

# Bankable Feasibility Study delivers more than \$550 million in Net Revenue: Mt Lindsay Tin/Tungsten Project

ASX Announcement  
7 November, 2012  
Ref: VMS/606/VMS0305

Australian mineral exploration company, Venture Minerals Limited (ASX code: VMS), is pleased to announce the results of the Bankable Feasibility Study ("BFS") for the Company's flagship Mt Lindsay Tin/Tungsten Project in Tasmania.

The robust results from the BFS represent an excellent outcome and confirm the long-term, high-value potential of the Mt Lindsay Tin/Tungsten Project. Highlights include:

- 14mt Maiden Reserve including proved reserves of 6.4mt @ 0.7% tin equivalent
- Project generates in excess of \$550 million in net revenue (pre tax)
- Net annual revenue peaks at more than \$110 million (pre tax)
- Long mine life of 9 years
- NPV<sub>8</sub>: \$143 million
- Return on Equity: 33% (60%debt/40%equity)
- Payback period of 4 years
- Capital cost of \$198 million including a 35% plant capacity upgrade to 1.75mtpa.
- Mt Lindsay BFS excludes the Company's near-term cash flow Direct Shipping Ore ("DSO") Projects.
- Extensive exploration upside still surrounds Mt Lindsay including the recent high grade tin discovery at Big Wilson.

Note: All dollar values are in Australian dollars unless otherwise specified

Venture Minerals Managing Director Hamish Halliday said: "Following several years of dedicated commitment to the Mt Lindsay Project by our team, the Company is delighted with the outcome of the BFS. The study has emphasized the potential of the project in particular its longevity. Importantly the BFS excludes the exciting, near production DSO assets and the considerable exploration upside that surrounds Mt Lindsay.

  
**VENTURE**  
MINERALS

#### Venture Fast Facts

ASX Code: VMS  
Shares on Issue: 287 million  
Market Cap: \$80.5 million  
Current Cash: \$21 million  
(31 October 2012)

#### Recent Announcements

Quarterly Activities and Cash Flow Report  
(30/09/2012)

Venture Minerals Share Purchase Plan Oversubscribed  
(12/09/2012)

Pilot Scale Metallurgy Confirms Excellent Recoveries at Mt Lindsay  
(31/08/2012)

Venture Announces \$17M Equity Raising  
(15/08/2012)

Major New High Grade Tin Discovery  
(02/08/2012)

DSO Projects Deliver 4mt Ore Reserve  
(26/07/2012)

Located in North-West Tasmania  
140 years of mining precedent



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With the project expected to deliver strong cash flow over a significant mine life, the development of Mt Lindsay will transform Venture into a prominent world producer of tin and tungsten, delivering returns to shareholders and benefiting stakeholders of the project alike, particularly those in the northwest community of Tasmania.”

With the BFS now complete the Company will focus on the approval process as well as off-take and financing strategies. In addition Venture will accelerate its exploration efforts at the new Big Wilson Prospect, where the Company has recently contracted a second rig to commence work in the coming week.

## Details of the Bankable Feasibility Study

### Reserve Statement – November 2012

| Category        | Tonnes       | Tin Equiv. Grade | Tin Grade | Tungsten Grade (WO <sub>3</sub> ) | Mass Recovery of Magnetic Iron (Fe) Grade | Copper Grade | Contained Tin Metal (tonnes) | Contained Tin/Tungsten Metal (tonnes) |
|-----------------|--------------|------------------|-----------|-----------------------------------|---|--------------|------------------------------|---------------------------------------|
| <b>Proved</b>   | <b>6.4mt</b> | <b>0.7%</b>      | 0.2%      | 0.2%                              | 18%                                       | 0.1%         | 14,000                       | 23,000                                |
| <b>Probable</b> | <b>7.3mt</b> | <b>0.5%</b>      | 0.2%      | 0.1%                              | 13%                                       | 0.1%         | 16,000                       | 23,000                                |
| <b>TOTAL</b>    | <b>14mt</b>  | <b>0.6%</b>      | 0.2%      | 0.1%                              | 15%                                       | 0.1%         | <b>30,000</b>                | <b>46,000</b>                         |

Note:

- Rounding conforming to JORC to appropriate levels of precision may cause minor computational errors.
- See Appendix 1 for full details.

The ore reserve has been estimated by independent mine engineering consultants at Rock Team Pty Ltd (“Rock Team”).

