



SUBMISSION REPORT - PLACE

TITLE: FIRST COMMERCIAL OIL FIELD, OIL SPRINGS, ONTARIO

AUTHOR: Arnold E. Roos, Historical Services Branch, Parks Canada

1. IDENTIFICATION OF PLACE:

a) Proposed Name of Place:

First Commercial Oil Field
Oil Springs, Ontario

b) Also known as:

First Oil Well in Canada
Oil Springs Oil Field
Oil Heritage District

c) Significant date(s):

1858 – first oil well in Canada

d) Address/Location:

Oil Springs, Ontario (see Figure 1)

e) Category of Property:

A producing oil field

f) Components of Property:

There are numerous components of the site, among the most important of which are the following:

350 producing oil wells;

Six rigs and associated jerker lines pumping the operating wells (see Figures 6, 7, 8, 9 and 10);

Three suspended or abandoned rigs;

The location of the original Williams well, as well as the Shaw, Fairbank and Tripp wells;

Last surviving three-pole derrick;

A number of separation and holding tanks, receiving stations, and disposal wells;

A number of structures that have been built over the years, including two barns, and four drive sheds (see Figures 4 and 5).

g) Boundaries & Area of Site Proposed for Designation:

The Fairbank and Oil Museum of Canada properties, which comprise most of the historic oil field. These properties are located on Lots 16, 17, 18, and 19, Concession 2, Lambton, County, Ontario (see Figures 2 and 3).

<i>Area (m²)</i> : Approx. 242.8 hectares

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h) Designer/Builder:

None

i) Previous Documentation on File:

1925: HSMBC Minutes recommend oil well site located near Bothwell be declared of national importance

1926: HSMBC Minutes recommend that more information on early oil industry be requested from Ontario Department of Mines

1936: HSMBC Minutes approve plaque text for commemoration at Oil Springs

1937: HSMBC Minutes indicate that plaque be erected (“near Bothwell”) in 1938

The initial 1925 HSMBC recommendation “That the first well for the discovery of petroleum in Canada [near Bothwell] be declared a site of national importance”¹ has not yet been clarified through the Status of Designations process. Research indicates that the first oil well was located at Oil Springs and not Bothwell. The Board, in 1936, recommended a plaque for a site at Oil Springs;² however, the 1925 recommendation was never clarified. Furthermore, it is not clear whether it is the first oil *well*, or the first oil *field*, that the Board intended to commemorate in marking the beginnings of the Canadian oil industry;³ and designated place boundaries have yet to be defined.

This submission report has been prepared with two objectives in mind: to respond to a request from the owners that the site proposed herein be submitted for consideration as a national historic site; and in so doing, to resolve the status of designation issues concerning the commemorative intent and designated place for the site of the first commercial oil field in Canada. The Board is therefore asked to consider whether the site proposed in this report should be recognized as an industrial landscape of national historic significance. If so, this would represent a clarification and expansion of the 1925 recommendation concerning the site near Bothwell.

j) Theme(s)/Priorities:

This site falls under the two themes of ‘Energy Development’ and ‘Architecture and Engineering’

¹ Historic Sites and Monuments Board of Canada [HSMBC], Minutes, May 1925.

² The approved text: FIRST OIL WELLS IN CANADA The presence of oil in this locality was observed by early travellers and by the pioneer farmers who used it for medicinal purposes. In 1858, near Oil Springs, James M. Williams dug the first oil well in Canada and later established a refinery at Hamilton. In 1861, John Shaw, by drilling into the rock, opened the first flowing well, its situation being lot 18, concession 2, Enniskillen Township. From these beginnings developed one of Canada's most important industries. (HSMBC, Minutes, May 1936.)

³ In 1974, the Board noted that “the inception of the oil *industry* has been marked by the Board at Oil Springs” [emphasis added]. HSMBC, Minutes, May 1974.

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2. PARTIES INVOLVED

a) Owner(s):

Charles Fairbank
Fairbank Oil Company
P. O. Box 10
Petrolia, Ontario
N0N 1P0

b) Place Submitted By/Purpose:

Charles Fairbank, president of Fairbank Oil Properties Ltd., the company that currently owns 75 percent of the historic oil field (some 600 acres) covering both the west and east “gumbeds” (asphalt ponds created by oil seeping to the surface of the ground) has requested that his property be considered for national designation. The oil company operates 350 producing wells (most of which are historic wells that have been maintained in operation); and the company continues to use the historic jerker-line pumping system devised in 1863 by his great-grandfather, John Henry Fairbank, one of the pioneer Oil Springs oilmen, and once the largest oil producer in Canada (see Figures 2, 3, 4 and 5).

The Oil Museum of Canada, which is located on the southwest corner of the west gumbed of the historic oil field in Oil Springs and adjacent to the Fairbank property, has requested that its property, which encompasses the original Williams well, be included with the Fairbank property for consideration as a historic site (see Figures 2 and 3).

3. DESCRIPTION

a) Setting and Site Resources:

The Fairbank and Oil Museum properties comprise all of the major historic resources of significance in the opening and development of the Oil Springs oil field site, and are the focus of an “Oil Heritage District” proposed by the present owners of the property.

The first dug well of James Miller Williams (“the first commercial oil well in the world”), is located on the west gumbed at Oil Springs, on Lot 16, Concession 2, Enniskillen Township, on the grounds of the Oil Museum of Canada where it is currently interpreted (see Figures 2, 3 and 8). The Oil Museum of Canada is on a small parcel of land, which was donated by Charles Fairbank of Fairbank Oil, on the southwest corner of the west gumbed. The well has been restored with new log cribwork lining, and a traditional three-pole derrick has been placed over the well for interpretive purposes. There is also a new “Canadian pole drilling

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rig” on the museum property (introduced world-wide by Canadian drillers), and a jack pump and jerker rod line for interpretive purposes.⁴

The drilled well of Hugh Nixon Shaw (the first drilled well in Canada) is located on Lot 18, Concession 2, on the east or main gumbed, near Black Creek, and is on the property of Charles Fairbank’s Fairbank Oil Company, which still has 350 wells in operation on the four lots comprising the historic Oil Spring oil field – Lots 16, 17, 18, and 19, Concession 2, Lambton County, Ontario (see Figure 4).

The bitumen pits dug by Charles N. and Henry Tripp in 1855-1856, who refined the bitumen to produce asphalt for marketing as road paving (the first commercial use of gumbeds anywhere in the world), are on Lot 18 on the Fairbank property; and the gas well drilled by Fairbank in 1914 (the first gas gusher in Canada) is on this property, which comprises 600 acres covering much of the west and east gumbeds that constitute historic Oil Springs oil field. About 200 of the producing wells on the Fairbank oil property continue to be operated by the historic jerker-line system; and there are six rigs and a number of independent electric motors powering the 350 producing wells. All of the jerker lines were originally powered by steam engines; however, as electric power and the electric motor developed, steam power was slowly replaced by electric power. The advantage of electric power, besides the fact that no combustibles or boilers were required, was that this source of power was very adaptable and could be applied to a single well or to the jerker line system as a whole, depending upon the requirements of the owner. On the Fairbank property there are also historic underground storage tanks (unique to Oil Spring and Petrolia), historic separation tanks, and modern disposal tanks in the ground, as well as the remnants of the last operating Imperial Oil receiving station (closed in 1974), a blacksmith shop, and the last in-situ three-pole derrick in the oil field (see Figures 4 and 5).

b) Determination of Historic Place Boundaries:

The primary focus for the perimeter of the possible designated site is to be the Fairbank and Oil Museum of Canada properties, which comprise most of the historic oil field. The perimeter, as noted previously, is located on Lots 16, 17, 18, and 19, Concession 2, Lambton, County, Ontario and approximately delineated by the following roads – Oil Springs Line east from Old Heritage Road to Black Ash Road, Black Ash Road south to Gumbed Line, Gumbed Line west to Gypsy Line, Gypsy Line south to Aberfeldy Line, Aberfeldy Line west to Kelly Road, Kelly Road north to Gumbed Line, Gumbed Line west to Old Heritage Road, and Old Heritage Road north to Oil Springs Line.⁵ There are two other, comparatively small, oil producers adjacent to the Fairbank property in the oil field; however, all of the major historic resources are on the oil

⁴ A pump is needed to extract the oil from a well and the pumps have always required power. Over the decades, these powerhouses or “rigs” have evolved to meet the needs of the oil property. Each rig operates around the clock and only requires a 5-horsepower motor. Today, there are six rigs located throughout the 600 acres that comprise the oil properties. Outside, leading into each rig, are the long wooden rods of the double jerker line running parallel to the ground and about eight inches above it. They move slowly (11 times a minute). Each pole has what are called Pitman arms, moving vertically. Inside the building there is a bull wheel measuring six feet across. When the bull wheel turns, a small pinion gear drives two large spur gears and they turn two cranks. The cranks act like a bicycle pedal, causing the Pitman arms to move back and forth. This takes the power outside to a field wheel and shifts the power horizontally. The large cast iron field wheels lie flat slightly above the ground and work like a hub for different spokes of jerker lines. The jerker lines are attached to a chain that converts the horizontal motion to vertical. At the end of the chain is attached one end of a pump handle that pivots at its middle. The other end is attached to the pump.

