

HISTORICAL FOUNDATION OF CANADA'S  
OIL INDUSTRY AND THE DEVELOPMENT  
OF IMPERIAL OIL LIMITED  
FROM 1880-1920

by

Alan Wayne Hill

Submitted in partial fulfillment  
of the requirements for the  
degree of Master of Arts

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## ABSTRACT

The purpose of this thesis is to examine the historical development of the Canadian oil industry from its inception in the 1850's until the end of 1920. Special emphasis has been placed on the major oil company formed in 1880, Imperial Oil Company Limited, and its role in functioning as Canada's dominant oil company.

It is the intent of this thesis to explain the underlying reasons as to why this industry evolved in the manner examined, and the various strategies implemented to gain market control over the industry. The events and analysis are presented in chronological order so that the reader may have an understanding of the transformation process which took place in this industry.

Each of the three chapters has an introduction outlining the industry transformation utilizing standard concepts in the study of industrial organization. The first chapter deals with the beginning of a new extractive industry, and the role of important entrepreneurs in shaping the industry structure. Considering that the United States oil production and industry growth was on a larger scale than in Canada, some detailed comparisons are made to point out the similarities and differences in explaining the distinctive Canadian industry which evolved. Chapter II examines the formation, expansion, and finally the acquisition of Imperial Oil by the Standard Oil Company (New Jersey) in 1898. It attempts to show that conditions operating

within the Canadian industry were the most important factors in the formation of Imperial. As demand and supply conditions changed with the expansion of Imperial, the acquisition process is examined to show how the Canadian oil industry became foreign controlled. Chapter III is a general account on the expansion of Imperial across Canada as a subsidiary of Standard Oil. Here judicial decisions in the U.S. (1911) affected the company in Canada. Policy decisions for increasing Imperial's functions in refining and crude oil production both in Canada and in South America are also described and analyzed to indicate the monopoly control Imperial Oil exerted over the industry.

Some of the major findings presented in this thesis vary from what the established sources on Canada's oil industry have to date dealt with. The first part of the thesis, concerned with the early period of development, emphasizes the importance of the events surrounding the export of Canadian oil. Other historians have neglected to look at this occurrence for the significance it had in structuring the early beginnings of the industry. The prominent entrepreneurs involved at this time have also been further researched to present an aggregate picture of what occurred. Moving along in this paper, unlike what has previously been written, this thesis has taken the approach that Imperial's formation was due to a desire to control a greater share of the Canadian oil market, rather than of a response to the threat of control by Standard Oil in the United States. The acquisition of Imperial by Standard in 1898 has been documented to show there were few alternatives to Imperial at the time. Research of the events taking place has shown that Imperial tried to sell out to another company in

1895, but Standard's strategy of control over Imperial and the Canadian market made it unlikely that any other company would purchase Imperial. Finally, after the acquisition of Imperial by Standard, this thesis conceptualizes the expanded role of Imperial as it included ownership control of a subsidiary formed in South America in 1914, the International Petroleum Company Limited. Findings verified in this thesis of events which occurred in the first World War explain why International Petroleum withdrew oil supplies from Peru because certain tax issues were not settled to the company's satisfaction.

## PREFACE

In 1976, Associate Professor Angus Gunn from the University of British Columbia, presented a speech to the Habitat Conference in Vancouver on the problems facing Canada's oil supply position. To introduce this topic, Mr. Gunn described the beginnings of Canadian oil production in Ontario as follows:

"The first Canadian oil finds were in Ontario. Oil Springs in Western Ontario was in the news in 1851 with details of two wells - one at 100 feet and one at 150. New wells were dug over the following 50 years but total production never ran above one million barrels a year. Throughout this period the U.S. was seen as the major oil source in North America."<sup>1</sup>

There are certain weaknesses in Mr. Gunn's statements which understate the importance of the historical foundation of Canada's oil industry. There have been few studies undertaken on Canada's oil history so it is not surprising that Mr. Gunn discounted the importance of Canada's early oil history. The few published books on Canada's oil history have tended to mythologize the early history and the role that the dominant company formed in 1880 - the Imperial Oil Company Limited - had in shaping the growth of the industry in Canada.

In effect this thesis is a re-examination of Canada's oil history and for this reason it has been necessary at times to refute some of the historical accounts from the commonly published sources.<sup>2</sup>

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<sup>1</sup> Winnipeg Tribune, July 20, 1977, p. 58.

<sup>2</sup> Three common published sources on Canada's oil history are: Gould, Ed., History of Canada's Oil and Gas Industry (Saanichton, B.C.: Hancock House, 1976); Gray, Earle, The Great Canadian Oil Patch, (Toronto: Maclean-Hunter Ltd., 1970); and Purdy, G.A., Petroleum: Prehistoric to Petro-chemicals (Vancouver; Copp Clark, 1957).

The main source of reference for this thesis is an unpublished four-volume manuscript completed in 1951 by John S. Ewing entitled The History of Imperial Oil Limited. Some of this extensive work was incorporated into the three volumes of The History of Standard Oil Company (New Jersey), but general access by the public to the Ewing study has - to this writer's knowledge - never been allowed by the sponsors of this study, Imperial Oil Limited and the Harvard Business Foundation. For example, Professor John T. Saywell of York University who wrote a short history of the Canadian Oil Company in 1961, in a subsequent letter to the writer in 1978, explained some of his difficulty in obtaining the Ewing study:

"I am positive there is a history of Imperial Oil in the possession of Imperial Oil. When I was doing this work I found a footnote in the History of Standard by Hidy and Hidy referring to such a piece of research. Apparently Imperial wanted to cover it up for I was unable to find it in their library and officials of the company denied that it existed."<sup>3</sup>

In addition to the Ewing study, other sources on the early oil industry have included the weekly oil reports found in the Monetary Times between 1869 and 1880. An unpublished Masters thesis by Edward Phelps examined the career of one prominent entrepreneur in the early Canadian industry.<sup>4</sup> Mr. Phelps provided helpful advice on sources for this thesis. Interviews with Petrolians, especially Mr. C. O.

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<sup>3</sup> Letter, John T. Saywell to A. W. Hill, May 10, 1978.

<sup>4</sup> Phelps, Edward C. W., John Henry Fairbank of Petrolia (1831 - 1914): A Canadian Entrepreneur, (unpublished thesis, University of Western Ontario, London, 1965).

Fairbank, gave the writer insight into how the early industry evolved. Research undertaken at the Lambton County Archives in Wyoming, Ontario and Imperial's library in Toronto also provided original material for this thesis.

For the latter period, especially, newspapers, periodicals, and government documents provided insight into the industry as it evolved. In particular, the Public Archives of Canada was a useful source in clarifying the controversial events involving an Imperial Oil subsidiary in Peru during the first World War - a topic which was conspicuously absent in the Ewing study.



### ACKNOWLEDGEMENTS

The writer is grateful to Imperial Oil Limited and especially Mr. W. G. Charlton, for allowing me access to unpublished research material on the company's history. A special thank you is extended to the Imperial library staff in Toronto where much of this research material was available, and also to Imperial's regional staff in Winnipeg for their courtesy.

In connection with research undertaken in Ontario, the writer would like to thank the people met in Petrolia for their hospitality, especially the Pearson family and Mr. C. O. Fairbank. Edward Phelps from London, Ontario, was also helpful in providing sources for this thesis.

Advice on this topic were offered by individuals in the Economics Department at the University of Manitoba and I would like to thank my thesis advisor, Professor Cy Gonick, whose innovative ideas and encouragement made this venture worthwhile.

Finally I would like to thank my family and my wife Marilyn for their support, without which this thesis would not have been possible.

CHAPTER I    THE EARLY BEGINNING 1850-1879

## I INTRODUCTION

### BASIC CONDITIONS

As with any industry study, there are certain basic conditions which can influence the early structure, conduct, and performance of that industry. In the case of the Canadian oil industry, these conditions were important from the commercial exploration of oil in the 1850's until the incorporation of Imperial Oil Company Limited in 1879 - 1880.

On the supply side, the oil region in Canada was concentrated in a small area of southwestern Ontario with discoveries first at Oil Springs, and later at Petrolia where the bulk of industry development occurred. The boom and bust nature of oil was apparent throughout this period with conditions generally of oversupply of crude oil for the domestic market. With rudimentary equipment and expertise to initially produce and refine oil, technological innovations altered the industry structure. From being labor intensive it became a more capital intensive industry, especially in refining.

Demand factors were also important during this period with the introduction of a homogeneous substitute product of kerosene. As demand for kerosene was more of a seasonal nature in Canada the potential export market was a major factor in stimulating production and increasing the industry's rate of growth especially from 1869 to 1873. The domestic rate of growth was small compared to the export market, and factors such as price discrimination and quality standards in favor of export were important determinants in shaping the industry growth.

## STRUCTURE

Economies of Scale. The size of the Canadian market was a determining factor in establishing scale economies in the Canadian oil industry. The small domestic market resulted in small-scale production and refining, but with product innovation introduced in 1869 which increased the export demand for Canadian oil, larger refineries were constructed to lower unit costs. Once the export market declined, reduced output did not allow the industry to continue to produce at optimum levels, and firms were forced to operate at higher per unit cost.

Mergers and Concentration. From 1861 until the formation of Imperial in 1879 - 1880, there was hardly a time when the Canadian producers and refiners were not in some sort of association, monopoly-leasing arrangements, or cartels to protect themselves from the instabilities of the market place and to maintain a higher priced domestic market.

Number of Sellers and Buyers. Throughout this period, there were prominent entrepreneurs who dominated the Canadian industry, many of whom were American citizens attracted to the region. Some like J. M. Williams, Judge Higgins, J.H. Fairbank, and others who did not become members of Imperial Oil were instrumental in forming the various producer and refiner associations. Most of Imperial's nineteen founding members, besides having interests in other business ventures, had long histories in the Canadian oil industry, mainly as refiners. Special emphasis is due to Imperial member J. L. Englehart who dominated the export market, became a major crude oil producer and refiner, and was at times in direct competition with many of Imperial's

future members.

Product Differentiation. With a high sulphur content in Canada's crude oil, the refined kerosene was basically inferior to products in the U.S. Refining techniques improved Canada's product in order that it be competitive for the export market, but this factor was to remain a distinct disadvantage to the industry structure.

Barriers to Entry. Capital requirements for entry into producing and refining were relatively the same at first, but as refineries grew in size to meet demand, the capital required for refinery construction and maintenance far exceeded individual crude oil producers' costs. The land restraint was a natural entry deterrent as the land was owned by a few individual producers who tended to integrate functions to maintain their dominance. The risk factor in producing and refining oil was also a barrier for potential entrants, and the instability of market conditions and business cycles in general (especially in the 1873 depression) were instrumental in affecting entry into the oil business.

Vertical Integration. Very few firms during this period were vertically integrated - that is operating in all functions of the business, with the noticeable exception of J. M. Williams who had vertically integrated his firm in order to bring the product to market. In general the period was characterized by forward and backward integration to lower costs and to provide some form of stability and control.

#### CONDUCT

Pricing Behavior. The industry exerted control over the price of Canadian oil through associations and cartels. With lower production

costs for what was refined into an inferior product, there was an artificially higher price structure in Canada. As the export market developed, a two price system was instituted. Exported oil was lower in price to meet the U.S. competition while the higher domestic prices in the protected Canadian market had the effect of discriminating against Canadian consumers.

Price changes were an accurate indicator of various market conditions and strategies implemented during this period. For this reason, prices have taken on an important part of this chapter.

Product Strategy. With the smaller domestic market, the large-scale producers and refiners were primarily involved in the export market.

Technical Innovation. With the major development of the oil industry being in the United States with close proximity to the Ontario oil region, most of the techniques and implements used in the Canadian industry were imported from the U.S.A. However, Canada's oil technology was unique because of the different quality of the oil and the lower depths to drill in Canada and implements like the jerker system of pumping wells and ways to improve the sulphurous crude oil were distinctly Canadian. The litharge process of deodorizing Ontario's crude oil was also a major innovation in the industry, and was widely accessible.

#### PERFORMANCE

Production and Allocative Efficiency. Collusive elements operating within the industry to maintain a higher price structure for short term gain, naturally resulted in a misallocation of resources. There were few conservation measures undertaken to

efficiently produce and refine oil although it should be mentioned that the jerker system of pumping oil is still in use at Oil Springs in 1979 which would make this area the longest oil producing region in the world.

Progress. The boom and bust nature of the oil industry in Canada was dependent to a large extent by exogenous factors because of the special emphasis of the export trade. Once this market was realized, the industry experienced tremendous growth with a high capital inflow into the region.

Employment. Initially the industry was labor intensive. As the industry evolved, the producing region around Petrolia remained labor intensive but the refining region centered in London became more capital intensive. The Petrolia region also expanded with secondary industries and the growth of agriculture.

Role in Canadian Economy. Oil was a multi-million dollar industry in Canada during this period, and its importance to Canada's industrial growth was an apparent fact that has largely been neglected in Canadian history. The regional growth of the viable oil industry in Canada was offset by the higher Canadian prices for an inferior product.

Profits. With the high risk factor in the oil business, those entrepreneurs with the initial capital were able to diversify operations from the profits obtained from either producing or refining oil. Companies were formed at sums ranging up to \$500,000 during an era of early industrialization in Canada, and profits were large enough to warrant the capital investments.

## PUBLIC POLICY

From 1861, government policy was to legislate tariff protection to the oil industry to restrict imports. This resulted in the industry's relative ability to maintain prices in accordance with the tariff. While there were few quality restrictions imposed on the industry to improve the products, those that were had a substantial impact on the industry.

## II KEROSENE DEMAND

The growth of a new extractive industry such as oil can be traced back in history to an initial discovery of the raw material, which, when processed into finished products would supply either a new or substitute commodity. Initial discoveries of crude oil in large quantities by the famous Colonel Drake in Pennsylvania in 1859 was to provide the impetus for a completely new industry. The instant success and expansion of the oil industry, both in the U.S. and in Canada, was primarily based on the supply and demand for one major by-product of crude oil - kerosene.

By 1859, kerosene from coal was becoming a commercially accepted substitute for whale oil that was used for illuminating purposes. Based on techniques developed by innovators such as Abraham Gesner from Halifax, and James Young from Glasgow, Scotland in the late 1840's and early 1850's, liquid extracts from coal and shale were found to yield three fractions from distillation: naptha, kerosene or coal oil, and a third fraction providing lubricants and waxes. Petroleum derivatives were known to possess similar qualities as liquid coal, and the discovery and subsequent development of large quantities



of crude oil provided an inexpensive substitute for liquified coal.<sup>1</sup>

### III OIL SPRINGS

In the U.S., an oil boom resulted from Colonel Drake's well that was drilled 160 feet in August of 1859 which demonstrated that crude oil existed in large quantities. An oil boom also occurred in Canada after the Drake discovery, and while Canada's oil boom never materialized to the degree development occurred in the U.S., Canada's initial oil history was unique from that in the U.S. Around the time of Drake's discovery, Canada's oil region in Lambton county in southwestern Ontario was already being developed by an integrated oil company formed by James Millar Williams.

Organized in 1857, J. M. Williams and Company acquired the land assets in Enniskillen township of a bankrupt oil company, the International Mining and Manufacturing Company.

International was the first oil company in Canada formed in 1851 (incorporated in 1854) by the Tripp brothers from Woodstock, Ontario. This company had concentrated its efforts into digging the surface deposits of oil mixed in with sand and gravel (familiarily known as the 'gum beds'), boiling this gumbo in open cast vessels, and producing asphalt used for caulking ships along the St. Clair and Detroit rivers. While asphalt samples sent to the Universal Exhibition in Paris in 1855 had won an honorable mention for International, large scale production of asphalt was not attained by this company. Initially,

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<sup>1</sup> Hidy, Ralph W. and Hidy, Muriel E.: Pioneering in Big Business 1882-1911 (New York 1955) p. 3-5.

International was poorly financed in that of 60,000 pounds authorized capital, only 1250 pounds was actually subscribed to by Tripp and their associates from Hamilton and New York. By manufacturing asphalt, there was not a ready market throughout the year, and the heavy asphalt could only be transported by road during the winter months when the swampy area had frozen over.

In 1855, mortgages were registered against International's eight hundred acres of property, with the property being sold in 1857 to pay off bad debts. Williams, an industrial entrepreneur from Hamilton who had previously manufactured carriages and railroad coaches, purchased International's property and proceeded to set up operations to market kerosene. Provided with technical expertise supplied by Abraham Gesner (the inventor of kerosene) Williams constructed a refinery at Oil Springs near the 'gum beds' to distill the heavy oil into kerosene. With the construction of the London to Sarnia branch of the Great Western Railway in 1858, Williams relocated his refinery at Hamilton which was the main market for kerosene. In that year, he dug what was considered to be the first commercial oil well in North America, where free-flowing crude was found at fourteen feet. Williams had the crude oil barreled, transported thirteen miles north to a receiving station of Wyoming, and shipped by rail to Hamilton where the oil was refined and marketed by this one company.<sup>2</sup>

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<sup>2</sup> The following books and articles provided the basis for the History of International Mining and Manufacturing Co. and J. M. Williams and Co.: Brown, J. R., Ideas in Exile, A History of Canadian Invention (Toronto, 1967); Ewing, John S., History of Imperial Oil Ltd. (Harvard, Mass., 1951) hereinafter cited Ewing History; Gould, Ed, History of Canada's Oil and Gas Industry (Toronto, 1976); Gray, Earle, The Great Canadian Oil Patch (Toronto, 1970); Harkness, R.B., "Ontario's part in the Petroleum Industry" in Canadian Oil and Gas Industries (Parts I and

This was the initial difference of development in Canada as compared to the U.S. Williams was the notable entrepreneur in Canada who undertook the complete operation of producing kerosene for the public, whereas in the U.S. the industry began with individual specialists operating at each successive stage of production. Williams had the technical expertise and sufficient capital to enter each stage of production except rail transport. He thus established an advantageous position once other producers were attracted to the area.

There was virtually no competition to J. M. Williams and Co. until well into 1860. Williams had responded to the demand for kerosene in Canada, but development of Canada's oil region on a larger scale did not occur until after the Drake discovery in the U.S. Because of Williams' initial production and also because of the easy access to Enniskillen township from the Pennsylvania oil region, many U.S. producers and speculators came to develop the Enniskillen oil region beginning in April of 1860.<sup>3</sup> Crude oil production increased towards the end of 1860 by

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(Cont'd.)

II, February, March, 1951) hereinafter cited Harkness Ontario; Phelps, Edward, John Henry Fairbank of Petrolia (unpublished thesis, University of Western Ontario, London, 1965), hereinafter cited Phelps' Fairbank; Purdy, G.A., Petroleum, Prehistoric to Petrochemicals (Toronto, 1958); Ross, Victor, Petroleum in Canada (Toronto 1917).

3

Smith, John, Census Enumerator, "Description of the Oil district of Enniskillen Township, Lambton County, Ontario. From the census of 1861"; affidavit sworn February 4, 1861 (Lambton County Library, Wyoming, Ontario). In this affidavit Smith stated "... the oil mania...commenced in April last and has tended greatly to increase the inhabitants and put a fictitious value on land, many parcels of land that a few years ago were thought hardly worth the taxes are now held at high prices." The point of the Oil Springs field being developed by Americans in 1862 is found in Toronto Daily Globe (January 28, 1862) hereinafter cited Globe: "We (Canadians) are mainly dependent upon the capital and enterprise of the Americans to develop the rich resources of this trade."

producers other than Williams, but because Williams had control over the other stages of production, the prices paid for crude was set by Williams as "...he had been able to dictate the price he would pay for crude by his unique position."<sup>4</sup>

Competitive conditions in Canada's oil region materialized in 1861-62 when more oilmen were attracted to Oil Springs, and to a smaller degree Bothwell and Petrolia. The oil producing area at Oil Springs was a relatively small physical area covering approximately two square miles. Since the landowner also owned the sub-surface mineral rights, the area was characterized by a few owners with many lessees drilling for oil on half-acre or acre lots leased by owners who did not undertake drilling exclusively. Williams, being one of the largest landowners with eight hundred acres (the other major landowners being a Mr. W. E. Sanborn, and Americans William Anthony and John Bush),<sup>5</sup> did not increase his landholdings in Oil Springs, but rather directed his operations towards drilling deeper on his 'gum beds' area, leasing the remainder of his land to others, and operating his refinery at Hamilton.

The price paid by lessees to drill for oil depended on the distance from established producing areas like Williams' wells, with higher prices paid nearer the producing wells. The landowner received a bonus of between \$300 - \$500 per acre of leased land plus the right

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<sup>4</sup> Ewing, History CH I, p. 46.

<sup>5</sup> Globe, September 6, 1861 stated that Mr. Sanborn was the largest landowner in Oil Springs, and Phelps' Fairbank p. 19 mentions Williams, Anthony and Bush as being the major landowners.

to one-third of the oil produced by the lessee.<sup>6</sup> Total costs for the lessee in leasing land and drilling a well (which took a few months to drill) would amount to around \$1,000 with ample credit available.<sup>7</sup> Competition was stimulated by the large numbers of lessees drilling for oil, and also by the owners who would encourage production since it would also be to their own profit.

By mid 1861, 400 wells had been drilled in the Oil Springs area, increasing to 1000 wells by the end of 1862. Crude oil production far exceeded the demand and prices reflected the competitive and sporadic nature of the industry. While crude oil had been around \$5.00 per barrel (of 40 - 42 wine gallons)<sup>8</sup> delivered to Wyoming in 1860, prices by March of 1862 were from 10 to 25 cents per barrel if the oil could be sold.<sup>9</sup>

The famous Hugh Nixon Shaw well drilled around 200 feet in January of 1862 produced as much as 35,000 barrels of oil, and other free-flowing wells (which did not require pumping) drilled in 1862

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<sup>6</sup> The August 27, 1861 Globe report on Bothwell stated the bonus was \$50 for five acres of land plus one-quarter of the oil produced. This would indicate the relative high value on land at Oil Springs.

<sup>7</sup> Phelps' Fairbank, p. 20, 23.

<sup>8</sup> All figures and measurements throughout this chapter should be accepted with caution because of the lack of consistent official statistics. The wine gallon was in use throughout this period.

<sup>9</sup> Harkness Ontario Part I, p. 34 on 1860 prices. 1862 prices are found in Phelps' Fairbank p. 44, #29 and also Monetary Times August 29, 1867, p. 3.

increased production to an estimated 3000 to 4000 barrels per day for short periods.<sup>10</sup>

The demand for the crude oil came from the many small refineries spread throughout southwestern Ontario. As many as 100 small refineries, each with a capacity of from 8 - 15 barrels of oil per day, were constructed at capital costs of around \$1,000 each.<sup>11</sup>

Most of these refineries were rudimentary stills (which Hugh Nixon Shaw had patents on) capable of distilling fifty per cent of the sulphurous crude oil into kerosene; the remaining by-products were largely waste. As a result of competition among the many refiners, prices on refined kerosene declined. While Williams had charged from 70 cents to \$1.25 per gallon in 1859-60, refined kerosene in 1862-63 varied from 15 cents to 35 cents per gallon.<sup>12</sup>

In order for the industry to prosper in times of overproduction associated with low prices, the industry evolved into a more structured form through government assistance, economizing production costs, forming a crude oil producers association, and expanding into new markets with the development of an export market for the excess oil.

Government assistance to the oil industry was first introduced in 1862 when the Parliament of Upper and Lower Canada placed a 10 cent per

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<sup>10</sup> For a description on the Shaw well and production, see Globe January 28, 1862, February 5, 1862, February 8, 1862 and March 13, 1862.

<sup>11</sup> Harkness, Ontario, March, p. 34. See also Phelps' Fairbank, p. 23 on refinery costs.

<sup>12</sup> For 1859-60 prices see Gray, op cit. p. 40-41, and for 1862-63 prices see Globe, March 13, 1862 and Harkness Ontario, March, p. 34.

gallon duty on imported kerosene. The duty on imported refined was reduced to 5 cents per gallon in 1864 when supply was declining; a duty of 5 cents per wine gallon on imported crude oil was introduced in 1864 to stimulate production.<sup>13</sup> The initial 1862 action by the government would have protected the refiners to a degree from U.S. kerosene which was of a better quality and easier to distill. This resulted in prices charged to Canadian consumers that were higher than they otherwise would have been.

To economize production costs in Oil Springs, measures were undertaken to integrate operations. Landowners like Sanborn and Bush constructed larger tanks to store the excess crude from lessee wells to cut down on the tremendous waste. Sanborn, the owner of Shaw's well, sent 50 barrels of crude to a New York refinery for quality analysis, and he also constructed a stave factory to cut down on the high costs of barrels.<sup>14</sup> The muddy road to Wyoming was planked in 1862 (some say by Williams and a founding Imperial Oil member William Spencer)<sup>15</sup> when a saw mill was constructed near Oil Springs; the planks were also used for housing and as siding for the small underground storage vats dug to store oil in the impervious clay. Some producers, like Shaw and J. H. Fairbank for example, constructed stills to distill their crude

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<sup>13</sup> Ewing History, Ch. II, p. 15.

<sup>14</sup> Globe, January 28, 1862; March 13, 1862; and May 20, 1862.

<sup>15</sup> Cronin, Fergus, Research on: (Imperial Oil) London, Company's Founding and General Oil History, (Toronto, 1955), p. 7.

oil into kerosene, and in 1863 J. H. Fairbank introduced the 'jerker system' of pumping several wells from one steam engine source.<sup>16</sup>

As production costs were being reduced, a combination of owners and producers agreed, in May of 1862, to form the Canada Oil Association as a one-year partnership to restrict supply so as to raise crude oil prices. Their objective was to "market their oil exclusively through the Association's secretary, who would fill each order through an assessment on the members according to the rated capacity of their wells."<sup>17</sup>

Crude oil prices fluctuated between \$1.00 and \$2.00 per barrel during the one-year contract of the Association indicating that it was successful; the fluctuations also indicate that prices were not fixed at excessively high levels so as to attract new entrants or risk price undercutting by some producers.

This form of centralized marketing and producer quotas established by the Canada Oil Association was to act as the basis for future producer combinations like the Crude Oil Association (1868),

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<sup>16</sup> For the Shaw and Fairbank stills, see Globe March 13, 1862, May 20, 1862 and Phelps' Fairbank p. 31. The 'jerker system' was first explained by Fairbank in: Ontario, Royal Commission on the Mineral Resources of Ontario, and Measures for their Development, Report (Toronto, 1890), p. 159. Hereinafter cited Ontario, Royal Commission.

<sup>17</sup> Phelps' Fairbank, p. 27. See also Globe May 20, 1862, and Phelps, Edward, "The Canada Oil Association - An Early Business Combination" in Western Ontario Historical Notes (XIX 2, September 1963, p. 31-39). Fairbank was one of the nine directors of the Canada Oil Association and W.E. Sanborn was treasurer. From the available documents on William E. Sanborn in the Lambton County Library (Box number 4 Biographies number 16) he apparently stayed in Oil Springs until the end of 1864 when the oil wells were starting to fill up with water and he began selling his land holdings.



Lambton Crude Oil Partnership (1871) and the Mutual Oil Association (1877).<sup>18</sup> The later combinations, especially Mutual, were formed to control market prices either in association with, or competition against refiners' combinations like the Oil Refiners Association of Canada (1868) and the London Oil Refining Company (from 1874 on).

To stimulate new market demand for the excess oil in 1862, the producers looked for an export market. During the fiscal year of 1862, over 43,000 barrels of crude and refined were exported abroad; 35,000 barrels of the total were exported from Montreal by ship to Europe, British Guiana and Australia.<sup>19</sup> The export market is interesting in two respects: the export trade most likely occurred during the contract of the Canada Oil Association indicating the Association did not restrict supply for export purposes; and secondly, the exported oil was shipped from the Canadian port of Montreal, and not New York as it was in the 1869-73 Petrolia export trade.

However, from 1863 until 1869 there was virtually no oil exported from the Enniskillen fields. The immediate decline of the Oil Springs field reduced any surplus oil. When Petrolia crude oil production was far in excess of domestic demand from 1867 to 1869, the terrible odor of the initial exported oil had given Canada's oil a bad reputation on the international market.

Oil Springs crude oil production began to decline towards the end of 1863, and in 1866 Oil Springs was abandoned when production shifted

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<sup>18</sup> Ibid.

<sup>19</sup> Geological and Natural History Survey of Canada, 1886, p. 58s and Phelps' Fair bank, p. 25. According to the Globe March 13, 1862, the export of oil had not yet been undertaken.

to Petrolia. Crude oil prices increased when supply declined; throughout 1864 crude was between \$3.50 and \$4.00 per barrel, and for short periods in 1865-66, crude oil was around \$10.00 per barrel.<sup>20</sup>

#### IV. PETROLIA

The Petrolia oil area, which was physically much larger than Oil Springs (around 25 square miles) had been developed to a certain degree during the Oil Springs boom of 1861-62, but the greater depths of wells at Petrolia (in the order of 500 feet versus Shaw's 200 foot gusher) made initial drilling costs more expensive.<sup>21</sup> Free flowing wells were discovered in late 1865, but had "...failed to attract the mass of operators, who still clung to the belief that a second series of 'big wells' was yet to be found at Oil Springs...."<sup>22</sup> With the discovery of more successful free flowing wells in the summer of 1866 (some capable of producing 500 barrels per day), production quickly shifted to Petrolia which became the oil producing capital of Canada for the next thirty years.

When the Canadian oil supply declined from 1864 to 1866, many of the rudimentary refineries went out of business. From the approximately 100 small refineries in 1862, the number had been reduced to twenty-five during 1866. Many refineries had gone out of business because of the excess refining capacity, a lack of crude oil, and because of the increased imports of refined from the U.S. In 1865

<sup>20</sup> Phelps' Fairbank, p. 35. See also the Monetary Times 29 August 1867 p. 3 and Ontario, Royal Commission, p. 160.

<sup>21</sup> For an early description on Petrolia see Globe September 12, 1861, and March 13, 1862.

<sup>22</sup> Globe January 24, 1867.

total domestic consumption was estimated at 75,000 barrels of refined oil per year, and of that total, around 25,000 barrels were imported from the U.S.<sup>23</sup> The better quality of the U.S. imported oil forced many of the small distillers out of business, and the high price of crude in the U.S. (also around \$10 per barrel at times in 1865 because of Civil War taxes on oil) discouraged Canadian refiners from importing U.S. crude oil.<sup>24</sup>

The total refining capacity of the twenty-five Canadian refineries was around 3500 barrels per week during 1866. Oil Springs had seven refineries with total capacity of 650 barrels per week (which soon went out of business) but London, Ontario was the refining capital of Canada with five refineries capable of refining 1300 barrels per week.<sup>25</sup>

Three of Imperial Oil's founding members, William Spencer and Herman and Isaac Waterman, operated two separate London refineries in 1866. Spencer, a small Woodstock refiner in 1862, had entered into a partnership with Herman Waterman, formerly a clothing manufacturer, in 1863, to build one of London's first refineries, called Spencer & Waterman. This partnership was dissolved in 1866 when Herman and his brother Isaac established the Atlantic Petroleum Works and Spencer went into partnership with Anthony Keenleyside to operate a refinery.<sup>26</sup>

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<sup>23</sup> Ibid.

<sup>24</sup> The U.S. tax prices are discussed in Tarbell, Ida, The History of the Standard Oil Company 2 Volumes (Gloucester, Mass., 1963) Vol. I p. 31 and Vol. II, p. 383.

<sup>25</sup> Globe January 24, 1867.

<sup>26</sup> Cronin op cit., p. 5, 27, 28, and Phelps' Fairbank, p. 33.

London maintained and expanded its domestic refinery dominance from 1866 onwards as crude oil production increased in Petrolia. By mid-1868 the increasing supply of crude at low prices increased the number of refineries in Canada to around fifty, with the majority being at London. The established London refineries like Spencer & Keenleyside, Atlantic, and also the Forest City Oil Refinery of the Duffield brothers (which was the first London refinery in 1861)<sup>27</sup> were expanded and upgraded to maintain the London influence in refining.

One of the main reasons why London, and not Petrolia, became the refining capital of Canada was the preferential freight rate policy of the only railway transporting oil from Petrolia until 1877, the Great Western Railway. The low rates on crude oil shipped from Petrolia as compared to Great Western's high rates on refined from Petrolia gave London a distinct advantage over Petrolia as a refining centre.<sup>28</sup>

Petrolia's crude oil production in 1866-67 followed a somewhat similar pattern of the Oil Springs boom of 1861-62. The initial drilling costs were much higher than Oil Springs, but the larger oil area of Petrolia and easy credit stimulated production among the 2000 oilmen who came (mainly as drillers, pipe-fitters, etc.) to Petrolia in 1866.

Phelps' Fairbank stated that Petrolia's production "...was more carefully controlled than the boom it had followed."<sup>29</sup> This would then indicate that producers would have more control over output and crude oil prices. But prices quickly fell once Petrolia's free flowing

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<sup>27</sup> Ibid., p. 47.

<sup>28</sup> Phelps' Fairbank, p. 54.

<sup>29</sup> Ibid., p. 50.

wells came into production. By January, 1867, crude had fallen to the level of between 75 cents to \$1.00 per barrel, and by August of 1867, crude oil was 50 cents per barrel.<sup>30</sup>

In early August of 1867, a tremendous fire<sup>31</sup> in Petrolia had a profound effect on the structure of the Petrolia oil industry. At the time of the fire the low price of crude was a result of three main factors: overproduction during the summer period when demand from refineries was low (the fall and winter were the periods of greatest demand for kerosene); producers selling at a loss to pay off debts; and the lack of adequate tanks to store the oil.<sup>32</sup>

After the fire in which fifteen to twenty-five acres of oil land, derricks, engines and oil tanks were destroyed causing \$75,000 to \$80,000 damage, companies were formed to store crude in large underground tanks. Small underground tanks had been in use at Oil Springs, and had also withstood the Petrolia fire. The construction of large underground tanks (each with a storage capacity of around 8000 barrels at a cost of around \$2,000 each) was seen as a means of artificially controlling the market at an intermediary stage of production.

Tanking companies were formed by local operators J. D. Noble and Charles Jenkins and outside investors by the names of Judge Higgins from Chicago, the Duffield brothers from London, Ontario, and a Mr.

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<sup>30</sup> Globe January 24, 1867, and Monteary Times August 29, 1867, p. 3.

<sup>31</sup> For a vivid description of the Petrolia fire, see the first issue of the Monetary Times August 15, 1867, p. 7. See also the New York Times August 6, 1867, p. 5 for a description of this fire which gained international attention.

<sup>32</sup> Monetary Times August 29, 1867, p. 3.

Base from Hamilton.<sup>33</sup> The outside investors were attracted by Petrolia's low price of crude oil while crude in the U.S. was \$3.75 per barrel at the time. Large-scale construction of underground tanks could provide a means of storing oil for long periods of time (without any wastage) in order for prices to rise to a profitable level. The Monetary Times explained the plan of Higgins, Duffield and Base:

"The plan these gentlemen intend to adopt is to construct this underground tankage and store the crude, if necessary, for one or two years, till \$3 or \$4 is reached. ...The refiners then, who up to the present, have had a monopoly on the market and could 'bill' or 'bear' it as they pleased, will now have to compete with capitalists who will outbid them with the producers for the sake of storing it to a future day."<sup>34</sup>

Higgins was reported to have invested \$100,000 in this venture, and the Duffield brothers, with a refinery at London, were integrating their operations backward in storing crude for their refinery use to increase prices. But crude oil prices did not rise to the anticipated level set by these gentlemen. For the remainder of 1867 and throughout 1868, the price of crude oil remained critically low, finally dropping to thirty cents a barrel.<sup>35</sup>

<sup>33</sup> Ibid. This report gives the names of Higgins, Duffield and Base. J.D. Noble, appeared before the 1890 Ontario Royal Commission (p. 165) and took credit for adopting the underground tankage in partnership with Jenkins.

<sup>34</sup> Ibid. Duffield's London refinery had a crude oil storage capacity of 36,000 barrels in 1868-69 (See Cronin op. cit. p. 47).

<sup>35</sup> Phelps' Fairbank p. 59 in turn citing Harkness, R. B., Makers of Oil History, 1850-1880, (Unpublished Mss. Regional History Collection, U. W. O. Library) Ewing History also cited Harkness, Makers of Oil History, 1850-1880. This writer has been unable to obtain Harkness Makers and has accepted what both Phelps and Ewing cite in this book.

In order for the plan by the tanking companies to succeed, it would have been necessary to store all the oil produced by each producer. The individual producer though, could sell his oil immediately once demand from refineries began for the winter season. Some producers felt that crude oil prices would increase only through a combination of all producers, and so in the fall of 1867 and the spring of 1868, J. H. Fairbank promoted the Petroleum Amalgamation Company. For this combination, the individual producers would lease their properties to the Company for a period of one or two years and the demand by refineries would be met by only a few of the larger wells. By restricting supply, the producer would receive a payment by the Company based on their properties. This proposal by Fairbank failed, however, when not all of the producers agreed to join.<sup>36</sup>

Once it was shown that producers refused to unite, Judge Higgins headed a combination which utilized the tanking companies in association with the refiners instead of producers. Higgins adopted Fairbank's proposal by leasing all fifty-two refineries in Ontario from August 1 to December 1, 1868 to create a monopoly. The Monetary Times gave an accurate report on the Higgins' scheme:

"All refiners are bound not to manufacture - unless for export - any more than a certain quantity graduated according to the capacity of the different refineries, and that quantity is to be determined by the Association

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<sup>36</sup> Ibid., p. 58-59. Ewing History Ch. II, p. 18-19 stated that when crude oil prices were so low in 1868, only fifteen wells were producing by August - the remaining wells had to be shut down.

who are to dispose of the oil and return the proceeds to the refiner."<sup>37</sup>

The contrived monopoly established by Higgins was a unique plan in that all the crude oil needed for the refineries would have been purchased at distress prices throughout 1867-68, and stored in Higgins own underground tanks. As demand for kerosene was inelastic with few substitutes, the prices on refined oil could be fixed by Higgins during the heavy demand season of fall and winter. Possible new entrants into refining would not have enough time to construct a refinery and either establish operations or extract rent from the Association not to refine.

The newly formed Dominion Parliament passed regulations which also aided the monopoly. In 1868, the duty on imported refined kerosene was increased from five cents to fifteen cents per gallon on refined and 6 cents per gallon on crude (applying to the Maritimes as well) which protected the Canadian industry from U.S. imports. The first Inspection Act to improve product quality was also passed. Imported and domestic refined had to pass a flash test<sup>38</sup> of 115°F.

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<sup>37</sup> Monetary Times, July 30, 1868, p. 518. This report also stated on Higgins: "At the head of the movement is Judge Higgins of Chicago, who is a large holder of crude oil at Petrolia, and is said to be possessed of capital of some five or six millions of dollars. It is understood that this gentleman will be chiefly benefitted by the movement, and it is more than probable that he has furnished the cash". Phelps' Fairbank, p. 59 and Ewing History, Ch. II, p. 19 state that all the refineries were closed down except for export. This writer is of the opinion that refined would have been produced to meet domestic demand, but only at the prices quoted by Higgins' combination.

<sup>38</sup> Flash test was a measurement of the degree that refined oil would ignite. A higher degree would provide a safer oil from exploding.



which would have the effect of standardizing a safer product and preventing small refiners from entering the industry.<sup>39</sup>

There are discrepancies as to the success of Higgins' scheme, but considering that refined oil increased from fifteen cents to thirty cents a gallon wholesale<sup>40</sup> it is quite probable that Higgins "made a fortune."<sup>41</sup>

Immediately after Higgins' monopoly legally expired, producers and refiners formed separate associations. Some of the major producers, with John Noble as vice-president and Fairbank as manager, organized the Crude Oil Association in December of 1868 to last for one year. The initial effect of this crude oil marketing organization was to increase crude oil prices to seventy-five cents a barrel, but as export demand increased in the latter half of 1869, there was little need for a producers' combination. The Crude Oil Association had been responsible for marketing over 100,000 barrels of crude oil between January and October of 1869 which amounted to around one-third of the total marketed. In November, the Association had

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<sup>39</sup> Ewing History, Ch. II, p. 12-17 discusses the regulations.

<sup>40</sup> Wholesale prices on refined oil are used throughout the remainder of this chapter because of the lack of statistics on the retail price of kerosene. Usually retail prices were double that of the wholesale price in the 1860's and about 10 cents per gallon higher during the 1870's.

<sup>41</sup> Ibid., Ch. II, p. 20. The Monetary Times (January 7, 1869, p. 330) also stated that Higgins' scheme was a success. Phelps' Fairbank p. 59 stated that "the Higgins group evidently found their scheme unprofitable." A superficial account on the Higgins' plan which stated that Higgins failed is found in Gould, op. cit., p. 44. "...a Judge Higgins of Chicago attempted to corner the market of oil in Lambton in 1868 by leasing every Canadian refinery available. He then tried to shut off supplies to everyone, but those in the export market, but the move failed."

outstanding contracts from refiners at an average price of \$1.35 per barrel, but by this time, the price of crude on the open market had increased to \$2.25 per barrel. With higher prices of crude on the open market, the Crude Oil Association quietly disappeared once contracts were settled.<sup>42</sup>

Like the producers' association, some of the London refiners formed the Oil Refiners Association of Canada in December of 1868. With W. J. Duffield as vice-president utilizing the Forest City Oil Refinery in association with other, but not all London refiners, this association hoped to maintain the high refined prices established by Higgins. Prices were fixed at from 25¢ to 32¢ per gallon with most crude oil supplies being initially purchased from the Crude Oil Association.<sup>43</sup> This indicated tacit agreement among both Associations to control market prices, but as not all producers and refiners joined their respective Associations, the open market prevailed.

