

Sidney Ells went on to work for the Great Canadian Oil Sands project as a senior advisor and was around to see the first Fort McMurray boom. He passed away in Victoria, British Columbia, in 1971.

Provincial Archives of Alberta, A12023

## History

Canadian geologist **Sidney Ells** dedicated his life to the study of the oil sands and convinced the Canadian government to grant a lease to American entrepreneur Max Ball. Ball and his associates formed Abasand Oils Ltd.

In 1930, **Max Ball** was granted a lease for an oil sands operation on the Horse River. On September 1, 1936, the Abasand Oils plant officially opened. It operated on a regular basis by 1941 and was producing 200 barrels a day. They drilled holes

in the oil sand, inserted blasting powder and set it off. The loose sand was loaded onto dump trucks and hauled to the separation plant.

In 1941, a fire broke out in the plant's powerhouse, destroying it. The plant was rebuilt with a greater capacity for operation. A second fire in 1945 completely destroyed the plant. Attempts to restart operations were unsuccessful.

## Timeline

- 1719** A Cree man, **Wa-pa-su**, brings oil sand to a Hudson Bay post.
- 1787** Explorer **Alexander MacKenzie** makes the first written account of oil sand in his journal.
- 1906** Private drilling occurs in the **Athabasca region** by various pioneers.
- 1927** **Robert Fitzsimmons** forms the International Bitumen Company and builds the first commercial oil sands plant at Bitumount.
- 1928** **Dr. Karl Clark** patents a hot water technique to separate bitumen from oil sands.
- 1930** **Max Ball**, of Abasand Oils Ltd. obtains a bituminous sands permit on properties at the Horse River.
- 1936** Official opening of **Abasand Oils Ltd.** At the time, the plant was not operational.
- 1941** Abasand Oil Ltd. is operating regularly until November 21 when the separation plant burns down.
- 1944** Reconstruction on Abasand is complete, operations recommence.
- 1945** June 16, a welder's torch ignites oil sand, destroying the entire plant. Operations are abandoned.
- 1967** Official opening of **Great Canadian Oil Sands Company** (now Suncor).
- 1978** Official opening of **Syncrude**.
- 2002** **Albian Sands** officially begins production at the Muskeg River Mine.

**Extraction** ~ Process of separating the bitumen from the oil sand.

**Oil sand** ~ A naturally occurring mixture of bitumen, water, sand, and clay.

**Oil sand lease** ~ A long-term agreement with the provincial government which permits the lease-holder to extract bitumen and other minerals contained in the oil sands within the specific lease area.

**Reclamation** ~ The process of returning excavated land back to its original, self-sustainable state.

## Glossary

**Barrel** ~ A common unit of measurement for crude oil. It equals 159 litres, 35 Imperial gallons, or 42 US gallons.

**Bitumen** ~ Petroleum that exists as a semi-solid or solid in natural deposits. It is the molasses-like substance which makes up 1%–18% of the oil sand.

**Coking** ~ A process used to break down heavy oil molecules into light ones by removing the carbon that remains as a residue called coke.

**Coke shill** ~ A furnace which uses coke (residue) as a fuel source.

## Nature's treasures

### Flora

Alfalfa  
Aspen Poplar  
Balsam Fir  
Birch  
Black Poplar  
Bluebell  
Cottonwood  
Cow Parsnip  
Dog Wood  
Gooseberry  
Honeysuckle  
Horse Tail  
Low Bush Cranberry  
Oak Fern  
Raspberry  
Red Currant  
Sandbar Willow  
Saskatoon Berry  
Stinging Nettle  
White Spruce  
Wild Rose  
Wild Strawberry

### Birds

American Crow  
American Robin  
Bald Eagle  
Black-Billed Magpie  
Blue Jay  
Boreal Chickadee  
Brewer's Blackbird  
Canada Goose  
Canada Warbler  
Common Raven  
Downy Woodpecker  
Fox Sparrow  
Gray Jay  
Gull  
Hairy Woodpecker  
Least Flycatcher  
Merlin  
Purple Finch  
Red-Tailed Hawk  
Ruffed Grouse  
Western Tanager  
Yellow Warbler

## What to bring when you go

- a partner
- bags and a spoon to scoop your own oil sand
- a bottle of water
- bug spray
- good hiking shoes/clothes
- a camera

The hike is about 1.5 hours long. Please be aware that the Abasand Trail into the Horse River Valley is quite steep and could be quite challenging for some people.

## Oil Sands Discovery Centre

515 MacKenzie Boulevard  
Fort McMurray, Alberta T9H 4X3  
(780) 743-7167

[www.oilsandsdiscovery.com](http://www.oilsandsdiscovery.com)

Alberta

# Abasand Oils Ltd.

Provincial Archives of Alberta, A203



## Self-guided historic walking tour and map

**Abasand Oils Ltd. is significant because it represents the rise and fall of a pioneering oil sands effort.**

It was the first oil sands plant to pipe a refined product.

