# TNG LIMITED

# **ENIGMA MINING LTD**

# **MOUNT PEAKE PROJECT**

# **GROUP ANNUAL REPORT**

# GR226/12

EL 27069 - 18/02/17 to 17/02/18 EL 27070 - 18/02/17 to 17/02/18 EL 27941 - 18/02/17 to 17/02/18 EL 29578 - 18/02/17 to 17/02/18 EL 31389 - 25/05/17 to 17/02/18

Tenement/s	EL27069, EL27070, EL27941, EL29578, EL31389	1:250 000 Sheet Name	Mount Peake (SE5305) Barrow Creek (SF5306)
Holder	Enigma Mining Ltd	1:100 000 Sheet Name	Anningie (5554), Conical Hill (5555) Barrow (5654) Crawford (5655)
Manager	N/A	Datum	GDA94-53
Operator	Enigma Mining Ltd	GDA_E	317050-327590
Commodity	V, Ti, Fe	GDA_N	/599400-/61/851
Elements Analysed			
Keywords	Iron, vanadium, titanium, biodiversity, prospects, target,	rehabilitation, waterbo graphite, drilling	res, logging, EIS,
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Report Date	April 2018		
Distribution	TNG Limited NT Department of Primary Indu	stry and Resources	(1) (1)

#### **EXECUTIVE SUMMARY**

The Mount Peake Project is operated by Enigma Mining Ltd, a wholly owned subsidiary of TNG Ltd. The project currently comprises five exploration licences (EL 27069, EL 27070, EL 27941, EL 25978 and EL 31389) in the north-central portion of the Paleoproterozoic Arunta Province.

The project area is located approximately 220km NNW of Alice Springs in the Northern Territory and covers portions of the Mount Peake (SF53-05) 1:250,000 map sheet. It lies within the Stirling and Anningie Pastoral Leases and is subject to Native Title.

The main focus of the Mount Peake project has been evaluation of the potenitally world class Fe-V-Ti deposit which lies within ELR 29627. The Definitive Feasibility Study was completed in mid-2015 with an update produced in November 2017. An addendum to the EIS was submitted in November 2017 and approval was granted by the NTEPA. Commonwealth approval is pending.

Minimal on ground exploration was conducted during the reporting year, most of which has been related to the potential mine development within ELR29627. Exploration licences 27069 and 27070 were renewed for two year periods and partial reductions were undertaken on EL 27070 and EL 29578. Rehabilitation audits and monitoring work was completed on EL27069 and EL31389.

Waterbore logging devices have been installed on seven waterbores within EL 31389. Water sampling is completed periodically TNG drilled bores along with existing station bores within the Mount Peake tenure. A surface water logging device has also been installed in Murray Creek, adjacent to the proposed Mount Peake minesite.

Biodiversity surveys were completed across 63 transects within the Mount Peake project area in order to provide additional data requested by the NTEPA as part of ongoing environmental assessment of the Mount Peake V-Ti-Fe project.

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# 1. INTRODUCTION

The Mount Peake Project is operated by Enigma Mining Ltd (Enigma), a wholly owned subsidiary of TNG Ltd. The project currently comprises five granted exploration licences (EL 27069, EL 27070, EL 27941, EL 29578 and EL 31389) in the north-central portion of the Paleoproterozoic Arunta Province. Exploration Licence 31389 was added to the group during the reporting period. An Exploration Licence in Retention (ELR 29627) has been granted surrounding the Mount Peake Fe-V-Ti deposit and this has been reported on separately.

The main focus of the Mount Peake project has been evaluation of the potentially world class Fe-V-Ti deposit which lies within ELR 29627. The Definitive Feasibility Study was completed in mid-2015 with an update produced in November 2017. An addendum to the EIS was submitted in November 2017 and approval was granted by the NTEPA. Commonwealth approval is pending.

Minimal on ground exploration was conducted during the reporting year, most of which has been related to the potential mine development within ELR29627. Exploration licences 27069 and 27070 were renewed for two year periods and partial reductions were undertaken on EL 27070 and EL 29578. Rehabilitation monitoring work was completed on EL27069 and EL31389.

