

Margaret Podhorski, P.Eng.

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PROFESSIONAL SUMMARY

- With over 20 years of international operations and consulting experience focused on studies, Margaret is an expert in optimization of existing mining operations and evaluation of unrealized opportunities. She is skilled in the use of Whittle Optimizer and is proficient in both open pit and underground projects.
- In her previous appointment as Principal Mining Engineer with AMEC Foster Wheeler, she took leading mining roles in a variety of projects, at all levels of study, from scoping to feasibility, including complex tradeoff studies and expansion throughput analysis. She actively mentored junior staff and is comfortable directing other consultants.
- Her great strength is the application of innovative and alternative approaches as shown by her ability to step back and look at the broad picture. One of her main strengths is strategic planning. She enjoys analyzing projects at a high level and looking for 'better solutions'.
- Margaret has sound knowledge in other areas such as; data acquisition, database management, exploration drilling planning, geological modeling, geostatistical analysis, block modeling, mine planning; for both open pit and underground. She has full understanding of the implications of dilution and mining selectivity.
- Margaret utilizes the newest computer technology available to aid her tasks and stays abreast with new software developments. Her computer related programming and system analysis skills allow for quick assessment of new technology.
- Recognized as a Competent / Qualified Person as defined by NI 43-101, SME and the JORC code

PROFESSIONAL REGISTRATIONS

- Professional Engineer in BC, NU, Manitoba and NT, Canada
- Registered with the Australian Institute of Mining and Metallurgy (AusIMM)

EDUCATION

- Diploma, Computer Programming and Systems Analysis, Institute for Computer Studies, ON, Canada, 1992
- M.Sc., Mineral Processing, Technical University of Wroclaw, Poland, 1985
- B.Sc., Mining Engineering, Technical University of Wroclaw, Poland, 1983
- Courses in Whittle and open-pit design, project management, standards of disclosure for mineral projects, block modelling, and geostatistics

LANGUAGES

- English, Polish, Russian, Greek, Bulgarian, can communicate in several Slavic origin languages, basic Spanish

SOFTWARE CAPABILITIES

- GEMS, Surpac (both general mining software), MineSched (complete scheduling tool for open pit and underground projects/mines), Whittle (open pit optimization, scheduling and cutoff optimizer), including SIMO, Deswik – Scheduling software, Vulcan stope optimizer, Talpac – the cycle times calculator, Leapfrog Geo.

EMPLOYMENT HISTORY OVERVIEW

- AMEC, Principal Mining Engineer, 2005 to Oct 2015
- SRK Consulting, Associate Consultant, 2005
- Monterrico Metals, Consultant, 2005
- Navan Mining, Technical Services Engineer, 1999 to 2001
- TVX Gold, various roles, 1995 to 1999
- Placer Dome, Mining Software Engineer, 1994 to 1995
- Roscoe Postle Associates, Mining Software Engineer, 1994
- SE Malouf Consulting Geologists, Mining Software Engineer, 1991 to 1994
- Technical University of Wroclaw, Researcher, 1984 to 1985

EMPLOYMENT HISTORY

Principal Mining Engineer AMEC Americas, Vancouver, BC

2005 – 2015

Recent Projects

- Confidential: Review and audit of the mining portion of an NI 43-101 Technical Report on three operating underground nickel mines and three historic open pits, and Qualified Person for the mineral reserves and mine plan.
- Kryviy Rih, ArcelorMittal, Ukraine: Mining Lead for trade-off studies, throughput analysis, and the prefeasibility study of expanding an operating iron-ore project.
- Michelin, Fronteer Development Group, NL, Canada: Determine of mineral resource constraints of a uranium deposit.
- Thunder Bay North, Magma Metals, ON, Canada: Mining lead for a scoping study and NI 43-101 Technical Report on an underground/open-pit ultramafic platinum palladium-copper-nickel project.
- Hackett River, Sabina Silver, NU, Canada: Creation of open-pit designs for the prefeasibility study of a project with three large-tonnage polymetallic massive sulphide deposits.
- Donlin Creek, Barrick, AK, USA: Throughput rationalization and pit design using Whittle and GEMS for a 45,000 t/d gold property.
- Kuriskova, Tournigan, Slovakia: Mine planning, cutoff calculations, conceptual mine access and other study work on a proposed underground uranium project.
- Jojay, Wescan Goldfields, SK, Canada: Reserve estimating for a proposed trackless underground gold mine.
- Harmony, Hunter-Dickenson, BC, Canada: Pit optimization for a proposed 10,000 t/d gold project.

