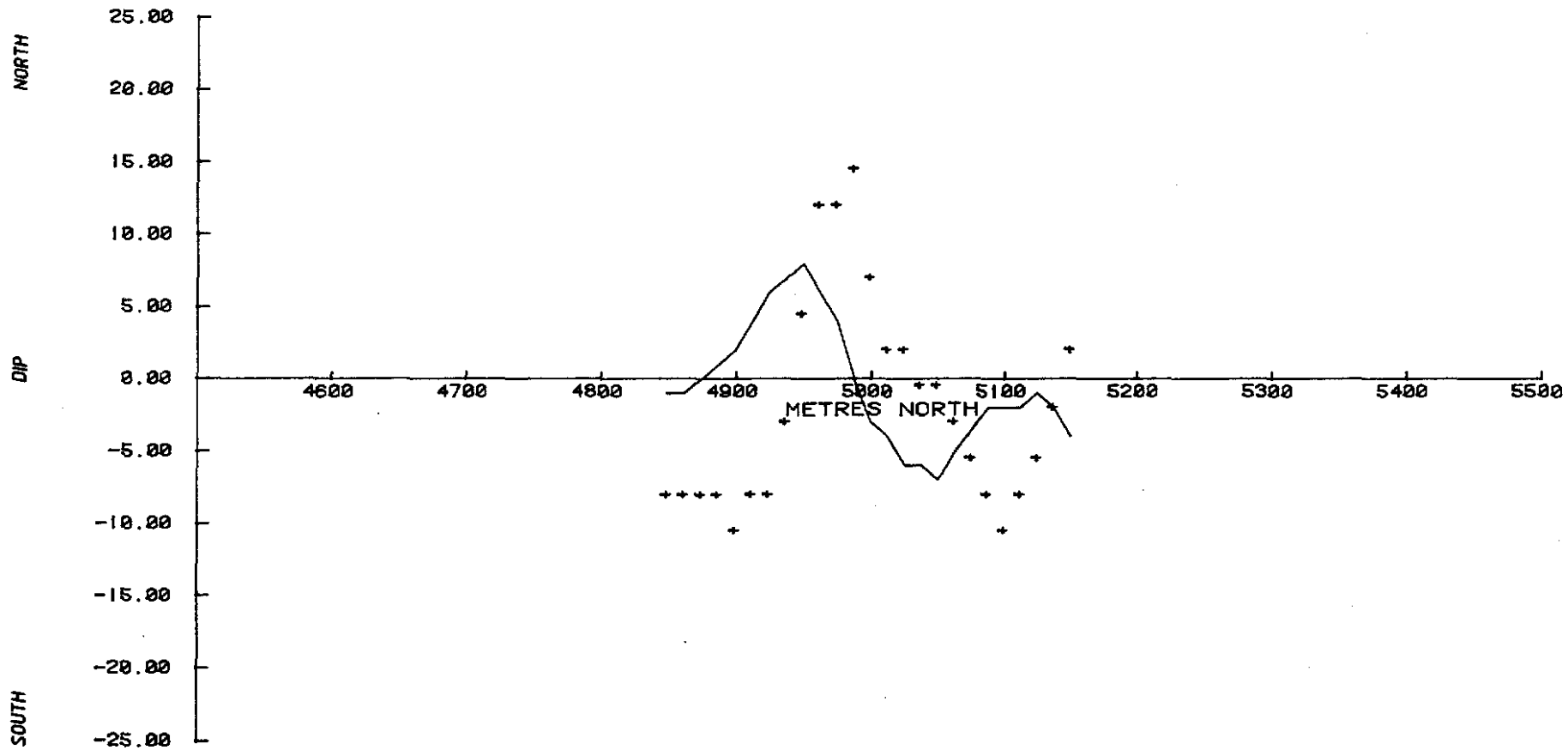
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
66xc Line 2

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1161

613346



5 cm

DIP ANGLE (DEGREES)

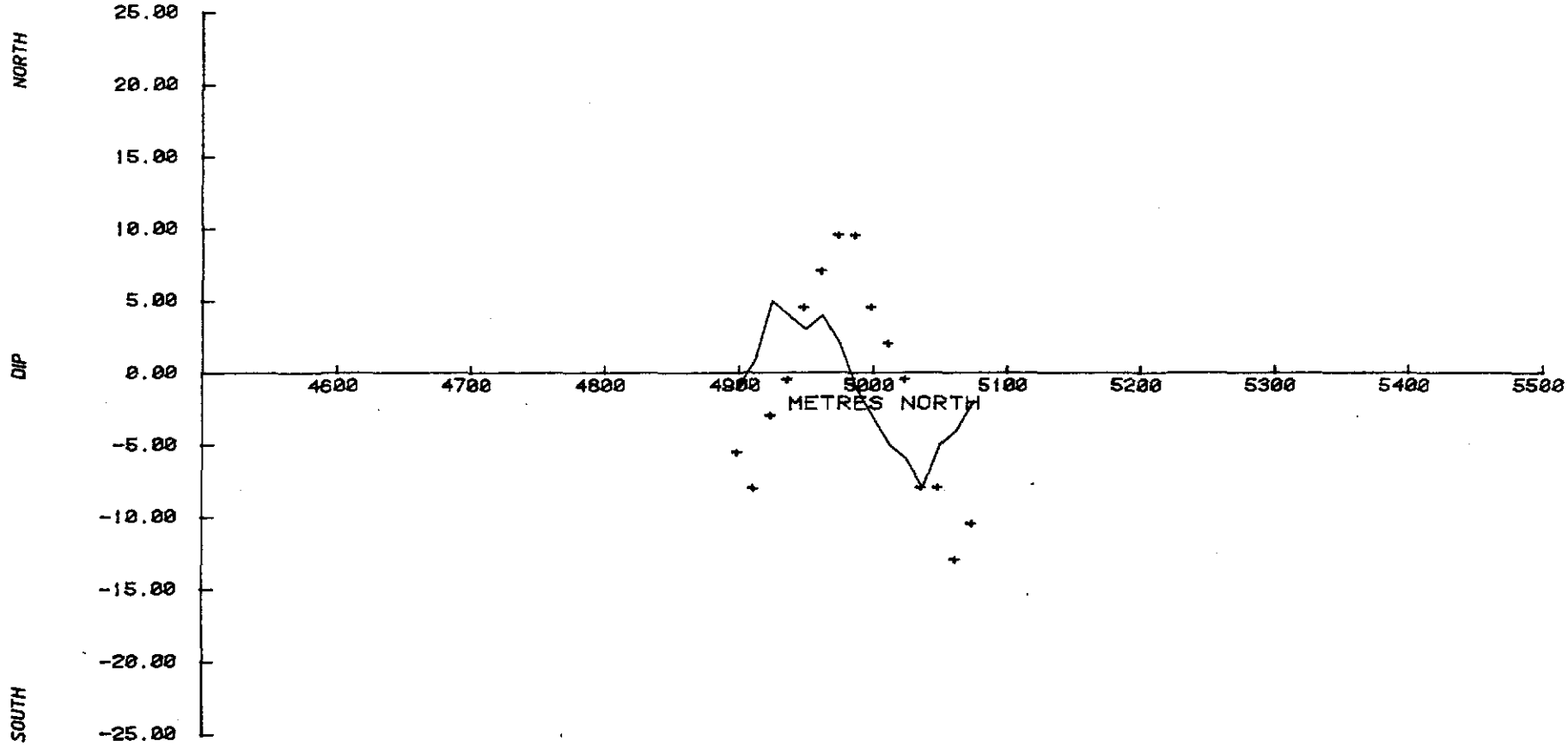
+ + + + + MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITRARY GAIN)

PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
73xA LINE 5100mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	7081



5 cm

DIP ANGLE (DEGREES)

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

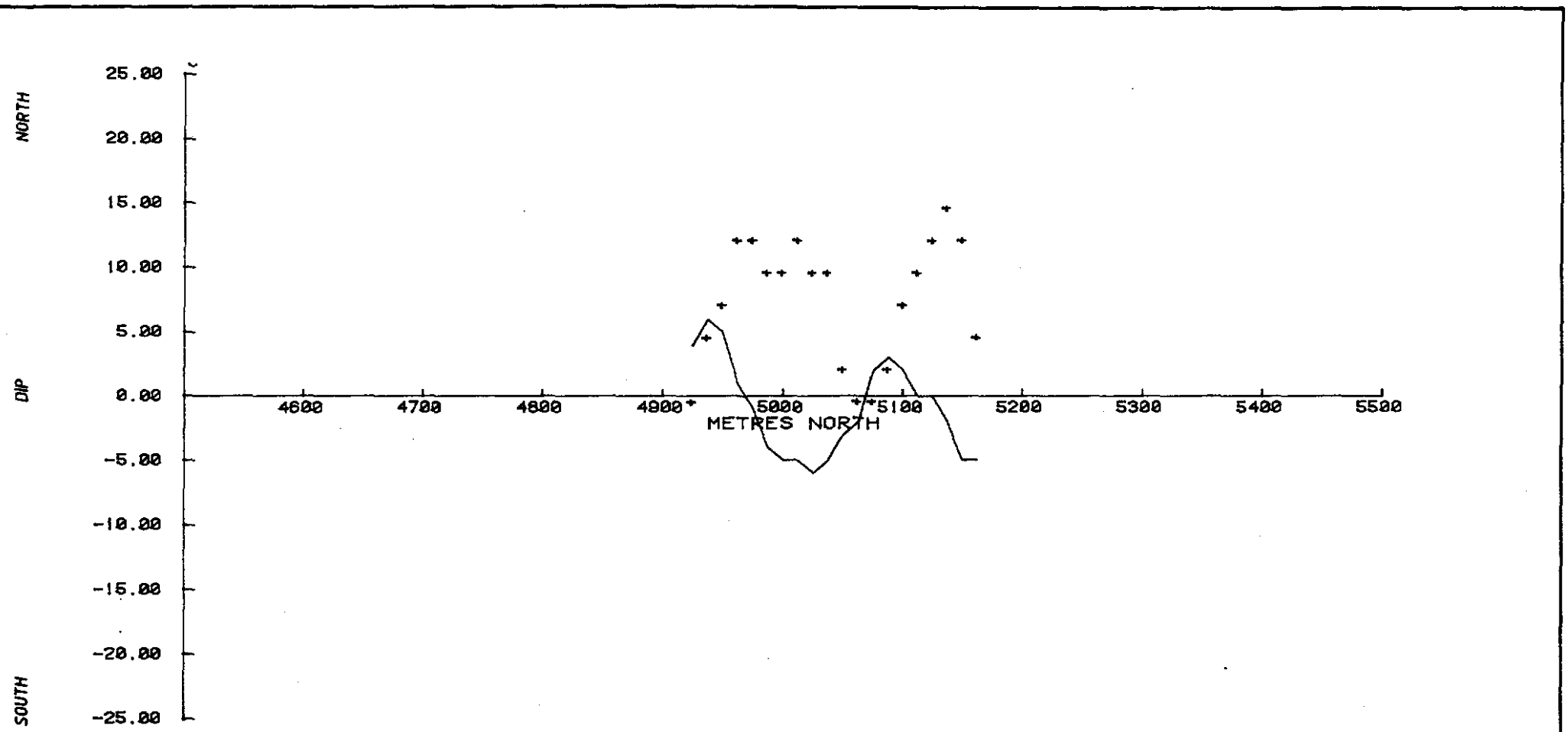
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
73xA LINE 4900mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1082

613541



5 cm

DIP ANGLE (DEGREES)

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

PHOENIX V.L.F. - 2 METER

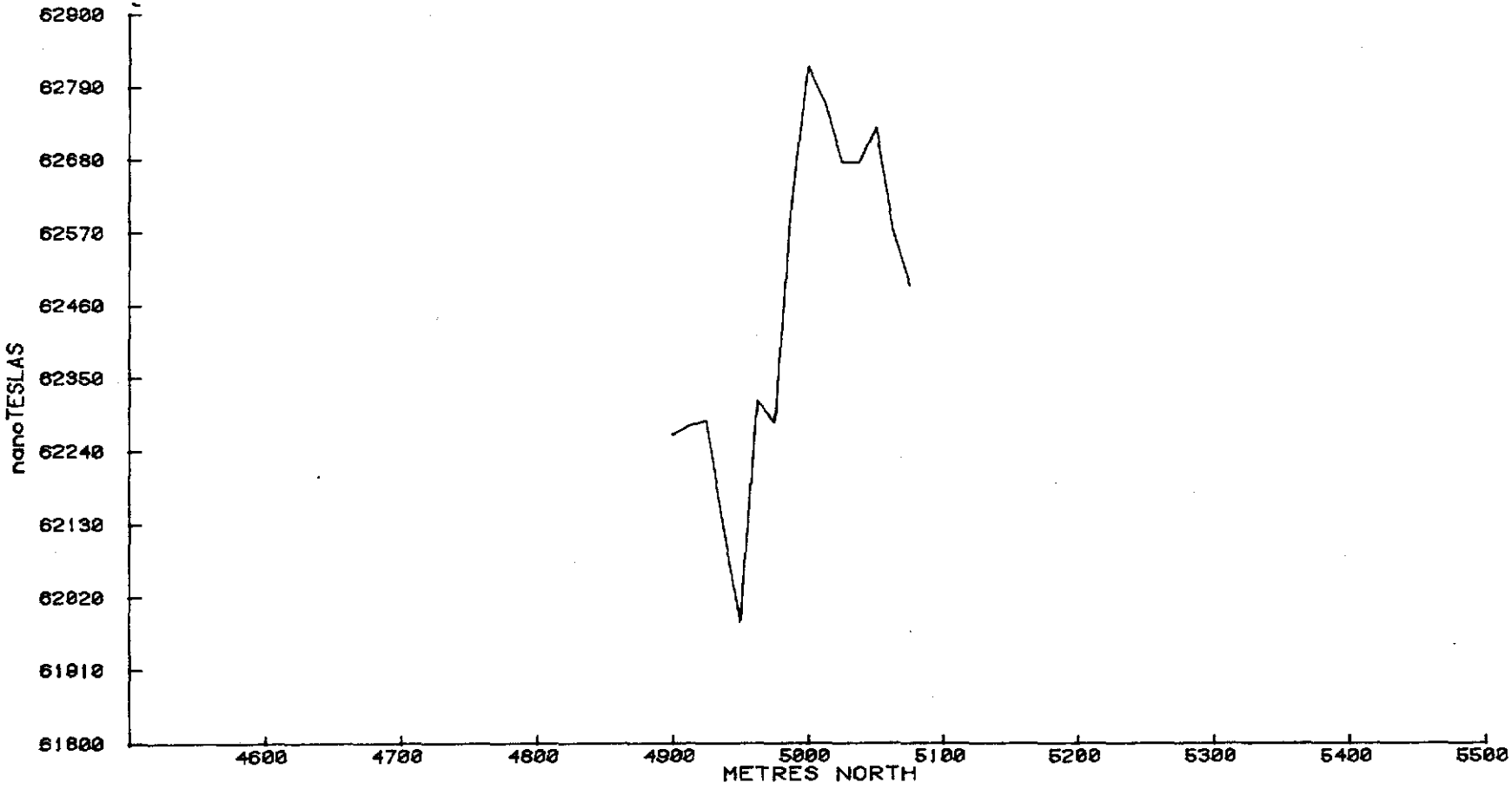
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
73xA LINE 5000mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1083

613348

613349



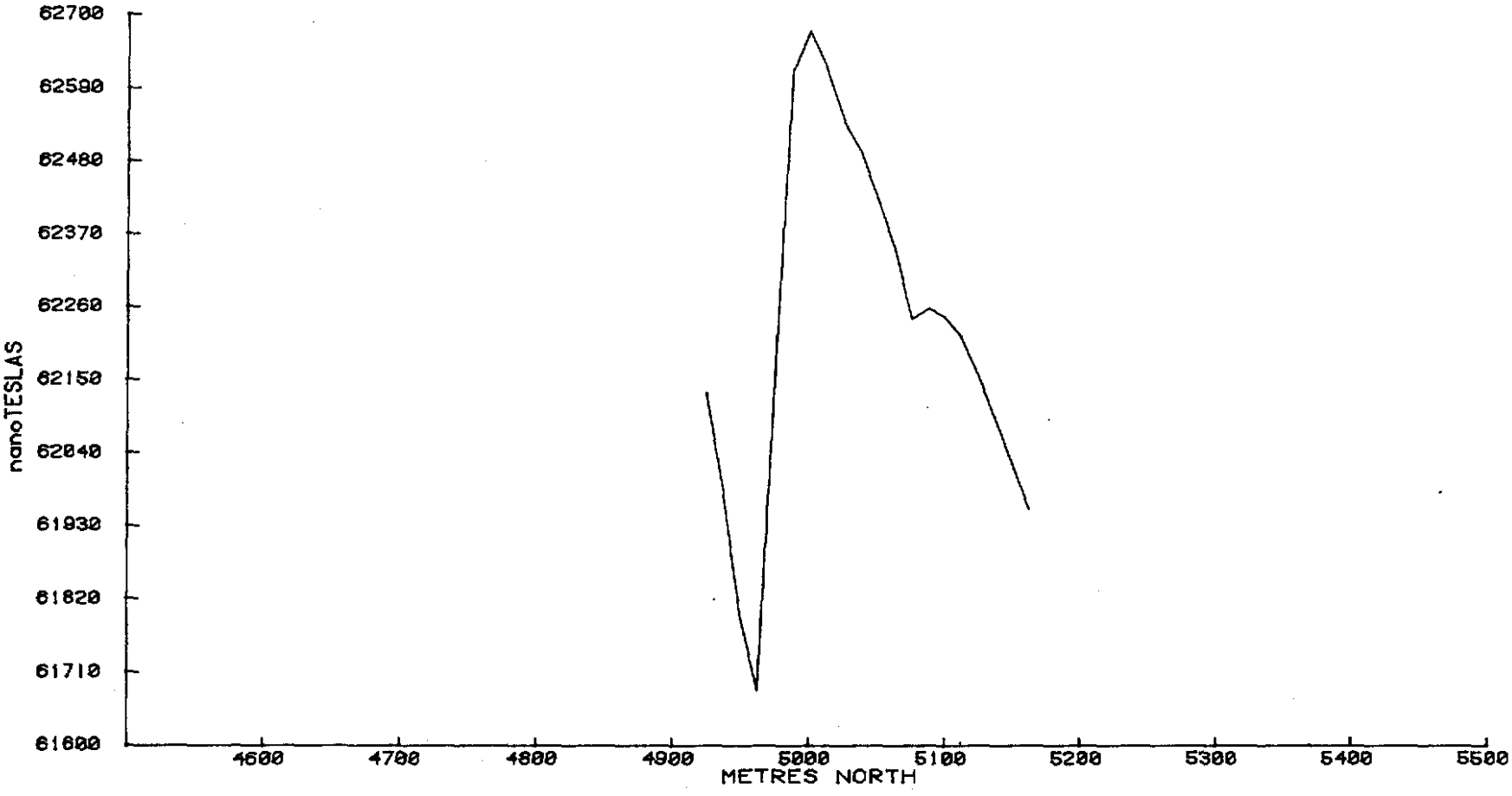
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
73xA LINE 4900mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASA N°	1084



5 cm

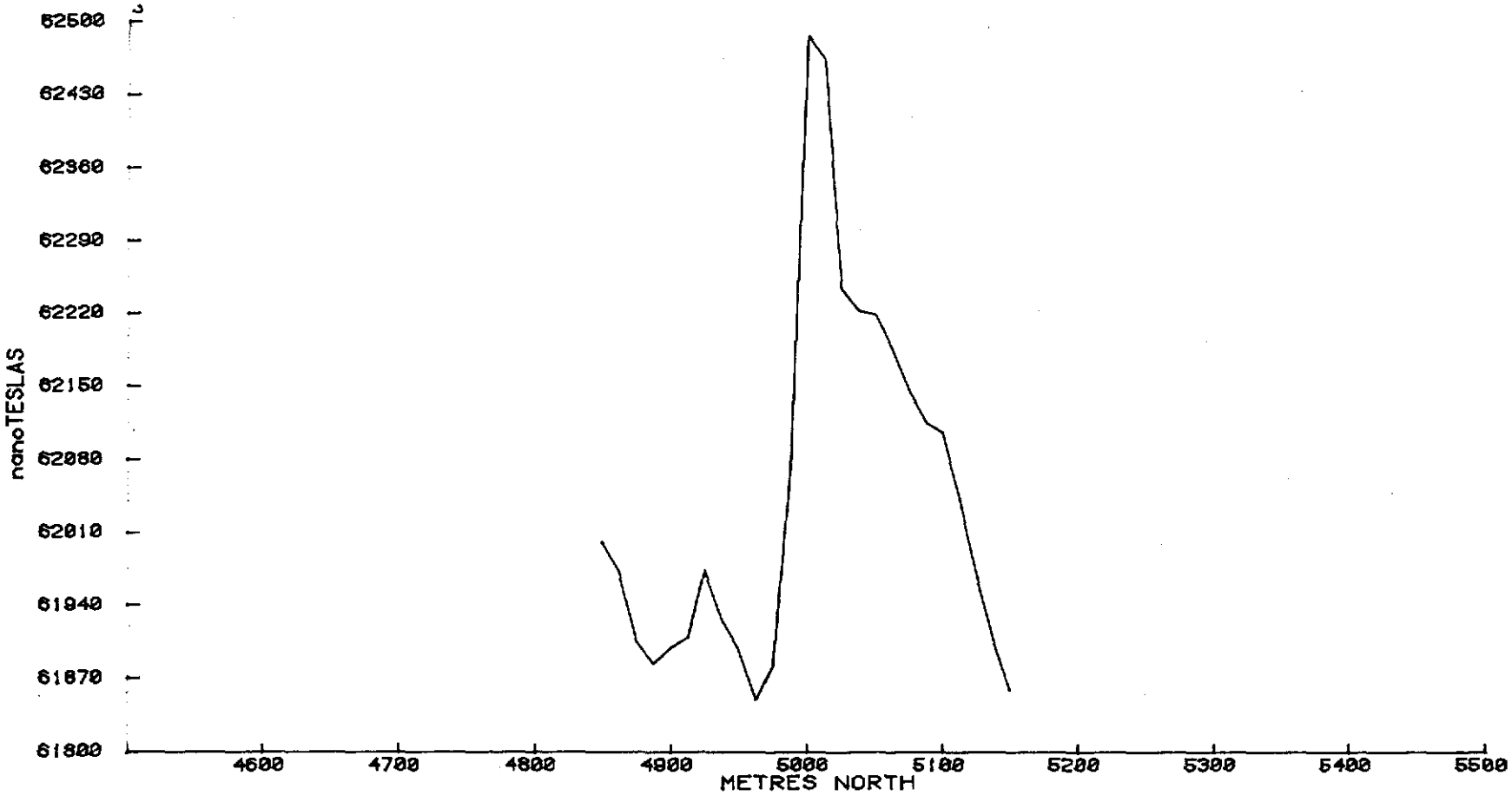
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
73xA LINE 5000mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1085

613350



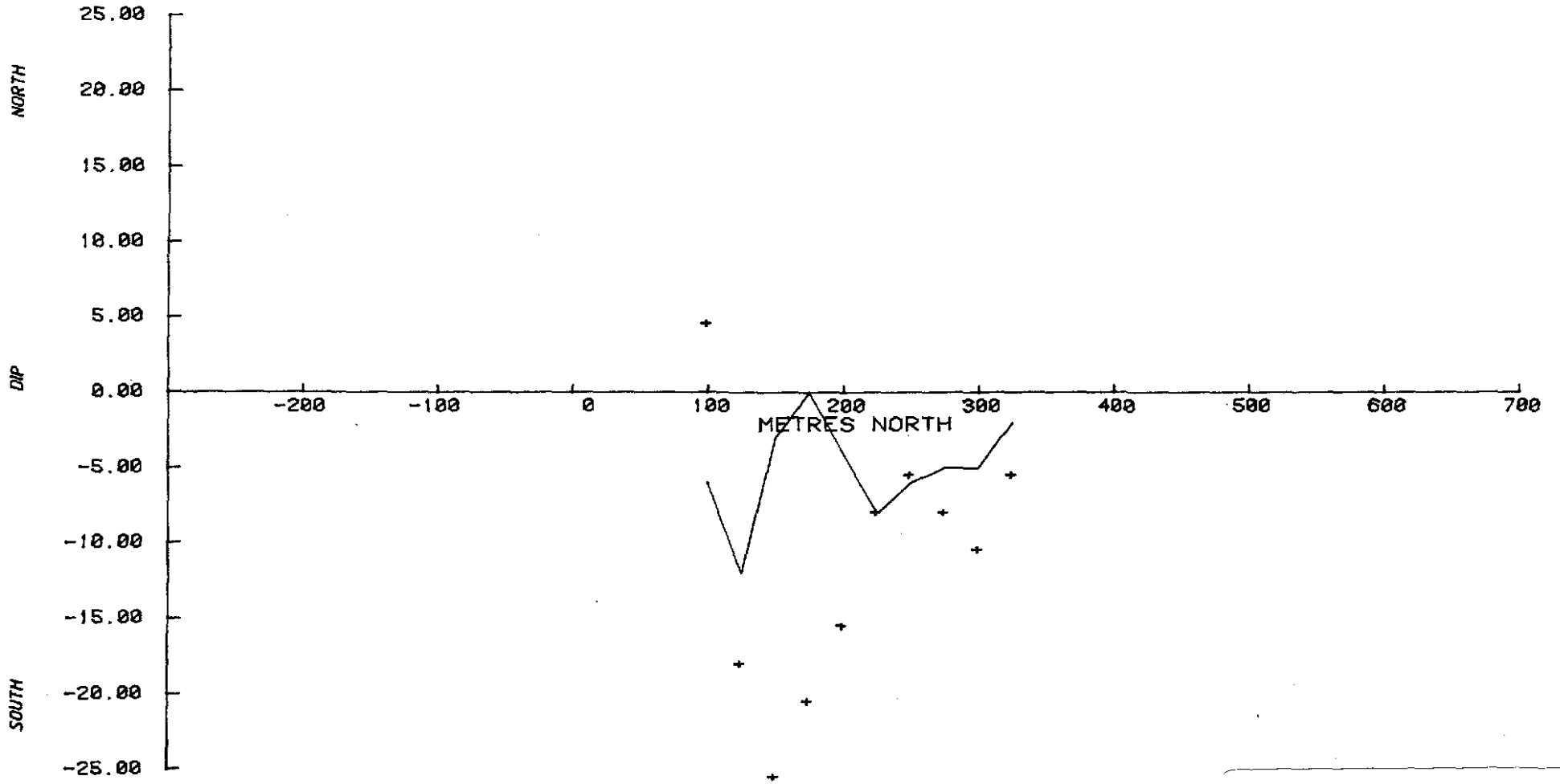
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED		
SHEFFIELD E.L. 7/73 GROUND MAGNETICS *73xA LINE 5100mW*		
REF.	SK55 - 3	
SCALE	AS SHOWN	DRAWN M. F.
AUTHOR	M. F.	REPORT N° 11883
DATE	SEPT. 1982	TASK N° 1086

613351

613352



5 cm

DIP ANGLE (DEGREES)

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

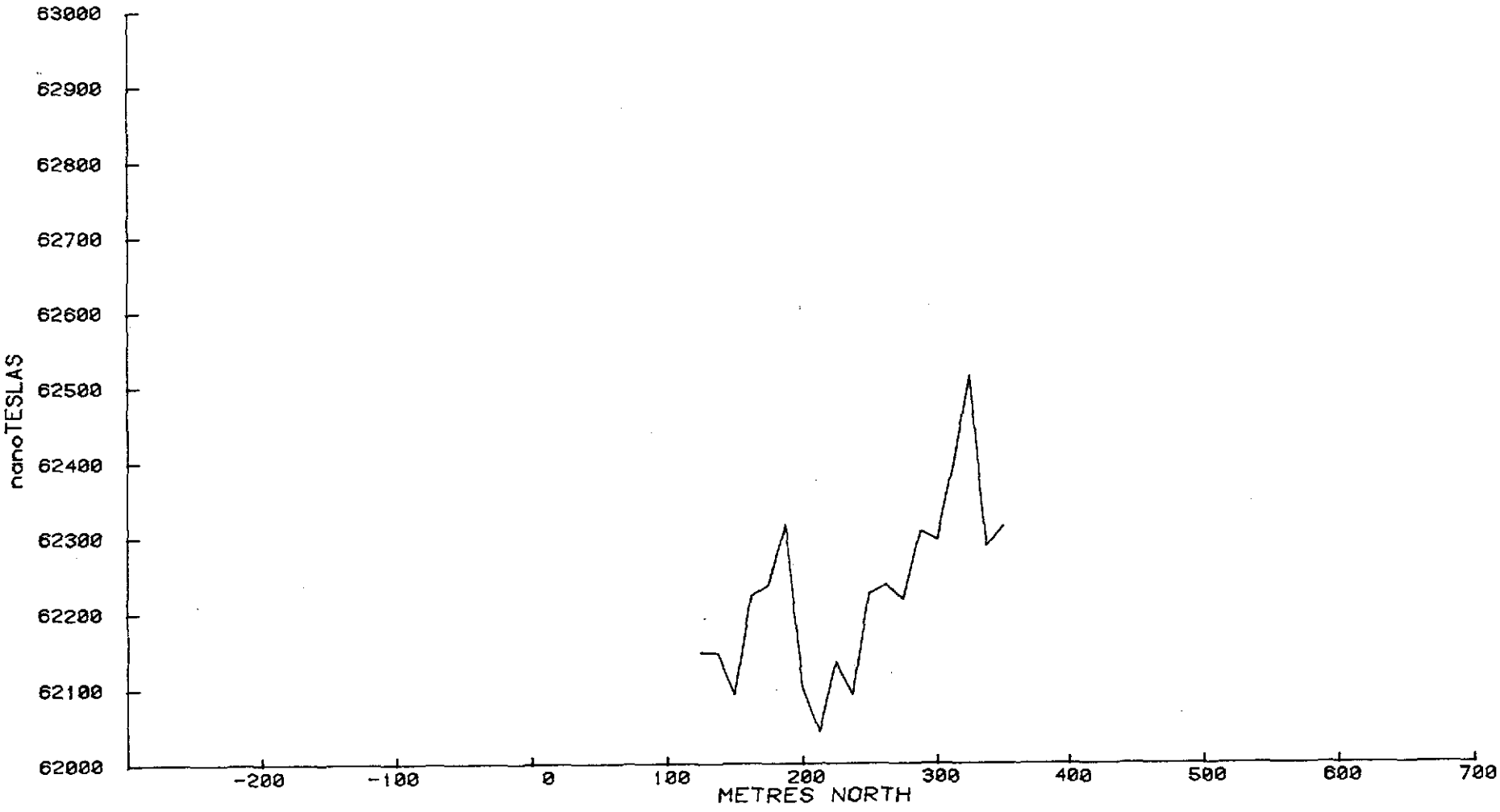
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
75A LINE 100mW

REF	SKSS - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1104

613353



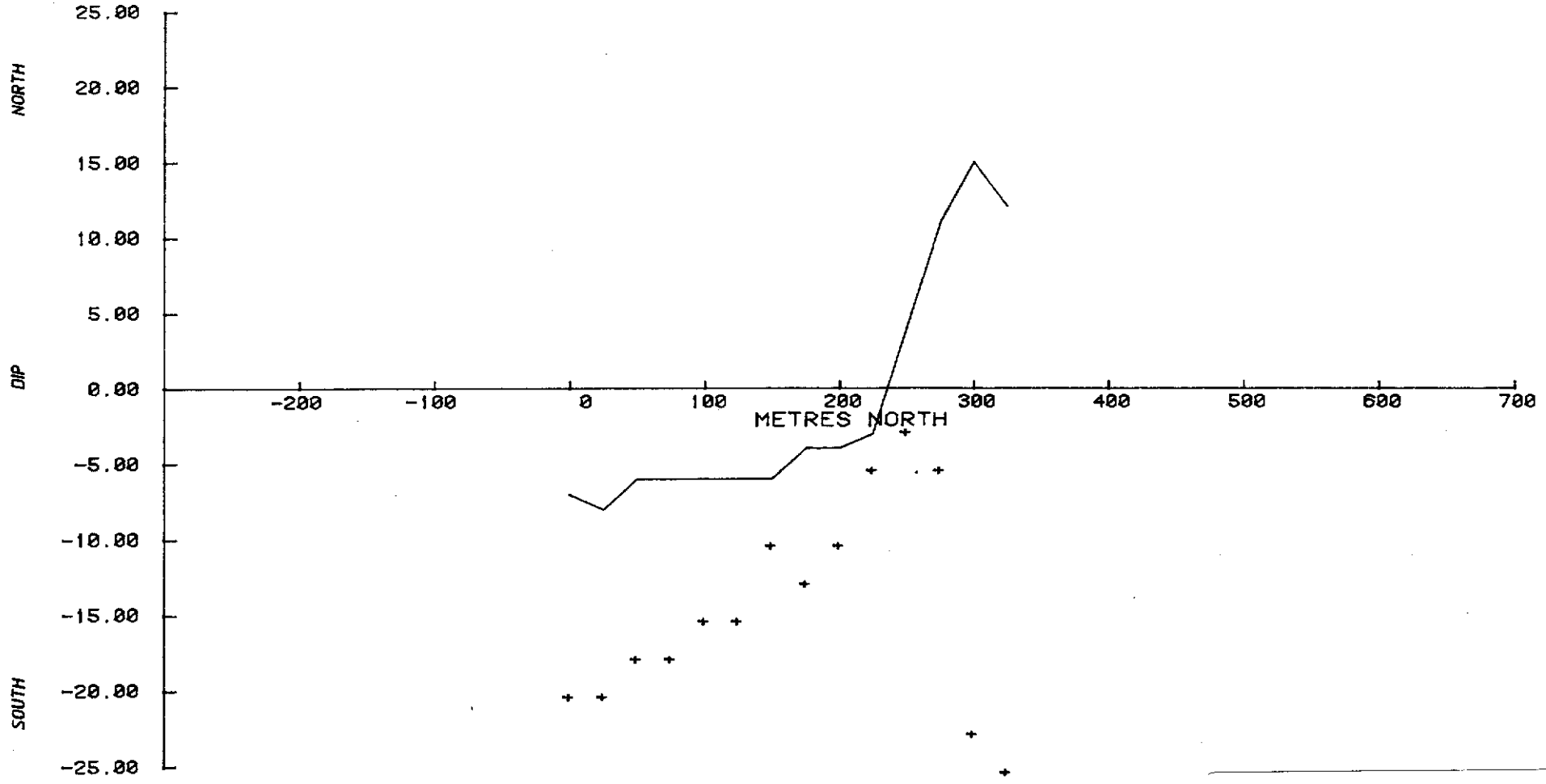
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
75A LINE 100mW

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASA N°	1105

5 cm

G 826 MAGNETOMETER



5 cm

DIP ANGLE (DEGREES)

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

PHOENIX V.L.F. - 2 METER

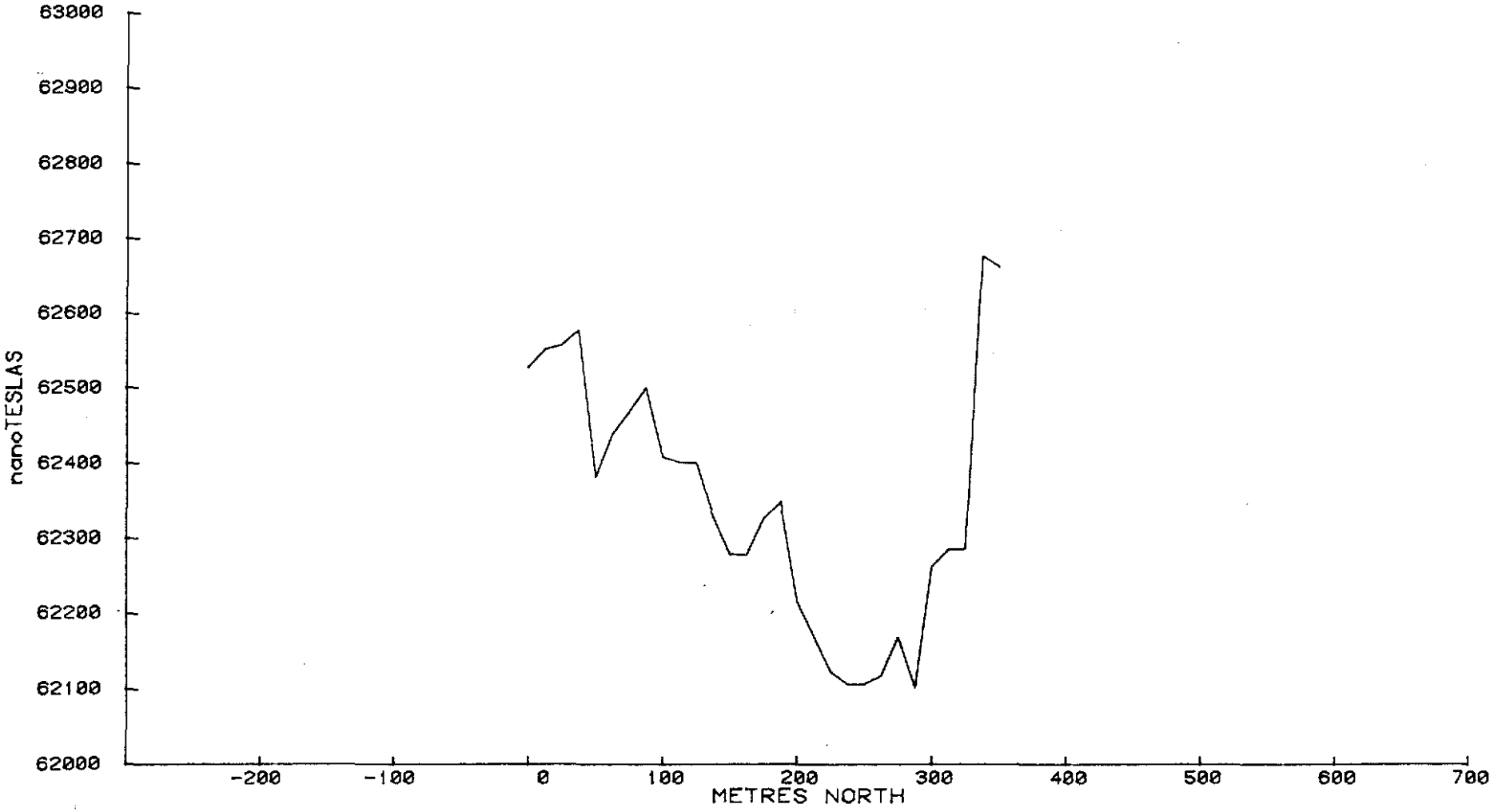
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
75A 0m

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1106

613334

613355



5 cm

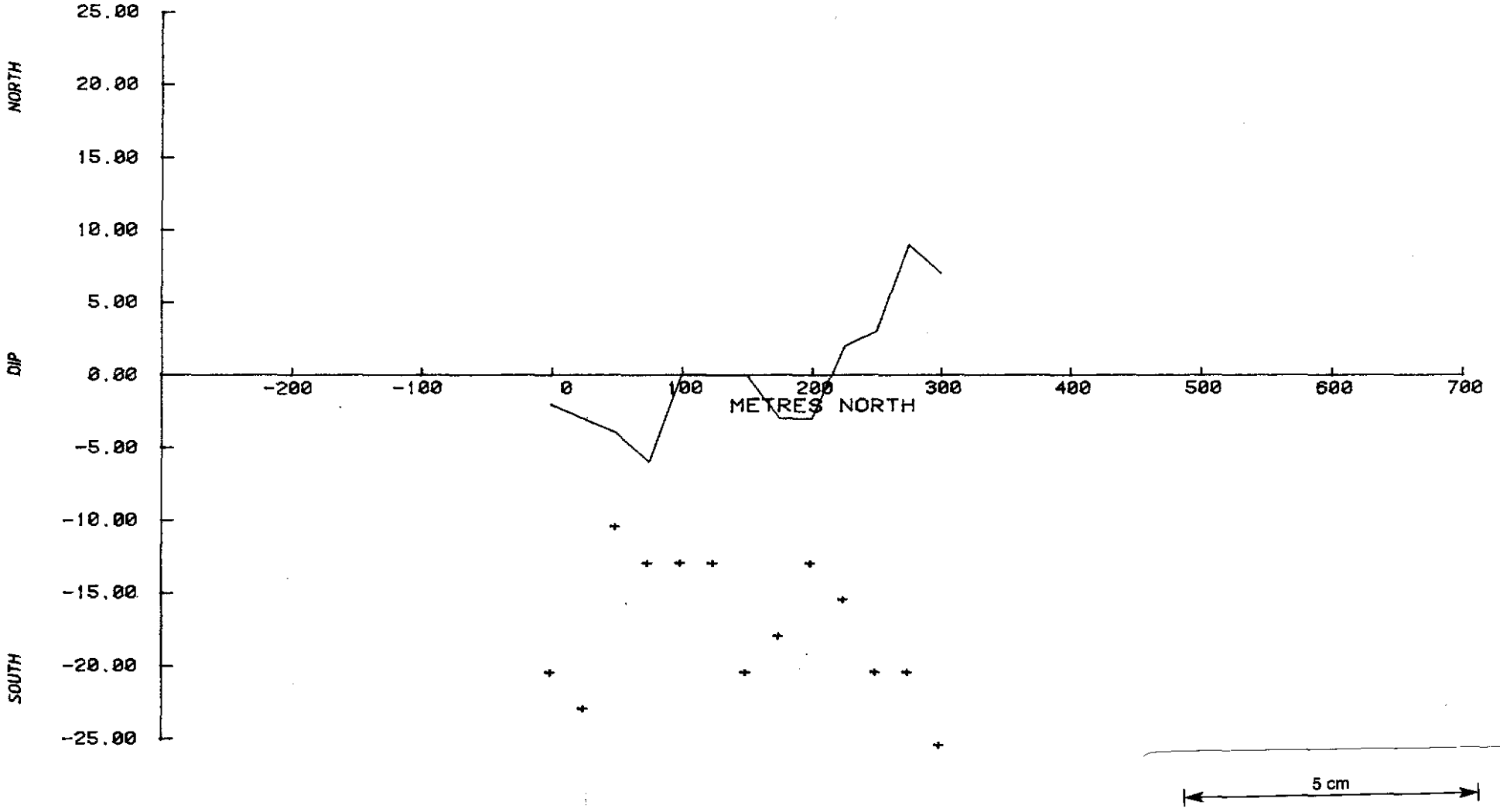
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
75A LINE 0

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1107

613356



DIP ANGLE (DEGREES)

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

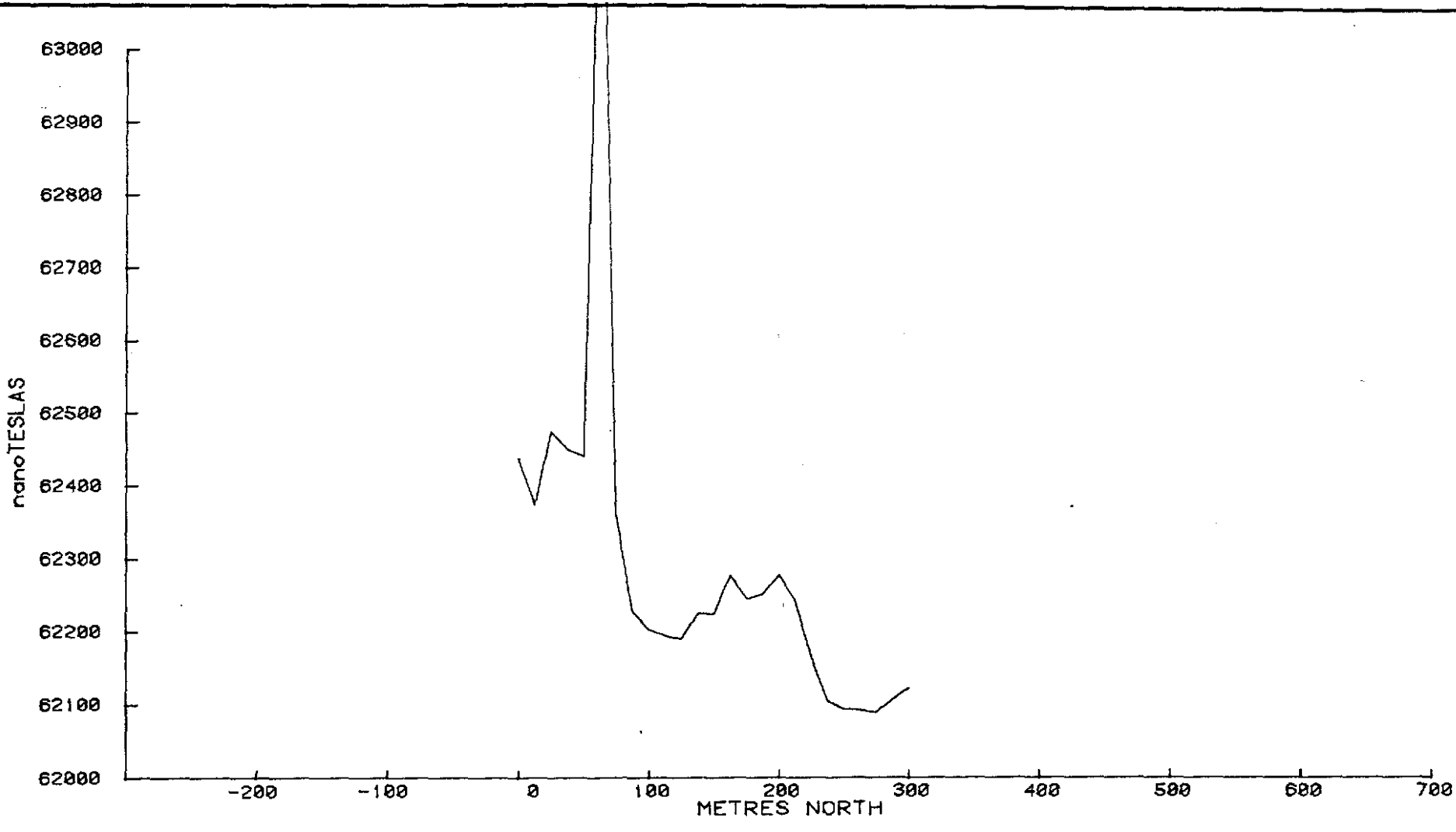
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
75A LINE 100mE

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1108

613557



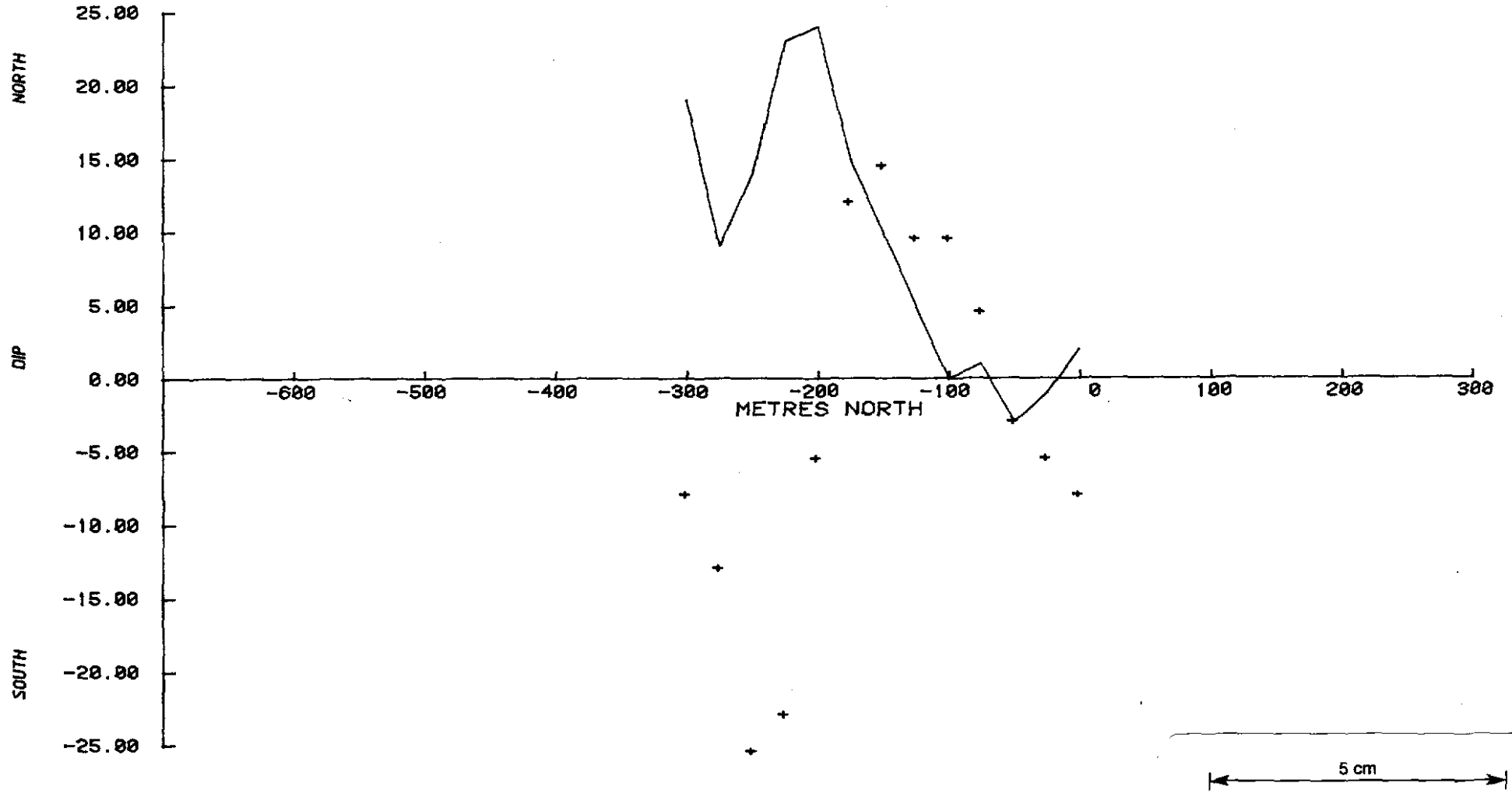
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
75A LINE 100mE

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1109



DIP ANGLE (DEGREES)

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

PHOENIX V.L.F. - 2 METER

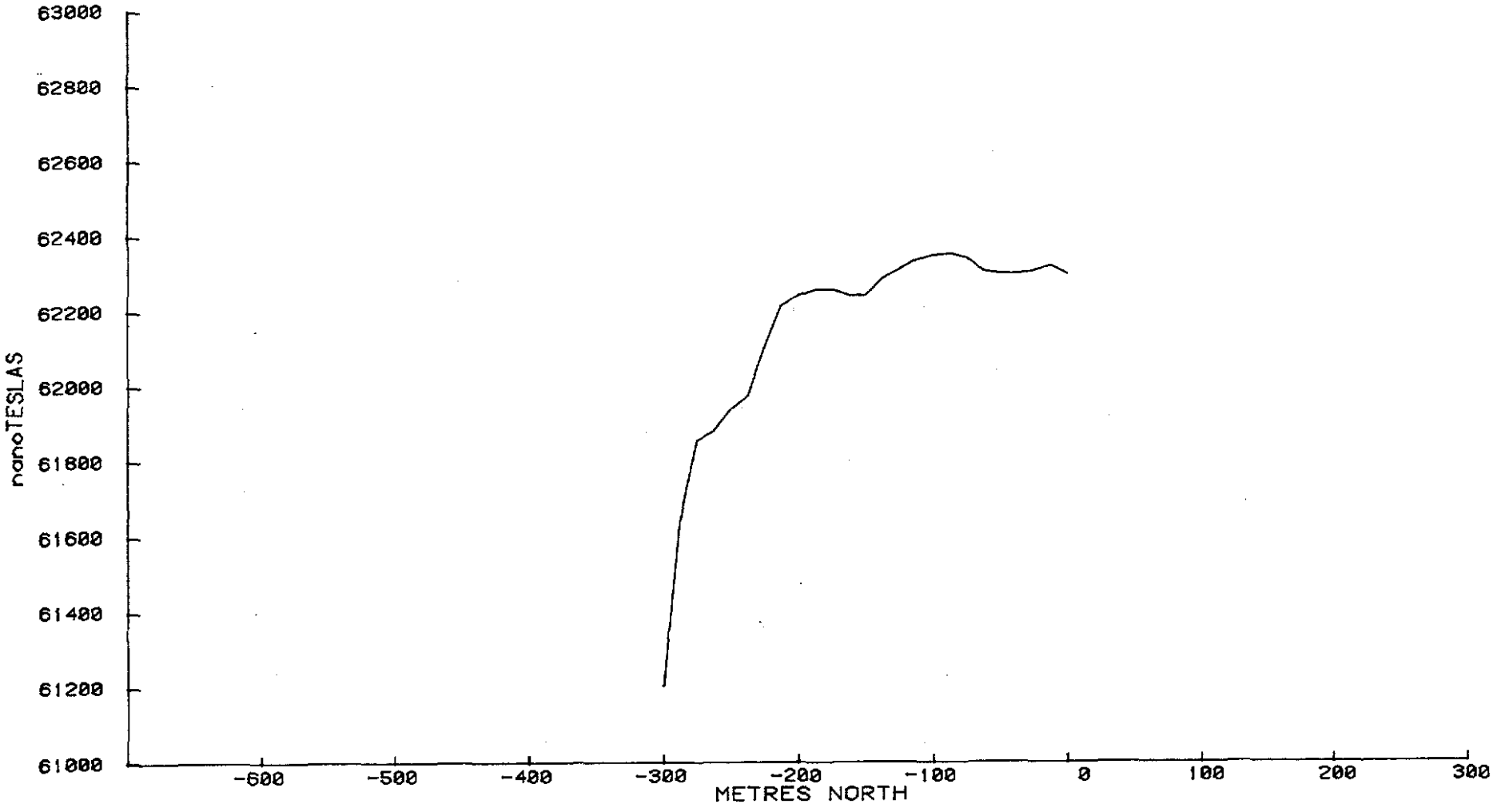
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
102xD, 103xF, 104xB
LINE 1

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1090

613358

613359

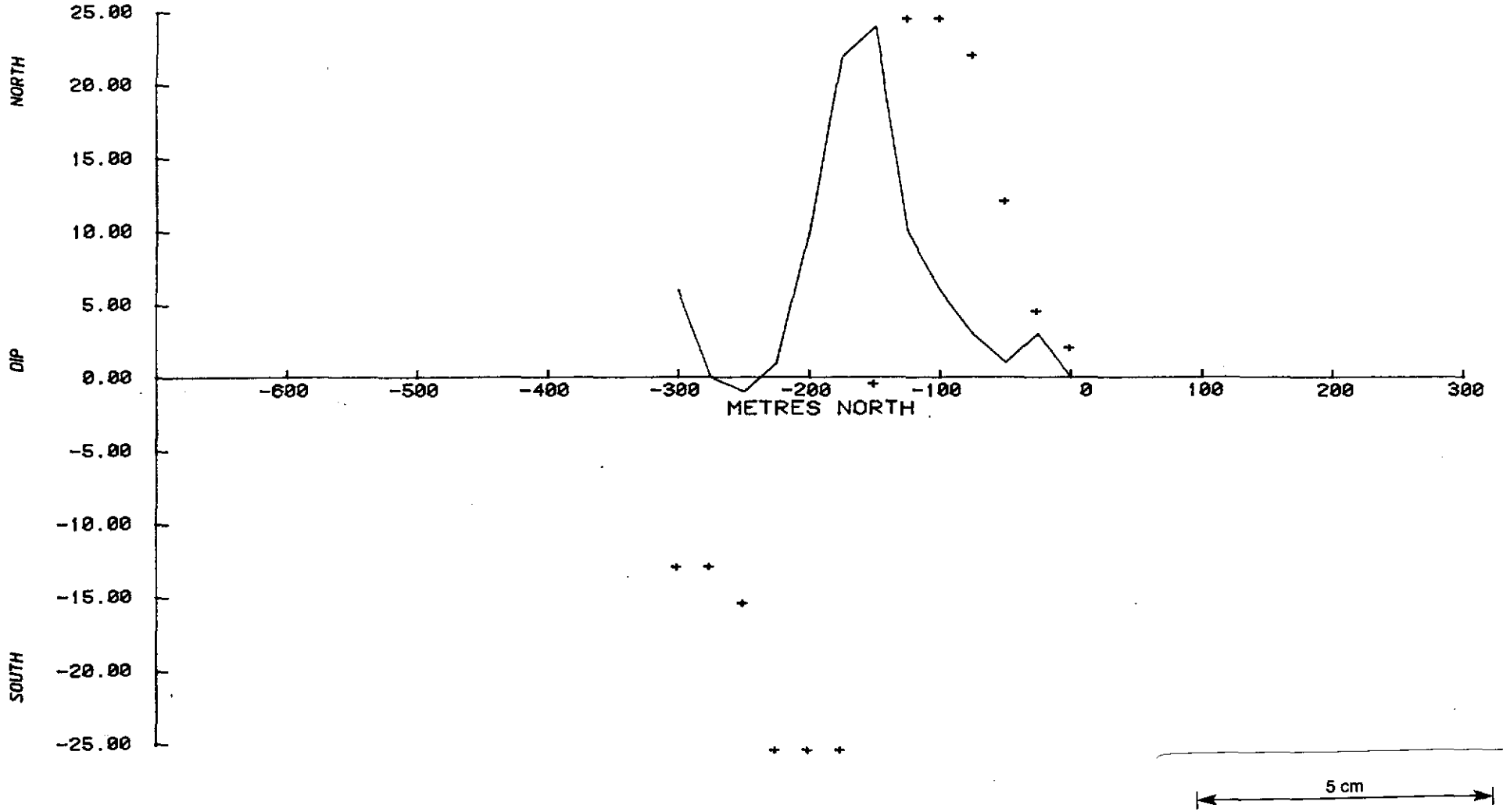


5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED	
SHEFFIELD E.L. 7/73 GROUND MAGNETICS 102xD, 103xF, 104xB LINE 1	
REF. SX55 - 3	
SCALE AS SHOWN	DRAWN M. F.
AUTHOR M. F.	REPORT N° 11883
DATE SEPT. 1982	TASh N° 1091

613360



DIP ANGLE (DEGREES)

