Denison Mines Corp.

2019 Annual Information Form

March 13, 2020

ABOUT THIS ANNUAL INFORMATION FORM

This annual information form ("**AIF**") is dated March 13, 2020. Unless stated otherwise, all of the information in this AIF is stated as at December 31, 2019.

This AIF has been prepared in accordance with Canadian securities laws and contains information regarding Denison's history, business, mineral reserves and resources, the regulatory environment in which Denison does business, the risks that Denison faces and other important information for Shareholders.

This AIF incorporates by reference:

- Denison's management discussion and analysis ("**MD&A**") for the year ended December 31, 2019, which is available under the Company's profile on SEDAR (www.sedar.com) and on EDGAR (www.sec.gov/edgar.shtml) as an exhibit to the Company's Form 40-F.
- Denison's audited consolidated financial statements for the year ended December 31, 2019, which are available on SEDAR and EDGAR as an exhibit to the Company's Form 40-F.

Financial Information

Unless otherwise specified, all dollar amounts referred to in this AIF are stated in Canadian dollars ("**CAD**"). References to "US$" mean United States dollars.

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Financial information is derived from consolidated financial statements that have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Caution about Forward-Looking Information

Certain information contained in this AIF and the documents incorporated by reference concerning the business, operations and financial performance and condition of Denison constitutes forward-looking information within the meaning of the United States *Private Securities Litigation Reform Act of 1995* and similar Canadian legislation.

Generally, the use of words and phrases like "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or the negatives and/or variations of such words and phrases, or statements that certain actions, events or results "may", "could", "would", "might" or "will" "be taken", "occur", "be achieved" or "has the potential to" and similar expressions are intended to identify forward-looking information.

Forward-looking information involves known and unknown risks, uncertainties, material assumptions and other factors that may cause actual results or events to differ materially from those expressed or implied by such forward-looking statements.

Denison believes that the expectations and assumptions reflected in this forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct. Forward-looking information should not be unduly relied upon. This information speaks only as of the date of this AIF, and Denison will not necessarily update this information, unless required to do so by securities laws.

Examples of Forward-Looking Information

This AIF contains forward-looking information in a number of places, including statements pertaining to Denison's:

- expectations regarding raising capital
- exploration, evaluation and development plans and objectives
- plans for capital expenditure programs, exploration and development expenditures and reclamation costs and timing
- results of its Wheeler River PFS and plans with respect to the EA and FS process (each as defined below)
- expectations regarding the process for and receipt of regulatory approvals, permits and licences under governmental and other applicable regulatory regimes
- estimates of its mineral reserves and mineral resources
- expectations about 2020 and future market prices, production costs and global uranium supply and demand
- expectations regarding ongoing joint arrangements and Denison's share of same
- expectations regarding additions to its mineral reserves and resources through acquisitions and exploration
- expectations regarding the toll milling of Cigar Lake ores, and the relationships with its contractual partners with respect thereto
- future royalty and tax payments and rates
- expectations regarding possible impacts of litigation and regulatory actions

Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral resources described can be profitably produced in the future.

Material Risks

Denison's actual results could differ materially from those anticipated. Management has identified the following risk factors which could have a material impact on the Company or the trading price of its common shares ("**Shares**"):

- the capital intensive nature of mining industry and the uncertainty of funding
- global financial conditions, including market reaction to COVID-19
- the speculative nature of exploration and development projects
- the imprecision of mineral reserve and resource estimates
- the risks of, and market impacts on, developing mineral properties
- risks associated with the selection of novel mining methods
- dependence on obtaining licenses, and other regulatory and policy risks
- uncertainty regarding engagement with Canada's First Nations and Métis
- environment, health and safety risks
- global demand and international trade restrictions
- the impact of uranium price volatility on the valuation of Denison's mineral reserves and resources and the market price of its Shares
- uncertainty regarding public acceptance of nuclear energy and competition from other energy sources
- volatility in the market price of the Company's Shares
- the risk of dilution from future equity financings
- dependence on other operators of the Company's projects
- reliance on contractors, experts and other third parties

- the risk of failure to realize benefits from transactions
- the risk of Denison's inability to expand and replace its mineral reserves and resources
- competition for properties
- risk of challenges to property title and/or contractual interests in Denison's properties
- the risk of failure by Denison to meet its obligations to its creditors
- change of control restrictions
- uncertainty as to reclamation and decommissioning liabilities and timing
- potential for technical innovation rendering Denison's products and services obsolete
- liabilities inherent in mining operations and the adequacy of insurance coverage
- the ability of Denison to ensure compliance with anti-bribery and anti-corruption laws
- the uncertainty regarding risks posed by climate change
- the reliance of the Company on its information systems and the risk of cyber-attacks on those systems
- dependence on key personnel
- potential conflicts of interest for the Company's directors who are engaged in similar businesses
- limitations of disclosure and internal controls
- the potential influence of Denison's largest Shareholder, Korea Electric Power Corporation ("**KEPCO**") and its subsidiary, Korea Hydro & Nuclear Power ("**KHNP**").

The risk factors listed above are discussed in more detail later in this AIF (see "Risk Factors"). The risk factors discussed in this AIF are not, and should not be construed as being, exhaustive.

Material assumptions

The forward looking statements in this AIF and the documents incorporated by reference are based on material assumptions, including the following, which may prove to be incorrect:

- our budget, including expected exploration levels and costs and the assumptions regarding market conditions and other factors upon which we have based our expenditure expectations
- our ability to continue as a going concern
- our ability to obtain all necessary regulatory approvals, permits and licences for our planned activities under governmental and other applicable regulatory regimes
- our expectations regarding the demand for, and supply of, uranium, the outlook for long-term contracting, changes in regulations, public perception of nuclear power, and the construction of new and relicensing of existing nuclear power plants
- our expectations regarding spot prices and realized prices for uranium
- our expectations regarding tax rates, currency exchange rates and interest rates
- our decommissioning and reclamation obligations and the status and ongoing maintenance of agreements with third parties with respect thereto
- our mineral reserve and resource estimates, and the assumptions upon which they are based
- our, and our contractors', ability to comply with current and future environmental, safety and other regulatory requirements and to obtain and maintain required regulatory approvals
- our operations are not significantly disrupted as a result of political instability, nationalization, terrorism, sabotage, social or political activism, breakdown, natural disasters, governmental or political actions, litigation or arbitration proceedings, equipment or infrastructure failure, labour shortages, transportation disruptions or accidents, or other development or exploration risks

A Note for US Investors Regarding Estimates of Measured, Indicated and Inferred Mineral Resources and Probable Mineral Reserves

This AIF uses the terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource", which are Canadian mining terms as defined in and required to be disclosed in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("**NI 43-101**"), which references the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "**CIM**") – CIM Definition Standards on Mineral Resources and Mineral Reserves ("**CIM Standards**"), adopted by the CIM Council, as amended. However, these terms are not defined terms under Industry Guide 7 ("**Industry Guide 7**") under the United States Securities Act of 1933, as amended, and, until

recently, have not been permitted to be used in reports and registration statements filed with the U.S. Securities and Exchange Commission (the "**SEC**" or the "**Commission**").

The terms "mineral reserve", "proven mineral reserve" and "probable mineral reserve" are also Canadian mining terms for the purposes of NI 43-101 and CIM Standards. These definitions differ from the definitions in Industry Guide 7. Under Industry Guide 7, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time of the reserve determination. Under Industry Guide 7 standards, a "final" or "bankable" feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority. Denison has not prepared a feasibility study for the purposes of NI 43-101 or the requirements of the SEC in connection with its probable mineral reserves disclosure, and therefore such mineral reserve disclosure is not comparable to information from U.S. companies subject to the reporting and disclosure requirements of the SEC. Further, until recently, the SEC has not recognized the reporting of mineral deposits which do not meet the Industry Guide 7 definition of "reserve".

The SEC adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the Exchange Act. These amendments became effective February 25, 2019 (the "**SEC Modernization Rules**") with compliance required for the first fiscal year beginning on or after January 1, 2021. The SEC Modernization Rules replace the historical disclosure requirements for mining registrants that were included in SEC Industry Guide 7, which will be rescinded from and after the required compliance date of the SEC Modernization Rules. As a result of the adoption of the SEC Modernization Rules, the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources". In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be "substantially similar" to the corresponding definitions under the CIM Standards, as required under NI 43-101. Accordingly, during the period leading up to the compliance date of the SEC Modernization Rules, information regarding mineral resources or mineral reserves contained or referenced in this Annual Report may not be comparable to similar information made public by United States companies.

United States investors are cautioned that there are differences in the definitions under the SEC Modernization Rules and the CIM Standards. Accordingly, there is no assurance any mineral reserves or mineral resources that the Company may report as "proven mineral reserves", "probable mineral reserves", "measured mineral resources", "indicated mineral resources" and "inferred mineral resources" under NI 43-101 would be the same had the Company prepared the reserve or resource estimates under the standards adopted under the SEC Modernization Rules.

United States investors are also cautioned that while the SEC will now recognize "indicated mineral resources" and "inferred mineral resources", investors should not assume that any part or all of the mineralization in these categories will ever be converted into a higher category of mineral resources or into mineral reserves. Mineralization described using these terms has a greater amount of uncertainty as to their existence and feasibility than mineralization that has been characterized as reserves. Accordingly, investors are cautioned not to assume that any "indicated mineral resources" or "inferred mineral resources" that the Company reports are or will be economically or legally mineable. Further, "inferred mineral resources" have a greater amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, United States investors are also cautioned not to assume that all or any part of the "inferred mineral resources" exist. In accordance with Canadian securities laws, estimates of "inferred mineral resources" cannot form the basis of feasibility or other economic studies, except in limited circumstances where permitted under NI 43-101.

Accordingly, information contained in this AIF and the documents incorporated by reference herein containing descriptions of the Company's mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

ABOUT DENISON

Denison Mines Corp. is primarily engaged in uranium exploration and development. The registered and head office of Denison is located at 1100 – 40 University Avenue, Toronto, Ontario, M5J 1T1, Canada. Denison's website address is www.denisonmines.com.

At the end of 2019, Denison had a total of 65 active employees, all of whom were employed in Canada. None of the Company's employees are unionized.

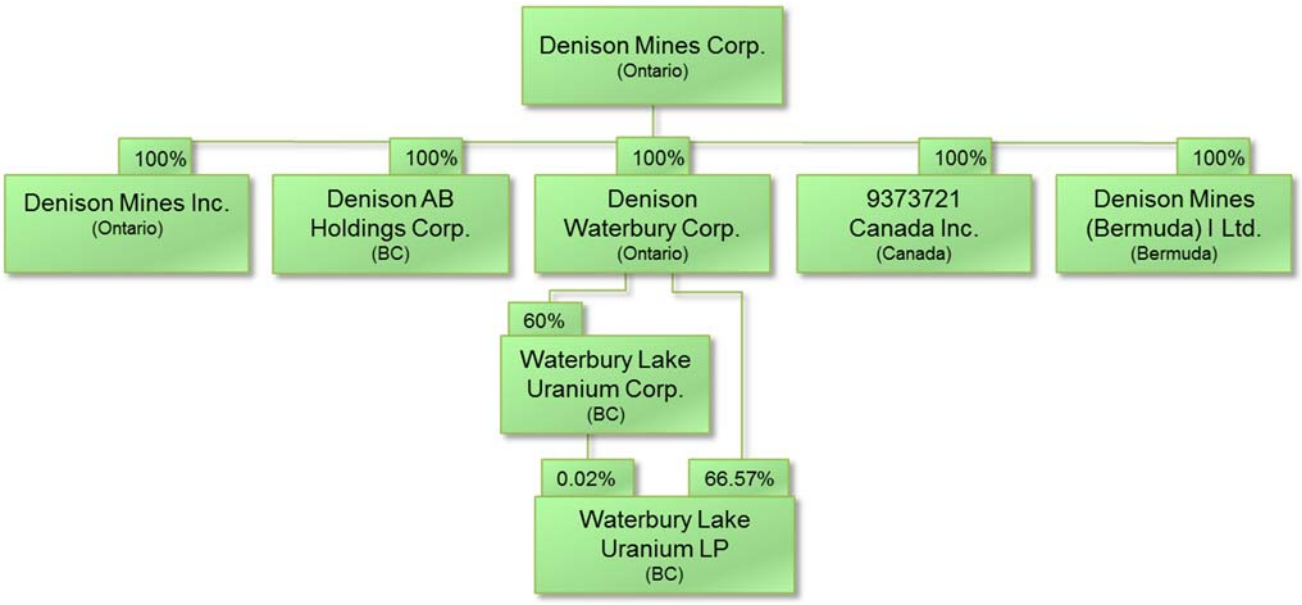
The Shares are listed on the Toronto Stock Exchange ("**TSX**") under the symbol "DML" and on the NYSE American under the symbol "DNN." Computershare Investor Services Inc. acts as the registrar and transfer agent for the Shares. The address for Computershare Investor Services Inc. is 100 University Avenue, 8th Floor, Toronto, ON, M5J 2Y1, Canada, and the telephone number is 1-800-564-6253.

In this AIF, *Denison* or *the Company* means Denison Mines Corp., *Shareholders* means holders of Denison's common shares and *Shares* means Denison's common shares.

Denison is a reporting issuer in all of the Canadian provinces. The Shares are also registered under the United States *Securities Exchange Act of 1934*, as amended, and Denison files periodic reports with the United States Securities and Exchange Commission.

Denison's Structure

Denison conducts its business through a number of subsidiaries. The following is a diagram depicting the corporate structure of Denison and its active subsidiaries as at December 31, 2019, including the name, jurisdiction of incorporation and proportion of ownership interest in each.



Denison also owns a number of inactive subsidiaries which have no liabilities or assets and do not engage in any business activities.

Denison Asset Overview

Uranium Exploration and Development

Denison's uranium exploration properties are principally held directly by the Company or indirectly through Denison Mines Inc. ("**DMI**"), Denison Waterbury Corp. and Denison AB Holdings Corp.

Denison's Key Assets - In the Athabasca Basin in Northern Saskatchewan:

- A 90% interest in, and operator of, the Wheeler River Uranium project, which is host to the high-grade Phoenix and Gryphon uranium deposits – together representing the largest undeveloped uranium project in the infrastructure rich eastern Athabasca Basin.
- A 66.57% interest in, and operator of, the Waterbury Lake project, which includes the J Zone and Huskie deposits.
- A 22.50% interest in the McClean Lake uranium processing facility and uranium deposits, through its interest in the McClean Lake Joint Venture ("**MLJV**") operated by Orano Canada Inc. ("**Orano Canada**").
- A 25.17% interest in the Midwest uranium project, operated by Orano Canada, which is host to the Midwest Main and Midwest A deposits.
- An extensive portfolio of exploration properties located in the Athabasca Basin.

Services

The Company generates cash flow through the following areas of its business:

(i) Management of Uranium Participation Corporation ("**UPC**")

Pursuant to a management services agreement, DMI serves as the manager of UPC, a publicly-traded company listed on the TSX under the symbol "U", which invests in uranium oxide in concentrates (U_3O_8) and uranium hexafluoride (UF_6).

(ii) Denison's Closed Mines division (formerly Denison Environmental Services)

Denison provides mine care & maintenance services to third party customers.

Toll Milling

Denison is a party to a toll-milling arrangement through its 22.50% interest in the MLJV, whereby ore is processed for the Cigar Lake Joint Venture ("**CLJV**") at the McClean Lake processing facility (the "**Cigar Toll Milling**"). In February 2017, Denison completed a financing (the "**APG Transaction**") with Anglo Pacific Group PLC ("**APG**") and its wholly owned subsidiary Centaurus Royalties Ltd. for gross proceeds to Denison of $43,500,000. The APG Transaction monetized a portion of Denison's future share of the Cigar Toll Milling, providing Denison with the financial flexibility to advance its interests in the Athabasca Basin, including the Wheeler River project.

While the APG Transaction monetized certain future toll milling receipts from the Cigar Toll Milling, Denison retains a 22.5% strategic ownership stake in the MLJV and McClean Lake processing facility. See “Denison’s Operations – Cigar Lake Toll Milling – APG Transaction”.

The Formation of Denison

Denison was formed by articles of amalgamation as International Uranium Corporation (“**IUC**”) effective May 9, 1997 pursuant to the *Business Corporations Act* (Ontario) (the “**OBCA**”). On December 1, 2006, IUC combined its business and operations with DMI, by plan of arrangement under the OBCA (the “**IUC Arrangement**”). Pursuant to the IUC Arrangement, all of the issued and outstanding shares of DMI were acquired in exchange for IUC’s shares. Effective December 1, 2006, IUC’s articles were amended to change its name to “Denison Mines Corp.”

Through its 2013 acquisitions of JNR Resources Inc. (“**JNR**”), Fission Energy Corp. (“**Fission**”) and Rockgate Capital Corp. (“**Rockgate**”) and its 2014 acquisition of International Enexco Limited (“**IEC**”), Denison increased its project portfolio in Canada, primarily in the Athabasca Basin.

In 2015 and 2016, Denison worked to further achieve its objective of focusing on its core activities in the Athabasca Basin, completing the sale of its interest in the Gurvan Saihan Joint Venture in Mongolia to Uranium Industry a.s. (“**UI**”) in 2015 (the “**Mongolia Transaction**”) and completing a transaction with GoviEx Uranium Inc. (“**GoviEx**”) in 2016 to combine their respective African uranium mineral interests, with GoviEx acquiring Denison’s uranium mineral interests in Zambia, Mali and Namibia. See “Legal and Regulatory Proceedings” for more information on the Mongolia Transaction.

DEVELOPMENTS OVER THE LAST THREE YEARS

2017…

In January, Denison executed an agreement with the partners of the Wheeler River Joint Venture ("**WRJV**") that was expected to increase Denison's ownership of the Wheeler River project to up to approximately 66% by the end of 2018. At that time, the WRJV was a joint venture between Denison as operator (60.0% interest, which is now a 90.0% interest), Cameco Corporation ("**Cameco**") (30.0% interest, which is now a 0.0% interest), and JCU (Canada) Exploration Limited ("**JCU**") (10.0% interest) (collectively, the "**WRJV Parties**"). Under the terms of the agreement, the WRJV Parties agreed to allow for a one-time election by Cameco to fund 50% of its ordinary share (30%) of joint venture expenses in 2017 and 2018. The shortfall in Cameco's contribution would be funded by Denison, in exchange for a transfer to Denison of a portion of Cameco's interest in the WRJV. Accordingly, Denison's share of joint venture expenses was to be 75% in 2017 and 2018, and Cameco and JCU's share of joint venture expenses was to be 15% and 10%, respectively. See “Mineral Properties – Wheeler River”.

Also in January, UI and Denison entered into an extension agreement (the “**Extension Agreement**”), pursuant to which it was agreed that the payment deadline for the contingent payments due for the Mongolia Transaction under the Amended and Restated Share Purchase Agreement between Denison and UI dated November 25, 2015 (the “**GSJV Purchase Agreement**”) would be extended from November 2016 to July 2017, provided that the outstanding amount would bear interest at a rate of 5% per annum, payable monthly in arrears. The contingent payments had become payable after the Mongolian government (through the Mineral Resource Authority of Mongolia) formally issued the mining license certificates for the Hairhan, Haraat, Gurvan Saihan and Ulzit projects in September 2016. The first payment under the Extension Agreement was due on or before January 31, 2017. The required payments were not made and

UI is in default of its obligations under the Extension Agreement and GSJV Purchase Agreement. For further updates, see below in this section and in "Legal and Regulatory Proceedings".

In February, Denison completed the APG Transaction for gross proceeds to Denison of $43,500,000. See "Denison's Operations – Cigar Lake Toll Milling – APG Transaction".

Co-ordinated with the closing of the APG Transaction, the maturity date under the credit facility with the Bank of Nova Scotia (the "**Credit Facility**") was extended to January 31, 2018 and the terms of the Credit Facility were amended to reflect certain changes required to facilitate an inter-creditor agreement between BNS and the parties to the APG Transaction. Amongst those changes, BNS and DMI agreed to replace a restrictive covenant to maintain $5,000,000 on deposit with BNS with a pledge of $9,000,000 in restricted cash or GIC's as collateral. Under the amended Credit Facility, Denison will pay letter of credit fees of 0.4% on the first $9,000,000 of credit utilized under the facility (associated with the restricted cash), and 2.4% on the remaining $15,000,000 of letters of credit issued thereunder.

Also in February, Mr. Kwang Hee Jeong was appointed to the Board as KHNP Canada's representative.

In March, Denison closed a private placement share offering, under which the Company issued, in aggregate, 18,337,000 Shares of Denison for gross proceeds of $20,000,290. The aggregate share offering was comprised of the following three elements: (a) a "Common Share" offering which consisted of 5,790,000 Shares at a price of $0.95 per Share for gross proceeds of $5,500,500; (b) a "Tranche A Flow-Through" offering which consisted of 8,482,000 Shares issued on a "flow-through" basis at a price of $1.12 per Share for gross proceeds of $9,499,840; and (c) a "Tranche B Flow-Through" offering which consisted of 4,065,000 Shares issued on a "flow-through" basis at a price of $1.23 per Share for gross proceeds of $4,999,950.

In April, Denison completed its winter exploration drilling in the Athabasca Basin. At Wheeler River, the winter 2017 drilling program was focused on two objectives: (1) continued infill and delineation drilling of the Gryphon deposit, in order to upgrade the estimated inferred resources to an indicated level of confidence, and (2) exploration drilling outside of the current resources estimated for the Gryphon deposit, with the aim of discovering additional resources. The winter 2017 drilling program at Wheeler River was completed with a total of 14,732 metres drilled in 26 holes. Drilling results at Wheeler River included intersections of high-grade mineralization within the D Series lenses of mineralization, located within 200 metres north and northwest of the Gryphon deposit. Other notable winter results included high grade intersections from infill drilling within the Gryphon deposit's A, B and C series lenses, where 17 drill holes, totaling approximately 8,402 metres, were completed as part of the winter 2017 program. Winter drilling programs were also completed by the Company at Waterbury Lake (9 holes, 4,803 metres), Murphy Lake (9 holes, 3,433 metres) and Crawford Lake (1 hole, 519 metres). A further 5,029 metres of drilling was completed in 17 holes on the Wolly project by Orano Canada.

In July, Denison announced that Denison Environmental Services (now Denison's Closed Mines Group) had entered into a new two-year services agreement with Rio Algom Limited ("**Rio Algom**"), which is a subsidiary of BHP Billiton Limited ("**BHP**"). Pursuant to the agreement, Denison was responsible for the management and operation of nine decommissioned mine sites in Ontario and two in Quebec from July 1, 2017 to June 30, 2019. See "Developments Over the Last Three Years – 2019…" for details of the agreement's renewal.

In September, Denison reported the completion of the summer exploration drilling program at the Waterbury Lake project. The summer 2017 drill program at Waterbury Lake commenced in late July and was highly successful, returning several high-grade uranium intersections from a target area located approximately 1.5 kilometres to the northeast of the property's J Zone uranium deposit. Following the discovery of uranium mineralization in the first four drill holes of the program, the scope of the program was increased in late August to allow for a total of 9 drill holes. Of the eight drill holes designed to test for basement-hosted mineralization, seven holes intersected significant mineralization, including 9.1% U_3O_8 over 3.7 metres (drill hole WAT17-446A), 1.7% U_3O_8 over 7.5 metres (drill hole WAT17-449) and 1.5% U_3O_8 over 4.5 metres; (drill hole WAT17-450A). Taken together, the summer program included a total of 3,722 metres drilled and resulted in the wide-spaced definition (approximately 50 x 50 metre drill hole spacing) of a significant zone of entirely basement-hosted mineralization with geological features consistent with basement-hosted deposits in the Athabasca Basin. This new zone of mineralization at the Waterbury Lake project became known as the "Huskie" zone.

Also in September, Denison and KHNP Canada entered into an amended and restated strategic relationship agreement dated September 19, 2017 (the "**KHNP SRA**"), on substantially similar terms as the prior strategic relationship agreement with KEPCO. The KHNP SRA was entered into in connection with the December 2016 transfer by KEPCO of substantially all of its indirect ownership of Denison's Shares to KHNP Canada. See "Risk Factors – Potential Influence of KEPCO and KHNP".

In November, the Company announced the completion of the summer 2017 drilling program at the Wheeler River project, including a total of 64 drill holes (totalling 29,224 metres). The drilling program was focused within, and in the immediate vicinity of, the Gryphon deposit ahead of a planned update to the mineral resource estimate for the property. Highlights from the summer drilling program included: (1) expansion of high-grade mineralization within the D series lenses; (2) discovery and expansion of the E series lenses both at the unconformity and within the upper basement; and (3) expansion of the A and B series lenses both up-dip and down dip. The Company also successfully completed the definition drilling program on the Gryphon deposit's A, B and C series lenses, with the objective of increasing the confidence of the previously estimated mineral resources from an inferred to indicated level. A summer drilling program was also completed by the Company at Crawford Lake (4 holes, 2,068 metres) and a further 5,870 metres of drilling was completed in 20 holes on the McClean project by Orano Canada.

In December, the Company filed a Request for Arbitration under the Arbitration Rules of the London Court of International Arbitration against UI in connection with the continued failure of UI to pay to the Company the contingent consideration payable under the GSJV Purchase Agreement and the Extension Agreement, with respect to the Mongolia Transaction. See "Legal and Regulatory Proceedings".

2018…

In January, the Company amended and extended its Credit Facility to January 31, 2019.

Also in January, Denison announced an 88% increase in the indicated mineral resources estimated for the Wheeler River project with the completion of an updated mineral resource estimate for the Gryphon deposit at Wheeler River. The Gryphon deposit is estimated to contain, above a cut-off grade of 0.2% U_3O_8, 61.9 million pounds of U_3O_8 (1,643,000 tonnes at 1.71% U_3O_8) in indicated mineral resources, plus 1.9 million pounds of U_3O_8 (73,000 tonnes at 1.18% U_3O_8) in inferred mineral resources. By comparison, the maiden mineral resource estimate,

completed in September 2015, was comprised of inferred mineral resources of 43.0 million pounds of U_3O_8 above a cut-off grade of 0.2% U_3O_8 (834,000 tonnes at 2.3% U_3O_8). Together, Wheeler River is now host to 132.1 million pounds U_3O_8 (1,809,000 tonnes at an average grade of 3.3%) in total indicated mineral resources. Following the mineral resource update, Wheeler River retained and improved its standing as the largest undeveloped high-grade uranium project in the infrastructure rich eastern portion of the Athabasca Basin. In March, Denison filed a technical report containing the updated mineral resource estimate for the Wheeler River property. See “Mineral Properties – Wheeler River”.

In March, Denison also completed a review of an updated mineral resource estimate for the Midwest project. The review resulted in the estimation of (a) inferred mineral resources on the property increasing to 18.2 million pounds of U_3O_8 (100% basis; above a cut-off grade of 0.1% U_3O_8), an increase of 13.5 million pounds of U_3O_8 from the prior estimate; and (b) indicated mineral resources increasing to 50.78 million pounds U_3O_8 (100% basis; above a cut-off grade of 0.1% U_3O_8), an increase of 2.08 million pounds U_3O_8 from the prior estimate. A technical report was filed on March 27, 2018. See “Mineral Properties – Midwest”.

In April, Denison further amended the Credit Facility to accommodate the Company's change in financial statement presentation currency to Canadian dollars. The covenant in the Credit Facility to maintain a specified level of tangible net worth was changed to $131,000,000 (from US$150,000,000).

Also in April, the Company reported the completion of the winter drilling program at the Wheeler River project, including the discovery of high-grade uranium mineralization 600 metres and 1 kilometre to the northeast of the Gryphon uranium deposit. High-grade intercepts were obtained at the sub-Athabasca unconformity along the K-North trend from reconnaissance drill fences spaced 200 metres apart. The results were confirmed by chemical assays announced on June 6, 2018, which included 1.4% U_3O_8 over 5.5 metres (including 7.2% U_3O_8 over 1.0 metre) in drill hole WR-704, located 600 metres northeast of Gryphon; and 1.1% U_3O_8 over 3.0 metres (including 2.8% U_3O_8 over 1.0 metre) in drill hole WR-710D1, located 1 kilometre northeast of Gryphon. The winter drilling program at Wheeler included 21,153 metres drilled in 29 diamond drill holes, largely focused on step-out drilling along strike of the Gryphon deposit and reconnaissance level regional exploration along the K-North and K-West trend.

And in April, Denison reported the expansion of the Huskie zone on the Waterbury Lake project, with the receipt of U_3O_8 chemical assay results from the Company's winter 2018 diamond drilling program. The results were highlighted by the following intercepts: 4.5% U_3O_8 over 6.0 metres (including 5.8% U_3O_8 over 4.5 metres), and 0.57% U_3O_8 over 6.3 metres (including 1.9% U_3O_8 over 1.0 metre) in drill hole WAT18-452; and 0.62% U_3O_8 over 1.0 metre in drill hole WAT18-460A. The winter drilling program involved 9,794 metres of diamond drilling in 19 drill holes, and was focused on 50 metre step-out drilling along strike and down-dip of the Huskie zone, as well as wider-spaced reconnaissance drilling to the west along the geological trend.

In May, Denison announced the results of its Annual General Shareholders Meeting, which included the ratification and approval of the Company’s new Share Unit Plan and the previous grants of share units thereunder.

In August, changes were made to the composition of the Company’s Board of Directors, with the appointment to the Board of David Cates, the Company’s President and Chief Executive Officer, Jack Lundin, Moo Hwan Seo and Patricia Volker. At that time, the Company accepted the

resignation of Kwang-Hee Jeong and Lukas Lundin. In addition, Catherine Stefan, previously serving as the Company's independent Lead Director, was appointed Chair of the Board.

In September, Denison entered into an agreement with Cameco, pursuant to which Denison would increase its ownership interest in the Wheeler River project to 90% through the acquisition of 100% of Cameco's minority interest in the WRJV (subject to certain rights of first refusal in favour of JCU pursuant to the WRJV joint venture agreement) in exchange for the issuance to Cameco of 24,615,000 Shares of Denison. JCU waived its rights under the WRJV joint venture agreement to acquire any of Cameco's interest, and Denison's acquisition of Cameco's interest was completed effective October 26, 2018 (the "**Cameco Transaction**"). See "Mineral Properties – Wheeler River".

Also in September, Denison announced the appointment of Tim Gabruch as the Corporation's Vice President Commercial.

And in September, Denison reported a new discovery of uranium mineralization on the Company's Waterbury Lake project. Basement-hosted uranium mineralization was intersected in two drill holes, approximately three kilometres northeast of the project's Huskie deposit, returning mineralized assay intervals of 0.43% U_3O_8 over 1.0 metre (including 0.73% U_3O_8 over 0.5 metres) in drill hole WAT18-478 and 0.45% U_3O_8 over 0.5 metre as well as 0.31% U_3O_8 over 0.5 metre and 0.20% U_3O_8 over 0.5 metre in drill hole WAT18-479. The zone of mineralization was subsequently named the GB zone.

In September, Denison announced the results of the Pre-Feasibility Study ("**PFS**") for the Wheeler River project. The PFS was completed in accordance with NI 43-101 and is highlighted by the selection of the in-situ recovery ("**ISR**") mining method for the development of the high-grade Phoenix deposit ("**Phoenix**"), with an estimated average operating cost of $4.33 (US$3.33) per pound U_3O_8. The PFS considers the potential economic merit of co-developing the Phoenix and Gryphon deposits. The ISR mining operation planned for Phoenix, would see associated processing to a finished product occurring at a plant to be built on site at Wheeler River. The Gryphon deposit is designed as an underground mining operation, utilizing a conventional long hole mining approach with processing of mine production assumed at Denison's 22.5% owned McClean Lake mill. Taken together, the project is estimated to have mine production of 109.4 million pounds U_3O_8 over a 14-year mine life, with a base case pre-tax Net Present Value ("**NPV**") of $1.31 billion (8% discount rate), Internal Rate of Return ("**IRR**") of 38.7%, and initial pre-production capital expenditures of $322.5 million. The base-case economic analysis assumes uranium sales are made at UxC Consulting Company, LLC's ("**UxC**") annual estimated spot price (composite mid-point scenario) for mine production from Phoenix (from ~US$29/lb U_3O_8 to US$45/lb U_3O_8), and a fixed price for mine production from the Gryphon deposit (US$50/lb U_3O_8). The PFS is prepared on a project (100% ownership) and pre-tax basis, as each partner to the WRJV is subject to different tax and other obligations. The technical report in support of the PFS was filed on October 30, 2018. See "Mineral Properties – Wheeler River".

In November, Denison reported that it had completed a maiden mineral resource estimate for the Huskie basement-hosted uranium deposit in accordance with NI 43-101 and CIM Definitions (2014), which was reviewed and audited by SRK Consulting (Canada) Inc. ("**SRK**"). The result was an inferred mineral resource estimate of 5.7 million pounds of U_3O_8 (above a cut-off grade of 0.1% U_3O_8) based on 268,000 tonnes of mineralization at an average grade of 0.96% U_3O_8. The updated technical report for Waterbury, including the Huskie mineral resource estimate, was filed on December 21, 2018. See "Mineral Properties – Waterbury Lake".

Also in November, Denison reported the discovery of unconformity uranium and base metals mineralization on the K West trend at Wheeler River. Highlights from the Company's summer 2018 diamond drilling program at Wheeler River included drill hole WR-733D1, which returned 0.30% U_3O_8, 4.7% Co, 3.7% Ni and 0.55% Cu at the unconformity on the K West trend, approximately 500 metres west of the parallel K North trend, which hosts the Gryphon deposit.

And in November, Denison announced the completion of a private placement offering (the "**2018 Offering**") of Shares issued on a "flow-through" basis pursuant to the *Income Tax Act* (Canada). The Company issued 4,950,495 Shares, at a price of $1.01 per Share, for total gross proceeds of approximately $5,000,000. The gross proceeds of the financing were used to fund expenses related to the Company's exploration activities in 2019.

In December, the Company's Board of Directors and the WRJV each approved the advancement of the Wheeler River project, following a detailed assessment of the robust economic results demonstrated in the PFS.

2019…

In January, the Company amended and extended its Credit Facility to January 31, 2020.

In March, Mr. Moo Hwan Seo resigned from the Board. Mr. Geun Park joined the Board, filling the vacancy created by Mr. Seo's resignation.

In March, the Company announced the execution of the new five-year management services agreement (the "**MSA**") to provide management services to UPC. The MSA took effect on April 1, 2019, at the conclusion of the three-year term of the then current management services agreement between UPC and DMI. See "Manager of UPC".

In May, the Company announced the discovery of unconformity-hosted uranium mineralization along the southern portion of the K West trend at the Company's Wheeler River Project, including 0.08% eU_3O_8 over 1.3 metres in drill hole WR-756, accompanied by strong sulphide mineralization and other geological features commonly associated with unconformity-related uranium deposits. The Company also announced the completion of follow-up drilling at the GB Zone at Waterbury Lake, which intersected basement-hosted mineralization in multiple drill holes, including 0.15% U_3O_8 over 6.0 metres in drill hole WAT19-480, and 0.25% U_3O_8 over 2.0 metres and 0.22% U_3O_8 over 1.5 metres in drill hole WAT19-486.

In June, the Canadian Nuclear Safety Commission ("**CNSC**") and the Saskatchewan Ministry of Environment accepted the Provincial Technical Proposal and Federal Project Description (the "**Project Description**") submitted by Denison for the ISR uranium mine and processing plant proposed for the Wheeler River Project. This acceptance initiated the Environmental Assessment ("**EA**") process for Wheeler River in accordance with the requirements of both the *Canadian Environmental Assessment Act, 2012* and the *Saskatchewan Environmental Assessment Act*.

Also in June, the Company announced that it had executed a series of Memoranda of Understanding (the "**MOUs**"), in support of the Wheeler River Project, with certain Indigenous communities who assert that Wheeler River falls partially or entirely within their traditional territories and where traditional land use activities are currently practiced within the local and regional area surrounding the project. These non-binding MOUs formalize the signing parties' intent to work together in the spirit of mutual respect and cooperation, in order to collectively identify practical means by which to avoid, mitigate, or otherwise address potential impacts of the

project upon the exercise of Indigenous rights, Treaty rights, and other interests, as well as to facilitate sharing in the benefits that are expected to flow from the project.

In June, the Company announced its plans to undertake an initial ISR field test program within the Phoenix orebody at Wheeler River, using water to evaluate hydrologic conditions that can be used to assess the hydraulic connections and potential mining solution flow between a series of test wells. Initial test results from Test Area 1 at Phoenix were announced in August, which confirmed hydraulic connectivity between multiple test wells, providing significant preliminary indications of the suitability of Test Area 1 for the application of ISR mining. In September, the Company reported the initial results from Test Area 2 of Phoenix, which also confirmed hydraulic connectivity within a significant portion of the ore zone tested.

In July, Denison's Closed Mines group entered into a new two-year services agreement with Rio Algom, a subsidiary of BHP. Under the terms of the agreement, the Closed Mines group is responsible for carrying out the management and operation of nine of Rio Algom's decommissioned mine sites in Ontario and Quebec from July 1, 2019 to June 30, 2021, which services include the operation of water treatment plants and tailings management facilities; environmental monitoring and compliance, data management, and regulatory reporting; maintenance of roads, dams and electrical infrastructure; site management, including health and safety, procurement, logistics, and budgeting activities; and project management and execution for various projects, including infrastructure upgrades and replacements, engineering and environmental programs, as well as water management initiatives.

In September, following the positive initial field test results at Phoenix, Denison advanced to the second stage of ISR field testing – the installation of a large-diameter commercial scale well ("**CSW**") in each of Test Area 1 and Test Area 2 of Phoenix, with each well designed to meet the technical and regulatory standards expected for a commercial ISR well at Phoenix.

In October, David Bronkhorst was appointed Vice President Operations with responsibility for overseeing and advancing the Company's project evaluation programs for Wheeler River.

Also in October, the Company successfully installed two CSWs at Phoenix – marking the completion of the first CSWs designed for ISR mining in the Athabasca Basin. The completion of each CSW included the drilling of a large-diameter vertical borehole (~12 inches in diameter), to intersect the Phoenix ore body at a depth of approximately 400 metres below surface, and the installation of well materials designed to meet expected environmental and regulatory standards for eventual ISR mining. The Company also tested down-the-hole permeability enhancement techniques within the large diameter CSWs.

In December, Denison completed a private placement offering (the "**2019 Offering**") of Shares issued on a "flow-through" basis pursuant to the *Income Tax Act* (Canada). Denison issued 6,934,500 flow-through shares, at a price of $0.68 per share, for aggregate gross proceeds to Denison of approximately $4.7 million, which includes the exercise, in full, of the over-allotment option of 904,500 shares. The gross proceeds from the financing will be used to fund the Company's Canadian exploration expenses through to the end of 2020.

Also in December, Denison reported the completion of a highly successful ISR field test program at Phoenix. The ISR field test program was designed to validate the permeability of Phoenix, and to collect an extensive database of hydrogeological data to further evaluate the ISR mining conditions present at Phoenix. This detailed data is expected to facilitate detailed mine planning

as part of the completion of a future Feasibility Study ("**FS**"). The ISR field test program, as described above, successfully achieved each of its planned objectives.

Denison also announced the initiation of the next phase of ISR metallurgical laboratory testing for uranium recovery, which will utilize the mineralized drill core recovered through the installation of various test wells during the 2019 ISR field test program. The metallurgical laboratory test program builds upon the laboratory tests completed for the recovery of uranium as part of the project's PFS and is expected to further increase confidence and reduce risk associated with the application of ISR. The results are expected to facilitate detailed mine and process plant planning as part of a future FS, and will provide key inputs for the EA process. Significant components of the metallurgical laboratory test program include core leach tests, column leach tests, bench-scale tests and metallurgical modelling.

And in December, Denison received a positive scoping decision, with a Record of Decision issued by the CNSC on the scope of the factors to be taken into account for the EA for the Wheeler River project, which indicate that the EA will follow the CNSC's generic guidelines.

Recent Developments…

In January, the Company amended and extended its Credit Facility to January 31, 2021.

In January, Mr. Geun Park resigned from the Board. Mr. Jun Gon Kim joined the Board effective February 17, 2020, filling the vacancy created by Mr. Park's resignation.

In February, Denison reported that initial data from the Phoenix Deposit core leach tests includes elemental uranium concentrations, after test startup, in the range of 13.5 grams per litre ('g/L') to 39.8 g/L, and an average of 29.8 g/L over a 20-day period of testing. This compares favourably to the previous metallurgical test work completed to assess the use of the ISR mining method at Phoenix, which supported the use of an assumed uranium concentration of 10 g/L in the PFS design for the ISR processing plant.

Also in February 2020, Denison reported that the results from the hydrogeological test work completed to-date have confirmed the ability to achieve bulk hydraulic conductivity values (a measure of permeability) consistent with the PFS. Extensive hydrogeological data sets were collected during the 2019 ISR field program, and are being incorporated into a hydrogeological model being developed for Phoenix. The completed hydrogeological model will allow for detailed planning for further ISR field testing with the intention that it will ultimately support the completion of a future FS.

THE URANIUM INDUSTRY

Much of 2019 was defined and influenced by policy matters in the United States ("**US**"), which have effectively created an overhang of uncertainty throughout the uranium market. In July 2019, the US Presidential Administration completed an investigation into a trade petition, launched under Section 232 of the Trade Expansion Act of 1962 ("**Section 232**"), and no trade actions were implemented. The US President indicated that the Administration's investigation did not agree with findings of the US Department of Commerce ("**DOC**") that uranium imports threaten to impair US national security. This announcement was expected to provide clarity to the uranium market; however, the Administration followed the decision with an order to review the nuclear fuel supply chain in the US. Accordingly, a Nuclear Fuel Working Group ("**NFWG**") was commissioned to examine the current state of domestic nuclear fuel production to reinvigorate the entire nuclear fuel supply chain, consistent with United States national security and non-proliferation goals, and to make recommendations to further enable US domestic nuclear fuel production, if needed. A report from the NFWG was submitted to the White House in late 2019. To date, no official recommendations have been made public; however, the President's recent Budget Request for Fiscal Year 2021 included $150 million in Department of Energy budget funding to establish a uranium reserve. The budget request also set out a schedule for a similar amount to be approved in the budget in each of the next ten years.

Another source of uranium market uncertainty stems from policies relating to Russian deliveries of nuclear fuel into the US. Since breaking from the Joint Comprehensive Plan of Action with Iran, commonly known as the Iran Nuclear Deal, the US Administration has put in place sanctions against Iran. The US has also issued waivers to certain of Iran's trading partners, allowing entities from particular nations, including Russia, to continue working with Iran on civilian nuclear programs. On December 15, 2019, one of those waivers, related to Iran's Fordow Fuel Enrichment Plant, was lifted, which raised concern among market participants regarding the possibility of other waivers being revoked. The waiver causing uranium market participants particular concern relates to the Bushehr nuclear power plant, which Russia is involved in building. If this waiver is removed, there is concern that Russia could face sanctions in the US, which would halt deliveries of Russian nuclear fuel to US utilities and represent a significant supply-side development.

Also relevant to Russian nuclear fuel supply into the US is the Agreement Suspending the Antidumping Investigation on Uranium from the Russian Federation (also known as the Russian Suspension Agreement, or the "**RSA**"), which established an annual quota limiting the delivery of nuclear fuel into the US from Russia. This agreement is set to expire at the end of 2020 and is currently under review. Before the agreement expires, a decision needs to be made by the US DOC as to whether there will be an extension and, if so, whether an extension will be under existing or revised terms. If the RSA expires, Russian-origin uranium products and services could be sold into the US without any restrictions – adding further uncertainty to the uranium market.

These market dynamics contributed to a soft uranium price throughout the year. In 2019, the spot uranium price traded within a narrow band, beginning the year at USD$28.50 per pound U_3O_8 and ending it down over 12% at USD$25.00 per pound U_3O_8. Lower prices near the end of the year were attributed to limited demand in the spot market. While spot uranium volumes did not match the historic high reached in 2018 (almost 89 million pounds U_3O_8), 2019 spot buying remained reasonably strong at 65 million pounds U_3O_8. Similar to 2018, however, despite seeing fairly robust spot market volumes, long-term utility contracting remained low in 2019.

Despite the impact of these policy matters, there are several indications that uranium supply and demand fundamentals continue to improve underneath the cloud of uncertainty that has

dominated the market in 2019. This was underscored in the bi-annual Nuclear Fuel Report released by the World Nuclear Association ("**WNA**") at its annual symposium in September 2019. The report evaluates nuclear fuel demand and supply scenarios for the period from 2019 to 2040, using reference, low and high cases. For the first time in several years, the WNA's outlook for global uranium demand increased for all three scenarios, which is positive for the future outlook on demand and reflects industry consensus that the demand picture has improved significantly in recent years.

This has been supported by many positive news stories on the demand side, including increasing public recognition of the critical role nuclear energy has to play in combatting climate change. One of the most significant acknowledgments of this was made by the European Union ("**EU**"), with its leaders recently agreeing that nuclear energy must be included as part of the solution required to meet the EU's goal of becoming carbon neutral by 2050. The EU's 'European Green Deal' officially acknowledged the importance of nuclear energy in meeting the region's comprehensive climate action goals.

- In the US, there were a number of positive announcements through the course of 2019. In Ohio, a long-awaited energy bill was passed supporting the continued operation of the Davis-Besse and Perry nuclear power plants. Previous attempts to secure subsidies for these plants were unsuccessful, which had led most in the industry to believe the plants would be shut down by calendar year 2021. Recognizing the long-term viability of existing nuclear power plants, the Turkey Point nuclear units 3 and 4 received approval for an additional 20 years of operating life from the US Nuclear Regulatory Commission ('NRC'). This additional extension will take the reactors to a total of 80 years of operating life, which is the longest license ever issued by the NRC. Turkey Point 3 and 4 are now licensed to operate to 2052 and 2053, respectively. In the US Midwest, the life of the Monticello nuclear plant was extended by another decade to 2040.

- In Mexico, the country's national nuclear utility, the Federal Electricity Commission, is considering building four new nuclear reactors, to add to its existing two units at Laguna Verde. The utility shared its plans to present a feasibility study to management and the government in 2020. The study will examine a project to build 1,400 megawatts ("**MWe**") reactors, with an estimated cost of US$7 billion each.

- In Canada, with the longer-term future of nuclear in mind, the provincial governments of New Brunswick, Ontario and Saskatchewan demonstrated support for future nuclear new builds. The leaders of these provinces announced that they had joined efforts to collaborate on advancing small modular reactor ("**SMR**") technologies. The leaders see SMR's as a practical solution to help curb carbon emissions, move away from coal-fired power generation, and create an opportunity for new economic growth in the provinces.

- In India, the government continued to demonstrate its commitment to increase its use of nuclear energy. At a recent nuclear conference, the Chairman of India's Atomic Energy Commission and Secretary of the Department of Atomic Energy reinforced the country's aggressive pursuit of new nuclear power plants in order to improve the reliability of the country's power supply. The government's Union Minister for Atomic Energy also confirmed that there are currently nine reactors under construction in India and indicated that the government had given administrative and financial support to build an additional 12 new reactors with a capacity of 9,000 MWe.

- In the United Kingdom, a leaked government analysis stressed the need to build a fleet of new nuclear or carbon capture power plants in order to meet climate targets. The UK government believes that up to 40,000 MWe of low carbon power stations could be needed in 2050 to reduce Britain's emissions to 'net zero' and currently there is just one nuclear power plant under construction – EDF Energy's 3,200 MWe Hinkley Point C in England.

- In South Korea, KHNP announced the successful start-up of its Shin Kori 4 nuclear power plant. Initial criticality was reached and the unit was connected to the grid in April 2019. The Shin Kori 4 unit is a 1,400 MWe APR-1400, which is the same design as those currently under construction in the United Arab Emirates at the Barakah nuclear power plant, which is expected to begin supplying electricity early in 2020.

