

## PRESS RELEASE

**DENISON REPORTS INCREASED GRADES WITH  
RECEIPT OF WHEELER ASSAY RESULTS AND ANNOUNCES  
SUMMER 2016 EXPLORATION PRIORITIES**

**Toronto, ON – May 26, 2016** Denison Mines Corp. (“Denison” or the “Company”) (DML: TSX, DNN: NYSE MKT) is pleased to report receipt of uranium assay results from the winter 2016 exploration drilling program on its 60% owned Wheeler River property, located in the infrastructure rich eastern portion of the Athabasca Basin region in northern Saskatchewan. In most cases, the final assay results have resulted in an increase in the grade of the previously reported downhole radiometric probe results.

The winter drilling program included 32 drill holes totalling 21,761 metres, and was primarily designed to test targets in the vicinity of the Gryphon deposit. The assay results, received from multiple high grade intercepts, confirm the expansion of the recently discovered mineralized zone located within 200 metres north and northwest of the Gryphon deposit. Similar to the Gryphon deposit, the new zone of mineralization is interpreted to occur as a series of stacked lenses. The assay results further confirm the interpretation of multiple new lenses of mineralization, which have been added to the Company’s geological model for the Gryphon deposit. The lenses, designated the D-series lenses, are open along strike to the southwest and northeast and occur roughly parallel to the known strike of the adjacent Gryphon deposit.

Assay highlights from D-series lenses located immediately north of the Gryphon deposit include:

- 5.3% U<sub>3</sub>O<sub>8</sub> over 11.0 metres (from 718.5 to 729.5 metres; drill hole WR-641), including 12.6% U<sub>3</sub>O<sub>8</sub> over 4.5 metres (from 725.0 to 729.5 metres)
- 11.9% U<sub>3</sub>O<sub>8</sub> over 1.5 metres (from 670.5 to 672.0 metres; drill hole WR-651)
- 2.9% U<sub>3</sub>O<sub>8</sub> over 6.0 metres (from 759.0 to 765.0 metres; drill hole WR-633D1)
- 2.3% U<sub>3</sub>O<sub>8</sub> over 4.0 metres (from 750.5 to 754.5 metres; drill hole WR-633D1)
- 6.2% U<sub>3</sub>O<sub>8</sub> over 2.5 metres (from 584.5 to 587.0 metres; drill hole WR-646)

Denison’s President and CEO, David Cates, commented, *“Given that these assay results rank among the best received since Gryphon was discovered in 2014, and that we have only finished drilling on one section in this new area north of Gryphon, we are enthusiastic about the potential to add significantly to the estimated resources for the Gryphon deposit with our summer 2016 drilling. This follows the completion of a successful Preliminary Economic Assessment (“PEA”) for the Wheeler River project, which was released earlier this year and studied the co-development of the high grade Gryphon and Phoenix deposits. With Gryphon expected to be mined first in the PEA plan, growth in the resource at Gryphon is expected to have a significant impact on the overall project economics – as it could extend the life of the low cost Gryphon deposit and defer the capital required to develop Phoenix.”*

In addition, assay results received from the winter drilling completed to the southwest of the Gryphon deposit, along the K-North trend, confirmed the prospectivity of this trend with weak mineralization intersected in almost every hole.

**Summer Exploration & Evaluation Plans**

The summer exploration program planned for the Wheeler River project is expected to consist of approximately 28,000 metres of diamond drilling, focussed on systematic step-out testing of the D-series lenses and additional testing, in areas where mineralization remains open, around the Gryphon deposit. Depending on results, an initial 50 x 50 metre drill spacing pattern is expected to be employed, with the

objective of delineating additional inferred resources at or around the Gryphon deposit. Exploration drilling is expected to commence on or around May 30<sup>th</sup>, 2016.

