



Mechanical Engineer

Project: Stibnite Gold Project - Stibnite, Idaho, USA

Work Location: Boise Office, with option to work remotely

Salary: Competitive

Employment Type: Full-Time, Regular Employee

Application Deadline: Position open until filled.

About Perpetua Resources

Perpetua Resources is an Idaho-based company committed to responsible mining and environmental stewardship. Our mission is to restore the abandoned Stibnite Mining District while responsibly developing its rich resources of gold and antimony—an essential mineral for national defense and sustainable technologies.

Why Join Us?

- Environmental Restoration: Be part of a team dedicated to restoring ecosystems and improving water quality in historically impacted mining areas.
- Innovative Projects: Contribute to the Stibnite Gold Project, designed to responsibly develop critical mineral resources while rehabilitating the environment.
- Community Engagement: Work with a company that values transparent partnerships and actively invests in local communities.
- Professional Growth: Join a diverse team of scientists, engineers, and environmentalists committed to excellence and innovation.

At Perpetua Resources, we believe in balancing resource development with environmental care to create a sustainable future. Join us in making a lasting, positive impact on Idaho and beyond.

 [Learn more at www.perpetuaresources.com](http://www.perpetuaresources.com)

About The Position

The Mechanical Engineer supports the safe, reliable, and efficient design of processing facilities and site infrastructure.. The role focuses on the design, maintenance, optimization, and continuous improvement of mechanical systems used in a gold flotation processing facility. This position partners closely with operations, maintenance, reliability, and safety teams to maximize equipment availability, reduce downtime, and ensure compliance with safety, environmental, and regulatory standards.

Essential Duties and Responsibilities

- Assist in the management of third-party engineering firms performing design services for plant facilities.
- Design, specify, and support mechanical systems and components for gold process plant systems.
- Provide engineering support for crushers, conveyors, pumps, mills, hoists, ventilation systems, and heavy mobile equipment.
- Collaborate with maintenance teams to improve preventive and predictive maintenance strategies.
- Support asset integrity and equipment reliability through root cause analysis, failure investigations, and corrective action plans.
- Review technical drawings including Mechanical layout and detail drawings, Piping drawings including Piping & Instrumentation Diagrams (P&IDs), detail drawings, etc.
- Review technical specifications for applicability to the project.
- Experience in materials selection and calculations for various mineral processing fluids including water, heavy slurry, compressed gases, reagents, and flotation froth.
- Assess equipment performance, wear life, and robustness in harsh operating environments.
- Lead or support plant upgrades, equipment replacements, and capital improvement projects.
- Ensure mechanical designs and modifications comply with mine safety regulations, standards, and site procedures.
- Participate in hazard identification, risk assessments, and safety reviews (e.g., Job Safety Analysis, Management of Change).
- Provide on-site technical support during commissioning, shutdowns, and major maintenance activities.
- Work with vendors and contractors to evaluate equipment, review designs, and resolve technical issues.
- Champion a strong safety culture and lead by example.
- Comply with applicable mining regulations (e.g., MSHA, OSHA, or local mining authorities).

Schedule & Logistics

The Mechanical Engineer will be based in Perpetua Resources' headquarters in Boise, Idaho, with the option to work remotely. Occasional travel will be required to other locations, including Stibnite and Donnelly.

Required Knowledge, Skills and Abilities

- Bachelor's degree in Mechanical Engineering or related engineering discipline.
- 8+ years experience supporting heavy industrial process equipment environments.
- Strong understanding of mechanical systems, power transmission, hydraulics, and structural components.
- Proficiency with CAD software and engineering documentation standards.
- Practical knowledge of maintenance practices, equipment inspections, and reliability principles.
- Ability to work effectively in field environments, including mine sites and processing plants.
- Strong problem-solving skills and hands-on technical aptitude.

Preferred Qualifications

- Experience in precious and/or base metal processing operations including flotation.
- High pressure metallurgy experience (autoclaves) a plus.
- Familiarity with crushers, conveyors, grinding mills, flotation cells, pressure filters process pumps and piping.
- Exposure to condition monitoring systems (vibration analysis, oil analysis, thermography).
- Understanding of welding, fabrication, and repair practices in mining environments.
- Professional Engineer (PE) registration or progress toward licensure.

Skills & Competencies

- Safety-first mindset
- Plant design, equipment reliability and asset management focus
- Field-based problem solving
- Collaboration with operations and maintenance teams
- Practical engineering judgment under real-world constraints
- Ability to prioritize in high-demand, production-driven environments

Physical Requirements

- Regular presence in mining, plant, and field environments.
- Exposure to noise, dust, varying weather conditions, and industrial settings.
- Occasional travel and extended hours during shutdowns or critical operational periods.
- Use of personal protective equipment (PPE) as required.

What We Offer

At **Perpetua Resources**, we are committed to supporting our employees with a comprehensive benefits package that promotes well-being, financial security, and career growth. We believe in fostering a workplace where our team members thrive personally and professionally.

What We Offer:

Health & Wellness

- Comprehensive medical, dental, and vision insurance
- Health savings account (HSA) available with eligible health plan choice
- Employee assistance program (EAP) for mental health and well-being
- Company-paid Life Flight membership for employees/immediate family

Financial Security

- Competitive salary
- Short-Term Incentive Plan (STIP) – Annual performance-based bonus program
- Long-Term Incentive Plan (LTIP) – Equity-based compensation for long-term success
- 401(k) retirement plan with company matching contributions
- Employee Assistance Program

Work-Life Balance

- Paid time off (PTO) and company-recognized holidays
- Parental leave
- Flexible work arrangements (role-dependent)

Professional Growth

- Career advancement opportunities within a growing company
- Industry conference attendance and networking opportunities
- Internal training programs and cross-functional learning

Additional Perks

- Company-paid professional memberships (e.g., industry associations, networking groups)
- Travel assistance and reimbursement for work-related conferences or site visits
- Commitment to sustainability and community engagement

At **Perpetua Resources**, we take pride in creating a workplace where employees feel valued and empowered. If you're looking for a career that combines purpose, growth, and a strong team environment, we'd love to have you join us!

What we Require

- Candidates may be required to pass a medical exam.
- Candidates must pass all required training and/or testing.
- Employees may be required to work a non-standard schedule, which may include shift work (other than day shift) at a 24/7, 365-day operation.
- Perpetua Resources Idaho Inc. promotes a drug/alcohol-free work environment using mandatory pre-employment drug testing and on-going drug and alcohol testing, as allowed by applicable laws.

Ready to Join the Perpetua Resources Team?

If you're passionate about making a difference in one of the most environmentally driven mining projects in the country, we'd love to hear from you!

 To apply: Send resume and cover letter directly to employment@perpetua.us

Perpetua Resources is committed to equal employment opportunity. All qualified applicants will be considered without regard to race, color, sex, age, religion, national origin, disability, or any other characteristic protected by federal, state, or local law.