⁵ An exact survey of the Fairbanks properties is on file with the HSMBC Secretariat.

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properties owned by the Fairbank family, or in the case of one historic well, on the property of the Oil Museum of Canada (see Figure 2).

4. JUSTIFICATION

a) Applicable HSMBC Criteria/Guidelines:

According to Criterion 1(b), a place may be designated of national historic significance by virtue of a direct association with nationally significant aspects of Canadian history that *illustrate or symbolize in whole or in part a cultural tradition, a way of life, or ideas important in the development of Canada*.

The Oil Springs site also merits consideration as an engineering landmark because events there had a significant impact on the development of a major region in Canada, and have a particularly important symbolic value to Canadians as a technical achievement.

The “First Oil Wells in Canada National Historic Site of Canada” was designated at Oil Springs, Ontario in 1925 and plaqued there in 1938. If the site proposed in this report is recommended as an industrial landscape of national historic significance, this would constitute a clarification and expansion of the 1925 designation (see Section 1(i) in this report).

b) Historic Values of the Place:

Introduction⁶

Work by the Geological Survey of Canada appears to have directed the attention of Charles Tripp to the gumbeds of Enniskillen Township, Lambton County, where he set up an asphalt production undertaking using these beds. His financial difficulties with this operation made him turn to James Miller Williams for financial help. Miller, seeing an opportunity, decided to explore the area himself and this led to the digging of the first producing oil well in the world. The find led Williams to establish, in 1858, the first fully operational oil company in the world, which included the mining, refining and marketing of his petroleum products. With the publication of this find, the first oil rush ever to take place was on, and within five years, about a thousand low head (shallow) wells were dug in the area. One of the products from the distillation of this oil that found worldwide distribution was kerosene, discovered by Abraham Gesner (NHP 1954). The Oil Springs field petered out by 1866 when salt water invaded the wells; however, by that date another field had been found nearby at Petrolia where, for a time, the oil industry was to establish itself.

The first producing oil field in the world had major impacts both financially and technologically not only here in Canada but also in other countries. For the immediate area, the discovery of oil was to establish two major oil producing centres, first at Oil Springs and next at Petrolia, necessitating an infrastructure to

⁶ The history of the first oil well in Canada has been well documented. The sources surveyed for this document all agreed on the sequence of events that led to the discovery and what followed subsequently. Some of the more easily accessible are: Hope Morrit, *Rivers of Oil. The Founding of North America's Petroleum Industry* (Kingston: Quarry Press, 1993); Gary May, *Hard Oiler! The Story of Early Canadians' Quest for Oil at Home and Abroad* (Toronto: Dundurn Press, 1998); and Patricia McGee, *The Story of Fairbank Oil* (Petrolia: Browns Graphics and Printing, 2004).

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transport, refine and market the oil and its products. A number of joint stock companies, to control pricing and production, were to make their appearances for varied periods of time, but none of these was successful until the establishment of Imperial Oil, which, until the end of the century, was the major player in the field in Canada. As with any nascent industry, technological innovation occurred as the industry grew. A novel storage method was developed in the region, brought about by the constant threat of fire. A jerker-line system for pumping out the oil made its first appearance in these oil fields. Refining went from a very crude kettle arrangement to more sophisticated distilling apparatus. A drilling rig that came to be known as the “Canadian Rig,” was widely used in opening up these fields at the deeper levels. This rig was to be used by men, who, having learned their trade in these oil fields, were instrumental in opening up major oil fields in the rest of the world.

Early History

The earliest settlers in south-western Ontario reported that there were gumbeds in Enniskillen Township that were used by Aboriginal people for medicinal purposes. Pioneers of the area secured the oil that oozed from the ground by soaking it up with flannel cloths and wringing the oil out into vessels. The oil was used mainly as a dressing for cuts and sores, especially on cattle. In 1850, the existence of these gumbeds was brought to the attention of Sir William Logan, director of the Geological Survey. He had the properties of the material from the gumbeds checked by Thomas Sterry Hunt, the Survey’s chemist. The analyses of the material from the gumbeds were published in the Geological Survey Report of 1849-50. Logan then requested that his assistant, Alexander Murray, take a closer look at the region. Murray compiled a full report, which appeared in the 1852-53 Geological Survey Report. The report noted two gumbeds in Enniskillen Township, a small west gumbed on Lot 16, Concession 2, and a large gumbed covering almost the whole area of Lots 17, 18, and 19, Concession 2. Murray, furthermore, confirmed Hunt’s findings concerning the suitability of the material from the gumbeds for the production of illuminating gas, paints, varnishes, and tars. The gumbeds were seeping oil but this was noted as having little value. He also noted in his report that during this survey of the area he had come across a test pit of some nine metres deep, dug into the clay.⁷

Charles Nelson Tripp became interested in the prospects of producing asphalt from the gumbed materials, and around 1850 decided to go to Lambton County in search of the substance that bubbled to the surface. He made a number of land purchases in the area of what would become Oil Springs and Petrolia. During 1851 and 1852 Tripp and his brother, as well as some other men from Woodstock, Hamilton and New York, formed what must have been the world’s first oil company. At least they instigated proceedings about this time that would lead to the granting of the company’s charter. It took until 18 December 1854 to incorporate the International Mining and Manufacturing Company.

During the intervening years, the group started work at the site, and it appears that buildings were erected there by 1852 to manufacture asphalt from the gumbeds. The process that they developed was rather simple. The men used picks and shovels to break up the hard bitumen that had accumulated on the surface over the millennia. They then built what was, in effect, a still from a big pot or cauldron, and lit a fire under it. Into the cauldron went the bitumen or muck, to be boiled down into a thick tar. The tar was poured out and formed into blocks that cooled into molds of asphalt. Perhaps to see what other uses the bitumen could be

⁷ This may have been the test pit of Charles N. Tripp, who became the first person to use the gumbeds commercially.

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turned to, Tripp had sent samples to a couple of men.⁸ They reported to him that the asphalt, and some of the byproducts in its production, were highly suitable for paints, mastics or adhesive products, waterproofing materials, and, if distilled, even lighting oil. Unfortunately, perhaps due to the remote location of his operation, Tripp did not take full advantage of what he had discovered.

Tripp's main focus was the production and sale of asphalt. Beginning as early as 1852, he began shipping asphalt locally and overseas as far as Paris, France, where it was used to pave the streets of that city. Tripp even sent a sample of the asphalt to the Universal Exhibition in Paris in 1855 where it won a honourable mention. However, by 1856 the company was in financial trouble because of the limited demand for asphalt at that time, and the long 32-kilometre trip on primitive bush roads to the port of Sarnia.

To try to stay financially viable, Tripp had borrowed money from the Bank of Canada and owed money to several Sarnia business people from whom he had purchased goods and services. He had also sold two hundred acres of the land he had accumulated to his brother Henry for four hundred pounds to keep the company operational. He appears to have run out of places where he could obtain credit in the immediate area and looked to Hamilton to obtain the equipment he needed to cart his asphalt out of the Lambton wilderness.

One of the people that Tripp turned to was James Miller Williams, one of the most successful of Hamilton's entrepreneurs and half-owner of The Williams and Cooper Carriage Factory.⁹ In order to obtain the equipment he needed, Tripp sold 400 acres of his International Petroleum and Mining Company land to a group from Hamilton, and Williams was one of the buyers. Williams was interested not in asphalt but in illuminating oil. By the later part of the 1850s, scientific journals were reporting on the findings of men like Gesner of Nova Scotia. His invention of a new method for refining oil to obtain kerosene for illuminating lamps led to a new interest in finding oil for that purpose.

The World's First Commercial Oil Well

Williams hired Tripp and the two set off into the swampy lands of Canada West's frontier looking for oil, an enterprise that would lead to the world's first commercial oil well. Their initial focus was not the gumbeds at what was to become Oil Springs, but the village of Bothwell somewhat south of the main gumbeds. It had been known for years that there was seepage of oil there. Perhaps Williams was looking for an easier site than Tripp's gumbeds. Having dug a hole with a depth of about eight metres, they struck oily water instead of oil and abandoned the site after a pipe that they were trying to drive into the hole broke.¹⁰ Their next focus was the gumbeds at Oil Springs in which Williams had, through the purchase of land, become part owner. This decision was to change his life. Early in the summer of 1858, fifteen and a half metres below

⁸ The chemists were Dr. Thomas Antisell, a New York chemist, and Thomas McIlwraith, manager of the Hamilton Gas Company in Hamilton, Ontario.

⁹ James Miller Williams was born in Camden, New Jersey, in 1818. He moved to London, Canada West, in 1840, where he opened a carriage operation. In 1846, he moved his operation to Hamilton, where he saw better opportunities.

