



**Annual Report
to March 2016**

**EL30/2014
Blackwater Rivulet**

Tasmanian Advanced Minerals Pty Ltd

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Date: 6 April 2016**

ABSTRACT

- The exploration program targeted silica to complement TAM’s existing resources.
- In this initial exploration program, some 70 test pits were dug on the licence during October and November 2015.
- The purpose of this initial work was to identify areas of resource that might hold potential for subsequent resource quantification work.
- Several areas of potential have been identified, but geochemical results and visual observation indicate substantial areas with unsuitable impurity levels.
- It is likely that auger drilling of selected targets would improve understanding of both resource volume and extent of contamination.

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- EL302014 201603 01 SL 1**
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1. INTRODUCTION

EL 30/2014, Blackwater Rivulet, is held by Tasmanian Advanced Minerals Pty Ltd (TAM), and is located approximately 40km south-southwest of Smithton (refer to the location map below). The Licence was granted on 26 March 2015, and this is the first annual report for the period up to the 2016 anniversary date.

Location Map: North-West Tasmania



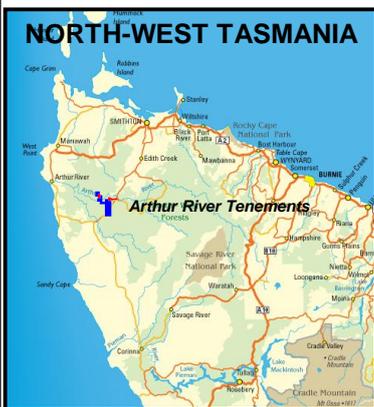
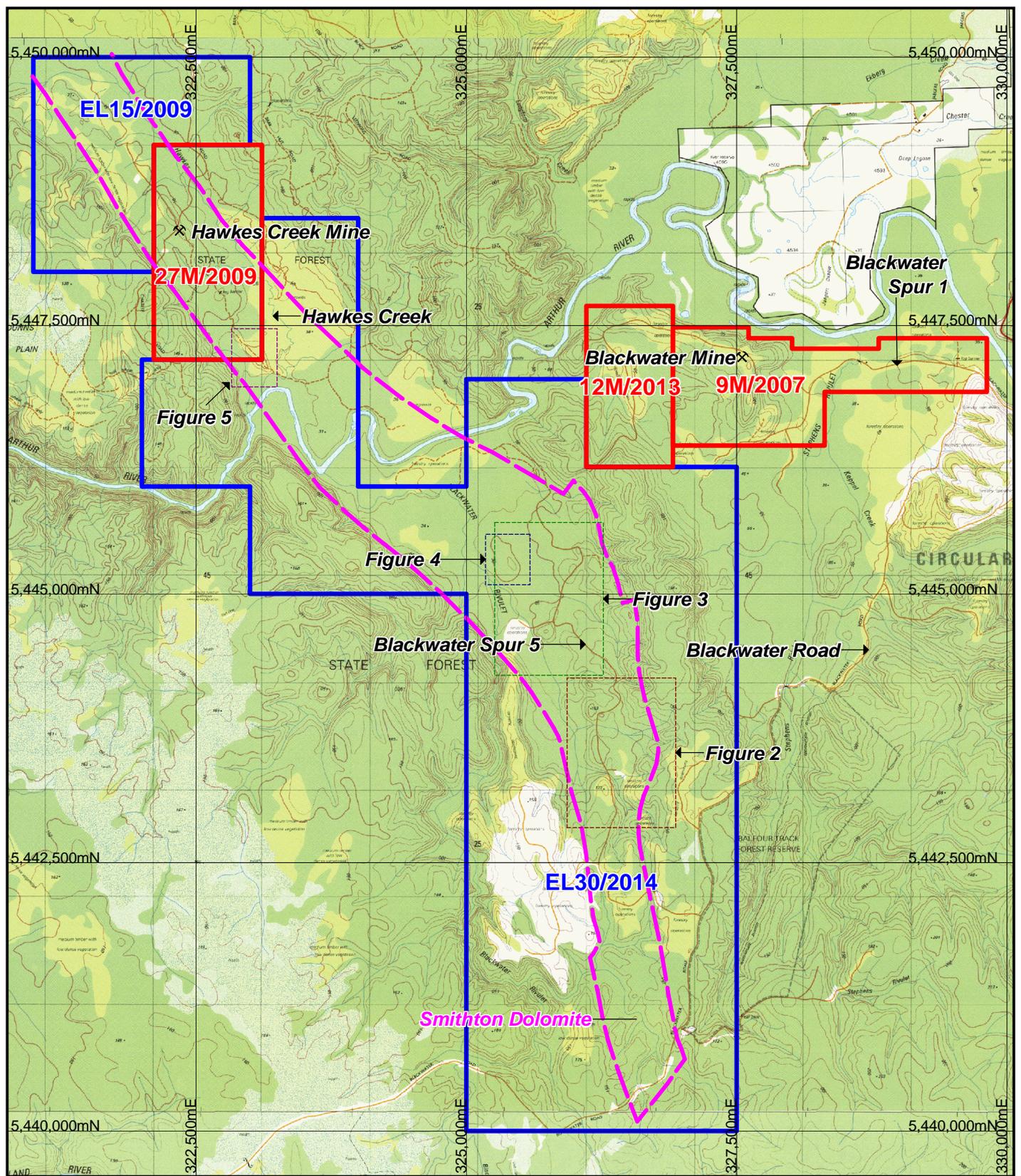
TAM is actively mining high purity silica from three locations in Tasmania, from one near Corinna and from two areas near the Arthur River in northwest Tasmania, Blackwater (9M/2007) and Hawkes Creek (27M/2009). EL30/2014 is in the vicinity of Blackwater Rivulet, and the north-western and north-eastern boundaries of the licence adjoin Hawkes Creek and Blackwater Far West (12M/2013) leases respectively (refer to, Figure 1).

