

31 May 2021

CHARGEABILITY ANOMALY OF NEEDLES GOLD PROJECT CONFIRMED - DIAMOND DRILL PROGRAM TO BE UNDERTAKEN

Key Highlights

- > DC/IP Chargeability anomaly at Needles Gold Project successfully confirmed by two separate modelling techniques
- > Chargeability interpreted to be caused by the presence of significant pyrite within porous volcanics, potentially indicative of Round Mountain type gold mineralisation
- > Resistivity modelling indicates presence of probable cap-rock layer above interpreted mineralisation, a key element required for the formation of Round Mountain type deposits
- > Processing of seismic survey indicates presence of multiple structures within target area
- > Three (3) 500m diamond drill-holes planned to test the chargeability anomaly for gold mineralisation in Q3
- > Additional diamond drill-hole planned to test Tomahawk mineralisation
- > Drill site locations close to existing tracks
- > Timing of the proposed drilling is to occur as soon as the drilling contractor and regulatory approvals are confirmed
- > Environmental field work currently being carried out over the target area

Astro Resources NL (ASX:ARO) (“**ARO**”, “**Astro**” or “the **Company**”) is pleased to advise that detailed modelling carried out utilising two separate modelling techniques, of the data obtained by Astro’s January 2021 DC/IP survey, has confirmed the presence of a significant chargeability anomaly located within the Company’s Needles Property in Nevada, USA (Figures 1 and 2) . It is interpreted that the anomaly reflects the presence of significant disseminated pyrite mineralisation, with which gold maybe associated.

The DC/IP survey data modelling, in addition to Astro's Seismic Survey, has also indicated the presence of numerous cross-cutting structures that may contain high-grade gold mineralisation within the shallowly dipping volcanic host rocks. Three major post-mineralisation structures have been interpreted that appear to confine the chargeability anomaly.

The Company now plans to commence a diamond drilling program comprising three 500m deep drill-holes to test the anomaly in Q3. A fourth hole will target mineralisation beneath the Tomahawk Shaft and workings. Three of the holes will be drilled adjacent to main tracks within the tenement and the fourth close to one. As such, the drilling will cause minimum disturbance.

Astro's Chairman, Jacob Khouri commented, *"The confirmation of the significant chargeability anomaly within the Needles Property, which is believed to reflect the presence of significant disseminated pyrite and possible gold mineralisation, is highly encouraging. As a result, the Astro Board has escalated the proposed work program with the aim of confirming the high prospectivity of the Needles Project as quickly as possible. The decision to undertake a four-hole campaign reflects the Board's confidence in the Needles Project."*

The current interpretation of the depth below surface of the target mineralisation is 250m, with it extending down a further 250m. This depth necessitates the use of diamond drill rigs to test it. Before the results of the geophysical programs were available, Astro estimated a drilling and reporting budget of approximately \$720,000 (AUD)* for shallower testing using a RC rig (ASX: ARO announcement 22nd February 2021). The positive results from these programs have enabled Astro to expand this budget to \$1.3M, the estimated cost of drilling four diamond drill-holes and subsequent analysis and reporting.

The use of diamond drill holes will provide important additional data, including structural orientation of mineralisation from drill-core measurements. It will also provide the opportunity to run a sonic log and/or a vertical seismic profile survey, which will help confine the depth of already located structures and stratigraphic horizons. Further, it will enable realistic estimations of the electrical properties from measurements of the core, which will provide additional constraints on the DC/IP interpretation.



Figure 1. Needles Project Location Map showing active gold mines within Nevada

DC/IP Modelling

The DC/IP data was subject to further interpretation by Southern Geoscience Consultants (“**SGC**”). SGC used two alternative modelling techniques to confirm the presence and location of the chargeability anomaly. SGC also carried out a detailed interpretation of the resistivity data, which indicated the presence of northeast-trending structure that clearly divides the surveyed area into separate domains.

