

**ANNUAL REPORT
EL 7276
TENNANT CREEK
1:250,000 SHEET AREA**

**ROEBUCK RESOURCES N.L.-
TENNANT CREEK GOLD LTD.
JOINT VENTURE**

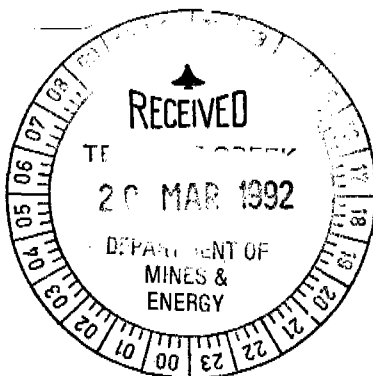
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March, 1992

CR 92 / 308

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Technical Report No. 260

CONTENTS

	Page No.
SUMMARY	1
1. INTRODUCTION	2
2. LOCATION	2
3. PREVIOUS EXPLORATION	2
4. EXPLORATION PROGRAMME	2
4.1 Geological Mapping and Photointerpretation	2
4.2 Regional Magnetic Interpretation	2
5. RECOMMENDATIONS	3
6. EXPENDITURE	3

FIGURES

Figure 1	Location Plan	1:100,000
Figure 2	EL 7276 Regional Geology showing Major Magnetic Features	
Figure 3	EL 7276 TMI Contours and Interpretation	

SUMMARY

EL 7276 was geologically mapped and a regional magnetic interpretation was undertaken. It was recommended that Explorer 12 magnetic anomaly as well as two others on the same trend be ground magnetically surveyed to delineate their orientation and depth.

Bedrock geochemical sampling along northeast-southwest orientated lines is also recommended.

EL 7276

Three Ways

Ford Bros Quarry

The Devil's
Pebble's

The Pebbles

Road

The Old Telegraph
Station

Disused
landing
ground

Mary Lane

Hidden
Mystery

Lucky
Strike

x Pretty Quadroon

x Mary Ann

Mary Ann Dam

ueline
Great

x Caroline

g Boulder

Great
Northern

Shamrock

True Blue

x Arizona

Burnt
Shirt

x Ace High

x Kathleen

Leichhardt

Microwave
Tower

Airport

Big Ben

Peter Pan

Wheal Dorid

Gibbett
TENNANT
CREEK

Central
Battery

Ajax

Fossilfern

Southern
Star

Pup

Pinnacles

Susan

Dolomite

Clay Target
Club

Rosebud

Wagg
Dams

Fig 1.

0 1 2 Km

1. INTRODUCTION

EL 7276 was granted to Tennant Creek Gold Ltd. on 21st February, 1991. It is currently part of a joint venture agreement with Roebuck Resources N.L. who are managers of the project.

2. LOCATION (Refer Figure 1)

EL 7276 is located 25 kilometres north of the Tennant Creek township centred on Three-ways Roadhouse.

3. PREVIOUS EXPLORATION

In 1973, Geopeko Ltd. (EL 214 Rep. 73/197) constructed an east-west baseline. A ground magnetic survey located an anomaly, Explorer 12, and a drill hole was planned. DDH1 was inclined at 65° towards true north, with an expected target intersection depth of 137 metres vertically. The hole was completely drilled in quartz-feldspar porphyry. Below the base of oxidation the porphyry contains disseminated magnetite. This was believed to be the source of the anomaly.

4. EXPLORATION PROGRAMME

4.1 Geological mapping and photointerpretation (refer Figure 2).

The Exploration Licence is essentially devoid of outcropping Bernborough Formation, being almost entirely sand/loam covered. There is one northwest trending outcrop straddling the southern boundary of the Exploration Licence. It and further outcrops to the south and southeast comprise northwest trending quartz feldspar porphyry dykes, within a sequence of "quartz arenites" which are silicified hornfelsed sediments - quartzites. It would appear that granite may occur at shallow depths in this area.

A number of quartz-hematite (specularite) bodies have been noted within shear zones which also trend northwest.

4.2 Regional magnetic interpretation (refer Figure 3)

The Explorer 12 anomaly is located 1 kilometre southeast of three-ways Roadhouse.

There are two other magnetic anomalies of greater magnitude - 140, 150 nanoteslas respectively on the same magnetic trend, namely northwest of Explorer 12. These should be followed up by a ground magnetic survey. It would appear that DDH1 may not have been correctly orientated. Explorer 12 should be resurveyed to check this.

