

MONTHLY ATHABASCA BASIN EXPLORATION UPDATE

September 2019

Sharing our expertise with the U.S. Nuclear Regulatory Commission: Signing of a memorandum of cooperation to strengthen regulation of nuclear safety

Source: [Canadian Nuclear Safety Commission](#)
2019-08-15

On August 15, 2019, the Canadian Nuclear Safety Commission (CNSC) and the United States Nuclear Regulatory Commission (U.S. NRC), two of the world's leading nuclear regulators, met to discuss increasing regulatory effectiveness through collaboration on the technical reviews of advanced reactor and small modular reactor (SMR) technologies.

During the official signing ceremony in Ottawa, Ontario, CNSC President Rumina Velshi and U.S. NRC Chairman Kristine Svinicki signed a memorandum of cooperation (MOC) aimed at enhancing technical reviews of advanced reactor and SMR technologies.

In her address, President Velshi spoke about her priority of global influence and the CNSC's commitment to engaging in international cooperation activities that foster relationships, strengthen frameworks and share best practices to improve nuclear safety: "Globally, interest and advances in small modular and advanced reactors are growing rapidly. The CNSC and the U.S. NRC are working together as regulatory leaders to ensure the development and deployment of these innovative technologies are done safely and efficiently," she stated.

"The signing of this memorandum further strengthens our long-standing history of collaboration with our U.S. counterparts and ensures the effectiveness and efficiency of our regulatory oversight for the future," she added.

Chairman Svinicki stated the following: "Today's signing of this memorandum further shapes our commitment to open and transformative thinking with our Canadian partners, enhancing our willingness to work together on matters of advanced nuclear power safety developments while increasing regulatory effectiveness. Advanced technologies are emerging at a rapid pace, demanding that regulators keep in step with modernization initiatives and the technologies of the future."

The joint memorandum entails that both regulators will ensure safe, efficient development and deployment of these technologies – both now and in the future. Both leaders publicly discussed this initiative in June 2019 at the International Economic Forum of the Americas' Conference of Montreal. Developing and signing the MOC was the next step in moving this concept from exploration to implementation.

Regulations under the Canadian Nuclear Safety and Control Act are already in place for regulating activities involving the use of advanced reactor and SMR technologies. However, these designs incorporate innovative aspects that will need to be supported by applicants and reactor vendors with sound scientific and technical evidence, in order to meet regulatory requirements. This memorandum will help the CNSC achieve this outcome.

As Canada's nuclear regulator, the CNSC will continue to ensure its readiness to regulate SMRs and advanced reactor technologies. •

UxC Consulting Spot Price (US\$)	
July 31, 2019	\$25.41/lb U ₃ O ₈
August 31, 2019	\$25.28/lb U ₃ O ₈
Change of -\$0.13/lb U₃O₈	
UxC Consulting Long-Term Price (US\$)	
July 31, 2019	\$32.00/lb U ₃ O ₈
August 31, 2019	\$32.00/lb U ₃ O ₈
Unchanged	

Key Basin Announcements

Purepoint and NexGen heading west to the Smart Lake Project Area

2019-08-26: NexGen commences maiden exploration drilling surrounding PTU's Smart Lake Project

