Open File Envelope No. 11,839

EL 4036

GULNARE

COMBINED FIRST ANNUAL / FINAL REPORT AT LICENCE EXPIRY/SURRENDER FOR THE PERIOD 23/1/2008 TO 22/1/2009

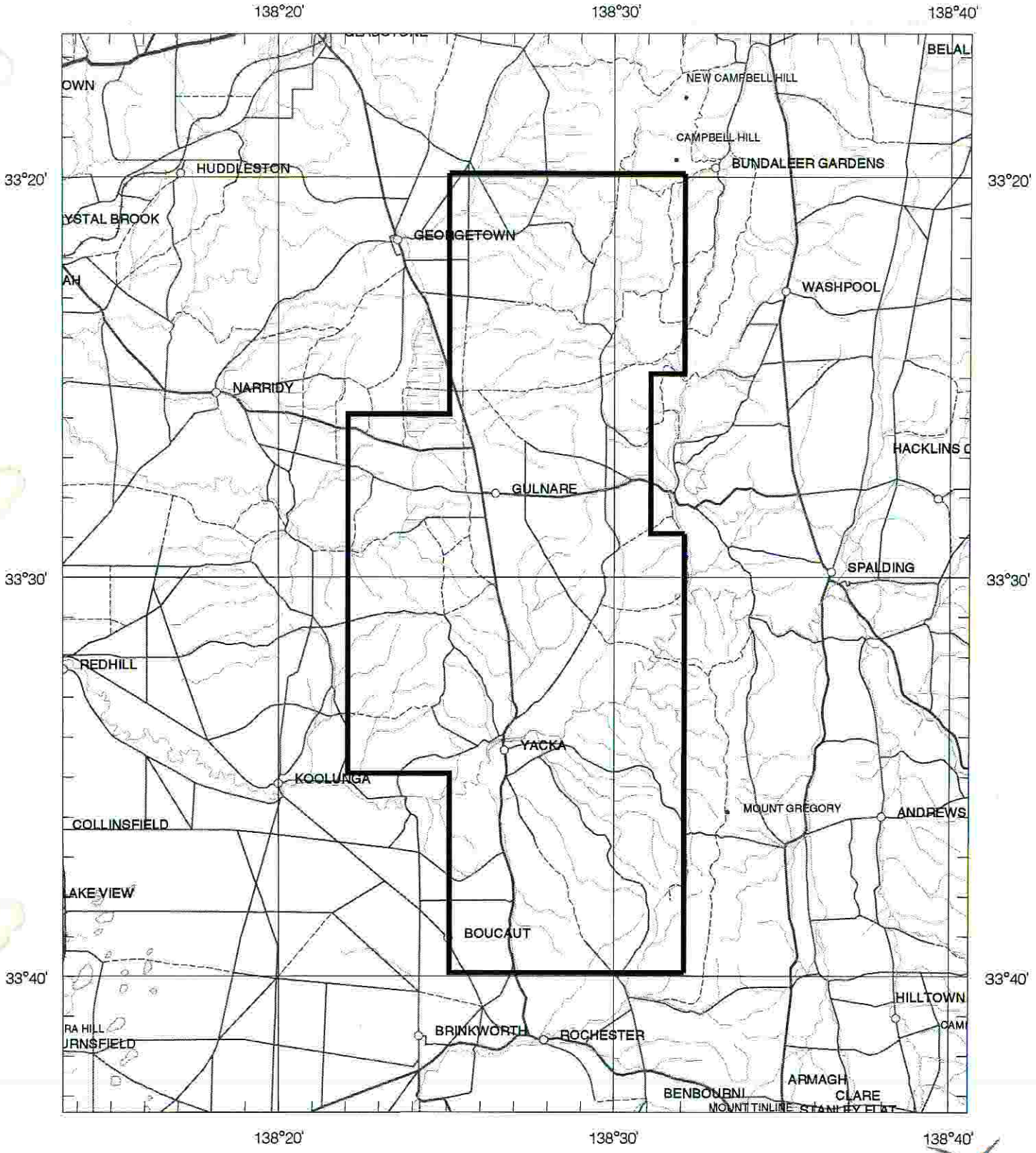
Submitted by
Regalpoint Exploration Pty Ltd
2008

Enquiries: Customer Services Branch
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



SCALE 1 : 250 000

KILOMETRES 5 0 5 10 15 20 25 KILOMETRES

LICENCE GRANTED IN : DATUM AGD66

GDA
GEOCENTRIC DATUM OF AUSTRALIA

APPLICANT : **REGALPOINT EXPLORATION PTY LTD**

FILE REF : **483/07** TYPE : **MINERAL ONLY** AREA : **467** km² (approx.)

1:250000 MAPSHEETS : **BURRA**

LOCALITY : **GULNARE AREA - Approximately 150 km north of Adelaide**

DATE GRANTED : **23-Jan-2008** DATE EXPIRED : **22-Jan-2009** EL NO : **4036**

PROJECT DETAILS

Project Name:	Gulnare
Tenement Number:	EL 4036
Tenement Operator:	Regalpoint Exploration Ltd
Tenement Holder:	Regalpoint Exploration Ltd
Report Type:	Final
Report Title:	Final Report for the Period 23 January 2008 to 22 January 2009, Gulnare Project, EL 4036
Report Period:	23 January 2008 to 22 January 2009
Author:	Oliver Kreuzer
Date of Report:	02 December 2008
1:250 000 map sheet:	BURRA SI 54-5
1:100 000 map sheet:	Pirie 6531, Jamestown 6631, Blyth 6530, Clare 6630
Target Commodity:	U
Keywords:	Uranium; spectrometer assays; Adelaide Fold-Thrust Belt; Warrina Supergroup; Heysen Supergroup
List of Assays:	K, U, Th

SUMMARY / ABSTRACT

Location:	The project area is centred upon the township of Gulnare, approximately 160 km north of Adelaide.
Geology:	The project covers a 36 km-long and 15 km-wide section of a regional-scale, N-S–striking and N–plunging syncline in the southern Adelaide Fold-Thrust Belt. The project area comprises a tightly folded assemblage of mainly siliciclastic and minor carbonate rocks of the Neoproterozoic Warrina Supergroup and unconformably overlying Neoproterozoic Heysen Supergroup. In the western part of the project area the Neoproterozoic sequences are largely obscured by Tertiary siliciclastic rocks and Quaternary alluvium.
Work done:	The 2008 work programme comprised of comprehensive desktop studies and reconnaissance exploration activities, including in-situ measurements using a hand-held RS-125 Super-Spec spectrometer.
Results:	Measured uranium concentrations of target lithologies were very low (0.0 to 2.8 ppm U). Desktop studies, including assessment of newly available public domain radiometric data also yielded discouraging results.
Recommendation:	Given the poor results of the desktop and field-based activities, Regalpoint will not seek a renewal of EL 4036.