This summer, the Company will also be undertaking other field activities to support the ongoing Pre-Feasibility Study (“PFS”) for the Wheeler River project – including further geotechnical work and environmental studies. Evaluation activities for the Wheeler River project have been budgeted at CAD\$2.6 million for the year (Denison’s share, CAD\$1.6M), which relate primarily to the initiation of the PFS.

Beyond Wheeler River, exploration drilling is also planned for the summer on several of the Company’s exploration pipeline properties. With the focus on a variety of high-priority exploration targets, the summer exploration program will include drilling at Waterbury Lake (61.55% Denison, 2,500 metres), Crawford Lake (100% Denison, 1,650 metres), Hatchet Lake (64.36% Denison, 1,600 metres) and Turkey Lake (100% Denison, 750 metres). Soil and radon surveys are also planned for the summer at South Dufferin (100% Denison) and Hatchet Lake.

Summer 2016 drill programs are also planned for Denison’s non-operated joint venture projects, including Mann Lake (30% Denison, 2,200 metres) and McClean Lake (22.5% Denison, 2,500 metres). At Mann Lake, the 2016 exploration program has been increased to allow for 3 holes to follow-up on highly anomalous geochemistry and alteration associated with a 100 metre sub-Athabasca unconformity offset identified in the southern portion of the property. The Mann Lake project is operated by Cameco (52.5%), and the McClean Lake project is operated by AREVA Resources Canada Inc. (“ARC”)(70%).

### **Gryphon Expansion Assay Results**

Following the discovery, this winter, of new high-grade mineralization in drill hole WR-633D1 (located immediately north of the Gryphon deposit), a further nine drill holes were completed. Five holes were completed on Section 5200GP (the same section as WR-633D1) and two holes on each of Section 5150GP and 5250GP (located to the southwest and northeast of Section 5200GP, respectively). The drilling pattern resulted in an approximate 50 x 50 metre spacing – the same spacing used to obtain the initial inferred resource estimate for the Gryphon deposit. Table 1 provides a summary of assay results from Section 5150GP, 5200GP and 5250GP.

**Table 1: Summary Assay Results from Intersections on Section 5150 GP, 5200GP and 5250 GP**

Section	Drill Hole	Down-Hole Total Gamma Probe <sup>1,5</sup>				Assay <sup>5</sup>			
		From (m)	To (m)	Length <sup>6</sup> (m)	eU <sub>3</sub> O <sub>8</sub> (%) <sup>2,3</sup>	From (m)	To (m)	Length <sup>6</sup> (m)	U <sub>3</sub> O <sub>8</sub> (%) <sup>4</sup>
5150 GP	WR-646	584.6	587.4	2.8	4.2	584.5	587.0	2.5	6.2
	(and)	642.7	643.8	1.1	0.20	642.7	643.7	1.0	0.27
	(and)	679.3	680.3	1.0	0.18	679.9	680.9	1.0	0.26
	(and)	Below cut-off grade of 0.1% eU <sub>3</sub> O <sub>8</sub>				686.7	687.7	1.0	0.11
	WR-651	562.8	564.5	1.7	0.69	563.0	564.5	1.5	0.99
	(and)	Below cut-off grade of 0.1% eU <sub>3</sub> O <sub>8</sub>				641.0	642.0	1.0	0.10
	(and)	649.4	650.4	1.0	0.11	Below cut-off grade of 0.1% U <sub>3</sub> O <sub>8</sub>			
	(and)	669.9	671.9	2.0	7.1	670.5	672.0	1.5	11.9
	(and)	683.0	684.0	1.0	0.20	683.5	685.5	2.0	0.11
5200 GP	WR-633D1	Below cut-off grade of 0.1% eU <sub>3</sub> O <sub>8</sub>				675.1	676.1	1.0	0.57
	(and)	Below cut-off grade of 0.1% eU <sub>3</sub> O <sub>8</sub>				682.1	685.1	3.0	0.18
	(and)	751.5	754.7	3.2	2.0	750.5	754.5	4.0	2.3
	(and)	757.7	765.3	7.6	1.7	759.0	765.0	6.0	2.9
	WR-633D2	748.3	749.6	1.3	0.76	749.2	750.2	1.0	1.1
	(and)	758.3	759.3	1.0	0.18	759.2	760.2	1.0	0.19

