

PRESS RELEASE

**Denison Announces Exclusive Acquisition of MaxPERF Tool Systems,
Enhancing Denison’s Leadership in ISR Mining in the Athabasca Basin**

Toronto, ON – February 26, 2024. Denison Mines Corp. (“Denison”) (TSX: DML, NYSE American: DNN) is pleased to announce that it has completed an acquisition of fixed and mobile MaxPERF Tool Systems from Penetrators Canada Inc. (“Penetrators”). Significantly, Penetrators has also agreed to work exclusively with Denison with respect to the use of the MaxPERF Tool Systems for uranium mining applications, and related services, in Saskatchewan for a 10-year period.

David Cates, Denison’s President & CEO, commented, ***“We are pleased to enter into this exclusive arrangement with Penetrators and add the MaxPERF technology to Denison’s in-house ISR mining toolkit, which we believe will further enhance our existing and significant competitive advantage in deploying the low-cost In-Situ Recovery (‘ISR’) mining method to our high-grade uranium deposits in the Athabasca Basin.”***

Chad Sorba, Denison’s Vice President Technical Services & Project Evaluation, added, ***“With Denison on track to operate the first ISR uranium mine in the Athabasca Basin region, the acquisition of the MaxPERF Tool Systems represents another important step in our preparations for project execution and commercial ISR mining. MaxPERF has historically been used in the oil and gas sector and was identified by Denison as a potentially useful tool for permeability enhancement to support ISR mining. In 2023, Denison completed a ground-breaking multi-year technical de-risking program at the Company’s Phoenix deposit, which rigorously assessed and successfully applied the MaxPERF system to enhance deposit permeability – including its deployment as part of the highly successful Feasibility Field Test program. Given the demonstrated success of the technology, we look forward to continuing to work together with the team at Penetrators to use MaxPERF in this new commercial application.”***

Dwayne West, President of Penetrators, further commented, ***“Denison’s ISR uranium mining technique is an outstanding application for the MaxPERF technology – permeability exposure that will be exploited for both injectivity and productivity purposes. Penetrators is very pleased with the relationship we have built with Denison and this partnership is a positive next step.”***

Permeability enhancement techniques, such as the use of the MaxPERF tool, are designed to improve hydraulic responses and inter-well connectivity within an ISR mining pattern, essentially engineering additional access to the natural permeability within the deposit. The MaxPERF tool has been successfully deployed several times as a method of permeability enhancement in ISR field studies conducted on the Company’s potential ISR mining projects, including at Denison’s flagship Phoenix uranium deposit.

About Denison

Denison is a uranium exploration and development company with interests focused in the Athabasca Basin region of northern Saskatchewan, Canada. Denison has an effective 95% interest in its flagship Wheeler River Uranium Project, which is the largest undeveloped uranium project in the infrastructure rich eastern portion of the Athabasca Basin region of northern Saskatchewan. In mid-2023, a Feasibility Study was completed for Wheeler River’s Phoenix deposit as an ISR mining operation, and an update to the previously prepared PFS was completed for Wheeler River’s Gryphon deposit as a conventional underground mining operation. Based on the respective studies, both deposits have the potential to be competitive with the lowest cost uranium mining operations in the world. Permitting efforts for the planned Phoenix ISR operation commenced in 2019 and have advanced significantly, with licensing in progress and a draft Environmental Impact Statement submitted for regulatory and public review in October 2022.

Denison's interests in Saskatchewan also include a 22.5% ownership interest in the McClean Lake Joint Venture, which owns several uranium deposits and the McClean Lake uranium mill that is contracted to process the ore from the Cigar Lake mine under a toll milling agreement, plus a 25.17% interest in the Midwest Main and Midwest A deposits and a 67.41% interest in the Tthe Heldeth T   (  THT  ) and Huskie deposits on the Waterbury Lake property. The Midwest Main, Midwest A, THT and Huskie deposits are located within 20 kilometres of the McClean Lake mill.

Through its 50% ownership of JCU (Canada) Exploration Company, Ltd (  JCU  ), Denison holds additional interests in various uranium project joint ventures in Canada, including the Millennium project (JCU, 30.099%), the Kiggavik project (JCU, 33.8118%) and Christie Lake (JCU, 34.4508%).

Denison's exploration portfolio includes further interests in properties covering ~285,000 hectares in the Athabasca Basin region.

About Penetrators

Penetrators is a privately owned, oil & gas industry service company, incorporated in Alberta in 1990 and is headquartered in Red Deer, Alberta.

Penetrators has developed the MaxPERF Drilling Tool technology – a hydraulically actuated, mechanical tool designed to mill wellbore casing and drill lateral tunnels into a formation pay-zone of interest, from an existing wellbore. The MaxPERF method of removing formation material through a rotary drilling technique offers production companies a unique ability to expose the pay-zone's permeability & porosity, thus providing unparalleled exposure to the pay-zone compared to other conventional industry techniques.

For further information regarding Penetrators, please contact Dwayne West at (403) 346-7474 or visit the company's website at maxperf.ca.

For more information, please contact:

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Qualified Persons

The technical information contained in this release has been reviewed and approved by Mr. Chad Sorba, P.Geo, Denison's Vice President Technical Services & Project Evaluation, a Qualified Person in accordance with the requirements of Canadian National Instrument 43-101 Mineral Disclosure Standards.

Cautionary Statement Regarding Forward-Looking Statements

Certain information contained in this press release constitutes "forward-looking information", within the meaning of the United States Private Securities Litigation Reform Act of 1995 and similar Canadian legislation concerning the business, operations and financial performance and condition of Denison. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or the negatives and/or variations of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur", "be achieved" or "has the potential to". In particular, this press release contains forward-looking information pertaining to the following: the anticipated services Penetrators may provide and the objectives to be achieved with the MaxPERF acquisition; and Denison's percentage interest in its properties and its plans and agreements with its joint venture partners.

Forward looking statements are based on the opinions and estimates of management as of the date such statements are made, and they are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Denison to be materially different from those expressed or implied by forward-looking

statements. Denison believes that the expectations reflected in this forward-looking information are reasonable but no assurance can be given that these expectations will prove to be accurate and may differ materially from those anticipated in this forward looking information.

For a discussion in respect of risks and other factors that could influence forward-looking events, please refer to the factors discussed in Denison's Annual Information Form dated March 27, 2023 under the heading "Risk Factors". These factors are not, and should not be construed as being, exhaustive.

Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking information contained in this press release is expressly qualified by this cautionary statement. Any forward-looking information and the assumptions made with respect thereto speaks only as of the date of this press release. Denison does not undertake any obligation to publicly update or revise any forward-looking information after the date of this press release to conform such information to actual results or to changes in Denison's expectations except as otherwise required by applicable legislation.