



# OPEN FILE

PASMINCO EXPLORATION

**SECOND ANNUAL REPORT ON COLES HILL E.L. 8125,  
ALICE SPRINGS 1:250,000 SHEET,  
FOR PERIOD ENDING 30 OCTOBER 1996**

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**Submitted To:** Group Geologist - Exploration Projects

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## **SUMMARY**

Exploration on Exploration Licence 8125 in the twelve months to 30 October 1996 has included:

- orientation soil geochemistry and follow-up geochemical traversing;
  - stream sediment sampling;
  - ground magnetic surveys;
- and     • RC drilling of 20 holes for a total depth of 1195 metres.

The work has been completed by Pasminco under terms of a farm-in heads of agreement with Roebuck Resources N.L.

Expenditure by Pasminco amounts to some \$209,799 which satisfies the covenant set by NT Department of Mines and Energy at \$86,000 for the first year of Exploration Licence 8125.

Further drilling is planned in the forthcoming year and was underway at time of writing this report.

## **1. INTRODUCTION**

Exploration Licence 8125 was granted to Roebuck Resources N.L. (Roebuck) on 31 October 1994 for a period of six years.

On 15 August 1995 Pasminco Australia Limited (Pasminco) signed a farm-in and joint venture heads of agreement allowing it to earn an interest in Exploration Licence 8125 and the adjoining tenement numbered Exploration Licence 8320 (Fig. 1).

The area of Exploration Licence 8125 was reduced from 70 graticular blocks to 35 graticular blocks in September 1996.

This report provides details of exploration completed on the tenement in the twelve months to 30 October 1996.

## **2. PREVIOUS WORK**

Summaries of previous work, especially work undertaken at the Red Rock Bore prospect, are provided below. Most relevant figures from these reports have been compiled to a uniform 1:5,000 scale (Figs. 2-16). The figures are mostly reported in local grid coordinates without correlation to known points. During compilation a “best fit” was all that could be obtained.

Fruzzetti (1969) reported results of three BMR holes drilled at the Red Rock Bore prospect. Table 1 summarises assay data from this drilling.

Planet Mining (Lyons, 1975) carried out soil sampling, costean sampling, ground magnetics, IP and geological mapping (Figs. 2- 6). Soil sampling results are not included as they are superseded by Triako’s work.

The Amdex Mining/Triako Mines consortium carried out detailed soil and costean geochemistry, ground magnetics and RRMIP (Figs. 7-15) (Close, 1980). Bennett (1980) reports drill holes DDH4 and DDH5. DDH4 drilled the lode beneath DDH3 and intersected 213-224m (11.0m) @ 0.42% Cu, 0.47% Pb, 1.69% Zn, 6 g/t, 0.03 g/t Au. DDH5 targeted a RRMIP chargeability anomaly north of the lode position and intersected no significant mineralisation.

Macmahon Constructions Pty Ltd (1989) conducted EM-37 surveys on five loops over the Red Rock prospect (Fig. 16). A significant conductor occurs south of, and parallel to, the outcropping lode and appears to be related to the amount of magnetite as reflected in magnetic contours. Weak EM anomalies were tested by costeaning.

Warne (1995) documents work carried out by Roebuck Resources NL, mainly soil sampling in the area around the Red Rock Bore prospect.

### **3. WORK CARRIED OUT**

#### **3.1 Aboriginal Site Clearance**

Site clearance over the tenement was initiated through the NT Aboriginal Areas Protection Authority. Although clearance was delayed by a death in the local aboriginal community an Authority Certificate (Document No 16650) detailing Aboriginal sites was received before significant field work commenced.

#### **3.2 Geochemical Orientation Survey**

##### ***3.2.1 Red Rock Lag Sampling***

###### **Sampling Locations**

At Red Rock Bore mineralisation is associated with silicification and the prospect is a slight positive topographic feature. Consequently there is an opportunity for significant dispersion of geochemically anomalous weathered rock fragments as a component of the surface lag material. The objective of lag orientation work was to determine the measurable extent of this dispersion and optimise the lag component to be sampled.

At Red Rock Bore sampling was undertaken on two traverse lines:

1. Samples were collected at 200m intervals (total six sites) along the soil line RR1 (Fig. 17).
2. Samples were collected at approximately 500m sample intervals (total six sites) along the cleared line which marks the proposed route of the Darwin-Alice Springs railway, but these were not analysed.

### Sampling Procedure

Four lag fractions were to be collected at each site as follows:

A	-5, +2 mm	magnetic
B	-5, +2 mm	non-magnetic
C	-2, +0.5 mm	magnetic
D	-2, +0.5 mm	non-magnetic

In practice it was not always possible to obtain all four fractions.

### Analytical Scheme

The entire sample was pulverised and analysed for Ag, As, Bi, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, P, Sb, V, Zn after aqua regia digest (Amdel ICP-OES scheme IC2E). Gold was determined by aqua regia digest and graphite furnace AAS (Amdel scheme AA9).

### Results

Analytical results for the four fractions are tabulated in Appendix 1. Inspection of these data indicate that systematic anomalous responses are restricted to the elements copper, zinc and lead. Profile plots for these elements are presented in Figures 18-21.

Non-magnetic fractions give higher amplitude responses but the anomaly width is not significantly greater than that for conventional soil anomaly, even in fine fractions.

Lower amplitude but broader and smoother anomalies are defined by magnetic fractions. Zinc in the fine fraction appears to show the greatest dispersion with the anomaly not fully defined by line RR1 which is one kilometre long (Fig. 19).

The wide zinc dispersion and smooth data in fine magnetic fractions are consistent with lag sampling experience in the Cobar region.

### ***3.2.2 Conventional Soil Sampling***

#### **Sampling Locations**

Orientation soil lines were completed at Red Rock Bore and over the centre of the Gillens Bore aeromagnetic anomaly. Both conventional and MMI samples were collected on all lines.

At Red Rock Bore two lines were sampled: (Fig. 22)

1. Line RR1: 0-1000N, bearing 020 magnetic. Datum for this line is the collar of DDH4 at 350N (GPS AMG coordinates 7449250N 374160E). The line runs across the eastern end of siliceous, mineralised outcrop.
  
2. Line RR2: 0-600N, bearing 020 magnetic. Datum for this line is at 000N located on the north side of the track from Red Rock Bore at GPS AMG coordinates 7449380N 373540E. The line crosses the westward continuation of the Red Rock magnetic anomaly in an area of no outcrop.

At Gillens Bore soil line GB1 was sampled between 000N and 600N (Fig. 17). Datum for the line is 000N (GPS AMG coordinates 7448950N 365770E) and the bearing is 360° magnetic.

#### **Sampling Procedure**

A -2mm B horizon soil sample was collected and approximately 0.5kg submitted for assay.

### Analytical Scheme

Entire samples were pulverised and analysed for Ag, As, Bi, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, P, Sb, V, Zn after aqua regia digest (Amdel ICP-OES scheme IC2E). Gold was determined by aqua regia digest and graphite furnace AAS (Amdel scheme AA9).

### Results

Analytical results are tabulated in Appendix 2 and profiles for copper, lead and zinc are presented in Figures 23-24. No profile plot was produced for the Gillens Bore line GB1. The full range of element responses (maximum and background values) obtained at each of the orientation sites is summarised below. All values are in ppm with the exception of gold which is reported in ppb.

Element	Red Rock RR1		Red Rock RR2	
	max	bg	max	bg
Cu	135	15	49	15
Pb	340	12	100	12
Zn	560	30	60	30
Mn	900	300	-	-
Au	3	X	-	-

The following observations are based on inspection of the above data as well as the profiles:

- The anomalous element suite at Red Rock Bore is limited to Cu, Pb, Zn and Au.
- At Red Rock Bore the profiles for copper, lead and zinc show a distinctive asymmetry which is not obviously related to topography. It is possible that this asymmetry is reflecting asymmetry in the primary mineralisation/alteration system.

- The non-outcropping “lode” position at Red Rock Bore is best defined by lead. The lead anomaly displays the same asymmetry seen in the data for line RR1 where zinc shows the best response on the outcrop.

### ***3.2.3 MMI Soil Sampling***

#### **Sampling Locations**

Soil samples for mobile metal ion analysis were collected at all conventional soil sample sites (see Section 3.2.2.) to enable direct comparison of conventional and MMI responses. Of particular interest were line RR2 at Red Rock Bore (testing for possible westward extensions of mineralisation beneath thin sheetwash and alluvial cover), and line GB1 at Gillens Bore (testing for possible Red Rock Bore style mineralisation beneath sheetwash plain).

#### **Sampling Procedure**

Each sample comprised approximately 300-500g of the sieved -2mm fraction from which conventional samples were taken.

#### **Analytical Scheme**

MMI analysis of the samples was carried out by Analabs in Perth using the MMI technique licenced from Wamtech. Only the base metal suite of elements (scheme MS800 -Cd, Cu, Pb, Zn) was determined.

#### **Results**

Analytical results are tabulated in Appendix 3 and profiles for copper, lead, zinc and cadmium are presented in Figures 25-28.

For comparison with conventional soil results, the element responses obtained at each orientation site are tabulated below. All values are in ppb.

Element	Red Rock RR1		Red Rock RR2	
	max	bg	max	bg
Cu	10200	200	520	60
Pb	9360	50	1300	<20
Zn	11600	100	720	60
Cd	78	10	28	4

Peak response ratios (defined as the maximum value divided by the background value) for conventional and MMI soils are tabulated below for comparison purposes. Because background values were simply estimated by inspection of raw data from each site, the calculated response ratios should be regarded as an order of magnitude guide only.

Element	Red Rock RR1		Red Rock RR2	
	Conv	MMI	Conv	MMI
Cu	9	51	3	9
Pb	28	187	8	65
Zn	19	116	2	12
Cd	-	8	-	7

As expected, MMI response ratios are in most cases significantly higher than their conventional equivalents. Whilst the MMI data is not as smoothed as conventional data there are no significant differences in the anomaly profiles. Specific comments on the results include:

- At Red Rock Bore the MMI peak response ratios are consistently around six times their conventional equivalents on both lines.
- A moderate zinc response occurs at 100N on line RR1 (Fig.25) however it is not supported by other elements and therefore its significance is downgraded.

- A weak Cu-Pb-Cd response (approximately twice background for each element) occurs at 100mN on line GB1 at Gillens Bore. Zinc highs (also twice background) occur at 200mN and 300mN. Given, (1) that the cover here is likely to be thicker (with greater transported component) than that encountered on line RR2 at Red Rock Bore, and (2) the relatively wide sample interval on GB1, these results are possibly significant.

### **3.3 MMI and Conventional Soil Geochemistry**

#### ***3.3.1 Gillens Bore***

Following results of orientation sampling over the Gillens Bore magnetic anomaly three further lines were sampled (Tables 2-3, Figs. 29-30).

#### ***3.3.2 Red Rock Bore Paddock***

One line of samples was taken across a small magnetic feature located about 1 km south of Red Rock Bore (Tables 4-5, Figs. 31-32).

#### ***3.3.3 Near Plenty Highway Line 370A***

One line of samples was taken across a magnetic anomaly centred at (7449000N, 370000E). Data are presented in Tables 6-7, Figures 33-34.

### **3.4 Stream Sediment Sampling**

Results of stream sediment survey are included as Table 8. Locations of samples are shown in Figure 35.

All samples are -80# fraction of stream sediment, taken from a number of sites within the active channel. No overbank material was collected. Approximately 200g of sample was sieved at each site, and stored in a kraft paper bag which was sealed within a plastic bag. Each site was GPS located.

Analysis was carried out by Amdel, Adelaide. Samples were pulverised using code PREP5L then assayed as follows:

IC2E (ICPOES)	Cu (1), Pb (3), Zn (1), As (1), Ni (1), Cd (1), Ag (0.5) Mn (5), Fe (100), Co (1), Cr (5), Bi (5), Sb (5)
XRF1L	Ba (10), Sn (4), W (5), Zn (10)
FA3	Au (1 ppb)

No significant anomalies were found in the stream sediment survey. Sampling was restricted to streams draining bedrock. No samples were collected in areas of extensive colluvium.

### **3.5 Geophysics**

#### ***3.5.1 Airborne Magnetics***

An aeromagnetic data file obtained from NT Department of Mines and Energy Open File was used to generate images covering Exploration Licence 8125. Interpretation of these images identified several localities with characteristics similar to the Red Rock Prospect (Fig. 36).

#### ***3.5.2 Ground Magnetics***

Ground magnetic profiles and modelling of causative bodies were carried out on Exploration Licences 8125.

The methodology, data profiles and modelling are included as Appendix 4.

Modelling for data at Red Rock prospect indicates that the mineralised position is at or very close to the northern margin of the causative body. This implies that the mineralisation is at the stratigraphic or structural contact of the magnetic feature, or that magnetite is an alteration feature.

At Gillens Bore, a similar but deeper magnetic source is modelled, suggesting drilling is required. The same can be said of Red Rock West and line 370A.

### **3.6 Drilling**

#### ***3.6.1 Reassay of Core***

Part of the mineralised interval in drill hole Coles Hill 1 was quartered and assayed. Previously reported high Ni values at Red Rock of up to 0.3% Ni in DDH3 (Fruzzetti, 1969) were not repeated even when samples were totally digested (Amdel method AA3). Clearly, the previously reported Ni values are in error. Other results (Cu, Pb, Zn, Ag) were in line with previous assays.

Three half-core samples from DDH4 were also assayed.

Analyses are included as Appendix 5.

#### ***3.6.2 Red Rock Prospect***

Sixteen RC holes (RRK001 to RRK007 and RRK012 to RRK020) were drilled at the Red Rock Prospect (Fig. 37, Table 9) . Close to the outcropping lode, holes could be confidently targeted at the lode. At the NW end of the soil geochemistry anomaly, two lines of shallow holes were drilled to ensure the lode was intersected.

Two holes (RRK007 and RRK020) were also drilled off the southeastern end of the lode. Drilling has now extended the strike extent of anomalous “lode” to 850m.

The best results from drilling, viz. 4m @ 6% (Pb and Zn) in RRK006 and 4m @ 5% (Pb and Zn) in RRK012, are slightly better than in DDH3 [206'-218'; 12' (3.65m) @ 4% (Pb and Zn)]. Table 10 lists significant results from the drilling. These results are consistent with patches of disseminated to stringery sphalerite with minor galena and chalcopyrite within a weakly mineralised quartz-garnet envelope.

Logging of diamond drill holes DDH3, DDH4 and DDH5 (Fig. 38) indicates the lode occurs at the contact between metasediments to the south, and mafic gneisses to the north. Asymmetric alteration (quartz + garnet ± magnetite) is magnetite-rich causing a magnetic anomaly south of the lode position, with increasing garnet content as the lode is approached from the south. Alteration is noticeably weaker in mafic gneisses north of the lode.

Previous geophysics and geochemistry were used to assist targeting holes. The gradient array IP chargeability anomaly west of DDH2 (Fig. 5) was tested by holes RRK001-RRK003. The lack of significant EM target coincident with the lode position (Fig. 16), while not good, was not prohibitive for drill testing as sphalerite-rich orebodies rely on other electrically connected sulphides for conductivity. Given the coarsely crystalline and patchy, disseminated nature of surface mineralisation within a siliceous-garnetiferous host, a sphalerite-rich orebody if present at Red Rock may not present as a good EM target.

The aim of the drilling was to test the lode at approximately 100 metre intervals along the strike length of anomalous surface geochemistry (Figs. 13-15). Projection of anomalous geochemistry on to plan (Fig. 37) shows a sigmoidal shape with the thickest intersection (DDH1) coincident with the sigmoidal bend.

All assays from the drilling are included as Appendix 7, while Table 10 shows significant results. In holes where composite samples (over 10m) were taken initially, anomalous ten metre intervals were re-submitted in two metre intervals. Drill logs are located in Appendix 8.

### ***3.6.3 Red Rock Bore Paddock***

Four shallow RC drill holes (Nos RRK008 - RRK011, Table 9) were drilled over the magnetic anomaly and spiky MMI soil geochemistry response about 1km south of the Red Rock Bore.

Bedrock was intersected at 10-12 metres. The southernmost hole, RRK011, intersection weekly anomalous Cu-Zn (>200 ppm each).

### ***3.6.4 Rehabilitation***

At Red Rock Prospect, drill holes were designed to fit the previously bulldozed grid. Access for drilling was re-established on these lines by the landholder, Mr Gorey.

Drill hole collars were cut and capped 30cm below ground level. All rubbish and sample bags have been removed from site. Ripping tracks to promote revegetation will be carried out after future drilling.

South of Red Rock Bore, four shallow (10-12m) holes were sited along the edge of a property track. Holes were backfilled and no other rehabilitation work is required.

#### **4. PROPOSED WORK**

RAB, RC and diamond drilling of selected targets will be undertaken particularly at Red Rock Prospect where anomalous results have been obtained.

Pasminco anticipates that exploration during the next twelve months will amount to \$90,000 as shown below.

Geology	14,000
Geochemistry (analysis of drill cuttings)	5,000
Travel and Accommodation	3,000
Drilling (RAB, RC and diamond)	50,000
Stores and Supplies	2,000
Vehicle, Plant and Equipment	2,000
Computer Processing and Imaging	2,000
Office Costs	3,000
Administrative Overheads	9,000
<b>TOTAL (\$)</b>	<b>90,000</b>

## **5. EXPENDITURE**

Expenditure on Exploration Licence 8125, to 30 October 1996 is tabulated below.

	12 Months	Since Inception
Personnel	45,692	52,376
Travel & Accommodation	14,326	15,221
Geological Consultants	10,395	10,395
Geochemical Consultants/Assays	14,933	14,933
Geophysical Surveys and Consultants	1,196	1,196
Other Consultants	10,510	10,521
Drilling, Storage	53,351	53,351
Stores and Supplies	7,678	8,519
Vehicles, Plant and Equipment	9,275	10,084
Land	2,339	3,049
Computer	2,568	2,666
Office Costs	18,463	20,342
Administrative Overheads	19,073	20,265
<b>TOTAL (\$)</b>	<b>209,799</b>	<b>222,918</b>

Note: Expenditure by Roebuck Resources N.L. not included.

## **6. CONCLUSIONS**

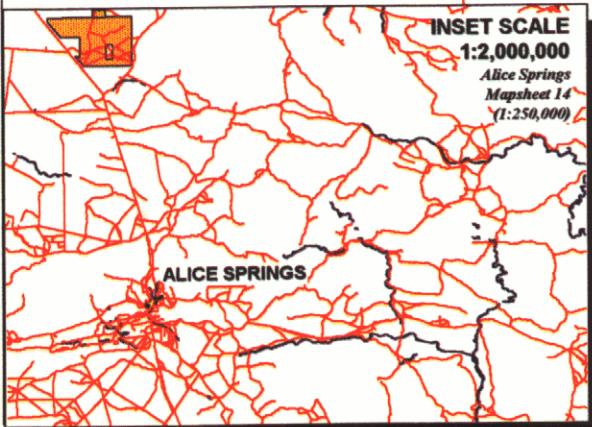
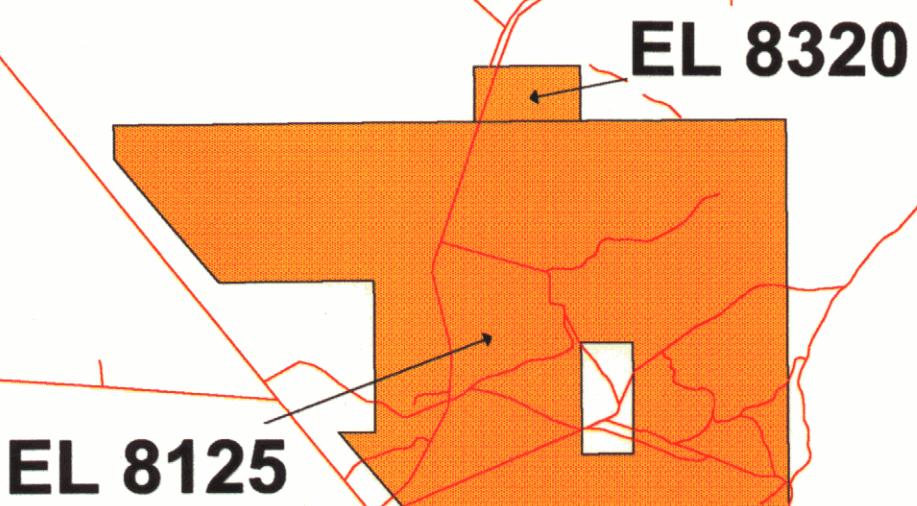
Drilling at Red Rock Prospect within Exploration Licence 8125 has located significant Pb-Zn values in a quartz-garnet lode between metasediments and mafic gneisses. Alteration of the sedimentary package to quartz-garnet-magnetite has provided a useful geophysical tool to guide exploration. Soil geochemistry (both MMI and conventional) locates mineralisation beneath shallow soil cover. Further drilling is warranted.

## **KEYWORDS AND LOCALITY**

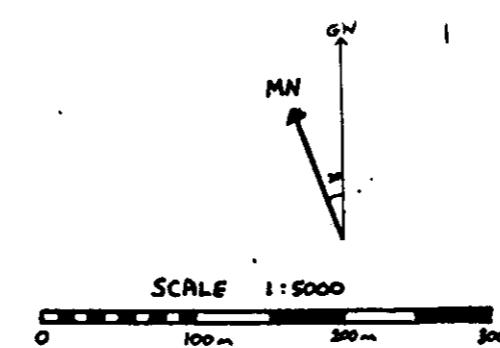
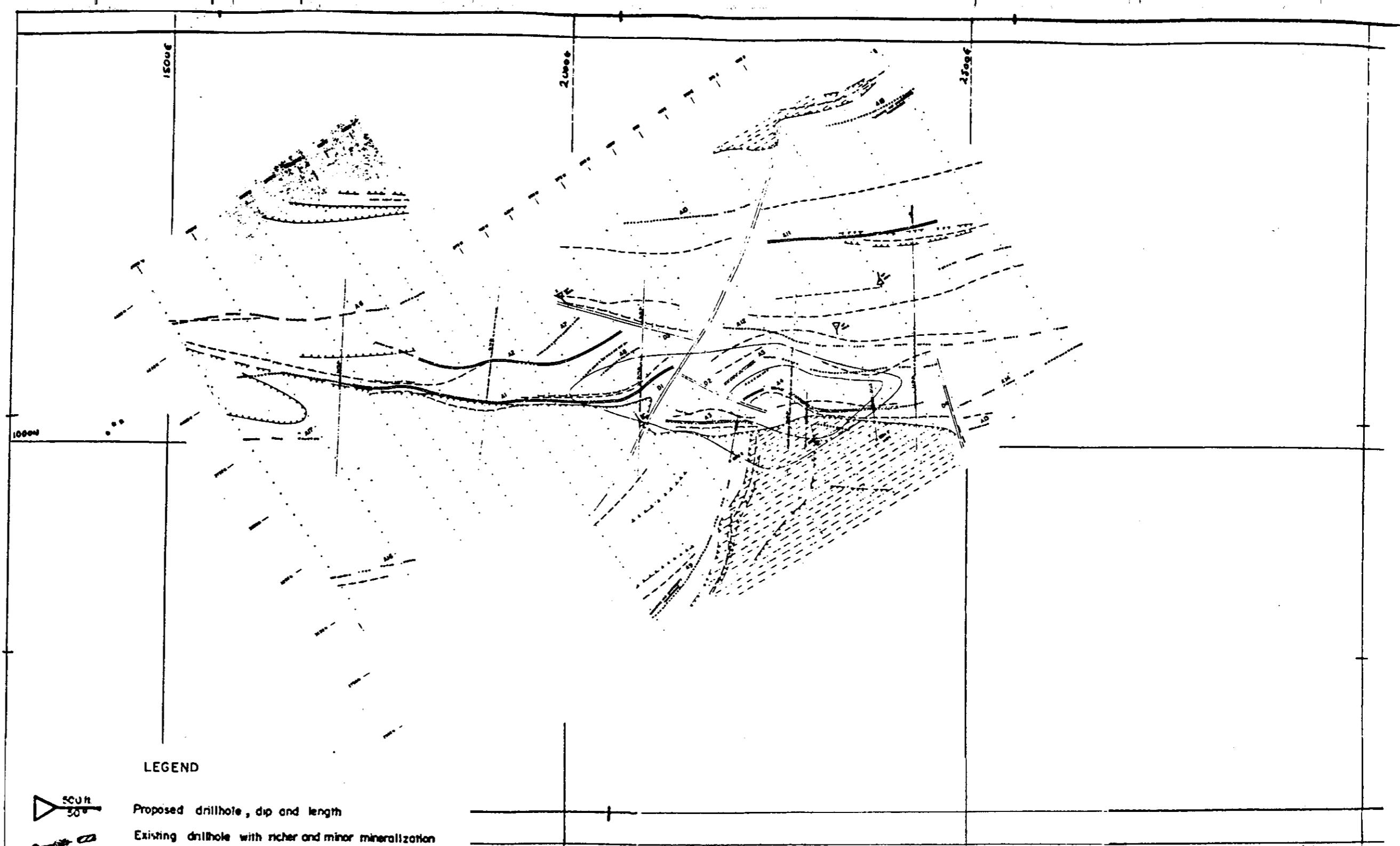
LEAD, ZINC, COPPER, DRILLING RC, GEOCHEM SOIL, GEOCHEM DRAINAGE,  
GEOPHYS MAGNETICS, ALICE SPRINGS SF 53-14, RED ROCK PROSPECT, COLES  
HILL E.L. 8125, ARUNTA.

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Pasminco Exploration		
Fig No. 1	Date: 17/7/1998	Author: TCL
Office: SA	Ref: AD0127	
<b>LOCATION MAP</b>		
<b>EL 8125 and EL 8320</b>		Scale 1:250,000



Pasminco Exploration

Coles Hill (Roebuck JV)

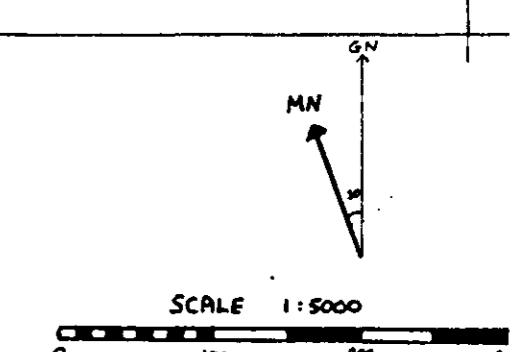
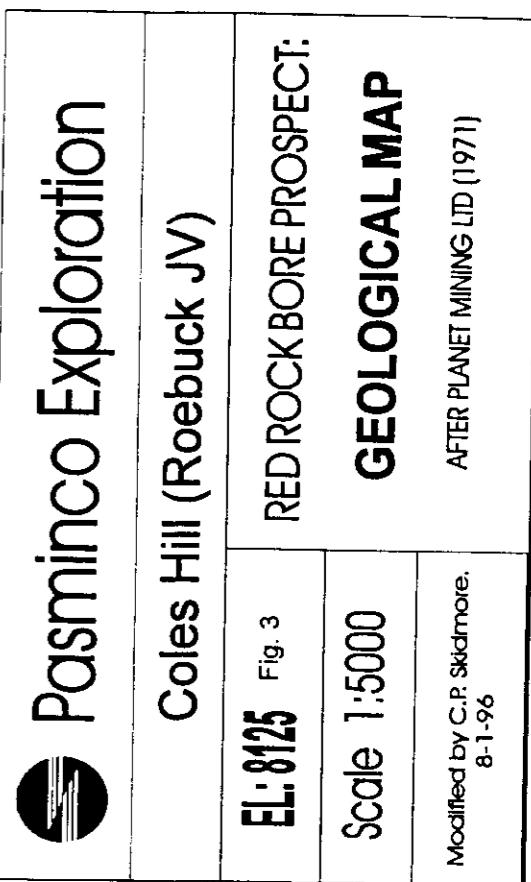
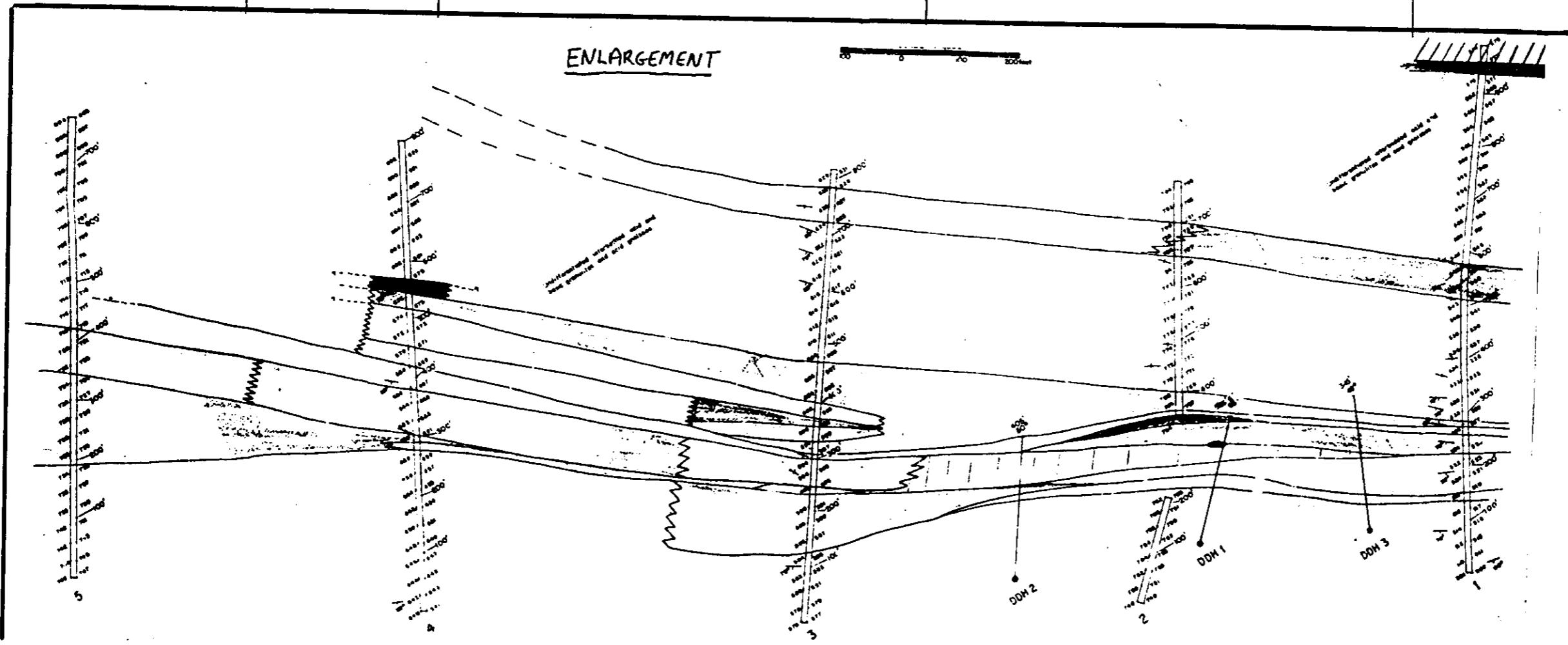
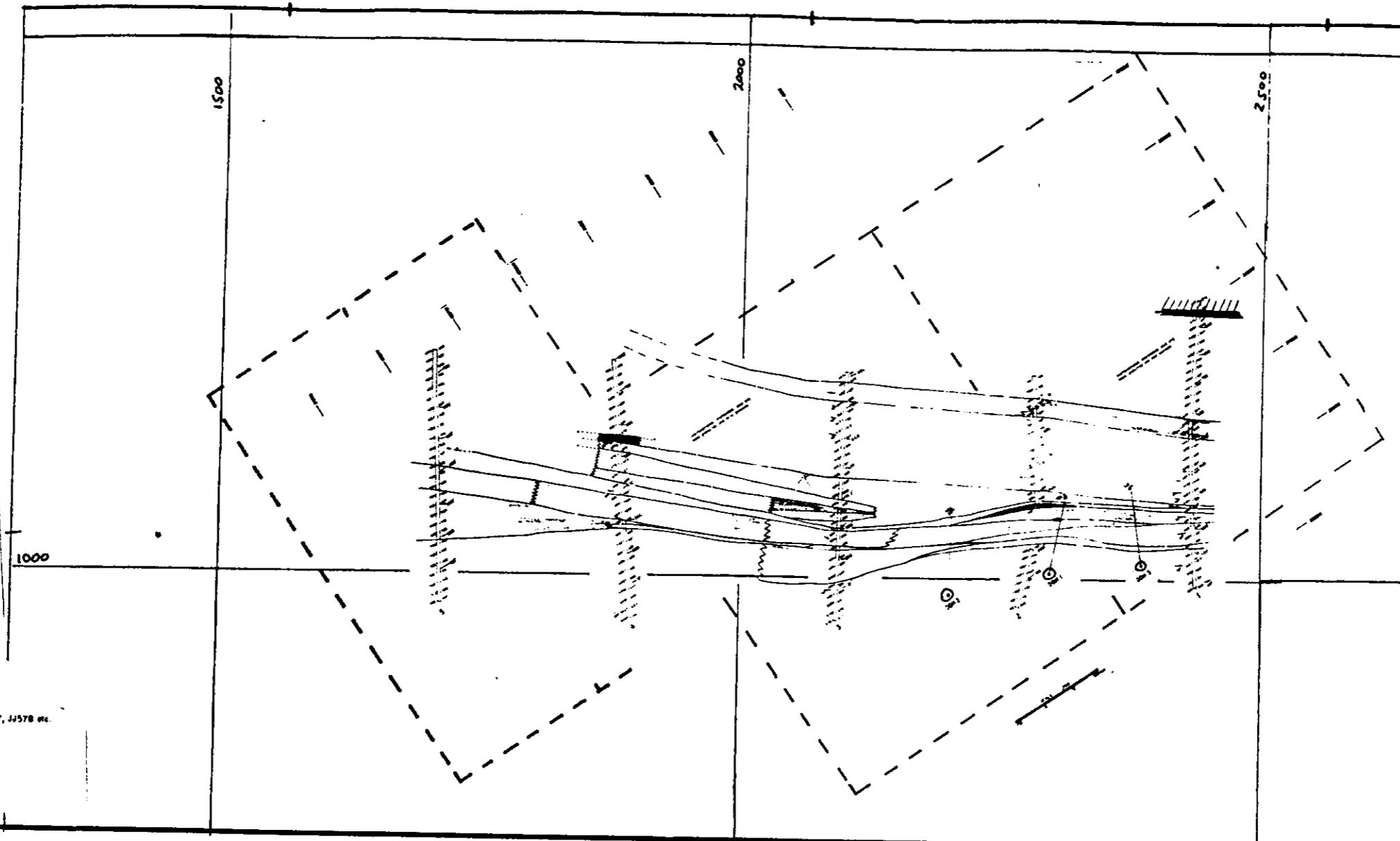
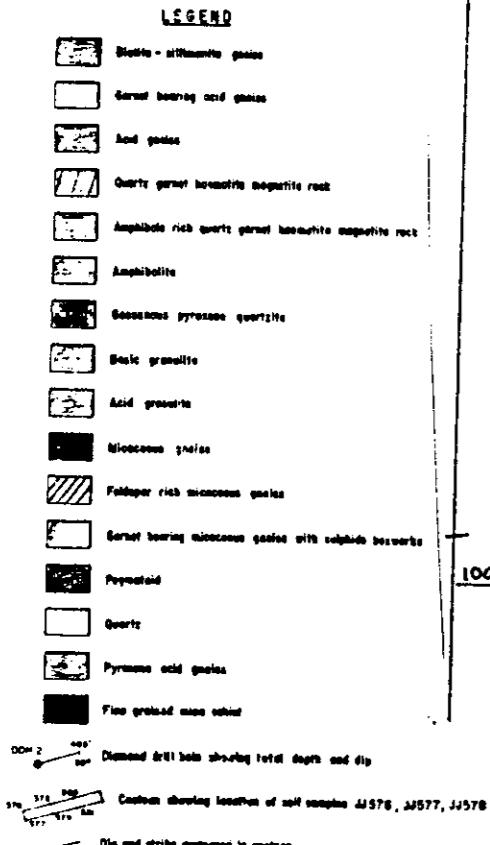
EL:8125 Fig. 2

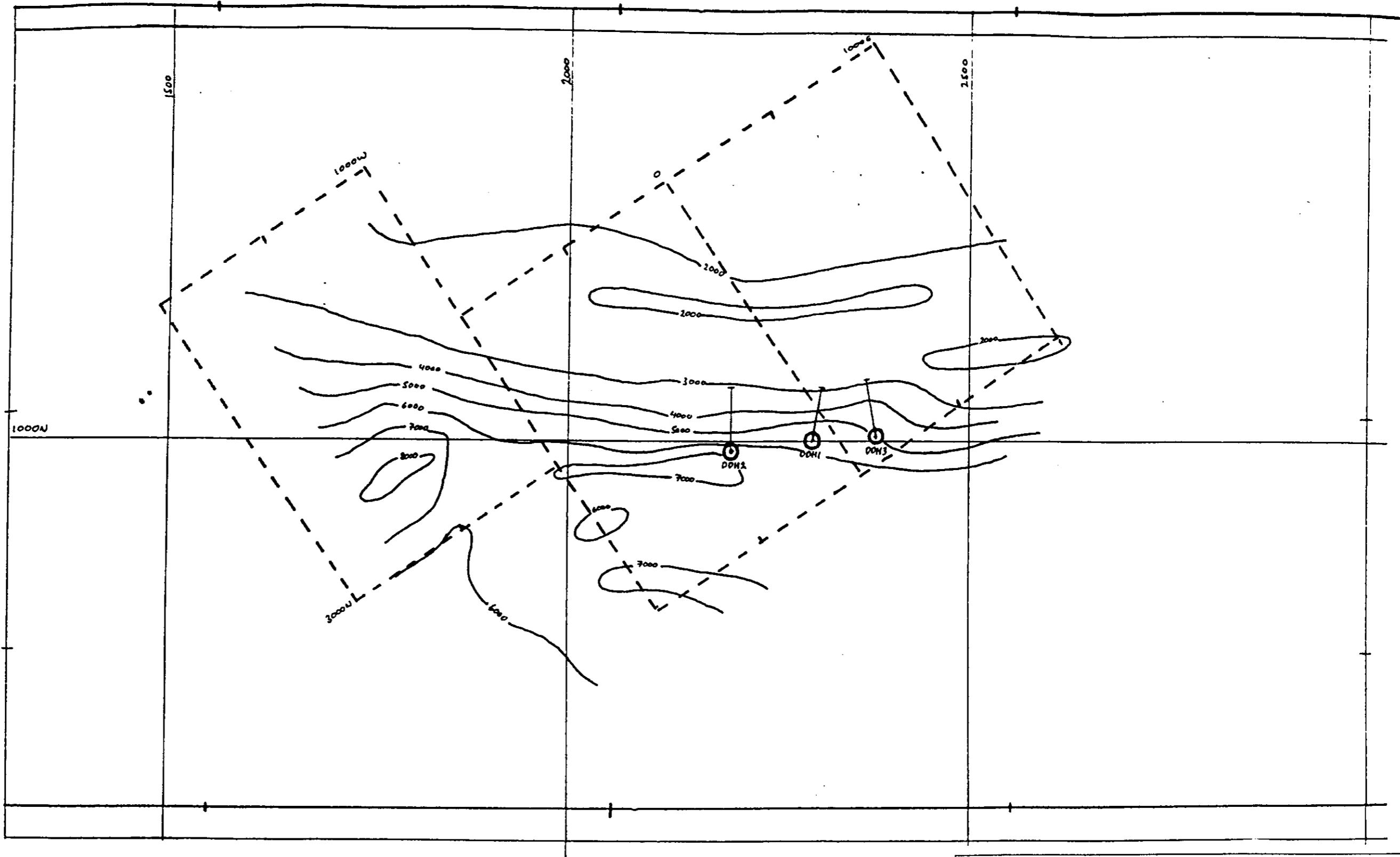
Scale 1:5000

Modified by C.P. Skidmore.  
8-1-96

RED ROCK BORE PROSPECT:  
**COMPREHENSIVE MAP**

AFTERPLANET MINING LTD (1971)





GN  
MN  
SCALE 1:5000  
0 100m 200m 300m



Pasminco Exploration

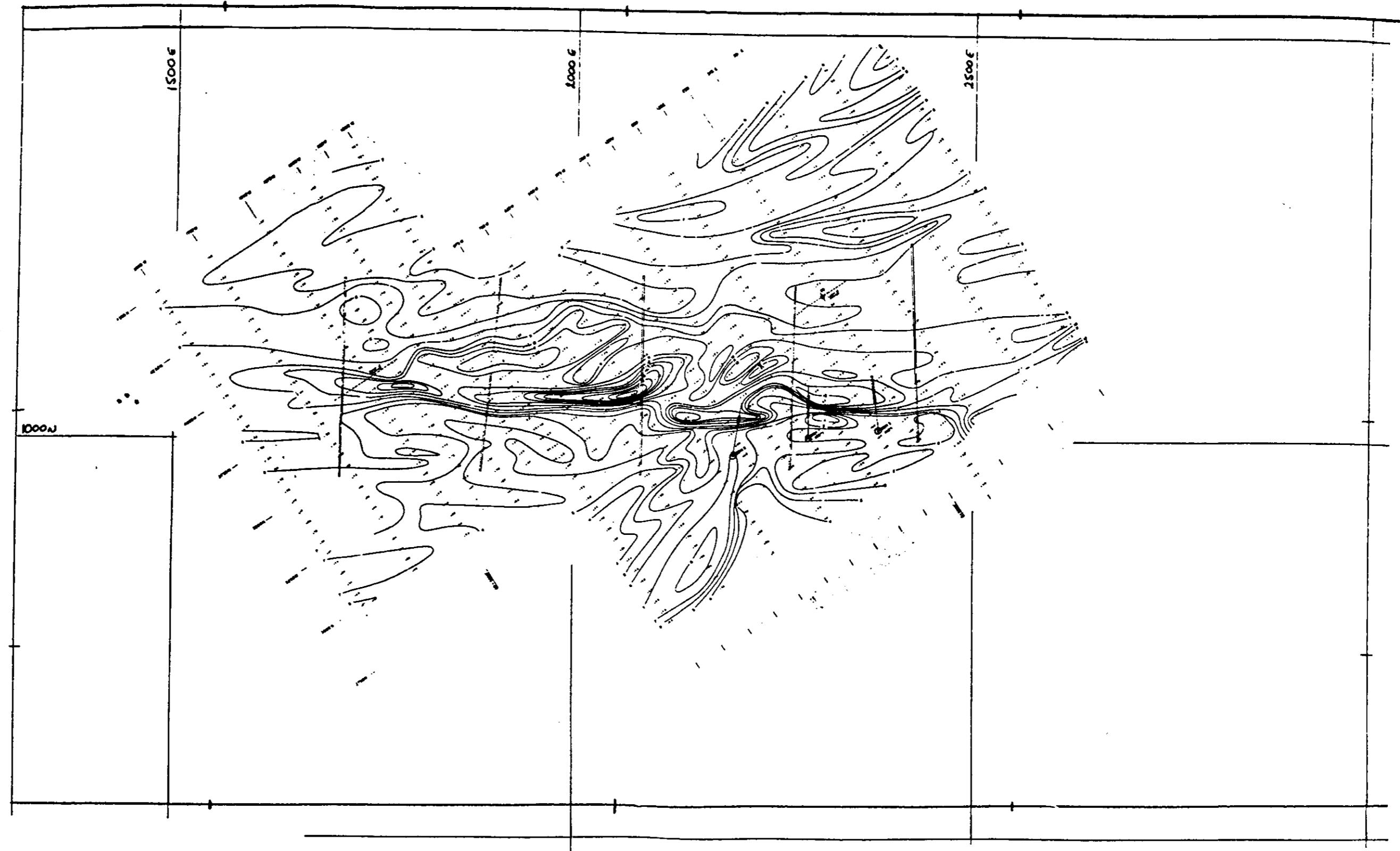
Coles Hill (Roebuck JV)

EL: 8125 Fig. 4

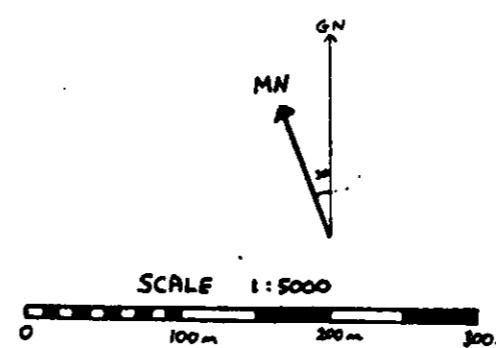
Scale 1:5000

Modified by C.P. Skidmore.  
8-1-96

RED ROCK BORE PROSPECT:  
GROUND MAGNETOMETER  
SURVEY  
AFTER PLANET MINING LTD (1971)



GRADIENT ARRAY AS = 5000' MM = 50'  
 TIME ON : 2secs OFF : 2secs  
 INTEGRATION FROM 450ms to 850ms after all off  
 CONTOUR INTERVAL 1ms.



**Pasminco Exploration**

**Coles Hill (Roebuck JV)**

**EL: 8125**

Fig. 5

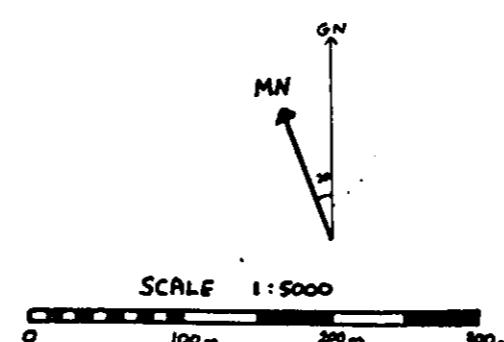
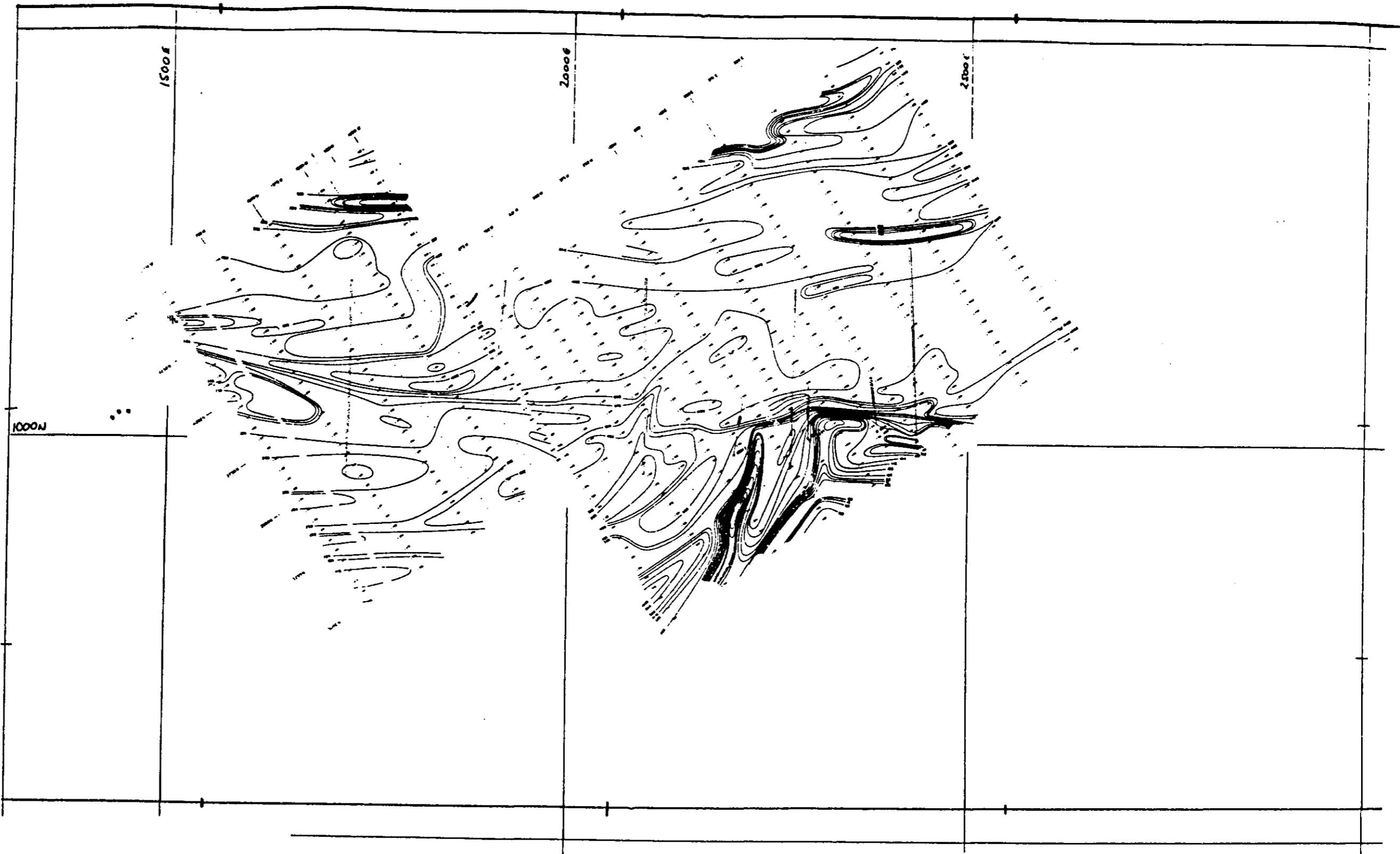
**RED ROCK BORE PROSPECT:**

**Scale 1:5000**

**APPARENT CHARGEABILITY  
MAP**

Modified by C.P. Siddmore,  
8-1-96

AFTER PLANET MINING LTD (1971)



Pasminco Exploration

Coles Hill (Roebuck JV)

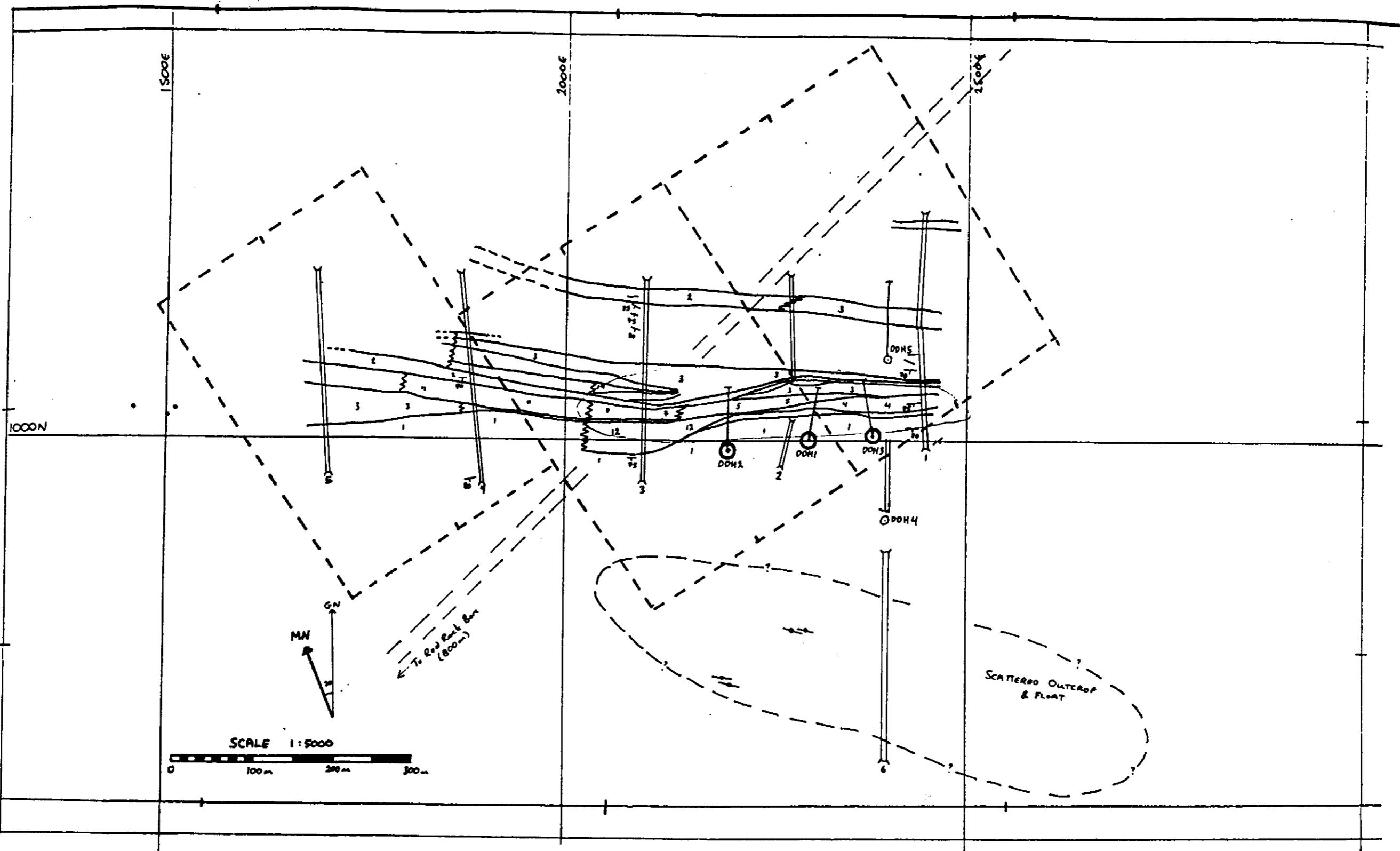
EL: 8125 Fig. 6

Scale 1:5000

Modified by C.P. Skidmore,  
8-1-96

**RED ROCK BORE PROSPECT:  
APPARENT RESISTIVITY  
MAP  
AFTERPLANET MINING LTD (1971)**

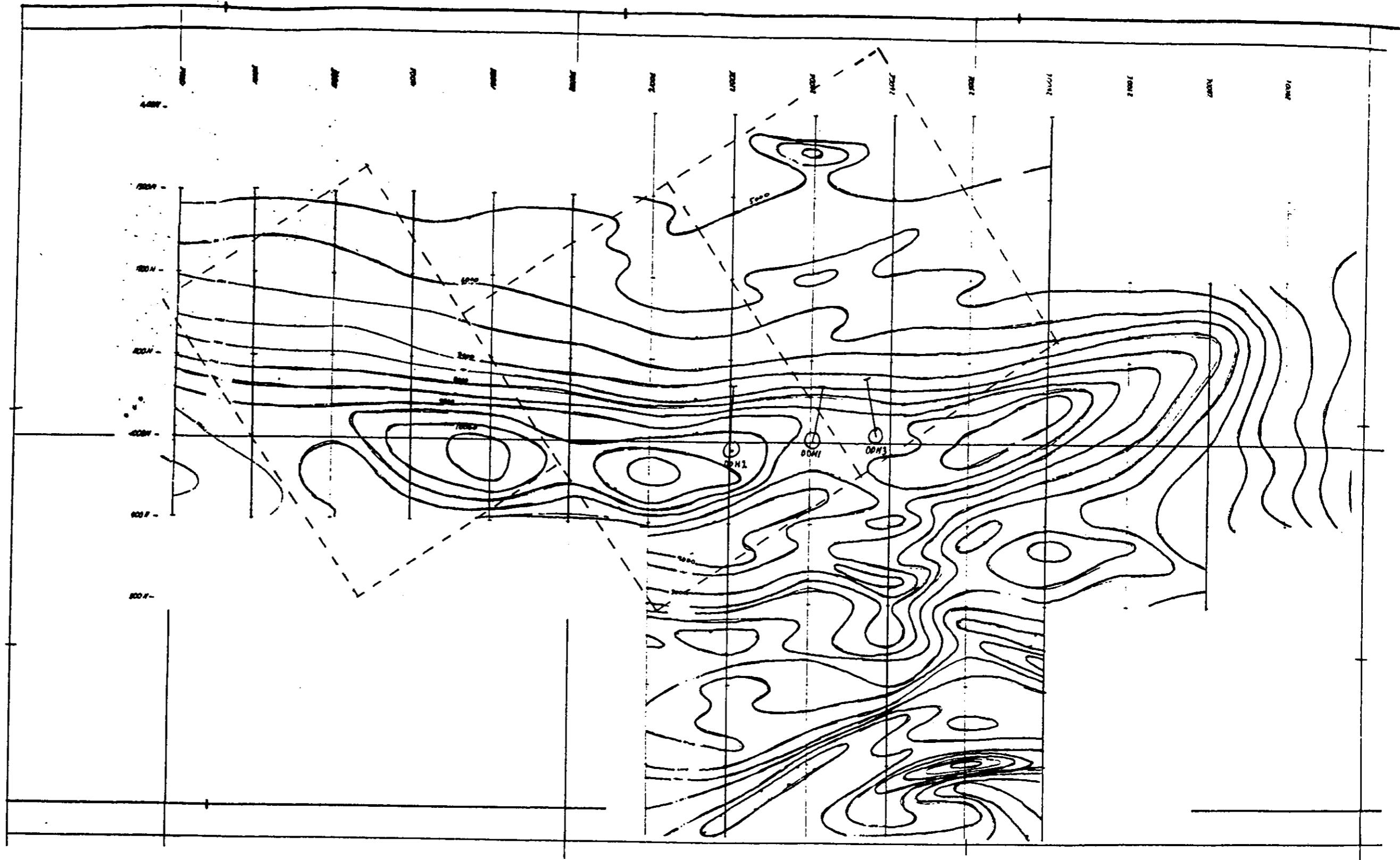




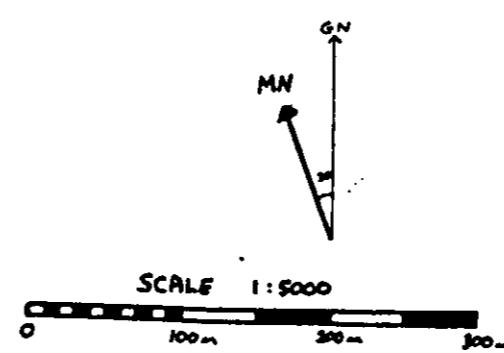
**Pasminco Exploration**  
**Coles Hill (Roebuck JV)**

EL: 8125 Fig. 8	RED ROCK BORE PROSPECT: <b>GEOLOGICAL MAP</b>
Scale 1:5000	AFTER TRIAKO MINES NL (1980)

Modified by C.P. Skidmore,  
8-1-96



- NB:
- For total magnetic field add 50,000 gammas to all readings.
  - Contoured at 500 gamma intervals.



