

# INVESTOR UPDATE

December 2016



**AVALON**

MINERALS LTD

GOLD, COPPER & LITHIUM

IN SCANDINAVIA

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# UPDATE COVERS -

- **Viscaria Copper Project;** in an increasing copper price environment  
Pre-development project and very compelling upside
- **Southern Finland Gold Project;** large land holding secures several gold prospects

# VISCARIA COPPER PROJECT



- ✓ A high quality copper project in a strengthening copper price environment
- ✓ A copper development opportunity in a mining district
- ✓ Development permitting in progress
- ✓ Exceptional exploration upside



PROJECT SITE



PUBLIC ACCESS ELECTRIC RAIL



KIRUNA TOWN

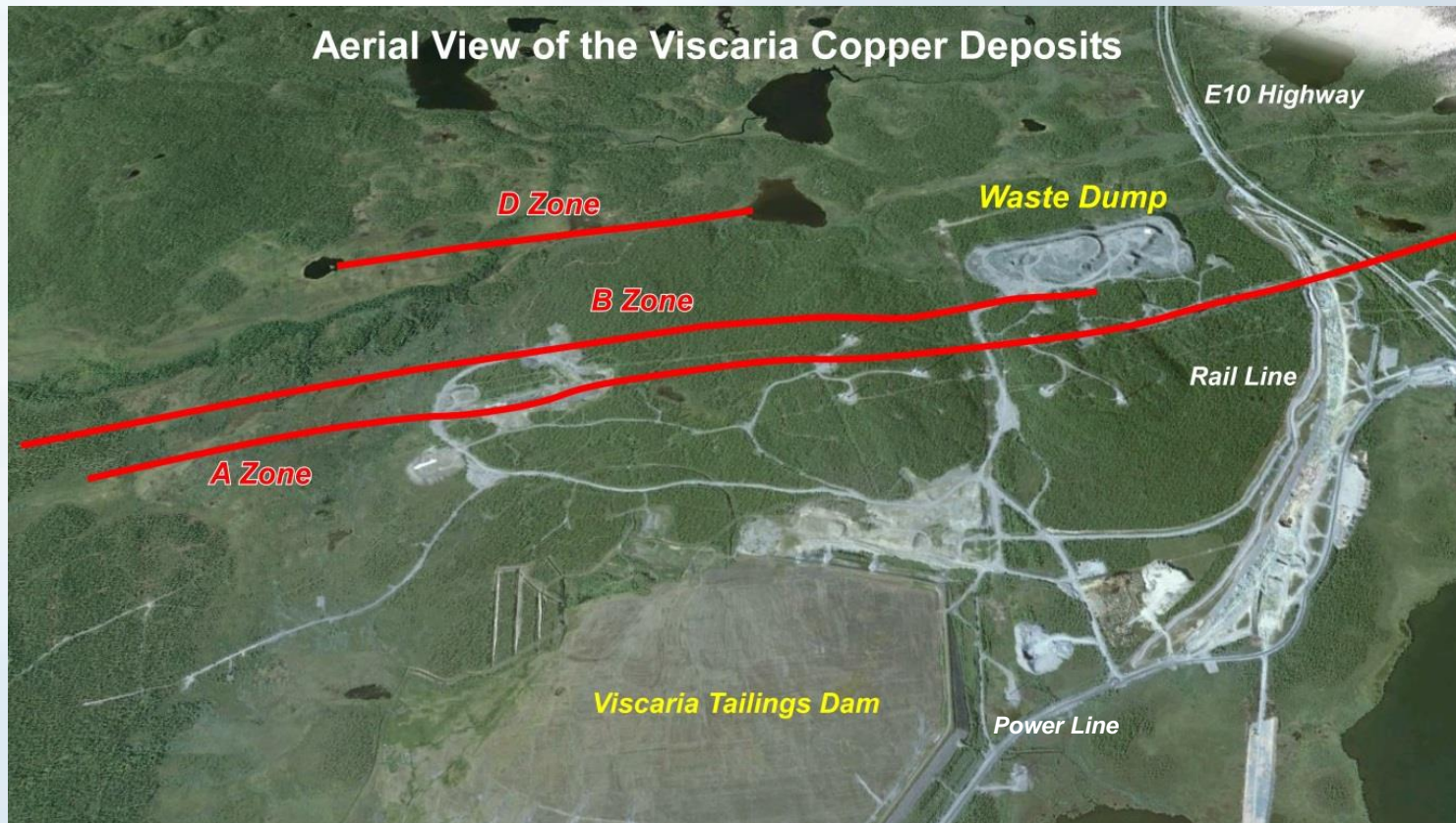


