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SECOND ANNUAL REPORT FOR

EXPLORATION LICENCE 9362

FOR THE PERIOD 29/11/96 TO 28/11/97

TENNANT CREEK DISTRICT, NORTHERN TERRITORY

ASTROBLEME PROSPECT

TENNANT CREEK 1:250,000 SHEET SE 53-14

VOLUME 1 OF 1

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COMMODITIES: Copper, Gold	

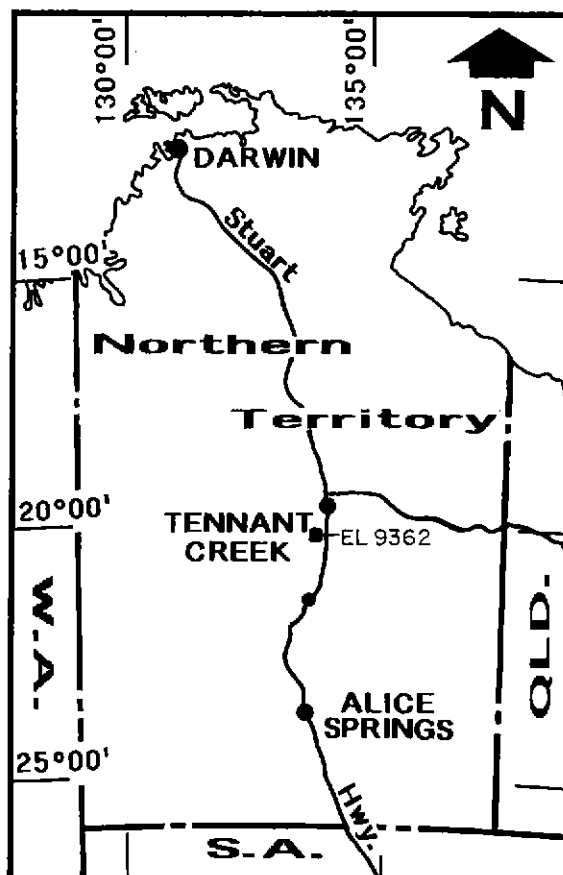
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REPORT NO: 97164
TITLE: SECOND ANNUAL REPORT FOR EXPLORATION LICENCE 9362 FOR
THE PERIOD 29/11/96 TO 28/11/97, TENNANT CREEK DISTRICT,
NORTHERN TERRITORY. ASTROBLEME PROSPECT
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1. SUMMARY

This report details work completed on EL 9362 (Astrobleme) during the period 29/11/96 to 28/11/97. This 16 hectare licence is managed by a joint venture consisting of Normandy Gold Limited (51.4%) and Acacia Resources Ltd (48.6%), known as the Desertex J.V. Exploration in this area is targeting Tennant Creek style ironstones for Au/Cu mineralisation.

Exploration during the second year of tenure has included both a high resolution aeromagnetic and a ground magnetic survey. The aeromagnetic survey has revealed detailed geology over the lease, including the presence of prospective Warramunga Formation and several magnetic targets. A total of \$42,446 was incurred during the second year of tenure.

2. INTRODUCTION

2.1 Location and Access

EL 9362 (Astrobleme) is located approximately 35 kms southwest of the Tennant Creek township (Figure 1) and lies within the Tennant Creek pastoral leases. Access to the tenement is gained via the Stuart Highway and a track turning westward 35 kms south of Tennant Creek. Access is difficult, sometimes impossible, during the November to February wet season.

2.2 Climate and Physiography

The climate of the Tennant Creek district is mild throughout autumn, winter and spring, with cool to cold winds in winter. High temperatures (in excess of 35°C) occur in summer, with associated seasonal rainfall in December to March, which can impede field programmes.

The physiography of the area including EL 9362 is dominated by aeolian sands, some alluvium, minor laterite surfaces and moderate outcrop. The outcrop occurs as low hills and breakaway surfaces with exposed rock aged from Devonian to Early Proterozoic.

