



Uranium Development & Exploration
The Athabasca Basin



Investor Update – January 2018

Cautionary Statements & References

Cautionary Statements:

This presentation includes forward-looking information or forward-looking statements under Canadian and U.S. securities laws that involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements.

Factors that could cause differences may include: the speculative nature of exploration and development projects, the failure of Denison to realize benefits from transactions, Denison's inability to expand and replace its mineral reserves and resources and the imprecision of mineral reserves and resources estimates, the impact of volatility in uranium prices on the valuation of mineral reserves and resources and the market price of Denison's shares, unexpected development and operating risks, delays in obtaining permits and licenses for development properties, reliance on other operators and partners, and uncertainty surrounding Denison's successful completion of exploration plans, timely completion economic analyses (including a PEA or PFS), the ability to reach revenue targets, and the ability to operate within budget. In addition, we have made assumptions in drawing the conclusions contained in these statements, including assumptions regarding future demand for uranium, production levels and costs, mining conditions, relationships with partners, and our ability to continue our operations without any significant disruptions.

Additional information about the material factors that could cause the results to differ materially, and the material assumptions we have made, are contained in our current Annual Information Form and our current annual MD&A, which are available on SEDAR. Forward-looking information is designed to help you understand management's current views of our near and longer-term prospects, and it may not be appropriate for other purposes. We will not necessarily update this information unless we are required to by securities laws.

This presentation may use the terms "measured", "indicated", "inferred" and "historical" mineral resources. U.S. investors are advised that, while such terms are recognized and required by Canadian regulations, the Securities and Exchange Commission does not recognize them. "Inferred mineral resources" and "historical estimates" have a great amount of uncertainty as to their existence and great uncertainty as to their economic feasibility. It cannot be assumed that all or any part of an inferred mineral resource or a historical estimate 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. Further, historical estimates are not recognized under Canada's NI 43-101. U.S. investors are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be converted to mineral reserves.

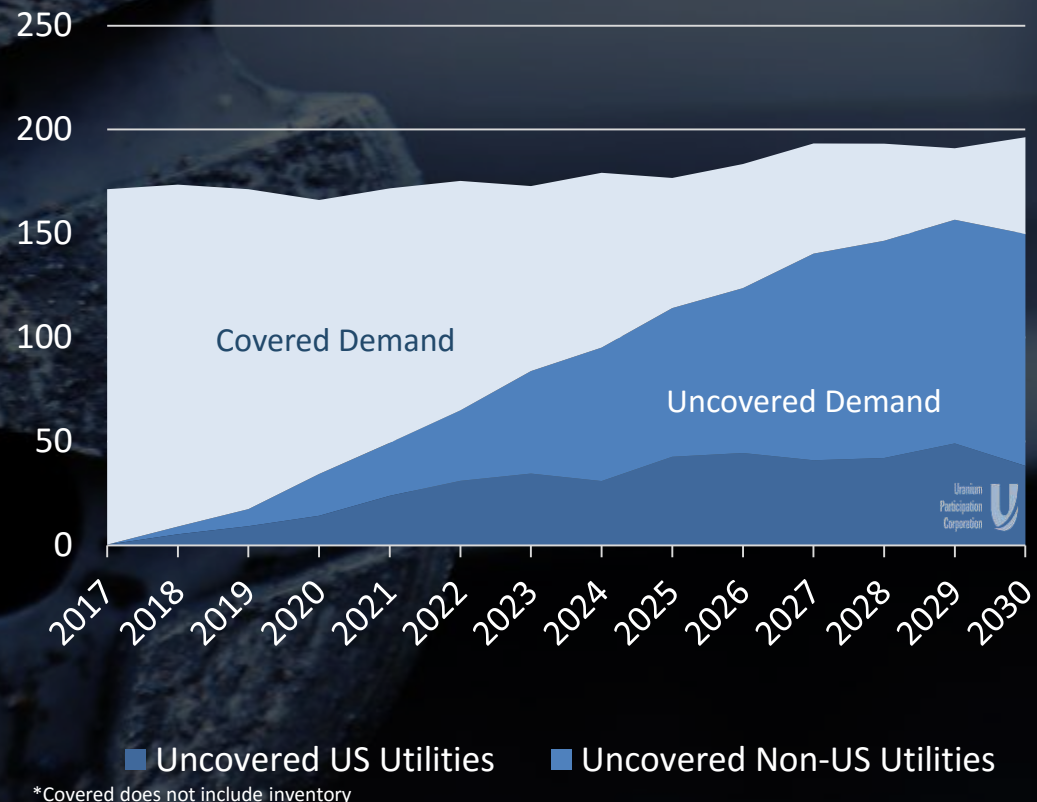
Technical Report References:

- **McClean Lake** "Technical Report on the Denison Mines Inc. Uranium Properties, Saskatchewan, Canada" dated February 16, 2006. Richard E. Routledge, M.Sc., P. Geo. and James W. Hendry, P. Eng., are the independent Qualified Persons for the McClean Technical Report for the purposes of the requirements of NI 43-101.
- **McClean Lake - Sue D** "Technical Report on the Sue D Uranium Deposit Mineral Resource Estimate, Saskatchewan, Canada", dated March 31, 2006. Richard E. Routledge, M.Sc., P. Geo. and James W. Hendry, P. Eng., are the independent Qualified Persons for the Sue D Report for the purposes of the requirements of NI 43-101.
- **McClean Lake – McClean North** "Technical Report on the McClean North Uranium Deposit Mineral Resource Estimate, Saskatchewan, Canada", dated January 31, 2007. Richard E. Routledge, M.Sc., P. Geo. is the independent Qualified Person for the McClean North Technical Report for the purposes of the requirements of NI 43-101.
- **Midwest** "Technical Report on the Midwest Uranium Deposit Mineral Resource and Mineral Reserve Estimates, Saskatchewan, Canada" (the "Midwest Technical Report") dated February 14, 2006. Richard E. Routledge, M.Sc., P. Geo., James W. Hendry, P. Eng. and Luke Evans, M.Sc., P. Eng. are the independent Qualified Persons for the Midwest Technical Report for the purposes of the requirements of NI 43-101.
- **Midwest – Midwest A** "Technical Report on the Midwest A Uranium Deposit of Saskatchewan, Canada" (the "Midwest A Technical Report") dated January 31, 2008. Michel Dagbert, P. Eng. is the independent Qualified Person for the Midwest A Technical Report for the purposes of the requirements of NI 43-101.
- **Waterbury** "Mineral Resource Estimate On The J Zone Uranium Deposit, Waterbury Lake Property" (the "J Zone Technical Report"), dated September 6, 2013. Allan Armitage, Ph.D., P.Geol., and Alan Sexton, M.Sc., P.Geol., are the independent Qualified Persons for the J Zone Technical Report for the purposes of the requirements of NI 43-101.
- **Wheeler River:** (1) "Technical Report on a Mineral Resource Estimate for the Wheeler River Property, Eastern Athabasca Basin, Northern Saskatchewan, Canada." Nov. 25, 2015. William E. Roscoe Ph.D, P.Eng. and Mark B. Mathisen C.P.G. A copy of this report is available on Denison Mines Corp.'s profile on the SEDAR website at www.sedar.com. William E. Roscoe, Ph.D, P. Eng., is the independent Qualified Person for the Report for the purposes of NI 43-101. and, (2) PRELIMINARY ECONOMIC ANALYSIS FOR THE WHEELER RIVER URANIUM PROJECT, SASKATCHEWAN, CANADA" March 31, 2016. Ken Reipas, P. Eng.

Uranium Market: Shifting Fundamentals?

- Sustained low price environment means very few new sources of supply in the pipeline
- Uncovered utility demand reaches ~21% by 2020 and ~65% by 2025
- Recent production cuts from world's largest producers – including Cameco's McArthur River / Key Lake operation in the Athabasca Basin

Utility Uranium Requirements
(million pounds U_3O_8 - per UxC Q4'17)



