## **ADU REVIEW**

## Companies collide for lithium giant

Australian JV partners Basin Mining Ltd, Range Mining Ltd and Comet Minerals Ltd have started mining the high-grade Jupiter lithium project in Nigeria, selling material at the mine gate.

JV chairman Dr Stephen Davis said lowcost production of close to 20,000t lithium spodumene ore per month had begun at Jupiter – 100km north-east of the Nigeran capital Abuja. Davis said the project JV had reached an offtake agreement for its first year of production, to be sold at the mine gate.

"We're mining lithium that's grading about 3%," Davis said.

Rock sampling, aeromagnetic interpretation, geological mapping and XRF analysis identified 29 targets at Jupiter and auger drilling was carried out in 2020-21. Assays of 32 samples returned grades of up to 7% lithium.

"The Jupiter project is particularly interesting because the lithium occurs as very large outcrops, 40-70m above ground level," Davis said. "The predominant occurrence of lithium is spodumene. Compared to the average mine, which is probably 1.3-1.5% lithium, we're running 2.4-2.6% lithium at the Jupiter project." Davis said ISO-accredited testing of samples returned an average of 3.4% lithium and x-ray powder diffraction studies completed in Western Australia identified the presence of 39% lithium-bearing spodumene.

Other minerals present at Jupiter include niobium, tantalum, beryllium, boron, titanium, tin and rubidium.



Dr Stephen Davis

"We are dealing with not only high grades of lithium, but other critical minerals as well. We haven't put a value to all the other critical minerals yet," Davis said.

Jupiter's exploration target range is 30-80mt and Davis said Basin, Range and Comet had fulfilled all regulatory requirements. He pointed to the companies' good standing with the Nigerian Government and open lines of communication with authorities as encouraging signs for the longevity of the project.

"We have our tenements and our mining leases. Our exploration licenses have been converted to mining leases. Those MLs are good for 25 years, plus renewal for another 25 years. We have a state agreement with Kaduna and we have our environmental and social impact assessments in place. We have community agreements and landholder agreements."

Nigeria's regulatory framework is based on WA's and Davis said this provided mining and exploration companies with solid legal foundations for operating in the country.

Davis announced another discovery at Jupiter on Day One of Africa Down Under and said exploration efforts were ongoing.

"As of yesterday, we have made 30 discoveries. The surface expression is extraordinary, and it's obvious," Davis said.

"At this stage, we have a lot more area to explore. We have thoroughly explored over 30% of our tenements and we now have 30 outstanding outcrops."

- Michael Cameron

## Nigeria slips into solid minerals

Since taking office in March, Nigerian President Bola Tinbu and his administration has been quick to outline its intention to pivot away from a resources industry dominated by oil.

Minister of Solid Minerals Development Oladele Alake said it was critical for Nigeria to de-risk the mining sector to attract investment.

"When Nigeria is mentioned, what readily comes to mind is oil," Minister Alake said.

"Yes, Nigeria has operated a mono-cultural economic system for decades and that is why the mining sector has been in the background, it has been de-emphasised for so long. However – as we all know – the [world's] attention is shifting from hydrocarbons to solid minerals."

Oil production in Nigeria dropped 14.69% year-on-year in the June quarter and although mining contributed just 0.85% growth in 2022, this number represents an increase of 32% year-on-year. Alake reminded Africa Down Under of Nigeria's mineral endowment, specifically lithium-bearing pegmatite belts in the country's west.

"Pegmatite belts stretch from Wamiba area, Nasawara State, north-central, through Egbe-Isanlu, Kogi State, Ondo-Ekiti States, Ilfe Ilesa, Osun State and the south-west," Alake said. "Within these belts, dozens of occurrences of rare metal-bearing pegmatites are recorded and some are known to have lithium."

Alake said the similarities between Nigeria's mining regulatory framework and that of Western Australia made the country an attractive destination for mining.

"The 2007 Nigerian Mining Act and its reforms were modelled after the WA Act and we know it is robust," Alake said.

Nigeria's new administration has created the state-backed Nigerian Solid Minerals Corporation to encourage foreign investment. Existing state-funded organisations such as the Nigerian National Iron-Ore Company and the Bitumen Commissioning Programme will be reviewed and fit into the new corporation. A mines police force has also begun operations

Hon Minister Oladele Alake



to crack down on widespread illegal mining in the country and provide security for mining operations.

"The [Nigerian Solid Minerals] corporation focuses on the investment aspect of the [mining] sector so the Ministry of Solid Minerals can focus on regulation," Alake said. "We aim to attract foreign multinationals interested in taking advantage of our investment-friendly regime. Security at exploration and mining sites is also important and we are dedicated to strengthening and providing much-needed security."

President Tinbu addressed the G20 summit in New Delhi in September, taking up a special invitation by India Prime Minister Narendra Modi to attend the meeting of the world's top 20 industrialised nations. The Nigerian Government is reportedly rallying support for the country to join the G20 and secured nearly \$US14 billion in pledges from Indian investors at the event. Jindal Steel and Power made a \$US3 billion commitment to the country's steel sector and Indorama Corp announced plans to invest \$US8 billion to expand its petrochemical facility in Nigeria's west.

- Michael Cameron