The 1st ARMA Hydraulic Fracturing Workshop Agenda

8:00 - 8:15 Opening Mark: TCHF Overview

8:15 - 10:15 Session I: Fracture Initiation

Chair: Hari Viswanathan

Overview of Fracture Initiation

Bob Barree (Barree and Associates): Consideration of Breakdown Conditions of Directional Wells Esteban Rougier (Sandia National Lab): FDEM analysis of Borehole Fracture Initiation Processes Robert Gracie (U of Waterloo): Self-consistent in Fracture Simulation: Initiation, Propagation, and Material Models

Group Discussions (led by Maurice Dusseault)

10:15 - 10:30 Coffee Break

10:30 - 12:30 Session II: Fracture Propagation

Chair: Xiaowei Weng

Overview of Fracture Propagation

Mark Mack (Itasca): The effects of stress changes and natural fractures on hydraulic fracture interactions

Ahmad Ghassemi (Oklahoma University): Impact of fracture interactions, rock anisotropy and heterogeneity on hydraulic fracturing - Some insights from numerical simulations Jon Olson (UT Austin): Hydraulic fracture complexity: what do we know and where are we going? Group Discussions (led by Sau-Wai Wong)

12:30 - 13:30 Lunch Break

13:30 - 15:30 Session III: Fracture Closure

Chair: Joe Morris

Overview of Fracture Closure

Dave Cramer (ConocoPhillips): Reexamining DFIT interpretation methods for determining in-situ stress Joe Morris (Livermore): Mechanics of proppant-formation interactions during fracture closure Alexei Savitski (Shell): Influence of near wellbore tortuosity upon pump-in/flowback test interpretation Ahmed Abou-Sayed (Advantek): Advanced insights into the process of multiple fracturing of horizontal wells and well response

Group Discussions (led by Neal Nagel)

15:30 - 16:00 Conclusions

Gang Han