

# History of Turner Valley Gas Plant

## 1914 - 1923

In 1914, the public knew the discovery well as Dingman No. 1. A. W. "Archie" Dingman was the General Manager for Calgary Petroleum Products, so it was easier to call it the Dingman well.

The Dingman No. 1 and Dingman No. 2 wells - pictured to the right - were both productive and led to the development of Western Canada's first commercial oilfield. They produced a gasoline-like liquid - unrefined condensate - and natural gas.



The Turner Valley Gas Plant National and Provincial Historic Site is the most significant surviving resource associated with the development of the Turner Valley oilfield.

From the social history by David Finch: "In early 1911, [Herron] collected a gas sample from the banks of the Sheep Creek and sent it off for analysis. Based on his findings Herron bought Michael Stoos' farm on the banks of the creek where the Turner Valley Gas Plant sits today. Herron set out to attract investors and in January 1913, Calgary Petroleum Products began drilling its first well."

Drilling commenced at the Dingman No. 1 well site in January 1913. The well struck a petroleum production zone on May 14, 1914, changing the industrial face of Canada and the Canadian West forever.

The earliest form of the Turner Valley Gas Plant was the first petroleum processing facility west of Ontario. Through three separate stages of development, between World War I and the late 40s, the processing plant at Turner Valley served as the largest natural gas processing plant in Canada's largest oilfield.

Early production used a simple knock out system to remove water from the naphtha. Later, Calgary Petroleum Products brought in a small compressor and built an absorption plant that burned to the ground in 1920.

In the fall of 1921, Royalite Oil Company built a new compressor station and a gasoline absorption plant and by year-end a pipeline to Okotoks had linked Turner Valley gas to Calgary supply systems.

## 1924 - 1947

New discoveries and new demands changed the Turner Valley Gas Plant through the 1920s until the end of World War II.

Royalite No. 4, one of the Turner Valley field's largest producers, blew in on October 14, 1924.

The new well dramatically altered the nature of the gas plant. High flows from the well led to the installation of new separators to recover gasoline both before and after the absorption stage, and new scrubbers to remove hydrogen sulfide.



The 1925 Seaboard-Kopper soda-ash scrubbing plant operated until 1952. The only building that survives from 1921 is the structure that housed the gasoline absorption plant. Other than archaeological remnants of the drilling operations, underground piping and concrete foundations, the remainder of the plant dates from the 1930s and after.

The nature of production in the Turner Valley field changed dramatically in 1936, when Turner Valley Royalties No. 1 well hit deep zone crude oil just north of Longview.

The third discovery triggered a drilling boom at the south end of the oilfield. At its peak in 1942, the Turner Valley oilfield produced almost 10 million barrels of oil per year. Then, as its production began to decline rapidly, drillers discovered the Leduc oilfield southwest of Edmonton in 1947.

## 1947 - Today

Although it was aging, the Turner Valley Gas Plant operated until 1985-nearly 70 years after it was first built.

While it was overshadowed by the arrival of Leduc No. 1 in 1947, the Turner Valley field continued to produce oil and gas. The Turner Valley Gas Plant also continued to operate, processing its specialty products until 1985.



In 1952 the plant began to produce propane and a sulphur extraction unit was added. These were last major changes to occur at the site. Throughout the 1950s and into the 1960s the plant continued to scrub gas and produce gasoline, propane and sulphur.

British American Oil acquired controlling interest of the site in 1962 and in 1977 the plant was sold by Gulf, British American's successor, to Western Decalta Petroleum Limited. Western Decalta closed the plant in 1985.



In 1985, Alberta Culture asked Western Decalta to assess the historical significance of the plant facilities. The Historical Resources Impact Assessment concluded that the plant, equipment and processes were of provincial, national and international significance to the history of industrial technology.

In 1988, Alberta Culture acquired the Turner Valley Gas Plant, and in 1989 it was designated a Provincial Historic Resource. In 1995 it was also named a National Historic Site.

The Turner Valley oilfield produces more oil and natural gas today than it did 50 years ago, in 1964. The story of oil is not dead in Alberta's first commercial oilfield.