2.3 Tenure

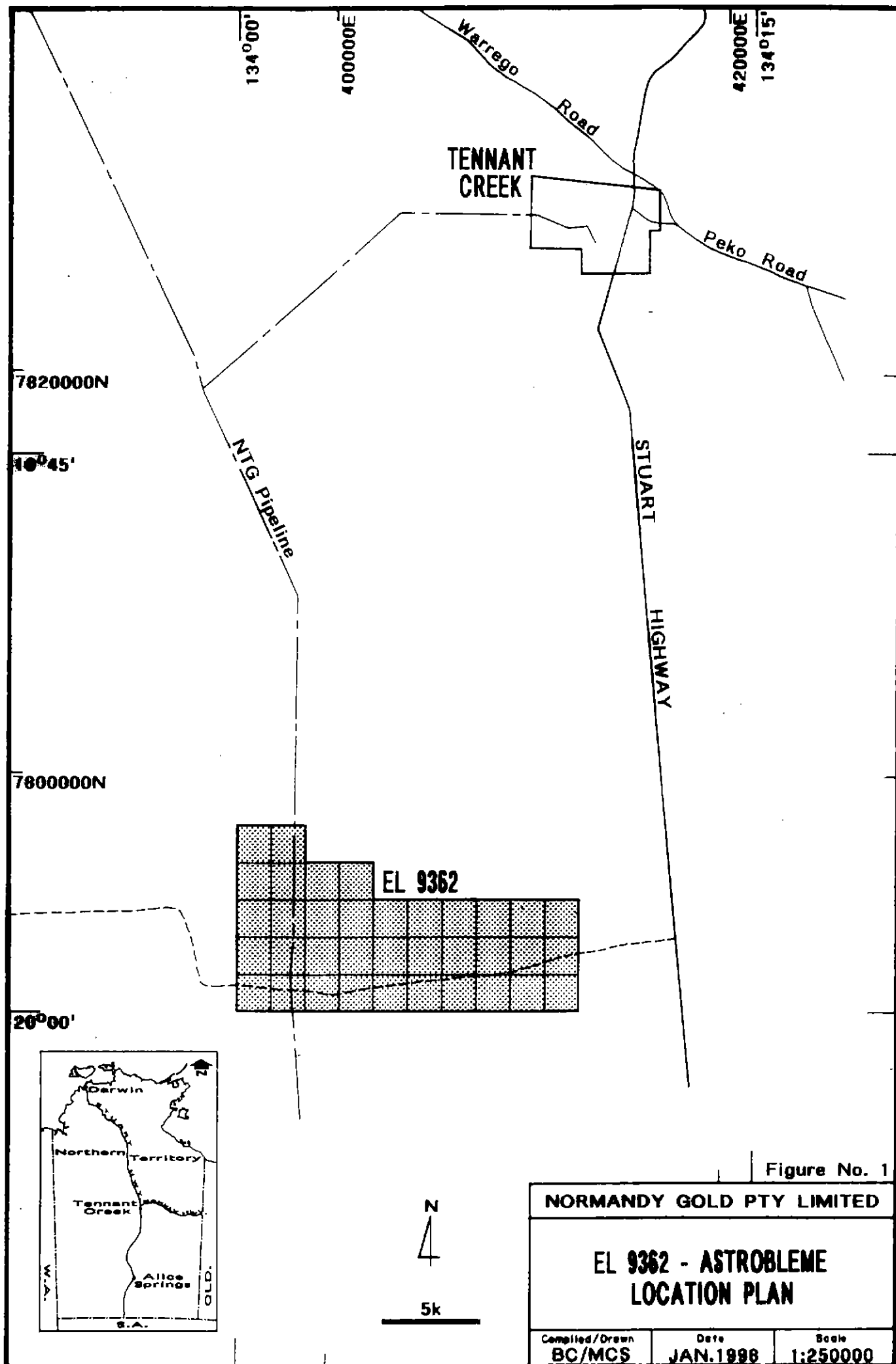
EL 9362 was granted on 29/11/95 for a period of 6 years. The licence is managed by a joint venture consisting of Normandy Gold Limited (51.4%) and Acacia Resources Ltd (48.6%) known as the Desertex J.V. EL 9362 lies within the boundaries of Tennant Creek Station, which is owned by Normandy Gold Pty Limited. On 15/10/97 the lease was reduced to from 32 to 16 hectares.

