

PRESS RELEASE

**DENISON REPORTS 6.97% U₃O₈ OVER 4.5 METRES
AND CONFIRMS EXPANSION OF HIGH GRADE MINERALIZATION
AT THE GRYPHON DEPOSIT, WHEELER RIVER**

Toronto, ON – November 17, 2016 Denison Mines Corp. (“Denison” or the “Company”) (DML: TSX, DNN: NYSE MKT) is pleased to report increased grades with the receipt of uranium assay results from the summer 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. As with previous assays, the assay results represent an overall increase in grade compared with previously reported radiometric equivalent U₃O₈ (“eU₃O₈”) results derived from a calibrated down-hole gamma probe.

Significantly increased grades were reported for two key drill results, located outside of the area included in the NI 43-101 mineral resource estimate for the Gryphon deposit, which form priority areas for potential resource expansion:

- 1) Down-dip of the Gryphon deposit, an increase in grade from 2.53% eU₃O₈ over 4.4 metres to **6.97% U₃O₈** over 4.5 metres was reported in drill hole WR-674 (Section 4950 GP). This intersection, coupled with an additional down-dip intersection of 0.94% U₃O₈ over 10.5 metres in drill hole WR-602D1 (Section 4900 GP) highlight the potential for resource growth beneath the Gryphon deposit, where mineralization remains largely open.
- 2) On the northernmost section drill tested to date (Section 5350 GP), approximately 350 metres north of the Gryphon deposit, an increase in grade from 9.39% eU₃O₈ over 1.6 metres to **19.31% U₃O₈** over 1.0 metre was reported in drill hole WR-507D2. This intersection occurs approximately 25 metres below the unconformity and is open to the northeast along strike and down-plunge with the potential for this result to represent a new lens of high-grade mineralization.

Assay results from the five initial Gryphon infill and delineation holes also showed a significant increase in grades from 0.93% eU₃O₈ over 14.1 metres to **1.37% U₃O₈** over 14.5 metres in drill hole WR-668, and 1.51% eU₃O₈ over 14.4 metres to **2.49% U₃O₈** over 12.5 metres in drill hole WR-668D2. These holes form part of a drilling program designed to upgrade the NI 43-101 mineral resource estimate for the Gryphon deposit from an inferred to indicated level of confidence.

Denison’s Vice President Exploration, Dale Verran, commented, “*Although we anticipate the high grades from downhole probe results to increase following the assay of core samples, it is especially encouraging to see these higher grade assay results in areas where mineralization remains open. While assays for the infill holes confirm the high-grade nature of the Gryphon deposit itself, assays from our exploration holes continue to demonstrate the growing footprint of mineralization and the potential for resource expansion. Drilling results to date indicate that the Gryphon deposit remains open in numerous directions and work is underway refining drill targets for 2017.*”

Expansion of Gryphon A and B Series Lenses

Toward the end of the summer 2016 program, a total of six drill holes were completed testing for extensions of mineralization up-dip (WR-673, WR-675 and WR675-D1) and down-dip (WR-674, WR-602D1 and WR-679) of the A and B Series lenses on the shallower, southwestern portion of the Gryphon deposit. The drill holes were spaced at a minimum of 50 metres apart and located approximately 50 metres from the previous drill holes that were used to define the current extents of the deposit. Apart from WR-679, all the holes intersected significant mineralization as provided in Table 1. Mineralization remains open down-dip and up-dip of these intersections.

Table 1: Assay results for drill holes testing for expansion of the A and B Series lenses