- In Taiwan, sentiment has shifted away from a previous policy to eliminate nuclear power from the Taiwan energy mix. In May 2019, the country passed an amendment to eliminate the 'Nuclear Free Homeland 2025' mandate that was imposed by the anti-nuclear Democratic Progressive Party in early 2017. This amendment has opened the door for future pro-nuclear decisions to be made regarding extending the lives of existing nuclear power plants in the country, as well as the possible completion of the Lungmen nuclear power plant, where construction was halted in 2014.

- In Germany, positive sentiment towards nuclear also appears to be growing. In 2019 the government received escalating calls from several of the country's most prominent businesses to delay the country's plans to implement a full-scale nuclear phase-out by the end of 2022. Some of these businesses emphasized the importance of nuclear power, highlighting that Germany needs to run its nuclear power plants longer if climate protection really matters to the country.

Though much of the nuclear news out of Asia was positive, news emerged from Japan early in 2019 that the requirements set out by the country's Nuclear Regulation Authority ("**NRA**") for utilities to complete anti-terrorism protection work on each reactor's emergency facilities were unlikely to be met on schedule. All three utilities currently operating units in Japan have said they require between one and two and a half additional years to complete the required work. The NRA has indicated, however, that it will not extend the deadline. Due to this, it was recently announced that reactors 3 and 4 at the Takahama nuclear power plant will stop operating by the summer of 2020, with work aimed at meeting the NRA commitment about one year behind schedule

Overall, uranium demand has grown in recent years, having now exceeded the annual levels that existed prior to Japan shutting all of its nuclear units following the 2011 Fukushima Daichii nuclear incident.

The supply side of the uranium market has also been progressing in the right direction. This has resulted in a growing gap between annual utility requirements and primary production, which continues to be filled by drawing down on inventories and other secondary sources of supply. Some of these positive supply indicators include:

- The world's largest and lowest cost uranium producer, National Atomic Company Kazatomprom, announced in August 2019 that it was reaffirming its commitment to reach and maintain a more commercial balance between supply and demand by extending its 20% production curtailment through to 2021.

- Other important supply side changes included Rio Tinto finalizing the sale of its Rössing operation in Namibia to China's China National Uranium Corporation. Taken together with the slow wind down of Rio Tinto's Ranger operation in Australia, we expect to see Rio Tinto, one of the world's largest mining companies and a long-term major producer in the uranium industry, completely exit the market.

- In Niger, it was announced that the Cominak mine will cease operation in March 2021, due to depletion of ore. The operation has been a source of supply to the industry since 1978.

With a significant shortfall having developed between annual nuclear utility requirements and primary production, inventories and other secondary sources of supply are being drawn down to meet utility needs. This process of inventory drawdowns suggests that we are nearing an inflection point - where end-users of uranium begin to question where long-term uranium supplies will come from and how secure that supply will be over the long lives of their nuclear reactors. There is already a growing sense that market participants are beginning to look beyond near-term market conditions in an attempt to understand what the supply environment will look like in the mid-2020s and beyond. With a renewed focus on nuclear energy as a critical element in battling climate change, it is expected that global utilities will be looking to source future supply from operations that are not only low-cost, reliable, and situated in stable jurisdictions (the typical criteria for a good supplier), but also those which are flexible and environmentally responsible.

Uranium Demand

As of February 2020, the WNA reports that there are 442 nuclear reactors operable in 30 countries. These reactors can generate more than 392 gigawatts of electricity ("**GWe**"), which equates to approximately 10% of the world's electrical requirements, with twelve countries producing 25% or more of their country's electricity from nuclear. As well, there are currently 54 nuclear reactors under construction in 18 countries with the principal drivers of this expansion being China (12 reactors under construction), Russia (4), India (7), South Korea (4), UAE (4) and the United States (4). In addition, there are another 109 reactors currently planned around the world.

According to UxC's Q1 2020 Uranium Market Outlook ("**Q1 2020 Outlook**"), global nuclear power capacities are projected to increase to 449 reactors in 32 countries in 2020, generating approximately 399 GWe as new plants come on line. By 2035, that is expected to be 470 reactors, generating approximately 459 GWe in 36 countries. In the Q1 2020 Outlook, UxC estimates base case demand will be 182 million pounds U_3O_8 in 2020. UxC also estimates that annual uranium demand could grow to 226 million pounds U_3O_8 under their base case, by 2035 and to almost 304 million pounds U_3O_8 in their high case in the same period.

Primary Uranium Supply

UxC's Q1 2020 Outlook estimates that world uranium production for 2020 is expected to be approximately 142 million pounds U_3O_8, a slight increase over 2019's production of 140 million pounds U_3O_8.

In Canada, Cigar Lake production is expected to remain constant at 18 million pounds U_3O_8 per year through 2028, according to the Q1 2020 Outlook. McArthur River remains closed indefinitely with no immediate plans for future production, and a decision to restart is expected to be dependent on market conditions. Canada remains the second largest producing nation, with almost 13% of the world's expected 2020 production, while Kazakhstan is expected to continue

to be the world's largest producer of uranium in 2020 by a large margin, representing almost 42% of production.

UxC estimates in its Q1 2020 Outlook that existing mine production, plus new planned and potential mine production under its base case, will reach a peak of 159 million pounds U_3O_8 by 2028, before declining back down to 97 million pounds U_3O_8 by 2035. At its projected height in 2028, production levels are anticipated to include the resumption of mining at McArthur River, with UxC anticipating the mine will ramp up from 4 million pounds U_3O_8 in 2027 to 18 million pounds U_3O_8 by 2028. While Kazakhstan is seen to maintain relatively consistent supply in future years, it does start to drop off significantly closer to 2035. In order for other projects to move forward and increase production forecasts, UxC believes uranium prices will need to increase appreciably to support higher cost production profiles and the significant capital expenditures that will be required.

Secondary Uranium Supply

In the Q1 2020 Outlook, primary mine production in 2020 is estimated to supply approximately 78% of the year's estimated base case demand, with the balance of demand expected to be supplied from secondary sources. These sources include commercial inventories, reprocessing of spent fuel, sales by uranium enrichers and inventories held by governments, such as the U.S. Department of Energy, and the Russian government. Primary mine production's share of annual demand remains lower than pre-2017 levels, in which primary production made up 85% or more of annual demand.

Secondary supplies remain a complexity of the uranium market. The Q1 2020 Outlook forecasts that 49 million pounds U_3O_8 will enter the market from secondary supplies in 2020, leaving a surplus of 9 million pounds U_3O_8, if the base case demand scenario for 2020 is met.

Though excess commercial inventories, which were one of the major sources of secondary supplies during the period from the early 1970s to the early 2000s, were largely consumed in that same period, the planned shutdown of nuclear programs in countries like Germany, and the continued struggles of the Japanese nuclear program to restart following Fukushima have contributed to commercial inventories again becoming a more significant factor. Government inventories also continue to contribute substantially to the secondary supply picture, particularly in the U.S. and Russia. The disposition of these commercial and government inventories may have a market impact in the near to medium term, although, UxC expects their role will diminish over time as these inventories continue to be depleted and the uranium and enrichment markets rebalance themselves.

In general, UxC expects that secondary sources of supply will fall significantly from estimated 2020 levels of 49 million pounds U_3O_8 to roughly 17 million pounds U_3O_8 per year by 2035.

Uranium Prices

Imbalances between supply and demand of uranium significantly influence uranium spot prices. According to the Q1 2020 Outlook, it is projected that primary production and secondary supply will be sufficient to meet base case demand for U_3O_8 through the mid 2020's, with significant supply deficits emerging later in the decade, contributing to upward price momentum.

With respect to long-term prices, utility uncovered requirements and long-term demand are significant influencers. Historically, nuclear utilities have purchased uranium primarily through long-term contracts. These contracts usually provide for deliveries beginning two to four years

after they are signed with delivery typically extending anywhere from three or four years to ten years or more. In awarding medium and long-term contracts, electric utilities consider the producer's uranium reserves, record of performance and production cost profile, in addition to the commercial terms offered. Prices are established by a number of methods, including base prices adjusted by inflation indices, reference prices (generally spot price indicators, but also long-term reference prices) and annual price negotiations. Contracts may also contain annual volume flexibility, floor prices, ceiling prices and other negotiated provisions. Under these contracts, the actual price mechanisms are usually confidential.

The long-term uranium demand that actually enters the market is affected in a large part by utilities' uncovered requirements. This is the amount of uranium required by utilities to operate their fleet that is not yet covered by purchase contracts with suppliers. UxC estimates, in the Q1 2020 Outlook, that uncovered demand for 2020 was just under 7 million pounds U_3O_8. Of course, this uncovered demand increases over time and is projected by UxC to increase significantly over the next decade. While almost 70 million pounds U_3O_8 are projected to remain uncovered in 2025, this number grows to just over 120 million pounds U_3O_8 in 2030. In 2035, this number grows to 168 million pounds U_3O_8 of uncovered demand, or roughly 74% of total expected base case demand in that year. In total just over 1.5 billion pounds U_3O_8 remain uncovered between 2020 and 2035.

At 168 million pounds U_3O_8, uncovered demand in 2035 is approximately 71 million pounds U_3O_8 more than total production expected from existing uranium mines for the same year, which UxC estimates at 97 million pounds U_3O_8. Uncovered demand in 2035 also exceeds the combined supply available from primary production and secondary sources by approximately 54 million pounds U_3O_8. In order to address the rising portion of demand that is uncovered, utilities will have to return to the market and enter into long-term contracts. From 2006 to 2010, on average, 39 million pounds U_3O_8 equivalent were purchased on the spot market per year and roughly 200 million pounds U_3O_8 equivalent were contracted in the long-term market each year. In contrast, in 2019, 64.3 million pounds U_3O_8 equivalent were purchased on the spot market, and 95.8 million pounds U_3O_8 equivalent contracted in the long-term market. Considering contract volumes over the past year remain well below annual requirements, and uncovered requirements are increasing out in time, we expect that long-term contracting activity will continue to increase in the near future as utilities look to secure future supply in order to fuel the world's growing fleet of nuclear reactors.

The long-term price is published on a monthly basis and stayed stagnant the whole year at US$32.00 per pound U_3O_8. Nuclear utilities procure their remaining uranium requirements through spot and near-term purchases from uranium producers, traders and other suppliers. Historically, spot prices are more volatile than long-term prices. The spot price began the year at US$28.90 per pound U_3O_8, dipping by the end of the year to US$25.00 per pound U_3O_8.

Competition

The uranium industry is small compared to other commodity industries, and other energy commodity industries in particular. Uranium demand is international in scope, but supply is characterized by a relatively small number of companies operating in only a few countries. Primary uranium production is concentrated amongst a limited number of producers and is also geographically concentrated with more than 77% of the world's production in 2020 projected to be coming from only four countries: Kazakhstan, Canada, Australia and Namibia.

Competition is somewhat different amongst exploration & development companies focused on the discovery or development of a uranium deposit. Exploration for uranium is being carried out

on various continents, but in recent years development activities by public companies have been generally concentrated in Canada, Africa and Australia. In Canada, exploration has focused on the Athabasca Basin region in northern Saskatchewan. Explorers have been drawn to this area by the high-grade uranium deposits that have produced some of the most successful uranium mines operating in the world today. Within the Athabasca Basin region, exploration is generally divided between activity that is occurring in the eastern portion of the Basin and the western portion of the Basin. The eastern Basin is a district that is defined by rich infrastructure associated with the existence of operating uranium mines and uranium processing facilities. Infrastructure includes access to the provincial power grid and a network of provincial all-weather highways. By comparison, in the western Basin, there are no operating uranium mines or processing facilities and access to the provincial power grid is not currently available. Several uranium discoveries have been made in the Athabasca Basin region in recent years, and competition for capital can be intense.

MINERAL RESERVES AND MINERAL RESOURCES

Each of Dale Verran, MSc, P.Geo, Pr.Sci.Nat., Denison's Vice President Exploration, and David Bronkhorst, P.Eng, Denison's Vice-President Operations, is a “Qualified Person” in accordance with the requirements of NI 43-101, and has reviewed and approved all disclosure of scientific or technical information in this AIF.

Summary of Mineral Reserves and Mineral Resources

NI 43-101 requires mining companies to disclose mineral reserve and resource estimates using the subcategories of proven mineral reserves, probable mineral reserves, measured mineral resources, indicated mineral resources and inferred mineral resources.

The following tables show the Company's estimates of mineral reserves and mineral resources as at December 31, 2019. The estimates are reported in the applicable technical reports prepared in accordance with NI 43-101, adjusted for mining activity where applicable. The summary information below on Denison’s proven mineral reserve estimates was prepared from the year-end stockpile survey reported by Orano Canada, the operator of the McClean Lake joint venture.

For full details, reference should be made to the applicable technical reports for the properties.

See “Mineral Properties” for more information.

Proven Mineral Reserve Estimates (1,10)

	100% Basis			Company Share(9)
Project/Deposit	Tonnes	Grade % U_3O_8	Pounds of U_3O_8 (,000)	Pounds of U_3O_8 (,000)
McClean - Ore Stockpile	90,000	0.37	716	161
Total Proven Mineral Reserves	**90,000**		**716**	**161**

Probable Mineral Reserve Estimates (1,2,3,4,10)

	100% Basis			Company Share(9)
Project/Deposit	Tonnes	Grade % U_3O_8	Pounds of U_3O_8 (,000)	Pounds of U_3O_8 (,000)
Wheeler River - Phoenix	141,000	19.1	59,700	53,730
Wheeler River - Gryphon	1,257,000	1.8	49,700	44,730
Total Probable Mineral Reserves	**1,398,000**		**109,400**	**98,460**

Indicated Mineral Resource Estimates [1,5,10]

Project/Deposit	100% Basis			Company Share[9]
	Tonnes	Grade % U_3O_8	Pounds of U_3O_8 (,000)	Pounds of U_3O_8 (,000)
Wheeler River - Phoenix[7]	166,000	19.1	70,200	63,200
Wheeler River - Gryphon[7]	1,643,000	1.7	61,900	55,700
Wheeler River Subtotal	*1,809,000*		*132,100*	*118,900*
McClean - Caribou	47,800	2.6	2,800	600
McClean - Sue D	122,800	1.1	2,800	600
McClean - McClean North	205,800	2.8	12,400	2,800
McClean Subtotal	*376,400*		*18,000*	*4,000*
Midwest - Midwest Main	453,000	4.0	39,900	10,100
Midwest - Midwest A	566,000	0.87	10,800	2,700
Midwest Subtotal	*1,019,000*		*50,700*	*12,800*
Waterbury - J Zone	291,000	2.0	12,800	8,500
Total Indicated Mineral Resources	**3,495,400**		**213,600**	**144,200**

Inferred Mineral Resource Estimates [1,6,10]

Project/Deposit	100% Basis			Company Share[9]
	Tonnes	Grade % U_3O_8	Pounds of U_3O_8 (,000)	Pounds of U_3O_8 (,000)
Wheeler River - Phoenix	9,000	5.8	1,100	1,000
Wheeler River - Gryphon	73,000	1.2	1,900	1,700
Wheeler River Subtotal	*82,000*		*3,000*	*2,700*
McClean - Sue D	24,200	0.39	200	0
McClean - Sue E[8]	483,400	0.69	7,300	1,600
McClean - McClean North	3,300	0.79	100	0
McClean Subtotal	*510,900*		*7,600*	*1,600*
Midwest - Midwest Main	793,000	0.66	11,500	2,900
Midwest - Midwest A	53,000	5.8	6,700	1,700
Midwest Subtotal	*846,000*		*18,200*	*4,600*
Waterbury - Huskie	268,000	0.96	5,700	3,800
Total Inferred Mineral Resources	**1,706,900**		**34,500**	**12,700**

Notes:

(1) CIM definitions were followed for classification of mineral reserves and mineral resources. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

(2) Mineral reserves for the Phoenix deposit are reported at the mineral resource cut-off grade of 0.8% U_3O_8. The mineral reserves are based on the block model generated for the May 28, 2014 mineral resource estimate. A mining recovery factor of 85% has been applied to the mineral resource above the cut-off grade.

(3) Mineral reserves for the Gryphon deposit are estimated at a cut-off grade of 0.58% U_3O_8 using a long-term uranium price of US$40/lb, and a US$/CAD$ exchange rate of 0.80. The mineral reserves are based on the block model generated for the January 30, 2018 mineral resource estimate. The cut-off grade is based on an operating cost of $574/tonne, milling recovery of 97%, and a 7.25% fee for Saskatchewan royalties (basic royalty plus resource surcharge).

(4) Mineral reserves are stated at a processing plant feed reference point and include diluting material and mining losses.

(5) The indicated mineral resources were estimated at various cut-off grades. They are:
- Phoenix: 0.80% U_3O_8
- Gryphon: 0.20% U_3O_8
- Caribou: 0.10% U_3O_8
- Sue D: 0.10% U_3O_8
- McClean North: 0.10% U_3O_8
- Midwest Main: 0.10% U_3O_8 (0.085% U)
- Midwest A: 0.10% U_3O_8 (0.085% U)
- J Zone: 0.10% U_3O_8

(6) The inferred mineral resources were estimated at various cut-off grades. They are:
- Phoenix: 0.80% U_3O_8
- Gryphon: 0.20% U_3O_8
- Sue D: 0.10% U_3O_8
- Sue E: 0.10% U_3O_8
- McClean North: 0.10% U_3O_8
- Midwest Main: 0.10% U_3O_8 (0.085% U)
- Midwest A: 0.10% U_3O_8 (0.085% U)
- Huskie: 0.10% U_3O_8

(7) Indicated mineral resources for Phoenix and Gryphon deposits are inclusive of probable mineral reserves.
(8) The operator conducted confirmatory drilling on a portion of the Sue E mineral resources outside the designated pit and late in 2006 submitted a preliminary analysis detailing an inferred mineral resource of approximately 2 million pounds on a 100% basis in this area, as compared to the 7.3 million pounds that Scott Wilson Roscoe Postle Associates Inc. ("**Scott Wilson RPA**"), now Roscoe Postle Associates Inc., estimated in its February 2006 technical report. Roscoe Postle Associates Inc. has not re-estimated the mineral resource using the new drill information.
(9) As at December 31, 2019, pursuant to the terms of the agreements with its applicable joint venture partners, the Company had a 90.00% interest in the Wheeler River project, a 22.50% interest in the McClean Lake property; a 25.17% interest in the Midwest project; and a 66.57% interest in the Waterbury Lake property.
(10) Numbers may not add due to rounding.

The tables below detail the changes to the Company's mineral reserve and mineral resource estimates during the fiscal year ended December 31, 2019 from December 31, 2018.

Change to Denison's Share of Proven Mineral Reserves
(in thousands of pounds U_3O_8)

Project/Deposit	December 31, 2018	Additions (Deletions)	December 31, 2019
McClean - Ore Stockpile	166	(5) [(1)]	161

Change to Denison's Share of Indicated Mineral Resources
(in thousands of pounds U_3O_8)

Project/Deposit	December 31, 2018	Additions (Deletions)	December 31, 2019
Waterbury - J Zone	8,400	100[(2)]	8,500

Notes:
(1) The decrease is due to changes in the year-end stockpile report prepared by the operator, Orano Canada.
(2) The Company increased its interest in the Waterbury Lake project by 0.65% in 2019, in accordance with the terms of the applicable agreements with Denison's partner on the project. The percentage change was not large enough to be reflected as a change to Denison's share of inferred mineral resources at Huskie, due in part to rounding.

Historical Estimates

McClean South Historical Estimate

On the McClean Lake Joint Venture property, the McClean South trend is located parallel to and approximately 500 metres south of the McClean North trend (see "Mineral Properties – McClean Lake"). There are two presently known mineralized pods which were drilled by the original owner of the property, Canadian Oxy, during 1979-1980: the Southwest Pod and the Southeast Pod. Canadian Oxy prepared estimates of tonnages, grades and contained uranium for these deposits as of 1980, which have not been verified by Denison. The results of these estimates are set out below.

The Company is not treating this historical estimate as current mineral resources or mineral reserves. This trend will require future evaluation to upgrade this historical estimate as a current mineral resource estimate.

McClean South Historical Estimates [1,2]

	100% Basis			Company's Share
Deposit	Tons (,000)	Grade (% U_3O_8)	Pounds of U_3O_8 (,000)	Pounds of U_3O_8 (,000)
Southwest Pod	47.6	2.10	2,000	500
Southeast Pod	126.7	0.73	1,900	400

Notes:

(1) The historical estimates do not comply with the requirement of NI 43-101. CIM definitions are not used.

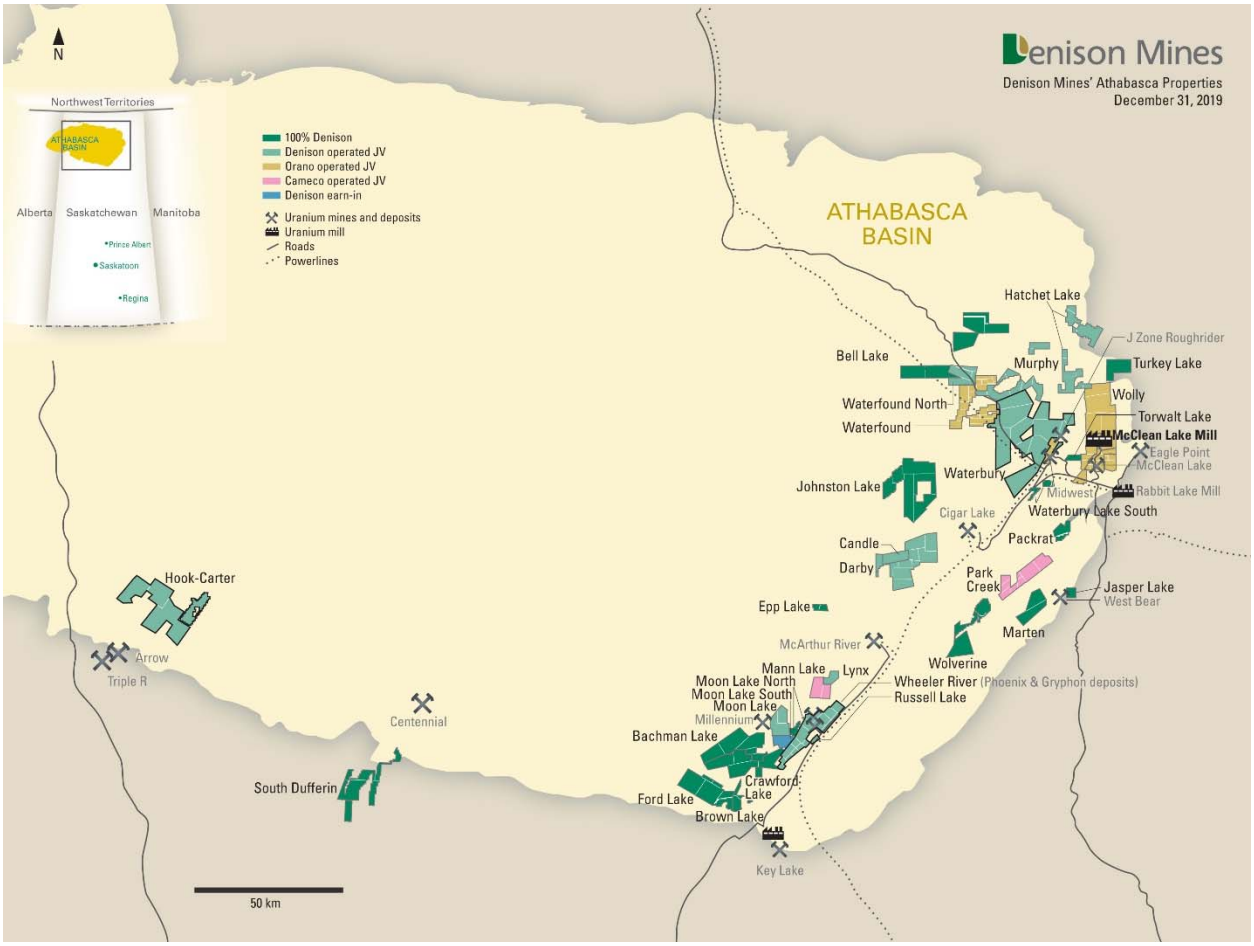
(2) The historical estimates cannot be verified and the estimates are not necessarily indicative of the mineralization on the property.

MINERAL PROPERTIES

Denison's Priority Properties:

Denison's mineral property interests are located in the Athabasca Basin region of northern Saskatchewan, the majority of which are located in the eastern portion of the Athabasca Basin, which is host to considerable existing infrastructure including uranium mines and mills, and provincial powerlines and highways (see location map, below). As at December 31, 2019, Denison has interests in 34 mineral properties in the Athabasca Basin, comprised of 214 claims covering 279,883 hectares.

Location Map of Denison's Athabasca Basin Mineral Properties



Athabasca Basin Overview

The Athabasca Basin covers an area of approximately 100,000 square kilometres in northern Saskatchewan and northeastern Alberta. The Athabasca Basin is one of the principal uranium producing districts in the world and is host to the world's highest-grade and some of the world's largest uranium mines and deposits, including the McArthur River mine and Cigar Lake mine located in the eastern Athabasca Basin.

The uranium deposits are classified as unconformity-associated (also unconformity-related and –type) deposits owing to their spatial association with a major unconformable contact between a relatively undeformed Proterozoic sedimentary basin (the Athabasca Basin) and underlying metamorphosed and deformed Archean to Palaeoproerozoic basement rocks.

A broad variety of unconformity-associated deposit shapes, sizes, and compositions have been discovered. Two distinct varieties have been classified; 1) 'egress-style' polymetallic lenses at and above the unconformity, with variable and often highly elevated base metal and rare earth elements ("**REE**") contents, and 2) 'ingress-style' vein sets within basement rocks, with typically lower base metal and REE contents.

Egress-style deposits can occur in the sandstone, directly above the unconformity (e.g. Cigar Lake, Sue A and B), straddling the unconformity (e.g. Phoenix, Collins Bay B Zone, Midwest Main, Midwest A, McClean North, Key Lake) or perched high above the unconformity (certain zones at McClean Lake, Midwest, Cigar Lake). Ingress-style deposits are located in the basement rocks (Gryphon, Huskie, Eagle Point, Sue C, Sue E, Millennium, Arrow, Triple R), however the Millennium deposit, and to an extent the Gryphon deposit, also contain subordinate mineralization at and above the unconformity. The Shea Creek deposits contain mineralization in the basement, deep in the basement, at the unconformity, and perched in the sandstone. In some deposit areas, there is a plunge to the mineralized pods from sandstone-hosted to basement-hosted within deposit–scale strike lengths (Rabbit Lake-Collins Bay-Eagle Point trend, Sue trend deposits, McClean North).

The Athabasca unconformity-associated deposits are typically related to graphite-bearing structural zones within the metamorphosed and deformed Archean to Palaeoproerozoic basement rocks, which are often termed 'corridors' or 'trends'. Alteration 'halos' or 'envelopes' tend to surround the mineralization, most notably in the overlying sandstone, and provide an enlarged exploration target through the detection of diagnostic alteration clays and geochemical pathfinder elements. Empirical exploration for the deposits typically involves mapping of structural corridors/trends by geophysical methods, dominantly electromagnetics, resistivity or magnetics, followed by drill testing given the buried or blind nature of the deposits below glacial cover or Athabasca sandstone, respectively. Drill core is subject to a variety of sampling and analytical methods to determine possible vectors toward mineralization, and downhole surveying is commonplace to test for elevated radioactivity or reconcile geophysical responses. The significant number of Athabasca uranium discoveries to date has also led to the development of numerous exploration models which are commonly used to facilitate interpretations and prioritize target areas.

Historical uranium production in the basin was initiated in the 1970s and 1980's using conventional open pit mining methods at Rabbit Lake, Cluff Lake and Key Lake. Later in the mine life of each of Cluff Lake and Rabbit Lake, there was a transition to underground mining of other deposits on those properties. In the 1990s another open pit operation at McClean Lake began production.

The discovery of high-grade deposits such as Midwest, McArthur River and Cigar Lake in the 1980s did not immediately lead to production. The combination of challenging ground conditions (most notably the friable and water-saturated Athabasca sandstone conditions above the mineralization), depth, and the high-grade nature of the deposits, required extensive research and development to design safe extraction methods before production was possible. Production from McArthur was achieved in the early 2000s while Cigar Lake only initiated production in 2014. Production from these mines was only made possible by their unique combination of high grades (average grades > 10% U_3O_8) and large scale (>300 million lbs U_3O_8), as well as the development of innovative mining techniques including ground freezing combined with either raise-bore mining or the use of the jet-boring mining system (JBS). The Midwest deposits are smaller in size than McArthur River and Cigar Lake, and remain undeveloped.

In terms of mineral processing, each historic mining operation included a dedicated processing plant: Cluff Lake, Key Lake, Rabbit Lake and McClean Lake operations included on-site processing plants. Due to the rising cost of construction for such facilities and the availability of highways and other infrastructure in Saskatchewan's North, processing of ores has transitioned to toll milling at existing facilities. McArthur River ore production is toll milled at the Key Lake mill, while Cigar Lake production is toll milled at the McClean Lake mill. With the suspension of operations at Rabbit Lake in 2016 and McArthur River in 2018, only the Cigar Lake mine and the McClean Lake mill continue to operate and produce yellowcake.

Wheeler River

The Wheeler River project is the largest undeveloped uranium project in the infrastructure rich eastern portion of the Athabasca Basin region, in northern Saskatchewan. The project is host to the high-grade Phoenix and Gryphon uranium deposits, discovered by Denison in 2008 and 2014, respectively, and is a joint venture between Denison (90% and operator) and JCU (Canada) Exploration Company Limited (10%). Denison is the operator/manager of the project.

The PFS for the Wheeler River project was completed in 2018, considering the potential economic merit of developing the Phoenix deposit as an ISR operation and the Gryphon deposit as a conventional underground mining operation. Taken together, the project is estimated to have mine production of 109.4 million pounds U_3O_8 over a 14-year mine life, with a base case pre-tax NPV of $1.31 billion (8% discount rate), IRR of 38.7%, and initial pre-production capital expenditures of $322.5 million. The Phoenix ISR operation is estimated to have a stand-alone base case pre-tax NPV of $930.4 million (8% discount rate), IRR of 43.3%, initial pre-production capital expenditures of $322.5 million, and industry leading average operating costs of US$3.33/lb U_3O_8. The results of the PFS are described in greater detail below.

A technical report entitled "Prefeasibility Study Report for the Wheeler River Uranium Project Saskatchewan, Canada" dated October 30, 2018 (the "**Wheeler PFS Report**") has been prepared for the project, a copy of which is available on the Company's website. The principal author of the Wheeler PFS Report was Mr. Mark Liskowich, P.Geo. of SRK, who is an independent Qualified Person in accordance with the requirements of NI 43-101.

The Wheeler PFS Report describes the results of the PFS for the Wheeler River project with an effective date of September 24, 2018, based in part upon the mineral resource estimates for the Gryphon deposit effective January 30, 2018 and the Phoenix deposit effective May 28, 2014.

Except as otherwise indicated, the following project description is a summary, supported by the Wheeler PFS Report. We recommend you read the Wheeler PFS Report in its entirety to fully understand the technical aspects of the project. The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the Wheeler PFS Report and in the "Risk Factors" set forth below; in particular, any advancement or development of the Wheeler River project is subject to attainment of any required approvals, agreements or resources, including capital funding.

Property Description, Location and Access

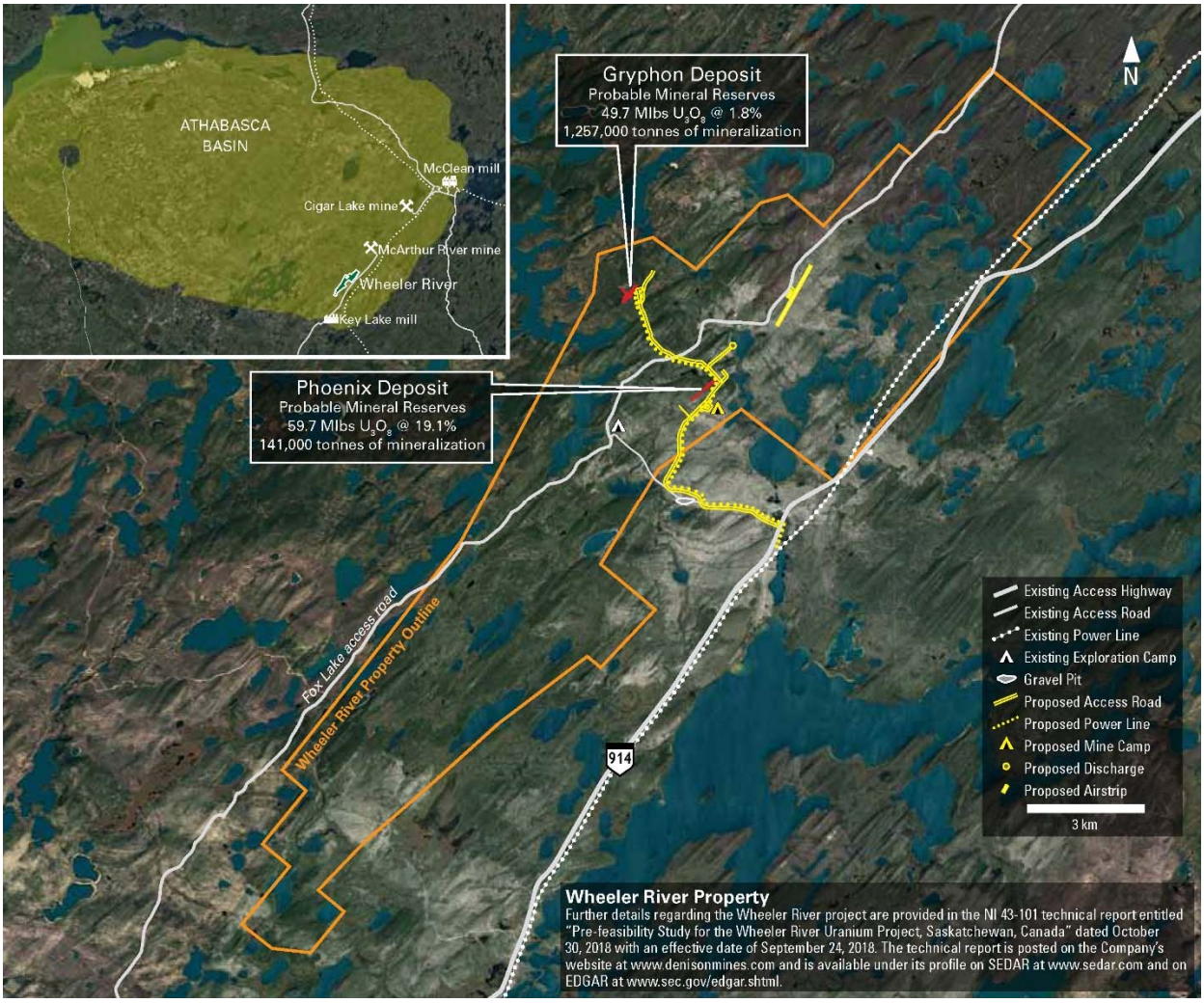
The property is located along the eastern edge of the Athabasca Basin in northern Saskatchewan, Canada and is located approximately 35 km north-northeast of the Key Lake mill and 35 km southwest of the McArthur River uranium mine.

Access to the property is by road or air from Saskatoon. The property is well located with respect to all-weather roads and the provincial power grid. Vehicle access to the property is by the provincial highway system to the Key Lake mill then by the ore haul road between the Key Lake and McArthur River operations to the eastern part of the property. An older access road, the Fox Lake Road, between Key Lake and McArthur River, provides access to most of the northwestern side of the property. Gravel and sand roads and drill trails provide access by either four-wheel-drive or all-terrain-vehicle to the rest of the property.

The property consists of 19 mineral claims totaling 11,720 hectares, with an aggregate annual requirement of $293,000 in either work or cash to maintain title to the mineral claims. Based on previous work submitted and approved by the province of Saskatchewan, title is secure until 2035.

The Wheeler River project is located within the boundaries of Treaty 10 (entered into between the Government of Canada and the First Nations People of Saskatchewan and Alberta). It is also located within the traditional territory of the English River First Nation and in the homeland of the Métis, each of whom have a strong and significant relationship to the land.

Location Map, Showing Regional and Proposed Infrastructure.



Any uranium produced from the Wheeler River property is subject to uranium mining royalties in Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See "Government Regulation - Canadian Royalties." There is also a 10% Net Profits Interest ("NPI") associated with the property held by the WRJV in proportion to the ownership interests of each WRJV participant. There are no other back-in rights or third-party royalties applicable to this property.

There are no known environmental liabilities associated with the property. Before work can be performed on the property, the appropriate exploration or other permits must be applied for and obtained. If Denison was unable to satisfy its obligations with respect to the regulatory and consultation process and obtain the necessary permits, the Company's plans for exploration or other work on the property could be delayed or halted. See "Risk Factors" for more information on this and other potential risks that may affect access, title or the right or ability to perform work on the property. For exploration activities that may occur in 2020, the Company has obtained all necessary permits for surface exploration. Additional permits and licenses may be required in connection with the Company's project evaluation activities and will be required (refer to section 20 of the Wheeler PFS Report) prior to commencement of development and production activities.

History

The Wheeler River property was staked on July 6, 1977, due to its proximity to the Key Lake uranium discoveries, and on December 28, 1978, it was vended into an agreement between AGIP Canada Ltd., E&B Explorations Ltd. and Saskatchewan Mining Development Corporation, with each holding a one-third interest. On July 31, 1984, each party divested a 13.3% interest and allowed Denison Mines Limited, a predecessor company to Denison, to earn in to a 40% interest.

In late 2004, Denison entered into an agreement to earn a further 20% interest by expending $7,000,000 within six years. In connection with that, Denison became the project operator (2005 being the first full year of operatorship). In 2007, when the earn-in obligations were completed, the participating and ownership interests were Denison 60%; Cameco 30%, and JCU 10% and they remained that way up to the end of 2016. In January 2017, Denison, Cameco and JCU executed an agreement, pursuant to which the WRJV Parties agreed to allow for a one-time election by Cameco to fund 50% of its ordinary share (30%) of joint venture expenses in 2017 and 2018. The shortfall in Cameco's contribution was funded by Denison, in exchange for a transfer to Denison of a portion of Cameco's interest in the WRJV.

Accordingly, Denison's share of joint venture expenses was 75% in 2017 and 2018, and Cameco and JCU's participating share of joint venture expenses was 15% and 10%, respectively. As a result of that agreement, Denison's interest increased to approximately 66%, with Cameco holding approximately 24% and JCU holding 10%.

Subsequently, Denison and Cameco completed the Cameco Transaction, pursuant to which Denison acquired all of Cameco's minority interest in the WRJV effective October 26, 2018, resulting in WRJV participating and ownership interests being Denison 90% and JCU 10%.

Exploration and Development History

Period (Year)	Activity
1978-Present	The area was previously explored by AGIP and SMDC (Cameco). Since 1978, several airborne and ground geophysical surveys have defined 152 km of conductor strike length in 14 conductive zones.
1986-1988	AGIP, SMDC, and Cameco drilled a total of 192 drill holes encountering sub-economic uranium mineralization in the M Zone (1986), O Zone (1986), and K Zone (1988). Rare earth element mineralization was also discovered in the MAW Zone (1982).
2004	Denison assumed operatorship in late 2004 and initially focused on exploration drilling on the western side of the quartzite ridge (west side of the property) intersecting sub-economic uranium mineralization.

Period (Year)	Activity
2008	During a regional exploration campaign, three resistivity targets were drilled leading to the discovery of the Phoenix deposit.
2008-2014	During this period, drilling predominantly focused on delineation of the Phoenix deposit.
2014-2017	Exploration drilling at K North in early 2014 resulted in the discovery of the Gryphon deposit. Delineation drilling of the Gryphon deposit was undertaken throughout this period. A Preliminary Economic Assessment was completed for the Project in early 2016.
2018-Present	A Pre-Feasibility Study was completed for the Project in late 2018. Exploration drilling undertaken on regional targets.

Geological Setting, Mineralization and Deposit Types

The Wheeler River property is located near the southeastern margin of the Athabasca Basin in the southwest part of the Churchill Structural Province of the Canadian Shield. The Athabasca Basin is a broad, closed, and elliptically shaped cratonic basin with an area of 425 km (east-west) by 225 km (north-south). The bedrock geology of the Athabasca basin area consists of Archean and Paleoproterozoic gneisses unconformably overlain by up to 1,500 m of flat-lying unmetamorphosed sandstones and conglomerates of the mid-Proterozoic Athabasca Group.

The Wheeler River property is located near the transition zone between two prominent litho-structural domains within the Precambrian basement, namely the Mudjatik Domain to the west and the Wollaston Domain to the east. The Mudjatik Domain is characterized by elliptical domes of Archean granitoid orthogenesis separated by keels of metavolcanic and metasedimentary rocks, whereas the Wollaston Domain is characterized by tight to isoclinal, northeasterly trending, doubly plunging folds developed in Paleoproterozoic metasedimentary rocks of the Wollaston Supergroup, which overlie Archean granitoid orthogenesis identical to those of the Mudjatik Domain. The area is cut by a major northeast-striking fault system of Hudsonian Age. The faults occur predominantly in the basement rocks but often extend up into the Athabasca Group due to several periods of post-depositional movement.

Local geology is comprised of relatively undeformed late Paleoproterozoic to Mesoproterozoic Athabasca Group strata comprised of Manitou Falls Formation sandstones and conglomerates which unconformably overlie the crystalline basement and have a considerable thickness from 170 m over the quartzite ridge to at least 560 m on the western side of the property. Basement rocks beneath the Phoenix and Gryphon deposits are part of the Wollaston Domain and are comprised of metasedimentary and granitoid gneisses. The metasedimentary rocks include graphitic and non-graphitic pelitic and semipelitic gneisses, meta-quartzite, and rare calc-silicate rocks. Pegmatitic segregations and intrusions are common in all units with garnet, cordierite, and sillimanite occurring in the pelitic strata, indicating an upper amphibolite grade of metamorphism. Graphitic pelite and quartzite units appear to play important roles in the genesis of Athabasca Basin unconformity-associated deposits. Thus, the presence of extensive subcrop of both units (18 km of quartzite and 152 line-km of conductors, assumed to be graphitic pelite) greatly enhances the geological potential of the Wheeler River property. The Wheeler River property is partially covered by lakes and muskeg, which overlie a complex succession of glacial deposits up to 130 m in thickness. These include eskers and outwash sand plains, well-developed drumlins, till plains, and glaciofluvial plain deposits. The orientation of the drumlins reflects southwesterly ice flow.

The Phoenix uranium deposit was discovered in 2008 and can be classified as an unconformity-associated deposit of the sandstone-hosted or egress-style variety. The deposit occurs dominantly within sandstone immediately above the sub-Athabasca unconformity approximately 400 metres below surface and comprises three elongate pods of mineralization (Zone A, B, and C) which cover a strike length of 1.1 kilometres. Zone A, the largest of the three pods, is approximately 380 metres in length, up to 80 metres wide, up to 15 metres thick, and consists of an exceptionally high-grade core (62,900 tonnes at 43.2 % U_3O_8 for 59.9 million pounds U_3O_8 in estimated Indicated resources) surrounded by a lower grade shell. The deposit occurs along a prominent post-Athabasca basement thrust fault (WS Shear) which occurs footwall to a graphite-rich pelitic gneiss unit and hangingwall to a garnetiferous pelitic gneiss and quartzite unit. Mineralization within the Phoenix deposit is dominated by massive to semi-massive uraninite associated with an alteration assemblage comprising hematite, dravitic tourmaline, illite, and chlorite. Secondary uranium minerals (including uranophane) and sulphides are trace in quantity.

The Gryphon uranium deposit was discovered in 2014 and can be classified as an unconformity-associated deposit of the basement-hosted or ingress-style variety. The deposit occurs within southeasterly dipping crystalline basement rocks below the regional sub-Athabasca Basin unconformity. The deposit is located from 520 to 850 metres below surface, has an overall strike length of 610 metres and dip length of 390 metres, and varies in thickness between two and 70 metres, depending on the number of mineralized lenses present. The mineralized lenses are controlled by reverse fault structures, which are largely conformable to the basement stratigraphy and dominant foliation. The A, B, and C series of lenses are comprised of stacked, parallel lenses which plunge to the northeast along a fault zone (G-Fault) which occurs between hangingwall graphite-rich pelitic gneisses and a more competent pegmatite-dominated footwall. A ubiquitous zone of silicification (Quartz-Pegmatite Assemblage) straddles the G-Fault and the A, B, and C series of lenses occur in the hangingwall of, within, and in the footwall of the Quartz-Pegmatite Assemblage respectively. The D series lenses occur within the pegmatite-dominated footwall along a secondary fault zone (Basal Fault) or within extensional relay faults which link to the G-Fault. The E series lenses occur along the G-Fault, up-dip and along strike to the northeast of the A and B series lenses, within the upper basement or at the sub-Athabasca unconformity. Mineralization within the Gryphon deposit lenses is dominated by massive, semi-massive, or fracture-hosted uraninite associated with an alteration assemblage comprising hematite, dravitic tourmaline, illite, chlorite, and kaolinite. Secondary uranium minerals (including uranophane and carnotite) and sulphides are trace in quantity.

Exploration and Drilling

As operator, Denison has conducted numerous geophysical surveys across the property, generating many drill targets over several years. Airborne surveys have included two electromagnetic surveys (totaling 2,005 line kilometres) and one gravity survey (totaling 1,711 line kilometres). Ground surveys have included four electromagenetic surveys (488 line kilometres), 10 resistivity surveys (979 line kilometres), two gravity surveys (2,920 stations) and 45 downhole geophysical surveys. Results to date indicate the property comprises multiple prospective trends that warrant drill testing. These trends are interpreted primarily from magnetic and electromagnetic and/or resistivity data to infer the location of faulted graphitic basement horizons that may have associated uranium mineralization.

Denison has completed 380,668 metres of exploration diamond drilling in 735 holes on the Wheeler River property during the period from 2005 to the end of 2019. The majority of this drilling has been focused on the discovery and delineation of the Phoenix (251 holes totaling 115,948 metres) and Gryphon (214 holes totaling 120,351 metres) deposits.

Discovery and Delineation of the Phoenix Deposit

In the summer of 2008, as a direct result of the 2007 DC resistivity survey along the hanging wall of the quartzite ridge, two drill holes were located 600 metres apart along the same low resistivity trend. This drilling intersected a zone of characteristic sandstone alteration and uranium mineralization linked to unconformity-associated uranium deposits. All drill holes during the summer of 2008 intersected either uranium mineralization or very strong alteration close to mineralization.

Subsequent drilling programs conducted during 2009 and 2010 extended the mineralized zone for a strike length of greater than 900 metres. An initial mineral resource estimate was completed at the end of 2010. Aggressive drilling programs in 2011 and 2012 successfully added additional mineral resources. In 2013, drilling was completed at the Phoenix deposit, but a large portion of the 2013 Wheeler River drilling program was also allocated to exploration of several other target areas on the property. Some additional infill drilling was completed at the Phoenix deposit in early 2014, and this work was successful in extending some high grade mineralization into areas previously modeled as low grade. These results, combined with results from 2013, were the catalyst for the updated mineral resource estimate for the Phoenix deposit effective May 2014.

Discovery and Delineation of the Gryphon Deposit

In March 2014, drill hole WR-556 resulted in discovery of the Gryphon deposit, intersecting uranium mineralization averaging 15.33% U_3O_8 over 4.0 metres in basement graphitic gneiss, 200 metres below the sub-Athabasca unconformity. The Gryphon deposit occurs on the K-North trend, which exhibits numerous favourable exploration criteria including basement quartzite and graphitic gneisses, basement structures, reverse offsets of the unconformity, weak basement hosted mineralization near the unconformity, and anomalous sandstone geochemistry and alteration.

