AMEROK GEOSCIENCES LTD.

ZIGGY EXPLORATION

MAGNETOMETER SURVEY OF THE ZIGGY CLAIMS, IRON CREEK, QUIET LAKE DISTRICT, Y.T.

120170

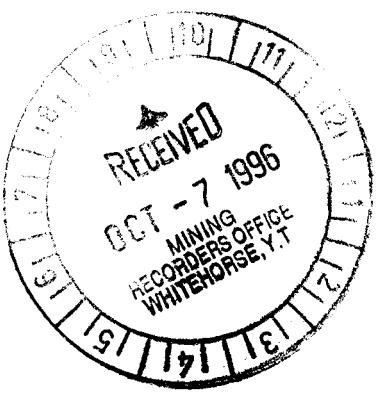
by

M. A. Power M.Sc. P. Geo.

Placer lease

PL9862

Location: 60° 53' N 133° 20' W
NTS: 105 C 14
Mining District: Whitehorse, Yukon Territory
Work performed: September 6-8, 1996
Date: October 3, 1996



This report has been examined by the Geological Evaluation Unit under Section 41 Yukon Placer Mining Act and is recommended as allowable representation work in the amount of $ 3300.00 .

William LeBarge

for Chief Geologist, Exploration and Geological Services Division, Northern Affairs Program for Commissioner of Yukon Territory.

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SUMMARY

A total magnetic field survey was conducted on the Ziggy property (PL9862) on Iron Creek near Quiet Lake, Y.T. The purpose of the survey was to locate concentrations of magnetite associated with placer gold concentrations in alluvial gravel. A flagged grid consisting of 4.5 line-km of survey line centred on the claim location line was put in by the two man field crew. Total magnetic field measurements were taken at 5 m intervals along the survey lines using a proton precession magnetometer. Temporal geomagnetic variation was removed using a base station magnetometer cycled at an interval of 20 seconds. The survey located 9 magnetic anomalies which have signatures similar to those expected from magnetite concentrations in shallow placer deposits. A tenth anomaly may be due to either a similar source or to surface metal.

