



## **NexGen 2021 Drilling Assay Results Confirm Uranium Mineralization Below Arrow At Depth and Commencement of 2022 Regional Exploration Program**

Vancouver, BC, July 28, 2022 - NexGen Energy Ltd. ("NexGen" or the "Company") (TSX: NXE) (NYSE: NXE) (ASX: NXG) is pleased to announce drill assays from 2021 confirm discovery of a uranium mineralized zone below the known Arrow Deposit and at Camp East:

- **Below Arrow** – multiple intersections of uranium mineralization were made significantly below Arrow, including 0.10% U<sub>3</sub>O<sub>8</sub> over 7.0 m in AR-21-268 from 1128 m to 1135 m down hole;
- **Camp East** – uranium concentration of 0.10% U<sub>3</sub>O<sub>8</sub> in RK-21-140 from 166 m to 167 m down hole in association with brittle structure and hydrothermal alteration.

Further, NexGen has commenced 2022 drilling focused on regional exploration targets at the 100% owned Rook I project (the "Project"); and an extensive geophysical program over high priority areas of NexGen's mineral tenure in the southwest Athabasca Basin, Saskatchewan.

Leigh Curyer, Chief Executive Officer, commented: "The intersection of mineralization below the known Arrow Deposit and along trend at Camp East highlights the extent and potential for additional significant discoveries at Rook I. The geology team led by Grant Greenwood are well positioned for the 2022 drilling season which incorporates an extensive regional geophysical survey as a foundation for drilling in 2023 and beyond."

Grant Greenwood, Vice President, Exploration, commented: "The 2021 exploration drilling successfully intersected uranium mineralization. In addition to mineralization, these encouraging 2021 exploration results share alteration and structural similarities to those intersected in the discovery hole at Arrow (AR-14-01 or RK-14-21). NexGen is poised to advance high priority targets on the Rook I property in a systematic fashion from Arrow proximal outwards. The geophysical survey plans are strategic initiatives in developing highly prospective conductors in greenfield areas of the well situated NexGen mineral tenure in the emerging southwest Athabasca Basin uranium district."

### **2022 Drilling**

The Rook I project – home to the Arrow Deposit – hosts numerous, underexplored electromagnetic conductors (conductors) and structural corridors. While development of the Arrow Deposit is progressing optimally, NexGen's 2022 exploration program will focus on these underexplored targets towards making additional material discoveries. The program will target high priority areas (Figure 1) and build off the positive 2021 drilling results that intersected brittle structural disturbance and hydrothermal alteration on multiple conductors.

This drill program – testing six (6) conductive trends – is designed to evaluate prospective targets systematically with aggressive step-outs along high priority conductors.

Drilling targets areas (from West to East):

- **Patterson Corridor (PLC)** – Systematic testing along trend of Arrow, as well as at Camp East where 2021 drilling intersected anomalous radioactivity. This fertile trend has a strike length of approximately 9 km on the Rook I property and remains highly prospective for further investigation.
- **Mirror** – Testing location with conductive response variation along the edge of a gravity low. The Mirror conductor is parallel immediately to the east of the Arrow conductor and of high priority.
- **PLC East** – Tests of segmented conductive responses on edges of gravity lows. PLC East is located proximal to the Arrow conductor with similar geometry.
- **Derkson West** – Follow-up of positive results from 2021 by testing along strike in both directions. Similar geometry to the PLC with a northeast-southwest trending conductor along magnetic gradient, coincident with local gravity lows.
- **Derkson** – Systematic drilling along prospective conductors in gravity lows. This high priority portion of the Derkson corridor for testing in 2022 contains discrete and strong conductive responses with interpreted structural disruptions.
- **Derkson East** – Targeting significant flexure of an underexplored conductor within a gravity low interpreted as localized structural disruption.

All target areas exhibit similar geophysical characteristics to Arrow, including strong conductive signatures with numerous off-sets coincident with discrete gravity lows and steep magnetic gradients. Structural interpretations across the property indicate several conductors lie along significant rheological/lithological contrasts interpreted to possess structural conditions favourable for localized uranium mineralization. Additionally, analysis of previous drilling has also revealed several target areas containing prospective alteration and geochemical signatures indicative of uranium bearing systems. The 2022 summer program incorporates 3 rigs for 12,000 meters in total.

These prospective signatures are present within the 2021 Exploration drilling results, in which 18 holes were completed for a total of 10,849.04 m (Figure 2). The program tested prospective electromagnetic conductors near Arrow with 6,400.31 m and a further 4,448.73 m tested significantly below the current outline of the Arrow Deposit resource (Figure 3). Brittle structural disturbance and hydrothermal alteration were intersected in all targeted areas, including anomalous uranium concentration below Arrow in drill hole AR-21-266 and -268, and at Camp East in drill hole RK-21-140 (see assay results in Table 1).

### **Strategic Geophysics**

Covering prospective conductive trends on NexGen's SW1, SW2, and SW3 properties in the southwest Athabasca Basin (Figure 4), this extensive geophysical program is designed to gain further resolution on conductors and identify stacked geophysical anomalies for greenfields exploration drilling.

**SW1** (Figure 5) – Ground electromagnetic survey along approximately 9 km conductor to further refine prospective targets for follow-up drilling.

