SUDAN

By Neil Scott

Sudan's considerable mineral exploration and production potential has been stunted as a consequence of a civil war that has ebbed and flowed for the past nine years. The conflict is between a fundamentalist Muslim government that holds Khartoum and the northern part of the country, and the secular Sudan People's Liberation Army (SPLA) in the south. Many have tried to foster the peace process, including George Bush who appointed a special envoy in 2001 in an effort to bring the war to an end. Discussions led to a partial cease-fire in 2002 and the signing of a Memorandum of Understanding that commits the government and SPLA to holding a referendum on self-determination in the south within six years. More talks in 2003 between the opposing sides led to 'complete agreement' on a number of contentious issues and, equally significantly, progress was reported on the thorny problem of sharing oil wealth.

Most of Sudan's 200,000 bbl/d oil production comes from the Helig and Unity fields operated by the Greater Nile Petroleum Operating Co. (GNOC), a consortium between the Sudanese Government, Petronas (Malaysia), China National Petroleum Corp., Sudapet (a Sudanese state firm) and Talisman of Canada. However, following a long-running campaign by pressure groups opposed to Talisman's involvement in Sudan, the company agreed in late 2002 to sell its share in GNOC to ONGC, an Indian state-owned company. There has subsequently been some delay in signing the deal, which has yet to be consummated.

GNOC's exploration efforts have increased Sudan's oil reserves from 417 Mbbl in 1997 to 800 Mbbl in 2002, although many officials in GNOP are reported to believe that the final figure could exceed three billion barrels, which would bring it on a par with other established African producers such as Egypt and Gabon. This potential has attracted several overseas companies including International Petroleum Co. (IPC) of Canada, which signed an exploration and PSA for the Thar Jath field.

Lundin Oil, a Swedish subsidiary of IPC, Petronas, OMV of Austria and Sudapet planned to bring a new concession into production in 2002, but deteriorating security forced Lundin to withdraw its personnel and the company will not now bring the property into production unless there is sustained improvement in security. The French firm TotalFinaElf is also maintaining a cautious stance. It holds a concession, but has let it be known that it does not intend to re-activate it until the civil war is over. Several Arab, Russian and East European firms are reported to be in negotiation with the government.

The Ariab gold mine is the country's principal metalliferous operation. Owned 40% by Cominor (formed by BRGM to manage its African mining assets) and

60% by the government, Ariab Mining Co. had resources of 5 Mt averaging 8.1 g/t Au in June 1998. Production is by open-pit mining from the supergene zones of four closely-located massive sulphide deposits, followed by heap leaching at a rate of 600,000 t/y.

Apart from cement raw materials (limestone, clay and gypsum), the only other industrial mineral production is of chromite, which is worked by Sudanese Mining Co. from three small-scale mines in the Ingessana Hills. Resources in podiform-type deposits are reported to be of the order of 2 Mt of high-quality, hard, lumpy, metallurgical-grade chromite averaging 51% Cr_2O_3, with a chrome/iron ratio of 3:1. Production is estimated to be 10,000 t/y.

Undeveloped industrial mineral deposits of commercial interest include: the Dirbat Well wollastonite deposit, with an estimated 300,000 t of 70-90% wollastonite; the Jebel Gerein kyanite deposit containing an estimated 450,000 t of kyanite; the Qala en Nahl talc-magnesite deposit; and semi-precious stones – notably agate, chalcedony and carnelian – with an alluvial production history dating from Neolithic times.

