

WGM: Around the world in 50 years



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BY VIRGINIA

To survive half a century as an independent firm, Watts, Griffis and McOuat (WGM) has had to be the James Bond of the consulting world, willing to embrace extremes and extricate itself from some dicey situations: bush planes sinking under the ice, locals wielding AK-47s, and revolutions, to name just a few.

"We all had a sense of adventure, so we didn't mind doing the foreign work," says Jack McOuat, the only surviving member of the original trio.

McOuat reckons the firm has made its mark in at least 130 countries since its inception in 1962. That wealth of international experience should serve Toronto-headquartered WGM well as it struggles to break into the geological-consulting market in China, a country with the potential to develop a thriving junior mining sector, but a means of financing exploration that runs counter to the Canadian system.

"The regulations and guidelines governing mining and exploration in China are completely different from the ones in North America," says Joe Hinzer, WGM's president. "In China, there is no value to mineral resources, so you can't raise money on resources alone. The money has to come out of your pocket."

Even in Canada, the exploration game

has changed compared to the swashbuckling post-Second World War era, when the seeds of WGM's international success were being sown in the Arctic.

The story began in the late 1950s when Oceanic Iron Ore hired McOuat, a recent geological engineering graduate from the University of Toronto, to work on a project on Ungava Bay in northernmost Quebec. His boss happened to be Tom Griffis, who had already made his name by playing a key role in discovering five iron ore deposits in Quebec and Labrador.

Soon after the two started working together, Rio Tinto acquired Oceanic and sent McOuat to conduct due diligence on the nearby Raglan nickel property the company had optioned from Murray Watts.

But try as he might, McOuat could not

reconcile the results from his drill holes with the geology and mineralization Watts had recorded. Rio demanded its money back, washed its hands of the project and prepared to deploy McOuat to another location.

But recognizing a bright geological mind, Watts — a born entrepreneur with a hunger and aptitude for discovery — convinced McOuat to continue helping him explore Raglan and a nearby project called Asbestos Hill. Probably much to Rio Tinto's surprise, both projects eventually became mines and Raglan is still operating under the ownership of Xstrata. It was a risky but ultimately rewarding career move for McOuat.

"I remember my boss at Rio saying 'Jack, you'll make a fool of yourself if you [work for Watts], because you'll lose



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Senior geologist Al Workman and trainee geologist Waluyo Hadi on an epithermal gold project in Central Java, Indonesia in 1997.

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Senior Geologist John Sullivan in Northern Quebec in 1999.

your pension," he says. "And I thought, 'Pension — what's a pension?"

NEWSPAPER

When both Raglan and Asbestos Hill were acquired by major mining companies, McOuat approached Watts with the idea of starting a consulting company based on their expertise in northern exploration, including a trained arctic crew, experience bulk sampling with a dog team — McOuat once had 400 dogs pulling samples to the coast for him — and the pioneering use of 12-inch diameter drill rods in permafrost.

He suggested that Griffis — a superb geologist who had just discovered a new

copper orebody at the McIntyre Porcupine mine in Ontario as a result of detailed re-mapping of the mine's underground workings — should join them.

"Watts and Griffis didn't know each other from Adam. But I was young enough and presumptuous enough to bring them together," McOuat recalls. "When I introduced them they got along pretty well for two guys who were so diametrically different."

Watts was the mining engineer, entrepreneur and prospector who often sported different coloured socks and once paddled 1,200 miles by canoe to the Ungava region from the southern end of James Bay.

Griffis was the meticulously groomed "renaissance man" with a PhD in geology from Cornell University, several discoveries to his credit and an aptitude for contract bridge and target shooting.

And McOuat was the city boy, born, raised and educated in Toronto, who had never set foot anywhere more remote than Brockville, but nevertheless became the unlikely catalyst for the partnership.

"I had to learn to cut with an axe and paddle a canoe because at first I would just go around in circles," McOuat says of his early days in the bush.

Ross Lawrence, who had also worked at Asbestos Hill, joined the trio and added his skills in mineral valuation and project management. The four founders started out by marketing their expertise as northern explorers, but soon realized that they would have to expand beyond the Canadian north if they were to keep their geologists occupied year round.

Over there

"We decided to go offshore and I started making the rounds and getting to know the people in the trade department and in key embassies around the world, where we thought there might be work," Lawrence says.

That initial networking led to contracts in Morocco and Libya, where WGM encountered its first major foreign challenge. "We were owed a slug of money when Libya decided to place a ban on the export of Libyan pounds," McQuat remembers. "I said to Ross, 'Why don't you just take the cash out of the bank, put it in your suitcase and come home?' He wasn't very enthusiastic about that idea."

At about the same time Watts, who never felt satisfied in his role as a consultant, left the firm to pursue his own interests in

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prospecting and promotion. He was later awarded the Order of Canada and the Massey Medal of the Canadian Geographical Society and inducted into the Canadian Mining Hall of Fame for his discoveries and logistical innovations in the Arctic.

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Griffis became WGM's president in 1965 and stayed on until 1980, when he retired as chairman. Under his leadership, WGM opened an office in Australia where the firm participated in that country's nickel boom, provided the feasibility study for the Nanisivik deposit on Baffin Island, which went on to become one of Canada's greatest lead-zinc mines, and identified a significant copper-zinc orebody at the Jamieson project in northern Ontario.

Both men died in 1982. In 1999, Griffis joined Watts in the Canadian Mining Hall of Fame.

Lawrence points to 1972 as his most memorable year, when WGM was invited by the Saudi Arabian government to run the country's mines ministry and train Saudi geologists to eventually take over the responsibility. Saudi Arabia has the same kind of Precambrian rocks that are such a prolific source of minerals in Canada, and the government was eager to tap Canadian expertise as it built its mineral exploration sector from scratch.