All silica mined from the leases is screened on each site, segregated according to chemical impurity profile, and trucked to TAM's processing facility at Wynyard. Processing involves blending the feed, removal of discrete particle impurities, and particle size control and separation.

The exploration targeted silica to complement TAM's existing resources, both in terms of resource quantity and geochemical impurity profile.

As indicated in Figure 1, it is understood that much of the Licence area is underlain with Smithton dolomite. Outcropping indicates the dolomite is closer to the surface in the south area of the Licence, and increases the likelihood that resources in that vicinity would have little depth. The dolomite extends northwest through the Licence, and through Hawkes Creek Mine, ML27/2009, and EL15/2009 (Everard et al, 2007). As with other occurrences in the district, silica is found on elevated knobs. These knobs were targeted in this first exploration program.

Datum used in this report is GDA94.



LEGEND

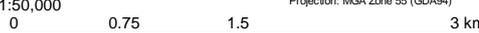
 Geological boundary inferred from MRT's Sumac 1:25,000 map

TASMANIAN ADVANCED MINERALS P/L
ARTHUR RIVER TENEMENTS AT 11.12.15

ML 27M/2009 and EL 15/2009 - HAWKES CREEK
MLs 9M/2007 and 12M/2013 - BLACKWATER
EL 30/2014 - BLACKWATER RIVULET

LOCATION PLAN

Compiled : Chris Stuart/Nic Turner	Drawn : DraftingWorks	Date : 11/12/2015	File : AR-Tenements 50k
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Scale: 1:50,000	Projection: MGA Zone 55 (GDA94)	Figure No
		1

N. J. Turner, Geologist

2. REVIEW OF PREVIOUS WORK

EL61/1994 was granted on 9.6.1995 to HD Nolan the owner of Cominex Pty Ltd. Nolan and Cominex are also shareholders of TAM. The tenement comprised 23 km², in two separate blocks. The southern block was elongated in a NNE – SSW direction, and comprised approximately 17km² following a line roughly along Sumac and Blackwater Roads. The northeast extent was near the intersection of Sumac Road with Canadian Creek (Turner, 2000). Approximately 2km² of the southwest extent of that expired licence overlaps with the southern end of EL30/2014.

