

Hydraulic Fracturing for Shale Gas in Nova Scotia FACTS

- The Department of Energy does not currently have any applications for the use of hydraulic fracturing of shales in Nova Scotia, nor are any anticipated this year.
- Hydraulic fracturing has occurred in the province before – three wells were hydraulically fractured in the Kennetcook area in 2007-2008 without incident.
- Nova Scotia will never be an Alberta or Oklahoma. The resource does not exist here to support an industry of that magnitude.
- Nova Scotia does have resource potential to support a strong onshore industry that can provide good jobs and spinoff benefits to rural communities. As an important source of revenue for the province, it can help pay for public programs, such as health care and infrastructure improvements.
- Oil and gas is critical to the global economy and central to our daily lives to fuel our cars, heat our homes and balance the intermittent nature of wind and tidal energy resources.
- Most issues attributed to hydraulic fracturing have been traced back to poor drilling practices rather than the fracture operation itself.
- Nova Scotia has rules and regulations designed to protect against poor drilling practices.
- Since the commercial application of hydraulic fracturing in the late 1940s, more than a million wellbores have been drilled and stimulated using hydraulic fracturing.
- Nova Scotia's geology is such that most freshwater aquifers are within 150 to 250 metres of the surface. Shale gas in Nova Scotia is generally drilled to a depth of between one to two kilometres below the surface.
- In Nova Scotia, regulations require any well being drilled to be cased in steel to ensure nothing put down the well or brought up the well can escape anywhere it is not intended. The steel casing is then encased in cement for additional protection of the aquifer.
- Oil and gas is available in the natural environment and can often be found at various depths depending on the geology. Cases have been reported of water wells containing methane in their drinking water. These water wells typically have several reasons for the methane that had nothing to do with oil and gas

operations. These water wells, when drilled, did not have adequate protection (ie: casing) in the well to isolate the well from the surrounding formations. These wells also drilled through coal seams which naturally have associated methane/gas.

- The Department of Environment has an important, independent role in reviewing applications for oil and gas activity in this province, including the use of hydraulic fracturing.
- The Department of Energy monitors what is happening in other jurisdictions and adopts the best industry practices as the standard for Nova Scotia.
- We will continue to learn from the experiences of other jurisdictions, like British Columbia, Alberta, Saskatchewan and Manitoba, where they have successfully managed the regulation of hydraulic fracturing. Close to half a million wells have been hydraulically fractured in these four provinces without any incidents noted.
- The Government of Quebec has placed a moratorium on future applications for the use of hydraulic fracturing. Quebec has 31 wells currently approved and in the process of being hydraulically fractured. Nova Scotia has none.
- New Brunswick has not implemented a moratorium based on the belief that it would take three to four years to develop a major hydraulic fracturing development in New Brunswick. This gives the province time to ensure proper processes are in place.
- Prince Edward Island is monitoring this issue, but does not have any current projects so has not taken any action to date.
- Nova Scotia looks to places where they are doing things right to establish standards based on best practices.