



Consultant Profile

MONIQUE EUGENIA

MINE ENGINEER

Bio

Monique is a Mine Engineer with over three years of experience in open-cut coal and metal mining operations, specializing in mine planning and pit design optimization. She has delivered practical engineering solutions that improve operational efficiency and reduce mining costs, supporting projects for major mining companies including BHP Mitsubishi Alliance (BMA) and Whitehaven.

Qualifications

Bachelor of Science (S.Si) majoring in Geology, Universitas Indonesia (2022 Graduate)

Software Literacy

Deswik

Minescape

Slide2

Spry

ArcGIS

QGIS

Global Mapper

PowerBI



Industry Experience

May 2025 – Recent

Mine Engineer at Insignia Mining

- Delivered optimized mid-term pit designs for the Winchester, Boomerang, and Yura Pits at BHP Mitsubishi Alliance's Peak Downs Mine, balancing strip ratio, production targets, and operational constraints.
- Optimized haulage access through an in-pit dump strategy for Peak Downs Mine.
- Evaluated tailings storage facility (TSF) alternatives for Whitehaven's Blackwater Mine (BWM) through a comprehensive trade-off study, with the recommended TSF option being selected by WH for implementation.
- Developed an integrated mine planning strategy for Whitehaven's BWM In-Pit Tailings Storage Facility (TSF), ensuring timely delivery of the TSF void through pit and dump access strategy, and mining sequence optimization.
- Optimized mine plan for Macmahon's Codrilla Project, reducing haul distances and truck fleet requirements through an optimized in-pit dump strategy.
- Enhanced mine planning for Macmahon's Hillside Project by optimizing blasting sequences, improving drill and blast efficiency and reducing overall blasting costs.
- Designed a balanced cut-and-fill rehabilitation landform using Deswik.Enviro Reshape Landform, ensuring compliance with environmental and operational requirements.
- Optimized dragline sequence plan using Deswik.DD for Terracom's Blair Athol Mine, improving dragline utilization and reducing operational costs.
- Enhanced mine planning for Stevin Rock's Quarry Mine by optimizing blasting sequences, pit access strategy, and material destination planning to improve operational efficiency.
- Developed a Time Usage Model (TUM) for MACA's Gruyere Project to support equipment productivity analysis and operational planning.
- Designed out-of-pit dump for MLG Wallbrook Templar Project, integrating geotechnical constraints with operational requirements.

Mar 2023 – Dec 2024

Graduate Geology at Thiess

- Prepared daily geotechnical reports, including prism monitoring, site inspections, water management, and hazard findings.
- Developed the Geotechnical Management Plan and Geotechnical Model for the MSJ & Halmahera sites to proactively manage geotechnical risks across operational areas.
- Implemented TARP (Trigger Action Response Plan) to effectively manage geotechnical hazards and ensure timely mitigation.
- Led field teams to manage and mitigate ongoing geotechnical hazards directly at site operations.
- Analyzed and reported slope stability of pits, dumps, and embankments using RocScience Slide2, providing actionable recommendations for safe and stable designs.
- Created geotechnical assessments for high-risk dump procedures, ensuring compliance with operational and safety standards.
- Authored Standard Operating Procedures (SOPs) and geotechnical guidelines, enhancing operational clarity and team alignment.
- Optimized prism monitoring reports by developing interactive Power BI dashboards, improving data accessibility and readability.
- Delivered weekly geotechnical hazard management reports, updating hazard maps and evaluating pit and dump conformance.
- Led weekly geotechnical awareness sessions (Geotech TARP Awareness, Hazard Area Identification, and Hazard Mitigation) during safety talks, reinforcing a culture of hazard vigilance.
- Conducted geotechnical hazard awareness training for new employees as part of the Geotechnical Hazard Management Plan.
- Achieved a 98% internal geotechnical audit score at the MSJ site through rigorous hazard management practices.
- Developed and socialized risk assessments and JSEA for high-risk mining activities, increasing workforce preparedness.
- Performed geotechnical field inspections to record geotechnical properties, including UCS measurements (Schmidt hammer), outcrop condition assessments, and GSI classifications.