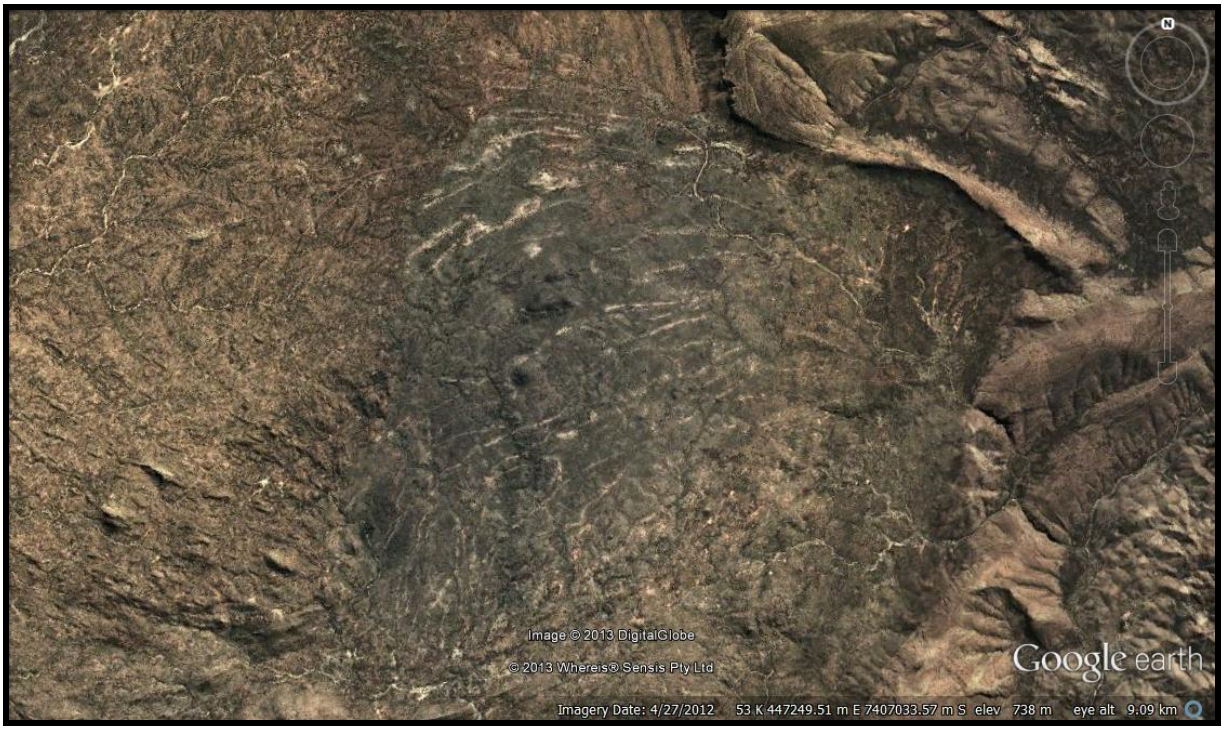
Bridging Report

Exploration Licence: EL 28940 ("Mordor")

Year Two: 7th March 2014 – 31st January 2015



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Date:	31st March 2015
Tenement Holders:	DBL Blues Pty Ltd
Tenement:	EL28940
Tenement Name:	Mordor
Reporting Period:	7st March 2014 – 31st January 2015 (Bridging)
Distribution:	Geoscience.Info (Department of Mines and Energy)
	Core Exploration Ltd
Map Sheet:	Alice Springs 1:250,000 sheet (SF5314)
	Laughlen 1:100,000 sheet (5751)
Prospects:	Mithril, Braveheart
Target Commodity:	PGM, IOCG
Keywords:	Platinum, Paladium, PGE, Ultramafic, IOCG, iron-oxide-copper-gold, Mordor

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1.0 Summary

EL 28940 is located approximately 75 km north-east of Alice Springs within the area known as “Mordor Pound”. The tenement had historical occurrences of PGM with drilling having previously recording a best intersection of 2m @ 1.1g/t Pt+Pd+Au within an alkaline igneous intrusive complex.

Core has undertaken a detailed assessment of EL28940’s potential to host Pb-Zn-Ag mineralisation within the Bitter Springs Formation (BSF) of the Amadeus Basin with similar characteristics to Core’s Inkheart Prospect. Core believes the discovery of the Inkheart Prospect reinvigorates the lower Amadeus Basin sediments potential to host sedimentary hosted Pb-Zn-Ag mineralisation systems. The BSF hosts the Inkheart Prospect and strikes NW/SE across EL28940 in contact with the underlying Heavitree Quartzite as well as structurally thrusted against the underlying Proterozoic Aileron Province units (Appendix 1).