¹⁰ The first wells in Lambton were dug by hand, and those that remain suggest they were generally about two metres by three metres across. As they dug, the men fitted wooden cribbing along the sides to keep the blue clay soil from breaking and falling into the well.

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the surface of the ground on Lot 16, Concession 2, Enniskillen Township, Lambton County, in the west gumbed, Williams struck oil¹¹ (Figure 8).

Williams did not stop with the well, for he had to get his product to a market. He hauled the oil from his well out of the swamp and over a wilderness trail to the railhead at the village of Wyoming some nineteen kilometres away. From there he shipped the oil to Hamilton, processed it and then marketed it. In order to speed up the extraction of the oil, he also brought a steam pump to the site to pump the oil out of the well. The timing of the well was propitious for Williams, as the Great Western Railway had opened the London to Sarnia branch in the very year he struck oil. If he could get the oil to the village of Wyoming, he could send it out by train. This meant that Williams was not hampered as much by very poor transportation to the extent that Tripp had been. Williams had a fully operational petroleum company in place by 1858 that was mining, refining, and marketing its products, all before Edwin L. Drake drilled his well in Titusville, Pennsylvania on 27 August 1859. Drake's sponsors did not immediately exploit the commercial potential of his find. In contrast, James Miller Williams had five producing wells in operation by 1861, yielding 600 to 800 barrels a day, and had also established a major refining industry that marketed kerosene and lubricating oils in Canada, the United States, and overseas, and was selling acreage in the gumbeds at Oil Springs to other oil prospectors who greatly increased the number of producing wells.

Williams subsequently formed a partnership with the Fisher Brothers – John, William, and Nathaniel – and with Isaac Jameson to create the Rock Oil Company. At the base of Hamilton's Wentworth Street, at Coal Oil Inlet on Burlington Bay, they opened a refinery early in 1860, about the time the firm was renamed the Canadian Oil Company. Prior to this, the refining was done on site at the wellhead. One of the best-selling products was a lamp fuel called Victoria Oil. In the coming years the products from the crude refinery would also be sold in Europe, South America and China. With this operation Williams began the world's first oil industry based on oil and not bitumen, as Tripp had done, which today is one of the largest industries worldwide.

Subsequent to the discovery of oil by Tripp and Williams, the oil-rush was on and hundreds of men descended on the area, with the village of Oil Springs being established in late 1858. Within five years almost 1,000 low-head wells were dug in the west gumbed of Lot 16, Concession 2, and the larger gumbed along Black Creek on Lots 17, 18, and 19, Concession 2, Enniskillen Township. Between 1851 and 1861, the population of Lambton County grew from 10,800 to 24,900; in that time Black Creek, which was also coming to be known by the names of Oil Springs, Olicia, and sometimes just "the city of grease," grew from a couple of log cabins to a village of several hundred. Additional refineries were established in London, Hamilton, Sarnia, and Wyoming, the nearest railway station on the Great Western Railway some 19 kilometres away. Kerosene and lubricating oils refined from the Oil Springs crude oil were sold all over eastern Canada, and shipped by rail to New York for sale in the American market, and for export to Britain.

In the fall of 1861, the geological information as to where oil was to be found increased when an Oil Springs driller, Hugh Nixon Shaw, contrary to popular belief that oil could not be found at deep levels, decided to drill a deep well at Oil Springs. He leased one acre in Lot 18, Concession 2 (Subdivision 10, Range B), and with a hired crew of two men through the winter months of 1861-62 drilled down to an

¹¹ The pit, having initially been dug to the depth of fifteen and a half metres, was later deepened to forty-five metres.

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unheard of depth of almost 150 feet (45 feet dug down in clay, over 100 drilled through rock), and at ten o'clock in the morning on 16 January 1862, blew in Canada's first oil gusher, which initially spewed 2,000 barrels a day.¹²

The men on site did not know how to handle the gusher. The jet of oil, which was described to be about 30 centimetres in diameter and shooting upwards about six metres, continued to flow unchecked with occasional brief cessations for upwards of four days. Oil flooded the hollow in which the well was situated, and flowed into Black Creek and fouled the Sydenham River all the way downstream to Lake St. Clair. Thousands of barrels of oil were lost and the roar could be heard miles away. The oil continued to flow from the well at a rate of 1,500 barrels a day (one barrel is equal to 42 U.S. gallons). Everyone who had barrels available was gathering up the free-flowing oil and selling it for what they could get. Apparently, 500 barrels were leaving the railhead in Wyoming each day and more would have gone if the barrels had been available.

Several attempts to shut off the flow of oil failed until two men, drilling nearby, who had experience in dealing with gushers in the Pennsylvania fields – J. H. Johnston and a man called Winters – managed to bring it under control. A packing material made from green calfskin and filled with flax seed, which expands when wet, was used to stop the flow. The packer was tapered and forced into the five-centimetre well pipe, but an opening had to be left to vent the gas pressure.

Shaw had challenged the popular belief of the day and had succeeded in drilling beyond the shallow sand and gravel beds from where the first surface oil had seeped, and into the limestone below. That second horizon of porous limestone would itself be tapped out by about 1866 and fifteen years later a third and deeper level of oil would be found in the same field that was to revitalize Oil Springs for a while.

Shaw's gusher set off an oil boom in Oil Springs, and soon 1,600 men were drilling for oil in the gumbeds on half-acre lots purchased from Williams. Within a matter of months, thirty more deep wells brought in gushers in the Oil Springs oil field, while numerous low-head or shallow wells were dug that had to be pumped. For several years Oil Springs was the oil capital of the world. (During the American Civil War, 1861-65, the Pennsylvania oil fields were shut down, further opening the American market to Canadian kerosene and lubricating products.)

With the discovery of oil in Lambton County, significant changes took place in the immediate vicinity to accommodate this new industry. From the first well dug in 1858 up to 1861, 50,000 barrels of oil had been shipped northward to the village of Wyoming. The quantity of oil did not reflect the amount of oil that was available to the oil industry in this period but was more an indication of the state of transportation from the oil field to the railhead located at Wyoming. The route was simply incapable in its primitive state of accommodating more traffic. The pioneer road was a stretch of mud that had become known as "the canal," a slick, glistening swath cut through the dense forest that connected the wells to Wyoming. In the best conditions, a team of oxen was able to drag a flat-bottomed wooden "stone boat" or barge up the canal of mud, loaded down with two thirty-five-gallon barrels. In order to improve conditions and get their products

¹² The two men were Hugh Smiley, on the treadle, which was also called the kick board, and John Coryell, who was in charge of the drilling tools. Coryell was also responsible for guiding the drill bit, turning it occasionally to ensure it bored a round hole.

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to market faster, Williams and two other men, W. E. Sanborne and Andrew Elliott, in 1860 formed the Black Creek Plank Road Company and began to sell stock. In the winter of 1861-62, work began on the area's first plank toll road. Traffic on the plank road once finished became so heavy that two continuous streams of vehicles poured over it in opposite directions day in and day out. With the completion of the road much more oil became available on the market and the price dropped from \$2.50 to as low as 10 cents a barrel.

The community on the banks of Black Creek mushroomed. In late 1861 it had finally been determined its official name would be Oil Springs. On the eve of Shaw's discovery of the deeper layer of oil, the population had grown to over five hundred. In its aftermath, hotels and boarding houses were slapped together, stores and suppliers of equipment for the drilling of oil were established and the population shot up to 2,000 and then to 4,000 in 1866.

It is also in the early 1860s that we get the first hint of the need to establish a joint stock company of the many individuals that operated in the oil field in order to control prices and production, in part to stabilize prices. Another reason was the expense of drilling wells to the depths now required, which demanded more financial resources than most of the independent drillers had at hand. The first of these companies was the Canada Oil Association of Oil Springs, formed in 1862 when prices were fluctuating wildly. This association survived for only about a year. A number of associations were formed over the years, most of which will be mentioned later in this report.

In 1861, John Henry Fairbank, a man who was to have a major impact upon the oil fields in south-western Ontario, arrived in Oil Springs.¹³ In London he paid \$10 down for a plot of land in Lambton. Back in Oil Springs, he built a log-and-mud shack, dug a surface well and struck oil. He and a partner then travelled between London and St. Thomas selling machine lubricating oil at 25 cents a gallon, which meant they cleared \$8 to \$10 apiece on ten barrels.

Even at this early stage of his career within the oil patch, Fairbank showed a genius for innovation. He got some men together and hauled some 3,000-4,000 barrels of oil to the banks of Black Creek. He had decided that it was possible to float the barrels down Black Creek to the Sydenham River, which flowed into Lake St. Clair. There, the barrels would be loaded onto a ship for export. The export of oil, by 1862, had mushroomed, for that year saw seventeen ships leaving Montréal for Europe, British Guiana, and Australia, carrying 35,000 barrels of crude and refined oil. By this time Canada's oil export business had become more than an interesting sideline.

