



ACN 009 253 187

## **ASX QUARTERLY REPORT**

**for the Period Ended 31<sup>st</sup> December 2010**

### **HIGHLIGHTS**

#### **SA – VULCAN PROJECT**

- **Drilling of priority targets is scheduled to resume on about 17<sup>th</sup> January 2010.**
- **Endeavours aimed at resolving access issues covering the southern, and possibly most prospective part of the Vulcan IOCGU system are continuing.**
- **Following the Vulcan IOCGU discovery, a regional data review has highlighted new targets for testing.**

#### **CORPORATE**

#### **INVESTMENTS**

**Fission Energy (Tasman: 28.0% shareholding fully diluted as at 31<sup>st</sup> December 2010).**

- **Further nickel sulphides were intersected in recent drilling (1m at 4.0% Ni).**
- **Infill drilling of the oxide resource was completed; resource modelling is awaiting final assay results.**

**Eden Energy (Tasman: 16.6% shareholding, fully diluted as at 31<sup>st</sup> December 2010).**

- **Eden acquired the 50% interest in the pyrolysis project and the gas to liquids held by the University of Queensland.**
- **Eden's wholly owned subsidiary, Hythane Company has commenced the scale-up of the pyrolysis technology in Colorado, USA and is now testing and optimising the process.**
- **In India, development of Eden's Optiblend® Dual Fuel business continued.**

## DETAILS

### IOCGU EXPLORATION: SOUTH AUSTRALIA

#### Vulcan Project (100% Tasman)

##### *Drilling Status*

No further drilling was conducted at Vulcan during the quarter due to wet weather in eastern Australia delaying the drilling contractor's prior program. Drilling is now due to commence on about 17<sup>th</sup> January 2011, and, as this will be the contractor's first program after the Christmas break, no further delays are expected.

Tasman expects to drill at least four to six holes in this program. Each hole is expected to take about two to three weeks to drill, and assay results are expected four to six weeks after the completion of each hole. Drill sites have been selected to target a diversity of potential opportunities for high-grade mineralisation, based on gravity, magnetic and seismic geophysical data, and a geological model based on features exhibited in other IOCGU systems such as Olympic Dam and Prominent Hill.

Work continues towards resolution of heritage matters affecting a portion of the southern, and possibly most prospective part of the gravity target.

The location of Vulcan is shown in Figure 1, and a plan showing the location of the five drill holes already completed at Vulcan is given in Figure 2.