Pasminco Exploration

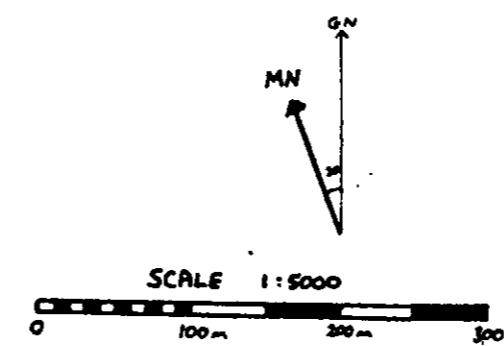
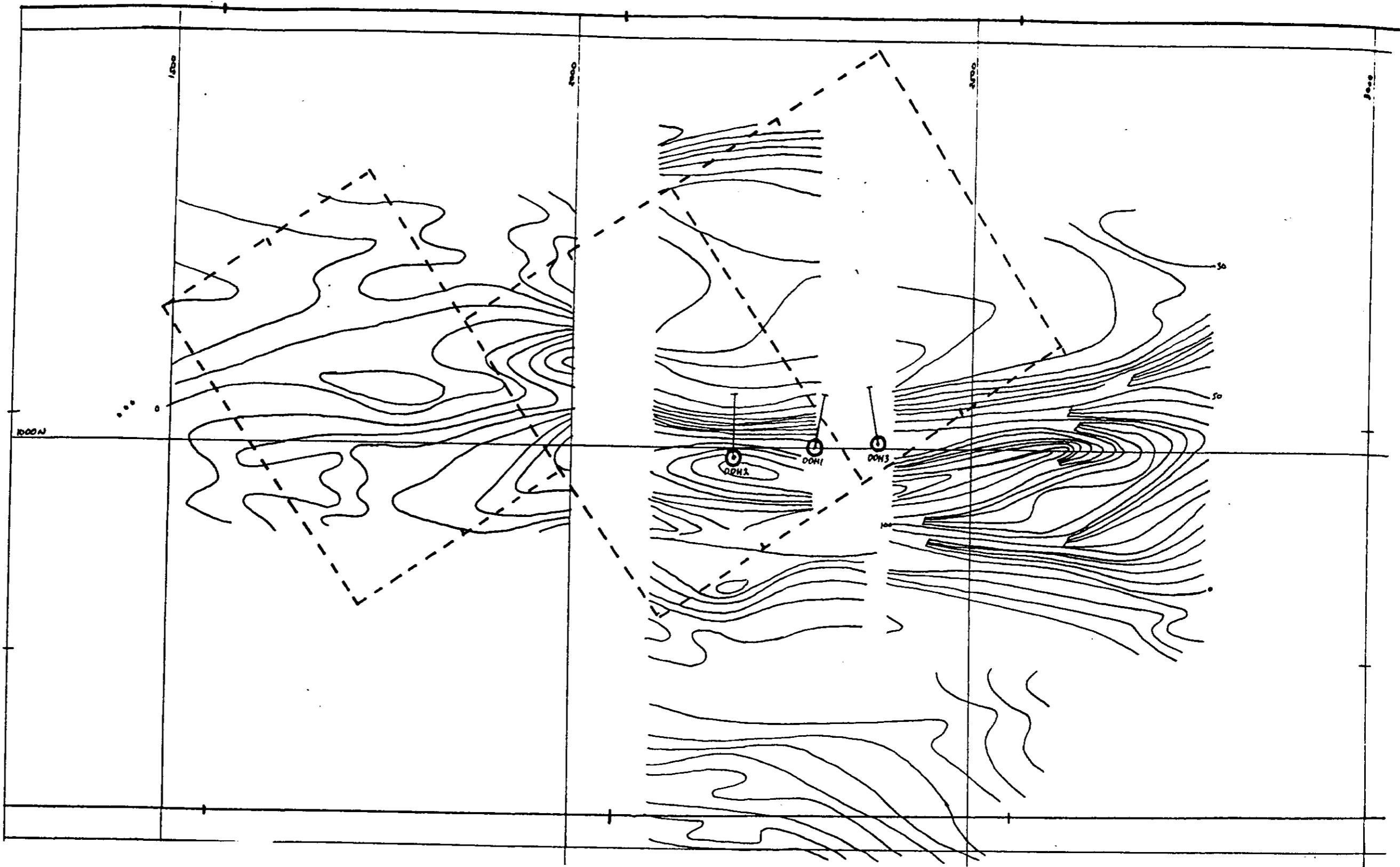
Coles Hill (Roebuck JV)

EL: 8125 Fig. 9

Scale 1:5000

Modified by C.P. Siddmore,  
5-1-96

**RED ROCK BORE PROSPECT:  
TOTAL MAGNETIC FIELD  
CONTOUR PLAN  
AFTER TRIAKO MINES NL (1980)**



**Pasminco Exploration**

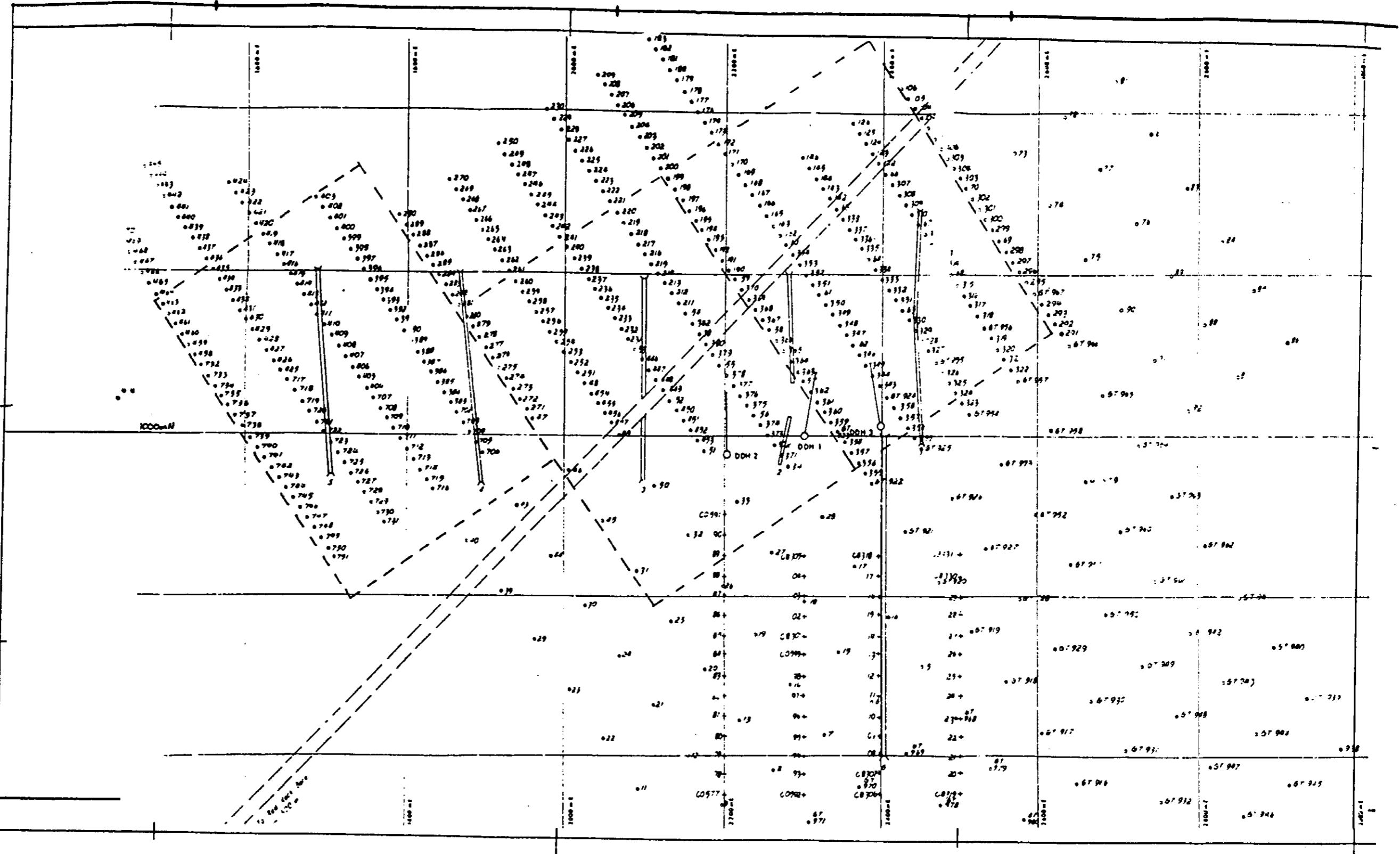
**Coles Hill (Roebuck JV)**

**EL:8125** Fig. 10

**Scale 1:5000**

Modified by C.P. Siddmore,  
8-1-96

**RED ROCK BORE PROSPECT:  
MMR CONTOUR PLAN  
RRMP SURVEY (Scintrex)  
AFTER TRIAKO MINES NL (1980)**



Pasminco Exploration

Coles Hill (Roebuck JV)

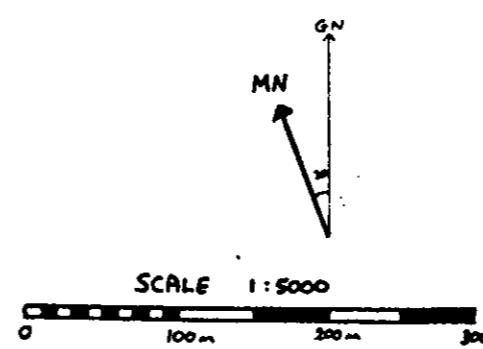
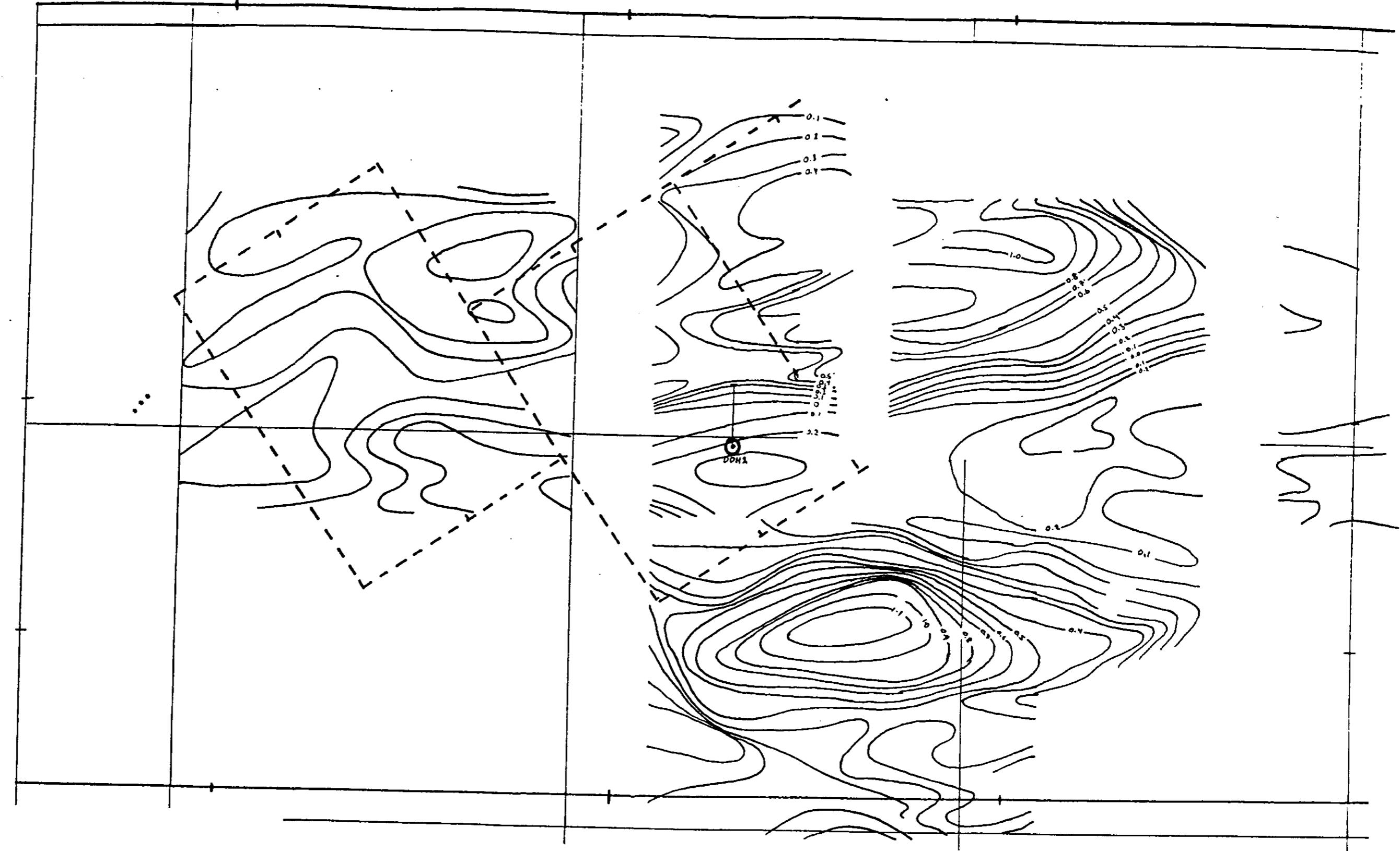
EL: 8125 Fig. 11

Scale 1:5000

Modified by C.P. Siddmore,  
5-1-96

**RED ROCK BORE PROSPECT:  
SAMPLE LOCATIONS  
SOIL GEOCHEMISTRY**

AFTER TRIAKO MINES NL (1980)



 Pasminco Exploration

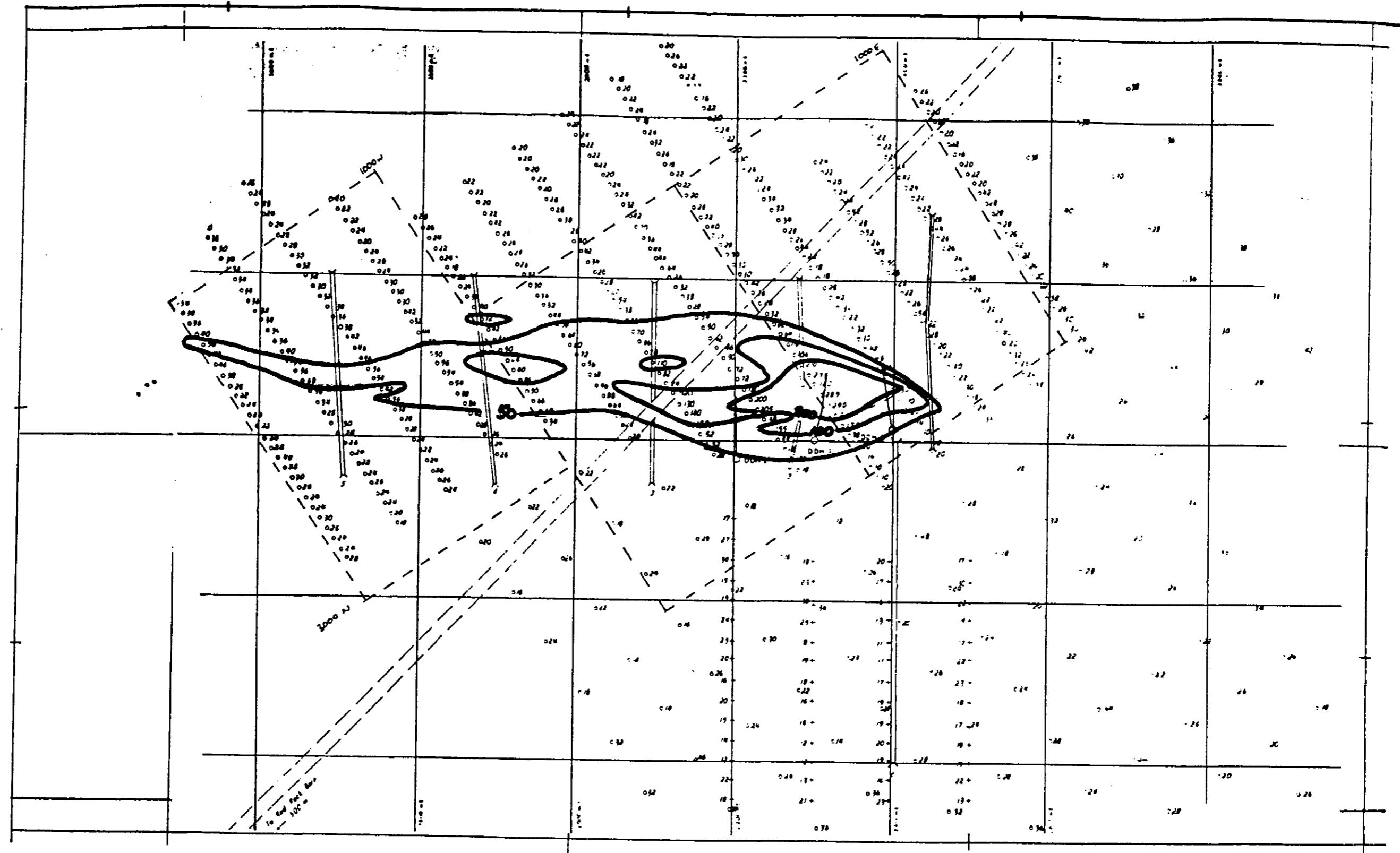
Coles Hill (Roebuck JV)

EL: 8125 Fig. 12

Scale 1:5000

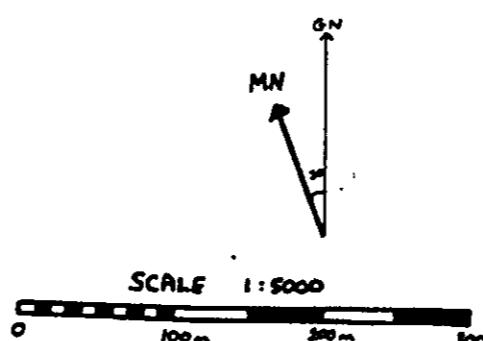
Modified by C.P. Skidmore,  
8-1-96

RED ROCK BORE PROSPECT:  
RPS CONTOUR PLAN  
RRMIP SURVEY (Scintrex)  
AFTER TRIAKO MINES NL (1980)



PLANET MINES  
GRID (1935) ft

- LEGEND**
- -> 100' Contour Interval
  - Copper & Zinc Vein Sample Locations
  - Planar Soil Sample
  - + Andes Soil Sample
  - - - Fault



Pasminco Exploration

Coles Hill (Roebuck JV)

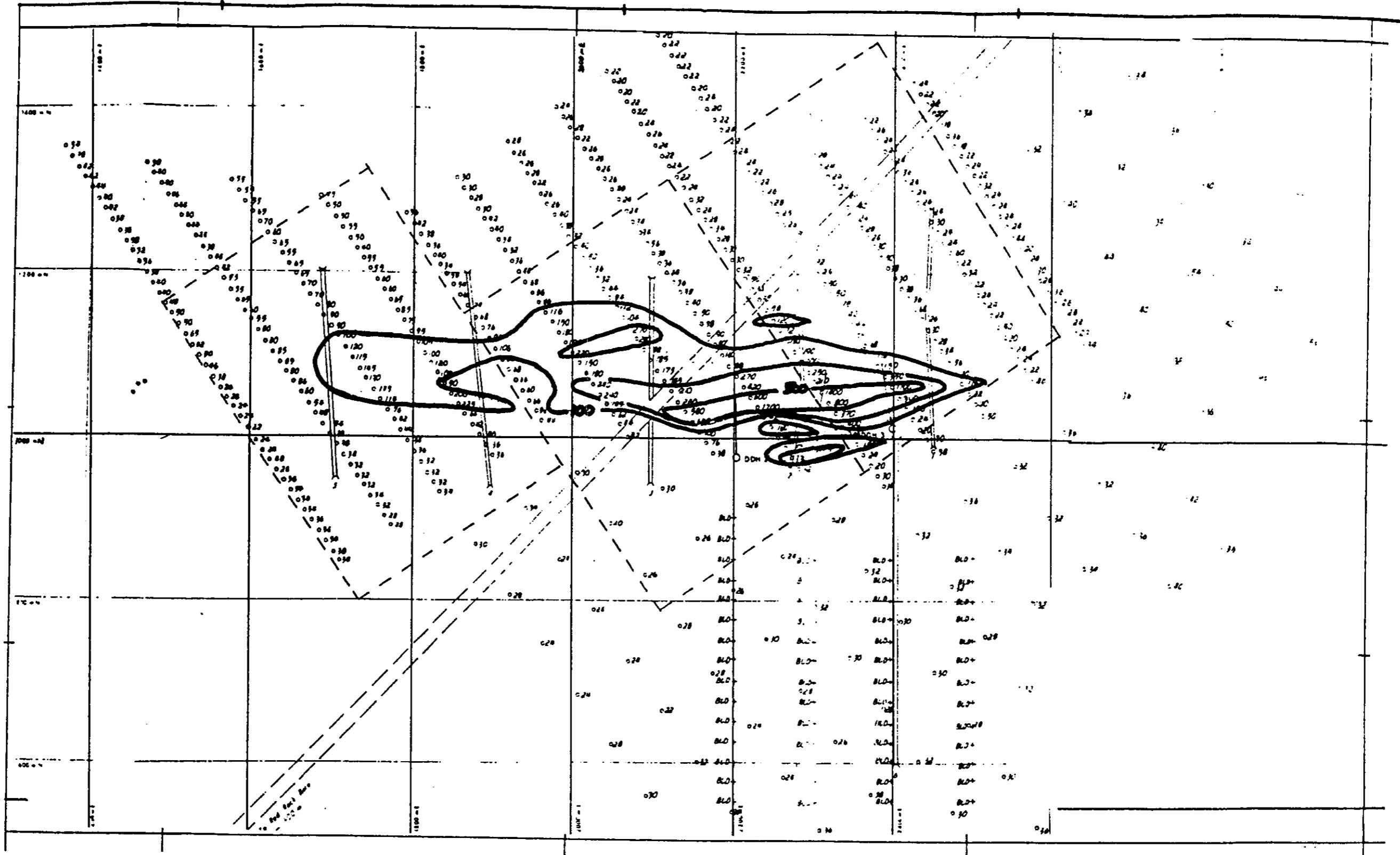
EL: 8125 Fig. 13

Scale 1:5000

Modified by C.P. Skidmore,  
5-1-96

RED ROCK BORE PROSPECT:  
**COPPER**  
SOIL GEOCHEMISTRY

AFTER TRIAKO MINES NL (1980)



Pasminco Exploration

Coles Hill (Roebuck JV)

EL: 8125 Fig. 14

Scale 1:5000

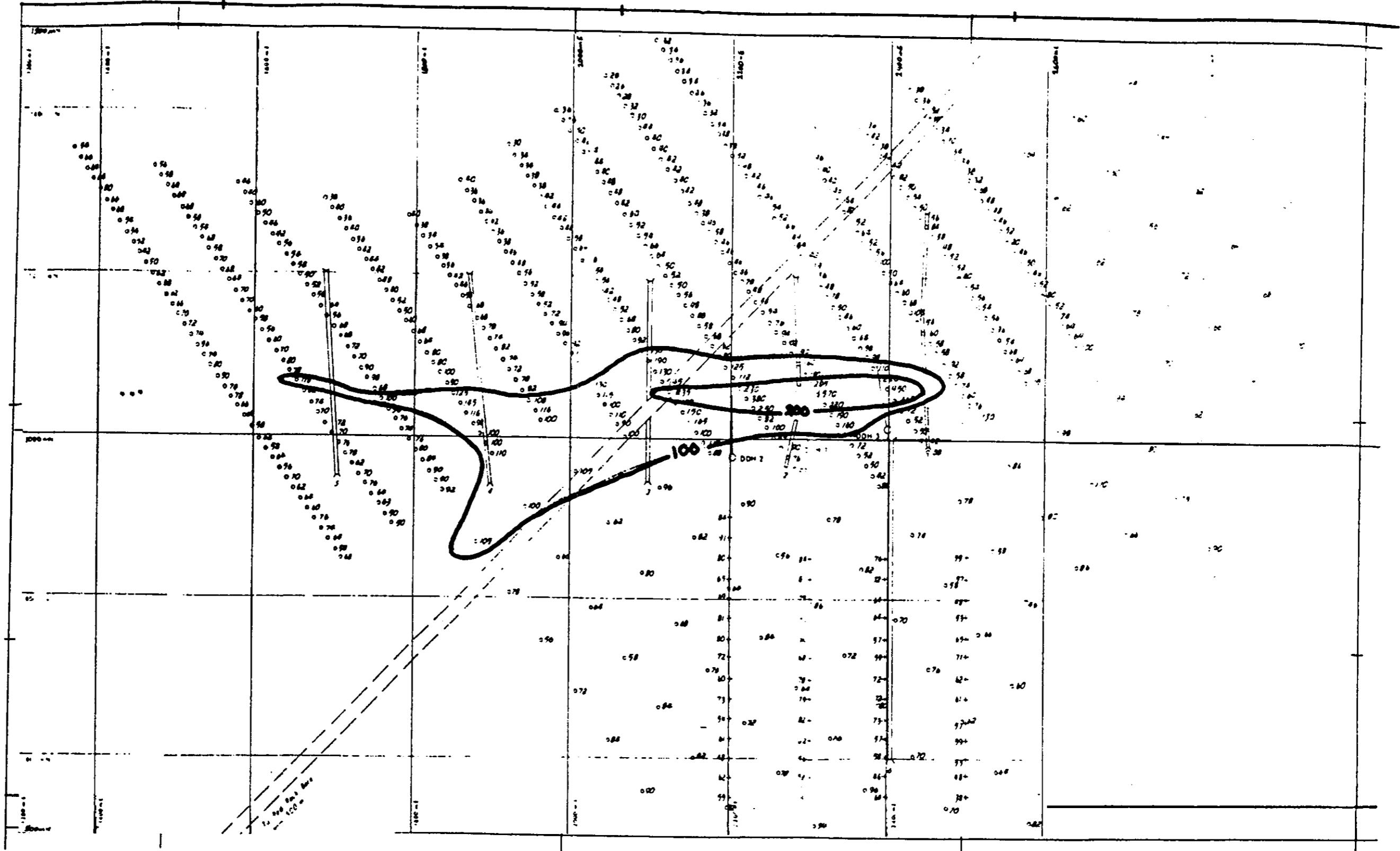
Modified by C.P. Siddmore,  
5-1-96

RED ROCK BORE PROSPECT:

