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MINERALS SERVICES

2010



TRUSTED MINERAL EXPLORATION EXPERTISE

GLOBAL SOLUTIONS TO ENHANCE VALUE AND REDUCE PROJECT RISK

SGS has a proven track record of providing trusted exploration services to projects. Our professionals blend geological and technical expertise with the latest computer and software technology. Mitigate your technical, environmental, strategic and, most importantly, economic risks.

PROJECT MANAGEMENT

- Independent project management
- Exploration target ranking and assessment reports
- NI 43-101 Property of Merit Reports
- Data compilation, verification and safeguarding
- Reassessment of legacy data, projects or targets
- Due diligence and fairness reports

GEOLOGY & GROUND SURVEYS

- Mapping, core logging and sampling
- Exploration mineralogy
- Geochemical and geophysical surveys
- Interactive GIS capabilities
- Geological interpretation

GEOCHEMISTRY

- Comprehensive analytical testing
- Mobile on-site sample preparation
- laboratories
- Full on-site analytical laboratories Physical testing (grain size analysis, specific gravity, magnetic susceptibility)
- Indicator mineral analysis
- Mobile Metal Ion (MMI[™]) technology
- QMine[™] secure web data downloads
- Independent and secure database
- hosting

RESOURCE & RESERVE MODELING & ESTIMATION

- Orebody modeling
- Database review and verification
- Resource estimation, classification, modeling, reporting and auditing to NI 43-101 or JORC standards
- Geostatistical data handling and variability studies

SCOPING STUDIES

- Definition of fatal metallurgical flaws • NI 43-101 Preliminary Economic Assessments
- Mineralogical characterization
- Preliminary flowsheet development • Geometallurgical domain definition
- and sampling guidance
- and audits
- domain characterization
- Metallurgical sampling assistance, audits and composite creation
- testing and optimization
- Geometallurgical block models

DIAMOND EXPLORATION

- Exploration sample processing
- Microdiamond recovery
- Indicator mineral selection Macrodiamond bulk sample
- processing
- Diamond evaluation

FEASIBILITY STUDIES

- Bankable pilot plant testing
- Production of market samples
- Geometallurgical process and mine planning, simulation and design
- Water treatment strategies
- Power consumption studies • Joint mining and metallurgical optimization, production and mine
- planning using geometallurgy • Mine closure and rehabilitation
- planning

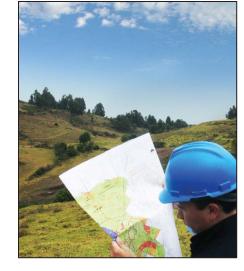
ENVIRONMENTAL SERVICES

- Environmental analysis • Environmental baseline studies, monitoring and auditing
- Water guality testing and treatment
- Acid rock drainage testing
- Environmental mineralogy

AUDITING & CERTIFICATION

- ISO 9001:2008 (Quality)
- ISO 1400:2004 (Environmental)
- OHSAS 18001 (Health and Safety)
- BS EN 16001:2009 (Energy)

SA 8000 (Social Accountability)



SGS AS A PARTNER

SGS provides independent technical advice and a strategic partnership to companies across the minerals sector. We offer:

- A vast global network of laboratory services
- Technology expertise and project development support
- Presence in all of the world's transportation hubs for trade services

Our range of value-added solutions contain costs, reduce risk and enhance value.

CONTACT US minerals@sgs.com www.sgs.com/minerals

Many SGS laboratories operate under the ISO/IEC 17025 Scope of Accreditation.

- **PRE-FEASIBILITY STUDIES** • NI 43-101 and JORC Technical Reports • Ore variability and geometallurgical
- Metallurgical flowsheet development,

