



HardRock Coal Mining Pty Ltd  
ACN: 150 741 094

## **ANNUAL REPORT FOR**

### **EXPLORATION LICENCE EL16/2016**

**Period covered:** 11 May, 2017 to 10 May, 2018

**Licensee:** Hardrock Investments Pty Ltd  
P.O. Box 3051  
Prahan East VIC 3181

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Managers of Hardrock Coal Pty Ltd as the  
sole shareholder of Hardrock Investments Pty  
Ltd

**Publication date:** 5 October, 2018

## ABSTRACT

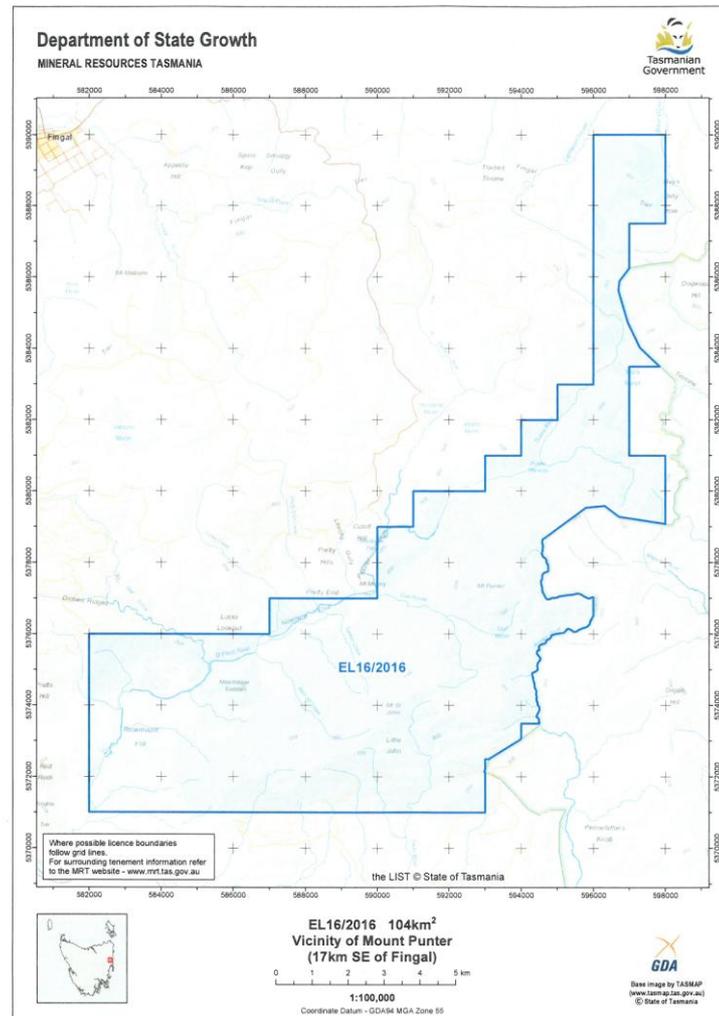
Hardrock Investments Pty Ltd is the holder of EL16/2016, which lies to the south of another Hardrock Investments held lease, EL16/2010. The exploration objective within this licence area is to further define coal resources, particularly those adjacent to Mining Lease 4M/2012.

EL16/2010 was adjoined to the west by EL17/2010 and after a number of relinquishments the remaining section of EL17/2010 was consolidated into EL16/2010 in October 2016. The term of the consolidated lease was extended to 7<sup>th</sup> November 2017. A further extension will be requested to allow the finalization of geological evaluation and feasibility work for EL16/2010.

EL16/2016, EL16/2010 and ML4M/2012 constitutes the consolidated whole licence area of Hardrock Coal Mining Pty Ltd and its wholly owned subsidiary, Hardrock investments Pty Ltd.

There has been considerable exploration drilling in the consolidated whole licence area, firstly by the Tasmanian Department of Mines in the 1970's & 1980's and recently by HardRock Coal Mining Pty Ltd (HRCM). HRCM considers EL16/2010, EL17/2010, EL16/2016 and 4M/2012 to be a combined resource and has a single geological model which covers the area. The model and JORC compliant resource statement are, by agreement with Mineral Resources Tasmania (MRT), confidential at this stage.

The boundary of EL16/2016 is shown below and is outlined in blue.



