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THE PETROLEUM PRODUCTS INDUSTRY
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THE PETROLEUM PRODUCTS INDUSTRY
1949

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Prepared in the Mining, Metallurgical and Chemical Section
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Dominion Bureau of Statistics, Ottawa

NOTICE

The Industry and Merchandising Division of the Bureau of Statistics collects and compiles figures on (a) the primary industries in Canada—mining, forestry and fishing; (b) manufacturing; (c) construction, and (d) merchandising and services.

For the purpose of annual compilation and publication, the manufacturing industries have been classified into major groups, prefaced by two reports of a general nature, as follows:

- I Summary Report on Manufacturing Industries
- II Manufacturing Industries by Geographical Distribution
- III Foods and Beverages
- IV Tobacco and Tobacco Products
- V Rubber Products
- VI Leather Products
- VII Miscellaneous Manufactures
- VIII Textiles
- IX Wood and Paper Products
- X Printing Trades
- XI Operations in the Woods
- XII Iron and Steel Products
- XIII Transportation Equipment
- XIV Non-ferrous Metal Products
- XV Electrical Apparatus and Supplies
- XVI Non-metallic Mineral Products
- XVII Products of Petroleum and Coal
- XVIII Chemicals and Allied Products

The present report belongs in Group XVII. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group are:

- A General Review
- B The Coke and Gas Industry
- C The Petroleum Products Industry

THE PETROLEUM PRODUCTS INDUSTRY

1949

Statistics for the Petroleum Products Industry cover all establishments in Canada which were occupied in (a) the refining of crude oil to produce gasoline, fuel oil, etc., and (b) the blending or compounding of lubricating oils and greases.

Thirty-three refineries and 14 blending plants, or a total of 47 works, reported under this category in 1949 and the aggregate value of production was \$436,796,213, an increase of 11 per cent over the 1948 total of \$394,934,200.

Output figures for 1949 included \$429,949,296 for petroleum refineries and \$6,846,917 for concerns engaged in blending oils and greases, against corresponding totals in 1948 of \$387,169,018 and \$7,765,182 respectively. The principal statistics for each of these groups and for the industry as a whole are tabulated below and the detailed figures for each division are recorded separately in the succeeding pages of this report.

(a) The Petroleum Refining Industry, 1949

Thirty-three petroleum refineries operating in Canada during 1949 (including one refinery in Ontario which discontinued operations in July) were distributed by provinces as follows: 4 in Quebec, 6 in Ontario, 3 in Manitoba, 7 in Saskatchewan, 7 in Alberta, 3 in British Columbia and 1 in each of Nova Scotia, New Brunswick and Northwest Territories. The refineries active at the end of the year had a capacity of 336,825 barrels of crude oil per day, of which Quebec had 124,000 barrels or 36.9 per cent; Ontario, 83,700 barrels or 24.8 per cent; Alberta, 43,200 barrels or 12.9 per cent; British Columbia, 28,500 barrels or 8.6 per cent; Saskatchewan, 26,475 barrels or 7.9 per cent; Nova Scotia, 22,000 barrels or 6.5 per cent; Manitoba, 7,300 barrels or 2.2 per cent; the Northwest Territories, 1,000 barrels and New Brunswick, 300 barrels. The location, type and capacity of each of these refineries is recorded in the directory at the end of this report.

During the year, 2,666,512,499 gallons of imported crude oil and 701,123,425 gallons of crude oil and absorption gasoline from Canadian wells, or a total of 3,367,635,924 was put through Canadian refineries, this amounting to about 78 per cent of the rated capacity. Of the total crude input, about 31 per cent was imported from the United States and nearly 48 per cent from other countries, while about 21 per cent came from Canadian wells. The total cost at refineries of all crude oil and naphtha charged to stills during the year was \$316,145,587. Stocks of crude oil held at the refineries on December 31, amounted to 201,748,334 gallons.

Refinery production of gasoline in 1949 amounted to 1,440,466,532 gallons, and in addition, the refineries used for blending about 55,330,734 gallons of imported casinghead gasoline which is not included in the Canadian production figures. The gallonage of gasoline made in 1949 was 18 per cent over 1948

which, in turn, was 13 per cent over 1947. The refinery selling value of the gasoline made during the year was \$234,153,039. Stocks of gasoline held by the refineries on December 31 included 129,981,959 gallons of motor or aviation gasoline and 11,489,819 gallons of imported casinghead gasoline. In 1949 there was an output of 16,710,610 gallons of natural gasoline from absorption plants in Alberta. This was practically all sold to refineries and is included with the gallonage charged to stills, and the refined gasoline made therefrom is included in the refinery output figures.

Imports of gasoline, including casinghead, amounted to 308,005,168 gallons during 1949, while exports, including re-exports, totalled 2,052,804 gallons. Sales as reported to the Bureau on a monthly basis amounted to 1,683,717,000 gallons, this figure being compiled from returns made to provincial governments in connection with tax payments.

Production of fuel and gas oils (excluding any made and used for cracking processes) totalled 1,513,289,022 gallons, of which 1,381,508,340 gallons were made for sale and 131,780,682 gallons for use as fuel in the producing plant. Imports amounted to 276,165,739 gallons and exports, including re-exports, totalled 25,689,224 gallons. Producers stocks of all fuel oils decreased 74,208,128 gallons to 188,543,627 gallons at the end of the year. Consumption of fuel oils and distillate in Canada as reported by distributors and refiners amounted to 1,885,906,000 gallons in 1949.

Monthly employment in the refining industry averaged 9,162 persons who received \$25,585,538 in salaries and wages. Expenditures for fuel and electricity amounted to \$16,837,394 and \$331,772,278 were paid out for crude oil and other processing materials.

PRODUCTS OF PETROLEUM AND COAL

TABLE 1. Principal Statistics of the Petroleum Products Industry, 1945-1949

Year	Number of plants	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
			\$	\$	\$	\$
Petroleum Refining						
1945.....	30	6,670	13,679,972	9,100,033	150,185,119	200,233,529
1946.....	30	7,048	14,657,496	10,153,100	154,714,683	221,702,376
1947.....	32	7,686	17,739,785	12,654,136	216,037,106	286,573,707
1948.....	33	8,245	21,522,698	17,605,205	308,604,948	387,169,018
1949.....	33	9,162	25,585,538	16,837,394	331,772,278	429,949,296
Compounding Oils and Greases						
1945.....	16	105	211,338	6,356	968,310	1,450,150
1946.....	13	97	191,645	5,925	1,104,061	1,723,004
1947.....	14	74	138,035	4,427	1,478,965	1,926,579
1948.....	11	250	539,261	42,433	5,544,416	7,765,182
1949.....	14	251	556,738	14,666	5,200,778	6,846,917
TOTAL						
1945.....	46	6,775	13,891,310	9,106,389	151,153,429	201,683,679
1946.....	43	7,145	14,849,141	10,159,025	155,818,744	223,425,380
1947.....	46	7,760	17,877,820	12,658,563	217,516,071	288,500,286
1948.....	44	8,495	22,061,959	17,647,638	314,149,364	394,934,200
1949.....	47	9,413	26,142,276	16,852,060	336,973,056	436,796,213

Note. Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, etc.

TABLE 2. Principal Statistics of the Petroleum Products Industry by Provinces, 1948 and 1949

Province	Number of plants	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
			\$	\$	\$	\$
1948						
Quebec.....	6	1,867	4,995,177	5,418,431	96,532,680	121,180,834
Ontario.....	14	3,923	10,097,032	7,490,575	106,522,193	141,250,825
Manitoba.....	3	180	299,255	159,664	6,561,593	7,191,271
Saskatchewan.....	7	577	1,431,049	1,285,111	31,604,125	34,387,934
Alberta.....	7	778	2,043,901	770,287	30,990,504	35,390,373
British Columbia.....	4	558	1,495,800	1,144,957	21,848,179	30,656,627
Nova Scotia.....	1	612	1,699,745	1,378,613	20,090,090	24,876,336
New Brunswick.....	1					
Northwest Territories.....	1					
Canada.....	44	8,495	22,061,959	17,647,638	314,149,364	394,934,200
1949						
Quebec.....	6	2,192	5,963,285	5,841,580	113,897,599	143,997,735
Ontario.....	16	4,251	11,903,392	5,918,307	101,321,991	141,427,763
Manitoba.....	3	248	497,335	226,958	6,759,563	8,731,894
Saskatchewan.....	7	552	1,514,829	1,341,774	30,632,381	34,258,225
Alberta.....	7	893	2,500,027	1,188,191	39,844,426	47,512,810
British Columbia.....	5	682	2,017,831	1,035,427	23,306,034	34,409,015
Nova Scotia.....	1	595	1,745,577	1,299,823	21,211,062	26,458,771
New Brunswick.....	1					
Northwest Territories.....	1					
Canada.....	47	9,413	26,142,276	16,852,060	336,973,056	436,796,213