Historical holes ZK-04 and ZK-06 drilled in the late 1980s, along the K-North trend, targeted unconformity-related mineralization and intersected favourable sandstone structure and alteration as well as alteration and weak mineralization in the basement approximately 35 metres below the unconformity. Follow-up drilling campaigns attempted to locate unconformity mineralization up dip of the weak basement mineralization. Gryphon deposit discovery drill hole WR-556 was the first to evaluate the down dip projection of these intersections into the basement.

Since the discovery hole at Gryphon, subsequent drilling campaigns in 2014 and 2015 were completed and an initial resource estimate was released in November 2015. Additional mineralization was discovered immediately northeast of Gryphon in 2016, which was subsequently named the “D Series Lenses”. Continued drilling during 2016 and 2017 was focused on expanding the mineral resources at Gryphon and increasing the level of confidence from an inferred to indicated category and an updated mineral resource estimate for the Gryphon deposit was released in January 2018. Drilling was completed during 2018 to test for extensions to the Gryphon deposit (15,621 metres in 23 drill holes). The deposit was successfully extended to the northeast by approximately 200 metres, however these results have yet to be included in a mineral resource estimate. The Gryphon deposit remains open in numerous areas and the 2018 results confirm potential to continue to expand the Gryphon mineral resource outside of the current extents of the deposit.

Post-PFS Exploration Drilling Activities

Denison conducted winter and summer diamond drilling programs at Wheeler River during 2019 – totaling 10,573 metres in 20 holes. The programs were focused on initial testing of regional target areas (K West, Q South East, K South, O Zone) with the potential to result in the discovery of additional high-grade deposits that could form satellite ISR operations.

The winter 2019 drilling program commenced in early January 2019 and was concluded by the end of March 2019. A single diamond drill rig was utilized, which completed 7,434 metres in 14 drill holes across regional target areas including O Zone (2091 metres; 4 holes), Q South East (714 metres; 2 holes), K South (1017 metres; 2 holes), K West (1899 metres; 3 holes), M Zone (1116 metres; 2 holes) and Gryphon South (597 metres; 1 holes). The location of the regional target areas are provided in the figure below. Highlight drilling results included:

- K West:

  Unconformity-hosted mineralization was intersected in drill hole WR-756, highlighted by 0.03% U_3O_8 over 1.5 metres, 1.3% Cu over 4.0 metres, 0.13% Ni over 4.0 metres and 0.18% Co over 6.0 metres, immediately above the sub-Athabasca unconformity which was intersected at 543.8 metres below surface.

  The mineralization was accompanied by other geological features commonly associated with unconformity-related deposits, including highly structured and hydrothermally altered sandstone and faulted graphitic basement rocks. Significant fault zones both within the lower sandstone and upper basement indicate additional unconformity targets exist to the southeast and northwest along section, respectively. While the other two holes completed at K West, on 600 metre centers along strike, did not intersect the optimal target area on their respective sections, they both intersected significant structure and alteration in the sandstone – confirming the presence of a mineralizing system along the southern portion of the K West trend.

- Q South East:

  Two drill holes, completed as a fence, were designed to test an unconformity target on the eastern edge of the Quartzite Ridge - a geological setting analogous to the Phoenix deposit. The drill holes intersected structured and hydrothermally altered sandstone, an unconformity offset of 16 metres and basement stratigraphy identical to the Phoenix deposit. Targets exist along strike, particularly to the northeast along the eastern edge of the Quartzite Ridge, which is largely untested for 8.8 kilometres.

- K South:

  Drill hole WR-749 intersected anomalous uranium in both the upper sandstone (average 1.29 parts per million ("**ppm**") uranium from 15 to 130 metres) and the lower sandstone (average 1.03 ppm uranium from 360 to 435 metres). The lower sandstone was also marked by significant hydrothermal alteration including anomalous clay signatures up to 80 metres above the unconformity. The granite intersected at the unconformity, at 465 metres, indicates the drill hole overshot the optimal target. The highly anomalous sandstone signatures indicate compelling future targets remain to the southeast, and along strike, where graphitic basement rocks and associated structure are interpreted to occur (subcrop) at the unconformity.

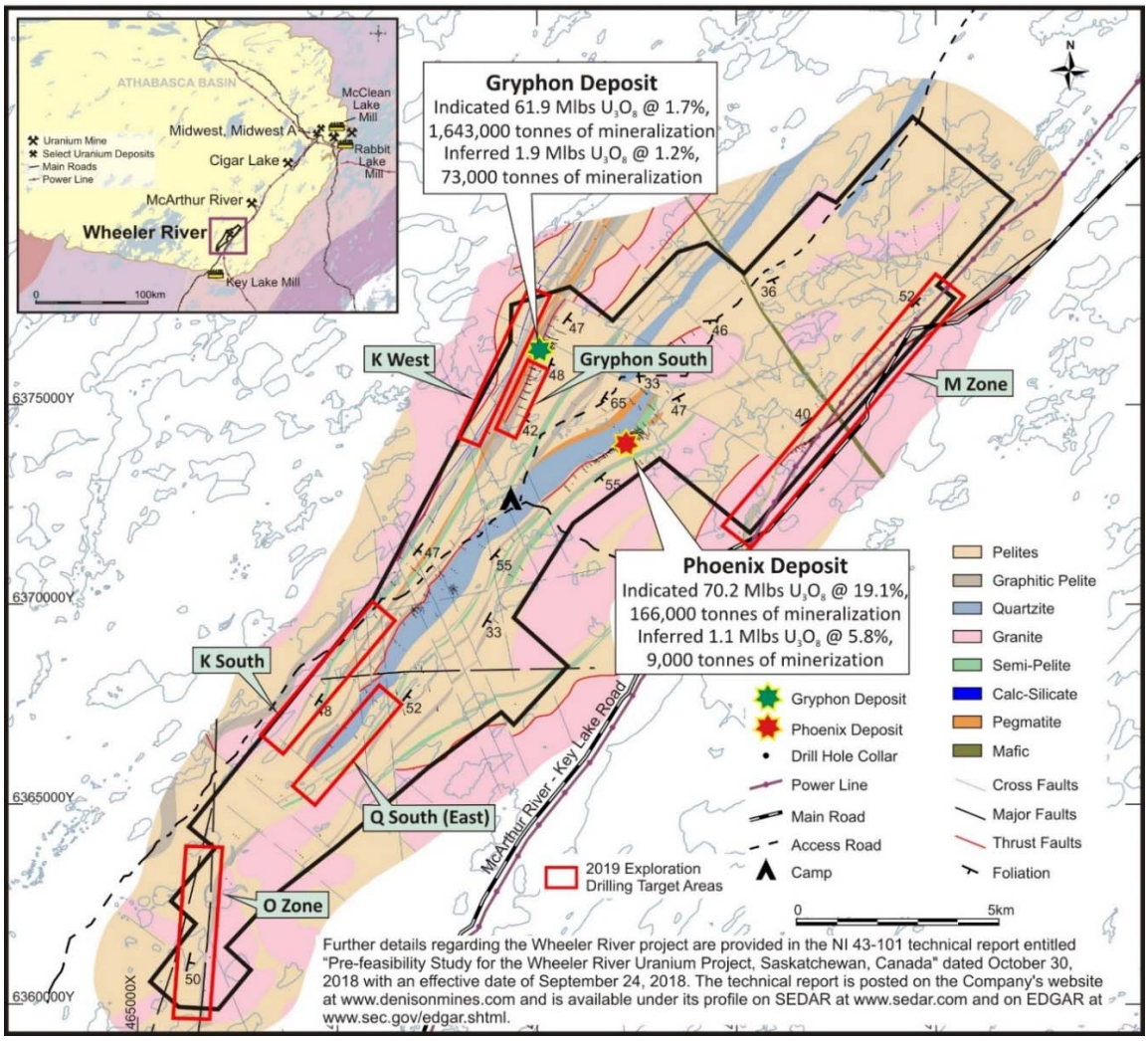
- O Zone:

  The testing of DCIP resistivity targets confirmed the presence of a major post-Athabasca thrust fault with an unconformity offset of over 60 vertical metres and associated significant sandstone structure and hydrothermal alteration. Additional targets exist over the 3 kilometres of interpreted strike length along the O Zone thrust fault.

During the summer 2019 exploration program, which commenced in late July and was concluded by early September, a total of 3,139 metres of diamond drilling was undertaken in six completed holes utilizing one drill rig. The summer drill holes were undertaken as a follow-up to the winter 2019 program along the southern portion of the K-West trend and designed to follow-up certain targets on existing drill sections, and to test along strike of previous drill holes.

In summary, the six drill holes completed during the summer 2019 exploration program all intersected favorable hydrothermal alteration within the basal sandstone associated with the K-West graphitic fault, including bleaching, desilification, and grey alteration. Three drill holes (WR-756D1, WR-756D2 and WR753D1) were completed as a wedge (or daughter) hole from existing drill holes, to follow-up on results from the winter 2019 exploration program. These drill holes intersected strong alteration associated with highly anomalous geochemistry, highlighted by WR-756D1 which averaged 3 parts per million uranium (partial digest) over the basal 230 metres of sandstone, indicative of a potentially fertile uranium mineralizing system along the K-West trend. Somewhat weaker geochemical results were returned from the other three holes completed (WR759, WR-760, WR761A) along strike of the winter 2019 drill holes on an approximate 300 metre spacing. The drill holes completed along strike are, however, interpreted to have undershot the optimal target by 45 to 65 metres. Accordingly, additional exploration along the K-West trend is warranted, particularly along the northern portion (west and northwest of the Gryphon deposit), where the strongest geochemical anomalism along the K-West trend occurs and unconformity targets are largely untested.

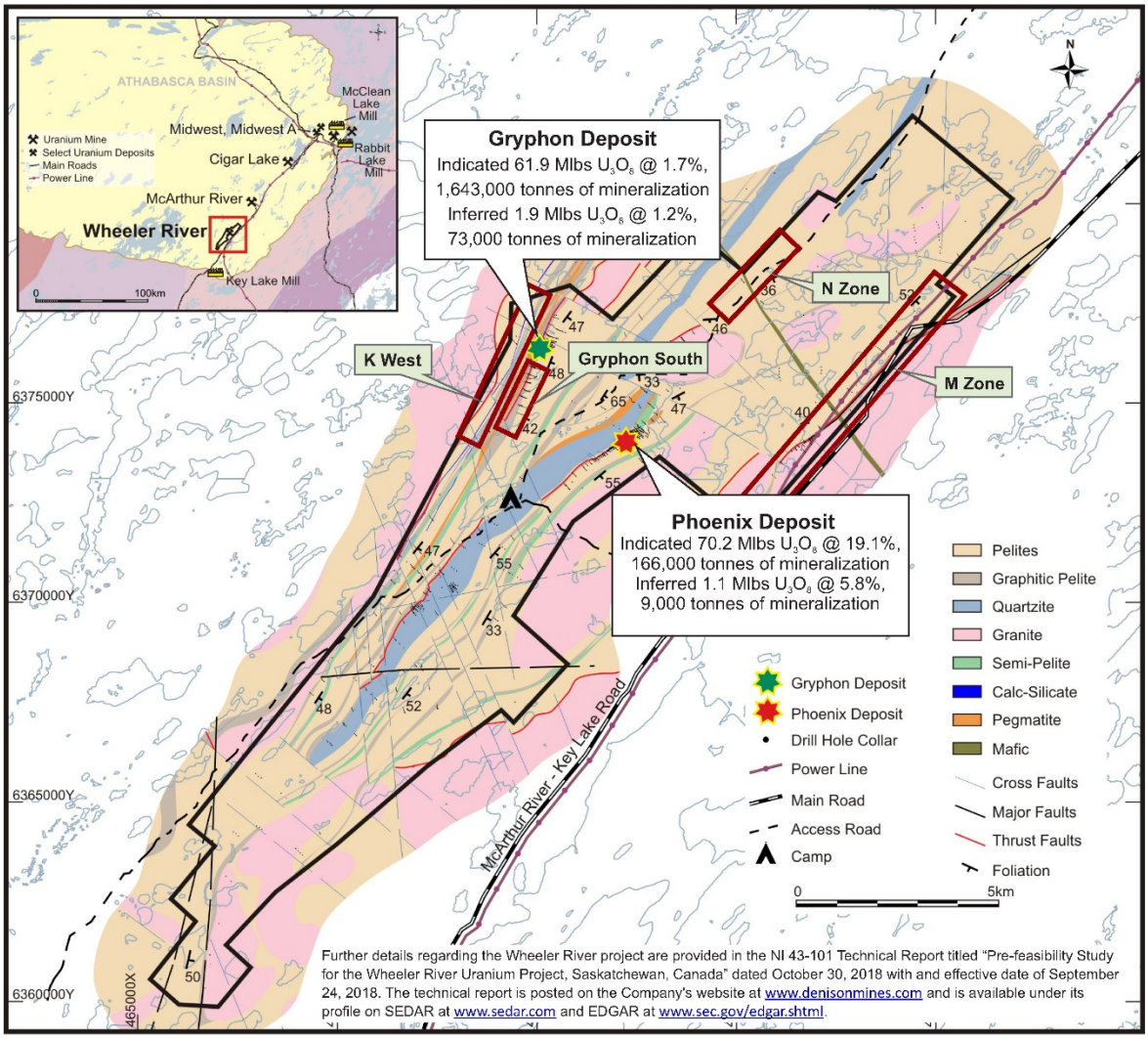
2019 Drill Testing Target Areas, shown on Basement Geology Map.



During 2020, exploration drilling is expected to be focused on the Phoenix deposit with the objective of delineating additional Indicated Mineral Resources within the planned ISR freeze dome that may be incorporated into a future FS. Priority target areas include the “A/B Gap” (between Zones A and B), Zone B, and Zone C. Within the A/B Gap, previous drilling has been interpreted to have missed the optimal target. Within Zone B and C, multiple drill sections exist where mineralization is not closed-off and/or the optimal target related to the WS Shear has not been adequately tested, particularly along the northwestern margin of the deposit. The mineralization at Zone C is not currently included in the mineral resources estimated for the Project.

Additional high-priority regional target areas exist on the property that may be tested during 2020 or future years. These target areas include K-West (northern portion), Gryphon South, N Zone and M Zone. The figure below shows the location of the target areas.

High Priority Regional Targets for 2020 Drill Testing, shown on Basement Geology Map.



Evaluation Activities - 2019 ISR Field Test Program

Subsequent to the completion of the PFS in 2018, project development and evaluation activities have pivoted towards initiating and supporting EA and FS processes for Phoenix. Work during 2019 focused on (a) those activities necessary to support and move forward the environmental assessment process (see "Government Regulation – Environmental Assessments" below), which is currently expected to take 36-48 months to complete from initiation in February 2019, and (b) those engineering and other studies required to de-risk the Phoenix deposit as an ISR mining operation.

Engineering and other studies completed in 2019 included (i) an ISR field test program, including the installation of CSWs at Phoenix, as the first CSWs designed for ISR mining in the Athabasca Basin, and (ii) further ISR metallurgical laboratory testing for uranium recovery (see "Mineral Processing and Metallurgical Testing, below).

The ISR field test program was designed to assess the permeability of Phoenix, and to collect an extensive database of hydrogeological data to further evaluate the ISR mining conditions present at Phoenix (see Figure 1 below). This data is of critical importance to the advancement of Phoenix as an ISR mining operation – as it is expected to support a detailed assessment of the ISR requirements related to permeability, and be further incorporated into a detailed ISR mine plan as part of the completion of a future FS.

The Company successfully completed the planned ISR field test work and safely concluded operations on site at Wheeler River during the fourth quarter of 2019. The field activities associated with the 2019 ISR field test program were completed over a period of approximately 23 weeks (starting in June and completed in late November), and required the support of approximately 40 Denison employees and contractor staff.

The objectives of the program were extensive, and the scope of the work completed on site during the program was considerable. The following represent the key components of field work completed as part of the 2019 ISR field test program:

- Installation of 4 small-diameter pump/injection ('P/I') wells with a 2.5-inch diameter PVC pipe and slotted well-screen set within the ore zone of Test Area 1 and Test Area 2.
- Installation of 5 small-diameter observation wells with a 1.5-inch diameter PVC pipe and slotted well-screen set at various depths within the ore zone of Test Area 1 and Test Area 2.
- Installation of 6 small-diameter observation wells with a 1.5 inch diameter PVC pipe and slotted well-screen set at various depths outside of the ore zone of Test Area 1 and Test Area 2, including wells situated in the basement formation below Phoenix and in the sandstone above and adjacent to Phoenix.
- Installation of 2 test wells containing Vibrating Wire Piezometers ('VWPs') in each of Test Area 1 and Test Area 2, equipped with pressure transducers at five different depth locations – including the overburden (1 transducer), overlying sandstone (2 transducers), ore zone (1 transducer), and underlying basement (1 transducer).
- Installation of 12 small-diameter regional observation wells with a 1.5 inch diameter PVC pipe and slotted well-screen set at various depths and located approximately between 100 metres and 700 metres outside of the boundaries of the ore zone at Phoenix, for the purposes of environmental monitoring and baseline data collection.
- Installation of 1 re-charge well with a 2.5-inch diameter PVC pipe and slotted well-screen set within the ore zone horizon for the purposes of recharging formation test waters.
- Completion of a series of short-duration preliminary hydrogeological tests, using the P/I wells to pump water from or inject water into the ore zone to collect hydrogeological data and identify hydraulic connectivity between test wells – validating the ability to move water, and the existence of significant permeability, within the Phoenix ore zone.
- Installation of 2 large-diameter CSWs within the ore zone – one located in each of Test Area 1 and Test Area 2 and both designed to meet expected regulatory and environmental requirements such that they can ultimately form part of the production ISR well field at Phoenix.
- Completion of a series of short-duration preliminary hydrogeological tests, using the CSWs to pump water from or inject water into the ore zone to collect further hydrogeological data and assess the extent of permeability prior to testing the MaxPERF Drilling Tool.

- Deployment of the MaxPERF Drilling Tool in each of CSW1 and CSW2 to complete an array of lateral drill holes (penetration tunnels) designed to enhance access from each CSW to the existing permeability within the ore zone.
- Completion of a further series of short-duration preliminary hydrogeological tests, using each of CSW1 and CSW2 to pump water from or inject water into the ore zone following the deployment of the MaxPERF Drilling Tool – indicating potential increased flow rates following the application of the MaxPERF drilling.
- Completion of long-duration hydrogeological tests, using each of CSW1 and CSW2 to pump water from or inject water into the ore zone for an extended period of time, to collect further detailed hydrogeological data designed to simulate fluid flow under conditions similar to an envisioned commercial production environment.
- Completion of approximately 23 individual hydraulic conductivity tests (downhole packer testing) in 15 boreholes at various depths within and adjacent to the ore zone of Test Area 1 and Test Area 2 – including hydraulic conductivity tests within the underlying basement formation below Phoenix and in the sandstone above and adjacent to Phoenix.
- Completion of downhole geophysics including nuclear magnetic resonance, dual neutron, and cement-bond log in CSW2 and dual neutron in GWR-001, GWR-010, GWR-019 and GWR-022.
- Recovery of approximately 100 metres of mineralized drill core in 14 individual drill holes from the installation of P/I and observation wells, as well as CSWs, within Test Area 1 and Test Area 2 – subject to detailed on-site geological and geotechnical logging as well as permeability (permeameter) testing, prior to portions of the core being preserved for laboratory-based metallurgical test work.
- Completion of extensive permeameter testing in the field, utilizing a portable nitrogen gas probe permeameter adapted for testing whole drill core pieces. Permeameter measurements were taken on core at approximate 10 centimetre intervals, resulting in a total of over 1,200 measurements collected from the 2019 ISR field test program.

The ISR field test achieved each of the program's planned objectives, and was highlighted by several key de-risking accomplishments, including the following:

- Confirmation of significant hydraulic connectivity within the Phoenix ore zone:

  85% of test wells located within Test Area 1 and Test Area 2 of the Phoenix deposit showed hydraulic connectivity with another test well (see Figure 2 and Figure 3). Hydraulic connectivity was observed over 77% of the total strike length tested in Test Area 1 and Test Area 2 combined, and over 100% of the total across-strike length tested. Taken together, the extent of hydraulic connectivity observed during the ISR field test program is supportive of the permeability of the ore zone and the potential suitability for ISR mining.

- Installation of the Athabasca Basin's first CSWs for ISR:

  ISR mining of the Phoenix deposit is expected to require the installation of approximately 300 large-diameter/commercial-scale vertical wells into and surrounding the Phoenix deposit at approximately 400 metres below surface. The installation of CSW1 (GWR-031) and CSW2 (GWR-032) represent a historic milestone for the advancement of ISR mining within the Athabasca Basin – as the first wells to have been installed in the Athabasca Basin for the purpose of ISR mining (see Figure 2 and Figure 3).

Completion of these wells represents a notable de-risking accomplishment for the project, as it confirms the ability to drill these large-diameter holes and install the materials necessary for ISR mining in a complex and highly altered geological setting that has not previously been tested for the suitability of the installation of ISR wells.

- Confirmation of limited hydraulic connectivity within the underlying basement units:

  During preliminary tests in Test Area 1 and Test Area 2, negligible hydraulic responses were observed in the observation wells situated in the basement rock units underlying the Phoenix deposit. This result is indicative of the basement units having relatively low permeability and is supportive of the PFS design for the Phoenix ISR operation, which relies on the basement units providing containment of the ISR mining solution in conjunction with the planned freeze dome.

- Demonstration of the effectiveness of MaxPERF to increase CSW access to existing permeability:

  The MaxPERF Drilling Tool was successfully deployed in CSW1 and CSW2 to create a series of lateral drill holes (penetration tunnels) roughly 0.7 inches (1.78 centimetres) in diameter, which extend up to 72 inches (1.83 metres) from the CSW. Initial short-duration hydrogeological tests confirmed increased flow rates in Test Area 1 following the completion of the MaxPERF drilling. In Test Area 2, initial short-duration hydrogeological tests confirmed similar flow rates both before and after the completion of the MaxPERF drilling.

  These results confirm that the MaxPERF Drilling Tool can be deployed successfully within a CSW to mechanically engineer increased access to the existing permeability of the ore formation. This tool could be of significant utility in areas of the Phoenix deposit where natural access to permeability is challenged.

- Confirmation of ability to achieve hydraulic conductivity values consistent with PFS

  In February 2020, the Company reported further results of the pump and injection tests performed on the two CSWs. These tests were designed to allow for the simulation of fluid flow under conditions similar to an envisioned commercial ISR production environment – ultimately facilitating a quantitative assessment of the bulk hydraulic conductivity of the Phoenix orebody and surrounding rock formations.

  For ISR mining operations, the term “hydraulic conductivity” is used to describe the ease with which a fluid can move through the pore spaces or fractures within a host rock. Hydraulic conductivity is commonly represented by the symbol ‘K’, is often stated as a rate of flow (under a unit hydraulic gradient through a unit cross-sectional area of aquifer) and is typically reported in units of metres/sec (‘m/s’) or metres/day (‘m/d’).

  The Pump and injection tests completed during the 2019 Field Test from CSW2 (drill hole GWR-032), after deployment of the MaxPerf Drilling Tool, produced K values ranging from 3.7×10^{-7} to 9.6×10^{-7} (or 0.033 m/d to 0.084 m/d) – consistent with the K values used in the PFS.

The extensive hydrogeological data sets collected during the 2019 field program will be incorporated into the hydrogeological model being developed for Phoenix, which is expected to facilitate detailed mine planning. Denison expects the hydrogeological model and final report to be completed in Q1 2020.

Figure 1: Test Areas and Well Installations Completed during 2019

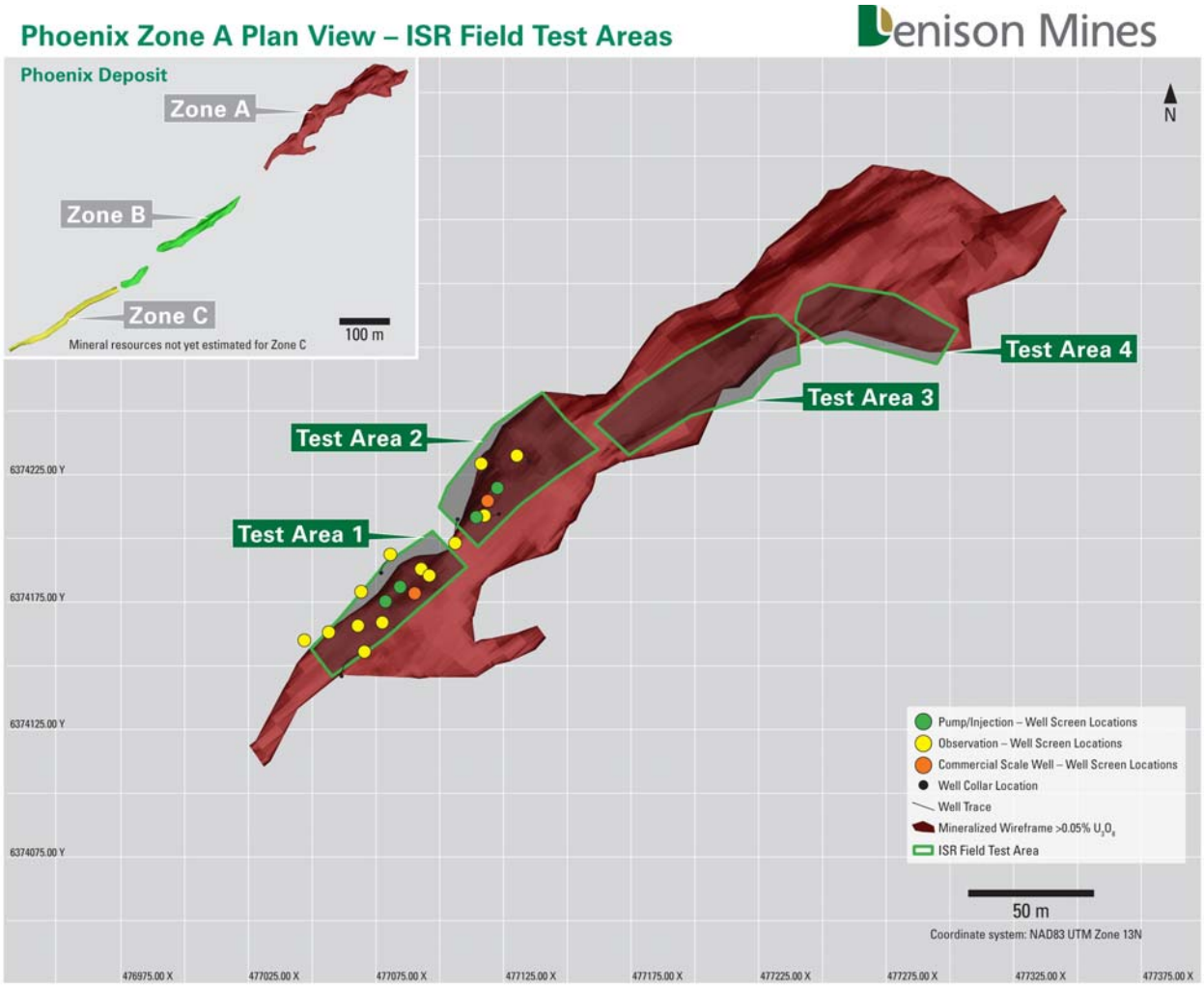


Figure 2: Pump/Injection wells, Observation wells and CSW1 in Test Area 1

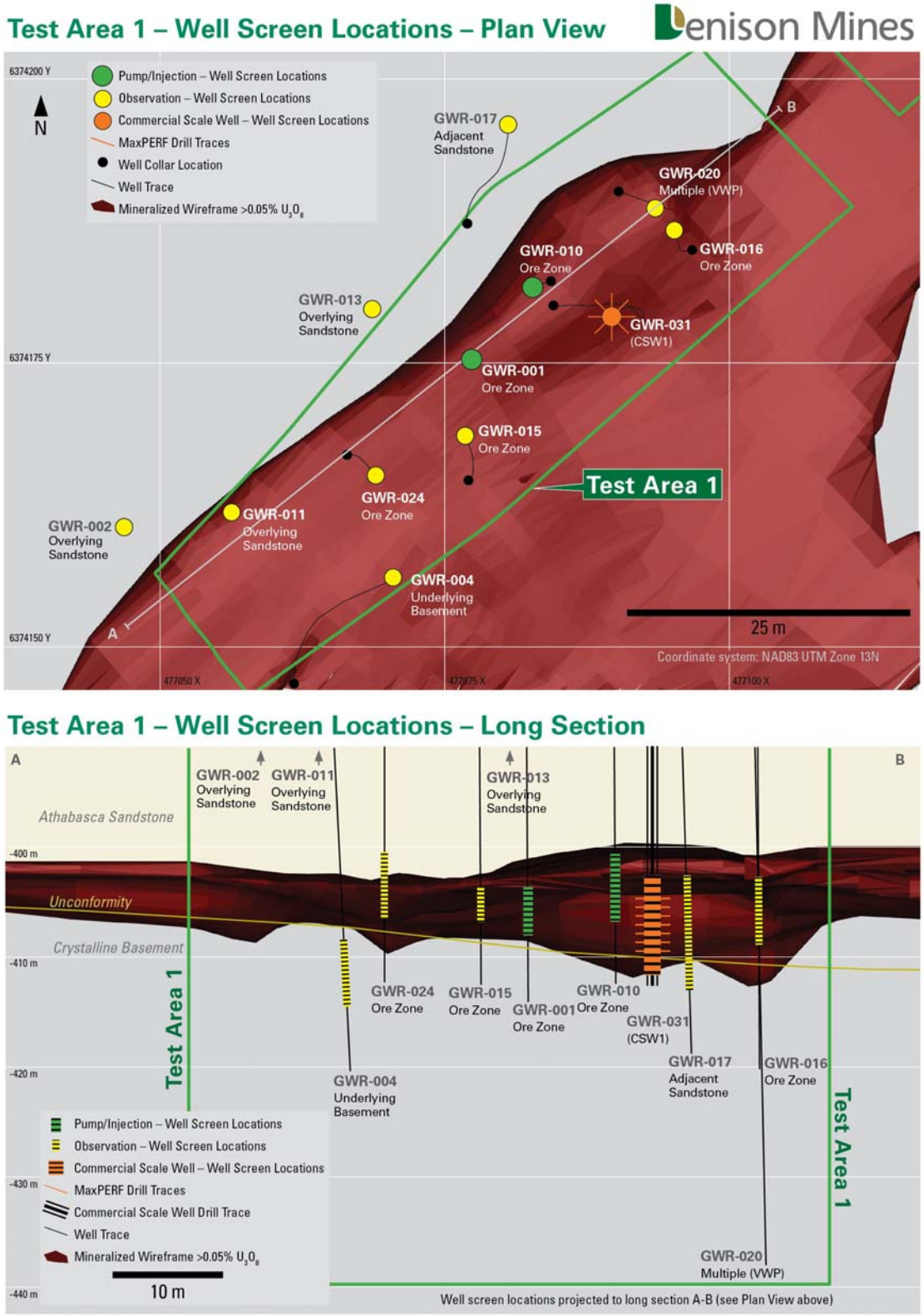
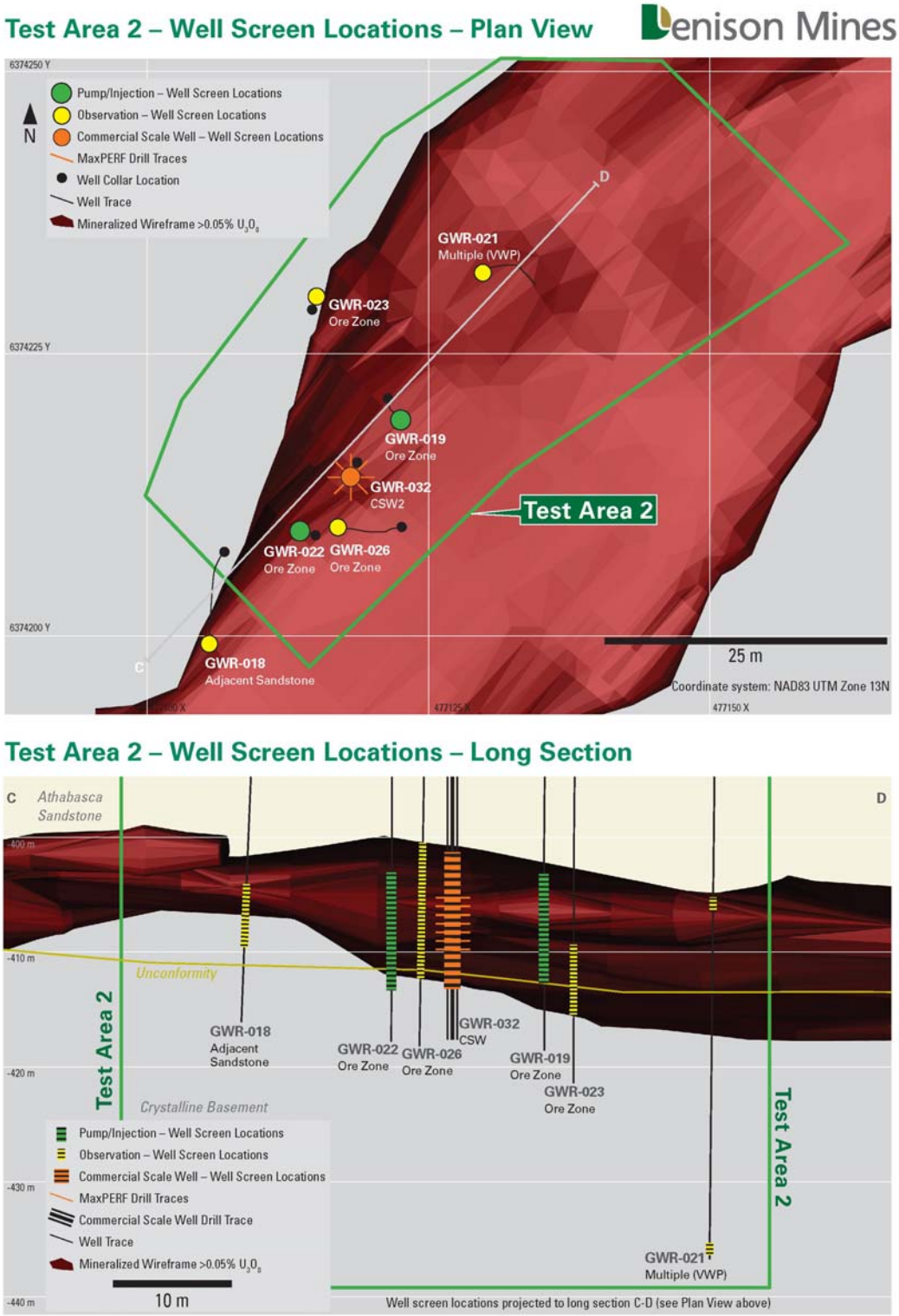


Figure 3: Pump/Injection wells, Observation wells and CSW2 in Test Area 2



Mineral Processing and Metallurgical Testing

A number of metallurgical testing programs have been undertaken at the project, to evaluate the mineral processing potential for both the Gryphon and the Phoenix deposits.

2014-2018

In 2014, preliminary metallurgical test work was initiated to assess the basic metallurgical properties of the deposit ores. In 2017 and 2018, advanced metallurgical testing was completed, to test mill performance at extremes of potential ore feed grades and impurity levels, as well as optimize processing parameters. Results of this testing are incorporated in the Wheeler PFS Report.

In summary, for both the Phoenix and Gryphon deposits, results of the testing indicate that ores are readily amenable to acid base leaching with high uranium extraction rates. Performance in terms of retention time, reagent usage and consumption are all consistent with current industry operating parameters. Test work results were positive, with results generally in line with capacities at existing plants and with yellowcake produced meeting all specifications from ASTM C967-13 “Standard Specifications for Uranium Ore Concentrate”.

In order to support the evaluation of a contemplated ISR operation for Phoenix, during the PFS process, Denison completed Leach Amenability Studies (Bottle Roll Tests) and column leach tests from 2016 to 2018. Testing included subjecting appropriate ore samples to various pH, ORP and other solution characteristics and monitoring progress of leaching over time. Results of these initial tests demonstrated Phoenix ore responded strongly to acid leach conditions with low impurities removal, extremely low reagent consumption levels and high uranium recovery.

2019-2020

In December 2019, Denison initiated the next phase of ISR metallurgical laboratory testing for uranium recovery at Phoenix, which will utilize the mineralized drill core recovered through the installation of various test wells during the 2019 ISR field test program. The metallurgical laboratory test program builds upon the laboratory tests completed for the recovery of uranium as part of the project’s PFS and is expected to further increase confidence and reduce risk associated with the application of the ISR mining method. The results are expected to facilitate detailed mine and process plant planning as part of a future FS, and will provide key inputs for the EA process. Significant components of the metallurgical laboratory test program include core leach tests, column leach tests, bench-scale tests and metallurgical modelling.

Metallurgical test work commenced in the fourth quarter of 2019, and is expected to include the following:

- Core Leach Tests:

  These specialized tests involve the testing of intact mineralized core samples (between 0.75 metres and 1.5 metres in length). Core samples were collected to represent the various ore types and grade ranges (~1% to 60% U_3O_8) at Phoenix. A triple-tube method of core recovery was employed to ensure the core could be recovered with minimal breakage and would be representative of the in-situ conditions at Phoenix, to evaluate uranium recovery specifically for the ISR mining method.

Denison has acquired access to a unique and specialized laboratory apparatus at the Saskatchewan Research Council laboratories, which will be utilized to completely seal the outer diameter of the intact mineralized core, thus ensuring that the leach solution travels through the intact core sample (25 centimetres to 50 centimetres in length). The tests are expected to utilize mining solution (or lixiviant) with acid and oxidant concentrations, and injection pressures, similar to those envisaged during commercial ISR operations. Denison considers this type of specialized test of intact competent core samples to be the most representative available laboratory test of the natural leach conditions of the host rock. Accordingly, these tests are expected to provide important detailed metallurgical recovery data that is expected to inform the Company's understanding of the potential scope of the start-up, steady state, and closure of ISR wells.

In February 2020, the Company reported on the results from the initial core leach tests. At that time, over 50 days of testing had been completed on a mineralized core sample recovered from drill hole GWR-016. The core sample was recovered from between 405 and 407 metres below surface within the extent of the high-grade core of Phoenix Zone A. Various parameters for lixiviant composition (including both acid and oxidant concentration) have been tested to date. In all cases, the lixiviant is injected into the core continuously and only interrupted periodically if a change in the lixiviant composition is required. After the initial test startup, uranium bearing solution recovered from the core sample returned uranium content in the range of 13.5 g/L to 39.8 g/L. The average uranium concentration returned over the last 20 days of testing was 29.8 g/L – which represents a uranium content that is approximately 200% higher than (or three times) the minimum level used for the ISR process plant design in the PFS of 10 g/L.

- Column Leach Tests:

  Additional core samples in the same grade ranges (~1% to 60% U_3O_8) were obtained from the 2019 ISR field test program and preserved for metallurgical tests. These samples will be crushed and packed into test columns at the test facility, in order to complete traditional column leach tests utilizing the same mining solutions as the Core Leach Tests. The testing is expected to provide additional data on the recovery of uranium, and any other metals, from the various ore types and grade ranges associated with the Phoenix deposit under the envisaged ISR mining conditions. The purpose of the Column Leach Tests is to correlate data from the specialized Core Leach Tests to the traditional ISR laboratory testing methods used during the PFS. Additionally, the Column Leach Tests are able to generate uranium bearing solutions in larger quantities for further laboratory testing of the process plant flowsheet.

- Bench Scale Tests:

  Upon completion of the Core Leach Tests and Column Leach Tests, Bench-Scale Tests of each unit operation in the proposed flowsheet is planned. These tests are expected to use the uranium-bearing solution produced from both of the Leach Tests. The data from the Bench-Scale Tests is expected to provide key details for plant design for impurity removal, uranium precipitation, solid liquid separation, reagent usage and water treatment.

- Metallurgical Modelling:

  Concurrent with these tests, Denison is building a metallurgical simulation model with the basic parameters for mass, energy and water balances. The data from all laboratory tests will be incorporated into a model update once testing is completed.

The timing and completion of the above noted elements of the metallurgical test program will be contingent on the Company raising sufficient capital.

Sampling, Analysis and Data Verification

See "Athabasca Exploration: Sampling, Analysis and Data Verification" for details.

Mineral Reserve and Mineral Resource Estimates

RPA, an independent technical consulting firm with relevant experience, was retained by Denison on behalf of the WRJV to prepare and audit the mineral resource estimates for the Gryphon and Phoenix deposits in accordance with CIM Definition Standards (2014) and NI 43-101. The Wheeler PFS Report contains a combined mineral resource estimate for the Wheeler River project, with effective dates for the mineral resource estimates for the Gryphon and Phoenix deposits of January 30, 2018 and May 28, 2014, respectively. See "Mineral Reserves and Mineral Resources", above, for a summary of the combined mineral resource estimate for the Wheeler River project.

As further discussed in the Wheeler PFS Report, a mineral reserve estimate for the Gryphon deposit was prepared based on the January 30, 2018 mineral resources estimate and a mineral reserve estimate for the Phoenix deposit was prepared based on the March 24, 2014 mineral resources estimate.

Phoenix Deposit Mineral Resource Estimation Methodology

Geology, structure, and the size and shape of the mineralized zones have been interpreted using data from 243 diamond drill holes which resulted in three-dimensional wireframe models that represent 0.05% U_3O_8 grade envelopes. The mineralization model generally consists of a higher-grade zone within an envelope of lower grade material, resulting in two main estimation domains - higher grade and lower grade. Additionally, a small zone of structurally controlled basement mineralization was modelled at the north end of the deposit.

Based on 196 dry bulk density determinations, Denison developed a formula relating bulk density to uranium grade which was used to assign a density value to each assay. Bulk density values were used to weight grades during the resource estimation process and to convert volume to tonnage.

Uranium grade times density ("**GxD**") values and density ("**D**") values were interpolated into blocks in each domain using an inverse distance squared ("**ID2**") algorithm. Hard domain boundaries were employed such that drill hole grades from any given domain could not influence block grades in any other domain. Very high-grade composites were not capped but grades greater than a designated threshold level for each domain were subject to restricted search ellipse dimensions in order to reduce their influence. Block grade was derived from the interpolated GxD value divided by the interpolated D value for each block. Block tonnage was based on volume times the interpolated D value.

The mineral resources estimated for the Phoenix deposit were classified as indicated or inferred based on drill hole spacing and apparent continuity of mineralization. The block models were validated by comparison of domain wireframe volumes with block volumes, visual comparison of composite grades with block grades, comparison of block grades with composite grades used to interpolate grades, and comparison with estimation by a different method.

Gryphon Deposit Mineral Resource Estimation Methodology

The three-dimensional mineralized wireframes were created by Denison utilizing Gemcom software following detailed interpretation of the deposit geology and structure. The wireframes were defined using a threshold of 0.05% U_3O_8 and minimum thickness of two metres. One higher grade domain was defined within the A1 lenses and three higher grade domains were defined in the D1 lenses based on a threshold of 4.0% U_3O_8. The wireframes and drilling database were sent to RPA for grade modelling following QAQC which included ensuring the wireframes were 'snapped' to the drill hole mineralized intervals.

Based on 279 dry bulk density determinations, a polynomial formula was determined relating bulk density to uranium grade which was used to assign a density value to each assay. Bulk density values were used to weight grades during the resource estimation process and to convert volume to tonnage. Uranium GxD values and D values were interpolated into blocks measuring 5 metres by 1 metre by 2 metres using an ID2 algorithm since variograms were not considered good enough to derive kriging parameters. Hard domain boundaries were employed at the wireframe edges, so that blocks within a given wireframe were only informed by grade data from that wireframe. For the A1 high-grade domain, assays were capped at 30% U_3O_8 with a search restriction applied to composite grades over 20% and for the D1 high-grade domains, assays were capped at 20% U_3O_8 with no search restriction. For the A1-A4, B3-B7, C4-C5 and D2-D4 low-grade domains, assays were capped at 10% U_3O_8. For the C1 low-grade domain, assays were capped at 20% U_3O_8 with a search restriction applied to composite grades over 10%. For the B1, B2, E1 and E2 low-grade domains, assays were capped at 15% U_3O_8 with search restrictions applied to composite grades over 10% U_3O_8 for the B1 domain and 5.0% U_3O_8 for the E2 domain. For the D1 low-grade domain, assays were capped at 5% U_3O_8. Block grade was derived from the interpolated GxD value divided by the interpolated D value for each block. Block tonnage was based on volume times the interpolated D value.

The mineral resources estimated for the Gryphon deposit were classified according to the drill hole spacing and the apparent continuity of mineralization, as either indicated mineral resources (generally, drill hole spacing of 25 x 25 metres) or inferred mineral resources (generally, drill hole spacing of 50 x 50 metres). The block models were validated by comparison of domain wireframe volumes with block volumes, visual comparison of composite grades with block grades, comparison of block grades with composite grades used to interpolate grades, and comparison with estimation by a different method.

Phoenix and Gryphon Deposit Reserve Calculations

The mineral reserve for the Phoenix and Gryphon deposits are summarized in the following table. For Phoenix, the ISR process has been designed to a level appropriate for a PFS and mineral reserve estimation, with application of appropriate modifying factors including geological, mining, hydrogeological, metallurgical and cut-off grades. The Gryphon mine design has been completed to a level appropriate for a PFS and the mineral reserve estimation, with application of appropriate modifying factors including geological, mining recovery and dilution and cut-off grades. The

estimated mineral reserves are based on previously estimated indicated mineral resources, which are converted to probable reserves.

Mineral Reserve Estimate – Wheeler River Project – September 1, 2018

Deposit	Category	Tonnes	Grade (% U_3O_8)	Million lbs U_3O_8 (100% Basis)
Phoenix	Probable	141,000	19.1	59.7
Gryphon	Probable	1,257,000	1.8	49.7
Total		**1,398,000**	**3.5**	**109.4**

Notes:

1. CIM definitions (2014) were followed for classification of mineral reserves.
2. Mineral reserves for the Phoenix deposit are reported at the mineral resource cut-off grade of 0.8% U_3O_8 and are based on the block model generated for the May 28, 2014 mineral resource estimate. Mining recovery factor of 85% has been applied to the mineral resource above the cut-off grade.
3. Mineral reserves for the Gryphon deposit are estimated at a cut-off grade of 0.58% U_3O_8 using a long-term uranium price of US$40/lb, and a US$/CAD$ exchange rate of 0.80. The mineral reserves are based on the block model generated for the January 30, 2018 mineral resource estimate. The cut-off grade is based on an operating cost of $574/tonne, milling recovery of 97%, and a 7.25% fee for Saskatchewan royalties (basic royalty plus resource surcharge).
4. Mineral reserves are stated at a processing plant feed reference point and include diluting material and mining losses.
5. Numbers may not add due to rounding.

Mining Evaluation and Development Operations

Phoenix

ISR mining has become the industry's leading low-cost uranium production method globally – following on from initial use in the 1960s to extensive use at present in Kazakhstan (the world's largest and lowest cost producer of uranium), the United States, China, Russia, and Australia, amongst others. ISR mining is amenable to uranium deposits in certain sedimentary formations and is well known in the industry for comparatively minimal surface impact, high production flexibility, and low operating and capital costs. In 1998, ISR mining represented roughly 13% of global uranium production, increasing rapidly to the point where today it is estimated to account for over 50% of global uranium production. There has been continuous development and improvement of ISR mining techniques in past years, particularly in the two decades since the International Atomic Energy Agency ("**IAEA**") published the Manual of Acid In-Situ Leach Uranium Mining Technology (IAEA-TECDOC-1239).

