

NEWS RELEASE

September 3rd, 2021

Trading Symbols:

TSX: AMM; NYSE American: AAU

www.almadenminerals.com

Almaden Provides Update on Drill Program at the Ixtaca Property

Vancouver, B.C. Almaden Minerals Ltd. (“Almaden” or “the Company”; TSX: AMM; NYSE American: AAU) reports that, given the perceived rise in the number of COVID-19 cases in the municipality of Ixtacamaxtitlán, it has elected to pause drilling for two weeks out of an abundance of caution.

Although none of the drilling or core logging and processing teams have tested positive for the virus, several COVID cases have been detected by the Company’s COVID protocols among members of the Company’s local staff. These people are now in quarantine. The Company is liaising with local health authorities and leaders to ascertain how it can assist authorities in the area.

To date the Company has completed one hole at the Southeast Alteration Zone, to a depth of 785 metres. Core has already been split and sent for assay. Results will be shared once they are received and assessed.

Morgan J. Poliquin, Ph.D., P. Eng., President and CEO of Almaden, and a Qualified Person as defined by National Instrument 43-101 (“NI 43-101”), has reviewed and approved the scientific and technical contents of this news release.

About Almaden

Almaden Minerals Ltd. owns 100% of the Ixtaca project in Puebla State, Mexico, subject to a 2.0% NSR royalty held by Almadex Minerals Ltd. The Ixtaca deposit hosts a proven and probable reserve containing 1.38 million ounces of gold and 85.1 million ounces of silver (73.1 million tonnes grading 0.59 g/t Au and 36.3 g/t Ag). A report titled “Ixtaca Gold-Silver Project, Puebla State, Mexico NI 43-101 Technical Report on the Feasibility Study”, which was prepared in accordance with NI 43-101, is available under the Company’s profile on SEDAR and on the Company’s website. The Ixtaca Gold-Silver Deposit was discovered by Almaden in 2010.

On Behalf of the Board of Directors,

“J. Duane Poliquin”

J. Duane Poliquin, P. Eng

Chairman

Almaden Minerals Ltd.

Forward Looking Statements

Certain of the statements and information in this news release constitute “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 and “forward-looking information” within the meaning of applicable Canadian provincial securities laws. All statements, other than statements of historical fact, are forward-looking statements or information. Forward-looking statements or information in this news release relate to, among other things: the outcome or nature of any exploration programs at Ixtaca, the

timeframe during which drilling will be paused and the ability of the Company to comply with COVID-19 related health protocols.

These forward-looking statements and information reflect the Company's current views with respect to future events and are necessarily based upon a number of assumptions, including assumptions that, while considered reasonable by the Company, are inherently subject to significant legal, regulatory, business, operational and economic uncertainties and contingencies, and such uncertainty generally increases with longer-term forecasts and outlook. These assumptions include: the number of COVID-19 cases in the municipality of Ixtacamaxtitlán and within the Company's local staff; stability and predictability in Mexico's health, safety, mineral tenure, mining, environmental and agrarian laws and regulations, as well as their application and judicial decisions thereon; continued respect for the rule of law in Mexico; prices for gold, silver and base metals remaining as estimated; currency exchange rates remaining as estimated; availability of funds; capital, decommissioning and reclamation estimates; mineral reserve and resource estimates; prices for energy inputs, labour, materials, supplies and services (including transportation); no labour-related disruptions; all necessary permits, licenses and regulatory approvals being received in a timely manner; the ability to secure and maintain title and ownership to properties and the surface rights necessary for operations; community support in the Ixtaca Project; and the ability to comply with environmental, health and safety laws. The foregoing list of assumptions is not exhaustive.

The Company cautions the reader that forward-looking statements and information involve known and unknown risks, uncertainties and other factors that may cause actual results and developments to differ materially from those expressed or implied by such forward-looking statements or information contained in this news release. Such risks and other factors include, among others, risks related to: access to healthcare and rates of COVID-19 vaccination in Mexico; political risk in Mexico; crime and violence in Mexico; corruption; environmental risks, including environmental matters under Mexican laws and regulations; impact of environmental impact assessment requirements on the Company's planned exploration and development activities on the Ixtaca Project; certainty of mineral title and the outcome of litigation; community relations; governmental regulations and the ability to obtain necessary licences and permits; risks related to mineral properties being subject to prior unregistered agreements, transfers or claims and other defects in title; changes in mining, environmental or agrarian laws and regulations and changes in the application of standards pursuant to existing laws and regulations which may increase costs of doing business and restrict operations; as well as those factors discussed the section entitled "Risk Factors" in Almaden's Annual Information Form and Almaden's latest Form 20-F on file with the United States Securities and Exchange Commission in Washington, D.C. Although the Company has attempted to identify important factors that could affect the Company and may cause actual actions, events or results to differ materially from those described in forward-looking statements or information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that our forward-looking statements or information will prove to be accurate. Accordingly, readers should not place undue reliance on forward-looking statements or information. Except as required by law, the Company does not assume any obligation to release publicly any revisions to on forward-looking statements or information contained in this news release to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

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