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EL 3828

IRRAPATANA

**FIRST ANNUAL AND FINAL REPORTS TO LICENCE
EXPIRY/SURRENDER FOR THE PERIOD
2/7/2007 TO 1/7/2008**

Submitted by
Red Metal Ltd
2009

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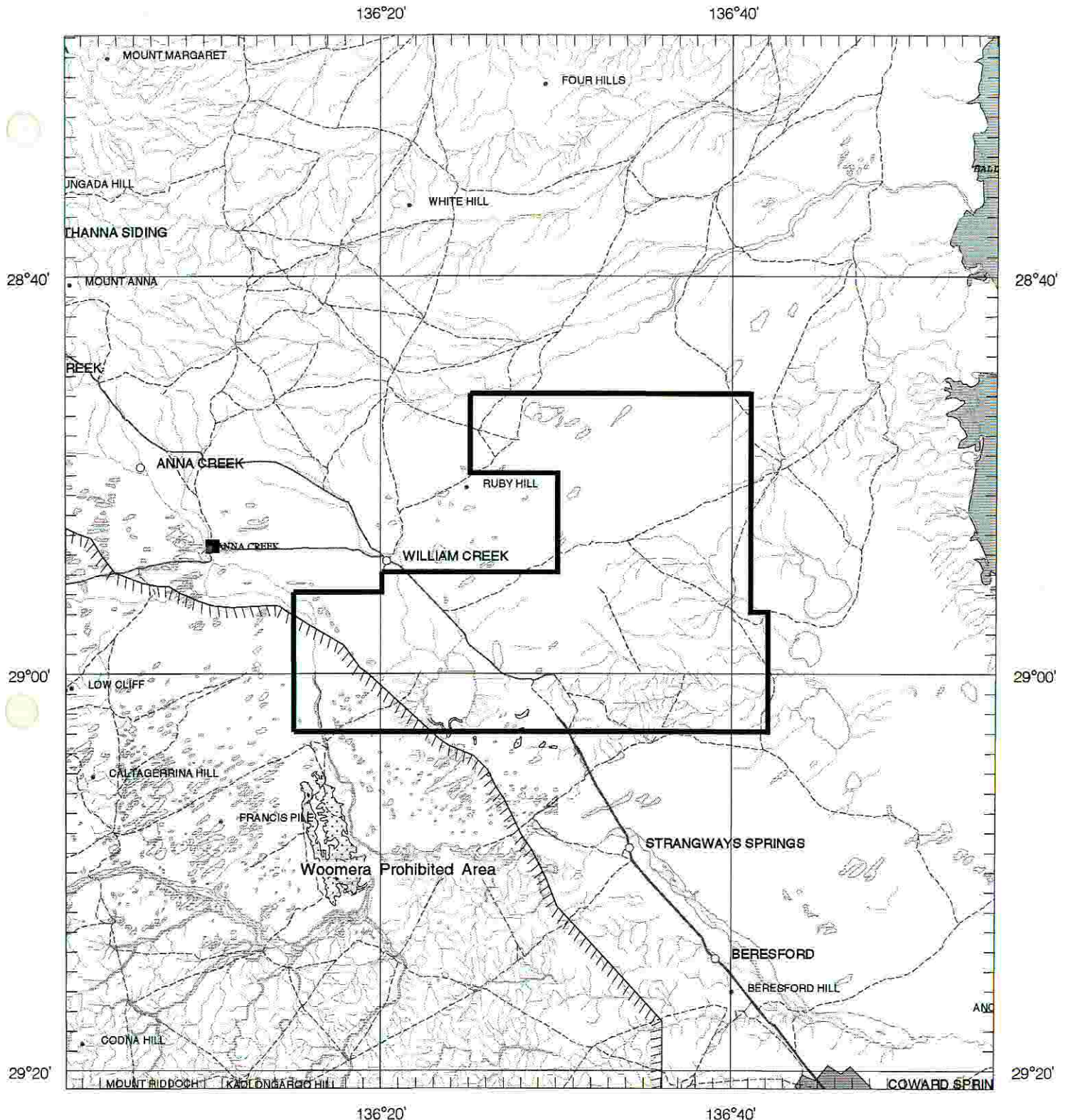
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Minerals and Energy Resources
7th Floor
101 Grenfell Street, Adelaide 5000

