KAJEENA MINING COMPANY PTY LTD

PARTIAL RELINQUISHMENT REPORT FOR EXPLORATION LICENCE 10060 FOR THE PERIOD ENDED 12 DECEMBER 2004

KULGERA AREA, NT

by

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### APPENDIX 1

**ASSAY DATA - ALS REPORT**

### APPENDIX 2

**ASSAY DATA - LOCATED DIGITAL DATA IN "TXT" FORMAT**
EXECUTIVE SUMMARY

This is the relinquishment report for EL 10060, near Kulgera and describes the work carried out in the relinquished portion of the area up to 12 December 2004. Exploration work consisted of:

- Reviews 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

Radiometrics interpretation showed that most of the relinquished portion of EL 10060 has substantial subcrop and outcrop and may have been easily prospected in the past.

Magnetics interpretation and existing NTGS geological mapping showed that the relinquished portion of EL 10060 is dominated by intrusions of the Kulgera Suite. A field visit did not reveal widespread or even local alteration in the outcropping parts and no mineral occurrences were located therefore downgrading the area for this mineralisation style.

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 relinquished portion of EL 10060.
1 INTRODUCTION

This report describes all the exploration work carried out by Kajeena on the relinquished blocks of EL 10060 from 13 December 2001 to 12 December 2004.

For work undertaken in prior years the details is presented in the previous reports written by Duncan (2003) and Dugmore (2004) and are listed in Section 9 (REFERENCES).

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

2 LOCATION & ACCESS

EL 10060 is located on the border between South Australia and Northern Territory (Figure 1). 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.

Figure 1. Location Map. Retained portion of EL10060
3 TENURE DETAILS

The Kajeena Mining Company Pty Ltd (“Kajeena”) holds EL 10060. An area of 372 blocks was originally granted to Kajeena on 13 December 2001 for a period of 6 years to 12 December 2007. Some 182 blocks were relinquished at the end of year 2 on 12 December 2003. A further 93 blocks was relinquished on the anniversary of year 3 on 12 December 2004 and is the subject of this report. The relinquished portion of EL10060 is shown in Figure 2.

4 EXPLORATION RATIONALE

The area was originally applied for on the basis of reports of gold mineralisation found by prospectors, east of the tenement area.

Subsequent review by Duncan (2003) highlighted the prospectivity for nickel-copper-PGE mineralisation associated with ultramafics, Tick Hill-style gold mineralisation and diamond-bearing diatremes.

Interpretation of magnetics data by Geodiscovery 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.
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.

5 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 Woodroofe 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.

6 SUMMARY OF PREVIOUS WORK

Details of previous exploration have been presented in the 2003 and 2004 annual reports 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.

Geosurveys (open range exploration)
Geosurveys in 1968 carried out open range exploration for rare earth minerals near Victory Downs. Isolated occurrences of monazite, allanite, orthite, samarskite and euxcenite were recorded, but not of sufficient quantity for exploitation. Host rocks were pegmatites and quartz reefs from the Musgrave Block.

**Dillingham Minerals (AP 2911 & AP 3243)**  
Dillingham were exploring for unidentified minerals, possibly heavy mineral sands near Kulgera in 1971. Title was relinquished.

**Agip Nucleare Australia Pty Ltd (EL 1213)**  
Agip were exploring for uranium in 1978, completing 10 RC holes for 918m of drilling with no success. The collars can be seen in Figure 4, with most of this work completed outside the current Kulgera EL’s. Disappointing results meant the ground was relinquished.

**Cultus Pacific NL (EL 1494)**  
Cultus explored the area in 1978 for potential sedimentary uranium in the Eromanga Basin. The water was sampled from the bores in the region and analysed for uranium, with a peak result of 12ppm. This anomaly was decided not worth pursuing. Tenement was relinquished.

**EDI Constructions (EL 6896)**  
EDI investigated the potential for dimension stone and crushed aggregate in the area in 1991. The exploration licence covered a large area of dolerite dyke swarms. The most intense area of intrusives with an areal extent of 4.5 square kms was pegged with mineral claims. Regional work was suspended and title relinquished.

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 chromite 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.
7 WORK COMPLETED DURING THE TENURE PERIOD

7.1 Summary of Work Done

Work completed during the three-year period to 12 December 2004 on the relinquished area consisted of;

- A full review and evaluation of the mineral exploration potential by Geodiscovery Pty Ltd (Dugmore, 2004), 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)

7.1.1 Magnetic Interpretation

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, particularly within the portion of EL10060 to be relinquished.

Interpretation by Geodiscovery Pty Ltd reveals the relinquished portion of EL 10060 to be characterised by circular magnetic intrusions of the non-prospective Kulgera Suite.

7.1.2 Drainage Sampling

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

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.

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_R_02_ALS report.pdf
EL10060_2004_R_03_SurfaceGeochem.txt

8 CONCLUSIONS

The relinquished portion of EL10060 is dominated by outcrop and subcrop of Kulgera Suite granite intrusions into gneissic basement. These intrusions or the surrounding country rock do not show any alteration typical of an IOCG terrane and is therefore downgraded. No mineral occurrences are known within the area of EL10060 but heavy mineral sands occur to the south of Victory Downs Homestead. It would not be expected to be an environment that would host a large tonnage deposit due to its largely fluvial regime (not coastal) and is therefore downgraded. While the potential for rare earth pegmatites has been the subject of previous exploration, this target type was not considered.

Stream sediment sampling in EL10060 was not effective due to subdued topography and lack of suitable drainage.

The prospectivity of the relinquished portion of EL10060 is considered low.
9 REFERENCES


