

# **June 2023 – A Comparative Review of Alberta Montney and Duvernay Resource Plays**

The Montney and Duvernay plays are considered the premiere resource plays in Alberta and will continue to be for the near future. They stack up very well against other unconventional resource plays in North America. The objective of the presentation was to compare & contrast them against each other, explore their individual attributes and to compare them against other Alberta plays. Jared Wynveen (P.Eng.), Executive Vice President at McDaniel and Associates, was on hand to elaborate using an interesting (& humorous) approach.

Prior to the above presentation, Stuart Torr, CEO – Integrated Sustainability and CSEE Director, was invited to provide a brief overview of CSEE's latest initiative, The Energy Ambassadors Program. The objective of this program is to provide a platform and opportunity for the emerging leaders of the energy industry to navigate, and potentially dictate, the energy transition narrative. The goals of this program are to empower the group, provide them with the opportunity to develop and refine their soft skills, and for them to document and deliver practical solutions to the issues and challenges facing the energy industry today.

For the keynote presentation, the speaker provided a brief background of the analysis he was about to present. He indicated that his company likes to utilize analogies to view data. In this case, they decided to use various makes & models of automobiles to illustrate their findings. In classifying production from different classes of assets in Alberta, the following was used to define the categories:

1. Conventional production was assigned with the monicker “Ford” – dependable, with steady production.
2. Unconventional shale / tight oil & gas production was classified as “Ferrari” – fast and short-term, requiring lots of maintenance and attention.
3. Production from the oilsands was nicknamed the “Freightliner” – takes a while to get going but comes with stable, long-term performance.

Given the dynamic nature of the industry, Jared pointed to several top tier companies that have a “3-car garage” allowing them to be able to leverage fluctuations in commodity prices. Over the past number of years, a well-structured portfolio, with assets in each of the above categories, was able to generate significant free cash flow for these companies. Since 2000, Ferrari production has compensated for the declining Ford production, while at the same time, the Freightliner output has been on a steady incline. From a number's perspective, Alberta's total production has grown from 5.3 MMBOE/D in 2,000 to 8.3 MMBOE/D by the end of 2021, with primarily the Freightliner's contribution accounting for the increment.

Looking at only natural gas production profiles for the same time frame (2000 to 2021), it has been dominated by shale and tight gas production, accounting for almost 70% of the total volumes currently. Since 2015 and in terms of news headliners or stars of the show, production from the Deep Basin Cretaceous group (termed Ford Mustang) has had a flat profile at 530 MBOE/D with a liquid content of <2%. The Ferrari F40 production profile since 2015 has grown to 2,000 MBOE/D with a liquid content of 18% and the Duvernay production (labelled Porsche 911) has steadily increased to 190 MBOE/D with a

significant liquid content of 47%. The speaker indicated that the Duvernay really has had a slow start (compared to the Montney) and was under-emphasized due to the missing liquids numbers. However, the Porsche 911 is gaining on its flashy Ferrari F40 counterpart and may win overall.

In summary, the Montney and the Duvernay plays are true stars in Alberta, with little to distinguish them from each other at first glance. However, to maintain their momentum, both the Ferrari F40 (Montney) and the Porsche 911 (Duvernay) require a lot of maintenance (tighter spacing) in comparison to the Ford or the Freightliner. The F40 may take off faster (high IPs), but the 911 may go further in its run (lower decline & higher EUR). Although both plays have significant remaining inventory, the Montney has a greater inventory level overall given its geographical extent (including into BC) and thickness (with multiple horizons). As such, it will continue to be Canada's biggest headliner for years to come.

Finally, Jared alluded to a new Ford model, the F350 Turbo Diesel, which they chose to represent the Clearwater formation. This play has seen significant growth in the past 5 years with its low cost, low decline, and steady performance. The Clearwater is a shallow heavy oil play, which recently surpassed 100 MBBL/D. It now ranks at #3 behind the oilsands and the Montney for overall production volumes. Only time will tell how this model will fare and evolve with technology!