LEAD

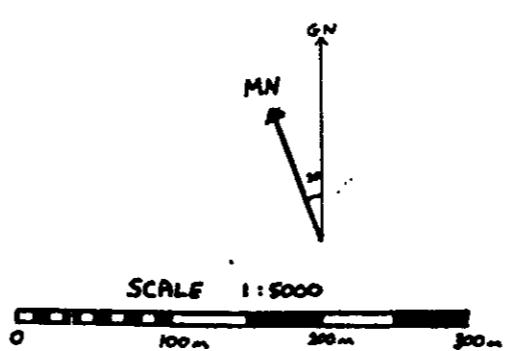
SOIL GEOCHEMISTRY

AFTER TRIAKO MINES NL (1980) I



**LEGEND**

- - Dipole Dipole
- ~~~~~ - Corten & Shallow Source Location
- ⊕ - Plotted Soil Sample (Plus Other Values in area)
- - Andes Soil Sample
- - - - Road



Pasminco Exploration

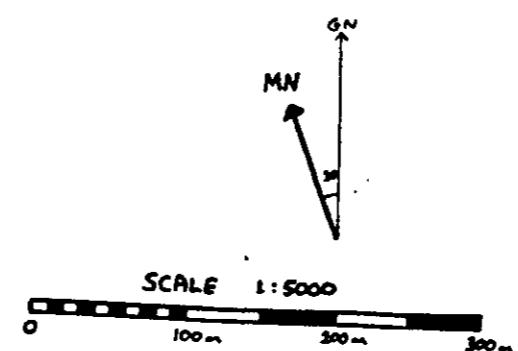
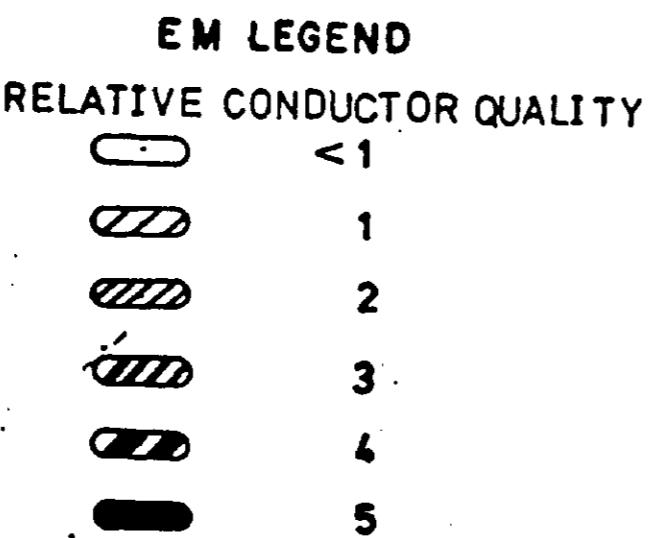
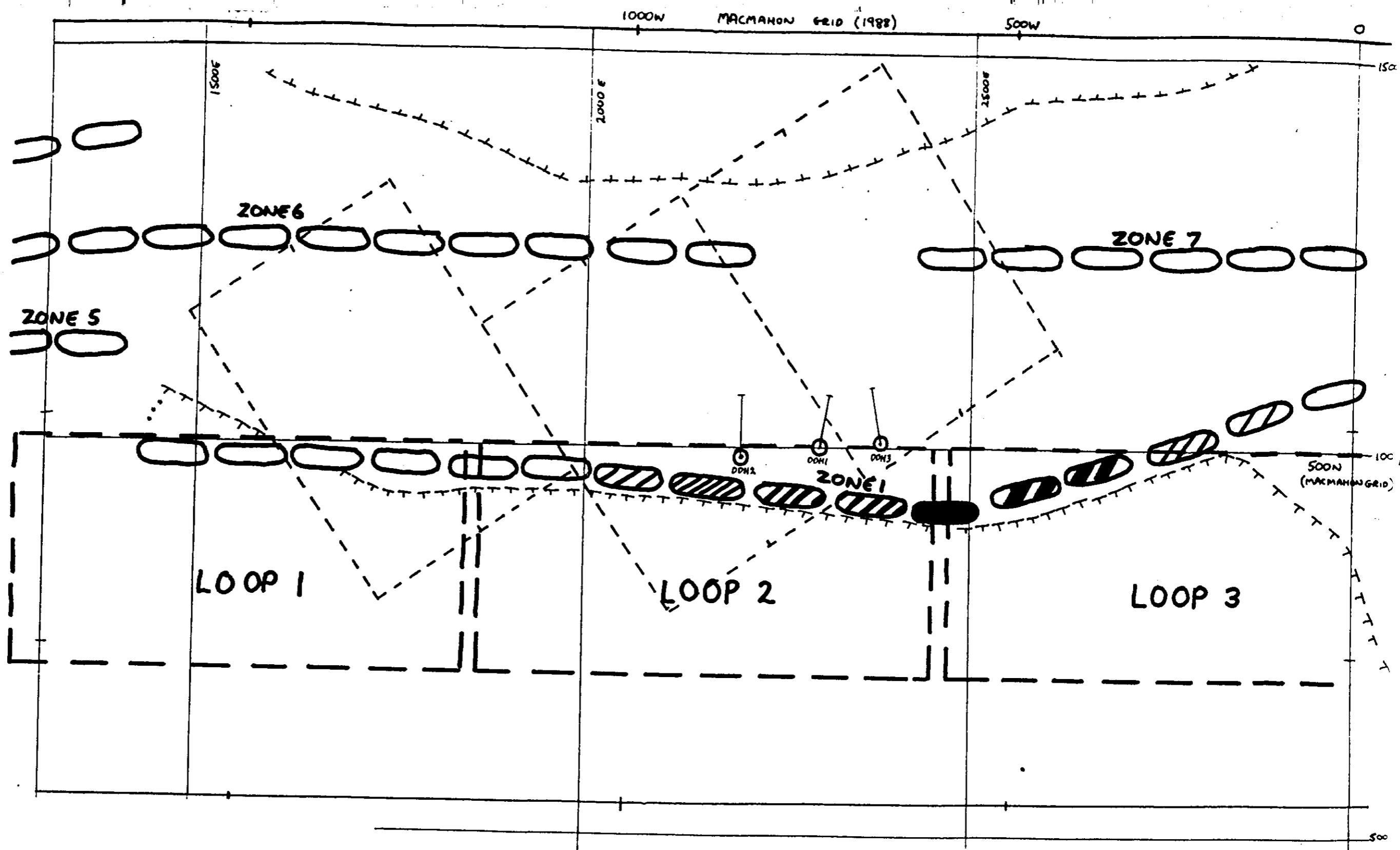
Coles Hill (Roebuck JV)

EL: 8125 Fig. 15

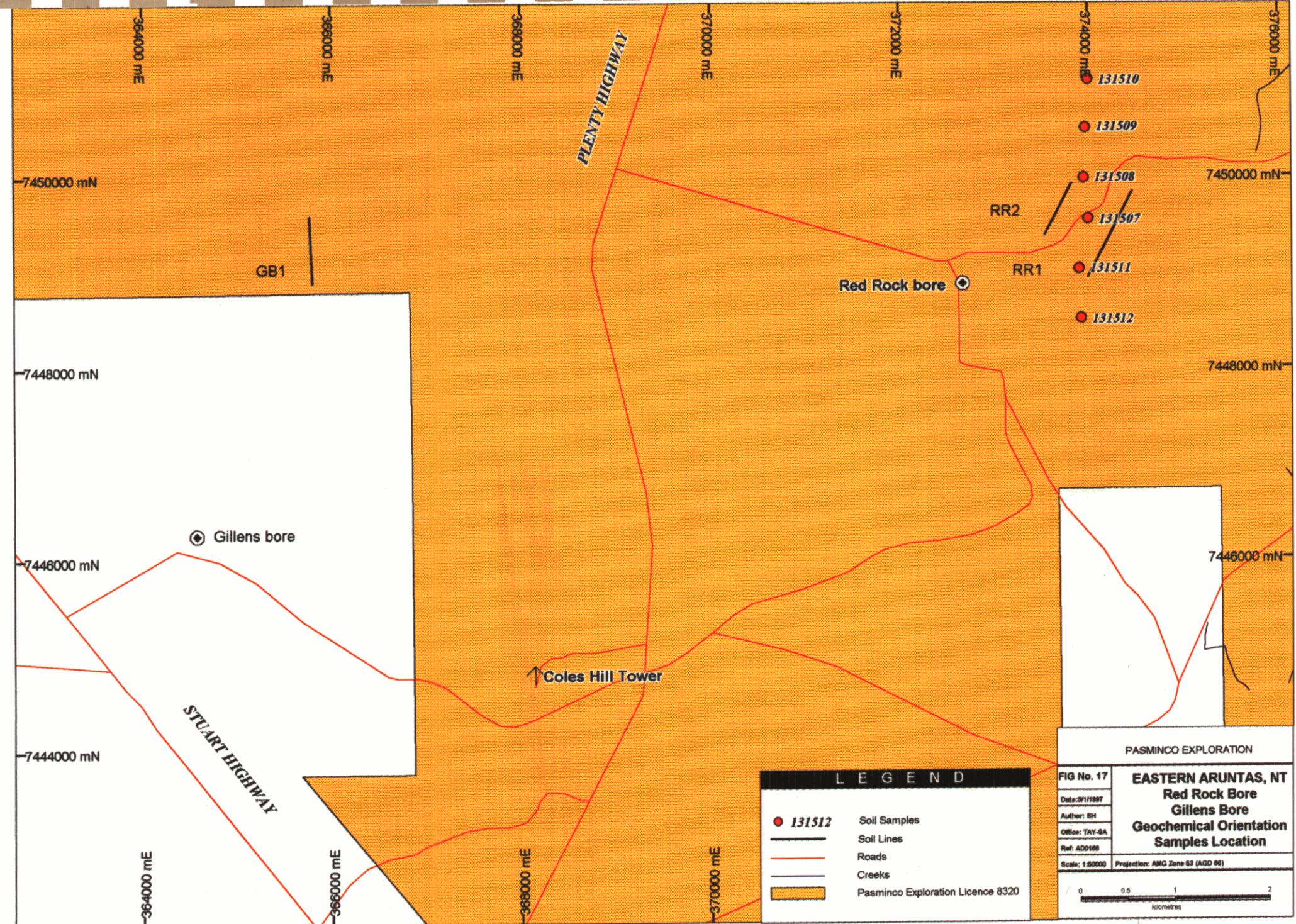
Scale 1:5000

Modified by C.P. Skidmore,  
5-1-96

RED ROCK BORE PROSPECT:  
**ZINC**  
SOIL GEOCHEMISTRY  
AFTER TRIAKO MINES NL (1980)



<b>Pasminco Exploration</b>	
Coles Hill (Roebuck JV)	
<b>EL: 8125</b>	Fig. 16
Scale 1:5000	
RED ROCK BORE PROSPECT: <b>EM-37</b>	
SELECTED CONDUCTOR MAP	
Modified by C.P. Skidmore, 5-1-96	
AFTER MACMAHON CONSTRUCTION (1989)	



RED ROCK BORE  
LINE RR1 - LAG -5/+2mm, magnetic

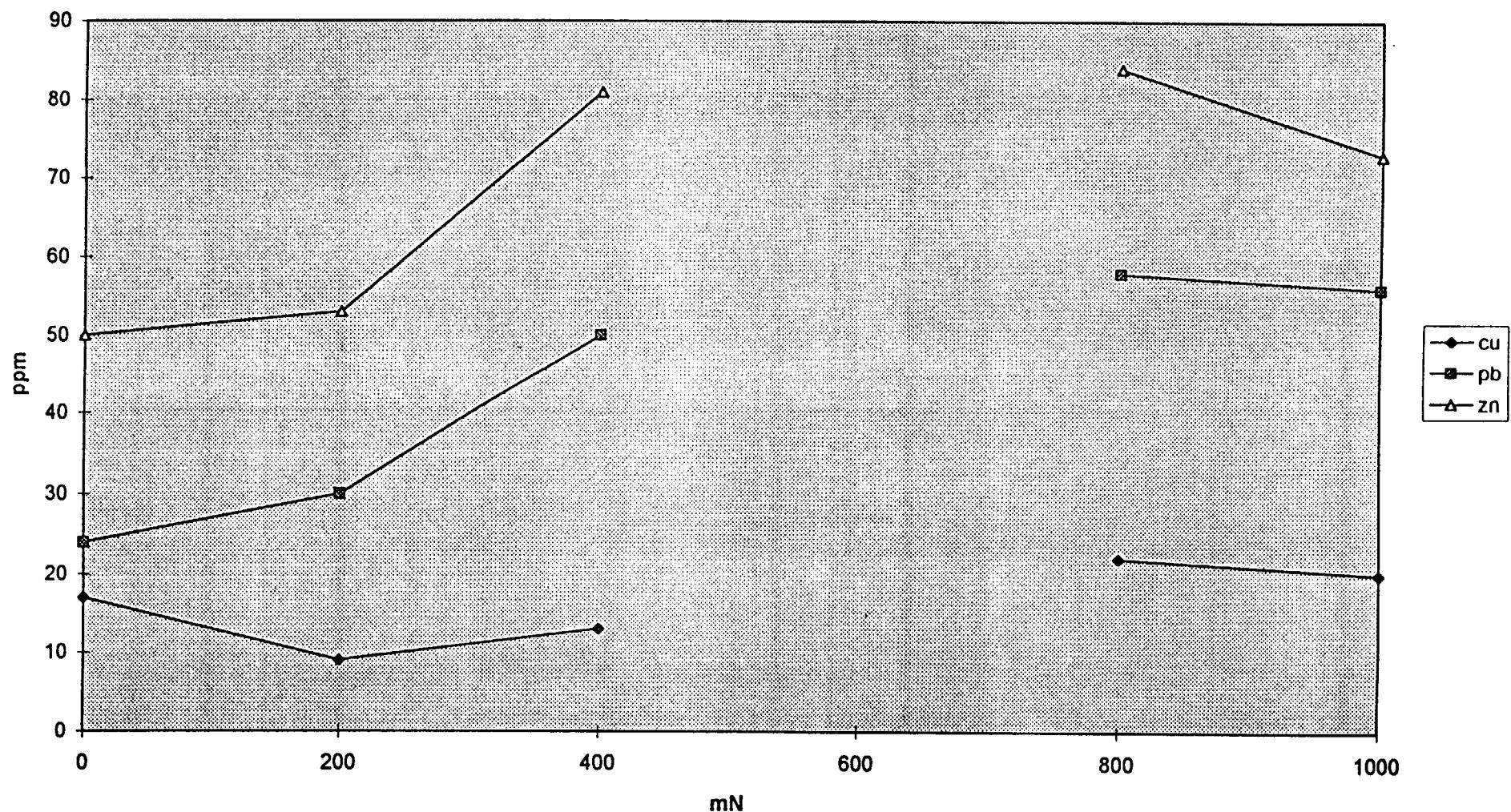


Figure 18

RED ROCK BORE  
LINE RR1 - LAG -2/.5mm, magnetic

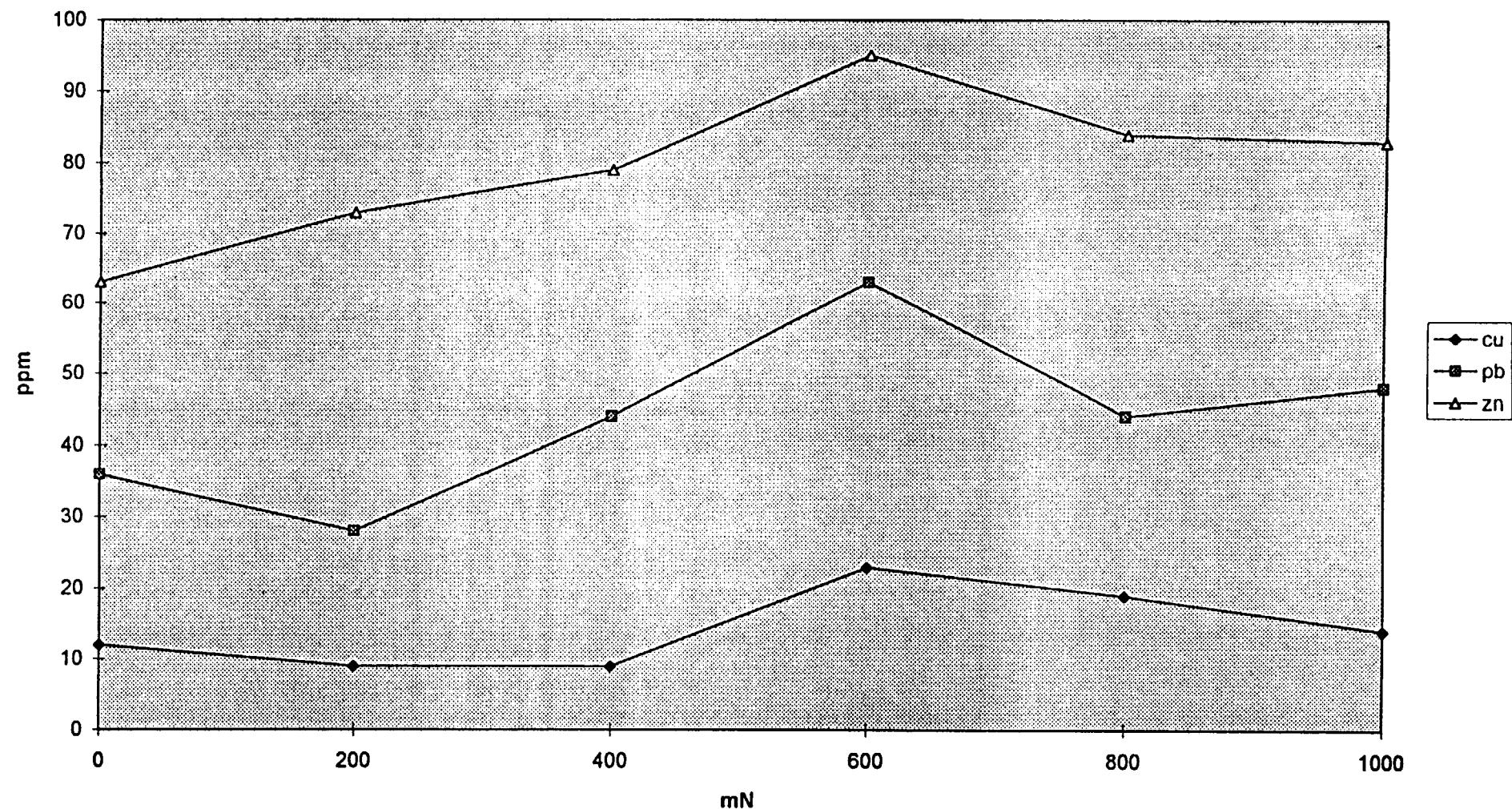


Figure 19

RED ROCK BORE  
LINE RR1 - LAG -5/+2mm, non-magnetic

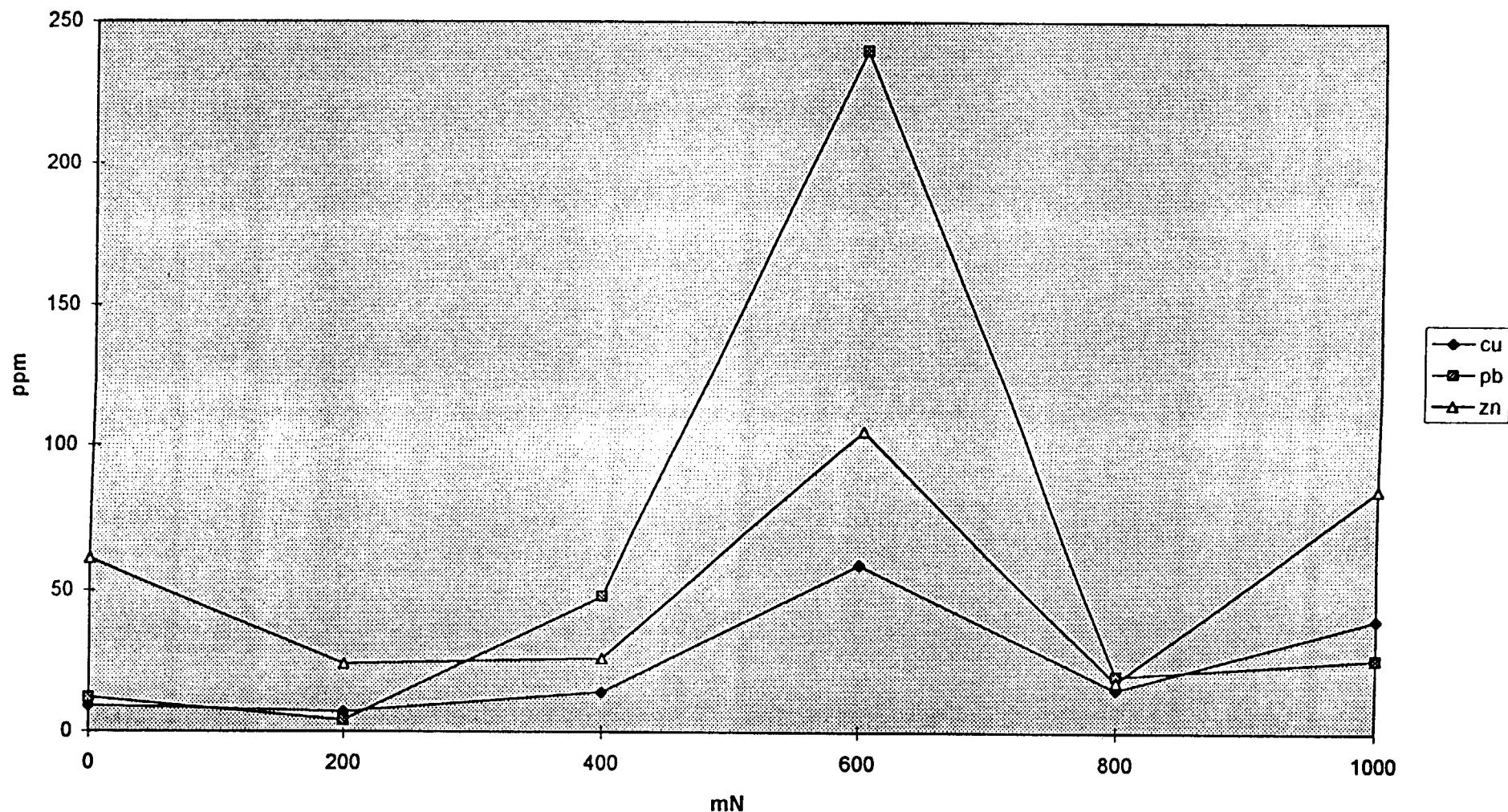


Figure 20

RED ROCK BORE  
LINE RR1 - LAG -2+.5mm, non-magnetic

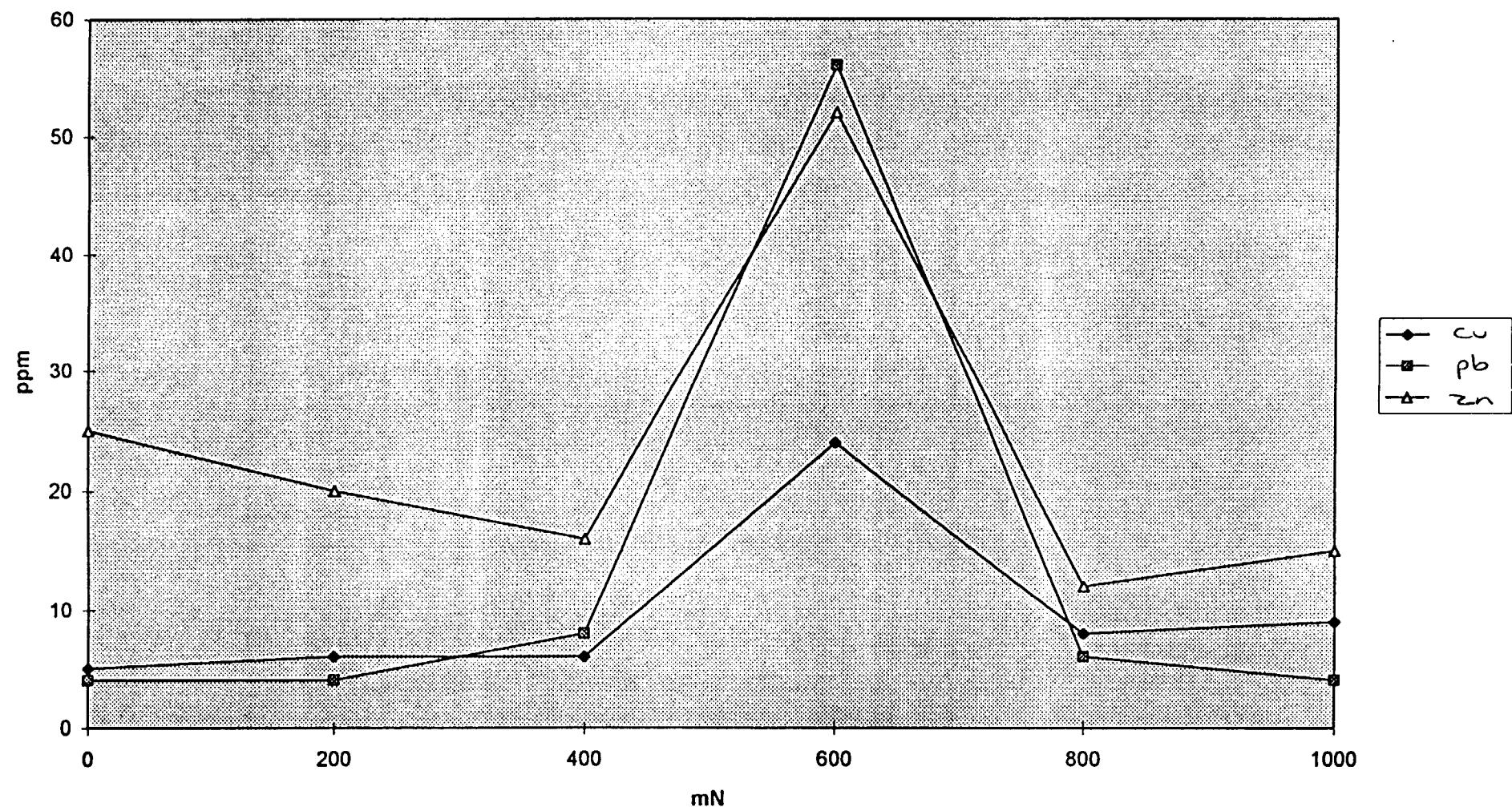
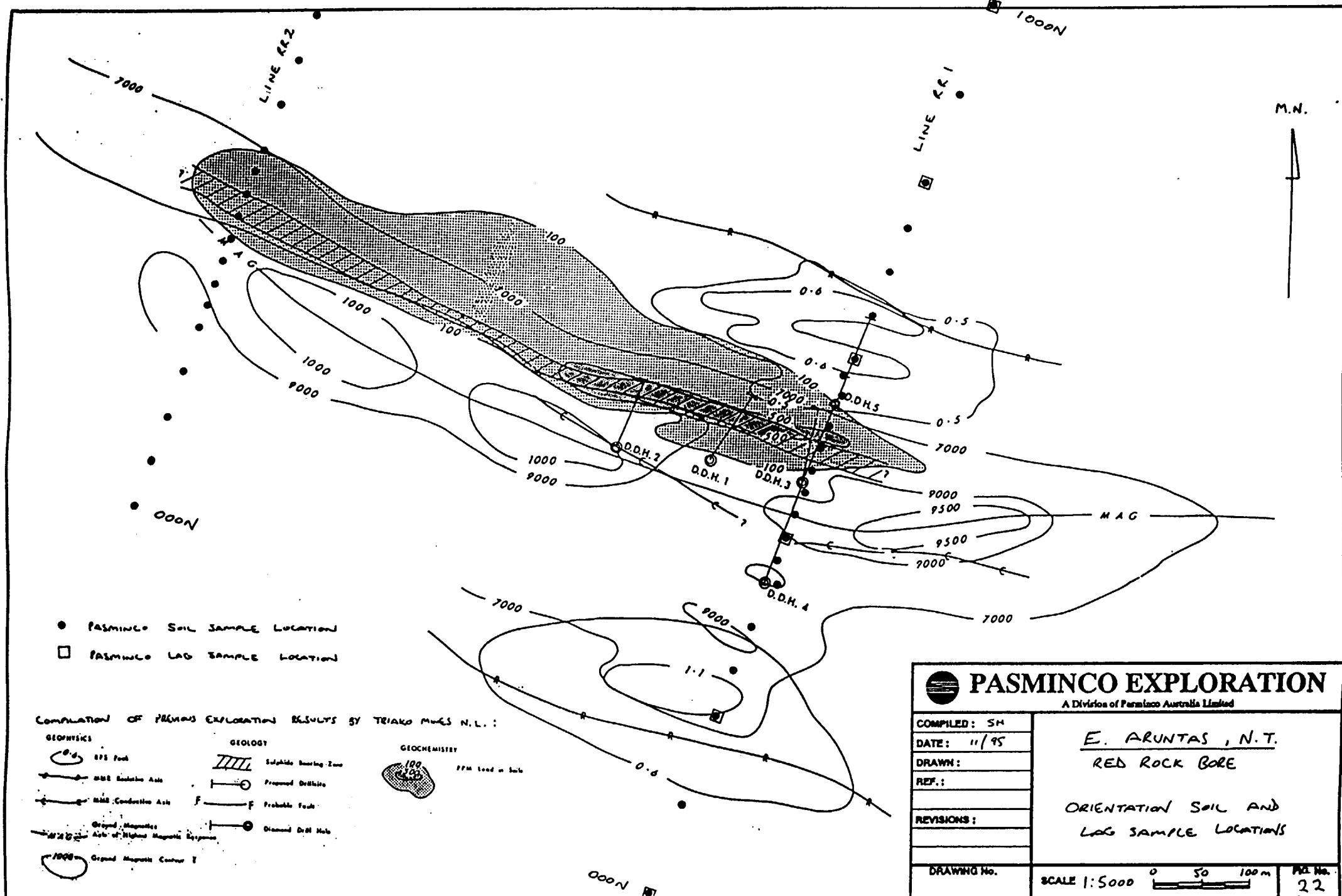


Figure 21



RED ROCK BORE  
LINE RR1 - CONVENTIONAL SOILS

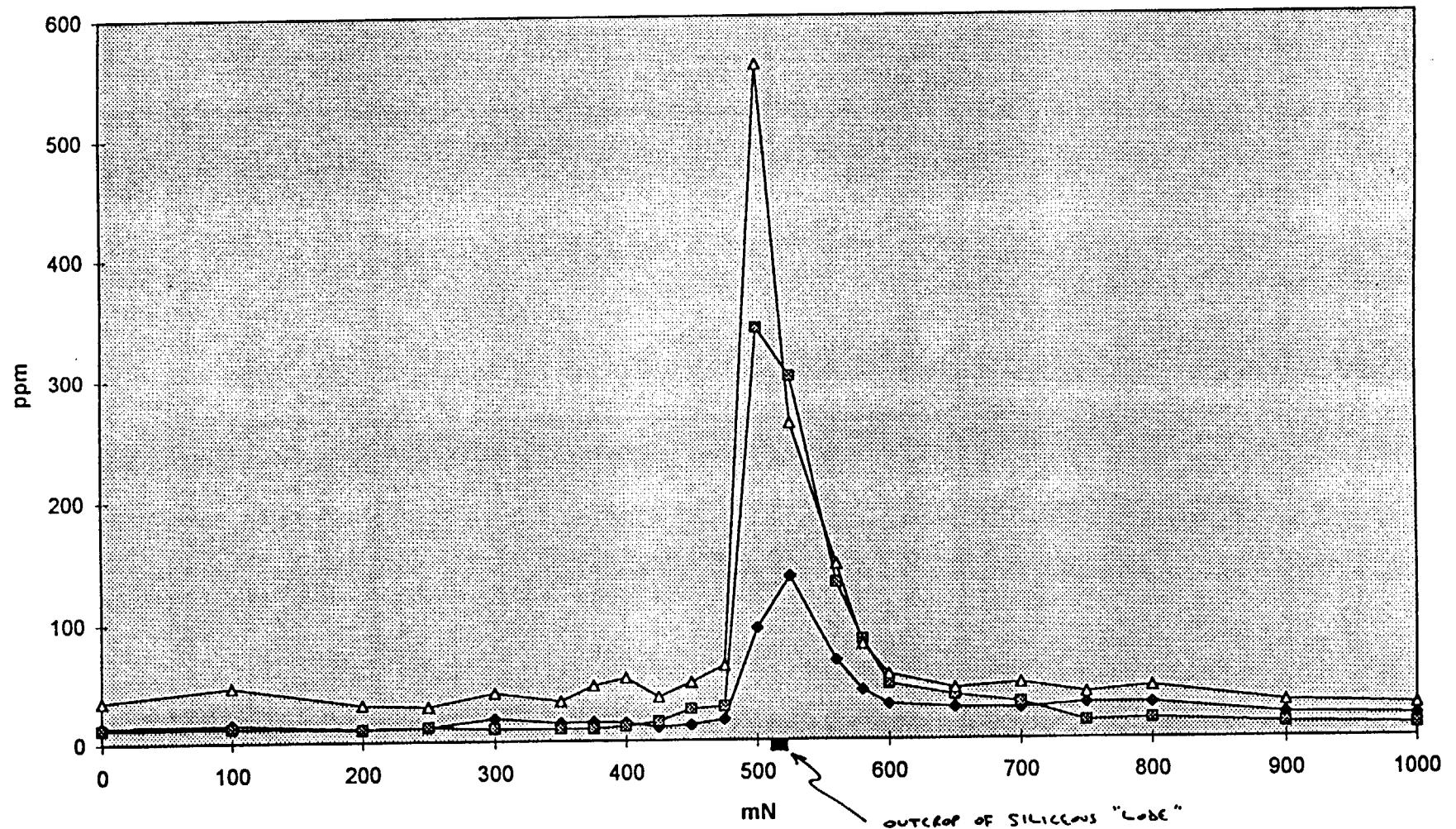


Figure 23

RED ROCK BORE  
LINE RR2 - CONVENTIONAL SOILS

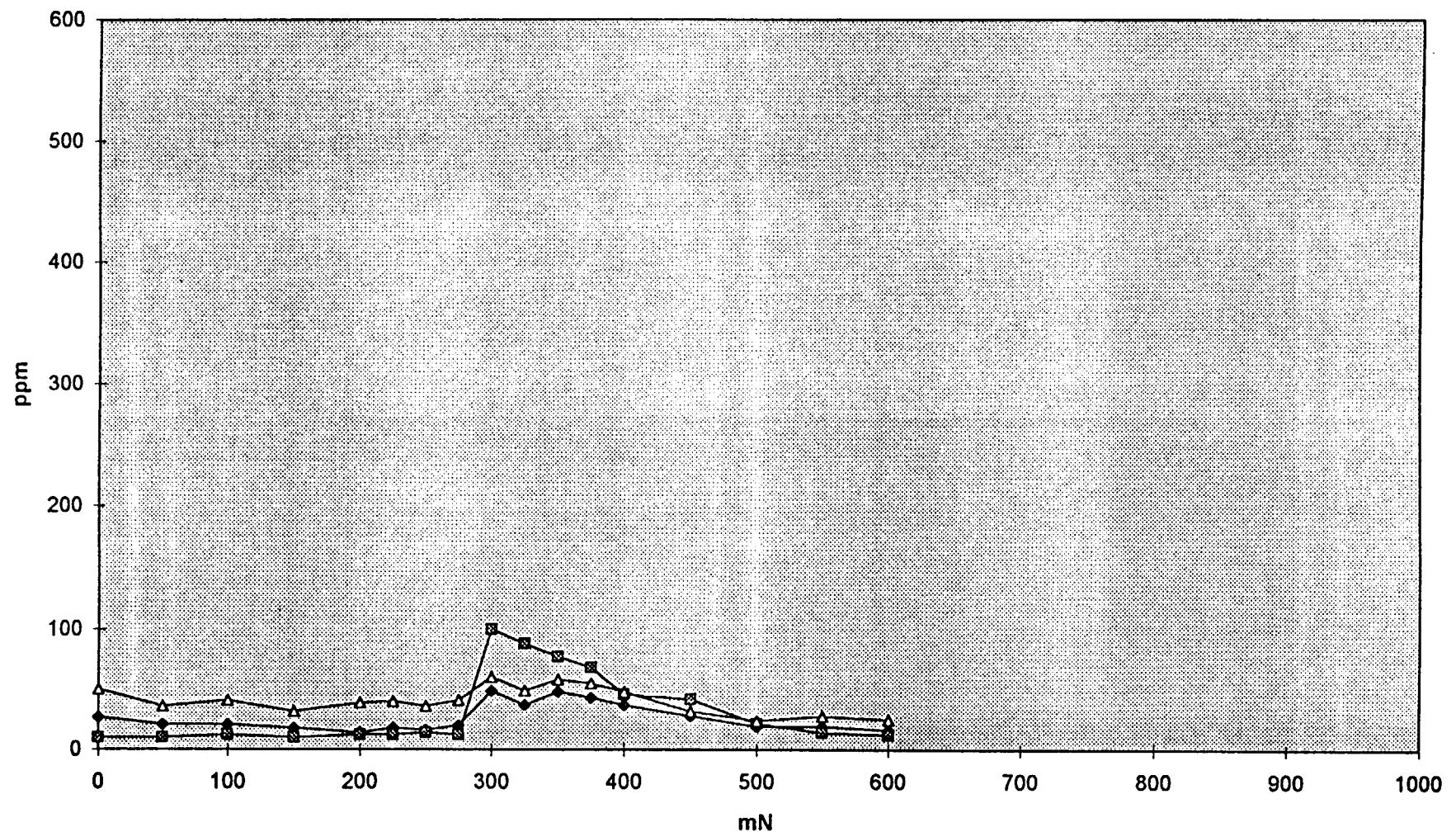


Figure 24

RED ROCK BORE  
LINE RR1 - MMI SOILS

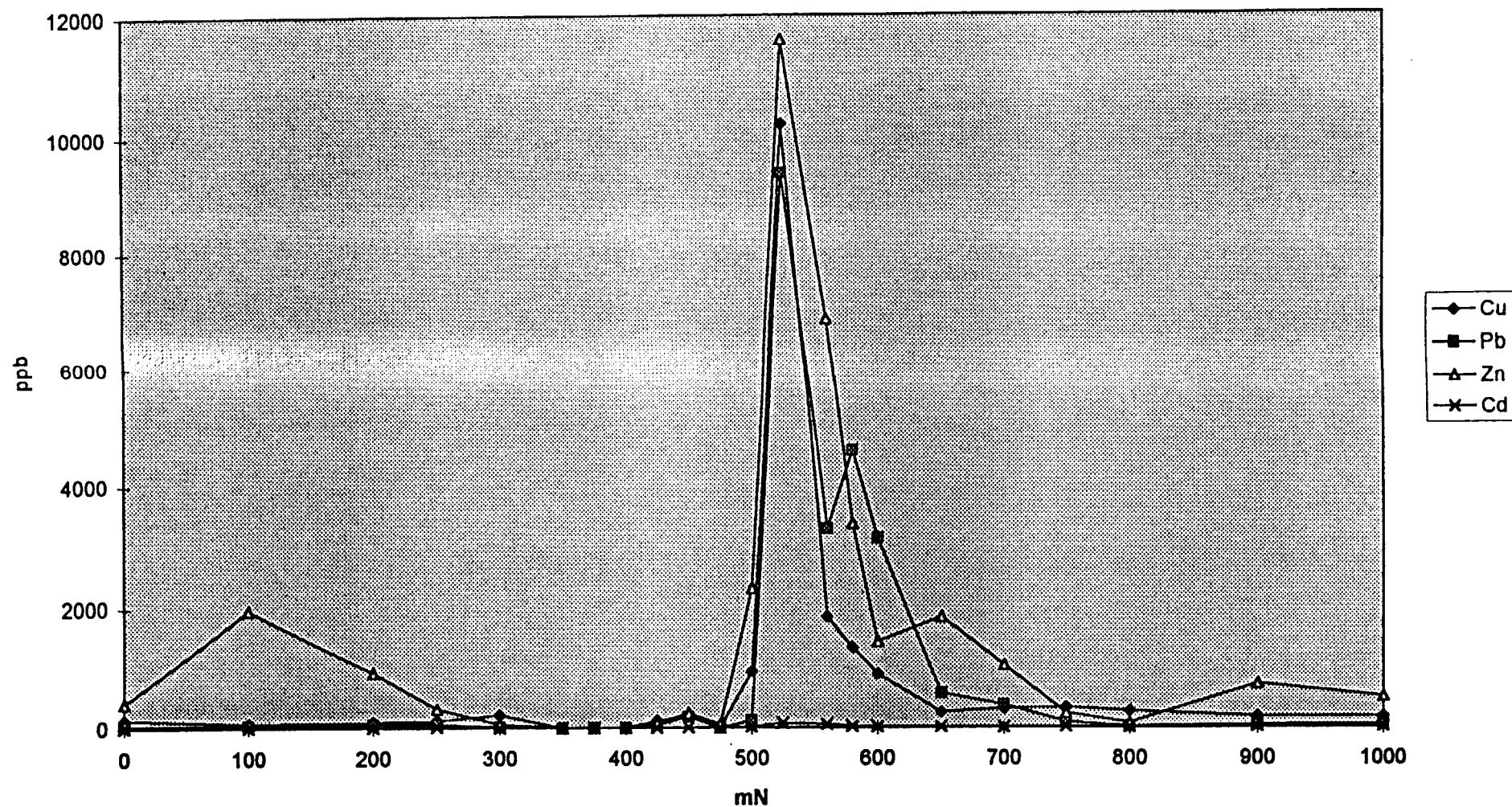


Figure 25

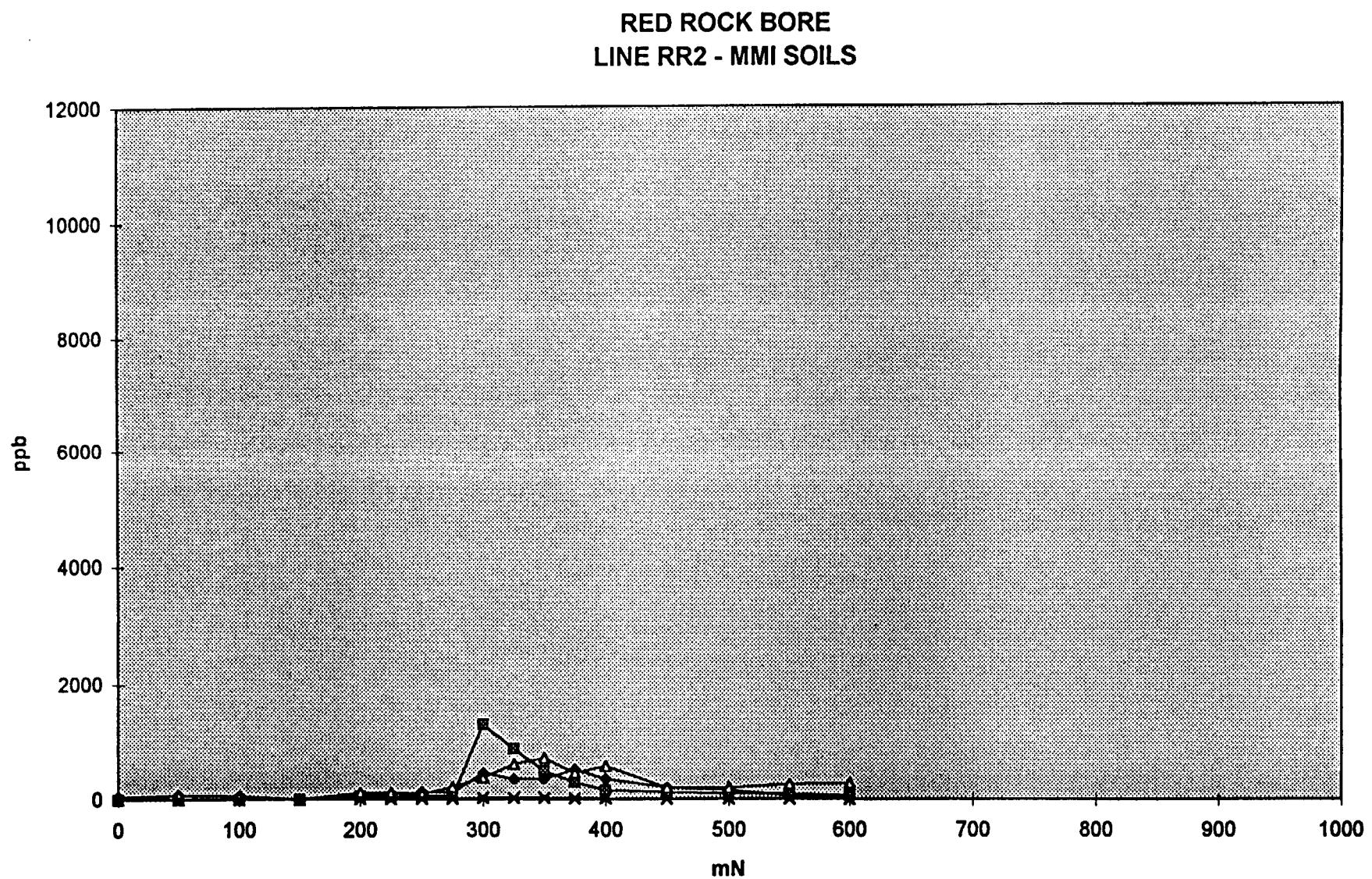


Figure 26

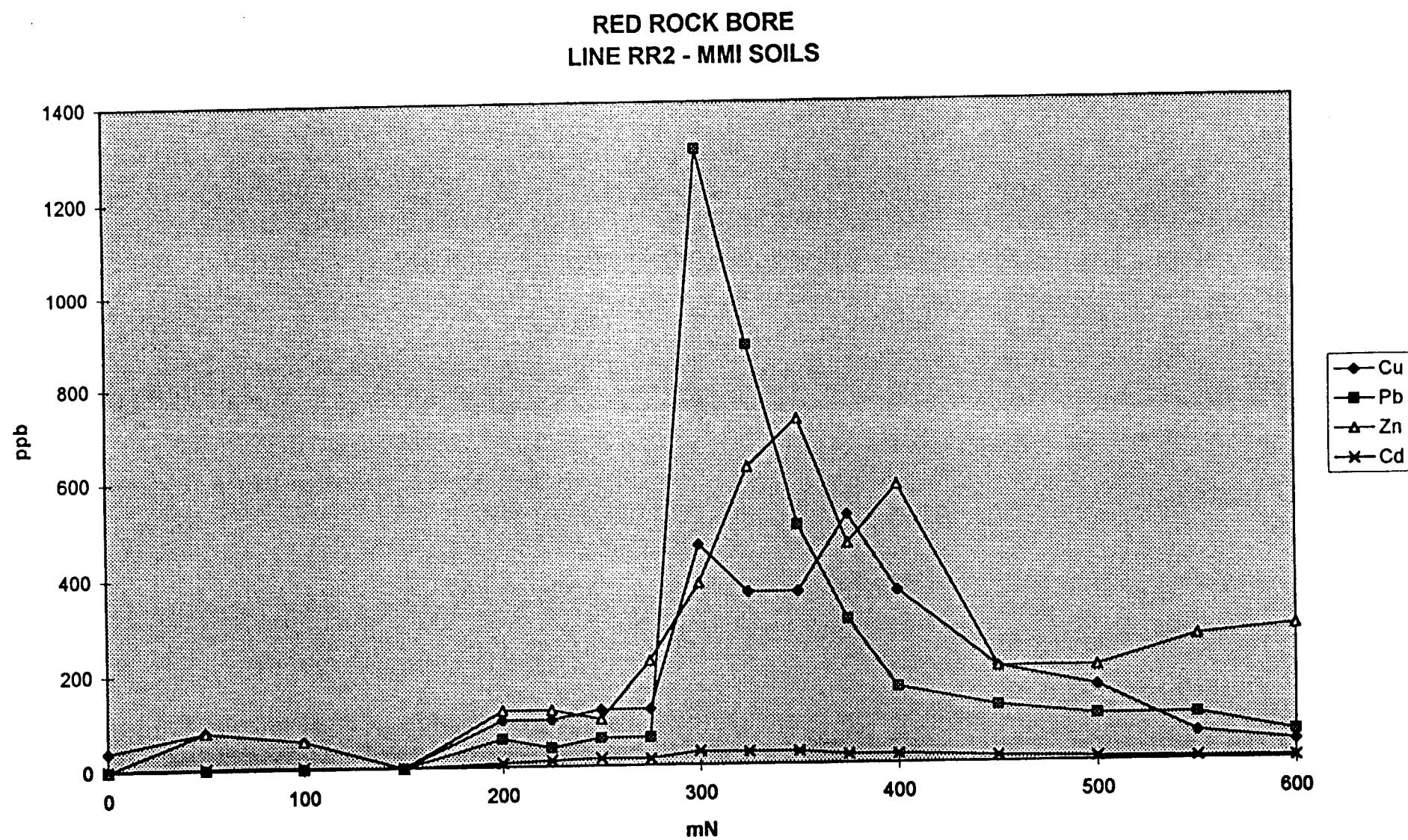


Figure 27

GILLENS BORE  
LINE GB1 - MMI SOILS

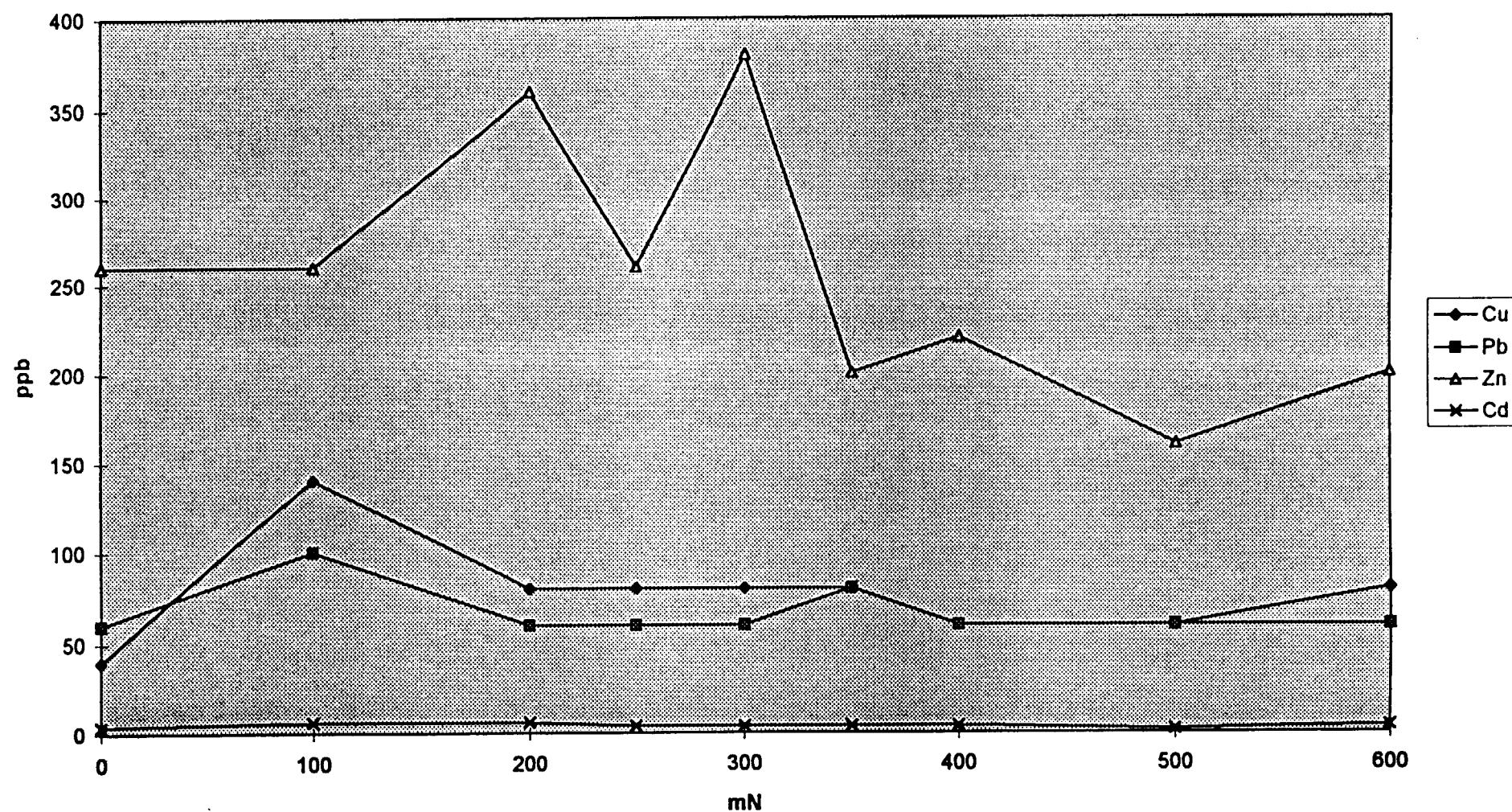
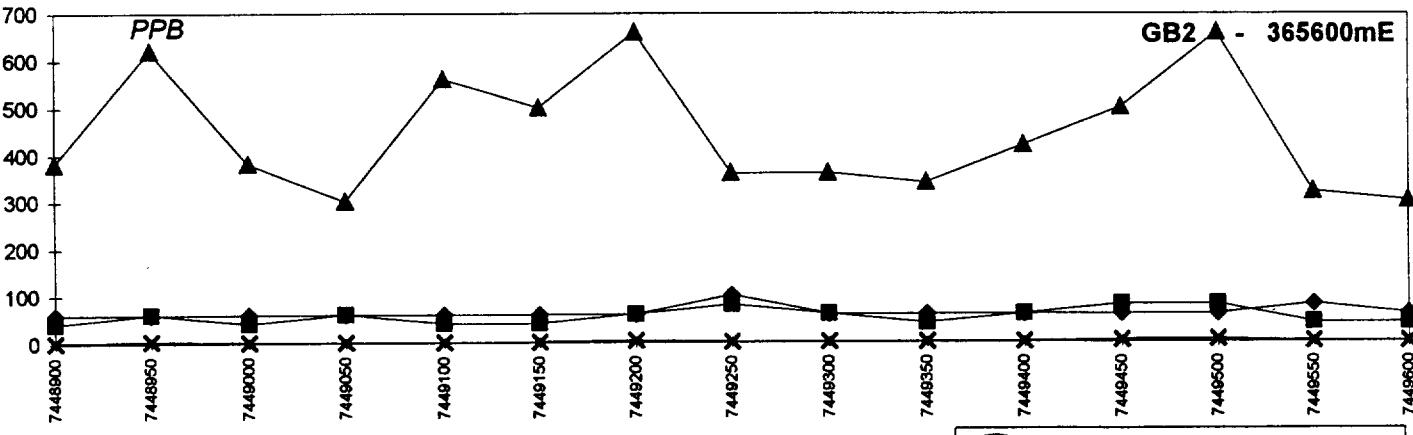
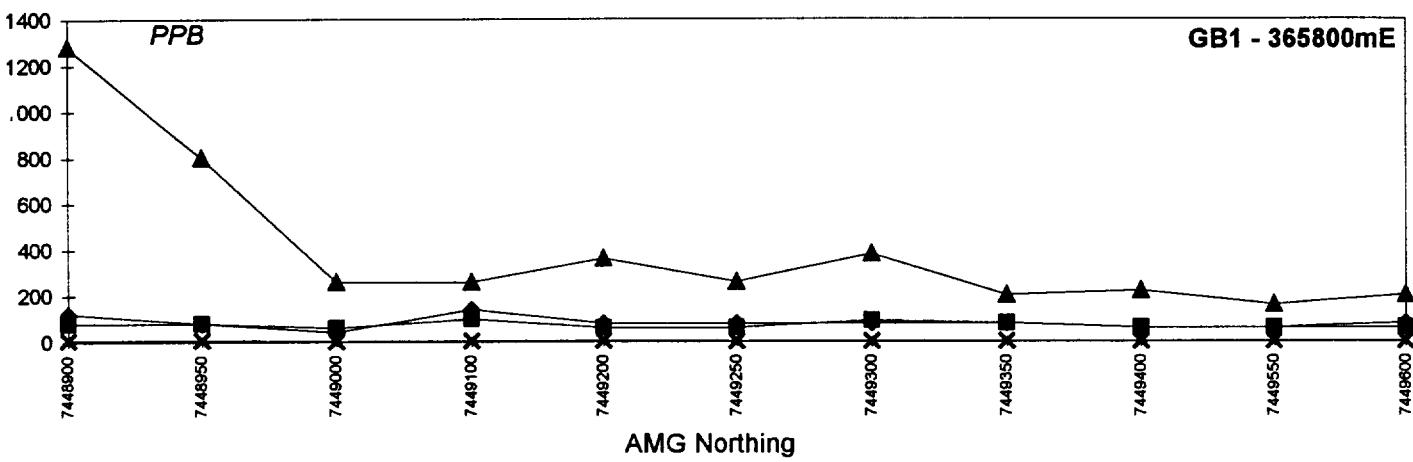
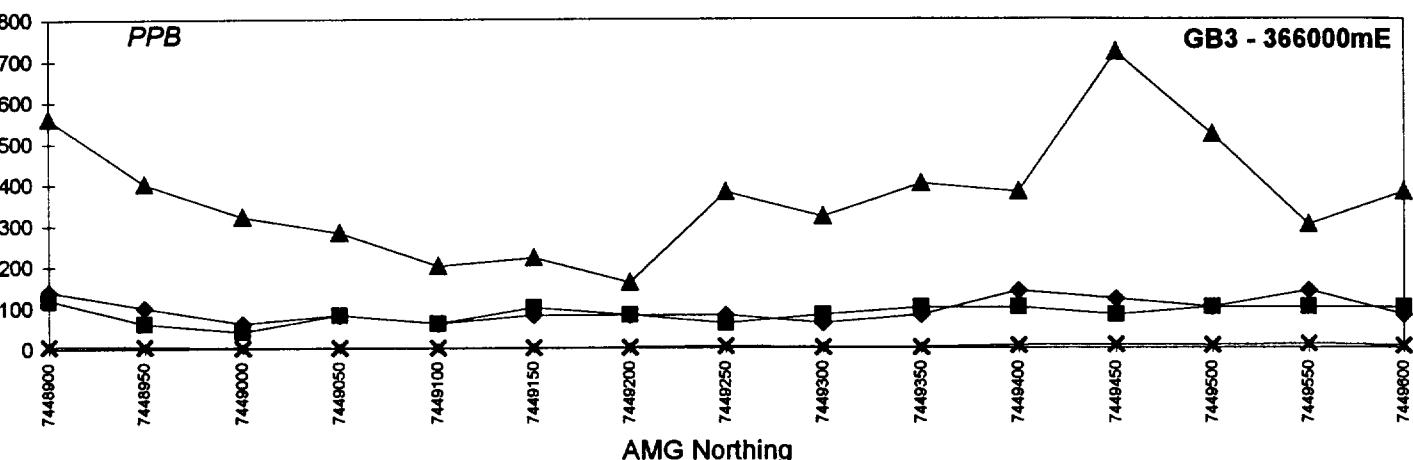
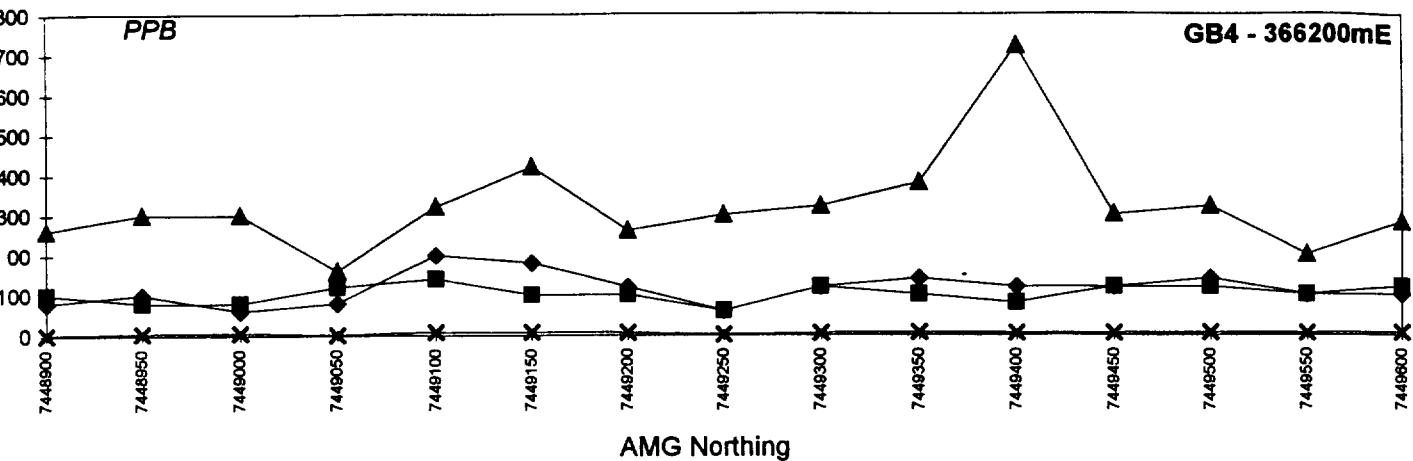


Figure 28

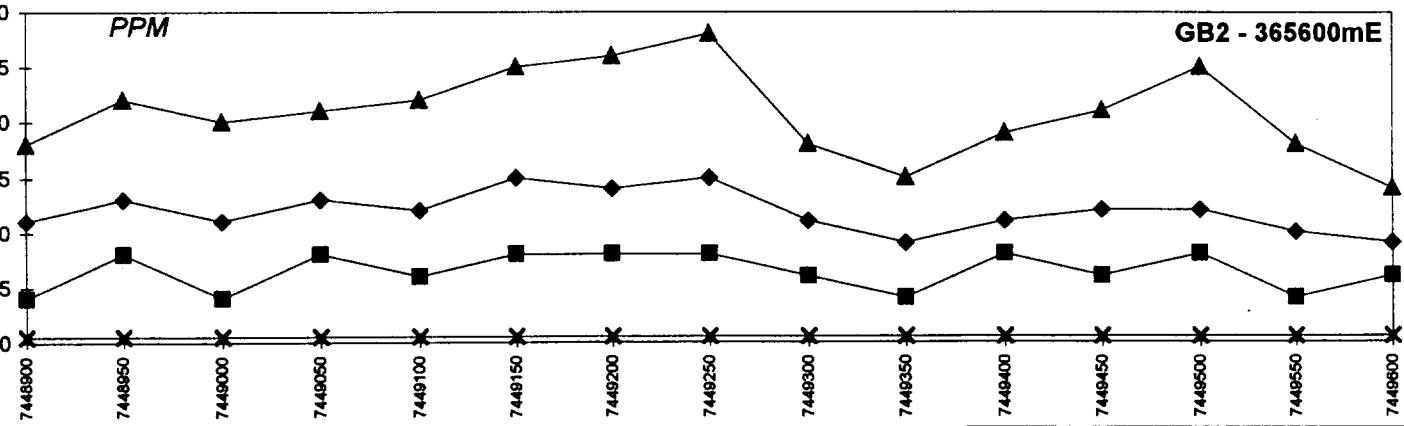
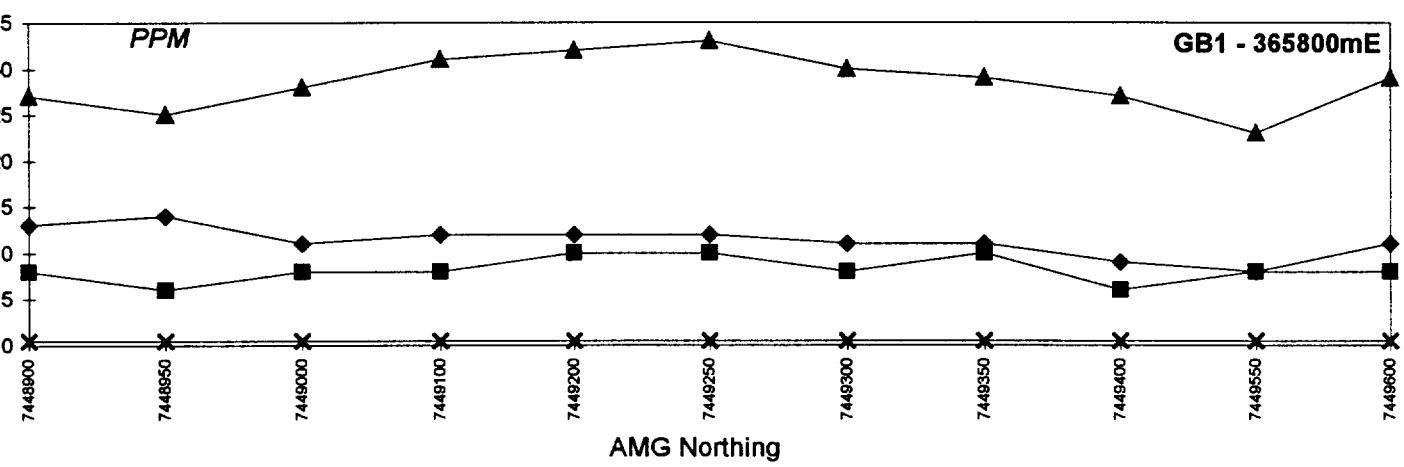
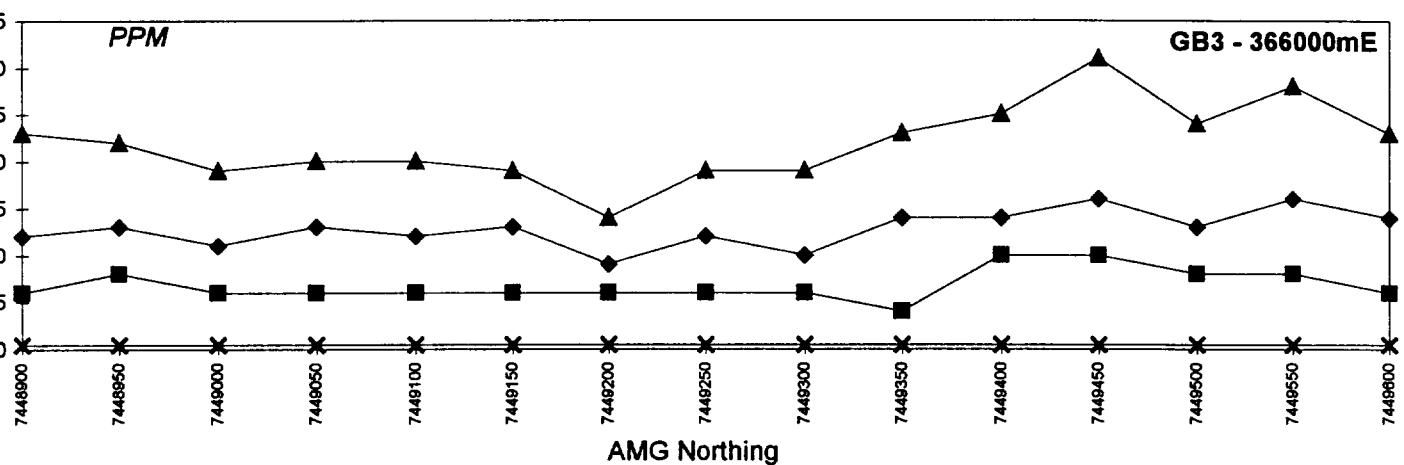
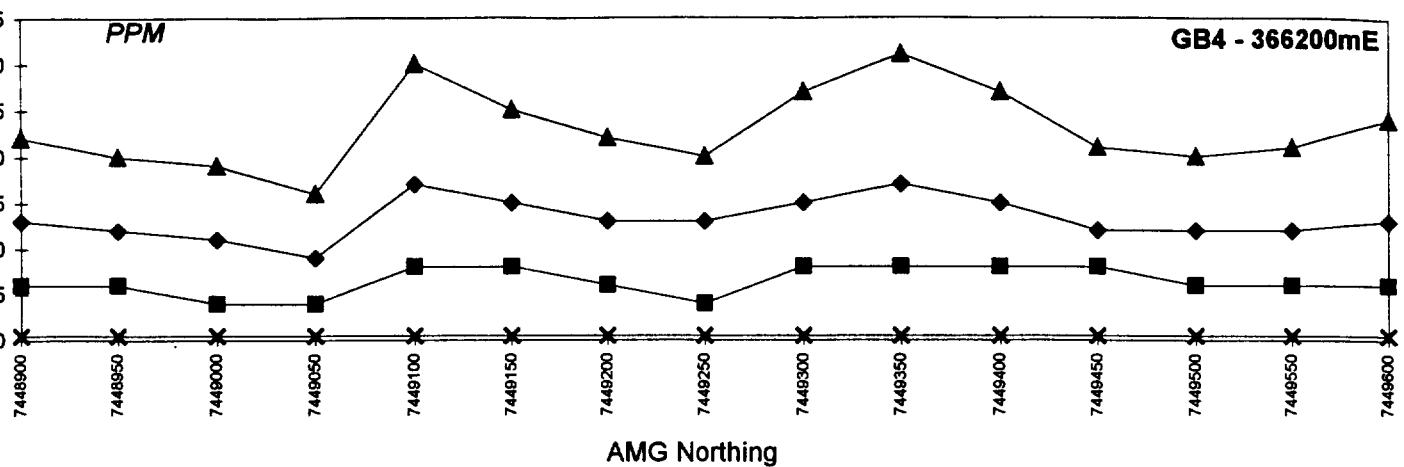


Cu      Zn      Pb      Cd      X

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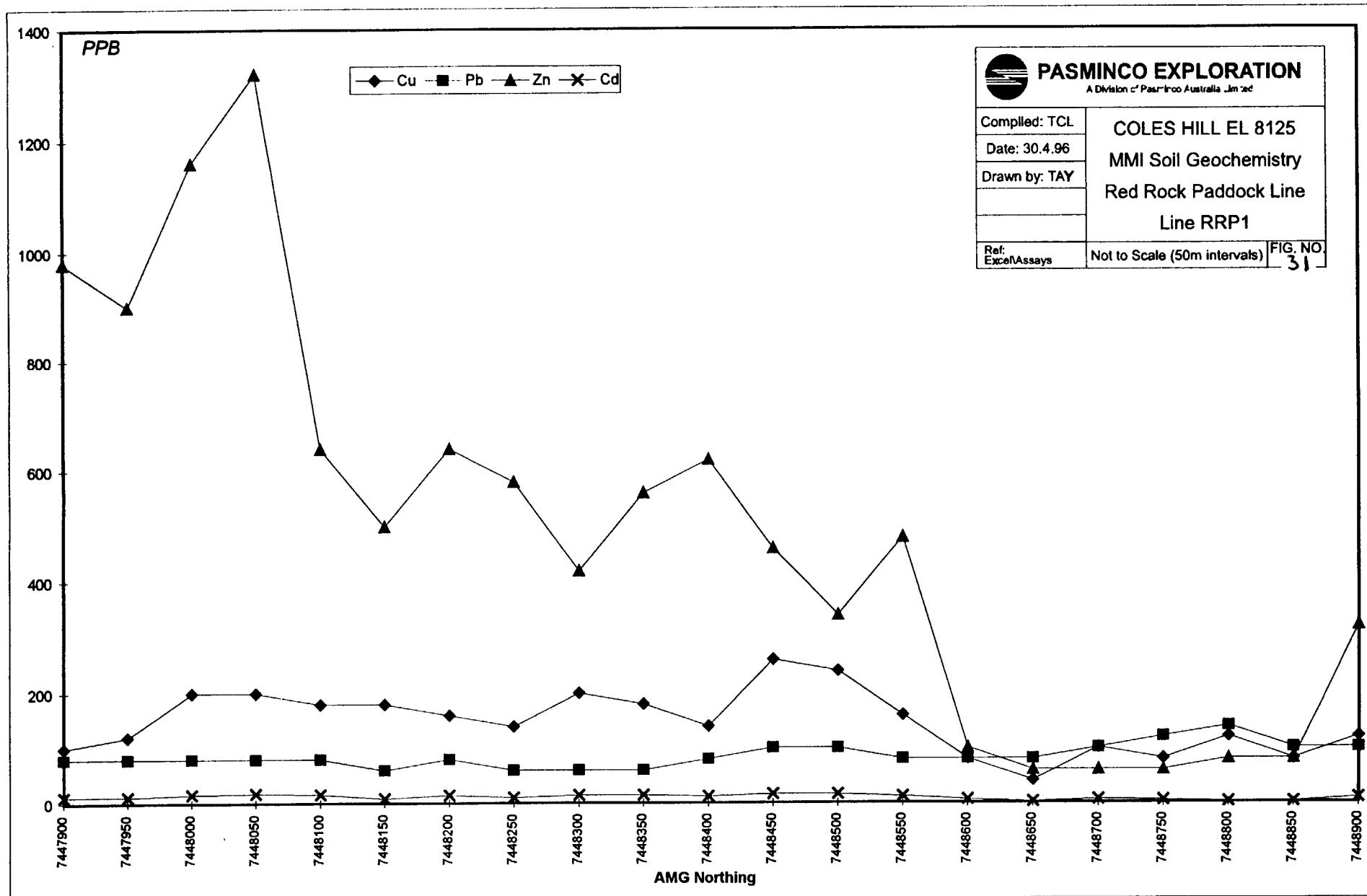
Compiled: TCL	COLES HILL EL 8125
Date: 30.4.96	MMI Soil Geochemistry
Drawn by: TAY	Gillens Bore
	Lines GB1 - GB4
Ref:	Not to Scale (50m intervals)
Spec Assays	FIG. NO.

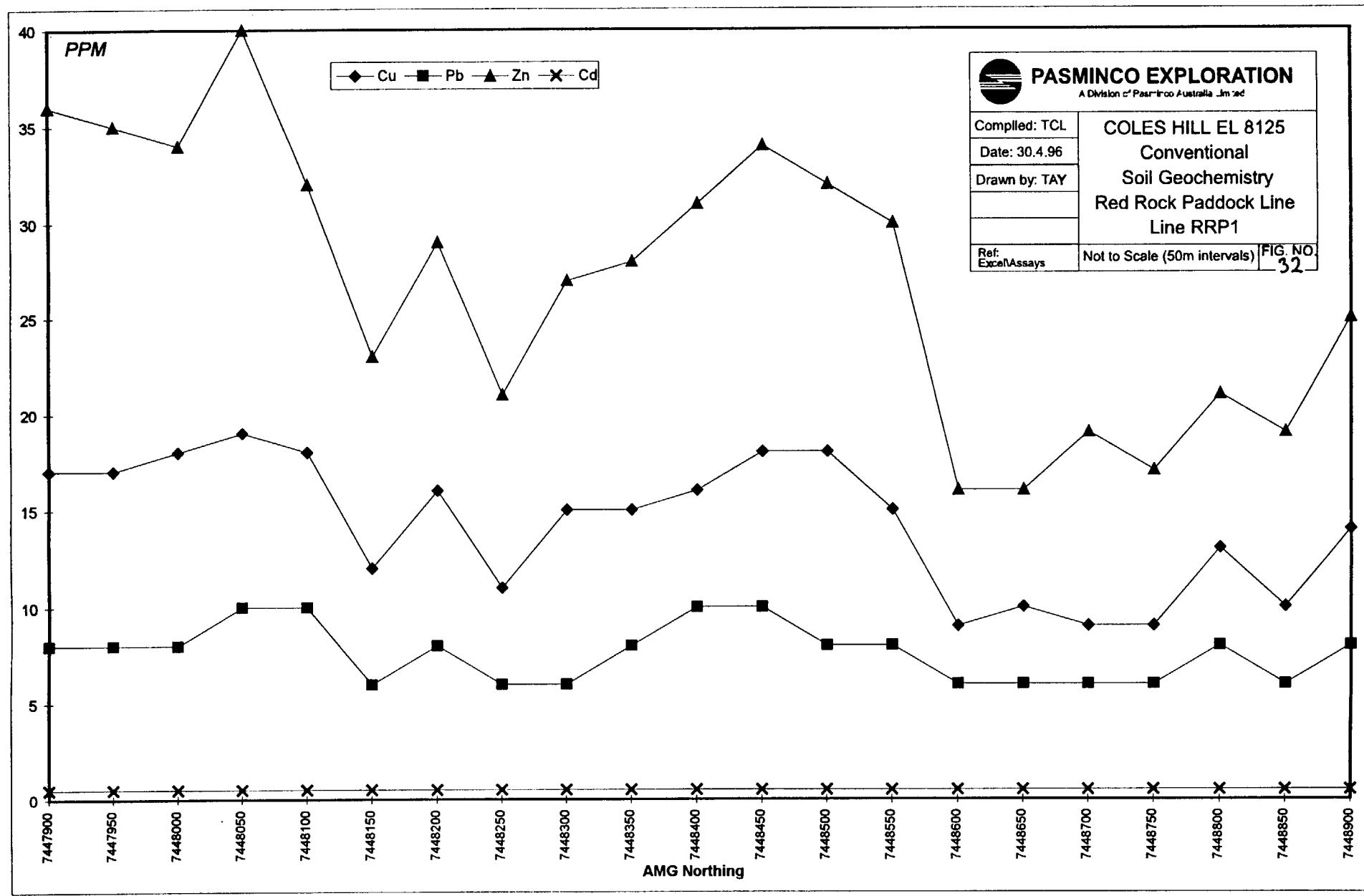
29

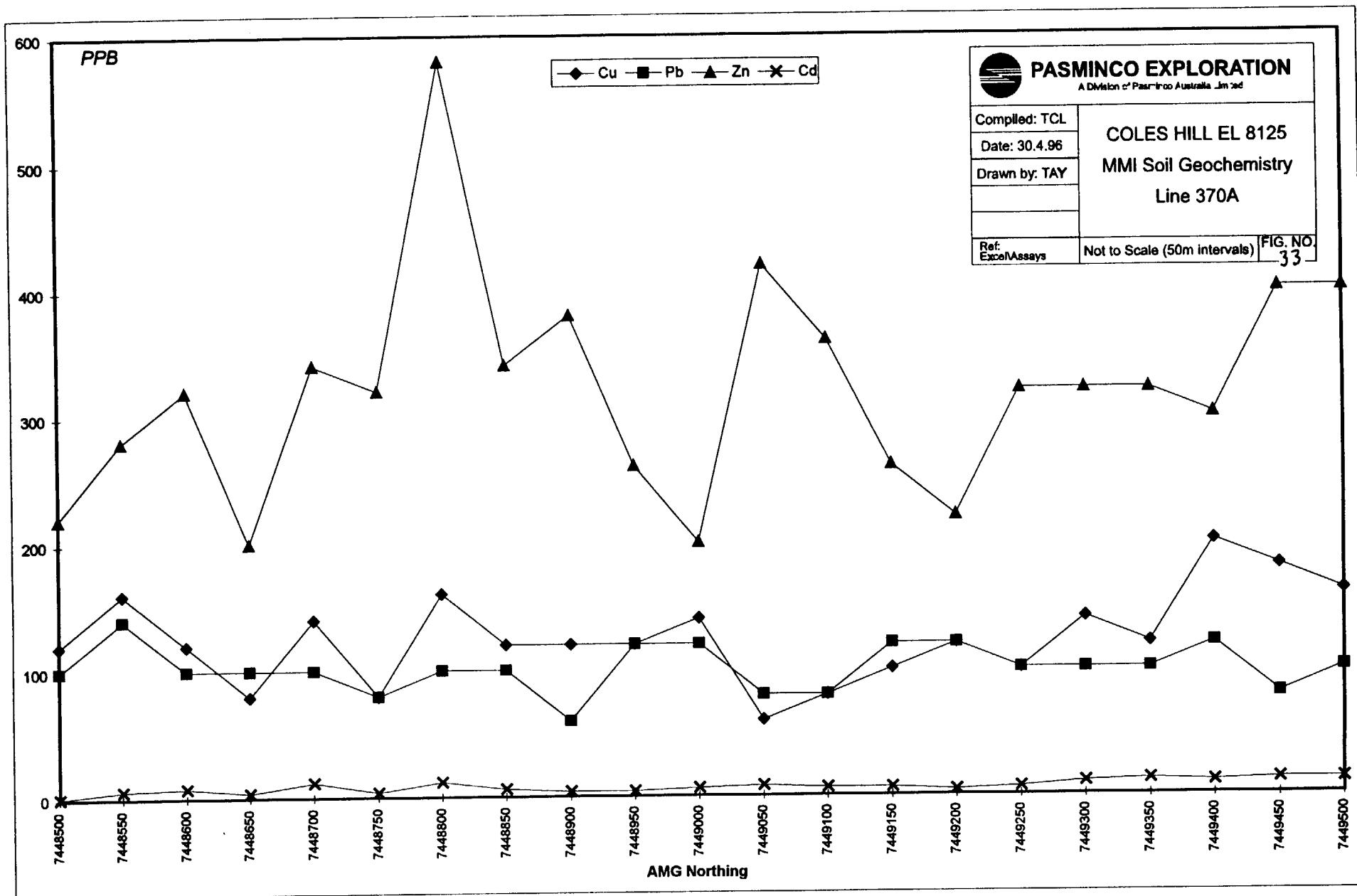


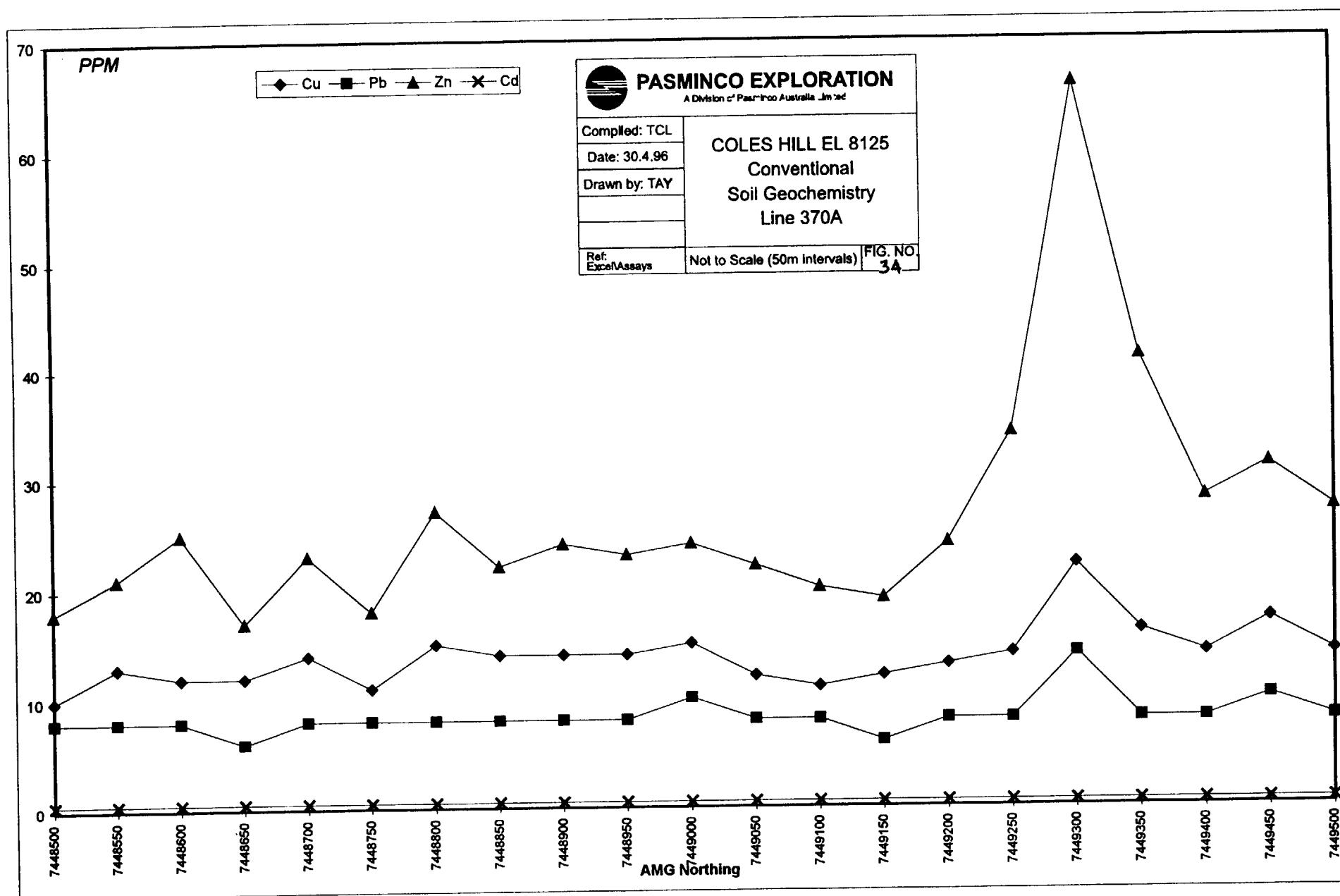
**PASMINCO EXPLORATION**  
A Division of Pasminco Australia Limited

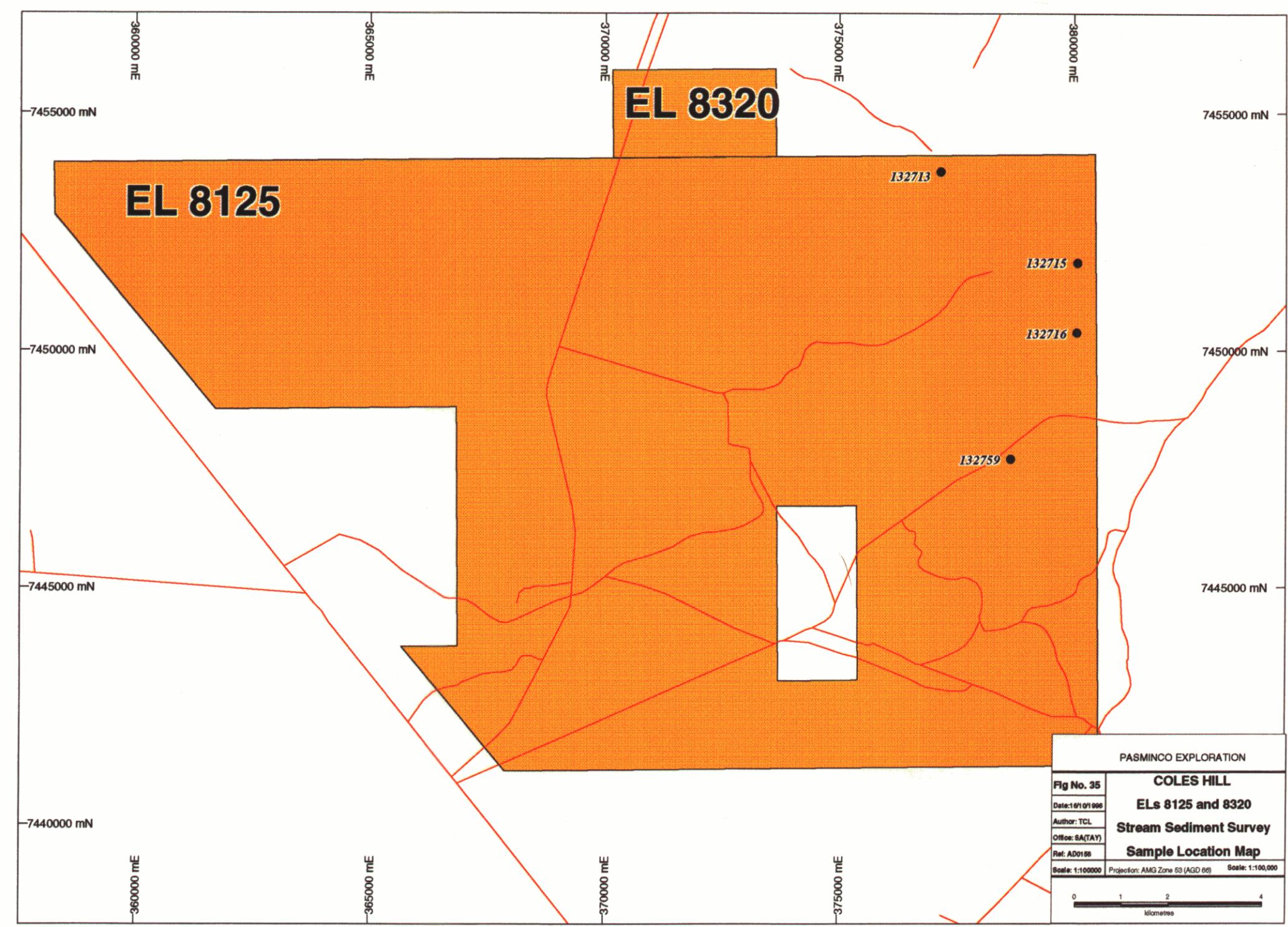
Compiled: TCL	COLES HILL EL 8125
Date: 30.4.96	Conventional
Drawn by: TAY	Soil Geochemistry
	Gillens Bore
	Lines GB1 - GB4
Ref: ExpertAssays	Not to Scale (50m intervals)
	FIG. NO. 30

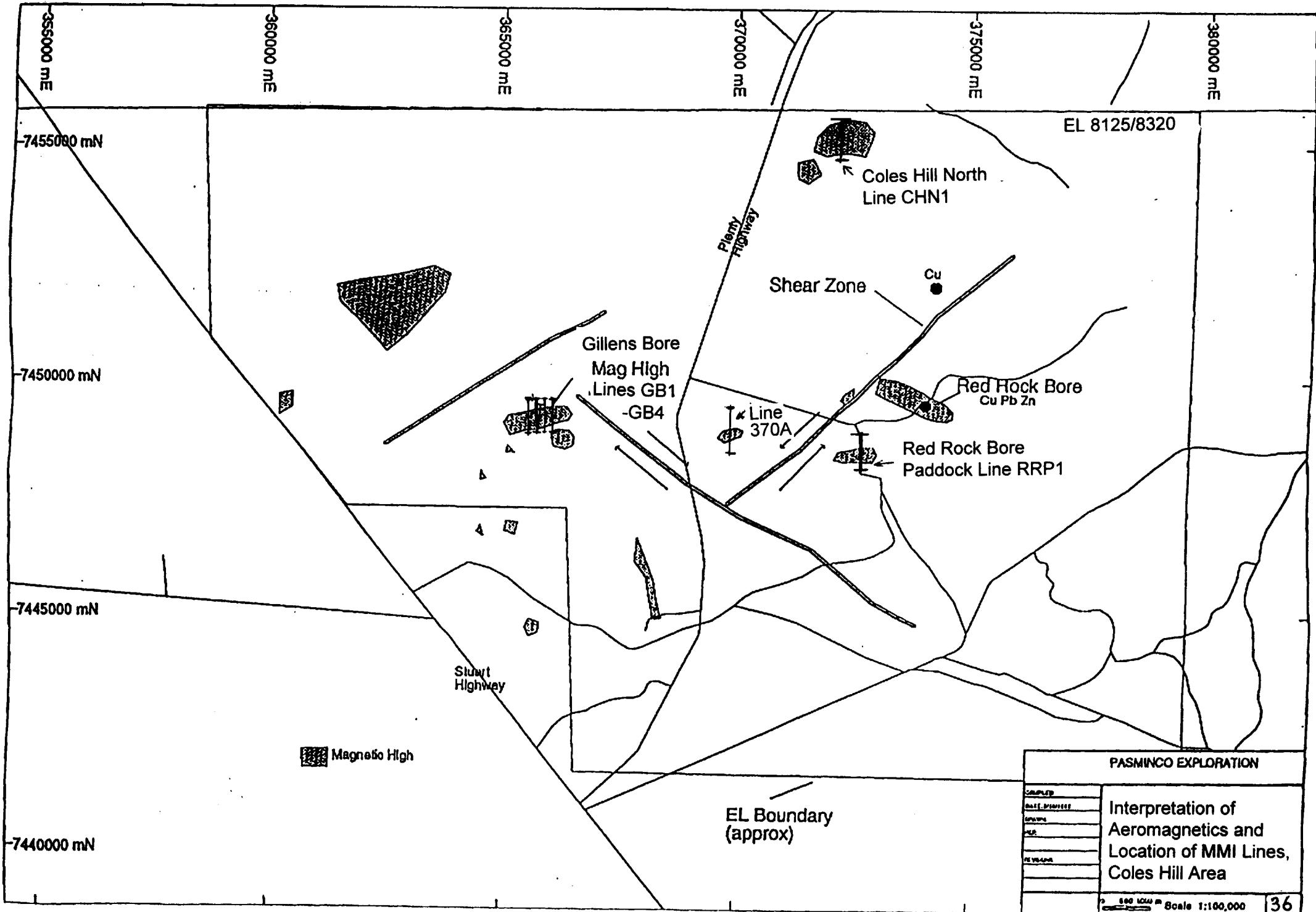








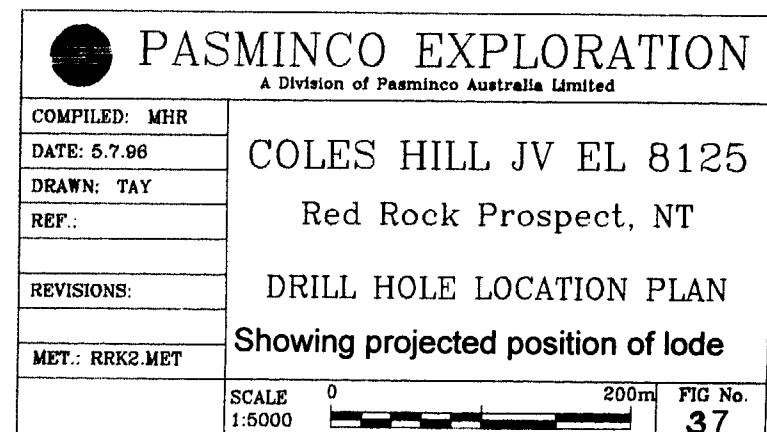
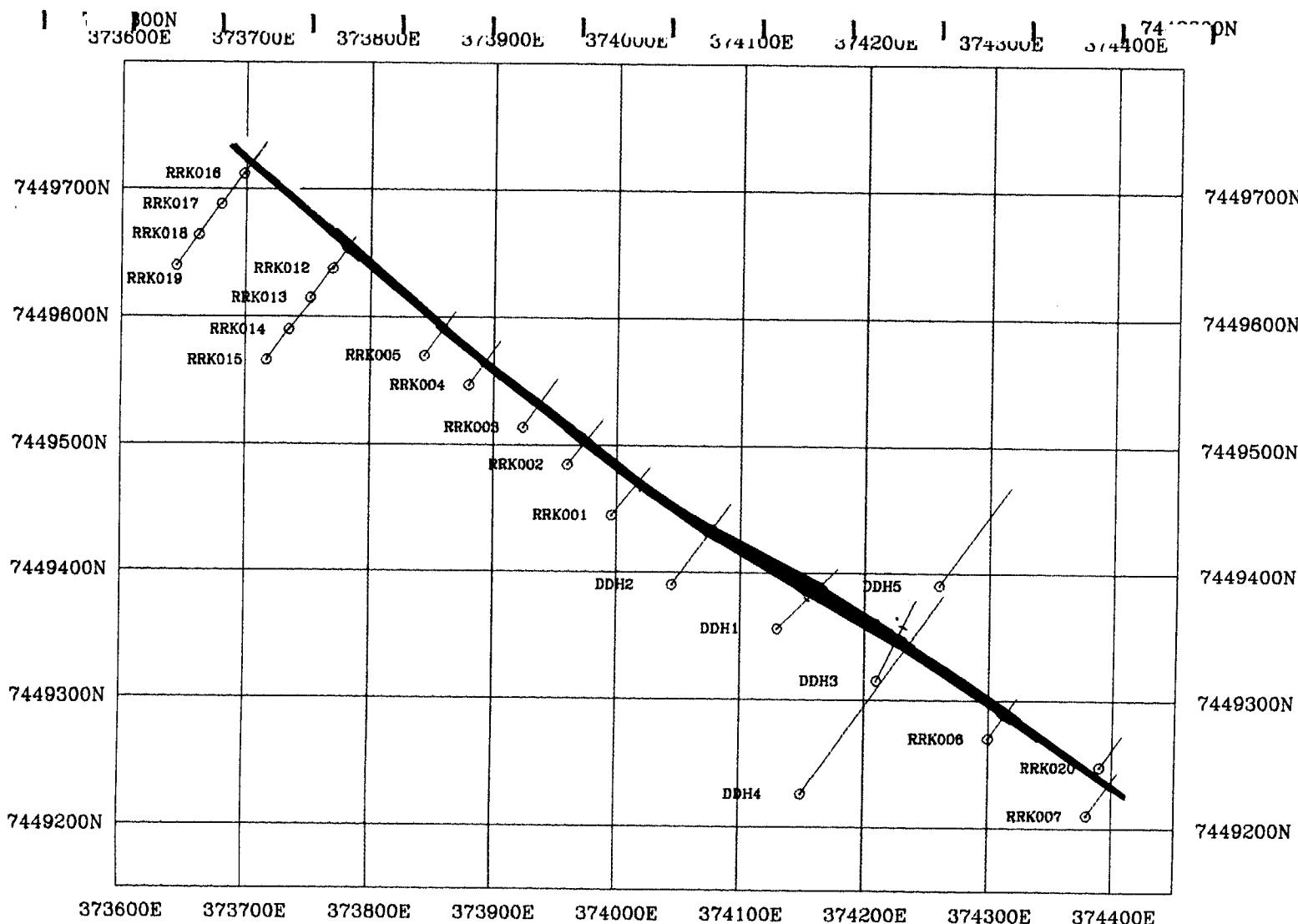




PASMINCO EXPLORATION

**COMPUTER**  
**DATAS, SPREADSHEET**  
**GRAPH**  
**HLP.**  
  
**RE-VOLUME**

## **Interpretation of Aeromagnetics and Location of MMI Lines, Coles Hill Area**



**S****N**

7449200N 374150E

374250E

7449400N

750

700

650

600

550

500

450

400

50

100

150

200

250

300

350

400

**SILLIMANITE -  
BIOTITE GARNET  
GNEISS (magnetic)**

**MAFIC  
GNEISS**

**LODE**

DDH003

DDH004

DDH005

0

50

100

150

Scale 1: 2500



**DRILL HOLE LEGEND**  
LHS Posting : ZN  
RHS Posting : CU

### PASMINCO EXPLORATION

COLES HILL EL 8125  
Red Rock Prospect  
Cross-section through DDH 3,4 & 5

GEO: TCL

SCALE 1:2500

FIGURE No.: 38

DRAWN: TAY

DATE: 09-08-1996

Drawing: AD0130

**Table 1. Summary of previous drilling results, Red Rock prospect.**

	From (m)	To (m)	Cu %	Pb %	Zn %	Ag ppm
DDH001	65.2	68.3	0.45	0.50	0.50	1
DDH001	68.3	69.8	0.55	0.70	2.90	1
DDH001	69.8	83.5	0.39	0.50	0.60	1
DDH001	83.5	85.0	0.40	0.70	2.30	1
DDH001	85.0	89.6	0.45	0.55	0.40	1
DDH001	89.6	91.2	0.50	0.50	3.10	1
DDH001	91.2	97.3	0.40	0.50	0.40	1
DDH001	97.3	100.3	0.32	0.25	2.30	1
DDH001	100.3	103.4	0.37	0.40	0.75	1
DDH001	103.4	109.5	0.12	0.40	1.00	2
DDH002	70.1	72.0	0.25	0.70	0.20	6
DDH002	72.0	81.7	0.52	0.55	0.42	5
DDH002	81.7	83.6	0.22	0.75	1.80	4
DDH003	60.4	62.7	0.30	0.50	0.20	4
DDH003	62.7	67.7	0.32	0.70	3.10	6
DDH003	67.7	69.5	0.24	0.50	0.30	2
DDH003	69.5	75.5	0.18	0.90	1.70	8
DDH004	213.0	218.0	0.49	0.40	1.10	5
DDH004	218.0	224.0	0.40	0.60	1.80	7
DDH004	224.0	228.0	0.17	0.45	0.75	2

**Table 2 - Gillens Bore MMI Soil Geochemistry Data**

Gillens Bore - Line 1							Gillens Bore - Line 2						
AMG Northing	AMG Easting	Sample No.	Cu (ppb)	Pb (ppb)	Zn (ppb)	Cd (ppb)	AMG Northing	AMG Easting	Sample No.	Cu (ppb)	Pb (ppb)	Zn (ppb)	Cd (ppb)
7448900	365800	132364	120	80	1280	8	7448900	365600	132366	60	40	380	1
7448950	365800	132365	80	80	800	8	7448950	365600	132367	60	60	620	4
7449000	365770	1316642	40	60	260	4	7449000	365600	132368	60	40	380	1
7449100	365770	1316652	140	100	260	6	7449050	365600	132369	60	60	300	1
7449200	365770	1316662	80	60	360	6	7449100	365600	132370	60	40	560	2
7449250	365770	1316672	80	60	260	4	7449150	365600	132371	60	40	500	2
7449300	365770	1316682	80	90	380	4	7449200	365600	132372	60	60	660	4
7449350	365770	1316692	80	80	200	4	7449250	365600	132373	100	80	360	1
7449400	365770	1316702	60	60	220	4	7449300	365600	132374	60	60	360	2
7449550	365770	1316712	60	60	160	2	7449350	365600	132375	60	40	340	1
7449600	365770	1316722	80	60	200	4	7449400	365600	132376	60	60	420	2
Gillens Bore - Line 3							Gillens Bore - Line 4						
AMG Northing	AMG Easting	Sample No.	Cu (ppb)	Pb (ppb)	Zn (ppb)	Cd (ppb)	AMG Northing	AMG Easting	Sample No.	Cu (ppb)	Pb (ppb)	Zn (ppb)	Cd (ppb)
7448900	366000	132381	140	120	560	6	7448900	366200	132396	80	100	260	2
7448950	366000	132382	100	60	400	4	7448950	366200	132397	100	80	300	4
7449000	366000	132383	60	40	320	1	7449000	366200	132398	60	80	300	6
7449050	366000	132384	80	80	280	1	7449050	366200	132399	80	120	160	2
7449100	366000	132385	60	60	200	2	7449100	366200	132400	200	140	320	8
7449150	366000	132386	80	100	220	1	7449150	366200	132401	180	100	420	8
7449200	366000	132387	80	80	160	1	7449200	366200	132402	120	100	260	6
7449250	366000	132388	80	60	380	4	7449250	366200	132403	60	60	300	1
7449300	366000	132389	60	80	320	1	7449300	366200	132404	120	120	320	4
7449350	366000	132390	80	100	400	2	7449350	366200	132405	140	100	380	6
7449400	366000	132391	140	100	380	6	7449400	366200	132406	120	80	720	4
7449450	366000	132392	120	80	720	8	7449450	366200	132407	120	120	300	4
7449500	366000	132393	100	100	520	6	7449500	366200	132408	140	120	320	6
7449550	366000	132394	140	100	300	10	7449550	366200	132409	100	100	200	4
7449600	366000	132395	80	100	380	4	7449600	366200	132410	100	120	280	6

**Table 3 · Gillens Bore Conventional Soil Geochemistry Data**

Gillens Bore - Line 1							Gillens Bore - Line 2						
AMG Northing	AMG Easting	Sample No.	Cu (ppm)	Pb (ppm)	Zn (ppm)	Cd (ppm)	AMG Northing	AMG Easting	Sample No.	Cu (ppm)	Pb (ppm)	Zn (ppm)	Cd (ppm)
7448900	365800	132064	13	8	27	0.5	7448900	365600	132066	11	4	18	0.5
7448950	365800	132065	14	6	25	0.5	7448950	365600	132067	13	8	22	0.5
7449000	365770	1316641	11	8	28	0.5	7449000	365600	132068	11	4	20	0.5
7449100	365770	1316651	12	8	31	0.5	7449050	365600	132069	13	8	21	0.5
7449200	365770	1316661	12	10	32	0.5	7449100	365600	132070	12	6	22	0.5
7449250	365770	1316671	12	10	33	0.5	7449150	365600	132071	15	8	25	0.5
7449300	365770	1316681	11	8	30	0.5	7449200	365600	132072	14	8	26	0.5
7449350	365770	1316691	11	10	29	0.5	7449250	365600	132073	15	8	28	0.5
7449400	365770	1316701	9	6	27	0.5	7449300	365600	132074	11	6	18	0.5
7449550	365770	1316711	8	8	23	0.5	7449350	365600	132075	9	4	15	0.5
7449600	365770	1316721	11	8	29	0.5	7449400	365600	132076	11	8	19	0.5
Gillens Bore - Line 3							Gillens Bore - Line 4						
AMG Northing	AMG Easting	Sample No.	Cu (ppm)	Pb (ppm)	Zn (ppm)	Cd (ppm)	AMG Northing	AMG Easting	Sample No.	Cu (ppm)	Pb (ppm)	Zn (ppm)	Cd (ppm)
7448900	366000	132081	12	6	23	0.5	7448900	366200	132096	13	6	22	0.5
7448950	366000	132082	13	8	22	0.5	7448950	366200	132097	12	6	20	0.5
7449000	366000	132083	11	6	19	0.5	7449000	366200	132098	11	4	19	0.5
7449050	366000	132084	13	6	20	0.5	7449050	366200	132099	9	4	16	0.5
7449100	366000	132085	12	6	20	0.5	7449100	366200	132100	17	8	30	0.5
7449150	366000	132086	13	6	19	0.5	7449150	366200	132201	15	8	25	0.5
7449200	366000	132087	9	6	14	0.5	7449200	366200	132202	13	6	22	0.5
7449250	366000	132088	12	6	19	0.5	7449250	366200	132203	13	4	20	0.5
7449300	366000	132089	10	6	19	0.5	7449300	366200	132204	15	8	27	0.5
7449350	366000	132090	14	4	23	0.5	7449350	366200	132205	17	8	31	0.5
7449400	366000	132091	14	10	25	0.5	7449400	366200	132206	15	8	27	0.5
7449450	366000	132092	16	10	31	0.5	7449450	366200	132207	12	8	21	0.5
7449500	366000	132093	13	8	24	0.5	7449500	366200	132208	12	6	20	0.5
7449550	366000	132094	16	8	28	0.5	7449550	366200	132209	12	6	21	0.5
7449600	366000	132095	14	6	23	0.5	7449600	366200	132210	13	6	24	0.5

**Table 4 - Red Rock Paddock MMI Soil Geochemistry Data**

Red Rock Bore Paddock - Line RRP1						
372600mE						
AMG Northing	AMG Easting	Sample No.	Cu (ppb)	Pb (ppb)	Zn (ppb)	Cd (ppb)
7447900	372600	132321	100	80	980	12
7447950	372600	132320	120	80	900	12
7448000	372600	132319	200	80	1160	16
7448050	372600	132318	200	80	1320	18
7448100	372600	132317	180	80	640	16
7448150	372600	132316	180	60	500	8
7448200	372600	132315	160	80	640	14
7448250	372600	132314	140	60	580	10
7448300	372600	132313	200	60	420	14
7448350	372600	132312	180	60	560	14
7448400	372600	132311	140	80	620	12
7448450	372600	132310	260	100	460	16
7448500	372600	132309	240	100	340	16
7448550	372600	132308	160	80	480	12
7448600	372600	132307	80	80	100	6
7448650	372600	132306	40	80	60	2
7448700	372600	132305	100	100	60	6
7448750	372600	132304	80	120	60	4
7448800	372600	132303	120	140	80	2
7448850	372600	132302	80	100	80	2
7448900	372600	132301	120	100	320	8

**Table 5 - Red Rock Paddock Conventional Soil Geochemistry Data**

Red Rock Bore Paddock - Line RRP1						
372600mE						
AMG Northing	AMG Easting	Sample No.	Cu (ppm)	Pb (ppm)	Zn (ppm)	Cd (ppm)
7447900	372600	132021	17	8	36	0.5
7447950	372600	132020	17	8	35	0.5
7448000	372600	132019	18	8	34	0.5
7448050	372600	132018	19	10	40	0.5
7448100	372600	132017	18	10	32	0.5
7448150	372600	132016	12	6	23	0.5
7448200	372600	132015	16	8	29	0.5
7448250	372600	132014	11	6	21	0.5
7448300	372600	132013	15	6	27	0.5
7448350	372600	132012	15	8	28	0.5
7448400	372600	132011	16	10	31	0.5
7448450	372600	132010	18	10	34	0.5
7448500	372600	132009	18	8	32	0.5
7448550	372600	132008	15	8	30	0.5
7448600	372600	132007	9	6	16	0.5
7448650	372600	132006	10	6	16	0.5
7448700	372600	132005	9	6	19	0.5
7448750	372600	132004	9	6	17	0.5
7448800	372600	132003	13	8	21	0.5
7448850	372600	132002	10	6	19	0.5
7448900	372600	132001	14	8	25	0.5

**Table 6 - Line 370A MMI Soil Geochemistry Data**

Line 370A 370000mE						
AMG Northing	AMG Easting	Sample No.	Cu (ppb)	Pb (ppb)	Zn (ppb)	Cd (ppb)
7448500	370000	132342	120	100	220	1
7448550	370000	132341	160	140	280	6
7448600	370000	132340	120	100	320	8
7448650	370000	132339	80	100	200	4
7448700	370000	132338	140	100	340	12
7448750	370000	132337	80	80	320	4
7448800	370000	132336	160	100	580	12
7448850	370000	132335	120	100	340	6
7448900	370000	132334	120	60	380	4
7448950	370000	132333	120	120	260	4
7449000	370000	132332	140	120	200	6
7449050	370000	132331	60	80	420	8
7449100	370000	132330	80	80	360	6
7449150	370000	132329	100	120	260	6
7449200	370000	132328	120	120	220	4
7449250	370000	132327	100	100	320	6
7449300	370000	132326	140	100	320	10
7449350	370000	132325	120	100	320	12
7449400	370000	132324	200	120	300	10
7449450	370000	132323	180	80	400	12
7449500	370000	132322	160	100	400	12

**Table 7 - Line 370A Conventional Soil Geochemistry Data**

Line 370A 370000mE						
AMG Northing	AMG Easting	Sample No.	Cu (ppm)	Pb (ppm)	Zn (ppm)	Cd (ppm)
7448500	370000	132042	10	8	18	0.5
7448550	370000	132041	13	8	21	0.5
7448600	370000	132040	12	8	25	0.5
7448650	370000	132039	12	6	17	0.5
7448700	370000	132038	14	8	23	0.5
7448750	370000	132037	11	8	18	0.5
7448800	370000	132036	15	8	27	0.5
7448850	370000	132035	14	8	22	0.5
7448900	370000	132034	14	8	24	0.5
7448950	370000	132033	14	8	23	0.5
7449000	370000	132032	15	10	24	0.5
7449050	370000	132031	12	8	22	0.5
7449100	370000	132030	11	8	20	0.5
7449150	370000	132029	12	6	19	0.5
7449200	370000	132028	13	8	24	0.5
7449250	370000	132027	14	8	34	0.5
7449300	370000	132026	22	14	66	0.5
7449350	370000	132025	16	8	41	0.5
7449400	370000	132024	14	8	28	0.5
7449450	370000	132023	17	10	31	0.5
7449500	370000	132022	14	8	27	0.5

Table 8 - Stream Sediment Survey Results

		Coles Hill EL 8125																		
Sample Number	AMG Northing	AMG Easting	Cu ppm	Pb ppm	Zn ppm	As ppm	Ni ppm	Cd ppm	Ag ppm	Mn ppm	Fe ppm	Co ppm	Cr ppm	Bi ppm	Sb ppm	Ba ppm	Sn ppm	W ppm	n_tot ppm	Au ppm
132713	7453776	377158	17	8	30	1	17	0.5	0.25	370	3.95	11	165	2.5	0	440	3	2.5	55	0.5
132715	7451850	380075	15	14	30	2	31	0.5	0.25	310	10.2	16	450	2.5	0	230	11	2.5	175	0.5
132716	7450380	380060	20	4	46	0.5	19	0.5	0.25	430	4.47	11	150	2.5	0	430	6	2.5	90	0.5
132759	7447708	378660	16	6	31	0.5	12	0.5	0.25	360	4.29	10	92	2.5	0	430	4	2.5	70	0.5

**Table 9**      **Drilling Summary**

Hole No	AMG Co-ordinates	Dip (°)	Azimuth (° mag)	EOH (m)
RRK001	7449445mN 373996mE	60	23	97
RRK002	7449485mN 373960mE	60	23	90
RRK003	7449514mN 373924mE	60	20	93
RRK004	7449547mN 373880mE	60	20	85
RRK005	7449570mN 373844mE	60	20	84
RRK006	7449270mN 374300mE	60	20	78
RRK007	7449210mN 374380mE	60	20	82
RRK008	7448130mN 372620mE	Vertical	-	10
RRK009	7448080mN 372680mE	Vertical	-	12
RRK010	7448100mN 372740mE	Vertical	-	12
RRK011	7447940mN 372790mE	Vertical	-	12
RRK012	7449638mN 373770mE	60	20	60
RRK013	7449615mN 373752mE	60	20	60
RRK014	7449590mN 373735mE	60	23	60
RRK015	7449566mN 373717mE	60	20	60
RRK016	7449712mN 373698mE	60	20	60
RRK017	7449688mN 373680mE	60	20	60
RRK018	7449664mN 373662mE	60	20	60
RRK019	7449640mN 373644mE	60	20	60
RRK020	7449248mN 374920mE	60	22	60
				TOTAL      1195

**Table 10 Anomalous Drilling Results**

Hole No	From	To	Interval	Cu (ppm)	Pb (ppm)	Zn (ppm)
RRK001 including	58 58	66 60	8 2	685 980	580 1000	900 2000
RRK002 including	60 68	70 70	10 2	5920 3200	100 1300	6900 1.03%
RRK003	46	52	6	1570	3200	3900
RRK004 including	34 36	42 38	8 2	580 350	320 450	1220 2150
RRK005 including	28 28	36 30	8 2	700 1000	290 470	1300 1700
RRK006 including	46 50	60 54	14 4	924 880	7200 0.9%	2.51% 4.9%
RRK007	72	80	8	426	1760	2625
RRK012 including	32 34	42 39	10 4	2200 3100	3060 5900	1.82% 4.11%
RRK016 including	10 16	26 18	16 2	710 1300	890 450	830 1850

# **APPENDIX 1**

## **Lag Sample Locations and Assays**

# LAG SAMPLE LOCATIONS AND ASSAYS

## APPENDIX 1

minus 5 / plus 2 mm, magnetic

sample	amg_e	amg_n	line_id	local_n	cu	pb	zn	mn	ag	as	fe%	sb	bi	mo	ni	co	cr	v	cd	au(ppb)	p
131501A	374015	7448932	RR1	0	17	24	50	1300	X	X	27.7	15	5	1	145	37	620	560	2	X	540
131502A	374098	7449114	RR1	200	9	30	53	1200	X	X	38.1	15	10	2	195	50	460	660	2	X	320
131503A	374181	7449296	RR1	400	13	50	81	1400	0.5	2	40.4	20	15	3	195	54	520	740	3	X	165
131504A	374264	7449477	RR1	600	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR
131505A	374347	7449659	RR1	800	22	58	84	1000	0.5	3	40.7	20	15	3	140	42	500	900	2	X	280
131506A	374430	7449841	RR1	1000	20	56	73	480	1	5	52.1	25	25	6	105	33	400	1000	4	X	620
131507A	374000	7449550	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131508A	373951	7449973	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131511A	373900	7449025	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131513A	391980	7433930	HC		260	48	240	380	1	1	52.8	20	25	13	18	32	37	65	3	4	175
131514A	392230	7434160	HC		82	87	260	840	1.5	6	60.7	30	35	16	25	22	77	170	5	X	155
131515A	392390	7434360	HC		73	200	280	520	1.5	5	58.4	30	40	8	26	22	100	320	4	X	200

minus 2 / plus 0.5 mm, magnetic

sample	amg_e	amg_n	line_id	local_n	cu	pb	zn	mn	ag	as	fe%	sb	bi	mo	ni	co	cr	v	cd	au(ppb)	p
131501C	374015	7448932	RR1	0	12	36	63	380	0.5	X	47.8	25	15	4	260	58	1200	1200	3	X	200
131502C	374098	7449114	RR1	200	9	28	73	400	0.5	X	45.5	20	15	3	260	56	1000	940	3	X	160
131503C	374181	7449296	RR1	400	9	44	79	720	1	X	48.2	25	15	3	260	61	980	1100	3	X	120
131504C	374264	7449477	RR1	600	23	63	95	400	1	X	45.9	25	15	3	220	54	980	1500	3	X	170
131505C	374347	7449659	RR1	800	19	44	84	720	1	X	47.4	25	20	5	180	54	720	1500	3	X	260
131506C	374430	7449841	RR1	1000	14	48	83	500	1	1	56.5	30	25	6	94	47	540	2000	4	X	320
131507C	374000	7449550	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131508C	373951	7449973	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131509C	373970	7450500	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131510C	374000	7451000	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131511C	373900	7449025	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131512C	373920	7448510	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131513C	391980	7433930	HC		220	62	200	520	1	3	53.6	25	25	14	23	35	62	145	3	1	195
131514C	392230	7434160	HC		38	62	280	780	1	4	53.7	25	30	8	33	28	115	1100	4	9	185
131515C	392390	7434360	HC		48	125	320	720	1.5	5	55.3	30	30	8	40	31	150	540	4	X	240
131516C	391900	7433760	HC		43	48	98	420	1	5	47.8	25	25	6	39	39	220	1500	3	X	220

all values in ppm unless otherwise indicated

NS = sample not submitted

APPENDIX 1 (Cont'd)

minus 5 / plus 2 mm, non-magnetic

sample	amg_e	amg_n	line_id	local_n	cu	pb	zn	mn	ag	as	fe%	sb	bi	mo	ni	co	cr	v	cd	au(ppb)	p
131501B	374015	7448932	RR1	0	9	12	61	460	X	X	6.44	X	X	X	41	16	260	105	X	X	180
131502B	374098	7449114	RR1	200	7	4	24	940	X	1	11.8	5	X	X	59	18	380	190	X	X	240
131503B	374181	7449296	RR1	400	14	48	26	185	X	1	2.68	X	X	X	12	5	185	47	X	X	85
131504B	374264	7449477	RR1	600	59	240	105	620	0.5	X	3.65	X	X	X	11	5	380	47	X	1	105
131505B	374347	7449659	RR1	800	15	20	18	1400	X	X	2.49	X	X	X	12	26	300	51	X	X	85
131506B	374430	7449841	RR1	1000	40	26	85	380	X	5	27.5	10	5	2	29	11	260	500	2	X	660
131507B	374000	7449550	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131508B	373951	7449973	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131511B	373900	7449025	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131512B	373920	7448510	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131513B	391980	7433930	HC		340	34	300	740	X	2	30.1	10	10	11	13	25	130	45	1	1	200
131514B	392230	7434160	HC		18	8	32	170	X	2	4.72	X	X	2	10	4	320	36	X	X	140
131515B	392390	7434360	HC		34	260	45	520	X	X	10.2	X	X	1	10	7	280	50	X	X	80
131516B	391900	7433760	HC		11	10	23	160	X	X	4.05	X	X	X	8	4	165	36	X	X	105

minus 2 / plus 0.5 mm, non-magnetic

sample	amg_e	amg_n	line_id	local_n	cu	pb	zn	mn	ag	as	fe%	sb	bi	mo	ni	co	cr	v	cd	au(ppb)	p
