TNG LIMITED

ENIGMA MINING LTD

MOUNT PEAKE PROJECT

FINAL REPORT

EL 23074 - 22/07/02 to 07/08/12

Tenement/s	EL23074	1:250 000 Sheet Name	Mount Peake (SE5305)			
Holder	Enigma Mining Ltd	Enigma Mining Ltd 1:100 000 Sheet Name				
Manager	N/A	Datum	Mount Peake (5454) GDA94-52			
Operator	Enigma Mining Ltd	GDA_E	317050-327590 7599400-7617851			
Commodity	V, Ti, Fe	-				
Keywords	Deposit, iron, vanadium, titanium, renewal, drilling, scoping study, pre- feasibility, metallurgical, amalgamation, TIVAN [™] .					
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EXECUTIVE SUMMARY

Exploration Licence 23074 was granted to Tennant Creek Gold (NT) Pty Ltd (TCG) on the 22/07/2002, and was set to expire on 21/07/08. TCG is a 100% subsidiary of TNG Ltd (ASX: TNG). On 29 May 2007, TCG transferred the licence ownership to Enigma Mining Ltd (Enigma), another wholly owned subsidiary of TNG Ltd.

EL 23074 was renewed for a period of two year until 21/07/2010 and again until 21/07/2012. Another renewal application was completed for the licence, but prior to it's approval EL 23074 was amalgamated entirely with the northern Mount Peake licence EL 23271 and a new licence number assigned (EL 29578). EL 29578 was granted on 8/08/2012 and the above licences ceased on 7/08/2012.

A number of geophysical and drilling programmes have been undertaken across the licence resulting in the discovery of the word-class Mount Peake Fe-V-Ti deposit.

The project has reached the feasibility stage with mining operations planned for 2015.

All continued work on the Mount Peake deposit and surrounds will take place under EL 29578, ELR 29627 (granted 17/12/12) and ML 28341 (still under application).

This report summarises all exploration undertaken on EL 23074 since grant in 2002.

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1. INTRODUCTION

This report summarises activities carried out on EL 23074 from its grant date 22/07/02 through to the amalgamation with EL 23271 to become EL 29578 on 8/08/12.

Exploration Licence 23074 was granted to Tennant Creek Gold (NT) Pty Ltd (TCG) on the 22/07/2002, and was set to expire on 21/07/08. TCG is a 100% subsidiary of TNG Ltd (ASX: TNG). On 29 May 2007, TCG transferred the licence ownership to Enigma Mining Ltd (Enigma), another wholly owned subsidiary of TNG Ltd. The licence was renewed for 2 years on 21/07/2008 and again on 21/07/2010. The licence was amalgamated with the northern licence EL 23271 and a new licence number assigned (EL29578) on 8/08/12.

TCG originally applied for the licence area to explore for Ni-Sulphides, and it formed part of the companies Mount Peake Project area together with EL 23271. On the 18th August 2003 TCG entered into a Joint Venture agreement with Falconbridge (Australia) Pty Ltd allowing them to earn a 60% interest.

On the 15th October 2003 Falconbridge (Australia) Pty Ltd entered into a Heads of Agreement with Discovery Nickel Limited (DNL) whereby DNL assumed Falconbridge's obligations for EL23074.

Tennant Creek Gold (NT) Pty Ltd (TCG) resumed management of the tenement in October 2006 following the failure of the joint venture partners to fulfill its exploration, rent and reporting obligations.

Approval for Group Technical Reporting for the Mount Peake Exploration Licences (including EL 23074) was received from the Department of Mines and Energy (DME) in October 2011 with the end of reporting year date 17 February each year. Approval for Group Expenditure Reporting was received in May 2012 under Group Reporting ID GR226/12.

At the time of amalgamation EL 23074 formed part of the Mount Peake Project Area together with EL 23271, EL 27069, EL 27070, EL 27706, EL 27787, EL 27941 and EL 28491 (Figure 1).

2. LOCATION AND ACCESS

Exploration Licence 23074 is located approximately 220km NNW of Alice Springs, in the Northern Territory and covers portions of the Mt Peake (SF53-05) 1:250,000 map sheet (Figure 1). It lies within the Stirling Perpetual Pastoral Lease and is subject to Native Title. Exploration access to the area has been granted by the CLC and Traditional Owners, and Authorisation 0477-03 is currently in place.

The LNG gas pipeline runs through the project area and the Darwin to Adelaide railway 80km to the east of the resource.