Telephone: (08) 8463 3000
Facsimile: (08) 8204 1880



Government of South Australia
Primary Industries and Resources SA

SCHEDULE A



APPLICANT : **RED METAL LTD**

FILE REF : **688/06**

TYPE : **MINERAL ONLY**

AREA : **984 km² (approx.)**

1:250000 MAPSHEETS : **WARRINA LAKE EYRE BILLA KALINA CURDIMURKA**

LOCALITY : **IRRAPATANA AREA - Approximately 170 km east of Coober Pedy**

DATE GRANTED : **02-Jul-2007**

DATE EXPIRED : **01-Jul-2008**

EL NO : **3828**

EXPIRED

EL 3828 Irrapatana
Annual Report
For the Period Ending 1 July 2008

Warrina SH53-03
Lake Eyre SH53-04

Author: G. McKay
Date: 21 August 2008

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REPORT DIGITAL FILE LIST

EL3828_2008_01_Main Report .pdf (this report)

1 **SUMMARY**

The primary objective of the programme is to determine the potential for diamond deposits within the Mesozoic sediments lying marginal to the Middle Proterozoic and Adelaidean Peake and Denison Inliers. The type of deposits sought include both sedimentary and hardrock deposits.

Work completed during the 2007-2008 reporting period comprised a review of historic literature and available magnetic data sets.

2 **INTRODUCTION**

EL 3828 is located on pastoral leases south of Davenport Range, west of Lake Eyre, approximately 200km east of Coober Pedy and immediately east of William Creek (Figure 1). The tenement area is the subject of a Native Title claim by the Arabunna People (SC98/002).

