

EL 25/2008 Melton Mowbray

ANNUAL REPORT

Tiger Coal Pty Ltd

September 2011 to September 2012

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Abstract

Previous exploration data was reviewed.

A drilling program was planned to test the shallow Triassic coal measures on the adjoining licences EL25/2008 and EL26/2008 in the Jericho – Oatlands area.

One diamond hole of this program at Jericho was within EL 25/2008. It successfully intersected five coal seams. Provisional assay results confirm the core log observation that there are seams of coal with relatively low ash values and high calorific values.

A further percussion drilling program around this diamond hole has recently commenced. It is planned to follow up this program with down hole geophysics, geological mapping and a review of the regional magnetics.

One diamond hole of 279.61m was drilled on the Mt Vernon property near Kempton. This hole intersected the Triassic coal measures with five thin seams in the top 50m. A further hole is planned between this hole and the DOM Mt Vernon DDH 1.

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2. DDH OJ002 Graphic log, detailed seam log and photographs of core.
3. Mt Vernon DDH 002 (MTV002) Graphic log, Core photographs, Recovery and RQD.
4. DOM Mt Vernon DDH 001 Graphic log and drill log.
5. Provisional Raw Coal Assays for OJ002.
6. Water bore drill hole data.

1 Introduction

1.1.1 Exploration philosophy and geological setting

EL 25/2008 Melton Mowbray covers 203 sq km in the Southern Midlands (see fig 1 below). The area is currently held by Tiger Coal Pty Ltd for Category 2 Minerals (coal) with the Operator being Midlands Energy Ltd.

The objective of the exploration in this area is to discover coal resources within the near surface Triassic coal measures. The Jericho and associated Melton Mowbray - Kempton troughs have a north to north-northwest trend and are disrupted by numerous northeast trending cross faults. The troughs are graben structures that extend for a minimum of 50 kilometres and vary from 1 to 5 kilometres wide (see Figure 2 for regional geology).

The geology is dominated by Jurassic dolerite as sills and dykes forming the tiers and hills. Dolerite intrudes the Triassic Upper Parmeener fresh water sequence of interbedded mudstone, siltstone and sandstone. The upper part of this sequence is lithic sandstone with interbeds of mudstone and coal measures. Tertiary Basalt flows are seen on a number of high areas and valley sides and floors are generally covered by Quaternary alluvium and slope deposits.

The structural history of the area is reflected in the north-northwest trend of valleys related to Tertiary tensional faulting which reactivated Triassic basin growth faults with north east trending cross faults forming numerous small graben structures.

1.1.2 Licence details

Tenement number:	EL 25/2008
Tenement name:	Melton Mowbray
Tenement location:	Dysart/Melton Mowbray/Jericho
Reporting period:	18 September 2011 – 18 September 2012
Tenement holder:	Tiger Coal Pty Ltd
Tenement operator	Midlands Energy Ltd
Tenement area	203 sq km
Project supervisor	Ron Gregory Prospecting