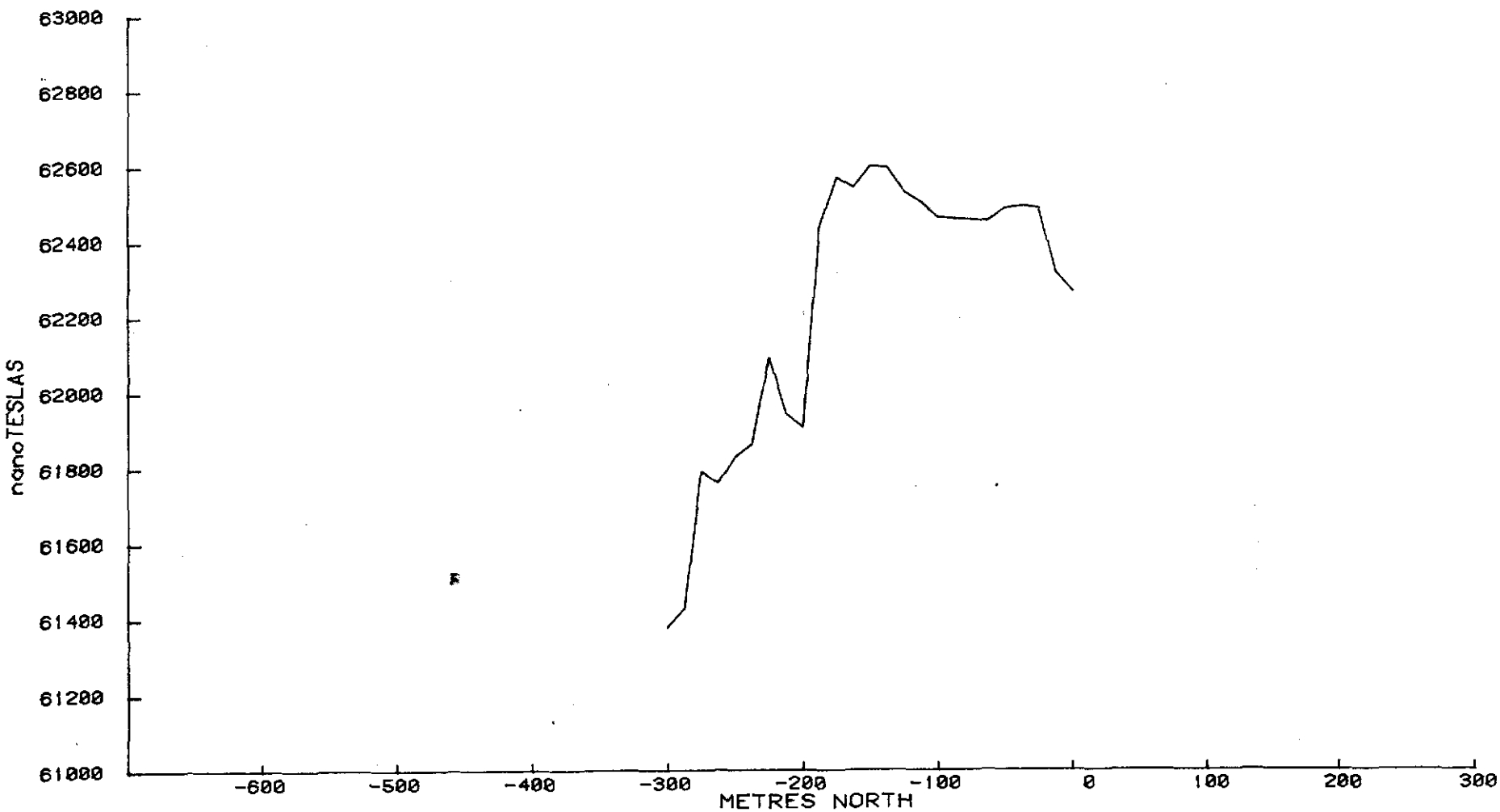
+ + + + + MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITARY GAIN)

PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
102xD, 103xF, 104xB
LINE 2

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASO N°.	1092



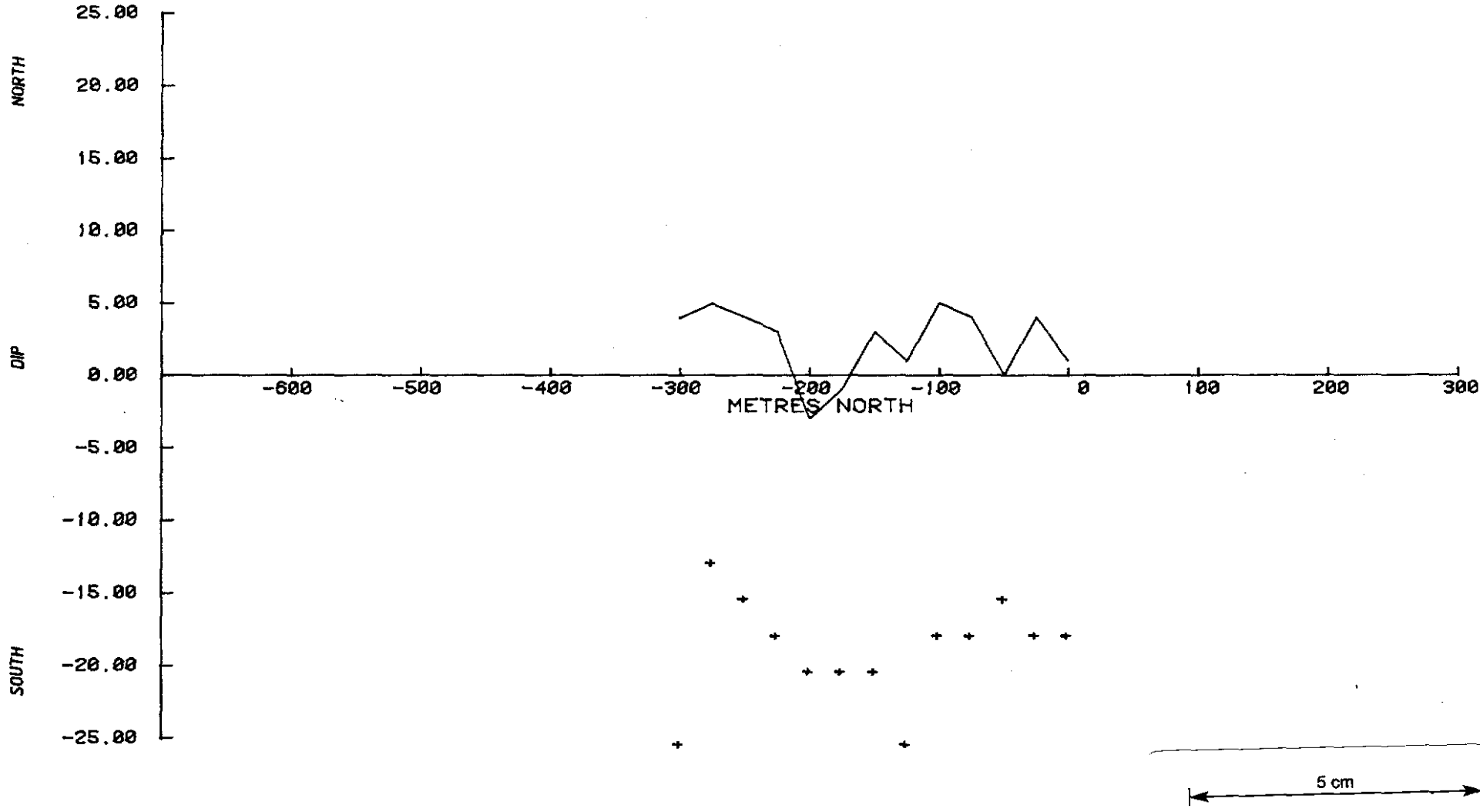
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED		
SHEFFIELD E.L. 7/73 GROUND MAGNETICS 102xD, 103xF, 104xB LINE 2		
REF.	SK55 - 3	
SCALE	AS SHOWN	DRAWN. M. F.
AUTHOR.	M. F.	REPORT N° 11883
DATE.	SEPT. 1982	TASh N° 1093

613561

613362



DIP ANGLE (DEGREES)

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

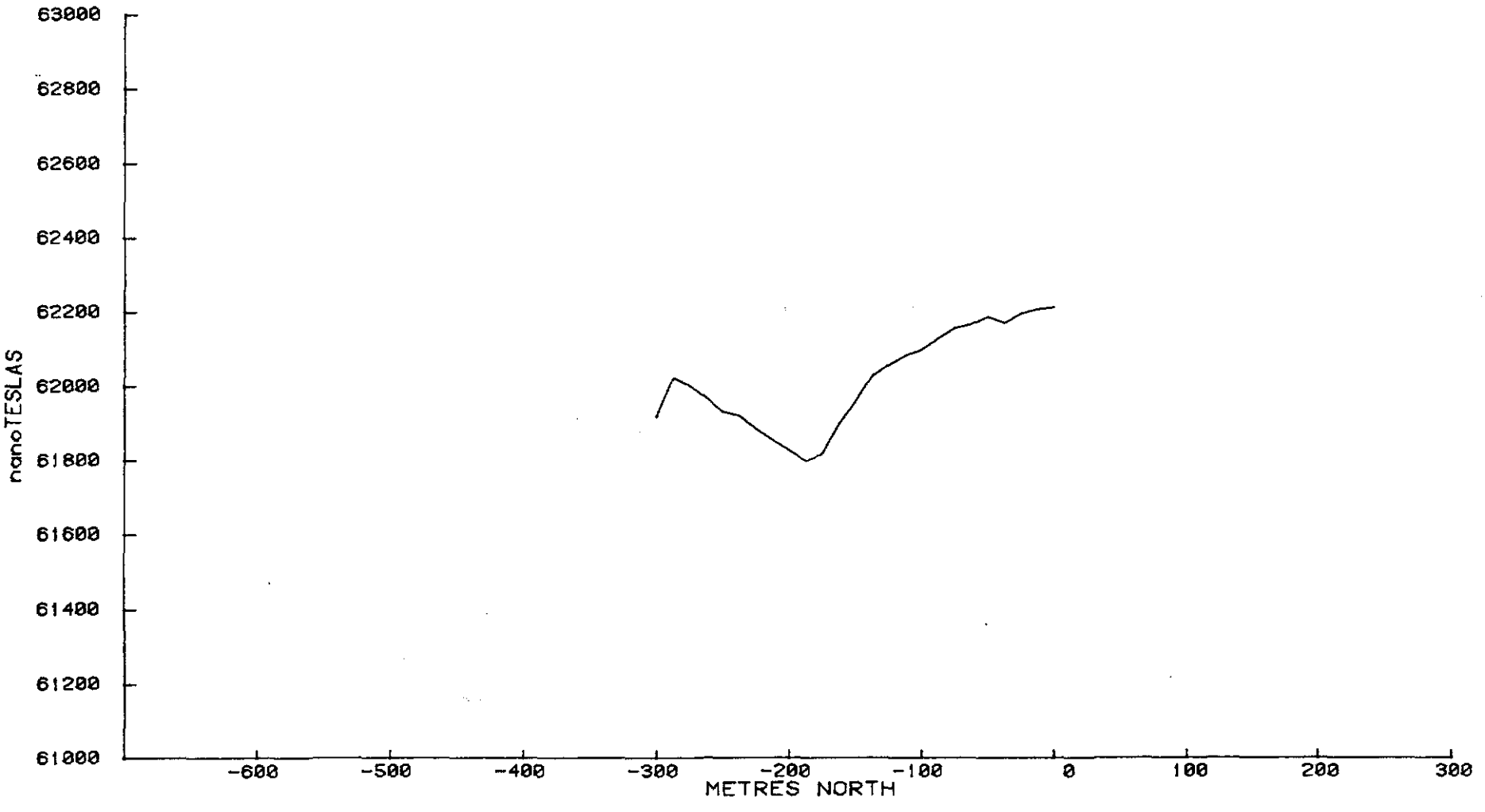
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
102xD, 103xF, 104xB
LINE 3

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1094

613363



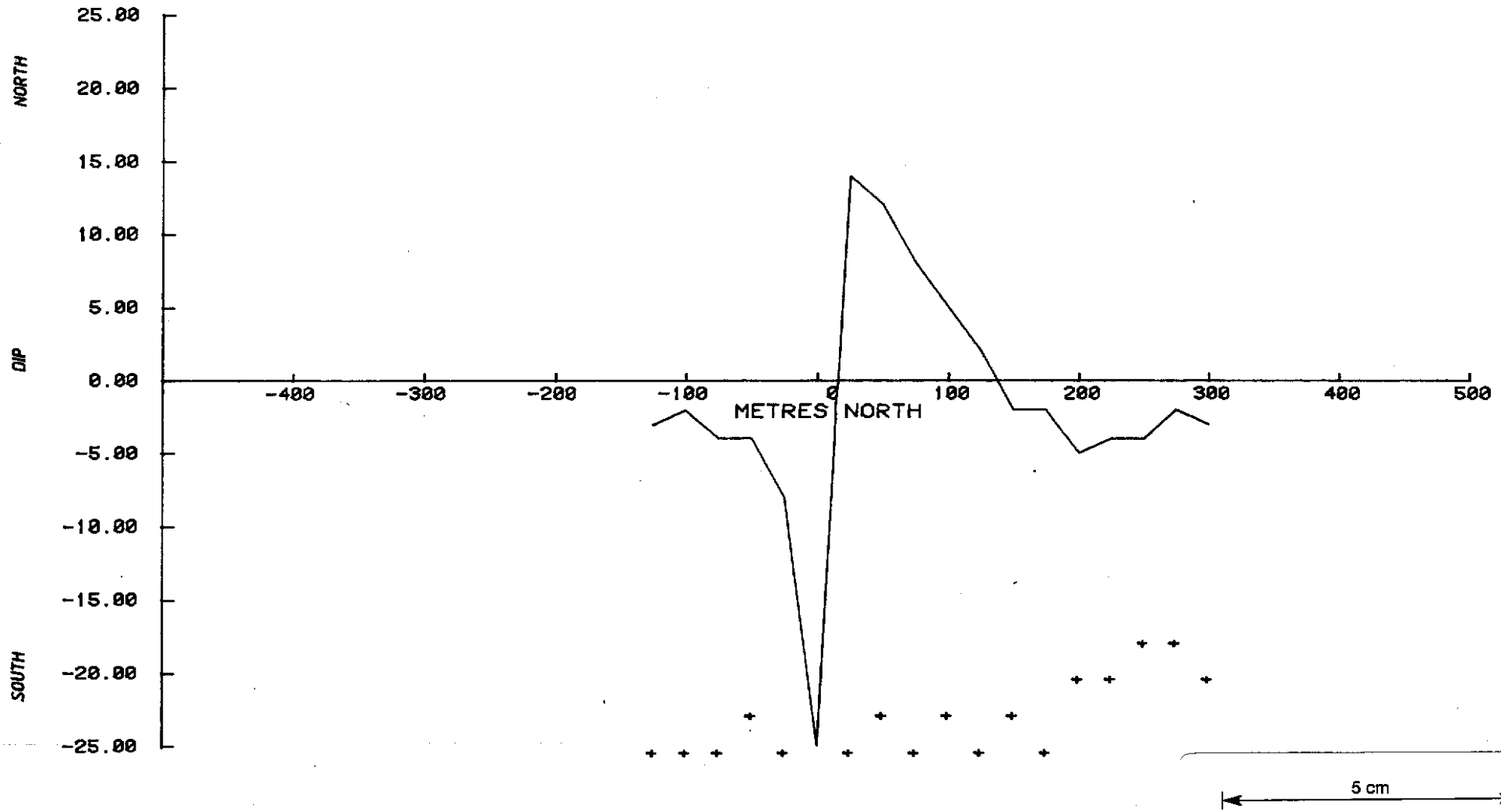
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
102xD, 103xF, 104xB
LINE 3

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1095



DIP ANGLE (DEGREES)

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

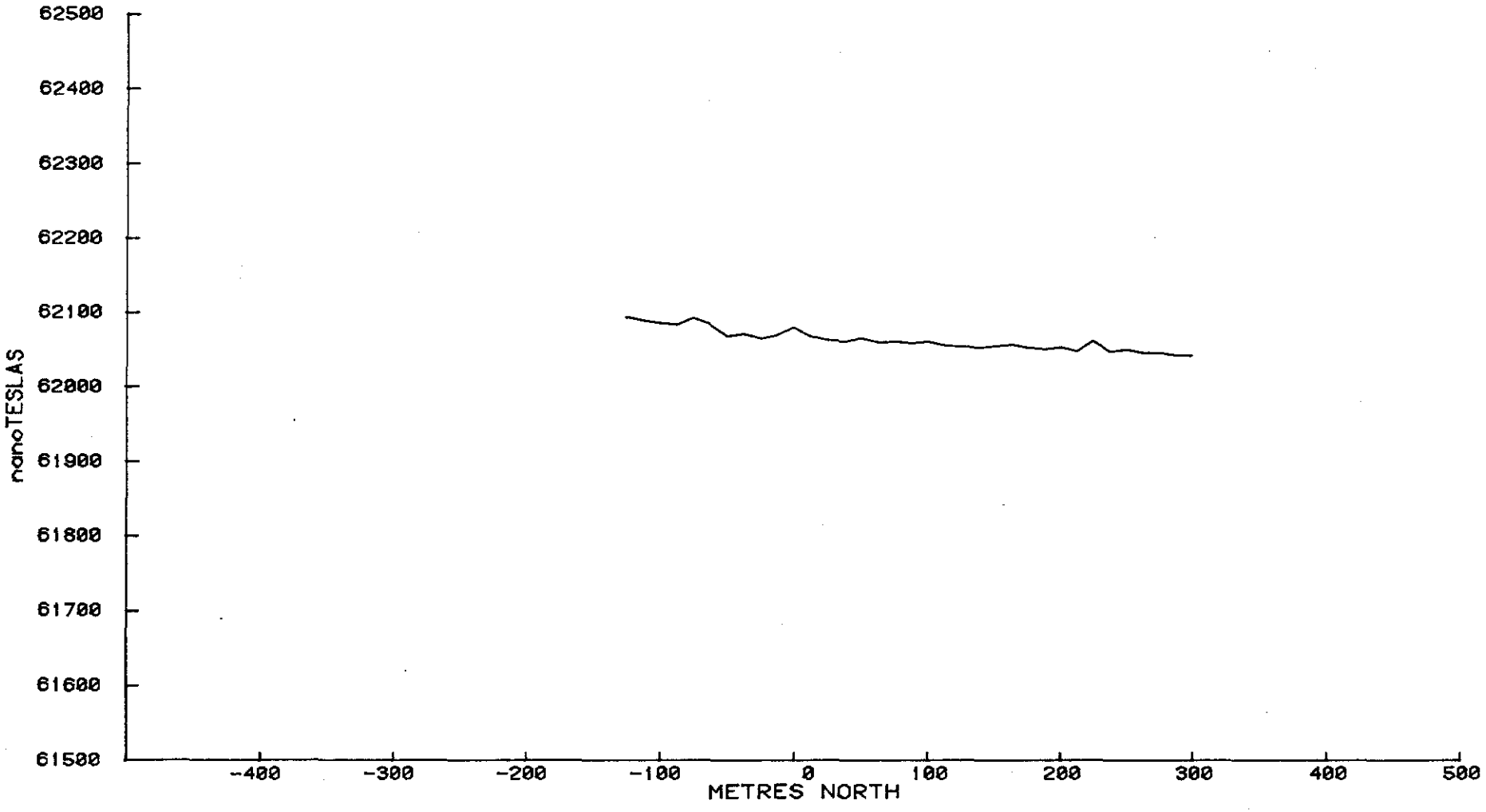
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
113A, 115xF LINE 1

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	T.A.S. N°	1055

015014



613365

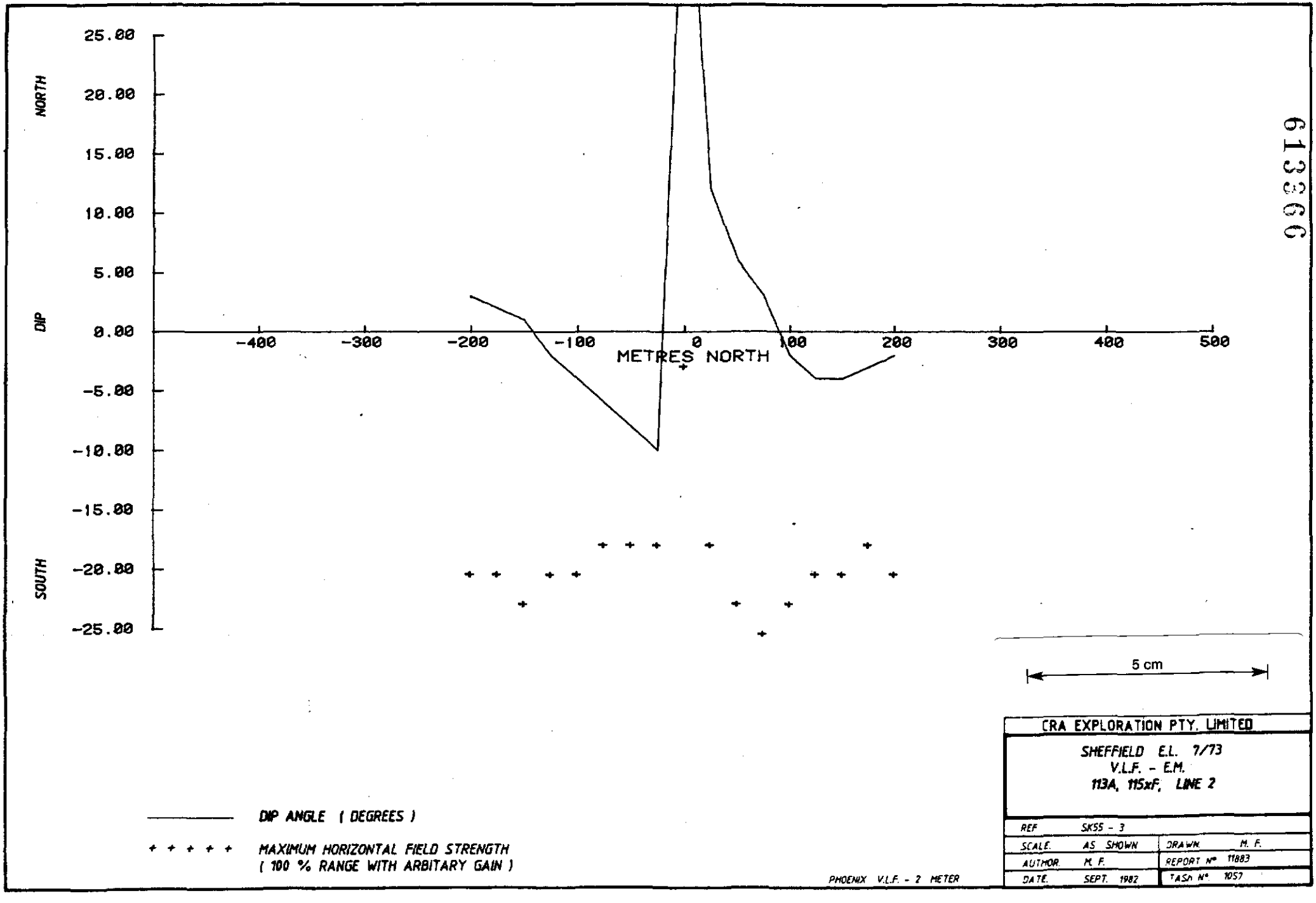
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
113A, 115xF, 100mW LINE 1

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	CASH N°	1056

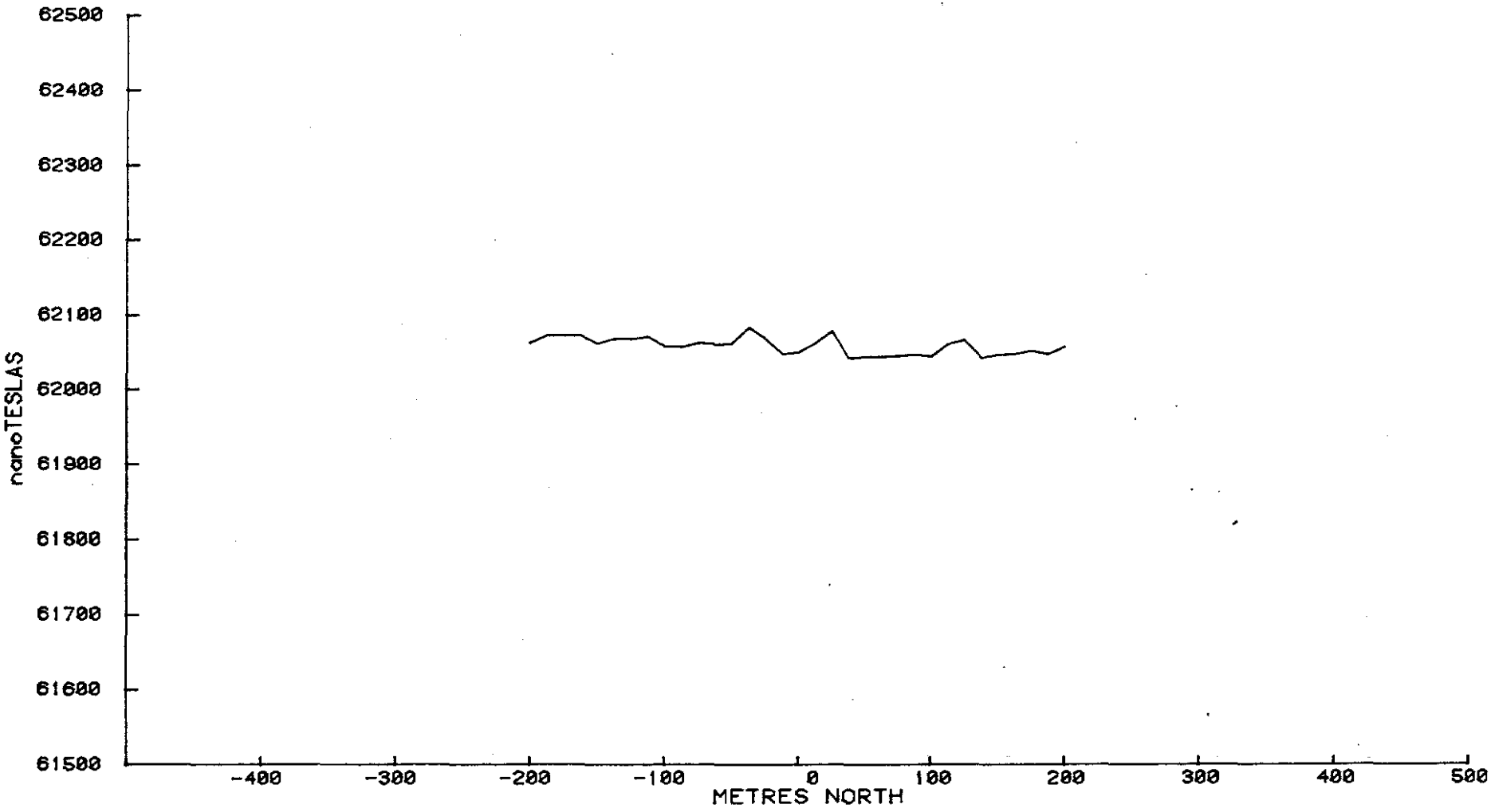


613366

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
113A, 115xF, LINE 2

REF	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1057



13267

5 cm

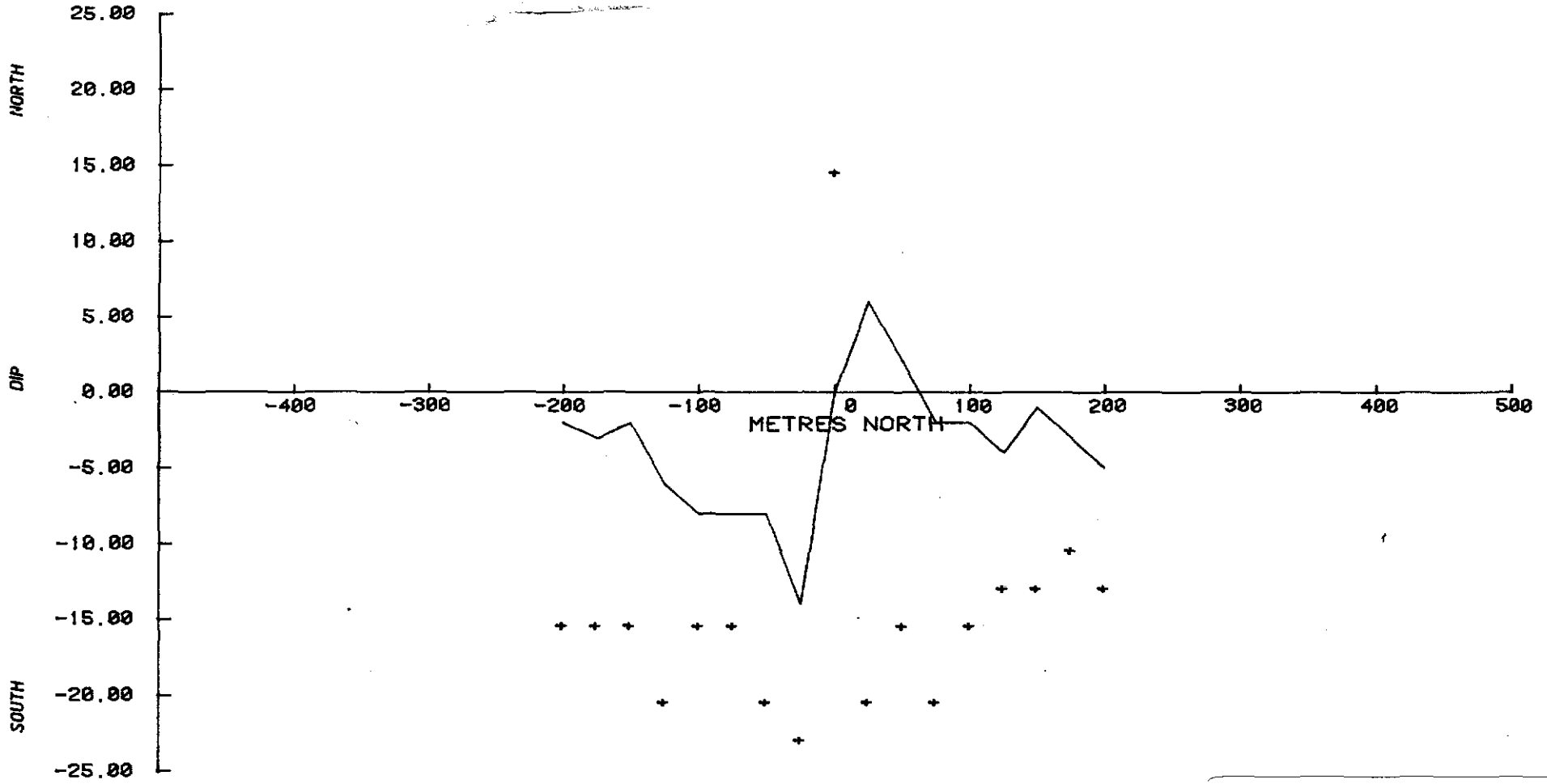
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
113A, 115xF, LINE 2

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASA N°	1058

613368



5 cm

DIP ANGLE (DEGREES)

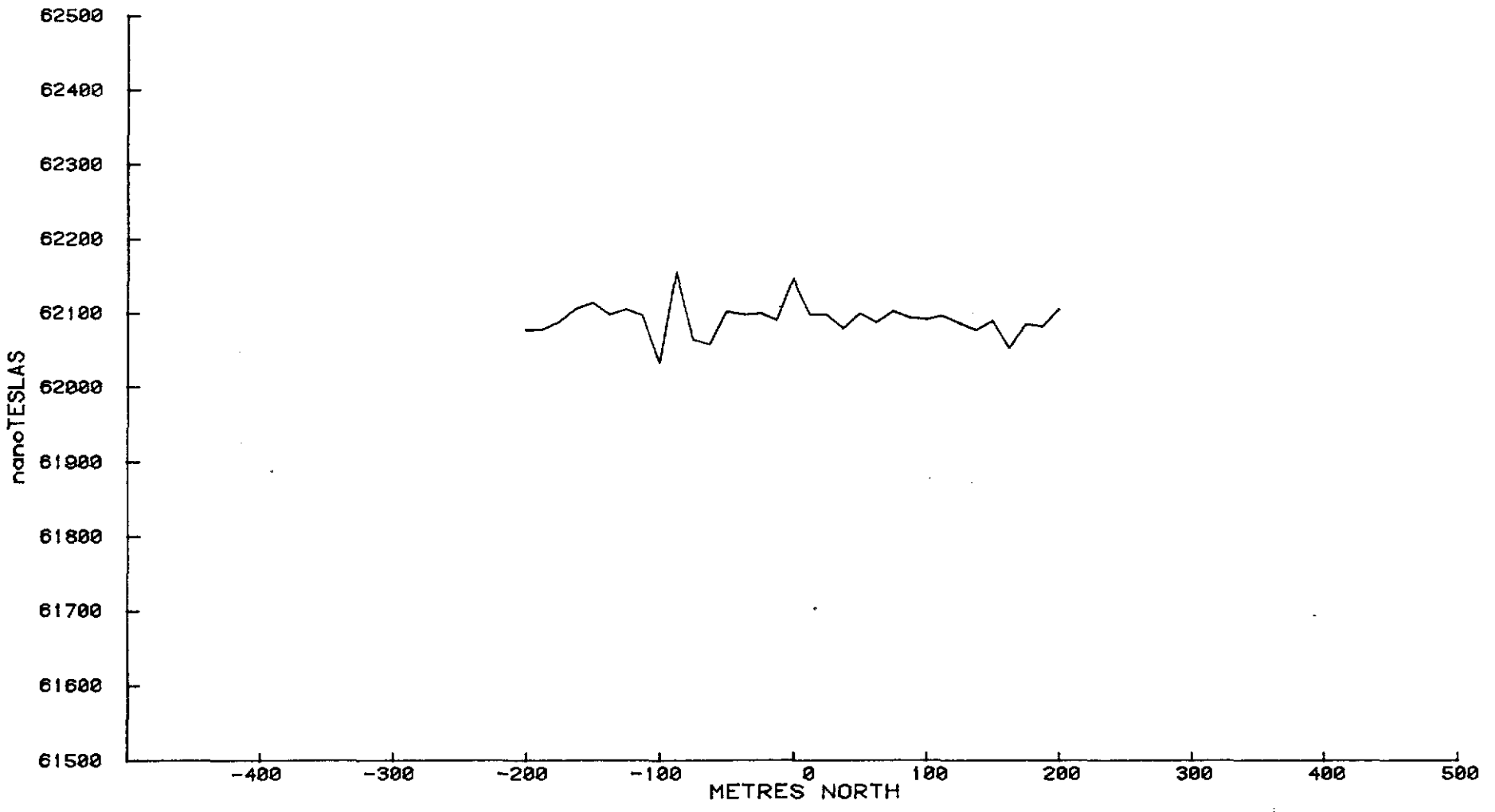
MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITARY GAIN)

PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
113A, 115xF, LINE 3

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	T.A.Sh N°	1059



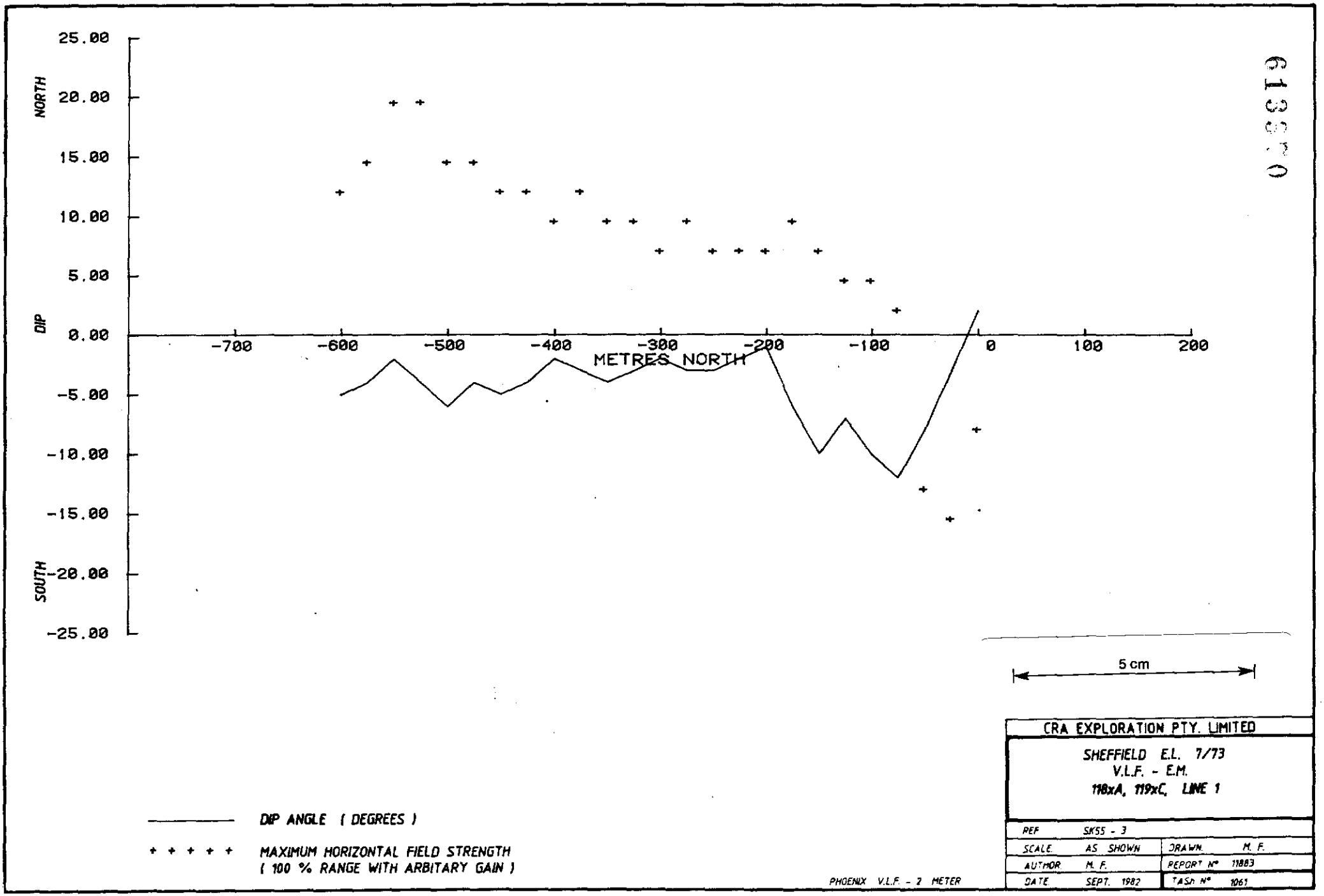
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
113A, 115xF, LINE 3

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT Nº	11883
DATE	SEPT. 1982	FASA Nº	1060

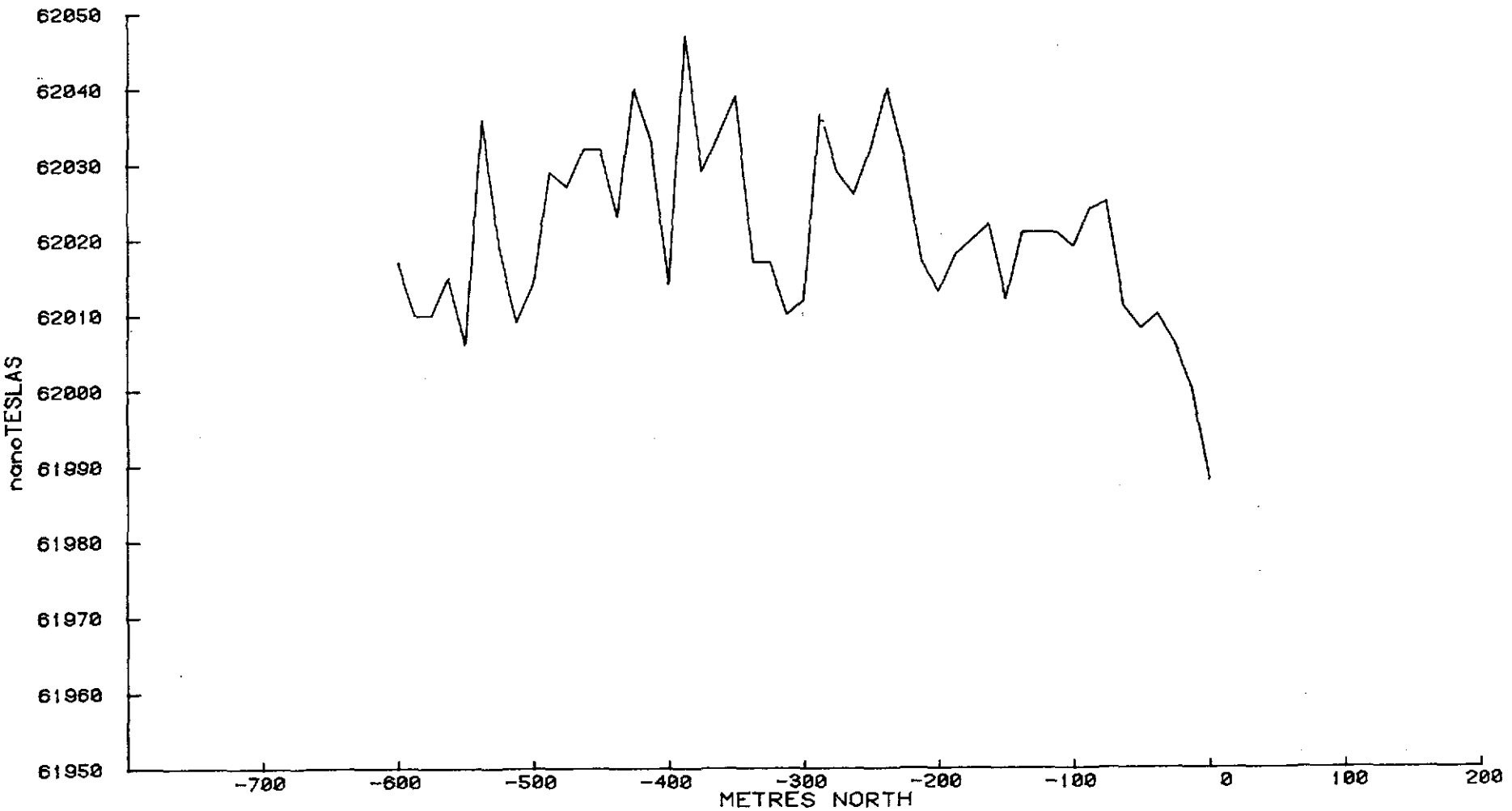


6133.0

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
118xA, 119xC, LINE 1

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1061



5 cm

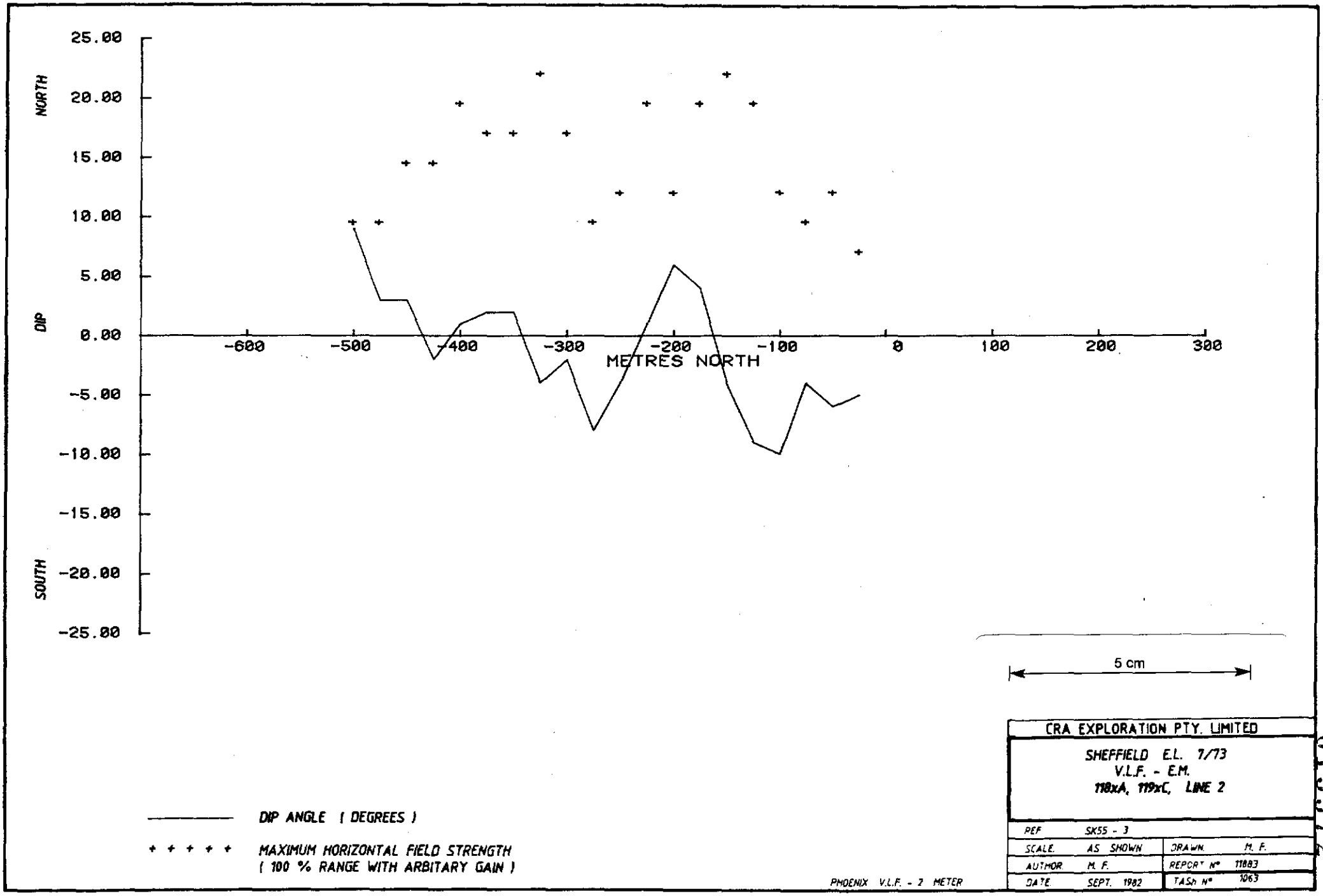
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
118xA, 119xC, LINE 1

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1062

FILMED

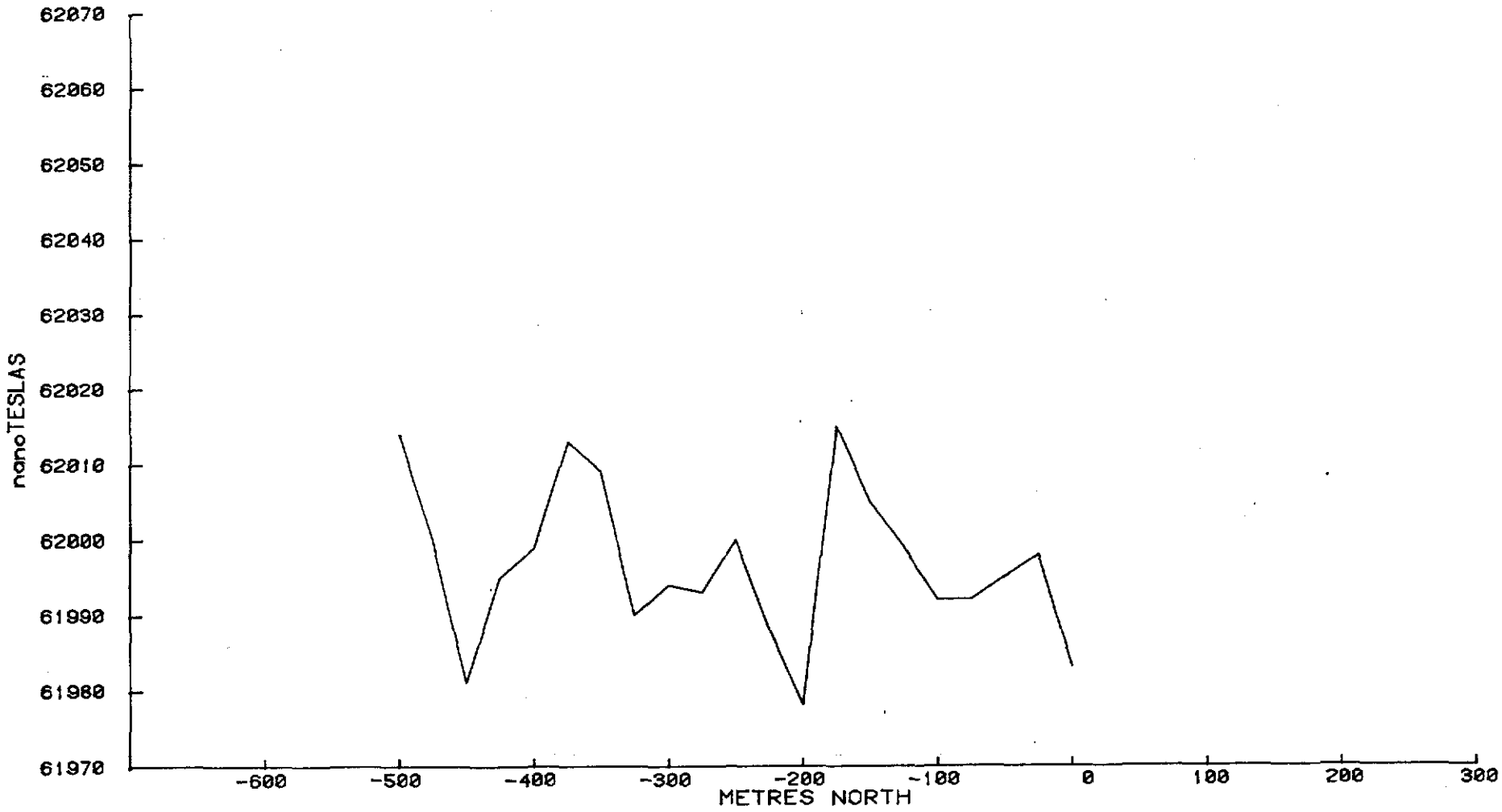


CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
118xA, 119xC, LINE 2

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1063

6133



5 cm

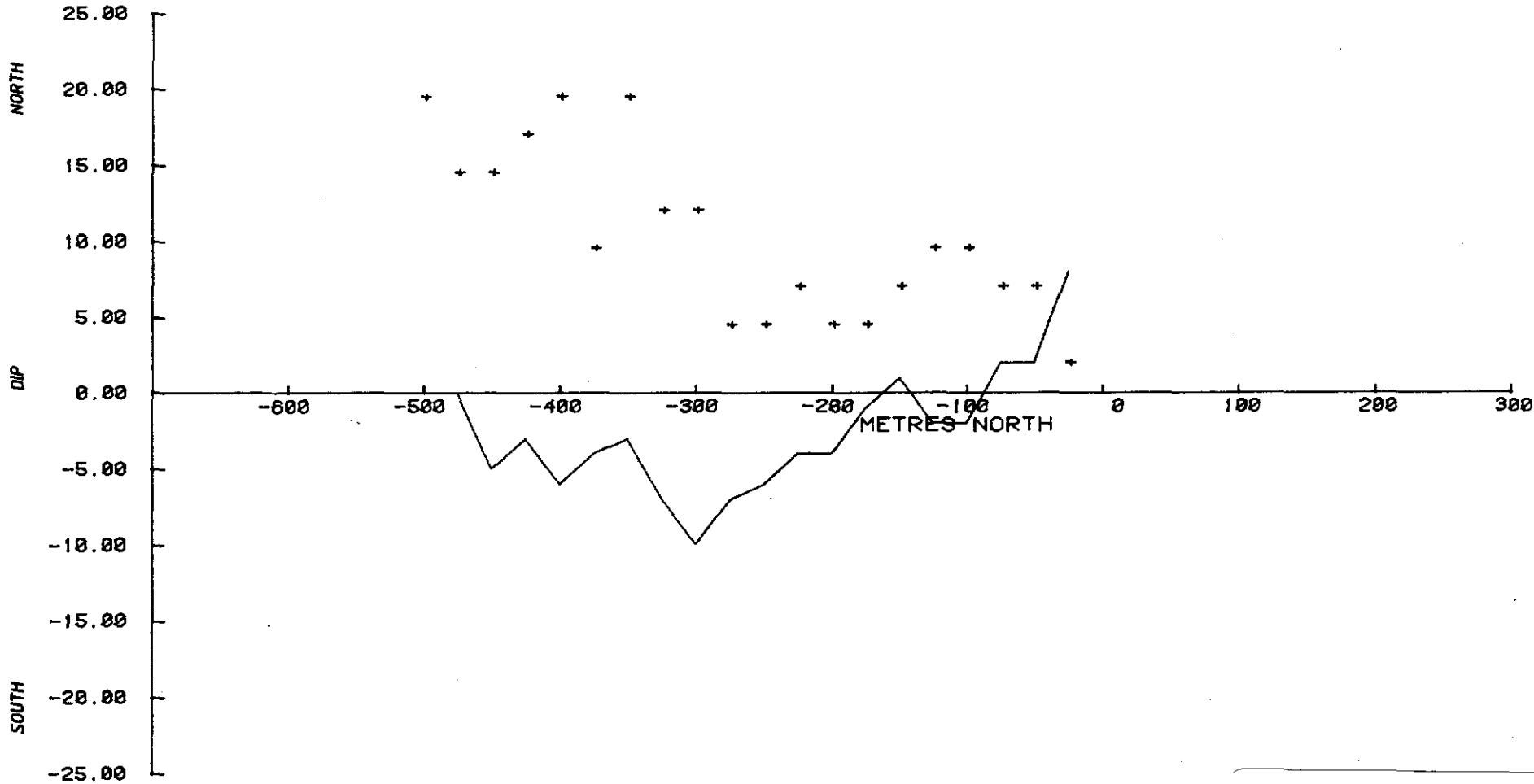
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
118xA, 119xC, LINE 2

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1064

91333



5 cm

DIP ANGLE (DEGREES)

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

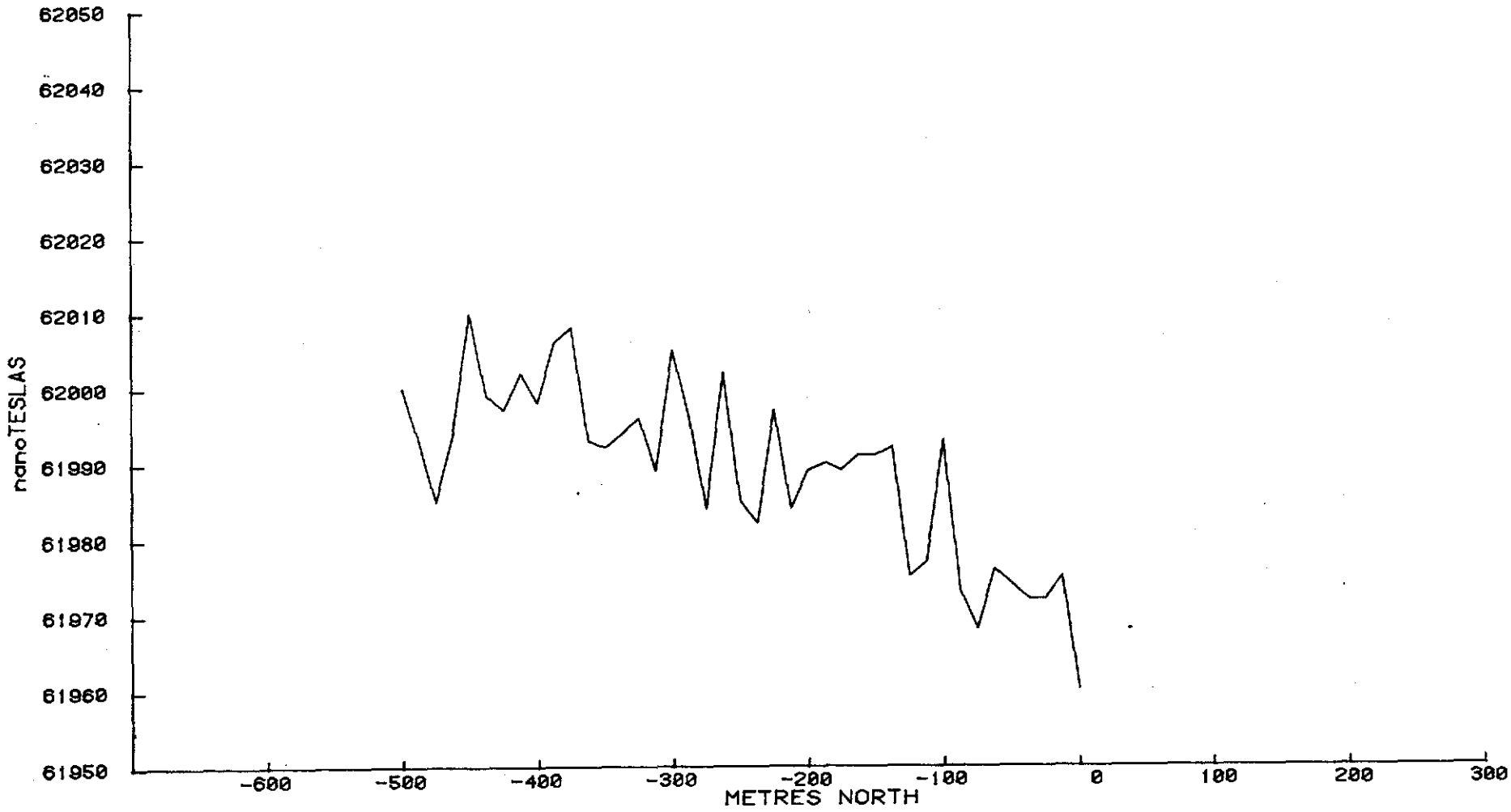
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
118xA, 119xC, LINE 3

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1065

613284



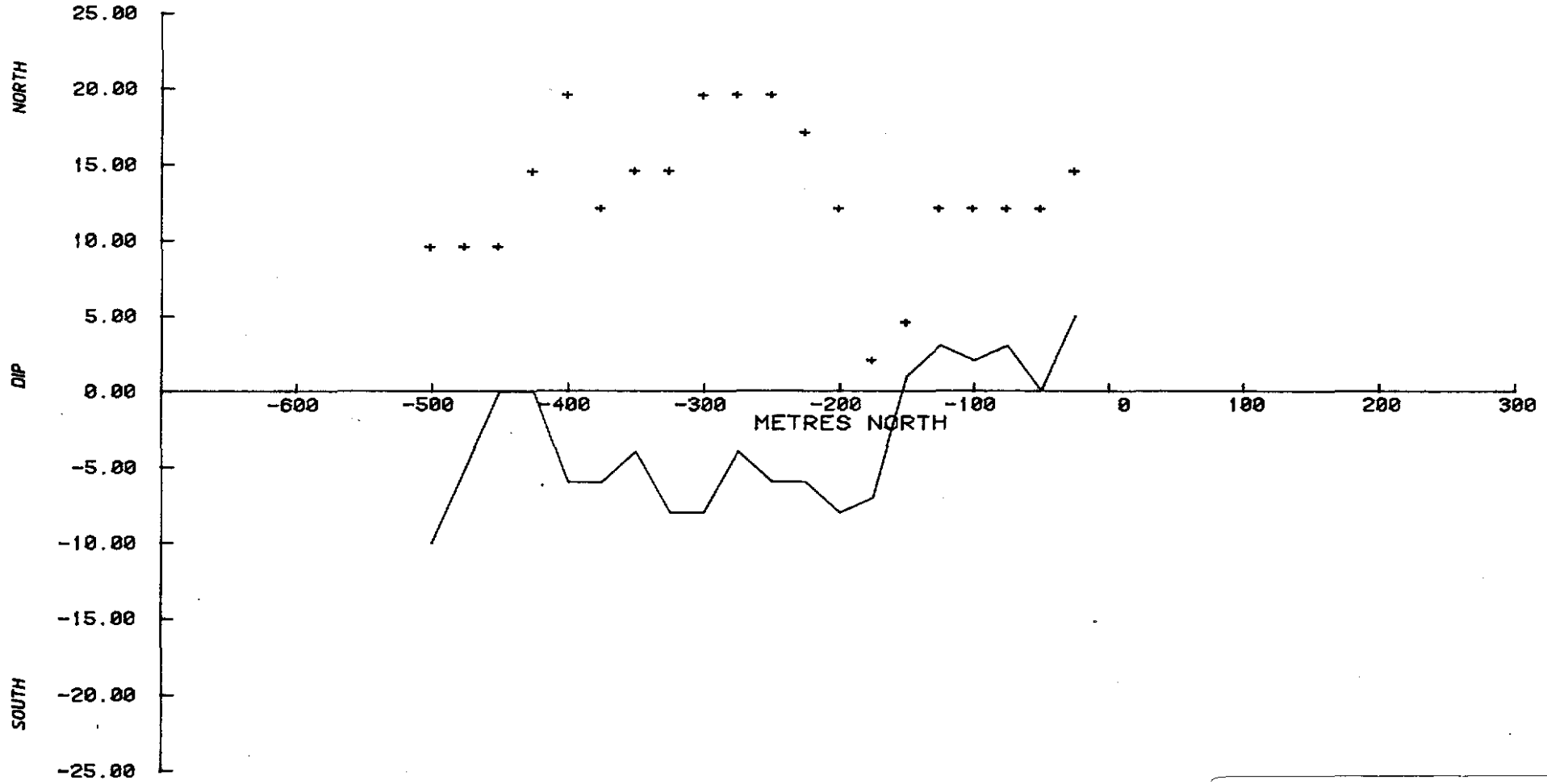
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
118xA, 119xC, LINE 3