2.4 Previous Exploration

Previous exploration within EL 9362 has been limited to two episodes. In 1983 EL 9362 was included in EL 2719 as part of the original Desertex Joint Venture between the Shell Company of Australia Limited and GeoPeko Limited (GeoPeko).

Exploration targeted magnetic anomalies that were interpreted to represent Tennant Creek style mineralised ironstones. Aeromagnetic data flown over the area by GeoPeko was reviewed and several magnetic anomalies south of EL 9362 were RAB drilled without success. In 1983 the portion of EL 2719 that included EL 9362 was relinquished due to lack of magnetic targets in that area (Davidson, 1984).

Further exploration was then carried out by PNC Exploration Pty Ltd in 1987 and 1988. Exploration focussed on EL 5200 which encompassed a large area of land around and including EL 9362. PNC Exploration's strategy in 1987 focussed on



exploring uranium deposits occurring at the unconformable contact between the Archean basement and the younger Warramunga Formation north of EL 9362.

In 1988 their exploration strategy changed to focus on anomalous magnetic features and structures that were interpreted to represent Tennant Creek style ironstones. Five magnetic anomalies were identified within EL 9362; KLB, KLC, KLD, KLE and KLF. Each anomaly was covered with a ground magnetic survey.

A percussion drilling programme was undertaken on grids KLB and KLC. The percussion drill hole sat KLB and KLC intersected shale, greywacke and sandstones which were thought to represent sediments of the Warramunga Formation. Assays for Au, Ag, Cu, Pb, Zn and Bi were taken at the bottom of each hole, returning background values only (Mackie, 1989).

During the first year of tenure, exploration conducted over EL 9362 included reprocessing and interpretation of regional aeromagnetic data, regolith and geological mapping, rock chipping and a regional RAB drilling program of 6 holes for 197m. Refer to Morris, 1996 for a discussion of the work completed.

3. REGIONAL GEOLOGY

The geological understanding of the Tennant Creek Inlier has been recently advanced by detailed geological mapping over the Tennant Creek and Flynn 1:100,000 map sheets (Donnellan et al. 1995), precision dating of stratigraphic components of the region (Compston, 1995) and regional geophysical interpretations.

The oldest exposed Proterozoic lithofacies in the Tennant Creek Inlier are the metasedimentary rocks of the Warramunga Formation, which are the host to the ironstone Au-Cu-Bi mineralisation of the Tennant Creek Goldfield. These Palaeoproterozoic metasediments were deposited approximately 1860 Ma. Deformation and intrusion of the Warramunga Formation by volumous porphyries and granitoids occurred during the Barramundi Orogeny (1858 Ma to 1845 Ma).

Following deformation and uplift the volcanics and volcanoclastics of the Flynn Sub-Group were erupted (1845 Ma to 1827 Ma), with intrusion of porphyries and minor granitoids into the Warramunga Formation. An additional deformation event preceded the deposition of the Hatches Creek Group/Tomkinson Creek Sub-Group (1820 Ma to 1785 Ma) and the intrusion of late-stage granitoids and porphyries into both the Warramunga Formation and Flynn Sub-Group at 1650-1712 Ma.

4. LOCAL GEOLOGY

The majority of geological information in the tenure area is interpreted from aeromagnetic surveys, investigations of outcrops and minor drilling conducted in the area.