LOW COST HYDRO POWER



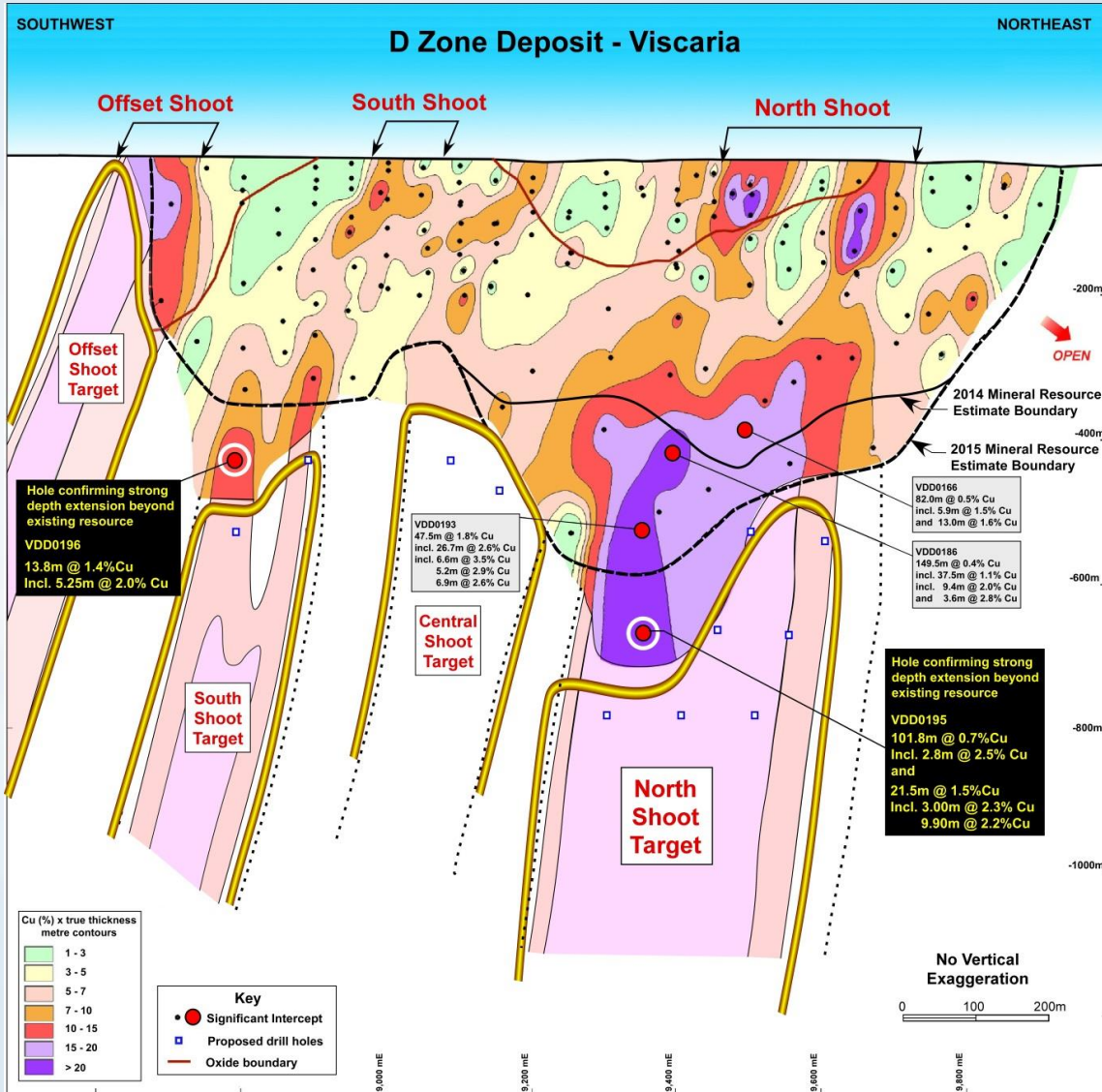
# VISCARIA COPPER PROJECT

Currently 3 main deposits, A, B and D Zones  
Potential for several others to be defined



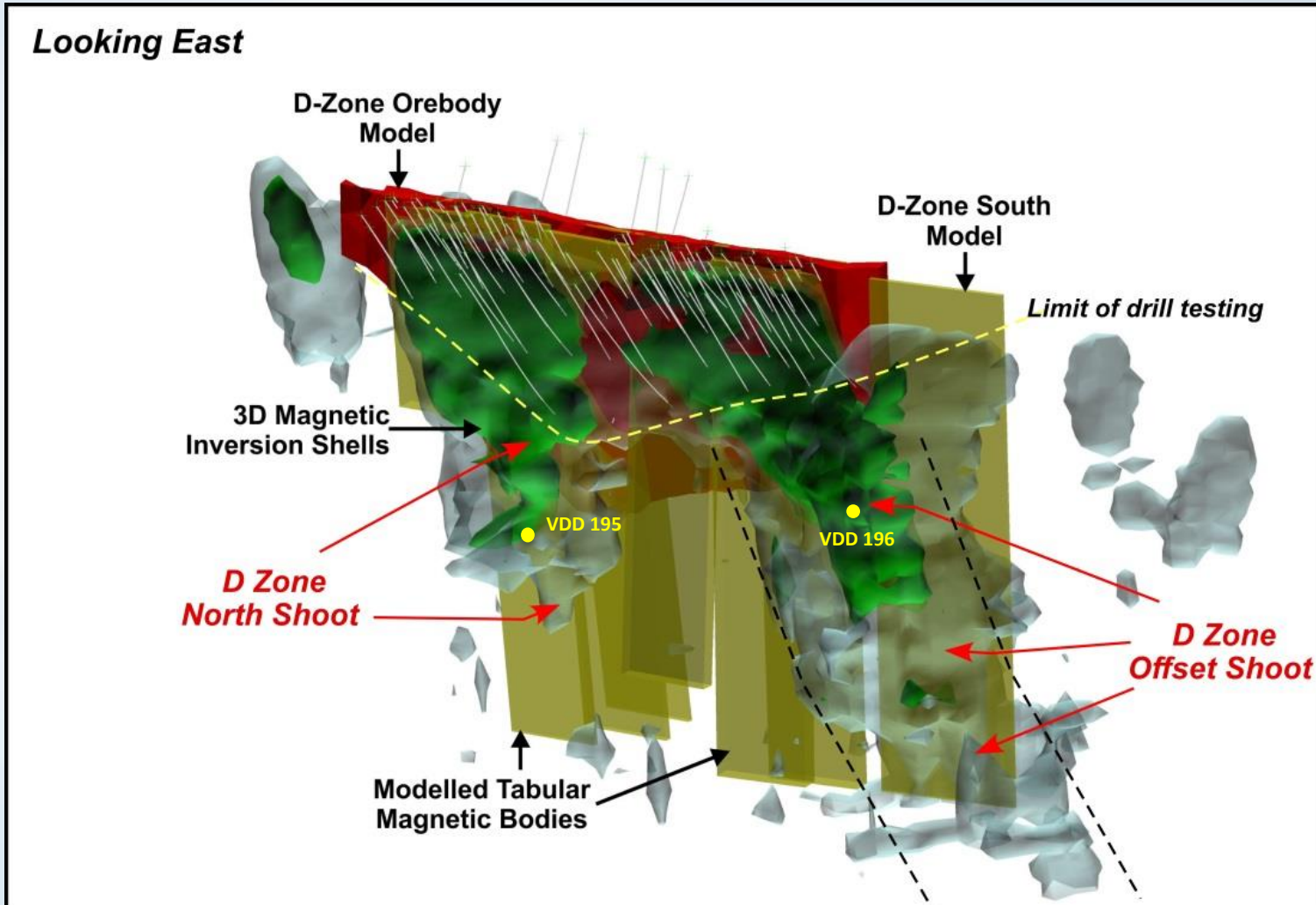
- **Low risk copper development opportunity – will add significant value within an increasing copper price environment**
- **Very significant exploration upside**
- Mineral Resource estimate 52.4Mt at 1.2% Cu - 65% Measured and Indicated (Refer Annual Report released 16 August 2016, Mineral Resource Estimate table and the Competent Persons Statement at the end of this presentation)
- Prefeasibility Study underway following positive outcomes from the April 2016 updated Scoping Study

