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TSXV: AMO

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Downhole EM Identifies Potential For Extensions to High Grade Mineralisation

Highlights

- Downhole EM identifies on-hole conductor ("PEM 3") in drillhole PARC005 coincident with reported mineralisation of 13 metres grading 4.48 g/t from 159 metres.
- Downhole EM identifies significant off-hole conductor ("PEM 4") at depth below PARC005.
- PEM 4 conductor interpreted to be associated with sulphide rich zone intersected in PARC005 with reported mineralisation of 8 metres grading 9.65 g/t from 199 metres.

VANCOUVER, BC (March 23, 2021) - Altan Rio Minerals Limited (TSXV: AMO) ("**Altan Rio**" or the "**Company**") is pleased to provide results from a Downhole Electromagnetic ("DHEM") geophysical survey completed at the Pilot Deposit ("**Pilot**"), pursuant to its exploration and mining agreement (the "**Pilot Agreement**") with Barto Gold Mining Pty Ltd ("**Barto**").

Following the completion of the Phase 1 drilling campaign (refer TSXV: AMO March 10, 2021), the Company conducted a geological review of all technical information obtained from the drill program. The review noted significant gold mineralisation was associated with sulphide assemblages which were pyrrhotite dominant and generally ~ 2% disseminated.

However, in drillhole PARC005, significant sulphides of up to 30% were logged in an interval from 201 to 206 metres associated with high grade gold mineralisation 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. Lower tenor gold mineralisation was observed with pyrite and pyrite-pyrrhotite sulphide assemblages.

The Company commissioned Newexco Exploration Pty Ltd ("**Newexco**"), a Perth-based geophysical and geological consultancy group, to investigate the application of DHEM in order to target gold mineralisation in sulphide-rich zones.

Initially, drillhole PARC005 was surveyed due to the high sulphide content observed during logging and the three gold mineralised intercepts reported. Attachment 1 provides a pictorial summary of the three mineralised intercepts, the individual metre gold grades and the logged percentage of sulphides. Drillhole PARC014 was surveyed as a follow-up to provide further information relating to the information obtained in drillhole PARC005.

Explanation of Results

The successful application of Surface EM or DHEM is a relatively recent development in the exploration for gold mineralisation. This technique has been successfully used 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.

Surveying of drillhole PARC005, identified a high frequency early-time on/off hole conductor at 170 metre depth downhole ("PEM 3") coincident with the reported intercept of 13 metres grading 4.48 g/t from 159 metres and another conductor at ~200 metres depth downhole which has been described by Newexco as an edge intersection with the anomaly being dominantly off-hole and the source interpreted to be south of and below the hole ("PEM 4").

Surveying of drillhole PARC014 identified two on-hole conductors (a weak on-hole anomaly at ~140m to 145m depth downhole ("PEM 1") and a weak on-hole anomaly at ~240m depth downhole ("PEM 2")), both of these conductors are associated with low percentages of disseminated pyrite/pyrrhotite and low gold grade content. More importantly, the survey identified an off-hole anomaly at ~200 metres depth downhole with the source interpreted to the north and below the hole ("PEM 4").

A summary of the conductors described above are presented in Table 1 and schematically shown in Figures 1 to 3. Importantly, the off-hole conductor identified in both holes is interpreted to be due to the same source, with modelling using a single plate to satisfy the DHEM response. The dimensions of this plate is estimated to be some 130 metres in strike extent with a depth extent of 200 metres commencing immediately below PARC005 where there is a reported intercept of 8 metres grading 9.65 g/t from 199 metres (up to 30% pyrrhotite logged).