Low hills in the east of the lease consist of flat lying massive quartz arenites interpreted as being the Devonian Lake Surprise Sandstone of the Wiso Basin Sequence. In EL 9362, the Lake Surprise Sandstone covers some areas of the lease but is thought to be a thin layer of cover, less than 10m thick, unconformably overlying the Early Proterozoic sediments.

Other hills in the lease and the exposed breakaway surface towards the west of the lease consist of steeply dipping haematite altered greywackes with minor siltstone beds. A steep WSW oriented cleavage can generally be recognised as can bedding which also strikes WSW. The relatively coarse greywackes are turbidic in origin and may be equivalent to the Proterozoic Flynn Sub-Group from the Tennant Creek Field that are interpreted to overly the older Proterozoic Warramunga Formation (Donnellan *et. al*, 1995).

The only other outcrops in the lease consist of north-west oriented late stage quartz infilled faults and a small exposure of haematite altered volcanic tuff in the south-west of the lease. Tuffs are known to occur within the Flynn Subgroup.

5. EXPLORATION CONDUCTED OVER EL 9362 FROM 29/11/96 to 28/11/97

Exploration conducted over EL 9362 during the second year of tenure has included both an aeromagnetic and a gravity survey over the lease.

5.1 Aeromagnetic Survey

During 1997 a high resolution aeromagnetic survey was flown over the area incorporating EL 9362. The survey was flown at 40m height along 75m spaced grid lines. The survey revealed detailed geology and high priority magnetic targets, in the eastern and western portions of the tenement, interpreted to be hosted the Warramunga Formation. Refer to Figure 2 for a contour diagram of the results.

Radiometric data was also collected during the aeromagnetic survey, refer to Figure 3. This data will be used to check a regolith map of the area.

5.2 Gravity Survey

A gravity survey was conducted over the area incorporating EL 9362. The survey was conducted over 4km spaced lines with stations 500m apart. A total of 49 gravity stations were read within the lease. The survey showed a high gravity signature in the extreme west of the lease and a system of lows in the central and western portion of the lease. Refer to Figure 4 for a contour diagram of the results.

6. CONCLUSIONS AND RECOMMENDATIONS

The results of both the geophysical surveys completed within year two of tenure, in association with field mapping and RAB drilling has indicated the presence of prospective Warramunga Formation beneath thin cover in the south eastern and western portions of the lease. The aeromagnetic survey also revealed several anomalies worthy of follow-up. A programme of close spaced ground magnetics over the most attractive targets with follow up RC drill testing is planned for the third year of tenure.

7. EXPENDITURE INCURRED DURING THE PERIOD 29/11/96 to 28/11/97

During the second year of tenure an expenditure of \$42,446 was incurred. A breakdown of this expenditure is listed below.