ISR mining involves recovery of uranium by pumping a mining solution (also referred to as a "lixiviant") through an appropriately permeable orebody. The method eliminates the need to physically remove ore and waste from the subsurface – thus eliminating the related surface disturbance and tailings normally related to underground or open pit operations. The mining solution dissolves the uranium as it travels through the ore zone – effectively reversing the natural process that originally deposited the uranium. The mining solution is injected into the ore zone through a series of cased drill holes called injection wells and pumped back to surface via a similar series of recovery wells. The collective of the various injection and recovery wells is referred to as a wellfield. Once on surface, the uranium bearing solution is sent to a surface processing plant for the chemical separation of the uranium. Following the uranium removal, the mining solution is

reconditioned (often referred to as the barren mining solution) and returned back to the wellfield for further production.

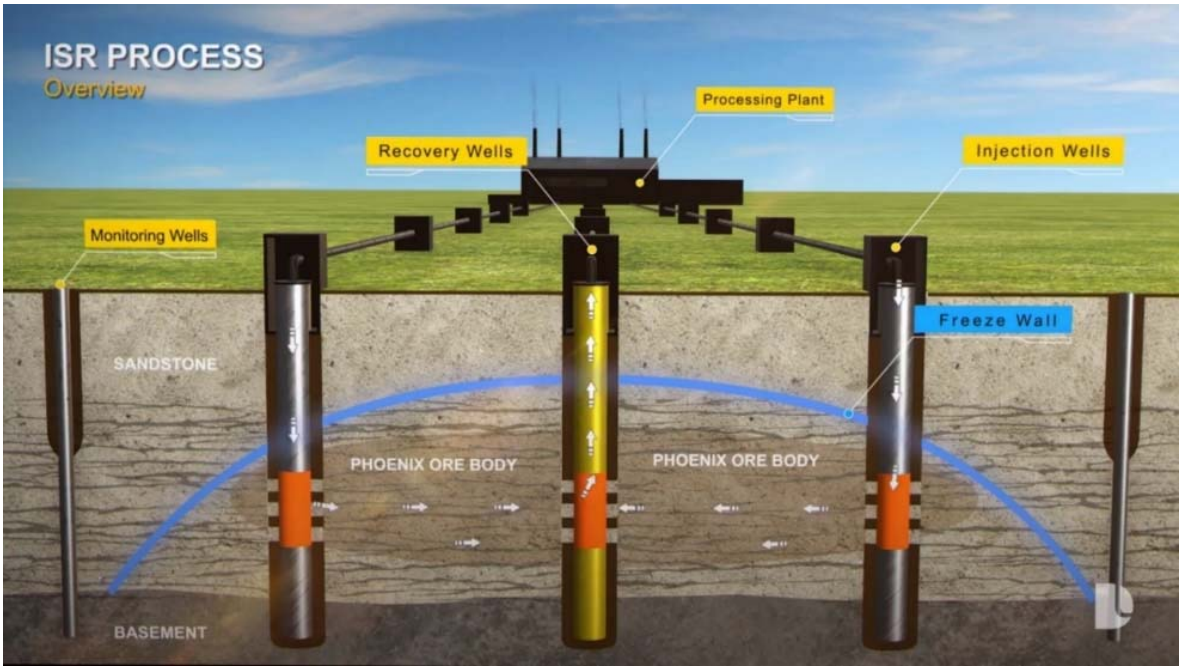
ISR wellfields are designed to effectively target delineated mineralization and achieve the operation's desired production level. At present, the Company expects the drilling of individual wells will be carried out utilizing either air rotary or mud rotary methods. The wellfield at Phoenix has been designed using a standard hexagonal pattern with 10m spacing between wells.

Containment of the solution is a requirement in ISR operations to ensure recovery of the uranium and to minimize regional groundwater infiltration into the ore zone and associated dilution of the mining solution. In typical ISR operations, this is normally achieved through natural clay or other impermeable geological layers.

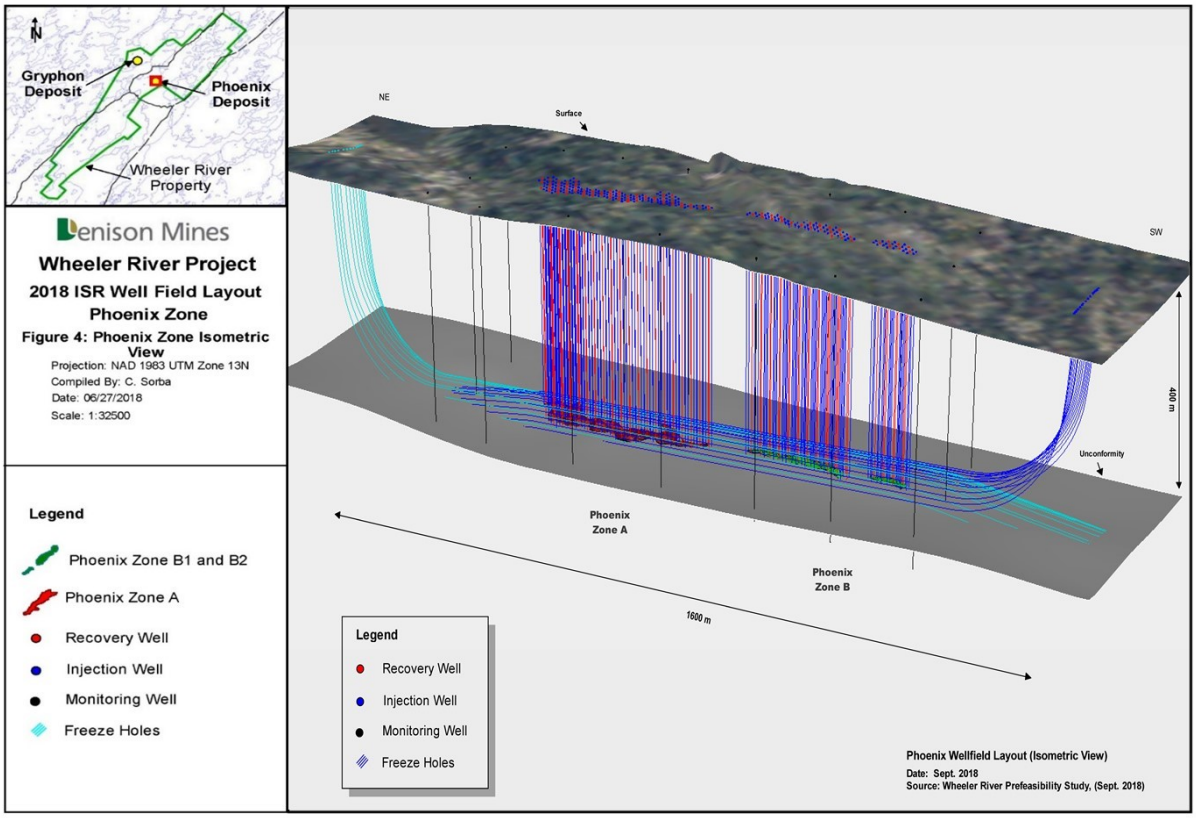
At Phoenix, the basement rock below the orebody achieves this purpose but the sandstone formation which hosts and surrounds the ore zone is not impermeable. As a result, in order to maintain containment, it is proposed that the entire orebody will be isolated by use of an artificial freeze wall that will cover all sides and above the orebody to create an impermeable dome to surround the deposit. This dome will be keyed into the impermeable basement rocks on all sides. The freeze wall would be established using directional drilling methods to drill and case a series of holes from surface that will run across the orebody. Circulation of a low temperature brine solution in the holes will remove heat from the ground, freezing the natural groundwater, and establishing an impermeable frozen wall encapsulating the deposit.

The following figures show the ISR operation planned for Phoenix (including the planned freeze dome and ISR wellfield) in a cross sectional view and an isometric view.

Proposed ISR Operation – Cross-Sectional View



Proposed ISR Operation – Isometric View



Benefits of ISR operations generally include:

- Established safety practices and procedures to ensure health and safety of workers.
- Minimal environmental impacts, including low noise, dust, and air emissions, low water consumption levels, minimal surface disturbance, and full rehabilitation of the area.
- Ability to scale production up or down to meet market demands.
- Insensitivity to ore grades (i.e. lixiviants will dissolve the uranium at any grades).
- Low initial capital costs and short timeframe to production.
- Low operating costs.

The Company's evaluation of the ISR mining method at Phoenix, as detailed in the PFS, has identified several significant environmental and permitting advantages, particularly when compared to the impacts associated with conventional uranium mining in Canada. The PFS's plan for the proposed ISR mining operation is expected to produce no tailings, generate very small volumes of waste rock, and has the potential for low volumes or possibly no treated water discharge to surface water bodies, as well as the potential to use the existing power grid to operate on a near zero carbon emissions basis.

The planned use of the freeze wall, to encapsulate the ore zone and contain the mining solution used in the ISR operation, has the potential to streamline the mining process, minimize interaction with the environment, and facilitate controlled reclamation of the site at decommissioning.

Taken together, ISR mining at Phoenix has the potential to be one of the most environmentally friendly uranium mining and processing operations in the world.

Gryphon

The extraction strategy for Gryphon, as described in the PFS, has not changed from the approach described in the Company's preliminary economic assessment released in March 2016. The planned mining method for Gryphon is conventional longhole stoping with backfill. Longhole stoping is a widely used conventional mining method applied in both the Canadian uranium industry as well as in the broader mining industry for the extraction of base metals, gold, and other commodities.

According to the planned approach, access to the Gryphon deposit will be established through two shafts. The primary shaft will provide for movement of personnel and supplies, ore/waste hoisting, and fresh air to the underground operations. The second shaft will be solely for exhaust air and secondary egress. Both shafts will be excavated through blind boring methods. Blind bored shafts have been selected for vertical access in favour of typical full-face shaft sinking with cover grouting or freeze curtain protection. Blind bored shafts offer more competitive costs and construction schedules, and a reduced risk profile while sinking through saturated ground conditions. A composite steel/concrete liner will be installed over the full length of the shaft and grouted into basement rock.

In the underground operation, initial underground development will focus on establishment of permanent infrastructure and flow through ventilation between the main shaft and the exhaust shaft. Most of the permanent infrastructure will be located on the 500 m level, the level of the main shaft station. Following this, development priorities will be to establish access to the E series lense (E Zone), which provides early opportunity for ore production and waste rock storage (in mined out stopes). As mining is initiated in the E Zone, ramp development will continue to provide access to the remainder of the ore zones.

The PFS also assumes that the ore will be hoisted to surface and transported to the McClean Lake mill for processing. A two-year ramp-up to full production is planned, with the full production rate set at 9 million pounds U_3O_8 per year. Processing at the McClean Lake mill will require the negotiation and execution of a toll milling agreement, which is not currently established, and will also require regulatory approvals, which have not been obtained.

After careful consideration of the risks and opportunities associated with concurrent permitting and advancement of project engineering activities, the Company decided to submit a Project Description and initiate the Environmental Assessment process in early 2019 to support the advancement of the Phoenix ISR operation, and to bring the Gryphon operation forward at a later date (still in line with the PFS plan of Gryphon first production by 2030).

Processing and Recovery

Phoenix

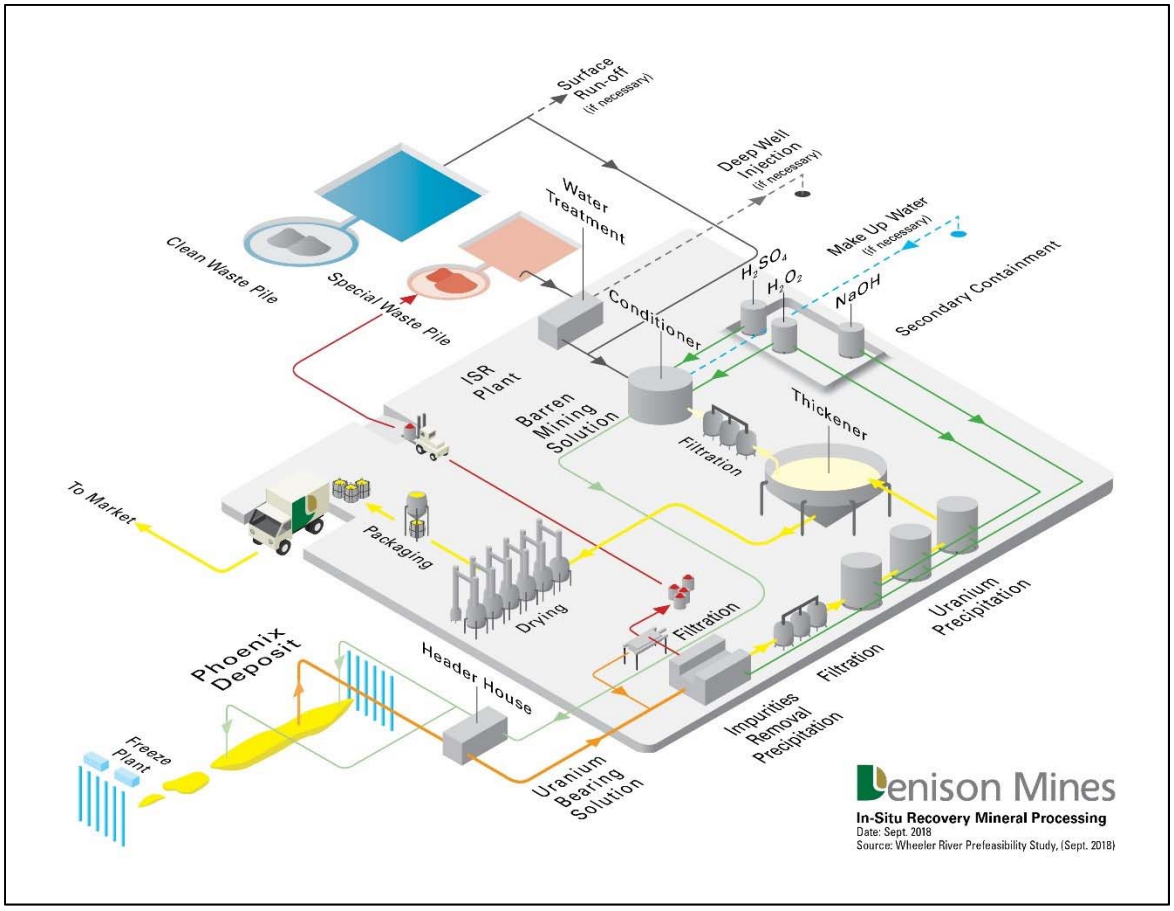
The uranium bearing solution from the Phoenix wellfield will be directed to a self-contained processing facility located adjacent to the wellfield. The processing plant is expected to house most of the process equipment in a 46,500 square foot pre-fabricated metal building.

The proposed processing plant for the Phoenix ISR process will have four major circuits: impurities removal, yellowcake precipitation, dewatering/drying, and packaging. The processing

plant will also have filtration systems, bulk chemical storage, process solution storage tanks, and a control room.

As described above, Denison is currently conducting additional leaching tests at the Saskatchewan Research Council laboratories in Saskatoon. The future results from these tests are expected to form the basis for the Processing Plant designs planned to be incorporated into a future FS. Testing is expected to include all unit operations currently included in the flow-sheet from the PFS, as summarized in the figure below.

Phoenix ISR Processing Plant Design



Broadly, the ISR processing plant design at Phoenix involves the beneficiation of the uranium bearing solution recovered from the wellfields and pumped to the processing plant, as described below:

- Impurities removal – Uranium liberated from underground in the Phoenix deposit will be routed to an iron/radium removal circuit, where the pH of the solution will be adjusted to allow the precipitation of iron hydroxide and other metals. Once the iron hydroxide has precipitated out of the solution, the solution will be routed to the primary yellowcake precipitation circuit.
- Yellowcake precipitation – The solution will be pH adjusted to optimal levels for uranium precipitation with sodium hydroxide, then yellowcake product will be precipitated with hydrogen peroxide, using sodium hydroxide (or other suitable high pH solution) to maintain

optimal pH. Following uranium precipitation into yellowcake slurry, the barren mining solution will be reconstituted to the proper acid level prior to being pumped back to the wellfield for reinjection.

- Yellowcake dewatering/drying – The precipitated yellowcake slurry will be transferred to a filter press, where excess liquid will be removed. Following a fresh water wash step that will further clean the yellowcake product, the resulting yellowcake will be transferred to the dryer, which will further reduce the moisture content, yielding the final dried, free-flowing product.
- Packaging – Refined yellowcake will be packaged in 55-gallon drums.

Taken together, the processing plant is expected to achieve 98.5% recovery of uranium from the uranium bearing solution. The simplified processing plant design, together with the use of the freeze cap, creates a closed loop system with the prospect of achieving zero discharge of effluent to the environment. The different types of chemical reagents will be stored, used, and managed to ensure worker and environmental safety, in accordance with standards developed by regulatory agencies and vendors.

Gryphon

The PFS plan assumes that Gryphon ore will be transported to the McClean Lake mill for processing.

The results of the metallurgical test work program completed for the PFS indicate that the Gryphon deposit is amenable to recovery utilizing the existing McClean Lake mill flowsheet. Moreover, the deposit is amenable to processing under similar conditions to those currently used in the McClean Lake mill. The mill is currently processing material from the Cigar Lake mine; however, it has additional licenced processing capacity to a total annual production of up to 24 million pounds U_3O_8. Overall process recovery based on metallurgical test work conducted to date has been estimated at 98.4% for Gryphon ore.

Should Denison proceed with processing the Gryphon deposit at the McClean Lake mill, such processing will require certain modifications to the McClean Lake mill. These modifications include expansion of the leaching circuit, the addition of a filtration system to complement the Counter Current Decantation (CCD) circuit capacity, the installation of an additional tailings thickener, and expansion of the acid plant. Various other upgrades will also be required throughout the mill to permit production at the full 24 million pounds per year U_3O_8 licenced capacity, as described in greater detail in the PFS.

Infrastructure, Permitting and Compliance Activities

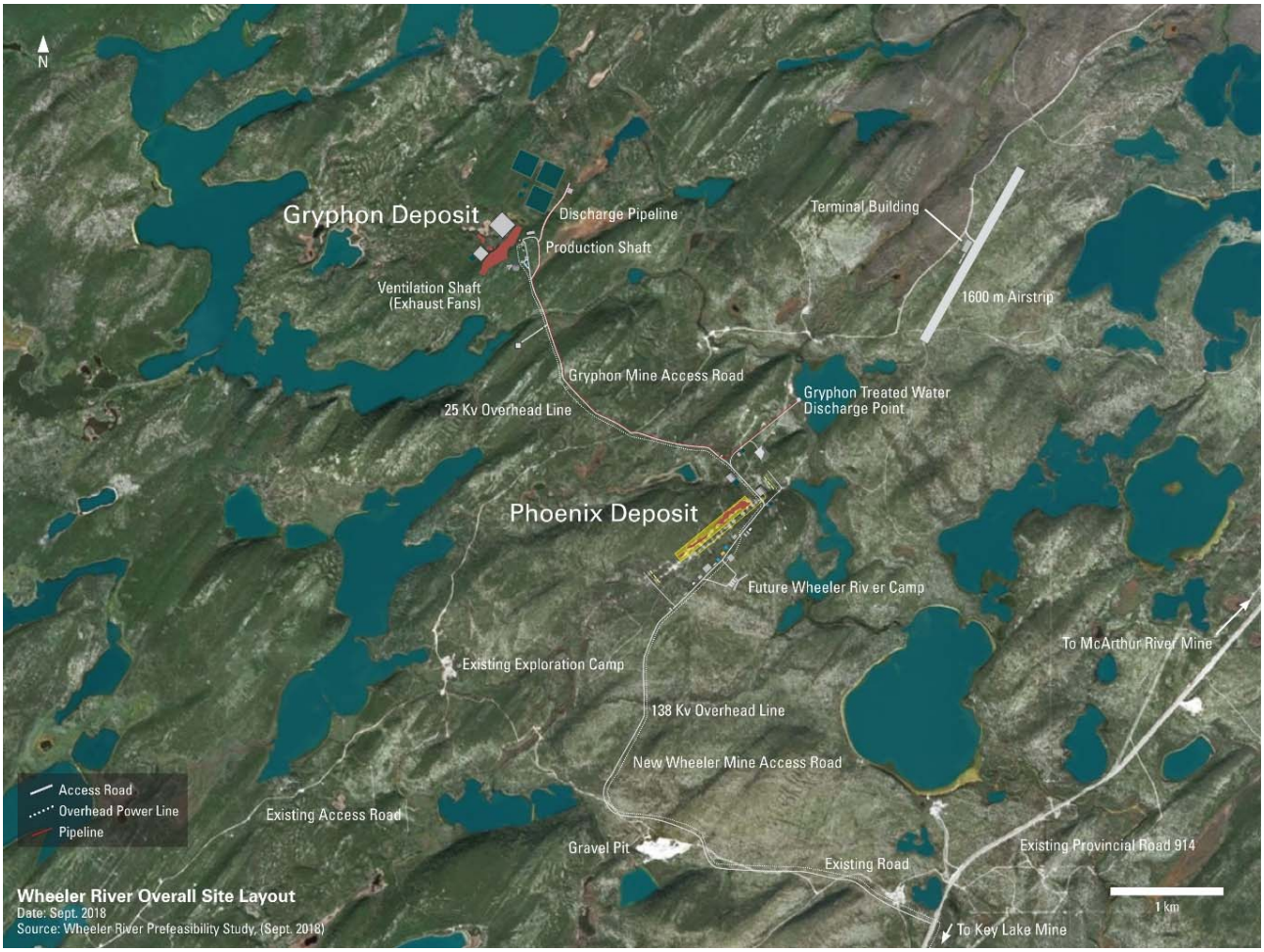
As a remote northern greenfield site, the Wheeler River project would require substantial infrastructure to support operations. The site is located approximately 5 kilometres from a provincial highway and powerline. Tie-ins from that infrastructure into site would be required.

Additional surface infrastructure required to be located at the sites would include:

- 5 km access road from provincial highway 914 to site;
- 5 km power distribution line from provincial power grid into site; and
- 1,600 m airstrip.

In accordance with the plan, production from the Gryphon site will be trucked to the existing McClean Lake mill to the northeast, via existing Provincial Highway 914, including 51 km of new road required between the McArthur River mine and the Cigar Lake mine. The large scale infrastructure described above and the existing regional infrastructure in the proximity to the Wheeler River project is illustrated in the figure below.

Wheeler River Regional Infrastructure

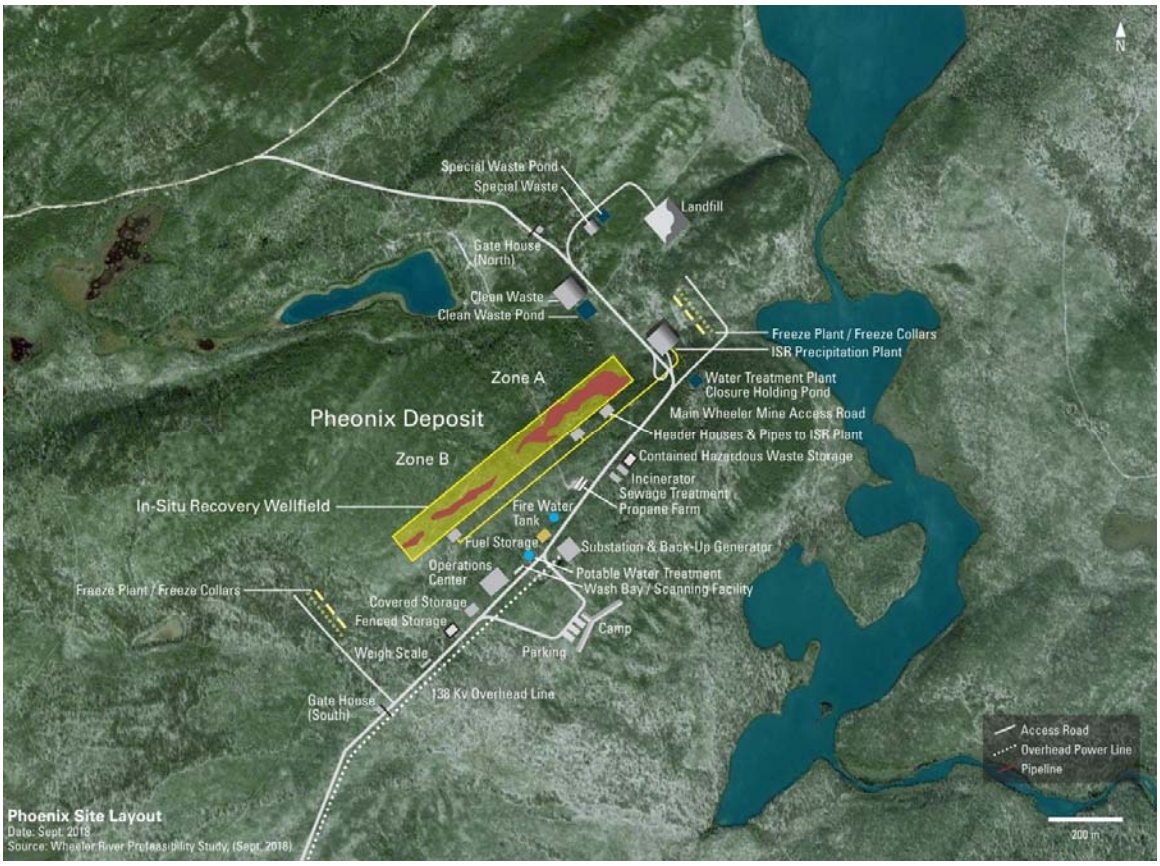


The figure below reflects the conceptual plan for the Phoenix operation's surface facilities, showing the relative scale and nominal footprint of site infrastructure, including (all estimated sizes are approximate):

- Area allocation over the defined deposit for an ISR wellfield (90 m x 800 m);
- ISR processing plant (90 m x 48 m);
- Operations centre (61 m x 41 m), including men's and women's dry facilities, 3-bay maintenance shop, welding bay, warehouse, emergency response vehicle storage, mine rescue and emergency response office, laboratory, nurse's station, training room, offices (administration, maintenance, and supply chain), meeting rooms, lunch room, and radiation monitoring room;
- 150-person camp with kitchen and laundry facilities;
- Personal-vehicle parking;
- Main electrical substation (50 m x 50 m);

- North and south gatehouses;
- Outdoor and covered storage (15 m x 30 m);
- Wash bay and scanning facility;
- 30 m long, 80 tonne weigh scale;
- Potable water treatment facility;
- Fuel storage and dispensing facility (gas and diesel);
- Fire water tank and pumphouse;
- Two bullet propane tank farm;
- Sewage treatment facility;
- Incinerator;
- Backfill plant with storage facility;
- Outdoor fenced hazardous storage area (30 m x 30 m);
- Fenced landfill area (90 m x 90 m);
- Water discharge station;
- Special waste storage (46 m x 46 m, 3,200 cubic meter capacity); and
- Clean waste rock storage (60 m x 60 m, 7,100 cubic meter capacity).

Phoenix Site Conceptual Layout



Taken together, the Phoenix operation has the potential to be one of the most environmentally friendly uranium mining projects in the world. Per the plan in the PFS:

- The planned ISR approach produces no tailings.

- The closed loop system of the processing plant has the potential to eliminate any major sources of treated water to be discharged to the environment. Due to evaporation and moisture content of the yellowcake product, the processing plant may require small volumes of make-up water.
- Minimal volumes of surface run-off will be captured, treated, and used as make-up water in the processing plant, re-injected underground or processed in the water treatment plant.
- Low to near zero carbon emissions due to the lack of heavy equipment and provision of power from the provincial power grid.
- Small volumes of waste products from the iron precipitation circuits will be temporarily stored on surface and disposed of in the underground stopes at Gryphon or other suitable long term storage facility.

At Gryphon, the most significant environmental concern associated with the project will be the management of treated mine effluent. Investigations into environmentally acceptable discharge locations has identified suitable sites nearby that will minimize any impacts from treated effluent discharge. Other waste products, such as potentially acid generating waste rock or low-grade waste products, will be used underground as backfill on a priority basis where possible. Otherwise, such materials will be stored in approved facilities designed for safe closure and decommissioning. Future studies will evaluate the potential for 100% underground storage to eliminate the need for surface facilities.

Denison believes all potential environmental impacts associated with the planned Phoenix or Gryphon operations can be successfully mitigated through the implementation of industry best practices.

The project will require completion of Federal and Provincial environmental impact assessments. In June 2019, the CNSC and the Saskatchewan Ministry of Environment accepted the Project Description submitted by Denison for the ISR uranium mine and processing plant proposed for Phoenix at the Wheeler River Project. This acceptance initiated the EA process of assessments for construction, operation and closure of the Phoenix deposit at Wheeler River for Phoenix in accordance with the requirements of both the *Canadian Environmental Assessment Act, 2012* and the *Saskatchewan Environmental Assessment Act*. It is estimated the assessments will require approximately 36 to 48 months to complete following these submissions. In late December 2019, Denison received a Record of Decision from the CNSC, on the scope of the factors to be taken into account for the Wheeler River EA, which indicates that the EA will follow the CNSC's generic guidelines.

See "Government Regulation – Environmental Assessments" for more information.

Denison recognizes the importance of early engagement and has been developing relationships with key interested parties since 2016. Amongst Denison's guiding principles is the outmost respect for Indigenous communities, Indigenous Rights, and traditional knowledge. Denison wishes to share the land and to work in partnership to return meaningful benefits from the Wheeler River to potentially impacted Rights holders, communities, and/or groups. Denison understands the importance of protecting the area in which it is working – including the land, the water, the animals, the air, and the history. Denison welcomes input from all interested parties through the regulatory engagement and consultation process and interested parties are invited to contact Denison directly to express any comments (positive or negative) or recommendations regarding its activities – so that the input can be incorporated into its project plans, designs, and decisions.

To support its engagement and consultation activities, Denison has developed practices to (1) ensure that employment opportunities are established for residents from the communities of interest; (2) procure goods and services from suppliers from the communities of interest and/or Indigenous-owned suppliers, to support continued exploration and evaluation activities; (3) support important community-led activities related to wellness and/or the preservation of traditional knowledge; and (4) solicit input through engagement and consultation activities into aspects of project designs (for example, selection of mining methods, access road routing, and selection of preferred treated water discharge locations).

Capital and Operating Costs

Capital and operating cost estimates were developed to support the PFS of the Gryphon and Phoenix deposits. The estimates address the initial capital, sustaining capital and operating costs required to engineer, procure, construct, commission, start-up and operate the mines, ISR precipitation plant and related infrastructure at the Wheeler River site and upgrades at the McClean Lake mill. Estimates were completed to 'Association for the Advancement of Cost Engineering' class four level with an accuracy of -15% to -30% on the low side and +20% to +50% on the high side.

The Wheeler River project total capital cost is estimated at approximately $1.13 billion, comprised of $322.5 million of initial pre-production capital for the Phoenix operation and $623.1 million of initial pre-production capital for the Gryphon operation as outlined in the following table.

Capital Cost Summary

Wheeler River Capital Cost (1,000's)			
Area	**Initial**	**Sustaining**	**Total**
Phoenix	$ 322,539	$ 103,411	$ 425,950
Gryphon	$ 623,120	$ 82,743	$ 705,863
Sub Total	**$ 945,659**	**$ 186,154**	**$ 1,131,813**

The capital costs for the ISR mining of the Phoenix deposit are categorized as follows:

Phoenix Capital Cost Summary

Phoenix Capital Cost Details (1,000's)			
Direct Capital Costs	**Initial**	**Sustaining**	**Total**
Wellfield	$ 63,674	$ 35,402	$ 99,076
ISR Precipitation Plant	$ 50,935	$ 4,606	$ 55,541
Water Treatment Plant	$ 1,268	$ 18,676	$ 19,944
Surface Facilities	$ 22,325	$ 49	$ 22,374
Utilities	$ 6,538	$ 803	$ 7,341
Electrical	$ 18,834	$ -	$ 18,834
Civil & Earthworks	$ 44,309	$ 1,331	$ 45,640
Offsite Infrastructure	$ 7,950	$ -	$ 7,950
Decommissioning	$ -	$ 27,454	$ 27,454
Total Direct Costs	**$ 215,834**	**$ 88,321**	**$ 304,155**
Indirect Costs	$ 28,288	$ 5,669	$ 33,957
Other (Owner's) Costs	$ 14,227	$ -	$ 14,227
Contingency Costs	$ 64,190	$ 9,421	$ 73,611
Total Costs	**$ 322,539**	**$ 103,411**	**$ 425,950**

The capital costs for the underground mining of the Gryphon deposit are shown in the following table.

Gryphon Capital Cost Summary

Gryphon Capital Cost Details (1,000's)			
Direct Capital Costs	**Initial**	**Sustaining**	**Total**
Shafts	$ 131,522	$ -	$ 131,522
Surface Facilities	$ 46,932	$ 6,074	$ 53,006
Underground	$ 49,518	$ 68,842	$ 118,360
Utilities	$ 3,946	$ 263	$ 4,209
Electrical	$ 3,613	$ -	$ 3,613
Civil & Earthworks	$ 11,791	$ 483	$ 12,274
McClean Mill Upgrades	$ 49,920	$ -	$ 49,920
Offsite Infrastructure	$ 32,392	$ -	$ 32,392
Decommissioning	$ -	$ 1,575	$ 1,575
Total Direct Costs	**$ 329,634**	**$ 77,237**	**$ 406,871**
Indirect Costs	$ 142,015	$ 5,112	$ 147,127
Other (Owner's) Costs	$ 28,143	$ -	$ 28,143
Contingency Costs	$ 123,328	$ 394	$ 123,722
Total Costs	**$ 623,120**	**$ 82,743**	**$ 705,863**

Operating costs are estimated for the 14-year mine production period from July 1, 2024 through to March 31, 2037. Phoenix mine production is scheduled from July 1, 2024 to June 30, 2034 and Gryphon mine production is scheduled from September 1, 2030 to March 31, 2037. The table below presents a summary of the Wheeler River prefeasibility level operating cost estimates.

Wheeler River Operating Cost Summary

Cost Area	Phoenix		Gryphon		Total Cost
	$000's	$/lb U_3O_8	$000's	$/lb U_3O_8	$000's
Mining	$ 44,020	$ 0.75	$ 266,202	$ 5.46	$ 310,222
Milling	$ 115,577	$ 1.97	$ 412,621	$ 8.45	$ 528,198
Transport to Convertor	$ 12,341	$ 0.21	$ 10,252	$ 0.21	$ 22,593
Site Support / Administration	$ 82,264	$ 1.40	$ 53,346	$ 1.09	$ 135,610
Total	**$ 254,202**	**$ 4.33**	**$ 742,421**	**$ 15.21**	**$ 996,623**
Total US$		**$ 3.33**		**$ 11.70**	
U_30_8 Sales - lbs in 000's	**58,767**		**48,817**		

The project economics have been analyzed on a pre-tax basis (100% basis) and a Denison specific post-tax basis (90% basis, based on Denison's current ownership interest and reflected as a pro-forma analysist in the PFS). Inputs into both pre-tax and post-tax models include:

- Discount rate of 8%.
- Estimated metallurgical process uranium recoveries of 98.5% and 98.2% for Phoenix and Gryphon mill feeds, respectively.
- Project capital and operating cost assumptions, as further described in the PFS.
- Project schedule assumptions from 2019 to 2043, as further described in the PFS.
- Mine production assumptions, as further described in the PFS.

- Uranium pricing scenarios, as follows:
    - Base case: (a) Phoenix – based on UxC's Q3-2018 Uranium Market Report Composite Midpoint spot price projection, in constant (uninflated) 2018 dollars, ranging from US$29.48 to US$45.14 per pound U_3O_8 during the Phoenix mine production period; and (b) Gryphon – based on a fixed price of US$50.00 per pound U_3O_8 during the Gryphon mine production period. US$ amounts translated to CAD using an exchange rate of 1.30 CAD/US$.
    - High case: a fixed price of US$65.00 per pound U_3O_8 for both the Phoenix and Gryphon production.
- Saskatchewan revenue-based royalties and surcharges applicable to uranium revenue, as follows: a) a basic royalty of 5.0% of uranium revenue; b) a resource credit of 0.75% of uranium revenue (which partially offsets the basic royalty); and c) a resource surcharge of 3.0% of the value of uranium revenue. For the purposes of these calculations, revenue has been computed as gross uranium revenue less transportation costs to the convertor.
- No inflation or escalation of revenue or costs have been incorporated.

The Wheeler River project pre-tax indicative economic results are illustrated below.

Pre-tax Economic Results (100% basis)

Pre-Tax Results	NPV 8%	IRR	Payback
Base Case	$1,308 million	38.7%	~ 24 Months
High Case	$2,587 million	67.4%	~ 11 Months

(1) NPV and IRR are calculated to the start of pre-production activities for the Phoenix operation in 2021.
(2) Payback period is stated as number of months to pay back from start of uranium production.

A post-tax Denison-specific economic assessment includes similar inputs as the pre-tax assessment with the following modifications:

- Denison's share of project development costs is included in the project's capital costs along with their impact on Denison's estimated tax pools.
- The impact of the Saskatchewan Profit Royalty as estimated for Denison is included.
- Denison's expected provincial and federal income taxes payable are included.
- Denison's recovery of toll milling fees paid to the MLJV (22.5% owned by Denison) by the WRJV for the toll milling of Gryphon ores are incorporated.

The Wheeler River project post-tax Denison-specific (90% basis) indicative economic results are further detailed in the PFS, and summarized as follows:

Post-tax Economic Results to Denison (90% basis)

Post-Tax Results	NPV 8%	IRR	Payback
Base Case	$755.9 million	32.7%	~26 months
High Case	$1,483.8 million	55.7%	~12 months

(1) NPV and IRR are calculated to the start of pre-production activities for the Phoenix operation in 2021;
(2) Payback period is stated as number of months to pay back from start of uranium production

Waterbury Lake

The Waterbury Lake property is owned by Denison (66.57%) and Korea Waterbury Uranium Limited Partnership ("**KWULP**") (33.41%), as limited partners, and Waterbury Lake Uranium Corporation ("**WLUC**") (0.02%), as general partner, in the Waterbury Lake Uranium Limited Partnership ("**WLULP**"), pursuant to the Waterbury Lake Uranium Limited Partnership Agreement. Denison holds a 60% interest in WLUC and is the operator of the project.

This project description is based on the project's technical report entitled "Technical Report with an Updated Mineral Resource Estimate for the Waterbury Lake Property, Northern Saskatchewan" dated December 21, 2018 (the "**Waterbury Report**") by Serdar Donmez, P.Geo., E.I.T., Dale Verran, Pr.Sci.Nat., P.Geo., and Paul Burry, P.Geo. of Denison, Oy Leuangthong, P.Eng, and Cliff Revering, P.Eng, of SRK, Allan Armitage, P.Geo, SGS Geostat and Alan Sexton, P.Geo, GeoVector Management Inc. ("**GeoVector**"), a copy of which is available on the Company's website.

The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the technical report. We recommend you read the technical report in its entirety to fully understand the project.

Property Description, Location and Access

The Waterbury Lake property is located within the eastern part of the Athabasca Basin in northern Saskatchewan. The project is located approximately 750 kilometres by air north of Saskatoon and about 420 kilometres by road north of the town of La Ronge. The property can be accessed year round by provincial highway to Points North Landing, which is a privately owned service centre with an airstrip and accommodations available. Points North Landing is located near the eastern edge of the property, approximately 12 kilometres away from current operations. The property's core camp is accessible year round via 4x4 trail or ice road during winter across McMahon Lake. The nearest community is Wollaston Lake, 57 kilometres directly south east of Points North Landing.

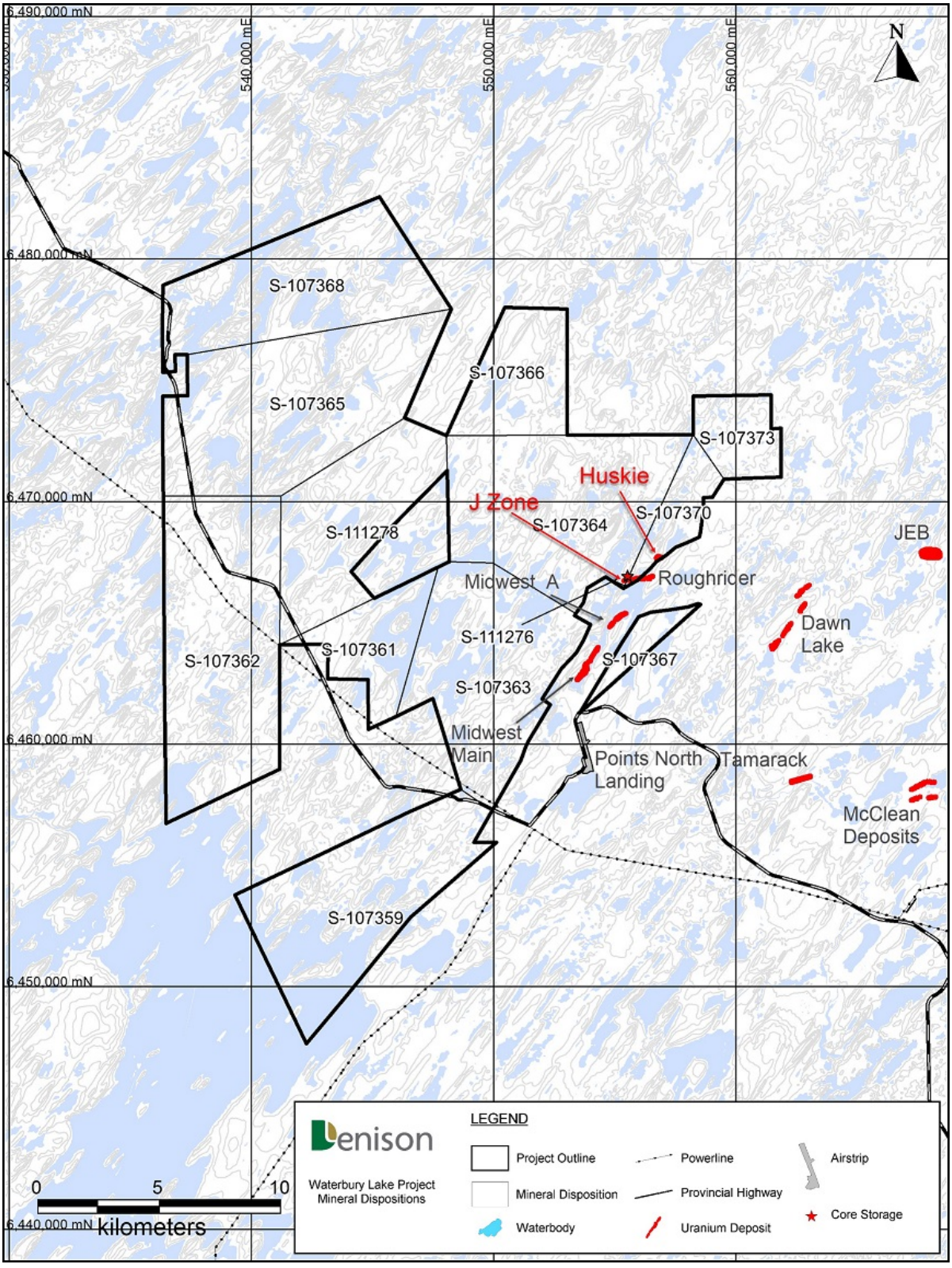
The property is comprised of 12 contiguous claims and one separate claim covering 40,256 hectares with an annual assessment requirement of $1,006,675 to maintain title to the mineral claims. Based on previous work submitted and approved by the province of Saskatchewan, there is sufficient assessment credits available to keep title on the property secure until at least 2039, with the separate claim secure until 2032.

The J Zone and Huskie Zone deposits are located within the property near its eastern edge. Several uranium deposits are located nearby including the Roughrider, McClean Lake, Midwest, and Midwest A deposits.

Any uranium produced from the Waterbury Lake property is subject to uranium mining royalties in Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See "Government Regulation - Canadian Royalties." There are no other back-in rights or royalties with non-owners applicable to this property. Denison has a 2% net smelter return royalty on the portion of the project that it does not own.

There are no known environmental liabilities associated with the Waterbury Lake property, and there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the property. All the necessary permits for surface exploration on the property are in place and current.

Location of the J Zone and Huskie Zone on the Waterbury Lake project



History

Uranium exploration activities have been conducted over various portions of the Waterbury Lake mineral claims over the past 40 years. The current Waterbury Lake mineral claims were originally staked by Strathmore Minerals Corp. in 2004. Strathmore subsequently spun out all of its Canadian assets to Fission in 2007. On January 30, 2008, KWULP and Fission entered into an earn-in agreement for the Waterbury Lake property, pursuant to which Fission granted KWULP the exclusive rights to earn up to a 50% interest in the Waterbury Lake property by funding $14,000,000 of expenditures on or before January 30, 2011. Additionally, Fission retained an overriding royalty interest in the property of 2% of net smelter returns. On April 29, 2010, KWULP had fully funded its $14 million of expenditures and consequently earned a 50% interest in the property. Fission and KWULP subsequently formed the WLULP in December 2010 with each party owning an equal interest. In April 2011, Fission exercised a back-in option right and increased its interest in the WLULP to 60%.

Effective April 26, 2013, Denison acquired Fission and all of Fission's rights and entitlements to the Waterbury Lake property, including the 2% net smelter returns royalty. Denison became manager of WLULP and operator of Waterbury Lake. KWULP has not funded spending programs of the WLULP since January 2014 and, as a result, Denison has increased its interest in the WLULP (now 66.57%) while KWULP has diluted.

The Waterbury Lake uranium project currently consists of two deposits: the J Zone deposit and the Huskie deposit.

The J Zone uranium deposit was discovered during the winter 2010 drill program. The second drill hole of the campaign, WAT10-063A, was an angled hole drilled from a peninsula extending into McMahon Lake. It intersected 10.5 metres of uranium mineralization grading 1.91% U_3O_8, including 1.0 metre grading 13.87% U_3O_8 as well as an additional four meters grading at 0.16% U_3O_8. Subsequent drilling led Fission to focus in on a significant mineralized trend immediately adjacent to the southeastern boundary of disposition S-107370. The maiden mineral resource estimate for the J-Zone was issued by Fission in 2011.

Denison first discovered mineralization at the Huskie zone in summer 2017 with the intersection 9.10% U_3O_8 over 3.7 metres, including 16.78% U_3O_8 over 2 metres, from 306.5 to 310.2 metres depth in drill hole WAT17-466A. Further drilling in 2017 and 2018 resulted in a maiden mineral resource estimate in December 2018.

Geological Setting, Mineralization and Deposit Types

The Waterbury Lake property is located near the southeastern margin of the Athabasca Basin in the southwest part of the Churchill Structural Province of the Canadian Shield. The Athabasca Basin is a broad, closed, and elliptically shaped, cratonic basin with an area of 425 km east-west by 225 km north-south. The bedrock geology of the area consists of Archean and Paleoproterozoic gneisses unconformably overlain by flat-lying, unmetamorphosed sandstones and conglomerates of the mid-Proterozoic Athabasca Group.

The Waterbury Lake property is located near the transition zone between two prominent litho-structural domains within the Precambrian basement, the Mudjatik Domain to the west and the Wollaston Domain to the east. The Mudjatik Domain is characterized by elliptical domes of Archean granitoid orthogenesis separated by keels of metavolcanic and metasedimentary rocks, whereas the Wollaston Domain is characterized by tight to isoclinal, northeasterly trending, doubly plunging folds developed in Paleoproterozoic metasedimentary rocks of the Wollaston

Supergroup, which overlie Archean granitoid orthogenesis identical to those of the Mudjatik Domain. The area is cut by a major northeast-striking fault system of Hudsonian Age. The faults occur predominantly in the basement rocks but often extend up into the Athabasca Group due to several periods of post-depositional movement.

