

Mike Burke: Be Patient; More Yukon Gold Will Be Found

Source: Brian Sylvester of The Gold Report (1/19/11)

Few, if any, know the Yukon better than Mike Burke, head of mineral services with the Yukon Geological Survey. Mike steadfastly believes in the mineral potential of the Yukon, and credits much of the gold-play excitement to prospector Sean Ryan, who diligently collected soil samples all over the Yukon for years before letting the mining industry in on his secrets. In this exclusive interview with The Gold Report, Mike provides an update on some of the most promising projects in the Yukon's White Gold Camp.

The Gold Report: It's a treat to interview someone with such extensive knowledge of the Yukon, probably the hottest gold area play anywhere. Mike, you have been working with the Yukon government since 1990. These days, one company will spend more exploring for gold in one season in the Yukon than did all the juniors combined just a few years ago. Did you think you'd ever see such a remarkable gold rush?

Mike Burke: Yes, I did, actually. I think I've proven over the years that I'm a great believer in the mineral potential of the Yukon. In 1983, as a student, I worked for Canamax Resources, which was looking for gold and tungsten in the Yukon. When I graduated in 1987, Canamax opened up the Ketz River mine. I worked there as a mine geologist through development, production and closure. We mined out the oxide portion of the Ketz River deposits, but there are substantial sulfide reserves there, as well as a ton of exploration potential. Yukon-Nevada Gold Corp. (TSX:YNG) has been working there in the last few years, but Ketz River is far from reaching its full potential. We're now seeing exploration success there.

A number of placer gold districts in the Yukon have produced a substantial amount of gold from creeks. I'm pretty sure it didn't fall from the sky. There hasn't been a discovery of a substantial gold deposit in those areas except for Victoria Gold Corp.'s (TSX.V:VIT) Dublin Gulch, in the Mayo Mining District. Dublin Gulch is a 2.5 million-ounce (Moz.) gold deposit, but in the Klondike or Livingston Creek or other placer mining areas there's no substantial multi-million ounce gold deposit. That's always been a mystery. There hasn't been much modern exploration in these areas, but we're seeing it now. Companies are using new technology to augment old techniques like soil geochemistry. When I worked as a student, we'd go out and get our 50 soil samples a day and come back and plot by hand where they were on a field map. In the fall, we would take that information to draftsmen in the Vancouver office who would draft a master set of maps with the locations and assay data. Now GPS is used to collect that data in the field so locations with assay data can be plotted instantly when the assay data is received, sometimes while still in the field. I knew that once we started seeing money spent in the right areas, hidden gold deposits would be discovered. And we've definitely seen a couple in the last few years.

TGR: Would this rush be taking place without a \$1,300 or \$1,400 gold price?

MB: It certainly helps. But it just might be taking place anyway, because of people like Sean Ryan. He was working when the gold price was a lot less than \$1,400. He was using the techniques we just talked about to develop some impressive soil anomalies on some of these properties, especially in the White Gold area.

TGR: He used a hand auger to go deeper into the soil than just the surface. Is that a more effective method of soil sampling?

MB: People used that method years ago, but Sean was just a little more scientific about it. With a hand auger, it's possible to get a much better response from the soil, and when the samples are collected from deeper soil, it reduces the likelihood that gold will come from somewhere else. Sean really emphasized that you have to take quality samples. In some cases, you might only get one chance to take a sample over a mineral deposit, and if you do a cruddy job, you might just miss a deposit. When he discovered GIS and MapInfo and the ability to integrate and process large amounts of data, a "monster" was born. He had an integrated geological database at his fingertips. Sean used old tools and modern tools and used them as a prospector would, which is rare.

TGR: Sean Ryan was recently named the Prospectors and Developers Association of Canada's (PDAC) Prospector of the Year after he took the information he learned from those soil samples and physically staked a number of properties. One of those properties was the White Gold Property, where Underworld Resources had discovered a mineralized gold system before being bought by Kinross Gold Corp. (TSX:K; NYSE:KGC) last winter. What do you know about those soil anomalies?

MB: Sean had been slowly building up his database of soil sample results for a number of years. In 2006, Underworld looked at the soil data and was overwhelmed at the size and the quality of the soil anomaly. Underworld did some trenching and got some good results. It didn't take them long to hit the anomaly in drilling.

TGR: How much do you estimate was spent in exploration in the Yukon in 2010?

MB: It's over \$150 million. We don't have an exact number yet, but it's definitely a record-setting year for exploration up here.

TGR: What was that number in 2009?