Continuity of the conductor suggests a well-developed structural trend with several breaks and jogs. The ground electromagnetic survey is designed to focus high-resolution geophysical data over these prospective features of the SW1 property and highlight specific areas for follow-up drilling.

**SW2** (Figure 6) – Ground gravity survey to generate and prioritize targets by identifying stacked anomalies.

Through historic magnetic and electromagnetic surveys, the SW2 property is highlighted by numerous broad prospective trends. The addition of a ground gravity survey in the central portion of the property is planned for focussing exploration attention to specific locations along these trends where geophysical anomalies align for follow-up drilling.

**SW3** (Figure 7) – Ground IP/Resistivity survey to generate and prioritize targets along approximately 6 km of prospective conductor that straddles the Athabasca Basin boundary, south of Cameco’s Centennial Deposit.

This ground IP/resistivity is designed to provide resolution over this ideally situated conductor at the edge of the Athabasca Basin to optimize future drilling and advance the SW3 property towards discovery.

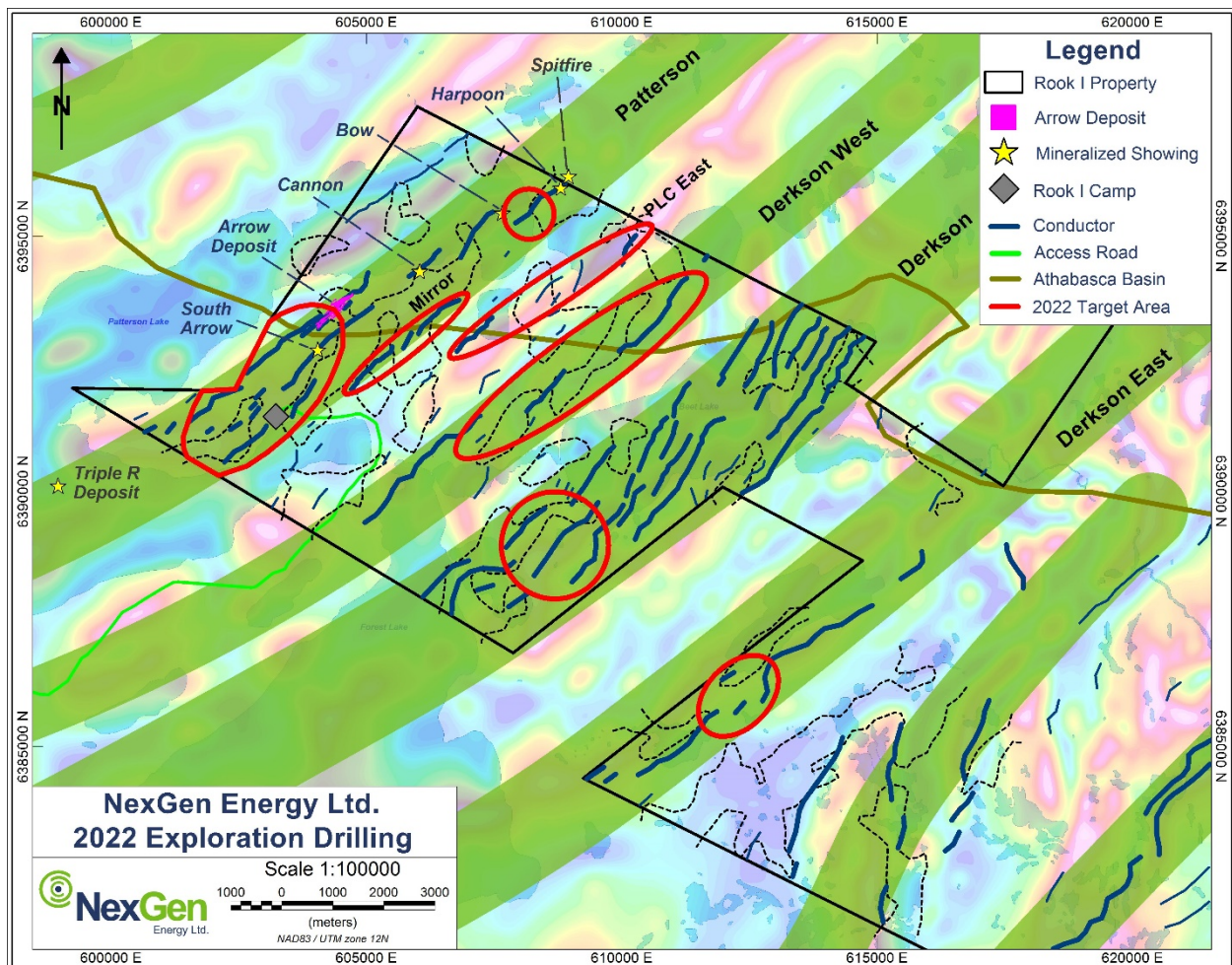


Figure 1: 2022 Exploration Target Areas



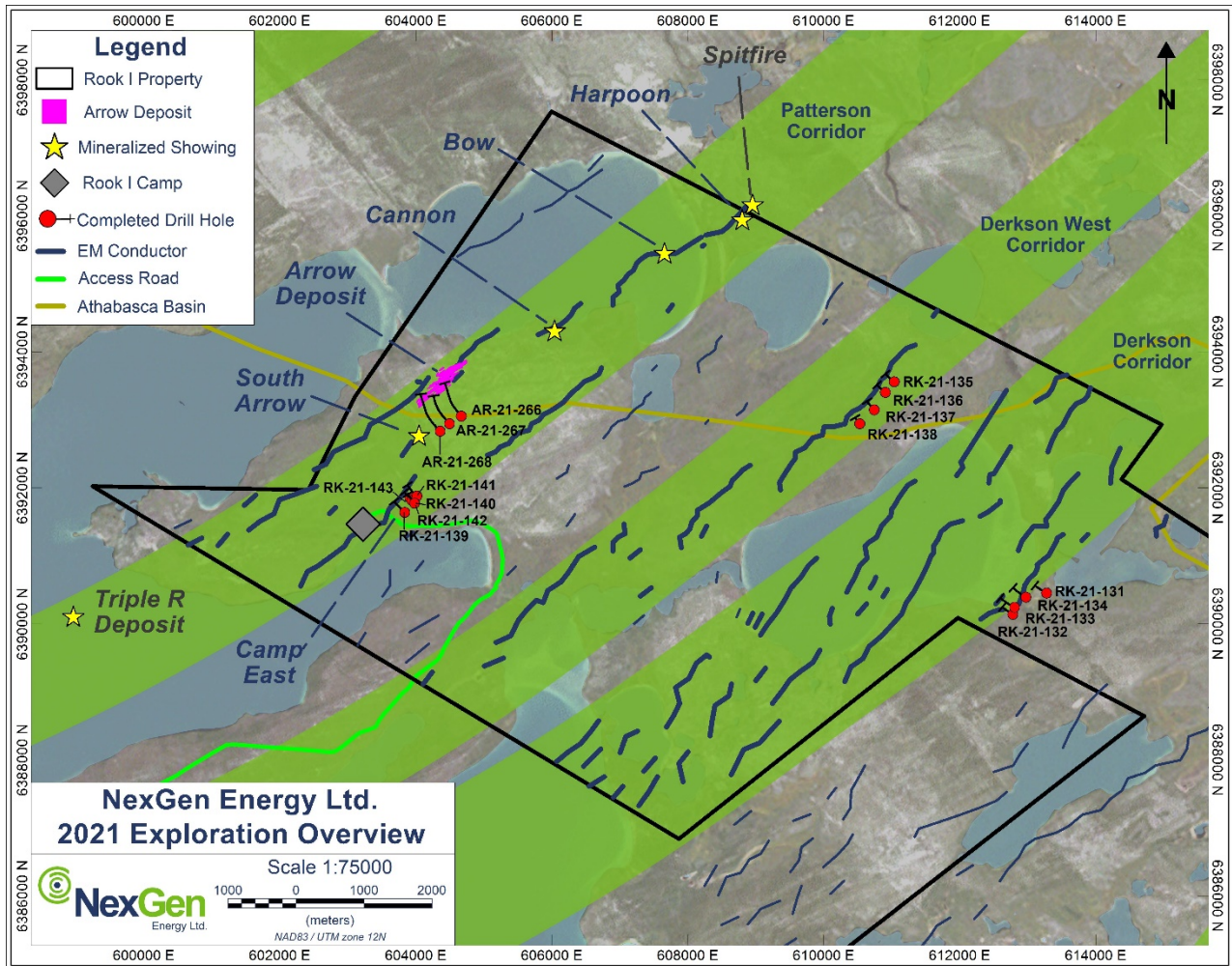


Figure 2: 2021 Exploration Drilling

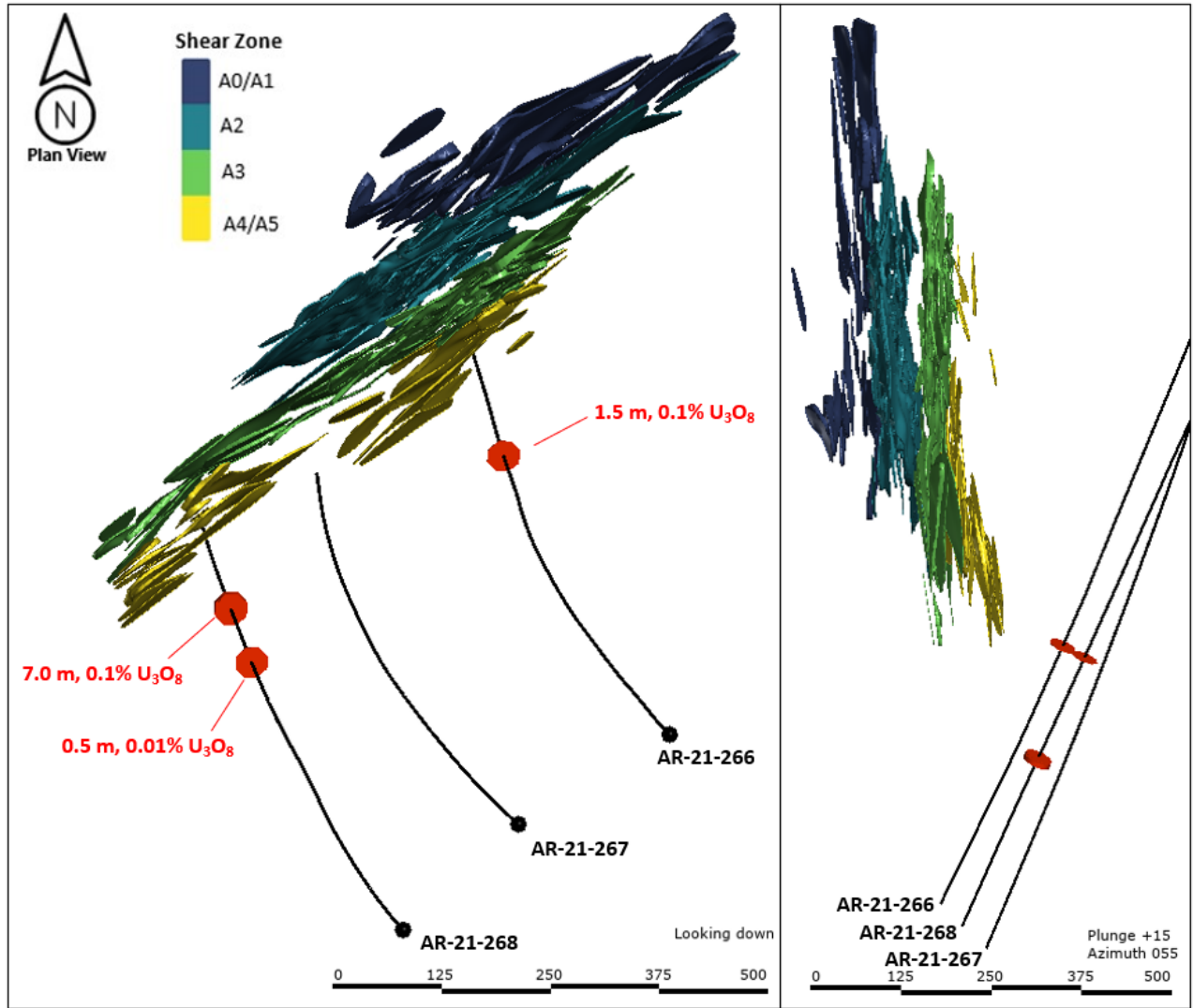


Figure 3: 2021 Below Arrow Exploration – Drill holes Completed – Plan View (left) and Cross Section looking Northeast (right)

