



CONFIDENTIAL COMMERCIAL INFORMATION
REGULATORY REPORTING

2nd ANNUAL & FINAL TECHNICAL REPORT

For the period 1st November 2011 to 1st November 2013

DJAMBIDJIMBA PROJECT

Exploration Licence 28701

Northern Territory

250k Mapsheet: Mount Doreen (SF52-12)

MGA Zone 52 (GDA94)

Report No: ROY0746

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PROJECT NAME: Djambidjimba Project

TENEMENT NO: EL28701

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REPORT TITLE: 2nd Annual & Final Technical Report
For the period 2nd November 2011 to 1st November 2013
Djambidjimba Project
EL28701
Northern Territory

AUTHOR: Ian Faris, compiled by Bethany Lawrence
Royal Resources Limited

DATE COMPILED: December 2013

DATUM: GDA94 Zone 52

1:250,000 SHEET AREA: Mount Doreen (SF52-12)

1:100,000 SHEET AREA: Vaughan (5053)

MINERAL FIELD: Ngalia Basin

COMMODITY: Uranium

ABSTRACT

- LOCATION:** The Djambidjimba Project is located approximately 350 kilometres northwest of Alice Springs on the northwestern margin of the Ngalia Basin, Northern Territory. The project is defined by a single Exploration Licence, EL28701, which covers an area of 16km² (5 blocks) and is located on the Mount Doreen (SF52-12) 1:250,000 sheet and the Vaughan (5053) 1:100,000 sheet.
- GEOLOGY:** The Djambidjimba Project is situated on the northwestern margin of the Ngalia Basin, a basin containing sediments up to 6000m thick ranging in age from Neoproterozoic to Palaeozoic and preserved in an elongate structure. The tenement covers an area to the south of the Treuer Range and the Vaughan Springs Syncline which is fault bounded to the south by the Waite Creek Thrust. EL28701 is predominately covered by Quaternary sands and Cainozoic gravels and laterite and believed to be underlain by units of the Carboniferous Mount Eclipse Sandstone. The Djambidjimba Mesa outlines the horizon in an otherwise flat lying desert terrain; the mesa development may be related to a NW-SE trending structure and is comprised of Mount Eclipse Sandstone.
- WORK DONE:** During the two year tenure all exploration efforts were focused on determining the uranium prospectivity of the Mount Eclipse Sandstone by desktop studies in order to collaborate EL28701 with the surrounding Ngalia Basin tenement holdings.
- No field work was undertaken as Royal was awaiting the finalisation of Exploration Agreements with the CLC on behalf of the Traditional Owners.
- CONCLUSIONS:** This work identified that the Mt Eclipse Sandstone overlies an irregular basement, which in turn is overlain by incised Tertiary channels, probably controlled by structure and the incompletely buried topography. It is assumed at this stage that the structures extend through the Mt Eclipse Sandstone but this has not been confirmed. Changes in the Company's exploration focus have resulted in surrender of the tenement.
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1 INTRODUCTION AND TENURE

This 2nd Annual and Final Technical report details the exploration completed on the Djambidjimba Project for the second year tenure period 2nd November 2011 to 1st November 2013. The reporting area comprises one surrendered Exploration Licence EL28701 situated approximately 350 kilometres northwest of Alice Springs on the margin of the Ngalia Basin, Northern Territory. The tenement covers 5 blocks (16 km²) and was 100% owned by Royal Resources Limited (“Royal”). Tenement details listed Table 1.

The exploration focus was uranium mineralisation hosted by structures in the Mt Eclipse Sandstone or by Tertiary palaeo-channels buried beneath the Quaternary sands. During the reporting period, Royal undertook literature searches and the initial compilation of public data sets within the region of EL28701. No field work was undertaken and a change in Company focus has led to the surrender of the tenement.

All coordinates in this report are in MGA94 Zone 52.

