ASX Announcement & Media Release

3 February 2012

Excellent Results from Conceptual Mine Study – Ondjou Prospect, Namibia

- Mine study completed by Mining Plus based on recently **upgraded inferred JORC resource estimate of 690Mt at 24% Fe**
- **Mine model: 650Mt at 24% Fe head grade (64% Fe DTC)**
- Base case confirms operating fundamentals, including:
  - **Revenue based on $110 per tonne****
  - **Low OPEX of ~$45 per tonne****
  - **Strip ratio of 1: 1.8** (which should improve with additional geotechnical work)
  - **Mine life potential of 8 -10 years**
  - **53mtpa throughput for 10mtpa concentrate**
- Significant resource expansion potential – **exploration targets*** include:
  - **Ondjou prospect and adjoining license areas:**
    - 1.0-1.5 Bt* magnetite Fe with multiple new targets still to be tested over 80km+ strike
  - **Hammerhead/Thresher prospect:**
    - 1.0 – 1.9Bt* magnetite Fe with mineralisation open along strike and at depth
- **AVZ Global exploration target*: 2.0 – 3.4 Bt* @20-30% Fe on granted licenses**

Avonlea Minerals Limited (ASX: AVZ FSX: 3A2) ("Avonlea") is pleased to provide an update on its iron ore exploration and development activities in Namibia.

In November 2011, Avonlea announced the details of a major resource upgrade at its Ondjou magnetite project in Northern Namibia. Independent specialists, Golder Associates Pty Ltd ("Golder"), completed the resource estimation reporting an inferred JORC compliant resource estimate of 693Mt at 23.7% Fe (head).

**This exploration target mineralisation tonnage and grade is conceptual in nature as there has been insufficient exploration completed to define a Mineral Resource in accordance with the JORC Code (2004), and it is uncertain if further exploration will result in the determination of a Mineral Resource.*

Following this, Avonlea commissioned independent consultants, Mining Plus, to undertake a conceptual mine and pit design study to assist the review of the existing resource model and determine the requirements to upgrade the resource from an inferred to indicated JORC compliant resource category. The complete report provided by Mining Plus, including mine model, assumptions and scenario planning for pit optimisation, and conceptual base case; a summary of the key assumptions are shown below and at the end of this release.

Further assessments on the capital costs for the processing plant and associated mining infrastructure are continuing but are anticipated to be within the range of $1b to $2.5b based on similar scale magnetite projects.

Resource Estimate

Avonlea announced a major resource upgrade on 21 November 2011 at the Ondjou prospect (EPL 4286) which was drawn from the Company's ~2,500m diamond core drilling program and metallurgical test results. The estimate represented a 33% increase in the inferred resource category tonnage. The table below outlines the details of the upgraded JORC compliant inferred resource estimate as detailed in the report compiled by Golder and Associates and lodged with the Australian Securities Exchange to accompany Avonlea's announcement on 21 November 2011.

	Million	Fe%	SiO2%	Al2O3%	DTR Wt	Fe%	SiO2%	Ai2O3%	Grind
	Tonnes	Head	Head	Head	%	DTC	DTC	DTC	Size
North zone	584.4	23.6	43.2	3.9	19.5	64.6	7.5	0.45	P80/25 micron
South zone	108.4	24.5	43.5	3.7	20.2	60.6	11.6	0.52	P90/38 micron

Table 1 is the combination of North and South Zones defined by Golder as delineated by separating the reverse circulation ("RC") and diamond drilling programs. The conceptual mine study details below are based on this resource estimation.

Conceptual Mine Study - Highlights

The conceptual mining study completed by Mining Plus included a conceptual mine model generated using a 10% Davis Tube Recovery ("DTR") cut-off. The mine model was reported at 650Mt with an approximate 24% Fe head grade and a 64% Davis Tube Fe Concentrate ("DTC"). This model reflected a minor decrease in tonnage and a minor increase in grade when compared to the JORC compliant inferred resource estimate outlined above.

The mine study modelled a number of different scenarios for pit optimisation with assumptions used by Mining Plus outlined below**. A base case scenario was created, with highlights including:

- Assumption of 70% conversion of Inferred resource
- Assumption of $45 per tonne OPEX (includes only mining and processing costs)
- Assumption of $110 per tonne selling price
- Strip ratio of approximately 1: 1.8 which has the potential for improvement through additional geotechnical work
- A reported mine life potential of 8-10 years
- Throughput of approximately 53mtpa (to generate 10mtpa Fe concentrate)

The range of outcomes confirms the robustness of the resource as it is currently inferred but would benefit from additional drilling to both extend and infill this resource at Ondjou.

Pit Optimisation

Whittle open pit optimisation was completed on the Ondjou resource model to assess the optimal open pit design. A staged approach was assessed for the development of the in-pit resource. Conceptual optimisation models indicated that the mine could be developed in a staged process involving four pit cut-backs. A visual representation of the conceptual pit design can be seen in Figure 1 below.

