



PRESS RELEASE

DENISON REPORTS RESULTS FROM Q2 2019

Toronto, ON – August 8, 2019. Denison Mines Corp. ("Denison" or the "Company") (DML: TSX, DNN: NYSE MKT) today filed its Unaudited Consolidated Financial Statements and Management's Discussion & Analysis ("MD&A") for the quarter ended June 30, 2019. Both documents can be found on the Company's website at www.denisonmines.com or on SEDAR (at www.sedar.com) 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, "Through the summer months of 2019, Denison has remained focused on advancing its environmental assessment and feasibility study related efforts at Wheeler River. More broadly, within the uranium industry, a significant cloud of uncertainty was lifted when the Trump Administration declined to impose any trade restrictions on foreign uranium following a year-plus process to review a trade petition launched in the United States under Section 232 of the Trade Expansion Act of 1962.

During the second quarter, Denison marked the completion of the first formal step to commence the environmental impact assessment process, under both federal and provincial regimes, with the acceptance of the Company's Provincial Technical Proposal and Federal Project Description for an In-situ Recovery ('ISR') mining operation at the Company's Wheeler River Uranium Project. Field activities at Wheeler River ramped up through the end of the second quarter, and continue through the third quarter, with the launch of a first of its kind ISR Field Test in the Athabasca Basin. At the Phoenix deposit, we have now successfully completed the large majority of well installations planned for the summer ISR field test and we are transitioning our activities to carry out a variety of hydrogeological tests, designed to evaluate the ISR mining conditions – a critical step in de-risking the application of ISR mining outlined in the project's Pre-Feasibility Study completed in late 2018. Establishing hydraulic connections between test wells, as part of the field test, will provide meaningful validation for the selection of ISR and take us an important step closer to bringing the world's lowest-cost mining method for uranium (ISR) to the jurisdiction hosting the world's highest grade uranium deposits (the Athabasca Basin).

From an industry perspective, we are pleased with the Trump Administration's decision related to the 232 petition. This represents the completion of a lengthy review process, spurred by the filing of a trade petition in early 2018 seeking a quota to require US utilities to buy from American uranium producers. The variety of possible risks created by this process weighed on the uranium market for months, creating uncertainty amongst utility fuel buyers in the United States and globally. Denison believes in the importance of a free market and is opposed to any trade measures that would artificially increase the cost of uranium to US nuclear utilities, and thus make nuclear energy comparatively less competitive against other sources of energy. With the expected cost profile of our Wheeler River ISR operation, we are well positioned to compete with uranium producers from around the world to meet the growing future requirements of nuclear utilities."

PERFORMANCE HIGHLIGHTS

Commencement of ISR Field Testing at Wheeler River

During June 2019, the Company announced the commencement of ISR field testing, as part of an active summer 2019 field program planned for the Company's 90% owned Wheeler River Uranium Project in northern Saskatchewan, Canada. The ISR field test program is designed to collect an extensive database of hydrogeological data from the Phoenix deposit. The data will be used to evaluate the ISR mining conditions present at the deposit, and is expected to be incorporated into a detailed ISR mine plan, as part of the completion of a Feasibility Study ('FS') for the project. Other key components of the summer 2019 field program include the continuation and expansion of the collection of certain environmental baseline data to support the Environmental Impact Assessment ('EIA'), and an exploration drilling program focused on the follow-up and expansion of unconformity-hosted uranium mineralization intersected along the K-West trend.

Initiation of the EIA for Wheeler River

During June 2019, Denison announced that the Canadian Nuclear Safety Commission ('CNSC') and the Saskatchewan Ministry of Environment ('SK MOE') accepted the Provincial Technical Proposal and Federal Project

Description (the 'PD') submitted by Denison for the ISR uranium mining operation proposed for Wheeler River. Acceptance of the PD is the first formal step to commence the EIA process in accordance with the requirements of both the Canadian Environmental Assessment Act, 2012 ('CEAA 2012') and the Saskatchewan Environmental Assessment Act.

Execution of Memoranda of Understanding ('MOUs') with Local Communities for Wheeler River

As reported in the PD, Denison executed a series of MOUs, in support of the advancement of Wheeler River, with a number of Indigenous communities who assert that the project falls partially or entirely within their traditional territories, and where traditional land use activities are currently practiced within the local and regional area surrounding the project. These non-binding MOUs formalize the signing parties intent to work together in the spirit of mutual respect and cooperation in order to collectively identify practical means by which to avoid, mitigate, or otherwise address potential impacts of the project upon the exercise of Indigenous rights, Treaty rights, and other interests, as well as to facilitate sharing in the benefits that will flow from the project.

 GoviEx Uranium Inc. ('GoviEx') (15.41% Denison owned) achieves significant milestone on the Madaouela Project ('Madaouela'), entering into definitive agreements with the Republic of Niger

In July 2019, GoviEx announced that it had entered into definitive agreements with the Republic of Niger to finalize the commercial terms necessary to advance the development of Madaouela. As part of these agreements, the Republic of Niger receives a 10% working interest in Madaouela in exchange for the settlement of approximately USD\$14,500,000 in claims due by GoviEx to the state – implying a valuation for the Madaouela Project of USD\$145,000,000.

 Denison Environmental Services ('DES') renews cornerstone environmental services contract with BHP Group Limited ('BHP')

Effective July 1, 2019, DES entered into a new two-year services agreement with Rio Algom Limited, a subsidiary of BHP. Under the terms of the agreement, DES is responsible for carrying out the management and operation of nine of BHP's decommissioned mine sites in Ontario and Quebec.

