EL65/2007 Tunbridge Annual Report 2014

EL 65/2007 (TUNBRIDGE)

September 2013 – September 2014

Energy Investments Pty Ltd
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Launceston

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VOLUME ONE (Main body of Report)

VOLUME TWO (Appendices 1-6)

VOLUME THREE (Appendix 7)

Abstract

The purpose of EL65/2007 is to locate an economically feasible coal resource for potential extraction.

The Joint Venture arrangement with South East Asia Resources (Aust) was terminated in early 2014. As a result of discussion with MRT in 2014, EL65 was reduced from 237 sq km to 115 sq km

A drilling program commenced on the 7th June 2014 at the Woodbury Prospect and was completed on the 25th August 2014, with drill-hole rehabilitation occurring in the following week. Geophysical logging was completed on the 30th August 2014. Geological logging and sampling was conducted as time allowed whilst drilling was being carried out at Jericho. Samples were sent to the Lab in October with the results returning values well above expectations.

The results of the drilling are currently been assessed and a revised JORC 2012 resource is currently underway and expected in the coming weeks.

Contents

1. Introduction

The aim of the current exploration programme on EL 65/2007 (Woodbury) is to quantify a JORC resource in the near surface Triassic coal measures.

The coal measures are associated with a lithic sandstone sequence which has been preserved from erosion by the overlying Jurassic dolerite capped Black Tier Range immediately to the south of the Woodbury deposit. Continuity of the coal seams has been established by past explorers through a combination of lithological, geophysical and analytical correlation. The Woodbury trough trends 112_0 and extends for a minimum of 9 kilometres (km) long and is 1 km wide. The Kuranda Graben forms a cross cutting structure trending 63_0 and is approximately 4 km long and 700 meters (m) wide. Coal seam distribution and lateral extent is not restricted to the graben structures.

Black coal was first discovered by Victor Petroleum and Resources Ltd, at Woodbury in 1981. Historically a number of companies have explored the region for coal, for relatively shallow open cut potential.

1.1 Report Datum

GDA94

1.2 Exploration Rationale

The aim of the current exploration program on EL 65/2007 (Woodbury) is to quantify an economically extractable JORC resource in the near surface Triassic coal measures.

1.3 Geological Setting

The coal measures are associated with a lithic sandstone sequence which has been preserved from erosion by the overlying Jurassic dolerite capped Black Tier Range immediately to the south of the Woodbury deposit.

Continuity of the coal seams has been established by past explorers through a combination of lithological, geophysical and analytical correlation. The Woodbury trough trends 112^0 and extends for a minimum of 9 kilometers (km) long and is 1 km wide. The Kuranda Graben forms a cross cutting structure trending 63^0 and is approximately 4 km long and 700 meters (m) wide. Coal seam distribution and lateral extent is not restricted to the graben structures.

