

Management's Discussion and Analysis

measures may not be comparable to similarly titled measures reported by other companies. For a reconciliation of cash production costs per pound to production and delivery costs applicable to sales reported in our consolidated financial statements, see "PT Freeport Indonesia Product Revenues and Net Cash Production Costs" under "Product Revenues and Production Costs."

PT Freeport Indonesia Operating Results – 2004 Compared with 2003

PT Freeport Indonesia's 2004 revenues were slightly higher than 2003 revenues, with higher price realizations offset by lower sales volumes. PT Freeport Indonesia reported lower production and sales in 2004, reflecting the mining of lower-grade material and accelerated overburden removal activities following the fourth-quarter 2003 slippage and debris flow events. Copper sales volumes totaled 1.0 billion pounds in 2004, 23 percent lower than the 1.3 billion pounds reported in 2003. Copper price realizations of \$1.37 per pound in 2004 were \$0.55 per pound higher than the 2003 realizations of \$0.82 per pound. Gold sales volumes totaled 1,443,000 ounces in 2004, 42 percent lower than the 2,469,800 ounces reported in 2003. Gold price realizations of \$412.32 per ounce in 2004 were \$54.71 an ounce higher than the 2003 realizations of \$357.61 per ounce, before realized gains related to the redemption of our Gold-Denominated Preferred Stock. Gold realizations were \$366.60 per ounce in 2003 after hedging gains from redemption of our Gold-Denominated Preferred Stock.

Treatment charges vary with the volume of metals sold and the price of copper, and royalties vary with the volume of metals sold and the prices of copper and gold. In addition, treatment charges vary based on PT Freeport Indonesia's customer mix. Market rates for treatment and refining charges increased significantly toward the end of 2004 and are expected to be higher in 2005; however, PT Freeport Indonesia expects its 2005 rates to approximate its 2004 rates because of its customer mix. Total treatment charges for PT Freeport Indonesia in 2004 were lower because of the lower volume of metal sales. Royalty costs totaled \$43.5 million in 2004 compared with \$26.5 million in 2003, reflecting higher metal prices partly offset by lower sales volumes.

Following the fourth-quarter 2003 Grasberg open-pit slippage and debris flow events, we accelerated the removal of overburden and mined low-grade ore prior to restoring safe access to higher-grade ore areas in the second quarter of 2004 and resuming normal milling rates in June 2004. Mill throughput averaged 185,100 metric tons of ore per day in 2004 and 203,000 metric tons of ore in 2003. Mill throughput, which varies depending on ore types being processed, averaged 229,800 metric tons per day in the fourth quarter of

2004 and is expected to average approximately 235,000 metric tons per day in 2005. Approximate average daily throughput processed at our mill facilities from each of our producing mines follows (metric tons of ore per day):

Years Ended December 31,	2004	2003	2002
Grasberg open pit	141,500	155,700	194,500
Deep Ore Zone	43,600	40,500	21,800
Intermediate Ore Zone	—	6,800	19,300
Total mill throughput	185,100	203,000	235,600

Production from the Deep Ore Zone (DOZ) underground mine averaged 43,600 metric tons of ore per day, representing 24 percent of total 2004 mill throughput. DOZ operations continue to perform above design capacity of 35,000 metric tons of ore per day. PT Freeport Indonesia is expanding the capacity of the DOZ underground operation to 50,000 metric tons per day with the installation of a second crusher and additional ventilation. PT Freeport Indonesia's share of capital expenditures for the DOZ expansion in the period 2004 through the projected 2007 ramp-up are expected to approximate \$37 million, with \$19 million estimated for 2005. The DOZ mine, a block cave operation, is one of the world's largest underground operations. The Intermediate Ore Zone underground mine was depleted during the third quarter of 2003, producing almost 30 percent more copper and gold throughout its 10-year life than the initial reserve estimates.

Copper ore grades averaged 0.87 percent in 2004, compared with 1.09 percent in 2003. Copper recovery rates were 88.6 percent for 2004, compared with 89.0 percent for 2003. In 2004, gold ore grades averaged 0.88 grams per metric ton (g/t), compared with 1.54 g/t in 2003. Gold recovery rates were 81.8 percent for 2004, compared with 87.3 percent for 2003. The mining of lower grade material resulted in lower 2004 recovery rates. Compared to 2004, ore grades are expected to be higher for 2005 resulting in increased metal production in 2005. Gold recovery rates are expected to improve with the higher ore grades.

Unit net cash production costs, including gold and silver credits, averaged \$0.40 per pound of copper during 2004, compared with a net credit of \$(0.02) per pound for 2003. Higher unit site production and delivery costs in 2004 reflected significantly lower sales volumes resulting from lower ore grades and the primarily fixed nature of a large portion of PT Freeport Indonesia's cost structure. In addition, the lower sales volumes resulted in PT Freeport Indonesia being allocated a larger percentage of those fixed costs in 2004 under our joint venture arrangements with Rio Tinto. To a lesser extent, 2004 unit costs were impacted by higher energy costs, increased maintenance costs, the impact of a stronger Australian dollar and increased treatment and refining charge rates caused by higher copper prices and our customer mix.