# VISCARIA COPPER PROJECT - D Zone



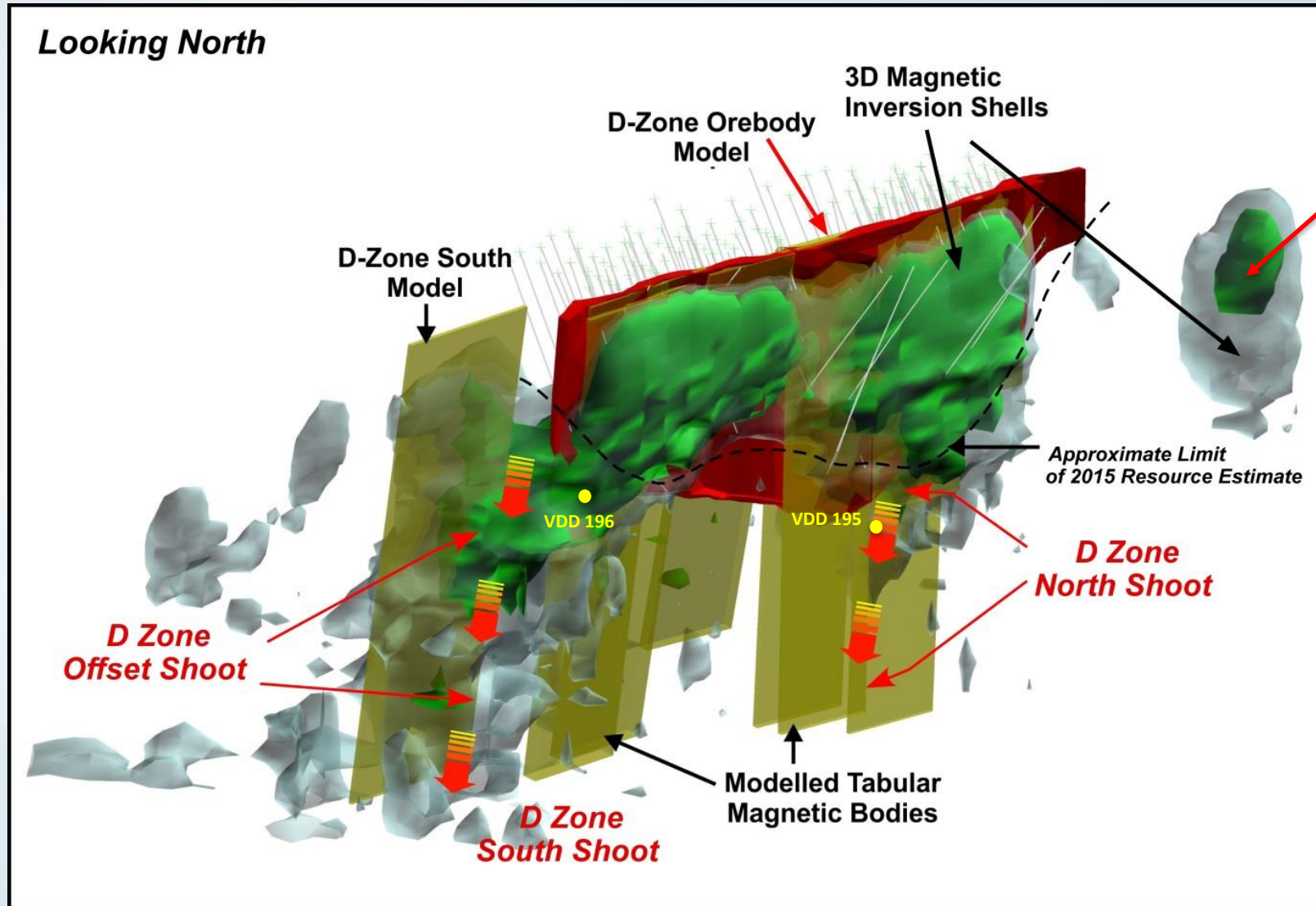
- VDD 193, the deepest hole in the North Shoot resource area, intersected **26.7m at 2.6% Cu**; including **6.6m at 3.5% Cu**; and **5.2m at 2.9% Cu**, and **6.9m at 2.6% Cu**
- VDD 195 was drilled below VDD 193, outside the resource boundary in the North Shoot, and intersected **21.5m at 1.5% Cu**, including **3m at 2.3% Cu**, and **9.9m at 2.2% Cu**
- Similarly, strong results from VDD 196, drilled outside of the resource boundary in the South Shoot, intersected **13.8m @ 1.4% Cu**, including **5.3m @ 2% Cu**
- ... and geophysical modelling of the host magnetite indicates that this copper orebody will grow .....

# VISCARIA COPPER PROJECT - D Zone



- An incredibly compelling upside opportunity
- D Zone copper host is 50-70% magnetite – simple process to model host to deliver orebody geometry
- **3-D and plate modelling of magnetic data demonstrates very clearly that the orebody is significantly larger than currently drilled**
- And we have demonstrated in our 2015 results that we know where to drill

# VISCARIA COPPER PROJECT - D Zone

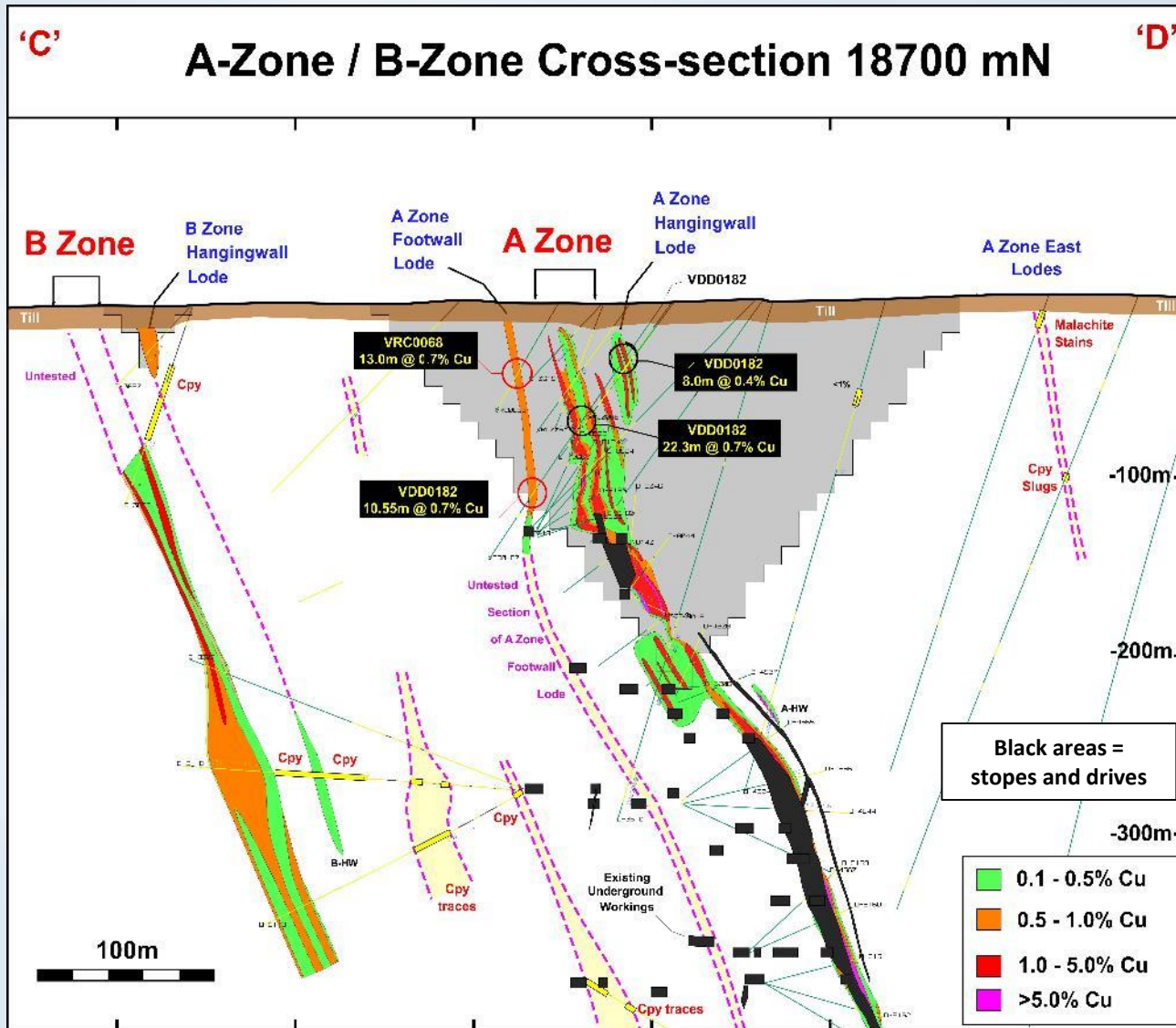


**C Zone North target;  
NOT drilled**

- **D Zone will grow considerably**
- C Zone North will be tested, and has the appearance of a D Zone type system

