

ANNUAL TECHNICAL REPORT EL 29580 (“JERVOIS”)

8th March 2013 – 7th March 2014

Author: N. McGregor
Date: 4th May 2014
Tenement Holders: DBL Blues Pty Ltd (100%)
Tenement: EL 29580
Reporting Period: 8th March 2013 – 7th March 2014
Distribution: Core Exploration Ltd (1)
Geoscience.Info, Dept Resources - Minerals & Energy (1)

Map Sheet: Huckitta 1:250,000 sheet (SF5311)
Jervois Range 1:100,000 sheet (6152)

Target Commodity: Copper, Gold, IOCG
Keywords: Exploration review, Iron oxide copper-gold, IOCG, Jervois, Aileron, Irindina

CONTENTS

1. Summary
2. Introduction
3. Tenure
4. Previous Exploration
5. Geology & Mineralisation
6. Year One Work Summary & Discussion
7. Rehabilitation
8. Year One (2013/2014) Expenditure
9. Year Two (2014/2015) Proposed Expenditure
10. References

LIST OF TABLES

<i>Table No</i>	<i>Title</i>
3.1	Tenure Details for EL 29580
7.1	Activity Details for the Year 1 Reporting Period: 8 th March 2013 to 7 th March 2014
9.1	Proposed Activities and Expenditure for the Year 2 Reporting Period: 8 th March 2014 to 7 th March 2015

LIST OF FIGURES

<i>Figure No</i>	<i>Title</i>
2.1	Location Map of EL 29580
5.1	Extract from Huckitta 1:250 000 Geology
6.1	NTGS interpretation- granite age and Cu-Au prospects
6.2	Eastern Aileron Province – Cu-Au occurrences and exposed geology

Copyright Statement

The owned information acquired by Core Exploration Ltd includes all information under the previous work by Core Exploration Ltd and work during reporting year sections. The rest of the information has been sourced from open reports and data through the Department of Resources - Minerals and Energy. The Minister has authority to publish the copyrighted information accordingly.

1.0 Summary

EL 29580 “Jervois” comprising twenty-eight (28) graticular blocks is located 250km east north-east of Alice Springs in Central Australia.

The licence area is dominated by parts of the Aileron and Irindina Provinces and the Georgina Basin. The basement in the area consists of sedimentary and igneous rocks of the Aileron Province of Palaeoproterozoic age (1865-1500Ma). The rocks have been metamorphosed to upper greenschist to lower amphibolites facies during the Strangways Orogeny (1740-1690 Ma).

During the first year of tenure, Core Exploration undertook a thorough review and compilation of historical exploration data and an assessment of applicable mineralisation models.

A second year program of targeted rock chip sampling and mapping to identify Jervois style IOCG mineralisation, prospect-scale EM and/or IP geophysical surveys to identify subsurface IOCG mineralisation, followed by detail inversions and modelling to generate drill targets is planned. RC drilling of defined targets will follow.

2.0 Introduction

This report covers first year exploration activities completed within EL 29580 “Jervois” between, 8th March 2013 and 7th March 2014. EL 29580 is located within the Jervois Range 1:100,000 map sheet, and is located within the HUCKITTA (SF53-11) 1:250,000 map sheet.

Access from Alice Springs is north via the Stuart Highway then east along the Plenty Highway to the vicinity of the Jervois Mine.

