

PRESS RELEASE

Denison Reports Financial and Operational Results for Q1 2024

Toronto, ON – May 8, 2024. Denison Mines Corp. ('Denison' or the 'Company') (TSX: DML, NYSE American: DNN) today filed its Condensed Consolidated Financial Statements and Management's Discussion & Analysis ('MD&A') for the quarter ended March 31, 2024. Both documents will be available on the Company's website at www.denisonmines.com, SEDAR+ (at www.sedarplus.ca) and EDGAR (at www.sec.gov/edgar.shtml). The highlights provided below are derived from these documents and should be read in conjunction with them. All amounts in this release are in Canadian dollars unless otherwise stated.

David Cates, President and CEO of Denison commented, "*This year, Denison commemorates its 70th year of uranium mining, exploration, and development. Denison's long history in uranium mining has been characterized by strategic vision, technological advancement, and an entrepreneurial drive to accomplish things others thought impossible. Modern Denison's defining moment can be traced to a decision, from approximately 15-years ago, to reposition the Company away from a high-cost global expansion platform to focus on the exploration and development of high-grade uranium deposits in the Athabasca Basin region of northern Saskatchewan. This strategy built on Denison's discovery of the Phoenix deposit in 2008 and demonstrated a steadfast conviction that uranium and nuclear energy would be recognized as an essential source of baseload power generation in the long-run – offering an unrivaled combination of emission-free energy and energy security.*

Our tireless efforts to advance the Company's strategy, and complete technical evaluations of our flagship Wheeler River project, led to the bold selection of the In-Situ Recovery ('ISR') mining method for the Phoenix deposit in 2018, and have put us in a position where we are nearing a final investment decision to proceed with the construction of potentially one of the lowest-cost uranium mines in the world. In Q1'2024 we made several important steps towards this objective, including the transition from Front-End Engineering Design to detailed design, and the exclusive acquisition of MaxPERF tooling systems, which are expected to support our industry leading deployment of the low-cost ISR mining method in the Athabasca Basin.

Denison's portfolio of uranium reserves, resources, and physical holdings has greatly appreciated in value through late 2023 and into early 2024, as positive sentiment in the uranium and nuclear energy markets has sustained and uranium prices have rapidly increased. As Denison has avoided entering low-priced uranium supply contracts in recent years and has held its physical uranium investment to support future project financing efforts for Phoenix, we are now in an enviable spot with significant uncommitted uranium production and physical holdings potentially available to the market at time of expected scarcity. Taken together with continued geopolitical instability and the expected emergence of significant additional demand from new nuclear builds, it is an ideal time for our Company to be readying to build a low-cost Saskatchewan-based uranium mine.

As we celebrate Denison's legacy of uranium mining in 2024, we look forward to marking this year with several additional notable milestones from our exciting portfolio of Saskatchewan-based uranium mining, exploration, and development projects."

Highlights

- **Transition to Detailed Design Engineering for Flagship Phoenix ISR Project with Award of \$16 Million Contract to Wood**

In January 2024, Denison awarded a contract for approximately \$16 million to Wood Canada Limited ('Wood'), for the completion of detailed design engineering for the In-Situ Recovery ('ISR') mining project planned for the Phoenix uranium deposit ('Phoenix').

Wood completed a Feasibility Study ('Phoenix FS') in 2023 to evaluate the use of the ISR mining method at Phoenix, the results of which reflected several years of technical de-risking efforts successfully completed by Denison and demonstrated robust economics. Following completion of the Phoenix FS, Denison's Board of Directors approved the continuation of efforts to advance Phoenix towards a final investment decision ('FID') and, in late 2023, the Management Committee of the Wheeler River Joint Venture approved a budget for the applicable 2024 expenditures, including detailed engineering design.

The scope of the facilities to be designed by Wood under the contract is extensive, with work commencing in the first quarter of 2024 and potentially extending into the first half of 2025.

▪ **Announcement of Planned Restart of McClean Lake Mining Operations**

In January 2024, Orano Canada Inc. ('Orano Canada') and Denison announced the planned restart of uranium mining operations on the McClean Lake property. Mining is expected to be carried out using the joint venture's patented Surface Access Borehole Resource Extraction ('SABRE') mining method and is planned to commence at the McClean North deposit in 2025. Activities in 2024 are intended to be focused on completing the preparations necessary to ready the existing SABRE mining site and equipment for continuous commercial operations, as well as the installation of eight pilot holes for the first mining cavities planned for excavation. The approved budget for this work in 2024 is \$7.0 million (100% basis). Approximately 800,000 pounds U_3O_8 (100% basis) are targeted for production from McClean North in 2025, with approximately 3,000,000 pounds U_3O_8 (100% basis) identified for potential additional production from a combination of the McClean North and Caribou deposits during the years 2026 to 2030.

▪ **Signing of Sustainable Communities Investment Agreement**

In March 2024, Denison signed a Sustainable Communities Investment Agreement with the municipalities of the Northern Village of Beauval, the Northern Village of Île-à-la-Crosse, the Northern Hamlet of Jans Bay, and the Northern Hamlet of Cole Bay (the 'Communities').

The agreement with the Communities establishes commitments of Denison in support of community development initiatives, with consideration towards contributing to the current and future economic prosperity and sustainability of the Communities by promoting economic development and investments in capital projects, job creation and training, housing, education, and other initiatives.

