Cinthia Maldonado



Geomechanical Engineer

Expertise	Geomechanics, Microseismics, Numerical Modeling
Education	B.Eng. (Mining), 2018 Laurentian University, Sudbury, Ontario, Canada
Registration	Registered Professional Engineer in the province of Ontario, Canada
Professional Experience	
2021 – Present	Itasca Consulting Canada Inc., Sudbury, Ontario, Canada Geomechanical Engineer
2020 – 2021	Itasca Consulting Canada Inc., Sudbury, Ontario, Canada Rock Mechanics – EIT
2019 – 2020	Alamos Gold Inc., Island Gold Mine, Dubreuilville, Ontario, Canada Ground Control – EIT
2018 – 2019	KGHM Morrison Deposit, Levack, Sudbury, Ontario, Canada Ground Control Coordinator
2017 – 2018	Kirkland Lake Gold Macassa, Kirkland Lake, Ontario, Canada Technical Clerk

Project Experience

Itasca Consulting Canada Inc.

- Perform statistical data analysis on geotechnical core logs and strength testing results for QA/QC purposes and to provide rock properties input for numerical modeling.
- Using Rhino 7 to clean up mine geometry for numerical modeling.
- Using Griddle 2.0 create model geometries to allow for explicit numerical modeling of infrastructure and or mine structures.
- Stope stability analysis.
- Provide geomechanical support to mine sites in the form of ground control training, underground tours, and general labor.
- Construction and calibration of both Flac3D 7.0 and 9.0 numerical models both on a minewide scale design and specific infrastructure analysis using site observations, seismicity, and unusual occurrences.
- Numerical model interpretation to form recommendations on stress hazards, sequencing, stope sizing, pillar interactions, infrastructure placement, and impact of geological structures on mine excavations.

Cinthia Maldonado



- Experience in geotechnical core logging.
- Content creator for Itasca Software (tutorials).

Alamos Gold Inc., Island Gold Mine

- Updated and wrote ground control processes and standards.
- Performed day to day ground control tasks (general inspections, stope and backfill inspections).
- Designed stope support (cable bolt design packages).
- Updated and managed the Ground Control Logbook.
- Worked with operations to perform geotechnical based investigations.
- Assisted in writing the Ground Control Management Program.
- Performed monthly quality control testing.
- Managed the daily tasks and expansion of the microseismic system.

KGHM Morrison Deposit

- Worked in the ground control department performing underground inspections.
- Performing and keeping track of backfill testing.
- Performing quality control pull tests on different bolts and observed installation.
- Issued rehab prints and helped manage the microseismic system.

Kirkland Lake Gold Macassa

- Worked with the geology and engineering departments using Deswick to repair block model solids with the purpose of turning a resource to a reserve.
- Worked with ground control, ventilation, and surveying departments both on surface and underground.