Waterbore logging devices have been installed on seven waterbores within EL 31389. Water sampling is completed periodically TNG drilled bores along with existing station bores within the Mount Peake tenure. A surface water logging device has also been installed in Murray Creek, adjacent to the proposed Mount Peake minesite.

Biodiversity surveys were completed across 63 transect within the Mount Peake project area in order to provide additional data requested by the NTEPA as part of ongoing environmental assessment of the Mount Peake V-Ti-Fe project.

# 2. LOCATION AND ACCESS

The Mount Peake project, is located approximately 220km NNW of Alice Springs in the Northern Territory and covers portions of the Mount Peake (SF53-05) 1:250,000 map sheet. It lies within the Stirling and Anningie Pastoral Leases and is subject to Native Title. The sealed Stuart Highway to Darwin cuts through the south-east corner of the project area (Figure 1) and access within the project area is good with well maintained station and previous exploration tracks.

The LNG gas pipeline runs through the project area and the Darwin to Adelaide railway lies 80km to the east of the Mount Peake Resource.

Exploration access to the area has been granted by the CLC and Traditional Owners, and Authorisation 0908-01 is currently in place.

# 3. TENURE

The Mount Peake project area currently comprises five exploration licences (EL 27069, EL 27070, EL 27941, EL 29578 and EL 31389; Figure 1, Table 1). An Exploration Licence in Retention (ELR 29627, granted 17/12/12) an additional exploration licence (EL30483) and four Mining Lease Applications (ML 28341, ML 29855, ML 29856 and ML 30686) complete the project tenure. All tenements are 100% held by Enigma Mining Ltd.

A partial cancellation resulted in EL 29578 and EL 27070 decreasing from 81 to 67 and 14 to 7 blocks respectively.

This report covers work only on the Exploration Licences (EL's) within the Mount Peake Project Area (highlighted below).



Figure 1: Mount Peake Tenure

TITLE	AREA	GRANT DATE	EXPIRY DATE
EL27069	38 blocks	13/08/2009	12/08/2019
EL27070	7 blocks	13/08/2009	12/08/2019
EL27941	19 blocks	20/10/2010	19/10/2018
EL29578	67 blocks	08/08/2012	07/08/2018
EL31389	178 blocks	25/05/2017	24/05/2023
ELR29627	1194 Hectares	17/12/2012	16/12/2019
EL30483	7 blocks	13/03/2015	12/03/2021
MLA28341	358 Hectares		
MLA29855	1508 Hectares		
MLA29856	164 Hectares		
MLA30686	104 Hectares		

Table 1: EL Mount Peake Project tenement details.

## 4. GEOLOGY

The Mount Peake gabbro body is located within outliers of Neoproterozoic sediments of the Georgina Basin. The Neoproterozoic sediments rest unconformably on metasediments and granites of the Aileron Province within the Lower Proterozoic Arunta Region. Bedrocks comprise metasediments, granites and metamorphosed basic rocks (Figure 2).

During the Barramundi Orogeny (1890-1850 Ma), the sedimentary units were intruded by mafic rocks which have been deformed and in places metamorphosed to amphibolite facies. During the closing stages of the Barramundi Orogeny granite plutons intruded rocks of the Arunta Province.

The mineralised Mount Peake gabbros are part of a 10x20km NW trending sill or sill complex (interconnected sills at different stratigraphic levels) named the Murray Creek Sill. Judging from the magnetic images at least two more sills/sill complexes are present in the eastern part of the region. The Murray Creek Sill comprises gabbros, olivine gabbros, and leucogabbros with magnetite rich olivine gabbros near the top of the sill. Where the basal contact to the sill has been intersected in the stratigraphic holes SDDH1 and SDDH2 the thickness of the sill. Most of the rocks in the sill are only moderately magnetic above the top of the mineralised zone.



Figure 2: Current Mount Peake Project tenements on 250K geology (Mount Peake Sheet and Barrow Creek Sheet).

