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Operator	Territory Iron Pty Ltd
Tenement Manager / Agent	Australian Mining & Exploration Titles Services (AMETS) Darwin office
Titles / Tenements	EL23506
Mine / Project Details	Frances Creek East
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TERRITORY RESOURCES LIMITED A.C.N. 100 552 118

EL23506 FRANCES CREEK EAST

ANNUAL REPORT
For The Period
8th May 2013 – 7th May 2014

Pine Creek SD52-08 1:250,000 Geological Map Sheet Pine Creek 5270 1:100,000 Geological Map Sheet

NORTHERN TERRITORY

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SUMMARY

This report describes exploration activities conducted on Frances Creek East tenement EL23506 by operator Territory Iron Pty Ltd from 8th May 2013 to 7th May 2014. Territory Resources Limited has a Split Commodity Agreement with Element 92 (wholly owned subsidiary of Thundelarra Pty Ltd) to explore for and develop economical deposits of iron ore and manganese within the tenement. Exploration activities during the reporting year consisted of detailed geophysical surveys and minor reconnaissance field visits. Daishsat Geodetic Surveyors conducted a regional ground gravity survey of the Frances Creek Project Area including the north-eastern portion of EL23506. The gravity survey within the tenement comprised 15.5 line kilometres with a total of 479 gravity stations and the survey files (ASEG format) are located in Appendix I. An airborne electromagnetic survey was conducted by GPX Surveys using their proprietary XTEM electromagnetic system in order to better define the structure of the host stratigraphy for mineralisation. Flying specifications include a nominal EM array height of 35m with a line spacing of 100m. The EM survey files were submitted previously in the Territory Resources Ltd 2013 - 2014 Annual Report for EL23824. An interpretation of the geophysical data is supplied in a report (Appendix II) by Hawke Geophysics Pty Ltd. The geophysical report highlights the potential for prospective stratigraphy to host iron mineralisation combined with favourable structural elements. Expenditure for the reporting year on EL23506 was \$16,505.

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1.0 LOCATION AND ACCESS

EL23506 is part of the tenement package which constitutes the Frances Creek Project Area in the Pine Creek Orogen in the Northern Territory. The Frances Creek Project Area is located about 220km south of Darwin and ~23km north of Pine Creek township, Figure 1.

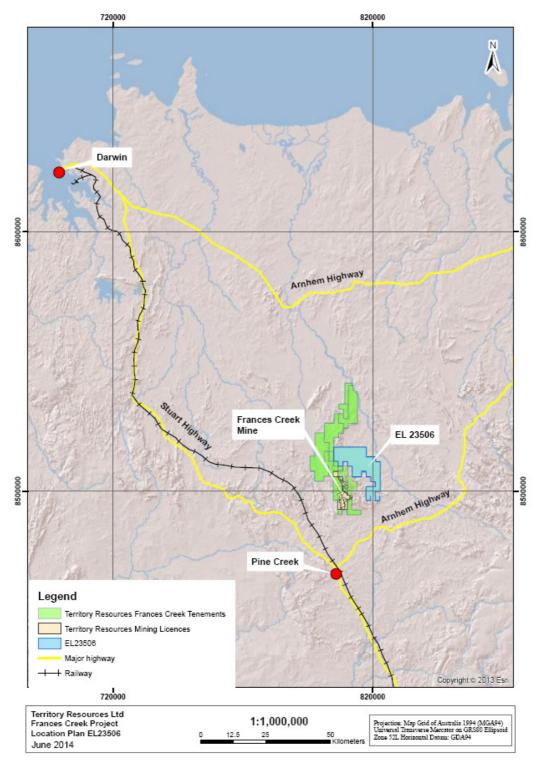


Figure 1: Location Map of Frances Creek Project with ESRI world shaded relief defining background topographic elevation. Beige polygons represent Frances Creek Mining Leases; Blue polygon defines the boundary of EL23506 and green polygons represent Exploration Licences (the remainder of the Frances Creek Project Area).

EL23506 is situated about 16km north-northeast of the current Frances Creek mining operations, Figure 2. Access to the northern area is via unsealed tracks north of the Frances Creek mine operations. The southeastern portion of EL23506 can be accessed along the Kakadu Highway (~21km northeast of Pine Creek) and north via the unsealed Mary River Station road for about 20km.