By failing to lease all refineries as Higgins did, the Oil Refiners Association could not fix prices without other refiners undercutting the fixed prices. This may have been one reason for the breakup of the Oil Refiners Association in April of 1869, but the major reason for disbanding was the sudden upsurge of demand

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<sup>42</sup> Phelps' Fairbank, p. 60-61; Ewing History, Ch. II, p. 20, Monetary Times, August 5, 1869, p. 813, Globe November 23, 1869.

<sup>43</sup> Monetary Times January 7, 1868 p. 330, January 14, 1869, p. 351, see also Phelps p. 61-62. Phelps was of the opinion that the Oil Refiners' Association was in competition with the Crude Oil Association.

for refined to meet the new export trade and the fact that Duffield became a member of the largest company formed to concentrate on the export market.

Both the Crude Oil Association and Oil Refiners Association were formed, according to their members, to also assist in the promotion of a viable export trade.<sup>44</sup> The Higgins' monopoly had also encouraged refiners to export oil, but the realization of such a market did not fully materialize until mid-1869.<sup>45</sup> Until that time, Canadian oil had a bad reputation on the international market from the offensive sulphur odor of the Oil Springs oil exported in 1862. However, the whole industry structure changed in 1868-69 when new refining techniques of treating the Petrolia sulphurous crude oil with lead monoxide were implemented to 'sweeten' Canadian oil and open up an export market to Europe. This innovative refining technique (known as the litharge process) was apparently introduced by an English chemist named Mr. Allen, but other adaptations of the new process implemented (or stolen) by W. Spencer, Pearce, Benjamin and Nicol allowed most refineries to install the needed equipment.<sup>46</sup>

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<sup>44</sup> Ontario Royal Commission, p. 161, where J.H. Fairbank testified that the Crude Oil Association "was organized with the object of encouraging export...." Phelps p. 61 stated the Oil Refiners' Association was also to "promote foreign trade."

<sup>45</sup> Monetary Times, September 17, 1868, p. 72, October 22, 1868, and February 18, 1869 all discuss the terrible export trade.

<sup>46</sup> Ontario, Royal Commission, p. 163. James Kerr, a prominent producer, testified that the lead treatment was introduced in 1868 by Allen and that Allen's process "was stolen from him and he never got anything out of it." Kerr also mentioned Pearce. Ewing History, ch. II, p. 21 listed the names of Allen and Pearce as well as Spencer, and stated the refining development began in 1869. The Monetary Times, July 22, 1868, p. 781 lists Allan (sic), Benjamin and Nicol.

With the installation of treating plants to deodorize Canadian crude oil, Canadian refiners were in the position to compete with American refined for the European market. The export market quickly crystallized in 1869, and for the next four years the whole Canadian oil industry was geared to the export trade. The table below from 1868 to 1874, based on estimates, gives an indication of the sudden upsurge and decline of the Canadian export trade:

Table I  
Canadian Crude Oil Production, Consumption and EXPORT  
1868-1874

<u>fiscal year</u> (ending June)	<u>crude oil production</u> (barrels) (1 bbl= 40 wine gal.)	<u>domestic consumption</u> (refined barrels)	<u>export</u> refined barrels
1868	250,000	75,000	8,500
1869	395,000	75,000	65,000
1870	450,000	83,000	123,000
1871	560,000	112,000	162,000
1872	550,000	120,000	205,000
1873	610,000	135,000	300,000
1874	312,000	168,000	570

Sources: Ewing History, Ch. II, Table I, p. 23, GEOLOGICAL SURVEY OF CANADA (1886), p. 56s

Monetary Times April 26, 1872, p. 847; February 28, 1873, p. 742; April 24, 1874, p. 1022; June 30, 1876, p. 15; October 13, 1876, p. 420-421.

Note: 1 barrel of crude, when refined would yield approximately .65 barrel of refined.

The industry problem of producer overproduction and refiner excess capacity was soon overcome once the refineries installed the needed equipment and established markets for the exported refined. Two new firms were formed to gain an advantage from the export trade, the Ontario Carbon Oil Company, and J. L. Englehart & Co. Carbon was formed before Jacob Lewis Englehart set up his London refining operations in July of 1869, but by August of 1871 there is the distinct probability that Englehart & Co. controlled both Carbon and the export trade. Since the above statement cannot be verified from actual documents, the following account on Carbon and Jacob Lewis Englehart - Imperial Oil's most prominent founder - must be regarded as tentative.

#### V. THE EXPORT TRADE 1869-74

##### 1. Carbon Oil and Englehart & Co.

The Ontario Carbon Oil Company of Hamilton was formed in April of 1869 by four of Canada's distinctive refiners and organizers. The four members were: Messrs. Parson Brothers from Toronto (owners of one of Toronto's first oil refineries, and crude oil producers who had discovered one of Petrolia's first flowing wells; they were also prominent oil brokers in selling crude and refined)<sup>47</sup>; the Duffield Brothers from London; the infamous Judge Higgins from Chicago; and none other than the father of Canadian Oil - James Millar

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<sup>47</sup> Globe, February 15, 1862, January 24, 1867. Monetary Times, May 6, 1869, p. 603.

Williams (in partnership with James Cummings also from Hamilton).<sup>48</sup> With Williams as the company's first president, Carbon was organized as a separate company to export 'treated' oil through the construction of the 'Big Still' in Petrolia and a treating refinery at Hamilton where the treated oil would be marketed mainly in New York for the European market. The Monetary Times explained Carbon's proposal:

"It is proposed to distill the oil at Petrolia and convey it to Hamilton in tank cars where it will be 'treated' (using the litharge process) and shipped by the narrow gauge of the Great Western Railway to the seaboard at Boston or New York. A still is being erected at Petrolia of 2800 bbls. capacity - probably the largest still ever built, the largest in Pennsylvania being about 1,200 barrels." The Hamilton refinery being constructed would "have a refining capacity equal to one-half of the united capacity of all the refineries in the Province, or from 2,000 to 3,000 barrels per week."<sup>49</sup>

Prior to Carbon's Hamilton refinery completion in the middle of May, Williams' Hamilton refinery and Duffield's London refinery (which both had the litharge process equipment installed) were used to treat the distilled oil and export refined oil.<sup>50</sup> The members of Carbon apparently then formed Carbon Oil strictly for the export trade while still maintaining their separate operations of producing (Parsons), tanking crude oil (Higgins, and Duffield) refining (Parsons, Duffield, and Williams) and marketing (Parsons, Williams and probably

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<sup>48</sup> Monetary Times, April 18, 1869, p. 539-540.

<sup>49</sup> Ibid. Gray op. cit., p. 42 stated Williams was Carbon Oil's first president.

<sup>50</sup> Ibid., May 6, 1869, p. 603. Regarding the name of William's Hamilton refinery, The Monetary Times lists the refinery as Messrs. J. M. Williams & Co. (April 8, 1869, p. 539) but both Gray (p. 42) and Harkness Ontario (Part I, p. 34) stated that Williams carried his oil business after 1860 under the name of the Canadian Oil Company. The writer is of the opinion that the Canadian Oil Company may have been the marketing oil company of Williams.

Duffield). With the inter-connected separate functions of the four members, Carbon was indirectly capable of operating as an integrated company processing a high grade of refined oil able to compete on the New York export market.

Around the time of Carbon's formation in April of 1869, a twenty-two year old oil broker from New York by the name of Jacob Lewis Englehart was attracted to the export potential of the Petrolia oilfields.<sup>51</sup> Englehart did not become a crude oil producer, but concentrated his operations in constructing a large refinery at London. Englehart's London refinery, which included large stills (like the Big Still at Petrolia), tanks, and the lead treatment process concentrated in one refinery, cost between \$100,000 and \$200,000 and had a refining capacity of 1000-2000 barrels per week.<sup>52</sup>

Englehart's refinery started operations in late July of 1869.<sup>53</sup> Together with Carbon, Englehart dominated the Canadian export of

<sup>51</sup> Ewing History, Ch. II, p. 64 stated that Englehart carried on an oil export business from New York until 1868 when he came to London. Both Gray op. cit. p. 261 and Morgan, H.J., editor, The Canadian Men and Women of the Time (Toronto, 1912), p. 377 stated Englehart came to Canada in 1866. The Toronto Globe, June 24, 1893 and Who's Who and Why (1915-16) p. 115 stated Englehart came to London in 1870.

<sup>52</sup> Monetary Times, Feb. 11, 1879, p. 409. The Wyoming News Letter (October 22, 1869) stated Englehart's refinery had a 2,000 barrel per week capacity. Cronin op. cit., p. 68 stated that Englehart's London refinery had cost \$200,000 in 1870. The Monetary Times, November 6, 1874, p. 512 stated what this writer considers to be the original cost of Englehart's refinery - \$100,000.

<sup>53</sup> The July 22, 1869 (p. 781) report of the Monetary Times stated: "The great works of Englehart & Co. (of New York), who have nearly completed a large refinery". The Montary Times weekly oil reports was a primary source on the early oil history, but the reports had a tendency to misspell names. Like the July 22, 1869 report, Englehart & Co. was known by names such as: Eagle & Hart (August 10, 1869, p. 830); Engle, Hart & Co. (October 1, 1869, p. 104); Crylehart (March 4, 1870, p. 457); and Anglehart (August 5, 1870, p. 845) among other names. It is the opinion of this writer that all these variations are names of the same company, Englehart & Co.

refined oil to New York (and not to Montreal as was the case in the Oil Springs export of 1862).

Other refineries now expanded to meet the new demand. By mid-1869, Petrolia had four distillate<sup>54</sup> refineries with total refining capacity of 1500 barrels a week, the largest being the Standard Refining Company, a Scottish owned company managed in Petrolia by Charles Jenkins. All the Petrolia distillate refineries were devoted to the export trade.<sup>55</sup> Apparently, the preferential freight rate policy of the Great Western was set up in such a way that distillate (but not treated oil) could be transported at low rates outside the Petrolia district.<sup>56</sup> This allowed companies like Carbon to set up the Big Still at Petrolia and others to distill crude for export, but also allowed London to retain its refining dominance over the domestic market.

The London refiners had expanded both for the export trade and also to compete domestically for the improved quality of oil that was now in demand. In mid-1869, the three other largest London refiners were: the Duffield Brothers (with a refining capacity of around 1,000 barrels a week), Spencer & Keenleyside (600 barrels per week), and the Watermans' Atlantic Petroleum Works (600 barrels per week).<sup>57</sup>

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<sup>54</sup> Distillate was untreated illuminating oil.

<sup>55</sup> Monetary Times, July 22, 1869, p. 781.

<sup>56</sup> Ewing, History, Ch. II, p. 26 stated the "Petrolia refiners had to sell his production outside of his own district."

<sup>57</sup> Monetary Times, July 22, 1869, p. 781.



Other Imperial Oil founders (besides Spencer and the Watermans) like F. A. Fitzgerald, the Hodgen brothers, J. Geary, and J. Minhinnick established London refineries during this period. The refineries in 1869 represented a substantial increase in refining capacity since the end of 1866 when the 1866 total refining capacity of the twenty-five refineries (3500 barrels per week) were about equal to the combined capacity of the largest London refiners, including Englehart.

In order for Canadian exporting firms to compete on the New York export market, a two-price system on crude oil was implemented in 1869. In late July, crude oil prices for domestic consumption were \$1.62½ per barrel while crude oil for export was \$1.25 per barrel. Exporting firms placed bonds certifying that the crude purchased was to be used for export and not domestic use.<sup>58</sup> The Crude Oil Association was behind such a system because the large stocks of crude oil held in storage tanks could be sold at a profit, even if prices were lower for export. For example, crude oil stocks at the beginning of 1869 were 300,000 barrels (about a three year domestic supply) and one year later, stocks were 145,000 barrels.<sup>59</sup> Purchases from the Crude Oil Association by the exporting firms were in quantities of 20,000 barrels and upwards at a time indicating the reliance of the industry on the export firms.

Oil prices in the U.S. during 1869 were much higher than in Canada; crude oil averaged \$5.60 per barrel and refined oil in New

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<sup>58</sup>

Ibid. Crude oil was not shipped to American refineries because of the sulphur content.

<sup>59</sup>

Monetary Times, January 7, 1870, p. 328.

York averaged around 33 cents per gallon.<sup>60</sup> Canada's crude oil prices reached a high of \$2.50 per barrel in September with the average being around \$1.70 per barrel and refined would have averaged around 20 to 25 cents per gallon.<sup>61</sup> Canadian exports though, would have paid much lower prices on Canadian crude to compete for a higher refined market in New York.

With the dominance of export refining by Carbon and Englehart, the question of competition between these two firms needs to be examined. In October of 1869 Carbon had shut down the Big Still, apparently because of ownership problems when Higgins and Duffield sold out their interests in the Company. At this time, there was the fear expressed that Englehart & Co. (which had only been in operation a few months) was going to purchase Carbon and try to 'corner' the export trade. The correspondent from the Monetary Times wrote on the proposed purchase:

"I sincerely hope that this will never happen, as I fear that they (Englehart & Co.) would then try to 'corner' the oil business. We are now in a position to carry on a legitimate business without corners or combinations, at remunerative prices, and anything to interfere with it will of course injure it."<sup>62</sup>

The proposed purchase of Carbon by Englehart & Co. did not materialize when Parsons and Williams maintained temporary ownership

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<sup>60</sup> Tarbell op. cit., Vol. II, Appendix 57, p. 383-384. All future U.S. figures are quoted from this source.

<sup>61</sup> Monetary Times, various issues, and Ewing History, Ch. II, Table I, p. 23. The high refined prices set by the Oil Refiners' Association at the beginning of 1869 was only temporary.

<sup>62</sup> Monetary Times, October 1, 1869, p. 104.

of Carbon.<sup>63</sup>

In December of 1869 when the exporting firms were purchasing crude from the tanking companies, (instead of through the Crude Oil Association which had disappeared by this time) an interesting quote in the Monetary Times illustrated the confusing relationship between Carbon (sometimes called Parsons & Williams) Englehart & Co., and the tanking companies:

"There have been two large sales of crude this week; one by Mr. Higgins to Messrs. Englehart & Co., of 25,000 barrels; the other the Iron Tank Company's oil, to Parsons & Williams, some 29,000 barrels."<sup>64</sup>

The above quote does not imply that Higgins and Englehart & Co. were in partnership, but rather indicates that Higgins still retained his interests in the tanking business, and that Parsons and Williams was not a favored customer of Higgins.

Throughout 1870, Carbon and Englehart & Co. retained separate ownership. G. A. Purdy in his book Petroleum Prehistoric to Petrochemicals suggested that after Carbon's Big Still blew up, the Carbon Oil Company disappeared and "Englehart acquired the site of the Big Still about 1870."<sup>65</sup> Carbon Oil did not disappear, nor did Englehart acquire the site of the Big Still 'about 1870'.

In 1870, both Carbon and Englehart & Co. did experience problems of fires and explosions to their innovative large-scale refineries.

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<sup>63</sup> Monetary Times, October 22, 1869, p. 151; Wyoming News Letter, October 22, 1869.

<sup>64</sup> Monetary Times, December 17, 1869, p. 280. To this writer's knowledge Higgins still maintained his tanking operations in Petrolia at least until 1871 (see Monetary Times, July 7, 1871, p. 5.)

<sup>65</sup> Purdy op. cit., p. 33. See also Gray op. cit., p. 261-263.

For example, Englehart's London stills had three fires and explosions on February 24, April 9 and May 23, 1870 causing at least \$6,000 - \$8,000 damage.<sup>66</sup> It is not certain whether Englehart's stills were in operation between the second and third fires, but during that period, Carbon was shut down for repairs and Englehart engaged the services of nearly all the Petrolia and London refineries for the export trade.<sup>67</sup> Englehart exercised a great deal of control in the export business because of his position of being an oil broker as well as a refiner. He had access to the New York market, and through these connections he was able to fulfill export contracts by utilizing the services of other Canadian refiners.

Export contracts were steady during the first half of 1870 but had slowed down during the summer months because of seasonal demand and also because of the Fenian raids still taking place in Canada.<sup>68</sup> By August, Englehart & Co. and Carbon were both running full capacity for the export trade to fulfill old contracts, but were refusing to buy crude until demand picked up.<sup>69</sup> Once demand picked up for the

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<sup>66</sup> Cronin op. cit., p. 54. This is verified by the Monetary Times, March 4, 1870, p. 457; April 15, 1870, p. 553, and June 3, 1870, p. 665. The first still explosion, which killed one worker, had no value placed on the damage; Cronin stated the second fire cause \$2,000 damage and the third caused \$6,000 damage. The Monetary Times (June 3, 1870, p. 665) placed the loss in the third fire at \$4,000.

<sup>67</sup> Monetary Times, May 27, 1870, p. 659. The actual report was written just before the third Englehart fire on May 23: "The large still is down at present for repairs, but Englehart & Co. having engaged the services of nearly all the refiners here and in London, for the export trade, nearly as much is exported as previous to the shortage."

<sup>68</sup> Monetary Times, June 3, 1870, p. 665; July 29, 1870, p. 824; August 5, 1870, p. 845.

<sup>69</sup> Monetary Times, August 5, 1870, p. 845.

winter season, Englehart & Co. expanded refining capacity in October and purchased large quantities of tanked crude from Petrolia to meet the New York contract for refined.

## 2. 1871: Domestic Associations: Carbon Ownership Change

During 1871, conditions changed in the Canadian oil industry when the New York market turned against the export of Canadian refined. Prices in New York were gradually declining to around 25 cents per gallon as exports to Europe were levelling off. January was usually a month of heavy demand for refined, but in 1871, the exporting firms (primarily Carbon and Englehart & Co.) were only exporting at half-capacity.<sup>71</sup> In April, some export was being carried on but nearly all Petrolia and London refineries were shut down because of depressed export and domestic prices.<sup>72</sup>

Once the demand for export started to decline, the Canadian oilmen felt the effects of such a decline. Domestic refineries were not needed to fulfill export contracts, and domestic prices fell as a result of competition; refined had fluctuated from seventeen to twenty cents a gallon by April. Crude oil prices had also declined from the lack of export demand to around \$1.25 - \$1.40 per barrel at a time when production was slowly increasing from around 5,000 barrels

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<sup>70</sup> Monetary Times, October 14, 1870, p. 173; November 18, 1872, p. 272.

<sup>71</sup> Monetary Times, January 13, 1871, p. 433.

<sup>72</sup> Monetary Times, April 7, 1871, p. 673. See also Monetary Times April 21, 1871, p. 703 where it was stated that "Nearly all the refineries, both here (Petrolia) and in London, are shut down, and only work when orders come in. Refined oil has become a drug it (sic) the market in London, and some sales have been made at prices lower than it could be manufactured for...."

a week to around 7,000 barrels a week within one year's time.<sup>73</sup>

To protect themselves from the depressed domestic market, a London refiners' joint stock company was contemplated (along the lines of the Higgins' scheme) in early May of 1871 to lease all refineries to the joint stock company using one agent to sell refined (for the domestic market only), and the profits were to be divided. To guard against competitors building new refineries, this cartel issued a self-defeating proposal that "the company can dissolve in twenty-four hours notice."<sup>74</sup> Not all refineries agreed to join and the joint stock company was not formed.<sup>75</sup>

Instead of a refiners joint stock company, some of the London refiners, most noticeably Herman and Isaac Waterman, and Anthony Keenleyside (who had broken up partnership with W. Spencer) joined together with the major producers and refiners from Petrolia and

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<sup>73</sup> Monetary Times, May 27, 1870, p. 649; April 7, 1871, p. 673; April 21, 1871, p. 703.

<sup>74</sup> Monetary Times, May 5, 1871, p. 75. The provisions of the joint stock company were as follows:

- 1) All known refineries are leased to the joint stock company composed of all the refineries.
- 2) All refined oils (so far as home consumption is concerned) to be sold by one agent employed by said company.
- 3) The price of refined oil to be governed by circumstances, with no speculative view...
- 4) All refined oil required by the company to be tendered for by refiners, and the lowest and best tender accepted. Should this cause a profit to the company, said profit to be divided amongst the company.
- 5) To guard against the building of new refineries in opposition to this company, the company can dissolve in twenty-four hours' notice.

<sup>75</sup> Monetary Times, May 26, 1871.

Wyoming to form the Lambton Crude Oil Partnership on May 26, 1871.<sup>76</sup> Lambton was a one year contract among the London refiners mentioned and nearly all the 150 major producers in Petrolia. Among the notable producers in Lambton were J. H. Fairbank, Charles Jenkins, John Noble, Henry Lancey, H. Parson, Thomas Cochrane, and future Imperial Oil member Frank Smith. Frank Ward, a refiner from Wyoming and a future Imperial member, was also a member of Lambton.<sup>77</sup>

The purpose of Lambton was to improve the domestic price of crude oil and allow refining members a guaranteed supply of crude for refining purposes. Lambton was to be influential in late 1871, but shortly after the formation of Lambton, Carbon ownership changed hands. In early June, a fire to Carbon's Bill Still in Petrolia destroyed the still, two engines, two boilers, and tanks causing an estimated \$30,000 damage.<sup>78</sup> Williams sold out his one-half interest in late July. The Monetary Times reported the new part owners to be Americans by the name of Messrs. Swinburn & Brothers or Mr. Suniburn,<sup>79</sup> but it is quite possible that the new partners, and later owners of Carbon were named Sonneborn, and more specifically Jonas

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<sup>76</sup> Phelps' Fairbank, Appendix G, p. 298-299.

<sup>77</sup> Ibid., Phelps p. 73-74 was of the opinion that Lambton was formed by Petrolia producers mainly as self-defence from the proposed refiners joint stock company.

<sup>78</sup> Monetary Times, June 23, 1871, p. 885.

<sup>79</sup> The Monetary Times, August 4, 1871, p. 85 lists the new part-owners as Swinburn & Brothers, and the following weekly oil report (August 11, 1871, p. 105) lists the name Suniburn.

Sonneborn & Co. from New York.<sup>80</sup> It was rumored at the time of Carbon's change in ownership that Englehart & Co. was connected with Sonneborn:

"There is a report that Messrs. Engleheart (sic) the exporters, are interested with the Swinburn's (sic); if so most of the export business will be controlled by Engleheart & Co. (sic.)"<sup>81</sup>

There is some evidence to suggest that the above report was in fact true,<sup>82</sup> and that Englehart & Co. did acquire part ownership in the Big Still not 'about 1870' as suggested by Purdy, but rather in 1871.

As Carbon ownership was in the process of changing, and the Lambton Crude Oil Partnership was taking effect, a major oil strike in July increased crude oil production to around 10,000 barrels a week.

The 'Clement Well' yielded 300-500 barrels of crude per day, and it was owned by John Noble and H. Parsons after they paid \$9,000 to the discoverer, Mr. Clement.<sup>83</sup> The effect of this well was to stimulate crude oil production but prices and output would be on a more controlled level.

With the increased production Lambton fixed the price on crude

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<sup>80</sup> According to the New York Times (August 27, 1874, p. 5) the full owners of Carbon at the beginning of 1873 was Jonas Sonneborn & Co. from New York.

<sup>81</sup> Monetary Times, August 4, 1871, p. 85. The following weekly oil report (August 11, 1871, p. 105) somewhat retracted from the report of Englehart & Sonneborn being connected: "In my report last week (August 4) I named that a Mr. Suniburn (sic) had bought out Mr. Williams' interest in the Big Still or Carbon Oil Co. There is no doubt but that this is a fact, but whether Mr. Suniburn (sic) has any connection with the Englehart Co. is not known."

<sup>82</sup> See below reference #(132).

<sup>83</sup> Monetary Times, July 21, 1871, p. 45. From this report, it would appear that Parson retained separate producing operations from the management of Carbon.



for the home market at \$2.50 per barrel, quite an increase from the \$1.24 - \$1.40 only a few months earlier. Like the Crude Oil Association of 1869, crude prices for export were much lower; when crude was \$2.50 per barrel for the home market, crude for export was set at \$1.50 - \$1.70. This had the effect of discriminating against Canadian refiners. The exporting firms would be charged \$2.50 per barrel and upon showing bills of lading from New York for the refined made from the crude, \$1.00 per barrel would be refunded to the exporters. But the exporters only used around 55-65 per cent of the crude to make a quality brand of refined; from the 'debris' or 'residium' of the crude, the exporting firms would refine some 15 per cent of the residium into refined oil fit for the domestic market. In other words, the exporters paid \$1.50 - \$1.70 for crude which was, in part, used to place an inferior oil on the home market at prices which Canadian refiners could not compete with.<sup>84</sup>

Between July and November when domestic crude was fixed at \$2.50 per barrel, the prices on domestic refined were around 24 cents per gallon (about the same price as in New York) because of the increase. Some sales of \$2.50 per barrel were made to refiners but the high crude prices made it difficult for domestic refiners to compete with the exporters' 'residium'. In November, the refiners joint stock company was revived under the name of the Oil Refiners Association among most of the London refiners to enter into an exclusive agreement with Lambton which would stimulate export and increase domestic

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<sup>84</sup> Monetary Times, July 21, 1871, p. 45; September 1, 1871, p. 165; September 29, 1871, p. 252; October 6, 1871, p. 221; October 20, 1871; November 10; 1871, p. 365.

refined prices by excluding competitors. The Monetary Times explained the new price system:

"The price is to be entirely subject to the New York market; there is to be no distinction between the price of export crude and that sold for home use, but the refiners buying crude for home use are to pay to the Crude Producers Company (Lambton) 5 cents per gallon on all oils on which a duty is paid in this country; refined oil is placed at such a price as to exclude American oil. Any refiner selling outside this Company will not be allowed to purchase crude from the Company at any price. Taking, for instance, the market in New York at 23 cents per gallon as it is now (November). The price of crude is placed at \$1.20 per barrel. Should the market in New York go up to 24 cents, the price of crude here would then be \$1.40 per barrel...."<sup>85</sup>

With this agreement among Lambton and the London refiners (which was to last two years), the price of domestic refined was fixed at 30-33 cents per gallon in November ending for the last time in the entire oil history that Canadian refined prices would be lower than American refined oil.

The exporting firms were also offered lower crude oil prices (\$1.20 per barrel from \$1.50 - \$1.70 per barrel) with the establishment of Canadian crude based on New York refined prices. This would stimulate export and also exclude exporters from placing 'residium' on the domestic market.

The export market picked up in late-1871 and new firms entered the export trade. James Millar Williams still had his separate refinery at Hamilton and entered into a partnership with Thomas Cochrane (a Lambton member) to build a refinery at Petrolia to provide distillate for his Hamilton refinery.<sup>86</sup> Colonel John Walker, president of

<sup>85</sup> Monetary Times, November 17, 1871, p. 385.

<sup>86</sup> Monetary Times, October 13, 1871, p. 291; December 15, 1871, p. 465; June 21, 1871, p. 1004; August 9, 1872, p. 104.

the Oil Refiners Association, and T. H. Smallman (both founders of Imperial Oil) were also interested in the export trade when they organized the Western of Canada Oil Lands and Works Company, more familiarly known as Walkers English Co. This was an English financed company that included producing and refining distillate at Petrolia, but was largely financed on speculation rather than the direct investment of the other exporting firms.<sup>87</sup>

### 3. 1872: Export Boom: Englehart Dominance

By mid-1872 there were 52 refineries operating in Canada to meet domestic consumption of some 160,000 barrels of crude per year.<sup>88</sup> With crude oil production of some 14,000 - 15,000 barrels per week in early 1872 levelling off to an average of 10,000 barrels per week, domestic demand was easily supplied by both refiners and producers. Crude oil prices fluctuated between \$1.00 and \$1.25 corresponding to New York refined prices of around 23 cents per gallon. Domestic refined was fixed by the 1871 agreement at the 30-33 cents per gallon level.

To meet the export demand, the major exporting firms by August were Englehart & Co., Carbon, Keenleyside, Waterman & Co., Messrs. Wood & Co., and Williams and Cochrane.<sup>89</sup> Carbon, as a separate

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<sup>87</sup> Monetary Times, October 27, 1871, p. 325; November 3, 1871, p. 348; February 3, 1872, p. 618; February 9, 1872, p. 641; February 23, 1872, p. 673; October 17, 1873, p. 373; December 12, 1873, p. 561.

<sup>88</sup> Monetary Times, April 19, 1872, p. 825; April 26, 1872, p. 847.

<sup>89</sup> Monetary Times, June 21, 1872, p. 1004; August 9, 1872, p. 104. The writer is unaware of who owned Wood & Co. unless it was Woodward & Co., a Petrolia distillate refinery.

company apart from Parsons' operations, had expanded its operations by acquiring oil land in Petrolia and drilling for oil. The Big Still had been in full blast until March when another fire to the Still caused between \$5,000 - \$15,000 damage. Instead of repairing it, the Big Still was dismantled and three conventional cylinder stills were constructed by August to provide the same amount of distillate.<sup>90</sup>

Englehart & Co. was the largest exporter during 1872, and in August, Messrs. Waterman went into partnership with Englehart & Co. for the upcoming season.<sup>91</sup> With combined forces utilizing both refineries, Englehart and Waterman had the capacity to refine and export 3,000 barrels per week.<sup>92</sup> This capacity, added with Carbon's capacity (2,000 barrels a week) gave these 'three' companies a solid footing for the export trade.

In October of 1872, the Pennsylvania oil wells were shut down because of refiner-producer disputes in the U.S. This was a tremendous boom time for Canada's export trade and the export firms were prepared to supply New York with as much refined as possible. New York refined increased to 26 cents per gallon in October and the export

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<sup>90</sup> Monetary Times, February 23, 1872; March 15, 1872, p. 740; March 22, 1872, p. 753; August 9, 1872, p. 104.

<sup>91</sup> Monetary Times, July 26, 1872, p. 65; August 9, 1872, p. 104. Since Lambton entered another contract year with the refiners, this writer assumes that the Watermans were still a member of Lambton while in partnership with Englehart. Ewing History Ch. II, p. 64 stated that Englehart and the Watermans were in partnership from the time Englehart first came to London, which Ewing stated as being 1868.

<sup>92</sup> Monetary Times, September 6, 1872, p. 184.



firm of Englehart and Waterman were expecting to export 1,000 barrels of refined a day.<sup>93</sup> With crude oil production by October 22 of 10,000 barrels per week, "Messrs. Englehart & Co. are preparing to manufacture nearly that amount alone, they have at present some 30,000 barrels secure...."<sup>94</sup> New York refined prices remained at the 26 - 27 cent per gallon level through December, and it was during the last quarter of 1872 that the Canadian export trade was at its height. Englehart, Waterman, and Carbon were the 'three' major exporters who had prepared for the increased demand, and considering that the total value of exported refined during 1872 was some \$2,000,000,<sup>95</sup> these 'three' major exporters benefitted quite handsomely from the export market.

#### 4. 1873-74: Export Decline: Home Oil, Export Bankruptcy

In the middle of December, 1872, and early January 1873, crude oil in Canada was around \$1.95 per barrel reflecting New York prices. Englehart and Waterman were still the largest buyers of crude but this situation soon changed. In mid-January, the New York price on refined fell to 22 cents per gallon as the agreement between U.S. producers and refiners broke up. With crude oil prices falling in value to \$1.32

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<sup>93</sup> Monetary Times, October 11, 1872, p. 289. The U.S. wells were shut down about 30 days and an agreement between refiners and producers went into effect from December 1872 until mid-January 1873.

<sup>94</sup> Monetary Times, October 25, 1872, p. 328.

<sup>95</sup> Monetary Times, November 21, 1873, p. 490-491.

per barrel in one week in Canada the Petrolia producers were in the process of forming the Home Oil Works Company, a Petrolia refinery that would begin operations in October of 1873 to treat the distillate from the Petrolia refiners.

Phelps' Fairbank suggested Home was organized "...in order to check the dominance of the oil refiners."<sup>96</sup> This may have been a factor once Home began treating distillate (Home's refinery did not distill crude oil), but the actual formation of Home was an outgrowth of the 1872 export boom of refined oil when the Great Western Railway was threatened in December of 1872 to reduce rates on refined or face competition from a pipeline that would be built to London.<sup>97</sup> Apparently the rates were reduced on refined from Petrolia, and Home was being organized in early 1873.

Home Oil had been capitalized at \$50,000 with the refinery (with refining capacity of around 3,000 barrels of crude per week) costing \$37,000. This indicated the capital requirements needed to enter the refining stage of production on a competitive scale. Of the fifteen major shareholders in Home, fourteen were Lambton members like J.H. Fairbank, Henry Lancey, Martin Woodward, and Thomas Cochrane, while one shareholder came from Hamilton - James Millar Williams.<sup>98</sup>

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<sup>96</sup> Phelps' Fairbank, p. 94.

<sup>97</sup> Monetary Times, December 13, 1872, p. 470; January 3, 1873, p. 536; May 2, 1873, p. 961.

<sup>98</sup> For Home Oil's capitalization and members, see Phelps' Fairbank p. 96, p. 139, footnote #19.

Williams' membership in Home probably served a dual purpose; being a director of several railways in Canada, he was in the position to bargain with the Great Western for reduced rates, and membership in another treating refinery would supplement his Hamilton refinery for the export of refined oil.

As Home Oil was being organized in early 1873, the exporters were facing the dilemma of declining New York refined prices plus increased crude oil production in the U.S. By the middle of March crude oil in Canada had fallen to 80 cents a barrel, and as the Monetary Times reported, there were few refineries operating:

"Nearly all the refiners at London have shut down and none are doing over one-quarter capacity. Englehart & Co<sup>99</sup> being the only one that is making up for old contracts."

The export trade advanced slightly in May when Waterman, Englehart & Co. were exporting between 3,000 and 4,000 barrels per week; the only other refineries exporting were Walkers English Co. and Carbon.<sup>100</sup> September to December was usually the busiest time of the year for exporters (remember 1872), but the depression of 1873 and greater U.S. production effectively cut off the export trade. In September when New York refined had fallen to 16½ cents per gallon, it was rumored that Carbon, the only firm exporting and Waterman, Englehart & Co. were "removing their immense oil works from London, but nothing definite is done."<sup>101</sup>

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<sup>99</sup> Monetary Times, March 21, 1873, p. 816.

<sup>100</sup> Monetary Times, May 9, 1873, p. 984; May 16, 1873, p. 1009; May 23, 1873, p. 1033.

<sup>101</sup> Monetary Times, September 5, 1873, p. 223.

In October (just when Home Oil began treating distillate), Carbon Oil was forced into liquidation when Jonas Sonneborn & Co., being Carbon's major owner and its New York creditor, obtained a judgment of \$100,000 against local creditors which made claims against the company comparatively worthless.<sup>102</sup> The judgment was settled in part when Sonneborn agreed to pay 25 cents on the dollar owing to local creditors.<sup>103</sup> The local creditors who had extended Carbon money during the last boom quarter of 1872 included Petrolia bankers (and oil producers) Vaughan and J. H. Fairbank for \$30,000, the Canadian Bank of Commerce for \$25,000, and John Noble of Petrolia who had purchased \$10,000 of Carbon stock.<sup>104</sup> The eventual biggest loser in Carbon however was Jonas Sonneborn & Co. In August of 1874 when Carbon's affairs were finally settled, Jonas Sonneborn & Co. was reported by the New York Times to have lost as much as \$500,000 on Carbon's failure and the resulting panic:

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<sup>102</sup> Monetary Times, October 24, 1873, p. 390. This report added the following: "As the law does not provide for proceeding against incorporated companies as in the case of an insolvent debtor, the other creditors have been unable to take any effective action to prevent this disposition of the estate. This involves a number of Hamilton firms in very heavy loss, in some cases almost ruinous; their debts were for materials supplied to the Company. Mr. Sonneburn (sic) having a large interest in the Company, and being also its consignee in New York for the sale of oil shipped thither, his action is...regarded by the other creditors as dishonorable treatment of them."

<sup>103</sup> Monetary Times, November 21, 1873, p. 486. This report stated: "We understand that the affairs of the Ontario Carbon Oil Company have been arranged by the creditors accepting a compromise of 25 cents on the dollar, extended over two years. Mr. Sonneburn (sic) of New York gives his note in security for the composition. This arrangement is probably the best that could be made, and a number of creditors will fare better than was expected at one time."

<sup>104</sup> Phelps' Fairbank, p. 129, footnote #14. Phelps stated the New York creditor as being Solomon S. Sanneborn.



"The liabilities were estimated at sums ranging from a quarter to half a million dollars. Upon investigation it was ascertained that the report was true and the liabilities were correctly stated.... Mr. Sonneborn stated in substance that his misfortunes had their origin in the collapse of the Ontario Carbon Oil Company, which failed during the recent panic. His firm lost by that failure fully \$300,000. ... He was certain that since the loss of the \$300,000 in the panic, the house had lost at least \$200,000 more, the figures might even be as high as \$500,000. ... The majority of their creditors were European houses and he did not think it likely that the failure would cause the suspension of any New York firms. Mr. Sonneborn further stated that his firm (Carbon) had commenced business about eighteen months ago. Formerly he himself had been engaged in the drygoods business on Broadway. He had been in that business for twenty-five years."<sup>105</sup>

When Carbon began bankruptcy proceedings in October of 1873, the other two exporting firms of the Western of Canada Oil Lands and Works Co. Ltd. (Walkers English Co.) and Waterman, Englehart & Co. also experienced difficulties.

As the bottom fell out of the export trade, the Western of Canada Oil Lands and Works Co. Ltd. ceased operations in October, 1873, as it was being sued for bad debts by English bondholders. According to the Monetary Times John Walker had organized this company in 1871 with a capital stock of 450,000 pounds of which only 700 pounds was actually subscribed to. On the strength of the large capital stock, Walker sold debentures on the English market amounting to some \$1,000,000 (with the option of buyers to convert the debentures into shares at par value of 100 pounds each). About \$900,000 of the debenture sales

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<sup>105</sup> New York Times, August 27, 1874, p. 8. From the preceding account on Carbon, it is the opinion of this writer that Jonas Sonneborn & Co. had control over Carbon since 1871 and not the beginning of 1873 stated in the article. It is not known to what degree the Parson brothers' loss in Carbon was.

came to Canada where Walker then apparently spent some \$600,000 on purchasing oil lands, wells, and refineries. Walker became the company's manager in Canada at a salary of \$5,000 a year and hired both his brother-in-law and his business partner, T. H. Smallman at salaries of \$2,500 a year. Once organized, Walker made large purchases of oil supplies from the firm of Reeves & Co. of which Walker had a one-third interest in.<sup>106</sup> For the two years that this company had been operating, very little refined kerosene was actually exported, and when the export trade disappeared, so too did the financially weak Western of Canada Oil Lands and Works Co. Ltd.

Waterman, Englehart & Co. did not experience the immediate bankruptcy problems that Carbon and Western were suffering through in late 1873. Waterman, Englehart & Co. had the export market completely to themselves during this period, but with the depressed U.S. conditions (New York refined had fallen to 13½ cents in December of 1873) the partners, each with their separate refinery, did not export any refined. In fact, between late 1873 and November of 1874, Englehart's London refinery was not in use. In March of 1874 when the Canadian industry was turning inward because of the depression conditions,

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<sup>106</sup> Monetary Times, December 12, 1873, p. 561. In the opinion of this writer, the figures in this editorial on the Western of Canada Oil Lands and Works Co. Ltd. seem to be too high in all respects. The editorial gave a scathing indictment on Walker and the Canadian directors of Western (the Hon. John Carling, A. Walsh, M.P., and J. Hespeler): "The maintenance of such relations on the part of Mr. Walker greatly strengthens the impression of dishonest intent which a perusal of the whole transaction is calculated to create... leaving them open to the suspicion of having sold their reputations for money."

Englehart & Co. considered tanking crude oil until the export market improved. Apparently, the Englehart and Watermans' partnership ended in May, 1874, and there were rumours that Englehart was going to dismantle his London refinery and move it to the U.S.<sup>107</sup> In July, both Englehart & Co. and the Watermans, along with other refiners, were considering turning their refineries into bonded working refineries where they would import the better quality American crude, refine this crude, and export the refined in bond back to the U.S.<sup>108</sup> Englehart did not seem to exercise any of these considerations but rather took a wait and see attitude until November. During this period, the London refiners had formed another Association distinct from some producers in September 1874, and from September until November, Englehart, who was not a member, extracted rent from the London refiners not to refine. Finally, in November, Englehart decided to get out of the Canadian refining business and he sold his London refinery to the London Refining Oil Company for \$40,000 - quite a loss from the original cost in 1869 of at least \$100,000.<sup>109</sup>

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<sup>107</sup> Monetary Times, March 27, 1874, p. 965; May 22, 1874, p. 1189-90 where this weekly report stated: "The recent change in the firm of Englehart & Co. leaves it in doubt whether export will be resumed when the price of oil allows of it or whether this important branch of the oil business will be neglected. There is a rumor that these large works are to be removed from London to the States." Ewing History, Ch. II, p. 64 stated the Englehart & Watermans' partnership was dissolved in 1875.