# 5. **PREVIOUS EXPLORATION**

The Mount Peake Project area has had little dedicated historic exploration work. The region has been partially explored for a variety of commodities including nickel, gold, copper, iron ore, bauxite and diamonds, with some areas experiencing limited or no work. The following is a brief summary of historic work reviewed to date.

- In the early 1970's CRA conducted Uranium exploration in the area. Work including geological mapping, photo interpretation, air and ground magnetics followed by rotary drilling and borehole logging. CRA resumed exploration in 1979 and over a four year period completed airborne magnetics/ radiometrics, drainage geochemistry, soil and rock chip geochemistry and limited diamond drilling.
- Stockdale Prospecting conducted exploration for diamonds in the Mount Peake region in the late 1980's. No significant kimberlitic indicators were apparent in the area.
- Between 1991 and 1997 WMC completed work focused on gold exploration that included data compilation, surface geochem sampling, XRD analyses, geological/regolith mapping, gravity surveys, airborne magnetics/ radiometrics, IP/TEM surveys and ground magnetics. Anomalies were then followed up with an Auger/ RC drill program.
- In 1997 WMC optioned the ground to Aberfoyle who completed further rock chip sampling, soil sampling and vacuum drilling on the properties. Aberfoyle withdrew from the J.V and WMC surrendered their properties in 1998.
- A garnet/magnetite skarn occurs in the centre of EL23074. This is known as the "Murray Creek" Iron prospect and was drilled by CRA in 1982.
- On the 21st of October 2002, Falconbridge (Australia) entered into a Joint Venture (JV) agreement with Tennant Creek Gold (NT) Pty Ltd. This agreement would provide Falconbridge a 60% share in EL 23074 by expenditure of \$800,000 over four years.
- Falconbridge, commissioned Fugro Airborne Surveys, Perth to conduct a 3814 line kilometer GEOTEM (25Hz, 4Ms) airborne electromagnetic survey (AEM) in the region, This was focused on the highest priority target areas. This survey covered EL 23074 in its entirety with coverage totalling 742 line kilometers. The results highlighted six targets on EL 23074 that were recommended for follow-up including ground EM surveys and drill testing.
- On the 15<sup>th</sup> of October 2003 Falconbridge Ltd entered into agreement with Discovery Nickel Ltd (DNL). DNL's exploration approach relied heavily on airborne electromagnetic (AEM) surveying, followed up by ground EM to define targets. After analysis of the Falconbridge AEM results, DNL commissioned a ground EM (SMARTEM) survey focussing on the highest priority target areas.
- DNL did investigate, model and drill (ARD02) a significant aeromagnetic anomaly Target J-1, located on EL 23074. The hole (ARD02) was drilled 70°/270° to a depth of 150.6m. It is unclear why the hole ended at that depth as the modelling suggested the depth to target was approximately 200m. The target source therefore remained unexplained. DNL reported that this proved to be a massive magnetic gabbro, and of no economic interest.

## 5.1 Exploration by TNG

TNG Ltd took control of exploration in 2007 and has progressed the project to it's current state. During that time the company has increased its landholding in the area with the aim of assessing the entire region for the presence of additional Fe-V-Ti deposits, and exploring the Cu and Ni potential of the Mount Peake region.

2007:

• TNG remodel the high resolution magnetic feature that was drilled showed dimensions of 4km x 1km, suggesting potential that the gabbro body is extensive.

2008:

- Results reveal high quantities of Iron, Vanadium and Titanium within the Magnetite. Davis Tube Recovery show significant results of:  $1.2\% V_2O_5$ , 56% Fe,  $17\% TiO_2$ .
- TNG complete a detailed ground gravity survey showing a large anomaly offset from the magnetic feature indicating additional Hematite potential.

