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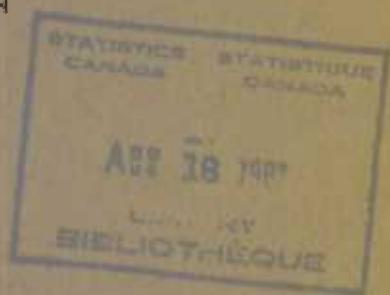
CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

MINING, METALLURGICAL & CHEMICAL BRANCH



THE PETROLEUM PRODUCTS INDUSTRY

IN

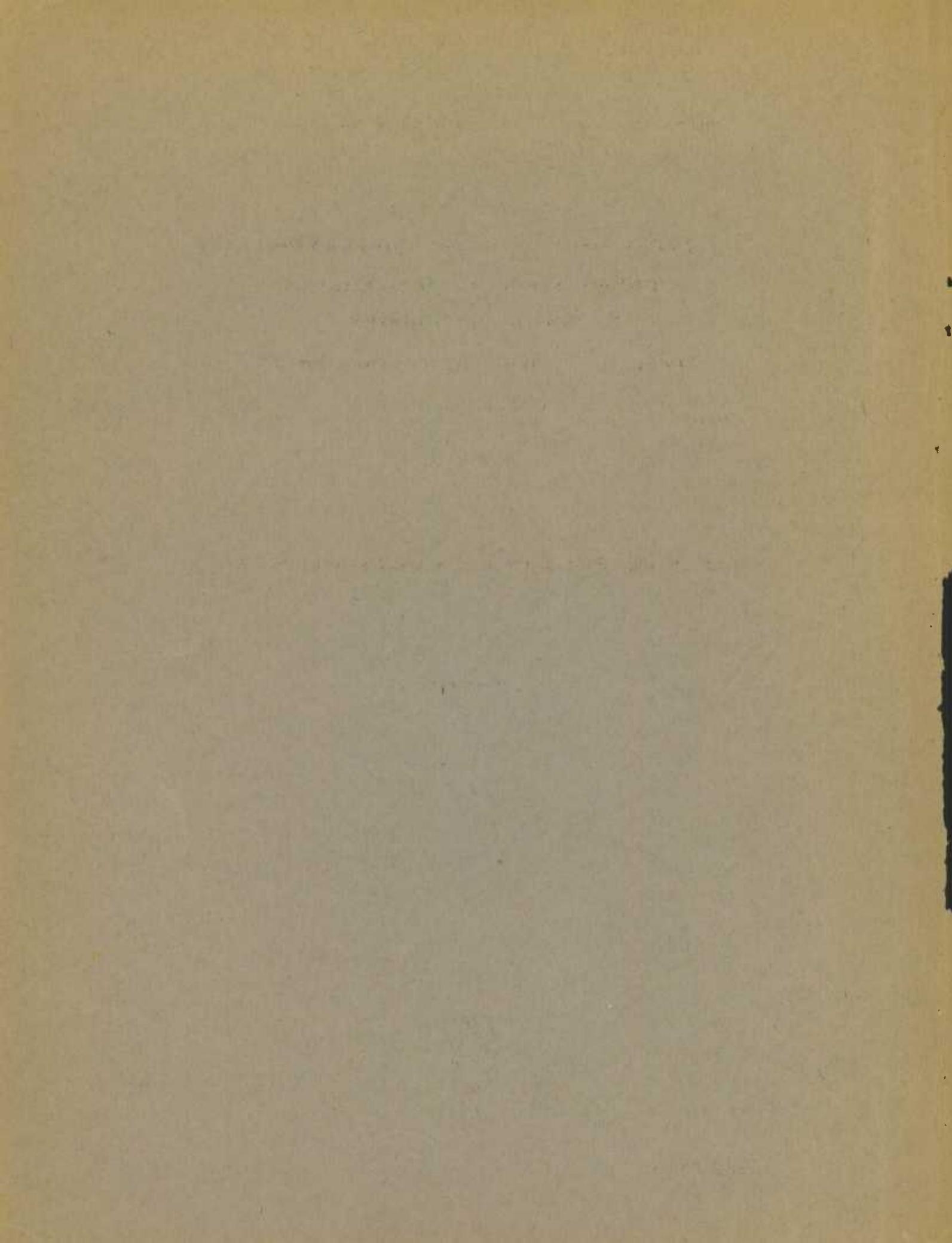
CANADA

1939



OTTAWA  
1940

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MINING, METALLURGICAL AND CHEMICAL BRANCH  
OTTAWA - CANADA

Dominion Statistician: R. H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.)  
 Chief - Mining, Metallurgical and Chemical Branch: W. H. Losee, B.Sc.  
 Statistician - Metal and Chemical Products: H. McLeod, B.Sc.

## ANNUAL INDUSTRY REPORT

## MANUFACTURES OF THE NON-METALLIC MINERALS GROUP

## PETROLEUM PRODUCTS INDUSTRY, 1939

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

Forty-two refineries and 11 blending plants, or a total of 53 works, reported under this category in 1939 and the aggregate value of production was \$104,578,517, an increase of 7.8 per cent over the 1938 total of \$97,003,347.

Output figures for 1939 included \$103,494,258 for petroleum refineries and \$1,084,279 for concerns engaged in blending oils and greases, against corresponding totals in 1938 of \$96,121,611 and \$881,736 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.

Table 1 - PRINCIPAL STATISTICS OF THE PETROLEUM PRODUCTS INDUSTRY, 1935 - 1939

Year	No. of plants	Capital employed	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
			\$	\$	\$	\$	\$
<u>PETROLEUM REFINING</u>							
1935 .....	45	64,012,045	4,771	7,046,675	3,839,424	58,415,916	79,176,081
1936 .....	50	61,307,820	4,935	7,193,148	3,927,321	66,219,418	85,172,981
1937 .....	44	63,759,579	5,047	8,126,583	4,444,878	79,993,972	97,701,954
1938 .....	47	62,097,038	4,586	7,750,746	4,678,933	75,993,557	96,121,611
1939 .....	42	65,784,933	4,675	7,736,330	4,573,570	73,922,207	103,494,258
<u>COMPOUNDING OILS AND GREASES</u>							
1935 .....	13	695,409	85	106,549	7,625	453,898	774,444
1936 .....	13	576,106	84	116,807	5,313	356,737	629,382
1937 .....	13	520,687	90	120,260	5,127	407,908	752,060
1938 .....	12	523,870	89	122,294	4,284	425,959	881,756
1939 .....	11	596,256	91	153,917	5,129	543,394	1,084,279
<u>TOTAL</u>							
1935 .....	58	64,707,454	4,856	7,153,224	3,847,049	58,869,814	79,950,525
1936 .....	63	61,883,926	5,019	7,309,955	3,932,634	66,555,885	85,802,363
1937 .....	57	64,280,266	5,137	8,246,843	4,450,005	80,401,880	98,454,014
1938 .....	59	62,620,908	4,675	7,873,040	4,683,217	76,419,516	97,003,347
1939 .....	53	66,381,189	4,766	7,890,247	4,578,699	74,465,600	104,578,517

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, 1938 and 1939

Province	No. of plants	Capital employed	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
<u>1938</u>							
Quebec .....	8	25,159,180	1,046	1,915,626	1,683,686	24,977,619	31,354,925
Ontario .....	13	19,424,451	2,019	3,362,982	1,590,383	24,136,319	29,442,712
Manitoba .....	5	771,969	100	99,530	43,157	1,044,062	1,659,986
Saskatchewan .....	12	4,094,938	410	616,655	446,607	6,660,841	9,389,608
Alberta .....	14	5,698,938	410	631,463	295,430	6,056,105	9,101,782
British Columbia ...	4	4,251,575	309	589,389	250,456	7,628,198	9,037,086
Nova Scotia .....	1)						
New Brunswick .....	1)	5,239,857	381	657,395	573,498	5,916,372	7,017,248
N. W. Territories ..	1)						
CANADA .....	59	62,620,908	4,675	7,875,040	4,685,217	76,419,516	97,003,347
<u>1939</u>							
Quebec .....	7	25,635,897	990	1,680,886	1,595,415	25,350,561	33,529,907
Ontario .....	12	19,111,045	2,051	3,408,743	1,523,567	23,266,811	32,087,996
Manitoba .....	5	1,231,709	134	151,271	54,572	1,453,756	1,884,891
Saskatchewan .....	11	4,659,959	452	655,759	467,015	6,669,751	10,074,461
Alberta .....	11	6,849,617	481	719,616	331,079	6,277,687	10,291,523
British Columbia ...	4	4,271,052	274	527,142	242,958	7,948,618	9,144,073
Nova Scotia .....	1)						
New Brunswick .....	1)	4,623,950	404	746,850	564,093	5,498,416	7,765,866
N. W. Territories ..	1)						
CANADA .....	53	66,381,189	4,766	7,890,247	4,578,699	74,465,600	104,578,517