Table 1: Pilot – Downhole EM Conductor Summary

	PEM 1	PEM 2	PEM 3	PEM 4
Drillhole ID	PARC014	PARC014	PARC005	PARC005-PARC014
Conductor Type	On-Hole	On-Hole	On-Hole	Off-Hole
Downhole Depth	140m	240m	170m	200m
Logged Visual % Sulphides	Trace to 1%	2%	2%	Target Only (1 to 20%)
Sulphide Description	Disseminated pyrite/pyrrhotite	Disseminated pyrite/pyrrhotite	Disseminated pyrrhotite	Disseminated pyrrhotite?
Grade Values	1m @ 1.19 g/t	1m @ 0.02 g/t	13m @ 4.48 g/t	Not Drilled

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

"This is a significant development at the Pilot deposit where Altan has now demonstrated the potential for the application of geophysical techniques to directly apply to gold exploration in the immediate area around Pilot and potentially elsewhere in the Southern Cross North Project.

Identification of the PEM 4 conductor is particularly exciting with modelling suggesting the strike extent of the high-grade gold mineralisation is substantially greater than what was observed on the 4 Level of the historical underground workings.

The company is eager to follow-up on our consultants' recommendations with planning for additional EM surveys and future drilling in progress."

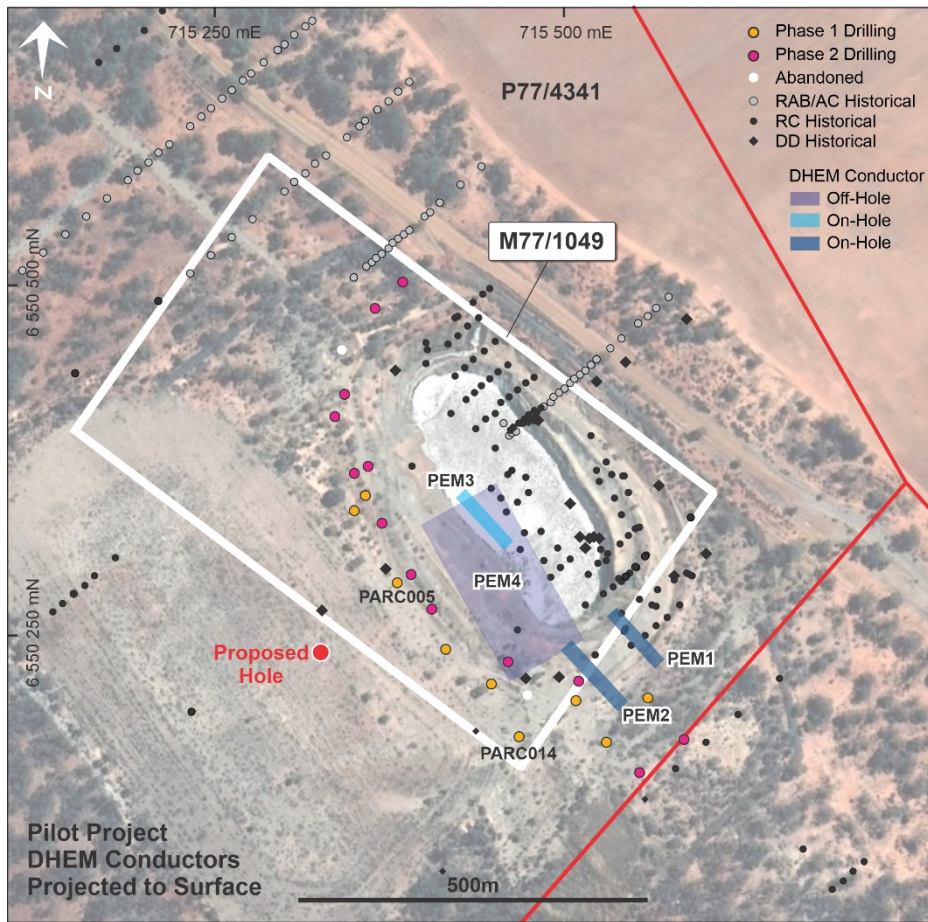


Figure 1: Pilot Deposit – Drill Collar Plan with DHEM Conductors projected to Surface.

