RETENTION LICENCE 10/1997
TOGARI

REPORT ON EXPLORATION
March 2011 to MARCH 2012

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

Compiled by
T W Dickson
5 Crouch Court
Doncaster VIC 3108
23 March 2012

TABLE OF CONTENTS

ABSTRACT

RL 10/1996 was granted to Mineral Holdings Australia Pty Ltd on 8th May 1998 over an area of 5 sq km, in North West Tasmania. The Licence is a flow on title from EL 33/1990 and covers exploration for Category 3 construction materials and 5 Industrial minerals and semi precious stones. Previous work by MHA has established a large resource of high grade dolomite suitable for blast furnace use.

In early 2010 MHA was asked by Blue Scope Steel to supply a 5000 tonne sample of dolomite from Togari to run a full scale furnace trial at the Port Kembla Steel works. In order to do this MHA had to apply for a small 2Ha mining licence (1906P/M). Even though the site was on fully cleared farming land, and with the full permission of the Land owner, the Environmental Protection Authority in their wisdom decided the operation needed a full Level 2 Environmental Effects Report. With mumerous requests for additional information from the EPA and even though there were no objections from the Circular Head Council or from the public the EER took almost 2 years to be approved. Needless to say the opportunity was lost with the financial downturn and it may be 1 to 2 years before Blue Scope Steel is willing to resume the test program.

1.0 INTRODUCTION

RL 10/1997 was granted to Mineral Holdings Australia Pty Ltd on 8th May 1998 over an area of 5 sq km in North West Tasmania. The Licence is a flow on title from EL 33/1990 and covers exploration for Category 3 construction materials and 5 Industrial minerals and semi precious stones.

The property is located in recently cleared farming land adjacent to the Montague River Drainage Channel south of the Bass Highway and about 25 km south-west of Smithton. Access is via the township of Brittons Swamp on the Bass Highway, 25 km west of Smithton, thence 2 km south along Salmon River Rd. and then farm tracks to the Licence area.

2.0 PREVIOUS EXPLORATION

There has been a long history of exploration by MHA, and a series of joint venture partners, for a wide range of carbonate products in North West Tasmania. By 1997 MHA had outlined a substantial inventory of high quality dolomite at Togari and has proceeded with a number of attempts to market material from the area.

The Pre-cambrian dolomite at Togari was mostly explored during the years 1995 to 1998. During that time exploration consisted of:

- 41 shallow backhoe pits dug to provide depth of soil overburden and to provide samples of the dolomite.(marked T 1 –T41 on map)
- 5 Hammer drill holes were developed along existing tracks.(marked TP1-5 on map)

Samples of Togari Dolomite were sent to Baker Dolomite in USA who conducted tests on refractory bricks made from the dolomite. The results were apparently successful but a copy of the test results is missing from the files. Follow up samples were then sent to National Refractories and the Research and Development Centre for Refractory Materials. Both only carried out routine analysis of the samples but noted the high purity of the sample which they compared favorably with their own deposits. Unimin also carried out what appears to be a single assay of Togari dolomite

A 250 tonne bulk sample was sent to Nittetsu Shoji company in Japan for Steel making furnace trials. The results were again very successful and were referred on to Nippon Steel. The fine ore ratio after firing was only 6.8% .

Comalco and APPM carried out whiteness tests for paper manufacture without any success.

3.0 GEOLOGY

The Togari area lies on the steeply dipping east limb of a major anticline and with a stratigraphic thickness well in excess of 1,000 metres a very large resource of dolomite are certainly available. However the dolomite is generally low lying in an extensive plain, covered by a thin black soil layer, and is only exposed in drainage trenches. Where it can be seen the dolomite is white to pale grey in colour, and is a hard massive very fine grained marble. No banding is visable but it is believed the dolomite dips at 20 to 30 degrees to the east in this area. An average assay of the material is given in the table below along with comparison assays of Ardrossan and ACI Mt. Gambier dolomites. The grade compares more than favourably with the average grade of those existing suppliers.

Supplier	Togari	BHP Ardrossan	ACI Mt Gambier
SiO2	0.44	2.00	1.0
TiO2	0.01	0.01	
Al2O3	0.54	0.39	0.5
Fe2O3	0.24	0.80	0.21
MnO	0.005	0.14	
MgO	19.62	21.00	18.8
CaO	32.86	29.00	33.7
Na2O	0.08		
K2O	-	0.048	
P205	-	0.05	
SO3	-	0.15	
LOI	46.1	46.40	

4.0 CURRENT AND FUTURE PROGRAM

MHA have made considerable efforts to interest major Australian and overseas groups in its carbonate holdings in North-west Tasmania and RL 10/1997 is an integral part of the "Pilbara of Carbonates program". A major part of program is to interest those companies in the benefits of mining high purity materials that are cryptocrystalline in nature and therefore suitable for use in vertical kilns where it is possible to trap the CO2 off gas. There would appear to be large commercial advantages once a CO2 penalty or tax is introduced.