Table 3 - SIZE OF ESTABLISHMENTS, ACCORDING TO PRODUCTION, NUMBER OF EMPLOYEES, and CAPITAL EMPLOYED, 1939

	Number of plants	Capital employed	Number of employees	Gross selling value of products at works
<u>(a) PRODUCTION</u>				
Under \$25,000 .....	7	230,526	25	54,902
\$25,000 to \$50,000 .....	3	47,889	12	110,773
\$50,001 to \$100,000 .....	11	727,298	99	758,776
\$100,001 to \$250,000 .....	8	885,828	83	1,245,625
\$250,001 to \$500,000 .....	5	1,207,255	153	1,272,346
\$500,001 to \$1,000,000 .....	4	1,281,263	162	2,375,327
\$1,000,001 to \$5,000,000 .....	9	16,403,882	906	25,199,238
Over \$5,000,000 .....	8	45,597,268	5,326	73,561,530
TOTAL .....	53	66,381,189	4,766	104,578,517
<u>(b) NUMBER OF EMPLOYEES</u>				
1 or 2 .....	4	19,977	4	52,186
3 to 10 .....	18	917,086	119	1,242,881
11 to 20 .....	9	1,351,780	127	1,874,728
21 to 50 .....	4	2,048,732	147	3,729,901
51 to 100 .....	7	9,606,910	493	12,052,788
101 to 250 .....	7	28,167,118	1,148	41,580,475
Over 250 .....	4	24,269,586	2,730	44,045,558
TOTAL .....	53	66,381,189	4,766	104,578,517
<u>(c) CAPITAL EMPLOYED</u>				
Under \$25,000 .....	10	174,756	36	274,679
\$25,000 to \$100,000 .....	14	866,584	123	1,236,752
\$100,001 to \$1,000,000 .....	15	5,779,869	501	9,226,957
Over \$1,000,000 .....	14	59,559,980	4,106	95,840,129
TOTAL .....	53	66,381,189	4,766	104,578,517

(a) THE PETROLEUM REFINING INDUSTRY

Forty-two petroleum refineries operating in Canada during 1939 were distributed by provinces, as follows: 11 in Saskatchewan, 11 in Alberta, 5 in Ontario, 5 in Manitoba, 4 in Quebec, 5 in British Columbia and 1 in each of Nova Scotia, New Brunswick and the Northwest Territories. Compared with 1938, there was a loss of 5 refineries in Alberta, 1 in Quebec and 1 in Saskatchewan, while in the other provinces the numbers remained unchanged. Operating refineries had a capacity of 200,020 barrels of crude oil per day, distributed as follows - Quebec, 64,500 barrels or 32.2 per cent; Ontario, 44,500 barrels or 22.2 per cent; Nova Scotia, 32,500 barrels or 16.3 per cent; British Columbia, 22,700 barrels or 11.4 per cent; Alberta, 18,250 barrels or 9.1 per cent; Saskatchewan, 14,620 barrels or 7.3 per cent; Manitoba, 2,550 barrels or 1.3 per cent; New Brunswick, 250 barrels or 0.1 per cent and the Northwest Territories, 150 barrels or 0.1 per cent. Eighteen of these plants reported cracking units in use with an aggregate capacity of about 95,500 barrels per day. The location, type and capacity of each of these refineries is recorded in the Directory at the end of this report.

During the year 1,507,704,411 gallons of imported crude oil and 262,198,884 gallons of crude oil, naphtha and absorption gasoline from Canadian wells, or a total of 1,569,903,295 gallons was put through Canadian refineries; this was about 61 per cent of the quantity they are equipped to handle. Over 65 per cent or 996,684,536 gallons was imported from the United States, 20 per cent or 311,019,875 gallons came from other countries and nearly 17 per cent, or 262,198,884 gallons came from Canadian wells. The total cost at the refineries of all crude oil and naphtha charged to stills during the year was \$68,046,834. Stocks of crude and naphtha held at refineries on December 31 were reported at 154,546,529 gallons.

Refinery production of gasoline in 1939 amounted to 740,563,619 gallons of which 405,758,237 gallons were made by the straight run process and 354,825,382 gallons by cracking. In addition, the refineries used 34,231,014 gallons of imported casinghead gasoline for blending purposes, but this was not included in the Canadian production figures. The gallonage of gasoline made in 1939 was the greatest on record, being 15 per cent greater than the output in 1938, which in turn was 2 per cent over 1937. The factory selling value of the gasoline made during 1939 was \$64,491,018. Stocks of gasoline held by refineries at the year end included 119,056,751 gallons of straight run and cracked gasoline and 10,556,679 gallons of imported casinghead. In 1939 there was an output of 10,479,515 gallons of natural gasoline from absorption plants in Alberta. Of this amount, only 483,000 gallons were sold direct to consumers while the remainder went to refineries for further treatment. The amount used in refineries 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 109,021,177 gallons during 1939, which added to a production of 740,563,619, less the increase in refinery stocks of 31,953,165 and less the exports of 3,443,416, made an apparent Canadian consumption for the year of 814,188,217 gallons. Actual sales as reported to the Provincial Governments under the Gasoline Tax Acts amounted to only 807,666,298 gallons.

Production in Canadian refineries of fuel and gas oils (excluding any made and used for cracking purposes) totalled 582,705,683 gallons of which 521,252,546 gallons were made for sale and 61,473,137 gallons for use as fuel in the producing plant. Imports aggregated 59,960,460 gallons and exports amounted to 2,879,286 gallons. Refinery stocks at the end of the year amounted to 75,240,018 gallons or about seven and a half million gallons less than in 1938. The apparent consumption in Canada as calculated from the above figures was 647,298,402 gallons.

Output of tractor and engine distillates was 33,620,396 gallons in 1939, imports amounted to 1,257,808 gallons, and refinery stocks declined 3,146,182 gallons. The apparent Canadian consumption was 38,024,386 gallons.

Lubricating oils were produced both in the refineries and in the blending plants, the actual figures being 25,856,313 gallons and 1,560,759 gallons respectively, a total of 25,017,072 gallons. By adding to this total the imports of 18,067,304 gallons and the decline in refinery stocks of 194,687, a consumption in Canada of 45,279,063 gallons is indicated.

Lubricating greases were produced as follows - 845,140 pounds in the blending plants and 12,296,476 in the refineries, a total of 13,141,616 pounds. The latter quantity plus the imports of 7,719,447 indicates a consumption in Canada of 20,861,063 pounds during 1939.

Capital employed in the petroleum refining industry in 1939 was reported at \$65,784,935 of which \$35,216,503 was the value placed on lands, buildings and equipment. The average number of employees was 4,675 and payment to these workers in salaries and wages amounted to \$7,736,530. Materials used in refining operations cost \$73,922,206, fuel and electricity cost \$4,573,570 and the products were valued at \$103,494,238.

Table 4 - NUMBER AND TOTAL CAPACITY OF PETROLEUM REFINERIES IN OPERATION IN CANADA, 1936 - 1939

Province	1936		1937		1938		1939	
	Number	Capacity in barrels per day						
Nova Scotia .....	1	11,000	1	11,000	1	20,000	1	32,500
New Brunswick .....	1	250	1	250	1	250	1	250
Quebec .....	4	65,500	5	63,500	5	65,500	4	64,500
Ontario .....	5	39,500	5	40,500	5	41,500	5	44,500
Manitoba .....	4	2,650	3	2,450	5	3,360	5	2,550
Saskatchewan .....	18	15,250	17	16,070	12	14,475	11	14,620
Alberta .....	12	16,860	8	9,800	14	13,600	11	18,250
British Columbia ..	4	20,000	3	19,500	3	22,500	3	22,700
N. W. Territories..	1	150	1	150	1	150	1	150
CANADA .....	50	171,160	44	168,220	47	181,335	42	200,020

NOTE - 1 barrel = 35 Imperial gallons.

Table 5 - PRINCIPAL STATISTICS OF THE PETROLEUM REFINING INDUSTRY, 1921 - 1939

Year	Number of refin- eries	Capital employed	Average number of em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross sell- ing value of products at works
			\$		\$		\$
1921 .....	11	55,630,864	3,911	6,003,559	4,429,308	35,850,653	51,565,403
1922 .....	15	61,253,400	3,498	5,391,285	4,227,615	38,129,880	56,495,821
1925 .....	14	60,288,861	4,195	5,531,569	4,054,846	36,435,306	45,571,506
1924 .....	17	53,095,784	3,603	5,623,978	3,580,032	36,669,292	48,677,347
1925 .....	13	49,461,900	3,655	5,621,898	3,433,017	37,814,303	49,802,615
1926 .....	17	56,476,449	3,698	5,782,589	3,580,049	50,783,871	70,570,240
1927 .....	16	55,442,193	3,802	6,078,226	3,628,842	52,743,530	63,979,849
1928 .....	16	55,811,418	4,252	6,803,234	3,440,578	57,033,185	82,448,392
1929 .....	15	69,887,267	4,883	7,984,786	3,745,956	76,289,182	98,384,180
1930 .....	15	69,077,982	5,030	8,003,357	3,859,683	71,307,879	90,809,711
1931 .....	20	67,288,556	4,058	6,110,068	3,371,118	50,353,423	75,588,425
1932 .....	24	68,882,376	4,058	5,897,811	3,338,648	52,029,471	71,360,324
1933 .....	37	67,566,886	4,551	6,041,230	3,130,719	48,916,966	69,803,721
1934 .....	42	66,450,496	4,876	6,274,799	3,117,697	56,659,492	75,785,677
1935 .....	45	64,012,045	4,771	7,046,675	3,839,424	53,415,916	79,176,081
1936 .....	50	61,307,820	4,935	7,193,148	3,927,321	66,219,148	85,172,981
1937 .....	44	63,759,579	5,047	8,126,583	4,444,878	79,993,972	97,701,954
1938 .....	47	62,097,038	4,586	7,750,746	4,678,933	75,293,557	96,121,611
1939 .....	42	65,784,933	4,675	7,736,330	4,573,570	75,992,207	103,494,258

