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ASX ANNOUNCEMENT



Outstanding Geophysical Results Highlight Potential for a Large Gold System at Satulinmäki

ASX: AVI

Highlights

- **Outstanding results from the large Induced Polarisation geophysical survey at the Satulinmäki prospect within the Southern Finland Gold Project**
- **Three-dimensional geophysical modelling identifies extensive areas of what is likely to be structurally-controlled alteration**
- **Clear drill targets identified on multiple structural corridors up to 1.2km long, and with significant vertical extent**
- **Represents a 'scale change' at Satulinmäki and potential for a large gold system**

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Avalon Minerals Limited ("**Avalon**" or "**Company**") (**ASX:AVI**) is pleased to announce strong geophysical results which highlight the potential for a large gold system at the Satulinmäki Prospect within its Southern Finland Gold Project.

A large Induced Polarisation (IP) geophysical survey was completed at Satulinmäki during the period January – April 2017. The key objective of the survey was to define areas of altered host rock within which gold mineralisation is expected to occur.

Based on historical drilling, and the seven holes drilled by Avalon in 2016, the IP signature of existing areas of known gold mineralisation could be defined and used to identify adjacent areas with similar geophysical signature within the extensive survey area.

The survey has delivered outstanding results which will enable Avalon to undertake focussed targeting of other potential gold-bearing zones in the project area. Geophysical mapping of interpreted sericite alteration and distribution of sulphides, both known to be associated with gold mineralisation from drilling, has shown (Figure 1) two main trends –

- The main Satulinmäki gold trend, which had been outlined over a ~300m strike length from drilling, has been extended to 1.2 kilometres by the IP survey; and
- A new northwest trending zone measuring 800m long.

In addition, the survey has defined:

- Subordinate trends to the south of Satulinmäki, each up to 400m long; and
- Subtle trends to the north of Satulinmäki showing both ENE and NW patterns.

Conductivity results have identified discrete anomalies that coincide with the high-grade intersections delivered by holes such as SMDD007, **23.5m at 3.3g/t Au including 9.2m at 7.3g/t Au**, as well as providing an explanation for the lower grade results such as that achieved in SMDD006 (refer ASX announcement dated 14 November 2016).



Chargeability results, which are interpreted to map the sulphides commonly associated with the gold mineralisation, demonstrate significant vertical extent, to well beyond the depth of previous drilling and to at least 300m below surface (Figure 3).

Avalon Managing Director Malcolm Norris said:

“These results have exceeded our expectations. We have a zone of strong gold intersections from drilling which we now interpret to extend for at least 1.2km to the north-east, and have defined several other similar trends. Satulinmäki is rapidly emerging as a large gold system with considerable vertical extent. We look forward to follow-up these results with our next drilling campaign.”

