

**Luke Martin**

New Mexico Bureau of Geology & Mineral Resources  
New Mexico Tech  
801 Leroy Place  
Socorro NM 87801-4796

575-835-5283  
luke.martin@nmt.edu

**EDUCATION**

**Northern Arizona University**, Flagstaff, AZ

Master of Science, August 2005

Major: Geology

Thesis: Miocene stratigraphy and sedimentology in Longwell Ridges area and implications for extension, Lake Mead region, Nevada

**University of Arkansas**, Fayetteville, AR

Bachelor of Science, August 2002

Major: Geology

**PROFESSIONAL EXPERIENCE**

**Senior Petroleum Geologist**

*New Mexico Bureau of Geology and Mineral Resources, Socorro, NM*    *March 2020- Present*  
Currently serving as a senior petroleum geologist within the oil and gas program. Through research, education, and data management, my work contributes to the geological understanding of petroleum systems within New Mexico. Together with the staff of the NMBGMR oil and gas program, I also manage the New Mexico Subsurface Data, Core & Cuttings Libraries.

**Senior Geologist**

*Stephens Production Company, Ft. Smith, Arkansas*    *June 2015 – January 2020*  
Responsible for development of oil and gas properties. Areas of interest include Arkoma Basin, Oklahoma Midcontinent, East Texas, and North Louisiana. Duties include geologic mapping, development of field exploitation plans, geosteering of horizontal wells. Additional duties include prospect screening and providing geological input for lease and mineral acquisition opportunities.

**Geologic Development Manager**

*Stephens Production Company, Ft. Smith, Arkansas*    *July 2013 – June 2015*  
Manager of an active drilling program with as many as 4 drilling rigs, 5 geologists, and 2 geotechs. Drilled and participated in over 50 wells in 2014 in the Mississippian, Woodford, and Hunton horizontal plays of central Oklahoma. Additional duties include budgeting and planning, prospect screening, also provide geological input for lease and mineral acquisition opportunities.

**Senior Geologist**

*Stephens Production Company, Ft. Smith, Arkansas*

May 2011 – July 2013

Responsible for development of Arkoma Basin and Midcontinent oil and gas properties. Duties included regulatory support and operations geology. Worked closely with the engineering department to optimize fracture stimulation treatments.

**Field Geologic Manager**

*Southwestern Energy Company, Conway, Arkansas*

November 2008 – April 2011

Responsible for management of geologic operations staff drilling 500+ wells per year in the Fayetteville Shale. Duties include coordinating LWD logging with vendors, QA/QC of geosteering and wellsite geology, recruiting, training, and supervision of up to 30 full-time and consulting geologists.

**Operations Geologist**

*Southwestern Energy Company, Conway, Arkansas*

August 2006-November 2008

Member of operations team providing geologic support for horizontal drilling in the Fayetteville Shale. Duties included wellsite geology, landing and geosteering wells, real-time data QA/QC, and coordinating the electronic logging program.

**Geologist**

*ExxonMobil Development Company, Houston, Texas*

March 2006 – August 2006

Rotational assignment with the Gulf of Mexico, Louisiana Deep Gas group. Duties included interpretation of 3D seismic data (time & depth) and identification of potential exploration targets. Supervisor: Dr. Dwight Trainor

**Geologist**

*ExxonMobil Upstream Research Company, Houston, Texas*

July 2005–March 2006

Rotational assignment with the Reservoir Characterization Division. Duties included interpretation of 3D seismic and assistance with software development to study erosional connectivity in experimental, deep water, and fluvial siliciclastic systems. Supervisor: Dr. John Snedden

**Geology Field Camp Instructor**

*University of St. Thomas, multiple locations*

January 2005

Part of a team of instructors that taught geologic field methods to 13 undergraduate students in the Lake Mead region, Grand Canyon National Park, Zion National Park, and Death Valley National Park. Supervisors: Dr. Tom Hickson and Dr. Lisa Lamb

**Intern Petroleum Geologist,**

*Anadarko Petroleum, The Woodlands, Texas*

June 2004-September 2004

Worked as part of a team of exploration geologists and geophysicist working in the Delaware basin, west Texas. Was responsible for prospect evaluation and construction of regional cross sections that correlated producing fields to prospective areas within the Delaware basin. Supervisor: Dr. Lans Taylor

**Graduate Researcher and Teaching Assistant,**

*Northern Arizona University, Flagstaff, Arizona*

August 2002-May 2005

*Graduate Research:* My thesis focused on the Miocene Rainbow Gardens and Thumb Members of the Horse Spring Formation in the Lake Mead Region of Nevada. Using detailed mapping, measured sections, clast counts, and Ar<sup>40</sup> / Ar<sup>39</sup> age control, I was able to

reconstruct the formation and later dissection of an extensional basin. Committee: Dr. Paul Umhoefer (primary advisor), Dr. Earnie Duebendorfer, L. Sue Beard (USGS).

*Teaching Assistantship:* Organized and taught multiple laboratories, up to 20 students each, of Geologic Field Methods, General Geology and Geologic Disasters Laboratories.

### **OTHER EXPERIENCE**

#### **Roving Outdoor Conservation School Instructor**

*Philmont Scout Ranch, Cimarron, New Mexico*

May 2003-August 2003

Led groups of 16-20 year old students through a three week program during which they learned many aspects of ecology and conservation of resources. Lessons included geology, botany, dendrology, animal study, "Leave No Trace" outdoor ethics, and trail building, which were taught during 21 day, 150 mile treks at Philmont Scout Ranch.

### **ABSTRACTS AND PUBLICATIONS**

Lamb, M., **Martin, K.**, Hickson, T., Umhoefer, P. and Eaton, L., 2010, Deposition and age of the lower Horse Spring Formation in the Longwell Ridges Area, southern Nevada, *in* Umhoefer, P., Lamb, M., and Beard, L.S., eds. Miocene Tectonics of the Lake Mead Region: Geology Society of America Special Paper 463, 441 p.

**Martin, K.**, Umhoefer, P., Beard, S., Lamb, M., Hickson, and T., Blythe, N., 2005, Constraints on complex Miocene deformational history of the Lake Mead area using detailed basin analysis: Tectonic implications of new data from the east and west Longwell Ridge area, Bitter Spring quad, NV: Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 229.

Beard, S., **Martin, K.**, and Duebendorfer, E., 2005, Evaluating tectonic reconstructions for the Lake Mead Region, Nevada-Arizona: Insights from stratigraphic studies: Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 229.

### **PROFESSIONAL MEMBERSHIPS**

Geological Society of America

American Association of Petroleum Geologists

### **AWARDS**

Graduate Assistantship, Northern Arizona University (August 2002-May 2004)

Best Teaching Assistant Award, Northern Arizona University (December 2003)

Geologic Society of America Research Grant (April 2003)

Member, Sigma Gamma Epsilon, National Earth Science Honor Society (March 2001-May 2002)

Legacy Scholarship, University of Arkansas (August 1998-May 2002)

Eagle Scout, Boy Scouts of America, Troop 173, Tulsa, OK (November 1995)