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EL 5629

ALGEBUCKINA

**ANNUAL REPORT PLUS FINAL REPORT TO LICENCE
EXPIRY/FULL SURRENDER, FOR THE PERIOD
9/6/2015 TO 8/6/2017**

Submitted by
Panda Mining Pty Ltd
2017

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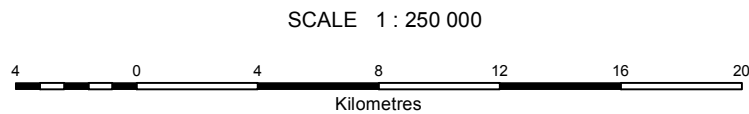
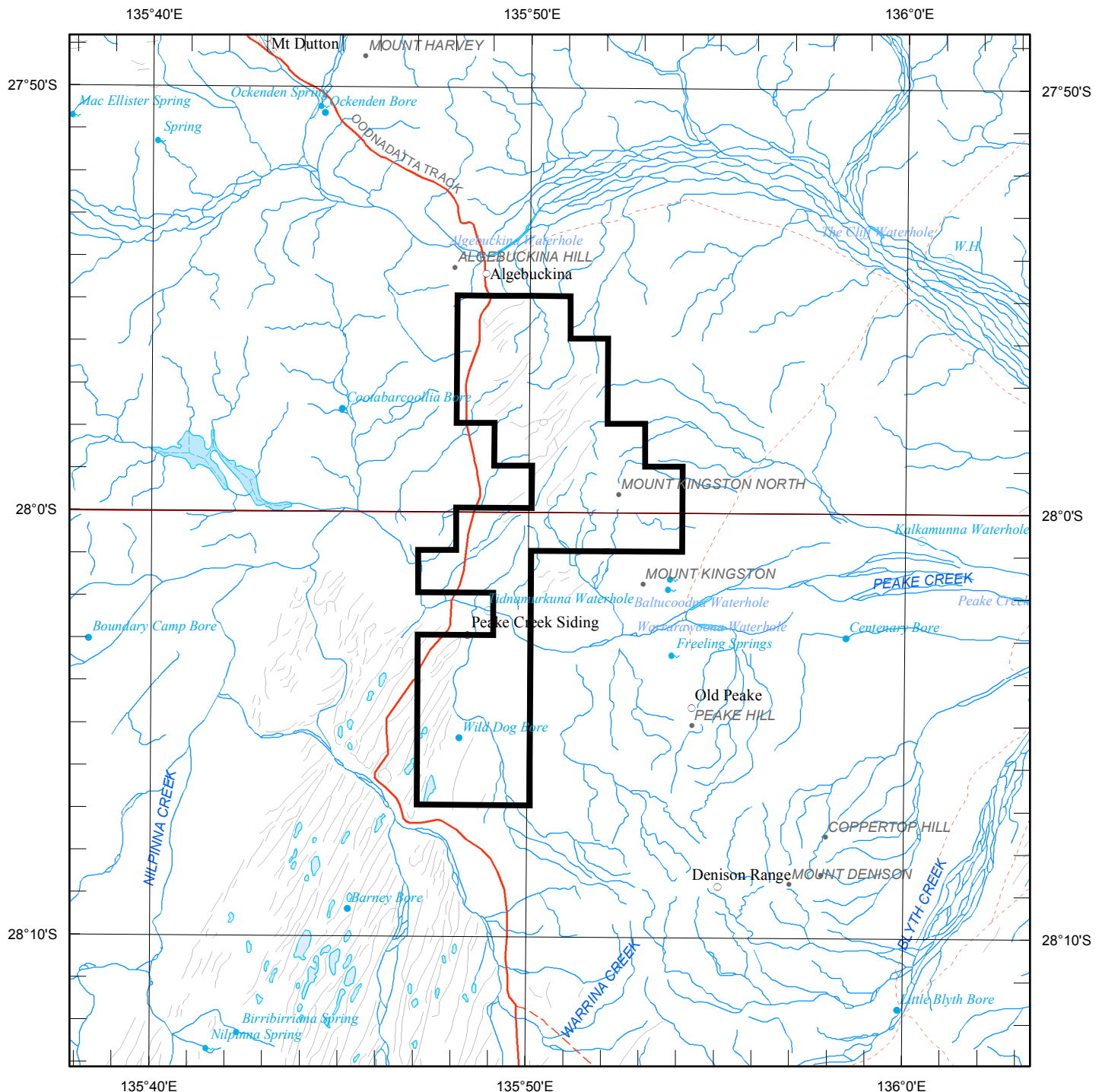
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Government of South Australia