1.1.3 Location

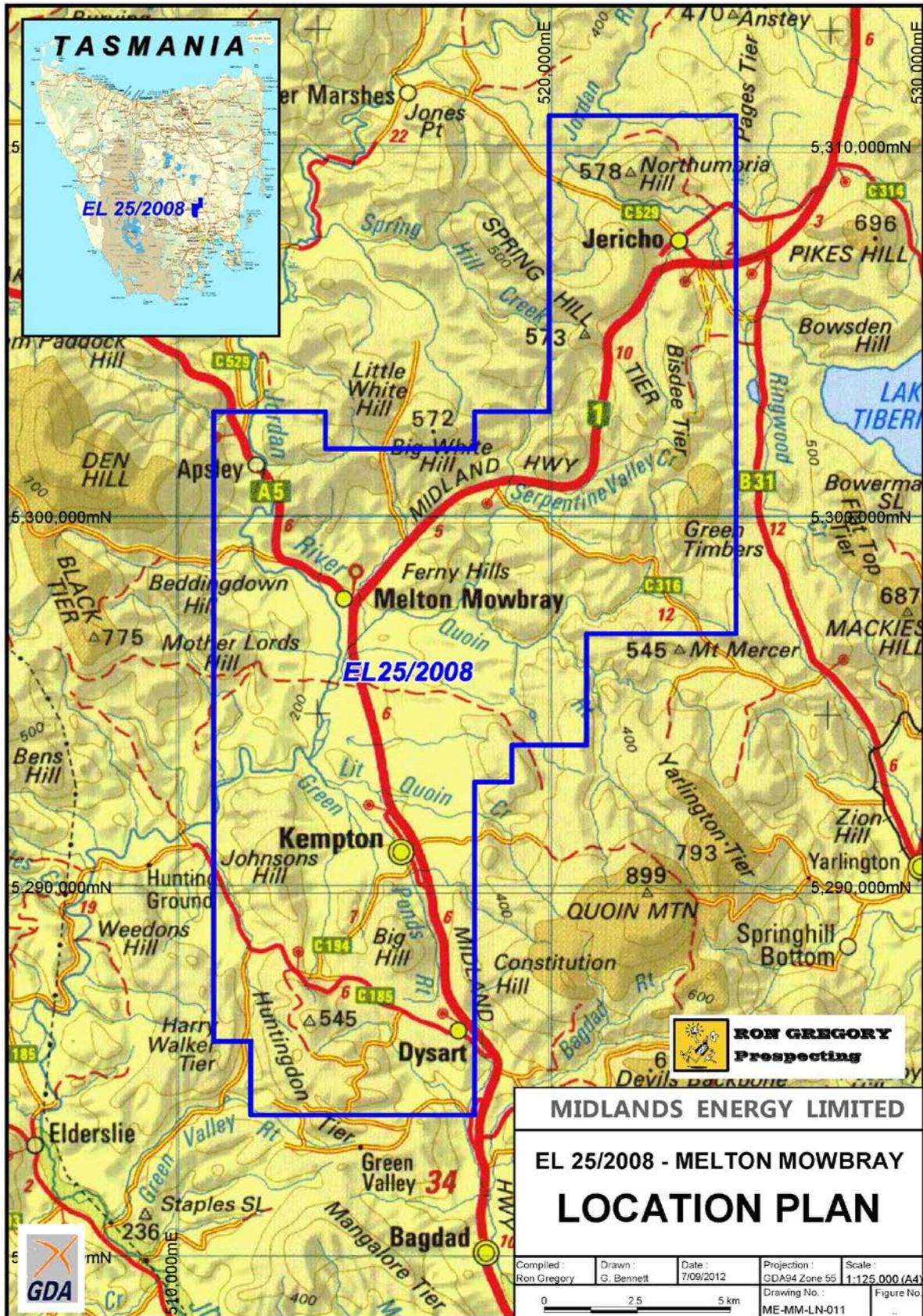


Figure 1. Location Map

1.1.4 Tenure

Five years from 18 September 2008 to 18 September 2013

2 Review of previous work

2.1.1 Prior to current tenement

Outcrops of coal have been noted in the Kempton area along road cuts but there is no record of mining (these notes are from "A brief review of past exploration in the area covered by EL 25/2008 Melton Mowbray for Midlands Energy Ltd" by John Pemberton – see Appendix 1 for full 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 wider area that included reconnaissance geology, remote sensing, structural interpretation and some scout drilling. One hole was drilled at Jericho within the current EL 25/2008. No coal was intersected. See reports TCR 80_1513, 81_1682 and 82_1798.

CRA Exploration Pty Ltd also conducted a widespread program over three licences in the Jericho-Oatlands-Kempton area (EL 18/1982, EL 19/1982 and EL 20/1982). The use of LANDSAT imagery allowed the identification of the structural trends that define the coal bearing grabens. A percussion drilling program was successful in that it confirmed that there was coal present but it also identified the difficulties of exploring in an area that is highly faulted and intruded by dolerite. Four holes were drilled on EL 25/2008 to the south and west of Kempton with some coal being found. See report 84_2213.