Table 6 - PRINCIPAL STATISTICS OF THE PETROLEUM REFINING INDUSTRY, BY PROVINCES, 1938 and 1939

Province	Number of refin- eries	Capital employed	Average number of em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross sell- ing value of products at works
			\$		\$		\$
<u>1938</u>							
Quebec .....	5	25,040,477	1,024	1,881,674	1,681,283	24,929,320	31,243,848
Ontario .....	5	19,005,635	1,954	3,276,492	1,588,619	23,762,266	28,679,052
Manitoba .....	5	771,969	100	99,530	43,157	1,044,062	1,659,986
Saskatchewan .....	12	4,094,938	410	616,655	446,607	6,660,841	9,389,608
Alberta .....	14	3,698,938	410	631,463	295,430	6,056,105	9,101,782
British Columbia ..	3	4,245,224	307	587,537	250,339	7,624,591	9,030,087
Other provinces ...	5	5,239,857	381	657,395	373,498	5,916,372	7,017,248
CANADA (1) .....	47	62,097,038	4,586	7,750,746	4,678,933	75,993,557	96,121,611

Table 6 - PRINCIPAL STATISTICS OF THE PETROLEUM REFINING INDUSTRY, BY PROVINCES, 1938 and 1939 (Concluded)

Province	Number of refineries	Capital employed	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
<b>1939</b>							
Quebec .....	4	25,533,326	967	1,645,643	1,592,467	23,296,707	53,210,624
Ontario .....	5	18,621,442	1,964	3,291,375	1,521,543	22,780,552	31,129,057
Manitoba .....	5	1,231,709	134	151,271	54,572	1,452,756	1,884,891
Saskatchewan .....	11	4,659,959	452	655,759	467,015	6,569,751	10,074,461
Alberta .....	11	6,849,617	481	719,616	331,079	6,277,687	10,291,325
British Columbia ..	3	4,264,950	273	525,836	242,801	7,945,337	9,158,016
Other provinces ...	3	4,623,930	404	746,830	364,093	5,498,416	7,765,866
CANADA (1) ....	42	65,784,933	4,675	7,736,330	4,573,570	73,922,206	103,494,238

(1) Includes 1 refinery in each of Nova Scotia, New Brunswick and the Northwest Territories.

Table 7 - CAPITAL EMPLOYED IN THE PETROLEUM REFINING INDUSTRY, 1938 and 1939

Province	Present value of lands, buildings, machinery and equipment	Inventory value of finished products and materials on hand and stocks in process	Operating capital (cash, bills and accounts receivable, etc.)	TOTAL CAPITAL EMPLOYED
<b>1938</b>				
Quebec .....	13,514,127	11,434,722	91,628	25,040,477
Ontario .....	11,300,616	6,988,509	716,510	19,005,635
Manitoba .....	370,562	207,660	193,747	771,969
Saskatchewan .....	1,937,566	1,974,510	182,862	4,094,938
Alberta .....	1,591,192	1,886,171	221,575	3,698,938
British Columbia .....	2,170,706	2,070,735	3,783	4,245,224
Other provinces .....	2,540,012	2,359,777	340,068	5,239,857
CANADA .....	33,424,781	26,922,084	1,750,173	62,097,038
<b>1939</b>				
Quebec .....	12,865,169	12,490,325	177,832	25,533,326
Ontario .....	10,850,294	7,437,593	333,555	18,621,442
Manitoba .....	741,305	270,925	219,479	1,231,709
Saskatchewan .....	2,306,831	2,037,471	315,657	4,659,959
Alberta .....	4,106,544	2,546,791	196,282	6,849,617
British Columbia .....	2,074,743	2,185,321	4,886	4,264,950
Other provinces .....	2,271,417	2,163,516	188,997	4,623,930
CANADA .....	35,216,503	29,181,942	1,436,688	65,784,933

Table 8 - EMPLOYEES IN PETROLEUM REFINERIES, SALARIES AND WAGES, 1938 and 1939

Province	Average Number of Employees						TOTAL SALARIES and WAGES		
	On Salaries		On Wages		TOTAL	\$	\$	\$	\$
	Male	Female	Male	Female					
<b>1938</b>									
Quebec .....	168	20	835	1	1,024	467,799	1,413,875	1,881,674	
Ontario .....	298	45	1,605	6	1,934	878,714	2,397,778	3,276,492	
Manitoba .....	29	7	64	...	100	43,682	55,848	99,530	
Saskatchewan .....	72	15	321	2	410	171,621	445,034	616,655	
Alberta .....	71	11	327	1	410	172,162	459,301	631,463	
British Columbia .....	59	12	236	...	307	187,295	400,242	587,537	
Other provinces .....	47	16	318	...	381	178,188	479,207	657,395	
CANADA .....	744	126	3,706	10	4,586	2,099,461	5,651,285	7,750,746	
<b>1939</b>									
Quebec .....	172	18	776	1	967	485,549	1,160,294	1,645,643	
Ontario .....	299	43	1,615	7	1,964	872,481	2,418,894	3,291,375	
Manitoba .....	34	10	90	...	134	61,491	89,780	151,271	
Saskatchewan .....	88	20	341	3	452	187,526	468,253	655,759	
Alberta .....	81	12	387	1	481	206,202	513,414	719,616	
British Columbia .....	54	10	209	...	273	165,882	359,954	525,836	
Other provinces .....	51	16	337	...	404	188,222	558,608	746,830	
CANADA .....	779	129	3,755	12	4,675	2,167,153	5,569,177	7,736,330	

Table 9 - NUMBER OF WAGE-EARNERS IN PETROLEUM REFINERIES, BY MONTHS, 1939

Month	Quebec	Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia	Other provinces	CANADA
January .....	809	1,512	53	283	298	191	329	3,475
February .....	757	1,547	63	283	300	192	336	3,478
March .....	800	1,585	83	286	314	196	316	3,530
April .....	773	1,561	121	319	416	196	328	3,714
May .....	820	1,633	121	386	407	216	351	3,914
June .....	794	1,663	102	378	420	219	366	3,942
July .....	747	1,606	98	390	417	223	359	3,840
August .....	784	1,606	102	398	422	214	348	3,874
September .....	766	1,673	95	399	433	216	345	3,927
October .....	775	1,760	88	372	411	215	315	3,936
November .....	788	1,681	75	349	399	222	328	3,842
December .....	709	1,695	67	285	393	213	347	3,709
AVERAGE ...	777	1,622	90	344	388	209	337	3,767

Table 10 - FUEL(x) AND ELECTRICITY USED IN PETROLEUM REFINERIES, 1938 and 1939

Kind	Unit of measure	1938		1939	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal - Canadian .....	short ton	156	\$ 967	...	...
Imported .....	short ton	21,565	98,473	11,650	52,485
Coke, including petroleum coke .....	short ton	5,948	15,439	4,232	18,202
Gasoline .....	Imp. gal.	1,337	495	17,903	2,006
Fuel oil .....	Imp. gal.	58,629,349	2,167,809	61,741,130	2,048,005
Wood .....	cord	146	558	160	613
Gas - Manufactured, including still gas	M cu. ft.	6,486,618	1,615,350	7,798,120	1,647,908
Natural .....	M cu. ft.	1,649,973	146,182	1,559,740	136,928
Other fuel .....	\$	...	214,695	...	207,127
Electricity purchased .....	K. W. H.	54,160,652	418,965	61,780,897	460,296
TOTAL .....	\$	...	4,678,933	...	4,573,570
Electricity generated for own use .....	K. W. H.	134,000	...	279,910	...

(x) Includes fuel oil, still gas, petroleum coke, etc., produced in the refineries and used by the producers for heating stills, buildings, etc., or for power purposes.

