

ASX ANNOUNCEMENT 31 JANUARY 2018

# **Quarterly Activities and Cashflow Report**

for quarter ending 31 December 2017

Pure Minerals Limited (the Company, Pure Minerals or PM1) provides the following update on its activities during the quarter ending 31 December 2017 (Relevant Quarter).

# **Project Activities**

## Battery Hub Project (100% PM1) - E09/2217 and E52/3523

During the Relevant Quarter, the final of the two tenements at Battery Hub, E52/3523, was granted, giving the Company rights to explore the entire 50km of strike length. Plans of Work for both Battery Hub tenements were approved by the Department of Mining, Industry Regulation and Safety (DMIRS) in November and December.

The initial drill programme for Battery Hub comprises 2,000m for both E09/2217 and E52/3523 with the first campaign to focus on E09/2217. The programmes were subject to routine surveys by traditional owners and their consultants. Clearances for the first campaign on E09/2217 and a portion of the second campaign (for E09/2217) were received in November, prior to commencement of first phase drilling. Consultants to the traditional owners expect to complete reports and clearances for the second phase of drilling early in the new year.

#### First Campaign - E09/2217

In December 2017, Pure Minerals completed its first phase of drilling at Battery Hub (see PM1 News Release, 12 December 2017, First Phase Drilling Completed at Battery Hub Manganese Project). The 2,880m program, an increase from the previously-planned 2,000m program, tested for manganese mineralisation at the Julia, Pools, Isles and Steven Ridge prospects, all located within tenement E09/2217. Pure Minerals opted to expand the campaign upon recognising that areas slated for testing in the second phase of drilling could be accessed without requiring track construction. In addition, new drill targets were identified in the field that warranted immediate testing.

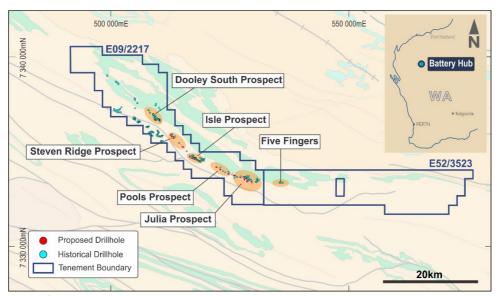


Figure 1: Location of the prospects within the Battery Hub manganese project.



**Figure 2:** Drilling into outcropping manganese-mineralised sediments at the Pools prospect. Source: PM1 News Release, 12 December 2017

More than 1,500 samples, comprising 413 composite samples and 1,125 one-metre split samples, were submitted to ALS Global laboratory in Wangara, Western Australia, for assay testwork. First test results are expected this month. At 31 December 2017, all results had been provided by ALS and Pure Minerals was reviewing and checking the data.

In addition, Company geologists have identified and sampled specific zones of mineralisation for preliminary metallurgical testwork aimed at determining the ability to beneficiate the mineralised material and assess its suitability to produce Electrolytic Manganese Dioxide (EMD) or Electrolytic Manganese Metal (EMM).

Following quarter end Pure Minerals has released drilling results from the Julia and Pools prospects. In a 11 January 2017 news release, *Positive initial drill results from the Julia Prospect at Battery Hub Project*, PM1 announced the results of drilling at the Julia Prospect. On 24 January 2017, in a news

release titled *Drill results at Pools prospect point to large tonnage potential*, Pure Minerals announced results from the Pools prospect. Results from Isles and Steven Ridge are expected to be released in due course.

The Company is not aware of any new information or data from the Battery Hub project that materially affects the information included in this quarterly report.

#### Rock Chip Samples at Five Fingers Prospect

On 15 November 2017 Pure Minerals announced the results of rock chip sampling at the Five Fingers prospect, located within the E52/3523 tenement. Assay results range from 14.3% Mn to 52.6% Mn, adding to evidence that the Project could host a significant manganese system.