Figure 1: Location of EL 23074 and Mount Peake project area.

3. TENURE

Exploration Licence 23074 was granted to Tennant Creek Gold (NT) Pty Ltd (TCG) on the 22/07/2002, and was set to expire on 21/07/08. TCG is a 100% subsidiary of TNG Ltd (ASX: TNG). On 29 May 2007, TCG transferred the licence ownership to Enigma Mining Ltd (Enigma), another wholly owned subsidiary of TNG Ltd. The licence was renewed for 2 years on 21/07/2008 and again on 21/07/2010. A third renewal application was submitted in July 2012, but prior to it being approved the licence was amalgamated with the northern licence EL 23271 and a new licence number assigned (EL29578) on 8/08/12 (Figure 2).

Exploration Licence 23074 covers a total area of 169.2km^2 . Tenure details are summarised in Table 1.

Table 1: EL 23074 tenement details.							
TITLE	PROSPECT	AREA (blocks)	GRANT DATE	EXPIRY DATE			
EL23074	Mount Peake	53	22/07/2002	7/08/2012			





Figure 2: Amalgamation of EL 23074 and EL 23271 into EL 29578, date effective 8/08/12.

4. **EXPLORATION ACTIVITIES**

Detailed accounts of all exploration activites, consultant reports and data have been submitted in Annual Reports for EL 23074 from 2002 onwards, including two Group Annual reports covering the Mount Peake Project Area in 2012 and 2013. Below is a year by year summary of exploration on the licence.

4.1 Year 1 (22/07/2002 - 21/07/2003)

Geological assessment of the region identified the central Arunta as an area prospective for Proterozoic, intrusive related, magnetic Ni-Cu-PGE sulphide mineralisation.

EL 23074 and the immediate surrounding area has had little historic exploration work and has not been the focus of dedicated nickel sulphide exploration.

4.1.1. Joint Venture

Falconbridge (Australia) Pty Ltd., under it's North Arunta Project had twelve Exploration Licences that surrounded EL23074. 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.

4.1.2 Exploration completed

During 2002 and 2003 regional scale compilation of open file reports and GIS compilation of geological and geochemical components was completed by TNG. This showed anomalous nickel and copper results in historic drill assays in the mafic/ultramafic units adjacent to EL 23074. An interpretation of Landsat imagery gave an indication of possible outcropping mafic/ultramafic units in a belt running NW-SE through the tenement. The imagery confirmed the validity and accuracy of DPIFM geological mapping, and the presence of mafic/ultramafic units on large regional structures, overlying coincident regional magnetic and gravity features.

Falconbridge after identifying favorable targets through compilation and interpretation of regional datasets, 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 (Figure 3).

Falconbridge ranked these anomalies with respect to Ni-S prospectivity. Descriptions of these are shown in Table 2.

Target ID	Figure	Description/ Comments
23074 A	B-12 L10670	Late time B field response on linear mag feature. Looks surficial in part and further modelling, ground truthing is required.
23074 B	B-13 L10980	Weak EM feature just off structural contact and possible embayment feature in regional mag high. Appears surficial – low priority.
23074 C	B-14 L11000	Good late time B-field response with coincident mag high on the flank of larger magnetic feature.
23074 D	B-15 L11030	Late time B-field response, possibly surficial on cross cutting magnetic high adjacent to large NE trending structure. Drilling by CRA in the vicinity of this target intersected garnet-magnetite skarn. Depth of the hole was 36.5m. No further work is recommended at this time.
23074 E	B-16	Isolated 7 line conductor in area of subdued magnetic response.
23074 F	No Figure	Isolated magnetic high under cover. Ground EM may provide better penetration through over lying conductive material.

Table 2: Target Summary, AEM results for EL 23074, Falconbridge 2003.



Figure 3: AEM results for EL 23074, Falconbridge 2003.

4.2 Year 2 (22/07/2003 - 21/07/2004)

4.2.1 Assignment of Joint Venture

On the 15th of October 2003 Falconbridge Ltd entered into agreement with Discovery Nickel Ltd (DNL) under a Heads of Agreement, whereby DNL assumed Falconbridge's option to earn a 60% interest in EL 23074. 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 a significant aeromagnetic anomaly Target J-1, located on EL 23074. DNL reported that this proved to be a massive magnetic gabbro, and of no economic interest.