<sup>108</sup> Monetary Times, July 31, 1874, p. 120.

<sup>109</sup> Monetary Times, November 6, 1874, p. 512; November 13, 1874, p. 541; December 25, 1874, p. 708. It is the opinion of this writer that Englehart's refinery was worth, at the time of the November, 1874 sale, in the neighborhood of \$200,000 because of the refinery expansion that took place from 1869 to 1873. This \$200,000 figure could also be applied to the subsequent loss of Jonas Sonneborn & Co. of \$200,000 as a result of Carbon's failure.

After the sale of his London refinery, Englehart left the Canadian oil business until September 1875 when he returned to once again influence the direction of the whole Canadian oil trade.

## VI. DOMESTIC RESPONSE TO THE 1873 DEPRESSION

With the absolute demise of the export market beginning in late 1873, the Canadian oil industry turned inwards to meet the depression. It must be remembered that from late 1871 onwards, the Lambton Crude Oil Partnership and the London refiners agreement had based the export price of oil to New York and the domestic price on the duty of U.S. oil (which had remained constant from 1868) at 15 cents per gallon. The producers were behind such an agreement with the domestic refiners since the majority of crude oil stocks went to the export firms. But if the New York prices declined with a corresponding decline in Canadian crude oil prices for export plus less crude oil being demanded by the export firms, the producers would try and improve their position relative to the domestic market. This would especially be the case if the London refiners, under contract with Lambton, were to maintain higher Canadian refined prices even if the price in New York fell.

From the beginning of 1873, New York refined prices started at 22 1/8 cents per gallon in January, and gradually declined to 19 cents per gallon in June. In Canada, however, refined prices as set by the Oil Refiners Association in conjunction with Lambton, were steady at the 30-33 cent per gallon level even with the decline in

Canadian crude oil prices.

When Lambton's contract expired in May of 1873, the conditions were changed so as to offer Lambton members (no doubt minus the Watermans) a higher margin on domestic crude oil prices. The Monetary Times reported Lambton's new 1873 contract:

"The Crude Oil Association (Lambton) have again resumed but under rather a different basis. Instead of being united with the Refiners Association they propose to sell to refiners, crude at prices for home consumption that will allow them a good margin...."<sup>110</sup>

The Oil Refiners Association still held together once Lambton's new contract year went into effect, but without an exclusive agreement with Lambton, the London refiners were not very united. Refined prices dropped to around 25-28 cents per gallon between June and October, 1873, but these high prices could not be maintained during the depression. Refined prices in New York fell to 13½ cents per gallon in December, and the higher Canadian refined prices, even with a 15 cent duty from U.S. imports, could not be upheld by the Refiners Association without fear of U.S. importations. This fear, added to the very low price of crude which had fallen to around 65 cents per barrel in December because of the depressed export trade, led to refiners undercutting the Association with eventual breakup of the Refiners Association in late December of 1873.<sup>111</sup>

Without a refiners' association, the price on Canadian refined quickly fell to reflect the depressed conditions of the times. Very

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<sup>110</sup> Monetary Times, June 13, 1873, p. 1104.

<sup>111</sup> Monetary Times, June 13, 1873, p. 1104; August 8, 1873, p. 126; October 10, 1873, p. 342; December 26, 1873, p. 609.

few London refineries were in actual operation between January and May of 1874 as the price on Canadian refined was in the neighbourhood of 14 to 15 cents per gallon, about one cent higher per gallon than in New York. In fact, in May of 1874, the only refiners operating in Canada were the Home Oil Works in Petrolia and Fitzgerald & Co. in London.<sup>112</sup>

Home, it should be remembered, was formed as a treating refinery in early 1873 as a result of the 1872 export boom when both producers and refiners were in mutual associations. Home began operations in October of 1873 treating the Petrolia distillate but it was at this time that the export business failed and Lambton was not united with the Refiners Association. Home, with its apparent reduced railway rates on refined could compete with the London refiners for the domestic trade, and with the depressed conditions in the industry, Home was one of the few refineries operating.

However, in June of 1874 when there was neither a refiners' association or a producers' association (Lambton had legally expired in June and was not renewed because of its ineffectiveness to market crude oil), the intra-industry rivalry between producers and refiners took on a somewhat confusing pattern.

The freight rate policy of the Great Western was altered in June which gave a distinct advantage to the London refiners. Rates on refined oil shipped from Petrolia to Toronto were left unchanged, but crude oil rates from Petrolia to London were reduced plus rates on

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<sup>112</sup> Monetary Times, May 22, 1874, p. 1188-9.

refined from London to Toronto were also reduced.<sup>113</sup> As a result of the reduced rates on crude from Petrolia to London, the London refiners stockpiled approximately 70,000 barrels of crude by August and were contemplating another association to control the domestic market.<sup>114</sup>

In early September of 1874, six of the largest London refiners formed the London Oil Refining Company. Although the members joining this co-partnership is not definite, the most likely refiners were: Waterman Bros.; W. Spencer & Son; F.A. Fitzgergald & Co.; T. D. & E. Hodgens; Geary, Minhinnick & Co., and the Duffield Bros.<sup>115</sup> One of above mentioned refiners, perhaps the Duffield Bros., stayed outside of the co-partnership in September, and by late October, the Waterman Bros. also left, leaving only four members.<sup>116</sup>

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<sup>113</sup> Phelps' Fairbank, p. 97 in turn citing Monetary Times, June 12, 1874 p. 1277.

<sup>114</sup> Ibid., in turn citing Monetary Times, August 21, 1874, p. 209.

<sup>115</sup> The London Oil Refining Co. was formed in September of 1874 (see Monetary Times, September 4, 1874, p. 261; September 11, 1874, p. 288) but the actual co-partnership registration was not filed until February of 1875 (see Phelps' Fairbank, p. 131 footnote #34). One writer (Scott, Benjamin S., Thesis in University of Western Ontario, 1930 quoted in Cronin op. cit. p. 40) stated the London Oil Refining Co. was formed in 1876 while another (Ewing History Ch. II, p. 32) stated it was April of 1875. For the members' names, see Cronin op. cit. p. 40, 69, but this was the list of members of 1876, not 1874. This writer can only assume that these were the original members and that Englehart & Co. was never a member of the London Oil Refining Co. (which was also known by names such as London Refining Co., London Oil Co., London Refiners Association, Refiners Association, and the Refiners Ring).

<sup>116</sup> Ewing History, Ch. II, p. 32-33 listed the four members in 1875 as being Fitzgerald, Spencer, Geary (and Minhinnick) and the Hodgen brothers. The Monetary Times reported (October 23, 1874, p. 457) that the "London ring...now consists of four members, Waterman and another having gone out of it."

The purpose of the London Oil Refining Co. was like all the previous associations of leasing all the refineries (this time on a monthly basis) in order to control the price on domestic refined. Upon its formation in September, the price of refined increased from 15 cents to 25 cents per gallon.<sup>117</sup>

To be successful the London Refining Oil Company entered into an agreement with Home Oil in late September where Home would "... supply some 20,000 brls. to said Ring."<sup>118</sup> This was an interesting agreement in two respects. First of all, without a special agreement with the London refiners, Home would not be able to treat the Petrolia distillate and compete with refiners because of the discriminatory freight rates. Either rates were reduced once Home entered into the agreement with the London Oil Refining Company or else Home Oil, with its distillate storage capacity of some 6,000 barrels, supplied only distillate to the London refiners. Second, Home Oil had only fourteen members from the Petrolia producers and the remaining producers, having no market for their crude oil, would in effect, be forced out of business by Home Oil producers.

Retaliating against the special agreement between Home Oil and the London Oil Refining Company, other prominent producers like Charles Jenkins and John Noble formed the Petrolia Crude Oil and Tanking Co. in November, a type of holding company among producers and tanking

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<sup>117</sup> Phelps' Fairbank, p. 97 in turn quoting Monetary Times, September 11, 1874, p. 288.

<sup>118</sup> Monetary Times, September 25, 1874, p. 345. See also Monetary Times, October 2, 1874, p. 372.



companies.<sup>119</sup> To integrate separately from Home Oil and the London Oil Refining Company, the Petrolia Crude Oil and Tanking Co. tried to purchase Englehart's London refinery in November,<sup>120</sup> but when it was sold to the London Oil Refining Company, the Tanking Company took a different strategy. In March of 1875, the Tanking Company "must have detached James Millar Williams from the Home, for they rented his refinery in Hamilton."<sup>121</sup>

To avoid the possibility of potential price-cutting among the various groups, a fifteen month agreement was negotiated in April, 1875 whereby the only refineries that would operate for the remainder of the year would be Home and the old Englehart refinery, with crude to be supplied at special rates by the Tanking Co.<sup>122</sup>

This agreement among the domestic refiners and producers had the effect of initially excluding competitors and keeping domestic prices as high as possible. This was much like the 1871 Lambton Crude Oil Partnership and Refiners Association agreement, but with two distinct differences. In 1875 there was no export trade with prices based on New York refined, and it was also a time of depression in the oil

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<sup>119</sup> Monetary Times, October 9, 1874, p. 400; November 20, 1874, p. 569; November 27, 1874, p. 597. It is interesting to note that members of Home Oil and of the Petrolia Crude Oil and Tanking Co. were all once members of the 1871 Lambton Crude Oil Partnership.

<sup>120</sup> Monetary Times, November 6, 1874, p. 512; November 13, 1874, p. 541.

<sup>121</sup> Phelps' Fairbank, p. 98 in turn citing Monetary Times, March 12, 1875, p. 1031.

<sup>122</sup> Monetary Times, April 9, 1874, p. 1143; April 16, 1874, p. 1170; April 30, 1874, p. 1227.

industry. In retrospect the Canadian oil industry in mid-1875 was more like the industry was in the beginning of 1869 when there was little export and the producers and refiner associations were in agreement to keep domestic prices as high as possible. But in the early days, both crude and refined were lower than U.S. prices.

Through 1875 when J. D. Rockefeller was in the process of consolidating refineries and gaining control of the U.S. market through acquisitions and ruthless business practices, the average price on crude oil was around \$1.25 per barrel and refined was constant at around 13 cents per gallon. In Canada where agreements between producers and refiners seemed destined to rule the smaller market, crude oil was around \$1.00 per barrel during 1875 while refined was held at the monopolistic price of around 25 cents per gallon, just low enough to exclude most U.S. imports.

The depressed conditions in the Canadian industry perhaps facilitated the need for associations, but with high Canadian prices relative to U.S. prices, there was always the problem of competition from producers and refiners outside the April, 1875 agreement. In fact, by July, there were many producers operating independently and by September, three refineries were being constructed at Oil Springs, Petrolia and London to extract rent from the London refiners.<sup>123</sup>

The London Oil Refining Company, in agreement with Home Oil and the Petrolia Crude Oil and Tanking Co. had utilized the old Englehart refinery (renaming it the Victor Oil Works)<sup>124</sup> throughout most of

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<sup>123</sup>Monetary Times, July 2, 1875, p. 9; July 9, 1875, p. 37; August 27, 1875, p. 233; September 10, 1875, p. 293.

<sup>124</sup>Monetary Times, October 22, 1875, p. 461.

1875 to supply enough refined to meet the domestic demand. From July until September, this was about the only refinery operating at all in Canada; Home was not operating because of the depressed conditions.<sup>125</sup> However, in September the London Oil Refining Company was threatening to break apart<sup>126</sup> when new refineries were being constructed for speculative purposes. Two such speculative refiners were future Imperial Oil members, Frank Smith and Frank Ward,<sup>127</sup> but the main threat to the London Oil Refining Company was the return of Jacob Lewis Englehart to the Canadian oil industry in September of 1875.

#### VII. ENGLEHART, GUGGENHEIM AND SONNEBORN

If J. L. Englehart was to re-establish his operations in Canada, one would normally expect that he would have bought back his old London refinery from the London Oil Refining Company. Instead, Englehart re-entered the Canadian oil business as an independent crude oil producer in Petrolia<sup>128</sup> and also as a potential refiner by 'purchasing'

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<sup>125</sup> Monetary Times, July 9, 1875, p. 37; August 13, 1875, p. 177.

<sup>126</sup> Ewing History, Ch. II, p. 36 (in turn citing Toronto Globe September 14, September 20, September 27, 1875).

<sup>127</sup> On Frank Smith see Monetary Times October 22, 1875, p. 461; November 12, 1875, p. 545. On Frank Ward see Ewing History, Ch. II, p. 36-37 (in turn citing Toronto Globe October 19, 1875 and November 9, 1875).

<sup>128</sup> Monetary Times, September 24, 1875, p. 349: "Mr. Englehart's new well near the old 'Iron Side' (Big Still) is being tested with fair prospects. He is putting down two or three other wells also."

the disused Carbon Oil Co. refineries in Petrolia and Hamilton.<sup>129</sup> Englehart's return to Canada was for the same purpose he first entered the Canadian oil trade in 1869 - the export trade. This trade was to increase substantially in 1876, but the point of Englehart's 'purchasing' the old Carbon Oil property and refineries should be examined more closely.

Englehart's partner in 1876 was not the Waterman brothers as in 1872, but rather Isaac Guggenheim from New York city. Isaac, the eldest son of Meyer Guggenheim (who formed Guggenheim & Bros. in 1881 - the majority owners of the future American Smelting and Refining Co.) was a twenty-two year old lace importer when he became Englehart's New York partner. The actual name of the partnership had been referred to as Englehart, Guggenheim & Co.,<sup>130</sup> but it is probable that in Canada the name of the firm was J. L. Englehart & Co. and in the U.S. Guggenheim & Co.

It is also quite probable that the partnership was supported by Jonas Sonneborn, the major owner of the old Carbon Oil Co., for as Harvey O'Connor pointed out in his book The Guggenheims, Isaac was Jonas Sonneborn's son-in-law:

"...by 1876 he (Isaac) had launched his own business, Guggenheim and Company, dealing in oil. In that year he moved to New York, married Carrie, seventeen-year-old daughter of Jonas Sonneborn, a fancy goods dealer, and became interested in wells in Petrolia, Ontario, near Detroit."<sup>131</sup>

<sup>129</sup> Monetary Times, October 22, 1875, p. 461: "I am glad to say that Mr. Englehart is now here and is putting down several wells, besides resusitating some old ones. He has purchased the old Carbon Oil Co. works both here and in Hamilton, and is at preasent one of our largest well owners."

<sup>130</sup> Cronin, op. cit., p. 40.

<sup>131</sup> O'Connor, Harvey, The Guggenheims: The Making of an American Dynasty (New York, 1937), p. 144.

There is also the possibility that Jacob Lewis Englehart had been related to Jonas Sonneborn,<sup>132</sup> which leads one to question the 'purchase' of Carbon Oil in 1875-76. The 'purchase' price of Carbon Oil to Englehart was never disclosed, but in all likelihood, Englehart and Guggenheim were closely 'related' to Sonneborn, making the 'purchase' price of Carbon at the very least, minimal.

Englehart did not become a member of the London Oil Refining Company, but as he established his crude oil operations and renovated the Petrolia stills and Hamilton treating refinery, Englehart extracted rent from the London Oil Refining Company not to refine for the domestic market.<sup>133</sup>

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<sup>132</sup>The whole question of Englehart being related to Jonas Sonneborn revolves around an obituary on Jacob Lewis Englehart in the Sarnia Canadian Observer, April 7, 1921. In this obituary it was stated that when Jacob first came to London, Ontario in 1869 "...his wife died shortly after coming to Canada." He later married Charlotte Eleanor Thompson in 1891 but that his "...first wife was related to the Guggenheims of New York." It is highly unlikely that Jacob's first wife was related to the Guggenheim family, but that she was related to Jonas Sonneborn, Isaac Guggenheim's father-in-law. It is only regrettable this writer cannot verify the Englehart-Sonneborn-relation, one way or the other. Even if Englehart was not related to Sonneborn, there is little doubt that Englehart knew Jonas Sonneborn considering the 1876 partnership of Englehart and Isaac Guggenheim. It is the speculative opinion of this writer that Englehart & Co. in Canada from 1869 to 1874 was a subsidiary of Jonas Sonneborn & Co. from New York.

<sup>133</sup>Ewing History, Ch. II, p. 36 stated Englehart extracted rent from the London refiners until the end of 1875, but from various issues of the Monetary Times throughout 1875-76, there was no indication that Englehart started refining until August of 1876.

VIII. 1876: EXPORT REVIVAL

The London Oil Refining Co. still had control over domestic refining in early 1876 after having purchased over 100,000 barrels of crude oil in March and April, and had even proposed exporting 1,000 barrels a week of refined to the English market.<sup>134</sup> The Petrolia producers, through Home Oil and the Petrolia Crude Oil and Tanking Co., had by May, 1876, 150,000 barrels of crude oil tanked and around 30,000 barrels of distillate in stock.<sup>135</sup> Agreement difficulties arose between June and August among the various groups, but it seems that short-term agreements settled any differences over the domestic market.<sup>136</sup>

The Canadian export trade was rejuvenated in August 1876 when the Standard Oil Co. in the U.S. exercised its refining power by increasing refined prices in New York. By July, 1876, New York refined had slowly increased to around 16 cents per gallon. In August refined went to 19 7/8 cents per gallon; in September 26 cents per gallon; in October 26 cents per gallon; in November 26 1/4 cents per gallon; in December 29 3/4 cents per gallon (the highest since February of 1870); in January 1877 24 cents per gallon. Refined prices then fell to reach an average of 15 3/4 cents per gallon in 1877.

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<sup>134</sup> Monetary Times March 3, 1876, p. 1017; April 4, 1876, p. 1181; April 28, 1876, p. 1244.

<sup>135</sup> Monetary Times May 12, 1876, p. 1297.

<sup>136</sup> Monetary Times August 11, 1876, p. 157; August 18, 1876, p. 192.

With the tremendous upsurge in New York prices, Canadian refiners, especially Englehart, were ready to meet the 'expected' demand. In early August Englehart "started his still running."<sup>137</sup> With his New York connections in Guggenheim, Englehart utilized the same system that Carbon had used in prior years. Distillate from Petrolia stills would be shipped to Hamilton where the distillate would be treated and exported by rail to New York.

Englehart, seen as the second largest crude oil producer in November after having paid \$20,000 for additional oil lands,<sup>138</sup> still had to utilize his old brokerage skills in securing crude oil, for production was not enough to keep up with demand. He most likely purchased crude oil stocks from the Petrolia Crude Oil and Tanking Co. in order to export in the neighbourhood of 3,000 to 4,000 barrels of refined per week.

The London Oil Refining Company was also prepared for the export trade. Refined oil for the domestic market was supplied by Home Oil in agreement with the London Oil Refining Company while the London refiners concentrated on the export trade.<sup>139</sup> By mid-November the London Oil Refining Company was exporting 1,000 barrels of refined a day but the exported oil took a different route from New York: "... most of it is going by the St. Lawrence."<sup>140</sup> The London refiners had

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<sup>137</sup> Monetary Times August 18, 1876, p. 192: "Mr. Englehart, who purchased the Carbon Oil Works intends going in for the export business and has already started his still running."

<sup>138</sup> Monetary Times November 17, 1876, p. 564.

<sup>139</sup> Monetary Times November 3, 1876, p. 511: "The Home Works of this place (Petrolia) is largely engaged for the London Association in making oil for the home market."

<sup>140</sup> Monetary Times November 17, 1876, p. 564.

established separate foreign markets for export and were able to compete for the European market independent from Englehart.

With separate export markets, Englehart seemed to be in direct competition with the London Oil Refining Company. The London refiners were able to compete for the export trade on an independent basis because of their utilization of their members' individual refineries. The Victor Oil Works, under joint ownership, was their largest refinery, while the refineries of Spencer, Minhinick, and Fitzgerald, could all be utilized for the export market. The combined refining capacity of these five refineries, plus the agreement with Home Oil (to supply the domestic market) and the Petrolia Crude Oil and Tanking Co. (to supply crude oil to the London refineries) would indicate that the London Oil Refining Company could even dominate the export trade. But this did not seem to be the case by the end of 1876, as the Montary Times reported that the export trade was divided between the London refiners and Englehart:

"The export trade is still flourishing and is about equally divided between the London Oil Refining Company, and J. Englehart of Petrolia and Hamilton."<sup>141</sup>

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<sup>141</sup>Monetary Times December 15, 1876, p. 671. This report went on to describe Englehart's operations: "Mr. E. (sic) has purchased and has been working the old Carbon Oil Company works for some time. They consist of five or six five hundred barrel stills here, and all the requirements for refining at Hamilton from whence the oil is exported. The stills are at present run off twice a week, and the quantity exported is between 3,000 and 4,000 bbls. per week."



IX. 1877-79: EXPORT DECLINE - DOMESTIC RESPONSE -  
MUTUAL OIL ASSOCIATION

1. Export Decline - Duty Reduction

The 1876-77 export trade was short-lived. Refined prices in New York began to decline after January of 1877 to levels in the 13 cents to 15 cents per gallon range. With lower prices in the U.S., Canadian exporters could not compete on the international market, and like the export decline of late 1873, the Canadian oil industry in 1877 turned inward. However, conditions in Canada in 1877 were far different than the financial depression of 1873. Domestic consumption of oil products was increasing as Canada was becoming a more industrialized nation. The structure of the oil industry was modified to meet the changing conditions.

Throughout 1876 and early 1877, the domestic producers and refiners had a monopoly agreement to keep oil prices as high as possible in relation to the duty on imported oil. When the export trade was still brisk in January of 1877, domestic refined was fixed at 35 cents per gallon while crude oil was around \$2.00 - \$2.25 per barrel. As the export trade declined in response to U.S. prices, domestic prices were still maintained at these high levels.<sup>142</sup>

In order to stimulate domestic competition and lower the price of refined oil to the Canadian consumer, the duty on imported refined oil was reduced from 15 cents per gallon to 6 cents per gallon making the duty on refined and crude uniform (the duty on imported crude being

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<sup>142</sup>Monetary Times January 5, 1877, p. 755; February 16, 1877, p. 927.

the same as in 1868 - 6 cents per gallon).<sup>143</sup>

The duty reduction on refined took effect by early March of 1877 with amazing results. Refined oil decreased to 23 1/2 cents per gallon in March and by June refined had fallen to 10 - 12 cents per gallon. For the remainder of 1877, refined prices fluctuated between 13 - 15 cents per gallon indicating intense competition among refiners.<sup>144</sup>

As a result of the duty reduction Ewing stated the London Oil Refining Company was dissolved because there were many rebels outside of the company, the price of leasing refineries was too high, and the funds for leasing refineries was too limited.<sup>145</sup> Phelps also stated the London Oil Refining Company was dissolved in 'early 1877'.<sup>146</sup> But the quote below from the Monetary Times (written in June 1877) would indicate that while the formal co-partnership agreement may have terminated because of leasing problems, the London refiners were still operating as a unit to force small refineries out of business by price-cutting:

"The London Oil Association is still working, and their object is to keep all other refineries from doing the same by making the price of refined so low that small refineries cannot compete."<sup>147</sup>

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<sup>143</sup> Ewing History, Ch. II, p. 38.

<sup>144</sup> Monetary Times various issues throughout 1877.

<sup>145</sup> Ewing History, Ch. II, p. 39.

<sup>146</sup> Phelps' Fairbank, pp. 99.

<sup>147</sup> Monetary Times, June 8, 1877, p. 1413.

By keeping refined prices low throughout 1877, the London refiners who comprised the London Oil Refining Company would have forced many small refineries out of business, as well as excluding U.S. refined imports (which would have needed a domestic price around 20 cents per gallon to import).

## 2. Producers' Response - Mutual Oil Association

The crude oil producers also felt the effects of the export decline and the duty reduction. From a high of \$2.00 - \$2.25 per barrel in January, 1877, crude oil prices dropped to around \$1.00 per barrel by mid-1877.<sup>148</sup> As the London refiners were in a price war to force small refineries out of business, the agreement between the London refiners with Home Oil and the Petrolia Crude Oil Tanking Company was most likely terminated in these turbulent times.

There were indications between March and September of 1877 that the producers were contemplating another combination to raise the price of crude oil either in association with the London refiners or on their own.<sup>149</sup> The London refiners, though, were in no mood to pay higher crude oil prices in the midst of a price war and no agreement among the various groups was made. Instead of conciliating, Petrolia producers and refiners united together to form their own association - the Mutual Oil Association - and on October 24, 1877 "...announced its existence to the business world by raising the price

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<sup>148</sup> Monetary Times, March 3, 1877, p. 1017; June 1, 1877, p. 1388; July 13, 1877, p. 67.

<sup>149</sup> Monetary Times, March 16, 1877, p. 1053; June 8, 1877, p. 1413; August 10, 1877, p. 183; August 24, 1877, p. 245.

of crude oil from its current level of \$1.10 per barrel to \$2.08, an increase of eighty-nine percent."<sup>150</sup>

### 3. Members of Mutual - Englehart and Guggenheim

The Mutual Oil Association was comprised of 154 members, most of whom were Petrolia land owners, producers, and refiners. Virtually all the members of Home Oil and the Petrolia Crude Oil and Tanking Company were in Mutual, as well as future Imperial Oil member Frank Smith.

Perhaps the most prominent member of Mutual was none other than Jacob L. Englehart, one of Mutual's four managers responsible for selling the members' crude oil. Another member of Mutual was Englehart's partner, Isaac Guggenheim, who was listed as an oil merchant from New York City.<sup>151</sup>

There has been no explanation given as to why Englehart and Guggenheim entered into the Mutual Oil Association,<sup>152</sup> and one can only speculate as to why they became members.

Englehart's Canadian operations had been established for the export trade, both in 1869 and his return to Canada in 1875-76. As the export trade declined in 1877, Englehart did not sell out as in 1874,

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<sup>150</sup> Phelps' Fairbank, p. 123.

<sup>151</sup> Ibid., p. 139 footnote #119 and Appendix I, p. 305, 306, 307 which lists the members of Mutual.

<sup>152</sup> To this writer's knowledge, Ewing did not mention Englehart or Guggenheim as being members of Mutual while Phelps (p. 139#119) stated that Englehart "...cast his lot with the producers this time instead of with the refiners."

but rather joined Mutual, possibly the first association Englehart ever joined. With his New York connection in Guggenheim (and probably Jonas Sonneborn), Englehart most likely anticipated another export revival and joined Mutual to have a secure source of crude oil for the export trade.

Englehart was also a major crude oil producer in 1877. He had expanded the Carbon Oil oil properties by purchasing additional oil lands, and in March of 1877, struck a well yielding 150 to 300 barrels of crude oil a day for a short period.<sup>153</sup> By integrating into producing as well as having perhaps the largest refinery in Canada, Englehart was in an advantageous position over the London refiners who were not crude oil producers.

As a member of Mutual, Englehart would have a secure source of crude oil above his own production, while the London refiners would have to deal for crude oil through Englehart, one of Mutual's four managers.

Conducting a price war to force small refineries out of business, the London refiners were most likely operating at the slimmest of profit margins, and higher crude oil prices (as dictated by Mutual) would force the London refiners to operate at a loss. Maybe this was what Englehart desired, for it should also be pointed out that he had been in competition with the London refiners for the revived export trade of 1876. By raising crude oil prices and restricting supply to the London refiners, Englehart may just have been in the position to gain complete control over Canada's oil industry.

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<sup>153</sup>Monetary Times May 23, 1877, p. 1081; April 6, 1877, p. 1139.

#### 4. Mutual - Proposals - Results, Problems

The Mutual Oil Association was formed on the basis of previous crude oil associations where the members would enter into a contract period (usually one year) and the crude oil would be marketed by the appointed managers. Mutual members were to receive payment for two-thirds of their oil at the going sale price, while negotiable receipts would be issued for the other one-third. A few cents per barrel would be retained in a reserve fund for the Association.<sup>154</sup>

It was stated in the Petrolia Advertiser (November 2, 1877) that the "Association may dissolve at the end of one year but it is proposed to be 'ever-lasting'."<sup>155</sup> Mutual did not turn out to be 'ever-lasting' for it was in effect from October, 1877 until May, 1879. From October, 1877 until January of 1879, crude oil prices for the domestic market were fixed by Mutual at \$2.08 per barrel, and from January 1879 until the break up of Mutual in May, crude oil for the domestic market was fixed at \$1.70 per barrel.<sup>156</sup>

By fixing the price of crude oil at artificially high levels, Mutual had to overcome the problems of attracting new entrants, and tanking the excess oil that could not be sold. The Monetary Times reporter accurately gauged these problems in November of 1877 when he wrote that the formation of Mutual:

"...may have the effect of stimulating production beyond its requirements and that in the fact of a falling and glutted market at home. It may also have the effect of causing a great

<sup>154</sup> Ewing History, Ch. II, p. 40, Monetary Times, Nov. 9, 1877, p. 563.

<sup>155</sup> Monetary Times, Nov. 9, 1877, p. 563 in turn citing Petrolia Advertiser, November 2, 1877.

<sup>156</sup> Phelps' Fairbank, p. 123, 125.

deal of oil to be stored, and then who is to pay the two-thirds cash?"<sup>157</sup>

The Mutual Oil Association's annual report for 1878 verified the problems of accelerated crude oil production and excess tanking. During the year 1878, Mutual received over 665,000 barrels of crude oil from producers. Of that amount, around 260,000 barrels were sold for the home trade while over 330,000 barrels were tanked with the remainder sold for export.<sup>158</sup>

The basic problem of Mutual was that not every producer joined the Association. Outside producers were attracted by the high price of crude oil where there was easy entry into that stage of production. Capital costs of drilling an oil well had not increased over the eleven to twelve year history of Petrolia's development. In fact the opposite was true. Oil wells drilled in 1866 had cost over \$2,000 and took one to three months to drill the 500 feet for oil. Oil wells drilled and equipped in 1876-77 cost the maximum of around \$1,300 (relatively the same as Oil Springs in 1861-62) and took between four and ten days to drill the same distance of 500 feet.<sup>159</sup> Even though Mutual had most of the land owners in its membership, there were still lessee producers outside the Association. These independent producers could sell their oil at any price they could receive which made it difficult for Mutual

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<sup>157</sup> Monetary Times, November 9, 1877, p. 563.

<sup>158</sup> Monetary Times April 18, 1879, p. 1307. The Mutual report had the following figures: received from producers 666,876 barrels; sold for home trade 260,070 barrels; sold for export trade, 86,330 barrels; tanked 337,476 barrels. As with most figures during this early period, these figures do not add up but are useful for comparative purposes.

<sup>159</sup> Ewing History, Ch. II, p. 37; Monetary Times, April 6, 1877, p. 1139.

to control both production and prices.

#### 5. London Refiners' Response to Mutual

With the low costs of drilling an oil well, the London refiners competed with Mutual. Between November, 1877 and April of 1878, the London refiners were organizing a company to drill for crude oil, and had also given contracts to independent producers to drill at least fifty wells.<sup>160</sup>

In April of 1878 the London Oil Refining Company was formally re-activated by the London refiners. (It is not known if the refineries still operating were leased and closed down.) The London Oil Refining Company had offered to purchase the entire crude oil output from Petrolia at a set price of \$1.60 per barrel, but the managers of Mutual refused this conciliatory offer.<sup>161</sup> With Mutual's fixed price of \$2.08, the London Oil Refining Company had to purchase crude oil from Mutual, but the Refining Company also went into actual crude oil production in addition to purchasing crude oil from independents outside of Mutual.

The London Oil Refining Company also kept refined oil prices low in relation to the fixed prices on crude oil. Throughout 1878 and early 1879, the price on refined oil did not increase but stayed at the level of around 13 to 15 cents per gallon.<sup>162</sup> By purchasing crude oil outside of Mutual at prices lower than \$2.08 and \$1.70 per barrel, the

<sup>160</sup> Monetary Times, November 16, 1877, p. 591; December 14, 1877, p. 703; March 14, 1878, p. 1085; March 29, 1878, p. 1143.

<sup>161</sup> Phelps' Fairbank, p. 124.

<sup>162</sup> Monetary Times various issues in 1878-79.



London refiners were able to effectively compete against the refineries in Mutual. Mutual refiners like Home Oil and Englehart would have to buy the members' oil at the fixed prices and compete against the unified London Oil Refining Company for the domestic market.

#### 6. Englehart's Problems

It was speculated earlier that Englehart had joined Mutual for the anticipated export trade and to compete against the London refiners for control over the domestic market. As events turned out, neither speculation materialized.

Englehart was at a disadvantage for the domestic market because of the high fixed prices on crude oil necessary for domestic refining. It was simply uneconomical for Englehart to compete against the lower refined prices of the London Oil Refining Co.

The export trade that Englehart and Guggenheim had anticipated never materialized. Englehart had prepared for the 1872 export boom, and also the 1876 export revival, but in 1877-78, conditions in the U.S. industry changed which had an adverse effect on the Canadian exporters.

At the time of Mutual's formation in 1877, crude oil prices in the U.S. had averaged around \$2.40 per barrel throughout the year. In 1878, however, U.S. crude oil production increased and crude oil prices dropped. U.S. crude oil prices averaged \$1.17 per barrel throughout 1878. In September of 1878, crude oil had reached the low price of around 75 cents per barrel. With Mutual's fixed price of \$2.08 per barrel throughout 1878, this marked for the first time in oil history that Canadian crude oil prices (for an inferior quality and lower production costs) were consistently higher than U.S. prices.

In hopes of stimulating export, Mutual offered a two price system on crude oil. Domestic prices remained fixed, but after August of 1878, crude oil for export were offered at 75 cents per barrel.<sup>163</sup>

Some export trade developed (i.e. to Manitoba),<sup>164</sup> but refined prices in New York continued to be against Englehart. Throughout 1878 New York refined averaged 10 3/4 cents per gallon, and in early 1879 New York refined was around 9 cents per gallon.

Even with the low U.S. refined oil prices, Englehart made an attempt at exporting. In February of 1879, the Canadian export price was reduced to 55 cents per barrel with Englehart purchasing 20,000 barrels. The Monetary Times reported that this sale to Englehart was the true value of crude oil rather than the fixed price of \$1.70 per barrel:

"The sale of Englehart & Co., some weeks ago, of some 20,000 of crude, to make export oil, at 55¢ per barrel has proved to the producer the actual worth of the article."<sup>165</sup>

It is not known how profitable Englehart's attempt at exporting was, but the low prices on refined in the U.S. throughout 1879 virtually collapsed the export trade.

## 7. Collapse of Mutual

Mutual continued operations in early 1879 but the problems of overproduction with easy entry, excess crude oil tanked, competition

<sup>163</sup>Monetary Times August 16, 1878, p. 213; September 6, 1878, p. 299; September 27, 1878, p. 403.

<sup>164</sup>Monetary Times October 18, 1878, p. 499, which stated the exported oil was being shipped to "the west." This was most likely Manitoba, for Home Oil had been exporting refined to Manitoba in June of 1877 (see Monetary Times June 1, 1877, p. 1388).

<sup>165</sup>Monetary Times, February 28, 1879, p. 1088.

from the London refiners and virtually no export trade, all combined to make it apparent that Mutual was not very unified.

When it came time to negotiate a new contract for Mutual in April of 1879, there were producers who refused to join and were in favor of an open market where their oil could be sold quickly to pay off creditors. Producers refusing to join blamed Mutual for failing to sell enough oil, and also the government for lowering the duty on refined.<sup>166</sup> Without a unified group, Mutual could not carry on for as Phelps' Fairbank explains:

"On 1 May 1879, Petrolia's 'Black Friday', the Mutual Oil Association flew apart, as producers frantically sold oil to keep their creditors at bay. For a few days the price of oil touched the calamitously low price of forty cents a barrel, then gradually rose to sixty."<sup>167</sup>

#### 8. Englehart, Guggenheim, and Frank Smith

After the collapse of Mutual when crude oil fell to around 50 cents per barrel with no signs of an export business, Englehart and Guggenheim realized that being members of a producers' association was not the most profitable way to operate in the Canadian oil industry.

Together with Frank Smith, these three members of the Mutual Oil Association evidently decided that the only way to stabilize the Canadian oil industry in a profitable manner would be through a strong refiners' organization.

<sup>166</sup> Ewing History, Ch. II, p. 43.

<sup>167</sup> Phelps' Fairbank, p. 125. See also Monetary Times May 9, 1879, p. 1385.

Such an organization would combine the major refineries in Canada under a separate joint stock company. The only way to do that would be to unite with the major London refiners to form such a company. With the approaching change of the wine gallon measurement to the imperial gallon, in 1879-80, an appropriate name for such a company would be The Imperial Oil Company Ltd.

CHAPTER II    1880-1898:    GROWTH AND DEMISE OF A  
CANADIAN CORPORATION

## I INTRODUCTION

### BASIC CONDITIONS

Canada's oil region around Petrolia was a steady crude oil source until the late 1890's when imports took a greater share of the Canadian market. The formation of Imperial as the dominant firm had a stabilizing effect on crude oil production, but some producers (most notably J. H. Fairbank) retained their independence from Imperial's market power, and were to incorporate their operations with Standard Oil in the late 1890's.

This was also a period of expansion across Canada as the growth of the national market offset the demise of the export market. With a steady rate of growth, the industry and in particular Imperial, supplied most of Canada's more diversified oil needs.

### STRUCTURE

Economies of Scale. With the formation of Imperial, the smaller less efficient refineries were closed down, and larger refineries were strategically located near the crude oil source to reduce unit costs. Some of the advantages of market size that lowers production costs is offset by the high costs of distribution and transportation given the geographical expanse of the market. Factors such as a natural decline in Petrolia crude oil production and Imperial's inability to gain access to an innovative refining technique in the latter stages of the period reduced output and increased unit costs.

Mergers and Concentration. Imperial was formed by a horizontal consolidation among Canada's major refiners, but the company's inability to exclude or acquire refining competitors was an indicator that Imperial did not monopolize the industry.

Number of Sellers and Buyers. With Imperial as the dominant firm, the previous inter-industry rivalry between producers and refiners took on a more stable nature with fewer refiners and producers that maintained the higher price structure in Canada.

Product Differentiation. As the market for oil products became more diversified and selective, Canada's kerosene was inferior because of Imperial's failure to incorporate the desulphurization process developed in Canada by Herman Frasch but controlled by Standard Oil in the U.S. This was an important advantage to Standard which also marketed superior products throughout Canada from various regions in the U.S.

Barriers to Entry. Being the dominant firm in the oil region and presenting barriers to potential entrants because of its size, Imperial was in the constraining position of having to expand nationally based primarily on Petrolia as its crude oil source. Besides marketing superior products, Standard Oil gained entry into Canada by utilizing other strategies such as establishing subsidiaries on a regional level, entering Petrolia crude oil producing and refining, unlimited financial resources, and acquiring a strategically located refinery at Sarnia to ensure long term access to imported crude oil.

Vertical Integration. Imperial was a vertically integrated company once it established retail outlets. When the export market diminished, Imperial was not able to integrate operations into the U.S. which would have allowed the company access to a crude oil supply and a larger concentrated market.

## CONDUCT

Pricing Behavior. Imperial exhibited price leadership as the dominant firm and this form of oligopolistic competition among few rivals was the guideline established for the future.

Product Strategy. This area was an important means for Standard Oil to compete with Imperial in Canada. Rather than price cutting to gain a greater share of the Canadian market which would reduce the price structure in Canada (and profits as well), Standard's policy of marketing superior products was an important factor in the demise of Imperial as a Canadian company.

Technical Innovation. Special emphasis has been placed on the impact of technical innovation on Imperial's history. Herman Frasch's discovery of the desulphurization process as an employee and part-owner of Imperial affected the structure of the oil industry both in Canada and the U.S. Patent control of this process belonged to Standard Oil which enabled Standard to develop a new oil region in the U.S. in addition to restricting Imperial's growth.

## PERFORMANCE

Production and Allocative Efficiency. As Imperial expanded to meet the increased demands from the domestic market, the company established its indigenous transportation network on an east - west basis. The tacit agreements to sustain the higher price structure between producers and refiners in Petrolia was not destroyed by the competitive threat from Standard Oil which intended to operate within established business guidelines.



Progress. With the thriving oil industry, Petrolia became the highest per-capita income centre in Canada, experiencing steady growth with Imperial having headquarters there.

Employment. Imperial's operations and the secondary industries from oil provided the major employment in Petrolia. The steady growth of Petrolia was offset by pollution, harsh working conditions and poor conservation techniques in the oil industry.

Role in Canadian Economy. This chapter deals with the formation and growth of an essentially Canadian company that was acquired by foreign interests.

Profits. With the rise of Imperial as the dominant firm, company profits had a steady growth rate until Standard Oil cut into Imperial's market. Imperial's stable profits may have warranted expansion into the larger market in the U.S., but it would have been doubtful that Imperial could have penetrated the Standard Oil monopoly in the U.S. even if Imperial's profits were larger than they were.

#### PUBLIC POLICY

Government regulations in the form of duty changes and quality controls were important factors in the formation of Imperial and also in Standard Oil's acquisition of Imperial. Legislative changes affected the structure of the industry as the fear of U.S. imports protected the viable Canadian industry but at the expense of the artificial high price structure in Canada.

## II IMPERIAL FORMATION AND GROWTH

### 1 Interpretations

There are several viewpoints as to the formation of Imperial Oil Company Ltd.