- Gahcho Kué, De Beers, NT, Canada: Reserve optimization and model validation for an open-pit diamond project.
- Casposo, Intrepid Minerals, Argentina: Feasibility Study for a hybrid operation.

Associate Consultant SRK Consulting UK

May 2005 – Oct 2005

- Skouries Project, Greece
Produced the three-dimensional solid representing the extent of the deposit. Prepared a report on the mineral reserves for stopes for long hole open stoping mining method. Designed major underground development.
- Qualified Person (QP) Report on the mine in the Krivy Rog region of the Ukraine
Acted as a member of a multidisciplinary group that completed a technical review of the methodology used in the reserve calculations and mining method used to date.
Produced a technical visit report and assessed the operation.

Consultant Monterrico Metals

Peru April 2005

- Two-week site visit to Review the project database, including the methodology of data entry and data processing at site and incorporated it into the main database in the head office.
Produced two surfaces representing the mineralized zone of super gene ore. The surfaces were used as a guideline in geological interpretation.

Technical Services Engineer Navan Resources PLC

Chelopech Mine, Bulgaria Jan 1999 – Sep 2001

- Reporting directly to the Director of Mining. Prepared Resource/Reserve document for London Listing. Participated in compiling a 5-year mine plan for Chelopech. Reviewed and reconstructed the geological database structure. Initiated and led the re-modelling of the entire deposit resulting in the generation of grade and NSR models reconciling with production to less than 5% error. Presented Chelopech project to potential partners, stock brokers and auditors. Dealt with various external consultants. Assisted short term planning. Trained 5 geologists and mining engineers on various matters related to Mining software. Computerized reconciliation and block modelling are to a high –tech level in Chelopech now driven by local professionals. The grade Block model of the Chelopech deposit was the first to be approved by the Bulgarian Geological Committee.

Group Mining Software Engineer TVX Gold Inc.

Halkidiki, Greece Jan 1997 – Jan 1999

- Reporting directly to the Group Technical Services Engineer
- Orebody modelling, stope design, mining reserves, development designs for the Olympias polymetallic project Bankable Feasibility Study. Tailings dam, waste rock modelling, evaluation and design for the Olympias and Skouries Projects. Trained 10 local Geologists and Mining Engineers in the use of Gemcom Mining Software on two projects and one operating mine. Provided all technical support and problem solving. Evaluated other mining software packages – Vulcan and Surpac. Seconded to Kvaerner international to work on mining reserves and development planning.

- Visit and work report on mining data flow in El Teniente (block caving) mine.

Database Manager TVX Gold Inc.

Halkidiki, Greece Jun 1995 – Jan 1997

- Olympias/Skouries Gold Projects & Madem Lakkos/Mavres Petres Operating Polymetallic Sulphide Mines
- Manager geological database throughout TVX's extensive exploration programs for three prospective mining areas. Orebody modelling and mine design of ramps and associated mine development for Olympias and Madem Lakkos mines. Evaluation of arsenopyrite stockpile tonnage and grade.

Mining Software Engineer Placer Dome Exploration Ltd.

Vancouver, BC Jan 1994 – Jan 1995

- Managed data acquisition and compilation at the Vasilkovskoye Gold Project in Kazakhstan. Software used Gemcom and UNIX (MKS Tolls routines). Trained local Kazsakh geologists to use laptops in order to help with data acquisition. Assisted modelling of the Vasilkovskoye deposit.

Mining Software Engineer Roscoe Postle Associates

Toronto, ON 1994 – 1995

- Compilation of the Ontario drill hole database at the request of the Ontario Provincial Government.

Draught Person/Junior Engineer S.E. Malouf Consulting Geologists

Toronto, ON 1991 – 1994

- Completed composite assay plans for the San Sebastian Gold Mine, El Salvador. Prepared underground drill assay plans for various client properties. Responsible for the implementation of new software technology. Performed system analysis for software handling matters, related to the logistics of mineral and mining rights and claim staking.

Researcher Technical University of Wroclaw

Poland 1984 – 1985

- In conjunction with KGHM Polish Copper Mines, conducted metallurgical research at the University lab, the goal of the research was to separate black shale concentrate from the dolomite ore of the Rudna mine, one of KGHM Polish Copper Mines.