The basement beneath the Waterbury Lake project is comprised of approximately northeast-trending corridors of metasediments wrapping around orthogneissic domes and locally in the Discovery Bay trend an east-west trending corridor of metasediments bounded to the north and south by thick zones of orthogneiss that, based on interpretation of aeromagnetic images, may represent two large dome structures. As discussed in the Waterbury Report, the metasediments and the orthogneiss domes are interpreted to be Paleoproterozoic and Archean in age, respectively.

The J Zone is hosted within an east-west trending faulted package of variably graphitic and pyritic metasediments bounded by orthogneiss to both the north and south. The pelitic metasedimentary assemblage, which ranges in thickness from 90 to 120 metres and is moderately steep dipping to the north includes, from north to south, a roughly 50 metre thick pelitic gneiss underlain by 20 metre thick graphitic pelitic gneiss, underlain by a 10 to 15 metre thick quartz-feldspar wedge underlain by 20 metre thick graphitic pelitic gneiss, underlain by a 15 to 25 metre thick pelitic gneiss, then back into a footwall orthogneiss. There are discontinuous offsets at the unconformity that range from a few metres to as much as ten metres.

The J Zone deposit can be classified as an unconformity-related deposit of the unconformity-hosted or egress-style variety. It is currently defined by 268 drill holes intersecting uranium mineralization over a combined east-west strike length of up to 700 metres and a maximum north-south lateral width of 70 metres. The deposit trends roughly east-west (080°) in line with the metasedimentary corridor and cataclastic graphitic fault zone. A 45 metre east-west intermittently mineralized zone occurs in the target area formerly known as Highland roughly separating the J Zone into two segments referred to as the eastern and western lenses which are defined over east-west strike lengths of 260 and 318 metres, respectively. A thin zone of unconformity uranium mineralization occurs to the north of intermittently mineralized zone which is interpreted to represent a mineralized block that has been displaced northwards by faulting and is referred to as the mid lens.

Mineralization thickness varies widely throughout the J Zone and can range from tens of centimetres to over 19.5 metres in vertical thickness. In cross section, J Zone mineralization is roughly trough shaped with a relatively thick central zone that corresponds with the interpreted location of the cataclasite and rapidly tapers out to the north and south. Locally, a particularly high-grade (upwards of 40% U_3O_8) but often thin lens of mineralization is present along the southern boundary of the metasedimentary corridor, as seen in holes WAT10-066, WAT10-071, WAT10-091, and WAT10-103. Ten meter step out drill holes to the south from these high-grade holes have failed to intersect any mineralization, demonstrating the extremely discreet nature of mineralization.

Uranium mineralization is generally found within several metres of the unconformity at depth ranges of 195 to 230m below surface at the J Zone. Mineralization occurs in three distinct settings: (1) entirely hosted within the Athabasca sediments, (2) entirely within the metasedimentary gneisses or (3) straddling the boundary between them. A semi-continuous, thin zone of uranium mineralization has been intersected in occasional southern J Zone drill holes well below the main mineralized zone, separated by several meters of barren metasedimentary gneiss. This

mineralized zone is informally termed the South-Side Lens and can host grades up to 3.70% U_3O_8, as seen in drill hole WAT11-142.

The Huskie deposit is entirely hosted within competent basement rocks below the sub-Athabasca unconformity primarily within a faulted, graphite-bearing pelitic gneiss ("**graphitic gneiss**") which forms part of an east-west striking, northerly dipping package of metasedimentary rocks flanked to the north and south by granitic gneisses. The Athabasca Group sandstones that unconformably overlie the basement rocks are approximately 200 metres thick. The deposit can be classified as an unconformity-related deposit of the basement-hosted or ingress-style variety and it is located approximately 1.5 kilometres to the north-east of the J-Zone deposit.

The deposit comprises three stacked, parallel lenses (Huskie 1, Huskie 2 and Huskie 3), which are conformable to the dominant foliation and fault planes within the east-west striking graphitic gneiss unit. The drilling to date suggests the grade, thickness, and number of lenses present is controlled by the presence of northeast striking faults which cross-cut the graphitic gneiss unit. The northeast striking faults identified at the Huskie deposit are interpreted to be part of the regional Midwest structure. The deposit occurs over a strike length of approximately 210 metres, dip length of approximately 215 metres and has an overall true thickness of approximately 30 metres (individual lenses vary in true thickness of between 1 metre and 7 metres). The deposit occurs at vertical depths ranging between 240 and 445 metres below surface and 40 to 245 metres below the sub-Athabasca unconformity. The high-grade mineralization within the lenses is comprised of massive to semi-massive uraninite (pitchblende) and subordinate bright yellow secondary uranium minerals occurring along fault or fracture planes, or as replacement along foliation planes. Disseminations of lower grade mineralization occur within highly altered rocks proximal to fault planes. The mineralization is intimately associated with hematite, which both occur central to a broad and pervasive alteration envelope of white clays, chlorite and silicification.

Exploration

With the exception of drilling, and related work, exploration on the Waterbury Lake property has mostly been in the form of geophysical surveys. Airborne magnetic surveys have been flown property wide and have been used to identify significant basement structures and to help map basement rock types. Airborne and ground based EM surveys have also been carried out across the property in order to define conductive, likely graphitic basement structures that may be associated with uranium mineralization. Additionally, ground based induced polarization (DC-IP) and gravity surveys have aimed to identify zones of low resistivity and negative gravity anomalies resulting from quartz dissolution and clay alteration. Since Denison acquired the property in April 2013 and up to the end of 2017, four resistivity surveys (298 line kilometres) have been completed, comprised of surveys over the Discovery Bay (J Zone), Oban and Hamilton Lake areas. These surveys augment existing magnetic, electromagnetic, resistivity and gravity surveys for the property. The resistivity surveying conducted by Denison have led to the definition of numerous drill targets, a large portion of which have been subsequently tested.

A 2D DCIP resistivity survey comprising 28.8 kilometres (16 lines) was completed during October 2018. The survey was designed to map the possible extension of the Midwest structure on to the Waterbury Lake property and to define possible drill targets for future testing. This area is referred to as the Midwest Extension area.

No significant geological mapping has been conducted on the Waterbury Lake property to date as the property is predominantly covered by a thick layer of Quaternary sediments resulting in poor outcrop exposure; however, several reconnaissance scale surface geochemical surveys have been undertaken on the Waterbury Lake property.

Drilling results from the 2019 exploration drilling program (described below) have indicated that follow-up exploration work is warranted on the GB Northeast target area. Reconnaissance drill hole (WAT19-493), which tested an airborne electromagnetic target, intersected highly favorable geology and geochemistry. A ground electromagnetic survey is planned for the GB Northeast target area in 2020, designed to map favourable conductive lithologies (graphite-bearing basement rocks) and identify targets for future drill testing.

Drilling

Target areas drill tested by Denison since April 2013, when Denison acquired the property, until the end of 2019, have included the Discovery Bay Extension (12 holes, 3,963 metres), Oban (23 holes, 8,113 metres), Hamilton Lake (12 holes, 5,880 metres), Arran (3 holes, 888 metres), Huskie (33 holes, 15,143 metres) and GB (11 holes, 4,286 metres). Highlights have included the discovery of the Huskie deposit and weak mineralization at Oban, Hamilton Lake and GB. These target areas have untested drill targets that warrant future follow-up.

The 2019 drilling program commenced in January and was concluded in March. Activities focused on drill testing priority target areas associated with the regional Midwest Structure, which is interpreted to be located along the eastern portion of the Waterbury Lake property. Target areas tested included the GB Zone (3,385 metres; 9 drill holes), Oban South (1,127 metres; 3 drill holes), GB Northeast (323 metres; 1 drill hole) and the Midwest Extension (900 metres; 2 drill holes), with highlight results described below:

GB Zone – Nine drill holes were completed to follow-up on basement-hosted mineralization discovered during the summer 2018 drilling program (see Denison's press release dated September 17, 2018). The winter 2019 drill holes were oriented steeply to the northeast on an approximate 100 x 100 metre spacing to test the faulted graphitic basement sequence which dips steeply to the southwest. Basement-hosted mineralization was intersected in drill hole WAT19-480, highlighted by 0.15% U_3O_8 over 6.0 metres, including 0.26% U_3O_8 over 3.0 metres. Additional basement-hosted mineralized intercepts were obtained approximately 100 metres to the southeast of WAT19-480 in drill hole WAT19-486 highlighted by 0.25% U_3O_8 over 2.0 metres and 0.22% U_3O_8 over 1.5 metres. The remainder of the holes encountered variable amounts of basement structure and alteration, often associated with anomalous geochemistry. The up-dip projection of the mineralized faults was tested at the unconformity, where two drill holes encountered significant hydrothermal alteration but no significant mineralization.

Oban South – The target area at Oban South comprises the interpreted intersection of the east-west trending Oban South graphitic conductor and the north-northeast trending regional Midwest structure. Three drill holes were completed as an initial test of the geological concept. The drilling successfully identified a faulted graphitic unit within the basement, which was hydrothermally altered, and a broad zone of desilicification within the lower sandstone, which included 10 ppm uranium and over 100 ppm boron within the basal 12.5 metres of sandstone immediately overlying the unconformity.

GB Northeast – A single reconnaissance drill hole was completed to test a coincident airborne electromagnetic conductor and magnetic low approximately 2.5 kilometres to the northeast of the GB Zone. The drill hole intersected moderately to locally strong sandstone alteration and an altered and faulted graphitic pelite unit immediately below the unconformity. The drill hole was highlighted by a discrete spike in basement radioactivity of 1,520 counts per second ("**cps**"), measured with an RS-125 gamma hand-held spectrometer, within the faulted graphitic pelite unit accompanied by elevated uranium (up to 200 ppm over 0.5 metres) and pathfinder geochemistry.

Sampling, Analysis and Data Verification

The following is a summary of the sampling, analysis and data verification procedures followed by non-Denison operators to establish the J Zone mineral resource estimate. For the exploration and drilling work being completed by Denison since April 2013, including the drilling completed to define the Huskie deposit, Denison has followed the sampling, analysis and data verification procedures as outlined in the section “Athabasca Exploration: Sampling, Analysis And Data Verification”.

Prior to April 2013, drill core was split once geological logging, sample mark up and photographing were completed. All drill core samples were marked out and split at the splitting shack by Fission employees, put into 5-gallon sample pails and sealed and transported to Points North, Saskatchewan only prior to shipment. The samples were then transported directly to the Saskatchewan Research Council Geoanalytical laboratories (the “**SRC Lab**”) in Saskatoon, Saskatchewan by Marsh Expediting. All assay and bulk density samples were split using a manual core splitter over the intervals noted in the sample booklet. Half of the core was placed in a plastic sample bag with the sample tag and taped closed with fibre tape. The other half of the core was returned to the core box in its original orientation for future reference. All drill core samples were evenly and symmetrically split in half in order to try and obtain the most representative sample possible. Mineralized core samples which occur in drill runs with less than 80% core recovery are flagged for review prior to the resource estimation process. Recovery through the mineralized zone is generally good however and assay samples are assumed to adequately represent in situ uranium content. The SRC Lab offers an ISO/IEC 17025:2005 accredited method for the determination of U_3O_8 weight % in geological samples. Rock samples are crushed to 60 % at -2 mm and a 100-200g sub sample is split out using a riffler. The sub sample is further crushed to 90% at -106 microns using a standard puck and ring grinding mill. An aliquot of pulp is digested in a concentrated mixture of HNO_3:HCl in a hot water bath for an hour before being diluted by deionised water. Samples are then analysed by a Perkin Elmer ICP-OES instrument (models DV4300 or DV5300).

Drill core samples collected for bulk density measurements were first weighed as they are received and then submerged in deionised water and re-weighed. The samples are then dried until a constant weight is obtained. The sample is then coated with an impermeable layer of wax and weighed again while submersed in deionized water. Weights are entered into a database and the bulk density of the core waxed and un-waxed (immersion method) is calculated and recorded. Not all density samples had both density measurements recorded. Water temperature at the time of weighing is also recorded and used in the bulk density calculation. The detection limit for bulk density measurements by this method is 0.01 g/cm3.

Prior to the summer 2010 drill program, the only QAQC procedures implemented on drill core samples from the project were those performed internally by SRC Lab. The in-house SRC Lab QAQC procedures involve inserting one to two quality control samples of known value with each new batch of 40 geochemical samples. All of the reference materials used by the SRC Lab on the Waterbury project are certified and provided by CANMET Mining and Mineral Services. The SRC Lab internal QAQC program continued through the 2013 drill program. Starting in the summer of 2010 and continuing into the 2013 drill program (discontinued after DDH WAT13-350), an internal QAQC program was designed by Fission to independently provide confidence in the core sample geochemical results provided by the SRC Lab. The internal QAQC sampling program determines analytical precision through the insertion of sample duplicates, accuracy through the insertion of materials of “known” composition (reference material) and checks for contamination by insertion of blanks. Blanks, reference standards and duplicates were inserted into the sample sequence

including field duplicates (quarter core every 1 in 20 samples), prep and pulp duplicates (inserted by the SRC Lab every 1 in 20 samples) and blank samples (1 sample for every mineralized drill hole). Beginning in 2012 certified, internal reference standards were used in all holes drilled at Waterbury Lake, replacing the re-analysed low, medium and high grade reference samples. The results of the QAQC programs indicate there are no issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore the data can support mineral resource estimation.

Mineral Processing and Metallurgical Testing

A preliminary assessment of the mineralogical and leaching characteristics of a representative selection of drill core samples from the J Zone was undertaken between July and December 2011 by Mineral Services Canada.

The study was based on a suite of 48 samples of mineralized material collected from thirty-two drill holes (2010 and 2011 programs). These were chosen to provide good spatial representation of the J Zone mineralization as well as representing a wide range of uranium content. The samples were derived from the half split core remaining after the initial geochemical / assay sampling process. All samples were submitted to the SRC Lab for comprehensive mineralogical analysis and preparation of thin sections for petrographic analysis. The results of mineralogical work were used, in conjunction with spatial considerations, to define suitable composite samples for preliminary leaching test work undertaken by the Saskatchewan Research Council ("**SRC**") Mining and Minerals Division.

Mineralogical analysis, utilizing XRD, quantitative mineralogical analysis (Q-Min), petrography and SEM-EDS analysis, determined that the most abundant uranium-bearing minerals in the J Zone are uraninite and/or pitchblende, and coffinite. The gangue mineralogy is essentially comprised of various amounts of quartz, phyllosilicates (illite-sericite, chlorite, biotite, kaolinite) and (Fe, Ti)-oxides (hematite, goethite and anatase). Feldspars also occur in most samples and carbonates as well as a variety of sulphides are locally present. Ni-arsenides are recognized throughout the samples as well. The results of the mineralogical analyses identified five groupings of samples with ore mineralogies typically dominated by either uranium oxide or uranium silicate phases.

Preliminary acid leaching tests were undertaken by SRC Mining and Minerals Division on composite samples prepared from the sample set. Only the leaching time and rate of acid addition were considered in the tests while the other parameters (e.g. solid percentage in the slurry, temperature, pressure and agitation conditions) remained fixed. A total of five composite samples were defined based on spatial location, lithology, uranium grades and mineralogy. Acid leaching (H_2SO_4) was performed on each of the composite samples for 12 hours under atmospheric pressure and at a temperature of 55-65°C. Agitation was used to create adequate turbulence. Sodium Chlorate was used as the oxidant. The tests were undertaken on the assay lab rejects from XRD analyses that were ground to 90% passing 106 microns. The percentage of solids in the slurry was set at 50%. The only variables were the acid addition and leaching residence time. Two different H_2SO_4 dosages were used to create an initial leaching environment with 25 mSc/cm and 55 mSc/cm, respectively. Each composite sample was split into two subsamples labelled A and B. The A sample was used to test high acid addition with high initial conductivity and the B sample was used to test low acid addition with low initial conductivity. The preliminary acid leaching tests showed that maximum extraction rates of 97.6 % to 98.5 % U_3O_8 can be obtained

(depending on the acid addition) within 4 to 8 hours of leaching time, and that the leaching efficiency was variably affected by acid addition and leaching time.

A more comprehensive phase of metallurgical test work has been recommended to optimize the leaching efficiency as well as to evaluate other parameters of the leaching process (grinding size of the ore, solid percentage in the slurry, temperature, pressure, and residence time and agitation conditions).

No metallurgical or mineral processing test work has been completed for the Huskie deposit.

Mineral Resource Estimates

J Zone

The Company retained GeoVector to independently review and audit mineral resource estimates for the Waterbury Lake property, in accordance with the requirements of NI 43-101, and in 2013 GeoVector prepared the J Zone Technical Report. See "Mineral Reserves and Mineral Resources", above, for a summary of the mineral resource estimate for the Waterbury Lake project.

For the 2013 mineral resource estimate, a 3D wireframe model was constructed based generally on a cut-off grade of 0.03 to 0.05 % U_3O_8 which involved visually interpreting mineralized zones from cross sections using histograms of U_3O_8. 3D rings of mineralized intersections were created on each cross section and these were tied together to create a continuous wireframe solid model in Gemcom GEMS 6.5 software. The modeling exercise provided broad controls on the size and shape of the mineralized volume.

Based on a statistical analysis of the composite database, no capping was applied on the composite populations to limit high values for uranium. A histogram of the data indicates a log normal distribution of the metals with very few outliers within the database. Analysis of the spatial location of outlier samples and the sample values proximal to them led GeoVector to believe that the high values were legitimate parts of the population and that the impact of including these high composite values uncut would be negligible to the overall resource estimate.

Using waxed core and dry bulk density determinations a formula was derived relating bulk density to grade and was used to assign a density value to each assay. Bulk density values were used to weight grades during the resource estimation process and to convert volume to tonnage.

GxD values and density (D) values were interpolated into the block model using an ID2 algorithm. Block grade was derived from the interpolated GxD value divided by the interpolated D value for each block. Block tonnage was based on volume times the interpolated D value.

Two passes were used to interpolate all of the blocks in the wireframe, but 99% of the blocks were filled by the first pass. The size of the search ellipse, in the X, Y, and Z direction, used to interpolate grade into the resource blocks is based on 3D semi-variography analysis (completed in GEMS) of mineralized points within the resource model. For the first pass, the search ellipse was set at 25 x 15 x 15 metres in the X, Y, Z direction respectively. For the second pass, the search ellipse was set at 50 x 30 x 30 metres in the X, Y, Z direction respectively. The Principal azimuth is oriented at 075º, the Principal dip is oriented at 0° and the Intermediate azimuth is oriented at 0°.

The mineral resources for the J Zone were classified as indicated based on drill hole spacing and continuity of mineralization. The block model was validated by visual and statistical comparisons of composite grades and block grades.

Huskie Deposit

During the fourth quarter of 2018, Denison completed a maiden mineral resource estimate for the Huskie basement-hosted uranium deposit, which was reviewed and audited by SRK in accordance with NI 43-101 and CIM Definitions (2014). See "Mineral Reserves and Mineral Resources", above, for a summary of the mineral resource estimate for the Waterbury Lake project.

For the 2018 mineral resource estimate, GEOVIA GEMS™ software (version 6.8) was used to build three-dimensional mineralized wireframes for the Huskie 1, Huskie 2 and Huskie 3 lenses based on lithological and structural data from core logs and geochemical assay (or radiometric probe) data collected from 28 holes totaling 12,273 metres completed by Denison since 2017. A lower cut-off of 0.05% U_3O_8 and a minimum thickness of 1 metre was selected for the mineralized wireframe model, consistent with similar basement-hosted uranium deposits in the Athabasca Basin. Of the 13 mineralized drill holes within the 28 hole data population, a total of 10 drill holes met the parameters for defining the mineralized wireframes.

The mineral resource model was constrained by the mineralization wireframes. The assay database (% U_3O_8 or % eU_3O_8) used for resource modelling consists of 201 assays from the 10 mineralized boreholes, contained within the three mineralized lenses. The 0.5 metre interval assays were composited to 1.0 metre lengths. Capping was considered, with only assay data from Huskie 2 being capped for % U_3O_8. Density values were assigned to the database based on a regression between U_3O_8 and density data pairs using the relationship determined for Denison's Gryphon deposit, which is also hosted within comparable basement rocks. The validity of the Gryphon grade:density regression for the Huskie deposit was confirmed by plotting 12 bulk dry density samples collected by SRK from the Huskie deposit. Variograms were modelled to determine appropriate search radii for grade estimation.

An accumulation-like approach was used, wherein "U_3O_8*density" and "density" were estimated into a three-dimensional block model, constrained by wireframes in two passes using ID2. A %U_3O_8 grade was then calculated into each block by dividing the estimated U_3O_8*density by the estimated density. A block size of 10 by 5 by 5 metres was selected. Search radii were based primarily on visual observations and variogram analyses. The estimation of U_3O_8*density and density were based on two estimation passes. The block model was validated using nearest neighbour estimation and by visual inspection of the block grades relative to composites and swath plots comparing the ID2 and nearest neighbour model. All blocks were classified as Inferred.

McClean Lake

The McClean Lake projects are owned by Denison (22.5%) and its joint venture partners, Orano Canada (70.0%) and OURD (7.5%). Orano Canada is the operator/manager of the projects.

Except as otherwise noted below, the project descriptions are based on the Company's technical reports: (A) the "Technical Report on the Denison Mines Inc. Uranium Properties, Saskatchewan, Canada" dated November 21, 2005, as revised February 16, 2006 (the "**McClean Technical Report**"), (B) the "Technical Report on the Sue D Uranium Deposit Mineral Resource Estimate, Saskatchewan, Canada" dated March 31, 2006 (the "**Sue D Report**"), and (C) the "Technical Report on the Mineral Resource Estimate for the McClean North Uranium Deposits, Saskatchewan" dated January 31, 2007 (the "**McClean North Technical Report**"), copies of which are available on the Company's profile on the SEDAR website at www.sedar.com. Scott Wilson RPA (now Roscoe Postle Associates Inc.) was engaged to prepare and deliver the McClean Technical Report (authored by Richard E. Routledge, M.Sc., P. Geo.), the Sue D Report and the McClean North Technical Report (each authored by Richard E. Routledge, M.Sc., P. Geo. and James W. Hendry, P. Eng.). Each author was an independent Qualified Persons for the purposes of NI 43-101. By letter dated October 20, 2009, Orano Canada received from Scott Wilson RPA subsequent corrections to the resource estimate in the McClean North Technical Report, which revisions have been incorporated herein as applicable.

The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the technical reports. We recommend you read the technical reports in their entirety to fully understand the project.

Property Description, Location and Access

The McClean Lake property is located within the eastern part of the Athabasca Basin in northern Saskatchewan, approximately 26 kilometres west of the Rabbit Lake mine and approximately 750 kilometres north of Saskatoon. Access to the McClean Lake site is by both road and air. Goods are transported to the site by truck over an all–weather road connecting with the provincial highway system. Air transportation is provided through the Points North airstrip about 25 kilometres from the project site.

The mineral property consists of four (4) mineral leases covering an area of 1,147 hectares and 13 mineral claims covering an area of 3,111 hectares. The right to mine the McClean Lake deposits was acquired under these mineral leases, as renewed from time to time. Mineral leases are for terms of 10 years with the right to renew for successive 10-year periods provided that the leaseholders are not in default of the terms of the lease. A mineral claim grants the holder the right to explore for minerals within the claim lands and the right to apply for a mineral lease. The current mineral leases have terms that expire between November 2025 and August 2026 and title to the mineral claims is secure until at least 2041. It is expected that the leases will be renewed in the normal course, as required, to enable all the McClean Lake deposits to be fully exploited.

The right to use and occupy the lands at McClean Lake has been granted in a surface lease agreement with the province of Saskatchewan. The McClean surface lease was entered into in 2002, has a term until 2035 (33 years) and covers a land area of approximately 3,677 hectares.

The uranium produced from the McClean Lake deposits is subject to uranium mining royalties in Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See "Government Regulation - Canadian Royalties." In addition, a royalty of 2% of the spot market

price on all U_3O_8 produced from the Sue E deposit is payable to the previous owner of a portion of the deposit.

History

Several operators and related joint ventures have managed the McClean Lake project from 1968 to present. Their involvement has resulted in the discovery of several uranium deposits including McClean North, McClean South, JEB, Sue trend (A,B,C,D,E) and Caribou. Exploration activities over the project have involved extensive geophysical surveys, both airborne and ground, in addition to exploration/delineation diamond drilling.

Uranium production from the McClean Lake deposits at the onsite McClean mill facility to date (current to 2019) is approximately 50 million pounds U_3O_8. The ore feed for production is almost entirely sourced from mining activities of the Sue (A, B, C, and E) and JEB deposits.

1968 – 1974 (Gulf Minerals Canada Ltd.)

From 1968 to 1974, the entire area was held under permit (Permit #8) by Gulf Minerals Canada Ltd. During this period, Gulf flew an airborne radiometric survey over the area and conducted reconnaissance and ground level surveys.

1974 – 1985 (Canadian Occidental Petroleum Ltd)

In 1974 Gulf reduced their land holding and allowed Permit #8 to lapse. Canadian Occidental Petroleum Ltd. ("**CanOxy**") acquired the ground and flew a reconnaissance survey over the area in July of that same year and preceded to stake a 260 square kilometre area called then the Wolly property (now divided into the McClean Lake and Wolly properties). CanOxy operated the project from 1974 to 1985 at first without partners, then in 1977, in partnership with Inco Ltd.

Initial exploration consisted of geochemical and ground radiometric prospecting with follow up drilling. Several geophysical methods were also used, but correlation with geochemical and radiometric anomalies was generally poor. In 1977, airborne magnetic and EM surveys were flown over the property. The results indicated conductive trends and helped to better define the regional basement structure and lithology. The first significant discovery came in 1978, when the Tent Lake zone was found along a major conductive trend. Following this discovery, the emphasis was on geophysical rather than geochemical or radiometric targets. From 1979 to 1985, several major discoveries were made based mainly on geophysics and improved geological interpretations. This included the McClean North deposit in 1979, the McClean South deposit in 1980, the Candy Lake zone in 1981 and the JEB deposit in 1982. During this period, CanOxy completed 781 drill holes for 118,540 metres of drilling; most of them concentrated in the area now known as the McClean Lake property.

1985 – 1993 (Minatco / Denison Mines / OURD)

In January 1985, Minatco entered into a joint venture agreement with CanOxy and Inco to become the operator of the project. Geophysical and drilling programs were conducted throughout the project area to follow up existing mineralized areas, and explore new zones. In 1987, an additional zone (Pod 5) was found in McClean North. Several very significant discoveries were also made the following year, in 1988: two new mineralized zones, Sue A and B were found in the Sue area, which would lead to the discovery of the highly productive Sue trend; mineralization was indicated on the McClean South conductor, west of the McClean Southwest pod; and additional mineralization was found in McClean North. Additional work in the Sue area over the next few

years, led to the Sue C deposit in 1989, the Sue D deposit in 1990 and the Sue E deposit in 1991. From 1985 to 1993, Minatco completed 1,160 drill holes for a total of 171,090 metres of drilling on the Wolly and McClean Lake projects, most of them concentrated again in the area now known as the McClean Lake property. In 1990, the CanOxy-Inco JV sold out to Minatco.

In 1993, Denison Mines Ltd. exchanged with Minatco a 70% interest in the Midwest Lake project for a 22.5% interest in the McClean Lake project. OURD Canada Ltd., a Denison partner, also obtained a 7.5% interest in McClean. Also in 1993, Orano Canada (formerly Cogema Resources Inc.) acquired the uranium assets of TOTAL (Minatco in Canada) and became the operator of the McClean Lake Project.

In 1993, the joint venture planned to proceed with mine development. The McClean Lake property was created, and defined as a portion of the Wolly property outlined by a surface lease (containing the JEB, Sue and McClean deposits).

Geological Setting, Mineralization and Deposit Types

The McClean Lake uranium deposits lie near the eastern margin of the Athabasca Basin in the Churchill Structural Province of the Canadian Shield. The bedrock geology of the area consists of Precambrian gneisses unconformably overlain by flat lying, unmetamorphosed sandstones and conglomerates of the Athabasca Group. The Precambrian basement complex is composed of an overlying Aphebian aged supracrustal metasedimentary unit infolded into the older Archean gneisses. The younger Helikian aged, Athabasca sandstone was deposited onto this basement complex. The basement surface is marked by a paleoweathered zone with lateritic characteristics referred to as regolith.

The McClean Lake uranium deposits which include the Sue deposits (A to E), McClean deposits (North and South), Caribou deposit and JEB deposit are unconformity-related deposits of the unconformity-hosted variety.

Exploration and Drilling

Exploration activities including ground geophysics and diamond drilling were conducted by Orano Canada from 1994 to present. The majority of exploration has been focused on areas of known mineralization at McClean North/South, Sue Trend, JEB and the Tent Seal Trend. Other target areas on the property which have also been subject to ground geophysics and drilling include Candy Lake, Bena, Vulture and Moffat Lake. In 2002 the discovery of Caribou, the high- grade unconformity related uranium deposit was made approximately 2 kilometres northwest of the Sue C open pit. No other significant discoveries have been made since 2002. During the period 1994 to 2019 Orano Canada completed 98,498 metres of drilling in 505 holes.

There is no significant exploration planned for 2020 for McClean Lake at this time.

Sampling, Analysis and Data Verification

The following description applies to all exploration on the McClean Lake property.

Following the completion of a drill hole, the hole is radiometrically logged using a downhole slim-line gamma probe. The gamma-log results provide an immediate equivalent uranium value (eU%) for the hole, which, except in high grade zones, is reasonably accurate. The gamma-log results, however, have not been used for the purposes of estimating mineral reserves or resources unless core loss is significant.

Sample intervals are generally 50 centimetres long, except where higher or lower grade mineralization boundaries fall within the interval. In that case, two 25 centimetre samples are collected. Flank samples of 1.0 metre are always collected where mineralization is located. A background geochemistry sample is collected every 10 metres down the hole.

All sampled core is split in half, one half retained and the other sent to an independent laboratory. Lost core is not an issue at the McClean project as core recovery has been good. Control samples are routinely assayed with each batch of core samples analyzed.

The mineralization in the various McClean deposits is highly variable in both mineralogy and uranium content. The principal minerals identified in the deposits are pitchblende, uraninite and niccolite. As a result of the highly variable uranium content, a variable density formula was developed for the McClean deposits. This formula was modified over the years to account for the fact that it originally tended to underestimate U_3O_8 content where the U_3O_8 values were associated with high values of nickel and arsenic.

No opinion can be given regarding security of samples in the mid to late 1970s and the late 1980s other than to indicate that subsequent geological work and all metallurgical and geotechnical work have confirmed the results. All procedures reviewed follow generally accepted industry practice. A good demonstration of the reliability is that JEB and the Sue deposits (B and C) have been mined out and more uranium has been recovered into stockpiles than had been estimated from surface drilling.

Mineral Reserve and Mineral Resource Estimates

Estimation procedures have evolved over the years. At the time of the feasibility study in 1990, polygonal methods were used for the JEB, the Sue A, the Sue B, the Sue C deposits and for the McClean zones. Prior to the start of mining at the JEB deposit, the mineral reserves were re-evaluated using computerized methods whereby block models were constructed and geostatistical methods were implemented. Much more recently, these mineral resource estimates have been further refined using Whittle pit optimization software. Appropriate tests and audits of the databases on all the McClean deposits have been carried out by past qualified Denison personnel. In the case of JEB, Sue C and Sue B, the amount of U_3O_8 recovered into stockpiles was higher than that estimated from surface drilling.

The Company received the McClean Technical Report from Scott Wilson RPA (now Roscoe Postle Associates Inc.) on its mineral reserves and mineral resources at certain of the deposits (Sue A, B, E and McClean North and Caribou) at McClean Lake. See “Mineral Reserves and Mineral Resources”, above, for a summary of the mineral resource and mineral reserve estimates remaining, after adjusting for mining activity, as applicable.

In preparing the McClean Technical Report, Scott Wilson RPA reviewed previous estimates of mineral reserves and mineral resources at the applicable properties, and examined and analyzed data supporting the previous estimates, as well as other available data regarding the properties, including extensive information from Orano Canada.

For the Sue E deposit, Scott Wilson RPA constructed a block model using indicator kriging to both map out and geologically constrain mineralized areas. A block that had at least one nearby composite within 10 metres of its centre, and that had composites from at least two different drill holes in its search neighbourhood was classified as part of the indicated mineral resource. The indicated mineral resource was evaluated by Scott Wilson RPA in 2005 using Whittle economic evaluation software showing that the Sue E pit economics were robust and mineral reserves were

estimated. Mining was completed at the Sue E pit during 2008 recovering about 91% of the probable mineral reserves estimated. Scott Wilson RPA classified approximately 7.3 million of the pounds outside the current pit as inferred mineral resources. Confirmatory drilling in 2006 by the operator has indicated that this may be reduced to 2.0 million pounds, but mineral resources have not been re-estimated.

The mineral resource estimate for the Caribou deposit is based on a block model for which grade was interpolated using ordinary kriging. Since there were no plans for the mining of this deposit at the date of the McClean Technical Report, the economic potential was not evaluated and mineral reserves were not estimated.

With respect to the Sue D deposit, the Company received the Sue D Report in 2006, authored by Scott Wilson RPA. Scott Wilson RPA carried out an independent mineral resource estimate for Sue D by conventional 3-D computer block modeling. A minimum vertical mining width of two metres was employed with a 0.1% U_3O_8 cut-off.

Due to the significant increase in the price of uranium from 2004 to 2006, Denison engaged Scott Wilson RPA to re-evaluate the uranium resources in the McClean North trend that are amenable to other methods of mining. The original McClean Technical Report had only evaluated mineral resources and mineral reserves of the high grade portions under the assumption that they would be mined using a blind shaft mining method. The Company received the McClean North Technical Report on the mineral reserves and resources at the McClean North uranium project in 2007.

The re-evaluation of McClean North was carried out by conventional 3-D computer block modeling. Wire frames were constructed for each of pods 1, 2 and 5. The estimate included internal dilution, but not external dilution, and was carried out at a 0.1% U_3O_8 cut-off. This mineral resource estimate is based entirely on diamond drill information. Block cell dimensions were selected at 8 metre model grid east west x 5 metre model grid north south and a 2 metre bench height or approximately 180 tonnes/block. Scott Wilson RPA constructed a mineral resource wireframe based on kriging, and constructed a special waste wireframe, that generally surrounds the mineral resource wireframe, using similar kriging parameters but with larger search distances. Subsequent to this report, the Company and Scott Wilson RPA reviewed the block model and estimation procedures in October 2009 and made a slight revision to the mineral resource estimate for the McClean North deposit.

Mining Operations

McClean Lake consists of nine known ore deposits: JEB; Sue A, B, C, D and E; McClean North; McClean South; and Caribou. In 1995, the development of the McClean Lake project began. Mill construction commenced in 1995 and ore processing activities reached commercial production in November 1999. Mining operations also commenced, and the following deposits have been mined out to date: JEB (1996 to 1997), Sue C (1997 to 2002), Sue A (2005 to 2006), Sue E (2005 to 2008) and Sue B (2007 to 2008). Various test mining programs from 2006 to date have also been conducted at McClean North.

At December 2019, the remaining ore reserves consist of a limited quantity of stockpiled ore from historical Sue B open pit mining operations and test mining activities at McClean North. Approximately 87,454 tonnes of Sue B ore at a grade of 0.35% U_3O_8 and 2,226 tonnes of McClean Lake North ore (mined via SABRE, as defined below), at an average grade of 0.68% U_3O_8, are stockpiled on surface as at the end of 2019.

Other than continued test mining activities for SABRE, no additional mining operations are planned at this time.

Low-grade special waste from the mining of the JEB, Sue C, Sue A, Sue E and Sue B deposits has been disposed of in the mined-out Sue C pit. In the future, Cigar Lake special waste is also expected to be disposed of in the Sue C Pit. By agreement between the CLJV and the MLJV, costs to update the Sue Water Treatment Plan and costs to dewater the Sue C pit for Cigar Lake special waste will be shared 50/50 between the CLJV and MLJV.

SABRE

The MLJV is currently assessing the Surface Access Borehole Resource Extraction ("**SABRE**") mining method technology for extraction of the McClean North deposits. The SABRE technology is experimental and a feasibility study has not yet been completed. Previous field tests of the SABRE technology have produced a small amount of ore, some of which has been processed into U_3O_8 and some of which remain in the ore stockpile at December 2019. See "Denison's Operations – SABRE Mining Program" below for more information on SABRE.

Processing and Recovery Operations

Processing of the McClean Lake ore stockpiles is anticipated to occur prior to the end of life of the McClean Lake mill. Historical processing of the McClean Lake orebodies through 2000 to 2010 has demonstrated strong performance, with recoveries above 97%. The MLJV anticipates processing of the remaining stockpiles to have similar performance results.

Development and Production

In 2012, Orano Canada (then AREVA) initiated an internal study evaluating the feasibility of mining the McClean North, Caribou and Sue D deposits via conventional underground methods. The internal study was completed in April 2014; however, no formal technical report has been prepared by Denison in accordance with NI 43-101 and a production decision has been deferred indefinitely due to the low uranium price environment.

As part of the continuing development of the SABRE mining tool in 2020, a small test mining program at McClean North is expected to occur with the potential to generate some ore for future processing. See "Denison Operations-SABRE Mining Program" for more information on the SABRE development program and potential processing activity for 2020.

Infrastructure, Permitting and Compliance Activities

The McClean Lake uranium mill, one of the world's largest uranium processing facilities, is currently processing ore from the Cigar Lake mine under the Cigar Lake toll milling arrangement between the MLJV and the CLJV. The site has been in operation since the late 1990's and consists of the mill, a tailings management facility, administration offices and building, camp facilities, back-up power supply, water treatment plants and a host of other minor facilities. The site is connected to the provincial power grid and provincial highways. Points North Landing Airport provides transportation to and from site for personnel on a daily basis.

As a uranium site, the CNSC permits the operations. On July 1, 2017 the McClean site received a 10 year license for operations until June 30, 2027. See "Denison's Operations – McClean Lake Mill License" for more details.

Midwest

The Midwest project is owned by Denison (25.17%) and its joint venture partners, Orano Canada (69.16%) and OURD (5.67%) pursuant to the Midwest Joint Venture Agreement. Orano Canada is the operator of the project.

Except as otherwise noted below, this project description is based on the project's technical report entitled "Technical Report with an Updated Mineral Resource Estimate for the Midwest Property, Northern Saskatchewan, Canada" dated March 26, 2018 (the "**Midwest Technical Report**"), a copy of which is available on the Company's profile on the SEDAR website at www.sedar.com. The Midwest Technical Report was authored by Dale Verran, MSc, P.Geo, Pr.Sci.Nat. and Chad Sorba, P.Geo, of the Company, G. David Keller, PGeo, formerly of SRK, and Oy Leuangthong, PEng, of SRK. G. David Keller and Oy Leuangthong are independent qualified persons for the purposes of NI 43-101.

The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the technical report. We recommend you read the technical report in its entirety to fully understand the project.

Property Description, Location and Access

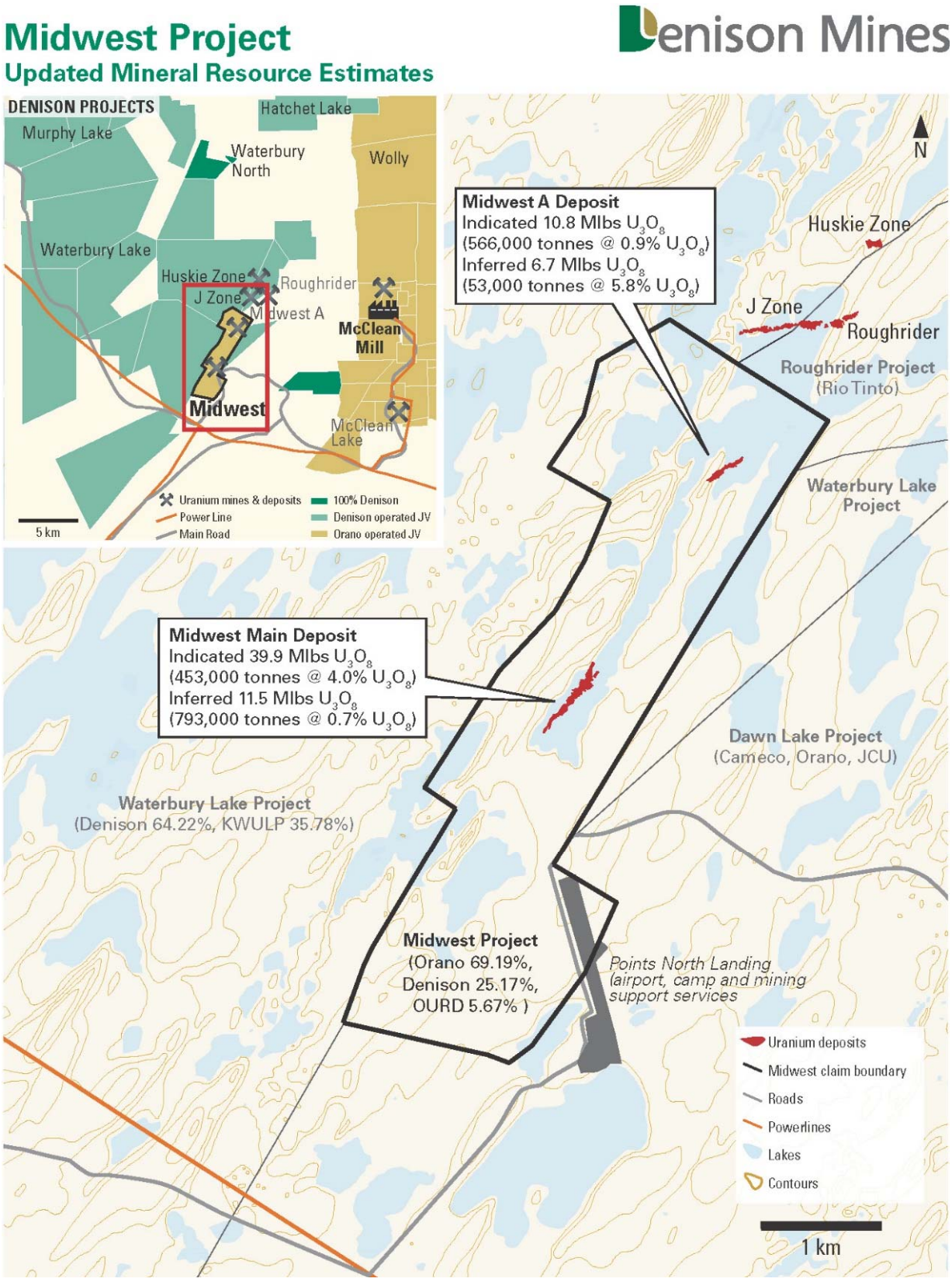
The Midwest property is located within the eastern part of the Athabasca Basin in northern Saskatchewan. The northern portion of the property is located on South McMahon Lake, about one kilometre from the Points North Landing airstrip and about 25 kilometres west by existing roads from the McClean Lake mill on the McClean Lake property. The site is approximately 750 km by air north of Saskatoon and about 420 km by road north of the town of La Ronge.

Access to the Midwest property is by both road and air. Goods are transported to the site by truck over an all-weather road connecting with the provincial highway system. Air transportation is provided through the Points North airstrip.

The property consists of three (3) contiguous mineral leases, covering 1,426 hectares and contains both the Midwest Main and Midwest A deposits. The mineral lease containing the Midwest Main deposit (ML 5115) is 556 hectares in size. Each of the mineral leases is at an annual assessment rate of $75.00 per hectare and has sufficient approved assessment credits to maintain the ground in good standing until 2031. There is no current production from these mineral leases. Leases must be renewed every 10 years as part of an administrative process.

Since the completion of the underground test mine at the Midwest Main deposit in 1988 and 1989, the site has been under an environmental monitoring and site security surveillance program. At present, there is an inactive water treatment plant, two water storage ponds and a core storage area on the site, as well as a dam in the Mink Arm of South McMahon Lake. All of the facilities used in the test mine program and all of the existing surface facilities are located on lands owned by the province of Saskatchewan. The right to use and occupy the lands was granted in a surface lease agreement with the province of Saskatchewan. The original surface lease agreement of 1988 was replaced by a new agreement in 2002. This new surface lease is valid for a period of 33 years. Obligations under the surface lease agreement primarily relate to annual reporting regarding the status of the environment, the land development and progress made on northern employment and business development. The Midwest surface lease covers an area of approximately 646 hectares.

Location of the Midwest Main and Midwest A deposits on the Midwest project



Any uranium produced from the Midwest deposits is subject to uranium mining royalties in Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See "Government Regulation - Canadian Royalties." A portion of Denison's interest in the Midwest project (i.e. 5.5% of the project reducing to 3.44% after payout) is subject to a sliding–scale, gross overriding royalty ranging from 2% to 4% payable to two previous owners of a portion of the Midwest project.

There are no known significant factors or risks that may affect access, title, the right, or ability of Orano to perform work at/on the Midwest property.

History

Initial exploration work in the vicinity of the two Midwest deposits began in 1966. Canada Wide Mines Ltd., a subsidiary of Esso Resources Canada Ltd., was operator of the project from 1968 to 1982. From 1968 to 1975, exploration was carried out on an exploration permit which included the area covered by the current mineral leases. Most of the work was concentrated on the area near South McMahon Lake where uranium mineralized boulders were found. In 1974, the exploration permit was changed to mineral leases.

During the winter season of 1977, one of the holes drilled through the unconformity encountered mineralization. In January 1978, the Midwest Main deposit was intersected by the first drill holes. During 1978 through 1980, a further 439 holes were drilled (for a total of about 650) to delineate the deposit and to explore the surrounding area of the mineral leases.

In 1987, Denison acquired a 45% interest in the Midwest project and became the operator. An underground test mine program was completed in 1989 which confirmed the results of the surface drilling program and identified a high grade historical mineral reserve containing 35.7 million pounds of U_3O_8 at an average diluted grade of 4.5% U_3O_8, considered to be mineable by underground methods. This is a historical estimate, not being treated as current mineral reserves. During this time, Denison also performed an EM-37 survey and geotechnical drilling on the Midwest Main deposit. Exploration drilling was conducted to the east (1988) and along the conductive trend to the north of Midwest Main deposit (1989).

In 1993, the respective owners of McClean Lake and Midwest combined their interests to make two complementary projects with one mill at McClean Lake. In order to accomplish this, a portion of Denison's interest in Midwest was exchanged for an interest in McClean Lake. This transaction, together with several related ownership changes, resulted in Denison's ownership interest in Midwest being reduced to 19.5% and Minatco, Orano Canada's predecessor in title, becoming the operator.

In 1999, Denison increased its interest in Midwest by 5.50% through the exercise of first refusal rights. With the uncertainty of the timing and costs of the Midwest development and the desire to eliminate the obligation to pay advance and future royalties on production from Midwest, Denison decreased its interest in Midwest from 25% to 19.96% effective March 31, 2001. Orano Canada, the operator/manager of Midwest, also reduced its interest from 70.5% to 54.84% for the same reason.

At the end of 2004, in order to take advantage of rapidly increasing uranium prices, Denison again increased its interest at Midwest, along with its joint venture partners, by buying the 20.70% interest in Midwest then held by Redstone Resources Inc. This purchase permitted Denison to acquire a further 5.21% interest in Midwest, bringing its interest to 25.17%. Orano Canada's interest increased to 69.16% and OURD's interest increased to 5.67%.