TABLE 3. Number and Total Capacity of Petroleum Refineries in Operation, 1946-1949

Province	1946		1947		1948		1949	
	Number	Capacity in barrels of crude per day	Number	Capacity in barrels of crude per day	Number	Capacity in barrels of crude per day	Number	Capacity in barrels of crude per day
Nova Scotia.....	1	34,000	1	34,000	1	25,000	1	22,000
New Brunswick.....	1	300	1	300	1	300	1	300
Quebec.....	4	71,000	4	73,000	4	107,000	4	124,000
Ontario.....	6	77,950	6	87,950	6	88,700	5 ¹	83,700
Manitoba.....	3	4,500	3	4,500	3	4,500	3	7,300
Saskatchewan.....	7	18,175	7	17,475	7	26,475	7	26,475
Alberta.....	4	17,300	6	21,300	7	35,750	7	43,200
British Columbia.....	3	21,800	3	22,300	3	26,650	3	28,850
Northwest Territories.....	1	840	1	1,100	1	1,100	1	1,000
Canada.....	30	245,865	32	261,925	33	315,475	32¹	336,825

1. This figure does not include 1 refinery which discontinued operations in July, 1949.

Note. 1 Barrel = 35 imperial gallons.

TABLE 4. Principal Statistics of the Petroleum Refining Industry, 1945-1949

Year	Number of refineries	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
			\$	\$	\$	\$
1945.....	30	6,670	13,679,972	9,100,033	150,185,119	200,233,529
1946.....	30	7,048	14,657,496	10,153,100	154,714,683	221,702,376
1947.....	32	7,686	17,739,785	12,654,136	216,037,106	286,573,707
1948.....	33	8,245	21,522,698	17,605,205	308,604,948	387,169,018
1949.....	33	9,162	25,585,538	16,837,394	331,772,278	429,949,296

TABLE 5. Principal Statistics of the Petroleum Refining Industry by Provinces, 1948 and 1949

Year	Number of refineries	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
			\$	\$	\$	\$
1948						
Quebec.....	4	1,858	4,977,046	5,417,719	96,324,020	120,882,770
Ontario.....	6	3,684	9,582,022	7,449,214	101,209,663	133,818,157
Manitoba.....	3	180	299,255	159,664	6,561,593	7,191,271
Saskatchewan.....	7	577	1,431,049	1,285,111	31,604,125	34,387,934
Alberta.....	7	778	2,043,901	770,287	30,990,504	35,390,373
British Columbia.....	3	556	1,489,680	1,144,597	21,824,953	30,622,177
Other provinces ¹	3	612	1,699,745	1,378,613	20,090,090	24,876,336
Canada.....	33	8,245	21,522,698	17,605,205	308,604,948	387,169,018
1949						
Quebec.....	4	2,180	5,941,521	5,840,881	113,691,163	143,638,473
Ontario.....	6	4,020	11,383,325	5,904,900	96,388,383	135,039,526
Manitoba.....	3	248	497,335	226,958	6,759,563	8,731,894
Saskatchewan.....	7	552	1,514,829	1,341,774	30,632,381	34,258,225
Alberta.....	7	893	2,500,027	1,188,191	39,844,426	47,512,810
British Columbia.....	3	674	2,002,924	1,034,867	23,245,300	34,309,597
Other provinces ¹	3	595	1,745,577	1,299,823	21,211,062	26,458,771
Canada.....	33	9,162	25,585,538	16,837,394	331,772,278	429,949,296

1. Includes one refinery in each of Nova Scotia, New Brunswick and Northwest Territories.

PRODUCTS OF PETROLEUM AND COAL

TABLE 6. Products Made in Petroleum Refineries, 1948 and 1949

Product	Unit of measure	1948		1949	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$
Made for sale:					
Gasoline (excluding imported casinghead blended):					
Aviation gasoline.....	Imp. gal.	14,431,816	3,377,142	14,223,254	3,451,067
Motor gasoline.....	Imp. gal.	1,204,400,950	189,316,256	1,425,801,723	230,624,688
Naphtha specialties.....	Imp. gal.	27,471,035	4,891,542	34,465,902	5,972,712
Tractor fuel.....	Imp. gal.	43,955,237	6,706,268	37,887,720	5,327,057
Kerosene.....	Imp. gal.	32,312,373	5,559,283	14,704,295	2,426,582
Stove oil (No. 1 fuel oil).....	Imp. gal.	95,188,301	12,249,508	125,507,377	17,168,732
Diesel fuel.....	Imp. gal.	193,434,096	19,093,562	207,933,116	20,496,895
Light fuel oils (Nos. 2 and 3).....	Imp. gal.	187,822,196	21,487,194	300,574,073	30,809,567
Heavy fuel oils (Nos. 4, 5 and 6).....	Imp. gal.	688,177,459	58,285,131	694,901,759	52,370,281
Lubricating oil.....	Imp. gal.	59,569,514	19,392,317	57,484,774	19,460,855
Lubricating grease.....	pound	25,862,484	1,707,633	46,695,974	3,848,723
Asphalt.....	Imp. gal.	139,094,598	17,690,590	121,705,726	15,104,148
Petroleum coke.....	ton	79,213	1,018,475	83,908	879,096
Liquefied petroleum gases.....	-	-	669,113	-	323,151
Other products ¹	-	-	9,525,575	-	6,281,983
Total - Made for Sale.....	-	-	370,969,589	-	414,545,537
Made for own use:					
Motor gasoline.....	Imp. gal.	458,577	69,298	441,555	77,284
Naphtha specialties.....	Imp. gal.	43,013	7,953	40,858	8,090
Kerosene.....	Imp. gal.	56,462	9,617	44,990	6,835
Stove oil (No. 1 fuel oil).....	Imp. gal.	14,510	1,837	52,594	8,892
Diesel fuel.....	Imp. gal.	460,507	52,780	673,887	84,340
Light fuel oils (Nos. 2 and 3).....	Imp. gal.	140,987	14,083	152,050	15,510
Heavy fuel oils (Nos. 4, 5 and 6).....	Imp. gal.	122,777,072	9,329,980	130,857,161	8,797,780
Lubricating oil.....	Imp. gal.	75,923	22,505	59,926	19,033
Asphalt.....	Imp. gal.	166,370	21,986	70,033	9,325
Petroleum coke.....	ton	8,225	83,357	33,461	239,138
Still gas.....	M cu. ft.	10,613,805	6,172,065	11,551,768	5,769,873
Other products.....	-	-	413,968	-	367,650
Total - Made for own use.....	-	-	16,199,429	-	15,403,760
Grand Total.....	-	-	387,169,018	-	429,949,297

1. Includes candles, alkylate, naphthenic acid, etc. These items were reported by fewer than three companies, so in accordance with the provisions of the Statistics Act, the figures cannot be shown separately.