The Final Report for EL61/1994 refers to poor quality, shallow silica flour being found by test pitting on the overlapping ground (Turner, 2007). The current work in EL30/2014 was to the north of that area.

The writer is not aware of any other exploration on the area over which the current licence lies.

3. EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Initial reconnaissance identified several areas of silica resource potential.

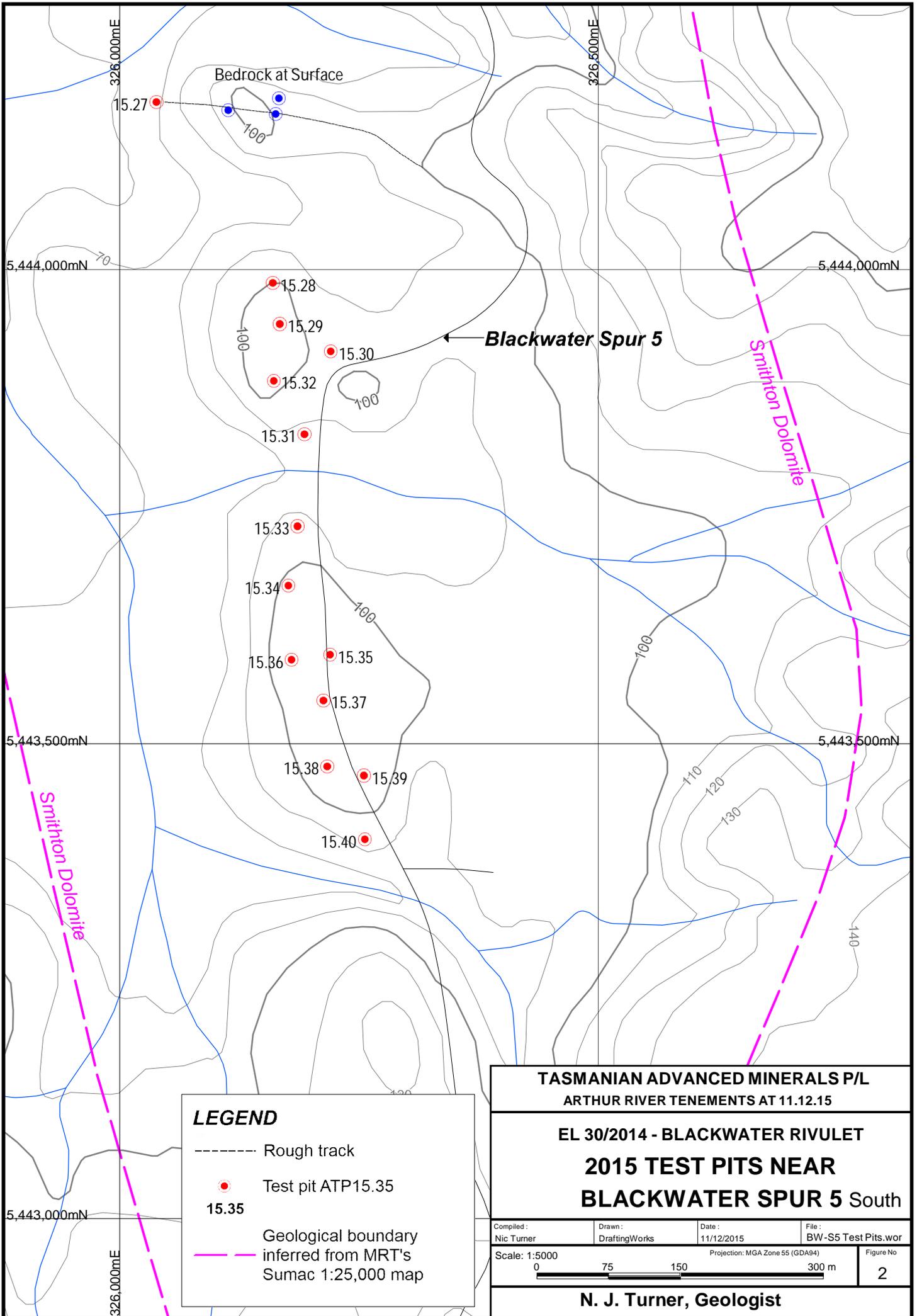
Test pitting was carried out was carried using a 14 tonne excavator (Doosan DX140LCR) on a series of elevated landforms along Blackwater Spur 5 Road south of the Arthur River, and on the continuation of a knob adjoining the south-east corner of Hawkes Creek Mine on the north side of the river.