Geological Setting, Mineralization and Deposit Types

The Midwest deposits are classified as 'unconformity-type' uranium deposits and occur approximately 200 metres below surface straddling the unconformable contact between overlying Athabasca Group sandstones and the underlying Paleoproterozoic and Archean basement rocks belonging to the Wollaston-Mudjatik Transition Zone. The north-northeast Midwest structural trend that controls the Midwest Main and Midwest A uranium deposits follows a steeply-dipping, graphitic pelitic gneiss, basement unit that is bounded by granitic gneisses or granite to both the east and west. The sub-Athabasca unconformity surface is relatively flat on a regional scale, however there is a slight uplift along the north-northeast Midwest trend and a generally higher elevation to the east. Fault zones in the basement are often characterized by brecciation and strong hydrothermal alteration with clay mineral development. These fault zones generally extend into the overlying Athabasca Group sandstone.

The Midwest Main deposit is lens to cigar shaped, 600 metres long, 10 to over 100 metres wide, with thicknesses ranging from 5 metres to 10 metres. The deposit consists of a near-massive, high-grade mineralized core that straddles the unconformity approximately 210 metres below surface. The high-grade core is surrounded by lower-grade, more dispersed, fracture-controlled mineralization in both sandstone and, in minor amounts, in basement rocks. The high-grade mineralization forms a roughly flat-lying lensoid concentration, with a root extending down into the basement rocks along a steeply-dipping fault.

The Midwest A deposit is approximately 450 metres long, 10 to 60 metres wide, ranges up to 70 metres in thickness and occurs between 150 and 235 metres below surface. Mineralization straddles the unconformity contact with minor amounts hosted within basement structures immediately below the unconformity. Thicker zones of mineralization above the unconformity are concentrated in conglomerate units at the base of the Athabasca sandstone. Similar to Midwest Main, a high-grade core of mineralization is surrounded by a lower-grade, more dispersed, fracture-controlled envelope.

Exploration and Drilling

Under Orano Canada's operatorship, exploration activities resumed in 2004. Exploration drilling was initiated some three kilometres to the northeast of the Midwest deposit to test ground around a historic hole MW-338 that had returned an isolated intercept of 3.8 metres at 6.9% U_3O_8. Between 2005 and 2009, a further 50,831 metres of drilling was completed in 191 drill holes on the property, which discovered and delineated the Midwest A deposit and identified and evaluated several other mineralized areas, including the Josie Zone, lying between the Midwest and the Midwest A deposits. 76 of these holes (20,794.9 metres) have intersected the mineralization associated with the Midwest A deposit. Additional geophysical programs were also conducted.

The Midwest Main deposit was intensively drilled in the late 1970's and 1980s. Drill holes defining the Midwest deposit include 615 drill holes, of which 362 are mineralized. By type, these include exploration, shallow reconnaissance (<100 metres), and geotechnical drill holes. Between 2004 and 2017, only 11 drill holes have been completed on the Midwest Main deposit area under Orano Canada's operatorship. Four inclined geotechnical holes were drilled in 2004 and four shallow geotechnical drill holes were completed in 2006. Three additional exploration drill holes were carried out within the deposit outlines in 2006 (MW-677, MW-678, and MW-685).

No exploration work was conducted at Midwest during the period 2010 to 2017 or in 2019. The winter 2018 drill program comprised 4,709 metres in 12 completed diamond drill holes. Drilling was conducted on the Points North conductor (6 drill holes, 2,269 metres) to test exploration

targets, and at Midwest Main (6 drill holes, 2,440 metres) to collect additional information from the unconformity-hosted mineralized zone and to test underlying basement targets. The drilling validated mineralization at the Midwest Main deposit (based on preliminary radiometric equivalent uranium results), but did not intersect any high-grade mineralization on the Points North conductor, or below the Midwest Main deposit within the basement. No further exploration is currently planned for 2020.

Sampling, Analysis and Data Verification

During 2017, Orano Canada undertook a comprehensive review of the databases for both the Midwest Main and Midwest A deposits ahead of an updated mineral resource estimate. Concerns were identified at both deposits that needed to be addressed to increase both the confidence and the accuracy of the final estimate.

Given the historic nature of the data at Midwest Main a limited amount of data was readily available digitally: downhole gamma probe ("**probe**") data existed only as paper logs making it previously unavailable to be used, no comprehensive 3D geological model was available, perched mineralization was not fully modeled, and further data QAQC was needed. Midwest A has a much more modern data set; however, no dry bulk density measurements were available, the latest drilling from September 2007 to December 2009 was not taken into account in the previous estimate, and the High Grade Zone was assigned an average uranium grade rather than performing grade modelling. Additionally, both deposits required new probe to chemical uranium assay grade ("**grade**") correlations for the calculation of equivalent uranium (eU), combination of probe and grade data based on core recovery and probing/drilling parameters to be available for estimation, updated lithology and structural models (geological models), and an updated block model.

Work began with verifying the grade data against assay certificates and a historical nine track database from ESSO. Some discrepancies were noted in the sample locations as well as some of the grades due to typographical errors. When compared to the original drill logs and the probe logs, these were able to be rectified.

The Midwest deposits often have core loss associated with the mineralization, due to the high amount of clay alteration and quartz dissolution which makes core recovery while drilling difficult. This results in gaps in the grade dataset that are typically addressed by using probe radiometric equivalent uranium (eU) data. Digital probe data was available for Midwest A, however for Midwest Main most of probe data was never digitized and remained only available on paper logs. The paper logs for 218 holes were digitized and added to the Midwest data set. This was followed up by ensuring the probe data was depth corrected (depth matched with grade data), as well as the creation of new probe to grade correlations for both deposits.

Midwest Main had a robust density to grade correlation; however, Midwest A did not have any dry bulk density measurements taken. The only density data at Midwest A was in the form of specific gravity measurements which do not take into account porosity and therefore tend to overestimate the density. Due to the high density of uranium, density is a vital reference for the expected tonnage of high-grade uranium deposits, which has a direct effect on the amount of uranium estimated. Given this uncertainty at Midwest A, previous resource estimations were forced to use a very conservative grade to density regression formula to avoid overestimation of resources. During a 2017 site visit, 25 dry bulk density measurements were taken from the remaining Midwest A drill core and sent for dry bulk density and geochemical analyses. A new grade to density regression formula was established showing an increase to the correlation by approximately 10%.

Various chemical assay methods have been employed at the Midwest Project prior to Orano Canada assuming operatorship in 2004. The methods described herein pertain to the program from 2004 onwards. Drill core with anomalous total gamma radioactivity (>200 counts per second utilizing a SPP2 or SPPγ scintillometer) was sampled 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 chemical assays are performed by the SRC Lab located in Saskatoon. Sample preparation involves crushing and pulverizing core samples to 90% passing -106 microns. Splits of the resultant pulps are initially submitted for multi-element ICP-MS analysis following partial (HNO_3:HCl) and total (HF:HNO_3:$HClO_4$) digestions. Samples with ≥ 1,000 ppm U (partial digest) are re-assayed for U_3O_8 using an ISO/IEC 17025:2005 accredited method for the determination of U_3O_8 weight %. Pulp splits are digested using aqua-regia and the solution analyzed for U_3O_8 weight % using ICP-OES.

For composite exploration samples, collected over 20 metre (upper sandstone) or 10 metre intervals (lower sandstone and basement), major and trace elements are determined using ICP-MS or ICP-OES after partial and total digestions. Boron values are obtained through NaO_2/$NaCO_3$ fusion followed by ICP-OES. In addition to internal checks by the SRC Lab, Orano has rigorous QAQC procedures including the insertion of standard reference materials, blanks and field duplicates.

For mineral resource estimation purposes, wherever core recovery was less than 75%, the eU values derived from a calibrated downhole gamma probe are substituted for chemical assays where possible. Core recovery at Midwest Main is typically good with poorer recovery observed at Midwest A. For the Midwest A and Midwest Main updated mineral resource estimates reported herein, 64% and 16% of the assay intervals relied on eU grades, respectively.

Orano Canada has performed detailed QAQC and data verification, where possible, of all datasets, which in Denison's opinion are in accordance with industry best practice. Denison has performed additional QAQC and data verification of the drilling database including review of the QAQC methods and results, verification of assay certificates against the database assay table, review of downhole probe and eU calculation procedures, standard database validation checks and two site visits to the Midwest project in early 2018. Denison has reviewed Orano Canada's procedures and protocols and considers them to be reasonable and acceptable for mineral resource estimation.

Mineral Processing and Metallurgical Testing

Several programs of metallurgical testing have been carried out on Midwest Main mineralization. The two main studies were by Melis Engineering in 1990 and by SEPA (Service d'Études, de Procédés et Analyses, engineering department of the Orano Group in France) in 1998. Both studies show that good metallurgical recovery of uranium can be achieved. The current McClean mill milling process differs from what was planned by Melis as a separate facility was planned in the study. The leaching tests done by SEPA on the Midwest Main mineralization samples showed that 99.5% of uranium could be extracted using these conditions:

- Leach time 24 hours
- Acid addition 120 kg/tonne
- Free acid at end of test 25 g/l
- Oxidation, 02 at 2 bar pressure
- Redox 470 m.v.

The current process for Cigar Lake ore being processed at the McClean mill requires an eight hour leaching time which is substantially less than what is proposed as optimal for Midwest Main ore (24 hours). As the mill has recently undergone upgrades, it is expected these leaching times will be reviewed.

The test work has demonstrated that a metallurgical recovery for uranium of 98% from Midwest Main mineralization can be obtained.

The Midwest Main deposit has a relatively high amount of arsenic (5-10% overall), which could affect the water quality discharge from the mill if not properly precipitated into the tailings. The SEPA study proposed using ferric sulphate to precipitate the arsenic in the tailings. Currently the mill is addressing moderate arsenic levels in the Cigar Lake ore feeds using barium chloride and ferric sulphate to precipitate it from solution.

Test work was conducted by Denison in 1992 at Lakefield Research to determine if the recovery of nickel and cobalt was feasible along with the extraction of uranium (Lakefield Research, 1992). Test work indicated that a precipitate with good grades of nickel and cobalt could be produced from a raffinate solution after the arsenic and radium are precipitated. It is estimated that an overall process recovery of 54% for both nickel and cobalt could be achieved.

The McClean mill has seen many upgrades and changes since the 1992 and 1998 studies were conducted. Review of the studies and additional metallurgical testing will likely need to be conducted prior to assessing the feasibility of mining of Midwest Main.

There has been no mineral processing or metallurgical test work completed on the Midwest A deposit.

Mineral Resource Estimates

The Company retained SRK to independently review and audit an updated mineral resource estimate for the Midwest project completed by Orano Canada in November 2017. The review and audit was done in accordance with CIM Definition Standards (2014) and NI 43-101. The Company received a memorandum from SRK dated March 9, 2018, which was incorporated into the Midwest Technical Report. See “Mineral Reserves and Mineral Resources”, above, for a summary of the mineral resource estimate for the Midwest project.

In November 2017, Orano Canada provided Denison with a comprehensive project database consisting of drill hole data, mineralized wireframes and block models for both the Midwest Main and Midwest A deposits. The Midwest database was sent to SRK to conduct review and audit of the updated mineral resource estimate completed by Orano Canada. For the audited mineral resource estimate, SRK used data collected from several drilling campaigns completed between 1977 and 2009, including a total of 156 drill holes for Midwest A and 305 drill holes for Midwest Main. The audited mineral resource estimate includes expanded Low Grade and High Grade zones for Midwest A and three primary mineralized zones at Midwest Main, namely Unconformity, Perched and Basement zones. A summary of the audited estimation methodology and for Midwest A and Midwest Main are described below.

The Midwest A block model consists of two main mineralized domains, Low Grade and High Grade zones constructed using a 0.05% U cut-off with minimum thickness of two metres and 10.0% U cut-off with minimum thickness of one metre, respectively. A perched zone was identified, but was not considered for resource estimation. The Midwest A deposit consists of data from 113 boreholes of which 69 boreholes intersect the mineralization itself. Grades are

comprised of 64% eU data, derived from a calibrated downhole gamma probe, and 36% chemical assay data. Sample data were composited to one metre length. An accumulation-like approach was used, wherein GxD (where grade is in percent uranium) and density were estimated into a three-dimensional block model, constrained by wireframes in two passes using ordinary kriging. The grade was then calculated into each block by dividing the estimated GxD by the estimated density. A block size of 5 by 5 by 2 metres was selected. Search radii were based on variogram analyses with a relatively flat ellipsoid used aligned roughly to the unconformity surface.

Grade capping was not performed, however, the treatment of high grades was considered during estimation by limiting the influence of GxD composites greater than 20 and density composites greater than 3, to a neighbourhood of 7.5 cubic metres within the low-grade zone. Classification is based on drillhole spacing, with blocks classified as Indicated only found in the sandstone and upper basement portion of the Low Grade zone with drillhole space of 30 metres or less. The lower basement and all other sandstone blocks are classified as inferred mineral resources.

The Midwest Main block model considered three main mineralized domains: one Unconformity, 19 Perched and a one Basement zone constructed using a 0.05% U cut-off with minimum thickness of two metres. The Midwest Main deposit consists of data from 305 boreholes that intersected the mineralization, with new downhole gamma probe eU data for unsampled locations or in areas of poor core recovery (less than 75% core recovery). Grades are comprised of 16% eU data, derived from a calibrated downhole gamma probe, and 84% chemical assay data. Sample data were composited to one metre length.

Similar to Midwest A, two attributes, density and GxD, were calculated into each block using ordinary kriging, and the uranium grade was then calculated by dividing the estimated GxD by the estimated density. A block size of 5 by 5 by 2 metres was selected. Search radii were based on variogram analyses with a relatively flat ellipsoid used aligned roughly to the unconformity surface. Capping was not performed, however, higher grade composites were limited to a 5-cubic-metre neighbourhood of influence. This was applied to all zones, with high grade thresholds varying by zone. Classification is based on estimation passes, with blocks classified as Indicated only in the Unconformity zone and in regions of tight borehole spacing up to a nominal spacing of 17.5 metres. All other blocks are classified as inferred mineral resources.

Development and Production

In early 2007, Orano Canada completed an internal study evaluating the feasibility of mining the Midwest Main deposit via open pit mining methods and processing the resulting ore at the McClean Lake mill. In November 2007, the Midwest Joint Venture partners made a formal production decision to proceed with the development of the Midwest Main deposit. Subsequently, in November 2008, the Midwest Joint Venture partners announced that the development of the Midwest Main project would be delayed for an indefinite period due to delays and uncertainties associated with the regulatory approval process, increasing capital and operating cost estimates and the depressed state of the uranium market at the time. At this time, no development or production work is planned.

Despite this decision, the Midwest Joint Venture partners advanced the environmental assessment process and, after several years of work, the final version of the Midwest Project Environmental Impact Statement ("**EIS**") was submitted to provincial and federal governments in September 2011. A Comprehensive Study Report was drafted by the CNSC and circulated for federal, provincial and aboriginal review, and in September 2012, the Midwest EIS was approved.

Other Properties, Athabasca Basin, Saskatchewan

Results from the 2019 programs at Denison's highest priority non-material properties are discussed below. For Sampling, Analysis and Data Verification Procedures with respect thereto, see "Athabasca Exploration: Sampling, Analysis and Data Verification".

Hook-Carter

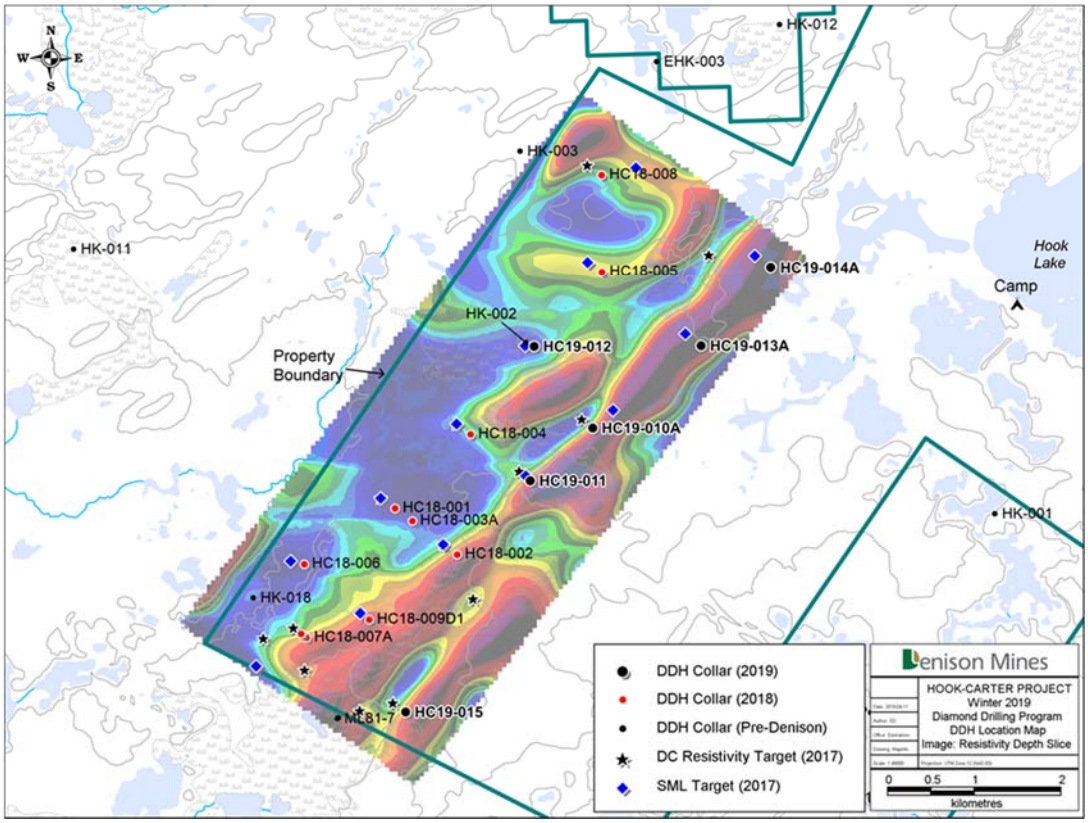
The Hook-Carter property is owned 80% by Denison and 20% by ALX Resources Corp. ("**ALX**"). Denison has agreed to fund ALX's share of the first $12 million in expenditures. The Hook-Carter property consists of 6 claims covering 24,262 hectares and is located in the western portion of the Athabasca Basin. The project is highlighted by 15 kilometres of strike potential along the prolific Patterson Lake Corridor ("**PLC**") – host to the Arrow deposit (NexGen Energy Ltd.), Triple R deposit (Fission Uranium Corp.), and Spitfire discovery (Purepoint Uranium Group Inc., Cameco, and Orano Canada), which occur within 8 to 20 kilometres of the property. The property is significantly underexplored compared to other properties along this trend, with only five of eight historic drill holes located along the 15 kilometres of PLC strike length. The property also covers significant portions of the Derkson and Carter Corridors, which provide additional priority target areas. During 2018, an additional 3,707 hectares (35 claims) were acquired which extended the prospective strike length of the Derksen Corridor up to 17 kilometres.

During 2018, Denison completed a winter and summer diamond drilling program totalling 6,960 metres in nine holes. The 2018 inaugural drilling programs were designed to test an initial set of geophysical targets on a regional scale along 7.5 kilometres of the 15 kilometres of PLC strike length at Hook-Carter. The nine holes completed successfully identified multiple prospective trends with geological features commonly associated with Athabasca Basin uranium deposits, including hydrothermal alteration in both the sandstone and the basement lithologies associated with graphitic basement structures.

During 2019, a diamond drilling program was completed in the first quarter consisting of 4,797 metres in six completed holes (see drill hole locations in the figure below). The program was aimed at testing additional high-priority geophysical targets identified from the 2017 electromagnetic (moving loop TEM) and resistivity (DCIP) surveys within the interpreted extension of the Patterson Lake Corridor.

Favorable structure and alteration was encountered in the majority of the drill holes completed in the 2019 drilling program, and the initial batches of geochemical results show significant concentrations of uranium pathfinder elements, which confirm the presence of a mineralizing system on the Hook Carter Property. Completion of the 2018 and 2019 drilling programs has provided reconnaissance level drill hole coverage along the Patterson Lake Corridor at an approximate 1,200 metre spacing within the 2017 geophysical survey area. These reconnaissance drill holes form an important initial repository of drilling data, which is expected to be used to prioritize target horizons and plan future exploration programs. There is not currently a planned exploration program for 2020.

Hook Carter Drill Hole Locations



Drill hole highlights from the 2019 drilling program include:

HC19-010A - Targeted a DC resistivity anomaly located along the eastern edge of the 2017 geophysical grid. The hole intersected weak to moderate hydrothermal alteration in the sandstone. Geochemistry results returned anomalous boron values up to 762 ppm throughout the sandstone column. An additional DC resistivity target is located to the southeast on this section.

HC19-011 – Tested a roughly coincident electromagnetic-resistivity anomaly 900 metres along strike to the southwest of HC19-010A. Drill hole HC19-011 intersected moderate to locally strong hydrothermal alteration in the sandstone and weakly elevated radioactivity in hematized clay near the unconformity (up to 225 cps with a handheld RS-125 spectrometer). Elevated levels of boron, up to 3,320 ppm, were reported in the sandstone and immediately below the unconformity. It has been interpreted that HC19-011 likely overshot the optimal target and additional targets may exist to the southeast on section.

HC19-013A and HC19-014A – These drill holes tested electromagnetic targets, 1.5 kilometres and 2.7 kilometres along strike to the northeast of HC19-010A, respectively. HC19-013A encountered multiple zones of strongly brecciated, faulted and hydrothermally altered sandstone, particularly near the unconformity. Strongly silicified pelitic gneisses and a graphite-rich pelitic gneiss were intersected within the basement that exhibited extensive shearing, faulting and brecciation. Elevated radioactivity, with handheld RS-125 spectrometer values of up to 170 cps, was recorded in some of the fault zones in the basement. The sandstone column returned highly

anomalous boron values ranging from 45 to 1,110 ppm in the basal 300 metres. One 10-metre composite sandstone sample, from 100 – 110 metres, averaged 5.79 ppm uranium (partial digest). Collared approximately 1.2 kilometres northeast of HC19-013A, drill hole HC19-014A encountered similar sandstone structure and alteration restricted to the basal portion of the sandstone column. A massive white clay zone about three metres in thickness was encountered at the unconformity. HC19-014A encountered strongly sheared, faulted and brecciated graphitic pelitic gneiss in the basement. Strong clay alteration and hematization followed the graphitic unit extending about 10 metres into the underlying quartz-flooded granitic gneiss. Lithogeochemical samples from HC19-014A did not yield anomalous uranium values, however one sample from the basal 3 metres of the sandstone column returned 1,380 ppm boron.

HC19-012 – Targeted a strong electromagnetic anomaly in the central portion of the 2017 geophysical survey area. The hole was designed to test the basement below historic drill hole HK-002. Sandstone structure included several narrow zones of blocky and locally brecciated core. Significant hydrothermal alteration was noted in the sandstone. Lithogeochemical samples analyzed from this hole returned strongly anomalous boron values up to 1,000 ppm for the entire sandstone column. Structurally-controlled clay alteration was observed in multi-metre sections. A weakly to moderately bleached, locally sheared, weakly graphitic unit was intersected in the basement below HK-002.

HC19-015 – Completed approximately 3 kilometres southwest of HC19-011, to test a resistivity target that is coincident with a historical electromagnetic anomaly. Weak dravite and pyrite alteration was noted mostly in the upper portions of the sandstone column. The basal 30 metres were desilicified with several unconsolidated sections. Basement lithologies encountered included a graphitic breccia and a weakly graphitic pelite unit. Pervasive strong quartz flooding was observed throughout the basement and elevated radioactivity of up to 350 cps was measured with a hand-held RS-125 scintillometer in a hematized zone below the unconformity.

Other Denison Athabasca Projects

Denison's other Athabasca projects range in exploration maturity and present numerous exploration opportunities. Denison continuously reviews its significant land package with a view to generating new exploration targets or creating spin-out opportunities. The table below provides a list of Denison's Athabasca projects as at December 31, 2019.

Projects	Denison Ownership	JV Partner	# Claims	Hectares
Bachman Lake	100%		5	11,419
Bell Lake	100%		6	16,479
Brown Lake	100%		4	1,853
Candle Lake	44.66%	Uranium One/JCU	1	2,595
Crawford Lake	100%		5	11,800
Darby	59.55%	Uranium One	9	15,392
Epp Lake	100%		2	865
Ford Lake	100%		8	10,924
Hatchet Lake	70.15%	Eros Resources	9	10,212
Jasper Lake	100%		1	900
Johnston Lake	100%		6	17,265
Lynx Lake	59.55%	Uranium One	1	1,274
Mann Lake	30%	Cameco/Orano	2	3,407
Marten	100%		2	5,008
Moon Lake	59.55%	Uranium One	2	4,309
Moon Lake North	100%		5	788
Moon Lake South(1)	51%	CanAlaska	1	2,716
Murphy Lake	100%		8	8,686
Packrat	100%		2	2,102
Park Creek	49%	Cameco	8	7,798
Russell Lake	37.82%	Cameco/Boyko	1	355
South Dufferin	100%		8	9,569
Torwalt Lake	100%		1	812
Turkey Lake	100%		1	3,789
Waterbury South	100%		7	1,145
Waterfound	12.32%	Orano/JCU	25	11,670
Waterfound North	59.55%	Uranium One	4	4,124
Wolly	21.89%	Orano/JCU	17	23,700
Wolverine	100%		5	7,006

Notes:

(1) Subject of an option agreement between Denison and CanAlaska Uranium Ltd., pursuant to which Denison can earn up to a 75% interest in the property.

ATHABASCA EXPLORATION: SAMPLING, ANALYSIS AND DATA VERIFICATION

Unless otherwise specifically disclosed herein, the following describes the procedures and protocols for all Athabasca exploration programs operated by Denison in reference to drill hole surveying, downhole radiometric surveying, core logging, core sampling, sample preparation methods, analytical procedures, Quality Assurance and Quality Control ("**QAQC**") and data verification. For Sampling, Analysis and Data Verification procedures employed by other operators, past or present, on projects in which Denison holds an ownership interest, refer to those project sections within the AIF, specifically for McClean Lake, Midwest and Waterbury Lake.

Drill Hole Surveying

Drill collars are typically sited and surveyed in the field using a Differential Global Positioning System ("DGPS") to determined accurate coordinates and elevation. The drill rig azimuth and dip is aligned using a field compass (set to the appropriate magnetic declination) or a rig alignment tool. The trajectory of all drill holes is determined with a Reflex survey instrument in single point mode, which measures the dip and azimuth at 50 metre intervals down the hole.

Downhole Radiometric Probe Surveying

When possible, all drill holes are surveyed immediately after drilling with a downhole radiometric probe to measure natural gamma radiation. Each survey consists of either a HPL2375 single sodium iodide (NaI) scintillation crystal tool or a 2GHF-1000 triple gamma (one sodium iodide crystal and two ZP1320 high flux Geiger-Mueller (GM) tubes) tool attached to a MX-Series winch with a MGX data recorder connected to a portable computer. All logging instruments are manufactured by Mt. Sopris Instruments Inc., Denver CO and powered by a portable Honda generator.

Downhole logging measurements are completed within the drill rods for both down and up survey runs using MSLog software provided by Mt Sopris. Logging speeds are maintained at approximately 10 metres/minute. Individual data recordings are stored separately for each run on a portable laptop computer.

Total count measurements from each survey are converted to radiometric equivalent grade U_3O_8 % ("**eU_3O_8**") values using conversion coefficients derived from calibration facilities at the SRC pits located in Saskatoon, Saskatchewan. The calibration facilities allow for regular checks on both probes and probing equipment and to monitor or determine maintenance issues before field operations begin. This site consists of four mineralized holes, with isolated uranium concentrations of 1.4, 1.6, 1.6 and 0.21 metres wide with U grades varying from 0.063, 0.29, 1.25 and 4.07%, respectively. Individual probes are calibrated using the NaI crystal measurements a minimum of two times per year, normally before and after the winter and summer field seasons. Survey results are also corrected for attenuation of signal in water and for the thickness of steel pipe in the hole. GM tubes are checked for drift at the site, however calibration factors for these probes was derived separately using direct comparisons of total count values with assay core results as high as 80% U_3O_8. The "in-situ" nature of this calibration procedure allows for a wider spectrum of predicted results than using the SRC calibration facilities.

The Company typically reports eU_3O_8, derived from a calibrated downhole total gamma probe, as preliminary during its exploration programs and subsequently reports definitive assay grades following sampling and chemical analysis of the mineralized drill core.

Core Logging

Denison employs suitably qualified persons to log all drill core in detail at dedicated, custom-built core logging facilities proximal to drilling operations. Routine logs completed for each drill hole include lithology, sandstone texture, paleoweathering, mineralization, alteration, structure (interval and point), geotechnical and gamma (handheld scintillometer). Where required for geophysical survey reconciliation, additional logs may include magnetic susceptibility and other physical property measurements. For advanced projects where mining studies may be applicable geotechnical logs are expanded and may also include point load testing. All logging data, together with collar and survey information and a drill hole summary, are uploaded to a DH Logger database with central storage on Denison's server at the Saskatoon office. In addition, drill core is photographed, both wet and dry, before it is stored at project sites either in racks or as cross-stacks. Drill core handling and sampling protocols are in accordance with industry best practices.

Core Sampling, Sample Preparation and Assaying

Assay Samples

Denison submits drill core samples for chemical U_3O_8 assay for all mineralized intervals, where core recovery permits. Mineralized intervals are identified by handheld scintillometre and confirmed by downhole gamma probe logs. All mineralized core is broken into approximate 10 centimetre pieces and measured with a handheld scintillometer (RS-120 or RS-125) by removing each piece of drill core from the ambient background, noting the most pertinent reproducible result in counts per second ("**cps**"), and carefully returning it to its correct place in the core box. Any core registering over 500 cps is marked for sampling, typically over 50 centimetre intervals. A threshold of 300 cps has been used at Wheeler River's Gryphon deposit since the beginning of 2017. Additional non-mineralized 'shoulder' samples are marked over 50 centimetre intervals to flank both ends of the mineralized intervals. In areas of strong mineralization more than one sample on either end is sometimes required. All core samples are split in half with a hand splitter according to the sample intervals marked on the core. One-half of the core is returned to the core box for future reference and the other half is tagged and sealed in a plastic bag. Bags of mineralized samples are sealed for shipping in metal or plastic pails depending on the radioactivity level.

Because the mineralized drill cores are classified as hazardous materials and are regulated under requirements governing the transport of dangerous goods, Denison staff have been trained in the proper handling and transport of the cores and deliver them from the core facility directly to the laboratory without outside contact.

All drill core U_3O_8 assays are conducted by the SRC Lab. The assay sample preparation and analytical procedures are as follows:

- Drill core samples are received by the analytical laboratory from Denison in sealed five-gallon plastic or metal pails. Each sample is contained in a sealed plastic bag with a sample tag. A packing slip is enclosed that contains instructions and a sample number list. Samples are verified against the packing slip. Any extra samples or missing samples are noted and Denison is informed.
- Samples are sorted and processed according to location (sandstone or basement origin) and level of radioactivity.
- Sample preparation includes drying, jaw crushing to 60% passing -2 millimetres and pulverizing to 90% passing -106 microns.

- The resultant pulp is split and digested using a two-acid partial digest (HNO_3:HCl) and a three-acid 'total' digest (HF: HNO_3:$HClO_4$) and the respective solutions analyzed for multi-elements, including uranium, using ICP-OES (SRC Lab analytical method ICP1). Boron values are obtained through NaO_2/$NaCO_3$ fusion followed by ICP-OES.
- When uranium partial values, as obtained above, are ≥1,000 ppm, sample pulps are re-assayed for U_3O_8 using SRC Lab's ISO/IEC 17025:2005 accredited method for the determination of U_3O_8 wt%. A split of the sample pulp is digested using aqua-regia (HCl:HNO_3 in the ratio 3:1) and the solution analyzed for U_3O_8 wt% using ICP-OES.F

Bulk Dry Density Sampling

In addition, samples are routinely collected from mineralized intersections for bulk dry density determination as required for mineral resource estimation. Density samples are typically collected at a frequency of one density sample per 10 assay samples (i.e. 1 sample for every 5 metre interval), also ensuring the density samples are representative of the uranium grade range and the different domains of the deposit. The density samples comprise half-split core over 10 centimetre intervals, and for each sample, the depth, rock type and gamma scinitllometre reading is recorded. The samples are sent to the SRC Lab for analysis along with the mineralized core samples for assay. At the SRC Lab, the density samples are first weighed as received and then submerged in de-ionized water and re-weighed. The samples are then dried until a constant weight is obtained. The sample is then coated with an impermeable layer of wax and weighed again while submersed in de-ionized water. Weights are entered into a database and the bulk density of each sample is calculated. Water temperature at the time of weighing was also recorded and used in the bulk density calculation. Following bulk density determination, the samples are sent for uranium assay using SRC Lab's ISO/IEC 17025:2005 accredited method for the determination of U_3O_8 wt% in order to ensure a direct correlation can be made between density and assay values.

Exploration Samples

Three other types of drill core samples are collected during routine exploration, the results of which are used to prioritize drill holes for follow-up exploration or determine geochemical and/or alteration vectors toward mineralization, as follows:

1. Composite geochemical samples are collected over approximately 10 metre intervals in the upper Athabasca sandstone and in fresh lithologies beneath the unconformity (basement) and over 5 metre intervals in the basal sandstone and altered basement units. The samples consist of 1 centimetre to 2 centimetres disks of core collected at the top or bottom of each row of core in the box over the specified interval. Care is taken not to cross lithological contacts or stratigraphic boundaries. These samples are submitted to the SRC Lab for sample preparation and multi-element analysis. The same sample preparation procedures are used as described above for U_3O_8 assay samples. The pulps are analyzed using the ICPMS Exploration Package which includes a total digest (HF:HNO_3:$HClO_4$) and partial digest (HNO_3:HCl) followed by ICP-MS analysis. Boron values are obtained through NaO_2/$NaCO_3$ fusion followed by ICP-OES.
2. Representative/systematic core disks (one to five centimetres in width) are collected at regular 5 metre to 10 metre intervals throughout the entire length of core until basement lithologies become unaltered. These samples are analyzed for clay minerals using reflectance spectroscopy. Samples for reflectance clay analyses are analyzed by Denison using an

ArcSpectro FT-NIR ROCKET spectrometer and sent to AusSpec International Ltd. (AusSpec) for interpretation.

3. Select spot samples are collected from significant geological features (i.e. radiometric anomalies, structure, alteration etc.). Core disks 1 to 2 centimetres thick are collected for reflectance spectroscopy and split core samples are collected for geochemical analysis. The same reflectance spectrometry or geochemical procedures as described above are used.

These sampling types and approaches are typical of uranium exploration and definition drilling programs in the Athabasca Basin.

Data Handling

After the analyses are completed, analytical data are securely sent using electronic transmission of the results, by the SRC Lab to Denison. The electronic results are secured using WINZIP encryption and password protection. These results are provided as a series of Adobe PDF files containing the official analytical results ("assay certificates") and a Microsoft Excel spreadsheet file containing only the analytical results. Analytical data received from the lab is imported directly into Denison's DH Logger database. The data is subject to validation using triggers built into the database to identify blank or standard assays that fall outside the accepted limits that require re-analysis. Field duplicates are validated using control charts. The laboratory is notified immediately of any problematic samples or batches and these are re-analyzed. Assay values that fall below the method detection limit (MDL) are reported by the lab as 'less than' values (<MDL). These values are automatically replaced by half MDL by the database during import. The database is backed up on- and off-site every day.

QAQC

The SRC Lab has an internal QAQC program dedicated to active evaluation and continual improvement in the internal quality management system. The laboratory is accredited by the Standards Council of Canada as an ISO/IEC 17025 Laboratory for Mineral Analysis Testing and is also accredited ISO/IEC 17025:2005 for the analysis of U_3O_8. The laboratory is licensed by the Canadian Nuclear Safety Commission (CNSC) for possession, transfer, import, export, use, and storage of designated nuclear substances by CNSC Licence Number 01784-1-09.3. As such, the laboratory is closely monitored and inspected by the CNSC for compliance. All analyses are conducted by the SRC Lab, which has specialized in the field of uranium research and analysis for over 30 years. The SRC Lab is an independent laboratory, and no associate, employee, officer, or director of Denison is, or ever has been, involved in any aspect of sample preparation or analysis on samples. The SRC Lab uses a Laboratory Management System (LMS) for Quality Assurance. The LMS operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E) "General Requirements for the Competence of Mineral Testing and Calibration Laboratories" and is also compliant to CAN-P-1579 "Guidelines for Mineral Analysis Testing Laboratories". The laboratory continues to participate in proficiency testing programs organized by CANMET (CCRMP/PTP-MAL).

The SRC Lab routinely inserts standard reference materials and blanks into batches of the Company's samples as an internal check on accuracy and contamination. Quality control samples (reference materials, blanks, and duplicates) are included with each analytical run, based on the rack sizes associated with the method. Before the results leave the laboratory, the standards, blanks, and split replicates are checked for accuracy, and issued provided the senior scientist is fully satisfied. If for any reason there is a failure in an analysis, the sub-group affected will be re-analyzed, and checked again. A Corrective Action Report will be issued and the problem

is investigated fully to ensure that any measures to prevent the re-occurrence can and will be taken. All human and analytical errors are, where possible, eliminated. If the laboratory suspects any bias, the samples are re-analyzed and corrective measures are taken.

Denison has developed several QAQC procedures and protocols for all exploration projects to independently monitor laboratory performance which include the analysis of uranium standards, blanks, field duplicates and exploration standards, as follows:

Uranium Standards - Due to the radioactive nature of the standard material, insertion of the standard materials is preferable at the SRC Lab instead of in the field. During sample processing, the appropriate standard grade is determined, and an aliquot of the appropriate standard is inserted into the analytical stream for each batch of materials assayed. Uranium standards are typically inserted at a minimum rate of 1 in every 40 samples. For the Wheeler River project up until the end of 2018, Denison used standards provided by Joint Venture partner Cameco for uranium assays. Six Cameco uranium assay standards were prepared for use in monitoring the accuracy of uranium assays received from the laboratory. For Wheeler River from 2019 and onward, and for other Denison projects, a suitable matrix-matched Certified Reference Material ("**CRM**") is used as a standard.

Blanks - Denison employs a lithological blank composed of quartzite to monitor the potential for contamination during sampling, processing, and analysis. The selected blank consists of a material that contains lower contents of U_3O_8 than the sample material but is still above the detection limit of the analytical process. Due to the sorting of the samples submitted for assay by the SRC Lab based on radioactivity, the blanks employed must be inserted by the SRC Lab after this sorting takes place, in order to ensure that these materials are ubiquitous throughout the range of analytical grades. In effect, if the individual geologists were to submit these samples anonymously, they would invariably be relegated to the minimum radioactive grade level, preventing their inclusion in the higher radioactive grade analyses performed by the SRC Lab. Blanks are typically inserted at a minimum rate of 1 in every 40 samples. For the Wheeler River project up until the end of 2018, Denison used blanks provided by Joint Venture partner Cameco. For Wheeler River from 2019 and onward, and for other Denison projects, other suitable blank material is used, as provided by the SRC Lab.

Field Duplicates - The Company inserts duplicate samples in the sample stream as a check on the precision of the SRC Lab. Core duplicates are prepared by collecting a second sample of the same interval, through splitting the original sample, or other similar technique, and are submitted as an independent sample. Duplicates are typically submitted at a minimum rate of one per 25 samples. The collection may be further tailored to reflect field variation in specific rock types or horizons.

Exploration Standards – Denison has prepared three in-house 'exploration standards' to independently monitor laboratory performance during the processing of routine drill core exploration samples. These standards aim to test laboratory accuracy and precision for a variety of trace metals at low levels, as required for Athabasca uranium exploration.

Assay Checks – In addition to the QAQC described above, up until the end of 2018, Denison sent one in every 25 U_3O_8 assay samples to the SRC Lab's Delayed Neutron Counting (DNC) laboratory, a separate umpire facility located at the SRC Lab in Saskatoon, to compare the uranium values using two different methods, by two separate laboratories. All radioactive samples are monitored and recorded as per CNSC licence 01784-1-09.0. Decommissioning of the SRC Lab's DNC facility is planned for early 2019. The SRC Labe is planning to have an X-ray

fluorescence (“XRF”) lab running in the spring of 2019 for umpire analyses, which will operate on a similar independent basis as the DNC facility. Furthermore, down hole radiometric probe results provide equivalent uranium data (eU_3O_8) that is used internally by the Company for comparisons with the SRC Lab U_3O_8 results.

Data Verification

Denison engages with independent consultants for estimation of mineral resources on its mineral properties, in accordance with CIM Standards and NI 43-101, as well as other studies, including the PFS and ISR field testing and engineering studies. In this regard, the independent consultants undertake rigorous data verification including, but not limited to, Denison’s field procedures, databases and assay results.

Prior to public disclosure of drilling results, including preliminary radiometric equivalent grades (“eU_3O_8”) and chemical assay grades (“U_3O_8”), the results are subject to data verification by Qualified Persons employed by Denison. This includes checks of 10 to 20% of the results (typically as composited intervals) against non-composited eU_3O_8 determinations and laboratory assay certificates.

DENISON'S OPERATIONS

McClean Lake Mill

The MLJV owns a state of the art uranium processing facility located on the eastern edge of the Athabasca Basin in northern Saskatchewan, approximately 750 kilometres north of Saskatoon. Orano Canada is the operator/manager of the facility.

The McClean Lake mill is specially designed and constructed to process high grade uranium ores in a safe and environmentally responsible manner. The mill uses sulphuric acid and hydrogen peroxide leaching and a solvent extraction recovery process to extract and recover the uranium product from the ore. In addition to the mill facility, other infrastructure on the site includes a sulphuric acid plant, a ferric sulphate plant, an oxygen plant, an electricity transmission line tied into the provincial power grid, a 14 megawatt back-up diesel power plant, warehouses, shops, offices and living accommodations for site personnel.

In 2016, an expansion of the mill was completed and an increase to the licensed capacity of the mill was approved – resulting in an increase to the licensed production capacity of the mill to 24 million pounds U_3O_8 per year. This increased licensed capacity allowed for the processing of 100% of ore production from the Cigar Lake mine, expected to be 18 million pounds U_3O_8 per year, and provides the flexibility for the mill to process ore from other sources in the future.

Operations

The McClean Lake mill began production of uranium concentrates in 1999, with the first ore fed to the mill on June 22, 1999 and commercial production achieved on November 1, 1999. The mill operated until the end of June 2010, producing approximately 50 million pounds U_3O_8, when it was placed on stand-by due to a lack of ore. In 2014, the McClean Lake mill re-commenced operations with the delivery of ore shipments from the Cigar Lake Mine, owned by the CLJV and operated by Cameco. In 2014, the mill processed over 456,800 pounds of U_3O_8 with a 97.5% recovery rate. Mill feed consisted of a blend of Cigar Lake ores and stockpiled Sue B and McClean Lake North ores (mined via SABRE). In 2015, production ramped up and the mill produced approximately 11.3 million pounds of U_3O_8 with a 98.9% recovery rate.

In 2016, the mill produced 17.3 million pounds of U_3O_8 with a 99% recovery, and mill feed was all Cigar Lake ore. From 2017 to 2019, the mill has produced just over 18.0 million pounds of U_3O_8 per year, processing 100% mill feed from Cigar Lake with recoveries at approximately 99%. The table below shows the operating statistics for McClean Lake over the last five years.

McClean Lake Operations	2019	2018	2017	2016	2015
Ore Milled (thousand tonnes)	45,456	42,624	36,374	36,682	24,912
Average Grade (% U_3O_8)	17.89	19.19	22.78	21.39	20.61
MLJV Production (thousand pounds U_3O_8)	-	-	-	-	10.7
Denison's share MLJV Production (thousand pounds U_3O_8)	-	-	-	-	2.4
Toll Mill Production (thousand pounds U_3O_8)	18,012	18,018	18,015	17,333	11,294

During the fourth quarter of 2019, the McClean Lake Union Unifor Local 48-S ratified a new collective bargaining agreement. The new three-year agreement includes a new two-weeks-in two-weeks-out rotation, which will be implemented early in 2020.

For information pertaining to taxes and royalties, see “Government Regulation – Saskatchewan Royalties” and “Government Regulation – Canadian Income and Other Taxes.”

Mill Licence

The McClean Lake site is operated under various permits, licences, leases and claims granted and renewed from time to time, all of which are currently in good standing. Several key regulatory achievements were completed in 2017 for McClean Lake: (a) the issuance by the CNSC of a 10 year license for operation of both McClean and Midwest projects; (b) the receipt of renewal of provincial approvals to operate for a 6 year term, expiring on October 31, 2023; and (c) CNSC approval to expand the existing tailings facility up to an elevation of 448 meters above sea level (“**m ASL**”). Historically CNSC issued Mine Operating Licences were granted for a 5 year term, but in 2009 the McClean Lake operations received an 8 year term and in 2017 was granted a further 10 year term: UMOL-MINEMILL-McLEAN.00/2017 (the “**Mine Operating License**”) which is valid for the period July 1, 2017 to June 30, 2027. In addition to renewal of all previously licensed activities, the current licence authorizes mining of the McClean North deposits using hydraulic borehole mining methods (SABRE) and includes the care and maintenance activities at the Midwest site.

Tailings Disposal

The disposal of mill tailings in an environmentally acceptable manner has led to advances in the design and construction of new tailings management facilities. In the McClean tailings management facility (“**TMF**”), tailings are deposited sub-aqueously from a barge. This procedure minimizes tailings segregation, reduces concerns of freezing and dust generation, and controls radiation and radon emissions from the pond. This facility has been designed to receive tailings from processing high grade Midwest and Cigar Lake ores in addition to tailings from the McClean Lake deposits.

Under the regulatory approved “**TMF Optimization**” project, the tailings capacity of the TMF was increased in two stages during the period 2013 to 2018. The TMF Optimization project involved the sloping of the TMF walls and the placement of a bentonite liner to increase the TMF capacity up to an elevation of 443 m ASL.

A second project, called “**TMF Expansion**”, entails adding additional tailings capacity over and above that created through the TMF Optimization project. The first phase of the project entails increasing the consolidated tailings elevation of the TMF up to 448 m ASL. On April 19, 2017, the MLJV received regulatory approvals for the TMF Expansion project. Following such receipt, construction activities were initiated in 2018 with re-sloping of the pit walls, installation of a new tailings pipe bench, decommissioning of 12 dewatering wells and the relocation of the contaminated landfill from the TMF to the Sue C site.

In 2019, phase one construction activities continued and work on placing additional bentonite liner commenced. By the end of September 2019, the first phase of the TMF Expansion was completed with the bentonite liner reaching a level of ~447.4 m ASL. The regulatory costs associated with the TMF Expansion Phase 1 work was funded by the MLJV while the CLJV funded predominantly all of the construction costs.

Plans for 2020 include regulatory work necessary to advance the permitting associated with the TMF Expansion Project Phase 2, which envisions raising the TMF capacity to 468 m ASL.

Cigar Lake Toll Milling

In 2002, Denison and its partners entered into an agreement with the CLJV to process Cigar Lake ore at the McClean Lake mill. Pursuant to that agreement, all Cigar Lake ore was to be leached at the McClean Lake mill with the pregnant aqueous solution being divided between the McClean Lake and Rabbit Lake facilities for processing into uranium concentrates. In order to process this Cigar Lake ore, an expansion of the McClean Lake mill was required. The expansion and modifications of the McClean Lake mill to raise its capacity to 13.0 million pounds U_3O_8 were completed in 2008 and all costs were paid for by the CLJV.

As a result of delays in the startup of the Cigar Lake mine and the exhaustion of permitted ore deposits at McClean Lake, the McClean Lake mill was placed on stand-by at the end of June of 2010. Under the Cigar Lake toll milling agreement, the CLJV funded a considerable portion of the McClean Lake stand-by costs, with the relative proportion of the stand-by costs paid by each party calculated on the basis of the percentage of mineral reserves between the McClean Lake and Cigar Lake joint ventures.