2. Includes the value for some butane used in blending operations.

TABLE 7. Materials Used in Petroleum Refineries, 1948 and 1949

Material	Unit of measure	1948		1949	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Crude oil (under 60° A.P.I.) in its natural state, from Canadian wells.....	Imp. gal.	405,720,981	40,748,721	686,720,820	68,893,279
Absorption gasoline, etc., from Canadian wells (run to stills)....	Imp. gal.	12,237,715	1,211,132	14,402,605	1,452,818
Crude oil, in its natural state, imported, (run to stills):					
From United States.....	Imp. gal.	1,165,426,704	114,686,493	1,057,941,841	100,033,264
From South America.....	Imp. gal.	1,104,767,684	97,752,550	966,725,009	85,290,837
From Other Countries.....	Imp. gal.	368,188,558	34,952,094	624,559,954	59,033,774
Crude oil, not in its natural state (run to stills).....	Imp. gal.	2,826,019	203,681	17,285,695	1,441,615
Benzol for blending.....	Imp. gal.	585,090	115,333	1,152,206	217,619
Phenol.....	pound	830,291	103,699	862,593	115,745
Sulphuric acid, 100%.....	pound	39,210,080	466,827	30,798,340	361,509
Sulphur.....	pound	335,986	14,383	429,086	10,743
Caustic soda.....	pound	9,932,820	332,274	8,441,652	271,811
Soda ash.....	pound	699,170	15,252	817,887	32,044
Litharge.....	pound	335,166	60,665	239,083	50,005
Fuller's earth, bentonite and other clays.....	pound	29,522,000	766,079	16,978,000	750,841
Compounding materials.....	-	-	437,771	-	16,007
Tetraethyl fluid.....	c.c.	3,182,047,096	5,334,261	3,939,675,017	6,602,385
Dyes for gasoline.....	-	-	84,769	-	59,323
Inhibitor.....	-	-	173,801	-	235,721
Blending stocks for aviation gas.....	Imp. gal.	6,754,917	1,706,041	5,768,957	1,414,226
Other materials.....	-	-	7,962,400	-	3,948,545
Shipping containers.....	-	-	1,316,722	-	1,549,762
Total.....	-	-	308,604,948	-	331,772,778

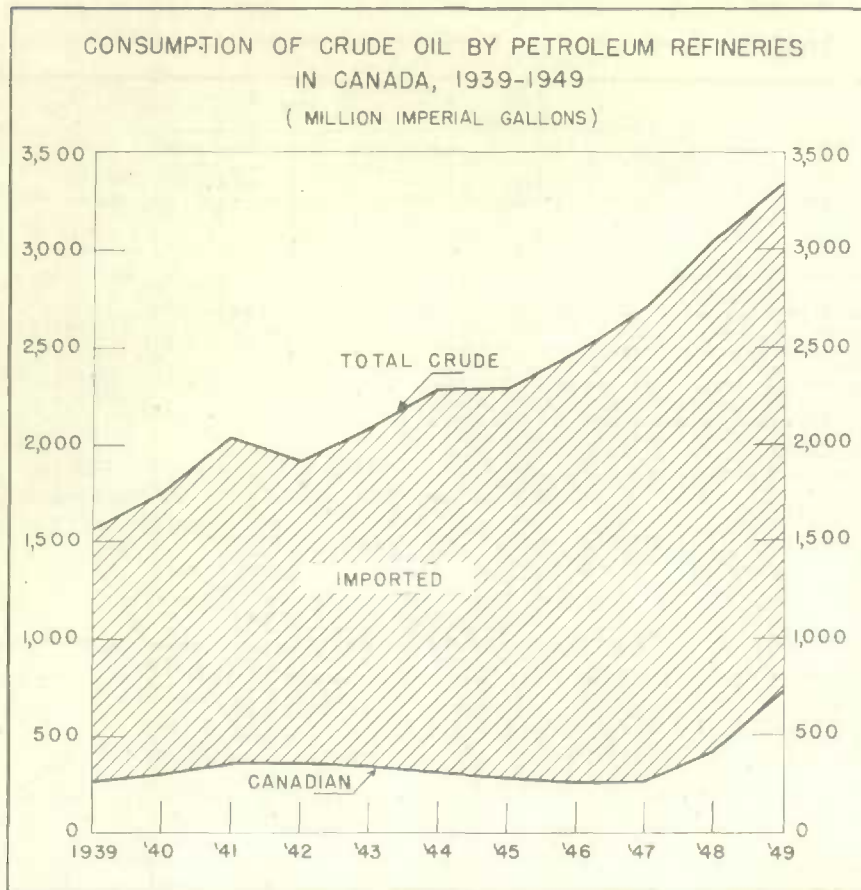


TABLE 8. Consumption of Crude Oil in Petroleum Refineries Showing Canadian and Imported, Separately 1940-1949

Year	Canadian ¹	Imported ²	Total
1940.....	302,235,830	1,443,258,451	1,745,494,281
1941.....	352,839,574	1,641,058,493	2,033,898,067
1942.....	359,535,738	1,551,617,151	1,911,152,889
1943.....	337,070,674	1,746,982,235	2,084,052,909
1944.....	300,536,071	1,982,671,799	2,283,207,870
1945.....	274,831,125	2,031,784,863	2,306,615,988
1946.....	250,566,210	2,227,789,282	2,478,355,492
1947.....	259,867,767	2,445,771,925	2,705,639,692
1948.....	417,958,696	2,641,208,965	3,059,167,661
1949.....	701,123,425	2,666,512,499	3,367,635,924

1. Includes the crude naphtha and absorption gasoline from the Turner Valley field which was run to refinery stills.
 2. Includes reduced crude.

TABLE 9. Casinghead Gasoline Imported and Used for Blending at the Refineries, 1949 (These items not included in previous tables)

Imported natural casinghead gasoline received at the refinery during the year.....	Imp. gal.	52,858,382
	\$	6,928,755
Imported natural casinghead gasoline used for blending during the year.....	Imp. gal.	55,330,734
Total stocks of imported natural casinghead gasoline at the end of the year.....	Imp. gal.	11,489,819

TABLE 10. Stocks on Hand at the Refineries at the end of 1949

	Stocks on hand at refineries on December 31, 1949	Increase or decrease over December 31, 1948
	(Imperial gallons)	
Crude oil and naphtha, in its natural state, from Canadian wells.....	34,073,141	+ 18,317,838
Absorption gasoline, etc., from Canadian wells.....	10,645,632	- 8,261,698
Crude oil, imported:		
In its natural state.....	156,881,196	- 17,753,789
Not in its natural state.....	148,365	- 3,304,542
Total Crude.....	201,748,334	- 11,002,191
Naphtha specialties.....	3,919,692	- 863,326
Aviation gasoline.....	11,062,223	+ 4,053,080
Motor gasoline.....	118,919,736	+ 27,396,197
Tractor fuel.....	7,484,307	- 4,984,377
Kerosene.....	9,172,980	- 3,269,266
Stove oil (No. 1 fuel oil).....	32,736,405	- 5,580,311
Diesel fuel.....	20,111,262	- 10,545,186
Light fuel oils (Nos. 2 and 3).....	62,422,533	- 20,705,648
Heavy fuel oils (Nos. 4, 5 and 6).....	56,616,140	- 29,123,340
Lubricating oils.....	7,999,968	- 353,840
Total Refined.....	330,445,246	- 43,976,017

TABLE 11. Production and Producers' Sales of Crude Petroleum, by Provinces, 1948 and 1949

Province	1948			1949		
	Production	Sales	Value of sales	Production	Sales	Value of sales
	(barrels)	(barrels)	\$	(barrels)	(barrels)	\$
New Brunswick.....	21,372	21,372	29,920	19,544	19,544	27,362
Ontario.....	176,989	176,989	608,109	260,670	260,670	901,143
Saskatchewan.....	849,166	849,166	976,541	782,188	782,188	836,941
Alberta ¹	10,973,583	10,888,592	35,127,751	20,246,392	20,087,418	58,999,936
Northwest Territories.....	349,763	350,541	676,574	155,528	155,528	353,108
Canada.....	12,370,873	12,286,660	37,418,895	21,464,322	21,305,348	61,118,490

1. Includes natural gasoline.

TABLE 12. World Crude Oil Production, 1939 and 1948-1950

	1939	1948	1949	1950
	(Thousands of barrels daily)			
North America:				
United States.....	3,465.7	5,508.9	5,042.0	5,385.0
Canada.....	19.1	33.8	57.5	80.0
Mexico.....	162.0	159.0	167.0	197.5
North America.....	3,646.8	5,701.7	5,266.5	5,662.5
South America:				
Venezuela.....	567.0	1,339.0	1,321.4	1,495.0
Colombia.....	65.5	65.1	81.5	92.5
Argentina.....	51.0	63.8	63.5	63.0
Trinidad.....	52.8	54.9	56.5	55.9
Peru.....	37.1	37.5	40.5	40.3
Ecuador.....	6.3	7.4	7.2	7.2
Bolivia.....	0.6	1.3	1.9	1.7
Cuba.....	0.3	0.3	0.3	0.3
Brazil.....	-	0.3	0.3	1.2
Chile.....	-	-	0.4	1.6
South America and Caribbean.....	780.6	1,569.6	1,573.5	1,758.7
Western Hemisphere.....	4,427.4	7,271.3	6,840.0	7,421.2