As part of the agreement, the Communities have provided their consent and support for the Wheeler River project and have committed, amongst other things, to support all regulatory approvals issued for the project related to exploration, evaluation, development, operation, reclamation, and closure activities.

▪ **Acquisition of MaxPERF Tool Systems**

In February 2024, the Company announced an acquisition of fixed and mobile MaxPERF Tool Systems from Penetrators Canada Inc. ('Penetrators'). The MaxPERF Tool Systems have 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 Phoenix. Penetrators has also agreed to work exclusively with Denison for a 10-year period with respect to the use of the MaxPERF Tool Systems for uranium mining applications, and related services, in Saskatchewan.

▪ **Sale of Uranium**

In April 2024, Denison completed the sale of 100,000 pounds of U_3O_8 from its physical uranium holdings, at a price of US\$100.00 per pound. The sale was agreed in January 2024, and is part of the Company's plans to sell approximately 300,000 pounds U_3O_8 from its physical uranium holdings during 2024. Denison acquired its physical uranium position in 2021 at an average cost of US\$29.65 per pound U_3O_8 .

▪ **Earn-In Agreement with Grounded Lithium Corp.**

In January 2024, Denison entered into an agreement with Grounded Lithium Corp. ('Grounded Lithium') to acquire up to a 75% interest in the Kindersley Lithium Project ('KLP') in Saskatchewan. The agreement includes a series of earn-in options, with each earn-in option requiring a cash payment to Grounded

Lithium as well as work expenditures to advance the KLP. Should Denison complete all three earn-in options, it will have made cumulative cash payments to Grounded Lithium of \$3.2 million and have funded \$12.0 million in project expenditures to earn a 75% interest in the KLP. The Company is currently evaluating its 2024 plans and will update its outlook for the year once the plan has been finalized.

About Denison

Denison Mines Corp. was formed under the laws of Ontario and is a reporting issuer in all Canadian provinces and territories. Denison's common shares are listed on the Toronto Stock Exchange (the 'TSX') under the symbol 'DML' and on the NYSE American exchange under the symbol 'DNN'.

Denison is a uranium mining, exploration and development company with interests focused in the Athabasca Basin region of northern Saskatchewan, Canada. The Company 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, the Phoenix FS was completed for the Phoenix deposit as an ISR mining operation, and an update to the previously prepared 2018 Pre-Feasibility Study ('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 Study ('EIS') 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 ('MLJV'), which includes unmined uranium deposits (planned for extraction via the MLJV's SABRE mining method starting in 2025) and the McClean Lake uranium mill (currently utilizing a portion of its licensed capacity to process the ore from the Cigar Lake mine under a toll milling agreement), plus a 25.17% interest in the Midwest Joint Venture ('MWJV')'s Midwest Main and Midwest A deposits, and a 69.35% interest in the Tthe Heldeth Túé ('THT') and Huskie deposits on the Waterbury Lake Property ('Waterbury'). The Midwest Main, Midwest A, THT and Huskie deposits are located within 20 kilometres of the McClean Lake mill. Taken together, the Company has direct ownership interests in properties covering ~384,000 hectares in the Athabasca Basin region.

Additionally, through its 50% ownership of JCU (Canada) Exploration Company, Limited ('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%).

In 2024, Denison is celebrating its 70th year in uranium mining, exploration, and development, which began in 1954 with Denison's first acquisition of mining claims in the Elliot Lake region of northern Ontario.

Technical Disclosure and Qualified Person

The technical information contained in this press release has been reviewed and approved by Chad Sorba, P.Geol., Denison's Vice President Technical Services & Project Evaluation, and Andy Yackulic, P.Geol., Denison's Vice President Exploration, who are both Qualified Persons in accordance with the requirements of NI 43-101.

For more information, please contact

David Cates (416) 979-1991 ext. 362
President and Chief Executive Officer

Geoff Smith (416) 979-1991 ext. 358
Vice President Corporate Development & Commercial

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain information contained in this press release constitutes 'forward-looking information', within the meaning of the applicable United States and 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: projections with respect to exploration, development and expansion plans and objectives, including the scope, objectives and interpretations of FS, PFS and the Wheeler River technical de-risking process for the proposed ISR operation for the Phoenix deposit; expectations with respect to the EA and EIS; expectations regarding the restart of mining operations at McClean Lake; Denison's plans with respect to its physical uranium holdings; expectations regarding the performance of the uranium market and global sentiment regarding nuclear energy; expectations regarding Denison's joint venture ownership interests; and expectations regarding the continuity of its agreements with third parties. Statements relating to 'mineral reserves' or 'mineral resources' are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral reserves and mineral resources described can be profitably produced in the future.

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, level of activity, performance or achievements of Denison to be materially different from those expressed or implied by such forward-looking statements. For example, the results and underlying assumptions and interpretations of the FS and PFS may not be maintained after further testing or be representative of actual conditions within the applicable deposits. In addition, Denison may decide or otherwise be required to discontinue testing, evaluation, engineering, and development work if it is unable to maintain or otherwise secure the necessary approvals or resources (such as testing facilities, capital funding, etc.). 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 results 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 the Company's Annual Information Form dated March 28, 2024 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.