#### 2009:

- TNG complete drill programme to define extent of magnetite mineralisation. The Mineralised Zone commences at shallow depths (>40m) and is currently 1.3km in strike length, 500m wide and up to 80-120m thick.
- JORC resource defined from drilling of 107mt@ 0.4% V<sub>2</sub>O<sub>5</sub>, 40% Fe. Estimated deposit size is >500mt.
- Metallurgical testwork produces high grade V<sub>2</sub>O<sub>5</sub> concentrate.
- Initial Scoping Study completed concludes positive economics, based on recovery of vanadium only.
- RC drilling determined the extension of the mineralised zone to at least 3000m in strike length.
- Additional exploration licences EL27069 and EL27070 were granted.
- Drilling to test layered mafic intrusion completed minor layering and sulphides noted.
- Heli-borne aeromagnetic/radiometric surveys revealed previously unknown uranium anomalies adjacent to the Mount Peake vanadium deposit. Further work has not yet been undertaken.
- Two further ELAs lodged to take TNGs landholding to over 2000km<sup>2</sup>.

#### 2010:

- Average metallurgical concentrate grade continues to exceed 1% V<sub>2</sub>O<sub>5</sub>.
- JORC Resource of 140mt@ 0.3% V<sub>2</sub>O<sub>5</sub>, 5.9% TiO<sub>2</sub>, 29% Fe at a 0.1% V<sub>2</sub>O<sub>5</sub> cut-off.
- Metallurgical testwork achieves high  $V_2O_5$  recovery of 85-97%.
- A new hydrometallurgical process, jointly developed by TNG and Mineral Engineering Technical Services Pty Ltd (METS) successfully recovers the three main commodities (V, Ti, Fe) from the ore.
- A joint patent application was submitted to protect the invention and allow commercialisation at a later date.
- Positive interim results were received for the Mount Peake scoping study. Fe recovery 71-75%, V recovery 91-95%, Ti recovery 75%.
- Northern extension to the present 9km linear magnetic anomaly at Mt Peake is interpreted to contain magmatic feeder zones, which may contain Ni, Cu and PGE's.
- Detailed assessment of airborne GEOTEM has identified a further 35 late-time, intermediate to strong conductive features recommended for further work.
- Copper gossan discovered in ultramafic package. Initial Niton results returning 4-24%. Subsequent assaying returned values of up to 6.07% Cu.

2011:

- The hydrometallurgical process for extracting vanadium, titanium and iron from titanomagnetite ores has been successfully trialled on other titanomagnetite vanadium deposits within Australia.
- Positive Scoping Study completed by Snowden Mining Industry Consultants confirms the Project's technical and financial strength.
- A subsequent scoping study was commissioned to investigate the effect of producing a ferrovanadium product (FeV), as a further value-add to the vanadium pentoxide concentrate produced.
- Evaluation of feasibility and pilot plant options is underway.
- Diamond drilling results confirm large continuous iron-vanadium zone at Mount Peake, results of up to 0.6% V<sub>2</sub>O<sub>5</sub>, 10% Ti and 36% Fe.
- An updated Indicated and Inferred JORC Resource incorporates the results of diamond and RC drilling carried out during 2011.
- Total resource 160Mt grading 0.3% V<sub>2</sub>O<sub>5</sub>, 5.0% TiO<sub>2</sub> and 23% Fe.

2012:

- Outstanding analytical results received from initial pilot plant programme.
- Pre-Feasibility Study completed in July 2012.
- Regional drilling of large magnetic features in the Mount Peake project area confirms two more, large magnetite-rich gabbro bodies opening up the potential for a substantial increase to the current JORC resource.
- Additional RC and diamond drilling to extend and upgrade the existing resource.
- Metallurgical testwork commenced on core.
- Hydrometallurgical pilot plant trial set to commence with CSIRO in June 2013.
- Regional RC drilling of magnetic anomalies on EL29578, EL27069 and EL 27941.
- Five HELITEM transects flown over areas of interest.
- Reanalysis of drill core from ARD01.
- Completion of the Pre-Feasibility Study by SKM, and progression to DFS.
- RC drilling 59 RC holes drilled for 7168m to upgrade and extend existing resource. Diamond Drilling 14 PQ diamond holes drilled for 1892m to provide bulk samples for metallurgical testwork and pilot plant studies.
- Petrography 11 samples of drillcore sent for petrographic analysis.

#### 2013:

- Mapping and sampling of east, west, southwest, north and northeast magnetic targets.
- Drill programme planned to follow up on target areas.
- Rehabilitiation of 2012 regional drillholes.

