

## ANNUAL REPORT ON EXPLORATION TO 1 FEBRUARY 2024

EXPLORATION LICENCE: 18 / 2015

DIANAS BASIN – ST HELENS

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Revision 0	16 January 2024	Andrew Griffiths	North East Excavations (Tas) Pty Ltd
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## 1 INTRODUCTION

EL 18 / 2015 covers an area north and west of the Licence Holder's existing Dianas Basin Quarry, mining lease number 22M/2003. Dianas Basin Quarry is located on a small mining lease (10 hectares) which is physically constrained on one side by a neighbouring quarry operation (inactive) and on the other by a steep gully.

## 2 ABSTRACT:

This report provides an overview of the work carried out by North East Excavations (Tas) Pty Ltd on Exploration Licence 18 / 2015 for the period between issue of the licence, 2 February 2016 and the forthcoming anniversary, 2 February 2024.

EL 18 / 2015 is a Category 3 (construction materials) licence consisting of a 3 square kilometre block of land partly vested in the Crown and partly owned by Sustainable Timber Tasmania.

### 2.1 OBJECTIVE

The objective of this licence is to test the geology in the vicinity of the existing quarry for similar source rock properties. Previous testing of the source rock at Dianas Basin Quarry found that a Polished Stone Value (PSV) result of up to 57 was possible. Obtaining this value for PSV in a Tasmanian quarry is rare and aligns Diana Basin Quarry with only two other known sources of high PSV rock.

### 2.2 METHODOLOGY

Work undertaken to date concentrated on proving the feasibility of accessing the source rock and direct representative sampling of accessible rock sampling sites.

22 sampling sites were initially considered based on the inferred underlying geology, access using existing forestry and other tracks and minimal disturbance to existing vegetation.

The rock samples were bagged and stored at the Licence Holder's facility at Dianas Basin Quarry, until a selection was taken for laboratory analysis. The samples were subjected to testing for Los Angeles Value (LAV) to determine if the source rock is likely to meet the requirements for State Roads Authority specifications for use on State Roads construction and maintenance projects.

Future exploration will incorporate;

- Compilation of the results of the exploration work in a final report showing suitability or otherwise of the resource for road construction materials.
- Develop a feasibility report to propose a possible extractive operation to estimate quantities of production, taking into consideration land tenure, loss of timber resource, natural values, aboriginal cultural heritage, other land users including mountain bike trails, transport routes and future demand.

2.3 RESULTS

No further analysis was undertaken of the 9 preferred samples. The Licence Holder elected to commence the application for a mining lease over the more prospective area of the EL area.