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SCHEDULE A



LICENCE BOUNDARIES IN : DATUM AGD66

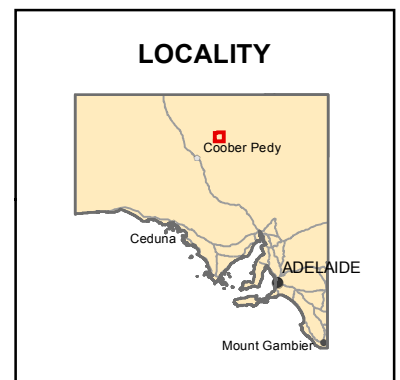
APPLICANT : **PANDA MINING PTY LTD**

FILE REF : **2014/00257** TYPE : **MINERAL ONLY**

AREA : **124** sq km (approx)

1 : 250 000 MAPSHEETS : **OODNADATTA WARRINA**

LOCALITY : **ALGEBUCKINA AREA -**
Approximately 140 km northeast of Coober Pedy



DATE GRANTED: **09-Jun-2015** DATE EXPIRED: **08-Jun-2017** EL NO: **5629**

PANDA MINING Pty Ltd

Annual Technical Report EL5629 Oodnadatta Project

For the Period Ending 08/06/2016

Author:

Panda Mining Pty Ltd

Date Issued: 30/08/2016

Revision History			
Date	Version	Summary of Change	Author
27/07/2016	0.0	Initial draft version	Panda Mining
30/08/2016	1.0	Submission version	Panda Mining

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1 Summary

This is the first annual technical report for EL5629 'Algebuckina' which was granted to Panda Mining Pty Ltd (PM) on 9th June 2015 for a two year period. PM holds 100% equity in the 124km² exploration licence(EL). The Exploration licence falls within PM's 'Oodnadatta' project area South East of Oodnadatta, South Australia.

Exploration activities conducted in the first year of EL5629 ending 8th June 2016 include:

- Desktop review/establishing GIS database and review of historical exploration and available datasets. This work has been completed to provide a first pass study of the tenement in order to plan more detailed exploration in the following reporting period.

2 General Information

<u>Report ID:</u>	EL5629_2016_A_01_AnnualTechnicalReport
<u>EL Number:</u>	Exploration Lease (EL) 5629
<u>Licensee/operator:</u>	Panda Mining Pty Ltd
<u>Contact:</u>	Jon Crowe, Director PO Box 1204, Fremantle, W.A. 6959 Ph: Tel: 9430 9988 E: jon@diao.com.au Katherine Kingma B.Sc., Project Geologist P: (08) 8339 6191 M: 0411 021010 E: kit_kingma@hotmail.com
<u>Location:</u>	1:250,000 mapsheet - Oodnadatta (SG 53-15) Warrina (SH 53-03) 1:100,000 mapsheet - Algebuckina (6042) Warrina (6041)

3 Tenement Status

3.1 Location

The Oodnadatta Project Area is located ~950km NNW of Adelaide. The exploration license covers an area of 124km² (Figure 1). The nearest main town is Oodnadatta, which is ~50km North West via station tracks and the Oodnadatta Track. The nearest homesteads to the project area are Peake (~16km) from the southern tenement boundary of EL5629, and Allandale (~38km) from the northern boundary.