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1.4 Licence Information

1.4.1 Licence Number

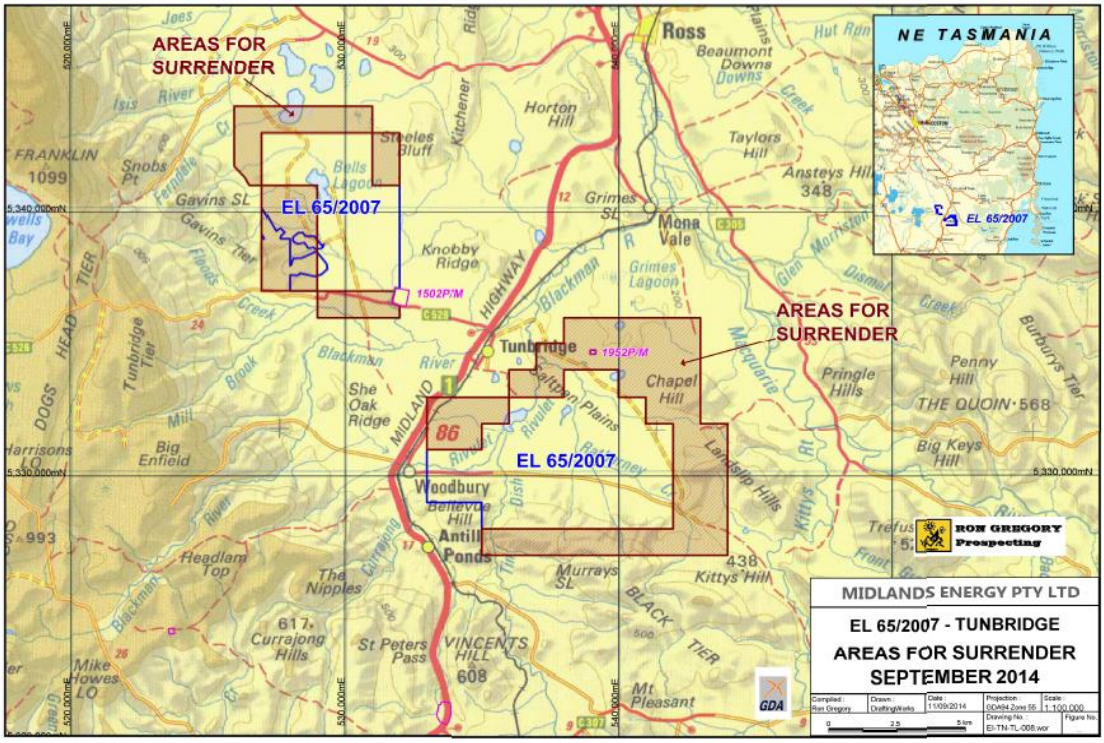
EL65/2007

1.4.2 Licence Name

Tunbridge

1.4.3 Licence Location

Tunbridge district including Woodbury



1.4.4 Reporting Period

18th September 2013 – 17th September 2014

1.4.5 Tenement Holder

Energy Investments Pty Ltd

2. Previous Work

2.1 Work Prior to Current Licence

A number of past explorers have conducted significant exploration over the Woodbury tenement. A joint venture between Costain Australia Limited, Victor Petroleum & Resources Limited and North West Bay Company Pty. Limited completed a study into the economics of supplying a nearby coal fired power plant in 1983 proposed by the Hydro Electric Commission of Tasmania.

3. Exploration

3.1 Desktop Studies

In November 2013 Golder Associates produced a JORC 2012 Resources Statement. This is included at **Appendix 6**.