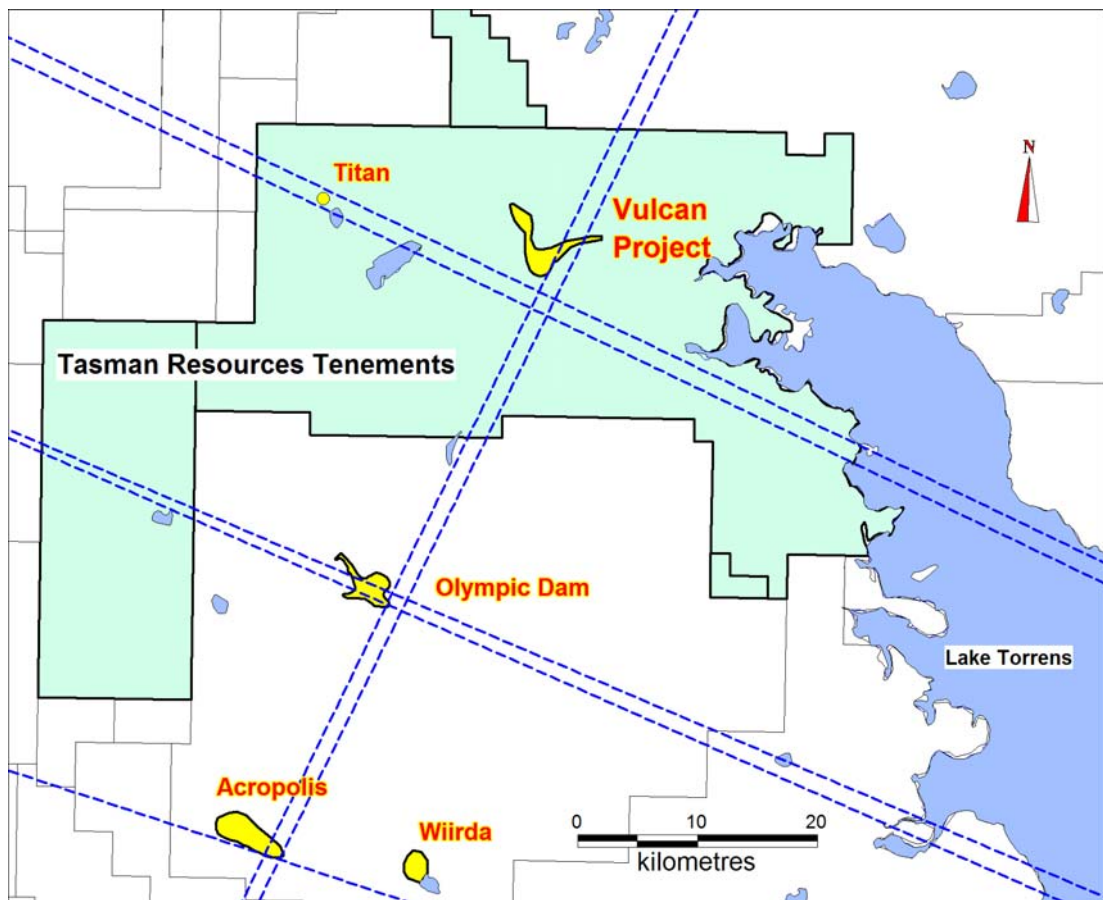
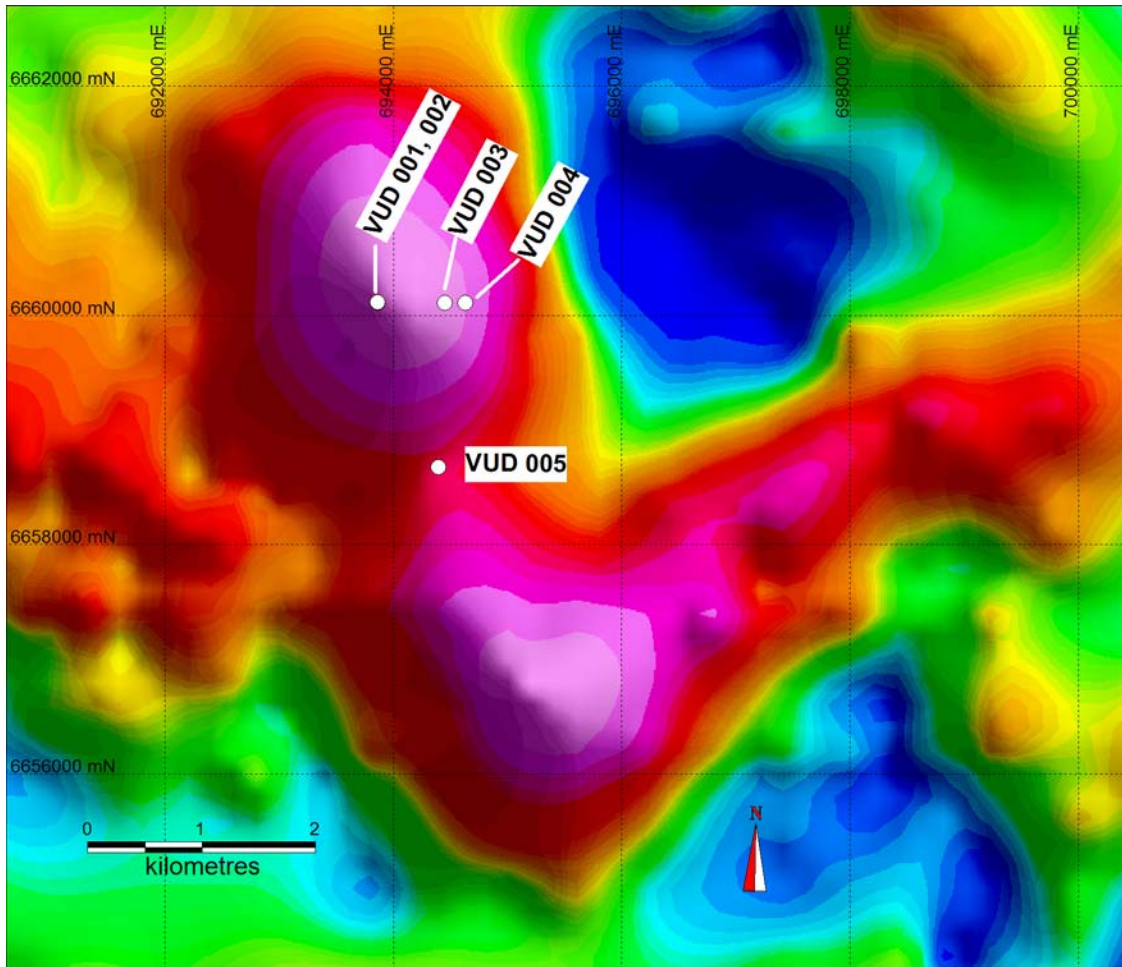


