



CSA Global
Mining Industry Consultants
an ERM Group company

RESOURCES

Delivering geological modelling and resource estimation services for exploration and mining companies worldwide.

CSA Global (an ERM Group company) is a geological and mining consulting company providing strategic services and advice to companies in the global minerals sector.

We have more than 35 years international experience across all mineral commodities with offices located in Australia, Canada, Indonesia, Ireland, South Africa and the United Kingdom.



RESOURCES

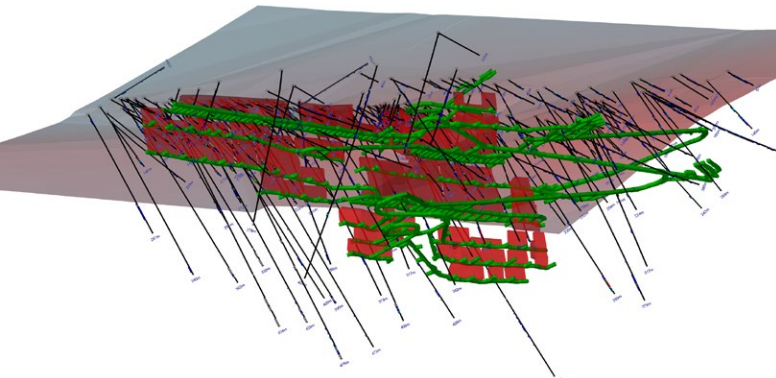
CSA Global's Resources team comprise a balanced mix of experienced operational personnel and experts in the fields of QA/QC, geostatistics, resource modelling, grade control and mine geology. We take a hands-on approach to assessing our client's projects to ensure that Mineral Resources and Ore Reserves are based on a thorough geological understanding and current industry best practices.

CSA Global are experts at profiling the risks and profitability in estimating and extracting resources. Our understanding of mining techniques and mineral economics has been cultivated from many years experience servicing the mining community.

At CSA Global we understand how important it is to get it right the first time.

OUR SERVICES

- Review of data collection techniques on pre-production and producing projects
- QA/QC audits
- Statistical analysis and variography
- Grade estimation and validation
- Resource reporting and classification
- JORC and NI 43-101 compliance reporting
- Risk analysis
- Project evaluation
- Grade control systems
- Reconciliation studies
- Studies for resource discovery and growth
- Training



Review Data Collection Techniques

- Design and implementation
- Data capture and transformations

QA/QC Audits

- Data management procedures
- Risk analysis

Statistical and Geostatistical Analysis

- Data review
- Domaining
- Variography

Grade Estimation and Validation

- Mineral Resource estimation
- Block model validation

Resource Reporting and Classification

- Mineral Resource classification
- Mineral Resource reporting
- Mineral Resource reviews and audits

JORC and NI 43-101

Compliance Reporting

- Statutory reporting
- Technical advice

Project Review

- Evaluation
- Design and review drilling programs
- Grade control practices
- Dilution control programs
- Mine reconciliation

Training

- Onsite/offsite
- Resource estimation
- Mine geology processes



RECENT EXPERIENCE

- Western Australia Gold, iron ore, lead, uranium, silver, graphite, copper, nickel sulphide, REE molybdenum, tungsten, magnetite
- Northern Territory Mineral sands, uranium, magnesite
- Queensland Magnetite, copper, gold
- Armenia Gold
- Brazil Copper, gold, iron ore
- Bulgaria Gold, copper
- Canada Zinc, lead, gold, copper, silver
- China Gold, zinc
- Dem.Rep of Congo Gold
- Guinea Bauxite, nickel
- Ghana Gold
- Kazakhstan Gold, tin, tungsten, uranium
- Kyrgyzstan Gold
- Madagascar Nickel laterite
- Malawi Graphite
- Mongolia Copper, gold
- New Zealand Iron sands
- Peru Copper
- Philippines Gold, copper, iron ore
- Saudi Arabia Copper
- Spain Tungsten
- Sweden Copper, iron ore
- Tanzania Graphite
- Turkey Uranium, nickel-cobalt
- Vietnam Chromite, nickel sulphide
- Russia Gold, uranium, silver
- Rep. of Congo Iron ore



About CSA Global

CSA Global delivers trusted technical services, training and independent advice to public and private mining companies, governments, industry associations, financial and legal groups around the world.

We are fully supported by our parent company ERM, a leading global provider of environmental, health, safety, risk, social consulting services and sustainability related services.

Collectively, we have more than 6,100 people in over 40 countries and territories working out of more than 160 offices globally who are helping us to deliver innovative solutions to help our clients manage and understand their sustainability challenges.

CSA Global specialises in:



CORPORATE



MINING



RESOURCES



EXPLORATION



DATA & TECHNOLOGY



WATER

info@csaglobal.com



[csaglobal.com](https://www.csaglobal.com)