Ascendant Resources Completes Phase 2 Metallurgical Test Work Program at Its Lagoa Salgada VMS Project in Portugal

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TORONTO, Sept. 09, 2021 - Ascendant Resources Inc. (TSX: ASND) (FRA: 2D9) ("Ascendant" or the "Company") is pleased to announce results from its Phase 2 metallurgical test work program, conducted by Grinding Solutions Limited (GSL), a UK mineral processing services company with strong technical knowledge of mineral processing of IPB ores and has been guided by Micon International, who was responsible for the metallurgical results validation on material from both the massive sulphide and stockwork ores from the Venda Nova North and South Zones, at its Lagoa Salgada VMS project located in Portugal.

In addition to supplementing further information regarding metal recoveries and concentrate grades, the Phase 2 metallurgical test work results support the use of a conventional polymetallic process flowsheet capable of recovering copper, lead, zinc, gold, and silver in three saleable concentrates. Flotation tailings will be leached for additional gold and silver values and tin will be recovered from processing the tailings material by flotation.

It should be noted that due to limited availability of fresh core, the testing material used was approximately 2 years old and partially oxidized which had a negative impact limiting results at this time. Grinding Solutions Ltd. is confident that with further work on fresh core, recovery expectations will be in line with or better than the average seen at existing mines on the Iberian Pyrite Belt.

Mark Brennan, Executive Chairman and Interim CEO of Ascendant stated, *"We are pleased that the test work completed by Grinding Solutions continued to show improved results as compared to our previous results despite having less than ideal material. Grinding Solutions are confident in achieving at least benchmark recoveries for the IBP at Lagoa Salgada. Enhanced testing developed a more robust and flexible flow sheet that could handle variability throughout the orebody and if encountered, also efficiently process oxidised fresh feed. We will continue to look for improvements with continued testing, which is likely to culminate in a full pilot test in Q1 2022. Testing of oxidized samples is necessary to fully understand the behaviour of ore characteristics on an industrial scale and the results achieved in the Phase 2 test work program continues to provide the confidence necessary to initiate a full feasibility metallurgical test work program in Q1 2022."*

The second stage of metallurgical testing was undertaken on samples with a more representative head grade of the overall resource to determine the conformity of the results (head grades shown in Figure 1). The testing was split into 5 main phases looking at both the massive sulphide and stockwork material and is summarized as follows: Comminution testing determining the specific energy requirement for tertiary milling in a stirred mill, this was because the primary grind size for the proposed testing is nominally 30-40?m. Gravity separation to evaluate the potential of a pre-concentrate of tin prior to sulphide flotation on the massive sulphide. Flotation scoping studies including rougher and cleaner rate kinetics resulting in a potentially more robust circuit configuration for ore variability was confirmed through locked cycle testing. From the locked cycle tailings flotation of the remaining tin to produce additional concentrates. Finally blend test work to confirm whether processing both the massive sulphide and stockwork together would be a potential process route.

As noted above, fresh core was not available and samples used for the test work had been in non-refrigerated storage for approximately 2 years at a crush size of 2mm. As a consequence, the samples had been oxidized and this was confirmed when undertaking initial milling trials where pH level reductions were seen differing from trials carried out on previously tested fresh feed. Further evidence was seen in EDTA extraction tests that indicated free Cu, Pb, Zn ions present which would lead to mineral activation during flotation. Flowsheet and reagent scheme modifications were made to both the Massive Sulphide and Stock Work resulting in comparable results (Figure 2) with the initial testing. In general, a decrease in grade but increase in the mineral recovery was observed.

Figure 1 - Head grades of samples tested
https://www.globenewswire.com/NewsRoom/AttachmentNg/20c33012-d94b-48a2-949a-3bf0b5657dde

Metallurgical testing showed that despite the oxidized sample, comparable performance could be achieved and allowed for the development of a more robust and flexible circuit that could handle variability throughout the orebody and if encountered, oxidized fresh feed.

Figure 2 - Grades and recoveries achieved across both test work phases
https://www.globenewswire.com/NewsRoom/AttachmentNg/0ae050b0-d478-405b-bcde-8287c5630af6

It should be noted that reported numbers shown above are calibrated results from Portable X-ray Fluorescence analysis (pXRF) results with confirmation via wet chemical assay are expected soon. The grades and recoveries will then be updated with an increased level of confidence, however, they are not expected to change materially.

The locked cycle results from the massive sulphide materials showed that grade was sacrificed for recovery in the second set of more oxidised samples, and clean concentrates were more challenging to achieve due to the "free" ions in solution. This issue was also identified in the stockwork sample where lead (Pb) deportment compromised both the lead and the zinc concentrate grades and recoveries. Further test work in reducing this difficulty is currently underway.

It should be noted that the second set of samples received do not represent the whole orebody, but some specific sections of the North and South Sectors, that were important to evaluate. Based on the results from the two phases of test work undertaken at Grinding Solutions, Grinding Solutions are confident that comparative performance could be achieved on projects working on similar ore bodies in the IPB, thus supporting recovery and concentrate grade assumptions used in the PEA. Further and continuous testing on fresh representative samples from drilling will be required to confirm. Ascendant plans to undertake additional test work going forward. The following table summaries the assumptions to be used in the upcoming PEA.

