



Heap Leaching

Leaching Operations Optimization

Our extensive experience in heap leaching enables us to assess heap leaching practices and operations effectively and accurately. Our expert knowledge facilitates the comprehensive review and upgrading of production modeling, metallurgical accounting, and operational practices. The process guides clients through an audit of their site to identify and investigate new metallurgical methodologies and practices to improve on-site recovery.

SSR Mining – Marigold, Nevada, USA

Site Audit and Solution Management

The team at Marigold operates a large run-of-mine heap leach operation in Humboldt County, Nevada. P&C conducted a site audit including a review of current leaching operations and placement estimation methodology, to provide assurance of the estimate and identify any potential areas of improvement.

P&C identified opportunities to improve solution management and production modeling protocols and performed an economic assessment of planned plant upgrades and expansions to address this.

Calibre Mining - Pan Mine, Nevada, USA

Operational Review and Production Modeling

The Pan mine is a gold heap leach in east-central Nevada. P&C conducted a review of current leaching operations and support for improving current production modeling and metallurgical accounting procedures.

P&C performed an in-depth analysis of current and historical metallurgical data and designed a new heap model to streamline data input and analysis for more accurate, readily available inventory estimation.

McEwen Mining - Gold Bar, Nevada, USA

Startup and On-Site Operational Support

P&C provided assistance in the startup, stabilization, and optimization of McEwen Mining's Gold Bar heap leach pad in Nevada. We assisted with a site audit, including a review of current leaching operations and placement estimation methodology, to provide assurance of the estimate and identify potential areas of improvement.

P&C identified opportunities to improve solution management and production modeling protocols and performed an economic assessment of planned upgrades and expansions. Personnel were also retained, on an interim basis, to provide direct oversight of operations while hiring replacements for key process staff was underway.



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Heap Leaching Services

- Flowsheet development from Concept Studies through Detailed Engineering
- In-house laboratory metallurgical and tailings management testing
- Geometallurgical determinations of optimized ore routing and processing
- Advanced, predictive heap leach production modeling
- Commissioning support for new leach pad facilities
- Process optimization (debottlenecking) and upgrade opportunities
- Site feed trials
- Operator training
- Process auditing, including focuses on Cyanide Code and Safety Compliance
- Qualified Persons (QP) for technical reports

Leaders in Process Engineering

At P&C we have a team of process engineers with extensive operational heap leach experience supported by our expert team of metallurgists offering a wide variety of project experience.

Our engineering expertise in the field of mineral processing spans the breadth of services from comminution through tailings. This, coupled with our in-depth knowledge of rheology, clay chemistry, and slurry and solution flow behavior, enables us to provide clients with unique, more creative, and more definitive mineral process solutions. Our engineering is backed by in-house laboratory testing to assist in providing cost-effective and operationally robust solutions.

Group Capabilities

- Tailings & Mine Waste
- Slurry Pipeline Systems
- Mine Backfill
- Mineral Processing
- Mine Services
- Marine Pipeline Systems
- Laboratory Services

Contact Us

AUSTRALIA

PERTH:

+61 (8) 6355 5166
Perth@PatersonCooke.com

CANADA

SUDBURY:

+1 (705) 222 1720
Sudbury@PatersonCooke.com

CHILE

SANTIAGO:

+562 3293 8300
Santiago@PatersonCooke.com

SOUTH AFRICA

CAPE TOWN:

+27 (0) 21 531 2955
CapeTown@PatersonCooke.com

JOHANNESBURG:

+27 (0) 11 258 8943
Johannesburg@PatersonCooke.com

SPAIN

MADRID:

+34 669 857 147
Madrid@PatersonCooke.com

SWEDEN

STOCKHOLM:

+46 (0) 793 361 615
Stockholm@PatersonCooke.com

UNITED KINGDOM

CORNWALL:

+44 (0) 1872 561 263
Cornwall@PatersonCooke.com

USA

DENVER:

+1 (303) 800 6280
Denver@PatersonCooke.com



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