One source, Canadian - American Industry (published in 1936) by H. Marshall, F.A. Southard. and K.W. Taylor, states that Imperial was formed in 1880 as a subsidiary of Standard Oil Co. of New Jersey:

"It (Imperial) began in 1880 when the Standard Oil Company of New Jersey incorporated the Imperial Oil Company Ltd., to which, in the next 15 years, it assigned 3 other oil companies in eastern Canada." <sup>1</sup>

Lloyd G. Reynolds, in his book The Control of Competition In Canada (published in 1940), is also of the opinion that Imperial Oil began as a Canadian subsidiary of Standard Oil.<sup>2</sup> This viewpoint was reversed when G.A.Purdy's book Petroleum. Prehistoric to Petrochemicals was published in 1958. Purdy wrote that Imperial was formed primarily to compete against Standard Oil and the American competition

"...the way seemed clear for a well organized concern such as Standard Oil to take over the Canadian market.

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<sup>1</sup> Marshall, Herbert, Southard, F.A., and Taylor, K.W. Canadian-American Industry (New Haven 1936) p. 77. See also Moore, E.S., American Influence in Canadian Mining (Toronto, 1941) p. 69, which cited Marshall, et al.

<sup>2</sup> Reynolds, L. G., The Control of Competition in Canada (Cambridge, Mass. 1940) pp. 6-7.

"The end of the road for the Canadian petroleum industry was in sight when sixteen men, fifteen of them in London, Ontario, decided to fight the American competition....On September 8, 1880, they formed the Imperial Oil Company Limited. ...The courage and experience of these men, their refineries, their oil wells and \$25,000 in cash were the ingredients that made Imperial Oil possible. The company was capitalized at \$500,000, a tremendous sum for a Canadian Oil Company in those days. The head office was set up in London East and from there the fight against American competition was directed with Jake Englehart as the organizing force." <sup>3</sup>

Purdy's theme of Imperial being formed to compete against Standard Oil and the American competition is repeated by other sources. <sup>4</sup>

For example, a recent book published in 1976 by Ed Gould entitled the History of Canada's Oil and Gas Industry says:

"On September 8, 1880 several refining companies in Petrolia and London, Ontario, pooled their resources and equipment and were incorporated in London. The new company was named Imperial Oil Co. Ltd. and was an amalgamation of J. S.(sic) Englehart & Co., F.A. Fitzgerald & Co., W. Spencer & Sons, Waterman Brothers, Geary, Minnennick (sic) & Co., T.D. & E. Hodgins, and Walker & Smallman. ...That's when 16 young Canadians decided to take on the United States competition. ...Their charter was to find, produce, refine and distribute petroleum and its products throughout Canada." <sup>5</sup>

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- <sup>3</sup> Purdy op. cit. pp. 29-31. Purdy was an employee of Imperial Oil Limited at the time his book was written (1958). It is probable that Purdy had access to Ewing's History.
- <sup>4</sup> Phelps Fairbank (p. 142) cited Purdy on Imperial's formation. It is probable that Gray op. cit. (p.266) also used Purdy. Another source which used Purdy and also Ian Sclander's article "The Amazing Jake Englehart", Imperial Oil Review (September 8, 1955) was de Mille, George, Oil in Canada West The Early Years (Calgary 1949) pp. 145-146.
- <sup>5</sup> Gould op. cit. pp. 45-46. Gould most likely cited Purdy as well as a pamphlet entitled "The Story of Imperial Oil" (an Imperial Oil Publication) p.1 which Gould used almost verbatim.

These views are far off the mark. There is no evidence to suggest that Imperial was incorporated as a Standard Oil subsidiary, although some employees of a Standard Oil subsidiary in the U.S. were shareholders and directors of Imperial as early as 1883. There is also no evidence to suggest Imperial was formed primarily to compete against Standard Oil and the American competition since Canadian legislation enacted in 1879-80 excluded most U.S. imports into Canada.

Imperial's formation seemed to be more a response to the conditions operating within the Canadian oil industry when the large refining interests in the country began a type of horizontal consolidation process. This process was culminated with the formal incorporation of Imperial Oil Co. Ltd. in September of 1880, but the formation of such a company began in 1879.

After the breakup of the Mutual Oil Association in May of 1879, wholesale prices on refined kerosene had declined due to competition to around 8 to 9 cents per wine gallon which was about equal to New York prices for refined.<sup>6</sup> Ewing's History suggests that Imperial was being organized in July, 1879 when Englehart joined the London Oil Refining Company's members F.A. Fitzgerald & Co., Geary & Minninnick, Spencer & Sons, and the Hodgins Brothers.<sup>7</sup>

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<sup>6</sup> Monetary Times various issues in 1879. See also Tarbell op. cit. vol. II Appendix 57, pp. 383-85 for New York prices.

<sup>7</sup> Ewing, History, Ch. II, p. 55. Apparently Ewing cited Toronto Globe (July 22, 1879) as his reference on the aspect of Englehart joining the London Oil Refining Co. This report also stated that the 'Mutual Association' was still in existence. It is not known Mutual was completely disbanded in May of 1879 or was extended by some members.

Known by names such as the Syndicate<sup>8</sup> or the Refiners Pool,<sup>9</sup> the members agreed not to sell refined at less than 9 cents per wine gallon until January 1880.<sup>10</sup> Refined oil prices increased beyond the 9 cents per wine gallon agreed price to around 13 to 16 cents per wine gallon in late 1879 while New York prices stayed at around 8 cents per gallon. Throughout early 1880, Canadian refined prices fluctuated around 13 cents per wine gallon which was about 6 cents higher than New York prices indicating Canadian prices were being checked by the import duty of 6 cents per wine gallon.<sup>11</sup> Canadian refined oil prices increased with the advent of the 'Syndicate' which concentrated on supplying kerosene for the domestic market once it was apparent the lower New York prices made the export market unprofitable.

It is not known whether Englehart (still in partnership with Isaac Guggenheim) and the London Oil Refining Company consolidated their refineries and assets during this period, but it seemed that the 'Syndicate' was more like a cartel association among its members. As a separate company, Englehart apparently combined his Hamilton and Petrolia operations under one refinery in Petrolia (naming it the Silver Star Works) where he built an additional 6,000 barrel capacity underground storage tank and had one of the most efficient refinery's in Canada.<sup>12</sup>

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8 Toronto Globe July 22, 1879.

9 Monetary Times November 21, 1879 p.614; January 9, 1880 p.812.

10 Ewing History CH. II p. 56 in turn citing Globe November 28, 1879. See also Monetary Times (August 9, 1879 p.184) which stated: "A number of refining firms have an understanding whereby unrestricted competition in refining is prevented..."

11 Ibid. See Monetary Times various issues in 1879-80.

12 Ibid.

## 2. Role of Government.

A major impetus in the formation of Imperial was the assistance provided by the Conservative government of Canada. In 1879 the National Policy of protection to Canadian industries was in effect. Protection afforded the oil industry was not in the form of increased duties on imported kerosene, but rather in the area of quality specifications.

A new Petroleum Inspection Act took effect in August of 1879 controlling the specific gravity of Canadian oil with the result being that a larger quantity of crude oil was required to make the same amount of kerosene for the domestic market. The effect of this aspect of the Petroleum Inspection Act was to restrict entry into refining by small refiners who could not meet the specific gravity requirements.

The larger refineries in Canada that had previously operated in the export trade had a distinct advantage because these refineries had already met the specific gravity requirements before the Act was passed. In order to compete on the export market, Canadian exporting refiners (i.e., Englehart, the Waterman brothers, London Refining Company and to a degree Home Oil Works) had to refine an acceptable quality of kerosene to compete and that included meeting the specific gravity requirements in the export market. The Monetary Times recognized this advantage to the exporting refiners when it commented on the Petroleum Inspection Act:

"...It is a little strange that the leading feature of the Act should have been overlooked, which is that all oil is now required to be of a specific gravity equal to 45 degrees of Baumes Hydrometer whereas before this law came into force, there was no restriction in this respect upon the manufacturer, and all common brands of oil for Canadian consumption were made considerably heavier, but for export the Canadian refiner had

"to make the oil up to the present government standard, or else the oil would not sell, the heavier oils being quite an inferior product."

Another aspect of the Petroleum Inspection Act which gave preference to Canadian refiners by restricting U.S. imports was the strict enforcement of flash test requirements. The fees for inspecting oil products were increased on imported oil while lowered on Canadian oil and the flash test for Canadian oil remained at 115°F (the same as in 1868) while imported kerosene had to pass a flash test of 130°F in 1879.<sup>14</sup> The flash test requirements were equalized at 115°F in 1880 (with the difference in inspection fees remaining) but through strict, and sometimes confusing enforcement of the Petroleum Inspection Act, importers found it difficult to sell kerosene in Canada.<sup>15</sup>

In effect, the Petroleum Inspection Act did little to improve the quality of domestic kerosene produced by the larger refining firms. For example, the London Oil Refining Company in 1876 was refining oil for the export market with a flash test of 130°F.<sup>16</sup> By already meeting, or surpassing the requirements of the Petroleum Inspection Act, the established exporting refiners had a distinct advantage over both the smaller domestic refiners and the U.S. importers.

Aided with government protection, the 'Syndicate' retained their agreement throughout 1879, and in 1880 the larger refiners consolidated. In May, 1880, the Monetary Times reported that the following firms had agreed to consolidate and form a joint stock company named the Imperial

<sup>13</sup> Monetary Times August 25, 1879 p. 213.

<sup>14</sup> Ewing History CH. II pp. 44-46.

<sup>15</sup> For an account on the strict enforcement of the Petroleum Inspection Act see Sessional Papers vol. 11, Second Session of the Fourth Parliament of the Dominion of Canada, Session 1880 vol. XIII No. 162.

<sup>16</sup> Monetary Times April 14, 1876 p. 1181.

Oil Company: J. L. Englehart & Company, Petrolia; London Oil Refining Company, London; Waterman Brothers, London; and the Mutual Oil Refining Company, London.<sup>17</sup>

Of the four refining companies being consolidated into Imperial, only the Mutual Oil Refining Company as a 'new' firm. Mutual was formed in 1879 when John Walker, in partnership with T.H. Smallman, purchased the Erie Petroleum Works in London and renamed it Mutual.<sup>18</sup> Walker had shown himself to be an astute entrepreneur in the oil industry by organizing the fraudulent Western of Canada Oil Lands and Works Co. Ltd. in 1871-73. Apparently, Walker and Smallman had enough foresight and capital to re-enter the refining business in 1879 in anticipation of becoming members of a larger company such as Imperial.

To form a corporate entity, the members comprising Imperial applied for their charter by letters patent in early May of 1880. Of the original nineteen shareholders of Imperial when the charter was granted in September of 1880, shareholders Frank Smith and Frank Ward were not members in the May application.

According to the Canada Gazette, one person who comprised Imperial's membership in the May charter application was Isaac Guggenheim. Listed as a partner with J.L. Englehart in the May charter application, Guggenheim was a member of Imperial when the company was being formed. It is

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<sup>17</sup> Monetary Times May 28, 1880 p. 1305.

<sup>18</sup> Ewing History CH. II p. 66. It is not known if the Mutual Oil Refining Company was connected with the Mutual Oil Association in 1879. In list of members comprising Mutual Oil Association, in 1877 there was a John Walker listed as a member, but whether this Walker was the Walker of Mutual Refining Company and Imperial is not substantiated by any source.



not known if Guggenheim was an original shareholder in Imperial, nor what role he played after Imperial's charter was granted in September. But the fact that Guggenheim was officially listed as an Imperial member applying for incorporation, plus the fact that Imperial Oil Co. Ltd. was a recognized company by June, 1880, would tend to dispel the assertion of contemporary writers that Imperial was formed as a purely Canadian Company.<sup>19</sup>

### 3. Strategy - Consolidation.

Between the time of the charter application in May, 1880, and the company's incorporation in September, Imperial pursued a policy of purchasing rival refineries. The London Oil Refining Company in the past had failed to dominate the refining industry because it had leased rival refineries and did not have enough capital to purchase the larger refineries such as Englehart and the Watermans. With the major refiners comprising the joint stock company, Imperial had the necessary capital to absorb competing refineries.

In early August of 1880, the Monetary Times reported that Imperial purchased two Petrolia refineries; the Home Oil Works and Ham-

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<sup>19</sup> Canada Gazette vol. XIII 1880-81 pp. 1581-82. John Ewing did not cite the Canada Gazette as a source on Imperial's charter application although Ewing recognized Imperial was a company by June of 1880. In the list of original shareholders Ewing did not mention Guggenheim. The writer has been unable to obtain Imperial's charter and list of original shareholders to verify whether Isaac Guggenheim was formally an original shareholder in Imperial.

mond & Fairbank.<sup>20</sup> In early September as the company was being incorporated, Imperial absorbed the St. Thomas Oil Refining Co. and Frank Ward's Star Oil Works Wyoming refinery.<sup>21</sup> Frank Smith's Reliable Oil Works must have also been absorbed by Imperial during this period as both Ward and Smith were original shareholders in Imperial.

By absorbing competing refineries, Imperial was to have a formidable advantage over the control of domestic refining and the prices on refined kerosene charged the Canadian consumer.

In October and November of 1880, editorials in the Toronto Globe accused Imperial Oil (as well as other Canadian refiners) and the Conservative government of being responsible for the excessively high prices on kerosene being charged the Canadian consumer. The extent of what the Globe referred to as the 'coal oil robbery' by refiners was in the neighborhood of some \$2,000,000. The Globe attack on Im-

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<sup>20</sup> Monetary Times August 6, 1880, p. 158. The actual deed of land sale from Home Oil to Imperial was signed in January of 1881 (see Phelps Fairbank, Appendix H, p.300). Phelps stated (p.181 n. 9) "No reasons have been found for the sale of the Home Oil Works". Phelps also stated (p. 139 n.23) that J. H. Fairbank's other refinery was named Fairbank & Hammond, and not Hammond & Fairbank as the Monetary Times reported. This refinery was most likely a distillate refinery of J.H. Fairbank and William Hammond, who were both Home Oil shareholders but did not become Imperial shareholders.

<sup>21</sup> Monetary Times September 10, 1880, p. 309. The writer is unaware of who owned the St. Thomas Oil Refining Company. One refinery of importance that was most likely purchased was that of the Duffield Brothers London refinery. There has been no documentation on this sale with the exception of the Sarnia Canadian Observer (April 7, 1921) which stated that J.Duffield was a member of Imperial. According to the list of Imperial shareholders, there was no mention of Duffields, nor was there any mention of Duffield in Ewing's History.

perial and the Conservative government's new Petroleum Inspection Act was based on comparing conditions in 1880 to conditions in 1877 when Canada was under a Liberal government.

The Globe asserted that based on the 1877 duty reduction on imported kerosene, Canadian kerosene prices had declined with a saving to Canadian consumers of around \$2,000,000. But under the Petroleum Inspection Act protective measures that were requested by Canadian refiners in 1879-80, the Globe stated that Imperial and other refiners were charging excessive prices that more than offset the duty reduction saving in 1877. The Globe also stated that the quality of kerosene was no better than before and that the new specifications made the oil burn faster without any noticeable improvement in illuminating quality.<sup>22</sup>

Some refiners (not Imperial per se) responded to the Globe's attack by arguing that the Canadian consumer was being served a safer product, but at increased refining costs due to the new specifications on domestic oil.

How excessive were kerosene prices in Canada? In September, 1880, wholesale prices on kerosene had increased to around  $16\frac{1}{2}$  cents per wine gallon, but New York prices had also increased the same proportion (relative to the import duty) to around  $10\frac{1}{2}$  cents per wine gallon. In October and November New York prices fluctuated between 12 cents and  $10\frac{1}{2}$  cents per wine gallon respectively while in Canada prices over the same period were 21 and 19 cents per wine gallon.

Canadian kerosene prices were much higher even with the duty protection of 6 cents per wine gallon. Imperial's formation and ab-

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<sup>22</sup> Toronto Globe October 21, 1880; November 1, 1880.

sorption of rival refineries was no doubt a major reason for the higher prices. Without the export demand, there was overcapacity in domestic refining. Imperial realized the economics of scale by operating the two largest refineries, the Victor Oil Works in London and Englehart's Silver Star Works in Petrolia, and closing down all of the company member's other refineries. With the concentration of refining strength, Imperial would have controlled around 75 percent of the refining capacity of Canada.<sup>23</sup> This refining advantage to one dominant firm instead of associations in the past changed the structure of the oil industry in Canada. The strategy for dominance was through horizontal combination of refining interests which had an immediate effect on the price system.

The monopolistic control over kerosene prices as exerted by Imperial was also due to other reasons. By forming the company during the summer months of 1880, Imperial was in the position to take advantage of the heavier demand for kerosene during the winter months. Coupled with higher U.S. prices and the strict enforcement of U.S. imports, Imperial was in the position to sell kerosene in restricted amounts instead of fixed contracts to jobbers and wholesalers.<sup>24</sup>

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Phelps Fairbank p. 143 stated "Imperial Oil at its founding probably controlled well over fifty percent of the refining capacities of the nation." Phelps mentioned Home Oil and James Miller Williams' Canadian Oil Company as being the major refineries outside of Imperial, but Home Oil's earlier absorption in 1880 would have increased Imperial's refining percentage to around 75 percent.

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Toronto Globe November 1, 1880.

The high kerosene prices in Canada also reflected the increased price of crude oil. The low price of 50 cents per barrel in May of 1879 had forced many new operators to suspend operations with only established producers sinking wells.<sup>25</sup> As refined prices increased with Imperial's formation, crude oil prices reached \$1.00 per barrel by November of 1879, and had doubled to \$2.00 per barrel by November of 1880.

One could argue that the high kerosene prices were a result of the increased price of crude oil because of the higher demand for crude from the specific gravity requirements. But in Imperial's case this argument does not now seem valid during the company's formation. Imperial had special contract arrangements with the Petrolia Crude Oil and Tanking Company<sup>26</sup> to supply large contracts of crude at less than market prices while the refined supply was restricted by Imperial. Added with Imperial's own crude oil production properties, and storage tanks, Imperial was able to initially operate independently from the market forces which stimulated competition.

Competition to Imperial's dominance did arise in the 1880's and 90's which will be examined more closely in a later section, but the initial market control by Imperial during its formation enabled the company to expand on a national basis while competitors in Canada were not in the position to limit Imperial's growth.

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<sup>25</sup> Monetary Times September 19, 1879 p. 361.

<sup>26</sup> Ewing History CH. III p. 16.

#### 4 Company Structure

As a company, Imperial was capitalized at \$500,000. of 5,000 shares at \$100. par value. Not every member contributed \$25,000. in cash towards the capitalization of Imperial as contemporary writers suggested, and the distribution of shares would indicate the relative importance of Imperial's founding members. Of the nearly 3,000 shares subscribed to, J. L. Englehart was the largest single shareholder with 577 shares. The other large shareholders were: the Waterman brothers with 440 shares (Herman with 420 and Isaac with 20 shares); Frank Smith with 337 shares; William Spencer and his two sons, 292 shares; Frederick Fitzgerald 292 shares; The Hodgen brothers 289 shares; the Geary brothers 146 shares; J.R. Minhinnick 146 shares; John Walker 114 shares; T. H. Smallman 118 shares, and Frank Ward 190 shares. The remaining shareholders were Cooper, W. English and J. Fallows.<sup>27</sup>

All nineteen men had at one time been experienced in oil refining, but after Imperial's formation, it seemed that only half a dozen or so founders were instrumental in managing the company. Jacob Lewis Englehart, vice-president, was no doubt the 'organizational genius' in Imperial as he was responsible for managing the Petrolia refinery and directing Imperial's growth on a national scale. Frederick Fitzgerald as Imperial's president, was also active in the management of the company, and as Imperial centralized most of its operating

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<sup>27</sup> Ewing History CH. III p. 69. The list did not include J. Fallows who was a partner with Fitzgerald in the May application.

headquarters from London to Petrolia, Frank Smith and Frank Ward became important managers of the company.

The relationship between Imperial's owners to Imperial itself is a confusing issue. First, upon Imperial's formation the company books remained open to shareholders for three years in order to provide a check on management. Second, restricted ownership was enforced by the company in not allowing any transference of shares from one shareholder to another without the consent of the board. And third, Imperial's formation being a type of merger among various refiners, the first directors of Fitzgerald, T. D. Hodgens, John Walker, and Herman Waterman were largely representatives of the various partnerships so that the transition to operating under Imperial would be kept in check.<sup>28</sup>

These relationships are clear enough. However, within a few years after the formation of Imperial, some of the members of the board had set up independent refineries. Imperial closed down several of the refineries of its founding members. However, by the mid-1880's Imperial members John Minhinick and the Spencer family operated independent refineries in London after Imperial's major refining operations were expanded at Petrolia. These independent refineries were not affiliated with Imperial which implied that the company did not, or ceased to have management control over its members operations in the oil industry.

One of Imperial's first advertisements in October of 1880 stated

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<sup>28</sup> Ewing History CH. II p. 69, and CH. III pp. 8-10.

the company was a "producer, refiner and shipper" of petroleum products.<sup>29</sup> As a company Imperial may have been a crude oil producer, but the crude oil operations of Imperial members (i.e., Englehart, Fitzgerald and Frank Smith)<sup>30</sup> were not absorbed into the company. These were retained as separate producing properties after the company was formed. By not absorbing its members' operations and by allowing members to operate independently from the company, Imperial's expansion policies as the largest oil company in Canada were by no means based on a clear cut strategy to monopolize the industry. Throughout its eighteen year existence as a Canadian company, Imperial became a vertically-integrated company operating in all the stages of production, but never achieved a monopoly in any one function.

#### 5. Expansion.

Imperial's position as the dominant oil company throughout this period was primarily based on its initial strategic advantage in refining. By continually updating and diversifying its refining operations at Petrolia under the direction of Englehart, Imperial expanded on a national scale to meet the ever increasing demand for oil products.

To expand nationally, Imperial had special freight rate agreements with the Grand Trunk Railway which enabled Imperial to supply refined products at an advantage over competitors. In 1881, the Grand Trunk was "accused of giving a rebate of 50 percent from its published

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<sup>29</sup> Monetary Times October 22, 1880 p. 469.

<sup>30</sup> Cronin op. cit. pp. 60, 61 in turn citing London Advertiser September 15, 1880; Sept. 24, 1880. See also Ewing History CH. III p. 15.



freight rates to the Imperial Oil Company".<sup>31</sup> Imperial's relation with the Grand Trunk (which had absorbed the Great Western in 1882) was a reciprocal one in that Imperial gave all its trade to the Grand Trunk. The oil tanks used to transport the oil products were supplied and repaired by Imperial while the railroad would repair the cars.<sup>32</sup>

Favorable freight rates were to give Imperial an advantage in expanding west. Imperial was not the first oil company to follow the western expansion of Canada, as Home Oil had been exporting oil to the west in 1877. In 1881-82, a bulk oil depot was opened in Winnipeg by Imperial and sales in that year amounted to over \$20,000. In 1883-84, Imperial's sales in the west amounted to over \$123,000., and by 1892-93 Imperial's strong position in the west resulted in sales of over \$236,000.<sup>33</sup> According to one source, Imperial's advantage in the west was in the construction of a bulk depot which enabled Imperial to transport refined to Winnipeg during the summer at lower freight rates while other refining companies could not afford to supply kerosene in the winter months because of the higher freight rates.<sup>34</sup> The only real competition to Imperial came from the various Standard Oil subsidiaries which exported refined to Western Canada as the country became more settled.

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<sup>31</sup> Waite, Peter B., Canada 1874-1896 - Arduous Destiny (Toronto, 1971) p. 181. See also Phelps Fairbank pp.144-145 and Currie, A.W. The Grand Trunk Railway of Canada (Toronto 1957) p.330.

<sup>32</sup> Ewing History CH III, pp. 26-27.

<sup>33</sup> Figures on Imperial's sales in Western Canada are found in Ibid. CH. III, p. 21

<sup>34</sup> Ontario Royal Commission p. 165.

Imperial's expansion policy took on a different pattern in the Maritimes. Because of its close proximity to the industrialized U.S. eastern seaboard, the Maritimes had historically been served with imported oil from the U.S. The increased import duty of 1868 discriminated against the Maritimes because no Canadian oil company supplied the Maritimes. The reduced import duty of 1877 might have reduced prices in the Maritimes but would not provide incentive for Canadian firms to compete with the U.S. oil. Even the stringent import specifications of the National Policy of 1879-80, forcing up prices and making the Maritimes especially indignant, did not result in Canadian oil companies supplying the Maritimes.

It was not until 1884-85 when customs regulations on imported oil were changed did Imperial begin to compete in the Maritimes. An additional duty of 40 cents per barrel on imported petroleum products was imposed by the federal government which made it possible for Imperial to open a branch office at St. John, N.B., in 1886, and may have also been a factor when Imperial obtained the federal government's contract to supply oil for Canada's lighthouse system.<sup>35</sup> Competition to Imperial came from the already established firms by J. Bullock & Sons and the Shatford Brothers who were Standard Oil marketers in the Maritimes. Because of their established position, these Standard Oil representatives which were merged into the Eastern Oil Company in the 1890's maintained as estimated 60 percent of the Maritime market by 1898.<sup>36</sup>

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<sup>35</sup> Ewing History CH. III p. 22. For the federal contract on supplying Canada's lighthouse system see Smith, W., Deputy Minister of Marine, "The Lighthouse System of Canada" in Canadian Economics (Montreal, 1885) p.35.

<sup>36</sup> Ibid. CH. IV, p.24.

Imperial's expansion policy in the more industrialized regions of Quebec and Ontario involved a concerted effort to obtain a greater share in the marketing of oil products. Prior to 1888 Imperial's products in these regions were sold to wholesale oil firms who marketed Imperial's products. To integrate into the marketing stage of production in Quebec, Imperial had representatives in Montreal by 1888 which could sell Imperial products at an advantage over imported oil because of the increased duty regulations.

To obtain the wholesalers margin in Ontario, Imperial formed a secret retailing company at Toronto called the Royal Oil Company in 1888. Royal purchased Imperial Oil stocks from Petrolia marketing Imperial's brand name kerosenes like 'Silver Star', 'Imperial', 'Headlight', 'Crescent', 'Ocean', and 'Lily white' and also marketed its own brand name 'Royalite' kerosene.<sup>37</sup> In addition to marketing, Royal had built storage warehouses for oil at places like Peterborough, Barrie, Orillia, Midland and Guelph by 1896 and its office staff of 14 in 1898 was even larger than Imperial's Petrolia office staff of 11.<sup>38</sup> Royal not only marketed in Ontario but expanded to the Maritimes in St. John, N.B., where sales in both regions were relatively equal in the middle 1890's. For the four years ending March 31, 1898, Royal Oil sales in Ontario were \$1,197,109.16, and in St. John sales totalled \$1,182,345.09 over the same period.<sup>39</sup>

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<sup>37</sup> Ewing History CH. III pp. 23-24 and Toronto Mail December 1, 1888.

<sup>38</sup> Ibid. CH. III pp. 68, 74.

<sup>39</sup> Ibid. CH. III p. 75.

Presumably one of the major reasons why Royal Oil was a secret subsidiary of Imperial was that Royal Oil imported U.S. kerosene (at least from 1892 onwards), and was a good customer of Standard Oil. Had the connection between Imperial and Standard Oil been made public, this would have brought pressure on the federal government to reduce tariff barriers on imported oil in order for Canadian prices to decline. On the other hand, perhaps Royal was secret from Standard Oil which would not have sold to Royal if Standard had known of Imperial's connection since Standard by this time was establishing its own subsidiaries in Canada to compete with Imperial.

In any event, Royal increased its imports from the U.S. In 1892 when total U.S. imports of refined products totalled 5,793,636 imperial gallons or around one-third of the total oil consumed in Canada, Royal Oil had purchased 182,587 gallons of the total which was about 3 per cent of total imports. Royal's purchases increased over the next five years to the point where Royal Oil imported 650,638 gallons in 1897 out of a total of 5,665,204 gallons representing an increase to about 11 per cent of U.S. imports into Canada.<sup>40</sup> Because of the better quality of U.S. kerosene at lower prices, Royal increasingly sold Standard Oil products (perhaps under the 'Royalite' brand) which would tend to refute the notion that Imperial was a vigorous competitor of Standard Oil in Canada.

### III ROLE OF TECHNOLOGY : HERMAN FRASCH

Perhaps the most important but confusing issue in Imperial's ex-

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<sup>40</sup> Ewing History CH. III p. 91, and CH. IV, p. 1.

pansion lay in the field of refining innovation and the relationship between Imperial Oil members John Minhinnick and the Spencers, a chemist named Herman Frasch, and Standard Oil.

Even before Imperial's formation, Ontario crude oil presented quality problems to Canadian refiners. The percentage of kerosene obtained from Ontario crude oil was less than the sweeter crude from Pennsylvania and the sulphur content in Ontario oil could not be removed in the refining process. The various adaptations of the litharge method of refining had essentially deodorized the sulphur which made the refined oil suitable for the times in the 1870's. But as product quality improved in the U.S., Canadian kerosene was inferior to the U.S. product because the litharge process did not remove the sulphur from the oil. With sulphur in kerosene, the wicks on coal oil lamps would soot up easier and present lighting and smoking problems as well.

Imperial Oil members T.H. Smallman, the Waterman brothers, Edward Hodgins, the Spencers, and John Minhinnick had all been innovators in developing new refining techniques to improve kerosene quality, but had not devised any desulphurization process. Imperial had acquired and utilized Edward Hodgins' deodorizing process upon the company's formation but had to look abroad for ways of improving product quality.

In 1883, Imperial purchased an innovative refining process developed by a German-American chemist named Herman Frasch. His career in Canada has been summarized in part by G. A. Purdy:

"In 1877 he (Frasch) patented an improved method of refining paraffin which prompted him to move to Cleveland where he worked in partnership with oil and wax refiners. There he developed an improved method of distilling petroleum

"which Imperial purchased in 1881 for stock in the new company and cash. In 1884 Imperial hired Frasch to develop a better method of making kerosene from high sulphur crude oil. During his time with Imperial (1884 to 1886) he developed the basic ideas of treating kerosene with metal oxides - ideas which he patented in 1887 when employed by the Standard Oil Company of Ohio." 41

Author Earle Gray also wrote that Frasch ... "produced a truly suitable product from Ontario crude, and greatly helped not only Imperial, but all Ontario producers."<sup>42</sup> An Imperial Oil publication entitled The History of Imperial Oil added a twist to Frasch's affiliation with Imperial by stating that William Spencer Jr., secretary treasurer of Imperial, hired Frasch who solved the sulphur problem ... "making Canada's product as pure as Pennsylvania's."<sup>43</sup> From these sources, one would get the impression Frasch solved the sulphur problem which enabled Imperial to produce a better quality of kerosene.

It was true that Frasch did solve the sulphur problem, but the main beneficiary of his desulphurization patent process was Standard Oil and not Imperial even though Imperial member John Minhinnick and possibly the Spencers, had been Frasch's partner(s) in developing the new refining innovation.

In 1882 when Imperial first approached Frasch, he was a partner in the firm of Meriam and Morgan Paraffin Company, a Cleveland oil company controlled by Standard Oil of Ohio.<sup>44</sup> There Frasch had developed a new refining method of fractional distillation which produced a larger

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<sup>41</sup> Purdy op. cit. pp. 31-32.

<sup>42</sup> Gray op. cit. p. 263.

<sup>43</sup> Imperial Oil Publication, History of Imperial Oil p. 2.  
See also Gould op. cit. p. 192

<sup>44</sup> Hidy op. cit. p. 160.

recovery of the marketable fractions of crude oil. In January of 1883 Imperial purchased the exclusive use of this patent process for the sum of \$10,000. In addition to the cash payment, Joseph P. Meriam was paid 500 shares of Imperial Oil stock (indicating he had control over the patent); 500 Imperial Oil shares were also held in trust for Meriam, Morgan, and Frasch (which in effect gave these men one-third ownership of Imperial Oil); and Frasch and Meriam became Imperial Oil directors.<sup>45</sup>

Frasch was a director of Imperial between 1883 and 1885 (Meriam apparently resigned as an Imperial director in 1887) during which time he was also actively employed by Imperial. Ewing's History speculated the Frasch's expertise on the fractional distillation process was needed for the expansion of Imperial's Petrolia refinery.<sup>46</sup> Prior to 1884, Imperial utilized both the London and Petrolia refinery, but in 1884 Englehart's Silver Star Works became Imperial's only major refinery. Perhaps the London city Council's refusal to spend \$20,000 for a pipeline from Petrolia to London and a fire at the London refinery<sup>47</sup> prompted Imperial's decision to have only one major refinery,

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<sup>45</sup> Ewing History CH III, pp.41-45.

<sup>46</sup> Ewing History CH. III, p. 46.

<sup>47</sup> Purdy op. cit. pp.32-33 gave these reasons for the London to Petrolia refinery move. To this writer's knowledge, Ewing's History never mentioned any of these reasons for the move. In 1883-84, there were few refineries operating at London which would tend to dispel the pipeline notion.

but it seems probable that the efficient installation of the fractional distillation process on a large scale in only one refinery was the major reason for Imperial's refinery move to Petrolia.<sup>48</sup>

Frasch's active employment with Imperial ended in February 1885 although he still retained 100 Imperial Oil shares until at least 1887. He then entered into a partnership with either the Spencer family or John Minhinick to operate an independent refinery in London.

William Spencer Jr., as secretary treasurer of Imperial, may have hired Frasch for Imperial (although Ewing History thought that Englehart, with his American connections, was responsible for hiring Frasch)<sup>49</sup> but Spencer resigned as secretary treasurer after the refinery move to Petrolia. One rather dubious source stated that he became a partner with Herman Frasch in the London firm known as Spencer and Frasch.<sup>50</sup> This partnership, if it ever existed, was apparently dissolved and the three Spencers began their own refinery called W. Spencer & Co. in 1886.<sup>51</sup>

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48 Another possible reason for the refinery move to Petrolia may have been the tax incentives offered by the municipality of Petrolia. In the past Home Oil had been granted tax exemptions in 1873 (see Monetary Times February 14, 1873, p.692) and Englehart's Silver Star refinery in 1879 also received tax exemptions. (See Petrolia Advertiser - Topic Centennial Issue p. 13)

49 Ewing History CH. III p. 44.

50 Cronin op. cit. p. 11. This section seemed to be the reminiscence of General Spencer, W.W. Spencer's son, who stated that the Spencer and Frasch partnership began in the late 1870's which seemed highly unlikely.

51 Ibid. pp. 56-57 in turn citing from Goodspeed, W.A. and C.L. History of the County of Middlesex - 1889.



It seems more likely that Frasch entered into a partnership in June 1885 with Imperial member John Minhinnick who had been granted a patent in 1881 for a method of recovering the chemicals used in deodorization.<sup>52</sup> They purchased the unused Empire Oil Company refinery in London, and it was between 1885 and 1887 that Frasch devised the desulphurization refinery method of using copper oxide to dissolve the sulphur content in oil to produce kerosene which would be of equal quality to Pennsylvania kerosene.

Frasch himself explained to the Society of Chemical Industry that when he gained patents to his discovery in 1887 in Canada, Standard Oil purchased his patents and his refinery in London:

"My patents had now been granted and I was selling refined Canadian oil with a guarantee that it would burn equal to the best Pennsylvania. After an investigation which convinced them that I had solved this problem, the Standard Oil Company bought my patents, and my refinery, and as soon as possible Lima, Cleveland, Whiting, Philadelphia and Bayonne were refining by the new method." 53

Frasch's own account was not substantiated by Hidy's Pioneering in Big Business which stated that Frasch was an employee of Standard Oil of Ohio in July of 1886, and that his experiments were completed in 1888 at a cost of \$200,000 while he was working with the Solar Refining

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<sup>52</sup> Ewing History CH. III, pp. 46, 49.

<sup>53</sup> Frasch, Herman, "Address of Acceptance" in The Journal of Industrial and Engineering Chemistry vol. IV, 1912 P. 135.

Company, a Standard Oil subsidiary refining company at Lima, Ohio. <sup>54</sup>

Lima, Ohio was the centre of a new crude oil boom in the U.S. Standard Oil was interested in Herman Frasch's Canadian activities because the sulphurous crude oil in Ohio was of similar quality to that in Ontario. Ohio crude oil production was started by independent producers in 1885, but was shortly controlled by Standard Oil. John D. Rockefeller, acting against the advice of other Standard Oil executives, felt that Lima, Ohio crude would eventually be desuphurized, and invested heavily in land leases, storage tanks, and pipelines to control crude oil production. Without a commercial market, demand was low for this crude oil which Rockefeller had purchased for as low as 14 cents per barrel and had stockpiled almost the entire output of approximately 12 million barrels from 1885 to 1888.

Once the Frasch process was secured and proven commercially viable, Standard Oil moved quickly to take advantage of a guaranteed source of crude oil. In 1889, Standard Oil built the then largest refinery in the world at Whiting Indiana (with a refining capacity of 36,000 barrels a day) and organized a new subsidiary, the Standard Oil Company (Indiana). By 1890 the Standard Oil Trust was drawing 56 percent of its crude oil from the Ohio oilfields to refineries utilized with the Frasch process. By having a patent monopoly on the Frasch process for seventeen years, Standard Oil's investment of over \$32,000,000 in the Ohio (and Indiana)

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<sup>54</sup> Hidy op. cit. pp. 159-168. Melvin G. de Chazeau and Alfred E. Kahn's book Integration and Competition in the Petroleum Industry (New Haven 1959) pp. 293-94 accepted Frasch's own account rather than Hidy's as the events leading to Standard Oil's purchase of Frasch's patents. Ewing History never mentioned (to this writer's knowledge) that Frasch was an employee of the Standard Oil Company of Ohio by July 1886, but stated that "...Frasch returned to Cleveland under an arrangement made through the Trust with the Solar Refining Company and never returned to Canada" (CH. III pp. 48-49).

oilfields between 1885 and 1891 proved to be extremely profitable for the company.<sup>55</sup>

The Frasch desulphurization process also had important implications regarding Imperial's expansion. Imperial had benefitted from the fractional distillation process of Frasch's, but the denial of utilizing his desulphurization process was to be one of the downfalls of Imperial as an essentially Canadian company.

It seems very odd that the Frasch process was developed and implemented in Canada by Frasch and Minhinnick, who were both shareholders of Imperial, and yet Imperial was denied patent access. Perhaps Frasch, with his Standard Oil of Ohio ties, realized the potential of his discovery and sold out to the highest bidder. Ewing's History also speculated that Frasch might have imposed a ban of silence on his London work, or that Minhinnick had a falling out with his Imperial friends and that if Minhinnick had urged Imperial "to seek participation in the rights to use Frasch's findings, it will probably never be known."<sup>56</sup>

It is not precisely known what became of the Empire Oil Company in London. From Frasch's own account, his refinery was purchased by Standard Oil in 1887. According to the Commercial Industries of Canada published in 1890, Minhinnick and Frasch still operated the Empire Oil

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Hidy op. cit. See also Abels, Julius, The Rockefeller Billions (New York, 1965) pp. 160-61; Nevins, Allen, John D. Rockefeller (New York, 1941) vol. I pp. 650-651, 680; vol. II pp. 7-11; Nevins, Allen, Study in Power (New York, 1953) vol. II pp. 98-106.

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Ewing History CH. III p. 50.

Company.<sup>57</sup> But according to the Geological Survey of Canada, Minhinnick was the name of one of two refineries operating at London in 1888-89 with the other London refinery being W. Spencer and Company.<sup>58</sup> Both Minhinnick and the Spencers operated separate refineries until 1893 when the only refinery at London was the Empire Oil Company.<sup>69</sup> Both Minhinnick and the Spencers seemed to have refining operations independent from Imperial which may have combined in 1893 to re-organize the Empire Oil Company (which operated until 1898 when it was formally acquired by Standard Oil).

Throughout the 1890's when U.S. imports were taking a greater share of the Canadian market, the U.S. Kerosene was a superior product although coming from the same quality crude oil as that of Ontario, but refined by Standard Oil using the Frasch process. In 1897 when a Standard Oil subsidiary in Canada - The Bushnell Oil Company - began construction of its Sarnia refinery to compete against Imperial's Petrolia refinery, Bushnell was installing the Frasch process while Imperial's refinery was still using the fractional distillation and Edward Hodgens' process. This refining advantage of Bhsnell would virtually

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<sup>57</sup> Commerical Industries of Canada (1890) cited in Cronin op. cit., pp. 75-76. This report stated that Empire had branch offices at Toronto, St. Thomas and Petrolia. Imperial also had branch offices at the same places and one can only wonder whether Imperial and Empire were affiliated or competitors.

<sup>58</sup> Geological Survey of Canada. Annual Report (1888-1889), vol. IV, p. 865. See also Clapp, Frederick G. and Others, Petroleum and Natural Gas Resources of Canada (Canada Department of Mines, 1915), vol. II, p. 107.

<sup>59</sup> Ibid., vol. VI, 1892-93.

render Imperial's refinery obsolete.

#### IV PETROLIA COMPETITION

Petrolia remained the crude oil producing capital of Canada during this period as well as becoming Canada's refining capital. Canada's industrial development depended to a large extent on the Petrolia oil industry supplying the many diverse oil products used in the industrialized regions of Ontario and Quebec, the outlying regions of the West, and to a lesser degree the Maritimes. Throughout the 1880's Canada was largely self-sufficient in oil and it was not until the 1890's did U.S. imported oil become a serious threat to the Petrolia oil industry.