In 1863, Fairbank made an outstanding contribution to the oil industry by devising the jerker-line system by which a single steam engine could operate a large number of pump jacks pumping oil, as opposed to the former system where a steam engine was needed to drive each single pump (see Figures 6, 7, 8, 9 and 10). This system revolutionized the cost of pumping oil, and made it possible for many small operators to prosper during the oil boom. It was subsequently improved by a man named Reynolds, who devised the

¹³ John Henry Fairbank was born at Rouse's Point, New York, in 1831. A surveyor, Fairbank procured a job with the Great Western Railway in 1855. Three years later, Mrs. Julia Macklem, a wealthy Niagara landowner, bought some land in the oil patch of Lambton County which the cash strapped Charles Tripp was unloading, and she hired J.H. Fairbank to survey it. He divided up this hundred-acre tract into 198 plots suitable for wildcatters. While there he was also bitten by the oil bug.

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wheel, or “spider wheel,” by which jerker-rod lines could be angled off in all directions, making it possible to hook up to 100 well pumps on a single steam engine (Figures 6, 7, 9-14).

Another technological innovation that had a wide-reaching impact was the development of the Canadian rig. In Canada, the early wildcatters looked to the drillers of artesian wells for inspiration as to how to drill an oil well. After William’s first hand-dug well, Canadians started experimenting with metal bits suspended from several black ash poles. The bit was raised and lowered, thus pounding or punching its way through rock. Early oil pioneers found that the pole-tool method worked effectively. Even after the rotary system was developed in the United States, many Canadian crews here and abroad continued to believe that their system was superior. It lowered the bit straighter than the cable-tool or rotary-drilling system, which suspended the drill bit from a cable. The new “Canadian Pole Drilling Rig” came with four framed legs mounted on a movable sled, as distinct from the old three-pole tepee arrangement that was fixed in place. The pole-tool method was shared and adapted in early oilfields all over the world and came to be known as the Canadian rig.

It was also during these years, the early 1860s, that centralized refineries began to replace the rudimentary refining units that were often set up right out in the fields. These early refineries were simply stills, and highly dangerous ones. Many blew up, and people were often injured or killed. Even when William Spencer and Herman Waterman built the first refinery in London in 1863, the process remained smelly and dangerous, but less so than the primitive contraptions found in the oil field. London quickly became an important refining centre, and for a while the petroleum capital of Canada.

In 1866, disaster struck Oil Springs as the deep wells filled up one by one with salt water, choking off the flow of oil from the large oil deposit deep underground, and the deep gusher wells had to be abandoned. However, the low-head wells continued to produce at a modest rate, and continued to be economical to pump owing to the jerker-rod pumping system invented by John Henry Fairbank. At the same time, at Bothwell, 34 kilometres south of Oil Springs, additional wells were driven and several producing wells were brought into operation.

The year before the Oil Springs deep wells were cut off by salt water, new gushers were brought in at nearby Petrolia, shifting the focus away from Oil Springs and initiating another oil boom. Oil had been discovered at Petrolia as early as 1860, and half-a-dozen low-head wells were brought in. However, they produced small quantities of oil compared to Oil Springs until 1865. In that year Benjamin King drilled down to the 300-foot level at Petrolia, deeper than any well at Oil Springs, and struck a gusher yielding 265 barrels a day. Oilmen immediately moved from Oil Springs to Petrolia, and numerous producing wells were drilled. J. H. Fairbank was among the oilmen moving to Petrolia, and drilled several producing wells there. He also continued to operate low-head wells at Oil Springs. With the discovery of oil in the Petrolia area the town of Oil Springs declined in population from 4,000 to 300 persons almost overnight and the focus, until the end of the century, would be upon the new field.

The discovery of more oil around Petrolia had a far-reaching impact on the whole Oil Springs/Petrolia region. The local oil producers began to clamour for a railway, and in 1866 a group led by John Henry Fairbank built an eight-kilometre spur line from the Great Western depot at Wyoming. The line was soon taken over by the Great Western to the advantage of the London refiners, as the railway charged less for

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crude oil going to London than refined products from the in-situ refiners at the oil fields. This unfair rate structure continued until 1877, when a spur line from the Canada Southern was built to Petrolia, providing much needed competition.

A devastating fire in 1867 was to have an interesting outcome in the field of oil storage in the area. Two fires hit the Petrolia oil field in the year of Confederation. The more serious one began at the King wells on 23 August. The blaze broke out on a rig, and by the time men began to arrive to put out the flames it had spread to a nearby oil holding tank. The men attacked the fire in the traditional way – by emptying the tank of its oil. Normally that worked, but in this case it was futile. The tank's staves, saturated in crude, caught fire, and the tank collapsed before the men could get rid of the oil. The oil, now flaming, gushed forth in all directions, igniting tank after tank. The fire raged for two weeks, consuming ten acres. As an immediate consequence of the fire, the Hard Oilers (a name that oilmen who worked in the fields were given) began constructing the tanks of iron. It soon became evident that lightning strikes could also cause fires and the metal in the tanks was a natural conductor. John Noble got together with a fellow oil man Charles Jenkins and devised an ingenious solution: they would build a vast network of underground pipelines connecting the wells and the refineries. The holding tanks these men built were different; rather than being built above ground, they took advantage of the clay soil's natural imperviousness to water and oil by digging huge pits in the clay and lining them from the bottom up with wooden rings to keep the clay from caving in. The clay was leak-proof. A tank, which was to become standard in Oil Springs, was nine metres in diameter, eighteen metres deep, and held 8,000 barrels of crude (Figure 15).

As with the producers at Oil Springs at the end of the 1850s, the producers at Petrolia tried to form an organization to control prices. Three such endeavours took place in a relatively short time, but each fell apart. In 1867, a committee of oilmen recommended that wells be shut down to force the price of oil up. This failed to even get off of the ground. The following year, Fairbank was instrumental in organizing the Petroleum Amalgamation Company, a union of producers. This idea fell flat. Later that year the major producers, realizing that something had to be done, formed the Crude Oil Association, fashioned on the Canada Oil Association that had existed at Oil Springs eight years earlier. This one lasted a while and oil prices actually rose. It eventually fell apart and for the same reasons the others had – jealousy, suspicion, greed, and sheer independence of the members.

In 1871, Fairbank again took the lead in organizing a producers' group, the Lambton Crude Oil Partnership. This organization held together for a short while, at least until prices shot up due to the temporary closing of the oil fields in Pennsylvania. In 1873 Canadian oil exports hit a record 170,000 barrels. But the crude, which started the year at \$2 a barrel quickly dropped to 70 cents a barrel by year's end with the discovery of new fields in Pennsylvania. The Canadian industry was thrown into a depression and many left the Ontario oil fields for a better life in Manitoba, where farmland was being opened up.

Fairbank, realizing that something had to be done to get prices to rise, formed the Home Oil Company in 1873. The company erected its own refinery in Petrolia. Despite the oversupply, this company survived for eight years. By May 1874, only Home Oil and F.A. Fitzgerald of London were still refining. In September the London refinery companies joined to form the London Oil Refining Company cartel. The producers not connected to Home Oil formed the rival Petrolia Crude Oil and Tanking Company, acting as a third major force in the industry. An agreement was reached between the three and prices rose to their benefit.

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All of the attempts to bring producers and refiners together in an organization came to fruition under the direction of Jacob (Jake) Englehart.¹⁴ If anyone could have challenged Fairbank for the title of “most influential oil baron,” then it would have been Jacob Englehart. In the late 1870s he moved to Petrolia where he built the Silver Star Refinery. In 1880, Englehart led in the formation of the Imperial Oil Company Limited and two years later joined Fairbank in the creation of Crown Savings and Loan.

Imperial Oil came about to counter the attempt by John D. Rockefeller and the Standard Oil Company from becoming a dominant force in Canada. A number of circumstances had conspired to keep the Canadian industry fragmented. First, Lambton County was pockmarked with more than 1,000 separate wells, most of which, on their own, produced only small quantities of oil. Second, transportation was fragmented, with three major railways serving the oil lands, and that kept prices competitive. Third, refineries up to that time had been small, and relatively inexpensive operations. And fourth, the industry had been, so far, protected by the national government. Tariff duties acted to protect small, inefficient operators. In total, all these factors acted to disrupt attempts to organize cartels and long-lasting industry cooperatives. In the United States the conditions were much different, where John D. Rockefeller had established a huge corporation that had cornered the petroleum business. He had acquired his first refinery in 1864, and in just eleven years he managed to control the entire American industry. By the end of the 1870s Rockefeller was looking north. Englehart saw the coming threat and decided to act. He formed Imperial Oil, the Canadian industry’s response to the Standard Oil threat. On 8 September 1880, sixteen oil men, all but Englehart located in London, created the new entity. Operations were centralized: oil was refined in two plants, in London and Petrolia, while others specialized in some phase of production such as lubricating oil or candles. The London refinery remained operational until it burned down in 1883, when all refining was centralized in Petrolia’s Silver Star. Imperial did keep a lubricating and wax plant in London until 1895. Imperial’s business boomed. Within a few years it had twenty-three branch offices, from Halifax to Vancouver.