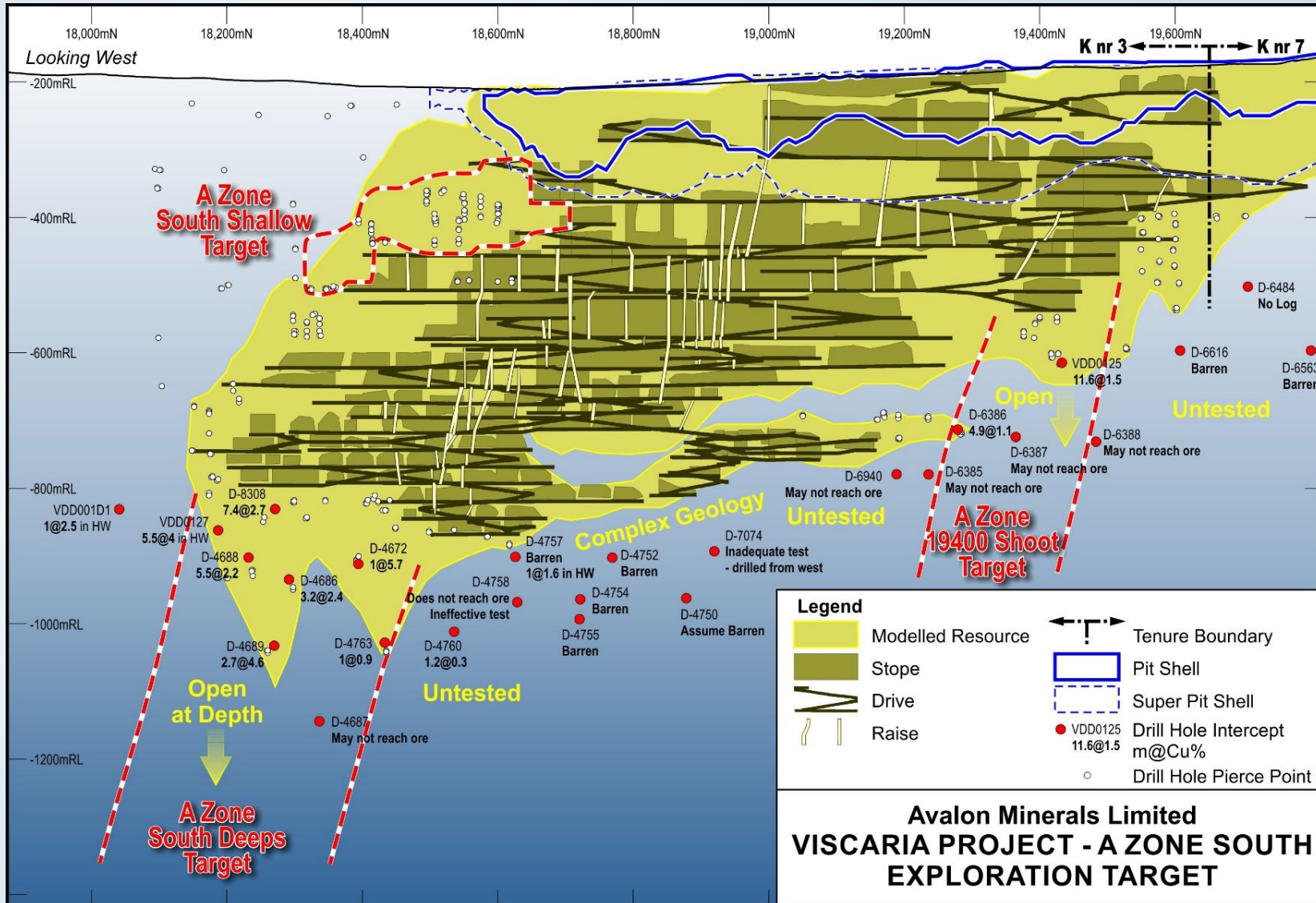


# VISCARIA COPPER PROJECT – A & B ZONES



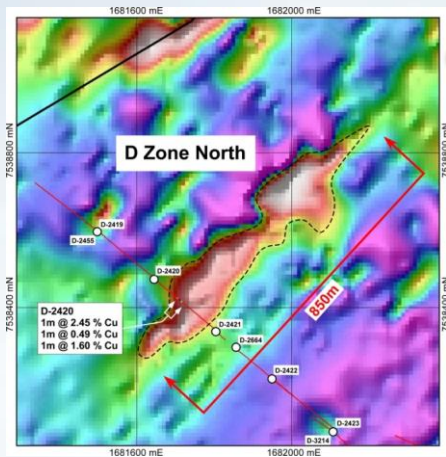
- A & B Zones will deliver more copper
- There is potential for more copper within the open pit development scenario than the historical mineral resource estimate suggests
- This is confirmed by Avalon drilling from 2014 (VDD 182) and detailed reviews of historical drill holes
- Multiple mineralised horizons defined
- Previous owner often did not assay mineralised zones that were visually assessed to be <2% copper (underground grade, now captured in open pit)
- Very limited drilling between A and B Zones, but copper has been reported in drill logs
- B Zone drilling is sparse, significant opportunities within the horizon