Table of Contents

List of Figures and Tables

SUMMARY OF OPERATIONS

Desktop Study I

1. Compilation of geological data
   a. All readily available digital geoscientific data were compiled and integrated in a GIS. The main data sources were PIRSA, Geoscience Australia and FrOGTech.
   b. Brief description of the geology of Gulnare (EL 4036):
      - The project area is approximately 467 km^2 and centred upon Gulnare, a small town 160 km north of Adelaide.
      - The Gulnare project covers a 36 km-long and 15 km-wide section of a regional-scale, N-S–striking and N–plunging syncline in the southern Adelaide Fold-Thrust Belt (e.g., Paul et al., 1999). The project area comprises a tightly folded assemblage of mainly siliciclastic and minor carbonate rocks of the Neoproterozoic Warrina Supergroup and unconformably overlying Neoproterozoic Heysen Supergroup. In the western part of the project area the Neoproterozoic sequences are largely obscured by Tertiary siliciclastic rocks and Quaternary alluvium.
      - Minor (i.e., up to 3 km-long) NNE–SSW- and E–W- to WNW–ESE-striking faults are mapped in the northwestern portion of the Gulnare project area. No major faults transect the project area, although regional-scale (i.e., 250 to 350 km-long), N–S- to NW–SE-striking Neoproterozoic faults are present 1 km east and 8 km west of EL 4036.
      - As illustrated in Figures 1 and 2, the project area is located at the western margin of a Palaeoproterozoic basement high and at the boundary between two basement terranes: the Palaeoproterozoic Willyama (mainly metamorphic rocks) and Mesoproterozoic St Vincents (mainly igneous rocks) terranes. The strike of this boundary is NNW–SSE and approximately parallel to the strike of the major, regional-scale faults immediately west of the project area. It is likely that these faults are connected to / controlled by the underlying terrane boundary and, therefore, that they are long-lived, deep-seated structures that were active and permeable during deformation of the Adelaide Geosyncline.
   c. A literature review helped to put the geology of the Gulnare project in the broader regional and tectonic context:
      - According to Cowley (2007), “the Adelaide Geosyncline was a major sedimentary basin filled with a thick sequence of Neoproterozoic (ca. 850 to 545 Ma) to Cambrian (545 to 515 Ma) rocks over deeply subsided Palaeoproterozoic to Mesoproterozoic basement. During the Neoproterozoic in the Adelaide Geosyncline, deposition commenced with the sediments of the Warrina Supergroup (Callanna and Burra groups), deposited largely in rift basins and including some mafic volcanic rocks and evaporitic sediments in the lower part. These were followed by sandstone and carbonate rocks, deposited by rivers and along coastal regions, and siltstone, resulting from invasion by the sea. After a pause, sedimentation resumed with the Heysen