A moderately northwest-trending northeast-dipping structure further divides the south-eastern portion of the area into a western and an eastern domain. The chargeability anomaly is confined to the northwest by the northeast structure and to the southwest by the northwest structure. It is also confined to the northeast by a parallel northwest structure (Figure 3).

It is interpreted that the anomaly reflects the presence of significant disseminated pyrite mineralisation, which may be associated with gold deposition. In this case, the mineralising fluids will have ascended along open structures and will have deposited the mineralisation within porous tuffs. The overlying resistive layer, interpreted to be of less-permeable welded tuff, has trapped and caused ponding of the rising fluids, depositing mineralisation below about 250m from the current surface.

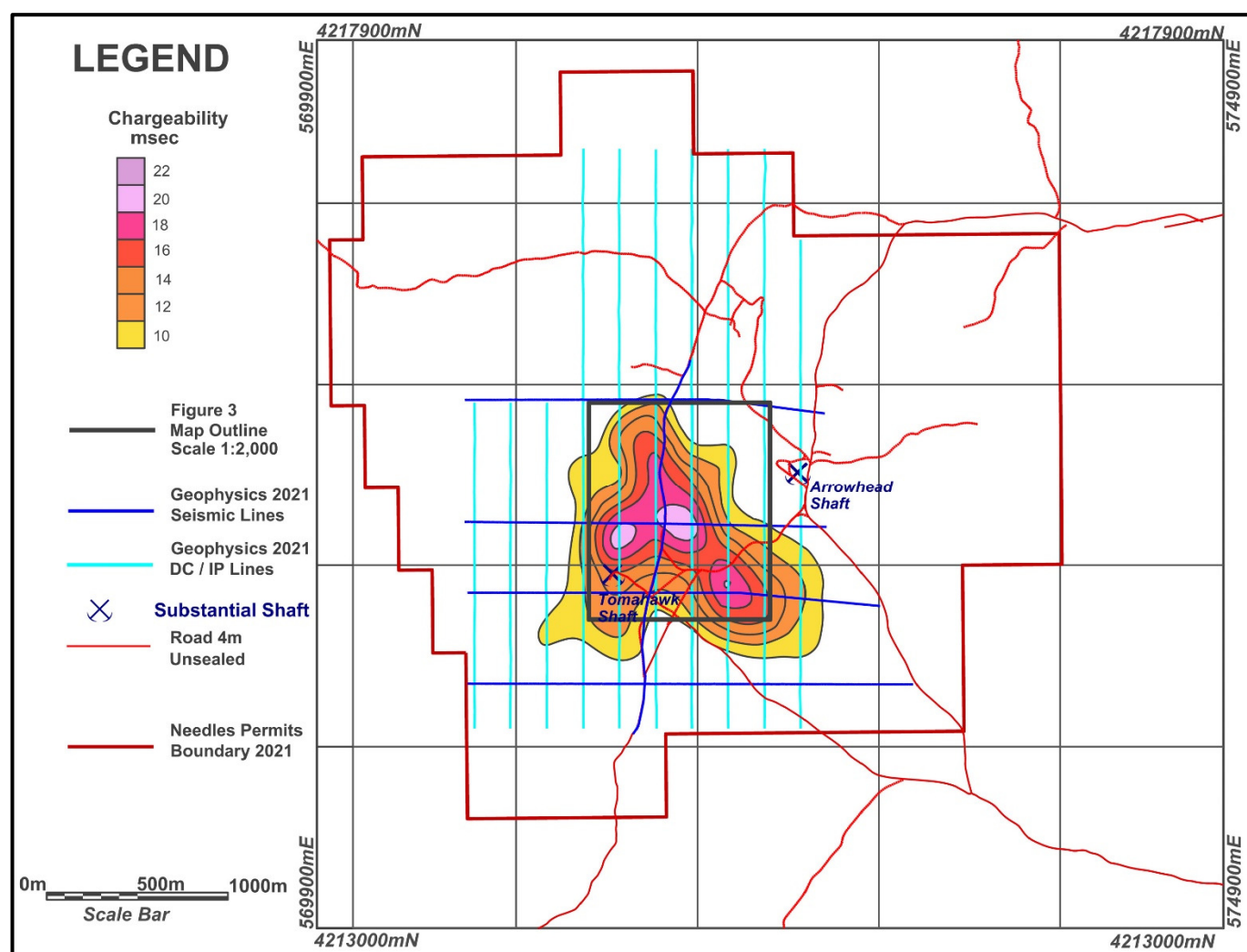


Figure 2. Map of Needles Property showing DC/IP and seismic survey lines and the chargeability anomaly