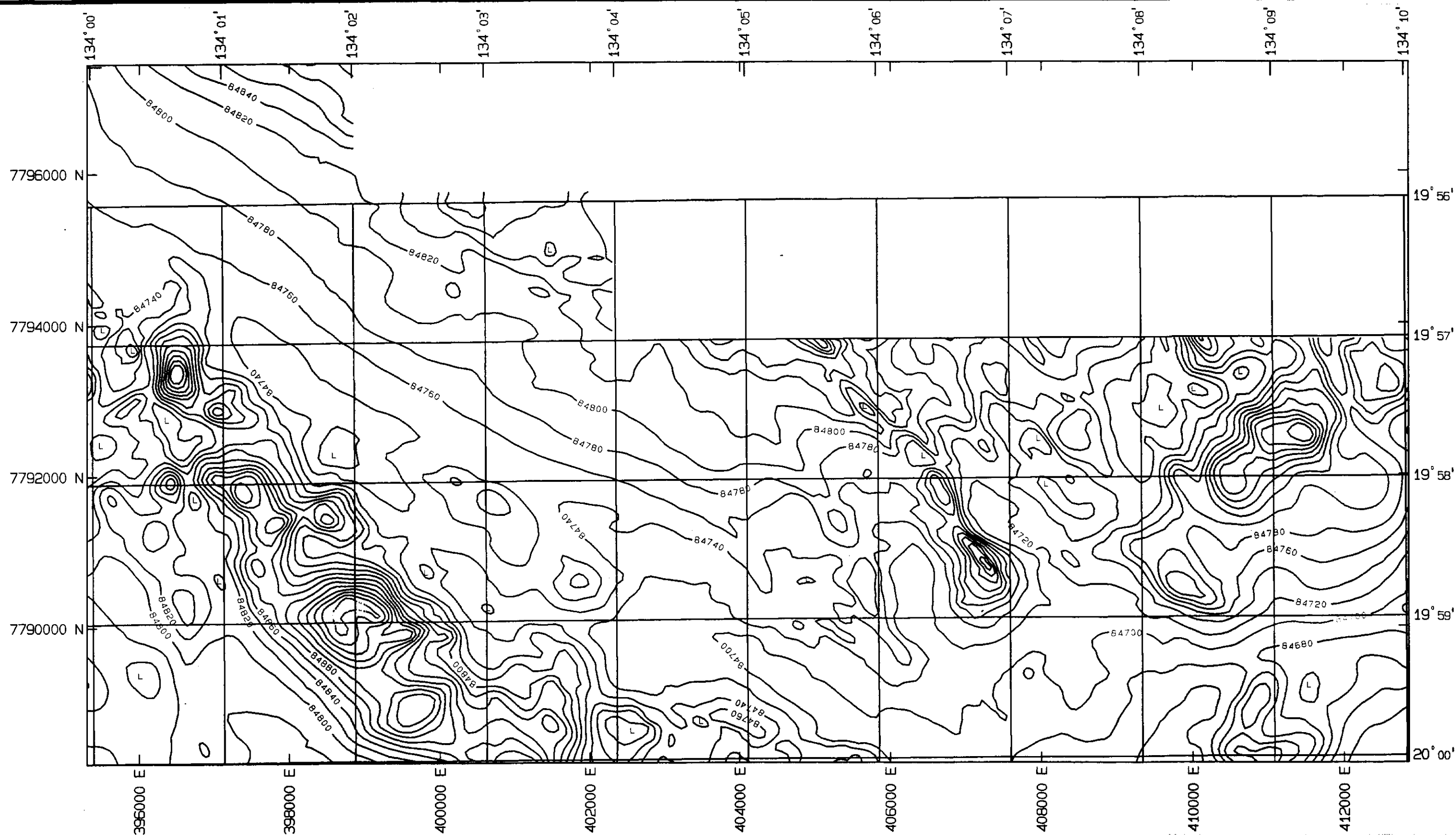


Figure No. 2

NORMANDY GOLD PTY LIMITED

TENNANT CREEK OPERATIONS

EL 9362 - ASTROBLEME

AEROMAGNETIC SURVEY JUNE 1997

FLIGHT LINES N-S, 75m SPACING, 40m HEIGHT

DATA GRIDDED AT 15m, REDUCED TO POLE

CONTOUR INTERVAL 20nT

DHI

1998 JAN 08