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT No.	11883
DATE.	SEPT. 1982	TASh No.	1066



5 cm

DIP ANGLE (DEGREES)

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

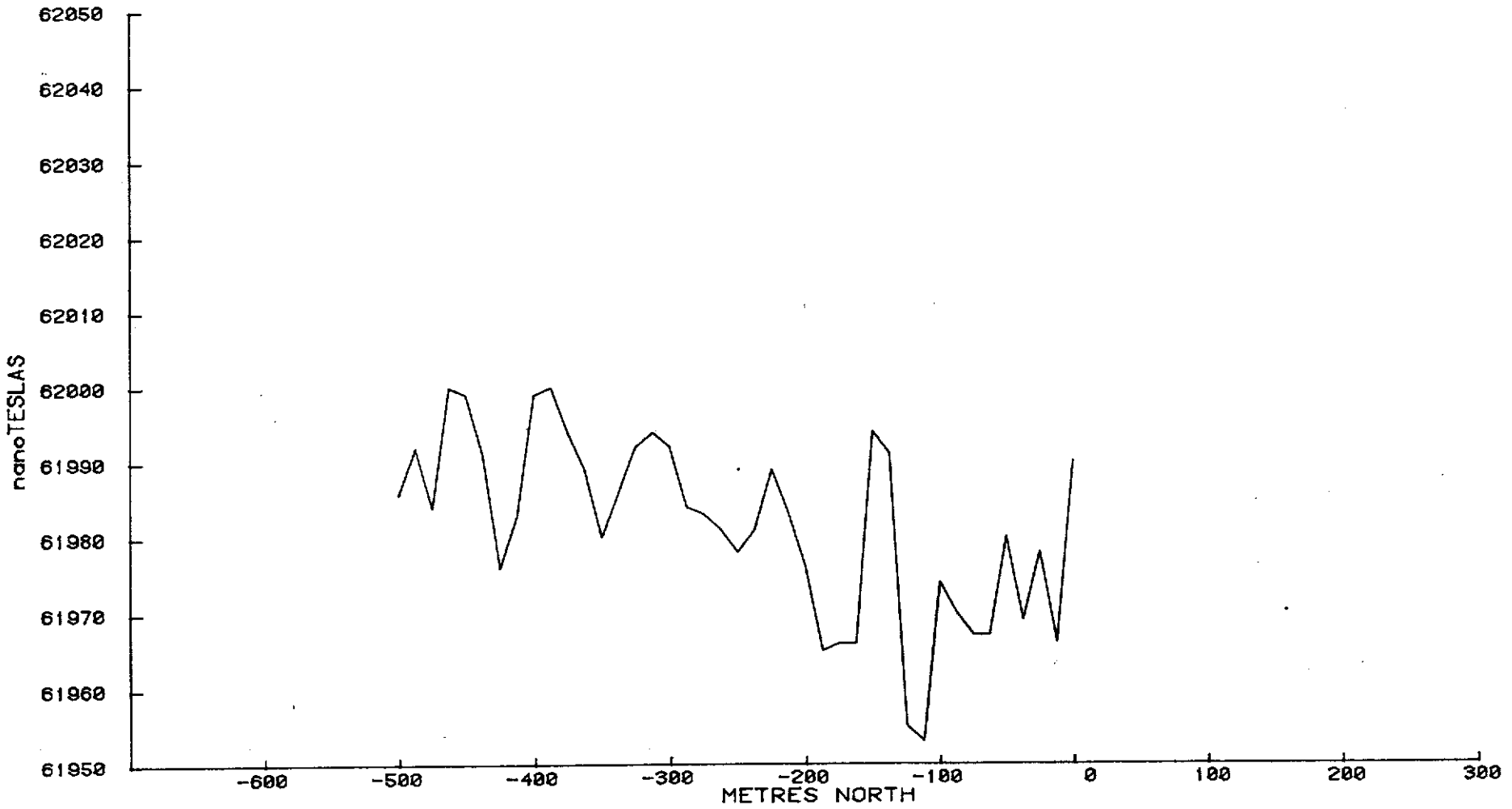
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
118xA, 119xC, LINE 4

REF	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASh N°	1067

9613



5 cm

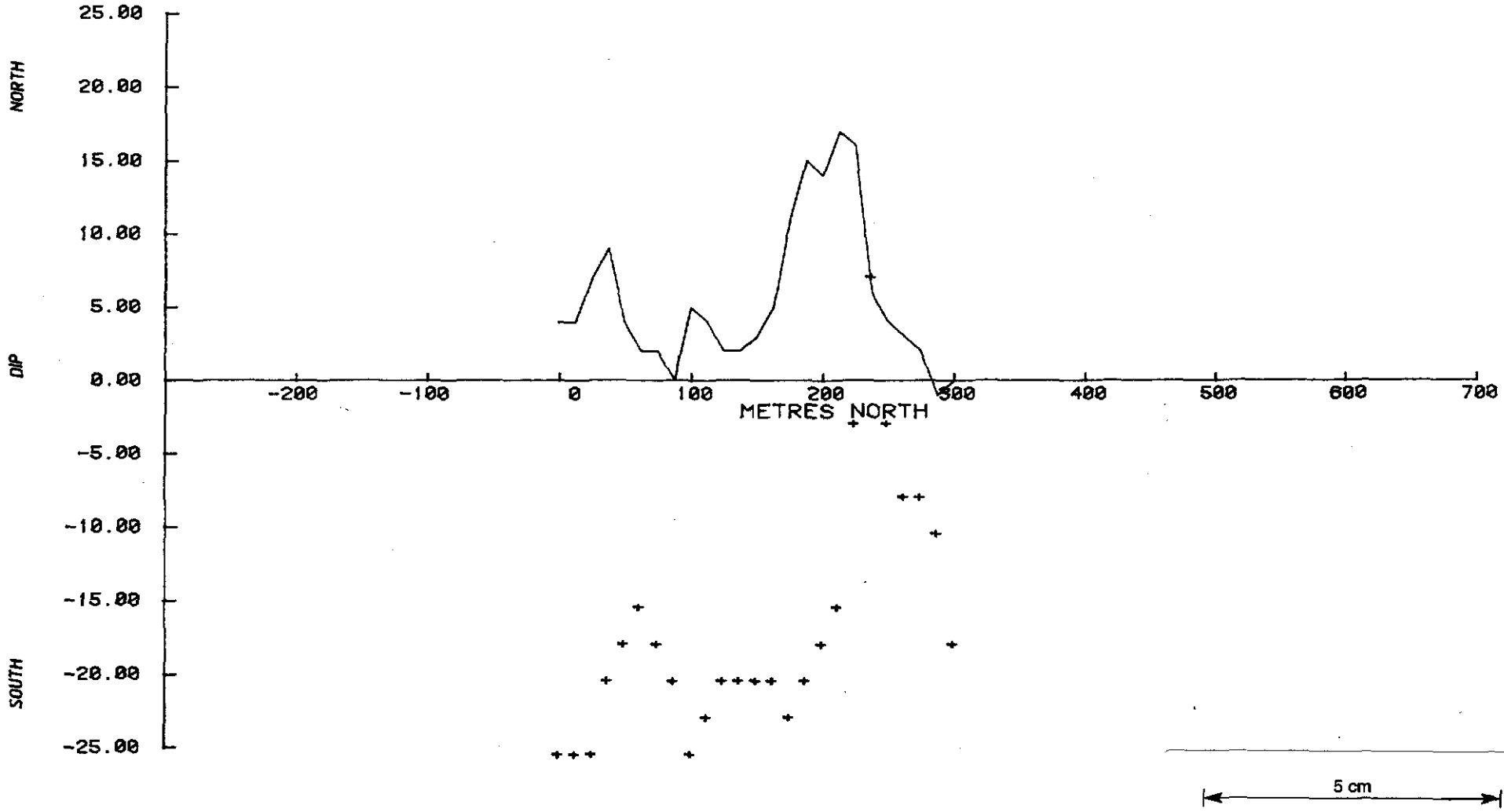
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
118xA, 119xC, LINE 4

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	T.A.Sh N°.	1068

6153/1



DIP ANGLE (DEGREES)

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

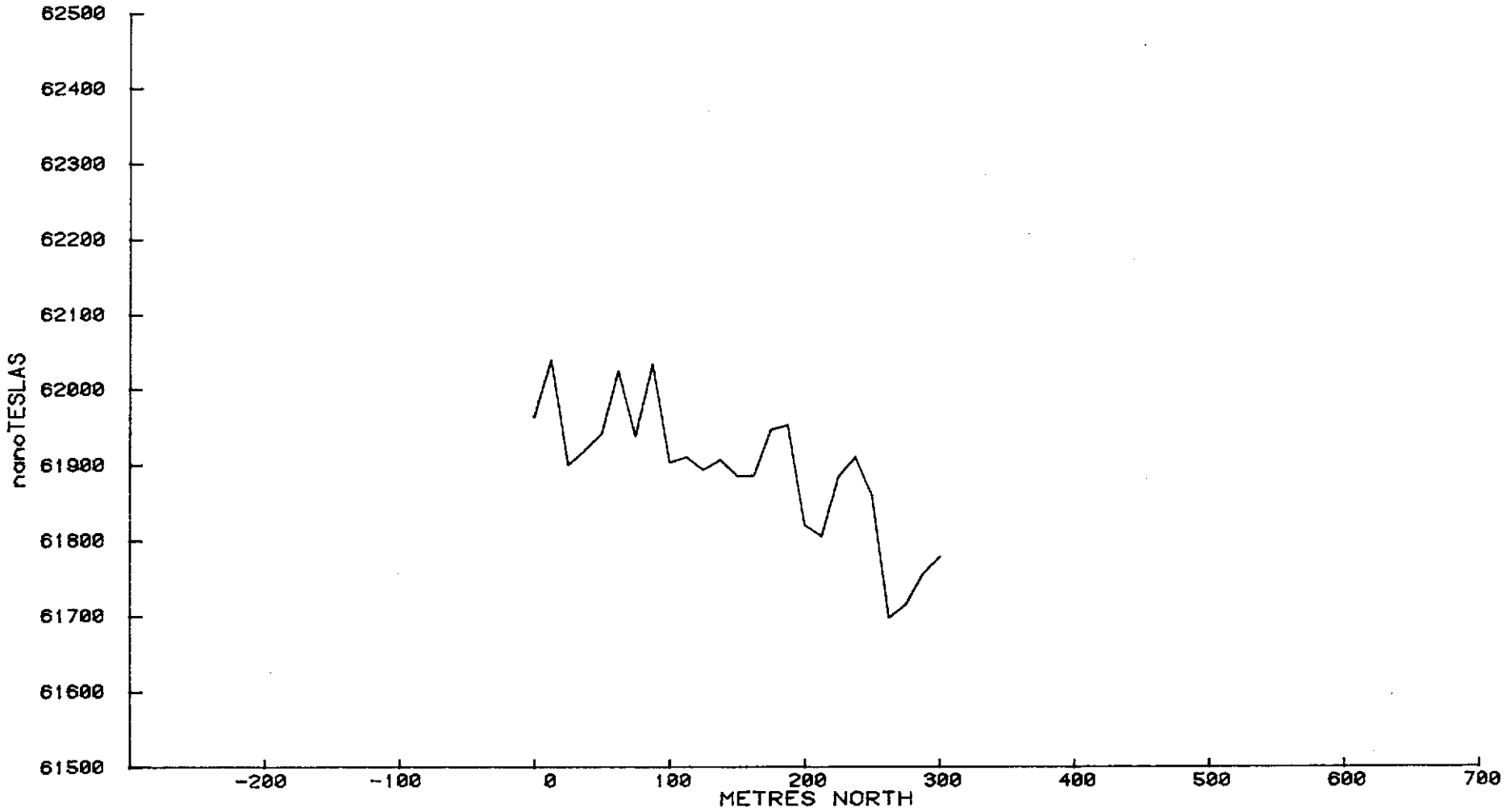
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
119xB

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1069

613378



5 cm

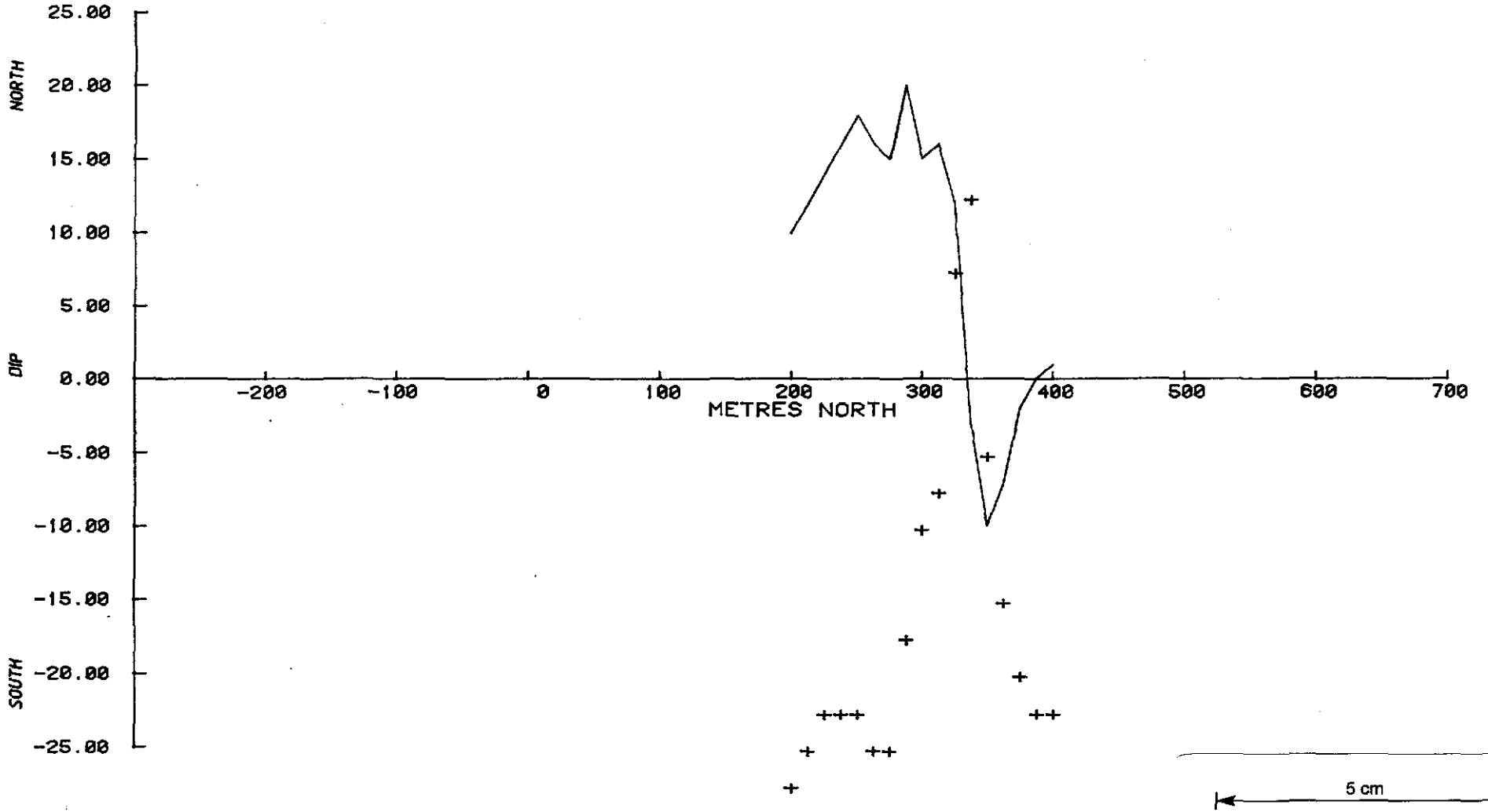
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
119xB

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1070

613379



DIP ANGLE (DEGREES)

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

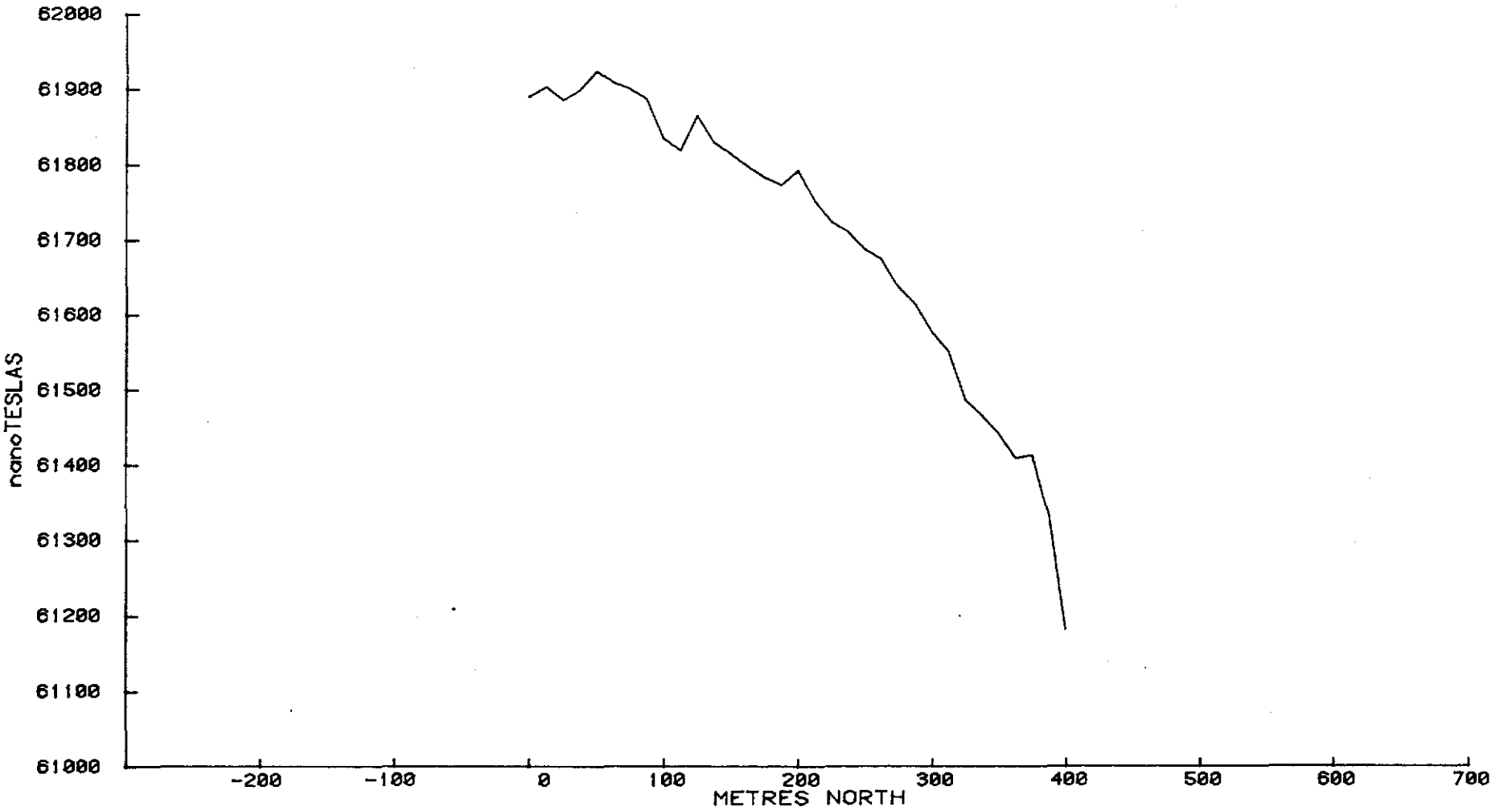
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
121xA LINE 100mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1071

613380



5 cm

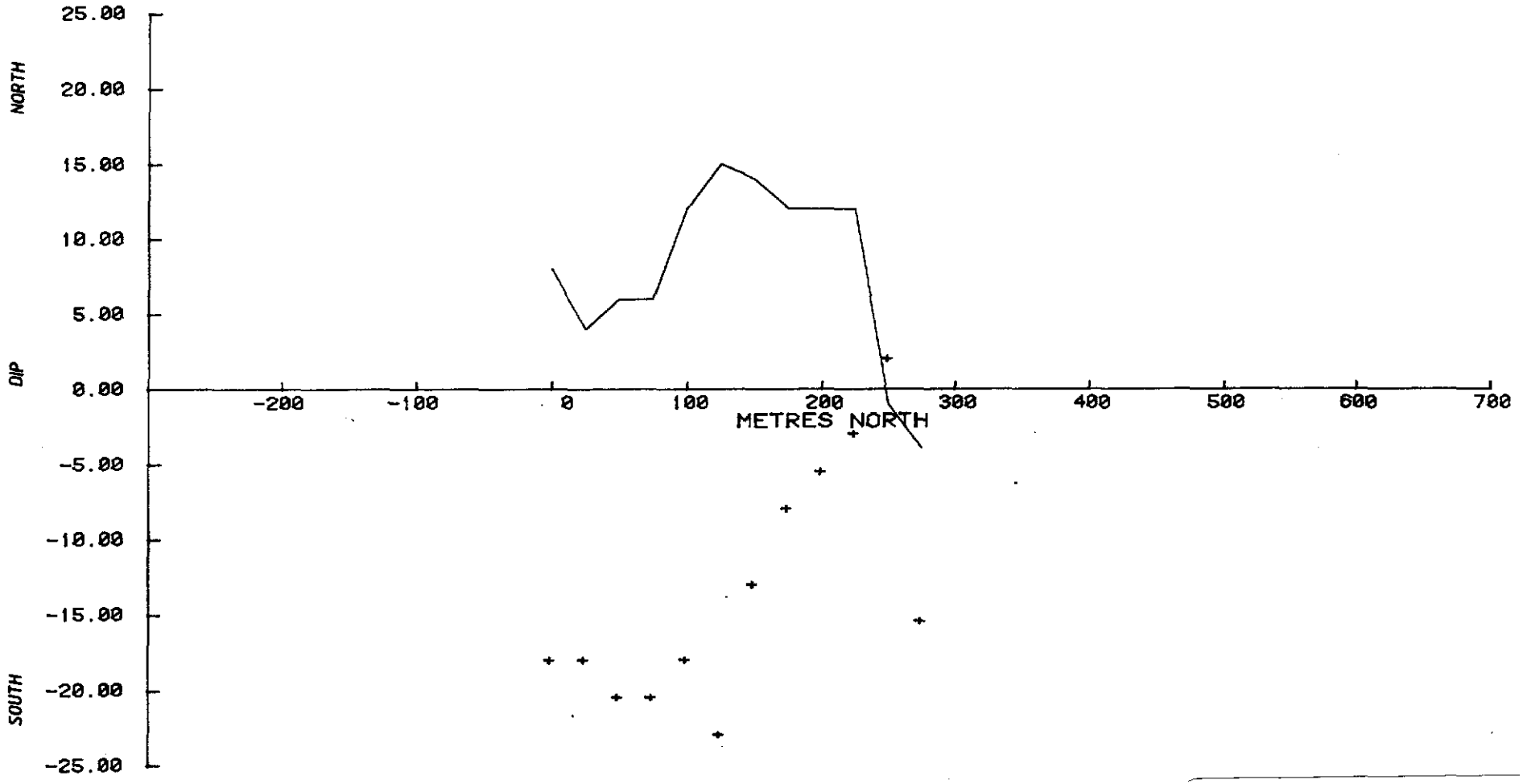
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
121xA LINE 100mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1072

19831



5 cm

DIP ANGLE (DEGREES)

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

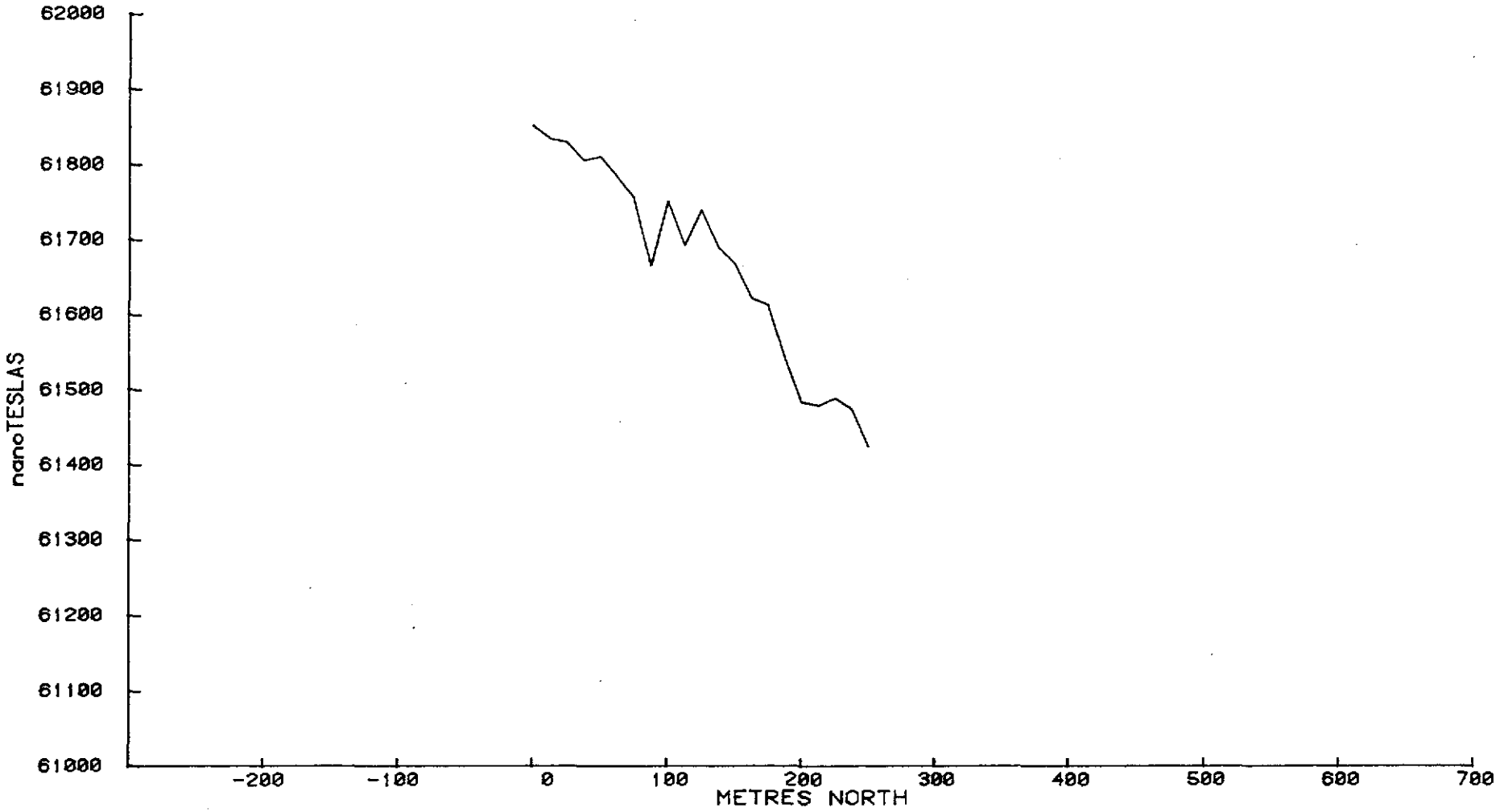
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
121xA LINE 200mW

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASI N°	1073

613382

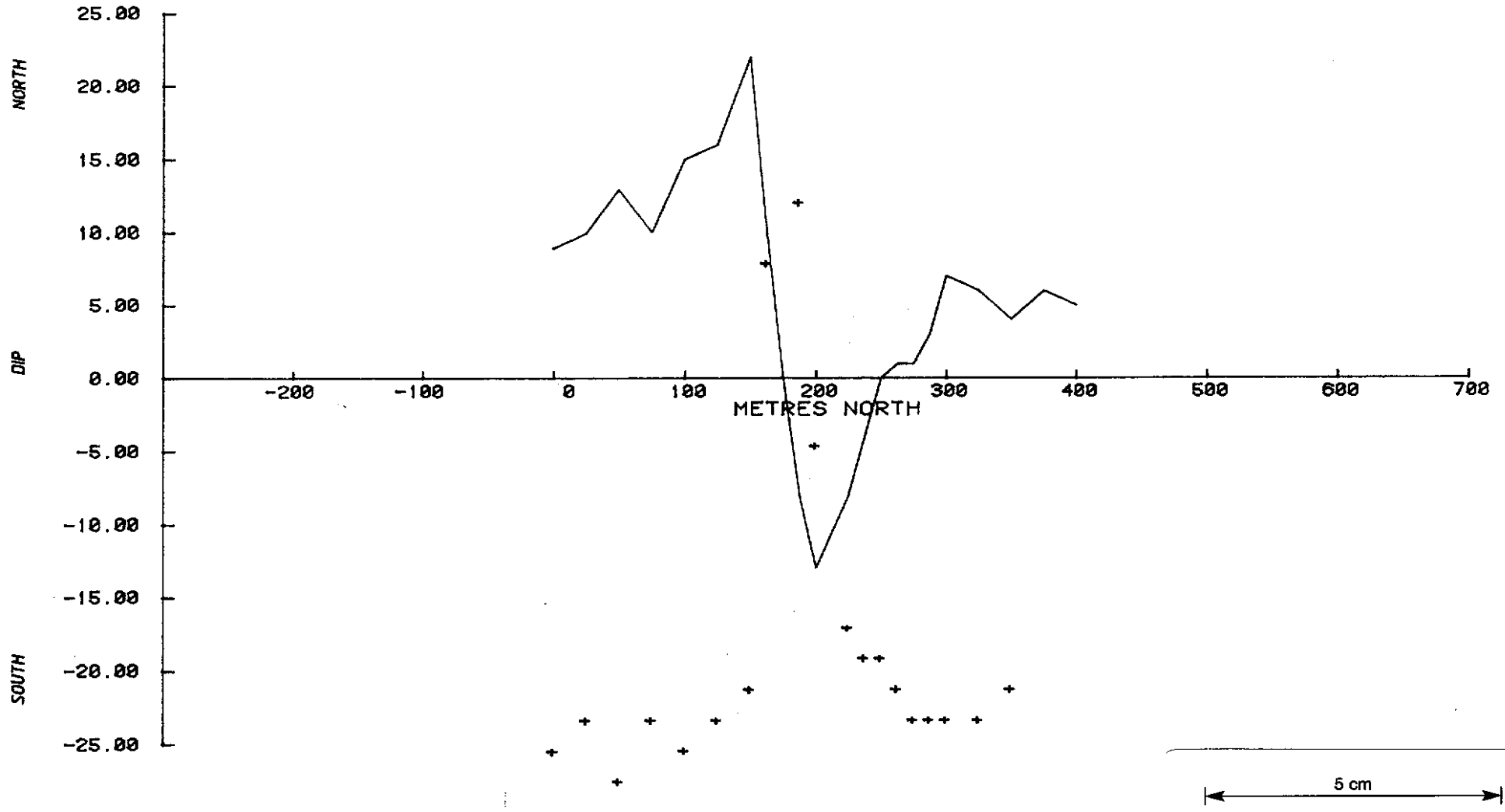


5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED		
SHEFFIELD E.L. 7/73 GROUND MAGNETICS 121xA LINE 200mW		
REF	SK55 - 3	
SCALE	AS SHOWN	DRAWN M. F.
AUTHOR	M. F.	REPORT N° 11883
DATE	SEPT. 1982	TASK N° 1074

61933



DIP ANGLE (DEGREES)

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

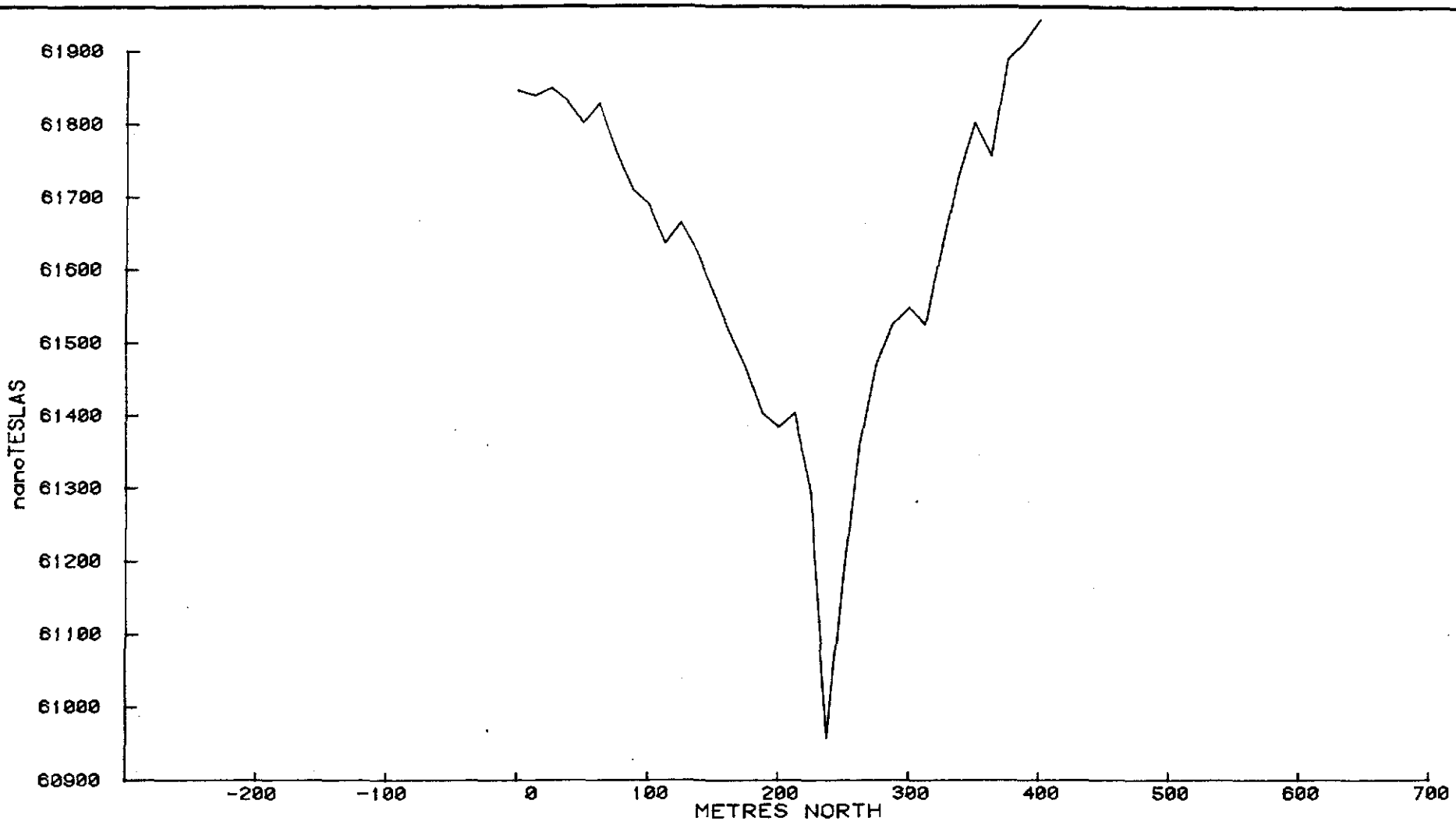
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
121xA LINE 0mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1075

61363



5 cm

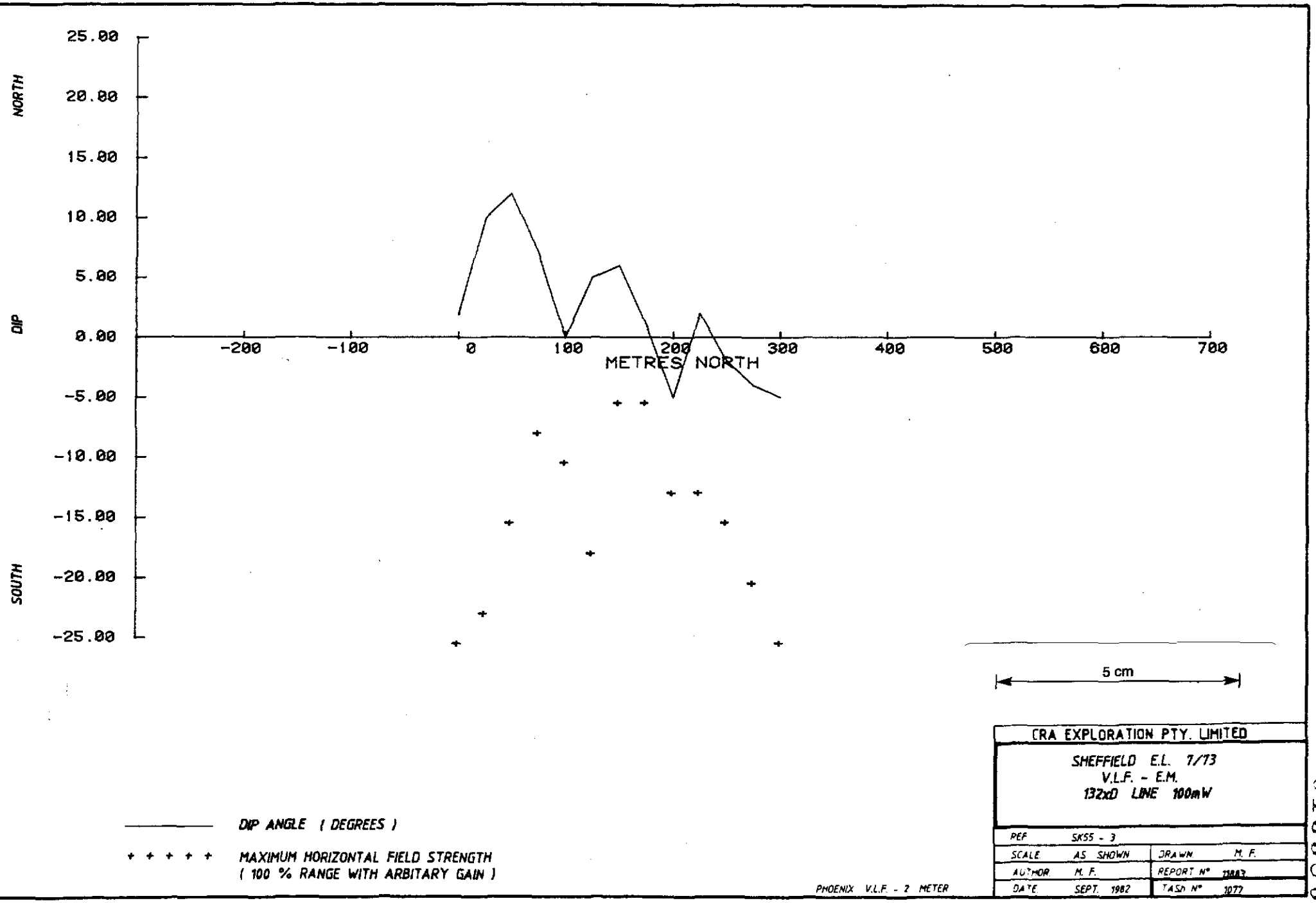
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
121xA LINE 0mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT No	11883
DATE	SEPT. 1982	TASK No	1076

613285

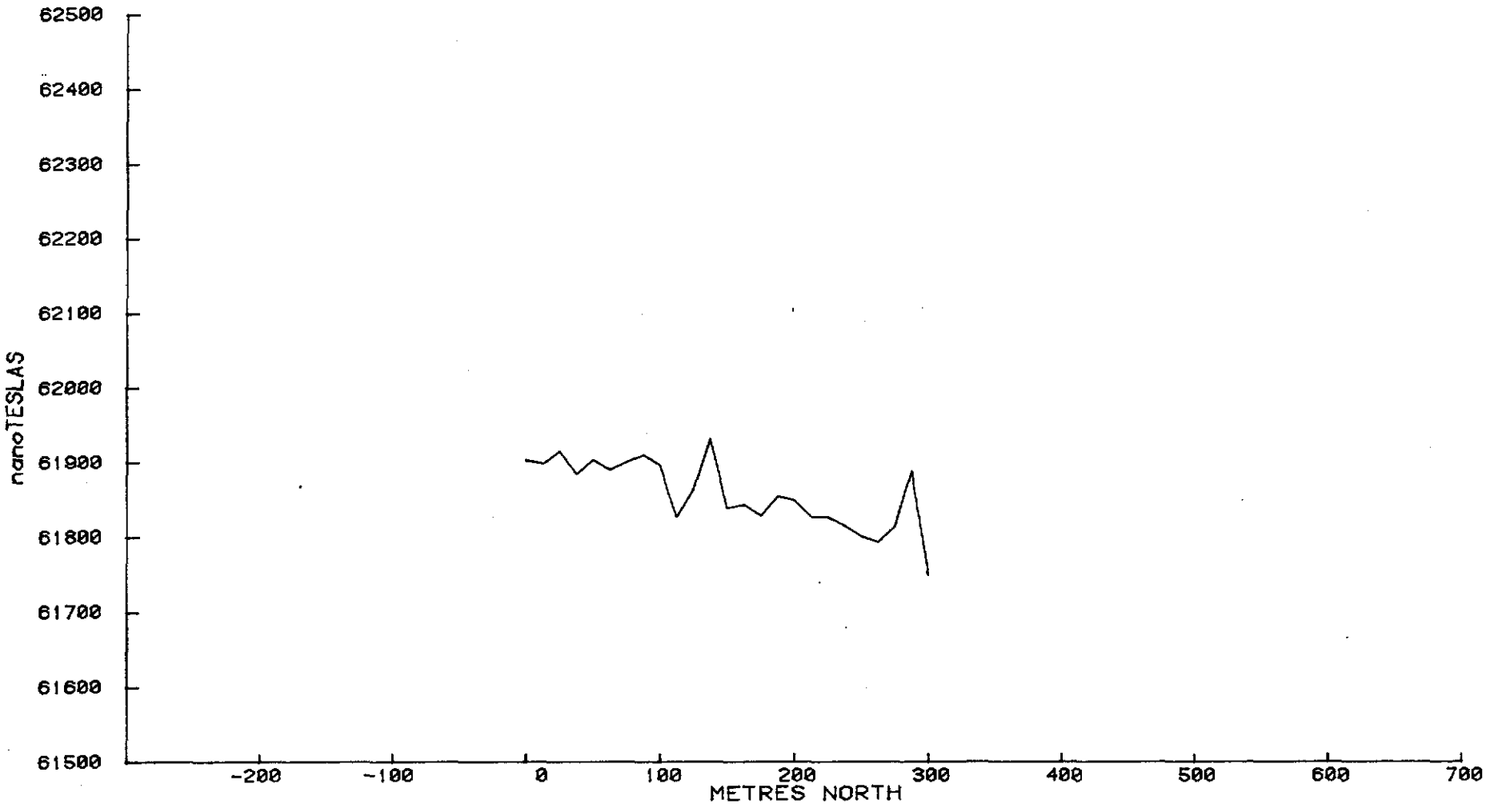


CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
132xD LINE 100mW

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1077

6133

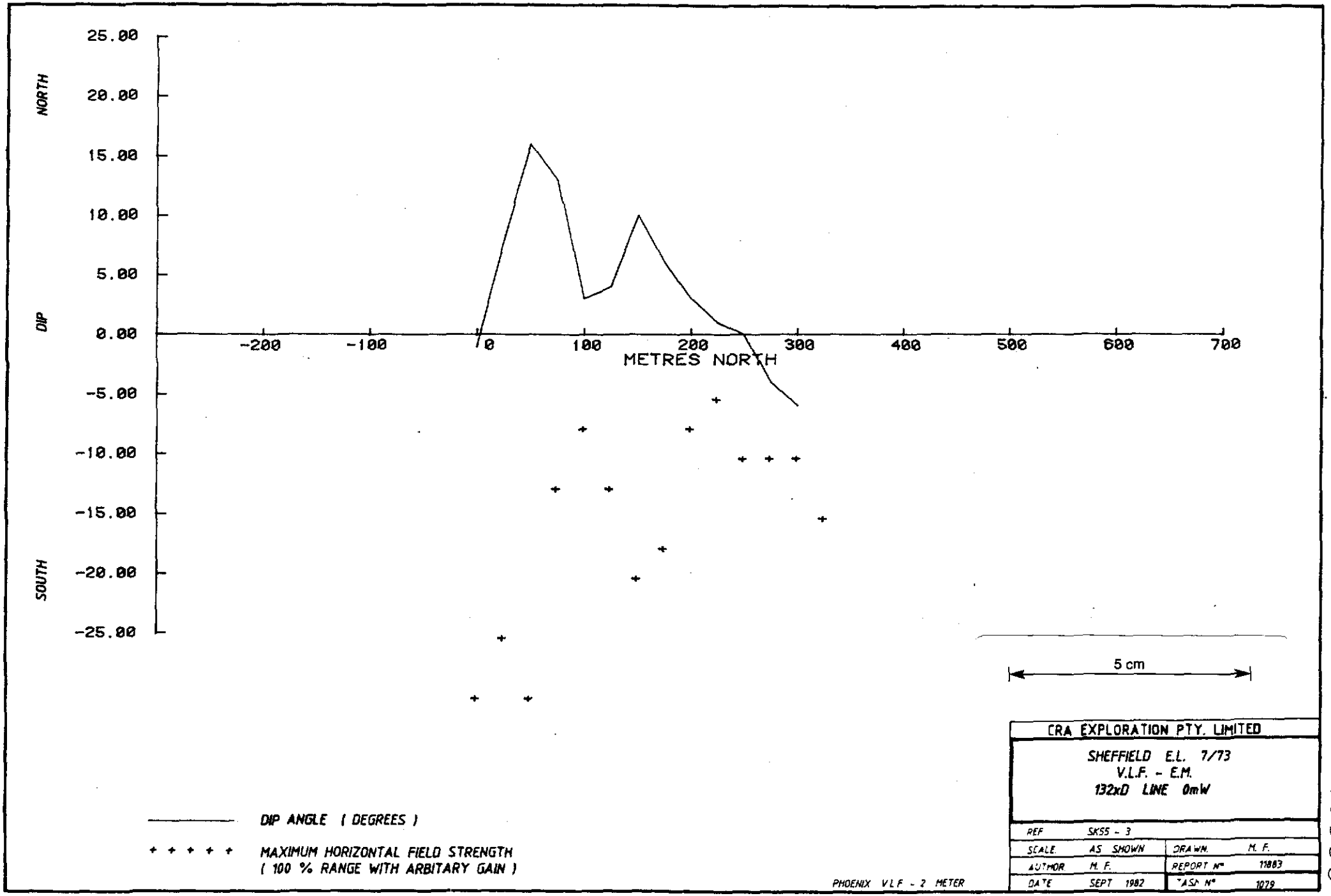


5 cm

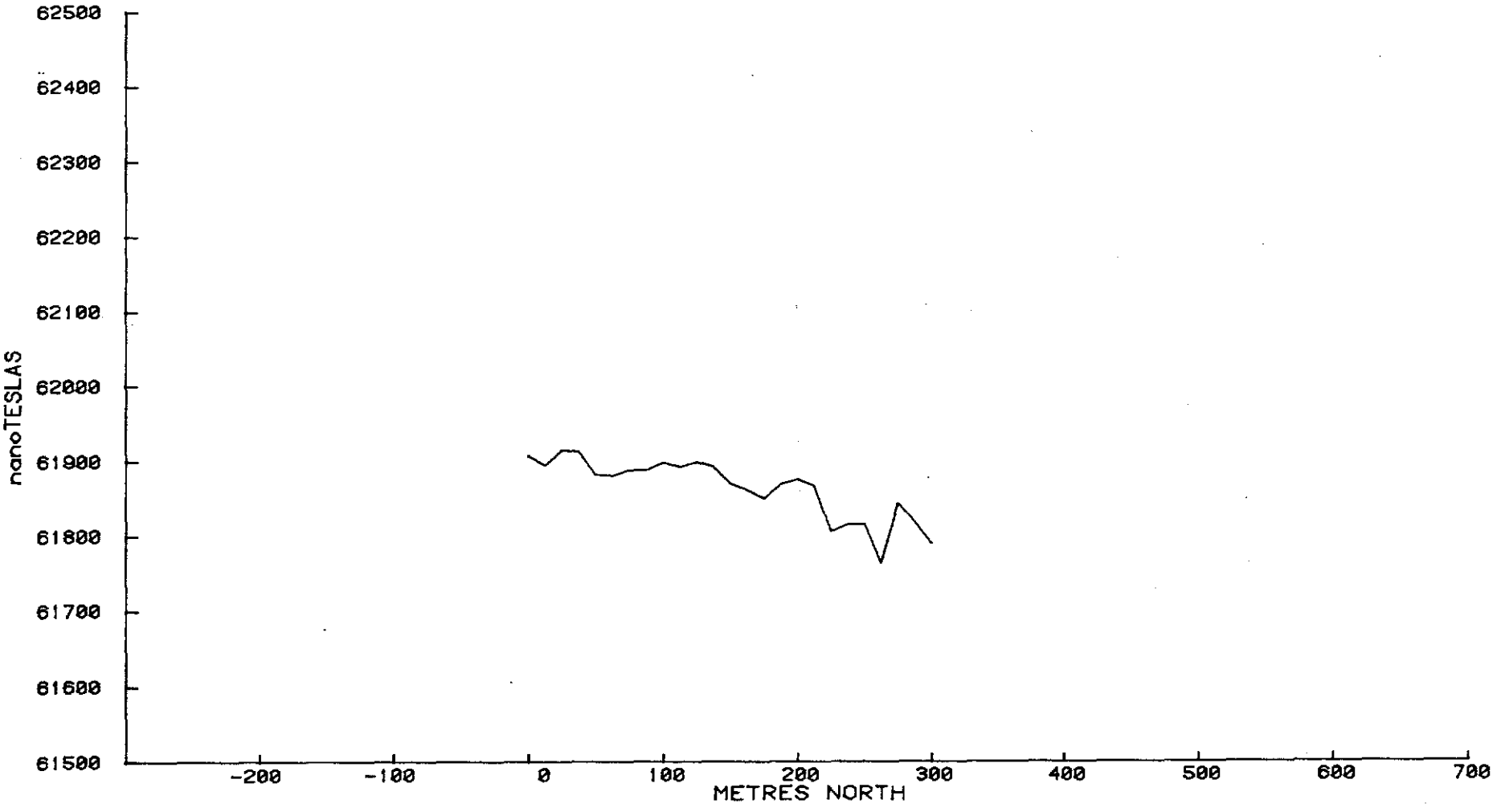
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED			
SHEFFIELD E.L. 7/73 GROUND MAGNETICS 132xD LINE 100mW			
REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1078

613383


25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
NORTH
DIP
SOUTH
-200
-100
0
100
200
300
400
500
600
700
METRES NORTH
5 cm
DIP ANGLE (DEGREES)
MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITARY GAIN)
PHOENIX V L F - 2 METER
CRA EXPLORATION PTY. LIMITED
SHEFFIELD E.L. 7/73
V.L.F. - E.M.
132xD LINE 0mW
REF SK55 - 3
SCALE AS SHOWN
DRAWN M. F.
AUTHOR M. F.
REPORT N° 11883
DATE SEPT 1982
TASK N° 1079

013328

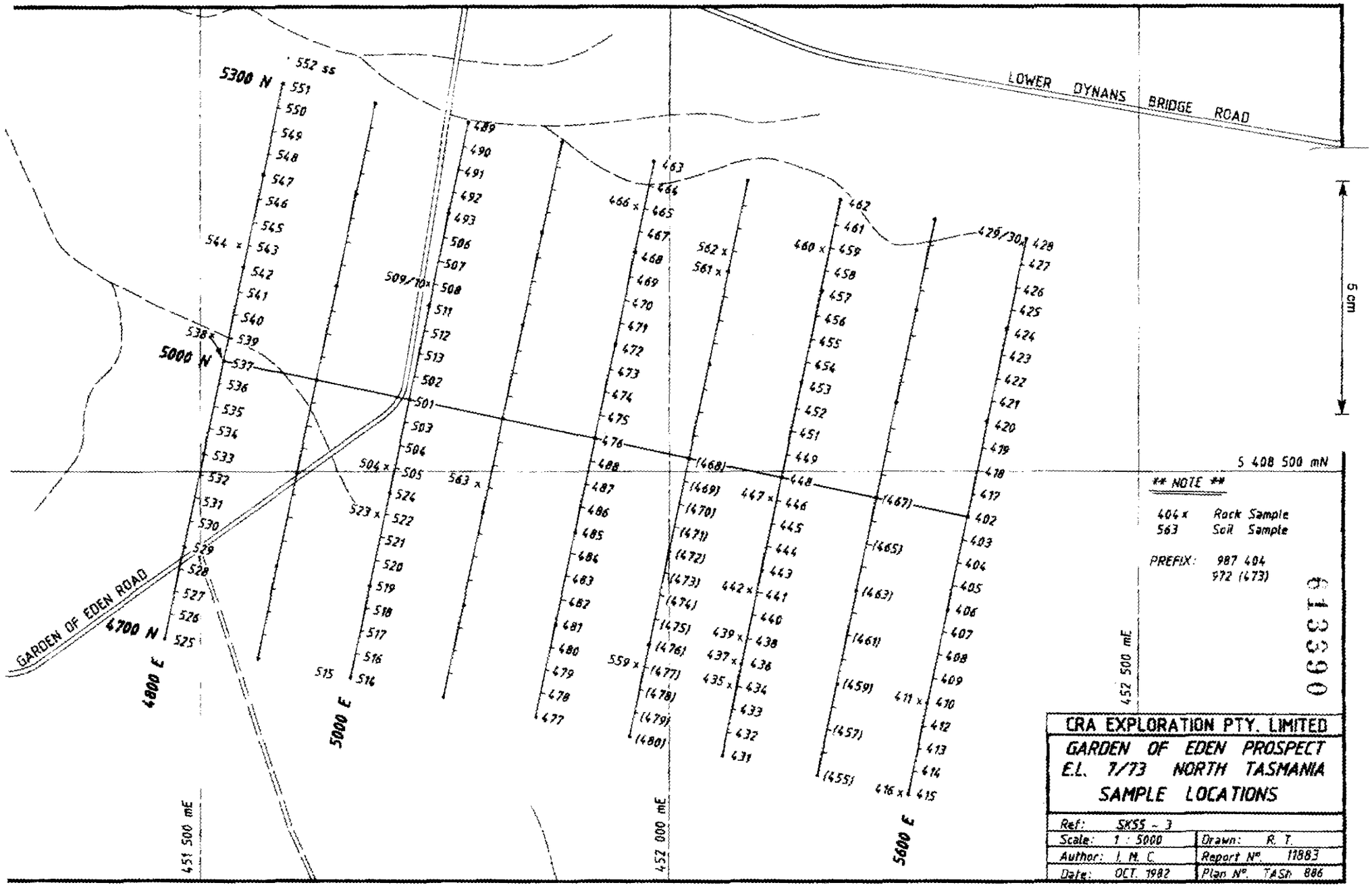


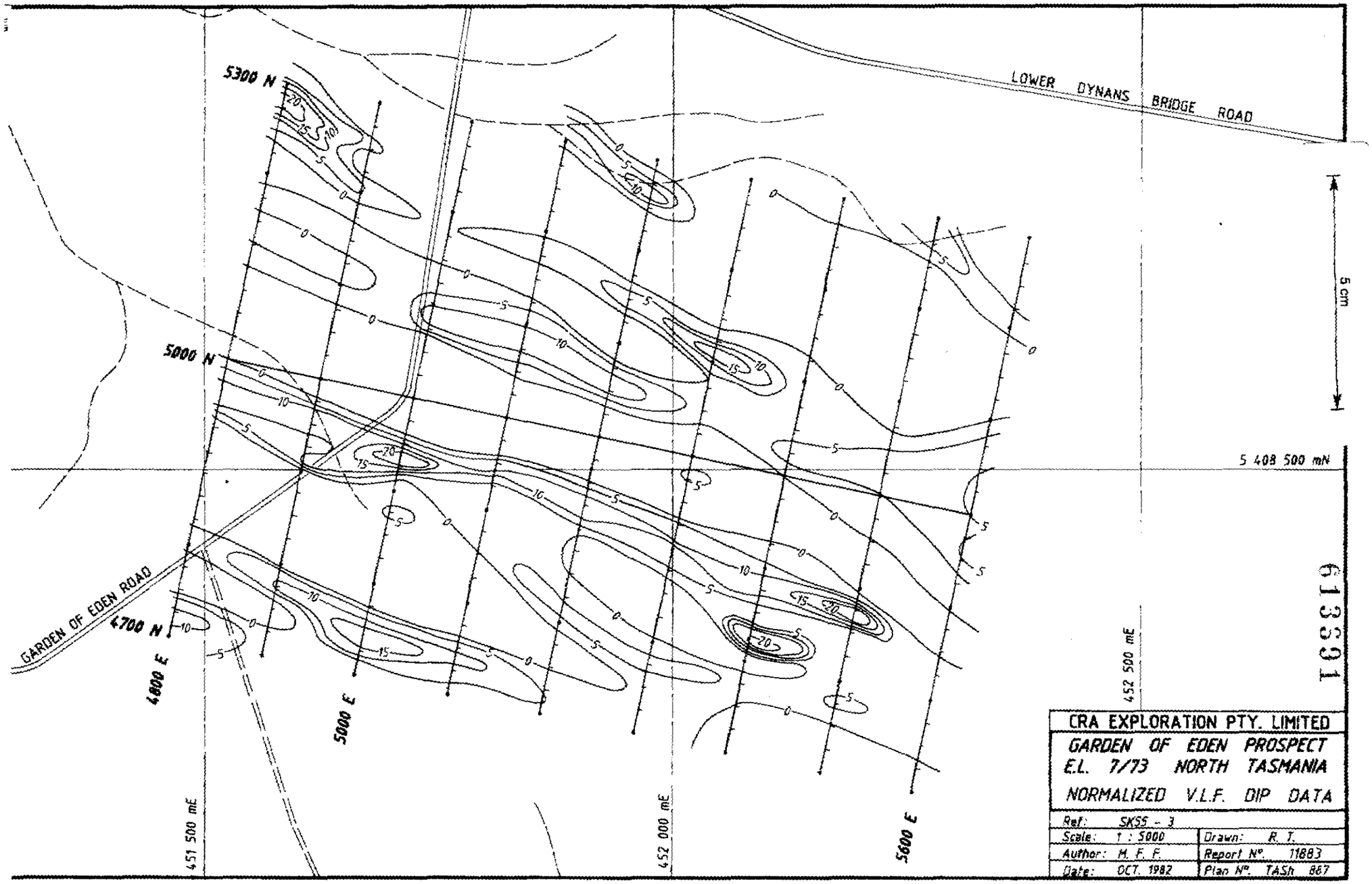
5 cm

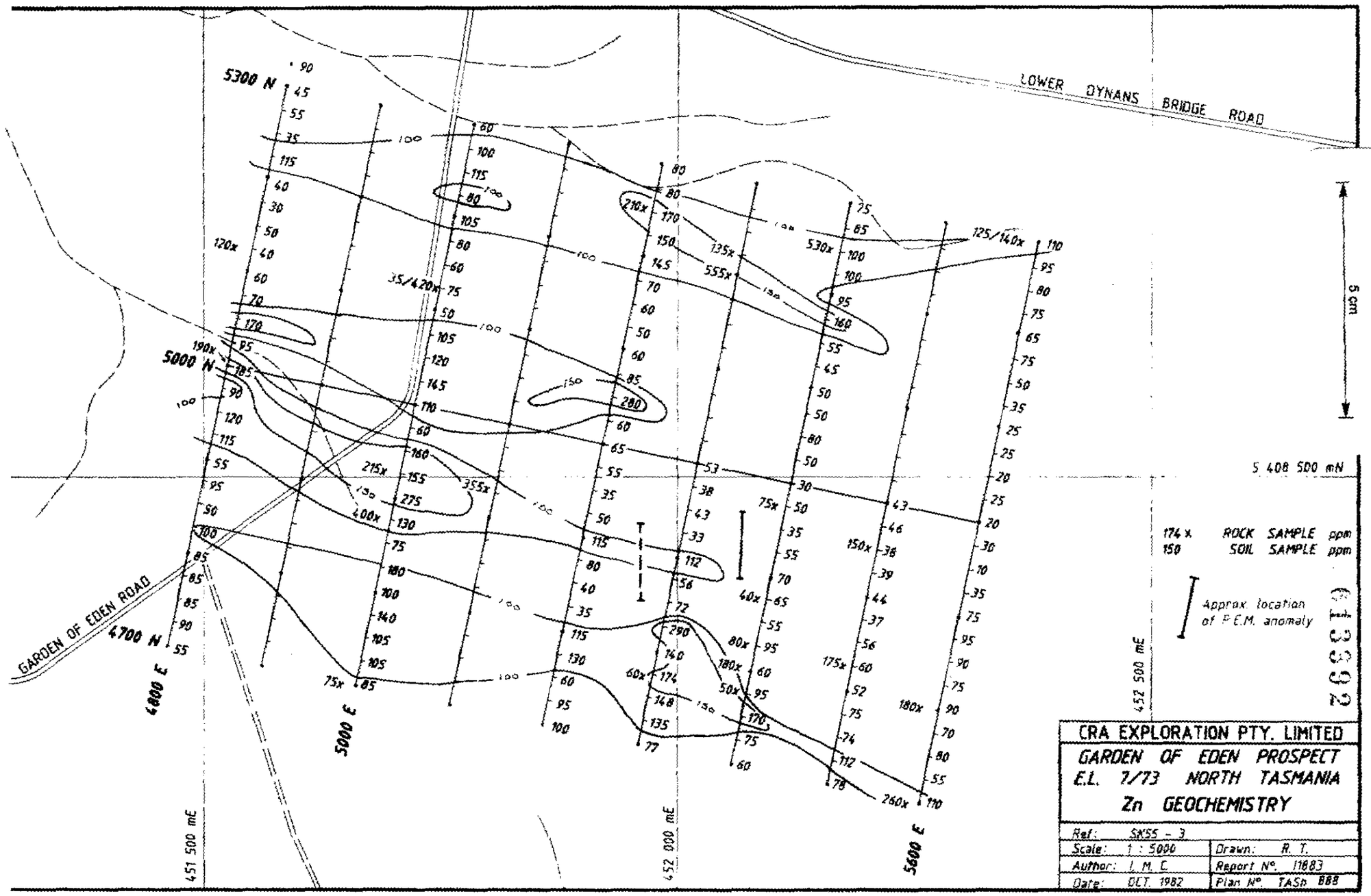
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED			
SHEFFIELD E.L. 7/73 GROUND MAGNETICS 132xD LINE 0mW			
REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASh N°	1080

