TERRITORY IRON LTD
A.C.N. 100 552 118

MT BUNDEY
EXPLORATION LICENCE 23791

ANNUAL REPORT
FOR THE PERIOD
21st JANUARY 2005 TO 20th JANUARY 2006

Darwin 1:250,000 Sheet
Mary River-Point Stuart 1:100,000 Sheet
NORTHERN TERRITORY

R Vivian
February 2006
CONTENTS

1. SUMMARY
3
2. INTRODUCTION
4
3. REGIONAL GEOLOGY
4
4. LOCAL GEOLOGY & STRUCTURE
4
5. MINERALISATION
7
6. EXPLORATION ACTIVITIES
7
7. EXPLORATION RESULTS
8
   7.1 Magnetic Features
8
   7.2 Radiometric Features
11
8. YEAR 3 PROGRAMME
11
9. EXPENDITURE
11

FIGURES

Figure 1 Tenement Location EL 23791
5
Figure 2 Regional Geology
6
Figure 3 Magnetic Features RTP 2VD TMI: Mt Bundey EL
9
Figure 4 U-Th-K Ternary image – Mt Bundey EL
10
APPENDICES

Appendix 1  Aeromagnetic Survey Located Data
Appendix 2  Expenditure Statement
1. SUMMARY

This report details exploration activities conducted by Territory Iron Limited within the EL23791 (Mt Bundey) area during the Year 3 ending 20th January 2006.

Exploration activities during the reporting year comprised:
1. acquisition of 2,547 line kilometres of high resolution, low altitude (80m line x 25m height) airborne magnetic and radiometric survey flown in late September over the entire tenement area,
2. processing of the data and,
3. preliminary GIS compilation of the data and identification of magnetic features of interest.

Nine magnetic anomalies (A to I) were identified within the tenement on the intrusive-metasediment contact between the Mt Goyder Syenite and Mt Bundey Granite with Wildman Siltstone.

Of these anomalies, three are associated with known mineralisation:

§ Anomaly A (Fe): coincides with the iron ore bodies at the abandoned Mt Bundey mine. One of the three features forming this anomaly, the largest northernmost feature, is 400m long and appears to lie outside the mine workings. While it therefore has excellent potential for iron mineralisation, the area lies within Reserve from Occupation No. 1366. A recent application by Territory Iron for an Exploration Licence over the reserve was rejected by DPIFM.

§ Anomaly F (Cu Pb Zn): is a prominent, 1.6km long, magnetic feature located on the contact of Koolpin Formation sediments with the Mt Bundey Granite. The northern end is held under MCN73, while the Quest 44 base metal prospect, located at the southern end, is within EL 23791.

§ Anomaly H (Fe): four martite-magnetite outcrops were reported by past explorers from a 530m long magnetic high located in the northern part of this anomaly group. Results from this work are not known.

Due to delays by the contractors in flying the survey until late in the field season, field work planned for the reporting period was deferred until the 2006 field season. As a consequence the expenditure for field season 2005 fell well short of the budget estimate.

Expenditure during the reporting year was $22,076.

During Year 4 the following field exploration activities are planned to evaluate the anomalies for their iron ore potential:
— mapping, gridding and geochemical sampling of anomalies,
— 1,200m of scout RAB drilling, and if appropriate,
— 2,400m of follow-up RC drilling of a number of the best anomalies.

Estimated expenditure for the proposed work is approximately $160,000.
2. INTRODUCTION

The report details exploration activities conducted by Territory Iron Limited within Exploration Licence area E23791 during the year ending 20th January 2006.

Exploration Licence 23791, covering 23 graticular blocks or a total of 75.7 square kilometres, was granted for a 6-year term on 21st January 2003. The tenement, with Exploration Licence 23921 and Exploration Licence Application 24468, forms part of the Mt Bundey Project area.

The tenement area is located approximately 100km ESE of Darwin. Access from Darwin to the property is by way of the Arnhem Highway that runs eastwards to Jabiru. The Arnhem Highway crosses the western portion of the Mount Bundey property and also its southern and eastern parts, Figure 1.

Climate is tropical and humid with a rainy season from December to March. Field work is largely restricted to the dry season.

3. REGIONAL GEOLOGY

The Mount Bundey tenement area is located over rocks of the Lower Proterozoic Pine Creek Orogen metasedimentary sequence. The sequence unconformably overlies Archaean gneissic granite, Figure 2.

The basal unit of the metasedimentary sequence in the area consists of the Mundogie Sandstone and the Wildman Siltstone of the Mount Partridge Group. The Mundogie Sandstone is comprised of sandstone and conglomerate with siltstone and shale while the Wildman Siltstone consists predominantly of fine grained sediments with minor sandstone and carbonate units. Many of the finer grained units are ferruginous.