Table 11 - HOURS WORKED PER WEEK BY WAGE-EARNERS, 1939 (In one week of normal employment, over-time not included)

Hours worked per week	Number of wage-earners	Per cent of total	Hours worked per week	Number of wage-earners	Per cent of total
30 hours or less .....	549	14.3	55 hours .....	1	...
31 - 43 hours .....	2,144	56.0	56 - 64 hours .....	87	2.3
44 hours .....	116	3.0	65 hours and over ....	27	0.7
45 - 47 hours .....	3	0.1	TOTAL .....	3,828	100.0
48 hours .....	794	20.8	Total wages paid during selected week .....	\$110,894	
49 - 50 hours .....	10	0.3			
51 - 54 hours .....	97	2.5			

Table 12 - POWER EQUIPMENT IN PETROLEUM REFINERIES, 1938 and 1939

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
<u>1938</u>				
Steam engines and steam turbines .....	433	17,060	4	455
Diesel engines .....	6	1,050	...	...
Gasoline, gas and oil engines (except diesel).	19	1,346	...	...
Total Primary Equipment .....	458	19,456	4	455
Electric motors run by purchased power .....	1,205	23,117	18	506
TOTAL .....	1,663	42,573	22	961
Stationary boilers .....	130	29,457	8	500

Table 12 - POWER EQUIPMENT IN PETROLEUM REFINERIES, 1938 and 1939 - (Concluded)

	Ordinarily in use Number of units	Total rated horse power	In reserve or idle Number of units	Total rated horse power
<b>1939</b>				
Steam engines and steam turbines .....	476	19,479	28	575
Diesel engines .....	9	1,024	...	...
Gasoline, gas and oil engines .....	57	2,952	3	78
<b>Total Primary Equipment .....</b>	<b>542</b>	<b>23,465</b>	<b>31</b>	<b>653</b>
Electric motors run by purchased power .....	1,306	25,600	50	550
<b>TOTAL .....</b>	<b>1,848</b>	<b>49,065</b>	<b>81</b>	<b>1,203</b>
Electric motors run by power generated by primary equipment above .....	25	75	...	...
Stationary boilers .....	138	31,650	5	220

Table 13 - MATERIALS USED IN PETROLEUM REFINERIES, 1938 and 1939

Material	Unit of measure	1 9 3 8		1 9 3 9	
		Quantity	Cost at works	Quantity	Cost at works
\$	\$				
Crude oil (under 60° A.P.I.) in its natural state, from Canadian wells .....	Imp.gal.	217,105,125	10,807,043	253,964,242	11,813,685
Crude naphtha (60° A.P.I. and over) in its natural state, from Canadian wells .....	Imp.gal.	12,035,820	746,679	5,750,952	338,747
Absorption gasoline, etc., from Canadian wells ..... (run to stills) .....	Imp.gal.	7,351,255	496,503	2,483,690	160,059
Crude oil, in its natural state, imported, (run to stills) - (a) From United States..	Imp.gal.	860,931,586	44,761,798	994,341,531	45,025,216
(b) From Other Countries Imp.gal.		321,229,681	14,067,659	311,019,875	10,577,842
Crude oil, not in its natural state, (run to stills) - .....	Imp.gal.	5,697	570	2,343,005	131,285
Benzol for blending .....	Imp.gal.	2,061,032	327,458	2,087,860	328,321
Phenol .....	pound	172,535	26,690	249,472	41,674
Sulphuric acid, 66° Be .....	pound	19,874,862	194,046	20,377,249	219,201
Sulphur .....	pound	280,060	8,128	175,727	4,161
Caustic soda .....	pound	4,309,264	130,565	4,100,782	127,642
Soda ash .....	pound	424,431	8,915	648,237	13,330
Litharge .....	pound	499,921	36,240	267,923	23,027
Fullers' earth and clay .....	pound	19,687,467	281,668	19,814,473	304,214
Compounding materials .....	\$	...	482,055	...	507,992
Tetraethyl fluid .....	\$	...	2,677,961	...	3,023,903
Other materials .....	\$	...	207,325	...	417,155
Shipping containers .....	\$	...	732,454	...	864,752
<b>TOTAL .....</b>	<b>\$</b>	<b>...</b>	<b>75,993,557</b>	<b>...</b>	<b>73,922,206</b>

Table 14 - MATERIALS USED IN PETROLEUM REFINERIES, BY PROVINCES, 1939

Material	Unit of Measure	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other Provinces
Crude oil (under 60° A.P.I.) in its natural state, from Canadian wells. Imp.gal.	\$	... 7,313,063 \$ 428,993	6,152,135 421,144	105,595,965 5,759,153	133,414,979 5,123,070		... 1,488,100 \$ 81,323	
Crude naphtha (60° A.P.I. and over) in its natural state, from Canadian wells .....	Imp.gal.	... \$	...	33,675 5,095		5,717,277 333,652	... ...	... ...
Absorption gasoline, etc. from Canadian wells (run to stills) Imp.gal.	\$	... \$	... ...	...	119,729 17,223	2,363,961 142,836	... ...	... ...
Crude oil, in its natural state, imported (run to stills)-								
(a) From United States .....	Imp.gal.	523,186,485 \$ 14,877,494	421,963,188 19,291,314	10,301,652 961,206	6,492,809 401,118	3,202,470 127,316	189,609,066 7,505,809	59,585,861 1,860,959
(b) From Other Countries .....	Imp.gal.	197,465,381 \$ 7,045,925	...	...	...	...	3,635,802 183,613	107,702,632 3,278,282
Benzol for blending .....	Imp.gal.	1,106,642 \$ 181,759	851,586 114,780	120,290 28,135	2,297 972	2,884 1,263	3,261 1,274	900 138
Sulphuric acid 66° Be' .....	Pound	819,654 \$ 7,623	15,864,926 163,381	11,030 347	1,412,474 23,701	1,430,954 15,764	834,371 8,272	3,840 113
Sulphur .....	Pound	13,850 \$ 421	52,379 1,132	272 15	61,990 1,631	47,236 962	...	...
Caustic soda ...	Pound	898,786 \$ 25,048	953,590 23,952	50,910 2,218	694,447 24,963	919,717 34,389	207,633 6,250	375,699 10,822
Soda ash .....	Pound	19,090 \$ 372	122,940 1,907	2,490 75	304,660 6,760	41,450 1,135	18,250 382	139,387 2,699
Litharge .....	Pound	14,779 \$ 1,288	64,519 6,554	1,663 171	70,009 5,292	116,490 9,681	78 6	385 35
Fullers' earth and clay .....	Pound	694,000 \$ 11,723	1,902,733 19,658	1,000 135	103,370 1,954	95,060 2,597	...	...
Compounding materials .....	\$	...	500,434	...	...	457	7,101	...
Tetraethyl fluid	\$	905,913	1,080,955	29,550	218,308	415,874	201,337	171,966
Other materials.	\$	156,618	368,354	2,665	193,611	59,159	23,351	54,503
Shipping containers .....	\$	12,501	779,138	3,000	15,085	9,532	7,942	37,574
<b>TOTAL .....</b>	<b>\$</b>	<b>25,296,707</b>	<b>22,780,552</b>	<b>1,453,756</b>	<b>6,669,751</b>	<b>6,277,687</b>	<b>7,945,337</b>	<b>5,498,416</b>

(\$ = Cost at works)

Table 15 - PRODUCTS MADE IN PETROLEUM REFINERIES, 1938 and 1939

Product	Unit of measure	1 9 3 8				1 9 3 9			
		Quantity	Gross selling value at works	Quantity	Gross selling value at works	\$	\$		
<u>MADE FOR SALE -</u>									
Gasoline - Straight run (1) .....	Imp.gal.	362,448,896	32,369,433	405,564,360	35,820,713				
- By cracking process .....	Imp.gal.	291,422,445	25,664,662	334,806,309	28,651,369				
Stove oil (40° - 42.5° A.P.I.) .....	Imp.gal.	14,429,501	652,935	18,051,831	781,873				
Gas and light fuel oil (20° - 40° A.P.I., except diesel) .....	Imp.gal.	86,884,950	4,157,448	86,120,186	4,061,854				
Diesel fuel oil (all fuel oil sold under this name) .....	Imp.gal.	50,731,677	2,240,724	54,144,956	2,323,535				
Residual fuel oil (10° - 20° A.P.I.)	Imp.gal.	330,303,137	11,447,904	362,915,573	12,140,704				
Tractor and engine distillate .....	Imp.gal.	35,002,461	2,873,639	33,618,261	2,607,008				
V.M. and P. or solvent naphtha .....	Imp.gal.	7,144,996	583,507	8,218,123	647,534				
Kerosene .....	Imp.gal.	22,518,046	2,109,211	27,245,025	2,481,379				
Lubricating oil .....	Imp.gal.	21,543,098	4,123,954	23,578,851	4,243,728				
Lubricating grease .....	Imp.gal.	13,658,233	669,514	12,287,647	629,082				
Asphalt .....	Imp.gal.	54,914,869	3,979,783	56,571,431	4,419,190				
Petroleum coke .....	short ton	63,375	388,753	62,094	370,936				
Other products .....		\$	219,895	...	338,189				
TOTAL - MADE FOR SALE .....		\$	92,081,507	...	99,517,144				

MADE FOR OWN USE -

Gasoline - Straight run .....	Imp.gal.	134,753	11,743	173,877	16,475
- By cracking process .....	Imp.gal.	23,031	3,144	19,073	2,461
Gas and light fuel oil (20° - 40° A.P.I.) .....	Imp.gal.	1,653,587	61,525	113,677	6,029
Residual fuel oil (10° - 20° A.P.I.)	Imp.gal.	56,822,008	2,102,252	61,317,404	2,026,429
Kerosene .....	Imp.gal.	18,379	1,562	15,230	1,308
Lubricating oil .....	Imp.gal.	74,251	13,701	77,462	13,413
Tar .....	Pound	624,708	27,764	1,536,570	6,829
Asphalt .....	Imp.gal.	65,058	4,879	43,607	3,532
Petroleum coke .....	short ton	634	1,547	4,238	18,253
Still gas .....	M cu.ft.	6,486,618	1,615,350	7,802,666	1,671,238
Other products .....		\$	196,637	...	211,327
TOTAL - MADE FOR OWN USE .....		\$	4,040,104	...	3,977,094
GRAND TOTAL .....		\$	96,121,611	...	103,494,238

Fuel and gas oils made for use in cracking process .....

