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No. 12,827

EL 4726

BARNA HILL

SECOND PARTIAL SURRENDER REPORT FOR THE PERIOD 27/4/2011 TO 26/4/2015

Submitted by
Gawler Resources Pty Ltd
2016

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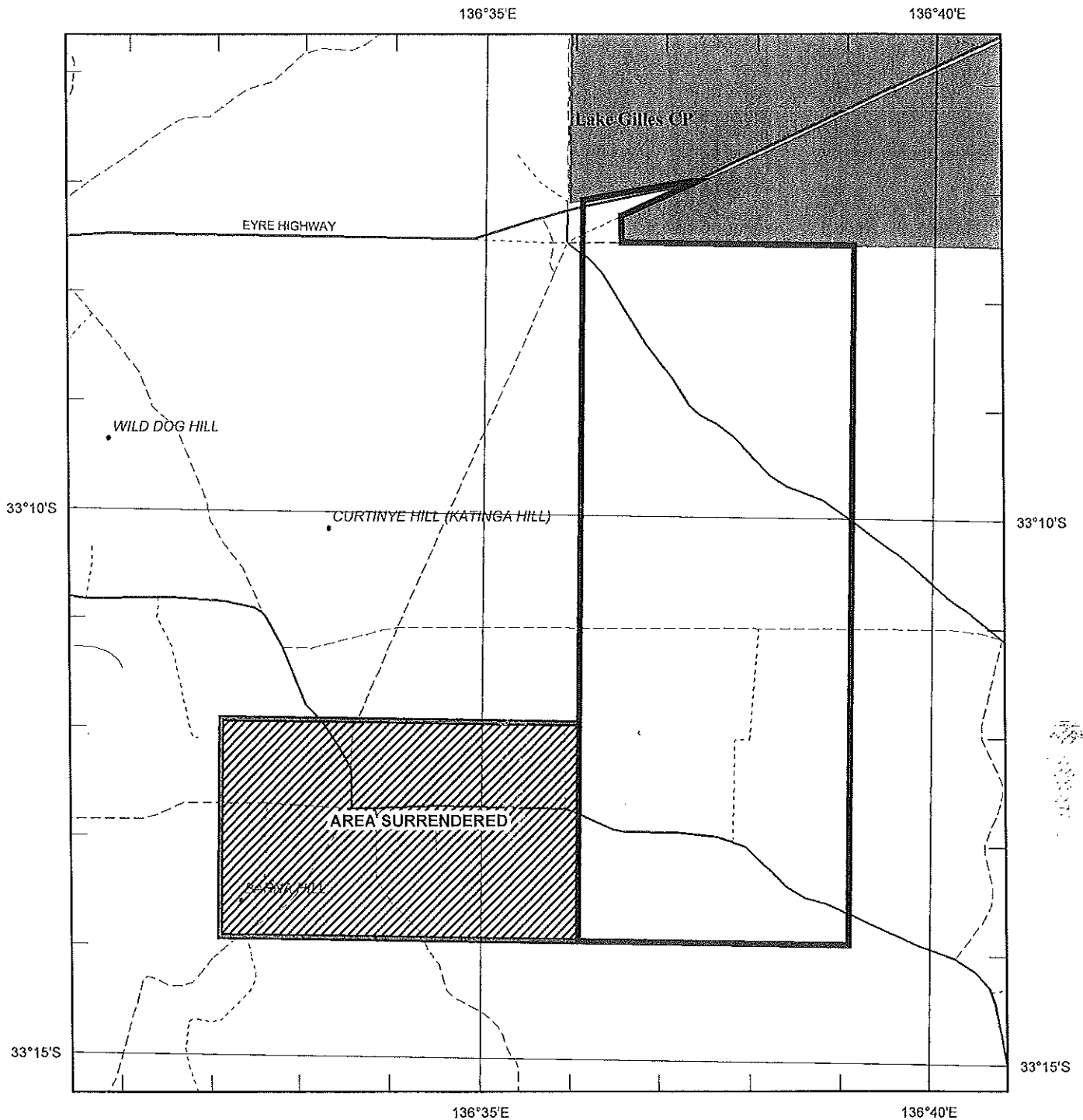
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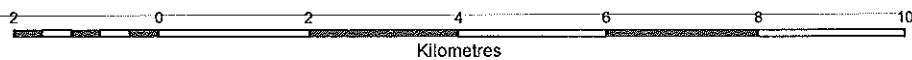