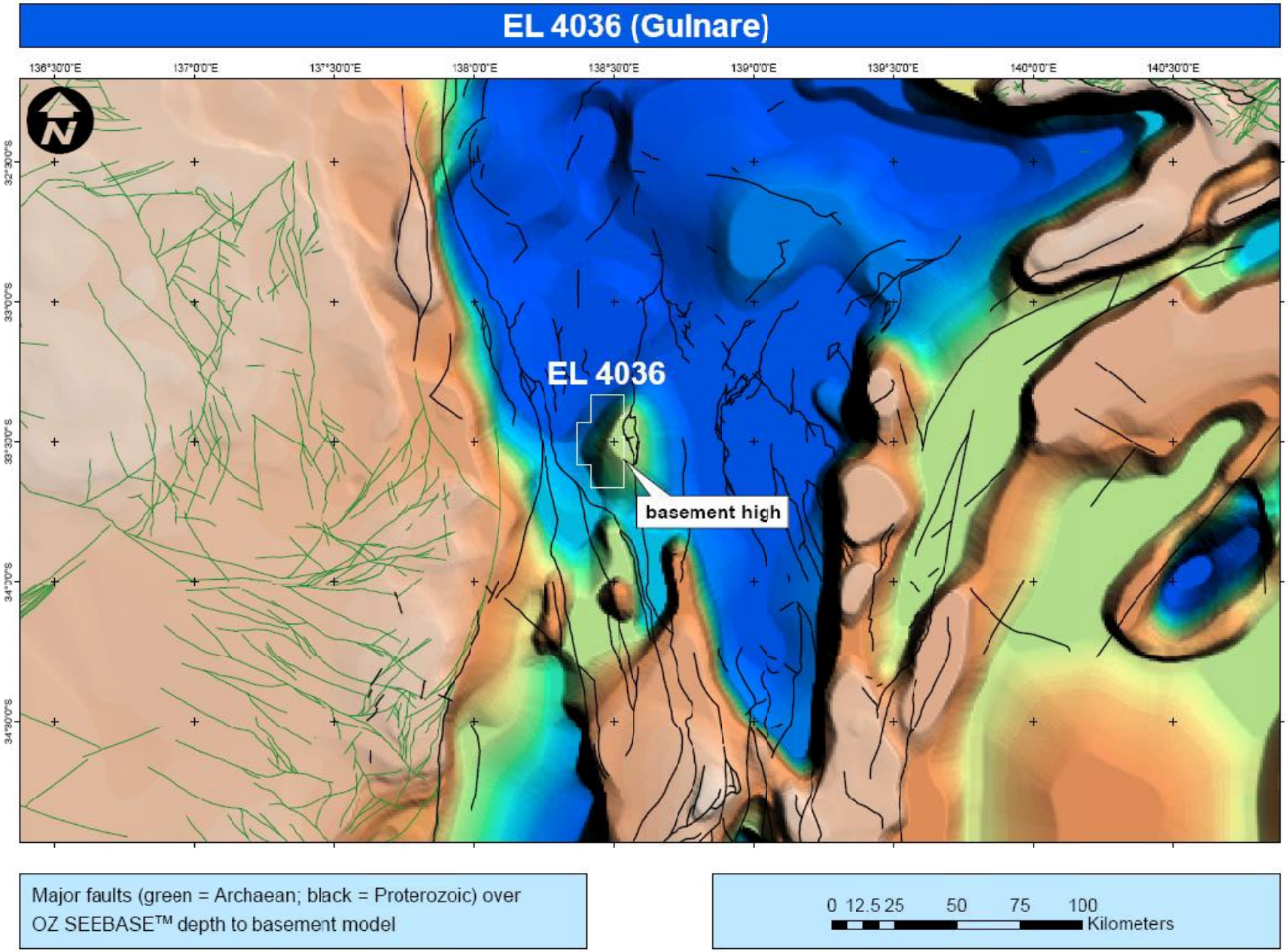


Figure 1. OZ SEEBASE™ depth to basement model (by FrOG Tech)

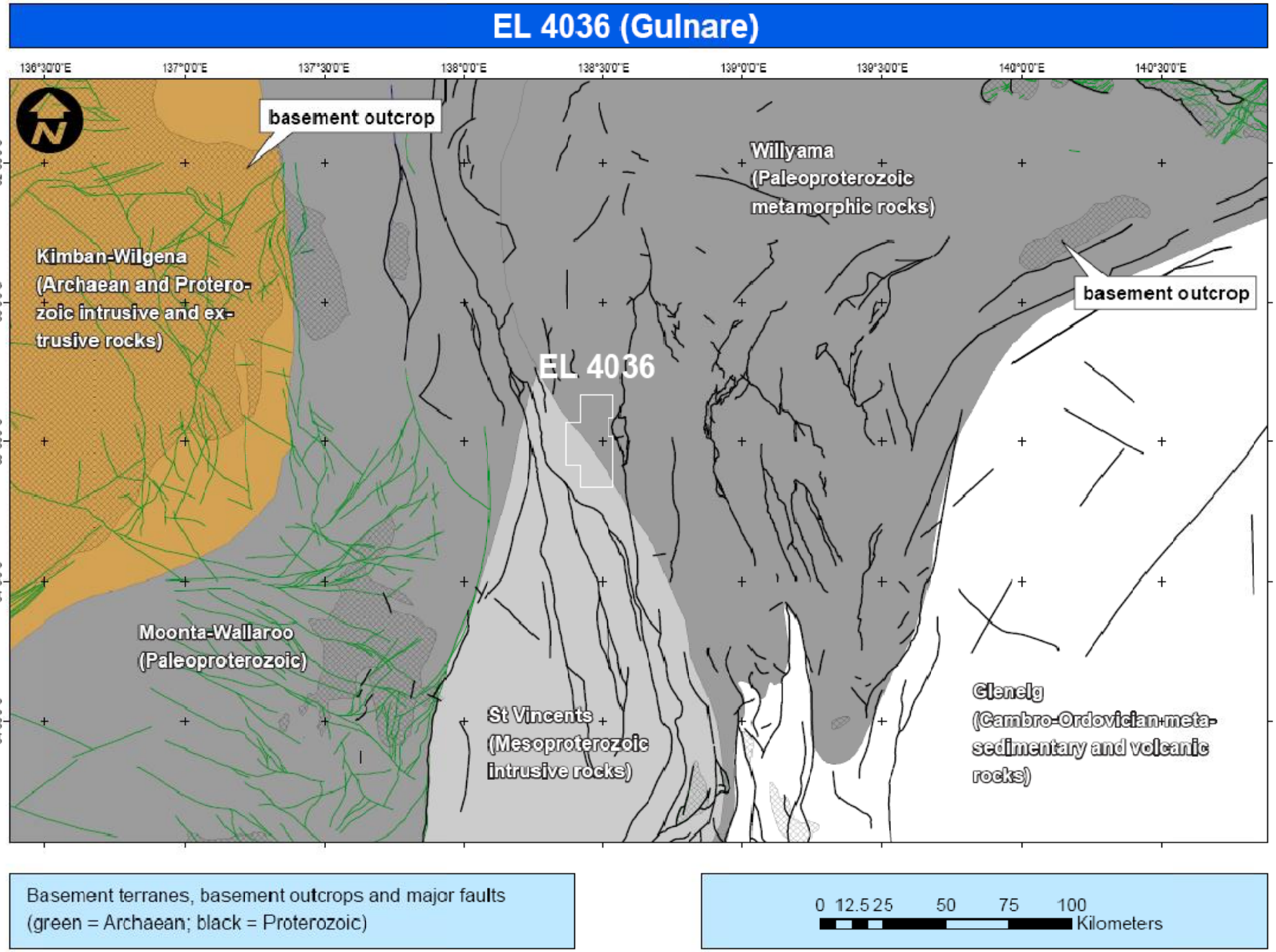


Figure 2. Basement terranes.

Supergroup (Umberatana and Wilpena groups), which commenced with sediments deposited during a world-wide glacial episode. After the glaciers melted, the sea again invaded the basin and deposited siltstone and carbonate rocks in shallow to deep water before a second glacial period ensued. The uppermost part of the Heysen Supergroup comprises two cycles of marine sediments which become coarser upward from mudstone to sandstone."