131501D	374015	7448932	RR1	0	5	4	25	185	X	X	4.01	X	X	X	21	8	220	74	X	X	115
131502D	374098	7449114	RR1	200	6	4	20	240	X	2	6.47	X	X	X	35	9	320	115	X	X	125
131503D	374181	7449296	RR1	400	6	8	16	240	X	X	2.81	X	X	X	15	5	340	46	X	X	65
131504D	374264	7449477	RR1	600	24	56	52	440	X	X	5.38	X	X	X	22	8	300	125	X	X	165
131505D	374347	7449659	RR1	800	8	6	12	620	X	X	1.8	X	X	X	10	10	300	38	X	X	80
131506D	374430	7449841	RR1	1000	9	4	15	130	X	X	4.5	X	X	X	9	4	240	86	X	X	170
131507D	374000	7449550	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131508D	373951	7449973	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131509D	373970	7450500	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131510D	374000	7451000	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131511D	373900	7449025	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131512D	373920	7448510	RR		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
131513D	391980	7433930	HC		220	44	160	1300	X	X	15.8	5	5	5	12	18	150	52	X	1	240
131514D	392230	7434160	HC		15	12	33	280	X	X	3.95	X	X	X	13	8	240	73	X	X	260
131515D	392390	7434360	HC		11	12	21	200	X	X	2.94	X	X	X	14	7	240	41	X	X	185
131516D	391900	7433760	HC		16	12	26	300	X	3	4.03	X	X	X	12	8	220	61	X	X	190

all values in ppm unless otherwise indicated

NS = sample not submitted

## **APPENDIX 2**

### **Conventional Soil Sample Locations and Assays**

APPENDIX 2

**CONVENTIONAL SOIL SAMPLE LOCATIONS AND ASSAYS**

**RED ROCK BORE**

sample	amg_e	amg_n	line_id	local_n	cu	pb	zn	mn	ag	as	fe%	sb	bi	mo	ni	co	cr	v	cd	au(ppb)	p
131601A	374015	7448932	RR1	0	14	12	35	360	X	3	4.59	X	X	1	25	10	105	95	X	X	155
131602A	374056	7449023	RR1	100	15	12	46	420	X	X	7.23	5	X	X	40	15	150	135	X	X	220
131603A	374098	7449114	RR1	200	11	10	31	440	X	3	6.85	X	X	X	39	15	140	140	X	X	150
131604A	374118	7449159	RR1	250	12	12	29	360	X	2	7.34	X	X	X	37	13	145	140	X	1	155
131605A	374139	7449205	RR1	300	19	10	40	340	X	3	6.06	X	X	X	33	13	115	120	X	X	115
131606A	374160	7449250	RR1	350	15	10	33	240	X	1	4.94	X	X	1	28	10	130	110	X	X	120
131607A	374170	7449273	RR1	375	16	10	46	240	X	2	4.6	X	X	X	26	10	120	99	X	X	105
131608A	374181	7449296	RR1	400	15	12	52	240	X	1	4.62	X	X	X	25	10	125	100	X	X	120
131609A	374191	7449318	RR1	425	11	16	36	280	X	2	5.84	X	X	X	35	13	130	115	X	X	90
131610A	374202	7449341	RR1	450	13	26	48	280	X	2	7.06	X	X	X	38	13	170	145	X	X	100
131611A	374212	7449364	RR1	475	17	28	62	300	X	1	5.93	X	X	X	35	12	145	125	X	1	125
131612A	374222	7449386	RR1	500	93	340	560	900	X	2	5.3	X	X	X	28	12	115	120	X	3	135
131613A	374233	7449409	RR1	525	135	300	260	700	X	2	5.6	X	X	1	25	11	115	140	X	1	160
131614A	374247	7449441	RR1	560	66	130	145	740	X	2	6	X	X	X	25	13	130	150	X	X	240
131615A	374255	7449459	RR1	580	41	83	79	460	X	2	5.1	X	X	2	19	8	110	125	X	1	180
131616A	374264	7449477	RR1	600	29	46	54	400	X	2	4.96	X	X	X	18	9	100	130	X	X	170
131617A	374284	7449523	RR1	650	26	36	42	340	X	2	3.78	X	X	X	13	8	83	93	X	1	185
131618A	374305	7449568	RR1	700	25	30	46	520	X	3	3.71	X	X	X	14	10	64	81	X	X	185
131619A	374326	7449614	RR1	750	29	14	38	620	X	4	4.29	X	X	X	19	16	75	105	X	X	190
131620A	374347	7449659	RR1	800	29	16	43	520	X	3	4.28	X	X	X	18	15	64	100	X	X	165
131621A	374388	7449750	RR1	900	20	12	30	460	X	4	3.71	X	X	X	14	11	68	91	X	X	200
131622A	374430	7449841	RR1	1000	18	10	27	340	X	2	3.89	X	X	X	11	8	60	88	X	1	220

all values in ppm unless otherwise indicated

APPENDIX 2 (Cont'd)

**RED ROCK BORE (continued)**

sample	amg_e	amg_n	line_id	local_n	cu	pb	zn	mn	ag	as	fe%	sb	bi	mo	ni	co	cr	v	cd	au(ppb)	p
131623A	373540	7449380	RR2	0	27	10	50	500	X	X	5.32	X	X	X	32	16	105	105	X	X	190
131624A	373561	7449426	RR2	50	21	10	36	300	X	X	6.12	X	X	X	33	11	130	120	X	X	125
131625A	373582	7449471	RR2	100	21	12	41	320	X	X	6.32	X	X	X	33	12	125	120	X	1	185
131626A	373602	7449516	RR2	150	18	10	32	280	X	X	5.69	X	X	X	25	10	130	110	X	X	130
131627A	373623	7449562	RR2	200	14	12	39	360	X	X	6.15	X	X	X	32	14	135	125	X	1	125
131628A	373633	7449585	RR2	225	18	12	40	380	X	X	6.19	X	X	X	34	15	130	120	X	X	140
131629A	373644	7449607	RR2	250	16	14	36	340	X	1	5.93	X	X	X	33	14	130	120	X	X	135
131630A	373654	7449630	RR2	275	20	12	41	360	X	2	5.74	X	X	X	30	13	125	115	X	X	145
131631A	373664	7449653	RR2	300	49	100	60	500	X	2	5.31	X	X	X	28	14	115	110	X	1	155
131632A	373675	7449676	RR2	325	37	88	49	500	X	X	4.97	X	X	X	24	12	110	105	X	1	165
131633A	373685	7449698	RR2	350	48	77	58	480	X	X	5.51	X	X	X	24	13	105	135	X	X	180
131634A	373696	7449721	RR2	375	43	68	55	520	X	X	5.86	X	X	X	24	13	100	140	X	1	200
131635A	373706	7449744	RR2	400	37	46	48	600	X	X	5.7	X	X	X	23	14	99	130	X	1	220
131636A	373727	7449789	RR2	450	28	42	32	440	X	X	4.97	X	X	1	18	10	100	120	X	X	180
131637A	373747	7449835	RR2	500	19	22	24	240	X	X	5.47	X	X	1	17	7	115	140	X	X	165
131638A	373768	7449880	RR2	550	19	14	28	240	X	1	4.91	X	X	X	15	7	90	120	X	X	220
131639A	373789	7449926	RR2	600	16	12	25	115	X	X	4.6	X	X	X	14	5	85	115	X	X	220

**GILLENS BORE**

sample	amg_e	amg_n	line_id	local_n	cu	pb	zn	mn	ag	as	fe%	sb	bi	mo	ni	co	cr	v	cd	au(ppb)	p
131664A	365770	7448950	GB1	0	11	8	28	85	X	2	2.05	X	X	1	7	3	67	40	X	X	155
131665A	365778	7449050	GB1	100	12	8	31	260	X	2	2.59	X	X	X	8	6	60	51	X	X	160
131666A	365786	7449149	GB1	200	12	10	32	185	X	4	2.64	X	X	1	7	5	61	53	X	X	170
131667A	365790	7449199	GB1	250	12	10	33	190	X	3	2.51	X	X	1	10	5	68	49	X	X	165
131668A	365794	7449249	GB1	300	11	8	30	110	X	3	2.31	X	X	X	7	3	58	46	X	X	155
131669A	365798	7449299	GB1	350	11	10	29	155	X	2	2.4	X	X	1	9	5	73	47	X	X	155
131670A	365801	7449349	GB1	400	9	6	27	140	X	3	2	X	X	X	6	4	57	40	X	X	145
131671A	365809	7449448	GB1	500	8	8	23	95	X	X	1.88	X	X	2	6	3	77	38	X	X	130
131672A	365817	7449548	GB1	600	11	8	29	185	X	2	2.34	X	X	1	8	4	62	47	X	1	165

all values in ppm unless otherwise indicated

# **APPENDIX 3**

## **MMI Soil Sample Locations and Assays**

## APPENDIX 3

### MMI SOIL SAMPLE LOCATIONS AND ASSAYS

#### RED ROCK BORE

##### Line RR1

Sample	amg_e	amg_n	line_id	local_n	Cu	Pb	Zn	Cd
131601B	374015	7448932	RR1	0	140	40	420	12
131602B	374056	7449023	RR1	100	80	40	1960	10
131603B	374098	7449114	RR1	200	100	60	940	8
131604B	374118	7449159	RR1	250	120	60	320	14
131605B	374139	7449205	RR1	300	220	20	60	4
131606B	374160	7449250	RR1	350	X	X	X	X
131607B	374170	7449273	RR1	375	X	X	X	X
131608B	374181	7449296	RR1	400	X	X	X	X
131609B	374191	7449318	RR1	425	120	40	80	4
131610B	374202	7449341	RR1	450	200	180	240	8
131611B	374212	7449364	RR1	475	X	X	60	2
131612B	374222	7449386	RR1	500	960	120	2320	20
131613B	374233	7449409	RR1	525	10200	9360	11600	78
131614B	374247	7449441	RR1	560	1860	3300	6840	64
131615B	374255	7449459	RR1	580	1360	4600	3380	28
131616B	374264	7449477	RR1	600	920	3140	1460	18
131617B	374284	7449523	RR1	650	260	580	1860	18
131618B	374305	7449568	RR1	700	320	380	1060	12
131619B	374326	7449614	RR1	750	340	100	240	16
131620B	374347	7449659	RR1	800	280	20	80	10
131621B	374388	7449750	RR1	900	180	40	740	16
131622B	374430	7449841	RR1	1000	180	60	520	14

##### Line RR2

Sample	amg_e	amg_n	line_id	local_n	Cu	Pb	Zn	Cd
131623B	373540	7449380	RR2	0	40	X	X	2
131624B	373561	7449426	RR2	50	80	X	80	4
131625B	373582	7449471	RR2	100	60	X	60	4
131626B	373602	7449516	RR2	150	X	X	X	X
131627B	373623	7449562	RR2	200	100	60	120	8
131628B	373633	7449585	RR2	225	100	40	120	12
131629B	373644	7449607	RR2	250	120	60	100	16
131630B	373654	7449630	RR2	275	120	60	220	14
131631B	373664	7449653	RR2	300	460	1300	380	28
131632B	373675	7449676	RR2	325	360	880	620	26
131633B	373685	7449698	RR2	350	360	500	720	26
131634B	373696	7449721	RR2	375	520	300	460	18
131635B	373706	7449744	RR2	400	360	160	580	18
131636B	373727	7449789	RR2	450	200	120	200	12
131637B	373747	7449835	RR2	500	160	100	200	8
131638B	373768	7449880	RR2	550	60	100	260	6
131639B	373789	7449926	RR2	600	40	60	280	4

all values in ppb unless otherwise indicated

### APPENDIX 3 (Cont'd)

#### GILLENS BORE

Sample	amg_e	amg_n	line_id	local_n	Cu	Pb	Zn	Cd
131664B	365770	7448950	GB1	0	40	60	260	4
131665B	365778	7449050	GB1	100	140	100	260	6
131666B	365786	7449149	GB1	200	80	60	360	6
131667B	365790	7449199	GB1	250	80	60	260	4
131668B	365794	7449249	GB1	300	80	60	380	4
131669B	365798	7449299	GB1	350	80	80	200	4
131670B	365801	7449349	GB1	400	60	60	220	4
131671B	365809	7449448	GB1	500	60	60	160	2
131672B	365817	7449548	GB1	600	80	60	200	4

# **APPENDIX 4**

**Memo "Ground Magnetic Traverses over Coles Hill E.L. 8125"  
by P.W. Basford, 26 September 1996**



PASMINCO  
EXPLORATION

# MEMORANDUM

**TO:** M S Saxon  
**COPY:** T C Lees  
**FROM:** P W Basford  
**DATE:** 26 September 1996  
**REF:** pwb/96296  
**SUBJECT: Ground Magnetic Traverses over Coles Hill EL 8125**

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## Summary

Twelve lines of ground magnetic data were collected over Coles Hill EL 8125 on 17 and 18 September 1996. Modelling of the data was carried out using a highly magnetised rectangular prism, which produced moderate fits with all the data. This body was initially used to model the Red Rock magnetic anomalies, from which it has been interpreted that sources for all other anomalies in the area are related.

## Conclusions and Recommendations

Ground magnetic data indicates that the aeromagnetic anomalies are all related to basement features. Modelling has inferred links between each of the anomalies.

Modelling of the Red Rock data reveals a source that is shallow, strike extensive and strongly magnetic. Data over the centre of the source implies shallowing of the body, however this zone may have undergone a second phase of alteration, causing magnetite destruction, or the original alteration event never went to completion, producing an apparent shallow response. Correlation of the drill hole data should aid in the interpretation of these lines.

The Gillens Bore anomaly appears similar on the ground to lines RR1 and RR4 at Red Rock. Modelling infers a deep source, with varying thickness along strike, and a similar magnetic susceptibility as at Red Rock. This feature warrants further exploration and could be drill tested along line GB2.

Observed data at West Red Rock appears to correlate well with that collected over the Red Rock Prospect. Modelling also revealed a similar source, however, buried much deeper. It is proximal to the feature and a sinistral shear interpreted in the aeromagnetic data links the two prospects. This feature should be followed up.

A large sistratal shear relates the feature at 370a to Red Rock and the data observed over 370a shows similar characteristics to line RR3. Modelling of this data however did not provide a convincing link between the two prospects.

Modelling of the anomalies observed at Red Rock Paddock produced a body with similar characteristics to that at Red Rock, however, the source appears to be slightly different. The small feature may have been drill tested already.

## **Introduction**

Ground magnetic data was collected over twelve lines on Coles Hill EL 8125 on 17 and 18 September 1996, to follow up aeromagnetic anomalies and for some areas, correlate with previous drilling. Four lines were located over the Red Rock prospect, one line each at West Red Rock and Anomaly 370a, two lines at Red Rock Paddock, one north-south, the other along the road, and four lines over the Gillens Bore prospect.

## **Data Collection**

All data was collected using the GEM GSM-19F overhauser magnetometer. Data was collected along lines every second, which equates to approximately 1.5 m. Pegs located every 50 or 100m (dependent on line of sight for each traverse) were used as control points to convert time readings to distance. Base station data was collected for diurnal variation using a GEM GSM-19 overhauser magnetometer sampling every five seconds. Diurnal corrections were made to a base value of 53950 nT.

## **Prospects**

### **Red Rock**

Four lines spaced 200m apart were surveyed over this prospect at a NE-SW angle. Local coordinates were used for control points, however, GPS readings were taken at each end which were used to convert the data into AMG space (assuming a straight path between the end points). All four lines indicated an anomalous response, which varies in position, amplitude and shape from line to line. Lines RR1 and RR2 (eastern most lines) contain surface magnetite noise on the south ends of the anomalies.

Modelling of this data set was conducted first. A general fit to the data was achieved by a large slab of magnetic material (alteration) extending through all lines. The modelled results of the thick unit are a good representation of the observed data for the end lines (RR1 and RR4). The data for lines RR2 and RR3 is more complex and a simple slab model by itself does not adequately explain the data.

Two explanations are provided for line RR3 which contains two apparent shallow sources underlain by a background. The first is that the magnetic alteration zone has thinned and split, with a continuous unit along its northern edge and a separate unit to the south. Alternatively the large wide magnetic alteration zone has 'holes' within it caused by a second magnetite destruction phase, or the original alteration event never went to completion across strike for these lines. Modelling of the line has been carried out with a large mass as well as using two separate bodies. For the separate bodies, a large negative response is evident at the south end of each body, which is not observed in the real data. This would have to be cancelled out by a

deeper magnetic source, however, it would alter the depth and magnetic strength of the bodies modelled. The large thick continuous slab model appears more representative of data.

Line RR2 is similar to RR3 except only one thin shallow feature is apparent in the observed data. Modelling this line did not produce a good match to the overall data when using a single thin source or when using a larger deeper source.

The source at Red Rock is best described as a rectangular unit striking approximately 300 degrees (AMG), dipping steeply to the SW and having a magnetic susceptibility of 0.36 SI. The depth to the source along RR1 and RR4 is around 60m, whilst the depth may be as shallow as 30m for lines RR2 and RR3 if using the alternative thin body model. The alteration feature varies in width from 150m to 300m and is around 1000m in strike length. There is an indication from the depths modelled for RR1 and RR4 that the body may plunge very shallowly to the NW.

### **Red Rock West**

A single north-south line was surveyed over this aeromagnetic feature, which appears in the aeromagnetic image to be an extension to the Red Rock Prospect. Ground magnetic data indicated a similar looking response to that observed over line RR4, with much less amplitude and much shallower gradients implying a deeper source.

Modelling was conducted on the profile using a deeper 'Red Rock' source. This produced a good fit to data when using a 'compact' body, dimensions 250m by 350m, depth to top of 160m. Due to the lack of geological control in the immediate area, and as the Red Rock source is steeply dipping, a vertical dip has been used for modelling. A magnetic susceptibility of 0.4 SI units was used in modelling, which is slightly larger than that used for Red Rock.

Ground magnetic data and modelling indicates that the Red Rock West anomaly could be related to and be similar to the source at the Red Rock Prospect.

### **Red Rock Paddock**

A north-south line along 372600E was surveyed, the northern section traversing parallel to the access road. An extra 500m of data was collected from the point where the line parted from the road, along the road to the south. This was added to the road section of line 372600E for correlation with previous and proposed drilling.

A large amplitude response was observed on the northern section of line 372600E, with a small anomaly on its southern edge, detected on both the north-south and road lines. The road line also indicated a small amplitude deep source centered at 47850N. This feature was not observed on the north-south line, inferring the source to be south of the road.

Modelling of the larger source has been carried out to match the overall shape, not the detail within the feature. A moderate match is achieved using a source 350m by 500m, buried 77m deep. The body is striking east-west, dipping vertically and has a magnetic susceptibility of 0.35 SI (similar to that used for Red Rock). The problem with such a body is that it produces a large negative at the south end of the body, due to the dipolar nature of the source and the angle of field inclination. This affect is observed in the real data, however, the amplitude is vastly less. Magnetic anisotropy may account for such a response.

The small high located at the gradient cross over of the larger feature has been modelled using a small 165m by 300m source on the southern edge of the larger body. It is buried approximately 32m, however, this depth has some error as the body is superimposed on top of a larger gradient. The magnetic susceptibility used is also 0.35 SI, which could imply some minor structure linking the two sources.

Both models have similar characteristics to the Red Rock Prospect and therefore could have an equivalent source. The small feature may already have been drill tested by previous drilling along the road.

### **Line 370a**

This north-south line runs along 370000E and has been interpreted to be a southern displaced section of the Red Rock magnetic unit. A large sinistral shear has been proposed in the aeromagnetic data to produce such an offset.

The anomaly observed on this line contains what appears to be three responses, with the northern feature the shallowest. The data is moderately similar to that observed at Red Rock, line RR3. There is also an increased noise component in the data along this line, for which there is no obvious source.

Modelling of this data set was difficult. A 'Red Rock' type source was used to model the data, however, the fit was moderate at its best. This body had a lower magnetic susceptibility (0.21 SI) compared to that used for the Red Rock sources. Depth to the source was determined to be approximately 50m.

An alternative model using two thin sources was produced which provided a closer match to the observed data. Dimensions of the bodies are listed below. The source of these bodies may still be related to the Red Rock magnetite alteration feature, as the magnetic susceptibilities and body styles are similar, even though the size of the bodies are reduced.

Model for 370a, two thin sources:

Body	X m	Y m	Depth m	Strike deg	Dip deg	Susc. SI	Width m	Length m	Height m
1	-21	48880	48.5	90	80	0.28	100	300	400
2	-0.8	48597	114	90	90	0.30	250	300	400