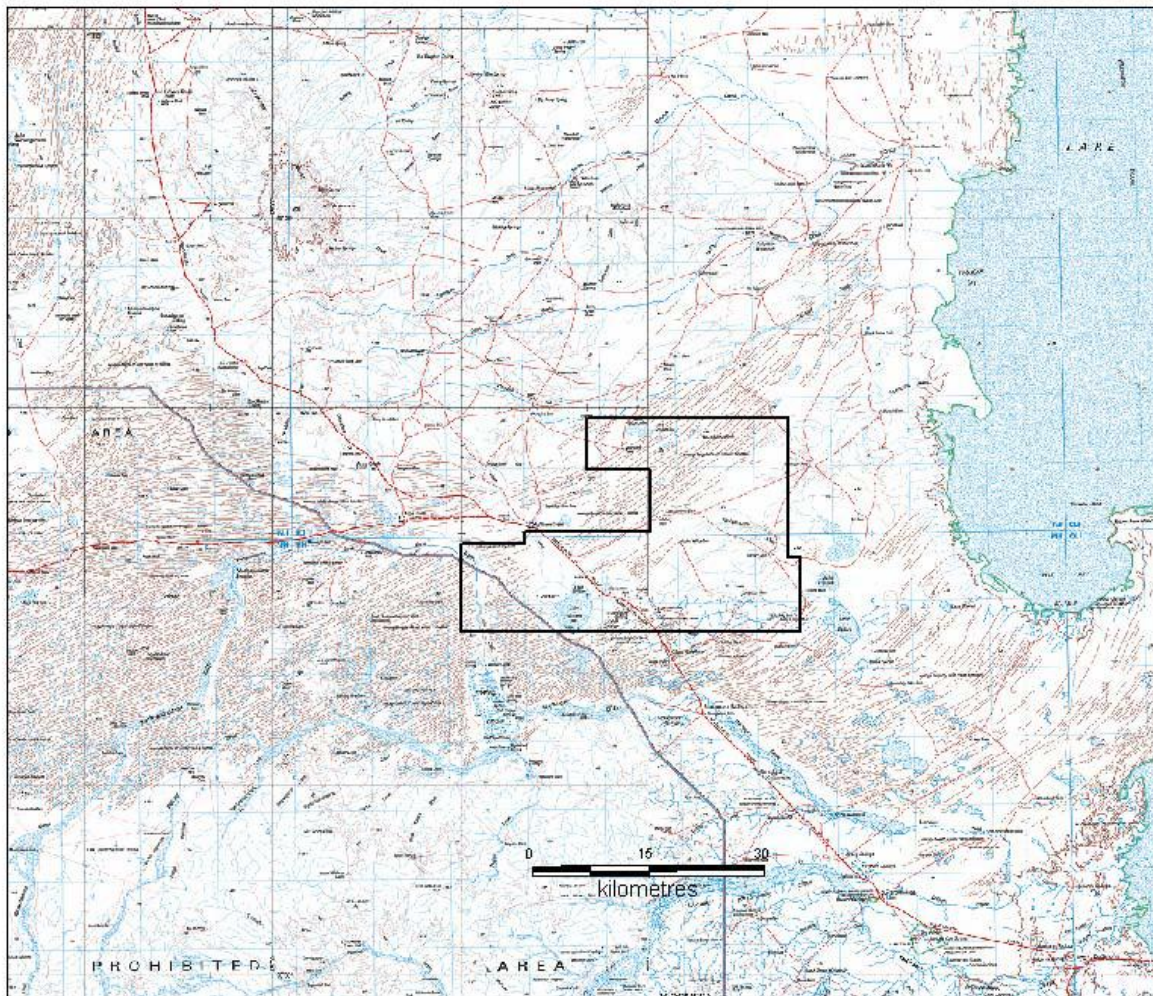


Figure 1: EL 3828 Location figure

3 TENURE

EL 3828 Irrapatana was granted to Red Metal Limited on 2 July 2007 over 984 sq km.

4 REGIONAL GEOLOGY AND GEOPHYSICS

The project area lies immediately south of the Proterozoic Peake & Denison inlier, which may be correlated with formations on the eastern Eyre Peninsula of the Gawler Craton, though similarities also exist with the geological, structural, and metallogenic evolution of the Olary Domain of the Curnamona Craton.

Palaeoproterozoic (1800-1780 Ma) basement lithologies are exposed within the inliers as large enclaves surrounded by Neoproterozoic “diapiric” breccias. These basement rocks are dominated by interlayered metabasalt and quartzite with subordinate porphyritic rhyolite, granite, phyllite, schist and calcsilicate. A second volcano-sedimentary cycle is recognised at 1750-1740 Ma comprising felsic metavolcanics, quartz-feldspar schist, gneiss, calcsilicate and quartzite.

Mesozoic sediment cover of the Eromanga Basin conceal metamorphic basement around the inliers. The Late Jurassic–Early Cretaceous marginal basin sequence exposed in the area comprises an fining-upwards sequence including the basal Algebuckina Sandstone, Cadna-Owie Formation and Bulldog Shale.

Tertiary gibber lag, gypsiferous clays, alluvial gravels, silts/clays, aeolian dune sands, lacustrine and mound spring deposits overlie the Mesozoic sediments and dominate the surficial cover away from the inliers.

5 PREVIOUS EXPLORATION

Previous companies conducting exploration over the area of EL 3828 include the following:

EL 33	Uranerz Aust Pty Ltd	1973-74
EL 192	Western Mining Corp Ltd	1975
EL 469	Newmont Pty Ltd	1979-80
EL 571. 968	Aberfoyle Exploration Pty Ltd	1980-87
ELs 852. 1179	Stockdale Prospecting Ltd	1981-88
EL 1533	Cyprus Aust Coal Company	1988-90
ELs 2094. 2935	Mount Isa Mines Ltd	1995-2003
EL 2970	Terramin Aust Ltd	2002-05
ELs 1453, 2754, 2755, 2892	Reedy Lagoon Corporation NL	1987-2005

6 WORK COMPLETED DURING CURRENT REPORTING PERIOD

Work conducted included a review of historic reports and available aeromagnetic data.