Government of South Australia
Department of State Development

SCHEDULE A



SCALE 1 : 100 000



LICENCE BOUNDARIES IN : DATUM AGD66

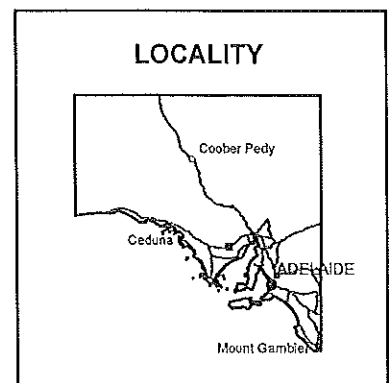
APPLICANT : GAWLER RESOURCES PTY LTD

FILE REF : 2010/00275 TYPE : MINERAL ONLY

AREA : 56 sq km (approx)

1 : 250 000 MAPSHEETS : WHYALLA

LOCALITY : BARNA HILL AREA -
Approximately 20 km ESE of Kimba



DATE GRANTED: 27-Apr-2011 DATE EXPIRED: 26-Apr-2015 EL NO: **4726**



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EL 4726 Barna Hill, Partial Surrender report, 12 months ending 26-04-2015.

EL 4726 Barna Hill, Partial Relinquishment report

250,000 mapsheet- SI53-8, Whyalla
100,000 mapsheet- 6231, Barna

Coordinates (GDA94 Zone 53)

Max Easting 653 950m, Min Easting 649 280m,
Max Northing 6 334 800m, Min Northing 6 319 970m

Keywords

Soil Sampling, Partial Leach Geochemistry.

Compiled by David Hopton, Senior Project Geologist, South Australia

EL 4726 Barna Hill, Partial Relinquishment report

Summary

This tenement was granted to Investigator Resources Limited on 27 April 2011 for a period of two years. It was subsequently transferred to its wholly owned subsidiary Gawler Resources.

Work on the tenement (including the parts relinquished on 26 April 2013, and further on 26/4/2015), consisted of notices of entry and negotiation of access agreements with various landholders and soil sampling across the tenement mainly on 1km x 1 km pattern. Selected areas e.g. over magnetic features were infilled to generally 100m spacing.

Most of this work was carried out in 2012 in the second year of the licence. No annual technical report was filed for this first year as a result of the lack of field work. However, annual technical reports by Investigator Resources over areas not relinquished will remain confidential until eventual licence surrender, further partial relinquishments, or expiry.

This report releases all technical data i.e. soil geochemistry in the 2015 relinquished area.

Samples were submitted for partial leach geochemistry by Genalysis, with generally weak geochemical anomalism seen in a range of economically important elements in the relinquished area.

A total of 24 soil samples were collected in the relinquished area.

EL 4726 Barna Hill, Partial Relinquishment Report

Table of Contents

1	Introduction	4
2	Tenure	4
3	Geological setting.....	6
4	Exploration work within the relinquished area	6
5	Conclusion.....	7
6	File Verification Listing	8
Figure 1.	Barna Hill EL 4726 tenement location	5
Figure 2.	Soil sample locations.....	7

1 Introduction

The Barna exploration licence was part of a wider East Eyre Peninsula Project commenced by Investigator Resources in 2007, with multiple tenements on central/upper Eyre Peninsula, about 60 kilometres west of Whyalla. The project comprises Peterlumbo (EL 4228), Lake Gilles (EL 5109), Mt Nott (EL 4827), Botenella Gate (EL 4257); Kimba (EL 4938, Moseley Nobs (EL 4860), and Uno Range (EL 4769), Morgans (EL 4828) and Moonabie (EL 4841), which cover a total area of approximately 3000 square kilometres.

