











# **MINERALS** SERVICES

2010

WHEN YOU NEED TO BE SUR



# COMPREHENSIVE **IRON ORE CAPABILITIES**

## WORLD CLASS TECHNICAL SUPPORT FOR THE IRON ORE INDUSTRY

SGS provides a wide range of services to support the exploration, treatment and trade of iron ore. We can help minimize your operational and financial risk through our industrial expertise and improve your operational efficiencies with our technical leadership. Together, we can develop innovative services and technologies that are customized to add significant value to your iron ore projects and operations.

#### **EXPLORATION SERVICES**

- Geochemical exploration services
- Mobile Metal Ion (MMI<sup>™</sup>) technology
- Project management
- Environmental baseline studies
- Orebody modeling and resource estimation
- Geometallurgy
- Metallurgical testing
- High Definition Mineralogy
- NI 43-101 and JORC Technical Reports

#### **PRE-FEASIBILITY & FEASIBILITY** SERVICES

- Geometallurgy and ore variability studies
- Orebody modeling, resource and reserve estimation and audit
- Metallurgical flowsheet development and pilot plant testing
- Plant design services
- Environmental services
- Mine closure planning

### **PRODUCTION SUPPORT**

- On-site laboratories
- Plant evaluation and audits
- Process control and troubleshooting
- Advanced systems
- Production forecasting and optimization
- Asset management

#### **PROCESSING SUPPORT**

- In-plant audits and optimization
- Beneficiation
- Hydrocyclones
- Spiral concentrators
- Magnetic separation
- Gravity separation
- Flotation
- Hydrometallurgy
- Metallurgical accounting
- Comminution and flotation simulation
- and modeling

#### **TRADE & INSPECTION SERVICES**

- Analytical services
- Umpire and settlement analysis
- Proficiency testing programs
- Marine services
- Quality and quantity inspection
- Collateral management agreements
- E-Reporting and E-Certification

#### SAMPLING

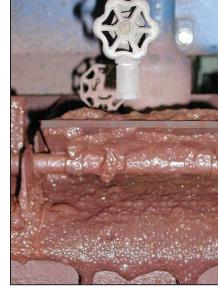
- Sample collection and lot sub-sampling
- Mechanical sampling systems
- Manual and auger sampling

#### **ENVIRONMENTAL SERVICES**

- Complete environmental analysis
- Air, water and soil testing
- Environmental baseline studies
- Water and effluent testing and Acid Rock Drainage treatment, prediction and mitigation
- Environmental mineralogy
- Silica, dust and noise analysis
- Land reclamation
  - Greenhouse gas emissions audit and verification

#### **AUDITING & CERTIFICATION**

- ISO 9001:2008 (Quality)
- ISO 1400:2004 (Environmental)
- BS EN 16001:2009 (Energy)
- OHSAS 18001 (Health and Safety)
- SA 8000 (Social Accountability)



#### SGS AS A TRUSTED PARTNER

SGS provides independent, technical advice and a trusted 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 contains costs, reduces risk and enhances value

> **CONTACT US** minerals@sgs.com www.sgs.com/iron-ore