2019-09-04: Purepoint identifies new priority targets at Smart Lake

2019-08-07: NexGen completes Phase I of Feasibility-Stage drill program at Arrow

2018-08-08: Azincourt plans phase two drill program at East Preston

2018-08-13: UEX's Christie Lake summer drill program underway

2018-08-14: Fission hits high-grade uranium in multiple areas at PLS

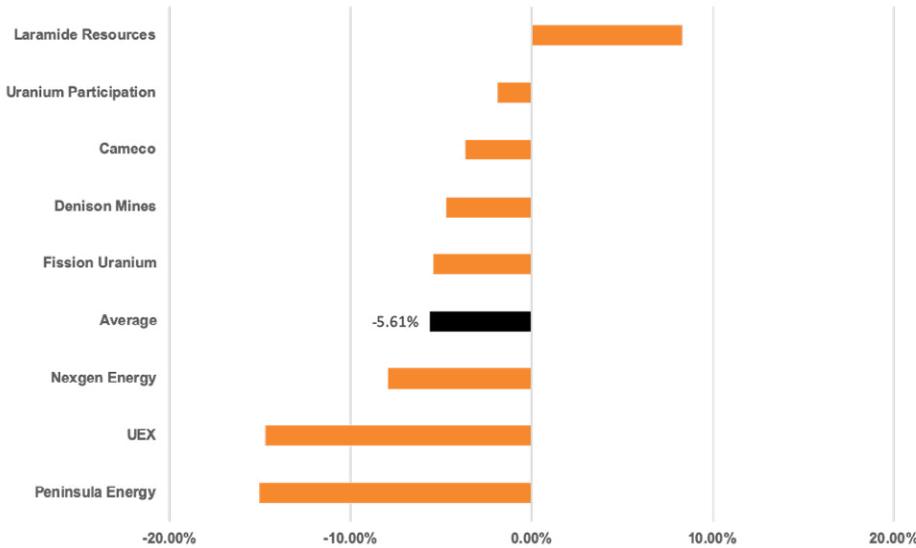
2019-08-21: ALX announces option extension for claims at the Newham Lake

2019-08-27: Denison announces positive initial results from ISR field test program at Phoenix test area 1

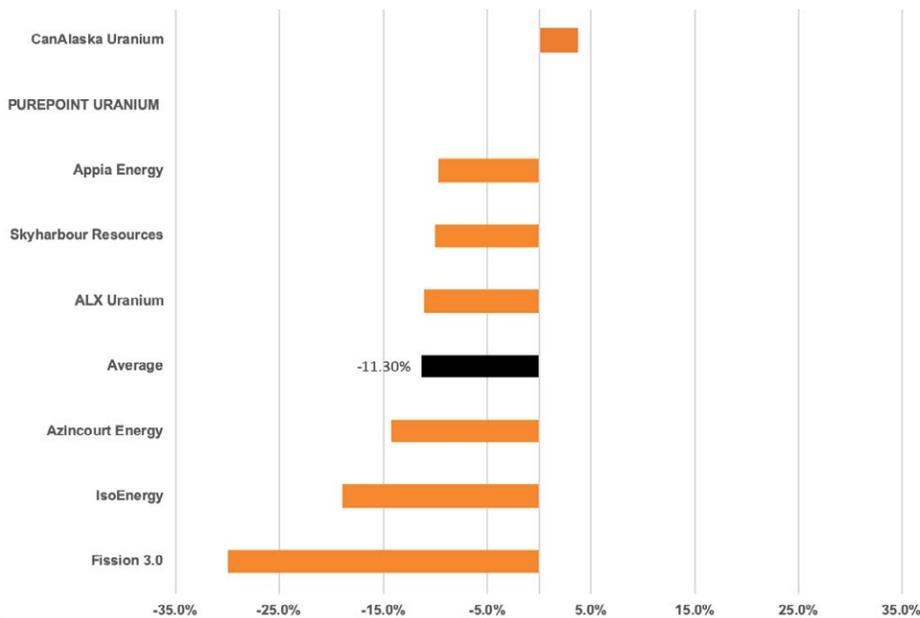
2018-08-28: IsoEnergy intersects additional uranium mineralization at the Hurricane Zone

August 2019 Monthly Uranium Stock Performance

Producing, Development & Advanced Exploration Companies



Athabasca Basin Exploration Companies



Disclaimer information:

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Monthly Athabasca Basin Exploration Update

Presented by Purepoint Uranium Group Inc. (TSXV: PTU), the Monthly Athabasca Basin Exploration Update is a monthly newsletter that gathers information on what's happening with uranium exploration companies in the Athabasca Basin, including its monthly exploration news, stock performances as well as the spot- and long-term uranium prices.

Purepoint Uranium Group Inc. TSXV: PTU

Purepoint Uranium Group Inc. is a uranium exploration company focused on precision exploration and with ten projects in the Athabasca Basin.

Its flagship project is the Hook Lake, a joint venture with two of the largest producers in the world, Cameco Corporation and Orano Canada.

A total of \$3MM exploration budget for 2019 has been completed with two drill rigs at the Hook Lake JV.

For more information, please visit: www.purepoint.ca.

