TRI-STAR ENERGY COMPANY

Annual Report

Year 3

14 August 2009 - 13 August 2010

GEL265 – Mound Springs Project

12 October 2010

Tri-Star Energy Company
The Riverside Centre
Level 35, 123 Eagle Street
Brisbane, Q. 4000

GEL 265 – Mound Springs Project
Annual Report Year 3
14 August 2009 – 13 August 2010

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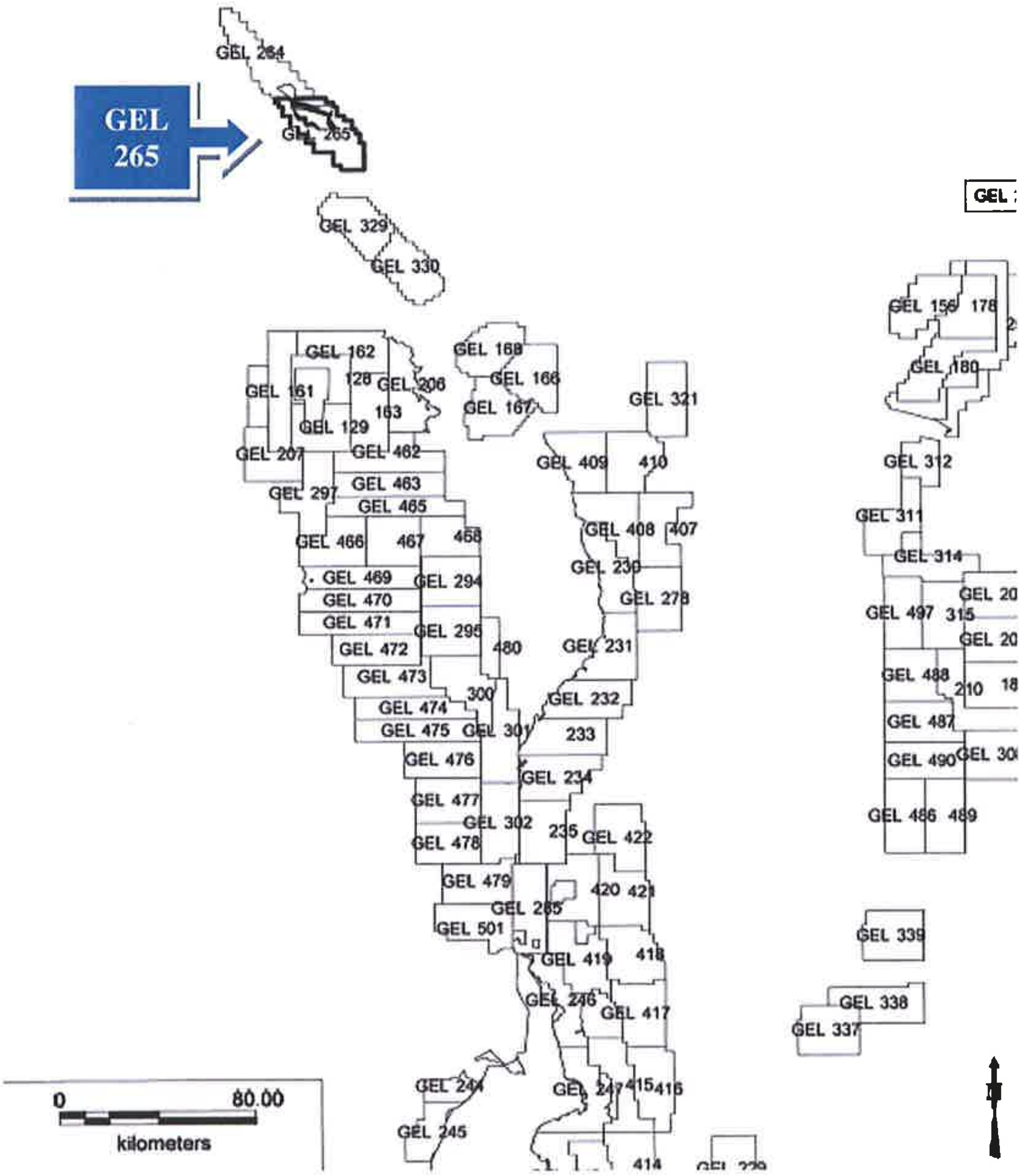
Introduction

Gel 265 was granted to Tri-Star Energy Company; ARBN 089 539 695, on 14 August, 2007, for a period of five (5) years. The licence area is located in central South Australia, 29° North Latitude and 136° West Longitude and covers an area of approximately 497 square kilometres.

GEL 265 is located in Map 100 000: 6239 Strangways, 6238 Trecompana, 6338 Bopeechee and 6339 Curdimurka.

This report describes the work performed during year three of the licence (14 August 2009 to 13 August 2010), and planned activity during year four, in accordance with Regulation 33 of the *Petroleum Act* 2000.