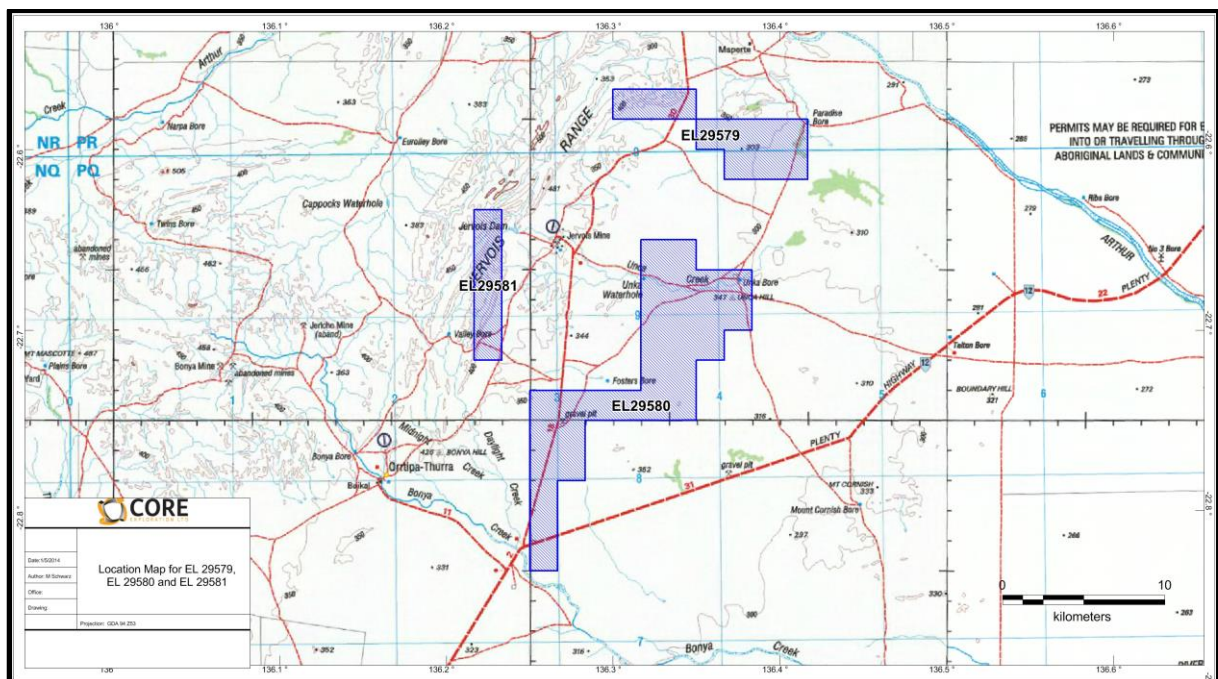


Figure 2.1 Location Map of EL 29580

3.0 Tenure

EL 29580 was granted to DBL Blues Pty Ltd, a wholly owned subsidiary of Core Exploration Ltd, on the 8th March 2013. EL 29580 overlies pastoral lease Jervois (PPL 962). Tenure details are tabulated below.

Table 3.1 Tenure Details for Year One

Tenement	Owner	Date Granted	Tenure	Size	Rent Yr 1	Expenditure Commitment
EL 29580	DBL Blues (100%)	08/03/2013	6 Years	28 blocks 88.20 km ²	\$1,158	\$23,000

4.0 Previous Exploration

The Jervois Mineral Field was discovered by prospectors in 1929, minor exploitation of the outcropping secondary copper mineralisation was undertaken. Exploration by New Consolidated Goldfields in the early 1960's led to the discovery of significant copper and silver-lead-zinc mineralisation.

Exploration for tungsten (scheelite) and base metals was carried out by Petrocarb Exploration NL and others under AP3161, EL128, EL584 and EL740 during the early 1970's. Minor scheelite prospects were found in the Bonya Schist near Unka Bore. Drilling at the Jervois Mine area outlined an ore resource of about 4Mt at 2.8% Cu and 60g/t Ag.

Otter Exploration NL and CEGB explored for scheelite and uranium through the area under EL1583, EL1584 and EL1585 from 1987 to 1989 (Kojan, C.J. and Fortowski, D., 1980). Work carried out included airborne radiometric surveys, ground scintillometer surveys, mapping and rock chip sampling. Minor occurrences of scheelite were discovered in the vicinity of the Jervois mine. No significant uranium prospects were discovered.

EL3317 covered the central part of the area and was explored by Petrocarb Exploration NL in joint venture with Geopeko from 1981 to 1983 (Turley, 1983). The exploration targeted Molyhill-style skarn hosted tungsten-molybdenum mineralisation. Airborne radiometric and magnetic surveys were flown and 40 magnetic anomalies were checked by ground reconnaissance. Eleven magnetic anomalies were chosen for testing by shallow RC percussion drilling (maximum depth 61m). No scheelite was found in the drilling samples which were of biotite gneiss and minor granite.

In 1981 Plenty River Mining Company acquired the leases over the Jervois mine, three exploration licences (EL3202, 3203 and 3204) were also taken up to the south and east of the leasehold. An airborne magnetic survey was flown over the area. Anaconda Australia entered into a joint venture with Plenty River Company and undertook an airborne INPUT EM survey in 1983 over the three ELs. Ground follow-up on 26 EM anomalies was undertaken with disappointing results (Ypma, 1987). Surface and trench sampling was carried out over three copper prospects – Wards, Van Gils and Anaconda. These prospects are located outside of the Core project area.