# VISCARIA COPPER PROJECT – A ZONE

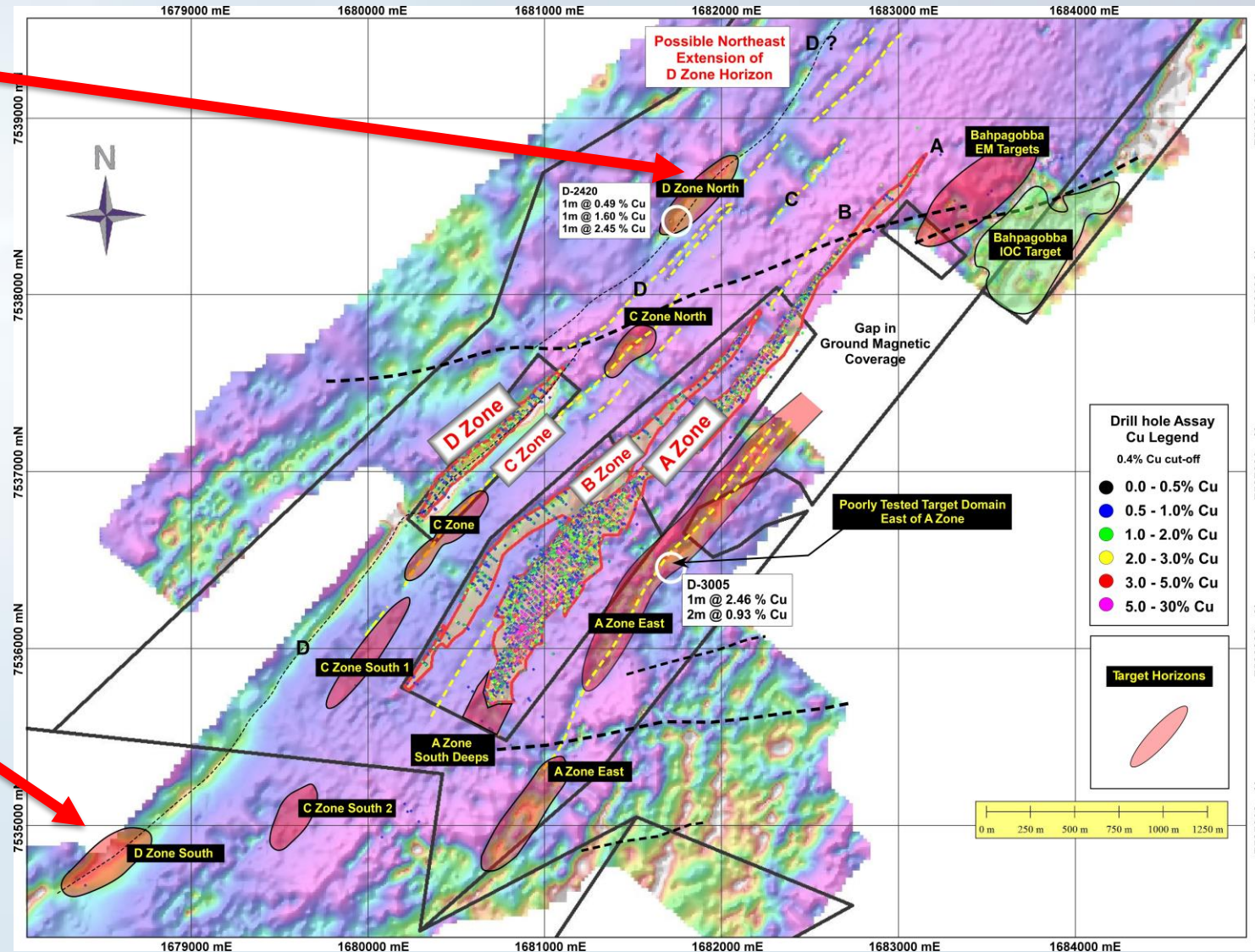
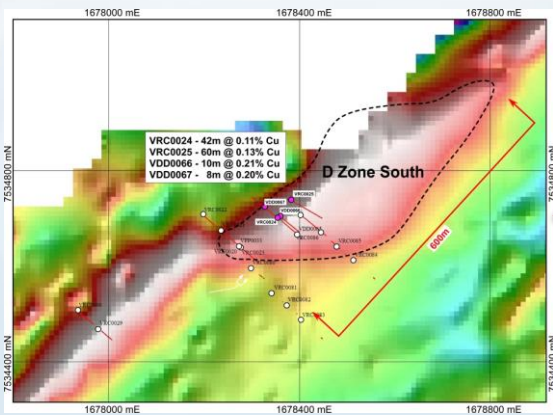


- None of the upside at A Zone beyond the proposed open pits has been considered in any development scenario
- It represents further upside to the current Target case
- A Zone underground represents high grade upside
- Some domains in A Zone and B Zone are elevated in Gold and some in Cobalt. These are to be further investigated

