Bell and Finlay fleet are real gems for Paleostone Mining

When it comes to financial risk in mining, alluvial diamond mining outshines the rest, as there is little surety of whether gravels may deliver on forecasts or not. And given that so much alluvial diamond mining is done by individuals who stake their life's saving on it, that risk is multiplied.

These words are not spoken lightly and come from someone with a Master's Degree in Geology and firsthand knowledge of the industry to boot. Lyndon de Meillon hails from the Eastern Cape and completed his tertiary education at the former University of Port Elizabeth, now the Nelson Mandela University.

Despite his Master's Degree study on the movement of sediment behind the breakers in Algoa Bay, working back a scholarship from the De Beers Group saw him doing five years of Kimberlite exploration in the Northern Cape and North West provinces. Employment with another diamond mining company in the Northern Cape followed before he started his own consulting company from Kimberley in the year 2000.

"Consulting in the diamond mining industry taught me a lot and when an opportunity came in 2007 to be the COO of Manhattan Diamonds and oversee the operations of four of their mines, I grabbed it with both hands," he tells us. "This lasted until 2012 when I started consulting to Steyn Diamonds as a geologist and mine manager on the De Kalk project, which entailed setting up a new mine and rehabilitating and closing worked out operations."

Schalk Steyn is himself a living legend in the South African alluvial diamond mining industry and with his backing and encouragement Lyndon started his own mining company, Paleostone Mining, in 2015. "We first mined an area at Marks Drift outside Douglas before moving in 2016 to this present site on the banks of the Riet River, between the town Modder River and the confluence of the Riet and Vaal Rivers," Lyndon explains.

Lyndon is at pains to point out that with the high financial risk of alluvial diamond mining and all types of regulatory and environmental factors working against the modern miner, it is critical to get as many controllable factors right the first time. One of these is the miner's choice of equipment and Lyndon has relied on a Finlay 893 Heavy Duty Screen to act as the heart of his mining operation.

"I first got to know Finlay Screens while working with Schalk Steyn and have come to admire how well this European designed and built equipment handles the harsh material and environment that we constantly throw at it," he says. "The Finlay 893 Heavy Duty Screen is particularly well-suited to our operation and although its design capacity is around 750 tonnes per hour, we do slightly less due to the difficult nature of the gravel we mine. The Finlay 893's double deck also handles wet gravel better and gives us a constant throughput without blockages."

Mining at Paleostone's operation sees oversized material being screened out close to the mining area where it forms the basis for future rehabilitation. Only the gravels are hauled to the run-of-mine (ROM) stockpile so eliminating double handling.

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"Lowering one's production cost is an on-going battle but a critical factor in sustainable mining and to this end, we recently took delivery of two Bell B50D Articulated Dump Trucks (ADTs) which we believe will help us achieve our production targets," he adds. "The one Bell ADT is a demonstration unit and has only clocked around 2 000 hours while the other is a pre-owned machine with around 14 000 hours."

Lyndon has been impressed by the Bell B50D's capacity and whether moving overburden, which is stockpiled for use in later rehabilitation, or hauling diamond-bearing gravel to the ROM stockpile, the Bell B50D ADTs look to add to this company's bottom line.

Paleostone Mining currently employs 70 people with most being drawn from the immediate area where unemployment is high. They include machine operators and drivers, maintenance and administration staff and middle management and all benefit from training and skills transfer.

"It should be considered that with our yields being between 0,1 and 0,3 carats per 100 tonnes of material

mined, this is too big a risk for larger diamond mining companies to take on," Lyndon points out. "We then become critical employers of people in an area where there is little or no other employment and despite this, we are constantly hampered by multitudes of regulatory compliance that come close to preventing us from mining profitably. That is why we place so much emphasis on getting our equipment needs right and to this end, we believe we have the correct mix in our Finlay and Bell machines."

"Reliable technical backup adds to this and we've been made to feel like we're clients of long-standing by Bell Equipment's Eric van der Merwe and Shaun Malan of the Bell Equipment Customer Service Centre in Kimberley. Working to tight margins does not allow us the luxury of extended downtime and having qualified mechanics with access to ready and reasonably priced parts on our doorstep augers well for our future in this challenging industry."

(From left): Lyndon de Meillon, owner of Paleostone Mining, with Shilo the Beagle, Eric van der Merwe, Bell Sales Representative at Kimberley CSC and Chris Jacobs, Paleostone Mine Manager.