

PRESS RELEASE

DENISON ANNOUNCES 2018 EXPLORATION & EVALUATION PROGRAM FOCUSED ON HIGH PRIORITY PROPERTIES

Toronto, ON – January 17, 2018 Denison Mines Corp. (“Denison” or the “Company”) (TSX: DML) (NYSE MKT: DNN) (NYSE American: DNN) is pleased to announce the details of its CAD\$16.7 million (Denison’s share) exploration and evaluation budget for 2018. The budget will be mainly focused on the Company’s high priority projects, namely Wheeler River, Waterbury Lake and Hook-Carter, each of which are located in the Athabasca Basin in northern Saskatchewan. Winter drilling has commenced at Wheeler River and winter drilling programs are expected to start at Waterbury Lake this week and at Hook-Carter in February.

Budget highlights for 2018 include:

- **Wheeler River Project** - A diamond drilling program of approximately 45,000 metres in 60 drill holes is planned with a focus on exploration drilling along strike of the Gryphon deposit and at other high priority, and largely untested, regional targets on the property. Concurrent with the diamond drilling program, a Pre-Feasibility Study (“PFS”) is scheduled for completion in 2018, which will be based on an updated mineral resource estimate for the project (expected in Q1 2018, see Denison’s press release dated January 4, 2018).
- **Waterbury Lake Project** - Exploration efforts in 2018 will follow-up on the highly successful drilling completed in 2017, which resulted in the discovery of the Huskie Zone of high-grade, basement-hosted uranium mineralization (see Denison’s press release dated October 11, 2017). Approximately 14,400 metres of diamond drilling is planned in 36 drill holes.
- **Hook-Carter Project** - Numerous priority targets have been generated along the prolific Patterson Corridor from ground geophysical surveying completed in 2017. An inaugural diamond drilling program of approximately 10,000 metres in 17 drill holes is planned.

David Cates, President and CEO of Denison commented, ***“The 2018 budget aligns with our strategy to focus our exploration spending on select high-priority projects. Our winter drilling programs at Wheeler and Waterbury will commence with drill step-outs from high-grade, basement hosted mineralization that remains open. In addition, our exploration team is excited to commence our maiden drilling campaign on the Patterson Corridor at Hook-Carter. We look forward to another year of active exploration on a range of exciting opportunities on the Company’s Athabasca-focused exploration portfolio.”***

Wheeler River Project

A CAD\$13.1 million budget has been approved for Denison’s flagship project, located in the infrastructure rich eastern portion of the Athabasca Basin. The budget includes exploration expenditures of CAD\$9.5 million and evaluation expenditures of CAD\$3.6 million.

Denison’s share of the budget is expected to be CAD\$9.8million, which represents 75% of joint venture expenses. The increased funding by Denison (ownership of 60%) in 2017 and 2018 is in accordance with an agreement with the Wheeler River Joint Venture partners Cameco Corp. (“Cameco”) and JCU (Canada) Exploration Company Limited (“JCU”), which allows Denison to increase its interest in the project to up to approximately 66% by the end of 2018. Under the terms of the agreement, Cameco will

fund 50% of its ordinary 30% share in 2017 and 2018, and JCU will continue to fund its 10% interest in the project (see Denison's press release dated January 10, 2017).

The 2018 exploration program, including approximately 45,000 metres of diamond drilling in 60 drill holes, will be focused on step-out drilling along strike of the Gryphon deposit and drill testing of high-priority and largely untested regional targets on the property. The Gryphon deposit remains open in numerous areas with a significant amount of potential for future resource growth. Priority target areas include: (1) Along strike to the northeast of the E series lenses, where both unconformity and basement potential exists; (2) Down plunge of the A and B series lenses; (3) Along strike to the northeast and southwest of the D series lenses; and (4) Within the currently defined D series lenses, where additional high-grade shoots may exist. Very little regional exploration has taken place on the property in recent years, with drilling efforts focused on Phoenix and Gryphon, which were discovered by Denison in 2008 and 2014 respectively. The property is host to numerous uranium-bearing lithostructural corridors which are under- or unexplored and have the potential for additional large, high-grade unconformity or basement hosted deposits. The 2018 exploration program will see renewed focus along these corridors to follow-up on previous mineralized drill results, or to test geophysical targets identified from recent past surveys.

The 2018 evaluation program will be aimed at completion of the Wheeler River PFS. As outlined in the Company's press release dated January 4, 2017, Denison has assembled a group of leading engineering and consulting firms to support the Company's in-house project development team in the completion of the PFS.