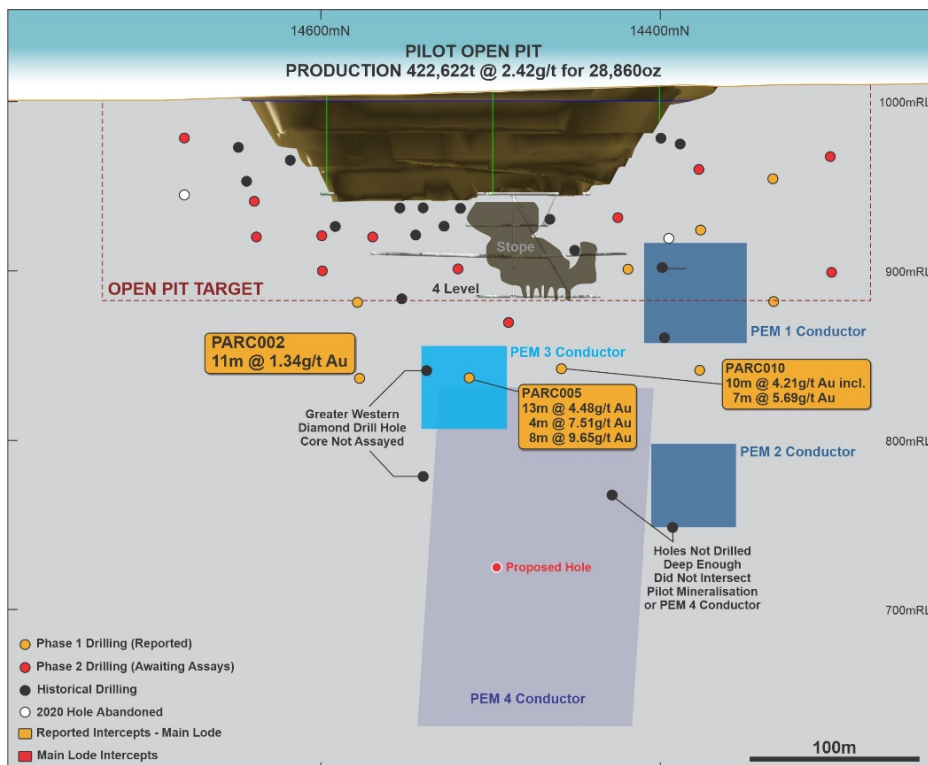


Figure 2: Pilot – Longitudinal Section

Altan Rio's geophysical consultants have recommended the following work programs:

- Drill test the source of DHEM conductor ("PEM 4") at a position down dip from the intersection in PARC005.
- Conduct surface EM surveys along strike to both north and south of the Pilot pit.