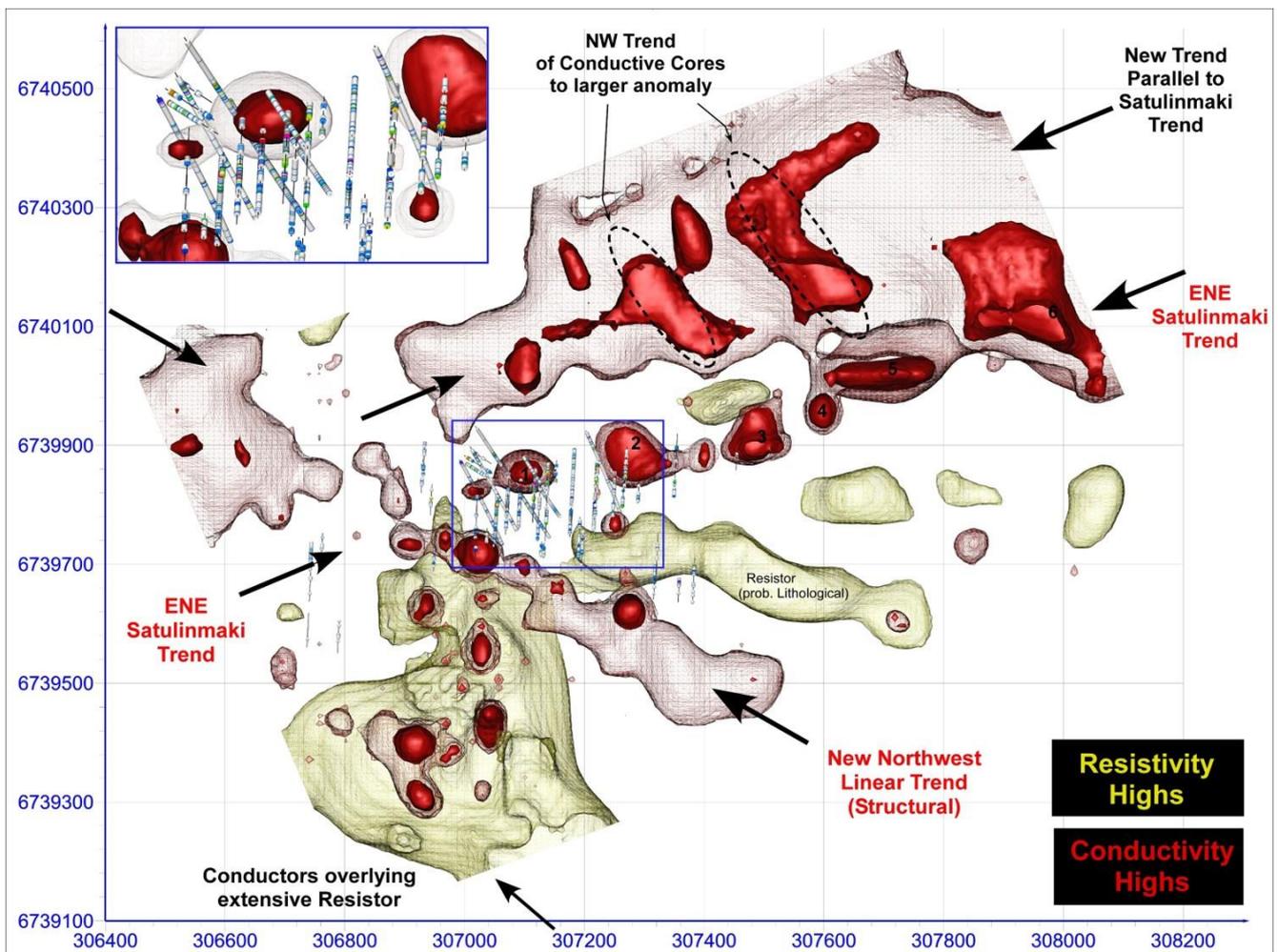


Figure 1: Compilation of IP survey results showing trends identified as being prospective for gold mineralisation relative to the existing drilling. The ENE Satulinmäki trend is now 1.2km long and significantly expands the gold target.



