



## MAJOR VTEM SURVEY COMMENCES AT ADAK COPPER PROJECT, SWEDEN

### Key Points

- Avalon commences 684 line km helicopter-borne electro-magnetic VTEM survey over Adak Copper Project, Sweden.
- First electro-magnetic survey over the project area in over 40 years.
- Immediate objective to cross-reference historical drilling with modern geophysics to define a new series of targets.
- Secondary objective to delineate porphyry copper mineralisation in the core of the Adak Dome.
- Skelleftea area hosts 20+ known VMS deposits with several still operating.

Australian-based resource company, Avalon Minerals Ltd (ASX: **AVI** – “Avalon”), is pleased to announce that it has commenced a major helicopter-borne electro-magnetic VTEM survey over the Company’s 80km<sup>2</sup> **Adak Copper Project**, located approximately 800km North of Sweden’s capital, Stockholm.

Avalon has commissioned Geotech Airborne to commence the 684 line-km VTEM survey, which represents the first phase of a new era of exploration at the Adak Project. The commencement of the survey reflects the growing momentum of Avalon’s exploration activities in Sweden.

The survey will be flown on a 100-metre line spacing in a north east orientation and will target Volcanogenic Massive Sulphide (VMS) mineralisation of the Adak/Storliden-style deposits.

Avalon’s Swedish holding Company, Avalon Minerals Adak AB, has been granted permission from the Mines Inspector and local land owners to conduct the VTEM survey and a crew has been mobilised to the Adak area to prepare for the survey, which will take approximately one week to complete.

Significantly, the VTEM survey will be the first electro-magnetic survey to be conducted over the Adak Project area in over 40 years. This represents a unique opportunity for Avalon to capitalise on advances in technology to delineate a new copper resource at Adak which would further enhance the Company’s growing mineral and exploration portfolio in the region.

The commencement of the VTEM survey follows the recently announced maiden 26.6 million tonne Indicated copper Resource estimate at the Company’s Viscaria Project, located approximately 250km to the north.

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**ASX Code:** AVI

**Issued Capital**  
50.6 million shares  
11 million unlisted options

**Directors**  
David McSweeney  
(Managing Director &  
CEO)

Stephen Stone  
(Director)

Gary Steinepreis  
(Director)

## **Objective**

The immediate objective of the VTEM survey is to cross reference historical drilling with the results of modern geophysics to define a new series of targets suitable for drilling.

A secondary exploration objective at Adak – one that interested the previous owner of the project, Phelps Dodge – is the potential to delineate porphyry copper mineralisation in the core of the Adak Dome. Previously, a single hole drilled at Adak to test the dome's core intersected 150 metres of anomalous copper from 305 metres depth in rocks above a granitoid, effectively supporting the Adak porphyry copper concept.

Exploration throughout the Skellefte belt – in which over 25 base and precious metal mines have been developed since 1925 – is still yielding commercial discoveries. The large, low-grade Aitik mine, 100km south of Kiruna and Viscaria provides a strong precedent for this type of mineralisation to occur.

## **Adak Dome**

The Adak Project lies in the westernmost cluster of VMS copper/zinc deposits in Sweden's Skellefte Mining District and contains four historical mines – Adak, Lindskold, Brannmyran and Rudtjebacken – covering a total area of 26.71km<sup>2</sup>.

The Project is located approximately 20km north-west of the Storliden zinc and copper deposit (2mt @ 10% Zn and 3.5% Cu), which is owned and operated by Canadian-listed Lundin Mining Corporation. The high-grade Storliden mine was discovered by drill testing of an EM target, and the geological setting of the Storliden mine, which has been mined since 2001, is considered to have some similarities to the Adak area.

State-owned Boliden mined 12 million tonnes of ore from the four underground mines around the rim of a 2-3km diameter dome structure at Adak between 1942 and 1978. The average mined grade was 1.5% copper with zinc, gold and silver credits with the largest of the deposits mined over a 1km strike length and 500m down dip.

After the closure of the Adak mines in 1978, the Project received little further attention under Sweden's state ownership regime and in 2003, Phelps Dodge acquired Adak on the strength of the Project's exploration potential at depth. Phelps Dodge subsequently divested the Project to Avalon in March 2008 without having ever drilled a hole.

The majority of the Adak deposits extend to surface and were found with surface prospecting methods, with other deposits discovered with a combination of geological interpretation, EM surveys from 1950-1970 and pattern drilling.

## **Summary**

Importantly – and similarly to Avalon's other Swedish Project, Viscaria – Adak is located in a historical mining district (the Skelleftea area hosts over 20 known VMS deposits with several still operating) with access to well-developed infrastructure, technical services, and a skilled workforce. The combination of these factors means that the Adak Project has the potential to be developed relatively rapidly once a resource has been delineated.

New Boliden, the publicly owned successor to State-owned Boliden, now operates four mines in the Skellefte District. In 2007, 12,000 tonnes of copper, 71,000 tonnes of zinc, 45,000 ounces of gold and 260 million ounces of silver were produced at New Boliden's 1.8 Mtpa central processing facility, located just 115 kilometres from Adak via sealed road.



Commenting on the VTEM survey, Avalon's Chairman and Managing Director, Mr David McSweeney, said: "The Adak Project represents an outstanding opportunity for Avalon to add to the resource base already defined at Viscaria – in an area of Sweden that has been a historically successful mining region.

"This will be the first electro-magnetic survey over the project in over 40 years, and considering that Phelps Dodge did not sink a dingle drill hole into the project, we believe the potential for Adak to host a substantial copper deposit, particularly at depth, is outstanding," he added.

*Competent Persons Statement*

*The information in this report relating to Exploration Results is reviewed by Mr Geoff Hewlett MSc DIC MAIG who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists and is the company's Exploration Manager. Mr Hewlett has over 30 years of exploration experience in a variety of mineral deposit styles including uranium, base metals and gold mineralisation and he consents to inclusion of the information in this report in the form and context in which it appears. He 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".*

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**Avalon Minerals – Background**

Avalon Minerals Ltd listed in March 2007 with the aim of developing and discovering mineral deposits.

Avalon's corporate objective is to build a diversified resource mining group based on cash flows from producing operations. The primary project generation strategy has been successful with the acquisition of the advanced Viscaria and Adak copper deposits in northern Sweden where a maiden copper resource of 26.6Mt has been delineated at Viscaria.

**Figure 1 - Project Location Map**



**Fig 2: Adak Tenement**