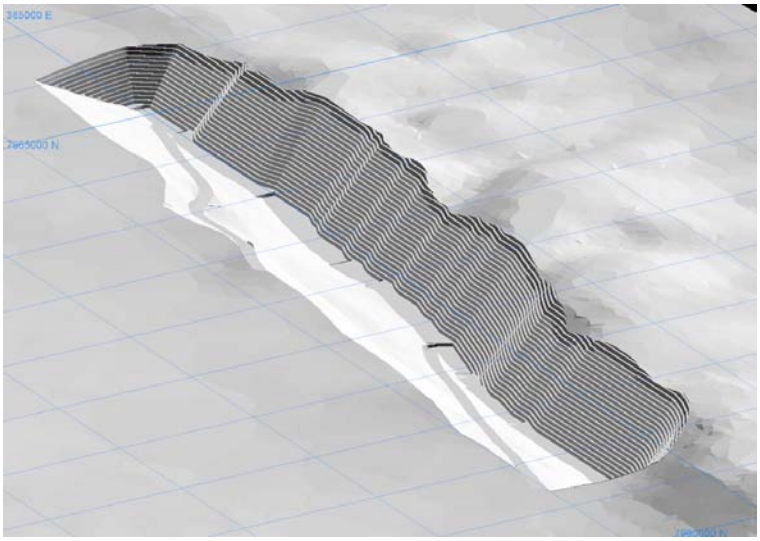

***Figure 1**: Visual representation of conceptual open-pit development*

Exploration Outlook – targeting resource expansion potential

The mining studies at Ondjou represent another step in a broader exploration and development strategy to unlock and expand the resource potential across Avonlea's magnetite prospects (see Figure 2). Previous exploration at Ondjou has enabled the identification of a number of new targets across more than 80km of strike length of its pending license areas.

Avonlea plans to undertake a low cost extensional drilling program, focused on extensions to known mineralised zones south of the existing resource and additional metallurgical tests on completed drillholes. Avonlea will also assess the opportunity to undertake further infill drilling to increase the existing inferred resource estimate to enable the indicated, and eventually, measured resource categories.

As previously announced, Avonlea have disclosed an exploration target at the Ondjou magnetite prospect of between 1.0-1.5 billion tonnes magnetite Fe between 20% and 30%*.

In addition, Avonlea will conduct further low cost metallurgical work to be completed for comminution.

Avonlea will continue to develop and assess the options available for collaborative logistic solutions emerging the Kunene region. The area has and will benefit from the heightened level of Iron Ore exploration activity including drilling on licenses areas contiguous and proximal to Avonlea.

Avonlea has also previously announced that preliminary assessment of the Hammerhead prospect contained within EPL 4129, WNW of Ondjou in Northern Namibia (see figure 2), has an exploration target of between 1.0 and 1.9 billion tonnes magnetite Fe between 20% and 30%*, with strong Davis Tube Recovery results received. This presents significant further exploration upside.