The contract was initially supposed to last four years, but after a couple of oil shocks sent the price of oil soaring, the kingdom was swimming in cash and looking to expand its ministries. "When the second old shock hit, the mines ministry couldn't spend the money fast enough. I think in the end we had 32 specialists in the group along with several service and support people," Lawrence says.

But commodity prices are nothing if not cyclical, and when the oil shock turned into an oil glut in the 1980s, the



WATTS, GRIFFIS AND MCOUAT

Senior geologist Valasques Spring (right) and his assistant on a gold project in Brazil.

Saudi government stopped paying its fees. Lawrence and McOuat were forced to mortgage their homes to meet their significant payroll obligations. With the partners in danger of losing everything they had built, McOuat called on some influential contacts.

"Joe Clark was (the Canadian) Prime Minister then, so I met with him and cried all over his shoulder," McOuat recalls. "He raised the issue with the King of Saudi Arabia and the next morning, the money showed up in the bank."

After 14 years under WGM's guidance, the Saudi geoscientists in Jeddah were ready take over the reins and WGM closed its office, eventually moving most of its team to Yemen, where it provided services for the country's geological survey.

WGM's work in Yemen resulted in several new exploration licences that were later acquired by local and foreign companies, including Chuck Fipke's **Cantex Mine Development** (CD-V), which owns licences over more than 1,500 sq. km with nickel, copper, cobalt, platinum and gold occurrences.

The Yemeni contract led to spinoff projects and satellite offices in Ghana, Argentina and Ecuador. In 1996 WGM opened an office in Indonesia and discovered several new gold prospects in central Java.

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Senior geologist Al Workman (left) and Greg Fernette on an exploration training project in Yemen in 1994.

"That's what set us apart," McOuat says. "The international projects, the eclectic mix of clients, but also the ability to go out and find mines — most consultants don't do that. They're there for the advising, not the doing."

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Other discoveries in which WGM played a key role included the Red Dog zinc mine, the Greens Creek silvergold-zinc mine and the Pogo gold mines — all three still in production today in Alaska, where WGM had opened an office in 1972 under the management of Riz Bigelow.

And then there is Mary River, considered the highest-quality, undeveloped high-grade iron ore resource on the planet. Discovered by Watts on the northern half of Baffin Island during an aerial reconnaissance survey in 1962, Mary River lay dormant for decades owing to a mix of politics and

economics.

Then in 2002 Gord McCreary, who had done his PhD thesis on Mary River, and Richard McCloskey, one of the original shareholders, acquired Hudson Bay Mining & Smelting's interest in the project and later pieced together smaller interests held by Falconbridge, Teck Cominco and Watts' estate, among others.

They formed a company called Baffinland Iron Mines to further explore and develop the project.

The risk paid off handsomely. Last year, ArcelorMittal and Nunavut Iron Ore purchased Baffinland for \$590 million and are now spending billions to get Mary River into production. Full production of 3 million tonnes per year is slated to start in 2014, with the mine life pegged at a minimum 20 years.

Ironically, WGM has gone back to its roots in a way by becoming the go-to

firm for evaluating iron ore deposits as a result of a timely merger with Buzz Neal's consulting firm in the 1990s, just before the iron ore exploration boom exploded. As one of Canada's foremost experts on iron ore exploration, mining and processing, Neal provided a whole new revenue stream for WGM.

"We've become real experts in this area," Lawrence notes. "We've worked on just about every deposit of significance at one time or another, in Canada as well as other places."

Today's WGM is a very different company from the one founded by the intrepid Watts, Griffis, McQuat and Lawrence. Tighter regulations governing exploration in Canada has forced it to evolve from a geological consultancy with direct financial and technical involvement in projects, to a handsoff advisor.

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NEWSPAPER

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WATTS, GRIFFIS AND MCQUAT Geologists Amy Nishio and Mike Phillips exploring a mesothermal gold project near Bathurst Inlet, Nunavut.

The introduction by regulators of National Instrument 43-101 and its tighter reporting standards following the Bre-X Minerals' scandal of 1997 has been both good and bad for the firm: good, because WGM can offer its expertise to complete 43-101 reports on behalf of thousands of junior companies listed in Canada as well as investors who request the similar reports as a form of risk mitigation; bad, because these projects tend to be short-lived.

About 30% to 40% of WGM's current business is resource estimation and associated due diligence for 43-101 compliance, while another 15% to 20% is due diligence related to mergers and acquisitions valuation, Hinzer says. The rest involves project management, often on behalf of Chinese companies with global assets.

In Beijing, WGM is focused on advising Chinese companies interested in listing on the Toronto Stock Exchange and helping them prepare the necessary paper-

work, including 43-101 reports. The initiative is a challenge because of the vastly different valuation styles for mining companies in Canada and China.

"When you have a Chinese company that wants to list on the Toronto Stock Exchange, explaining the different concepts and how things works is very, very difficult," Hinzer says. "Chinese companies for the most part are state-owned and so they tend to have a central management that hoards information, and getting them to share that information

for 43-101 reports is like pulling teeth."

But Hinzer sees huge potential for WGM to grow in China as more Chinese companies seek to list on the TSX and explore beyond their borders. He is hoping to build up the company close to 1990 levels, when WGM had 35 employees and a full engineering department, without surrendering to the old

model of having a direct interest in projects and the "bad optics" that approach would create under Canada's current regulations.

"After all the rule changes around 43-101, we redirected WGM away from specific involvement in projects, and we've had to cut some ties," Hinzer says. "We're trying to set ourselves up as one of the few pure service providers that doesn't have its fingers in too many other pots. We are evolving, and I think as long as companies can evolve, they can remain relevant."

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