EL25/2008 Jericho Annual Report 2014

EL 25/2008 (Jericho)

September 2013 – September 2014

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Vol. 1 - Annual Report
Vol. 2 - Appendices

Abstract

The purpose of EL65/2007 is to locate an economically feasible coal mine.

The Joint Venture arrangement with South East Asia Resources (Aust) (SEARS) was terminated in early 2014. As a result of discussion with MRT in early 2014, EL25/2008 was reduced by 110 sq. km. The adjoining licence EL26/2008 was also reduced by 121 sq. km. The remaining 196 sq. km. has been consolidated into EL25/2008.

A downhole geophysical survey was conducted on the open 2013 drill holes by Dr Brian Senior on behalf of SEARS and report provided in February 2014. Endeavour Geophysics conducted a single check downhole survey of OJ08, when conducting the Woodbury survey to compare with the SEARS (Dr Brian Senior) survey.

A drilling program commenced on the 25th August 2014 and was completed on the 3rd October 2014, with drill-hole rehabilitation occurring in the following week. The drilling completed to the 17th September is included in this report.

The results of the drilling will be assessed over the coming months.

Contents

Figures

1. Introduction

The operator's (Midlands Energy Pty Ltd) principal objective of exploration in the Jericho area is to delineate any coal seams within the near surface Triassic coal measures for the purpose of defining one or more resources suitable for open cut mining.

1.1 Report Datum

GDA94

1.2 Exploration Rationale

The aim of the current exploration program on EL 25/2008 (Jericho) is to quantify a JORC resource in the near surface Triassic coal measures.

1.3 Geological Setting

The geology of the area is dominated by the freshwater sequence of mudstones, sandstones and siltstones of the Upper Parmeener of the Triassic intruded by Jurassic Dolerite. Typically the Coal measures are found within a lithic sandstone sequence (dominantly within the grabens) that has been preserved in some areas by Jurassic dolerite capping. Structurally, the Jericho area (and surrounds) is dominated by a series of north to north-north-western troughs/grabens upwards of 50 by 1 kilometres in size and disrupted by numerous north-east trending faults.

1.4 Licence Information

1.4.1 Licence Number

EL25/2008

1.4.2 Licence Name

Jericho

1.4.3 Licence Location

The Licence covers the Jericho district, from Bowhill Rd west of Oatlands in the north, to Mudwalls Rd in the south. Please refer to Location Plan at **Figure 1**.