3.2 Regional Exploration Activities

No regional exploration was done in 2013-2014

3.3 Prospect-based Exploration Activities

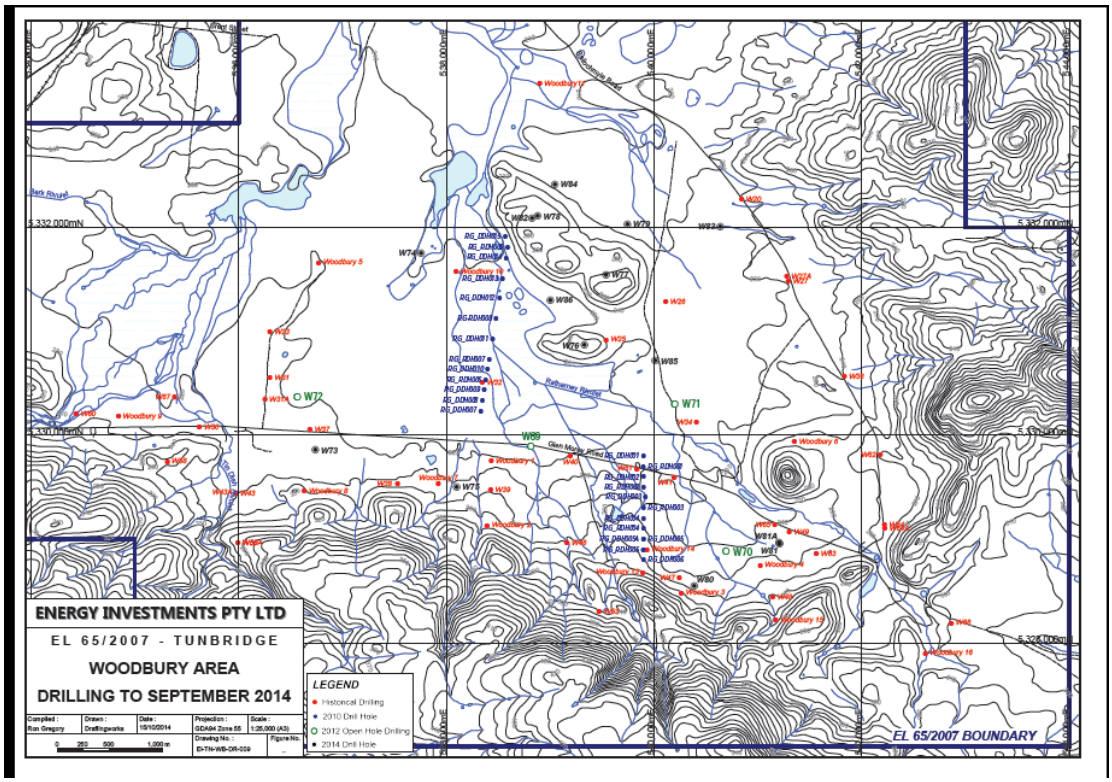
Woodbury Prospect 2013

A 5 hole (percussion/open) drilling program was commenced on the 7th Sept 2013 and abandoned after 4 holes (W69 – W72), due to ground conditions. Lithology Logs were provided in the 2012-2013 Annual Report.

Coal intercepts in W69 – W71 were assayed and are provided in **Appendix 1.**

Woodbury Prospect 2014

A drilling program commenced on the 7th June 2014 and was completed on the 25th August 2014. A total of 16 diamond and percussion/open holes (W73 – W86) were drilled at 13 different locations were drilled. All were all located on private property amongst cropping and grazing activities requiring significant landowner liaison and alteration to planned drilling locations.



3.3.1 Prospect-based Exploration Activities

Woodbury Prospect 2014

3.3.2 Geology

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

Significant coal intercepts are in **Appendix 2**.

3.3.3 Geochemistry

Suitable coal intercepts have been sampled and analysis was completed by ALS Coal Laboratory, Richlands, QLD. ALS is currently conducting washability analysis on selected samples.

3.3.4 Geophysics

Most drillholes (W74 – W83) were geophysicaly logged. See **Appendix 3.**

The downhole, wireline geophysics contractor was Endeavour Geophysics Pty Ltd of South Australia.

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 W73 – W86

W73
Collar percussion drilled to 9m, and then HQ3 diamond drilled to 105.20m in Coal Measure Sediments of the Upper Triassic. Traces of coal were intersected, and the hole was completed in bleached/hornfels altered sediments, suggesting the hole was nearing dolerite at its base.

W74
Percussion collar drilled to 15m, and then HQ3 diamond drilled to 93.30m after drilling 83.20m of Coal Measure sediments with traces of coal and some cavities and core loss. This hole drilled into, and remained in dolerite to its completion depth. The sediments were near horizontally deposited.

W75
Collar percussion drilled to 7.4m then drilled to 138m in HQ3 core size in Coal Measure Sediments. Bedding planes in the sediments were flat lying. This hole intersected narrow seams of coal correlated to be Seams D, C, B and A. Geophysics confirmed the positions of these coal seams.

W76
Five and a half inch hammer drilled to 120m. This hole commenced in dolerite, then intersected the Coal measure Sediments at 17m to the end of hole. Coal percussion chips were recovered from three possible coal seams in this hole. Geophysics confirmed the presence of these coal intersections.

W77
Percussion hammer drilled to 102m in coal poor Coal measure Sediments. A possible three narrow coal seams were intersected. Geophysics was completed on this hole.

W78
Hammer drilled to 132.50m. This percussion hole drilled in dolerite to 48m, then remained in Coal Measure Sediments to the end of hole depth. Coal was recovered in percussion sample chips at six locations.

W79/W79A
Collar hammer drilled to 4.6m, and then HQ3 diamond drilled to 111.60m in near flat lying Coal Measure Sediments, intersecting coal seams A, B and C. The hole ended in bleached sediments suggesting an end of hole depth that is in close proximity to dolerite. Geophysics was completed at this location.

W80
Percussion collar drilled to 36m in Coal measure Sediments, then HQ3 diamond drilled to 117.5m, intersecting Coal Measure Sediments to 112.61m, then dolerite to the end of hole depth. Four narrow coal seams were intersected at this location.

W81/W81A
Percussion collar drilled to 15.10m, then diamond HQ3 drilled to 54.8m in Coal Measure Sediments. Some minor intersection of coal drilled, and the hole ended in altered/bleached sediments suggesting a close proximity to dolerite. Geophysics confirmed the position of coal and mudstones at this location.