MB: Ninety million, but what's important is that we're seeing \$150 million in mine development. That's a point that I've tried to make in the talks to investment guys and analysts. You can spend \$150 million on exploration, but if you're not in the right jurisdiction to turn those exploration dollars into development dollars and a producing mine, then you're throwing your money out the window. This year, we're going to have three operating mines. That's a critical part of the equation.

TGR: Does the Yukon offer advantages over other jurisdictions?

MB: I think the key advantage is the Yukon's mineral potential. We're part of the Northern Canadian Cordillera. We all know the great mineral potential of British Columbia, and the number of mines there. We all know the great mineral potential of Alaska, and the number of mines there. Yukon is part of that same tract of rocks. The Yukon has a great mining history, but in the last 10 years we haven't had a lot of mines. With the opening of three mines in the last few years, though, mining is retaking its former role in the Yukon.

TGR: Why is that only happening now?

MB: Historically, exploration has occurred only three or four months out of the year. Modern exploration, if you will, really started in the mid-1960s with the use of the helicopter (because the Yukon is a Northern Territory with imperfect infrastructure.) If you take the 45 years since the mid-1960s and divide it by three, because people typically have explored the Yukon for only one-third of the year, that's 15 years of modern exploration. When you look at the amount of time that's been spent here looking for economic deposits, compared to Ontario or southern British Columbia, there's a lot of work to be done. Now, with better infrastructure, better communications and better camps, the field season is year-round. Winter exploration programs are going on up here. There's a lot of untouched ground in the Yukon. The proof of that is in discoveries like White Gold.

TGR: You talked about areas that have not been touched—but tell us briefly about those three main areas where gold discoveries have been made.

MB: Let's start with White Gold because it's definitely in the forefront of everybody's mind. It's 90 km south of Dawson City where the famous Klondike Gold Rush happened more than 100 years ago. The White Gold district is a smaller part of what we call the Dawson Range, a belt of Cretaceous intrusive rocks that span from 110 million years to 70 million years in age and that stretch in a northwesterly southeasterly line through the Yukon. When the White Gold or the Golden Saddle deposit was found, it brought people's attention back to the region's gold potential. It also gave them a much better idea of what to look for in that belt of rocks.

Then, look at the other big discovery, ATAC Resources Ltd.'s (TSX.V:ATC) Rau Gold Project, just above the classic Tombstone Gold Belt. That's the stretch of 93-million-year-old Cretaceous intrusions that goes across the Yukon and has been looked at for gold deposits. Dublin Gulch is in that belt and it's a 93-million-year-old Cretaceous intrusion-related gold deposit.

TGR: Victoria Gold has done a prefeasibility study on Dublin Gulch. What's happening with that project now?

MB: Around Christmas, Victoria Gold submitted its project proposal to the environmental review agency in the Yukon. Victoria Gold is just moving into the feasibility study on Dublin Gulch, but they're obviously far enough along that they could start the environmental review of that project.

TGR: Please continue with your overview of the three main gold discovery areas.

MB: Yes, that Tombstone belt of rock stretches across the Yukon. ATAC's Tiger and Osiris discoveries are in that belt of rocks, but not directly associated with any intrusive rocks. That's where a lot of the excitement comes from. There's a gold discovery in Selwyn Basin rocks that is not directly associated with an intrusive source, so the comparison to Nevada-style deposits is being made.

The Selwyn Basin has the same geological history as the Great Basin in Nevada. On some of the field trips that I've taken to Nevada, I could have taken rocks from the Selwyn Basin and dropped them on the ground in Nevada and nobody would have known the difference. The geological histories of the Selwyn Basin and the Great Basin are extremely similar. People have always thought there's good potential for Carlin-style deposits in the Yukon, and have sniffed around since the 1970s without much success. But with ATAC Resources discovering the Tiger zone, which had similarities to some deposits in Nevada, and then the discovery of Osiris, which shows a dramatic resemblance to some

deposits in Nevada's Carlin Trend, it has opened people's eyes to the potential of the Selwyn Basin for Carlin- or Nevada-style gold deposits.

TGR: So, we should believe the hype?

MB: Yes, you should. I had a physical reaction looking at ATAC's core. Seriously. In the spring, I went down to the GSN Conference, and we did a field trip to some deposits similar to Nevada's Carlin Trend. When I looked at that drill core from Osiris, the similarity was astounding. It was a breathtaking moment. It's kind of the Holy Grail of gold deposits.

TGR: What has ATAC managed to accomplish so far, and what is the next step?