4.2.2 Exploration completed

Exploration completed within EL 23074 included the following:

- Ground EM survey.
- Interpretation of ground EM data.
- Interpretation of the aeromagnetic data.
- Magnetic modelling of the J-1 magnetic target
- Drilling of J-1 target in EL 23074, generated from the aeromagnetic data.
- Construction of an access track, to drill J-1.

4.2.3 Land Access

The land access obligations of Falconbridge for EL 23074 were passed on to Discovery Nickel on the 29th of October 2003 under a Deed of Assumption signed by Tennant Creek Gold (NT), Falconbridge and Discovery Nickel and the Central Land Council. Discovery Nickel reported that a land access agreement was in place with the Traditional Owners that facilitates access to EL 23074.

4.2.4 Ground EM Survey

Following reprocessing and interpretation of the GEOTEM data by DNL a number of bedrock conductors were identified and ranked. A selection of these conductors were followed up with a more detailed moving loop ground EM survey in April 2004 by Quantec (Brisbane). The fixed loop data did not show any evidence for strong anomalies or basement conductors from any of the chosen GEOTEM anomalies within EL 23074 and therefore these targets were not drilled.

4.2.5 Aeromagnetic Survey Interpretation and modelling

The aeromagnetic data from the Arunta project area was interpreted in conjunction with the GEOTEM data (Figure 4). The target selected on EL 23074 was selected from the magnetic data collected during the GEOTEM survey. After only one basement conductor was identified in the SMARTEM data it was decided to drill the strongest magnetic feature J-1 (Figure 5). Magnetic modelling was completed on the aeromagnetic data using Model Vision (Figure 6).



Figure 4: Late time conductors identified in the GEOTEM survey and followed up by the moving loop SMARTEM survey, displayed on a psuedoclor image of the reduced to the pole, Total Magenetic Intensity, Discovery Nickel Limited, 2004.



Figure 5: 1VD aeromagnetics with EM picks within project area, the coloured areas show gridded Geotem data channel Bz12, Discovery Nickel Limited, 2004.



Figure 6: Magnetic Model of J-1 Target using Model Vision. Section view showing proposed drill hole (Hole Loc: 322430E, 7606410N (AGD84), Discovery Nickel Limited, 2004.

4.2.6 Drilling – J-1.

Discovery Nickel reported that access to EL 23074 was accomplished by constructing a 1.5 kilometre access track with the permission of the CLC.

A UDR650 Diamond rig was contracted from Titeline Drilling. The hole 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 (Figure 6).

Discovery Nickel reported that the drill core showed little variation and predominantly contained medium to coarse grained, massive, magnetite-bearing gabbro, with a mineralogy of magnetite-pyroxene-feldspar-quartz with traces of biotite.

Samples collected were reported as follows:

Sample no.	From	То
AR2050	50.0	50.5
AR2075	75.0	75.5
AR2100	100.0	100.5
AR2125	125.0	125.5
AR2150	149.5	150.0

No economic mineralisation was noted, but assay results were not provided by DNL. It is unsure if any samples were submitted for analysis. No digital data or assays were provided to TNG.

4.3 Year 3 (22/07/2004 - 21/07/2005)

Discovery Nickel reported that due to the unavailability of geophysical EM crews and drill contractors little work was completed on the licence during 2005.

Reported by Discovery Nickel, work completed included the following:

- Further interpretation of ground EM data.
- Interpretation of the aeromagnetic data.
- Magnetic modelling of the J-1 magnetic target.
- Assessment of the drilling of J-1 target in EL 23074.

4.4 Year 4 (22/07/2005 - 21/07/2006)

During this period Falconbridge (Australia) Pty Ltd and their J.V partner, Discovery Nickel Limited withdrew from their agreement with TNG without fulfilling their obligations under the terms of the joint venture agreement.

This came to TNG's attention in July 2006 when it was discovered that EL 23074 was being passed off to a third party, Proto Resources and Investments, by Discovery Nickel Limited, with no reference to the Joint Venture in place.

No ground exploration was carried out during the reporting period by the joint venture parties.

4.5 Year 5 (22/07/2006 - 21/07/2007)

The attempt by DNL to assign licence EL 23074 to the IPO for Proto Resources & Investments Ltd., was intersected by TNG in August 2006, at which time DNL advised TNG that they were withdrawing from the J.V.

No ground exploration was carried out in the 2006 – 2007 reporting period.

4.5.1 Data Compilation and Geological Review

A full review of all Mount Peak data was carried out by TNG to establish what the J.V Partners had completed.

Closed file company reports, agreements and all project data were gathered in order to conduct a full geological review of the project area.

