



**Annual Report
to 3 January 2020**

EL15/2017

Tasmanian Advanced Minerals Pty Ltd

Prepared by: Chris Stuart, Mari Rademeyer
Date: March 2020

ABSTRACT

- This report covers the second year of exploration.
- From January to March 2019 45 auger holes were attempted. Silica was intercepted in 17 holes.
- Analysis of the silica samples indicates high variability in impurities and particle size.
- The silica is present in several very small deposits.
- The 2019 exploration did not find a commercial resource because of poor quality and small volume.

Contents

1. INTRODUCTION	3
2. REVIEW OF PREVIOUS WORK	4
3. EXPLORATION COMPLETED DURING THE REPORTING PERIOD	5
4. DISCUSSION OF RESULTS	5
5. CONCLUSIONS	6
6. ENVIRONMENT	6
EXPENDITURE	6
REFERENCES	7

List of Figures

Figure 1 **Location Plan**

Figure 2: **Auger Hole Locations**

List of Digital Files

EL152017-2020-Filelisting

EL152017-2020-01-SL 1

EL152017-2020-02-DL 1

EL152017-2020-03-DG 1

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 second annual report for the period up to 3 January 2020.

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.

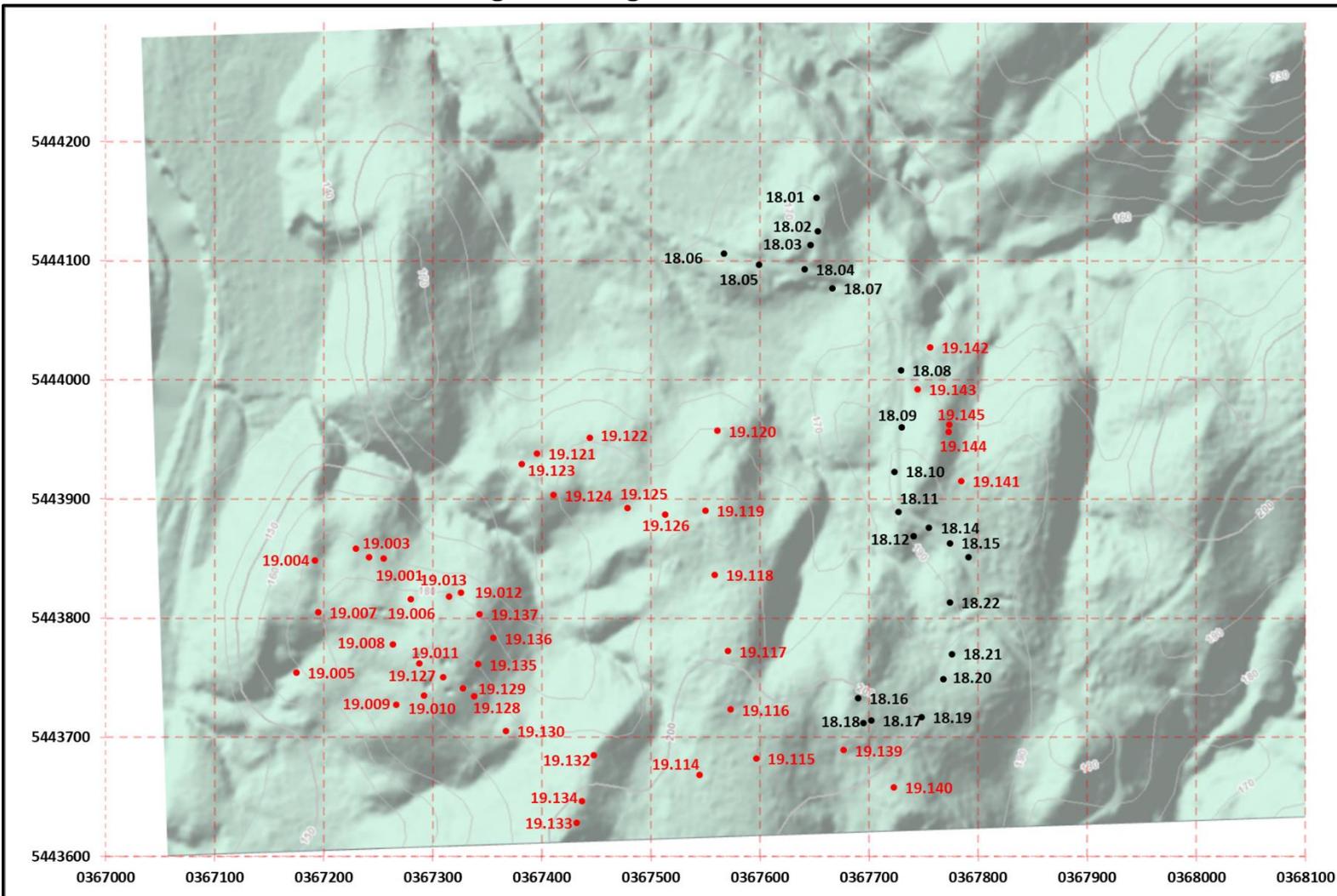
In 2018 TAM undertook a limited drilling campaign along Champion Road and existing tracks. Eleven of the holes intercepted a relatively shallow silica deposit which was relatively low in impurities. The size of the deposit was not estimated.