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Purepoint identifies new priority targets at Smart Lake

TSXV: PTU

2019-09-04

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$ 13.96MM	\$0.065	\$0.105	\$0.05

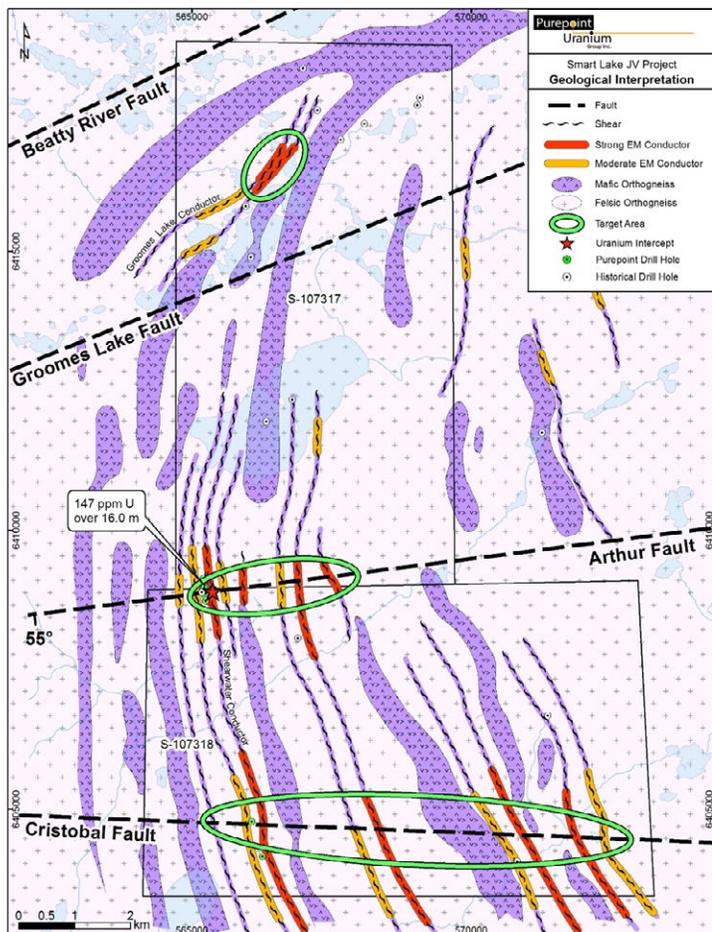
Purepoint Uranium Group Inc. (TSXV: PTU) announced today that geology at the Smart Lake JV, a project owned jointly by Cameco Corp. (73%) and Purepoint Uranium Group Inc. (27%), has been reinterpreted based on new regional knowledge of basement hosted uranium deposits. The Smart Lake property is situated in the southwestern portion of the Athabasca Basin, approximately 18 km west-northwest of the Hook Lake Project and 60 km south of the former Cluff Lake mine.

Last week, NexGen Energy Ltd. announced the commencement of a 4,000 metre drill program on their claims that surround Smart Lake. (See Press Release, Aug 26, 2019).

“Basement-hosted uranium mineralization was encountered at Smart Lake during our initial drill programs,” said Scott Frostad, Purepoint’s VP Exploration. “During the re-logging of our Smart Lake drill core this summer, it was immediately recognised that the rocks were similar to those encountered at our Hook Lake JV project. The Smart Lake target areas are seen as extremely prospective and we look forward to advancing this project further”.

Highlights:

- Smart Lake drill core was re-logged based on our new understanding of the western Athabasca geological setting acquired from advanced work at Hook Lake. All drill sections and plan maps have now been revised;
- Early drilling by the JV partners, intersected basement-hosted uranium mineralization associated with a hydrothermally altered, graphitic shear zone that included 15.4 metres of 147 ppm U only 200 metres from surface;
- Comparable to the Patterson Uranium District, key geological processes required for the development of high-grade uranium deposits are considered to be clearly present at Smart Lake;
- A revised 43-101 compliant technical report is being completed for review by our JV partners.



Key Findings:

Representatives from both Purepoint and Cameco Corp. carried out work at the Smart Lake project in June, focused on re-logging and reviewing the core from the 2008 and 2012 drill programs.