Hunter Resources Ltd took up EL5171 to explore for platinum group elements (PGE) in the Attutra Metagabbro to the east of the Jervois Mine (Hunter Resources, 1989). Reconnaissance mapping, rock chip and stream sediment sampling, and ground magnetic were carried out. Most of the rock chip samples were taken from magnetite-rich rocks which were known to be vanadium-rich. Best results were 28ppb Pt and 215ppb Pd, which Hunter concluded were too low to warrant further work.

Normandy Poseidon explored the central and eastern part of the area on exploration licences 6993, 7287 and 7505 between 1990 and 1996. Normandy targeted the area as being prospective for Broken Hill style base metal mineralisation. Initial exploration in 1990/1991 consisted of orientation soil and rock chip sampling, bedrock auger drilling on widely spaced traverses and an airborne EM (Questem) survey (Cozens and Booth, 1992). In subsequent years lag sampling was carried out over two areas; east of the Jervois mine site (Hamburger Hill prospect) and in the south near the Marshall River. Soil sampling was undertaken over a number of anomalies generated from the Questem survey. Vacuum and RAB drilling was done over a number of anomalies including Hamburger Hill. A number of regional RAB traverses and grids were undertaken to determine the bedrock beneath transported cover with mixed success.

A drilling programme consisting of five diamond holes and five RC percussion holes was undertaken to investigate the geochemical anomaly at Hamburger Hill. Minor sulphide mineralisation (chalcopyrite, sphalerite, galena and bornite) was intersected in veins in garnet psammopelites. One diamond drillhole was completed to test an airborne EM anomaly - AEM3N. The hole intersected strongly sheared gneiss and did not explain the EM anomaly. Fixed loop ground EM surveys were used to check some of the airborne EM anomalies. A regional gravity survey was undertaken in the final year (Price, 1996).

CRA Exploration acquired EL8116 covering the Georgina Basin sediments in the northern part of the area. The tenement was explored for unconformity related Cu-U-phosphate mineralisation during 1993-1994. Work was directed at the Middle Cambrian phosphatic Arthur Creek Formation. Reconnaissance percussion drilling failed to locate any mineralisation at the targeted stratigraphic level.

Arafura Resources explored the area under EL10214 and EL10215 from 2001 to 2008. Portions of these ELs are still held by Arafura and some of the reports have not been released to open file. Little work was done on EL10214, which covered the southern part of the area (Hussey, 2008). Two airborne magnetic and radiometric surveys were flown over portions of EL10215 in 2005. One covered the Lucy Creek uranium anomaly the other covered the Unca magnetite-vanadium prospect, which is underlain by the Attutra Metagabbro. Drilling programmes were carried out on both of these prospects during 2006 (Hussey, 2007). The results from the Unca prospect were encouraging with reasonable Davis Tube recoveries of magnetite and vanadium. The results from the work completed at Lucy Creek were disappointing and no further work was done at this prospect. Arafura carried out a second-phase programme over portions of the Unca prospect in 2008, due to lack of funds the company did not assay any of the samples until 2010 (ASX release 29-7-2010). Further assay results were released in 2012 and highlighted anomalous gold and PGE values (ASX release 26-4-2012). This prospect is still held by Arafura Resources.

The southern portion of the area was held by Ausquest Limited under EL25508 from 2007 to 2009. The tenement covered two gravity anomalies identified by the NTGS East Arunta gravity survey which was completed in 2006. Ausquest interpreted these anomalies as being IOCG targets. Detailed gravity surveys were undertaken over the two targets. Soil and rock chip sampling were carried out over the target zones with disappointing results, no drilling was undertaken (Lee et al, 2009).

Minotaur Exploration held the ground now covered by the southern ELAs as EL27733 and EL28789. Ground EM traverses were undertaken over thirteen target areas. No late-time conductive responses were identified which could be due to massive sulphide mineralisation.

Minotaur also completed detailed ground magnetic traverses over the Coolibah Bore anomaly which is located in the southeast corner of ELA29598. There is also a regional gravity anomaly coincident with the magnetic anomaly. Further work was recommended but not completed. Minotaur concluded that the area was not worth retaining due to the lack of deep conductive responses in the EM surveys (Flint, 2012A and 2012B).

5.0 Geology and Mineralisation

The Project is underlain by parts of the Aileron and Irindina Provinces and the Georgina Basin. The basement in the area consists of sedimentary and igneous rocks of the Aileron Province of Palaeoproterozoic age (1865-1500Ma). The rocks have been metamorphosed to upper greenschist to lower amphibolites facies during the Strangways Orogeny (1740-1690 Ma).

