Denison Extends High-Grade Unconformity Mineralization Near the Gryphon Deposit with 4.3% eU3O8 over 4.3 Metres and Completes Summer Drilling at Wheeler

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TORONTO, ONTARIO--(Marketwired - Nov 2, 2017) - Denison Mines Corp. ("Denison" or the "Company") (TSX:DML)(NYSE American:DNN)(NYSE MKT:DNN) is pleased to report the extension of new high-grade unconformity-hosted uranium mineralization located up-dip and approximately 250 metres along strike to the northeast of the basement-hosted Gryphon deposit, on the Company's 60% owned Wheeler River project. Preliminary radiometric equivalent grades ("eU_3O_8") from drill hole WR-670D2 are highlighted by an interval of 4.3% eU_3O_8 over 4.3 metres, from mineralization occurring immediately above the sub-Athabasca unconformity. This result adds to previous unconformity mineralized intercepts that include 5.0% eU_3O_8 over 4.7 metres in drill hole WR-689D3 and 1.2% eU_3O_8 over 1.4 metres in drill hole WR-690D3 (see Denison's press release dated August 30, 2017). The new zone of "E series" unconformity mineralization now extends approximately 80 metres horizontally along the unconformity and remains open along strike to the northeast and southwest.

To view the graphics associated with this release, please click on the following link: http://media3.marketwire.com/docs/DenisonGryphon.pdf

In addition, after nearly six months of field activities, Denison is pleased to report that the summer 2017 drilling program at Wheeler River has now been concluded, following the completion of a further 30 drill holes totalling 12,466 metres. Preliminary radiometric grades for these results are reported herein and represent a strong finish, to an extended summer exploration program at Wheeler, with continued exploration success on multiple fronts. Importantly, these results also represent the final batch of drill holes to be completed ahead of the planned update to the Company's resource estimate for the Gryphon deposit and the Wheeler River project.

Highlights from the final 30 drill holes include:

- Extension of the E series lenses: Additional mineralized intervals in the E series lenses were returned at the unconformity in drill hole WR-670D2 (4.3% eU_3O_8 over 4.3 metres) and WR-657D3 (0.86% eU_3O_8 over 2.2 metres), as well as in the upper basement in drill hole WR-646D2 (4.6% eU_3O_8 over 1.5 metres) and WR-646D4 (1.1% eU_3O_8 over 7.6 metres). The E series lenses occur outside of the current resources estimated for the Gryphon deposit, remain open along strike to the northeast and southwest, and now have an unconformity and upper basement extent of 80 and 350 metres, respectively.

- Continued expansion of high-grade within the D series lenses: Intersections of 4.9% eU_3O_8 over 1.0 metre (drill hole WR-621D5), 1.6% eU_3O_8 over 2.5 metres (drill hole WR-657D2), and 2.0% eU_3O_8 over 1.3 metres (drill hole WR-657D3), have added to several previous high-grade results within the D series lenses. During the summer program, a significant lens of high-grade mineralization has been delineated amongst the D series lenses by infill drilling on an approximate 25 x 25 metres spacing. The high-grade lens measures up to 150 metres along strike, approximately 240 metres along dip, with interpreted true thicknesses between approximately 2 and 20 metres. All D series lens mineralization occurs outside of the current resources estimated for the Gryphon deposit.

- Continued expansion of the A and B series lenses: Drill holes located down-dip and up-dip of the extent of the A and B series lenses, as defined by the current resources estimated for the Gryphon deposit, returned highlight intersections of 4.0% eU_3O_8 over 3.1 metres (drill hole WR-681AD3) and 4.0% eU_3O_8 over 5.2 metres (drill hole WR-624D3). The holes were located approximately 25 metres from previous holes with the potential to add indicated resources to the Gryphon deposit.

- Completion of the definition drilling program: Definition drilling designed to upgrade the current inferred resources of the Gryphon deposit (A, B and C series lenses) to an indicated level of confidence has now been completed with the final four drill holes, of the 42 drill hole program, successfully reaching their respective targets. Results continue to show good consistency with the inferred grade model.

Dale Verran, Denison's Vice President Exploration, commented, *"The summer drilling program at Wheeler River has produced exceptional results with over 90% of the holes completed returning significant mineralization. The sheer number of high-grade and thick intersections, inside and outside the current Gryphon resource area, indicate potential to increase both the confidence and size of the Gryphon deposit. A n updated independent resource estimate, in accordance with NI 43-101, is planned for later this year once the final batch of assay results is received. Looking ahead to 2018, our exploration team is excited to continue with exploration near Gryphon. The mineralizing system continues to impress as new zones continue to be added - most recently with the E series lenses. The deposit remains open in numerous areas with excellent prospects for further growth."*

Summer 2017 Drilling Program Completed

The primary objectives of the summer 2017 exploration program were to increase the confidence of the Gryphon resource to an indicated level, and to expand the overall size of the estimated resources, ahead of an updated resource estimate, scheduled for later in the year, and the Pre-Feasibility Study ("PFS"), scheduled for 2018. As a result, the summer program included a total of 64 drill holes (totalling 29,823 metres) targeted within and in the immediate vicinity of the Gryphon deposit. The large majority of drill holes (59) were completed as 'daughter' holes drilled from part way down 'parent holes', which were previously drilled from surface. Included in the final 30 drill holes is also a single shaft pilot hole, totalling 600 metres, which was completed near the Gryphon deposit as part of field activities related to the Wheeler River PFS.