The outstanding physical feature of the area is a succession of mound springs that extend northwest to southeast for a considerable distance along the trend of a deep underlying fault. The tenure area is prima facie prospective by the presence of those thermal mound springs. Figure 1 shows the location of the tenure in respect of surrounding tenures.

GEL 265 is located in the north east of South Australia covered by the Great Artesian, Eromanga, Lake Eyre, Warburton and Cooper Basin. Figure 2 indicates the geological location of the tenure. The South Australian Heat Flow Anomaly (SAHFA) occurs throughout the Curnamona Province down to the Delamerian Fold Belt, therefore flowing through GEL 265. GEL 265 is covered by Palaeozoic and Tertiary sediments.

1 Work Requirements

The work program related to GEL 265 as set out in accordance with the conditions of the licence, are as follows:-

Licence Year	Minimum Work Program
Year 1	• Geological and geophysical review. (To be conducted anywhere in the area covered by GELs 264 and 265).
Year 2	• Geological and geophysical review. • Commence feasibility study. (To be conducted anywhere in the area covered by GELs264 and 265).
Year 3	• Geological and geophysical review. • Complete feasibility study. (To be conducted anywhere in the area covered by GELs 264 and 265).
Year 4	• Drill Injection well at depth where down-hole temperature is at least 150°C. • Geological and geophysical review. • Design plant. (To be conducted anywhere in the area covered by GELs 264 and 265).
Year 5	• Drill 1 production well. • Geological and geophysical review. (To be conducted anywhere in the area covered by GELs 264 and 265).

2 Work Conducted

Office-Based Work

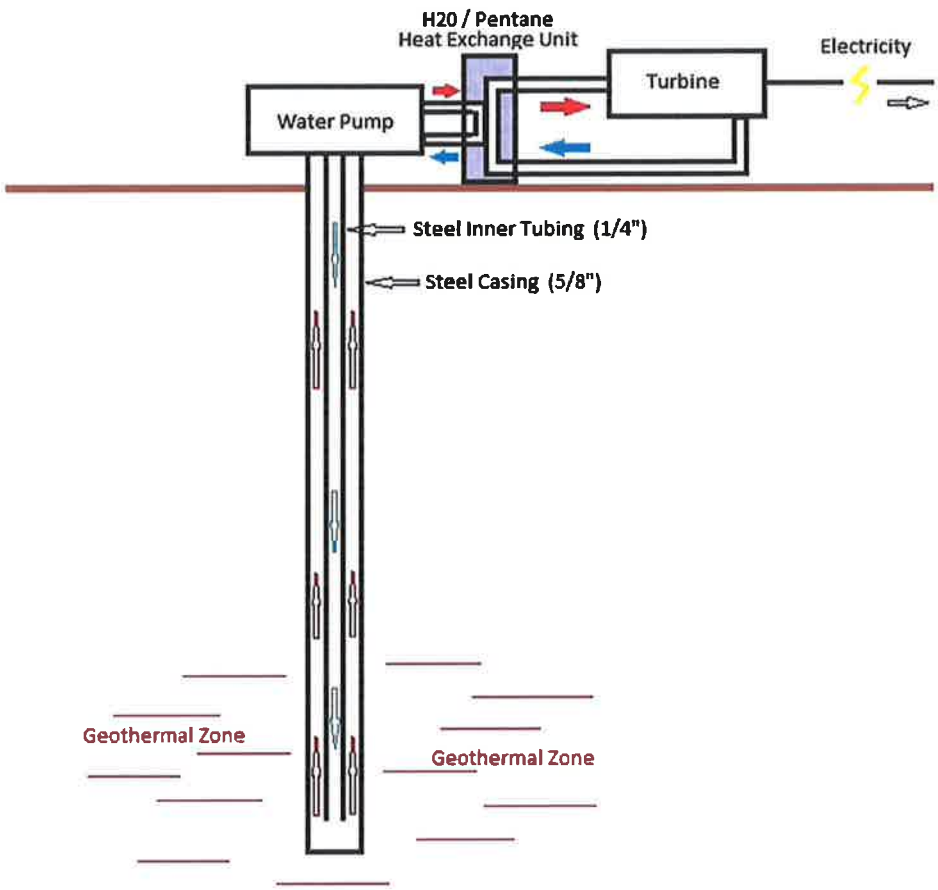
During the reporting period, Tri-Star Energy Company ("Tri-Star") continued to collect and analyse available geological and geophysical data and continued mapping available data into its mapping software, SMT and MapInfo. Tri-Star further continued its research of the sedimentary cover contained in and around GEL 265.

Tri-Star, during Year 3 of the term, finalised its internal concept study. This study investigated the methodology relating to producing heated aqueous fluids to the surface through a single well bore, rather than drilling two holes and circulating down one hole and up the other.

The focus has been on a single well binary cycle power plant which utilises an organic Rankine cycle. Tri-Star has designed a single well system as part of its internal concept study during this term. Tri-Star believes a single well system may be more environmentally friendly and cost-effective for several reasons. A two-well system design makes two assumptions: a) that water will always migrate through the rock at the required rate for the life of the well, and b) that the water will always migrate in the correct direction (towards the production well). Since the condition and permeability of the rock is not known, water may not be able to freely circulate from the injection well to the production well. Additionally, the two wells may require fracture stimulation to obtain the required flow rates, which may not be cost-effective.