Section	Hole Number	Down-Hole Total Gamma Probe ^{4,7}				Assay ^{4,7}			
		From (m)	To (m)	Length ⁸ (m)	eU ₃ O ₈ (%) ²	From (m)	To (m)	Length ⁸ (m)	U ₃ O ₈ (wt%) ³
4800 GP	WR-679	No significant mineralization				No significant mineralization			
4900 GP	WR-602D1 ¹	Below cut-off grade of 0.05% eU ₃ O ₈				686.8	687.8	1.0	0.09
	(and)	692.7	704.1	11.4	1.22	693.3	703.8	10.5	0.94
	(including) ⁶	693.2	694.2	1.0	3.77	693.3	694.8	1.5	3.25
	(including) ⁶	699.4	701.1	1.7	4.63	698.8	699.8	1.0	4.00
4925 GP	WR-673 ¹	Below cut-off grade of 0.05% eU ₃ O ₈				625.6	626.6	1.0	0.06
	(and)	627.2	631.0	3.8	0.36	628.3	631.3	3.0	0.51
	(including) ⁶	627.6	628.6	1.0	1.06	628.3	629.3	1.0	1.31
	(and)	634.2	652.9	18.7	0.18	634.6	637.6	3.0	0.07
	(and) ¹	Merged with above interval				638.1	639.1	1.0	0.07
	(and) ¹	Merged with above interval				642.4	651.4	9.0	0.30
	(including) ⁵	642.1	652.9	10.8	0.27	642.4	649.9	7.5	0.34
4950 GP	WR-674	691.8	692.8	1.0	0.13	693.2	694.2	1.0	0.16
	(and) ¹	696.9	697.9	1.0	0.06	Below cut-off grade of 0.05% U ₃ O ₈			
	(and) ¹	736.1	737.1	1.0	0.07	Below cut-off grade of 0.05% U ₃ O ₈			
	(and)	740.9	742.2	1.3	0.65	742.0	743.5	1.5	0.83
	(and) ¹	Below cut-off grade of 0.05% eU ₃ O ₈				742.0	743.0	1.0	1.19
	(and)	744.8	749.2	4.4	2.53	746.0	750.5	4.5	6.97
	(including) ⁶	745.5	748.9	3.4	3.19	746.5	750.0	3.5	8.89
5000 GP	WR-675 ¹	605.5	606.5	1.0	0.06	Below cut-off grade of 0.05% U ₃ O ₈			
	(and)	607.9	608.9	1.0	1.36	607.4	608.4	1.0	1.38
	(and)	613.4	614.6	1.2	0.14	613.5	614.5	1.0	0.10
	(and) ¹	618.1	619.1	1.0	0.07	Below cut-off grade of 0.05% U ₃ O ₈			
	(and) ¹	639.8	640.8	1.0	0.07	640.0	641.0	1.0	0.09
	(and) ¹	695.3	696.3	1.0	0.07	Below cut-off grade of 0.05% U ₃ O ₈			
	(and) ¹	710.4	711.4	1.0	0.08	710.0	711.5	1.5	0.09
	(and) ¹	721.2	722.2	1.0	0.36	720.8	721.8	1.0	0.32
	WR-675D1	600.3	601.5	1.2	0.12	600.5	601.5	1.0	0.10
(and)	627.4	630.5	3.1	0.43	628.0	630.0	2.0	0.38	

Notes:

1. Result not reported previously
2. eU₃O₈ is radiometric equivalent U₃O₈ derived from a calibrated total gamma down-hole probe
3. U₃O₈ is chemical assay of mineralized split core sample
4. Compositing above a cut-off grade of 0.05% eU₃O₈ or U₃O₈ unless otherwise indicated
5. Compositing above a cut-off grade of 0.1% eU₃O₈ or U₃O₈
6. Compositing above a cut-off grade of 1.0% eU₃O₈ or U₃O₈
7. Composites compiled using 1.0 metre minimum mineralization thickness and 2.0 metres maximum waste
8. 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

Extension of Gryphon D Series Lenses

Following on from the discovery of the D Series lenses on Section 5200 GP during the winter 2016 exploration program, the lenses were successfully extended along strike to the northeast and southwest during the summer 2016 program. The D Series lenses are located within 200 meters north and northwest of the Gryphon deposit, within the pegmatite-dominated footwall (Basal Pegmatite), and are interpreted to occur as a series of stacked, parallel lenses conformable to the stratigraphy and dominant foliation - similar to the A, B and C Series lenses of the Gryphon deposit.

Assay results from the 21 holes completed during the summer 2016 program, testing for D Series lens mineralization along strike to the northeast and southwest, are presented in Table 2. The drill holes are orientated steeply toward the northwest and therefore test the entire package of prospective southeast dipping, basement stratigraphy including the Quartz-Pegmatite Assemblage which hosts the A and B Series lenses, the Lower Graphite which hosts the C Series lenses and the Basal Pegmatite which hosts the D Series lenses. The assay results indicate the D Series lens mineralization totals 330 meters in collective strike extent, with mineralization still open along strike in both directions. Highlight D Series lens intersections include 1.39% U₃O₈ over 5.0 metres in drill hole WR-671D1, 3.00% U₃O₈ over 1.0 metre in drill hole WR-669 and 2.93% U₃O₈ over 1.0 metre in WR-670. As noted, many of the mineralized intersections in Table 2 refer to mineralization intersected in the stratigraphic position of the A or B Series lenses outside of the current NI 43-101 mineral resource estimate. Of particular importance is drill hole WR-507D2, which intersected **19.31% U₃O₈** over 1.0 metre approximately 25 metres below the unconformity in the stratigraphic position of the A Series lenses. This intersection is open to the northeast along strike and down-plunge, with the potential to represent a new lens of high-grade mineralization.