# VISCARIA COPPER PROJECT - TARGETS

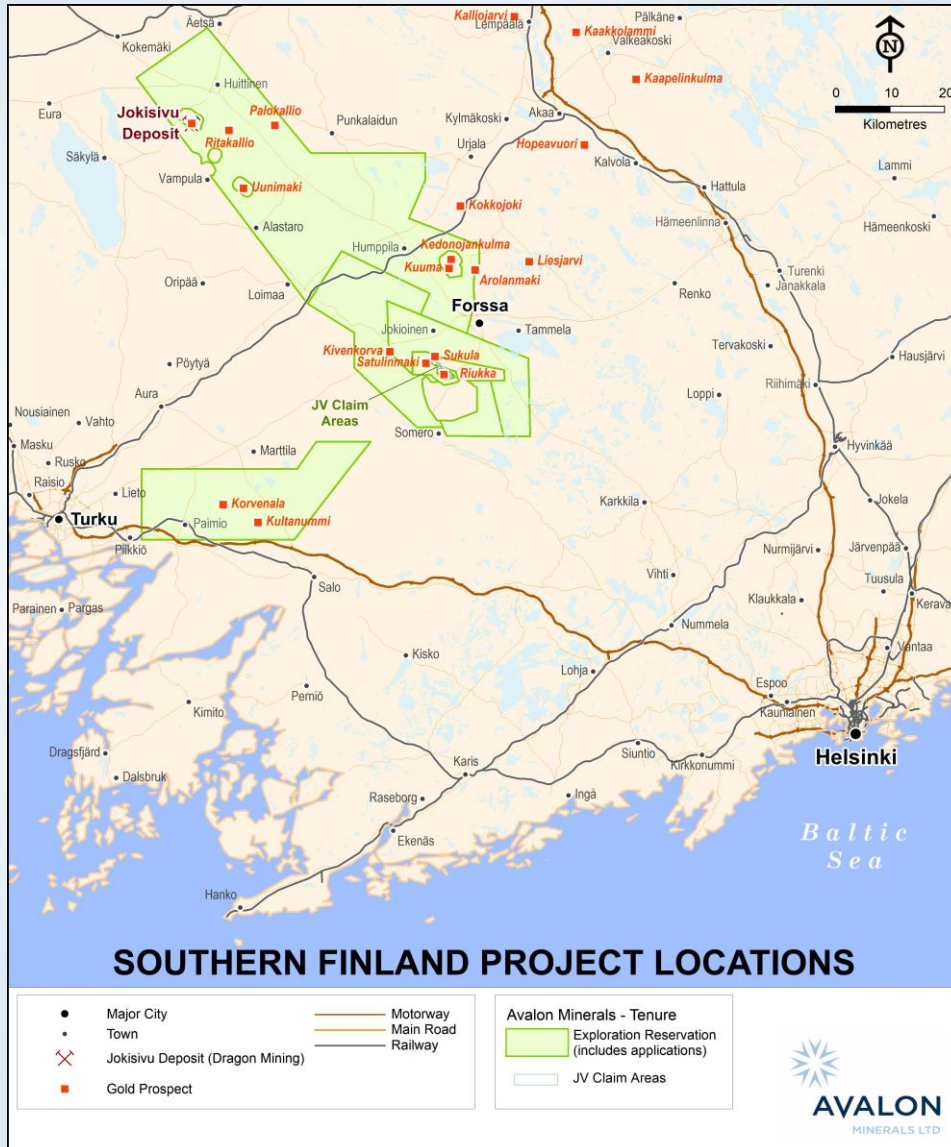


**Copper and Magnetite at D Zone North and D Zone South – very limited drill testing**



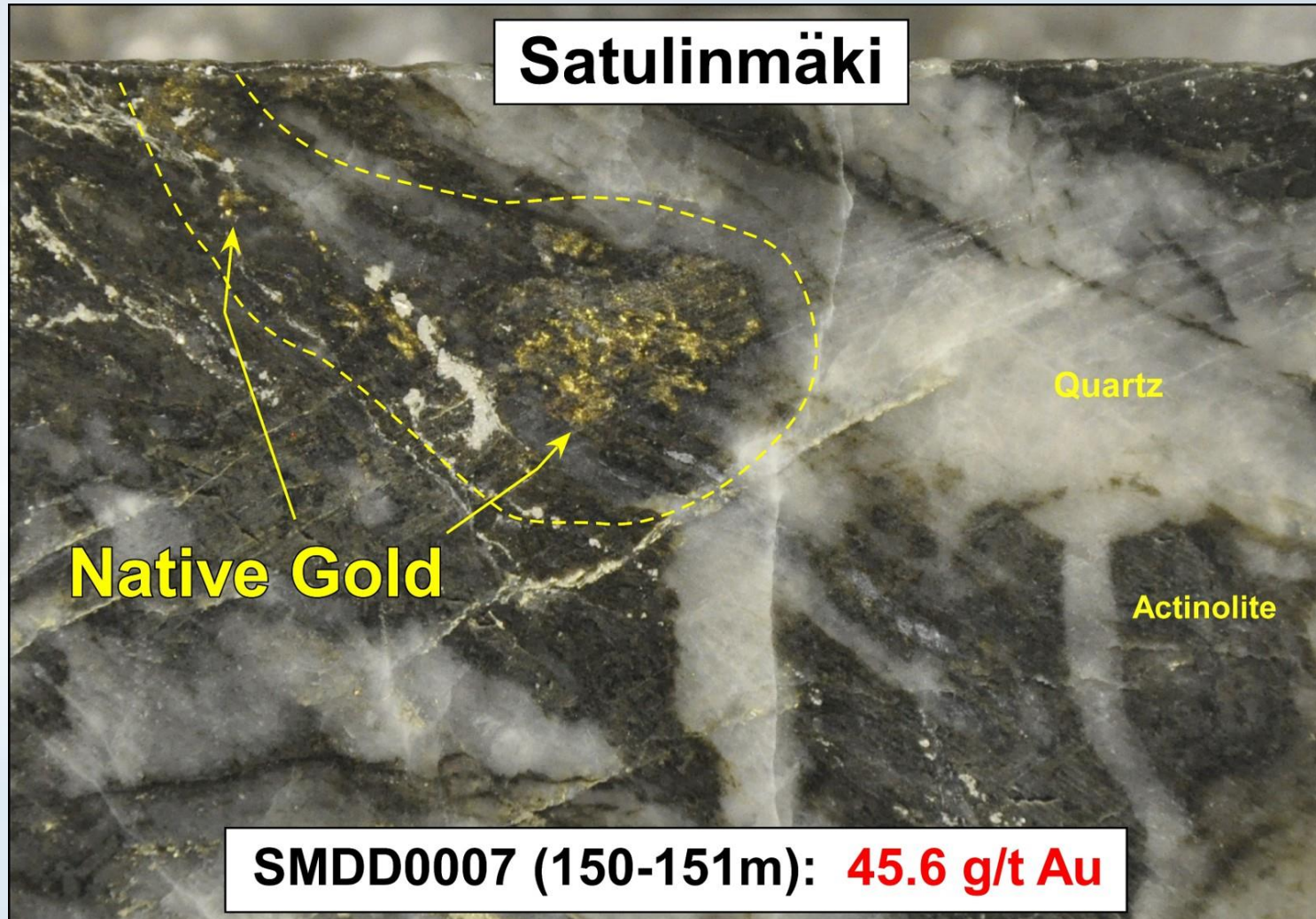
- Mine scale orebody extensions have **low technical risk**
- Exploration success can be delivered within **6 km long belt**
- A rich portfolio of near mine targets to add to the scale of the project
- A lot more copper to be delivered

# SOUTHERN FINLAND GOLD PROJECT



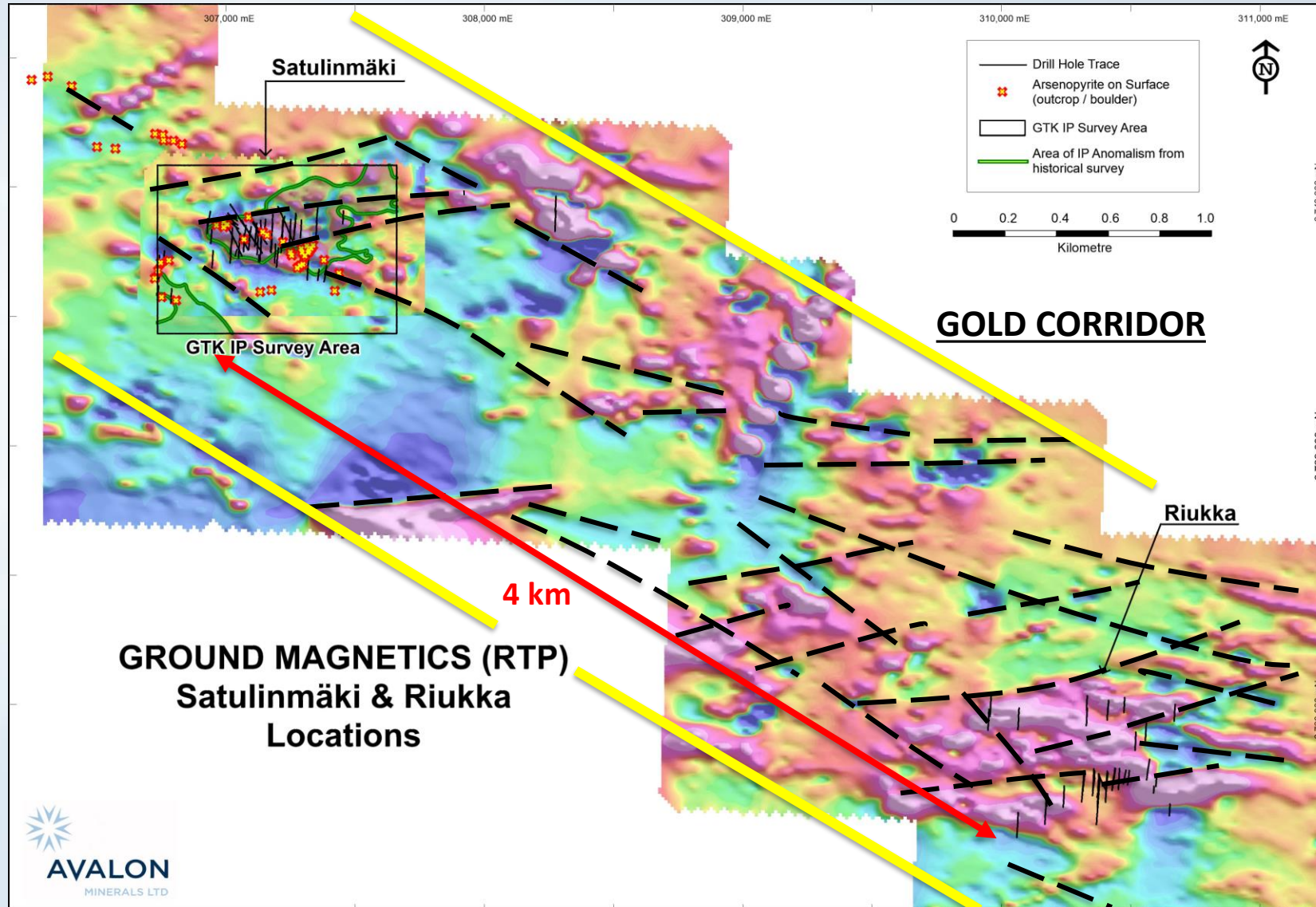
- **2,400km<sup>2</sup> held under exploration reservation, and a JV with Nortec Minerals**
- Supported by infrastructure
- Can operate all year round
- Historical exploration by the Finnish Geological Survey has identified multiple gold occurrences
- **Initial drilling by Avalon delivered excellent results from Satulinmäki including visible gold**