Upon subsequent analysis and interpretation, it was found that the geology of the Smart Lake Property (Figure 1) can be broadly broken into two rock types; felsic orthogneiss (dominated by pink, granite gneiss with lesser granodiorite and local tonalite gneiss) and mafic orthogneiss (grades from diorite to gabbro). The contrast in competency between the highly competent felsic rocks and the softer mafic rocks has focused displacement along lithologic contacts allowing for increased flow of hydrothermal fluids.

Known uranium mineralization at Smart Lake is associated with the Shearwater conductor, a 20 to 25 metre wide, steeply west dipping, north-northwest (NNW) striking and hydrothermally altered, graphitic-pyritic band of mafic orthogneiss. The Shearwater conductor is conformable with the dominant NNW striking, west-dipping gneissosity, the same orientation of the proximal linear magnetic highs. The gneissosity would be the first planer structure created, referred to as “S1”, and it was produced by an east-west shortening, the first phase of deformation referred to as “D1”.

Based on drill core observations and geochemistry, a second deformation event (D2) was identified; a north-south shortening related to the Beatty River Fault. The D2 event produced folds and east-northeast (ENE)-striking, south dipping S2 joints, fractures and faults axial planar to the folds (e.g. the interpreted Groomes

Purepoint identifies new priority targets at Smart Lake (cont'd)

TSXV: PTU

2019-09-04

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$ 13.96MM	\$0.065	\$0.105	\$0.05

Lake, Arthur and Cristobal Faults). Where the ENE-striking Arthur Fault intersects both the Shearwater conductor and felsic-mafic transition zones, strong alteration, displacement and low-grade uranium mineralization is observed.

Reinterpretation of previous drilling while integrating the Shea Creek deposit model has identified priority exploration targets where interpreted faults (i.e. Arthur and Cristobal faults) crosscut both the conductive anomalies and interpreted mafic-felsic transitions.

The most prospective target may be the Groomes Lake conductor which, unlike other conductors, strikes north-east. When accommodating north-south compression (D2), which produced the east-west faults (S2), this orientation may have been favourable for enhanced dilation, fluid flow and uranium deposition.

Smart Lake Project

Purepoint, as operator, holds a 27% ownership of the Smart Lake project in joint venture with Cameco Corporation.

The Smart Lake property includes two claims with a total area of 9,860 hectares situated in the southwestern portion of the Athabasca Basin, approximately 60 km south of the former Cluff Lake mine and 18 km west-northwest of Purepoint's Hook Lake JV Project.

Depth to the unconformity, where it occurs, is relatively shallow at less than 350 metres.

Aeromagnetic and electromagnetic patterns at Smart Lake reflect an extension of the patterns underlying the Shea Creek deposits (Indicated resource of 68M lbs at 1.48% U₃O₈) 55 km north of the property. Exploration by Purepoint and Cameco has firmly established the presence of uranium mineralization, hydrothermal alteration and the location of a number of basement electromagnetic conductors and cross-cutting east-west structures yet to be drill tested.

Similar to the Kianna fault at Shea Creek, known uranium mineralization at the Smart Lake project is associated with the intersection of the east-west Arthur Fault and north-south-striking fluid/chemical traps including the Shearwater conductor and chloritized mafic orthogneiss. The occurrence of low-grade uranium mineralization along the Arthur Fault away from Shearwater conductor underscore the need to target east-west structures both at the intersection with conductive anomalies and at magnetically interpreted lithological contacts.

Additional east-west striking faults (Groomes Lake and Cristobal) have been interpreted from examination of airborne magnetic and electromagnetic surveys. These faults are spatially related with strong EM conductors identified in both airborne and ground-based surveys.

The best uranium intercepts for each hole of the 2008 and 2012 drill programs are provided below. Note that holes SMT08-03 and 04 were drilled along strike over 4 km south of the other drill holes and their results suggest background uranium concentrations in basement rocks are typically less than 4 ppm.

