

# **MINERAL HOLDINGS AUSTRALIA PTY LTD**

## **EXPLORATION LICENCE EL47/2011 DIP RANGE, NW TASMANIA**

### **PARTIAL RELINQUISHMENT REPORT TO AUGUST 2017**

**Compiled by  
T W Dickson  
5 Crouch Court  
Doncaster VIC 3108**

**For  
Mineral Holdings Australia Pty Ltd  
11 Kent Court  
Toorak VIC 3142**

**3 August 2017**

# TABLE OF CONTENTS

	Page No.
ABSTRACT.....	1
1.0 INTRODUCTION.....	2
2.0 GEOLOGY.....	2
3.0 CURRENT EXPLORATION.....	3
4.0 CONCLUSIONS.....	3
5.0 REFERENCES.....	3
6.0 KEYWORDS.....	3
 <b>Figure 1: Location Diagram – EL47/2011 Dip Range</b> .....	 <b>4</b>
(showing areas to be relinquished and retained)	

## **ABSTRACT**

This report gives a review of the exploration work carried out by Mineral Holdings Australia Pty Ltd in the past 12 months on EL47/2011 over the relinquished section of the exploration licence. The licence originally covered 186 km<sup>2</sup> in the Dip Ranges surrounding the Thomas Mountain silica mine and RL1/2005. It was reduced to 38 km<sup>2</sup> in September 2013 and a further 22.7 km<sup>2</sup> is now to be relinquished in September 2017.

The licence covers outcrops of the Detention Quartzite and the Jacobs Quartzite of the Rocky Cape Group and the target of the exploration program is silica, silica sand and quartzite for the chemical, metallurgical glass and coal seam methane industries.

Previous exploration by Mineral Holdings Australia Pty Ltd and its joint venture partners has outlined a substantial inventory of potential silica products in RL1/2005 and the intention was to explore the adjacent areas for any further resources of a similar nature.

The area south of grid reference 5,460,000 N is extremely inaccessible but a detailed program of foot traversing located no significant quartzite bodies or significant areas of silica sand. As a consequence, the 22.7 km<sup>2</sup> of the licence south of grid 5,460,000 N is to be relinquished.

## 1.0 INTRODUCTION

EL47/2011 was granted to Mineral Holdings Australia Pty Ltd on 16 September 2012 for a period of 5 years. The licence originally covered 186 km<sup>2</sup> in the Dip Ranges and surrounds the Thomas Mountain silica mine within RL1/2005. It was reduced to 38 km<sup>2</sup> in September 2013 and to 15.3 km<sup>2</sup> at this renewal.

The Thomas Mountain Mine contains significant resources of high-quality quartzite and frac sand, located in the northern Dip Range, about 25 km south-west of Wynyard and 20 km south-east of a deep-water harbour at Port Latta. Access is via the township of Montumana on the Bass Highway, 25 km west of Wynyard, thence 6 km south along Montumana and Newhaven roads to a turn-off just east of Hogarths Creek.

Exploration licence EL47/2011 covered outcrops of the Detention Quartzite and the Jacobs Quartzite of the Rocky Cape Group surrounding the Thomas Mountain Mine and the target of the exploration program was for any additional resources of silica, silica sand and quartzite for the chemical, metallurgical glass and coal seam methane industries.

During the year, a detailed program of foot traversing was carried out throughout the 22.7 km<sup>2</sup> of the licence area located to the south of grid 5,460,000 N. No significant quartzite bodies or areas with silica sand were located within the area which is now to be relinquished.

## 2.0 GEOLOGY

Resources of high-grade quartzite have been reported in various government publications as occurring within the Proterozoic rocks of north-west Tasmania. The better quartzite occurred within the Detention Quartzite and Jacob Quartzite sub-groups and rocks of these sub-groups underlie most of the licence area.

Gee (1971) described the Proterozoic sequence within the Rocky Cape Group from youngest to oldest as – the Jacob Quartzite (1,130 m in thickness), the Irby Siltstone (760 m) and the Detention Quartzite (1,400 m). Gee suggested the Detention Quartzite contained about 10% siltstone in beds from a few metres to more than 80 metres in thickness, while the Jacob Quartzite is a pure quartz sandstone and is the coarser grained of the two. The Rocky Cape Group, in turn, overlies the Cowrie Siltstone which was at least 2,400 m in thickness.

Structurally the Detention Quartzite and the Jacob Quartzite are folded into a tight series of anticlines and synclines with north-east trending and dipping axes with folds becoming overturned in the east, resulting in north-west dipping beds at 45 degrees or above.

Gee (1971) described the quartzites as uniformly fine grained orthoquartzites, with 99% quartz grains and a granular to glassy texture, depending on the degree of cementation by silica. Turner (1989), on the other hand, preferred to call the mature, quartzose, sandy

sediments quartz arenites and attributes their variable physical character as mostly due to variable silicification and occasionally to metamorphism.

