Southern Ocean Science Pty. Ltd.

Second Annual and Relinquishment Report for:

EL 24/2005, Telopea Road

Prepared by Dr Alistair Reed
areed@southernoceanscience.com

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Street address: Unit 8, 8 Percy Street, Bellerive, Hobart, Tasmania, Australia 7018
Postal Address: PO Box 426, Rosny Park, Tasmania, Australia 7018

Phone 03-6244 1886
Mobile 0407-115123

ABN 62 084 385 919

SUMMARY

This is the second annual and final report for Exploration licence 24/2005. This licence covers an area of 8km^2 and is located about 50km east of Launceston in northern Tasmania. The licence area contains coloured granitic rocks that were being assessed for their potential for input into the landscape or bulk aggregate markets.

Prior to 2007, a small number of hand-specimens of orange to red coloured granite were collected. The volume of coloured granite was estimated to be in the oreder of 250,000m^3. Samples were crushed and tested for size and density and an estimate of the size of the deposit made. It was recommended that further work be done to map the extent of the deposit, prior to collection of a bulk sample and application for a mining lease.

An application was submitted to Mineral Resources Tasmania in 2007 to systematically sample the granite. Approval for this sampling was given, however, the program was never completed. The main reason for this was identification of what may have been a threatened flora species (Acacia pataczekii) within the area of interest during a planning trip in late 2007. Recognition that this species might be in the area was only brought to the attention of the company by David Gatehouse at MRT on his approving the work program in mid to late 2007.

A flora survey was considered to confirm and/or identify occurrences of this species within the area of interest. However, cursory examination of the area showed little scope to extend the size of the deposit. This was discouraging, especially given the marginal nature of what is necessarily a bulk commodity project. The combination of a marginally economic and limited resource in an area containing possible threatened species resulted in a decision to relinquish the licence.

This report contains a summary of works to date.

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INTRODUCTION

At commencement of this project, Tasmania was considered ideally placed to supply the local, national and, possibly, the international market with decorative gravel. This is because Tasmania has;

1. A unique geology and, hence, rock diversity not easily duplicated on the mainland, and

2. access to ports whereby material can be cheaply and efficiently shipped to Pacific Ports.

After briefly surveying about 12 rock types around Tasmania, it was decided that the Telopea Road area east of Launceston (attached maps) warranted further investigation on the basis that;

1) Landscape designers and product retailers were impressed by hand-specimens of the rock.
2) The rock was well-located to ports at Bell bay and Devonport, as well as population centers along the north coast and Launceston.
3) The rock is significantly different to anything else available on the Australian mainland.
4) The rocks lay on Crown land and within close proximity to existing roads.
5) The area contains a number of stone quarries, including several now abandoned dimension stone quarries (Blessington Road or Jaydon Quarry and an unnamed gravel quarry located 500m east of the junction of Telopea and Blessington Roads, herein named the Memory Road Quarry).
6) The area has already been exploited for stone and is currently subject to logging.

An exploration licence covering 8 sq km was applied for and granted to Southern Ocean Science Pty. Ltd. on the 16th February 2006.

Location

The licence is located about 50km east of Launceston, in the vicinity of the Telopea and Blessington Road intersection.

Directions
Proceed east from Launceston via White Hills on highway C401. Proceed through Upper Blessington following sign posts as for heading to Mathinna. Beyond Upper Blessington, the road climbs gently and passes from farmland into forest. Continue until the crossroads of Telopea and Blessington Road.

