



## Todd Wakefield

### Principal Geologist

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#### Professional Summary

Mr. Wakefield has more than 30 years of worldwide experience in mine operations, mining consulting, mineral exploration, and software development. He has worked at mining operations in the United States, Mexico, Peru, Venezuela, and Indonesia, and consulted on mining and exploration projects around the world. Todd is an expert in mineral resource evaluation, geochemical exploration, database management, assay QA/QC, and software development. He has served as Qualified Person for over 20 Canadian NI 43-101 Technical Reports.

#### Representative Experience

- Los Azules, McEwen Copper, Argentina – Database audit for large copper project in northern Argentina
- Cerro Negro, Newmont, Argentina – Database audit for operating underground and open pit gold mine complex in southern Argentina.
- El Castillo/San Agustin/La Coloradao, Argonaut Gold, Mexico – NI 43-101 Technical Report compilation for three operating gold mines in Mexico.
- South Mountain, BeMetals, Idaho – Preliminary Economic Assessment for a Zn-Ag-Au-Cu-Pb skarn deposit in southeast Idaho.
- Bisoni McKay, Nevada Vanadium, Nevada – Resource estimation for a black-shale-hosted vanadium project in north-central Nevada.
- Gold Bar, McEwen Mining, Nevada – Resource estimation and reconciliation reviews for an open pit heap leach gold mine in north-central Nevada.
- Detour Lake, Kirkland Lake, Ontario – Resource estimation audit of open pit and underground resource models for open pit gold mine in Ontario, Canada.
- Moss, Golden Vertex, Arizona – Mine reconciliation and metallurgical accounting review for an open pit heap-leach gold mine in Arizona.
- Newmont Goldcorp, Canada, Mexico & Argentina – Database audits for seven operating gold mines and advanced projects in Canada, Mexico, and Argentina.
- NRN & SRN Complexes, Sigma Lithium, Brazil – Technical Report assistance for a lithium pegmatite project in Brazil.
- Ahafo, Newmont, Ghana – Technical Report assistance for an open pit gold mine in Ghana, Africa.
- Gibellini, Prophecy Development, Nevada – Drill spacing study to support Measured and Indicated Mineral Resources at Louie Hill black-shale-hosted vanadium prospect in north-central Nevada.
- Pogo, Sumitomo, Alaska – Led multi-discipline team on reconciliation audit of high-grade quartz-vein hosted gold mine in Central Alaska.
- Rhyolite Ridge, Global Geoscience, Nevada – Completed 3D geological model and drill spacing study for clay-hosted lithium-borate deposit in Central Nevada.
- Arturo, Barrick, Nevada – Led multi-discipline team to assist Barrick to compile NI 43-101 Technical Report for open-pit and underground gold mine in Northern Nevada.

- Lindero, Fortuna Silver, Argentina – Managed compilation of NI 43-101 Technical Report summary of Feasibility Study for open-pit gold project in Argentina.
- Casale-Caspiche, Goldcorp, Chile – Combined two large drilling and exploration databases for adjacent projects in the Maricunga Belt into a single acQuire-based database.
- Mineral Ridge, Scorpio Gold, Nevada – Data quality for leach pad reprocessing Feasibility Study and Qualified Person for NI 43-101 Technical Report.
- Sanshandao/Yulin/Guilazhuang, Shandong Gold, China – Geology and resource estimation in support of Competent Persons Report and NI 43-101 Technical Reports for three operating gold mines in China.
- Goldstrike, Barrick, Nevada – Data management assistance in support of large open-pit and underground gold mine operation in Carlin Trend, Nevada.
- Mineral Ridge, Scorpio Gold, Nevada – Data quality, database, and resource estimation support for heap leach gold reprocessing study at open-pit gold mine in Nevada.
- Castle Mountain, NewCastle Gold, California – Data quality, database management, and geologic modeling, and resource estimation assistance to support Prefeasibility Study for past-producing gold mine in California.
- El Limon-Guajes, Torex Gold, Mexico – Directed the setup, implementation, and documentation of geological and ore control processes and systems at the El Limon-Guajes gold mine located in Guerrero State, Mexico. Responsible for blast hole sampling, database management, assay QA/QC, geologic mapping and logging, ore control processes, resource and reserve estimation, and reconciliation.
- Kakanda, Eurasian Natural Resources, Congo – Database audit and QA/QC evaluation to support resource estimation for sediment hosted copper-cobalt deposits in the DRC.
- Bingham Canyon, Rio Tinto, Utah – Managed a resource and reserve audit of a porphyry copper-gold mine in Utah.
- Maturi and Birch Lake, Twin Metals, Minnesota – Database audits to support resource estimation for mafic intrusive copper-nickel-PGM-gold deposits in Minnesota.
- Mineral Ridge, Scorpio Gold, Nevada – Managed a Feasibility Study, LOM plan and NI 43-101 TR for a vein-hosted gold project in Nevada.
- Caspiche, Exeter Resources, Chile – Managed the initial resource estimate, two updates and associated NI 43-101 Technical Reports on a gold-copper porphyry project in the Maricunga Belt of Chile.
- Cerro Casale, Barrick/Kinross, Chile – Geology and data quality review for the prefeasibility and feasibility studies of a large porphyry gold-copper deposit in the Maricunga Belt of Chile.
- Boron and Yellowstone, Rio Tinto, California/Montana – QA/QC evaluation for significant borate and talc mines in the United States.
- Olympic Dam, BHP Billiton, Australia – Database audit for a large copper-gold-uranium intrusive-hosted iron oxide deposit in South Australia.
- Spring Valley, Midway Gold, Nevada – Management, evaluation of geology, data quality and assay QA/QC and NI 43-101 TRs to support mineral resource estimates for a volcanic-hosted gold deposit in Nevada.
- Yanacocha, Newmont, Peru – Provided geochemical support to the exploration and mine geology programs at the Yanacocha mine in northern Peru.



- Mesel and Batu Hijau, Newmont, Indonesia – Supported exploration and mine operations in Indonesia and exploration programs in the Philippines, China, and Myanmar.
- Carlin, Newmont, Nevada – Directed geochemical programs, database management, and assay QA/QC for exploration and mine operations in Nevada.

### Employment History

Mine Technical Services, Principal, 2016 to present  
Torex Gold, Director Geology Operations, 2014 to 2016  
AMEC, US Manager Consulting, 2009 to 2014  
AMEC, Principal Geologist, 2005 to 2008  
Covance Central Diagnostics, Software Developer, 2002 to 2004  
Independent Consultant, 1998 to 2000, 2001 to 2002  
Newmont, Geochemist / Senior Geochemist, 1989 to 1994, 1996 to 1998, 2000 to 2001  
Bolivar Goldfields, Senior Geochemist, 1994 to 1996  
Westmont Mining, Exploration Geologist/Geochemist, 1987 to 1989

### Education

Citation in Applied Geostatistics, University of Alberta, 2019  
M.Sc., Geology, Colorado School of Mines, 1989  
B.Sc., University of Redlands, 1986

### Computer Skills

MineSight  
VB.NET, SQL Server

### Professional Affiliations

Society of Mining Metallurgy and Exploration (SME), Registered Member  
Geological Society of Nevada, Member