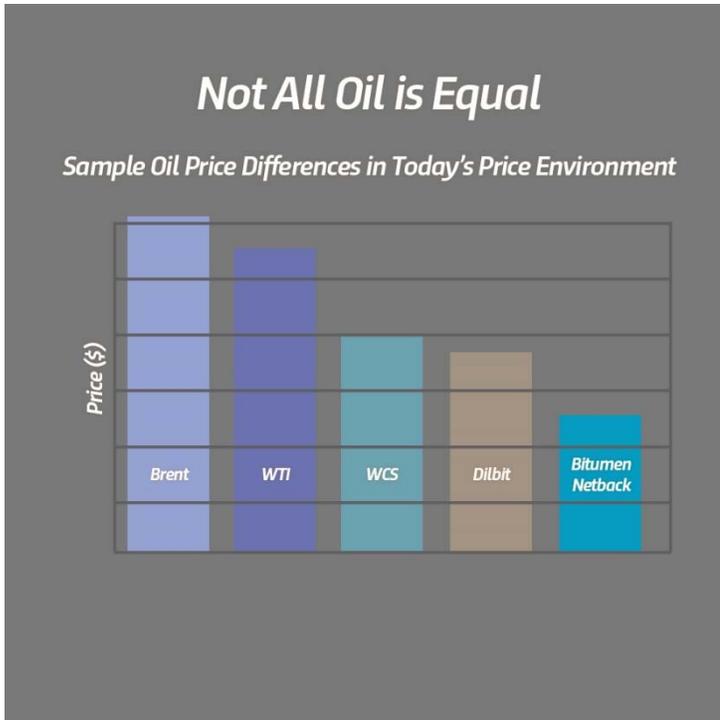




# NOT ALL OIL IS EQUAL: EXPLAINING PRICE DIFFERENCES



You've probably heard people quote the price of "West Texas Intermediate" or "Brent" oil in news or business reports. Although these price benchmarks have significance in oil markets, it may surprise you to learn that Alberta does not receive these prices for its oil.

This is because not all oil is equal. The price a producer receives for a barrel of oil depends on the type of oil, where it's produced, and where it is purchased.

We've previously discussed how there are different types of oil. Lighter oils generally receive higher prices than heavier oils, because they are easier (and cheaper) to process in refineries.

Where the oil is produced geographically also matters, because it needs to be transported from its point of production to a refinery. This impacts the price received for the oil.

As a starting point, let's look at "Brent" oil — a global benchmark used by oil markets. Its name

refers to oil fields in the European North Sea, where it originates. However, many oils produced in the Middle East, Africa and Europe, all trade in relation to Brent oil.

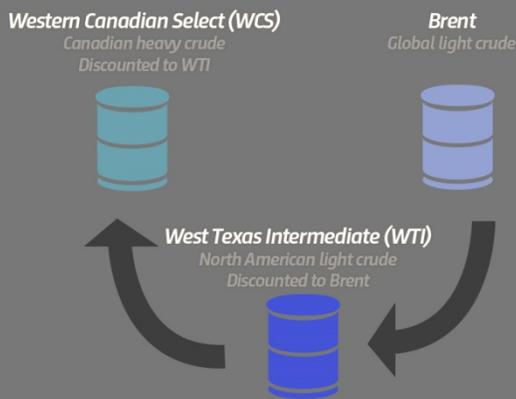
Because it has easy access to coastal ports (e.g., extensive pipelines to the coast), Brent oil can move easily to customers around the world. (Brent oil is even imported by some refineries in the U.S. and Canada.) Because it is inexpensive to move oil in large tankers the price is fairly similar anywhere tankers can load or unload. As a light, sweet oil that can be widely transported, Brent oil currently receives some of the highest prices.

"West Texas Intermediate" (WTI) oil is another benchmark used by oil markets, representing oil produced in the U.S. It is based on oil at a large tank and pipeline hub in Cushing, Oklahoma.

Like Brent oil, WTI is priced as a light oil, but it doesn't have the same global reach. One reason is that, with few exceptions, the U.S. prohibits the export of crude oil. Another reason is that WTI supplies are produced in landlocked areas, and nowadays need to be transported to the coast, where most refineries are located. Because of growth in U.S. oil production, there's a glut of oil supply in the U.S. midwest. So WTI now trades at a price "discount" to Brent oil.