2.0 Introduction

This annual technical report covers second year exploration activities conducted within EL 28940 by Core Exploration between 7th March 2013 and 6th March 2014. EL 28940 “Mordor” is located approximately 75km’s north-east of Alice Springs and is located within the Alice Springs 1:250,000 Geological Map Sheet (Fig.2.1).

Access from Alice Springs is by way of the Ross Highway for 100 km until you reach Paddys Hole Dam, then turning north through Paddys Plain, circling the Georgina Range and then turning south west along the Georgina Gap Road and following this through to the Mordor Pound area. Access can be difficult and will require a 4WD vehicle. Summer periods often have seasonal rainfalls and bushfires which can hinder access to the area.

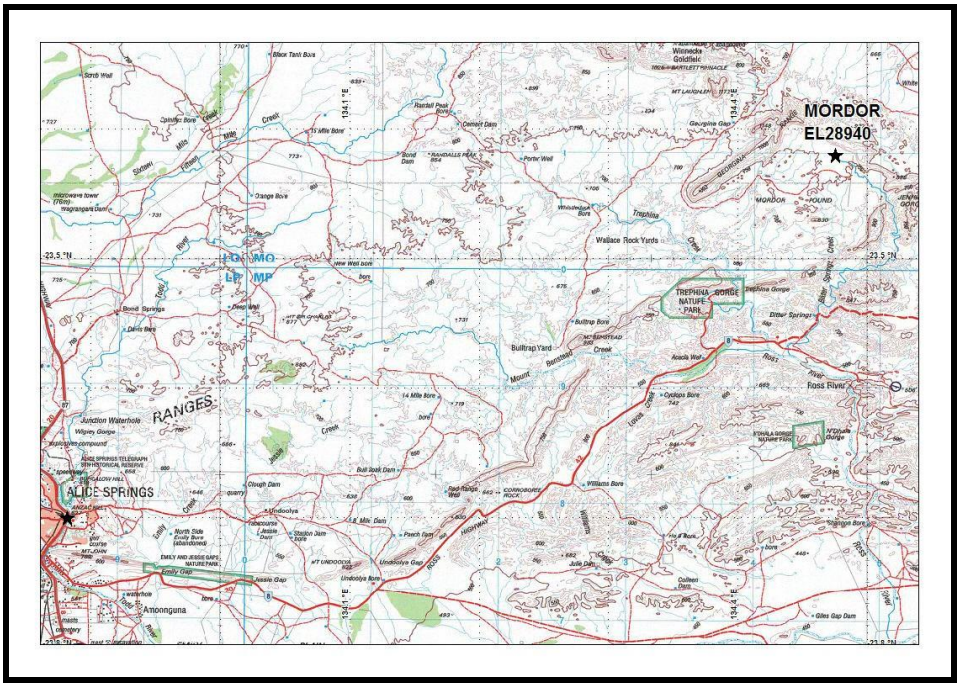

Figure 2.1 Location Map of EL28940

3.0 Tenure

EL 28940 is located within pastoral lease PPL1095 (The Garden). Tanami Gold reported that several exclusion zones had been noted in the Mordor region by the Central Land Council (CLC) however, none were located in the areas of interest and did not impact upon exploration activities. Tenure details are shown below.

Table 3.1 Tenure Details

Tenement	Owner	Date Granted	Tenure	Size	Year 2 Expenditure Commitment
EL 28940	DBL Blues Pty Ltd (100%)	7/3/2012	6 Years	26 blocks	$21,500

4.0 Geology and Mineralisation

A detailed report summarising Mordor by Barnes et al. (2008) is referenced below.

The Mordor Alkaline Igneous Complex (MAIC) intrudes the high-grade Palaeoproterozoic Arltunga granitic gneisses of the Arunta Orogen (Fig. 4.1), and is situated close to the Woolanga Gravity Lineament. The gravity feature is an inferred deep-seated southeast-trending structure (Langworthy and Black 1978). The Complex has previously been described by Barraclough 1981 and by Langworthy and Black 1978 who interpreted it as a poly-phase intrusion of likely kimberlitic affinity.