Infrastructure Rich Eastern Athabasca Basin

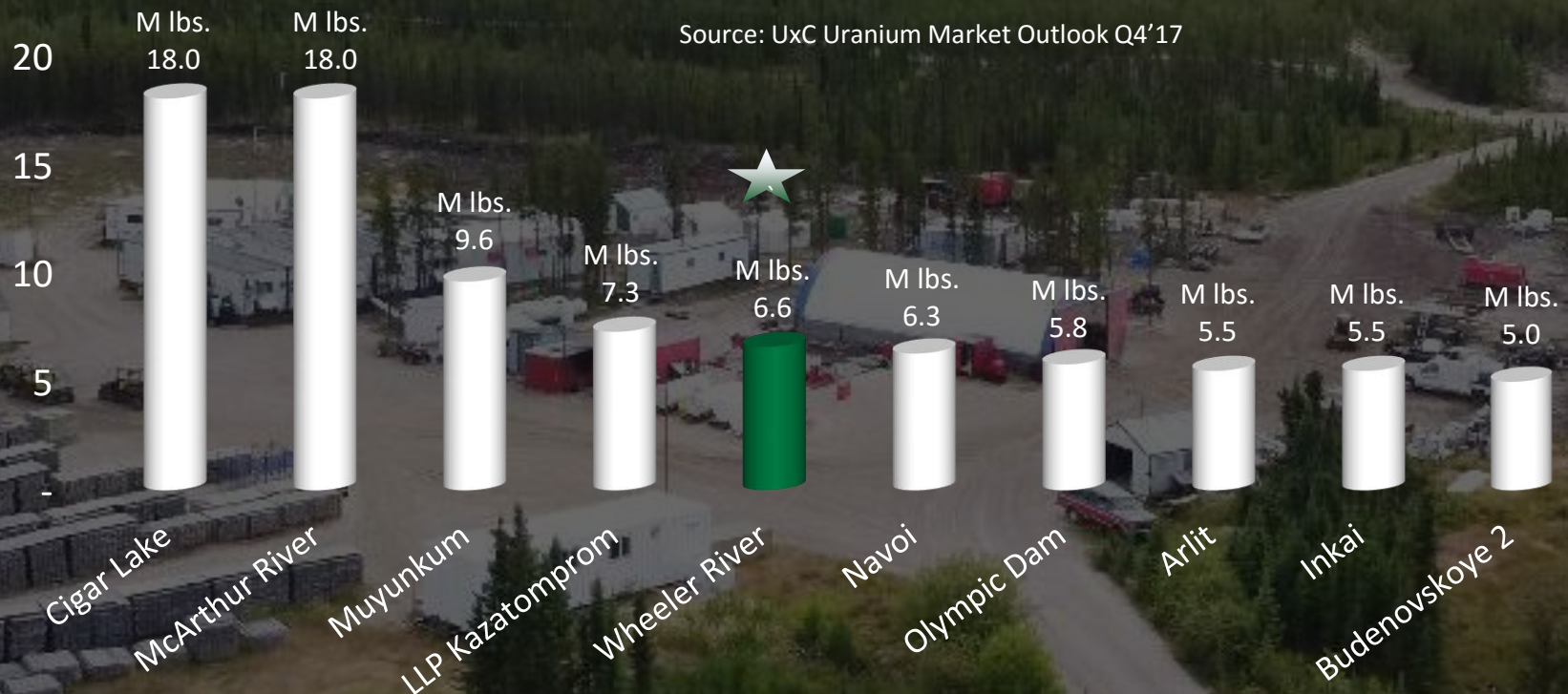


Potential to be Top 5 Producing Asset

*Top Producing Uranium Mines 2017 est.
vs. Wheeler PEA Production Plan⁽¹⁾⁽²⁾*

Million Pounds U₃O₈

Source: UxC Uranium Market Outlook Q4'17



(1) **IMPORTANT CAUTION REGARDING THE PRELIMINARY ECONOMIC ASSESSMENT ("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 value. See Press Release dated April 4, 2016 and Technical Report filed on SEDAR and EDGAR: "PRELIMINARY ECONOMIC ANALYSIS FOR THE WHEELER RIVER URANIUM PROJECT, SASKATCHEWAN, CANADA" March 31, 2016. Ken Reipas, P. Eng.

(2) Based on Wheeler River average annual production per PEA

Project PEA: 2 Phase Development Plan

PHASE 1: Gryphon

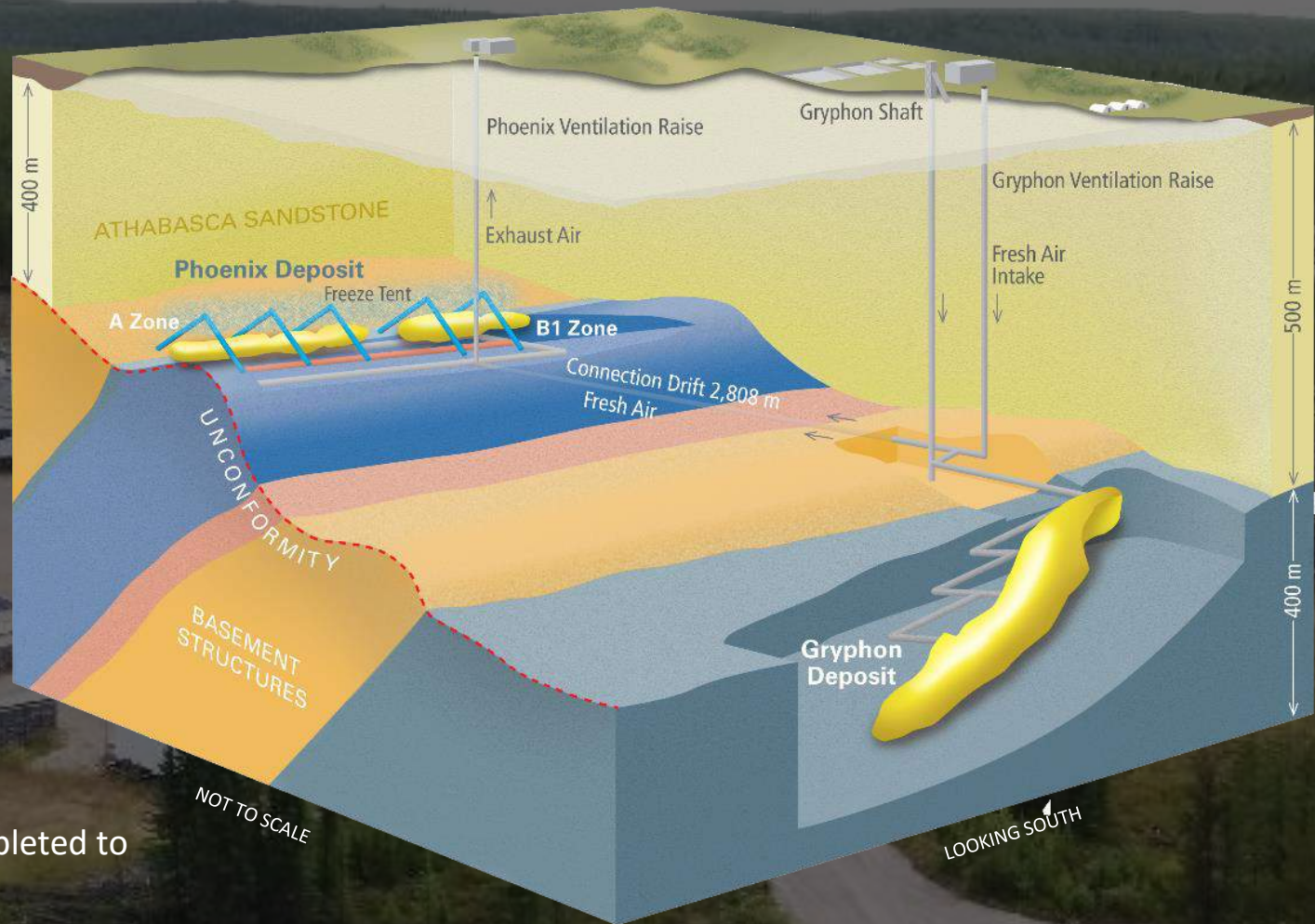
- Conventional underground mining
- USD\$14.28/lb U_3O_8 est. OPEX
- 6M lbs U_3O_8 / year ⁽¹⁾
- 7 years

PHASE 2: Phoenix

- U/G freezing + Jet Bore mining
- USD\$22.15/lb U_3O_8 est. OPEX
- 7M lbs U_3O_8 / year ⁽¹⁾
- 9 years

2016 PEA⁽¹⁾:

- Based on drilling completed to end of 2015



(1) See IMPORTANT CAUTION REGARDING PEA on slide 4

Project PEA Assumes Processing at 22.5% Owned McClean Lake Mill⁽¹⁾

Licensed Capacity

- 24M lbs/yr U_3O_8
- 18M lbs/yr reserved for Cigar Lake
- 6M lbs/yr expected excess capacity