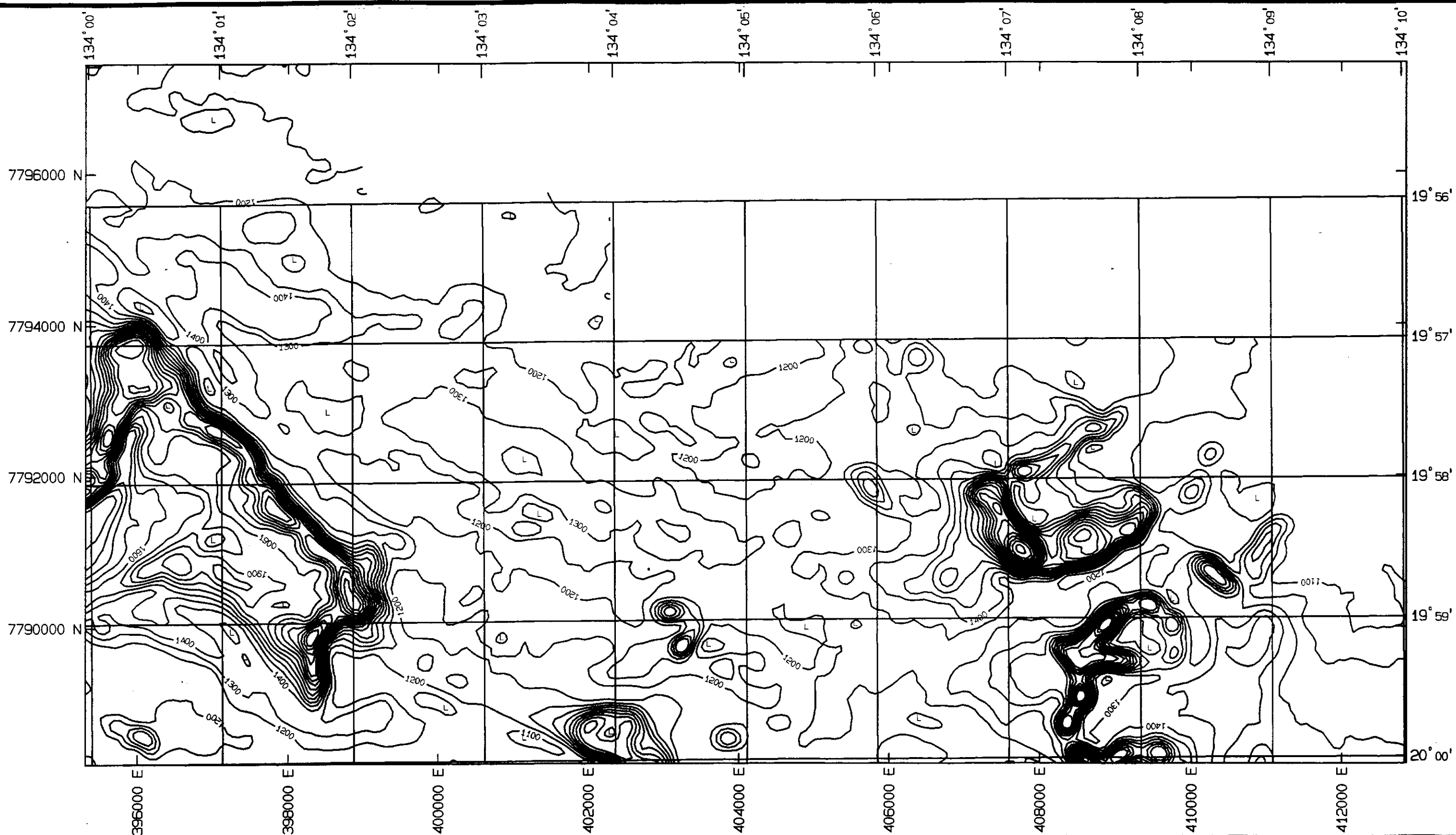


Figure No. 3

0 1000 2000 3000
M
SCALE 1: 50000



NORMANDY GOLD PTY LIMITED

TENNANT CREEK OPERATIONS

EL 9362 - ASTROBLEME

AIRBORNE RADIOMETRIC SURVEY JUNE 1997
FLIGHT LINES N-S, 75m SPACING, 40m HEIGHT
DATA GRIDDED AT 15m, AVG. WINDOW 9 x 9
CONTOUR INTERVAL 100 COUNTS
DHI