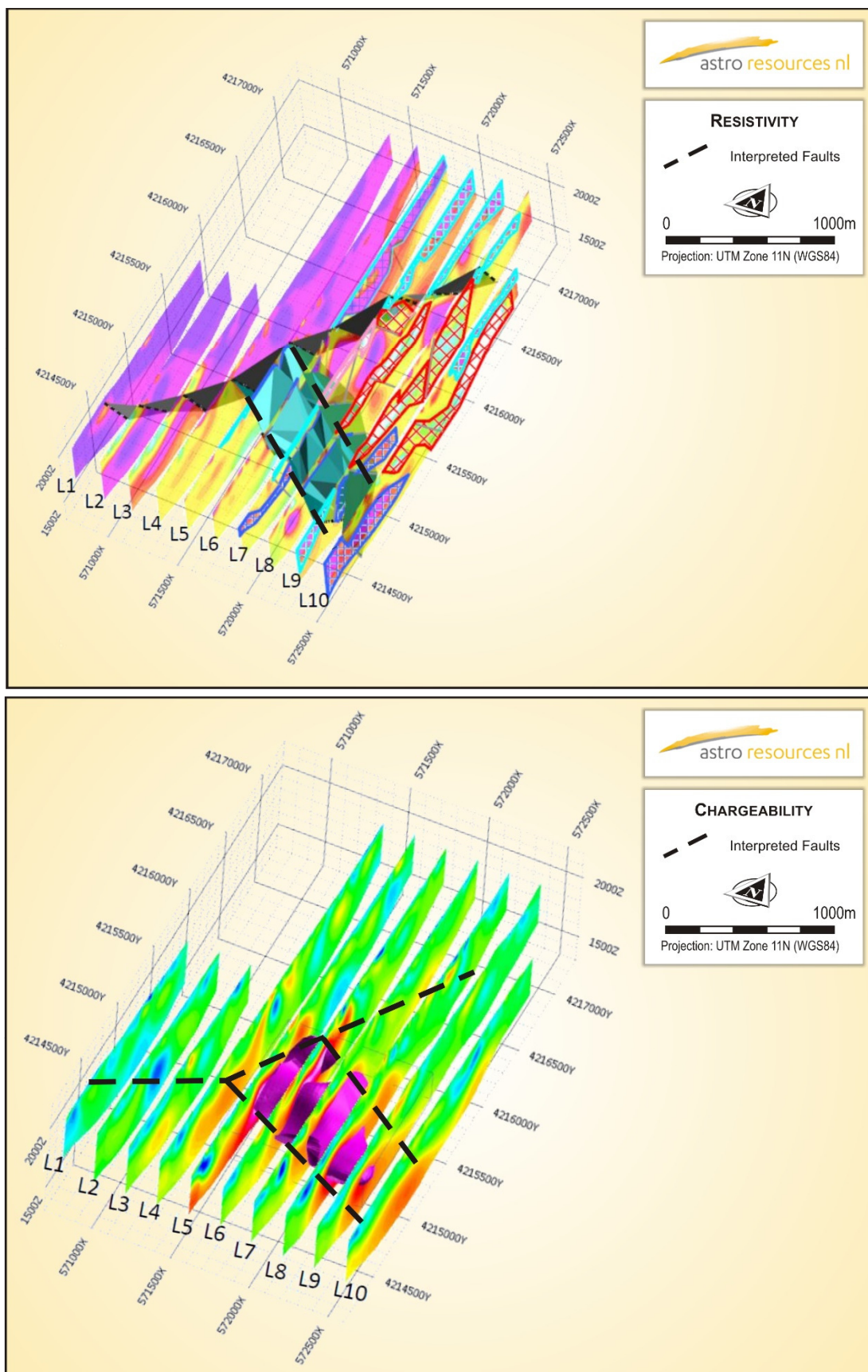


Figure 3. Stacked Resistivity(upper) and Chargeability (lower) images showing interpreted post-mineralisation bounding faults