In 1982 the Department of Mines (DOM) drilled a deep hole at Mount Vernon to assist with a gravity survey. The coal measures were intersected over some 300m with a seam of 2.3m from 204.79m proving to be very low in ash and now recognised as the best coal intersection seen in Tasmania (Carol Bacon pers com). This hole was reported on by Bacon (1983) and logged by Summons in TCR84_2213. The hole was 500m deep but only logged to 209.01 by Bacon and 300m by Summons. The hole has been logged to 500m as part of this year's work (see Appendix 4). There were numerous coal seams (11) varying in thickness from 0.10m to 2.3m. The 2.3m seam was from 204.79m to 207.09m and the good quality of the seam is regarded as exceptional for Tasmanian coal:

Analysis basis (AD)

Relative density	1.37	
Moisture%	7.1	
Ash%		14.5
Volatile matter%	27.2	
Fixed carbon%	58.3	
Total sulphur%	0.43	
Specific energy (MJ/kg)		
Dry basis	28.6	
Dry ash-free basis	32.94	
Carbon dioxide%	0.82	

Cornwall Coal Company NL was granted EL 11/91 in 1991 with the express intention of following up the DOM drill hole Mount Vernon DDH1. Cornwall drilled three rotary holes and two diamond holes in the vicinity of Mount Vernon DDH1 with some success but concluded that the risks were too high with the coal measures in a small down faulted block with numerous dolerite intrusions affecting the coal quality. See reports 92_3378 and 93_3491.

2.1.2 During current tenement

An evaluation of the regional geology was not able to confirm the extent of the Jericho Trough through the licence (see figure 2 below for regional geology). Most of the licence is dominated by Jurassic dolerite and basalt which obscure the older underlying sedimentary sequence. In some areas the dolerite is intrusive and contact metamorphism is recorded in the Permo-Triassic sediments. An area in the southwest of the licence was identified as containing Permo-Triassic sediments that may be an extension of the coal bearing sequence known from the adjoining area. Two secondary graben structures were identified to the west of Melton Mowbray and Kempton.

A regional stratigraphic drilling programme of 18 holes was prepared to test the quality and extent of shallow coal measures within the Jericho and Kempton graben. The holes were designed to intersect the "Sequence 1" strata of previous workers. This is the uppermost member of the Triassic and has been recognised as the most prospective for economic coal seams. Up to six seams were thought to be present.

Due to the unknown extent of the Permo-Triassic geology in the Kempton – Melton Mowbray area of EL25/2008 two holes were proposed to test the stratigraphy in this area. This area was thought to contain coal measures in two secondary graben structures that have been identified immediately to the west of Melton Mowbray and Kempton. These are possibly truncated structures of somewhat limited extent.