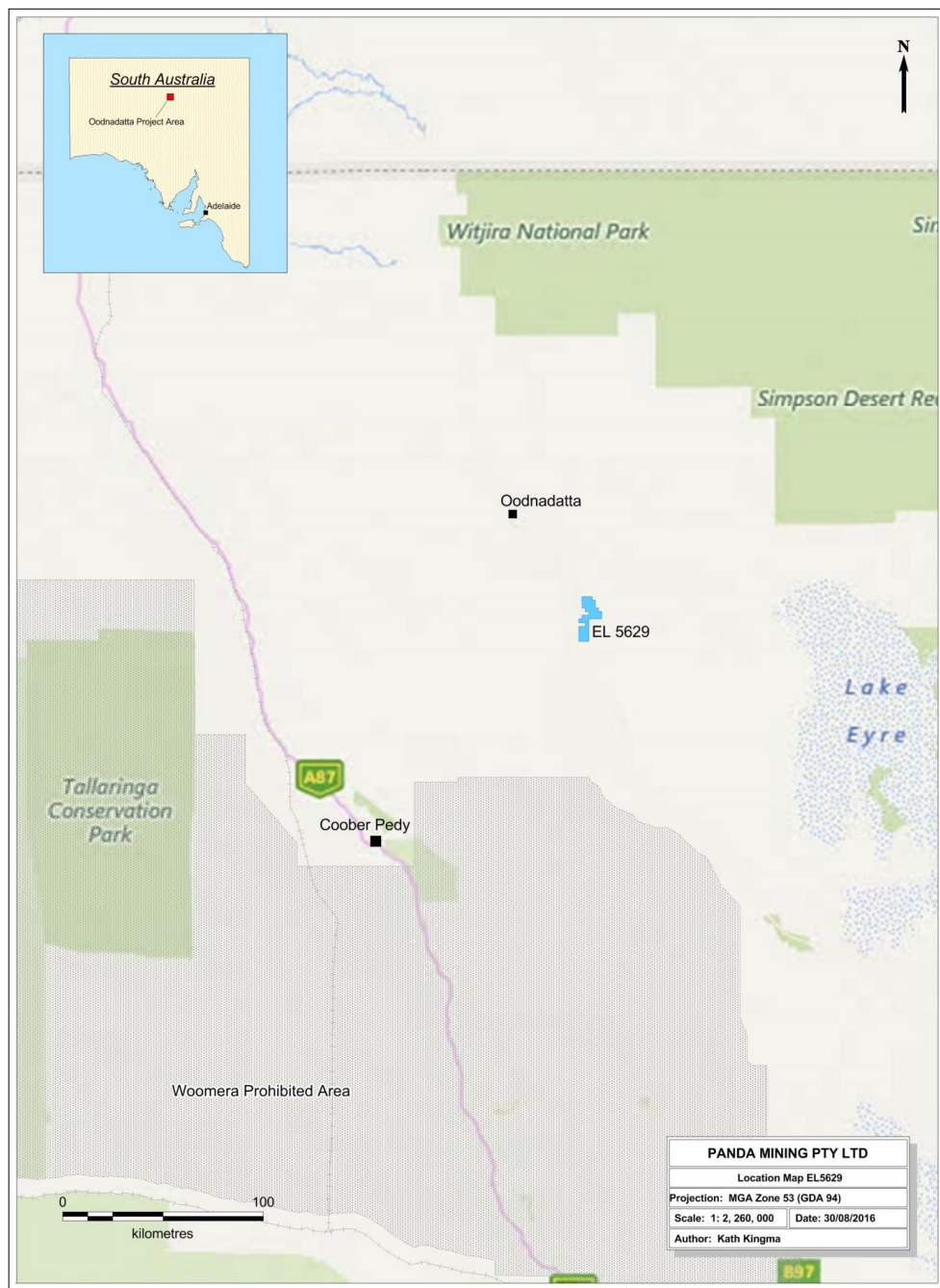


Figure 1: Location Map of EL5629

3.2 Land use & tenure

The land covered by EL5629 lies within the Allandale and The Peake Pastoral Leases. Both Allandale and The Peake Pastoral Leases are working stations and the land is used for sheep and cattle grazing which is supported by dams, bores, mills and numerous tracks, grids and. The owners/managers (Table 1) of both pastoral leases are kept well informed of the activities of Panda Mining in the area.