Imp.gal.      497,513,602      ...      576,923,544      ...

(1) Includes Turner Valley naphtha and natural gasoline run to refinery stills but does not include the imported casinghead gasoline which was used for blending at the refineries.

Table 16 - PRODUCTS MADE IN PETROLEUM REFINERIES, BY PROVINCES, 1939

Product	Unit of measure	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other Provinces
<u>MADE FOR SALE -</u>								
Gasoline - (a) Straight run .....	Imp.gal.	115,644,640	114,768,441	7,221,662	42,012,886	63,450,429	40,756,446	21,709,856
	\$	10,100,777	9,059,506	1,043,309	4,600,524	5,604,447	3,885,090	1,527,060
- (b) By cracking process	Imp.gal.	138,392,534	110,297,800	1,000,000	24,004,498	27,113,910	808,150	33,189,358
	\$	12,577,558	8,570,964	140,000	2,555,249	2,439,448	68,127	2,300,023
Fuel oil and gas oil .....	Imp.gal.	176,111,763	97,379,989	3,500,078	15,024,364	18,769,232	137,354,477	72,543,082
	\$	6,318,223	3,081,390	274,956	733,528	749,028	4,530,205	2,685,324
Tractor and engine distillate ....	Imp.gal.	1,325,145	7,986,024	2,387,537	13,537,818	8,381,737	...	...
	\$	79,525	530,987	277,355	1,139,698	570,443	...	...
V. H. & P. or solvent naphtha ....	Imp.gal.	3,311,583	3,362,850	45,210	240,652	369,187	674,137	214,495
	\$	262,581	244,268	10,573	22,549	35,868	56,830	14,865
Kerosene .....	Imp.gal.	3,355,590	14,375,562	487,593	3,136,067	2,913,077	...	2,977,136
	\$	267,466	1,149,454	66,778	408,158	331,405	...	258,118
Lubricating oil .....	Imp.gal.	569,807	22,388,740	...	...	390	474,016	145,898
	\$	98,235	4,043,361	...	...	190	80,772	21,170
Grease .....	Pound	...	12,103,330	181,283	...	3,034	...	...
	\$	...	605,178	23,590	...	314	...	...
Asphalt .....	Imp.gal.	26,848,212	10,810,402	...	2,475,627	5,252,566	3,636,665	7,547,962
	\$	2,018,322	897,263	...	192,630	382,499	301,495	626,481
Petroleum coke .....	Ton	3,660	56,248	...	1,157	246	...	783
	\$	15,592	350,505	...	1,920	757	...	2,162
Wax and candles .....	Pound	...	6,725,234	...	...	...	...	...
	\$	...	313,553	...	...	...	...	...
Other products .....	...	...	6,808	2,000	26,362	15,828	...	...
TOTAL - MADE FOR SALE .....	\$	31,738,779	29,762,237	1,838,561	9,680,618	10,130,227	8,931,519	7,435,203
<u>MADE FOR OWN USE -</u>								
Gasoline - (a) Straight run .....	Imp.gal.	19,822	97,250	6,500	15,819	10,993	7,689	15,804
	\$	1,941	7,331	975	3,109	894	643	1,527
- (b) By cracking process	Imp.gal.	10,010	9,063	...	...	...	...	...
	\$	1,600	861	...	...	...	...	...
Fuel oil and gas oil .....	Imp.gal.	22,151,582	18,925,201	775,158	6,972,922	1,253,079	6,160,292	5,334,903
	\$	673,867	634,165	39,455	257,001	36,094	196,042	197,551
Kerosene .....	Imp.gal.	...	10,586	...	1,800	...	60	2,784
	\$	...	867	...	193	...	7	241
Lubricating oil .....	Imp.gal.	6,888	62,924	...	...	...	2,917	4,733
	\$	1,188	11,041	...	...	...	497	687
Tar .....	Imp.gal.	...	1,536,570	...	...	...	...	...
	\$	...	6,829	...	...	...	...	...
Petroleum coke .....	Ton	...	2,514	...	341	1,383	...	...
	\$	...	12,460	...	1,147	4,646	...	...
Still gas .....	M cu.ft.	3,327,345	2,631,760	...	507,207	546,587	32,485	757,282
	\$	793,230	494,217	...	132,223	111,696	9,221	130,651
Other products .....	...	19	198,999	5,900	170	7,766	82	6
TOTAL - MADE FOR OWN USE .....	\$	1,471,845	1,366,820	46,330	393,843	161,096	206,497	330,663
GRAND TOTAL .....	\$	33,210,624	31,129,057	1,884,391	10,074,461	10,291,323	9,138,016	7,765,366
Fuel and gas oils made for use in cracking process .....	Imp.gal.	198,257,300	200,485,101	1,340,648	38,170,265	37,777,285	4,360,090	96,532,855

(\$ = Gross selling value at works)

Table 17 - STOCKS ON HAND AT THE REFINERIES AT THE END OF 1939

	Stocks on hand at refineries on December 31, 1939	Increase or decrease over December 31, 1938
	Imp. Gal.	Imp. Gal.
Crude oil and naphtha, in its natural state, from Canadian wells ...	19,207,581	+ 6,958,426
Absorption gasoline, etc., from Canadian wells .....	445,028	+ 138,020
Crude oil, imported - in its natural state .....	134,893,920	- 13,286,021
- not in its natural state .....	...	- 2,124,825
Gasoline (excluding imported casinghead or Canadian absorption gasoline) .....	119,056,751	+ 31,952,163
Stove oil (40° - 42.5° A.P.I.) .....	5,932,582	+ 470,499
Gas and light fuel oil (20° - 40° A.P.I., excepting diesel) .....	18,879,939	- 10,598,925
Diesel fuel oil .....	6,144,423	+ 915,467
Residual fuel oil (10° - 20° A.P.I.) .....	44,283,074	+ 1,701,414
Fuel oil for use in cracking process .....	25,524,195	- 14,089,699
Tractor and engine distillate .....	7,229,506	- 3,146,182
Kerosene .....	5,753,356	- 2,593,104
Lubricating oils .....	4,300,528	- 194,687
Petroleum coke .....	4,016	- 233
	short tons.	

Table 18 - CASINGHEAD GASOLINE IMPORTED AND USED FOR BLENDING AT THE REFINERIES, 1939

Imported natural casinghead gasoline received at the refinery during the year -	Imp. gal. ....	38,134,791
	\$ .....\$	3,193,883
Imported natural casinghead gasoline used for blending during the year -	Imp. gal. ....	34,231,014
Total stocks of imported natural casinghead gasoline at the end of year -	Imp. gal. ....	10,556,679

Table 19 - CONSUMPTION OF CRUDE OIL IN PETROLEUM REFINERIES IN CANADA, 1918 - 1939

Year	Crude oil used	Year	Crude oil used
	Imp. gal.		Imp. gal.
1918 .....	261,742,274	1929 .....	1,072,828,496
1919 .....	301,006,553	1930 .....	1,064,474,974
1920 .....	295,576,527	1931 .....	1,074,788,038
1921 .....	373,469,418	1932 .....	930,114,055
1922 .....	394,139,055	1933 .....	1,044,210,850
1923 .....	408,810,739	1934 .....	1,109,510,343
1924 .....	467,144,634	1935 .....	1,196,411,443
1925 .....	445,115,694	1936 .....	1,286,462,895
1926 .....	585,466,329	1937 .....	1,433,581,694
1927 .....	716,369,820	1938 .....	1,418,659,164
1928 .....	849,933,770	1939 .....	1,569,903,295

Table 20 - CONSUMPTION OF CRUDE OIL IN PETROLEUM REFINERIES SHOWING CANADIAN AND IMPORTED, SEPARATELY,  
1930 - 1939

Year	Canadian (a)	Imported (b)	TOTAL
	Imp. Gal.	Imp. gal.	Imp. Gal.
1930 .....	51,522,864	1,012,912,110	1,064,474,974
1931 .....	49,668,579	1,025,119,509	1,074,788,038
1932 .....	37,340,321	892,773,734	930,114,055
1933 .....	32,404,139	1,011,806,711	1,044,210,850
1934 .....	41,461,763	1,068,048,580	1,109,510,343
1935 .....	40,785,473	1,155,625,970	1,196,411,443
1936 .....	42,792,311	1,543,670,584	1,286,462,895
1937 .....	90,004,669	1,345,577,025	1,433,581,694
1938 .....	236,492,200	1,182,166,964	1,418,659,164
1939 .....	262,198,884	1,307,704,411	1,569,903,295

(a) Includes the crude naphtha and natural gasoline from the Turner Valley field which was run to refinery stills.

(b) Includes reduced crude.

