

**Annual Report
to 3 January 2019**

EL15/2017

Tasmanian Advanced Minerals Pty Ltd

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ABSTRACT

- This report covers the first year of exploration.
- In March 2018 22 auger holes were drilled near the side of Champion Road, and on existing tracks off Champion Road, 11 of which intercepted silica.
- Analysis of the silica samples indicates the presence of silica whose quality appears suitable for use at TAM’s Wynyard factory as a blend component.
- It is not possible to determine if the deposit is of commercial size due to the limited number of holes.
- A natural values assessment was undertaken in order to support an application for a more extensive works program. That program has commenced in January 2019.

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1. INTRODUCTION

EL 15/2017 is held by Tasmanian Advanced Minerals Pty Ltd (TAM) and is located approximately 10km west-northwest of West Takone (refer to Figure 1, Location Map). The Licence was granted on 4 January 2018. This is the first annual report for the period up to 3 January 2019.

TAM is currently mining high purity silica from three locations in Tasmania, from one near Corinna, and from two areas near the Arthur River in northwest Tasmania, Blackwater (6M/2016) and Hawkes Creek (27M/2009). TAM also holds other exploration licences in that vicinity, EL15/2009, EL30/2014 and EL17/2016. A further exploration licence, EL20/2016 is held adjacent to the Corinna mine borders.

Exploration is being undertaken to increase resource quantity, and to provide a wider range of impurity profiles in the resource available for blending with existing resources, for processing at TAM's Wynyard factory.

Datum used in this report is GDA94.

Figure 1: Location Map



Base map from The List by TASMAPP, © State of Tasmania

2. REVIEW OF PREVIOUS WORK

From 1988 to 28 March 2017 the ground was held by Mineral Holdings Australia Pty Ltd (MHA) under EL24/1988 and subsequently RL2/1996.

TAM has reviewed that work. The exploration undertaken appears to have consisted of approximately: -

- 9 excavator test pits, 4 of which intercepted >3m of silica flour in the North and South Deposits (Threader, 1990)
- 7 excavator test pits, 3 of which intercepted >3m of silica flour in the North and South Deposits (Threader, 1991)
- 11 excavator test pits 5 of which intercepted >3m of silica flour in the West No. 2 Deposit (Threader, 1994)
- Hand augering to a maximum depth of 1m in West No. 1 and No. 2 deposits (number of holes not recorded)
- 2 bulk samples from the same location in North Deposit for market development purposes.

Based on this combination of 12 test pits and some hand augering MHA reported a resource of 220,000t, (Threader, 1994 and Threader, 1995), as follows:

MHA Deposit Name	Tonnage Estimate
North Deposit	70,000 t
South Deposit	90,000 t
West No. 1 Deposit	10,000 t
West No. 2 Deposit	<u>50,000 t</u>
	220,000 t

There does not appear to have been further resource definition work after 1995.

Based on our experience, TAM considers that 12 test pits spread over four separate deposits is not sufficient on-ground investigation to quantify the above silica resource. Further, review of the resource quantity estimation method indicates MHA extrapolated both depth and the extent of the area of resource further than test pits actually indicated.

In addition the MHA annual reports provide scant chemical analyses with seemingly inappropriate sample preparation to determine suitability for processing.

Therefore TAM considers that these resource estimates cannot be relied on to determine the commercial viability of deposits (quantity or quality). The previous work is only a guide for the location of the presence of silica.

3. EXPLORATION COMPLETED DURING THE REPORTING PERIOD

An Exploration Works Program application was submitted to MRT in January 2018. The application included drilling and test pitting on Champion Road and along tracks to the east and west of Champion Road. This was to be followed by infilling with cross-tracks at approximately 50m intervals. The program required vegetation clearing, and was not approved because of requirement for a natural values survey.