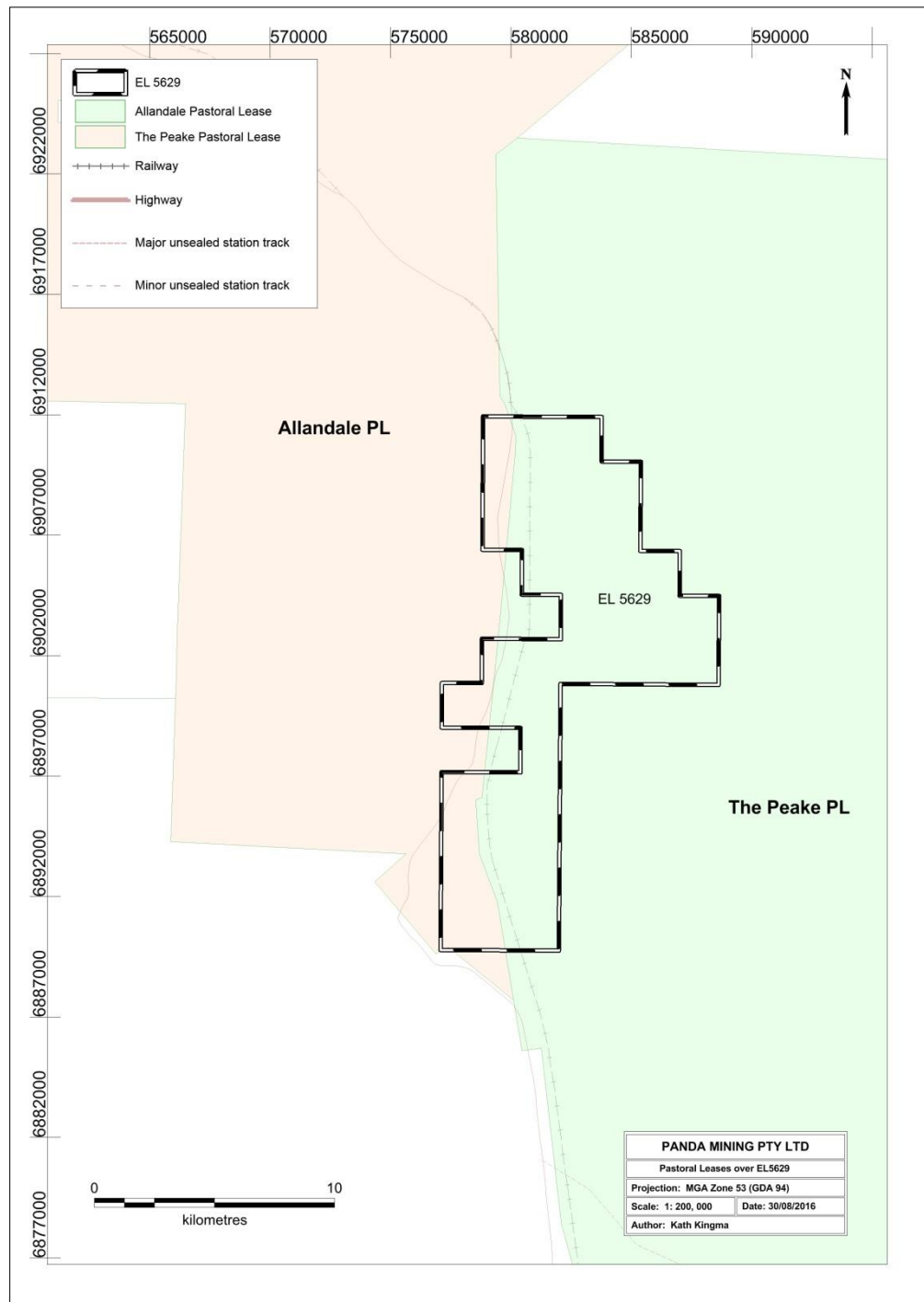


Figure 2: Pastoral Leases within EL5629

Pastoral Lease	Lessee	Land Manager
Allandale	Andrew Clarke	Andrew Clarke
The Peake	S. Kidman & Co Ltd	Jim Wheeler

Table 1 Relevant Pastoral Lease Information

3.3 Landform & topography

The Oodnadatta project area is characterised by a very hot dry desert climate with short cool to cold winters and overall very low rainfall which lacks seasonal patterning (Laut 1977(5):2). The area experiences average January highs of 37.9 and lows of 23.0 degrees with July average highs and lows ranging from 19.6 to 5.8 degrees. Average monthly rainfall ranges from 31.7mm in February (the wettest month), to 7.8mm in August, the driest month (Bureau of Meteorology 2015 - based on Oodnadatta meteorological data, ~ 50km northwest).

The area is typically dominated by gently undulating plains exhibiting gypsum crusting with an older, higher gypcrete surface interrupted by low discontinuous escarpments. (Laut 1977(5):2) Vegetation in the region typically consists of chenopod scrubland as well as low fringing woodland and is used for livestock grazing. (Laut 1977(5):2).

3.4 Native Title

The Oodnadatta Project Area EL5629, falls within the Arabana People Native Title Claim (Federal Court # SAD6025/1998)(Figure 3).