Waterbury Lake Project

The 'Huskie Zone' was discovered during the Company's summer 2017 drilling program at Waterbury Lake. Seven of the nine drill holes completed as part of the summer program intersected uranium mineralization, including intersections of 9.1% U₃O₈ over 3.7 meters (drill hole WAT17-446A), 1.7% U₃O₈ over 7.5 meters (drill hole WAT17-449) and 1.5% U₃O₈ over 4.5 meters (drill hole WAT17-450A) (see Denison's press release dated October 11, 2017). The mineralized zone is entirely basement-hosted occurring between 50 and 175 metres vertically below the sub-Athabasca unconformity (265 and 390 metres vertically below surface) and measuring approximately 100 metres along strike (current extent of drilling), up to 120 metres along dip, with individual lenses varying in interpreted true thickness between approximately 2 and 7 metres. The zone is wide-open in all directions in terms of the mineralization and associated alteration intersected.

The 2018 exploration program is budgeted at CAD\$3.5 million (100% Denison share) and is designed with the potential to expand the Huskie zone mineralization through step-out drilling. A diamond drilling program of approximately 14,400 metres in 36 drill holes is planned for 2018 and is expected to be carried out during the winter and summer drilling seasons.

The Waterbury Lake property consists of 13 claims covering 40,256 hectares, and is located in the infrastructure rich eastern portion of the Athabasca Basin. The property is jointly owned by Denison (64.22%) and Korea Waterbury Uranium Limited Partnership ("KWULP") (35.78%) through the Waterbury Lake Uranium Limited Partnership ("WLULP"). KWULP has elected not to fund the 2018 exploration program and, as a result, will incur dilution of its ownership interest in the WLULP.

Hook-Carter Project

The Hook-Carter property consists of 45 claims covering 20,522 hectares and is located in the western portion of the Athabasca Basin. The project is highlighted by 15 kilometres of strike potential along the prolific Patterson Corridor – host to the recently discovered Arrow deposit (NexGen Energy Ltd.), Triple R deposit (Fission Uranium Corp.), and Spitfire discovery (Purepoint Uranium Group Inc., Cameco Corp., and AREVA Resources Canada Inc.), which occur within 8 to 20 kilometres of the property. The property is significantly underexplored compared to other properties along this trend, with only five of eight historic drill holes located along the 15 kilometres of Patterson Corridor strike length. The property also covers significant portions of the Derkson and Carter Corridors, which provide additional priority target areas.

During 2017, exploration activities at the Hook-Carter project included ground electromagnetic and resistivity surveying covering 7.5 kilometres of strike along the shallower portions of the Patterson Corridor. The surveys have generated numerous compelling unconformity and basement targets which Denison believes warrant drill testing. A diamond drilling program is planned for the winter of 2018, consisting of approximately 10,000 metres in 17 drill holes, with a budget of CAD\$2.2 million (100% Denison share). The property is owned 80% by Denison and 20% by ALX Uranium Corp. ("ALX"), and Denison has agreed to fund ALX's share of the first CAD\$12M in expenditures (see Denison's Press Releases dated October 13th and November 7th, 2016).

Other Exploration Projects

The 2018 budget also provides for a reconnaissance diamond drilling program (2,200 metres in 16 drill holes) for approximately CAD\$1.0 million on Denison's 100% owned South Dufferin project, and funding of Denison's share of AREVA Resources Canada operated exploration programs at the McClean Lake project (22.5% Denison) and Midwest project (25.17% Denison) with a total budget of \$570,000 (Denison's share).

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 its 60% owned Wheeler River project, which hosts the high-grade Phoenix and Gryphon uranium deposits, Denison's exploration portfolio consists of numerous projects covering approximately 347,000 hectares in the Athabasca Basin region, including 327,000 hectares in the infrastructure rich eastern portion of the Athabasca Basin. 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, 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 64.22% interest in the J Zone deposit and Huskie discovery 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.

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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 state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur", "be achieved" or "has the potential to", or the negatives and/or variations of such words and phrases. In particular, this press release contains forward-looking information pertaining to the following: exploration (including drilling) and evaluation activities, plans, budgets and objectives; management's assessments regarding the potential for additional mineralization to be discovered through further exploration of its properties; plans and objectives with respect to updating its

resource estimates and preparing a PFS; and Denison's percentage interest in its properties and its plans and agreements with its joint venture partners, as applicable. 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 forward-looking statements. Factors, such as potential environmental impacts, the speculative nature of exploration and development, the need for stakeholder approvals, and ongoing capital needs can significantly alter plans and achievements. 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 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 23, 2017 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 Measured, Indicated and Inferred Mineral Resources: This press release may use the terms "measured", "indicated" and "inferred" mineral resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission 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.

