

November 4, 2021 TSXV: AMO

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# Project

Southern Cross North Gold Project



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# **Moving Loop EM Identifies Five Conductors**

# **Highlights**

- Five EM conductors identified from MLEM survey completed at the Southern Cross North Project.
- Three conductors (SEM03, SEM04 and SEM05) are considered strong bedrock conductors.
- Conductor SEM03 is significant as it is modelled to cross cut stratigraphy and is interpreted to be a sulphide rich structure.
- Conductors are not constrained requiring additional MLEM work prior to drill planning and evaluation.

VANCOUVER, BC (November 4, 2021) - Altan Rio Minerals Limited (TSXV: AMO) ("**Altan Rio**" or the "**Company**") is pleased to provide results from a Moving Loop Electromagnetic ("**MLEM**") geophysical survey completed at the Southern Cross North Project.

Following the successful identification of bedrock conductors using DHEM techniques at the Pilot deposit (refer TSXV: AMO March 23, 2021), the Company commissioned a MLEM survey to evaluate the potential for additional conductors northwest and south-east of Pilot along the interpreted strike extensions of the known mineralisation.

At Pilot, the company investigated the application of DHEM to target gold mineralisation associated with sulphide-rich zones. The technique was successful in identifying a strong off-hole conductor (PEM 4) which broadly coincided with a high-grade intercept recorded in drillhole PARC005, of 5 metres grading 13.93 g/t from 201 metres within a broader mineralised intercept of 8 metres grading 9.65 g/t from 199 metres, refer to Figure 1 and 2.

The MLEM survey identified five EM conductors, all of them are bedrock conductors with three of the five conductors giving strong responses.



# **Explanation of Results**

#### Background

The successful application of Surface EM or DHEM geophysical techniques is a relatively recent development in the exploration for gold mineralisation. This technique has been successfully applied by ASX listed explorers Bellevue Gold Limited at its Bellevue Gold Project, Apollo Consolidated Limited at its Rebecca Gold Project both in Western Australia and Benz Mining Corp. at its Eastmain Gold Project in Quebec, Canada.

The MLEM survey targeted strike extensions to both the Pilot mineralisation and to the PEM 4 conductor identified by DHEM (refer TSXV: AMO 23 March 2021) and comprised six receiver lines south-east and three receiver lines northwest of the Pilot open pit with a spacing of 200m between each receiver line, refer to Figure 3.

Processing of the MLEM data has identified five EM conductor responses varying in distance from 450m to 1,300m from the Pilot open pit.

Conductors SEM 01 and SEM 02 provided a weak response, with overall similar dimensions to what has been observed for the PEM 4 conductor beneath the Pilot deposit, at this time the significance of these two conductors is not known and can only be resolved from exploratory drilling and DHEM surveying to determine their relevance.

Conductors SEM 04 and SEM 05 were initially identified during the DHEM surveying of drillholes PARC005 and PARC014 however the actual position and orientation of these conductors at the time could not be accurately determined. Both conductors give strong responses, with modelling of the MLEM data interpreting them as strike extensive (690m and 930m respectively) with significant vertical extent (640m and 670m). Both conductors are only partially constrained by the current MLEM survey with additional surveying required extending southwest onto adjoining tenement E77/2691 which Altan recently signed an option agreement (refer TSXV: AMO 13 September 2021).

Conductor SEM03 is described as giving a similar strong response but with an orientation of 300° Magnetic, oblique to the general trend of the stratigraphy, suggesting this EM response may represent a sulphide rich structure cross-cutting stratigraphy. This conductor is also only partially constrained with additional surveying required to further evaluate this response.

A summary of the five conductors described above are presented in Table 1 and schematically shown in Figures 3.

	SEM 01	SEM 02	SEM 03	SEM 04	SEM 05
Conductor Characteristics					
Strength	Weak	Weak	Strong	Strong	Strong
Depth to Top (m)	100	100	50	65	70
Strike Length (m)	200	200	500	690	930
Modelled Dip	90	90	76	88	88
Vertical Extent (m)	380	380	500	640	670

# Table 1: Pilot – MLEM Conductor Summary



### Commenting on the results, Altan Rio CEO Mr Paul Stephen said:

"The Southern Cross North Project continues to deliver exciting and potentially significant exploration opportunities. The EM conductors identified in the MLEM survey in conjunction with the ongoing evaluation of high-grade mineralisation beneath the nearby Pilot open pit highlights the potential of the Pilot area as a future mining hub."

# The Company's geophysical consultants (Newexco Exploration Pty Ltd) have recommended the following work program to investigate the significance of these five conductors:

- Conduct additional MLEM work to fully define each of the conductors.
- Conduct reconnaissance drill programs following review and interpretation of all geophysical data.