### **3.0 CURRENT EXPLORATION**

The area was extensively traversed on foot by prospector, Mr Kevin Pinner, as there are no roads or tracks in the area south of grid line 5,460,000 N. No new significant quartzite deposits or silica sand were identified within the area to be relinquished. An area of 15.3 km<sup>2</sup> is to be retained to follow up small areas of potential sand deposits.

### **4.0 CONCLUSION**

The area being relinquished is believed to have very limited potential for significant deposits of high-quality quartzite and silica sand.

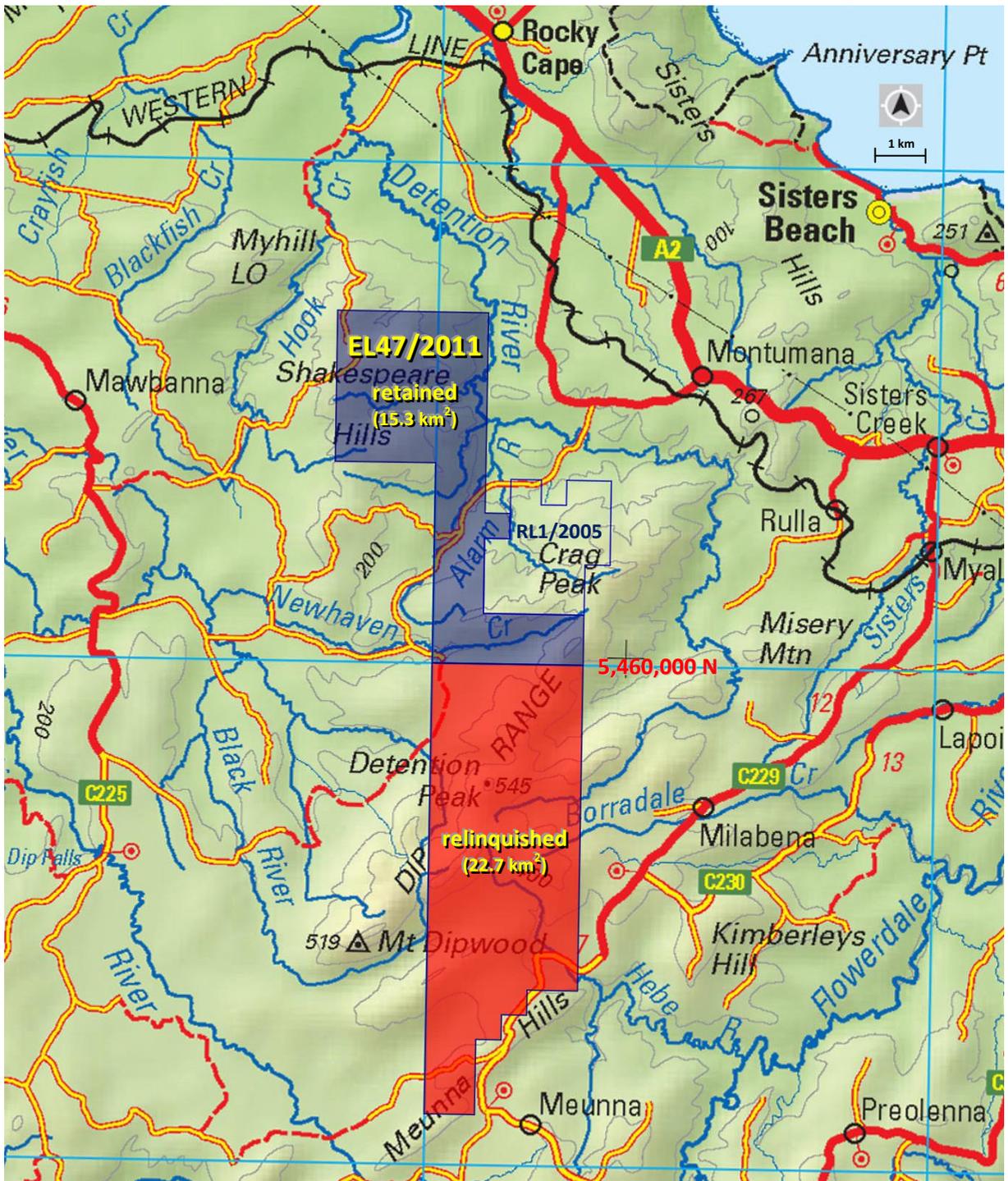
### **5.0 REFERENCES**

Bacon, C.A. 1989. Silica. Mineral Resources Tasmania. 12.

Gee, R.D, 1971. Table Cape, Tasmania. Tasmanian Geological Atlas 1 Mile Series Expl. Rep., Sheet 22 (8016S).

### **6.0 KEYWORDS**

Dip Range, Thomas Mountain, Detention Subgroup, Jacob Quartzite, Rocky Cape Group, Frac Sand, Quartzite, Silica Resources.



**FIGURE 1:** Location Diagram - EL47/2011 Dip Range (showing areas to be relinquished and retained)