4.5.2 Joint Venture Administration and DPIFM Notification

In a letter dated 30th October 2006, Damian Delaney (CFO and Company Secretary, TNG Ltd) notified DPIFM that the farm – in partner for the Joint Venture over the Mt Peake tenements, Falconbridge Ltd and their partner Discovery Nickel, had failed to meet any of the expenditure or statutory requirements for the 2005 – 2006 reporting period.

In addition both Falconbridge Ltd and the tenement manager, Bichard Exploration had not notified TCG of these failings. A large amount of time was spent administering the handover and subsequent management of this tenement, including assessment and submission of outstanding documentation to DPIFM.

In addition, the Native Title agreement, with the Traditional Owners and the CLC referred to by Falconbridge and Discovery Nickel in their Annual reports, cannot be located, either at TNG offices or at the CLC. TNG is now in consultation with the CLC regarding this.

4.6 Year 6 (22/07/2007 - 21/07/2008)

Due to the TNG's focus on its Manbarrum Project in 2007, where expenditure for the 2007 period exceeded \$8m, no fieldwork was undertaken on this project.

During the year TNG has reviewed and assessed all available data, and attempted to acquire all outstanding information. Discussion also began with the CLC in relation to an exploration agreement

The data review has shown a heavy reliance on geophysical techniques by both Falconbridge and DNL to locate prospective targets. DNL reprocessed Falconbridge's GEOTEM data and produced a number of targets. These were listed under a series of either "J" or "B" targets, however no description or modelled data for these was supplied to TNG.

DNL drilled one target, J-1, but stopped the hole 50m short of the targeted depth of 200m.

4.6.1 Proposed Exploration Programme

Once access has been approved by the Traditional Owners and the CLC, a detailed soil/lag geochemical survey is planned. This will provide a geochemical basis for planning future work programmes and ranking the remaining geophysical anomalies prior to drill testing, and assess other prospects.

In order to provide a base map for ground work TNG will commence compilation of a regolith map prior to conducting any field work. This will be achieved using multiple remote sensing techniques.

Following this, the lag/soil sampling survey will be conducted over the total licence area, with samples collected at 500m intervals. This technique has proved very successful in similar, sand covered terrains for the location of Ni-S deposits (Baker et al, 2005). Results from this survey would be used to rank the existing geophysical targets prior to drill testing.

4.7 Year 7 (22/07/2008 - 21/07/2009)

A significant amount of work was carried out in this reporting period, comprising field, laboratory and resource evaluation work. Drilling was completed and laboratory testing (assaying, metallurgical testwork and Davis Tube recovery work) carried out on the new drill core. Snowden Mining Industry Consultants (Snowden) were commissioned to carry out an Initial Resource Estimate and Initial Scoping Study of the Mt Peake Project. Petrological and geochemical work was carried out on drill core from ARD02 and as a result of the findings a proposal was submitted to the NT government requesting funding for additional drilling in the area.

4.7.1 Drilling

In the reporting period TNG drilled six RC drillholes for 928 metres (Table 3).

	COORDIN	NATES MGA		HOLE	DEPTH
HOLE_ID	EASTING	NORTHING	AZI	TYPE	(m)
09MPRC001	322550	7605700	0	RC	150
09MPRC002	322700	7607000	090	RC	156
09MPRC003	322625	7606500	0	RC	198
09MPRC004	322650	7606200	270	RC	174
09MPRC005	323550	7607300	0	RC	150
09MPRC006	322625	7606050	270	RC	100

Table 3: RC drillhole details February 2009.

Samples were collected at 1 m intervals. Samples that were sent for analysis were from the base of transported horizon or the top of calcrete horizon to 2 m past the base of mineralisation. Samples were assayed at Nagrom in Kelmscott, Perth for Fe, SiO₂, Al₂O₃, TiO₂, Mn, V₂O₅, P, S, Ca, Mg by XRF and for Cr₂O₃, Cu, Zn, Co, Ni by ICP. Samples from one drillhole were analysed by fire assay for Au, Pt, Pd.

