TORONTO, ONTARIO--(Marketwired - Jul 24, 2017) - <u>Denison Mines Corp.</u> ("Denison" or the "Company") (TSX:DML)(NYSE MKT:DNN) is pleased to report that multiple high-grade intervals of uranium mineralization have been returned from the initial drill holes completed during the summer 2017 drilling program on the Company's 60% owned Wheeler River project. The summer 2017 drilling program is focused on the delineation and expansion of the Gryphon deposit and, to date, has been successful on multiple fronts including expansion of mineralization within the A, B and D series of lenses.

A total of 9,446 metres in 17 holes have been completed as part of the summer 2017 drilling program, which is expected to include approximately 18,000 metres in 40 holes. Results below are reported as preliminary radiometric equivalent grades ("eU₃O₈") derived from a calibrated downhole total gamma probe. The Company subsequently reports definitive assay grades following sampling and chemical analysis of the mineralized drill core.

Highlights

- Nine infill and delineation drill holes have been completed on the Gryphon deposit's A, B and C series lenses, as part of the Company's infill drilling program to bring the current estimated inferred resources to an indicated level of confidence. Results are provided in Table 1 and include the following highlights:
 - 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
 - 1.9% eU₃O₈ over 8.4 metres (including 2.5% eU₃O₈ over 6.2 metres) in drill hole WR-570D1

The results 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. In total, 31 infill and delineation drill holes have been completed of the approximately 40 holes required.

- Five initial drill holes have been completed within the Gryphon D series lenses, which are located outside of the current resources estimated for the Gryphon deposit. Each drill hole intersected meaningful mineralization, highlighting the potential for resource growth at the indicated or inferred level of confidence. Results are provided in Table 2 and include the following highlights:
 - 3.5% eU₃O₈ over 3.2 metres (including 4.1% eU₃O₈ over 2.7 metres) 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
 - 3.2% eU₃O₈ over 2.0 metres (including 6.1% eU₃O₈ over 1.0 metres) in drill hole WR-621D1
- Three initial drill holes have been completed as part of the summer 2017 program with the objective of adding indicated resources from areas surrounding and within the Gryphon deposit's A and B series lenses. All three drill holes intersected mineralization, including drill hole WR-582D3 which was highlighted by a mineralized interval of 1.7% eU₃O₃ over 8.6 metres. Results are provided in Table 3.

The summer program at Wheeler River also includes the continuation and completion of certain Pre-Feasibility Study ("PFS") field activities, including environmental and engineering data collection programs. An updated mineral resource estimate for Wheeler River is planned once the summer 2017 assay results are received, and is then expected to be incorporated into the completion of a PFS planned for 2018.

Dale Verran, Denison's Vice President of Exploration, commented, "As we near the halfway mark of the summer 2017 drilling program at Wheeler River, we are very pleased with the downhole probe results received to date - particularly the eight holes drilled outside of the current Gryphon resource area, which have returned mineralization that we expect will increase the size of the resources at Gryphon. Drilling that has targeted the D series lenses continues to deliver new high-grade mineralization and we continue to see results from our infill drilling program that are expected to support an increase in both the size and confidence of the previously estimated resources for the Gryphon deposit."

Illustrative Figures & Further Details

To view Figures 1-5, please visit the following link: http://media3.marketwire.com/docs/Denis%20Mines%20image%20PDF.pdf

A plan map of the Gryphon A, B, C and D series lenses is provided in Figure 1. The inset on Figure 1 shows a schematic cross section of the A, B, C and D series lenses and their respective inclined longitudinal section windows (as shaded rectangles). Figures 2 to 5 provide inclined longitudinal sections of the Gryphon A, B, C and D series lenses respectively. The modelled mineralized lenses shown in Figures 1 to 5 are defined using a 0.05% U₃O₈ 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 a complete set of the radiometric equivalent probe results to date from the drill holes completed during the summer 2017 exploration program at Wheeler River.

Table 1: Radiometric equivalent probe results for Gryphon deposit infill and delineation drill holes