Figure 1: Location Plan showing the Vulcan IOCGU Project, nearby IOCGU deposits/systems and several key (historic) tectonic lineaments identified prior to the discovery of Olympic Dam (dashed blue lines). Tasman's tenements area shown in green.



**Figure 2: Vulcan residual bouguer gravity image with the location of the five drill holes VUD 001 to 005, completed to date.**

### ***Exploration Completed To Date: Significance***

Four of the five drill holes completed at Vulcan have intersected the alteration and mineralisation associated with the Vulcan IOCGU system. The best results have been from hole **VUD 003**, which intersected much stronger IOCGU mineralisation than the discovery hole VUD 001, including 7.8m down hole at 1.21% Cu, (and 0.35g/t Au) higher copper grade than the Olympic Dam discovery hole RD 1. This 7.8m zone is included within a much thicker interval of 56.65m at 0.59% Cu, which also included a number of other higher grade zones such as 0.75m at 4.44% Cu, 1.34g/t Au, 0.58kg/t U<sub>3</sub>O<sub>8</sub> and 0.65m at 7.82% Cu, 2.41g/t Au and 0.03kg/t U<sub>3</sub>O<sub>8</sub>, as reported to the ASX on 6<sup>th</sup> July 2010.

**VUD 002** and **VUD 004**, intersected weaker mineralisation than VUD 003, although interestingly, VUD 002 also intersected further anomalous rare earth element concentrations, with one five metre zone (from 947m to 952m down hole) averaging 0.29% Ce and 0.18% La, comparable to levels seen in mineralised hematite-rich breccias at Olympic Dam. VUD 004 intersected a 1.37m thick zone at the basement unconformity averaging 0.91kg/t U<sub>3</sub>O<sub>8</sub>.

The main sulphide minerals intersected in the first holes (VUD 001 to VUD 004) are pyrite and chalcopyrite and not the higher tenor bornite or chalcocite as seen in higher grade parts of the Olympic Dam Deposit. However, Vulcan is clearly large enough (about 11km<sup>2</sup>) for significant development elsewhere within the system of this style of higher-grade, and economically more attractive mineral assemblage. Further, individual sections of these holes have returned assays for copper, uranium, gold, cerium and lanthanum that are equivalent to the higher-grade ore mined at Olympic Dam, confirming that the system has the potential to produce high-grade mineralisation.

