

Mining Project

Olympias Mine

Chalkidiki, Northern Greece

Project

Special design for the determination of the minimum allowable strength of the backfilling material and elaboration of the related modification annex of the technical mining study for Olympias mine

Project Schedule

Design: 2019

Geology

Kerdyllion geotectonic zone
Biotitic Gneisses and Matbles

Underground Mining Method

Overhand cut & fill with ascending direction

Ore Type

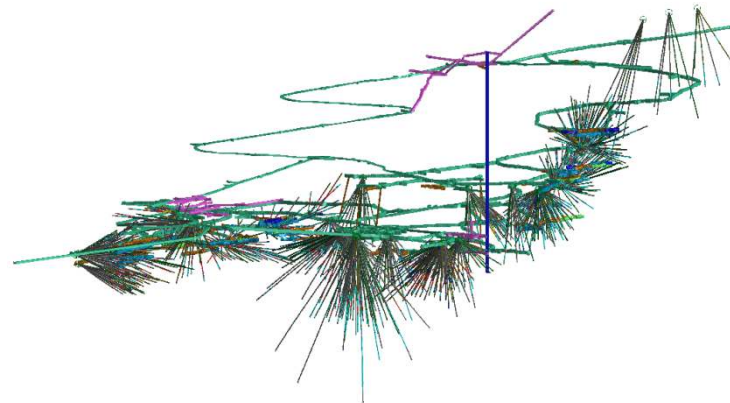
Sulphide deposits, zinc and argentiferous Lead, Ferrum and Manganese minerals

Our Services

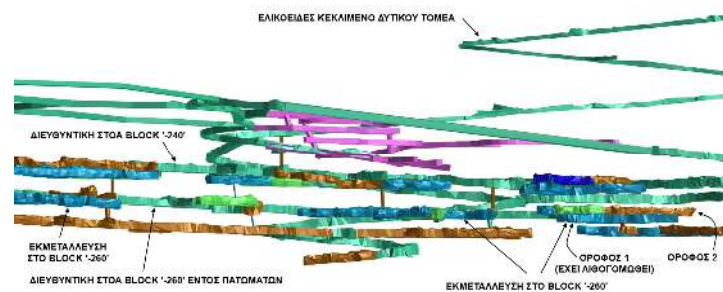
- Review of existing studies and initial data
- Review of the permit framework and of the contractual provisions relevant to hydraulic mining and backfilling works
- Review of the geological and geotechnical data regarding the mine
- Estimation of the minimum capacity of the mining and backfilling works through the parametric three-dimensional (3D) numerical analysis
- Presentation of the three-dimensional (3D) numerical analysis' results of the mining and backfilling works
- Documentation of the possibility of capacity reduction at the mining and backfilling works, in relation to the foreseen requirements aiming to determine in the most rational manner the minimum material capacity and therefore to enhance the projects' sustainability development

Client

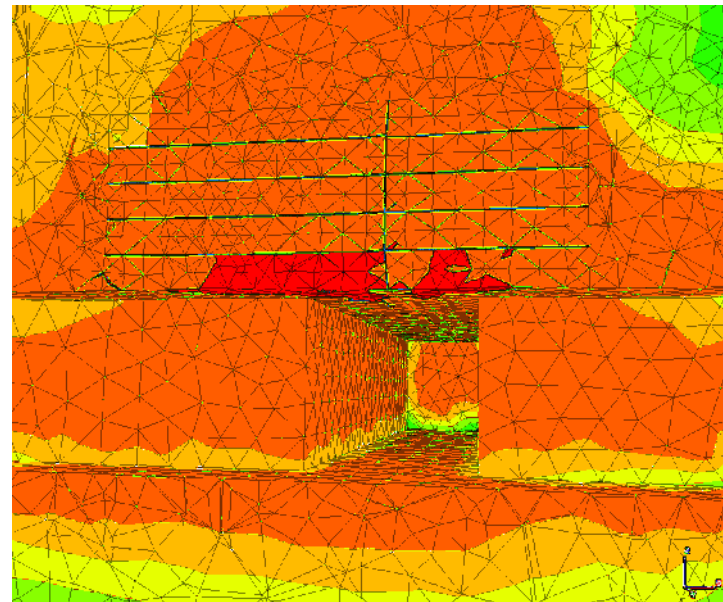
HELLAS GOLD S.A. {ELDORADO GOLD (CA) Subsidiary}



Three dimensional representations of investigation drilling and mine deposits



Three dimensional simulation of mine layout, mining deposits, access works and mining method



Three dimensional calculation models and simulations

Mining Project

Olympias Mine Main Access Tunnel and Secondary Access Adit

Olympiada, Chalkidiki, Kassandra Mine Project

Northren Greece

Project

- Design of main access tunnel in order to serve as the main ore haulage for Olympias mine to the new plant in Madem Lakkos
- Design of secondary access adit in order to serve as haulage access until the completion of construction of the main access and haulage tunnel from Olympias Mine to Madem Lakkos New Plant

Construction Cost

Total cost: approx. € 150 m.

Project Schedule

Design: 2011
Construction 2012 - on going

Project Description

- Length of main access tunnel: 8,770 km
- Overburden 1000m
- Effective cross section of main tunnel: 37.2 m²
- Length of secondary access tunnel: 1043m
- Effective cross section of secondary tunnel: 22.23m²

Geology

- Amphibolites – amphibolitic gneisses
- Biotitic gneisses
- Marbles
- Tectonic breccias // Mylonitized - Kaolin zones
- Underground water

Our Services

Technical Studies and Detailed Designs for the construction permitting (according to the articles No 4 and 101 of the Greek Mining Regulation), Application Designs, Consultancy Services, construction Follow up (Design) Services, project Management

Client

HELLAS GOLD S.A. {Subsidiary of ELDORADO GOLD (CA)}



Main access tunnel during construction



Typical cross section of excavation and primary support of main tunnel