Section	Drill Hole	From (m)	To (m)	Length (m) ⁵	eU ₃ O ₈ (%) ^{1,2,4}	Lens Designation
4925GP	WR-567D3	680.7	681.7	1.0	0.10	A Series
	and	690.0	698.0	8.0	1.7	A Series
	including ³	690.2	691.2	1.0	7.0	A Series
	including ³	694.3	695.3	1.0	4.1	A Series
	including ³	696.8	697.8	1.0	1.6	A Series
	and	705.7	707.9	2.2	0.14	B Series
	WR-692	706.9	713.4	6.5	2.3	A Series
	including ³	710.7	711.8	1.1	11.3	A Series
	and	737.3	738.3	1.0	0.37	B Series
	and	740.5	743.1	2.6	0.57	B Series
	and	746.2	752.1	5.9	4.1	B Series
	including ³	746.4	751.8	5.4	4.4	B Series
	and	758.2	759.2	1.0	0.11	B Series
4975GP	WR-693	No signific	cant min	eralization		
	WR-564D1	681.0	682.0	1.0	0.10	A Series
	and	693.8	694.8	1.0	0.11	A Series
	and	702.3	703.3	1.0	0.49	A Series
	and	709.8	710.9	1.1	1.6	A Series
	including ³	709.9	710.9	1.0	1.7	A Series
	and	714.6	715.6	1.0	0.26	A Series
	including ³	718.4	719.4	1.0	2.7	A Series
	and	718.5	726.1	7.6	0.92	A Series
	including ³	722.4	723.4	1.0	2.3	A Series
	and	730.6	732.1	1.5	0.21	B Series
	and	742.2	751.5	9.3	2.3	B Series
	including ³	746.1	748.3	2.2	7.9	B Series
	including ³	750.4	751.4	1.0	2.2	B Series
	and	754.4	755.4	1.0	0.30	B Series
5025GP	WR-571D3	731.6	738.1	6.5	2.3	A Series
	including ³	733.1	737.5	4.4	3.3	A Series
	and	759.3	760.9	1.6	3.4	B Series
	including ³	759.8	760.8	1.0	5.3	B Series
	and	762.9	763.9	1.0	0.12	B Series
	and	775.6	776.6	1.0	0.25	C Series

5075GP		WR-610D1	513.2	514.4	1.2	0.24	A Series
		and	751.0	752.0	1.0	0.11	B Series
		and	799.3	806.3	7.0	3.0	B Series
		including ³	800.1	805.8	5.7	3.6	B Series
		WR-604D1	749.1	750.1	1.0	0.20	A Series
		and	764.6	766.1	1.5	1.2	A Series
		including ³	765.0	766.0	1.0	1.7	A Series
		and	769.0	794.3	25.3	1.3	A Series
		including ³	774.3	775.5	1.2	1.3	A Series
		including ³	778.3	779.3	1.0	1.0	A Series
		including ³	779.6	787.4	7.8	3.3	A Series
		and	798.0	800.5	2.5	1.3	B Series
		including ³	798.7	800.2	1.5	1.9	B Series
		and	801.2	802.2	1.0	0.11	B Series
		WR-570D1	744.7	752.4	7.7	0.92	A Series
		including ³	744.9	745.9	1.0	2.1	A Series
		including ³	748.1	750.9	2.8	1.5	A Series
		and	753.6	754.6	1.0	0.13	B Series
		and	758.6	759.6	1.0	0.10	B Series
		and	766.2	774.6	8.4	1.9	B Series
		including ³	768.2	774.4	6.2	2.5	B Series
		and	785.8	786.9	1.1	0.18	C Series
	5100GP	WR-606D3	782.7	787.0	4.3	0.32	A Series
		and	789.9	805.1	15.2	0.63	B Series
		including ³	791.4	792.4	1.0	4.3	B Series
		including ³	798.1	799.1	1.0	1.6	B Series

Notes:

- 1. eU₃O₈ is radiometric equivalent U₃O₈ from a calibrated total gamma downhole probe. eU₃O₈ results are preliminary in nature and all mineralized intervals will be sampled and submitted for chemical U₃O₈ assay.
- 2. Intersection interval is composited above a cut-off grade of 0.1% eU₃O₈ unless otherwise indicated.
 3. Intersection interval is composited above a cut-off grade of 1.0% eU₃O₈.
- 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 and the basement mineralization is interpreted to dip moderately to the southeast, the true thickness of the mineralization is expected to be approximately 75% of the intersection lengths. Drill hole WR-692 was drilled steeply to the north and therefore the true thickness of the mineralization is expected to be approximately 60% of the intersection lengths in this hole.

Table 2: Radiometric equivalent probe results for drill holes targeting the Gryphon D series lenses

Section	Drill Hole	From (m)	To (m)	Length (m) ⁵	$eU_3O_8(\%)^{1,2,4}$	Lens Designation ⁶
5175GP	WR-691	639.7	640.7	1.0	0.59	A Series
	and	699.3	700.3	1.0	0.21	B Series
	and	712.8	713.8	1.0	0.14	D Series
	and	785.9	786.9	1.0	0.47	D Series
	and	788.9	790.1	1.2	0.16	D Series
	and	791.8	794.2	2.4	0.95	D Series
	including ³	793.1	794.1	1.0	2.1	D Series
	and	804.9	805.9	1.0	0.43	D Series
	and	810.9	813.2	2.3	2.7	D Series
	including ³	811.5	812.8	1.3	4.5	D Series
	and	817.1	818.1	1.0	0.12	D Series