Table 2: Assay results for drill holes testing for extensions of the D Series lenses

Section	Hole Number	Down-Hole Total Gamma Probe ^{4,5}				Assay ^{4,5}			
		From (m)	To (m)	Length ⁶ (m)	eU ₃ O ₈ (%) ²	From (m)	To (m)	Length ⁶ (m)	U ₃ O ₈ (wt%) ³
5050 GP	WR-565D1	668.3	669.3	1.0	0.12	668.8	669.8	1.0	0.11
	(and)	678.2	679.2	1.0	0.08	678.7	679.7	1.0	0.08
	WR-659	No significant mineralization				No significant mineralization			
5100 GP	WR-613EXT	No significant mineralization				No significant mineralization			
	WR-665 ⁷	683.1	685.6	2.5	0.11	685.5	686.5	1.0	0.21
	(and) ⁷	692.3	693.7	1.4	0.15	693.5	694.5	1.0	0.27
	(and) ^{1,7}	713.5	714.5	1.0	0.07	714.5	715.5	1.0	0.09
	(and) ⁷	717.3	722.7	5.4	0.10	718.0	723.5	5.5	0.14
	(and) ^{1,7}	762.5	763.5	1.0	0.08	Below cut-off grade of 0.05% U ₃ O ₈			
	WR-669 ⁷	647.4	649.4	2.0	0.17	648.4	649.9	1.5	0.15
	(and) ⁷	652.2	653.4	1.2	0.08	652.6	653.6	1.0	0.07
	(and)	722.2	723.2	1.0	0.05	Below cut-off grade of 0.05% U ₃ O ₈			
	(and)	746.2	747.3	1.1	0.80	747.2	748.2	1.0	3.00
	WR-671 ⁷	583.5	584.7	1.2	2.26	584.5	585.5	1.0	1.61
	(and)	670.0	671.1	1.1	0.33	670.7	671.7	1.0	0.58
	(and)	697.9	700.0	2.1	0.14	698.5	699.5	1.0	0.22
	(and) ¹	Below cut-off grade of 0.05% eU ₃ O ₈				700.5	701.5	1.0	0.05
(and)	703.1	704.9	1.8	0.57	704.4	705.9	1.5	0.76	