Table 1: EL28701 Tenement details

Tenement	EL28701
Location	Djambidjimba
Grant date	2 nd November 2011
Surrender date	1 st November 2013
Area	5 Blocks (16 km ²)
Expenditure Covenant	\$12,750

2 LOCATION AND ACCESS

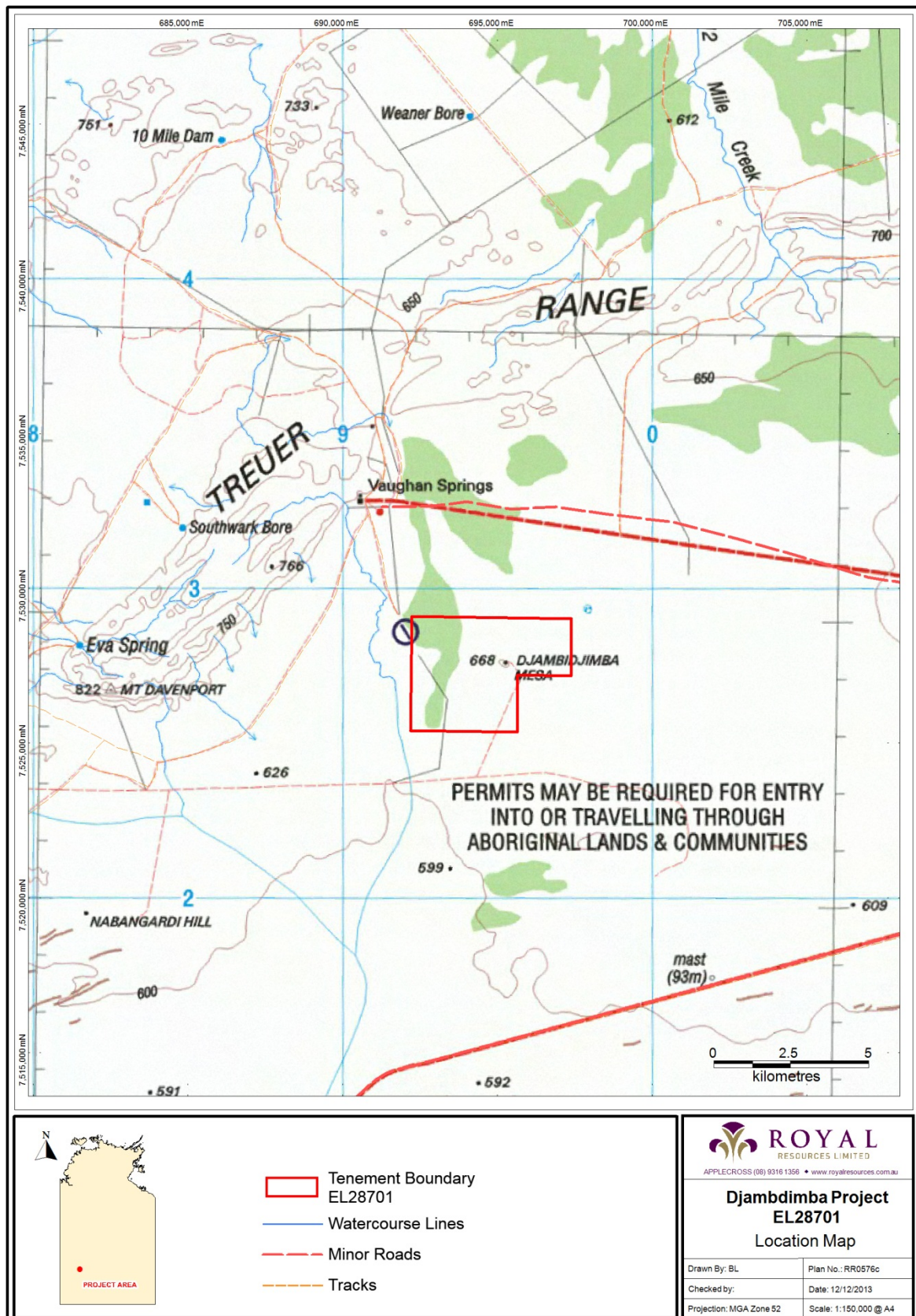
EL28701 is located 350 kilometres northwest of Alice Springs in the Northern Territory, (Figure 1) on the Mt Doreen (SF52-12) 1:250,000 geological mapsheet and the Vaughan (5053) 1:100,000 mapsheet. Access to the area is by the sealed Stuart Highway for approximately 20 kilometres heading northwest of Alice Springs, then by travelling 265 kilometres northwest along the Tanami Highway and turning west, ~35km further north of Yuendumu along the access road toward Vaughan Springs Homestead.

