



**Borealis Mining Company LLC**  
**12 Miles SW of Hawthorne on Lucky Boy Pass Road**  
**Hawthorne, NV 89415**

**POSITION DETAILS**

<b>Position Title:</b>	<b>Mine Technician</b>
<b>Department:</b>	<b>Engineering</b>
<b>Location:</b>	<b>Borealis Mine Site</b>
<b>Reports to:</b>	<b>Senior Mine Engineer</b>

**Basic Function:** The Mine Technician provides essential technical support to the Mine Engineering team, primarily assisting the Senior Mine Engineer in the planning, design, and operational tracking of mining activities. This role is critical for ensuring the safe, efficient, and cost-effective execution of mine plans through accurate surveying, production planning, drill and blast design, and geotechnical data management.

**Duties and Responsibilities:**

1. Mine Surveying & Data Collection:
  - Execute daily and weekly mine surveying tasks using GPS, Total Station, and other specialized equipment (e.g., drone photogrammetry).
  - Conduct volume calculations for material moved, stockpiles, and excavated areas.
  - Establish and maintain survey control points throughout the mine.
  - Stake out drill patterns, blast hole locations, ore/waste contacts, haul roads, ramps, and other infrastructure as per engineering and geology designs.
  - Perform as-built surveys for reconciliation and compliance.
  - Process and validate survey data, ensuring accuracy and integrity for use in mine planning software.
2. Short-Term Mine Planning & Scheduling:
  - Assist the Senior Mine Engineer in developing and updating daily, weekly, and short-term mine plans and schedules.
  - Translate engineering designs and long-term plans into actionable plans for mining crews.
  - Generate and distribute production layouts, haulage routes, and dig limits to operations personnel.
  - Monitor and track plan adherence, reporting any deviations and proposing adjustments as needed.
  - Maintain and update mine maps and plans in Micromine or other mine planning software.
3. Drill & Blast Design Support:
  - Collaborate with the Senior Mine Engineer on the design and optimization of drill and blast patterns for both production and pre-splitting.
  - Utilize mine planning software to develop detailed blast layouts, including hole locations, depths, and charging designs.
  - Calculate explosive quantities, powder factors, and stemming requirements.
  - Prepare blast notification forms and assist with legal and regulatory compliance for blasting activities.
  - Monitor blast performance, fragmentation, and ground vibration data, providing feedback for continuous improvement.
4. Geotechnical Tracking & Data Analysis:
  - Assist with routine geotechnical inspections and perform data collection in active mining areas (e.g., pit walls, underground excavations).
  - Operate and maintain geotechnical monitoring instrumentation (e.g., extensometers, prism monitoring, radar systems).

- Maintain and update geotechnical databases, ensuring data accuracy and accessibility.
5. General Engineering Support & Data Management:
- Maintain and organize engineering data, files, and drawings in a systematic manner.
  - Prepare and update various reports, spreadsheets, and presentations as required by the engineering department.
  - Assist with other ad-hoc engineering tasks, projects, and analyses as directed by the Senior Mine Engineer.
  - Collaborate effectively with other departments, including Operations, Geology, and Maintenance.
6. Health, Safety & Environment (HSE):
- Adhere strictly to all company health, safety, and environmental policies, procedures, and regulations.
  - Actively participate in safety meetings, hazard assessments, and incident investigations.
  - Promote a safety-conscious culture within the engineering team and in the field.
  - Ensure all work is conducted with appropriate Personal Protective Equipment (PPE) and in a safe manner.

**Qualifications:**

- Education: Technical Diploma or Certificate in Mining Engineering Technology, Geomatics, Civil Engineering Technology, or a related field.
- Experience: Minimum of 2 years of relevant experience in an operational mine environment.
- Proficiency in operating mine survey equipment (GPS, Total Station).
- Competence in CAD software (e.g., AutoCAD).
- Familiarity with mine planning software (e.g., Micromine, Surpac, Vulcan, MineSight, Deswik) strongly preferred.
- Basic understanding of GIS software.
- Strong computer skills, particularly with Microsoft Excel, Word, and Outlook.
- Knowledge of drill and blast principles and practices preferred.

**Physical Demands:**

- Personal protective equipment is required when performing work in a mine, outdoor, manufacturing or plant environment, including hard hat, hearing protection, safety glasses, safety footwear, and as needed; respirator, rubber steel-toe boots, protective clothing, gloves and any other protective equipment as required.
- Employee is occasionally required to crawl, kneel, bend, and reach with hands and arms above their shoulders.
- Must be able to lift and carry up to 30-50lbs
- Ability to work in extreme weather conditions; exposure to wet and/or humid outside weather conditions; and extreme cold and/or heat.
- Ability to maintain awareness of occupational hazards and safety precautions. Skilled in following safety practices and recognizing hazards.
- Physically capable of sitting or standing, shovelling and performing other types of physical work for long periods of time.
- Must be willing to work shift work or otherwise assigned.
- Must be a self-starter.

Supervisor's Signature with date: \_\_\_\_\_ Job Holder's Signature with date : \_\_\_\_\_