

Diamonds

CSA Global offer expert services at all stages of the exploration and evaluation cycle relating to diamond deposits, both kimberlite and alluvial. From the identification and assessment of potential target areas to the delivery of a compliant mineral resource statement we can provide the solution for our clients needs.


CSA Global has experience in kimberlite exploration and interpretation of alluvial deposits in many regions around the world including Angola, Botswana, Democratic Republic of Congo, Gabon, Liberia, Sierra Leone, Guinea, South Africa, Zimbabwe and India.

Our team have been involved in many aspects of the diamond exploration industry such as:

- Exploration and planning, drill and bulk sample programme management.
- Sample processing, heavy mineral analysis (HMA), kimberlitic indicator mineral extraction (KIMs), mineral chemistry interpretation and classification.
- Surface texture analysis of KIM's and micro diamonds.
- Kimberlite petrography and classification.
- Size frequency distribution and evaluation of diamonds.
- Kimberlite geology and resource modelling.

Detailed geological logging together with petrographic investigation of drill core are used as the framework for building robust geological models that form the foundation of Mineral Resource estimates and economic models for kimberlite pipes.

Recent Projects

NATION	PROJECT	COMMODITY	WORK COMPLETED
 Angola	Luena	Diamond	Sample of processing & HM extraction of reconnaissance samples taken in Moxico Province.
 Brazil	Castelo de Sonhos	Diamond	First-pass Diamond Sampling Program.
 Democratic Republic of Congo	Sankuru River	Diamond	Technical report on alluvial diamond project.
	Mbuji Maji River Project	Diamond	Mineral Resource update.
 India	Moonlake	Diamond	Competent Person Report on exploration permits.
 Sierra Leone	Avivit Minerals	Diamond	Evaluation of diamond and gold prospects.

Experience within CSA Global

PROJECT STAGE	HIGH LEVEL EXPERIENCE
Exploration	Exploration strategy and programme design.
	Exploration programme management.
	Specification and monitoring of sampling procedures.
Evaluation	Resource modelling, characterisation and estimation.
	Data management and technical assistance.
	Probing and mineral chemistry interpretation of kimberlitic indicator minerals (KIMs) and geochemistry.



Kimberlitic indicator minerals (from left to right): 1) ilmenite, 2) chromian spinel, 3) pyrope garnet, 4) micro diamond.



**Mining
Industry
Consultants**

CSA Global has been providing innovative and practical solutions to the resources industry since 1984. During this period, CSA Global has assisted its customers with projects in Australia, Africa, the Americas, Central and South East Asia, China, Mongolia and Europe.

We believe that the key to achieving positive outcomes for our clients are to understand their goals and collaborate with their project teams, integrating our expert knowledge into their situations and developing practical solutions that add value to their projects.

Our offices in Perth, Jakarta and London provide an ideal base of operations for our consultants to provide around the clock service to our clients worldwide.

About CSA Global

We are a leading mining, geological, technology and management consulting company with more than 30 years experience in the international mining industry. We cover all stages of the exploration and mining cycle, including mineral commodities and extraction methods across all regions:

CORPORATE

- Project reviews
- Due diligence
- Expert valuations
- Independent reports
- Geo-corporate advice
- Secure information hosting (Spring portals & data rooms)

MINING

- Mining & engineering studies (concept to feasibility)
- Reserve assessment reviews
- Mine optimisation, scheduling & design
- Ore Reserve estimation & reporting
- Grade control & reconciliation
- Productivity improvement & project management

RESOURCES

- Review of data collection techniques & QAQC of data
- Geological & geo-metallurgical modelling
- Geostatistical analysis & variography
- Mineral Resource estimation, validation & classification
- Resource reporting in accordance with international codes
- Resource audits & risk analysis

EXPLORATION

- Mineral systems targeting & project generation
- Remote sensing & geophysics
- Geochemistry (traditional & non-destructive methods)
- Mapping & field investigations
- Drill program planning & supervision
- Exploration strategy & project management

TECHNOLOGY

- Data management (capture, data warehousing & QAQC of data)
- Data visualisation, analytics & cartography
- GIS plans, sections & 3D plots
- IT Management (health reporting, auditing, cyber security advice)
- Project design & management (Cloud systems design, infrastructure design & implementation)
- Mining specialist IT Helpdesk

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