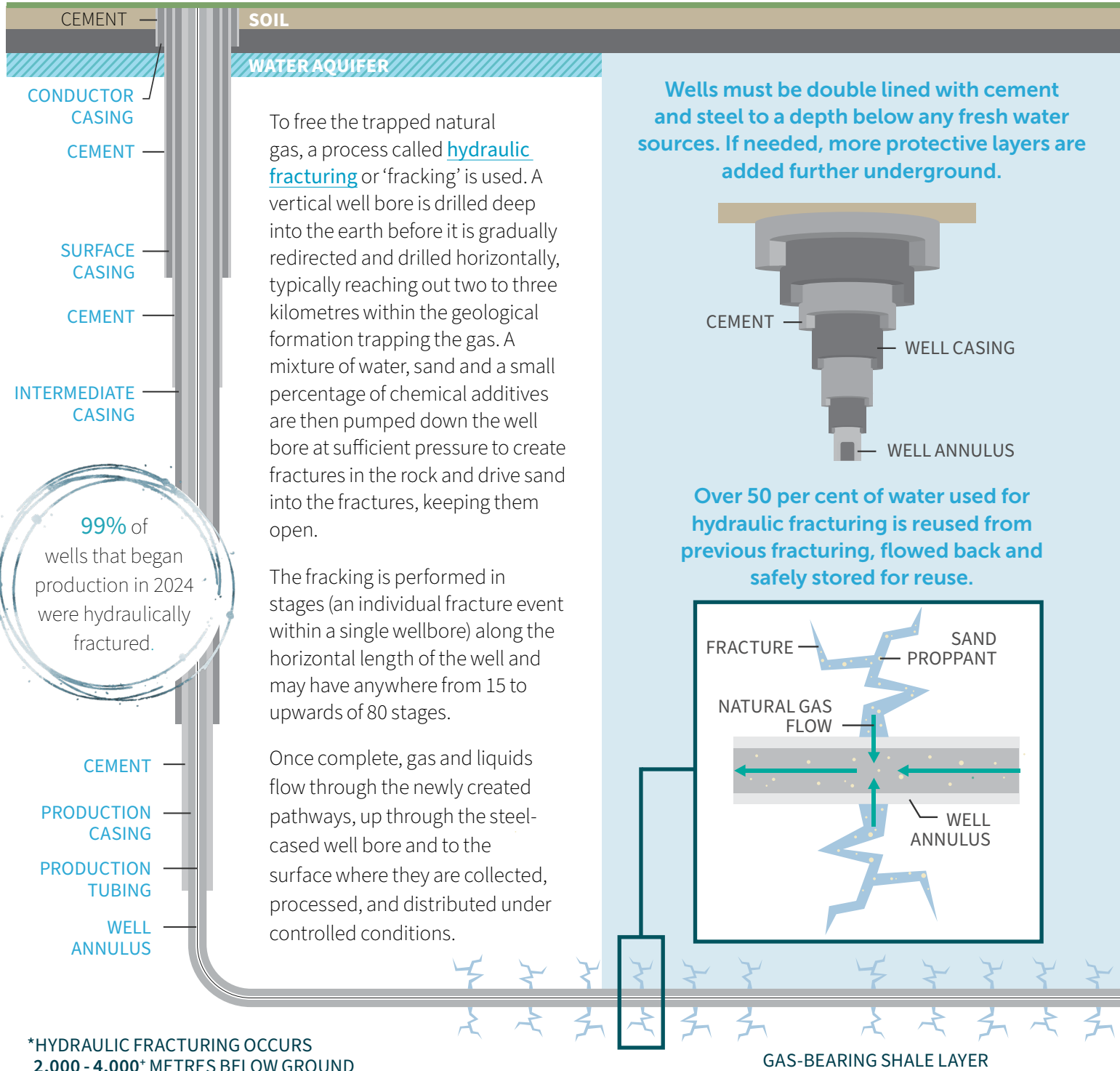


Hydraulic Fracturing

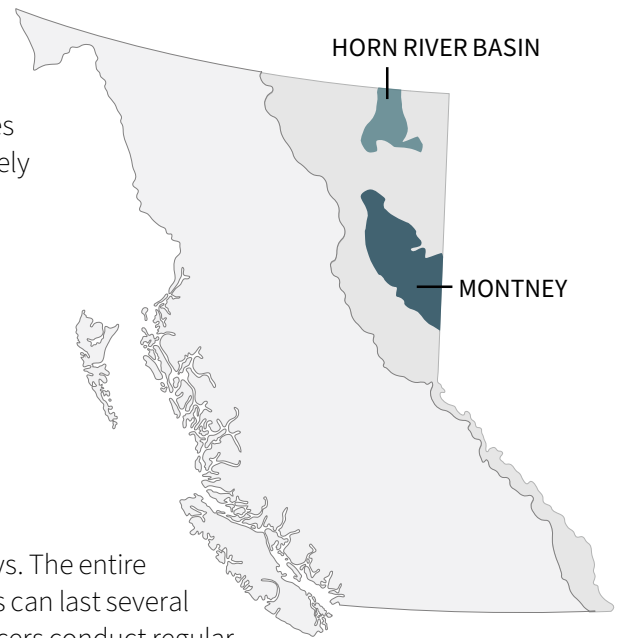
In B.C., natural gas is found deep underground in geological formations, in some cases as deep as four kilometres, and beneath several impermeable layers of rock.





Where does hydraulic fracturing happen in B.C.?

The most active unconventional gas play in the province continues to be the Montney located in northeast B.C., covering approximately three million hectares northwest from the B.C. – Alberta border.



Why is hydraulic fracturing used?

Currently, hydraulic fracturing is the only available technology allowing the economic recovery of natural gas from low permeability geological formations deep underground. The majority of wells drilled in B.C. produce natural gas and associated hydrocarbons and are fracked.

How long does it take to ‘frack’ a well?

Typically, the hydraulic fracturing process on a well lasts one to three days. The entire process for both preparation and testing following the fracturing process can last several weeks. Throughout the process, BCER compliance and enforcement officers conduct regular inspections to make sure companies are following all requirements. If we find a company isn’t complying, we carry out appropriate actions and share the results on our [Compliance & Enforcement](#) page.

How do we protect the environment?

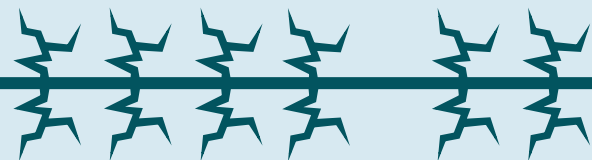
BCER is committed to protecting and conserving our province’s air quality and natural resources. We undertake detailed well application reviews that include thorough environmental, Indigenous Nations and public safety considerations. We enforce strict requirements for testing and monitoring [methane emissions](#) during all phases of operations to limit air discharges to the environment from energy resource activities.

Before approving water use for hydraulic fracturing, we ensure there is enough water supply for community needs and environmental flows for fish and other aquatic animals. Through mandatory water use reporting by operators, and by utilizing the public-facing water monitoring tools at [bc-er.ca](#), our hydrology experts track water use and availability and act quickly to suspend water withdrawals in times of drought, prioritizing environmental and community needs.

As hydraulic fracturing technology advances, the regulations overseeing it are reviewed to ensure appropriate oversight and data collection to foster improvements.

Our post-secondary partnerships, such as with UBC and UNBC, allow us to address key aspects of natural gas development including cementing and fracture propagation, assessments of groundwater sampling, impact on water quality and community readiness.

We are a leader in the detection and mitigation of [induced seismicity](#). New regulations and orders have resulted from BCER-led studies, which include shutting down operations if seismic activity reaches a certain threshold. We continue to work with industry, academia, and other agencies on ongoing research in this field.



Fracturing Fluid Storage, Reuse and Disposal

It is against the law in B.C. to release hydraulic fracturing fluid to the surface environment. Strict laws are in place for the storage and disposal of fracturing fluids; they are only authorized for disposal by deep well injection at wells we have reviewed and approved for disposal. More information on storage and disposal is available at [bc-er.ca](#).