1.4.4 Reporting Period

18th September 2013 – 17th September 2014

1.4.5 Tenement Holder

Tiger Coal Pty Ltd

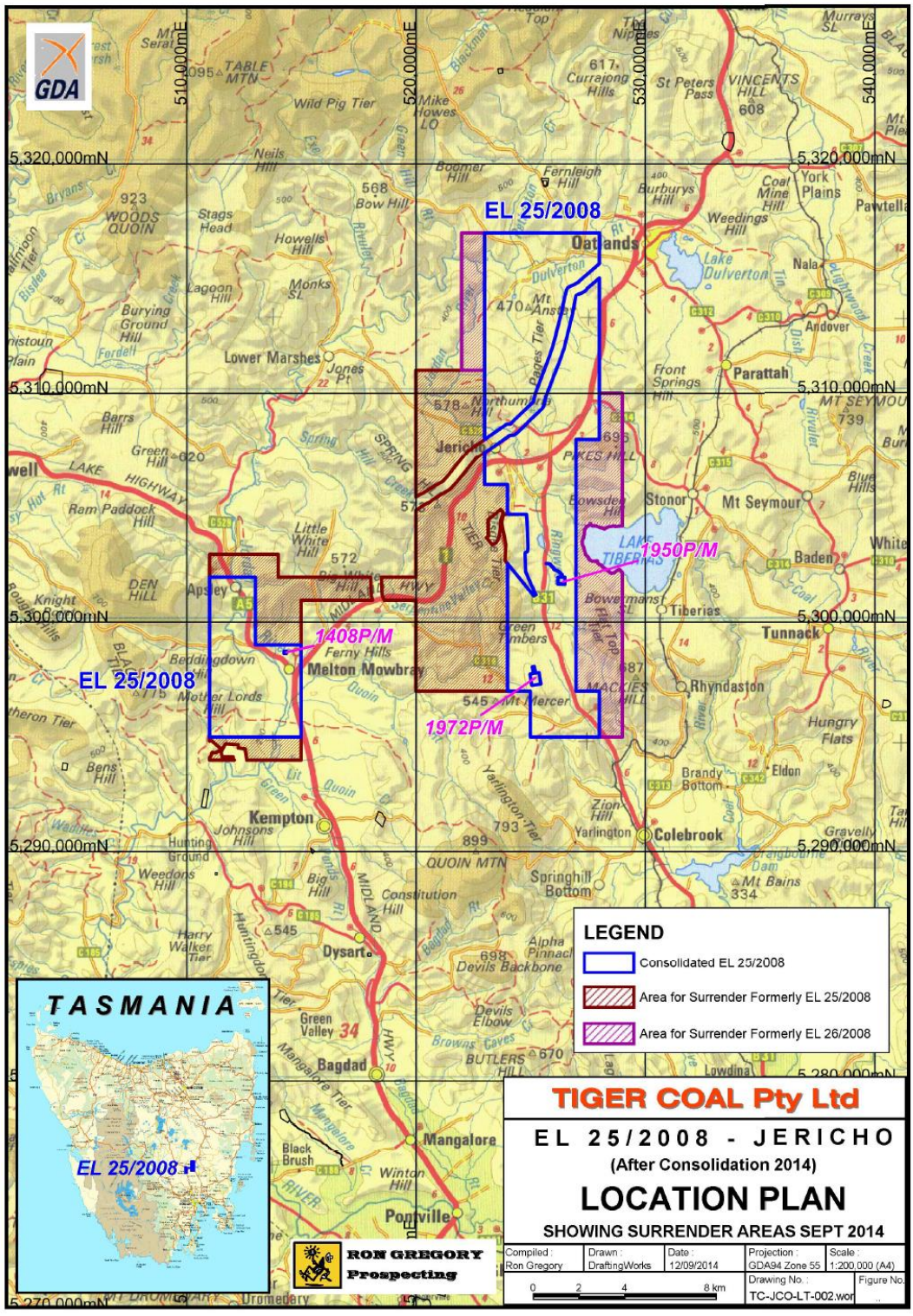

Figure 1 – Location Plan

2. Previous Work

2.1 Work Prior to Current Licence

A review of past exploration was done in the 2012 Annual Report (Pemberton, 2012).

The following are notes from the report.

Modern exploration has only taken place since 1980 when Capricorn Mining Ltd was granted EL 28/1979. Capricorn conducted a regional exploration program over a wide area that included reconnaissance geology, remote sensing, structural interpretation and some drilling (reports: TCR80_1513, TCR81_1682 and TCR82_1798).

CRA Exploration Pty Ltd conducted a program over three licences in the Oatlands-Jericho-Kempton area: EL18/1982, EL19/1982 and EL20/1982. CRA used LANDSAT imagery to identify the overall structural trend in the area and followed up with a percussion drilling program to identify if the graben structures were prospective for coal. While the results indicated coal was present, elements of complexity due to the highly faulted nature of the area and the frequent presence of dolerite intrusions were also identified (report TCR84_2213).

The Department of Mines drilled a deep diamond hole in 1982 at Mount Vernon (Mount Vernon DDH1). Coal measures were intercepted; the most significant seam observed was 2.3m thick from 204.79m and surprisingly low in ash.

Cornwall coal Company NL was granted EL11/91 in 1991 to follow up on this hole with three rotary holes and two diamond holes in the area with limited success attributed to both dolerite intrusions and the nature of the faulting proximal to the coal measures (reports TCR92_3378 and TCR93_3491).

3. Exploration

3.1 Desktop Studies

A Report of Gamma Ray Logging of OJ009 – OJ029 conducted in late 2013 was provided by B.R. Senior & Associates Pty Ltd (commissioned by SEARS) in January 2014. A summary of results is hereunder. This report is included in its entirety in **Appendix 1.**

Drilling and gamma ray logging details – Jericho 2013.