EL 7276 REGIONAL GEOLOGY
SHOWING MAJOR MAGNETIC
FEATURES

qv-quartz vein, — M—magnetic linear
 --- photo linear
 Ewb—Early Proterozoic, Waramangu
 Grp, Bernborough Fm quartz
 arenites, feldspar porphyrys.

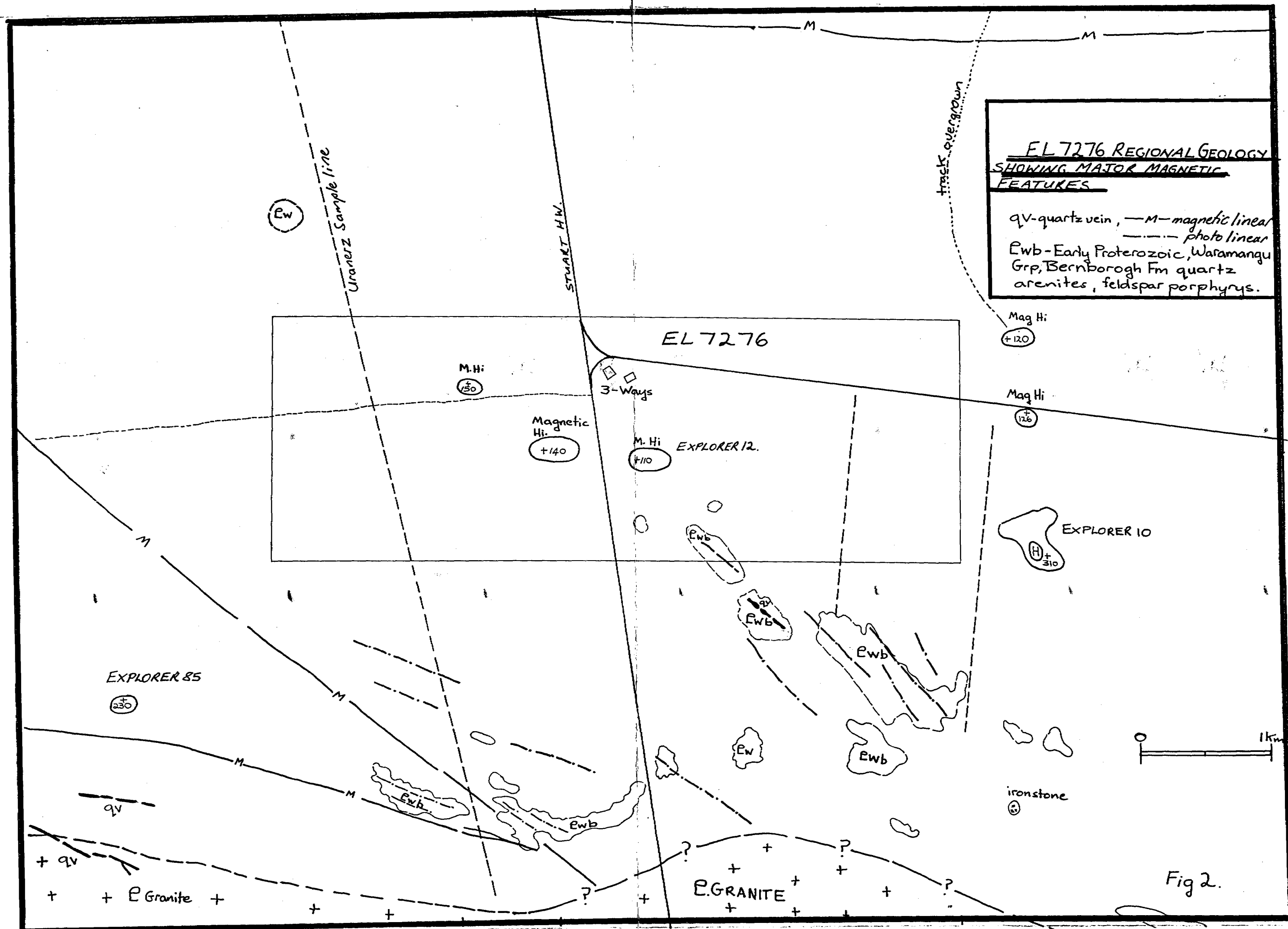


Fig 2.