In 2011, the CLJV and the MLJV agreed to amend the toll milling agreement. Under the new milling arrangement, the McClean Lake operation is to process and package 100% of the uranium produced from the Cigar Lake mine. To accommodate the annual production of 18.0 million pounds U_3O_8 from the CLJV, the mill has been further expanded to an annual licensed capacity of 24.0 million pounds U_3O_8. All costs for the expansion of the McClean Lake mill and a portion of the TMF Optimization and TMF Expansion were paid or will be paid for by the CLJV (see "Denison's Operations - McClean Lake - Tailings Disposal").

Cigar Lake Toll Milling – APG Transaction

Pursuant to the APG Transaction in February 2017, certain of Denison's interests in the Cigar Lake toll milling proceeds have been sold to APG and its subsidiary Centaurus Royalties Ltd. ("**Centaurus**") for aggregate gross proceeds to Denison of $43,500,000. The APG Transaction is comprised of the following elements: (1) a 13 year limited recourse lending arrangement involving a loan from APG to 9373721 Canada Inc. ("**SPV**") (the "**APG Loan**") and a further loan from SPV to DMI (the "**SPV Loan**") each for $40,800,000 (collectively, the "**Lending Arrangement**"); and (2) $2,700,000 in proceeds from the sale, to Centaurus, of a stream equal to Denison's 22.5% share of proceeds from the toll milling of Cigar Lake ore by the McClean Lake mill for specified Cigar Lake toll milling throughput in excess of 215 million pounds U_3O_8 after July 1, 2016 (the "**Stream Arrangement**").

Additional details of the APG Transaction are as follows:

- No Warranty of the Future Rate of Production - No warranty is provided by Denison (including DMI and SPV) to APG (including Centaurus), under the terms of the Lending Arrangement or the Stream Arrangement, regarding: the future rate of production at the Cigar Lake mine and / or the McClean Lake mill; or the amount or collectability of proceeds to be received by the MLJV in respect of toll milling of Cigar Lake ore.
- APG Loan Details - The APG Loan will accrue interest at a rate of 10% per annum and does not have a predetermined principal repayment schedule. The APG Loan is secured by a first priority interest in the assets of SPV which will essentially consist of the SPV Loan to DMI.
- SPV Loan Details - The SPV Loan will accrue interest at a rate of approximately 10% per annum and does not have a predetermined principal repayment schedule. The SPV Loan is limited in its recourse against DMI such that it is generally repayable only to the extent of Denison's share of the toll milling revenues earned by the MLJV from the processing of the

first 215 million pounds of U_3O_8 from Cigar Lake ore on or after July 1, 2016. Denison will guarantee the limited recourse loan repayments and will grant a second ranking pledge of its share of DMI to secure performance by DMI of its obligations to pay the SPV Loan. The share pledge is second ranking to Denison's existing pledge of its shares of DMI to the Bank of Nova Scotia ("**BNS**") under the terms of its Letters of Credit Facility.

Surface Access Borehole Resource Extraction (SABRE) Mining Program

The SABRE program is focused on developing a viable alternate mining method combining surface drilling and borehole mining technology. Benefits of the method may include a reduced time to production, reduced or deferred capital costs, as well as minimized safety and environmental risks.

Hydraulic borehole mining is a technique used to extract materials through a small access borehole, typically less than one-half of a metre in diameter, resulting in a very small disturbance to the surface. A mining tool containing a high-pressure water jet nozzle is lowered through the access borehole in the overburden and sandstone to the mineralized horizon. The high-pressure water jet is used to cut or erode the mineral-bearing ore and to create a cavity up to four metres in diameter. The cuttings are transported to surface in a slurry form and sent through a series of screens and settling ponds to separate the ore from the jetting water. Jetting water is filtered further and re-used in the process. Each mined out cavity is backfilled after completion with a cemented mixture in the mineralized horizon.

Between 2007 and 2012, approximately 2,100 tonnes of ore was recovered through various SABRE test mining programs, a portion of which has been fed to the mill between 2007 and 2014. After the completion of several significant milestones in 2012 and 2013, a decision was made in late 2013 to suspend the SABRE program in 2014 in response to the low uranium price environment. In 2015, SABRE activities were limited to patent applications and upgrading down-hole sonar capabilities with the objective of improving surveying of cavity dimensions and mining performance. In 2016, an expanded program was evaluated for SABRE including the re-tooling of the program to allow for larger volumes and jetting pressures designed to increase the SABRE production rate. In addition, the purchase, installation and testing of a new solid / liquid separation system was completed to assess the improvement in recovery of small uranium particles from the production slurry created during the SABRE mining process.

In 2017 and 2018, development of the re-tooled SABRE program continued with engineering of larger diameter mining pipes, procurement of high-pressure pumps and a tendering process to contract drilling equipment and labour for a further mining test. In addition, in 2018 four access holes were drilled and cased from surface to just above the McClean North orebody elevation. It is expected that these access holes will be used in 2020 as part of planned mining tests using the re-tooled equipment. In 2019, engineering and procurement activities for the re-tooled mining equipment continued and various equipment acceptance testing activities were completed.

It is currently anticipated that, in 2020, the work to be performed for the SABRE program will include installation and testing of the re-tooled mining equipment on-site. A four-hole test mining program is planned at McClean North, using the four-access holes drilled in 2018. There is the potential that a small uranium processing campaign, using any ore recovered from the test mining program, could be carried out at the McClean mill in December of 2020. Processing ore from the SABRE test mining program will require sufficient ore to be recovered from the test, and for the McClean mill's production schedule to allow for it. Modifications to the grinding circuit at the McClean Lake mill are planned, in order to facilitate the possible processing of ore recovered from the test mining program.

MANAGER OF UPC

DMI is the manager of UPC. UPC is a public company with the primary investment objective of achieving an appreciation in the value of its uranium holdings. The Company does not, directly or indirectly, have an ownership interest in UPC. As manager, DMI provides UPC's officers and manages UPC's activities, including purchasing uranium for and on behalf of UPC as directed by the UPC board, arranging for its storage and attending to regulatory reporting for UPC.

The MSA is the current management services agreement between DMI and UPC, effective April 1, 2019 for a five year term. Under the MSA, DMI receives the following management fees from UPC: a) a base fee of $400,000 per annum, payable in equal quarterly installments; b) a variable fee equal to (i) 0.3% per annum of UPC's total assets in excess of $100 million and up to and including $500 million, and (i) 0.2% per annum of UPC's total assets in excess of $500 million; c) a fee, at the discretion of the UPC board, for on-going monitoring or work associated with a transaction or arrangement (other than a financing, or the acquisition of or sale of U_3O_8 or UF_6); and d) a commission of 1.0% of the gross value of any purchases or sales of U_3O_8 or UF_6, or gross interest fees payable to UPC in connection with any uranium loan arrangements. During 2019, DMI earned an aggregate of $1,966,000 in management fees from UPC.

The MSA may be terminated by Denison upon the provision of 180 days written notice. The MSA may be terminated by UPC (i) in the event of a material breach, (ii) within 90 days of certain events surrounding a change of both of the individuals serving as Chief Executive Officer and Chief Financial Officer of UPC, and / or a change of control of Denison, or (iii) upon the provision of 30 days written notice and, subject to certain exceptions, a cash payment to Denison of an amount equal to the base and variable management fees that would otherwise be payable to Denison (calculated based on UPC's current uranium holdings at the time of termination) for the lesser period of a) three years, or b) the remaining term of the MSA.

DENISON CLOSED MINES GROUP

Denison formed its Denison Environmental Services division ("**DES**") in 1997 to provide mine decommissioning and mine care and maintenance services to industry and government, as well as to manage Denison's post mine closure environmental obligations on its Elliot Lake landholdings. In late 2019, driven by a new strategic vision for Denison as a mining company with expertise across the full mining life cycle, Denison discontinued the use of the DES name. The team of closed mine care & maintenance specialists and environmental professionals previously working under DES are now part of Denison's integrated "Closed Mines" group, which is positioned within the organization alongside each of Denison's exploration and project development teams.

The Closed Mines group ("**CMG**") remains focused on post-closure mine care and maintenance services, and its technical team is principally located in Elliot Lake, Ontario.

The primary activities of the Closed Mines Group include: the ongoing monitoring of Denison's two closed Elliot Lake mine sites, plus environmental monitoring, effluent treatment and maintenance services for other non-Denison clients, including in 2019:

- Certain of Rio Algom Ltd.'s closed mine sites in Ontario and Quebec, including Elliot Lake;
- Yukon Government's closed Mt. Nansen Mine in the Yukon; and
- Ontario Government's closed Lockerby Mine in northern Ontario.

ENVIRONMENTAL, HEALTH AND SAFETY MATTERS

The Company has an Environmental, Health and Safety Policy (the "**EHS Policy**") that affirms Denison's commitment to environmentally responsible management and compliance with occupational health and safety laws. Under the EHS Policy, the Company has committed to run its operations in compliance with applicable legislation, in a manner that minimizes the impact on our ecosystem. The EHS Policy mandates the use of regular monitoring programs to identify risks to the environment, to the public and to Denison's employees and to ensure compliance with regulatory requirements. The EHS Policy also sets out Denison's requirement to train its employees regarding environmental and health and safety compliance and best practices and to provide adequate resources in this regard.

The EHS Policy requires regular reporting to the Board regarding the Company's compliance and the results of the Company's monitoring. To assist the Board with its responsibilities in overseeing environmental, health and safety matters, the Board has established the Environment, Health and Safety Committee (the "**EHS Committee**") which works with management to discuss matters affecting the environment, health and safety and its stakeholders and reporting and making recommendations to the Board.

Exploration and Development

In 2019, Denison's exploration team did not have any lost time incidents, but there were three modified work injuries. The project development team did not have any lost time incidents or modified work injuries. Combined, the teams (and the contractors for whom they are responsible) had one medical incident.

There was one reportable environmental incident in 2019, when a drill malfunctioned resulting in a spill of mineralized cuttings in the immediate vicinity of the drill hole. The potential impacts have been mitigated, and remediation will be completed as required to minimize any potential environmental impacts.

Closed Mines

In 2018, the CMG team were celebrated for having achieved over 500,000 cumulative work hours without a lost time injury, representing almost 10 years of continuous service without a lost time injury. In 2019, the CMG continued its excellent safety performance and, as at December 31, 2019, the team had worked a total of 618,577 hours without a lost time injury. Over 890 cumulative hours of health and safety training was completed by CMG staff during the year.

Denison also holds the internationally recognized ISO 9001:2015 certification, which is a certification for Quality Management Systems.

Elliot Lake

Denison's uranium mine at Elliot Lake, Ontario, which started operations in 1957, was permanently closed upon completion of deliveries of U_3O_8 to Ontario Hydro in May 1992. During its 35 years of continuous operation, the facility produced 147 million pounds of U_3O_8 in concentrates from the milling of 70 million tons of ore. By 1998, all significant capital reclamation activities at Denison's two closed Elliot Lake mines had been completed and, for the most part, decommissioning has progressed to the long-term monitoring phase (see "Government Regulation – Canadian Uranium Industry").

During 2019, the water treatment plants operated as planned and all environmental targets were met. Monitoring and other remediation related expenses were $842,000 for the year. Reclamation expenses for 2020 are budgeted to be $891,000. All expenditures are funded from the Reclamation Trust described below. It is estimated that sufficient funds are in the Reclamation Trust to meet all monitoring costs through 2025.

All activities and monitoring results are reviewed regularly by the CNSC and the Elliot Lake Joint Regulatory Group, which consists of federal and provincial regulators. Pursuant to a Reclamation Funding Agreement, effective June 30, 1994, with the Governments of Canada and Ontario, Denison has established a Reclamation Trust from which all spending on its Elliot Lake reclamation activities is funded. When the Reclamation Trust was first established in 1994, Denison was required to deposit 90% of its cash receipts after deducting permitted expenses, as defined in such agreement, into the Reclamation Trust. In 1997, the Governments of Canada and Ontario agreed to suspend the 90% funding requirement provided Denison maintained four years of cash requirements in the Reclamation Trust. Early in 1999, the Governments of Canada and Ontario agreed to further amend the Reclamation Funding Agreement, effective when Denison received an amended site decommissioning licence, which was obtained on April 22, 1999. Pursuant to that amendment, Denison is required to maintain sufficient funds in the Reclamation Trust to meet six years of cash requirements.

McClean Lake

At McClean Lake, which is operated by Orano Canada, toll milling activities for Cigar Lake ores continued at a stable rate throughout the year. During 2019, a total of 511,807 hours were worked. During this time, there were 3 medical incidents, 3 modified work injuries and 3 lost time incidents. Environmentally there were 3 reportable environmental incidents. The facility has maintained its internationally recognized ISO 14001:2004 and OHSAS 18001 certification.

The McClean Lake and Midwest projects are combined under a single Operating License issued by the CNSC. The combined Preliminary Closure Plan was prepared by Orano Canada and approved by the authorities in 2016, estimating the total decommissioning and reclamation costs for both projects to be $107,241,000. Financial assurances are in place for this entire amount, with Denison's share being $24,135,000.

GOVERNMENT REGULATION

Saskatchewan Exploration and Land Tenure

In Canada, natural resource exploration and land tenure activity fall under provincial legislative jurisdiction. In Saskatchewan, the management of mineral resources and the granting of exploration and mining rights for mineral substances and their use are regulated by the *Crown Minerals Act* (Saskatchewan) and *The Mineral Tenure Registry Regulations*, 2012, that are administered by the Saskatchewan Ministry of Energy and Resources.

The right to explore for minerals in Saskatchewan is acquired under a mineral claim from the province. The initial term of a mineral claim is two years, renewable for successive one–year periods, provided the mineral claim is in good standing. To maintain a mineral claim in good standing, generally, the holder of a mineral claim must expend a prescribed amount on exploration. Excess expenditures (also known as assessment credits) can be applied to satisfy expenditure requirements for future claim years. Except for exploration purposes, a mineral claim does not grant the holder the right to mine minerals. A holder of a mineral claim in good standing has the right to convert a mineral claim into a mineral lease. Surface exploration work on a mineral claim requires additional governmental approvals.

The right to mine minerals in Saskatchewan is acquired under a mineral lease from the province. A mineral lease is for a term of 10 years, with a right to renew for successive 10-year terms in the absence of default by the lessee. The lessee is required to spend certain amounts for work during each year of a mineral lease. A mineral lease cannot be terminated except in the event of default and for certain environmental concerns, as prescribed in *The Crown Minerals Act* (Saskatchewan). However, mineral leases may be amended unilaterally by the lessor by amendment to *The Crown Minerals Act* (Saskatchewan) or *The Crown Mineral Royalty Regulations, 2013* (Saskatchewan).

Mineral rights, held through mineral claims and mineral leases, are distinct from surface rights. The surface facilities and mine workings are located on lands owned by the province of Saskatchewan. The right to use and occupy lands is acquired under a surface lease from the province of Saskatchewan. A surface lease is for a period of time, up to a maximum of 33 years, as is necessary to allow the lessee to operate its mine and plant and thereafter carry out the reclamation of the lands involved. Surface leases are also used by the province of Saskatchewan as a mechanism to achieve certain environmental and radiation protection and socio-economic objectives, and contain certain undertakings in this regard.

Environmental Assessments

The assessment of a proposed uranium project in Saskatchewan involves both a provincial and federal environmental assessment ("**EA**"). In Saskatchewan, the assessment of a project with joint federal and provincial jurisdiction is coordinated through established protocols in order to align with the "one project-one assessment" model for the proponent and the public without compromising any statutory requirements of the legislation of either jurisdiction.

In the province of Saskatchewan, the *Environmental Assessment Act* is administered by the Ministry of Environment. The level of assessment for mining projects is dependent on the specific characteristics of each individual project. A proponent of a project that is considered to be a "development" pursuant to the Saskatchewan *Environmental Assessment Act*, is required to conduct an environmental assessment ("**EA**") of the proposed project and prepare and submit an environmental impact statement ("**EIS**") to the Minister of Environment.

Federally, the *Canadian Environmental Assessment Act* (CEAA) was amended in the spring of 2012 and the *Regulations Designating Physical Activities* (2012) were established to clarify when a federal EA is required and define what federal agency is required to be the "responsible authority" for the conduct of the EA. For uranium projects, the CNSC is designated as the "responsible authority" under the CEAA and carries full authority to complete the screening of the proposed project and any subsequent environmental assessments.

The Government of Canada implemented a new *Impact Assessment Act* (the "**IAA**"), to replace the CEAA on August 28, 2019. The transitional provision (section 182 of the IAA) provide that a CNSC designated project EA, which commenced under the CEAA 2012, is to be continued under the CEAA 2012. This means that the Wheeler River EA will continue the assessment process under CEAA 2012.

An EA is a planning and decision-making tool, which involves predicting potential environmental effects throughout the project lifecycle (construction, operation, decommissioning and post-decommissioning) at the site, and within the local and regional assessment areas. Under the CEAA, an EA's scope focuses on potential adverse environmental effects that are within federal jurisdiction including: (a) fish and fish habitat and other aquatic species; (b) migratory birds; (c) federal lands; (d) effects that cross provincial or international boundaries; (e) effects that impact on aboriginal peoples, such as their use of lands and resources for traditional purposes, and (f) changes to the environment that are directly linked to or necessarily incidental to any federal decisions about a project.

Wheeler River

Project Description and Environmental Assessment

In 2019, Denison executed on its decision to advance the Wheeler River Project through the EA regulatory process following the release of the PFS. Activities completed in 2019 included the submission of two key documents to provincial and federal regulators, with respect to the proposed ISR mining operation: 1) the Saskatchewan Provincial Technical Proposal and the Federal Project Description and 2) the Terms of Reference. Acceptance of these documents was announced by both the Province of Saskatchewan and the CNSC on June 1, 2019. Final confirmation of the scope and guidelines for the EA for the Project was received from the CNSC on December 20, 2019. The Company identified the EA process as a key element of the Project's critical path. Accordingly, Denison has initiated various studies and assessments as part of the EA process, which is intended to culminate in the preparation of a Project EIS.

Environmental Baseline Data Collection

Baseline work completed during 2019 included ongoing monitoring of ambient radon and dust in the air, groundwater quality, and waste rock barrel leachate chemistry. In addition, ambient gamma, sulphur dioxide and nitrogen dioxide monitoring programs were initiated during the year, and aquatic, terrestrial and heritage baseline surveys were conducted to build upon the work completed to date. These ongoing tests are designed to improve Denison's understanding of the existing environment in and around the Wheeler River Project area and support the completion of the EA.

In 2019, 12 regional observation wells were also installed for the purpose of regional hydrogeological testing outside of the Phoenix deposit. The wells will be used to establish

baseline conditions within the local and regional groundwater system and the data collected (including groundwater levels and flow) will form key inputs to groundwater models for the EA.

Denison expects that the federal and provincial EA process for the proposed Phoenix operation will take approximately 36-48 months to complete from initiation in February 2019.

Corporate Social Responsibility

Denison has been focused on strengthening many long-term relationships, and building new relationships, with Indigenous and non-Indigenous communities who have a strong connection to the land on which the Wheeler River Project is located.

The Company has conducted site tours for the Indigenous and municipal leaders for communities of interest, including two site tours in 2019. These tours have focused on introducing the community members to the site, providing an overview of the Company's project-related activities and offering an opportunity for collaboration regarding the advancement of the Project. Denison also supports various community initiatives and activities, as part of its focus on community investment.

The Company was pleased to announce in June 2019 that it had executed a series of MOUs, in support of the advancement of Wheeler River, with certain Indigenous communities who assert that the project falls within their traditional territories and where traditional land use activities are currently practiced within the local and regional area surrounding the project. These non-binding MOUs formalize the signing parties' intent to work together in the spirit of mutual respect and cooperation, in order to collectively identify practical means by which to avoid, mitigate, or otherwise address potential impacts of the project upon the exercise of Indigenous rights, Treaty rights, and other interests, as well as to facilitate sharing in the benefits that will flow from the project.

Later in 2019, the Company saw two significant leadership and relationship changes. By elections held on October 25, 2019, a new Chief and Council were formed for the English River First nation ("**ERFN**"). Denison has engaged with the newly elected Chief and Council, to develop meaningful lines of communication and enhance their understanding of the Wheeler River Project.

Denison was also formally notified that the Métis Nation – Saskatchewan ("**MNS**") was appointed to represent a number of Métis communities that Denison had established and developed direct relationships with since 2016. Denison is now engaged with the MNS, pursuant to a new process set out by the MNS, for consultation on Denison's exploration and project development activities.

McClean and Midwest

Environmental matters related to the McClean Lake uranium facility and the Midwest project are regulated by the CNSC and the Saskatchewan Ministry of Environment. A number of other ministries and departments of the federal and Saskatchewan governments also regulate certain aspects of the operation. Prior to proceeding with development of the McClean Lake uranium facility and Midwest project, the proponents were required to submit Environmental Impact Statements for review. After completion of that review and receipt of recommendations, the federal and Saskatchewan governments issued the appropriate initial authorizations, subject to the normal licensing renewal process, for the McClean Lake uranium facility in 1995 and for Midwest in 2012.

Licensing and Permitting

The federal government recognizes that the uranium industry has special importance in relation to the national interest and therefore regulates the mining, extraction, use and export of uranium under the *Nuclear Safety and Control Act* ("**NSCA**"). The NSCA is administered by the CNSC which issues licences pursuant to the regulations under the NSCA.

In the event EA approvals by both the provincial and federal governments are granted, a project will be allowed to proceed to the second tier of approvals for licenses. The federal (CNSC) licensing process requires the submission of detailed engineering design packages as well as detailed management plans for all facets of the operation as part of their licensing process. The federal licenses are typically the license (i) to prepare a site and construct, (ii) operate, (iii) decommission, and (iv) abandon. Under provincial jurisdiction, a number of permits and approvals are required prior to construction. Key requirements include the execution of a Surface Lease Agreement with the Province of Saskatchewan and an Approval to Construct and Operate a Pollutant Control Facility as regulated under the Saskatchewan *Environmental Management and Protection Act* (2010).

Activities at McClean Lake and Midwest are currently carried out under a single operating license issued by the CNSC and are subject to all applicable federal statutes and regulations and to all laws of general application in Saskatchewan, except to the extent that such laws conflict with the terms and conditions of the licences or applicable federal laws.

Decommissioning activities at Elliot Lake are currently carried out under two decommissioning licences issued by the CNSC: for the Stanrock tailings area and the Denison mine site and tailings areas. Decommissioning of the facilities pursuant to the terms of the decommissioning licences has been completed. The CNSC has initiated the actions to combine the Stanrock and Denison sites under one Waste Facility Operating Licence. There are no significant differences between the different forms of licences. After a lengthy period of care, maintenance and monitoring, Denison may apply to the CNSC for permission to abandon the sites.

Saskatchewan Royalties

The province of Saskatchewan imposes royalties on the sale of uranium extracted from ore bodies in the province in accordance with Part III of The Crown Mineral Royalty Regulations (the "**Regulations**") pursuant to The Crown Minerals Act (the "**Act**"). Significant revisions to the uranium royalty regime in Saskatchewan became effective on January 1, 2013, with the resulting regime consisting of the following three components:

(i) Basic Royalty: Computed as 5% of gross revenues derived from uranium extracted from ore bodies in the province;
(ii) Saskatchewan Resource Credit: Reduction in the basic royalty equal to 0.75% of gross revenues derived from uranium extracted from ore bodies in the province; and
(iii) Profit Royalty: Two-tier rate structure, computed as 10% or 15% of net profits derived from the mining and processing of uranium extracted from ore bodies in the province.

Gross revenue, for the Basic Royalty, is determined in accordance with the Regulations and allows for reductions based on specified allowances. Net profit, for the Profit Royalty, is calculated based on the recognition of the full dollar value of a royalty payer's exploration, capital, production, decommissioning and reclamation costs, in most cases, incurred after January 1, 2013. Net profits will be taxed under the profit royalty at a rate of 10% for net profits up to and including $22.00 per kilogram ($10 per pound) of uranium sold, and at 15% for net profits in excess of

$22.00 per kilogram. The $22.00 per kilogram threshold is applicable for 2013 (the base year) and is indexed in subsequent years for inflation.

Under this system, each owner or joint venture participant in a uranium mine is a royalty payer. Individual interests are consolidated on a corporate basis for the computation and reporting of royalties due to the province.

Royalty payments are due to the province on or before the last day of the month following the month in which the royalty payer sold, or consumed, the uranium for the purposes of the basic royalty, and quarterly installments are required based on estimates of net profits in respect of the profit royalty.

Canadian Income and Other Taxes

Denison and its Canadian subsidiaries are subject to federal and provincial income taxes. In 2019, taxable income was subject to federal taxes at a rate of 15%, and provincial taxes in Saskatchewan, Ontario, Quebec, British Columbia and the Yukon Territory at rates varying between 11.5% and 12.0%. Taxable income for each entity is allocated between provinces and territories based on a two point average of the proportion of salaries and revenues attributable to each province or territory. Denison expects that it will not be liable for Canadian income taxes on a current tax basis for the financial year ended 2019. As a resource corporation in Saskatchewan, Denison is also subject to a resource surcharge equal to 3% of the value of resource sales from production in Saskatchewan, if any, during the year.

In recent years, including 2019, Denison has issued shares eligible for treatment as “flow through shares”, as defined in subsection 66(15) of *the Income Tax Act* (Canada). As a result, a significant portion of Denison's Canadian Exploration Expenditures have been renounced to shareholders and are not available to Denison as a tax deduction in the current year or future years.

Audit / Review by Taxing Authorities

From time to time, Denison is subject to audit / review by taxing authorities. In certain jurisdictions, periodic reviews are carried out by taxing authorities in the ordinary course of business. Denison cooperates with all requests received from taxing authorities, and is not currently engaged in a material dispute with any of the applicable taxing authorities.

RISK FACTORS

Denison's business, the value of the Shares and management's expectations regarding the same 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 than anticipated. The following are those risks, uncertainties and other factors pertaining to the outlook and conditions currently known to Denison that have been identified by the Company as having the potential to negatively affect Denison's business and the value of the Shares. Current and prospective security holders of Denison should carefully consider these risk factors. However, these factors are not, and should not be construed as being exhaustive, and other circumstances that are currently not foreseen by management of Denison could arise to negatively affect Denison's business and its Shareholders.

Capital Intensive Industry and Uncertainty of Funding

The exploration and development of mineral properties and any operation of mines and facilities requires a substantial amount of capital and the ability of the Company to proceed with any of its plans with respect thereto depends on its ability to obtain financing through joint ventures, equity financing, debt financing or other means. General market conditions, volatile uranium markets, a claim against the Company, a significant disruption to the Company's business or operations or other factors may make it difficult to secure financing necessary to fund the substantial capital that is typically required in order to continue to advance a mineral project, such as the Wheeler River project, through the testing, permitting and feasibility processes to a production decision or to place a property, such as the Wheeler River project, into commercial production. Similarly, there is uncertainty regarding the Company's ability to fund additional exploration of the Company's projects or the acquisition of new projects.

There is no assurance that the Company will be successful in obtaining required financing as and when needed on acceptable terms, and failure to obtain such additional financing could result in the delay or indefinite postponement of any or all of the Company's exploration, development or other growth initiatives.

Global Financial Conditions

Global financial conditions continue to be subject to volatility arising from international geopolitical developments and global economic phenomenon, as well as general financial market turbulence, including a significant recent market reaction to the novel coronavirus (COVID-19), resulting in a significant reduction in in many major market indices and in Denison's share price. Access to public financing and credit can be negatively impacted by the effect of these events on Canadian and global credit markets. The health of the global financing and credit markets may impact the ability of Denison to obtain equity or debt financing in the future and the terms at which financing or credit is available to Denison. These instances of volatility and market turmoil could adversely impact Denison's operations and the trading price of the Shares.

Speculative Nature of Exploration and Development

Exploration for minerals and the development of mineral properties is speculative, and involves significant uncertainties and financial risks that even a combination of careful evaluation, experience and technical knowledge may not eliminate. While the discovery of an ore body may result in substantial rewards, few properties which are explored prove to return the discovery of a commercially mineable deposit and/or are ultimately developed into producing mines. As at the date hereof, many of Denison's projects are preliminary in nature and mineral resource estimates include inferred mineral resources, which are considered too speculative geologically to have the

economic considerations applied that would enable them to be categorized as mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Major expenses may be required to properly evaluate the prospectivity of an exploration property, to develop new ore bodies and to estimate mineral resources and establish mineral reserves. There is no assurance that the Company's uranium deposits are commercially mineable.

Imprecision of Mineral Reserve and Resource Estimates

Mineral reserve and resource figures are estimates, and no assurances can be given that the estimated quantities of uranium are in the ground and could be produced, or that Denison will receive the prices assumed in determining its mineral reserves. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry best practices. Valid estimates made at a given time may significantly change when new information becomes available. While Denison believes that the Company's estimates of mineral reserves and mineral resources are well established and reflect management's best estimates, by their nature, mineral reserve and resource estimates are imprecise and depend, to a certain extent, upon statistical inferences and geological interpretations, which may ultimately prove inaccurate. Furthermore, market price fluctuations, as well as increased capital or production costs or reduced recovery rates, may render mineral reserves and resources uneconomic and may ultimately result in a restatement of mineral reserves and resources. The evaluation of mineral reserves or resources is always influenced by economic and technological factors, which may change over time.

Risks of, and Market Impacts on, Developing Mineral Properties

Denison's current and future uranium production is dependent in part on the successful development of its known ore bodies, discovery of new ore bodies and/or revival of previously existing mining operations. It is impossible to ensure that Denison's current exploration and development programs will result in profitable commercial mining operations. Where the Company has been able to estimate the existence of mineral resources and mineral reserves, such as for the Wheeler River project, substantial expenditures are still required to establish economic feasibility for commercial development and to obtain the required environmental approvals, permitting and assets to commence commercial operations.

Development projects are subject to the completion of successful feasibility studies, engineering studies and environmental assessments, the issuance of necessary governmental permits and the availability of adequate financing. The economic feasibility of development projects is based upon many factors, including, among others: the accuracy of mineral reserve and resource estimates; metallurgical recoveries; capital and operating costs of such projects; government regulations relating to prices, taxes, royalties, infrastructure, land tenure, land use, importing and exporting, and environmental protection; political and economic climate; and uranium prices, which are historically cyclical.

Denison is currently undertaking various studies and test work in connection with a feasibility study for its Wheeler River project, subject to the availability of capital. If completed, such a feasibility study, and any estimates of mineral reserves and mineral resources, development costs, operating costs and estimates of future cash flow contained therein, will be based on Denison's interpretation of the information available to-date. Development projects have no operating history upon which to base developmental and operational estimates. Particularly for development projects, economic analyses and feasibility studies contain estimates based upon many factors, including estimates of mineral reserves, the interpretation of geologic and engineering data, anticipated tonnage and grades of ore to be mined and processed, the

configuration of the ore body, expected recovery rates of uranium from the ore, estimated operating costs, anticipated climatic conditions and other factors. As a result, it is possible that actual capital and operating costs and economic returns will differ significantly from those estimated for a project prior to production.

The decision as to whether a property, such as the Wheeler River project, contains a commercial mineral deposit and should be brought into production will depend upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified engineers and/or geologists, all of which involves significant expense and risk.

It is not unusual in the mining industry for new mining operations to take longer than originally anticipated to bring into a producing phase, and to require more capital than anticipated. Any of the following events, among others, could affect the profitability or economic feasibility of a project or delay or stop its advancement: unavailability of necessary capital, unexpected problems during the start-up phase delaying production, unanticipated changes in grade and tonnes of ore to be mined and processed, unanticipated adverse geological conditions, unanticipated metallurgical recovery problems, incorrect data on which engineering assumptions are made, unavailability of labour, increased costs of processing and refining facilities, unavailability of economic sources of power and water, unanticipated transportation costs, changes in government regulations (including regulations with respect to the environment, prices, royalties, duties, taxes, permitting, restrictions on production, quotas on exportation of minerals, environmental, etc.), fluctuations in uranium prices, and accidents, labour actions and force majeure events.

The ability to sell and profit from the sale of any eventual mineral production from a property will be subject to the prevailing conditions in the applicable marketplace at the time of sale. The demand for uranium and other minerals is subject to global economic activity and changing attitudes of consumers and other end-users' demand.

Many of these factors are beyond the control of a mining company and therefore represent a market risk which could impact the long term viability of Denison and its operations.

Risks Associated with the Selection of Novel Mining Methods

As disclosed in the Wheeler PFS Report, Denison has selected the ISR mining method for production at the Phoenix deposit. While test work completed to date indicates that ground conditions and the mineral reserves estimated to be contained within the deposit are amenable to extraction by way of ISR, actual conditions could be materially different from those estimated based on the Company's technical studies completed to-date. While industry best practices have been utilized in the development of its estimates, actual results may differ significantly. Denison will need to complete substantial additional work to further advance and/or confirm its current estimates and projections for development to the level of a feasibility study. As a result, it is possible that actual costs and economic returns of any mining operations may differ materially from Denison's best estimates.

Dependence on Obtaining Licenses and other Regulatory and Policy Risks

Uranium mining and milling operations and exploration activities, as well as the transportation and handling of the products produced, are subject to extensive regulation by federal, provincial and state governments. Such regulations relate to production, development, exploration, exports, imports, taxes and royalties, labour standards, occupational health, waste disposal, protection and remediation of the environment, mine decommissioning and reclamation, mine safety, toxic substances, transportation safety and emergency response, and other matters. Compliance with

such laws and regulations is currently, and has historically, increased the costs of exploring, drilling, developing, constructing, operating and closing Denison's mines and processing facilities. It is possible that the costs, delays and other effects associated with such laws and regulations may impact Denison's decision with respect to exploration and development properties, including whether to proceed with exploration or development, or that such laws and regulations may result in Denison incurring significant costs to remediate or decommission properties that do not comply with applicable environmental standards at such time.

The development of mines and related facilities is contingent upon governmental approvals that are complex and time consuming to obtain and which involve multiple governmental agencies. Environmental and regulatory review has become a long, complex and uncertain process that can cause potentially significant delays. In addition, future changes in governments, regulations and policies, such as those affecting Denison's mining operations and uranium transport, could materially and adversely affect Denison's results of operations and financial condition in a particular period or its long-term business prospects.

The ability of the Company to obtain and maintain permits and approvals and to successfully explore and evaluate properties and/or develop and operate mines may be adversely affected by real or perceived impacts associated with its activities that affect the environment and human health and safety at its projects and in the surrounding communities. The real or perceived impacts of the activities of other mining companies, locally or globally, may also adversely affect our ability to obtain and maintain permits and approvals. The Company is uncertain as to whether all necessary permits will be obtained or renewed on acceptable terms or in a timely manner. Any significant delays in obtaining or renewing such permits or licences in the future could have a material adverse effect on Denison.

Denison expends significant financial and managerial resources to comply with such laws and regulations. Denison anticipates it will have to continue to do so as the historic trend toward stricter government regulation may continue. Because legal requirements are frequently changing and subject to interpretation, Denison is unable to predict the ultimate cost of compliance with these requirements or their effect on operations. While the Company has taken great care to ensure full compliance with its legal obligations, there can be no assurance that the Company has been or will be in full compliance with all of these laws and regulations, or with all permits and approvals that it is required to have.

Failure to comply with applicable laws, regulations and permitting requirements, even inadvertently, may result in enforcement actions. These actions may result in orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Companies engaged in uranium exploration operations may be required to compensate others who suffer loss or damage by reason of such activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Engagement with Canada's First Nations and Métis

First Nations and Métis rights, entitlements and title claims may impact Denison's ability and that of its joint venture partners to pursue exploration, development and mining at its Saskatchewan properties. Pursuant to historical treaties, First Nations in northern Saskatchewan ceded title to most traditional lands but continue to assert title to the minerals within the lands. Métis people have not signed treaties; they assert aboriginal rights throughout Saskatchewan, including aboriginal title over most if not all of the Company's project lands.

Managing relations with the local First Nations and Métis communities is a matter of paramount importance to Denison. Engagement with, and consideration of other rights of, potentially affected Indigenous peoples may require accommodations, including undertakings regarding funding, contracting, environmental practices, employment and other matters. This may affect the timetable and costs of exploration, evaluation and development of the Company's projects.

The Company's relationships with communities of interest are critical to ensure the future success of its existing operations and the construction and development of its projects. There is an increasing level of public concern relating to the perceived effect of mining activities on the environment and on communities impacted by such activities. Adverse publicity relating to the mining industry generated by non-governmental organizations and others could have an adverse effect on the Company's reputation or financial condition and may impact its relationship with the communities in which it operates. While the Company is committed to operating in a socially responsible manner, there is no guarantee that the Company's efforts in this regard will mitigate this potential risk.

The inability of the Company to maintain positive relationships with communities of interest, including local First Nations and Métis, may result in additional obstacles to permitting, increased legal challenges, or other disruptions to the Company's exploration, development and production plans, and could have a significant adverse impact on the Company's share price and financial condition.

Environmental, Health and Safety Risks

Denison has expended significant financial and managerial resources to comply with environmental protection laws, regulations and permitting requirements in each jurisdiction where it operates, and anticipates that it will be required to continue to do so in the future as the historical trend toward stricter environmental regulation may continue. The uranium industry is subject to, not only the worker health, safety and environmental risks associated with all mining businesses, including potential liabilities to third parties for environmental damage, but also to additional risks uniquely associated with uranium mining and processing. The possibility of more stringent regulations exists in the areas of worker health and safety, the disposition of wastes, the decommissioning and reclamation of mining and processing sites, and other environmental matters each of which could have a material adverse effect on the costs or the viability of a particular project.

Denison's facilities operate under various operating and environmental permits, licences and approvals that contain conditions that must be met, and Denison's right to pursue its development plans is dependent upon receipt of, and compliance with, additional permits, licences and approvals. Failure to obtain such permits, licenses and approvals and/or meet any conditions set forth therein could have a material adverse effect on Denison's financial condition or results of operations.

Although the Company believes its operations are in compliance, in all material respects, with all relevant permits, licences and regulations involving worker health and safety as well as the environment, there can be no assurance regarding continued compliance or ability of the Company to meet stricter environmental regulation, which may also require the expenditure of significant additional financial and managerial resources.

Mining companies are often targets of actions by non-governmental organizations and environmental groups in the jurisdictions in which they operate. Such organizations and groups may take actions in the future to disrupt Denison's operations. They may also apply pressure to

local, regional and national government officials to take actions which are adverse to Denison's operations. Such actions could have an adverse effect on Denison's ability to advance its projects and, as a result, on its financial position and results.

Global Demand and International Trade Restrictions

The international uranium industry, including the supply of uranium concentrates, is relatively small compared to other minerals, and is generally highly competitive and heavily regulated. Worldwide demand for uranium is directly tied to the demand for electricity produced by the nuclear power industry, which is also subject to extensive government regulation and policies. In addition, the international marketing of uranium is subject to governmental policies and certain trade restrictions. For example, the supply and marketing of uranium from Russia and from certain republics of the former Soviet Union is, to some extent, impeded by a number of international trade agreements and policies.

In the United States, certain uranium producers filed a petition with the U.S. DOC to investigate the import of uranium into the U.S. under Section 232 of the 1962 Trade Expansion Act. The DOC completed its investigation and, in July 2019, presented its findings to the President of the United States whom is empowered to use tariffs or other means to adjust the imports of goods or materials from other countries if it deems the quantity or circumstances surrounding those imports to threaten national security. The U.S. President ultimately concluded that uranium imports do not threaten national security and no trade actions were implemented under Section 232. The U.S. Administration, however, ordered a further review of the nuclear supply chain in the U.S. and commissioned the NFWG. The results of the NFWG review, and any recommendations therefrom, have not yet been made public.

The uncertainty surrounding this Section 232 trade action and the subsequent NFWG review is believed to have impacted the uranium purchasing activities of nuclear utilities, especially in the U.S., and consequently negatively impacted the market price of uranium and the uranium industry as a whole. Depending on the outcome of the NWFG's review, there is the potential for this to have further negative impacts on the uranium market globally.

Restrictive trade agreements, governmental policies and/or trade restrictions are beyond the control of Denison and may affect the supply of uranium available for use in markets like the United States and Europe, which are currently the largest markets for uranium in the world. Similarly, trade restrictions could impact the ability to supply uranium to developing markets, such as China and India. If substantial changes are made to the regulations affecting global marketing and supply of uranium, the Company's business, financial condition and results of operations may be materially adversely affected.

Volatility and Sensitivity to Market Prices

The value of the Company's mineral resources, mineral reserves and estimates of the viability of future production for its projects is heavily influenced by long and short term market prices of U_3O_8. Historically, these prices have seen significant fluctuations, and have been and will continue to be affected by numerous factors beyond Denison's control. Such factors include, among others: demand for nuclear power, political and economic conditions in uranium producing and consuming countries, public and political response to nuclear incidents, reprocessing of used reactor fuel and the re-enrichment of depleted uranium tails, sales of excess civilian and military inventories (including from the dismantling of nuclear weapons) by governments and industry participants, uranium supplies from other secondary sources, and production levels and costs of production from primary uranium suppliers.

Uranium prices failing to reach or sustain projected levels can impact operations by requiring a reassessment of the economic viability of the Company's projects, and such reassessment alone may cause substantial delays and/or interruptions in project development, which could have a material adverse effect on the results of operations and financial condition of Denison.

Public Acceptance of Nuclear Energy and Competition from Other Energy Sources

Growth of the uranium and nuclear power industry will depend upon continued and increased acceptance of nuclear technology as a clean means of generating electricity. Because of unique political, technological and environmental factors that affect the nuclear industry, including the risk of a nuclear incident, the industry is subject to public opinion risks that could have an adverse impact on the demand for nuclear power and increase the regulation of the nuclear power industry. Nuclear energy competes with other sources of energy, including oil, natural gas, coal and hydro-electricity. These other energy sources are, to some extent, interchangeable with nuclear energy, particularly over the longer term. Technical advancements in, and government subsidies for, renewable and other alternate forms of energy, such as wind and solar power, could make these forms of energy more commercially viable and put additional pressure on the demand for uranium concentrates. Sustained lower prices of alternate forms of energy may result in lower demand for uranium concentrates.

Current estimates project increases in the world's nuclear power generating capacities, primarily as a result of a significant number of nuclear reactors that are under construction, planned, or proposed in China, India and various other countries around the world. Market projections for future demand for uranium are based on various assumptions regarding the rate of construction and approval of new nuclear power plants, as well as continued public acceptance of nuclear energy around the world. The rationale for adopting nuclear energy can be varied, but often includes the clean and environmentally friendly operation of nuclear power plants, as well as the affordability and round-the-clock reliability of nuclear power. A change in public sentiment regarding nuclear energy could have a material impact on the number of nuclear power plants under construction, planned or proposed, which could have a material impact on the market's and the Company's expectations for the future demand for uranium and the future price of uranium.

Market Price of Shares

Securities of mining companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic conditions in North America and globally, and market perceptions of the attractiveness of particular industries. As noted above, global financial conditions continue to be subject to volatility arising from international geopolitical developments and global economic phenomenon, as well as general financial market turbulence, including a significant recent market reaction to the novel coronavirus (COVID-19), resulting in a significant reduction in in many major market indices and in Denison's share price.

The price of Denison's securities is also likely to be significantly affected by short-term changes in commodity prices, other mineral prices, currency exchange fluctuation, or changes in its financial condition or results of operations as reflected in its periodic earnings reports and/or news releases. Other factors unrelated to the performance of Denison that may have an effect on the price of the securities of Denison include the following: the extent of analytical coverage available to investors concerning the business of Denison; lessening in trading volume and general market interest in Denison's securities; the size of Denison's public float and its inclusion in market indices may limit the ability of some institutions to invest in Denison's securities; and a substantial decline in the price of the securities of Denison that persists for a significant period of time could cause

Denison's securities to be delisted from an exchange. If an active market for the securities of Denison does not continue, the liquidity of an investor's investment may be limited and the price of the securities of the Company may decline such that investors may lose their entire investment in the Company. As a result of any of these factors, the market price of the securities of Denison at any given point in time may not accurately reflect the long-term value of Denison. Securities class-action litigation often has been brought against companies following periods of volatility in the market price of their securities. Denison may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

Dilution from Further Issuances

While active in exploring for new uranium discoveries in the Athabasca Basin region, Denison's present focus is on advancing the Wheeler River project to a development decision, with the potential to become the next large scale uranium producer in Canada. Denison will require additional funds to further such activities.

Denison may sell additional equity securities (including through the sale of securities convertible into Shares) and may issue additional debt or equity securities to finance its exploration, development and other operations, acquisitions or other projects. Denison is authorized to issue an unlimited number of Shares. Denison cannot predict the size of future sales and issuances of debt or equity securities or the effect, if any, that future sales and issuances of debt or equity securities will have on the market price of the Shares. Sales or issuances of a substantial number of equity securities, or the perception that such sales could occur, may adversely affect prevailing market prices for the Shares. With any additional sale or issuance of equity securities, investors may suffer dilution of their voting power and it could reduce the value of their investment.

Reliance on Other Operators

At some of its properties, Denison is not the operator and therefore is not in control of all of the activities and operations at the site. As a result, Denison is and will be, to a certain extent, dependent on the operators for the nature and timing of activities related to these properties and may be unable to direct or control such activities.

As an example, Orano Canada is the operator and majority owner of the McClean Lake and Midwest joint ventures in Saskatchewan, Canada. The McClean Lake mill employs unionized workers who work under collective agreements. Orano Canada, as the operator, is responsible for most operational and production decisions and all dealings with unionized employees. Orano Canada may not be successful in its attempts to renegotiate the collective agreements, which may impact mill and mining operations. Similarly, Orano Canada is responsible for all licensing and dealings with various regulatory authorities. Orano Canada maintains the regulatory licences in order to operate the McClean Lake mill, all of which are subject to renewal from time to time and are required in order for the mill to operate in compliance with applicable laws and regulations. Any lengthy work stoppages, or disruption to the operation of the mill or mining operations as a result of a licensing matter or regulatory compliance, may have a material adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

Reliance on Contractors and Experts

In various aspects of its operations, Denison relies on the services, expertise and recommendations of its service providers and their employees and contractors, whom often are engaged at significant expense to the Company. For example, the decision as to whether a property contains a commercial mineral deposit and should be brought into production will depend

in large part upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified third party engineers and/or geologists. In addition, while Denison emphasizes the importance of conducting operations in a safe and sustainable manner, it cannot exert absolute control over the actions of these third parties when providing services to Denison or otherwise operating on Denison's properties. Any material error, omission, act of negligence or act resulting in environmental pollution, accidents or spills, industrial and transportation accidents, work stoppages or other actions could adversely affect the Company's operations and financial condition.

Benefits Not Realized From Transactions

Denison has completed a number of transactions over the last several years, including without limitation the acquisition of International Enexco Ltd., the acquisition of Fission, the acquisition of JNR, the sale of its mining assets and operations located in the United States to Energy Fuels Inc., the Mongolia Transaction, the optioning of the Moore Lake property to Skyharbour Resources Ltd., the acquisition of an 80% interest in the Hook-Carter property from ALX, the acquisition of an interest in the Moon Lake property from CanAlaska, entering into the APG Transaction and Cameco Transaction. Despite Denison's belief that these transactions, and others which may be completed in the future, will be in Denison's best interest and benefit the Company and Denison's shareholders, Denison may not realize the anticipated benefits of such transactions or realize the full value of the consideration paid or received to complete the transactions. This could result in significant accounting impairments or write-downs of the carrying values of mineral properties or other assets and could adversely impact the Company and the price of its Shares.