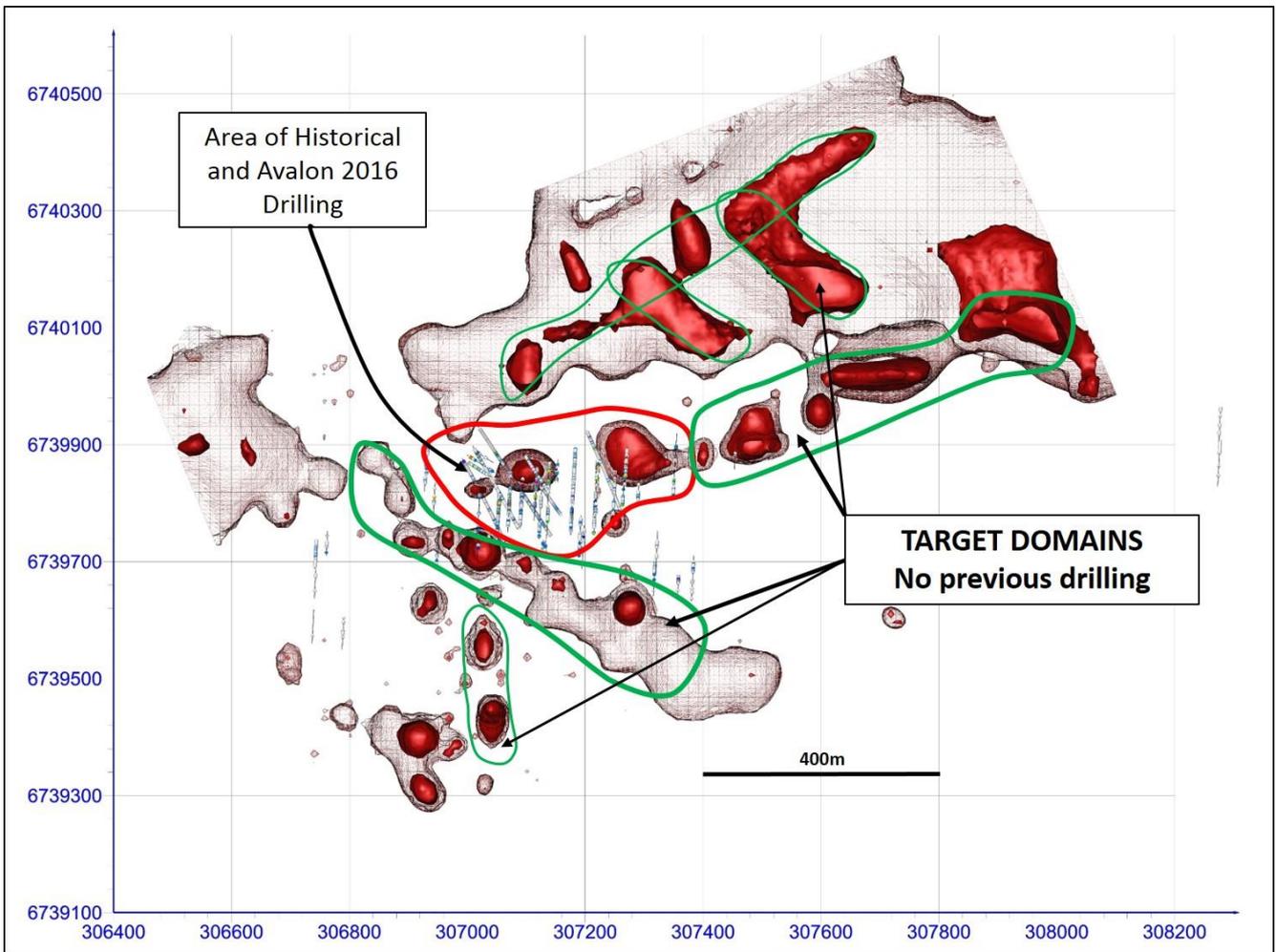


Figure 2: Target domains as defined from IP survey.



