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PRESS RELEASE

DENISON ANNOUNCES EXPANSION OF GRYPHON MINERALIZATION AS WINTER EXPLORATION DRILLING WRAPS UP AT WHEELER RIVER

Toronto, ON – April 18, 2016 Denison Mines Corp. ("Denison" or the "Company") (DML: TSX, DNN: NYSE MKT) is pleased to report the expansion of the mineralized zone discovered immediately north of the Gryphon deposit, as well as the completion of a successful winter exploration drilling program, on the Company's 60% owned Wheeler River property in northern Saskatchewan. A total of 21,800 metres of diamond drilling, in 32 drill holes, was completed at Wheeler River during the winter exploration program.

The final weeks of the winter exploration program were highlighted by positive results from the follow up of the high-grade basement hosted mineralization previously reported in drill holes WR-633D1 and WR-641, both of which tested the area immediately north and northwest of the Gryphon deposit on section 5200GP earlier in the winter program. Despite limited time for follow up this winter, Denison successfully identified additional mineralization on section 5200GP (drill holes WR-644 and WR-648) and encountered additional high-grade mineralization on section 5150GP (drill holes WR-646 and WR-651), representing a 50 metre step out to the southwest of section 5200GP. These results have added several new lenses of mineralization to the Company's geological model for the area north of the Gryphon deposit and highlight the potential for the discovery of additional lenses with further follow up drilling.

In addition to testing in the immediate vicinity of Gryphon, the 2016 winter exploration program was designed to explore for new uranium mineralization to the southwest of the Gryphon deposit along the K-North trend. Step-out drill testing in this area was successful in extending the mineralized K-North trend roughly 1.4 kilometres southwest of Gryphon. Mineralization was encountered at or near the sub-Athabasca unconformity and continues to suggest that there is potential for a material discovery to occur at the unconformity or within the basement rock along the trend.

Denison's President and CEO, David Cates, commented, *"The 2016 winter exploration program at Wheeler River has been a tremendous success. Following the April 4, 2016 release of the Company's findings from the Preliminary Economic Assessment for the Wheeler River project, which returned a pre-tax IRR of 20.4% using the current long term price for uranium, we are very pleased to be drilling a new zone of high-grade mineralization in very close proximity to the Gryphon deposit. Gryphon is a key part of the strategic development plan for Wheeler, and the potential to add pounds near Gryphon is very exciting and potentially meaningful from an economic standpoint. Planning for a roughly 25,000 metre 2016 summer drill program, at Wheeler River, is underway and is expected to focus on further expansion of the mineralization at Gryphon as well as testing of other high priority target areas."*

Wheeler River Project

On April 4th, 2016 Denison announced the results of a Preliminary Economic Assessment ("PEA") for the Wheeler River Project which, based on today's long term contract price for uranium, included a pre-tax Internal Rate of Return ("IRR") of 20.4%, an indicative post-tax IRR to Denison of 17.8%, and Denison's share of estimated initial capital expenditures of CAD$336M (CAD$560M on 100% ownership basis). 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. Results from the winter 2016 drilling program have not been incorporated into the current resource estimates or the PEA.

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_3O_8 (above a cut-off grade of 0.2% U_3O_8) based on 834,000 tonnes of mineralization at an average grade of 2.3% U_3O_8. 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_3O_8 (above a cut-off grade of 0.8% U_3O_8) based on 166,000 tonnes of mineralization at an average grade of 19.1% U_3O_8, and is the highest grade undeveloped uranium deposit in the world.

Mineralized Zone North of Gryphon Expands with Initial Follow Up

During the winter 2016 program, drill testing within 200 metres north and northwest of the Gryphon deposit returned numerous high-grade intersections within the Basal Pegmatite unit. This stratigraphic unit occurs footwall to the Gryphon deposit and has undergone little previous drill testing. Initial high-grade intersections were obtained on Section 5200GP highlighted by 3.9% eU_3O_8 over 9.2 metres, including 6.7% eU_3O_8 over 5.3 metres, in drill hole WR-641, and 1.7% eU_3O_8 over 7.6 metres, including 6.3% eU_3O_8 over 1.7 metres, in drill hole WR-633D1 (see Denison news release dated March 10, 2016).