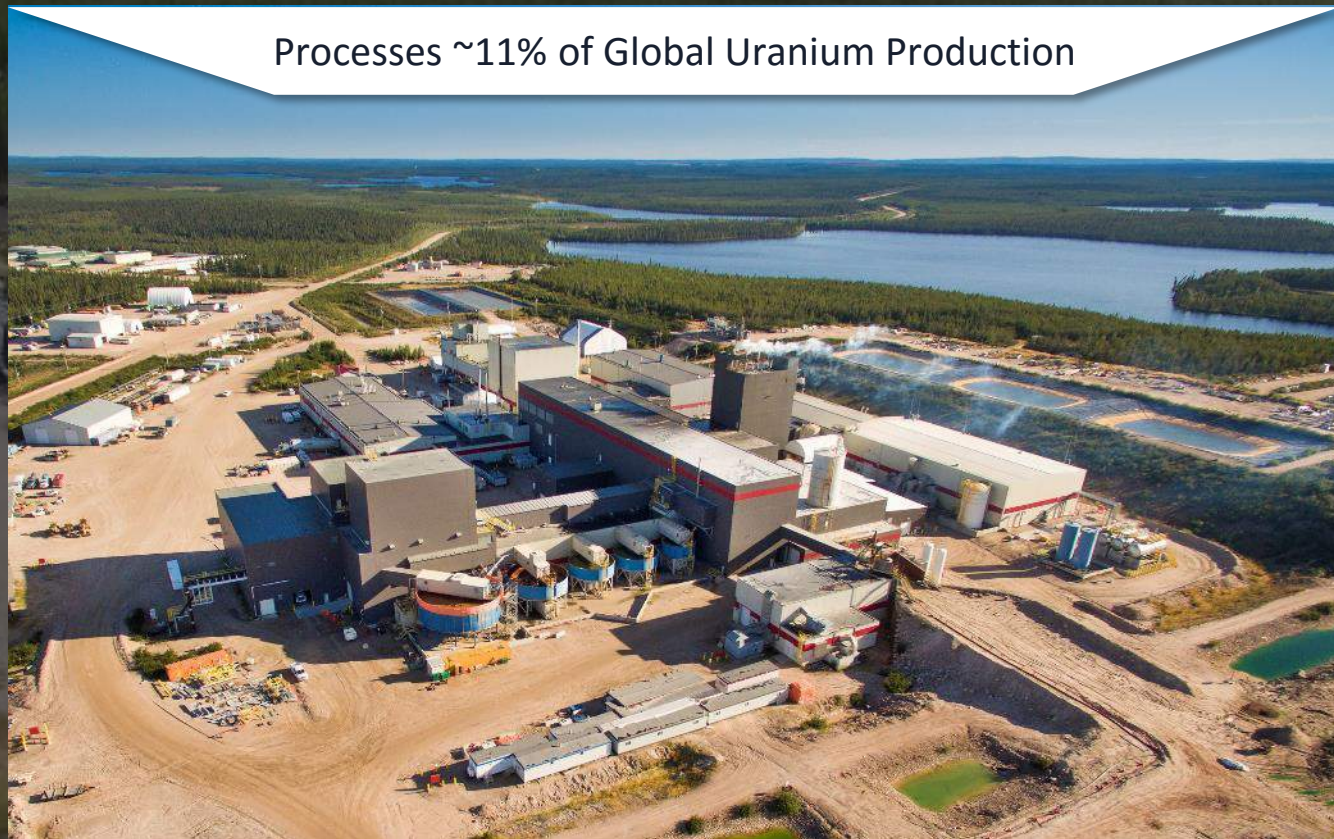
Positive Processing Metallurgical Test

- +97% recovery

Granted 10-Year Licence Renewal by CNSC in 2017

McClean Lake Mill

Processes ~11% of Global Uranium Production



(22.5% Denison, 70% AREVA, 7.5% OURD)

(1) See IMPORTANT CAUTION REGARDING PEA on slide 4

Infrastructure Rich Eastern Athabasca

- Existing infrastructure is tailored to mining operations surrounding the Wheeler property, allowing for low initial CAPEX & a lower risk profile throughout the development of the project
- Wheeler is located within 50km & 100km of the two largest uranium mines in the world (McArthur River & Cigar Lake)

Existing provincial power grid with ample capacity



Existing provincial highways & haul roads



3 licensed & 2 operating uranium mills



Precedent with local stakeholders



Reduced Risk & Shorter Lead time at Wheeler



Largest Undeveloped Uranium Project in the Eastern Athabasca Basin

Phoenix Deposit⁽¹⁾

70.2 Million Pounds (indicated)

166k tonnes @ 19.1% U₃O₈ ★

Gryphon Deposit⁽¹⁾

43.0 Million Pounds (inferred)

834k tonnes @ 2.3% U₃O₈

Location:

Infrastructure rich
eastern Athabasca
Basin

Ownership:

Denison 60%,
Cameco 30%, JCU
10%

Earn-In:

Denison increasing
to ~66% by the end
of 2018

Processing: PEA⁽¹⁾

assumes use of
22.5% owned
McClellan Mill

Economics: PEA⁽¹⁾

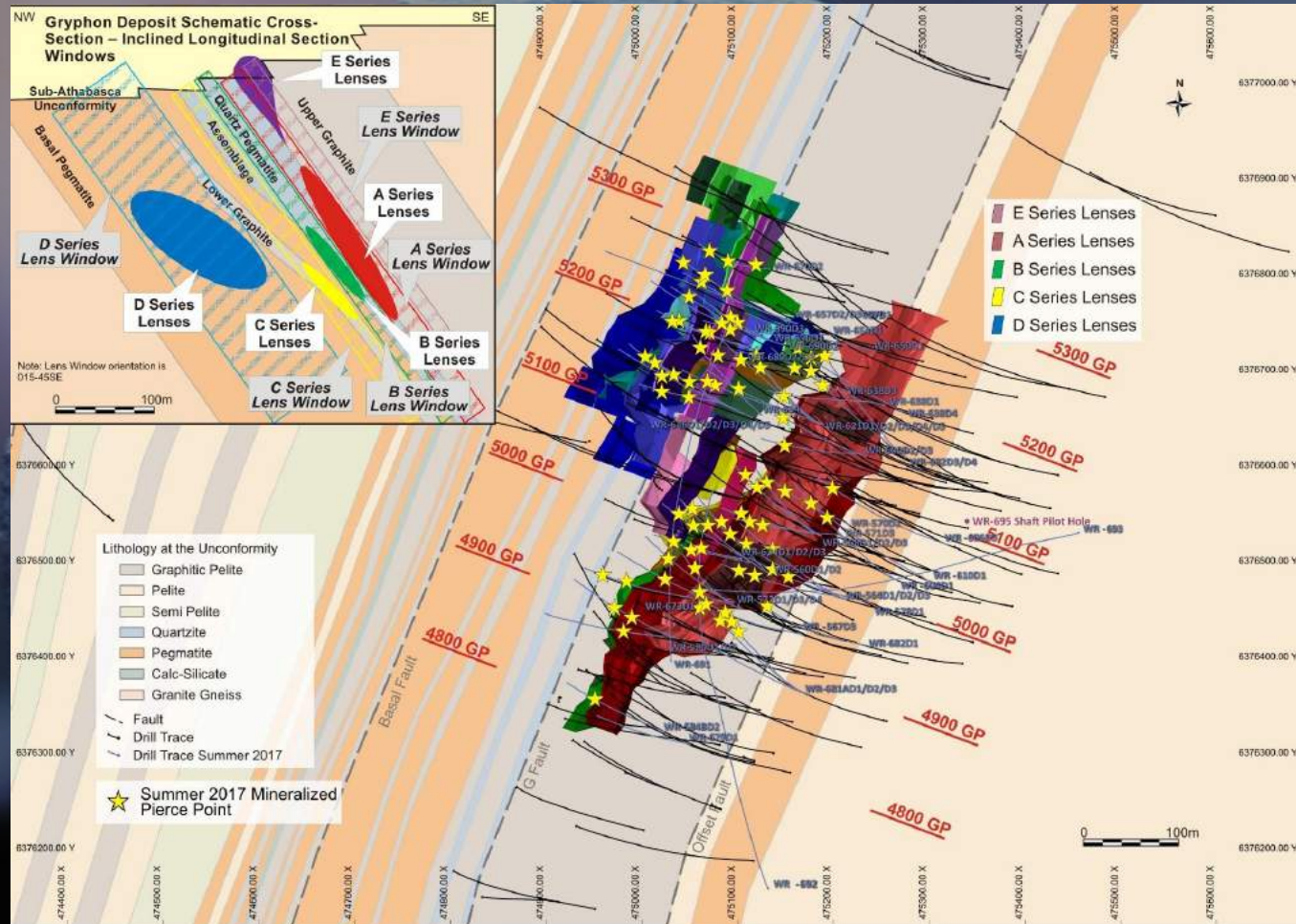
returned 20.4% IRR
at US\$44/lb U₃O₈



- Updated resource estimate expected Q1'2018
- Pre-Feasibility Study to be completed Mid-2018