#### 2014:

- Regional magnetic target drilling on EL 27069 and EL 29578. Twelve RC holes for 1319m across five target areas.
- Graphite drilling at targets G34 (EL 27069) and BCG1 (EL 27070).
- Rehabilitation of all drilling to date.

#### 2015:

- Completion of DFS for the proposed Mount Peake mine.
- Lodgement of minesite EIS with the NT EPA.
- Reconnaissance trips to determine the location of infrastructure associated with the planned Mount Peake mining operation.
- Rehabilitation of eroded tracks and subsidence affected drillholes.

#### 2016:

- Supplement to minesite EIS lodged with the NT EPA.
- Rehabilitation monitoring across the Mount Peake project area.
- Exploration review of all Mount Peake licences.

# 6. TNG EXPLORATION AND ACTIVITIES 2017-2018

Limited exploration was undertaken across the Mount Peake Project Area during 2017 as the main focus was on the completion of work necessary to lodge the addemdum to the minesite EIS and the update to the DFS. The majority of this work has been attributed to ELR29627, which is not included as part of the Mount Peake group reporting.

Table 2 outlines the exploration carried out on the Mount Peake group reporting tenements from 18 February 2017 though to 17 February 2018. Each of the table entries are discussed further in the sections below.

ACTIVITY	TITLES	COMMENTS
Reduction	EL27070 EL29578	Loss of block, partial reduction.
Renewal	EL27069 EL27070	Two year renewal
Rehabilitation	EL31389	Waterbore drillhole and access track audit
Rehabilitation	EL27069 EL31389	Site Monitoring
Waterbore logging	EL31389	Loggers installed and data downloaded.
Surface water monitoring	EL29578	Surface water logger installed in Murray Creek, adjacent to the proposed minesite.
Biodiversity Surveys	EL27069 EL27941 EL29578 EL31389	Targeted threatened species surveys – Greater Bilby, Great Desert Skink and Brush-tailed Mulgara

Table 2: Summary of exploration on licences which make up the Mount Peake project.

## 6.1 Reduction and Renewal

A partial reduction was carried out on EL 27070 and EL 29578 as part of the DPIR's Partial Cancellation Notice (Loss of Block Penalty). A total of 21 blocks were required to be cancelled and as such EL 27070 was reduced from 14 blocks to 7 blocks and EL 29578 was reduced from 81 blocks to 67 blocks (Figure 3).

Two year renewal applications and summary reports outlining previous exploration were submitted for EL 27096 and EL 27070 in August 2017. Both licences have been renewed through to 12 August 2019.

## 6.2 Rehabilitation

Site monitoring and a waterbore drillhole and access track audit was carried out at Mount Peake in November 2017. Photographs were taken at the sites of the waterbore drilling and are included in Appendix 1 (along with 2016 photographs for comparison). All sites are revegetating well.

Current Monitoring Sites were also visited and photographed, these photographs are included in Appendix 2 (along with 2016 photographs for comparison). Three additional monitoring stations were added as a result of the waterbore drilling. These include drillsites 15MPWB02, 15MPWB03 and the access track to 15MPWB03. All these areas are



rehabilitating well and no remediation was required. Photographs of these sites are included in Appendix 2.

Figure 3: Partial cancellation of EL 27070 and EL 29578.

Six monitoring stations were set up during the early stages of the project, to monitor track access to the resource area and 6 drill sites. These sites were visited and photographed during March 2016 and as rehabilitation has been successful will no longer be monitored. Six additional monitoring sites were set up at sites visited by the DPIR in June 2015 (Table 3). Three new monitoring sites were added along the Mount Peake borefield including the length of the track to 15MPWB003 (Table 3). All sites were visited and photographed in November 2017. All photographs of monitoring sites are included in Appendix 4. No additional drillhole or site rehabilitation is specifically required at any site, though regrowth of vegetation and erosion along access tracks will continue to be monitored.