# SATULINMÄKI GOLD



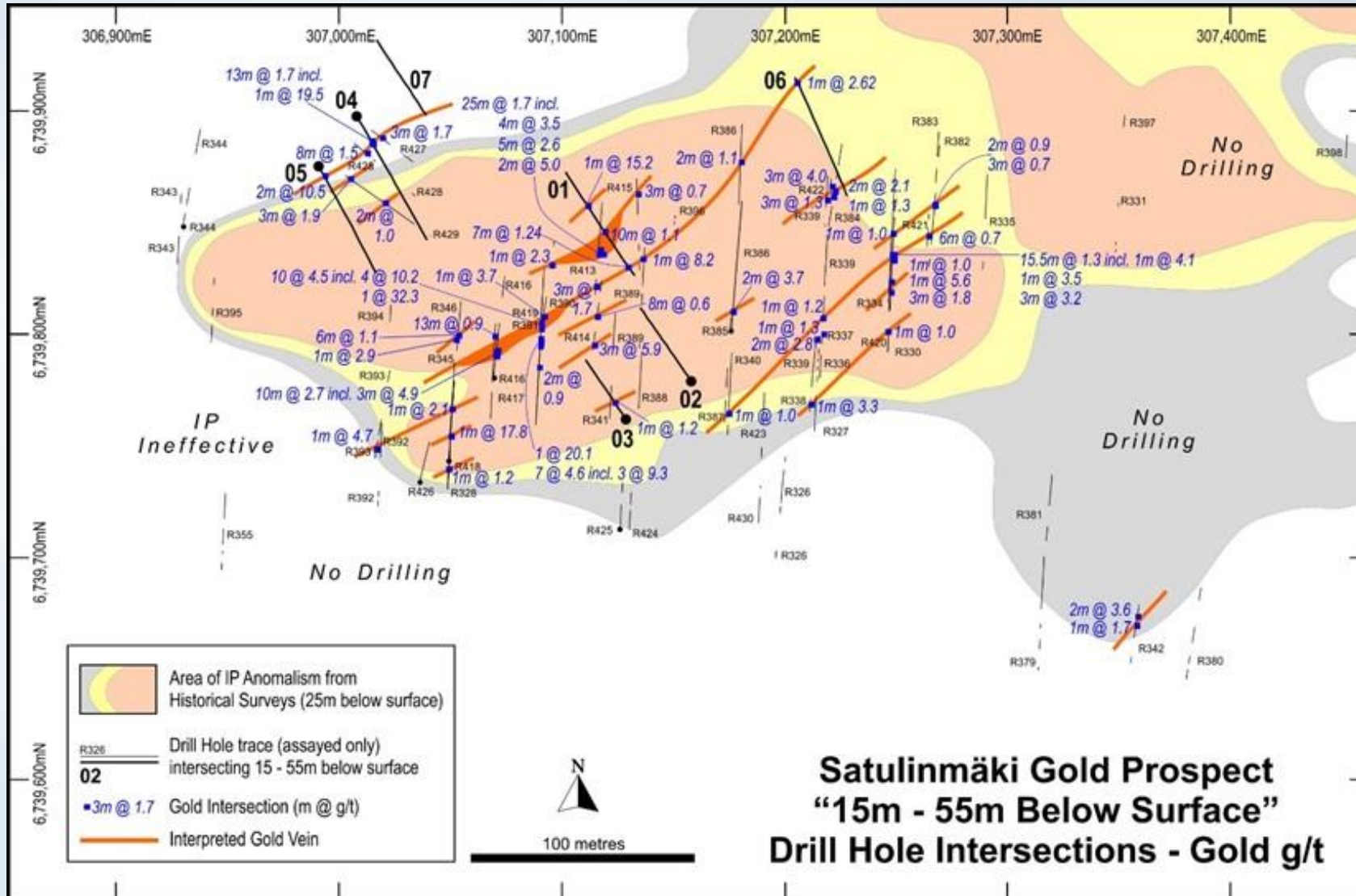
- Very early days, very strong discovery potential
- High grade zones
- Visible gold
- Local high grade veins
- All within a large gold system that is several hundred meters long