- During the Cambro-Ordovician Delamerian Orogeny, sedimentary rocks of the Adelaide Geosyncline were compressively deformed and folded into large-scale westverging folds and intruded by syn- to postkinematic granites, which occur only in the eastern part of the belt. The overall ENE- and locally WNW-trending fold axes suggest approximately north–south shortening (e.g., Mills, 1973; Milnes et al., 1977; Foden et al., 1990; Mancktelow, 1990; Flöttmann et al., 1994). The southern Adelaide Fold-Thrust Belt consists of an imbricate fan of large-scale west-vergent and largely NE–SW-trending folds and E- to SE-dipping basement-involved thrusts which are interpreted as inverted growth faults (e.g., Marshak and Flöttmann 1996; Flöttmann and James 1997).

2. Formulation of the exploration model
   a. The Gulnare project is conceptual in nature. There are no known uranium occurrences at or near Gulnare. The nearest ones are basement hosted and 130 km south (e.g., Norton, Hermitage and Inglewood) and 180 km northeast (e.g., Crockers Well and Radium Hill) of the project area. Hence, the Gulnare project is of greenfields status with respect to uranium exploration.
   b. The Gulnare project is an outcome of a GIS-based prospectivity study of Australian uranium mineralising systems undertaken at the Centre for Exploration Targeting (University of Western Australia and Curtin University of Technology) and funded by Regalpoint. Modelling results strongly imply that unconformities are an important, if not essential, ingredient of most sediment-hosted uranium systems. Geostatistical analyses of the spatial relationship between sediment-hosted uranium deposits and unconformities indicate a strong positive spatial association of these deposits with unconformities that is maximized within a certain distance from the unconformity. The study further suggested that sediment-hosted uranium deposits can form at significant distances from uranium sources, especially in the presence of permeable strata or structures.
   c. According to the GIS-based prospectivity model, the Gulnare area is prospective for structurally-controlled, sediment-hosted uranium deposits (Fig. 3). Regalpoint was attracted to the area and lodged an application because of the occurrence of graphitic, carbonaceous and pyrite-bearing sequences (Saddleworth Formation, shale members of the Undalya Quartzite, Kadlunga Slate and Tapley Hill Formation) close to regional-scale faults, and near / at a Neoproterozoic unconformity along the eastern limb of the syncline (Fig. 4). Given these parameters, the Gulnare project area incorporates two key ingredients that are crucial in the formation of sediment-hosted uranium deposits:

- suitable pathways (faults, fold, unconformity and permeable strata) for transportation of uranium-bearing fluids at a time of regional deformation, and
- likely “traps” for uranium deposition (reduced rock packages).

d. Potential sources of uranium are less obvious. However, felsic igneous and metamorphic rocks of the pre-Neoproterozoic basement and relatively uranium-enriched siliciclastic rocks of the Neoproterozoic Wilpena Group (Fig. 5), approximately 60 km north of Gulnare, are possible uranium sources. Uranium could have been liberated from such sources and transported to the project area by oxidised hydrothermal fluids that may have been available during the Cambro-Ordovician Delamerian Orogeny.

3. Investigation of past and present exploration activities
   a. An investigation of open file data of past exploration activities indicates that the Gulnare project area has received little attention by previous explorers and none in terms of uranium exploration.
      - In the early 1980s Dampier Mining Co Ltd (precursor to BHP Minerals Ltd) explored a large portion of EL 4036 for potential alluvial diamond deposits in Tertiary gravels and kimberlite rocks that may contain diamonds. The main exploration techniques applied by Dampier at its Snowtown (EL 0598) project were gravel sampling and airborne magnetic surveying at 250 m spacing. This early stage work was followed up by a programme of shallow drilling to delineate the extent of Tertiary gravel beds and ground magnetic surveys over circular magnetic anomalies over potential kimberlite bodies. However, no kimberlites were intersected and base metal analysis results were low, and the licence was relinquished.
      - Newmont Australia Ltd explored parts of EL 4036 in the early 1990s. Newmont’s Spalding project (EL 1667) covered part of the western portion of Regalpoint’s Gulnare project although Newmont’s work was mainly focussed on the “Spalding Inlier” to the east of Gulnare. The “Spalding Inlier” was considered by Newmont to have a favourable structural and stratigraphic setting for the possible development of sediment-hosted gold mineralisation. However, results of Newmont’s work were disappointing. With only low order gold anomalism having been detected the potential of the area to host a significant gold resource was considered unlikely. However, Newmont suggested that anomalous stream sediment results would warrant further work.
      - Intex Pty Ltd explored parts of EL 4036 in the mid 1990s for diamonds and stratiform cobalt deposits. Their Laura project (EL 1857) covered the northwestern part of EL 4036, which was subsequently relinquished due to its low perceived potential to host significant diamond or cobalt deposits.
      - In the period 2001 to 2005 Magnesium Developments Ltd explored the nortwestern portion of EL 4036, which formed part of their Nelshaby (EL 2828) project. The targets were magnesite beds within the Neoproterozoic Skillogalee Dolomite. A package of 8 high-grade magnesite beds was mapped over a strike length of 6 km at the Collaby Hill prospect, approximately 10 km north-northwest of Crystal Brook.