XRF results confirmed that the mineralisation is continuous over at least 80m, from 30m to a depth of 111m. Best results were:

MPRC004	117m @ 0.44% V ₂ O ₅ , 7.9% TiO ₂ , 24.9% Fe
including	24m @ 0.56% V ₂ O ₅ , 10.04% TiO ₂ , 32.75% Fe
MPRC003	115m @ 0.35% V ₂ O ₅ , 6.065% TiO ₂ , 27.9% Fe
including	54m @ 0.45% V ₂ O ₅ , 7.92% TiO ₂ , 30.8% Fe
MPRC002	40m @ 0.35% V ₂ O ₅ , 6.01% TiO ₂ , 24.05% Fe

4.7.2 Metallurgy

TNG commissioned Mineral Engineering Technical Services Pty Ltd (METS) to design and manage the metallurgical testwork programme. Samples were submitted for Davis Tube Recovery (DTR) and metallurgical test work to assess the recovery of the magnetic fraction from a low intensity magnetic separation procedure, and then assay this fraction for the elements of interest.

The Davis tube test results were highly encouraging and confirmed high grade vanadium concentrate can be obtained from mineralisation intersected at the Mount Peake project. Average DTR concentrate grade exceeds $1\% V_2O_5$, with the highest values up to $1.5\% V_2O_5$, 52% Fe and 17% TiO₂. Significant results are shown in Table 4.

	Depth Interval		-75µm DTR	-75µm DTR Concentrate Grades		
Hole ID	From (m)	Thickness (m)	Mass Recovery (%)	V ₂ O ₅ (%)	TiO ₂ (%)	Fe (%)
MPRC001	13	95	4.8	0.96	12.5	50.2
MPRC002	21	55	12.0	1.47	15.3	52.7
MPRC003	6	150	17.7	1.28	17.0	52.8
MPRC004	6	165	15.7	1.17	16.6	52.6
MPRC005	5	145	5.4	0.94	15.8	52.0
MPRC006	5	95	9.0	1.21	13.3	53.6

Table 4: DTR concentrate results summary

Further test work aimed at optimising the grade and recovery, has successfully improved the initial results.

TNG has commissioned METS to investigate the recovery of iron and titanium as additional marketable products.

4.7.3 Initial Resource Estimate

The consistent mineralisation over large intersections of up to 165m indicated significant potential for a substantial resource. Based on these results the company appointed Snowden Mining Industry Consultants (Snowden) to commence an initial resource estimate based on the drilling and geophysics completed to date.

The results of the resource estimate show that the Mount Peake vanadium project provides TNG with a maiden Inferred Mineral Resource (cut-off $0.1\% V_2O_5$) of:

107 Mt @ 0.32% V₂O₅, 5.9% TiO₂, 29% Fe

4.7.4 Initial Scoping Study

Snowden also undertook an Initial Scoping Study to assess project viability and assist in planning ongoing exploration activities at Mount Peake.

The results of the Initial Scoping Study were encouraging, particularly as the optimisation was based on TNG's maiden Inferred Mineral Resource which was estimated from its first round of drilling on the project. A significant portion of the Mount Peake magnetic anomaly remains untested and offers the potential to increase the initial resource and further enhance the project's economics.

4.7.5 Petrology and Geochemistry

Three samples of quarter HQ drill core from the historical drill hole ARD02 were sent to Dick England for polished section preparation and description. Petrological assessment of the three samples identified a magnetite olivine cumulate with good evidence of layering and traces of magmatic sulphide; chalcopyrite, pentlandite, and bornite.

Indications that PGE's may have precipitated earlier in the intrusion were highlighted, as in the Bushveld, Munni Munni, and Stillwater intrusions. Deeper drilling was suggested to investigate if PGE mineralisation took place at a greater depth in the intrusion.

Geochemical results from the last 5m of drillhole ARD02 display a distinct increase in the concentration of Cr_2O_3 and S adding further evidence for the possible evolution of mineralisation at depth in the intrusion.

4.7.6 Drilling Collaboration Proposal

In March 2009 TNG submitted a proposal to the NT Government applying for funding for a diamond drilling programme to provide information on the nature and extent of a potential layered mafic intrusion in the prospective Western Arunta province.

4.8 Year 8 (22/07/2009 - 21/07/2010)

4.8.1 Drilling Collaboration Funding

TNG was awarded \$75,000 in funding from the Northern Territory Government for diamond drilling in the Stirling Deeps project (located at Mount Peake) as part of the Governments \$2.4 million collaborative funding programme.

The funding was approved on the 26th July 2009, and a 'Geophysics and Drilling Collaborations Funding Agreement' was drawn up between TNG Ltd and the Northern Territory of Australia and signed by the relevant parties.

The drilling took place in October-November 2009 and details are provided below (Section 4.8.3).