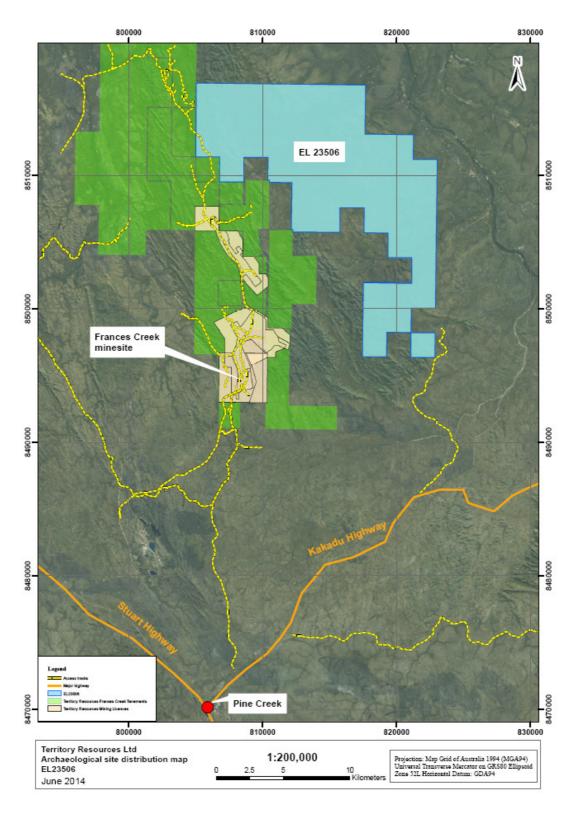


Figure 2: Location map of and Frances Creek mine site. ESRI world satellite imagery defines background relief.

2.0 TENURE

Tenement EL23506 was granted on 8th May 2003 for a 6 year term with an area of 173.3km² covering 52 square blocks. Reduction deferrals were granted on 22/05/2005, 04/04/2006, 02/04/2007, and 17/04/2008. A renewal application was made on 2nd February 2009, and granted on 9th March 2009. The present listed expiry date of the tenement is 7th May 2013; however, the tenement holders submitted an application to the NT Department of Resources (now Department of Mines and Energy – DME) on 23rd February 2013 for a further extension of 2 years until 2015.

2.1 MINERAL RIGHTS

Territory Resources Limited holds the exploration rights for iron ore and manganese under a Split Commodity Agreement. This Agreement was originally held with Teelow, Orridge and Clarke (TOC), dating from November 2006. TOC sold their rights to EL23506 to Element 92 Pty Ltd (wholly owned subsidiary of Thundelarra Pty Ltd). Territory Resources Ltd retained the iron and manganese rights to the tenement.

2.2 LAND TENURE

Land tenure under the title includes parts of:

- Ban Ban Springs Pastoral Lease, PPL 1111 NT Portion 695, owned by Ban Ban Springs Station Pty Ltd, PO Box 7207, St Kilda Road, Melbourne, Vic 8004.
- Mary River East Pastoral Lease, PPL 1134 NT portion 1631, owned by Mary River Wildlife Ranch Pty Ltd, PO Box 137, Pine Creek, NT 0847.

2.3 ABORIGINAL HERITAGE AND NATIVE TITLE

Registered native title claims are in place over the pastoral lease:

- DC01/21 (Paddy Huddleston & Ors) PPL 1111
- DC00/18 (Northern Land Council) PPL 1134

In July-August 2009, heritage surveying contractor Earthsea Pty Ltd was employed to conduct a detailed heritage survey in the southern portion of the tenement for areas considered prospective for iron mineralisation with the potential to incur drilling activities. A number of archaeological sites protected under the *Heritage Act* 2012 were recorded. More recent heritage surveys by Territory Iron archaeologists in the north-western portion of the tenement recorded additional archaeological sites. All drill programmes and associated land disturbance have been designed to avoid these areas. Archaeological sites are shown in Figure 3. The remainder of the tenement has not yet been surveyed. Senior Traditional Owners accompanying the archaeological surveys stated that there were no sacred sites in the survey areas. An Authority Certificate under the *NT Aboriginal Sacred Sites Act* 1989 will only be issued should the area ever be mined.



 $Figure \ 3: Archaeological \ site \ distribution \ map-EL23506. \ The \ red \ diamonds \ show \ the \ location \ of \ these \ sites. \ All \ exploration \ activities \ are \ designed \ to \ avoid \ these \ areas$

3.0 REGIONAL GEOLOGY AND MINERALISATION

The oldest rocks in the area, the Palaeoproterozoic Woodcutters Supergroup, comprise the Namoona Group (Masson Formation) and overlying Mount Partridge Group (Mundogie Sandstone) and cover the majority of the tenement area.

