

## POTOSI REVISITED

### Letter to the Editor

The justly famous mining in Potosi, in Bolivia, struggles on in reduced circumstances. I visited the site late in 2003, and can provide a modest update to the postscript on Simon Timberlake's excellent paper in *Mining History* (14:4, pp31-39).

It would appear that there has been an increase in activity since Simon's visit in 1985, as we were told that there are now about 6000 men working on metal production from the mountain of Cerro Rico that has yielded such fabulous riches from the host of veins within its old volcanic core. This number includes many that are in daylight processing plants, and there may be some that are re-working old tip material. But there are also hundreds working underground, mostly in small co-operatives, each with 10-12 men. Each team has its own patch within the mountain where they work one or more veins, and gain access and ore transport out through the old levels (Plate 1). We were told that the miners can work anywhere except where another group has already started, and their ore is then sold raw to any of the twelve processing plants that rely on flotation and have required more capital investment.

One major change is that they are now working primarily for zinc, with lesser values of silver, lead and tin. We visited a vein that was about 500 mm wide and visibly rich in sphalerite (Plate 2), but the available ore appears to be so marginal in value that hand-working by small teams probably offers the only scope for continuing extraction. The miners earn about 800 bolivianos (£80) per month, which is an improvement over the potential earnings from desert farming or urban sweatshops: enough to keep them in the mines.

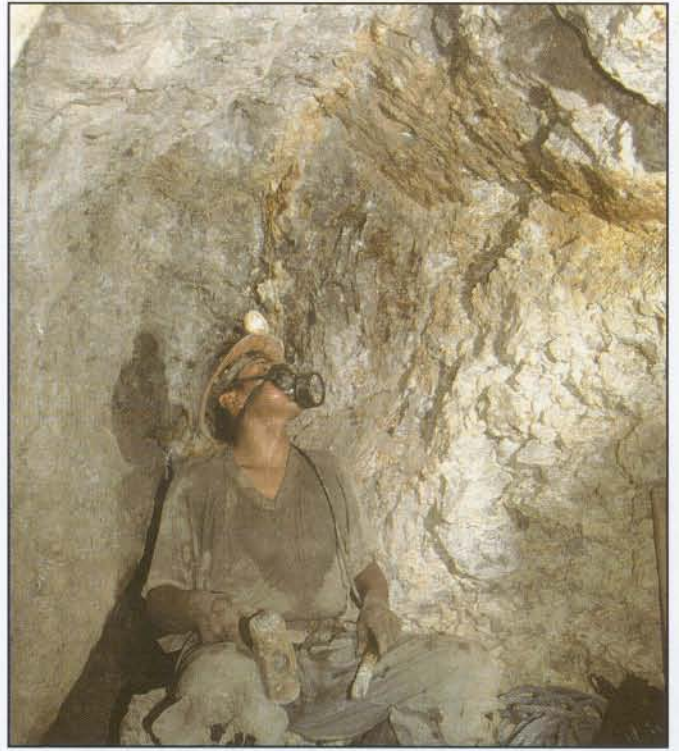
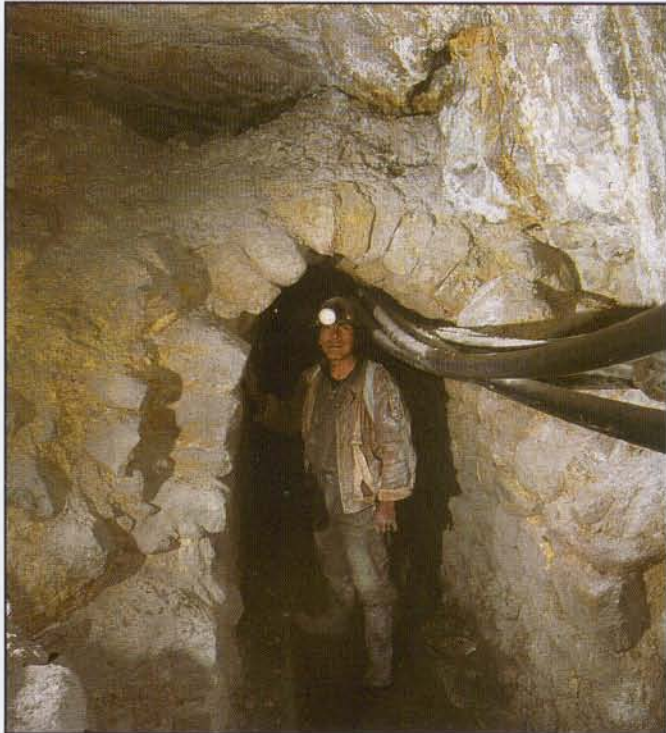
Working conditions are appalling - hot, dusty, low in oxygen (in thin air at an altitude of 4200m), and with galleries that require crawling and even squeezing to get through. The miners permanently chew wads of coca leaves so that they are too stoned to realise the awfulness of their environment. We saw an electric hoist on one internal raise, but everything else was by manpower alone, from drilling the shot-holes and scraping the ore out of the mini-stopps, to hand-winding on small raises and pushing tubs out along the levels.

Some auxiliary income for the miners is created from taking visitors on tours round the mines, though there are not that many visitors to Potosi and even less daft enough to take one of the tours. These are not for the faint-hearted. Hot, breathless, stooping walks, then

*Plate 1 (below). An old stone arch on the long level into the mines.*

*Plate 2 (top right). A miner rests from hammering a roof shot-hole into the vein.*

*Plate 3 (bottom right). The tourist route down the mine.*



precarious ladder-climbing (Plate 3) and flat-out grovelling along ore chutes firmly place a mine visit in the "interesting experience" category. A handful of agents in town run daily tours that are a very convenient way of seeing the mines; there are obvious limitations to any such tour, but by their nature these are not unpleasantly "touristy". Any PDMHS member passing that way should join a tour, the experience will not be forgotten.

Tony Waltham.

