

PRESS RELEASE

DENISON REPORTS Q2 2017 RESULTS INCLUDING HIGHLIGHTS FROM PROMISING SUMMER 2017 EXPLORATION PROGRAM

Toronto, ON – August 3, 2017 Denison Mines Corp. (“Denison” or the “Company”) (DML: TSX, DNN: NYSE MKT) today filed its Consolidated Financial Statements and Management’s Discussion & Analysis (“MD&A”) for the period ended June 30, 2017. Both documents are available 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 U.S. dollars unless otherwise stated.**

David Cates, President and CEO of Denison commented, *“With the spot price of uranium correcting back into the low US\$20 per pound U₃O₈ range through the end of the second quarter, we are reminded of the importance of building uranium projects in the future, that can both sustain tough times and take advantage of good times, through the long uranium cycle. Denison is very fortunate to be fully funded, with over CAD\$50 million in cash and GIC’s on the balance sheet at the end of the second quarter, and to have a controlling interest in the largest undeveloped high-grade uranium project in the infrastructure rich eastern portion of the Athabasca Basin. Wheeler River has already evidenced its potential to be a top tier mine in the future from our PEA in 2016, but also continues to deliver further high-grade and thick intervals in new areas of mineralization at the Gryphon deposit, which illustrate the potential for meaningful resource growth.*

We are looking forward to the completion of the summer 2017 exploration program at Wheeler, and the results of the resource update that our exploration team is working on, as well as the resulting impact on our outlook for the Wheeler River project going forward. Work continues on the pre-feasibility study, in parallel with the exploration program, and is providing us with an opportunity to carefully assess the mining methods available for the Phoenix deposit and all of the options available to us to maximize the value of the Wheeler River project.”

Q2 2017 PERFORMANCE HIGHLIGHTS**▪ Assay results increase the winter 2017 probe grades by 45% at Wheeler River’s Gryphon deposit**

The assay results received from the Company’s winter 2017 drilling program on the 60% owned Wheeler River project showed a significant increase in grade compared to the previously released preliminary radiometric probe results. Assay grades greater than 0.5% U₃O₈ were on average 45% higher than their corresponding radiometric equivalent eU₃O₈ grades. The winter 2017 exploration program involved a combination of infill drilling at the Gryphon deposit and resource expansion exploration drilling to the northwest of the Gryphon deposit – targeting mineralization amongst the D series of lenses.

▪ Gryphon D series lenses continue to deliver thick and high-grade intersections

Drill holes from the winter 2017 drilling program testing for additional mineralization within the D series of lenses, outside of the Gryphon resource area, returned results with the potential to add meaningful resources to the Gryphon deposit - ahead of a planned update to the resource estimate for the project. The results were highlighted by drill hole WR-633D3 which intersected 19 metres of cumulative high-grade mineralization, including 3.3% U₃O₈ over 13.5 metres, 6.2% U₃O₈ over 2.5 metres and 1.3% U₃O₈ over 3.0 metres. Follow-up drilling of WR-633D3, during the summer 2017 program, has continued to deliver positive results. Preliminary radiometric equivalent probe results have included 3.5% eU₃O₈ over 3.2 metres (including 4.1% eU₃O₈ over 2.7 metre) in drill hole WR-621D2, 2.7% eU₃O₈ over 2.3 metres (including 4.5% eU₃O₈ over 1.3 metres) in drill hole WR-691 and 3.2% eU₃O₈ over 2.0 metres (including 6.1% eU₃O₈ over 1.0 metres) in drill hole WR-621D1.