By 1895, however, the rush for expansion in the oil industry was so great that Imperial did not have the capitalization to keep up. American competitors were serving one-third of the Canadian market. Imperial attempted to find new investors in Canada and in Britain but to no avail. Clearly the only source of sufficient capital was Standard Oil, and in 1898 Rockefeller’s corporation gained a controlling interest in Imperial in exchange for the capital needed to meet Canada’s growing need. Soon after Standard took over control of Imperial, it moved the head office to Sarnia and built a pipeline from the Lambton fields. The transfer to Sarnia also represented the first of two significant blows to Petrolia’s economy. The second would come little more than a decade later, when the Lambton wells would begin to dry up.

New discoveries at Oil Springs in 1881, continued good production at Petrolia, and steady prices shook Lambton County out of the last remnants of the 1870s depression. With the drilling of deeper wells at Oil Springs, a deeper stratum was tapped to give up its oil reserves. There were no gushers here, nothing to rival the excitement of the 1860s. Instead, in the area of Oil Springs and Petrolia, wells now pumped consistently and productively. The markets for oil had grown through the invention of the internal combustion engine and the turbine. There was no fear in the last two decades of the nineteenth century that petroleum markets

¹⁴ J. Englehart was born in Cleveland in 1847. He had come to London from New York where, at the age of eleven, he had worked as a clerk in the oil firm of Sonneborn, Dryfoos and Company. In six years he was a partner.

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might dry up. In fact, the Lambton oil fields could not keep pace with Canada's thirst for oil. By 1890 nearly one-fifth of the oil used in this country had to be brought in from the United States. In 1903, when it was clear that the Lambton fields were wearing out, almost two-thirds of the oil used in Canada had to be imported from that country.

The new wells at Oil Springs resulted from the actions of a Mr. Duggan, the president of the Excelsior Oil Company refinery of London, Ontario, when he decided to drill a well to the 450-foot level in the Oil Springs oil field using a new auger drilling technology. He reached some 200 feet deeper than any previous well on the Oil Springs gumbeds. Duggan's deep well produced 100 to 200 barrels a day, and within several years there were 2,000 wells drilled close together over an area of 500 acres. (Land in the gumbeds was generally sold in ½ acre lots.) Oil production from the Oil Springs oil field climbed steadily until it reached a peak of 133,366 barrels per annum in 1898, and then began to decline. By the 1920s, production was at 26,000 barrels per annum, with only 200 wells remaining in operation, and oil production has remained at that level ever since at Oil Springs, even though the number of wells has increased with the re-opening of some of the historic wells since the Organization of the Petroleum Exporting Countries (OPEC) price increase of 1973.

One international impact of the discovery of oil at Oil Springs came about when oil drillers from Petrolia and Oil Springs were recruited in the latter decades of the 19th century by international firms to explore for oil all over the world. These "Hard Oilers" were directly responsible for bringing in the first producing wells, and establishing an oil industry, in Sumatra, Persia (Iran), Galacia (Austria-Hungary), Saudi Arabia, and Baku in the Russian Empire.

At Oil Springs, most of the small independent oil companies have long since closed their operations and moved on as production decreased from the oil field and costs escalated. However, the Fairbank family stayed active in the historic oil fields, and managed to maintain a profitable operation employing the old jerker-rod system to pump the low-head historic wells owned by the family. Moreover, in March 1914, the Fairbank family drilled a gas gusher on their property – the then-biggest gas well producer in Canada. Subsequently, an even bigger gas well was drilled by another company in the Oil Springs field. Over the years, the Fairbank family has greatly expanded its holdings by acquiring other oil properties in the Oil Springs oil field in an ongoing consolidation to gain economy of scale. Today, Fairbank Oil Properties Ltd. owns three-quarters of the historic Oil Springs oil field in the "east gumbed" on Lots 17, 18, and 19, Concession 2, Enniskillen Township, and is currently pumping 350 oil wells. It has been estimated that more than 10 million barrels of oil have been produced by the Oil Springs oil field since its opening in 1858; and it is the oldest operating oil field in the world.

The site today presents a unique industrial landscape highlighting in-situ technologies that were developed to open and operate the first commercial oil field – not only in Canada, but in the world.

c) Integrity:

The site has been an operating oil field for approximately 146 years and has seen many changes over that time. The location of the first dug oil well in Canada is well known, as is the first drilled well. The gumbeds that Tripp developed and which led to the discovery of the first oil well are also present on the site. The

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technologies used to develop and exploit the oil field can still be seen at the site. These range from the historic jerker-line system for extracting the oil from the ground to the sunk storage tanks peculiar to the region. There are also vestiges of the technology associated with Imperial Oil, the first successful corporation that brought the many producers and processors together (Figure 16). The resources on site reflect the beginnings of the oil extraction and processing industry in Canada, an industry that was to become a major contributor to the economic wealth of the country.

d) Selection of Name:

If the property were designated, the most appropriate name would be the “First Commercial Oil Field National Historic Site of Canada.” This name would reflect the commemorative intent of the designation.

e) Comparative Context:

The history of the beginning of the oil industry in Canada revolves around three foci in south-western Ontario: Oil Springs, Petrolia and Bothwell. Although the oil fields are all within Lambton County and very close to each other, each played a different role. Bothwell was the location where the first well was dug (unsuccessfully) to find a continuous source of oil. (Oil would eventually be found at Bothwell.) The focus switched to Oil Springs, where the first successful oil well was dug. The exploitation of the Oil Springs field was to provide the impetus and the expertise to explore the region and led to the development of the Petrolia field. The latter would subsequently surpass the Oil Springs field in the production of oil.

Each of the three fields has left in-situ resources that address the beginnings of the oil industry in Canada.

The Bothwell field, the last to be developed, is easiest to deal with as there is very little left of the 19th-century operation. A number of wells are still operating in the area; however, they use modern technology to get the oil out of the ground. There is a small museum that consists of an original building containing a non-operational rig that is hooked up to two jerker lines that terminate outside the building and are not now connected to any oil pump. Some other artefacts of the early oil industry, such as an oil collector wagon, are distributed around the rig building (Figures 17 and 18).

The Petrolia field, which is much more extensive than either of the other two, is now pumped on a commercial scale by contemporary oil pumps. There is an operational jerker-line rig in-situ on the Petrolia field, but this is located on the museum grounds established there to commemorate the oil industry. This rig operates no more than six oil wells. There are a small number of other wells on the site; however, they use contemporary technology. The museum site at Petrolia also encompasses other artefacts associated with the early oil industry, such as oil wagons, and a partially reconstructed Canadian Rig. The site is also being used as a pioneer village as a number of buildings have been moved to the site and restored (Figures 19 and 20).

The Oil Springs field has approximately 350 operating wells, of which approximately 120 are operated by the jerker-line system using six rigs for power. The Oil Springs field also encompasses a number of significant in-situ resources relevant to the beginning of the oil industry. This is the location of the original Williams well, now situated beside a museum that tells the history of the oil industry in the area through artefacts and didactic displays. The remains of a number of other dug wells, as opposed to drilled wells, can

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be found throughout the field. The sites of a number of wells significant in the history of the beginnings of the industry can also be found throughout the field, such as the Old Fairbanks well, the Black and Matheson flowing well, the Shaw well, and the Jury and Evoy flowing well. The gumbeds that initially drew interest to the site can be also be found there (Figures 8 to 14).

Beside the fact that the Oil Springs field was the first to be developed on a commercial basis, encompassing many of the initial developments of the industry, this operational field has the greatest integrity in regards to in-situ resources of the three areas in question.

Although much later in time, the Turner Valley Gas Plant can be considered as a comparative for the evaluation of the Oil Springs oil field. According to the Minutes of the HSMBC,

The Board recommended that the Turner Valley Gas Plant be designated a national historic site because it is central to the history of petroleum extraction technology and the earliest and only surviving example of its kind in Canada. Also, the plant is the principal extant built resource associated with the Turner Valley, the most important petroleum field in Alberta until 1947, and, through its processing function, the plant facilitated the development of the valley as a leading producer of natural gas, naphtha and liquid petroleum gases. Further, the site of the plant is intimately linked with other themes crucial to the history of the oil and gas industry including exploration, the development of transportation networks, the role of entrepreneurship, and the regulatory impact of Government.¹⁵

Another comparative would be a mining district that has been designated. In this regard, the Cobalt Mining District serves as a very good example. The HSMBC recommended the Cobalt Mining District for designation because it is a rare cultural landscape possessing a large number of vestiges and buildings directly relating to the evolution of the hard rock mining process of the early 20th century in Canada; and it reflects an important period of hard rock mining in Canada, between 1903 and the late 1920s, that established a more secure investment environment for mining speculation and created financial capital for large-scale Canadian mining development in the first half of the 20th century.¹⁶

The Oil Springs' oil field is central to the history of petroleum extraction and refining, and to the technology required for this industry. It is also the first example of its kind in Canada and the world. Through its development, the Oil Springs oil field laid the basis of this industry in the 19th century. As with the 20th-century Turner Valley site and the Cobalt Mining District, the Oil Springs site is an industrial landscape possessing a large number of vestiges relating to beginnings of the oil industry in Canada. The site is also intimately linked with other themes, noted for the Turner Valley and Cobalt District sites, crucial to the history of the start of the oil and gas industry in Canada and the world.

