December 2019 - CSUR Members' Technical Luncheon

Thursday, December 12, 2019

PRESENTATION: The Montney Formation: The Gift that Keeps on Giving – But how can we Maximize that Gift to Keep on Giving?

The Montney Formation has been the backbone of the Canadian oil and gas market for the last decade and has many more decades of life in it – if we start to think unconventionally. What that statement means is that in some respects we are treating the Montney Formation like a conventional play. Yes, we have optimized lateral length, we frac those laterals with optimal proppant types and tonnage, we are somewhat cognizant of perf and cluster spacing – all unconventional means to increase and maximize the stimulated rock volume. So why are we seeing steep decline curves, the need to increase infill drilling to maintain production and the resultant parent-child relationship issues? These are not uncommon issues across the unconventional plays globally, in fact, it's an epidemic everywhere. So what are we doing wrong? The short answer to this question is that we are producing these reservoirs like they are conventional plays. This presentation will describe some ways how we can maximize and increase the stimulated rock volume by switching to an unconventional mindset. Discussion points include a brief look at 'soaking' in the Montney - where the water is coming from? What is the benefit of 'soaking'? Is 'soaking' beneficial across the entire fairway? The presentation will also dive into specific testing that illustrates the pressure dependent nature of the Montney Formation and the effect it has on production rates and the overall stimulated rock volume.

PRESENTER: Carolyn Currie, Core Laboratories

Carolyn Currie's primary position as senior geologist and project lead has included work on various unconventional plays in North America and globally including Duvernay, Montney, Wilrich, Eagleford, Marcellus, Midland Basin and Deep-Water Mozambique. She currently serves as the Manager of Geology and Integrated Studies, leading such projects as the Duvernay, Montney and Wilrich/Spirit River consortia studies in the Canadian office. Throughout her time at Core Laboratories and previous projects (including her master's project), she had logged, described, interpreted and integrated 500+ cores ranging from unconventional shales, tight sand formations, deep water sandstones, heavy oil/oil sand cores.