KAJEENA MINING COMPANY PTY LTD

ANNUAL REPORT FOR THE PERIOD ENDING
12TH DECEMBER 2004

EXPLORATION LICENCE 10060

KULGERA AREA, NT

by

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EXECUTIVE SUMMARY

This annual report describes the work carried out in EL 10060, near Kulgera during the period ending 12 December 2004. Exploration work consisted of;

- A full review and evaluation of the mineral potential of EL 10060 including magnetics and radiometrics interpretation.
- Preparation of a GIS-based project
- Field investigation of the geology, geophysical anomalies and features identified during the review
- A drainage sampling program and
- Compilation of a detailed report

The work carried out was aimed at determining the prospectivity EL 10060 for various commodities.

Magnetics interpretation showed that the western portion of EL 10060, under younger cover, has a linear magnetic signature, quite different from the subcropping/outcropping eastern portion of the area, which is dominated by intrusions of the Kulgera Suite. Nickel, copper and chromium occurrences are associated with major north-trending structures to the south of EL10060 in South Australia. These structures are interpreted to trend into the southwestern portion of EL10060.

A field visit did not reveal widespread or even local alteration in the outcropping parts and no mineral occurrences were located.

Only three drainage samples were taken, the results of which were not anomalous in any of the base or precious metals.

It is concluded that little potential exists for a significant base or precious metal deposit in the eastern portion of EL 10060 and it is recommended that this portion of the area be relinquished.
1 INTRODUCTION

Kajeena Mining Company Pty Ltd is the owner of EL 10060, near Kulgera in the southern part of the Northern Territory. Assessment of previous exploration data and a full review of the mineral potential for EL 10060 were undertaken by Geodiscovery Pty Ltd on behalf of Kajeena Mining Company Pty Ltd in 2004.

This annual report describes all the exploration work carried out within EL 10060 during the reporting period. For work undertaken in prior years the details is presented in the previous reports written by Duncan and are listed in Section 10 (REFERENCES).

EL 10060 is part of the Kulgera Project, which also includes EL 10055. The work during 2004 was directed at a full evaluation for the mineral potential within EL 10060.

Significant exploration activity for copper and especially nickel is current on the immediate South Australian side of the border and the work that has been completed suggests potential for these commodities within EL 10060.

2 LOCATION & ACCESS

EL 10060 is located on the border between South Australia and Northern Territory (Figure 1). The centre of the area is approximately 40 kilometres southwest of Kulgera. Access is south from Kulgera via the Stuart Highway, then either via station tracks through Mount Cavenagh Station or the Victory Downs road. Vehicle access over most of the tenement is good via station tracks and fence lines.

The region is semi-arid with long hot summers reaching 40°C + for much of January and February, winters are milder with temperatures ranging from 0°C overnight to high 20°’s during the day. Rainfalls are generally late summer with 250-300mm a year the average. Land usage is for pastoral properties with beef the main stock.

Low scrubby vegetation and gentle sand dunes form the topography for the main part with small hills and some ridgelines present.
3 TENURE DETAILS

EL 10060 is held by the Kajeena Mining Company Pty Ltd.

<table>
<thead>
<tr>
<th>Exploration Licence No.</th>
<th>No. Blocks (Area km²)</th>
<th>Grant Date</th>
<th>Expiry Date</th>
<th>Expenditure Covenant</th>
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<td>EL 10060</td>
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<td>12/12/2007</td>
<td>$20,000</td>
</tr>
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</table>

4 REGIONAL GEOLOGY

EL 10060 includes rocks from two distinct geological provinces
- northeastern limit of exposure of the Mesoproterozoic Musgrave Block and
- southern margin of an outlier of the western Mesozoic Eromanga Basin

Cainozoic sediments form a surficial cover over large parts of EL10060 estimated at 60-70%.

All exposed basement rocks of the Musgrave Block within EL 10060 are:
- Predominantly Kulgera Suite Granites which intruded the terrane syn- or post-tectonically at 1190-1150 Ma with
- Minor Granulites of the Fregon terrane comprising quartzo-feldspathic and peraluminous (felsic) gneisses and minor amphibolites and tonalitic and granite
gneisses. These gneisses have a protolith age of 1600-1500 Ma and peak metamorphism at 1200-1160 Ma for the Musgravian Event.