Table 21 - PRODUCTION OF CRUDE PETROLEUM IN CANADA, 1938 and 1939

Areas	1 9 3 8		1 9 3 9	
	Barrels	Value	Barrels	Value
NEW BRUNSWICK .....	19,276	\$ 27,246	22,799	\$ 32,082
<u>ONTARIO -</u>				
Petrolia and Enniskillen .....	58,273	120,229	56,951	109,934
Oil Springs .....	52,285	69,728	52,442	65,715
Moore Township .....	1,398	2,882	1,527	2,947
Sarnia Township .....	595	1,227	397	766
Plympton Township .....	191	394	156	301
Bothwell Township .....	40,449	83,339	39,616	76,364
West Dover .....	8,801	18,145	15,037	29,023
Onondaga .....	878	1,882	219	507
Mosa Township .....	13,527	27,888	12,857	24,816
Brooke .....	101	208	52	101
Dunwich .....	195	402	210	405
Raleigh and Tilbury East .....	207	427	27	52
Thamesville .....	1,990	4,103	1,293	2,496
Dawn and Euphemia .....	5,416	11,166	5,958	7,639
Warwick .....	8,510	17,132	41,478	80,057
Chatham .....	27	56	159	307
TOTAL for ONTARIO .....	172,641	359,268	206,379	401,430
<u>ALBERTA -</u>				
Turner Valley .....	6,703,548	8,736,664	7,543,929	9,534,069
Red Coulee .....	14,157	12,742	12,649	11,137
Wainwright-Taber-Moose Dome .....	33,607	25,688	20,354	17,157
TOTAL for ALBERTA .....	6,751,312	8,775,094	7,576,932	9,562,363
<u>NORTHWEST TERRITORIES</u> .....				
CANADA .....	22,855	68,565	20,191	50,477
CANADA .....	6,966,084	9,230,173	7,826,301	9,846,352

Table 22 - REFINERY PRODUCTION OF GASOLINE IN CANADA, 1930 - 1939

Year	Straight run	By cracking	TOTAL	Per cent of total made by cracking
				Imp.gal.
1930 .....	276,284,656	169,314,761	445,599,417	58
1931 .....	278,215,832	191,632,502	469,925,375	41
1932 .....	207,823,273	192,113,405	399,936,678	48
1933 .....	267,086,230	155,850,563	422,936,793	37
1934 .....	294,980,092	166,773,271	461,753,363	36
1935 .....	292,520,425	221,195,579	513,716,004	43
1936 .....	316,207,576	251,451,700	567,659,276	44
1937 .....	361,900,597	278,599,479	640,299,878	43
1938 .....	362,583,649	291,445,476	654,029,125	45
1939 .....	405,738,237	334,825,382	740,563,619	45

Table 23 - AVERAGE WHOLESALE TANK WAGON PRICES FOR GASOLINE (MEDIUM GRADE), FUEL OIL, ETC., BY MONTHS, 1939

Month	Halifax	Montreal	Toronto	Winnipeg	Regina	Calgary	Vancouver
GASOLINE -	\$	\$	\$	\$	\$	\$	\$
January .....	.135	.140	.150	.205	.190	.165	.160
February .....	.135	.140	.150	.205	.190	.165	.160
March .....	.135	.140	.150	.195	.190	.165	.160
April .....	.135	.140	.150	.195	.190	.165	.160
May .....	.135	.140	.150	.195	.190	.165	.160
June .....	.135	.140	.145	.195	.190	.165	.160
July .....	.135	.140	.145	.195	.190	.165	.160
August .....	.135	.140	.145	.195	.190	.165	.160
September .....	.135	.140	.145	.195	.190	.165	.160
October .....	.140	.145	.150	.195	.190	.165	.160
November .....	.145	.150	.155	.195	.185	.160	.160
December .....	.145	.155	.155	.195	.185	.160	.160
YEARLY AVERAGE ...	.137	.143	.149	.197	.189	.164	.160
Kerosene .....	.177	.148	.154	.205	.209	.184	.230
Fuel oil, light .....	...	...	.076	...	...	...	...
Lubricating oils (Atlantic red oil) ...	...	...	...	.303	...	...	...

Table 24 - APPARENT CONSUMPTION IN CANADA OF GASOLINE, FUEL OIL, ENGINE DISTILLATE, KEROSENE and LUBRICATING OIL, 1937, 1938 and 1939

	Fuel and gas oils(a)	Gasoline	Lubricating oils	Kerosene	Tractor and engine distillate
	Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.
<b>1937</b>					
Production .....	(b) 544,109,039	640,299,876	23,867,529	26,349,649	30,319,024
Plus imports .....	49,315,477	72,478,101	15,331,130	2,415,350	1,451,292
Less exports and re-exports ....	593,424,516	712,777,977	39,198,659	23,764,939	31,770,516
Plus decline in refinery stocks.	11,050,735	4,322,972	...	890,309	...
Less increase in refinery stocks	582,373,781	708,455,005	39,198,659	27,874,690	31,770,516
APPARENT CONSUMPTION .....	18,566,691	820,659	426,473	1,191,994	580,997
	563,807,090	709,275,664	39,625,132	26,682,696	31,189,519
<b>1938</b>					
Production .....	(b) 540,907,971	654,029,125	22,709,001	22,536,425	35,002,461
Plus imports .....	51,273,799	119,038,120	16,173,426	4,723,576	1,142,847
Less exports and re-exports ....	592,181,770	773,067,245	38,882,427	27,260,001	36,145,308
Plus decline in refinery stocks.	1,847,017	4,984,879	...	767,763	...
Less increase in refinery stocks	590,334,753	768,082,366	38,882,427	26,492,238	36,145,308
APPARENT CONSUMPTION .....	2,325,053	1,844,503	...	974,518	...
	592,659,806	769,926,869	38,882,427	27,466,756	36,145,308
	...	...	132,899	...	4,115,975
	592,659,806	769,926,869	38,749,528	27,466,756	32,029,353
<b>1939</b>					
Production .....	(b) 582,705,683	740,563,619	25,017,072	27,260,255	33,620,396
Plus imports .....	52,960,460	109,021,177	18,067,304	6,518,685	1,257,808
Less exports and re-exports ....	642,666,143	849,584,796	43,084,376	33,778,940	34,878,204
Plus decline in refinery stocks.	2,879,286	5,443,416	...	614,159	...
Less increase in refinery stocks	639,786,857	846,141,380	43,084,376	33,164,801	34,878,204
APPARENT CONSUMPTION .....	7,511,545	...	194,687	2,593,104	3,146,182
	647,298,402	846,141,380	43,279,063	35,757,905	38,024,386
	...	31,953,163	...	...	...
	647,298,402	814,188,217	43,279,063	35,757,905	38,024,386

(a) Import figures for fuel oil include amounts brought in "ex-warehouse for ships' stores". This item covers fuel oil imported in bond for use in fueling vessels at Canadian ports and, as there is no corresponding export item, such quantities might properly be omitted when compiling figures of Canadian consumption. In 1937, the amount under this item was 24,369,010 gallons; in 1938, 31,198,446 gallons, and in 1939, 41,057,202 gallons.

(b) Exclusive of fuel oil for cracking operations but including fuel oil used by refineries for power or heating purposes.

Table 25 - APPARENT CONSUMPTION OF FUEL OIL, GASOLINE, KEROSENE, ENGINE DISTILLATE, and LUBRICATING OILS, 1930 - 1939

(Computed from Production, Imports, Exports and Refinery Stocks)

Year	Fuel and gas oils	Gasoline	Engine distillate	Kerosene	Lubricating oils
(Imperial gallons)					
1930 .....	513,137,434	601,756,656	Not	47,150,034	34,394,696
1931 .....	488,371,080	565,266,046		46,543,627	29,270,337
1932 .....	460,366,156	505,231,853	avail-	54,534,585	26,128,986
1933 .....	481,688,950	463,176,444		42,362,473	30,557,493
1934 .....	503,060,605	524,622,641	able	42,727,528	26,933,794
1935 .....	505,844,126	564,140,772	38,030,150	31,168,762	32,800,623
1936 .....	532,285,589	616,676,937	35,344,520	31,138,985	34,823,724
1937 .....	563,807,090	709,275,664	31,189,319	26,682,696	39,625,132
1938 .....	592,659,806	769,926,869	32,029,333	27,466,756	38,749,528
1939 .....	647,298,402	814,188,217	38,024,386	35,757,905	43,279,063

Table 26 - GROSS SALES OF GASOLINE IN CANADA, BY PROVINCES, 1936 - 1939  
 (Gross sales - Imperial gallons sold for all purposes)  
 (Net sales - Imperial gallons on which no tax refunds were granted)

Province	1936	1937	1938	1939
Prince Edward Island .....	3,039,910	3,420,163	3,631,360	4,128,937
Nova Scotia .....	25,247,957	29,150,531	29,632,787	31,621,371
New Brunswick .....	17,477,029	21,947,202	21,908,723	23,192,413
Quebec .....	109,835,482	128,304,645	135,026,866	138,925,246
Ontario .....	282,827,724	324,358,959	337,880,996	345,105,726
Manitoba .....	30,551,665	34,655,432	38,596,532	41,455,558
Saskatchewan .....	45,968,233	46,278,251	65,000,674	87,377,405
Alberta (x) .....	60,397,314	75,166,087	73,724,520	75,525,323
British Columbia .....	48,725,037	54,567,327	57,157,313	59,823,751
TOTAL GROSS SALES .....	624,115,851	718,427,427	762,740,326	807,666,298
REFUNDS .....	91,260,543	115,022,668	130,722,877	144,504,737
TOTAL NET SALES .....	532,855,308	603,404,759	632,017,449	663,161,561

(x) Includes diesel oil to March 31st, 1936.

