

PRESS RELEASE

DENISON ANNOUNCES APPOINTMENT OF RON HOCHSTEIN AS BOARD CHAIR AND WELCOMES NEW DIRECTORS

Toronto, ON – May 11, 2021. Denison Mines Corp. ("Denison" or the "Company") (DML: TSX, DNN: NYSE American) is pleased to announce the appointment of Mr. Ron F. Hochstein as Chair of the Board of Directors ("Board Chair"). Mr. Hochstein was elected Board Chair, and Mr. Brian Edgar was elected Lead Director, at a meeting of the Company's independent directors following the Company's Annual General Meeting. The Company is also pleased to welcome David Neuburger and Jennifer Traub to the Board of Directors.

Ron Hochstein, Denison's Board Chair, commented, "I am honoured to have been elected Chair of Denison's Board by the Company's independent directors. This is a very exciting and important time in the modern history of Denison – as the Company focuses on advancing its low-cost Phoenix In-Situ Recovery ('ISR') uranium development project, at a time when the uranium market is showing signs of a sustained recovery.

Navigating years of challenging uranium markets, with a view of building a sustainable low-cost uranium mining company, has taken great vision from the Company's Board and management. Accordingly, on behalf of the Board of Directors, I would like to thank Catherine Stefan and Jack Lundin for their contributions to the Board, and specifically express our appreciation to Ms. Stefan, the Company's outgoing Board Chair, for her legacy of leadership and oversight of the Company during her six year term as Chair and Lead Director and 17 year tenure as a Director of the Company and its predecessor Denison Mines Inc."

David Cates, Denison Director and President & CEO, added, "We are also pleased to welcome the addition of two highly qualified new Directors to join Denison's Board. Jennifer Traub serves as Co-Chair of the Mining Group at Cassels Brock & Blackwell LLP and has been recognized as a legal leader in the Canadian resource sector. Joining Jennifer as a new Director is Dave Neuburger. Few people have the same caliber of directly applicable technical experience that Dave brings to our Board – including previous executive oversight of Cameco's international ISR mining operations and various mining operations in the Athabasca Basin."

While both Mr. Hochstein and Mr. Edgar are considered by the Board to be independent, the appointment of Mr. Edgar as Lead Director is a corporate governance initiative designed to enhance the Company's overall governance practices by further capitalizing on the diversity of qualifications that each of Denison's directors brings to the Board – including Mr. Edgar's 30-plus years of experience serving on public company boards and 16 years of practice in corporate and securities law.

Ron Hochstein

Mr. Hochstein is currently the President and Chief Executive Officer of Lundin Gold Inc. ("Lundin Gold"), which owns and operates the high-grade and multi-million-ounce Fruta del Notre ("FDN") gold mine in southeast Ecuador. Under Mr. Hochstein's leadership, Lundin Gold acquired FDN in late 2014, completed a feasibility study, signed several agreements with the Ecuadorian Government, financed, and then constructed the mine and infrastructure on time and on schedule within five years – achieving first gold production in November 2019. Mr. Hochstein is a Professional Engineer and holds an MBA from the University of British Columbia and a B.Sc. from the University of Alberta. Mr. Hochstein has served as a director of Denison since April 2000, and sits on the Board of Lundin Gold (TSX, Nasdaq Stockholm) and Josemaria Resources Inc. (TSX, Nasdaq Stockholm).

<u>Brian Edgar</u>

Brian Edgar is the Chairman of Silver Bull Resources Inc., a mineral exploration company listed on the TSX and the OTC MKTS. Mr. Edgar holds a Bachelor of Arts degree and a Law degree, both from the University of British Columbia. Mr. Edgar practiced Corporate and Securities law in Vancouver, BC Canada for 16 years before retiring from the law in October 1992. Since that date, Mr. Edgar has served on the board of numerous private and public mining and oil & gas companies and had co-founded a private investment company, Rand Edgar Investment Corp. Mr. Edgar has served as a director of the Company since March 2005.

David Neuburger

David Neuburger is a corporate director and consultant, with more than 30 years of experience in executive leadership, operations management, corporate strategic planning, projects, and mine engineering for companies involved in uranium, gold, nickel and copper/zinc mining. From 2013 to 2018, Mr. Neuburger was Vice President, General Manager, Kupol Operations for Kinross Gold Corporation. Prior to that, Mr. Neuburger held the positions of Vice President, International Mining (2010 to 2013) at Cameco Corporation ("Cameco"), where he was responsible for oversight of Cameco's ISR mining operations and joint ventures in the United States and Kazakhstan and Vice President, Mining Division (2004 to 2010) with oversight of Cameco's uranium mining operations in the Athabasca Basin region of Northern Saskatchewan. Additionally, Mr. Neuburger has served as President and held other executive committee roles with the Saskatchewan Mining Association. Mr. Neuburger is a Professional Engineer registered in Saskatchewan, and holds B.Eng. (Mining) and B.Sc. (Biology) degrees from McGill University and an MBA from the University of Saskatchewan.

Jennifer Traub

Jennifer Traub is a partner in the Securities Group at Cassels Brock & Blackwell LLP and serves as Co-Chair of the firm's Mining Group. Ms. Traub represents both issuers and investment dealers in connection with M&A, public and private securities offerings and other financing transactions. She has particular expertise and experience in the resource sector and has played an integral role in managing some of the largest and most complex Canadian corporate finance and M&A transactions in the mining industry. In addition to transactional work, Ms. Traub regularly advises public companies regarding general corporate and securities law matters, including continuous disclosure, corporate governance and Canadian stock exchange issues. Ms. Traub is a member of the Law Societies of British Columbia and Ontario, has completed the Osgoode Certificate in Mining Law, and holds a Bachelor of Laws degree from Osgoode Hall Law School.

About Denison

Denison is a uranium exploration and development company with interests focused in the Athabasca Basin region of northern Saskatchewan, Canada. The Company's flagship project is the 90% owned 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 Túé ("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.

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.

For more information, please contact

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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 composition of the Denison Board; expectations regarding Denison's joint venture ownership interests and the continuity of its agreements with 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 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 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.