

## Andersons Creek Aggregates Project

First and Final Annual Report:

Exploration Licence 20\_2014, Andersons Creek



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## ABSTRACT

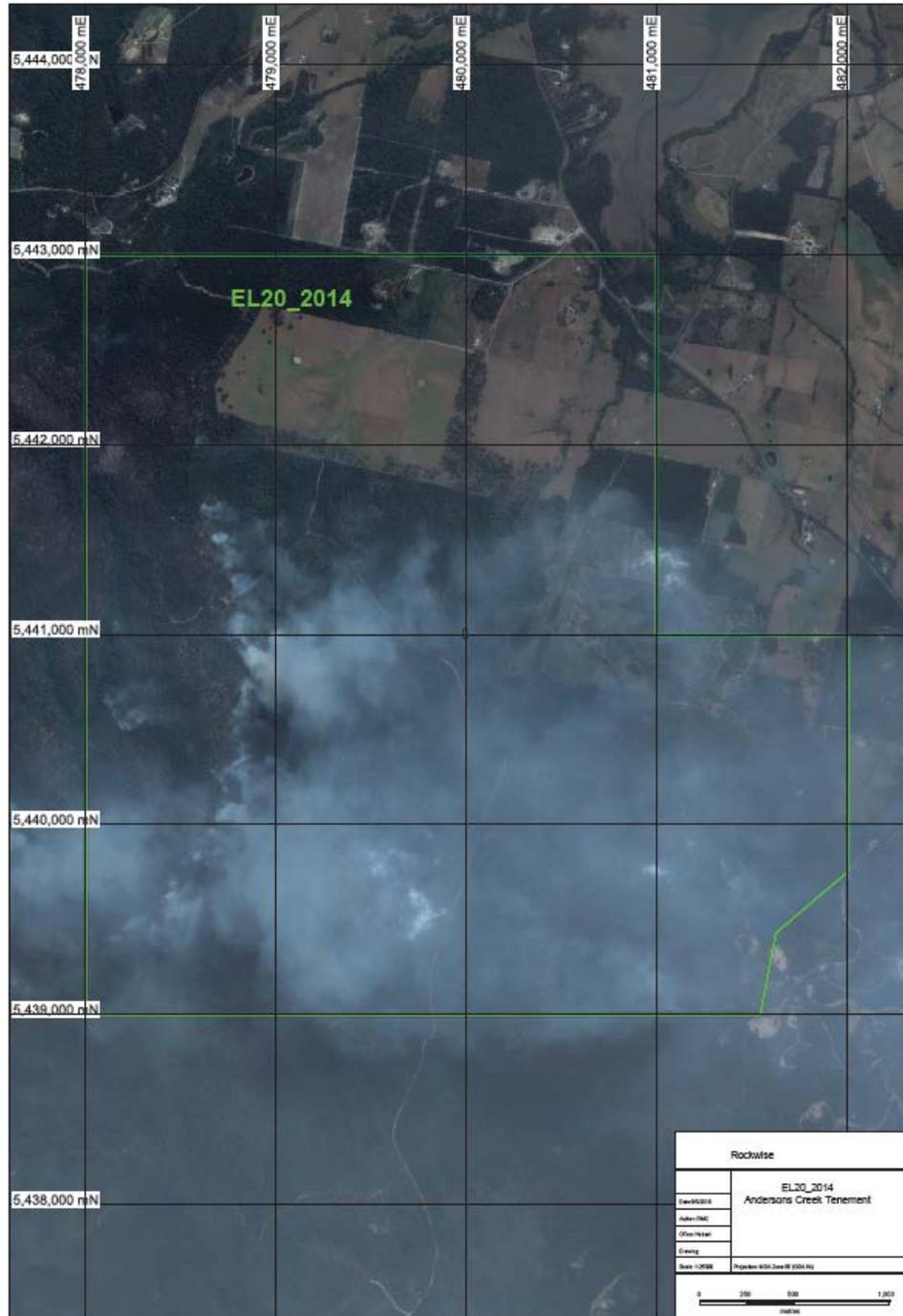
The complex geology of the Andersons creek ultramafic, has developed the formation of rare and interesting mineral assemblages. Unique textures and contrasting colors are favorable to a local aggregates industry. Samples have been collected and tested for strength and promoted for marketability. Considering the limited size and large variability of the deposit it has been decided that the project is uneconomic and does not warrant further work.