# SATULINMÄKI GOLD



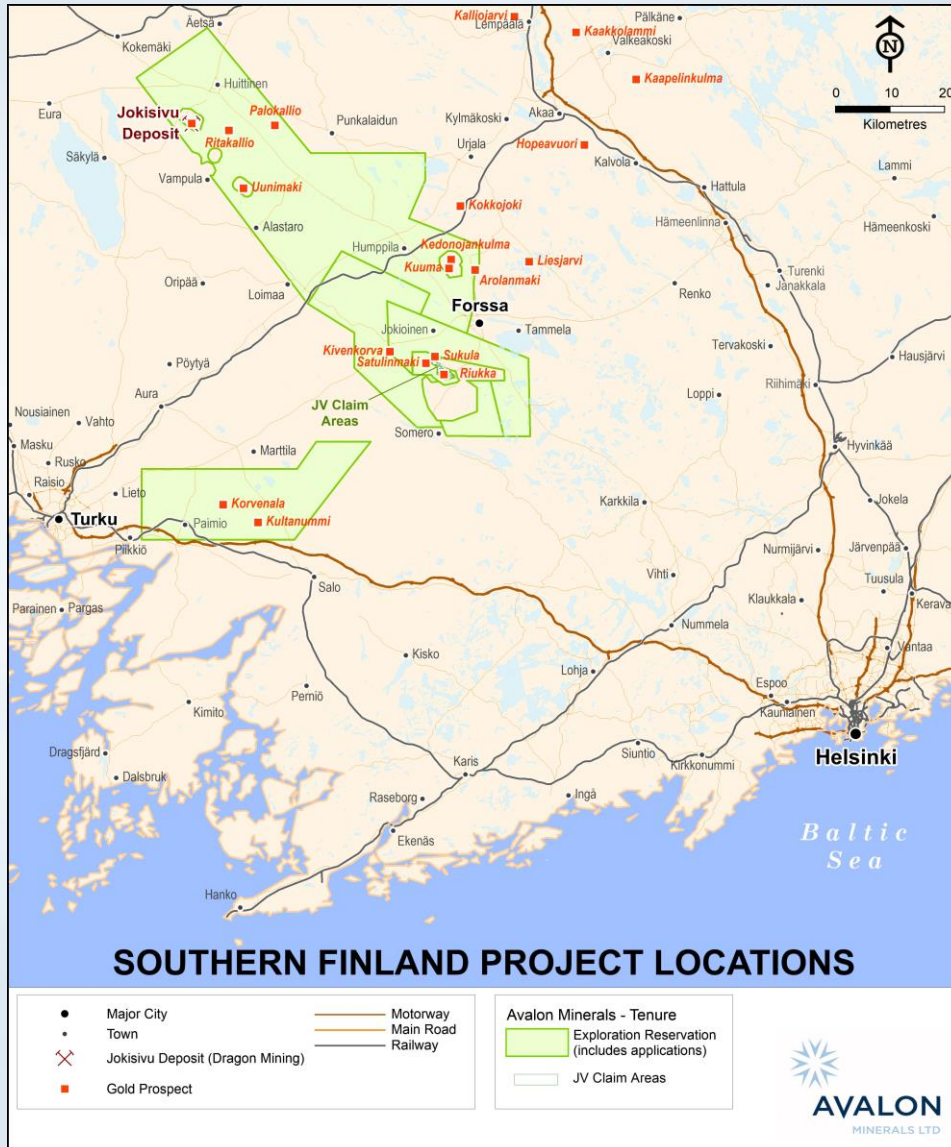
- **Gold corridor at least 4km long**
- Mappable structures deliver rich suite of target areas
- Historical mapping of arsenopyrite supports larger gold target areas
- Field assessment and outcrop mapping is underway (and yes it's winter)

# SATULINMÄKI GOLD



- At 120m depth, this image would show intersections from only 5 holes and include:
  - 9.2m at 7.3g/t gold
  - 4.0m at 2.2g/t gold
  - 9.0m at 1.6g/t gold
- Geophysical Induced Polarisation ('IP') survey to map sulphides and alteration; planned and ready to go
- Drilling to further define system scheduled for 2017
- Explore areas that have seen no previous drilling

# SOUTHERN FINLAND GOLD PROJECT



- **Avalon has secured exploration rights over several gold prospects**
- Most have seen some drilling by the Finnish Geological Survey (GTK)
- They include:

Korvenala – 10 shallow holes; 5.5m at 1g/t gold

Kultanutmi - 31 shallow holes; 1 to 6m intervals up to 10g/t gold

Kivenkorva – 3 shallow holes; up to 16.6g/t gold in surface sampling

Sukula – 4 shallow holes; 1m at 1.7g/t gold

Ritakallio – 15 shallow holes; 4.7m at 1.7g/t gold

Palokallio – 18 shallow holes; 1.0m at 41.8g/t gold

There has only been limited exploration between these prospects



# AVALON – COPPER AND GOLD FOCUS



- ❑ **Viscaria Copper Project** – an advanced stage copper development opportunity with significant upside potential
  - Mineral Resource estimate 52.4Mt at 1.2% Cu - 65% Measured and Indicated (Refer Annual Report released 16 August 2016, Mineral Resource Estimate table and the Competent Persons Statement at the end of this presentation)
  - Prefeasibility Study underway following positive outcomes from the April 2016 updated Scoping Study
  - Low risk copper development opportunity – will add significant value within an increasing copper price environment
  
- ❑ **Southern Finland Gold Project** – multiple prospects, early results very encouraging
  - Satulinmäki Prospect: large gold system, high grade zones within large low grade system
  - Includes 147.0m at 0.8 g/t gold from 73m in SMDD007,
    - Including 23.5m at 3.3g/t from 143m
      - including 9.0m at 7.3 g/t from 147m
  - First phase of drilling completed and delivered positive results
  - Second phase being planned

# MINERAL RESOURCE ESTIMATE



**Table: Currently Defined Mineral Resource for Copper reported on the Viscaria Project (JORC 2012)**

Resource Name	Classification	Tonnes (t)	Cu Grade (%)	Cu Metal (t)
A Zone	Measured	14,439,000	1.7	240,000
	Indicated	4,690,000	1.2	57,200
	Inferred	2,480,000	1.0	25,500
	<b>Subtotal</b>	<b>21,609,000</b>	<b>1.5</b>	<b>322,700</b>
B Zone	Measured	123,000	1.3	1,600
	Indicated	4,118,000	0.7	29,700
	Inferred	15,410,000	0.8	118,700
	<b>Subtotal</b>	<b>19,651,000</b>	<b>0.8</b>	<b>149,000</b>
D Zone	Indicated	10,360,000	1.21	125,000
	Inferred	780,000	1.56	12,200
	<b>Subtotal</b>	<b>11,140,000</b>	<b>1.23</b>	<b>137,200</b>
	<b>Total</b>	<b>52,400,000</b>	<b>1.2</b>	<b>608,900</b>

# CORPORATE



<b>TICKER</b>	<b>ASX:AVI</b> <b>Frankfurt:AL9</b>
<b>SHARE PRICE*</b>	<b>A\$0.025</b>
<b>SHARES ON ISSUE</b>	<b>520.4 million</b>
<b>MARKET CAP</b>	<b>A\$13M</b>
<b>CASH#</b>	<b>A\$1.0M</b>
<b>52 WEEK TRADING</b>	<b>A\$0.012 - \$0.057</b>

As at 11.11.16 - 30 day VWAP \*  
As at 11.11.16 - unaudited #

Top 10 shareholders hold 55% of shares on issue

Board and management hold 3.3% and have participated in most placements

European and UK shareholders total 43%

## SUBSTANTIAL SHAREHOLDERS

<b>NAME</b>	<b>%</b>
Valbonne II	12.4%
Marilei International	8.2%
Potezna Gromadka	7.1%
Tan Sri Abu Sahid Bin Mohamed	6.5%

# COMPETENT PERSONS STATEMENT



## **Competent Persons Statement**

The information in this report that relates to exploration results and exploration targets and results is based upon information reviewed by Mr Malcolm Norris who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Norris is a full-time employee of Avalon Minerals Ltd and 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Norris consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Refer to Annual Report released 16 August 2016 for the Competent Persons Statement in relation to the estimates of mineral resources. The Company confirms that it is not aware of any new information or data that materially affects the information and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

The information in this report that relates to the updated D Zone Mineral Resource estimate is based on the information compiled by Chris Grove who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Measured Group Pty Ltd. Measured Group is an independent mining consultancy who have been engaged by Avalon Minerals Limited to perform geological consulting on a fee for service basis. Mr Grove has sufficient experience that is relevant to the style of mineralisation being considered 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 Grove consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.



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