Sample ID	Prospect Name	MnO (%)	Mn (%)
BHS03	Five Fingers	27.7	21.5
BHS04	Five Fingers	33.7	26.1
BHS05	Five Fingers	43.2	33.5
BHS06	Five Fingers	43.4	33.5
BHS07	Five Fingers	65.2	50.5
BHS08	Five Fingers	18.4	14.3
BHS09	Five Fingers	63.4	49.1
BHS10	Five Fingers	67.9	52.6

**Figure 3:** Rock Chip Results from Battery Hub project in Western Australia. Analysis completed by ALS Global Laboratories located in Malaga, Western Australia, using fused disc XRF (ALS method ME-XRF25s) technique and reported as a MnO (%) grade. Mn (%) calculated by multiplying MnO (%) by 0.7745. Source: PM1 News Release, 15 November 2017, *High Grade Rock Chip Samples Recovered from Five Fingers Prospect within the Battery Hub Manganese Project* 

The Five Fingers prospect contains multiple outcropping and subcropping discontinuous manganiferous beds extending over a mapped strike length of more than 5km. Previous rock chip samples from Five Fingers have returned values of up to 54.8% Mn; however, the prospect has only been subject to limited drill testing.

Five Fingers will be a priority target area during the second campaign of drilling that is planned to focus on E09/2217.

## Morrissey Hill (80% PM1)

Soil and Rock Chip Sampling Results

On 5 October 2017, Pure Minerals announced results from a soil sampling survey and rock chip sampling program over the northern portion of its 59 km<sup>2</sup> Morrissey Hill project to identify its prospectivity for lithium-tantalum mineralization (PM1 News Release *Large-Lithium-Tantalum soil anomalies defined at Morrissey Hill Project*). The area is known for multiple pegmatite intrusions and fractionated granites which have the potential to host lithium mineralisation.

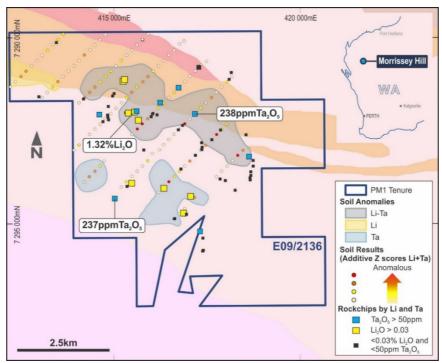
The soil survey consisted of 133 samples collected on a 200m x 800m grid. In addition, the Company collected 50 rock chip samples from various pegmatite and granite outcrops within and surrounding the soil sampling grid.

The soil sampling program was designed to identify lithological packages with anomalous pathfinder elements for lithium-caesium-tantalum pegmatites (Li, Cs, Ta, Nb, Rb) which may indicate subcropping prospective pegmatites.

The program successfully delineated two key anomaly areas (see Figure 4):

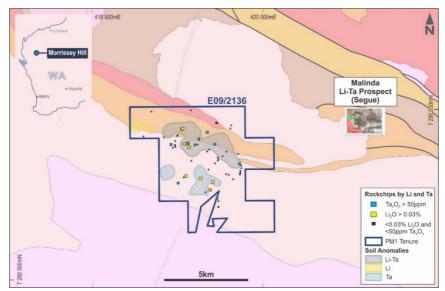
- a 5.0km x 1.0km lithium and tantalum soil anomaly, with results up to 0.045% Li<sub>2</sub>O and 20.9 ppm Ta<sub>2</sub>O<sub>5</sub>, and
- two tantalum soil anomalies of 1.6km x 1.4km and 1.0km x 0.4km with results up to 18.9 ppm  $Ta_2O_5$

All anomalies occur within a broad caesium anomaly above 10ppm Cs covering an area of more than 10 km<sup>2</sup>.



**Figure 1:** Soil anomalies, soil sampling locations showing multivariate Z-score (Li, Ta, Cs, Rb, Nb), and highlighted rock chip samples (Source: PM1 News Release, 5 October 2017, *Large-Lithium-Tantalum soil anomalies defined at Morrissey Hill Project*)

Morrissey Hill is located approximately 10km west of Arrow Resources' (former Segue Resources) recent Malinda (formerly Reid Well) lithium discovery. At Melinda, an east-west trend of lithium and tantalum-bearing pegmatites has been identified.