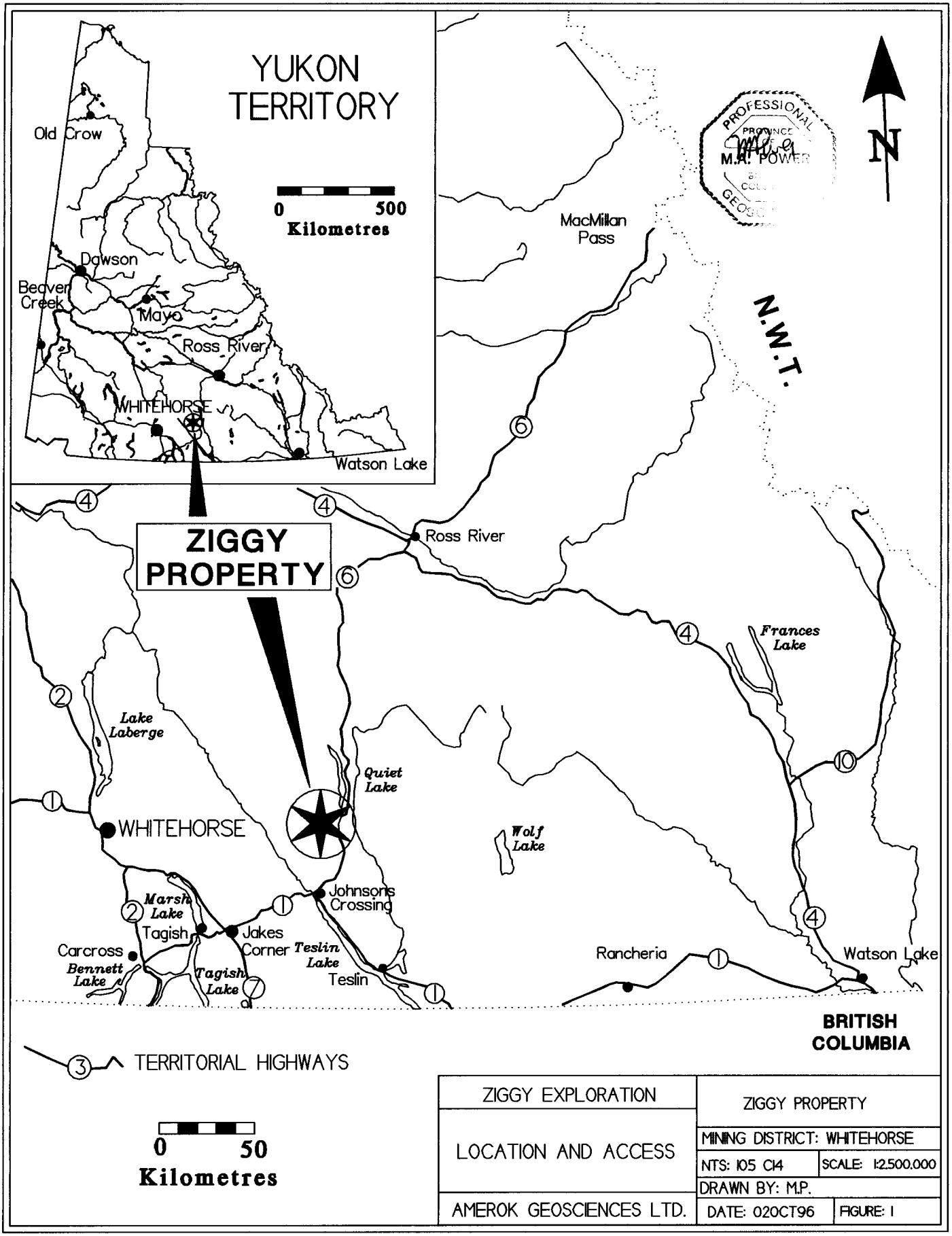
1.0 INTRODUCTION

Amerok Geosciences Ltd. performed a total magnetic field survey on the Ziggy property at Iron Creek, Y.T. in aid of an ongoing placer exploration program. A total of 4.5 line-km of grid were emplaced and surveyed on September 6 to 8, 1996. The purpose of this survey was to locate concentrations of magnetite associated with placer gold deposits.

2.0 LOCATION AND ACCESS

The Ziggy property is located at 60° 53' N 133° 20' W on Iron Creek, a tributary of Sidney Creek, southwest of Quiet Lake, Y.T. (Figure 1). The property can be reached by road using the following route:

Section	Distance (Km)	Remarks
Whitehorse to Sidney Creek Road	205	Via Alaska Highway and South Canol Highways; all weather roads. South Canol Highway is closed in the winter.
Sidney Creek Road to Iron Creek road.	16	4x4 road
Iron Creek road to Property	1	4x4 road, currently impassable for last 600 m



ZIGGY EXPLORATION	ZIGGY PROPERTY
LOCATION AND ACCESS	MINING DISTRICT: WHITEHORSE
	NTS: 105 C14 — SCALE: 1:2,500,000
	DRAWN BY: M.P.
AMEROK GEOSCIENCES LTD.	DATE: 02OCT96 — FIGURE: 1

3.0 PROPERTY

The Convert property consists of the following unsurveyed lease staked under the Yukon Placer Mining Act in the Whitehorse Mining District:

Placer Lease	Record Numbers	Expiry date[1]	Registered owner
No name	PL9862	July 10, 1997	Dorothy Edzerza

The lease location is shown together with topography and the survey grid in Figure 2.

4.0 PHYSIOGRAPHY

The Ziggy property is on Iron Creek, a tributary of Sidney Creek in the Big Salmon Range of the Pelly Mountains. Local relief in the area of the claims ranges from 880 to 1490 m. The property is centred on Iron Creek and is bounded by a steep sloped hill on the west and a gentle slope on the east. Downcutting has created a steep scarp with relief in the order of 10 to 15 m on the east side of the creek. Local vegetation ranges from thick spruce in uncleared areas to cleared areas overgrown with willows and alders.

5.0 PLACER GEOLOGY

The Ziggy property is underlain by Mesozoic granites (Lees 1936). Placer deposits were discovered on Iron Creek around 1905 and mined by hand and with equipment intermittently since then. Placer gold is reportedly associated with gravels in the recent creek drainage; older, pre-glacial gravels are reported in the lower reaches of Iron Creek. Most of the work on this creek has been exploratory.