Hole ID	Easting	Northing	Elevation	Licence	Drill Method	Hole depth	Gamma Ray Log depth
OJ009	524250	5308999	386	EL25/2008	Diamond	59.55	44
OJ010	524919	5308789	390	EL25/2008	Diamond	52.6	30
OJ011	525417	5305194	401	EL26/2008	Diamond	41.3	10
OJ012	525599	5301094	437	EL26/2008	Diamond	41.45	32
OJ013	525704	5315433	351	EL26/2008	Diamond	65.4	49
OJ014	525337	5315026	371	EL26/2008	Diamond	60.6	46
OJ015	525713	5305590	404	EL26/2008	Diamond	48.58	38
OJ016	525313	5314279	389	EL26/2008	Diamond	51.48	39
OJ017	525520	5313550	389	EL26/2008	Diamond	60.33	44
OJ018	526577	5308563	404	EL26/2008	Diamond	54.71	21
OJ019	523899	5310113	399	EL25/2008	Diamond	60	23
OJ020	522069	5311626	357	EL26/2008	Diamond	54.71	41
OJ021	525685	5300302	446	EL26/2008	Open hole	60	45
OJ022	525689	5300501	445	EL26/2008	Open hole	44	31
OJ023	524035	5306916	392	EL25/2008	Open hole	43	29
OJ024	523815	5311193	395	EL26/2008	Open hole	31	23
OJ025	523903	5313462	375	EL26/2008	Open hole	33	24

A JORC compliant inferred coal resource assessment of EL25/2008 (as EL25 & 26/2008) by Dr Brian Senior & Associates was commissioned by Midlands Energy in late 2013 and provided in February 2014. This report is included in its entirety in **Appendix 2**.

3.2 Regional Exploration Activities

No regional exploration was conducted in 2013-2014

3.3 Prospect-based Exploration Activities

Bowhill Rd Prospect 2014

A 5 hole (3 diamond & 2 open) drilling program (OJ30 –OJ35) was commenced on the 1st Sept and completed on the 16th Sept 2014

Details of this drilling are provided hereunder and in **Appendix 4, 5 & 6**.

Jericho Prospect 2014

4 holes (OJ41-OJ44) were also drilled following Bowhill Rd, north of the Midlands Hwy at Jericho after September 17. These holes will be reported in the 2014-2015 Annual Report.

Mudwalls Prospect 2014

5 holes (OJ36-OJ39) were also drilled following the Bowhill Rd Prospect, south of the Midlands Hwy and east of Mudwalls Rd after September 17. These holes will be reported in the 2014-2015 Annual Report.

Bowhill Rd Prospect 2014

3.3.2 Geology

Triassic coal measures and dolerite intrusives were encountered similar to previous drilling.

3.3.3 Geochemistry

Suitable coal intercepts have been sampled and are currently with ALS laboratory.

3.3.4 Geophysics

OJ08 was geophysicaly down-hole logged by Endeavour Geophysics for comparison with previous 2013 gamma ray logging. The Logs are attached at **Appendix 3.**

3.3.5 Remote Sensing

No Remote Sensing was conducted in 2013 – 2014

3.3.6 Drilling

Drilling contractor was KMR Drilling of Richmond utilizing either a Hydrapower Explorer 500 (No 1 Rig) or a Hydrapower Scout MKIV (No. 2 Rig)
Ron Gregory Prospecting provided logistic including On Site Geologist, Rowena Murcott.
Landowners were all very supportive and accommodating

Drilling Summary OJ030 – OJ035

OJ30

Percussion collared to 3.6m, then HQ3 diamond drilled to an end of hole depth of 58.1m. The rocks intersected were dolerite from 4.89m to 13.42m, then into sediments of the Coal Measure Sediments of the Upper Triassic to the end of hole. This hole intersected minor coal at 20m, and a coal seam at 39-40m.

OJ31

This hole was drilled in Upper Triassic Coal Measure Sediments to its end of hole depth of 60.60m. Minor weathered coaly clays were intersected at 9m, some dull coal at 23m, six narrow coal seam splits from 28m to 41m, and two significant coal seams at 46m and at 54m.