Inability to Expand and Replace Mineral Reserves and Resources

Denison's mineral reserves and resources at its Wheeler River, Waterbury Lake, McClean Lake and Midwest projects are Denison's material future sources of possible uranium production. Unless other mineral reserves or resources are discovered or acquired, Denison's sources of future production for uranium concentrates will decrease over time if its current mineral reserves and resources are depleted. There can be no assurance that Denison's future exploration, development and acquisition efforts will be successful in replenishing its mineral reserves and resources. In addition, while Denison believes that many of its properties demonstrate development potential, there can be no assurance that they can or will be successfully developed and put into production in future years.

Competition for Properties

Significant competition exists for the limited supply of mineral lands available for acquisition. Participants in the mining business include large established companies with long operating histories. In certain circumstances, the Company may be at a disadvantage in acquiring new properties as competitors may have greater financial resources and more technical staff. Accordingly, there can be no assurance that the Company will be able to compete successfully to acquire new properties or that any such acquired assets would yield resources or reserves or result in commercial mining operations.

Property Title Risk

The Company has investigated its rights to explore and exploit all of its material properties and, to the best of its knowledge, those rights are in good standing. However, no assurance can be given that such rights will not be revoked, or significantly altered, to its detriment. There can also be no assurance that the Company's rights will not be challenged or impugned by third parties,

including the Canadian federal, provincial and local governments, as well as by First Nations and Métis.

There is also a risk that Denison's title to, or interest in, its properties may be subject to defects or challenges. If such defects or challenges cover a material portion of Denison's property, they could have a material adverse effect on Denison's results of operations, financial condition, reported mineral reserves and resources and/or long-term business prospects.

Ability to Maintain Obligations under Credit Facility and Other Debt

The 2020 Credit Facility has a term of one year, and will need to be renewed on or before January 31, 2021. There is no certainty what terms of any renewal may be, or any assurance that such renewal will be made available to Denison.

Denison is required to satisfy certain financial covenants in order to maintain its good standing under the Credit Facility. Denison is also subject to a number of restrictive covenants under the Credit Facility and the APG Transaction, such as restrictions on Denison's ability to incur additional indebtedness and sell, transfer of otherwise dispose of material assets. Denison may from time to time enter into other arrangements to borrow money in order to fund its operations and expansion plans, and such arrangements may include covenants that have similar obligations or that restrict its business in some way.

Events may occur in the future, including events out of Denison's control, which could cause Denison to fail to satisfy its obligations under the Credit Facility, APG Transaction or other debt instruments. In such circumstances, the amounts drawn under Denison's debt agreements may become due and payable before the agreed maturity date, and Denison may not have the financial resources to repay such amounts when due. The Credit Facility and APG Transaction are secured by DMI's main properties by a pledge of the shares of DMI. If Denison were to default on its obligations under the Credit Facility, APG Transaction or other secured debt instruments in the future, the lender(s) under such debt instruments could enforce their security and seize significant portions of Denison's assets.

Change of Control Restrictions

The APG Transaction and certain other of Denison's agreements contain provisions that could adversely impact Denison in the case of a transaction that would result in a change of control of Denison or certain of its subsidiaries. In the event that consent is required from our counterparty and our counterparty chooses to withhold its consent to a merger or acquisition, then such party could seek to terminate certain agreements with Denison, including certain agreements forming part of the APG Transaction, or require Denison to buy the counterparty's rights back from them, which could adversely affect Denison's financial resources and prospects. If applicable, these restrictive contractual provisions could delay or discourage a change in control of our company that could otherwise be beneficial to Denison or its shareholders.

Decommissioning and Reclamation

As owner of the Elliot Lake decommissioned sites and part owner of the McClean Lake mill, McClean Lake mines, the Midwest uranium project and certain exploration properties, and for so long as the Company remains an owner thereof, the Company is obligated to eventually reclaim or participate in the reclamation of such properties. Most, but not all, of the Company's reclamation obligations are secured, and cash and other assets of the Company have been reserved to secure this obligation. Although the Company's financial statements record a liability for the asset retirement obligation, and the security requirements are periodically reviewed by

applicable regulatory authorities, there can be no assurance or guarantee that the ultimate cost of such reclamation obligations will not exceed the estimated liability contained on the Company's financial statements.

As Denison's properties approach or go into decommissioning, regulatory review of the Company's decommissioning plans may result in additional decommissioning requirements, associated costs and the requirement to provide additional financial assurances. It is not possible to predict what level of decommissioning and reclamation (and financial assurances relating thereto) may be required from Denison in the future by regulatory authorities.

Technical Innovation and Obsolescence

Requirements for Denison's products and services may be affected by technological changes in nuclear reactors, enrichment and used uranium fuel reprocessing. These technological changes could reduce the demand for uranium or reduce the value of Denison's environmental services to potential customers. In addition, Denison's competitors may adopt technological advancements that give them an advantage over Denison.

Mining and Insurance

Denison's business is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions, earthquakes, pit wall failures and cave-ins) and encountering unusual or unexpected geological conditions. Many of the foregoing risks and hazards could result in damage to, or destruction of, Denison's mineral properties or processing facilities in which it has an interest; personal injury or death; environmental damage, delays in or interruption of or cessation of exploration, development, production or processing activities; or costs, monetary losses and potential legal liability and adverse governmental action. In addition, due to the radioactive nature of the materials handled in uranium exploration, mining and processing, as applicable, additional costs and risks are incurred by Denison and its joint venture partners on a regular and ongoing basis.

Although Denison maintains insurance to cover some of these risks and hazards in amounts it believes to be reasonable, such insurance may not provide adequate coverage in the event of certain circumstances. No assurance can be given that such insurance will continue to be available, that it will be available at economically feasible premiums, or that it will provide sufficient coverage for losses related to these or other risks and hazards.

Denison may be subject to liability or sustain loss for certain risks and hazards against which it cannot insure or which it may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to Denison.

Anti-Bribery and Anti-Corruption Laws

The Company is subject to anti-bribery and anti-corruption laws, including the *Corruption of Foreign Public Officials Act* (Canada). Failure to comply with these laws could subject the Company to, among other things, reputational damage, civil or criminal penalties, other remedial measures and legal expenses which could adversely affect the Company's business, results from operations, and financial condition. It may not be possible for the Company to ensure compliance with anti-bribery and anti-corruption laws in every jurisdiction in which its employees, agents, sub-contractors or joint venture partners are located or may be located in the future.

Climate Change

Due to changes in local and global climatic conditions, many analysts and scientists predict an increase in the frequency of extreme weather events such as floods, droughts, forest and brush fires and extreme storms. Such events could materially disrupt the Company's operations, particularly if they affect the Company's sites, impact local infrastructure or threaten the health and safety of the Company's employees and contractors. In addition, reported warming trends could result in later freeze-ups and warmer lake temperatures, affecting the Company's winter exploration programs at certain of its material projects. Any such event could result in material economic harm to Denison.

The Company is focused on operating in a manner designed to minimize the environmental impacts of its activities; however, environmental impacts from mineral exploration and mining activities are inevitable. Increased environmental regulation and/or the use of fiscal policy by regulators in response to concerns over climate change and other environmental impacts, such as additional taxes levied on activities deemed harmful to the environment, could have a material adverse effect on Denison's financial condition or results of operations.

Information Systems and Cyber Security

The Company's operations depend upon the availability, capacity, reliability and security of its information technology (IT) infrastructure, and its ability to expand and update this infrastructure as required, to conduct daily operations. Denison relies on various IT systems in all areas of its operations, including financial reporting, contract management, exploration and development data analysis, human resource management, regulatory compliance and communications with employees and third parties.

These IT systems could be subject to network disruptions caused by a variety of sources, including computer viruses, security breaches and cyber-attacks, as well as network and/or hardware disruptions resulting from incidents such as unexpected interruptions or failures, natural disasters, fire, power loss, vandalism and theft. The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures.

The ability of the IT function to support the Company's business in the event of any such occurrence and the ability to recover key systems from unexpected interruptions cannot be fully tested. There is a risk that, if such an event actually occurs, the Company's continuity plan may not be adequate to immediately address all repercussions of the disaster. In the event of a disaster affecting a data centre or key office location, key systems may be unavailable for a number of days, leading to inability to perform some business processes in a timely manner. As a result, the failure of Denison's IT systems or a component thereof could, depending on the nature of any such failure, adversely impact the Company's reputation and results of operations.

Although to date the Company has not experienced any material losses relating to cyber-attacks or other information security breaches, there can be no assurance that the Company will not incur such losses in the future. Unauthorized access to Denison's IT systems by employees or third parties could lead to corruption or exposure of confidential, fiduciary or proprietary information, interruption to communications or operations or disruption to the Company's business activities or its competitive position. Further, disruption of critical IT services, or breaches of information security, could have a negative effect on the Company's operational performance and its reputation. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the

continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority.

The Company applies technical and process controls in line with industry-accepted standards to protect information, assets and systems; however these controls may not adequately prevent cyber-security breaches. There is no assurance that the Company will not suffer losses associated with cyber-security breaches in the future, and may be required to expend significant additional resources to investigate, mitigate and remediate any potential vulnerabilities. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

Dependence on Key Personnel and Qualified and Experienced Employees

Denison's success depends on the efforts and abilities of certain senior officers and key employees. Certain of Denison's employees have significant experience in the uranium industry, and the number of individuals with significant experience in this industry is small. While Denison does not foresee any reason why such officers and key employees will not remain with Denison, if for any reason they do not, Denison could be adversely affected. Denison has not purchased key man life insurance for any of these individuals. Denison's success also depends on the availability of qualified and experienced employees to work in Denison's operations and Denison's ability to attract and retain such employees.

Conflicts of Interest

Some of the directors and officers of Denison are also directors of other companies that are similarly engaged in the business of acquiring, exploring and developing natural resource properties. Such associations may give rise to conflicts of interest from time to time. In particular, one of the consequences would be that corporate opportunities presented to a director or officer of Denison may be offered to another company or companies with which the director or officer is associated, and may not be presented or made available to Denison. The directors and officers of Denison are required by law to act honestly and in good faith with a view to the best interests of Denison, to disclose any interest which they may have in any project or opportunity of Denison, and, where applicable for directors, to abstain from voting on such matter. Conflicts of interest that arise will be subject to and governed by the procedures prescribed in the Company's Code of Ethics and by the OBCA.

Disclosure and Internal Controls

Internal controls over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. Disclosure controls and procedures are designed to ensure that information required to be disclosed by a company in reports filed with securities regulatory agencies is recorded, processed, summarized and reported on a timely basis and is accumulated and communicated to the company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance with respect to the reliability of reporting, including financial reporting and financial statement preparation.

Potential Influence of KEPCO and KHNP

Effective December 2016, KEPCO indirectly transferred the majority of its interest in Denison to KHNP Canada. Denison and KHNP Canada subsequently entered into the KHNP SRA (on substantially similar terms as the original strategic relationship agreement between Denison and KEPCO), pursuant to which KHNP Canada is contractually entitled to Board representation. Provided KHNP Canada holds over 5% of the Shares, it is entitled to nominate one director for election to the Board at any shareholder meeting.

KHNP Canada's shareholding level gives it a large vote on decisions to be made by shareholders of Denison, and its right to nominate a director may give KHNP Canada influence on decisions made by Denison's Board. Although KHNP Canada's director nominee will be subject to duties under the OBCA to act in the best interests of Denison as a whole, such director nominee is likely to be an employee of KHNP and he or she may give special attention to KHNP's or KEPCO's interests as indirect Shareholders. The interests of KHNP and KEPCO, as indirect Shareholders, may not always be consistent with the interests of other Shareholders.

The KHNP SRA also includes provisions granting KHNP Canada a right of first offer for certain asset sales and the right to be approached to participate in certain potential acquisitions. The right of first offer and participation right of KHNP Canada may negatively affect Denison's ability or willingness to entertain certain business opportunities, or the attractiveness of Denison as a potential party for certain business transactions. KEPCO's large indirect shareholding block may also make Denison less attractive to third parties considering an acquisition of Denison if those third parties are not able to negotiate terms with KEPCO or KHNP Canada to support such an acquisition.

DENISON'S SECURITIES

The Shares

The Company is entitled to issue an unlimited number of Shares. As of December 31, 2019 and the date hereof, Denison had an aggregate of 597,192,153 Shares issued and outstanding.

Shareholders are entitled to receive notice of, and to one vote per share at, every meeting of Shareholders and to share equally in the assets of Denison remaining upon the liquidation, dissolution or winding up of Denison after the creditors of Denison have been satisfied.

Price Range and Trading Volume of Shares

The Shares trade on the TSX under the symbol "DML" and on the NYSE American under the symbol "DNN". The following table sets forth, for the periods indicated, the reported intra-day high and low sales prices and aggregate volume of trading of the Shares on the TSX and NYSE American during the year ended December 31, 2019.

Month	High (CAD$) TSX	Low (CAD$) TSX	Volume TSX	High (US$) NYSE American	Low (US$) NYSE American	Volume NYSE American
January	0.71	0.63	8.30 M	0.55	0.46	9.84 M
February	0.74	0.65	8.07 M	0.55	0.50	8.24 M
March	0.75	0.66	7.75 M	0.56	0.49	10.29 M
April	0.78	0.68	8.92 M	0.59	0.51	12.27 M
May	0.73	0.66	4.56 M	0.55	0.49	8.19 M
June	0.72	0.67	3.93 M	0.58	0.46	5.07 M
July	0.72	0.57	10.80 M	0.55	0.43	12.80 M
August	0.64	0.52	6.60 M	0.49	0.38	10.58 M
September	0.68	0.58	4.65 M	0.51	0.44	8.71 M
October	0.65	0.59	3.74 M	0.49	0.45	4.65 M
November	0.64	0.55	3.82 M	0.48	0.42	4.86 M
December	0.57	0.51	7.33 M	0.43	0.38	10.90 M

Source: TMX Money

Dividends

Shareholders are entitled to receive dividends if, as and when declared by the Board of Directors. The Company is restricted from paying dividends under its Credit Facility, and the directors are focused on dedicating cash flow to reinvestment in the business of the Company. Accordingly, no dividends have been declared to date.

Prior Sales

During the year ended December 31, 2019, the Company issued the following securities pursuant to the Company's Option Plan and Share Unit Plan, as applicable:

Stock Options:

Date of Issuance	Options Issued (#)	Exercise Prices ($)
March 11, 2019	2,691,000	$0.68
August 12, 2019	27,000	$0.58
November 11, 2019	287,000	$0.61
TOTAL	**3,005,000**	

Share Units:

Date of Issuance	Restricted Share Units Issued (#)	Performance Share Units Issued (#)
March 18, 2019	1,914,000	-
April 2, 2019	-	240,000
August 12, 2019	13,000	-
TOTAL	**1,927,000**	**240,000**

DENISON'S MANAGEMENT

Denison's Directors

The following table sets out the names and the provinces and countries of residence of each of the directors of Denison as of the date hereof, their respective positions and offices held with Denison and their principal occupations during the five preceding years. The following table also identifies the members of each committee of the Board of Directors.

Name and Province and Country of Residence	Principal Occupation and Employment for Past Five Years	Director Since[1]
DAVID D. CATES Ontario, Canada	President and Chief Executive Officer of the Company since 2015; prior: serving in various roles with the Company since 2008, including Vice President Finance, Tax & Chief Financial Officer as well as Director, Taxation.	2018
W. ROBERT DENGLER[5,8, 11] Ontario, Canada	Corporate Director since 2006; prior: Vice-Chairman and Director of Dynatec Corporation; President and Chief Executive Officer of Dynatec Corporation.	2006
BRIAN D. EDGAR[3,4] British Columbia, Canada	Chairman of Silver Bull Resources, Inc., a mineral exploration company listed on both OTCMKTS and the TSX, since 2012, and President and Chief Executive Officer of Dome Ventures Corporation, a subsidiary of Silver Bull Resources Inc., since 2005.	2005
RON F. HOCHSTEIN[7][9][10] British Columbia, Canada	President and Chief Executive Officer of Lundin Gold Inc. since 2014; prior: President and Chief Executive Officer of the Company from 2009 to 2015.	2000
JUN GON KIM Gyeongsangbuk-do, Korea	General Manager of the Nuclear Fuel Supply division of KHNP; prior: has held various positions at KHNP.	2020
JACK O.A. LUNDIN[9][11] British Columbia, Canada	Chief Executive Officer of Bluestone Resources Inc.; prior: Senior Mine Project Engineer of Lundin Gold Inc. since 2017 and analyst in the commercial department of Lundin Norway AS.	2018
WILLIAM A. RAND[7] British Columbia, Canada	President and director of Rand Investments Ltd., a private investment company based in British Columbia.	1997
CATHERINE J. G. STEFAN[2,5] Ontario, Canada	Chair of the Board of the Company; prior: President, Stefan & Associates, a consulting firm based in Ontario, from 2009-2016; prior: Managing Partner, Tivona Capital Corporation, a private investment firm, from 1999-2008.	2006
PATRICIA M. VOLKER[3,6] Ontario, Canada	Corporate Director since 2016; prior: over 17 years of service in various roles at the Chartered Professional Accountants of Ontario including Director of Standards Enforcement and Director, Public Accounting.	2018

Notes:

(1) The term of office of each of the directors of Denison will expire at the Annual Meeting of the Shareholders currently scheduled to be held on May 7, 2020.

(2) Chair, Audit Committee
(3) Member, Audit Committee
(4) Chair, Corporate Governance and Nominating Committee
(5) Member, Corporate Governance and Nominating Committee
(6) Chair, Compensation Committee
(7) Member, Compensation Committee
(8) Chair, Environment Health and Safety Committee
(9) Member, Environment, Health and Safety Committee
(10) Chair, Technical Committee
(11) Member, Technical Committee

Denison's Executive Officers

The following table sets out the names and the provinces or states and countries of residence of each of the executive officers of Denison as of the date hereof, their respective positions and offices held with Denison and their principal occupations during the five preceding years.

Name and Province and Country of Residence	Position with Denison and Employment for Past Five Years
DAVID CATES Ontario, Canada	President and Chief Executive Officer since 2015; prior: Vice President Finance, Tax and Chief Financial Officer since 2013.
GABRIEL MCDONALD Ontario, Canada	Executive Vice President and Chief Financial Officer, with Denison since 2015; prior: Director of Financial Reporting at IAMGOLD Corporation from 2015, Senior Manager at PricewaterhouseCoopers LLP from 2008.
DAVID BRONKHORST Saskatchewan, Canada	Vice President Operations since 2019; prior: Vice President, Mining, Projects and Technology at Cameco Corporation until retirement in 2016.
TIM GABRUCH Saskatchewan, Canada	Vice President Commercial since 2018; prior: various marketing and corporate development roles for Cameco Corporation.
MICHAEL SCHOONDERWOERD Ontario, Canada	Vice President, Controller since 2013.
DALE VERRAN Saskatchewan, Canada	Vice President, Exploration since January 2016; prior: Technical Director, Exploration since 2013.
AMANDA WILLETT British Columbia, Canada	Corporate Counsel and Corporate Secretary since June 2016; prior: Senior Associate at Blakes in Vancouver since 2011.

The directors and executive officers of Denison, as a group, beneficially own, or control or direct, directly or indirectly, 3,177,115 Shares, or less than one percent of the Shares as of the date of this AIF. No single director or officer beneficially owns or controls or directs, directly or indirectly, one percent or more of the Shares as of the date of this AIF. The information as to Shares beneficially owned or directed by the directors and officers, not being within the knowledge of the Company, has been furnished by each such individual.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Other than as referred to below, no director or officer of the Company:

(a) is, as at the date of this AIF, or has, within the previous ten year period, been a director or executive officer of a company (including Denison) that:

(i) was subject to a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days that was issued (A) while that person was acting in such capacity or (B) after that person ceased to act in such capacity but which resulted from an event that accrued while that person was acting in that capacity; or

(ii) became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets (A) while that person was acting in such capacity or (B) within a year of that person ceasing to act in such capacity, or

(b) has, within the previous ten year period, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold such person's assets; or

(c) is, or has been, subject to any penalties or sanctions (i) imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or (ii) imposed by a court or regulatory body that would likely be considered important to a reasonable security holder in making an investment decision.

Ron Hochstein was a director of Sirocco Mining Inc. ("**Sirocco**"). Pursuant to a plan of arrangement completed on January 31, 2014, Canadian Lithium Corp. amalgamated with Sirocco to form RB Energy Inc. ("**RBI**"). In October 2014, RBI commenced proceedings under the Companies' Creditors Arrangement Act (the "**CCAA**"). CCAA proceedings continued in 2015 and a receiver was appointed in May 2015. The TSX de-listed RBI's common shares in November 24, 2014 for failure to meet the continued listing requirements of the TSX. Ron Hochstein was a director of RBI until October 3, 2014.

Conflicts of Interest

Some of Denison's directors and officers are also directors and/or officers of other natural resource companies and, consequently, there exists the possibility for such directors and officers to be in a position of conflict relating to any future transactions or relationships between the Company and such other companies or common third parties. However, the Company is unaware of any such pending or existing conflicts between these parties. Any decision made by any of such directors and officers involving the Company are made in accordance with their duties and obligations to deal fairly and in good faith with the Company and such other companies and their obligations to act in the best interests of Denison's shareholders. In addition, each of the directors of the Company discloses and refrains from voting on any matter in which such director may have a conflict of interest.

None of the present directors or senior officers of the Company, and no associate or affiliate of any of them, has any material interest in any transaction of the Company or in any proposed transaction which has materially affected or will materially affect the Company.

However, investor relations, administrative service fees and other pass-through expenses of $217,000 were incurred during the financial year ended December 31, 2019 with Namdo

Management Services Ltd., a company which shares a common director with Denison. These services were incurred in the normal course of operating a public company.

In addition, one of Denison's directors, Mr. Kim, is employed by KHNP, a subsidiary of KEPCO and the parent corporation of KHNP Canada. Through its corporate holdings, KEPCO is a significant shareholder of the Company, with approximately 9.76% of the outstanding Shares as of the date hereof (the majority of which are held directly by KHNP Canada). The Company and KHNP Canada are parties to the KHNP SRA, which may present a conflict of interest for Mr. Kim. The KHNP SRA provides KHNP Canada with a right of first offer for certain asset sales and the right to be approached to participate in certain potential acquisitions being considered by Denison. While the Company is not aware of a pending or existing conflict of interest with Mr. Kim as of the date hereof, the interests of KEPCO, KHNP and KHNP Canada as shareholders of Denison and their business relationships with Denison may place Mr. Kim in a position of conflict as a director of the Company in the future.

Interest of Management and Others in Material Transactions

Other than as disclosed in this AIF, no director or executive officer of Denison, no person or company that beneficially owns, controls or directs, indirectly or directly, more than 10% of the Shares, and no associate or affiliate of any of them, has or has had, within the three most recently completed financial years or during the current financial year, any material interest, direct or indirect, in any transaction which materially affects or is reasonably expected to materially affect Denison.

Standing Committees of the Board

The Audit Committee

The audit committee of the Company's Board of Directors is principally responsible for:

- recommending to the Company's Board of Directors the external auditor to be nominated for election by the Company's shareholders at each annual general meeting and negotiating the compensation of such external auditor;
- overseeing the work of the external auditor;
- reviewing the Company's annual and interim financial statements, its MD&A in respect thereof and press releases regarding earnings before they are reviewed and approved by the Board of Directors and publicly disseminated by the Company; and
- reviewing the Company's financial reporting procedures for the Company's public disclosure of financial information extracted or derived from its financial statements.

The Company's Board of Directors has adopted an audit committee mandate/terms of reference (the "**Mandate**") which sets out the Audit Committee's mandate, organization, powers and responsibilities. The complete Mandate is attached as Schedule A to this AIF.

Below are the details of each Audit Committee member, including his or her name, whether she or he is independent and financially literate as such terms are defined under National Instrument 52-110 - *Audit Committees* of the Canadian Securities Administrators ("**NI 52-110**") and his or her education and experience as it relates to the performance of his or her duties as an Audit Committee member. All three audit committee members have "financial expertise" within the meaning of the *U.S. Sarbanes-Oxley Act* of 2002, as amended, and are financially literate under NI 52-110. The qualifications and independence of each member is discussed.

Director	Independent[1]	Financially Literate[2]	Education & Experience Relevant to Performance of Audit Committee Duties
Catherine J.G. Stefan Chair of the Audit Committee	Yes	Yes	• Chartered Professional Accountant, Chartered Accountant • B.Comm • Held position of Chief Operating Officer, O&Y Properties Inc., President of Stefan & Associates and Executive Vice-President of Bramalea Group, Chair, Tax Committee of the Canadian Institute of Public Real Estate Companies (CIPREC).
Brian D. Edgar	Yes	Yes	• Law degree, with extensive corporate finance experience • Held positions of Chairman (since 2011) and President and Chief Executive Officer (2005 to 2011) of a public company. • Has served on audit committees of a number of public companies
Patricia M. Volker	Yes	Yes	• Chartered Professional Accountant, Chartered Accountant, Certified Management Accountant • B.Sc. • Served for over 17 years in various positions at the Chartered Professional Accountants of Ontario during her 30+ year career in the accounting profession. • Serves on private and public company audit and/or finance committees

Notes:

(1) Independent within the meaning of NI 52-110.

(2) To be considered financially literate, a member of the Committee must have the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

Since the commencement of the Company's most recently completed financial year, there has not been a recommendation of the Audit Committee to nominate or compensate an internal auditor which was not adopted by the Company's Board of Directors.

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services as described in Section D of the Mandate.

The following table discloses the fees billed to the Company by its external auditor, PricewaterhouseCoopers LLP ("**PwC**"), during the last two fiscal years.

Financial Year Ending	Audit Fees[1]	Audit-Related Fees[2]	Tax Fees[3]	All Other Fees[4]
December 31, 2019	$180,775	$115,254	Nil	Nil
December 31, 2018	$171,434	$123,994	Nil	Nil

Notes:

(1) The aggregate fees billed for audit services of the Company's consolidated financial statements.
(2) The aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements and are not disclosed in the Audit Fees column. Fees relate to reviews of interim consolidated financial statements and specified audit procedures not included as part of the audit of the consolidated financial statements.
(3) The aggregate fees billed for tax compliance, tax advice, and tax planning services, such as transfer pricing and tax return preparation.
(4) The aggregate fees billed for professional services other than those listed in the other columns.

Other Board Committees

The Board currently has three other standing committees in addition to the Audit Committee, namely the Corporate Governance and Nominating Committee, the Compensation Committee and the Environment, Health and Safety Committee. Each standing committee of the Board operates according to its mandate, which is approved by the Board and sets out the committee's duties and responsibilities. The Board also has an ad hoc Technical Committee. A discussion of each committee and its composition can be found in the most recent management information circular prepared in connection with the Company's Shareholder meeting, and copies of the standing committee mandates are available at www.denisonmines.com.

Corporate Governance

As a Canadian reporting issuer with its Shares listed on the TSX, Denison has in place a system of corporate governance practices which is responsive to applicable Canadian requirements, including National Policy 58-201 - *Corporate Governance Guidelines* of the Canadian Securities Administrators (the "**Guidelines**"). Denison's corporate governance practices meet or exceed the Guidelines and all other applicable Canadian requirements. Reference is made to the Corporate Governance Practices section of the Circular, which contains a description of the Company's system of corporate governance practices with reference to the Guidelines.

Denison is classified as a foreign private issuer under U.S. securities law and its Shares are listed on NYSE American. Pursuant to the rules of the NYSE American, a foreign private issuer is permitted to follow home country practice except with respect to certain rules, with which Denison complies.

LEGAL AND REGULATORY PROCEEDINGS

Except as described below, the Company was not a party to, and none of the Company's property was the subject of, any material legal proceedings in 2019, and the Company knows of no such material legal proceedings that are contemplated. However, from time to time, the Company may become party to litigation incidental to its business or other litigation matters deemed by the Company to not be material and/or not involve a claim for damages in excess of ten per cent of the current assets of the Company.

Uranium Industry a.s. Arbitration

Pursuant to the terms of the Amended and Restated Share Purchase Agreement between Denison and UI dated November 25, 2015 (the "**GSJV Purchase Agreement**") with respect to the Mongolia Transaction, the Company had sold its interest in the Gurvan Saihan Joint Venture (the "**GSJV**") effective December 1, 2015 (the "**Mongolia Transaction**"). In connection with the closing the Company received US$1,250,000 and retained rights to receive additional proceeds from contingent payments of up to US$12,000,000, for total consideration of up to US$13,250,000. The contingent payments are payable as follows: (1) US$5,000,000 within 60

days of the issuance of a mining licence for an area covered by any of the four principal exploration licences held by the GSJV, being the Hairhan, Haraat, Gurvan Saihan and Ulzit projects (the "**First Project**"); (2) US$5,000,000 within 60 days of the issuance of a mining licence for an area covered by any of the other exploration licences held by the GSJV (the "**Second Project**"); (3) US$1,000,000 within 365 days following the production of an aggregate of 1,000 pounds U_3O_8 from the operation of the First Project; and (4) US$1,000,000 within 365 days following the production of an aggregate of 1,000 pounds U_3O_8 from the operation of the Second Project.

The issuance by the Mongolian government of mining licence certificates for the Hairhan, Haraat, Gurvan Saihan and Ulzit projects in 2016 triggered an obligation for UI to make an aggregate of US$10,000,000 of contingent payments to Denison by November 16, 2016.

Pursuant to the Extension Agreement subsequently entered into between UI and the Company, the payment due date for the contingent payments was extended from November 16, 2016 to July 16, 2017. As consideration for the extension, UI agreed to pay interest on the contingent payments at a rate of 5% per year, payable monthly up to July 16, 2017 and agreed to pay a US$100,000 instalment amount towards the balance of contingent payments. The first payment under the Extension Agreement was due on or before January 31, 2017. The required payments were not made and UI is in breach of the GSJV Purchase Agreement and the Extension Agreement.

On February 24, 2017, the Company served notice to UI that UI was in default of its obligations under the GSJV Agreement and the Extension Agreement and that the contingent payments and all interest payable thereon are immediately due and payable. On December 12, 2017, the Company filed a Request for Arbitration under the Arbitration Rules of the London Court of International Arbitration in conjunction with the default of UI's obligations under the GSJV and Extension agreements. Hearings in front of the three-person arbitration panel were held in December 2019, and all anticipated formal submissions to the panel have been made by each party. The arbitration panel's findings are expected to be issued in 2020.

Other Arbitration

Denison commenced arbitration with Orano Canada and OURD in October 2019, with Denison's initial written submission made on March 9, 2020. The arbitration relates to certain payments made under the joint venture agreement for the MLJV. Denison claims that these payments were required in breach of OURD and Orano's contractual and other obligations. Denison seeks approximately $6.5 million with respect to these payments, an unquantified amount for further damages and related contractual relief. The arbitral tribunal has set hearing dates in 2020.

MATERIAL CONTRACTS

Reference is made to the material contracts which have been filed by Denison with the Canadian securities regulatory authorities on the SEDAR website at www.sedar.com.

Below are the particulars of each contract, other than those entered into in the ordinary course of business, that is material to Denison and that was entered into between January 1, 2019 and the date hereof or was entered into before that date but is still in effect:

1. The following agreements executed in connection with the APG Transaction:
    a. The loan agreement between DMI and SPV dated January 31, 2017 with respect to the DMI Loan;

b. The loan agreement between SPV and APG dated January 31, 2017 with respect to the SPV Loan;

c. The performance guarantee by Denison as guarantor in favour of the SPV as beneficiary and APG as permitted assignee, pursuant to which Denison has agreed to guarantee the performance of DMI's obligations to SPV under the SPV Loan, which guarantee has been assigned by SPV in favour of APG;

d. The streaming agreement between the DMI and Centaurus dated January 31, 2017 with respect to the Stream Arrangement; and

e. The performance guarantee by Denison as guarantor in favour of Centaurus as beneficiary, pursuant to which Denison has agreed to guarantee the performance of DMI's obligations to Centaurus under the Stream Arrangement.

2. The Reclamation Funding Agreement made as of the 21st day of December 1995 among Denison Mines Limited ("**DML**"), Her Majesty the Queen in Right of Canada (the "**Government of Canada**") and Her Majesty the Queen in Right of the Province of Ontario (the "**Government of Ontario**") as amended by the Amending Agreement made as of the 11th day of April 1997 among DML (now DMI), the Government of Canada and the Government of Ontario and as further amended by the Amending Agreement made as of the 25th day of February 1999 among DML, the Government of Canada and the Government of Ontario and further amended by an Assignment and Novation Agreement made as of the 29th day of December, 2003 among Denison Energy, DMI, the Government of Canada and the Government of Ontario.

   According to the Reclamation Funding Agreement, the Company is required to maintain funds in an Environmental Trust sufficient for the succeeding six years of the estimated reclamation and on-going care and monitoring expenditures for the Company's closed Elliot Lake mining facility.

3. The KHNP SRA dated September 19, 2017 between the Company and KHNP Canada.

   The KHNP SRA provides for a long-term collaborative business relationship between the parties, replacing the strategic relationship agreement made as of June 15, 2009 among the Company, KEPCO and KEPCO Canada Uranium Investment Limited Partnership. Under the KHNP SRA, KHNP Canada is entitled to the nomination of one Board representative, provided that KHNP Canada's shareholding percentage stays above 5%.

   The KHNP SRA also provides that if Denison intends to sell an interest in certain of its substantial assets, it will first notify KHNP Canada of each such proposed sale and provide KHNP Canada with a 30-day right of first offer to allow KHNP Canada to purchase the interest in the asset that Denison proposes to sell. The KHNP SRA provides that Denison will allow KHNP Canada to participate in potential purchases of certain assets, including a mill facility, a producing mine or a mineral resource for which a production feasibility study has been completed, which Denison plans to pursue with a co-investor. KHNP Canada's ability to purchase will not be available where Denison and KHNP Canada cannot agree on terms within a reasonable time or where their involvement would adversely affect Denison's ability to pursue an investment opportunity.

   The right of first offer and co-investment rights are subject to pre-existing contractual commitments and do not apply to certain pre-existing transactions. KHNP Canada is also entitled to subscribe for additional Shares in order to maintain or increase its shareholding

percentage in Denison to thresholds which are relevant to its rights under the KHNP SRA, in circumstances where Denison completes a public offering or broadly distributed private placement to raise proceeds of greater than $10 million.

Denison is entitled to terminate the KHNP SRA if KHNP Canada's shareholding percentage in Denison drops below 5% and stays below 5% for 60 days following delivery of a notice to that effect by Denison to KHNP Canada or if Denison completes an Extraordinary Transaction, as defined in the KHNP SRA.

4. The Credit Facility dated January 30, 2015, and all subsequent amendments including the Sixth Amending Agreement to the Fourth Amended and Restated Credit Facility dated January 28, 2020.

NAMES AND INTERESTS OF EXPERTS

The Company's Independent Registered Public Accounting Firm is PricewaterhouseCoopers LLP, Chartered Professional Accountants, Licensed Public Accountants, who have issued an independent auditor's report dated March 5, 2020 in respect of Denison's consolidated financial statements as at December 31, 2019 and 2018 for the years ended 2019 and 2018 and the effectiveness of the Company's internal control over financial reporting as at December 31, 2019. PwC has advised that it is independent with respect to the Company within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of Ontario and Public Company Accounting Oversight Board Rule 3520 Auditor Independence.

Dale Verran, MSc, Pr.Sci.Nat., Denison's Vice President Exploration, who is a "Qualified Person" within the meaning of this term in NI 43-101, has prepared sections of this AIF that are of a scientific or technical nature pertaining to the Company's mineral projects and has verified the data disclosed therein. To the knowledge of Denison, Dale Verran is the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

David Bronkhorst, P.Eng., Denison's Vice President Operations, who is a "Qualified Person" within the meaning of this term in NI 43-101, has prepared sections of this AIF that are of a scientific or technical nature pertaining to the Company's mineral projects and has verified the data disclosed therein. To the knowledge of Denison, David Bronkhorst is the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

The principal author of the Wheeler PFS Report dated October 30, 2018 was Mark Liskowich, P.Geo. of SRK, who is independent in accordance with the requirements of NI 43-101.

The Waterbury Report dated December 21, 2018 was authored by Serdar Donmez, P.Geo.,E.I.T., Dale Verran, Pr.Sci.Nat., P.Geo., and Paul Burry, P.Geo. of Denison, Oy Leuangthong, P.Eng, and Cliff Revering, P.Eng, of SRK, Allan Armitage, P.Geo, SGS Geostat and Alan Sexton, P.Geo, GeoVector Management. Each of Messrs. Leuangthong, Revering, Armitaage and Sexton, and their respective firms, are independent in accordance with the requirements of NI 43-101.

RPA, which was retained to independently review and audit the mineral reserves and mineral resources in accordance with the requirements of NI 43-101, prepared the following technical reports: (a) McClean Technical Report dated November 21, 2005 as amended on February 16, 2006 by Richard E. Routledge, M.Sc., P.Geo. and James W. Hendry, P.Eng.; (b) McClean North Technical Report dated January 31, 2007 by Richard E. Routledge, M.Sc., P.Geo.; and (c) Sue

D Report dated March 31, 2006 by Richard E Routledge, M.Sc., P.Geo. and James W. Hendry, P.Eng.

The Midwest Technical Report dated March 26, 2018 was authored by Dale Verran, MSc, Pr.Sci.Nat. and Chad Sorba, P.Geo, of the Company and G. David Keller, PGeo, formerly of SRK, and Oy Leuangthong, PEng, of SRK. Each of Messrs. Keller and Leuangthong and SRK are independent in accordance with the requirements of NI 43-101.

To the knowledge of Denison as of the date hereof, each of RPA, GeoVector, SGS Geostat, and SRK and each of their respective partners, employees and consultants who participated in the preparation of the aforementioned reports, or who were in a position to influence the outcome of such reports, are the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

ADDITIONAL INFORMATION

Additional information regarding the Company is available on the SEDAR website at www.sedar.com. Further information concerning the Company, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the management information circular for the Company's most recent meeting of shareholders. Additional financial information is provided in the Company's audited consolidated financial statements and MD&A for the financial year ended December 31, 2019.

A copy of this AIF, as well as the Circular and such other information and documentation that the Company makes available via SEDAR, can be found at www.sedar.com. In addition, certain of this information is distributed to shareholders in connection with Denison's Annual General Meeting of Shareholders. The Company will provide any of the foregoing documents subject to its rights to require people who are not security holders of the Company to pay a reasonable charge. Copies of these documents may be obtained by writing to:

Denison Mines Corp.
1100 – 40 University Avenue
Toronto, Ontario, M5J 1T1

Telephone: (416) 979-1991
Facsimile: (416) 979-5893
Email: info@denisonmines.com

SCHEDULE A

Audit Committee Mandate and Charter

A. Composition of the Committee

(1) The Board shall appoint annually from among its members at the first meeting of the Board following the annual meeting of the shareholders a committee to be known as the Audit Committee (the "Committee") to be composed of three (3) directors or such other number not less than three (3) as the Board may from time to time determine.

(2) Any member of the Committee may be removed or replaced at any time by the Board. Any member of the Committee ceasing to be a director or ceasing to qualify under A(3) below shall cease to be a member of the Committee. Subject to the foregoing, each member of the Committee shall hold office as such until the next annual appointment of members to the Committee after his or her election. Any vacancy occurring in the Committee shall be filled at the next meeting of the Board.

(3) Each member of the Committee shall:

(a) be a member of the Board;

(b) not be an officer or employee of the Company or any of its affiliates;

(c) be an unrelated director as defined in the Toronto Stock Exchange (the "TSX") Corporate Governance Guidelines ("TSX Guidelines") as the same may be amended from time to time;

(d) satisfy the independence requirements applicable to members of audit committees under each of Multilateral Instrument 52-110 – Audit Committees of the Canadian Securities Administrators ("M1 52-110"), Rule 10A-3(b)(1)(ii) of the United States Securities and Exchange Commission, and any other applicable laws and regulations, as the same may be amended from time to time (with the TSX Guidelines, "Applicable Laws"); and

(e) satisfy the financial literacy requirements prescribed by Applicable Laws.

(4) A majority of the Committee shall constitute a quorum.

(5) The Committee shall elect annually a chairperson from among its members.

B. Purpose

(1) The Committee's purpose is to assist the Board in its supervision of the management of the business and affairs of the Company through oversight of:

(a) the integrity of the Company's financial statements, Management's Discussion and Analysis ("MD&A") and other financial reporting;

(b) the integrity of the Company's internal control and management information systems;

(c) the Company's compliance with all applicable laws, rules, regulations, policies and other requirements of governments, regulatory agencies and stock exchanges relating to accounting matters and financial disclosure;

(d) the auditor's qualifications and activities;

(e) communication among the auditor, management and the Board; and

(f) such other matters as are determined by the Board from time to time.

C. Committee Resources

(1) The Committee shall have direct channels of communication with the Company's auditor to discuss and review specific issues as appropriate.

(2) The Committee, or any member of the Committee with the approval of the Committee, may retain at the expense of the Company such independent legal, accounting (other than the auditor) or other advisors on such terms as the Committee may consider appropriate and shall not be required to obtain the approval of the Board in order to retain or compensate any such advisors.

(3) The Committee shall have unrestricted access to Company personnel and documents and shall be provided with all necessary funding and other resources to carry out its responsibilities.

D. Committee Responsibilities

(1) The responsibilities of the Committee shall be to:

(a) with respect to financial accounting matters:

(i) review with management and the external auditors the annual consolidated financial statements, MD&A and press release announcing annual financial results of operations before making recommendations to the Board relating to approval of such documents;

(ii) review with management and the external auditors interim financial statements, MD&A and press release announcing interim financial results of operations before making recommendations to the Board relating to approval of such documents;

(iii) review and discuss with management and the external auditors all public disclosure documents containing audited or unaudited financial information including: any Prospectus; the Annual Report; interim unaudited reports; and any material change report pertaining to the Company's financial matters. The Committee will review the consistency of the foregoing documents with facts, estimates or judgments contained in the audited or unaudited financial statements;

(iv) satisfy itself that adequate procedures are in place for the review of the Company's disclosure of financial information extracted or derived from the Company's financial statements, other than the Company's financial statements, MD&A and earnings press releases, and shall periodically assess the adequacy of those procedures;

(v) prior to the completion of the annual audit, and at any other time deemed advisable by the Committee, review and discuss with management and the auditor the quality of the Company's accounting policies and financial statement presentation, including, without limitation, the following:

1. all critical accounting policies and practices to be used, including, without limitation, the reasons why certain estimates or policies are or are not considered critical and how current and anticipated future events may impact those determinations as well as an assessment of any proposed modifications by the auditors that were not made;

2. all alternative accounting treatments for policies and practices that have been discussed by management and the auditors; and

3. other material written communications between the auditor and management, including, without limitation, any management letter, schedule of unadjusted differences, the management representation letter, report on internal controls, as well as the engagement letter and the independence letter;

(vi) review annually the accounting principles and practices followed by the Company and any changes in the same as they occur;

(vii) review new accounting principles of the Chartered Professional Accountants of Canada and the International Accounting Standards Board which would have a significant impact on the Company's financial reporting as reported to the Committee by management;

(viii) review the status of material contingent liabilities as reported to the Committee by management;

(ix) review potentially significant tax problems as reported to the Committee by management; and

(x) review any errors or omissions in the current or prior year's financial statements which appear material as reported to the Committee by management;

(b) with respect to the external auditors:

(i) be directly responsible for recommending the appointment of the auditor, the auditor's compensation, retention and termination and for oversight of the work of the auditor (including, without limitation, resolution of disagreements between management and the auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or services for the Company;

(ii) approve, prior to the auditor's audit, the auditor's audit plan (including, without limitation, staffing), the scope of the auditor's review and all related fees;

(iii) satisfy itself as to the independence of the auditor. The Committee shall pre-approve any non-audit services (including, without limitation, fees therefor) provided to the Company or its subsidiaries by the auditor or any auditor of any such subsidiary and shall consider whether these services are compatible with the auditor's independence, including, without limitation, the nature and scope of the specific non-audit services to be performed and whether the audit process would require the auditor to review any advice rendered by the auditor in connection with the provision of non-audit services. The Committee shall not allow the auditor to render any non-audit services to the Company or its subsidiaries that are prohibited by Applicable Law;

(iv) review and approve the Company's policies concerning the hiring of employees and former employees of the Company's auditor or former auditor.

(c) with respect to internal controls:

(i) oversee management's design, testing and implementation of the Company's internal controls and management information systems and review the adequacy and effectiveness thereof.

(d) with respect to concerns and complaints:

(i) establish procedures for:

1. the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters; and

2. the confidential, anonymous submission by employees of the Company of concern regarding questionable accounting or auditing matters.

(e) with respect to ethics:

(i) The Committee shall be responsible for oversight and enforcement of the Code of Ethics for the Chief Executive Officer, Senior Financial Officers and Other Officers of the Company, subject to the supervision of the Board.

(f) with respect to general audit matters:

(i) inquire of management and the external auditors as to any activities that may or may not appear to be illegal or unethical;

(ii) review with management, the operations analyst and the external auditors any frauds reported to the Audit Committee;

(iii) review with the external auditors the adequacy of staffing for accounting and financial responsibilities; and

(iv) report and make recommendations to the Board as the Committee considers appropriate.

(2) In addition, the Board may refer to the Committee such matters and questions relating to the Company as the Board may from time to time see fit;

(3) Any member of the Committee may require the auditors to attend any or every meeting of the Committee.

E. Meetings

(1) The times of and the places where meetings of the Audit Committee shall be held and the calling of and procedure at such meetings shall be determined from time to time by the Committee, provided however that the Committee shall meet at least quarterly, and the Committee shall maintain minutes or other records of its meetings and activities. Notice of every such meeting to be given in writing not less than five (5) days prior to the date fixed for the meeting, and shall be given to the auditors of the Company, that the auditors shall be entitled to attend and be heard thereat. Meetings shall be convened whenever requested by the auditors, the operations analyst or any member of the Audit Committee in accordance with the Ontario Business Corporations Act.

(2) As part of each meeting of the Committee at which it recommends that the Board approve the financial statements of the Company, and at such other times as the Committee deems appropriate, the Committee shall meet separately with the auditor to discuss and review specific issues as appropriate.

F. Evaluation of Charter and Mandate

(1) On at least an annual basis, the Committee shall review and assess the adequacy of this Charter and Mandate and recommend any proposed changes to the Board of Directors.

(2) All prior resolutions of the Board relating to the constitution and responsibilities of the Audit Committee are hereby repealed.

SCHEDULE B

Glossary of Technical Terms

Note: The terms related to Mineral resources and mineral reserves presented herein are as defined in "CIM DEFINITION STANDARDS on Mineral Resources and Mineral Reserves" prepared by the CIM Standing Committee on Reserve Definitions, adapted by CIM Council, May 10, 2014.

eU_3O_8 or **eU**
This term refers to equivalent U_3O_8 grade derived from the downhole logging of drill holes using a calibrated total gamma probe.

Feasibility Study
A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.

Historical Estimate
A historical estimate means an estimate of the quantity, grade or metal or mineral content of a deposit that an issuer has not verified as a current mineral resource or mineral reserve, and which was prepared before the issuer acquiring, or entering into an agreement to acquire, an interest in the property that contains the deposit.

Indicated Mineral Resource
An indicated mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Inferred Mineral Resource
An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes

Measured Mineral Resource
A measured mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineral Reserve
A mineral reserve is the economically mineable part of a measured or indicated mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes diluting materials and allowances for losses that may occur when the material is mined.

Mineral Resource
A mineral resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial materials in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge.

Modifying Factors
Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

Preliminary Feasibility Study or Pre-Feasibility Study
A Pre-Feasibility Study is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be converted to a Mineral Reserve at the time of reporting. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.

Probable Mineral Reserve
A 'probable mineral reserve' is the economically mineable part of an indicated, and in some circumstances, a measured mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

Proven Mineral Reserve
A 'proven mineral reserve' is the economically mineable part of a measured mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Qualified Person
A 'Qualified Person' means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report and is a member or licensee in good standing of a professional association of geoscientists and/or engineers meeting the criteria set out in NI 43-101.