Weekly, monthly and half-yearly short term plans are prepared. These plans are designed within the framework of a one year plan. The monthly plan is divided into weekly plans which are designed as far as possible to avoid wide grade fluctuations and to programme waste removal at the correct ore-to-waste stripping ratio. Daily adjustments are made to suit operating conditions, e.g. shovel or truck breakdowns, services, etc.

Benches are divided into ore and discard composites, the copper values of which are determined by projecting known values of blast holes which were drilled in the bench immediately above. These projected values are used for planning purposes until such time as the working bench is drilled for blasting and the holecuttings sampled. When this is completed, new composite areas are obtained and used for detailed planning. Projected values normally compare fairly accurately with actual "blast sheet" values.

Fig. 12 is an example of a blast sheet, showing tonnage blasted, grade, and ore or discard type. Composites in the pit are staked out and notices indicating ore and discard type placed on the muck pile. Shovel runners load through the composite up to the boundary stakes, which indicate that loading of that particular composite is complete.

A weekly reconciliation is prepared by which the effectiveness of the planning is gauged. Seldom does the actual grade fluctuate more than 0,01 per cent copper from the planned grade.

### Conclusions

The geology of the Palabora Complex was confirmed and evaluated in the extensive drilling programme of 1957-1962. The unique factor of copper mineralization of a carbonatite body enabled and promoted feasibility studies to be made and led to the development of this major open pit mine.

#### References

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  LOMBAARD, A. F., WARD-ABLE, N. M., and BRUCE, R. W. (1964). The exploration and main geological features of the copper deposit in carbonatite at Loolekop, Palabora Com-plex. The Geology of some ore deposits of South Africa Vol U 1964. Trans. and Soc. S. Afr. Vol. II, 1964. Trans. geol. Soc. S. Afr. HANEKOM, H. J., VAN STADEN, C. M. V. H., SMIT, P. J., and
- MILLE D. R. The geology of the Palabora Igneous Complex. Mem. geol. Surv. S. Afr. 54.

# NOTICES

# LURGY AND REFINING

A symposium organised by the Institution of Mining and Metallurgy will be held in London from 4th to 6th October, 1971.

Particulars can be obtained from:

The Secretary. Institution of Mining and Metallurgy, 44 Portland Place, London W1N 4BR, ENGLAND.

### ICAMC - 71 - HUNGARY

The Third International Conference on Automatic Control of Mines and Collieries will be held at Balantsfured, Hungary from 27th to 30th September, 1971. Further particulars can be obtained from:

ICAMC --- 71, Budapest 3, P.O. Box 115, HUNGARY.

## **ADVANCES IN EXTRACTION METAL- AUSTRALIAN INSTITUTE OF MINING** AND METALLURGY

### Illawarra Branch

A symposium on "Blast Furnace Injection" is to be held at Wollongong University College from 15th to 17th February, 1972.

About 20 papers on various aspects of blast furnace injection will be presented, including two on nonferrous furnaces.

Further particulars may be obtained from:

N. Standish, Chairman, Symposium Committee, Wollongong University, Australia 2600.