Unconformably overlying the Mount Partridge Group is the South Alligator Group which has three members. At the base is the Koolpin Formation consisting of carbonaceous and pyritic fine grained sediments that are ferruginous in outcrop. Above is the Gerowie Tuff of fine grained sediments and tuff whilst the top unit is the Mount Bonnie Formation of generally fine grained sediments.

Sills of the Zamu Dolerite intrude the Lower Proterozoic sedimentary sequence. The sequence is also intruded by the Lower Proterozoic Mount Bundey Granite and the Mount Goyder Syenite. They are considered to be two phases of a cogenetic plutonic complex. The older Mount Bundey Granite is present in the west central portion of the property with the Mount Goyder Syenite flanking it to the north and northeast. The upper surface of the intrusive is interpreted to dip away to the north at a shallow angle.
Figure 2  Regional Geology EL 23791
4. LOCAL GEOLOGY & STRUCTURE

The Koolpin Formation to Burrell Creek Formation portions of the Lower Proterozoic sequence crop out in the eastern part of the Mount Bundey property area and on the western margin of the property. The stratigraphically lower Wildman Siltstone and in parts the Mundogie Sandstone are present in the central property area and in the north. Outcrops to sub-outcrop of the Mt Bundey Granite and Mt Goyder Syenite predominate in the western and central portions of the property.

The broad overall structure is a south-plunging metasediment synclinorium intruded along its fold axis by granite and syenite of the plutonic complex. In detail, the synclinorium is composed of many constituent anticlines and synclines that have fold axes that trend northerly to north nor easterly and that plunge at low angles to the south.

5. MINERALISATION

Economic iron mineralisation in the Mount Bundey district is known from the abandoned Mt Bundey mine. Some 843,000 tonnes of haematite at 63.4% Fe and 0.06% P₂O₅ were mined during the 1968-171 period.

Ore reserves have been depleted, though sulphur-rich tonnage remains beneath the old pit floor. The mineralisation formed two approximately parallel lodes that struck north easterly. The Main or Pritchards Lode was around 700 metres long and had a maximum width of 32 metres. To the northwest was the Parallel Lode that ranged up to 9 metres in width. Between and adjacent to these two structures were greatly altered and ferruginised sediments probably of the country rock.

The iron bearing materials present were of four types. The martite caprock lode consisted of massive martite with little texture but abundant vugs and various amounts of massive goethite generally along fractures. Quartz was present in stringers and filling some of the vugs. Boxworks were present and rarely pyrite. The hematite lode comprised massive hematite with small amounts of goethite whilst the hematite-goethite lode consisted of massive amorphous goethite associated with hematite. The limonite-clay lode consisted of limonite of lateritic origin. The lodes passed downwards in to a martite-magnetite-pyrite rock.

Flanking the original outcrop of the iron deposit there were developed rubble and scree of iron bearing materials that were partially cemented in places.

The Mount Bundey iron ore is taken to be skarn mineralisation formed by the intrusion of the Mt Goyder Syenite into a metasediment roof pendent comprised of carbonaceous, pyrite sediments (possibly the Wildman Siltstone). Hydrothermal processes under a reducing environment caused by the presence of carbonaceous material converted pyrite into magnetite. Subsequent supergene enrichment (during the Tertiary?) converted magnetite into martite.
6. EXPLORATION ACTIVITIES

A low level, high resolution (25m height x 50m line spacing) aeromagnetic and radiometric survey was conducted in August-September 2005 by UTS Geophysics of Perth, Western Australia over the entire tenement area. During this survey adjoining tenement EL23921 was also flown. Approximately 2,547 line kilometres (lkm) of the total 3,482 lkm was flown over EL23791.

Radiometric data collected consisted of total count, potassium, uranium and thorium counts. Electronic aeromagnetic survey data is contained on a CD in Appendix 1.

The raw located data was processed by Resource Potentials of Perth, Western Australia who produced and forwarded to Territory Iron for preliminary interpretation the standard electronic image products, viz. reduced-to-the-pole TMI 1st to 3rd vertical derivatives and U, Th, K images.

7. EXPLORATION RESULTS

A preliminary examination of various TMI and radiometric products compiled by GIS software onto geology shown on the Mary River-Point Stuart region 1:100,000 geological sheet highlights a number of magnetic and geological features.