Seismic Modelling

The seismic data was presented as a sectional view along each line, accompanied by structural interpretation. Figure 4 displays the sectional view along the north-south seismic line, which passes over the chargeability anomaly. An image of the chargeability anomaly is overlain on seismic interpretation.

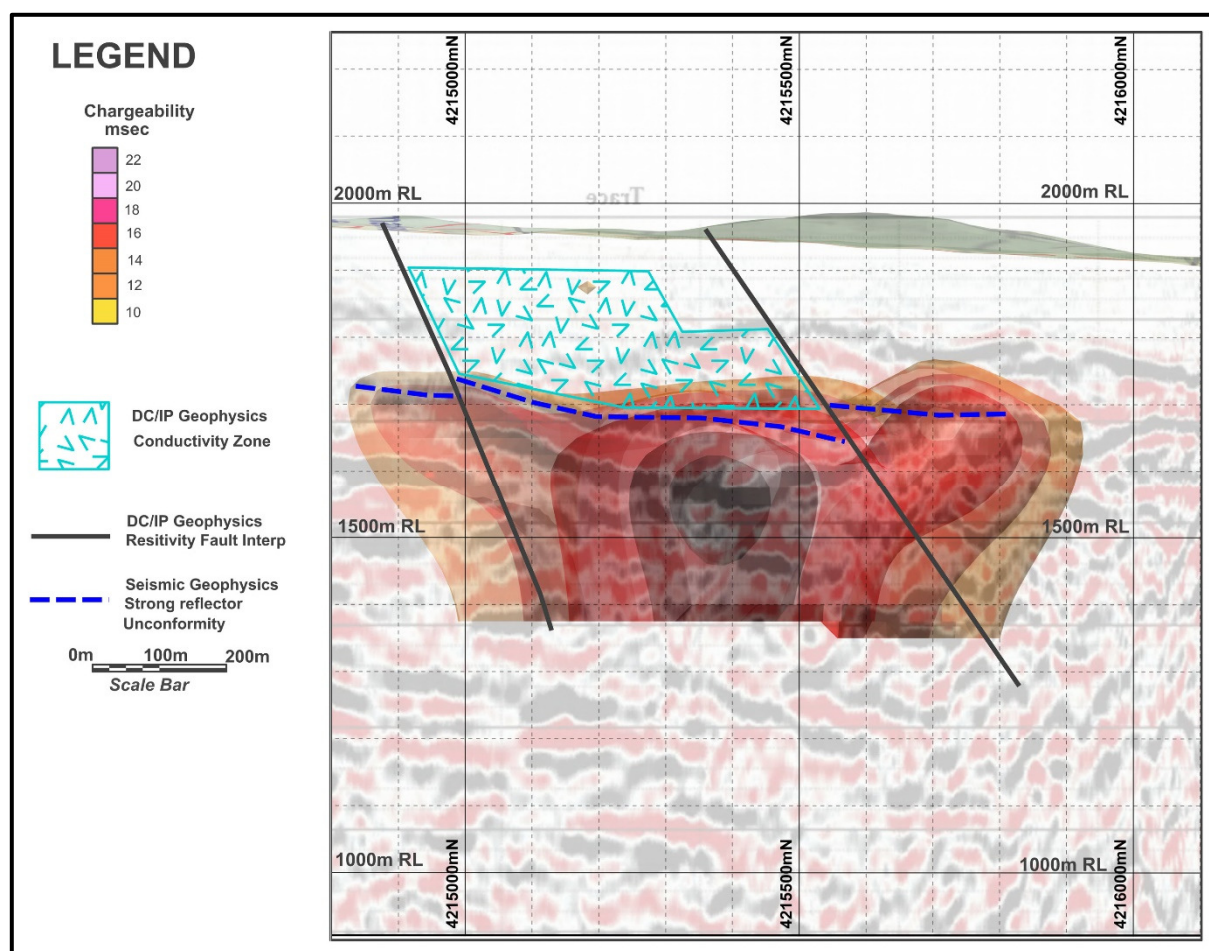


Figure 4. Seismic section looking west, with chargeability anomaly overlain, resistivity interpreted faults (black), major sub-horizontal break (blue dashes), and conductive zone (pale blue patterned).

The shallow dipping stratigraphy and numerous structural breaks can be seen in the image of the seismic data. A major shallow structure coincides with the upper surface of the chargeability anomaly. A zone of high conductivity sits above this break. Processing of the seismic survey indicates the presence of multiple structures within the target area which may contain higher-grade mineralisation.

Planned Drilling

Three 500m diamond drill-holes have been planned to test the interpreted mineralisation (Figures 5 and 6). Two will test the central portion of the mineralisation in two directions, which will maximise the possibility of intersecting higher-grade structures, irrespective of their orientations. The third will test a second chargeability high centred about 500m to the southeast. The drilling is expected to occur during Q3 2021.