In areas where indications of silica were promising, the number of pits was higher. Pit locations are shown in Figures 2, 3, 4 and 5.

Depending on the pit content's appearance, and access and safety considerations, samples of approximately 1kg were taken using non-contaminating hand implements, approximately every metre of depth, otherwise samples were taken using the excavator bucket. The samples were collected in strong plastic bags and delivered to TAM's Wynyard laboratory.

Sample analyses were undertaken to determine contaminant levels and silica particle size distribution. The sample preparation prior to sample analysis includes removal of +250µm and -45µm particles. This method provides greater insight into whether or not the silica is processable in TAM's Wynyard factory, rather than simply analysing the whole sample.

Out of 70 pits dug, 12 did not return samples because visual inspection determined the material unsuitable, eg clay, gravel etc. 157 samples were analysed using TAM's Fusion Method for 9 important contaminants, an average of 2.7 samples per pit. In addition 62 samples were analysed using TAM's Multiacid Method for a further 4 impurities.



LEGEND

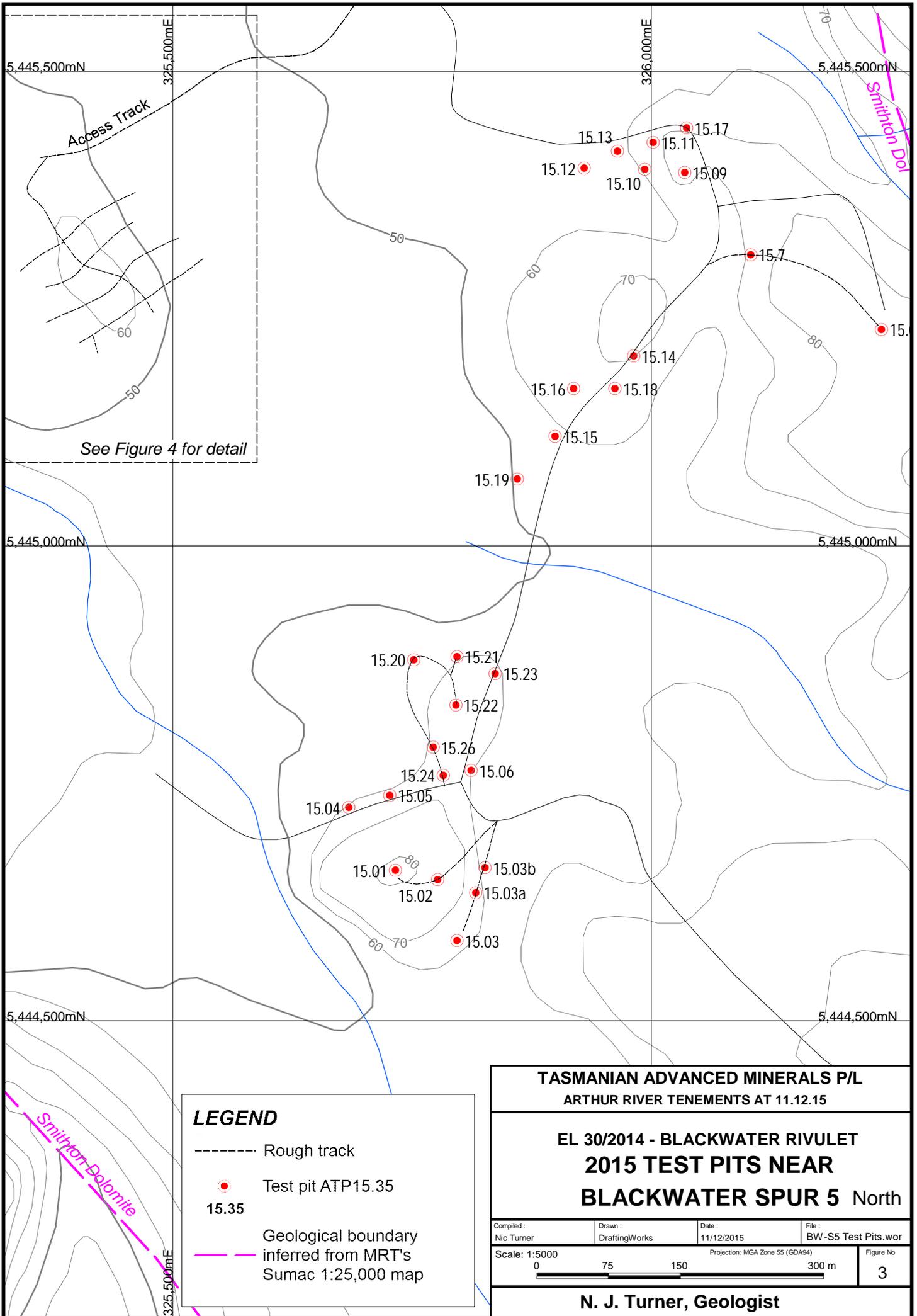
- Rough track
- Test pit ATP15.35
15.35
- Geological boundary inferred from MRT's Sumac 1:25,000 map

TASMANIAN ADVANCED MINERALS P/L
ARTHUR RIVER TENEMENTS AT 11.12.15

EL 30/2014 - BLACKWATER RIVULET
2015 TEST PITS NEAR
BLACKWATER SPUR 5 South

Compiled : Nic Turner	Drawn : DraftingWorks	Date : 11/12/2015	File : BW-S5 Test Pits.wor
Scale: 1:5000		Projection: MGA Zone 55 (GDA94)	
0 75 150 300 m		Figure No 2	

