Denison Mines Corp.
1100 – 40 University Ave
Toronto, ON M5J 1T1
www.denisonmines.com

PRESS RELEASE

Denison Reports Financial and Operational Results for Q2 2025, Highlighted by Return to Uranium Production at McClean Lake and Provincial Approval of Wheeler River Environmental Assessment

Toronto, ON – August 7, 2025. 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 three and six months ended June 30, 2025. 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). 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 summer has been highly productive for Denison. We've achieved key milestones at McClean Lake and Wheeler River and delivered results on multiple projects that showcase the potential to add value within our portfolio of leading Athabasca Basin development projects.*

We marked our return to uranium production and inaugurated a new source of Canadian uranium, with the newly commissioned McClean North SABRE mine commencing mining operations in June and the McClean Lake mill processing the first recovered ore and packaging finished yellowcake product in July. We look forward to further reporting on the results from the McClean Lake Joint Venture in the coming quarters and marketing our share of production.

At our flagship Wheeler River project, the Province of Saskatchewan issued a Ministerial Approval for the Environmental Assessment ('EA'), which approval represents one of the final regulatory milestones necessary for Denison to commence construction of the planned Phoenix In-Situ Recovery ('ISR') mine. The Canadian Nuclear Safety Commission ('CNSC') has already scheduled public hearings for Wheeler River this fall, where we will seek to obtain approval of the Federal EA and the Federal License to Prepare the Site & Construct. After several years of permitting efforts, we are now truly in the final months of the process. Similarly, our engineering design efforts are nearing completion, with 80% total engineering completed, including several scopes planned for the first year of construction approaching 100% total engineering.

We also reported positive exploration results at Wheeler River's Gryphon deposit, where we carried out the first follow-up drill program since 2018. While the focus of the program was on mineral resource delineation, we also tested a handful of resource expansion targets and are very pleased that drilling has identified additional high-grade mineralization beyond the defined extent of the D-series of lenses.

Lastly, in recent days we reported the results of a Preliminary Economic Assessment ('PEA') for the use of ISR mining at the Midwest Joint Venture's Midwest Main deposit. The PEA incorporates results from multiple successful field test programs and outlines the potential for the project to have an all-in cost of production amongst the lowest cost uranium mines in the world, generating an impressive internal rate of return over 80% and an NPV attributable to Denison's ownership interest of over $240 million."

Highlights

- **Announced First Production at McClean Lake North using SABRE Mining**

  In July 2025, the McClean Lake Joint Venture ('MLJV') announced the successful start of uranium mining operations at the McClean North deposit using the joint venture's patented Surface Access Borehole Resource Extraction ('SABRE') mining method. Mining operations commenced in June, with approximately 250 tonnes of high-grade ore estimated to have been recovered from the first mining cavity. Processing of recovered ore commenced at the McClean Lake mill in the third quarter.

- **Obtained Provincial Approval of Environmental Assessment for Wheeler River**

  In July 2025, Denison received Ministerial approval under *The Environmental Assessment Act* of Saskatchewan to proceed with the development of the Wheeler River Uranium Project, as outlined in the final provincial Environmental

Assessment submitted for final approval in late 2024. The provincial EA is substantially similar to the Federal EA, which was accepted as final by the Canadian Nuclear Safety Commission in December 2024. Approval of the provincial EA represents one of the final regulatory milestones necessary for Denison to commence construction of the planned Phoenix In-Situ Recovery ('ISR') mine.

Remaining regulatory requirements to commence construction include receipt of the Provincial Pollutant Control Facility Permit, as well as the Federal approval of the EA and receipt of the Federal License to Prepare the Site & Construct. Both outstanding Federal approvals are the subject of the CNSC public hearings scheduled for the Project in October and December 2025.

- **Achieved Approximately 80% Completion of Total Engineering for Phoenix**

  Detailed design engineering for the proposed ISR mine project at the Phoenix deposit ('Phoenix') commenced in early 2024 and continues to be on track for substantial completion prior to the commencement of construction, which is currently expected to occur following a final investment decision ('FID') during the first half of 2026.

  Total engineering is significantly advanced with approximately 80% estimated to be completed by June 30, 2025, including several scopes planned for the first year of construction approaching 100% total engineering.

- **Discovery of Additional High-Grade Mineralization at Wheeler River Gryphon Deposit**

  Additional high-grade uranium mineralization, located approximately 40 metres outside of the previously estimated mineralized domain associated with the D1 lens, was discovered as part of a highly successful delineation drill program carried out at the Gryphon uranium deposit ('Gryphon') during the first half of 2025. Drill hole WR-837AD2 intersected 2.3 metres at 1.69% eU_3O_8 including 0.5 metres at 5.48% eU_3O_8 in the down plunge direction from the previously defined D1 lens. This area remains open for further expansion down-plunge and along strike to the northeast.

  Gryphon is situated approximately 3 km northwest of Phoenix on Denison's 95% owned Wheeler River property in northern Saskatchewan. In addition to the discovery of additional mineralization, the results from the delineation drilling program are expected to add confidence to the previously estimated mineral resources for Gryphon, having confirmed the geological interpretation of the deposit and intersecting uranium grades in line with expectations.