Section	Hole Number	Down-Hole Total Gamma Probe ^{4,5}				Assay ^{4,5}			
		From (m)	To (m)	Length ⁶ (m)	eU ₃ O ₈ (%) ²	From (m)	To (m)	Length ⁶ (m)	U ₃ O ₈ (wt%) ³
5100 GP	WR-671D1	656.7	662.0	5.3	0.11	656.5	662.0	5.5	0.15
	(and)	662.8	663.8	1.0	0.06	Below cut-off grade of 0.05% U ₃ O ₈			
	(and)	668.4	669.4	1.0	0.26	668.5	669.5	1.0	0.23
	(and)	682.2	687.5	5.3	1.21	682.5	687.5	5.0	1.39
	WR-671D2	658.8	659.9	1.1	0.52	659.0	660.0	1.0	1.09
	(and)	664.2	667.3	3.1	0.68	664.5	667.0	2.5	0.66
	(and)	675.4	676.4	1.0	0.76	675.2	676.2	1.0	0.63
	(and)	686.0	687.0	1.0	0.27	685.9	686.9	1.0	0.12
	WR-671D4	642.1	643.1	1.0	0.11	643.0	644.0	1.0	0.12
	(and)	651.4	652.4	1.0	0.22	652.0	653.0	1.0	0.10
	(and)	659.3	661.4	2.1	0.11	660.0	662.4	2.4	0.13
	(and)	670.5	671.5	1.0	0.14	Below cut-off grade of 0.05% U ₃ O ₈			
	(and)	678.4	679.4	1.0	0.07	Below cut-off grade of 0.05% U ₃ O ₈			
	5150 GP	WR-658	No significant mineralization				No significant mineralization		
5250 GP	WR-657 ⁷	550.9	551.9	1.0	0.10	552.0	553.0	1.0	0.08
	(and) ⁷	611.9	612.9	1.0	0.06	613.0	616.0	3.0	0.09
	(and) ⁷	614.3	615.3	1.0	0.07	Below cut-off grade of 0.05% U ₃ O ₈			
	(and) ⁷	616.7	619.8	3.1	0.09	618.5	619.5	1.0	0.18
	(and) ⁷	Below cut-off grade of 0.05% eU ₃ O ₈				620.0	621.0	1.0	0.06
	(and) ⁷	629.3	630.3	1.0	0.18	630.5	631.5	1.0	0.14
	(and)	698.0	700.1	2.1	0.39	699.5	701.5	2.0	0.51
	(and)	711.7	712.9	1.2	0.68	713.0	714.0	1.0	0.51
	WR-661 ⁷	554.0	555.0	1.0	0.27	554.0	555.0	1.0	0.21
	(and) ¹	650.7	651.7	1.0	0.07	651.0	652.0	1.0	0.07
	(and) ¹	652.8	654.1	1.3	0.06	Below cut-off grade of 0.05% U ₃ O ₈			
	(and) ¹	690.2	691.2	1.0	0.05	Below cut-off grade of 0.05% U ₃ O ₈			
	(and)	694.4	695.5	1.1	1.50	694.7	695.7	1.0	1.39
	WR-662 ^{1,7}	No significant mineralization				764.5	765.5	1.0	0.10
5300 GP	WR-664	No significant mineralization				No significant mineralization			
	WR-667A ⁷	572.2	573.3	1.1	0.28	572.0	573.0	1.0	0.22
	(and) ^{1,7}	594.0	595.6	1.6	0.08	Below cut-off grade of 0.05% U ₃ O ₈			
	(and) ^{1,7}	599.7	600.7	1.0	0.05	Below cut-off grade of 0.05% U ₃ O ₈			
	(and)	688.8	689.8	1.0	0.42	688.5	689.5	1.0	0.96
	WR-670 ⁷	610.2	611.2	1.0	0.06	Below cut-off grade of 0.05% U ₃ O ₈			
	(and) ⁷	613.7	614.7	1.0	0.05	614.5	615.5	1.0	0.06
	(and)	650.6	651.7	1.1	1.34	651.5	652.5	1.0	2.93
	(and)	657.1	658.1	1.0	0.05	Below cut-off grade of 0.05% U ₃ O ₈			
WR-670D1	No significant mineralization				No significant mineralization				

Section	Hole Number	Down-Hole Total Gamma Probe ^{4,5}				Assay ^{4,5}			
		From (m)	To (m)	Length ⁶ (m)	eU ₃ O ₈ (%) ²	From (m)	To (m)	Length ⁶ (m)	U ₃ O ₈ (wt%) ³
5350 GP	WR-507D1EXT	721.7	723.5	1.8	1.16	723.0	724.5	1.5	1.95
	WR-507D2 ⁷	557.3	559.2	1.9	0.22	558.5	560.5	2.0	0.15
	(and) ⁷	579.5	581.1	1.6	9.39	581.0	582.0	1.0	19.31
	WR-672A ⁷	588.8	589.8	1.0	0.28	589.1	590.1	1.0	0.30
	(and) ⁷	599.7	602.6	2.9	0.10	600.1	603.1	3.0	0.13
	(and) ⁷	613.1	614.4	1.3	0.83	613.6	614.6	1.0	1.05
	WR-672AD1 ⁷	596.8	597.8	1.0	0.09	597.3	598.3	1.0	0.17

Notes:

1. Result not reported previously
2. eU₃O₈ is radiometric equivalent U₃O₈ derived from a calibrated total gamma down-hole probe
3. U₃O₈ is chemical assay of mineralized split core sample
4. Composites above a cut-off grade of 0.05% eU₃O₈ or U₃O₈
5. Composites compiled using 1.0 metre minimum mineralization 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
7. Mineralized intercept located in the stratigraphic position of the A or B Series lenses (see Figure 3)

Gryphon Infill and Delineation Drilling

On July 19, 2016 Denison announced the initiation of a Pre-Feasibility Study ("PFS") for the Wheeler River project. An important step in completing the PFS involves increasing the level of confidence of the previously released inferred resources estimated for the Gryphon deposit to an indicated level. A total of five initial infill and delineation drill holes, totaling 2,620 metres, were completed as part of the summer 2016 program, which included a single parent hole (WR-668) and subsequent daughter holes (WR-668D1 to WR-668D4). Assay results for the initial five infill and delineation drill holes are provided in Table 3 and drill hole locations are shown in Figure 2.