¹⁵ HSMBC, Minutes, November 1995.

¹⁶ HSMBC, Minutes, November 2001.

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5. CURRENT STATUS

a) Threat(s):

There appear to be no immediate threats to the site.

b) Other Designations:

None.

c) Community Value:

The Fairbank Oil Properties Ltd., recognizing the historical value of the site of the first oil well in Canada, donated land for the construction of the Oil Museum in Oil Springs near the site of that first well. This company is also in the process of constructing a heritage walkway through part of the site. Furthermore, Fairbank Oil Properties Ltd. is willing to have its land, which encompasses most of the Oil Springs oil field, designated as a national historic site in order to preserve the history that this oil field reflects.

The Oil Spring site has already received some international recognition. Dr. Emory Kemp, director of the Institute for the History of Technology and Industrial Archaeology at the University of West Virginia, headed a team of American industrial archaeologists and engineers who in the summer of 1991 spent six weeks recording several components of the Fairbank oil property, including remnants of a historic steam-powerhouse (damaged by fire in 1961) and the Orchard Rig, an extant drive house/jerker-line pumping system that is one of four similar surviving historic rigs that pump up to 120 of the 350 oil wells in production today.

d) Proposed Plaque Location:

The location of the present HSMBC plaque¹⁷ at the Oil Museum in Oil Springs, in proximity to the well dug by James Miller Williams, on the south corner Lot 16, Concession 2, Enniskillen Township, appears to be the most logical place.

¹⁷ See footnote 2 for the text of this plaque.

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6. SUMMARY OF SIGNIFICANCE

The first commercial oil field in Canada is historically significant because:

- the site is a rare industrial landscape possessing a large number of vestiges directly related to the beginning and to the evolution of the oil industry in the latter half of the 19th century in Canada;
- the site contains the first commercial oil well in the world, the first drilled well in Canada, the first gumbeds that were commercially used in the world, and the first gas gusher in Canada;
- the site, where the mining, refining and marketing of petroleum products once took place, had major impacts both financially and technologically not only in Canada but on the development of the oil industry in other countries.

First Commercial Oil Field in Canada, Oil Springs, Ontario

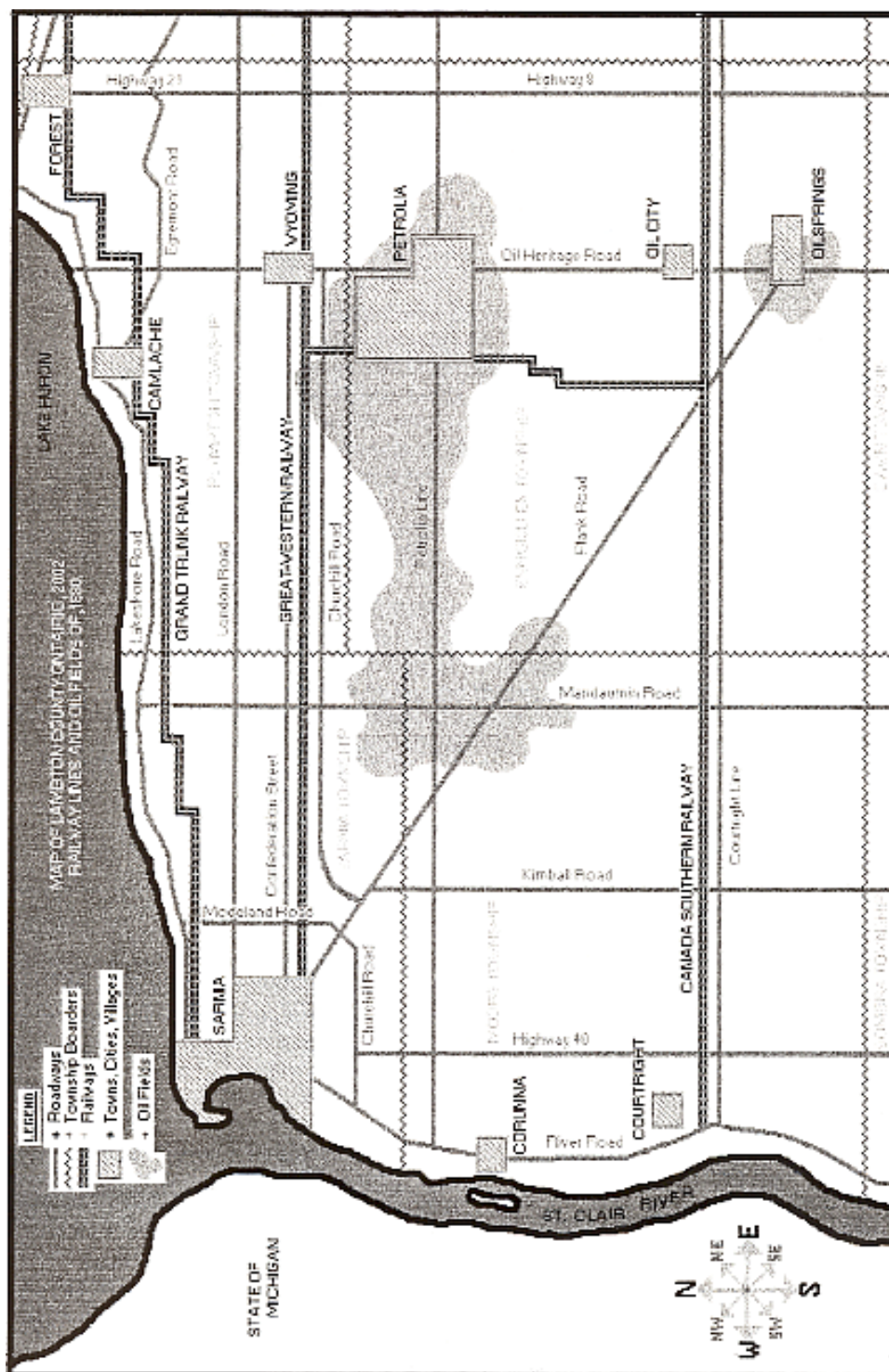


Figure 1. Schematic map of Lambton County, Ontario, showing rail lines, roads, oil fields, and the towns of Oil Springs, Petrolia and Wyoming. (From Patricia McGee, *The Story of Fairbanks*, p. 92)