N. J. Turner, Geologist



LEGEND

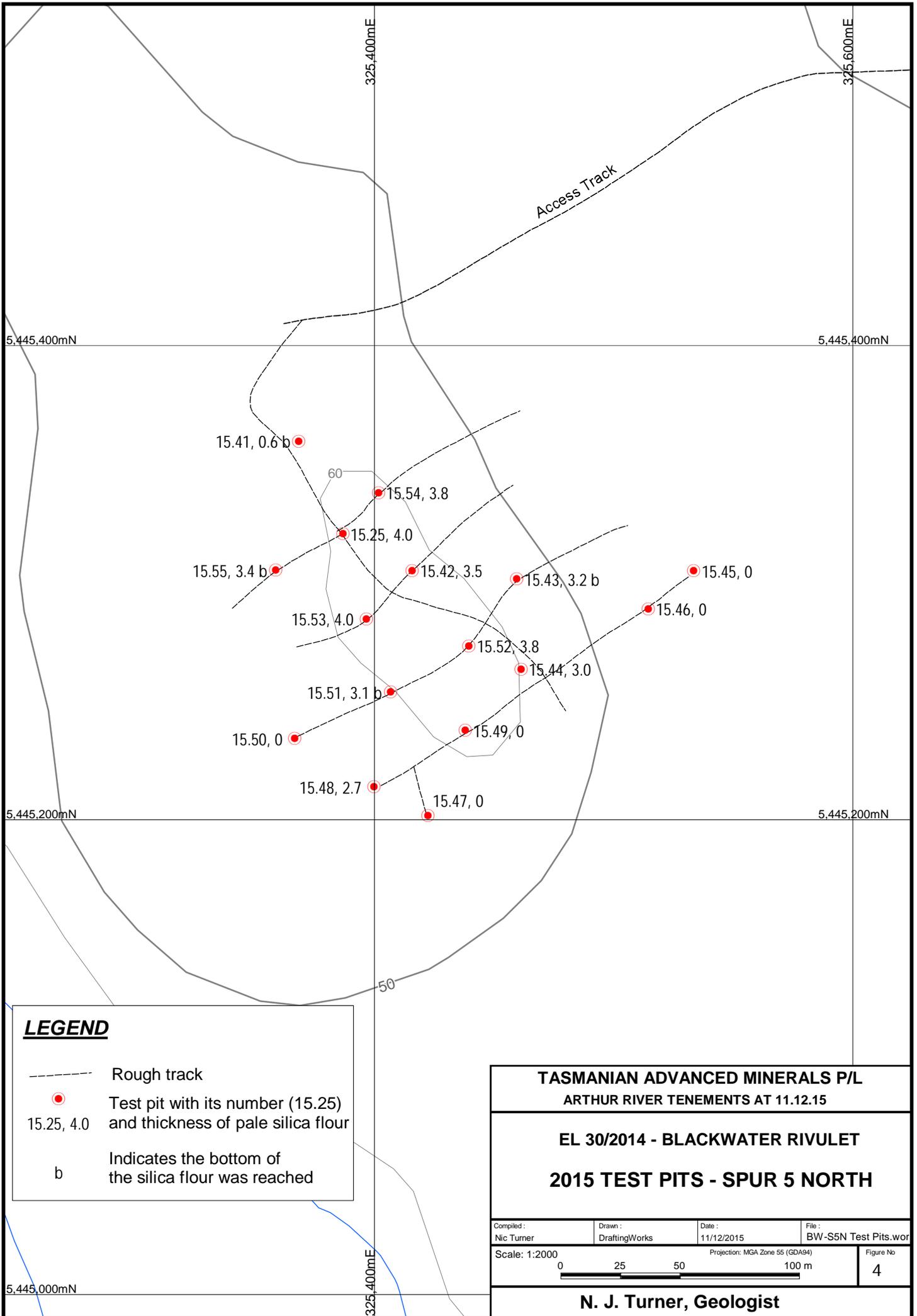
- Rough track
- Test pit ATP15.35
15.35
- Geological boundary inferred from MRT's Sumac 1:25,000 map

TASMANIAN ADVANCED MINERALS P/L
ARTHUR RIVER TENEMENTS AT 11.12.15

EL 30/2014 - BLACKWATER RIVULET
2015 TEST PITS NEAR
BLACKWATER SPUR 5 North

Compiled : Nic Turner	Drawn : DraftingWorks	Date : 11/12/2015	File : BW-S5 Test Pits.wor
Scale: 1:5000		Projection: MGA Zone 55 (GDA94)	
0		75	150
		300 m	
			Figure No 3