W82
Percussion hammer drilled through dolerite to 48m, then HQ3 diamond drilled to 154.07m in Coal Measure Sediments, then in dolerite to 156.75m. This hole intersected three coal seams. Bedding planes in this hole were near horizontal.
The down-hole geophysics survey correlated well with the position of the coal seams logged in the geological graphic log.

W83
Collar drilled to 2.8m, then HQ3 diamond drilled to an end of hole depth of 50.40m. Coal Measure Sediments were intersected from surface to 47.66m. Dolerite was drilled from 47.66m to 50.40m. A weathered or altered coal seam was intersected at 26m. Geophysics was successfully completed on this hole.

W84
Pre-collar drilled to 5.15m then HQ3 diamond drilled to an end of hole depth of 69.8m. The drilled core was highly jointed and veined at this location, and drilling encountered problems resulting in some core loss. Some coal was intersected in these jointed zones and a good coal seam was drilled at 52m. The hole was ended in dolerite, first intersected at 66.20m. Geophysics was completed on this hole.

W85
Collar drilled to 4.5m then HQ3 diamond drilled to 97.3m in Coal Measure Sediments. The sediments at the base of the hole were bleached and hornfels altered suggesting the end of hole was close to dolerite. Some coal was intersected in this hole, and the geophysical down-hole survey correlated well with the geologically logged location of these seams. Near vertical jointing and some lower angle faults were drilled at this location.

W86
Percussion collar drilled to 5.05m and then HQ3 diamond drilled to 105.40m in Coal Measure Sediments and stopped in altered sediments at 105.40m. Coal seams A, B and C were intersected in this hole. The geophysics survey confirmed the position of the coal seams and mudstone bands down hole.

Drillhole Logs W73 – W86 are attached in **Appendix 4**.

Drillhole Photos W73 – W86 are attached in **Appendix 5.**

3.3.7 Ore Reserves and Resources

Current total JORC 2012 coal resources for EL65/2007 are 23 million tons. This is comprised of an Inferred resource of 21 million tons, and an Indicated resource of 2 million tons with the below in-situ quality;

Calorific Value 19.2 MJ/kg (4,585 Kcal/kg)
Raw Ash 37.8%
Total Sulphur 0.4%
Fixed Carbon 45.4%
Volatile Matter 13.4%
Total Moisture5.4%

A revision of the JORC 2012 coal resources is currently underway by Golder and Associates and is expected within the coming weeks.

3.3.8 3D Modelling

Further modelling of the Woodbury deposit is currently underway.

4. Results

The current exploration results have proved encouraging, with a significant improvement in both in-situ coal quality and seam structure, particularly in the North eastern portion of the Woodbury Resource Area.

Coal quality analysis was conducted in two stages, with all samples undergoing "proximate analysis" then any samples below 50% ash content were further sampled for Relative Density, Calorific Value and Sulphur content. Washability testing of selected samples is still underway with the results expected in the near future.

Quality of the samples that received full analysis ranged as per the below table.

Coal Quality Variation

	Minimum	Maximum
Ash %	16.8	46.2
Volatiles %	3.9	26.9
Fixed Carbon %	29.2	64.8
Total Moisture %	2.4	7.3
Sulphur %	0.09	1.62
MJ/kg	14.6	26.87
Kcal/kg	3,486	6,418

Significant coal intersections were obtained in W79/79A, W82, W84 and W86, some examples of which are tabled below. Full coal analysis results are provided in **Appendix 6**.(

Significant W79A Intersections

From (m)	To (m)	Ash %	Calorific Value
11.74	13	24.4	5,490 Kcal/kg
63.99	65.92	40.5	4,218 Kcal/kg
88.08	90.07	30.9	5,292 Kcal/kg

Significant W82 Intersections

From (m)	To (m)	Ash %	Calorific Value
125.19	127.56	23.1	5,874 Kcal/kg
139.95	142.48	54.1	N/A

Significant W84 Intersections

From (m)	To (m)	Ash %	Calorific Value
50.63	52.66	31.8	4,958 Kcal/kg

Significant W86 Intersections

From (m)	To (m)	Ash %	Calorific Value
33.32	34.67	33.8	4,928 Kcal/kg
83.63	85.47	55.1	N/A

5. Conclusions

5.1 Conclusions

The results derived from the 2014 drilling program have surpassed expectations and further strengthened the possibility of an economically extractable coal resource.

