

## **Lesson #4-A Short History of Petroleum in Canada**

With this lesson plan, students will learn how the oil industry has grown and changed over time.

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# **Black Gold: the Story of Oil**

## **Section Six**

**The History of Petroleum  
in Canada**

# Black gold: the story of oil

## Section 6: A Very Short History of Petroleum in Canada

**Purpose:**

Students will realize how the oil industry has grown and changed over the course of time.

**Materials:**

◆ Blackline Masters #36 to #38

**Procedure:****1. Review**

Have the students write down three problems that must be overcome when transporting oil by pipeline. Use a chart as follows. Then pass their papers to someone near them who will fill out a solution beside each problem.

**Transporting Oil by Pipeline**

Problems	Solutions

**2. Time Line**

Read the time line on Blackline Masters #36 and #37 as a whole class. Note points of interest to the students. Complete the timeline sequencing activity, as they cut the nine events and glue them onto Blackline Master #38.

## A Very Short History of Petroleum in Canada

Name \_\_\_\_\_

1854--The first oil company in Canada is formed to use the asphalt beds that were discovered in Ontario, on the north shore of Lake Erie.

1857--workers at the asphalt beds drilled for water, and accidentally drilled North America's first oil well!

1883--Railwaymen drilling for water near Medicine Hat found natural gas instead. The gas caught fire and burned the derrick.

1904--The discovery of the Medicine Hat gas sand made Medicine Hat the first city in Alberta to get natural gas service. It was described as *The City With All Hell for a Basement!*

1908--Calgary Brewing and Malting Company became the first customer to use natural gas in Calgary.

1914--Oil and gas were discovered at Turner Valley, SW of Calgary. In one day, more than 500 "oil companies" were formed. By 1917, there were just 17 oil companies.

1924--Alberta's most spectacular blowout, at Turner Valley, shot 2 km of pipe into the air. The well blew wild, the gas caught fire, and destroyed the rig. Fires blazed for 21 days.

1936--In Turner Valley, there weren't enough customers for all the gas, so natural gas burned all year round at *Hell's Half Acre*. The grass stayed green all year round, and some migrating birds spent the winter there.

World War II: The Americans wanted a safe supply of oil to Alaska, so a pipeline was built from Norman Wells in the Northwest Territories, to Whitehorse in the Yukon.

1946--Imperial Oil had drilled 133 dry holes in Alberta and Saskatchewan. They started drilling on November 20, on Mike Turta's farm 15 km northwest of Leduc.

1947, February 13--Leduc #1 started producing 155 cubic meters of oil a day.

1947, May 10--Leduc #2 hit a much bigger Devonian Reef.

1947 Imperial Oil started to build the town of Devon for its employees.

1948, March 6--Atlantic Leduc #3 blew out, and was out of control for 6 months. It eventually caught fire.

1948, Sept.9--Atlantic Leduc #3 is brought under control, with 160,000 cubic meters of river water pumped down the well. 180,000 cubic meters of oil had been lost during the blowout, but most of it is recovered in ditches and pools.

1950 (approx.) Imperial Oil bought the Whitehorse Refinery for \$1,000,000 and moved it to Edmonton, where it was put back together to handle oil from Leduc.

1948-1952: The success of the Leduc field led to other major discoveries, including:

- ◆ 1948--Redwater
- ◆ 1949--Golden Spike
- ◆ 1951--Wizard Lake, Fenn Big Valley, Bonnie Glen
- ◆ 1952--Westerose
- ◆ 1953--Pembina--the largest field in western Canada
- ◆ 1957--Swan Hills

1967: The Great Canadian Oil Sands Ltd. (Now known as Suncor) started to mine the Athabasca Oil Sands. These are among the largest deposits of petroleum in the world. Since the lighter oils had evaporated long ago, what's left is bitumen.

1979: Syncrude Canada also started to mine the oil sands. Every year, this one plant moves more earth material than the rest of the Canadian industry.

**Petro point:** bitumen is so thick and goeey, that it doesn't flow. It won't come up a drill pipe or flow through a pipeline. To get oil from the Athabasca Oil Sands, the earth is stripped away, and enormous machines dig up the bitumen-soaked sands. At the plant, the sand is mixed with hot water or steam so that the bitumen can be separated from the sand.

Make a timeline from 1850 to today. Cut these out and glue them beside the right year

Railwaymen find natural gas instead of water near Medicine Hat	Pembina oil field discovered	Athabasca oil sands starts development
Leduc #1	North America's first oil well	A pipeline is build from Norman Wells NWT to Whitehorse, Yukon
Medicine Hat gets natural gas	Blowout at Turner Valley	Leduc Atlantic #3 blows out