MB: So far, they have drilled off the Tiger occurrence, ATAC's first discovery. They'll be working on a resource for that. There are other similar occurrences within 15 or 20 km of Tiger. They drilled a few holes into one of them called the Cheetah and hit 1.29 g/t gold over 16.9 meters proving there is more potential in the neighborhood.

TGR: But ATAC has staked the whole trend, the Rackla Gold Belt.

MB: Yes, their ground position is bigger than Hong Kong. Osiris is 100 km east of Tiger. That's the new discovery that really bears striking similarities to Carlin-style deposits. ATAC only discovered Osiris in late July, and put their first drill holes into it in the end of August and early September. ATAC got some really interesting numbers out of some holes and that's caught the market's attention.

TGR: What sort of grams per ton are we looking at?

MB: The discovery hole was 9.26 grams over 31.1 meters within a much larger intersection. It was a very impressive drill hole. They have a number of drill holes over a fair distance; they have four discovery areas in drilling and they are a couple of kilometers apart. Being a late-season drill program, they basically drilled along the ridge tops where they could. ATAC's plans for next year are rather ambitious. I think it's a 45,000-meter drill program. It's a \$20 million exploration program. What they're planning is huge.

TGR: The other big player in the play, at least in terms of market cap, is Kaminak Gold Corporation (TSX.V:KAM) with its Coffee Project. You visited that one. Tell us what's going on there.

MB: The Coffee discovery is only about 30 km south of the White Gold or Golden Saddle deposit. It's a big soil geochem anomaly that Sean Ryan discovered. Kaminak optioned it from him, carried on with the soil sampling and started doing some trenching, which came up with some nice gold results. The rocks are very similar to the ones on Kinross' property.

Kaminak started drilling a number of these targets and they had very good intersections on eight or nine different zones. Kaminak's exploration strategy this year was not to go into a zone, drill it off and determine a resource. It was to drill test as many of these geochemical anomalies as they could to get an idea of the size and tenure of the Coffee property. They had gold intersections on almost every geochem anomaly that they drilled. Their success ratio was quite astounding. I think virtually every drill hole hit an intersection that was over a gram per ton. The similarities between the style of

mineralization in the Golden Saddle deposit and Kaminak's Supremo Zone are quite striking. What Kaminak's discovery has shown is that this is a gold camp in the making. The Golden Saddle deposit isn't just some one-off deal; this is an area that has the potential to host multiple gold deposits. Kaminak just announced a \$15 million, 40,000-meter drill program this morning. Kaminak is going to start defining a resource on some of these zones, as well as testing a whole bunch of others that haven't seen any drilling.

TGR: What are some smaller players in that camp with some large claim blocks?

MB: There are a lot of companies in there now. Taku Gold Corp. (TSX.V:TAK; OTCBB:TAKUF) has a large land position. Ryan Gold Corp. (TSX.V:RYG) is a new company; Sean Ryan is involved with it. It was formed through a reverse takeover of Valdez Gold and that junior has a large land position there. Silver Quest Resources Ltd. (TSX.V:SQI) has a large land position, and Pacific Ridge Exploration Ltd. (TSX.V:PEX) too. There are a number of companies in the White Gold camp and a lot more we probably don't know about. This is a very early stage district—most of these companies have only started doing preliminary work like soil sampling, trenching and the odd drill program. In the next couple of years, we expect to see a lot more drilling in this area.

TGR: Has Taku outlined any plans to begin a drill program?

MB: They did big geochemical programs on a number of their properties, followed by some trenching. They have a couple of properties with drill targets that they'll work on early in the season. Taku's Rosebute property is not far from Kinross' JP Ross property. Rosebute Creek is a well-known Placer-producing creek. Taku found a pretty impressive soil geochemical anomaly there. They'll do some trenching early in the season and they should be able to refine some drill targets very quickly.

Another of their properties, more in the core of the Klondike gold region, is the Portland property. Portland has had some gold showings over the years. Taku did some trenching there and got some spectacular gold results in a vein-type system. One result was 450 grams per ton gold over a couple of meters. That's pretty nice stuff. That's a drill target that they'll work on.

TGR: And Ryan Gold is taking similar steps?

MB: Yes, Ryan Gold has done big soil-sampling programs. In 2010, Ryan Gold was acquiring ground and doing some early-stage work. These properties are so big it's going to take a year or two just to do a proper soil-sampling job on them.

During the last few years the approach has been to develop a drill target as fast as possible, but that doesn't mean you're going to drill your best target first. It means you're going to drill whatever you find as quickly as you can. I think companies have been forced to drill projects too early because they have to satisfy the stock markets by producing drill results.

TGR: How long before we start to see some consolidation in the camp?