- Swarms of dolerite dykes (Alcurra Dyke Swarm) related to the opening of the Amadeus Basin dated at ~1080 Ma and equivalent to the Giles Complex in SA.

The Fregon terrane forms the hanging wall of the Woodroffe thrust, a major northeast trending, and north-directed tectonic feature of the Musgrave Block seen in the northwest portion of EL10060.

The northwest corner of EL10060 may contain rocks of the Mulga Park terrane comprising foliated porphyritic granites showing upper greenschist/amphibolite facies metamorphism, and unfoliated garnet-bearing granite intrusives.

Rocks of the Fregon terrane host a number of mineral occurrences across the border in South Australia, notably copper, nickel and chromite associated with ultramafics and the metasediments in which they intrude. There is a total lack of mineral occurrences within EL 10060.

Figure 2. Regional geology (EL10060 outline shown in red)
5 SUMMARY OF PREVIOUS WORK

Details of previous exploration have been presented in the 2003 annual report and are included in the report by Duncan (2003). In summary, very little effective exploration appears to have taken place within and in the vicinity of EL 10060 on the NT side.

Significantly more work has been carried out on the immediate South Australian side of the border. Major exploration models that have been used to guide exploration on the Musgrave Province in SA in the past include ultramafic hosted nickel sulphides, PGE, stratiform chromitite cumulates, stratiform titaniferous magnetite cumulates, laterite nickel deposits, stratabound Pb-Zn-Ag, VHMS in basement meta-volcanics, Broken Hill style Pb-Zn-Ag mineralisation, diamonds in kimberlites along major structures.

The nearest reported occurrence of mineralisation to EL 10060 was by T.S. Minerals Pty Ltd in 1968 which began investigation on ALBERGA of reported occurrences of allanite (cerium epidote) in pegmatites of the Kulgera Suite. They found no prospect of economic interest. The company then switched to evaluation of heavy mineral sands and rare earth sands in creeks south of Victory Downs homestead. The average heavy mineral content of the sands tested was 38%. The average TiO2 content of the heavy mineral fraction was 4.4%. Zircon ranged from 1.6% to 8.6%. Beneficiation trials showed that high-grade ilmenite and iron oxides could be recovered. The rare earth sands yielded concentrations of yttrium, cerium and lanthanum up to 20 times the normal level for granites.

6 WORK COMPLETED DURING THE PERIOD

6.1 Summary of Work Done

Work completed during the reporting period to 12 December 2004 consisted of:

- A full review and evaluation of the mineral potential of EL 10060 by Geodiscovery Pty Ltd (as consultants), including magnetics and radiometrics interpretation.
- Preparation of a GIS-based project
- Field investigation of the geology, geophysical anomalies and features identified during the review
- A drainage sampling program and
- Compilation of a detailed report (Geodiscovery Internal Report Number 2330-1)

6.2 Rationale

Results of the review undertaken by Geodiscover Pty Ltd showed that part of EL 10060 was amenable to drainage sampling. Interpretation of magnetics data revealed that the highly magnetic nature of the geology together with a large number of intrusions in a Proterozoic host was suggestive of an Iron Oxide Copper Gold (IOCG) terrane similar to the terrane which hosts Olympic Dam and Prominent Hill in South Australia.

A field investigation was considered the most practical method to investigate the IOCG potential due to the widespread regional alteration typical of these terranes.
Significant current exploration activity immediately across the border in South Australia, particularly for nickel, together with encouraging results for nickel and gold being achieved by companies such as Independence Gold, also warranted investigation into the potential for these commodities.

### 6.3 Magnetic Interpretation

The magnetics for the area around EL 10060 is shown in Figure 3.

![Figure 3. Magnetics for EL 10060](image)

Rankin and Newton (2002) have carried out, probably the most comprehensive recent interpretation of the Musgrave Block. Their interpretation shows the predominance of interpreted magnetic intrusions within EL 10060 (Figure 4).