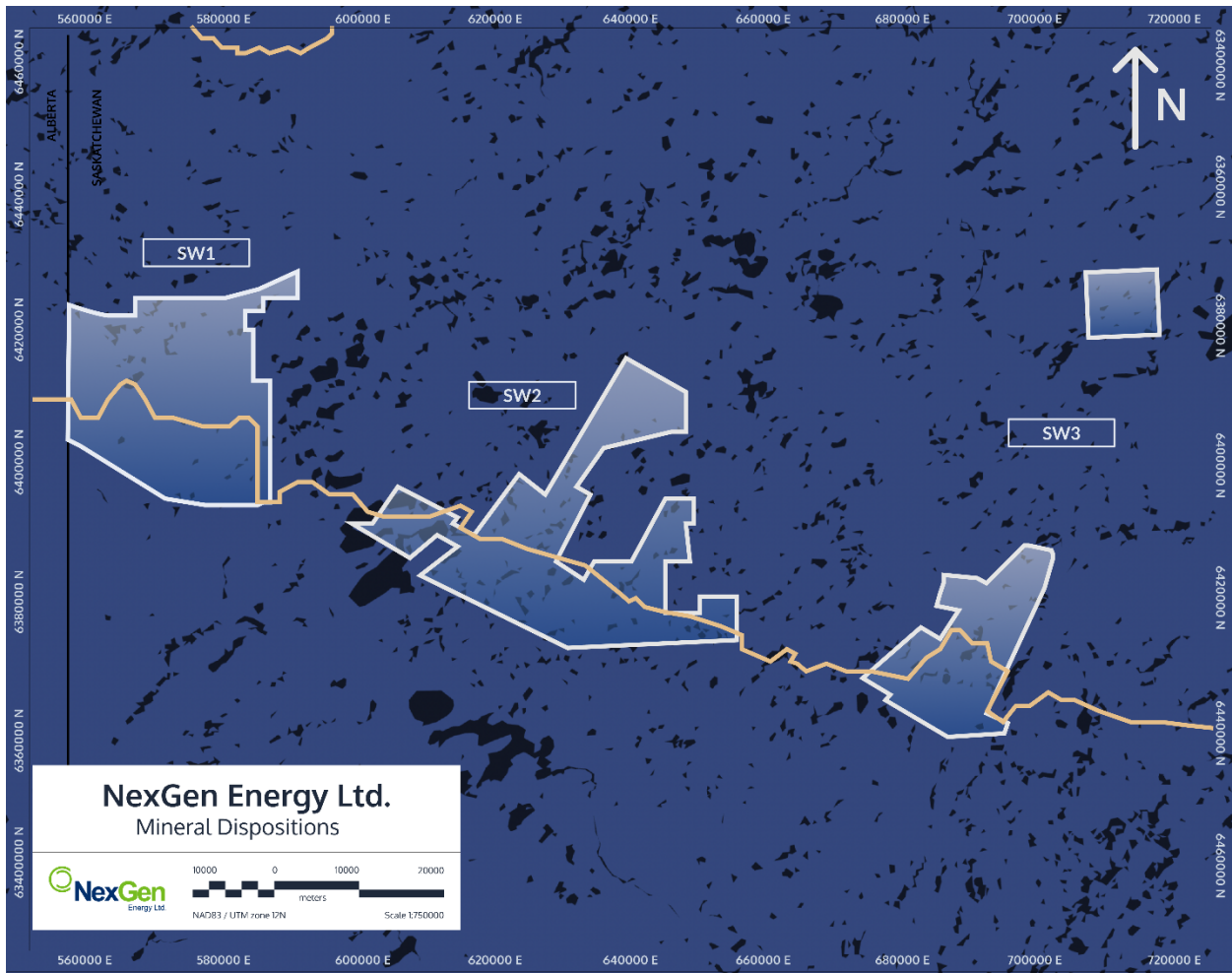


Figure 4: NexGen's Mineral Disposition Tenure in Southwest Athabasca Basin



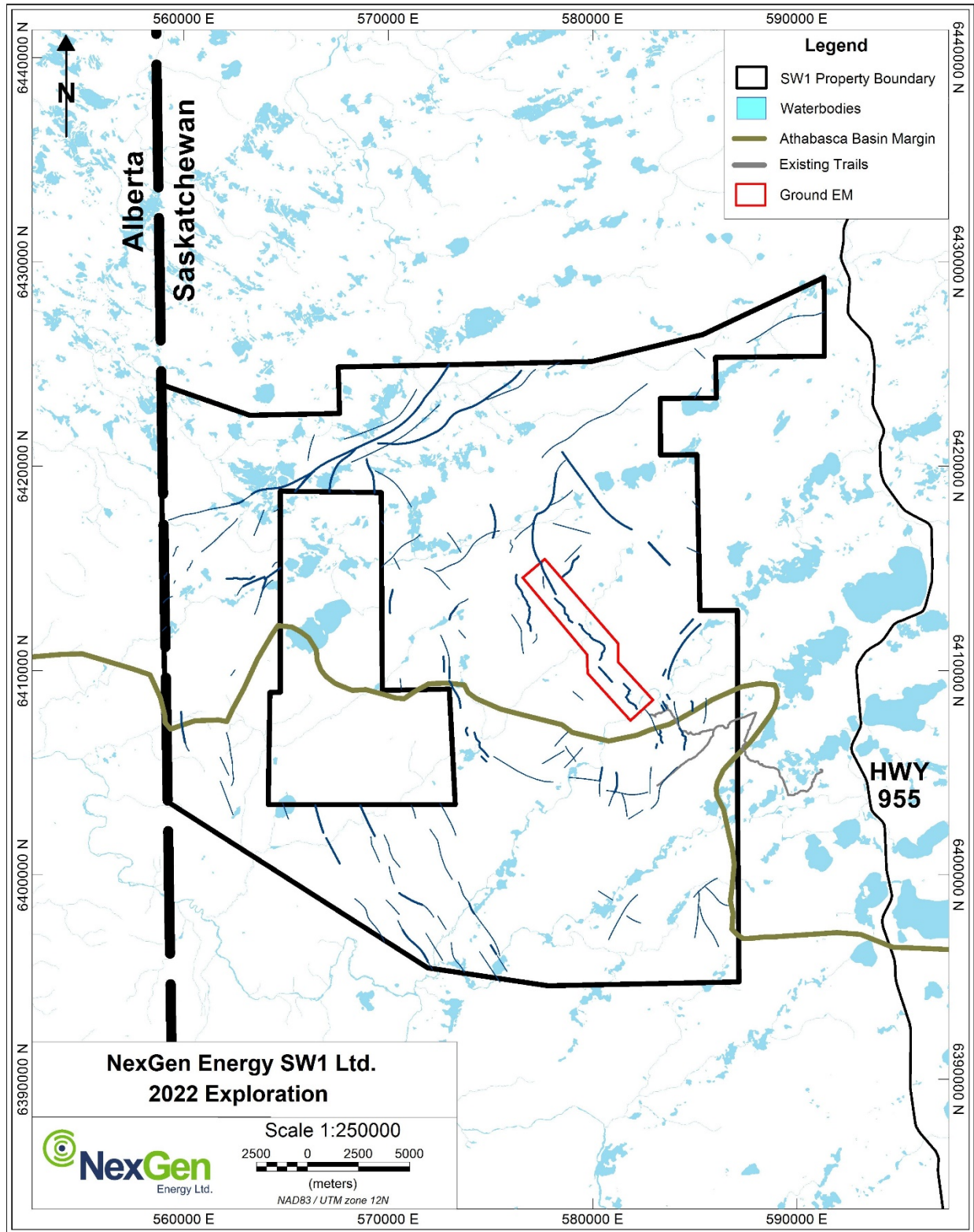


Figure 5: 2022 Geophysical Program Planned for SW1

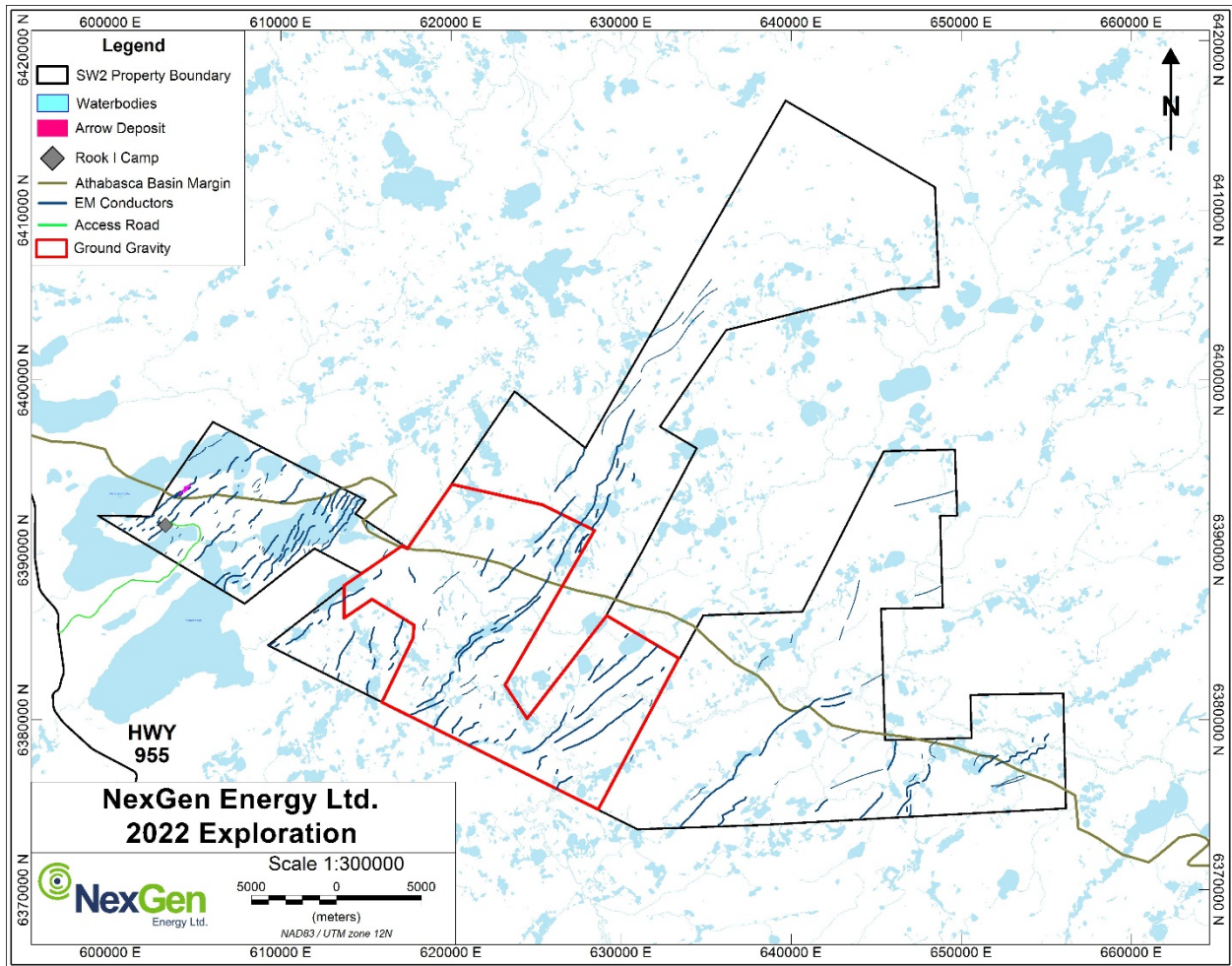


Figure 6: 2022 Geophysical Program Planned for SW2



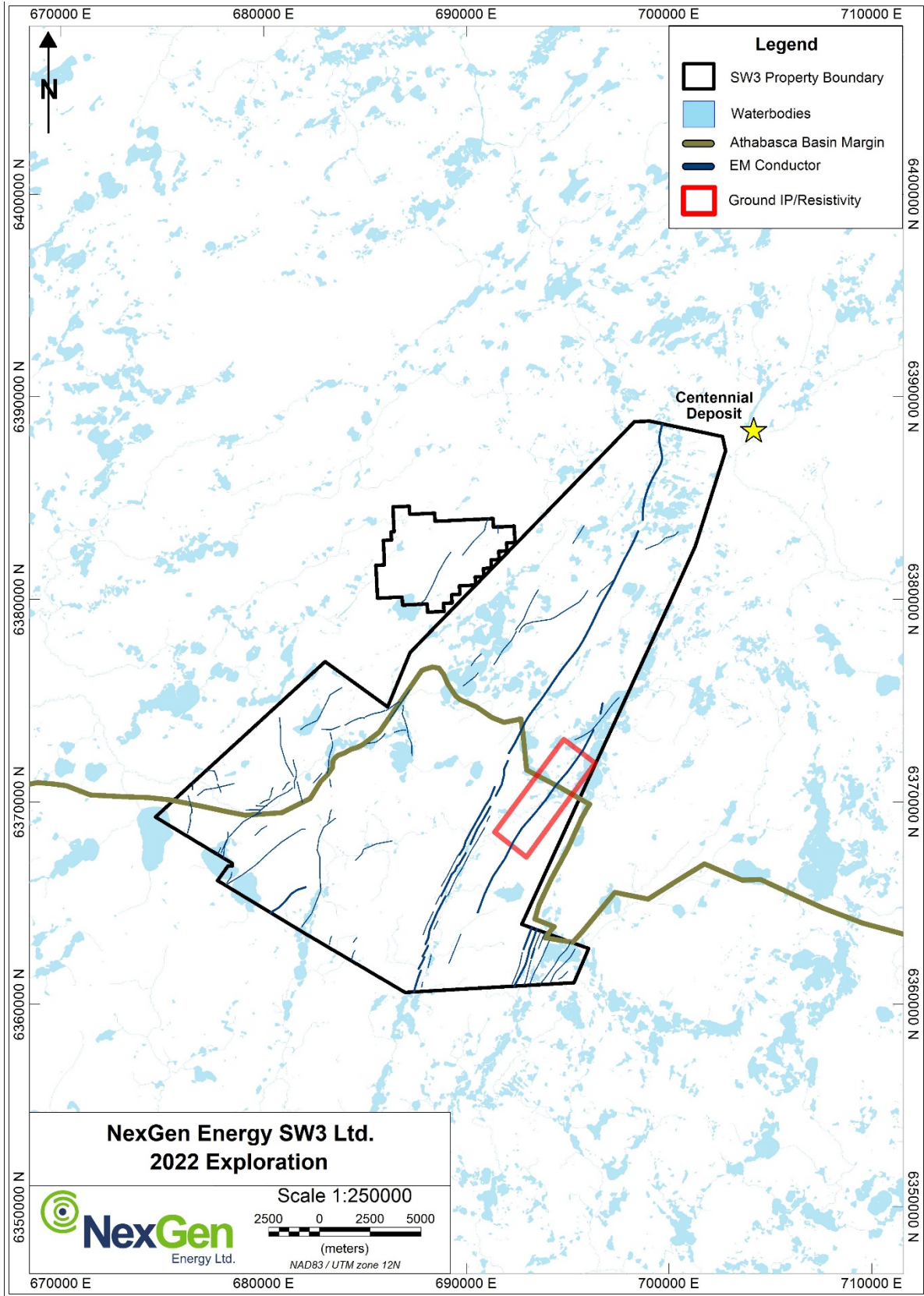


Figure 7: 2022 Geophysical Program Planned for SW3

Table 1: 2021 Exploration Assay Results (Cutoff of 0.01% U<sub>3</sub>O<sub>8</sub>)

Drill Hole				Unconformity Depth (m)	SRC Geoanalytical Results			
Hole ID	Azimuth	Dip	Total Depth (m)		From (m)	To (m)	Width (m)	U <sub>3</sub> O <sub>8</sub> (wt%)
AR-21-266	314	-73	1482.73	129.50	1058.5	1060.0	1.5	0.10