A further four holes were completed on Section 5200GP, all of which intersected mineralization in excess of 0.1% eU_3O_8 over 1 meter. As warranted by these results, additional follow-up drilling commenced on adjacent sections, roughly 50 metres along strike to the southwest (Section 5150GP, two holes) and to the northeast (Section 5250GP, two holes). The results from Section 5150GP are highlighted by drill hole WR-651, which returned 7.1% eU_3O_8 over 2.0 metres, including 9.3% eU_3O_8 over 1.5 metres, and drill hole WR-646, which intersected 4.2% eU_3O_8 over 2.8 metres, including 8.2% eU_3O_8 over 1.4 metres. The highlights of the winter 2016 drilling program, for the area immediately north and northwest of the Gryphon deposit, are presented in Table 1. Denison reports its initial exploration results as radiometric equivalent uranium ("eU_3O_8") from a calibrated, total gamma, down-hole probe. All mineralized intersections have been sampled for chemical U_3O_8 assay and final results will be reported following receipt of the data.

Table 1: Highlight intersections from Section 5150 GP, 5200GP and 5250 GP

Section	Drill Hole	From (m)	To (m)	Length (m)[4]	eU_3O_8 (%)[1]
	WR-646[2]	**584.6**	**587.4**	**2.8**	**4.2**
	(includes)[3]	**585.8**	**587.2**	**1.4**	**8.2**
	(and)[2]	642.7	643.8	1.1	0.20
	(and)[2]	679.3	680.3	1.0	0.18
	WR-651[2]	562.8	564.5	1.7	0.69
5150GP	(includes)[3]	563.2	564.2	1.0	1.0
	WR-651[2]	640.7	641.7	1.0	0.14
	(and)[2]	649.4	650.4	1.0	0.11
	(and)[2]	**669.9**	**671.9**	**2.0**	**7.1**
	(includes)[3]	**670.2**	**671.7**	**1.5**	**9.3**
	(and)[2]	683.0	684.0	1.0	0.20
	WR-633D1[2,5]	**751.5**	**754.7**	**3.2**	**2.0**
	(includes)[3,5]	**753.6**	**754.6**	**1.0**	**5.7**
	(and)[2,5]	**757.7**	**765.3**	**7.6**	**1.7**
	(includes)[3,5]	**760.3**	**762.0**	**1.7**	**6.3**
5200GP	**(includes)[3,5]**	**764.2**	**765.2**	**1.0**	**1.2**
	WR-633D2[2,5]	748.3	749.6	1.3	0.76
	(and)[2,5]	758.3	759.3	1.0	0.18
	(and)[2,5]	785.0	786.0	1.0	0.30
	WR-638[2,5]	725.7	726.7	1.0	0.12

	(and)[2,5]	727.6	729.5	1.9	0.13
	(and)[2,5]	738.5	739.5	1.0	0.12
	(and)[2,5]	740.4	741.6	1.2	0.16
	(and)[2,5]	747.4	748.4	1.0	0.32
	(and)[2,5]	760.2	761.2	1.0	0.13
	(and)[2,5]	763.7	764.7	1.0	0.11
	(and)[2,5]	781.4	782.4	1.0	0.98
	(and)[2,5]	785.0	786.0	1.0	0.14
	WR-641[2,5]	575.3	576.3	1.0	0.20
	(and)[2,5]	718.1	719.1	1.0	0.62
	(and)[2,5]	**721.1**	**730.3**	**9.2**	**3.9**
	(includes)[3,5]	**723.7**	**729.0**	**5.3**	**6.7**
	WR-644[2]	558.3	560.6	2.3	0.20
	(and)[2]	647.8	649.1	1.3	0.23
	WR-648[2]	606.7	607.7	1.0	0.19
5250GP	WR-650[2]	772.8	773.8	1.0	0.15
	WR-654[2]	663.1	664.1	1.0	0.13

Notes:
1. eU_3O_8 is radiometric equivalent uranium from a calibrated total gamma down-hole probe. All intersections will be sampled for chemical U_3O_8 assay
2. Intersection interval is composited above a cut-off grade of 0.1% eU_3O_8
3. Intersection interval is composited above a cut-off grade of 1.0% eU_3O_8
4. 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
5. Previously reported results, see Denison news release dated March 10, 2016

Growing Mineralized Footprint 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 are associated with a significant fault zone (G-Fault) that separates a thin unit of quartzite (Quartz-Pegmatite) from an overlying graphitic pelite (Upper Graphite). The lenses dip moderately to the southeast and plunge moderately to the northeast. The deposit is approximately 450 metres long in the plunge direction and 80 metres wide across the plunge. The deposit is centered at 720 metres below surface and approximately 220 metres below the sub-Athabasca unconformity.

