

INTRODUCTION

The Dy Pb-Zn-Ag mineral deposit is one of several stratiform pyritic sulphide deposits in the Anvil District, Yukon Territory (Figure 1). Previous surface drilling has defined probable ~~mining reserves~~ geological reserves (at a 9% Pb+Zn cutoff) of 21 million tonnes containing an average grade of 5.5% Pb and 6.7% Zn.

~~To fully evaluate the mining reserves of the deposit, an underground~~

An underground exploration program is required to fully evaluate the mining reserves for this deposit. Toward that end, two vertical pilot drill holes were completed during the interval April - July, 1989 to test the ~~for placement~~ ground conditions for placement of a vertical exploration shaft. Controlled drilling methods were used to minimize deviation of the drill holes from their original vertical orientation. Total depth completed was 844.3 m (2770 feet). In both instances drilling was halted short of the 914.4 m. ~~long~~ (3000 feet) target depth because of drilling difficulties.

This report describes the results of the 1989 Dy Pilot Hole Project. Detailed field drill logs are contained in the Appendix. Figure 3 is a SW-NE vertical cross section with the projected drill hole traces and lithologies indicated.

PROGRAM ROCMAP

Program ROCMAP constructs a geological map for a particular surface grid from the PC-MINE rock type model and the ~~surface~~ user-selected surface grid. It reads the surface grid elevation for each block and creates an ^{ASCII} extraction file incorporating the Northing, Easting, elevation and integer rock code for the 3-D block containing that elevation.

- ① Read property definition file.
 - save corners of the model
 - size of each block
 - number of rows, benches, and columns in the model
 - ~~number~~ elevations of toes of the benches for the model
 - scale factors for elevations
- ② Input proper data
 - output file name
 - surface grid selected for the model
 - input file name.
- ③ Import the surface grid as a matrix array.
 - convert to real values from integers using scale factors
 - quickly run through array and determine ~~minimum~~ minimum and maximum elevations
- ④ Correlate minimum & maximum of sequence of benches which must be tested.

5) Do loop to zero the ROCKMAP array

6) Do loop to insert rock codes into ROCKMAP from top bench to bottom bench

Read in bench of rock code values from rock type model.

If elevation is appropriate for that bench —
i.e. elevation \geq bench toe

then insert rock values into array ROCKMAP

if not appropriate then skip to bottom of loop.

7) Do loop to print ASCII file — output file
suitable for importing into PC-XPLOK or PC-MINE

Northing, Easting, elevation, Rock code, "GEOLOGY"

need to calculate Northing & Easting values.

8) Close Files

9) Stop Program.

Extraction file can be imported for plotting

Can modify the program RKEDIT to do this sort
of thing very quickly.