### **Gillens Bore**

Four north-south lines spaced 200m apart were surveyed. The lines were restricted in the southern extension due to the presence of Aboriginal land, however, all four indicated a deep response. Response on line GB1 indicated the feature may have thickened, then decreased again to line GB2 (GB2 is an end line).

Modelling of these four lines has been carried out using a single rectangular body, with physical properties similar to Red Rock (magnetic susceptibility varies from 0.36 to 4). The thickness of the body varies from line to line, as does the depth to the top of the source. This variation in

depth ranges from 200m to 125m, whilst width variation is from 200m to 400m. A body striking 1km long has been used for all lines. The fit for each individual line is fairly good and an overall source shape has subsequently been defined by combining the individual models for each line.

Modelled results infer a Red Rock type source.

Parameters used for modelling each line is listed below:

GB2

X m	Y m	Depth m	Strike deg	Dip deg	Susc. SI	Width m	Length m	Height m
5900.5	49100	125	90	90	0.36	400	1000	400

GB1

X m	Y m	Depth m	Strike deg	Dip deg	Susc. SI	Width m	Length m	Height m
5900.5	49113.5	200.8	90	90	0.36	400	1000	400

GB3

X m	Y m	Depth m	Strike deg	Dip deg	Susc. SI	Width m	Length m	Height m
5900.5	49113.5	200.8	90	90	0.36	300	1000	400

GB4

X m	Y m	Depth m	Strike deg	Dip deg	Susc. SI	Width m	Length m	Height m
5900.5	49154	182.9	90	90	0.4	200	1000	400



P W Basford

**COLES HILL E.L. 8125**  
**MAGNETIC TRAVERSSES COMPLETED**

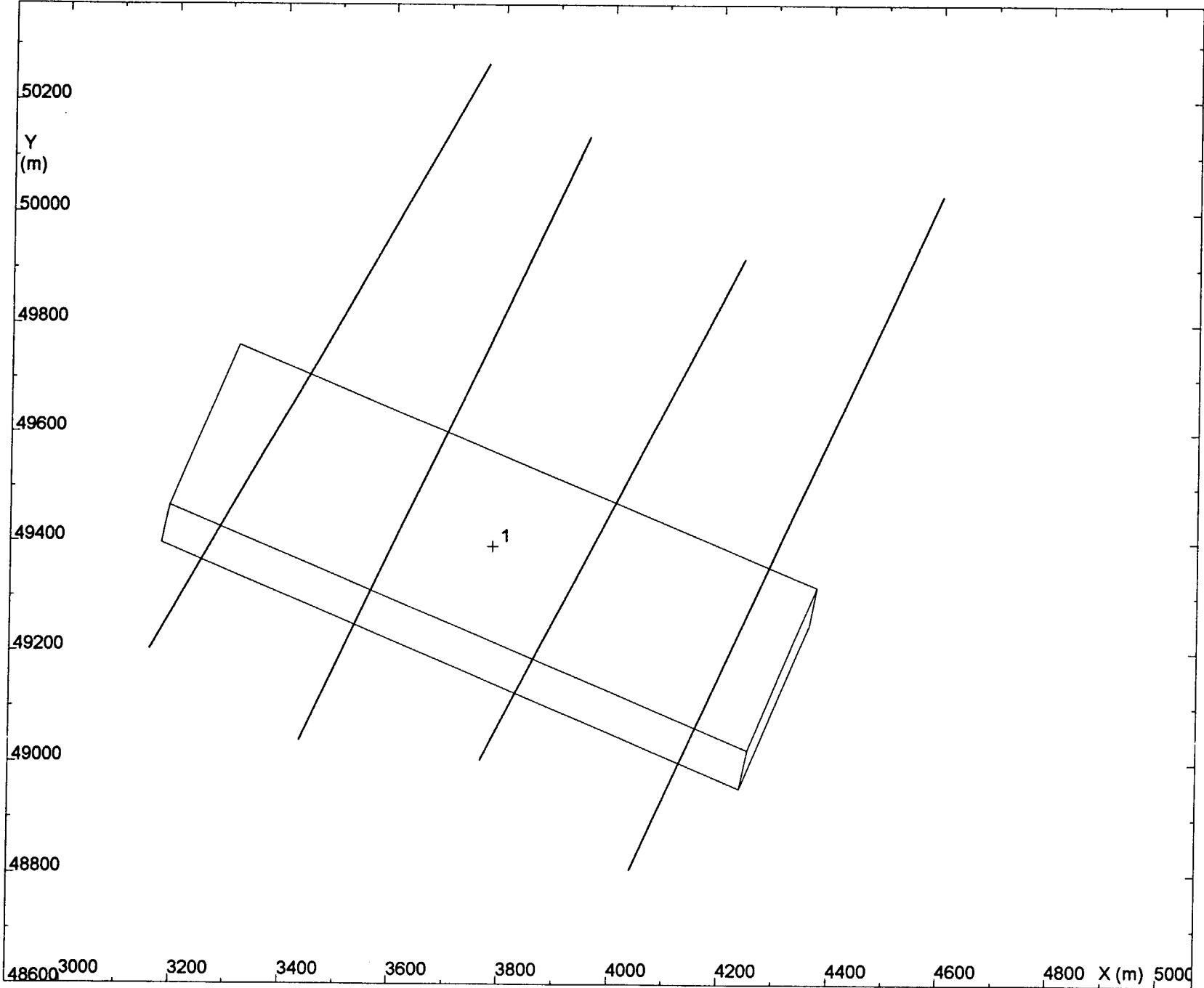
No	Area	Grid Start	AMG Start	Grid Finish	AMG Finish	Length (km)	Bearing (Grid)	Grid Spacing	Pegging
RR1	Red Rock	9900N RR1	7448808N 374040E	11200N RR1	7450030N 374600E	1.3	205°	100 m	100m
RR2	Red Rock	9500N RR2	7449005N 373766E	10500N RR2	7449917N 374240E	1.0	205°	100 m	100 m
RR3	Red Rock	9400N RR3	7449039N 373434E	10700N RR3	7450135N 373954E	1.3	210°	100 m	100 m
RR4	Red Rock	9300N RR4	7449115N 373107E	10600N RR4	7450265N 373769E	1.3	205°	100 m	100 m
WRR1	West Rock	7449100N 372400E	7449140N 372400E	7450400N 372400E	7340404N	1.3	5°	100 m	100 m
370A	West Red Rock	7448400N 370000E	7448395N 369963E	7449700N 370000E	7449684N 369954E	1.3	0°	50 m	-
RRP1	Red Rock Paddock	7447000N 372600E	7447086N 372595E	7448900N 372600E	7447886N 372681E	1.9	0° (Approx)	100 m	100 m
RRP2 (Road)	Red Rock Paddock	7447700RN		7448200N 372600E (RRP1grid)		0.5	145° (Approx)	50 m	N end
GB1	Gillens Bore	7448900N 365800E	7448799N 365741E	7450000N 365800E	7449829N 365825E	1.1	0°	50 m	-
GB2	Gillens Bore	7448850N 365600E	7448720N 365561E	7450000N 365600E	7449946N 365564E	1.15	0°	50 m	-
GB3	Gillens Bore	7448900N 366000E	7448845N 365981E	7450000N 366000E	7449926N 365999E	1.1	0°	50 m	-
GB4	Gillens Bore	7448900N 366200E	745000N 366200E	7448840N 366160E	7449987N 366207E	1.4	0°	50 m	-

**COLES HILL E.L. 8125**  
**MAGNETIC TRAVERSSES COMPLETED**

No	Comments	
RR1	On section with DDH 3, 4, 5 and MMI line RR1. 10 000 added to all values with respect to MMI line. MMI and magnetic localities match well north of DDH5. South of DDH5:	
	MMI (OLD)	MAGNETIC (NEW)
	0	10 064
	100	10 153
	200	10 242
	300	10 332
	400	10 425
	500	10 500
	600	10 600
	DDH4 collar is at new 10384N, DDH5 collar at new 10588N, DDH3 collar at new 10490N.	
RR2	On section with hole RRK-01. 10 000N at collar.	
RR3	On section with holes RRK12-15. 10 000N at collar of RRK15	
RR4	10 000N at 200m at 100° (GN) from RRK16.	
GB2	Original MMI line located and extended. Magnetics read to track.	
GB1	Line approximately 270m east of GB2. Magnetics read to track.	
GB3	Original MMI line located extended. Magnetics read to track.	
GB4	Original MMI line located extended. Magnetics read to track.	
370A	Original MMI line located and extended. Bend in line over magnetic anomaly.	
RRP1	Part of original MMI line located. Relationship between mag line and MMI locations not clear. 7448200N at bend in road does correspond. North of this point lines runs along west side of road.	
RRP2	Gridded from 7448200N on RRP1, south along road. RRK8 at 7448100R, RRK9 at 7448050R, RRK 10 at 7448000R, RRK11 at 7447950N. End of line at 7447700R, 496m along track south of 7448100N, RRP1.	

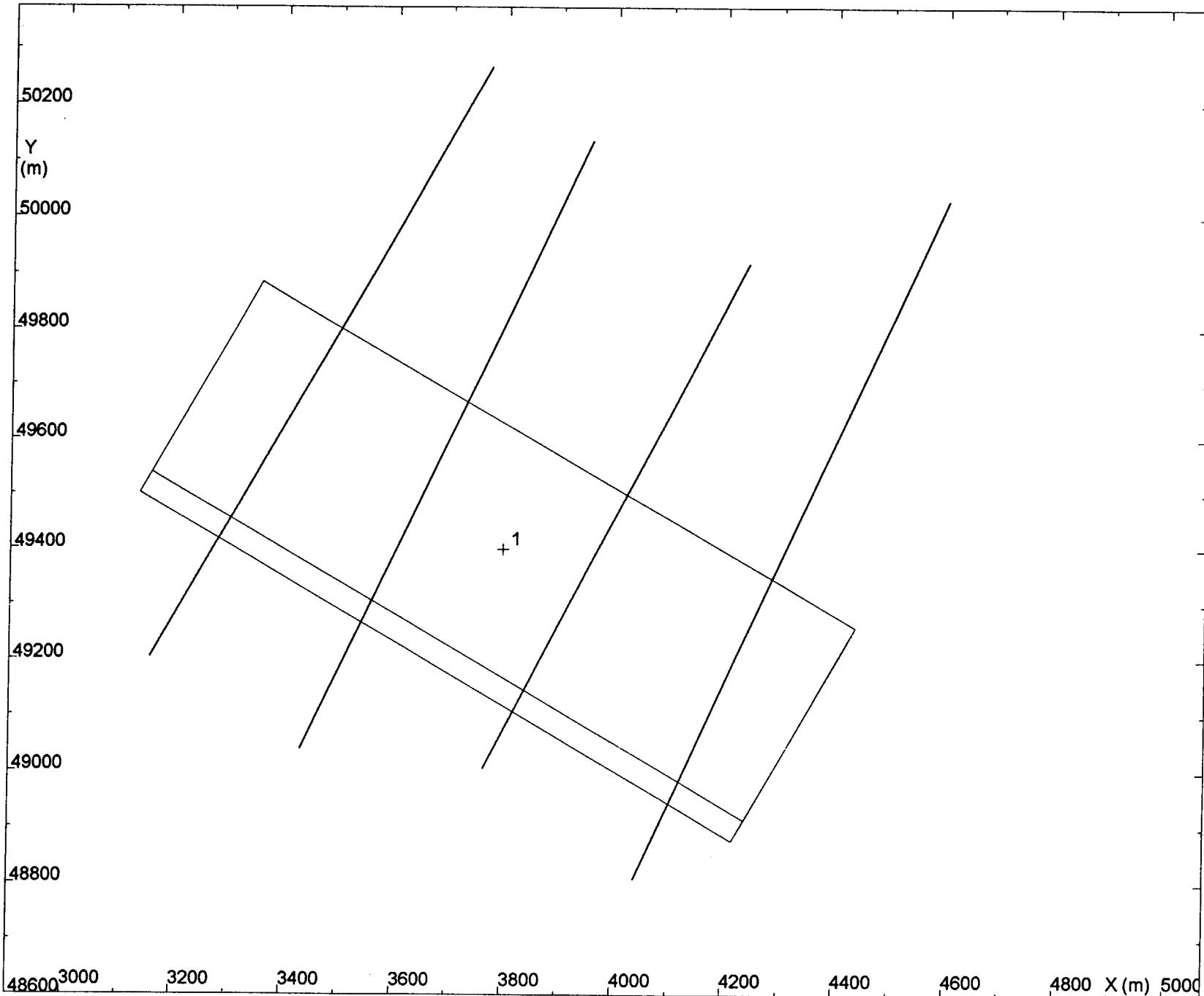
# **RED ROCK PROSPECT**

**OBSERVED  
AND  
MODELLED DATA**



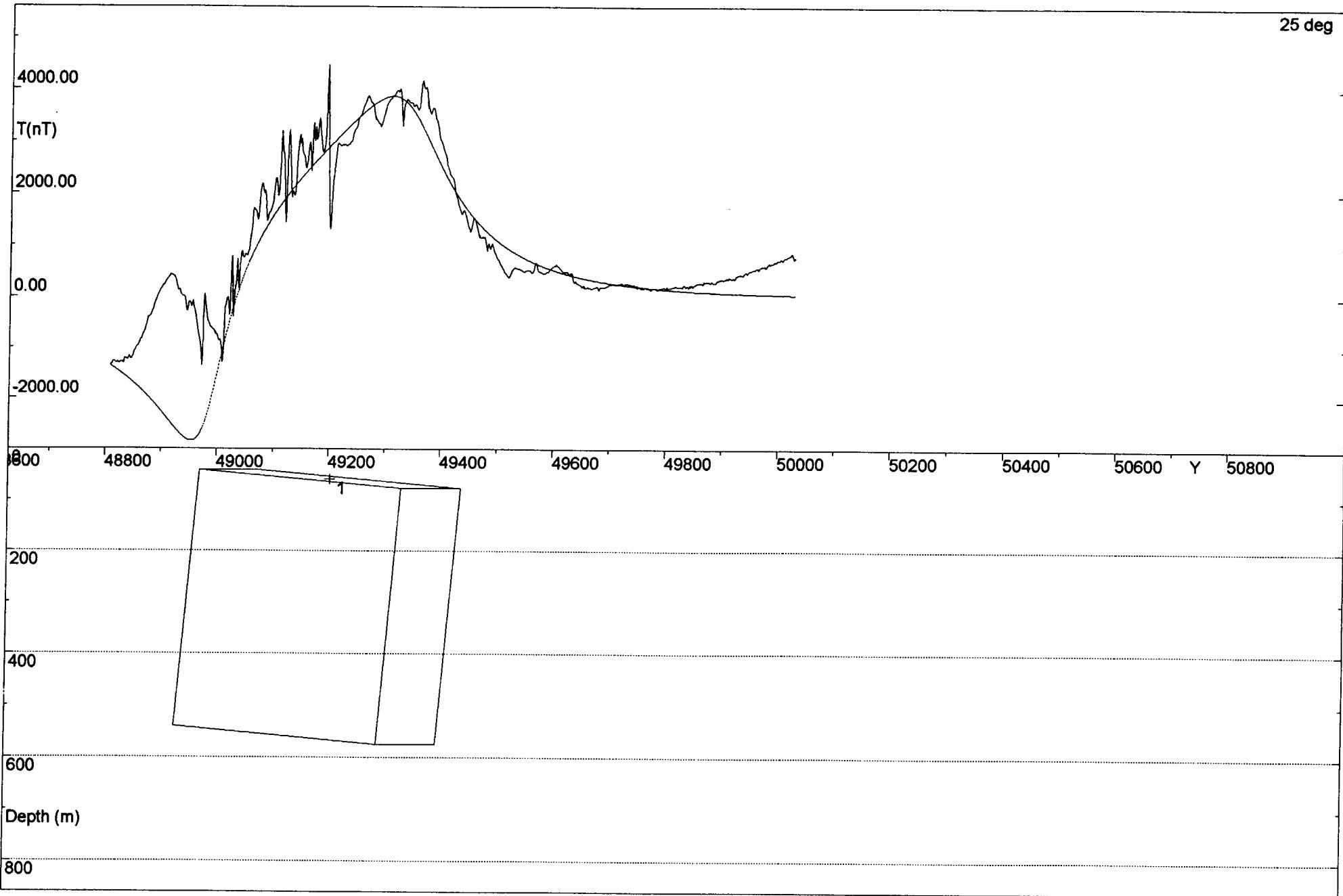
Observations: Red Rock Prospect (AMG coordinates from GPS)

Model: Idealised Model



Observations: Red Rock Prospect (AMG coordinates from GPS)

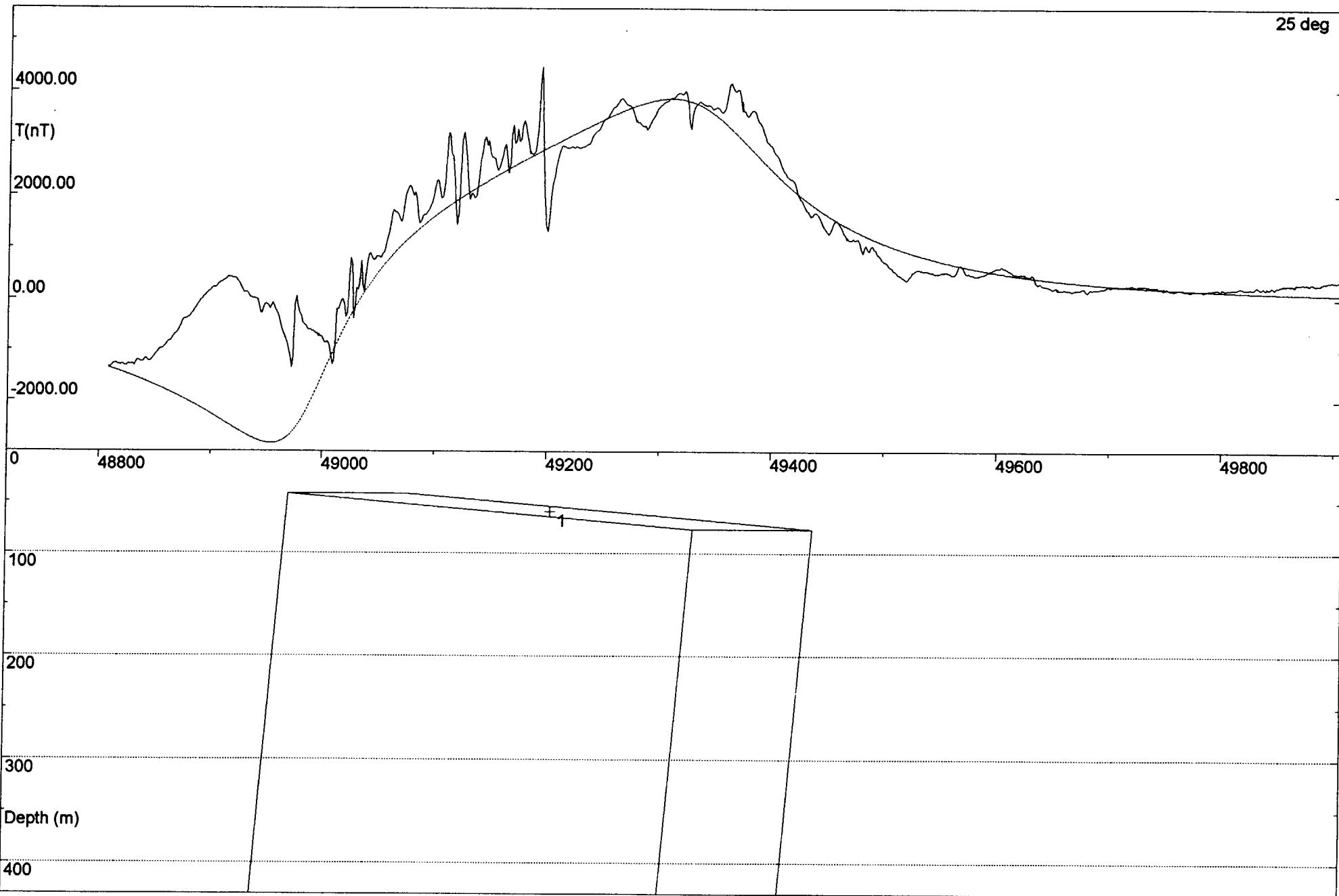
Model: RR170D



Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #2: RR1

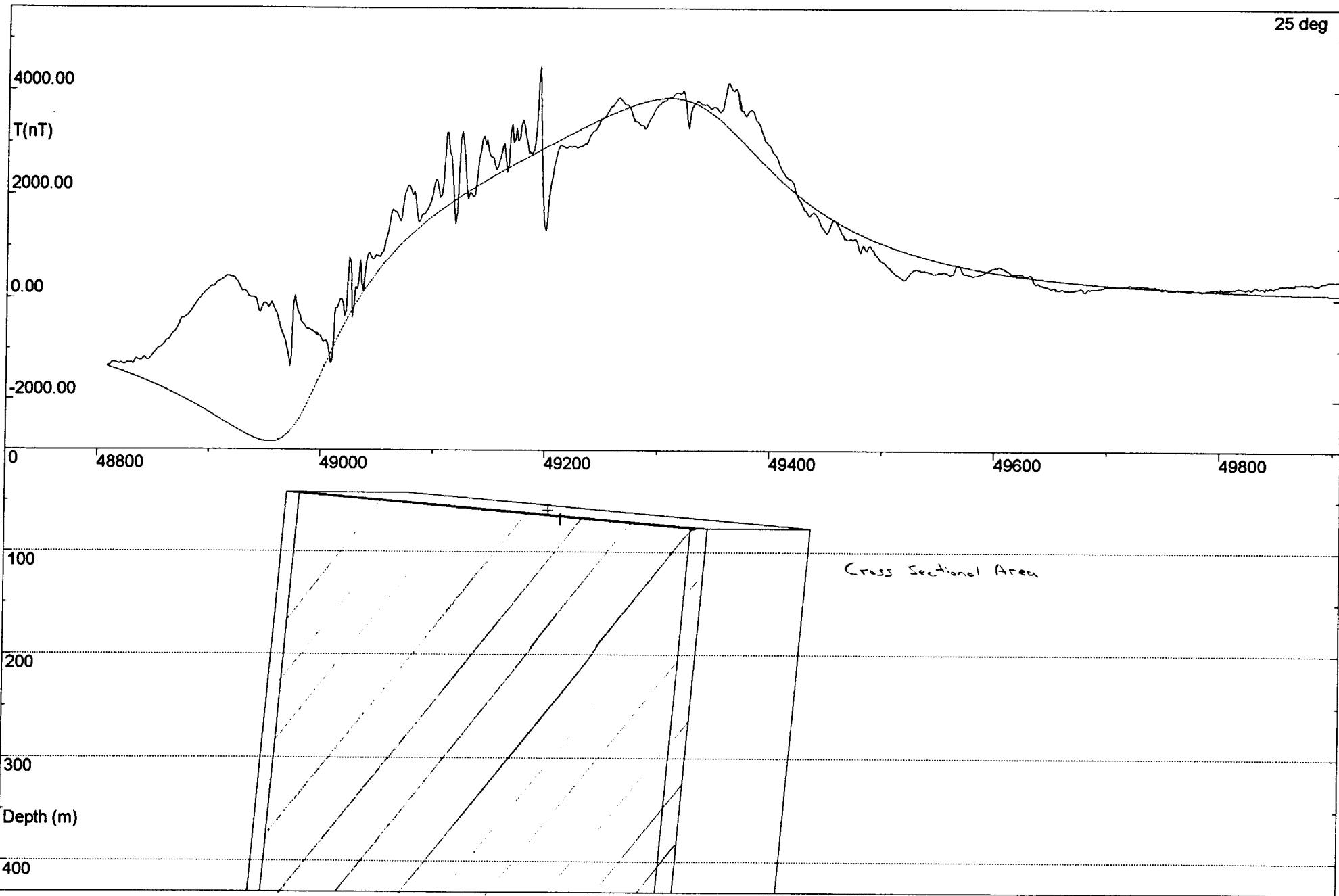
Model: RR1 MOD



Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #2: RR1

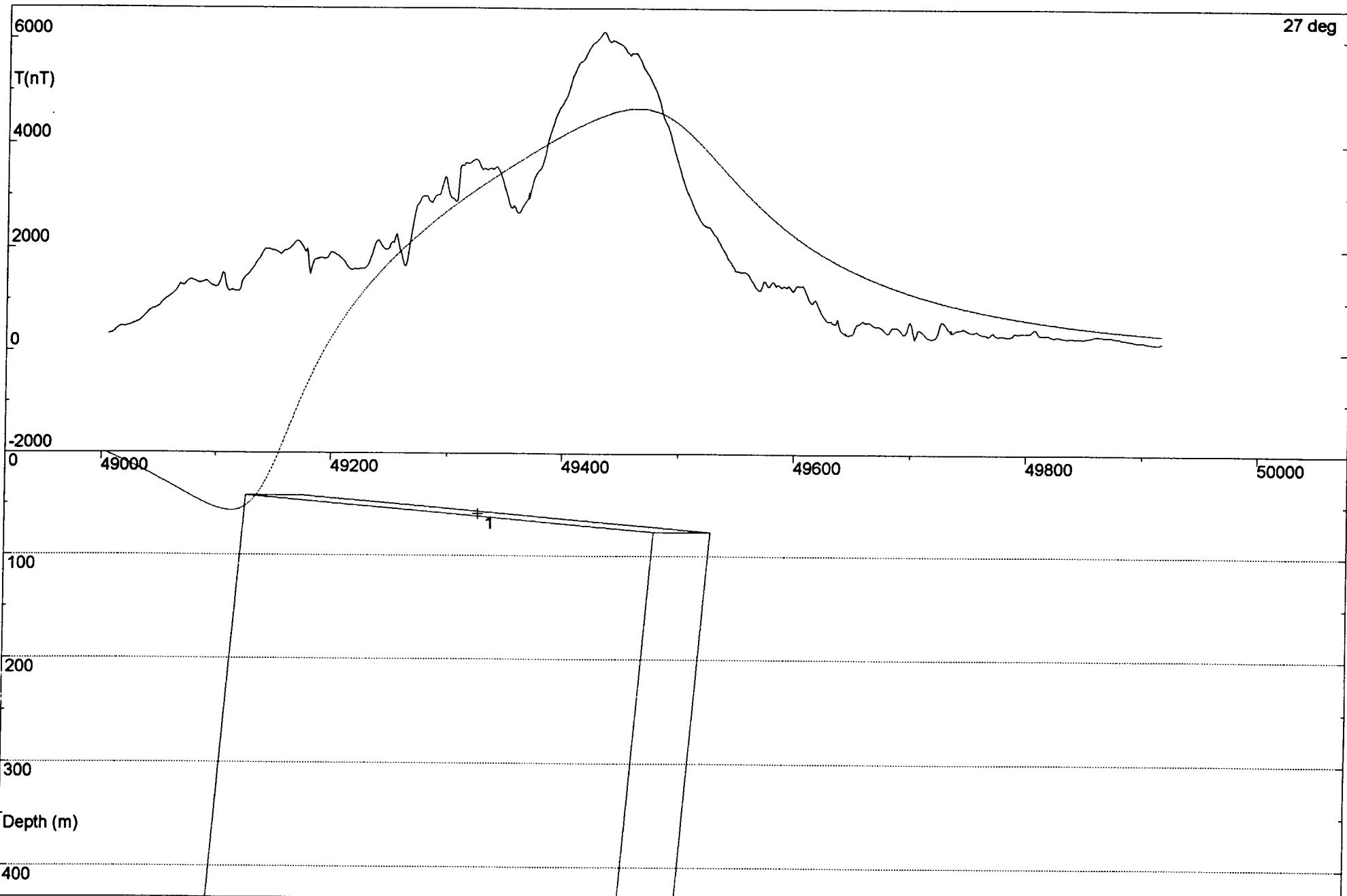
Model: RR1M00



Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #2: RR1

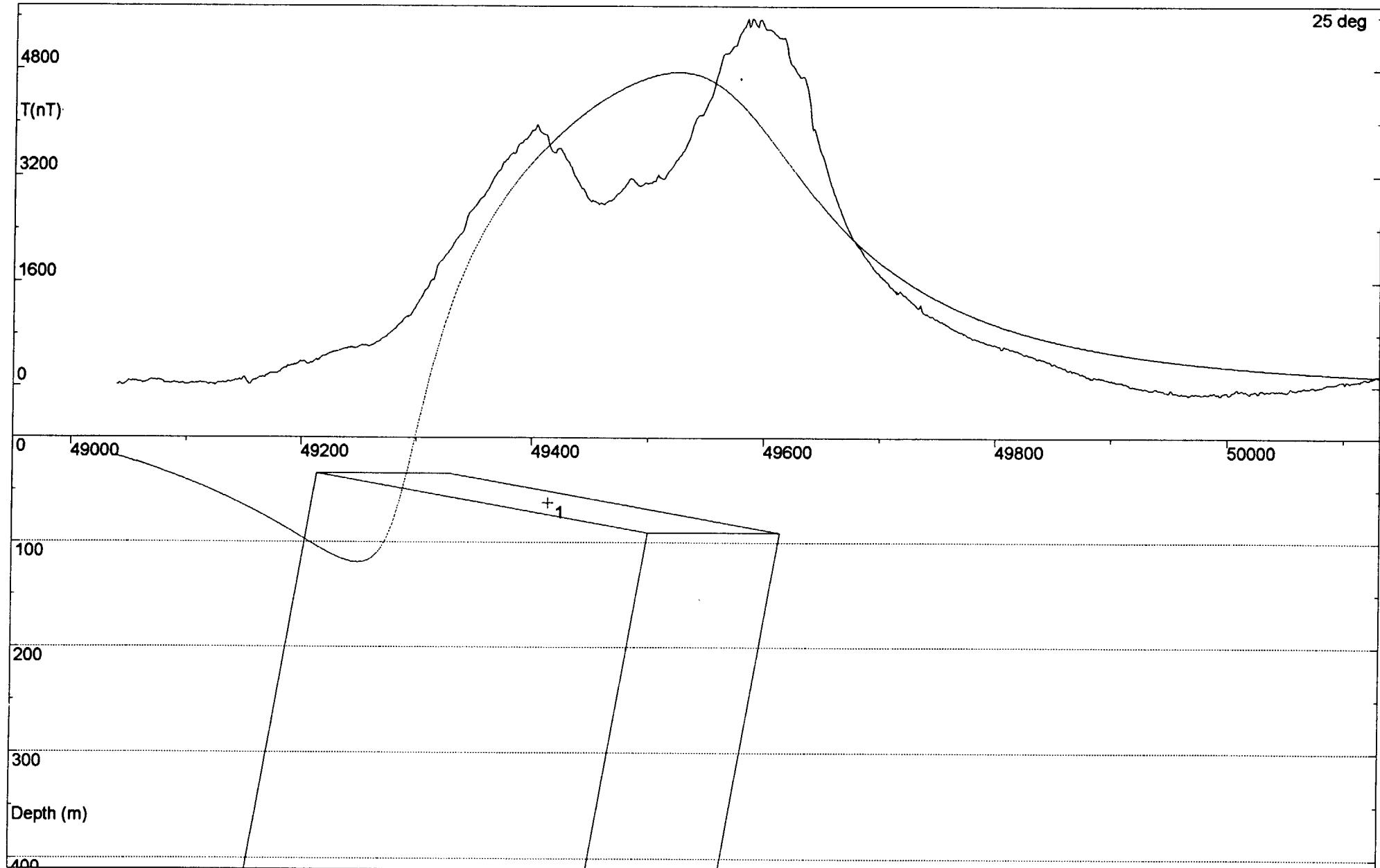
Model: RR1T109



Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #1: RR2

Model: RR15-0

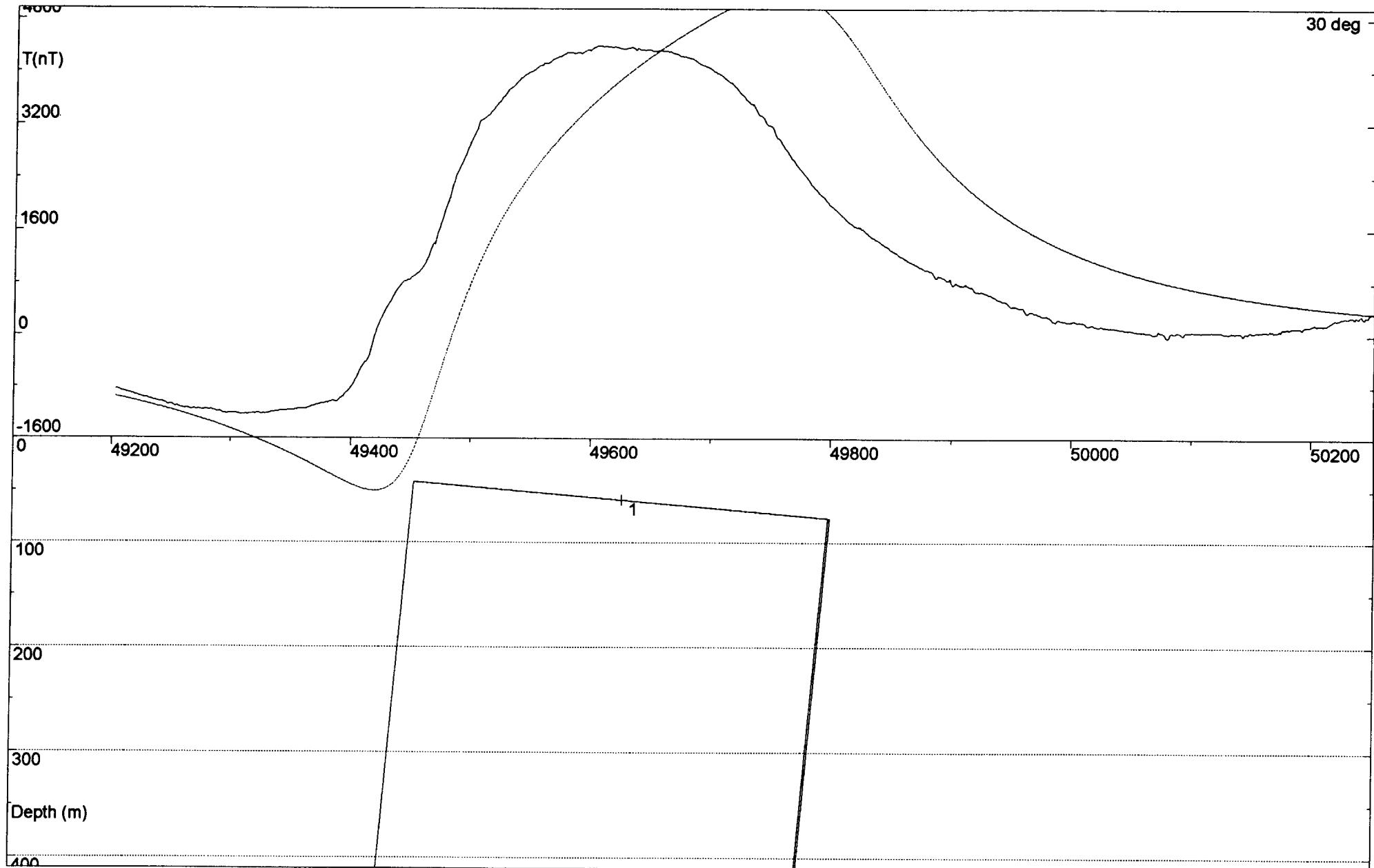


Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #2: RR3

Model: RR11100

Calculation mode: Total Magnetic Intensity

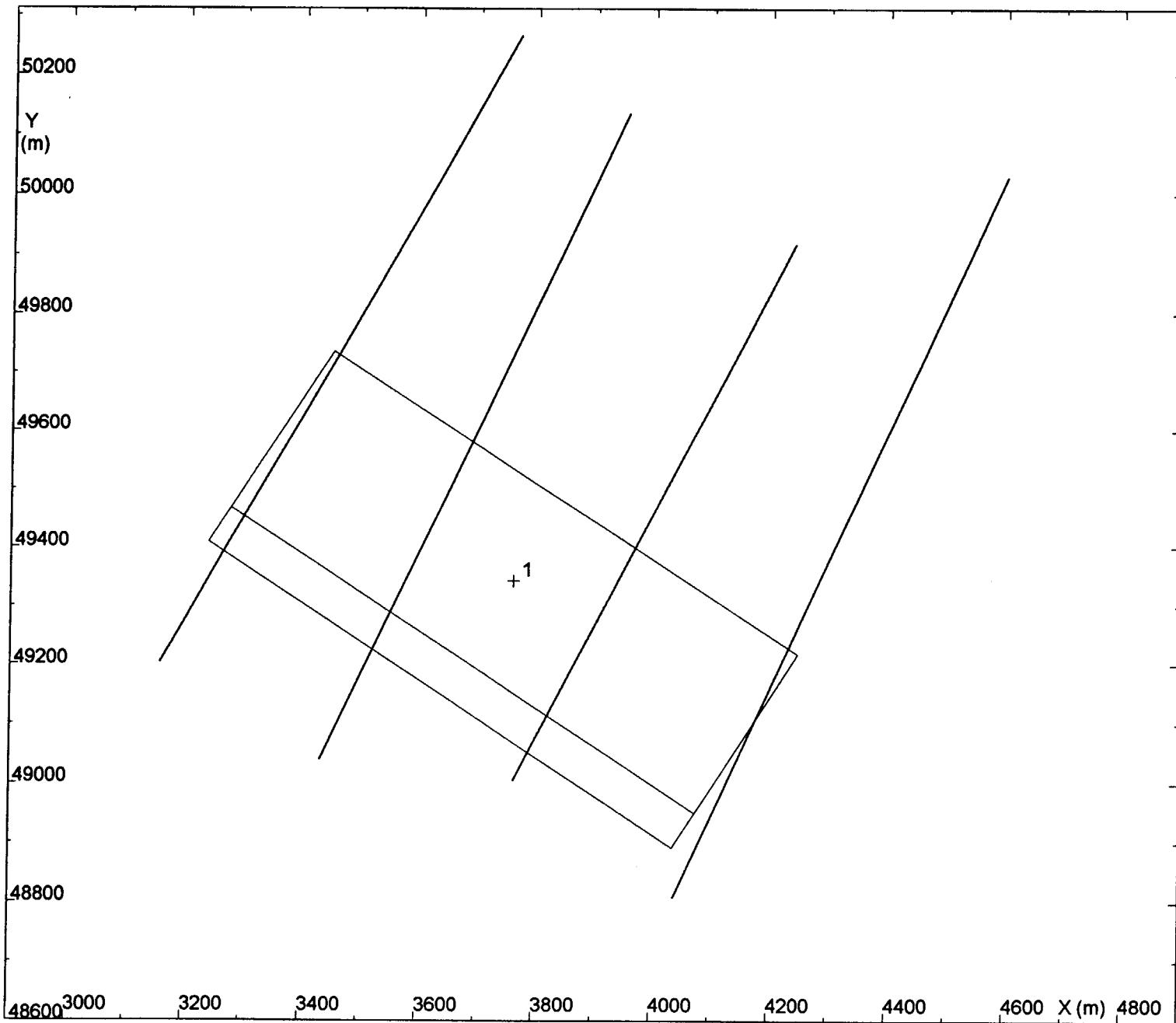


Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #1: RR4

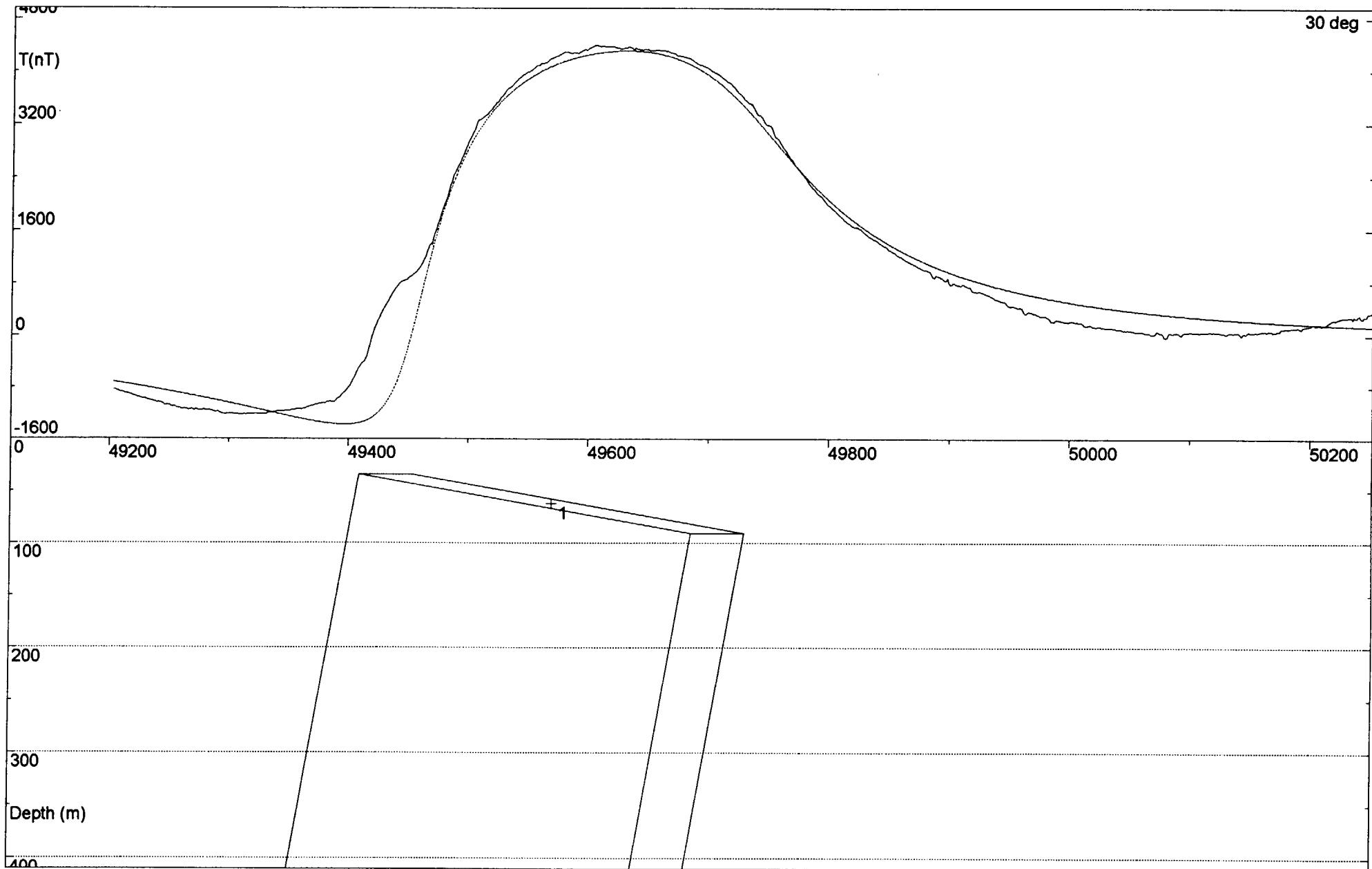
Model: RR15109

Calculation mode: Total Magnetic Intensity



Observations: Red Rock Prospect (AMG coordinates from GPS)

Model: RR + nos

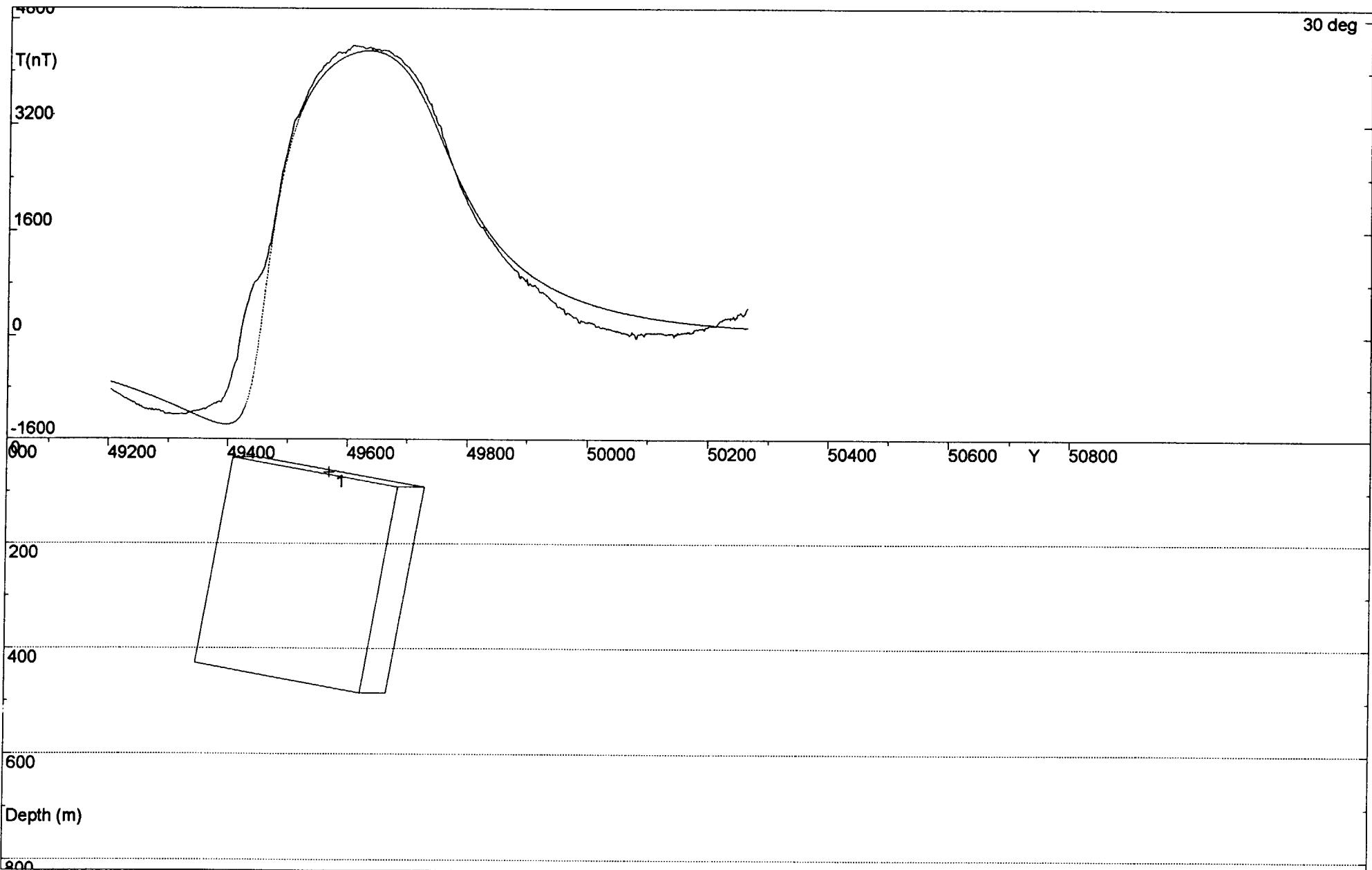


Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #1: RR4

Model: RR4 1100

Calculation mode: Total Magnetic Intensity

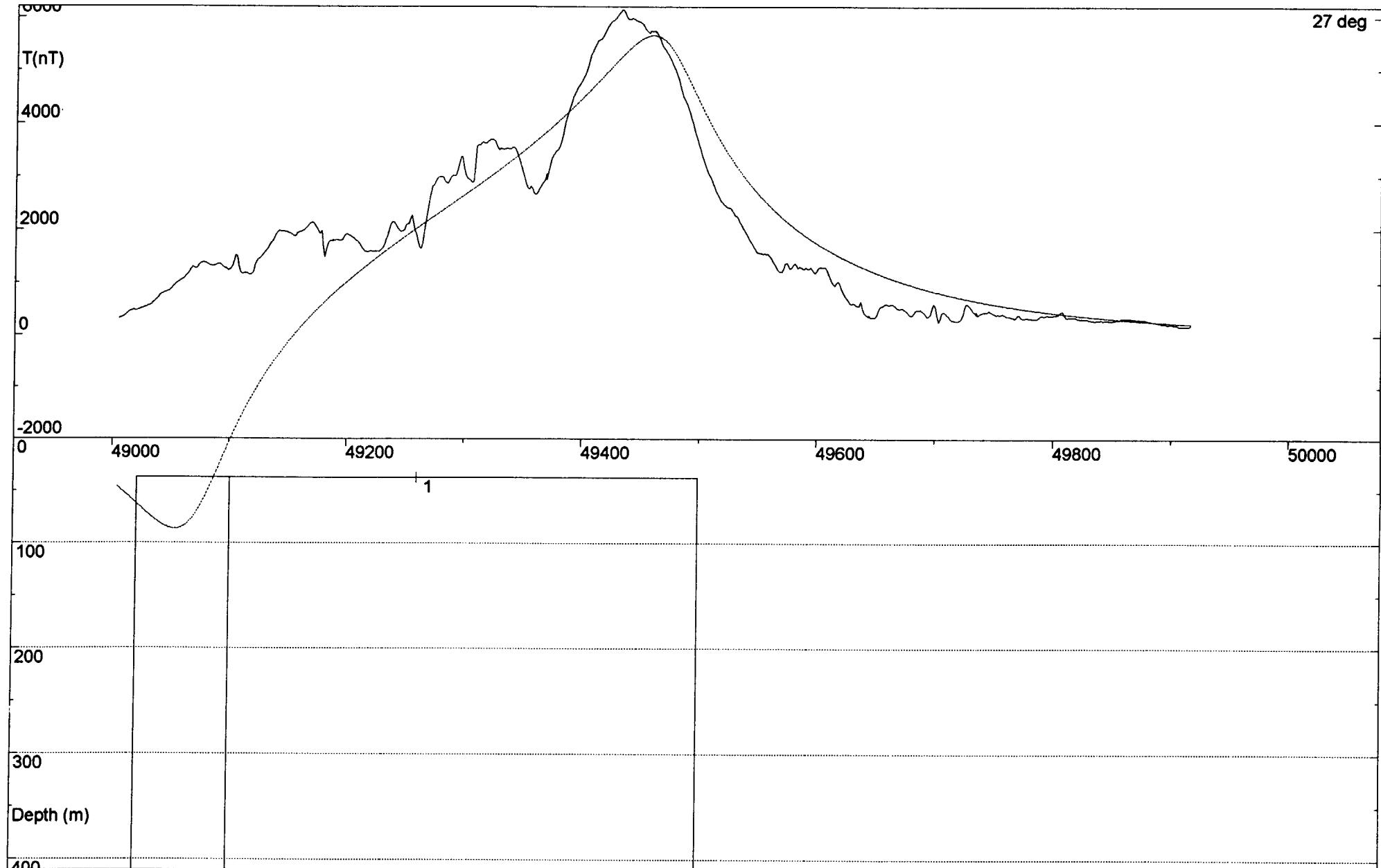


Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #1: RR4

Model: RR4-100

Calculation mode: Total Magnetic Intensity

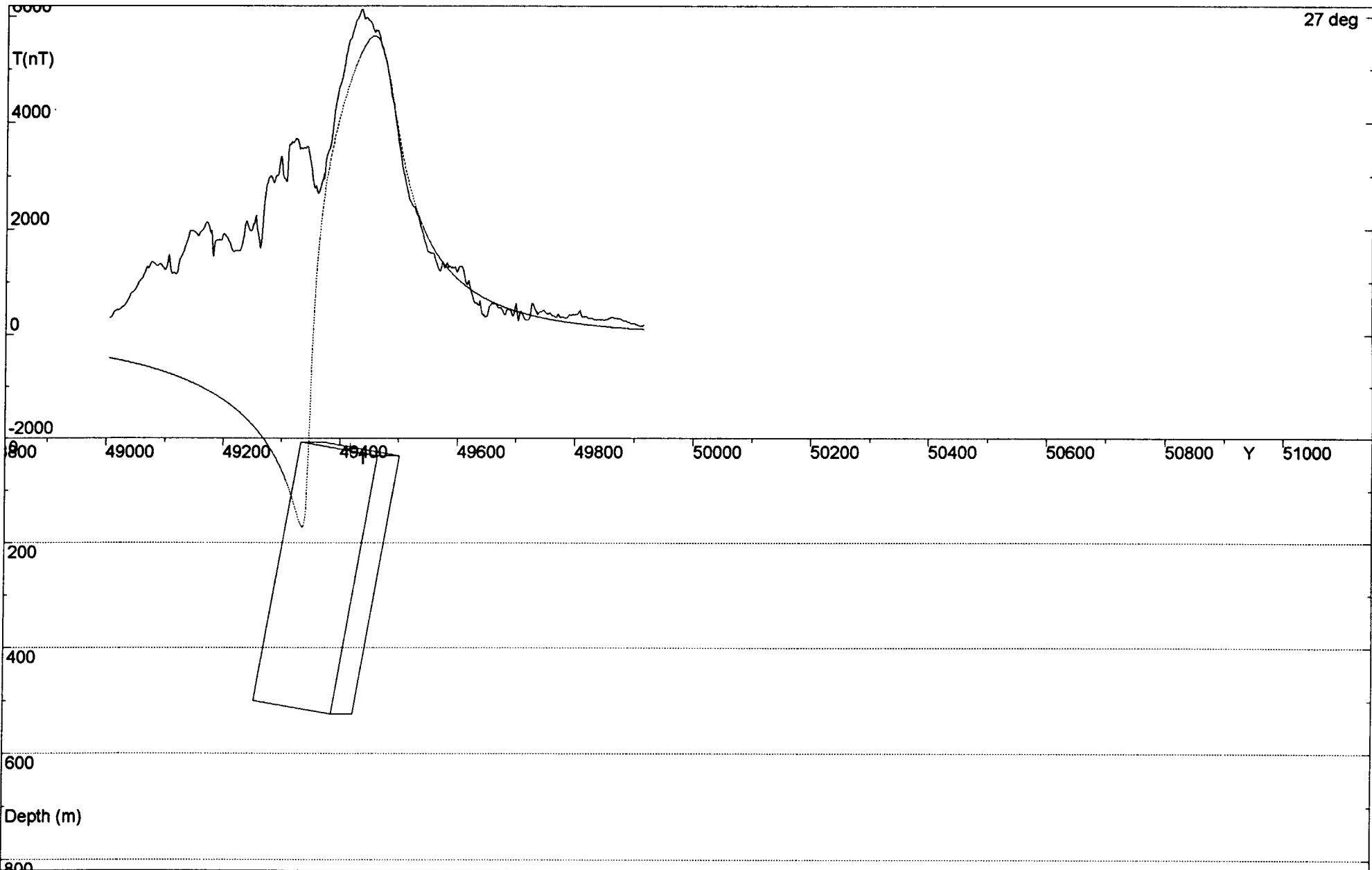


Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #1: RR2

Model: IDEAL MODEL

Calculation mode: Total Magnetic Intensity

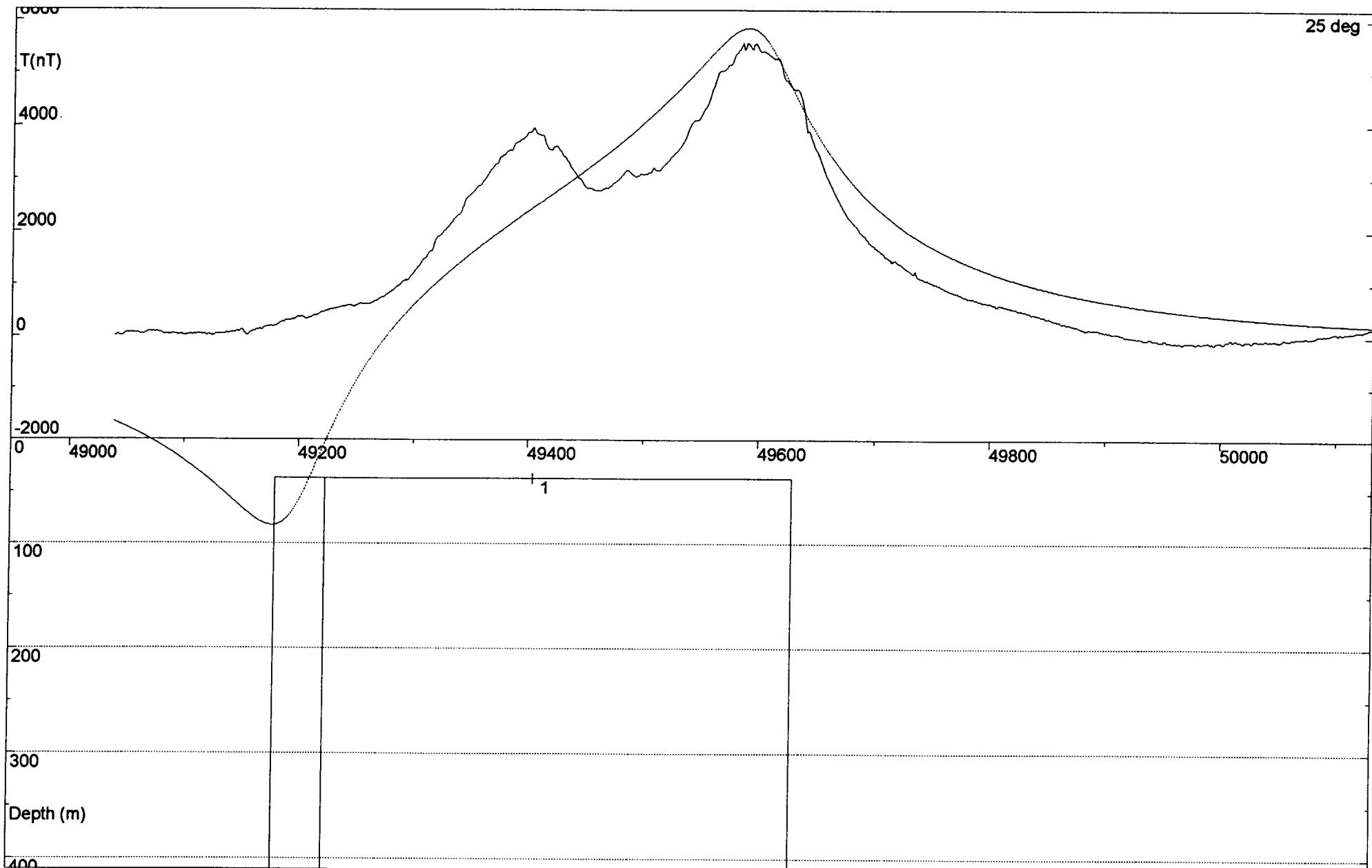


Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #1: RR2

Model: ALTERNATIVE MODEL

Calculation mode: Total Magnetic Intensity

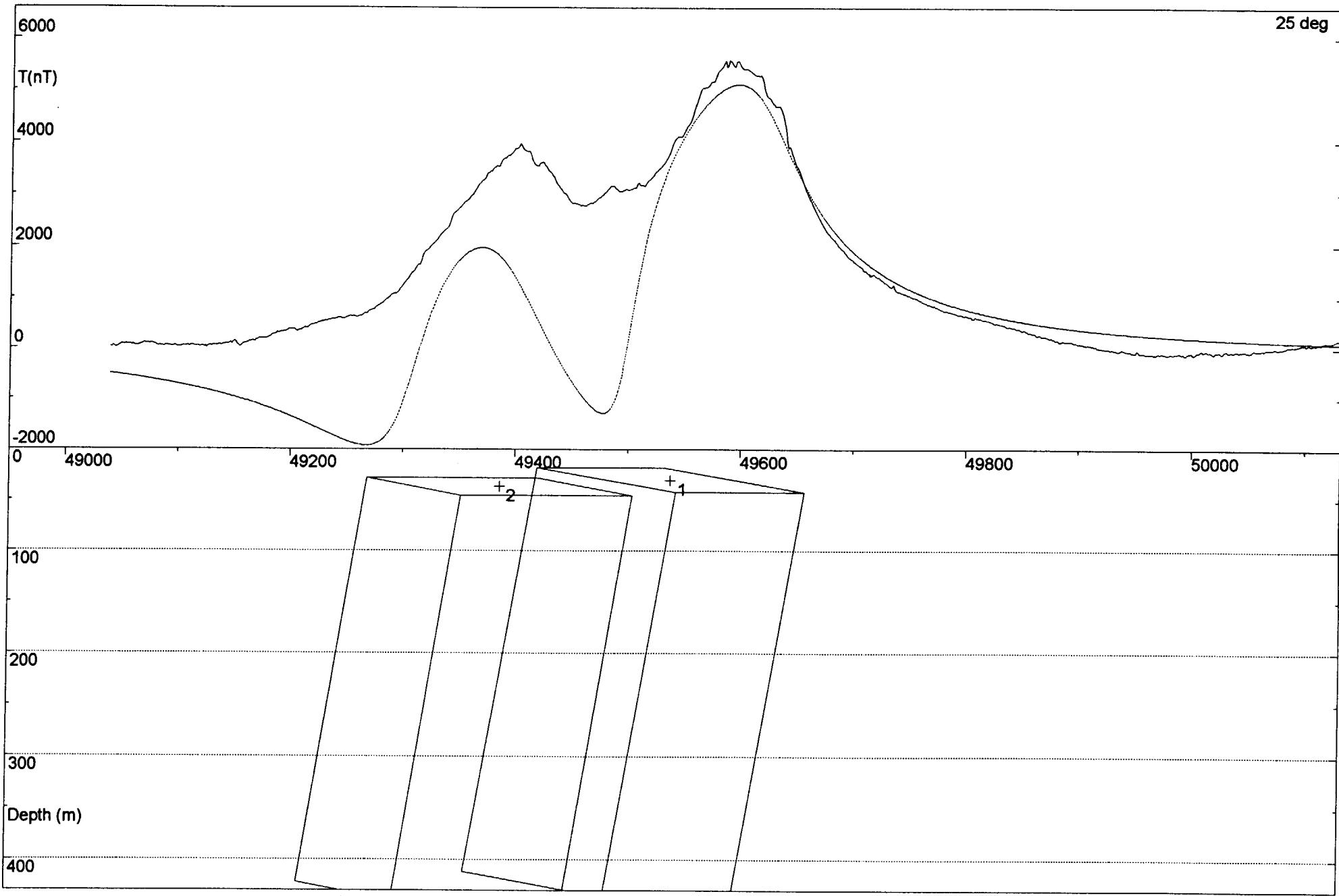


Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #2: RR3

Model: IDEAL MODEL

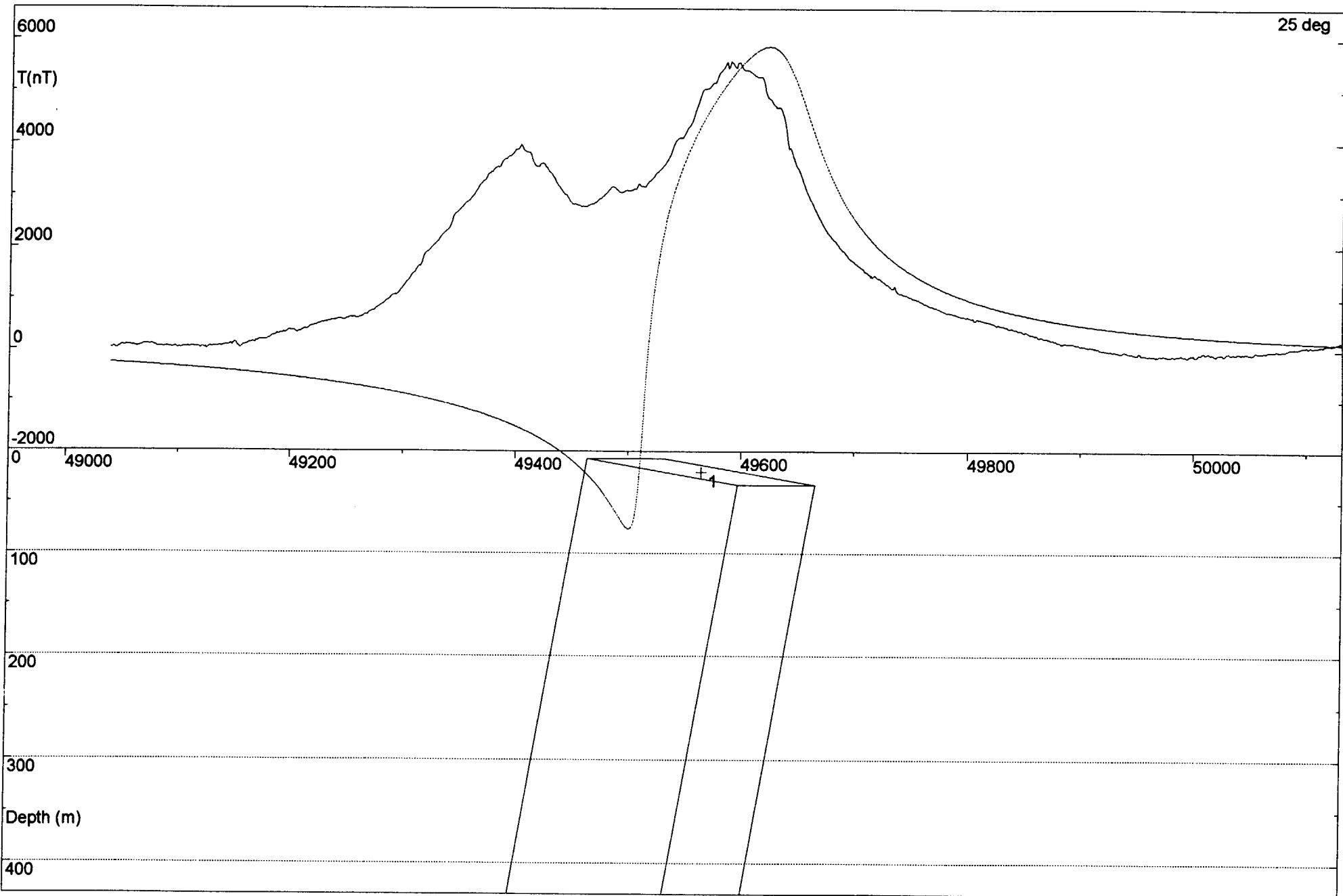
Calculation mode: Total Magnetic Intensity



Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #2: RR3

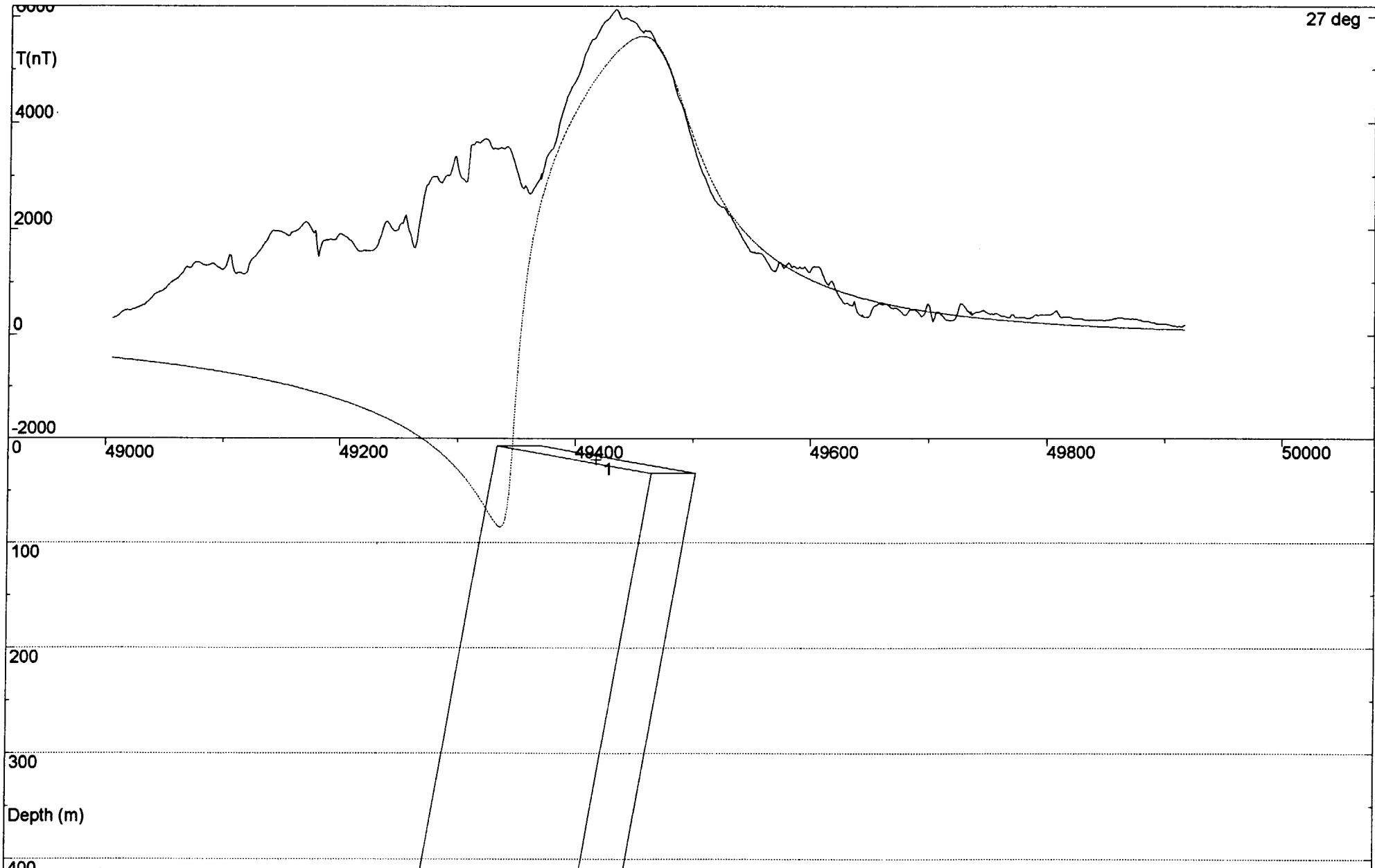
Model: ALTERNATIVE MODEL



Observations: Red Rock Prospect (AMG coordinates from GPS)

Profile #2: RR3

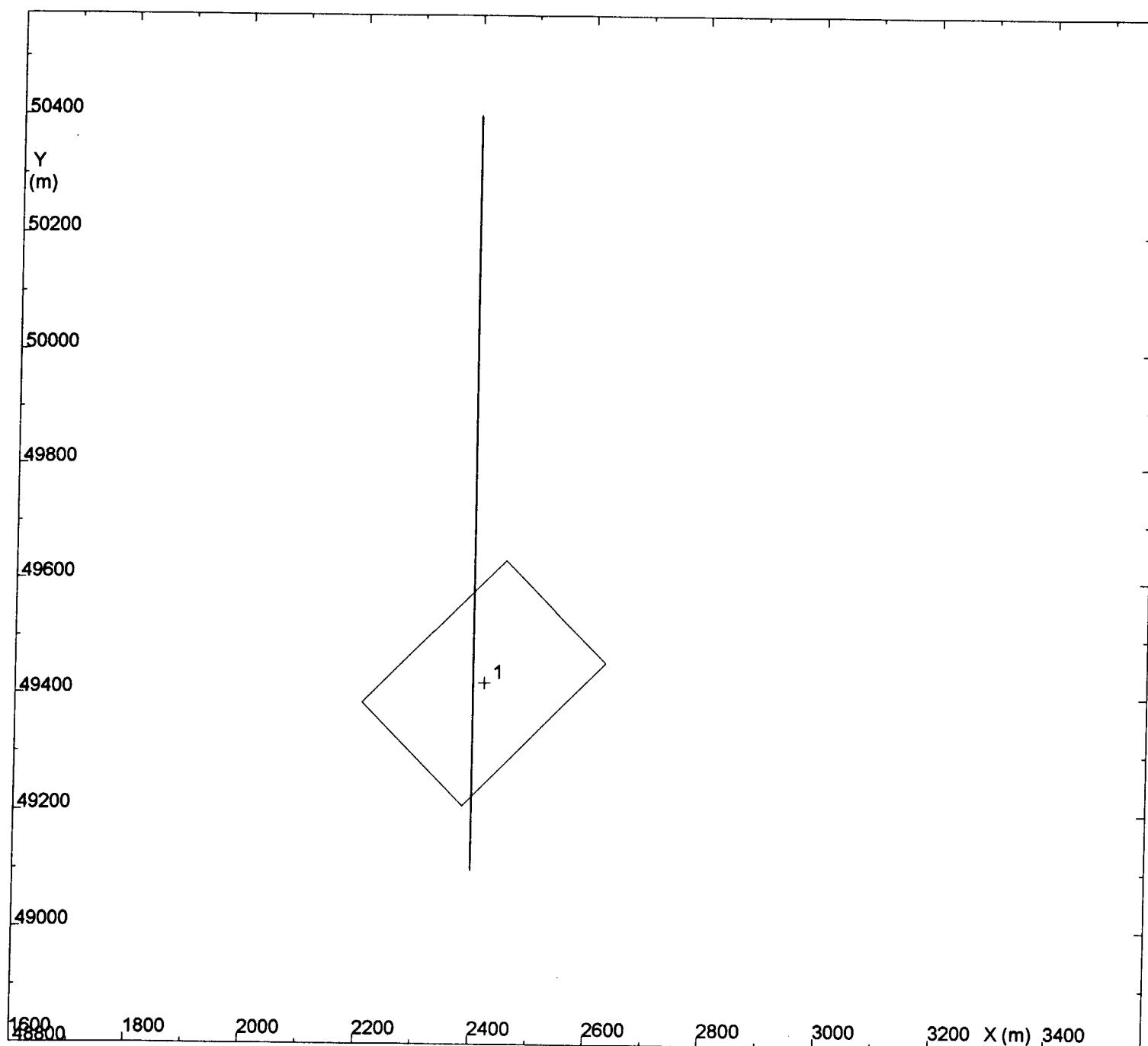
Model: ALTERNATIVE MODEL



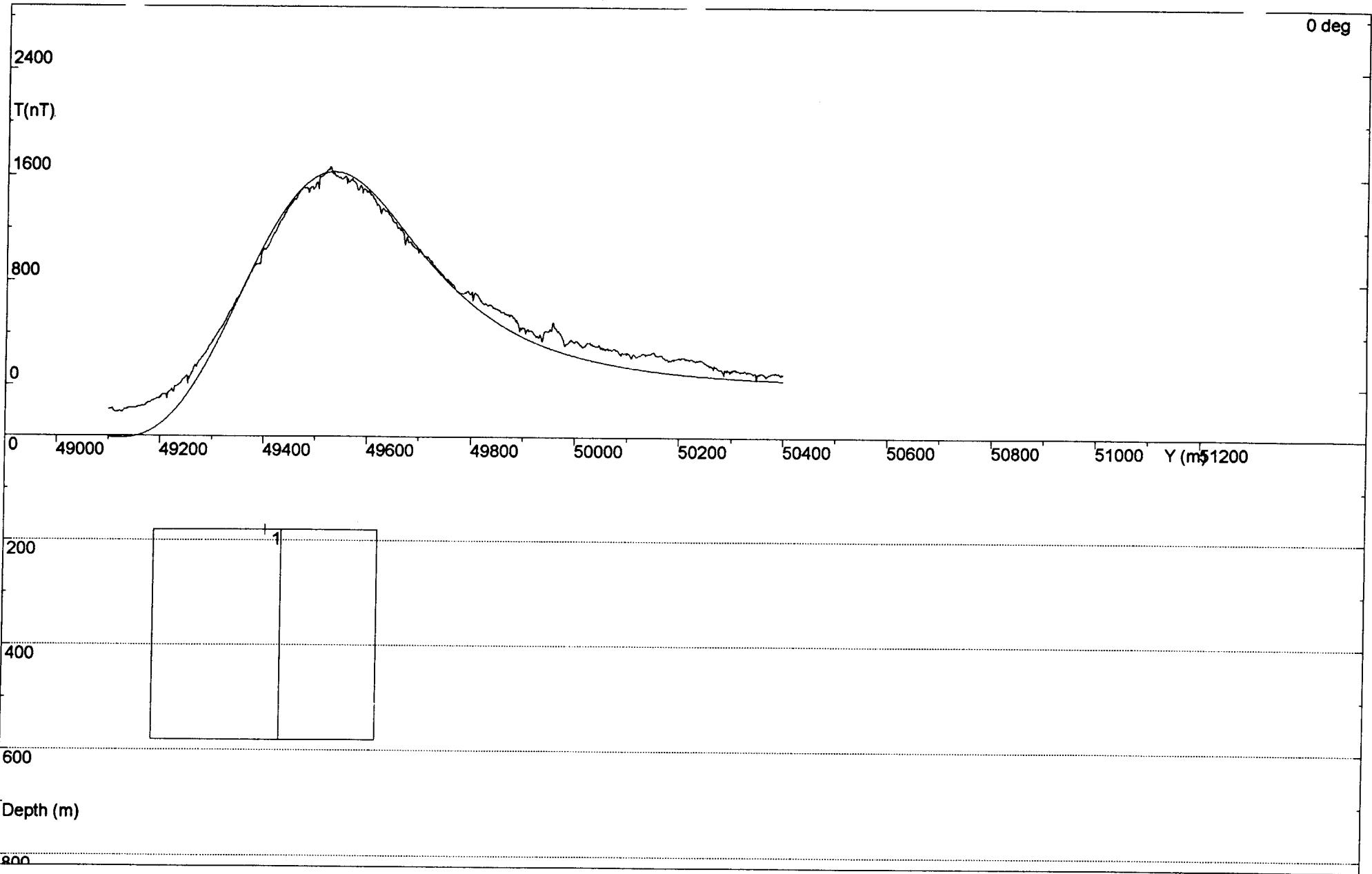
Observations: Red Rock Prospect (AMG coordinates from GPS)  
Profile #1: RR2  
Model:  
Calculation mode: Total Magnetic Intensity

# **RED ROCK WEST PROSPECT**

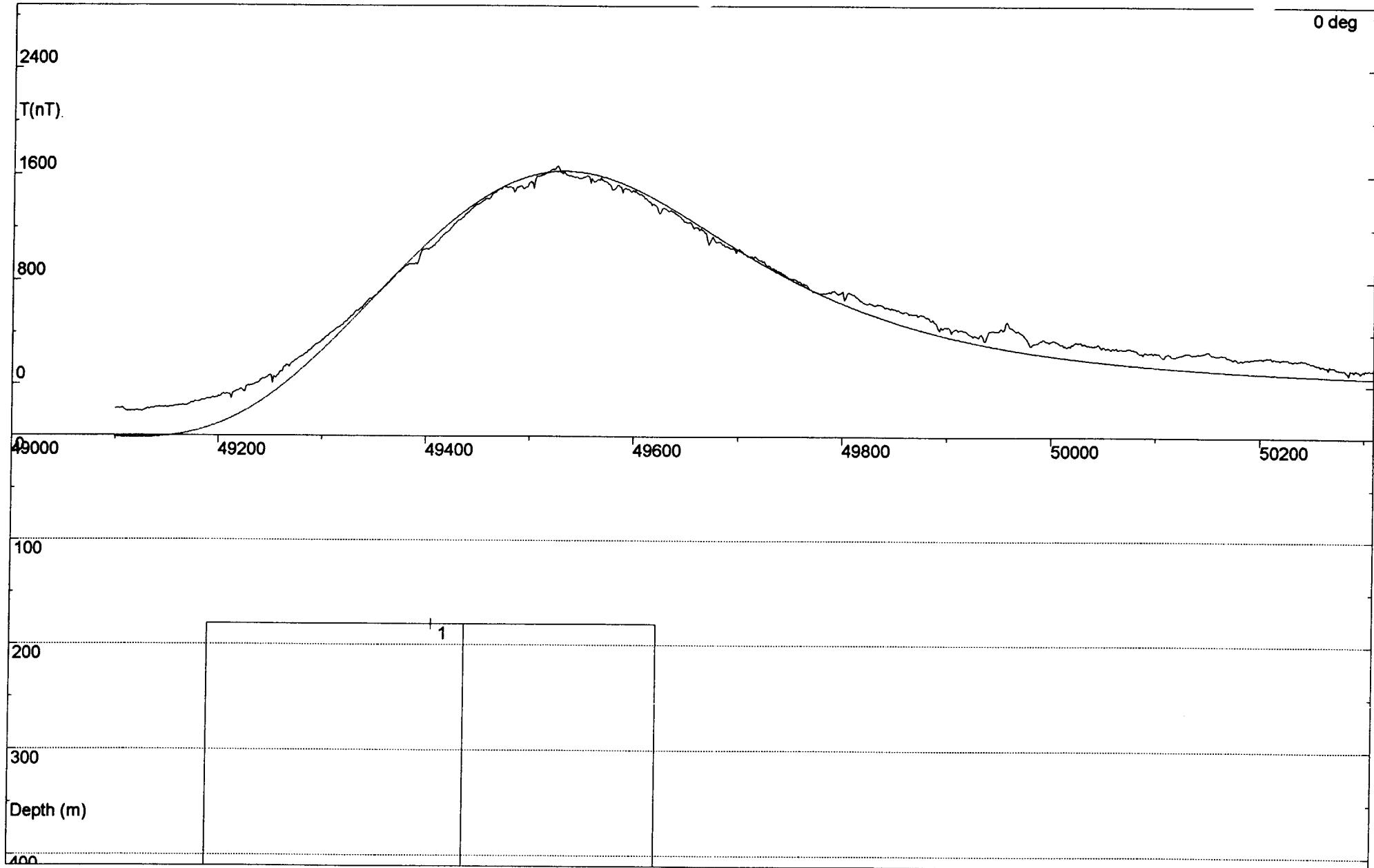
**OBSERVED  
AND  
MODELLED DATA**



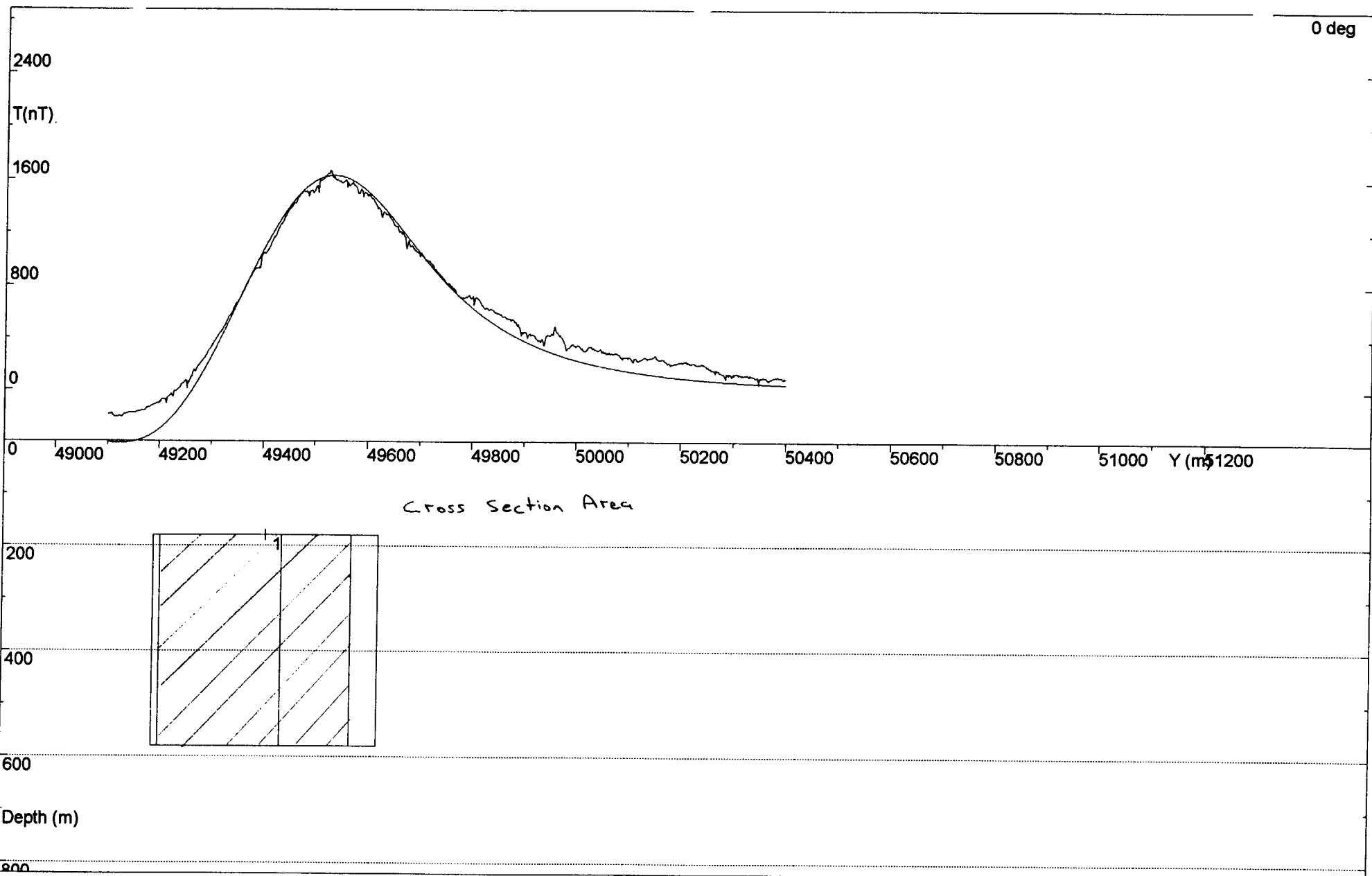
Observations: Red Rock West  
Model:



Observations: Red Rock West  
Profile #1: 372400 (WRR1)  
Model:  
Calculation mode: Total Magnetic Intensity



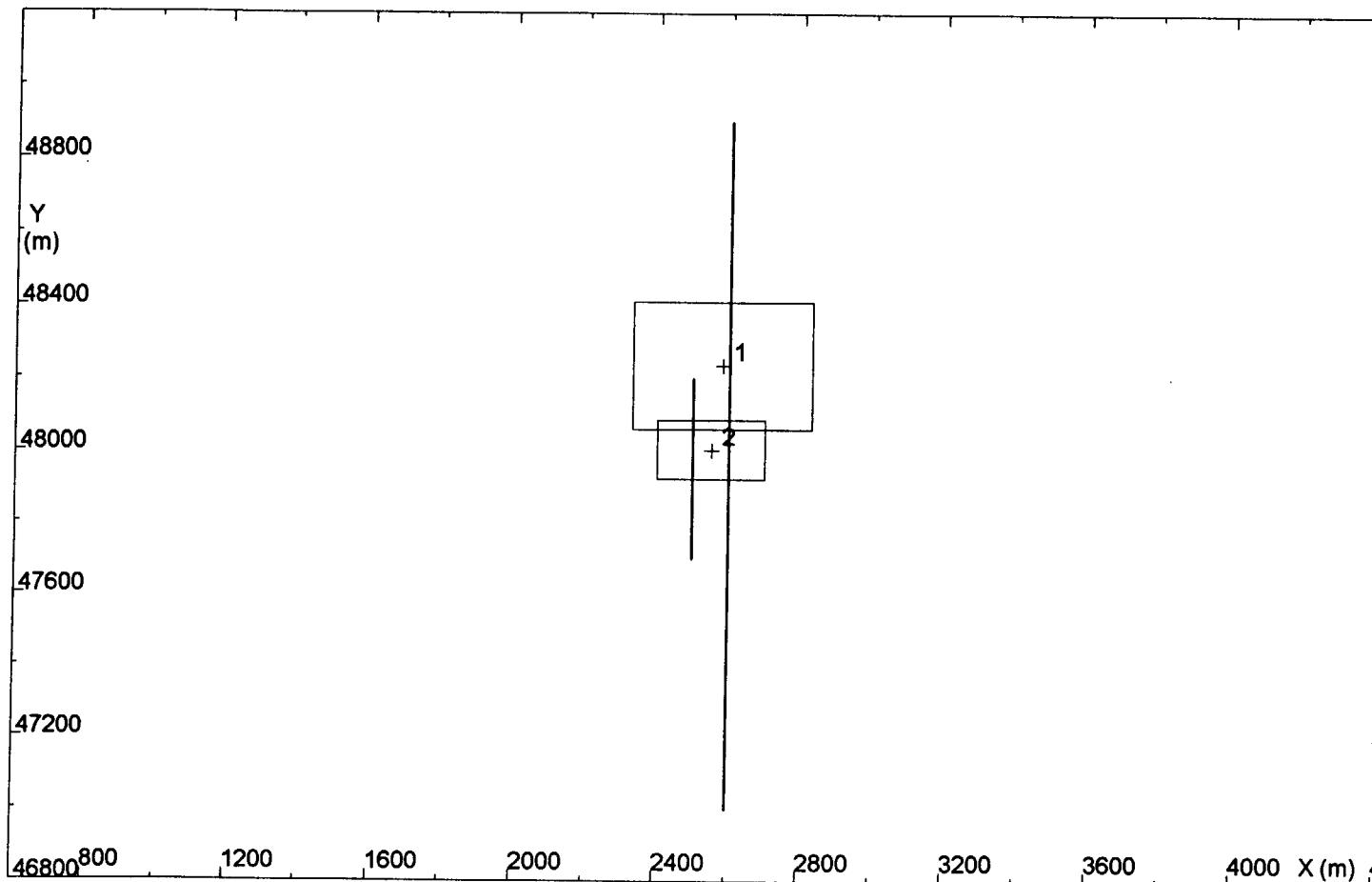
Observations: Red Rock West  
Profile #1: 372400 (WRR1)  
Model:  
Calculation mode: Total Magnetic Intensity



Observations: Red Rock West  
Profile #1: 372400 (WRR1)  
Model:  
Calculation mode: Total Magnetic Intensity

# **RED ROCK PADDOCK**

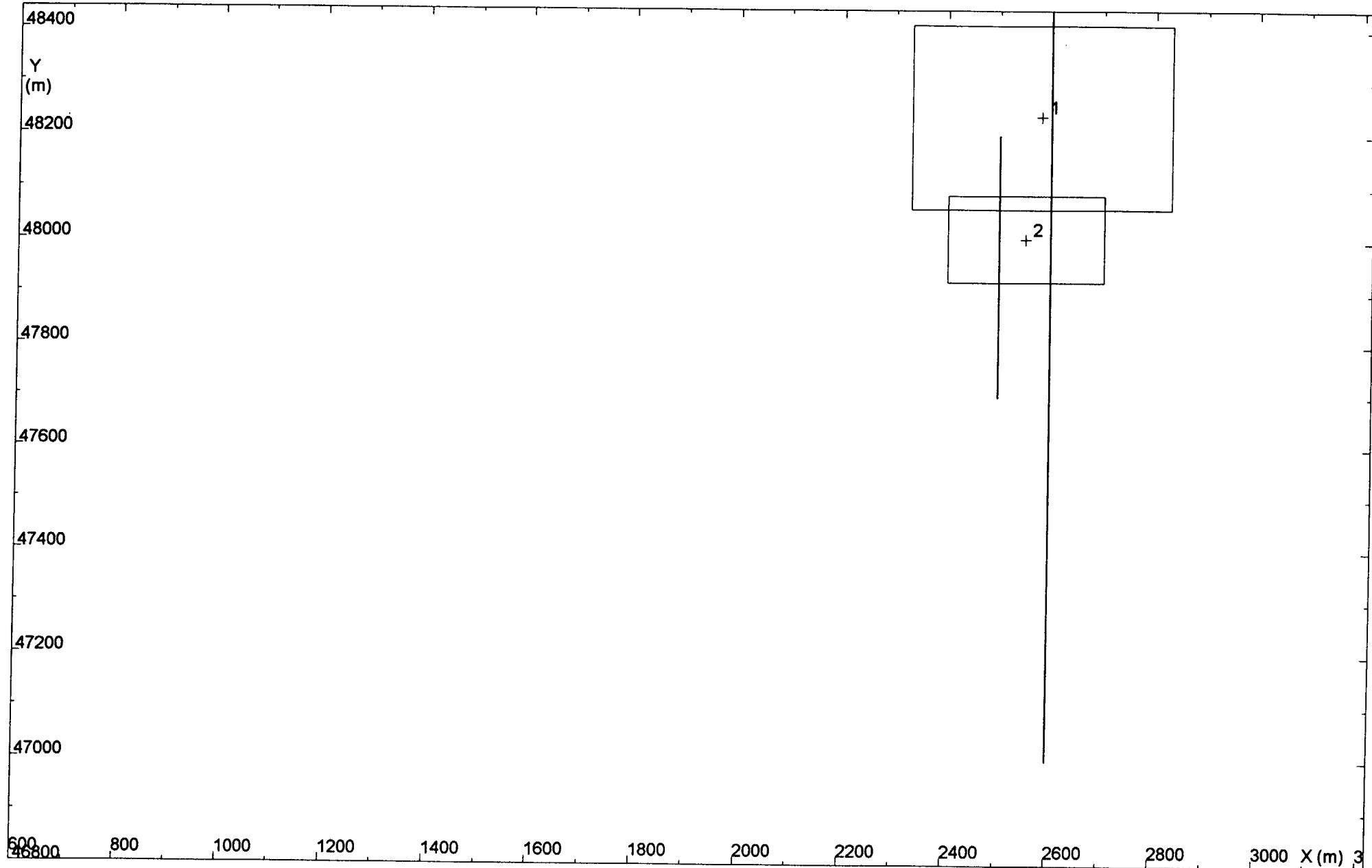
**OBSERVED  
AND  
MODELLED DATA**



Observations: Red Rock Paddock

Model:

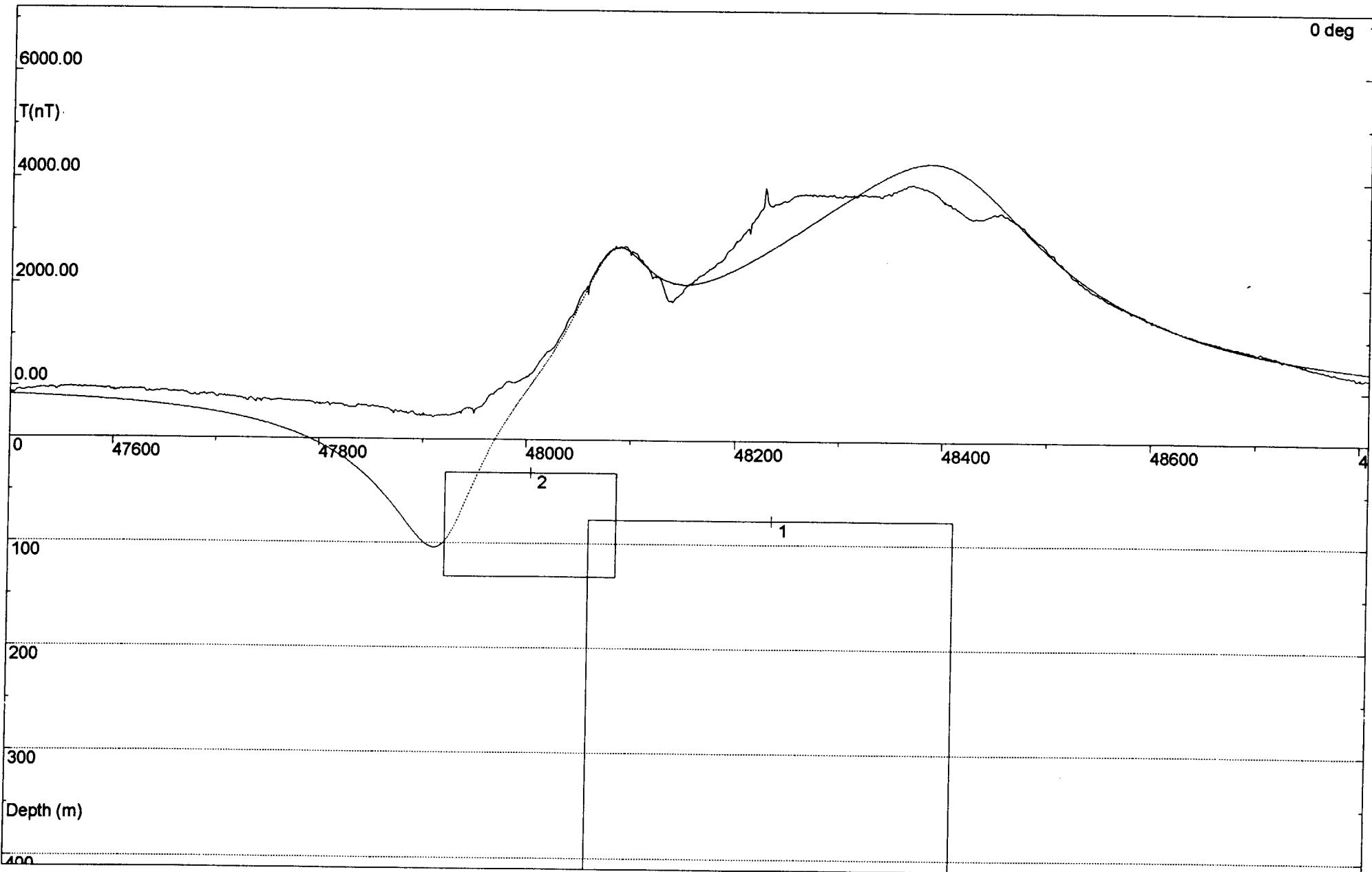
POTENT v3.07 Plan drawn at 14:05 27/09/1996 for Pasminco Exploration



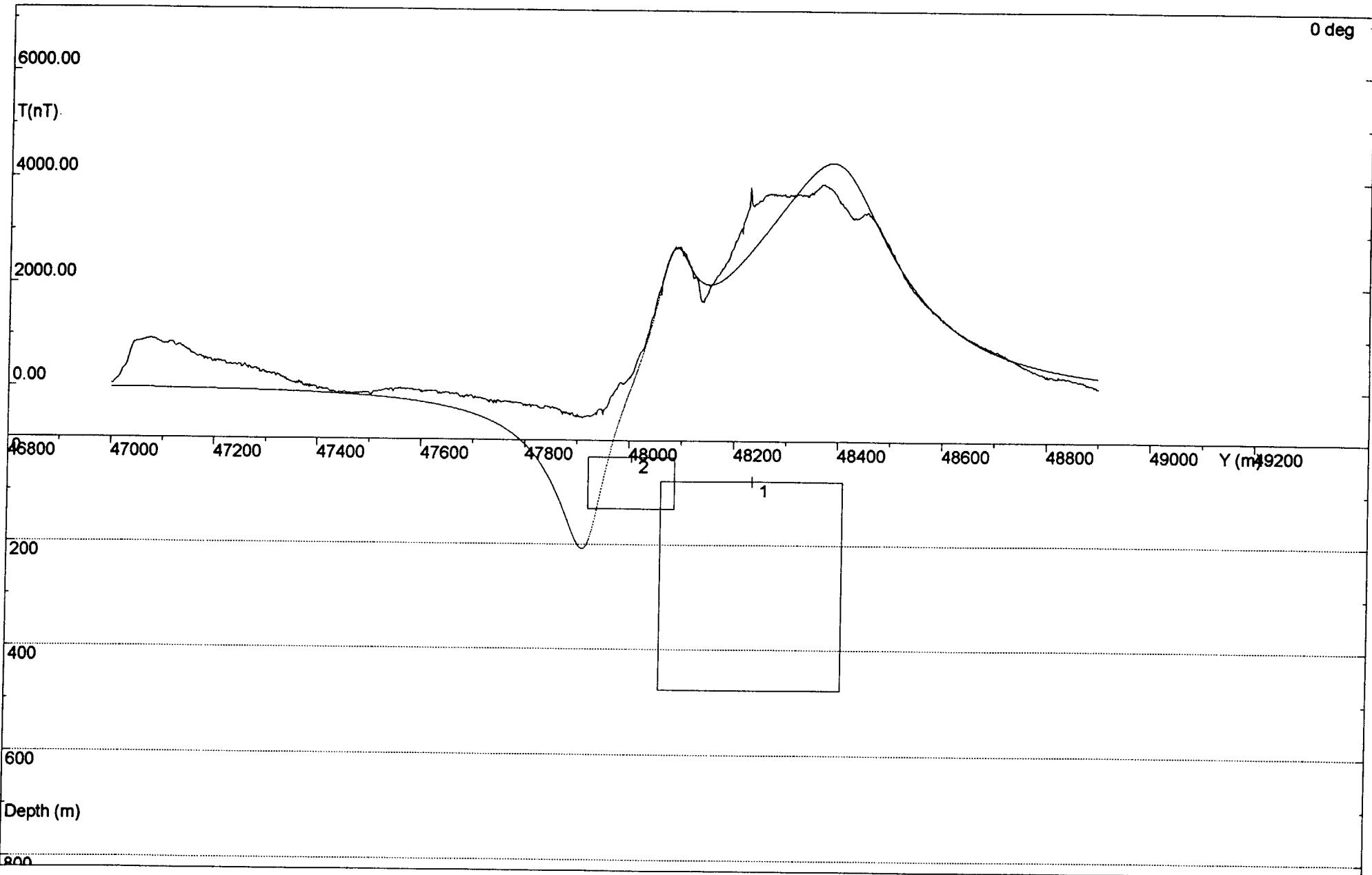
Observations: Red Rock Paddock

Model:

POTENT v3.07 Plan drawn at 14:11 27/09/1996 for Pasminco Exploration



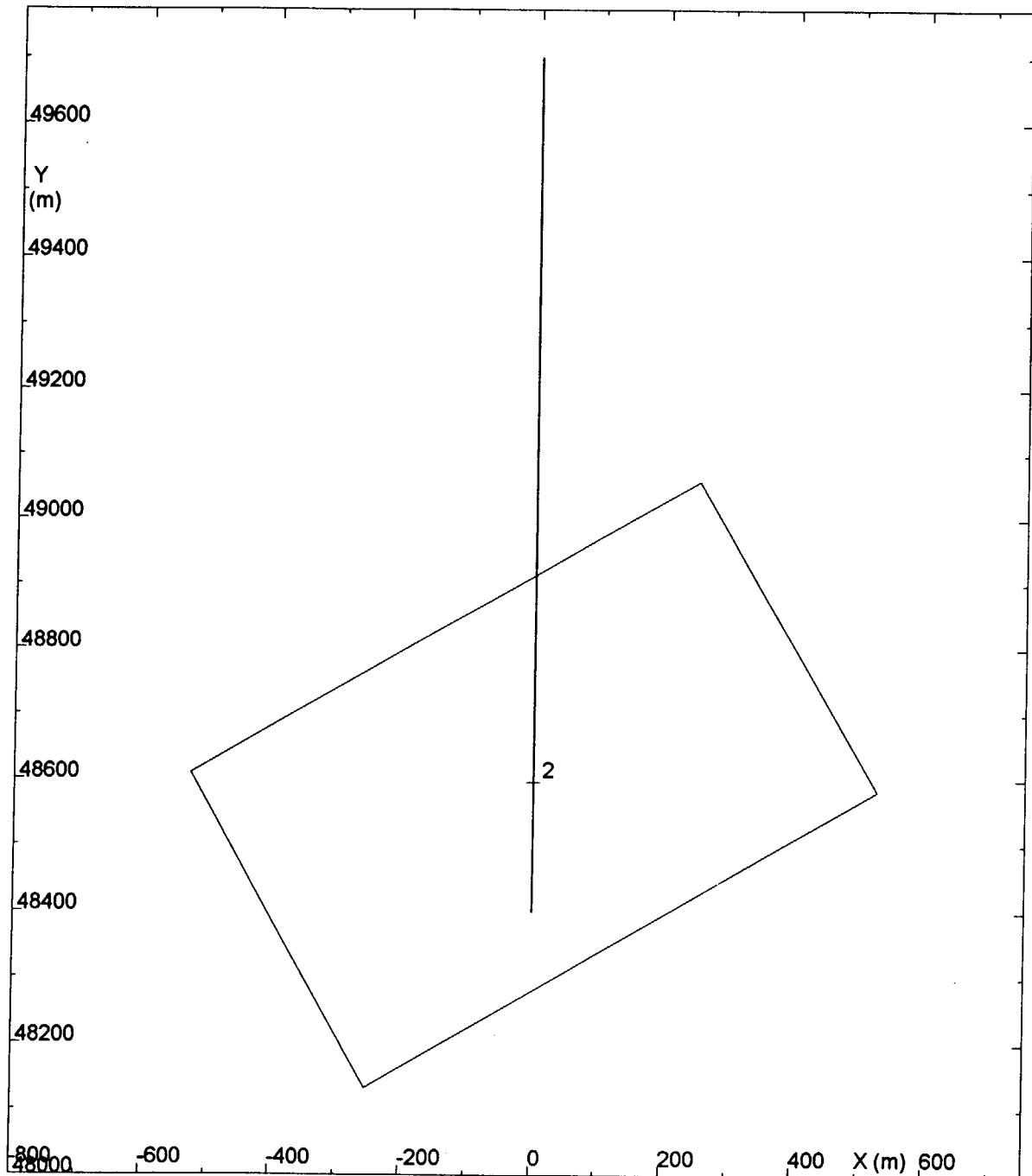
Observations: Red Rock Paddock  
Profile #1; 372600E (RRP1)  
Model:  
Calculation mode: Total Magnetic Intensity



Observations: Red Rock Paddock  
Profile #1: 372600E (RRP1)  
Model:  
Calculation mode: Total Magnetic Intensity

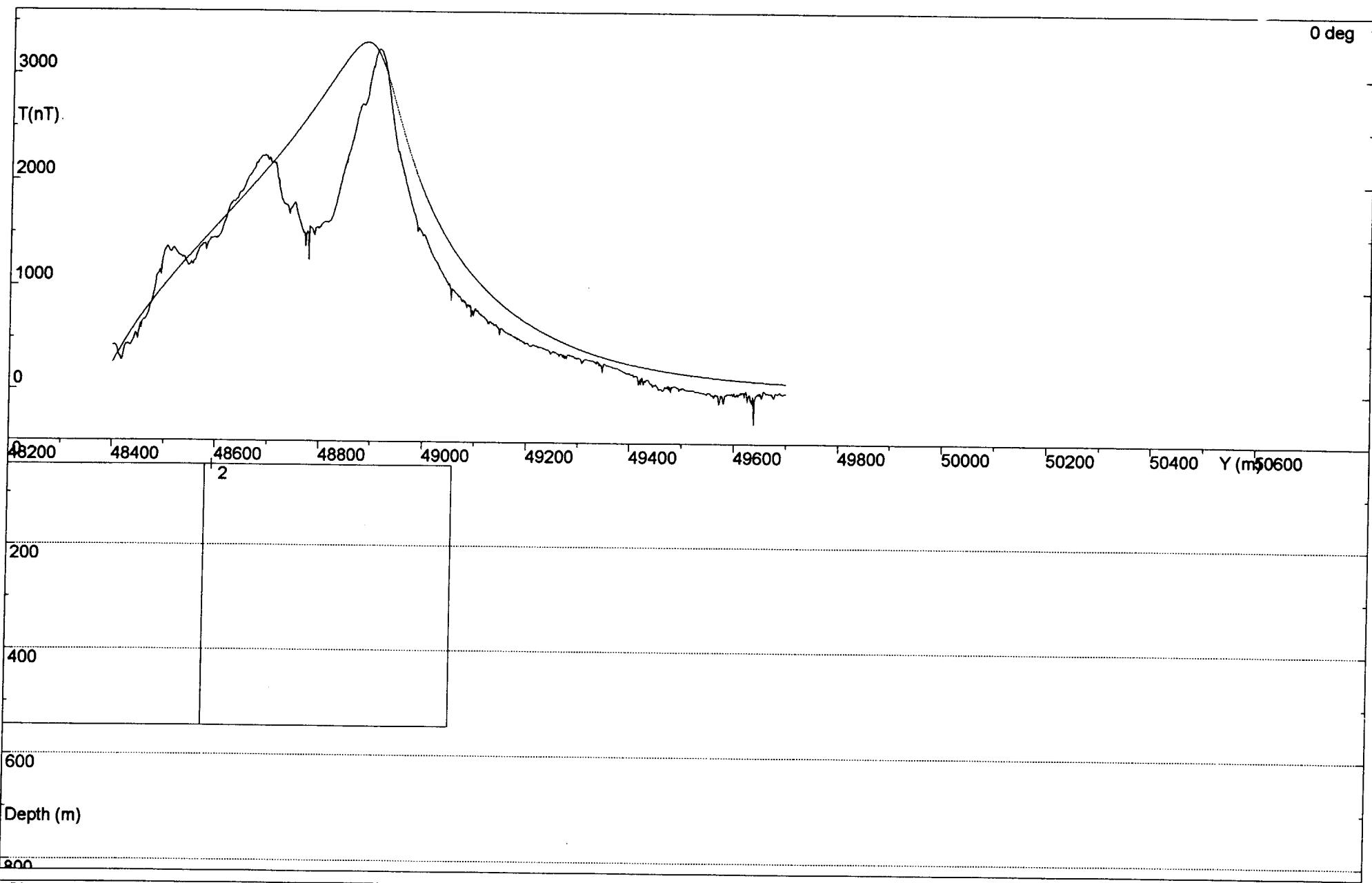
**RED ROCK PADDOCK AREA  
(370A)**

**OBSERVED  
AND  
MODELLED DATA**

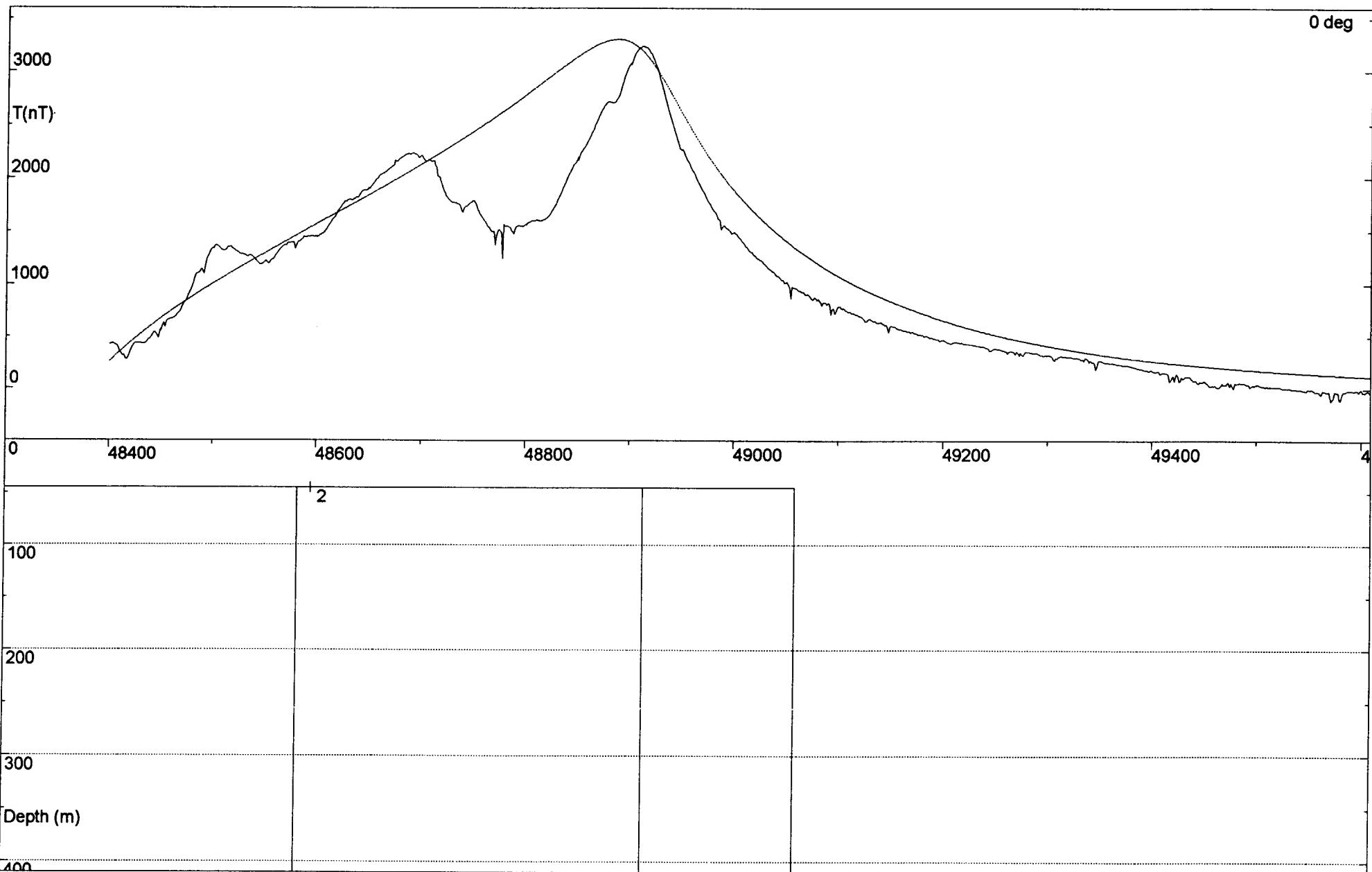


Observations: Red Rock Paddock Area

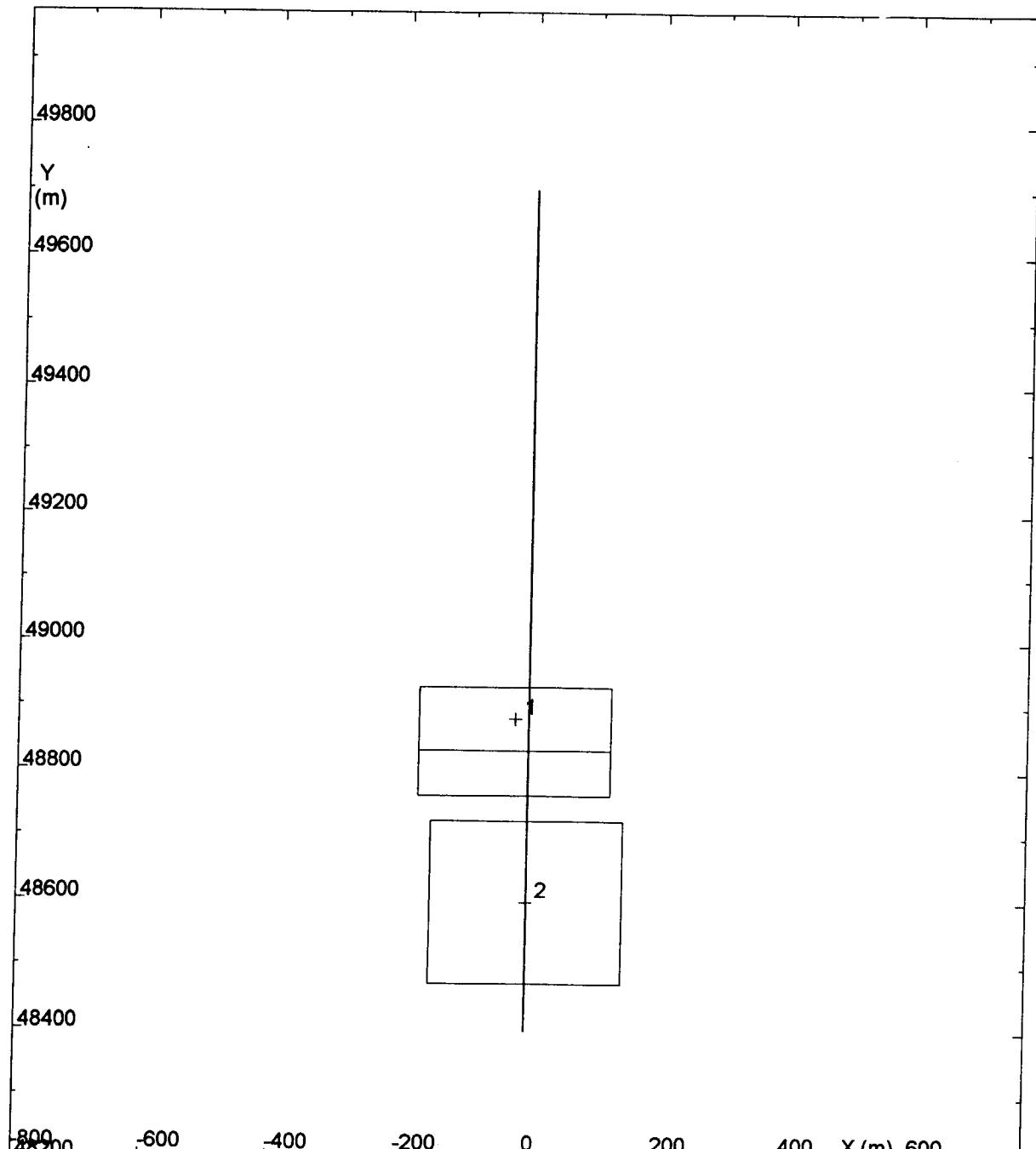
Model: Red Rock style



Observations: Red Rock Paddock Area  
Profile #1: 370000E (370A)  
Model: Red Rock style  
Calculation mode: Total Magnetic Intensity

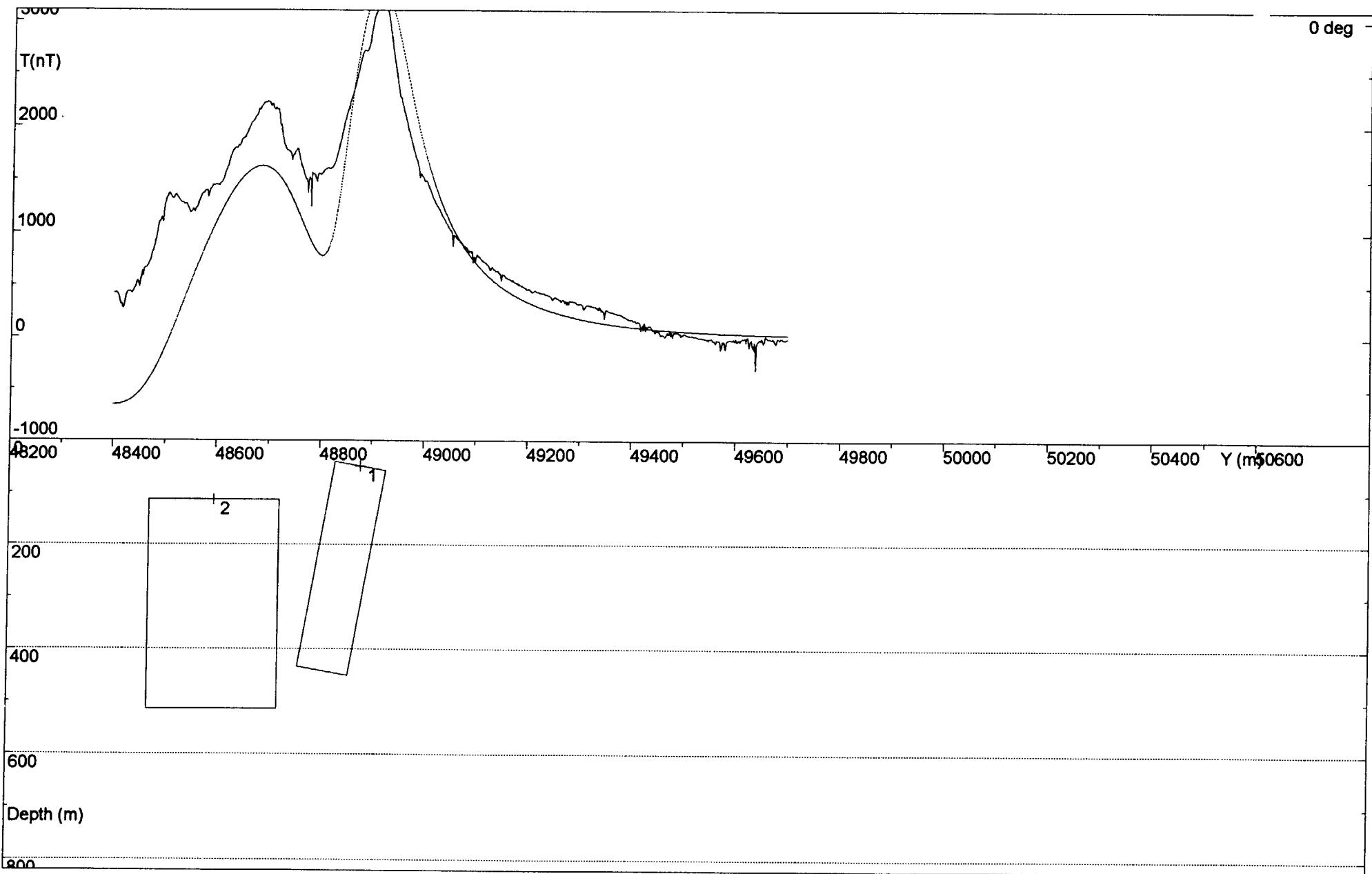


Observations: Red Rock Paddock Area  
Profile #1; 370000E (370A)  
Model: Red Rock style  
Calculation mode: Total Magnetic Intensity



Observations: Red Rock Paddock Area

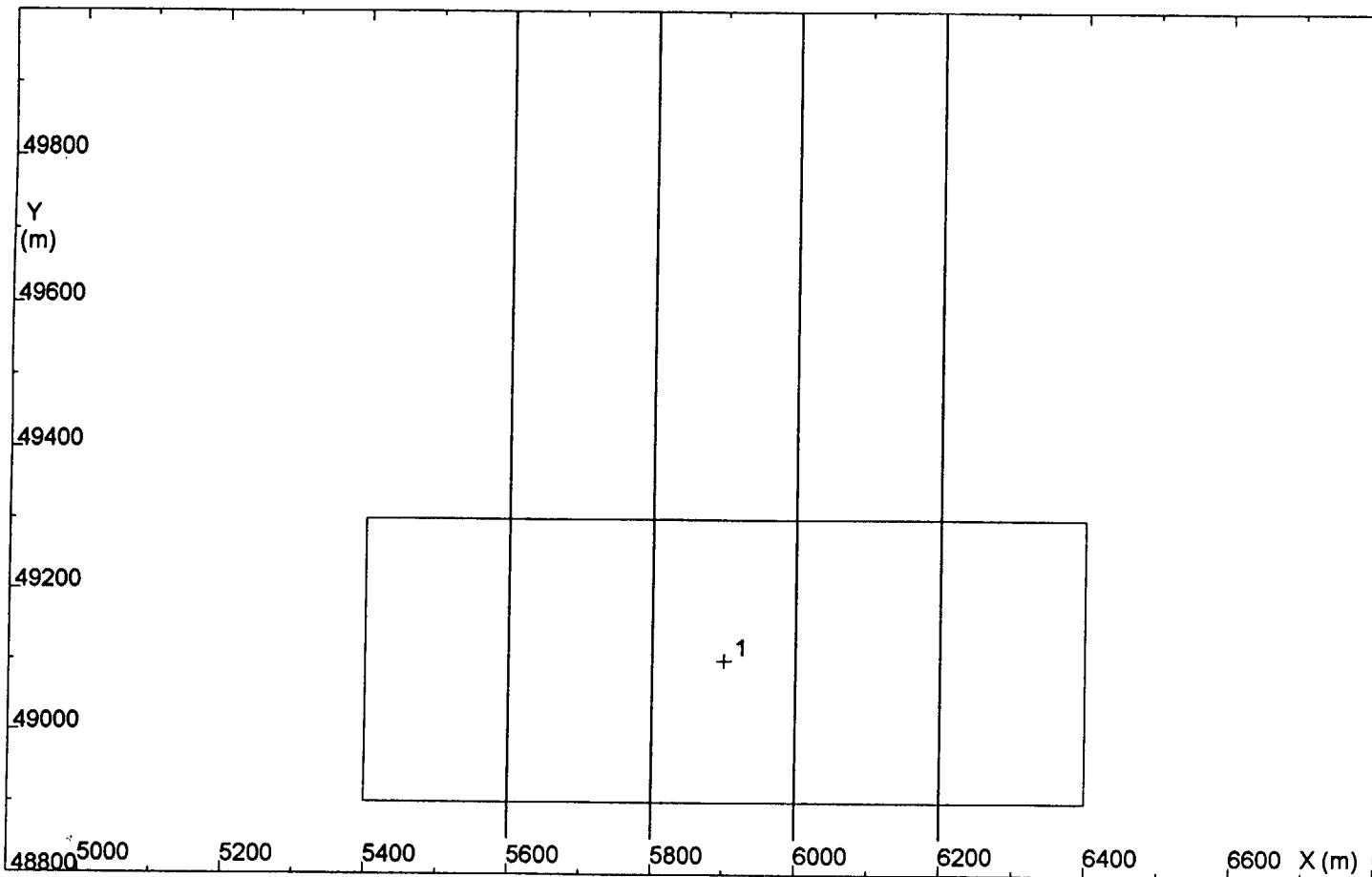
Model: Alternative



Observations: Red Rock Paddock Area  
Profile #1: 370000E (370A)  
Model: Alternative  
Calculation mode: Total Magnetic Intensity

# **GILLENS BORE PROSPECT**

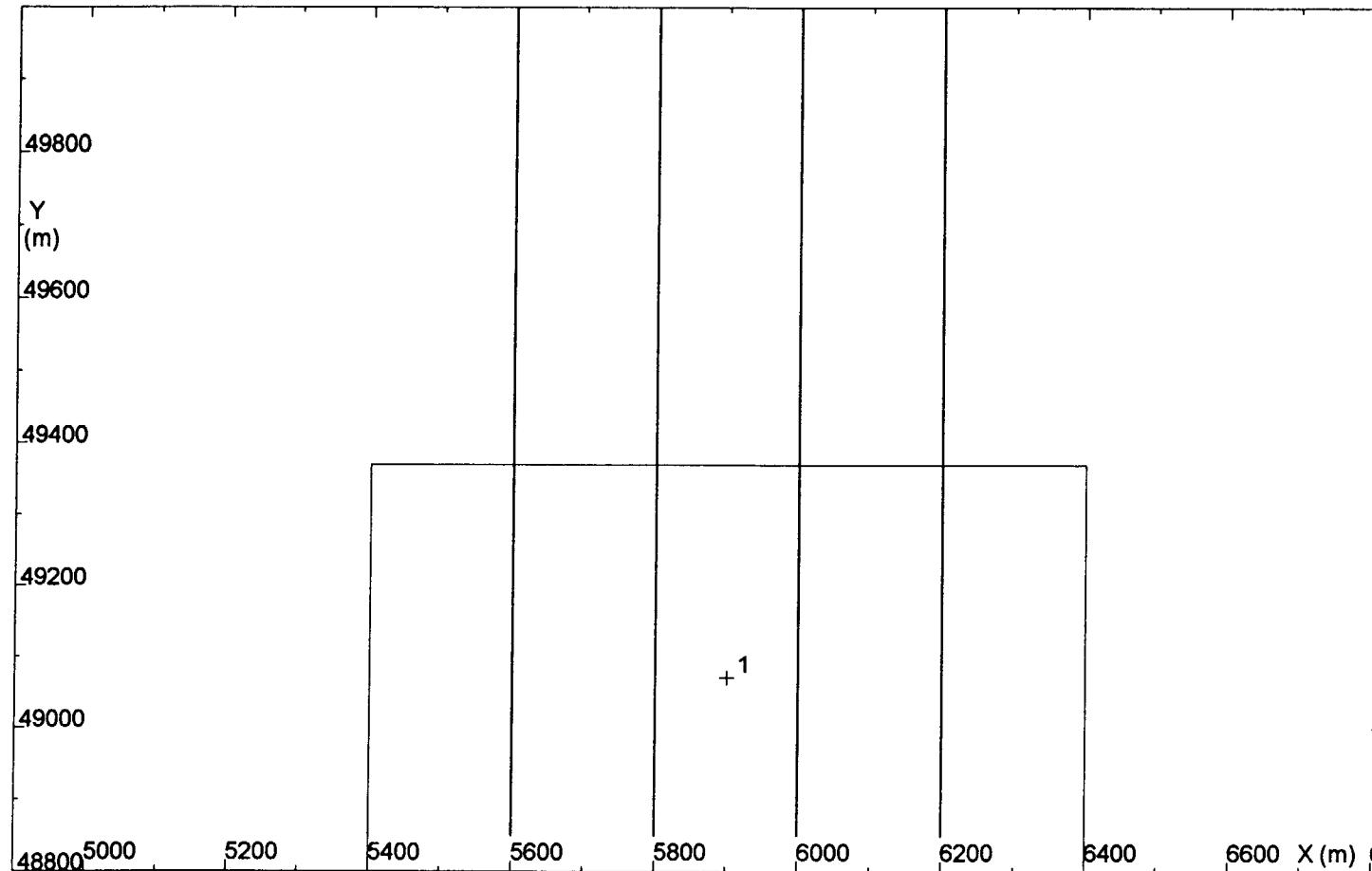
**OBSERVED  
AND  
MODELLED DATA**



Observations: Gillens Bore Prospect

Model: GB2

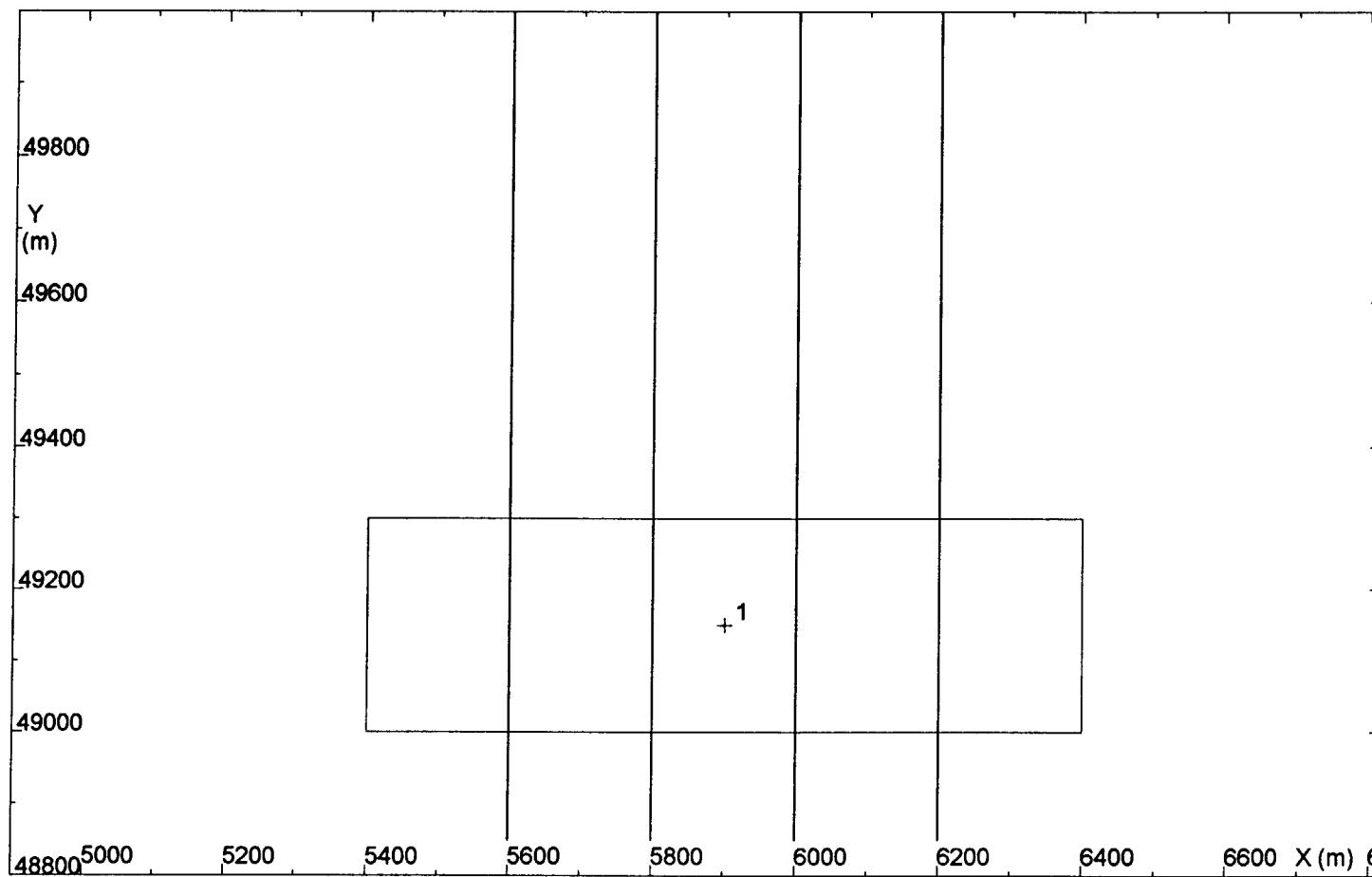
POTENT v3.07 Plan drawn at 13:05 27/09/1996 for Pasminco Exploration



Observations: Gillens Bore Prospect

Model: C<sub>4</sub>B<sub>1</sub>

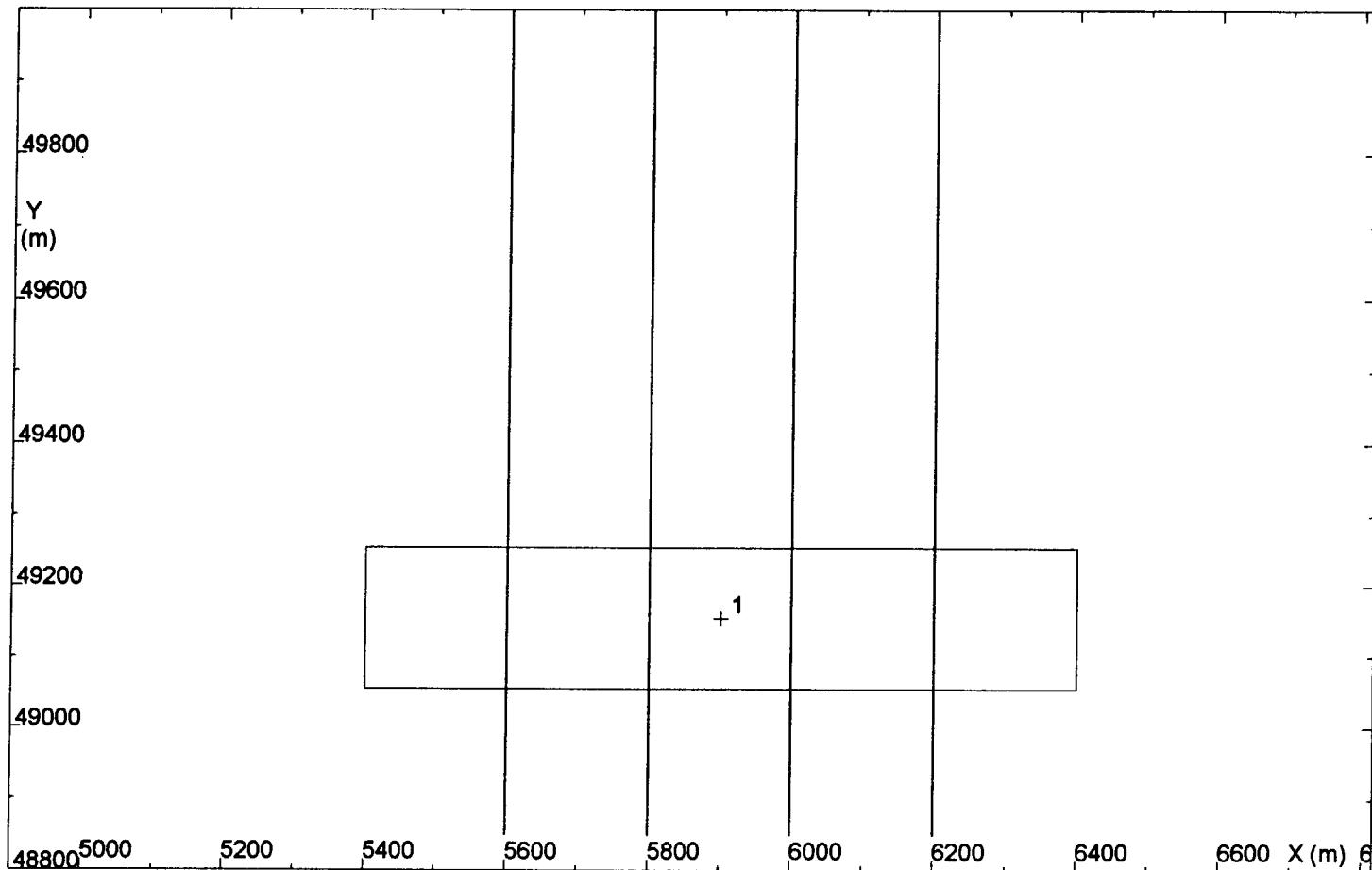
POTENT v3.07 Plan drawn at 13:29 27/09/1996 for Pasminco Exploration



Observations: Gillens Bore Prospect

Model: GR3

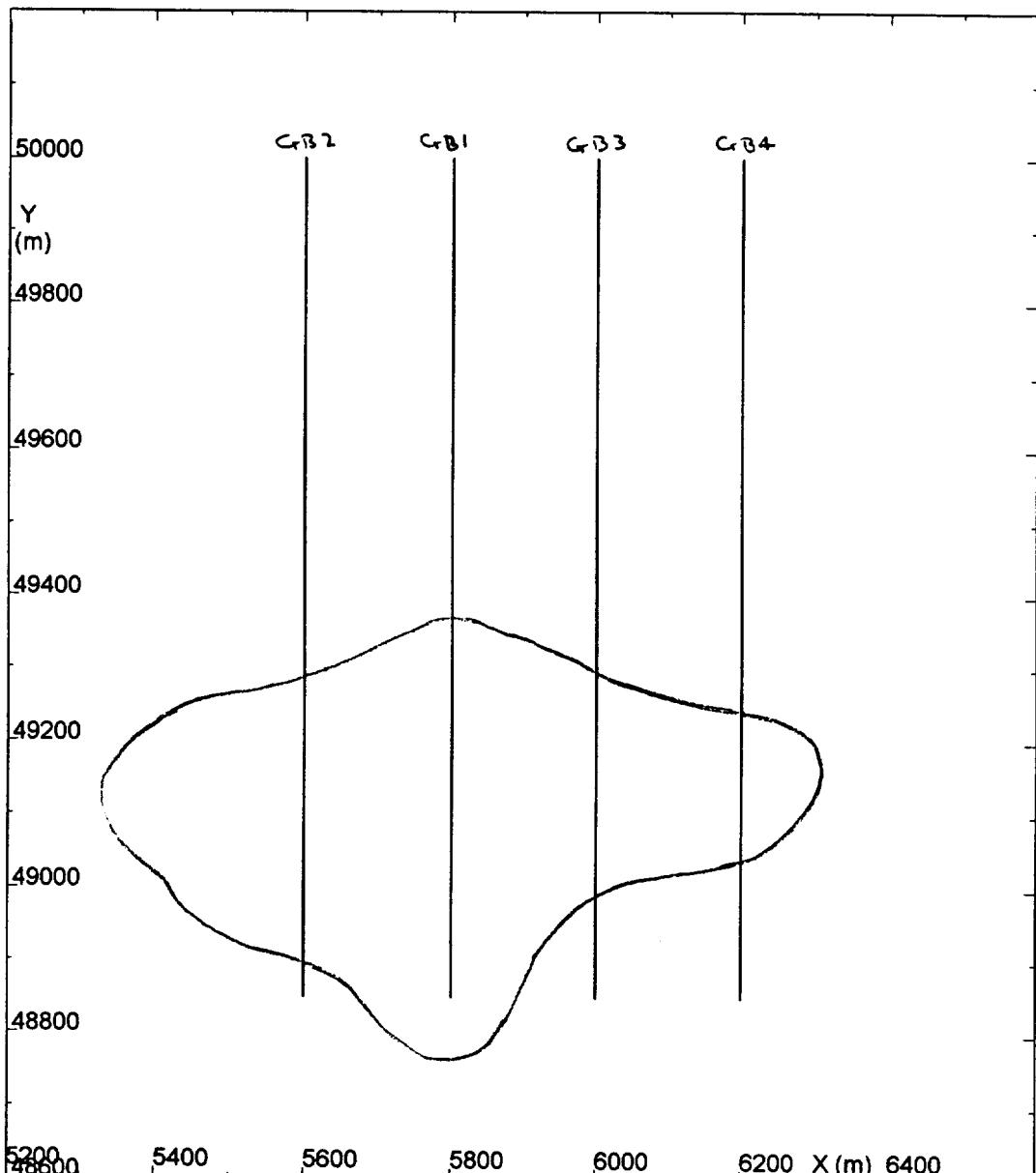
POTENT v3.07 Plan drawn at 13:16 27/09/1996 for Pasminco Exploration



Observations: Gillens Bore Prospect

Model: Cr B 4

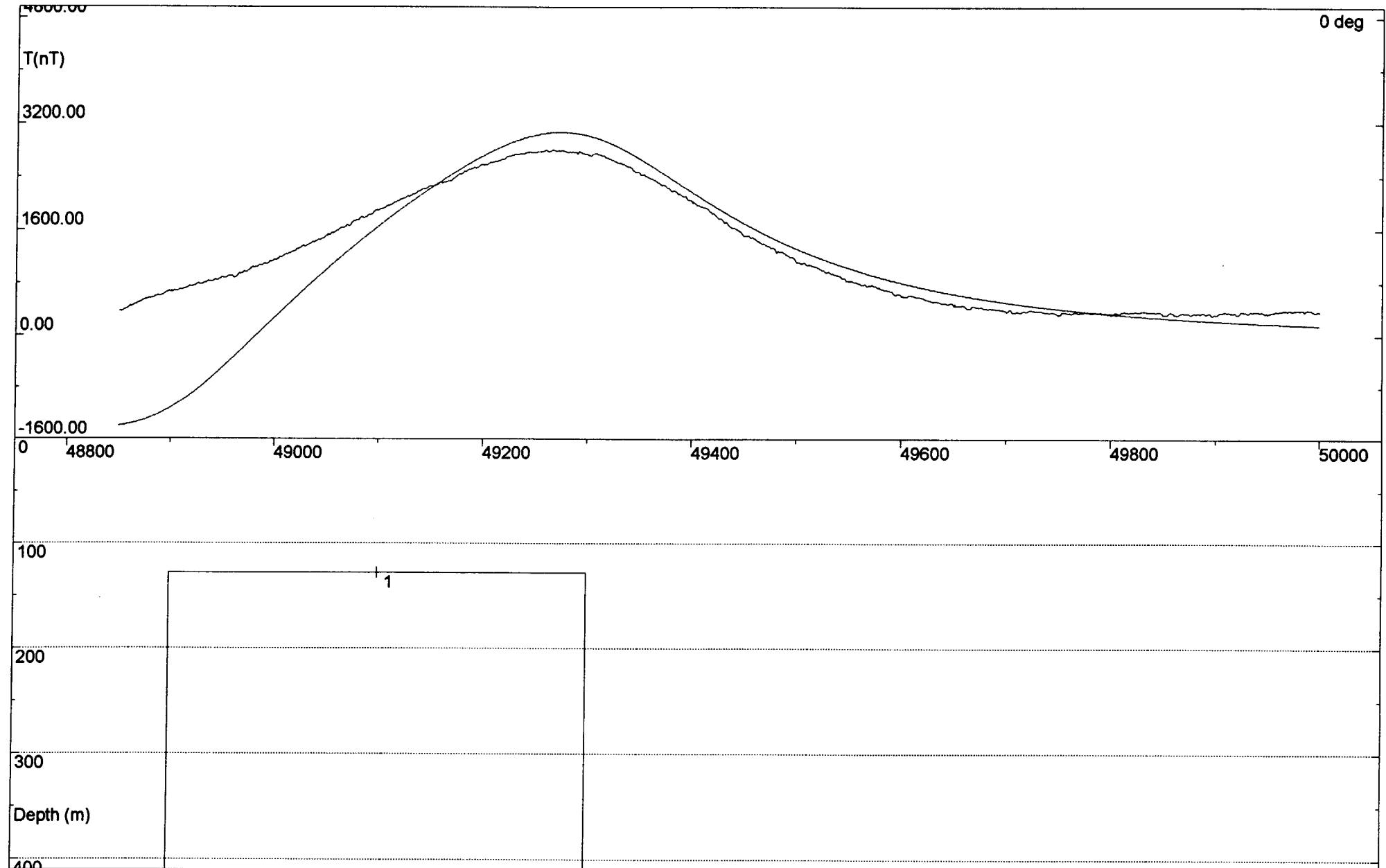
POTENT v3.07 Plan drawn at 13:07 27/09/1996 for Pasminco Exploration



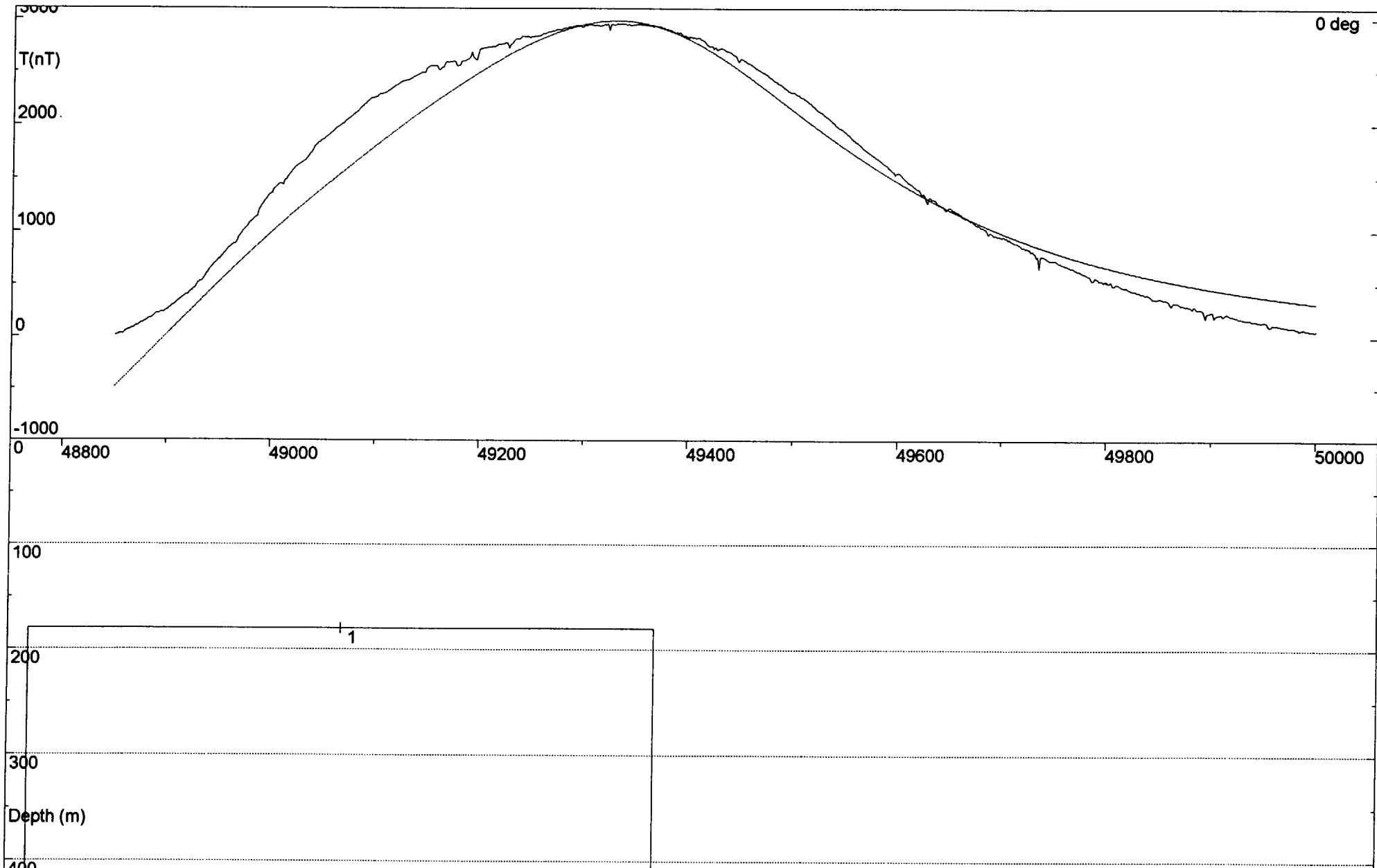
Observations: Gillens Bore Prospect

Model:

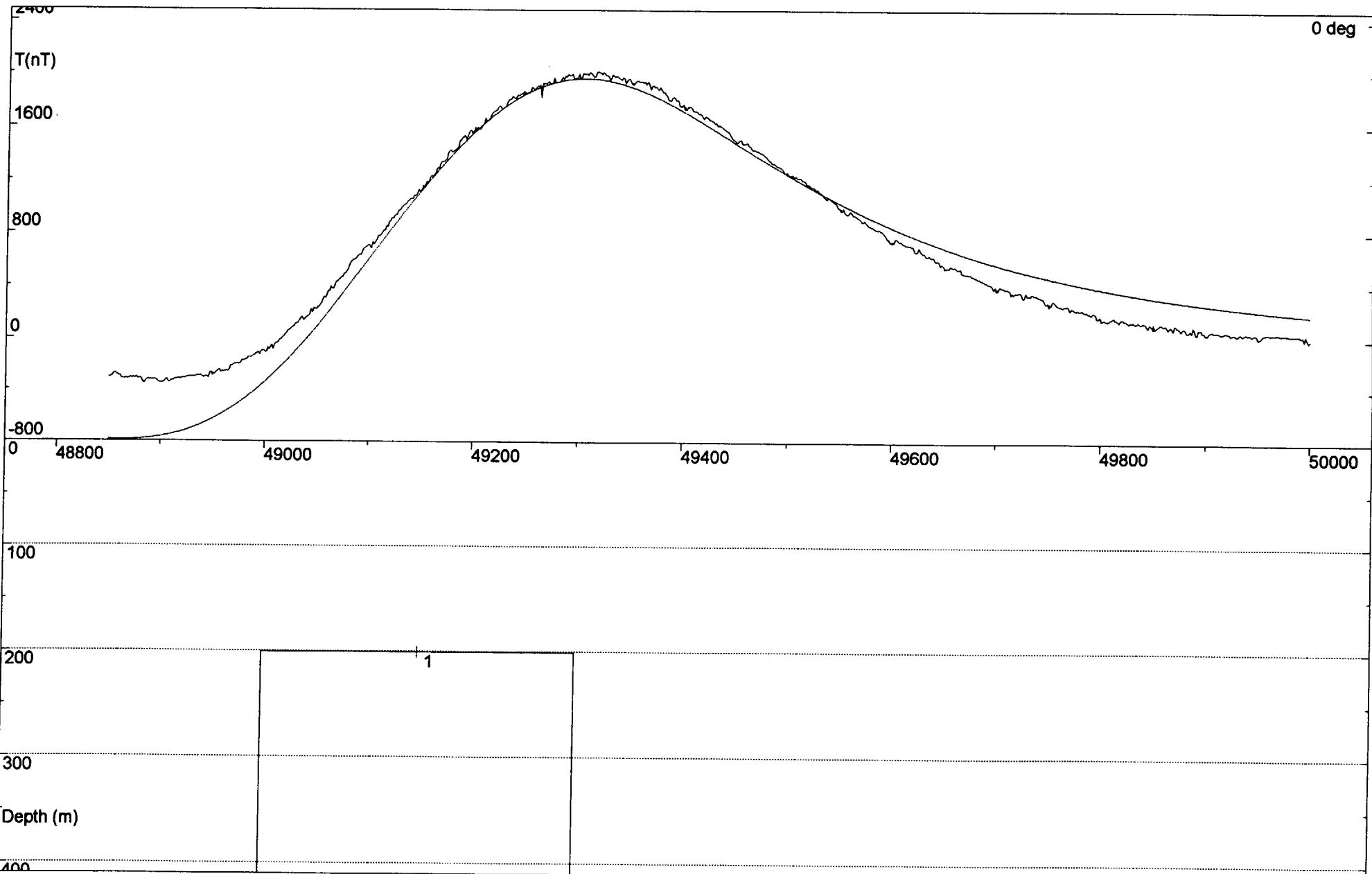
POTENT v3.08 Plan drawn at 10:38 15/10/1996 for Pasminco Exploration



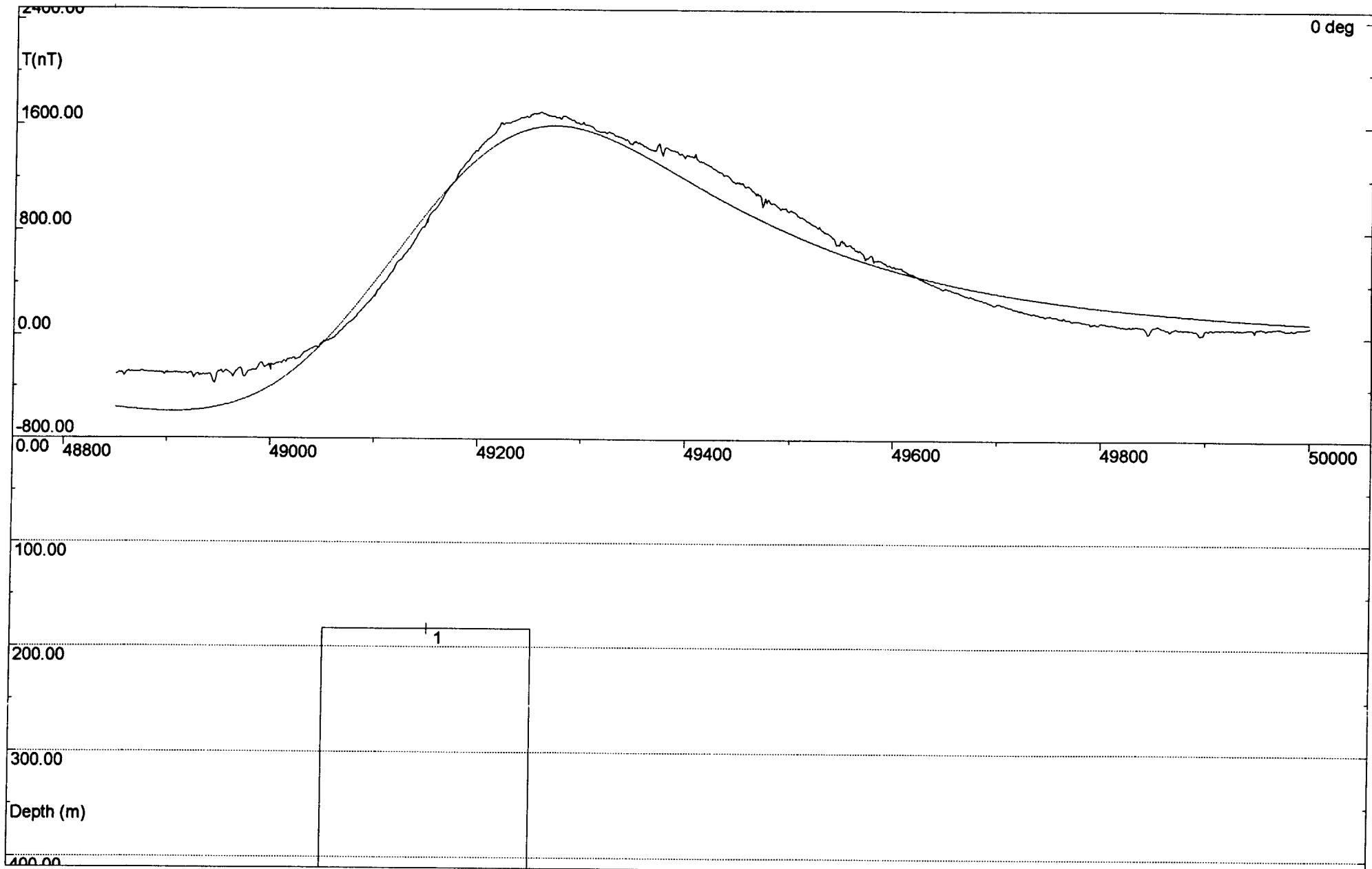
Observations: Gillens Bore Prospect  
Profile #1; 365600E (GB2)  
Model:  
Calculation mode: Total Magnetic Intensity



Observations: Gillens Bore Prospect  
Profile #: 365800E (GB1)  
Model:  
Calculation mode: Total Magnetic Intensity



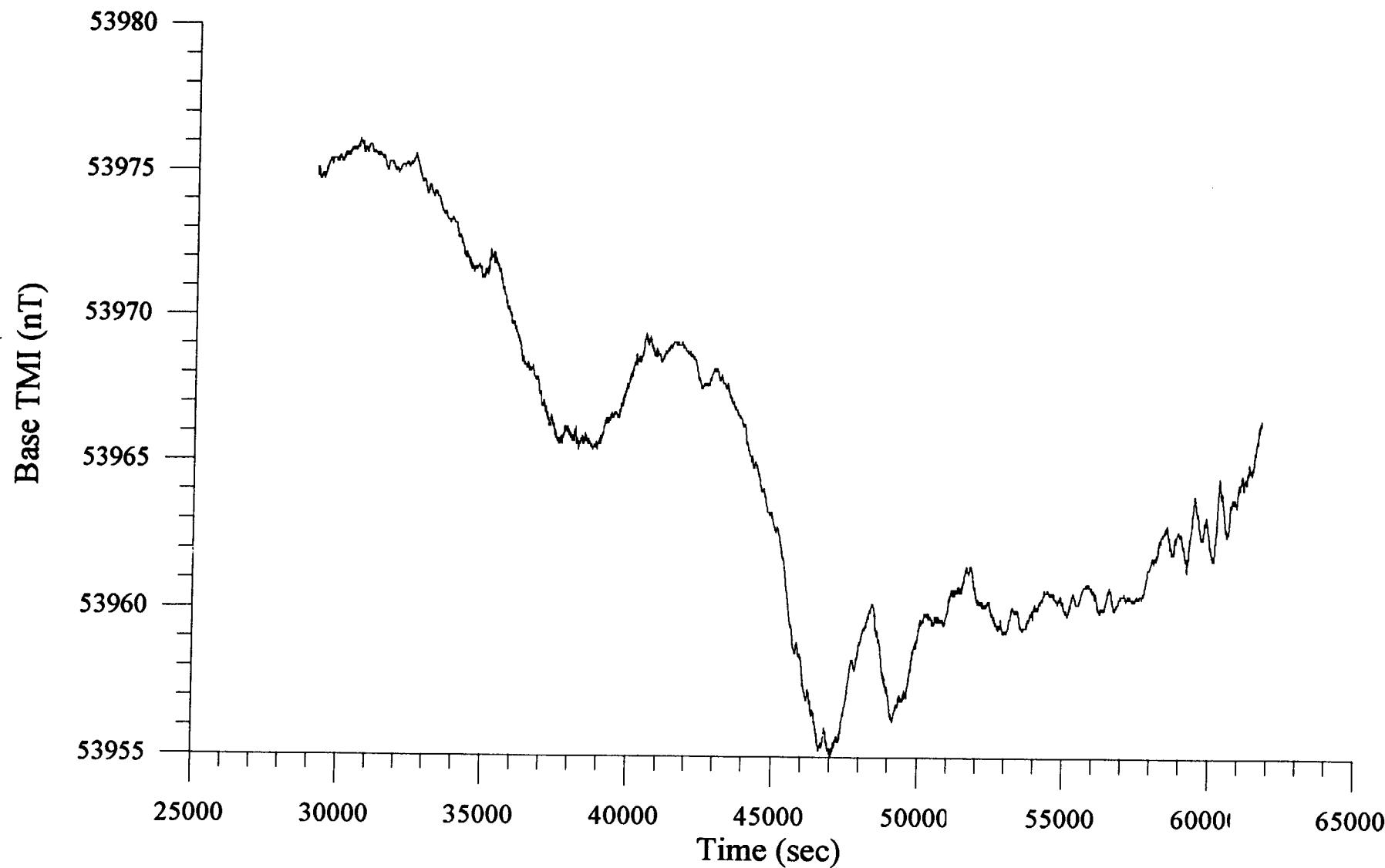
Observations: Gillens Bore Prospect  
Profile #1; 366000E (GB3)  
Model:  
Calculation mode: Total Magnetic Intensity



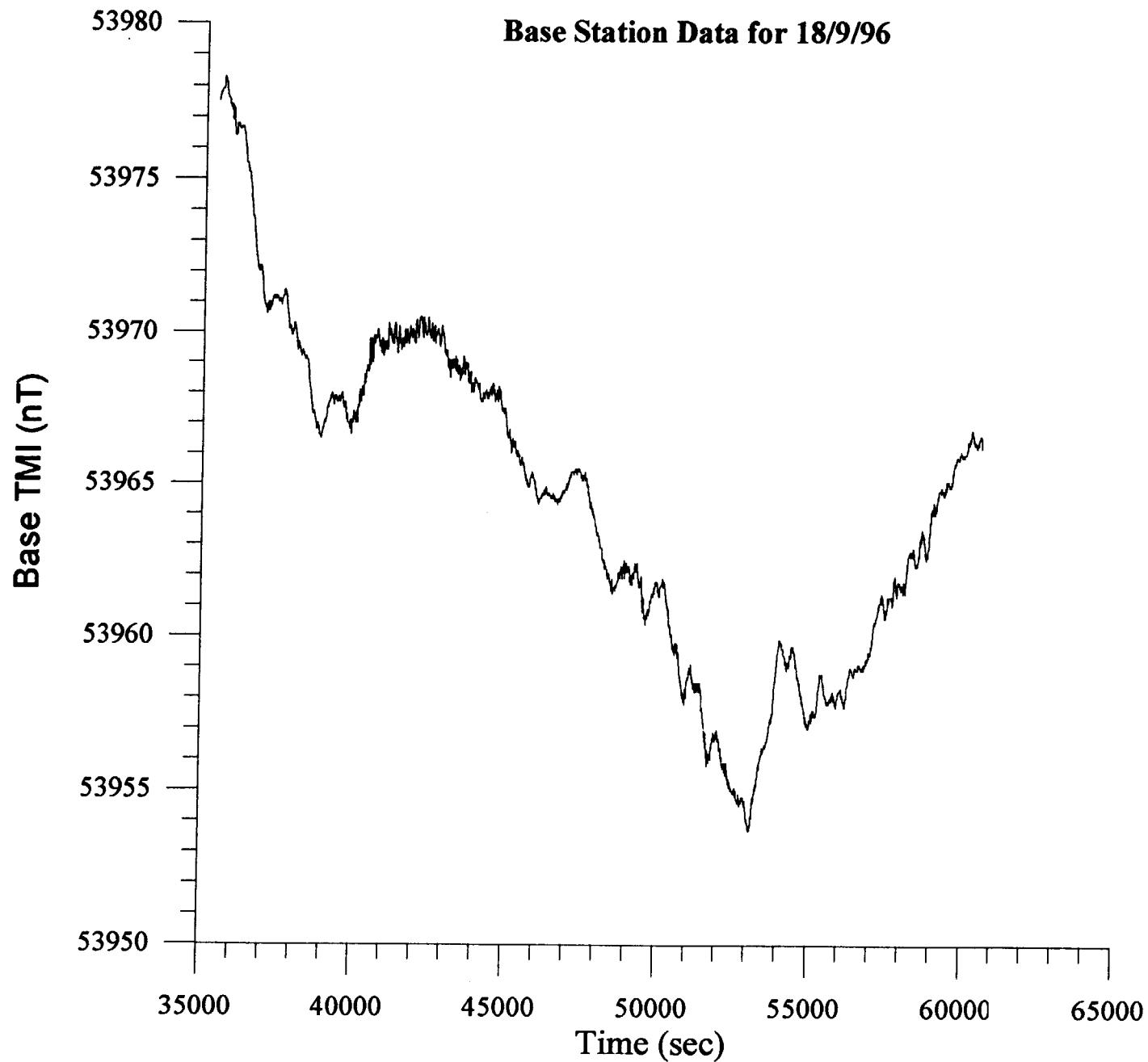
Observations: Gillens Bore Prospect  
Profile #1; 366200E (GB4)  
Model:  
Calculation mode: Total Magnetic Intensity

**BASE STATION  
DATA**

**Base Station Data for 17/9/96**



**Base Station Data for 18/9/96**



# **APPENDIX 5**

## **Split Drill Core Locations and Assays**

## APPENDIX 5

### SPLIT DRILL CORE LOCATIONS AND ASSAYS

Sample No	Location	
131818	CH1	204'-205'
131819	CH1	205'-206'
131820	CH1	206'-207'
131821	CH1	207'-208'
131822	CH1	208'-209'
131823	CH1	209'-210'
131824	CH1	210'-211'
131825	CH1	211'-212'
131826	CH1	212'-213'
131827	CH1	213'-214'
131828	CH1	214'-219'
131829	CH1	219'-224'
131830	CH1	224'-229'
131831	CH1	229'-234'
131832	CH1	234'-239'
131833	CH1	239'-242'
131834	RR4	234.0-235.0m
131835	RR4	235.0-236.0m
131836	RR4	236.0-237.0m



Job: 5AD4216  
O/N: 2553

Final

ANALYTICAL REPORT

SAMPLE	Ag	As	Bi	Cd	Co	Cr	Cu
131818	3	<3	5	3	5	<2	360
131819	<1	<3	5	2	<2	<2	175
131820	9	<3	10	6	2	<2	2700
131821	1	<3	5	2	4	<2	540
131822	1	<3	<5	7	4	<2	1900
131823	<1	<3	<5	<2	3	<2	9
131824	2	6	5	7	7	<2	2500
131825	9	<3	10	18	2	<2	7000
131826	8	<3	5	15	4	3	5800
131827	5	<3	<5	12	<2	<2	3000
131828	8	<3	<5	10	<2	340	3800
131829	4	<3	<5	68	4	280	3200
131830	5	<3	<5	19	3	340	3600
131831	5	<3	<5	22	3	170	3900
131832	4	<3	<5	12	<2	185	2700
131833	7	<3	<5	39	3	300	3100
131834	3	<3	<5	4	6	83	400
131835	4	<3	<5	36	13	200	1300
131836	<1	<3	<5	<2	3	66	150

UNITS DET.LIM SCHEME	ppm 1 IC1E	ppm 3 IC1E	ppm 5 IC1E	ppm 2 IC1E	ppm 2 IC1E	ppm 2 IC1E	ppm 2 IC1E
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Job: 5AD4216  
O/N: 2553

Final

ANALYTICAL REPORT

SAMPLE	Fe	Mn	Mo	Ni	Pb	P	V
131818	4.16%	3200	<3	<2	2400	105	7
131819	4.77%	2500	<3	<2	1300	125	7
131820	9.92%	2100	<3	4	4200	110	10
131821	6.14%	2300	6	3	1100	150	20
131822	4.22%	2200	<3	2	460	35	12
131823	2.71%	1400	<3	2	185	140	9
131824	5.58%	2000	4	3	2000	115	24
131825	12.0%	5000	4	<2	4900	40	
131826	6.15%	3800	<3	2	7100	50	5
131827	3.98%	2100	<3	<2	4400	15	3
131828	4.98%	2000	4	9	5500	10	3
131829	6.27%	2800	6	6	4400	30	3
131830	4.22%	1600	6	8	4600	220	11
131831	5.28%	3500	12	5	4100	190	5
131832	2.87%	1200	4	4	4100	15	
131833	4.42%	2600	4	7	7600	25	2
131834	2.04%	580	<3	6	1500	25	23
131835	3.38%	560	4	9	1700	80	3
131836	1.44%	280	<3	4	660	70	6

UNITS DET.LIM SCHEME UPPER SCHEME	ppm 100 IC1E	ppm 10 IC1E	ppm 3 IC1E	ppm 2 IC1E	ppm 5 IC1E XRF1	ppm 5 IC1E	ppm 2 IC1E	Page 2 of 5
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Final

Job: 5AD4216  
O/N: 2553

## ANALYTICAL REPORT

SAMPLE	Zn	Ni	Zn	Au	Au	Dp1	Ag	As
131818	150	<50	1400	<0.01	<0.01	--	3	8
131819	150	<50	1600	<0.01	--	--	<1	16
131820	180	<50	2700	0.04	--	--	9	14
131821	200	<50	1400	0.02	--	--	<1	12
131822	1900	<50	2600	0.02	--	--	<1	<3
131823	120	<50	780	<0.01	--	--	<1	8
131824	1600	<50	2800	0.01	--	--	2	<3
131825	5100	<50	7000	0.05	--	--	8	<3
131826	3700	<50	5000	0.02	--	--	8	4
131827	2200	<50	2700	0.03	--	--	4	<3
131828	1900	<50	2400	0.03	--	--	6	6
131829	1.49%	<50	1.68%	0.02	--	--	4	<3
131830	3900	<50	4800	0.01	--	--	4	<3
131831	5500	<50	6600	0.01	--	--	4	<3
131832	2500	<50	2800	0.01	--	--	4	<3
131833	8300	<50	1.01%	0.02	--	--	6	<3
131834	360	<50	4400	<0.01	--	--	3	<3
131835	8100	<50	1.77%	<0.01	--	--	4	4
131836	150	<50	1700	<0.01	0.01	--	<1	4

UNITS DET.LIM SCHEME UPPER SCHEME	ppm 2 IC1E OA4	ppm 50 XRF1	ppm 5 XRF1	ppm 0.01 FA2	ppm 0.01 FA2	ppm 1 IC3E	ppm 3 IC3E



Final

Job: 5AD4216  
O/N: 2553

## ANALYTICAL REPORT

SAMPLE	Bi	Cd	Co	Cr	Cu	Fe	Mn
131818	15	5	8	3	380	13.2%	9500
131819	10	<5	6	3	175	14.1%	7700
131820	15	10	6	3	2800	22.1%	6900
131821	10	<5	5	5	560	12.9%	6500
131822	<5	10	5	3	1900	7.36%	4200
131823	<5	<5	5	3	10	7.03%	3800
131824	5	10	9	4	2600	9.22%	4400
131825	10	20	5	2	6800	16.2%	6800
131826	5	20	5	<2	5700	9.33%	5500
131827	<5	15	2	<2	2800	4.84%	3100
131828	<5	10	<2	400	3400	5.52%	3100
131829	5	70	5	340	2900	6.74%	3900
131830	<5	20	3	460	3400	4.60%	1800
131831	5	25	7	220	3700	7.18%	4800
131832	<5	15	<2	195	2600	3.71%	1600
131833	5	45	2	440	2900	5.53%	4200
131834	5	5	4	135	420	4.75%	2200
131835	10	45	15	320	1300	7.07%	3100
131836	5	<5	<2	125	150	3.24%	1400

UNITS DET.LIM SCHEME UPPER SCHEME	ppm 5 IC3E	ppm 5 IC3E	ppm 2 IC3E	ppm 2 IC3E	ppm 2 IC3E	ppm 100 IC3E	ppm 5 IC3E



Job: 5AD4216  
O/N: 2553

Final

ANALYTICAL REPORT

SAMPLE	Mo	Ni	Pb	P	V	Zn
131818	<3	<2	2400	160	12	1000
131819	<3	<2	1300	175	10	1000
131820	4	4	4100	175	15	1600
131821	8	3	1100	200	23	920
131822	<3	2	460	55	13	2200
131823	<3	3	220	170	12	620
131824	4	2	2300	145	25	2000
131825	4	3	4900	60	11	5300
131826	4	<2	6900	95	6	3700
131827	<3	<2	4400	20	3	2100
131828	4	7	5200	15	2	1900
131829	8	7	4100	30	2	1.36%
131830	6	9	4500	220	10	3700
131831	10	5	4100	200	6	5500
131832	4	3	4100	20	<2	2500
131833	6	5	7600	30	3	8300
131834	<3	5	1600	35	34	1800
131835	4	9	1800	85	6	9600
131836	<3	4	720	85	8	940

UNITS DET.LIM SCHEME UPPER SCHEME	ppm 3 IC3E	ppm 2 IC3E	ppm 5 IC3E MET1	ppm 5 IC3E	ppm 2 IC3E	ppm 2 IC3E MET1 Page
						5 of 5



Final

Job: 5AD4216A  
O/N: 2553

## ANALYTICAL REPORT

SAMPLE	Ag	As	Bi	Cd	Co	Cr	Cu
131818	3	8	15	5	8	3	380
131819	<1	16	10	<5	6	3	175
131820	9	14	15	10	6	3	2800
131821	<1	12	10	<5	5	5	560
131822	<1	<3	<5	10	5	3	1900
131823	<1	8	<5	<5	5	3	10
131824	2	<3	5	10	9	4	2600
131825	8	<3	10	20	5	2	6800
131826	8	4	5	20	5	<2	5700
131827	4	<3	<5	15	2	<2	2800
131828	6	6	<5	10	<2	400	3400
131829	4	<3	5	70	5	340	2900
131830	4	<3	<5	20	3	460	3400
131831	4	<3	5	25	7	220	3700
131832	4	<3	<5	15	<2	195	2600
131833	6	<3	5	45	2	440	2900
131834	3	<3	5	5	4	135	420
131835	4	4	10	45	15	320	1300
131836	<1	4	5	<5	<2	125	150

UNITS DET. LIM SCHEME	ppm 1 IC3E	ppm 3 IC3E	ppm 5 IC3E	ppm 5 IC3E	ppm 2 IC3E	ppm 2 IC3E	ppm 2 IC3E
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Job: 5AD4216A  
O/N: 2553

Final

ANALYTICAL REPORT

SAMPLE	Fe	Mn	Mo	Ni	Pb	P	V
131818	13.2%	9500	<3	<2	2400	160	12
131819	14.1%	7700	<3	<2	1300	175	10
131820	22.1%	6900	4	4	4100	175	15
131821	12.9%	6500	8	3	1100	200	23
131822	7.36%	4200	<3	2	460	55	13
131823	7.03%	3800	<3	3	220	170	12
131824	9.22%	4400	4	2	2300	145	25
131825	16.2%	6800	4	3	4900	60	11
131826	9.33%	5500	4	<2	6900	95	6
131827	4.84%	3100	<3	<2	4400	20	3
131828	5.52%	3100	4	7	5200	15	2
131829	6.74%	3900	8	7	4100	30	2
131830	4.60%	1800	6	9	4500	220	10
131831	7.18%	4800	10	5	4100	200	6
131832	3.71%	1600	4	3	4100	20	<2
131833	5.53%	4200	6	5	7600	30	3
131834	4.75%	2200	<3	5	1600	35	34
131835	7.07%	3100	4	9	1800	85	6
131836	3.24%	1400	<3	4	720	85	8

UNITS	ppm						
DET.LIM	100	5	3	2	5	5	2
SCHEME	IC3E						
UPPER SCHEME					MET1		



Final

Job: 5AD4216A  
O/N: 2553

ANALYTICAL REPORT

SAMPLE	Zn
131818	1000
131819	1000
131820	1600
131821	920
131822	2200
131823	620
131824	2000
131825	5300
131826	3700
131827	2100
131828	1900
131829	1.36%
131830	3700
131831	5500
131832	2500
131833	8300
131834	1800
131835	9600
131836	940

UNITS	ppm
DET.LIM	2
SCHEME	IC3E
UPPER SCHEME	MET1

# **APPENDIX 6**

**Assays Results, Red Rock Holes 1 to 20,  
Coles Hill Joint Venture E.L. 8125, Northern Territory**

**COLES HILL JOINT VENTURE  
E.L. 8125, NORTHERN TERRITORY**

**ASSAY RESULTS  
RED ROCK HOLES 1 TO 20**

**EXPLANATORY NOTE**

Samples from RRK001 to RRK020 (inclusive) were assayed by AMDEL (Job Nos 6AD2083, 6DN0485, 6DN0560, 6DN0907) using the following methods:

<b>Element</b>	<b>Analytical Method</b>	<b>Detection Limit (ppm)</b>
Au	FA1	0.01
Ag	IC2E	0.5
Cu, Zn, Ni, Cd, As, Co	IC2E	1
Cr	IC2E	2
Pb	IC2E	3
Mn, Bi, Sb	IC2E	5
Fe	IC2E	100

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148501	RRK001	0	3	21	22	210	1	49	-1	9	220	49800	12	92	-5	-5	-0.01
148502	RRK001	3	6	33	30	390	-0.5	68	-1	9	2000	54600	51	90	-5	-5	-0.01
148503	RRK001	6	8	19	34	470	-0.5	85	1	12	2700	65100	95	100	-5	-5	-0.01
148504	RRK001	8	10	7	14	440	-0.5	105	-1	10	1600	61100	79	100	-5	-5	-0.01
148505	RRK001	10	12	20	52	430	-0.5	91	2	11	3300	60300	115	105	-5	-5	-0.01
148506	RRK001	12	14	50	50	540	-0.5	72	2	7	4100	71200	82	97	-5	-5	-0.01
148507	RRK001	14	16	23	22	290	-0.5	66	-1	5	1200	60600	42	100	-5	-5	-0.01
148508	RRK001	16	18	14	22	340	-0.5	66	-1	3	1200	60400	35	105	-5	-5	-0.01
148509	RRK001	18	20	16	8	190	-0.5	68	-1	2	620	63600	29	125	-5	-5	-0.01
148510	RRK001	20	22	4	4	160	-0.5	55	-1	3	470	57100	26	110	-5	-5	-0.01
148511	RRK001	22	24	2	6	150	-0.5	64	-1	3	350	59900	27	125	-5	-5	-0.01
148512	RRK001	24	26	-1	4	100	-0.5	64	-1	-1	300	78400	22	135	-5	-5	-0.01
148513	RRK001	26	28	3	-3	160	-0.5	65	-1	4	390	71400	25	140	-5	-5	-0.01
148514	RRK001	28	30	32	-3	86	-0.5	60	-1	2	220	65500	20	130	-5	-5	-0.01
148515	RRK001	30	32	14	6	61	-0.5	62	-1	2	300	68100	18	150	-5	-5	-0.01
148516	RRK001	32	34	10	16	71	-0.5	56	-1	3	320	60400	18	150	-5	-5	-0.01
