

AFRICA-FOCUSED JUNIOR SELECTS MADAGASCAR

The convergence of a favourable political climate in Madagascar thanks to the government of president Marc Ravalomanana that took office in 2002 and access to Madagascar's untapped geological potential has seen Canadian junior, Pan African Mining Corporation, focus all its attention on that country.

CEO of Pan African Mining Corporation, Irwin Olian, says the company was formed with a view to investing in exploration in Africa, and its business model has attracted interest from six other African countries in addition to Madagascar. However, with Pan African holding 69 exclusive exploration permits in Madagascar covering 9,962.5 km², he says the focus will remain at present exclusively on that country. In many ways Pan African Mining Corporation, which is a publicly listed company on Canada's TSX Venture Exchange under the trading symbol PAF, is a traditional Canadian junior exploration company. Olian, who has a background in law and finance, has sourced about US\$7 million of venture capital and Pan African is investing this in exploring for exploitable mineral resources.

The difference between Pan African and a typical junior is that, having sourced initial funding, it has granted a great deal of discretionary decision making power to its local people in Madagascar, whose remuneration is tied to the future prospects of the company. This is very different from the standard model of exploration in Africa where expatriates fund, find and drive projects.

"We find high quality individuals, and those local people make the decisions and manage the claims; we do not send in experts to tell them what to do. We only offer guidance and leave the day-to-day running of the business to them," Olian says. "Some of the expatriate geologists don't necessarily like this system, but that is too bad."

One of the people given significant latitude in guiding Pan

African Mining Corporation's path is its Madagascar country manager, Fanomezana (Fafah) Ramboasalama. Prior to joining Pan African, Ramboasalama, an environmental engineer, managed Madagascar's largest national park. Working with him is Olivier Rakotomalala, a civil engineer who Olian refers to as Madagascar's leading mapping expert.

With Madagascar having instituted pro-investment philosophies, and its interest in developing its minerals potential highlighted by a large airborne aeromagnetic survey being undertaken, Pan African woke to the potential of Madagascar's future mining industry sooner than most. As a result it has tied up some of the country's most prospective land covering a variety of commodities.

"There had been some exploration work by the French in the past and the key decision making when choosing land was based on BRGM historical data and old French workings," Ramboasalama says.



In the Dabolava region of central-west Madagascar, rows of workings indicate veins with a strike length of 15 km.

"However, the idea is not to hold land," Ramboasalama says. "We will assess the potential of the claims, identify the sites where we can develop conventional mines, and year by year we will reduce our holding. At the same time if we can obtain further promising exploration claims we will take those up too."

In order to cover as much ground as it can Pan African is using up to about 15 local geologists as well as expatriate geologists from the USA, Canada and South Africa. It hires local people for fieldwork on a temporary basis in various localities. "We use manpower from the areas where we are exploring, such as for digging of trenches, and have employed up to 200 people at a time," Ramboasalama says.

Even so with the amount of land held by the company, on a ten-year lease, he estimates a reasonable target for assessing it all is five to six years.

Pan African's tenements include land that is prospective for gemstones, including sapphires and diamonds, base metals, including iron, copper and nickel, chromite and platinum group metals, coal and gold. It also has ground that is prospective for uranium and has formed a joint venture with the government ministry Office Mines Nationales Industries Strategiques (Omnis) to prospect for this mineral that has been ignored in the country for about half a century. Madagascar once supplied uranium to France, but those mines closed almost 50 years ago. The joint venture in which Pan African has an 80% stake will be managed by a Pan African subsidiary in Madagascar named PAM Atomique Sarl.

"While we are clearly interested in all commodities we will take different approaches in each case. We have no plans to sell our holdings, and we will definitely develop the gold assets ourselves. There are also some commodities where the technical and the commercial investment challenges are large and joint ventures make the best sense," Ramboasalama says.