Brent and WTI set the stage for prices that Alberta producers receive for their oil products.

## Global and US oil price benchmarks set the stage for Alberta prices



The complex relationship between different crude oil benchmarks reflects crude oil quality, transportation, and access to markets.

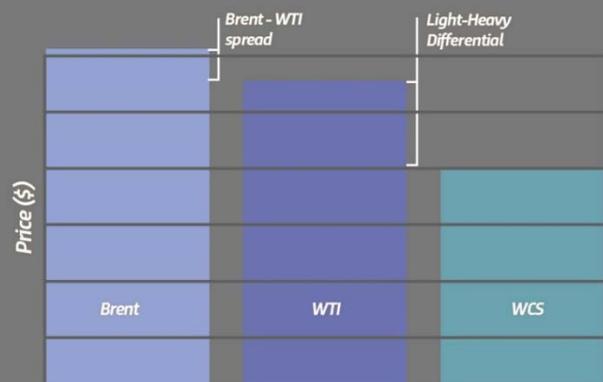
An important benchmark price in Canada is known as Western Canada Select (WCS). WCS represents a stream of conventional heavy (high viscosity) oil mixed with some blends of bitumen and diluents. Since the oil in WCS is much heavier than WTI (which is a light oil), and further away from main markets, WCS is priced at a further discount to WTI.

Other oil streams produced from the oil sands are also priced at a discount to WTI or WCS. Much of the oil produced from the oil sands is delivered to market in various blends of bitumen and diluents (which are used to help the bitumen flow in the pipeline). These blends are commonly called "dilbit".

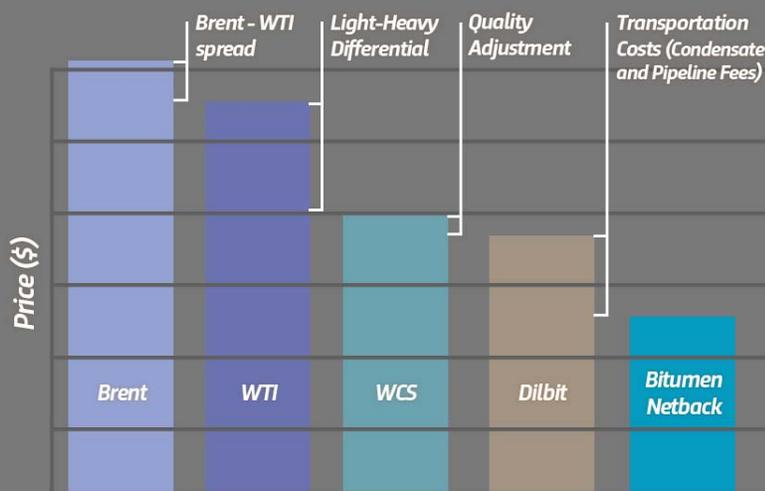
Since the share of bitumen it contains is higher, dilbit is generally heavier than WCS, and so dil-bit is priced at a discount to WCS.

To break down prices further, the theoretical price of bitumen is determined once you deduct the transportation costs. (This includes the diluent cost used to make the bitumen flow in the pipeline and the pipeline cost.) The resulting price is known as the "bitumen netback". Producers' revenues and royalties are based on the "bitumen netback" price.

## Sample Oil Price Differences in Today's Price Environment



### Sample Oil Price Differences in Today's Price Environment and Transportation Costs



What does this mean for the royalty framework?

Well, royalties are about Albertans (as owners) getting the value of our resources when they are produced and sold. The amount of value depends on the price we receive for our resources, and what it costs to produce and transport them.

The lower the prices we receive for our resources, the less value there is. And the prices we actually receive for our oil products are lower than the “Brent” and “WTI” prices typically quoted in business reports.

To some extent, these price discounts are unavoidable. The oil Alberta produces is simply of a lower quality than Brent or WTI, and is located further away from customers.

But it's also important to note that price discounts are impacted by Alberta's access to markets. The easier it is to move our oil to refineries around the world, the less the price discounts will be.

Source: Alberta Energy