5200GP	WR-621D1	752.5	754.5	2.0	3.2	D Series
	including ³	752.8	753.8	1.0	6.1	D Series
	and	761.5	764.0	2.5	0.62	D Series
	including ³	762.7	763.7	1.0	1.2	D Series
	WR-621D2	706.3	707.3	1.0	0.11	D Series
	and	752.8	756.0	3.2	3.5	D Series
	including ³	753.1	755.8	2.7	4.1	D Series
	and	762.7	765.4	2.7	0.34	D Series
	and	776.7	777.7	1.0	0.11	D Series
	WR-638D3	709.4	710.8	1.4	0.37	A Series
	and	715.7	716.7	1.0	0.24	A Series
	and	758.2	759.3	1.1	0.26	C Series
	and	770.9	771.9	1.0	0.11	C Series
	and	775.4	779.5	4.1	0.44	D Series
	including ³	777.5	778.5	1.0	1.3	D Series
	WR-621D3	736.4	737.4	1.0	0.26	C Series
	and	762.1	763.1	1.0	0.24	D Series
	and	765.6	766.6	1.0	0.27	D Series
	and	769.8	770.8	1.0	0.10	D Series

Notes:

- 1. eU₃O₈ is radiometric equivalent U₃O₈ from a calibrated total gamma downhole probe. eU₃O₈ results are preliminary in nature and all mineralized intervals will be sampled and submitted for chemical U₃O₈ assay.
- 2. Intersection interval is composited above a cut-off grade of 0.1% eU₃O₈ unless otherwise indicated.
- 3. Intersection interval is composited above a cut-off grade of 1.0% eU₃O₈.
- 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 and the basement mineralization is interpreted to dip moderately to the southeast, the true thickness of the mineralization is expected to be approximately 75% of the intersection lengths. Drill hole WR-691 was drilled steeply to the north and therefore the true thickness of the mineralization is expected to be approximately 60% of the intersection lengths in this hole.
- 6. Drill holes targeting the D series lens mineralization, in some cases, also intersect mineralization in the A and/or B and/or C stratigraphic horizons outside of the Gryphon resource area.

Table 3: Radiometric equivalent probe results for Gryphon deposit additional infill and expansion drill holes

Section	Drill Hole	From (m)	To (m)	Length (m) ⁵	$eU_3O_8(\%)^{1,2,4}$	Lens Designation
5175GP	WR-638D1	724.0	725.8	1.8	0.22	A Series
	and	728.6	729.6	1.0	0.20	A Series
	and	786.6	787.7	1.1	0.85	D Series
5200GP	WR-582D3	738.8	747.4	8.6	1.7	A Series
	including ³	743.3	745.8	2.5	5.3	A Series
	and	756.4	757.4	1.0	0.16	A Series
	and	805.2	806.2	1.0	2.3	D Series
5225GP	WR-582D4	746.3	748.6	2.3	0.24	A Series
	and	763.2	764.2	1.0	0.10	A Series
	and	798.1	799.1	1.0	0.28	D Series
	and	814.4	816.2	1.8	0.81	D Series
	including ³	814.7	815.7	1.0	1.2	D Series

Notes:

- 1. eU₃O₈ is radiometric equivalent U₃O₈ from a calibrated total gamma downhole probe. eU₃O₈ results are preliminary in nature and all mineralized intervals will be sampled and submitted for chemical U₃O₈ assay.
- 2. Intersection interval is composited above a cut-off grade of 0.1% eU₃O₈ unless otherwise indicated.
- 3. Intersection interval is composited above a cut-off grade of 1.0% eU₃O₈.
- 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 and the basement mineralization is interpreted to dip moderately to the southeast, the true thickness of the mineralization is expected to be approximately 75% of the intersection lengths.

Qualified Persons and Data Quality

requirements of NI 43-101 has reviewed and approved the technical information contained in this release. The Company currently reports preliminary radiometric equivalent grades ("eU₃O₈"), 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 U308 (above a cut-off grade of 0.2% U308) based on 834,000 tonnes of mineralization at an average grade of 2.3% U308. 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 U308 (above a cut-off grade of 0.8% U308) based on 166,000 tonnes of mineralization at an average grade of 19.1% U308, 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 U3O8), 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 10th, 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. Including 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 over 330,000 hectares in the infrastructure rich eastern Athabasca Basin. Denison's interests in Saskatchewan also include a 22.5% ownership interest in the McClean Lake joint venture, 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 63.01% 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 <u>Uranium Participation Corp.</u>, a publicly traded company which invests in uranium oxide and uranium hexafluoride.

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, including plans to update certain mineral resource estimates and to complete a PFS; potential mineralization of drill targets; the estimates of Denison's mineral resources and the results of its PEA. 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.

Contact

David Cates
President and Chief Executive Officer
(416) 979-1991 ext. 362
Sophia Shane
Investor Relations
(604) 689-7842
Follow Denison on Twitter
@DenisonMinesCo