The MAIC has a sensitive high resolution ion microprobe (SHRIMP) II zircon U–Pb date of 1132±5 Ma (Hoatson and Claoué-Long 2002). It is believed to be associated with the ca. 1150–1130 Ma Teapot Event (Black et al. 1983), a period of elevated crustal temperature (amphibolite facies) in the southern part of the Arunta Orogen (Black et al. 1983), which may be related to magmatism associated with the Musgrave Orogeny (Close et al. 2004).

The Neoproterozoic (ca. 820 Ma) Heavitree Quartzite of the Amadeus Basin unconformably overlies both the Arunta Orogen and the MAIC. The Heavitree Quartzite has been preferentially eroded and retreated over the MAIC, forming a three-sided box-shaped canyon surrounded by a steep escarpment called the Georgina Range. This three-sided box-shaped morphology inspired earlier geologists to name the area “Mordor Pound” owing to the resemblance to the fictional “Mordor” of J.R.R. Tolkien.

The Mordor Alkaline Igneous Complex covers about 35 km2 in area. The complex is an unusual composite intrusive body that consists of two major phases: a very coarse grained (up to 5 cm-sized phenocrysts), relatively homogenous syenite body to the northwest, and an ultramafic–mafic phase, referred to from here on as the Mordor Mafic–Ultramafic Intrusion or MMUI, consisting of a diverse assemblage of layered pyroxene-rich cumulates with widely varying proportions of other cumulus phases including olivine, phlogopite, apatite, ilmenite, and potassium feldspar. Field relationships, including isolated pods and cross-cutting apophyses of the ultramafic–mafic phase in the syenitic phase, suggest that the ultramafic–mafic phase has intruded the essentially coeval syenitic phase.

Numerous pegmatite dykes and lesser quartz- and quartz carbonate veins crosscut the ultramafic cumulates, which are also offset by minor faulting. The pegmatites possibly represent a late-stage residual melt. The veining and faulting is probably associated with the later Alice Springs Orogeny (450–300 Ma; e.g., Haines et al. 2001). The syenitic phase forms the western part of the MAIC in a circular shape that makes up about 60% of the complex, and consists of a relatively uniform, leucocratic, coarse-grained K-feldspar syenite

with accessory clinopyroxene and phlogopite. K-feldspar laths have a weak planar preferred orientation that may indicate a magmatic lamination.

The Mordor Mafic–Ultramafic Intrusion or MMUI forms the remaining 40% of the complex and consists predominantly of phlogopite-bearing feldspathic pyroxenites and clinopyroxene syenites (historically called “mafic shonkinites”) with lesser pyroxenites and minor wehrlites. The massive pyroxenite units commonly form rounded hills, boulders, and low ridges, and display igneous lamination, modal layering, and cryptic layering (terminology of Irvine 1982). The clinopyroxene syenites are poorly exposed owing to their high phlogopite content, and occur as rubbly subcrop with thin residual soil cover. These syenites consist of 40–50% phlogopite, 30–40% augite, 5–10% K-feldspar, 5–10% apatite, and traces of zircon, magnetite, and ilmenite. (Rock names present a particular problem at Mordor in view of the large number of atypical mineral assemblages and historical use of obscure nomenclature.

Barnes et al. have attempted to use standard International Union of Geological Sciences (IUGS) terminology as far as possible, supplemented by cumulus terminology where necessary). The larger outcrops of olivine and pyroxene-rich cumulate ultramafic rocks in the vicinity of Mt. Doom have a roughly concentric distribution. These bodies were interpreted as a younger intrusive phase within a composite multi-phase intrusion by Langworthy and Black (1978).

Field evidence for modal layering and igneous lamination suggests that the ultramafic rocks are likely to be contiguous undercover, forming a ring-like distribution of inward-dipping stratiform cyclic units, centered on about GDA 447300 mE and 740720 mN (Fig.4.2). The units contain a subtle but pervasive inward dipping conformable igneous lamination, which leads us to the conclusion that they represent distinct conformable layers within the predominantly more mafic intrusion.

Layering dips steeply at the margins and shallow toward the center, suggesting that the ultramafic–mafic phase is a funnel-shaped intrusion. A marginal zone of the ultramafic-mafic phase in the Braveheart region (Fig. 4.2) comprises a very distinctive “porphyritic shonkinite” unit, which consists of large idiomorphic phenocrysts of K-feldspar within a matrix identical to the mafic shonkinite. The phenocrysts are identical to those within the main syenite mass, and this unit is interpreted as the result of incorporation of phenocrysts during injection of the mafic phase of the intrusion into still partially molten syenite.