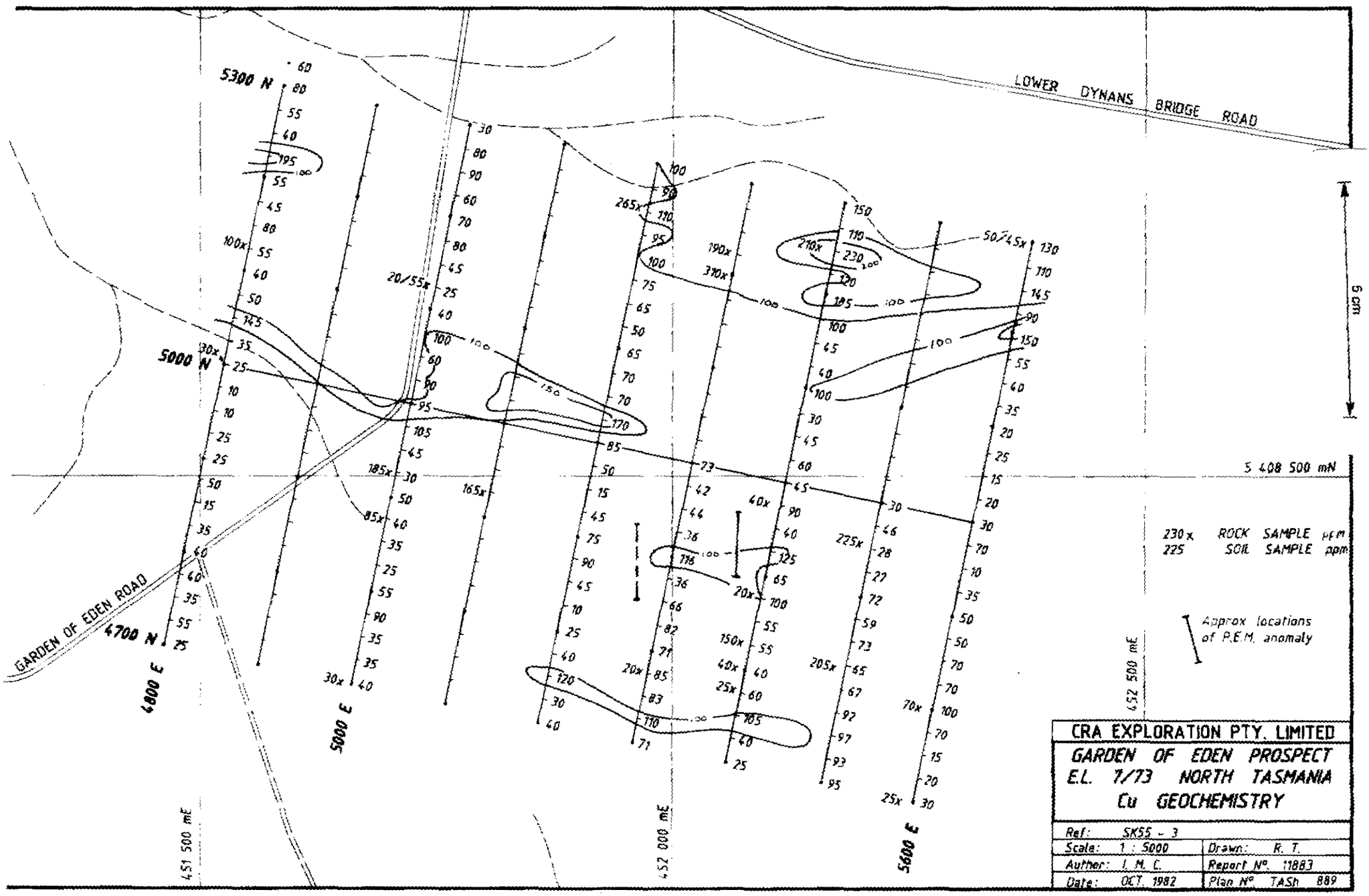
613369


LOWER DYNANS BRIDGE ROAD
GARDEN OF EDEN ROAD
5300 N
5000 N
4700 N
4800 E
5000 E
5600 E
552 ss
564 x
538 x
509/10x
504 x
523 x
515
563 x
466 x
582 x
561 x
559 x
460 x
447 x
442 x
439 x
437 x
435 x
426/30x
411 x
416 x
5 cm
S 408 500 mN
452 500 mE
451 500 mE
** NOTE **
404 x Rock Sample
563 Soil Sample
PREFIX: 987 404
972 (473)
CRA EXPLORATION PTY. LIMITED
GARDEN OF EDEN PROSPECT
E.L. 7/73 NORTH TASMANIA
SAMPLE LOCATIONS
Ref: SKSS - 3
Scale: 1 : 5000
Drawn: R. T.
Author: I. M. C.
Report N°. 11883
Date: OCT. 1982
Plan N°. TASh 886
06339

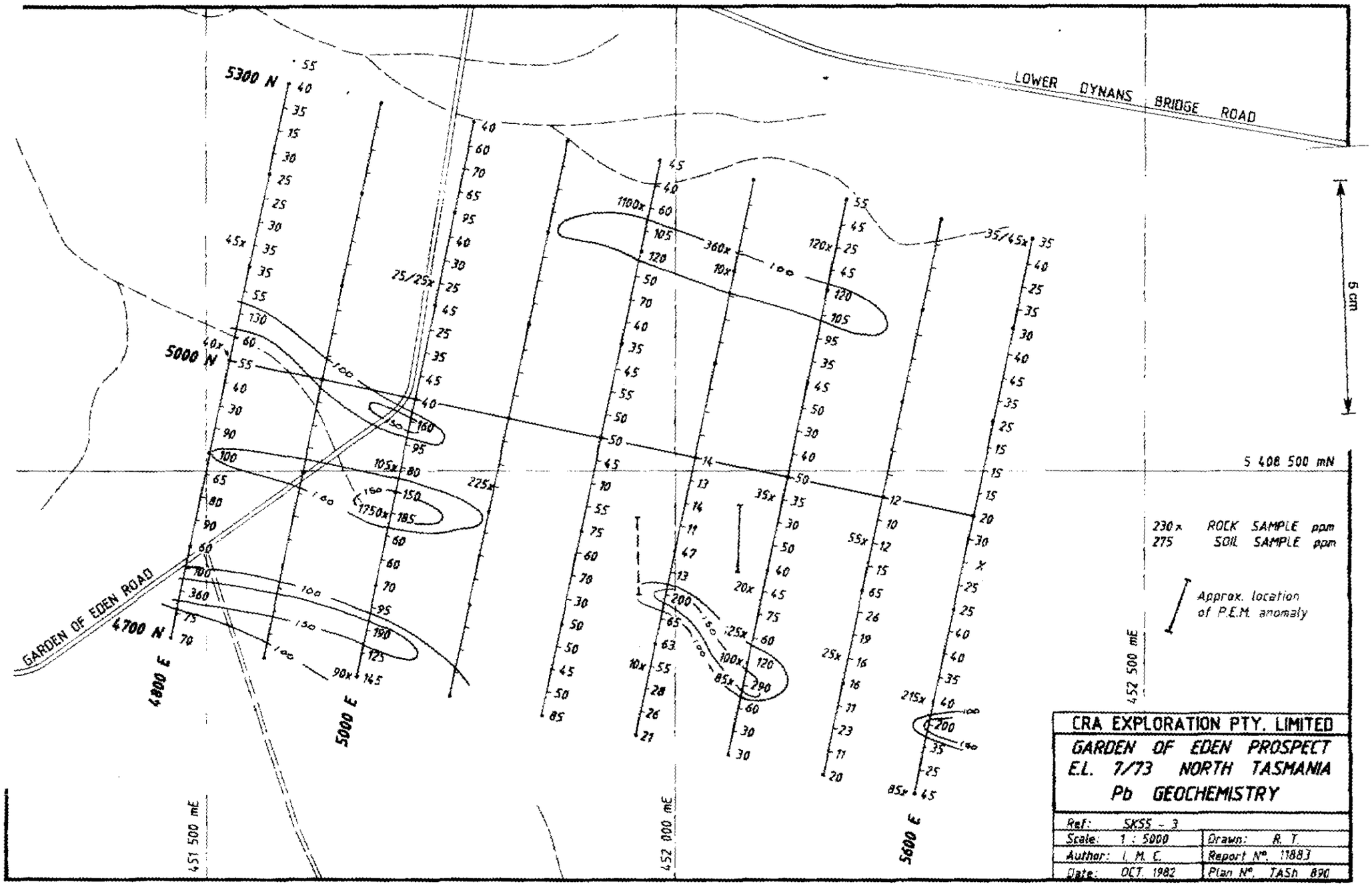

5300 N
5000 N
4700 N
4800 E
5000 E
5600 E
LOWER DYNANS BRIDGE ROAD
GARDEN OF EDEN ROAD
5 cm
5 408 500 mN
452 500 mE
451 500 mE
452 000 mE
6133691
CRA EXPLORATION PTY. LIMITED
GARDEN OF EDEN PROSPECT
E.L. 7/73 NORTH TASMANIA
NORMALIZED V.L.F. DIP DATA
Ref: SKS5 - 3
Scale: 1 : 5000
Drawn: R. T.
Author: M. F. F.
Report N°. 11883
Date: OCT. 1982
Plan N°. TASh 867


LOWER DYNANS BRIDGE ROAD
GARDEN OF EDEN ROAD
5300 N
5000 N
4700 N
4800 E
5000 E
5600 E
451 500 mE
452 000 mE
452 500 mE
5 408 500 mN
5 cm
174 x ROCK SAMPLE ppm
150 SOIL SAMPLE ppm
Approx. location of P.E.M. anomaly
CRA EXPLORATION PTY. LIMITED
GARDEN OF EDEN PROSPECT
E.L. 7/73 NORTH TASMANIA
Zn GEOCHEMISTRY
Ref: SK55 - 3
Scale: 1 : 5000
Drawn: R. T.
Author: I. M. C.
Report No. 11683
Date: OCT. 1982
Plan No. TASP 888

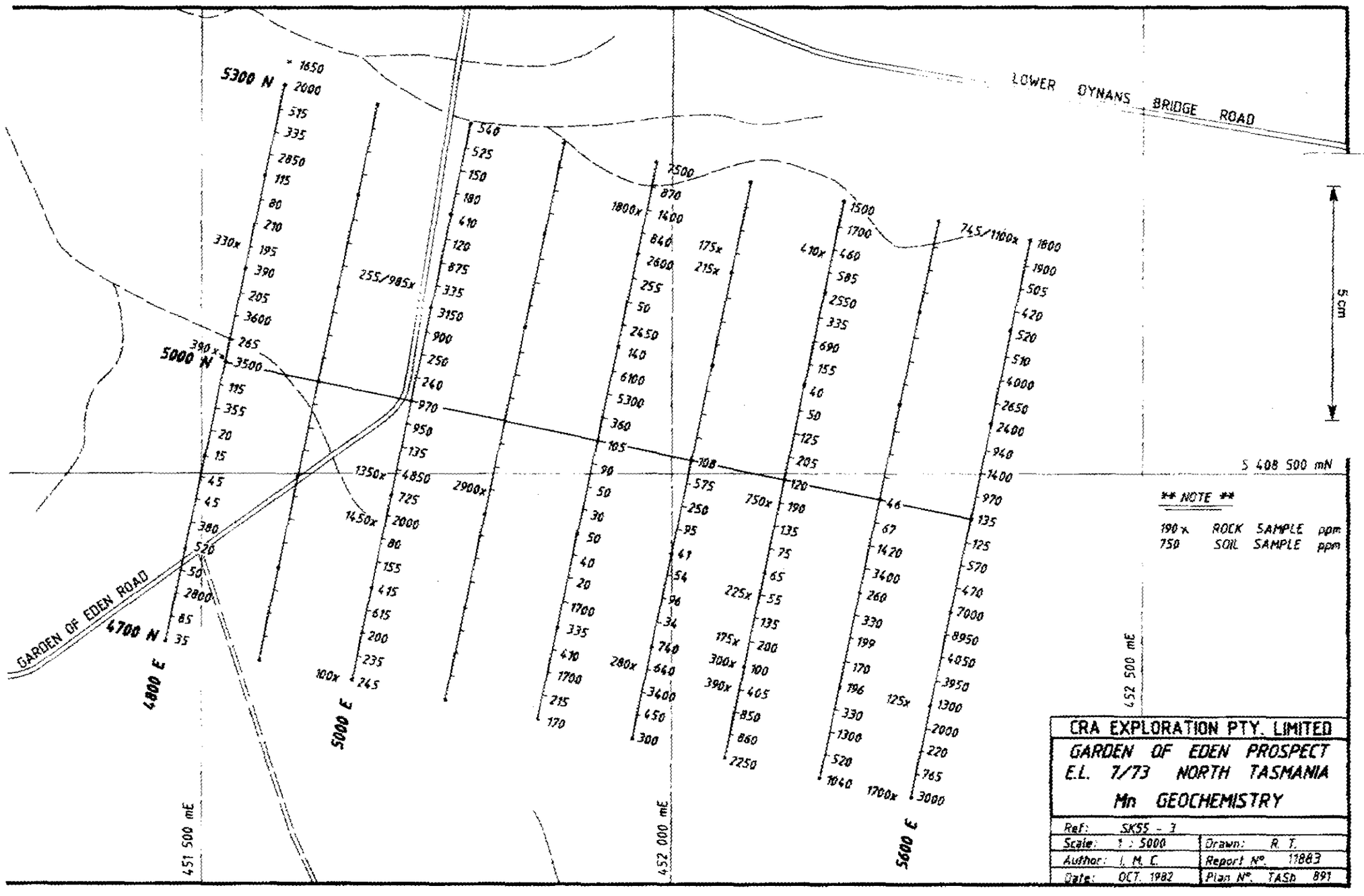
613393


LOWER DYNANS BRIDGE ROAD
GARDEN OF EDEN ROAD
5300 N
5000 N
4700 N
4800 E
5000 E
5600 E
451 500 mE
452 000 mE
452 500 mE
5 408 500 mN
5 cm
230 x ROCK SAMPLE µg/m
225 SOIL SAMPLE ppm
Approx locations of P.E.M. anomaly
CRA EXPLORATION PTY. LIMITED
GARDEN OF EDEN PROSPECT
E.L. 7/73 NORTH TASMANIA
Cu GEOCHEMISTRY
Ref: SK55 - 3
Scale: 1 : 5000
Drawn: K. T.
Author: I. M. C.
Report N° 11883
Date: OCT. 1982
Plan N° TASh 889

613394


LOWER DYNANS BRIDGE ROAD
GARDEN OF EDEN ROAD
5300 N
5000 N
4700 N
4800 E
5000 E
5600 E
451 500 mE
452 000 mE
452 500 mE
5 408 500 mN
6 cm
230 x ROCK SAMPLE ppm
275 SOIL SAMPLE ppm
Approx. location of P.E.M. anomaly
CRA EXPLORATION PTY. LIMITED
GARDEN OF EDEN PROSPECT
E.L. 7/73 NORTH TASMANIA
Pb GEOCHEMISTRY
Ref: SK55 - 3
Scale: 1 : 5000
Drawn: R. T.
Author: I. M. C.
Report N°. 11883
Date: OCT. 1982
Plan N°. TASh 890

613395


LOWER OYNANS BRIDGE ROAD
GARDEN OF EDEN ROAD
5300 N
5000 N
4700 N
4800 E
5000 E
5600 E
451 500 mE
452 000 mE
452 500 mE
S 408 500 mN
5 cm
** NOTE **
190 x ROCK SAMPLE ppm
750 SOIL SAMPLE ppm
CRA EXPLORATION PTY. LIMITED
GARDEN OF EDEN PROSPECT
E.L. 7/73 NORTH TASMANIA
Mn GEOCHEMISTRY
Ref: SK55 - 3
Scale: 1 : 5000
Drawn: R. T.
Author: I. M. C.
Report N°. 11883
Date: OCT. 1982
Plan N°. TASb 891

613396

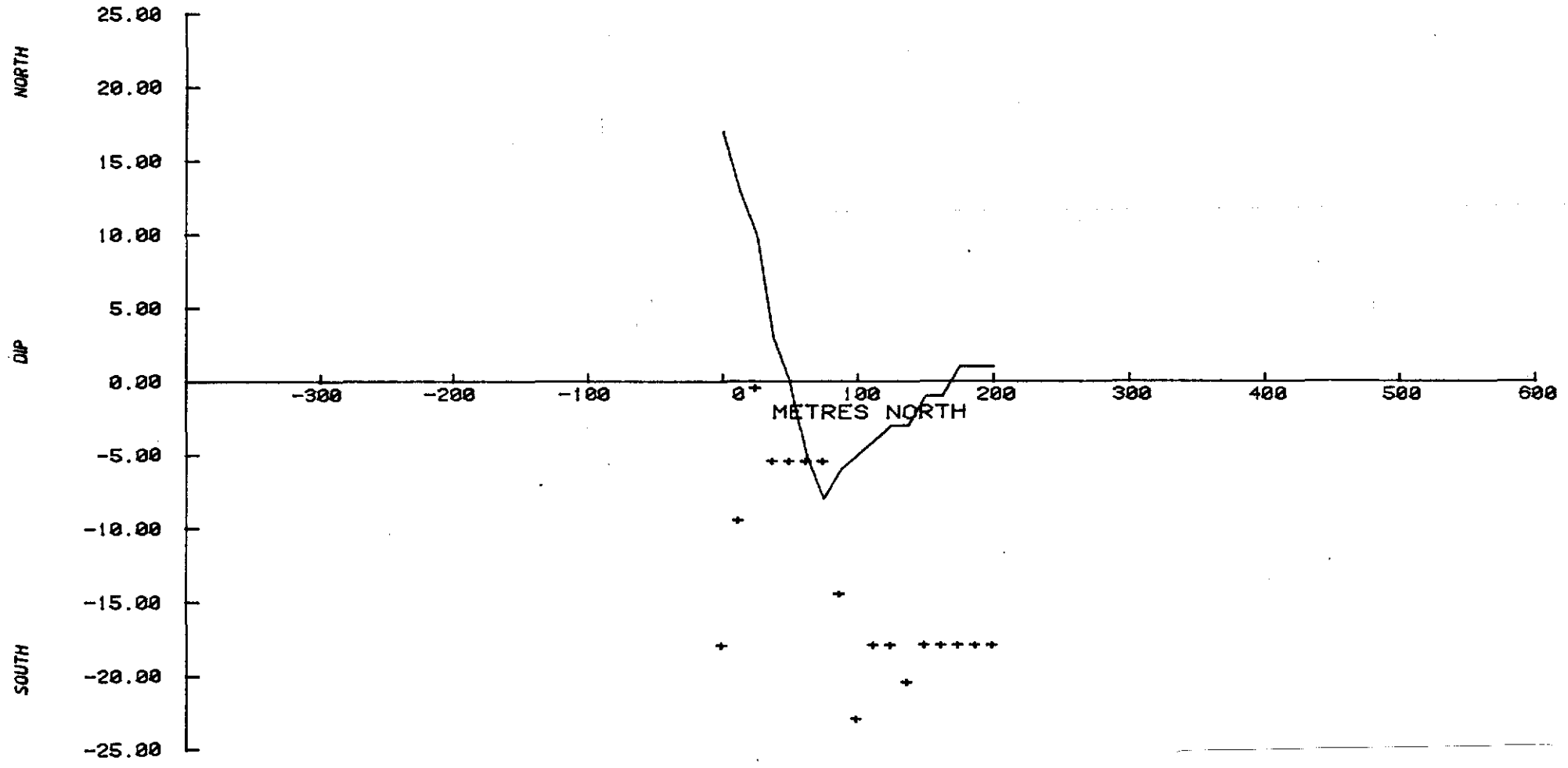


CRA EXPLORATION PTY. LIMITED

GARDEN OF EDEN PROSPECT
E.L. 7/73 NORTH TASMANIA

GROUND MAGNETICS
TOTAL FIELD INTENSITY

Ref: SK55 - 3	
Scale: 1 : 5000	Drawn: T.G.D.S.
Author: M.F.	Report No. 11883
Date: June 1982	Plan No. TASh 1231



DIP ANGLE (DEGREES)

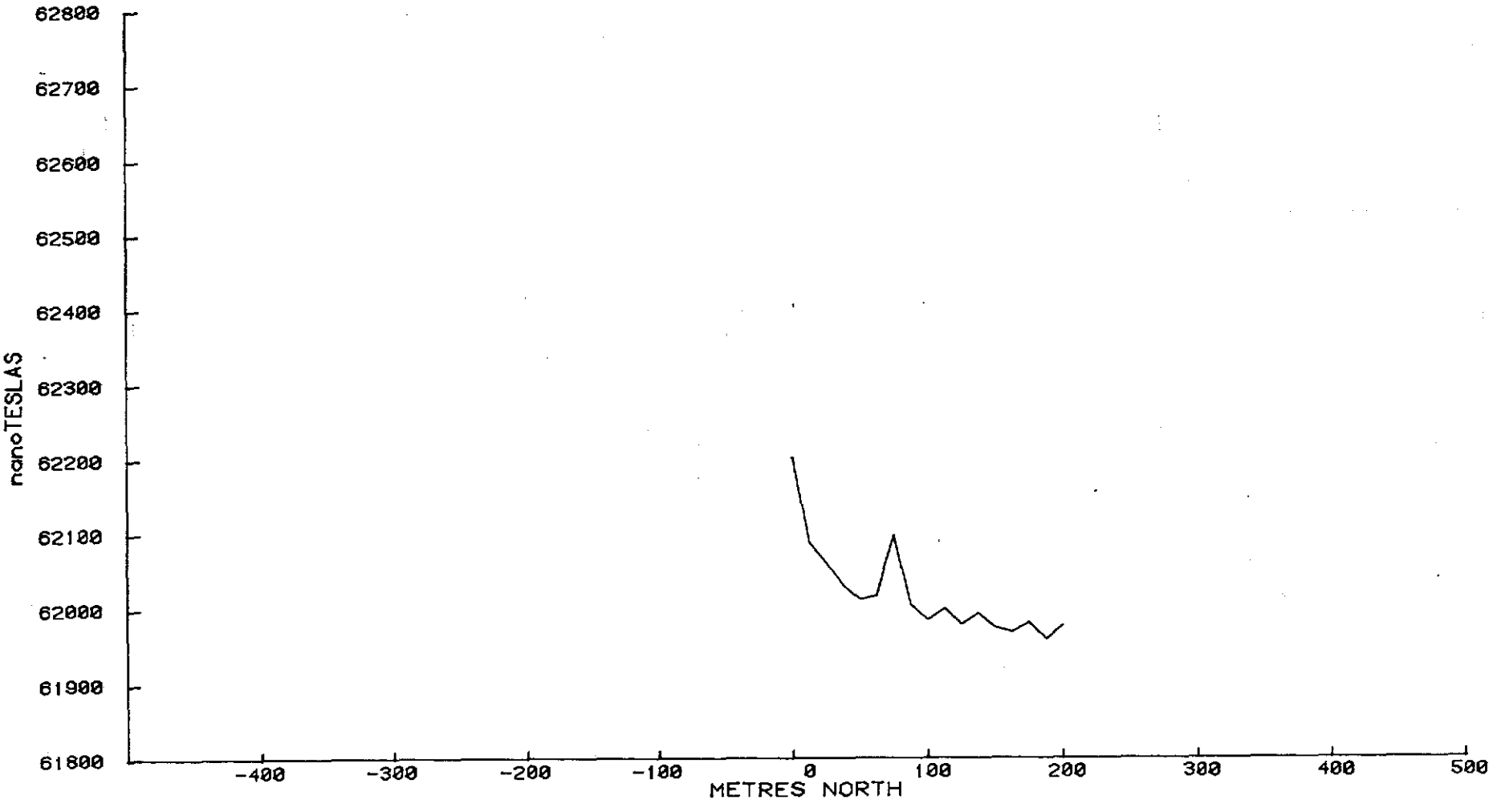
+ + + + + MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITRARY GAIN)

PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
145xa

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1152



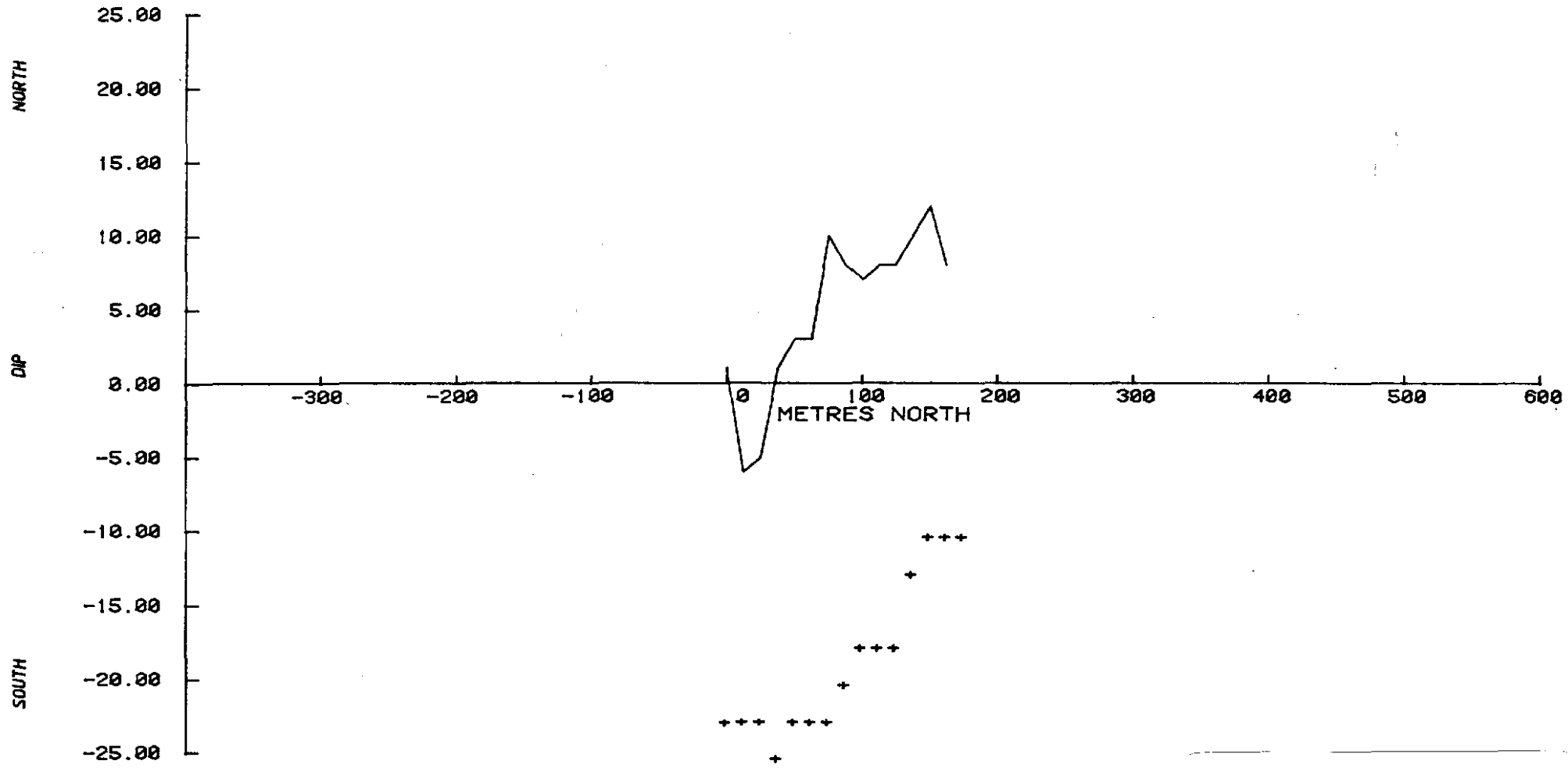
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
145xa

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1153



DIP ANGLE (DEGREES)

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

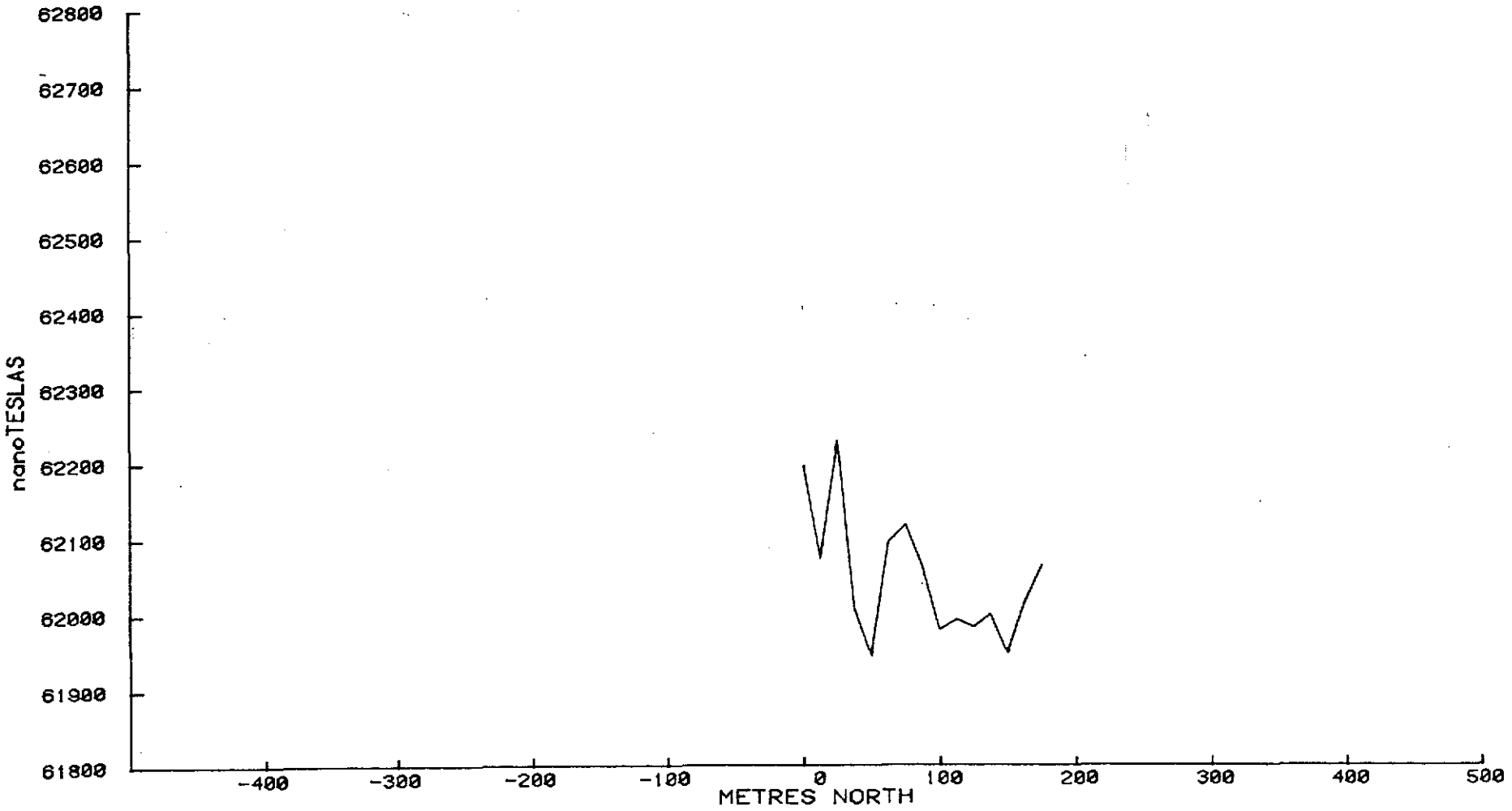
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
146xc

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1154

613400



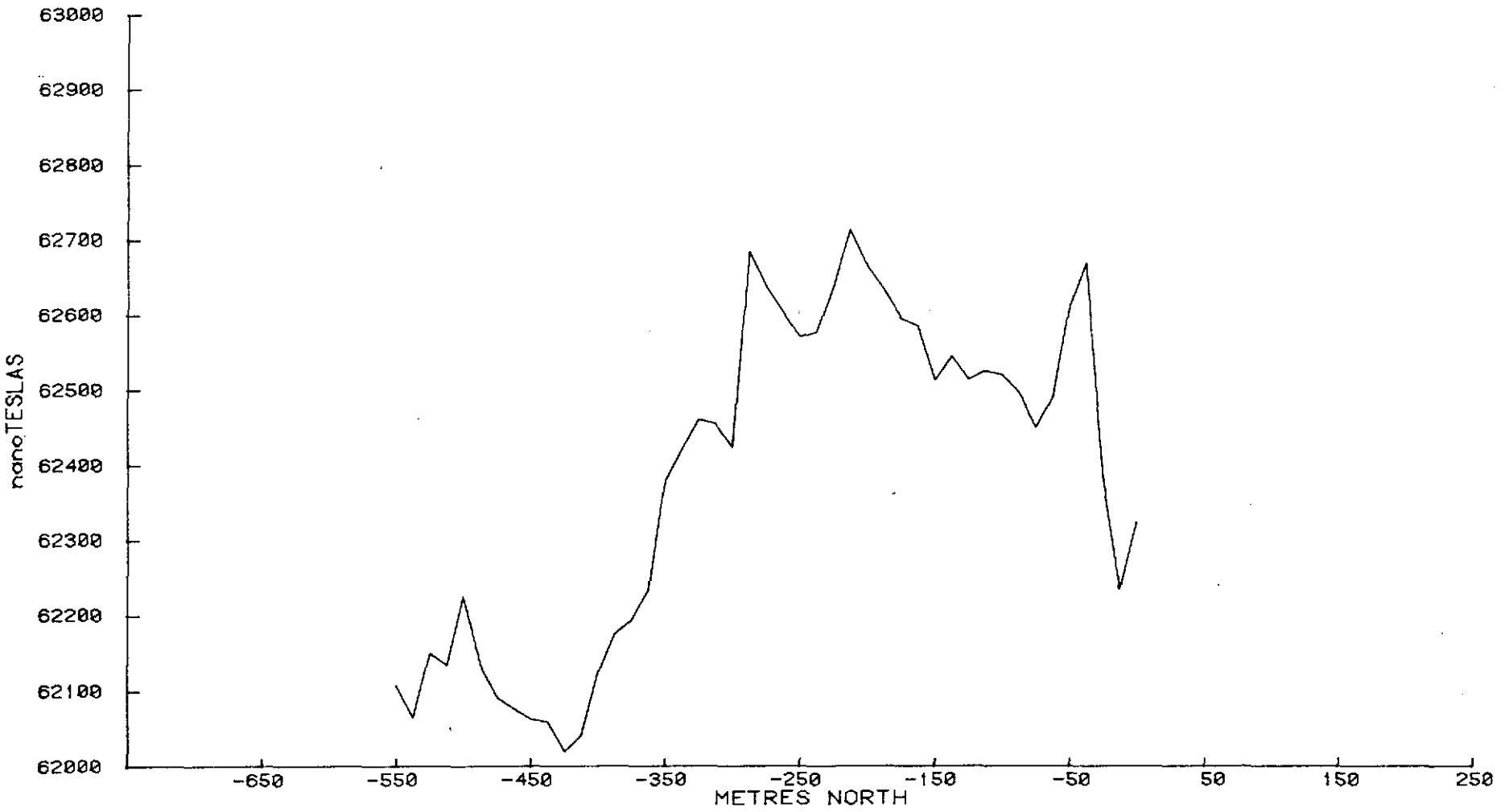
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
146xc

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1155



5 cm

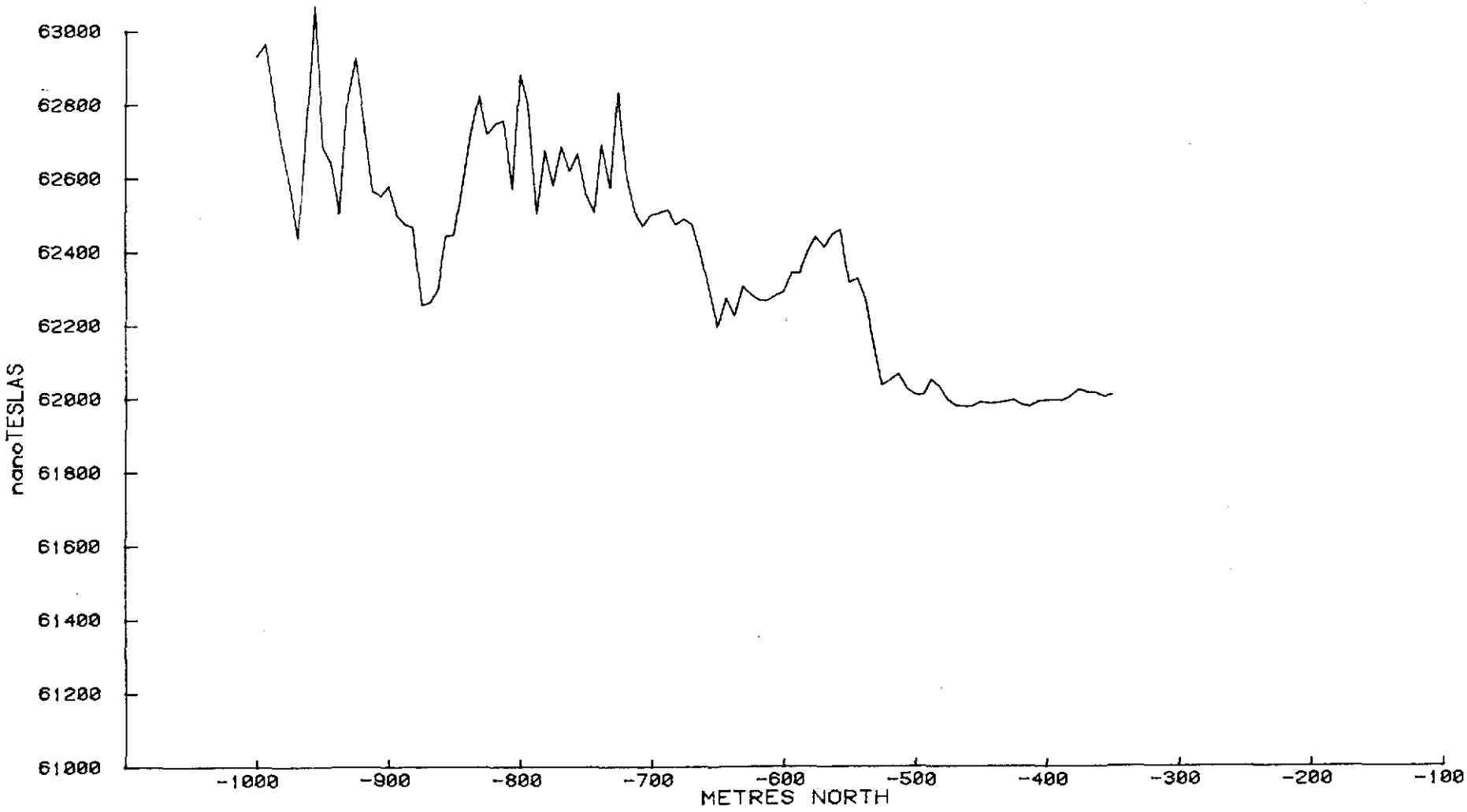
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

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

REF	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	1883
DATE	SEPT. 1982	TASK N°	1087

613402



5 cm

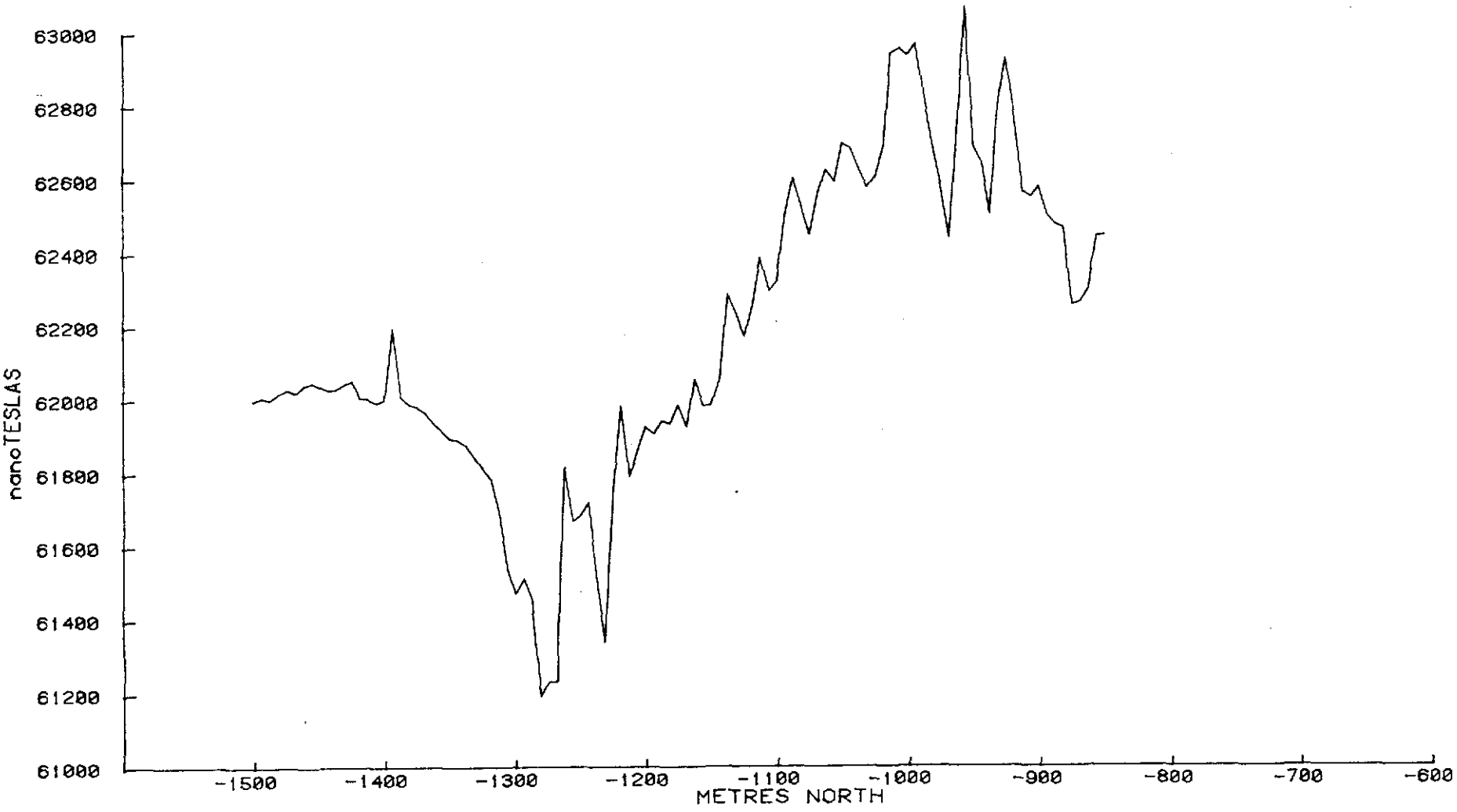
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
AEROMAGNETIC ANOMALY
24-1816 Nth END

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1088

613403



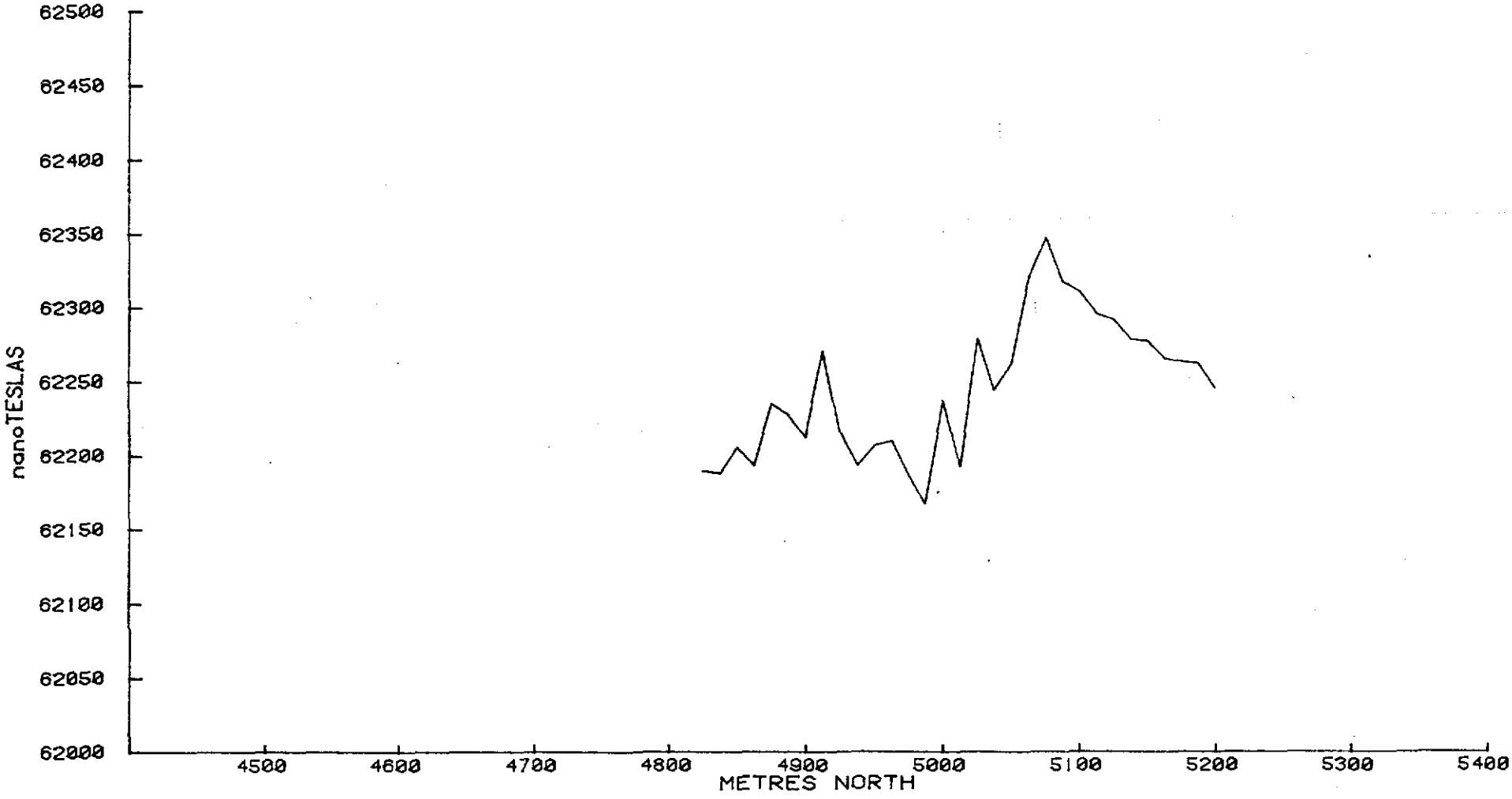
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
24-1816 Sth. END

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	1883
DATE	SEPT. 1982	TASA N°	1089



5 cm

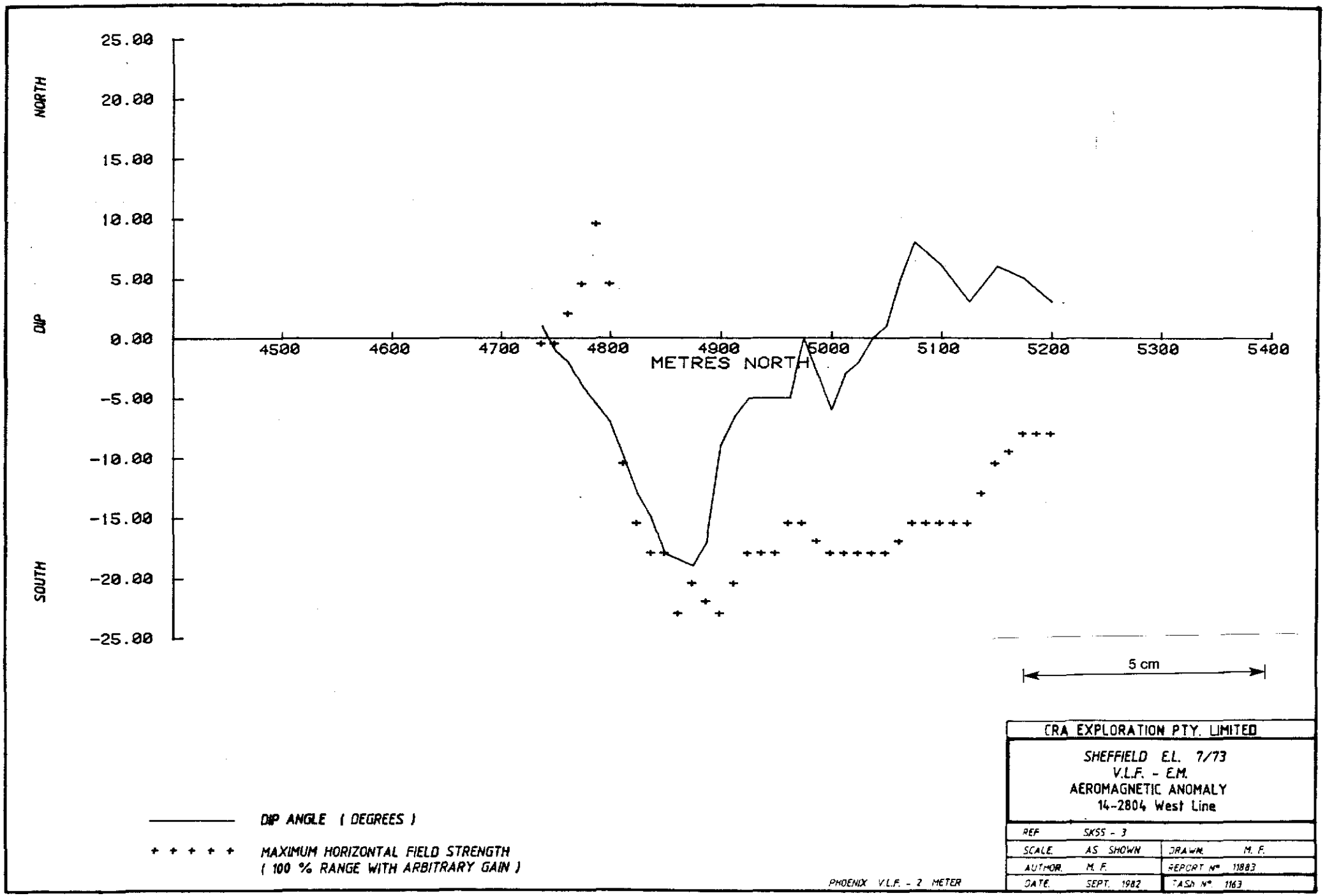
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
AEROMAGNETIC ANOMALY
14-2804 WEST LINE

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT Nº	11883
DATE	SEPT. 1982	TASA Nº	1162

613405

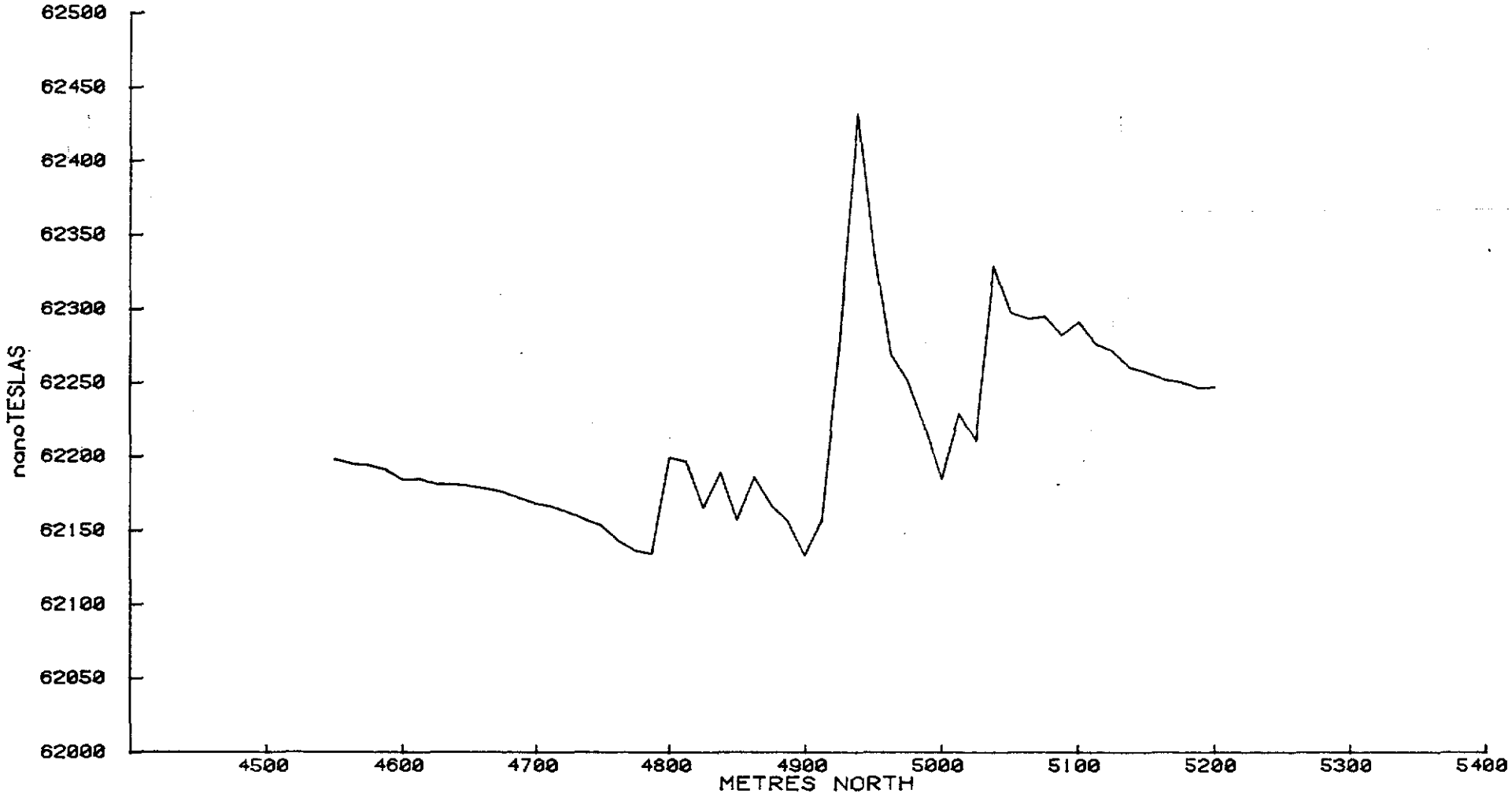


CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
AEROMAGNETIC ANOMALY
14-2804 West Line