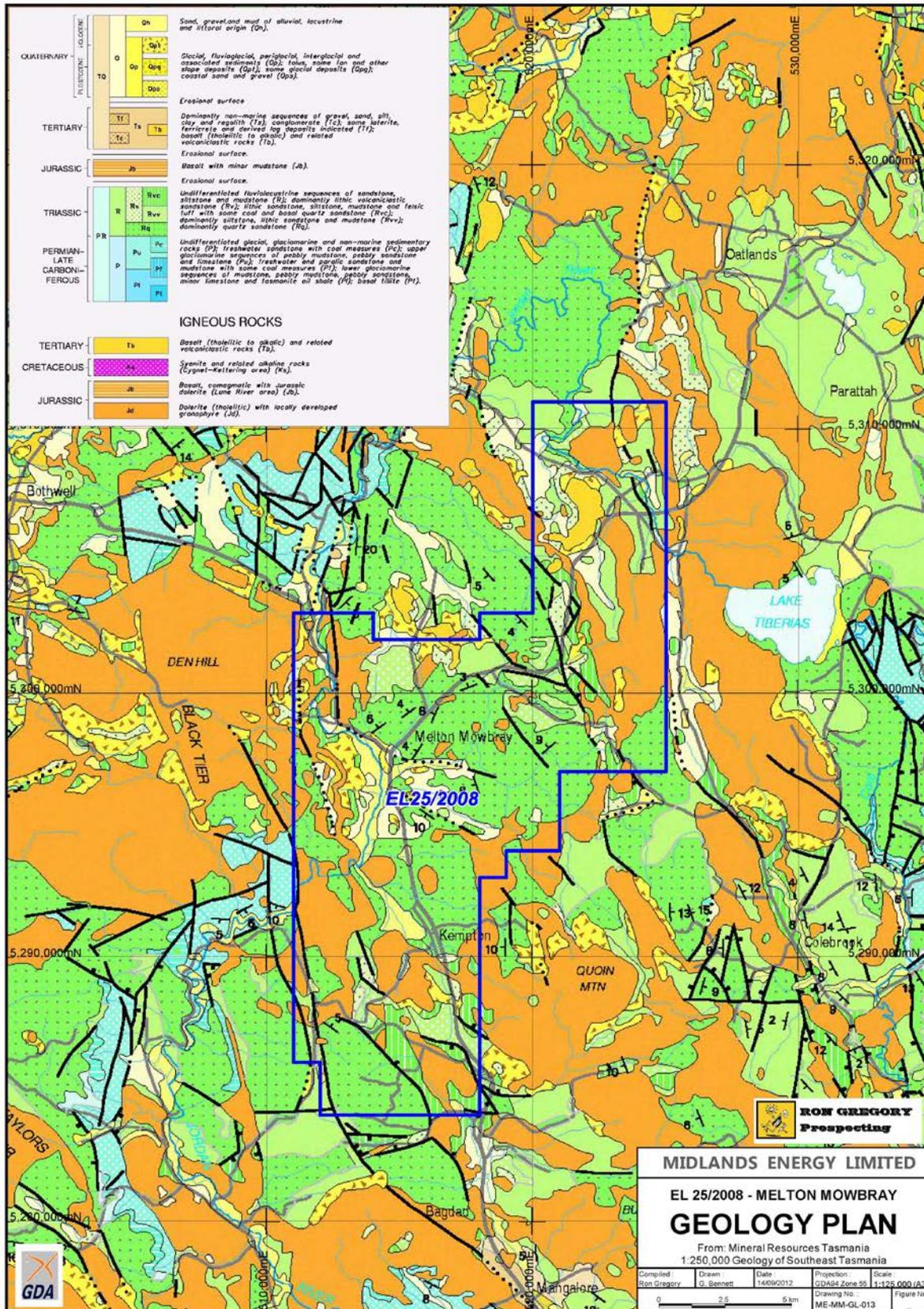


Figure 2 Regional Geology

3 Exploration completed during the reporting period

3.1.1 Exploration activities

The previous work in the area covered by EL25/2008 was reviewed and the report is attached in Appendix 1.

The initial phase of a drilling program designed to test the Jericho graben over two licences (EL25/2008 and EL26/2008) was composed of four diamond drill holes. These holes were drilled by KMR Drilling in March 2012. One of these drill holes, OJ002, was drilled on EL25/2008 just north of Jericho. It was drilled to a depth of 99.65m and encountered five seams of coal and coal-bearing carbonaceous mudstone (see Figure 3 for locality and Appendix 2 for the graphic log, detailed coal intersection logs and core photographs). The seams were sampled and provisional assay results are discussed below and presented in Appendix 5.

Four more drill holes were planned around this hole at Jericho and approved by Mineral Resources Tasmania. They are currently being drilled and will be reported on in the next annual report.

A geological survey of road cuttings (on public roads) was carried out in June to aid in identification of prospective areas and to attempt to identify the location of coal sampled in outcrop in the Kempton area in the 1980's.

A review of water bore drill hole geological data was undertaken to develop an understanding of the regional geology. This information has been collated and is presented in Appendix 6. Numerous descriptions from these bores report "coaly material" and this information will be used in the planning of future work on the licence

The DOM Mt Vernon DDH 1 was relogged to 300m and logged for the first time to the EOH at 496m. This work is presented in Appendix 4. This information will be used to attempt to correlate the coal measures across to Mt Vernon DDH 002 (MTV002).

A work program application was submitted and approved for two diamond drill holes on the Mount Vernon property. One hole was designed to further test the coal intersection from the DOM Mt Vernon DDH 1 and the second hole was a step out to the south east of 1 km. Drill rig availability delayed these holes until late July with the second hole adjacent to the Mt Vernon homestead being completed in late August (MTV002 see Figure 4 for locality and Appendix 3 for graphic log, core recovery and RCD). The rig was required to drill the percussion drill holes at Jericho and Oatlands (EL 25 and 26/2008) and the drilling program at Woodbury (EL 65/2007) and could not complete the drill hole that was approximately 100m from DOM Mt Vernon DDH 1. The rig will return to this hole at Mt Vernon when the other programs are completed.