2 Tenure

Exploration Licence 4726 “Barna Hill” was granted for 2 years to Investigator Resources on 27th April 2011.

Resource constraints and re-directed investment priorities within Investigator’s SA portfolio of tenements the during the period from 27/4/14 to 26/4/15 caused underspending with respect to the DMITRE minimum expenditure requirements, leading to the need to partially relinquish a portion of the tenement.

It was therefore necessary, to partially relinquish 23.2 km², approximately 30% of the tenement, upon expiry and application to renew the exploration licence on 27 April 2015 for a further year.

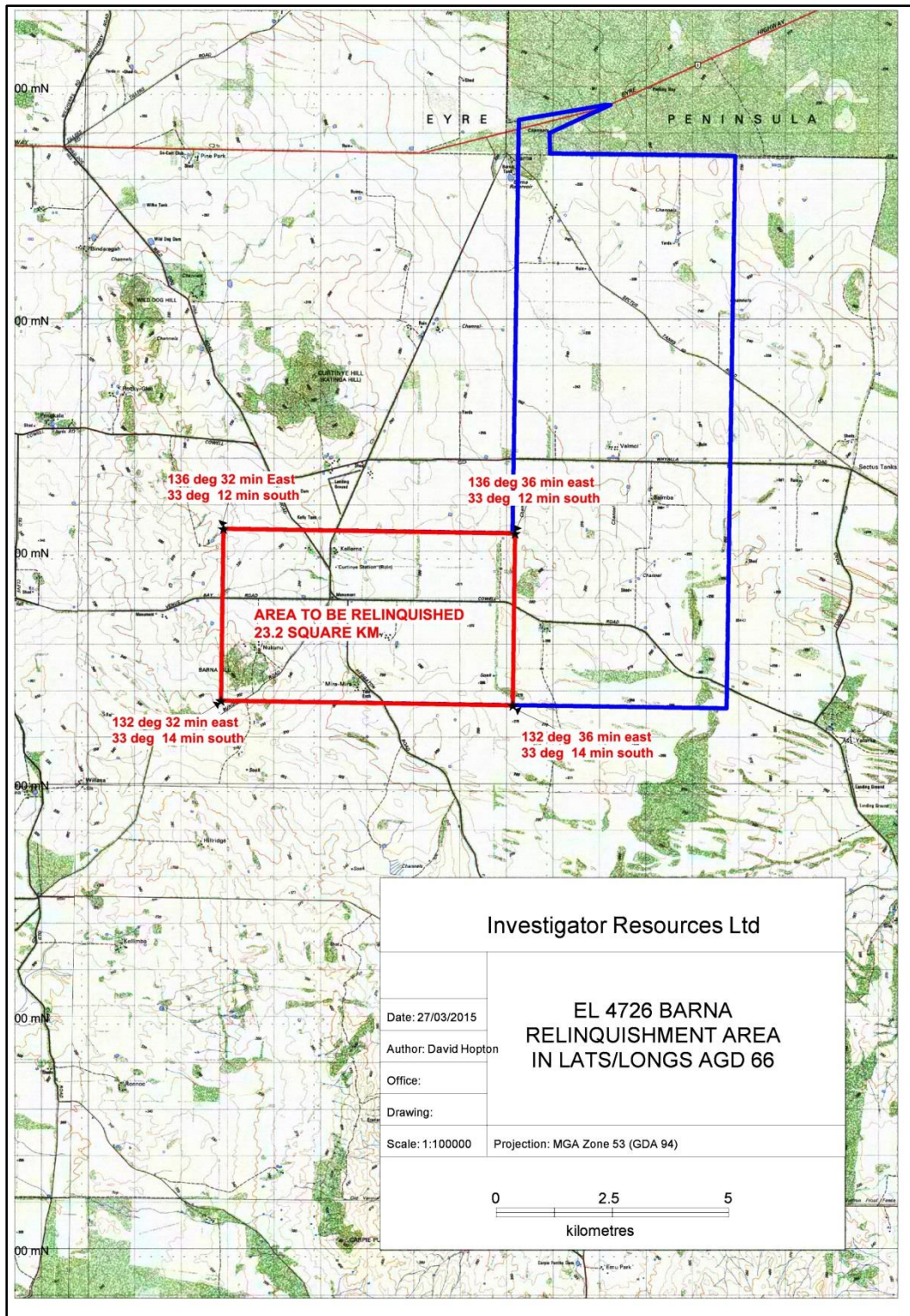


Figure 1 Barna Hill EL 4726 tenement location, showing relinquished area in red.