	(and)	785.0	786.0	1.0	0.30	786.0	787.0	1.0	0.98
	WR-638	725.7	726.7	1.0	0.12	727.0	731.0	4.0	0.15
	(and)	727.6	729.5	1.9	0.13	Merged with above interval			
	(and)	738.5	739.5	1.0	0.12	740.0	743.0	3.0	0.16
	(and)	740.4	741.6	1.2	0.16	Merged with above interval			
	(and)	747.4	748.4	1.0	0.32	749.1	750.1	1.0	0.36
	(and)	760.2	761.2	1.0	0.13	Below cut-off grade of 0.1% U <sub>3</sub> O <sub>8</sub>			
	(and)	763.7	764.7	1.0	0.11	765.2	766.2	1.0	0.13
	(and)	781.4	782.4	1.0	0.98	783.3	784.3	1.0	1.3
	(and)	785.0	786.0	1.0	0.14	Below cut-off grade of 0.1% U <sub>3</sub> O <sub>8</sub>			
	WR-641	575.3	576.3	1.0	0.20	575.5	576.5	1.0	0.33
	(and)	718.1	719.1	1.0	0.62	718.5	729.5	11.0	5.3
	(and)	721.1	730.3	9.2	3.9	Merged with above interval			
	WR-644	558.3	560.6	2.3	0.20	559.5	561.5	2.0	0.46
	(and)	647.8	649.1	1.3	0.23	649.0	650.5	1.5	0.17
	WR-648	606.7	607.7	1.0	0.19	607.1	608.1	1.0	0.11
5250 GP	WR-650	772.8	773.8	1.0	0.15	775.0	776.0	1.0	0.22
	WR-654	663.1	664.1	1.0	0.13	Below cut-off grade of 0.1% U <sub>3</sub> O <sub>8</sub>			

Notes:

1. Probe results were previously reported, see Denison news release dated April 18, 2016
2. eU<sub>3</sub>O<sub>8</sub> is radiometric equivalent uranium from a calibrated total gamma down-hole probe
3. Composited above a cut-off grade of 0.1% eU<sub>3</sub>O<sub>8</sub>
4. Composited above a cut-off grade of 0.1% U<sub>3</sub>O<sub>8</sub>
5. Composites compiled using 1.0 metre minimum ore thickness and 2.0 metres maximum waste
6. 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

### **Potential for Resource Growth at Gryphon**

The current resource estimate for the Gryphon deposit, completed in November 2015, includes the A, B and C series lenses - a set of parallel, stacked, elongate lenses that are broadly conformable with the basement geology and dip moderately to the southeast and plunge moderately to the northeast. The mineralization intersected during the winter 2016 program is interpreted to represent an additional series of stacked lenses, designated the D series lenses, which are similar to and conformable with the Gryphon deposit A, B and C lenses. The D series lenses, occur with the Basal Pegmatite unit immediately footwall to, and to the northwest of, the Gryphon deposit. The D series lenses are considered to be open in all directions. Three priority target areas have been identified for immediate follow up this summer. The target areas are discussed below and are shown in Figure 2:

1. Between the newly defined D series lenses (Section 5200GP and 5150GP) and the previously identified D series lenses (Section 5100GP and 5050GP), which occur approximately 100 metres up plunge to the southwest, and were intersected in 2014 but were not included in the initial resource estimate for the Gryphon deposit, due to insufficient drilling at the time;
2. Up plunge and along strike to the southwest of the D series lenses identified in 2014 (Section 5100GP and 5050GP), roughly parallel to the Gryphon deposit – which extends approximately 250 metres in this direction.
3. Down plunge and along strike to the northeast of the newly delineated D series lenses (Section 5200GP and 5150GP). On Section 5250GP, the northeastern most drill section at Gryphon, the weak mineralization intersected by the first two follow up holes in this direction, as well as the continuation of faulting, hydrothermal alteration, and sub-units of graphitic pelitic gneiss, suggest the mineralizing system continues in this direction.

