

PRESS RELEASE**Denison Announces \$15 million Strategic Investment in F3**

Toronto, ON – October 6, 2023. Denison Mines Corp. (“Denison”) (TSX: DML; NYSE American: DNN) is pleased to announce that it has entered into a binding agreement with F3 Uranium Corp. (“F3”) to make a \$15 million strategic investment in F3 in the form of unsecured convertible debentures (the “Debentures”).

David Cates, President and CEO of Denison commented, ***“F3’s technical team has an incredible track record of exploration success including the discovery of the JR Zone on the Patterson Lake North (“PLN”) property, which represents one of the top new uranium discoveries globally. We are pleased to be investing in F3, supporting the further assessment of the PLN property, and providing Denison shareholders with exposure to this exciting new discovery in the Athabasca Basin.”***

Dev Randhawa, CEO of F3 commented, ***“We are pleased to welcome Denison as a strategic investor in F3. Denison is a uranium industry leader, possessing a diverse array of both early and advanced-stage assets in the Athabasca Basin, where F3 is currently advancing the PLN property. We highly value Denison’s perspectives on uranium exploration, and look forward to pursuing a productive relationship.”***

Terms of the Debentures

The Debentures will carry a 9% coupon (the “Interest”), payable quarterly over a 5-year term and will be convertible at Denison’s option into common shares of F3 at a conversion price of \$0.56 per share (the “Conversion Price”), representing a 30% premium to F3’s five-day volume weighted average share price (“VWAP”) on the TSX Venture Exchange (the “TSXV”) as at October 5, 2023. F3 shall have, at its sole discretion, the right to pay up to one-third of the Interest in common shares of F3 issued at a price per common share equal to the VWAP of F3’s common shares on the TSXV for the 20 trading days ending on the day prior to the date on which such payment of Interest is due.

On or after the third anniversary of the date of issuance of the Debentures, at any time F3’s 20-day VWAP on the TSXV exceeds 130% of the Conversion Price, F3 will be entitled to redeem the Debentures at par plus accrued and unpaid Interest. Further, in the event of an F3 change of control transaction, F3 may redeem the Debentures at par plus accrued and unpaid interest plus an amount equal to the greater of (i) 15% of the principal amount of the Debentures being redeemed and (ii) the amount of remaining unpaid Interest that would be payable during the initial three-year term of the Debentures being redeemed.

The gross proceeds of the Debentures are to be used primarily for exploration and development of the PLN property and for F3’s general working capital purposes. The closing of the Debentures is expected to occur on or around October 18, 2023 and is subject to certain conditions including, but not limited to, the receipt by F3 of all necessary regulatory approvals, including the acceptance of the TSXV.

Advisors and Legal Counsel for the Transaction

Osler, Hoskin & Harcourt LLP is acting as legal counsel to Denison and Blake, Cassels & Graydon LLP is acting as legal counsel to F3. Canaccord Genuity Corp. is acting as financial advisor to Denison and Haywood Securities Inc. is acting as financial advisor to F3.

About F3

F3 Uranium is advancing the newly discovered high-grade JR Zone on the PLN Property in the Western Athabasca Basin. This area of Saskatchewan is poised to become a major uranium producing region and is home to large deposits including Triple R, Arrow and Shea Creek. F3 Uranium currently holds 18 projects across the Athabasca Basin.

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. In mid-2023, a Feasibility Study was completed for Wheeler River's Phoenix deposit as an In-Situ Recovery ('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 ('EIS') submitted for regulator and public review 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, 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 approximately 285,000 hectares in the Athabasca Basin region.

For more information, please contact:

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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 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 Denison's current intentions and objectives with respect to its investment in the F3 Debentures; the closing of the strategic investment and the satisfaction of the conditions precedent thereto; the intended use of proceeds by F3; F3's projects, objectives and assessments with respect to the JR Zone and PLN property; and expectations regarding Denison's joint venture ownership interests and the continuity of its agreements with its partners and third parties.

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 there can be no assurance that such statements 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 "Risk Factors" in Denison's Annual Information Form dated March 27, 2023 available under its profile at www.sedar.com and its Form 40-F available at www.sec.gov/edgar.shtml. 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 its expectations except as otherwise required by applicable legislation.