

Finalists gather in the race for graphite production

The “Big Beasts” of the Canadian mining scene are neither as evident nor as prominent as they used to be. Some have reconfigured their activities for the new reality of markets since 2011. One of the “Big Beasts” that temporarily disappeared from the scene and has now resurfaced is Sheldon Inwentash. He is famed for his management of Pinetree Capital which, at its peak, commanded a market cap of over \$1 billion and held a rather daunting 400 plus names in its portfolio.

Pinetree Capital can be said to be the proto-mining hedge fund in the Canadian space and it revolutionized the resource investment model. Pinetree veterans are spread across Toronto, churning out deals, raising hundreds of millions of dollars, and managing funds and mining companies themselves. In its heyday Pinetree was famous for having seeded companies such as Queenston Mining (acquired by Osisko Mining Corp. for \$550mn), Aurelian Resources (acquired by Kinross for \$1.2bn), and Gold Eagle Mines (acquired by Goldcorp for \$1.5bn).

Inwentash “retired” from Pinetree in 2015 after 23 years at the helm, but began incubating another company almost immediately after, waiting for the markets to stabilize and emerge from the bear market. One of the targets for his interest has been [CKR Carbon Corporation](#) (TSXV: CKR), with its focus on graphite in Namibia. Thus far in the process of broadening the supply of graphite (and reducing China dependency) Africa has been seen as a major new frontier with Madagascar (NextSource and some historical small producers), Guinea (with SRG, the former Sama Graphite), Mozambique (with Syrah and Triton, some other ASX players in the now blighted Tanzanian sphere and CKR Carbon with its past producer in Namibia).

As is well known to InvestorIntel followers we are big fans of reopening old mines and in this case we have one of the few mine reopenings in the graphite space. CKR is not alone in following this strategy but not many others have been able to identify mines worth reviving. In this case CKR have discovered what seems to be a highly prospective target for reanimation. In this piece I shall discuss their main target and how things are progressing.

The Deal

The Aukam property is comprised of Exclusive Prospecting License (EPL) 3895 in respect of base and rare metals, industrial minerals and precious metals. The license covers an area of 34,075 hectares on the farms Aukam104 and Harichab121 located in the district of Bethanie, Karas region of southern Namibia.



Back in September 2016, CKR Carbon signed a Farm Out agreement to earn up to a 63% interest in the Aukam Graphite project from Next Graphite Inc. and Gazania 242 Pty Ltd via a commitment to invest up to US\$1.1mn in the project, or constructing a processing plant with necessary infrastructure,

and making payments to Next of US\$180,000. CKR can also, subject to agreement by Next, earn an additional 10% interest by paying Next US\$180,000. CKR had invested more than US\$400,000 in the project at the time of signing the Farm Out agreement and had already earned a 23% interest in the project.

The Back Story

Since its discovery in 1928 the Aukam graphite deposit has been worked intermittently including two periods of mining between 1940 and 1974 that produced a total of 22,602 tons of graphite from three adits and an open cut. Minimal further exploration was undertaken in the area prior to Next's acquisition of the property in November 2013. Following the acquisition, Next carried out work programs predominantly aimed at characterizing the graphite remaining in dumps from the historical mining.

Geology

The Aukam Graphite deposit lies at an elevation between 1150m and 1300m above sea level. The surrounding area is up until 1450m above sea level at the highest point. The area is rugged with steep sided valleys and abrupt changes in local relief caused by differential erosion.

The Aukam graphite deposit daylights in an erosional window incised through the hard layers of sedimentary rocks that mantle southern Namibia. This suite of rocks indicates that the entire complex was once deeply buried. Steep dipping shear zones are common and some are dated around 1200 million years ago.

A prominent flat-lying and resistant sediment layer overlies the erosional unconformity at the top of the Namaqualand Complex. Hydrothermal alteration is common to some rocks in the window as is pegmatite veining. Both are evidence of hot water flowing through the rock. The graphite occurs at one

such site where over-pressured hot waters evidently carried carbon dioxide and maybe methane mineralized carbon into a zone of broken rock. This hosting "shear zone" is exposed for 350 m. The zone comprises three parallel lodes. Veins, lenses and pockets of ore, several centimeters wide, dip 70 to 90 degrees to the south.

Graphite mineralization at Aukam is of the vein or lump type and occurs as massive lenses and veins and more rarely as minor disseminated patches hosted by variably altered granite of the Namaqualand Metamorphic Complex. Kaolinite is the most widespread alteration mineral, while strong epidotization occurs in the immediate vicinity of the graphite veins and lenses. Iron oxides in the form of hematite and limonite are commonly associated with the graphite mineralization. An east-west trending shear zone cuts through the property and is traceable on surface for about 400 metres before disappearing under cover, but which an historical report indicates may extend for four kilometres.

Recent Exploration

The work carried out by Next and CKR has focused on characterizing the graphite mineralization in the adits, and open cut and especially in the dumps remaining from the historical mining. During 2014, Next conducted bulk testing of the Aukam dumps and screened 500 tonnes of graphitic material. Results of 84 composite samples from the screened material averaged 41.58% Cg (Carbon as graphite). An unscreened representative sample from a 350 tonne stockpile graded 35% Cg. Next also sampled exposed graphite veins, presumably from the open cut, and assays of the samples range from 41.45 to 68.85 % Cg.

During late 2015, CKR completed a 25 tonne bulk sampling program of graphite from the lower adit. Representative samples totalling 1,000 kilograms were sent for assay, particle size analysis and flotation testing. Results of

assays of 84 sub-samples showed a range of 11.39% Cg to 72.14% Cg with an average of 27.66% Cg. During April 2016, CKR sent a 1.6 tonne bulk sample of screened graphitic material to an operating mill and graphite plant. Seven composite samples ranging in weight from 20 kg to 30kg were taken from the bulk sample and assayed for their carbon content. The results of the assays show a range of 55.64% Cg to 63.87% Cg with an average of 59.40% Cg.

Flake size distribution tests have been carried out that show a distribution showing primarily medium to large flake (35% to 38.4%) and fine flake (39.7% to 42%) sizes.

Conclusion

It's interesting that as the fervour for graphite which peaked in 2013 started to retreat then Sheldon Inwentash started to move into the space. During the "downtime" of the last four years, the universe of graphite wannabes has seen some companies move towards production, some abandon the space (or fizzle out from lack of funds) or continue working waiting for the Brave New World of EV's where graphite would earn its due as a key component in Lithium-Ion batteries.

It will be interesting to step what next steps are taken here. Frankly a mine reboot might be possible if the funding can be found with a by-pass being driven around the consultants and other leeches determined to gain a pound of flesh for their dubious PFS and BFS offerings. With the magic words being Production, Production, Production and CKR having a past-producer in its hands the potential is there to fast-track this operation to remain in contention as the finalists gather for the Graphite Stakes.