April 25, 2019

"Physics Driving Chemistry

Optimizing Production and Lowering Operating Expenses"

Abstract

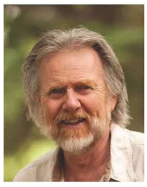
For many decades, the oil and gas industry has struggled to deal with production problems related to paraffin, asphaltene, scale, heavy oil, and emulsion. The industry has long searched for new solutions. Revelant's EnercatTM tool addresses these problems in an entirely new way that reduces and usually prevents downhole paraffin crystallization, asphaltene flocculation, scale deposition, and heavy oil's increase in viscosity. Also, the Enercat™ has shown promising results when dealing with emulsions and scale at the surface. More than 4,000 tools have been installed in diverse geological and reservoir conditions in 23 countries around the world with consistent success, but have not been widely offered in the lower US 48 until 2018-2019.

The purpose of this talk is to present examples of the successful application of this tool and how it significantly improved the profitability of the client's bottom line. Case histories from states such as KS, OK, TX, NM, and IL, (developing data from CO, and WY) with photos of before and after Enercat™ installation will be shown in addition to production and analytical data. You will see, how the tool solved the problems of paraffin, asphaltene, scale, heavy oil viscosity, and emulsions by decreased operating expenses such as workover and chemical costs, increasing HS&E benefits and how it stabilized, and in some cases increased production - together increasing profitability for the client.

Our Presenter

Monte Swan

Chief Scientist Revelant



Monte is the Chief Scientist for Revelant and is working with CSU in Fort Collins through a research partnership developing the downhole Enercat™ tool, which has a disruptive economic and positive environmental impact on oil production and water. He is also currently a technical advisor and co-discover of a peraluminous gold belt in Colorado for Zephyr Minerals. Monte co-founded MagmaChem, a research and exploration consulting company that developed risk-lowering mineral exploration technologies. This work was funded at the $165 million level and resulted in the discovery of 20 metal deposits and 1 geothermal system on 3 continents, totaling more than $65 billion worth of copper, gold, zinc, and silver. In 2001, the technology was applied to petroleum. Funding by Noble, Statoil, and Det Norske, resulted in the

identification of a first-order Earth process that has been applied to 200 case studies and resulted in the founding of the UltraDeep Hydrothermal Institute in 2006. Monte earned his BSc degree in Geological Engineering from Michigan Technological University and MSc degree in Geology from the University of Arizona. He began his career as a geologist for Kennecott's Geological Research Group.