**Figure 2:** Location of Malinda lithium project relative to Morrissey Hill. Outline of Malinda project from Segue Resources (now Arrow Minerals Limited) News Release dated 20 September 2017. Source: PM1 News Release, 5 October 2017, *Large-Lithium-Tantalum soil anomalies defined at Morrissey Hill Project*)

Pure Minerals intends to infill sample the areas showing the strongest lithium and tantalum anomalies in the soil sampling program with the intention of enhancing the definition of the anomaly for improved drill targeting. In December 2017, Pure Minerals surveyed and mapped the area and identified additional areas for infill sampling.

The Company is not aware of any new information or data from Morrissey Hill that materially affects the information included in this quarterly report.

### Mount Boggola (80% PM1)

No exploration activities were undertaken during the quarter. However, the Company continued to review data.

## Bordah Well (80% PM1)

No exploration activities were undertaken during the quarter

#### Lake Blanche (100% PM1)

The transfer of the Lake Blanche uranium project, located in South Australia, from GB Energy Ltd to Pure Minerals continued during the quarter. In October 2017, the Department of the Premier and Cabinet, Government of South Australia, consented to the transfer of the license.

#### Regnard Bay (100% PM1)

During the quarter, Pure Minerals applied for a 150km<sup>2</sup> exploration license at Regnard Bay, located approximately 30km southwest of Karratha, Western Australia. Pure Minerals aims to test modern sediments overlying basement rock both onshore and offshore for heavy minerals, metals and industrial minerals that have been eroded and transported from the Pilbara Craton.

At quarter end the tenement remained pending grant.

## Corporate

During the Relevant Quarter, Pure Minerals issued the following securities:

- 25,000,000 incentive options to the Company's management and board. The options are
  unlisted, have an expiry date of 21 December 2022 and are exercisable at a price of A\$0.03
  per share. Prior to the issue, no equity securities had been issued to the Company's
  management and board, and the issue is intended to serve as incentives to the Board and
  management to ensure sustainable shareholder value is created.
- 67,500,000 options to to existing investors and brokers to the Company for investor relations purposes. The options are listed, have an expiry date of 21 December 2019 and are exercisable at a price of A\$0.03 per share. This tranche of securities was issued pursuant to a full form prospectus, lodged with ASIC in December, 2017.

At 31 December 2017, Pure Minerals had 270,629,059 fully paid ordinary shares on issue. Of those, 12,500,000 shares are under escrow until 4 August 2019 and a further 5,000,000 shares are under escrow until 4 August 2018. In addition, 92,500,000 options were outstanding with an exercise price of A\$0.03 per share.

At 31 December 2017, the Company's cash balance was A\$2.853M.

For more details about Pure Minerals Limited see www.pureminerals.com.au

For and on behalf of the board, Mauro Piccini Company Secretary **Tenement Table: ASX Listing Rule 5.3.3** 

# Mineral tenement interests held at the end of the quarter

Tenement	Status	Project	Holding	Grant Date	End Date	Prospective for
E08/2693	Granted	Mt Boggola, WA	80%	29/09/2015	28/09/2020	Copper-gold
E09/2132	Granted	Bordah Well, WA	80%	01/07/2016	30/06/2021	Gold-copper, REE, Uranium
E09/2133	Granted	Morrissey Hill, WA	80%	20/07/2016	19/07/2021	Lithium, Tantalum & REE
E09/2136-I	Granted	Morrissey Hill, WA	80%	20/07/2016	19/07/2021	Lithium, Tantalum & REE
EL5391	Granted	Lake Blanche, SA	100%	27/03/2014	26/03/2018	Lithium & Uranium
E09/2217	Granted	Battery Hub, WA	100%	13/09/2017	12/09/2022	Manganese
E52/3523	Granted	Battery Hub, WA	100%	06/11/2017	05/11/2022	Manganese
E47/3919	Application	Regnard Bay , WA	100%			Heavy Mineral Sands, Gold, Industrial Minerals

The mining tenement interests relinquished during the quarter and their location Nil.

# The mining tenement interests acquired during the quarter and their location

Applied for (grant pending): E47/3919 (Pilbara, Western Australia)

As announced on 7 November 2017 (*Final Battery Hub Tenement Granted*), the second and final exploration license (E52/3523) which forms the 100% owned Battery Hub Manganese Project was granted

Beneficial percentage interests held in farm-in or farm-out agreements at the end of the quarter

Not applicable.

Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of during the quarter

Not applicable.