1998 JAN 08

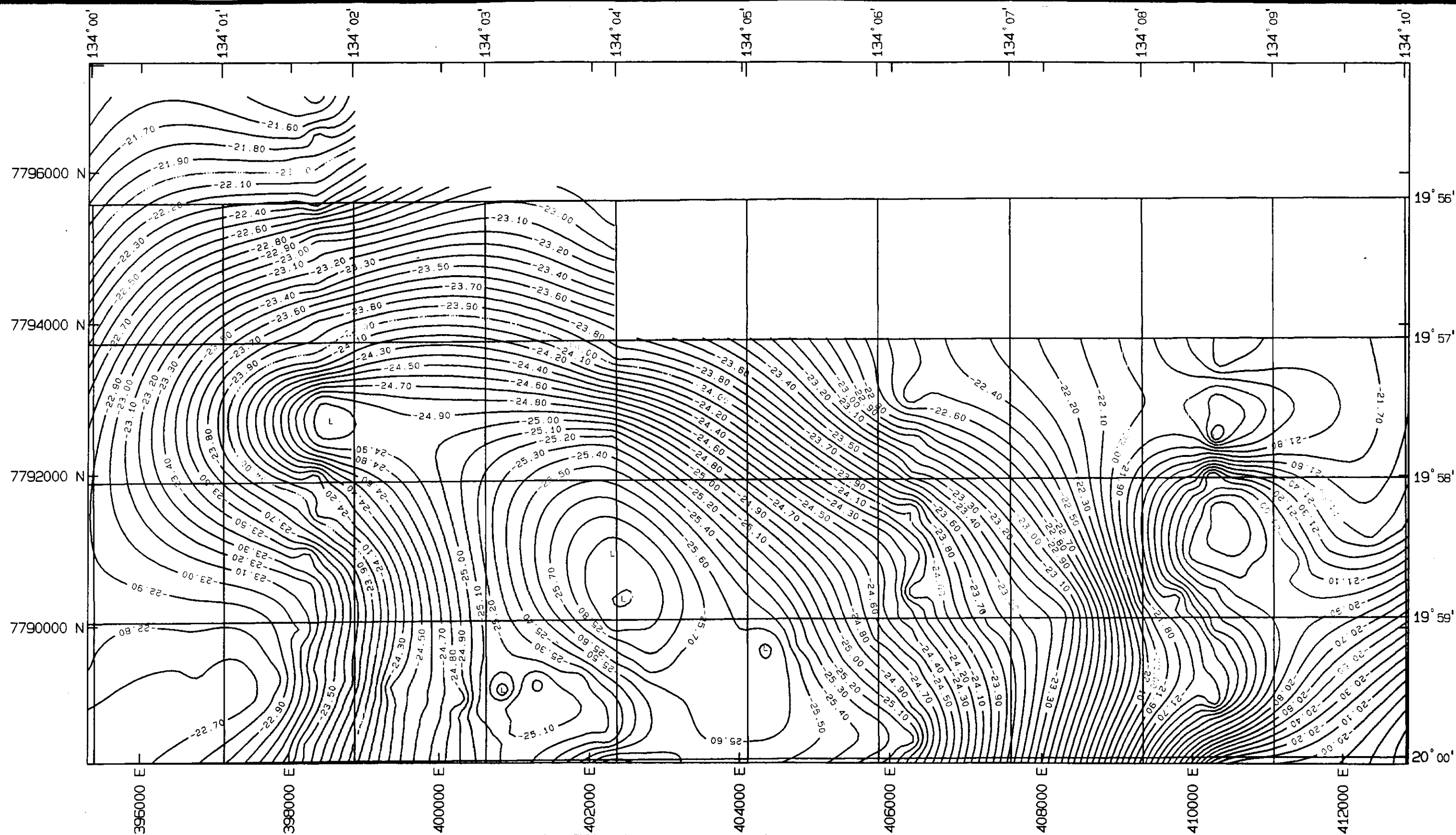


Figure No. 4

NORMANDY GOLD PTY LIMITED

TENNANT CREEK OPERATIONS

EL 9362 - ASTROBLEME

GRAVITY SURVEY NOVEMBER 1997
 SURVEY LINES N-S @ 4 Km; STATIONS 500m SEPN.
 POSITIONING BY DIFF GPS. GRIDDED @ 50m
 CONTOUR INTERVAL 0.1mGals
 DHI