OJ32

OJ32 was HQ diamond drilled to 60.60m in Coal Measure Sediments of the Upper Triassic. A coal seam was intersected at 15m, then a further five narrow coal seam splits were drilled between 19m to 40m. Two significant coal seams were intersected at 40m and at 49m.

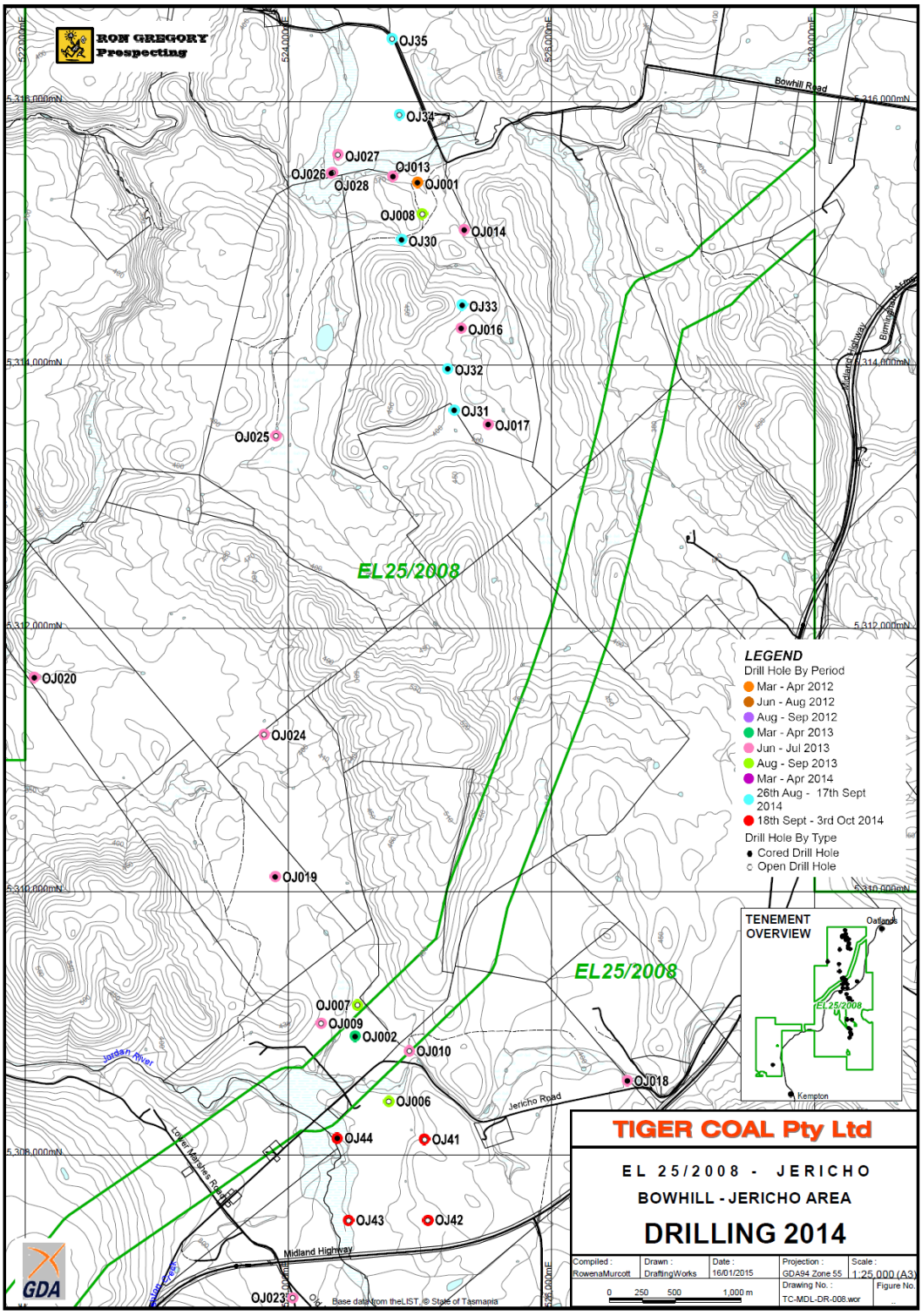

Figure 2 Drilling Locations (North)

OJ33

This hole was HQ diamond drilled to a depth of 60.50m. Below 39m the hole intersected hornfels altered Coal Measure Sediments, absent of coal, and dolerite sills. A weathered clayey coal unit was intersected at 12m, and one significant coal seam was drilled through at 31m.