Circulating water through geothermal fractures over time may also induce biological or calcite build-ups due to a combination of high temperature, impurities in the surrounding rock and water, and chemical reactions with pH of the circulating water, which could jam the fractures with solids. The wells would then require an expensive work-over job to re-establish circulation. This may not be cost effective.

A single well design system would work as a closed system, with no material being actively pumped into subterranean reservoirs. A single well would be drilled to the geothermal zone and cased off from the surrounding rock with steel casing. Water would then be circulated down a steel inner tube and back up the outer casing. The water would be heated during its contact with the steel casing, which is in contact with the geothermal zone. The heated water would be circulated back to the surface, and run into a heat exchange with a low-boiling point organic fluid. Upon contact with the heated water in the heat exchange, the organic fluid would reach boiling point and its vaporization would drive a turbine. The fluid could then be cooled back to a liquid, and circulated back into the heat exchange. By using a low-boiling point organic in the heat exchange unit, the heated water does not need to achieve ultra-high temperatures, only a temperature sufficient to reach the boiling point of the organic fluid. See below diagram.

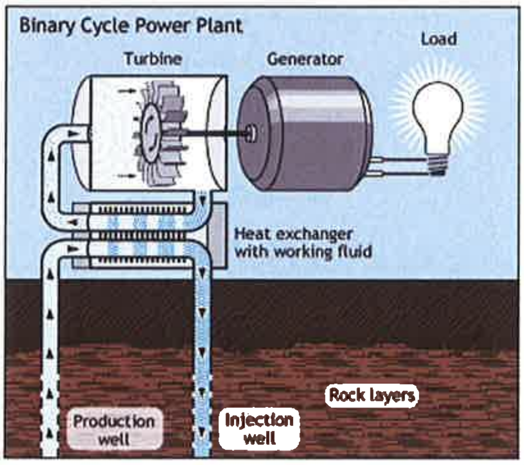


The geological characteristics of the Cooper Basin area are that of hot rock, and a lack of natural subterranean reservoirs of hot water. It is this characteristic which has directed Tri-Star to investigate the binary cycle power plant, since it does not require large amounts of water to transported onsite and pumped into the ground to begin the power-generation cycle.

The benefit of using an organic Rankine cycle is the low boiling point of the organic working fluid. The efficiency of the system is increased due to the lower temperature the geothermal water needs to reach before converting the working fluid to power generating steam. The organic working fluids may include Ammonia, HCFC123 (Dicholortrifluoroethane), n-Pentane, PF5050 (Perflurotri-N-Butylamine) and i-Butane. For example, the boiling point of pentane is 36.1°C, which means it is not necessary for the water being pumped out of the well to reach boiling point (100°C) before it enter the heat exchange unit. In the upcoming reporting year the aforementioned fluids will be investigated to determine the most cost-effective design.

The binary system is a closed loop system. This ensures the working fluid and the geothermal water never come in contact with one another thus reducing the likelihood of environmental damage as there are virtually no emissions to atmosphere from the system.

The following depicts a typical dual well binary cycle power plant:



The difference between this system and the system Tri-Star has investigated (and will continue to investigate) is the need for a production well and an injection well. Tri-Star will endeavour to integrate the two wells in an effort to reduce costs and take advantage of the horizontal hydrothermal energy flows in the rock. This well integration will also reduce bacteria contamination to surrounding aquifers due to the lack of water being cycled through the rock layers.

Tri-Star must establish whether the tenure area has the capability of supporting the single well design. There is uncertainty surrounding the single well design, which will need to be more thoroughly investigated in Year 4 of the tenure, as no known well of similar design is in operation at present. The fourth term investigation will be concentrated around this design and the capability in the GEL 265 tenure area.

Tri-Star has previously finalised its initial assessments of the area which included indentifying all relevant parties in relation to the tenure, such as landowners and Native Title Claimants. Figure 3 Cadastral Map and Figure 4 Native Title Claim Map respectively indicates relevant interests in relation to the tenure area. Figure 5 provides a map of existing roads and tracks in order to access the tenure area.

Field Work

No drilling or other field work was conducted during this third year of work.

3 Proposed Operations for Year Four

During the fourth term, Tri-Star will continue its geological and geophysical review of the tenure area. This will include undertaking further analysis of the heat values from the wells surrounding the tenure area, including the Boorthanna 1 Well and the Warriner Creek 1 Well. Figure 6 show the locations of existing petroleum wells in relation to the tenure area. Tri-Star has designed and will tenure a drilling program and will implement this program through the drilling of an injection well within the tenure area at a depth where the down-hole temperature is at least 150°C.

Tri-Star will also design a Geothermal power generation plant during the fourth term, in preparation for the drilling of a production well in Year 5 of the tenure. Tri-Star will further continue to review and evaluate available geological, geophysical and environmental data in relation to the tenure area. Furthermore, Tri-Star will continue to conduct additional mapping of available data.