Hole ID	Hole Depth	Maximum Radiation				
		Max. CPS	U (ppm)	Interval (m)	From (m)	To (m)
SMT08-01	300.0	3809	449	0.2	234.7	234.9
SMT08-02	192.0	534	27	1.0	191.0	192.0
SMT08-03	213.0	1579	4	0.3	94.0	94.3
SMT08-04	254.4	881	1	0.4	158.2	158.6
SMT08-05	219.0	13534	1900	0.2	152.8	153.0
SMT08-06	258.0	5047	1600	0.1	156.2	156.3
SMT12-07	369.0	1926	456	0.3	146.7	147.0
SMT12-08	306.0	1006	155	0.3	208.8	209.1
SMT12-09	292.6	2036	106	1.0	237.1	238.1

NexGen commences maiden exploration drilling surrounding PTU's Smart Lake Project

TSX: NXE

2019-08-26

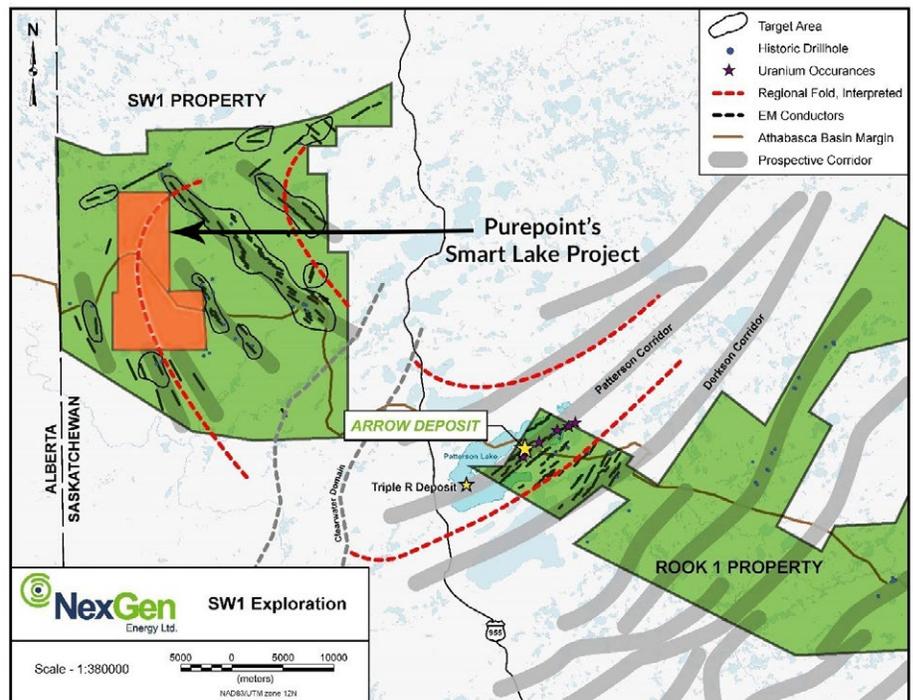
Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$619.03MM	\$1.74	\$3.31	\$1.455

NexGen announced that an exploration drill program consisting of a minimum 4,000 m is scheduled to begin in early September at our 100% owned, SW1 property (approximately 10 km northwest of Rook I), in the Athabasca Basin, Saskatchewan.

The Property is situated on the western limb of a regional fold structure with the Patterson Lake Uranium Corridor and the Arrow Deposit situated on the eastern limb. Historical drill core from the Property show that the area contains similar host rocks as the Arrow Deposit.

Exploration drilling with a minimum of 4,000 m, utilizing 2 drill rigs, will commence imminently on the Property. The program is designed to test the highest-priority anomalies, analogous to those at the Arrow Deposit, for uranium mineralization that has been highlighted by geophysical surveys and the analysis of historic drilling.

SW1 Property surrounds Purepoint's Smart Lake Project.



Since the acquisition by NexGen of the SW1 property (the "Property") in 2012, NexGen has systematically developed the property through testing with numerous studies and geophysical surveys. The resulting geophysical signature on the Property, particularly the Gartner Lake Corridor ("GLC"), displays strong similarities to the Rook I property (Figure 1) which hosts Arrow, Canada's largest to-be developed uranium deposit currently in the Environmental Assessment process. Those similar characteristics include a strong conductive signature with numerous off-sets coincident with discrete gravity lows and steep magnetic gradients (Figure 2, Figure 3). Analysis of historic drilling has also revealed prospective structure and alteration that coincides with highly-favourable geophysical properties for potential uranium mineralization.