N. J. Turner, Geologist



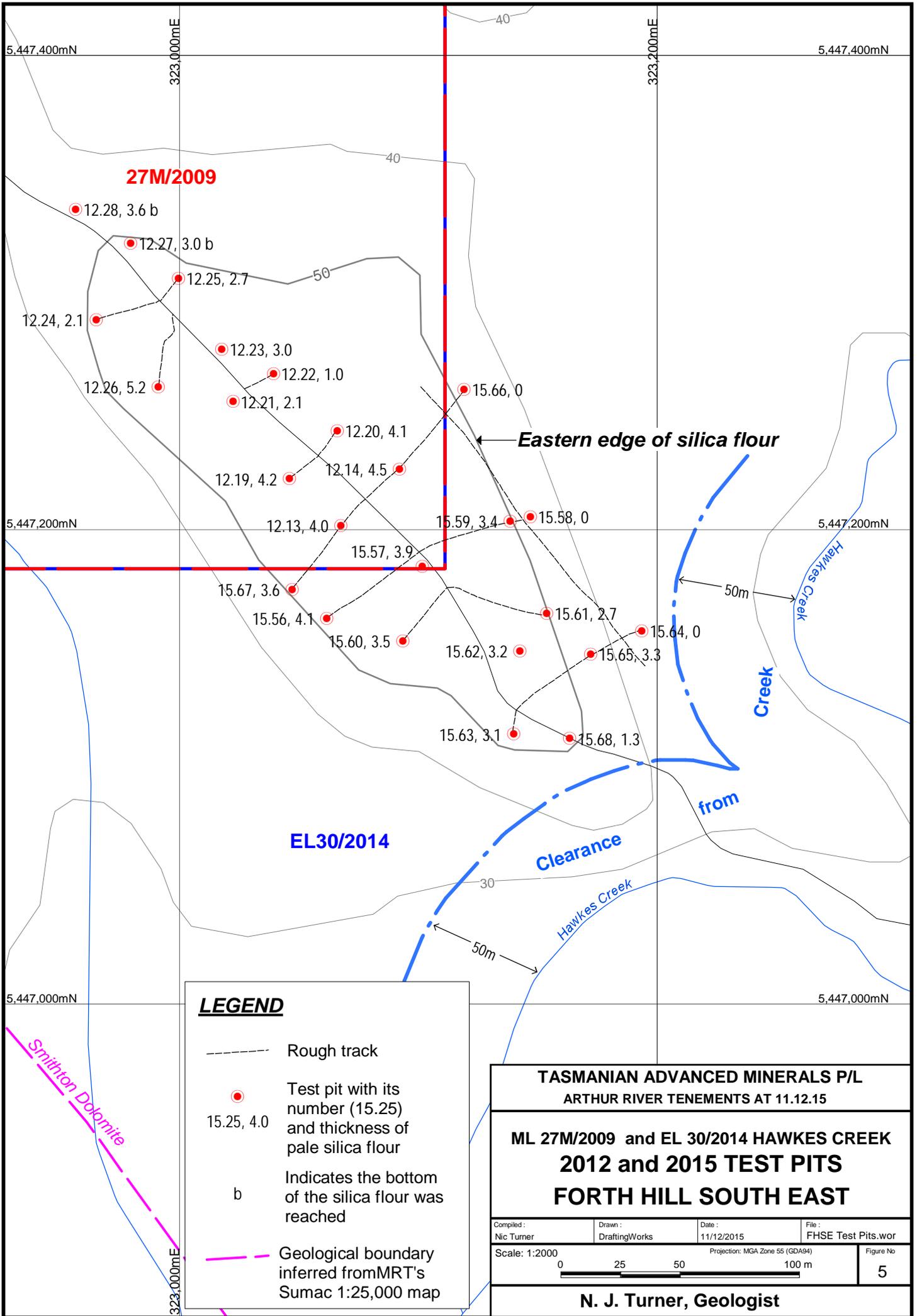
**TASMANIAN ADVANCED MINERALS P/L
ARTHUR RIVER TENEMENTS AT 11.12.15**

**EL 30/2014 - BLACKWATER RIVULET
2015 TEST PITS - SPUR 5 NORTH**

Compiled : Nic Turner	Drawn : DraftingWorks	Date : 11/12/2015	File : BW-S5N Test Pits.wor
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Scale: 1:2000	Projection: MGA Zone 55 (GDA94)	Figure No 4
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N. J. Turner, Geologist