4 Compliance Issues

Tri-Star Energy Company did not perform any activities that fall within the purview of Regulation 33. Given that no regulated activities were undertaken in the licence year, many of the regulations are inapplicable at this stage, and no instances of non-compliance have been noted. No reportable incident occurred and no threats have been identified during licence year one.

Tri-Star Energy Company recognises the importance of achieving regulatory compliance and is committed to achieving best practice in its management strategies, work practices, and procedures, in an environmentally and socially responsible manner. Tri-Star Energy Company is in the process of developing a management system that will ensure this commitment is met.

5 Expenditure Statement

Please refer to Appendix 1 for the expenditure statement for the current reporting period 14 August 2009 - 13 August 2010.

FIGURE 1

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SURROUNDING TENURES MAP

TRI-STAR ENERGY COMPANY

GEL 265 Surrounding Tenures Map
2010

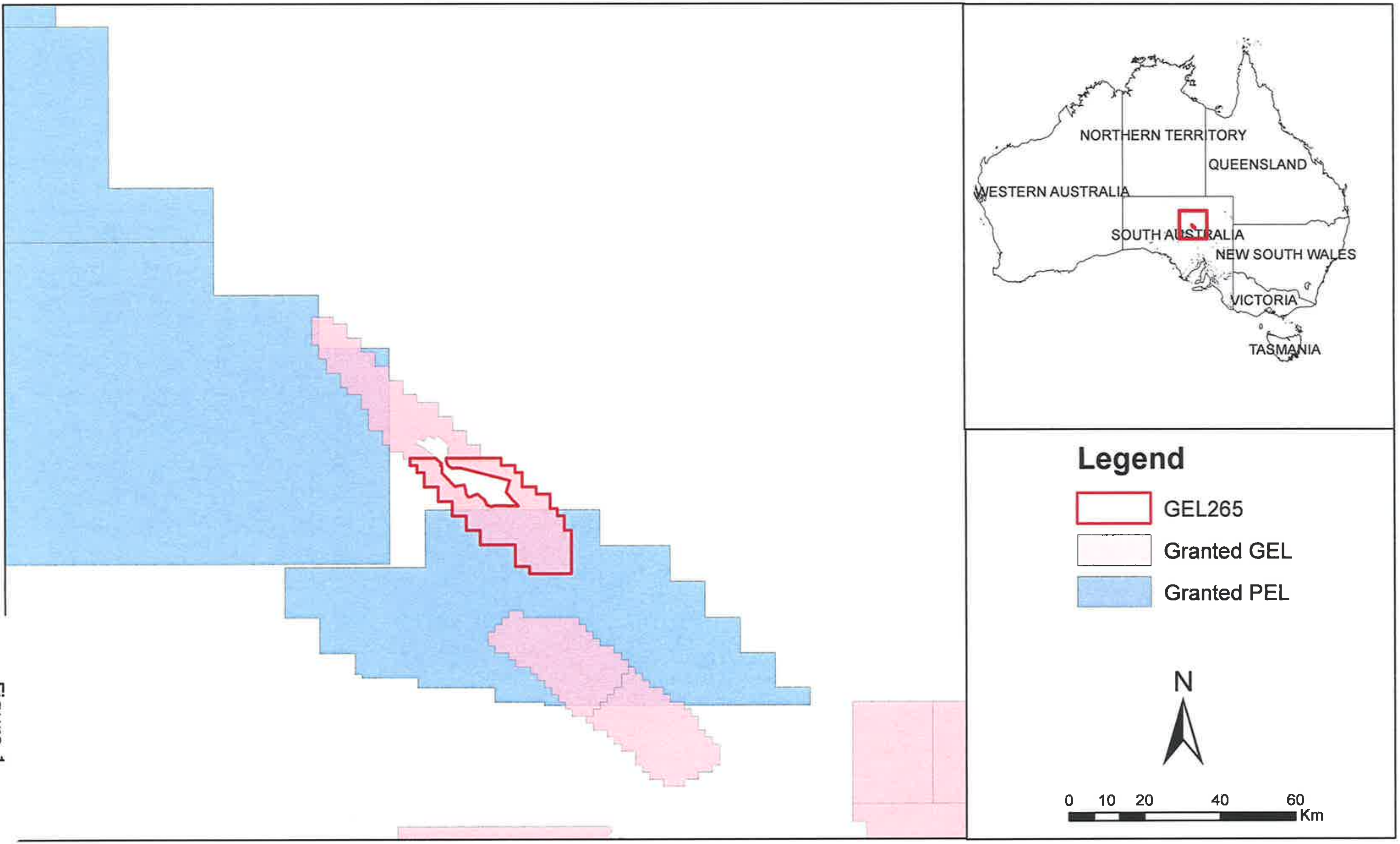

Figure 1