▪ Ongoing infill and delineation drilling for indicated resources on the Gryphon deposit continues to return confirmatory high-grade and thick intersections, indicating the potential for further resource growth

A total of 31 infill and delineation holes have been completed to date, of the approximately 40 holes required to upgrade the current inferred Gryphon resource to an indicated level of confidence. The assay results received from the winter 2017 drilling program continued to confirm the continuity and high-grades of the Gryphon deposit A, B and C mineralized lenses and were largely consistent with the current inferred block model. Highlight preliminary

radiometric equivalent probe results to date, from the summer 2017 drilling program include 1.3% eU₃O₈ over 25.3 metres (including 3.3% eU₃O₈ over 7.8 metres) in drill hole WR-604D1, 4.1% eU₃O₈ over 5.9 metres in drill hole WR-692, 2.3% eU₃O₈ over 9.3 metres in drill hole WR-564D1, 3.0% eU₃O₈ over 7.0 metres (including 3.6% eU₃O₈ over 5.7 metres) in drill hole WR-610D1, and 1.9% eU₃O₈ over 8.4 metres in drill hole WR-570D1. The preliminary summer 2017 results also show good consistency with the current inferred block model, with drill holes WR-564D1 and WR-570D1 indicating potential for resource growth in their respective areas of the deposit.

▪ **High-grade uranium discovered on the Waterbury Lake property**

The first drill hole of the summer 2017 drilling program at the Waterbury Lake property returned a new high-grade uranium intersection in the basement rock. Drill hole WAT-17-443 intersected 1.1% eU₃O₈ over 0.8 metres (from 296.9 to 297.7 metres) approximately 1.5 kilometres to the northeast of the property's J Zone uranium deposit. The high-grade mineralization occurs immediately below a broader 10.3 metre mineralized interval (from 282.8 to 293.1 metres) with an average grade of 0.15% eU₃O₈. The mineralization is open in all directions and follow-up drilling is presently underway.

▪ **Denison Environmental Services (“DES”) renews its cornerstone environmental services contract**

DES has entered into a new two-year services agreement with Rio Algom Limited, a subsidiary of BHP Billiton Limited (“BHP”) for the management and operation of nine decommissioned mine sites in Ontario and Quebec.

ABOUT DENISON

Denison was formed under the laws of Ontario and is a reporting issuer in all Canadian provinces. Denison's common shares are listed on the Toronto Stock Exchange (the “TSX”) under the symbol “DML” and on the NYSE American (the “NYSE MKT”) exchange under the symbol “DNN”.

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 359,000 hectares in the Athabasca Basin region, including 340,000 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 deposit and a 63.63% interest in the J Zone deposit on the Waterbury Lake property. Both the Midwest and J Zone deposits are located within 20 kilometres of the McClean Lake mill.

Denison is engaged in mine decommissioning and environmental services through its Denison Environmental Services (“DES”) division, which manages Denison's Elliot Lake reclamation projects and provides post-closure mine and maintenance services to a variety of industry and government clients.

Denison is also the manager of Uranium Participation Corporation (“UPC”), a publicly traded company listed on the TSX under the symbol “U”, which invests in uranium oxide in concentrates (“U₃O₈”) and uranium hexafluoride (“UF₆”).

SELECTED QUARTERLY FINANCIAL INFORMATION

(in thousands)	As at June 30, 2017	As at December 31, 2016
Financial Position:		
Cash and cash equivalents	\$ 9,775	\$ 11,838
Investment in debt instruments (GIC's)	\$ 30,884	\$ -
Cash, cash equivalents and GIC's	<u>\$ 40,659</u>	<u>\$ 11,838</u>
Working capital	\$ 35,649	\$ 9,853
Property, plant and equipment	\$ 193,031	\$ 187,982
Total assets	\$ 258,865	\$ 217,423
Total long-term liabilities	<u>\$ 64,410</u>	<u>\$ 37,452</u>

(in thousands, except for per share amounts)	2017 Q2	2016 Q2
Continuing Operations:		
Total revenues	\$ 2,611	\$ 3,663
Net loss	\$ (6,423)	\$ (3,832)
Basic and diluted loss per share	\$ (0.01)	\$ (0.01)

RESULTS OF CONTINUING OPERATIONS

Revenues

On February 13, 2017, Denison closed an arrangement under which Denison received an upfront payment of \$32,860,000 (CAD\$43,500,000), in exchange for its right to receive future toll milling cash receipts from the MLJV under the current toll milling agreement with the Cigar Lake Joint Venture ("CLJV") from July 1, 2016 onwards. Following the closing of the APG Transaction, CAD\$1,947,000 in toll milling cash receipts were received from the MLJV, and for the three months ended June 30, 2017, the Company recognized toll milling revenue from the draw-down of deferred revenue of \$638,000 and \$992,000, respectively.