The major Palaeoproterozoic unit outcropping within the tenements is the Bonya Schist. This unit consists of pelitic, psammopelitic and calcareous metasedimentary rocks, with minor psammitic and quartzite facies. Felsic and mafic igneous rocks of intrusive and extrusive origin also occur within the unit. The entire sequence has been strongly deformed in the Strangways Orogeny. Magnetite-bearing andalusite and muscovite-biotite schists with minor calc-silicate rocks of the Bonya Schist host the base metal mineralisation of the Jervois District (see below). In the far western part of the area the Bonya Schist is underlain by the Mascotte Gneiss Complex consisting of quartzo-feldspathic gneiss, biotite schist and gneiss, amphibolites and hornblende gneiss (Figure 5.1).

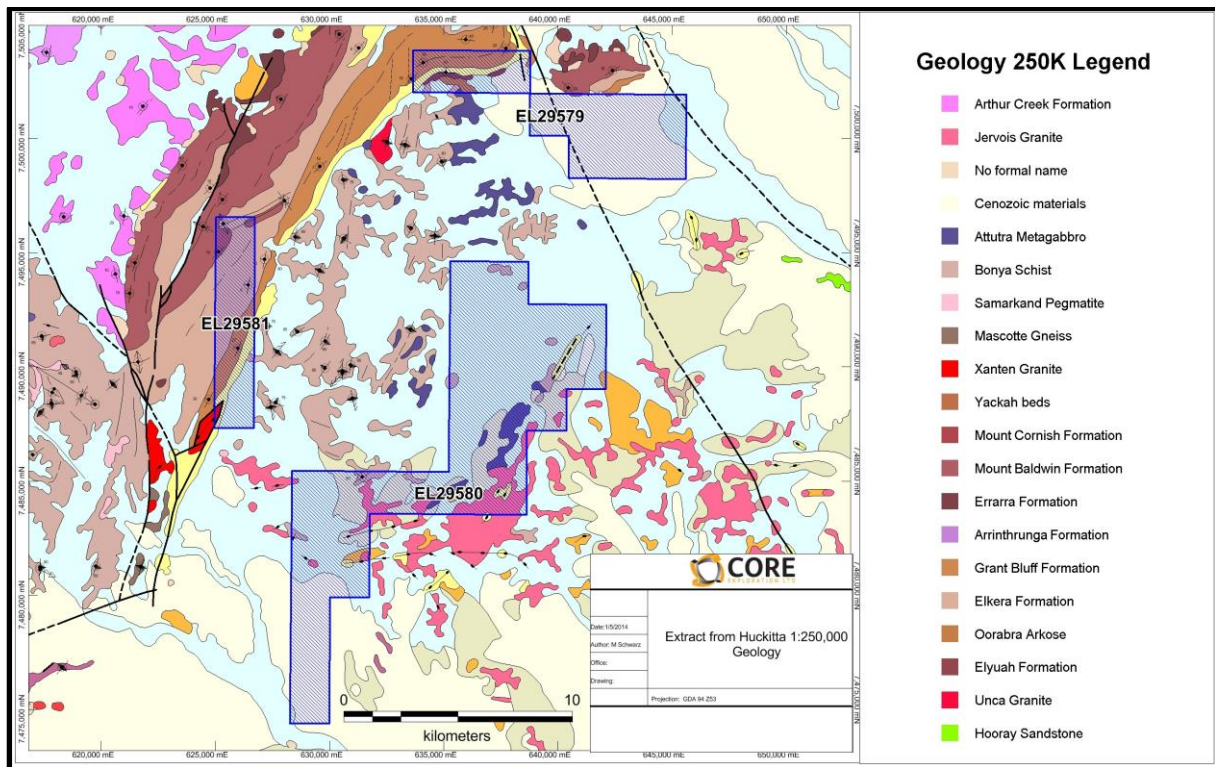


Figure 5.1 Extract from Huckitta 1:250,000 Geology

The Attutra Metagabbro intrudes the Bonya Schist in the area to the east of the Jervois township. This unit includes metamorphosed gabbro, dolerite, norite and magnetite rock and has been dated at 1786Ma.

Isolated outcrops of Palaeoproterozoic rocks occur in the area south of the Plenty Highway and may be equivalents of the Bonya Schist or units of the Strangways Metamorphics. Large bodies of granite to granodiorite outcrop poorly through the area and include the Jervois, Unca and Xanten Granites. These granites were intruded at about 1770Ma (Yambah Event) and have been metamorphosed and deformed during the Strangways Event.