Illustrative Figures and Further Details

A plan map of the Gryphon A, B, C, D and E series lenses is provided in Figure 1. The inset on Figure 1 shows a schematic cross section of the A, B, C, D and E series lenses and their respective inclined longitudinal section windows (as shaded rectangles). Figures 2 to 6 provide inclined longitudinal sections of the Gryphon A, B, C, D and E series lenses respectively. Figure 7 provides a plan map of the mineralization located at, or immediately above, the sub-Athabasca unconformity which forms part of the E series lenses.

The modelled mineralized lenses shown in Figures 1 to 6 are defined using a 0.05% U_3O_8 grade shell and minimum thickness of two metres and have been updated following receipt of the winter 2017 assay results. There is no certainty that the modelled mineralized lenses shown will constitute future mineral resources and they may be subject to modifications as further drilling data becomes available.

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.

Detailed Radiometric Equivalent Probe Results

The following tables provide the radiometric equivalent probe results from the final 30 drill holes completed during the summer 2017 exploration program at Wheeler River.

Table 1: Radiometric equivalent probe results for drill holes targeting the Gryphon D and E series lenses

Section	Drill Hole	From (m)	To (m)	Length (m)[5]	eU_3O_8(%)[1,2,4]	Lens Designation
5125GP	WR-646D1	557.9	558.9	1.0	0.33	E Series
	and	586.8	588.6	1.8	1.0	E Series
	including[3]	587.3	588.3	1.0	1.4	E Series
	and	686.5	687.5	1.0	0.36	D Series

5150GP	WR-621D4	No significant mineralization				
	WR-621D5	750.7	751.7	1.0	0.11	D Series
	WR-646D2	584.7	586.2	1.5	4.6	E Series
	including[3]	584.9	586.0	1.1	6.2	E Series
	WR-646D3	Not probed				
	WR-646D4	559.1	560.1	1.0	0.15	E Series
	and	578.5	579.5	1.0	0.10	E Series
	and	580.2	581.2	1.0	0.27	E Series
	and	585.7	593.3	7.6	1.1	E Series
	including[3]	585.8	586.8	1.0	3.4	E Series
	including[3]	590.0	591.5	1.5	2.1	E Series
	and	664.4	665.4	1.0	0.15	E Series
	and	697.0	698.1	1.1	4.4	D Series
	including[3]	697.1	698.1	1.0	4.9	D Series
	WR-646D5	578.7	579.9	1.2	0.97	E Series
	including[3]	578.7	579.7	1.0	1.1	E Series
	and	586.1	587.1	1.0	0.14	E Series
5250GP	WR-657D3	559.3	560.3	1.0	0.11	E Series
	and	561.4	562.4	1.0	0.23	E Series
	and	564.4	566.6	2.2	0.86	E Series
	including[3]	564.5	565.5	1.0	1.7	E Series
	and	664.5	665.5	1.0	0.24	E Series
	and	677.6	678.6	1.0	0.22	E Series
	and	693.4	694.4	1.0	0.92	D Series
	and	701.3	702.6	1.3	2.0	D Series
	including[3]	701.4	702.4	1.0	2.5	D Series
5275GP	WR-657D2	586.4	587.4	1.0	0.20	E Series
	and	624.3	625.3	1.0	0.11	E Series
	and	680.1	682.6	2.5	1.6	D Series
	including[3]	680.5	682.4	1.9	2.0	D Series
	and	700.4	701.4	1.0	0.12	D Series
	WR-670D2[3]	544.6	548.9	4.3	4.3	E Series
	and	553.6	555.3	1.7	0.13	E Series
	and	569.7	570.7	1.0	0.39	E Series
	and	681.3	682.3	1.0	0.18	D Series

Notes:

(1) eU_3O_8 is radiometric equivalent U_3O_8 derived from a calibrated total gamma downhole probe. eU_3O_8 results are preliminary in nature and all mineralized intervals will be sampled and submitted for chemical U_3O_8 assay.

(2) Intersection interval is composited above a cut-off grade of 0.1% eU_3O_8 unless otherwise indicated.

(3) Intersection interval is composited above a cut-off grade of 1.0% eU_3O_8.