Revenue from DES during Q2 2017 was \$1,713,000, while revenue from the Company's management contract with UPC was \$260,000.

Operating expenses

Operating expenses in the Canadian mining segment include depreciation, mining and other development costs. Operating expenses during Q2 2017 were \$896,000, including \$745,000 of depreciation from the McClean Lake mill, associated with the processing of U₃O₈ for the CLJV.

Operating expenses at DES during Q2 2017 totaled \$1,484,000 and relate primarily to care and maintenance as well as environmental consulting services provided to clients, and includes labour and other costs.

Exploration and Evaluation

During 2017, the Company has remained active on its portfolio of projects in the Athabasca Basin region in Saskatchewan. The Company's Athabasca land package increased during the second quarter from 356,597 hectares (248 claims) to 359,313 hectares (249 claims) owing to the 51% interest earned in the Moon Lake South claim. Denison's share of exploration and evaluation expenditures was \$2,537,000 during Q2 2017.

Wheeler River Project

Denison's exploration and evaluation expenses on the Wheeler River Project, represents 75% of the Joint Venture's expenses, as part of a previously announced agreement (see press release Dated January 10, 2017) to fund a greater share (ordinarily 60%) of the Joint Venture's expenses in 2017 and 2018 in order to increase its interest in the project to up to approximately 66%.

Denison's share of exploration costs at Wheeler River amounted to \$1,223,000 during Q2 2017.

Field activities during Q2 2017 included conclusion of the winter 2017 drilling program in early April 2017 and commencement of the summer 2017 drilling program in late May 2017.

Winter 2017 Highlights from Assay Results

During the winter 2017 drilling program, nine holes totalling 6,330 metres were completed outside of the current inferred resources estimated for the Gryphon deposit, including four holes targeting the Gryphon D series lenses, and five holes down-dip of the A and B series lenses. The assay results illustrate the potential for meaningful resource expansion at Gryphon (See Denison's press release dated May 26, 2017).

In addition to exploration drilling to expand mineralization outside of the current Gryphon resource, the 2017 winter drilling program continued with infill and delineation drilling of the Gryphon deposit, with the objective of increasing the level of confidence of the current inferred resources to an indicated level. A total of 17 infill and delineation drill holes, totaling 8,402 metres, were completed during the winter program. In comparison to the previously reported radiometric equivalent grade results, the assay results represented an overall increase in grade and thicknesses of

mineralization. The assay results also confirm the continuity and high-grades of the Gryphon A, B and C series lenses that are included in the current resource estimate for the deposit.

Summer 2017 Highlight Results

A total of 9,446 metres in 17 holes were completed as part of the summer 2017 drilling program through mid-July 2017. Preliminary radiometric equivalent results were reported in our press release dated July 24, 2017. The summer drilling program is expected to include approximately 18,000 metres in 40 holes, and includes infill and expansion drilling to potentially add indicated or inferred resources to the Gryphon deposit, and infill and delineation drilling to bring the current inferred resources to an indicated level of confidence.

Drilling continued within the Gryphon D series lenses to potentially add indicated or inferred resources to the Gryphon deposit. A drill spacing of approximately 25 x 25 metres is being implemented around previous high-grade results which included 3.3% U₃O₈ over 13.5 metres, 6.2% U₃O₈ over 2.5 metres and 1.3% U₃O₈ over 3.0 metres in drill hole WR-633D3, and 5.3% U₃O₈ over 11.0 metres in drill hole WR-641. Five drill holes, of approximately 10 holes planned, have been completed within the D series lenses, all of which intersected high-grade mineralization.

Approximately 10 infill and expansion drill holes located outside of the Gryphon inferred resource area are planned for the summer 2017 program. The objective of these drill holes is to add indicated resources to the areas surrounding and within the Gryphon deposit's A and B series lenses. Three holes have been completed, all of which intersected mineralization including a highlight result of 5.3% eU₃O₈ over 2.5 metres in drill hole WR-582D3.