Geophysical History

The Property is situated on the western limb of a regional fold structure with the Patterson Lake Uranium Corridor and the Arrow Deposit situated on the eastern limb. Historical drill core from the Property show that the area contains similar host rocks as the Arrow Deposit. Given this geological affiliation, NexGen commissioned the same airborne geophysical techniques that led to the discovery of the Arrow Deposit in February 2014. A VTEM survey defined several discrete and disjointed conductive corridors on the Property, similar to what was seen at Arrow. Follow-up ZTEM surveys were conducted in conjunction with HeliFalcon gravity gradiometry surveys over the entire Property. These surveys defined additional corridors and numerous gravity anomalies, several of which are coincident with the dislocation of the conductors (Figure 4), similar to the Arrow Deposit (Figure 4). The development of the Property has led to high-confidence targets that are prime for focused exploration through drilling.

NexGen completes Phase I of Feasibility-stage drill program at Arrow

TSXV: SYH

2019-08-07

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$619.03MM	\$1.74	\$3.31	\$1.455

NexGen reported radioactivity results for an additional thirty-seven holes comprising 16,585.5 m from the Company's Feasibility-stage drilling program at our 100% owned, Rook I property in the Athabasca Basin Saskatchewan. The Phase I resource component of the 2019 Feasibility stage program has completed 117 holes totaling 50,968 m. Utilizing new directional drilling technology, AziDrill, the Company was able to reduce the metres required for Phase I conversion by 28% due to the ability to target mineralization more accurately with deeper directional cuts from the pilot hole.

Further, an additional 14 holes of 6,314.4 m were completed designed to geotechnically and hydrogeologically characterize the rock mass within areas of the proposed mine workings and the Underground Tailings Management Facility ("UGTMF").

In total, the 2019 Phase I winter drilling program comprised 131 completed holes totaling 57,282.4 m.

Phase I results are all pending final assays and will be released as received and finalized. The commencement of Phase II is pending final compilation and analysis of all Phase I drilling results. All programs for the Feasibility Study (H1 2020) and Environmental Assessment (H2 2020) are ongoing and on schedule.

NexGen commenced an Environmental Assessment on the Rook I Project on April 29, 2019 in accordance with the requirements of both the Environmental Assessment Act and the Canadian Environmental Assessment Act, 2012 ("CEAA 2012") after receiving acceptance of the Rook I Project Description (Technical Proposal) by the Canadian Nuclear Safety Commission ("CNSC") and the Saskatchewan Ministry of Environment ("SMOE"). In addition, NexGen filed an Initial Licence Application with the CNSC under the Nuclear Safety and Control Act in order to obtain a Licence to Prepare Site and Construct for the Project.

Azincourt plans phase two drill program at East Preston

TSXV: AAZ

2019-08-08

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$4.30MM	\$0.03	\$0.09	\$0.02

Azincourt provided an update on its operational plans at the East Preston uranium project, located in the western Athabasca Basin, northern Saskatchewan, Canada.

Drill targeting and permitting are already underway and ahead of schedule. The proposed winter 2019-2020 drill program will comprise 2,000-2,500 meters of land-based diamond drilling with a budget of approximately \$1.2M CDN. Drilling will consist of up to 15 holes in several high priority target zones.

The property-wide helicopter-borne Versatile Time-Domain Electromagnetic (VTEM™ Max) and Magnetic survey was completed in early 2019 and forms the primary dataset for target prioritization, combined with the knowledge gained from 2018 ground Electromagnetic and Gravity geophysical surveys and the 2019 drill program.

UEX's Christie Lake summer drill program underway

TSX: UEX

2019-08-13

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$55.30MM	\$0.145	\$0.23	\$0.13

UEX announced that the 2019 Phase II exploration program consisting of diamond drilling is underway on the Christie Lake Project. The summer drilling program will consist of up to 8,000 metres of diamond drilling in approximately 12-15 holes utilizing two drill rigs with a budget of \$2.0 million.

The summer program will focus on drill-testing targets in the three high priority areas outside the footprint of the existing deposits. Highest priority target is along the B Trend where the previous operator intersected uranium, cobalt and nickel mineralization in hole CB94-048 averaging 0.25% U3O8, 2.05% Co and 2.32% Ni over 1.5 m within a fault structure located approximately 50 m below the unconformity. The unconformity target up-dip of this hole remains untested. Follow-up of similar mineralization at the same depth below the unconformity in 2017 led UEX to the discovery of the Ōrora Deposit, approximately 4 km to the east.