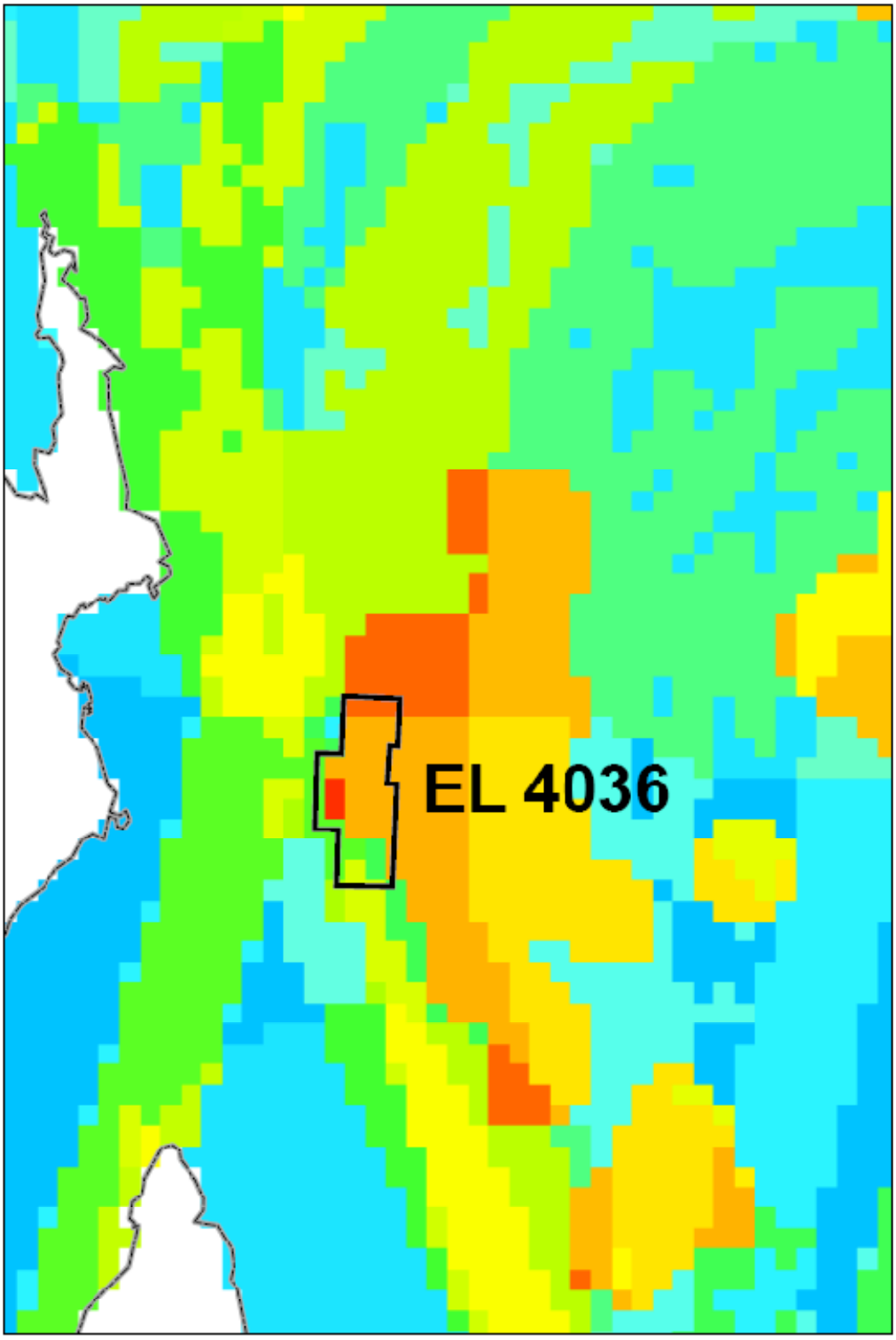


Figure 3. Uranium prospectivity model (pixel resolution = 4 km^2) for sediment-hosted uranium deposits (red = favourable, blue = unfavourable). This model is part of a continent-wide prospectivity analysis undertaken by the Centre for Exploration Targeting (University of Western Australia) (note: geographic coordinates were removed to protect IP).