Table 3: Assay results for infill and delineation drill holes on the Gryphon Deposit A and B Series lenses

Section	Hole Number	Down-Hole Total Gamma Probe ⁶				Assay ⁶			
		From (m)	To (m)	Length ⁷ (m)	eU ₃ O ₈ (%) ²	From (m)	To (m)	Length ⁷ (m)	U ₃ O ₈ (wt%) ³
5025 GP	WR-668D1 ⁴	763.5	768.6	5.1	0.33	764.4	768.9	4.5	0.24
	WR-668D3 ⁴	738.6	739.6	1.0	0.12	740.3	741.3	1.0	0.13
	(and) ^{1,4}	Below cut-off grade of 0.05% eU ₃ O ₈				781.6	782.6	1.0	0.16
5050 GP	WR-668 ⁴	754.7	768.8	14.1	0.93	754.8	769.3	14.5	1.37
	(including) ⁵	756.1	759.8	3.7	2.13	755.3	760.3	5.0	3.02
	(including) ⁵	765.5	766.8	1.3	1.43	765.3	767.3	2.0	1.59
	(and) ⁴	772.6	779.9	7.3	2.36	772.7	778.2	5.5	3.11
	(including) ⁵	773.8	778.3	4.5	3.65	773.7	774.7	1.0	1.49
	(including) ⁵	Merged with above interval				775.2	777.7	2.5	6.15
	WR-668D2 ¹	Below cut-off grade of 0.05% eU ₃ O ₈				763.5	764.5	1.0	0.14
(and) ⁴	768.9	783.3	14.4	1.51	768.5	770.0	1.5	0.13	

Section	Hole Number	Down-Hole Total Gamma Probe ⁶				Assay ⁶			
		From (m)	To (m)	Length ⁷ (m)	eU ₃ O ₈ (%) ²	From (m)	To (m)	Length ⁷ (m)	U ₃ O ₈ (wt%) ³
5050 GP	WR-668D2 ⁴	Merged with above interval				771.0	783.5	12.5	2.49
	(including) ⁵	772.0	779.9	7.9	2.30	773.0	783.0	10.0	3.01
	(including) ⁵	781.7	782.7	1.0	1.46	Merged with above interval			
	WR-668D4 ⁴	795.4	796.4	1.0	0.20	796.7	797.7	1.0	0.49

Notes:

1. Result not reported previously
2. eU₃O₈ is radiometric equivalent U₃O₈ derived from a calibrated total gamma down-hole probe
3. U₃O₈ is chemical assay of mineralized split core sample
4. Compositing above a cut-off grade of 0.1% eU₃O₈ or U₃O₈
5. Compositing above a cut-off grade of 1.0% eU₃O₈ or U₃O₈
6. Composites compiled using 1.0 metre minimum mineralization thickness and 2.0 metres maximum waste
7. 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

Mineralization at K-West

Assay results confirmed weak uranium mineralization at K-West, approximately 500 metres west of the Gryphon deposit, in drill hole WR-663, including 0.06% U₃O₈ over 0.5 metres (from 826.3 to 826.8 metres), 0.06% U₃O₈ over 1.5 metres (from 858.2 to 859.7 metres) and 0.04% U₃O₈ over 0.5 metres (from 867 to 867.5 metres). The two follow-up drill holes, WR-676 and WR-663D1, that were drilled approximately 50 metres up-dip and down-dip of WR-663 respectively, did not encounter any significant mineralization; however, a similar extensive alteration zone was intersected indicating continued potential for higher grades. The zone is open along strike within the basement and, given the proximity to Gryphon and similar favorable geological setting, additional follow-up is warranted.

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 provided in Figure 2. The plan map shows the location of the D Series lenses, interpreted from winter 2016 drilling results and the summer 2016 mineralized intercepts as yellow stars. Figure 3 shows an inclined longitudinal section of the Gryphon deposit A Series lenses. Shown on the section are drill hole pierce points of the A Series plane indicating which holes intersected A and/or B Series lens mineralization. Drill hole pierce points in the upper right of the section relate to drill holes that were targeting the D Series lenses, which are located footwall to the A Series lenses (further into the page) and are therefore not visible in this section. Similarly, the B and C Series lenses occur footwall to (behind) the A Series lenses and are therefore also not visible in the section. Further details and illustrative figures regarding results from the summer 2016 exploration program can be found in Denison's Press Releases dated [August 4](#), [September 7](#), [September 22](#) and [October 6](#), 2016.