1998 JAN 08

EXPENSE	COST
Employee Costs	\$ 7,660
Overheads	\$ 7,540
Assays	\$ 360
Geophysics	\$ 17,530
Operating Costs	\$ 6,320
Specialist Services	\$ 2,620
Tenement Costs	\$ 410
TOTAL	\$ 42,440
(Covenant)	\$ 20,000

8. PROPOSED EXPLORATION PROGRAMME AND EXPENDITURE FOR THE PERIOD 29/11/97 TO 28/11/98

Proposed exploration programme includes ground magnetics over a few select anomalies with follow up drill testing with RAB and RC drilling. The estimated expenditure for the proposed exploration programme is listed below.

EXPENSE	COST
Employee Costs	\$ 3,400
Overheads	\$ 1,080
Drilling	\$ 4,600
Assays	\$ 860
Operating Costs	\$ 1,350
Specialist Services	\$ 8,360
Tenement Costs	\$ 350
TOTAL	\$ 20,000

9. ENVIRONMENTAL AND REHABILITATION FACTORS

Normandy Gold has commenced an active rehabilitation programme over much of the Tennant Creek field. This commitment has been reinforced within the Normandy Group with the appointment of a Group Environmental Engineer to oversee and implement the Group's guidelines and objectives. In addition to this an Environmental Superintendent has been engaged at Tennant Creek to design and implement the Group's objectives throughout the Tennant Creek area.

As an example of the Group's commitment to environmental issues several active rehabilitation programmes are currently being undertaken in the Tennant Creek field. These include programmes at Nobles Nob, Eldorado, White Devil and Warrego.

An Environmental Management Plan for the Company's Tennant Creek Operations (Fowler, 1993) has been submitted to the Department of Mines and Energy under separate cover (March 1993). This plan details the strategies to be implemented over various areas following completion of exploration programmes and mining operations.

10. REFERENCES

- Compston, D M 1995. Time constraints on the evaluation of the Tennant Creek Block, northern Australia. *Precambrian Research* 71, 107-29.
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- Fowler, B 1993. Environmental Management Plan 1993. Report No. 93181, PosGold Limited
- Mackie, A W 1994. Summary Report and Current Status of Tennant Creek and Bonney Well Prospects. Unpublished Report – Tennant Creek Gold. (TC: 94168)
- Morris, T 1996. First Annual Report for Exploration Licence 9362 for the period 29/11/95 to 28/11/96, Astrobleme Prospect. Normandy Gold (TC: 96126)

APPENDIX ONE

BIBLIOGRAPHIC DATA SHEET

BIBLIOGRAPHIC DATA SHEET

REPORT NUMBER:

T/CK: 97164

ADEL: 22077

SECOND ANNUAL REPORT FOR EXPLORATION LICENCE 8687, FOR THE PERIOD
29/11/96 to 28/11/97, TENNANT CREEK DISTRICT, NORTHERN TERRITORY,
ASTROBLEME PROSPECT.

PROSPECT NAME(S):

EL 9362
ASTROBLEME

OWNER/JV PARTNERS:

NORMANDY GOLD PTY LIMITED
ACACIA RESOURCES LIMITED

WARRAMUNGA GROUP, FLYNN SUBGROUP, AEROMAGNETICS, GROUND
MAGNETICS, EL 2719, EL 5200

COMMODITIES:

GOLD, COPPER

TECTONIC UNIT:

TENNANT CREEK INLIER

1:250,000 MAP SHEET:

TENNANT CREEK SE 53-14

1:100,000 MAP SHEET:

KELLY 52/4