In the south west corner of the area rocks of the Harts Range Group of the Irindina Province crop out. These sedimentary rocks of Neoproterozoic to Cambrian were metamorphosed to amphibolite/granulite facies during the 480-460Ma Larapinta Event. There is a tectonic contact along the Mount Sainthill Fault zone with the Aileron Province to the north.

The Neoproterozoic Mopunga Group of the Georgina Basin unconformably overlies the older rocks throughout the area. These unmetamorphosed marine and terrestrial sedimentary rocks are in turn overlain by Cambrian age sediments to the north. Diamicite of the Mt Cornish Formation lies unconformably on the Proterozoic rocks in the south eastern part of the area..

The southern portions of the project area are underlain by recent alluvium and aeolian sand which obscure the bedrock lithologies.

Base metal and tungsten mineralisation has been identified within the Bonya Schist in the Jervois area. Three styles of mineralisation are recognised:

- Stratabound base metal and silver mineralisation associated with magnetite-garnet-chlorite rocks of the Bonya Schist at the Green Parrot, Marshall and Reward Mines. Kentor Gold have recently announced a Mineral Resource of 8Mt at 1.3% Cu and 29g/t Ag for the Marshall/Reward deposit (ASX release 7/11/2012).
- Stratiform copper mineralisation in garnet-chlorite-magnetite quartzite horizons in the Bonya Schist at Marshall and Bellbird. Current resources at Bellbird have been estimated by Kentor Gold as 4Mt at 1.1% Cu (ASX release 7/11/2012).
- Tungsten (Scheelite)-copper mineralisation in calc-silicate rocks within the Bonya Schist (Bonya Mineral Field).

Mining was carried out by Plenty River Mining Company during 1982 and 1983 on the Green Parrot deposit. Production was in the order of 2000 tonnes of concentrate grading 50% Pb, 5% Zn and 20oz/t Ag. Mining was suspended in late 1983 due to low metal prices. The Jervois mines are currently owned by Kentor Gold. The current mineral resource for the Jervois project is estimated as 13.5 Mt at 1.3% Cu and 26g/t Ag.

The Attutra Metagabbro contains some zones of magnetite-hosted vanadium mineralisation with associated anomalous platinum, palladium and gold values. Average assay results from drilling conducted by Arafura Resources in 2008 were 22% Fe, 0.5% V and 4.8% TiO₂. The Davis Tube concentrate recoveries were about 20% with the following concentrate grades - 65% Fe and 1.5% V.

6.0 Year One Work Summary & Discussion

Exploration Review

Recent work by the NTGS (Whelan et al, 2013) and Geoscience Australia (Schofield, 2012) has shown that the southern part of the Aileron Province is prospective for iron-oxide copper gold (IOCG) mineralisation. Mapping and other studies conducted by the NTGS has led to the identification of regional-scale alteration systems which are similar to those that are related to intrusion-associated IOCG mineralisation.