The complex is criss-crossed by a swarm of intersecting dykes, similar in composition to the mafic syenites, and interpreted by previous authors as the result of late migration of expelled interstitial magma during later stages of solidification of the cumulate pile.

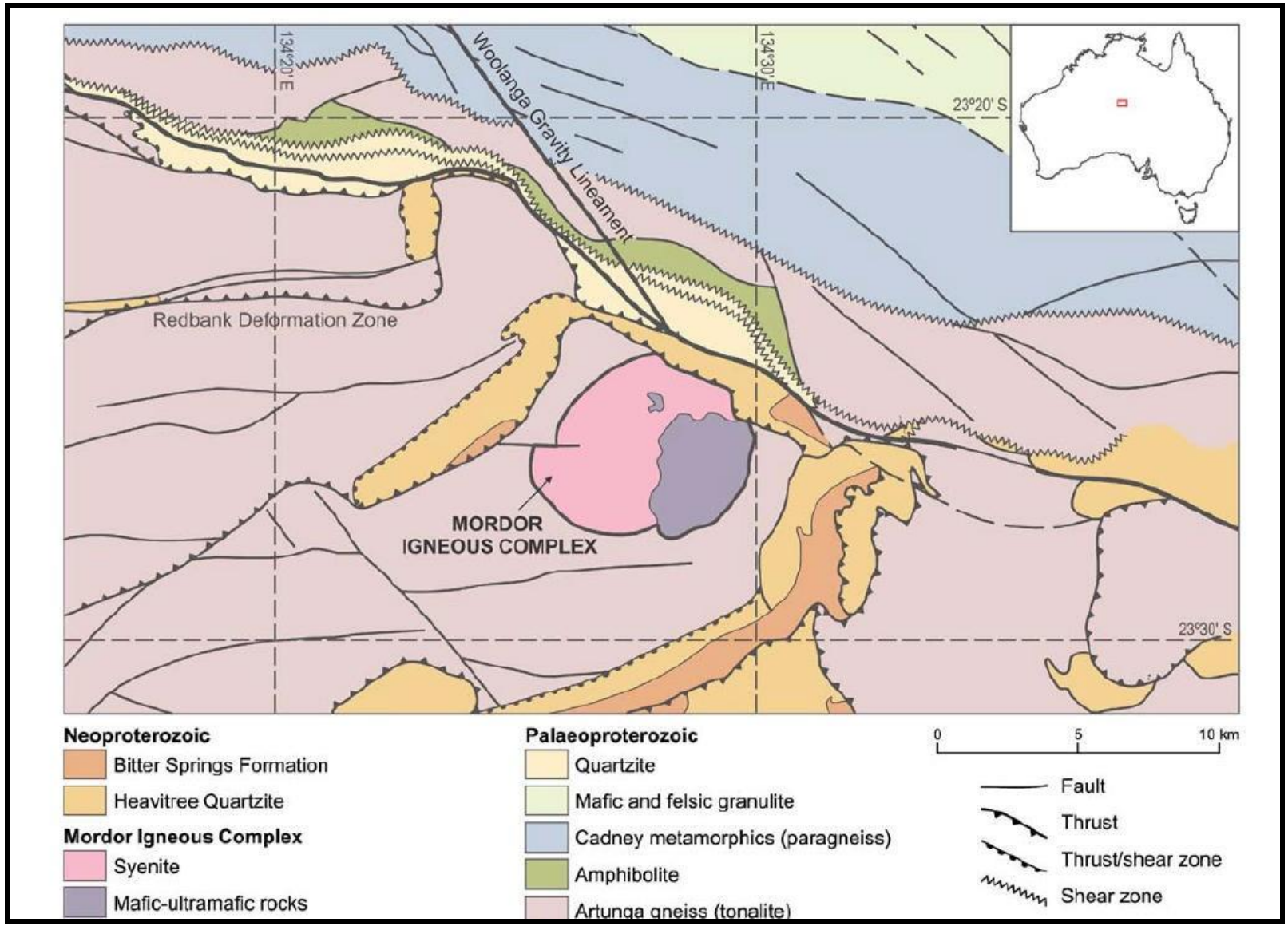

Figure 4.1 Regional geology of the central arunta block showing location of the Mordor Alkaline Igneous Complex (Barnes et al. 2008)