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.

Sampling and Assay Procedures

Drill core with anomalous total gamma radioactivity (>500 counts per second) was 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 U₃O₈ 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_3O_8 weight % using ICP-OES. Core recovery at Gryphon is typically 100% and therefore radiometric equivalent U_3O_8 grades ("e U_3O_8 ") are not required as a substitute for chemical U_3O_8 assays. In addition to internal checks by SRC Geoanalytical Laboratories, the Company has rigorous quality assurance and quality control ("QAQC") procedures including the insertion of standard reference materials, blanks and field duplicates. For further details on the assay and QAQC procedures please see Denison's Annual Information Form dated March 24, 2016 filed under the Company's profile on SEDAR (www.sedar.com).

Qualified Persons

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.

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_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.

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 winter and summer 2016 drilling program 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.

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 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 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.

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.*

Wheeler River Property Location and Geology

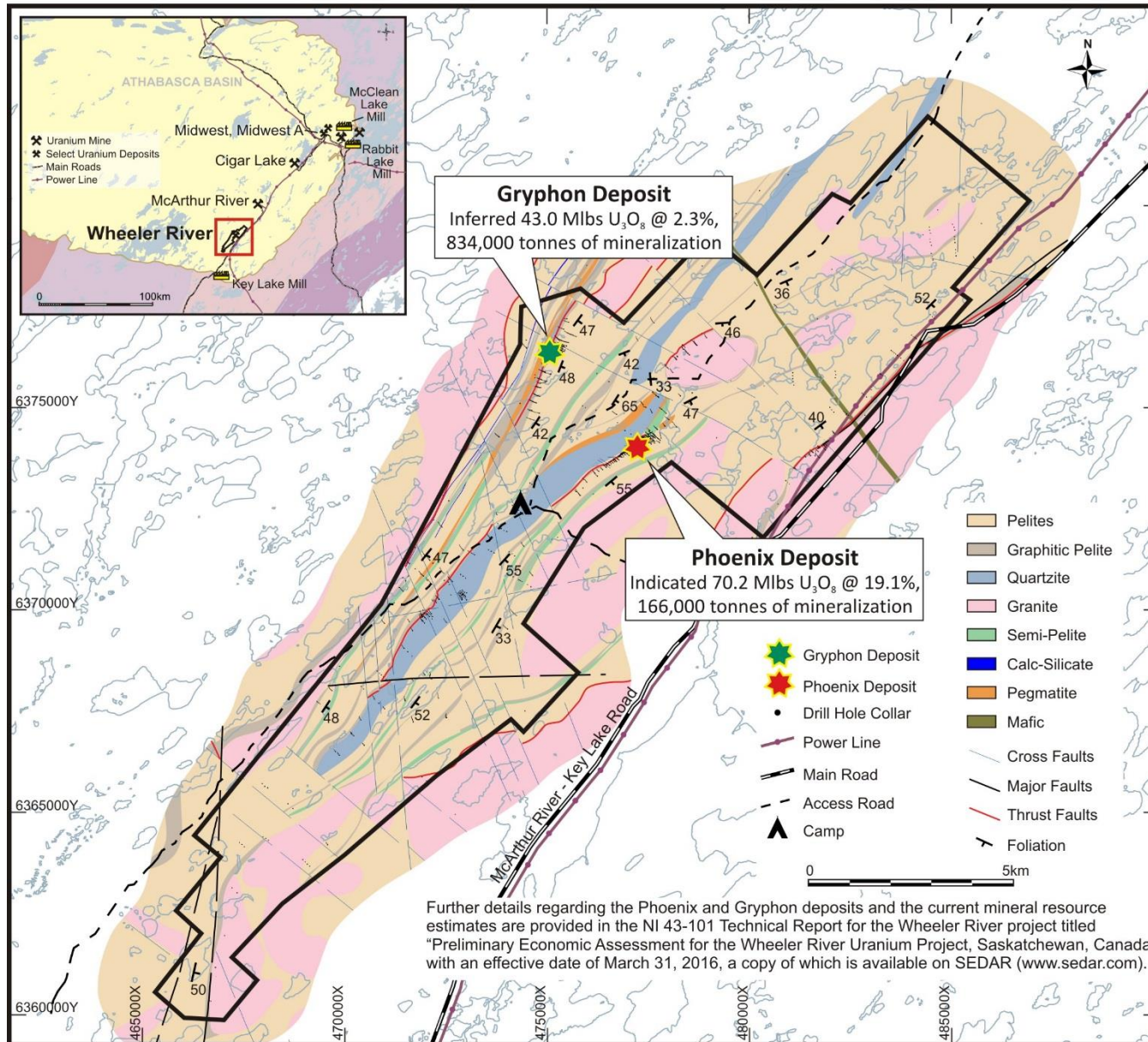


Figure 1: Wheeler River property location and basement geology

Plan Map, Gryphon Deposit

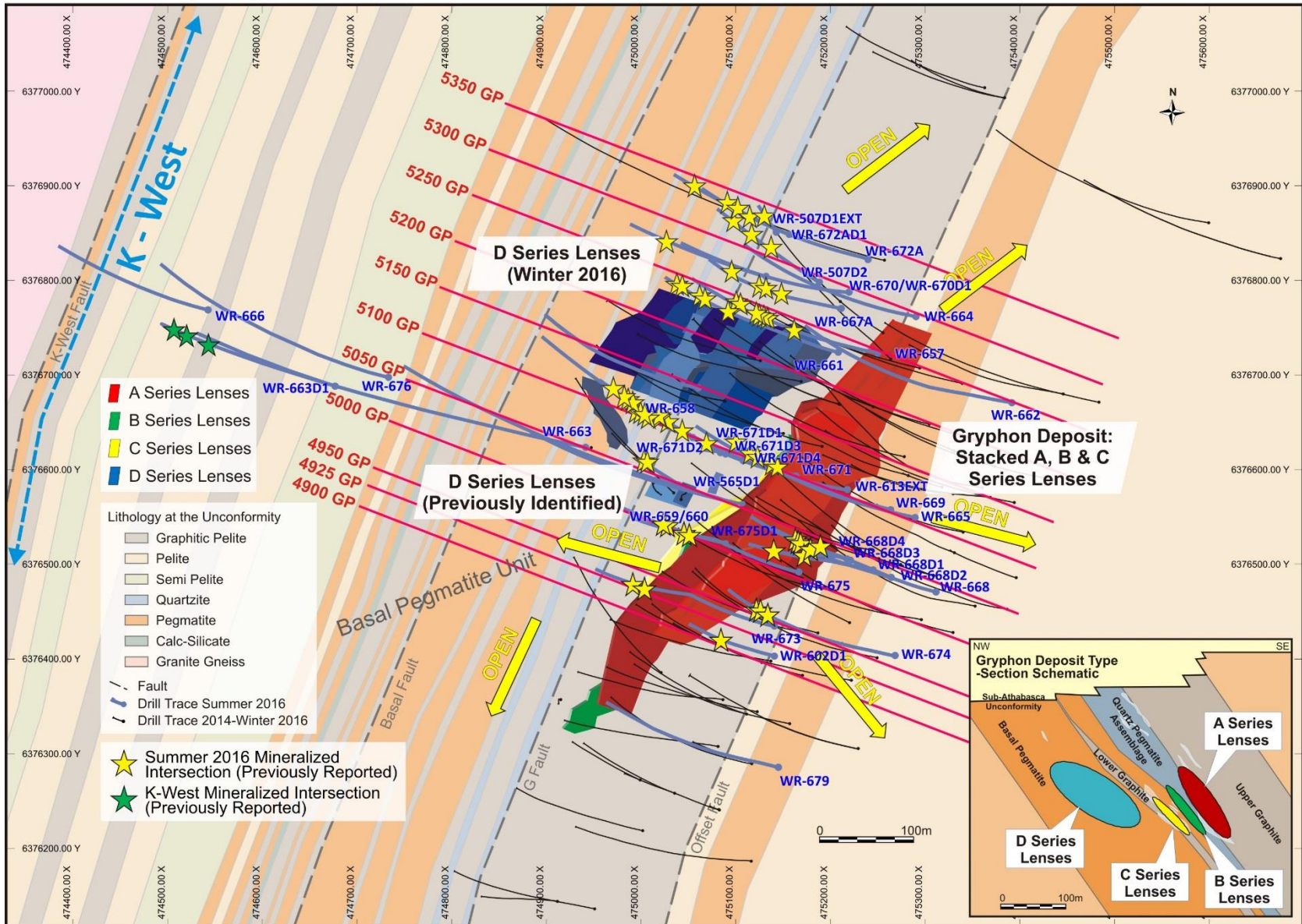


Figure 2: Plan map of the northeast plunging Gryphon mineralized lenses projected up to the simplified basement geology at the sub-Athabasca unconformity. Yellow stars show the summer 2016 mineralized intersections.