TABLE 12. World Crude Oil Production, 1939 and 1948-1950 - Concluded

	1939	1948	1949	1950
	(Thousands of barrels daily)			
Europe:				
Romania.....	128.5	79.5	85.0	84.0
Austria.....	11.7	15.0	18.0	18.0
Germany.....	12.3	12.3	16.3	20.9
Hungary.....	3.0	10.0	10.0	10.0
Poland.....	10.7	2.7	3.3	3.0
Netherlands.....	-	9.3	11.8	13.8
Albania.....	2.5	1.0	2.5	3.5
France.....	1.4	1.1	1.1	2.3
French Morocco.....	-	0.3	0.4	0.8
United Kingdom.....	0.1	0.9	0.9	0.9
Czechoslovakia.....	0.2	0.4	0.8	0.8
Yugoslavia.....	-	1.1	6.5	6.5
Italy.....	0.2	0.2	0.2	0.2
Europe excluding USSR.....	170.6	133.8	157.1	164.7
USSR.....	603.0	611.0	690.0	754.0
Europe.....	773.6	744.8	847.1	918.7
Near and Middle East:				
Iran.....	214.0	523.0	561.0	659.4
Saudi Arabia.....	10.8	390.3	477.0	547.0
Iraq.....	84.5	72.5	85.0	135.5
Kuwait.....	-	127.2	242.0	342.5
Bahrain.....	20.8	30.0	30.0	30.0
Qatar.....	-	-	-	33.8
Egypt.....	12.8	36.8	43.5	45.0
Turkey.....	-	-	0.3	0.8
Near and Middle East.....	342.9	1,179.8	1,438.8	1,794.0
Far East and Oceania:				
Indonesia.....	170.0	87.3	115.9	139.0
British Bornea.....	20.0	54.0	70.5	79.3
New Guinea.....	-	-	4.8	4.8
India.....	-	-	5.3	5.5
Pakistan.....	28.0	7.1	2.6	2.7
Burma.....	-	-	1.0	1.0
Japan.....	7.3	3.1	3.7	5.4
China.....	-	1.8	2.0	2.0
Far East.....	225.3	153.3	205.8	239.7
Eastern Hemisphere.....	1,341.8	2,077.9	2,491.7	2,952.4
World Total.....	5,769.2	9,349.2	9,331.7	10,373.6

TABLE 13. Crude Oil Production by Principal Nations and Hemispheres, 1939 and 1948-1950

	1939	1948	1949	1950
	%	%	%	%
Principal Nations:				
United States.....	60.0	59.0	55.5	52.0
Venezuela.....	9.8	14.4	14.2	14.4
USSR.....	10.5	6.7	7.4	7.3
Iran.....	3.7	5.6	6.0	6.4
Saudi Arabia.....	0.2	4.2	5.1	5.3
Kuwait.....	-	1.4	2.6	3.3
Western Hemisphere:	76.7	77.8	73.3	71.5
North America.....	63.2	61.0	56.5	54.6
South America.....	13.5	16.8	16.8	16.9
Eastern Hemisphere:	23.3	22.2	26.7	28.5
Middle East.....	6.0	12.6	15.4	17.3
Oceania and Far East.....	4.1	1.8	2.3	2.3
Europe (including USSR).....	13.2	7.8	9.0	8.9

Source: Data for Tables 12 and 13 were extracted from "World Petroleum", January, 1951.

Note: 1 barrel = 35 Imperial gallons.

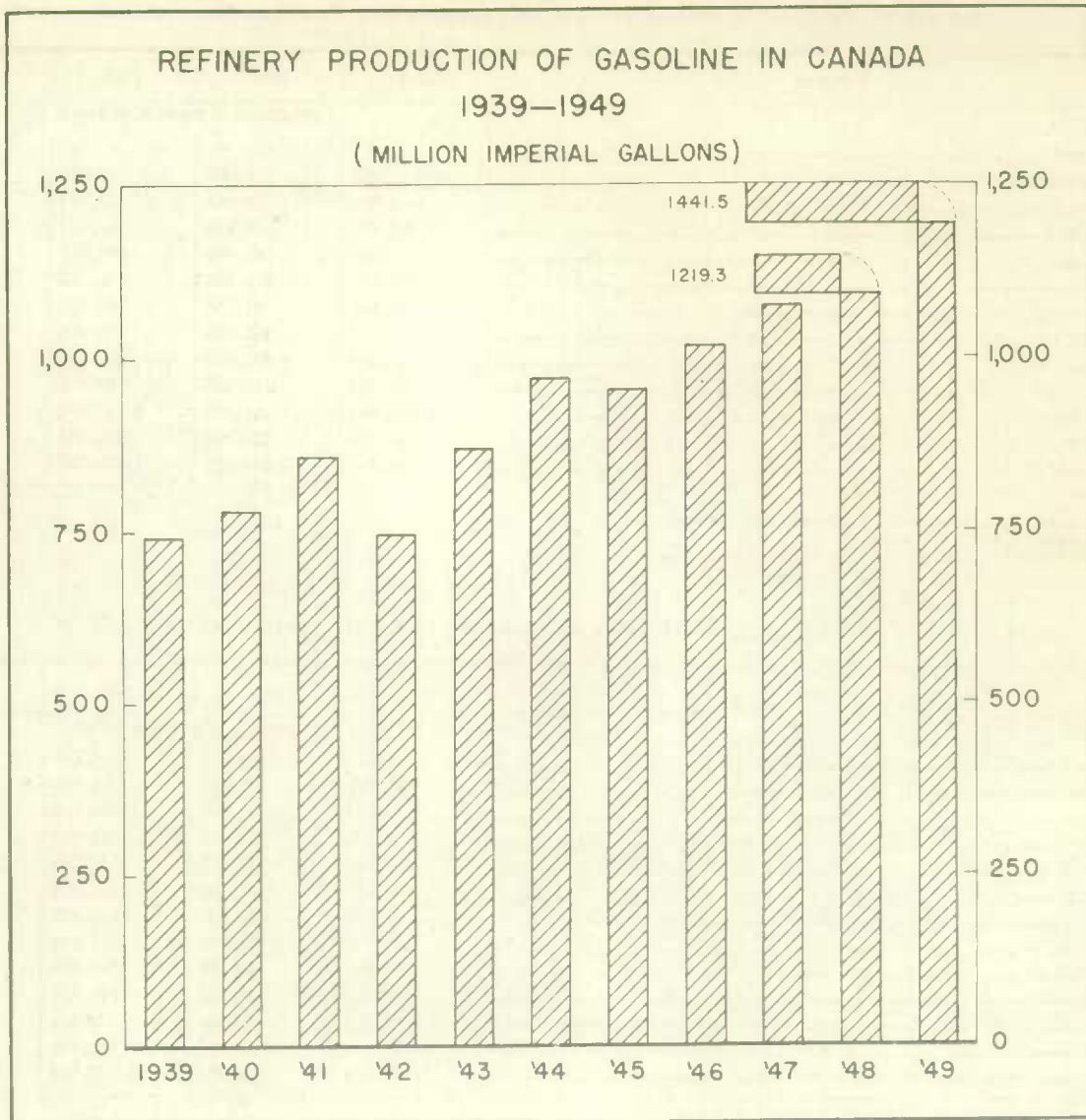


TABLE 14. Refinery Production¹ of Gasoline, 1940-1949

Year	Motor gasoline	Aviation gasoline	Total
	Imp. gal.	Imp. gal.	Imp. gal.
1940.....	761,774,399	18,208,707	779,983,106
1941.....	802,056,916	54,791,743	856,848,659
1942.....	658,240,211	90,815,278	749,055,489
1943.....	748,780,879	120,507,358	869,288,237
1944.....	863,677,723	107,263,449	970,941,172
1945.....	933,842,039	19,174,916	953,016,955
1946.....	1,009,624,507	7,996,196	1,017,620,703
1947.....	1,065,422,068	9,127,797	1,074,549,865
1948.....	1,204,859,527	14,431,816	1,219,291,343
1949.....	1,426,243,278	14,223,254	1,440,466,532

1. Includes production made for own use.

TABLE 15. Gross Sales of Gasoline, by Provinces, 1946-1949 (Gross Sales = sold for all purposes; net sales = sold for use in automobiles as computed from Gasoline Tax returns)

Province	1946	1947	1948	1949
	(Thousands of Imperial gallons)			
Newfoundland.....	-	-	-	1
Prince Edward Island.....	5,945	6,963	7,288	8,240
Nova Scotia.....	44,572	51,648	53,137	57,443
New Brunswick.....	43,320	49,936	54,186	56,686
Quebec.....	218,009	247,468	280,858	304,139
Ontario.....	451,252	501,433	562,530	623,685
Manitoba.....	72,403	83,146	90,602	104,023
Saskatchewan.....	1,066	142,368	147,446	168,267
Alberta.....	143,650	171,113	190,608	218,936
British Columbia.....	97,383	117,497	130,909	142,297
Total Gross Sales.....	1,212,600	1,371,572	1,517,563	1,683,717
Refunds.....	213,315	250,218	286,828	326,913²
Total Net Sales.....	999,285	1,121,354	1,230,735	1,363,992³

1. Not available - net sales estimated from tax revenues.
2. Newfoundland not included.
3. Includes 7,188 thousand gallon for Newfoundland.

