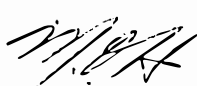


M E M O R A N D U M

TO: Engineering Department Staff
FROM: M. O. Hampton
DATE: July 28, 1971
SUBJECT: MINE PROGRESS AND ORE DATA

The modified collection and recording system outlined in Pete Forrest's memo of July 27 is being implemented and will be followed by those concerned.

Should changes in the system be desired at a later date, such proposals will be reviewed by myself and put into effect if it is in overall best interest. No changes are to be made without my prior approval.


M. O. Hampton
Chief Engineer

MOH/mm

cc. N. G. Cornish
J. W. Mossop

M E M O R A N D U M

TO: M. O. Hampton
J. McLachlan
J. Gondi
Survey Dept. (2)
Drafting Dept.

FROM: F. P. Forrest

DATE: July 27, 1971

SUBJECT: PIT PROGRESS AND ORE BLAST HOLE DATA COLLECTION AND RECORDING SYSTEM

CONCLUSION:

The following is a summary of the proposed system for obtaining and recording pit progress and ore blast hole data. The function of each department involved is discussed separately.

1. SURVEYORS

a) Survey all ore blast holes. Record ore hole numbers (sample numbers) in survey field sheets.

1) Bench Ore Drill Hole Index

Plot ore blast holes on individual bench plans. (Bench plan shows ultimate pit outline) and diamond drill holes). Record a four digit sample hole number and the blast date within the enclosed blasted area.

Method of plotting - overlays bench plan on semi-monthly pit work sheets and with use of compass, plots directly on to the bench plan. Use of the semi-monthly plan eliminates duplication of plotting survey points. Overlaying on the semi-monthly pit plan will provide the surveyors with a quick check that the holes are plotted correctly.

b) Perform routine daily pit surveys.

1) Plot data on semi-monthly progress pit plans.

2) Trace monthly progress onto the monthly progress bench plan (new). Bench plan sepia print shows diamond drill holes, ultimate pit limit and mining phase outlines. Planimeter progress and calculate volume removed from bench monthly.

2. PLANNING ENGINEER

Utilizes Actual and Predicted Bench Plans prepared by the Ore Control Geologist.

3. ORE CONTROL GEOLOGIST

a) Actual Bench Plan

Traces ore holes and plots assay values with respective holes. Deleted sampled waste holes - (13)
Traces ore/waste contact waste holes and waste inclusion holes.
Traces monthly crests from status sheets.

Calculates ore mucked per month. (Shades area on plan).

Bench plan sepia print shows:

- ✓ 1) ore blocks within $\frac{1}{2}$ bench outline.
- ✓ 2) ultimate pit limit
- ✓ 3) mining phase outlines
- 4) D.D. holes

b) Prediction Bench Plan

Traces monthly crests from status sheets.

Shades area of predicted ore mucked per month. Cross hatches area of ore mucked outside predicted ore zone.

Calculates predicted ore tonnage.

Bench plan sepia print shows:

- ~ 1) ore blocks with in $\frac{1}{2}$ bench outline
- ~ 2) ultimate pit limit
- ~ 3) ~~predicted $\frac{1}{2}$ and full bench~~

A) D.D. holes

Compares actual monthly ore mucked to predicted monthly ore mucked.

- c) Files ore blast hole assay information. Files sample books.
- d) Up-dates comparison of predicted and actual pit ore grade and tonnage.

4. ASSAYER

Issues assay sheet to Ore Control Geologist showing blast hole sample number and respective assay.

5. PRODUCTION DEPARTMENT CLERK

Maintains a daily muck sheet showing daily and cumulative mucked ore or waste per bench.

Pete

F. P. Forrest
Assistant Planning Engineer

FPF/mm