Discussions and information exchanges have been made with Adelaide Brighton Cement, Alcoa, BGC Cement, BHP, Carmeusse Ltd., Fortescue Metals group Ltd., Hismelt, Leader Mining International Inc., Metals X, Mineral Technologies NV, Minteq International Inc., Nippon Steel Trading Co., Omya Australia P/L, One Steel Ltd., Rio Tinto, Worsley Aluminium, Unimin Australia Ltd. Discussions with these companies and others will continue.

In early 2010 MHA was asked by Blue Scope Steel to supply a 5000 tonne sample of dolomite from Togari to run a full scale furnace trial at the Port Kembla Steel works. In order to do this MHA had to apply for a small 2Ha mining licence (1906P/M).

5.0 BULK SAMPLE PROGRAM

After the request for a 5000 tonne sample from Togari MHA contacted Mineral Resources Tasmania immediately and were told the only way a bulk sample of this size could be taken was from a Mining Licence. This is a very real problem for Non-metallic and construction type mineral resources as potential buyers commonly ask for very large samples to run full scale furnace trials. The process of obtaining a full scale Mining Licence is long drawn out and very costly with added costs and long delays in the process of supplying bulk samples.

The request from Blue Scope was received 29th January 2010. MHA immediately began compensation negotiations with the land owner and negotiations with MRT as to how the sample could be taken. Philip Milner Landscape Consultants P/L were engaged to conduct an environmental assessment of the area. It was decided that a 2Hectare licence would be sufficient to contain the sample pit and a crusher site. Millers environmental report was received on the 12th March and the licence application fowarded to MRT on the 15th March 2010. Notices of Intent were sent to the Circular Head Council and the EPA on the 16th March 2010.

On the 18th May 2010 The EPA notified that it considered the project to be a Level 2 activity as defined in the Environmental Management and Polution Control act 1994 and as such will be subject to Environmental impact assessment under the EMPC Act by the EPA. They classed the assessment as Level 2A and attached guidelines for the Environmental Effects Report they required. This level of report was required even

though the project was very simple. It involved a pit of 50 metres by 10 metres and 6 metres deep and a temporary crusher. It was on cleared privately owned farming land, with the full consent of the land owner. The pit extended below land surface and would not be seen from any public roads which were more than 3Km away. The whole project would be over and finished within two to three weeks.

The EER report was forwarded to EPA on 3rd June and they forwarded a request for further information on the 8th June. The modified EER was sent to EPA on 11th June. Some minor additional changes were requested on the 16th June and the final version of the EER was sent to EPA on 15 th June. EPA suggested the EER could then be sent to the Circular Head Council for comments by them and after they were received the EPA would advertise the proposal and after a suitable time for public comment the proposal would go to the EPA Board for approval.

The Final report was E-mailed to the Circular Head Council on the 16 th June but with personnel changes and computer changes the file got lost. In the meantime Blue Scope Steel was caught in the financial down turn and indicated it would be 2 -3 years before they would be in a position to take the sample. The opportunity had already been missed and MHA did not pursue the Circular Head Council to hurry things along.

The next thing MHA knew was a notification from the EPA on the 9th April 2011 indicating they had no referral from the Council and asking if MHA wanted to proceed with the application. MHA considered it better to proceed now and get approval rather than re apply in 2 to 3 years time. MHA contacted the Circular Head Council and forwarded new copies of the NOI and EER reports. Council reviewed the reports and referred back to the EPA with no alterations on 27th June 2011. EPA then advertised the proposal on 9th July 2011. No objections were received from the Council or the Public and EPA was ready to submit the proposal to the EPA Board but first they needed extra information (1/8/11).

- Why did Blue Scope want the sample?
- Why did MHA select Togari?

Even though the site was only 2Ha in area and would be occupied for only 2 to three weeks the EPA wanted

- A Hydrologeological report
- A report on Karst features
- A full study of the eagle's nest
- What would happen if the test was a success?

MHA managed to cover these requests in an EER Supplement Report and the EER went to the EPA Board and was approved on 20th October 2011 and approved by the Circular Head Council on 2nd November 2011. Still the requests for more information came. Someone in EPA was worried about blast noise even though the nearest house was 3Km away. What was the proposed depth of the settling pond. Would MHA use a culvert or causeway to cross the adjacent drainage channel even though it was a condition of the EPA report we would use a culvert.