4.8.2 Heli-borne Magnetic and Radiometric Survey

In August 2009 Aerosystems Pty Ltd flew a detailed heli-borne magnetic and radiometric survey over the Mount Peake magnetic anomaly.

The survey was flown with an east-west survey line orientation and separation of 50m. The mean terrain clearance for the survey was 50m. A total of approximately 425 line kilometres of data was collected over 129 flight traverses.

The new magnetic data highlights the existing magnetic anomaly, with N-S strike orientation and amplitude in excess of 4000 nanno-Teslas and 3D modelling of the data further indicates the source of the magnetic complex is a ring-type dome structure. On the western flank of the structure the source of the high intensity magnetic anomaly has a westerly dip and plunges to the south. The modelling clearly displays the dextral offsetting of the magnetic source and the deepening of the northern extension of the source. On the eastern flank of the magnetic structure, the source appears more complex with easterly dipping variable susceptibility magnetic shells.

Results from the radiometric survey have revealed previously unknown uranium anomalies, up to 500m long that occur adjacent to the Mount Peake vanadium deposit. Uranium has not been routinely assayed in any of the previous exploration work at Mount Peake. Field checking of the anomalies is planned and re-assaying of sample pulps and residues is scheduled.

4.8.3 RC and Diamond Drilling

A 14 hole RC drilling programme (09MPRC007-020) and 2 diamond drilling programmes were completed at the Mount Peake Prospect in October - November 2009. This programme was aimed at infilling and testing extensions to the existing Inferred Resource. The RC programme resulted in a total of 2148m being drilled with hole depths ranging from 90m-222m. Seven of the holes were drilled vertically and the remaining seven drilled at -60° towards 090°.

The 2 diamond drillholes (09MPDD01-02) were completed for 225.4m (Table 5). All holes were pre collared. These two holes were drilled PQ in order to obtain a large sample for metallurgical testwork.

Prospect	Hole No.	Easting	Northing	Dip	Azimuth	Depth
Mount Peake	09MPDD01	322610	7606507	-88.7	0	128.0
Mount Peake	09MPDD02	322658	7606204	-63.4	270	97.4

Table 5: Mount Peake Diamond Drillholes	October 2009
	0010001 2000

Samples were initially analysed by XRF and those samples with results in excess of 15% Fe were submitted for Davis Tube Recovery (DTR) in order to assess the magnetic separation, recovery and concentrate grades. Significant DTR intersections include:

115 m @ 1.13% V_2O_5 , 15.3% TiO₂, 54.7% Fe 89 m @ 1.16% V_2O_5 , 14.2% TiO₂, 54.4% Fe 104 m @ 1.16% V_2O_5 , 15.1% TiO₂, 54.9% Fe 85 m @ 1.09% V_2O_5 , 16.0% TiO₂, 52.9% Fe

These new drill results established consistent mineralisation extending for greater than a 2km strike length within a magnetic feature that has a strike length of 9km.

Drill testing of other untested magnetic targets adjacent to the Mount Peake anomaly is also planned in the hope of extending or adding to the existing mineralisation.

A further two diamond drillholes (Stirling Deeps; SDDD001-SDDD002; Table 6) were completed with funding provided by the NT Governments collaborative funding programme. The holes were drilled with the aim of providing information on the nature and extent of a potential layered mafic intrusion in the Western Arunta province.

Prospect	Hole No.	Easting	Northing	Dip	Azimuth	Depth
Stirling Deeps	SDDD001	323000	7606200	-88.7	0	405.8
Stirling Deeps	SDDD002	322482	7606310	-89.9	0	285.9

Table 6: Stirling Deeps Drillholes.

Results of this drilling indicated minor mineralised zones in minor layering. These were sampled and submitted for analysis. Best results are shown in Table 7.

Table 7: Best results from	Stirling	Deeps	Drilling
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Hole ID	Highest Cu (ppm)	Highest Ni (ppm)	Highest Cr (ppm)
SDDD001	153	121	50
SDDD002	105	282	148

Gabbro was intersected in both holes and reinforces the presence of an extensive olivine gabbro intrusion; however the presence of a mafic layered intrusion was not confirmed.

TNG's exploration model remains strong with further follow up drilling programmes proposed to adequately test the potential of a layered mafic complex. Chromite mineralisation within SDDD002 reinforces the mafic intrusion model with more work required to investigate any additional mineralisation.

4.8.4 Metallurgy

TNG's metallurgical consultants, METS have confirmed that a high-grade vanadium pentoxide (V_2O_5) concentrate can be produced from the Mount Peake mineralisation. Further test work was aimed at optimising the grade and recovery, and exploring processing options.