Mount Peake Project – Environmental Monitoring Stations					
Station	Easting	Northing	Ten-ID	Prospect	Description
1	328210	7605569	EL27069	Boundary Fence Anomaly	Access track between 12MPBFRC002 and 12MPBFRC003
2	328129	7605785	EL27069	Boundary Fence Anomaly	Access track between 12MPBFRC002 and 12MPBFRC003
3	328375	7605400	EL27069	Boundary Fence Anomaly	Drill site 12MPBFRC003, drilled April 2012.
4	322662	7606500	ELR29627	Mount Peake Resource	Drill site 12MPRC082, drilled November 2012.
5	322900	7607400	ELR29627	Mount Peake Resource	Drill site 12MPRC102, drilled November 2012.
6	322800	7607100	ELR29627	Mount Peake Resource	Drill site 11MPDDH09, drilled June 2011.
7	346150	7612693	EL31389	Borefield	Drill site 15MPWB002
8	338709	7641403	EL31389	Borefield	Drill site 15MPWB003
9			EL31389	Borefield	Track to 15MPWB003

#### Table 3: Monitoring stations within the Mount Peake project.

Five camp sites have been used since TNG started field exploration in 2009. Three of these were used in drilling programmes between 2009 and 2012 and have been fully rehabilitated and are no longer monitored. Two campsites were used during waterbore drilling programmes in 2015 and 2016 Middle Well and Browns Yard). The campsite at Middle Well has been added as Campsite Monitoring Site 2 (Table 4).

Camp sites are selected in cleared areas large enough to accommodate a caravan and support vehicles. All waste is removed from site and disposed of in the Ti Tree waste disposal facility; no rubbish is allowed to be burnt onsite.

## Table 4: Camp site monitoring within the Mount Peake project.

Mount Peake Project – Campsite Monitoring Stations				
Site	Easting	Northing	Description	
1	323495	7604612	Main campsite	
2	339400	7627600	Middle Well Camp – Waterbore Drilling	

## 6.3 Water Bore and Surface Water Logging and Sampling

## 6.3.1 Waterbore Logging and Sampling

Logging devices have been fitted to seven waterbores within the Mount Peake borefield (Figure 4). This is primarily to monitor groundwater levels over time which will be used throughout the life of mine to ensure change in levels have minimal impact on the surrounding environment. Data is collected hourly and is downloaded from the logging devices approximately every six months. Water sampling, measuring pH and total dissolved solids is usually also undertaken at this time. Existing station bores within the

Mount Peake area are also sampled. Bores within the Mount Peake Project area boundaries include Twin Soak Bore, Wollogolong Bore, Middle Well, Browns and Boko Bore (Figure 4).

Collar and sampling data is included in Appendix 3 and downloaded logger information is included in Appendix 4.



Figure 4: Location of Mount Peake long term monitoring bores.

#### 6.3.2 Surface Water Monitoring

A surface water monitoring device was set up on Murray Creek, adjacent to the proposed Mount Peake minesite, in November 2017 (Figure 5, 6). The reading point on the logger is at creek bed level. Logger data from the reporting period is included in Appendix 4.

Minesite construction proposals include a causeway across Murray Creek, with the causeway road surface at or just above the creek bed level and as such the main access road to the mine may be cut for a period after high rainfall.

Monitoring the depths and duration of flood events prior to construction will inform the mine construction team what height causeway is required to minimise disruption to mining and haulage activities.

Instructions from environmental consultants were:

- Place monitoring sites downstream from the infrastructure (1-4km) So have predisturbance record to compare with post-construction activity
- Monitoring site need be 2m high above the channel bed level
- Capable of withstanding the flood flow
- Able to measure water depth and flood duration



Figure 5: Location of the Murray Creek Surface Water Logger, SWM01.



Figure 6: Surface water logger on the Murray Creek.

## **6.4 Biodiversity Surveys**

Following submission of the Supplement to the EIS submitted in early 2017, the NTEPA determined that further work was required with particular focus on areas that had not been adequately surveyed for Greater Bilby, Great Desert Skink and Brush-tailed Mulgara.

It was proposed that searching be undertaken over an agreed number of 1km transects placed strategically along the entire extent of the proposed project potential impact footprint where suitable Greater Bilby, Great Desert Skink and Brush-tailed Mulgara habitat occurs, a large area being covered by the extent of the Mount Peake tenure (Figure 7).

