

# New diamond play emerging in Saskatchewan

by Thomas Schuster

In May this year, the market's attention focused on the \$20 million staged option-participation deal made between **CanAlaska Uranium Ltd.** [CVV-TSX; CVVUF-OTCQB; DH7N-FSE] and **De Beers Canada**, a division of Anglo American Group. That agreement spawned a new round of speculation fever in the Saskatchewan diamond camp and helped triple CanAlaska's stock in just four months.

The claims staked by CanAlaska cover 75 kimberlite-style magnetic targets in northwestern Saskatchewan that were identified via a high-resolution, airborne geophysical survey performed on behalf of the Saskatchewan Geological Survey in 2011. A more recent detailed low-level airborne survey has identified 85 magnetic anomalies, enclosing 258 magnetic targets.

The geophysical surveys revealed a series of discrete magnetic anomalies with a shallow signature located northeast of the Carswell structure and close to a large crustal structure, known as the Grease River Shear Zone.

The Saskatchewan government Kimberlite Indicator Mineral sampling (KIM) programs did not cover the down-ice trend of these specific magnetic anomalies. However, KIM trends in the Fort McKay-Fort McMurray area in Alberta are down-ice from other kimberlite targets

CanAlaska identified in the northwestern Athabasca region. These indicator minerals contain some pyrope and eclogitic garnets which are a positive sign. In addition, the basement rocks beneath the Athabasca sandstone, in the target area, are the same rocks that host diamond-bearing kimberlites in Nunavut.

"These circular targets fit all the geophysical criteria of kimberlites," commented Peter Dasler, President of CanAlaska. "The clustering of the targets around major geological structural features within the Rae Province basement rocks is added impetus for immediate investigation."

All these geologic clues taken together prompted CanAlaska to stake the ground that DeBeers is now spending \$20.4 million on, over seven years to acquire a 90% interest.

With market speculation now well underway, the real work has commenced

in earnest. De Beers has already completed a very detailed low-level airborne survey over the Athabasca diamond project as well as a KIM sampling program. Most of the near surface magnetic anomalies coincide with lakes, or are in swamps.

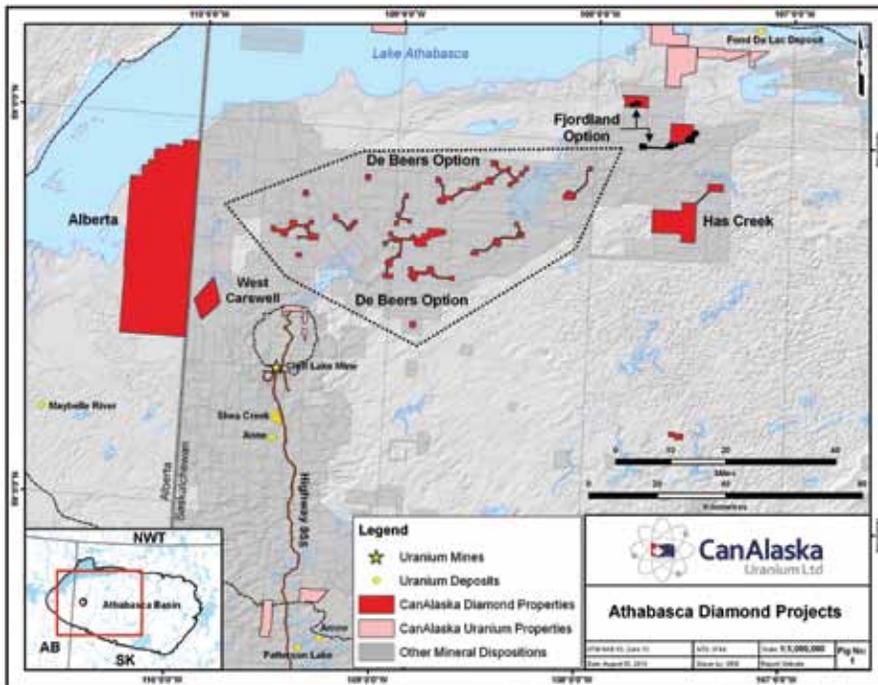
De Beers wasted no time and recently announced that it has begun a drill program that will test 11 kimberlite targets. The remaining targets, many of which are located under small lakes and swamps, will be drilled during the winter months.

The first few holes have already been drilled. They tested near surface targets, X0031 and X0017, located at the extreme west of the project. DeBeers reported that the overburden was 22-36 metres deep but neither target was a kimberlite. These two anomalies could be explained by a slight enrichment of magnetic materials near the base of the overburden.

"While finding economical diamond-

A geologist looks out over a promising kimberlite target in the CanAlaska/De Beers West Athabasca diamond project in the Athabasca Basin of northwest Saskatchewan. Eleven kimberlite targets with various features are scheduled to be drilled in the current program, with the balance to be tested this winter, depending on results. Photo courtesy CanAlaska Uranium Ltd.





bearing kimberlites is difficult – there are about 50 mines worldwide, compared to about 8,000 kimberlite discoveries – clusters like the one in northern Saskatchewan increase those odds,” stated Tom Ormsby, Head of External & Corporate Affairs for De Beers Canada.

“We have a very aggressive exploration program across Canada in 2016, which may actually be the largest exploration of any Canadian miner currently underway,” said Ormsby. “This project in the West Athabasca is a good fit with our other work taking place as we continue to build a strong portfolio of short-term, medium-term and long-term projects and targets. We look forward to the seeing the results of the drilling program once it is complete.”

