RONALD N. McGINNIS, JR.
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M.S., Geology, University of Texas at San Antonio, 2005
B.S., Geology, University of Texas at San Antonio, 2002

Mr. McGinnis is a structural geologist whose research has included quantitative and qualitative analyses of the origins of structural geologic and tectonic features occurring in the French Alps, the flood basalts of Southern Idaho, the Basin and Range Province of the western United States, the northern Rocky Mountains, the Ouachita and Laramide orogenies of west Texas, the Balcones fault system of central Texas, and the Devils River Trend and Maverick Basin of central and south Texas. His work includes structural geological analysis of groundwater aquifers, characterization of faulted and fractured hydrocarbon reservoirs, seismic interpretation, and cross-section construction through structurally complex hydrocarbon reservoirs and groundwater aquifers. In addition, Mr. McGinnis prepares and teaches training courses for the energy industry. He is currently investigating mechanical stratigraphy and the control it has on natural deformation features, which affect hydraulic fracturing programs in unconventional reservoirs.

Mr. McGinnis also conducts geophysical surveys for the purpose of understanding the subsurface geology. These investigations support a wide range of purposes, including general site characterization, assessment of the presence and risk of caves and underground conduits, karst hydrology, structural geological controls on petroleum resources, the presence and evolution of permafrost conditions, and planetary science. Study sites include the Edwards and Barton Springs aquifer systems of Texas; mesas of the western desert of Egypt; karst features on the island of Barbados; fluvial deposits of sand and gravel aggregate resources in Arkansas, Louisiana, and Texas; the Bishop Tuff sequence in California; aeolian dunes in the Alaskan arctic; and permafrost distribution in southeastern Alaska. Mr. McGinnis uses a wide-range of surveying techniques for stratigraphic, hydrogeologic, geophysical, and structural mapping. These include real-time kinematic differential GPS, geodetic GPS, total station, and ground based spatial scanning. He is proficient in the use of Res2/3dinv, EarthImager™, Surfer®, ArcGIS, Lithotect, PETREL, and Trimble RealWorks to create and visualize 2D and 3D models of geologic systems.

PUBLICATIONS: Mr. McGinnis has co-authored 25 peer reviewed technical articles and 45 published abstracts.

PROFESSIONAL CHRONOLOGY: Southwest Research Institute: 2002-[graduate student scientist, 2002–5; scientist, 2005–7; research scientist, 2011; senior research scientist, 2011-present].

MEMBERSHIPS: American Association of Petroleum Geoscientists

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