The whole process has taken 2 years and the total cost of the lease application and fees and reports etc. has amounted to $22,371.45 to say nothing of the missed opportunity to supply the bulk sample.

5.0 ENVIRONMENT

All pits and drill sites have been backfilled immediately following logging and sampling. The area is private open pasture land and there are no outstanding environmental issues.

6.0 REFERENCES

Threader, V.M.1995. Annual Report EL 31/90 redpa, 32/90 Montague Plains and 33/90 Brittons Swamp. Mineral Holdings Australia Pty Ltd. TCR 95-3735.

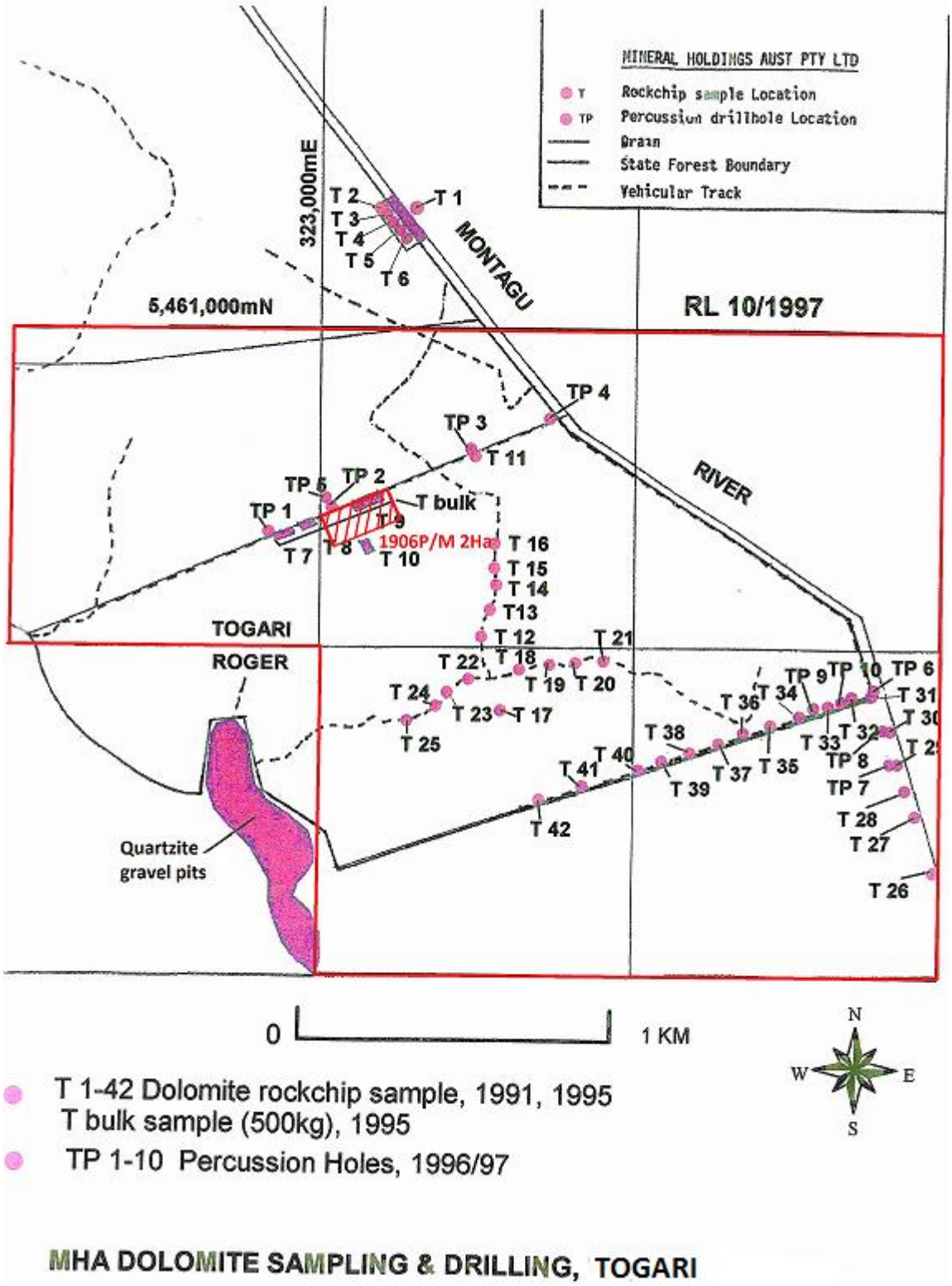
Threader, V.M.1996. Annual Report. EL 31/90 Redpa, and 33/90 Togari. Mineral Holdings Australia Pty Ltd. TCR 96-3895