6.0 MAGNETOMETER SURVEY

The magnetometer survey was conducted by Dan Hall (Crew chief) and Jeff Boyce (Technician) between September 6 to 8, 1996. The crew was equipped with a pair of Omni Plus proton precession magnetometers, an Omni IV base station proton precession magnetometer, laptop computer, colour printer, generator, Garmin 38 GPS receiver and 4x4 truck. The crew worked out of a placer camp on the property.

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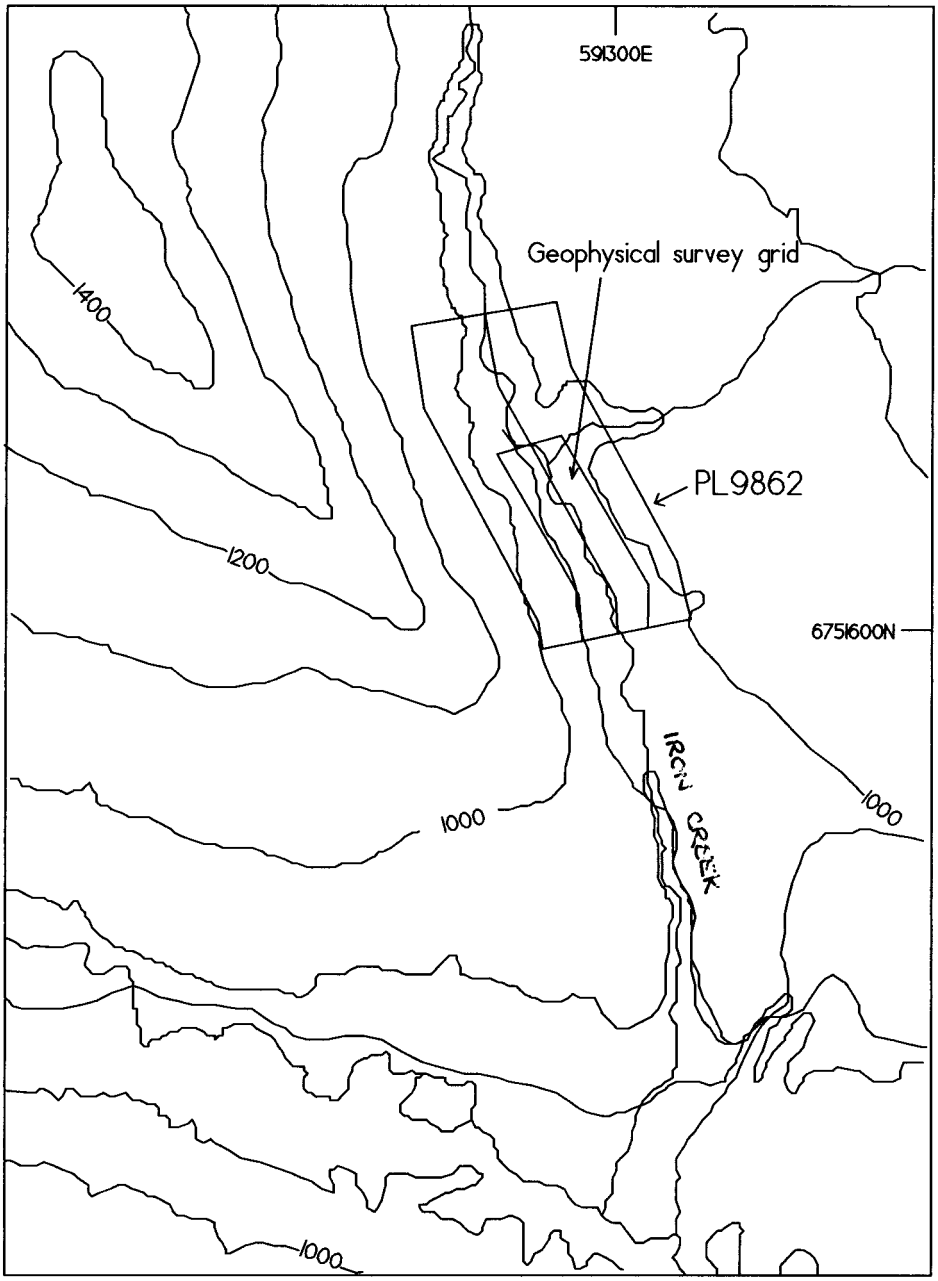
[1]Expiry date does not include assessment credit for work performed in 1996.