REF	SKSS - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1163

613406



5 cm

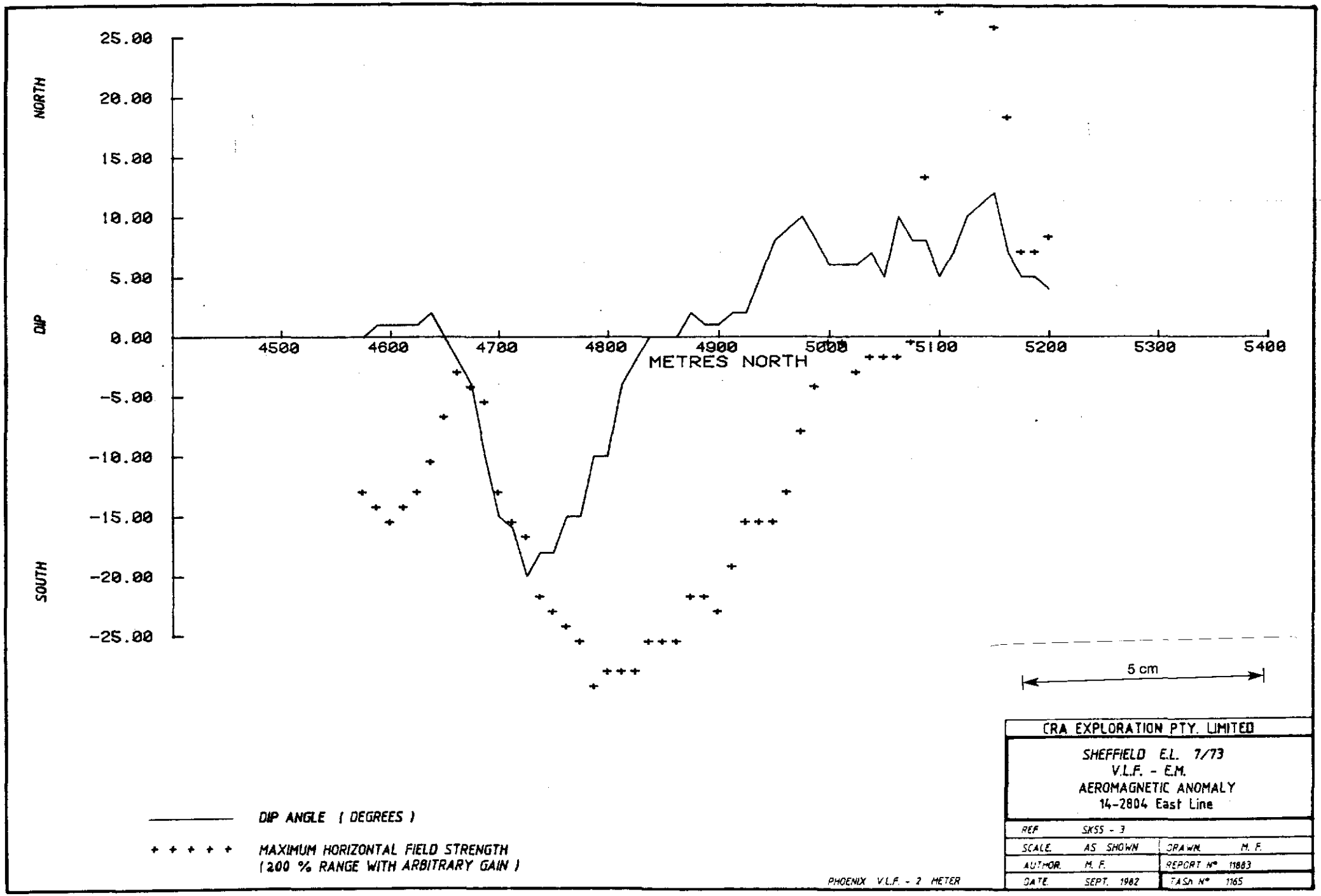
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
AEROMAGNETIC ANOMALY
14-2804 East Line

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR.	M. F.	REPORT No.	11883
DATE.	SEPT. 1982	TASK No.	1164

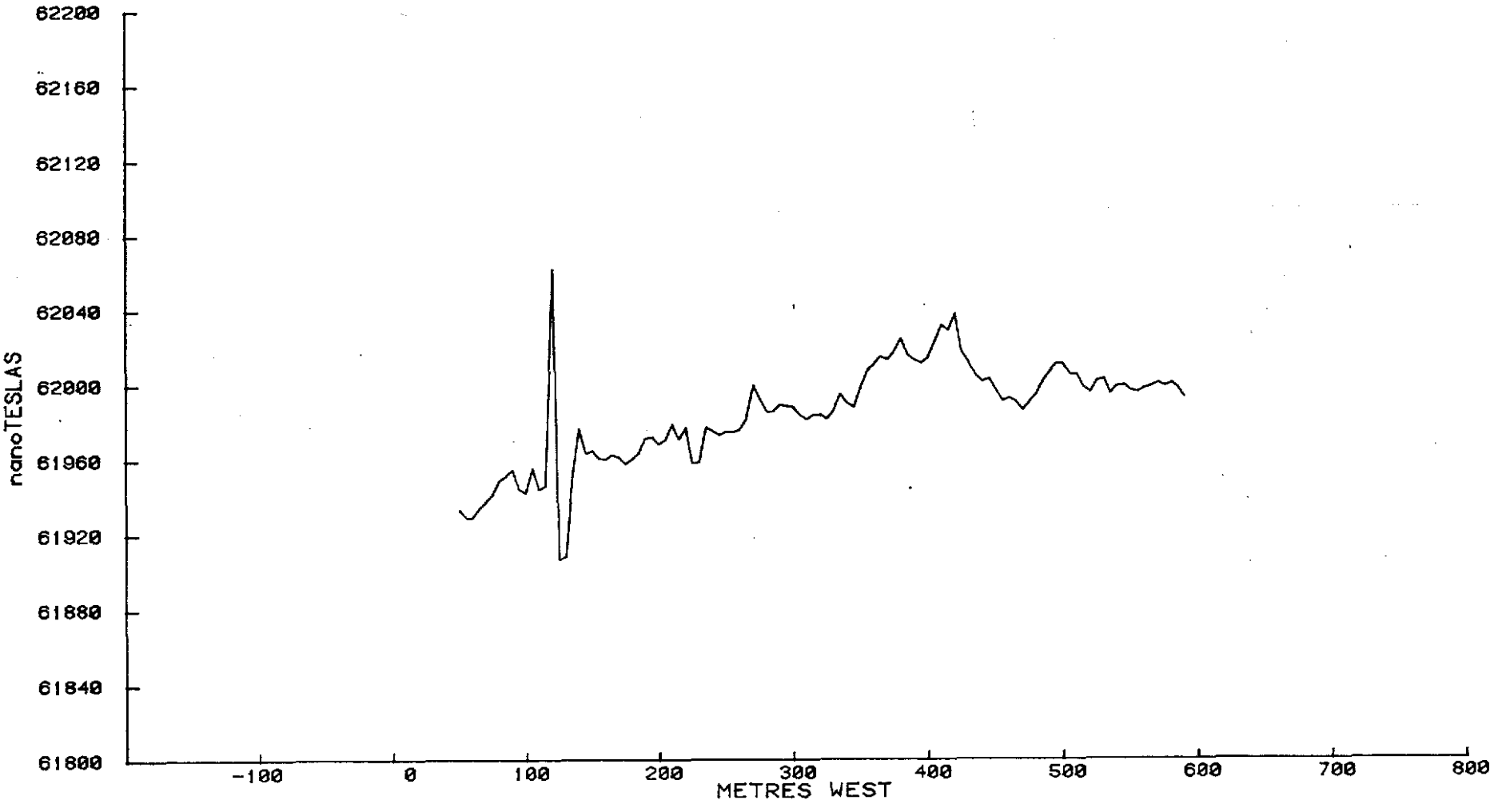
613407



CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
AEROMAGNETIC ANOMALY
14-2804 East Line

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1165



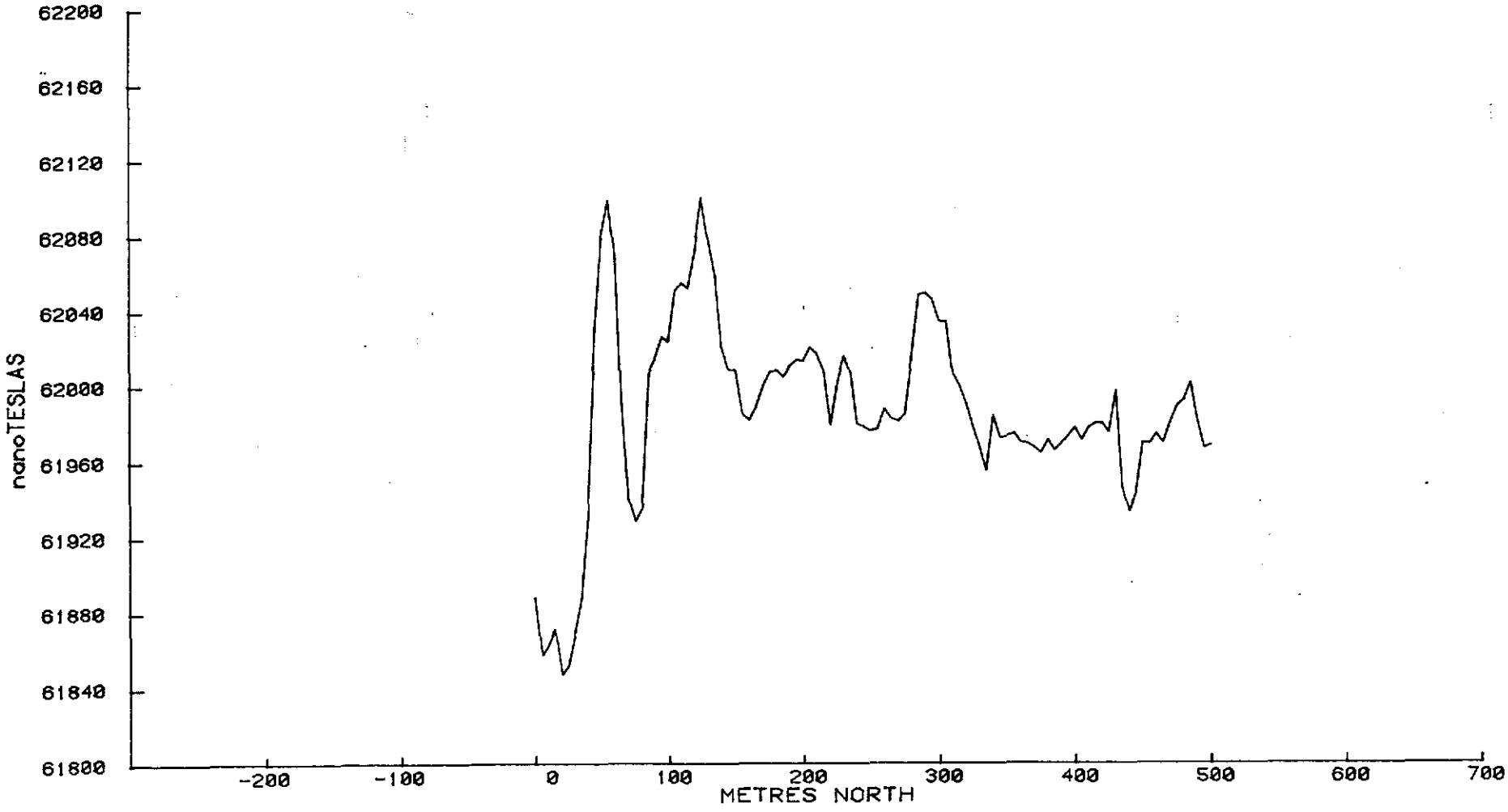
5 cm

G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
AEROMAGNETIC ANOMALY
113-0518 EAST-WEST

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1166



5 cm

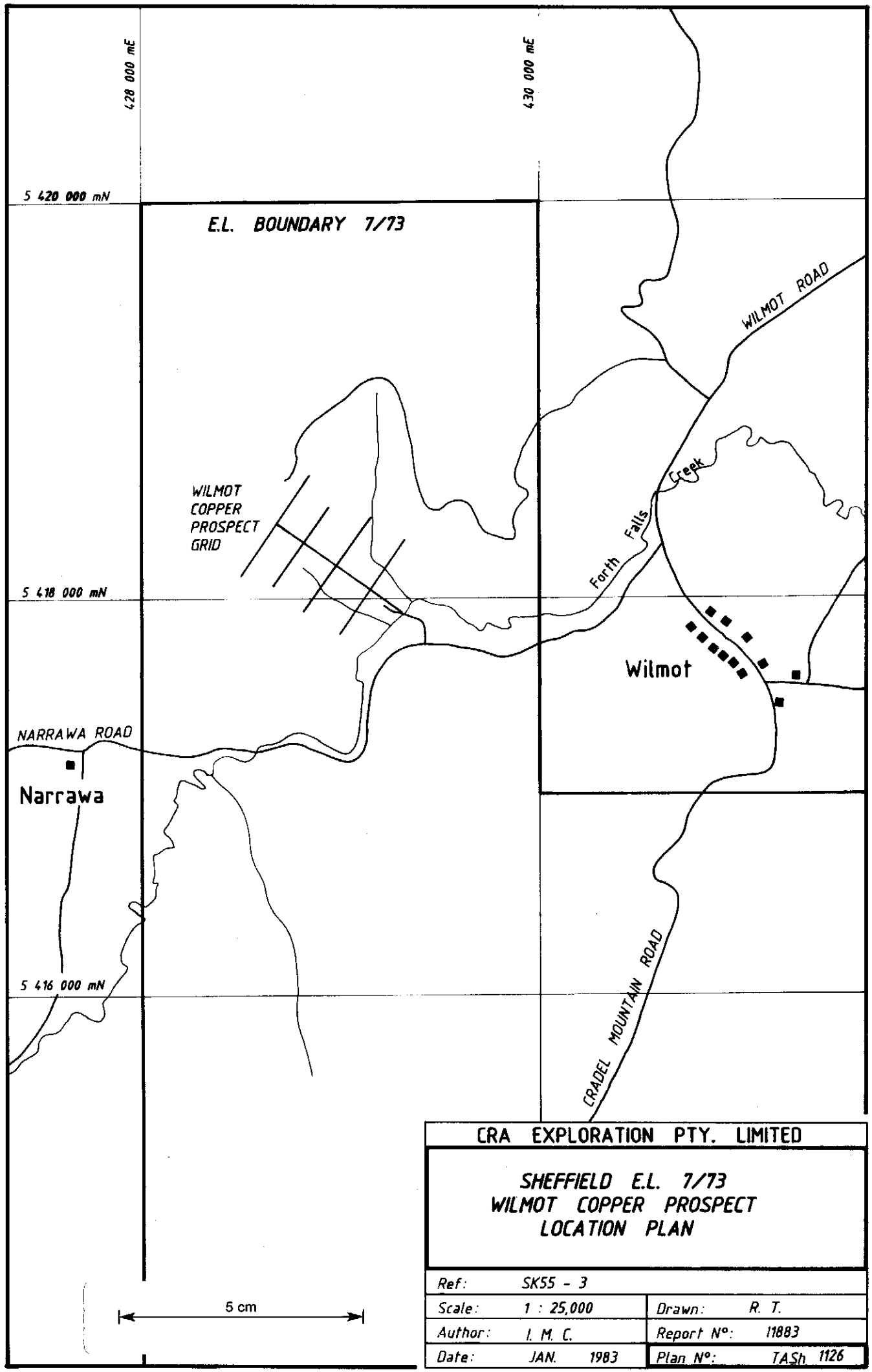
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
AEROMAGNETIC ANOMALY
113-0518 Sth-Nth

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASA N°.	1167

613410

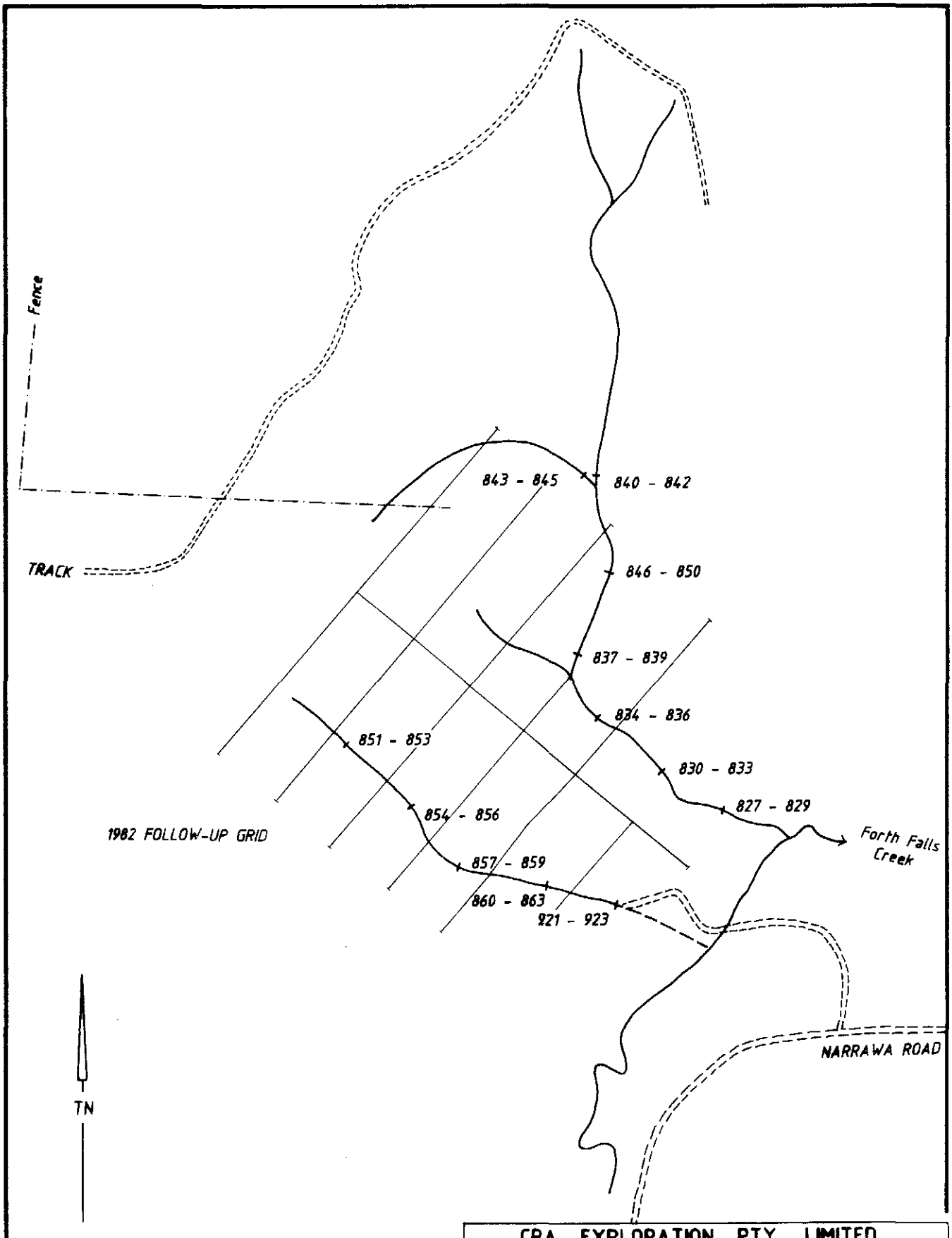


CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
WILMOT COPPER PROSPECT
LOCATION PLAN

Ref:	SK55 - 3		
Scale:	1 : 25,000	Drawn:	R. T.
Author:	I. M. C.	Report N°:	11883
Date:	JAN. 1983	Plan N°:	TASh 1126

613411

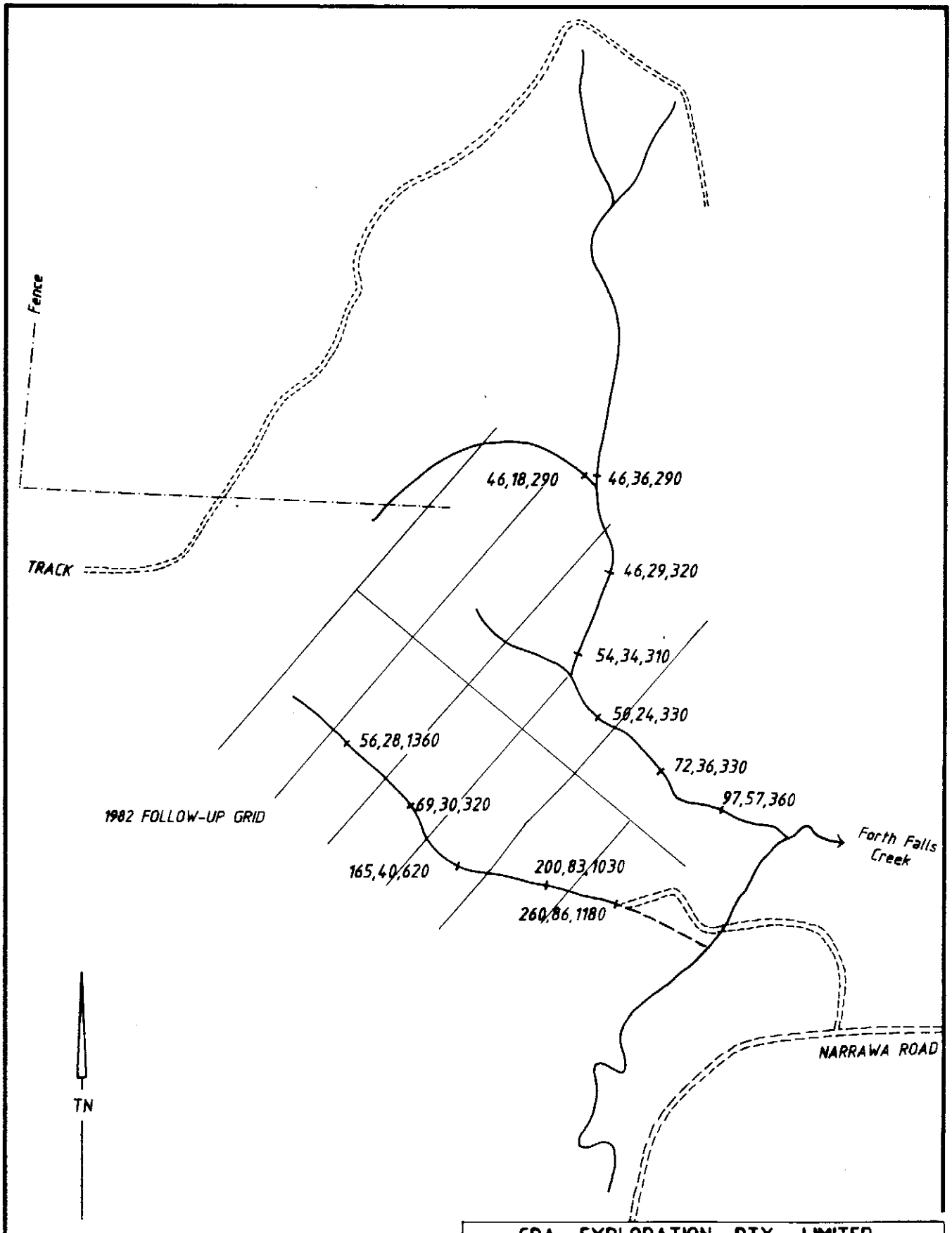


CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
WILMOT COPPER PROSPECT
SAMPLE LOCATION PLAN
1982

Ref:	SK55 - 3		
Scale:	1 : 7500 (approx)	Drawn:	R. T
Author:	I. M. C.	Report N°:	11883
Date:	JAN. 1983	Plan N°:	TASh 1128

613412

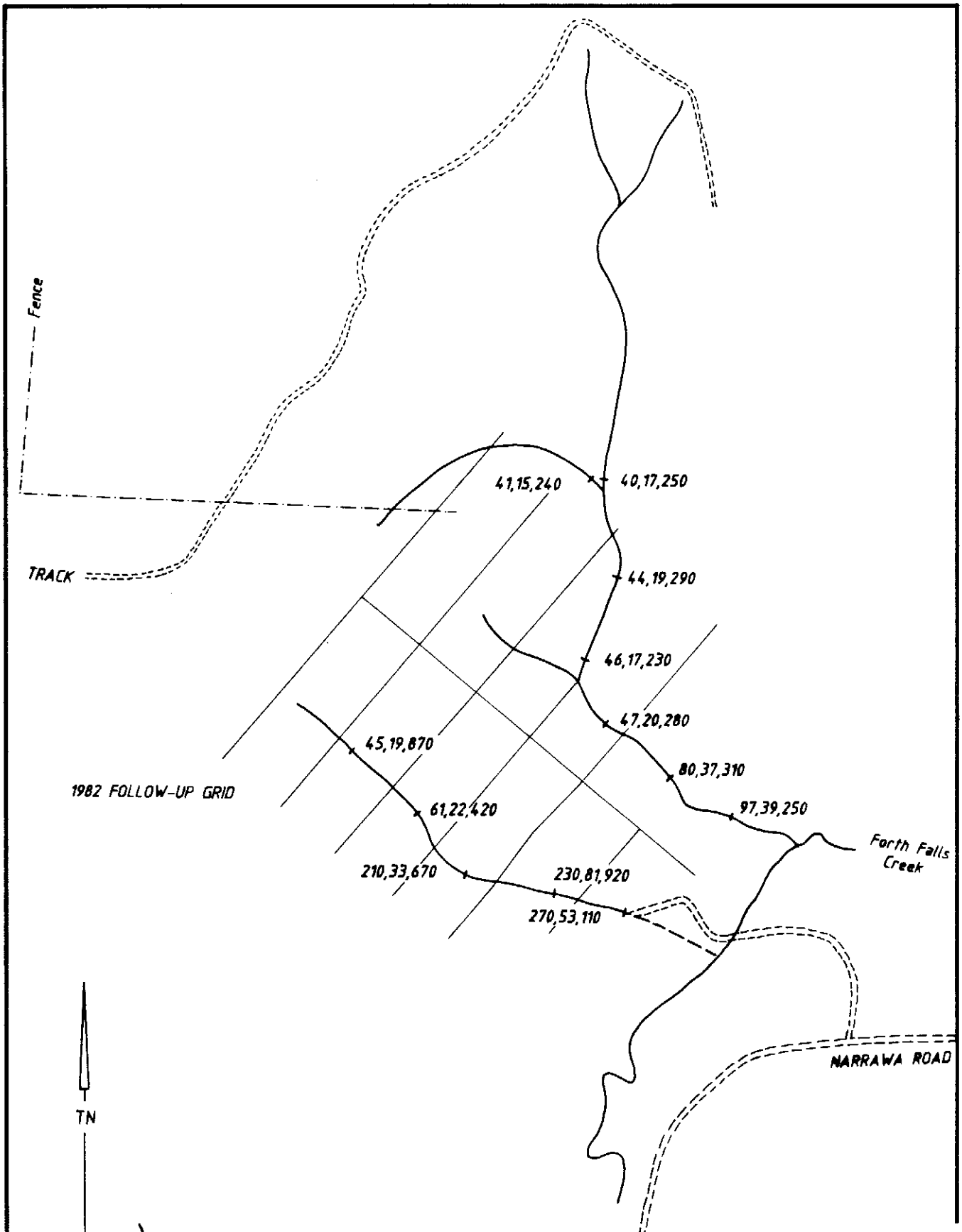


CRA EXPLORATION PTY. LIMITED

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°	11883
Date:	JAN. 1983	Plan N°:	TASh 1129

613413

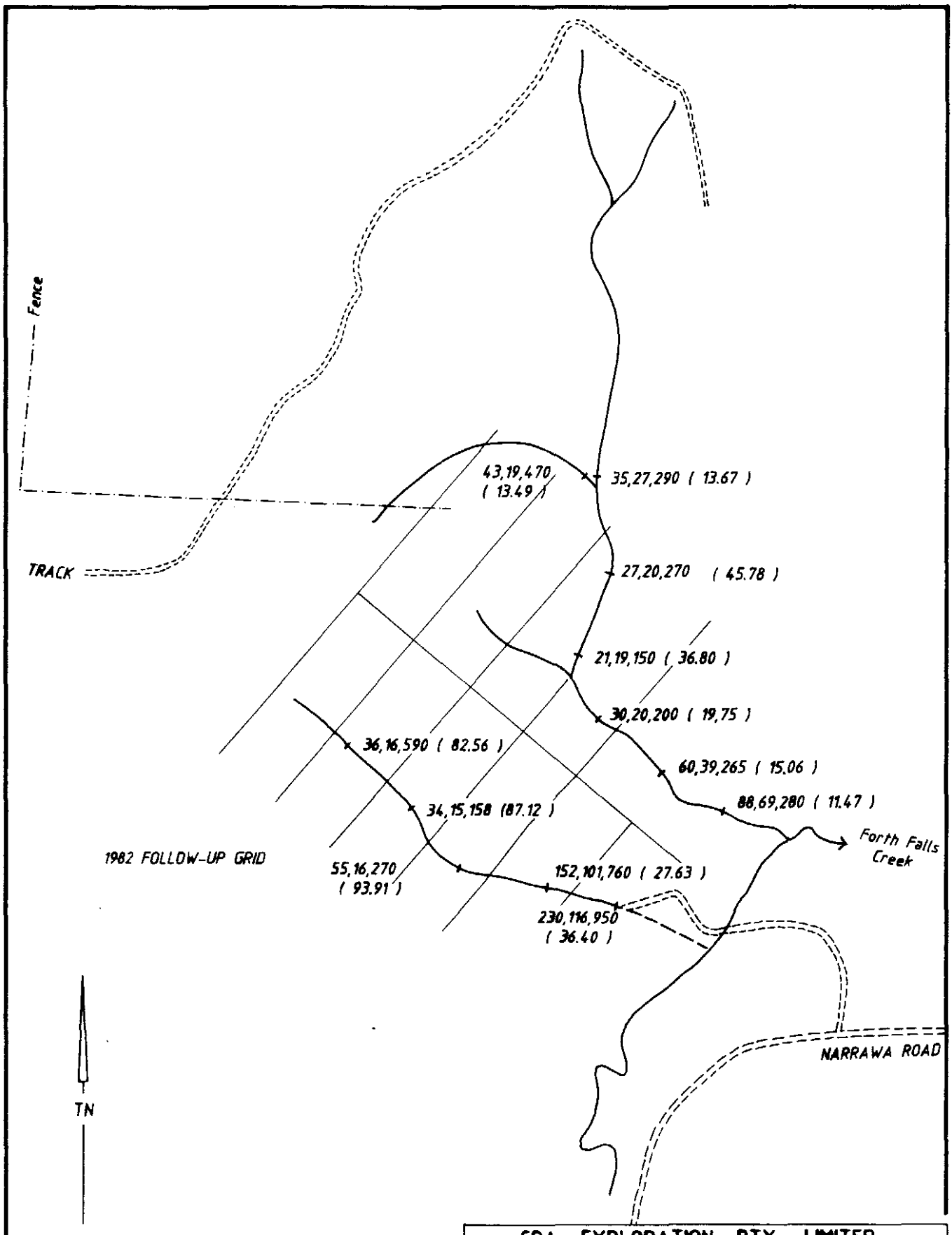


CRA EXPLORATION PTY. LIMITED

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

Ref:	SK55 - 3		
Scale:	1 : 7500 (approx)	Drawn:	R. T
Author:	I. M. C.	Report N°:	11883
Date:	JAN. 1983	Plan N°:	TASh 1130

613414

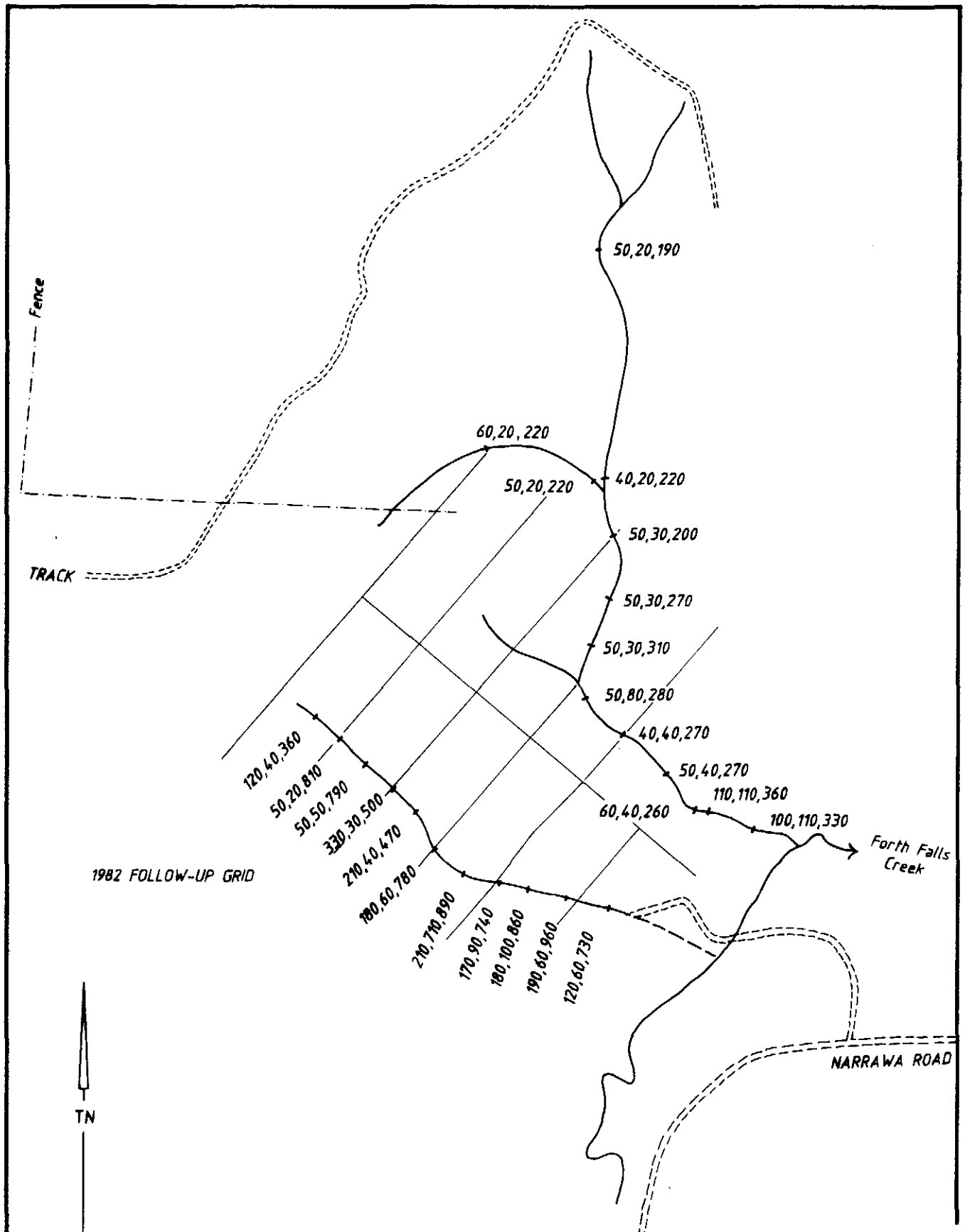


CRA EXPLORATION PTY. LIMITED

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

Ref:	SK55 - 3		
Scale:	1 : 7500 (approx)	Drawn:	R. T
Author:	I. M. C.	Report N°:	11883
Date:	JAN. 1983	Plan N°:	TASh 1131

613415

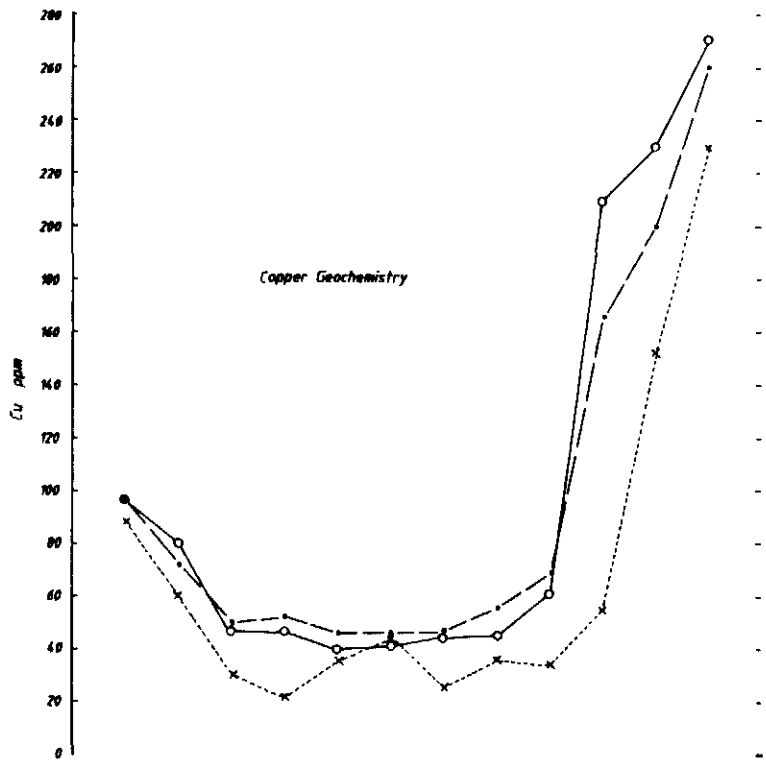


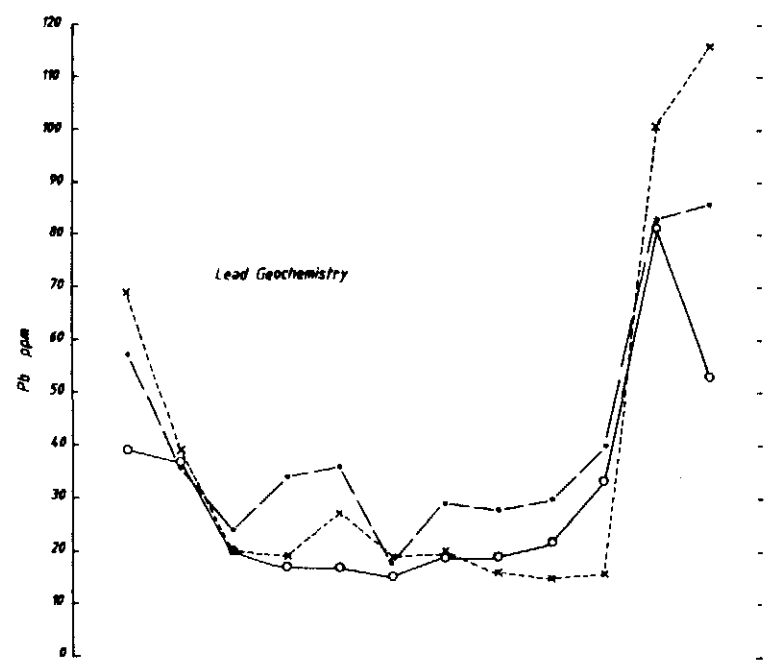
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
WILMOT COPPER PROSPECT
1975 ANALYSES OF
STREAM SEDIMENT SAMPLES

Ref:	SK55 - 3		
Scale:	1 : 7500 (approx)	Drawn:	R. T
Author:	I. M. C.	Report N°:	11883
Date:	JAN. 1983	Plan N°:	TASh 1132

613416





KEY

SUSPENDED CLAY

PANNED CONCENTRATE

GRAB SAMPLE

5 cm

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:	I. M. C.	Report N°.	11883
Date	JAN 1983	Plan N°.	TASh 1133

613417

4400 E 4500 E 4600 E 4700 E 4800 E 4900 E 5000 E

5300 N
5200 N
5100 N
5000 N
4900 N
4800 N
4700 N

310° T

Tb Cs Cg Cv

85 75 80 80 80 85

Es (quarry)

TN

5 cm

LEGEND

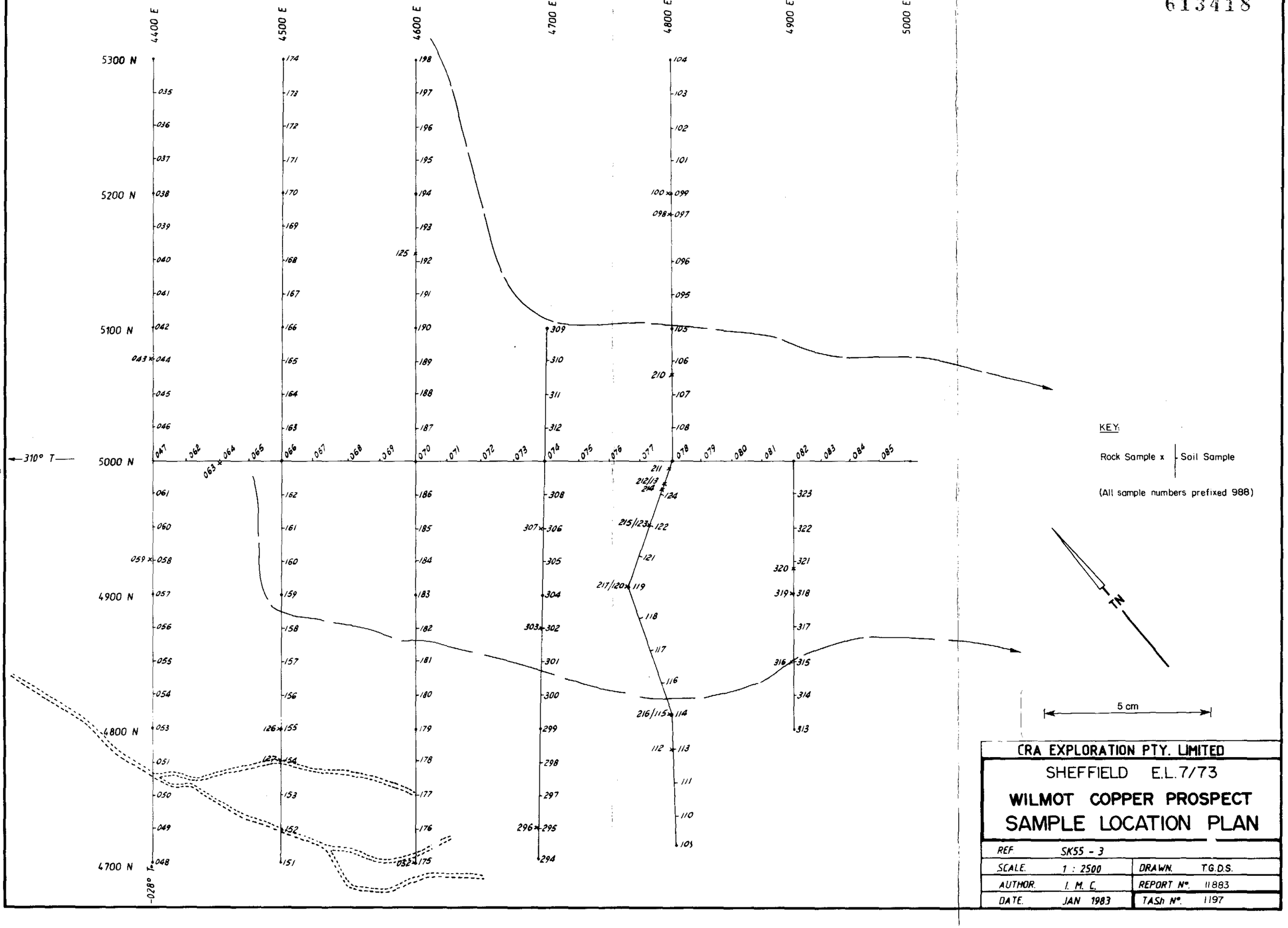
Tb	Tertiary Basalt
Cs	Cambrian siltstones, shales, fine tuffs
Cg	Cambrian greywackes, sandy tuffs, some coarse tuffs.
Cv	Cambrian volcanics, coarse vitric crystal tuffs, tourmalinised volcanic breccia or felsic porphyries.

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
WILMOT COPPER PROSPECT
GEOLOGY PLAN

REF.	SK55 - 3		
SCALE.	1 : 2500	DRAWN.	R. T
AUTHOR.	I. M. C.	REPORT N°	11883
DATE.	JAN 1983	TASh N°.	1135

613418



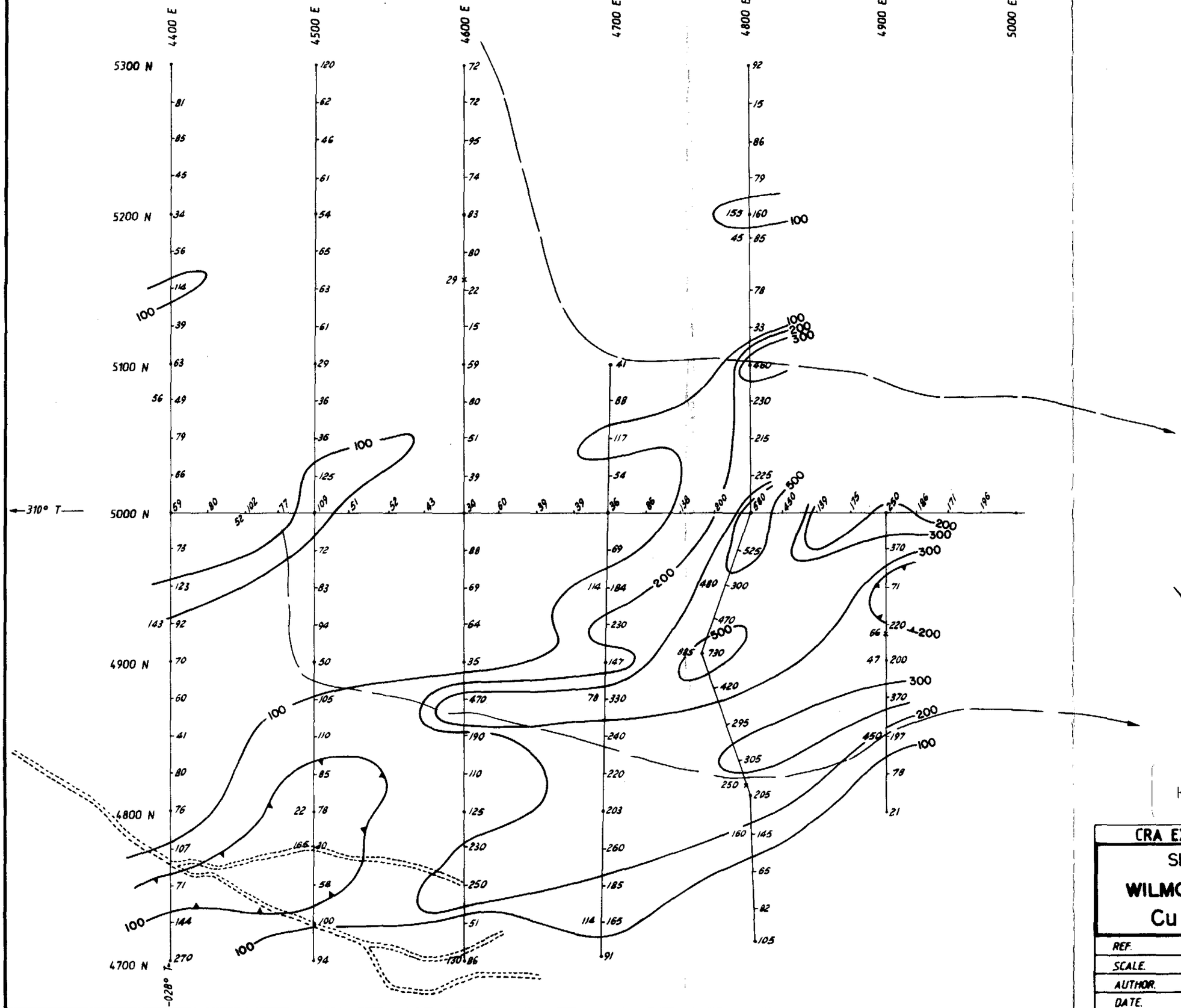
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L.7/73

WILMOT COPPER PROSPECT
SAMPLE LOCATION PLAN

REF.	SK55 - 3		
SCALE.	1 : 2500	DRAWN.	T.G.D.S.
AUTHOR.	I. M. C.	REPORT N°.	11883
DATE.	JAN 1983	TASh N°.	1197

613419



CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L.7/73

WILMOT COPPER PROSPECT

Cu GEOCHEMISTRY

REF.	SK55 - 3		
SCALE.	1 : 2500	DRAWN.	T.G.D.S.
AUTHOR.	I. M. C.	REPORT N°.	11883
DATE.	JAN 1983	TASh N°.	1198

613420

4400 E 4500 E 4600 E 4700 E 4800 E 4900 E 5000 E

5300 N
5200 N
5100 N
5000 N
4900 N
4800 N
4700 N

← 310° T →

KEY:

Pb ppm in rock | Pb ppm in soil

35 | 52

TN

5 cm

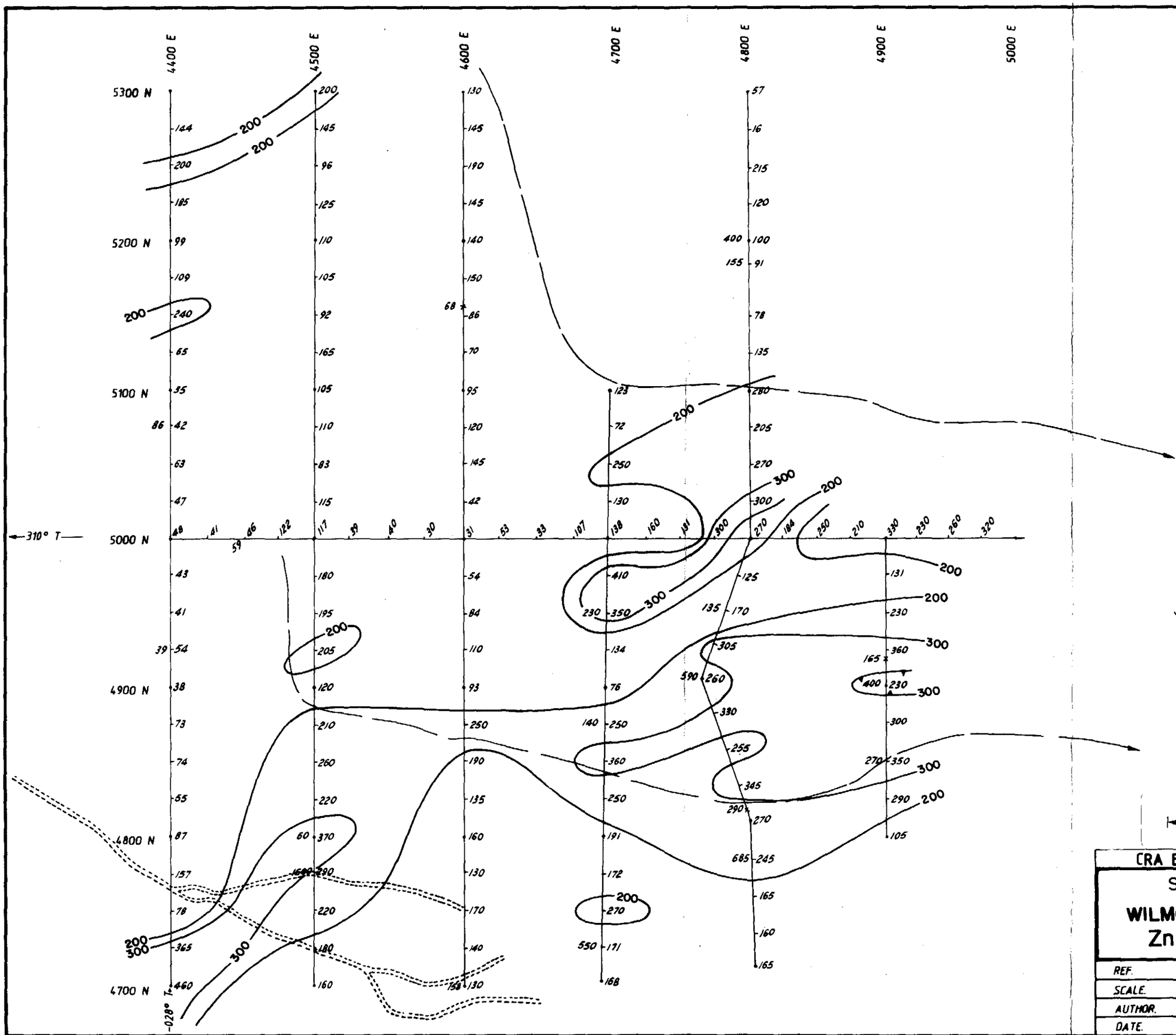
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L.7/73

WILMOT COPPER PROSPECT
Pb GEOCHEMISTRY

REF.	SK55 - 3		
SCALE.	1 : 2500	DRAWN.	T.G.D.S.
AUTHOR.	I. M. C.	REPORT N°.	11883
DATE.	JAN 1983	TASK N°.	1199

613421



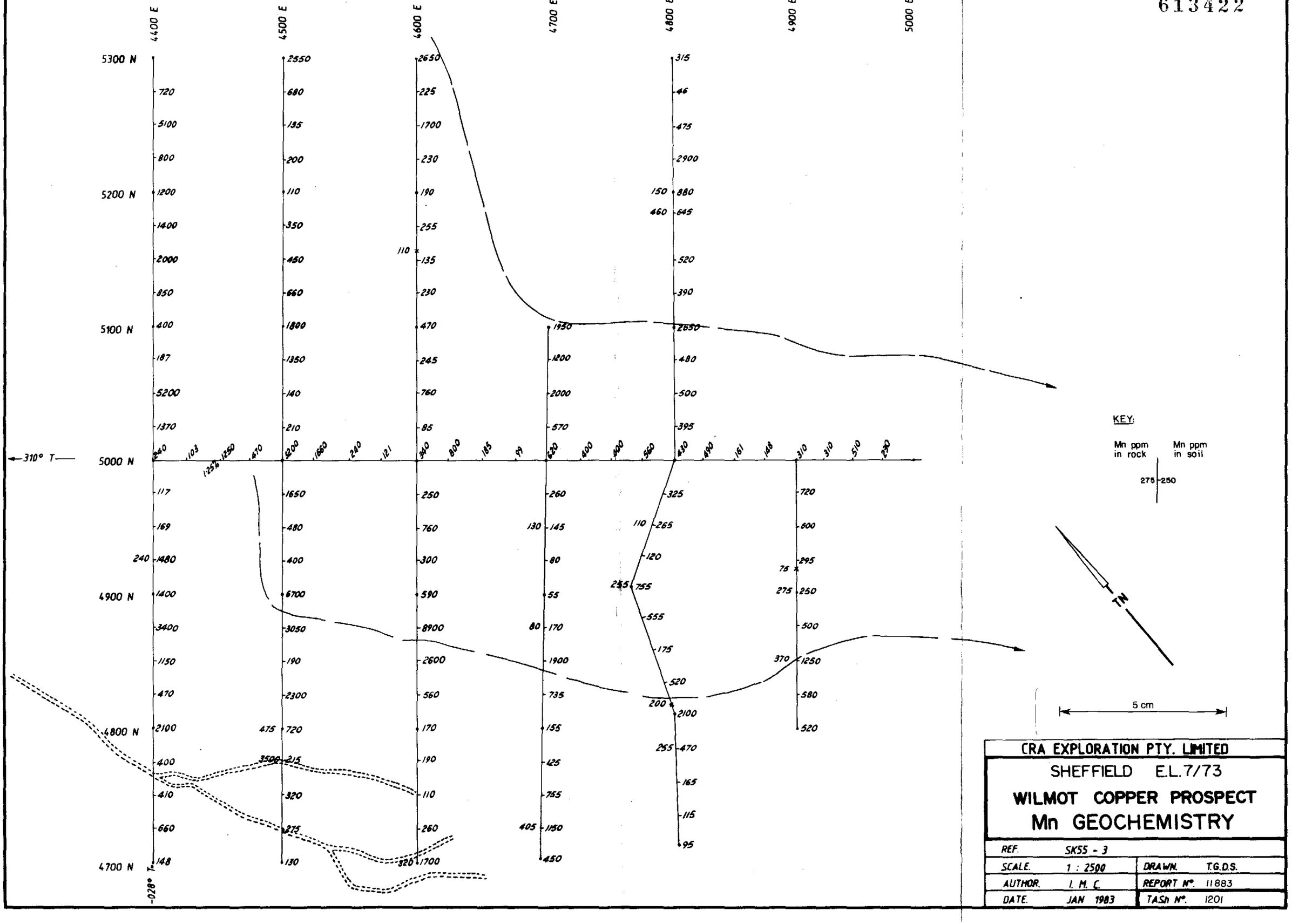
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L.7/73

WILMOT COPPER PROSPECT
Zn GEOCHEMISTRY

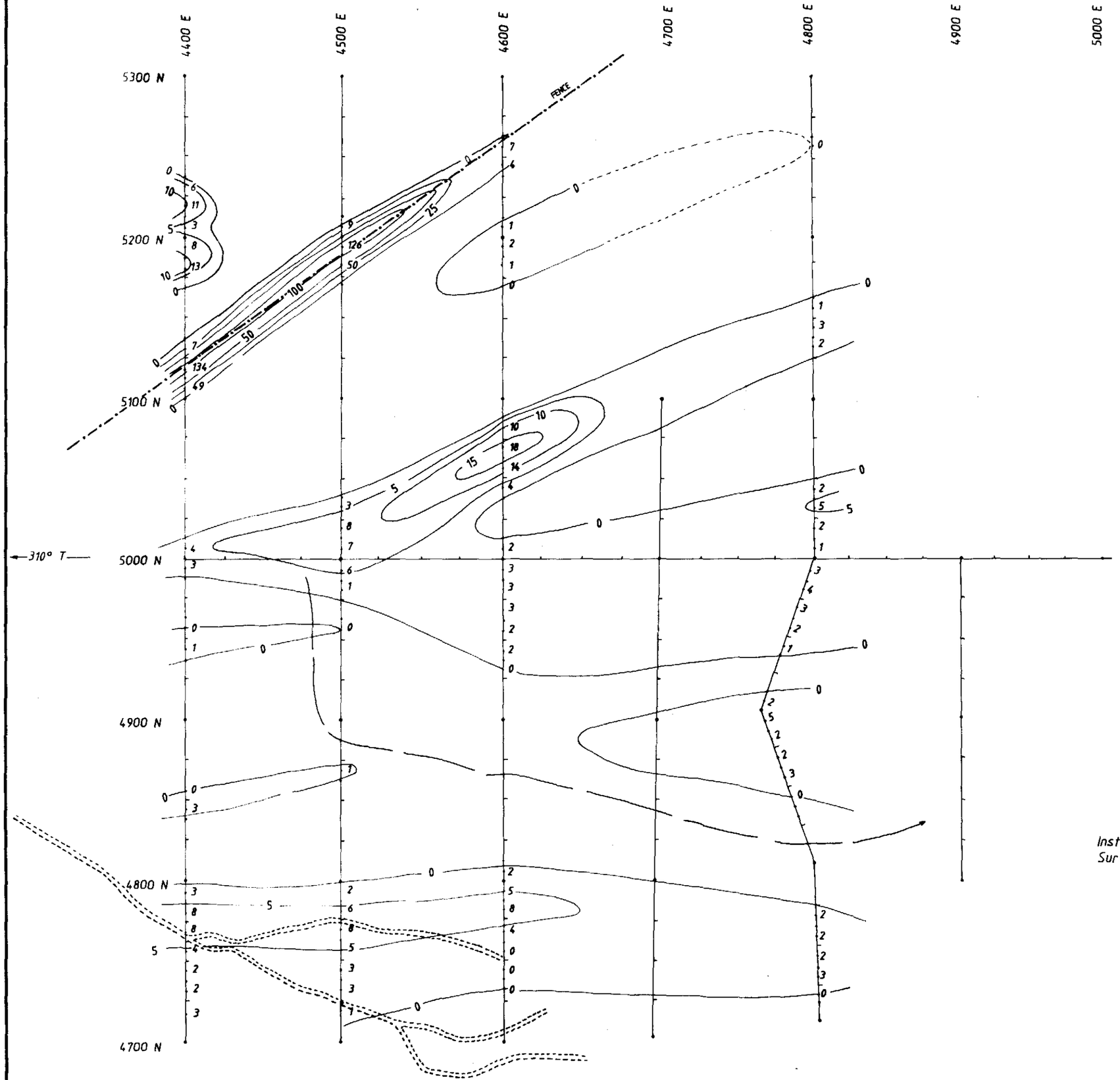
REF.	SK55 - 3		
SCALE.	1 : 2500	DRAWN.	T.G.D.S.
AUTHOR.	I. M. C.	REPORT N°.	11883
DATE.	JAN 1983	TASh N°.	1200

