

# **ASX QUARTERLY REPORT**

for the Period Ended 31st March 2020

# SUMMARY SOUTH AUSTRALIAN EXPLORATION PROJECTS

# Pernatty IOCG\* Project - EL 6137 (100% Tasman)

• Field reconnaissance and Aboriginal heritage surveys over five priority EM –magnetic-gravity drill target areas completed.

(\*IOCG – Iron Oxide-Copper-Gold)

# Lake Torrens IOCG\* Project – EL6416 (Fortescue Metals Group Ltd (Fortescue) earning 51%)

Work completed during the quarter by Fortescue included:

- Historic data review
- Review of proprietary Tasman data
- Relogging of Marathon and Vulcan drill core
- Detailed magnetic susceptibility, specific gravity and conductivity data collected on Marathon and Vulcan drill holes
- Hyperspectral analysis of Vulcan core (VUD011, VUD14, VUD016, and VUD017)
- Completion of ground gravity survey
- Submission of samples for hematite/magnetite geochemical vectoring program

# **EDEN INNOVATIONS LTD (ASX Code: EDE)**

- Tasman through its wholly owned subsidiary, Noble Energy Pty Ltd, holds 624,634,707 fully paid shares in Eden (representing 36.24% of the total issued capital of Eden) and 14,814,815 EDEOB options. Based on the closing price on the ASX of EDE (\$0.024) and EDEOB (\$0.003) on 31 March 2020, this investment had a market value of \$15 million, which is equivalent to 3 cents for every currently issued TAS share.
- Highlights of Eden's progress during the quarter can be viewed in Eden's quarterly activities report.



### MINERAL EXPLORATION

## LAKE TORRENS PROJECT, SOUTH AUSTRALIA

# Pernatty Project - EL 6137 (Tasman 100%)

The Pernatty Project is located approximately 20km SSE of the IOCG deposit at Carrapateena, within Exploration Licence 6137 (refer Figure 1). The area was initially targeted by Tasman for its potential to host IOCG deposits due to available geophysical data, the possibility of reasonable basement depths and its proximity to Carrapateena. Importantly, Tasman's regional geological studies identified Pernatty as lying within an interpreted prospective "corridor" containing the most commercially favourable IOCG deposits at Olympic Dam, Wirrda and the three deposits in the Carrapateena area (see Figure 1). Recently, BHP has announced the potential discovery of a major new deposit at Oak Dam West, which is also located within this interpreted corridor. There has been no previous drilling within the tenement.

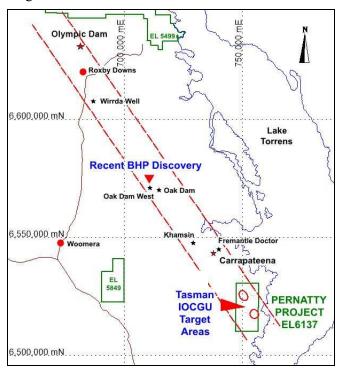


Figure 1: Pernatty Project Location Plan (grid GDA 94, Z53).

## **Drill Targets**

EM surveying over priority gravity and magnetic targets (refer ASX announcement 20 January 2020) identified five priority drill targets for copper sulphides within the Pernatty IOCG project (Figure 2). During the quarter field reconnaissance over the target areas was carried out by Tasman personnel and Aboriginal heritage surveys were conducted by representatives of the Kokatha Native Title holders. All of the proposed hole locations were cleared for drilling.

The proposed drilling program to test the Pernatty targets has been placed on hold due to the COVID-19 situation. The South Australian Department of Energy and Mining has recently announced relief from exploration expenditure commitments for mineral explorers for the next 12 months.



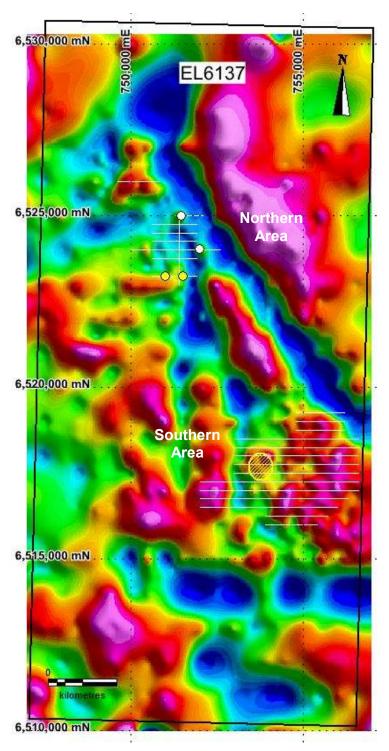


Figure 2: EL 6137. Residual gravity image showing EM survey lines (white) and location of modelled TEM conductor in southern area (yellow hatch). Yellow circles in north area are approx. locations of modelled steeply dipping conductive plates. White circles are locations of small coincident gravity-magnetic-TEM anomalies. Overall dimensions of EM anomalies in north area unknown. Grid GDA 94 Z53.