The second priority area is Ōrora North, where a large and strong resistivity anomaly has been identified in the lower sandstone column oriented parallel to the C Conductor Trend approximately 175 m north of the Ōrora Deposit. This anomaly has never been drill-tested. Sandstone resistivity anomalies are often associated with the alteration that envelopes unconformity uranium deposits, including UEX's Paul Bay, Ken Pen and Ōrora Deposits. The third priority area is the Southwest C Extension that covers the area 100 m to 600 m southwest along strike of the Paul Bay Deposit on the C Conductor Trend where limited drilling has been completed. Within this area, hole CB96-083 intersected two narrow zones of uranium mineralization in a fault structure also located approximately 50 m below the unconformity that remains untested both up-dip at the unconformity and down-dip into the basement.

JCU informed UEX they will not be contributing their share of expenditures for both the Phase I and Phase II 2019 programs and will be diluting their interest in the project. UEX agreed to contribute JCU's share of all 2019 expenditures and as a result, UEX's interest in the Christie Lake Project is expected to increase to approximately 64.3% and JCU's interest is expected to decrease to approximately 35.7%

Fission hits high-grade uranium in multiple areas at PLS

TSX: FCU

2019-08-14

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$170.10MM	\$0.35	\$0.75	\$0.32

Fission announced assay results from three dual purpose holes drilled during the winter 2019 program at its' PLS property in Canada's Athabasca Basin region. The holes tested outside of the Triple R deposit's current high-grade domain with the goal of confirming areas of future growth and obtaining further geotechnical data for mine planning. All three returned substantial high-grade intervals which were previously not accounted for.

Holes PLS19-PW-09 and PLS19-PW-10 intersected high-grade mineralization outside of the current high-grade domain of the R780E zone, thus showing the potential for further high-grade zone growth. Of particular note is hole PLS19-PW-09 (line 735E) which intersected 41.0m of total composite uranium mineralization, including intervals such as 5.0m @ 22.88% U3O8 in 38.0m @ 3.52% U3O8.

ALX announces option extension for claims at the Newham Lake Uranium Project

TSXV: AL

2019-08-21

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$4.68MM	\$0.04	\$0.085	\$0.04

ALX announced that a three-year extension of time has been granted by a vendor to ALX for two claims totaling 1,518.6 hectares within its 100%-owned Newham Lake Uranium Project located in the northeastern Athabasca Basin of northern Saskatchewan, approximately 75 kilometres east of Stony Rapids.

Under the terms of an option agreement dated August 21, 2014, ALX was obligated to spend \$1.5 million in exploration expenditures on the Claims by August 28, 2019. All other monetary terms of the option agreement (cash and shares payable to the vendor) have been satisfied by ALX. In consideration for a three-year extension to August 28, 2022 for ALX to complete the exploration expenditures, ALX has agreed to issue to the vendor 300,000 common shares of the Company.

IsoEnergy intersects additional uranium mineralization at Hurricane Zone

TSXV: ISO

2019-08-28

Market Cap	Price as of 08/31/19	52-Week High	52-Week Low
\$32.16MM	\$0.47	\$0.79	\$0.285

IsoEnergy provided an update on its recently completed summer drilling program on the Hurricane zone at the Larocque East property. Highlights include assay results from drill hole LE19-18C1, intersections of strong radioactivity in LE19-28 and LE19-29, plus the intersection of mineralization on an aggressive 250m step-out to the east.

Additionally, interpretation of new DC-Resistivity data has identified new target areas along-strike to the east of the Hurricane zone. The Hurricane zone is located on the Company's 100% owned Larocque East property in the Eastern Athabasca Basin of Saskatchewan.