### Outcomes

| <b>Mt Lindsay Tin/Tungsten Project</b> | <b>Bankable Feasibility Study (November 2012)</b> |
|--|---|
| Gross project revenue                  | A\$1,435m   |
| Net operating cashflow                 | A\$554m   |
| Plant & infrastructure capex           | A\$198m   |
| NPV <sub>8</sub>                       | A\$143m   |
| Operating cost per ore tonne ^         | A\$59   |
| Total project ore tonnes               | 14.8m   |
| Plant design throughput capacity       | 1.75mtpa  |
| Project Life                           | 9 years   |
| Payback period                         | 4 years   |
| Return on Equity (40% Equity/60% Debt) | 33%   |
| IRR                                    | 21%   |

\* Please note all figures are quoted pre-tax

^ Operating cash cost includes royalties and excludes capital development and plant capital costs.

### Processing Plant

A 1.75mtpa processing plant was designed by GR Engineering Services in conjunction with the recently completed pilot scale metallurgical program (ASX announcement of 31 August 2012). The plant also includes an APT circuit, designed to produce Ammonium paratungstate. The pilot scale metallurgical program was coordinated by Venture’s General Manager of Metallurgy, Mr Geoff Beros, through three major laboratories in Perth with specialist testing also conducted in laboratories based in Adelaide, Burnie, the Gold Coast and Guangzhou, China.

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## Metallurgical Recoveries

Metallurgical recoveries are based on the recently completed pilot scale metallurgical program (ASX announcement of 31 August 2012).

## Mine Design

Rock Team undertook the open pit and underground mine design work. GHD, Earth Systems and Rock Team co-designed the Waste Dump.

The pit design has an overall slope angle of approximately 50° and consequently has a waste to ore strip ratio of 8 to 1.

The underground mine design was based on the top down longhole open stoping method.

## Environmental & Permitting

The Company has conducted a diligent approach to the approval process, striving to exceed its environmental obligations for the development of the Mt Lindsay Project. Venture is progressing well through the approval process working closely with both the State and Federal Governments.

Independent environmental consultants, Pitt & Sherry, have assisted Venture with all environmental and permitting aspects of the Mt Lindsay Project development. The Company has received the guidelines from the EPA for preparing a Development Proposal and Environmental Management Plan (DPEMP) for the development of the Mt Lindsay Project. The DPEMP is near completion with the final document to be submitted as soon as possible.

## Hydrogeological Modelling

William C. Cromer Pty Ltd developed a Hydrogeological Model for the Mt Lindsay Project which was utilized for mine design, process design and tailings dam design for the study.

## Infrastructure & Logistics

GHD designed the Tailings Dam for the BFS. Venture has worked with various consultants and government bodies to determine the accommodation, power supply and ore transport costs.

## Sales & Marketing

Penfold Limited, an international metals marketing company, has advised Venture on all sales and marketing aspects of the study.

## Financials

Northwind Resources built the Financial Model used in the study.

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## List of Financial Assumptions

### Commodity Prices

The commodity prices used are in line with forecasts over the life of the project.

The tin price used in the BFS represents a 15% discount to the average ITRI (International Tin Research Institute) tin price forecast. The price selected for this study is also less than the average LME (London Metal Exchange) quoted tin price for the past two years.

The Company engaged the services of Roskill, a specialist metal forecasting group who have analysed the tungsten industry for over the past 30 years, to assist in selecting an appropriate APT (Ammonium paratungstate) price. The Company selected Roskill's long-term forecast of US\$392/mtu. As with the tin price selected, the tungsten price used in this study is less than the average tungsten price over the past two years.

| Metal prices adopted               |              |
|------------------------------------|--------------|
| Tin                                | US\$23,800/t |
| Tungsten                           | US\$392/mtu  |
| Magnetite (reference price Fe 62%) | US\$125/t    |
| Copper                             | US\$8,000/t  |

### Exchange Rate

A constant exchange rate of USD/AUD = \$0.90 has been used and this is in line with forecasts over the life of the project.

### Smelter Discount

A discount of 6% was used for the tin concentrate and a discount of 7% was used for copper concentrate.

