Bell machines shine bright for diamond miners

The alluvial diamond mining areas of the Northern Cape have proved over the years that they are not places for the faint-hearted. This goes for man and machine.

Frank Sinatra sang in his hit song New York, New York that 'if you can make it there, you can make it anywhere' and the same can be said of the Northern Cape's diamond fields.

Two young alluvial diamond miners are certainly confident that they can make it there and are not afraid to put up their hands to make it happen. Jonathan Lloyd and Dale Hohne have been successfully mining diamonds in the Windsorton district for the past three years and have recently started mining an area within the Vaalbos diamond fields close to Barkly-West.

Both hail from families who have mining in their blood and Jonathan has worked in diamond, gold and base metal mining, with six years spent in Sierra Leone doing just that. Dale Hohne is the fourth generation in his family to choose mining as a profession. Both have, however, always had the urge to be self-employed and are doing so under the banner of their company, Mogale Operations (Pty) Ltd.

"This type of mining is all about moving earth and for that you need earthmoving equipment," says Dale Hohne. "One of the first pieces of equipment we bought was a well-used Bell L2206 Wheeled Loader that had been fitted with the engine normally found in a Bell L2208 machine and which had done a remarkable 24 000 hours at that time."

According to Dale they have added another 15 000 hours to the machine which is still being used daily.

"This should tell you that we've pretty much based our fleet of earthmoving machines on those sold and maintained by Bell Equipment," Jonathan Lloyd adds. "For this operation at Vaalbos, we're using two Bell HD2045 Excavators, a Bell L1806C and Bell L1806E Wheeled Loader respectively and three Bell B30D Articulated Dump Trucks (ADTs)."

Although all this equipment was sourced on the preowned market, it was done through the Bell Equipment Customer Service Centre in Kimberley with Sales Representative Eric van der Merwe, who has first-hand knowledge of alluvial diamond mining, guiding and advising Mogale Operations' owners.

Mining takes place using the Bell HD2045 Excavators, which first remove the topsoil and overburden, with both materials being stockpiled for later use in rehabilitation. Diamond-bearing gravels at Vaalbos vary in depth as there is some red ground, which offers shallower pits as opposed to some lime-rich ground, which in turn demands deeper digging. Once exposed, the gravels are loaded onto the Bell B30D ADTs for a short haul to the screening plant and eventually fed into a dual set of 16-foot pans where the concentrate is removed. Final sorting of the diamonds, out of the concentrate, takes place off-site.

The Bell L1806 Wheeled Loaders feed the screening plant and load the Bell B30D ADTs with the discarded material, which is then hauled back to the pit for rehabilitation of the mined-out areas.

"Fuel consumption is obviously important to us as we constantly aim to lower our production cost per tonne of earth moved," Dale Hohne says. "Even with running full loads from the mining pit to the plant and back again, we're seeing fuel consumption figures of 20 to 23 litres an hour, which impresses us given the tonnages moved."

Equally light is the fuel consumption of Mogale Operations' two Bell L1806C and L1806E Wheeled Loaders, which only use 9 to 10 litres an hour.

"These are still early days for us on Vaalbos and depending on our yields in the long term, we may have to consider bigger haulage machines like the proven Bell B40D ADTs and then we will look to buy new machines," says Jonathan Lloyd. "We have an estimated three years on this ground and time will reveal all we need to know."

Both partners agree that although their fleet of Bell earthmoving equipment is not new, they are ensured of longevity of fleet through solid technical back up and sustained availabilities of essential original parts, all supplied by the Bell Equipment Customer Service Centre in Kimberley.



From left: Bell Equipment Sales Representative, Eric van der Merwe, with the owners of Mogale Operations (Pty) Ltd, Dale Hohne and Jonathan Lloyd, together with the Team Leader at Bell Equipment's Customer Service Centre at Kimberley, Shaun Malan.