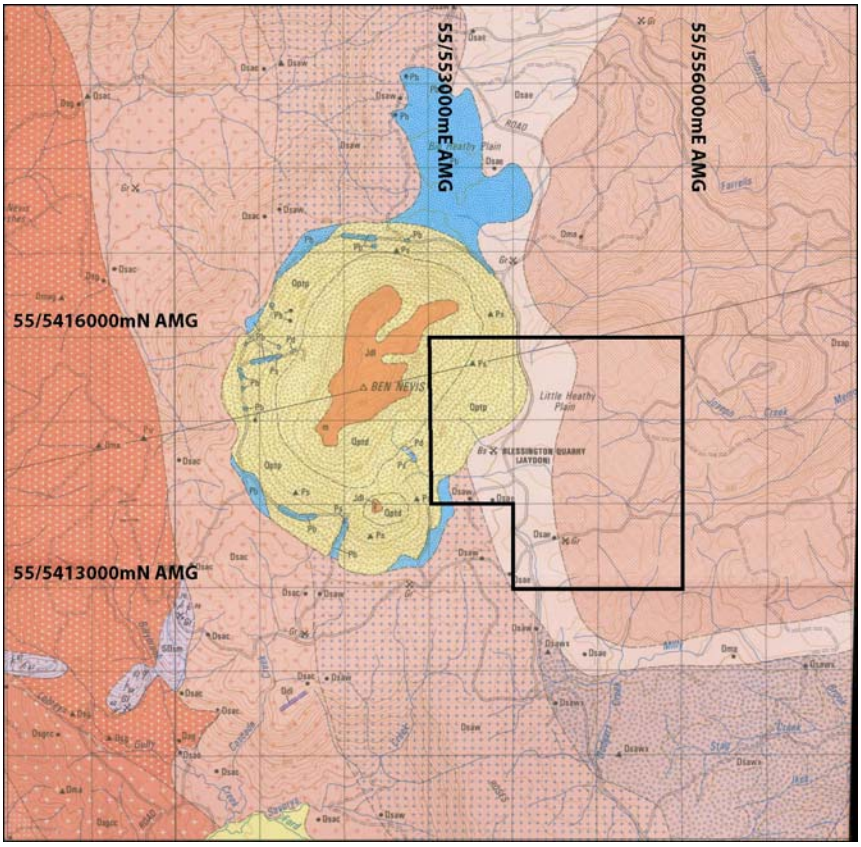
Jaydons Quarry
Head north along Telopea Road for about 1.25km (just before a small stream and a newly logged area to the left). The old quarry is located 50m upstream of the intersection of Telopea Road with the small stream running off Ben Nevis. About 50m south of the stream is an old and partially obscured track that leads of to the left and up the gentle rise to the cleared area above the old quarry. The old dimension stone quarry is small and partially infilled.

Memory Road Quarry
Continue straight ahead from Blessington Road, across Telopea Road and about 400m along Memory Road. Granite outcrop to the right (south) is clearly visible. An old track leads into what is left of the small quarry.

Site tenure
Crown land. State forest.

Physiography
Variable. Sloping land at generally <5 degrees in areas of interest. Outcropping rock as boulders and cuttings.

Extent of outcrop
Orange and red granite crops out at Jaydons Quarry and trends south-southeast to intersect Telopea Road. Progressing east, the granite gradually becomes greyer in colour but with bands or areas of light orange.



Maps showing the location of EL24/2005 and its proximity to Launceston city (top) and the geology of the licence area (modified from the the Alberton 1:50,000 Geological Map (Tasmania Dept of Mines, 1993) .

REVIEW OF PREVIOUS WORK

The area is disturbed with ongoing forestry. There is no known history of exploration for gravels derived from hard rock sources. No reference has been located describing production from the two small stone quarries (Jaydon and Memory Road). Both quarries are known only from their inclusion on the Alberton 1:50,000 Geological Map (Tasmania Dept of Mines, 1993).

EXPLORATION COMPLETED

The main rock of interest is an orange to pale orange/grey and red/grey fresh to partially decomposed medium- to coarse-grained equigranular granite and/or adamellite. This rock forms part of the western marginal sequence of the larger Scottsdale Batholith and is of Devonian age.

Site visits have been made to assess the extent of the rock of interest and hand samples were collected. Hand samples were crushed and screened to assess bulk density (for transport purposes and to estimate tonnage per cubic meter for bulk sales). Subjective assessments were also made as to the shape and hardness of the aggregate, and the effect this might have on machinery wear and marketability.

Crush samples have been shown to various retail outlets for comment. Discussions have also been held with contractors and site visits made to assess ground conditions.

The coloured rock of interest has never been mapped in detail. Rather, work was restricted to reconnaissance and planning trips.

Out crop is poor. Trenching is probably necessary to determine the extent and variability of the rock with any accuracy. At surface, the width of the coloured zone was originally estimated at greater than 50m. However, more recent observations suggests the possibility of a number of smaller zones or bands. This would reduce the size of the deposit to below the original estimate of 250,000m^3.

The strike extent has been traced for greater than 100m. It is not known if the thickness of the coloured rock zone is maintained along strike.

