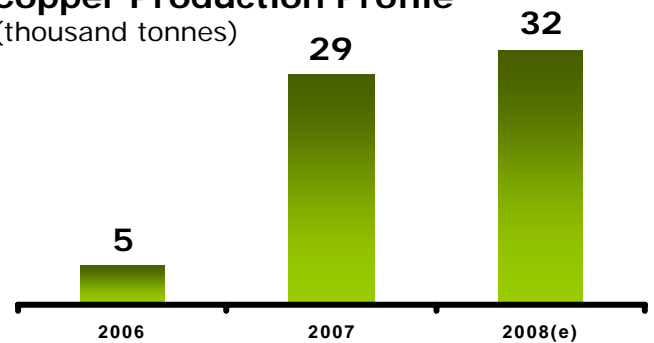


Guelb Moghrein

Location: **Mauritania**
Ownership: **80%**
Type of mine: **open pit**
Status: **operating**
Primary metal: **copper**
Secondary metal: **gold**
End products: **concentrate**
2007 production: **28,755 tonnes**
2007 cash cost: **\$0.65/lb**
2007 total cost: **\$1.15/lb**
Resource grade: **1.88 % copper**
1.4 g/t gold
Est. mine life: **2005—2020**
Employees: **877**



Copper Production Profile
(thousand tonnes)



* start up production and costs



Overview

The Guelb Moghrein deposit is located 250 kilometres northeast of the nation's capital, Nouakchott, near the town of Akjoujt and is accessible by paved highway. It consists of an open pit mineable copper/gold deposit.

In January 2005, the detailed design and engineering contract was awarded with site establishment commencing in March 2005. The first copper in concentrate was produced in July 2006 and commercial production was achieved in October 2006.

Ore is crushed and milled followed by flotation to produce a copper concentrate which is shipped to offshore smelters. Approximately one-half of the gold recovered reports to the concentrate and the remainder is produced from gravity concentrate and the flotation tails which are fed to a carbon in leach circuit for recovery using standard cyanide techniques. Gold doré is produced on site.

In 2007, 2.3 million tonnes of ore grading 1.4% copper and 5.8 million tonnes of waste were mined. Copper production was 28,755 tonnes as copper in concentrate. Cash costs were \$0.65 per pound of copper, with a total cost of \$1.15 per pound of copper.

Production is estimated to be approximately 32,000 tonnes of copper in concentrate and 100,000 ounces of gold in 2008.

Geology

The Occidental deposit at Guelb Moghrein is considered to be an example of the Iron Oxide Copper Gold (IOCG) type deposit that, in terms of its structure and mineralogy, has common features with other IOCG deposits elsewhere in the world. The mineralization is predominantly hosted by ferromagnesian carbonates (FMC). The copper-gold mineralization is hosted primarily within chalcopyrite and pyrrhotite. Magnetite becomes abundant outside the sulphide rich zones of the FMC. The Occidental deposit extends approximately 600 meters along strike and dips to the southwest at 30o to 40o. The eastern and western flanks of the Occidental deposit are fault bounded and the deposit is open at depth.