Table 27 - GROSS SALES OF GASOLINE IN CANADA, BY MONTHS, 1936 - 1939  
 (Gross sales - Imperial gallons sold for all purposes)

Month	1936	1937	1938	1939
January .....	27,728,100	33,793,537	35,407,164	40,077,850
February .....	25,879,349	30,779,948	33,146,647	33,452,296
March .....	28,416,716	38,871,176	41,573,273	43,065,980
April .....	41,868,340	50,976,732	54,401,471	48,866,349
May .....	57,754,193	68,420,444	74,511,526	78,809,692
June .....	65,611,294	73,724,575	77,739,950	77,668,907
July .....	70,395,637	80,023,053	80,660,413	87,258,978
August .....	75,456,062	84,022,269	90,584,831	97,200,212
September .....	74,486,006	79,135,342	85,737,623	95,290,364
October .....	64,363,792	71,172,611	77,036,348	82,708,454
November .....	51,365,992	61,183,652	63,560,199	67,842,577
December .....	42,789,870	46,529,088	48,520,376	55,424,639
TOTAL .....	624,115,851	718,427,427	762,740,326	807,666,298

Table 28 - GROSS MONTHLY SALES OF GASOLINE IN CANADA, BY MONTHS, 1939, and TOTALS FOR 1938  
 (in thousands of gallons)

Month	Prince Edward Island	New Nova Scotia	Bruns-wick	Quebec	Ontario	Mani-toba	Saskat-chewan	Alberta	British Columbia	TOTAL
January .....	100	1,566	987	6,758	19,682	1,826	1,825	3,586	3,748	40,078
February .....	73	1,324	866	5,708	17,675	1,301	836	2,147	3,522	33,452
March .....	90	1,716	1,025	6,042	24,286	1,520	1,028	3,409	3,950	43,066
April .....	107	1,690	986	7,093	19,857	2,609	5,564	6,536	4,425	48,867
May .....	432	2,886	1,883	12,635	32,074	3,825	11,643	8,020	5,412	78,810
June .....	531	3,202	2,437	14,579	33,165	4,029	7,099	7,086	5,541	77,669
July .....	529	3,512	2,884	16,131	36,599	4,567	9,359	7,604	6,074	87,259
August .....	643	3,989	3,272	17,364	38,917	5,177	12,452	8,815	6,571	97,200
September .....	537	3,415	2,846	16,545	36,210	5,197	15,670	9,153	5,717	95,290
October .....	468	3,112	2,496	14,806	32,264	4,738	11,389	8,042	5,393	82,708
November .....	404	2,856	2,030	12,200	28,895	3,732	6,579	6,229	4,917	67,842
December .....	215	2,354	1,480	9,065	25,482	2,934	4,433	4,908	4,554	55,425
TOTALS FOR 1939	4,129	31,622	23,192	138,926	345,106	41,455	87,877	75,535	59,824	807,666
TOTALS FOR 1938	3,631	29,632	21,199	135,027	337,881	38,957	65,090	73,725	57,158	762,740

Table 29 - NET SALES OF GASOLINE IN CANADA, BY PROVINCES, 1936 - 1939  
 (Net Sales - Gallons sold on which no refunds have been granted, chiefly for motor vehicles).

Province	1936	1937	1938	1939
	(Imperial gallons)			
Prince Edward Island .....	2,484,445	2,814,779	2,891,204	3,205,552
Nova Scotia .....	22,322,829	23,968,732	25,575,322	26,836,029
New Brunswick .....	15,042,044	19,119,043	18,905,155	19,479,851
Quebec .....	103,662,080	121,732,952	128,768,743	131,113,441
Ontario .....	260,721,064	301,997,891	310,461,674	316,505,920
Manitoba .....	28,578,031	32,665,795	36,388,003	38,858,888
Saskatchewan .....	29,308,886	24,753,482	27,347,080	41,692,634
Alberta .....	32,861,958	33,762,330	37,179,884	38,900,385
British Columbia .....	37,873,971	42,589,755	44,500,384	46,568,881
CANADA .....	532,855,308	603,404,759	632,017,449	663,161,561

Table 30 - REVENUES FROM GASOLINE TAXES, BY PROVINCES, 1936 - 1939

Province	1936	1937	1938	1939
	\$	\$	\$	\$
Prince Edward Island .....	200,854	269,232	285,505	316,087
Nova Scotia .....	1,760,209	2,006,489	2,424,355	2,608,189
New Brunswick .....	1,149,129	1,439,096	1,807,493	1,893,169
Quebec .....	6,272,064	7,078,230	7,637,151	(x) 9,969,226
Ontario .....	16,049,857	17,644,164	18,503,789	(x) 25,105,359
Manitoba .....	2,051,200	2,270,660	2,529,088	2,750,638
Saskatchewan .....	1,951,834	1,937,553	1,822,689	2,760,196
Alberta .....	2,380,088	2,610,211	2,953,128	3,096,644
British Columbia .....	2,717,201	3,118,312	3,284,490	3,454,852
CANADA .....	34,532,436	38,373,947	41,247,688	51,954,360

(x) Rates increased from 6 to 8 cents, April 1, 1939.

Table 31 - REVENUES FROM MOTOR VEHICLE REGISTRATIONS and GASOLINE TAXES, 1934 - 1939

Year	From motor vehicle registrations	From gasoline taxes	Year	From motor vehicle registrations	From gasoline taxes
	\$	\$		\$	\$
1934 .....	21,567,830	29,054,853	1937 .....	25,993,905	38,373,947
1935 .....	25,090,978	31,532,645	1938 .....	26,227,699	41,247,346
1936 .....	25,632,843	34,532,436	1939 .....	27,961,132	51,954,360

Table 32 - DATES WHEN GASOLINE ACTS BECAME EFFECTIVE and RATES OF TAX

Province	Dates when gasoline tax rates became effective	Rates per gallon (x)
		cents
Prince Edward Island .....	May 1, 1924 March 31, 1926 May 1, 1928 May 2, 1932 April 15, 1933 April 23, 1937	2 3 5 6 8 10
Nova Scotia .....	March 15, 1926 March 11, 1927 April 1, 1932 May 1, 1934 March 15, 1938	3 5 6 8 10
New Brunswick .....	April 30, 1926 December 1, 1928 April 1, 1932 April 1, 1934 March 20, 1938	3 5 7 8 10

Table 32 - DATES WHEN GASOLINE ACTS BECAME EFFECTIVE and RATES OF TAX (Concluded)

Province	Dates when gasoline tax rates became effective	Rates per gallon (x) cents
Quebec .....	April 1, 1924	2
	April 1, 1925	3
	April 1, 1928	5
	December 17, 1931	6
	April 18, 1939	8
Ontario .....	May 11, 1925	3
	March 27, 1929	5
	March 25, 1932	6
	April 1, 1939	8
Manitoba .....	April 27, 1923	1
	March 5, 1925	3
	April 14, 1930	5
	May 7, 1932	7 (refund 5 cents)
	April 5, 1940	7 (refund 7 cents)
Saskatchewan .....	May 1, 1928	3
	April 1, 1930	5
	May 1, 1932	6 (refund 5 cents) (A)
	April 1, 1935	7 (refund 7 cents)
Alberta .....	April 30, 1922	2
	June 1, 1929	5 (refund 4 cents)
	April 1, 1933	6 (refund 5 cents)
	April 1, 1935	7 (refund 6 cents)
British Columbia .....	December 21, 1923	3
	March 25, 1930	5 (refund 5 cents)
	April 18, 1932	7 (refund 6 cents)

(x) When gasoline is used by farm tractors, fishing boats and for other stipulated uses, the total tax paid is refunded except in the western provinces where only a portion is refunded, as noted.

(A) Effective January 1, 1933.