Site of the old Jaydon dimension stone quarry, located adjacent to Telopea Road.

Image showing variety in colour of crushed granite from EL24/2005.

Distance to market and/or main port

Transport cost is one of the main constraints to the viability of any operation.

Distances shown are in km, by road, and are approximate. The distances show the shortest (but not necessarily the same) route.

Hobart	Launceston	Burnie	Devonport	Bell Bay
240	70	220	170	122

The rock is well located near to markets in Launceston and for shipment to the mainland from either Bell Bay or Devonport.

Processing Information

Approximately 20kg of sample was collected for crush testing (under prospecting licence). The way a rock crushes affects the volume of a sized or screened product available for sale.

The following figures should be regarded as estimates only and will vary depending on equipment used. The rocks tested here were crushed using a laboratory jaw-breaker, and then hand screened.

Testing was conducted to indicate;

- the viability of transporting uncrushed product vs using a transportable crushing plant.
- the size distribution of crushed rock product for a machine set to produce a ~20mm coarse aggregate.

Any further testing should be based on an aggregate of 10mm, preferred for market.

Sample sizes processed (kg)

Crush weights	Description	Fines	3.35 to 5.5mm	>5.5mm	Total
	Terracotta Orange Granite	1.45	0.936	3.75	6.136

This translates in to the following proportions:

Ratios	Description	Fines	3.35 to 5.5mm	>5.5mm
	Terracotta Orange Granite	24%	15%	61%

Bulk densities

Bulk densities are used to estimate transport costs.

Weights shown in grams are for a conical volume of rock equivalent to 0.5lt, with minimal settling. Figures shown are estimates only (but are consistent with one another when compared to documented solid-rock densities).

weight/volume		Fines	3.35 to 5.5mm	>5.5mm
	Terracotta Orange Granite	718	644	666

This equates to bulk densities of (t/m^3):

Density		Fines	3.35 to 5.5mm	>5.5mm	Particle form
	Terracotta Orange Granite	1.436	1.288	1.332	Cubic

NOTE:
Bulk density variations between rocks and between crush size is strongly influenced by particle proportions. For example, a 10mm aggregate will, in most cases, yield the **most** volume from the **least** amount of rock and will, thus, be the **cheapest** to transport.

Hand samples only were collected during the course of site inspections. There has been no land disturbance.

Further work completed in 2007

Work was restricted to a visit to the site over two days in late 2007.

During this time an attempt was made to determine the best areas for sampling. Limited an variable outcrop resulted in a decision that trenching was needed to better define the size of the deposit and any variability in stone colour across the deposit.

Expenditure

Geological support, industry and government consultation, sample collection and preparation.	$2,640
Geological investigation (2 days), including administration and reporting costs	$2000

Land disturbance

Several hand samples only were collected during the course of site inspections. These were taken from disturbed areas (roadside and old quarry sites) and were collected within the limits of the issued prospecting licence. There has been no land disturbance to date.

DISCUSSION

The rock is of a high quality. The aggregate was well received by landscape suppliers and could probably attract a premium price relative to other materials on offer. The rock does not appear so hard as to cause undue crusher plate wear, but is hard enough for use in a diverse range of environments including inclusion in concrete (polished or raw), driveways, and bed mulch. The granite crushes well to a spherical particle. There is also scope to sell a bulk blended product or to selectively mine and crush to produce a variety of colours from the one deposit (in either a bulk or bagged form).

The size and variability of the stone may be a barrier to development of any product. Multiple bands of unknown extent will make it difficult to generate a consistent product. This is unlikely to be a large impediment to the home market but will prove problematic if the product is to be included in concrete.

More problematic is determining the extent of the coloured rock. Rather than being restricted to a single band, there is scope for the coloured rocks to form across a number of individual bands within the overall mineralised zone. Trenching is required to determine the extent of the coloured rock both across the zone and along strike.

Identification of what may have been a threatened flora species (Acacia pataczekii) within the area of interest complicates development of the site. Recognition that this species might be in the area was only brought to the attention of the company by David Gatehouse at MRT on his approving a work program planned for late 2007. A flora survey will probably be necessary to confirm and/or identify the extent of this species within the area of interest.

CONCLUSIONS

The combination of a marginally economic and limited resource in an area containing possible threatened species has resulted in a decision to relinquish the exploration licence.