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Elevation contours in metres above mean sea level.
Contour interval: 100 m
Mapping datum: NAD27

0 1000
metres

ZIGGY EXPLORATION	ZIGGY PROPERTY
CLAIM LOCATION MAP	MINING DISTRICT: WHITEHORSE
	NTS: 105 C14 / SCALE: 1:40,000
	OPERATOR: D.H. / J.B.
AMEROK GEOSCIENCES LTD.	DATE: 020CT96 / FIGURE: 1

A grid consisting of a base line coincident with the claim location line and survey lines turned at 50 and 100 m intervals off the base line was flagged in by the survey crew. The origin of the grid is at the Number 1 post of Ziggy 1 (ie. the downstream boundary of the property) and the area covered by the grid is indicated in Figure 2. Survey lines were held to a constant orientation of 74° and extend 150 m either side of the base line. Both the lines and base line were flagged in; survey lines were flagged with stations every 20 m. Several points on the grid were registered with the GPS to locate the grid with respect to the NAD27 UTM datum.

The magnetometer survey was conducted at a 5 m station spacing with the synchronized base station cycling at a maximum 20 second interval. All data was recorded in on-board RAM and dumped to the laptop computer at the end of the survey day for processing and plotting.

7.0 RESULTS

Corrected total magnetic field readings registered to grid and UTM (NAD27) coordinates are contained in Appendix C. The magnetic field data was contoured and is shown in Figure 3 (in pocket). Several broad magnetic field anomalies appear to be bedrock features while a number of sharp, isolated anomalies, some of which are coincident with the present drainage, are targets for additional investigation.

Many placer deposits are associated with significant concentrations of magnetite or ilmenite (black sands) (Telford *et. al.* 1990). Placer deposits of this type have a significant positive magnetic anomaly associated with them in the order of 30 to 100 nT. Anomalies less than 30 nT are difficult to discriminate from background noise. The general form of an anomaly associated with a typical placer deposit is sketched in Figure 4. These anomalies differ from bedrock anomalies in that they are of lower amplitude and shorter spatial wavelength and have proportionately higher amplitude negative magnetic responses on the magnetic north side of the features.

Figure 5 (in pocket) is an interpretation map indicating the location of magnetic anomalies which have signatures similar to those expected from the shallow placer deposit. Several of these anomalies are known to be caused by nearby metal; these are indicated by an **M** in the figure. Anomalies **A1** through **A9** show responses which could be caused by concentrations of magnetite in a placer deposits. This determination is based upon the following criteria:

a. **Strike.** Anomalies associated with placer deposits are generally parallel to the overall drainage.

b. **Strike length.** Anomalies associated with placer deposits are of restricted