Wheeler: Potential for Gryphon Resource Growth

Gryphon Plan View



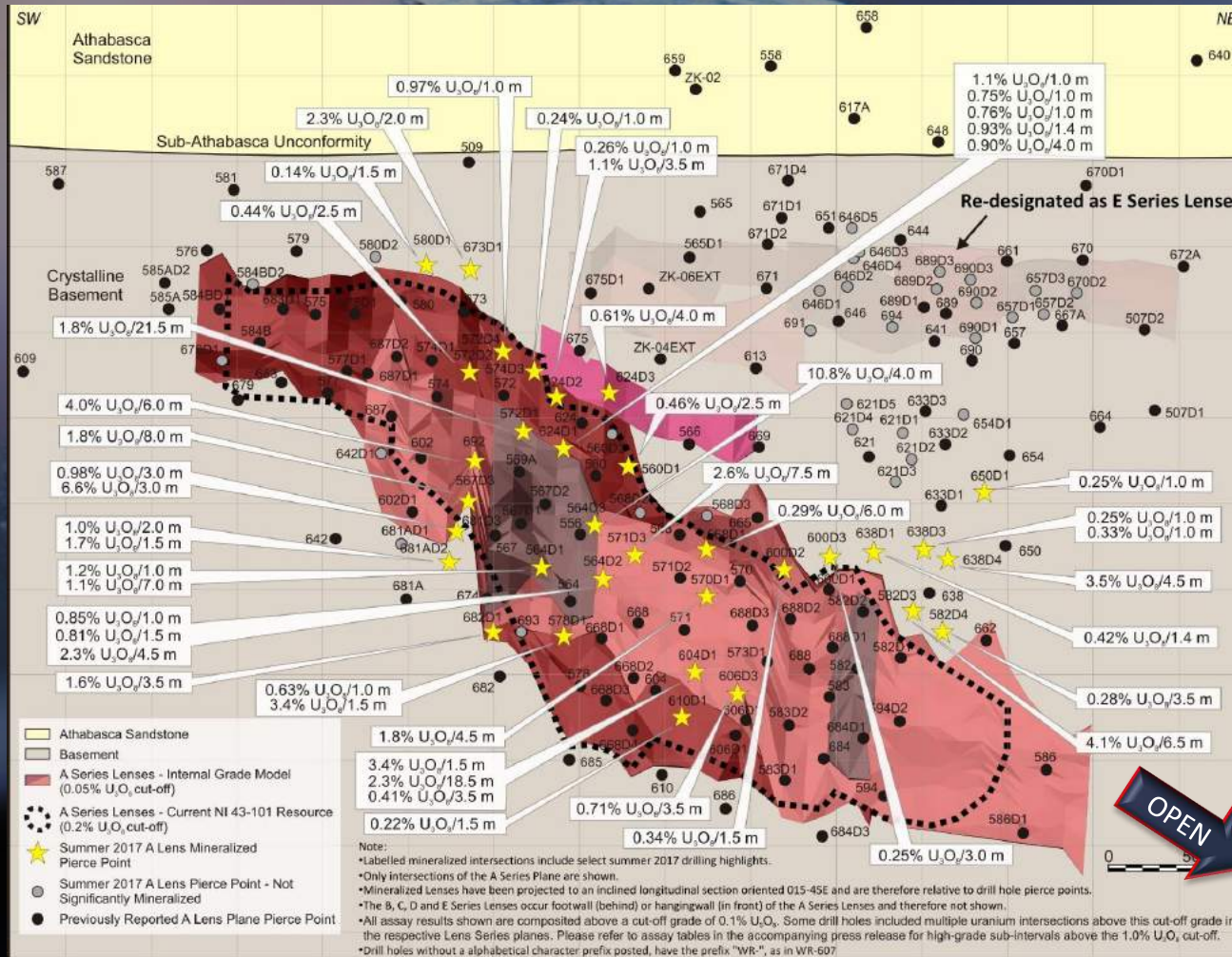
See Press Release dated November 27, 2017 for additional details

Significant New Mineralization

- Expansion of A and B Series Lenses
- Discovery and expansion of D and E Series Lenses

Mineralization at Gryphon Continues to Grow

A Series Lenses – Inclined Longitudinal Section



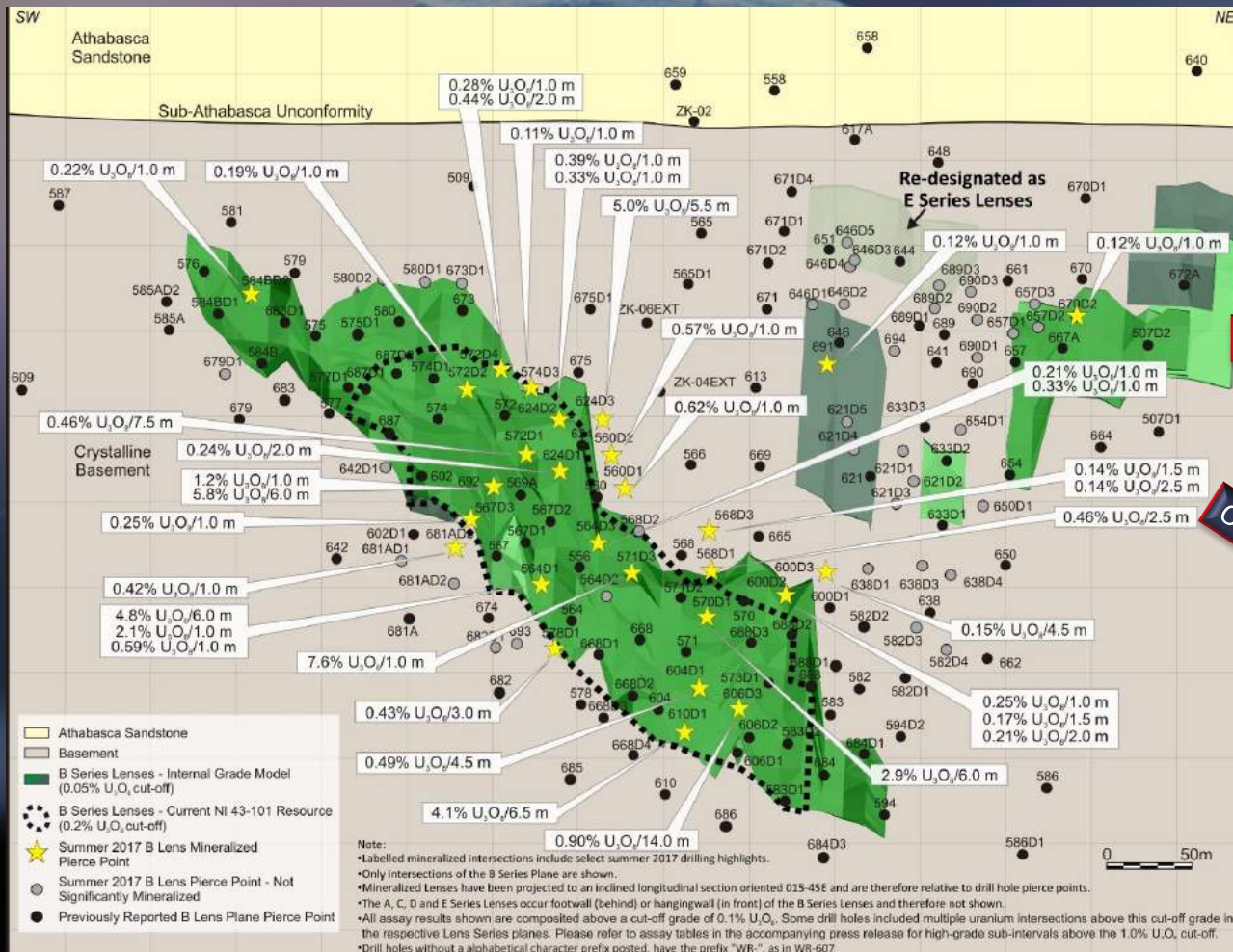
2017: A Series Results

- Potential for resource growth with higher than expected grades in certain portions of the deposit compared to the inferred grade model
- Noteworthy mineralized intercepts outside of the current resource area

- Uranium assays are performed by the Saskatchewan Research Council Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U_3O_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.
- See Press Releases dated November 27, 2017 for additional details.