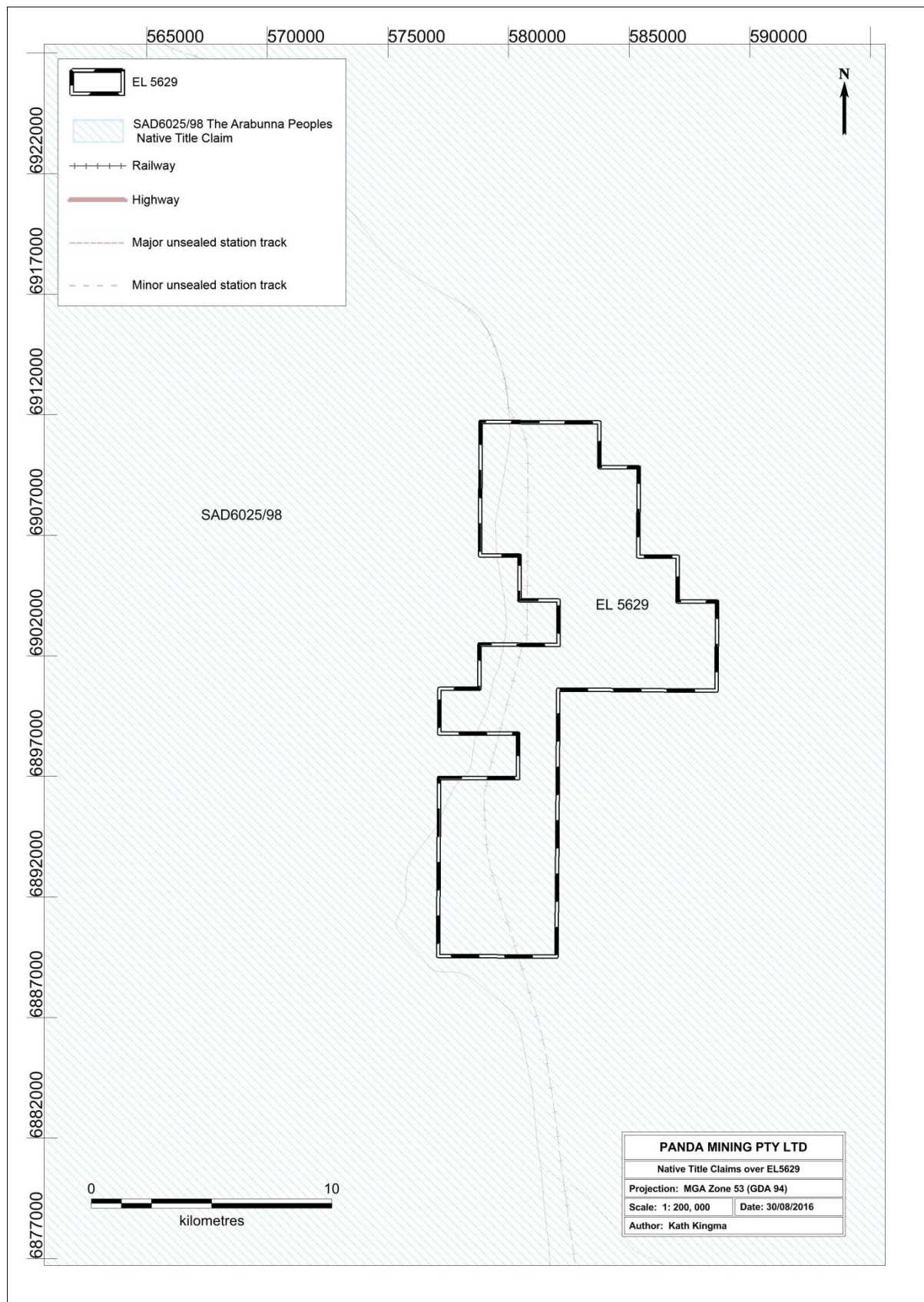


Figure 3 Native Title Claims over EL5629

4 Geology

4.1 Regional Geology

EL5629 is partly enclosed by an inlier of Precambrian bedrock, which lap Cretaceous sedimentary strata and veneers of Quaternary cover. Precambrian bedrock of the Peake and Denison Inliers consists of Paleoproterozoic rocks, including metasediments of the Peake Metamorphics, Wirriecurie Granite, and Neoproterozoic rocks, including sediments of the Callanna and Burra Groups as well as a variety of volcanic rocks.



Figure 4: Geological Provinces of South Australia

4.2 Mineralisation

The tenement contains a number of small, historic copper workings. These are mostly small shear hosted lodes within Paleoproterozoic gneiss and are commonly associated with veining and iron oxide (hematite / magnetite) alteration of the original meta-sedimentary, meta-basalt or calc-silicate rocks. Open file reports generally describe these workings as small generally only 5-10m deep, although some are reported as deep as 30m, with the most common ore forming mineral reported as malachite.

The Peake and Dennison Ranges has been explored by a number of large companies including Pancontinental, RGC, BHP and CRA-Rio Tinto, and more recently by Red Metal LTD. The primary exploration targets were:

- Sedimentary and hardrock uranium
- Shear hosted copper
- IOCGs

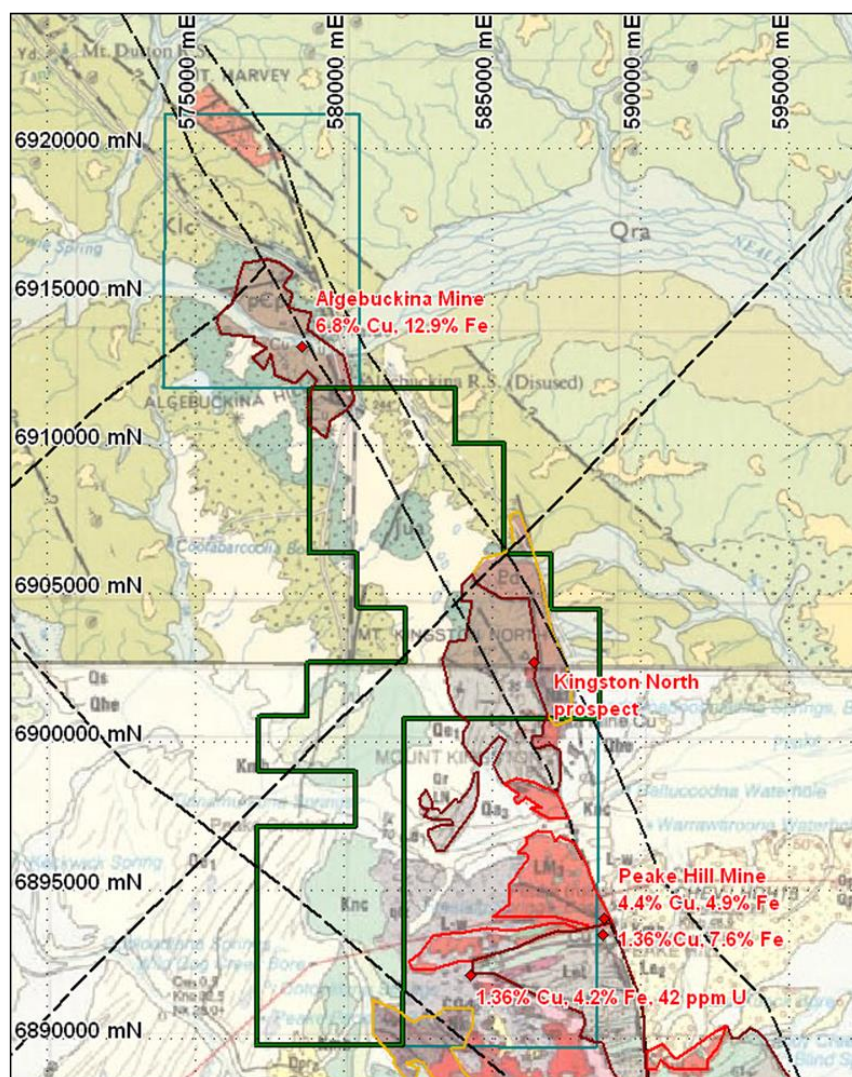


Figure 5. Regional geology map over EL5629 shown with summarised geology and selected rock chip sampling of historic workings.

5 Review of Previous Work

5.1 Summary of recent exploration

Recent exploration of the Peake and Denison Ranges in the vicinity of EL5629 has been completed for gold, base metal and uranium mineralisation. A brief summary of past work follows:

Placer Exploration (1989-1991) Env.8254 – completed rock chip sampling around the margins of the Kingston Inlier identifying high copper grades in the vicinity of the historic workings.

Pancontinental Mining (1993-1995) Env.8953 – completed regional landsat and magnetic interpretations, geological mapping, stream and rock chip sampling. Identified copper mineralisation to the north of Mt Kingston North and completed follow up mapping and assay to develop a drill target.

RGC (Rennison) (1995-1999) Env.8953 – took over Pancontinental in 1995. Drilled 3 holes KNDH001-3 to test the historic Mt Kingston North workings and the new copper prospect to the north. Identified minor chalcopyrite enrichment associated with hematite alteration/breccia of granite and metasedimentary rocks (best intercept 3m @ 0.31% Cu). Also completed 8 aircore holes targeting a magnetic anomaly to the north (ALAC01-08). Intersected a hematite altered amphibolite and biotite schist (metabasalt) at the bottom of holes with minor chalcopyrite mineralisation (best intercepts 15m @ 0.44% Cu, including 3m @ 1.22% Cu).

BHP JV with RGC (1998-99) Env.8953 – completed a moving loop EM (Protem) survey over the ALAC aircore grid with the hope of identifying a basement conductor target. No basement anomalies were identified although a large resistivity contrast between the highly resistive metabasalt and less resistive Adelaidean sediments can be clearly seen in the data.