Threader, V.M.1997. Annual Report EL 31/90 Redpa and EL 33/90 Togari Mineral Holdings Australia Pty Ltd. TCR 97-4052

7.0 KEYWORDS

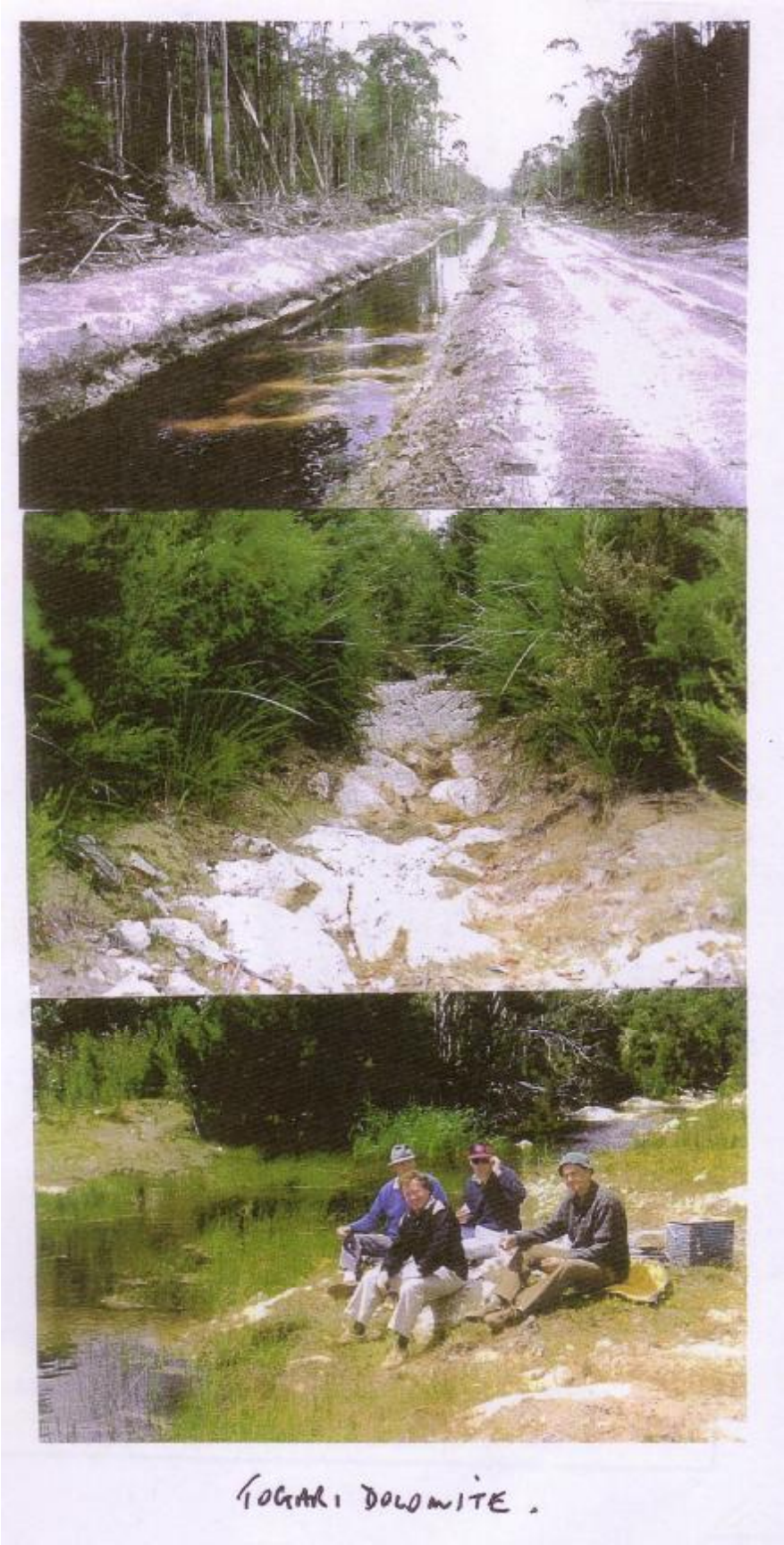
Togari, Dolomite, Pre-Cambrian

Figure 1. Location diagram of Retention Licence 10/1997 south of the Bass Highway and 1 Km south west of Brittons Swamp.



- T 1-42 Dolomite rockchip sample, 1991, 1995
  T bulk sample (500kg), 1995
- TP 1-10 Percussion Holes, 1996/97

MHA DOLOMITE SAMPLING & DRILLING, TOGARI



TOGARI DOLOMITE.