MB: That's a good question. We're wondering about Kinross, actually. It has the original White Gold property and it could be interested in Kaminak, but it's going to take a couple of years for some of these other projects getting to the drilling stage. Those have to prove to Kinross and the other majors

that they have something substantial before we're going to see consolidation.

As far as some of these smaller companies consolidating, I think they've got their hands full with the size of their land packages. Many of them have large, promising land packages. They need to test those and make discoveries, and then we will see what happens after that. It's going to be really interesting to see what happens with the Kaminak story.

TGR: You discussed the first two areas, but the third area where gold has been discovered is the eastern area of the Yukon where Northern Tiger Resources Inc. (TSX.V:NTR) has found some grab samples that returned 80 grams of gold per ton.

MB: Oh, yes, it's a spectacular showing down there. Northern Tiger's sample was found in Selwyn Basin rocks along its eastern margin. We can draw some geological similarities between where the 3Ace Property of Northern Tiger and the location of ATAC Resources' Rau Property. Some of the host rocks are different but they're in the margin of the Selwyn Basin.

Again, we're talking about a new district that's being developed. Northern Tiger's high-grade vein was found by prospector Alex MacMillan a few years ago and has some beautiful gold in it. It's spectacular. Northern Tiger was not planning on drilling this year, but they did a lot of geochem on the property, and some detailed structural mapping. At the end of the year they were confident enough to pop a few drill holes into that project. On the main showing they found the vein with the very spectacular gold in it. We're pleased that the results they got back weren't confined to very high-grade assays on a discrete vein. They got some pretty good results over a much bigger width. The wall rock to the vein was mineralized as well. They're pretty excited about the size potential of that main showing area.

Northern Tiger also made a new discovery of the Sleeping Giant Zone. Again, that's a high-grade vein with visible gold, but it's not as spectacular as the main showing. Northern Tiger has some great targets to follow up on, and its discovery really opens up that southeastern part of the Yukon to a new interpretation as we start learning more about its geology. We mentioned ATAC Resources has a land position the size of Hong Kong; well, there are a lot of other companies staking in the area around ATAC Resources and Northern Tiger.

TGR: In terms of full disclosure, you recently accepted a job as chief geologist with Golden Predator Corp. (TSX:GPD), another junior operating in the Yukon. Do you want to tell us about what they're doing?

MB: Golden Predator is quite involved in the classic Tintina Gold Belt, or the Tombstone Gold Belt including the former producing Brewery Creek mine. They have Grew Creek Project, which is a small historical gold deposit. They are going to start drilling those projects a month from now.

Golden Predator is one of the players that is acquiring a large amount of ground in the Selwyn Basin around ATAC Resources' discoveries. Golden Predator is probably the largest landholder in that district after ATAC. Strategic Metals, Ltd. (TSX.V:SMD) has picked up a fair amount of ground, as has Constantine Metal Resources Ltd. (TSX.V:CEM).

Another company that has an interesting property is Colorado Resources Ltd. (TSX.V:CXO). It picked up the old Brick-Neve property through staking in the summer. I was astounded that that property

was open. Brick-Neve has been around since the 1970s. If you're looking for a Nevada- or Carlin-style occurrence in the Yukon, it's Brick-Neve.

TGR: Please tell us what needs to happen to keep the momentum of the current rush alive.

MB: We are going to have to see a stream of new discoveries or good results coming out to keep the market's attention. But we're talking properties that are the size of mineral districts in other parts of the world. Patience is the key. Give these guys time. I think the payoffs are going to be pretty big.

TGR: Thank you for talking with The Gold Report, Mike.

MB: You're very welcome.

Mike Burke has been employed by the Yukon Geological Survey since 1990, most recently as the head of mineral services, which includes the Yukon Minfile database, placer geology, Yukon Mining Incentive Program and the H.S. Bostock Core Library. Mr. Burke has been responsible for liaising with mining and exploration companies, visiting active exploration sites, authoring the annual Yukon Mining, Development and Exploration Overview, and presenting information on Yukon to investment bankers, financial institutions and mining analysts in meetings and conferences around the world.

Burke has worked since 1983 in the mineral exploration and mining industry in British Columbia and Yukon. He was fortunate to be part of the exploration team which discovered the Sa Dena Hes lead-zinc mine and the Ketz River gold mine in Yukon. Mr. Burke worked at the Ketz River gold mine from exploration through mine development, production and closure as the mine geologist, before joining the Yukon Geological Survey in 1990. Mr. Burke holds a BSc in geology from the University of British Columbia, and is a member of the Society of Economic Geologists.

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