3 Geological setting

East Eyre Peninsula project lies in the Cleve and Spencer Sub-domains of the southern Gawler Craton. The predominant crystalline basement rocks are Palaeoproterozoic in age, and include Miltalie Gneiss, Hutchison Group metasediments, pre-early syntectonic granitoids and late syntectonic granitoids. Small inliers of Archaean Sleaford Complex crop out in places.

Intruding the older basement in a roughly northwest trending belt are Mesoproterozoic Hiltaba Suite granites. Outcrop is plentiful in the southern section of the project, but a thin cover of Quaternary fluvial, alluvial and aeolian sediments covers bedrock in much of the northern section.

The project lies near the southern margin of the Gawler Range Volcanics Domain, in a zone with known intrusions of Hiltaba Suite granites. At the time of the Hiltaba Suite thermal event, this would have been a shallow, sub-volcanic igneous environment, similar to the geological setting of IOCG deposits at Olympic Dam, Prominent Hill and Carrapateena.

The East Eyre Peninsula project lies on a major geological feature recognised by Investigator Resources as a northwest trending lineament, the Moonta-Tarcoola Corridor. The company recognises that this corridor contains a concentration of Hiltaba Suite intrusions and related mineralisation and likens it to a similar corridor containing the Olympic Dam, Prominent Hill and Carrapateena IOCG deposits.

This corridor has potential for Hiltaba related IOCG deposits, and epithermal style deposits similar to the recent Paris discovery, Menninnie Dam and other base metal and silver prospects known south of the GRV domain. Palaeoproterozoic metasediments (jaspilites) also host numerous iron deposits throughout the southern Gawler Craton.

The East Eyre Peninsula project may also have potential for vein style uranium deposits, hosted by major fault structures that were active at the time of Hiltaba Suite intrusion. In the southern part of the project, there may be potential for roll front style sedimentary uranium deposits, associated with redox boundaries identified by previous explorers.

4 Exploration work within the relinquished area

A soil survey was conducted across the area, initially on 1 km spacing, with closer spaced infill sampling over areas of special interest such as magnetic and structural features, to a maximum sample density of 200m (Nb not within the relinquished area). All samples were sent to Genalysis (Intertek) for partial leach analysis (TL8 method).

This uses a weakly alkaline leach to strip ions from the sand and clay particles, the theory being that the ions have migrated upwards from weathered basement through the regolith and deposited from water vapour just below the soil surface.

This method relies on ultra-low levels of detection and is specifically tailored for uranium exploration, however it is also suitable for a wide range of elements.

Located assays are included in the datafiles associated with this report.