TABLE 16. Gross sales of Gasoline, by Months, 1946-1949

Month	1946	1947	1948	1949
	(Thousands of Imperial gallons)			
January.....	63,072	70,380	81,527	86,373
February.....	55,974	63,445	72,698	82,421
March.....	76,603	72,747	86,654	99,523
April.....	88,765	87,716	97,752	130,508
May.....	121,552	141,300	139,452	168,771
June.....	112,328	136,463	163,198	168,029
July.....	132,912	150,727	160,920	170,114
August.....	137,130	148,269	170,572	193,763
September.....	125,834	146,208	165,709	180,476
October.....	120,516	146,519	147,727	155,865
November.....	97,662	110,980	126,020	133,769
December.....	80,252	96,818	105,334	114,105
Total.....	1,212,600	1,371,572	1,517,564	1,683,717¹

1. Newfoundland not included.

TABLE 17. Gross Sales of Gasoline, by Months and by Provinces, 1949 and Totals for 1948

Month	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total ¹
	(Thousands of Imperial gallons)									
January.....	361	3,284	3,218	17,104	36,970	3,588	3,397	10,207	8,243	86,373
February.....	320	2,980	3,168	16,512	35,828	3,562	2,792	9,343	7,915	82,421
March.....	241	3,345	3,362	18,641	42,209	4,084	4,649	12,989	10,004	99,523
April.....	374	3,948	3,477	21,286	48,974	7,465	15,206	18,740	11,037	130,508
May.....	908	5,327	5,432	27,738	56,572	12,379	23,017	24,765	12,634	168,771
June.....	949	5,744	5,746	29,675	58,720	11,231	20,005	22,297	13,661	168,029
July.....	898	6,053	5,973	32,122	62,628	10,827	17,823	19,764	14,026	170,114
August.....	1,005	6,600	6,656	33,703	67,101	14,846	23,238	25,344	15,269	193,763
September.....	995	5,782	6,188	30,562	61,178	13,706	23,935	24,196	13,935	180,476
October.....	854	5,137	5,292	28,991	56,536	9,327	16,321	20,774	12,634	155,865
November.....	754	4,769	4,465	25,684	51,240	7,082	10,755	17,103	11,917	133,769
December.....	582	4,474	3,708	22,121	45,730	5,925	7,128	13,416	11,021	114,105
Totals for 1949.....	8,240	57,443	56,686	304,139	623,685	104,023	168,267	218,936	142,297	1,683,717
Totals for 1948.....	7,288	53,137	54,186	280,858	562,530	90,602	147,446	190,608	130,909	1,517,564

1. Newfoundland not included.

PRODUCTS OF PETROLEUM AND COAL

TABLE 18. Net Sales (for use in Automobiles) of Gasoline, by Provinces, 1946-1949

Province	1946	1947	1948	1949
	(Thousands of Imperial gallons)			
Newfoundland	-	-	-	7,188 ¹
Prince Edward Island.....	4,738	5,280	5,600	6,178
Nova Scotia	36,056	49,340	51,764	49,282
New Brunswick.....	36,512	42,400	46,841	48,408
Quebec	200,805	227,276	257,632	274,671
Ontario	399,327	427,726	469,684	522,606
Manitoba	48,664	56,537	53,901	60,281
Saskatchewan.....	63,280	62,109	64,842	77,844
Alberta	132,582	163,941	182,532	211,260
British Columbia.....	77,321	86,745	97,940	106,274
Canada	999,285	1,121,354	1,230,735	1,363,992

1. Estimated from tax revenues.

TABLE 19. Federal and Provincial Government Receipts from Gasoline Taxes, by Provinces, 1946-1949

Province	1946	1947	1948	1949
	\$	\$	\$	\$
Newfoundland	-	-	-	1,006,356
Prince Edward Island	465,648	698,303	783,913	855,776
Nova Scotia	3,498,181	5,179,783	5,869,246	6,246,491
New Brunswick	2,832,391	4,200,080	5,191,864	5,535,767
Quebec	16,468,731	25,568,671	29,590,885	30,750,000
Ontario	31,260,377	47,420,015	52,566,951	58,228,135
Manitoba	3,320,949	4,592,510	4,890,086	5,291,740
Saskatchewan	4,724,071	8,399,303	6,641,867	7,882,783
Alberta	5,403,921	7,657,915	8,577,567	10,635,059
British Columbia.....	5,682,094	9,295,743	10,146,654	11,163,046
Yukon	26,842	50,497	71,954	80,813
Total provincial receipts	73,683,205	111,062,820	124,330,987	137,676,004
Add Federal Government receipts	34,889,990	8,605,249 ¹	-	-
Total gasoline taxes.....	108,573,195	119,668,069	124,330,987	137,676,004

1. January to March, 1947.

TABLE 20. Revenues from Motor Vehicle Registrations and Gasoline Taxes, 1940-1949

Year	From motor vehicle registrations	From gasoline taxes	Year	From motor vehicle registrations	From gasoline taxes
	\$	\$		\$	\$
1940.....	29,300,720	56,179,173	1945.....	32,166,464	87,666,795 ¹
1941.....	31,559,944	77,024,754 ¹	1946.....	39,787,935	108,573,195 ¹
1942.....	28,498,676	72,349,746 ¹	1947.....	46,004,131	119,668,069 ¹
1943.....	30,292,019	70,355,731 ¹	1948.....	51,287,732	124,330,987
1944.....	30,584,711	77,192,353 ¹	1949.....	58,177,596	137,676,004

1. Total tax paid by public including Provincial and Federal Government taxes but allowing for subsidies paid to provinces by Federal Government in guarantee of revenues because of gasoline rationing.

Note. Subsidies discontinued in 1946. Federal Government gasoline tax cancelled March 31, 1947.

TABLE 21. Registrations of Motor Vehicles, by Provinces, 1946-1949

Province	1946	1947	1948	1949
	(Number)			
Newfoundland.....	-	-	-	13,981
Prince Edward Island.....	9,192	9,948	11,290	13,211
Nova Scotia.....	62,660	70,300	76,319	86,041
New Brunswick.....	44,654	51,589	62,366	67,280
Quebec.....	255,172	296,547	335,953	384,733
Ontario.....	711,106	800,058	874,933	970,137
Manitoba.....	101,090	112,149	128,000	139,836
Saskatchewan.....	148,206	158,512	167,515	185,027
Alberta.....	138,868	155,386	173,950	200,428
British Columbia.....	150,234	179,684	202,126	230,008
Yukon and N.W.T.....	1,281	1,786	2,491	2,544
Canada.....	1,622,463	1,835,959	2,034,943	2,293,226

TABLE 22. Registrations of Motor Vehicles, by Types, 1949

Province	Passenger cars	Motor trucks	Motor buses	Motor cycles	Tractors	Other motor vehicles	Total
	(Numbers)						
Newfoundland.....	9,022	4,098	312	252	183	114	13,981
Prince Edward Island.....	9,086	3,071	25	51	978	-	13,211
Nova Scotia.....	54,419	25,565	1	1,283	2,176	2,598	86,041
New Brunswick.....	43,989	18,324	363	1,309	2,813	482	67,280
Quebec.....	267,097	91,493	2,777	14,013	8,582	771	384,733
Ontario.....	771,709	181,911	3,455	13,062	-	-	970,137
Manitoba.....	99,974	35,342	178	1,757	2,083	502	139,836
Saskatchewan.....	120,291	63,063	121	1,298	90	164	185,027
Alberta.....	130,945	62,405	434	2,265	3,173	1,206	200,428
British Columbia.....	165,106	58,850	1	4,681	1,371	-	230,008
Yukon and N.W.T.....	714	1,555	31	23	103	118	2,544
Canada.....	1,672,352	545,677	7,696	39,994	21,552	5,955	2,293,226

1. Included with trucks.

TABLE 23. Petroleum Coke: Deliveries for Consumption, 1948 and 1949 (Used as fuel only - not as manufacturing materials)