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## INTRODUCTION

The Anderson Creek licence is a collaborative project at EL20\_2014 between Rockwise Pty Ltd and Metalstocks Pty Ltd. A revamp from the Southern Ocean Science project in 2005 (Reed 2005) identifying unique rock types that could be accepted and fed into the local aggregates industry.

A small area at Andersons Creek, around 4km west of Beaconsfield northern Tasmania, has been prospected for aggregates (Figure 1, in MGA94).



## REVIEW OF PREVIOUS WORK

A “snowflake” (Figure 2) a pegmatitic gabbro unit was identified by Reed, (2005) to be in particularly rare and favorable to the aggregates market. The “snowflake” geological formation has been identified to be confined to a restricted area, projected volume have been difficult without excavation or drilling. It is the impression of the author that the area is unlikely able to supply a quarry of sufficient size without further exploration and disturbance.



Figure 2. Rock chip taken of the “Snowflake” aggregate.

#### EXPLORATION COMPLETED AND RESULTS

The area has had various levels of exploration and small-scale mining for metallic minerals and asbestos. Evidence of exploration for nickel laterite was identified on the visit.

Historically of exploration for gravels by Southern Ocean Science in 2005 (A, Reed 2005) concluded similar outcomes to the area.

Studies of shipping and distances to markets have been completed over the area by A Reed, 2005. Current studies on aggregates concluded that the unit is well located to markets in Launceston, and could be well received in Hobart.

Access to the area is limited with bridges that may restrict load capacities.

Local Mapping of the area show that the extent of outcrop is very limited with only around 100mx50m of the “Snowflake” aggregate available. The unit is highlighted with large (15-20mm) black amphibole and white plagioclase making up the appearance of the unit. Variability within the mapped area show an inconsistency in minerals size and shape. This may affect the deposits efficiency if it were to be mined.

Crush tests showed that the material commonly splintered. This could have been a symptom of the size of crusher used (lab scale jaw crusher) but was noted.

## DISCUSSION

The Andersons Creek licence has a host's small deposit of boutique aggregate, there are limitations to the economics of a feasible operation, the size of the deposit is small and has shown variability in quality.

The access track may not be suitable for larger trucks and vehicles, upgrades to the access bridge may be also required to accommodate for feasible production.

## CONCLUSION

Due to the limited size, variability, limited access and limited budget, it is not recommended to continue exploration on the Andersons creek tenement. It is recommended that no further work is completed on the licence and it is relinquished.

## ENVIRONMENT

Mapping and surface sampling have been completed over the Andersons creek area, there has been no land disturbance on the tenement. Vehicles were cleaned before entering the site, vehicles stayed to the roads and no off-roading was engaged.

The unit is located near an area of threatened species, including areas of fauna denning, nesting and foraging environments. Dr Reed and myself were aware of the species and possible impacts if disturbed. No threatened species were identified or disturbed.

Threatened flora and fauna identified by government in the area included the Tasmanian devil, spotted-tailed quoll, New Holland mouse, tussock skink, green and gold frog, striped marsh frog, swift parrot, masked owl, white-bellied sea-eagle and the wedge-tailed eagle. including fauna; including the Tasmanian Devil, spotted-tailed quoll and others. *Tetratheca Gunnii*, development of the deposit would most likely result in the requirement of an environmental management plan to assess impacts on such species. A number of State and Commonwealth listed plant species have been recorded within the licence area, namely Shy pink bells (*Tetratheca gunnii*), *Epacris virgata* (Beaconsfield) and Creeping dustymiller (*Spyridium obcordatum*). *Tetratheca gunnii* is listed as Critically Endangered on the National schedule.

**EXPENDITURE**

Expenditure: as a table subdivided by activity type

*Cumulative expenditure EL20\_2014*

Geology costs	prospecting, hiring equipment, Tests and market studies	\$15,000
General administration		\$1,500
total		\$16,500
Cumulative expenditure		<b>\$16,500</b>

**REFERENCES**

Reed, R 2005, First annual and final report for 1/2005 Mt Vulcan. Deceptive Gravel Project, Southern Ocean Science. <<http://www.mrt.tas.gov.au>>