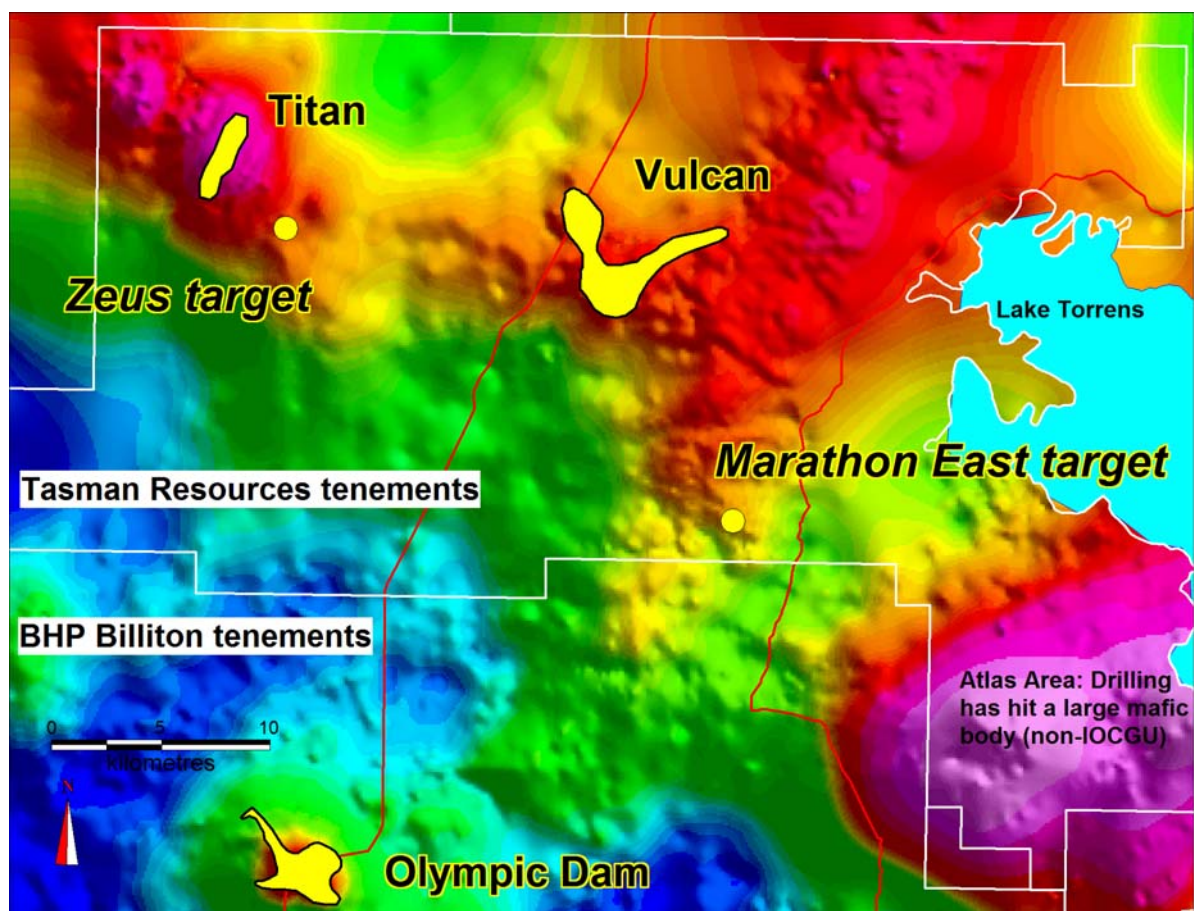
A review of **VUD 005** has indicated that the rocks intersected are possibly highly altered parts of the Vulcan system, and not the younger and unrelated Pandurra Formation as previously thought. Accordingly, samples have been submitted for assay, although no significant visible mineralisation has been observed.

### ***Regional Review and Synthesis***

Following the drilling success at Vulcan a review of regional geophysical and geological data has been conducted. This review has highlighted the importance of a number of patterns and trends evident in these data on a more regional scale.

For example, it is believed that there is a clear link between the IOCGU systems at Vulcan and Titan, evident in both the regional gravity (see Figure 3) and magnetic data for the area. This suggests that untested targets between these IOCGU systems such as the previously identified Zeus target (Figure 3) may have a higher priority for drill testing than previously believed.

Likewise, at the Marathon East target (Figure 3), detailed gravity and magnetic features have highlighted a significant anomaly for drill testing.



**Figure 3: Known and interpreted IOCGU systems (Olympic Dam, Vulcan and Titan) and IOCGU targets Zeus and Marathon East) superimposed on regional bouguer gravity image.**

### ***Background***

Tasman identified Vulcan as a prime IOCGU target in 2009, based on the presence of a very large gravity anomaly, supporting magnetic and seismic anomalies and Vulcan's location close to key tectonic (structural) lineaments which had previously been used in the original targeting of Olympic Dam by WMC in the mid-1970s (see Figure 1). Tasman's initial discovery drill hole, VUD 001, intersected the Vulcan IOCGU system late in 2009, and further investigations have confirmed the potential significance of the discovery.

## **GOLD EXPLORATION: SOUTH AUSTRALIA**

### **Parkinson Dam Epithermal Gold-Silver (Lead-Zinc) Project (Tasman 100%)**

Tasman discovered new, outcropping epithermal-style gold and silver mineralisation in 2005, and later hit very encouraging, high grade gold and silver mineralisation in vertical hole **PD 63 (21m at 21g/t Au and 83g/t Ag, including 9m down hole at 31g/t Au and 152g/t Ag)**.

