Kevin Searles is a Wells Advisor for ExxonMobil Technology and Engineering Company. He has 35 years of experience in computational geomechanics, mechanics of materials and finite element analysis. Over the past two decades, he led research initiatives to apply computational mechanics to business challenges from basin-to-well. He also led a multi-year joint development program to commercialize new multiphysics simulation capabilities in Abaqus for O&G industry applications. He has a number of patents and publications on numerical methods and processes for multiscale geomechanics modeling, fluid injection, subsurface stress prediction and seismic hazard analysis.