The mineralization intersected within the Basal Pegmatite unit during the winter 2016 program is interpreted to represent a series of stacked southeasterly dipping lenses, conformable to the pelitic gneiss sub-units with which they are typically associated and broadly conformable to the Gryphon deposit A, B and C lenses. These lenses have been designated as D series lenses. Reasonable continuity of the mineralized lenses could be interpolated between Section 5200GP and Section 5150GP, which suggests a similar northeast plunge as the Gryphon deposit lenses. Further drilling is still required to test whether these lenses are continuous with the previously identified D series lenses, which were drilled in 2014 and occur approximately 100 metres up plunge to the southwest. The D series lenses are not included in the current resource estimate for the Gryphon deposit, or the Wheeler River PEA.

On Section 5250GP, the northeastern most drill section at Gryphon, the limited drilling completed this winter (two holes) failed to intersect any significant high-grade mineralization within the Basal Pegmatite unit; however, the weak mineralization intersected, as well as the continuation of faulting, hydrothermal alteration and sub-units of graphitic pelitic gneiss, suggest the mineralizing system continues to the northeast and further drilling is warranted on this section and to the northeast. In this regard, the mineralization within the Basal Pegmatite unit is still considered to be open in all directions.

Exploration Southwest of Gryphon along the K-North Trend

Drill testing for unconformity or basement hosted mineralization has continued to the southwest of the Gryphon deposit, along the K-North trend. During 2015, numerous mineralized intercepts were obtained along this trend over a 1.5 kilometer strike length – including drill hole WR-597 (Section 4000GP), which intersected 4.5% U_3O_8 over 4.5 metres. The mineralization is located at or proximal to the unconformity and is associated with structurally disrupted, clay altered, and geochemically anomalous sandstone and basement rocks, typical of other Athabasca unconformity deposit settings. This portion of the 2016 winter program focused on testing for additional zones of mineralization at the unconformity along strike of the southernmost hole drilled in 2015, WR-628 (Section 3200GP), which intersected the most significant sandstone alteration and anomalous geochemistry of the 2015 program.

A total of 13 drill holes were completed, commencing on Section 3200GP and continuing along strike to the southwest on sections at 200 metres, 600 metres, 1,000 metres and 1,400 metres respectively. Weak mineralization and/or anomalous radioactivity was intersected in almost every hole, including 0.10 % eU_3O_8 over 10.4 meters in drill hole WR-634 and 0.11% eU_3O_8 over 6.1 meters in drill hole WR-655. The mineralization is generally located at or proximal to the unconformity.

Although no significant high-grade mineralization has been intersected, the favorable alteration and structure along the K-North trend, within the sandstone and basement, indicate further priority drilling is warranted to test targets at the unconformity and within the basement below. The trend remains untested for approximately 3.5 kilometres along strike to the southwest before reaching the K-Central area. Historic drilling from the K-Central area encountered significant alteration and anomalous geochemistry within the sandstone and basement lithologies.

Table 2: Summary of intersections from Section 3200GP to 1800GP

Section	Drill Hole	From (m)	To (m)	Length (m)[4]	eU_3O_8 (%)[1]	Length to Unconformity (m)
3200GP	WR-629		No significant mineralization			548.5
	WR-629D1		No significant mineralization			492.8
3000GP	**WR-634[3]**	**472.2**	**482.6**	**10.4**	**0.10**	**474.1**
	(and)[3]	486.8	487.8	1.0	0.09	474.1
	(and)[3]	492.4	493.4	1.0	0.13	474.1
	(and)[2]	498.9	499.1	0.2	0.05	474.1
	WR-634D1		No significant mineralization			493.2
	WR-634D2[3]	455.1	456.3	1.2	0.07	458.5
2600GP	WR-643		No significant mineralization			463.9
	WR-645[2]	467.9	468.2	0.3	0.09	465.9
2200GP	WR-647[2]	516.5	516.7	0.2	0.09	476.2
	WR-649[2]	520.5	520.8	0.3	0.11	437.4
	(and)[2]	548.9	549.3	0.4	0.14	437.4
	WR-655[3]	**480.5**	**486.6**	**6.1**	**0.11**	**476.7**
	(and)[2]	582.8	583.1	0.3	0.06	476.7
	WR-656[2]	585.3	585.7	0.4	0.07	431.4
1800GP	WR-652		No significant mineralization			448.6
	WR-653[2]	465.8	466.2	0.4	0.18	462.3
	(and)[2]	466.3	466.6	0.3	0.13	462.3
	(and)[2]	522.7	522.8	0.1	0.06	462.3

