

PRESS RELEASE**DENISON ACQUIRES 50% OF JCU (CANADA) EXPLORATION COMPANY, LIMITED AND INCREASES EFFECTIVE INTEREST IN WHEELER RIVER TO 95%**

Toronto, ON – Aug 3, 2021. Denison Mines Corp. (“Denison” or the “Company”) (TSX: DML, NYSE American: DNN) is pleased to announce the completion of its acquisition of 50% ownership of JCU (Canada) Exploration Company, Limited (“JCU”), from UEX Corporation (“UEX”), for cash consideration of \$20.5 million. Denison’s acquisition of a 50% interest in JCU occurred immediately following UEX’s acquisition of all the outstanding shares of JCU from Overseas Uranium Resources Development Co., Ltd. (“OURD”) for cash consideration of \$41 million.

David Cates, President and CEO of Denison, commented, ***“Denison is pleased to have acquired a 50% interest in JCU – which holds a unique and valuable portfolio of strategic Canadian uranium interests, including a 10% interest in Denison’s flagship Wheeler River project. We believe there is considerable value in JCU’s portfolio of assets and that this transaction is highly accretive for Denison shareholders.*”**

In addition to consolidating an effective 95% interest in Wheeler River, this acquisition expands Denison’s leading Athabasca Basin development portfolio to include additional important Canadian uranium development projects such as Millennium and Kiggavik.”

JCU’s Project Portfolio

JCU holds a portfolio of twelve uranium project joint venture interests in Canada, including a 10% interest in Denison’s 90% owned Wheeler River project, a 30.099% interest in the Millennium project (Cameco Corporation 69.901%), a 33.8123% interest in the Kiggavik project (Orano Canada Inc. 66.1877%), and a 34.4508% interest in the Christie Lake project (UEX 65.5492%).

Term Loan to UEX

Pursuant to Denison’s agreement with UEX (see press release dated June 15, 2021), Denison provided UEX with an interest-free 90-day term loan of \$40.95 million (the “Term Loan”) to facilitate UEX’s purchase of JCU from OURD. On the transfer of 50% of the shares in JCU from UEX to Denison, \$20.5 million of the amount drawn under the Term Loan was deemed repaid by UEX. Accordingly, UEX has currently drawn \$20.45 million under the Term Loan, which is due to Denison by November 1, 2021.

UEX may extend the Term Loan maturity by an additional 90 days (to January 30, 2022), in which case interest will be charged at a rate of 4% from the date of the initial advance under the Term Loan (August 3, 2021) until maturity. All of the shares of JCU owned by UEX will be held by Denison as security against the Term Loan pursuant to a pledge agreement until the Term Loan is repaid in full. The Term Loan is subject to certain customary terms and conditions and contains standard events of default that protect Denison.

Further details of the terms of the transaction are described in Denison’s June 15, 2021 press release and under Denison’s profile at www.sedar.com and www.sec.gov/edgar.

About Denison

Denison is a uranium 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. Denison's interests in Saskatchewan 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 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 66.90% interest in the Tthe Heldeth T   ("THT," formerly J Zone) and Huskie deposits on the Waterbury Lake property. Each of Midwest Main, Midwest A, THT and Huskie are located within 20 kilometres of the McClean Lake mill.

Through its 50% ownership of JCU (Canada) Exploration Company, Limited ("JCU"), Denison also holds interests in various uranium project joint ventures in Canada, including the Millennium project (JCU 30.099%), the Kiggavik project (JCU 33.8123%) and Christie Lake (JCU 34.4508%).

Denison is also engaged in mine decommissioning and environmental services through its Closed Mines group (formerly Denison Environmental Services), which manages Denison's Elliot Lake reclamation projects and provides post-closure mine care and maintenance services to a variety of industry and government clients.

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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: the terms of the Term Loan, including the conditions and other rights and obligations of the parties; and expectations regarding its joint venture ownership interests and the continuity of its agreements with its 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, 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 and 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 Annual Information Form dated March 26, 2021 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.