Of most interest are the numerous occurrences of nickel, copper and chromium to the south in South Australia. These occurrences appear to be related to an interpreted major north-trending structural zone which trends into the southern portion of EL 10060. Two separate alteration zones of magnetic overprint and hematite? have also been interpreted to trend into the southern part of EL 10060.

Interpretation by Geodiscovery Pty Ltd reveals the western portion of EL 10060 to have more linear magnetic signature compared with most of the area, characterised by circular magnetic intrusions of the Kulgera Suite.
6.4 Drainage Sampling

A stream sediment-sampling program was carried out within EL10060 during October 2004. Radiometrics shown in Figure 5 were used as a guide to locate samples within subcrop areas. The bulk of the eastern portion of EL 10060 is shown in this data to have substantial outcrop & subcrop.

The samples were taken as part of a broader program also incorporating EL 10055. Samples comprising ~5kg of ~2mm material were taken from active sediment within creeks. Spacing of samples was originally aimed on drainage basin size of ~5km x5km. ALS in Brisbane prepared the samples by splitting out 3kg and taking a ~80# sample for analysis by ALS method ME-ICP41s for Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mo, Mn, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, U, V, W, Zn. The remaining 2kg was bottle roll leached using cyanide and analysed for Au, Cu, Ag and Pd by ALS method Au-CN12.
During the field visit it was realised that drainage is poorly developed within EL 10060 and only three samples were collected. Sample numbers are V60/1, 2 & 3.

None of the results returned from the stream sediment-sampling program are considered significantly anomalous to warrant follow-up. Elevated Fe, V and particularly Phosphorous are characteristic of these samples. The ALS work order and located digital data is attached in the accompanying “pdf” and “txt” files respectively.

EL10060_2004_A_02_ALS report.pdf
EL10060_2004_A_03_SurfaceGeochem.txt
7 CONCLUSIONS

Stream sediment sampling in EL10060 was not effective due to subdued topography and lack of suitable drainage. The central and eastern portion of EL10060 is dominated by outcrop and subcrop of Kulgera Suite granite intrusions into gneissic basement but these intrusions do not show any alteration typical of an IOCG terrane. No mineral occurrences are known within the area of EL10060 but heavy mineral sands occur to the south of Victory Downs Homestead. This report did not evaluate fully this target type but it would not be expected to be an environment that would host a large tonnage deposit due to its largely fluvial regime and not coastal. While the potential for rare earth pegmatites has been the subject of previous exploration, this target type was not considered.

The western portion of EL10060 does not outcrop and is covered by alluvium and sand dunes. Interpretation of magnetic data indicates that a favourable geological sequence and structure hosting nickel, copper and chromium prospects in SA is present in the southwestern part of EL10060. Linear magnetic units occupy this area and remain of interest but are under cover.

The prospectivity of the eastern portion of EL10060 is considered low and should be relinquished.

That portion of the tenement west of 132degrees, 54minutes should be retained.
8 EXPENDITURE FOR YEAR 3

Expenditure for Year 3 of EL10060 was as follows:

. Meals & Accommodation. $ 477
. Travel. $ 573
. Vehicle Expenses. $ 467
. Geoscience Consultants. $ 7,020
. Field Support. $ 775
. Geochemistry. $ 133
. Equipment. $ 55
. Consumables. $ 8
. Tenement Consultant. $ 750
. Other Consultants. $ 4,005
. Administration. $ 2,140

TOTAL $16,403

9 FORWARD PROGRAM FOR YEAR 4 (2005)

The proposed forward program for year 4 of EL10060 for 2005 is anticipated to involve the following major work;

- Interpretation of existing magnetics data to determine whether depths to prospective basement are shallow enough (<50m) to warrant further detailed exploration effort in the retained portion of EL10060
- Regional grid-based deflation lag sampling within interdunal corridors if depth to basement interpretation is positive

The costs estimated to achieve this work are in Table 1;

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10 REFERENCES