Fuel for domestic and industrial heating	1948	1949
	(Tons)	
Atlantic Provinces.....	54	37
Quebec.....	383	10,355
Ontario.....	71,962	59,967
Manitoba.....	-	-
Saskatchewan.....	-	877
Alberta and Northwest Territories.....	-	-
British Columbia and Yukon.....	-	-
Total.....	72,399	71,236

TABLE 24. Fuel Oil and Distillate Deliveries: Deliveries for Consumption, by Provinces, 1949 and Totals for 1945-1948 (As reported by Distributors and Refiners - Imperial gallons - Calendar Years)

No.	Atlantic Provinces	Quebec	Ontario	Manitoba	
		(Imperial gallons)			
(a) Heavy and Medium Fuel Oils (Nos. 6 and 5):					
1	3,783,795	40,566,479	15,758,986	2,592,727	
2	16,158,531	39,187,611	74,449,930	3,124,781	
3	2,769,816	—	—	124,533	
4	31,810,257	104,596,217	153,622,188	5,313,522	
5	—	—	—	—	
6	12,555,403	16,706,196	3,799,225	4,321,745	
7	65,166,489	80,672,552	15,023,041	111,852	
8	130,081	—	—	—	
9	132,374,372	281,729,055	262,653,370	15,589,160	
(b) Heavy and Light Furnace Oils (Nos. 3 and 2):					
10	32,756,529	94,700,474	158,216,799	5,439,689	
11	—	46,987	—	—	
12	422,390	18,629,922	10,249,323	472,551	
13	—	150,348	193,956	323,562	
14	266,391	566,066	134,855	1,162,583	
15	10,460	400,000	—	—	
16	—	465,892	—	—	
17	33,455,770	114,959,669	168,794,933	7,398,385	
(c) Diesel Fuel:					
18	976,959	695,033	5,279,197	2,353,116	
19	3,900,526	499,764	380,705	732,917	
20	3,535,037	3,492,966	5,472,023	2,267,083	
21	4,177,214	7,731,918	12,328,785	5,919,523	
22	2,955,213	3,097,634	4,585,589	548,075	
23	14,206,499	12,944,371	2,577,671	—	
24	673,163	788,308	—	—	
25	30,424,611	29,249,994	30,623,970	11,820,714	
(d) Stove Oil (No. 1), Tractor Fuel, kerosene and Illuminating Oil:					
26	32,379,429	86,706,309	42,544,022	3,906,225	
27	305,977	131,884	426,578	249,517	
28	—	2,019	—	110,817	
29	130,213	1,092,101	1,642,689	12,555	
30	6,683	899,169	2,196,433	11,441,703	
31	165,803	1,066,091	—	—	
32	32,988,105	89,897,573	46,809,722	15,720,817	
33	229,242,858	515,836,291	508,881,995	50,529,076	
34	185,847,559	488,950,975	502,841,132	44,948,525	
	1947.....	181,129,176	450,481,073	499,222,723	42,761,893
	1946.....	141,308,068	330,054,644	377,869,730	33,112,167
	1945.....	182,099,759	228,972,776	227,394,907	29,736,411

Note: 1. Newfoundland not included in Atlantic Provinces prior to 1949.

2. Amounts recorded respectively for domestic, industrial, and tractor purposes were for actual consumption within the areas indicated; those recorded under railways and bunkering were taken from, or accepted at delivery points within these areas, but were consumed by carriers where required. Amounts recorded prior to 1946 exclude fuel oil consumed under refinery boilers and fuel oil used as a material in manufacturing but from 1946 on, figures include fuel oil used for both purposes.

TABLE 24. Fuel Oil and Distillate Deliveries: Deliveries for Consumption, by Provinces, 1949 and Totals for 1945-1948 (As reported by Distributors and Refiners - Imperial gallons - Calendar Years)

Subsections	Alberta and Northwest Territories	British Columbia and Yukon	Canada		Canada		
			1949	Per cent of section total	1948	Per cent of section total	
			(Imperial gallons)				
6,442,639	272,226	23,429,809	92,846,661	8.8	89,923,810	9.1	1
16,002,375	17,039,791	13,803,526	179,766,545	16.9	175,368,847	17.7	2
10,462,936	877,899	5,497,233	19,732,417	1.8	12,915,974	1.3	3
13,597,404	3,024,417	70,451,501	382,415,506	35.9	380,234,157	38.4	4
-	40,219	-	40,219	-	322,428	-	5
30,532,012	72,203,709	22,969,990	163,088,280	15.3	104,741,745	10.6	6
-	5,933,058	59,038,579	225,945,571	21.2	222,080,566	22.4	7
671	-	712,123	842,875	.1	5,559,708	.5	8
77,038,037	99,391,319	195,902,761	1,064,678,074	100.0	991,147,235	100.0	9
8,973,675	457,726	26,727,887	327,272,779	89.9	287,494,587	88.3	10
280,901	-	-	327,868	-	225,265	-	11
-	231,934	1,495,200	31,501,320	8.8	35,126,926	10.7	12
847,507	3,538	-	1,518,911	.3	940,032	-	13
63,048	268,402	22,487	2,483,832	.7	3,106,749	1.0	14
-	-	-	410,460	.1	144,123	-	15
261,792	3,570	-	731,254	.2	844,545	-	16
10,422,833	965,170	28,245,574	364,246,424	100.0	327,882,227	100.0	17
5,466,329	5,138,396	5,478,937	25,387,967	12.7	8,741,369	5.0	18
4,880,543	1,215,027	1,627,131	12,946,613	6.6	17,512,508	10.1	19
275,477	15,753,856	12,124,069	42,920,511	21.9	40,013,851	23.0	20
10,430,002	7,088,389	6,145,330	53,821,161	27.5	52,011,180	30.0	21
336,078	549,772	1,689,999	13,762,360	7.1	8,875,747	5.1	22
-	380,820	15,530,918	45,640,279	23.5	45,625,047	26.1	23
-	-	-	1,461,471	.7	1,116,025	.7	24
21,098,429	30,126,260	42,596,384	193,940,362	100.0	173,895,727	100.0	25
3,750,381	4,819,363	36,073,025	210,178,754	80.8	210,103,950	80.2	26
87,642	99,228	126,629	1,427,455	.4	1,276,621	.5	27
-	-	-	112,836	-	187,770	-	28
8,758	-	325,224	3,209,540	1.2	4,100,612	1.6	29
16,239,172	8,901,307	4,752,991	44,437,458	17.0	46,221,244	17.6	30
259,742	183,435	-	1,675,071	.6	347,595	.1	31
20,343,695	14,003,333	41,277,869	261,041,114	100.0	262,237,792	100.0	32
128,907,084	144,486,082	308,022,588	1,885,905,974	100.0	1,753,162,981	100.0	33
96,223,977	120,996,569	315,354,244	1,755,162,981	-	-	-	34
87,500,092	96,982,750	299,096,420	1,657,174,127	-	-	-	35
67,532,214	91,201,704	233,998,281	1,275,076,808	-	-	-	36
50,628,996	62,100,262	181,136,549	962,069,660	-	-	-	37

Note: 1. Newfoundland not included in Atlantic Provinces prior to 1949.

2. Amounts recorded respectively for domestic, industrial, and tractor purposes were for actual consumption within the areas indicated; those recorded under railways and bunkering were taken from, or accepted at delivery points within these areas, but were consumed by carriers where required. Amounts recorded prior to 1948 exclude fuel oil consumed under refinery boilers and fuel oil used as a material in manufacturing but from 1948 on, figures include fuel oil used for both purposes.

PRODUCTS OF PETROLEUM AND COAL

(b) Manufacture of Lubricating Oils and Greases (other than in Refineries), 1949

Fourteen Canadian factories were occupied chiefly in compounding lubricating oils and greases in Canada during 1949. Ten of these plants were located in Ontario, 2 in Quebec and 2 in British Columbia.

They gave work to a monthly average of 251 people who were paid \$556,738 as salaries and wages. Purchases of processing materials and containers cost \$5,200,778 and the selling value of products totalled \$6,846,917. Included in the year's output were lubricating oils at \$5,158,316, lubricating

greases at \$1,524,720 and soaps or soap powders at \$53,419.

Total Canadian output of lubricating oils, including production from the refineries amounted to 67,548,396 gallons in 1949 against 67,519,904 gallons in 1948. Corresponding figures for lubricating greases totalled 60,330,179 in 1949 and 36,778,205 pounds in 1948. Sales of lubricating oils as reported by principal dealers amounted to 67,327,000 gallons in 1949, while sales of lubricating greases totalled 63,309,000 pounds.