148517	RRK001	34	36	2	8	56	-0.5	68	-1	3	230	71600	19	160	-5	-5	-0.01
148518	RRK001	36	38	12	16	105	-0.5	68	-1	3	310	71400	19	185	-5	-5	-0.01
148519	RRK001	38	40	2	30	86	-0.5	66	-1	4	390	71600	18	170	-5	-5	-0.01
148520	RRK001	40	42	-1	4	125	-0.5	67	-1	5	330	81300	18	190	-5	-5	-0.01
148521	RRK001	42	44	3	8	185	-0.5	66	-1	4	460	78600	19	230	-5	-5	-0.01
148522	RRK001	44	46	8	12	195	-0.5	67	-1	5	560	76400	20	210	-5	-5	-0.01
148523	RRK001	46	48	7	18	130	-0.5	63	-1	3	720	68100	17	190	-5	-5	-0.01
148524	RRK001	48	50	6	56	600	-0.5	54	8	1	1600	46700	19	120	-5	-5	-0.01
148525	RRK001	50	52	26	145	680	-0.5	19	2	6	2500	25900	18	57	-5	-5	-0.01
148526	RRK001	52	54	21	420	1000	-0.5	39	6	9	1800	43000	16	71	-5	-5	-0.01
148527	RRK001	54	56	120	490	1300	-0.5	31	3	6	2700	44800	16	56	-5	-5	-0.01
148528	RRK001	56	58	92	300	640	-0.5	10	2	2	1700	19200	8	33	-5	-5	-0.01
148529	RRK001	58	60	980	1000	2000	1.5	21	14	3	1800	38900	11	72	-5	-5	-0.01
148530	RRK001	60	62	960	760	1000	1	12	8	-1	780	26800	7	82	-5	-5	-0.01
148531	RRK001	62	64	500	270	360	-0.5	34	3	-1	440	30400	16	75	-5	-5	-0.01
148532	RRK001	64	66	300	280	240	-0.5	85	2	-1	260	27200	24	95	-5	-5	-0.01
148533	RRK001	66	68	240	57	300	-0.5	54	-1	-1	700	31100	16	77	-5	-5	-0.01
148534	RRK001	68	70	185	18	230	-0.5	18	-1	-1	620	24700	7	76	5	-5	-0.01
148535	RRK001	70	72	48	26	240	-0.5	12	-1	-1	520	24100	5	86	-5	-5	-0.01
148536	RRK001	72	74	135	99	470	-0.5	15	-1	-1	700	22300	6	105	-5	-5	-0.01
148537	RRK001	74	76	29	18	140	-0.5	8	-1	2	470	18400	2	86	-5	-5	-0.01
148538	RRK001	76	78	34	14	115	-0.5	7	-1	1	410	17300	3	47	-5	-5	-0.01
148539	RRK001	78	80	95	12	125	-0.5	14	-1	2	700	21400	5	115	-5	-5	-0.01
148540	RRK001	80	82	97	12	130	-0.5	9	-1	1	430	19200	4	73	-5	-5	-0.01
148541	RRK001	82	84	96	22	62	-0.5	22	-1	-1	200	57800	18	105	-5	-5	-0.01
148542	RRK001	84	86	50	10	60	-0.5	15	-1	-1	230	37800	10	91	-5	-5	-0.01
148543	RRK001	86	88	29	8	58	-0.5	5	-1	-1	300	15200	3	51	-5	-5	-0.01
148544	RRK001	88	90	48	10	66	-0.5	19	-1	-1	270	31500	10	105	-5	-5	-0.01
148545	RRK001	90	92	34	14	61	-0.5	7	-1	1	310	15500	3	120	-5	-5	-0.01
148546	RRK001	92	94	31	14	60	-0.5	7	-1	-1	190	12000	3	37	-5	-5	-0.01
148547	RRK001	94	96	41	16	74	-0.5	7	-1	-1	220	14200	5	37	-5	-5	-0.01
148548	RRK001	96	97	34	10	64	-0.5	10	-1	3	290	19000	5	180	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148549	RRK002	4	6	34	16	270	-0.5	100	2	3	2300	52800	130	115	-5	-5	-0.01
148550	RRK002	6	8	27	14	420	-0.5	130	2	6	2500	69600	87	125	-5	-5	-0.01
148551	RRK002	8	10	10	10	360	-0.5	120	-1	3	1300	72700	89	130	-5	-5	-0.01
148552	RRK002	10	12	8	6	290	-0.5	88	-1	4	860	70600	42	135	-5	-5	-0.01
148553	RRK002	12	14	8	4	220	-0.5	79	-1	2	660	68800	32	130	-5	-5	-0.01
148554	RRK002	14	16	13	4	210	-0.5	80	-1	2	680	70300	26	135	-5	-5	-0.01
148555	RRK002	16	18	13	4	200	-0.5	68	-1	3	520	64900	23	125	-5	-5	-0.01
148556	RRK002	18	20	6	4	210	-0.5	68	-1	3	540	64600	24	125	-5	-5	-0.01
148557	RRK002	20	22	5	-3	230	-0.5	75	-1	3	460	66400	24	150	-5	-5	-0.01
148558	RRK002	22	24	4	4	220	-0.5	77	-1	3	410	72800	25	160	-5	-5	-0.01
148559	RRK002	24	26	-1	-3	155	-0.5	75	-1	2	300	78500	26	165	-5	-5	-0.01
148560	RRK002	26	28	-1	6	220	-0.5	64	-1	2	460	86300	26	140	-5	-5	-0.01
148561	RRK002	28	30	-1	6	155	-0.5	69	-1	3	580	79700	25	155	-5	-5	-0.01
148562	RRK002	30	32	-1	4	110	-0.5	59	-1	2	520	68100	20	150	-5	-5	-0.01
148563	RRK002	32	34	-1	4	47	-0.5	66	-1	2	780	81000	21	165	-5	-5	-0.01
148564	RRK002	34	36	10	18	67	-0.5	64	-1	3	780	75900	22	145	-5	-5	-0.01
148565	RRK002	36	38	5	97	61	-0.5	60	-1	2	1100	68500	20	175	-5	-5	-0.01
148566	RRK002	38	40	9	130	61	-0.5	70	-1	2	720	80200	22	185	-5	-5	-0.01
148567	RRK002	40	42	10	22	66	-0.5	53	-1	-1	1000	49800	19	140	-5	-5	-0.01
148568	RRK002	42	44	10	48	200	-0.5	49	1	3	2300	49500	21	135	-5	-5	-0.01
148569	RRK002	44	46	7	84	580	-0.5	61	2	4	1700	48700	23	110	-5	-5	-0.01
148570	RRK002	46	48	230	240	1300	-0.5	57	3	7	4100	50900	23	110	-5	-5	-0.01
148571	RRK002	48	50	400	580	2600	-0.5	42	3	9	4600	55100	23	67	-5	-5	-0.01
148572	RRK002	50	52	360	780	3800	-0.5	34	4	14	5600	65900	22	66	-5	-5	-0.01
148573	RRK002	52	54	240	600	2600	-0.5	30	6	5	3200	46400	16	72	-5	-5	-0.01
148574	RRK002	54	56	105	250	680	-0.5	24	2	6	2100	40400	12	99	-5	-5	-0.01
148575	RRK002	56	58	540	720	1300	0.5	7	5	-1	1200	29900	4	52	-5	-5	-0.01
148576	RRK002	58	60	500	720	960	-0.5	6	3	-1	900	24700	4	35	-5	-5	-0.01
148577	RRK002	60	62	4500	3000	2600	3	6	15	2	2100	48200	7	80	-5	5	-0.01
148578	RRK002	62	64	9700	2100	6600	4.5	9	28	5	1100	61600	10	150	-5	10	-0.01
148579	RRK002	64	66	6800	2100	5900	3.5	7	25	3	960	61800	9	115	5	10	-0.01
148580	RRK002	66	68	5400	2700	9400	3	7	40	2	470	55900	10	110	5	-5	-0.01
148581	RRK002	68	70	3200	1300	10300	1	9	54	1	600	42100	9	140	5	-5	-0.01
148582	RRK002	70	72	1600	1800	640	1.5	7	7	1	600	28500	6	100	-5	-5	-0.01
148583	RRK002	72	74	1500	740	1300	0.5	9	11	-1	780	28900	7	54	-5	-5	-0.01
148584	RRK002	74	76	520	145	210	-0.5	26	2	-1	360	29600	12	105	-5	-5	-0.01
148585	RRK002	76	78	310	220	260	-0.5	55	2	-1	250	26500	18	99	-5	-5	-0.01
148586	RRK002	78	80	260	120	400	-0.5	11	2	-1	840	26600	6	125	-5	-5	-0.01
148587	RRK002	80	82	72	16	135	-0.5	7	-1	2	430	19500	3	88	-5	-5	-0.01
148588	RRK002	82	84	120	44	175	-0.5	9	-1	-1	560	24300	4	100	-5	-5	-0.01
148589	RRK002	84	86	240	96	390	-0.5	13	2	2	740	21600	5	92	-5	-5	-0.01
148590	RRK002	86	88	44	14	155	-0.5	7	-1	1	420	16900	3	34	-5	-5	-0.01
148591	RRK002	88	90	100	14	350	-0.5	14	-1	1	1200	27600	6	115	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148592	RRK003	0	10	30	16	230	-0.5	89	-1	4	1500	67600	73	140	-5	-5	-0.01
148593	RRK003	10	20	8	-3	145	-0.5	63	-1	3	430	66000	27	135	-5	-5	-0.01
148594	RRK003	20	30	3	4	89	-0.5	65	-1	1	600	71500	24	145	-5	-5	-0.01
148595	RRK003	30	40	3	24	57	-0.5	60	-1	3	1100	69900	21	180	-5	-5	-0.01
148596	RRK003	40	42	2	65	110	-0.5	58	-1	2	2000	58400	24	185	-5	-5	-0.01
148597	RRK003	42	44	69	76	130	-0.5	56	-1	-1	1600	54800	24	150	-5	-5	-0.01
148598	RRK003	44	46	10	105	320	-0.5	44	6	-1	1900	41000	18	135	-5	-5	-0.01
148599	RRK003	46	48	1300	2300	3500	-0.5	39	1	7	2600	55300	17	78	-5	-5	-0.01
148600	RRK003	48	50	2000	4900	5300	1	17	3	10	2900	67700	11	41	5	15	-0.01
148601	RRK003	50	52	1400	2500	3000	2	30	7	2	1200	54900	17	130	-5	15	-0.01
148602	RRK003	52	54	450	660	420	-0.5	42	1	-1	490	45000	22	155	-5	20	-0.01
148603	RRK003	54	56	240	460	290	-0.5	64	1	-1	400	34400	24	140	-5	20	-0.01
148604	RRK003	56	58	380	350	540	0.5	34	-1	-1	680	31300	12	110	-5	-5	-0.01
148605	RRK003	58	60	180	240	165	-0.5	14	-1	-1	580	27200	14	155	-5	-5	-0.01
148606	RRK003	60	62	150	175	280	-0.5	13	-1	-1	440	25400	5	120	-5	-5	-0.01
148607	RRK003	62	64	125	230	220	-0.5	8	-1	-1	540	23000	4	35	-5	-5	-0.01
148608	RRK003	64	66	165	330	410	-0.5	12	-1	1	760	24200	15	180	-5	-5	-0.01
148609	RRK003	66	68	210	350	300	-0.5	18	-1	-1	900	23500	6	140	-5	-5	-0.01
148610	RRK003	68	70	165	380	270	-0.5	15	-1	2	1000	24400	7	92	-5	-5	-0.01
148611	RRK003	70	72	150	150	210	-0.5	15	-1	1	760	23300	6	46	-5	-5	-0.01
148612	RRK003	72	74	175	150	200	-0.5	15	-1	2	660	31700	8	97	-5	-5	-0.01
148613	RRK003	74	76	89	57	84	-0.5	21	-1	3	280	47000	24	100	-5	10	-0.01
148614	RRK003	76	78	38	44	76	-0.5	8	-1	-1	390	17200	14	82	-5	-5	-0.01
148615	RRK003	78	80	64	40	88	-0.5	16	-1	2	470	23100	17	115	-5	-5	-0.01
148616	RRK003	80	82	36	56	71	-0.5	11	-1	2	360	15800	50	100	-5	-5	-0.01
148617	RRK003	82	84	91	64	93	-0.5	12	-1	-1	370	18200	5	115	-5	-5	-0.01
148618	RRK003	84	86	69	270	155	-0.5	10	-1	-1	680	16800	5	81	-5	-5	-0.01
148619	RRK003	86	88	76	260	180	-0.5	11	-1	1	660	20700	6	94	-5	-5	-0.01
148620	RRK003	88	90	89	42	57	-0.5	24	-1	2	250	32000	12	97	-5	-5	-0.01
148621	RRK003	90	92	48	57	90	-0.5	15	-1	-1	480	21600	6	115	-5	-5	-0.01
148622	RRK003	92	93	145	330	170	-0.5	12	-1	-1	880	21300	7	85	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148623	RRK004	0	10	29	18	195	-0.5	77	-1	5	1100	73300	45	145	5	-5	-0.01
148624	RRK004	10	20	23	-3	310	-0.5	91	-1	2	680	70300	46	150	5	-5	-0.01
148625	RRK004	20	30	3	-3	155	-0.5	61	-1	2	780	69700	24	135	5	-5	-0.01
149422	RRK004	28	30	9	8	130	-0.5	65	-1	-1	820	79600	21	160	-5	-5	0.04
149423	RRK004	30	32	28	20	68	-0.5	64	-1	-1	1050	67900	20	150	-5	10	-0.01
149424	RRK004	32	34	12	36	175	-0.5	63	1	-1	940	67500	20	140	-5	-5	-0.01
149425	RRK004	34	36	45	56	1450	-0.5	54	4	3	2900	48400	19	87	-5	5	-0.01
149426	RRK004	36	38	350	450	2150	-0.5	37	3	7	3200	49900	21	81	-5	-5	-0.01
149427	RRK004	38	40	1650	620	920	2	13	7	4	2000	50300	9	105	-5	-5	0.02
148626	RRK004	30	40	600	220	960	-0.5	47	4	4	1800	53100	19	91	5	5	-0.01
148627	RRK004	40	42	290	155	370	-0.5	20	1	3	820	30500	12	115	-5	-5	0.03
148628	RRK004	42	44	960	340	135	1.5	14	3	1	440	24300	6	115	-5	-5	-0.01
148629	RRK004	44	46	450	230	210	-0.5	79	2	5	410	42200	28	140	-5	20	-0.01
148630	RRK004	46	48	350	220	155	0.5	79	2	2	280	39600	30	140	10	20	-0.01
148631	RRK004	48	50	155	26	90	-0.5	14	-1	-1	390	19900	6	33	-5	-5	-0.01
148632	RRK004	50	52	97	10	59	-0.5	9	-1	2	490	23400	4	93	-5	-5	-0.01
148633	RRK004	52	54	30	10	45	-0.5	10	-1	2	520	18500	3	125	-5	-5	-0.01
148634	RRK004	54	56	175	12	93	-0.5	13	-1	3	390	15700	6	26	-5	-5	-0.01
148635	RRK004	56	58	69	4	61	-0.5	7	-1	2	370	14800	4	14	-5	-5	-0.01
148636	RRK004	58	60	91	12	105	-0.5	20	-1	-1	740	19400	7	62	-5	-5	-0.01
148637	RRK004	60	62	125	18	105	-0.5	18	-1	3	310	44200	17	75	-5	-5	-0.01
148638	RRK004	62	64	58	6	45	-0.5	16	-1	1	185	29200	10	73	-5	5	-0.01
148639	RRK004	64	66	33	6	44	-0.5	7	-1	2	340	15000	3	62	-5	-5	-0.01
148640	RRK004	66	68	70	4	40	-0.5	20	-1	3	240	28300	16	91	-5	-5	-0.01
148641	RRK004	68	70	21	4	39	-0.5	5	-1	2	200	11800	2	68	-5	-5	-0.01
148642	RRK004	70	72	39	34	78	-0.5	7	-1	3	330	15400	4	69	-5	-5	-0.01
148643	RRK004	72	74	20	8	47	-0.5	6	-1	2	220	14000	3	38	-5	-5	-0.01
148644	RRK004	74	76	32	10	50	-0.5	8	-1	1	270	17200	4	82	-5	-5	-0.01
148645	RRK004	76	78	22	10	42	-0.5	14	-1	1	230	24100	7	75	-5	-5	-0.01
148646	RRK004	78	80	95	4	50	-0.5	27	-1	1	135	30300	14	94	-5	-5	-0.01
148647	RRK004	80	82	16	-3	54	-0.5	13	-1	2	220	18500	7	68	-5	-5	-0.01
148648	RRK004	82	84	165	110	200	-0.5	17	-1	1	600	25200	10	105	-5	-5	-0.01
148649	RRK004	84	85	145	125	450	-0.5	18	-1	2	520	23100	13	67	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148650	RRK005	0	10	35	16	165	-0.5	54	-1	5	940	55800	31	130	5	-5	-0.01
148651	RRK005	10	20	12	16	300	-0.5	82	-1	6	1100	65700	55	130	5	-5	-0.01
149412	RRK005	18	20	5	4	280	-0.5	81	-1	-1	1050	66800	39	140	-5	-5	-0.01
148652	RRK005	20	30	13	42	400	-0.5	66	1	4	2400	55200	29	110	5	-5	-0.01
149413	RRK005	20	22	5	8	320	-0.5	91	-1	1	900	73900	32	160	-5	-5	-0.01
149414	RRK005	22	24	8	22	230	-0.5	66	-1	-1	2500	67100	35	120	-5	-5	-0.01
149415	RRK005	24	26	8	36	290	-0.5	60	1	1	3150	65400	26	115	-5	-5	-0.01
149416	RRK005	26	28	13	69	640	-0.5	68	2	-1	4850	54800	30	125	-5	-5	-0.01
149417	RRK005	28	30	1000	470	1700	-0.5	22	1	2	1750	43000	15	55	-5	-5	-0.01
148653	RRK005	30	40	620	240	1000	-0.5	22	-1	5	900	38000	13	44	-5	-5	-0.01
149418	RRK005	30	32	350	190	820	-0.5	18	1	-1	820	34300	5	92	-5	-5	-0.01
149419	RRK005	32	34	480	320	1250	-0.5	43	2	-1	1050	55000	20	97	-5	5	-0.01
149420	RRK005	34	36	1000	190	1450	-0.5	11	-1	-1	1100	56600	7	58	-5	-5	-0.01
149421	RRK005	38	40	320	125	420	-0.5	23	2	-1	520	35800	9	120	-5	-5	-0.01
148654	RRK005	40	42	330	220	300	-0.5	75	3	-1	380	36000	26	110	-5	25	-0.01
148655	RRK005	42	44	920	420	450	-0.5	150	4	3	680	84200	52	230	10	95	-0.01
148656	RRK005	44	46	280	110	160	-0.5	47	1	2	390	29500	16	88	-5	5	-0.01
148657	RRK005	46	48	145	18	155	-0.5	14	-1	2	440	23000	11	67	-5	-5	-0.01
148658	RRK005	48	50	72	12	105	-0.5	8	-1	2	540	21200	3	99	-5	-5	-0.01
148659	RRK005	50	52	120	8	105	-0.5	45	-1	2	760	27600	12	66	-5	-5	-0.01
148660	RRK005	52	54	140	14	99	-0.5	39	-1	3	740	23200	2	79	-5	-5	-0.01
148661	RRK005	54	56	30	4	63	-0.5	8	-1	2	500	17900	4	64	-5	-5	-0.01
148662	RRK005	56	58	62	28	105	-0.5	13	-1	3	500	15200	5	33	-5	-5	-0.01
148663	RRK005	58	60	74	52	87	-0.5	13	-1	-1	320	41100	11	70	-5	-5	-0.01
148664	RRK005	60	62	55	6	67	-0.5	18	1	-1	240	39700	11	87	-5	10	-0.01
148665	RRK005	62	64	30	10	130	-0.5	8	-1	-1	330	16100	1	76	-5	-5	-0.01
148666	RRK005	64	66	48	14	110	-0.5	10	-1	1	410	19500	4	69	-5	-5	-0.01
148667	RRK005	66	68	39	8	61	-0.5	5	-1	-1	280	13500	-1	67	-5	-5	-0.01
148668	RRK005	68	70	12	-3	21	-0.5	5	-1	-1	300	14000	-1	76	-5	-5	-0.01
148669	RRK005	70	72	37	16	87	-0.5	6	-1	-1	370	13700	1	97	-5	-5	-0.01
148670	RRK005	72	74	8	-3	24	-0.5	4	-1	-1	290	11400	-1	77	-5	-5	-0.01
148671	RRK005	74	76	7	-3	39	-0.5	2	-1	-1	170	10000	-1	20	-5	-5	-0.01
148672	RRK005	76	78	92	4	78	-0.5	21	-1	-1	200	27800	9	82	-5	-5	-0.01
148673	RRK005	78	80	105	4	54	-0.5	26	-1	2	170	38800	12	89	-5	-5	-0.01
148674	RRK005	80	82	47	-3	32	-0.5	5	-1	6	160	11900	1	24	-5	-5	-0.01
148675	RRK005	82	84	13	-3	27	-0.5	2	-1	-1	220	9200	-1	22	-5	-5	-0.01

ASSAY RESULTS RED ROCK HOLES 1 TO 20

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148676	RRK006	0	10	5	-3	88	-0.5	45	-1	3	210	49600	14	105	-5	-5	-0.01
148677	RRK006	10	20	12	16	87	-0.5	62	-1	-1	350	60600	19	130	5	-5	-0.01
148678	RRK006	20	30	2	14	41	-0.5	62	-1	-1	390	65600	15	135	5	-5	-0.01
148679	RRK006	30	40	12	30	47	-0.5	62	-1	2	520	65300	17	130	5	-5	-0.01
148680	RRK006	40	42	5	16	52	-0.5	59	-1	1	760	62100	15	145	-5	-5	-0.01
148681	RRK006	42	44	5	71	91	-0.5	54	-1	7	2500	41500	13	145	-5	10	-0.01
148682	RRK006	44	46	210	470	680	1.5	17	4	5	2000	29500	6	52	-5	-5	-0.01
148683	RRK006	46	48	390	3600	24600	3.5	4	110	3	840	16900	-1	37	5	-5	-0.01
148684	RRK006	48	50	1200	11100	15000	7.5	3	66	2	1900	27400	-1	6	5	5	-0.01
148685	RRK006	50	52	1300	9800	50800	6.5	6	200	3	3100	51100	7	53	15	-5	-0.01
148686	RRK006	52	54	460	7800	47500	5	6	195	4	4200	60800	10	35	15	-5	-0.01
148687	RRK006	54	56	320	7300	12700	4.5	7	58	2	3300	37300	-1	73	10	-5	-0.01
148688	RRK006	56	58	1300	7800	12800	6.5	8	59	4	2900	44100	4	44	10	-5	-0.01
148689	RRK006	58	60	1500	2900	12000	3.5	8	59	2	1600	61500	6	43	10	-5	-0.01
148690	RRK006	60	62	1000	2000	3900	3.5	6	21	1	1700	51400	3	52	5	-5	-0.01
148691	RRK006	62	64	98	200	600	-0.5	14	3	2	1100	34600	4	100	-5	-5	-0.01
148692	RRK006	64	66	73	100	250	-0.5	7	1	1	900	29300	-1	125	-5	-5	-0.01
148693	RRK006	66	68	51	18	100	-0.5	11	-1	-1	660	24800	-1	98	-5	-5	-0.01
148694	RRK006	68	70	40	42	135	-0.5	7	-1	2	660	21800	2	86	-5	-5	-0.01
148695	RRK006	70	72	97	52	240	-0.5	18	-1	2	1100	28400	6	99	-5	-5	-0.01
148696	RRK006	72	74	115	98	430	-0.5	14	2	1	1000	33300	7	86	-5	-5	-0.01
148697	RRK006	74	76	79	105	460	-0.5	21	3	1	250	48100	13	97	-5	15	-0.01
148698	RRK006	76	78	8	-3	20	-0.5	4	-1	1	80	9200	2	23	-5	-5	-0.01

ASSAY RESULTS RED ROCK HOLES 1 TO 20

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148699	RRK007	0	10	5	-3	72	-0.5	46	-1	2	290	45900	17	110	-5	-5	-0.01
148700	RRK007	10	20	19	-3	78	-0.5	54	-1	2	280	61100	16	150	5	-5	-0.01
148701	RRK007	20	30	8	6	33	-0.5	52	-1	4	180	56400	14	115	-5	-5	-0.01
148702	RRK007	30	40	25	4	27	-0.5	59	-1	-1	200	65600	18	135	-5	-5	-0.01
148703	RRK007	40	42	4	4	47	-0.5	57	-1	-1	350	63800	19	110	-5	-5	-0.01
148704	RRK007	42	44	18	-3	51	-0.5	65	-1	2	240	64500	21	130	-5	-5	-0.01
148705	RRK007	44	46	26	6	45	-0.5	62	-1	2	210	65800	17	150	-5	-5	-0.01
148706	RRK007	46	48	4	-3	32	-0.5	65	-1	2	240	74500	19	135	-5	-5	-0.01
148707	RRK007	48	50	3	4	32	-0.5	66	-1	-1	240	76400	18	160	-5	-5	-0.01
148708	RRK007	50	52	2	4	32	-0.5	61	-1	3	320	69200	18	130	-5	-5	-0.01
148709	RRK007	52	54	2	4	27	-0.5	63	-1	-1	370	72000	17	135	-5	-5	-0.01
148710	RRK007	54	56	2	8	42	-0.5	62	-1	2	450	70900	20	135	-5	-5	-0.01
148711	RRK007	56	58	1	16	57	-0.5	58	-1	1	740	67500	22	105	-5	-5	-0.01
148712	RRK007	58	60	1	16	55	-0.5	62	-1	4	740	67900	22	120	-5	-5	-0.01
148713	RRK007	60	62	2	12	66	-0.5	62	-1	3	800	72300	24	120	-5	-5	-0.01
148714	RRK007	62	64	3	24	62	-0.5	65	-1	5	840	73600	25	115	-5	-5	-0.01
148715	RRK007	64	66	3	28	82	-0.5	65	-1	2	780	77500	23	125	-5	-5	-0.01
148716	RRK007	66	68	10	34	58	-0.5	59	-1	2	580	70400	18	135	-5	-5	-0.01
148717	RRK007	68	70	4	63	100	-0.5	67	-1	5	940	71700	27	125	-5	-5	-0.01
148718	RRK007	70	72	12	350	310	-0.5	23	1	3	1200	40700	16	62	-5	5	-0.01
148719	RRK007	72	74	390	940	1800	1.5	13	12	1	1000	41000	14	34	-5	-5	-0.01
148720	RRK007	74	76	720	3000	6500	8.5	5	39	1	1000	99700	8	12	-5	-5	-0.01
148721	RRK007	76	78	390	1300	1100	3	3	7	2	1000	45100	9	22	-5	-5	-0.01
148722	RRK007	78	80	270	1800	1100	3	3	7	3	1600	24200	4	24	-5	-5	-0.01
148723	RRK007	80	82	240	390	580	-0.5	36	8	1	1100	37000	17	48	-5	-5	-0.01
148724	RRK007	82	82.5	92	410	250	-0.5	43	3	2	600	44100	-1	94	-5	15	-0.01

ASSAY RESULTS RED ROCK HOLES 1 TO 20

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148725	RRK008	0	2	12	6	37	-0.5	14	-1	3	230	26100	9	35	-5	-5	-0.01
148726	RRK008	2	4	14	10	38	-0.5	15	-1	4	260	31300	11	48	-5	-5	-0.01
148727	RRK008	4	6	48	4	40	-0.5	81	-1	2	490	57400	29	125	-5	-5	-0.01
148728	RRK008	6	8	51	8	32	-0.5	84	-1	-1	250	55800	28	97	-5	-5	-0.01
148729	RRK008	8	10	44	32	32	-0.5	69	-1	1	240	52500	27	130	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148730	RRK009	0	2	19	12	59	-0.5	18	-1	3	310	33100	12	45	-5	-5	-0.01
148731	RRK009	2	4	21	20	64	-0.5	18	-1	3	380	33900	14	45	-5	-5	-0.01
148732	RRK009	4	6	43	8	64	-0.5	32	-1	4	440	69800	32	39	-5	-5	-0.01
148733	RRK009	6	8	54	4	60	-0.5	37	-1	3	490	70800	29	29	-5	-5	-0.01
148734	RRK009	8	10	62	6	71	-0.5	51	-1	2	940	76100	42	37	-5	-5	-0.01
148735	RRK009	10	12	55	4	76	-0.5	52	-1	1	680	75300	39	42	-5	-5	-0.01

ASSAY RESULTS RED ROCK HOLES 1 TO 20

Sample Number	Hole Number	Depth From	Depth To(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148736	RRK010	0	2	14	10	32	-0.5	14	-1	2	240	29700	11	38	-5	-5	-0.01
148737	RRK010	2	4	17	10	37	-0.5	18	-1	4	390	40500	13	51	-5	-5	-0.01
148738	RRK010	4	6	41	4	76	-0.5	54	-1	3	560	60400	28	76	-5	-5	-0.01
148739	RRK010	6	8	54	4	85	-0.5	70	-1	2	760	68300	35	100	-5	-5	-0.01
148740	RRK010	8	10	53	-3	76	-0.5	73	-1	2	800	60000	33	87	-5	-5	-0.01
148741	RRK010	10	12	55	4	78	-0.5	65	-1	-1	660	61900	31	89	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148742	RRK011	0	2	17	12	50	-0.5	19	-1	3	270	30400	13	50	-5	-5	-0.01
148743	RRK011	2	4	38	8	68	-0.5	44	-1	2	290	45300	19	130	-5	-5	-0.01
148744	RRK011	4	6	125	8	150	-0.5	135	-1	-1	420	64500	40	300	-5	5	-0.01
148745	RRK011	6	8	210	6	270	-0.5	340	-1	1	9800	67300	720	310	-5	-5	-0.01
148746	RRK011	8	10	99	6	240	-0.5	260	-1	-1	2100	61400	210	310	-5	-5	-0.01
148747	RRK011	10	12	87	4	195	-0.5	240	-1	-1	1800	62400	145	330	-5	-5	-0.01

ASSAY RESULTS RED ROCK HOLES 1 TO 20

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148748	RRK012	0	10	23	28	200	-0.5	73	-1	4	980	61300	48	120	-5	-5	-0.01
148749	RRK012	10	20	21	26	240	-0.5	65	-1	2	640	57900	35	100	-5	-5	-0.01
148750	RRK012	20	30	150	210	280	-0.5	60	-1	2	1200	57100	25	115	-5	-5	-0.01
148751	RRK012	30	32	490	900	700	0.5	29	-1	3	1700	42700	-1	92	-5	-5	-0.01
148752	RRK012	32	34	420	960	1200	0.5	12	1	2	1400	24200	10	33	-5	-5	-0.01
148753	RRK012	34	36	3700	8200	40600	14.5	7	130	3	1400	70600	20	24	10	40	-0.01