(4) Composites are compiled using 1.0 metre minimum ore thickness and 2.0 metres maximum waste.

(5) As the drill holes are oriented steeply toward the northwest the true thickness of both the basement and unconformity mineralization is expected to be approximately 75% of the intersection lengths (the basement mineralization is interpreted to dip moderately to the southeast and the unconformity mineralization is interpreted to be flat-lying).

Table 2: Radiometric equivalent probe results for Gryphon deposit A, B, C definition and expansion drill holes

Section	Drill Hole	From (m)	To (m)	Length (m)[5]	eU_3O_8(%)[1,2,4]	Lens Designation
4775GP	WR-679D1	No significant mineralization				
4800GP	WR-584BD2	631.2	632.2	1.0	0.11	B Series

4875GP	WR-580D2	No significant mineralization				
4900GP	WR-681AD1	No significant mineralization				
	WR-580D1	613.2	614.6	1.4	0.16	A Series
4925GP	WR-681AD2	698.9	699.9	1.0	0.26	A Series
	and	718.3	719.9	1.6	1.3	A Series
	including[3]	718.6	719.6	1.0	1.9	A Series
	and	725.8	727.4	1.6	1.7	A Series
	including[3]	726.1	727.2	1.1	2.2	A Series
	and	785.1	786.1	1.0	0.54	C Series
	WR-673D1	612.6	615.5	2.9	1.1	A Series
	including[3]	614.5	615.5	1.0	2.8	A Series
	and	648.7	649.7	1.0	0.17	B Series
	and	680.9	681.9	1.0	0.15	C Series
	and	697.3	698.3	1.0	0.28	C Series
	and	699.6	700.6	1.0	0.15	C Series
	WR-681AD3	705.6	709.0	3.4	0.41	A Series
	and	714.1	717.2	3.1	4.0	A Series
	including[3]	715.3	717.0	1.7	6.9	A Series
	and	724.5	725.5	1.0	0.29	B Series
	and	781.8	782.8	1.0	0.29	C Series
4950GP	WR-572D4	641.7	642.7	1.0	0.78	A Series
	and	644.3	645.3	1.0	0.11	A Series
	and	657.5	658.5	1.0	0.38	B Series
	and	665.5	667.4	1.9	0.21	B Series
	and	706.7	707.7	1.0	0.19	C Series
4975GP	WR-572D3	643.3	644.4	1.1	0.23	A Series
	and	668.5	669.5	1.0	0.17	B Series
	and	685.1	686.1	1.0	0.13	B Series
	WR-624D2	632.9	633.9	1.0	0.32	A Series
	and	634.3	635.3	1.0	0.10	A Series
	and	636.5	637.5	1.0	0.19	A Series
	and	642.0	643.0	1.0	0.10	A Series
	and	647.7	651.1	3.4	1.1	A Series
	including[3]	649.8	650.8	1.0	2.7	A Series
	and	669.6	670.7	1.1	0.33	B Series
	and	677.5	678.7	1.2	0.46	B Series
	and	731.9	733.5	1.6	1.0	C Series
	including[3]	732.3	733.3	1.0	1.6	C Series

5000GP	WR-624D1	628.7	629.7	1.0	0.79	A Series
	and	635.2	636.2	1.0	0.11	A Series
	and	638.0	639.0	1.0	0.31	A Series
	and	653.2	654.2	1.0	0.83	A Series
	and	656.2	657.9	1.7	1.0	A Series
	including[3]	656.2	657.2	1.0	1.6	A Series
	and	662.2	666.3	4.1	0.57	A Series
	including[3]	663.4	664.4	1.0	1.3	A Series
	and	691.6	695.3	3.7	0.31	B Series
	and	737.5	742.0	4.5	0.56	C Series
	and	745.8	748.1	2.3	0.69	C Series
	and	797.2	799.3	2.1	0.23	C Series
	WR-578D1	707.4	708.4	1.00	0.59	A Series
	and	758.0	759.7	1.7	2.5	A Series
	including[3]	758.5	759.5	1.0	3.9	A Series
	and	766.8	768.0	1.2	0.42	B Series
	WR-624D3	631.1	632.1	1.0	0.20	A Series
	and	636.4	640.2	3.8	0.54	A Series
	including[3]	637.2	638.2	1.0	1.3	A Series
	and	660.9	666.1	5.2	4.0	B Series
	including[3]	663.8	665.9	2.1	9.3	B Series
	and	669.2	670.3	1.1	0.28	B Series
	and	720.9	721.9	1.0	0.40	C Series
	and	738.6	741.2	2.6	0.69	C Series
5025GP	WR-560D1	669.6	672.4	2.8	0.39	A Series
	and	675.2	676.2	1.0	0.24	A Series
	and	720.4	721.4	1.0	0.24	B Series
	and	759.2	760.4	1.2	3.8	C Series
	including[3]	759.3	760.3	1.0	4.5	C Series
	WR-560D2	675.0	676.0	1.0	0.38	B Series
	and	696.8	697.8	1.0	0.10	B Series
	and	729.2	730.5	1.3	0.13	C Series
	and	744.9	745.9	1.0	0.16	C Series
	and	747.8	754.7	6.9	0.76	C Series
	including[3]	747.9	748.9	1.0	1.0	C Series
	including[3]	750.4	751.4	1.0	2.0	C Series
	including[3]	752.0	753.0	1.0	1.2	C Series
5075GP	WR-568D3	687.9	690.2	2.3	0.18	A Series
	and	725.3	726.3	1.0	0.14	A Series
	and	753.0	754.3	1.3	0.54	C Series
5125GP	WR-600D2	723.3	725.2	1.9	0.35	A Series
	and	729.1	730.1	1.0	0.20	B Series
	and	732.2	733.4	1.2	0.12	B Series
	and	741.1	743.2	2.1	0.11	B Series
5150GP	WR-600D3	710.4	714.5	4.1	0.21	A Series
	and	720.8	721.8	1.0	0.21	A Series
	and	732.7	733.8	1.1	0.18	B Series
	and	738.2	739.2	1.0	0.16	B Series