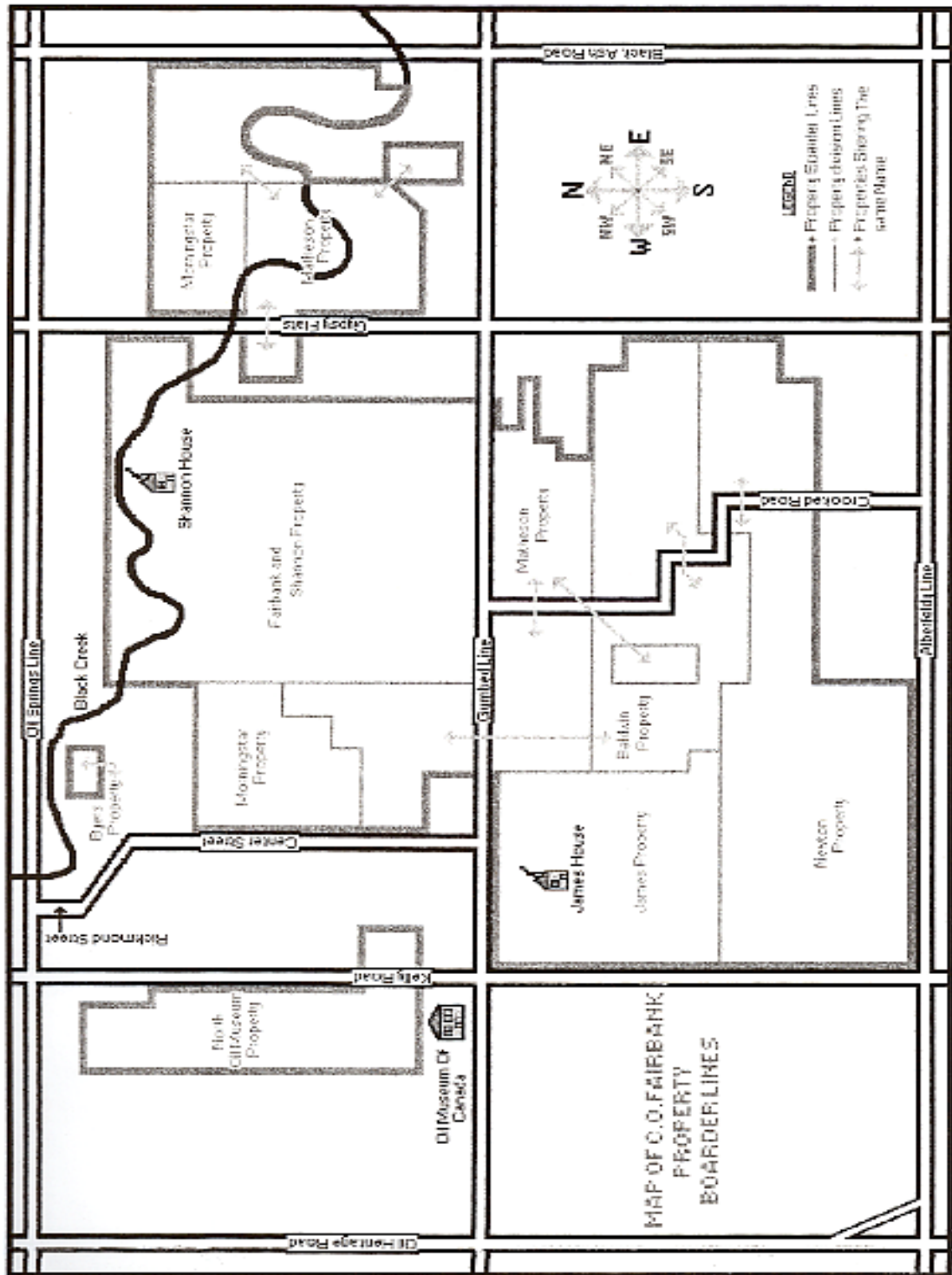


Figure 2. Schematic map showing the roads that delineate the properties of the Fairbank company and the museum. (From Patricia McGee, *The Story of Fairbanks*, p. 93)

First Commercial Oil Field in Canada, Oil Springs, Ontario

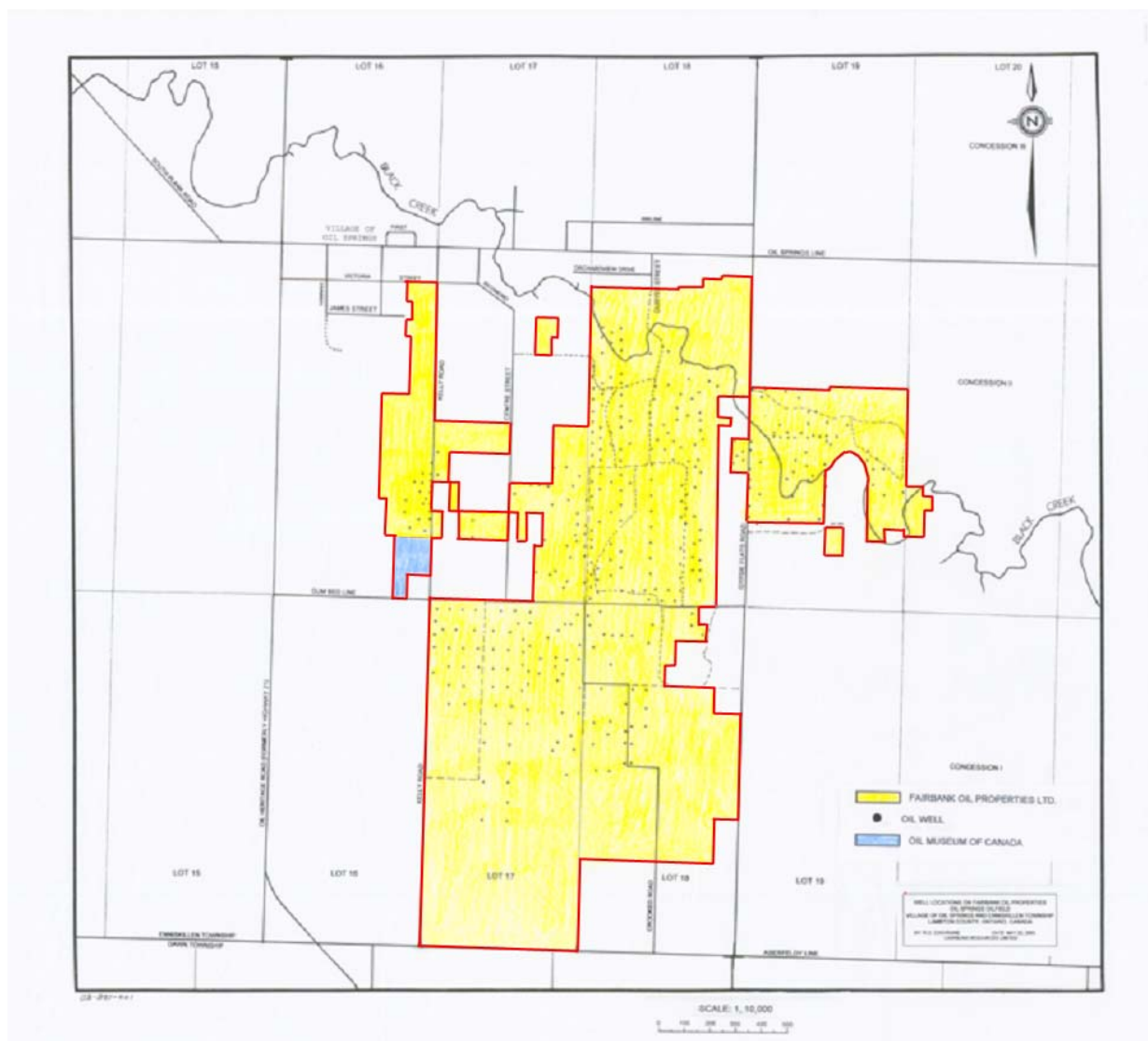


Figure 3. The shaded areas on the map indicate the location of the Fairbank Oil property (yellow), the Oil Museum of Canada property (blue), and the producing oil wells found thereon, located on Lots 16, 17, 18 and 19, Concession 2, Lambton County. The proposed designated place is indicated by a red line. (Courtesy of Fairbank Oil Properties Ltd.)

First Commercial Oil Field in Canada, Oil Springs, Ontario

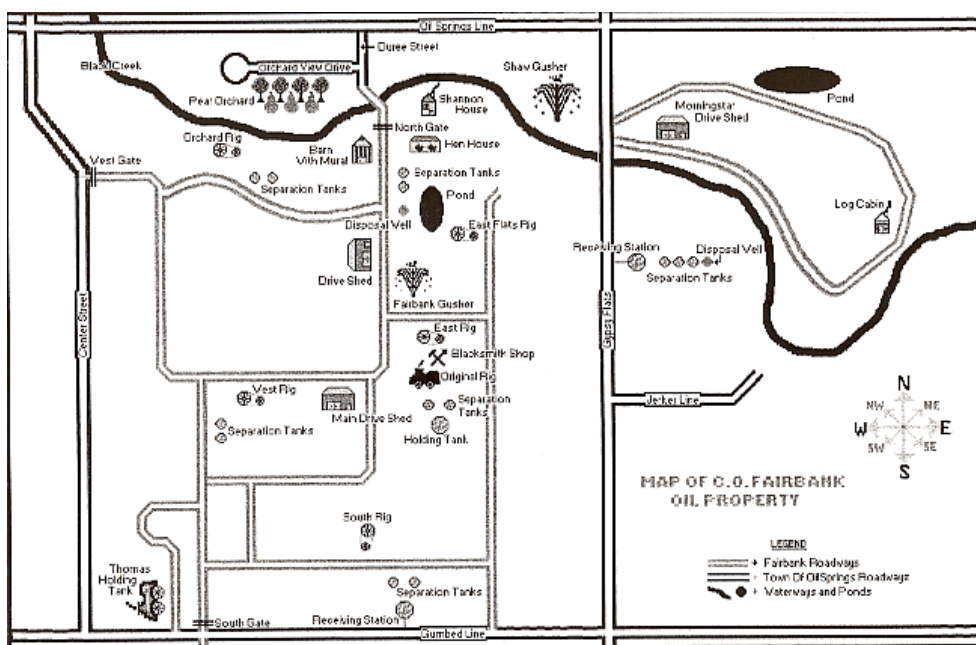


Figure 4. Schematic map of the C.O. Fairbank property located north of Gumbel Line showing the location of the Shaw Gusher, the Fairbank Gusher, various rigs, separation tanks, holding tanks and receiving station. (From Patricia McGee, *The Story of Fairbank Oil*, p. 94)