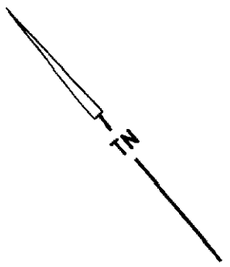
613422



CRA EXPLORATION PTY. LIMITED	
SHEFFIELD E.L.7/73	
WILMOT COPPER PROSPECT	
Mn GEOCHEMISTRY	
REF. SK55 - 3	
SCALE. 1 : 2500	DRAWN. T.G.D.S.
AUTHOR. I. M. C.	REPORT N°. 11883
DATE. JAN 1983	T.A.Sh N°. 1201

613423





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

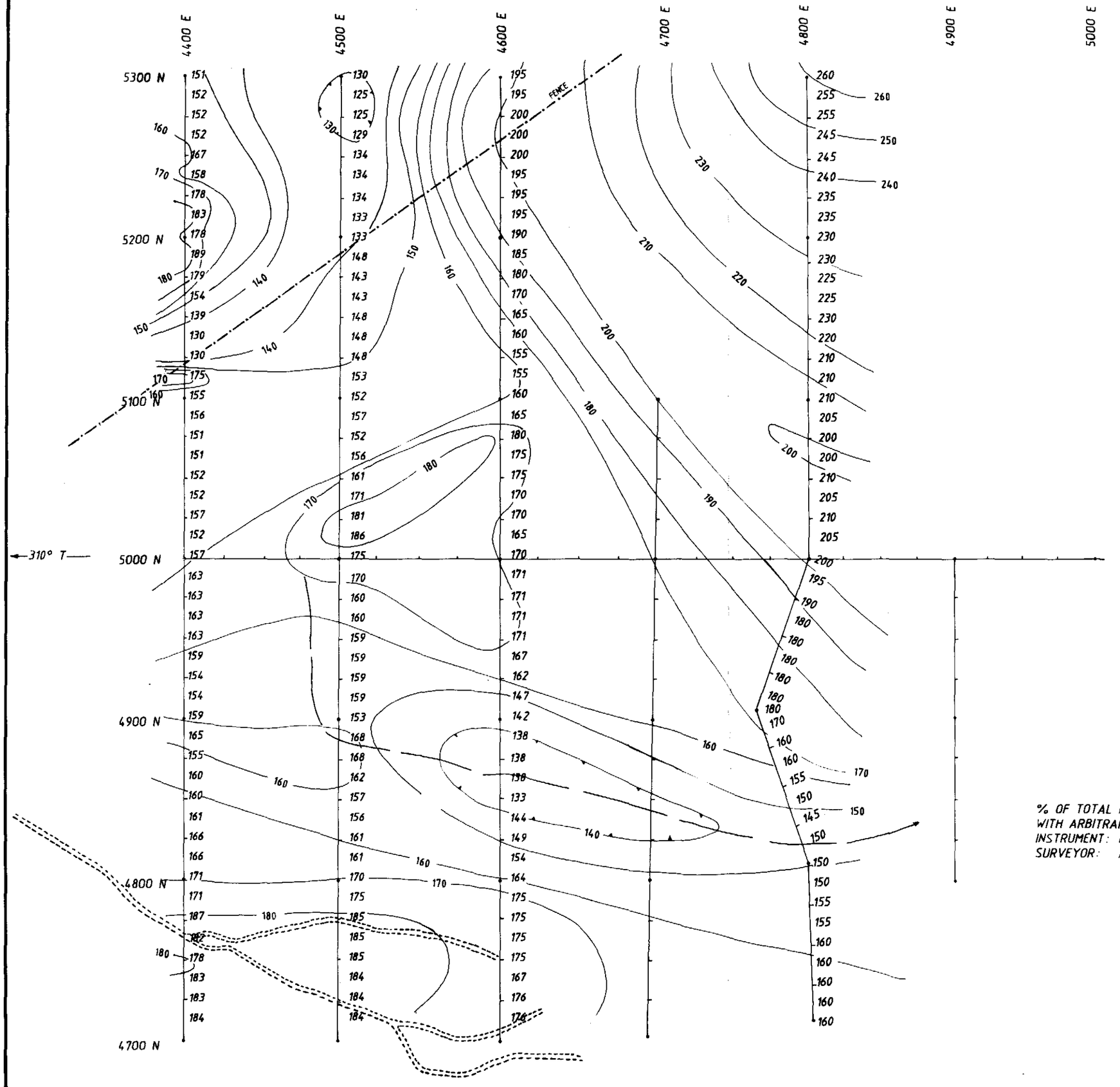
5 cm

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	TASh N°.	1136

613424



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

N

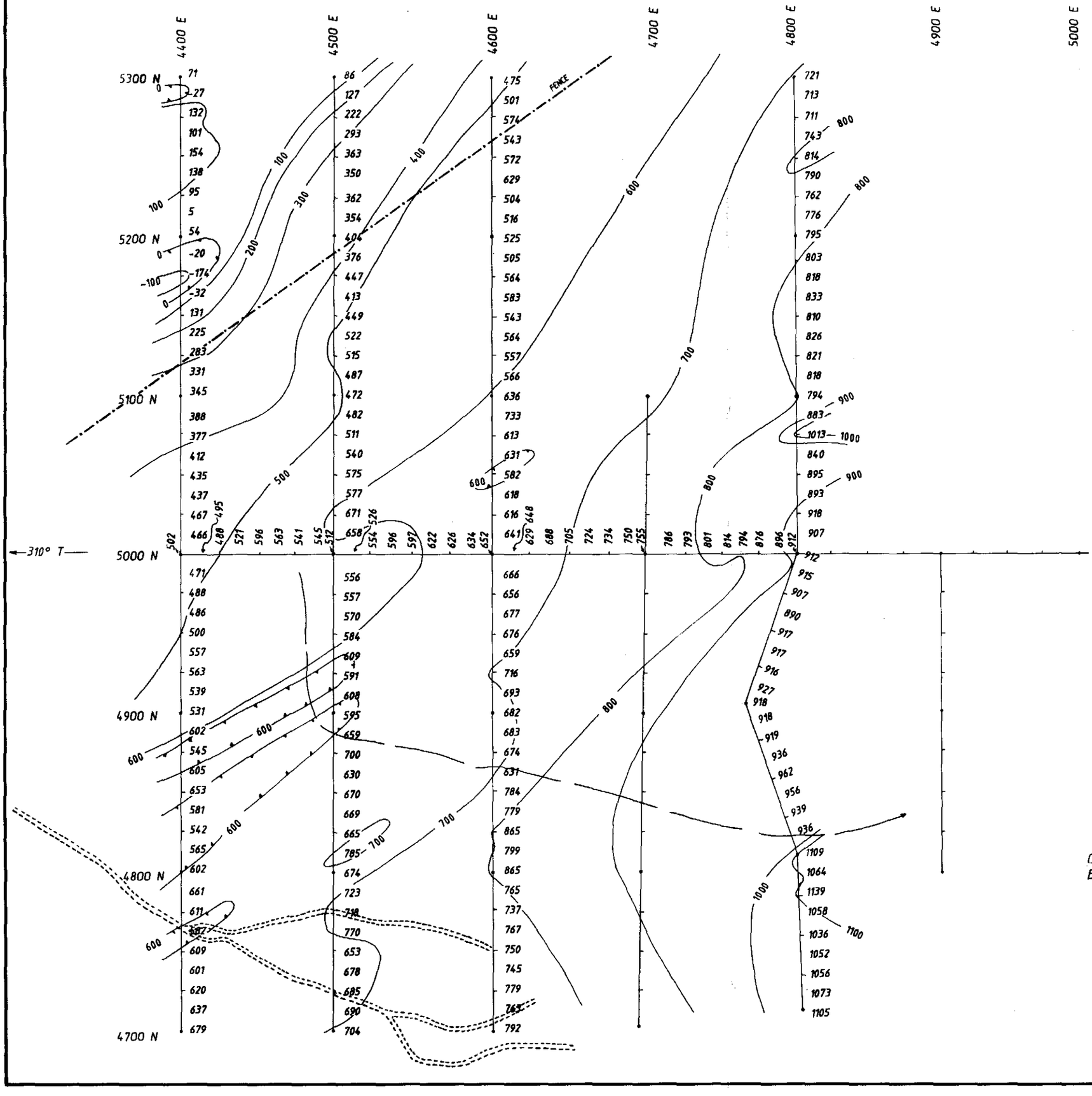
5 cm

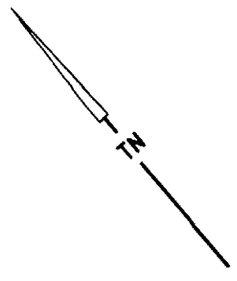
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
WILMOT COPPER PROSPECT
V.L.F. - E.M.
MAX. HORIZONTAL FIELD STRENGTH

REF.	SK55 - 3		
SCALE.	1 : 2500	DRAWN.	R. T
AUTHOR.	M. F. F.	REPORT N°.	11883
DATE.	JAN 1983	TASh N°.	1137

613425





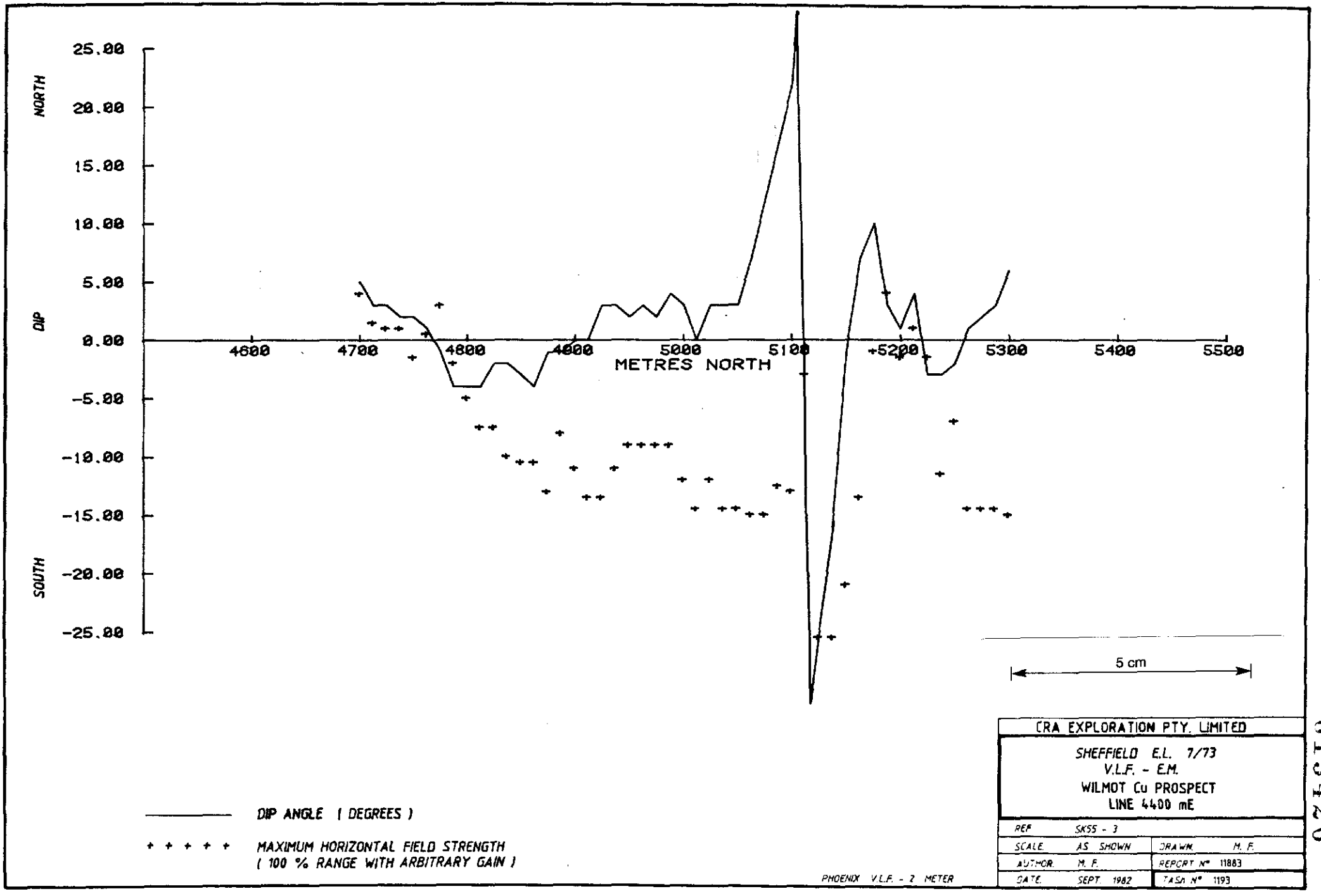
5 cm

CONTOURS: 100 nT
BASE: 62,000 nT

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
WILMOT COPPER PROSPECT
TOTAL INTENSITY
GROUND MAGNETICS

REF.	SK55 - 3		
SCALE.	1 : 2500	DRAWN.	R. T
AUTHOR.	M. F. F.	REPORT N°.	11883
DATE.	JAN 1983	TASh N°.	1138

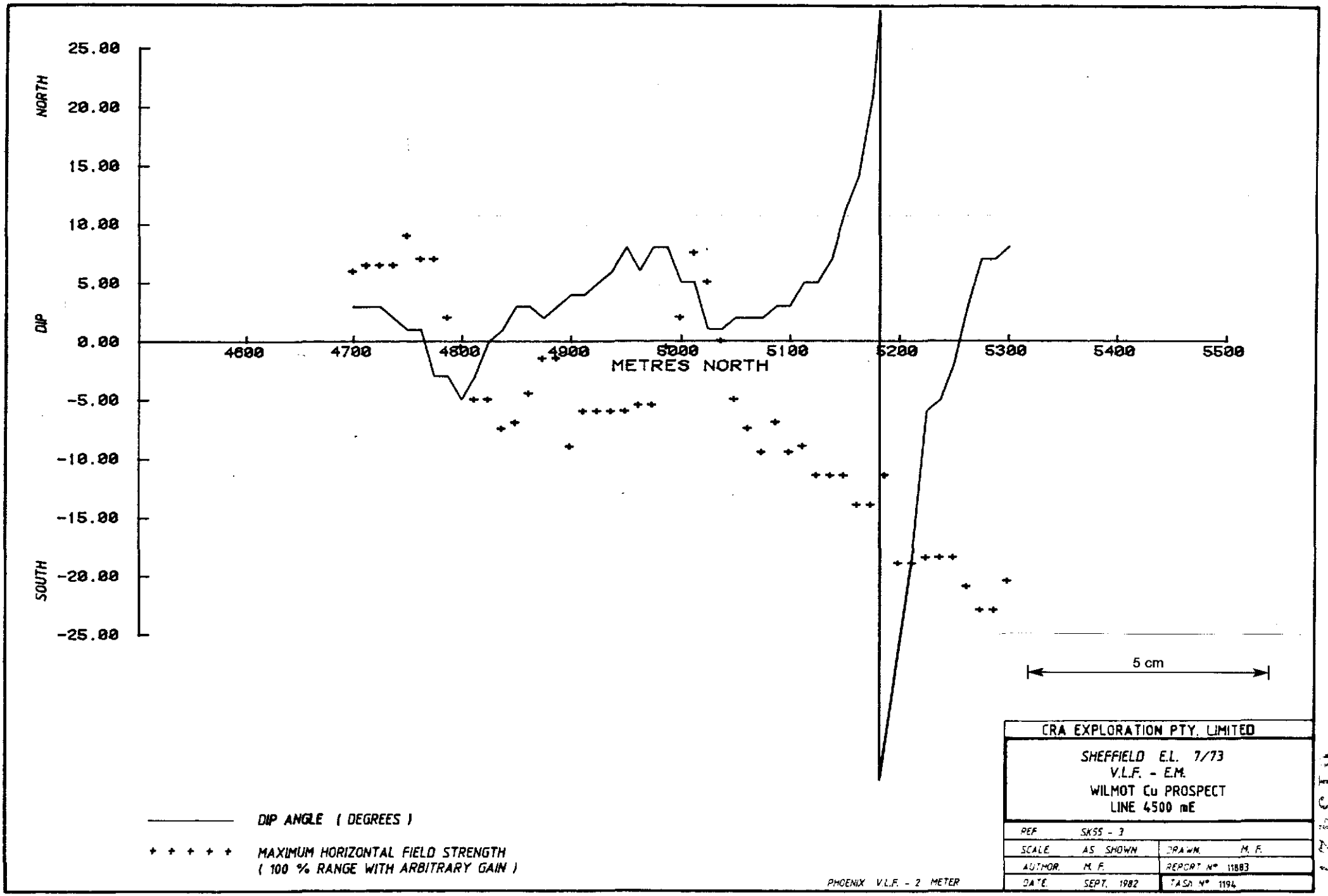


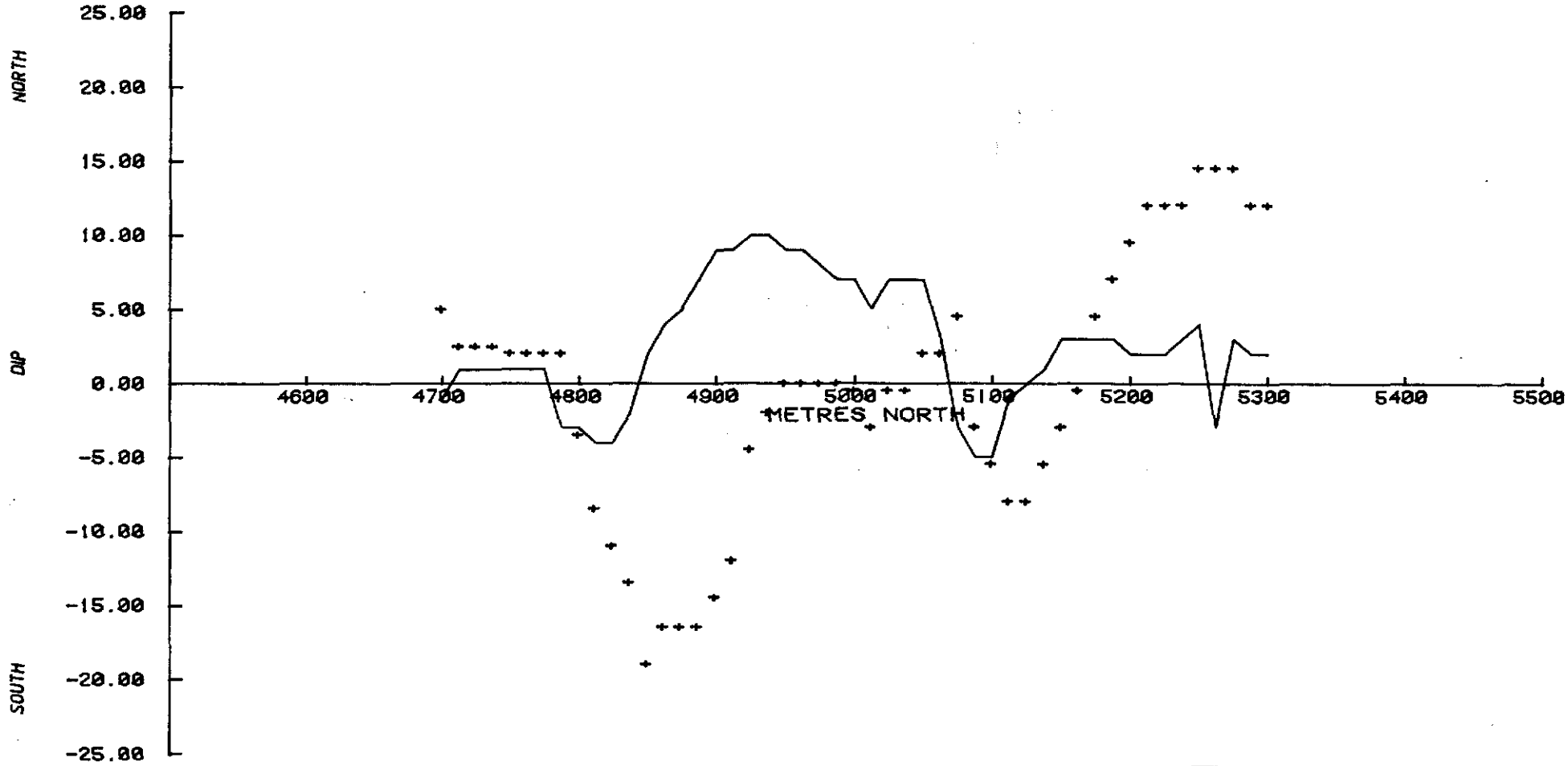
CRA EXPLORATION PTY. LIMITED

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°	11883
DATE.	SEPT. 1982	TASK N°	1193

613426


25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
NORTH
DIP
SOUTH
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
METRES NORTH
5 cm
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
V.L.F. - E.M.
WILMOT Cu PROSPECT
LINE 4500 mE
REF. SK55 - 3
SCALE AS SHOWN
DRAWN M. F.
AUTHOR M. F.
REPORT N° 11883
DATE SEPT. 1982
TASA N° 1194



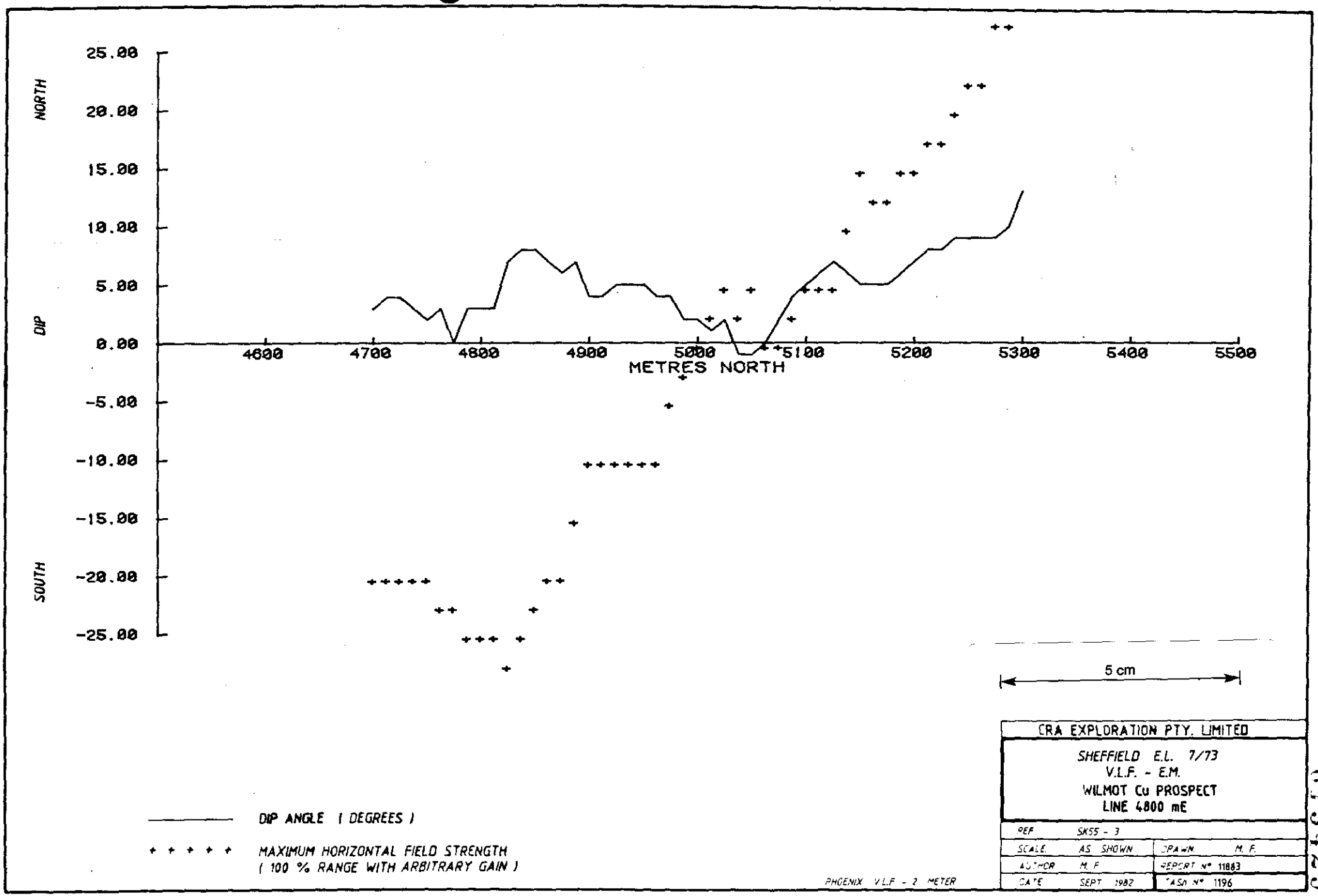
DIP ANGLE (DEGREES)

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

PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED			
SHEFFIELD E.L. 7/73 V.L.F. - E.M. WILMOT Cu PROSPECT LINE 4600 mE			
REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	CASH N°	1195

613428


25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
NORTH
DIP
SOUTH
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
METRES NORTH
5 cm
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
V.L.F. - E.M.
WILMOT Cu PROSPECT
LINE 4800 mE
REF SK55 - 3
SCALE AS SHOWN
DRAWN M. F.
AUTHOR M. F.
REPORT N° 11883
DATE SEPT 1982
CASE N° 1196

619329

LAKE BARRINGTON

BASELINE

100 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200 E. 1300 E.

613430

LEGEND

Qs QUARTZ - SERICITE SCHISTS
Medium to coarse grained, quartz rich.
Probably after crystal tuffs and lavas and rare lithic - crystall tuffs.
Grades to fine grained schists.

Ta SERICITIC SCHISTS - PHYLLITES
Fine grained, quartz poor.
Probably after fine tuffs.
Grades to quartz sericite schist.
Limonitic pits and clots after pyrite common to abundant.

Ss SERICITIC SLATES AND SCHISTS
Very fine grained, highly fissile - vissually bleached
Probably after tuff shales.
Ferruginous pits and clots after sulphides occassionally present.

- Clastic bands. Quartzose grits. Quartzose clasts in schists.
- Rhyollite. Relatively unaltered pink, vitric with quartz phenocrysts. Grades to quartz - sericite schists.
- Breccia. Quartz rich fragmentals - rare.
- fe Ferruginous - mainly hematitic with associated red soils. Usually occurs with sericite schists.
- li Limonite. Massive or banded gossanous limonite.
- bedding
- schistosity
- Interpreted lithological trends
- I.P. anomaly probable
- I.P. anomaly possible
- Creek
- Possible discontinuity, shown as major fault line on previous mapping.

Grid North

0 50 100 Metres
SCALE 1:2500

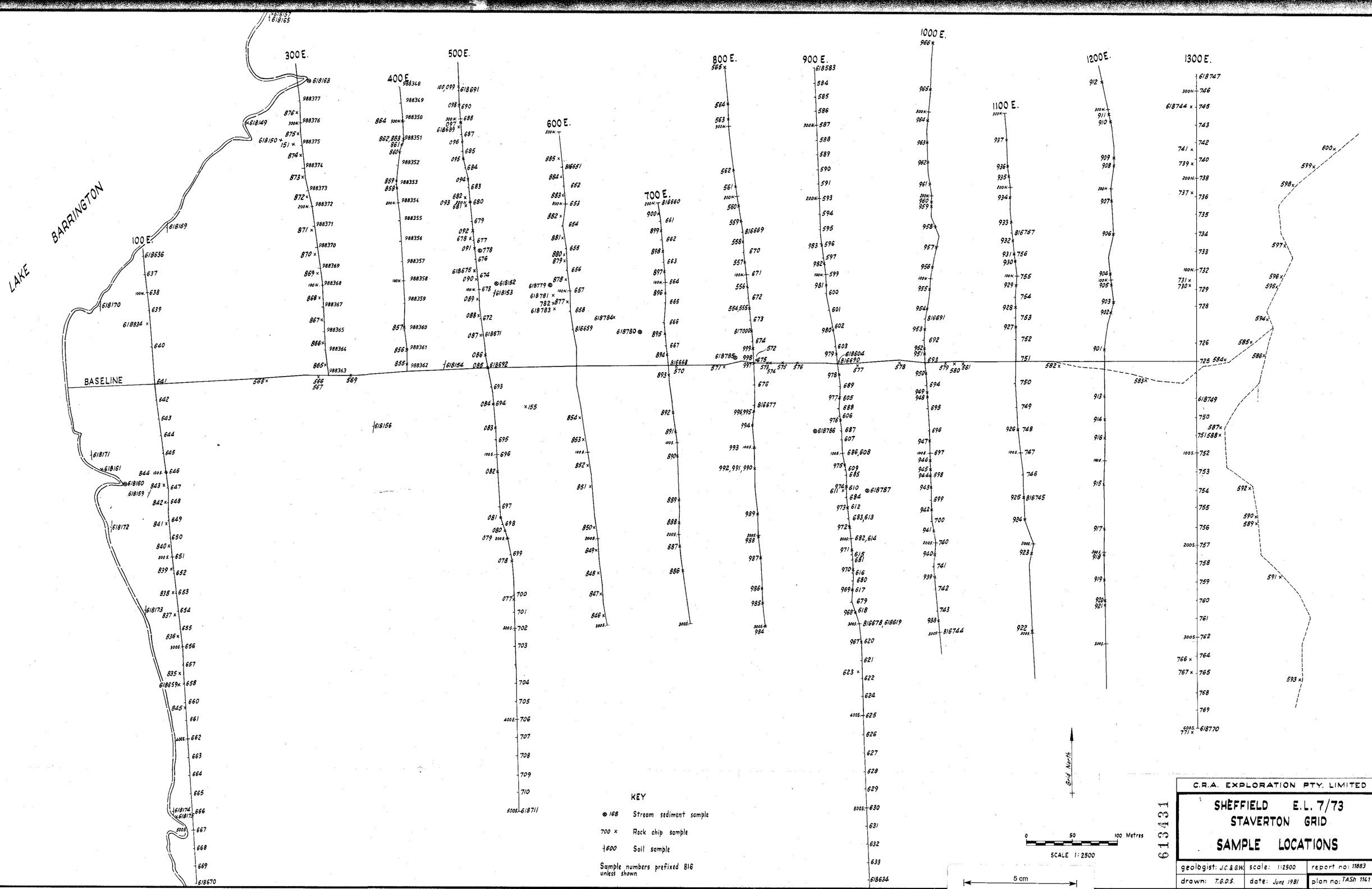
5 cm

C.R.A. EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
STAVERTON GRID
GEOLOGICAL PLAN

geologist: J.C.	scale: 1:2500	report no. 11883
drawn: T.G.D.S.	date: Jan 1981	plan no. TASH 1140

14444


LAKE BARRINGTON
BASELINE
100 E.
300 E.
400 E.
500 E.
600 E.
700 E.
800 E.
900 E.
1000 E.
1100 E.
1200 E.
1300 E.
618636
618168
618149
618150
618169
618170
618834
618171
618161
618160
618159
618172
618173
618659
618174
618175
618670
618156
618154
618675
618691
618689
618152
618153
618692
618671
618779
618781
618783
618784
618780
618660
618668
618785
618786
618787
816651
816659
816669
816677
816691
816744
816745
816767
816678, 618619
618634
618744
618747
618749
618770
618711
155
KEY
⊗ 168 Stream sediment sample
700 × Rock chip sample
600 Soil sample
Sample numbers prefixed 816 unless shown
Grid North
0 50 100 Metres
SCALE 1:2500
5 cm
C.R.A. EXPLORATION PTY. LIMITED
SHEFFIELD E.L. 7/73
STAVERTON GRID
SAMPLE LOCATIONS
geologist: J.C. & G.W.
scale: 1:2500
report no: 11883
drawn: T.G.D.S.
date: June 1981
plan no: TASh 1141
6133431
14444

LAKE BARRINGTON

BASELINE

100 E. 200 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200 E. 1300 E.

KEY

160 Soil sample
Results in p.p.m.

Contours at 50
100 ppm Cu

0 50 100 Metres
SCALE 1:2500

5 cm

C.R.A. EXPLORATION PTY. LIMITED

6134132

SHEFFIELD E.L. 7/73
STAVERTON GRID

COPPER SOIL GEOCHEMISTRY

geologist: J.C. & G.W.	scale: 1:2500	report no: 11883
drawn: T.G.D.S.	date: June 1981	plan no: TASh 1142

1445

LAKE BARRINGTON

BASELINE

100 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200 E. 1300 E.

KEY

60 Soil sample
Results in p.p.m.
Contours at 1000
2000 ppm Pb

Grid North

0 50 100 Metres
SCALE 1:2500

5 cm

6133433

C.R.A EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
STAVERTON GRID

LEAD SOIL GEOCHEMISTRY

geologist: JC & GW	scale: 1:2500	report no: 11883
drawn: TGDS	date: June 1981	plan no: TASh 1143

1445

LAKE BARRINGTON

BASELINE

100 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200E. 1300 E.

KEY

60 Soil sample
Results in p.p.m.

Contours at 200
300
400 ppm Zn

SCALE 1:2500

0 50 100 Metres

5 cm

CRA EXPLORATION PTY. LIMITED

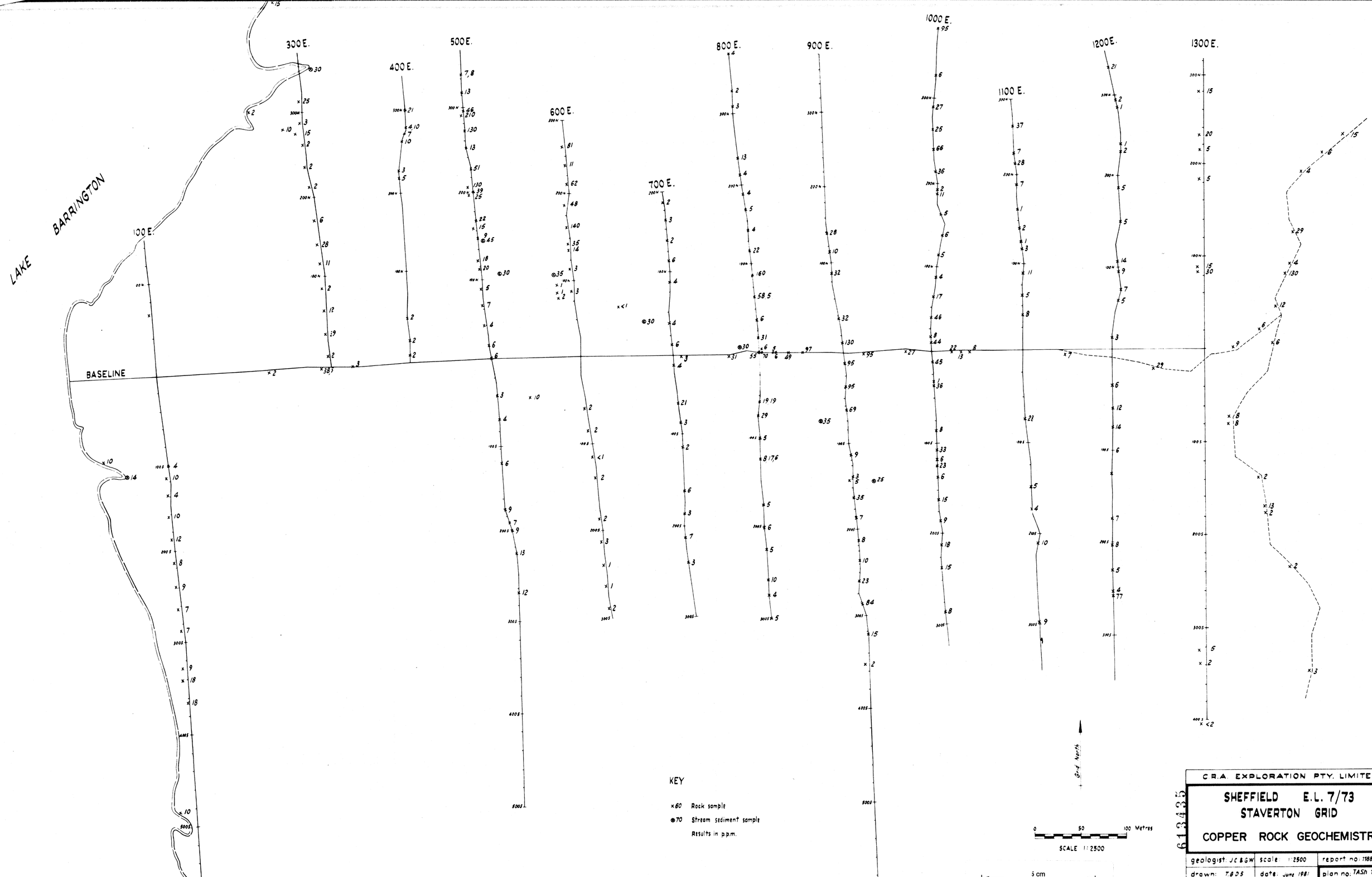
613434

SHEFFIELD E.L. 7/73
STAVERTON GRID

ZINC SOIL GEOCHEMISTRY

geologist J.C.B.G.W.	scale 1:2500	report no. 11883	
drawn T.G.D.S.	date June 1981	plan no. TASh 1144	

1445


LAKE BARRINGTON
BASELINE
100 E.
300 E.
400 E.
500 E.
600 E.
700 E.
800 E.
900 E.
1000 E.
1100 E.
1200 E.
1300 E.
KEY
×60 Rock sample
⊛70 Stream sediment sample
Results in p.p.m.
Grid North
0 50 100 Metres
SCALE 1:2500
5 cm
C.R.A. EXPLORATION PTY. LIMITED
SHEFFIELD E.L. 7/73
STAVERTON GRID
COPPER ROCK GEOCHEMISTRY
geologist: J.C & G.W
scale: 1:2500
report no: 11883
drawn: T.B.D.S
date: June 1981
plan no: TASh 1145
6134435
1445

LAKE BARRINGTON

100 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200 E. 1300 E.

BASELINE

KEY

×60 Rock sample

⊗70 Stream sediment sample

Results in p.p.m.

Grid North

0 50 100 Metres

SCALE 1:2500

5 cm

C.R.A. EXPLORATION PTY. LIMITED

613136

SHEFFIELD E.L. 7/73
STAVERTON GRID

LEAD ROCK GEOCHEMISTRY

geologist: J.C. & G.W.	scale: 1:2500	report no: 11883	
drawn: T.B.D.S.	date: June 1981	plan no: T.A.Sh 1146	

1445

LAKE BARRINGTON

BASELINE

100 E. 300 E. 400 E. 500 E. 600 E. 700 E. 800 E. 900 E. 1000 E. 1100 E. 1200 E. 1300 E.

KEY

×60 Rock sample

●70 Stream sediment sample

Results in ppm

Grid North

0 50 100 Metres

SCALE 1:2500

5 cm

C.R.A. EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73

STAVERTON GRID

ZINC ROCK GEOCHEMISTRY

613437

geologist: J.C. & G.W.	scale: 1:2500	report no.: 11883
drawn: T.B.D.S.	date: June 1981	plan no.: TASh 1147

LEGEND.

Road
Track
Creek
Geological boundary
Traverse line
Fault
f/p° Dip & strike of bedding

Quaternary — Qa Alluvium
Qt Talus
Ordovician — Or Roland conglomerate
Unaltered Nietta Group
Enul Rhyolite lava (may be intrusive in parts).
Enuc Rhyolitic crystal tuff.
Cambrian — Altered to unaltered Nietta Group.
Enls Fine vitric tuff, fine tuff, tuffaceous shale, lithic tuffs & shale.
Enla Ash flow & crystal-ash flow tuff.

TRAVERSE MAPPING SYMBOLS
Talus (Quaternary)
Alluvium (")
s - Tuffaceous shale, shale.
T - Fine tuffs
Q - Quartz crystal tuff
□ - Ash flow tuff
+ - Schistose tuff
+ - Lithic tuff - medium to coarse.
Δ - Fine, usually bedded, vitric tuff.
L - Rhyolite lava.
◊ - Lapilli tuff.
⊙ Roland conglomerate (Ordovician)

Map N

Unnamed Bridge Rd

GOG RANGE WEST

445 600mE

5 405 000mN

Boundary of E.L. 7/73

5 cm

CRA EXPLORATION PTY. LIMITED
E.L. 7/73 SHEFFIELD N.W. TAS.
GOG RANGE PROSPECT
GEOLOGY PLAN

REF. SK55-3	
SCALE. 1:5000	DRAWN. T.M.P./T.G.D.S.
AUTHOR. T.M.P./I.M.C.	REPORT No. 11883
DATE. FEB. 1983	TAS h No. 1226

613438

LEGEND.

Road
Track
Creek

Mag. N

445 600mE

Union Bridge Rd

GOG RANGE WEST

Line G 19E
Line G 20E
Line G 21E
Line G 22E
Line G 23E
Line G 24E
Line G 25E
Line G 26E
Line G 27E
Line G 28E
Line G 29E
Line G 30E
Line G 31E
Line G 32E
Line G 33E
Line G 34E
Line G 35E
Line G 36E
Line G 37E
Line G 38E
Line G 39E
Line G 40E
Line G 41E
Line G 42E
Line G 43E
Line G 44E
Line G 45E
Line G 46E
Line G 47E
Line G 48E
Line G 49E
Line G 50E
Line G 51E
Line G 52E
Line G 53E
Line G 54E
Line G 55E

5700mN
5600mN
5500mN
5400mN
5300mN
5200mN
5100mN
5000mN
4900mN
4800mN
4700mN

5405 000mN

445 600mE

5 cm

Boundary of E.L. 7/73

613439

CRA EXPLORATION PTY. LIMITED

E.L. 7/73 SHEFFIELD N.W. TAS.

GOG RANGE PROSPECT

SAMPLE LOCATION PLAN

REF. SK55-3	
SCALE. 1:5000	DRAWN. T.M.P./T.G.D.S.
AUTHOR T.M.P./I.M.C.	REPORT N° 11883
DATE. FEB. 1983	TAS h N° 1227

Map N

445 600mE

LEGEND.

Road

Track

Asarco Sampling

20 - Initial sampling results - Assays by Geomin - Sydney

20 / 8 - Follow-up sampling results - Assays by Robertson Research - Bowral.

20 CRAE sampling & results - Assays by Zinc Corp. - Broken Hill

Creek

GOG RANGE WEST

Union Bridge Rd

Line G 31E

Line G 32E

Line G 33E

Line G 34E

Line G 35E

Line G 36E

Line G 37E

Line G 38E

Line G 39E

Line G 40E

Line G 41E

Line G 42E

Line G 43E

Line G 44E

Line G 45E

Line G 46E

Line G 47E

Line G 48E

Line G 49E

Line G 50E

Line G 51E

Line G 52E

Line G 53E

Line G 54E

Line G 55E

Line G 56E

Line G 57E

Line G 58E

Line G 59E

Line G 60E

Line G 61E

Line G 62E

Line G 63E

ANOMALY 1

ANOMALY 2

ANOMALY 3

ANOMALY 4

5780 m N

5680 m N

5580 m N

5480 m N

5380 m N

5280 m N

5180 m N

5080 m N

4980 m N

4880 m N

4780 m N

5 405 000mN

3000m E

3100m E

3200m E

3300m E

3400m E

3500m E

3600m E

3700m E

3800m E

3900m E

4000m E

4100m E

4200m E

445 600mE

CONTOUR INTERVAL.
100 - 200 p.p.m.
201 - 350 p.p.m.
> 351 p.p.m.

Contours at 100 200 350 ppm

Boundary of E.L. 7/73

5 cm

CRA EXPLORATION PTY. LIMITED

E.L. 7/73 SHEFFIELD N.W. TAS.
GOG RANGE PROSPECT
Cu GEOCHEMISTRY

REF. SK55-3	
SCALE. 1:5000	DRAWN. T.M.P./T.G.D.S.
AUTHOR. T.M.P./I.M.C.	REPORT Nº 11883
DATE. FEB. 1983	TAS h Nº 1228

613440

LEGEND.

Road

Track

Assarco Sampling

20 • Initial sampling results. – Assays by Geomin. – Sydney

Followup sampling results – Assays by Robertson Research – Booral.

20 ○ CRRE sampling & results. – Assays by Zinc Corp. – Broken Hill.

Coincident C.R.A.E. & Assarco samples. – Z.C. value underlined

Creek

Mag. N.

415 600mE

Union Bridge Rd

GOG RANGE WEST

Line G 9½E
Line G 9E
Line G 8½E
Line G 8E
Line G 7½E
Line G 7E
Line G 6½E
Line G 6E
Line G 5½E
Line G 5E
Line G 4½E
Line G 4E
Line G 3½E
Line G 3E
Line G 2½E
Line G 2E
Line G 1½E
Line G 1E
Line G ½E
Line G 0E

ANOMALY 4

ANOMALY 3

ANOMALY 2

ANOMALY 1

5300mN
5200mN
5100mN
5000mN
4900mN
4800mN
4700mN

5 405 000mN

CONTOUR INTERVAL:
100 - 200 p.p.m.
201 - 350 p.p.m.
> 351 p.p.m.

Boundary of EL 7/73

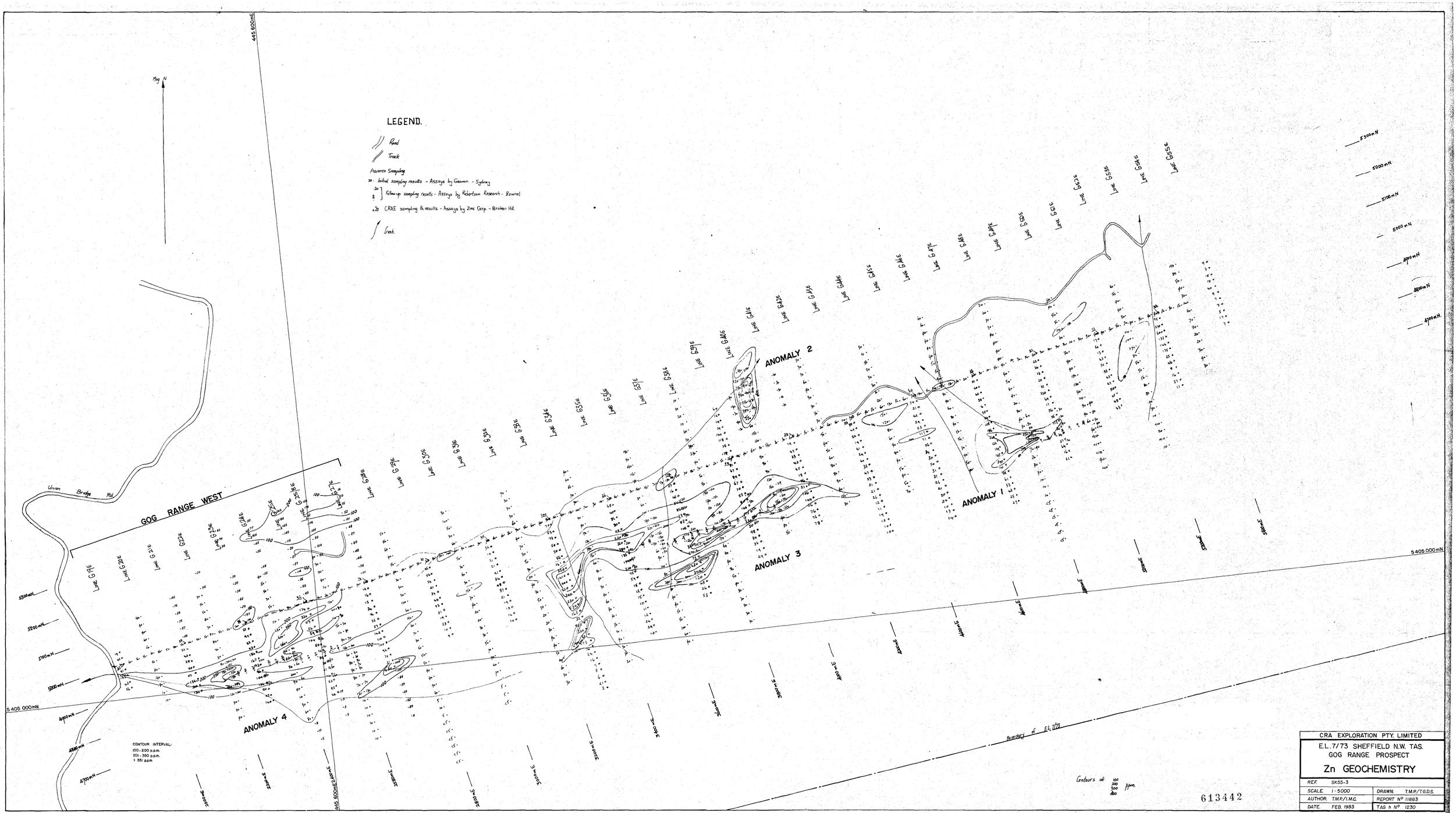
Contours at 100 200 500 400 ppm.

5 cm

CRA EXPLORATION PTY. LIMITED	
E.L. 7/73 SHEFFIELD N.W. TAS. GOG RANGE PROSPECT	
Pb GEOCHEMISTRY	
REF. SK55-3	
SCALE. 1:5000	DRAWN. T.M.P./T.G.D.S.
AUTHOR. T.M.P./I.M.C.	REPORT Nº 1883
DATE. FEB. 1983	TAS h Nº 1229

613441

1446


LEGEND.
Road
Track
Assarco Sampling
20 - Initial sampling results - Assays by Geomin. - Sydney
20 / 8 - Follow-up sampling results - Assays by Robertson Research. - Bowral.
20 - CRAE sampling & results - Assays by Zinc Corp. - Broken Hill.
Creek.
Mag. N
445 600mE
GOG RANGE WEST
Union Bridge Rd
ANOMALY 1
ANOMALY 2
ANOMALY 3
ANOMALY 4
5 405 000mN
5300mN
5200mN
5100mN
5000mN
4900mN
4800mN
4700mN
CONTOUR INTERVAL:
100 - 200 p.p.m.
201 - 350 p.p.m.
> 351 p.p.m.
Boundary of E.L. 7/73
Contours at 100 200 300 400 ppm.
613442
CRA EXPLORATION PTY. LIMITED
E.L. 7/73 SHEFFIELD N.W. TAS.
GOG RANGE PROSPECT
Zn GEOCHEMISTRY
REF. SK55-3
SCALE. 1:5000
DRAWN. T.M.P./T.G.D.S.
AUTHOR. T.M.P./I.M.C.
REPORT Nº 11883
DATE. FEB. 1983
TAS h Nº 1230
1446

613443

	2100mE	2200mE	2300mE	2400mE	2500mE	2580mE	2700mE
5300mN	NR	-43	-61	-61	-56	-1	-28
	NR	-18	-59	-49	-56	2	-20
	-5	2	-56	-55	-60	55	-17
	8	17	-52	-58	-58	8	-13
	18	15	-61	-56	-56	1	-14
	7	27	-53	-45	-59	-4	-2
	-16	NR	-39	-58	-50	-5	-2
	-33	25	-27	-57	-66	-7	-1
5200mN	NR	7	-14	-62	-81	-10	-3
	-64	17	NR	-65	-91	-8	3
	-65	NR	-2	-91	-67	-21	-3
	-61	NR	-34	-60	-67	-16	1
	-65	-48	-46	-67	-67	-12	-4
	-66	-54	-40	-52	-71	-7	0
	-63	-57	-43	-62	-66	-11	3
	-63	-45	-51	-47	-64	-6	2
5100mN	-53	-57	-57	-58	-74	-4	-1
	-59	-38	-62	-64	-49	-7	-6
	-73	-42	-65	-67	-52	1	-6
	-50	-16	-59	-47	-50	9	-10
	-56	-9	-66	-42	-59	8	-6
	-66	-10	-71	-46	-51	18	-3
	-57	-20	-53	-18	-50	17	-17
	-53	-37	-66	-35	-34	31	-7
5000mN	-47	-35	-63	-34	-28	16	0
	-28	-33	-108	-28	-85	-8	4
	-25	-30	-96	-34	-48	11	-1
	-19	-32	-96	2	-47	3	3
	-16	-37	-73	2	-55	-5	4
	5	-28	-75	-8	-40	-48	1
	-12	-27	-65	-17	-49	-97	8
	-5	2	-59	-19	-53	-94	9
4900mN	-10	4	-55	-23	-60	-49	3
	-9	3	-57	-14	-92	-45	8
	-5	3	-46	-7	-121	-57	13
	-8	2	-58	-37	-137	-30	1
	-8	6	-62	12	-128	-36	7
	1	11	-52	0	-144	-78	0
	-6	1	-52	36	-141	-97	-8
	-17	0	-48	-5	-118	-140	-3
4800mN	-21	0	-53	-2	-58	-43?	-7
	-28	-5	-65	54	-34	-58	-14
	-39	-9	-67	2	-26	-60	-34
	-61	-15	-71	-8	-15	-55	-46
	-66	-9	-67	-10	8	-11	-14
	-59	-16	-69	-10	26	17	1
	-73	-14	-73	-7	9	-7	4
	-71	-52	-83	-10	-8	-1	-2
4700mN	-102	-71	-106	-23	8	17	-5
	-129	-101	-127	-37	-26	-28	-6
	-156	-110	-154	-41	-14	-9	-9
	-169	-128	-182	-44	-24	-5	-2
	-173	-143	-197	-44	-40	-18	-9
	-156	-151	-220	-71	-60	-15	-8
	-106	-161	-218	-104	-101	-38	-13
	-169	-157		-129	-118	-50	-12
4600mN	-146	-171		-182	-185	-91	-32
	-157	-183		-224	-200	-160	-30
	-148	-185		-233	-213	-248	-29
	-152	-202		-246	-247	-294	NR
		-210		-268	-253	-350	-68
				-269	-253	-376	
				-284		-409	
				-282			

5 cm

* NOTE * ALL VALUES IN MILLIVOLTS WITH RESPECT TO THE BASELINE LINES WERE LEVELED WITH RESPECT TO LINE 2700 mE.

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST

SELF POTENTIAL

Ref:	SK55 - 3		
Scale:	1 : 2 500	Drawn:	R. T.
Author:	M.F.F.	Report N°.	11883
Date:	23 - 9 - 1982	Plan N°.	TASh 882

613444

2100mE 2200mE 2300mE 2400mE 2500mE 2580mE 2700mE

5300mN 5200mN 5100mN 5000mN 4900mN 4800mN 4700mN 4600mN

ALL VALUES IN MILLIVOLTS WITH RESPECT TO THE BASELINE
ALL LINES WERE LEVELLED WITH RESPECT TO LINE 2700 mE

CONTOUR INTERVAL: 25mV

5 cm

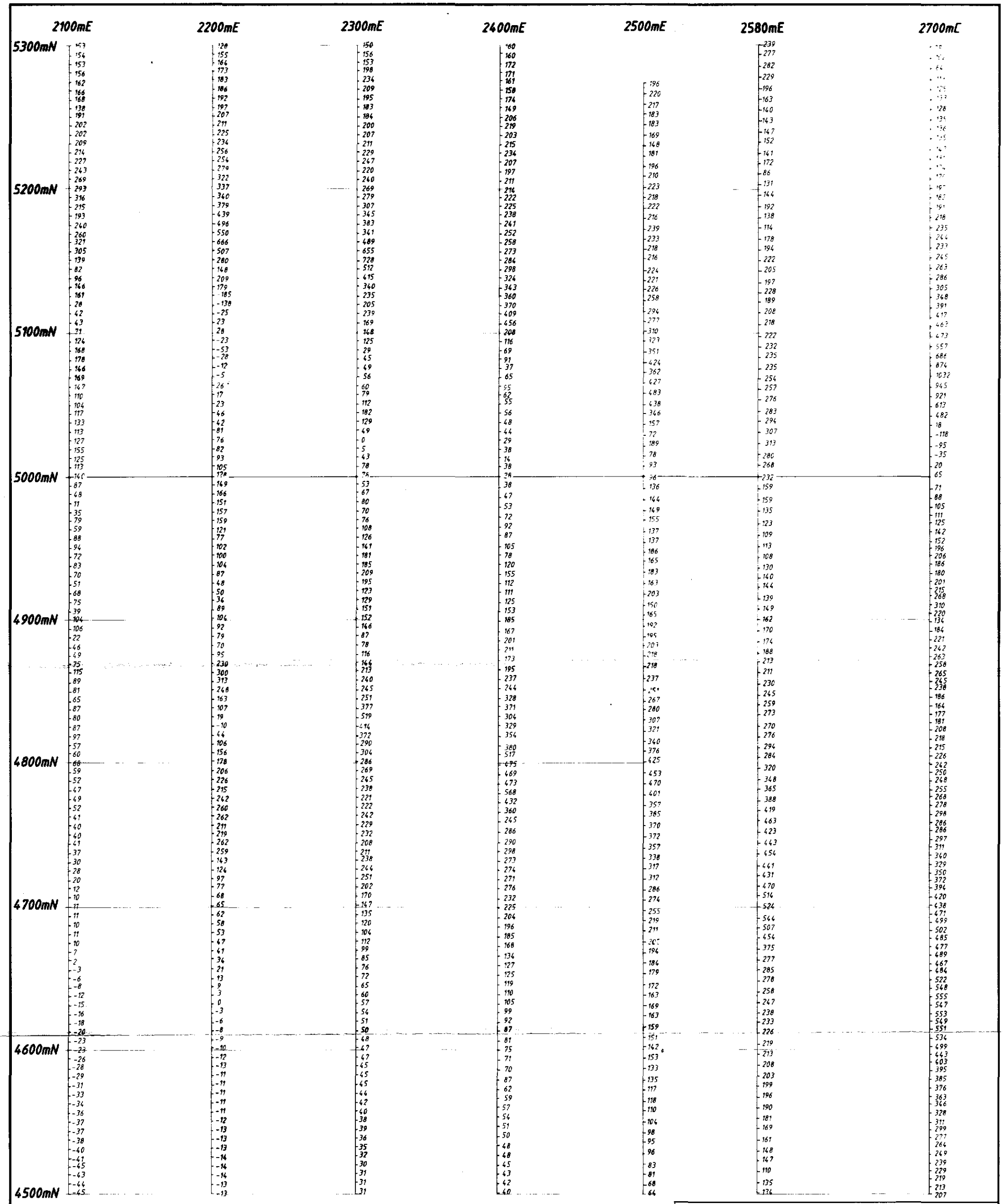
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST

CONTOURS OF SELF POTENTIAL

Ref:	SK55 - 3		
Scale:	1 : 2 500	Drawn:	R. T.
Author:	M. F. F.	Report N°.	11883
Date:	23 - 9 - 1982	Plan N°.	TASh 883

613445



**** NOTE ****

Base: 62000 nT
Magnetometer: G 836
Sensor on 2m staff.