OJ34

This percussion hole was hammer drilled to a depth of 60m in Upper Triassic Coal Measure Sediments. Some coal samples were recovered at 7m, 15m and 22m. Traces of coal were seen in percussion chip samples recovered from depths 17m, 20m, 21m, 26m, 30m, 40m, and 48m.

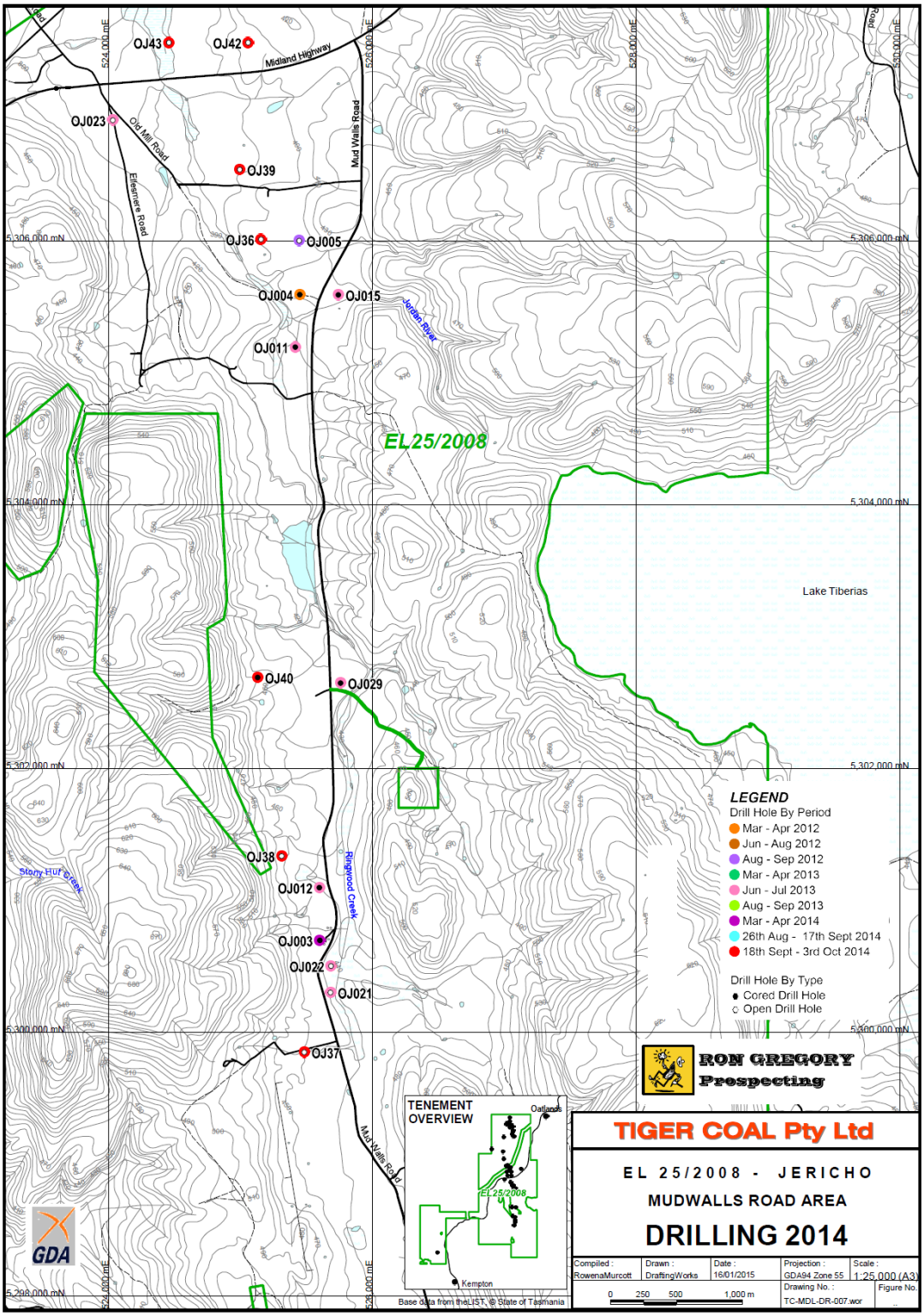

Figure 3. Drilling Locations (South)