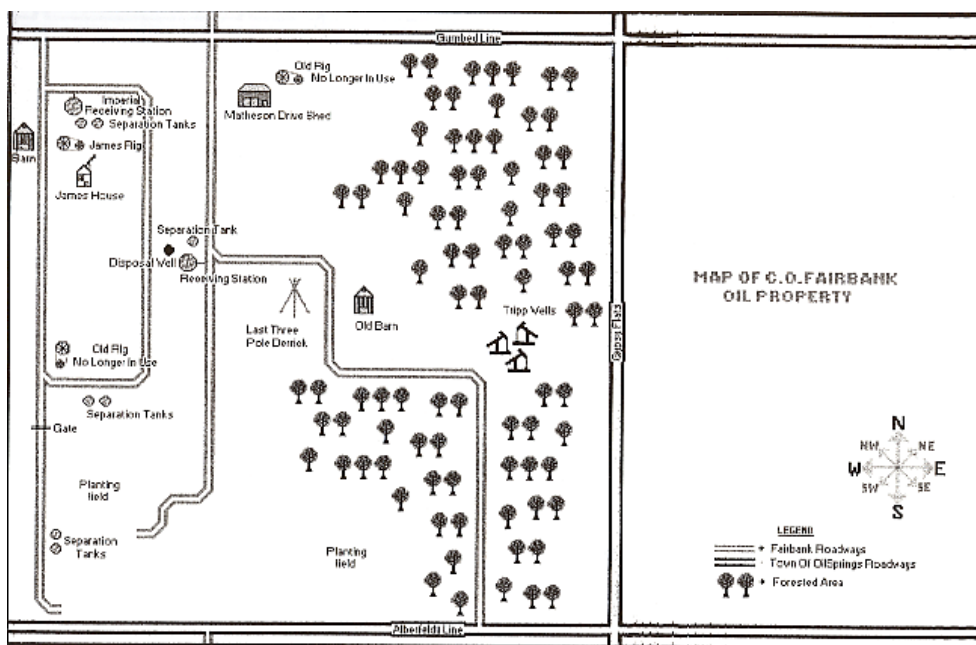


Figure 5. Schematic map of the C.O. Fairbank property located south of Gumbel Line showing the location of a number of rigs, separation tanks, the East Gumbel Tripp wells, and the last three-pole derrick. (From Patricia McGee, *The Story of Fairbank Oil*, p. 95)

First Commercial Oil Field in Canada, Oil Springs, Ontario

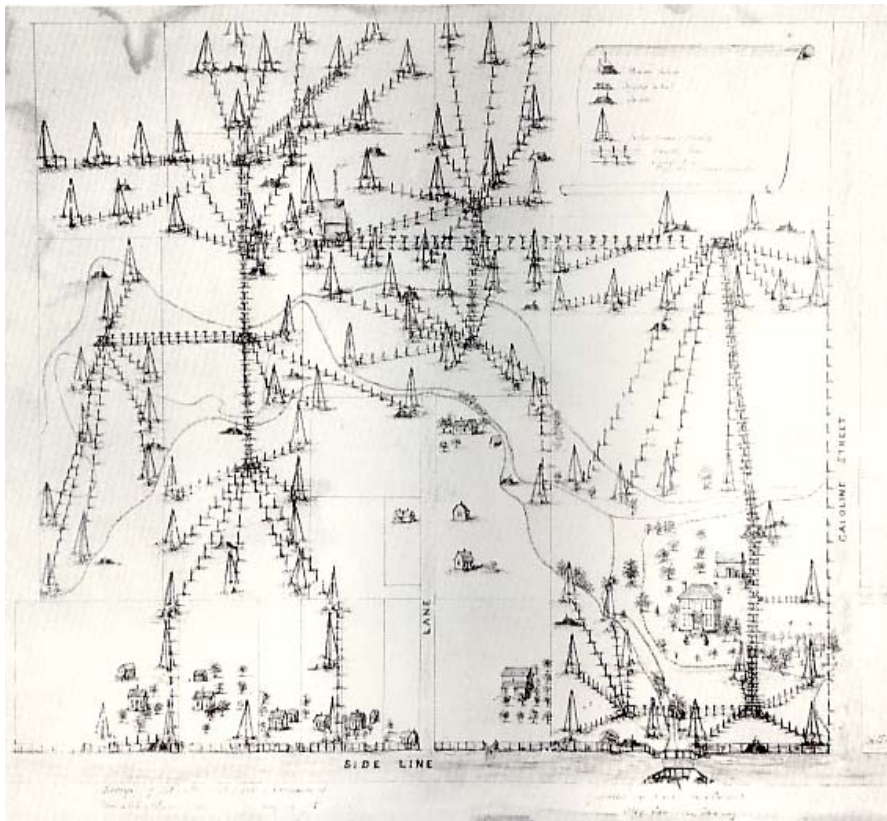


Figure 6. Group of oil wells run by a jerker line system showing a number of spider wheels from which the jerker lines radiate out to the wells. (D. Newell and R. Greenhill, *Survivals*, image 6-4)



Figure 7. Oil wells operated by the jerker system, Petrolia, 24 January 1915. (D. Newell and R. Greenhill, *Survivals*, image 6-5)

First Commercial Oil Field in Canada, Oil Springs, Ontario



Figure 8. Williams-dug oil well near the museum with a three-pole derrick – Oil Springs. (A. Roos, Parks Canada, April 2005)



Figure 9. Wooden oil tank with jerker line in background – Oil Springs. (A. Roos, Parks Canada, April 2005)

First Commercial Oil Field in Canada, Oil Springs, Ontario



Figure 10. Spider wheel allowing changes of direction of jerker line, with a contemporary derrick in the background – Oil Springs. (*A. Roos, Parks Canada, April 2005*)



Figure 11. Jerker line coming down a hill and over a creek – Oil Springs. (*A. Roos, Parks Canada, April 2005*)

First Commercial Oil Field in Canada, Oil Springs, Ontario



Figure 12. Rig house with jerker lines coming out from machinery located inside – Oil Springs. (*A. Roos, Parks Canada, April 2005*)



Figure 13. Machinery inside rig house – Oil Springs. (*A. Roos, Parks Canada, April 2005*)

First Commercial Oil Field in Canada, Oil Springs, Ontario

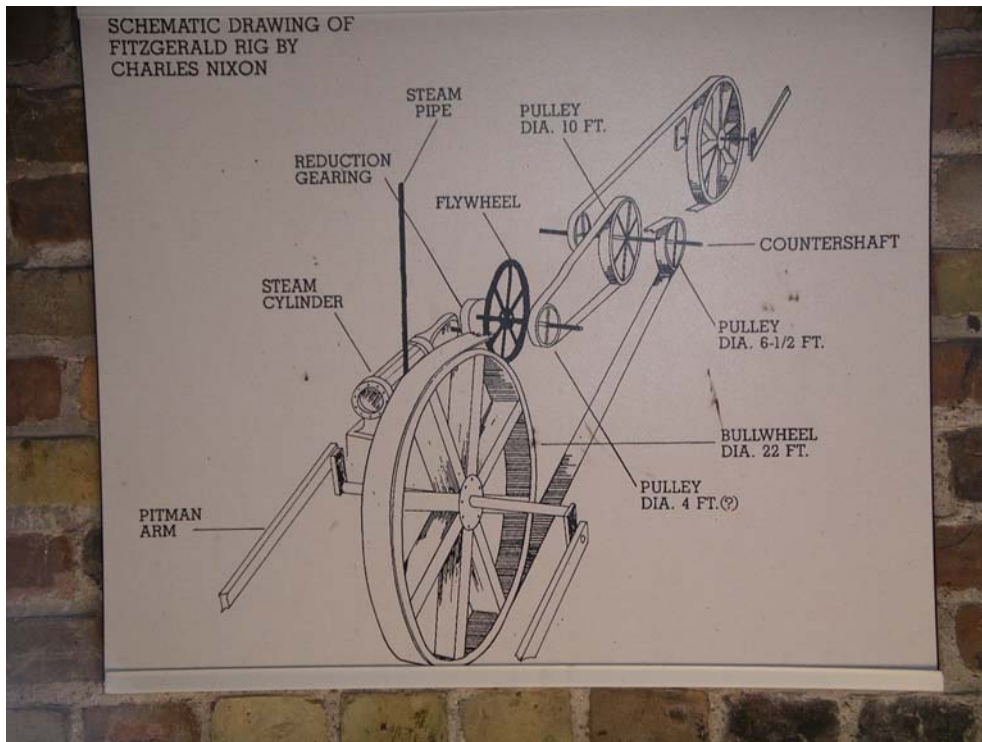


Figure 14. Schematic of machinery inside rig house. (*A. Roos, Parks Canada, April 2005*)



Figure 15. Below-grade wooden oil tank – Oil Springs. (*A. Roos, Parks Canada, April 2005*)

First Commercial Oil Field in Canada, Oil Springs, Ontario



Figure 16. Imperial Oil Receiving Station, 1915 - 1973 – Oil Springs. (*A. Roos, Parks Canada, April 2005*)



Figure 17. Bothwell Oil Museum, showing a three-pole and a contemporary derrick. (*A. Roos, Parks Canada, April 2005*)

First Commercial Oil Field in Canada, Oil Springs, Ontario



Figure 18. Non-operational rig building – Bothwell Oil Museum. (*A. Roos, Parks Canada, April 2005*)



Figure 19. Operational rig building with jerker lines coming out of the building – Petrolia Oil Museum. (*A. Roos, Parks Canada, April 2005*)

First Commercial Oil Field in Canada, Oil Springs, Ontario



Figure 20. Oil wagons and three-pole derrick – Petrolia Oil Museum. (*A. Roos, Parks Canada, April 2005*)