## Assay Results Southwest of Gryphon along the K-North Trend

During the winter 2016 program drill testing for unconformity and basement hosted mineralization continued to the southwest of the Gryphon deposit, along the K-North trend. Drilling commenced on Section 3200GP, approximately 1.5 kilometers to the southwest of Gryphon, and proceeded on sections at 200 metres, 600 metres, 1,000 metres and 1,400 metres to the southwest respectively. Assay results for 12 of the 13 drill holes completed during the winter program have been received. Assay results confirm weak mineralization in almost every hole over the strike length of 1.4 kilometres, including 0.12% U<sub>3</sub>O<sub>8</sub> over 3.5 meters in drill hole WR-634 and 0.52% U<sub>3</sub>O<sub>8</sub> over 1.0 meter in drill hole WR-655. The mineralization is generally located at or proximal to the unconformity. The trend remains open and untested for approximately 3.5 kilometres along strike to the southwest before reaching the K-Central target area. Additional drilling is warranted along this trend to test targets at the unconformity and within the basement. A summary of assay results from Section 3200GP to 1800GP is provided in Table 2.

**Table 2: Summary of assay results from  
Section 3200GP to 1800GP**

Section	Drill Hole	From (m)	To (m)	Length (m) <sup>4</sup>	U <sub>3</sub> O <sub>8</sub> (%) <sup>1,2</sup>	Length to Unconformity (m)
3200GP	WR-629		No significant mineralization			548.5
	WR-629D1		No significant mineralization			492.8
3000GP	WR-634	473.5	474.5	1.0	0.16	474.1
	(and)	478.5	482.0	3.5	0.12	474.1
	(and)	487.0	487.5	0.5	0.10	474.1
	(and)	492.5	493.0	0.5	0.64	474.1
	WR-634D1		No significant mineralization			493.2
	WR-634D2	455.5	456.0	0.5	0.17	458.5
2600GP	WR-643		No significant mineralization			463.9
	WR-645					465.9
2200GP	WR-647	520.2	520.6	0.5	0.10	476.2
	WR-649 <sup>3</sup>	520.5	520.8	0.3	0.11	437.4
	(and)	548.9	549.3	0.4	0.14	437.4
	WR-655	481.5	482.5	1.0	0.12	476.7
1800GP	(and)	484.5	485.5	1.0	0.52	476.7
	(and)	487.0	487.5	0.5	0.17	476.7
	WR-656					431.4
1800GP	WR-652		No significant mineralization			448.6
	WR-653	466.5	467.5	1.0	0.19	462.3
	(and)	466.3	466.6	0.3	0.13	462.3
	(and)	522.7	522.8	0.1	0.06	462.3

Notes:

- Composites compiled using no minimum ore thickness and no maximum waste
- Intersection interval is composited above a cut-off grade of 0.05% U<sub>3</sub>O<sub>8</sub>
- Chemical assay results not yet received. Grade reported as radiometric equivalent uranium (eU<sub>3</sub>O<sub>8</sub>) from a calibrated total gamma down-hole probe. Probe results were previously reported, see Denison news release dated April 18, 2016
- 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

## **Illustrative Figures & Further Details**

A property location and basement geology map is provided in Figure 1. A plan map of the northeast plunging Gryphon deposit mineralized lenses, projected up to the simplified basement geology at the sub-Athabasca unconformity, is shown in Figure 2 with the location of the D-series lenses interpreted from winter 2016 drilling results. At present, mineralized lenses are defined using a 0.05% eU<sub>3</sub>O<sub>8</sub> (radiometric equivalent uranium) grade shell and minimum thickness of two metres. The grade shells will be updated in due course using the recently received assay data.