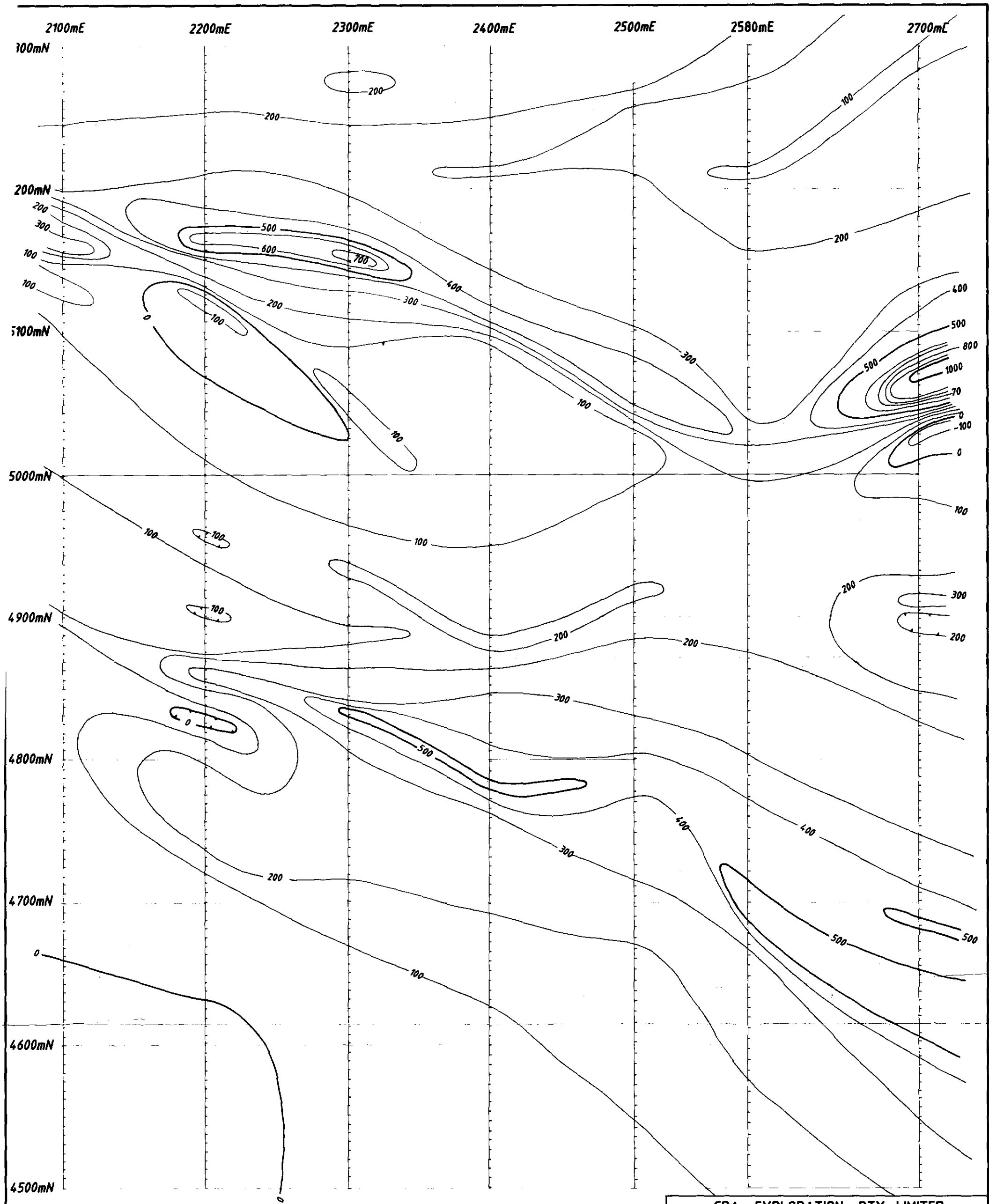
5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST
TOTAL INTENSITY GROUND MAGNETICS

Ref: SK55 - 3	
Scale: 1 : 2500	Drawn: R. T.
Author: M. F. F.	Report N°.
Date: 17 - 11 - 1982	Plan N°. TASh 949

613446



** NOTE **

Base: 62000 nT
Magnetometer: G 836
Sensor on 2m staff.
Contour interval: 100 nT

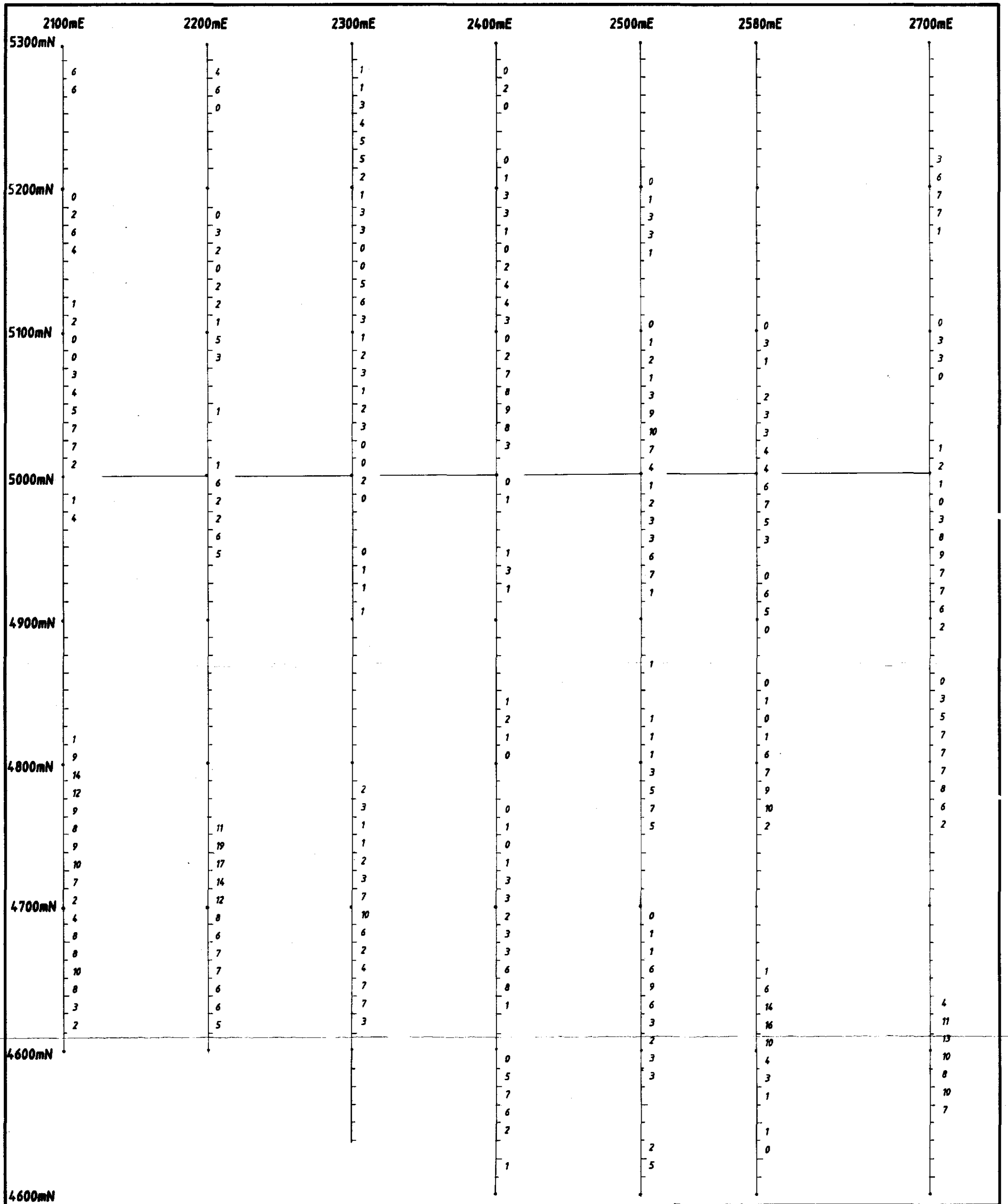
5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST
TOTAL INTENSITY
GROUND MAGNETIC CONTOURS

Ref: SK55 - 3	
Scale: 1 : 2500	Drawn: R. T.
Author: M. F. F.	Report N°.
Date: 17 - 11 - 1982	Plan N°. TASh 950

613447



** NOTE **
Instrument: PHOENIX VLF-2
Dip data Normalized using FRAZERS VLF-EM FILTER

5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST
NORMALIZED VLF-EM DIP

Ref:	SK55 - 3		
Scale:	1 : 2500	Drawn.	R.T.
Author:	M. F. F.	Report N°.	11883
Date:	December 1982	Plan N°.	TASH 1110

613448

	2100mE	2200mE	2300mE	2400mE	2500mE	2580mE	2700mE
5300mN	211	204	269	266	232	233	145
	201	204	260	266	232	234	147
	202	204	270	266	227	234	149
	197	199	290	265	212	234	151
	187	199	281	220	221	235	154
	192	194	271	214	221	235	160
	192	193	272	214	221	230	165
	192	193	262	213	220	230	168
5200mN	192	188	252	213	220	231	151
	188	188	233	207	225	226	163
	198	193	223	212	229	221	160
	198	193	224	241	224	222	157
	198	192	224	251	229	227	154
	193	192	220	270	229	232	150
	193	192	215	260	233	232	161
	188	187	220	269	233	228	163
5100mN	178	192	206	279	233	228	160
	184	186	201	288	232	229	161
	179	181	202	278	227	229	163
	189	176	187	297	232	229	160
	189	171	193	297	236	234	167
	185	171	188	296	236	220	169
	175	176	184	276	236	220	171
	180	181	184	275	231	225	178
5000mN	165	185	180	200	220	230	190
	161	180	175	169	216	226	191
	156	175	184	191	217	212	201
	151	164	174	177	210	208	221
	142	164	163	173	208	199	221
	137	158	153	168	205	201	227
	127	153	162	169	200	197	232
	117	147	162	164	195	198	222
4900mN	118	137	156	154	192	179	223
	113	136	140	160	190	175	233
	109	136	145	160	187	177	243
	114	145	139	161	190	168	254
	130	135	139	161	188	167	254
	130	134	148	171	187	170	264
	136	144	148	172	187	166	275
	151	143	158	172	186	172	275
4800mN	185	147	157	163	184	163	265
	207	152	162	158	182	165	256
	213	156	162	159	176	166	226
	219	181	166	169	179	147	223
	225	195	166	169	173	144	213
	225	210	175	170	162	135	203
	226	209	180	175	160	137	198
	216	199	185	176	164	138	189
4700mN	207	188	174	176	162	139	179
	192	168	164	182	170	145	174
	192	172	175	192	169	147	190
	188	167	163	193	178	153	195
	183	166	172	183	177	169	231
	184	161	162	178	175	185	251
	169	151	151	174	164	176	271
	170	155	146	169	167	158	282
4600mN	165	155	150	165	155	144	282
			140	165	158	141	277
			134	161	150	137	273
			134	161	152	128	253
			129	151	150	129	234
			128	142	138	130	234
				142	135	126	229
				132	137	127	225
4600mN				133	130	124	225

** NOTE **
Instrument: PHOENIX VLF-2
Base: ARBITARY GAIN

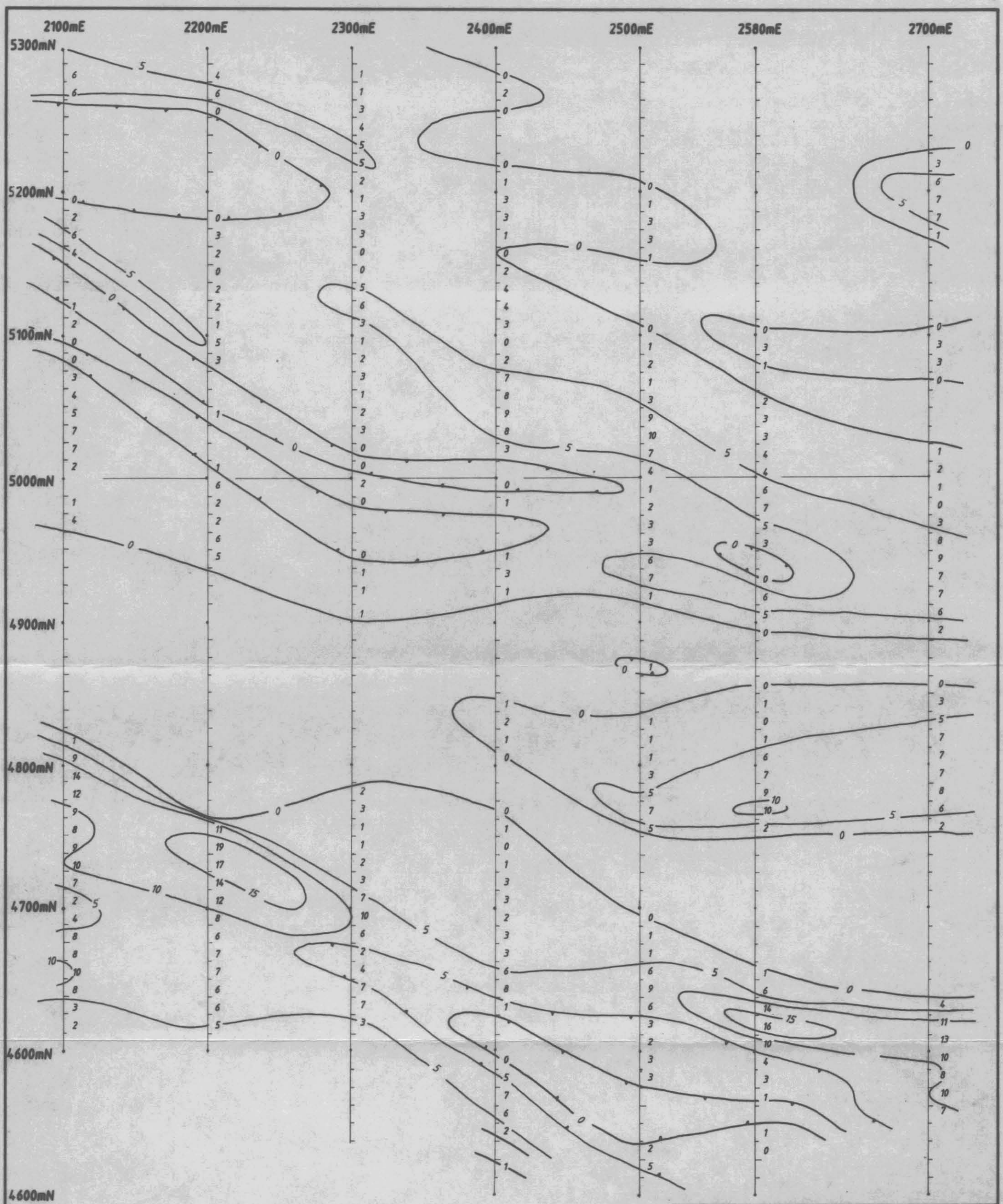
5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST
VLF-EM MAX. HORIZONTAL
FIELD STRENGTH (%)

Ref:	SK55 - 3		
Scale:	1 : 2500	Drawn.	R. G.
Author:	M. F. F.	Report N°.	11883
Date:	December 1982	Plan N°.	TASH 1111

613449



INSTRUMENT: PHOENIX VLF-2
DIP DATA NORMALIZED USING FRASER'S FILTER

CONTOUR INTERVAL: 5 NORMALIZED DEGREES

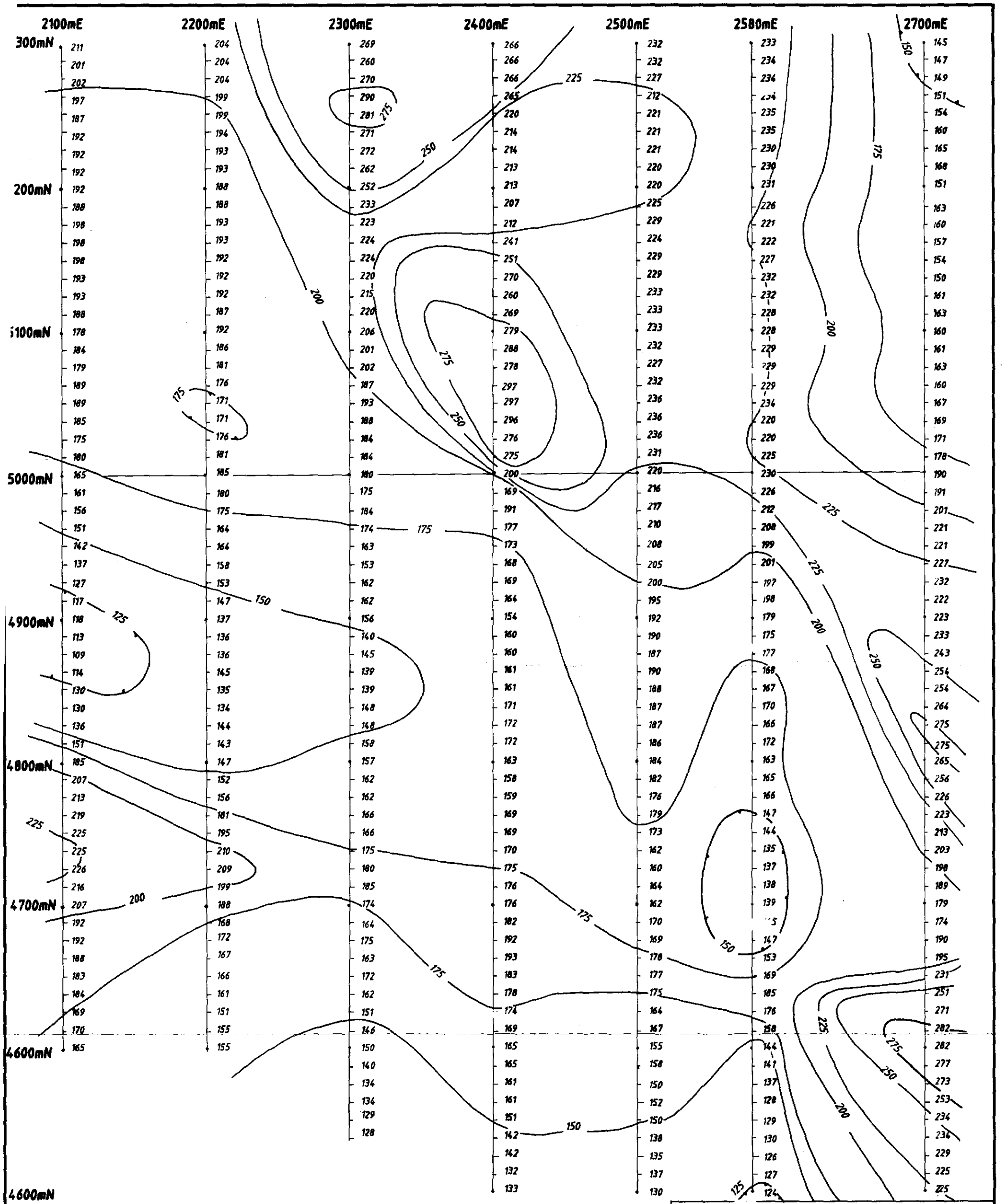
5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST
CONTOURS OF
NORMALIZED VLF-EM DIP

Ref:	SK55 - 3		
Scale:	1 : 2500	Drawn.	R.T.
Author:	M. F. F.	Report N°.	11883
Date:	December 1982	Plan N°.	TASH 1112

613450



** NOTE **
Instrument: PHOENIX VLF-2
Base: ARBITRARY GAIN
Contour Interval: 25%

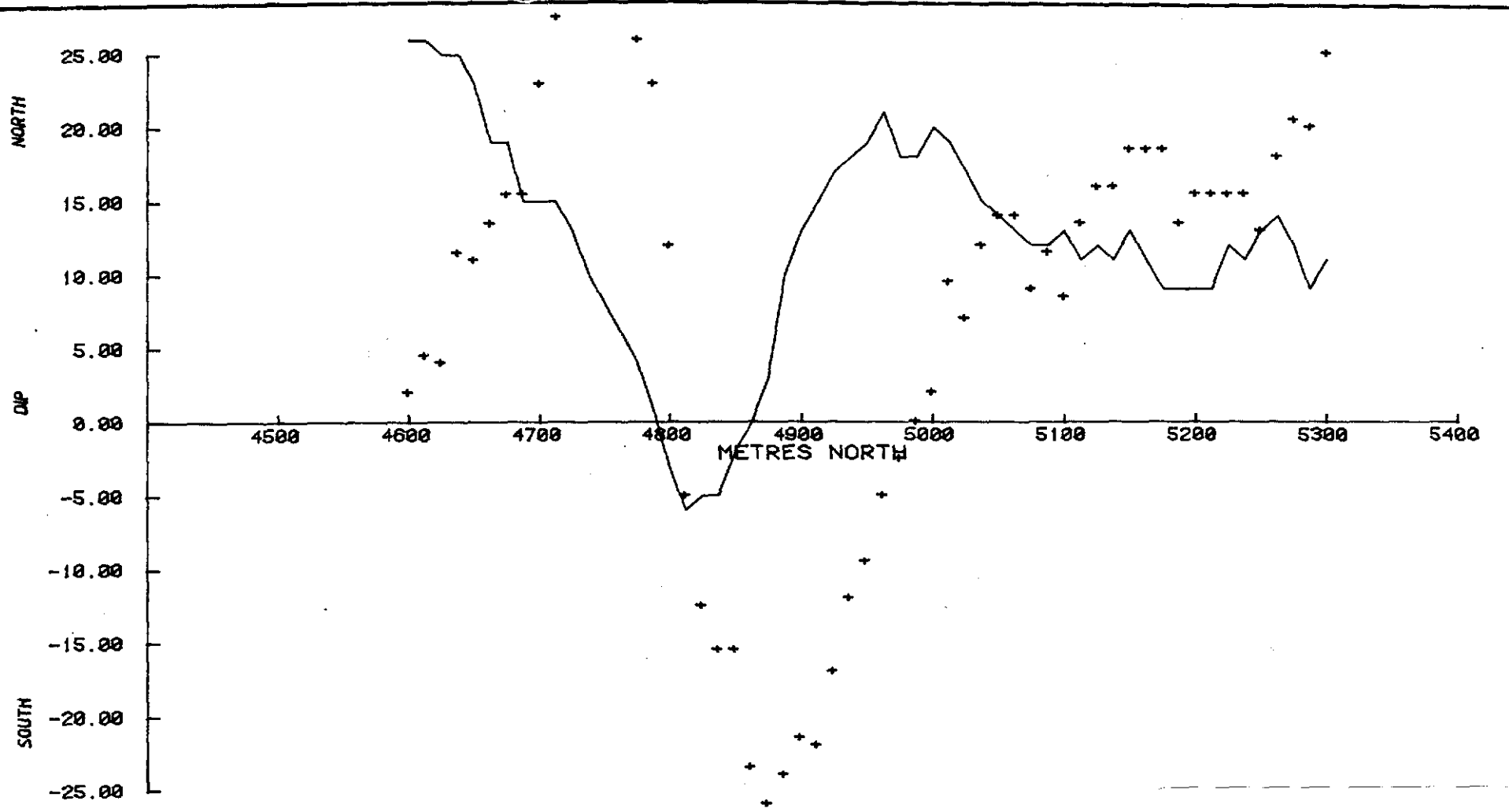
5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GOG RANGE WEST
CONTOURS OF VLF-EM
MAX. HORIZONTAL FIELD STRENGTH (%)

Ref:	SK55 - 3		
Scale:	1 : 2500	Drawn.	R. G.
Author:	M. F. F.	Report N°.	11883
Date:	December 1982	Plan N°.	TASH 1113

613451



DIP ANGLE (DEGREES)

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

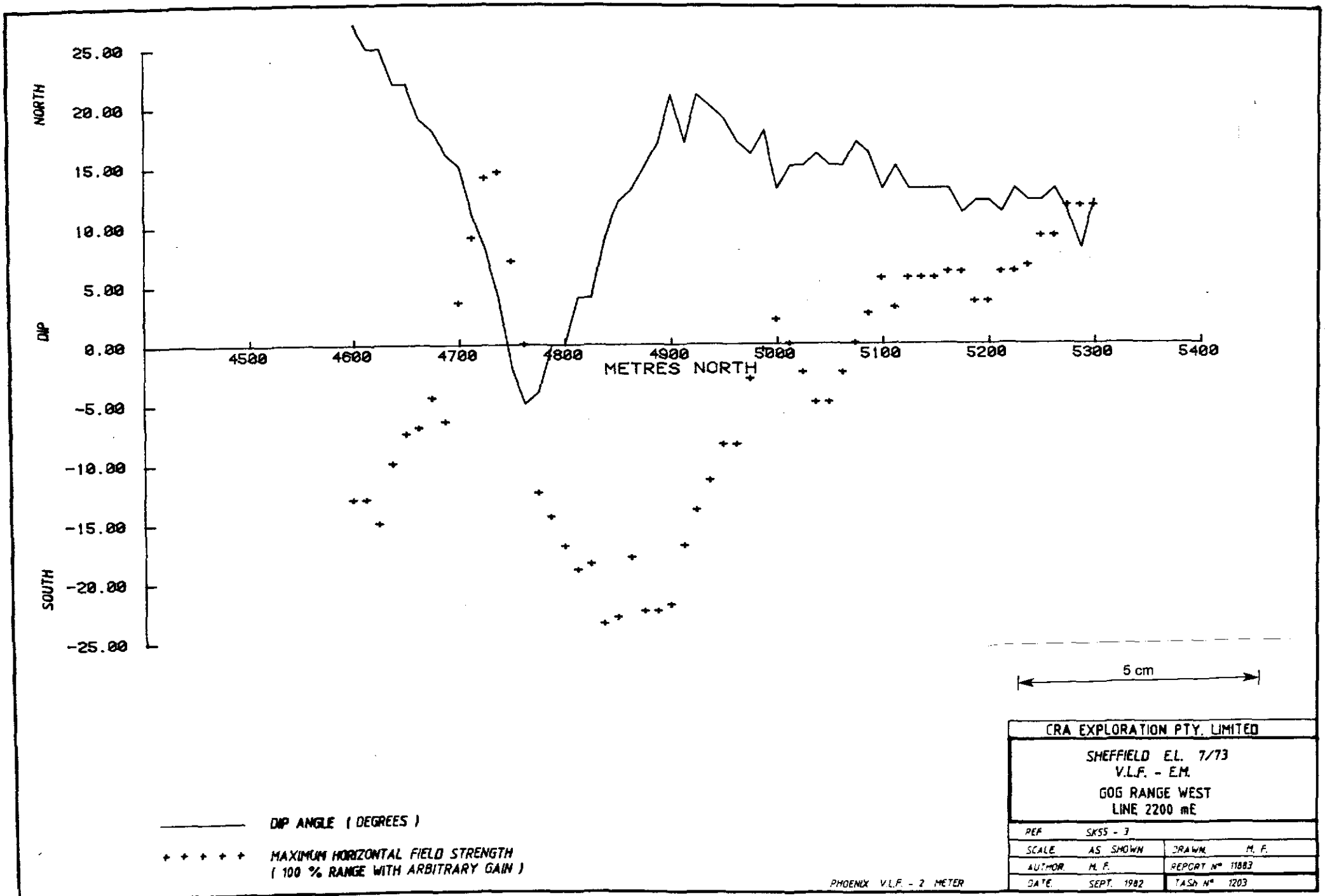
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
GOG RANGE WEST
LINE 2100 mE

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT No.	11883
DATE	SEPT. 1982	TASK No.	1202

613452

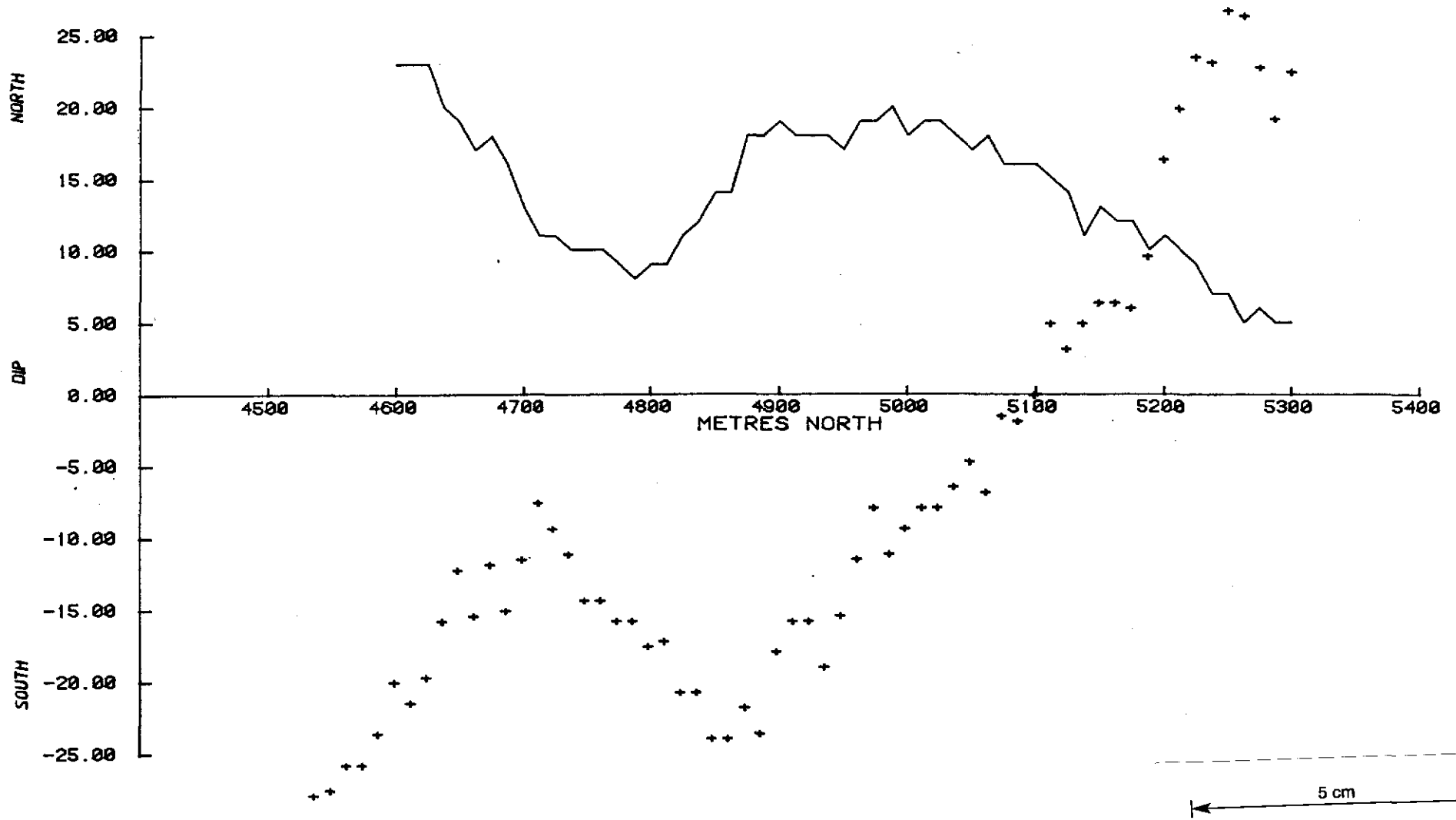


CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
GOG RANGE WEST
LINE 2200 mE

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1203

613453



DIP ANGLE (DEGREES)

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

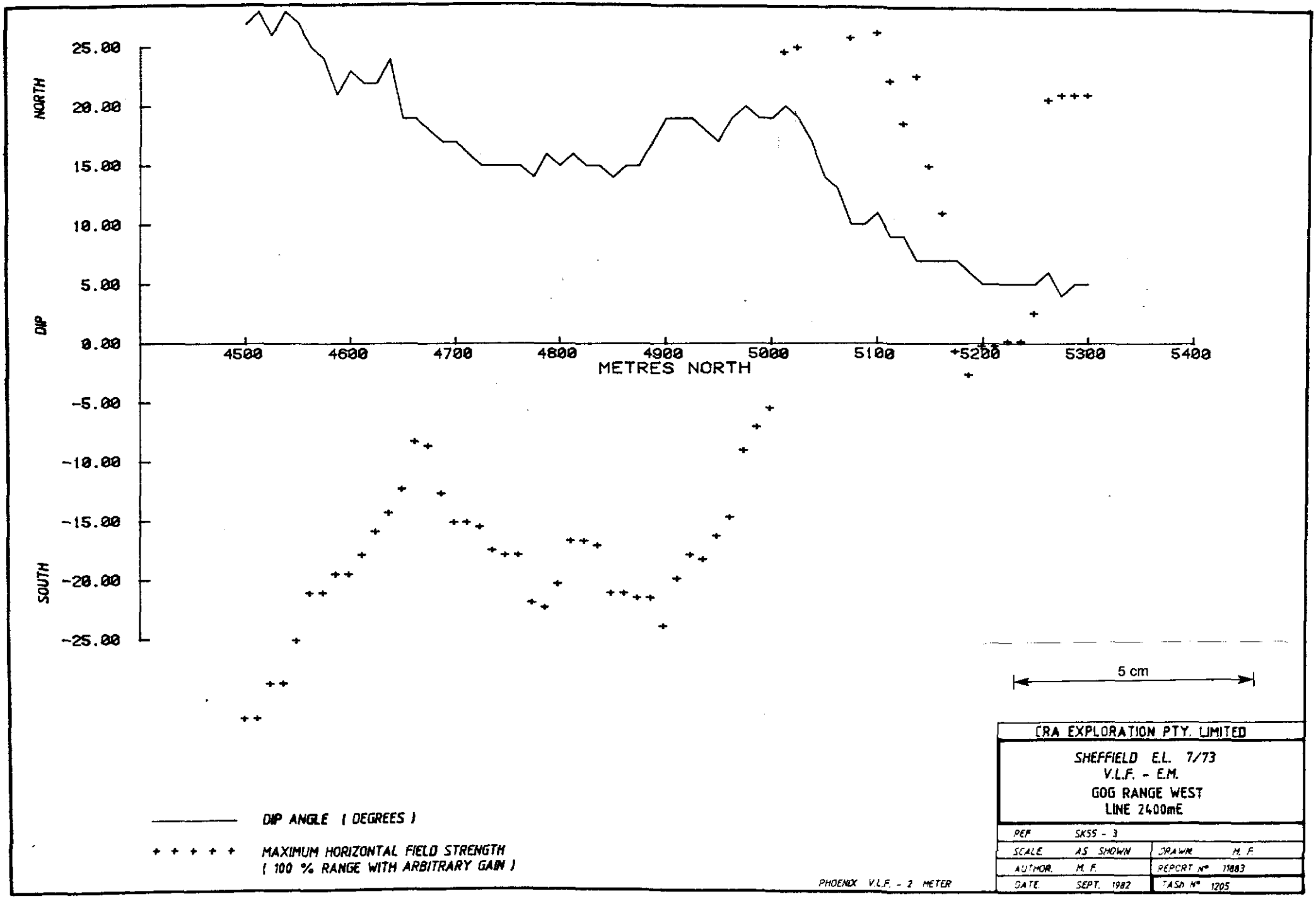
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
GOG RANGE WEST
LINE 2300 mE

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1204

613454

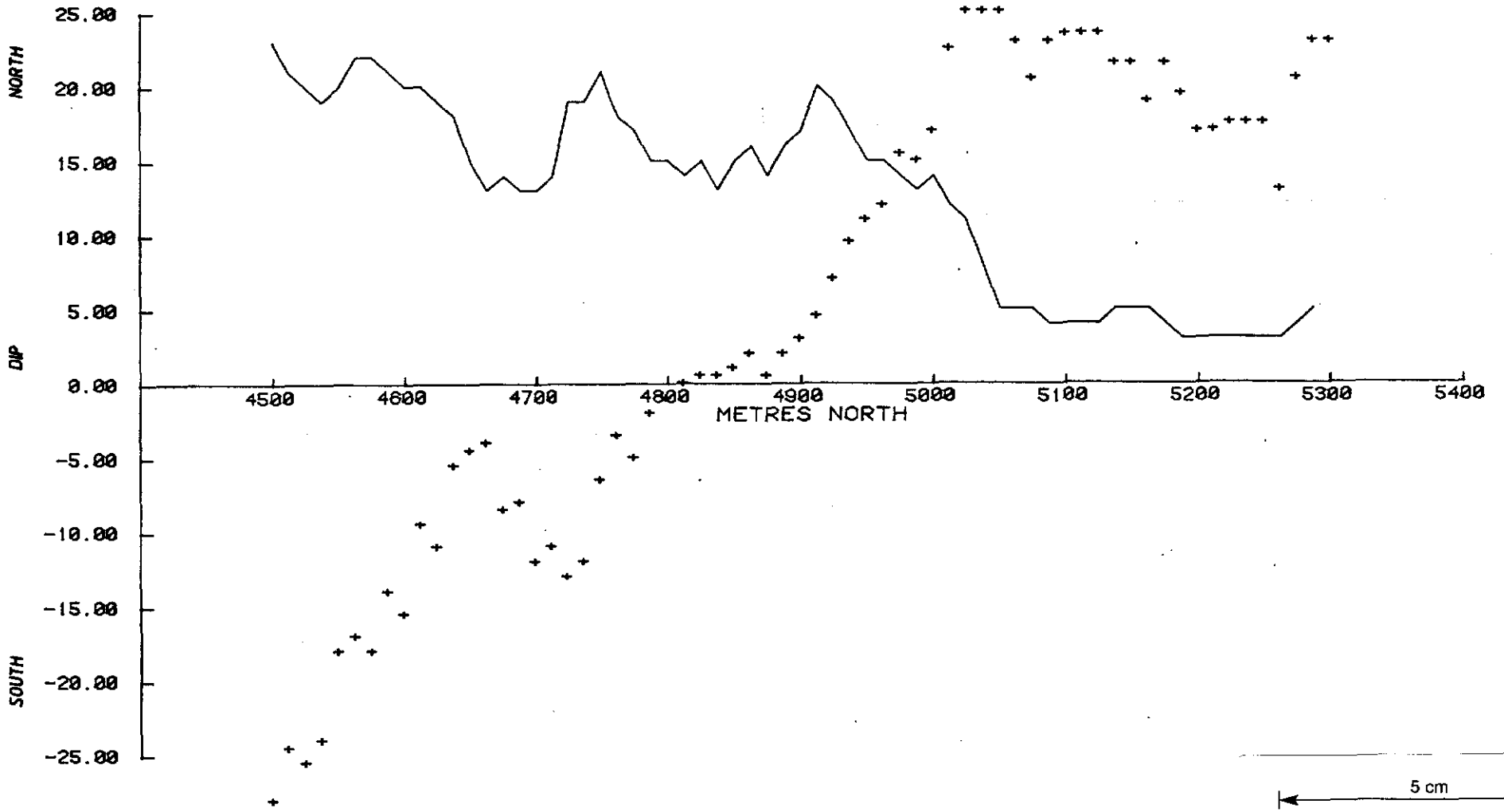


CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
GOG RANGE WEST
LINE 2400mE

PEP	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASD N°	1205

613455



5 cm

DIP ANGLE (DEGREES)

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

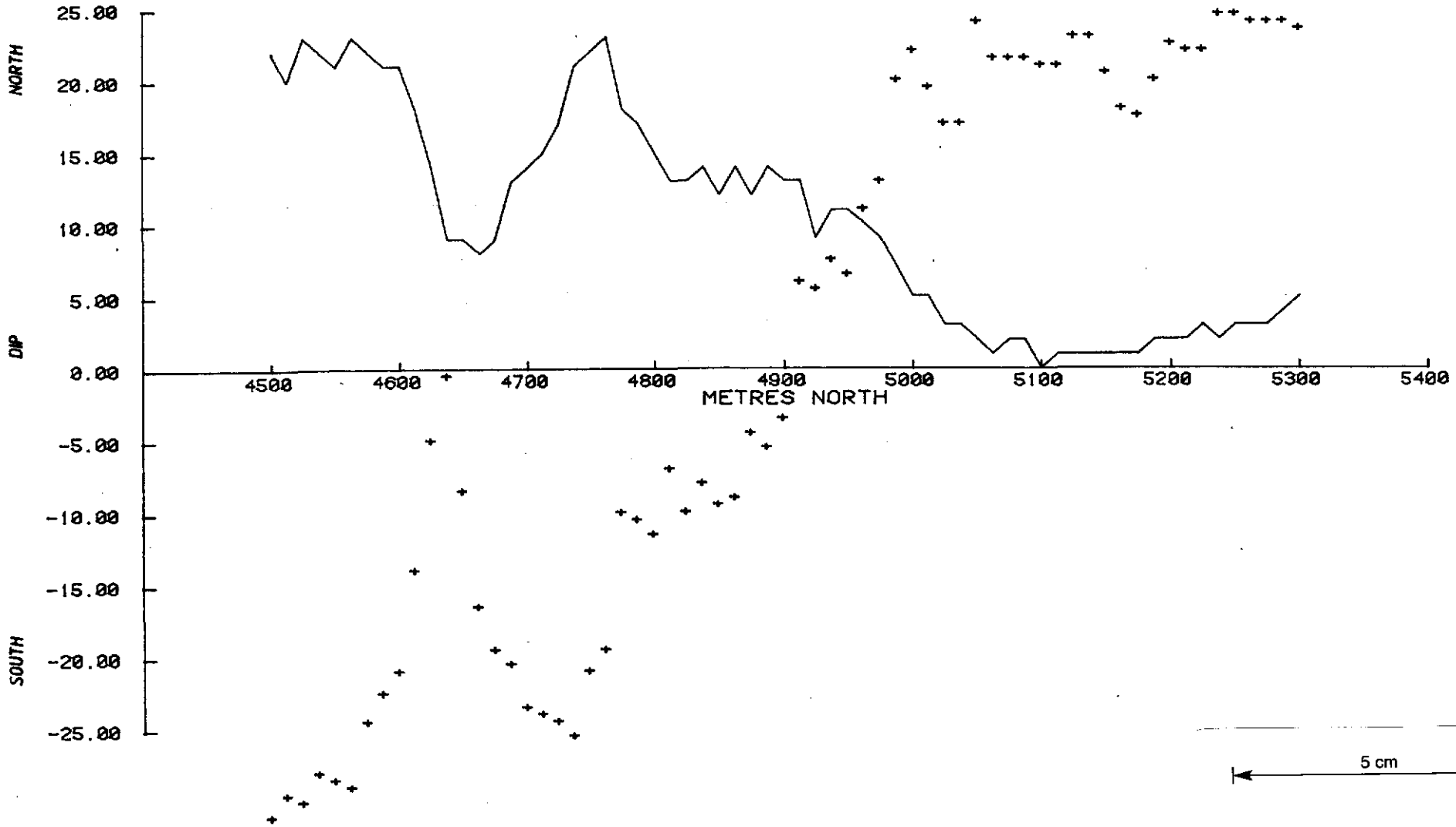
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
GOG RANGE WEST
LINE 2500 mE

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1206

613456

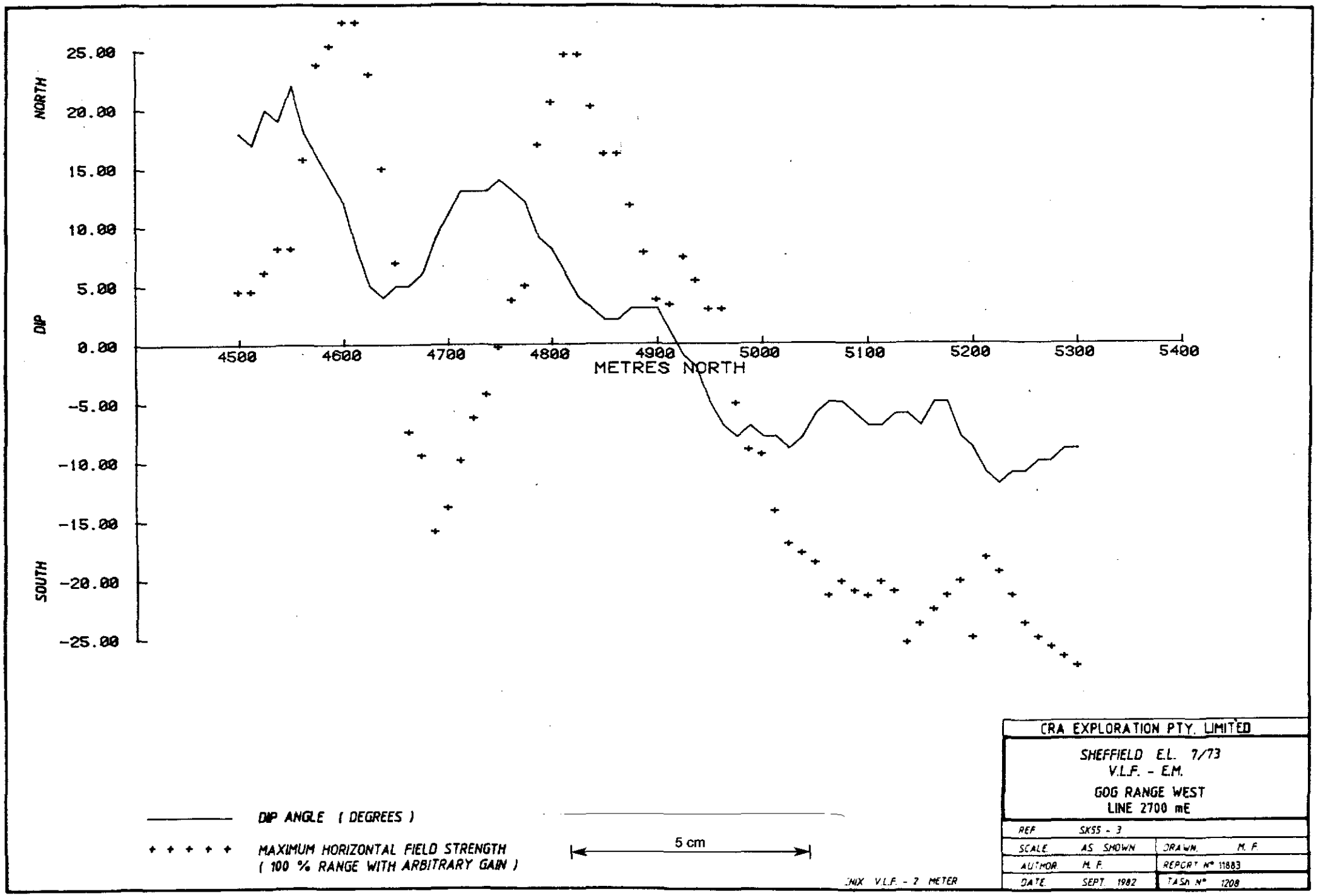


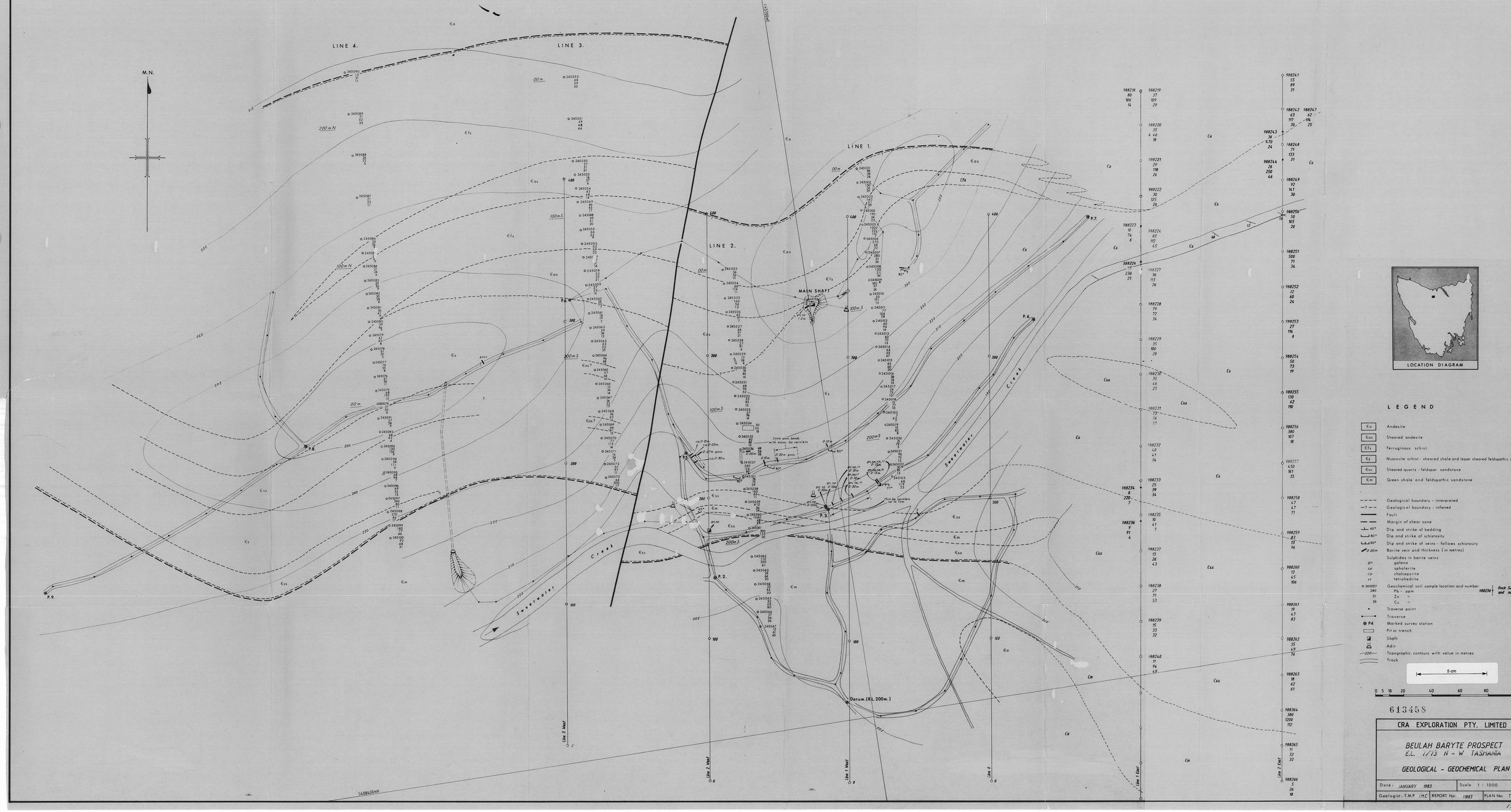
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
GOG RANGE WEST
LINE 2580 mE

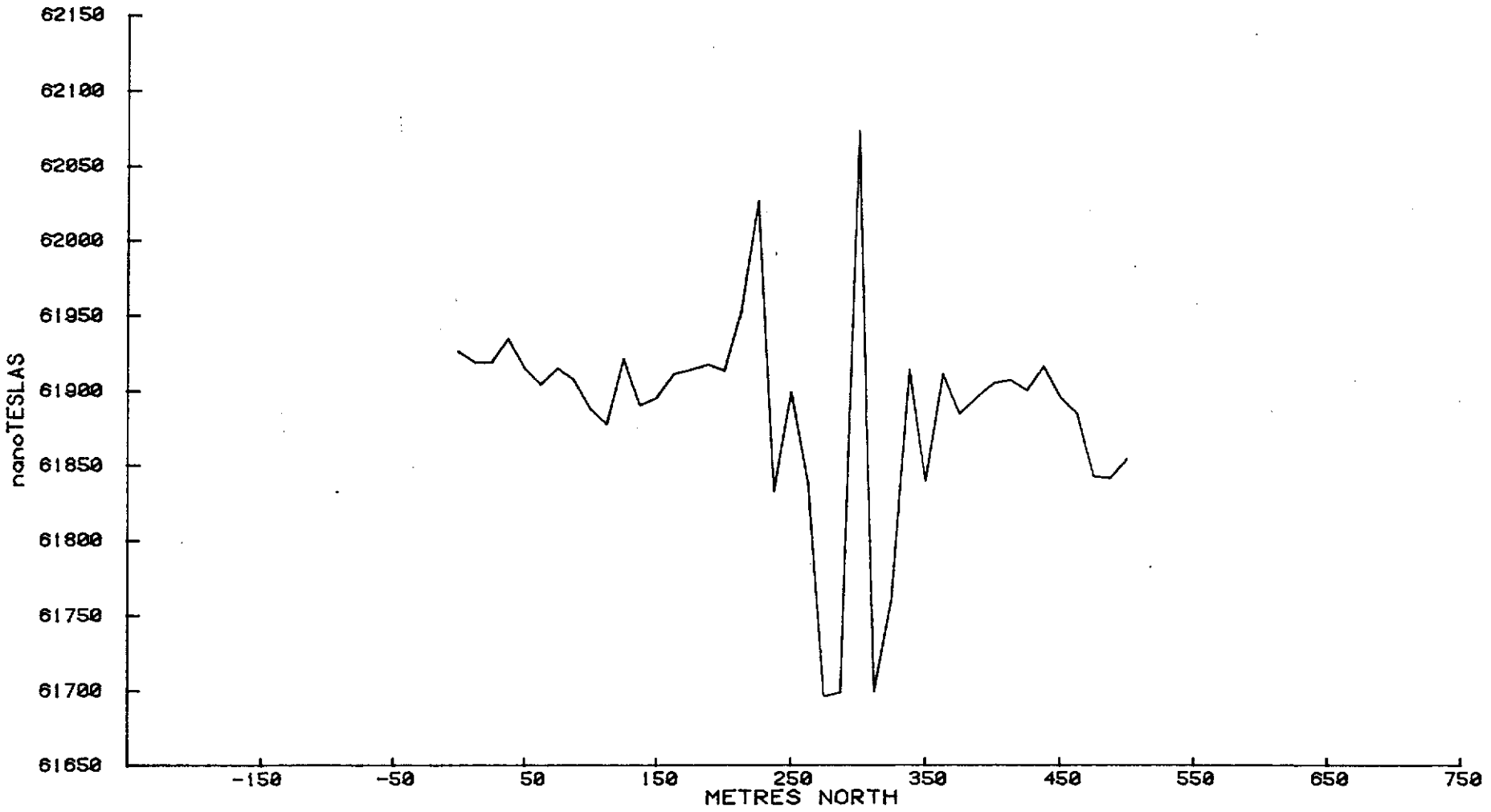
REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1207

613457


25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
NORTH
DIP
SOUTH
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
METRES NORTH
DIP ANGLE (DEGREES)
MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITRARY GAIN)
5 cm
CRA EXPLORATION PTY. LIMITED
SHEFFIELD E.L. 7/73
V.L.F. - E.M.
GOG RANGE WEST
LINE 2700 mE
REF. SK55 - 3
SCALE AS SHOWN
DRAWN. M. F.
AUTHOR M. F.
REPORT N° 11883
DATE SEPT. 1982
TASK N° 1208
JNIX V.L.F. - 2 METER


LINE 4.
LINE 3.
LINE 2.
LINE 1.
M.N.
MAIN SHAFT
Sweetwater Creek
Datum (R.L. 200m.)
Line 3 West
Line 2 West
Line 1 West
Line 0
Line 1 East
Line 2 East
Line 3 East
P.1
P.2
P.3
P.4
P.6
P.7
P.8
P.9
LOCATION DIAGRAM
LEGEND
Eo Andesite
Eos Sheared andesite
Efs Ferruginous schist
Es Muscovite schist - sheared shale and lesser sheared feldspathic sandstone
Ess Sheared quartz - feldspar sandstone
Em Green shale and feldspathic sandstone
Geological boundary - interpreted
Geological boundary - inferred
Fault
Margin of shear zone
Dip and strike of bedding
Dip and strike of schistosity
Dip and strike of veins - follows schistosity
Barite vein and thickness (in metres)
Sulphides in barite veins
gn galena
sp sphalerite
cp chalcopyrite
tr tetrahedrite
Geochemical soil sample location and number
Pb - ppm
Zn - "
Cu - "
Rock Sample location and number.
Traverse point
Traverse
Marked survey station
Pit or trench
Shaft
Adit
Topographic contours with value in metres
Track
5 cm
0 5 10 20 40 60 80 100 metres
613458
CRA EXPLORATION PTY. LIMITED
BEULAH BARYTE PROSPECT
E.L. 1/13 N - W TASMANIA
GEOLOGICAL - GEOCHEMICAL PLAN
Date: JANUARY 1982
Scale 1 : 1000
Geologist T.M.P /M.C
REPORT No: 11843
PLAN No: TAS/ 1121
1446