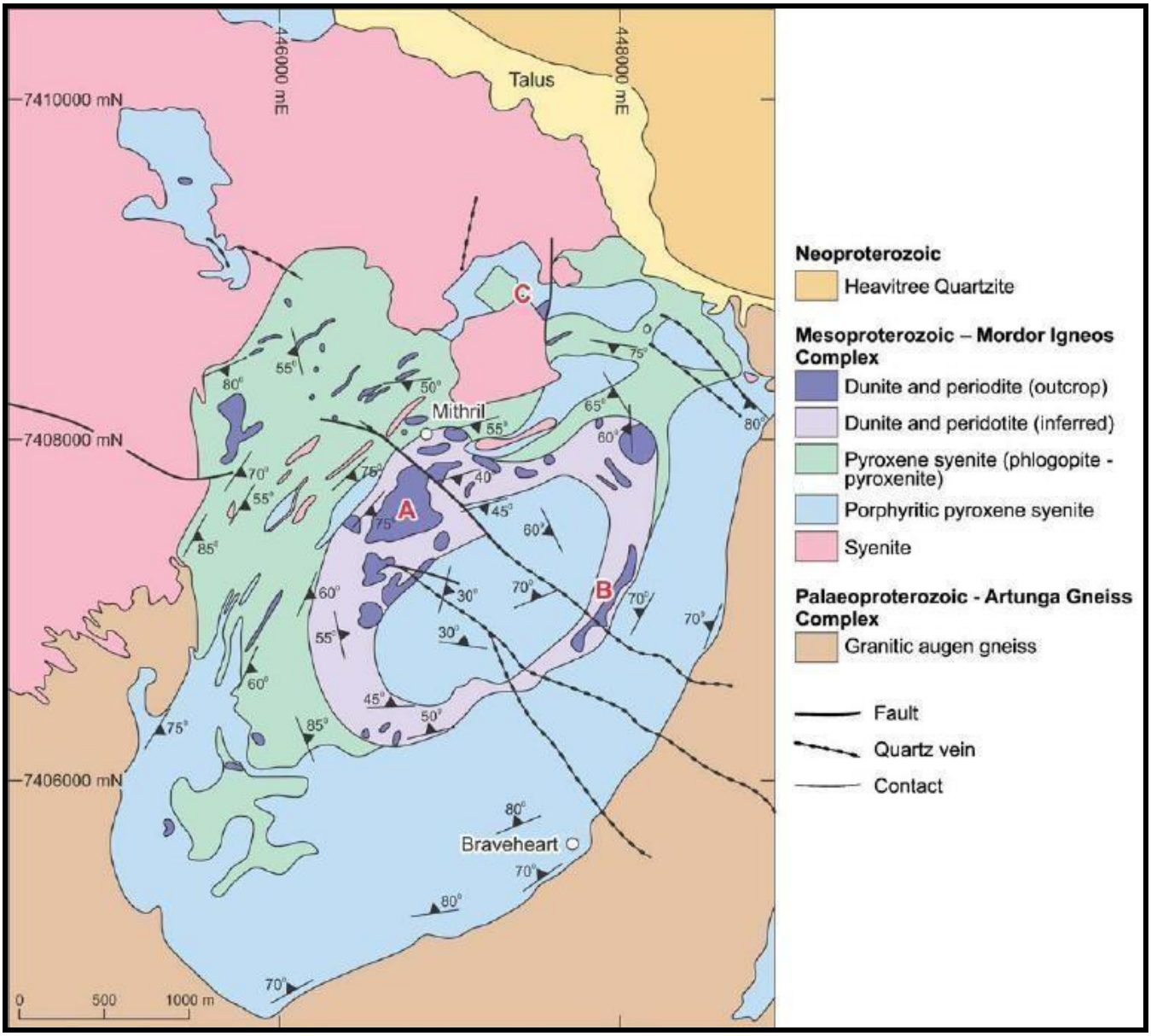

Figure 4.2 Mordor Geology (after Barraclough, 1981)

5.0 Previous Exploration

An important contribution to Mordor mineralisation and geology was made by CRA in 1997. CRA produced a detailed report outlining their diamond drilling, ground and airborne geophysical surveys and surface sampling. Several prospects were generated and tested (Braveheart). Some potentially prospective areas, defined by several IP anomalies, appeared to have been neglected.

Tanami Gold was the first company to obtain significant mineralisation in a drill hole with a best intercept of 2m @ 1.1 g/t Pt+Pd+Au at the Mithril prospect Tanami Gold recorded several anomalous hits, and suggested that Mordor was a genuine stratiform reef style PGE mineralisation (www.tanami.com.au, 2002) The drill holes tested surface geochemistry soil anomalies, and have not been followed up with further depth or strike testing. These areas remain a priority for follow up work.

