

"MASS BLAST OF PILLARS USING NEW BLASTING TECHNIQUE"

Ingvar Hansson and Bjorn A Jonsson
Nitro Consult AB, Stockholm, Sweden

Bernt Larsson
Nitro Nobel AB, Gyttorp, Sweden

ABSTRACT

In the Kiruna Research Mine, Sweden, four large open stopes have been mined, leaving intermediate pillars and crown pillars. At the final stage of mining mass blasting of the crown pillars above two of the stopes was carried out.

The crown pillars contained some 290,000 tons of iron ore.

In the mass blast a new initiation technique was used, utilizing the new non-electric system NONEL ® UNIDET. The blasting technique including vibration control is described.

The mass blast resulted in high recovery, good fragmentation and low vibration levels.