Drilling Highlights:

- Chemical assays received for drill hole LE19-18C1, comprising 1.2% U3O8 over 5.0m, including 3.9% U3O8 over 0.5m
- Strong uranium mineralization was intersected in drill hole LE19-28, with an intersection of 10.5m >1,000 CPS, including 1.0m >20,000 CPS
- Strong uranium mineralization was intersected in drill hole LE19-29, with an intersection of 2.0m >1,000CPS, including 0.5m >20,000CPS
- Length of the Hurricane zone extended to 500m with an intersection of uranium mineralization on section 4985E in drill hole LE19-22
- Additionally, the newly defined strong resistivity anomaly to the east of the known Hurricane deposit provides a high priority target for the follow-up winter 2019/2020 drill program

Purepoint Uranium Group Inc.
TSXV: PTU

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\$ 13.96MM	\$0.065	\$0.105	\$0.05

Strategically positioned in the Athabasca Basin

- Advanced-stage exploration portfolio of 10 projects in the Athabasca Basin - *all assessment requirements current*
- Dozen of drill targets well defined
- Support and continued spending by two of the world’s largest uranium producers
- Most speculative phase of investment completed with low priority properties all exited

Uranium Industry Market Overview

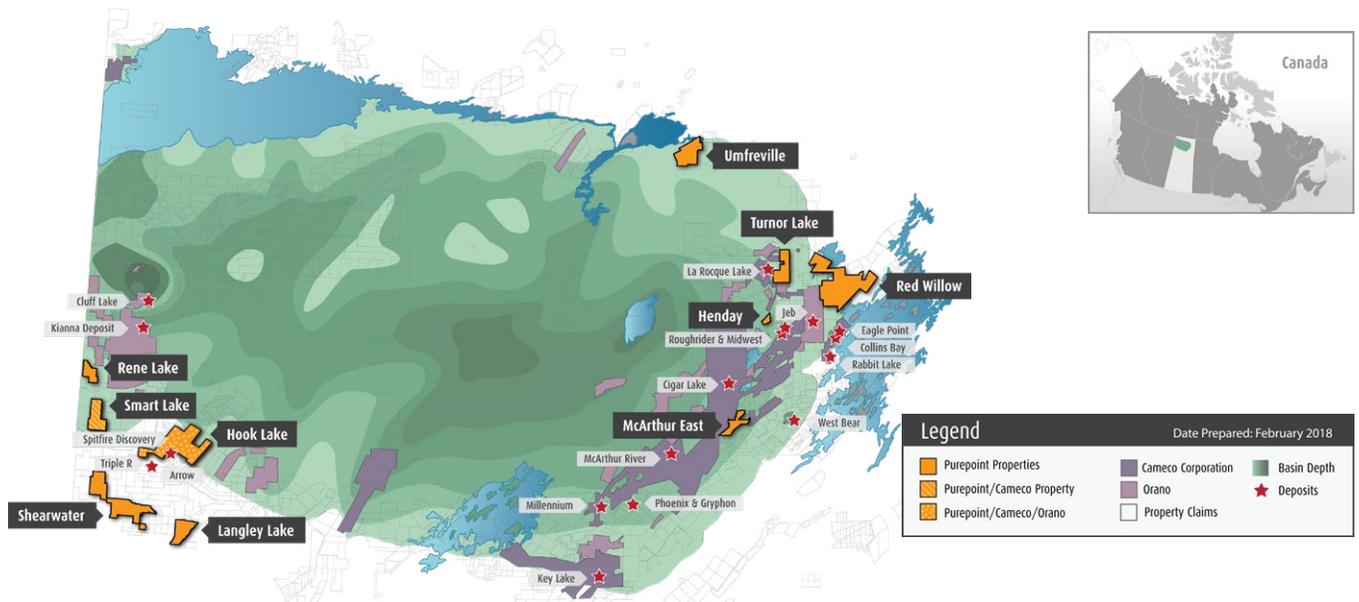
Click on the image to access full report.



Purepoint Uranium Group Inc. (TSXV: PTU) has assembled an end-to-end investment thesis for uranium investors, providing a complete understanding of the current events, facts and statistics that point towards a pending price correction.

Send us your comments/suggestions at info@jeannyso.com.

PUREPOINT'S ATHABASCA BASIN PROJECTS



Strategic Project Acquisitions

- Focused on the precision exploration of its ten projects in the Canadian Athabasca Basin, the world’s richest uranium region

Partnered with two of the World’s Largest Uranium Producers



High Grade Discovery at the Patterson Uranium District

- Spitfire Discovery (53.3% U₃O₈ over 1.3m within a 10m interval of 10.3% U₃O₈ at Hook Lake JV
- \$3 Million Exploration program completed in 2019



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