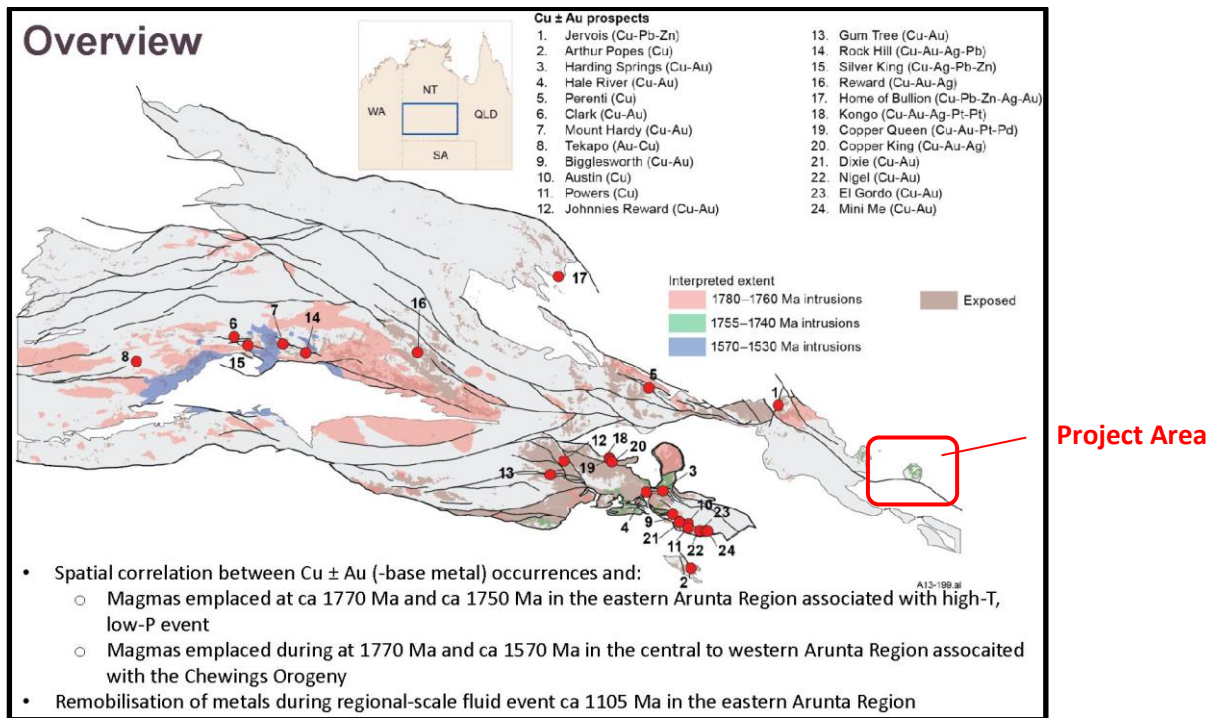


Figure 6.1: NTGS interpretation- granite age and Cu-Au prospects

There appears to be a spatial correlation between the Cu-Au occurrences and granites intruded about 1750-1770Ma (Figure 6.1). Major crustal-scale structures have also been mapped in the Arunta Region, and these generally west to north-west trending zones may have acted as conduits for fluid flow and metal deposition.

In the Jervois Project area the Jervois Granite to the east and the Jinka Granite to the west lie in close proximity to the base metal prospects in the Bonya Schist. Major structures passing through the area include the Mount Sainthill Fault Zone, the Charlotte Fault Zone and the Mt Playford Fault Zone. The southern part of the project lies on the flood plains of the Plenty and Marshall Rivers, and the bedrock is covered by alluvium and aeolian sand. It is likely that parts of this area are underlain by granites of similar age to those outcropping to the north.

Numerous minor Cu-scheelite prospects occur in the Bonya Hills area – Bonya Cu-W field (Figure 6.2). This area has recently been the subject of a joint venture between Arafura Resources and Rox Resources (ASX release 11/12/2012). Rox reported numerous old workings of oxide copper with grab sample grades of up to 33% Cu and 55g/t Ag, and with elevated Au values.