Notes:

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Qualified Persons and Data Quality

Dale Verran, MSc, P.Geo, Pr.Sci.Nat., Denison's Vice President, Exploration, who is a Qualified Person in accordance with the requirements of NI 43-101 has reviewed and approved the technical information contained in this release. The Company currently reports preliminary radiometric equivalent grades ("eU_3O_8"), derived from a calibrated downhole total gamma probe, during its exploration programs and subsequently reports definitive assay grades following sampling and chemical analysis of the mineralized drill core. Radiometric equivalent probe results are subject to verification procedures by qualified persons employed by Denison prior to disclosure. For further details on the total gamma downhole probe methods employed by Denison, QAQC procedures and data verification procedures please see Denison's Annual Information Form dated March 23, 2017 filed under the Company's profile on SEDAR (www.sedar.com).

About Wheeler River

Wheeler River is the largest undeveloped high-grade uranium project in the infrastructure rich eastern portion of the Athabasca Basin region, in northern Saskatchewan. The project is a joint venture between Denison (60% and operator), Cameco Corp. ("Cameco") (30%), and JCU (Canada) Exploration Company Limited ("JCU") (10%), and is host to the high-grade Gryphon and Phoenix uranium deposits discovered by Denison in 2014 and 2008, respectively. The Gryphon deposit is hosted in basement rock and is currently estimated to contain inferred resources of 43.0 million pounds U3O8 (above a cut-off grade of 0.2% U3O8) based on 834,000 tonnes of mineralization at an average grade of 2.3% U3O8. The Phoenix unconformity deposit is located approximately 3 kilometres to the southeast of Gryphon and is estimated to include indicated resources of 70.2 million pounds U3O8 (above a cut-off grade of 0.8% U3O8) based on 166,000 tonnes of mineralization at an average grade of 19.1% U3O8, and is the highest grade undeveloped known uranium deposit in the world.

On April 4th, 2016, Denison announced the results of a Preliminary Economic Assessment ("PEA") for the Wheeler River Project, which considers the potential economic merit of co-developing the high-grade Gryphon and Phoenix deposits as a single underground mining operation. The PEA returned a base case pre-tax Internal Rate of Return ("IRR") of 20.4% based on the current long term contract price of uranium (US$44.00 per pound U_3O_8), and Denison's share of estimated initial capital expenditures ("CAPEX") of CAD$336M (CAD$560M on 100% ownership basis). Exploration results from the subsequent drilling programs have not been incorporated into the resource estimate or the PEA. The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability. On July 19th, 2016 Denison announced the initiation of a Pre-Feasibility Study ("PFS") for the Wheeler River property and the complimentary commencement of an infill drilling program at the Gryphon deposit to bring the inferred resources to an indicated level of confidence.

As previously announced on January 10, 2017, Denison has entered into an agreement with its Wheeler River Joint Venture partners, Cameco and JCU, to fund 75% of Joint Venture expenses in 2017 and 2018 (ordinarily 60%) in exchange for an increase in Denison's interest in the project to up to approximately 66%. Under the terms of the agreement, Cameco will fund 50% of its ordinary 30% share in 2017 and 2018, and JCU is expected to continue to fund its 10% interest in the project.

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 deposit and a 64.22% 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 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 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: exploration (including drilling) and evaluation activities, plans and objectives; potential mineralization of drill targets; the estimates of Denison's mineral resources and the results of its PEA; plans and objectives with respect to updating its resource estimates and preparing a PFS; and Denison's percentage 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. 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.

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