AR-21-266a	314	-73	120.00	N/A	No significant mineralization			
AR-21-267	314	-73	1446.00	117.30	No significant mineralization			
AR-21-268	314	-73	1400.00	113.75	965.0	965.5	0.5	0.01
					1125.0	1125.5	0.5	0.04
					1128.0	1135.0	7.0	0.10
RK-21-131	300	-65	501.00	51.00	No significant mineralization			
RK-21-132	300	-65	468.00	34.00	No significant mineralization			
RK-21-133	300	-65	555.00	49.00	No significant mineralization			
RK-21-134	300	-65	516.63	57.70	No significant mineralization			
RK-21-135	310	-70	534.00	81.00	No significant mineralization			
RK-21-136	310	-70	447.00	88.10	No significant mineralization			
RK-21-137	310	-70	534.00	90.70	No significant mineralization			
RK-21-138a	310	-70	96.88	90.00	No significant mineralization			
RK-21-138	310	-70	486.00	82.30	No significant mineralization			
RK-21-139	315	-65	495.00	84.00	No significant mineralization			
RK-21-140	315	-70	479.40	80.95	166.0	167.0	1.0	0.10
RK-21-141	315	-70	488.00	92.10	No significant mineralization			
RK-21-142	315	-70	465.00	84.00	No significant mineralization			
RK-21-143	315	-70	334.40	79.90	No significant mineralization			

*Parameters:*

- *Maximum internal dilution 2.0 m downhole*
- *Minimum thickness of 0.5 m downhole*
- *Cutoff grade of 0.01% U<sub>3</sub>O<sub>8</sub>*
- *All depths and intervals are metres downhole*

**About NexGen**

NexGen is a British Columbia corporation focused on the development of the Rook I Project located in the southwestern Athabasca Basin, Saskatchewan, Canada, into production. The Rook I Project is supported by a NI 43-101 compliant Feasibility Study which outlines elite environmental performance as well as industry leading economics. Rook I hosts the Arrow Deposit that hosts Measured Mineral Resources of 209.6 M lbs of U<sub>3</sub>O<sub>8</sub> contained in 2.18 M tonnes grading 4.35% U<sub>3</sub>O<sub>8</sub>, Indicated Mineral Resources of 47.1 M lbs of U<sub>3</sub>O<sub>8</sub> contained in 1.57 M tonnes grading 1.36% U<sub>3</sub>O<sub>8</sub>, and Inferred Mineral Resources of 80.7 M lbs of U<sub>3</sub>O<sub>8</sub> contained in 4.40 M tonnes grading 0.83% U<sub>3</sub>O<sub>8</sub>.