3 REGIONAL GEOLOGY

The Djambidjimba Project is contained within the Ngalia Basin. The basin contains sediments up to 6000m thick ranging in age from Neoproterozoic to Palaeozoic and preserved in an elongate structure that is remnant of a much more extensive, polyphase intracratonic basin.

The NeoProterozoic Vaughan Springs Quartzite is the oldest unit in the Ngalia Basin and mostly forms ridges along the northern and southern margins and contains the Treuer Member, a less-resistant interbedded siltstone and sandstone. It unconformably overlies the Arunta Inlier basement and is overlain conformably by carbonate units of the Albinia Formation, which in turn is overlain by the Naburula Formation, the Mount Stuart Formation, Rinkabeena Shale and unconformably by glacial deposits of the Mount Doreen Formation. The Yuendumu Sandstone, Walbiri Dolomite, Bloodwood Formation, Djagamara Formation and Kerridy Sandstone were deposited, the latter during the Ordovician. Unconformably overlying, the youngest Mount Eclipse Sandstone was deposited during the Carboniferous and crops out widely in the Ngalia Basin having a maximum thickness of more than 3000m and hosts the majority of the sandstone-uranium mineralisation. It is a medium to coarse-grained feldspathic sandstone, commonly with carbonate cement. Conglomerate, arkose, dolomitic sandstone and shale are present as lenses. The rocks are dominantly red, although restricted zones of light to dark grey and yellow-brown sandstone are present.

Figure 1: Djambidjimba Project Locality Map



The Arunta Block, located on the northern and western margins of the Ngalia Basin, is host to the Southwark Granite, an undivided megacrystic biotite and muscovite-biotite granite with minor microgranite and leucogranite, pegmatite and aplite dykes, (Young et al. 1995). The Southwark Granite is considered to be the source of uranium within the Mount Doreen area. Seismic data indicates that the basin is an asymmetrical synclinal structure which preserves a much thicker succession on the northern margin marked by northerly dipping thrusts (Waite Creek and Yuendumu Thrusts) and high angle reverse faults. The current basin configuration results from effects of the 300-400Ma Alice Springs Orogeny. This involved exhumation of the basement which became the provenance for the Carboniferous Mt Eclipse Sandstone (Edgoose, 2006).

3.1 Local Geology

The project is in the western Ngalia Basin, (Figure 2). The area is dominated by the Djambidjimba Mesa (Mt Eclipse Sandstone) within essentially flat lying Cainozoic sands and gravels and Quaternary aeolian sand covered plains. There are no known uranium prospects or drill holes within the Licence areas beside the shallow shot holes for the seismic surveys related to petroleum exploration (Line NT_Ext). EL28701 is ~20 kms to the southwest of the Bigrlyi uranium deposit, which was discovered within the Mount Eclipse Sandstone by Central Pacific Minerals NL (CPM) in 1971 following up surface radiometric anomalies. Most of the uranium mineralisation encountered to date within the Ngalia Basin is in the basal Mt Eclipse Sandstone. Central Pacific Mines NL sub-divided the basal 500m of the Mt Eclipse Sandstone into eight units, namely Units A to H (Pope, 1978). Unit C contains most of the known mineralisation. More recently, exploration companies (Thundelarra) have identified significant uranium mineralisation within Tertiary channels incised into the Mt Eclipse or related to buried topography.

The uranium is thought to be sourced from the Southwark Granite, transported in oxidising solutions and precipitated in reduced sandstones containing carbonaceous material and pyrite such as the Mount Eclipse Sandstone, although more recent work (CSIRO, pers. comm.) suggests most of the 'carbonaceous matter' are vanadium minerals. Uranium minerals include carnotite in the oxidised zone and uraninite±montroseite in the fresh rock below the water table. Diagnostic alteration in the Bigrlyi deposit includes hematitisation, chloritisation and kaolinisation.

Three exploration models exist at present, namely:-

- uranium associated with structures and associated with redox fronts within, although not restricted to the Mt Eclipse Sandstone;
- within Tertiary channels overlying the Mt Eclipse Sandstone and
- associated with surficial calcrete deposits.

To the northwest is the Vaughan Springs Syncline which is thrust along the Waite Creek Thrust, Figure 3.