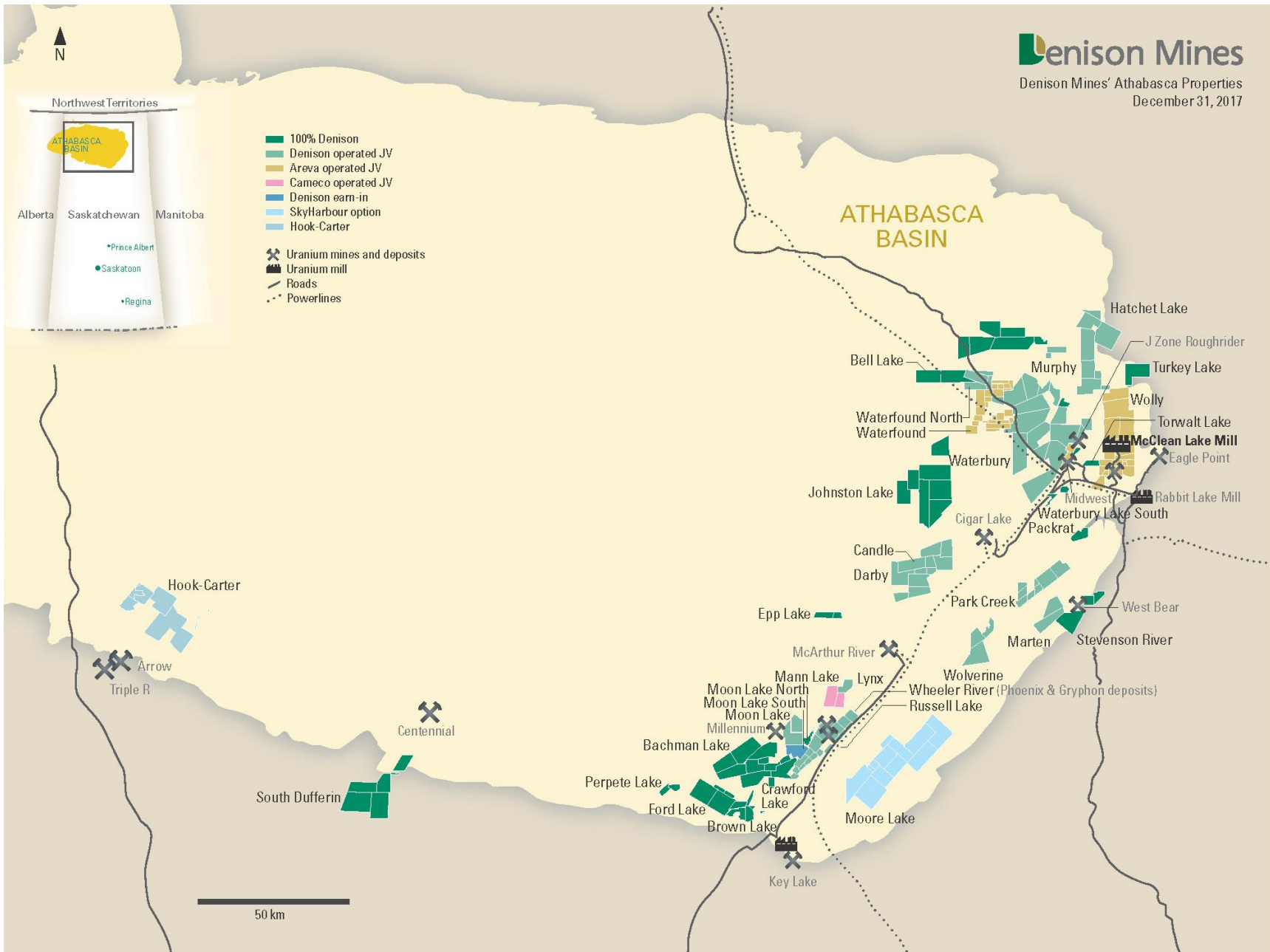


Figure 1: Denison's Athabasca property portfolio as of December 31st, 2017.