Figure 3 accompanying this announcement is available at
https://www.globenewswire.com/NewsRoom/AttachmentNg/df86ca80-9432-4743-b117-f38759e11431

Qualified Persons

Metallurgical test work is being carried out by Grinding Solutions Limited (GSL), a UK mineral processing services company with a strong technical knowledge on the mineral processing of the IBP ores and has been guided by Micon International, who was also responsible for the metallurgical results validation, resource determination and will act as the QP for the NI 43-101 preliminary economic assessment report.

Review of Technical Information

The scientific and technical information in this press release has been reviewed and approved by Jo?o Nunes, Mining Engineer, BSc (Mine Eng), director of Quadrante and by Dr. Sergio Gelcich, P.Geo., Vice President for Exploration for Ascendant Resources Ltd. Both are all Qualified Persons as defined in NI 43-101.

About Ascendant Resources Inc.

Ascendant is a Toronto-based mining company focused on the exploration and development of the highly prospective Lagoa Salgada VMS project located on the prolific Iberian Pyrite Belt in Portugal. Through focused exploration and aggressive development plans, the Company aims to unlock the inherent potential of the project, maximizing value creation for shareholders.

Lagoa Salgada contains over 10.33 million tonnes of Measured and Indicated Resources @ 9.06 % ZnEq

and 2.50 million tonnes of Inferred Resources @ 5.93 % ZnEq in the Northern Zone; and 4.42 million tones of Indicated Resources @ 1.50 % CuEq and 10.83 million tonnes of Inferred resources @ 1.35 % CuEq in the South Zone. The deposit demonstrates typical mineralization characteristics of Iberian Pyrite Belt VMS deposits containing zinc, copper, lead, tin, silver and gold. Extensive exploration upside potential lies both near deposit and at prospective step-out targets across the large 10,700ha property concession. The project also demonstrates compelling economics with scalability for future resource growth in the results of the Preliminary Economic Assessment. Located just 80km from Lisbon, Lagoa Salgada is easily accessible by road and surrounded by exceptional Infrastructure. Ascendant holds a 21.25% interest in the Lagoa Salgada project through its 25% position in Redcorp - Empreendimentos Mineiros, Lda, ("Redcorp") and has an earn-in opportunity to increase its interest in the project to 80%. Mineral & Financial Investments Limited owns the additional 75% of Redcorp. The remaining 15% of the project is held by Empresa de Desenvolvimento Mineiro, S.A., a Portuguese Government owned company supporting the strategic development of the country's mining sector. The Company's interest in the Lagoa Salgada project offers a low-cost entry to a potentially significant exploration and development opportunity, already demonstrating its mineable scale.

The Company's common shares are principally listed on the Toronto Stock Exchange under the symbol "ASND". For more information on Ascendant, please visit our website at www.ascendantresources.com.

Additional information relating to the Company, including the Preliminary Economic Assessment referenced in this news release, is available on SEDAR at www.sedar.com.

Neither the Toronto Stock Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX) accepts responsibility for the adequacy or accuracy of this release.

For further information please contact:

Mark Brennan	Nicholas Campbell, CFA
CEO, Executive Chairman, Founder	Manager, Corporate Development
Tel: +1-647-796-0023	Tel: +1-905-630-0148
mbrennan@ascendantresources.com	ncampbell@ascendantresources.com

Forward Looking Information

This news release contains "forward-looking statements" and "forward-looking information" (collectively, "forward-looking information") within the meaning of applicable Canadian securities legislation. All information contained in this news release, other than statements of current and historical fact, is forward-looking information. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "budget", "guidance", "scheduled", "estimates", "forecasts", "strategy", "target", "intends", "objective", "goal", "understands", "anticipates" and "believes" (and variations of these or similar words) and statements that certain actions, events or results "may", "could", "would", "should", "might" "occur" or "be achieved" or "will be taken" (and variations of these or similar expressions). Forward-looking information is also identifiable in statements of currently occurring matters which may continue in the future, such as "providing the Company with", "is currently", "allows/allowing for", "will advance" or "continues to" or other statements that may be stated in the present tense with future implications. All of the forward-looking information in this news release is qualified by this cautionary note.

Forward-looking information in this news release includes, but is not limited to, statements regarding the exploration activities and the results of such activities at the Lagoa Salgada Project, the ability of the Company to advance the Lagoa Salgada Project to a Preliminary Economic Assessment, and the ability of the Company to fund the exploration with funds from operations. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by Ascendant at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information. The material factors or assumptions that Ascendant identified and were applied by Ascendant in drawing conclusions or making forecasts or projections set out in the forward-looking information include, but are not limited to, the success of the exploration activities at Lagoa Salgada Project, the Company advancing the project to a Preliminary Economic Assessment, the ability of the Company to fund the exploration program at Lagoa Salgada with funds from operations, and other events that may affect Ascendant's ability to develop its project; and no significant and continuing adverse changes in general economic conditions or conditions in the financial

markets.