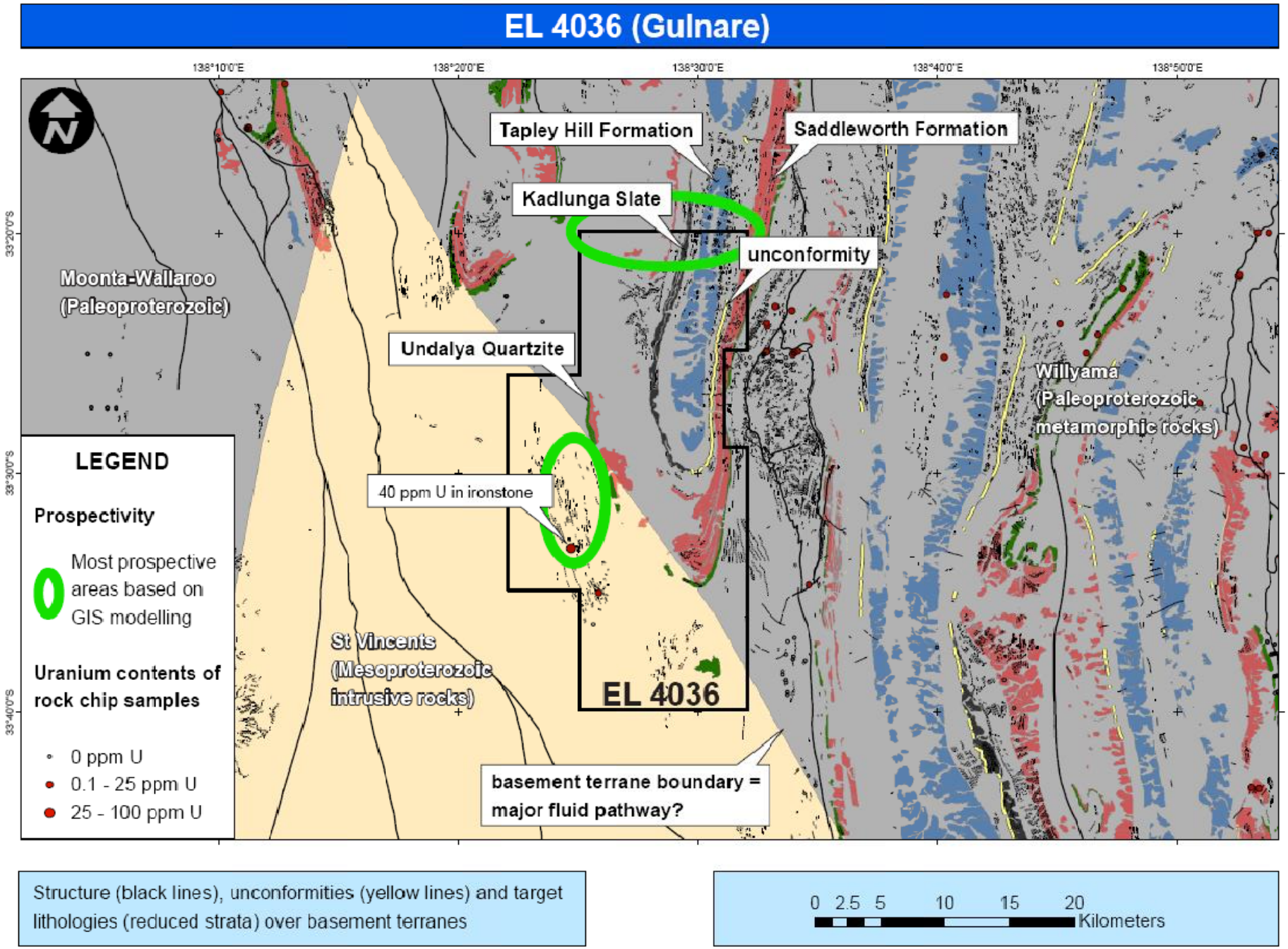


Figure 4. Key geological and exploration features at and in the vicinity of EL 4039.

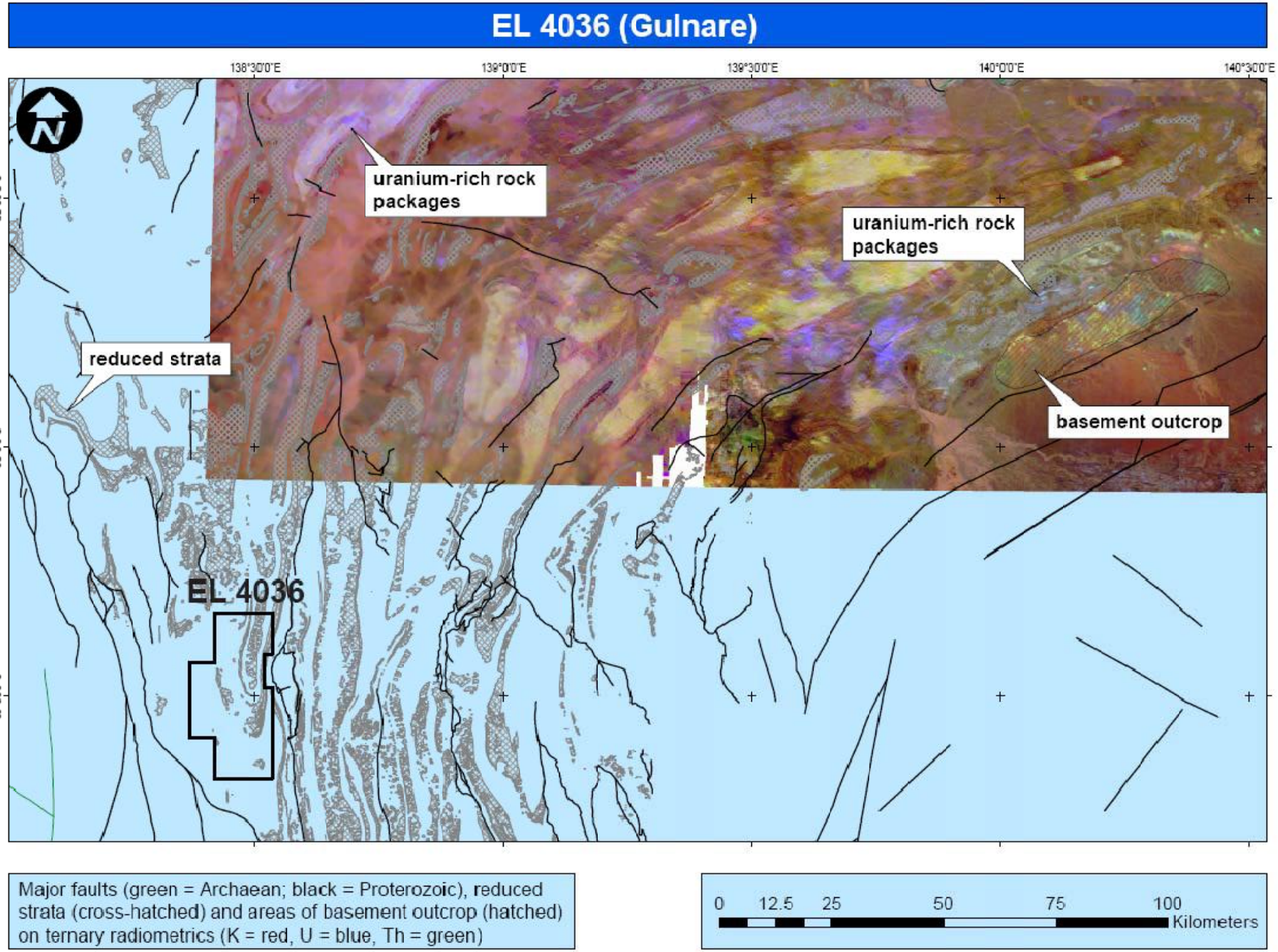


Figure 5. Reduced (carbonaceous or pyrite- or graphite-bearing) strata (cross-hatch pattern) and basement outcrop (hatched pattern) superimposed on ternary airborne radiometrics.

b. Present exploration programmes in the vicinity of the Gulnare project area are mainly targeting diamond (Flinders Diamonds Ltd), magnesium (Magnesium Minerals Pty Ltd) and copper deposits (e.g., Phoenix Copper Ltd). Gulnare appears to be one of few uranium-focused projects in the southern Adelaide Fold-Thrust Belt.