At its peak, Abasand Oils Ltd. had 150 employees and produced 500 barrels of bitumen per day. Although these numbers are very small compared to companies today, the plant was a pioneer of its time and will not be forgotten.

*"Once a person falls under the spell of oil sand and gets tar on his boots, he can never shake it off."*

~ Dr. Karl Clark

# The Abasand hike

## 1 Abasand Drive

This is the road that you will take to get to the beginning of your Abasand Hike. Abasand Heights is one of the older communities in Fort McMurray.

## 2 Trail opening

The opening to the trail is in Abasand Heights, across from the École Boreal School.



## 3 View point of the Horse River

This view is what the early pioneers would have seen when they came through this area. The Horse River Valley is part of the Boreal Forest, which is Canada's largest eco-zone and makes up about 48% of Alberta. The origin of the river's name is unknown, but some have suggested it was called this because a horse once fell through the ice and into the river.

From here if you look to the north west you can see the area where the Alberta Salt Company Ltd. plant site was, and the Athabasca River beyond. There is no access to those two points from here.

## \* Alberta Salt Company Ltd. plant site

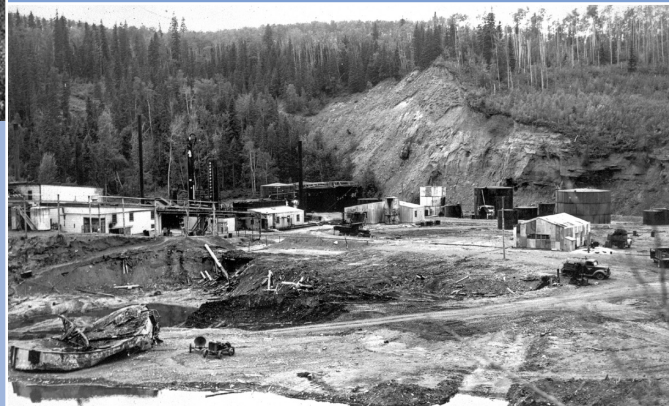
In 1897, Count Alfred von Hammerstein travelled through this area on his way north to the Gold Rush. He stopped in Fort McMurray to drill for pools of oil and ended up finding salt! Hammerstein's discovery led to the birth of the first commercial salt plant in Alberta. Alberta Salt Company Ltd. operated from 1925–1927.

## \* Athabasca River

The Athabasca River originates from the Columbia Icefield in Jasper National Park, Alberta. The river was designated a Canadian Heritage River for its importance to the fur trade and development of the Canadian West.

## 4 Walking trail to the plant site

This area is very typical of the boreal forest; winding rivers and lots of trees! Some local tree species include birch, white spruce, black spruce and aspen. Wildlife including black bears, moose, deer, foxes, beavers and red squirrels thrive in the boreal forest and are common sights.



Provincial Archives of Alberta, A3556

## 5 Overview of the site

Here you can see the out cropping of the Abasand plant site. Try to picture this area as it was in 1938. The outcropping you see here is the same as in this photo.

## 6 Abasand Oils Ltd. plant site

Sidney Ells, a senior engineer for the Federal Mines Branch, arrived in the area in 1913 to do surveys and field explorations with oil sands. The Horse River lease was encouraged by Sidney Ells. In return, he had to build a plant capable of processing 250 tons of oil sand per day. So, the Abasand Oils Ltd. Plant Site was built!

The Abasand Trail system is not owned or maintained by the Government of Alberta.



## 7 Coking skills

The walls located here are what are believed to be the coking skills, or storage containers for products created during the coking process. A major challenge faced by the site was the cost to transport these products by rail. Initially, Max Ball thought he would be charged 12¢ per barrel, however the actual cost was \$1.78 per barrel.

## 8 Remnants of the dam

Remnants of the dam can also be seen along the river bank. A water source is essential for oil sands development because of the hot water extraction process. During the days of Abasand Oils, the Horse River was used to obtain water for processing.

## 9 Dig your own oil sand!

Here in this open area where you can see there is still rich oil sand. You are welcome to hand mine some oil sand to take home as a souvenir!

## 10 Residential remains

When Abasand Oils Ltd. first started operating, a bridge was constructed across the river and a work camp was built for the employees. In 1944, 12 frame homes were built and equipped with running water and power—a luxury that even Fort McMurray didn't have yet!

## 11 Stone fireplace

The stone fireplace on the other side of the river bank is all that remains of the cabin of Fred Sage, the plant superintendent.