FIGURE 2

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GEOLOGICAL REGIONS MAP

TRI-STAR ENERGY COMPANY

GEL 265 Geological Regions Map 2010

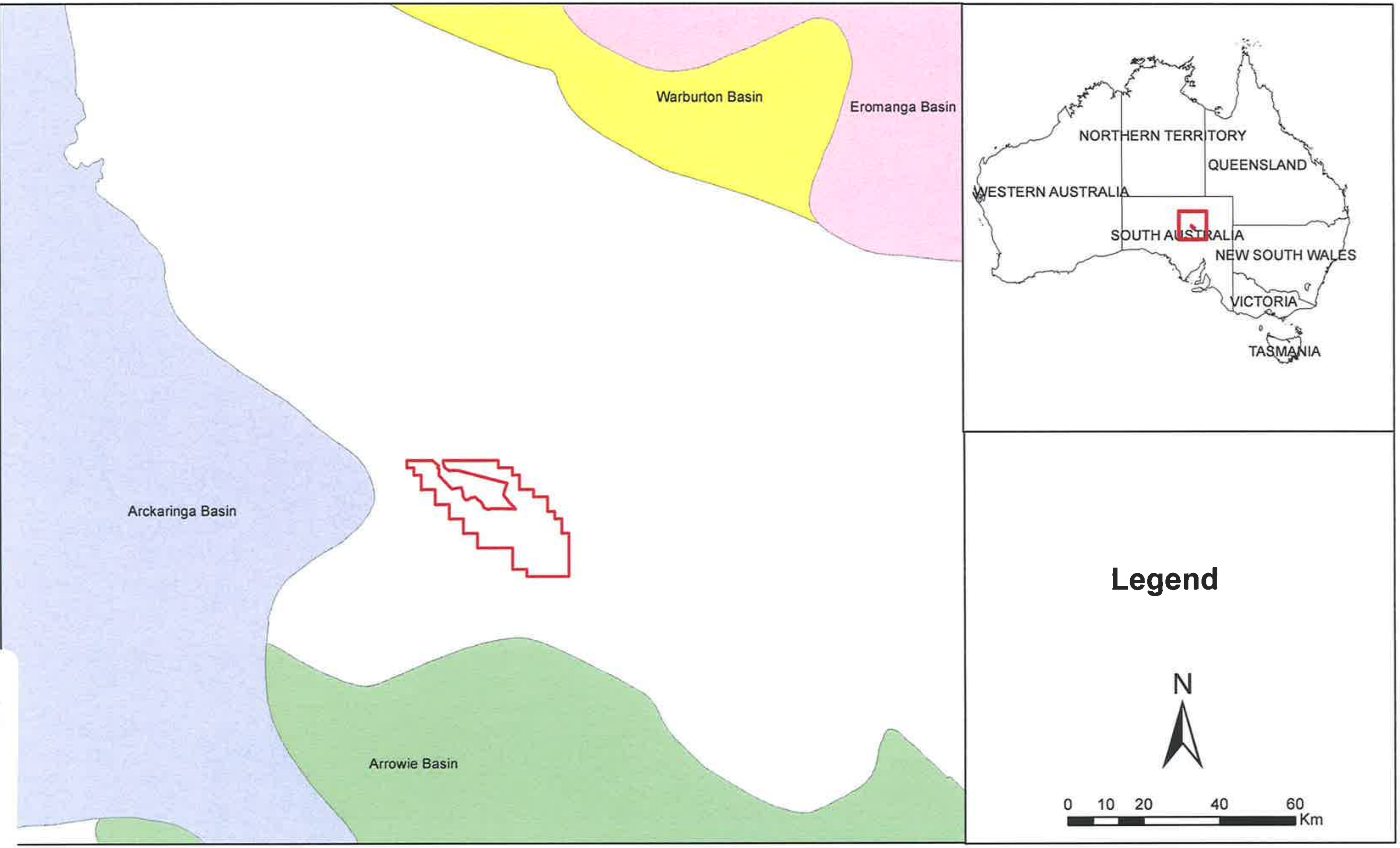

Figure 2

FIGURE 3

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CADASTRAL MAP

TRI-STAR ENERGY COMPANY

GEL 265 Cadastral Data Map
2010

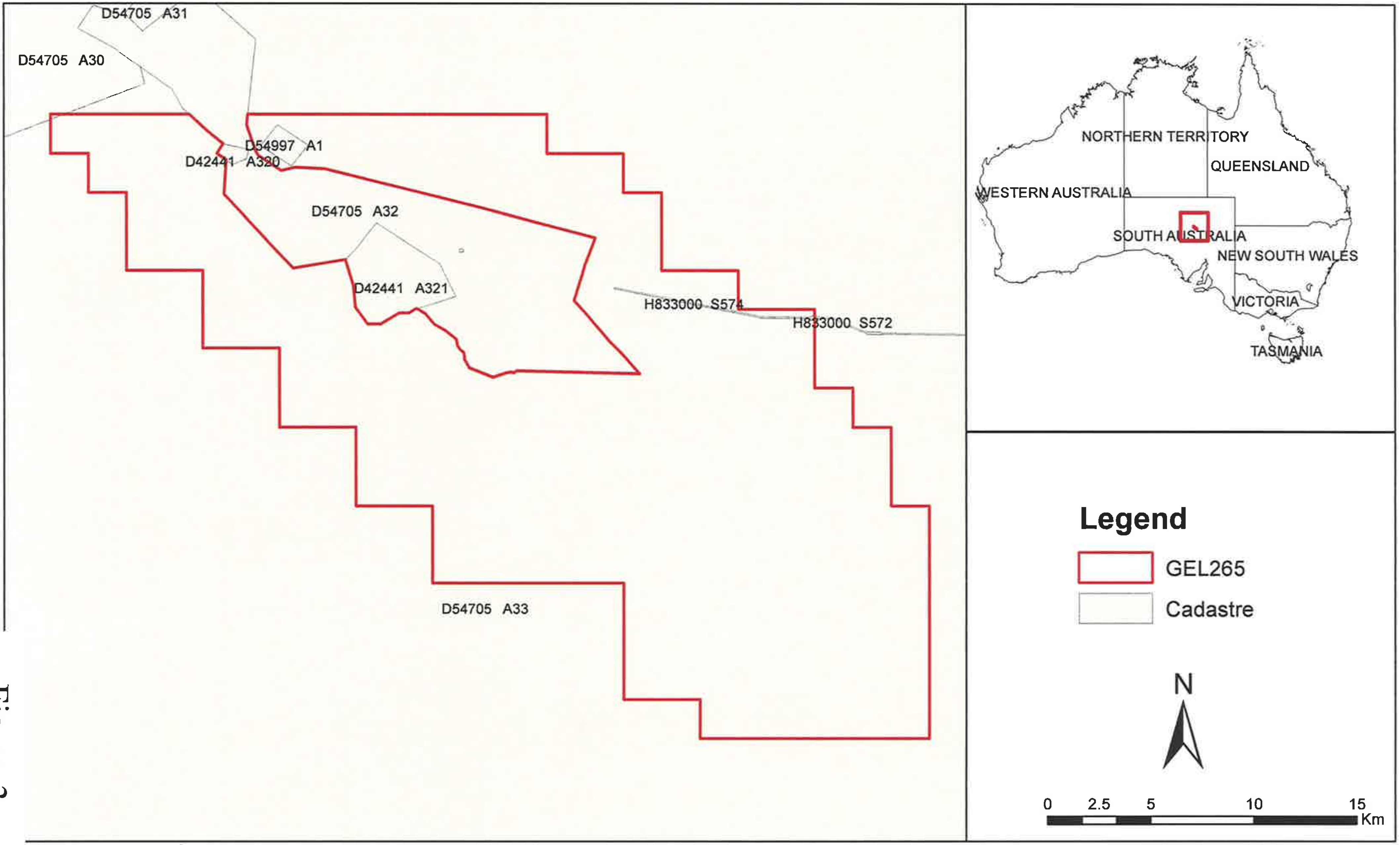

Figure 3

FIGURE 4

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NATIVE TITLE CLAIM MAP

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GEL 265 Native Title Map 2010