TABLE 25. Principal Statistics of the Lubricating Oils and Greases Industry, 1945-1949

Year	Number of plants	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
1945.....	16	105	\$ 211,338	\$ 6,356	\$ 968,310	\$ 1,450,150
1946.....	13	97	191,645	5,925	1,104,061	1,723,004
1947.....	14	74	138,035	4,427	1,478,965	1,926,579
1948.....	11	250	539,261	42,433	5,544,416	7,765,182
1949.....	14	251	556,738	14,666	5,200,778	6,846,917

TABLE 26. Principal Statistics of the Lubricating Oils and Greases Industry, by Provinces, 1948 and 1949

Province	Number of plants	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
1948						
Ontario.....	8	239	\$ 515,010	\$ 41,361	\$ 5,312,530	\$ 7,432,668
Quebec.....	2					
British Columbia.....	1	11	24,251	1,072	231,886	332,514
Canada.....	11	250	539,261	42,433	5,544,416	7,765,182
1949						
Ontario.....	10	231	520,067	13,407	4,933,608	6,388,237
Quebec.....	2					
British Columbia.....	2	20	36,671	1,259	267,170	458,680
Canada.....	14	251	556,738	14,666	5,200,778	6,846,917

TABLE 27. Products made in the Lubricating Oils and Greases Industry, 1948 and 1949

Product	Unit of measure	1948		1949	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
Greases, lubricating.....	pound	10,886,076	\$ 1,471,170	13,619,462	\$ 1,524,720
Oils, lubricating.....	gallon	7,874,467	6,175,403	10,003,696	5,158,316
Soaps and powders.....	—	—	28,614	—	53,419
All other products.....	—	—	89,995	—	110,462
Total.....	—	—	7,765,182	—	6,846,917

Table 28. Materials used in Lubricating Oils and Greases Industry, 1948 and 1949

Material	Unit of measure	1948		1949	
		Quantity	Cost at works	Quantity	Cost at works
Compounding stocks (oils, etc.).....	Imp. gal.	9,417,892	\$ 3,886,239	10,143,400	\$ 3,550,574
Tallow and grease.....	lb.	80,964	12,486	13,927	1,756
All other materials.....	—	—	595,233	—	916,641
Shipping containers.....	—	—	1,050,458	—	731,807
Total.....	—	—	5,544,416	—	5,200,778

TABLE 29. Sales of Lubricating Oils, 1948 and 1949 (As reported by principal dealers)

	Motor transport and tractor crankcase oil	Aircraft crankcase oils	Other oils (Industrial, etc.)	Total all purposes
(Imperial gallons)				
1948				
Prince Edward Island				
Nova Scotia.....	3,050,000	41,000	1,559,000	4,650,000
New Brunswick				
Quebec.....	6,637,000	169,000	5,346,000	12,152,000
Ontario.....	13,036,000	143,000	14,591,000	27,770,000
Manitoba.....	2,260,000	71,000	1,297,000	3,628,000
Saskatchewan	3,973,000	14,000	179,000	4,166,000
Alberta.....	4,519,000	104,000	684,000	5,307,000
British Columbia (including Yukon).....	3,637,000	65,000	1,978,000	5,680,000
Total - Canada.....	37,112,000	607,000	25,634,000	63,353,000
1949				
Newfoundland	408,000	96,000	342,000	846,000
Maritimes.....	2,818,000	59,000	1,773,000	4,650,000
Quebec.....	7,411,000	155,000	4,779,000	12,345,000
Ontario.....	14,682,000	180,000	13,681,000	28,543,000
Manitoba.....	2,717,000	74,000	1,439,000	4,230,000
Saskatchewan	4,438,000	12,000	255,000	4,705,000
Alberta.....	5,266,000	55,000	727,000	6,048,000
British Columbia (including Yukon).....	3,916,000	79,000	1,965,000	5,960,000
Total - Canada.....	41,656,000	710,000	24,961,000	67,327,000

TABLE 30. Sales of Lubricating Greases, 1948 and 1949 (As reported by principal dealers)

	Automotive	Industrial	Total
(pounds)			
1948			
Prince Edward Island, Nova Scotia and New Brunswick.....	2,581,000	1,290,000	3,871,000
Quebec	6,093,000	4,784,000	10,877,000
Ontario	13,191,000	7,840,000	21,031,000
Manitoba	3,472,000	2,018,000	5,490,000
Saskatchewan.....	7,908,000	501,000	8,409,000
Alberta	5,800,000	1,226,000	7,026,000
British Columbia (including Yukon).....	2,213,000	1,298,000	3,511,000
Total - Canada	41,258,000	18,957,000	60,215,000
1949			
Newfoundland.....	162,000	102,000	264,000
Maritimes	2,218,000	1,660,000	3,878,000
Quebec	6,108,000	4,902,000	11,010,000
Ontario	13,530,000	8,275,000	21,805,000
Manitoba	4,116,000	1,763,000	5,879,000
Saskatchewan.....	7,828,000	413,000	8,241,000
Alberta	6,614,000	1,450,000	8,064,000
British Columbia (including Yukon).....	2,810,000	1,358,000	4,168,000
Total - Canada	43,386,000	19,923,000	63,309,000

TABLE 31. Imports of Petroleum, Asphalt and Their Products, 1948 and 1949

Item	1948		1949	
	Quantity	Value	Quantity	Value
		\$		\$
Asphaltum or asphalt, solid or not..... cwt.	211,520	595,376	441,949	871,093
Oil, imported by miners or mining companies, for the concentration of ores or metals..... gal.	126,890	92,030	150,423	108,795
Crude petroleum for refining .8155 specific gravity (42.0 A.P.I.) or heavier at 60° Fah..... M gal.	2,643,758	191,803,368	2,587,709	189,363,805
Crude petroleum, n.o.p..... gal.	814,339	46,256	430,500	32,476
Fuel oil, ex-warehoused, for ships' stores..... gal.	12,504,179	756,688	13,327,449	669,887
Kerosene, n.o.p. gal.	76,868,321	8,791,014	36,618,392	3,687,650
Engine distillate .8017 specific gravity or heavier at 60° Fah..... gal.	1,064,885	150,136	1,236,878	166,887
Gasoline, lighter than .8236 specific gravity at 60° Fah. (Included the following item prior to 1949)..... gal.	274,983,729	40,514,758	215,340,198	31,209,682
Aviation gasoline..... gal.	(see preceding item)		43,301,850	8,963,945
Natural casinghead, compression or absorption gasoline lighter than .6690 specific gravity (80.0 A.P.I.) at 60° Fah. when imported by refiners of crude petroleum for blending with gasoline wholly produced in Canada gal.	47,623,626	5,946,914	49,363,120	5,082,866
Lubricating oils, composed wholly or in part of petroleum and costing less than 25 cents per gallon..... gal.	6,935,374	1,187,075	9,538,199	1,725,916
Lubricating oils costing 25 cents or more per gallon..... gal.	9,240,999	4,444,874	6,925,888	2,943,840
Oils, mineral, n.o.p. gal.	1,516,410	1,493,552	837,318	984,373
Imports of petroleum n.o.p., .8236 specific gravity (40.3 A.P.I.) or heavier at 60° Fah. (Included the five following items prior to 1949)..... gal.	335,447,326	32,309,045	(see below)	
Stove oil, No. 1 fuel oil..... gal.			49,473,310	5,015,267
Light fuel and furnace oils, Nos. 2 and 3..... gal.		included in preceding item prior to 1949	38,912,347	3,456,260
Heavy fuel oils, Nos. 4, 5 and 6..... gal.			98,093,110	5,123,750
Diesel fuel..... gal.			38,465,627	3,863,056
Tractor fuel..... gal.			38,626	5,515
Petroleum greases and lubricating greases, n.o.p..... lb.	10,157,242	892,459	10,996,214	972,014
Refined petroleum jellies and oils for toilet, medicinal, edible or similar purposes..... -	-	555,720	-	590,822
Paraffin wax..... lb.	43,580,756	3,464,046	24,282,584	1,614,209
Paraffin wax candles..... lb.	11,786	2,749	236,047	67,077
Naphtha, including solvent naphtha..... gal.	(see following item)		3,924,515	816,982
Products of petroleum n.o.p., lighter than .8236 specific gravity at 60° Fah. (Included the preceding item prior to 1949)..... gal.	9,210,764	1,268,296	4,043,863	1,325,334
Liquefied petroleum gases..... lb.	-	2,269,714	142,506,357	2,360,680
Petroleum tops; blends of petroleum tops or petroleum products with crude petroleum; all the foregoing .7249 specific gravity (63.7A.P.I.) or heavier at 60° Fah. when imported by oil refiners to be refined..... gal.	72,607,104	5,021,638	60,695,952	3,641,419