About Wheeler River

Wheeler River is the largest undeveloped uranium project in the infrastructure rich eastern portion of the Athabasca Basin region, in northern Saskatchewan – including combined Indicated Mineral Resources of 132.1 million pounds U_3O_8 (1,809,000 tonnes at an average grade of 3.3% U_3O_8), plus combined Inferred Mineral Resources of 3.0 million pounds U_3O_8 (82,000 tonnes at an average grade of 1.7% U_3O_8). The project is host to the high-grade Phoenix and Gryphon uranium deposits, discovered by Denison in 2008 and 2014, respectively, and is a joint venture between Denison (90% and operator) and JCU (Canada) Exploration Company Limited (10%).

A pre-feasibility study ('PFS') was completed in late 2018, considering the potential economic merit of developing the Phoenix deposit as an ISR operation and the Gryphon deposit as a conventional underground mining operation. Taken together, the project is estimated to have mine production of 109.4 million pounds U_3O_8 over a 14-year mine life, with a base case pre-tax NPV of \$1.31 billion (8% discount rate), Internal Rate of Return ("IRR") of 38.7%, and initial pre-production capital expenditures of \$322.5 million. The Phoenix ISR operation is estimated to have a stand-alone base case pre-tax NPV of \$930.4 million (8% discount rate), IRR of 43.3%, initial pre-production capital expenditures of \$322.5 million, and industry leading average operating costs of US\$3.33/lb U_3O_8 . The PFS was prepared on a project (100% ownership) and pre-tax basis, as each of the partners to the Wheeler River Joint Venture are subject to different tax and other obligations.

Further details regarding the PFS, including additional scientific and technical information, as well as after-tax results attributable to Denison's ownership interest, are described in greater detail in the NI 43-101 Technical Report titled "Pre-feasibility Study for the Wheeler River Uranium Project, Saskatchewan, Canada" dated October 30, 2018 with an effective date of September 24, 2018. A copy of this report is available on Denison's website and under its profile on SEDAR at www.sedar.com and on EDGAR at www.sec.gov/edgar.shtml.

Readers should note that mineral resource tonnage information was previously omitted from the Company's public disclosures in the 'About Wheeler River' section of certain prior press releases. The Ontario Securities Commission advised the Company of this omission, which was observed in connection with a review of the Company's disclosure record. The information has been included herein, and will be included in all applicable future disclosures, in compliance with the requirements of National Instrument NI 43-101.

About Denison

Denison is a uranium exploration and development company with interests focused in the Athabasca Basin region of northern Saskatchewan, Canada. In addition to the Wheeler River project, Denison's Athabasca Basin exploration portfolio consists of numerous projects covering approximately 305,000 hectares. Denison's interests in the Athabasca Basin also include a 22.5% ownership interest in the McClean Lake joint venture ("MLJV"), which includes several uranium deposits and the McClean Lake uranium mill, which is currently processing ore from the Cigar Lake mine under a toll milling agreement, plus a 25.17% interest in the Midwest and Midwest A deposits, and a 66.51% interest in the J Zone and Huskie deposits on the Waterbury Lake property. Each of Midwest, Midwest A, J Zone and Huskie are located within 20 kilometres of the McClean Lake mill.

Denison is also engaged in mine decommissioning and environmental services through its Denison Environmental Services division and is the manager of Uranium Participation Corp., a publicly traded company which invests in uranium oxide and uranium hexafluoride.

Technical Disclosure and Qualified Person

The disclosure of scientific and technical information regarding Denison's properties in this news release was prepared or reviewed by Dale Verran, MSc, P.Geo., Pr.Sci.Nat., the Company's Vice President, Exploration, a Qualified Person in accordance with the requirements of NI 43-101.

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Investor Relations

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain information contained in this news 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 news release contains forward-looking information pertaining to the following: exploration, development and expansion plans and objectives, including the results of the PFS, commencement of ISR field testing, the initiation of the EIA and other plans for the regulatory and feasibility study processes for Wheeler River; expectations regarding Denison's joint venture ownership interests and the continuity of its agreements with its partners; the implied value of GoviEx's assets and the benefits to be derived by Denison as a result thereof; and expectations regarding the terms and continuity of, and revenues from, DES and the UPC management contract. 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. 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 Denison's Annual Information Form dated March 12, 2019 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 news 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 news release. Denison does not undertake any obligation to publicly update or revise any forward-looking information after the date of this news 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 Measured, Indicated and Inferred Mineral Resources and Probable Mineral Reserves: This news release may use the terms 'measured', 'indicated' and 'inferred' mineral resources. United States investors are advised that while 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 Canadian National Instrument 43-101 Mineral Disclosure Standards ("NI 43-101") and are recognized and required by Canadian regulations, the United States Securities and Exchange Commission ("SEC") does not recognize them. 'Inferred mineral resources' have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. 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 measured or indicated mineral resources will ever be converted into mineral reserves. United States investors are also cautioned not to assume that all or any part of an inferred mineral resource exists, or is economically or legally mineable. References to estimates of mineral reserves in this news release have been prepared in accordance with NI 43-101. The definition of probable mineral reserves used in NI 43-101 differs from the definition used by the SEC in the SEC's Industry Guide 7. Under the requirements of the SEC, mineralization may not be classified as a "reserve" unless the determination has been made, pursuant to a "final" feasibility study that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Denison has not prepared a feasibility study for the purposes of NI 43-101 or the requirements of the SEC. Accordingly, Denison's probable mineral reserves disclosure may not be comparable to information from U.S. companies subject to the reporting and disclosure requirements of the SEC.