OJ35

Coal Measure Sediments were intersected to 60m end of hole depth in this percussion hammer drilled hole. Some coal chip samples were recovered at 7m, 42m and 45m. Traces of coal were seen in chip samples from 11m, 15m, 21m, 22m, 27m and 33m.

Drillhole Summary Logs OJ030 – OJ035 are attached in **Appendix 4.**

Drillhole Logs OJ030 –OJ035 are attached in **Appendix 5**.

Drillhole Photos OJ030 – OJ035 are attached in **Appendix 6**

3.3.7 Ore Reserves and Resources

Ore Reserve calculations will be done when the results of recent drilling have been assessed.

3.3.8 3D Modelling

Further modelling will be conducted following assessment of recent drilling

4. Results

Some coal intersects were obtained in OJ30 – OJ35.

Coal quality analysis from the coal intersections of the 2014 drilling 0J30 – 0J44 are currently pending and will be reported in the 2014 – 2015 Annual Report.

5. Conclusions

5.1 Conclusions

The full results of the 2013-2014 exploration programs are still pending, therefore accurate conclusions of the results cannot be formed. Exploration works to date have outlined a substantial coal resource in the EL25 area, but further works will be required to identify an economically extractable resource. Full reporting of the results will be published in the 2014 – 2015 Annual Report.

5.2 Recommendations

Although drilling in the northern portion of the lease has shown some less than encouraging results in comparison to previous campaigns, further exploration works are recommended to fully understand the resource geology of the area and to more accurately define the economic boundaries of the potential resource.

6. Environment

All drillholes were back filled and rehabilitated. All down-hole geophysical tools were retrieved.
Should a radioactive Sonde be lost at any time and is beyond retrieval then the hole will be cemented from top to bottom.

7. Expenditure

Expenditure for the 2014 exploration year has been calculated to $77,836* as per the companies' quarterly returns.

8. References

Pemberton J., 2012. *A brief review of past exploration in the area covered by EL 25/2008 Melton Mowbray for Midlands Energy Ltd.*
TCR80_1513 *Final report of Tasmanian Coal Prospects for Capricorn Mining Ltd.* General Geological Services. February 1981.
TCR81_1682 *Tasmanian coal prospects. Six month progress report, 17 April to 16 October 1981, for Capricorn Mining Ltd.* General Geological Services.
TCR82_1798 *Capricorn Mining Ltd, Relinquishment Report, Coal EL28/79, Oatlands Tasmania.* May 1982
TCR84_2213 *Parattah EL18/82, Kempton EL19/82, Jericho EL20/82. Exploration report for the year ending 30 September 1984.* CRA Exploration Pty Ltd. Report 12862.
TCR92_3378 *The Cornwall Coal Company NL Coal Exploration Kempton – Report No 1. Year ended 23/8/92. EL11/91.* By Dr JH Bryan.
TCR93_3491 *The Cornwall Coal Company NL Relinquishment Report. Year ended 23/8/1993. EL11/91.* By Dr JH Bryan.

9. Appendices – (Vol. 2)

Appendix 1

Report on gamma ray logging – OJ009 – OJ029
(B.R Senior & Associates, Jan 2014)

Appendix 2

JORC compliant inferred coal resource assessment of EL25 & EL26/2008.
(B. R. senior & Associates, Feb 2014)

Appendix 3

Down-hole geophysical log of OJ008
(Endeavour Geophysics, 2014)

Appendix 4

Drill-hole Summary Logs, OJ030 – OJ035

Appendix 5

Drill-hole Logs, OJ030 – OJ035

Appendix 6

Drill-hole Photos, OJ030 – OJ035

Appendix 7

Drilling maps North & South

Appendix 8

File List (excel format)

Appendix 9

Drill-hole Summary Logs, OJ030 – OJ035 (excel format)