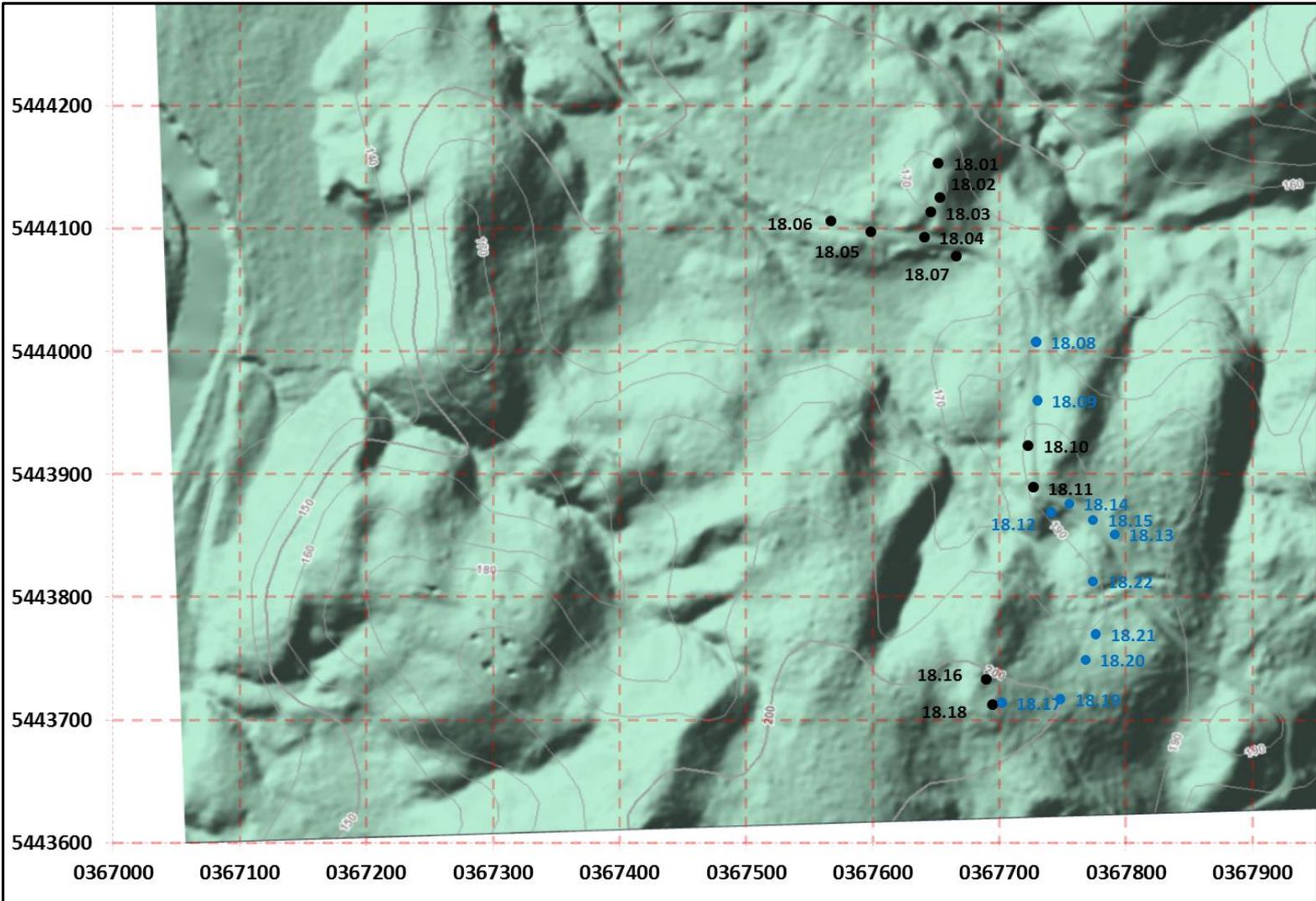
A modified works program was submitted, and approved in March (WPA 18/3). This program was limited in scope, but did not require vegetation clearing. It consisted of auger holes along 670m of Champion Road, initially at 50m spacings, and secondary sites west and east of Champion road that were accessed via existing open tracks.

The work was undertaken with a rubber-tracked Dando Terrier Auger Drill having 150mm diameter flights at the end of March 2018.

Samples were taken from each auger hole at approximately 1m intervals and analysed for a range of impurities, particularly the transition metals, CaO, MgO and Al₂O₃. The particle size distribution was also analysed.

A natural values assessment was conducted over the target areas in the licence, and approval for a more substantial works program was obtained in November 2018. That work will be conducted in the second year of the licence term.

Figure 2: Auger Hole Locations



Base map from The List by TASMAP, © State of Tasmania

- Indicates holes intercepting silica
- Indicates holes not intercepting silica

4. DISCUSSION OF RESULTS

The presence of silica was confirmed, but the limited number of holes was not sufficient to calculate a resource volume. Initial indications are that in the area drilled the resource is small, with average holed depth of 4m and only 5 holes returning a depth of more than 3m.

The samples were prepared by washing, removing coarse and fine particles, and removing magnetics. The remaining fraction was analysed by ICP OES.

In terms of quality, the transition metals were in the acceptable range. Al₂O₃ averaged more than 280ppm which is substantially higher than from other TAM mines, and would require blending to reduce it to acceptable levels.

The CaO/MgO ratio was low compared to other TAM deposits. Again, blending with other silica would enable use in current products.

Some holes, AAH-CR 18.04, .05, .06 and .18, had very fine particle size distributions, and would result in low product yields, meaning a high waste portion and high processing costs.

5. CONCLUSIONS

The area investigated was limited because of the works program conditions.

The results show some promise in the silica quality being suitable for use as a component in the Wynyard processing facility feed blend. Whether or not there is sufficient volume requires drilling over a wider area.

A more substantial exploration program is required to determine the commercial viability of these deposits. That work is planned to be completed in the first half of 2019.

6. ENVIRONMENT

Test holes were covered. No new tracks were open, and there was no other disturbance requiring rehabilitation.

EXPENDITURE

Expenditure for the period January to December 2018 is listed below.

Geochemistry/physics	\$	6,183
Drilling	\$	6,480
Feasibility Studies (NVA)	\$	12,250
Other	\$	85
Administration	\$	2,499
Total Costs	\$	<u>27,497</u>

REFERENCES

- Threader, V.M. 1990, Annual Report EL24/88 Champion Road.
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