Petrolia's development as Canada's refining capital materialized after the formation of Imperial when the London Oil Refining Company consolidated into Imperial and shifted the major refinery to Petrolia. As Imperial enlarged its Petrolia refinery and diversified refining functions to produce waxes, greases, lubricating oils, barrels, etc., the company had to compete with independent refiners in Petrolia.

Imperial's initial advantage over competitors was in the refining stage of production. Upon the company's formation and succeeding couple of years, Imperial was in the market position to charge the highest possible price for Canadian kerosene. From the available records on the company's profits and dividends, the period from 1880 to 1882 was also the most profitable years for Imperial. In the last six months of 1880, Imperial's net profits were \$116,904.14 with dividends of \$55,632.00 or \$19.00 per share. Profit figures are not available for 1881 and 1882, but in 1881 dividends were \$52,704 (\$18.00 per share) and in 1882 dividends jumped to \$113,548.00 (\$18.00 per share

on 4,000 shares) amounting to a return on investment of about 55 per cent.<sup>60</sup>

Dividends, with the exception of 1887, were not paid again until 1891 and were nowhere near the 1882 figures considering the company's national expansion. From the table below on profits and dividends for the company in the 1890's, Imperial's position as the dominant firm was steady, but in no means was it as spectacular as the company's initial years.

Table 2

Imperial Oil Company Limited - Profits and Dividends 1891-1898

<u>Year</u>	<u>Net Profit</u>	<u>Dividends</u>	<u>Dividend Rate %</u>
1891	\$ 86,000.00	\$ 40,420.00	-
1892	52,247.87	32,336.00	6.4
1893	66,030.13	30,000.00	6.0
1894	68,885.24	24,000.00	5.0
1895	60,319.05	25,000.00	5.0
1896	104,401.04	36,000.00	7.2
1897	61,593.68	35,000.00	7.0
1898	-	30,000.00	6.0

Source: Ewing History, Ch. III, pp. 28, 82 and Appendix II, p. 92

One of the major reasons why Imperial was unable to sustain the high profit and dividend years of 1880-1882 was the company's failure to exclude competitors in the refining stage of production. The high prices on kerosene, as dictated by Imperial's initial refining control, attracted new entrants into refining.

By the end of 1881, there were five other recognized refineries in Petrolia besides Imperial.<sup>61</sup> In 1884 the number of Petrolia re-

<sup>60</sup> Ewing, History, Ch. III, p. 14-15.

<sup>61</sup> Toronto Globe, Sept. 10, 1881. These refineries were: Consumers Oil Refinery; Petrolia Oil Companies; Lindsay, Harley & Company; P. Gleason & Company, and John McMillan.

fineries had increased to eight excluding Imperial.<sup>62</sup> Throughout 1889 there were still eight other refineries operating in Petrolia; Minhinick and Spencer were operating in London, the Sarnia Oil Company had a refinery in Sarnia, and James Millar Williams' son operated a refinery - the Canadian Oil Company - at Hamilton.<sup>63</sup>

The number of refineries began to decline after 1889, but even then Imperial had to vigorously compete for its share of the domestic refining market. Imperial's control over refining was sharply reduced from around 75 percent of domestic output in 1880 to less than 50 percent in 1891. Even by October 1884, Imperial's Petrolia refinery output was reported to be 12,391 barrels for the month out of a total output of 29,490 barrels.<sup>64</sup>

The majority of the Petrolia refining companies in the 1880's were formed or re-organized by established producers, well owners, tanking companies, etc., who integrated forwards into refining. For example, the John McDonald refinery was established in 1881 by John McDonald, a

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<sup>62</sup> Petrolia Advertiser - Topic Centennial Issue p. 13. The refineries operating in 1884 were: Petrolia Crude Oil and Tank Company; M.J. Woodward Company; John McDonald; Consumers Oil Refinery; John McMillan; McMillan Harley Company; Standard Oil; and P. Gleason and Brothers. The Standard Oil refinery was most likely the one operated by Charles Jenkins (See CH. I p.30).

<sup>63</sup> Clapp op. cit. p. 107.

<sup>64</sup> Petrolia Advertiser - Topic Centennial Issue p. 13.

successful crude oil producer who had most likely been a member of both the Lambton Crude Oil Partnership of 1871 and the Mutual Oil Association of 1877.<sup>65</sup> Other producers turned refiners like McMillan Kittridge & Co. (formed in 1880) and M.J. Woodward & Co. were able to compete in refining by developing various patent adaptations to the litharge process of refining. The Consumers Oil Refining formed in 1881 by producers, operated well into the 1890's, and was successful on a quality basis by experimenting with a refining method which used chemicals similar to the Frasch process.<sup>66</sup>

The capital requirements into refining on a competitive basis were not excessive so as to prevent entry. Consumers had a paid up capital of \$30,000. The Petrolia Crude Oil and Tanking Company operated what was reported to be the second largest refinery at Petrolia in 1884, and this company, which was also the largest tanking company, had a paid up capital of \$50,000. A refining company organized in late 1884 - the Producers Oil Refining Company - had paid up capital of \$37,998. among its fifty shareholders who were mainly crude oil producers.<sup>67</sup> Refineries like the Producers and Consumers did not produce crude oil as companies, but many of the stockholders of these companies were themselves producers who would supply the refineries with crude oil.

Crude oil producers had traditionally been a strong influence over the control of Canadian oil. Previous associations like the

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<sup>65</sup> Ontario Royal Commission op. cit. p. 164. See also Phelps Fairbank pp. 298, 305.

<sup>66</sup> Ibid.

<sup>67</sup> Ibid.



Lambton Crude Oil Partnership and the Mutual Oil Association were examples of strong producers groups. After the collapse of Mutual in May of 1879 when crude oil prices remained around 50 cents per barrel for a few months, the established producers retained their oil properties and produced oil regardless of price. As crude oil prices increased with the formation of Imperial to around \$2.00 per barrel in late 1880, one year later a barrel of oil was still \$2.00. A partial exhaustion of the Petrolia wells may have occurred from 1880-1881<sup>68</sup> to explain the sustained high crude oil prices, but it may also be probable that the established producers restricted production in the developed region around Petrolia. In addition, tariff protection on crude oil resulted in crude oil producers making what the Toronto Globe described as over 100 per cent above an ordinary profit in late 1881.<sup>69</sup>

The high crude oil prices attracted new entrants into crude oil production, but unlike the Petrolia rush of 1877, the new entrants successfully drilled wells at Oil Springs which led to a revival of the area in 1881. As production increased at Oil Springs, established Petrolia producers, especially J. H. Fairbank, re-invested in Oil Springs.

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<sup>68</sup> Phelps Fairbank p. 168.

<sup>69</sup> Toronto Globe October 8, 1881. Producers apparently restricted crude oil production if official statistics are to be taken as fact. According to the Geological Survey of Canada, Annual Report (1902) vol. XVI Table 4, p. 101s production was 350,000 barrels in 1880 and 275,000 barrels in 1881 and 1882. Production then decreased to 250,000 b/y in 1883 and 1884 according to this source.

In November of 1882 Fairbank purchased a two-thirds interest in 138 acres of land around Oil Springs for \$16,000 and spent \$39,000 between 1882 to 1887 improving the property. Fairbank's crude production in 1885 from the Oil Springs property amounted to 15,000 barrels per year - about half of this one producer's total production.<sup>70</sup>

With the successful revival of Oil Springs and renewed production at Petrolia, crude oil production exceeded demand and prices declined. From 1883 until the spring of 1888 crude oil prices fluctuated between 65 to 90 cents per barrel - quite a drop from the levels of 1880 to 1881. Phelps Fairbank stated crude oil prices were 'critically low',<sup>71</sup> in this price range, but this did not seem to be the case, at least not for the larger producers. Throughout the 1880's and 1890's Canadian crude oil prices were consistently maintained at or above U.S. crude oil prices despite the fact that production costs were much lower in Canada. Drilling costs continually declined throughout the 1880's in Canada; in 1881 total drilling costs averaged around \$700 per well taking a week to ten days to drill and by 1890 a well would have cost around \$160 and taken a few days to drill.<sup>72</sup> Through efficient management of the jerker system, established producers like Fairbank and perhaps twenty or so other large producers could operate profitably at the lower price levels. But the smaller producers were at a distinct disadvantage with the lower crude oil prices because their fewer number of wells would not produce enough oil to warrant independent expansion.

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<sup>70</sup> Phelps Fairbank pp.176, 183, n 19.

<sup>71</sup> Ibid. p. 170.

<sup>72</sup> Toronto Globe September 3, 1881, Ontario Royal Commission p.159. See also the United States Geological Survey, Mineral Resources (1887) pp.456-57 which stated the cost of drilling a well ranged between \$400 and \$500 in 1887.

Imperial had to compete within the context of established producers integrating forwards into refining. Imperial had integrated backwards into crude oil production, constructed gathering pipelines and enlarged its storage capacity to receive crude oil, but did not have control over these stages of production. Obviously Imperial did not suffer from the high crude oil prices of 1880 to 1882. The company did not absorb rival refineries or initially compete with price reductions to force competitors out. But if Imperial was to remain competitive and expand on a national scale as the company did, it would have to pursue a strategy of improving product quality while at the same time reducing kerosene prices to remain competitive with U.S. imports.

The period between 1883 and 1887 was one of structural adjustment in the Petrolia industry to the inevitable fact that prices had to decline. Imperial's position as the dominant firm was maintained by its major refining move to Petrolia where products could be refined more efficiently in one large refinery rather than two refineries of relatively equal size. With the exclusive patent rights to Frasch's fractional distillation process, Imperial reduced refining costs through scale economies where unit costs declined with the refinery expansion and a more standardized product could be produced.

Through its position as the dominant refining firm in Petrolia, Imperial managers became intimately involved in the associations, syndicates and oil exchange which arose to meet the adjustment to lower prices.

As Imperial was purchasing the fractional distillation process from Frasch and his associates in 1883 to reduce refining costs, a

group of Petrolia producers were combining to offset the sharp decline in crude oil prices. In February of 1882 the producers secured a charter to organize the Oil Exchange Financial Association of Petrolia, a holding company capitalized at \$150,000 to purchase crude oil stocks in order to restrict supply and therefore increase crude oil prices to their previous levels. This Association could not raise the required capital to have an effect on the price structure for crude oil which continued to decline in price.<sup>73</sup>

Even with crude oil prices remaining at less than \$1.00 per barrel throughout 1883 and 1884, production increased. Two other tanking companies were incorporated (the Producers Tanking Company and the Crown Warehousing Company) to handle the excess crude oil stocks which amounted to a total of 425,000 barrels by the end of 1884.<sup>74</sup>

Apparently Imperial and the other Petrolia refiners (who were also producers) felt that crude oil prices outside of their control were too high and reverted to tactics of the past to obtain a greater share of the refiners' profit margin at the expense of some producers. In June of 1884, Imperial and most of the Petrolia refiners formed a Syndicate to keep crude oil prices down and reduce price competition among refiners. The aim of this cartel arrangement among the refiners was to purchase crude oil from independents to ensure a regular supply of crude. In this regard the crude would be purchased for as low a price as possible since crude oil supply was in excess of demand from the refiners. The

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<sup>73</sup> Phelps Fairbank p. 170.

<sup>74</sup> Ibid. pp. 171, 175. See also Toronto Mail December 1, 1888.

producers who had not integrated into refining felt the refiners were taking advantage of the situation in that the producers were not receiving their fair share of the profits.

To stabilize the mounting antagonism between refiners and independent producers, the Petrolia Oil Exchange was organized in late 1884 to act as a medium in establishing crude oil prices and controlling the quality of the crude offered. Imperial members Jacob Englehart, Frederick Fitzgerald, Frank Smith and Frank Ward were large shareholders in the Exchange<sup>75</sup> which ensured that crude oil prices would not be set at too high a level.

The refiners' Syndicate was such a success in 1884 that this cartel arrangement was extended into 1885 with the formation of the Refiners Oil Company - a type of holding company capitalized at \$50,000 with F. Fitzgerald as its president. Until its demise in 1887, Refiners continued to exert a high degree of monopoly power in fixing kerosene prices and ensuring a regular supply of crude oil. The smaller producers had organized the Producers Oil Refining Company in late 1884 to compete against Refiners, but Refiners controlled this new entrant by purchasing the entire output of Producers.<sup>76</sup>

A final means of stabilizing the price fluctuations in crude was the revival of the Oil Exchange Financial Association in May of 1886. With J.H. Fairbank as president and Frank Smith as vice-president this Association was re-capitalized at \$300,000 by shareholders subscribing crude oil as stock (150,000 barrels) and borrowing \$150,000 mainly from

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<sup>75</sup> Ewing History CH. III p. 60.

<sup>76</sup> Phelps Fairbank p.174, p.198 (n147) p. 199 (n154) listed the Refiners Oil Company as having 12 refineries in its membership.

from the Bank of London in Canada. By entering into an agreement to supply crude oil to the Refiners Oil Company at a stable price, the Oil Exchange Financial Association bought all the oil that came on the Petrolia Oil Exchange for a fixed price initially set at 90 cents a barrel. By July of 1886, 350,000 barrels were under this Association's control, but the fixed price only stimulated production. Crude oil prices were lowered to 75 cents per barrel, but the Association could not finance the purchase of all the crude oil offered. The Association continued to operate in agreement with the Refiners Oil Company until the summer of 1887 when both organizations were terminated and the Petrolia Oil Exchange became the official outlet in setting crude oil prices.<sup>77</sup>

Throughout the turbulent years of 1883 to 1887, Imperial members were influential in the direction of the various associations and companies formed. Imperial seemed quite content to conduct operations in Petrolia with the other refiners as long as Imperial was the dominant firm. In this regard there was little doubt that Imperial was the dominant firm. The various refining companies organized in the 1880's were capitalized at around \$30,000 to \$50,000 each while Imperial's Petrolia refinery had by itself a book value of over \$445,000 by 1891.<sup>78</sup> Imperial was continually expanding the Petrolia refinery to meet the demands of the Company's national expansion. Throughout the 1880's when Imperial's share of the refining market became less than 50 percent, kerosene prices were gradually reduced from the 20 to 25 cents per imperial gallon in

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<sup>77</sup> Phelps Fairbank pp. 179-180.

<sup>78</sup> Ewing History CH. III. Table I p.30.

in 1880-81 to 11 cents per imperial gallon by 1890.

One of the major reasons why Imperial seemed content to dominate but not monopolize any stage of production was the unique social and financial character in the town of Petrolia. In 1881 Petrolia was seen by a correspondent from the Toronto Globe as a polluted oil town; "a good place to make money in, but to be got out of as soon as sufficiency has been acquired."<sup>79</sup> As Imperial's headquarters and major refinery shifted to Petrolia, the town expanded into a thriving industrial centre as the oil industry also made it possible for secondary manufacturing to establish in Petrolia. By 1891 Petrolia was the highest per-capita manufacturing town in Canada.

As Imperial settled in Petrolia, members like Englehart and Fitzgerald built stately homes (complete with a golf course for Englehart's home) to reflect the affluence and stability in the industrial position of Petrolia. In being isolated from the larger cities in Ontario, Petrolia became the focal point for oilmen regardless of company affiliation. Men's clubs like the Masonics, Oddfellows, Petrolia Assemblies and Petrolia Club were social organizations formed to enhance a co-operative attitude of 'refined' harmony for its members.

These social gatherings most likely resulted in informal collusive pricing arrangements to stabilize industry prices and output. While there were no corporate relationships with Imperial members and others representing divergent oil interests, the Petrolia oilmen seemed like a fairly harmonious group in the late 1880's and early 1890's. Englehart for example, was president of the Masonics, Petrolia Club, and Petrolia Assemblies, and in the case of the Petrolia Club, C.O. Fairbank (J. H.

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<sup>79</sup> Toronto Globe September 3, 1882.

Fairbank's son and business partner) was vice-president. Englehart was also associated with J.H. Fairbank in the Crown Savings and Loan Company, a local financial institution of which Fairbank was president and Englehart vice-president.<sup>80</sup>

Perhaps through the various social and financial associations in Petrolia, Imperial was lulled into a false sense of complacency that the oil industry was in secure control by Canadian firms with Imperial as its leader. Such organizational harmony among the various oil firms was shattered in the 1890's when the industry's real competitor - the Standard Oil Trust - began to acquire monopoly control over the industry.

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<sup>80</sup> Information on Petrolia can be found in Petrolia Advertiser Topic Centennial Issue, Toronto Mail, December 1, 1888, and Toronto Globe, June 24, 1893. Regarding the informal collusive pricing arrangements, an interesting letter from J.H. Fairbank to his son in 1885 while J.H. Fairbank was an M.P. in Ottawa, illustrates his concern to warn the industry of possible excise duties: "On my way here I heard that putting an excise upon oil had again been thought of ... The want of money will cause Ministers to seek for new sources of revenue - new taxes to impose, and in that event the existence of an oil combination would be a most excellent reason for taxing oil. To be able to say 'A few individuals are by combining [are] standing between the producer and consumer and imposing a tax for their own benefit,' would be sufficient excuse for imposing one for the benefit of all the people. There is real danger in that direction ... You better mention these things to Edward, Kerr, Walker ... the time is indeed critical." (Phelps Fairbank p. 177).



## V STANDARD ACQUISITION

This section deals with the monopoly control over Canada's oil industry attained by Standard Oil. Standard's strategy for control was a gradual process which began around the time of Imperial's formation in 1880 and was culminated with the acquisition of Imperial in 1898. The various affiliate oil companies and subsidiaries operating in Canada is discussed to illustrate how Standard acquired control over the Canadian industry first through the marketing stage of production and then into refining in which Standard's main subsidiary in Canada - the Bushnell Company Limited became Imperial's major competitor. Imperial's position in the industry and the problems it faced is discussed to understand why it did not continue as an essentially Canadian company. The role of government, an important factor in the acquisition of Imperial, is also elaborated. Finally the acquisition of Imperial is discussed to illustrate the complete dominance of the Canadian oil industry by Standard Oil.

### 1. Standard Oil Companies in Canada.

Standard Oil established four subsidiary oil companies on a regional basis in Canada to gain control over the Canadian industry. In the Maritimes the Eastern Oil Company was formed in 1888. There were two subsidiaries operating in Ontario and Quebec; the Queen City Oil Company Limited which was formally incorporated in 1896, and the Bushnell Company Limited incorporated in 1890. In the West the British Columbia Oil Company Limited was organized in 1898. All four subsidiaries were co-ordinated from the Domestic Trade Department of Standard Oil of New York, and strategic policy decisions were formed by top Standard Oil executives like Frank Q. Barstow, Horace Hutchins, and Ambrose McGregor.

a) Eastern Oil Company.

In the Maritimes, Standard Oil had traditionally supplied its oil products through Canadian wholesalers and retailers. Two such Standard Oil agents were John Bullock & Sons from St. John, N.B., and the Shatford Brothers from Halifax. These agencies sold Standard Oil products with almost no competition until Imperial opened a branch office at St. John in 1886. J. Bullock & Sons competed with Imperial until 1888 when the Bullocks asked Standard Oil to acquire their company. Perhaps the Bullocks required additional capital to compete with Imperial; in any event Standard gladly complied with the Bullock request. In September of 1888 the Eastern Oil Company was incorporated under the laws of New Brunswick for \$50,000 in which Standard Oil owned 65 percent of the fully subscribed stock. The Bullocks retained managerial responsibility for the company in Canada while accounting and policy decisions were handled by Standard's Domestic Trade Department in New York.

The Shatford Brothers were not initially absorbed into Eastern but actually competed against Eastern for the Halifax and surrounding area market. Since the Shatford Brothers were agents for the Domestic Trade Department, their business was purchased by the Standard Oil Trust in 1890 to reduce unnecessary competition and was merged under the Eastern Oil Company in 1894.<sup>81</sup>

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<sup>81</sup> The information on the formation of Eastern is found in Ewing's History CH. IV pp. 5,6,9-20. Purdy op. cit. p. 35 stated Joseph Bullock & Sons were reorganized as Eastern in 1887 and not as Ewing stated. Purdy also stated that the Shatfords began importing U.S. oil in 1885. Ewing's History CH. IV pp.5,6 stated that J.D. Shatford was a Standard Oil agent by 1882 and that his brothers S.S and J.F. Shatford carried on the business in 1885. The Story of Imperial Oil p.2 stated the false comment that the Shatford Brothers were Imperial Oil agents. Ed Gould op. cit. p. 191 diligently subscribed to this interpretation.

With direction and capital from the Domestic Trade Department, Eastern maintained a 60 percent share of the Maritime market throughout the 1890's paying an average return on capitalization of slightly above 10 percent. Through its association with the Bullocks in St. John, Standard had an able spokesman for justifying the higher prices on oil that the Maritimes had to pay. T. H. Bullock, secretary of Eastern, was also an alderman and city councillor who later became mayor of the city.<sup>82</sup> Through Bullock's influence Standard could argue that prices could be cheaper in the Maritimes if government regulations were changed to allow easier access for Standard Oil products into the Maritimes.

b) Samuel Rogers and the Queen City Oil Company Limited.

Like the Bullocks and Shatfords in the Maritimes, Standard also had a marketing outlet in Toronto under the name of the Queen City Oil Company Limited. Formed in 1878 by Samuel Rogers of Toronto, Queen City was a Canadian company importing Standard Oil products into Ontario on a commission basis at the retail level rather than the wholesale level at which Canadian refiners traditionally operated. By providing a superior array of oil products, Rogers expanded into Quebec in 1881 by opening a branch office in Montreal in conjunction with the Cheesebrough Manufacturing Company, a Standard Oil subsidiary.

In addition to marketing Standard Oil products in Canada, Samuel Rogers also conducted separate operations in Petrolia. Because of his apparently exclusive dealership to market Standard Oil products in Ontario during the 1880's, Rogers had acquired enough capital to integrate backwards into the tanking business in Petrolia. By 1888 Rogers was a

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<sup>82</sup> Parke, Dr. C.W., Editor, Who's Who and Why (1915-1916) p.797.

director and stockholder in the Crown Warehousing Company which had been formed in 1884 as the third tanking company in Petrolia.<sup>83</sup> Imperial had contract arrangements for crude oil to be supplied by Crown which would indicate that Rogers most likely entered the tanking business not as a competitor to Imperial (by restricting supply of crude oil) but rather for the simple reason that it was a profitable venture.

The tanking business also allowed easier access for Rogers to integrate into refining. In 1890 the refining firm of McMillan Kittridge & Co. was under an exclusive contract to sell their entire output to Rogers.<sup>84</sup> Another Petrolia refinery, the M.J. Woodward and Company became "hopelessly insolvent" in July of 1891.<sup>85</sup> As a major creditor of this firm, Samuel Rogers took over refining operations throughout 1891 under the name of Rogers & Co.<sup>86</sup> In July of 1892 Rogers and his two sons entered into a co-partnership agreement with none other than J.H. Fairbank to operate the refinery under the name of Fairbanks Rogers & Co.<sup>87</sup>

Fairbank had also been a creditor of the M.J. Woodward & Company which would indicate that while Fairbank most likely realized Rogers' affiliation with Standard, Fairbank was a businessman whose primary concern was to protect his investments. An interesting implication of Fairbank's partnership with Rogers was that the Fairbanks Rogers & Co. refinery became the

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<sup>83</sup> Toronto Mail December 1, 1888. Unless otherwise specified, the information on Queen City is found in Ewing's History CH. IV. pp. 5, 52-59.

<sup>84</sup> Ontario Royal Commission p. 162. McMillan Kittridge & Company was shut down by 1894 according to the Geological Survey of Canada. Annual Report (1894) vol. VIII, Table 5, p.102s.

<sup>85</sup> Phelps Fairbank p. 239.

<sup>86</sup> Geological Survey of Canada. Annual Report (1890-1891) vol. V, p. 127ss.

<sup>87</sup> Phelps Fairbank p.239, p.275 n4.

first Petrolia refinery to be acquired in 1896 by a Standard Oil direct subsidiary - the Bushnell Company Limited. (Samuel Rogers had helped Bushnell acquire the refinery which operated until 1898 in competition to Imperial). Fairbank was the first prominent Petrolian oilman to sell out to American interests thereby giving Standard Oil a foothold in the Petrolia refining business. In the past Fairbank had been one of the industry spokesmen who had strived to exclude Standard Oil from Canada.

Samuel Rogers oil interests had expanded over the years as imports began to take a greater share of the Canadian market. To ensure Standard Oil control over Rogers' varied operations, his company was re-capitalized in 1896 for \$200,000. Through Frank Q. Barstow and other Standard executives, Standard Oil owned 80 percent of Queen City's fully subscribed stock. Like the Eastern Oil Company in the Maritimes, policy decisions for Queen City came from the Domestic Trade Department in New York while the actual day-to-day operations remained with Rogers. Samuel Rogers continually denied having any affiliation with Standard and went so far as to state in 1897 that he was 'for Canada first' when the Canadian industry was being threatened by new government regulations.

c) Bushnell Company Limited and B.C. Oil Company Limited.

The major Standard Oil subsidiary in Canada which provided Imperial with its stiffest competition was the Bushnell Company Limited. Organized in 1890 at Montreal on the business of Bushnell & Company - a Montreal marketing company formed in 1885 which merged Rogers Montreal agency and the Cheesebrough Manufacturing Co. - Bushnell's main function was to control the Canadian industry through the refining stage of production.

Only half of the \$100,000 capitalized stock was issued to Bushnell

members F. Q. Barstow, Joseph Bushnell, Horace Hutchins, Ambrose McGregor (all Standard Oil executives from New York, who owned 96% of the stock), and Charles Campbell and Clavering Peverly from Montreal who acted as the company's manager and agent respectively.<sup>88</sup>

In addition to marketing in Quebec, Bushnell had initially proposed in 1890 "to refine at or near London".<sup>89</sup> If this was the company's intention, it made no attempt to actually refine at London. Instead, Bushnell acquired the old Frasch refinery at London from the Standard Oil Company (Ohio) for the same price Ohio Standard had paid in 1889 - \$30,385.66.<sup>90</sup> From 1890 until 1894 Bushnell owned the London refinery but no refined oil was produced. Since Bushnell and Ohio Standard were affiliates, Bushnell was obviously not purchasing rival refineries. It may have been plausible that Bushnell actually did prepare to refine at London. This would have followed established Standard Oil procedure to refine away from the crude oil producing region and ensure a regular supply of crude oil through transportation advantages of either a pipeline or railroad freight rates. A regular supply of crude oil could have initially been supplied by Rogers' Crown Warehousing Company, but an apparent failure to attain strategic control over transportation of crude to London made refining unfeasible.

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88 Ewing History CH. IV pp. 25-28.

89 Monetary Times February 14, 1890 p. 988.

90 Ewing History CH. IV pp.28-29. This source stated Minhinick owned the Empire Oil Works which was a refinery separate from Frasch's refinery in London. The Geological Survey of Canada (1898 vol. XI p. 126s) stated the only refinery operating in London was the Empire Oil Company.

Instead of London refining, Bushnell sold the refinery in 1894 (it is not known to whom) and turned its attention to Petrolia. By purchasing the Fairbanks Rogers & Co. refinery in 1896 and centralizing policy control over Queen City, Bushnell was in the position to compete head on with Imperial. Bushnell's Petrolia refinery was one of only five or six refineries operating in 1896. However it was not expanded on a scale to match Imperial's refinery at Petrolia.

To compete with Imperial at the refining stage of production Bushnell purchased an unused refinery at Sarnia in the spring of 1897. Government regulations passed in 1897 which reduced the import duty on crude and refined as well as allowing the import of oil into Canada by tank vessel was a major impetus to refine at Sarnia. Sarnia offered a strategic waterfront for tank vessels, an abundant water supply for refining purposes, and a small pipeline to the oilfields. In addition to these advantages the municipality offered tax exemptions to Bushnell to locate at Sarnia.<sup>91</sup>

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<sup>91</sup> The ownership of the unused refinery that Bushnell purchased is not certain. Hidy's Pioneering in Big Business (p. 151) stated the refinery was "apparently that of the scientist Herman Frasch" while Ewing's History (CH. IV p.37) only made reference to the refinery being named the Alpha. The Alpha refinery could very well have been the refinery of the Sarnia Oil Company which had been formed in 1890 by a future Michigan governor by name of General Alger. Between 1890 and 1894 the Sarnia Oil Company had financial problems. Imperial Oil, and specifically Englehart, had tried to purchase the refinery in 1891 for possible reasons of refining at Sarnia or to absorb rivals, but apparently failed to obtain this refinery. For an account on the Sarnia Oil Company and Alpha see Naylor, R. T., The History of Canadian Business (Toronto, 1975) vol. II p.84, and the Sarnia Observer 7, 1890, August 14, 1891, September 24, 1891, October 13, 1891 and July 15, 1892. Regarding the Sarnia pipeline, Ewing's History (CH IV p.40) stated the pipeline was to Petrolia, but a map of the region appearing in the Geological Survey of Canada (1898 vol XI p138s) showed the pipeline was to Oil Springs.

Bushnell originally invested \$64,000 in its Sarnia refinery and by June of 1898 had spent over \$330,000 in constructing a virtually new refinery (complete with the Frasch process to refine sour crude) and enlarging the pipeline. The capital requirements and supervisory personnel were furnished by the Atlas Works in Buffalo which was a refinery for Standard Oil of New York. Actual refining operations began in October of 1897 and by December refining capacity was approximately 32,000 barrels a month which, combined with its Petrolia refinery, would about equal Imperial's refining capacity of 40,000 barrels a month.<sup>92</sup>

With the large capital investment in refining, Bushnell was on a more than equal footing with Imperial. On June 30, 1898, Bushnell's liability for refinery and marketing expansion into Ontario had totalled over \$650,000 while assets had gone over the one million dollar mark. Bushnell had also become a small crude oil producer in Ontario (and not a large producer as R. T. Naylor suggested in his book The History of Canadian Business 1867-1914)<sup>93</sup> to complete the vertical integration of the company.

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<sup>92</sup> Figures on Bushnell's operations in Canada are found in Ewing's History CH. IV pp. 37-44.

<sup>93</sup> Naylor op. cit. p. 84 stated that in the mid-1890's "American refining companies led by Standard and followed by others Bushnell began boring wells... . The depths of the new wells and the rising capital intensity of crude production was an effective barrier to the old farmer-operated crude producing units that were still the mode of production." Naylor is wrong on three points. First, Standard and Bushnell were the same company (a point Naylor realized later (p. 175)). Second, the depths of the new wells was not an effective barrier since the oil formations in southern Ontario varied in depth from 350 feet for the Oil Springs revival in 1881 to 500 feet around Petrolia. Finally, the principal operators were certainly not farmers, and capital requirements were not a barrier to the established producers.



But the main expenditures went towards refinery construction. Bushnell's profits certainly did not indicate the powerful position Bushnell had attained in Canada. From 1890 until 1898 total net profits of company were \$45,851.64 while Imperial was making double the figure in one year.

It was fairly evident that Standard Oil executives were not primarily interested in immediate profits to attain market control over the Canadian industry. Bushnell's direct investment in refining was a strategy for control while other Standard subsidiaries could utilize the expansive resources of the U.S. company to compete with Imperial on a national scale. The creation of the B.C. Oil Company Limited in January of 1898 with F. Q. Barstow directing its operations was merely another pressure tactic to force Imperial into submission: Standard had been marketing products in the West under different U.S. subsidiary names since 1887 and the formation of B.C. Oil in 1898 centralized policy decisions across Canada under the Domestic Trade Department in New York.

## 2) Role of Government.

Canadian government regulatory policies had influenced the formation of Imperial and were to play an important role in the eventual acquisition of Imperial in 1898. Governments had to respond to two opposing factions of opinion regarding the oil industry. On the one side were the Canadian refiners and crude oil producers who felt that the viable industry needed government protection to prevent complete absorption by Standard Oil. On the other side were the consumers of oil products who were mainly concerned with the price and quality of oil.

Throughout the 1880's and early 1890's the National Policy of protection for the oil industry remained intact. The continuing protection measure of the National Policy resulted in the industrial capital requirements needed for refineries, etc., being generated within the Canadian industry and expansion of refined products on an east - west nexus indicated the developed industrialization of the Canadian industry. Standard Oil, with its large capital resources, did not set up branch plant refineries in Canada during the 1880's when Canadian prices were more than double U.S. prices. Standard's entry into Canada was through the establishment of marketing agencies and direct investment did not flow into Canada on a large scale until the late 1890's.

The protection measures of a high tariff and strict customs regulations did not shut out American imports. Imported kerosene was simply a better quality, and while prices on imports were higher in Canada, consumer preference made it possible for Standard to market their products efficiently in Canada.<sup>94</sup> As Canadian oil production could not meet the increasing demands in the 1890's, imports filled

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<sup>94</sup> Monetary Times December 9, 1892 p. 667 and Ewing's History CH. IV p. 33. There was no indication that Standard dumped oil into Canada. Phelps Fairbank p.168 (in turn citing from The Petroleum Age (Bradford, Pa.) vol. 2, n.11, December 1883) stated that Standard had placed a little less than one million barrels of high-test refined within Canada's jurisdiction in 1882. Considering that total U.S. imports in 1883 amounted to around 85,000 barrels (see Ewing's History CH.III p.90) this statement would seem to be highly unlikely.

a natural void within the higher price structure in Canada.

In response to Canadian consumers to lower oil prices, the Conservative government in 1893-94 reduced the tariff on imported refined and cheaper lubricating oil from 7-1/5 cents per imperial gallon (which was equal to the 6 cents per wine gallon rate of 1877) to 6 cents per imperial gallon.<sup>95</sup> In addition to the flash test requirements on kerosene quality was reduced from 115°F to 90°F in 1893 and 85°F in 1894 which had the effect of reducing Canadian refiners' costs but also allowing easier access for imported kerosene. Another government measure to try to reduce prices was to allow tank cars into Canada. The refined oil still had to be packaged for inspection purposes (at equalized fees) but the entry of tank cars reduced importers' costs and increased their access to the Canadian market.

With these regulations, the price of refined oil dropped in 1893-94 but increased in 1895 to the same level as in 1890.

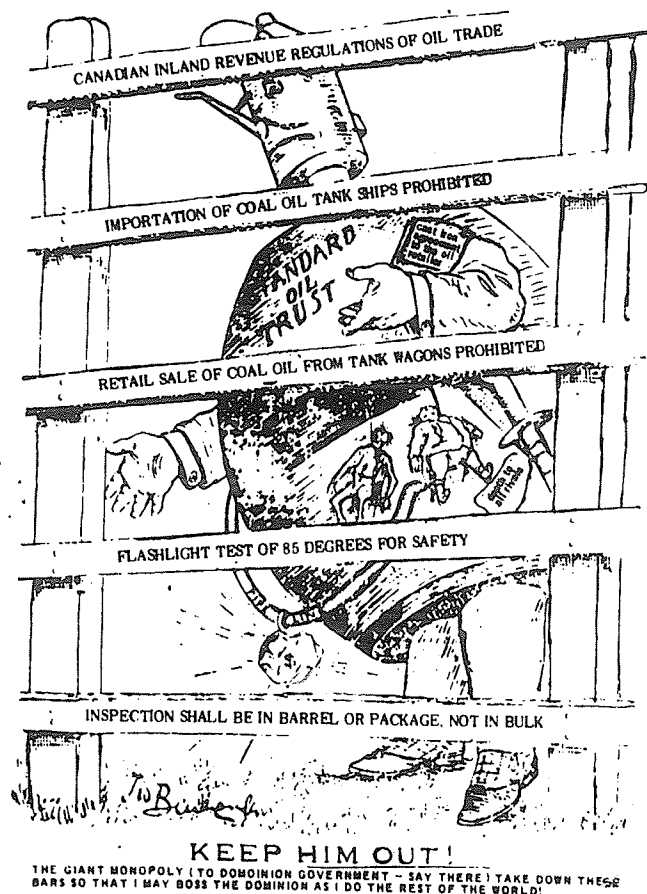
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<sup>95</sup> For an account of tariff and custom regulation changes for 1893-94 and 1897 see Ewing's History Ch. III, p. 63-64; Ch. IV, pp. 61-65; Phelps Fairbank, p. 274, n. 12; and "Report of the Tariff Board" in Reference No. 84 - Crude Petroleum and its Derivatives (Canada, Tariff Board, 1936), pp. 161-163 (hereinafter cited as Reference No. 84.)

By competing on a quality basis rather than through price competition Standard increased its market share and at the same time could justify the higher prices because of the remaining government restrictions. In 1897 the Liberal federal government proposed to reduce Canadian prices by lowering the tariff plus allowing tank vessels to import crude and refined into Canada and tank wagons on the retail level. Naturally Standard Oil was in favor of these regulations, and it was supported by the small but vociferous Maritime market and the importers of U. S. products.

It was also natural for the Canadian industry to oppose the new regulations. The entry of tank vessels would mean a cost saving of around 2 or 3 cents a gallon on refined and the permission of tank wagons on a retail level would constitute a new way of business which required a large capital investment. In June of 1897, Charles Jenkins, the Canadian industry's spokesman, charged in the Toronto Globe that Standard Oil was urging the entry of tank vessels which would enable Standard to 'be in a position to get from the Canadian railways the same discriminatory favors it secured in the United States.' Jenkins also accused

Standard of encouraging the use of tank wagons 'as a means of coercing the retail trade and thus making its (Standard) monopoly complete.'<sup>96</sup> The cartoon below depicted Canada's 'barriers to entry' against the Standard Oil threat:



Source: Toronto Globe June 7, 1897

Arguing in favor of the new regulations, Standard Oil spokesman Samuel Rogers stressed that the new regulations would result in cheaper costs and prices. He argued that the distribution of oil products in bulk by tank wagons would be cheaper to the consumer and retailer since accounts which could be handled in cash and bulk distribution instead of barrels were a more efficient means of marketing. He continually stressed

<sup>96</sup> Toronto Globe June 1, 1897.

that the new regulations would benefit the industry and, most important of all, the Canadian consumer.<sup>97</sup>

After a heated debate in the House of Commons in June,<sup>98</sup> the Liberals lowered the tariff on imported crude and refined to 5 cents per imperial gallon, allowed the entry of tank vessels into Canada, but did not permit the entry of tank wagons until 1899 when Standard had control over Imperial and the Canadian industry.

By reducing the tariff and allowing the entry of tank vessels, Standard Oil had the impetus needed to control the Canadian industry. Standard's purchase and construction of its Sarnia refinery in 1897 coincided with the government regulations which would enable Standard to import crude for its refinery as well as ensuring a regular Canadian supply through its pipeline.

It didn't seem to matter which Canadian government was in power when Standard was gaining control in the 1890's. Both the Conservatives and the Liberals (to a lesser degree) felt the need for protecting the Canadian industry, but also perceived the greater demand for price reductions by allowing easier access for imported oil. (As it turned out, the prices on Canadian oil products never were reduced to match American prices and the Jenkins assertion of tank vessel entry to control freight rates was a lot more accurate than Rogers statements on reducing prices). The governments believed that the regulations would reduce prices, but with the price structure of Canadian prices being higher than American prices for nearly thirty years, Standard was not about to

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<sup>97</sup> Toronto Globe, June 4, 1897.

<sup>98</sup> House of Commons Debates, June 4, 1897, pp. 3484-3496, June 19, 1897, pp. 4721-4724.

alter such an established practice, especially if it was to be in the market position to control prices.

### 3) Imperial : Position, Problems and Sale.

As Standard Oil began to take a more active role in the Canadian market in the late 1880's and 1890's, Imperial's position as Canada's largest oil company was continually being threatened by Standard's competitive pressures for control over the market. In response to these pressures, Imperial actually increased its market position as the nation's largest refiner in the 1890's as indicated by Table 3:

Table 3

Output of Canadian Refineries and Imperial Oil Company's  
Percentage, 1890-1897  
(Imperial Gallons)

<u>Year</u>	<u>Illuminating Oil Manufactured</u>			<u>All Products Manufactured</u>		
	<u>Quantity</u>	<u>Aver. Price</u>	<u>Imperial's % of Value</u>	<u>Quantity</u>	<u>Value</u>	<u>Imperial's % of Value</u>
1890	11,129,277	11¢	\$1,264,677		\$1,636,420	
1891	10,427,040	11	1,170,241	43.5%	1,534,509	49.0
1892	10,806,806	10	1,176,720	45.9	1,782,265	51.6
1893	11,100,810	9.5	1,073,738	50.6	1,675,784	56.3
1894	11,289,741	8	1,003,973	56.2	1,567,134	63.2
1895	10,711,378	11.3	1,217,416	63.5	1,806,237	53.3
1896	11,107,150	11	1,251,122	55.4	1,876,913	63.1
1897	10,493,449	10	1,064,130	60.9	1,672,429	71.1

Source: Ewing History CH. III p. 90

Imperial's improved refining position was the result of smaller Canadian refineries shutting down. In the 1880's Imperial had joined with the local Petrolia refiners in the Refiners Syndicate to keep refined prices as high as possible in relation to the tariff. But as Standard began marketing on a larger scale, the price on Canadian kerosene - a recognized inferior product - had to sell for less than imported kerosene in order to compete. As Canadian wholesale prices

on kerosene declined to average around 10 cents per imperial gallon from 1890 to 1897, the smaller refineries could not compete. From a high of thirteen refineries operating in 1889, the number of refineries dropped to ten by 1891, six by 1894 and five by 1897-98. John McDonald's National Oil Company refinery was shut down by 1898 so that the refineries operating in 1898 included Imperial's Petrolia refinery, Bushnell's Sarnia and Petrolia refineries, Minhinnick's London refinery, and the Petrolia Crude Oil and Tanking Company's Petrolia refinery.<sup>99</sup>

Imperial did pursue a strategy of absorbing rival refineries but not on the same scale as during the company's formation. Imperial had tried to purchase the Sarnia Oil Company which had been operating in 1890, but apparently failed to acquire it. In 1893 Imperial acquired the Premier Oil Company for \$22,500 and presumably consolidated it under Imperial's name.<sup>100</sup>

With the reduction in refineries, Imperial continually updated its Petrolia refinery. From 1893 until 1898 Imperial spent an average of \$7,000 annually on its Petrolia refinery to improve product quality and reduce costs. Imperial's old London refinery had been used to produce paraffin since 1882-84 and in 1891 the paraffin works were centralized at Petrolia to reduce production costs.

