



CSPG International Division

The Llanos Basin's Heavy Oil fields: A challenging and important player in the oil production of Colombia.

Speakers: Lino Castillo and Oscar Valbuena

Date: Wednesday, June 8th, 2022 | 12:00am – 1:00pm (MST)

Location: *Virtual*

ABSTRACT

Colombia is the third oil producer in Latin America, with current gross production of about 800.000 bopd. The Llanos Basin is the biggest and most important one in the country, being responsible for approximately 75% of the total oil production, mainly from heavy oil fields like Rubiales, Quifa, Castilla, and Chichimene, among others, having a crucial impact with around 50% of the Basin production. Developing these fields is challenging; for instance, one of the challenges is the well-placement and construction of the lateral section of horizontal wells in a multi-stacked unconsolidated sand oil reservoir, deposited in a fluvial - estuarine environment where thin-bedded units affect the performance. That scenario represents a complex geological condition impacting the production behavior of the wells and the project's economies. This talk will describe general aspects of some heavy oil fields in the country and critical factors identified during the early and advanced levels of field developments for Frontera Energy's assets. Finally, a short description of the lessons learned from this process will be carried out.

BIOGRAPHY



Lino Castillo is a Senior Geologist at Frontera Energy with over 20 years of experience in Oil & Gas exploration and reservoir development. Mr. Castillo is a geologist with a master's degree in Earth Sciences at Universidad Simon Bolivar, Venezuela. In 2001, he started his career in PDVSA as an exploration geologist. Later, he worked for Universidad de Oriente and Halliburton. Since 2014, he has been carried out different senior roles in Colombia, demonstrating substantial experience in petroleum system analysis, sedimentology, unconventional gas reservoirs, and horizontal-well drilling. Currently, he works for Frontera Energy's technical support team in several Colombian and Ecuador fields.



Oscar Humberto Valbuena is Director of Field Development Technical Support and Reserves Management at Frontera Energy with over 28 years of experience in the Exploration and Production sector (Technical and Senior Manager), in roles mainly related to integrated assets evaluation & full-field development; reservoir engineering, and reservoir management; reserves management, evaluation and reporting, and reservoir characterization and modeling. Mr. Valbuena is a Petroleum Engineer, with a Financial Specialization, an MSc in Petroleum Engineering, and an MBA with specialization in Oil and Gas Management.