# Lake Torrens IOCG Project – EL 6416 (Tasman 100%, Fortescue earning 51%).

## **Fortescue Agreement**

Tasman Resources Ltd ("Tasman") and FMG Resources Pty Ltd, a subsidiary of Fortescue Metals Group Ltd (ASX:FMG "Fortescue") executed a Farm-in and Joint Venture Agreement ("Agreement") over Tasman's wholly owned Exploration Licence 6416 in June 2019 (Refer to TAS:ASX Announcement 14 June 2019).

EL6416 (refer Figure 3) hosts the Vulcan, Vulcan West and Titan iron oxide-copper-gold ("IOCG") prospects, approximately 30km north of BHP's Olympic Dam mine in South Australia

### **Work Carried Out During the Quarter by Fortescue**

### **Historical Exploration Data Review**

Fortescue commenced a detailed review of historic exploration activities covering EL 6416 including an evaluation of drilling, geochemical, petrophysical and geophysical data. Collation of data, including digitisation of non-digital data is ongoing. Fortescue has completed relogging of all drill holes from the Titan Prospect and basement-intersecting drill holes from the Marathon Prospect, in conjunction with collecting detailed magnetic susceptibility, specific gravity and conductivity data.

#### **Hyperspectral Scanning**

During the period, the Geological Survey of South Australia completed HyLogger spectral scanning of Vulcan drill holes VUD011, VUD014, VUD016, and VUD017. These holes were selected to provide a cross-section of the Eastern limb of the Vulcan prospect. The spectral analysis will provide additional detail on the range of alteration and mineralization as well as high resolution imagery. The results from these scans are expected in Q4. Additional holes will be sent for scanning when there is machine availability.

#### **Geophysics**

A detailed ground gravity survey has recently been completed. The survey included 22,217 new gravity stations, 1,353 repeat stations and 55 repeats of old survey stations to facilitate data merging. This survey provided high resolution gravity coverage of 400m x 400m, down to 200m x 200m spacing over areas of interest, through to high resolution 100m x 100m spacing over the Vulcan and Titan prospects.

#### Geochemistry

A representative sub-suite (subset) of pulp samples from Vulcan drill core has been submitted to the laboratory for detailed analytical testing. This program is designed to quantify the distribution of magnetite and hematite and aid vectoring within the mineral system.

#### **Program for the June Quarter**

Work planned by Fortescue for the next quarter includes:

- Continued review, re-logging and data collation of Vulcan drill core
- Processing of gravity data
- Analysis of results from the hematite/magnetite geochemical vectoring program
- On ground reconnaissance for future access preparation
- Geological and geophysical modelling and target generation.



# **Background on Vulcan and Vulcan West Prospects** (presently regarded by Tasman as the high priority prospects within EL6416)

(Note: All information provided in this section has been previously announced to the ASX by Tasman.)

Vulcan is located 30km NNE of the giant Olympic Dam IOCG deposit and is a very large IOCG system, where drilling to date has intersected a number of very thick intervals of alteration and low-grade mineralisation over a large target area (about 12km²).

Vulcan West occupies a very geophysically anomalous and interesting zone (around 50km²) between, Vulcan and Titan, another very large IOCG system within Tasman's Exploration Licence 5499 (see Figure 3). Other regional IOCG targets within Tasman's EL6416 are also shown in Figure 3.

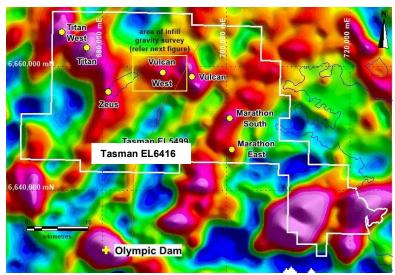


Figure 3: Regional residual gravity image over Tasman's Exploration Licence 6416, showing the location of Olympic Dam, Tasman's IOCG prospects and the area of the 2018 gravity infill survey and modelling (Vulcan West). (GDA 94, MGA Zone 53)

As previously reported (see Tasman's ASX Quarterly Report for the quarter ending 31 March 2018) the infill gravity survey completed in January 2018 over a previously undrilled section of the Exploration Licence, provided high quality data to enable detailed geophysical modelling (combined gravity and magnetics) over an area considered prospective for discovery of IOCG deposits. A number of potential drill targets were identified in this modelling, and as suspected, a number of these targets are at shallower depth than the nearby large Vulcan IOCG system.