Notes:
1. eU_3O_8 is radiometric equivalent uranium from a calibrated total gamma down-hole probe. All intersections will be sampled for chemical U_3O_8 assay
2. No cut-off grade applied to the intersection interval
3. Intersection interval is composited above a cut-off grade of 0.05% eU_3O_8

4. 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. Figure 2 provides a plan map of the northeast plunging Gryphon deposit mineralized lenses projected up to the simplified basement geology at the sub-Athabasca unconformity and shows the location of mineralized intercepts from the winter 2016 drilling program. Cross-sections along section lines 5200GP and 5150GP are provided in Figure 3 and 4 respectively. The cross-sections depict the simplified geological interpretation with the new lenses of mineralization shown based on the interpretation of the mineralized intercepts received to date. All mineralized lenses are defined using a 0.05% U_3O_8 or eU_3O_8 grade shell and minimum thickness of two metres.

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 under Denison’s profile on SEDAR (www.sedar.com).

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.

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 May, 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.

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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 *and in its Form 40-F available at* 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.*

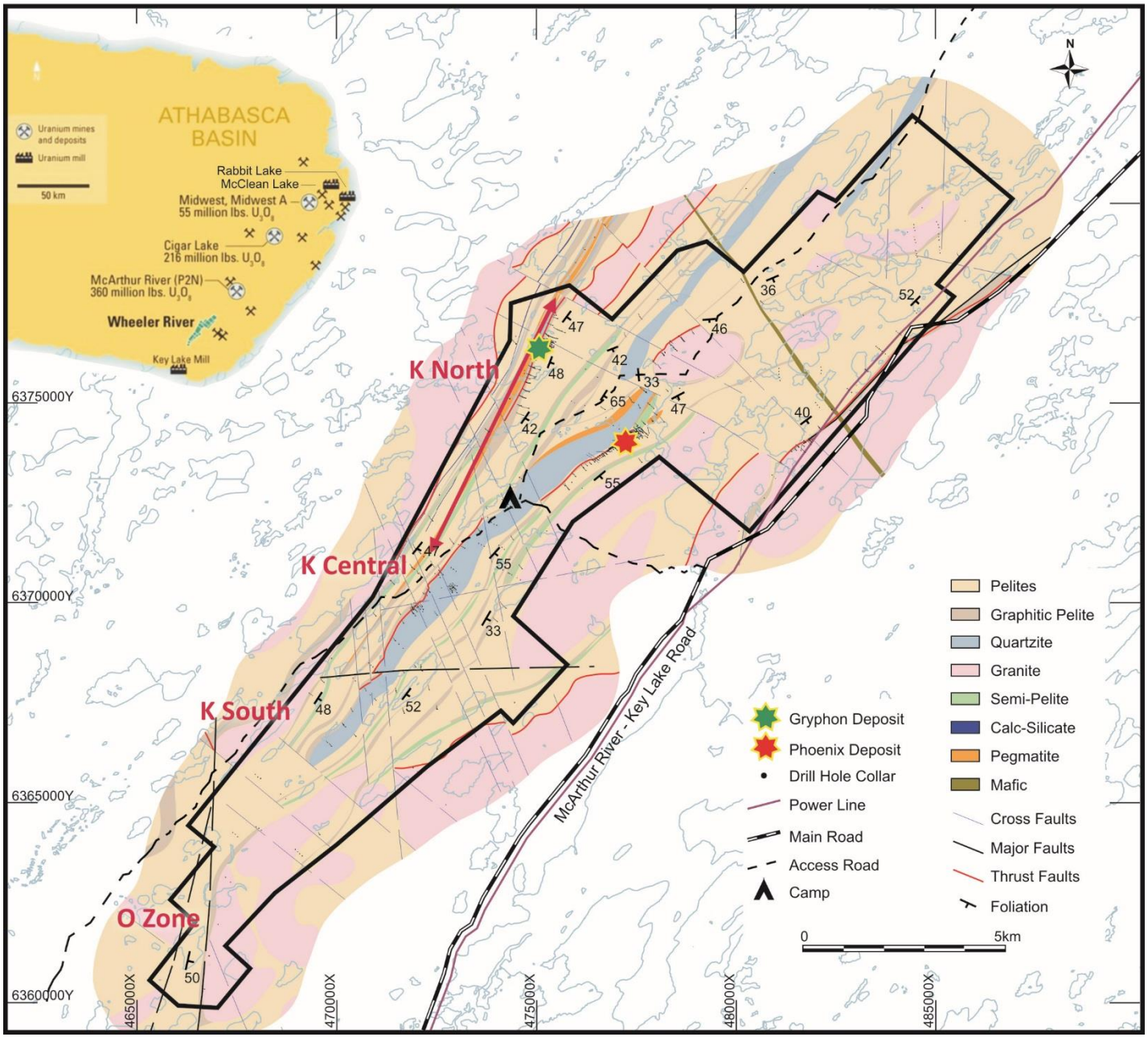

Figure 1: Wheeler River property location and basement geology

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

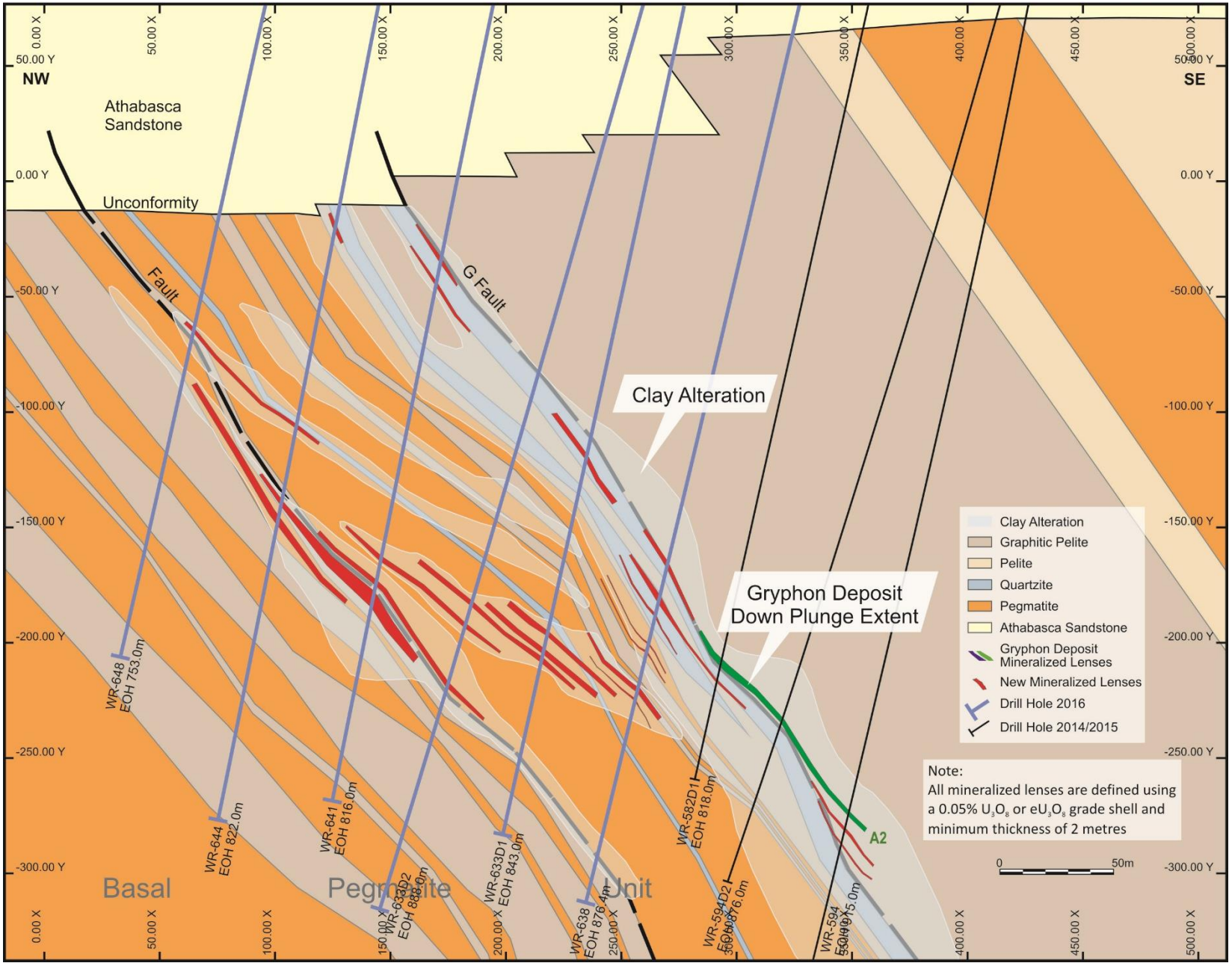

Figure 3: Cross-section along section line 5200GP

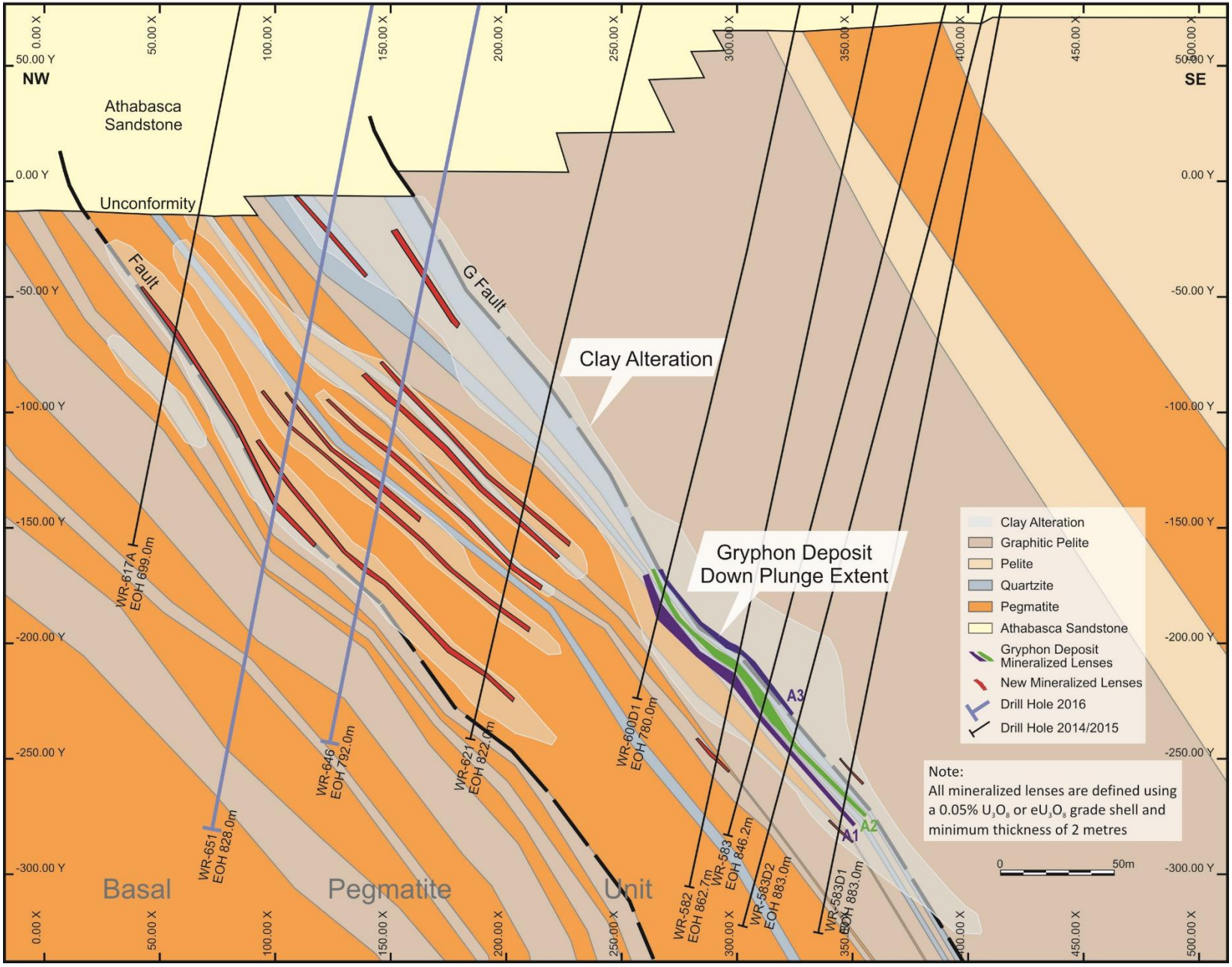

Figure 4: Cross-section along section line 5150GP