

ROSS C. BARKLEY, P.E.

Education

M.S., Geological Engineering, University of Arizona, 1982

M.S. Thesis: *Simulation of Surface Ground Motions Induced by Near Surface Blasts*

B.S., Geological Engineering, University of Arizona, 1979

Registration

Professional Engineer (Geological) P.E. #32171, Arizona

Affiliations

Society for Mining, Metallurgy, and Exploration, Inc.

Experience

- 2007–Present **Vice President, Call & Nicholas, Inc.**, Tucson, Arizona.
Principal of the firm. Manager of projects involving geotechnical engineering and geomechanics, specializing in slope stability of rock and soil slopes.
- 1995–2006 **Senior Geological Engineer, Call & Nicholas, Inc.**, Tucson, Arizona.
Consults on slope stability, underground stability, hydrology, and fragmentation. Responsible for managing projects, generating proposals, and performing engineering analyses.
- 1988–1995 **Geological Engineer, Call & Nicholas, Inc.**, Tucson, Arizona.
Project work includes hydrologic and slope stability analyses for pit slope design, slope remediation and dewatering feasibility studies, analyses of underground stability for proposed stoping operations, and blast vibration monitoring and damage criteria development for access tunnel blasting in Southwestern United States, Chile, and Indonesia.
- 1986–1988 **Associate Reservoir Engineer, Shell Offshore, Inc.**, New Orleans, Louisiana.
Duties included performing reservoir and geologic analyses to justify expenditures for wells and production facilities and to ensure that the reservoirs were produced in a manner to achieve the maximum return on investments. Attended Shell Technical Training Courses in reservoir, geological, production, facilities, petrophysical engineering, economic analysis and computer systems.
- 1983–1986 **Associate Production Engineer, Shell Offshore, Inc.**, New Orleans, Louisiana.
Responsible for surveillance of 200+ offshore oil and gas wells in the Gulf of Mexico. Duties included identifying re-completion and remedial workover candidates, writing safety and efficiency procedures for rig foreman, and forecasting capital expenditures.
- 1980–1982 **Research Assistant, University of Arizona**, Tucson, Arizona.
Responsible for developing a computer simulation of ground motions induced by quarry and surface coal mine blasts.

Publications

- Call, Richard D., Cicchini, Paul F., Ryan, Thomas M., and Barkley, Ross C., 2000, "Managing and Analyzing Overall Pit Slopes," in Hustrulid, W. A., McCarter, M. K., and Van Zyl, D. J. A., eds., *Slope Stability in Surface Mining*: Littleton, Colorado, Society for Mining, Metallurgy, and Exploration, Inc., p. 39-46.
- Call, Richard D., Ryan, Thomas M., and Barkley, Ross C., 1993, "Geotechnical Analyses for Open Pit Mining in Areas of Large-Scale Slope Instability," in Proceedings, International Congress on Mine Design, Kingston, Ontario, Canada: Rotterdam, Netherlands, A. A. Balkema, p. 45-56.
- Ghosh, Amitava, Barkley, Ross C., and Daemen, Jaak J. K., 1986, "Simulated Predictor of Ground Vibration Induced by Blasting," in Proceedings, 27th U.S. Symposium on Rock Mechanics, Tuscaloosa, Alabama: Society of Mining Engineers, Inc.