3. EXPLORATION COMPLETED DURING THE REPORTING PERIOD

An Exploration Works Program application was submitted to MRT in October and approved in November 2018. The application included a Natural Values Assessment of the area, which was conducted in July 2018. The approval was for sectional pitting and auger drilling of ridges off Champion Road.

The hole locations are shown in Figure 2.

Figure 2: Auger Hole Locations



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

- Indicates 2018 auger holes
- Indicates 2019 auger holes

Where the drilling returned silica, samples were taken at 1m depth intervals and analysed for impurities and particle size at TAM's Wynyard laboratory. The chemistry results are presented in the accompanying file EL152017-2020-03-DG_1.

4. DISCUSSION OF RESULTS

Silica was intercepted at 17 of the 45 holes. Of these 17 holes, 4 had a silica depth of 1m and another hole had just 3m. Generally, at least 4m depth is necessary for commercially viable extraction. Holes 19.003, 19.004 had 4m depth but were of very poor quality and not suitable for extraction.

Besides the degree of chemical impurity present in the silica being an important consideration of whether or not a resource is viable, the particle size distribution is also important. Preferably the particle size distribution should be between 250µm and 45µm. The amount of silica finer than 45µm is preferably less than 40%, or more preferably less than 20%. Hole 19.011 had reasonable chemical quality and a depth of 7m, but averaged 62% finer than 45µm. Similarly, hole 19.013, the deepest hole at 15m, had good chemical quality but averaged 70% less than 45µm. The fine particle size means that silica is not suitable for use.

Excluding lack of depth, poor chemical and particle size quality, only 3 holes 19.024, 19.144 and 19.145, returned silica. However, no holes close to 19.024 returned silica. So, it seems there is only a small remnant pod of silica at 19.024.

There appears to be a small deposit in the vicinity of 19.144, 19.145 and the two 2018 exploration holes 18.10 and 18.11. But the size of this deposit alone is not big enough to justify development costs.

5. CONCLUSIONS

The results were disappointing. A commercial resource has not yet been established. It is possible that several more holes will be drilled in 2020 in locations not yet investigated to establish whether or not a resource of commercial size is present.

6. ENVIRONMENT

Test holes were covered. The tracks remain open. Tracks not required for further investigation will be rehabilitated by pulling back vegetation in 2020.

EXPENDITURE

Expenditure for the period January to December 2019 is listed below.

Geochemistry/physics	\$	6,118
Drilling	\$	37,304
Feasibility Studies (NVA)	\$	0
Other	\$	53
Administration	\$	4,348
Total Costs	\$	<u>47,824</u>

REFERENCES

- Threader, V.M. 1990, Annual Report EL24/88 Champion Road.
Threader, V.M. 1991, Annual Report EL24/88 Champion Road.
Threader, V.M. 1994, Annual Report EL24/88 Champion Road.
Threader, V.M. 1995, Annual Report EL24/88 Champion Road.
Dickson, T.W. 2017, RL2/1996 Champion Road final report on Exploration.
Stuart, C.C, Rademeyer, M.C., 2019, Annual Report EL15/2017.