David F. Martinez

ITASCA

Petroleum and Geomechanical Engineering

Expertise	Petroleum Engineering, Geomechanics, Numerical Modeling
Education	Ph.D. Candidate (Petroleum Engineering), 2010 M.Sc. (Petroleum Engineering), 2005 University of Oklahoma, Norman, Oklahoma
	B.S.C.E. (Petroleum Engineering), 1999 Industrial University of Santander (UIS), Bucaramanga, Columbia

Professional Experience

2008- Present	*Itasca Houston, Inc., Houston, Texas* *Intern and Geomechanics Engineer*
2005 – 2008	*University of Oklahoma, Mewbourne School of Petroleum and Geological Engineering, Graduate Research Assistant*
2007	*GeoMechanics International (G.M.I.), Houston, Texas* *Intern*
2001 - 2004	*Well Construction Technology Center, University of Oklahoma* *Graduate Research Assistant*
2001-2002	*Noble Drilling Services, Sugar Land, Texas* *Intern*

Project Experience

Geomechanical Modeling: Assessed pore pressure and in-situ stresses geomechanical analysis to model wellbore stability, and hydraulic fracturing. Led the construction of a software tool to estimate maximum horizontal stresses from wellbore failure features (breakouts, drilling induced fractures). Conducted Discrete Element Modeling (DEM) of the micromechanics of unconsolidated formations including fluid flow and performed wellbore stability analysis, stress determination, fault leakage, stress contrast and sanding prediction.

Drilling engineering: Contributed to the design of software tools for predicting the hydraulics of Coiled Tubing operations. Assistance in a joint venture project with Noble Drilling to develop a system for detecting the onset of abnormal drilling trends, including training with Noble Drilling on an offshore drilling rig.