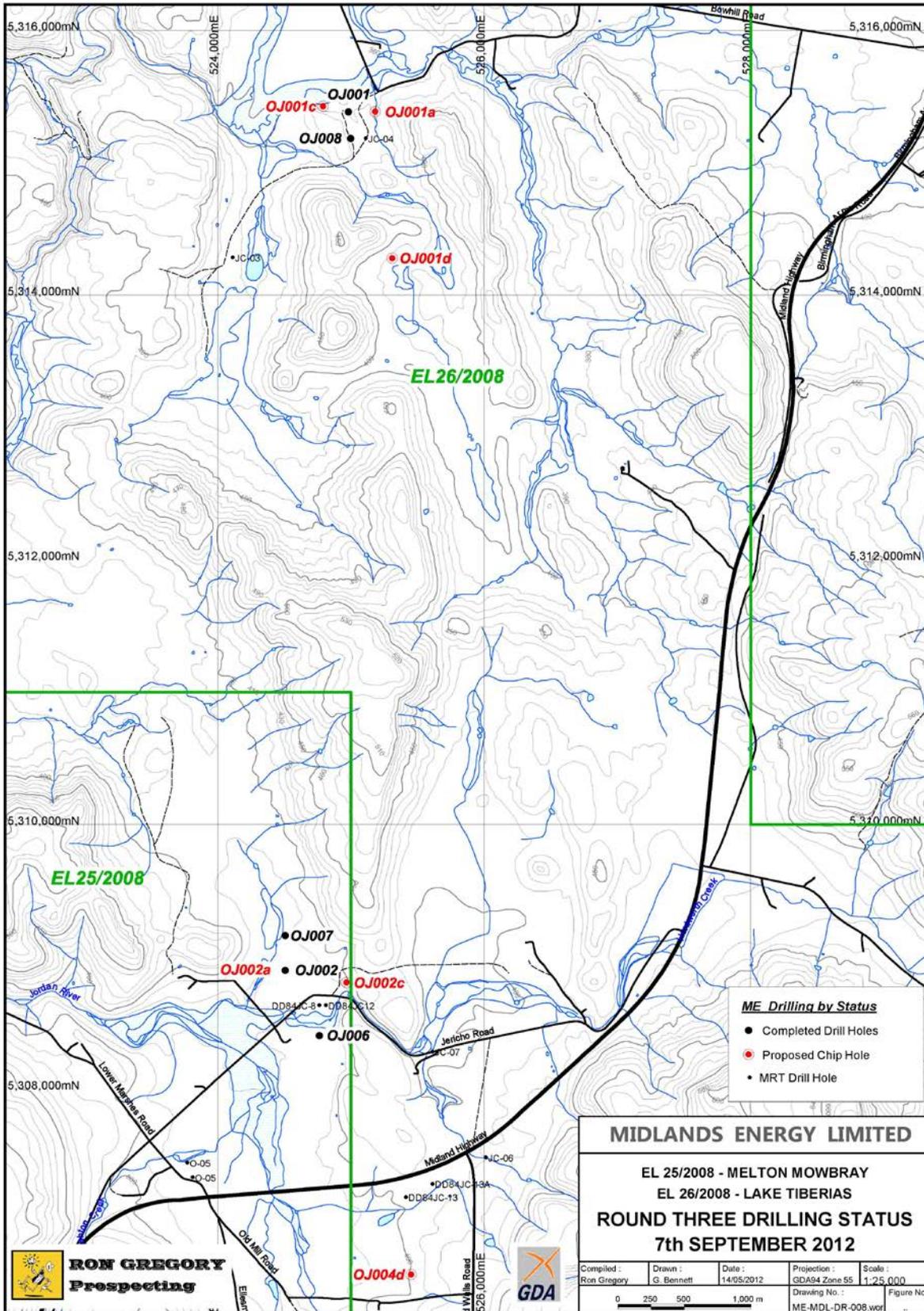


Figure 3 Locality plan for OJ002, OJ006 and OJ007

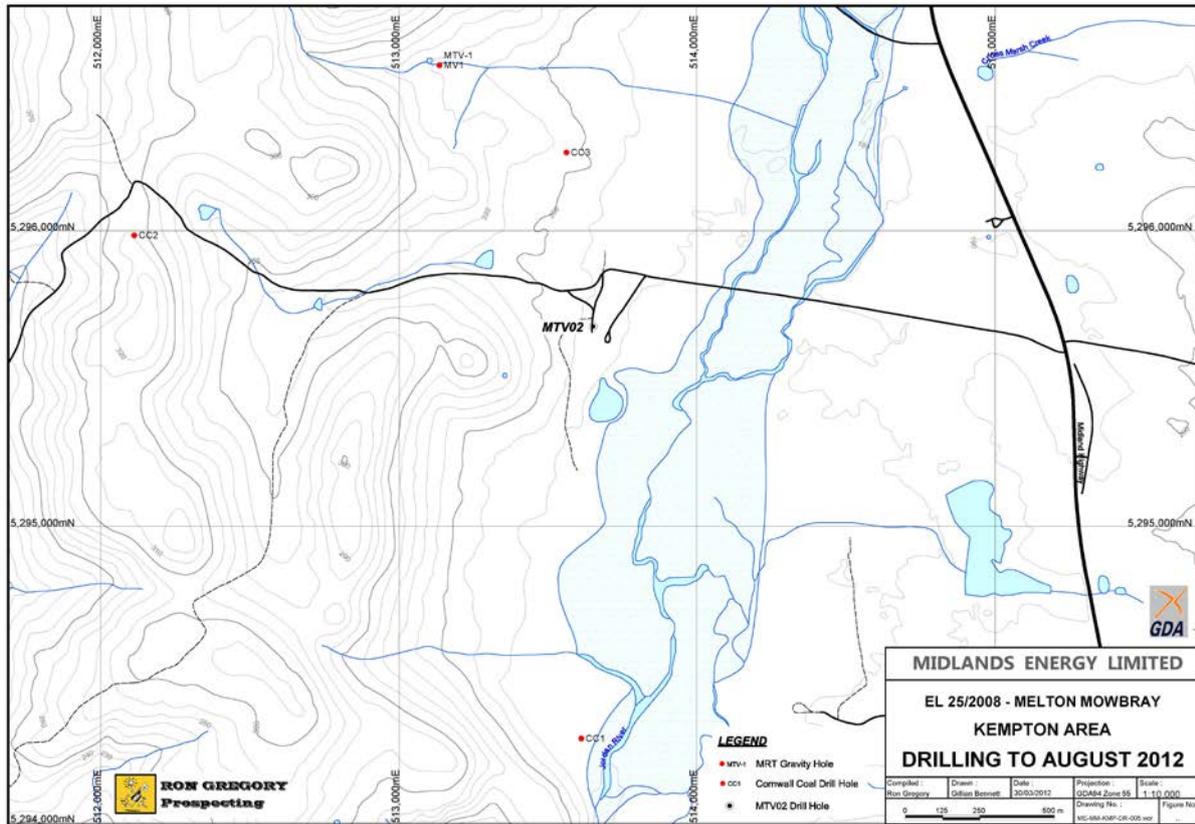


Figure 4 Locality plan for Mt Vernon DDH 002

4 Discussion of results

The review of the previous work in the area covered by EL25/2008 (see Appendix 1) recommended further examination of the Mount Vernon coal seam, carrying out regional magnetic and gravity surveys, further exploration of the northern extent of the Melton Mowbray graben and follow up on the CRAE drilling in the south of the licence.

OJ002 was drilled in the Jericho area of EL 25/2008 and intersected five seams of coal or coal bearing carbonaceous mudstone, all of which have been sampled and assay results are appended (see Appendix 2). Intervals with coal occurrences have been listed below.

OJ002		
From	To	Description
5.63	5.82	Highly weathered coal 'dirt'
17.18	18.37	Minor bright coal with calcite cleats and veining with some mud bands
29.19	29.91	Carbonaceous mudstone interbedded with dark grey sandstone and minor coal in 1mm wide vitric bands at 70-80 degrees to core axis
31.05	31.6	Moderately bright coal with calcite veins and cleats
31.6	33.7	Coal with calcite veining and vitric bands
50.94	51.88	Coal, grading from dull and moderately heavy to moderately bright with vitric bands and calcite veining (ranging from sub parallel to 20 degrees to core axis)
51.88	53.06	Dark brown to grey carbonaceous mudstone and mudstone with some coal bands (from 52.6-52.7m) with calcite cleats
53.06	53.18	Vitric coal bands with calcite veining and cleats. Some carbonaceous mudstone present
62.98	64.96	Dull, moderately heavy coal with carbonaceous mudstone banding and calcite veining common. Brecciated down hole contact. Pyrite mineralisation at 64.77m