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<sup>99</sup> Geological Survey of Canada. Annual Report (1890-91) vol. V. pp.127ss, 147ss; (1893) vol. VII p. 96s; (1897) vol. X p. 145s; (1898) vol. XI p. 126s.

<sup>100</sup> Ewing History CH. III p. 79. From the Geological Survey of Canada. Annual Report (1890-91) vol. V p.147ss, and (1894) vol. VII p.96s, Premier was organized in 1891 and was not operating in 1894. Ewing stated the value of Premier 1896 was \$55,800, but since Premier was never mentioned as a refining company after 1893, the writer assumes it operated as part of Imperial's Petrolia refinery.



Through more efficient refining techniques, the yield of all refined products from Ontario crude oil increased from 78 per cent in 1892 to 85 per cent by 1895. However, kerosene, which comprised around 80 per cent of the total value of all refined products manufactured in Canada, had yields of only 40 per cent from Ontario crude which was much lower than American kerosene yields reported to be 75 per cent.<sup>101</sup> By obtaining only 40 per cent kerosene from the crude oil, Canadian refiners were at a distinct disadvantage of having to use more crude oil. To ensure a more regular supply of Ontario crude oil in demand Imperial over the years had increased its crude oil storage capacity to reportedly 100,000 to 200,000 barrels.<sup>102</sup>

With the high tariff on crude oil imports, Imperial's expansion depended almost entirely on Ontario crude oil production. In 1894 Ontario's crude oil production peaked at 829,104 barrels and thereafter began a gradual decline as the small oil territories were being naturally depleted after thousands of wells had been drilled over the thirty-five year period. While the immediate demand from refineries could be met

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<sup>101</sup> Ewing History CH. III p.63 in turn citing from Report of the Ontario Bureau of Mines found in the U.S. Geological Survey 1897 p.116. Ewing stated some Standard Oil refineries in the U.S. were obtaining yields of 96 per cent from Pennsylvania crude oil. Phelps Fairbank (p.194 n.109) in turn citing from Ontario Royal Commission p.166 stated American kerosene yields were 75 per cent while Canada's was 40 per cent. This does not explain the refinery yields from Ohio oil which was of the same quality as Ontario crude. Since Standard was utilizing more of its Ohio crude in the 1890's, the Frasch desulphurization process must have met the yield requirements of other Standard refineries to be used on such a large scale as it was.

<sup>102</sup> Purdy op. cit. p.34 stated Imperial had crude oil storage capacity of 100,000 barrels and the Toronto Globe (June 24, 1893) stated Imperial's crude oil storage capacity was 250,000 barrels.

from crude oil storage facilities, the gradual decline in production, coupled with a general increase in crude oil prices to reflect the decline, would have been recognized by Imperial as a serious obstacle for future expansion.<sup>103</sup>

Imperial's market position as the nation's leading refiner improved but the stable output of kerosene in the 1890's indicated the problem of a decline in crude oil supply. Refined imports were taking approximately one-third of the Canadian market in 1895, and without the Frasch process to desulphurize Ontario crude oil, Imperial could not match the quality of imported kerosene. To have secured its position as the leading refining company in Canada, Imperial would have needed access to future crude oil supplies from the U.S. Even if the tariff on crude oil imports had been lowered in 1895 as Ontario production began to decline, it would have been unlikely that Imperial would have been able to import crude oil.<sup>104</sup> Standard Oil denied Imperial access to the Frasch process, and Standard's extensive control over the transportation of crude oil in the U.S. would have made it difficult for Imperial to obtain crude oil supplies.

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<sup>103</sup> The quantity and price of Ontario crude oil (which was the total Canadian production from 1893 to 1897) was as follows:

<u>Year</u>	<u>Quantity</u> (barrels of 35 Imperial gallons)	<u>Average Price Per Barrel</u>
1893	798,406	\$1.09½
1894	829,104	1.00 ¾
1894	728,665	1.49 ⅔
1896	762,822	1.59
1897	709,857	1.42½

Source: United States Geological Survey 1893-1898

<sup>104</sup> According to the Geological Survey of Canada Annual Report, 1903 (Toronto 1905) p.102s, imports other than illuminating oil (kerosene) varied between the years 1880 to 1898 from a high of over 3,000,000 gallons in 1890 to a low of 862,286 gallons in 1897. It is virtually impossible from these statistics to determine what amount, if any, of U.S. imports was crude oil used for refining purposes in Canada. To this writer's knowledge, Ewing's History never mentioned Imperial importing crude oil for refining purposes.

While Standard allowed Imperial - through Royal Oil - to import refined products, the strategic advantage in refining that Imperial had would be severely hampered without future crude oil supplies.

Given the basic conditions of the decline in Canadian crude oil supply and the increased demand for U.S. kerosene imports affecting the structure of the Canadian oil industry, it was in 1895 that Imperial owners felt the competitive pressures mounting and decided to sell the company. Instead of selling to Standard, Imperial negotiated with an English investment firm named the Colonial Development Corporation. From December of 1895 until the spring of 1898 negotiations over the sale of Imperial to Colonial dragged on. Imperial sent statements showing what Imperial's profits could have been if the company had sufficient capital to maintain its leading position. Indeed, Imperial's profits increased dramatically in 1896 (see table 3) to strengthen Imperial's bargaining position and the sale was nearly finalized in May of 1897. But as tariff and customs regulations were enacted to strengthen Standard's refining and marketing position in Canada, Colonial requested further extensions to raise the required capital to purchase Imperial. Negotiations between Imperial and Colonial broke off in 1898 for reasons unknown, but it would have been fairly apparent to the English financiers that Standard Oil's large direct investment in its Sarnia refinery would have presented severe competition to Imperial.<sup>105</sup>

Imperial had been in need of capital in order to compete with Standard. Imperial had carried a loan with the Bank of Montreal from

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105

Ewing History CH. IV pp. 78-81 discusses the negotiations between Imperial and Colonial. Ewing stated (p.79) that ... "unquestionably the Imperial men were anxious to sell the company".

at least 1891 onwards; in 1892 the loan was \$155,395.85 and in 1894 the loan reached a high point of \$206,395.85. With interest charges of around \$20,000 a year plus bad debts written off totalling over \$39,000 between 1895 and 1897, Imperial's financial position was not secure. Although the company's net worth had increased to over \$950,000 in 1898, Imperial's capital requirements to continue on a competitive scale with Standard would have been substantial for long term expansion.<sup>106</sup>

With the changing structure in the Canadian Oil industry of fewer refineries and a growing dependence on oil imports, it was only a matter of time until Standard would have acquired Imperial. Once negotiations with Colonial failed in April of 1898, Imperial owners assessed their market position and then promptly sold the company to Standard on July 1. 1898.

Standard did not purchase Imperial at distress prices which would have probably happened within a few years had Imperial decided to remain Canadian, but rather paid Imperial shareholders a good return for the company. In total, Standard paid Imperial shareholders \$810,187.86 or \$324 for each share of \$100 par value plus a one-fourth interest in the 'new' Imperial.<sup>107</sup> Imperial's capitalization was increased to \$1,000,000 in order to absorb Bushnell, Eastern and the B.C. Oil Company Ltd.,

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<sup>106</sup> Ewing History CH. III pp.83-85. From the apparent increase in loans from the Bank of Montreal in 1893 and 1894, the 1893 depression in Canada did not seem to be a factor in Imperial's problem of acquiring more capital. It is the opinion of this writer that from the high loans of Imperial from the Bank of Montreal, it would seem that the bank was willing to finance Imperial until the latter 1890's when Standard's presence was apparent.

<sup>107</sup> Ibid. CH. IV p. 88.

but not Queen City which in turn absorbed Imperial's marketing operations in Ontario plus Royal Oil. Imperial shares were transferred to Standard's Anglo-American Oil Company Limited in London, England, which had been a matter of policy since 1892 when the Sherman Anti-Trust laws in the U.S. had discouraged Standard to openly control foreign subsidiaries.

The acquisition of Imperial gave Standard Oil a pure refining monopoly in Canada and not 75 per cent as Hidy's Pioneering in Big Business implied.<sup>108</sup> In addition to closing down the Imperial and Bushnell refineries at Petrolia and centralizing all refining operations at Sarnia, Standard also purchased the Petrolia Crude Oil and Tanking Company's refinery, five other unused Petrolia refineries, and Minninnick's London refinery.<sup>109</sup> This refining monopoly was useful in the short run to control the Petrolia region by being the only buyer of crude oil, and was also to be useful in the future as a strategy for control over the Canadian market.

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108

Hidy op. cit. p.257 stated "While the Cleveland Leader generalized about Standard Oil's 'absolute monopoly' of refining in Canada, Archbold more modestly assessed its share at 75 per cent". Phelps Fairbank (p.240) accepted Hidy's implication of 75 per cent, but Ewing's History (CH. V p.90) stated Standard had an absolute refining monopoly. The Geological Survey of Canada Annual Report (1898) vol. XI p.126s stated the only refineries operating in the last half of 1898 were Bushnell and Imperial.

109

Ewing History CH. IV pp. 47-49. Sarnia Observer July, 1898. According to Ewing, the purchase of these refineries were negotiated through Bushnell which was dissolved by the end of 1898. Standard purchased the five unused Petrolia refineries between June and July of 1898 with Imperial members being helpful in these negotiations.

CHAPTER III    IMPERIAL 1898-1921: A SUCCESSFUL  
STANDARD OIL SUBSIDIARY

## I INTRODUCTION

### BASIC CONDITIONS

It was during this period that Canada became virtually dependent on foreign sources for oil as the Petrolia region lost its national supply position. With Imperial integrated into the Standard Oil network of companies, the major oil supplies for Imperial came from Standard Oil subsidiaries in the U.S. In 1911 Standard Oil was found guilty of using its market power to monopolize the U.S. oil industry with the result that Imperial's future oil supplies were not guaranteed. Imperial expanded its refining operations to guarantee its future as Canada's largest oil company, and with no national competitive threat, expanded its producing operations into South America and Alberta.

Demand factors also influenced Imperial's growth as this was a transition period from kerosene demand being substituted by the growth in demand for gasoline. Western expansion caused overextended cash outlays initially, but with refinery construction in Regina and Vancouver, coupled with control in Alberta, Imperial was able to control its national monopoly.

The transformation of Imperial from an essentially refining and marketing company by 1911 into a more sophisticated modern corporation is presented below in Chart I to illustrate the oil supply changes and the increased functions Imperial undertook.

### STRUCTURE

Economies of Scale. Imperial's absorption into Standard Oil increased economies of scale for the company as Imperial was tied into Standard's production, transportation, and distribution network. With Imperial's regional refineries supplying 80 per cent of Canada's oil

## CHART I

## Imperial Oil - Sources of Oil Supply

1911

REGIONS	Western Canada			Eastern Canada	
	Man.Sask.	Alta.	B.C.	Ont.	Mont. Maritimes
SOURCES OF REFINED OIL	Whitting, Ind.	Calif.	Sarnia	Albany Buffalo Bayonne	Boston New York

1920

REGIONS	B.C.	Man. Sask. Alta.	Ont.	Quebec	Maritimes
REFINERY LOCATION	Ioco	Regina	Sarnia	Montreal	Halifax
TRANSPORTATION	Tanker	Pipeline	Pipeline	Tanker	Tanker
MAJOR SOURCE OF CRUDE OIL	Peru	Wyoming	Ohio	Mexico	Peru

products, pecuniary economies of scale - that is stabilizing profits  
and spreading risks - ensured Imperial's future as the dominant oil  
firm in Canada.



Mergers and Concentration. Throughout this whole period, there was no other oil company besides Imperial which operated throughout all of Canada. Imperial's major competitors had regional operations, and the largest being the British-American Oil Company was two-thirds owned by Imperial for about 10 years. Even without this control over competitors, the company maintained its approximate 80 per cent market share of kerosene and gasoline sold in Canada.

Number of Sellers and Buyers. There was an increase in buyer dependency on Imperial as the refinery chain was established plus the inaccessibility of rivals to import oil profitably into Canada. The fewer number of competitors could be attributed to Imperial's market control rather than the smaller Canadian market.

Product Differentiation. There was a level of standardization of Canadian products to those in the U.S. as Canada became dependent on foreign sources of oil. The introduction of the auto and the demand for gasoline revolutionized the industry, and the ability of the large companies like Imperial to increase prices while drastically reducing gasoline refining costs will be documented in this chapter.

Barriers to Entry. The most obvious barrier entry for rivals was access into the American oil network which was controlled by the Standard Oil companies. Imperial's national refining monopoly was not threatened because of the high capital requirements and a stable source of crude oil; these two prerequisites, plus the geographic restraint on competition, were enough for Imperial to expand without any serious competition.

Vertical Integration. As the refinery chain was being constructed and a subsidiary, the International Petroleum Company (I.P.C.), being

formed in Peru, Imperial was a vertically-integrated company virtually independent of supply conditions affecting Canada. The multi-national aspect of Imperial was evident in Peru and policy control over Imperial from headquarters in New York was apparent from 1898 onwards.

#### CONDUCT

Pricing Behavior. Price fluctuations did not occur as in the earlier periods when the industry was more competitive. With no national competition, Imperial set the oil prices in Canada and was in a position to charge the highest prices in relation to the tariff barriers established. The protected Canadian market gave Imperial the added incentive for constructing refineries and to conduct operations as if it were an indigenous crude oil producing national company.

Product Strategy. Through the expansion of bulk stations and a co-ordinated line of organization, Imperial's role as the only national seller of differentiated products resulted in a case of near pure monopoly in Canada.

Technical Innovation. The revolutionary gasoline cracking process invented by Dr. W. Burton in the U.S. radically changed the structure of the oil industry and provided an example of how Imperial was able to take advantage of this patent process through its connection with the Standard Oil companies in the U.S. Restricted patent access to this process by selective Standard Oil companies, including Imperial, was also an example of how oil companies reduced refining costs, increased gasoline prices, and increased operation profits and royalties by approximately 150 million dollars in a short period of time.

## PERFORMANCE

Production and Allocative Efficiency. With access into the American network, Imperial's product flow was more on a south to north manner. The major thrust of Imperial's production plans were in South America and except for political reasons and to control the potential oil and gas production in Alberta, Imperial had no serious plans to explore for oil in Canada.

Progress. The refinery construction and national expansion placed Imperial into the ranks of a major oil company and Standard Oil's most important foreign subsidiary.

Employment. Regional employment increased as Imperial expanded with company policy of paying lower wages than their counterparts in the U.S. and to establish industrial councils to avoid unionism.

Role in Canadian Economy. The profitable control of Imperial by Standard Oil of New Jersey over the Canadian market enabled Imperial to expand virtually unhindered. The higher price structure in Canada could be justified by Imperial because of the regional employment and secondary industries created by Imperial and these factors were important strategies used in Canada in 1904 and also in Peru in 1918.

Profits. Under the Standard Oil banner, Imperial became the parent company's most profitable foreign subsidiary. Over this period examined, Imperial earned a total net income in excess of \$60,000,000 and the capital stock of this profitable subsidiary increased from \$1,000,000 in 1898 to \$50,000,000 by 1919.

## PUBLIC POLICY

The Canadian market was isolated from the U.S. by tariff protection which offered an added incentive for refinery construction even though Canada had virtually no domestic crude oil production. The anti-combines legislation in Canada had no effect on hindering Imperial's monopoly position. The tax example of the International Petroleum Company in Peru illustrated how a multi-national oil company like Imperial could operate with jurisdictional independence from governments.

## II. MARKET CONTROL 1898 - 1911

### 1. Administrative Changes

Once Imperial was acquired by the Standard Oil Trust, Imperial's directors and by-laws were changed to reflect Standard's ownership control and direction that Imperial was to proceed as a foreign subsidiary. One would normally have expected that Imperial men like Englehart, Fitzgerald, Smith and others who were intimately involved in Imperial's day-to-day operations, would have been useful managers once Standard attained its monopoly position in Canada. With the exception of Imperial men aiding Standard in acquiring the desired Petrolia refineries in June and July of 1898, it does not seem that the original Imperial shareholders played an active role in managing the 'new' Imperial.

Of the original shareholders, only Fitzgerald, Englehart and T. H. Smallman were retained as Imperial directors. The outgoing directors were T. D. Hodgins, Frank Smith, Frank Ward, and Herman Waterman. Even

though Fitzgerald and Englehart were classified as first and second vice-presidents of Imperial respectively at annual salaries of \$5,000 each, their roles were primarily to act as chairmen of directors' meetings.<sup>1</sup> Fitzgerald was on the verge of bankruptcy in 1901-2<sup>2</sup> presumably because of other financial ventures, and resigned as Imperial's vice-president in 1905 and as a director in 1908. John Geary and T. D. Hodgins also experienced bankruptcy problems;<sup>3</sup> T. D. Hodgins was a Member of the Ontario Provincial Parliament in late 1899 when he apparently committed suicide.<sup>4</sup> Most of the other original shareholders in Imperial were not so unfortunate as T. D. Hodgins, as families like the Spencers, Smallman, and Smith were prominent in London, Ontario circles for future generations based on their Imperial Oil stock interests.<sup>5</sup>

Jacob Englehart's career best exemplifies the role of original Imperial Oil members. While he remained as an Imperial Oil vice-president

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<sup>1</sup> Ewing History, Ch. V, p. 14-18, 21-22.

<sup>2</sup> Phelps Fairbank, p. 145, p. 182, #13 stated Fitzgerald still had a refinery in partnership with J. S. Fallows until 1901 when the refinery went bankrupt.

<sup>3</sup> Ewing History, Ch. V, p. 22-23.

<sup>4</sup> Cronin, op. cit., p. 22-25.

<sup>5</sup> To give an example of the value of the original members' stock interests, Frank Smith's original 325 Imperial Oil shares had grown over the third generation of Smiths to over 170,000 shares by 1970 as a result of all the Imperial stock splits between 1898 and 1970 (see Ontario Reports 1971, vol. 1, [High Court of Justice] Re Smith, p. 584-591 and Ontario Reports, 1971 Vol. 2, [Court of Appeal] Re Smith, p. 541-544).

until his death in 1921, his salary was discontinued in 1911 since he had little managerial association with the oil company. In 1905 he concentrated his business skills as chairman in the construction and expansion of the Temiskaming and Northern Ontario Railroad. With financial interests in various companies such as the Bank of Toronto, the London and Western Trust Company and the Crown Savings and Loan Association, Englehart's role in Imperial Oil, as Ewing's History pointed out, was primarily as a figurehead:

"...there is little doubt that his activity in the conduct of Imperial Oil was greatly diminished. This may have been due to the pressure of outside interests, for Englehart was involved in other spheres of business, but it was also a reaffirmation of the American control of Imperial."<sup>6</sup>

Imperial's new president from 1899 until the end of 1907 was Frank Q. Barstow. This seemed a natural selection since it was Barstow who had directed the Standard Oil companies which had competed with Imperial. Barstow's role as Imperial's president was to co-ordinate Imperial into the other foreign subsidiaries which he headed as a director of Standard's newly formed holding company, the Standard Oil Company (New Jersey).<sup>7</sup> As the quote from Ewing's History indicated, Barstow co-ordinated Imperial Oil policy decisions into the broader framework of the Standard Oil organization, and he was not concerned at all in the operations of Imperial as such:

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<sup>6</sup> Ewing History, Ch. VI, p. 29-30. When Englehart died in 1921, his estate was valued at \$3-1/2 million dollars - most of which was comprised of Imperial Oil stock. This would have placed Jacob L. Englehart as one of Canada's foremost industrial entrepreneurs, but as with most people studied in Canada's early oil history (with the exception of J. H. Fairbank) little is known on Englehart's real career in Canada.

<sup>7</sup> Hidy, op. cit., p. 314-316.

"F. Q. Barstow took little part in the company of which he was president.... In the eight years that he was president of Imperial, he resided at only one meeting of directors, and that one was held in New York; he visited Sarnia almost not at all, and his function in Imperial was chiefly to act as a go-between for the company and the Standard Oil directors."<sup>8</sup>

With Barstow co-ordinating Imperial into the maze of foreign subsidiaries controlled by Jersey Standard, the managerial affairs of Imperial were administered almost exclusively by Americans from within the parent company. Imperial's new treasurer, W. R. King from New York, was also the head of domestic marketing for the Standard Oil Company (New York). A. H. Brainard, also from New York, was Imperial's secretary and became comptroller for Jersey Standard (between 1905 to 1911). K. D. Clarke was a director and large stockholder in Imperial and had also been a comptroller for Jersey Standard (between 1900 - 1905) in New York. Imperial's assistant general manager between 1905 and 1908 was Seth B. Hunt who later became treasurer of Jersey Standard. Imperial's general manager from 1898 to 1908 and president from 1908 to 1911 was Horace P. Chamberlain from Buffalo. Even as general manager and president of Imperial, Chamberlain was a refining specialist who continued to manage the Atlas Works in Buffalo. Like Chamberlain, Imperial's Sarnia refinery superintendent, C. O. Stillman from Buffalo, became a general manager and director of Imperial in 1907-08, and was later a long-time president of the company (from 1919 to 1933) while

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<sup>8</sup> Ewing History, Ch. V, p. 21.

essential maintaining his role in the company as a refining specialist.<sup>9</sup>

It was fairly evident from the list of major Imperial Oil executives that Imperial came under firm ownership and managerial control by the American parent company. As Imperial evolved primarily into a refining and marketing oil company, the administrative organization of the company was co-ordinated through a system of split control. While Imperial's head office shifted from Petrolia to Sarnia in conjunction with the refinery move completed by April of 1899, Sarnia was only the Canadian legal head office for Imperial. The eastern and western marketing branches reported directly to New York where the financial records of the company were kept. Once Chamberlain became president in 1908, the Imperial presidency and Sarnia's refining records resided at his Buffalo refining headquarters. With no definite channels of communication between the operating headquarters, Imperial's management decisions were largely controlled from New York with local conditions in Canada being handled by the Canadian staff. The result of this control

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<sup>9</sup> Ibid. Ch. V, p. 15, Ch. VI, p. 27-29, Ch. XV, p. 3. Hidy op cit. p. 314, 330, 410. A list of directors of 1907-08 appeared in Canada, Department of Mines, Mines Branch, Report on the Mining and Metallurgical Industries of Canada 1907-08 (Ottawa 1908), p. 438-439. According to this list, Barstow was president, J. A. Fitzgerald from New York was vice-president, and the directors were J. L. Englehart from Petrolia, H. P. Chamberlain from Sarnia, W. P. Cutler from Sarnia, J. H. Smallman from Sarnia, and C. O. Stillman from Sarnia. Stillman was mentioned as the general manager and A. H. Brainard from Sarnia was listed as secretary. From this list it would appear there were a few factual errors on the names and residences: F. A. Fitzgerald would still have been listed as a vice-president but he was from London, Ont., not New York; H. P. Chamberlain was in Buffalo, not Sarnia; J. H. Smallman should read T. H. Smallman and he was from London and not Sarnia; and A. H. Brainard was in New York and not Sarnia. It is not known to this writer's knowledge what role W. P. Cutler had other than he resigned as a director in 1911.



was to administer Imperial as if it were a Standard domestic subsidiary in the U.S. and to assert its monopoly position in Canada through business practices perfected in the U.S.

## 2. Transportation

One of the first strategies which Imperial pursued to strengthen its monopoly position in Canada was to exert its bargaining power in the transportation stage of production. Transportation control in the Petrolia crude oil region was secure with Imperial's pipeline to Sarnia, but there was a near total reliance on the railways to distribute both Sarnia refined and imported oil products.

Between September of 1898 until at least 1901, Imperial had preferential freight rate agreements with the Canadian Pacific Railway and the Grand Trunk Railway. Unlike the previous reciprocal agreement that Imperial had with the Grand Trunk in 1880, the agreement in 1898 was different in that Imperial threatened to divert as much of its oil shipments into Ontario and Quebec by tank vessels unless the railways reduced freight rates to Imperial. Not only did the railways comply by reducing posted rates by one-sixth to one-third on Imperial's shipments originating from Sarnia, the railways issued rebates to Imperial while increasing freight rates by one-half on American oil entering Canada through cities like Buffalo and Detroit.<sup>10</sup>

The initial effect of preferential freight rates was to discriminate against independent oil companies like the Sun Oil Refining Co. in Hamilton, the Gall-Schneider Oil Company in Montreal and no doubt other

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<sup>10</sup>Ewing History, Ch. V, p. 30.

small oil companies which imported refined oil in tank cars. The companies voiced their opposition to Standard's transportation advantage to the press, with the Monetary Times editorializing in February of 1899 that Standard Oil should not have been able to threaten the railways and also stated that Canada "must teach this great monopoly, if we be strong enough, that it cannot hold up our railways, cannot get discrimination in its favour on Canadian soil."<sup>11</sup>

In the past railway rate discrimination was an important strategy implemented by Standard Oil in the U.S. to gain control over competitors, and Canada was no different once Imperial became a subsidiary of Standard Oil. Ewing's History viewed the freight rate discrimination as a case of bad public relations on the part of Standard.<sup>12</sup> But there was a little more to the freight rate discrimination than just bad public relations for the rate preference to Imperial enabled it to centralize the wholesale distribution system of tank car delivery into the high market demand areas of Ontario and Quebec. Coupled with the legislation passed in 1899 allowing tank wagons which tended to confer strong buyer-seller ties at the retail level, Imperial had greater control over the supply of oil products.

In a related matter which arose with the freight rate discrimination issue, Imperial was also in the market position to discriminate against industrial firms in Canada which had converted from coal to fuel oil. Being the only supplier of fuel oil in Canada, and having

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<sup>11</sup> Monetary Times, February 24, 1899, p. 1113.

<sup>12</sup> Ewing History, Ch. V, p. 54.

well over 70 per cent of the fuel oil market in the U.S. through its parent firm, Imperial was able, with the preferential freight rate agreements, to control whatever independent supply entered Canada. John Saywell wrote that companies like Massey Harris, the Dominion Bridge of Montreal, and 150 other companies sent a letter to the Prime Minister in February of 1899 stating that "since the Standard Oil Company secured the control of the product there has been a tendency to curtail the supply and reduce the quality, and in fact some cases to cut it off altogether as well as advance the price materially."<sup>13</sup>

By controlling the supply of oil products through its transportation advantage, Imperial also exerted its market power to increase prices. In a resolution submitted to the Canadian Manufacturers Association (C.M.A.) in 1901, a Mr. Clarkson claimed that Canadian prices for kerosene were over double prices across the border, and that Standard Oil, with its freight rate advantage, was responsible for the higher prices and should be prosecuted under the Canadian Criminal Code as a Trust. The quote below illustrated the manner in which supporters of Imperial defended these accusations with the mythical assertion to the C.M.A. that Imperial was not controlled by Standard and that prices were cheaper once Standard Oil entered the Canadian market:

"On the one side proof was produced by invoices, etc., showing that prices had advanced as stated, and that manipulation of freight rates was a fact. It was pointed out on the other side that the Imperial Oil Company which was said to control the Refineries, was not the Standard Oil Company, but a Canadian corporation in which the majority of the directors were Canadian - many of the Canadian shareholders dating their stock back twenty-two years. Some of the stock was held by

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<sup>13</sup> Saywell, John T., "The Early History of Canadian Oil Companies", Ontario History, Vol. LIII (1961), No. 1, p. 69.

the Standard Oil people, but the whole concern only held 8 per cent of the total oil-producing industry.... It was claimed that the oil fluctuated constantly in price and that it was really cheaper than prior to the preliminary entrance into Canada of the Standard Oil Company."<sup>14</sup>

While not condemning Standard Oil outright, the C.M.A. adopted a resolution that a Commission be appointed to investigate the whole oil industry in Canada. No investigation into the industry itself ever took place, but the government had investigated the freight rate charges through the Railway Committee of the Privy Council in 1900 - 1901 where the charges against Standard were true. As Ewing's History pointed out though, the rates were not lowered for other companies to compete, but rather Imperial's rates were raised to match the increased rates of 1898.<sup>15</sup>

Imperial relied on the railways to distribute oil products, especially during the winter months, but to lessen this dependence and to maintain distribution control, Imperial owned over 140 tank cars around the turn of the century. Imperial also shifted its oil shipments more to water transport by purchasing a 6,000 barrel capacity tank steamer in 1902 and a larger steamer in 1910 to augment its barges and tugs that were being used to import oil into Ontario and Quebec.

The Maritimes and the West were quite separate from the high demand areas of Ontario and Quebec. Soon after Standard acquired Imperial, the east-west transportation nexus which Imperial had developed during its Canadian existence was quickly severed. Oil

<sup>14</sup> Morangs - Annual Register of Canadian Affairs (1901), P. 118-119. See also Globe April 27, 1899 for the same implication that Imperial was Canadian controlled.

<sup>15</sup> Ewing History, Ch. V, p. 59.

products for the Maritimes could be imported by rail and water from refineries of the Standard Oil Co. (New York) more cheaply than by rail from Sarnia. Rail transportation was essential in supplying oil products to the expanding Prairie Provinces, with the bulk of refined products coming from the Whiting refinery of the Standard Oil Co. (Indiana). From 1906 to 1911 the distinct British Columbia region was being served by the Standard Oil Co. (California) through rail and water transport.

By assimilating the four Canadian geographic regions into the parent company's network of subsidiaries and the transportation connections, Imperial's nation-wide monopoly was secure from any competition on the same scale. With the formation of this continental oil strategy, Imperial's growth was largely determined on the corporate decisions emanating from New York.

### 3. Crude Oil Operations

When Imperial was acquired by Standard Oil in 1898, the Petrolia crude oil region was a well structured market controlled by a few large producers and a host of smaller producers. Imperial's control over the Petrolia region was not in the crude production end but rather in refining and pipeline transportation. Imperial did increase its investment in the crude oil stage of production on a small scale, but the company's primary concern during this transition period was to protect its large capital investment in the Sarnia refinery.

Table 4 below gives the annual production and average price per barrel of Canadian crude oil from 1898 to 1911 which showed that crude oil price fluctuations were not always a true reflection of supply and price conditions operating within the industry:

Table 4  
Annual Production of Crude Petroleum\*  
1898-1911

<u>Year</u>	<u>Barrels of</u> <u>35 gallons</u>	<u>Average price</u> <u>per Barrel</u>
1898	758,391	\$1.400
1899	808,570	1.48-3/4
1900	710,498	1.620
1901	622,392	1.620
1902	530,624	1.792
1903	486,637	2.155
1904	503,474	1.858
1905	634,095	1.350
1906	569,753	1.337
1907	788,872	1.340
1908	527,987	1.415
1909	420,755	1.330
1910	315,895	1.230
1911	291,092	1.225

SOURCE: Mineral Production of Canada (1914), p.282

\*With the exception of negligible production in New Brunswick and Alberta, Southwestern Ontario was the major producing region in Canada.

John Saywell suggested in an article that the price of Canadian crude oil fell once Standard acquired Imperial,<sup>16</sup> but Table 4 indicates this was not true. Being the only purchaser, transporter, and refiner of crude from the middle of 1898 until late 1901 when a Petrolian refinery of the Canadian Oil Refining Company was constructed, Imperial naturally set the prices on crude oil offered by the producers. With only one purchaser of crude oil, the Petrolia Oil Exchange served no

<sup>16</sup> Saywell op. cit., p. 69 stated: "Standard's invasion was at once felt throughout the country. The price of Canadian crude fell. Dependent on a single market Canadian producers were insecure and impotent."

useful function and was disbanded.<sup>17</sup> In setting crude oil prices, Imperial's higher price structure was a means to stimulate new production and to justify the higher prices charged retailers and consumers. The relatively high crude oil prices did not have any direct relation to increased production costs; with the exception of new drilling rigs and improved pumping systems, production costs in the Petrolia region were generally fixed at around 50 cents per barrel.<sup>18</sup> The initial crude oil price increase in 1899 when production increased was also a means of pacifying most of the established Petrolia producers who had criticized Standard's earlier attempt in 1897 to control the industry but defended Standard and Imperial once it was apparent that the company had no intention of demoralizing the producing region.<sup>19</sup>

Imperial itself increased its investment into Canadian crude oil production after 1898. By purchasing land, operating wells in Sarnia township, and constructing gathering pipelines around Petrolia, Imperial's crude oil operations were valued at over \$88,000 by the end of 1901.<sup>20</sup> This figure was most likely a close approximation to the 8 per cent value of the total oil producing industry that was quoted at the 1901 C.M.A. meeting.

This backward integration by the company (the old Imperial members like Englehart and Smallman still retained their separate producing companies) could be termed as a precautionary investment to possess

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<sup>17</sup> Phelps Fairbank, p. 240.

<sup>18</sup> Industrial Canada, March 1901, p. 219.

<sup>19</sup> Toronto Globe, April 15, 1899, April 22, 1899, April 27, 1899.

<sup>20</sup> Ewing History, Ch. V, p. 33-34 and Toronto Globe, April 29, 1899.

greater control over potential crude oil production. Imperial gradually disengaged itself from crude oil operations after 1901 when production declined even with the higher crude oil prices. In 1906-07 when temporary oil discoveries were made 50 miles southwest of Petrolia around Tilbury, Ontario (accounting for the increased annual production in Table 4), Imperial controlled this region by installing a pipeline to a receiving station at Merlin, eleven miles east of Tilbury, and transporting the crude to its Sarnia refinery by rail.<sup>21</sup> Imperial did not risk much capital in actual drilling, but rather controlled the majority of independent production by controlling the intermediary stages of production. With the exception of the pipelines and receiving tanks owned by Imperial in Petrolia and Tilbury, Imperial had completely divested its crude oil interests by 1911.

4. Refinery Importance and the Role of Government in Providing Tariffs and Subsidies

Imperial's integration into actual crude oil production was not enough to maintain any degree of Canadian self-sufficiency for its Sarnia refinery. With the duty on crude and refined equal at 5 cents per gallon after 1897, the Sarnia refinery processed Canadian crude for the Ontario and Quebec region and refined imports supplemented the Maritime and Western regions. The higher price structure on Canadian crude oil did not initially in any way adversely affect Imperial's refining operations. In 1899 the refinery alone had a net profit of close to

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<sup>21</sup> Ibid., Ch. VI, p. 43 and Report on the Mining and Metallurgical Industries of Canada, 1907-1908, p. 429.



\$440,000 on a total income of over \$1,575,000, and in 1900 when crude oil prices increased, Imperial's refining profits also increased to over \$525,000.<sup>22</sup>

However, from 1901 to 1904 profits from the Sarnia refinery declined to nearly half that of the 1899 figure. In 1904 net refining profits were \$226,734.88.<sup>23</sup> This decline of refining profits could be attributed to the increased protected price of Canadian crude oil associated with decreased production and also to the entry of a competing refinery which threatened Imperial's monopoly position.

To protect its large capital investment in the Sarnia refinery, Imperial asked the federal government in March of 1903 for a reduction of the duty on crude oil imports to 2-1/2 cents per gallon, threatening as an alternative to close the Sarnia refinery and supply the whole Canadian market with imported refined. The established Petrolia producers formed a Crude Oil Tariff Committee which agreed with Imperial's initial 2-1/2 cent reduction proposal, and also to Imperial's further demand of a duty reduction to 2 cents per gallon on imported crude. In late 1903 when the 2 cent proposal was endorsed by the Crude Oil Tariff Committee, the less-established smaller but larger numerically Petrolia producers divided the tariff issue by rejecting the Committee as misrepresentative of all the producers' interests.<sup>24</sup>

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<sup>22</sup> Ewing History, Ch. V, Appendix I, Table I, p. 72.

<sup>23</sup> Ibid.

<sup>24</sup> Phelps Fairbank, p. 241-243.

With internal dissension among the Petrolia producers, the federal government had to decide on whether to extend protection to the crude oil producing industry which was still viable and provided the major source of employment and income to the Petrolia region, or to lower crude oil duties and retain duties on imported refined to provide employment in Sarnia and to protect Imperial's interests in Canadian refining. As an added measure to persuade the government to reduce the duty on crude imports, Imperial began to scale down its Sarnia refining operations. In 1903 the Sarnia refinery employed 400 workers (who worked 12 hours a day, 7 days a week for 52 weeks a year, at an average salary of \$1.50 per day)<sup>25</sup> but in 1904 when the tariff question was being disputed, the refinery staff had been reduced to 160 workers.<sup>26</sup>

Faced with pressure from the town of Sarnia and Imperial to reduce crude oil import duties and retain duties on imported refined, from the majority of Petrolia producers to retain a duty on imported crude, and from consumers who wanted lower prices similar to those in the U.S., the government passed legislation in June of 1904 which was a compromise to all groups concerned.

Canadian consumers were the group least affected by the government legislation. The rate of duty on light refined products and cheaper lubricating oils was reduced from 5 cents to 2-1/2 cents per gallon, while the rate of duty on kerosene - still the greatest demanded oil product - was reduced by only 5 percent.<sup>27</sup> Duty rates were also reduced

<sup>25</sup> Ewing History, Ch. VIII, p. 67.

<sup>26</sup> Ibid., Ch. V, p. 37.

<sup>27</sup> Report on Reference No. 84, p. 164.

slightly on paraffin products leading to a slight reduction in final prices for consumers, but the much higher price structure in Canada remained after this legislation.

The Petrolia producers were given ample incentive from the 1904 legislation to continue their operations. The duty on imported crude was removed for certain grades of crude oil and as a compensatory measure to Canadian producers, a bounty of 1-1/2 cents per gallon was established by the government to stimulate Canadian crude oil production.<sup>28</sup> In other words, the federal government subsidized Petrolia crude oil producers over 50 cents per barrel of oil which approximated the total costs of producing the oil. With the exception of temporary oil discoveries around Tilbury in 1907, the bounty did little to stimulate actual production as the Petrolia region was in a natural decline. The bounty remained in effect until 1925 when increased oil production from Alberta warranted bounty removal; in total the government paid over 3 million dollars on bounties to the Canadian crude oil industry of which in excess of \$1,900,000 was paid between 1905 and 1911.<sup>29</sup>

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<sup>28</sup> Ibid.

<sup>29</sup> Ibid, p. 163-165. For some inexplicable reason, the bounty payments ended in 1927 although the legislation clearly stated that no bounty was to be paid after July 1, 1925. Regarding the total bounty payments, the figures in Reference No. 84 (p. 184) differ from those given in Macleish Op. cit., p. 282. The small differences between these figures may be due to variations in the calendar years (Macleish) and fiscal years (Reference 84). O. J. McDiarmid in his book entitled Commercial Policy in the Canadian Economy (Cambridge, 1946) mistakenly stated that between "1904 and 1908 crude petroleum received over \$13,000,000 in bounties" (p. 245 footnote 13). His source cited was Sessional Papers Vol. XLII (1907-1908) No. 18, Paper No. 93 which in fact were the same figures used in Reference No. 84. McDiarmid quoted the total bounties paid between 1904 and 1908 on all products; the bounty on oil between 1904 and 1908 amounted to \$1,204,135.-39 (Sessional Papers p. 3).

Imperial's original and revised demands for duty reduction on imported crude were more than met by the 1904 legislation. The duty on crude and gas oils of a lighter specific gravity was levied at 1-1/2 cents per gallon while crude oil of a heavier specific gravity was allowed duty free into Canada.<sup>30</sup> This difference in the quality of crude allowed into Canada was to ensure that Canadian refineries would use similar oil to that of Ontario's.

This specific gravity difference was of major significance to Imperial's refining operations because oil in the U.S. of a similar specific gravity to Ontario's was the Lima oilfields in Ohio and Indiana which had been under Standard control since 1885. The close proximity of the Lima oilfields to Sarnia and the smaller Canadian demand for oil from this region (which was in a production decline) made it profitable for Imperial to increase crude imports duty free. On company estimates made in June of 1904, the Sarnia refinery could expect a yearly profit of \$566,076.85 or 76.65 cents per barrel based on using around 424,000 barrels of Ohio crude and 324,000 barrels of Canadian crude to supply the Ontario and Quebec regions with oil products.<sup>31</sup>

The duty removal on crude and retention of refined oil duties gave the added stimulus for Imperial's Sarnia refinery to maintain its dominant position in Canada. The Frasch desulphurization process was utilized on a larger scale by Imperial; in 1904 Imperial paid \$27,833.02 in royalties to the Solar Refining Company for the Frasch license fees.<sup>32</sup>

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<sup>30</sup> Ibid., p. 163.