- **Midwest Preliminary Economic Assessment Showcases Robust Results from ISR Mining**

  The PEA outlines total ISR mine production from the Midwest Main deposit (100% basis) of 37.4 million pounds U_3O_8 over an approximately 6-year mine life with processing at the nearby McClean Lake mill, resulting in annual average production of nearly 6.1 million pounds U_3O_8, an after-tax base-case NPV of $965 million, and after-tax base-case IRR of 82.7%. Initial capital costs are estimated at $254 million, with average life of mine cash operating costs estimated to be USD$11.69/lb. U_3O_8 and all-in costs (including initial capital, sustaining capital, operating and decommissioning costs) estimated to be USD$25.78/lb. U_3O_8. See the press release dated August 6, 2025 for further details.

  Midwest is a joint venture owned by Denison (25.17%) and Orano Canada Inc. ('Orano Canada') (74.83%), and is located approximately 25 kilometers, by existing roads, from the Denison (22.5%) and Orano Canada (77.5%) owned McClean Lake uranium mill.

  The PEA is preliminary in nature, includes mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would allow them to be categorized as mineral reserves, mineral resources that are not mineral reserves do not have demonstrated economic viability, and there is no certainty that the PEA will be realized.

- **Discovery of Additional High-Grade Mineralization at McClean South**

  Several significant new intercepts of shallow high-grade uranium mineralization were discovered at the McClean South zone ('McClean South'), on the Company's 22.5%-owned McClean Lake project ('McClean Lake') in northern Saskatchewan, during a 6,400-metre exploration drilling program completed during the first half of 2025. Orano Canada (MLJV operator), reported uranium mineralization measuring greater than 0.05% eU (0.06% eU_3O_8) was intersected in 14 of 24 drill holes completed during the program. The results are interpreted to have successfully confirmed the continuity of mineralization and expanded the footprint of the 8W and 8C pods. McClean South is located approximately 600 metres south of the McClean North deposit.

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 leading uranium mining, development, and exploration 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, the Phoenix feasibility study was completed for the Phoenix deposit as an ISR mining operation, and an update to the previously prepared 2018 Pre-Feasibility Study 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 are nearing completion with approval of the project's EA received from the Province of Saskatchewan and CNSC hearing dates set in the fall of 2025 for Federal approval of the EA and project construction license.

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 Midwest Main and Midwest A deposits, and a 70.55% interest in the Tthe Heldeth Túé ('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. Taken together, Denison 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 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 celebrated 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.Geo., Denison's Vice President Technical Services & Project Evaluation, who is a 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

Follow Denison on Twitter — @DenisonMinesCo

Non-GAAP Financial Measures

This news release includes certain terms or performance measures commonly used in the mining industry that are not defined under International Financial Reporting Standards ('IFRS'). Such non-GAAP performance measures, including operating costs and sustaining costs, are included because it understands that investors use this information to determine the Company's ability to generate earnings and cash flows. The Company believes that conventional measures of performance prepared in accordance with IFRS do not fully illustrate the ability of mines to generate cash flows. Non-GAAP financial measures should not be considered in isolation as a substitute for measures of performance prepared in accordance with IFRS and are not necessarily indicative of operating costs, operating profit or cash flows presented under IFRS.

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 the Phoenix feasibility study, Gryphon pre-feasibility study, and the Wheeler River engineering and technical de-risking process for the proposed ISR operation for the Phoenix deposit; expectations with respect to the EA and Licensing and permitting for proposed operations at Wheeler River, including the CNSC public hearings; expectations with respect to mine development and operations on the Wheeler River property, including discussions of an FID and timing for construction and achievement of first production; expectations regarding the restart of mining operations at, and production from, McClean Lake; projections and expectations with respect to the Company's other projects, including those assumed and interpreted for the Midwest PEA; expectations regarding the performance of the uranium market and global sentiment regarding nuclear energy; and expectations regarding Denison's joint venture ownership interests. 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 its technical studies 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 Annual Information Form dated March 25, 2025 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.

Cautionary Note to United States Investors Concerning Estimates of Mineral Resources and Mineral Reserves:

This news release may use the terms 'measured', 'indicated' and 'inferred' mineral resources. United States investors are advised that such terms have been prepared in accordance with the definition standards on mineral reserves of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in NI 43-101 and are recognized and required by Canadian regulations. 'Inferred mineral resources' have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. United States investors are cautioned not to assume that all or any part of an inferred mineral resource exists and/or will ever be upgraded to a higher category, nor assume that all or any part of measured or indicated mineral resources will ever be converted into mineral reserves.

Effective February 2019, the United States Securities and Exchange Commission ('SEC') adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the Exchange Act and as a result, the SEC now recognizes estimates of 'measured mineral resources', 'indicated mineral resources' and 'inferred mineral resources'. In addition, the SEC has amended its definitions of 'proven mineral reserves' and 'probable mineral reserves' to be 'substantially similar' to the corresponding definitions under the CIM Standards, as required under NI 43-101. However, information regarding mineral resources or mineral reserves in Denison's disclosure may not be comparable to similar information made public by United States companies.