Further details regarding the Gryphon deposit and the current mineral resources estimated at Wheeler River are provided in the report titled "Technical Report on a Mineral Resource Estimate For The Wheeler River Property, Eastern Athabasca Basin, Northern Saskatchewan, Canada.", dated Nov. 25, 2015, authored by William E. Roscoe Ph.D, P.Eng. and Mark B. Mathisen C.P.G of RPA. A copy of this report is available on Denison's website and under Denison's profile on SEDAR ([www.sedar.com](http://www.sedar.com)).

## **Sampling and Assay Procedures**

Drill core with anomalous total gamma radioactivity (>500 counts per second) is selected for sampling and uranium assay over 0.5 metre intervals. Sampling is undertaken on site by splitting the core in half, with one half submitted for analysis and the other half retained in the core box for future reference. Uranium assays are performed by the Saskatchewan Research Council ("SRC") Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U<sub>3</sub>O<sub>8</sub> weight %. Sample preparation involves crushing and pulverizing core samples to 90% passing -106 microns. The resultant pulp is digested using aqua-regia and the solution analyzed for U<sub>3</sub>O<sub>8</sub> weight % using ICP-OES.

## **Qualified Person**

The disclosure of a scientific or technical nature contained in this news release was prepared by Dale Verran, MSc, Pr.Sci.Nat., Denison's Vice President, Exploration, who is a Qualified Person in accordance with the requirements of NI 43-101. For a description of the assay procedures and the quality assurance program and quality control measures applied by Denison, please see Denison's Annual Information Form dated March 24, 2016 filed under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

## **About Wheeler River**

*The Wheeler River property is a joint venture between Denison (60% and operator), Cameco Corp. (30%), and JCU (Canada) Exploration Company Limited (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 U<sub>3</sub>O<sub>8</sub> (above a cut-off grade of 0.2% U<sub>3</sub>O<sub>8</sub>) based on 834,000 tonnes of mineralization at an average grade of 2.3% U<sub>3</sub>O<sub>8</sub>. 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 U<sub>3</sub>O<sub>8</sub> (above a cut-off grade of 0.8% U<sub>3</sub>O<sub>8</sub>) based on 166,000 tonnes of mineralization at an average grade of 19.1% U<sub>3</sub>O<sub>8</sub>, and is the highest grade undeveloped 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<sub>3</sub>O<sub>8</sub>), and Denison's share of estimated initial capital expenditures ("CAPEX") of CAD\$336M (CAD\$560M on 100% ownership basis). Results from the winter 2016 drilling program have not been incorporated into the resource estimate or the PEA. Additional definition drilling is required to improve the confidence in the existing mineral resources estimated for the Gryphon deposit, and is expected to be completed as the Company advances the project towards the completion of a Pre-Feasibility study ("PFS"). 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.*

## 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 350,000 hectares in the 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 61.55% 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. Internationally, Denison owns 100% of the Mutanga project in Zambia, 100% of the uranium/copper/silver Falea project in Mali, and a 90% interest in the Dome project in Namibia. Denison has recently entered into an agreement with GoviEx Uranium Inc. (GXU: CSE) to sell its African interests, with an expected closing date in late May or early June, 2016.

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.

### For more information, please contact

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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; and the estimates of Denison's mineral resources.

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 there can be no assurance that such statements 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 "Risk Factors" in Denison's Annual Information Form dated March 24, 2016 available under its profile at [www.sedar.com](http://www.sedar.com) and in its Form 40-F available at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml). 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. 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 its 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.