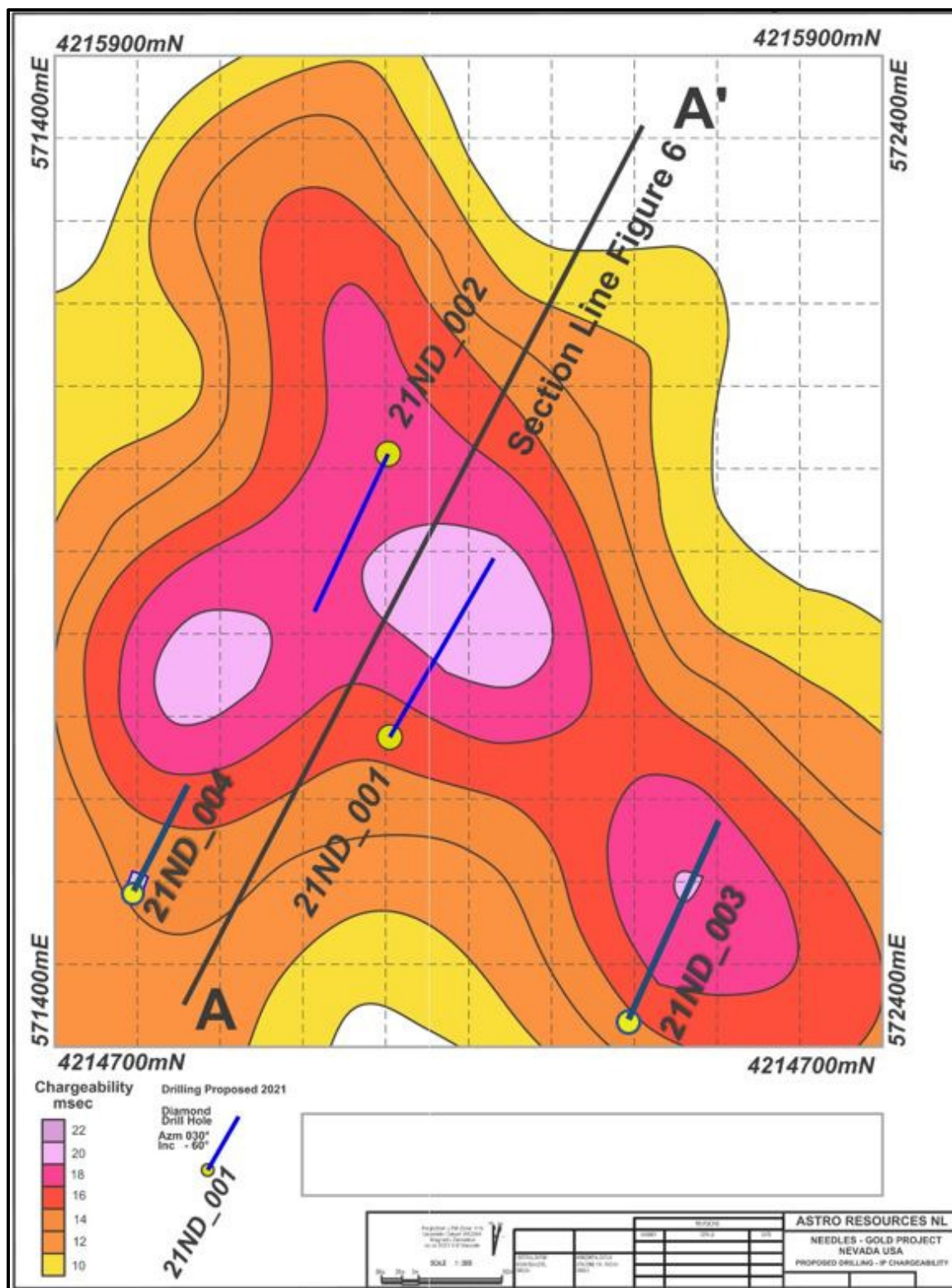


Figure 5. Detail of 200m depth slice of chargeability anomaly showing planned drill-holes