148754	RRK012	36	38	2500	3600	41600	6	6	175	3	2300	70800	17	69	5	30	-0.01
148755	RRK012	38	40	3700	2000	4200	5	13	27	-1	660	50300	11	155	-5	-5	-0.01
148756	RRK012	40	42	740	560	3300	1	48	20	1	320	30000	24	94	-5	10	-0.01
148757	RRK012	42	44	660	240	940	0.5	57	5	-1	680	42000	27	115	-5	-5	-0.01
148758	RRK012	44	46	140	34	260	-0.5	11	1	-1	520	22300	6	105	-5	-5	-0.01
148759	RRK012	46	48	145	36	240	-0.5	20	1	1	700	24900	10	105	-5	-5	-0.01
148760	RRK012	48	50	270	62	260	-0.5	15	1	2	1300	28900	9	160	-5	-5	-0.01
148761	RRK012	50	52	91	59	430	-0.5	18	-1	3	640	35300	13	44	-5	-5	-0.01
148762	RRK012	52	54	130	67	520	-0.5	25	-1	-1	760	40300	20	57	-5	-5	-0.01
148763	RRK012	54	56	210	97	430	-0.5	25	2	-1	980	62300	33	82	-5	10	-0.01
148764	RRK012	56	58	42	20	130	-0.5	8	-1	3	370	19100	5	110	-5	-5	-0.01
148765	RRK012	58	60	79	44	175	-0.5	17	-1	2	370	27500	12	89	-5	-5	-0.01

ASSAY RESULTS RED ROCK HOLES 1 TO 20

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148766	RRK013	0	10	22	30	190	-0.5	77	-1	2	980	77100	42	165	-5	-5	-0.01
148767	RRK013	10	20	20	10	120	-0.5	65	-1	3	440	64600	46	135	-5	-5	-0.01
148768	RRK013	20	30	10	10	44	-0.5	64	-1	-1	260	69000	21	125	-5	-5	-0.01
148769	RRK013	30	32	47	14	44	-0.5	67	-1	2	200	71300	21	125	-5	-5	-0.01
148770	RRK013	32	34	8	12	79	-0.5	63	-1	-1	220	64100	21	115	-5	-5	-0.01
148771	RRK013	34	36	13	16	92	-0.5	68	-1	2	290	70900	24	140	-5	-5	-0.01
148772	RRK013	36	38	43	20	42	-0.5	62	-1	2	200	65100	-1	125	-5	-5	-0.01
148773	RRK013	38	40	19	40	45	-0.5	65	-1	-1	220	67100	19	130	-5	-5	-0.01
148774	RRK013	40	42	29	18	51	-0.5	69	-1	1	210	67000	22	135	-5	-5	-0.01
148775	RRK013	42	44	7	18	40	-0.5	67	-1	1	210	69300	19	135	-5	-5	-0.01
148776	RRK013	44	46	8	44	53	-0.5	63	-1	-1	250	67600	20	130	-5	-5	-0.01
148777	RRK013	46	48	13	36	56	-0.5	59	-1	1	270	65000	19	150	-5	-5	-0.01
148778	RRK013	48	50	8	36	39	-0.5	71	-1	2	210	77900	20	170	-5	-5	-0.01
148779	RRK013	50	52	9	18	48	-0.5	69	-1	3	260	76500	21	170	-5	-5	-0.01
148780	RRK013	52	54	16	28	52	-0.5	64	-1	-1	260	72500	19	160	-5	-5	-0.01
148781	RRK013	54	56	22	48	59	-0.5	71	-1	1	380	71600	22	175	-5	-5	-0.01
148782	RRK013	56	58	26	51	75	-0.5	67	-1	-1	480	73600	22	180	-5	-5	-0.01
148783	RRK013	58	60	24	52	77	-0.5	67	-1	-1	490	73900	34	180	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148784	RRK014	0	10	14	22	160	-0.5	83	-1	3	1800	65700	71	115	-5	-5	-0.01
148785	RRK014	10	20	8	4	37	-0.5	61	-1	3	380	71800	27	135	-5	-5	-0.01
148786	RRK014	20	30	6	4	63	-0.5	63	-1	3	360	76900	25	125	-5	-5	-0.01
148787	RRK014	30	32	4	6	61	-0.5	67	-1	3	460	79000	27	130	-5	-5	-0.01
148788	RRK014	32	34	6	8	47	-0.5	62	-1	2	290	84700	23	130	-5	-5	-0.01
148789	RRK014	34	36	7	4	73	-0.5	64	-1	1	310	77000	25	125	-5	-5	-0.01
148790	RRK014	36	38	6	10	47	-0.5	66	-1	-1	280	77000	-1	145	-5	-5	-0.01
148791	RRK014	38	40	9	10	38	-0.5	63	-1	-1	240	82600	19	165	-5	-5	-0.01
148792	RRK014	40	42	11	14	65	-0.5	68	-1	-1	260	90100	21	180	-5	-5	-0.01
148793	RRK014	42	44	3	6	34	-0.5	66	-1	1	220	83500	20	170	-5	-5	-0.01
148794	RRK014	44	46	16	4	34	-0.5	66	-1	3	250	84900	20	170	-5	-5	-0.01
148795	RRK014	46	48	4	-3	33	-0.5	61	-1	-1	200	78700	19	155	-5	-5	-0.01
148796	RRK014	48	50	5	-3	34	-0.5	58	-1	2	185	76300	18	145	-5	-5	-0.01
148797	RRK014	50	52	4	4	31	-0.5	67	-1	-1	220	82800	19	175	-5	-5	-0.01
148798	RRK014	52	54	4	4	37	-0.5	68	-1	-1	210	85800	21	190	-5	-5	-0.01
148799	RRK014	54	56	4	6	58	-0.5	67	-1	-1	210	78900	19	175	-5	-5	-0.01
148800	RRK014	56	58	97	-3	69	-0.5	66	-1	-1	250	69800	20	145	-5	-5	-0.01
148801	RRK014	58	60	6	4	110	-0.5	64	-1	-1	220	74200	18	145	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148802	RRK015	0	10	6	8	120	-0.5	66	-1	6	1300	53300	44	100	-5	-5	-0.01
148803	RRK015	10	20	9	-3	68	-0.5	66	-1	2	500	73400	22	140	-5	-5	-0.01
148804	RRK015	20	30	5	-3	64	-0.5	60	-1	1	540	67500	22	125	-5	-5	-0.01
148805	RRK015	30	32	3	-3	86	-0.5	64	-1	4	480	73700	25	125	-5	-5	-0.01
148806	RRK015	32	34	3	-3	72	-0.5	59	-1	-1	680	70300	23	120	-5	-5	-0.01
148807	RRK015	34	36	5	-3	50	-0.5	68	-1	3	500	74300	22	135	-5	-5	-0.01
148808	RRK015	36	38	5	6	49	-0.5	67	-1	2	500	80200	22	150	-5	-5	-0.01
148809	RRK015	38	40	9	4	40	-0.5	77	-1	5	450	86200	22	170	-5	-5	-0.01
148810	RRK015	40	42	10	-3	38	-0.5	74	-1	4	480	88200	22	170	-5	-5	-0.01
148811	RRK015	42	44	6	4	37	-0.5	72	-1	5	480	87200	21	175	-5	-5	-0.01
148812	RRK015	44	46	4	-3	31	-0.5	64	-1	3	400	76400	18	155	-5	-5	-0.01
148813	RRK015	46	48	4	-3	31	-0.5	65	-1	4	420	74000	19	150	-5	-5	-0.01
148814	RRK015	48	50	8	-3	38	-0.5	58	-1	1	400	65300	16	170	-5	-5	-0.01
148815	RRK015	50	52	5	10	54	-0.5	72	-1	3	620	78600	23	150	-5	-5	-0.01
148816	RRK015	52	54	11	12	105	-0.5	75	-1	1	960	78000	47	150	-5	-5	-0.01
148817	RRK015	54	56	10	10	47	-0.5	73	-1	2	560	79000	23	175	-5	-5	-0.01
148818	RRK015	56	58	9	4	125	-0.5	69	-1	1	520	73300	26	150	-5	-5	-0.01
148819	RRK015	58	60	12	4	37	-0.5	74	-1	3	480	86600	20	170	-5	-5	-0.01

ASSAY RESULTS RED ROCK HOLES 1 TO 20

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148820	RRK016	0	10	75	155	185	-0.5	22	-1	4	600	55800	8	97	-5	-5	-0.01
149401	RRK016	8	10	145	240	380	-0.5	36	-1	2	1350	66300	17	115	-5	-5	-0.01
148821	RRK016	10	20	880	1300	880	-0.5	105	3	11	12800	79500	390	110	5	-5	-0.01
149402	RRK016	10	12	440	2350	330	-0.5	20	-1	34	8050	55700	74	93	5	5	-0.01
149403	RRK016	12	14	490	1300	330	-0.5	51	2	6	7800	51900	230	95	-5	-5	-0.01
149404	RRK016	14	16	1200	880	1050	-0.5	125	5	13	12000	122000	230	200	-5	-5	0.02
149405	RRK016	16	18	1300	450	1850	-0.5	185	4	12	13600	126000	450	170	-5	10	-0.01
149406	RRK016	18	20	660	700	800	0.5	110	2	7	7950	50000	560	74	-5	-5	-0.01
148822	RRK016	20	30	400	390	520	-0.5	33	1	-1	1900	24500	83	73	-5	-5	-0.01
149407	RRK016	20	22	620	940	680	-0.5	59	1	3	4500	31600	260	75	-5	-5	0.04
149408	RRK016	22	24	360	210	620	-0.5	36	-1	-1	1350	20500	61	39	-5	-5	-0.01
149409	RRK016	24	26	620	320	1000	-0.5	42	1	-1	1900	33500	54	38	-5	-5	0.04
149410	RRK016	26	28	200	230	270	-0.5	13	-1	-1	1050	17900	23	105	-5	-5	0.02
149411	RRK016	28	30	96	32	190	-0.5	17	-1	-1	780	23600	7	99	-5	-5	-0.01
148823	RRK016	30	40	53	16	77	-0.5	10	-1	-1	240	22000	7	56	-5	-5	-0.01
148824	RRK016	40	42	38	14	145	-0.5	8	-1	-1	220	11700	4	81	-5	-5	-0.01
148825	RRK016	42	44	24	6	42	-0.5	4	-1	-1	130	9600	2	44	-5	-5	-0.01
148826	RRK016	44	46	30	10	57	-0.5	4	-1	-1	145	10100	2	63	-5	-5	-0.01
148827	RRK016	46	48	55	6	75	-0.5	12	-1	-1	220	17100	6	68	-5	-5	-0.01
148828	RRK016	48	50	16	-3	41	-0.5	5	-1	-1	160	12900	-1	73	-5	-5	-0.01
148829	RRK016	50	52	18	4	31	-0.5	7	-1	-1	105	16200	4	54	-5	-5	-0.01
148830	RRK016	52	54	165	20	210	-0.5	65	2	-1	1200	83800	33	180	10	20	-0.01
148831	RRK016	54	56	20	4	27	-0.5	6	-1	-1	210	11800	2	63	-5	-5	-0.01
148832	RRK016	56	58	31	6	51	-0.5	11	-1	-1	250	16400	6	64	-5	-5	-0.01
148833	RRK016	58	60	22	6	51	-0.5	10	-1	-1	220	13700	5	65	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148834	RRK017	0	10	14	24	73	-0.5	29	-1	3	115	59300	6	125	-5	-5	-0.01
148835	RRK017	10	12	23	59	155	-0.5	44	-1	4	580	65700	16	155	-5	-5	-0.01
148836	RRK017	12	14	29	73	330	-0.5	69	-1	6	1600	77900	37	155	-5	-5	-0.01
148837	RRK017	14	16	25	42	420	-0.5	74	-1	4	2000	64000	69	125	-5	-5	-0.01
148838	RRK017	16	18	18	24	340	-0.5	125	-1	3	2900	76100	210	155	-5	-5	-0.01
148839	RRK017	18	20	12	20	260	-0.5	115	-1	3	2100	71600	175	140	-5	-5	-0.01
148840	RRK017	20	22	12	18	220	-0.5	105	-1	5	1600	71200	160	155	-5	-5	-0.01
148841	RRK017	22	24	19	18	270	-0.5	105	-1	4	1700	64700	195	135	-5	-5	-0.01
148842	RRK017	24	26	27	6	240	-0.5	84	-1	3	1000	62300	94	130	-5	-5	-0.01
148843	RRK017	26	28	13	4	210	-0.5	74	-1	3	740	65600	49	130	-5	-5	-0.01
148844	RRK017	28	30	7	8	210	-0.5	75	-1	2	540	64600	37	140	-5	-5	-0.01
148845	RRK017	30	32	15	8	135	-0.5	77	-1	4	320	76700	25	160	-5	-5	-0.01
148846	RRK017	32	34	11	8	71	-0.5	70	-1	3	260	74900	-1	145	-5	-5	-0.01
148847	RRK017	34	36	12	10	78	-0.5	69	-1	2	390	72500	25	140	-5	-5	-0.01
148848	RRK017	36	38	19	18	59	-0.5	63	-1	4	350	68400	21	145	-5	-5	-0.01
148849	RRK017	38	40	58	8	34	-0.5	57	-1	3	300	64700	19	125	-5	-5	-0.01
148850	RRK017	40	42	53	8	34	-0.5	71	-1	4	330	80100	21	155	-5	-5	-0.01
148851	RRK017	42	44	10	18	135	-0.5	64	1	5	660	71000	22	140	-5	-5	-0.01
148852	RRK017	44	46	13	28	86	-0.5	65	-1	1	740	71400	26	135	-5	-5	-0.01
148853	RRK017	46	48	18	24	67	-0.5	72	-1	4	700	77400	26	150	-5	-5	-0.01
148854	RRK017	48	50	8	40	92	-0.5	66	-1	3	1000	61200	27	125	10	5	-0.01
148855	RRK017	50	52	7	64	120	-0.5	60	1	-1	2000	51400	29	130	10	15	-0.01
148856	RRK017	52	54	11	51	105	-0.5	54	-1	1	1300	37700	23	90	-5	-5	-0.01
148857	RRK017	54	56	11	26	98	-0.5	61	-1	-1	1100	34400	22	120	-5	-5	-0.01
148858	RRK017	56	58	50	26	98	-0.5	52	-1	-1	1600	36700	22	105	-5	-5	-0.01
148859	RRK017	58	60	89	64	120	-0.5	44	-1	1	1300	30800	28	73	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148860	RRK018	0	10	8	28	48	-0.5	39	-1	5	200	59400	26	100	-5	-5	-0.01
148861	RRK018	10	20	9	30	120	-0.5	72	-1	5	1900	71600	55	120	-5	-5	-0.01
148862	RRK018	20	30	5	12	140	-0.5	89	-1	4	720	68400	79	125	-5	-5	-0.01
148863	RRK018	30	40	17	16	135	-0.5	66	-1	1	420	70900	24	125	-5	-5	-0.01
148864	RRK018	40	42	23	14	81	-0.5	62	-1	4	280	65800	19	125	-5	-5	-0.01
148865	RRK018	42	44	6	8	51	-0.5	62	-1	1	260	72600	20	125	-5	-5	-0.01
148866	RRK018	44	46	15	4	44	-0.5	58	-1	3	260	67000	18	125	-5	-5	-0.01
148867	RRK018	46	48	10	6	105	-0.5	62	-1	2	260	68600	23	125	-5	-5	-0.01
148868	RRK018	48	50	17	32	100	-0.5	55	-1	-1	400	59500	21	125	-5	-5	-0.01
148869	RRK018	50	52	68	84	105	-0.5	67	-1	5	440	65800	26	135	-5	-5	-0.01
148870	RRK018	52	54	15	22	56	-0.5	62	-1	3	270	68800	19	135	-5	-5	-0.01
148871	RRK018	54	56	12	26	74	-0.5	60	-1	-1	340	68100	22	145	-5	-5	-0.01
148872	RRK018	56	58	44	14	41	-0.5	61	-1	2	250	66100	20	145	-5	-5	-0.01
148873	RRK018	58	60	13	14	53	-0.5	58	-1	3	190	58900	19	120	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148874	RRK019	0	10	8	20	39	-0.5	32	-1	3	150	58200	8	96	-5	-5	-0.01
148875	RRK019	10	20	10	24	160	-0.5	58	-1	7	1200	54300	37	96	-5	-5	-0.01
148876	RRK019	20	30	3	6	130	-0.5	75	-1	-1	1300	67400	7	120	-5	-5	-0.01
148877	RRK019	30	40	9	-3	70	-0.5	64	-1	2	620	71900	24	130	-5	-5	-0.01
148878	RRK019	40	42	4	6	69	-0.5	64	-1	4	680	75300	27	125	-5	-5	-0.01
148879	RRK019	42	44	7	6	68	-0.5	64	-1	2	800	71900	25	135	-5	-5	-0.01
148880	RRK019	44	46	7	4	83	-0.5	65	-1	2	680	78300	26	140	-5	-5	-0.01
148881	RRK019	46	48	6	8	81	-0.5	60	-1	-1	540	69400	24	130	-5	-5	-0.01
148882	RRK019	48	50	15	20	85	-0.5	60	-1	4	600	74200	25	120	-5	-5	-0.01
148883	RRK019	50	52	15	34	92	-0.5	62	-1	2	520	61200	47	100	5	-5	-0.01
148884	RRK019	52	54	8	10	100	-0.5	64	-1	2	560	57400	28	100	5	-5	-0.01
148885	RRK019	54	56	7	10	140	-0.5	71	-1	-1	620	64400	32	115	5	-5	-0.01
148886	RRK019	56	58	26	26	97	-0.5	64	-1	3	430	70400	26	125	5	-5	-0.01
148887	RRK019	58	60	7	10	76	-0.5	71	-1	5	620	85300	26	155	-5	-5	-0.01

**ASSAY RESULTS RED ROCK HOLES 1 TO 20**

Sample Number	Hole Number	Depth From	Depth to(m)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Ni (ppm)	Cd (ppm)	As (ppm)	Mn (ppm)	Fe (ppm)	Co (ppm)	Cr (ppm)	Bi (ppm)	Sb (ppm)	Au (ppm)
148888	RRK020	0	10	13	14	67	-0.5	52	-1	1	580	57900	18	115	-5	-5	-0.01
148889	RRK020	10	20	74	380	520	-0.5	40	2	-1	1000	47400	14	91	-5	-5	-0.01
149428	RRK020	10	12	9	53	76	-0.5	55	-1	-1	620	66000	14	150	-5	-5	-0.01
149429	RRK020	12	14	12	12	57	-0.5	49	-1	-1	400	59000	11	135	-5	-5	-0.01
149430	RRK020	14	16	12	66	230	-0.5	45	1	-1	2400	40400	15	105	-5	5	-0.01
149431	RRK020	16	18	100	450	680	-0.5	27	2	-1	1450	41200	12	96	-5	15	-0.01
149432	RRK020	18	20	190	1450	2100	1	12	4	-1	1100	35400	8	75	-5	5	-0.01
148890	RRK020	20	22	190	680	640	1	11	1	4	1000	35200	5	53	-5	-5	-0.01
148891	RRK020	22	24	98	66	180	-0.5	7	-1	1	400	22200	5	71	-5	-5	-0.01
148892	RRK020	24	26	145	83	195	-0.5	37	-1	-1	880	32200	14	65	-5	-5	-0.01
148893	RRK020	26	28	145	93	125	-0.5	53	-1	-1	440	32200	18	70	5	-5	-0.01
148894	RRK020	28	30	14	6	36	-0.5	8	-1	-1	360	19200	2	89	-5	-5	-0.01
148895	RRK020	30	32	28	12	48	-0.5	8	-1	2	340	17700	3	69	-5	-5	-0.01
148896	RRK020	32	34	10	4	32	-0.5	7	-1	-1	410	18100	4	74	-5	-5	-0.01
148897	RRK020	34	36	19	4	29	-0.5	5	-1	-1	450	22500	5	36	-5	-5	-0.01
148898	RRK020	36	38	62	8	33	-0.5	5	-1	2	410	13100	25	49	-5	-5	-0.01
148899	RRK020	38	40	9	12	55	-0.5	6	-1	3	430	16500	3	51	-5	-5	-0.01
148900	RRK020	40	42	38	18	86	-0.5	10	-1	-1	390	15100	4	28	-5	-5	-0.01
148901	RRK020	42	44	42	24	90	-0.5	7	-1	2	520	18000	4	60	-5	-5	-0.01
148902	RRK020	44	46	75	14	61	-0.5	23	1	2	460	51500	19	64	10	10	-0.01
148903	RRK020	46	48	19	-3	49	-0.5	4	-1	-1	350	16200	5	28	-5	-5	-0.01
148904	RRK020	48	50	12	-3	31	-0.5	3	-1	1	250	10700	3	22	-5	-5	-0.01
148905	RRK020	50	52	105	4	77	-0.5	3	-1	-1	500	15300	4	28	-5	-5	-0.01
148906	RRK020	52	54	24	4	53	-0.5	9	-1	1	480	19500	6	52	-5	-5	-0.01
148907	RRK020	54	56	36	10	93	-0.5	12	-1	-1	500	21300	6	105	-5	-5	-0.01
148908	RRK020	56	58	5	-3	35	-0.5	3	-1	1	195	10300	3	25	-5	-5	-0.01
148909	RRK020	58	60	65	1.5	40	0.25	18	0.5	1	220	32900	14	57	2.5	2.5	0.005

# **APPENDIX 7**

**Drill Hole Log Sheets, Red Rock Holes 1 to 20,  
Coles Hill Joint Venture E.L. 8125, Northern Territory**



# DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK001		
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS						
0	39 AMG	60				EL NUMBER:	8125	AMG CO-ORDINATES					
						EOH DEPTH:	97	7449445 mN   373996 mE					
						TRAVERSE No:		RL:		650			
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lithology	Structure	Alteration	Mineralisation	Comments	Mag Susc	
0	3	148501	ltgy	mw mn	eqgr	q, bio, cly	bio GN					10	
3	6	148502	gy	mw	mg, eqgr	q, fs, bio, mag(cly)	bio GN		fs(?)>cly			20	
6	8	148503	dkgy	mw	mg, eqgr	q, fs, bio, mag(cly)	bio GN					30	
8	10	148504	dkgygn	mw	mg, eqgr	q, fs, bio, (cly)	bio GN				some Fe clays	30	
10	12	148505	dkgygn	mw	mg, eqgr	q, fs, bio, (cly)	bio GN					40	
12	14	148506	dkgygn	mw	mg, eqgr	q, fs, bio, (cly)	bio GN					30	
14	16	148507	dkgygn	mw	mg, eqgr	q, fs, bio, (cly)	bio GN					40	
16	18	148508	bngy	mw	mg, eqgr	q, fs, bio, (cly)	bio GN					90	
18	20	148509	bngy	ww	mg, eqgr	q, fs, gar, mag	gar GN				increase in q	130	
20	22	148510	bngy	ww	mg, eqgr	q, fs, gar, mag	gar GN					360	
22	24	148511	bngy	ww	mg, eqgr	q, fs, gar, mag	gar GN					450	
24	26	148512	bngy	ww	mg, eqgr	q, fs, gar, mag	gar GN					800	
26	28	148513	bk	ww	mg, eqgr	q, fs, gar, mag	gar GN					1100	
28	30	148514	bk	fr	mg, eqgr	q, bio, mag	bio GN				bio has golden sheen	550	
30	32	148515	bk	fr	eqgr	q, bio, gar, mag	bio GN					750	
32	34	148516	bk	fr	eqgr	q, fs, bio, sil, mag	sil GN					1100	
34	36	148517	bk	fr	eqgr	q, fs, bio, sil, mag	sil GN					2700	
36	38	148518	bk	fr	eqgr	q, fs, bio, sil, mag	sil GN					3350	
38	40	148519	bk	fr	eqgr	q, fs, bio, sil, mag	sil GN					3700	
40	42	148520	bk	fr	eqgr mg	q bio sil	sil GN		ox at jnt planes			3300	
42	44	148521	bk	fr	eqgr mg	q bio sil	sil GN					2300	
44	46	148522	bk	fr	eqgr mg	q bio sil	sil GN					2400	
46	48	148523	bk	fr	eqgr mg	q bio gar mag	sil GN					2400	
48	50	148524	gybn	fr	eqgr mg	q bio gar mag	sil GN					2600	
50	52	148525	bnw	mw	eqgr mg	q fs cly cl	SKARN				low mag	1500	

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<i>From</i>	<i>To</i>	<i>Sample Number</i>	<i>Colour</i>	<i>Weathering</i>	<i>Texture</i>	<i>Mineralogy</i>	<i>Lithology</i>	<i>Structure</i>	<i>Alteration</i>	<i>Mineralisation</i>	<i>Comments</i>	<i>Mag Susc</i>
52	54	148526	bnwgn	mw	eqgr mg	q fs cly cl	SKARN					300
54	56	148527	bnw	mw	eqgr mg	cly q	SKARN		fs,cl>cly			200
56	58	148528	bnw	mn	eqgr mg	q cly fs sil	SKARN					150
58	60	148529	dkgybn	fr	eqgr	q fs gar	LODE					200
60	62	148530	bk	fr	eqgr	q bio gar sil	LODE					250
62	64	148531	dkgy	fr	eqgr	q bio gar sil	LODE			py cpy	minor cg py	600
64	66	148532	bk	fr	eqgr	q bio sil	GN				no gar	300
66	68	148533	bk(pk)	fr	eqgr	q bio sil gar	GN				5-10% gar	200
68	70	148534	bk	fr	eqgr	q bio sil gar	GN					360
70	72	148535	bkbn	fr (ox)	eqgr	q bio sil	GN				no gar	600
72	74	148536	ltbn	ww	eqgr	q gar	Q				damp sample	500
74	76	148537	gypk	fr	eqgr	q sil gar	GN					50
76	78	148538	gypk	fr	eqgr	q sil gar	GN					30
78	80	148539	gypk	fr	eqgr	q sil gar	GN					30
80	82	148540	gypk	fr	mg eqgr	q sil gar	GN	weak fol				1000
82	84	148541	bk	fr	mg eqgr	q sil mag	GN					2500
84	86	148542	gygn	fr	mg eqgr	q bio gar mag	GN				gn minrl (diopside ?)	1000
86	88	148543	gypk	fr	mg eqgr	q bio gar	GN					500
88	90	148544	gy	fr	mg eqgr	q sil mag	GN					1000
90	92	148545	ltgy	fr	mg eqgr	q fs px gar	GN				foot wall rock	400
92	94	148546	ltgy	fr	mg eqgr	q fs px gar	GN					50
94	96	148547	ltgy	fr	mg eqgr	q fs px gar	GN					40
96	97	148548	ltgy	fr	mg eqgr	q fs px gar	GN				EOH	20



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK002	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0	39 AMG	60				EL NUMBER:	8125					
						EOH DEPTH:	97			7449445 mN	373996 mE	
						TRAVERSE No:				RL:	650	
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lith- logy	Structure	Alteration	Mineral- isation	Comments	Mag Susc
0	2		ltbn	hw	snr	q cly carb	CAL				for CAL read KUNKAR	15
2	4		bngn	hw	eqgr	q cly	GN					15
4	6	148549	bngn	hw	eqgr	q cly	GN					30
6	8	148550	bngn	hw	eqgr	q cly gar	GN					40
8	10	148551	rdbngn	hw	eqgr	q cly	GN					250
10	12	148552	rdbngn	hw	eqgr	q cly	GN					275
12	14	148553	rdbngn	hw	eqgr	q bio gar (cly)	GN	fol				300
14	16	148554	rdbngn	hw	eqgr	q bio gar (cly)	GN	fol				300
16	18	148555	rdbngn	hw	eqgr	q bio gar (cly)	GN					320
18	20	148556	rdbngn	hw	eqgr	q bio gar (cly)	GN					240
20	22	148557	rdbngn	hw	eqgr	q bio gar (cly)	GN					320
22	24	148558	bnpkgn	hw	eqgr	q bio gar (cly)	GN					800
24	26	148559	bnpkgn	mw	eqgr	q bio gar (cly)	GN					400
26	28	148560	bnpkgn	mw	eqgr	q bio gar (cly)	GN					200
28	30	148561	bnpkgn	mw	eqgr	q bio gar (cly)	GN					400
30	32	148562	bnpkgn	mw	eqgr	q bio gar (mag)	GN					440
32	34	148563	bkbn	ww	eqgr	q fs mag	GN					480
34	36	148564	bkbn	fr	eqgr	q fs mag	GN		silicified		minor gar	900
36	38	148565	bk	fr	eqgr	q fs gar mag	GN					1200
38	40	148566	bk	fr	eqgr	q fs mag	GN					2000
40	42	148567	dkgy	ww	mg eqgr	q fs bio gar	GN					15
42	44	148568	gygnw	mw	mg eqgr	q cly cl	SKARN					110
44	46	148569	gygnw	mw	mg eqgr	q cly cl lim	SKARN					160
46	48	148570	gyw	mw	mg eqgr	q cly lim	SKARN					80
48	50	148571	dkbn	hw	am	cly	SKARN					50
50	52	148572	dkbn	hw	am	cly	SKARN		fs>cly		wet smpl fizz with HCl	50

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<b>From</b>	<b>To</b>	<b>Sample Number</b>	<b>Colour</b>	<b>Weathering</b>	<b>Texture</b>	<b>Mineralogy</b>	<b>Lithology</b>	<b>Structure</b>	<b>Alteration</b>	<b>Mineralisation</b>	<b>Comments</b>	<b>Mag Susc</b>
52	54	148573	gygnw	mw	eqgr	q cly bio	SKARN					140
54	56	148574	gybn	ww	eqgr	q cly mag*	GN				* grn min has HCl fizz	270
56	58	148575	bkgn	fr	eqgr	q fs bio *	GN				* grn min has HCl fizz	250
58	60	148576	bkgn	fr	eqgr	q fs bio	LODE			trace py		40
60	62	148577	bk	fr	eqgr	q fs bio mag	LODE			trace py		430
62	64	148578	bk	fr	eqgr	q bio mag py cpy	LODE			>1% py in chips		480