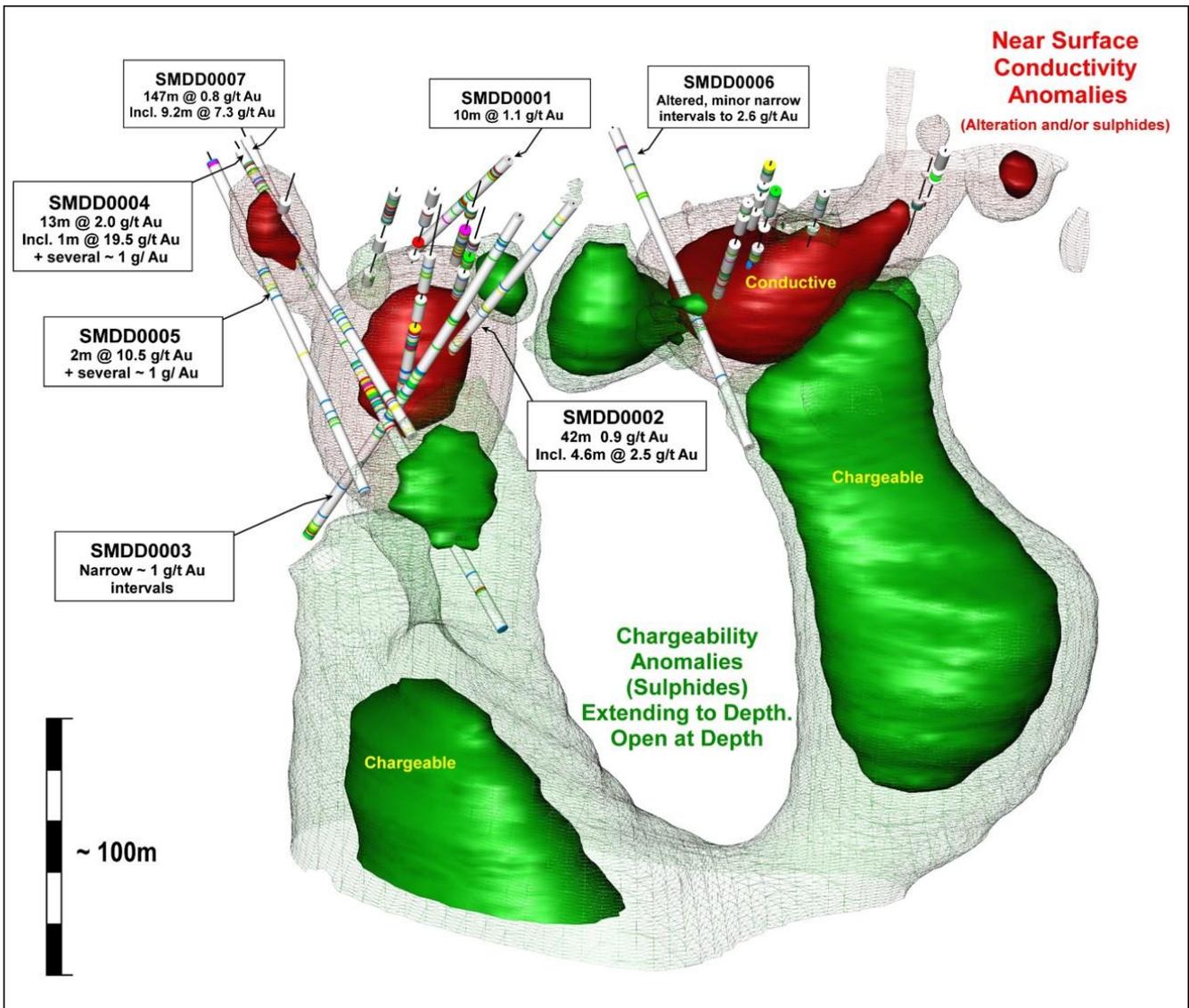


Figure 3: 3-D image of the Satulinmäki Prospect drilling area showing considerable depth extent of chargeability anomalies that may be related to gold mineralisation. Unmarked holes are those drilled by the Finnish Geological Survey (GTK).



About Avalon

Avalon has an advanced portfolio of exploration and development projects in Scandinavia. The portfolio comprises:

1. **The Viscaria Copper Project** in northern Sweden has a completed Scoping Study (see ASX announcements dated 16th December 2015 and 5th April 2016) and is moving towards PFS and permitting to allow for mine development. The project has a mineral resource estimate of 52.4 Mt at 1.2% Cu (see Table 1 below). Considerable exploration upside exists and low technical risk drill targets continue to be tested.
2. **The Southern Finland Gold Project**, which includes the Satulinmäki and Riukka gold prospects. These prospects have received shallow diamond drilling by the Geological Survey of Finland (GTK) and Avalon Minerals has now completed a 7-hole diamond drilling program. Intersections from GTK include 18m @ 4.1g/t Au from 50m downhole, including 3m @ 9.3g/t Au, and 4m @ 10.3g/t Au in drill hole R391 at Satulinmäki. Intersections by Avalon include 23.5m at 3.3g/t in SMDD007 and 2m at 10.5g/t in SMDD005. The Satulinmäki and Riukka gold prospects are part of an earn-in JV with Canadian company Nortec Minerals, where Avalon can earn up to an 80% interest (see ASX announcement dated 19th May 2016). Avalon has already earned a 51% interest, and has also acquired a significant land position, in its own right, in the district.
3. **The Bramaderos Gold-Copper Project** where Avalon has signed an earn-in agreement with TSXV listed Cornerstone Capital Resources (see ASX announcement dated 10th April 2017). The Bramaderos gold-copper project is located in Loja province, southern Ecuador, and is considered to be highly prospective for the discovery of large copper-gold systems. Historical results from drilling at Bramaderos include wide intervals such as 260m at 0.6g/t Au and 0.14% Cu. Trenching results at the West Zone breccia include intersections at surface of up to 42m at 3.7g/t Au. These results, together with the distribution of alteration, and large coincident gold-copper-molybdenum surface anomalies indicate a fertile mineralised system with significant discovery potential.



Table 1 Total combined resource figure for A Zone, B Zone and D Zone at Viscaria

Resource Area	Classification	Tonnes (Mt)	Cu Grade (%)	Contained Cu (kt)
A Zone	Measured	14.44	1.7	240.0
	Indicated	4.69	1.2	57.2
	Inferred	2.48	1.0	25.5
	Subtotal	21.61	1.5	322.7
B Zone	Measured	0.12	1.3	1.6
	Indicated	4.12	0.7	29.7
	Inferred	15.41	0.8	118.7
	Subtotal	19.65	0.8	149.0
D Zone	Indicated	3.11	0.81	25.2
	Inferred	0.01	0.32	0.02
	Subtotal	3.11	0.81	25.2
	Indicated	7.26	1.37	99.8
	Inferred	0.78	1.57	12.2
	Subtotal	8.03	1.39	111.9
Overall Cu	Total	52.4	1.2	608.9

Note: D Zone subtotals represent open pit at an average grade of 0.81% copper, and underground at an average grade of 1.39% copper.

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.

Competent Persons Statement

The information in this report that relates to exploration results is based upon information reviewed by Dr Bruce Rohrlach who is a Member of the Australasian Institute of Mining and Metallurgy. Dr Rohrlach 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". Dr Rohrlach consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For further information, please visit www.avalonminerals.com.au

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