No exploration was conducted at Parkinson Dam during the quarter.

### **OTHER PROJECTS**

Tasman has gold and base metal projects at Mirrica in Queensland and the Central Gawler Craton in South Australia (Figure 4), however there was no exploration activity in these areas during the quarter due to priority work at Vulcan. The Streaky Bay uranium project in South Australia has been surrendered.



**Figure 4: Location of Tasman Project Areas in South Australia and Queensland**

### **Outside interests in Tasman's 100%-owned mineral tenements:**

Fission Energy Ltd has the right to explore for uranium in all Tasman's South Australian tenements except for (a) basement-hosted mineralisation within the Lake Torrens Project and (b) part of the Parkinson Dam Project, where Fission farmed out its uranium exploration rights to Mega Hindmarsh Ltd.

Flinders Mining Ltd has a joint venture agreement with Tasman to explore for diamonds within all Tasman's South Australian granted tenements except for the Parkinson Dam Project.

## **CORPORATE**

### **Investment in Fission Energy Ltd**

Tasman has a 28.0% interest in uranium explorer and potential nickel-cobalt producer Fission Energy Ltd (ASX: FIS), on a fully diluted basis as at 31<sup>st</sup> December 2010.

#### ***Mt Thirsty Nickel-Cobalt Project (refer Fission Energy Ltd Quarterly Report for full details)***

Fission Energy owns 50% of the Mt Thirsty Nickel-Cobalt Project in WA, with the other 50% held by Barra Resources Limited (ASX: BAR). Mt Thirsty is located 20 kilometres north-northwest of Norseman, Western Australia.

#### ***Mt Thirsty Oxide Deposit***

Mt Thirsty has a current JORC compliant Indicated Resource of 14.8 million tonnes at 0.14% Co, 0.59% Ni and 0.99% Mn and a JORC compliant Inferred Resource of 14.2 million tonnes at 0.11% Co, 0.52% Ni and 0.77% Mn over an apparent strike of 1.3 kilometres and a width of around 800 metres.

#### ***Infill Resource Drilling***

Infill resource drilling was completed during the Quarter, and this will enable an updated resource estimation to be calculated early in 2011, and open pit optimisation and mine scheduling studies to be carried out prior to possible commencement of the PFS.

#### ***Mt Thirsty – Nickel Sulphide Exploration***

In early 2010 the intersection of primary nickel sulphide mineralisation was announced by Fission Energy Limited and 50% joint venture partner Barra Resources Limited. Reverse circulation hole MTRC015 intersected a 6 metre thick zone of massive and stringer nickel sulphides assaying 3.38% nickel at a down hole depth of 201 metres.

Follow-up reverse circulation drilling has intersected further nickel sulphides - MTRC020: 2m down hole at 5.9% Ni, MTRC022: 2m at 3.5% Ni, and MTRC030: 1m at 4.0% Ni.

Diamond drilling to test the zone of interest at a greater depth will occur early in 2011.

### **Investment in Eden Energy Ltd**

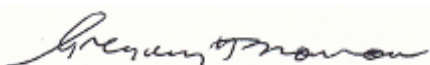
Tasman has a 16.6% interest in alternative energy company Eden Energy Ltd (ASX: EDE), on a fully diluted basis as at 31<sup>st</sup> December 2010.

#### ***Pyrolysis Project***

- Eden acquired the 50% interest in the pyrolysis project and the gas to liquids project held by the University of Queensland by the issue of 3.75 million Eden shares.
- Eden's wholly owned subsidiary, Hythane Company has commenced the initial scale-up of the pyrolysis technology in Colorado, USA and are now testing and optimising the process, and preliminary results are encouraging.

#### ***India***

- Eden secured further sales of Optiblend® Dual Fuel Kits in northern India.



Greg Solomon  
Executive Chairman

*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.*

*The information in this announcement, insofar as it relates to Mineral Exploration activities, is based on information compiled by Robert N. Smith and Michael J. Glasson, who are members of the Australian Institute of Geoscientists, and who have more than five years experience in the field of activity being reported on. Mr Smith and Mr Glasson are full-time employees of the company. Mr Smith and Mr Glasson have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Smith and Mr Glasson consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.*

*It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource.*