

Pangea Diamondfields



Potential alluvial gem

By Wendy Durham

Article Date: 28-11-2007

Rob Still of Pangea Diamondfields is best known for his almost uncanny knack of discovering highly prospective mineral projects...

Rob Still of Pangea Diamondfields is best known for his almost uncanny knack of discovering highly prospective mineral projects which are then sold on to be successfully developed by other companies. PGMs, gold, diamonds, coal, titanium – he and his team have teased them all out of Africa's mineral-rich soils.



It is this excellent reputation for being a good mine-finder that led to his high-profile tussle with Alan Bond earlier this year over Lesotho Diamond Corporation - a tussle which was precipitated by an appeal to Still from LDC shareholders dissatisfied with Bond's management of the company and lack of progress on its sole asset, the Kao kimberlite. Sadly for the rebel shareholders, a formal offer by Still's company – Pangea Diamondfields – did not attract enough support to ensure control of LDC and in the teeth of intransigent opposition from Bond interests, ultimately Still withdrew his offer.

Does it matter that Pangea Diamondfields will not, after all, own 44% of what's described as one of the largest undeveloped kimberlites in the world?

Just a brief scan of the portfolio Pangea Diamondfields has put together gives you the answer. Ten alluvial diamond projects, one of which is a revenue generating pilot plant, and a further seven of which should be at bulk sampling stage in a matter of months. More than two dozen target resources within those ten projects, in four diamond-rich countries. Add a management team with a first-rate track record of discovery of economically mineable mineral deposits. Then throw in a well supported team of 26 professionals deployed on the ground and in regional offices.

Kao might have put some rather expensive gilt on the gingerbread, but the gingerbread doesn't need the gilt!

Pangea came to AIM just over a year ago, with a portfolio of eight alluvial diamond projects, ranging from the well-advanced pilot plant operating at Cassanguidi in Angola to early stage exploration targets on newly acquired licences in South Africa. After successfully raising almost £16 million at 60p per share on admission, the company was well funded to undertake the ambitious work programme they had set out.

The core of the work programme is what Pangea call "Phased Incremental Project Development" – a modular process comprising three consecutive phases of Exploration, Bulk Sampling and Pilot Mining, followed by an initial Mining Phase, which introduces the first mining module. Further mining modules can be added at will to cater for the optimum mining rate and output. As far as is possible, the machinery and equipment for each phase is the same, allowing relocation of plant as and when required.



This methodical approach has paid dividends in the last 12 months, allowing development of several projects through Phase I to Phase II with more expected by the end of the year.

Key amongst these is the 90% owned Dimbi concession in the Central African Republic, where Pangea are one of the largest investors in the diamond sector. Situated just north of the border with the DRC, the alluvial diamond deposits of the 1,000 sq km Dimbi licence area are associated with the ancient course of the Kotto river – known as a palaeo-channel system - which originally flowed southward past Dimbi. Diamonds are found at the base of the Dimbi formation itself, a thick red-coloured sandy unit preserved on higher ground to the east of the main Kotto palaeo-channel. They are also found in hill-wash-type deposits in and close to the tributaries which drain the Dimbi formation and again in the main river where the tributaries contribute additional stones to those already drained from further upstream.

Dimbi has been the subject of bulk sampling since early 2007, with a recent emphasis on resource definition at the Palaeo and Tributary deposits. Thus far, these two sites have yielded diamonds totalling 3,700 carats, presently stored in Antwerp awaiting an increase to approximately 5,000 carats for valuation purposes. This has encouraged the company to bring Dimbi into the Pilot Mining Phase during Q1 2008, prior to the planned commissioning of Mining Module I later in the year. A preliminary scoping study has shown that the output from Mining Module I would be approximately 14,000 carats per month with a possible value of \$140 per carat, thus generating EBITDA for the project of around \$13 million per annum. As the required capex is only \$6 million for the mining module plus approximately \$5.5 million already expended on exploration and development, payback will be pretty speedy, taking well under a year.

In the DRC, Pangea have undertaken a trailblazing approach – literally!