7 CONCLUSIONS

Red Metal is planning follow-up programs, including gravity surveys over basement magnetic anomalies.

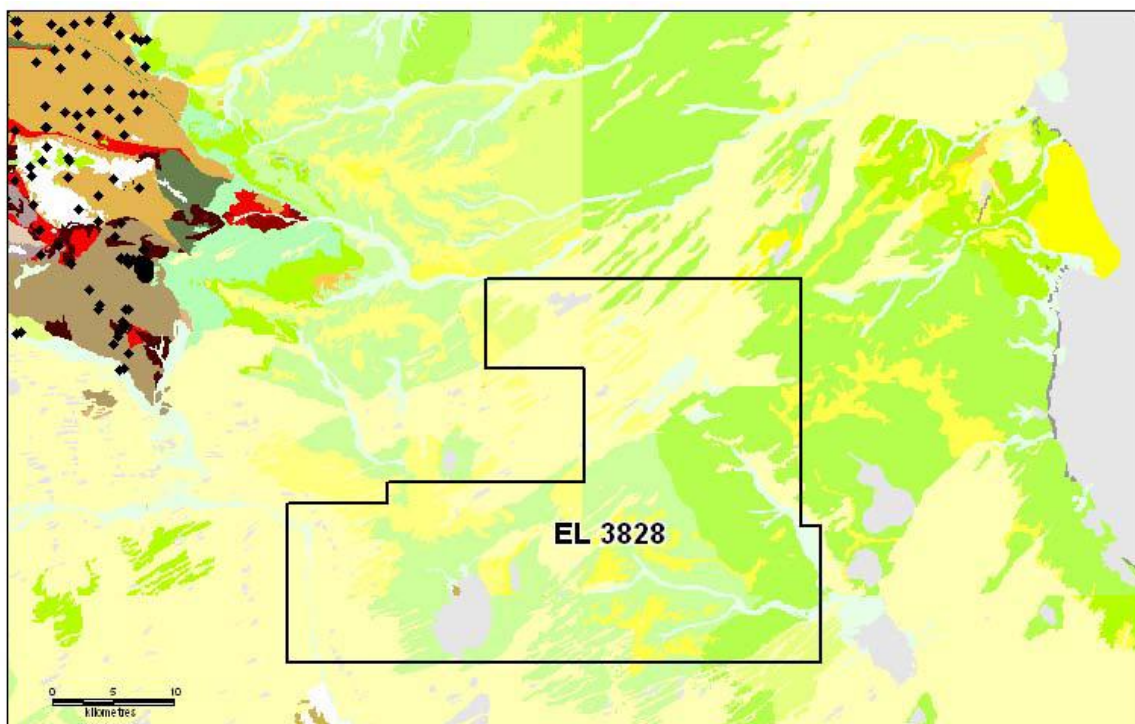


Figure 2: EL 3828 geology with historic sample locations for diamonds

LOCALITY

Warrina	SH53-03	1:250,000
Lake Eyre	SH53-04	1:250,000
Douglas	6240	1:100,000
Anna Creek	6141	1:100,000
Irrapatana	6139	1:100,000
Strangways	6239	1:100,000

DESCRIPTOR

This is the first annual report for the period ending 1 July 2008 for EL 3828, Irrapatana.

KEYWORDS

Diamonds, Mesozoic, Peake & Denison Inlier.