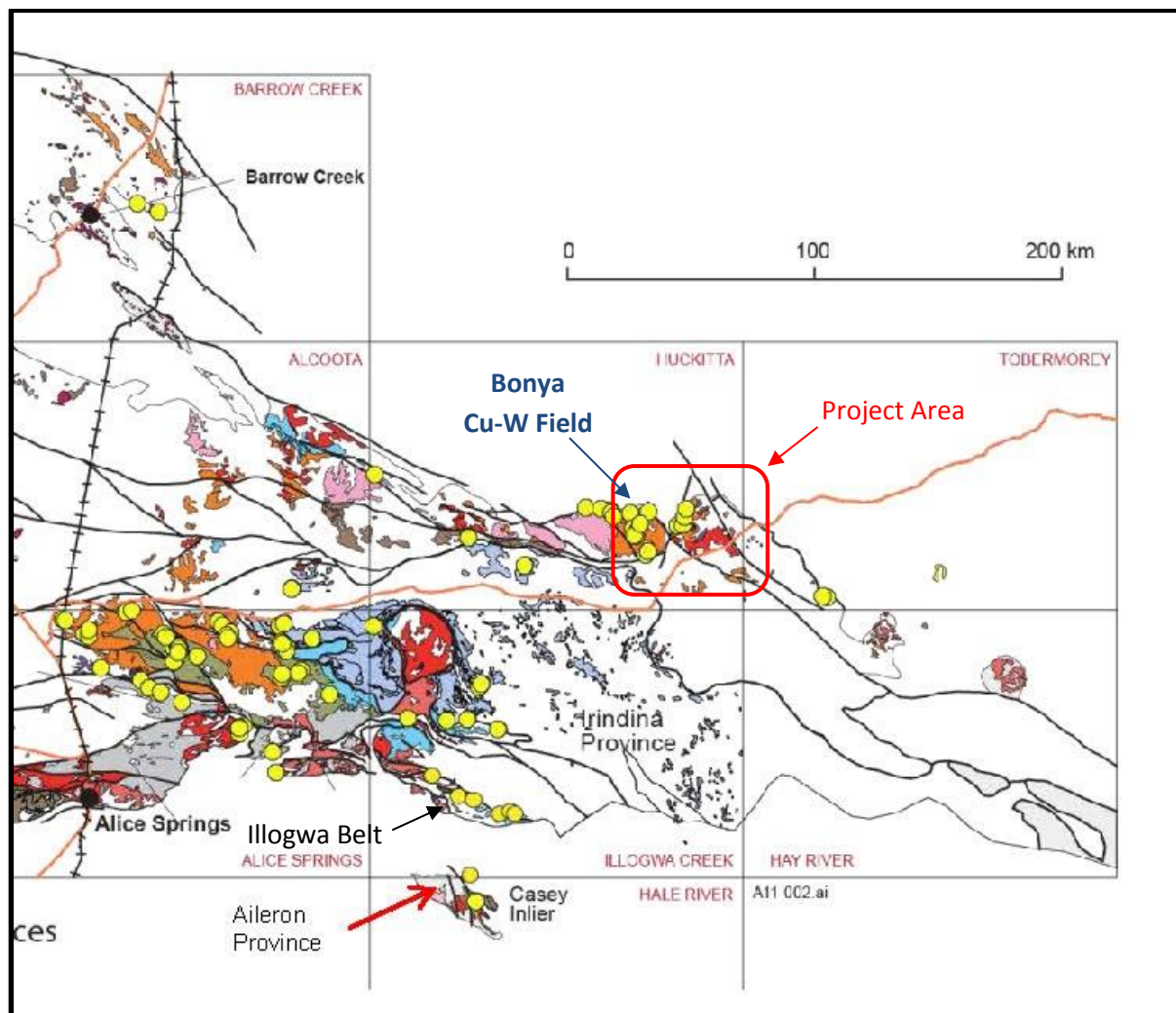


Figure 6.2: Eastern Aileron Province – Cu-Au occurrences and exposed geology

The project area has a similar level of prospectivity for IOCG deposits as the southern part of the Aileron Province (Figure 6.2). Exploration by Mithril Resources in the Illogwa Belt has led to the discovery of altered brecciated granite with copper mineralisation (Lyons et al, 2013). Fluorite-silica-hematite-magnetite and potassic alteration have been identified.

Previous exploration within the Jervois project area has been mostly directed either towards scheelite mineralisation in the early days or later towards base metal and gold mineralisation in the Bonya Schist. Little attention has been directed towards the granites which occur throughout the area.

The prospectivity of the individual Core Exploration tenements is dependent on the underlying geology. Possible target ore types include IOCG variants, mafic-hosted vanadium-magnetite and PGE mineralisation, skarn mineralisation (Molyhil-type) and rare-earth mineralisation.

EL29580 is located to the south east of the Jervois township. The bedrock geology is partially obscured by alluvium but includes the Jervois Granite, Attutra Metagabbro and Bonya Schist. The mafic rocks are prospective for vanadium, magnetite and PGE. The granite and Bonya Schist should be explored for IOCG mineralisation.

7.0 Rehabilitation

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

8.0 Year One (2013/2014) Expenditure

Year One (8th March 2013 to 7th March 2014) expenditure details are summarised in the table below. A formal statement was lodged with the Department of Mines and Energy on the 5th April 2014. Core Exploration Ltd submitted a Variation of Covenant application for Year One expenditure on the 2nd April 2014 for EL 29580. DBL Blues is anxious to ensure that all Licences remain in good standing within their Northern Territory tenure package.

Table 7.1 Activity Details for the Year 1 Reporting Period: 8th March 2013 to 7th March 2014

9.0 Year Two Proposed Expenditure

As taken from the 2014 Annual Expenditure Report for EL 29580, during Year Two of the license tenure Core intends to complete targeted rock chip sampling and mapping to identify Jervois style IOCG mineralisation, complete prospect-scale EM and/or IP geophysical surveys to identify subsurface IOCG mineralisation, followed by detail inversions and modelling to generate drill targets. RC Drilling of defined targets will follow.