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## 1 Introduction

### 1.1 Licence Area, Report Datum, Reporting Period

EL16/2016 covers an area of 104 km<sup>2</sup>. The boundary is shown on the appended **Figure 1**, which is the plan contained in the licence document. The licence area is located south to south east of Fingal township, the Report Datum is GDA94 (MGA Zone 55) and the reporting period is from 10 May, 2017 until 9 May, 2018.

### 1.2 Exploration Rationale

The aim of exploration on EL16/2016 is to further define the coal resource within the licence area, particularly the resources extending from ML4M/2012 and through EL16/2010.

### 1.3 Geological Setting

The coal seams of interest lie within the Triassic Upper Parmeener Super Group. The upper limit is defined by outcrop or the overlying Jurassic Dolerite which forms a discordant upper limit to the coal measures. The base of coal bearing strata is defined by a formation highlighted by the presence of white quartz rich sandstone beds.

Large volumes of Jurassic dolerite have intruded the Parmeener Supergroup stratigraphy, and in the project area dolerite outcrop up to >400metres thickness covers most of the coal measures. Cainozoic tectonic rifting and periglacial landscape development processes through the Fingal Valley have produced the escarpment and benched dolerite talus slope morphology which characterizes the landscape of the project area.

### 1.4 Coal Measures Geology

The coal seams are hosted within an approximate thickness of 250 metres of fluvial lithic sandstones and minor siltstones, argillic and carbonaceous mudstones, and minor air fall volcanoclastics.

There are 8 coal horizons which are identified simply “A” to “H” within the consolidated whole licence area Seams in descending order. Seams F and G have significant areas of economic thickness and coal quality. The other coal beds are either removed by the dolerite or are generally represented by minor coal or carbonaceous shale bands. At the regional scale the coal measures show a south easterly dip of 1-2°.

The F Seam has been mined at the Valley No1 and No2 Mines and is equivalent to the Duncan Seam worked in Duncan Colliery. The G Seam has been identified as the East Fingal Seam from drilling carried out in the early 1980s and there is a short entry into the seam at the old Valley No2 mine.

### 1.5 Other Information

The tenement holder and licence owner is HardRock Investments Pty Ltd, a wholly owned subsidiary of HardRock Coal Mining Pty Ltd of P.O. Box 3051, Prahan East, VIC 3181. There is no joint venture structure and there have been no title transfers during the reporting period.

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## **2 Exploration During Reporting Period**

### **2.1 Desktop Studies**

Additional data was added to the geological model database.

### **2.2 Regional Exploration Activities**

No regional exploration was conducted during the reporting period.

### **2.3 Prospect-based Exploration Activities**

#### **2.3.1 Drilling**

No drilling was undertaken during the reporting period.

#### **2.3.2 Geophysical Logging**

No geophysical logging has been done during the reporting period.

#### **2.3.3 Assay of Samples**

No new samples were generated during the reporting period.

## **3 Results**

Not applicable at this stage.

## **4 Conclusions**

There are further coal resources adjacent to the eastern and southern boundaries of ML4M/2012, in the F Seam. Coal resources are likely in the licence area. Further clarity over the extent of the recoverable resource will occur when the geological and coal quality model is updated and run.

## **5 Environment**

There have been no environmental impacts during the reporting period.

## **6 Expenditure**

Expenditure, being the total of four quarterly reports spanning 10 May, 2017 to 9 May, 2018, is shown below.

<b>Expenditure EL16/2016</b>	
<b>10/05/2017 to 09/05/2018</b>	
<b>Expense Category</b>	<b>Value</b>
Geoscientific	
Geology	\$15,346
Geochemistry	\$0
Geophysics	\$0
Remote Sensing	\$0
Drilling & Gridding	
Gridding	\$0
Meters Drilled	0m
Drilling	\$0
Land Access	\$0
Rehabilitation	\$0
Feasibility	\$1,000
Other	\$6,000
Admin	\$1,676
<b>Total</b>	<b>\$24,022</b>

## 7 References

Bacon, C.A. 1991. The Coal Resources of Tasmania. *Bull. Geol. Surv. Tasm.* 64.

## 8 List of Appended Figures

Figure 1 - Plan of Licence boundary from MRT Approval Document

## 9 Listing of Files on Attached CD

Exploration Work Type	Filename	File format
<i>Report</i>	EL162016_ANNUAL_REPORT.pdf	<i>pdf</i>
<b>Surface sampling</b>		
<b>Other - Airborne Survey</b>		
<b>File Verification Listing</b>	EL162010_201612_03_FILELIST.xls	xls

**END OF REPORT**

## Appended Figures