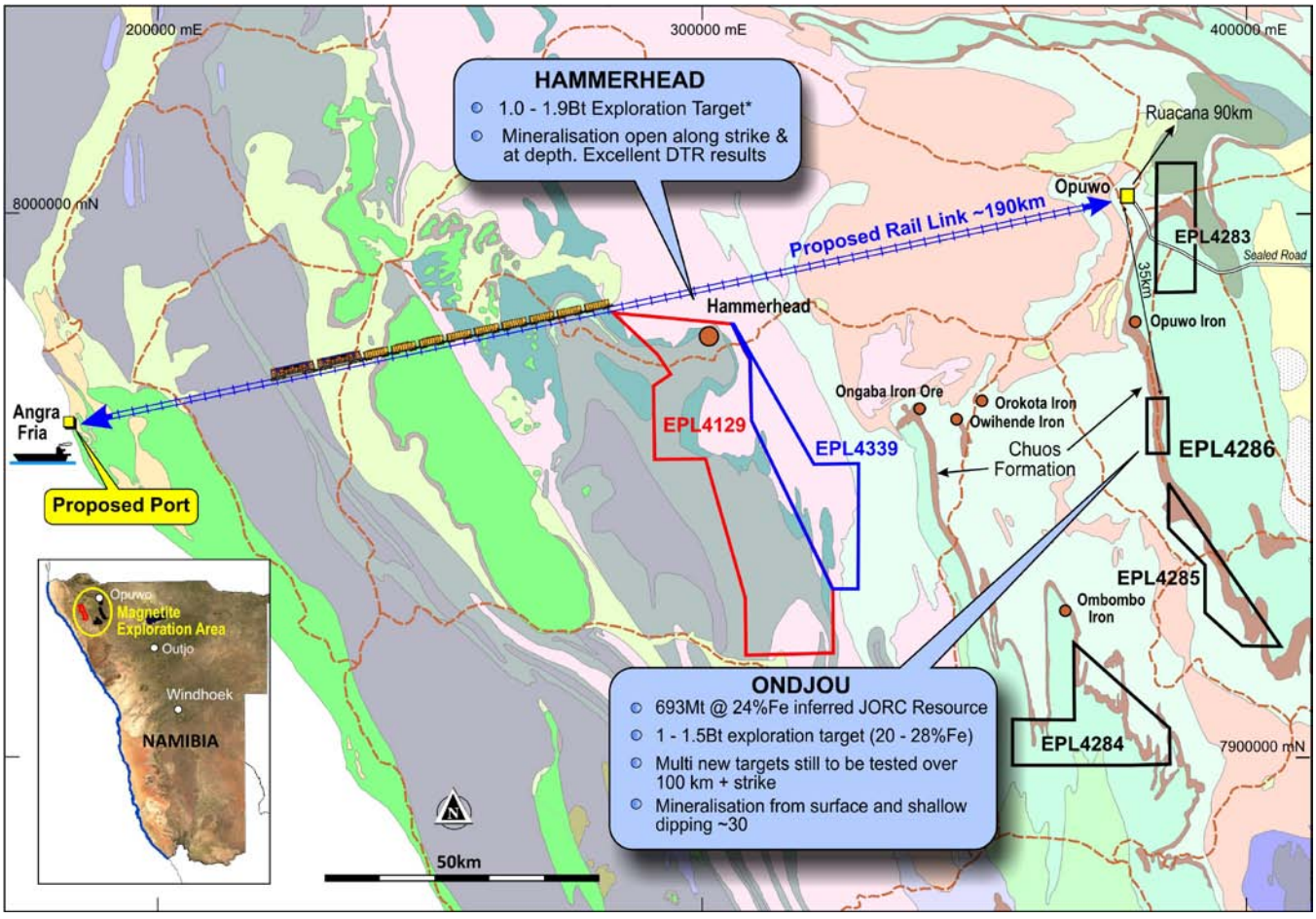

Figure 2: Magnetite Prospects

Managing Director, David Riekie said:

"This result is extremely encouraging for Avonlea. We have been able to independently confirm the potential we have long held for a large scale magnetite operation in this emerging Iron Ore region. It provides a framework that will enable us to build on this initial positive study.

"Clearly the logistics solution has always been an important ingredient for the revaluation of our resource and exploration targets,

"We are however delighted with the hightened level of exploration activity that now exists in the Kunene region. This activity is similarly targeting large scale magnitite Iron Ore deposits. We are pleased with the affirmation provided by other explorers that recognise the potential to achieve sufficient regional scale to justify a large scale transport infrastruture program in line with the tender issued by the Namibian Government.

"The push for the delineation and development of an Iron Ore province is gathering impetus."

Yours Faithfully

David Riekie

MANAGING DIRECTOR

About Avonlea

Avonlea Minerals Limited (ASX: AVZ) is an Australian publicly listed exploration company based in Perth, Western Australia. It operates with a board experienced in African exploration and corporate matters.

AVZ through its local subsidiaries in Namibia has accumulated an exciting portfolio of Exclusive Prospecting Licences (EPL's). The company has applied for EPL's covering 9,500sq km (1,625kms remain pending) and are considered prospective for Specialty Minerals (Vanadium & Tin), Rare Earth Elements and Precious and Base Metals.

*AVZ announced on in November 2011 details of a JORC compliant Fe inferred Resource estimate of 693 million tonnes at 24% from its Ondjou Prospect; drilling is continuing to expand on this base. In addition the company has released details of the potential Exploration Target size of its prospect of between 2 to 3.4Bt (20 – 30%+ Fe) from this and its other Fe prospects.**

**This exploration target mineralisation tonnage and grade is conceptual in nature as there has been insufficient exploration completed to define a Mineral Resource in accordance with the JORC Code (2004), and it is uncertain if further exploration will result in the determination of a Mineral Resource.*

***Assumptions utilised by Mining Plus to create mine plan study with multiple scenarios for pit optimisation:*

- *OPEX costs ranging from $25, $35, $45, $55 and $65 per tonne but includes only mining and processing costs.*
- *Selling price of $130, $110 and $90 per tonne.*
- *No CAPEX was included in the mine study.*
- *A production rate of 53Mtnpa Ore to produce approximately 10Mtnpa of concentrate.*

The information in this report that related to Exploration Results, Exploration Targets, Mineral Resources or Ore Reserves is based upon information compiled by Mr Alex Aitken a member of the Australian Institute of Geoscientists. Mr Alex Aitken is a full time employee of the company. Mr Aitken has sufficient experience which is relevant to the style and mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent persons as defined in the 2004 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Aitken has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.