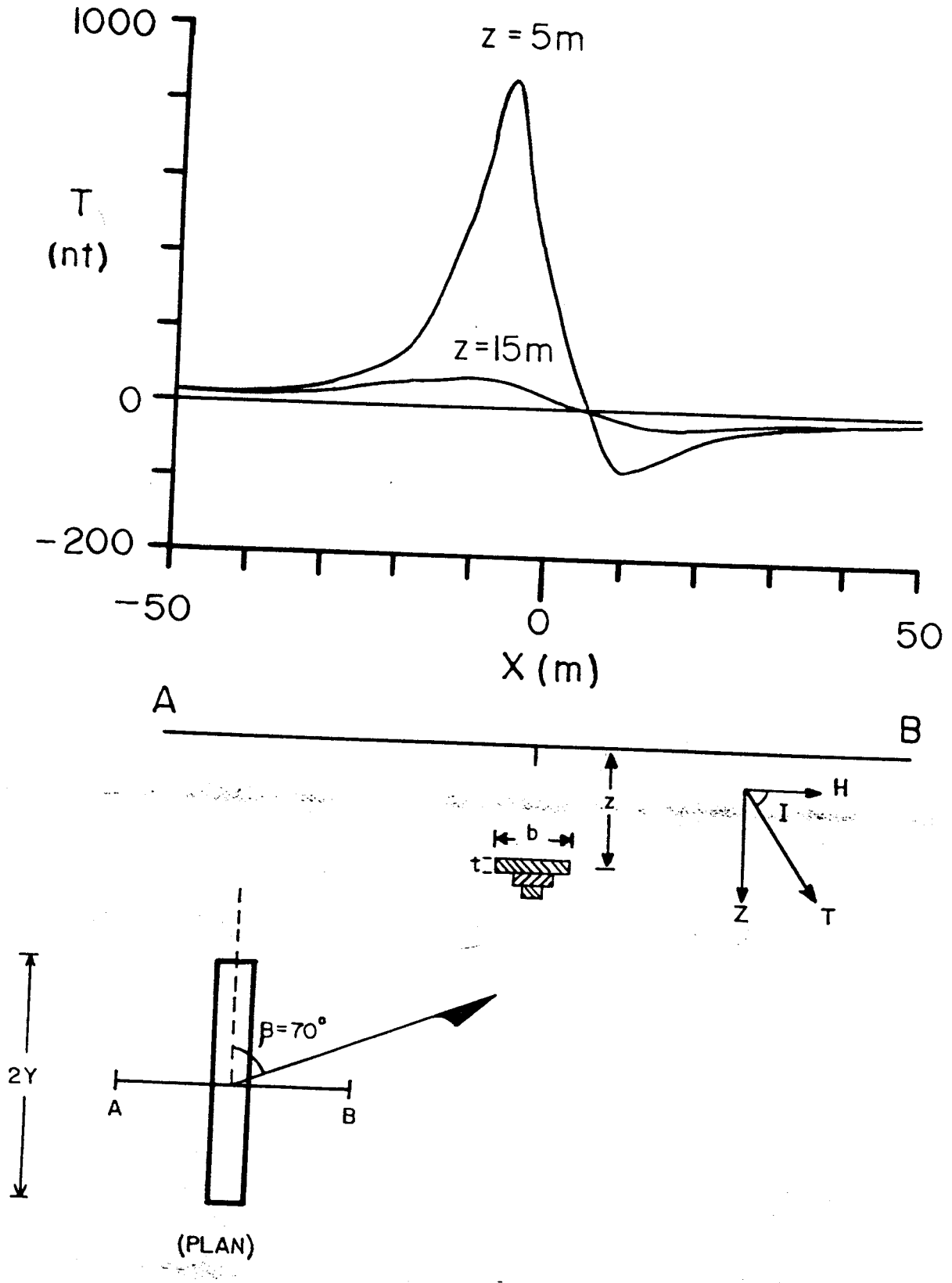

Fig. 4 Magnetic model of a stream channel deposit.

strike length in contrast to anomalies from bedrock features which persist over long distances.

c. **Width.** Anomalies associated with placer deposits are quite narrow, in the order of the width of the pay streak.

d. **Magnetic north flank negative response.** Anomalies associated with shallow features of limited depth extent usually show an significant depression on the north side of the anomaly.

It is possible that a significant concentration of placer minerals may overlie the areas covered by the high intensity magnetic field anomalies thought to originate from bedrock or metal. Unfortunately, the signature of a placer concentration would be indetectible in areas of high magnetic relief.

10.0 CONCLUSIONS AND RECOMMENDATIONS

The magnetic field survey results lead to the following conclusions:

a. Anomalies **A1** through **A9** may be caused by concentrations of magnetite associated with placer deposits based on their signatures.

b. Areas of the property are underlain by bedrock units with high magnetic relief and magnetic field surveys cannot successfully locate placer deposits in this setting.

I recommend that anomalies **A1** through **A9** be tested by trenching, shafting or drilling to determine the source of the anomalies.

Respectfully submitted,
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Michael A. Power M.Sc. P. Geo.
Geophysicist

REFERENCES CITED

Lees, E.J. (1936) Geology of Teslin - Quiet Lake Area, Yukon. Ottawa: Geological Survey of Canada Memoir 203.p26.

Telford, W.M, L.P. Geldart and R.E. Sheriff (1990). Applied Geophysics (Second edition). New York: Cambridge University Press.

APPENDIX A. CERTIFICATE

I, Michael Allan Power, M.Sc. P.Geo., with business and residence addresses in Whitehorse, Yukon Territory do hereby certify that:

1. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (registration number 21131).

2. I am a graduate of the University of Alberta with a B.Sc. (Honours) degree in Geology obtained in 1986 and a M.Sc. in Geophysics obtained in 1988.