Qualified Person

Mr. Neal Leggo, Principal Geologist, CSA Global 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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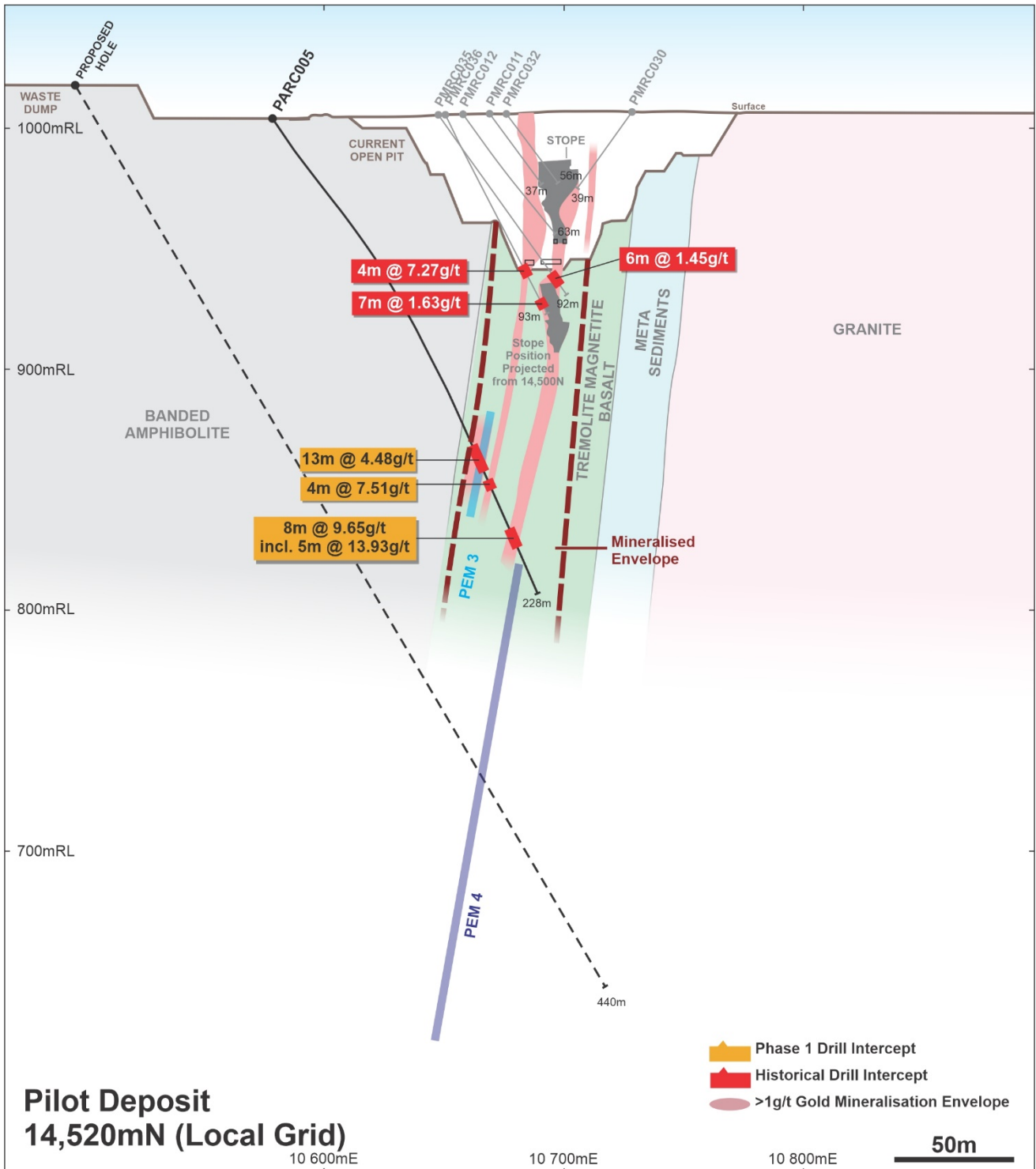


Figure 3: Pilot Deposit – 14,520N Cross Section

Attachment 1: The three mineralised intercepts from PARC005

PARC005 - 13 m grading 4.48 g/t from 159 metres



Depth To	160	161	162	163	164	165	166	167	168	169	170	171	172
Grade	5.27	4.62	1.37	7.07	1.98	1.67	8.02	7.03	1.40	1.40	8.81	5.13	4.44
% Sulphide Logged	Trace	2.0	2.0	Trace	Trace	2.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0

PARC005 - 4 m grading 7.51 g/t from 176 metres



Depth To	177	178	179	180
Grade	2.65	1.58	19.14	6.66
% Sulphide Logged	2.0	1.0	1.0	3.0

PARC005 - 8 m grading 9.65 g/t from 199 metres



Depth To	200	201	202	203	204	205	206	207
Grade	4.02	1.96	12.13	10.24	5.30	29.32	12.65	1.60
% Sulphide Logged	1.0	1.0	20.0	30.0	12.0	15.0	12.0	3.0