Inclined Longitudinal Section, Gryphon Deposit A Series Lenses

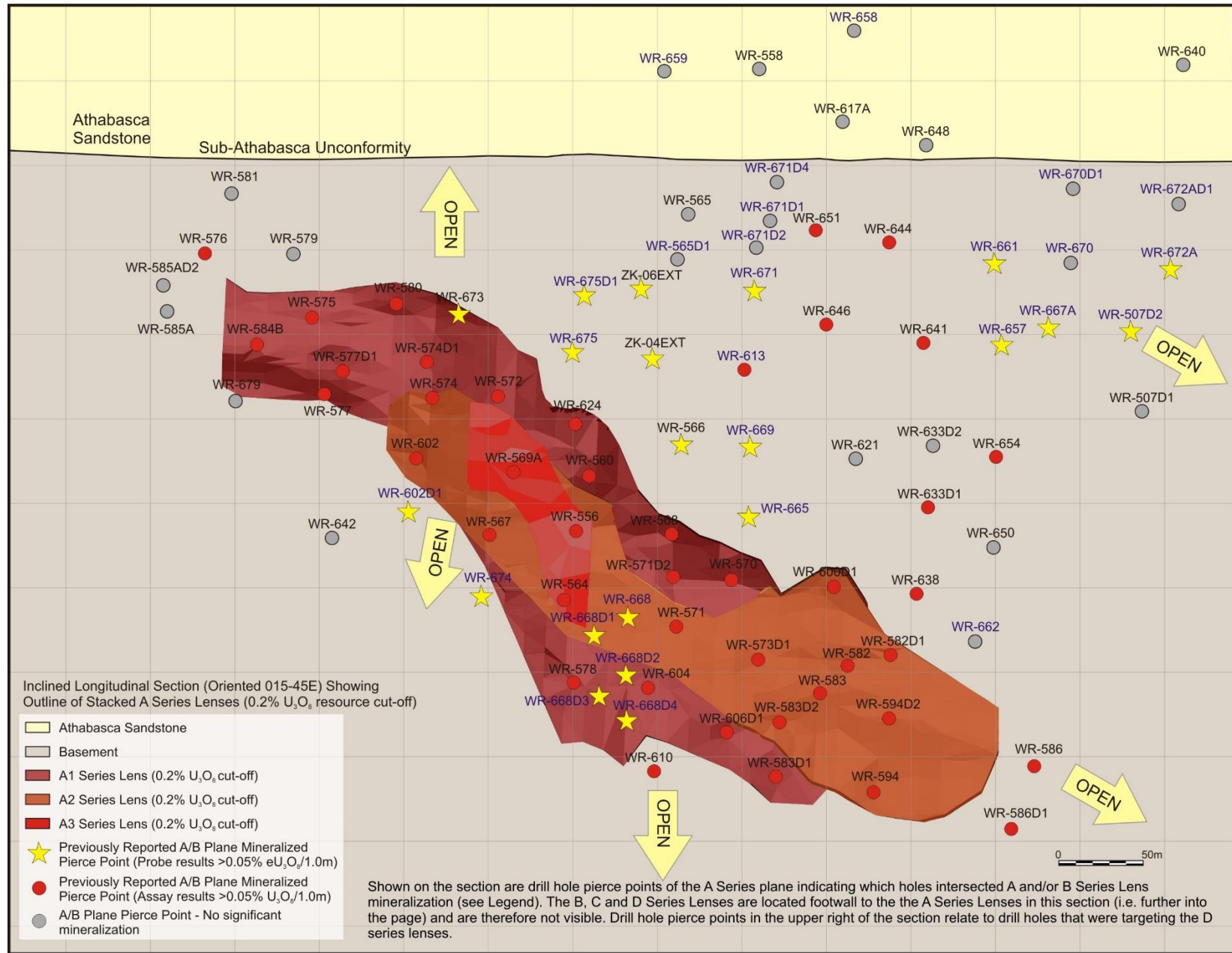


Figure 3: Inclined longitudinal section of the Gryphon deposit A Series lenses.