If you want to move several hundred tonnes of alluvial diamond bulk sampling equipment from South Africa to the southern DRC, how do you do it? Why, with a convoy, of course! And if there aren't many roads leading to where you want to go? Why, build them yourself, of course! That is precisely what Pangea have done. A convoy of 17 trucks is about to complete an epic 4,700 km voyage through four countries - South Africa, Namibia, Angola and the Congo – to their destination at the Longatshimo River alluvial project near Tshikapa in the DRC. This pioneering convoy has been on the road for four months, accompanied by earthmoving equipment to smooth the way. The convoy is now in the DRC and several of the trucks have already reached the camp - in time for construction and commissioning of a bulk sampling plant during Q1 2008.

The convoy's target – Longatshimo – is situated in the Tshikapa diamond field, and was originally part of the Tshikapa river operation, but is now a project in its own right. The Tshikapa diamond field lies directly down stream of the alluvial fields of northern Angola, and its diamonds are thought to originate from erosion of the kimberlites lying in the Angolan Lucapa corridor. The main targets for alluvial diamonds are in the river terraces and flood plains, and along the course of the present-day river. Historical records state that approximately 65% of the diamonds produced from the field are of gem quality.



Yusufu and Ikulu are the two areas currently being developed by Pangea, and were classified in 2006 as containing inferred resources of approx 8.8 million carats with an estimated value of \$150 per carat. Pangea, through their wholly owned subsidiary Efidium have effective ownership of 80%, following revised agreements with their JV partners earlier in the year.

The Bulk Sampling phase at Longatshimo will be succeeded by the Pilot Mining phase in Q3 of 2008, in preparation for the introduction of Mining Module I in mid-2009. They expect resource delineation to be complete by the end of 2008 and are targeting project parameters of 18,000 carats per month output at an average carat

value of \$175, generating EBITDA of over \$29 million per annum for the project from a preliminary scoping study planned for later in 2008. With total capex assumed to be \$11.5 million, another fast payback of well under 6 months is anticipated.

Upstream of Longatshimo, just over the DRC border in the diamond rich Lucapa corridor of Angola, is the Cassanguidi project. Subject of one of only a few "old order" mining rights left in Angola, Cassanguidi is free of any direct government ownership. The mining licence is held by Marsanto, and operated by Sub-Sahara – with input from Pangea - of which Efidium holds 50%, giving Pangea an effective 33% project interest. The project consists of four distinct areas in close proximity to each other, and the current overall resource, as per the Admission Document, is just under a million carats at an approximate value of \$180 per carat. Main targets for the current phase of pilot mining are the "Colinas" – hill-wash deposits of diamondiferous gravel drained from the Calonda formation. These are exploited by open pit methods and are currently producing 3 - 4,000 carats per month. Diamond sales – under Angolan law – must be conducted through the state agency Sodiam, and earlier this year, lower-than-expected sale proceeds were causing the company some concern, particularly as Pangea were keen to progress to commercial scale mining at Cassanguidi. Prolonged negotiation with Sodiam has since resulted in an improvement, and Cassanguidi is now anxious to move to the next phase, with possible commissioning in Q3 2008 of Mining Module 1. Talks are presently ongoing with the project partners regarding funding of the \$3 million capex which will be needed, and a decision is expected early next year. When in operation, Mining Module 1 is targeted to produce just over 8,000 carats per month at an average sale price of \$150 per carat. This will bring in \$5.5 million per annum before tax and depreciation, with a 6 month payback.

Methodical. Structured. Cost-effective. These three projects demonstrate very effectively the Pangea approach which is being applied consistently in four countries and ten projects, on dozens of different alluvial targets. If current progress can be maintained over the next couple of years, Pangea should have no difficulty in reaching their target of \$30 million attributable positive cashflow. But alluvial diamonds are not "in fashion" right now with retail investors – and nor is Angola, where Pangea's most advanced project is located. The stock is thus thinly traded, with little general investor interest. But provided Pangea can achieve that cashflow target, today's market cap of £65 million would seem to give plenty of headroom.