TABLE 32. Exports of Petroleum and Its Products, 1948 and 1949

Item	1948		1949	
	Quantity	Value	Quantity	Value
		\$		\$
Petroleum, crude..... gal.	23,948	2,684	-	-
Oil, coal and kerosene, refined..... gal.	336,073	61,203	167,938	24,807
Gasoline and naphtha..... gal.	8,772,438	1,236,288	2,019,342	291,361
Fuel oil..... gal.	63,590,878	4,841,459	25,265,609	1,855,198
Lubricating oil..... gal.	917,004	348,721	124,041	108,913
Oil, mineral, n.o.p..... gal.	751,888	128,045	418,226	34,953
Wax, mineral..... cwt.	326,779	2,685,514	51,034	273,023

TABLE 33. Employees and Their Earnings in the Lubricating Oils and Greases Industry, 1948 and 1949

Province	Average Number of Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
1948						\$	\$	\$
Ontario.....	58	13	166	2	239	161,681	353,329	515,010
Other provinces.....	2	2	7	-	11	11,116	13,135	24,251
Canada.....	60	15	173	2	250	172,797	366,464	539,261
1949								
Ontario.....	59	12	157	3	231	188,665	331,402	520,067
Other provinces.....	6	4	10	-	20	15,757	20,914	36,671
Canada.....	65	16	167	3	251	204,422	352,316	556,738

TABLE 34. Employees and Their Earnings in Petroleum Refineries, 1948 and 1949

Province	Average Number of Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
1948						\$	\$	\$
Quebec.....	326	47	1,475	10	1,858	1,179,290	3,797,756	4,977,046
Ontario.....	641	138	2,858	47	3,684	2,495,028	7,086,994	9,582,022
Manitoba.....	33	14	127	6	180	67,379	231,876	299,255
Saskatchewan.....	96	15	462	4	577	339,946	1,091,103	1,431,049
Alberta.....	132	24	620	2	778	496,181	1,547,720	2,043,901
British Columbia.....	86	12	457	1	556	329,268	1,160,412	1,489,680
Other provinces.....	82	30	488	12	612	346,005	1,353,740	1,699,745
Canada.....	1,396	280	6,487	82	8,245	5,253,097	16,269,601	21,522,698
1949								
Quebec.....	453	56	1,662	9	2,180	1,608,261	4,333,260	5,941,521
Ontario.....	968	313	2,688	51	4,020	4,262,340	7,120,985	11,383,325
Manitoba.....	53	17	173	5	248	175,057	322,278	497,335
Saskatchewan.....	98	14	435	5	552	351,901	1,162,928	1,514,829
Alberta.....	148	27	714	4	893	614,136	1,885,891	2,500,027
British Columbia.....	151	52	471	-	674	627,108	1,375,816	2,002,924
Other provinces.....	95	30	464	6	595	425,262	1,320,315	1,745,577
Canada.....	1,966	509	6,607	80	9,162	8,064,065	17,521,473	25,585,538

Directory of Operating Petroleum Refineries, 1949

Name of Company	Location of refinery	Crude oil capacity	Type of refinery	Cracking Plant	
				Type	Capacity
		Bbl. per 24 hours			Bbl. per 24 hours
NOVA SCOTIA:					
Imperial Oil Limited.....	Imperoyal	22,000	S-C	Combination unit.....	9,900
NEW BRUNSWICK:					
New Brunswick Oilfields Ltd.	Weldon.....	300	S	-	-
QUEBEC:					
British American Oil Co. Limited.....	Montreal East	32,000	S-C	Thermal and Catalytic...	20,850
Imperial Oil Limited.....	Montreal East	37,500	S-C	Tube and tank and Kellogg F.C.C.U.	20,300
McCull-Frontenac Oil Co. Limited.....	Montreal East	40,000	S-C	Thermal and Fluid Catalytic	27,000
Shell Oil Company of Canada Ltd.....	Montreal East	14,500	S-C	Dubbs Selective	7,500
ONTARIO:					
British American Oil Co. Limited.....	Toronto.....	1			
Canadian Oil companies Limited.....	Petrolia	3,700	S-C	Dubbs	2,150
Imperial Oil Limited.....	Sarnia.....	52,000	S-C	Suspensoid and tube and tank	26,000
McCull Frontenac Oil Co. Limited.....	Toronto.....	12,000	S-C	Combination unit and Jenkins Still	6,500
British American Oil Co. Limited.....	Clarkson	10,000	S-C	Thermal.....	4,500
Trinidad Leaseholds (Canada) Limited.....	Port Credit...	6,000	S-C	Dubbs	3,000
MANITOBA:					
Anglo-Canadian Oils Ltd.	Brandon.....	2,300	S-C	Dubbs	1,100
North Star Oil Limited.....	St. Boniface..	4,000	S-C	Dubbs	2,000
Radio Oil Refineries Ltd.....	East Kildonan	1,000	S	-	-
SASKATCHEWAN:					
British American Oil Co. Limited.....	Moose Jaw....	6,000	S-C	Thermal.....	2,000
Saskatchewan Federated Cooperatives	Regina.....	2,400	S-C	Dubbs	1,100
Hi-Way Refineries Limited.....	Saskatoon....	300	S	-	-
Hi-Way Refineries Limited.....	Rosetown....	275	S	-	-
Imperial Oil Limited.....	Regina.....	16,000	S-C	Tube and tank.....	9,000
Moose Jaw Refineries Ltd.	Moose Jaw....	1,000	S	-	-
Northern Petroleum Corporation, Ltd.....	Regina.....	500	S	-	-
ALBERTA:					
British American Oil Co. Limited.....	Calgary.....	7,200	S-C	Thermal.....	2,500
Gas and Oil Refineries Limited.....	Hartell.....	3,000	S-C	Dubbs	1,000
Gold Standard Oils Ltd.	Wainwright...	300	S	-	-
Imperial Oil Limited.....	Calgary.....	10,000	S-C	Kellogg Combination Unit	4,000
Imperial Oil Limited.....	Edmonton....	16,200	S-C	Dubbs	9,000
Excelsior Refineries Ltd.....	Lloydminster	1,500	S	-	-
Husky Oil & Refining, Ltd.....	Lloydminster	5,000	S	-	-
BRITISH COLUMBIA:					
Imperial Oil Limited.....	Ioco.....	12,000	S-C	Tube and tank.....	2,750
Shell Oil Company of British Columbia Ltd.....	Shellburn....	5,300	S-C	U.O.P.	2,700
Standard Oil Company of British Columbia Ltd.....	Burnaby.....	8,350	S	-	-
NORTHWEST TERRITORIES:					
Imperial Oil Limited.....	Norman Wells	1,000	S	-	-

S - Skimming
C - Cracking

1. Operations discontinued as of July, 1949.

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Directory of Plants Engaged in the Compounding of Lubricating Oils and Greases, 1949

Name of Company	Location of Plant
QUEBEC:	
Chapman, L. L. and W. H.	Champlain St., Gatineau Point
Tide Water Associated Oil Company (Canada) Ltd.	950 St. Lawrence Blvd., Montreal
ONTARIO:	
Campbell Lubricating Specialties, Ltd.	414 Eastern Ave., Toronto
Canadian Oil Companies, Limited	Petrolia
Hastings Ltd.	Colebrook
Hollingshead, R. M., Co. of Canada, Ltd.	Bowmanville
The Kearns Co. of Canada.	226 Weston Road, Toronto
McColl-Frontenac Oil Co. Ltd.	Toronto
Miracle Products Co. Ltd.	194 John St. S., Hamilton
Ontario Gasoline & Oil Limited	45 Dickens St., Toronto
Ontario Lubricating Company Ltd.	120 Chatham St., Hamilton
Tide Water Associated Oil Company (Canada) Ltd.	55 Wade Ave., Toronto
BRITISH COLUMBIA:	
Bar-Dol Products Ltd.	5405 West Boulevard, Vancouver
Renton Distributors Ltd.	550 Beatty St., Vancouver

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 551

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