To increase coverage of the major habitat types and to improve survey efficiency, it was proposed that transects be tightly grouped into sets of six 1 km transects within suitable habitat. This approach provides a more intensive investigation of optimal habitat rather than a dilution of effort over optimal/suboptimal/poor habitat along the haul road route. As the haul road route occurred most frequently between 3-5 km from established access tracks the grouping of transects also reduced the total lost time accessing habitats of interest along the site.

During September and October a total of  $150 \times 1$  km transects were searched for signs of Greater Bilby, Brush-tailed Mulgara and Great Desert Skink. 63 of these were within the Mount Peake tenure (Figure 7). None of the above species were observed during the most recent survey.



Figure 7: Location of September/October 2017 Biodiversity Survey Transects.

The Greater Bilby was not observed at any stage despite extensive targeted searches of all areas of potentially suitable habitat. However, diggings were found 11 km from the proposed impact areas in initial surveys in April 2013. Confidence in these diggings being made by Greater Bilby was reasonably high. Therefore, the presence of Greater Bilby in the broader region is considered possible. The Brush-tailed Mulgara was not observed, but was considered likely to be present based on the observations of fresh active burrow diggings and scratchings by GHD zoologists with requisite experienced derived from recent nearby surveys of the Burt Plain area of the NT. Failure to detect a live animal at the burrow using a remote sensing camera may indicate relatively low abundance of the species at this site, but may also be explained by the species' known sensitivity to disturbance, and the likelihood that Brush tailed Mulgara have numerous burrow entrances that would be used preferentially in response to disturbance. The Brush-tailed Mulgara is considered potentially present in the Project area.

A single Great Desert Skink (Liopholis kintorei) was observed fleetingly on a cool and cloudy morning during the November 2016 survey, at the edge of an access track in open sandplain within spinifex (Triodia spp.) understorey. Subsequent searches of the area surrounding the sighting failed to detect any further signs of this species, such as communal burrow systems or latrines. It is anticipated that this species may occur in suitable habitat within or near to the Project area.

The EIS addendum and associated Appendicesm including a Biodiversity Management Plan have not been included as part of this report, but can be access on the website link below.

https://ntepa.nt.gov.au/environmental-assessments/register/mount-peake-project

# 7. CONCLUSIONS AND RECOMMENDATIONS

During the upcoming reporting year there will continue to be work completed across the Mount Peake project area which relates to the proposed minesite within ELR29627. Along with this the company are keen to continue exploration within the project area.

Based on the exploration review completed in 2016 there are a number of target areas within the Mount Peake tenure that still require follow up exploration. Figure 8 shows the exploration conducted across the project area and areas requiring followup exploration.

Targets BCG-1, B1 and G34 require further assessment as to the economic viability of the graphite targets. Additional drilling is proposed to further assess the extent of the graphitic horizon at the BGC-1/B1 target area.

A number of target areas identified in as part of the GEOTEM review in 2010 have never been followed up with additional ground EM surveys (G24-33). It is unlikely that these target areas will result in additional vanadiferous resources but may result in additional base metal prospects being defined.

A transect line across the M1 target (T1h) from the HELITEM survey in 2012 suggested that the hole drilled has not adequately tested the target and followup drilling is recommended to fully test the magnetic low area.

Drilling in 2012 and 2014 produced positive results for additional vanadium resources within the northern target area (12MPNRC003), eastern bullseye target (12MPBBERC001) and the eastern target area (14MPRC001, 14MPRC007 and 14MPRC008). Additional drilling in these areas to test and constrain the extent of magnetite gabbro mineralisation is recommended.

Magnetic anomalies to the west and southwest of the Mount Peake deposit remain unexplained and while magnetic susceptibilities in this region are determined to be less than in the eastern area further geophysical investigation as to the source of the magnetic highs is recommended.



Figure 8: GEOTEM targets and regional drilling across the Mount Peake project area. HELITEM transects are shown. Drillholes with anomalous vanadium results are highlighted along with areas requiring followup exploration.