#### **Qualified Person**

Mr. Neal Leggo, Geological Consultant, Indeport Pty Ltd, a member of the Australian Institute of Geoscientists (MAIG) and an independent Qualified Person as defined by National Instrument 43-101, is responsible for the preparation of the technical content regarding the Southern Cross North Project contained in this document. Mr. Leggo has reviewed and approved the technical disclosure in this news release.

#### On behalf of Altan Rio Minerals Limited

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#### Cautionary Statement on Forward-Looking Information

This release may contain forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance, or achievements of Altan Rio to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. These forward-looking statements are based on management's current expectations and beliefs but given the uncertainties, assumptions and risks, readers are cautioned not to place undue reliance on such forward-looking statements or information. Actual results may differ materially from those currently anticipated in such statements, and Altan Rio undertakes no obligation to update such statements, except as required by law.

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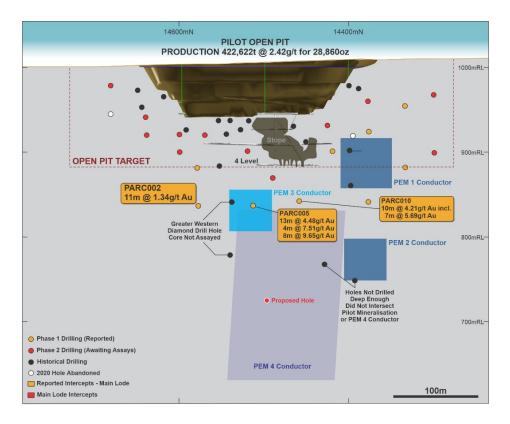


Figure 1: Pilot – Longitudinal Section



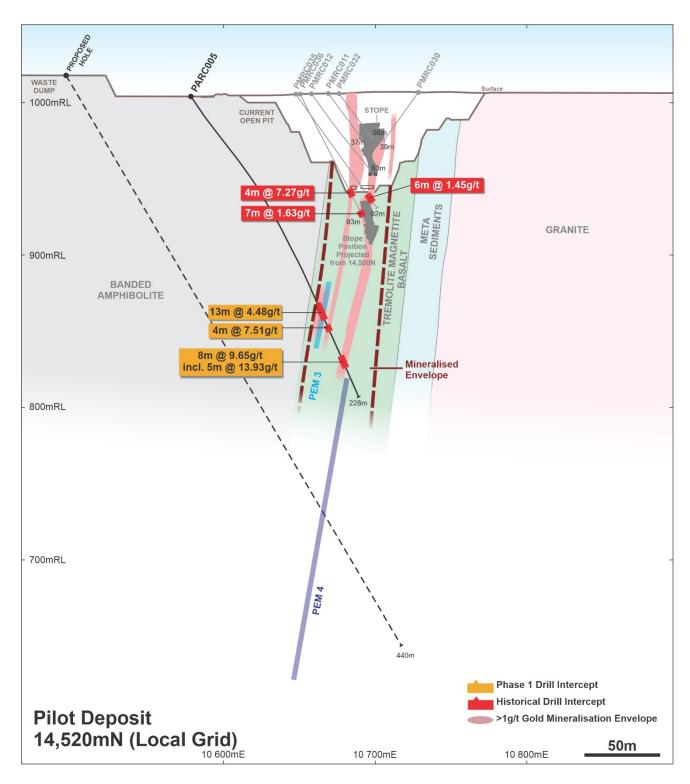


Figure 2: Pilot Deposit – 14,520N Cross Section





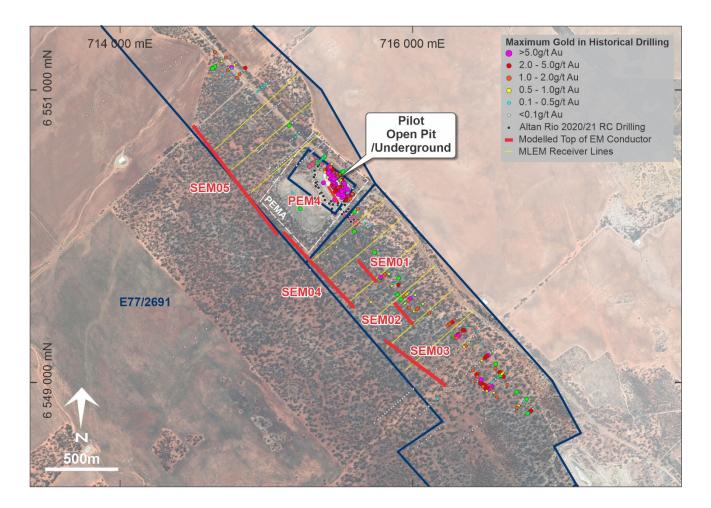


Figure 3: MLEM Survey – Pilot Extensions