



FRAC ACADEMY™

LINKING FRACTURING TO RESERVOIR ENGINEERING

DISCOVER HOW TIME AND ROCK-FLUID INTERACTION IMPACT WELL PRODUCTION AND HYDROCARBON RECOVERY

- Increase hydrocarbon recovery by understanding rock-fluid interactions under different hydraulic fracturing scenarios.
- Reduce completion and treating costs by controlling design parameters based on the understanding of rock-fluid properties.
- Model lab results to estimate the extent of fluid imbibition during soaktime and its impact on well performance.

Trican, industry and academic partners are looking for your involvement and contribution to solve some fundamental problems in the hydraulic stimulation of unconventional reservoirs to improve Estimated Ultimate Recovery (EUR).

Objective

The objective of the Frac Academy™ is to increase hydrocarbon recovery and reduce completion and treating costs. This will be done by controlling design parameters based on an increased understanding of hydraulic fracture practices and the dynamics of flowback fluid behavior. The Academy will use geological lab analysis, and chemical and reservoir engineering practices integrated with geomechanical concepts to estimate the extent of fluid imbibition during soak time and its impact on well performance.

We are kicking off this project in Q1 2015 to take a multidisciplinary approach to understanding these complex interactions. The goal is to recognize which controllable variables we need to pay attention to and when, based on an understanding of measurable fluid and rock properties. The results of data analysis and modeling will provide an understanding of when it might be detrimental or advantageous to have an extended shut-in period, as well as how to flow the well back.

Deliverables

Three months

- Collect, summarize and correlate all available treatment and production results from publicly reported and contributed wells
- Couple reserve estimates to the frac/production database

Six months

- Summarize the preliminary results of the geomechanical and geochemical lab analysis
- Provide a common approach for well performance to benchmark individual wells and operators under different operating conditions

One year

- Provide detailed results of the geotechnical testing specific to each customer's wells and correlate to production results
- Provide specific recommendations for operational enhancements for each customer based on findings to date
- Facilitate a focused workshop on the results with all participants and provide the opportunity to guide investigation in year two of the program

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