EL 3828 Irrapatana
Final Report
For the Period Ending 6 November 2008

Warrina SH53-03
Lake Eyre SH53-04

Author: G. McKay
Date: 9 March 2009

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REPORT DIGITAL FILE LIST

EL3828_2008_01_Final Report .pdf (this report)

1 **SUMMARY**

The primary objective of the programme was to determine the potential for diamond deposits within the Mesozoic sediments lying marginal to the Middle Proterozoic and Adelaidean Peake and Denison Inliers. The types of deposits sought include both sedimentary and hardrock deposits.

Work completed included a review of historic literature and available aeromagnetic data.

2 **INTRODUCTION**

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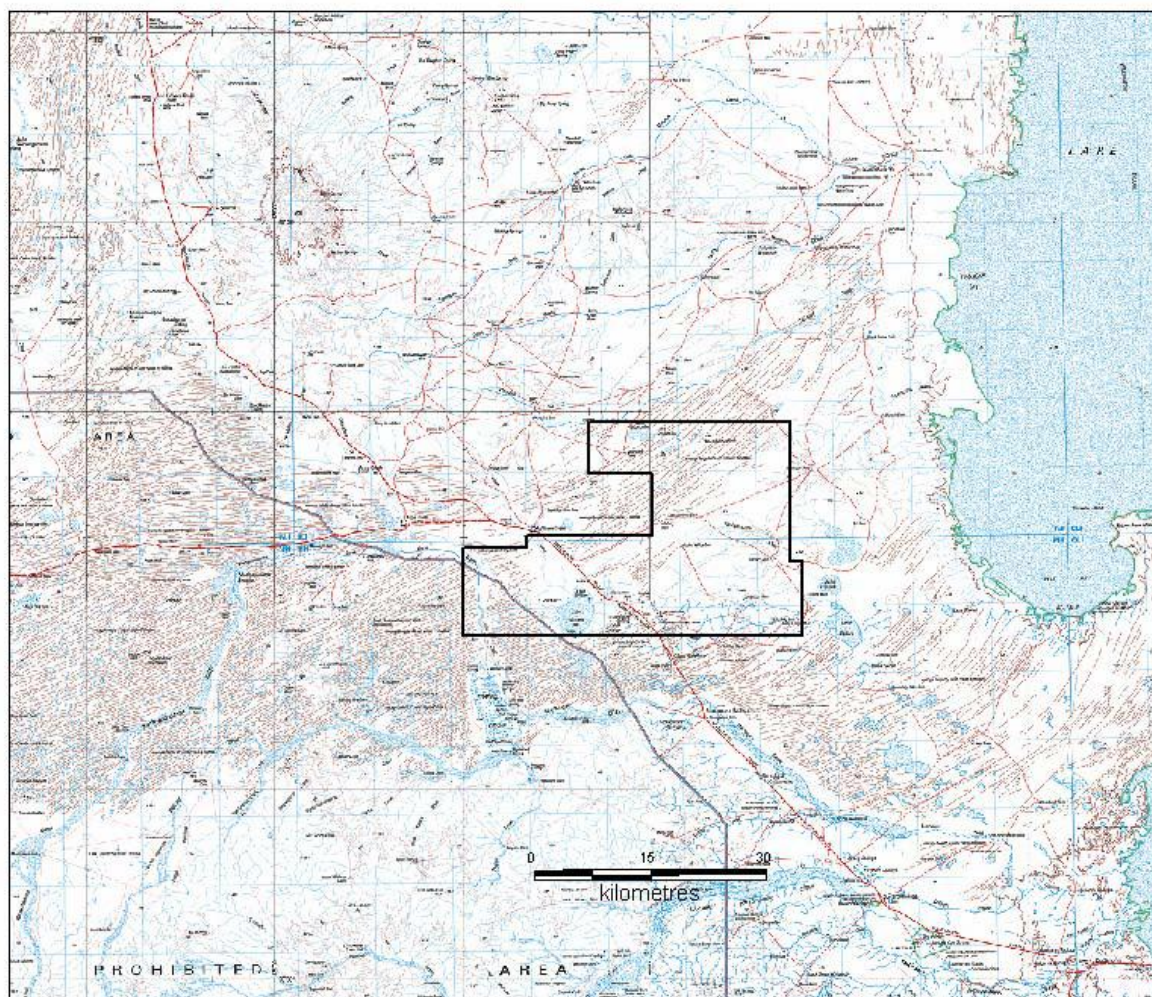


Figure 1: EL 3828 Location figure

3 **TENURE**

EL 3828 Irrapatana was granted to Red Metal Limited on 2 July 2007 over 984 sq km.