<sup>31</sup> Ewing History, Ch. V, p. 45.

<sup>32</sup> Ibid., Ch. V, p. 40-41.

The refinery resumed employing 400 workers by 1907-08 and by 1911 refining capacity had increased from 2395 barrels per day in 1907 to 3,997 barrels per day by 1911.<sup>33</sup>

With the resumption of employment and increase in refining capacity Imperial could apply these two measures to argue for a retention in duties on refined imports. As Ontario crude oil production naturally declined after forty odd years of extensive oil drilling and with it the many hundreds of jobs dependent on crude oil, the continuance of the Imperial refinery in Sarnia to justify an artificially high price structure across all of Canada was a large price for Canadians to pay.

#### 5. Competition

Imperial was not the only oil company operating in Canada during this period. There was competition to Imperial mainly in retailing on a regional basis, but Imperial's monopoly position was not seriously threatened on a national level. In the crude oil stage of production, Imperial's investments increased until 1901, but even that investment was considered minor in the company's operations. At the refining and marketing stage of production, there were only two other oil companies of any note in Canada competing with Imperial; the Canadian Oil Refining Company of Petrolia organized in 1901 and the British-American Oil Company of Toronto formed in 1906.

The most effective barrier to entry for potential competitors to

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<sup>33</sup> Ibid., Ch. VI, p. 17 gave the increased refining capacity figures. Employment figures for the refinery in 1907-08 are found in Report on the Mining and Metallurgical Industries of Canada, 1907-1908, p. 429.

Imperial was a regular access to U.S. oil supplies. The formation of Canadian Oil Refining Co. in 1901 was most likely based on the possibilities of continued Canadian crude oil production supplemented with American crude. Formed by two established Petrolia producers James McCort and John Kerr, along with businessmen from around Toronto and oilmen from Philadelphia and Tittusville, Canadian Oil had access to U.S. crude, but not enough to compete on a national scale. Just prior to the June 1904 government legislation affecting import duties, in April of 1904 the company merged with eight other independent oil companies in Canada (including Sun Oil Refining Co. of Hamilton and Gall-Schneider Company of Montreal) under the Canadian Oil Company Limited with a capitalization of one million dollars. This merger provided competition to Imperial on a wider scale, but financial problems in 1907 forced Canadian Oil into bankruptcy closing down the Petrolia refinery. In November of 1908, Canadian Oil's assets were purchased for \$400,000 by the National Refining Company of Cleveland, a relatively small U.S. refining company independent of Standard. With American ownership and a steady supply of imported crude and refined oil, Canadian Oil continued its operations in refining and marketing but was not a major impediment to Imperial's monopoly position.<sup>34</sup>

Like Canadian Oil, the British-American Oil Company's existence depended on a regular access to independent oil supplies from the U.S.

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<sup>34</sup> Information on Canadian Oil can be found in Saywell op. cit., p. 69-72 and Ewing's History, Ch. VI, p. 20-21. There are a few discrepancies over certain aspects of the Canadian Oil Company Limited. Saywell (p. 71) stated the National Refining Company of Cleveland was a "large American concern", but according to Hidy's Pioneering in Big Business op. cit., p. 404, p. 749n. 34, and p. 776n. 39, the National Refining Company was referred to as being one of the refineries that Bushnell acquired in 1898.

Formed in 1906 by Canadian and American businessmen, B-A was primarily a small retailer in Toronto until 1908 when a refinery was acquired on Toronto's waterfront. This refinery was quite small compared to Imperial's; in 1911 B-A's refining capacity was 24,000 barrels per month or about what Imperial's Sarnia refinery could process in six days. B-A was to be Imperial's major competitor because of its access to American crude and setting up its own integrated operations. But as B-A increased in size, it was a little known fact that in 1911 Jersey Standard considered purchasing B-A for its refinery on the strategic waterfront in Toronto, and sometime later Imperial purchased \$900,000 of B-A's \$3,000,000 authorized stock.<sup>35</sup> Whether Imperial had a controlling interest in B-A has never been documented, but the fact that Imperial became part owner of one of its major competitors gives little credence to the notion of fierce competition amongst the few oil companies in Canada.

Ewing's History suggested that competition from rival oil companies like B-A and Canadian Oil did have an effect on Imperial's profit position during the latter part of this transition period.<sup>36</sup> Between 1899 and 1904 Imperial's net operating profits and dividends from Queen City amounted to \$3,402,816.60. Earnings continued to increase reaching a high of \$1,051,406.84 in 1907, but from 1908 to 1910 earnings dropped to \$934,000 in 1908, \$903,000 in 1909, and \$845,046 in 1910.<sup>37</sup>

Whether competition from rivals was the major reason for the decline in Imperial's earnings after 1907 is doubtful. Earnings per se do not

<sup>35</sup> Ewing History, Ch. VI, p. 21-23 and Ch. IX, p. 50-51.

<sup>36</sup> Ibid., Ch. VI, p. 18.

<sup>37</sup> Ibid., Ch. 5, Appendix I, p. 72, Ch. VII, p. 6.

necessarily reflect the degree of competition within the industry. There are other influences. As Table 5 below indicates, Imperial's share of the kerosene and naptha and gasoline markets did not decline (with the exception of Winnipeg and Halifax's naptha and gasoline market) after 1906:

Table 5  
Annual Sales of Kerosene and Naptha and Gasoline  
in Canada by Imperial Oil :  
1906 and 1910  
In barrels of 42 winegallons

Region	Kerosene				Naptha and Gasoline			
	Quantity		Per Cent		Quantity		Per cent	
	1906	1910	1906	1910	1906	1910	1906	1910
Toronto	213,899	227,029	82.4	85.0	52,217	107,111	81.9	95.3
Montreal	130,856	166,793	79.1	83.4	27,117	60,846	83.2	84.2
St. John	43,193	49,682	85.0	90.1	3,383	14,838	87.6	87.5
Halifax	55,887	59,568	93.9	96.1	4,192	15,885	97.2	92.3
Winnipeg	94,957	118,540	79.0	64.0	25,248	119,117	66.8	62.2
Vancouver	-	33,258	-	-	-	42,667	-	-
	<u>438,802</u>	<u>635,870</u>			<u>112,157</u>	<u>360,464</u>		

SOURCE: Hidy and Hidy, Pioneering in Big Business, Table 42, P. 474-475.

One possible explanation for Imperial's decline in earnings was the apparant overexpansion in the West. In 1904 Imperial had 6 bulk stations and depots in the West and by 1911 with the rapid settlement of the area, Imperial had 120 bulk stations and depots. Plant investment in the West was over \$760,000 in 1909 and \$1,061,494.34 in 1911.<sup>38</sup> This large fixed expenditure was made during a time when Imperial's net earnings

<sup>38</sup> Ibid., Ch. VI, p. 11.



declined and was compounded by the apparent failure of Imperial to deter entrants into the relatively new and unstructured market.<sup>39</sup>

Imperial's earnings do not give the true picture regarding the strong financial position that Imperial had gained during this period. Net earnings were approximately \$3,000,00 for the four years between 1907 and 1910, but total dividends paid during those years totalled \$4,280,000. These dividend payments excluded dividends of \$300 per share in 1907 when Imperial increased its capitalization to \$6,000,000 and issued 30,000 additional shares to existing shareholders through a three for one stock split. Imperial's financial position was strengthened by its surplus funds, which were made up of earnings and capital appreciation (inventory gains from price fluctuations). From these funds, Imperial loaned Jersey Standard \$1,200,000 in 1906, and the surplus in 1907 was over \$5,000,000. By the end of 1911, Imperial's undivided profits were well over \$2,500,000, so that while net earnings had officially declined, Jersey Standard's 80 per cent ownership of Imperial and sound management practices had turned Imperial into a very profitable subsidiary.<sup>40</sup>

As events in the U.S. regarding anti-trust proceedings threatened the financial and market position of the Standard Oil Trust, Imperial's operations in Canada contributed a stable investment for Jersey Standard.

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<sup>39</sup> According to Winnipeg's Henderson's Directory, there were three oil companies in Winnipeg by 1903; by 1906 the number of companies had increased to six and by 1910 there were 14 oil companies listed in Winnipeg. The majority of companies were listed as oil wholesale dealers and oil manufacturers, with the major dealers being Imperial, Canadian Oil, The Winnipeg Oil Company Ltd., Prairie City Oil Co. and McColl Brothers & Co.

<sup>40</sup> Ewing History, Ch. VII, p. 6.

With little actual Canadian managerial participation in the direction of Imperial, the company's monopoly position across Canada was totally dependent on the affiliation of Imperial into the Standard Oil network of companies in the U.S. Imperial as such was not a vertically integrated company. It had no investments in crude oil production. But this did not deter from the fact that Imperial operated as an extension of Jersey Standard which had producing subsidiaries in the U.S. Imperial was able to take advantage of its reliance on Jersey Standard to import both crude and refined as Canada's production naturally declined. With the famous anti-trust decision of 1911 which 'broke up' the Standard Oil Trust, this judicial decision was to have a profound effect on the structure both of Imperial and the oil industry in Canada.

### III. THE 1911 DECISION AND ITS EFFECT ON IMPERIAL

In May of 1911, the Standard Oil Trust was convicted under Section I of the Sherman Act to have combined or formed a conspiracy in restraint of trade and under Section 2 of the same act Standard was found guilty of the specific intent to monopolize the U.S. oil industry.<sup>41</sup>

<sup>41</sup> The Standard Oil Case (1911) has been one of the most discussed legal cases in the study of industrial organization. For a more in-depth analysis of this case, see Blair, John, Economic Concentration, (New York: Harcourt Bruce Jovanovich Inc., 1972); Blair, John, The Control of Oil (New York: Pantheon Books, 1976); Cassady, R., Jr. Price Making and Price Behavior in the Petroleum Industry (New Haven: Yale University Press, 1954); Cookenboo, L. Jr., Crude Oil Pipelines and Competition in the Oil Industry, (Cambridge, Mass.: Harvard University Press, 1955); Dirlam, J.B., "The Petroleum Industry" in The Structure of American Industry, Walter Adams, ed. (New York: The Macmillan Company, 1954); Gibband Knowlton op. cit.; Rostow, R.V., A National Policy for the Oil Industry, (New Haven: Yale University Press, 1948); Singer, E.M., Antitrust Economics: Selected Legal Cases and Economic Models, (New Jersey: Prentice-Hall Inc., 1968).

From sixty-five subsidiary companies in predissolution days Jersey Standard was ordered by the U.S. Supreme Court to divest its control from thirty-three of these companies. With the re-structuring of thirty-two subsidiaries, Imperial became one of Jersey Standard's most important subsidiaries. For example, Imperial's net earnings in 1913 of \$4,748,000 made up 10 per cent of Jersey Standard's total earnings and Imperial was the second largest subsidiary (behind the Standard Oil Company of Louisiana) in the reorganized corporation.<sup>42</sup>

The 1911 dissolution decision in the U.S. was the prime motive behind the basic formation of the modern corporate structure of Imperial that did not fundamentally change for the subsequent forty-five years. Imperial's corporate structure was now modified out of necessity; predissolution subsidiaries like the Standard Oil Company (Indiana), the Standard Oil Company (California) and the Standard Oil Company of New York which had integrated Imperial's operations into their own and had controlled Imperial's financial records, were divested from Jersey Standard control from the 1911 decision. Imperial's monopoly position across Canada was not threatened by the initial entry of these three subsidiaries which had been intimately aware of Imperial's operations in Canada, although both the Standard Oil Company (California) and the Standard Oil Company of New York were to set up regional operations in British Columbia and Newfoundland respectively.

Control over Imperial shifted from the former split control by the Standard Oil subsidiaries to a more cohesive direct control by Jersey Standard because of the legal precedent in the U.S. As a means to

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<sup>42</sup>Ewing History, Ch. VIII, p. 85.

retain Imperial's market position in Canada, Jersey Standard's strategy was to de-centralize Imperial's operations into the five distinct geographic regions in Canada (as outlined in Chart 1) to ensure a strong co-ordinated company on the national level. With this de-centralization came a managerial shift to Canada where company records and day-to-day operational decisions were more independently handled by the Imperial staff in Canada. The five regions were broken down into districts with agents distributing Imperial products to wholesalers and retailers. Divisional managers reported to senior executives in Toronto who were for the most part, functional specialists.

This managerial shift and re-structuring of Imperial enabled it to assume more autonomous responsibilities from Jersey Standard to meet the changing market conditions in Canada. But, otherwise, Jersey Standard never relinquished any noticeable control over Imperial. Large expenditures, Imperial's capital changes in capitalization, legal points and problems of high policy were all determined by Jersey Standard executives in New York or by their appointed executives in Canada.<sup>43</sup>

No other individual had a greater impact on Imperial's and also Jersey Standard's policies than did Walter C. Teagle. Teagle had previously worked for the Standard Oil Company of New York as head of distribution in Europe, and was a director of Jersey Standard in 1909 and vice-president in 1911. With the dissolution Teagle was president of Imperial from 1912 to 1917. He went on to become Jersey Standard's chairman and chief executive officer from 1917 to 1932 and chairman until 1942.

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<sup>43</sup>

Ibid., Ch. VIII, p. 20.

With Teagle's expertise in foreign subsidiary operations, his appointment as Imperial's president also raised the probability that Imperial was to become Jersey Standard's holding company for foreign subsidiaries. As Ewing's History pointed out, the direct control over Imperial by Jersey Standard also gave Jersey the option of making Imperial the headquarters of not only the other foreign subsidiaries, but the parent company as well:

"The dissolution left Jersey Standard in control of a number of foreign companies but considerable doubt existed in the minds of the company lawyers as to the eventual position of these companies under the decree... perhaps in the future the ownership might be questioned. Consideration, therefore, was given to the question of moving the head office of Jersey Standard to Canada where the baleful influence of the Sherman Act would not extend."<sup>44</sup>

Jersey Standard never had to legally shift its headquarters as a result of the 1911 dissolution decree. But the formation of the International Petroleum Company in Peru in 1914 as an Imperial subsidiary and also the control of Jersey Standard's overseas subsidiaries by Teagle in Toronto indicated that Imperial's structure shifted to a foreign holding company in addition to expanding operations and developing separate subsidiaries in Canada.

Under Teagle's presidency, Imperial's strategy for control of the Canadian market was through the construction of four new refineries for the five distinct regions in Canada. This refinery construction was most likely an effect of the 1911 dissolution decree because of the additional functions Imperial undertook to assume its more autonomous nature in Canada. Coupled with the strong financial control over

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<sup>44</sup> Ibid., Ch. VII, p. 14.

Imperial by Jersey Standard and the change in Imperial's corporate structure to dissipate any threat of further prosecution under the Sherman Act, Imperial's structural adjustment to meet the changing market conditions in Canada and elsewhere resulted in Imperial becoming Jersey Standard's most important foreign subsidiary.

#### IV. CANADA'S COMBINES LEGISLATION AND IMPERIAL'S RESPONSE

At the time of the 1911 court decision in the U.S., similar antitrust legislation in Canada was embodied in the Combines Investigation Act (C.I.A.). Passed by the federal government in 1910, the C.I.A. reflected the view of Canadian legislators that large industrial companies like Imperial did not, by their national monopoly position, pose any violations to Canada's competition policy. Mackenzie King, who helped formulate the C.I.A., stated at the time of the Act's inception that the "legislation is in no way aimed at trusts, combines and mergers as such, but rather only at the possible wrongful use or abuse of their power...."<sup>45</sup>

King wanted to avoid what he felt was the excessive enforcement of the Sherman Act in the U.S. There, many large corporations were being convicted under the 'per se' application of the Sherman Act where all restraints of competition were considered illegal. To differentiate Canada's anti-trust legislation from the Sherman Act, the C.I.A. was directed, not against all restraints of competition, but against those whose harmful effects towards consumers or producers could

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<sup>45</sup> Ball, John A., Canadian Anti-trust Legislation (Baltimore: The Williams & Wilkins Company, 1934), p. 38.

be proven.<sup>46</sup>

However, the 1911 Standard Oil case in the U.S. made the intent of the C.I.A. in Canada more applicable to prosecute monopolies. Standard Oil was found guilty by the 'rule of reason' interpretation of the Sherman Act (rather than the 'per se' application) where unreasonable, but not all restraints of trade were found to be illegal. This discretionary interpretation of the Sherman Act could have been applied to Canada's legislation which was worded so that similar unreasonable or 'unduly' restraints on competition were also considered illegal.

The similarity between the C.I.A. and the 'rule of reason' interpretation of the Sherman Act ended with the intent of the legislation. The structural framework of the C.I.A. differed from the Sherman Act so that companies like Imperial had little to fear in terms of prosecution under the C.I.A. In the Standard Oil case, the U.S. Attorney General, under the direction of President Roosevelt, had brought legal proceedings against Standard, and the financial resources of the U.S. government were used to prosecute Standard. In Canada, the C.I.A. was structured so that any six individuals could pursue the costs of initiating legal proceedings against companies suspected of violating the Act. With a Board of Commissioners appointed to investigate the charges, there was no way to provide continuity in administration of the legislation and determine whether the board's recommendations were being carried out.

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<sup>46</sup> Reynolds op. cit., p. 137-138.

The few companies that were charged under the C.I.A. were not thoroughly investigated to find any 'abuse of their power'. King felt that publicity would be a capable deterrent for companies not to violate the Act, but this was not an effective measure in Imperial's case. The press had very little information as to how Imperial conducted its operations as the following examples indicated:

-- As the company increased its market capitalization and allotted more shares to finance new expansion towards the end of 1911, a prominent member of the Liberal party, Sir George Gibbens from the London district, threatened Imperial with legal action if his share holdings were not increased to his satisfaction. To avoid any undue publicity, Imperial secretly allotted an extra 100 shares to be divided between Gibbens and two of the company's original founders, Englehart and Smallman.

-- Members of Parliament (mainly from around Petrolia) were given the opportunity to purchase the valuable Imperial stock in return for speaking out for the company or acting as Imperial's interests dictated.

-- Probably the only published source on oil during this era was Petroleum in Canada written in 1916 by Victor Ross, an Imperial executive who incorporated in his book Teagle's wishes for strong tariff support in the Canadian oil industry.

-- To avoid public acknowledgment of Standard's 80 per cent ownership of Imperial, Teagle wrote to W. J. Hanna, Imperial's legal counsel, that an article on Imperial for Moody Manual Co. in 1916...

'made no mention of the stock which the Standard Oil Co. (N.J.) has in the Company.'



-- C. O. Stillman, Imperial's president after Teagle left in 1917, continued the myth of Imperial being a Canadian company by publicly stating in 1919 that ... 'Imperial is a ... distinctly Canadian corporation with a very large and influential body of Canadian and British as well as American shareholders.'

-- There was also little public attention given to the fact that two of Imperial's subsidiaries, the Winnipeg Oil Co. and the Consumers Gasoline Supply Co. were secretly owned and operated by Imperial with their dividend payments included in Imperial's accounts as income from miscellaneous investments.<sup>47</sup>

Even if Imperial had been investigated and found guilty of monopolizing the Canadian oil industry to the detriment of consumers or producers, there was no specific framework in the C.I.A. legislation to strengthen competition in the market. Competition to Imperial was virtually non-existent on the national level, and with scant attention given to the ineffective regulatory powers in Canada's Combines Investigation Act, Imperial's unrestricted monopoly was left unchecked.

## V. CONSOLIDATION FOR THE FUTURE

### 1. Refining Monopoly

Both the Canadian and American anti-trust legislation failed at the time to recognize the monopoly power exerted by Standard Oil in the U.S. and Imperial Oil in Canada. While the U.S. courts had found

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Ewing History, Ch. VII, p. 21; Ch. VIII, pp. 24, 25, 29, 33, 40.

Standard guilty of certain unlawful business practices, which stifled competition, it has been stated that with the dissolution of the Standard Oil Trust the "economic links of the former whole remained, despite the change in corporate structure."<sup>48</sup> This was because the assets of the parent company were distributed among its own shareholders so that the economic power of Standard was in the hands of those who possessed it before dissolution.

The reorganization of the various Standard Oil subsidiaries into separate operating companies with mutual interdependent shareholder ties resulted in the U.S. oil industry being dominated by companies associated with the original Standard Oil Trust. Certain basic conditions such as increased market demand for diverse oil products (especially gasoline) and the discovery of oil fields in the U.S. mid-continent affected the structure of the industry in that firms like the Texas Company and the Gulf Oil Corporation expanded from their production base into large integrated companies able to compete with the individual Standard Oil companies. As the list of major oil companies in the U.S. increased to perhaps a dozen companies, control over the the market was exerted through the extensive 'network' of transportation facilities like pipelines, strategically located refineries, and distinctive marketing regions.

Canada also experienced an increase in demand for oil products, but with a near total dependency on the U.S. for crude and refined oil, Canada's supply position became more integrated into the U.S. network.

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<sup>48</sup>Dixon, D.F., "The Growth of Competition Among the Standard Oil Companies in the United States, 1911-1961" in Business History, Vol. IX, No. 1 January 1967, p. 5. See also Blair, John M. The Control of Oil (Pantheon Books, New York, 1976), p. 127.

Access to American supplies was a strong barrier for potential entrants in the Canadian market, and competitors like British-American and Canadian Oil were successful because of their ownership connections into the U.S. network. Imperial's monopoly position in Canada was strengthened by its easy access into the American network through the parent company's corporate connections. With this easy access, Imperial's strategy for control over the supply of oil entering Canada was through the construction of refineries in the distinctive geographic and market regions of Canada where the anticipated increased demand for products could be controlled on a regional level by forcing marketing competitors to be dependent on Imperial as the supply source.

The refineries constructed by Imperial are presented below to illustrate the relative rapid expansion of the refinery chain across Canada and the increased refining capacity between 1911 and 1920-21.

Table 6

Imperial Oil Refineries

Location	Date Constructed	Initial Refining Capacity (Barrels per Day)	Refining Capacity by 1920-1921 (Barrels per Day)
Sarnia	1898	4,000	10,000
Ioco, B.C.	1915	1,000	2,300
Regina	1916	2,000	3,100
Montreal	1916	100	4,200
Halifax	1918	3,500	7,000

SOURCE: Gibb & Knowlton op. cit. Appendix 2 TABLE VIII, p. 678-679 and Ewing History, Ch. XI, p. 21-45.

Ewing History stated the additional refineries were a result of the 1911 dissolution,<sup>49</sup> but had this been the only reason, the refineries

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<sup>49</sup> Ewing, History, Ch. XI, p. 21.

would have been constructed at an earlier date to remove Imperial's dependence on the various Standard Oil companies. The 1911 decision was one legal factor influencing Imperial to increase refining capacity, but the development of a refinery chain such as Imperial's was equally influenced by regional local conditions and securing crude oil supplies in the various geographic regions.

Sarnia's refining capacity was increased to meet the changing demand conditions and a pipeline from Cygnet, Ohio, to Sarnia was built in 1913 to take advantage of the duty savings and the cheap transportation costs associated with the pipeline. Ioco's construction coincided with the development of the International Petroleum Company in Peru (which was to become a major source of crude oil for Ioco) and the high demand fuel oil market in B.C. warranted a refinery. As demand increased on the Prairies, Regina's refinery was completed after crude oil supplies were secured from Wyoming and where a pipeline was built to Regina. Montreal's refinery was built as a result of local conditions such as the high demand in Quebec, the deep-water port for crude imported mainly by tanker, and the availability of Mexican crude with its asphalt base which led to the Montreal refinery having a monopoly in asphalt manufacture for Canada. The first World War was an obvious stimulant for oil products, and was an instrumental factor in the construction of the Halifax refinery (which was started in 1916) as the location served as a transportation link to England and the refining capacity was ample to supply the Maritimes.<sup>50</sup>

A prerequisite for the refinery construction was in securing supplies of crude oil through Imperial's connection with Jersey Standard.

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<sup>50</sup> Ibid., Ch. VIII, p. 34-35; Ch. XI, p. 30-37.

Halifax, Montreal, and Ioco were mainly supplied by Jersey Standard subsidiaries where tanker transportation costs were low. The Cygnet pipeline was connected to the newly exploited Mid-Continent oilfield in the U.S. where the Carter Oil Co., a Jersey Standard producing company, acted as a non-profit jobber for Imperial, and the Regina area had stable crude oil supplies that Teagle had negotiated for. In total, the supply situation was linked into Jersey Standard's over-all operations in which Imperial was in effect a vertically integrated company that had control over supply and was in the position to plan capital investments.

The refinery expansion was financed for the most part by increased capitalization; in 1913 Imperial's subscribed capitalization was \$6,000,000, and by 1915 it had been increased to \$50,000,000 with Jersey Standard retaining its 80 per cent ownership control over Imperial. The increased capitalization was to expand other facilities as well but the emphasis on growth was clearly towards a national refinery monopoly. In 1916 alone, Imperial spent almost \$6,000,000 on refinery construction with the bulk of that amount being spent on Sarnia and Montreal.<sup>51</sup>

Imperial's refineries were integrally tied into Jersey Standard's operations, but as this system was being established (and even upon completion) Imperial was also able to utilize the corporate connections to the disaffiliated Standard Oil companies. After the dissolution Imperial still received refined products from Standard Oil (California) and the Ioco refinery depended in part on crude oil supplied by Standard

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<sup>51</sup> Ibid., Ch. VIII, p. 44 and Ch. XI, p. 21.

Oil (California). Standard Oil (Indiana) continued to supply products for Imperial in the mid-west, Imperial lubricants were supplied by the Vacuum Oil Co., Standard Oil (Ohio) helped Imperial in the distribution of products by motor truck, and Standard Oil of New York aided Imperial in developing the sale of packaged oil in Canada.<sup>52</sup>

## 2. Technical Innovation

Another factor in conjunction with the disaffiliated Standard Oil companies which influenced Imperial to construct the refinery chain came in the area of technical innovation. As the demand for gasoline increased, refining techniques shifted to chemical analysis of improving gasoline yields. A revolutionary technique which doubled the gasoline yield from crude oil through the use of cracking the distillate fractions under high pressures was commercialized by Dr. W. Burton from Standard Oil (Indiana).<sup>53</sup> Burton apparently studied under Herman Frasch, and later became a refinery manager at the Whiting refinery. By 1911 (before the dissolution) the refining process seemed feasible to Burton, but Jersey Standard directors refused to allocate the \$1,000,000 requested by Burton to construct the pressure stills. After the dissolution, Burton became a director of Standard Oil (Indiana) and under his leadership, the revolutionary process was put into operation at the Whiting refinery in January of 1913 for a reported cost of \$236,000.

<sup>52</sup> Ibid., Ch. VIII, p. 12-14.

<sup>53</sup> For a more detailed analysis of the actual refining process see Gibb & Knowlton op. cit., p. 113-117 and Enos, J. Petroleum Progress and Profits, A History of Process Innovation, (Cambridge Mass.; M.I.T. Press, 1962), pp. 1 - 60.

In January of 1914, Imperial was the first oil company that received the license to use the Burton process from Indiana Standard. The granting of the license to Imperial was not by itself collusion between these companies as Imperial had to pay a fee of \$15,000 per year plus a royalty rate of 25 per cent of the profits from the cracking process, but as Teagle was Imperial's (and in effect Jersey Standard's) negotiator and later became Indiana Standard's international representative to sell the Burton process license, tacit collusion amongst the Standard Oil affiliates was a distinct likelihood.

Licenses for the Burton process were first granted to the Standard Oil group of companies which discriminated against other refiners and restrained competition through patent control. From 1913 until the early 1920's when this refining process became obsolete, the price of gasoline did not decline because of the increased yields and long-run cost savings attributed to the Burton process, but rather increased by the efficient control exerted by the Standard Oil companies; the royalties and operating profits derived from the Burton process during this time period amounted to an estimated figure of \$150,000,000.<sup>54</sup>

Whether Imperial was granted the exclusive rights to the Burton process for all of Canada was a debatable point. Gibb and Knowlton's History of Standard Oil stated that during the negotiations with Teagle, Indiana Standard "would do better to build its own stills in Canada than to accept the figure that Teagle had named. It also became apparent

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<sup>54</sup> Enos op. cit., p. 56, Table 14, p. 309, Appendix Table 2b p. 299. See also Duchesneau, Thomas Competition in the U.S. Energy Industry (Cambridge, Mass: Ballinger Publishing Company, 1975) Table 4-5, p. 161.

that Imperial would not be able to obtain the exclusive rights in Canada that Teagle sought."<sup>55</sup> J. Enos' Petroleum Progress and Profits stated that Imperial did receive the Canadian (as well as European) rights to the Burton process.<sup>56</sup> Given that Imperial was the first oil company to receive the Burton license, plus the refinery chain that Imperial constructed using the Burton process, it would appear from the evidence that Imperial was granted the exclusive right to utilize the Burton process and was the only company in Canada which had access to the patented process.

With the Burton process secured, plus easy access into the American network for crude and refined supplies, Imperial had a distinct advantage over its competitors in Canada. From Table 4 Imperial's share of the gasoline market was approximately 84 per cent in 1910, and by 1921 Imperial's total share of the gasoline market was 79 per cent<sup>57</sup> which indicated that Imperial's relative market position was strengthened by the refinery construction during a time when, for example, the gasoline business in the U.S. controlled by the various Standard Oil companies had declined from 87 per cent in 1911 of the industry total to 65 per cent in 1916.<sup>58</sup> Even before the refinery chain was completed, Imperial's volume of products sold had risen 89 per cent between 1913 and 1917 with net income of well over \$20,000,000. From 1918 to 1920 when the refinery chain was in full operation, Imperial's net income was

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<sup>55</sup> Gibb & Knowlton, op. cit., p. 117.

<sup>56</sup> Enos, op. cit., p. 99.

<sup>57</sup> Ewing History, Table 4, Ch. IV, p. 16.

<sup>58</sup> Gibb & Knowlton, op. cit., p. 192.



\$28,664,070 which illustrated the profitable investment the refinery chain made in Imperial's operations.<sup>59</sup>

### 3. Labor Policy

As mentioned earlier, Imperial's refinery workers at Sarnia around the turn of the century worked long hours with few benefits from the company. As conditions changed in labor relations throughout North America, Imperial became a recognized leader in Canada in the implementation of an industrial representation plan.

One of the most important components to improve labor relations was the joint industrial council which Imperial first introduced in January of 1919:

"The plan provides for the election by free and secret ballot of workingmen's committees in the proportion of one delegate for every 75 employees in each trade. These delegates will sit jointly with all grievances, questions of wage increases, and plans for the social betterment of the workers."<sup>60</sup>

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<sup>59</sup> Ibid., p. 197 and Ewing History Table 2, Ch. VIII, p. 85. From 1912 to 1920 Imperial's net income was \$52,826,533 with over half of that figure made between 1919 and 1920. During and after the war, Imperial was in a period of capital readjustment to finance expansion. Authorized capital stock was increased to \$50,000,000 in 1915 to more accurately reflect the assets of Imperial. Minority shareholder participation was encouraged as Imperial employees had a stock purchase plan first introduced in 1915, but Jersey Standard maintained its 80 percent ownership of Imperial. Dividends paid by Imperial over the 1912-1920 period amounted to \$35,057,096; this included a 100 percent stock dividend of \$12,260,000 in 1915. Imperial Oil stock was a profitable investment during this period; if an original share was purchased for \$100 in 1911, the profit on that one share by 1920 would have been \$1,222.65. See Ewing History, Ch. VIII, p. 44-51; 84.

<sup>60</sup> The Labour Gazette, January, 1919, p. 46.

In addition to the joint industrial councils, Imperial also established an employee insurance plan, old age pensions, sick benefits and an extended plan whereby the 6,000 employees of Imperial could purchase the Imperial Oil Limited capital stock.<sup>61</sup>

The main motive behind Imperial's implementation of an industrial representation plan was a series of two riotous strikes which occurred in Jersey Standard's Bayonne New Jersey refinery in 1915 and 1916. After these strikes (and in conjunction with John D. Rockefeller Junior's labor problems with the Colorado Fuel and Iron Company and the infamous Ludlow Massacre of 1913) Canada's Mackenzie King had been hired by the Rockefeller Foundation to ease labor tensions.<sup>62</sup> Together with Clarence Hicks, King formulated the industrial representation plan which Jersey Standard adopted because of the explicit exclusion in the plan of unionism among its workers.

In Canada there did not seem to be any real threat of unionism among Imperial Oil workers as no strikes occurred during this period. Walter Teagle had earlier expressed his concerns about giving Imperial workers a personal interest in their work,<sup>63</sup> yet he "had sternly held

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<sup>61</sup> Ibid. See also Ewing History, Ch. VIII, p. 74-80. In 1919 the name of Imperial Oil Company Limited was changed to Imperial Oil Limited, because of complicated tax proceedings between the company and the Canadian government over business profits taxes. Imperial Oil Limited was actually formed in 1917 as a subsidiary to evade taxes, and conditions in 1919 warranted the name change. This issue is discussed by Ewing's History, Ch. VIII, p. 51-61.

<sup>62</sup> Gibb & Knowlton, op. cit., pp. 137-150; 570-590.

<sup>63</sup> Ewing History, Ch. VIII, p. 66. In a letter to R.W. Stewart on June 9, 1915, Teagle wrote: "In our organization by far the greater proportion of our employees are occupying positions where the salaries are practically fixed and where there is little or no prospect for advancement. These men discharge their duties in a machine-like manner. I want, if possible, to get them out of the 'machine' class and give them some personal interest in their particular work."

wages and benefits at the absolute minimum consistent with labor peace and had declared that under no circumstances would the company tolerate unionism."<sup>64</sup>

Imperial had implemented the industrial representation plan (after Jersey Standard first adopted it in the U.S.) with mixed results. The main goal of preventing unionism was achieved and the joint councils provided an outlet to improve working conditions. However, without any cohesive bargaining unit among all the various groups of tradespeople, Imperial's workers did not have any real bargaining power and this tended to fragment the councils Imperial established.

#### 4. Competition to Imperial

Competition to Imperial was more on the retail level, and it was during this period that Imperial was able to exert more control over its retail competitors. Both the Winnipeg Oil Co. and Consumers Gasoline Supply Co. had secretly served customers at the retail level, and although both were disposed of by Imperial in 1920,<sup>65</sup> Imperial had publicly entered the retail level by building service stations, expanding bulk facilities and establishing marketing operations to coincide with the refinery monopoly which would force competitors to be dependent on Imperial for supplies.

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<sup>64</sup> Gibb & Knowlton, op. cit., p. 574.

<sup>65</sup> Ewing History, Ch. VIII, p. 36 and Ch. IX, p. 22-24. Consumers was dissolved in 1920, and the Winnipeg Oil Co. was sold to B-A after Imperial had sold its share holdings in B-A.

Imperial, through its integration into Jersey Standard's operations, was in the position to reduce costs over the long run and also to be able to maintain the traditionally higher price structure in Canada. By importing crude oil tariff-free via the American network and abroad by various subsidiaries, Imperial was relatively free from the instabilities and uncertainties of the marketplace. Refining costs had been reduced by the Burton process and also by government legislation in 1917 that lowered the specific gravity requirements on imported crude which in turn increased Imperial's maximum refining yields from the different qualities of imported crude by an additional 50 per cent above the increased yields attributed to the Burton process.<sup>66</sup>

Yet Canadian refined prices were never lowered because of Imperial's cost savings. An inquiry into the high prices of Canadian gasoline by the Cost of Living Commissioner in September of 1918 condemned the pricing practices of independent retailers, especially on the Prairies.<sup>67</sup> Nothing was accomplished by this inquiry as prices examined were on imported gasoline, and not on the separate price structure in Canada that was dominated by Imperial. With 80 per cent of the national gasoline market, an extensive refinery chain across Canada to control supplies, and less restrictive legislation, Imperial was able to continue its national monopoly in Canada without any serious obstructions.

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<sup>66</sup> Ibid., Ch. XI, p. 19-20 discusses the specific gravity changes.

<sup>67</sup> The Labour Gazette, September 1918, p. 773 - 775.

## VI. INTERNATIONAL PETROLEUM COMPANY LIMITED

In 1914, "Imperial Oil formed a subsidiary, the International Petroleum Company to find and develop oil fields in South America to augment Canada's sources of supply. Oil fields were acquired immediately in Peru and in 1920 the I.P.C. acquired the Tropical Oil Company of Columbia which also became a source of crude oil for Canada."<sup>68</sup>

By reading accounts such as the one above on the formation of International Petroleum Company (I.P.C.), one tends to overlook the international aspect of Imperial's history. The formation and early expansion of I.P.C. cannot be overlooked as a mere sequence to the natural expansion of Imperial requiring crude oil supplies, but rather in the international context of a large multinational company like Jersey Standard forming new subsidiaries in underdeveloped countries.

The formation of I.P.C. was not so much a result on Imperial's initiative for a crude oil source, although crude oil exports from Peru were important to Imperial's coastal refineries, but rather the need by Jersey Standard for a western source of crude oil to supply the potential far East market. From the 1911 dissolution decree, Jersey Standard lost operational control over its California crude oil supply and the geographic location of Peru would be able to fill this void. Peru had traditionally been reported in the U.S. Geological Survey since the 1880's as possessing commercial quantities of oil, but under the development of a British oil company - the London and Pacific Petroleum Company - Peru's crude oil region had never been developed for the export potential.

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<sup>68</sup> Purdy, op. cit., p. 39.

Under the direction of Walter Teagle, negotiations for the purchase of the London and Pacific Petroleum Company were initiated in 1913 after Jersey Standard geologists established the feasibility of large proven crude oil reserves in what was known as La Brea y Pariñas Estate that London and Pacific had privately leased from 1889 for a period of 99 years. By August of 1913, three representatives of Jersey Standard interests were elected to the board of London and Pacific and the controlling stock interests were purchased by Imperial Oil in Canada "notwithstanding the fact that Imperial had no producing staff at the time."<sup>69</sup>

I.P.C. was formally incorporated in September of 1914 (after having purchased other smaller oil companies operating in Peru and parts of Chile) as an Imperial subsidiary rather than a Jersey Standard direct subsidiary for several reasons: I.P.C. had its virtual monopoly in Peru and with the bitterness generated between Jersey Standard and the U.S. government over the dissolution, Imperial was utilized so as not to violate Section 2 of the Sherman Act which dealt with monopolies in foreign nations; the British enjoyed more prestige in Peru than did

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<sup>69</sup> Gibb & Knowlton op. cit., p. 95. Unless otherwise specified, the history of Imperial in South America was found in four sources: Gibb & Knowlton History of Standard, 94-104, 366-380; Pinelo Adalberto J. The Multinational Corporation as a Force in Latin American Politics. A Case Study of the International Petroleum Company in Peru (New York 1973), p. 1 - 33; O'Connor Harvey World Crisis in Oil, (New York; Monthly Review Press, 1962), pp. 225-251; and Ewing History which had scattered references to I.P.C. which have been incorporated. Two of the 20 chapters of Ewing's History - that dealing with the history of I.P.C. - were omitted from the study for unknown reasons. It is the opinion of this writer that Ewing History's two omitted chapters would clarify much of the controversy which arose in Peru.

American business which made it possible for I.P.C. to retain the London and Pacific Company with its British minority stockholders and utilize this connection to its advantage while conducting operations in Peru; and finally under Section 4K of the Income Tax Act of Canada, I.P.C. did not have to pay any taxes to Canada since I.P.C. was operating in a foreign country.

Certain Imperial Oil executives performed important functions in the affairs of I.P.C. One of the first directors of I.P.C. was none other than the venerable J. L. Englehart who was most likely a director because of his Imperial Oil shareholdings and was not active in I.P.C.<sup>70</sup> W. J. Hanna was also a director of I.P.C. and as legal counsel for Imperial, he was responsible in obtaining I.P.C. its tax-free status in Canada (in addition to his duty as being Canada's food controller during the first World War). R. V. Le Seur was a Canadian lawyer for Imperial (who later became an M.P. from 1921 - 24 and Imperial president in the 1940's) and acted on behalf of I.P.C. as its legal representative in Peru. On the producing end, A.M. McQueen, who had been J. H. Fairbank's business manager during the 1890's in Petrolia, became a vice-president of Imperial and I.P.C., and was responsible for attaining the crude oil production in Peru. The driving force behind I.P.C. was Teagle who was president of Imperial and I.P.C. and after he became Jersey Standard's president in 1917, G. H. Smith was I.P.C. president and vice-president of Imperial. C. O. Stillman was also involved in I.P.C. affairs as a director, and as both Imperial and I.P.C. headquarters were in the same

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<sup>70</sup> Annual Financial Review, 1915, p. 461. Englehart was a director of I.P.C. until his death in 1921.

building in Toronto, there was close co-ordination of both companies into Jersey Standard's operations.

Upon acquiring London and Pacific, I.P.C. spent an initial amount of \$1,500,000 on geological work and expansion of facilities in order for I.P.C. to be a vertically integrated company. By 1915 crude oil production had reached 5,000 barrels per day from the 400 barrels per day in 1913. The La Brea y Pariñas Estate proved to be a steady supply of crude oil for both the local economy and for export, although in the initial expansion of the company in 1915, Teagle gave the pessimistic opinion that the oil fields would never become great oil producers and that the deposits were showing signs of exhaustion.