Initial Site Visit / Reconnaissance

An initial site visit to Gulnare was planned and executed in late June 2008.

a. Affected landholders were notified 2 weeks prior to commencement of field work. Only 1 landholder refused access to her property (Plan: D 2229, Parcel: B 14, Title: CT 5586562). Unfortunately, this 8 km^2 property covers good outcrop of the target lithologies and unconformity.
b. The main aims of the initial site visit were to (i) look at rock outcrops, (ii) take measurements of the uranium content of the target lithologies, and (iii) gather samples for chemical analysis. A secondary aim was to evaluate the area in terms of access and assess potential sites for future soil and stream sediment sampling.
c. Results
    - 22 measurements were made at EL 4036 of the uranium content of the Kadlunga Slate near Mount Misery and Saddleworth Formation, Mintaro Shale, Appila Tillite, Wilyerpa Formation and Tapley Hill Formation between the “Flairville” and “Yandowie” homesteads, using a RS-125 Super Spec by Radiation Solutions Inc. The measurements are listed in Table 1. No significant uranium values were recorded in the reduced, pyrite-bearing, graphitic or carbonaceous target sequences within the Saddleworth Formation, Kadlunga Slate and Tapely Hill Formation. The best values were 2.7 and 2.8 ppm U from pyrite-bearing black shales of the Tapely Hill Formation near “Flairville” homestead. Granite and gneiss boulders in tillite near “Flairville” homestead gave values in the range of 0.0 to 2.3 ppm U.

Tabe 1. Results of spectrometer readings at EL 4036

Latitude	Longitude	Rock Type	Total [ppm]	Total [cpm]	K [ppm]	K [cpm]	U [ppm]	U [cpm]	Th [ppm]	Th [cpm]	Dose	Dose units
33° 21.024'	138° 30.734'	shale (black, pyrite-bearing)	216.2	1,834.1	2.1	159.5	2.8	33.5	13.4	27.4	78.7	nGy/h
33° 21.024'	138° 30.734'	shale (black, pyrite-bearing)	185.2	1,571.0	1.8	128.4	2.7	24.7	7.3	15.5	57.6	nGy/h
33° 21.024'	138° 30.734'	shale (black, pyrite-bearing)	194.1	1,646.6	2.1	147.1	0.3	22.1	13.4	26.9	65.7	nGy/h
33° 21.044'	138° 30.938'	shale (black)	225.3	1,911.5	2.3	163.1	2.1	27.3	11.0	22.8	71.3	nGy/h
33° 21.052'	138° 30.953'	conglomerate	123.0	1,043.3	0.9	69.3	0.0	14.3	10.5	20.7	40.1	nGy/h
33° 21.062'	138° 30.975'	shale (black)	230.4	1,954.6	2.2	159.0	1.7	27.8	12.7	25.9	72.7	nGy/h
33° 21.14'	138° 30.994'	tillite (granite boulder)	222.0	1,883.3	2.3	163.6	2.1	29.3	12.3	25.3	74.7	nGy/h
33° 21.818'	138° 32.805'	sandstone (gray) with quartz veins	159.7	1,354.8	1.7	114.8	1.4	18.4	7.5	15.5	49.2	nGy/h
33° 21.835'	138° 32.722'	sandstone (red) with quartz veins	194.2	1,648.1	2.4	156.8	1.7	17.9	5.1	11.4	55.0	nGy/h
33° 21.901'	138° 32.469'	sandstone (pink) with quartz veins	118.4	1,004.8	1.1	84.3	0.9	16.9	8.4	17.0	42.4	nGy/h
33° 22.083'	138° 32.361'	shale (black)	286.0	2,426.1	3.9	252.3	0.4	29.9	17.2	35.2	99.2	nGy/h
33° 22.097'	138° 32.227'	shale (gray) with calcite veins	171.3	1,453.7	1.9	128.3	0.0	18.9	12.6	25.3	58.5	nGy/h
33° 22.138'	138° 31.871'	shale (gray, pyrite-bearing) with calcite veins	177.2	1,503.8	1.7	127.9	1.6	25.7	12.0	24.3	63.4	nGy/h
33° 22.113'	138° 31.673'	sandstone (pink) at redox boundary	137.5	1,166.7	2.5	144.3	0.0	6.0	3.2	7.2	40.8	nGy/h
33° 22.053'	138° 31.628'	shale (gray, oxidised pyrite)	266.3	2,259.5	3.4	226.4	1.1	31.4	16.5	33.6	94.3	nGy/h
33° 22.082'	138° 31.467'	sandstone (red) with quartz veins	79.1	671.0	1.2	73.4	0.0	5.5	3.5	7.2	25.0	nGy/h
33° 21.955'	138° 31.263'	tillite (matrix)	200.2	1,698.9	2.2	152.2	1.9	25.7	10.5	21.7	67.0	nGy/h
33° 21.955'	138° 31.263'	tillite (granite boulder)	198.8	1,686.5	1.4	116.0	2.3	29.3	12.5	25.3	64.8	nGy/h
33° 21.955'	138° 31.263'	tillite (gneiss boulder)	151.1	1,282.2	1.3	94.2	0.0	15.8	12.0	23.8	49.6	nGy/h
33° 21.229'	138° 28.727'	sandstone (gray, silicified)	106.7	904.9	1.2	82.7	1.0	14.3	6.0	12.4	37.0	nGy/h
33° 21.576'	138° 28.851'	shale (gray, laminated)	120.5	1,022.4	1.4	97.2	0.1	13.8	8.7	17.6	42.6	nGy/h
33° 29.931'	138° 29.644'	siltstone (gray)	66.1	561.2	0.6	47.5	1.0	10.1	3.5	7.2	23.1	nGy/h

- Seven rock samples were collected that are representative of the outcropping rock packages. Given the very low uranium content of these samples they were not sent to a laboratory for further testing.

d. Interpretation of results
   - The low to very low uranium content of rocks measured in the Flairville-Yandowie and Mount Misery areas is disappointing and suggest that this particular area within EL 4036 is unlikely to host a significant uranium resource.
   - If the low to very low uranium contents of granite and gneiss boulders in tillite near "Flairville" homestead were representative of the geochemical make-up of the rocks of the underlying St Vincents and Willyama basement terranes, the basement could not have been a source of uranium. However, the source of these boulders is not constrained. They could have been transported by glaciers and / or melt waters from areas up to 100s of kilometres away. Moreover, 3 samples are clearly insufficient to support the hypothesis of a uranium-poor basement, in particular when considering that metamorphic rocks of the Barossa Complex (Mount Lofty Ranges Inlier), windows of Palaeoproterozoic basement that are exposed 130 km south-southwest and 200 km south of Gulnare, contain uranium occurrences.