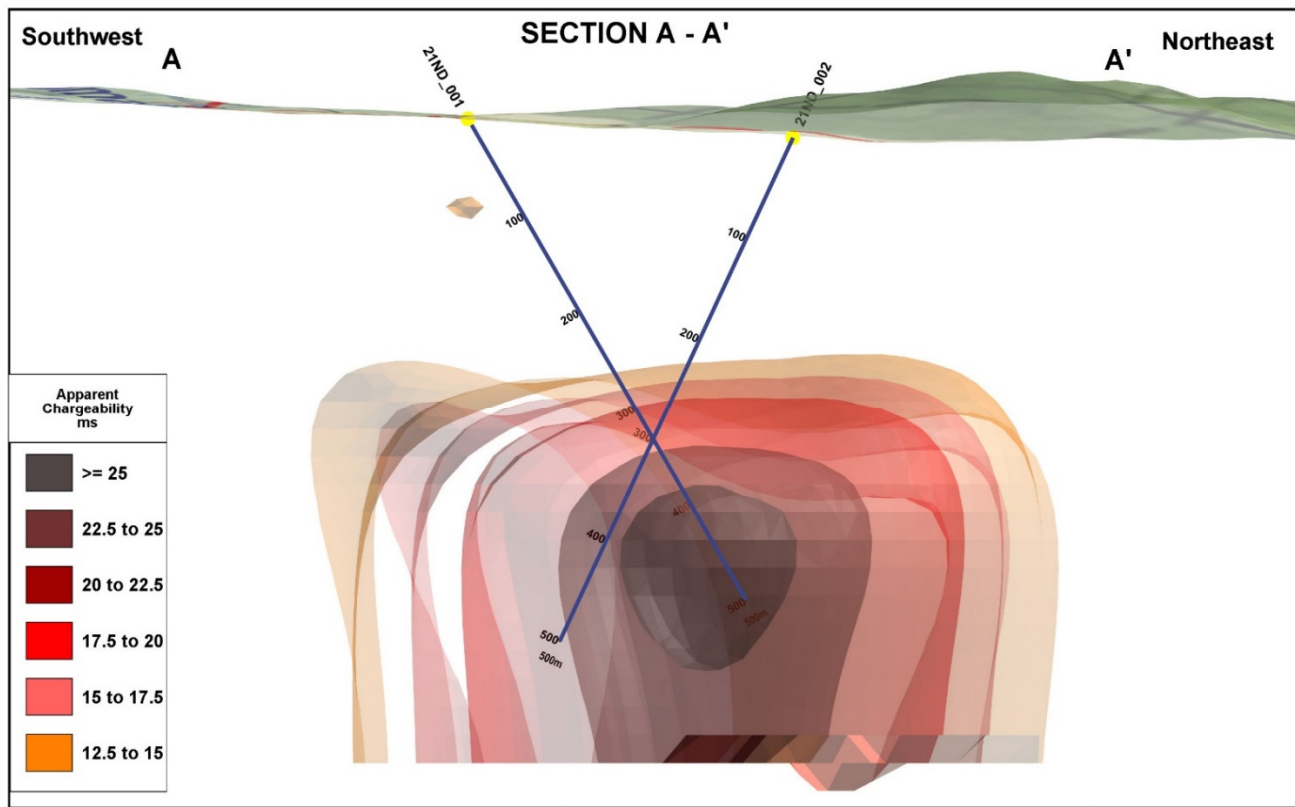


Figure 6. Sectional view of chargeability anomaly showing proposed drill-holes 001 and 002.

Astro is proceeding to securing a contract driller to undertake the necessary work. The Company has been in discussion with two suitable drilling companies, both of which have indicated availability if personnel can be obtained. Astro is also in the process of applying to the Bureau of Lands Management (**BLM**) for the necessary approvals to undertake the work. Further details will be announced as they come to hand.

Astro has engaged a Nevada based environmental and permitting consulting company, EM Strategies Inc., to carry out required environmental studies across the target area. These studies are currently in progress.

Review of the East Kimberly Diamond work program

As previously announced by Astro, the Company has been in ongoing discussions with the Traditional Owners of the Lower Smoke Creek site to enter into an arrangement which would enable it to proceed with the Program of Works (**POW**). The Company has received an agreement from the Traditional Land Owners legal representative, which, subject to what is considered to be a minor change put forward, is in line with the Traditional Owners agreement. To date, the Company has still received no feedback on this agreement. Accordingly, the Company has not yet been able to enter into agreements to secure technical contractors to undertake the necessary exploration work. As such, the Board has formed the view that it is unlikely that the work can be undertaken in the current season.

The Company intends to undertake a limited scope of work during the course of this dry season and at the same time, apply for an extension of its licence, noting that the work has been impacted by a number of factors, including, but not limited to, Covid-19.

The Company will provide full details of the proposed scope of work as soon as it is in a position to do so.

This announcement has been authorised for release by the board.

More Information

Vince Fayad

Executive Director

Vince.fayad@vfassociates.com.au

+61 (0) 414 752 804

Victoria Humphries

Media & Investor Relations

victoria@nwrcommunications.com.au

+61 (0) 431 151 676