Rio Tinto Exploration (RTX) (1999-2003) Env.9741, 10430 – complete 1:5000 scale mapping of the Kingston inlier, however no reference coordinates given in report. Identified a pegmatite dyke trending between the Pinta and Kingston North Mines and believe the main control for mineralisation. Limited rock chip sampling, most anomalous around known copper occurrences. A small IP survey was completed at the Peake Siding Prospect, with chargeability features test by five drill holes (RC01PS001-5).

Red Metal (2003-2014) Env.11376, 12111, 12437 – five mud-rotary holes in the western part of the tenement as part of a larger PACE co-funded program to test for paleo-channel hosted uranium mineralisation (AG07-series). Results were generally disappointing with a peak uranium response of 213 ppm U. Also completed an airborne EM survey over the tenement area, presumably to help target paleochannels.

5.2 Previous exploration undertaken by Panda Mining Pty Ltd

Work completed during the first year of tenure of EL5629 focussed on 3 main areas; Site reconnaissance trip, Desktop review/establishing GIS database and review of historical exploration and available datasets. This work has been completed to provide a first pass study of the tenement in order to plan more detailed exploration in the following reporting period. The long history of exploration for multiple commodities in the area has provided useful geological interpretations of the tenement. The desktop review focussed on two main areas of exploration, geology and geophysics, with work being completed to tie the two together and compare to previous exploration completed by other companies prior to Panda's tenure of EL5629.

6 Proposed Future Exploration Activities

Past exploration work has shown that targeting a combination of magnetic and gravity highs is frequently successful at identifying shallow hematite or magnetite alteration of the Paleoproterozoic Peake Metamorphics, particularly when drilled adjacent to a gravity low which can be interpreted to reflect a granite intrusion.

This interpretation is consistent with the expected exploration model for IOCG or the more generic porphyritic style of mineralisation, although this has not yet translated to the discovery of a significant base metal intersection within the region.

Where it has been intersected, copper mineralisation has been found associated with;

- Hematite breccia in shears, possibly associated with local granite or pegmatite intrusions. This style of mineralisation describes most of the historic workings in the area. While some of these deposits did achieve moderate metal grades over local areas, presumably through supergene enrichment (malachite is the ore mineral), they are considered to have a very small size potential.
- Disseminated chalcopyrite in hematite altered meta-sediments or metabasalt. This style of mineralisation has potential to form part of a larger, if lower grade, resource.

The broad zone of low grade copper mineralisation identified at the top of basement in shallow aircore drilling by RGC at the northern end of the tenement is considered the most prospective lead;

- It is located within a dense, hematite altered amphibolite,
- Adjacent to a local gravity low which could represent a granite intrusion,
- Has a peak bottom of hole assay grade of >1% Cu.
- Slightly higher conductivity than surrounding basement rocks.

Ground and airborne EM surveys completed by BHP and Red Metal failed to detect any strong basement conductors in this prospect area, effectively ruling out the likelihood of shallow massive sulphide being the source of the geochemical anomalism.

However, this does not rule out the potential for a large disseminated sulphide deposit in this area which is considered a reasonable target model for future exploration.

References

Bureau of Meteorology 2012. Climate Statistics for Australian Sites. [URL: http://www.bom.gov.au/climate/averages/tables/cw_017043.shtml; accessed July 10, 2015.

Laut, P., G. Keig, M. Lazarides, E. Loffler, C. Margules, R. M. Scott and M. E. Sullivan 1977. Environments of South Australia. C.S.I.R.O., Canberra

PANDA MINING PTY LTD

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Department of State Development,
Mineral Resources Division,
101 Grenfell St,
Adelaide. S.A.

12th June, 2017

Re: Exploration Licence 5629: Letter in lieu of Final Report to 09/06/2017.

Dear Madam,

Exploration Licence 5629 was surrendered on 28th of July, 2016. No field work was undertaken between the anniversary of the tenement and the surrender.

We hereby request that this letter be accepted in lieu of a final Annual Technical Report for the period ending 9th of June, 2017.

Yours faithfully,



Jon Crowe
Director