

ANGOLA

*By Paul Crankshaw
Brooke Patrick Publications*

There are few places in the world where national politics and security are as closely tied to mining as in Angola; and this is why the death of a warlord features in the introduction of an industry overview. For a quarter of a decade, Angola's easily-accessible alluvial diamonds have fed the power-hunger of the 'opposition' Unita movement, driven and directed by Jonas Savimbi. Unita's control of significant diamond-mining regions reportedly generated US\$300 million per annum, fuelling a war that has killed half a million Angolans and left one in five as refugees in their own country. Jonas Savimbi's death early in 2002 is a potential watershed, giving cautious hope for peace - which could in time allow diamond (and other) mining and exploration activities to grow.

Angola is the world's fourth largest producer of diamonds, accounting for over 10% of global rough diamond production in 2001. Partly in response to the international campaign against 'blood diamonds', the Angolan Government established Angola Selling Corp. (Ascorp) as a single-channel marketing vehicle in 1999. Ascorp marketed over 5.1 Mct in 2001 (compared with 4 Mct in 2000), amounting to US\$730 million (slightly less than the US\$739 million in 2000, owing to depressed market prices).

Following the halt in fighting between Unita and government forces in 2002, there has been talk of some relaxation in this single-channel system, but the Angolan Government has said that Ascorp will continue to operate.

Projects

Despite the difficulties in operating in Angola, the year has seen one major project get off the starting block: Camafuca, a joint venture project between state diamond company Empresa Nacional de Diamantes de Angola (Endiama), Toronto-listed SouthernEra Resources and

Leviev Group company Welox Ltd. In July, Angola's Council of Ministers authorised the formation of the operating company Sociedade Mineira do Angola, following the partners' acceptance of Camafuca's feasibility study a year earlier. This study indicated a total inferred mineral resource containing 23.24 Mct (down to 145 m below surface) valued at an average of US\$109/ct. During the five-year Phase One period, mining operations will concentrate on the southeast corner of Camafuca where 6.13 million m³ of material will be dredged with an average grade of 0.18 ct/m³ and a value of US\$117/ct. Total operating costs are expected to be just US\$55/ct.

Another important diamond development is the planned expansion of processing facilities at Catoca in the northeast; this is expected to increase the plant's capacity from its current level of 3 Mt of ore to 6.5 Mt by 2005, potentially doubling the value of its diamond production from US\$150 million per annum to US\$300 million per annum. The expansion would increase power requirements, so consideration is being given to the building of a hydro-electric power plant on the Shicapa River at Catoca. Electricity is currently generated by diesel engines, with fuel delivered to site by air from Luanda.

Sociedade Mineira de Catoca is owned 40% each by Endiama and Russian producer Almazil Rossi-Sakha (Alrosa), with the remainder held by Brazil's Odebrecht Mining Services. The Catoca kimberlite mined by the company is one of the world's largest, and is believed to hold reserves of 200 Mct.

Exploration

Mineral exploration continues mainly for diamonds, marble, gem-stones, granite, limestone and plaster, generating a significant US\$700 million per annum in government revenue. The provinces of Huila, Namibe,

Lunda Norte and Luanda Sul are the main prospecting locations.

In July 2002, America Mineral Fields' subsidiary IDAS Resources (with Endiama and a local partner) was given permission to begin exploring its diamond licences in a 2,936 km² area north of the Cuango River Basin adjoining the border with the Democratic Republic of Congo. The company's view that political conditions had improved sufficiently for it to move into the licensed area before the end of the third quarter of 2002, is bound to send a positive message to a wary investor community; it will also be re-opening its Luanda office.

Petra Diamonds, listed on the London Stock Exchange's Alternative Investment Market, also has exploration rights in Angola and has said it wants to 're-enter' the market there following the latest peace accord.

Very little of Angola has been systematically explored for solid minerals. Those deposits that have been identified include phosphates (100 Mt estimated at Cabinda and 50 Mt at Kindonakasi), gold (at Cassinga and Lombige), and copper, lead and zinc (in Tetelo and Alto Zambeze). There are deposits of marble and black granite in southern Angola. Current production of ornamental stones was predominantly of black granite which was exported mainly to Spain and Portugal. Exports rose from 4,136 m³ in 1999 to 7,200 m³ in 2000, and this was expected to increase further with the establishment of new private producer Metarocho; this company aimed to ramp up its own production to 6,000 m³ by 2005.

Oil

The backbone of Angola's economy - and government revenue - remains oil. The sector has boomed since the late 1970s, growing at up to 20% a year, and observers predict that export earnings could double in the next five years on the basis of off-shore reserves that are reportedly unmatched in the southern hemisphere. Angola's 750,000 barrels per day (bbl/d) output is second only to Nigeria in sub-Saharan Africa and is expected to reach 850,000 bbl/d in 2002 as the giant TotalFinaElf Girassol development comes on stream. Total production is expected to hit 1.3 million bbl/d by 2008.

Huge new deep-water discoveries have brought reserves up to as much as 12 billion barrels, equalling those of Norway and prompting comparisons of scale with the North Sea. The largest three operators in 2000 were Chevron (550,000 bbl/d), TotalFinaElf (150,000 bbl/d), and Texaco (80,000 bbl/d). Esso Exploration Angola (a subsidiary of ExxonMobil) has a massive new find and Royal Dutch Shell plans to spend several billion dollars in deep and ultra-deep water projects off Angola.

Plans have been developed for a second 200,000 bbl/d refinery at a cost of between US\$2.7 and US\$3.3 billion. This new refinery is tentatively expected to start operations in 2005.

Sonangol and Texaco plan to build a liquefied natural gas (LNG) facility at Luanda, with installed exportable capacity of 4 Mt/y of LNG by 2005.