Figure 2: Djambidjimba Geology Mount Doreen NTGS 250k

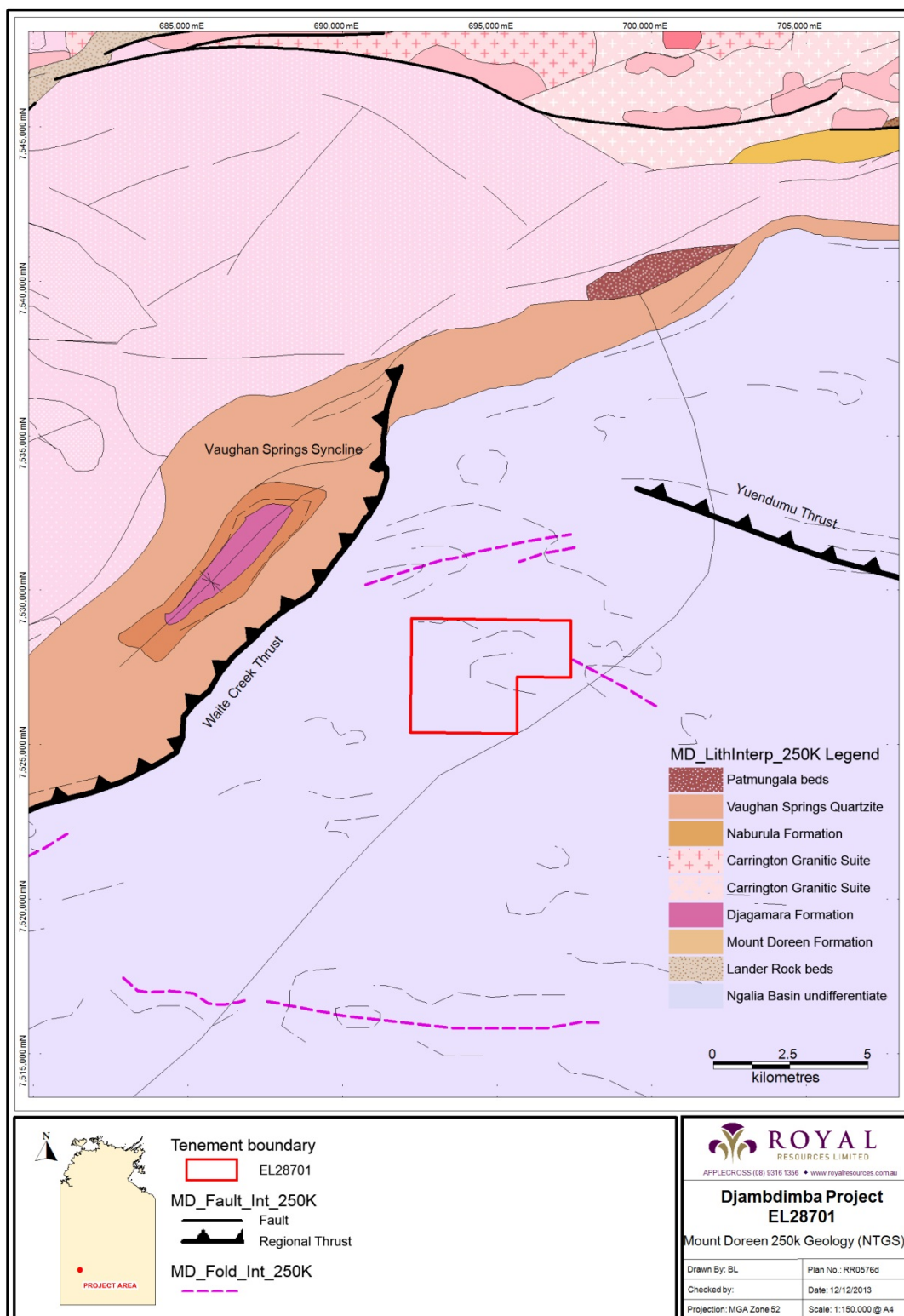


Figure 3: Vaughan Springs Syncline (Mount Doreen SF52-12 extract)