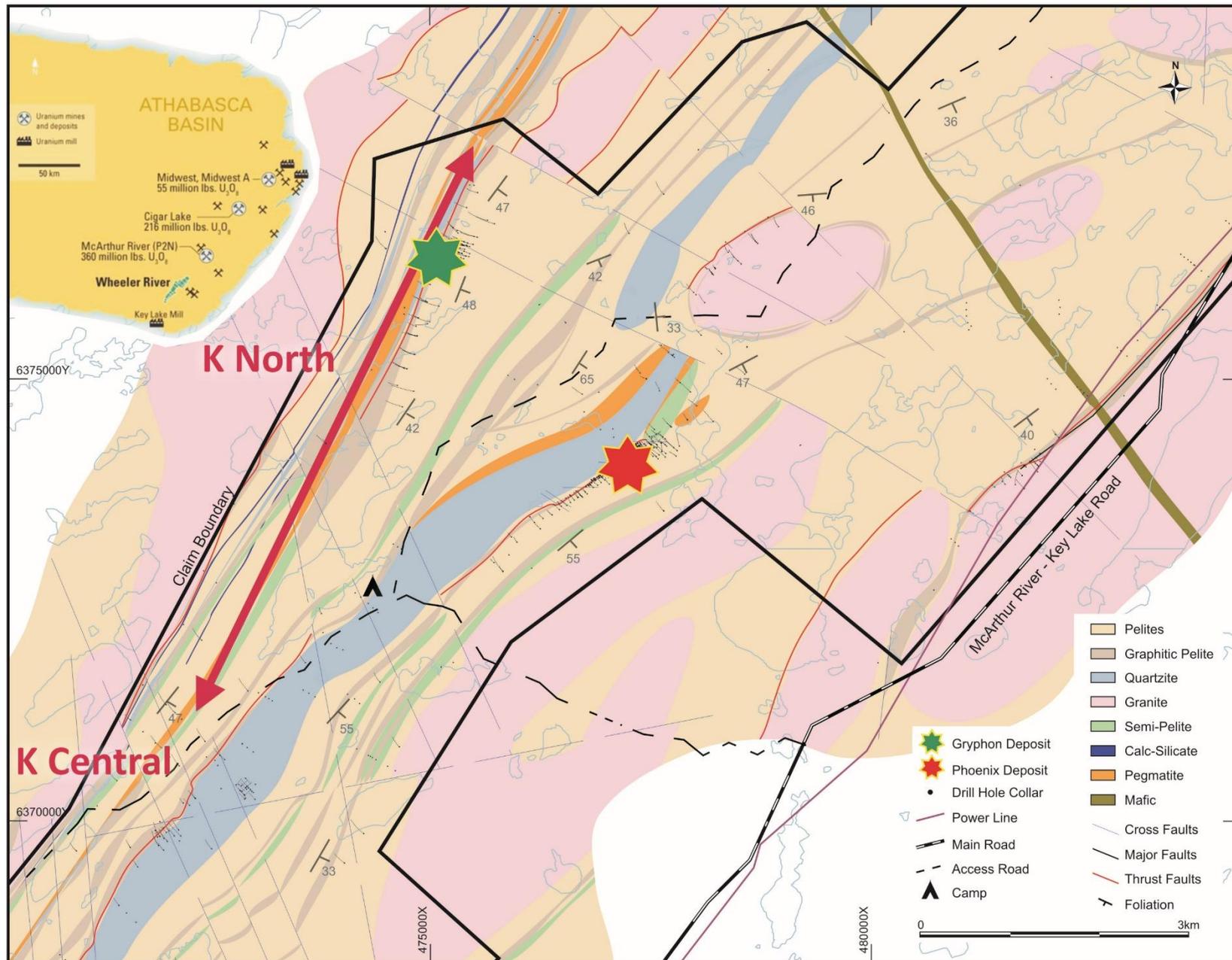


Figure 1: Wheeler River property location and basement geology



Figure 2: Plan map of the northeast plunging Gryphon mineralized lenses projected up to the simplified basement geology at the sub-Athabasca unconformity