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Pamela Strand's Shear Minerals Ltd. and its partners on the Churchill play in Nunavut continue to come up with kimberlite pipes, seemingly with ease. The latest finds bring the kimberlite count to nine, over a fairly wide area, adding to the expectations that there are a number of kimberlite clusters, or one mammoth one, in the area just north of Rankin Inlet. The key to the current program will be finding a significant quantity of diamonds in a few of the pipes, but the best of the kimberlites on the large Churchill property may well lie undiscovered at this stage. As a result, the area is expected to be a busy spot in the coming years, regardless of the diamond counts from the initial finds.

Shear set out to drill 15 targets this year, and the company has put at least one hole into 11 magnetic anomalies that it had initially ranked as priority targets earlier this year. Only one of them was a clearly a dud. Ms. Strand described that target as an odd looking thing that ended up being an iron formation, not a kimberlite. Drilling on another target failed to produce a kimberlite hit, but that was due to difficult drilling conditions in the overburden, which caused the hole to be abandoned. The target may well be a kimberlite, as the hole was lost at a depth of less than 14 metres, but Shear decided to move on rather than waste time on another attempt, which may well have produced a similar result due to the limitations of the light drill rig.

That has left Shear and its partners with nine kimberlites in 11 tries, which is an unusual success rate for what was a beginning grassroots play just a few months ago. The first six finds were in what is now referred to as the Kalluk area, a region that is about 10 kilometres square. The three latest discoveries were made further afield, but there is no reason to suspect that the nine finds are not scattered across what is a single, larger cluster of pipes, raising the possibility that many more could ultimately be found.

The drill success will likely be one of the topics for the next meeting of the joint venture partners, which will likely reassess their plans for the immediate future. Ms. Strand said the partners would likely be meeting in the next couple of weeks for a few days, and they would hopefully develop some new strategies. Although Shear's current strategy appears to be working very well for the joint venture partners, Ms. Strand said, "It is always good to have a new set of eyes."

That new set of eyes will be provided by BHP Billiton, which recently joined the Churchill hunt after paying \$3-million in cash for a 14-per-cent piece of the play. As well, BHP agreed to pay for the costs of a 200-tonne mini-bulk test of a pipe, should it be warranted, and to buy \$1-million of Shear's shares. The arrival of BHP gave the play added credibility, but Shear's quick discovery of the kimberlite pipes has provided a much bigger boost in recent weeks. Despite the new set of eyes, Shear is the operator of the project and in the driver's seat, with a majority interest in the project.

The Churchill play is now Shear's top play, but the company and Ms. Strand have been hunting diamonds for years across the North. All of that earlier work was conducted much farther to the west, around and just northeast of the Lac de Gras area, but the new play is not Ms. Strand's first contact with the Churchill craton and the Rankin Inlet region. She grew up in Toronto and obtained her geology degree from the University of Toronto and a master's in economic geology from the University of Western Ontario, but she began making trips to the North in 1987, in her third year of university. That summer project was centred in an area just west of Rankin Inlet, but in a search for gold, not diamonds.

Ms. Strand continued to work for exploration companies through her university years, but she took a job with the federal government as a district geologist based in Yellowknife in the early 1990s. She moved on a few years later, but the mid-1990s were a busy and exciting time for diamond exploration in the region, and that whetted Ms. Strand's appetite for gems. Her husband was transferred to Edmonton in 1997, but interesting rocks seemed few and far between in Alberta at the time, and Ms. Strand kept her focus on northern diamonds. She struck out on her own with Pinnacle Resources (1996) Ltd., a mineral property broker, which subsequently sold some diamond prospects as a major transaction for a Don Planche cash shell, which subsequently became Shear, with Ms. Strand running things. The company had found a new kimberlite and came up with a collection of microdiamonds from rock samples, but nothing much became of its early plays.

The Churchill partners are still waiting for their first diamond, but things are off to an encouraging start, as Shear seems to have interpreted its geophysics just right. The company discovered the first Churchill pipe about a month ago, testing a magnetic low anomaly that was subsequently named Qaumallak, or Lightning. The next four finds followed in quick succession, in the same general area. Kalluk-1 is about six kilometres north of Qaumallak, and Kalluk-2 is about four kilometres to the east of the original find. Both were magnetic low anomalies as well, but the next two discoveries came from magnetic high targets. In mid-June, Shear produced Kalluk-3 and Kalluk-4, both in the general vicinity of the earlier finds, and at the end of the month, drilling of another magnetic high revealed Kalluk-5.

Since then, Shear's drill has strayed a bit further afield. The Tuvaq-1, or Hunter kimberlite resulted from drilling another magnetic high, about 10 kilometres to the northeast of the Kalluk area, and another magnetic high target in the immediate vicinity is now known as the Tuvaq-2 pipe. After those quick finds, Shear moved its rig another 20 kilometres to the northeast to test a magnetic low, which produced what is now called the Tuktu-1 kimberlite pipe.