The information in this report that relates to Exploration Results for the Needles Property is based on information compiled by Richard Newport, principal partner of Richard Newport & Associates – Consultant Geoscientists. Mr Newport is a member of the Australian Institute of Geoscientists 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 under the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Newport consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> ARO is in the process of registering, via a wholly owned US subsidiary, 26 contiguous unpatented lode mining claims in Nevada, USA referred to as the "Needles Property". These claims encompass an area of 217 hectares.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	Previous exploration has been summarised in the NI43-101 Report available on SEDAR titled "NI 43-101 TECHNICAL REPORT on the THE NEEDLES Au-Ag PROPERTY Arrowhead Mining District, NYE COUNTY, NEVADA, USA" (2010) MPH Consulting Ltd.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Primary target is a combination of low sulphidation epithermal bonanza lode gold vein mineralization and associated "Round Mt" style epithermal stratabound gold.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> All historic information is available in the NI 43-101 referenced above and in the JORC 2012 table included in the Astro announcement dated 19th December 2019 titled "Needles Drilling"
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> NA
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> NA
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Included in ASX announcement

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> NA
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> Interpretations have been received of the January 2021 DC/IP data and of the seismic survey on the Needles Property. The interpretations confirm the presence of a significant chargeability anomaly within a specific structural location. Baseline environmental studies have commenced of chargeability anomaly Base line studies to enable a Plan of Operation to be submitted for the area of interpreted mineralisation
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Initial drill testing of chargeability anomaly and of Tomahawk mineralisation