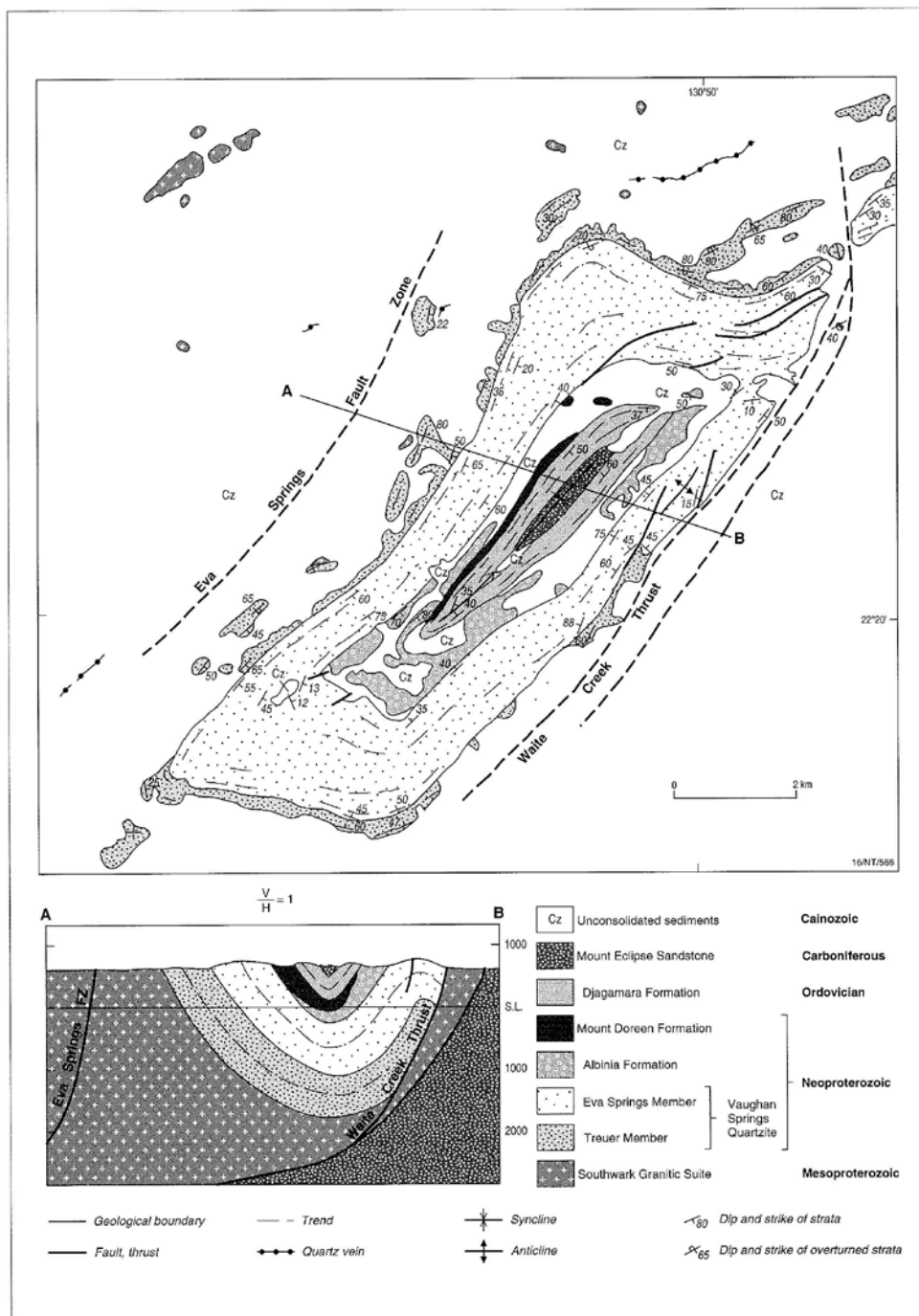


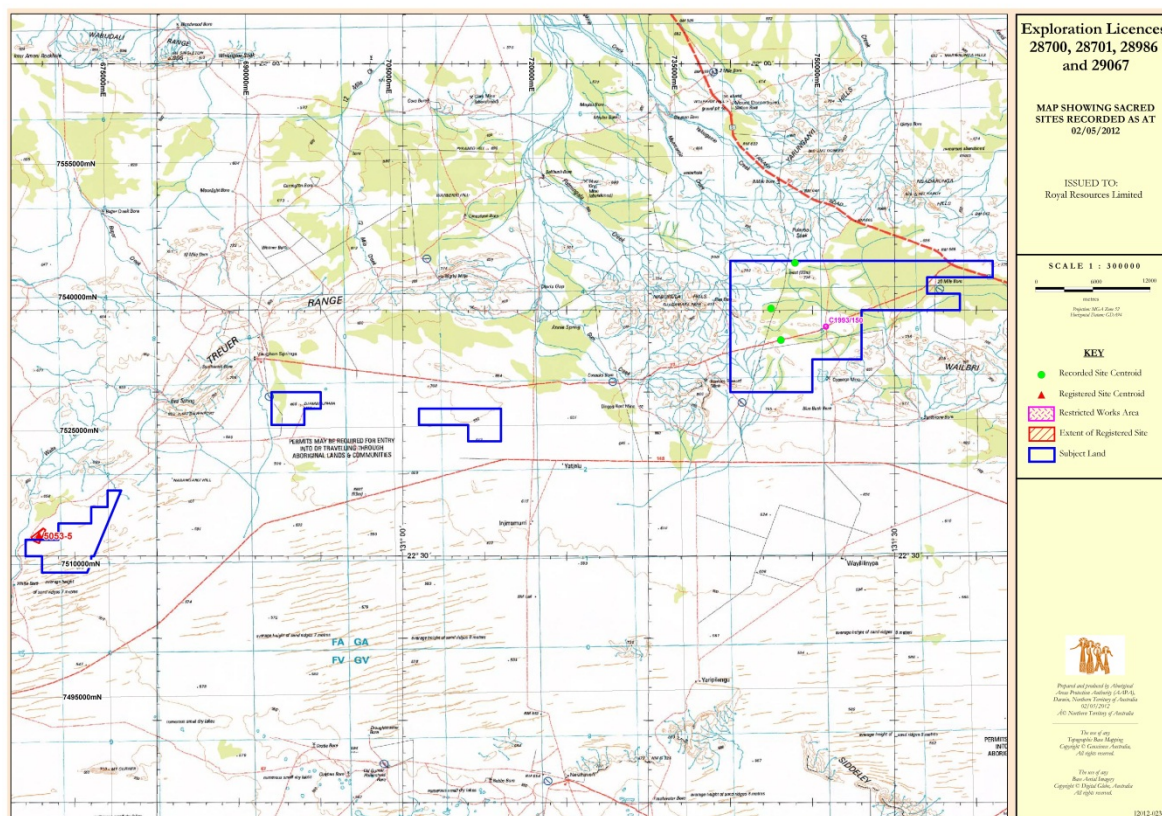
Figure 5 Geological map of the Vaughan Springs Syncline in VAUGHAN.

4 EXPLORATION AND RESULTS

4.1 Heritage Surveys

During the first year of tenure a search for sacred aboriginal sites in the tenement area was completed with the Aboriginal Areas Protection Authority, (AAPA). No sacred sites were identified within EL28701, Figure 4. During the reporting period Royal attempted to finalise an Exploration Agreement with the CLC on behalf of the traditional owners however were unsuccessful prior to surrender of tenement.

Figure 4: AAPA Search results



4.2 Permitting and access

During the reporting period Royal operated a number of tenements in the Ngalia Basin. An MMP was lodged for drilling on nearby projects in May 2012. Focus was primarily on the Ngalia Tenement EL24571 during this time.

4.3 Data Compilation

The public data sets (geology, geophysics and geography) and open file reports were acquired and relevant maps scanned and georeferenced for viewing by GIS software. An extensive search was also undertaken for any lithological information from the shot holes, currently without success.

5 RESULTS

5.1 Data Compilation

The magnetic, gravity and historic shot hole locations are shown on Figures 5 to 7 together with the interpreted structures at the base of the Mt Eclipse Sandstone which have been assumed to extend into the formation.

