

# Canada's Athabasca Basin, the world's richest uranium play

written by InvestorNews | November 4, 2021

Another day and another 5+% move up in the uranium names. I'm not sure if that had to do with Wednesday's comments from the Pentagon that China plans to quadruple its nuclear (weapons) stockpile by 2030 because that seems pretty bearish for the whole world to me. Although the reality is, that this would likely increase demand for yellowcake,  $U_3O_8$ . The bull run on uranium still appears to be in full force as names like Cameco Corp. (TSX: CC0 | NYSE: CCJ) set another multi-year high with an 8.4% gain on the day. Additionally, there are more entities out there that are following Sprott's lead and either adding to existing, or starting new funds, to acquire physical yellowcake which continues to support the underlying [spot commodity price](#) above US\$40/lb.

With that in mind let's have a look at arguably the world's richest uranium jurisdiction – Canada's Athabasca Basin which hosts several of the highest-grade uranium deposits on the planet. Located primarily in the mining friendly jurisdiction of Saskatchewan, the Athabasca Basin covers an area of almost 100,000 square kilometers and hosts the world's largest producing uranium mine, Cigar Lake. Cameco owns [50% of Cigar Lake](#) which boasts an average  $U_3O_8$  grade of 15.9%. With 2021 production forecast to be 12 M lbs (6 M net to Cameco), it would make this single mine account for roughly 11% of global uranium production. It also helps make Cameco and its 37% partner Orano Group two of the top four global producing uranium companies behind Kazatomprom. This single mine also goes a long way to making Canada the third largest uranium producing country, behind Kazakhstan and Australia. Although Canada could leapfrog

Australia in production if Cameco's 70% owned McArthur River mine was restarted, given it used to hold the title of world's largest uranium mine with  $U_3O_8$  grades over 16%.

The map below shows that the Athabasca Basin is a pretty popular place, not just for the major uranium players like Cameco and Denison Mines Corp. (TSX: DML | AMEX: DNN) but also for a whole host of junior and intermediate players, all seeking to be the next successful explorer that potentially gets bought out like many before them.



There's no way we can get through all the names on this map so we'll just focus on a few to whet your appetite as to who might participate as this uranium frenzy continues to create shareholder returns.

We'll start with a team that has already had success in the region including an asset sale to a major producer. [Fission 3.0 Corp.](#) (TSXV: FUU | OTCQB: FISOF) is the third generation Fission run by one of Canada's leading uranium exploration teams. The Company's management, headed up by Dev Randhawa as CEO & Chairman, is part of the team that founded Fission Energy Corp., which made the J-Zone high-grade discovery in the Athabasca Basin and built Fission into a TSX Venture 50 Company, which sold the majority of its assets to Denison Mines in April 2013. [Fission Uranium Corp.](#) (TSXV: FCU) was founded by the same team, including current CEO, and uranium expert, Ross McElroy, which made the Patterson Lake South high-grade discovery. Mr. McElroy elected to focus on the development of the Triple R deposit at Patterson Lake South, but remains on Fission 3.0's Board of Directors and remains as the Company's QP. These two names, Randhawa and McElroy, give investors the option to select which level of exploration advancement they want to choose from with

confidence that a solid, experienced, team is in place.

Next up is [NexGen Energy Ltd.](#) (TSX: NXE | AMEX: NXE) is a well-funded exploration and development company with a portfolio of high-impact projects centered in the large-scale southwestern Athabasca Basin where NexGen holds 199,576 hectares of land. NexGen's southwestern properties host the high-grade Arrow Deposit (made on February 21, 2014), the South Arrow discovery (made on July, 2017) the Harpoon discovery (made on August, 2016), the Bow discovery (made on March, 2015) and the Cannon area (discovered April, 2016), all of which are located on the Company's 100% owned Rook I property. The Arrow Deposit hosts Measured Mineral Resources of 209.6 M lbs of  $U_3O_8$  contained in 2.18 M tonnes grading 4.35%  $U_3O_8$ . With an advanced deposit, over \$200 M in cash, and an active drill program that began in late July, there is lots of expectations for NexGen.

[UEX Corp.](#) (TSX: UEX | OTCQB: UEXCF) has the distinction of being the 3<sup>rd</sup> largest resource holder in the Athabasca Basin following the August, 2021 closing of its [acquisition of 50% of JCU \(Canada\) Exploration Company](#) (Denison Mines holds the other 50%). UEX's directly-owned portfolio of projects are located in the eastern, western and northern perimeters of the Athabasca Basin including the 82.8% owned Christie Lake Project, its 49.1% owned Shea Creek Project (with Orano), its 100% owned Horseshoe-Raven Development Project, and the 100% owned West Bear Project. JCU's portfolio of projects includes interests in some of Canada's key future uranium development projects, notably a 30.1% interest in Cameco's Millennium Uranium Development Project, a 10% interest in Denison Mines Wheeler River Project, and a 33.8% interest in Orano Canada's Kiggavik Project, located in the Thelon Basin in Nunavut. The Company boasts 7 uranium deposit discoveries with reported resources amounting to over 275+ M lbs of  $U_3O_8$ . They certainly have their fingers in a lot

of pies.

Moving into the small cap space we have [Azincourt Energy Corp.](#) (TSXV: AAZ). It has two core projects, but only one is a pure uranium exploration project in the Athabasca Basin, the other project is a lithium/uranium project on the Picotani Plateau, Peru. Azincourt's Athabasca project is a 70% interest in the 25,000+ hectare [East Preston property](#) with joint venture partners Skyharbour Resources (TSXV: SYH) and Dixie Gold. The property is strategically located near NexGen's high-grade Arrow deposit, Fission Uranium's Triple R deposit, & Orano/Cameco/Purepoint's joint venture, Spitfire. Pretty good company if you are playing the closeology game. With a winter 2021-22 drilling program consisting of approximately 7,000 meters in 30-35 drill holes and only a \$30 M market cap, Azincourt has plenty of leverage to uranium.

Looking at what else Azincourt's JV partner [Skyharbour Resources Ltd.](#) (TSXV: SYH | OTCQB: SYHBF) has on the go, we find it holds an extensive portfolio of uranium exploration projects in the Athabasca Basin with six drill-ready projects covering over 250,000 hectares of land. Skyharbour acquired from Denison Mines, a large strategic shareholder of the Company, a 100% interest in the Moore Uranium Project which is located 15 kilometres east of Denison's Wheeler River project and 39 kilometres south of Cameco's McArthur River uranium mine. Moore is an advanced stage uranium exploration property with high grade uranium mineralization at the Maverick Zone that returned drill results of up to 6.0%  $U_3O_8$  over 5.9 metres including 20.8%  $U_3O_8$  over 1.5 metres at a vertical depth of 265 metres. Additionally, Skyharbour has a joint-venture with industry-leader Orano at the Preston Project whereby Orano has earned a 51% interest leaving Skyharbour with a 24.5% interest in the Project. Seems that Skyharbour is a pretty good prospect generator that is very efficient with its capital.

This is by no means a comprehensive list of Athabasca Basin explorers and producers. I'd have to do a 10 part series to get even close, although there does seem to be a few names, like Denison Mines, that keep showing up quite frequently. Maybe that's the best place to start, although if you are like me, and you like a little more leverage to your mining plays and the excitement of pending drill results. Nevertheless, if you are keen to participate in the current boom in uranium stocks then the Athabasca Basin is probably the best place to look first. You have a top tier mining jurisdiction, rule of law, best practices for environmental protection and most importantly (for capitalists) the richest uranium grades in the world.