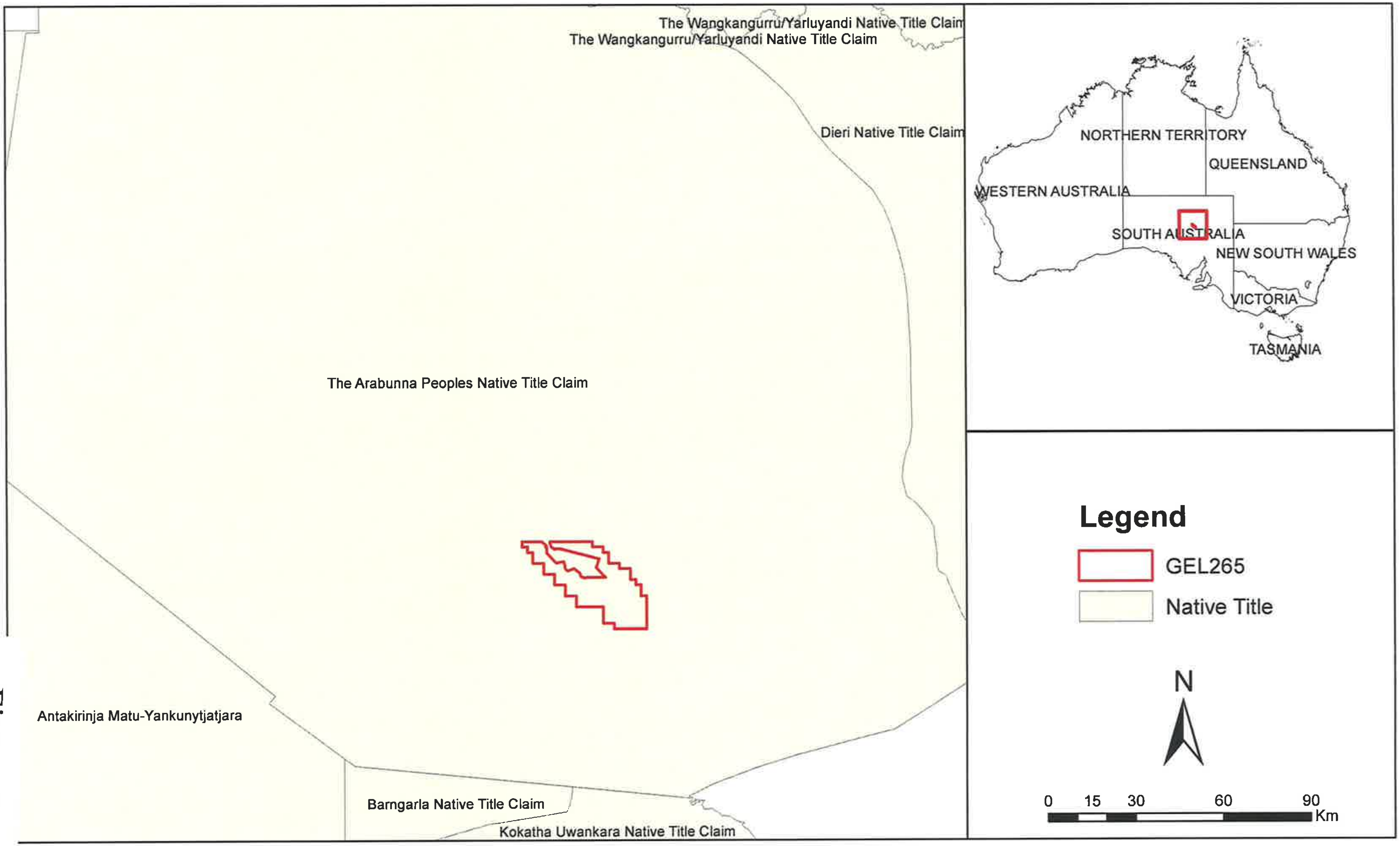

Figure 4

FIGURE 5

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SURROUNDING ROADS & TRACKS MAP

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GEL 265 Surrounding Roads Map
2010