NexGen has a highly experienced team of uranium industry professionals with a successful track record in the discovery of uranium deposits and in developing projects through discovery to production. The Company is the recipient of the 2018 PDAC Bill Dennis Award for Canadian mineral discovery and the 2019 PDAC Environmental and Social Responsibility Award.

### **Contact Information**

**Leigh Curyer**

**Chief Executive Officer**

**NexGen Energy Ltd.**

+1 604 428 4112

[lcuryer@nexgenenergy.ca](mailto:lcuryer@nexgenenergy.ca)

[www.nexgenenergy.ca](http://www.nexgenenergy.ca)

**Travis McPherson**

**Senior Vice President Corporate Development**

**NexGen Energy Ltd.**

+1 604 428 4112

[tmcpherson@nexgenenergy.ca](mailto:tmcpherson@nexgenenergy.ca)

<http://www.nexgenenergy.ca>

### **Technical Disclosure**

*All technical information in this news release has been reviewed and approved by Jason Craven , P.Geo, NexGen's Manager, Exploration, a qualified person under National Instrument 43-101.*

*A technical report in respect of the FS is filed on SEDAR ([www.sedar.com](http://www.sedar.com)) and EDGAR ([www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml)) and is available for review on NexGen Energy's website ([www.nexgenenergy.ca](http://www.nexgenenergy.ca)).*

### *Cautionary Note to U.S. Investors*

*This news release includes Mineral Reserves and Mineral Resources classification terms that comply with reporting standards in Canada and the Mineral Reserves and the Mineral Resources estimates are made in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ from the requirements of the Securities and Exchange Commission ("SEC") set by the SEC's rules that are applicable to domestic United States reporting companies. Consequently, Mineral Reserves and Mineral Resources information included in this news release is not comparable to similar information that would generally be disclosed by domestic U.S. reporting companies subject to the reporting and disclosure requirements of the SEC. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.*

### **Forward-Looking Information**



*The information contained herein contains "forward-looking statements" within the meaning of applicable United States securities laws and regulations and "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to mineral reserve and mineral resource estimates, the 2021 Arrow Deposit, Rook I Project and estimates of uranium production, grade and long-term average uranium prices, anticipated effects of completed drill results on the Rook I Project, planned work programs, completion of further site investigations and engineering work to support basic engineering of the project and expected outcomes. Generally, but not always, forward-looking information and statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negative connotation thereof or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment that, based on certain estimates and assumptions, the mineral resources described can be profitably produced in the future.*

*Forward-looking information and statements are based on the then current expectations, beliefs, assumptions, estimates and forecasts about NexGen's business and the industry and markets in which it operates. Forward-looking information and statements are made based upon numerous assumptions, including among others, that the mineral reserve and resources estimates and the key assumptions and parameters on which such estimates are based are as set out in this news release and the technical report for the property, the results of planned exploration activities are as anticipated, the price and market supply of uranium, the cost of planned exploration activities, that financing will be available if and when needed and on reasonable terms, that third party contractors, equipment, supplies and governmental and other approvals required to conduct NexGen's planned exploration activities will be available on reasonable terms and in a timely manner and that general business and economic conditions will not change in a material adverse manner. Although the assumptions made by the Company in providing forward looking information or making forward looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate in the future.*

*Forward-looking information and statements also involve known and unknown risks and uncertainties and other factors, which may cause actual results, performances and achievements of NexGen to differ materially from any projections of results, performances and achievements of NexGen expressed or implied by such forward-looking information or statements, including, among others, the existence of negative operating cash flow and dependence on third party financing, uncertainty of the availability of additional financing, the risk that pending assay results will not confirm previously announced preliminary results, conclusions of economic valuations, the risk that actual results of exploration activities will be different than anticipated, the cost of labour, equipment or materials will increase more than expected, that the future price of uranium will decline or otherwise not rise to an economic level, the appeal of alternate sources of energy to uranium-produced energy, that the Canadian dollar will strengthen against the U.S. dollar, that mineral resources and reserves are not as estimated, that actual costs or actual results of reclamation activities are greater than expected, that changes in project parameters and plans continue to be refined and may result in increased costs, of unexpected variations in mineral resources and reserves, grade or recovery rates or other risks generally associated with mining, unanticipated delays in obtaining governmental, regulatory or First Nations approvals, risks related to First Nations title and consultation, reliance upon key management and other personnel, deficiencies in the Company's title to its properties, uninsurable risks, failure to manage conflicts of interest, failure to obtain or maintain required permits and licences, risks related to changes in laws, regulations, policy and public perception, as well as those factors*

or other risks as more fully described in NexGen's Annual Information Form dated February 25, 2022 filed with the securities commissions of all of the provinces of Canada except Quebec and in NexGen's 40-F filed with the United States Securities and Exchange Commission, which are available on SEDAR at [www.sedar.com](http://www.sedar.com) and Edgar at [www.sec.gov](http://www.sec.gov).

*Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or statements or implied by forward-looking information or statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Readers are cautioned not to place undue reliance on forward-looking information or statements due to the inherent uncertainty thereof.*

*There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.*