3. I have been employed in mining exploration and geophysical research since 1986.

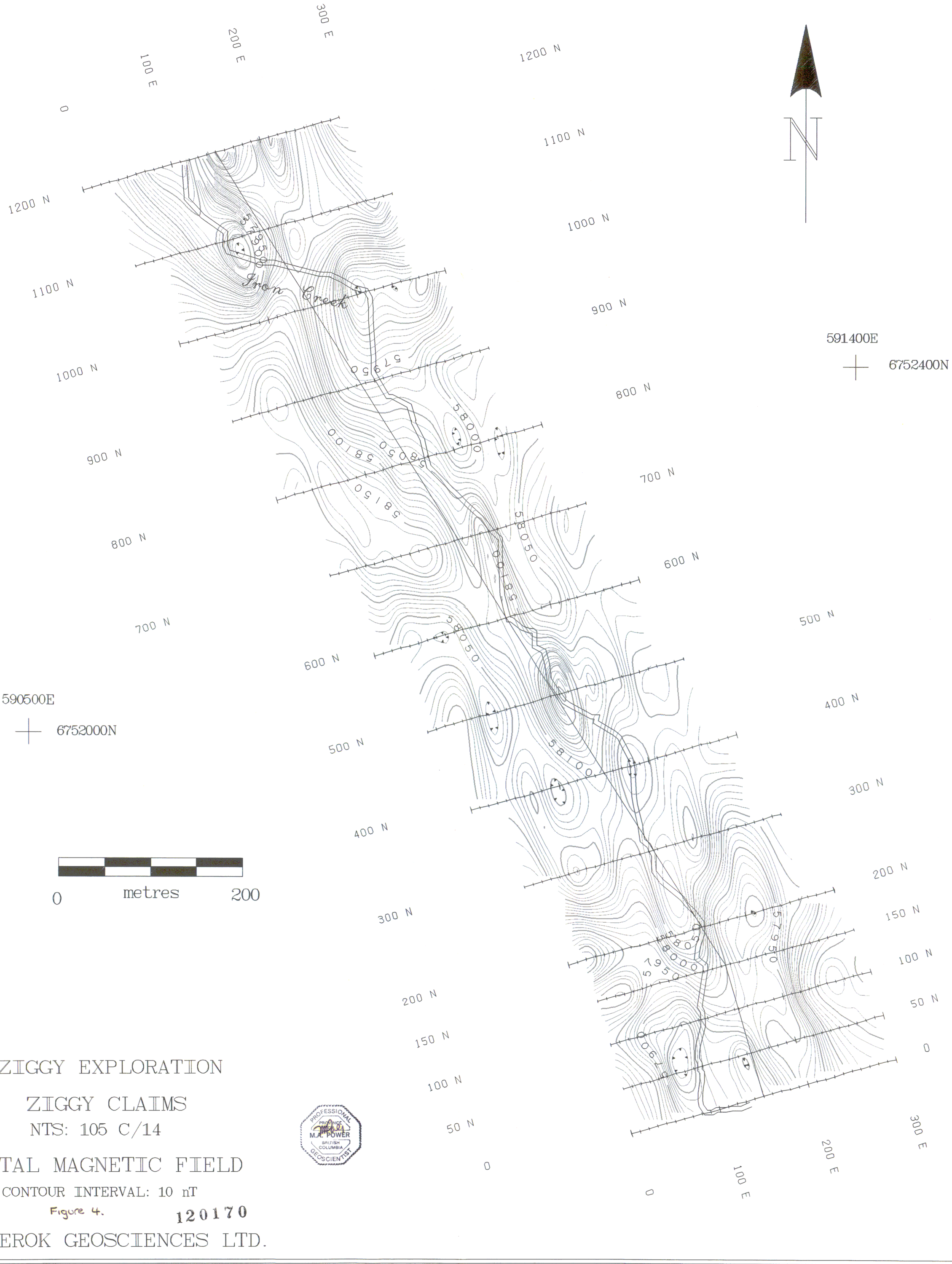
Dated this 3rd day of October, 1996 in Whitehorse, Yukon.

Respectfully Submitted,

Michael A. Power M.Sc. P.Geo.

APPENDIX B. STATEMENT OF COSTS

Mobilization / demobilization	$500.00
Survey	2000.00
Report	800.00
Total expenses	$3,300.00



ZIGGY EXPLORATION

ZIGGY CLAIMS

NTS: 105 C/14

TOTAL MAGNETIC FIELD

CONTOUR INTERVAL: 10 nT

Figure 4.