The Masson Formation (Namoona Group) consists of poorly exposed metapelites, minor quartzose sandstone, sandstone, muscovite-tremolite marble (dolomitic schist) and ironstone ridges in the west (Stuart-Smith *et al.*, 1987). Quaternary alluvium and colluvium covers most of the unit. The Masson Formation is best exposed on slopes close to ridges of the overlying Mundogie Sandstone, where they form interbedded sequences of dominantly metapelite with minor quartzite. The Masson Formation is intruded by Zamu Dolerite sills and subsequent to deformation, the Allamber Springs Granite, where the unit is extensively hornsfelsed at the contact.

The Mundogie Sandstone (Mount Partridge Group) forms prominent continuous northwest-striking ridges of dominantly coarse, pebbly, feldspathic quartzite and arkosic sandstone (Stuart-Smith *et al.*, 1987). Massive, graded beds of pebble conglomerate are common and units often display graded bedding and lenticular cross-bedding. Within the contact aureole with Cullen Supersuite granitoids, the units are recrystallised to micaceous quartzite and metamorphic assemblages include cordierite-mica-hornsfels.

Subsequent to sedimentation of the Mundogie Sandstone, the Wildman Siltstone was deposited with apparent conformity. The unit mainly comprises metapelitic assemblages with subordinate sandstone. Although associated with Fe-mineralisation to the east, the stratigraphically younger Wildman Siltstone does not occur in the Frances Creek East tenement area.

Subsequent to deposition of the Namoona Group, pre-orogenic Zamu Dolerite sills intruded the Masson Formation. In dissected valleys, the dolerite has limited outcrop exposure where it subcrops as rounded boulders and rubble. Further to the west in the Frances Creek mine area and surrounds, dolerite(s) intruded the Wildman Siltstone and the overlying South Alligator Group of the Cosmo Supergroup.

Syn- to post-orogenic activity is represented by intrusion of the 1835-1800 Ma Cullen Supersuite. Intrusion of the granite led to contact aureoles in the surrounding pre-orogenic Masson Formation, Mundogie Sandstone and Zamu Dolerite.

Two major episodes of folding are recognised, earlier tight to isoclinal F1 folds followed by younger open (widely spaced) folds (Stuart-Smith *et al.*, 1987). The major structural controls in the tenement area are related to D3 1-3 km scale northwest-trending non-cylindrical folds, which plunge gently to the northwest to form a series of anticlines and synclines pre-dating the intrusion of the Cullen Supersuite, and 1-3 km long northwest and northeast-trending faults. Permeable fault breccias are associated with iron mineralisation.

Known (outcropping) Fe-mineralisation in Frances Creek East is hosted by the Masson Formation in the southeast portion of the tenement and is documented in Stuart-Smith *et al* (1987). In this region, ironstone ridges are dominantly Fe-breccia with both hematite and goethite, however, goethite-dominated breccias in this region are not deemed to be prospective. The hematite ridges are located on the western boundary of the southern-most portion of EL23506.

4.0: EXPLORATION ACTIVITIES - CURRENT REPORTING YEAR

The only exploration activities for the 2013-2014 reporting year for EL23506 involved detailed ground gravity and airborne electromagnetic surveys and minor field reconnaissance visits (en route to EL 23824). Between August and October 2013, Territory Resources Ltd engaged contractors to undertake detailed geophysical surveys in the Frances Creek Project Area, comprising a ground gravity and airborne electromagnetic survey. The survey area includes the northwestern-most portion of EL23506.

4.1 GROUND GRAVITY GEOPHYSICAL SURVEY

In September and October 2013, Territory Iron Pty Ltd undertook a significant ground gravity geophysical survey programme at the Frances Creek Mine operation which included tenement EL23506.

Gravity data were collected by Daishsat Geodetic Surveyors. Within EL23506, 479 gravity stations with a 200mx25m line spacing and totalling 15.5 line kilometres were positioned to infill existing gravity surveys collected in the Frances Creek mine area. All data were subsequently forwarded to Hawke Geophysics Pty Ltd for analysis and interpretation. Gravity station locations are shown in Figure 4.

Local survey and gravity base stations were established in the survey area by Daishsat Geodetic Surveyors. Stations were tied to the Australian Gravity Network by a direct loop tie to a known base station. Historic gravity surveys in the Frances Creek area that were not previously levelled to this datum have been subsequently matched to the 2013 data.

Survey locations are recorded in GDA94 Zone 52L coordinates and Australian Height Datum (AHD). Observed gravity has been levelled to Isogal71 values. Gravity data levelled to the Isogal 84 datum were reduced to Bouguer Anomaly values using formulas supplied by Geoscience Australia to a density of 2.40 g/cc.