7.1 Magnetic Features

Nine magnetic anomalies were identified. They are best expressed in the RTP 2nd VD TMI data and are shown in Figure 3. A description of each follows:

- **Anomaly A:** (781529mE 8578089mN) three, linear, N-NNE trending, strong anomalies are located within RO 1366 and are associated with the abandoned Mt Bundey mine mineralisation. The largest, northernmost anomaly is 400m long and appears to be outside the mine workings. A recent application for an Exploration Licence over the reserve was rejected by DPIFM.

- **Anomaly B:** (780363mE 8578654mN) four, small, semi-circular features of low-moderate intensity. The biggest anomaly is approximately 120m in diameter. Cainozoic sediments are mapped over the area. However, the magnetic data indicates that they probably lie on or close to the Granite-Wildman Siltstone contact. These anomalies are most likely cultural: they lie on or close to the Arnhem Highway.

- **Anomaly C:** (778994mE 8577213mN) a small (100m long) moderate strength anomaly located in Gerowie Tuff sediments near the Granite contact.

- **Anomaly D:** (784034mE 8579450mN) a strong, 360m long, NNE elongate feature lying on or close to the Wildman Siltstone-Syenite contact. Two further smaller magnetic highs lie to the southeast at 7842230mE/8578929mN and 784519mE/8579074mN.
Figure 3  Magnetic Features & Anomalies RTP 2VD TMI: Mt Bundey EL
Figure 4 U-Th-K Ternary image & Magnetic Anomalies – Mt Bundey EL
• **Anomaly E:** (784816mE 8573925mN) three elongate anomalies and other minor ones over a 1.3km N-S extent. The largest (northernmost) is 380m long and occurs in Quaternary alluvium. The magnetic data indicates it is underlain by Mt Goyder Syenite.

• **Anomaly F:** (784760mE 8570130mN) a group of three main, N-S elongate anomalies extending over about 1.6km and located in Koolpin Formation sediments near its contact with the Mt Bundey Granite. The most prominent feature (northernmost) is about 370m long and is located within MCN73. At the southern end of anomaly group, at about 884630mE 8569540mN, a dislocation in the magnetic linear may represent a fault perhaps associated with the Quest 44 base metal occurrence from which 1.2% Pb, 1.9%Zn and 231 ppm Cu over 1m was reported from a chloritic zone within hornfelsing sediments of the Koolpin Formation (Twist, 1977).

• **Anomaly G:** (786670mE 8577336mN) a 150m long moderate-strong intensity feature located in the flood plains of the Mary River. It is may be a cultural feature as its N-S orientation is discordant with the NE magnetic grain of the surround terrain.

• **Anomaly H:** (789240mE 8576988mN) a 2km long, N-trending group of 5 linear anomalies that appear to lie on the contact of the Syenite and Wildman Siltstone. The most prominent (northernmost) anomaly is about 530m long and four martite-magnetite outcrops are reported from past investigations on it. However, results from this work are not known.

• **Anomaly I:** (788883mE 8579020mN) a series of three anomalies N-trending in an area of alluvium cover underlain by Mt Goyder Syenite. They are discordant to the NE trend of the terrain. However, as they lie on the northern end of a prominent ?fault-related NW-trending feature they may not be spurious.

### 7.2 Radiometric Features

The radiometric (U, Th, K) channels are excellent mappers of the granitoids, and to a lesser extent the sediments, and highlights no major variations to mapped lithological boundaries as shown on the Mary River-Point Stuart region 1:100,000 geological sheet.

However, the Mt Goyder Syenite may be more extensive in the Mount Bundey area, ie it may extend further south along the eastern margin of the Mt Bundey Granite than shown on the 1:100,000 sheet. In the ternary radiometric image (Figure 4) the Mt Goyder Syenite is white to light pink and in part bordered by apple green colours, while the Mt Bundey Granite occurs as darker pink to lilac shades.

Additionally, the Koolpin Formation shows as a dark blue ink colour that clearly defines the bedding in the Mary River area and suggests that further folding occurs to that shown on the 1:100,000 sheet.
8. YEAR 3 PROGRAMME

During Year 3 field exploration activities are planned to test the anomalies for their iron ore potential and they will include:

— mapping, gridding and geochemical sampling of anomalies;
— 1,200m of scout RAB drilling, and if appropriate;
— 2,400m of follow-up RC drilling of a number of the best anomalies.

Estimated expenditure for the proposed work will be approximately $160,000.

9. EXPENDITURE

Expenditure for Year 1 exploration was $22,076 as detailed in the attached expenditure statement in Appendix 2.
10. REFERENCES

Stuart-Smith, PG et al; 1984: Mary River-Point Stuart Region 1:100,000 Geological Map Commentary, BMR Aust Govt Publ Serv.
APPENDIX 1  AEROMAGNETIC SURVEY LOCATED DATA
(electronic data on CD)