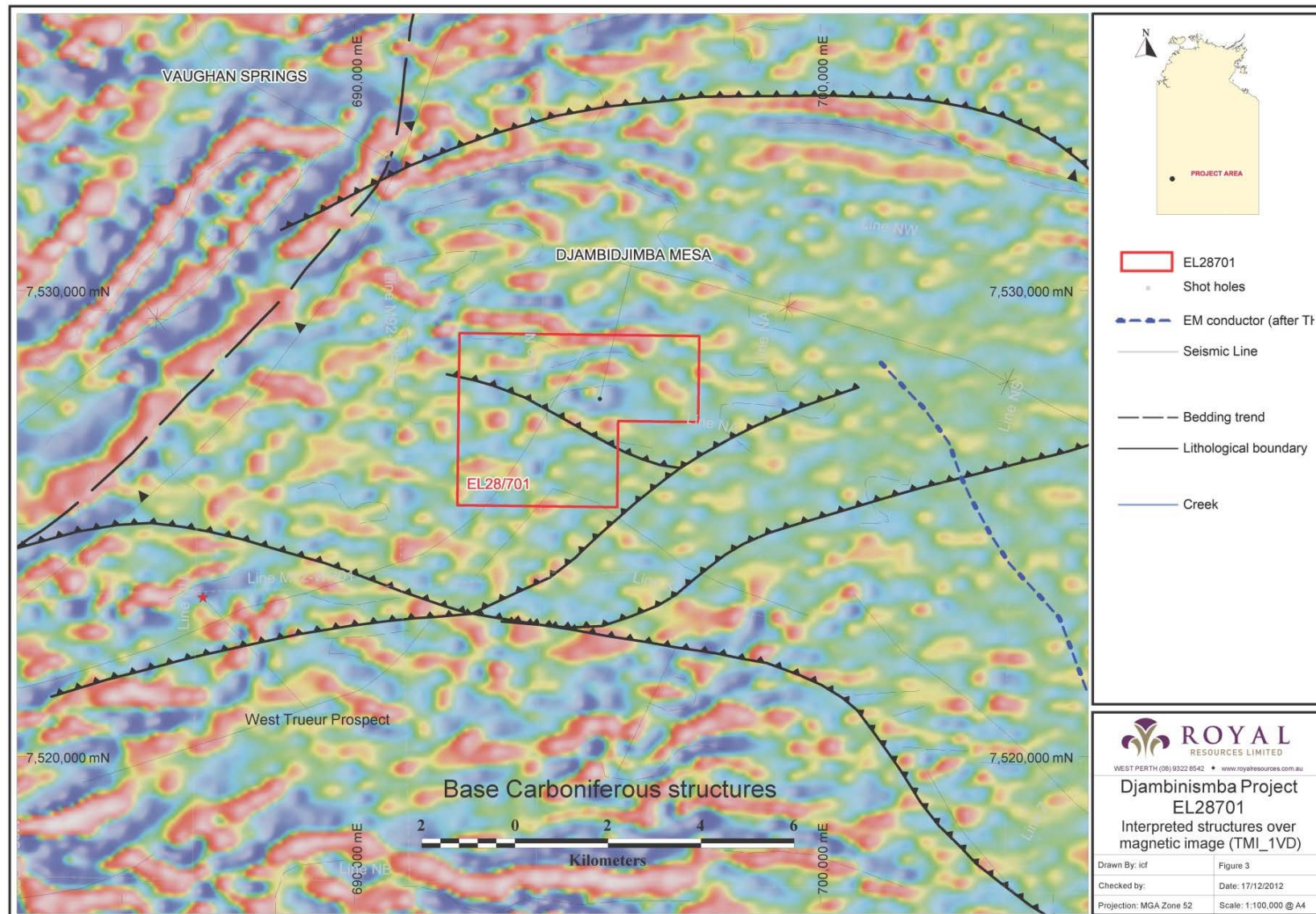
6 CONCLUSIONS AND RECOMMENDATIONS

EL28701 is considered to be completely underlain by Mt Eclipse Sandstone over an irregular basement, which in turn is overlain by incised Tertiary channels, probably controlled by structure and the incompletely buried topography. Younger Quaternary aeolian units cover most of the Licence area, except for the prominent Djambidjimba Mesa composed of the Mt Eclipse Sandstone.

It is assumed that the structures extend through the Mt Eclipse Sandstone. This may not be the case and future reconnaissance mapping along the interpreted surface projections of the structures should focus on this aspect. The NW-SE trend may be responsible for the development of the mesa and may be one a target area although scree may be a problem. This also assumes that access to the area is permitted and there are no heritage issues.

Due to a change in the Company's exploration focus the tenement was surrendered.