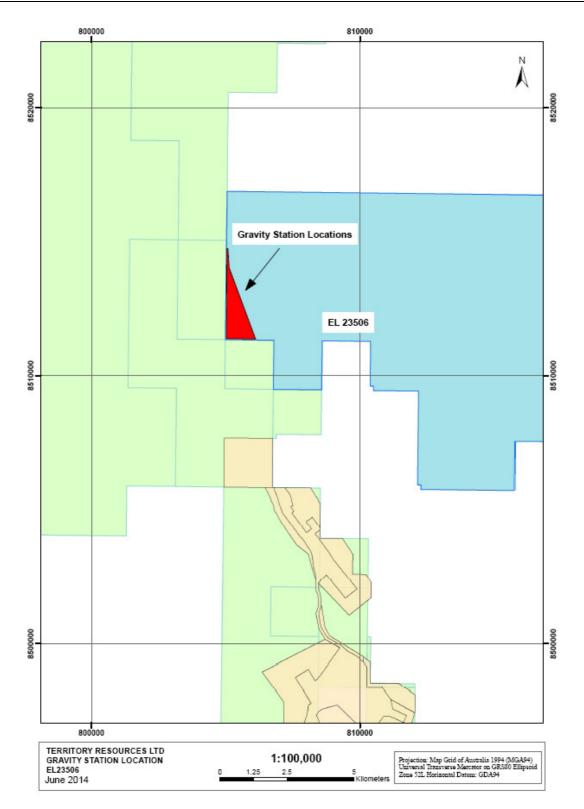


Figure 4: Red polygon defines location of Ground Gravity stations - EL23506

Data were merged with historic data collected in the Frances Creek area and gridded to a 25m cell size. Standard image products were created including the Bouguer Anomaly and first vertical

derivative. An image of the first vertical derivative is shown in Figure 5. The survey files are in ASEG format and are located in Appendix I.

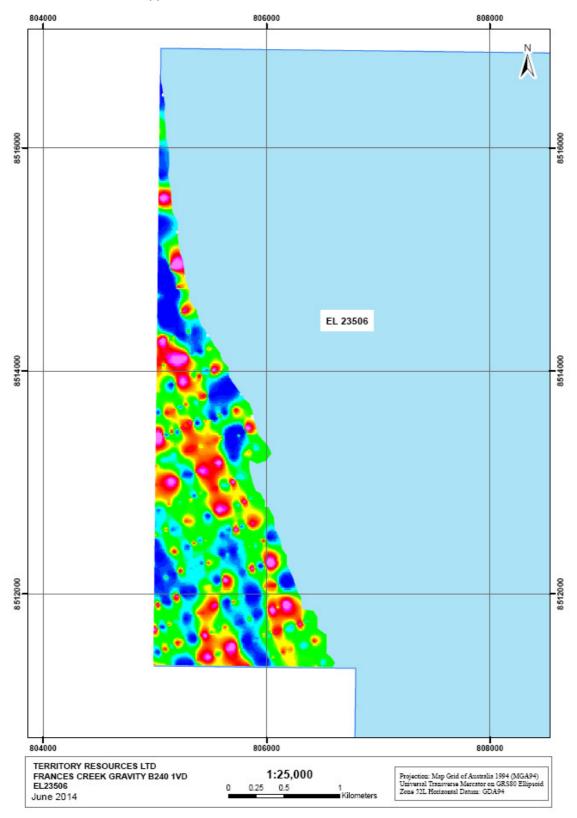


Figure 5: Ground Gravity B240 1VD - EL23506

4.2 AIRBORNE EM SURVEY

An airborne electromagnetic survey was flown over part of the Frances Creek Project area to assist in mapping the structure of the host stratigraphy of the Frances Creek mineralisation. This survey was flown by GPX Surveys using their proprietary XTEM electromagnetic system during August and September 2013 as Job Number 2511. The area that was flown over part of EL23506 is shown in Figure 6.

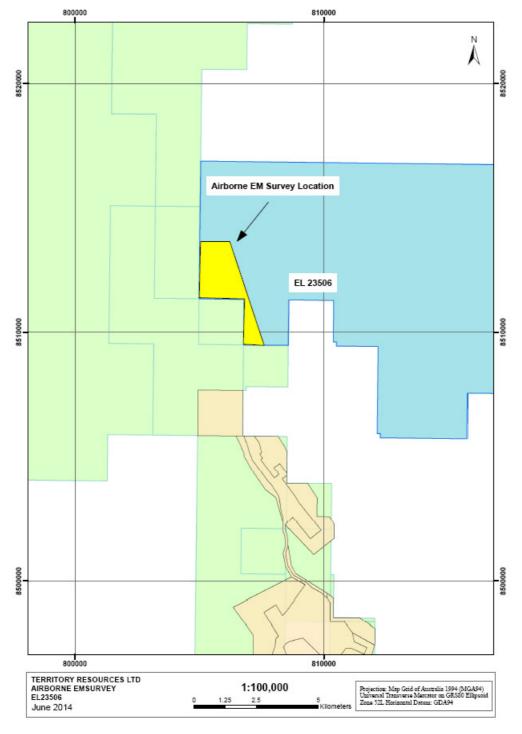


Figure 6: Airborne EM Survey Location - EL23506

Flying specification used for the survey was:

Line spacing: 100m
 Flying direction: 90 – 270
 Survey size: 848 km

Coordinate datum: GDA94 MGA Zone 52

XTEM equipment specifications were:

Nominal EM array height: 35 m
Array configuration: In-loop

• Waveform: 25% duty cycle square wave, 25 Hz

Tx loop size: 340m2
Effective Rx area: 10,000m2
Sampling interval: ~10m

Magnetometer: Geometrics G822A Caesium vapour

Nominal sensor height: 35 mSampling interval: 1-2m

EM data was field checked, field processed to reduce the effects of birdswing, parallax, reverse negative decays, spline to a uniform data spacing and smoothed using a Butterworth filter.

The cleaned EM data was conductivity-depth inverted (CDI) to produce depth sections using the both the EMFlow modelling code distributed by Emcom and the EMaxAIR algorithm developed by Fullagar Geophysics. Depth slices were extracted from the inversion products at ten metre intervals ranging from 10m to 160m. Area with a null CDI modelled response are shown as grey in the depth slice imagery. An image of the 30m depth slice generated from the inversion of the EM data is shown in Figure 7.

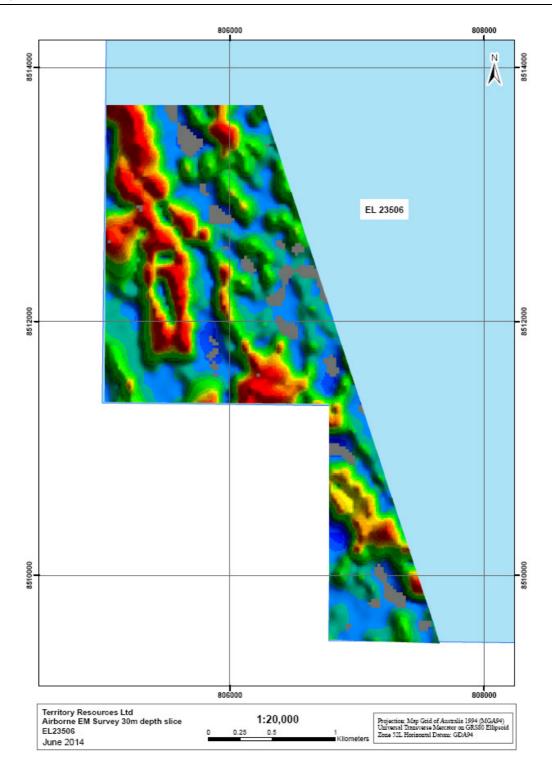


Figure 7: Airborne EM survey - 30m depth slice

Electromagnetic data were collected at a 50 Hz sampling frequency but was averaged down to 25 Hz to minimise the effect of the EM system on the magnetic field measurements.

The survey files are in ASEG format and have been previously lodged with the Annual Report for adjacent tenement EL23824 under the title "Annual Report EL23824 Millers Northern Territory for the period 9th February 2013 to 8th February 2014".

4.3 GEOPHYSICAL INTERPRETATION REPORT

Subsequent to the geophysical surveys, Territory Resources Ltd engaged Hawke Geophysics Pty Ltd to provide a report with an interpretation of the geophysical survey data. The report, which covers the north-western portion of EL23506 (Figures 4-7), is titled "Interpretation of recent geophysical survey collected between the Ochre hills and Millers prospects, Frances Creek region, N.T., December 2013" and is located in Appendix II.

The report highlights the potential for prospective stratigraphy to host iron mineralisation combined with favourable structure (possible subsurface syncline outlined by the geophysics) in this region and is summarised as follows:

Overall, several parallel trends of the prospective host unit were identified. These are inferred to represent synclinal fold structures, with the main fold axis roughly parallel with bedding. Structural complexities such as faulting or refolding of these stratigraphic units may have been important for the development of iron mineralisation.

5.0: CONCLUSIONS AND RECOMMENDATIONS

A follow up reconnaissance programme involving detailed field mapping and rock-chip sampling (and potentially RC drilling, if warranted) is recommended for EL23506 for the coming year.

6.0: REFERENCES

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