In August, CanAlaska contracted Goldak Airborne Surveys to fly a low-level high definition airborne magnetics survey over the company’s wholly-owned Alberta diamond exploration property. The property lies on trend with the De Beers option just to the west across the provincial boundary. The surveys are expected to start immediately upon aircraft availability. Earlier Alberta and Saskatchewan surveys show kimberlite targets on these properties.

In addition to the properties optioned to De Beers and Fjordland Exploration Inc.

[FEX-TSXV], CanAlaska holds the West Carswell, Alberta, and Has Creek Diamond projects. These three large properties, collectively comprising over 290,000 acres, are immediately northeast of a group of kimberlite indicator minerals (KIM) discovered in the Fort McKay-Fort McMurray area in Alberta. The KIM’s are down-ice from CanAlaska’s properties; their source has yet to be discovered.

More recently, CanAlaska inked a deal with Randy Turner-Led **Canterra Minerals Corp.** [CTM-TSXV] to acquire up to a 70% interest in the West Carswell property. This 4,800-hectare property is located in the western Athabasca Basin, about 20 km southwest of the De Beers-CanAlaska Athabasca diamond project.

The West Carswell property lies within the west Athabasca Kimberlite trend and is located 10 km northwest of the Cluff Lake uranium mine. The property hosts six discrete magnetic anomalies derived from a survey flown in 2010 for the Saskatchewan Geological Survey. These six targets exhibit discrete magnetic lows and are characteristic of magnetic features, thought to be kimberlite pipes, intruding into the thick Athabasca sandstone sequence. A high-resolution airborne magnetics survey encompassing 1,770 line-km has been com-

missioned for the property by Canterra.

Randy Turner, President and CEO of Canterra, stated, “We are excited to be working with CanAlaska. CanAlaska has been innovative in their approach to diamond exploration and identified many new targets in northwestern Saskatchewan, a region we believe has the potential to host a new Canadian kimberlite field.”

Canterra can acquire a 50% interest in the property by making staged cash payments totaling \$100,000, issuing 2 million shares and spending \$1 million on exploration by the third anniversary of the deal. Canterra can earn another 20% for an additional cash payment of \$100,000, an additional issuance of 1 million shares and spending a further \$4 million on exploration within the third anniversary of completion of the initial 50% earn-in.

**Makena Resources** [MKN-TSXV] has also seized the opportunity to acquire ground in the Athabasca basin in the vicinity of the De Beers diamond option. The junior has entered into a share purchase agreement with DB Diamond Holdings to acquire 4,060 hectares of prospective exploration ground.

Negar Adam, president of Makena, stated, “We are very pleased to acquire this diamond prospect in Saskatchewan’s emerging diamond district.”

Meanwhile, about 250 km to the southeast, **North Arrow Minerals Inc.** [NAR-TSXV], and joint venture partner **Stornoway Diamond Corp.** [SWY-TSX] have been working to advance the diamond discovery on the Pikoo claims, 30 km west of Pelican Narrows.

The Pikoo claims (85% North Arrow and 15% Stornoway), were staked in 2011 based on results of a regional exploration program that was designed to test the diamond potential of the Sask craton. Initial till sampling identified two distinct KIM trains. The South and North Pikoo kimberlite fields were discovered in July of 2013.

The most significant kimberlite is dubbed PK 150 and is located in the South Pikoo area. Delineation drilling continued on the body in 2015 and 2016 and PK150 is now thought to be measure about 10-15

metres wide, approximately 150 metres in strike length and still remains open for along strike for at least 200 metres.

The 2016 spring drilling program discovered several new kimberlites, the most significant in size being PK 346 located in North Pikoo. PK346 is interpreted as a near vertical NE trending body with a true width of approximately 16 metres.

To date, North Arrow reports that it has discovered 9 to 11 discreet kimberlites and five of them have proven to be diamondiferous so far. A till sampling program is on-going in an effort to guide target selection for a possible winter 2017 drill campaign.

By far, the most advanced diamond project in the Province is the Fort à la Corne Joint Venture (FALC-JV) and Star Diamond project, in the Fort à la Corne forest in central Saskatchewan. **Shore Gold Inc.** [SGF-TSX] discovered the Star kimberlite in 1996 under 100 metres of overburden. In 2005, Shore merged with Kensington Resources to gain its interest in the FALC-JV.

Currently Shore Gold holds a 100% interest in the Star Diamond project and a 69% interest in the Star West and Orion South kimberlites which fall within the adjacent FALC-JV. The remaining 31% interest is held by Newmont Canada FN Holdings.

This year drilling programs were required to further expand the internal stratigraphy of the Orion South and Star Kimberlites extending and in-filling geological continuity from the successful programs of 2015.

The partners are in the process of updating the previous Feasibility Study with a revised mine plan, revised resource estimate and an improved processing technology with the goal of improving the economics of the project.

The recently revised resource estimate hosts an indicated resource containing 55.4 million carats and an inferred resource containing 11.6 million carats. The weighted average rough diamond price: US \$210/carat. The company reports a “significant proportion high value Type IIa diamonds,” stating a valuation of one particular 11.96-carat stone at US \$12,500/carat. Shore expects the updated Feasibility Study will be completed later this year. ■