Results from new magnetic separation beneficiation test work were highly encouraging. The ore responded well to coarse cobbing, giving an upgrade from 0.3% V₂O₅ to 0.5-0.8% V₂O₅. High V₂O₅ recovery at 85-97% was obtained. Re-grinding the cobbing magnetic concentrate to P₁₀₀ 75 μ m resulted in an increase of the V₂O₅ grade to 0.9-1.2%. Once again, a high recovery of V₂O₅ at 80-94% was achieved.

Additional testing improved the results again results, producing a vanadium-rich titanomagnetite grading $1.0-1.3\% V_2O_5$.

Overall, the test work completed to date has demonstrated that the Mount Peake deposit has no mineralogical issues that would inhibit the response of the ore to magnetic separation beneficiation.

4.8.5 Resource Estimate

An updated Inferred Resource Estimate was completed by Snowden in March 2010 and was reported using a V_2O_5 cut-off of 0.1 %. The updated Inferred Resource was:

139 Mt @ 0.29% V₂O₅, 5.3% TiO₂, 23.7% Fe

This represents a 30% increase from the previous resource estimate of 107Mt and improved concentrate grades.

4.9 Year 9 (22/07/10 - 21/07/11)

A significant amount of work was carried out during Year 9 of tenure. This comprised drilling, a geochemical review, metallurgical optimisation and pilot plant testwork, two scoping studies and commencement of pre-feasibility work. Full details are provided in the Annual Report, EL23074, 2011, and a summary is provided below.

4.9.1 TIVAN[™] Hydrometallurgical Process

The new hydrometallurgical process - the TIVAN[™] process - which was jointly developed in 2010 in conjunction with TNG's metallurgical consultants, Mineral Engineering Technical Services Pty Ltd (METS), was used for the first time to successfully extract commercial grades of vanadium, titanium and iron from the Mount Peake Deposit, which is hosted by a similar rock type (Magnetite-Gabbro) to that which hosts most known vanadium deposits worldwide.

An international patent application for the TIVAN[™] hydrometallurgical process was been filed by TNG and metallurgical consultants Mineral Engineering Technical Services Pty Ltd (METS).

4.9.2 Scoping Study

Snowden Industry Consultants completed a detailed Scoping Study based on the revised JORC Inferred Resource of 139.1Mt @ 0.29% V_2O_5 , 5.34% TiO₂ and 23.66% Fe. In addition to this resource, TNG has estimated an Exploration Target¹ of 500-700Mt grading 0.2-0.4% V_2O_5 and 25-35% Fe based on available geophysics.

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.

4.9.3 Pre-Feasibility Study

In March 2011 TNG advanced the project to Pre-Feasibility stage and appointed Sinclair Knight Mertz (SKM), to manage the completion of a Pre-Feasibility Study (PFS) for the Mount Peake Project.

The PFS will build on the positive independent Scoping Study completed by Snowdens earlier in the year and will be based on a conventional open pit mining operation processing 5Mtpa. It will be undertaken in conjunction with the next phase of pilot plant metallurgical test work. Reporting on environmental factors, flora and fauna, and water assessment have been completed to date.

4.9.4 Drilling Programmes

A diamond drilling programme was carried out at the Mount Peake Fe-V-Ti deposit in May and June 2011. Eight diamond drillholes (11MPDD03-10) were completed for 1081m (Figure 7). These holes were drilled HQ in order to provide representative samples for metallurgical and Pilot Plant testwork.

In July a 23 hole, 2748m RC infill-drilling programme was completed over the Mount Peake deposit (Figure 8). The programme was designed to in-fill and upgrade the current JORC Inferred Resource estimate of 140Mt @ 0.29% V_2O_5 , 5.34% TiO₂ and 23.66% Fe, to indicated status.

4.9.5 Geological Review

TNG employed the services of consultant geologist Finn Barrett to review and analyse the geological data on Mount Peake and produce a comprehensive report on the geology, stratigraphy and styles of mineralisation within the Mount Peake gabbro hosted Ti-V-Fe deposit. As part of this study a number of samples were sent to Nea Kameni Pty Ltd for petrographic analysis. Nine polished sections were produced. The rock types within the sections are mainly ultramafic cumulate rocks.



Figure 7: Mount Peake 2011 diamond drillhole locations over magnetic image.



Figure 8: Mount Peake 2011 RC drillhole locations over magnetic image.