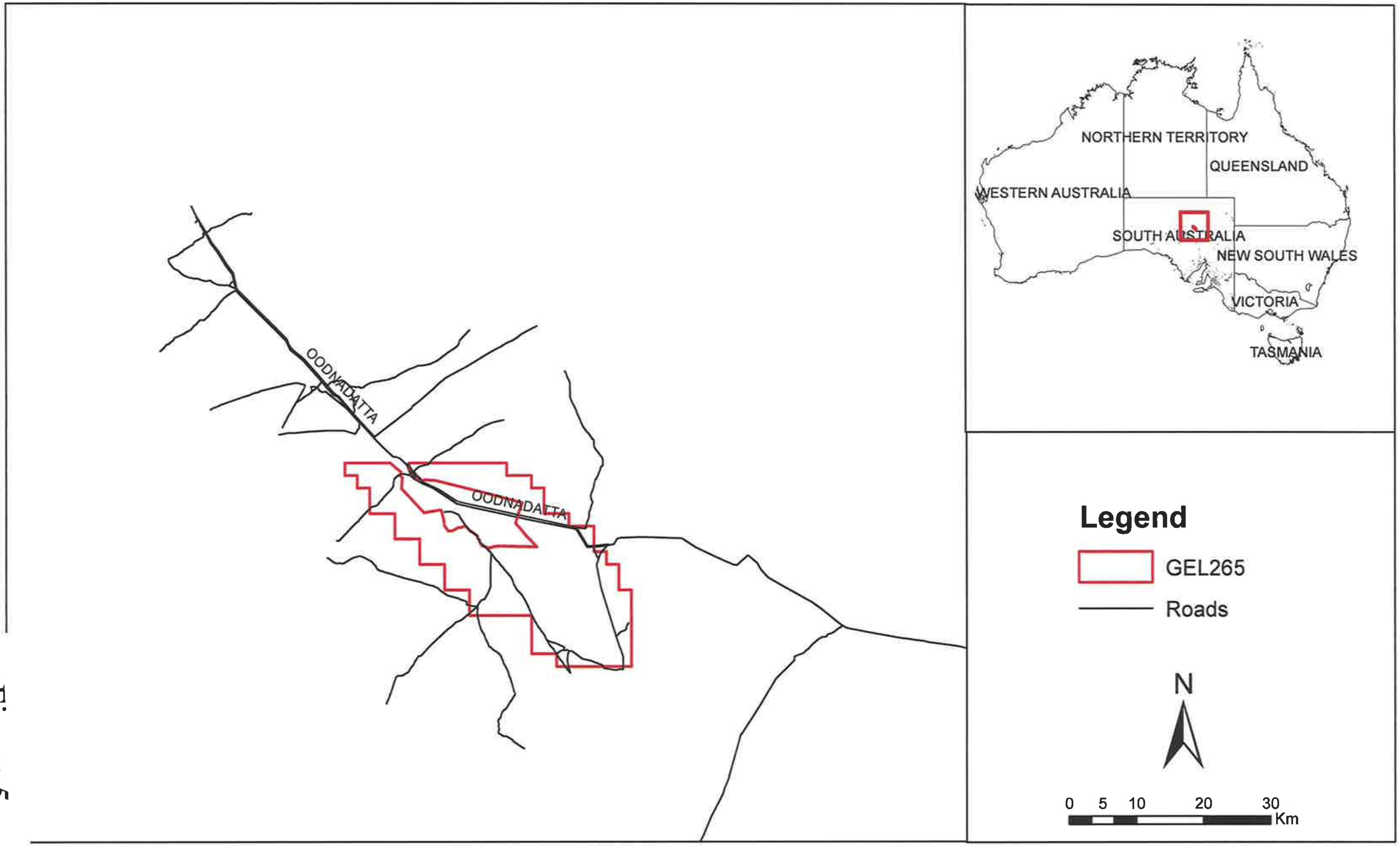

Figure 5

FIGURE 6

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SURROUNDING PETROLEUM WELLS MAP

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GEL 265 Surrounding Petroleum Wells Map 2010

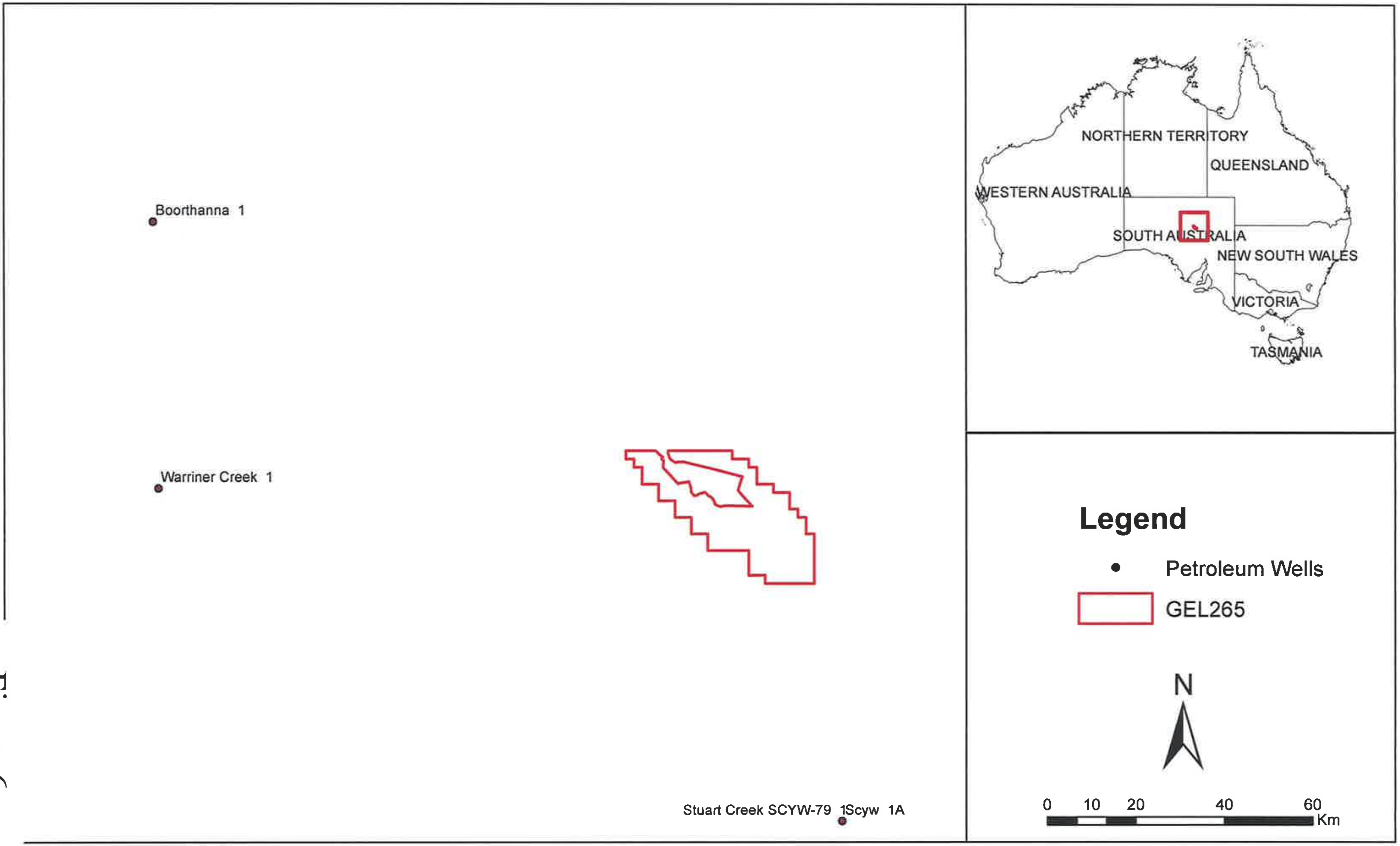

Figure 6