

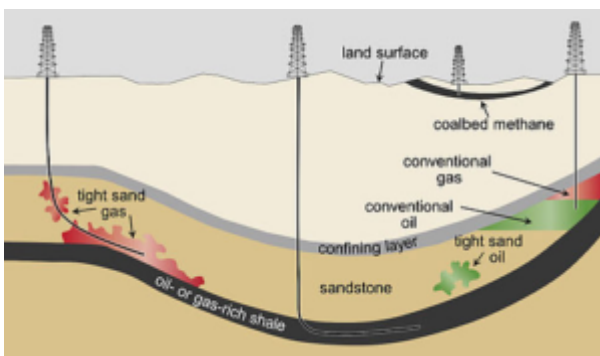
# Tight oil

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**In news**– Recently, Cairn Oil & Gas has announced that it is partnering with US-based Halliburton to start shale (Tight Oil) exploration in the Lower Barmer Hill formation, Western Rajasthan.

## **About Tight oil**–

- Tight oil, **also known as shale oil, shale-hosted oil or light tight oil**, is light crude oil **contained in petroleum-bearing formations of low permeability**, often shale or tight sandstone.
- However, tight oil should not be confused with oil shale (shale rich in kerogen) or [shale oil](#) (oil produced from oil shales).



- The key difference between shale oil and conventional crude is that the **former is found in smaller batches**, and deeper than conventional crude deposits.
- **Its extraction requires creation of fractures in oil and gas rich shale** to release hydrocarbons through a process **called hydraulic fracking**.
- However, tight oil is processed into gasoline, diesel, and jet fuels– just like conventional oil.
- **Russia and the US are among the largest shale oil producers in the world**, with a surge in shale oil production in the US having played a key role in turning the country from an importer of crude to a net exporter in 2019.

## **Current status of shale oil exploration in India-**

- Currently, there is no large-scale commercial production of shale oil and gas in India.
- Though ONGC's assessment found prospects of shale oil at the Cambay basin in Gujarat and the Krishna Godavari basin in Andhra Pradesh, the quantity of oil flow observed in these basins did not indicate commerciality.