Chromite is an example of a commodity that could be suited to a joint venture. Madagascar's single operating mine, Kraomita, located in the Andriamena region which has been producing chromite since 1969, is at present a state-owned company, and Pan African holds squares of land on a site of interest near this mine. Pan African has tenure over 700 km² immediately to the north, west and southwest of Kraomita's Andriamena mining operation. Its licenses cover the Zafindravoay and the Beriana chrome projects, both of which have concentrations of chromite ore regarded as among the world's richest, in some areas ranging as

high as 55% chromite. Zafindravoay was a commercial open pit mine that operated until 1987. Zafindravoay and Beriana also have potential for additional metal credits, in particular nickel, cobalt and platinum group metals.

The coal potential that Pan African holds in the south of the country has also attracted interest, in the forms of letters of enquiry, but access and lack of infrastructure may delay any short-term developments here. The coal would also have to be beneficiated to make it into an exportable product. A small coal operation nearby but outside Pan African's tenements did mine three coal seams of 2.1 metres, 3.3 metres and 1.5 metres width respectively, these ranging in depth from 92 metres to 142 metres, during the 1970s.



Pan African Mining Corporation technical director Olivier Rakotomalala (right) and country manager Fanomezana Ramboasalama (left).

Pan African Mining has also sent teams to assess the diamond potential on permits covering more than 3,000 km² of areas it deems prospective for diamond exploration. According to government data, a number of diamonds have been recovered in Madagascar over the past century and its placement in the Gondwana supercontinent between kimberlite-rich areas of Tanzania and India 200 million years ago implies it should have diamond potential. Pan African began a programme of steam sampling in August 2004, which has

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found kimberlitic indicator minerals. Once it has collected data it will undertake a follow-up sampling program of one of its prime target areas with the primary objective of finding kimberlitic diamond sources and, failing that, finding alluvial deposits that contain diamonds or other precious stones.

Pan African also has among its holdings four land squares in the southern central part of the country that are seen as highly prospective for gemstones but the international price of gemstones puts these fairly low among its priorities.



Typical artisanal mining at Mountain of Gold.

Gold is Pan African's top priority and it has promising targets on its 12 gold properties. Ramboasalama believes that one, if not the most exciting, of these is Andavakoera, consisting of 292 land blocks that cover

1,825 km² east of Ambilobe in the north of Madagascar, but the company has rather prioritised its Mountain of Gold project in the Dabolava region. This prioritisation took into account infrastructure and road access in a country whose road network is quite undeveloped.

"Dabolava is located some 400 km from Antananarivo by means of a good road whereas, while Andavakoera is very a good project, it presents us with an access problem," Ramboasalama says.

Pan African used bulldozers to build some 10 km of roads to provide ease of access to the Mountain of Gold exploration and drilling site area from the paved national highway. Following an aerial aeromagnetic survey and interpretation of the maps a first phase of drilling, covering 2,000 metres, was completed in April 2005.

Mineralisation at Dabolava occurs in quartz veins that range from a few centimetres to a metre in width and often extend for over a kilometre. Reported production from the area

during the early to mid 20th century referred to grades of between 10 and 30 g/t gold. Historic samples from the Mountain of Gold project area ranged from 3.23 g/t gold to 45.45 g/t gold and supported the reported historic grades.

"The interpretation of this first phase of drilling we undertook looks positive," says Rakotomalala. Two of the intercepts, one of 4.3 metres grading 10.52 g/t gold and one of 17.2 metres grading 4.04 g/t gold are about 110 metres apart. These are believed to define a northeast trending zone that coincides with gold-in-soil and magnetic anomalies generated by BRGM. The drilling suggests that the Mountain of Gold shear zone may host a number of similar gold-bearing dilational features along its 10 km length.

"We are designing a second phase of drilling to give us a clear idea of the potential of this target," Rakotomalala says.