Mineralization at Gryphon Continues to Grow

B Series Lenses – Inclined Longitudinal Section



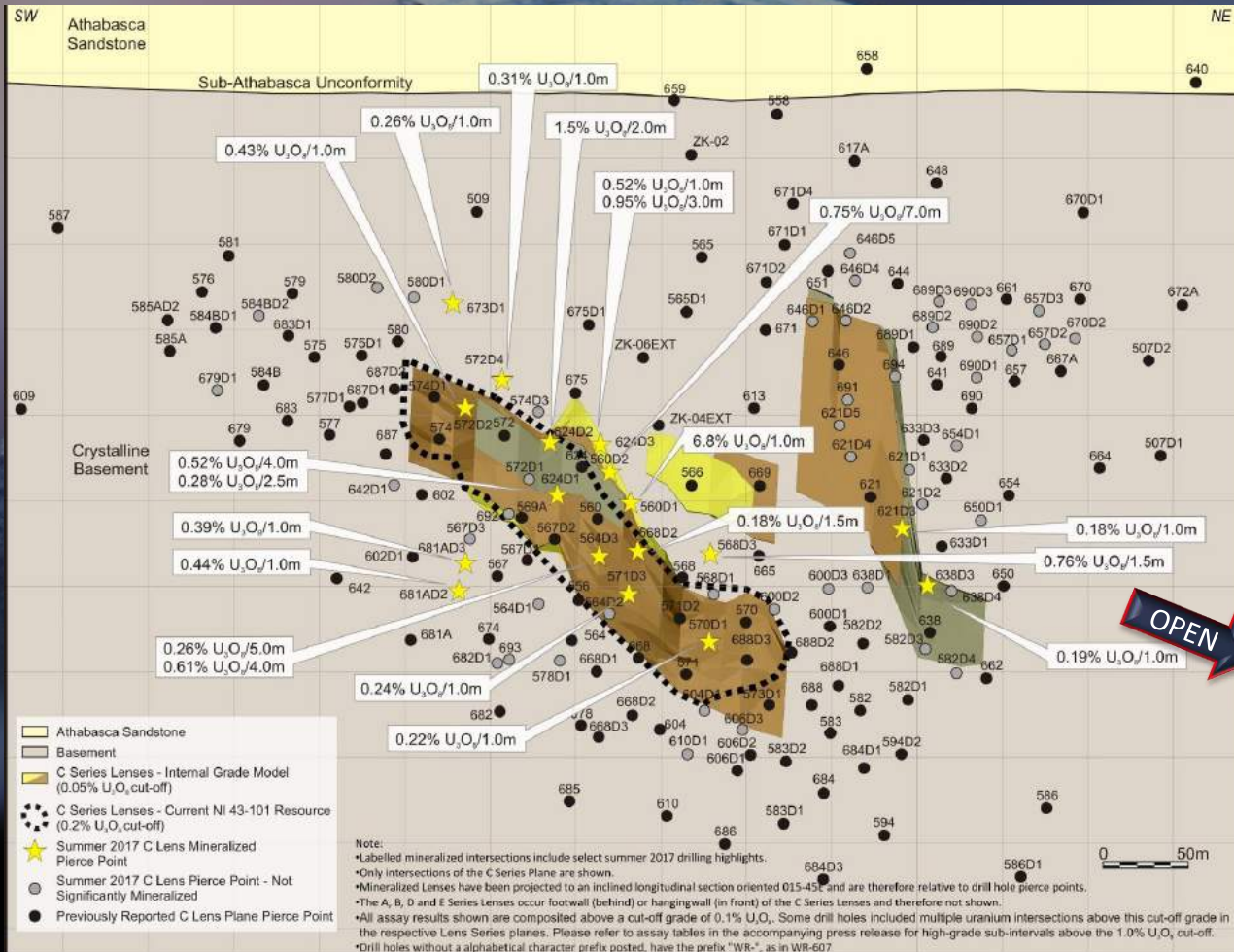
2017: B Series Results

- Potential for resource growth with higher than expected grades in certain portions of the deposit compared to the inferred grade model
- B Series Lenses that are not included in the current resource estimate are open along strike and down plunge to the northeast

- Uranium assays are performed by the Saskatchewan Research Council Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U_3O_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.
- See Press Releases dated November 27, 2017 for additional details.

Mineralization at Gryphon Continues to Grow

C Series Lenses – Inclined Longitudinal Section



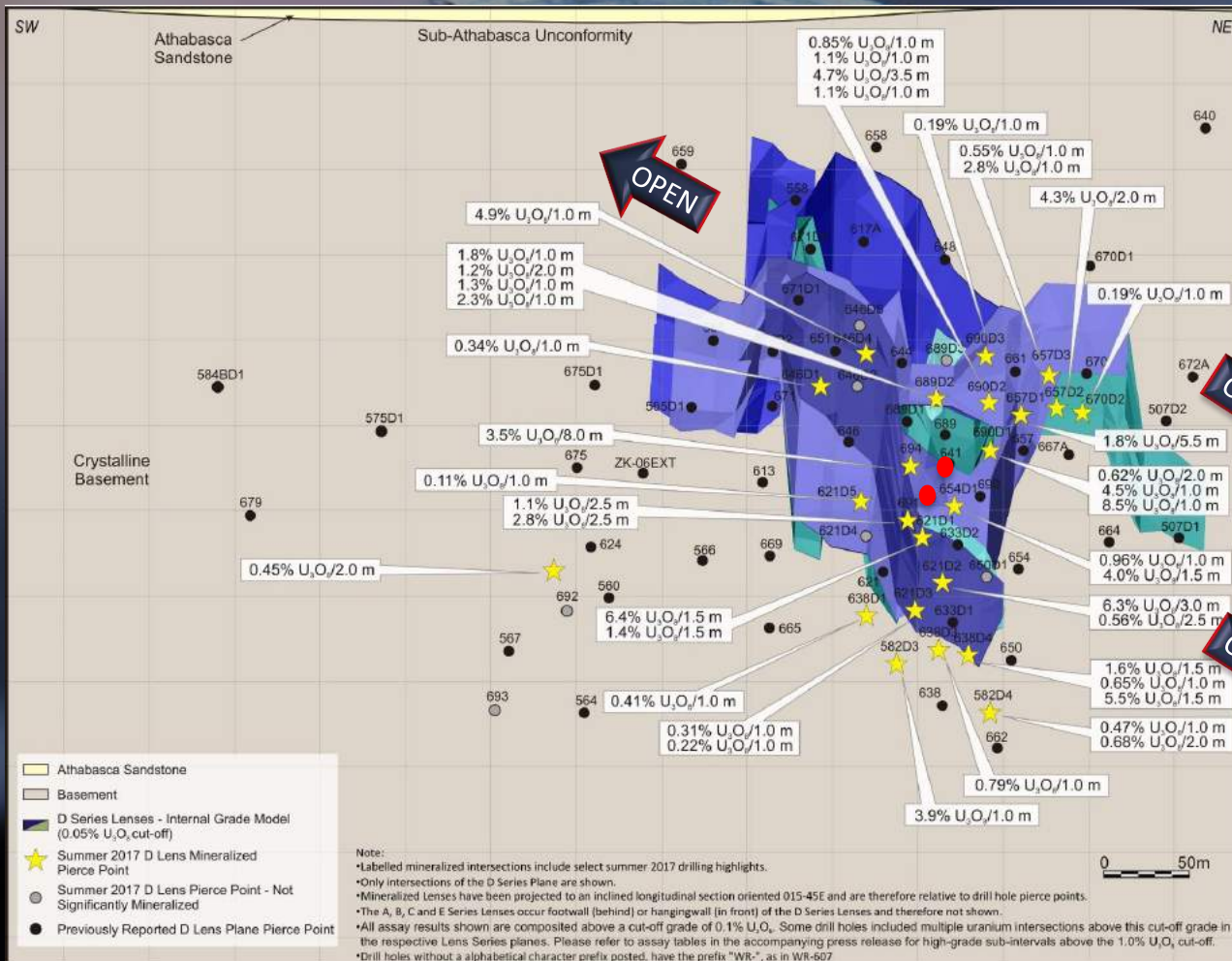
2017: C Series Results

- Confirmed up plunge and down plunge limits
- C Series Lenses that are not included in the current resource estimate are open to the northeast
- Different structural controls suggested by lower grades compared to the inferred grade model
- New drill holes designed to test for additional high-grade zones or 'shoots'

- Uranium assays are performed by the Saskatchewan Research Council Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U_3O_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.
- See Press Releases dated November 27, 2017 for additional details.