These intervals are somewhat encouraging, however it is anticipated that tracking the extent of these seams is likely to be difficult given the faulting in the area. Provisional assay results were received at the time of final compilation of this report (13th September) (see Appendix 5). A cursory examination of these results confirms the detailed core log observation that there are seams of coal with relatively low ash values and high calorific values. Some of the better results are:

Drill hole	Interval thickness	Ash	Calorific Value
OJ002	31.07m-32.60m =1.53m	41.5%	4152 Kcal/kg
OJ002	32.97m-33.70m =0.73m	28.1%	5646 Kcal/kg
OJ002	50.94m-51.88m =0.94m	37.7%	4792 Kcal/kg

Four more percussion drill holes were approved by Mineral Resources Tasmania spaced approximately 200m from this hole (see Figure 3) and are currently being drilled (OJ006 and OJ007 completed) and will be reported on in the next annual report for EL 25/2008.



Site OJ002 on the McShane property.

The geological survey of road-side outcrops failed to positively identify the coal reported in Bacon, 1991, in the Kempton area; however an outcrop of highly degraded carbonaceous mudstone was identified at the eastern intersection of Clifton Vale Road and Fosters Road, west of Kempton. Examination of the area in which the 'KP' holes were drilled resulted in the conclusion that these holes were unlikely to have been drilled deep enough to thoroughly test the area. With dolerite sills observed in the area, it is possible that the dolerite, in which the CRAE holes ended, may not have been extensive.

MTV002 diamond drill hole intersected 270m of Triassic coal measures (see Appendix 3 for graphic log and photographs and Figure 4 for locality). Five thin seams were present in the top 50m. The hole was stopped at 279.61m after a change from the predominantly lithic sandstone sequence with carbonaceous grey mudstones to grey-green mudstones with mica. This was interpreted to be the change from the freshwater coal measures to the underlying Permian sequence.



Photograph shows Darren Richardson and Ross Stevens of KMR Drilling setting up the rig immediately adjacent to the Mt Vernon Homestead (with the full support of the owner!).

5 Conclusions

The encouraging coal intersections in OJ002 have resulted in the current follow up percussion drilling program. Down hole geophysics will be completed in the coming year in conjunction with that planned for EL 26/2008 and EL 65/2007. Following the encouraging assay results geological mapping, a review of the regional magnetics and further drilling at Jericho will be planned following full consideration of the assay results, the current drilling results and associated geophysics.

The Melton Mowbray-Kempton graben remains an area of interest although the MTV002 drill hole was not encouraging. This hole did confirm that the coal measures do extend for at least a kilometre from DOM Mt Vernon DDH 1. It is intended to drill the currently approved hole closer to the DOM hole in an attempt to extend the know intersection of excellent coal.

6 Environment

At both drill sites access was negotiated with the land owners and all aspects of the 5th Edition of the Mineral Exploration Code of Practice were followed. The following is a brief description of the completion of the rehabilitation requirements for the holes.

The OJ002 drill hole was sealed to within 1m of the surface by grout and then soil to the surface. Both sumps were backfilled.



Sumps backfilled at OJ002



Collar at OJ002

At MTV002 the hole was cased to 50m with 100mm class 12 PVC and capped while the landowner decides if he wishes to develop the hole as a water bore. If he chooses to do this he will obtain the necessary licence from DPIPWE and Midlands Energy Ltd will hand over

the ongoing responsibility for the hole to him. If it is decided that he does not want to use the hole for water then Midlands Energy Ltd will grout the hole to surface. The sumps have been backfilled at this site.



MTV002 Collar – 100m class 12 PVC to 50m.



MTV002 sumps backfilled.

7 Expenditure

Expenditure in 2011/2012 was calculated to be \$177,321.47.

Details are:

Drilling	\$91,627.74
Geology	\$69,573.60
Administration	\$16,120.13

8 References

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