During Core Exploration's first year of tenure (2012/2013), exploration activities were confined to office work only, no field work was conducted. As Mordor is a unique example of a central Australian lamprophyric alkaline intrusive, it has been widely studied by both mining companies and earth scientists. It was decided therefore to initially concentrate on learning about this prospect, reviewing what exploration has taken place, and most importantly generating exploration ideas. Core Exploration completed work on existing magnetic and Landsat imagery to see if any shear related mineralisation or linements had been overlooked by previous explorers. Radiometrics, in particular, potassium (K) were examined to highlight the alkaline area of the pyroxene syenites "mafic shonkinites", as this may map out the non-prospective ground that may be under cover. The favoured PGE model considers the ultramafics (high MgO) as being the most likely host rock for mineralisation. Areas of elevated Mg may likewise map out obscured ultramafics using Aster imaging. One interpreted area of interest is the occurrence of thin pegmatite dykes within the complex having returned anomalous amounts of Hf (NTGS data). Little is known about this occurrence, and is proposed to be followed up in due course.

As part of the DBL vending deal, a due diligence was undertaken on their part. This included their own in-house assessment of Mordors potential. Besides the Mordor ultramafics being a PGE target, the strategic location near the Woolanga gravity linement may indicate potential for other forms of mineralisation (e.g. IOCG) to occur elsewhere within EL 28940.

During the Year Two reporting period, 7th March 2013 to 6th March 2014, Core Exploration completed detailed literature research, GIS database compilation and geophysical interpretations.

6.0 Bridging Period Work Summary

During the bridging period Core Exploration undertook a reconnaissance field trip to the Mordor Igneous Complex as well as developed an exploration proposal for a mapping and soil sampling program over the mapped Bitter Springs Formation sediments within EL28940.

In September 2014 Core undertook a brief reconnaissance fieldtrip to the Mordor Igneous Complex. The field trip was designed to test access and visit existing prospects within the tenement. Core staff visited the Braveheart Prospect where a malachite bearing iron + manganese gossan outcrops and there is evidence of the previous explorers drill collars which drilled underneath the gossan. This prospect is described a minor in scale.

Core has assessed the prospectivity of EL28940 for sedimentary hosted Pb-Zn-Ag within the

Amadeus Basin sediments which are extensively mapped within EL28940 in conjunction with the neighbouring EL27709 (Appendix 1). Core is encouraged by the tenements potential to host Pb-Zn-Ag mineralization with similar characteristics to Core Exploration's Inkheart Prospect discovery on EL28136. The Inkheart Prospect is a Pb-Zn-Ag within quartz ± carbonate veining system within Bitter Springs Formation sediments. Core believes that the veining is associated with either a specific permeable lithological unit or with discrete structural zones. EL28940 contains extensive outcrop of the Heavitree Quartzite and the Bitter Springs Formation of the Amadeus Basin. These basal basin sediments have been intensely deformed by the Alice Springs orogeny and Core believes the structural contacts between the BSF and the underlying Aileron Province basement (and Mordor Complex) are a controlling factor in the Inkheart Prospects emplacement. These contacts and other prospective zones within EL28940 (and EL27709) are detailed in Appendix 1.

Table 6.1: Expenditure figures for the bridging period, EL28940.

EL28940 07/03/2014 – 31/01/2015 Bridging	**Eligible**
Geology - costs	$14,715.31
Miscellaneous items	$389.00
Depreciation of equipment	$101.00
Vehicle cost internal charge	$85.00
Total	**$15,290.31**

7.0 Rehabilitation

There were no earth disturbing activities within the tenement during the reporting period. No rehabilitation was required.

8.0 Conclusions and Recommendations

Core intends to actively explore EL28940 during the first year of the grouped reporting (Albarta South GR361) focusing on the Amadeus Basin sediments particularly the Bitter Springs Formation assessing its potential to host Pb-Zn-Ag mineralisation. Core will use the work proposal detailed in Appendix 1 as a basis to reconnaissance map and soil sample the areas of mapped Bitter Springs Formation, exploring for evidence of similar characteristics to Core's Inkheart Prospect discovered in 2014 on EL28136.

Depending on the results of the reconnaissance mapping and soil sampling Core may follow up anomalous results with prospect scale Induced Polarisation surveys attempting to map the underlying geology to hopefully identify zones of disseminated sulphides and/or bounding structures.

9.0 REFERENCES

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