Drilling in the previously under explored northern portion of the Woodbury Resource Area has identified coal quantities of both economic quality and thickness. This area will be subject to further drilling and feasibility/marketing studies at the earliest convenience.

5.2 Recommendations

Adequate resource information is now available to allow for the commissioning of economic feasibility and coal marketing studies. A large portion of the companies' financial resources for the 2015 year should be allocated to these studies.

The feasibility studies should concentrate on defining appropriate methods of coal extraction for high overburden ratio deposits and the coal marketing studies should attempt to define markets for higher ash/direct shipping (raw) coal products.

It is also recommended that further resource drilling be conducted, particularly within the northern portion of the Woodbury Resource Area. Drilling should be on a close spaced grid concentrating on the potential resources beneath the hilly cover immediately to the north and east of Ratharney Rivulet.

Several large diameter diamond cored holes should also be completed to allow for more comprehensive washability testing to be conducted.

6. Environment

All drillholes were back filled and rehabilitated except W73 which is in the middle of cropping. W73 will be back filled when cropping has completed.
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 $368,433 as per the companies' quarterly returns.

8. References

There are no References.

9. Appendices

VOLUME TWO

Appendix 1

Assay Results – W69 – W71 (2013)

Appendix 2

Significant coal intercepts W73 – W86 (2014)

Appendix 3

Geophysical Logs W73 – W86

Appendix 4

Drilling Logs W73 – W86

Appendix 5

Drilling photos W73 – W86

Appendix 6

Woodbury Coal Analysis – Nov 2014

VOLUME THREE

Appendix 7.

Woodbury Coal Project 2013 - JORC Resources Statement

AREAS FOR SURRENDER

EL 65/2007

1502P/M

1952P/M

AREAS FOR SURRENDER

EL 65/2007

NE TASMANIA

EL 65/2007

RON GREGORY Prospecting

MIDLANDS ENERGY PTY LTD

EL 65/2007 - TUNBRIDGE

AREAS FOR SURRENDER SEPTEMBER 2014

Compiled :	Drawn :	Date :	Projection :	Scale :
Ron Gregory	DraftingWorks	11/09/2014	GDA94 Zone 55	1:100,000

0 2.5 5 km

Drawing No. : EI-TN-TL-008.wor

Figure No. ..

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EL 65/2007 - TUNBRIDGE

WOODBURY AREA

DRILLING TO SEPTEMBER 2014

Compiled :	Drawn :	Date :	Projection :	Scale :
Ron Gregory	Draftingworks	15/10/2014	GDA94 Zone 55	1:25,000 (A3)

0 250 500 1,000 m

Drawing No. : EI-TN-WB-DR-009

Figure No. ..

LEGEND

- Historical Drilling
- 2010 Drill Hole
- 2012 Open Hole Drilling
- 2014 Drill Hole

EL 65/2007 BOUNDARY

Brent Street
Ballochmyle Road
Bark Rivulet
Tin Dish Rivulet
Ratharney Rivulet
Glen Morey Road

538,000mE
540,000mE
542,000mE
544,000mE
5,332,000mN
5,330,000mN
5,328,000mN

Woodbury11
Woodbury 5
Woodbury 10
Woodbury 9
Woodbury 1
Woodbury 7
Woodbury 8
Woodbury 2
Woodbury 14
Woodbury 13
Woodbury 3
Woodbury 4
Woodbury 15
Woodbury 16
Woodbury 6

W84 W78 W82 W79 W83 W74 W77 W86 W76 W85 W73 W75 W69 W72 W71 W70 W81 W81A W80

W20 W26 W25 W23 W31 W31A W67 W60 W30 W37 W68 W43A W43 W38 W39 W40 W61 W41 W46 W50A W34 W62 W65 W49 W63 W64 W64A W47 W48 W53 W66 W36 W27A W27

RG_DDH015 RG_RDH009 RG_DDH014 RG_DDH013 RG_DDH012 RG-RDH008 RG_DDH011 RG_RDH007 RG_DDH010 RG_RDH006 RG_DDH009 RG_DDH008 RG_DDH007

RG_DDH001 RG_RDH001 RG_DDH002 RG_RDH002 RG_DDH003 RG_RDH003 RG_DDH004 RG_RDH004 RG_DDH005A RG_DDH005 RG_RDH005 RG_DDH006