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## Sensitivity Analysis

|                              |      |                 |          | NPV               | Operating cashflow | IRR          | ROE          | Payback        |
|------------------------------|------|-----------------|----------|-------------------|--------------------|--------------|--------------|----------------|
|                              |      |                 |          | A\$M              | A\$M               | %            | %            | Yrs            |
|                              |      |                 |          | <b>BFS RESULT</b> |                    |              |              |                |
|                              |      |                 |          | <b>\$142.9</b>    | <b>\$554.3</b>     | <b>21.0%</b> | <b>33.4%</b> | <b>4.0 yrs</b> |
|                              |      | BFS Input       | Adjusted |                   |                    |              |              |                |
| Tin Price<br>US\$/t          | +10% | <b>\$23,800</b> | \$26,180 | \$179.4           | \$603.4            | 24.4%        | 40.7%        | 3.5 yrs        |
|                              | -10% |                 | \$21,420 | \$106.2           | \$504.9            | 17.7%        | 26.4%        | 4.25 yrs       |
| Tungsten Price<br>US\$/mtu   | +10% | <b>\$392</b>    | \$431    | \$180.3           | \$608.5            | 24.0%        | 39.0%        | 3.75 yrs       |
|                              | -10% |                 | \$353    | \$105.9           | \$500.5            | 18.0%        | 27.5%        | 4.25 yrs       |
| Magnetite Price *<br>US\$ /t | +10% | <b>\$125</b>    | \$138    | \$160.2           | \$578.8            | 22.5%        | 36.3%        | 3.75 yrs       |
|                              | -10% |                 | \$113    | \$125.6           | \$529.8            | 19.6%        | 30.5%        | 4.25 yrs       |
| Operating costs<br>A\$       | +10% |                 |          | \$134.6           | \$542.4            | 20.4%        | 32.3%        | 4.0 yrs        |
|                              | -10% |                 |          | \$151.2           | \$566.1            | 21.7%        | 34.4%        | 4.0 yrs        |
| NPV A\$M @ discount rate     |      | <b>8.0%</b>     | 9.0%     | \$127.7           | \$554.3            | 21.0%        | 33.4%        | 4.0 yrs        |
|                              |      |                 | 10.0%    | \$113.4           | \$554.3            | 21.0%        | 33.4%        | 4.0 yrs        |

\* Reference price (Fe 62%)

Yours faithfully,



**Hamish Halliday**  
Managing Director

The information in this report that relates to Exploration Results, Exploration Targets or Mineral Resources is based on information compiled by Mr Andrew Radonjic, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic is a full-time employee of the company. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this letter that relates to Ore Reserves is based on information compiled by Mr Denis Grubic, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Grubic is an independent consultant employed by Rock Team Pty Ltd. Mr Grubic qualifies as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Grubic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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## APPENDIX ONE

- The reserves are based on the resources announced in the Quarterly Report for the period ending 30 September 2012 on 17 October 2012.
- The open pits for each deposit were optimised using the Whittle Four-X implementation of the Lerchs–Grossman algorithm. Ore selection within Whittle has been based on cashflow. Ore is selected by comparing the cashflow which would be produced by processing versus the cashflow produced by mining it as waste. If the cashflow from processing is higher, the material is treated as ore. If not, it is treated as waste. Material is defined as ore when revenue less fixed, mining, processing and realisation costs is greater than zero.
- The open pit deposits will be mined using conventional drill and blast and excavator and truck mining methods.
- The underground deposit (represents 13% of total reserves) is proposed to be mine using Long Hole Open Stopping (“LHOS”) methods. Mining progresses down-dip/plunge with rib pillars employed, to maintain regional stability. Development drives are established along the strike of the ore body. Once the extremities of the ore body are reached, stoping progresses in a retreat manner back along strike. The LHOS method is successfully used in mines throughout Australia and overseas with a high safety record.
- The Sn equivalent formula used to calculate the Sn equivalent values for the Main Skarn is:  $\text{Sn Equivalent (\%)} = \text{Sn\%} + (\text{WO}_3\% \times 1.9181) + (\text{mass recovery \% of magnetic Fe} \times 0.0064) + (\text{Cu\%} \times 0.232791)$ . The Sn equivalent formula used to calculate the Sn equivalent values for the western extension to the Main Skarn is:  $\text{Sn Equivalent (\%)} = \text{Sn\%} + (\text{WO}_3\% \times 2.3174) + (\text{mass recovery \% of magnetic Fe} \times 0.0078) + (\text{Cu\%} \times 0.3111)$ . The Sn equivalent formula used to calculate the Sn equivalent values for the No.2 Skarn is:  $\text{Sn Equivalent (\%)} = \text{Sn\%} + (\text{WO}_3\% \times 2.17993) + (\text{mass recovery \% of magnetic Fe} \times 0.00709) + (\text{Cu\%} \times 0.31006)$ . The Sn equivalent formula used to calculate the Sn equivalent values for the Reward Skarn is:  $\text{Sn Equivalent (\%)} = \text{Sn\%}$ .
- The mass recovery of the magnetic iron is determined mostly by Davis Tube Results.
- The Sn equivalent formulae use the Commodity Price Assumptions as listed in this ASX announcement.
- Pilot scale metallurgical testwork has been completed on the Main and No.2 Skarns with results indicating the metallurgical recovery for tin is 72%, for  $\text{WO}_3$  is 83%, for iron in the form of magnetite is 98% and for copper is 58%. The results of this testwork are stated in the ASX announcement of 31 August 2012. Whereas for the western extension to the Main Skarn a metallurgical recovery for tin of 62% and for  $\text{WO}_3$  of 82% were used with the same magnetite and copper recoveries. A metallurgical recovery for tin of 73% was used for the Reward Skarn.
- In addition 1.7Mt of low grade material will be used to supplement mill feed during the later stages of the ine operations.

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