2.4 RECOMMENDATIONS

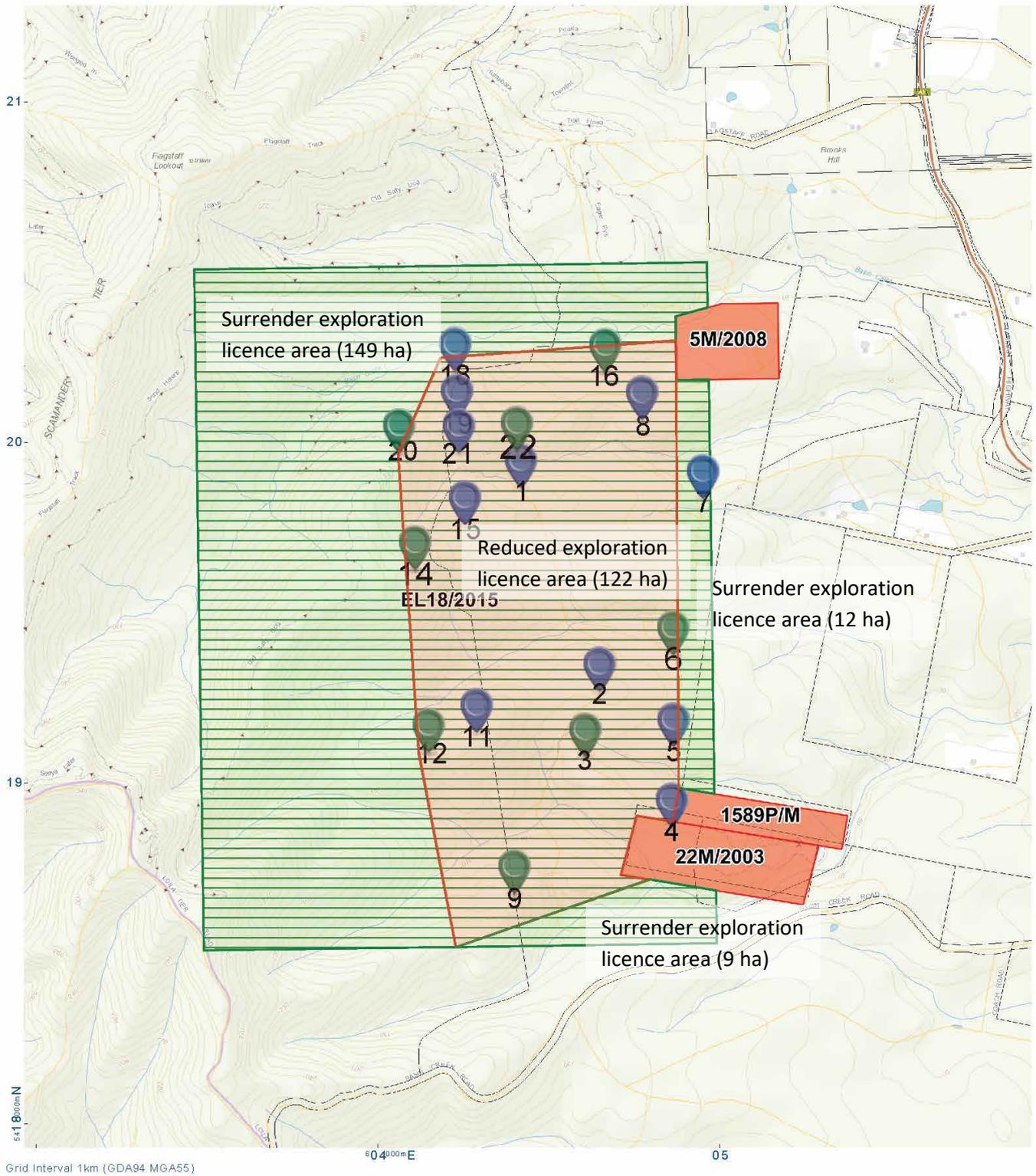
It is recommended that the application for mining lease over the more prospective area of the exploration licence area is considered.

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FIGURE 1 - ROCK SAMPLING MAP

3 INTRODUCTION:

**TABLE 1: TENEMENT DETAILS**

Exploration Licence	18 / 2015
Name	Dianas Basin
Location	5 km south of St Helens
Reporting period	1/02/2023 to 1/02/2024
Licence holder	North East Excavations (Tas) Pty Ltd;

Exploration licence 18 / 2015 covers a total of 3 square kilometre blocks in state forest west of Dianas Basin and immediately west and north of the existing Dianas Basin Quarry in eastern Tasmania. The exploration licence was applied for on the 27 April 2015 and granted for a period of five years on 2 February 2016. A year’s grace was provided through 2020 – 2021 due to unavailability of exploration resources because of restrictions on travel relating to Covid 19.

An extension of term was granted in 2022 to allow for a full range of testing to be undertaken on the representative samples. The testing provided evidence that the source rock is suitable to supply to government projects once the new source has undertaken the pre-qualification assessment process.

The existing Dianas Basin Quarry (22M/2003) which is located on the south east corner of EL 18/2015 produces a rock that has the potential to provide aggregate with a very high polished stone value (PSV). State Roads specifications call up a high friction resistance sealing surface on roads in particular locations and situations. Most quarries producing sealing aggregates in Tasmania are targeting igneous rock, either basalt or dolerite. The best of these source rocks can provide a PSV of 48. The State Roads specification calls up a PSV of 54 for high friction resistance applications.

It was planned to conduct PSV testing on the 9 preferred source rock samples in this period. There are no laboratories in Tasmania which perform PSV testing and due to the low volumes and high equipment cost it is unlikely the test will be offered by a commercial Tasmanian laboratory. Mineral Resources Tasmania will offer the test in the future but currently is seeking NATA accreditation and hence does not offer the test.