All of that gives Shear and its partners a cluster of pipes scattered across an area measuring about 30 kilometres by 15 kilometres. That is an area of about 45,000 hectares, although the finds to date appear to be confined to an area roughly half that size. The Churchill project now comprises a total of about 600,000 hectares, which suggests that the current effort has been limited to less than 5 per cent of the property, which is roughly the size of the Diavik and Ekati properties combined.

That is just one reason for optimism in the longer term. Shear has come up with some impressive geochemical results, with G-10 garnet proportions that far exceed those obtained in

most other areas. The mineral chemistry hopes appear scattered across much of the property, but less than 200 samples have been collected in what amounts to a reconnaissance program, and the sampling is too coarse to reveal any real trains of indicator minerals.

The sampling was conducted along fences about five kilometres apart, and the sample sites along the fences were separated by a few kilometres. The presence of indicator minerals suggesting a diamondiferous source spread across wide areas of the property is a promising sign, but the sampling has been far too coarse to tie any of the existing targets to the indicator minerals that were found.

That could theoretically mean that at least some of the current crop of kimberlites did not produce the exceptional indicator minerals. Ms. Strand said that Shear's drilling program was designed primarily on geophysics, and geochemistry was not used to select the targets. That might increase the uncertainty about the diamond content of the kimberlites found so far, but the diamond content of individual kimberlites is a complete unknown in any case, until the samples are actually processed. Furthermore, if none of the current finds were responsible for the G-10 garnets, there would be a number of others, still undiscovered, that are. That seems a reasonable assumption in any case, which adds to the long-term optimism for the project, as a detailed delineation of the mineral trains would add to the chances of success.

Patience is clearly a virtue in the diamond hunt, and it can produce a big payoff. The rich Diavik property produced an abundance of mineral hope and kimberlite finds through the early years. Seven were found in 1992 and another 18 in 1993, but only six of those original finds were just marginally diamondiferous. It was not until 1994 that Aber Resources zeroed in on the area containing the four rich pipes that are now part of the Diavik mine plan. Long term potential aside, notoriously impatient investors undoubtedly hope that Shear has already keyed on the best area.

That could be. The indicator mineral sampling was a bit denser in the Kalluk area, and prospecting in that region had produced some kimberlite float. That provided a higher probability of success, and was likely a reason that Shear began its drill program nearby. Still, there were G-10 garnets and other minerals found close to all of the drill targets, and although Ms. Shear said that none of them could be directly linked to the drill targets with any certainty, they are a hopeful sign.

Shear's exploration crews have also been busy during drilling. The company has come up with another 11 drill targets, and at least one seems especially promising, as kimberlite float was discovered at one of the anomalies. Ms. Strand said that although the initial program had called for drilling just 15 holes, several more would likely be tested this summer, if all goes smoothly.

If Shear's drill can match its initial success rate, the partners could be sitting on as many as 20 kimberlites by later this year. Shear had initially said that it would be releasing its diamond counts in one batch, but that was in the initial stages of its drill success, and it seems likely that the partners will now rethink that strategy. A more reasonable approach, from a speculator's point of view, would be to reveal the counts in batches, a few at a time, or as they came available. That matter will likely be discussed by the partners at their next meeting.

STREET WIRE: Shear adds to its Churchill pipe tally

Written by Will Purcell

Shear plans to send its kimberlite to the Saskatchewan Research Council lab in Saskatoon, with check samples sent to at least one other lab. How the partners release the diamond counts could well depend on just how and when the results are received from the lab. Another influencing factor is that a rival play in the area has come up with several kimberlite pipes to the south of Shear's ground, and those results would likely be out long before Shear's, if the partners do wait until all of the numbers are in.

The diamond counts will be the big news from this year's program, but Shear will likely provide more details about its targets and the drill results. Although the company has been generally testing the targets with a single short hole, rather than attempting a crude delineation of the bodies, there is a reasonable chance that it has several fairly large kimberlites.

The Kalluk-3 anomaly measured 250 metres by 200 metres, and Kalluk-2 was even larger at 300 metres by 225 metres. As well, several of the other targets had diameters of 150 metres, including Kalluk-1, Kalluk-4, Kalluk-5 and Tuvaq-2. The Tuvaq-1 anomaly was 125 metres in diameter, and Tuktu-1 measured 200 metres by 150 metres. The dimensions of the original find, Qaumallak, are not known, but it was likely comparable.

There have been much larger kimberlites discovered throughout the world, but if the dimensions of the Churchill pipes correspond closely with their magnetic anomalies, size would not be a big concern. A steep-walled pipe 150 metres in diameter could contain at least 10 million tonnes of kimberlite, and would be roughly comparable with the size of the Diavik and Ekati pipes. It will take a detailed delineation program to determine the actual geometry of the finds, but that detailed drill work would logically be limited to the kimberlite bodies that produce encouraging diamond counts.

Speculators now await the detailed diamond counts from the existing finds and the prospect of several more discoveries this year, along with more hope from additional till sampling that will help define the source of the geochemical promise.

The wait seems an impatient one. Shear dropped on the news of its two latest finds, to an intraday low of \$1.10, before closing down two cents at \$1.15.