Regional MT surveys conducted by the University of Adelaide have suggested that Vulcan and Olympic Dam share a very deep underlying zone of anomalously conductive rocks that are postulated to represent a zone of fluid migration, which was critical in the formation of these two very large IOCG systems.

Figure 4 (see Figure 3 for location) shows the residual gravity response obtained from the new geophysical processing and modelling over the main area of interest at Vulcan West and clearly highlights a number of distinctive anomalies. Combined modelling of this gravity data with existing magnetics has defined a number of potential drill targets at a variety of depths (Figure 4):

- Target A: Modelled depth of about 650m
- Target B: Modelled depth of about 700m
- Target C: Modelled depth of about 680m
- Target D: Modelled depth of about 850m
- Target E: Modelled depth of about 700m
- Target F: Modelled depth of about 750m



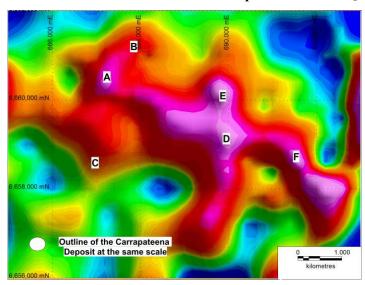


Figure 4: Detailed plan of residual gravity at Vulcan West, based on all available data. Red/magenta colours are areas of stronger residual gravity, generally indicating areas likely to be underlain by denser, more iron-rich rock, potentially IOCG systems. The letters A, B C etc. refer to individual modelled bodies. Also shown in plan, at the same scale is an outline of the Carrapateena IOCG deposit, located 125km to the SE. Clearly there is potential for the Vulcan West area (especially Targets A & C) to host Carrapateena-size deposits at attractive depths.



Figure 5: Location of Tasman's Exploration Project Areas in South Australia.



## **INVESTMENT IN EDEN INNOVATIONS LTD (ASX Code: EDE)**

Tasman through its wholly owned subsidiary, Noble Energy Pty Ltd, holds 624,634,707 fully paid shares in Eden (representing 36.24% of the total issued capital of Eden) and 14,814,815 EDEOB options in Eden. Based on the closing price on the ASX of EDE (\$0.024) and EDEOB (\$0.003) on 31 March 2020, this investment had a market value of \$15 million, which is equivalent to 3 cents for every currently issued TAS share.

The board of Tasman believes there is potentially significant upside in its investment in Eden and as a major part of Tasman's investment strategy it intends to continue to hold the Eden shares as a long term investment.

The highlights of progress made by Eden during the quarter are included in the Eden quarterly activities report.

## **INVESTMENT IN CONICO LTD (ASX Code: CNJ)**

Tasman holds 50,660,821 fully paid shares and 5,184,536 CNJO options in potential cobalt-nickel producer Conico Ltd ("Conico"), representing 13.18% of the total issued capital of Conico. Based on the closing price on the ASX of CNJ (\$0.007) on 31 March 2020, this investment had a market value of \$0.35 million.

The highlights of progress made by Conico during the quarter are included in the Conico quarterly activities report.

**Greg Solomon** 

**Executive Chairman** 

This announcement was authorised by the above signatory.

For any queries regarding this announcement please contact Aaron Gates on +618 9282 5889.

#### Disclaimer

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

#### Competent Persons Statement

The information in this quarterly report that relates to Exploration Results is based on and fairly represents information compiled by Michael J. Glasson, a Competent Person who is a member of the Australian Institute of Geoscientists.

Mr Glasson is an employee of the company. Mr Glasson is a share and option holder.

Mr Glasson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Glasson consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



# **Report for March Quarter 2020**

# **Interests in Mining Tenements**

Tenements	Location	Interest held at end of quarter	Acquired during the quarter	Disposed during the quarter
EL 6416*	SA	100%		
EL 5602	SA	100%		
EL 6137	SA	100%		

<sup>\*</sup>Subsequent licence to EL 5499