

13 October 2021

# NEW GEOLOGICAL MAPPING AND SAMPLING COMPLETED AT NEEDLES GOLD PROJECT

# Key Highlights

- Seological mapping and surface rock chip sampling completed within recently staked tenements
- > Anomalous gold, silver and other pathfinder elements returned
- > Anomalous results are within or adjacent to an interpreted fault
- > IP/Seismic work will be undertaken to help target buried mineralisation which maybe present within the underlying volcanics

Astro Resources NL (ASX:ARO) ("ARO", "Astro" or "the Company") advises that it has now completed mapping and rock-chip sampling (refer to ASX release dated 15 July 2021) carried out within the Company's recently (refer to ASX release dated 22 February 2021) acquired mining lode claims ("New Area") at the Needles Gold Project in Nevada, USA (Figure 1).

The geological mapping identified areas of alteration within sub-horizontal porous volcanic ash-flow tuffs, the target lithology for Round Mountain type gold mineralisation that the Company believes maybe present in the area. In addition, impervious, welded volcanic units were identified, consistent with the Round Mountain model where these units help dam rising fluids, depositing gold mineralisation within more porous volcanics.

The altered rocks within the tuffs were rock chip sampled and submitted to ALS Global at Reno Nevada for assay. The results have now all been received, with five of the samples that were collected from the newly pegged area returning low but anomalous values of gold, silver and other pathfinder elements (Table 1). The locations of these samples are shown in Figure 2. The remaining samples contained only background values for these elements.

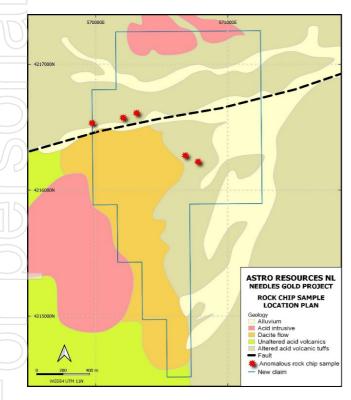


**Figure 1.** Needles Project location map showing active gold mines

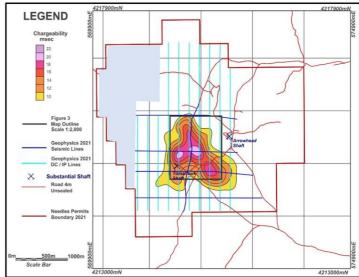
Notwithstanding the fact that no significant gold mineralisation was located at surface, the mapping and sampling indicate that the area has potential to contain sub-surface mineralisation, as it contains tuffs of the right age to act as host rocks, welded tuff and impervious dacite flow units that could act as seals to rising fluids, faults that could act as pathways for rising fluids, and source rocks, the younger felsic intrusives.

The three northern-most anomalous samples are along the line of an interpreted fault (Figure 2). The mineralising fluids are likely to have ascended along the fault fractures with significant mineralisation possibly being present at depth.

The IP chargeability anomaly identified in the central portion of the Needles property (Figure 3) is at a depth of about 250m and has no surface expression. The lack of surface mineralisation within the new claims does not rule out the possibility of a similar target at depth within the volcanic tuffs.



**Figure 2.** Geological map of area of new claims showing locations of anomalous samples



**Figure 3.** Needles Property with new claims in pale blue and the IP chargeability anomaly

Table 1 Anomalous Rock Chip Assays [Refer Figure 2 above]

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
WGS84_Z11N_mE	WGS84_Z11N_mN	SAMPLE	Au_ppm	Ag_ppm	As_ppm	Sb_ppm
569973	4216533	5131	0.007	0.9	277	5
570208	4216575	5129	0.012	0.4	358	12
570310	4216612	5300	0.006	0.4	132	5
570679	4216275	5145	0.014	0.6	170	2
570775	4216225	5144	0.008	0.2	426	13

Samples are sorted in the above table from west to east

#### **Next steps**

The new tenement block was not covered by the IP and seismic surveys carried out earlier this year (see Figure 2). Astro intends to carry out similar surveys over the area after completion of its initial drilling program. These surveys will help identify any buried mineralisation that is within the underlying volcanics.

This announcement has been authorised for release by the board.

#### More Information

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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> <li>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.</li> <li>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.</li> </ul>	ARO holds 139 unpatented lode mining claims in Nevada via a wholly owned US subsidiary These claims are referred to as the "Needles Property".
Exploration done by other parties	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 NEEDLES Au-Ag PROPERTY Arrowhead Mining District, NYE COUNTY, NEVADA, USA" (2010) MPH Consulting Ltd.
Geology	Deposit type, geological setting and style of mineralisation.	Primary target is a combination of low sulphidation epithermal bonanza lode gold vein mineralization and associated "Round Mountain" style epithermal stratabound gold within sub-horizontal volcanic tuffs.
Drill hole Information	<ul> <li>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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	All historic information is available in the NI 43-101 referenced above and in the JORC 2012 table included in the Astro announcement dated 19 <sup>th</sup> December 2019 titled "Needles Drilling"
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values</li> </ul>	• N/A

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>should be clearly stated.</li> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	• NA
Diagrams	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.	Included in ASX announcement
Balanced reporting	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.	• NA
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or ontaminating substances.	<ul> <li>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.</li> <li>Baseline environmental studies have commenced of chargeability anomaly</li> <li>Base line studies to enable a Plan of Operation to be submitted for the area of interpreted mineralisation</li> <li>Geological mapping of area of new claims</li> <li>Rock-chip samples from area of new claims submitted for assay by ALS Reno.</li> <li>Five samples from the area of the new claims returned anomalous results for Au, and for combinations of Ag, Cu, As, Sb, and V.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Initial drill testing of chargeability anomaly and of Tomahawk mineralisation