4 REGIONAL GEOLOGY AND GEOPHYSICS

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ELs 1453, 2754, 2755, 2892	Reedy Lagoon Corporation NL	1987-2005

6 SUMMARY OF WORK COMPLETED

Work conducted included a review of historic reports and available aeromagnetic data.

7 CONCLUSIONS

Red Metal planned to conduct gravity surveys over basement magnetic anomalies. However with changing exploration priorities it was decided to surrender the licence in November 2008.

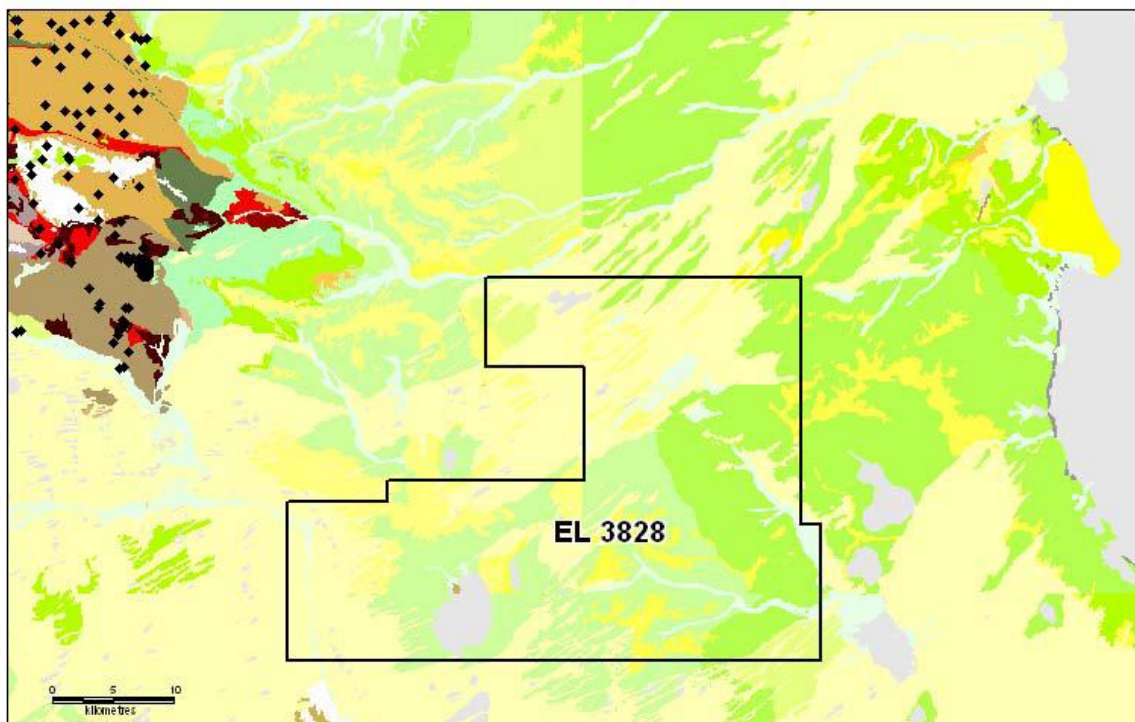


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Irrapatana	6139	1:100,000
Strangways	6239	1:100,000

DESCRIPTOR

This is the second and final report for EL 3828, Irrapatana.

KEYWORDS

Diamonds, Mesozoic, Peake & Denison Inlier.