64	66	148579	bk	fr	eqgr	q mag py cpy	LODE			1-5% py cpy sph		1600
66	68	148580	bk	fr	eqgr	q mag py cpy	LODE			1-5% py cpy sph		1800
68	70	148581	bk	fr	eqgr	q bio gar py cpy	LODE			>1%py		200
70	72	148582	bkpk	fr	eqgr	q bio gar py cpy	LODE			trace py		20
72	74	148583	bkpk	fr	eqgr	q bio gar py cpy	LODE	-		trace py	slickensided frags	150
74	76	148584	bkpk	fr	eqgr	q bio gar mag py	LODE			trace py		170
76	78	148585	bk	fr	eqgr	q bio mag	LODE			trace py		200
78	80	148586	bkor	ww	eqgr	q bio gar	GN					200
80	82	148587	dkgy	fr	eqgr mg	q fs bio gar	GN					0
82	84	148588	gypk	fr	eqgr mg	q fs bio gar	GN				footwall rock	0
84	86	148589	gybn	fr	eqgr mg	q fs bio gar	GN		ox on jnts			0
86	88	148590	gybn	fr	eqgr mg	q fs bio gar	GN					0
88	90	148591	gybn	fr	eqgr mg	q fs bio gar	GN				EOH	0



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK003	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0	36 AMG	60				EL NUMBER:	8125			AMG CO-ORDINATES		
						EOH DEPTH:	93			7449514 mN	373924 mE	
						TRAVERSE No:				RL:	650	
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lith-log	Structure	Alteration	Mineral-isation	Comments	Mag Susc
0	10	148592										
0	2		ltbn	hw	eqgr	q bio cly	GN					10
2	4		bngn	hw	eqgr	q bio cly	GN					10
4	6		bngn	hw	eqgr	q bio cly	GN					10
6	8		bngnbk	hw	eqgr	q bio cly	GN					200
8	10		bngnbk	hw	eqgr	q bio cly	GN					240
10	20	148593										
10	12		bngnbk	hw	eqgr	q bio cly	GN					290
12	14		bngnbk	hw	eqgr	q bio cly	GN					100
14	16		bngnbk	hw	eqgr	q bio cly	GN					220
16	18		dkgybn	mw	eqgr	q bio fs (cly)	GN					270
18	20		dkgybn	mw	eqgr	q bio fs (cly)	GN					300
20	30	148594										
20	22		dkgybn	ww	eqgr	q bio fs mag	GN					500
22	24		gybn	mw	eqgr	q bio cly	GN					700
24	26		gybn	ww	eqgr	q bio fs (cly)	GN					200
26	28		gybn	ww	eqgr	q bio fs (cly)	GN					320
28	30		dkgy	fr	eqgr	q bio mag	GN					800
30	40	148595										
30	32		dkgy	fr	eqgr	q bio mag sill	GN					1300
32	34		dkgybn	fr	eqgr	q fs bio mag	GN					1600
34	36		dkgybn	fr	eqgr	q fs bio mag	GN			blue quartz		1200
36	38		dkgybn	fr	eqgr	q fs bio mag	GN					1000
38	40		gybpnk	fr	eqgr	q fs bio mag gar	GN					500
40	42	148596	gy	fr	eqgr	q fs bio mag gar	GN					660
42	44	148597	gy	fr	eqgr	q * bio mag gar	GN			*gn min has HCl fizz		700

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From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lithology	Structure	Alteration	Mineralisation	Comments	Mag Susc
44	46	148598	gygn	fr	eqgr	q * bio gar	SKARN				-gn min has HCl fizz	200
46	48	148599	gygnw	ww	eqgr	q * bio gar	SKARN					50
48	50	148600	bngn	mw	eqgr	q * cly	SKARN					130
50	52	148601	dkgybn	ww	eqgr	q mag py	LODE			sec Cu	speck azurite	700
52	54	148602	bk	fr	eqgr	q mag bio	LODE			tr py		1400
54	56	148603	bk	fr	eqgr	q mag bio	LODE			tr py		400
56	58	148604	bk	fr	eqgr	q mag bio (gar)	LODE			tr py		50
58	60	148605	bkbn	fr	eqgr	q bio gar	LODE		oxd jnts			10
60	62	148606	gybn	fr	eqgr	q bio fs gar	GN					0
62	64	148607	gybn	fr	eqgr	q bio fs gar	GN					0
64	66	148608	gy	fr	eqgr	q bio fs gar	GN					0
66	68	148609	gypk	fr	eqgr	q bio fs gar	GN					0
68	70	148610	gypk	fr	eqgr	q bio fs gar	GN					0
70	72	148611	gypk	fr	eqgr	q bio fs gar	GN			tr py		20
72	74	148612	gypk	fr	eqgr	q bio fs gar(mag)	GN					370
74	76	148613	bk	fr	eqgr	q bio fs mag	GN					1500
76	78	148614	gypk	fr	eqgr	q bio fs gar mag	GN					300
78	80	148615	gybn	ww	eqgr	q bio fs gar	GN					50
80	82	148616	ltgy	fr	eqgr	q fs bio gar	GN					0
82	84	148617	gybn	fr	eqgr	q fs bio gar	GN					0
84	86	148618	ltgy	fr	eqgr	q fs bio gar	GN					0
86	88	148619	ltgy	fr	eqgr	q fs bio gar	GN					20
88	90	148620	bk	fr	eqgr	q fs bio mag gar	GN					500
90	92	148621	gybn	ww fe	eqgr	q fs bio mag gar	GN					100
92	93	148622	gybn	fr	eqgr	q fs bio mag gar	GN				EOH	0



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK004
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS				
0	36 AMG	60				EL NUMBER:	8125				
						EOH DEPTH:	85			AMG CO-ORDINATES	
						TRAVERSE No:				7449547 mN	373880 mE
<b>From</b>	<b>To</b>	<b>Sample Number</b>	<b>Colour</b>	<b>Weathering</b>	<b>Texture</b>	<b>Mineralogy</b>	<b>Lith- ology</b>	<b>Structure</b>	<b>Alteration</b>	<b>Mineral- isation</b>	<b>Comments</b>
0	10	148623									
0	2	crltbn	hw	eqgr	q carb	CAL					0
2	4	rdbngn	hw	eqgr	q cly	GN					0
4	6	rdbngn	hw	eqgr	q cly	GN					0
6	8	rdbngn	hw	eqgr	q cly	GN					0
8	10	rdbngn	mw	eqgr	q bio cly	GN					0
10	20	148624									
10	12	rdbngn	mw	eqgr	q bio cly	GN					0
12	14	rdbngn	mw	eqgr	q bio cly	GN					0
14	16	rdbngn	mw	eqgr	q bio cly	GN					100
16	18	rdbngn	mw	eqgr	q bio cly	GN					120
18	20	rdbngn	mw	eqgr	q bio cly	GN					50
20	30	148625									
20	22	rdbngn	mw	eqgr	q bio gar cly	GN					200
22	24	rdbngn	mw	eqgr	q bio gar cly	GN					400
24	26	rdbngn	mw	eqgr	q bio gar cly	GN					180
26	28	rdbngn	mw	eqgr	q bio gar cly	GN					450
28	30	149422	rdbngn	mw	eqgr	q bio gar cly	GN				1600
30	32	149423	rdbngn	ww	eqgr	q bio gar mag	GN				1200
32	34	149424	rdbngn	ww	eqgr	q bio gar mag	GN				300
34	36	149425	ltbngn	mw	eqgr	cly q	GN				50
36	38	149426	ltbn	mw	eqgr	cly q	GN				0
38	40	149427	dkgy	fr	mg eqgr	q bio gar mag	GN				0
30	40	148626									
40	42	148627	bkpk	fr	mg eqgr	q bio gar ep mag	LODE			tr py	0
42	44	148628	bkpk	fr	mg eqgr	q bio gar ep mag	LODE			tr py	160

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<b>From</b>	<b>To</b>	<b>Sample Number</b>	<b>Colour</b>	<b>Weathering</b>	<b>Texture</b>	<b>Mineralogy</b>	<b>Lithology</b>	<b>Structure</b>	<b>Alteration</b>	<b>Mineralisation</b>	<b>Comments</b>	<b>Mag Susc</b>
44	46	148629	bkpk	fr	mg eqgr	q bio gar ep mag	LODE			tr py		600
46	48	148630	bkpk	fr	mg eqgr	q bio gar ep mag	LODE			tr py		550
48	50	148631	bkpk	fr	mg eqgr	q bio fs gar	GN					100
50	52	148632	bkpk	fr	mg eqgr	q bio fs gar	GN					20
52	54	148633	gypk	ww	mg eqgr	q bio fs gar	GN					15
54	56	148634	gypk	ww	mg eqgr	q bio fs gar	GN					5
56	58	148635	gypk	fr	mg eqgr	q bio fs gar	GN					0
58	60	148636	gypk	fr	mg eqgr	q bio fs gar	GN					130
60	62	148637	bkpk	fr	mg eqgr	q bio fs gar mag	GN					1500
62	64	148638	bkpk	fr	mg eqgr	q bio fs gar mag	GN					600
64	66	148639	gybkbn	fr	mg eqgr	q bio fs gar	GN					100
66	68	148640	gypk	fr	mg eqgr	q bio fs gar mag	GN					250
68	70	148641	gybn	ww fe	mg eqgr	q fs bio	GN					100
70	72	148642	gybn	ww fe	mg eqgr	q fs bio	GN					0
72	74	148643	gy	fr	mg eqgr	q fs bio	GN					0
74	76	148644	gybn	fr	mg eqgr	q fs bio	GN					0
76	78	148645	gy	fr	mg eqgr	q fs bio mag	GN					700
78	80	148646	bk	fr	mg eqgr	q fs bio mag	GN					500
80	82	148647	bkpk	fr	mg eqgr	q bio gar mag	GN					0
82	84	148648	gybn	ww fe	mg eqgr	q bio	GN					0
84	85	148649	gybn	ww fe	mg eqgr	q bio	GN				ABD due to water	0



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK005	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0	36 AMG	60				EL NUMBER:	8125					
						EOH DEPTH:	84					
						TRAVERSE No:						
									RL:	650		
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lith- ology	Structure	Alteration	Mineral- isation	Comments	Mag Susc
0	10	148650										
0	2		ltbn	hw	rnd	q carb	CAL					0
2	4		bn	hw	eqgr	q cly	GN				weathered bedrock	0
4	6		bngn	hw	eqgr	q cly	GN					0
6	8		bngn	hw	eqgr	q cly	GN					10
8	10		bngn	hw	eqgr	q cly	GN					10
10	20	148651										
10	12		bngn	hw	eqgr	q cly	GN					10
12	14		dkgn	hw	eqgr	q bio cly	GN				sim to outcrop h/w	0
14	16		dkgn	hw	eqgr	q bio cly	GN					0
16	18		bn	hw	eqgr	q cly	GN					100
18	20	149412	bn	hw	eqgr	q cly	GN					150
20	30	148652	bn									
20	22	149413	bn	hw	eqgr	q cly	GN					180
22	24	149414	bngn	hw	eqgr	q cly	GN					170
24	26	149415	bngn	hw	eqgr	q cly	GN					130
26	28	149416	bngy	hw	eqgr	q bio cly	GN					10
28	30	149417	gy	mw	eqgr	q bio cly	GN					10
30	40	148653										
30	32	149418	gy	fr	eqgr	q fs bio (gar)	GN					10
32	34	149419	gy	fr	eqgr	q fs bio (gar)	GN					10
34	36	149420	gybn	ww	eqgr	q fs bio (gar)	GN					0
36	38	149421	gybn	ww	eqgr	q fs bio (gar)	GN				sample lost	0
38	40	149421	gypk	fr	eqgr	q fs bio (gar)	GN					0
40	42	148654	bk	fr	eqgr	q bio mag	GN			tr py		0
42	44	148655	bk	fr	eqgr	q bio mag	LODE			tr py		1100

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From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lithology	Structure	Alteration	Mineralisation	Comments	Mag Susc
44	46	148656	gybn	ww	eqgr	q bio mag	LODE			tr py		400
46	48	148657	gybn	ww	eqgr	q bio ep gar	LODE			tr py		250
48	50	148658	gybn	fr	eqgr	q bio gar	GN					50
50	52	148659	gypk	fr	eqgr	q bio gar	GN					20
52	54	148660	gypk	fr	eqgr	q bio gar	GN					0
54	56	148661	gybn	ww	eqgr	q bio gar FeOx	GN					0
56	58	148662	gypk	fr	eqgr	q bio ep gar mag	GN					100
58	60	148663	gybn	fr	eqgr	q bio ep gar mag	GN					1100
60	62	148664	gybn	fr	eqgr	q bio ep gar mag	GN					1200
62	64	148665	gybn	ww fe	eqgr	q bio fs gar cly	GN					250
64	66	148666	gybn	ww	eqgr	q bio fs gar cly	GN				strong water flow	150
66	68	148667	ltgy	fr	eqgr	q bio gar	GN					10
68	70	148668	ltgy	fr	eqgr	q bio gar	GN					10
70	72	148669	ltgy	fr	eqgr	q bio gar	GN					0
72	74	148670	ltgy	fr	eqgr	q bio gar	GN					0
74	76	148671	bngy	ww	eqgr	q bio gar	GN					100
76	78	148672	gy	fr	eqgr	q bio gar mag	GN					900
78	80	148673	bk	fr	eqgr	q bio mag	GN					1100
80	82	148674	gy	fr	eqgr	q bio gar	GN					250
82	84	148675	gybn	ww	eqgr	q bio gar FeOx	GN				EOH Strong water flow	50



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK006	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0	36 AMG	60				EL NUMBER:	8125					
						EOH DEPTH:	78					
						TRAVERSE No:				RL:	650	
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lith- ology	Structure	Alteration	Mineral- isation	Comments	Mag Susc
0	10	148676										
0	2		lt bn	hw	mg eqgr	q cly bio	GN					10
2	4		bn	hw	mg eqgr	q cly bio	GN					0
4	6		bn gn	hw	mg eqgr	q cly bio	GN					130
6	8		bn gn	hw	mg eqgr	q cly bio	GN					200
8	10		bn gn	hw	mg eqgr	q cly bio	GN					200
10	20	148677										
10	12		bn gn	hw	mg eqgr	q cly bio	GN					200
12	14		bn gn	mw	mg eqgr	q cly bio	GN					220
14	16		gy gn	mw	mg eqgr	q bio (cly) mag	GN					230
16	18		gy gn	mw	mg eqgr	q bio (cly) mag	GN					230
18	20		gy gn	mw	mg eqgr	q bio (cly) mag	GN					300
20	30	148678										
20	22		gy gn	mw	mg eqgr	q bio fs mag	GN					600
22	24		gy gn	mw	mg eqgr	q bio fs mag	GN					900
24	26		dk gy	ww	mg eqgr	q bio fs mag	GN					1800
26	28		dk gy	ww	mg eqgr	q bio fs mag	GN					1400
28	30		dk gy	ww	mg eqgr	q bio fs mag	GN					1000
30	40	148679										
30	32		dk gy	ww	mg eqgr	q bio fs mag	GN					1000
32	34		dk gy	ww	mg eqgr	q bio fs mag	GN					1500
34	36		dk gy	ww	mg eqgr	q bio fs ep mag	SKARN					1500
36	38		dk gy	fr	mg eqgr	q bio fs mag	LODE			tr py		3000
38	40		dk gy	fr	mg eqgr	q bio fs mag	LODE			tr py		3500
40	42	148680	gy	fr	mg eqgr	q bio fs mag	LODE			tr py		2500
42	44	148681	gybn	ww	mg eqgr	q bio fs mag	LODE			tr py		600

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HOLE NO: RRK006

<i>From</i>	<i>To</i>	<i>Sample Number</i>	<i>Colour</i>	<i>Weathering</i>	<i>Texture</i>	<i>Mineralogy</i>	<i>Lithology</i>	<i>Structure</i>	<i>Alteration</i>	<i>Mineralisation</i>	<i>Comments</i>	<i>Mag Susc</i>
44	46	148682	gybn	ww	mg eqgr	q bio fs ep?	LODE			tr py		70
46	48	148683	gybn	fr	mg eqgr	q bio fs mag	LODE			tr py		50
48	50	148684	gybn	fr	mg eqgr	q bio fs mag	LODE			tr py		50
50	52	148685	gybn	fr	mg eqgr	q bio fs mag	LODE			tr py		350
52	54	148686	gybn	fr	mg eqgr	q bio fs mag	LODE			tr py		280
54	56	148687	gybn	fr	mg eqgr	q bio fs mag	LODE			tr py		260
56	58	148688	gybn	fr	mg eqgr	q bio fs mag	LODE			1-5%py		600
58	60	148689	gybn	fr	mg eqgr	q bio fs mag	LODE			tr py		1800
60	62	148690	gybn	fr	mg eqgr	q bio fs mag	GN					400
62	64	148691	gybn	fr	mg eqgr	q bio fs gar	GN					0
64	66	148692	gybn	fr	mg eqgr	q bio fs gar	GN					0
66	68	148693	gybn	ww	mg eqgr	q bio fs gar	GN					0
68	70	148694	gybn	ww	mg eqgr	q bio fs gar FeO	GN					0
70	72	148695	ltgy	fr	mg eqgr	q bio gar	GN			tr py		0
72	74	148696	ltgy	fr	mg eqgr	q bio gar ep	GN					300
74	76	148697	bk	fr	mg eqgr	q mag bio	GN					700
76	78	148698	bk	fr	mg eqgr	q mag bio	GN				EOH	500



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK007	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0	36 AMG	60				EL NUMBER:	8125					
						EOH DEPTH:	82.5			7449210 mN	374380 mE	
						TRAVERSE No:				RL:	650	
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lithology	Structure	Alteration	Mineralisation	Comments	Mag Susc
0	10	148699										
0	2		bn	hw	rnd	q cly	SAND					30
2	4		bn	hw	eqgr	q cly bio	GN					0
4	6		gy gn	hw	eqgr	q cly bio	GN					100
6	8		bn gn	hw	eqgr	q cly bio	GN					100
8	10		bn	hw	eqgr	q cly bio	GN					100
10	20	148700										
10	12		gn w	mw	am	q bio kao	GN					400
12	14		dkgy	ww	eqgr	q fs bio	GN					800
14	16		dkgy bn	ww	eqgr	q fs bio	GN					800
16	18		dkgy bn	ww	eqgr	q fs bio	GN					600
18	20		dkgy bn	ww	eqgr	q fs bio	GN					400
20	30	148701										
20	22		dk gy	ww	eqgr	q fs bio	GN					400
22	24		dk gy	fr	eqgr	q fs bio mag	GN					1000
24	26		dk gy	fr	eqgr	q fs bio mag	GN					1500
26	28		dk gy	fr	eqgr	q fs bio mag	GN					1600
28	30		dk gy	fr	eqgr	q fs bio mag	GN					1700
30	40	148702										
30	32		dk gy	fr	eqgr	q fs bio mag	GN					2900
32	34		dk gy	fr	eqgr	q fs bio mag	GN					2500
34	36		dk gy	fr	eqgr	q fs bio mag gar	GN					2600
36	38		dk gy	fr	eqgr	q fs bio mag ep	GN					1900
38	40		dk gy	fr	eqgr	q fs bio mag gar	GN					2200
40	42	148703	dkgy	fr	eqgr fg	q fs bio mag	GN					1500
42	44	148704	dkgy	fr	eqgr	q fs bio mag	GN			tr py		2500

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<b>From</b>	<b>To</b>	<b>Sample Number</b>	<b>Colour</b>	<b>Weathering</b>	<b>Texture</b>	<b>Mineralogy</b>	<b>Lithology</b>	<b>Structure</b>	<b>Alteration</b>	<b>Mineralisation</b>	<b>Comments</b>	<b>Mag Susc</b>
44	46	148705	dkgy	fr	eqgr	q fs bio mag	GN					3800
46	48	148706	dkgy	fr	eqgr	q fs bio mag	GN					4300
48	50	148707	dkgy	fr	eqgr	q fs bio mag	GN					4300
50	52	148708	dkgy	fr	eqgr	q fs bio mag	GN					3200
52	54	148709	dkgy	fr	eqgr	q fs bio mag	GN					3700
54	56	148710	dkgy	fr	eqgr	q fs bio mag	GN					3200
56	58	148711	dkgy	fr	eqgr	q fs bio mag	GN					1900
58	60	148712	dkgy	fr	eqgr	q fs bio mag	GN					2300
60	62	148713	dkgy	fr	eqgr	q fs bio mag	GN					1900
62	64	148714	dkgy	fr	eqgr	q fs bio mag	GN					1800
64	66	148715	dkgy	fr	eqgr	q fs bio mag	GN					2000
66	68	148716	dkgy	fr	eqgr	q fs bio mag	GN					2100
68	70	148717	dkgy	fr	eqgr	q fs bio mag	GN					2200
70	72	148718	gygn	fr	eqgr	q fs bio mag ep	LODE			tr py		70
72	74	148719	gygn	fr	eqgr	q fs bio mag ep	LODE			tr py		600
74	76	148720	gygn	fr	eqgr	q fs bio mag ep	LODE			tr py		2000
76	78	148721	gygn	fr	eqgr	q bio ep	LODE			tr py		700
78	80	148722	gygn	fr	eqgr	q bio ep	LODE					200
80	82	148723	dkgy	fr	eqgr	q bio	GN					200
82	82.5	148724	dkgy	fr	eqgr	q bio	GN				ABD	200



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK008	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0		90				EL NUMBER:	8125			AMG CO-ORDINATES		
						EOH DEPTH:	10			7448115 mN	372620 mE	
						TRAVERSE No:				RL:	650	
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lithology	Structure	Alteration	Mineralisation	Comments	Mag Susc
0	2	148725	rdbn	hw	snd	q	SAND					0
2	4	148726	bn	mw	snd	q cly	GN					0
4	6	148727	gygn	ww	eqgr	q mu	GN					280
6	8	148728	gy	fr	eqgr	q mu fs ep	GN					280
8	10	148729	gy	fr	eqgr	q mu fs mag	GN				EOH	260



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK009	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0		90				EL NUMBER:	8125					
						EOH DEPTH:	12			7448075 mN	372650 mE	
						TRAVERSE No:				RL:	650	
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lith- ology	Structure	Alteration	Mineral- isation	Comments	Mag Susc
0	2	148730	rdbn	hw	rnd	q	SAND					10
2	4	148731	rdbn	hw	rnd	q cly	sCLAY					0
4	6	148732	gygn	ww	eqgr	q mu fs	GN					10
6	8	148733	gygn	fr	eqgr	q mu fs	GN					140
8	10	148734	gygn	fr	eqgr	q mu fs	GN					180
10	12	148735	gygn	fr	eqgr	q mu fs mag	GN				EOH	50



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK010	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0		90				EL NUMBER:	8125					
						EOH DEPTH:	12			AMG CO-ORDINATES		
						TRAVERSE No:			RL:	650		
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lith- ology	Structure	Alteration	Mineral- isation	Comments	Mag Susc
0	2	148736	rdbn	hw	rnd	q	SAND					0
2	4	148737	gygn	hw	rnd	q cly	sCLAY					0
4	6	148738	gygn	ww	mg eqgr	q mu ep gar	GN					0
6	8	148739	gy	ww	mg eqgr	q mu ep gar	GN					50
8	10	148740	gy	fr	mg eqgr	q mu bio	GN					100
10	12	148741	rdbn	fr	mg eqgr	q mu bio	GN			EOH		50



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK011	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0		90				EL NUMBER:	8125					
						EOH DEPTH:	12			7448000 mN	372715 mE	
						TRAVERSE No:			RL:	650		
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lith- ology	Structure	Alteration	Mineral- isation	Comments	Mag Susc
0	2	148742	bn	hw	rnd	q	SAND					0
2	4	148743	bn	hw	eqgr	q cly	CLAY					0
4	6	148744	gygn	hw	eqgr	q mu ?	CLAY					0
6	8	148745	gygn	mw	eqgr	q mu ?	GN					50
8	10	148746	gygn	mw	eqgr	q mu ?	GN					50
10	12	148747	gygn	fr	eqgr	q mu ?	GN				EOH	0



## DRILL HOLE LOG SHEET

DOWN HOLE SURVEY DATA						DRILL TYPE:	RC			DRILL HOLE NO.:	RRK012	
Depth	BRG	DIP	Depth	BRG	DIP	PROJECT:	ARUNTAS					
0	36 AMG	60				EL NUMBER:	8125					
						EOH DEPTH:	60			AMG CO-ORDINATES		
										7449638 mN	373770 mE	
						TRAVERSE No:				RL:	650	
From	To	Sample Number	Colour	Weathering	Texture	Mineralogy	Lithology	Structure	Alteration	Mineralisation	Comments	Mag Susc
0	10	148748										
0	2		ltbnw	hw	eqgr	q carb	CAL			KUNKAR	0	
2	4		ltbnw	hw	eqgr	q carb	CAL				0	
4	6		bngn	mw	eqgr	q bio cly	GN		fs->cly	weathered bedrock	0	
6	8		bngn	mw	eqgr	q bio cly	GN				0	
8	10		bngn	mw	eqgr	q bio cly	GN				0	
10	20	148749										
10	12		bngn	mw	eqgr	q bio cly	GN				0	
12	14		bngn	mw	eqgr	q bio cly	GN				0	
14	16		gybn	mw	eqgr	q fs bio	GN				0	
16	18		gybn	mw	eqgr	q fs bio	GN				0	
18	20		gybn	ww	eqgr	q fs bio	GN				40	
20	30	148750										
20	22		dkgybn	ww	eqgr	q fs bio mag	GN				300	
22	24		dkgybn	ww	eqgr	q fs bio	GN				400	
24	26		dkgy	fr	eqgr	q fs bio gar	GN				500	
26	28		dkgy	fr	eqgr	q fs bio	GN				200	
28	30		dkgy	fr	eqgr	q fs bio	GN				200	
30	32	148751	dkgy	fr	eqgr	q fs ep (gar)	CHERT?				200	
32	34	148752	gygn	fr	eqgr	q fs ep (gar)	CHERT?			tr py	300	
34	36	148753	gygn	ww	eqgr	q fs ep (chl) mag	LODE			tr py	150	
36	38	148754	gygn	fr	eqgr	q fs bio ep	LODE		min oxdn	ga cpy py	1-2% sulphides	150
38	40	148755	bk	fr	eqgr	q fs bio gar ep	LODE			tr py		350
40	42	148756	bk	fr	eqgr	q bio gar mag	LODE			tr py		200
42	44	148757	gybn	fr	eqgr	q bio mag	GN					150
44	46	148758	gypkbn	ww	eqgr	q bio gar	GN		FeOx			0

PASMINCO EXPLORATION - SA

116 Fullarton Road NORWOOD SA 5067

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HOLE NO: RRK012

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