Given the low risk factor that I.P.C. purchased an oil field with large proven oil reserves, the cheap extraction costs (especially labor) after the initial capital outlay, I.P.C. fulfilled its function of providing oil for the Jersey Standard subsidiaries which included Imperial.

Perhaps the greatest problem that I.P.C. faced in Peru was the tax issue over the La Brea y Pariñas Estate and the bitter confrontations between I.P.C. and the Peruvian government. Originally the Estate was surveyed to contain 10 pertennencias (400,000 square meters) and the London and Pacific Petroleum Co. had been paying an annual mining tax of \$150. After Jersey Standard interests had purchased the controlling interest, but before the incorporation of I.P.C., the Estate was re-surveyed by the government and found to contain not 10 but rather 41,614 pertennencias. By a 1914 decree, the government insisted London and Pacific pay taxes of \$6 million. Evidently Jersey Standard and Imperial executives felt this important difference in tax payments could be negotiated, because I.P.C. was incorporated after this difference was



known and the expansion of facilities was progressing.

By the end of 1915 once I.P.C. production came on stream, a new government was elected in Peru which made provisions for the Estate to be taxed at different rates based on current exploitation by I.P.C. and a fixed tax rate for 50 years; taxes would then amount to approximately \$620,000 per year. The Peruvian government was split between those who were in favor of attracting foreign investment from companies like I.P.C. which generated employment, taxes, and secondary industries, and between those who felt that Peru would abdicate its taxation privileges for 50 years and have no control over the petroleum resources of Peru.

A temporary compromise over the tax issue was adopted during 1916 and 1917, but in the meantime, Peru needed a \$ 3,000,000 foreign loan to bolster its weak financial position brought on by the war. Peru appealed to I.P.C. and Jersey Standard executives arranged meetings between Peruvian officials and a New York banking group headed by the National City Bank. Peru would be loaned the required funds on the condition that petroleum (along with tobacco and copper) would be taxed for a fixed period of time. Peru refused these demands and the loan negotiations were terminated.

Peru and I.P.C. could not reach a solution over the tax issue and in 1918 matters reached a crisis stage. The La Brea y Pariñas bill, which would have placed the whole issue to an arbitration court, faced probable defeat in Peru's Chamber of Deputies where opposition to I.P.C. was strong. Faced with the possible loss of its investment in Peru, I.P.C. had threatened to close down its operations - a tactic that Imperial had successfully threatened Canada with in 1904. But unlike conditions in 1904 where there was a more receptive Canadian government,

events in Peru during the height of the first World War gave I.P.C. added power over the divided Peruvian legislature with its weak financial position.

The strategy of curtailing operations in Peru was implemented during 1918. At first the tactic was to discontinue tanker shipment of refined oil from Talara - the I.P.C. refinery site on the northern coast of Peru - to Callao where the oil would be distributed to the industrialized region around Lima.

Just the exact time and the circumstances behind the discontinuation of oil shipments within Peru has been an issue among several authors. Gibb and Knowlton's History of Standard stated that since I.P.C. was a Canadian company, the Canadian government requisitioned the two I.P.C. tankers serving Peru in October of 1918 to assist Canada in the war effort. Harvey O'Connor's World Crisis in Oil also supported this view that the Canadian government was responsible for withdrawing the two tankers from Peru.

Adalberto J. Pinelos' A Case Study of the International Petroleum Company in Peru disputes the time and the source behind the requisitioning of the I.P.C. tankers. Pinelo contends that one of the tankers, the Azov<sup>71</sup> was withdrawn by Standard Oil and not the Canadian government around January of 1918 and that the second tanker, the Circassian Prince, was withdrawn in October 1918 by Standard Oil which cut Peru off from its petroleum supply.

Based on information received by the Public Archives of Canada, the Canadian government had never requisitioned either of the two tankers

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<sup>71</sup> Pinelo op cit., p. 17 spelled the Azov as the Azof. Another spelling was the Azow. Based on the references below and from Ewing History Ch. XVIII, p.8 the proper name of this tanker was the Azov.

in question.<sup>72</sup> In early January of 1918 as the Azov was being withdrawn, the British Minister at Lima informed Canada's Governor General of the serious situation if the Canadian government were to withdraw the tanker.<sup>73</sup> Sir Joseph Pope, the Under Secretary of State for External Affairs, submitted two draft telegrams in reply to the British Minister in Lima, one of which W. J. Hanna (I.P.C. vice-president) prepared which read: "Could give reply at once if we knew that amicable adjustment of matters in difference between Company and Peruvian Government will be reached and when."<sup>74</sup> Pope told Prime Minister Borden that he thought Hanna's draft associated the Canadian government too closely with the affairs of the I.P.C., "...and suggests that the contemplated requisitioning of the boat was prompted, not so much by the need of this boat, as by a desire to put the screws on the Peruvian government."<sup>75</sup>

The Canadian government sent an amended draft to the British Minister at Lima which did not tie the Canadian government too closely with I.P.C.<sup>76</sup>, and files on requisitioning of vessels by the Canadian

<sup>72</sup> Letter, A.W. Hill with Glen T. Wright, Archivist, State and Military Records Section, Public Records Division, Public Archives Canada, May 23, 1978. (Specific references from the Wright letter are hereafter designated as "Wright letter" followed by the particular Public Archive reference.)

<sup>73</sup> Wright letter, British Minister, Lima to Governor General, secret telegram, 10 January 1918, Record Group 25, volume 1221, file 144-18.

<sup>74</sup> Ibid., RG 24, Vol. 1221, file 144-18.

<sup>75</sup> Ibid.

<sup>76</sup> Ibid. Governor General to the British Minister, Lima, paraphrase of a cypher telegram, secret, 15 January 1918, copy, in RG 24, Vol. 1221, file 144-18. The amended draft read: "Before taking up this question Canadian Government would be glad to know of position of affairs with respect to matters in difference between Peruvian Government and Company, and what prospect there is of an amicable and early adjustment."

government during the war confirmed that neither the Azov nor Circassian Prince were ever requisitioned.<sup>77</sup> This fact did not deter I.P.C. from implementing their tactic of curtailing tanker shipments, and it would appear from the various sources that I.P.C. publicly used the Canadian government as their reason for withdrawing the tankers.

Regarding the role of the various international embassies in Peru, throughout 1918 Pinelo stated the "American, British and Canadian embassies in Lima kept quiet about the ship requisition scheme and played Standard Oil's game - effectively pulling the rug out from Peru."<sup>78</sup> This was not altogether true because on January 19, 1918, the U.S. State Department, in its mistaken belief that Canada was behind the Azov requisitioning, had urged the Canadian government not to requisition the Circassian Prince because of the serious political and economic problems that would develop.<sup>79</sup> From January until October when the Circassian Prince was taken out of service, the embassies in Peru as well as the Canadian government did not take any explicit measures to prevent I.P.C. from withdrawing its tankers.

By October of 1918, all I.P.C. operations were temporarily shut down. In view of the crisis situation in Peru which had approximately

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<sup>77</sup> Ibid. Deputy Minister of Marine to Sir Joseph Pope, 25 January 1918, RG 24, Vol. 1221, file 144-18; Record Group 42; Department of National Defence, Record Group 24, Vol. 3755, file 1048-31-2, part 2, formerly Naval Intelligence file G 48-31-2, part 2.

<sup>78</sup> Pinelo op cit., p. 19. To this writer's knowledge, Canada never had an international embassy in Peru but rather corresponded through the British embassy.

<sup>79</sup> Wright letter, British Minister at Washington to Governor General, cypher telegram, secret, 19 January 1918, RG 25, Vol. 1221, File 144-18.

one month's supply of oil, the Peruvian Government agreed to submit the La Brea y Pariñas tax issue to international arbitration. I.P.C. operations resumed and the final arbitration, which was passed in 1922, was most favorable to the company. From 1922, I.P.C. was to pay fixed taxes on the Estate for 50 years with export taxes also fixed for a period of 20 years in exchange for the payment of \$1,000,000 to the Peruvian Government in back taxes. By 1921-22 the company's Peruvian operations had fixed assets of over \$48,000,000, and with this added incentive, I.P.C. was able to provide a cheap source of crude oil for its affiliate companies abroad.

As the controversial La Brea y Pariñas Estate tax issue was being negotiated between I.P.C. and Peru, the company was also concerned with obtaining oil concessions in Columbia. Like in Peru with the Estate, the Columbian oilfields were a private concession granted by the government. In Columbia, the De Mares concession was 2,000 square miles, and was controlled in 1916 by an American oil drilling company headed by N.L. Benedum and J. C. Trees who formed The Tropical Oil Company. Unlike in Peru where the oilfields were close to the coast for easy transportation access, the De Mares concession was about 350 miles inland where the crude oil would require pipeline transportation to the coast.

With glowing reports of attainable reserves on the De Mares concession, but with little actual development by Tropical because of a lack of capital and the harsh tropical conditions, I.P.C. sought the purchase of the De Mares concession from the Benedum - Trees group. As a lever in purchasing this valuable oilfield, Teagle had secretly dispatched his personal emissary, James W. Flanagan to obtain land concessions from the government for a pipeline from the De Mares concession

to the port of Cartegena.

A new I.P.C. subsidiary was formed, the Andian National Company Ltd. in June of 1919 with Flanagan as its vice president. For similar reasons as International's formation as a Canadian company, Andian was registered as a Canadian corporation with headquarters in Ottawa and later Woodstock, Ontario.<sup>80</sup> Andian's first president and chairman was Sir Herbert Holt, president of the Royal Bank of Canada, who was no doubt involved in Andian's financial administration. From the host country, Dr. Carlos Urueta, Columbia's Minister to the United States, was a director of Andian and with Flanagan's connections to influential U.S. senators, Urueta was a mediator in the Panama treaty ratification in 1921 and would have most likely aided Andian in securing Columbian land concessions.

Andian was not fully operational until 1927 (during which time this one pipeline had recorded a net investment of \$26,800,000 and a profit of \$5,000,000 in that one year) but the formation in 1919 can be viewed as a tactic of I.P.C. to purchase Tropical. The Benedum-Trees group had realized the vast oil potential of the De Mares concession, but with the possible exclusion to transport the oil to the coast, had little recourse but to sell. In August of 1920, I.P.C. purchased Tropical for \$33,000,000 with J. C. Trees becoming a new director in I.P.C. With this purchase, the required capital for integrating Tropical was furnished by Jersey Standard as well as the technical expertise

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<sup>80</sup> Information on Andian's directors was found in Annual Financial Review, Vol. XXV, p. 167; Vol. XXVL, p. 110 and Vol. XXVII, p. 109.

needed to develop Tropical into a major oil producing and exporting company.

This short history into the formation of I.P.C. in Peru and Columbia provided a good example of how Jersey Standard expanded its operations into underdeveloped countries. This expansion into South America was no doubt stimulated as a result of the 1911 decision in which Jersey Standard was cut off from oil supply sources. By acquiring known oil concessions in both Peru and Columbia, Jersey Standard was in the enviable position of being able to plan and utilize oil production to meet not only the needs of the local economy but for the company's various subsidiaries abroad.

Imperial's role in the operational functions of I.P.C. was important in view of the Imperial executives who were instrumental in the early formation, and the role that I.P.C. fulfilled in supplying the majority of crude oil for Imperial's coastal refineries in Canada. Imperial was in effect the holding company for Jersey Standard's massive investment into South America. By the mid-1920's, the total direct investment by the I.P.C. subsidiaries formed would have totalled more than \$100,000,000 which paid substantial dividends to the parent company, and was also able to operate with a high degree of jurisdictional independence from any specific country.

#### VII. IMPERIAL IN ALBERTA

Imperial's investment in Canadian crude oil production was not on such a grand scale as operations were in South America. Imperial's policy in Alberta from the outset was based on the feasibility of exploration and to be in the position to control the potential oil and

gas reserves. Through the formation of two subsidiaries, the Northwest Company Limited in 1917 and the Royalite Oil Co. in January 1921, Imperial had near total control over the province's oil and gas reserves.

Alberta's oil history dates back to the 1880's when the west was first being settled. Sporadic oil and gas wells had been struck around Medicine Hat and Waterton areas in southern Alberta by the C.P.R. and private wildcatters, but it wasn't until 1913 when oil and gas discoveries around Calgary stimulated a rash of oil land speculation but little actual development.<sup>81</sup>

Imperial's initial entry into Alberta was in the summer of 1914 when Teagle felt the 1913 oil rush to Calgary warranted geological investigations. Since Imperial had no producing staff at the time, two Jersey Standard geologist teams were sent to Alberta and reported that oil exploration did not seem feasible.<sup>82</sup>

Imperial's policy on Alberta's oil prospects were altered when a former Shell Oil geologist, T. O. Bosworth, did contract exploration work for a Calgary group of businessmen. Bosworth found large oil deposits along the Mackenzie River in 1914 and wrote a report outlining the necessary procedures to control the oil region of Alberta:

"To avoid all competition, I strongly advise that you form a controlling company containing the most influential men....

"I advise that you should not direct your own efforts simply to the ordinary program of drilling wells, for in that case you would incur the heavy expenses of

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<sup>81</sup> For a more graphic account on Alberta's early oil history, see Gray op. cit.

<sup>82</sup> de Mille op. cit., p. 151-154, and Gibb op. cit., p. 89-90.



testing the field, after which others would profit by your costly experience.

There is a far brighter and safer prospect for your company if it seeks to control the oil territory, to foster associated companies, and to form subsidiary companies which shall drill the wells. It would then be the business of your company to carry out those branches of the exploitations which control the rest, make the investigations, hold the technical knowledge and secure the valuable territories, which you would assign to the smaller companies in return for royalties on the oil.

You would also provide for the transportation, the necessary railroads, the pipelines, the refineries and what is more important than all the rest, and which would give you complete command of the whole situation, all of the oil produced in the region would pass through your hands to be marketed by you."<sup>83</sup>

Imperial purchased the Bosworth report and Bosworth became a chief geologist for a new subsidiary that was formed in 1917, the Northwest Company Ltd. Although Teagle wanted Northwest ownership to be secret to avoid land speculation by others, the company was an open subsidiary of Imperial after Jersey Standard president A. C. Bedford felt that openness should be the proper procedure in Canada. Jersey Standard held 78 per cent of the initial \$500,000 of capitalized stock in Northwest, but it was soon after a wholly owned Imperial subsidiary.<sup>84</sup>

Northwest was in reality more of an extension of I.P.C. than a distinct Imperial subsidiary. Northwest's producing department was formally a part of I.P.C. with Northwest costs paid by I.P.C. who in turned charged Imperial. A. M. McQueen was president of Northwest and a vice president of I.P.C., and O. B. Hopkins was also responsible

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<sup>83</sup> Ibid., p. 176-177.

<sup>84</sup> Ibid., p. 155, Ewing History op. cit., Ch. XII, p. 10.

for directing the producing operations of both companies.<sup>85</sup> With complete integration into I.P.C. and the technological expertise which was available through the parent Jersey Standard, Northwest was in the position to utilize these connections while Imperial itself was concentrating more on expanding the refining and marketing branches of production.

It would appear from the various sources that Northwest's primary function from 1917 until the end of 1919 was to secure potential oil land leases held by the federal government, the C.P.R. and the Hudson's Bay Company, and to make oil explorations.

Northwest was not alone in its efforts to secure leases in Alberta as the province was being recognized by international companies. The major threat to Imperial in Alberta came from the Shell Oil Co. which was competing with Jersey Standard for potential oil fields worldwide. In July of 1917 (or about the time Northwest was being organized) Shell had applied to the federal government for the exclusive land rights to explore for oil in northern Alberta for the duration of the war and five years after with exemption from custom duties and other concessions from the federal government. This and another application for the exclusive right to explore for oil in Alberta was rejected by the federal government.

In the summer of 1918, Shell altered their proposal to the government which would have radically changed the whole history of the Alberta oil industry had this proposal been accepted. For the exclusive right to search for oil, Shell would have supplied all the necessary funds,

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<sup>85</sup> Ewing History, Ch. XII, p. 18-19.

and shared the net profits accrued from oil development on a 50-50 basis with the federal government. In return, there was to be no import and export duties and no taxation. The federal cabinet took many months to reach a decision on Shell's application, and in March of 1919, Shell's final proposal was rejected.<sup>86</sup>

There was little doubt that Imperial had been instrumental in persuading the federal government to reject the Shell proposal. While Imperial Oil felt that it had a legitimate right to obtain land concessions in Peru and Columbia, the threat of possible exclusion in Alberta by another company brought prompt action on the part of Imperial. Northwest increased its leasing activities and in the spring of 1918, sent two expeditions to the most probable (but not commercially feasible) oil-bearing formations around Fort Norman. While no oil was commercially produced, the campaign to stall Shell's proposal was accelerated. Teagle was by this time president of Jersey Standard, and together with A. C. Bedford, Hanna, Smith, McQueen, and Stillman, decided to lease 200,000 acres in Alberta and the Northwest Territories, and to allot an additional \$1,000,000 in Northwest's exploration budget.<sup>87</sup>

This tactic of actual exploratory work and securing leases would have made it difficult for the government to accept Shell's application. Shell had by this time established small marketing operations in the high demand area of B. C., but there was no indication that Shell had undertaken any exploratory work while the applications were before

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<sup>86</sup> Ibid., Ch. XII, p. 17 discusses the Shell application. See also de Mille op. cit., p. 154, and Gibb op. cit., p. 90.

<sup>87</sup> Ibid.

Cabinet. Shell had concentrated primarily on the political level to secure lease concessions for the probable intention developing the potential oil and gas reserves for export to the U.S.

On the other hand, Imperial successfully countered this proposal through actual exploration. While A. M. McQueen publicly expounded on the high risks that Imperial was undertaking in Alberta's north,<sup>88</sup> he wrote to C. O. Stillman in October of 1919 on Northwest's activities that the "primary object of the two expeditions to the far North was for the purpose of heading off the Shell application, and that object was accomplished."<sup>89</sup>

After the Shell application was rejected, Northwest continued its exploration activities on a scaled down level since there was no competitive threat from any established rival companies. By the end of 1921, a reported \$3 million was spent by Northwest on materials, labor, leasing and wildcatting.

Part of these costs were offset by subsidization from the federal government. In 1921, Imperial's Victor Ross wrote to Sir James Lough-  
eed, Minister of the Interior, that Northwest was going to abandon operations unless more exploration expenditures could be used as a credit on lease rentals on Crown land. With nationalistic overtones, Ross felt that more encouragement from the government was needed for Imperial 'who are interested more than anything else in bringing in a Canadian oil field' and 'that the world is facing an ultimate shortage of

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<sup>88</sup> Edmonton Bulletin, June 30, 1919.

<sup>89</sup> Ewing History, Ch. XII, p. 23.

petroleum, it is of the utmost national importance that the search for oil in Canada be continued with vigour and thoroughness.<sup>90</sup> He also went on record that Imperial would be happy if rivals were to discover oil, but since Shell had given up on Canadian production, there were few rivals capable of competing with Imperial. The government responded by applying 40 per cent of exploration expenditures as a credit on lease rentals which resulted in Imperial drilling four dry wells in 1921 and receiving a federal credit of \$500,000.<sup>91</sup> Even with this subsidization, Northwest scaled down its operations and did little exploratory work until the outbreak of World War II.

Imperial's other subsidiary in Alberta, the Royalite Oil Company, was the controlling company formed along the recommendations as outlined by Bosworth. Although Bosworth was referring to the Mackenzie River area where there were known deposits and where Northwest explored, the control of gas reserves in Turner Valley around Calgary followed closely to Bosworth's plan. Royalite was formed in January of 1921 to take over the properties of the Calgary Petroleum Products Co. (C.P.P.). C.P.P. had been one of the first gas producing companies in Turner Valley to build an absorption plant in 1914 to strip gas of its liquid content. With negligible production, the owner C. A. Dingman, had no

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<sup>90</sup> Royal Commission on the Natural Resources of Alberta (1935) Exhibit 17-D, pp. 7 - 9.

<sup>91</sup> Ibid. , "Brief on Behalf of the Province of Alberta", p. 105-106. Responding to the federal government's oil policy, the province stated: "It is inconceivable that a revenue administration would have set up a credit of \$500,000 for a mere promise to continue the drilling of four wells for one year. It would have been cheaper to collect the revenue, and drill the wells.... Nor would the province have increased these credits by another ten percent as late as 1929, by which time Turner Valley had produced millions of dollars to this same company's subsidiaries."

intention of developing the company into a large-scale operation. In 1915 Dingman offered C.P.P. for sale to Imperial, but Imperial declined entering into Alberta production at that time. In 1920 the absorption plant burned down and with Imperial's previous failure to find significant oil discoveries with Northwest, C.P.P. was bought out by Imperial to form Royalite.

Royalite was 80 per cent controlled by Imperial with the remainder being influential minority shareholders. Sir James Lougheed, along with R. B. Bennett, had done legal work for Imperial's leasing in Alberta, and were both shareholders in C.P.P. and R. B. Bennett was president of Royalite before he became Prime Minister of Canada. This presence was to help Imperial nationally as well as in Alberta where Royalite was to control 75 per cent of Turner Valley production by the late 1920's. By constructing a small refinery in Calgary in 1923, building a pipeline from Okotoks to the refinery, and signing an exclusive gas contract to supply the Calgary Gas Company to the exclusion of competitors, Imperial was in the strategic position to control the potential oil and gas reserves in Alberta.<sup>92</sup>

Both subsidiary companies in Albera were not that important in terms of Imperial's corporate structure. The heavy refinery investment in Canada was planned on the assumption that Canada would be a net importer for many years, and that the operating company structure

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Information on Royalite was found in Ewing History, Ch. XII, pp. 29-32; Beach, F. K., "An Engineer Looks at the Law", Canadian Oil and Gas Industries, Parts I and II, May and June, 1954; House of Commons, Select Standing Committee on Banking and Commerce: Reference, Price of Gasoline (Ottawa, King's Printer, 1932), p. 14.

were based on being dependent on outside sources for oil. Production in Alberta was not a priority in Imperial's operations until the Shell threat warranted action, and the business of controlling Turner Valley was a process that Imperial entered after commercial quantities of gas were discovered. Had Imperial been a national company solely confined to Canada, it would have surely concentrated on a more concerted and sustained effort to explore for oil in Canada, but with control over Canada's oil requirements being met for the most part by Imperial, with the major policy decisions being administered from New York, the major commercial discovery of oil in Alberta was not to be realized for another twenty-five years.

## CONCLUSION

This thesis has attempted to provide an in-depth analysis of the changing structures of the early oil industry in Canada and the evolution process of development which saw Imperial Oil Company Limited emerge as the dominant oil company.

Each of the three time periods covered in this thesis had distinct patterns of growth in terms of supply and demand conditions. The early beginnings saw the rise of an indigenous industry capable of supplying Canada's oil needs, and in fact experienced rapid growth primarily based on the export trade. The formation and expansion of Imperial Oil witnessed the national growth of a dominant oil company supplying the majority of demand across Canada. Imperial's growth was to a large degree dependent on the Petrolia oil supply, and this restraint restricted Imperial's national expansion as demand increased and supply remained relatively stable. This restraint was a factor in the takeover of Imperial by Standard Oil (New Jersey). As Canada became virtually dependent on foreign oil supplies in the latter period, demand conditions changed with the gradual substitution of gasoline from kerosene as the major product in demand, and Imperial's supply system of regional refineries refining imported oil was the base for the future.

The oil industry in Canada has also been a study in the growth of capitalistic enterprise. The early period was not a simple case of small-scale enterprise, but rather a case study of monopolistic



competition struggling towards an oligopolistic structure. In the complex infrastructure of associations and cartel arrangements between producers and refiners, the basis for market control revolved around the export market. Prominent entrepreneurs tended to be refiners although the geographical oil land restraint around Petrolia made it possible for Canadian oil producers to be an uniquely strong group. As the export market became unfeasible, the formation of Imperial through a horizontal consolidation of refiners transformed the industry into a more oligopolistic form of competition with Imperial as the dominant company. With the takeover in 1898, Imperial had an absolute refining monopoly in Canada, and with access to oil supplies via its connections with Standard Oil in the U.S., the industry became a virtual monopoly for Imperial as the few independent oil companies in Canada did not pose any serious competition.

From the maze of companies formed during the early period, more formal corporate organizations emerged as firms became larger and more complex. The internal changes from entrepreneurship to a managerial institutionalized corporation have been examined to illustrate how the industry adjusted to these changes. With the rise of Imperial as the dominant firm, it has been necessary to document the ownership control of the company and how Imperial changed over the years. Certain individuals like Jacob Englehart and Frederick Fitzgerald were prominent managers for Imperial, but as soon as Imperial was acquired by Standard Oil, the company was controlled from New York. With Imperial being only one part in Standard Oil's world-wide oil operations, the system of split-control management took effect. As conditions changed, Imperial corporate structure also changed to form the base of the modern corporation:

the directional responsibilities were built along the line form of management with final policy decisions regarding the company's operations emanating from New York. The development of Imperial subsidiaries in South America illustrated not only the importance Imperial had within Standard Oil but also showed that the corporate structure of a company like Imperial cannot be viewed in purely national terms.

The development of the Canadian oil industry has, from the outset, been integrally linked with developments from abroad, especially the U.S. Americans were greatly responsible for the first oil discoveries in Canada, and as the Petrolia area became more settled, the export trade connections to the U.S.A. and other countries, as devised by Englehart, Sonneborn and Guggenheim, were important factors in the growth of the industry.

Another notable linkage which occurred in the three periods under study can be seen in technological innovation. The three refining innovations and their effects were: the litharge process in the late 1860's which enabled Canadian oil to compete abroad; the Frasch process of the 1880's which opened up a whole new crude oil source for Standard Oil and was a factor in the eventual takeover of Imperial, and the Burton process in 1913 that improved gasoline yields, reduced refining costs, and contributed to Imperial establishing its national refinery chain.

Another important factor in the process of development came in the area of the role of government. As oil became an important commodity in Canada, the industry received ample legislated protection from the government. Tariff restrictions against imported oil products provided the incentive for a distinctly Canadian industry but at the expense of

Canadian consumers generally paying more money for a basically inferior product. The protective measures of the National Policy of 1879-80 was an incentive in the formation of Imperial, and as conditions changed, the legislative changes in the late 1890's were a contributing factor in the takeover of Imperial by Standard. As Canada became dependent on foreign oil supplies, protection to the industry continued even though Imperial was an extension of Standard Oil's worldwide operations.

Canada's anti-combines legislation did not have any effect on Imperial's market control, and the Canadian government's role in the crisis situation in Peru during the first World War illustrated just how ineffective the knowledge was that the government had on an Imperial subsidiary. Finally, the government's role in Alberta was significant in that Shell Oil's proposal to the exclusive oil rights in Alberta spurred Imperial to re-enter Canadian crude oil and gas exploration.

Combining the various factors of growth and development of Canada's early oil industry has shown that while economists and historians alike have tended to ignore the study of oil in Canada's history, the impact of this industry has been an important element in the growth of Canada as an industrialized nation. One of the contributions of this thesis has been to analyse the various strategies and motives behind the manner in which the industry evolved and how Imperial Oil Company Limited conducted its operations. Many of the strategies and concepts of industrial organization theory have been utilized to provide the basic framework for an industry case study.

While the study of oil has become significantly more important in the 1970's, an objective appraisal of the oil industry and its impact can only be assessed once it is known why certain strategies and policies

are undertaken. The market control of oil has, for the most part, been in the hands of private enterprise, and therefore to understand why decisions have been made, it has been a prerequisite to obtain access to their company records. This reminds us once again of the impact of the profit motive, and should act as a guideline of what to expect in the future from the oil companies.

APPENDIXTO LEDUC

The history of Canada's oil industry examined in this thesis is naturally only a part of the total history. The historical development of Imperial cannot be complete without an overview of the company and the industry up to 1947 when the Leduc, Alberta oilfields ushered in a new era for Canada becoming a crude oil producing nation (again). For a serious analysis of the period between 1921 and 1947, some of the major bibliographical sources and an introduction outlining some important highlights are listed below.

SOURCES

John S. Ewing's History of Imperial Oil Limited provides the most extensive source on the period; some of his study was incorporated into the last two volumes of the History of Standard Oil (New Jersey) within the context of Imperial being a Standard Oil subsidiary.

To develop a more documented history of the Canadian oil industry, one initial source would be Lloyd G. Reynold's The Control of Competition in Canada which outlined Imperial's monopoly position around 1940. The various government inquiries which took place during this period are another source of information. The Select Standing Committee on Banking and Commerce: Reference, Price of Gasoline, published in 1932, was perhaps the first inquiry giving a detailed account of how the oil companies conducted their operations in Canada. Included in this inquiry was the 1926 Report of G. T. Clarkson, Esq. On the Prices of Gasoline and Oil Sold to the People of Ontario; and Saskatchewan's 1932 Report of Select

Special Committee Re Gasoline and Petroleum Products Inquiry. The Tariff Board's 1935 Report on Reference 84 - Petroleum and its Derivatives is an excellent source which scrutinized cost accounting procedures of oil companies as did the 1937 Province of British Columbia's Royal Commission on Coal and Petroleum Products, Volume I, Report of the Commissioner Relating to the Petroleum Industry (which was reviewed by E. Forsey in the 1939 edition of the Canadian Journal of Economics and Political Science).

The common sources on the early oil history in Canada, as documented in the bibliography, are also useful for generalizing this period but fail to examine some of the important events which arose. One important area not generally covered in the literature is Imperial's operations in South America. Adalberto J. Pinelo's case study of the International Petroleum Company in Peru examined International's impact on Peru, but did not examine the operational relationships between I.P.C., Standard Oil (New Jersey) and Imperial. With John S. Ewing's incomplete study on Imperial's main subsidiary, there is room for further analysis on this important topic because of I.P.C. being a major source of crude oil supply for Imperial during this period.

## INTRODUCTION

### Basic Conditions

Canada experienced a rapid growth in demand for oil products; except for localized discoveries of oil and gas in Alberta and Petrolia's minor production, all of Canada's oil was supplied from foreign sources.

The 1920's was a period of rapid expansion across Canada as demand for gasoline increased. Imperial was naturally the leader in service station construction, marketing new products, and supplying wholesalers

and retailers with refined oil products.

Conditions changed during the depression within the Canadian oil industry. Because of Imperial's monopoly position, Jersey Standard had an explicit policy of cutting back Imperial's capital expenditures while at the same time charging monopoly prices in Canada in order to increase Imperial's dividends to alleviate the financial pressures of Jersey Standard. The much higher price structure in Canada (as opposed to lower prices in the U.S. brought on as a result of crude oil over-production) attracted new entrants into the industry, and Imperial's monopoly position was seriously threatened.

The war was a stimulative factor in the growth of the Canadian oil industry. By this time there were three major competitors to Imperial; British-American Oil Company, McColl-Frontenac Oil Company, and Shell Oil. Imperial's national monopoly, based on its refineries, was secure in that no other company operated refineries across Canada, but competitive conditions regionally (especially in Ontario and British Columbia) decreased Imperial's market position.

Imperial's corporate structure was changed to fit the changing conditions. Managerial control in Canada was severely hampered by the depression policy of Jersey Standard, but as demand picked up with the war, capital expenditures were increased and Imperial's staff in Canada assumed more autonomous managerial control over the company.

Supply conditions in Alberta affected the growth of the industry. Independent gas and oil discoveries in the 1920's and 1930's were under Imperial control either through acquisition of independents or by controlling output through the transportation and refining advantage. Tax incentives during the Second World War stimulated crude oil production, and Imperial's role in the Canol Project (which was a war effort by the

the U.S. government to re-activate Norman Wells as a precaution against enemies in Alaska) provides an example of how interest in Alberta's oil and gas potential increased. Leduc itself was the culmination of test wells by Imperial, but it should be reiterated that the basis for this discovery came from tests done by Chevron Standard and that it was Jersey Standard's geological staff and not Imperial itself, which was responsible for Canada's new era.

## STRUCTURE

### Economies of Scale

Regional refineries were constructed by Imperial's competitors, but were much smaller in comparison and could not refine the varied products that the larger-scale Imperial refineries could. Imperial's refineries experienced quality problems during the depression because of Jersey Standard's capital restraint policy, but new expenditures during the war on refinery expansion once again ensured Imperial's dominance.

### Mergers and Concentration

This period, 1921-1947, was the basis for the development of four major oil companies controlling the modern oil industry in Canada: Imperial; British-American was to become controlled by Gulf Oil; McColl-Frontenac by Texaco; and Shell. Smaller independents existed within the market structure, but were generally dependent on the majors for oil supplies. There was not a great deal of merger activity in the oil industry, with the possible exception of Imperial's acquisition of independent oil companies in Alberta, for the simple reason that there were few competitors capable of competing against Imperial.



### Number of Sellers and Buyers

Without guaranteed sources of imported oil, the Canadian market was dominated by Imperial. Competition to Imperial was more localized in heavier demand regions where the few independents could arrange oil contracts from the U.S. separate from the Jersey Standard network.

### Product Differentiation

Gasoline and fuel oil were the major products obtained from oil and were among the hundreds of refined oil products available. Maintaining quality standards in the Imperial refinery network was a problem because of a lack of operational control in Canada. This was a factor in stimulating marketing competitors to Imperial because independently imported refined were of superior quality in some instances.

### Barriers to Entry

As the capital requirements for entry into the oil industry on a competitive level grew during the 1920's to meet the gasoline demand, Imperial's strategy of access through its Jersey Standard connections prevented any large-scale competition. However, because of developments occurring in the U.S., this era gradually saw the establishment of the four 'majors' controlling the market and independents operating within localized regions.

### Vertical Integration

Having no crude oil in Canada, competitors to Imperial were not as such vertically integrated because of this crucial prerequisite for integration. With I.P.C. in Peru and Columbia assuming a larger role in supplying crude oil for Imperial, the company was vertically integrated. With additional supply access into the U.S. market, Imperial's vertical integration was an important factor in maintaining its dominance in Canada.

## CONDUCT

### Pricing Behavior

In the early 1920's, a cartel-like Code of Ethics was established in the expanding west by the majority of existing companies which agreed to keep prices up and reduce competition. McColl-Frontenac refused to join and gained entry into this region by undercutting the accepted pricing policy. In the 1930's with Imperial's monopoly pricing, small-scale independents could operate successfully under the 'umbrella' of Imperial's pricing policy. With sophisticated cost accounting methods devised by the oil companies based on the sales realization method (whereby costs fluctuated with changing realized prices which kept prices in the same relation to any costs), the much higher price structure in Canada was maintained. Additional pricing behavior such as base point pricing on imported crude oil, informal price agreements, and price discrimination between fuel oil and gasoline were all tactics used to keep prices up.

### Product Strategy

With gasoline as the major product, a whole new industry was geared towards the automobile. To have greater control over the marketing of gasoline, Imperial's strategy of secret service station affiliates, service station absorption, exclusive dealer contracts, and strong buyer-seller ties at the retail level tended to exert control over the complete distribution network.

### Technical Innovation

Chemical refining analysis had a very significant impact on the oil industry. New refining processes such as the tube and tank (which increased refining capacity and gasoline yields by pumping hot oil at

high pressures) and leaded gasoline were developed by Jersey Standard and implemented by Imperial in Canada. Imperial's research staff at Sarnia concentrated on improving products such as motor oils, whereas the bulk of innovation occurred in the U.S.

## PERFORMANCE

### Production and Allocative Efficiency

With strong market control over the industry, Imperial's transition of growth in the 1920's, cutbacks in the 1930's to increase profits and dividends to its parent company, and another expansion from the second World War all were an integral part in Canada's industrialization. The degree of market control by Imperial is an intriguing point. For example, there is very little published material regarding the legal monopoly Imperial was granted by the Newfoundland government in 1931. Threats of nationalization, and Newfoundland's poor financial status were two factors behind this monopoly, and like earlier conditions in Peru during the first World War, Imperial had the economic and political power to be granted a legal monopoly.

### Progress

Imperial's role as Jersey Standard's most important foreign subsidiary continued throughout this period especially with the role of International Petroleum in South America. Competition increased as Canada's market expanded, but Imperial's future by the end of this era was rosy.

### Employment

Another interesting point of Imperial's history occurred in the field of employment. In 1935-36, Imperial laid off over half of its 14,000 employees. Why? There have been no explanations by any source

and further study on this topic is necessary in the assessment of the company and the industry in general.

#### Role in the Canadian Economy

Oil has historically grown in importance as a nation becomes increasingly industrialized. Being a commodity in a world market, the oil industry in Canada had to act within this world market because of Canada's dependence on foreign oil supplies. Had Leduc been discovered thirty or forty years earlier, it would not have been unlikely that the industry in general would have transformed Canada into a more industrialized nation than it evolved into.

#### Profits

Table 7 below presents the profit and dividend statement of Imperial between 1921 and 1947.

From this table, International Petroleum contributed nearly \$260,000,-000 and was a much larger company than was Imperial solely confined in Canada. Naturally profits do not give the total picture of Imperial's history, but as John S. Ewing expressed in his study, Imperial's attitude 'was to keep prices as high as possible. There was nothing immoral in keeping prices high, whether or not it met with enthusiasm on the part of the consumer; the company was in business for profits alone.'

#### PUBLIC POLICY

The role of government in the development of the Canadian oil industry has always been important and this period of 1921-1947 was no exception. There were numerous inquiries into the industry, especially during the depression as governments became more knowledgeable on the

Table 7  
Imperial Oil Limited  
Income Received and Dividends Paid, 1921-1947

<u>Year</u>	<u>Manufacturing &amp; Marketing Profit</u>	<u>Dividends from Subsidiary Cos.</u>	<u>Net Income after Taxes</u>	<u>Dividends Paid Shareholders</u>	<u>Shares Outstanding</u>
1921	\$ 1,349,235	\$ 1,009,750	\$ 315,156	\$ 4,202,372	1,426,282
1922	7,709,997	2,227,218	9,560,767	4,734,114	1,584,209
1923	2,528,211	1,251,194	5,595,495	6,372,707	1,601,073
1924	7,927,062	3,245,886	13,088,530	4,836,627	1,619,410
1925	7,972,286	2,155,978	11,221,106	6,506,608	6,511,527
1926	14,102,301	3,266,111	17,540,239	8,161,579	6,539,398
1927	5,647,970	3,488,716	13,615,219	9,841,660	6,575,582
1928	16,775,134	3,097,998	22,963,264	8,692,596	6,605,442
1929	15,703,192	6,269,249	26,350,309	13,231,384	26,490,741
1930	7,215,292	8,850,549	19,020,361	26,545,219	26,557,496
1931	8,914,813	8,972,545	18,226,894	13,360,910	26,742,792
1932	4,331,157	9,370,470	14,713,237	13,379,961	26,783,092
1933	3,926,892	10,278,503	14,101,561	13,415,283	26,857,152
1934	3,023,400	22,164,631	25,771,653	24,881,284	26,919,871
1935	2,899,579	23,162,308	25,229,350	33,697,336	26,965,078
1936	3,082,241	23,103,818	25,628,285	33,706,410	26,965,078
1937	3,527,133	25,406,446	26,452,156	33,706,413	26,965,078
1938	3,573,260	24,481,609	25,959,580	33,706,418	26,965,078
1939	5,368,179	17,047,695	19,250,071	26,965,150	26,965,078
1940	7,112,900	14,032,352	17,038,716	16,853,211	26,965,078
1941	5,495,951	10,634,794	16,144,069	13,482,539	26,965,078
1942	7,935,882	9,673,002	14,063,007	13,482,539	26,965,078
1943	8,396,616	9,628,294	15,548,873	13,482,539	26,965,078
1944	9,141,339	9,472,572	16,192,670	13,482,539	26,965,078
1945	11,902,022	9,415,132	16,616,585	13,482,530	26,965,078
1946	14,902,022	5,713,061	17,326,112	13,482,539	26,965,078
1947	15,555,619	5,756,379	20,464,381	13,513,917	27,090,590
	\$ 206,022,933	\$ 271,236,459	\$ 508,198,126	\$ 431,527,098	

Source: Ewing, John S. History of Imperial Oil Limited,  
Table 1, Table 2, Ch. XV, pp. 21, 25; Table 1,  
Ch. XV, p. 9

industry. Governments did not, however, know all the issues of how companies act together to further the same cause. For example, during the 1932 Banking and Commerce Committee inquiry into the price of gasoline in Canada, the two largest companies - Imperial and British-American - colluded together in order to substantiate their arguments for higher legislative protection. Government protection in the form of tariffs,

dumping duties, and quality regulations, were important for the industry during the depression. The relationship between R. B. Bennett and Imperial is another issue that has not been fully covered, as Bennett was actively involved in Imperial's dealings with his government. Mackenzie King's liberalization of tariffs in 1935 attracted the majors into Canada (and just may have been the reason for Imperial's cutback in staff), but without any serious anti-combines legislation, the market in Canada was under firm control by only a few oil companies. The government's role in Alberta is another important topic not fully covered. The implementation of provincial control of resources in 1930 made it easier in a sense for Imperial in Alberta to expand because of the company's complete control of oil production. The provincial attitude in respect to the oil industry favored the large companies like Imperial, and did not do much in the line of developing this province's vast resource for the betterment of society as a whole.

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