Table 9.1 Proposed Activities and Expenditure for the Year 2 Reporting Period:
8th March 2014 to 7th March 2015

10.0 References

- COZENS, G.J. AND BOOTH, S.A., 1992. Poseidon Exploration Ltd. *Annual Report – Exploration Licences 6993 and 6994, 9/11/90 to 8/11/91*. NTGS Open file report CR1992-0008.
- COZENS, G.J., 1993. Poseidon Exploration Ltd. *Annual Report – Exploration Licences 6993, 6994 7089, 7287 and 7505 – Eastern Arunta Project, 16/1/92 to 15/1/93*. NTGS Open file report CR1993-0042.
- COZENS, G.J., 1994. Poseidon Exploration Ltd. *Annual Report – Exploration Licences 6993, 6994, 7287 and 7505 – Eastern Arunta Project, 9/11/92 to 8/11/93*. NTGS Open file report CR1994-0111.
- COZENS, G.J., 1995. Poseidon Exploration Ltd. *Annual Report – Exploration Licences 6993, 6994, 7287 and 7505 – Eastern Arunta Project, 9/11/93 to 8/11/94*. NTGS Open file report CR1995-0108.
- FLINT, R.B. AND THOMPSON, A.D., 2012A. Minotaur Exploration Ltd. *Final Report – Exploration Licence 27733 - for the year ending 13/8/2012*. NTGS Open file report CR2012-0568.
- FLINT, R.B. AND THOMPSON, A.D., 2012B. Minotaur Exploration Ltd. *Final Report – Exploration Licence 28789 - for the year ending 13/8/2012*. NTGS Open file report CR2012-0597.
- FREEMAN, D. AND SEN, A., 2011. Minotaur Exploration Ltd. *Annual Report – Exploration Licence 27733 - for the year ending 8/7/2011*. NTGS Open file report CR2011-0438.
- FREEMAN, M.J., 1986. *Huckitta 1:250,000 Geological map series and Explanatory notes, SF53-11*. Northern Territory Geological Survey.
- HUSSEY, K.J., 2005. Arafura Resources NL. *Annual Report – Exploration Licence 10214 and 10215 – Jervois Project – for year ending 5/12/2005*. NTGS Open file report CR2005-0653.
- HUSSEY, K.J., 2006. Arafura Resources NL. *Annual Report – Exploration Licence 10214 and 10215 – Jervois Project – for year ending 5/12/2006*. NTGS Open file report CR2006-0648.
- HUSSEY, K.J., 2007. Arafura Resources NL. *Annual Report – Exploration Licence 10214 and 10215 – Jervois Project – for year ending 5/12/2007*. NTGS Open file report CR2007-0777.
- HUSSEY, K.J., 2008. Arafura Resources NL. *Final Report – Exploration Licence 10214 – Jervois Project*. NTGS Open file report CR2008-0343.
- HUNTER RESOURCES LTD, 1989. *Final Report – Exploration Licence 5171*. NTGS Open file report CR1989-0630.
- KOJAN, C.J. AND FORTOWSKI, D., 1980. Otter Exploration NL and CEGB. *1979 Annual Report – Exploration Licence 1585*. NTGS Open file report CR1980-0252.
- LEE, S., SHERINGTON, M. AND THORNETT, J., 2009. Ausquest Ltd. *Final Report – Exploration Licence 25508 - for the period 13/7/2007 to 25/3/2009*. NTGS Open file report CR1992-0008.
- LYONS, P., MIZOW, D., LOCKHEED, A., GOLDMAN, M., MCKINNON-MATTHEWS, J. AND HUTTON, D., 2013. *Discovery of the Illogwa IOCG belt: Mithril opens new exploration space in the east Arunta Region*. Annual Geoscience Exploration Seminar abstracts 2013, NTGS Record 2013-001.

PRICE, L.A., 1996. Normandy Exploration Ltd. *Final Report – Exploration Licences 6993, 7287 and 7505 – Eastern Arunta Project, 9/11/90 to 2/1/96*. NTGS Open file report CR1996-0283.

SCHOFIELD, A., (ED.) 2012. *An assessment of the uranium and geothermal prospectivity of the southern Northern Territory*. Geoscience Australia - Record 2012/51.

TURLEY, S.D., 1983. Geopeko. *Final Report – Exploration Licences 2591, 2890, 3012, 3317 and 4175*. NTGS Open file report CR1983-0173.

WHELAN, J.A., CLOSE, D.F., SCRIMGEOUR, I.R., BEYER, E.E., KOSITCIN, N. AND ARMSTRONG, R.A, 2013. *The Cu-Au potential of the Arunta Region: Links between magmatism, tectonism regional-scale alteration and mineralisation*. Annual Geoscience Exploration Seminar abstracts 2013, NTGS Record 2013-001.

YPMA, P.J., 1987. Plenty River Mining Company NL. *Final Report – Exploration Licences 3202, 3203 and 3204*. NTGS Open file report CR1987-0146.