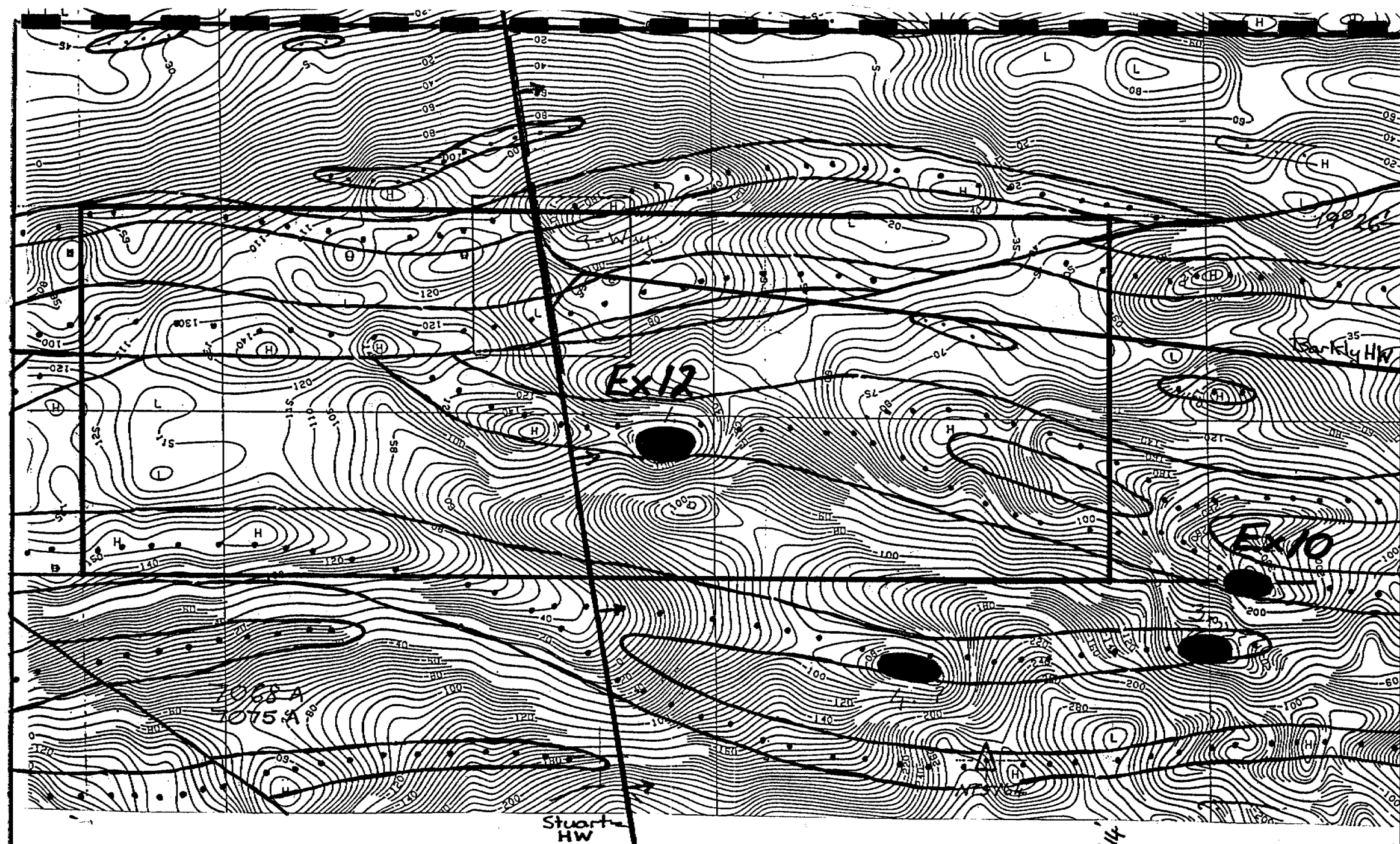




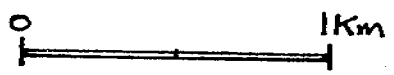
Fig 3

134°

134° 14'

 Magnetic sediment.
 Magnetic Anoms.
 'High' = ironstone

EL 7276 TMI CONTOURS INTERPRETATION



5. RECOMMENDATIONS

Ground magnetic surveys should be conducted over Explorer 12 and the other two anomalies to the northwest.

Gridding and bedrock geochemical RAB drilling along northeast to southwest orientated lines should be undertaken.

6. EXPENDITURE

Literature search
Regional magnetic interpretation
Photointerpretation
Geological mapping

TOTAL:

\$6,000.00

A. MACKIE
19 MARCH 1992