4.10 Year 10 (22/07/11 - 21/07/12)

Full details of the Year 10 exploration programme can be found in the Mount Peake Group Annual Reports, submitted in April 2012 and 2013. A summary is presented below.

4.10.1 Drilling Update

Diamond drilling at the Fe-V-Ti deposit in mid-2011 was aimed at providing representative samples for metallurgical and pilot plant testwork. The results confirmed the presence of continuous and reasonably homogeneous mineralisation hosted within the magnetite zone, and include the highest vanadium and iron grades intersected to date in un-beneficiated material of up to $0.6\% V_2 0_5$ and 36% Fe.

RC drilling was undertaken to infill and upgrade the existing JORC resource. The grades and widths of intersection encountered in this drilling contributed to an overall increase in both tonnes and grade of an updated JORC resource at Mount Peake.

4.10.2 Resource Update

An updated resource estimate was produced based on the results of the drilling in 2011. The estimate of 160Mt grading 0.27% V_2O_5 , 5% TiO₂, 22% Fe represents a significant increase from the previous Inferred Resource estimate of 139Mt grading 0.29% V_2O_5 , 5.3% TiO₂, 23.6% Fe.

Significantly, approximately 70% of the resource, or 112 million tonnes, is now confirmed in the Indicated category, and available for conversion to Ore Reserves. The resource was also identified as remaining open to the east, which increases the potential for significant resource upgrades (Figure 9).

4.10.3 Pre-Feasibility Study

The Interim PFS results have been independently prepared by METS (process and infrastructure design and related capital and operating costs), Snowden (mine design, mining costs and financial analysis) and SKM (transport costs) to an accuracy level of ± 25 per cent, which is typical for a PFS and provides a strong platform to progress to a Definitive Feasibility Study (DFS) decision.

The Pre-Feasibility Study (PFS) is based on the updated JORC Indicated and Inferred Resource for Mount Peake published on 12 October 2011 of 160Mt @ 0.3% V_2O_5 , 5% TiO2 and 23% Fe (Indicated 110Mt @ 0.29% V2O5, 5.3% TiO2 and 23% Fe; Inferred 48Mt @ 0.24% V_2O_5 , 4.5% TiO2 and 21% Fe).

4.10.4 TIVAN[™] Hydrometallurgical Process

The metallurgical testwork programme for all phases of the TIVAN[™] metallurgical process is progressing steadily. Operation and testing of the pilot plant commenced in mid-March, providing a definitive test of the commercial potential of the TIVAN[™] process to produce a high purity aqueous vanadium solution leading to a vanadium pentoxide product of commercial grade.

4.10.5 Geological and Geophysical Review

Additional work on the Mount Peake Project Area (MPPA) involved the completion of a Geological Review which concludes that the geophysical data and drilling results from Mount Peake show the Murray Creek Ti-V magnetite body is part of a larger sill with other shallow targets. Other sills with Ti-V mineralisation potential are present within the MPPA.

Additional drill targets were identified on EL 23074 as a result of a geophysical review of the regional magnetic data available over the Mount Peake area (Figure 10). Confirmation of the

presence of additional magnetite-gabbro (the host to the iron-vanadium-titanium mineralisation at the Mount Peake deposit) within very large magnetic features around the existing Mount Peake deposit could significantly expand the resource potential in the MPPA.



Figure 9: Outline of the Mount Peake Fe-V-Ti resource to date, showing that the resource remains open to the east.



Figure 10: Location of potential targets, including Mount Peake North # 1 & 2, within the Mount Peake Project Area.

5. EXPENDITURE

Table 8 summarises the expenditure reported each year for the licence since the grant date in 2002. An expenditure report has been forwarded to the Department of Mines and Energy each year.

YEAR	AMOUNT
Year 1	\$81,527
Year 2	\$72,551
Year 3	\$65,143
Year 4	\$2,295
Year 5	\$39,240
Year 6	\$92,290
Year 7	\$252,208
Year 8	\$972,596
Year 9	\$629,293
Year 10	\$485,958
TOTAL	\$2,693,101

Table	8:	Expenditure	details,	Years 1-10.
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6. CONCLUSIONS

In August 2012 EL 23074 was amagamated entirely with the northern Mount Peake licence EL 23271 and a new licence number assigned (EL 29578). EL 29578 was granted on 8/08/2012 and EL 23074 ceased on 7/08/2012.

All continued work on the licence area will take place under EL 29578.