Mineralization at Gryphon Continues to Grow

D Series Lenses – Inclined Longitudinal Section



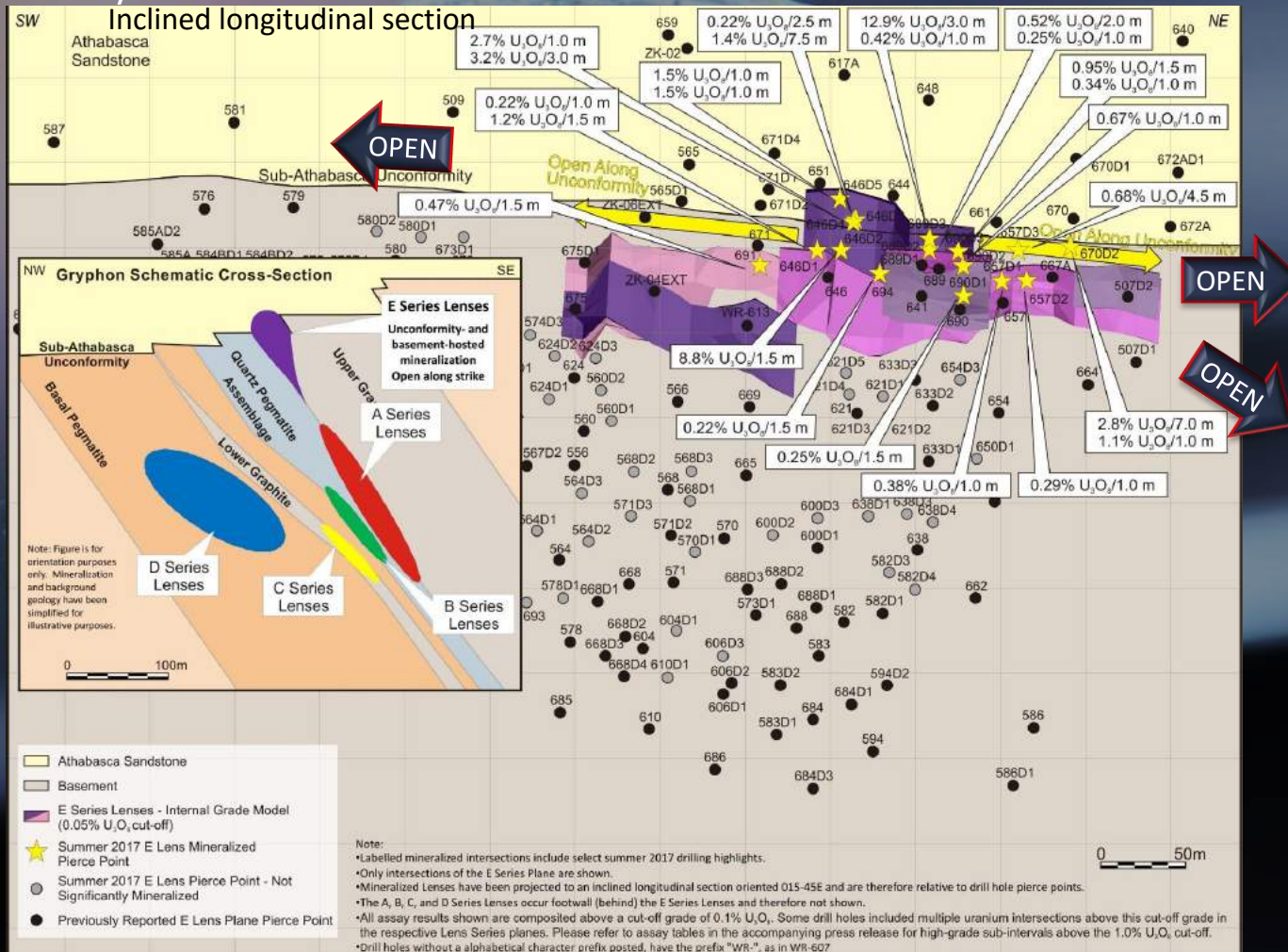
2017: D Series Results

- All D Series Lens mineralization occurs outside of current resource estimate for Gryphon
- Expanded on previous high grade results
 - WR-641: 5.3% U₃O₈/11.0m, incl. 12.6% U₃O₈/4.5m
 - WR-633D3: 1.3% U₃O₈/3.0m and 3.3% U₃O₈/13.5m and 6.2%U₃O₈/2.5m

- Uranium assays are performed by the Saskatchewan Research Council Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U₃O₈ %
- 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.
- See Press Release dated November 27, 2017 for additional details.

Mineralization at Gryphon Continues to Grow

Newly Discovered E Series Lenses



2017: E Series Results

- Discovery of new high-grade unconformity-hosted mineralization in drill hole WR-689D3 (12.9% U₃O₈ over 3.0m) and WR-670D2 (2.8% U₃O₈ over 7.0 metres)
- Immediately up-dip of previously intersected basement mineralization that includes drill hole WR-507D2 (19.30% U₃O₈ over 1.0 metre) and drill hole WR-646 (6.20% U₃O₈ over 2.5 metres)

- Uranium assays are performed by the Saskatchewan Research Council Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U₃O₈ %
- 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.
- See Press Releases dated November 27, 2017 for additional details.

2017: Positioning for the Future

Agreement to earn-in to additional 6% at Wheeler



January

Monetized Cigar Lake tolling revenue to raise CAD\$43.5M



January

CAD\$20M bought deal private placement



February

McClean Lake Mill granted 10-year licence renewal by CNSC



July

Denison Environmental extends cornerstone contract with BHP



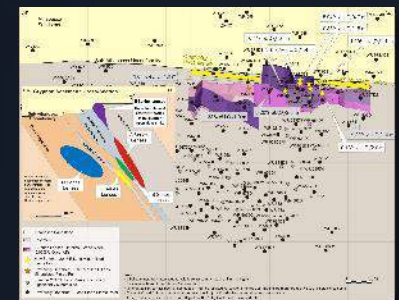
July

New high grade discovery on Waterbury property



August

Discovery of New "E" series of lenses at Wheeler's Gryphon Deposit



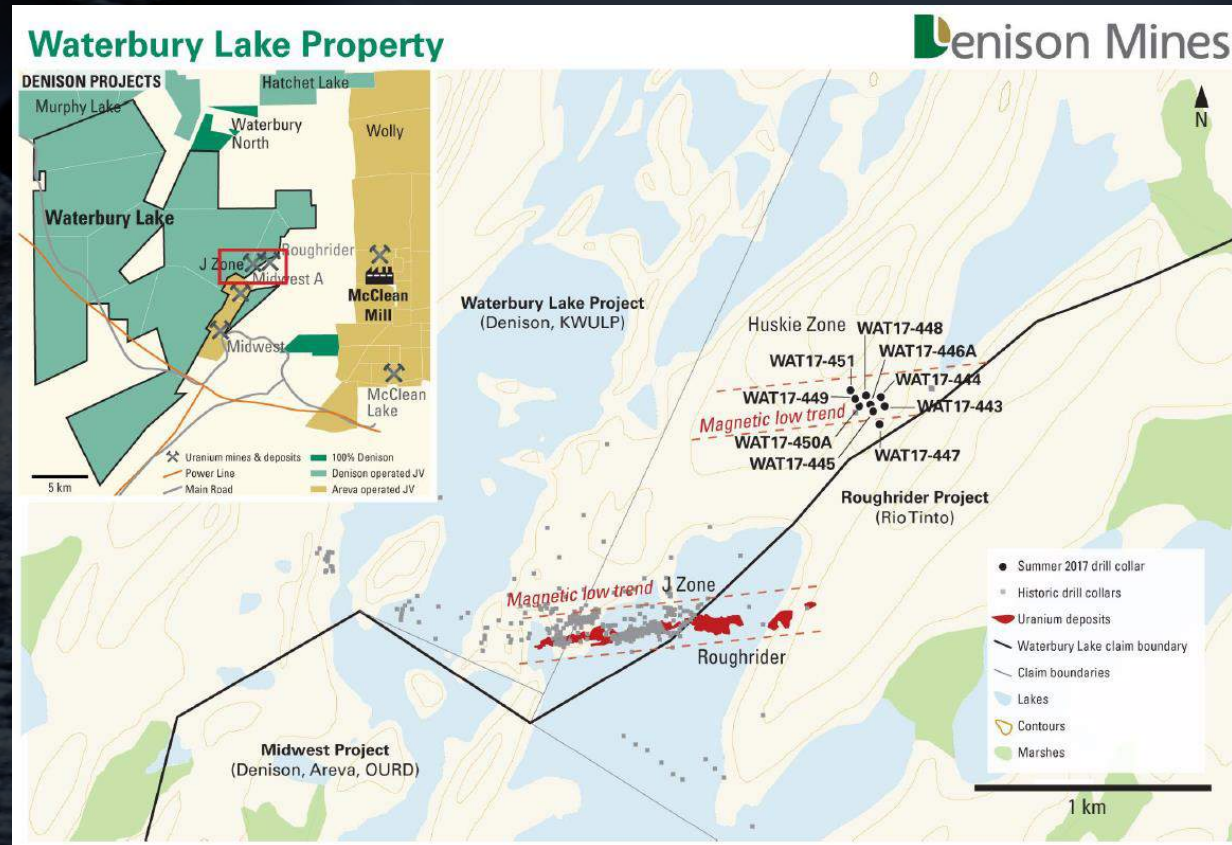
August

Huskie Zone: New High-Grade Basement Hosted Uranium Discovery at Waterbury Lake

Summer 2017 drilling program: Designed to test an east-west trend, which shares interpreted geological similarities with the east-west trend that hosts the J Zone and Roughrider deposits (~1.5km south)

Immediate success...

- The first summer 2017 drill hole at ~64% owned Waterbury project intersected 1.2% U_3O_8 over 1.0 metre (WAT-17-443)
- Fourth hole intersected 9.1% U_3O_8 over 3.7 metres, including 16.8% U_3O_8 over 2.0 metres (WAT17-446A)
- Increased 2017 Waterbury drilling program by 50% to 9 drill holes, from an original plan of 6