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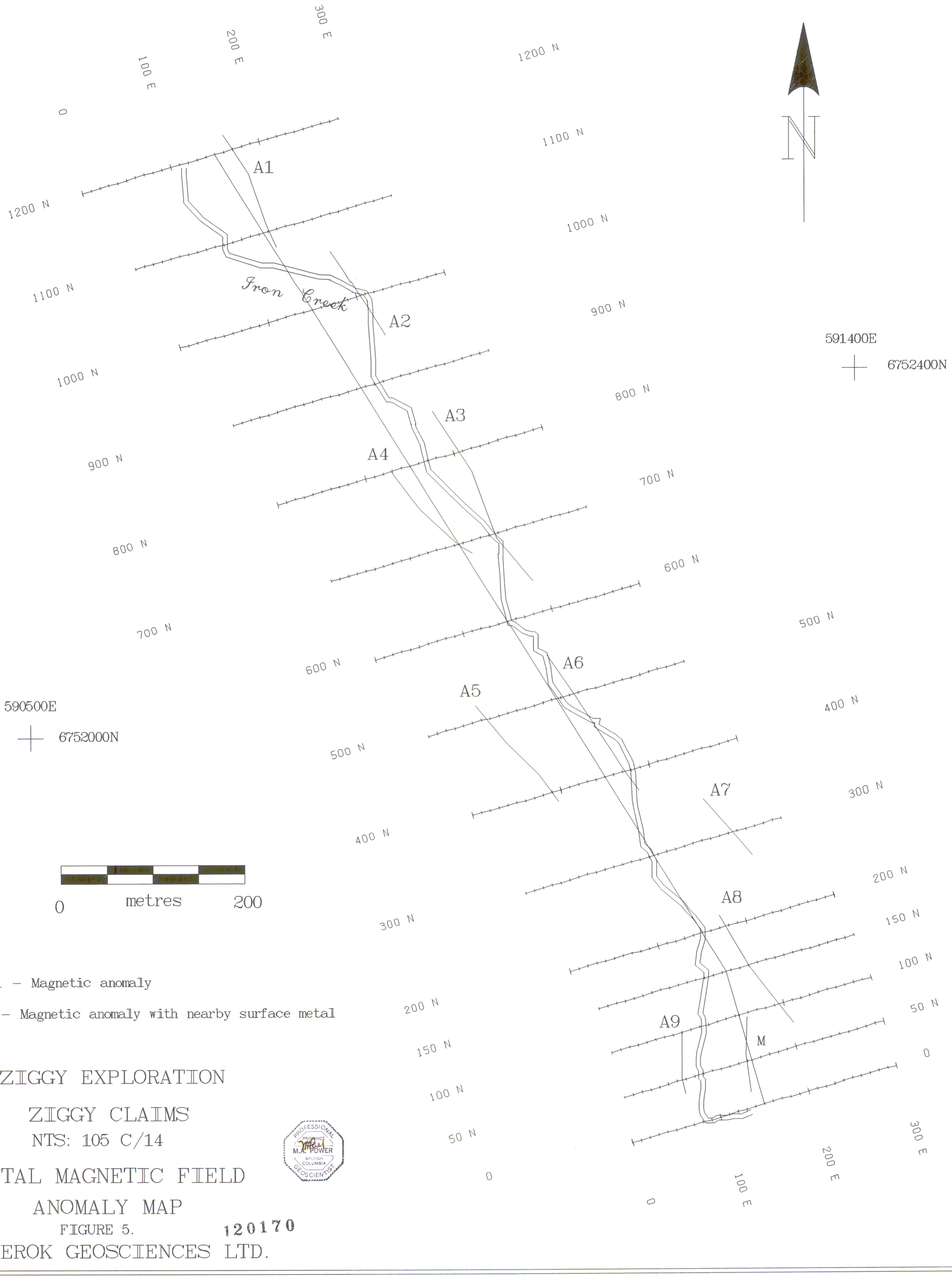

A1 – Magnetic anomaly

M – Magnetic anomaly with nearby surface metal

ZIGGY EXPLORATION

ZIGGY CLAIMS

NTS: 105 C/14

TOTAL MAGNETIC FIELD ANOMALY MAP

FIGURE 5.

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