LEGEND

- Rough track
- Test pit with its number (15.25) and thickness of pale silica flour
- Indicates the bottom of the silica flour was reached
- Geological boundary inferred from MRT's Sumac 1:25,000 map

TASMANIAN ADVANCED MINERALS P/L
ARTHUR RIVER TENEMENTS AT 11.12.15

ML 27M/2009 and EL 30/2014 HAWKES CREEK
2012 and 2015 TEST PITS
FORTH HILL SOUTH EAST

Compiled : Nic Turner	Drawn : DraftingWorks	Date : 11/12/2015	File : FHSE Test Pits.wor
Scale: 1:2000		Projection: MGA Zone 55 (GDA94)	
		Figure No	5

N. J. Turner, Geologist

4. DISCUSSION OF RESULTS

Pit logs and chemical analysis results are provided as attachments to the electronic version of this report in the following files:

- EL302014 201603 01 SL 1
- EL302014 201603 02 DL 1
- EL302014 201603 03 DG 1
- EL302014 201603 04 Filelisting

In general, contaminant levels improved from south to north. Iron, chromium and titanium are very important contaminants. From experience on other licences and leases TAM has found that the levels of these impurities can be roughly estimated from the extent of gravel contained in the silica, which is likely related to ground movement resulting in the mixing of originally overlying tertiary sand and gravel mixing with silica. Usually those gravels are 10-20mm in diameter.

Visual inspection of some of the southern test pits (ref. Figure 2) showed up to 150mm size gravel, indicating high energy mixing of the gravels. However there were numerous examples of good quality and very poor quality samples taken from within the same pit.

The two northern knobs (figures 4 and 5), showed the most promising results. However, although iron and chromium levels were mostly low, titanium was still quite high. The titanium is suspected as being rutile, and relatively fine in size, resulting in difficulty in removal from the silica in gravity and magnetic separation processes.

5. CONCLUSIONS

Considering the extent of contamination, it is likely that it will be very difficult to commercially process the silica exposed in the southern pits for the same applications that TAM currently supplies, namely LCD and OLED display glasses. However, TAM is already actively researching and testing processing improvements for enhanced metallic contaminant removal. Further consideration about the possible use of silica from those areas will be made as the testing and process development proceeds.

Analytical results of the silica in the northern knobs' test pits (Figures 4 and 5) are promising. Auger drilling is recommended to quantify resource quantity, and to increase understanding of contaminant distribution.

Drilling outside the areas of the current test pitting is also suggested, including east of Blackwater Spur 5 road, to gather greater understanding of the concealed fault location which is suggested in literature (Everard et al, 2015).

6. ENVIRONMENT

All pits were backfilled after sampling, and covered with topsoil. There are no outstanding environmental issues.

EXPENDITURE

Expenditure for the exploration program is provided below:

Machinery Hire & Manning	\$ 12,627.46
Consulting Geologist	\$ 32,016.02
Labour assisting Geologist	\$ 1,147.52
Sampling consumables & equipment	\$ 1,149.60
Laboratory Costs	\$ 12,992.19
Administration	\$ 5,993.28
Total	\$ 65,926.07

REFERENCES

Everard J.L., Seymour D.B., Reed A.R., McClenaghan M.P., Green D.C. and Calver C.R. Regional geology of the Southern Smithton Synclinorium, Explanatory Report for the Roger, Sumac and Dempster 1:25 000 scale geological map sheets, far northwestern Tasmania.

Turner, N. J. 2000. EL61/94 Arthur River, Interim Report to 31st May 2000.

Turner, N. J. 2007. EL61/94 Arthur River, Annual Report to 9th June, 2007 & Final Report.

Everard, J.L., McClenaghan, M.P., Brown, A.V., Seymour, D.B., Green, D.C. and Reed, A.R. (compilers) 2015. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3244 Sumac. Mineral Resources Tasmania.