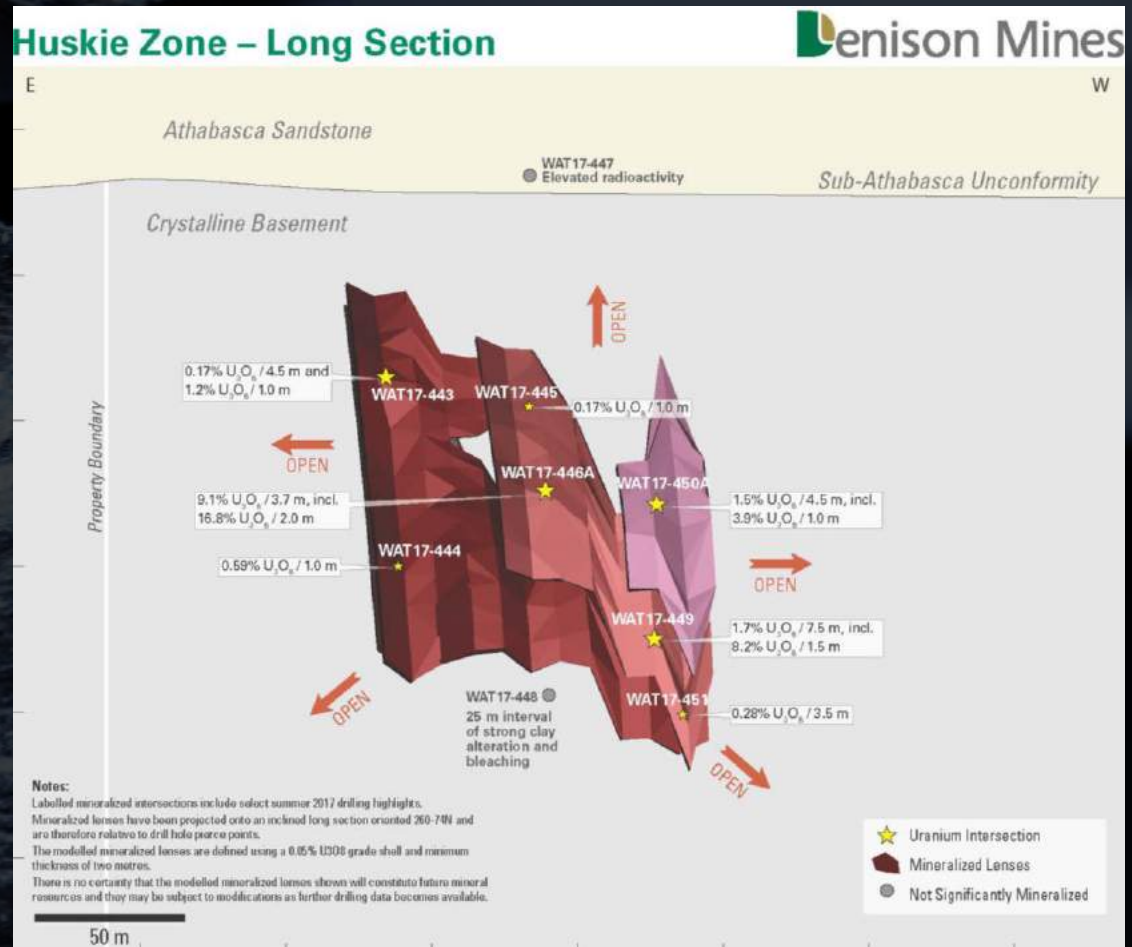
See Press Releases dated August 1st, 2017, August 22nd, 2017, Sept. 19, 2017, and Oct. 11, 2017 for additional details.

Huskie Zone: New High-Grade Basement Hosted Uranium Discovery at Waterbury Lake

“The basement plumbing system appears to be improving as we move west - as indicated by the increased number of mineralized lenses, a broader and stronger alteration halo and a widening of the structured, graphitic package” Dale Verran, VP Exploration

Early Days...

- Drill holes WAT17-449 & WAT17-450A have extended mineralized zone to a total strike length of ~100 metres
- WAT17-449 returned 1.5% U_3O_8 over 4.5 metres, including 3.9% U_3O_8 over 1.0 metre
- WAT17-450A returned 1.7% U_3O_8 over 7.5 metres, including 8.2% U_3O_8 over 1.5 metres
- Follow-up drilling in 2018 necessary to evaluate the scale this new mineralized zone

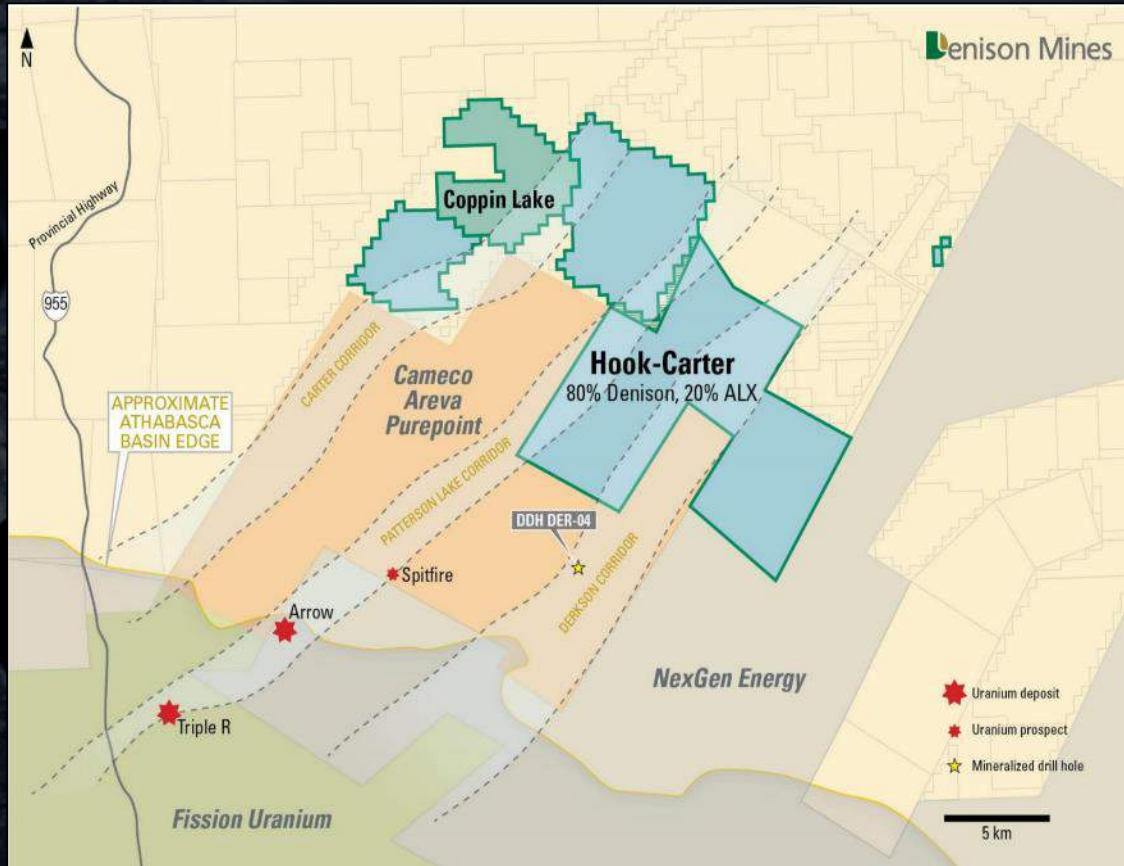


See Press Releases dated August 1st, 2017, August 22nd, 2017, Sept. 19, 2017, and Oct. 11, 2017 for additional details.

Hook Carter: Long Term Potential

Strategic Acquisition...

- Denison acquired 80% interest in the Hook-Carter property from ALX Uranium Corp. in 2016
- Also acquired Coppin Lake project to consolidate Hook-Carter property
- 45 land claims = 20,522 hectares
- Significantly underexplored, with only 8 holes drilled to date
- On trend with Triple R and Arrow deposits + Spitfire discovery
- Brings new long-term exploration potential as Denison continues to focus on Wheeler River
- Drilling to commence in the near future



Company Specific Catalysts on The Horizon

Wheeler River Resource Update & Exploration



Q1-2018

An updated resource estimate is planned for Q1-2018 + Start of 45,000 metre drilling program targeting resource growth along strike of Gryphon and at untested regional targets throughout 2018

CAD\$9.5M Budget
(CAD\$7.1M Denison)

Wheeler River Pre-Feasibility Study



Mid-2018

The PFS is expected to build on the updated resource estimate for Gryphon and potentially incorporate work on alternative mining methods for Phoenix – both having the potential to enhance the already strong economics of the project

CAD\$3.1M Budget
(CAD\$2.3M Denison)

New high-grade “Huskie” discovery at Waterbury



**Winter &
Summer 2018**

High-grade discovery, including a result of 9.1% U_3O_8 over 3.7 Metres (drill hole WAT17-446A). Remains open in all directions, with 14,400 metres of follow-up drilling planned in 2018

CAD\$3.5M Budget
(100% Denison funded)

Inaugural drilling program at Hook-Carter



Winter 2018

20,522 hectares of ground in the western Athabasca Basin, highlighted by 15km of untested strike potential along the Patterson Corridor. Inaugural drill program expected to include 10,000 metres of drilling

CAD\$2.2M Budget
(100% Denison funded)

Denison's Uniquely Diversified Asset Base

- Denison's Flagship property in eastern Athabasca Basin (AB)
- **Gryphon + Phoenix co-development**
- PEA completed 1H16 with 20.4% IRR @ US\$44/lb U₃O₈
- PFS in progress

Wheeler River Project (60%)

- Strategic high-grade AB uranium mill
 - **6 M lbs/year excess milling capacity**
 - Currently tolling Cigar Lake ore
 - 24 M lbs /year lic. capacity

McClean Lake Mill (22.5%)

- Interests in Midwest (25.17%), McClean (22.5%), and Waterbury (~64%)
- **Over 350,000 hectares of AB exploration properties**
- (e.g. Crawford, Hook-Carter, Murphy)

Strategic Project Portfolio

Cash Flow from UPC & DES

- Management services Agreement with UPC (TSX: U)
- DES environmental services group in Elliot Lake
- **Regular cash flow minimizes reliance on dilutive equity financing**

The enison Advantage

Wheeler River: Largest undeveloped uranium project in the infrastructure rich eastern Athabasca Basin