Desktop Study II

1. Interpretation of new radiometric data
   a. PIRSA recently made available for download from SARIG a new ternary radiometric image covering approximately 80% of the total area of South Australia, including EL 4036.
   b. The resolution in the part of the new ternary radiometric image that covers EL 4036 is coarse (Fig. 6A). However, it is obvious from this image that the rock packages that are exposed within EL 4036 are uranium-poor compared to those in areas with known uranium occurrences and deposits (e.g., Croakers Well, Beverley and Radium Hill). Moreover, the data clearly illustrate that EL 4036 does not contain any significant uranium anomalies.
   c. Two domains within EL 4036 are characterised by relatively higher uranium values (Fig. 6B). These domains were previously identified as areas of interest (Fig. 4) and tested by measuring the uranium content of exposed rocks with a RS-125 Super Spec (Table 1).
2. Implications
   a. The spectrometer measurements (Table 1) and regional airborne radiometric data (Fig. 6) strongly suggest that the rocks that are exposed within EL 4036 contain low to very low uranium concentrations.
   b. Given the good exposure of potential uranium traps (i.e., reduced strata) at, above and below the targeted unconformity, the main implication of the consistently poor uranium content of the local rocks is that EL 4036 is unlikely to host a significant uranium mineralising system.
   c. Given a. and b., any additional exploration spending on EL 4036 could be a waste of precious funds.

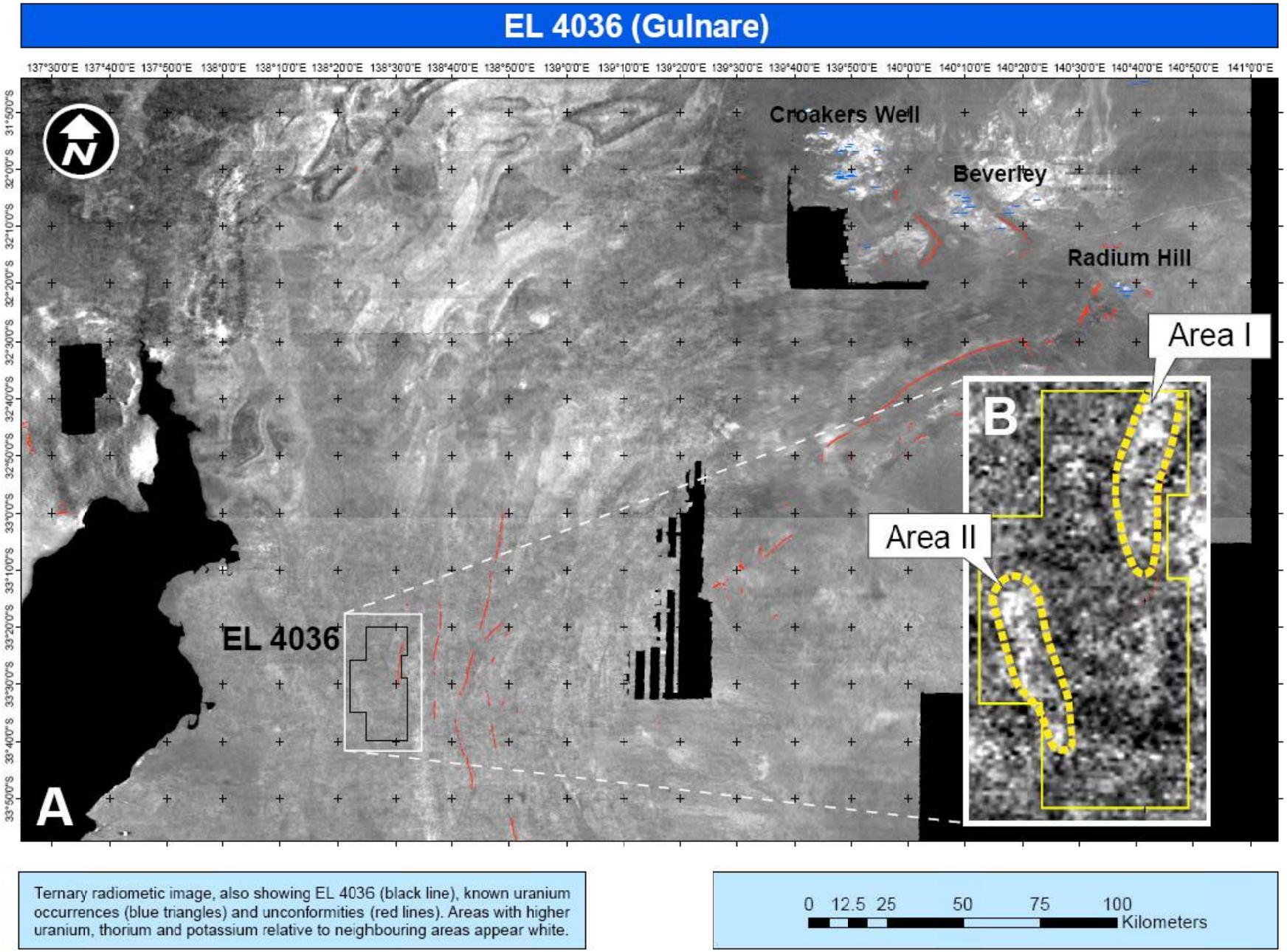


Figure 6. Ternary airborne radiometrics.

RECOMMENDATION

Given the disappoint results and serious implications of the work undertaken to date it is unlikely that the area contains significant uranium mineralisation. Hence, Regalpoint will not apply for a renewal of EL 4036.