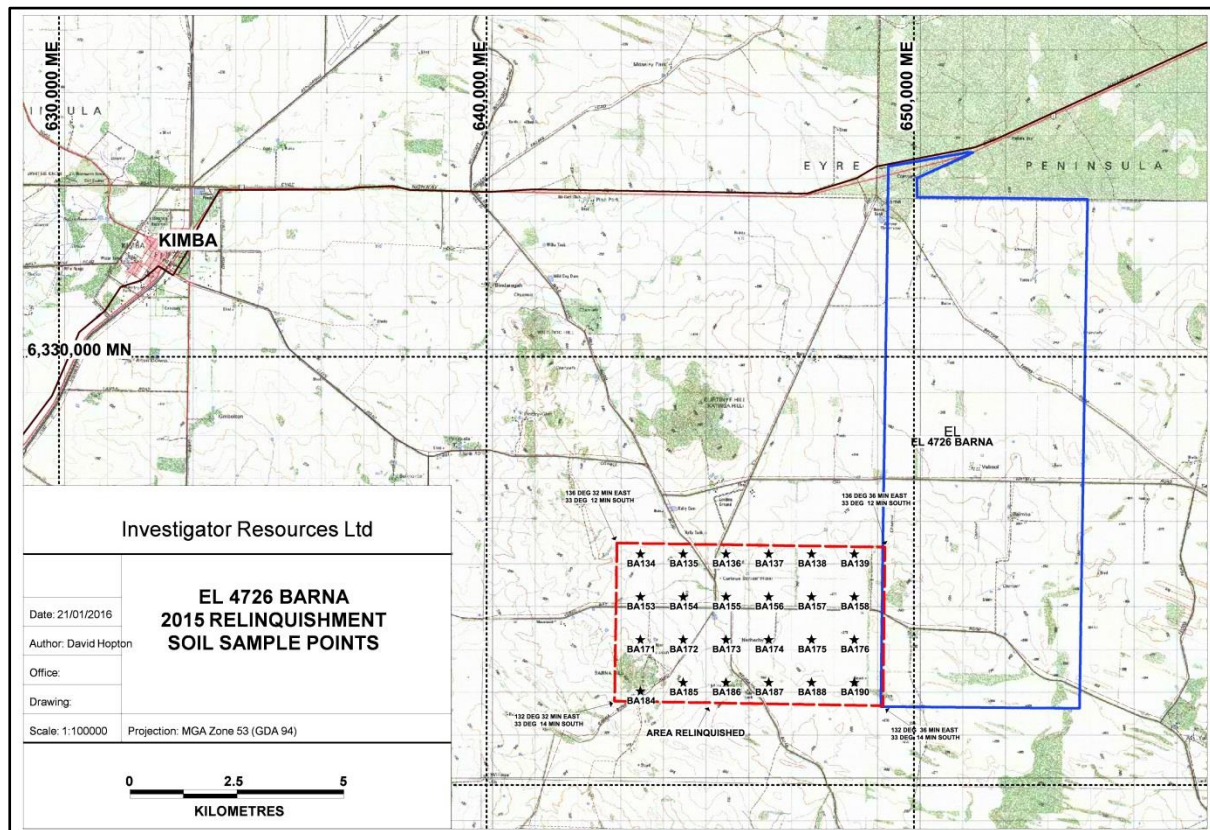


Figure 2 - Soil sample locations

5 Conclusion

Investigator Resources Ltd has explored the relinquished area with grid based geochemical soil sampling designed to uncover basement mineralisation under varying degrees and depths of cover, and analysing results against known geological and geophysical data and maps for this area.

Poor geochemical results gave little encouragement for further exploration of the relinquished area for the original target of base metals. The retained area has potential for graphite.

6 File Verification Listing

Exploration Work Type	File Name	Format
AIRBORNE EXPLORATION SURVEYS		
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital terrain modelling		
Other (specify)		
GROUND EXPLORATION SURVEYS		
GEOLOGICAL MAPPING		
Regional		
Reconnaissance		
Prospect		
Underground		
Costean		
GROUND GEOPHYSICS		
Radiometrics		
Magnetics		
Gravity		
Digital terrain modelling		
Electromagnetics		
SP / AP / EP		
IP		
AMT		
Resistivity		
Complex Resistivity		
Seismic Reflection		
Seismic Refraction		
Well logging		
Geophysical interpretation		
Other (specify)		
GEOCHEMICAL SURVEYING		
Drill sample		
Stream sediment		
Soil	EL4726 2015 R 03 Soil Data	txt
Rock chip		

Laterite		
Water		
Biogeochemistry		
Isotope		
Whole Rock		
Mineral analysis		
Other (specify)		
DRILLING		
Diamond		
Reverse Circulation		
Rotary air blast		
Air-core		
Auger		
Groundwater Drilling		
All Drilling		
OFFICE STUDIES		
Literature search		
Database compilation		
Computer modelling		
Reprocessing of data		
General research		
Report Preparation	EL4726 2015 R 01 Report	pdf
Other (specify)		
REMOTE SENSING		
Aerial Photography		
LANDSAT		
SPOT		
MSS		
Radar		
Other (specify)		