613459



5 cm

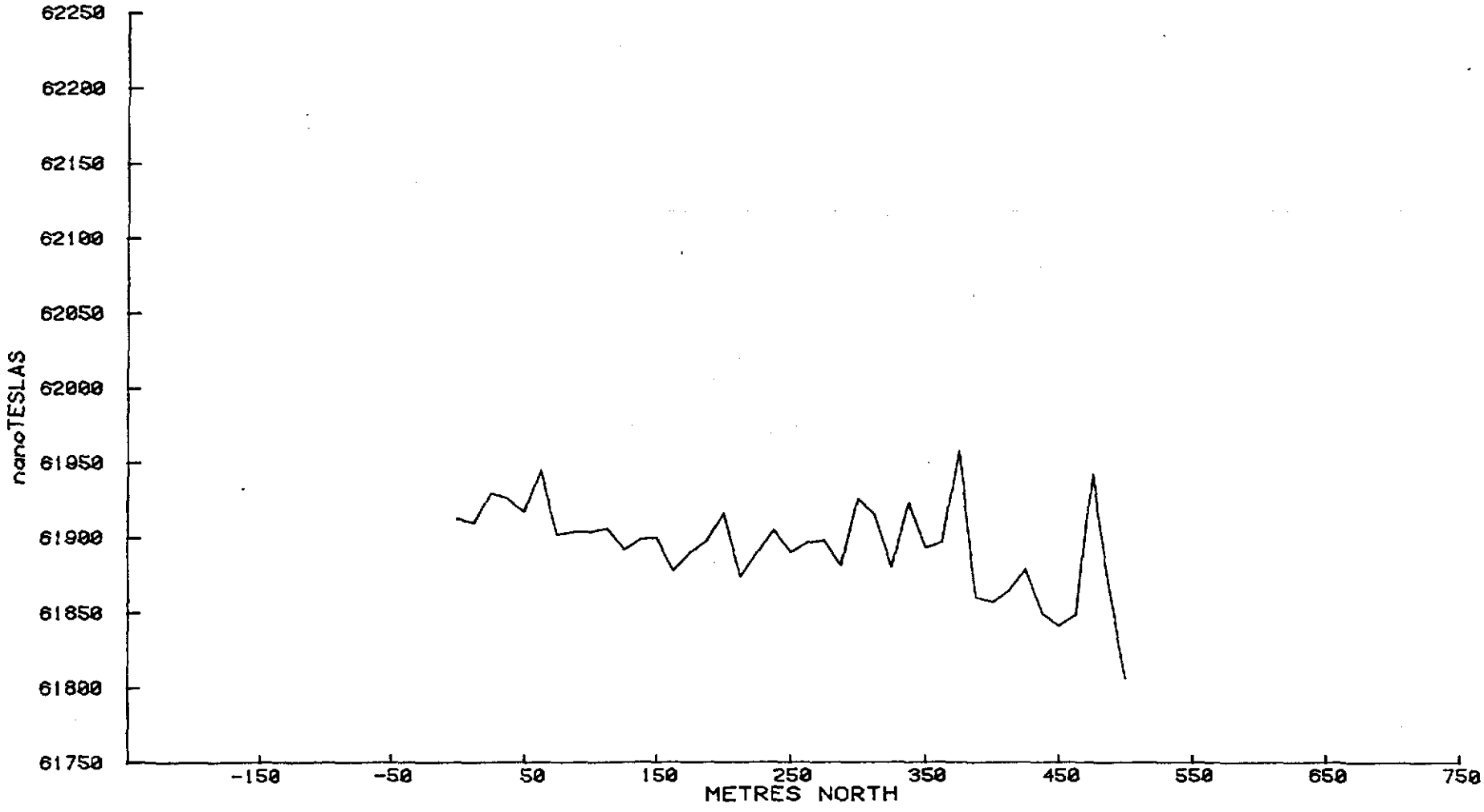
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
BEULAH BARYTE
LINE 0

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1209

613460



5 cm

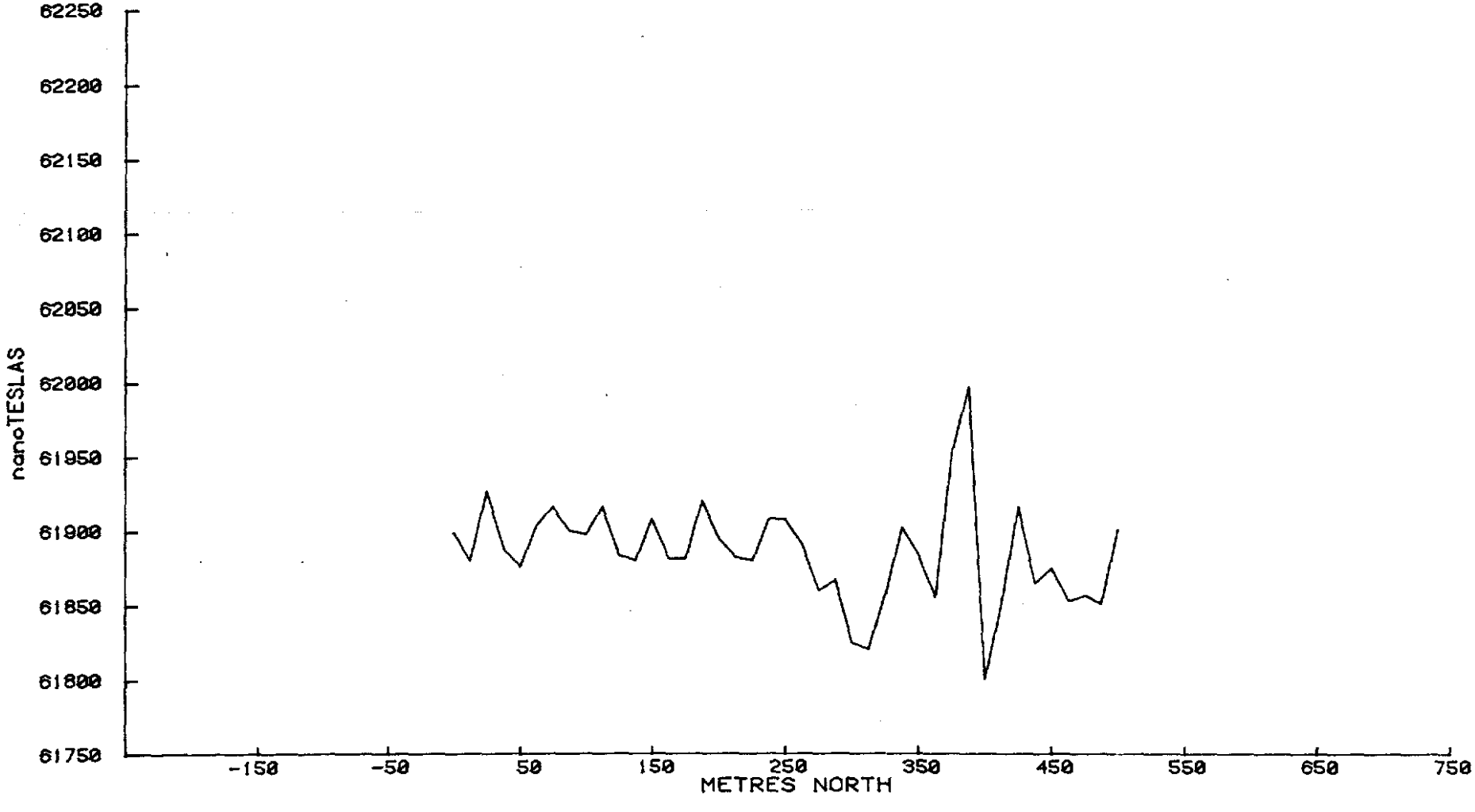
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
BEULAH BARYTE
LINE 1 EAST

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1210

613461



5 cm

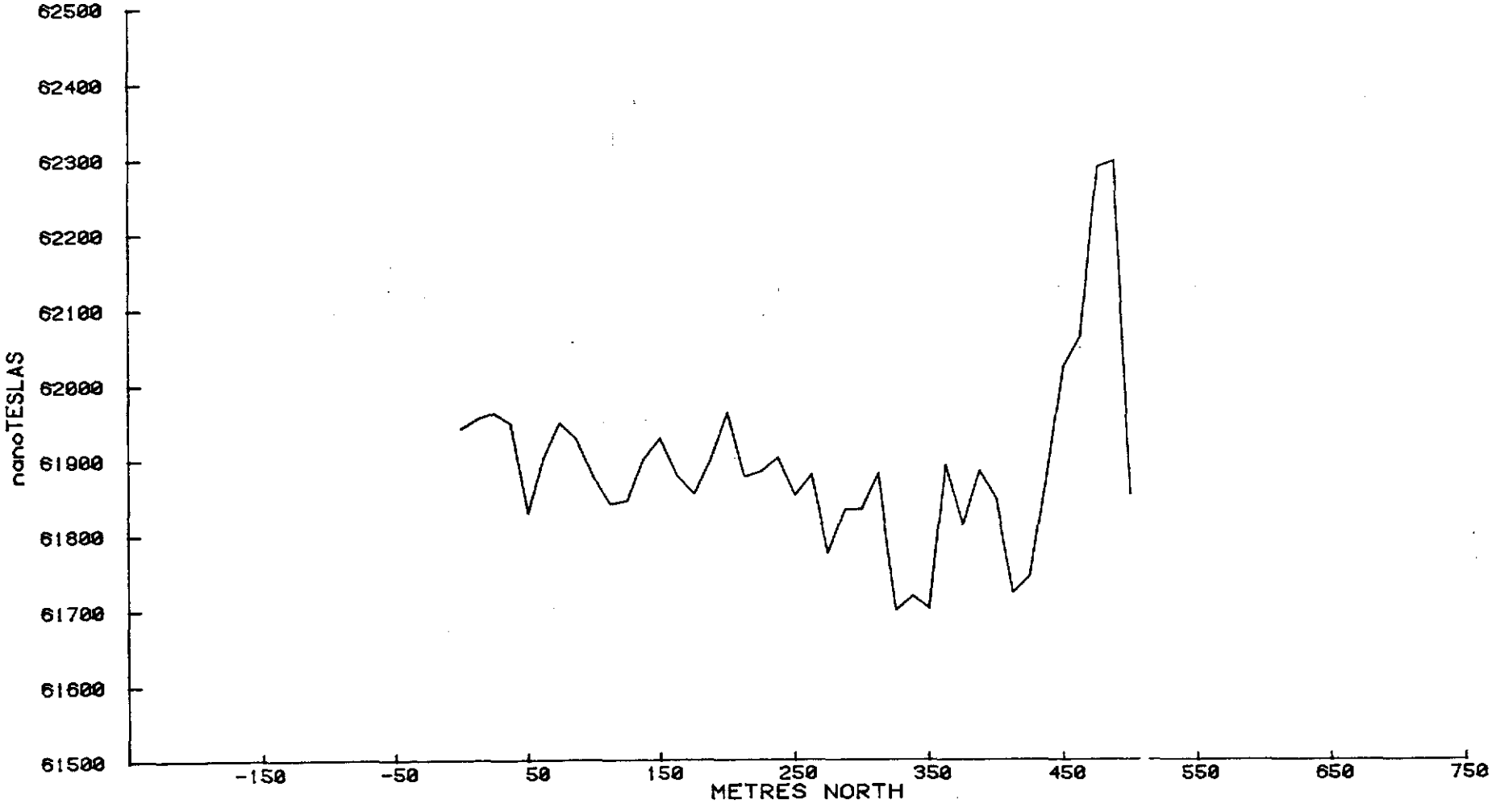
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
BEULAH BARYTE
LINE 2 EAST

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASI N°	1211

613462



5 cm

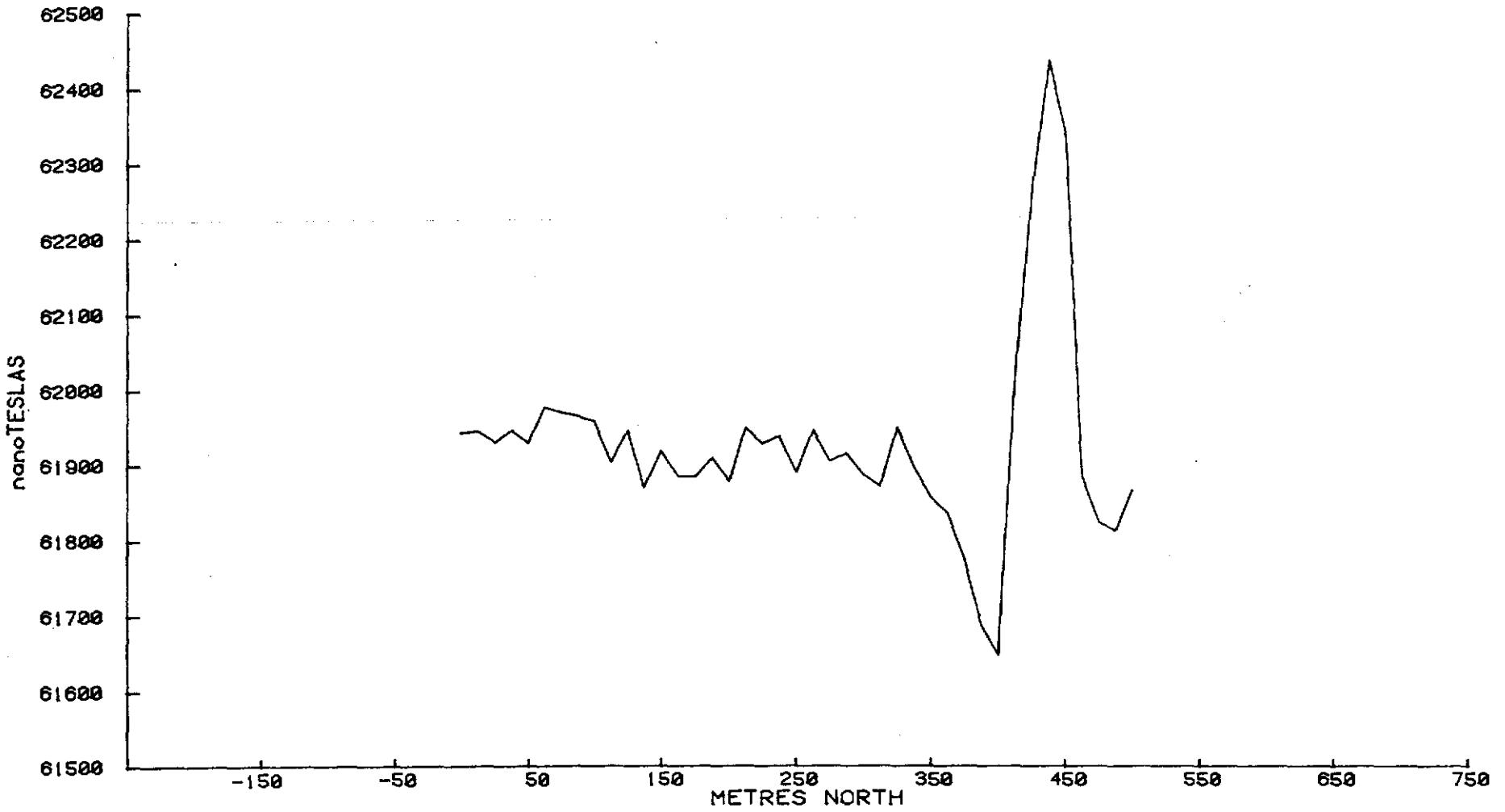
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
BEULAH BARYTE
LINE 3 WEST

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1212

613463



5 cm

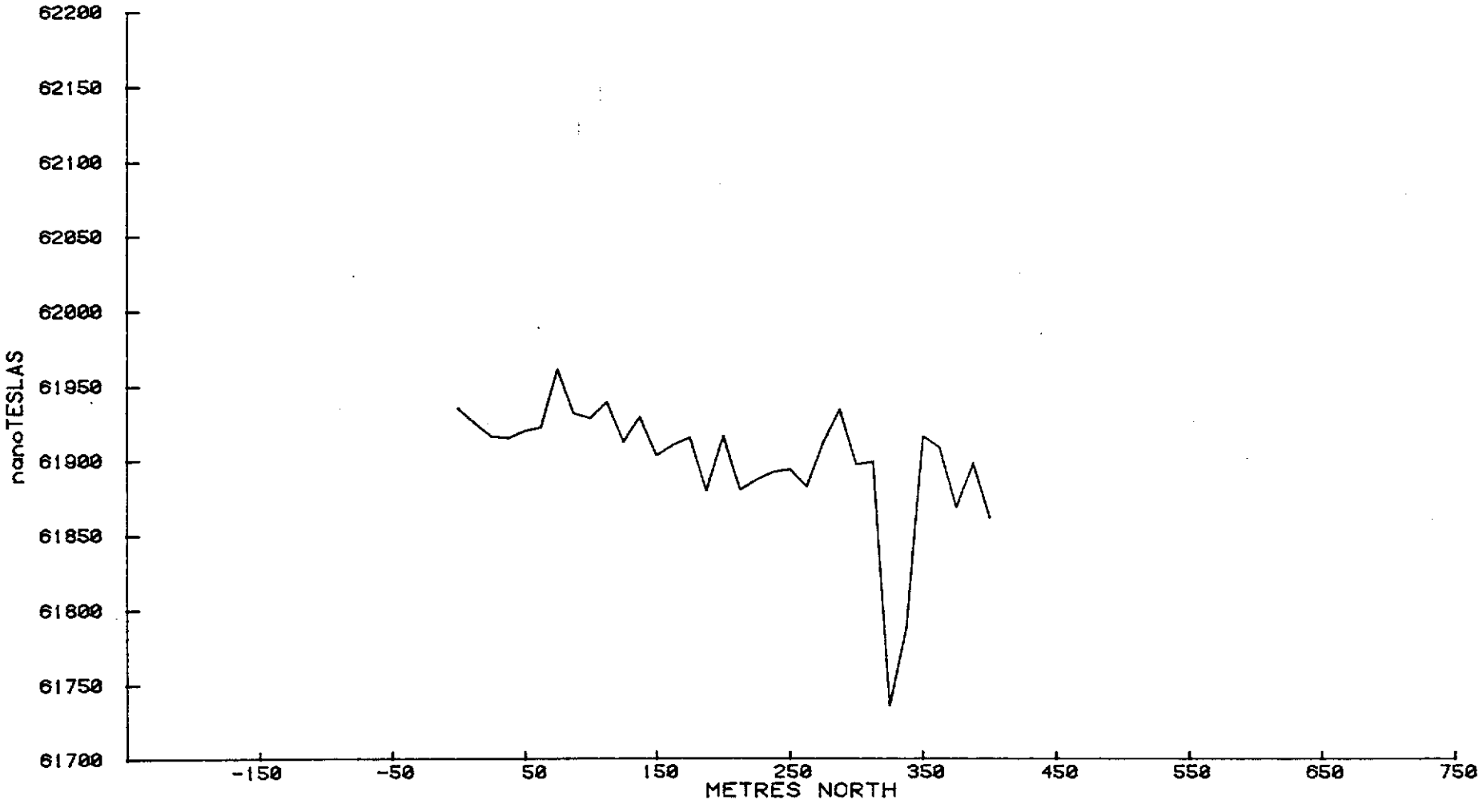
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
BEULAH BARYTE
LINE 2 WEST

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1213

613464



5 cm

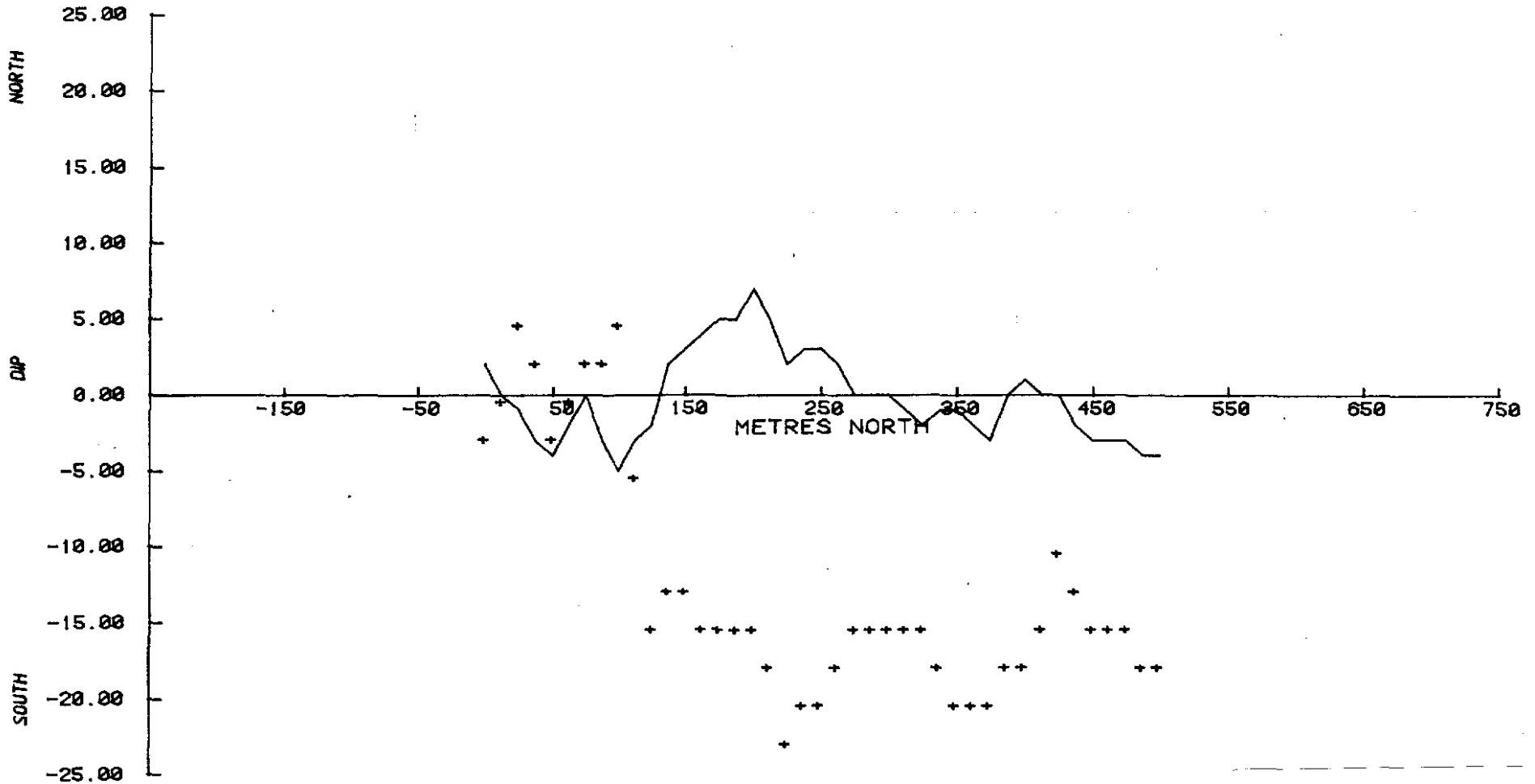
G 826 MAGNETOMETER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
GROUND MAGNETICS
BEULAH BARYTE
LINE 1 WEST

REF.	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASK N°	1214

613465



5 cm

DIP ANGLE (DEGREES)

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

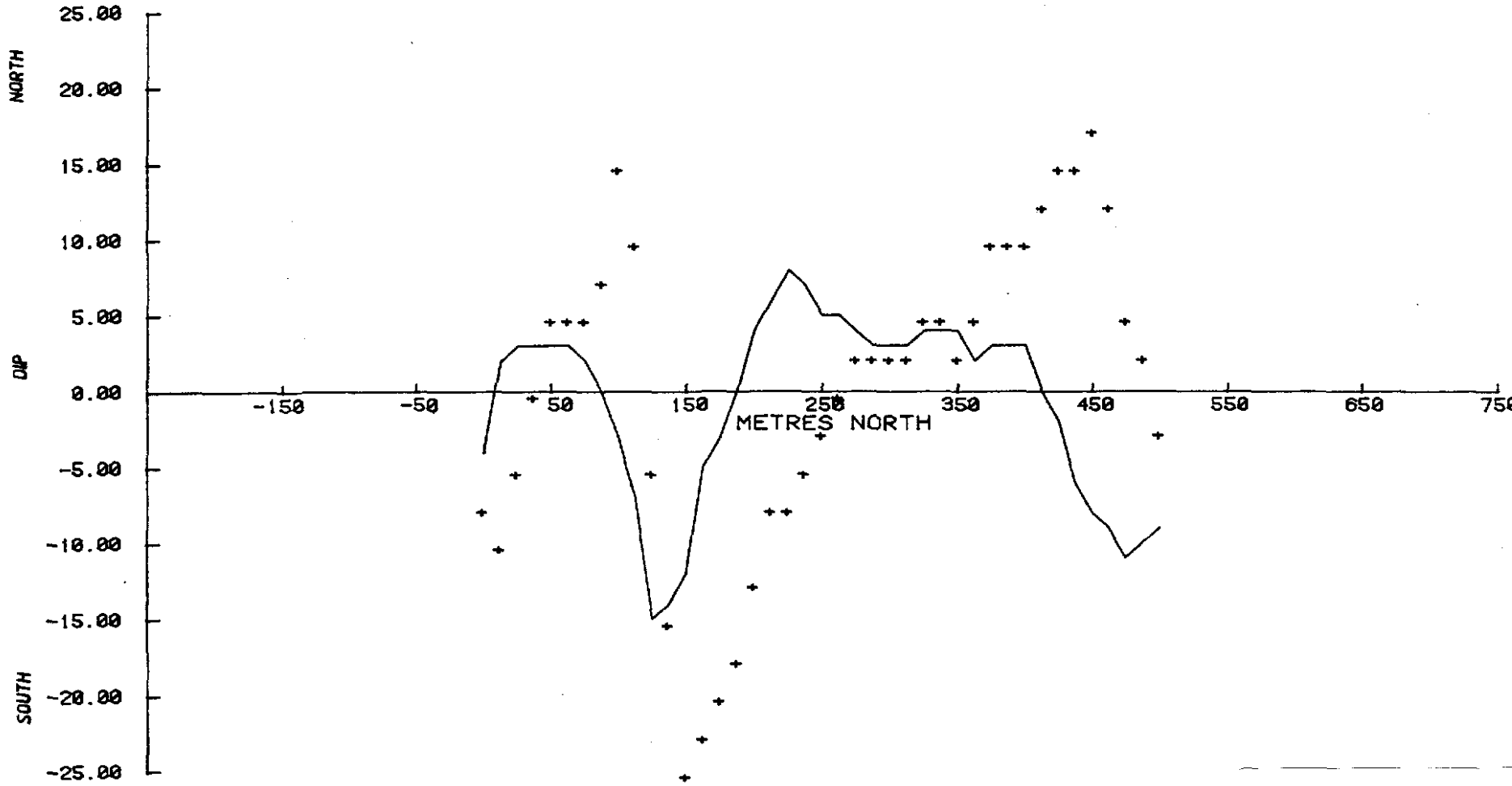
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
BEULAH BARYTE
LINE 3 WEST

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT No.	11883
DATE.	SEPT. 1982	TASK No.	1215

613466



5 cm

DIP ANGLE (DEGREES)

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

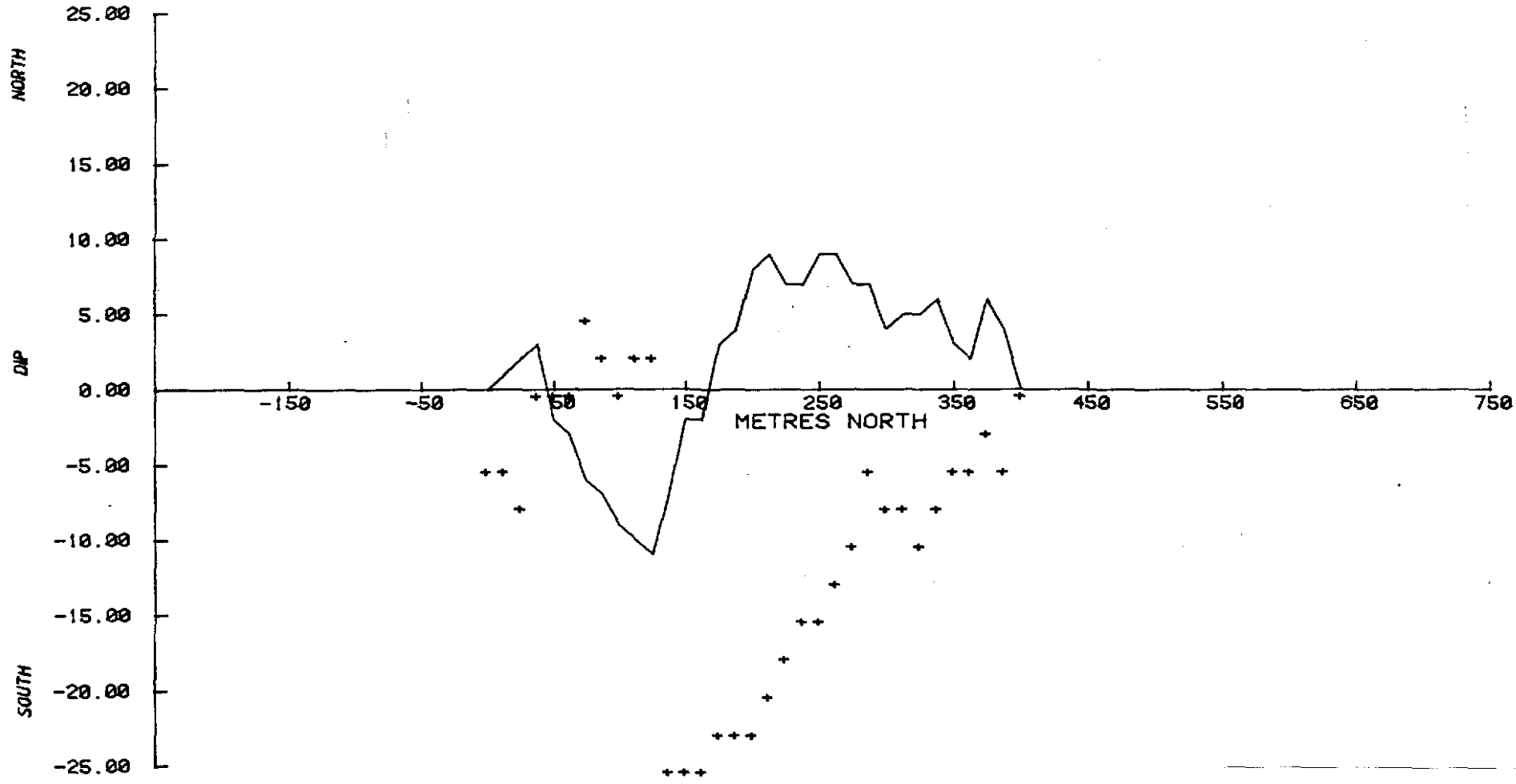
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
BEULAH BARYTE
LINE 2 WEST

REF	SKSS - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASO N°	1216

613467



5 cm

DIP ANGLE (DEGREES)

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

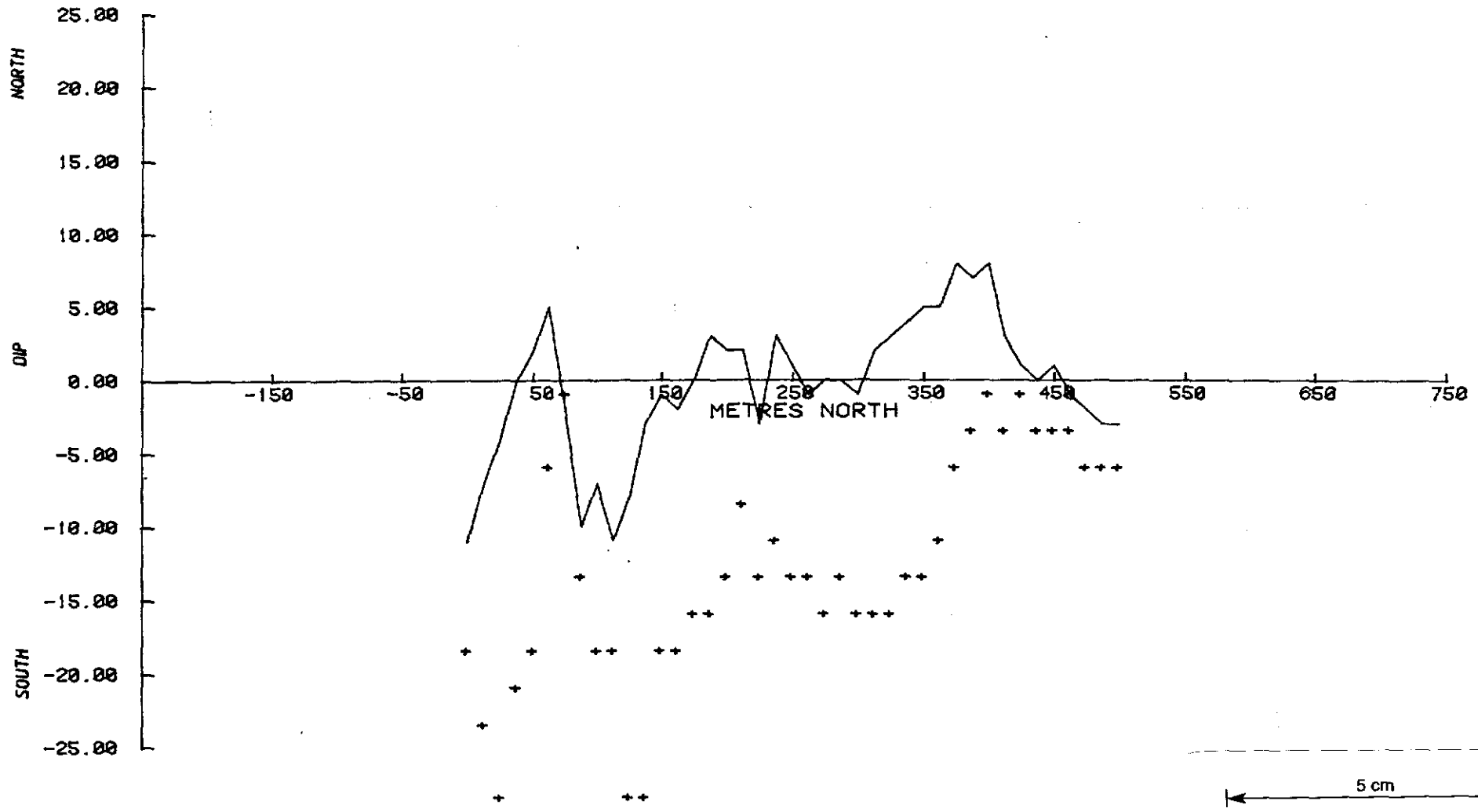
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
BEULAH BARYTE
LINE 1 WEST

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT N°	11883
DATE.	SEPT. 1982	TASK N°	1217

613468



DIP ANGLE (DEGREES)

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

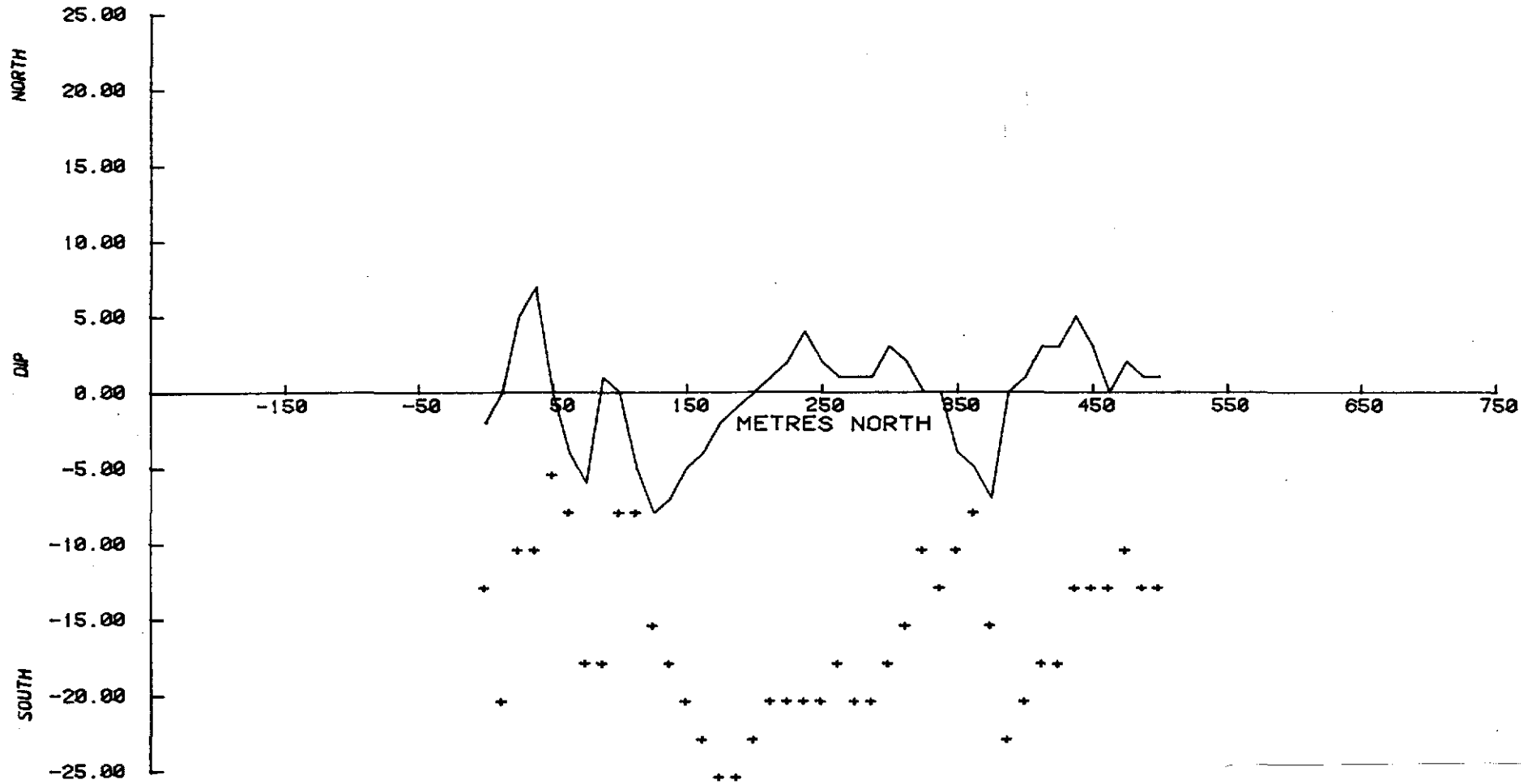
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
BEULAH BARYTE
LINE 0

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT N°	11883
DATE	SEPT. 1982	TASh N°	1218

613469



5 cm

DIP ANGLE (DEGREES)

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

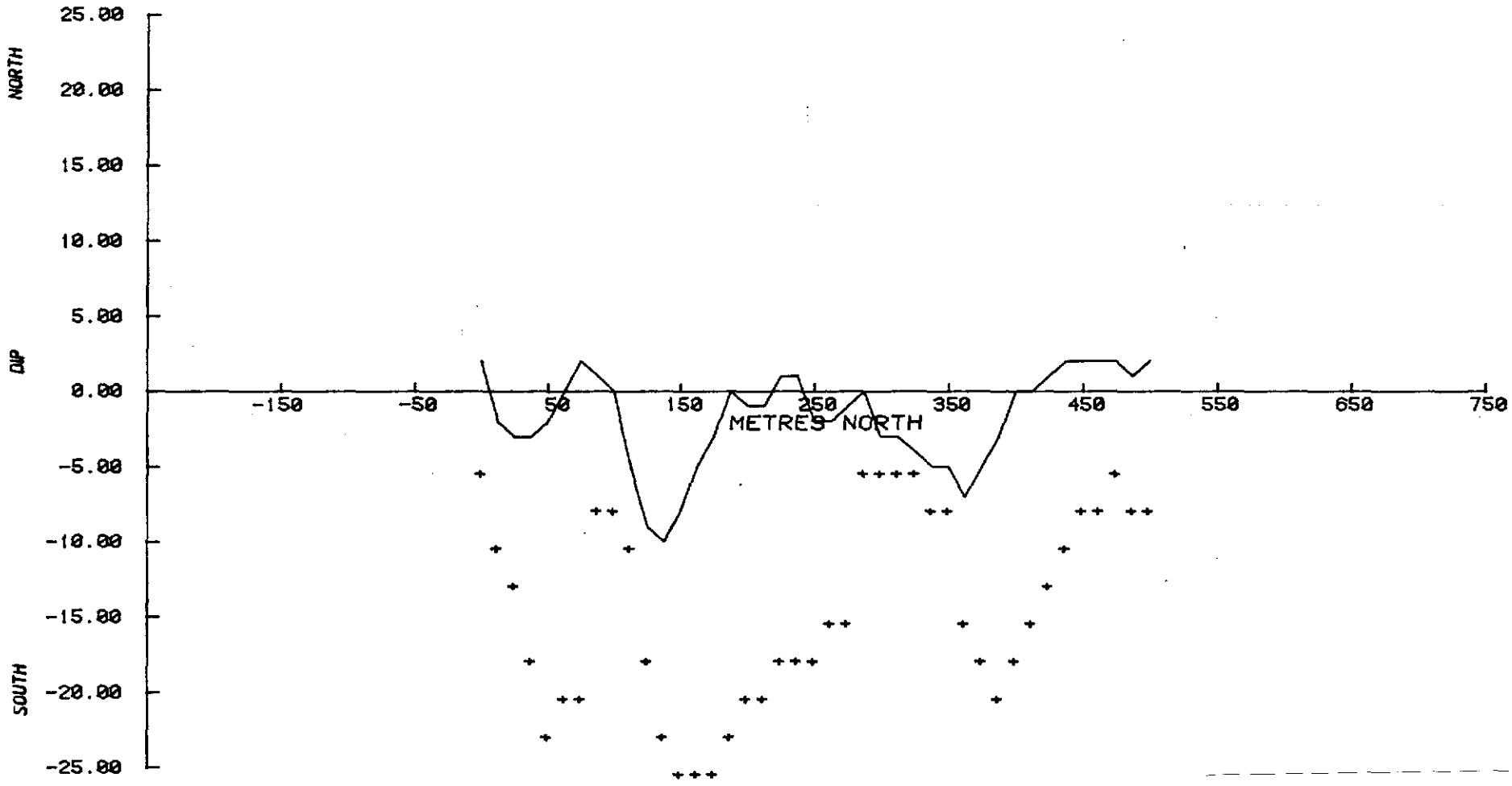
PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
BEULAH BARYTE
LINE 1 EAST

REF.	SK55 - 3		
SCALE.	AS SHOWN	DRAWN.	M. F.
AUTHOR.	M. F.	REPORT No.	11883
DATE.	SEPT. 1982	TASA No.	1219

613470



5 cm

DIP ANGLE (DEGREES)

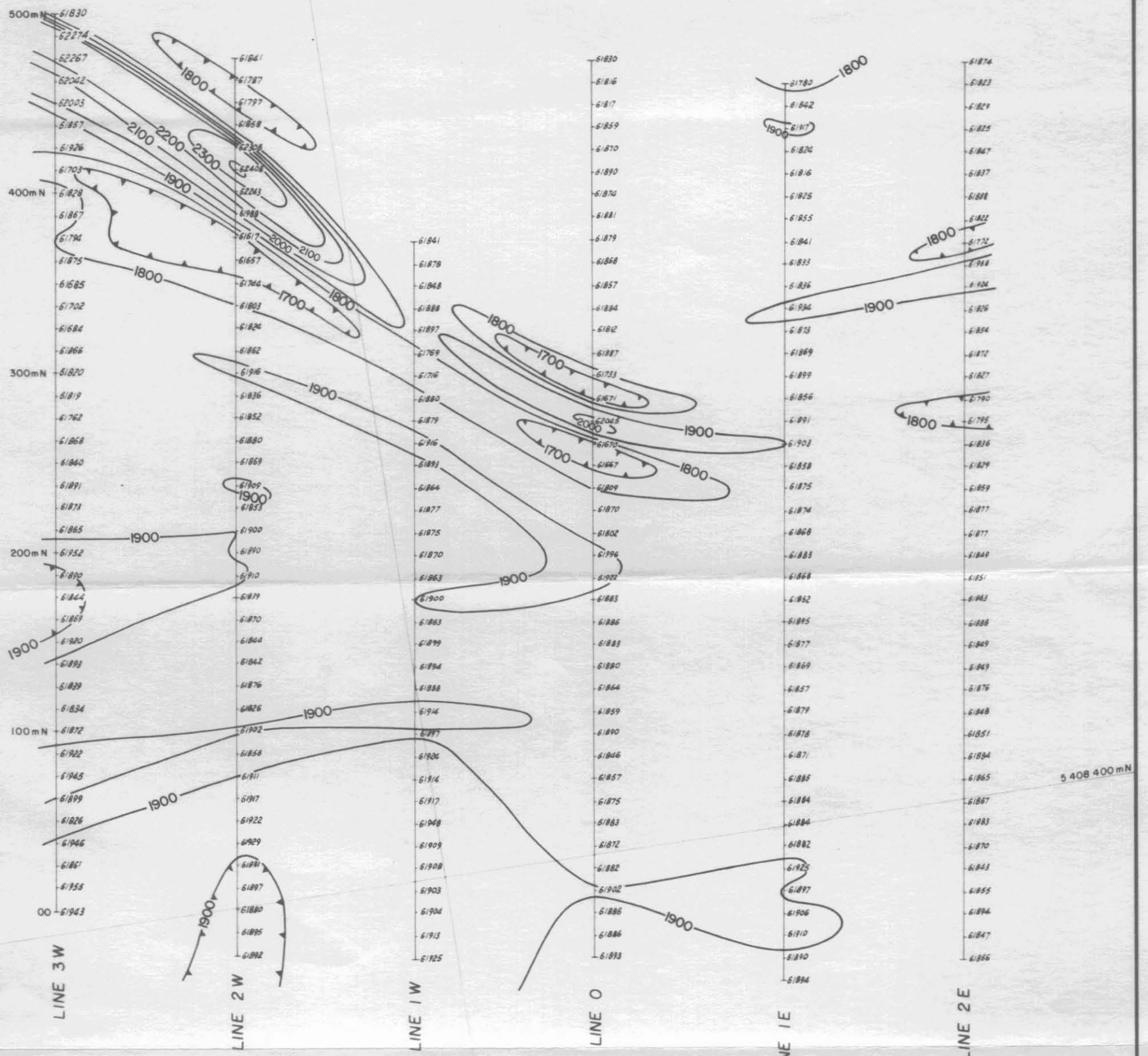
+ + + + + MAXIMUM HORIZONTAL FIELD STRENGTH
(100 % RANGE WITH ARBITRARY GAIN)

PHOENIX V.L.F. - 2 METER

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
V.L.F. - E.M.
BEULAH BARYTE
LINE 2 EAST

REF	SK55 - 3		
SCALE	AS SHOWN	DRAWN	M. F.
AUTHOR	M. F.	REPORT No	11883
DATE	SEPT. 1982	CASH No	1220



AMG N GN MN

KEY:

Sensor on 2m. pole

Contour Interval : 100 nano Teslas

Base: 60,000 nT

5 cm

CRA EXPLORATION PTY. LIMITED

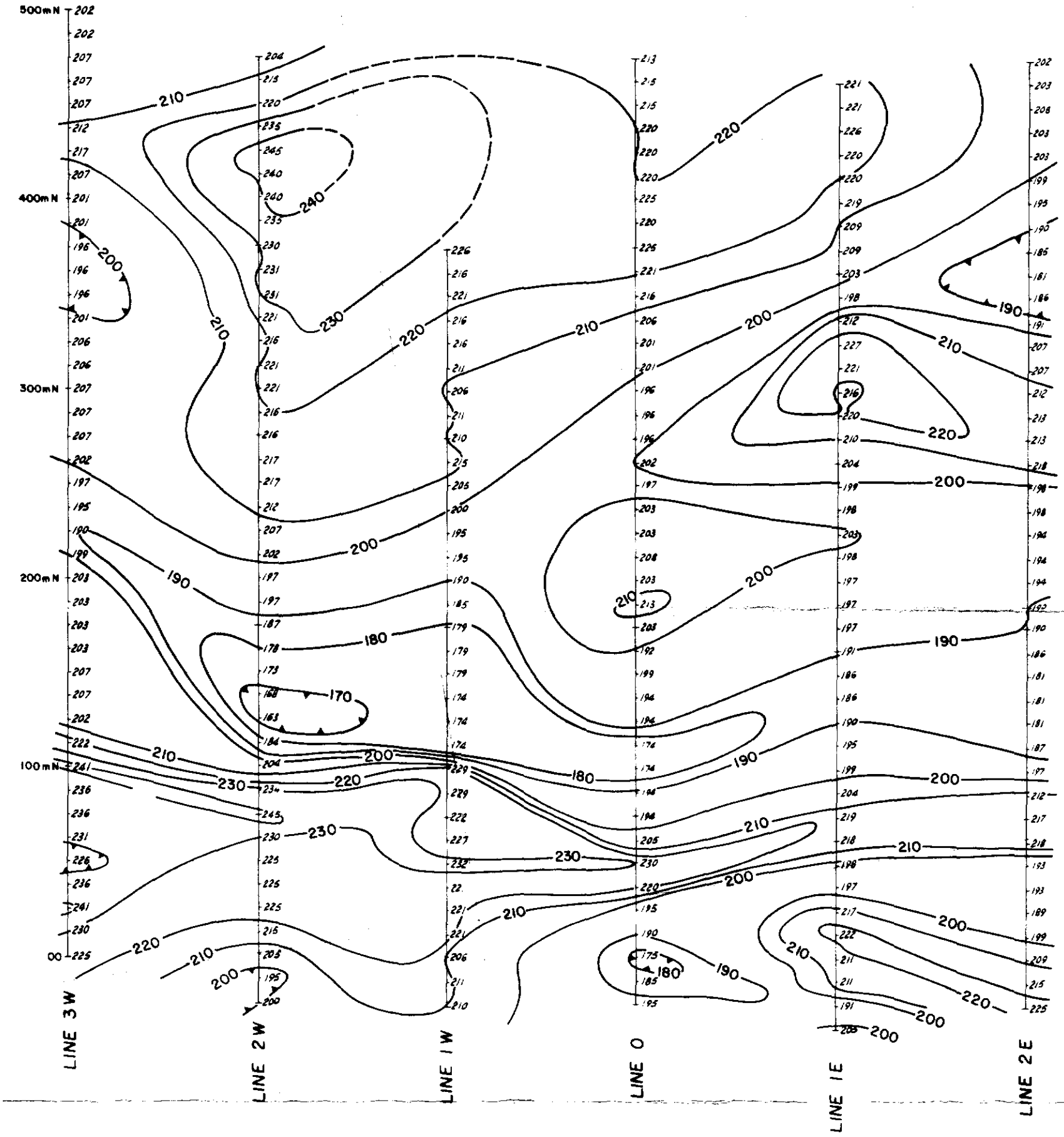
SHEFFIELD E.L. 7/73

BEULAH BARYTE GRID

GROUND MAGNETICS

G856 MAGNETOMETER
TOTAL FIELD INTENSITY

REF.	SK55-3		
SCALE.	1:2500	DRAWN.	T.G.D.S.
AUTHOR	M.F.F.	REPORT N°	11883
DATE	FEB. 1983	TASh N°	1221



AMG N GN MN

KEY

Phoenix V.L.F. - 2

Transmitter: Northwest Cape - 22·3 KHz

Contour Interval: 10 % of M.H.F.S.

5 cm

CRA EXPLORATION PTY. LIMITED	
SHEFFIELD E.L.7/73 BEULAH BARYTE GRID **V.L.F. – E.M.** % MAX. HORIZONTAL FIELD STRENGTH (ARBITRARY GAIN)	
REF. SK55-3	
SCALE 1:2500	DRAWN. T.G.D.S.
AUTHOR M.F.F.	REPORT No. 11883
DATE FEB 1983	TASH No. 1222

613473

500mN
400mN
300mN
200mN
100mN
00

LINE 3W
LINE 2W
LINE 1W
LINE 0
LINE 1E
LINE 2E

5 408 400mN

445 700mE

AMG N
GN
MN

KEY:

Phoenix V.L.F. - 2

Transmitter: Northwest Cape - 22·3 KHz

Contour Interval: 5° Normalized Dip

5 cm

CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L.7/73

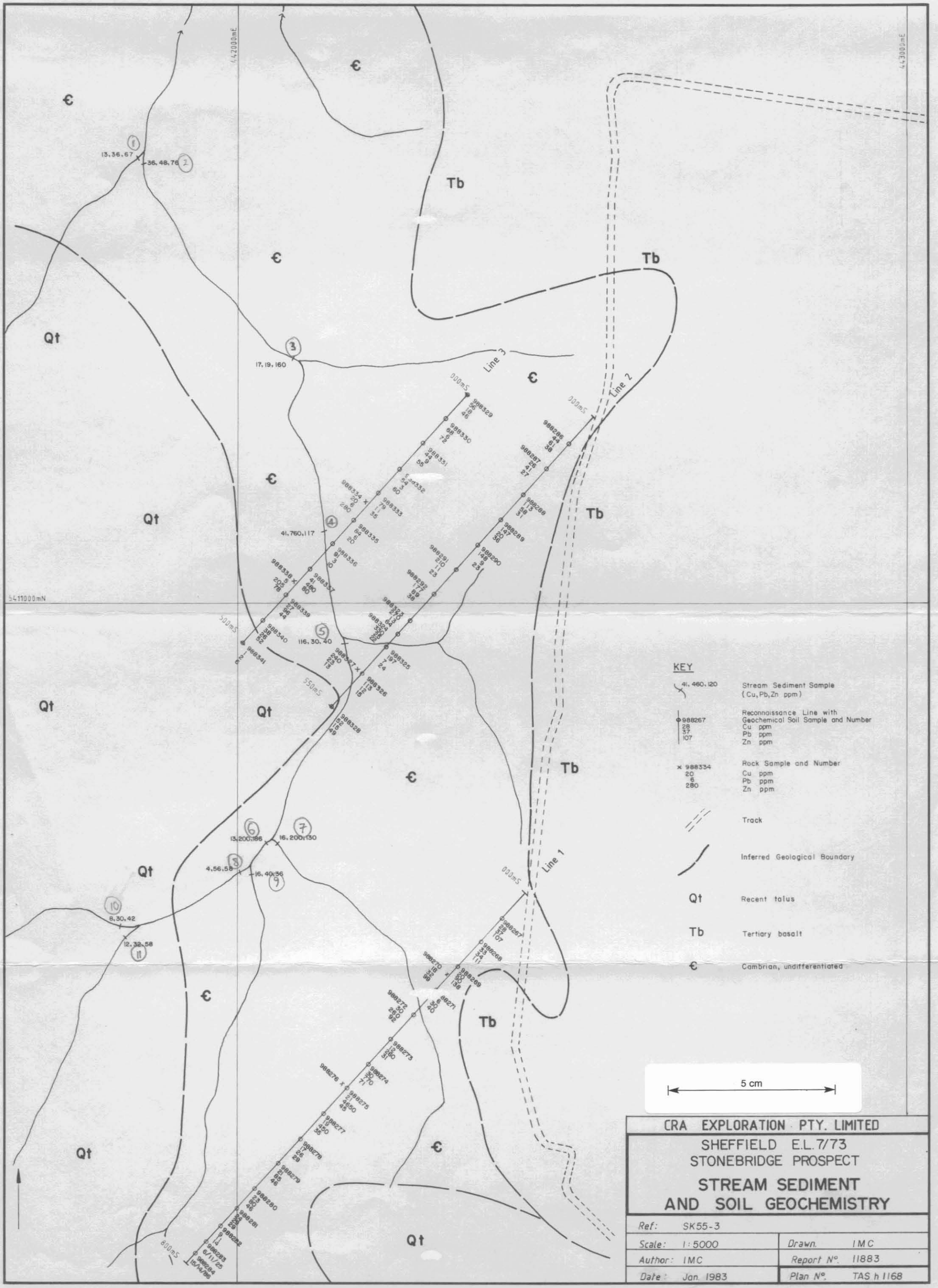
BEULAH BARYTE GRID

V.L.F. – E.M.

NORMALISED DIPS
(USING FRASER'S FILTER)

REF	SK55-3		
SCALE	1:2500	DRAWN	T.G.D.S.
AUTHOR	M.F.F.	REPORT No.	11883
DATE	FEB. 1983	TASh No.	1223

613474



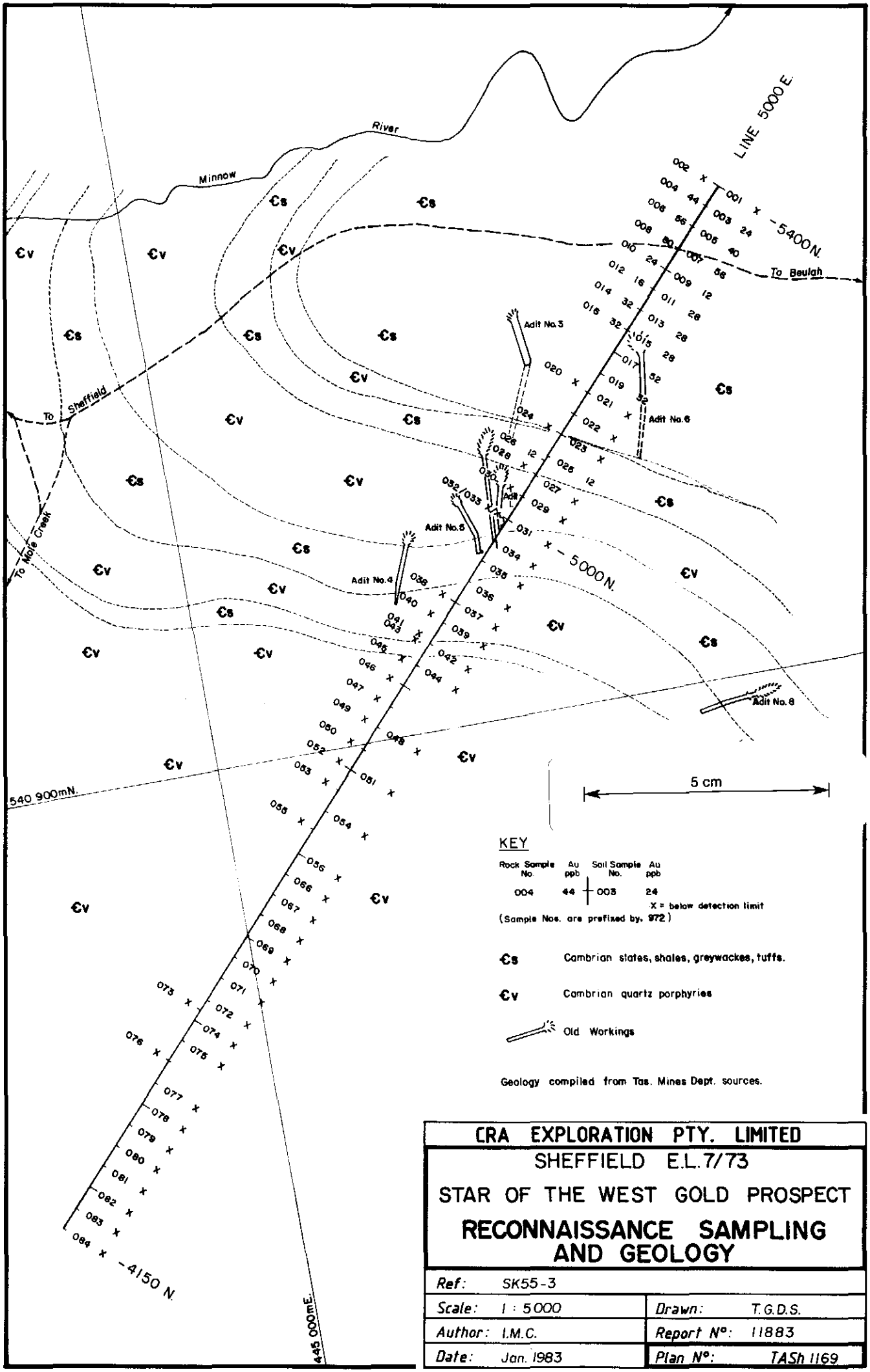
CRA EXPLORATION PTY. LIMITED

SHEFFIELD E.L. 7/73
STONEBRIDGE PROSPECT

STREAM SEDIMENT AND SOIL GEOCHEMISTRY

Ref:	SK55-3		
Scale:	1:5000	Drawn.	IMC
Author:	IMC	Report N°.	11883
Date:	Jan. 1983	Plan N°.	TAS h 1168

613475



CRA EXPLORATION PTY. LIMITED	
SHEFFIELD E.L.7/73	
STAR OF THE WEST GOLD PROSPECT	
RECONNAISSANCE SAMPLING AND GEOLOGY	
Ref: SK55-3	
Scale: 1 : 5000	*Drawn:* T.G.D.S.
Author: I.M.C.	*Report N°:* 11883
Date: Jan. 1983	*Plan N°:* TASh 1169