## 4 REVIEW OF PREVIOUS WORK

### 4.1 TIME LINE OF WORKS

The following is a brief timeline of the submission of work programs for EL 18/2015.

- The Licence Holder applied for an EL on 27 April 2015
- Exploration Licence 18 / 2015 was granted 2 February 2016.
- In Year 1 (2017) of the licence activity was concentrated on testing source rock properties in the adjacent Dianas Basin Quarry for Los Angeles bearing and PSV:
  - Assigned Los Angeles value: 13
  - Assigned Polished Stone Value: 57
- Work in year 2 (2018) comprised verification of sample site locations. Issue of a work program to Mineral Resources Tasmania (MRT) and advice from MRT relating to environmental considerations.
- Field sampling work was undertaken in Year 3 (2019) with small bulk samples taken from 22 previously approved sites. Covid 19 made further work difficult during this time and the Licence Holder applied for an extension of term over a reduced area to complete the exploration activities.
- February 2022 the extension of term for EL 18 / 2015 was issued by the Director of Mines.
- Nine of the 22 source rock samples were subjected to analysis in December 2022 and were issued an assigned Los Angeles Value. The values ranged between 18 and 22. The maximum LAV to meet the State Roads Specification for Class B pavement is 25.

### 4.2 DURING THE LIFE OF THIS LICENCE

This Exploration Licence resulted in better understanding of the geology underlying land to the west and north of the Dianas Basin Quarry. The results of analysis of bulk samples taken at 22 samples site across a more prospective 122 hectares area of the 3 square kilometre licence area shows that it is likely that viable road construction materials area available.

### 4.3 EXPLORATION WORK THE PREVIOUS PERIOD

Exploration work during the 2023 – 2024 period resulted in a mining lease application for an area encompassing the more prospective portion of the remaining EL area. The mining lease application included developing a workable quarry development plan running over 4 stages.

The Licence Holder has been unable to locate a laboratory that is able to perform the Polished Stone Value test so the assigned PSV for the 9 bulk samples is at present unknown.

## 5 EXPLORATION WORK 2024 – 2025 PERIOD

The Licence Holder has elected to apply for a mining lease over the prospective area of the exploration licence area.

The mining lease application process includes assessment of the commercial and environmental implications of extracting and processing the source rock from the new ML area.

6 FUTURE EXPLORATION WORK

No further exploration work is anticipated. The work undertaken on EL 18 / 2015 proved successful in proving the geology underlying the land to the west and north of Dianas Basin Quarry has similar material properties.

7 ENVIRONMENTAL MANAGEMENT

No on-ground works were undertaken during this period. The previous disturbance associated with digging the test pits has rehabilitated successfully.

8 EXPENDITURE

**TABLE 2: EXPENDITURE 2023 PERIOD**

Item	Activity	Amount
1. Geoscience		
Geology		0
Geochemistry		0
Preparing samples		0
Laboratory testing		0
Geophysics		0
Remote sensing		0
2. Drilling & gridding		
Gridding		
Drilling		0
3. Land access		
Land access	Negotiations with Forestry Tas. and PWS re access	1,000
4. Rehabilitation		
Works		
5. Feasibility studies		
Quarry development	Consultant prepared staged quarry development plan, completed environmental assessment for mining plan.	4,500
6. Other		
Equipment		500
7. Administration		
	Consultant prepare application form	2,500
8. Total exploration costs (period 2023)		8,500

**TABLE 3: EXPENDITURE 2024 PERIOD**

	Item	Activity	Amount
1.	Geoscience		
	Geology		0
	Geochemistry		0
	Preparing samples		0
	Laboratory testing		0
	Geophysics		0
	Remote sensing		0
2.	Drilling & gridding		
	Gridding		0
	Drilling		0
3.	Land access		
	Land access		0
4.	Rehabilitation		
	Works		0
5.	Feasibility studies		
	Site access		0
	Feasibility study		0
6.	Other		
	Equipment		0
7.	Administration		
		Release of balance of EL area not under ML.	2,500
8.	Total exploration costs (period 2024)		2,500