Infill and delineation drilling on the Gryphon deposit's A, B and C series lenses also continues as part of the summer 2017 program, with nine holes completed to mid-July 2017. In total, 31 infill and delineation holes were completed, of the approximately 40 holes required to upgrade the current inferred resources of the Gryphon deposit to an indicated level of confidence.

Evaluation Program / PFS Activities

Denison's share of evaluation costs at Wheeler River amounted to \$437,000 for Q2 2017, and mainly related to the work on the pre-feasibility study, which included engineering data collection activities, geotechnical and hydrogeological work, and engineering investigations into alternate mining methods at Phoenix and options for shaft and vent raise excavation at both Gryphon and Phoenix. The Company also advanced its environmental baseline programs, and continued with the community consultation and engagement process.

General and administrative expenses

Total general and administrative expenses were \$1,197,000 during Q2 2017. These costs are mainly comprised of head office salaries and benefits, office costs in multiple regions, audit and regulatory costs, legal fees, investor relations expenses, project costs, and all other costs related to operating a public company with listings in Canada and the United States.

Other Income and expenses

During Q2 2017, the Company recognized a loss of \$2,173,000 in other expenses, mainly due to a net loss of \$2,080,000 on the mark to market of investments carried at fair value.

LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents were \$9,775,000 at June 30, 2017 compared with \$11,838,000 at December 31, 2016. At June 30, 2017, the Company also held investments in GICs of \$30,884,000, which are categorized as short term investments on the balance sheet. The Company holds the large majority of its cash, cash equivalents, and GIC's in Canadian dollars, amounting to CAD\$52.8 million.

At June 20, 2017, Denison has restricted cash of \$9,646,000, largely due to the terms of the Company's revolving term credit facility with the Bank of Nova Scotia ("BNS"), which is restricted to non-financial letters of credit in support of reclamation obligations. The facility requires the Company maintain CAD\$9,000,000 pledged restricted cash on deposit at BNS.

OUTLOOK FOR 2017

During Q2 2017, the Company increased its 2017 outlook for mineral property exploration expense by \$1,050,000, primarily because of higher than budgeted cost at the Hook-Carter project, as well as a summer exploration drilling program at the Waterbury Lake project. The Company has also decreased its 2017 outlook for DES contribution by \$320,000, in order to reflect decreased care and maintenance activities at certain sites, as well as a reduction in consulting projects. The remainder of the 2017 outlook remains unchanged from the previously disclosed 2017

outlook.

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QUALIFIED PERSON, ASSAY PROCEDURES AND FURTHER DETAILS

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

Grade results reported herein as "eU₃O₈" refer to radiometric equivalent U₃O₈ derived from a calibrated total gamma down-hole probe. Radiometric equivalent U₃O₈ results are preliminary in nature and all mineralized intervals have been sampled and submitted for chemical U₃O₈ assay in accordance with Denison's technical procedures. All Gryphon drill holes reported herein were drilled at a high angle to mineralization to allow for better evaluation of true thicknesses which are expected to be approximately 75% of the intersection lengths. For further details regarding the description of the assay procedures, data verification, and the quality assurance program and quality control measures applied by Denison, please see Denison's Annual Information Form dated March 23, 2017 available under Denison's profile on SEDAR at www.sedar.com, and its Form 40-F available on EDGAR at www.sec.gov/edgar.shtml.

Further details regarding the Gryphon deposit and the current mineral resource estimates are provided in the NI 43-101 Technical Report for the Wheeler River project titled "Preliminary Economic Assessment for the Wheeler River Uranium Project, Saskatchewan, Canada" dated April 8, 2016 with an effective date of March 31, 2016. 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.

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 the following: the likelihood of completing and benefits to be derived from corporate transactions; use of proceeds from financing activities; expectations regarding further studies on material properties, including the PFS; expectations regarding the toll milling of Cigar Lake ores; expectations regarding revenues and expenditure from operations at DES; expectations regarding Denison's ownership interests and continuity of agreements with its partners; expectations regarding the provision of management services to UPC; capital expenditure programs, estimated exploration and development expenditures and reclamation costs and Denison's share of same; and exploration, development and expansion plans and objectives and statements regarding anticipated budgets. 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. 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.**