This second drilling phase, which could cover some 2,000 to 3,000

SE FOCALISANT SUR L'AFRIQUE, LA JUNIOR CANADIENNE CHOISIT MADAGASCAR

La convergence d'un climat politique favorable à Madagascar, grâce au gouvernement du Président Marc Ravalomanana qui a pris ses fonctions en 2002, et l'accès au potentiel géologique inexploité de Madagascar ont permis à la junior canadienne, Pan African Mining Corporation, de focaliser toute son attention sur le pays.

Selon le Président Directeur Général de Pan African Mining Corporation, Irwin Olian, la société a été créée avec une vue d'investir dans l'exploration en Afrique. Cependant, avec la Pan African détenant 69 permis exclusifs d'exploration à Madagascar couvrant 9,962.5 km². Monsieur Irwin Olian souligne que la société se focalisera exclusivement sur ce pays, pour le moment.

Du fait que Madagascar a institué un cadre politique favorable à l'investissement et son intérêt en

développant ses ressources minérales, souligné par une large étude aéromagnétique, Pan African Mining Corporation a pris conscience du potentiel futur de l'industrie minière à Madagascar plus tôt que la plupart. Par conséquent, la société a fait main mise sur quelques zones minières regorgeant une variété de commodités.

Le territoire d'exploration de Pan African inclut des zones potentielles en gemmes, incluant saphirs et diamants; métaux de base incluant fer, cuivre et nickel, chromite et les métaux du groupe platine, charbon et or.

L'unique mine malgache en opération, Kraomita, située dans la région d'Andriamena, qui produit du chromite depuis 1969, est actuellement une société étatique. Pan African Mining a un bail de plus 700 km², qui couvre directement le

nord, l'ouest et le sud-ouest des opérations minières de Kraomita à Andriamena.

Pan African Mining a envoyée des équipes pour évaluer le potentiel diamantifère sur le permis couvrant plus de 3,000 km² des zones jugées favorables à l'exploration du diamant.

L'or est la première priorité de Pan African Mining qui a des objectifs prometteurs sur ses 12 gisements d'or. L'un de ses gisements est Andavakoera, le plus prometteurs de tous. Il a une superficie de 1,825 km² allant de l'est d'Ambilobe au nord de Madagascar. Cependant, la société a plutôt mis sa priorité sur son projet de Mountain of Gold dans la région de Dabolava. Cette priorité a pris en compte les infrastructures et l'accès aux routes, dans un pays où le réseau routier n'est pas assez développé.

metres and cost about US\$1 million, is due to be implemented during 2005.

"For the remaining sites we are sending out geologists to assess their potential," Ramboasalama says. With the top priority this year being the Mountain of Gold project in the Dabolava region, the next highest priority will be the Marovato property, located 120 km east of Antananarivo. Though it is located near the capital a drawback is that it is not easily accessible. It was mined by the French, and was shut down in 1947. It was the last important commercial hard rock mine to operate in the country. The French left without fully exploiting the orebody because their above ground facilities were destroyed during an insurrection. The old mine contained six tunnels, now mostly collapsed. It was reported to extend over three strong quartz veins, the largest of which extends over 4,000 metres and averaged 13 to 16 g/t of gold over widths between 35 and 150 cm. Pan African plans to undertake some 2,000 metres of diamond drilling on this site, which aims to confirm and expand historic resources near and beneath the old workings.

The Andavakoera project is thus only third on the company's priority list. Gold was discovered in this area in 1906 and it became one of Madagascar's main gold mining centres during the early 20th century. Total declared production from 1906 to 1941 amounted to nearly 7,350 kg of gold with less than a quarter of this extracted from underground. Since 1941, small-scale mining by local inhabitants has continued but total production is not known.

Perhaps the next most notable target area for Pan African is the Andramasina property that consists of 60 contiguous land squares and covers 375 km². The property is located 45 km east of Antsirabe and this region has been explored and mined since the late 1800s. After gold was discovered at the headwaters of the Mania River system in 1888, during the French colonial period, several small companies and entrepreneurs mined gold from extensive alluvial deposits and from quartz veins in bedrock. This project area is relatively dry and exploration programmes can be conducted there throughout the year. **MRA**

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