Figure 5: Djambidjimba Project - Interpreted structures over airborne magnetic image



VAUGHAN SPRINGS

DJAMBIDJIMBA MESA

EL28701

West Trueur Prospect

Base Carboniferous structures

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Djambinjimba Project EL28701
Interpreted structures over gravity image BA (2.67)

Legend:

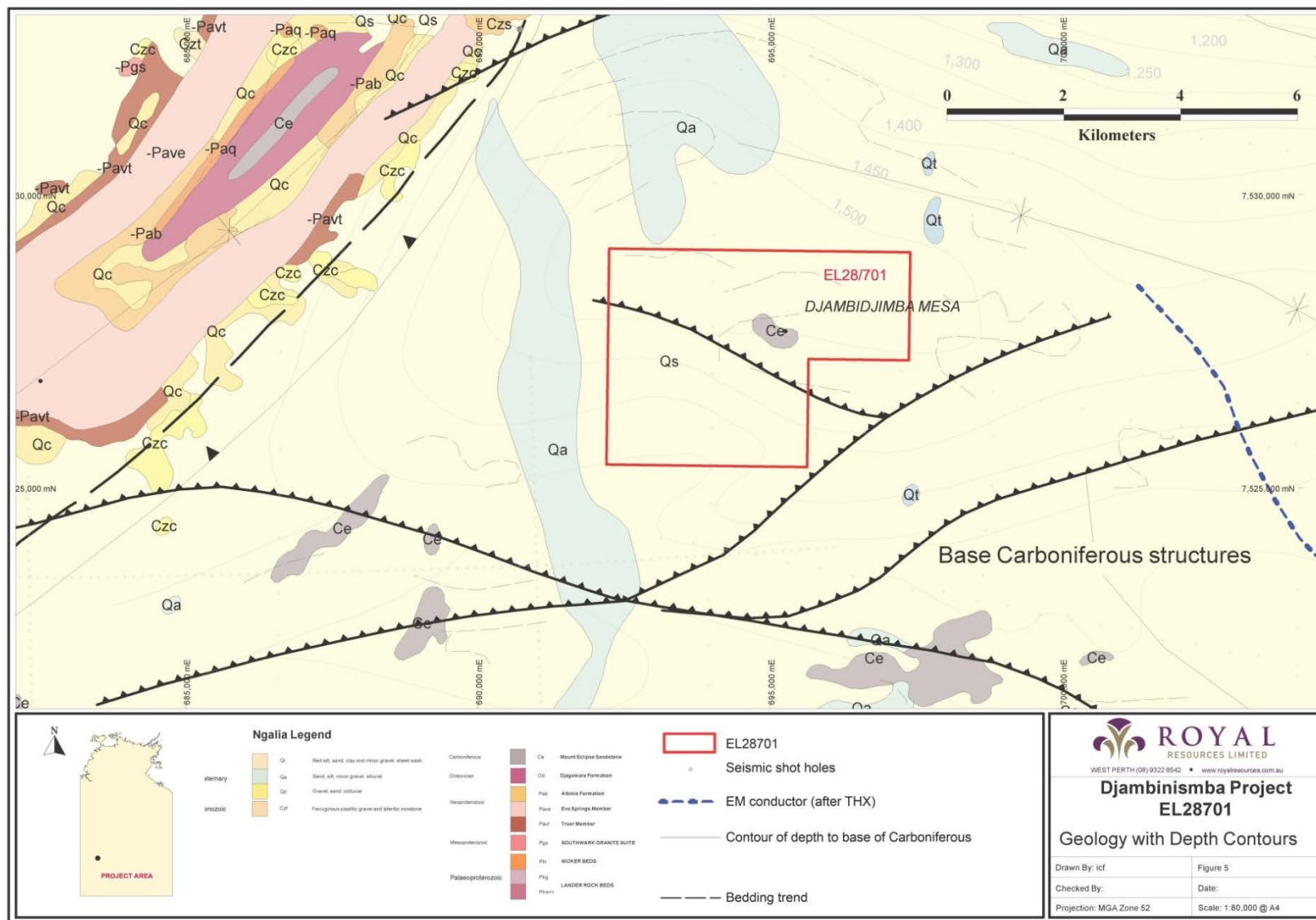
- EL28701
- Shot holes
- EM conductor (after T1)
- Seismic Line
- Bedding trend
- Lithological boundary
- Creek

Scale: 0 to 6 Kilometers

Projection: MGA Zone 52

Scale: 1:100,000 @ A4

Figure 7: Geology over depth contours - base of Mt Eclipse Sandstone



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