Increasing our interest in Wheeler to up to ~66% by end of 2018

Potential to improve Wheeler River PEA economics through exploration and engineering activities ongoing through 2017

Early days on new and exciting “Huskie” discovery at Waterbury Lake

Diversified asset base including McClean Lake mill and investments in GoviEx Uranium (~20%) and SkyHarbour Resources (~11%), providing leverage to rising commodity price

Financial flexibility to advance projects with fortified balance sheet

Appendix: Wheeler River PEA Economics

2016 Wheeler River Project Preliminary Economic Assessment⁽¹⁾ (100%)

Assumptions / Financial Results	Base Case	Production Case
Uranium Price	US\$44.00	US\$62.60
Exchange Rate (CAD:USD)	1.35	1.35
Discount Rate	8.00%	8.00%
Pre-Tax IRR ⁽²⁾	20.4%	34.1%
Pre-Tax NPV ⁽²⁾ (100%)	CAD\$513M	CAD\$1,420M
Payback Period ⁽³⁾	~3 years	~18 months
Initial Capital Costs	CAD\$560M (100%); CAD\$336M to DML	
Sustaining Capital Costs	CAD\$543M (100%); CAD\$326M to DML	
Average Operating Costs per lb U ₃ O ₈	CAD\$25.67 (USD\$19.01)	

(1) See IMPORTANT CAUTION REGARDING PEA on slide 6

(2) NPV and IRR are calculated to the start of pre-production activities in 2021.

(3) Payback period is stated as number of years to pay-back from the start of commercial production.

Appendix: Wheeler River PEA Resources

2015 Wheeler River Property Mineral Resource Estimate Summary⁽¹⁾

Deposit	Category	Tonnes	Grade (%U ₃ O ₈)	Million lbs U ₃ O ₈ (100%)	Million lbs U ₃ O ₈ (60% Denison)
Gryphon	Inferred	834,000	2.3	43.0	25.8
Phoenix	Indicated	166,000	19.1 ★	70.2	42.1
Phoenix	Inferred	9,000	5.8	1.1	0.7

Gryphon Deposit⁽²⁾	<ul style="list-style-type: none"> ➤ High-grade and hosted in basement rock ➤ Expected to allow for conventional underground mining methods (longitudinal longhole method assumed)
Phoenix Deposit⁽²⁾	<ul style="list-style-type: none"> ➤ Very high grade and hosted at the sub-Athabasca unconformity ➤ Expected to require remote mining method and ground freezing to prevent water inflows (jet boring method assumed)

(1) See NI 43-101 Technical Report references for additional information about the resource estimate dated April 8, 2016.

(2) See IMPORTANT CAUTION REGARDING PEA on slide 6.

Appendix: Wheeler River Estimated CAPEX

2016 Wheeler River Project Preliminary Economic Assessment⁽¹⁾

Capital Costs (CAD\$ millions)	Initial	Sustaining	Total
Surface Infrastructure	\$166	\$7	\$174
Mine	\$220	\$334	\$554
Mineral Processing	\$19	\$60	\$79
Owners Costs	\$25	\$0	\$25
Decommissioning	\$0	\$40	\$40
Subtotal	\$429	\$442	\$871
Contingency	\$131	\$101	\$232
Total Capital (100%)	\$560	\$543	\$1,103
Denison's Share (60%)	\$336	\$325	\$661

(1) IMPORTANT CAUTION REGARDING THE PRELIMINARY ECONOMIC ASSESSMENT ("PEA"): The PEA is preliminary in nature. Capital costs are stated in 2015 Canadian dollars to a bottom line accuracy of +/- 40%. Initial capital costs are from Jan. 1, 2021 to Dec. 31, 2025. Sustaining capital costs are from Jan. 1, 2026 to end of 2045. See IMPORTANT CAUTION REGARDING PEA on slide 6.

Appendix: Wheeler River Estimated OPEX

2016 Wheeler River Project Preliminary Economic Assessment⁽¹⁾

Operating Costs (CAD\$/lb U ₃ O ₈)	Gryphon	Phoenix
Mining	\$3.45	\$17.45
Surface Transportation	\$1.63	\$0.85
Mineral Processing (including tolling)	\$10.03	\$8.03
General & Administration	\$4.17	\$3.57
Total (CAD\$/lb U₃O₈)	\$19.28	\$29.90
Total (USD\$/lb U₃O₈)	\$14.28	\$22.15
Average Operating Cost (USD\$/lb U₃O₈)	\$19.01	

(1) IMPORTANT CAUTION REGARDING THE PRELIMINARY ECONOMIC ASSESSMENT ("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 value. See IMPORTANT CAUTION REGARDING PEA on slide 6.

Corporate Information

Market Summary

Exchanges TSX: **DML**, NYSE MKT: **DNN**

Shares Outstanding⁽¹⁾ 559.1 M

Warrants⁽¹⁾ 1.7 M

Options⁽¹⁾ 12.5 M

Fully Diluted Shares⁽¹⁾ 573.3 M

Market Cap – DML @ C\$0.67/share⁽²⁾ CAD\$380.2 M

Market Cap – DNN @ U\$0.55/share⁽²⁾ USD\$305.8 M

Daily Trading Volume – DML⁽³⁾ 1.8M shares

Daily Trading Volume – DNN⁽³⁾ 0.49M shares

Management & Directors

Lukas Lundin (Executive Chairman)

David Cates (President & CEO)

Mac McDonald (VP Finance & CFO)

Peter Longo (VP Project Development)

Dale Verran (VP Exploration)

Kwang-Hee Jeong (Director)

W. Robert Dengler (Director)

Brian D. Edgar (Director)

Ron F. Hochstein (Director)

William A. Rand (Director)

Catherine J.G. Stefan (Director)

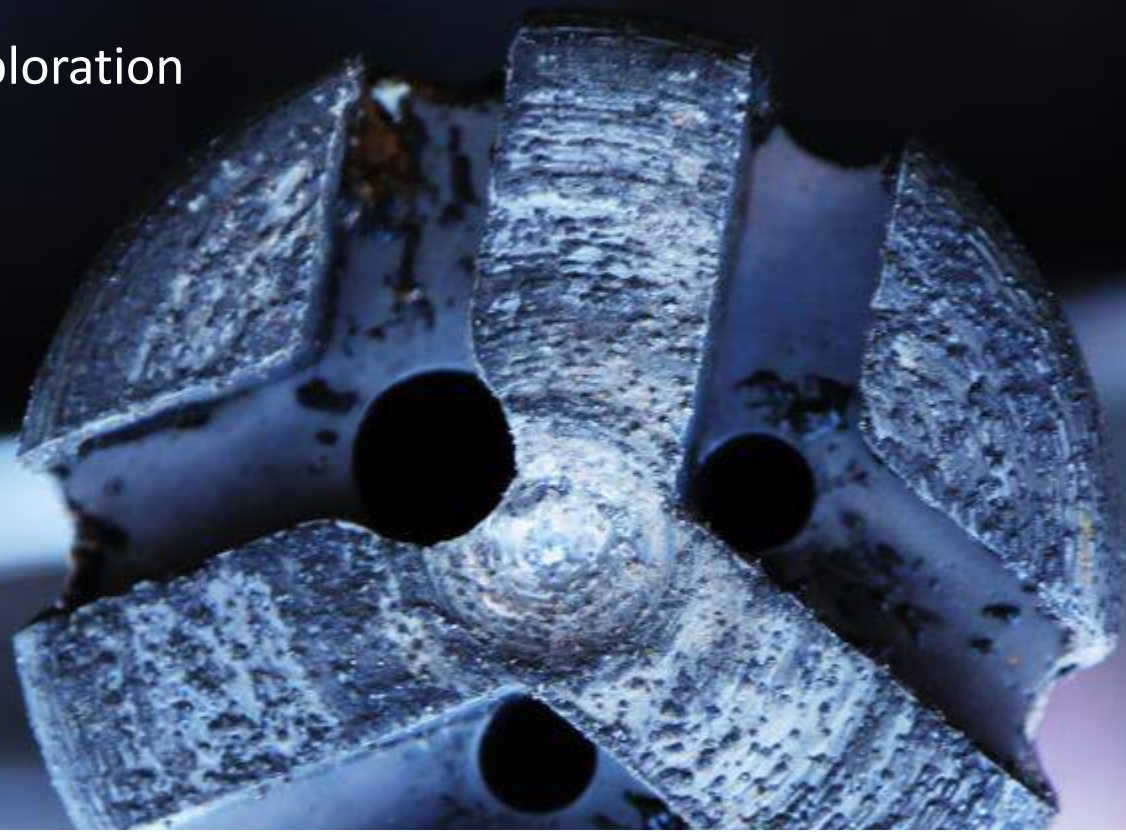
(1) As of September 30, 2017 – per Denison's Q3 Report

(2) Based on shares outstanding above, and DML & DNN share prices as of January 15, 2017

(3) Average daily trading volume over 100 day period as at January 2, 2017



Uranium Development & Exploration
The Athabasca Basin



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LUNDINGROUP