Table 33 - REGISTRATIONS OF MOTOR VEHICLES IN CANADA, 1904 - 1939

Year	TOTAL	Year	Passenger cars	Commercial vehicles	Motor cycles	TOTAL
1904 .....	555	1922 .....	...	...	...	509,382
1905 .....	565	1923 .....	513,075	54,564	8,346	575,985
1906 .....	1,447	1924 .....	573,204	64,003	8,056	645,263
1907 .....	2,148	1925 .....	641,186	74,938	7,924	724,048
1908 .....	3,054	1926 .....	736,729	88,019	7,520	832,268
1909 .....	4,809	1927 .....	830,001	102,088	7,562	939,651
1910 .....	9,158	1928 .....	930,619	130,827	7,897	1,069,343
1911 .....	21,783	1929 .....	1,022,654	155,820	8,857	1,187,331
1912 .....	36,429	1930 .....	1,055,514	167,548	9,427	1,232,489
1913 .....	54,580	1931 .....	1,023,923	167,097	9,648	1,200,668
1914 .....	74,246	1932 .....	945,073	159,041	9,419	1,113,553
1915 .....	95,284	1933 .....	917,008	156,170	10,000	1,083,178
1916 .....	128,528	1934 .....	952,427	166,799	10,306	1,129,532
1917 .....	203,502	1935 .....	989,754	175,888	10,484	1,176,126
1918 .....	276,893	1936 .....	1,041,529	187,770	10,825	1,240,124
1919 .....	542,455	1937 .....	1,103,012	205,588	11,102	1,319,702
1920 .....	408,790	1938 .....	1,159,604	223,176	12,073	1,394,853
1921 .....	464,805	1939 .....	1,190,021	236,902	12,522	1,439,245

NOTE - Livery and taxi-cabs included with passenger cars.

\* Buses, convertible cars, road tractors, ambulances, etc., included with commercial vehicles.

Table 34 - REGISTRATIONS OF MOTOR VEHICLES IN CANADA, BY PROVINCES, 1935 - 1939

Province	1935	1936	1937	1938	1939
	Number	Number	Number	Number	Number
Prince Edward Island .....	8,231	7,632	8,011	7,992	8,040
Nova Scotia .....	43,952	46,179	50,048	51,214	53,008
New Brunswick .....	31,227	33,402	36,780	37,110	38,116
Quebec .....	170,644	181,628	197,917	205,463	213,148
Ontario .....	564,076	590,226	623,918	669,088	682,891
Manitoba .....	70,660	74,940	80,860	88,219	88,864
Saskatchewan .....	94,792	102,270	105,064	109,014	119,018
Alberta .....	93,870	97,468	100,434	107,191	113,702
British Columbia .....	98,411	106,079	116,341	119,220	122,087
Yukon .....	263	300	329	342	371
CANADA .....	1,176,126	1,240,124	1,319,702	1,394,853	1,439,245

Table 35 - REGISTRATIONS OF MOTOR VEHICLES IN CANADA, BY TYPES, 1939

Province	Passenger cars	Motor trucks	Motor buses	Motor cycles	Ambulances, hearse, etc.	TOTAL
	Number	Number	Number	Number	Number	Number
Prince Edward Island ...	6,804	1,192	6	18	20	8,040
Nova Scotia .....	41,919	10,262	(2)	291	536	53,008
New Brunswick .....	30,457	6,865	102	187	505	38,116
Quebec .....	171,766	37,141	796	2,879	566	213,148
Ontario .....	593,693	83,139	960	5,093	(2)	682,891
Manitoba .....	70,506	17,605	86	667	(1-2)	88,864
Saskatchewan .....	89,471	28,908	77	553	(1-2-3) 9	119,018
Alberta .....	88,516	24,369	143	674	(1-2-3)	113,702
British Columbia .....	96,727	22,445	355	1,938	612	122,087
Yukon .....	152	162	5	16	36	371
CANADA .....	1,190,021	232,088	2,530	12,322	2,284	1,439,245

(1) Included with passenger cars.

(2) Not registered.

(2) Included with trucks.

Table 36 - FUEL OIL DELIVERIES: DELIVERIES FOR CONSUMPTION, BY PROVINCES, 1937 - 1939

(As reported by distributors, and importers - Imperial gallons - Calendar years)

NOTE - Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of Mines and Resources, Ottawa

Area	DOMESTIC and BUILDING heating		INDUSTRIAL				TOTAL DELIV- ERIES	Inventory on Dec. 31, at refinery, warehouses and consum- ers storage	
	Number domestic cus- tomers	Quantity	(manufac- turers') heating and for power	TRACTOR fuel oil, lubricant	RAILWAYS, principally including locomotive fuel	BUNKERING, distribu- tors' tankers			
<b>1939</b>									
N.B. and P.E.I.	2,186	4,493,469	2,485,211	49,913	49,507	5,270,941	12,349,041	2,852,333	
Nova Scotia ....	4,454	6,442,431	6,366,062	53,389	15,241	50,545,488	63,422,611	21,565,440	
Quebec .....	12,536	53,134,573	46,218,057	966,538	2,010,681	67,988,200	170,318,049	63,874,721	
Ontario .....	23,232	40,029,086	72,160,112	4,188,732	2,692,579	7,420,359	126,491,868	62,167,856	
Manitoba .....	786	1,926,773	2,942,160	14,326,537	1,156,855	...	20,352,325	2,404,785	
Saskatchewan ...	339	1,664,445	9,803,019	7,693,313	201,735	...	19,362,512	12,260,155	
Alta. and N.W.T.	113	609,732	2,958,450	6,729,997	12,643,068	114,898	23,056,145	8,558,119	
British Columbia*15,008	27,800,598	38,306,818	764,272	35,025,401	73,604,578	175,501,667	34,960,258		
TOTAL - 1939..	58,654	136,101,107	181,239,889	34,773,691	53,795,067	204,944,464	610,854,218	208,643,667	
TOTAL - 1938..	42,982	118,987,210	164,161,165	26,769,293	51,458,444	175,258,308	536,634,420	188,424,793	
TOTAL - 1937..	50,319	117,723,083	162,446,348	38,525,588	52,634,677	161,160,924	532,560,620	177,936,649	

Fuel oil includes all oils heavier than 42° A.P.I. processed from petroleum. 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.

\* Including Yukon.

Table 37 - KEROSENE DELIVERIES: DELIVERIES FOR CONSUMPTION, BY PROVINCES, 1937 - 1939  
 (Data include all oils ranging approximately between 42° and 47° A.P.I. - Imperial gallons -  
 Calendar years)

NOTE - Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of  
 Mines and Resources, Ottawa.

Province	For domestic heating, cooking and lighting purposes	For fuel in tractors	For other general usage	Total deliveries	Inventory December 31
<u>1939</u>					
N.B. and P.E.I. ....	2,972,999	...	5,477	2,978,476	485,701
Nova Scotia ....	3,194,266	...	11,704	3,205,970	647,683
Quebec ....	4,520,475	68,364	151,968	4,540,807	3,074,840
Ontario ....	7,031,887	551,173	351,105	7,934,165	4,049,948
Manitoba ....	1,981,444	280,194	70,024	2,331,662	601,976
Saskatchewan ....	3,742,813	329,969	65,562	4,138,344	2,095,524
Alberta ....	1,234,606	1,413,057	10,111	2,757,774	2,186,504
British Columbia ....	1,025,779	411	33,753	1,059,943	1,166,757
TOTAL - 1939 ....	25,604,269	2,643,168	699,704	28,947,141	14,308,933
TOTAL - 1938 ....	23,868,526	20,067,567	477,394	44,413,487	16,623,879
TOTAL - 1937 ....	22,331,826	6,343,340	1,220,608	29,895,774	22,868,792

Table 38 - PETROLEUM COKE: DELIVERIES FOR CONSUMPTION, 1937 - 1939

(Used as fuel only - not as manufacturing materials)

NOTE - Figures taken from "Petroleum Fuels in Canada" issued by the Department of Mines and  
 Resources, Ottawa.

Fuel for domestic heating (x)	Fuel for industrial heating(a)	TOTAL	Inventories December 31
(short tons)			
<u>1939</u>			
N.B. and P.E.I. ....	...	...	...
Nova Scotia ....	783	...	783
Quebec ....	269	...	269
Ontario ....	31,077	2,515	33,592
Manitoba ....	...	...	...
Saskatchewan ....	149	1,724	1,873
Alberta and N.W.T. ....	432	...	432
B.C. and Yukon ....	...	...	...
CANADA, 1939 ....	32,710	4,239	36,949
CANADA, 1938 ....	51,684	667	52,351
CANADA, 1937 ....	42,138	6,049	48,187

(x) As reported by dealers, distributors and importers.

(a) Consists mostly of amounts used in refineries as fuel.

#### (b) LUBRICATING OILS AND GREASES

Reports were received from 11 factories engaged chiefly in compounding lubricating oils and greases in Canada during 1939. Seven of these plants were located in Ontario, 3 in Quebec and 1 in British Columbia.

Capital employed was given at \$596,256 and the 91 employees were afforded work for which \$153,917 were paid in salaries and wages. Purchases of processing materials and containers for the finished products amounted to \$543,394 and the selling value of the lubricants, etc., made totalled \$1,084,279. Included in this year's output were lubricating oils at \$796,872, lubricating greases at \$155,997 and soaps at \$33,117.

Total Canadian output, including production from the refineries, of lubricating oils was 25,017,072 gallons in 1939 against 22,709,001 gallons in 1938. Corresponding figures for lubricating greases amounted to 13,141,616 pounds in 1939 and 14,271,613 pounds in 1938.

Table 39 - PRINCIPAL STATISTICS OF THE LUBRICATING OILS AND GREASES INDUSTRY, 1921 - 1939

Year	No. of plants	Capital employed	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
1921 .....	5	1,933,724	103	178,955	10,343	778,923	1,367,012
1922 .....	6	800,629	57	101,398	4,172	283,311	539,742
1923 .....	6	738,843	62	116,751	6,236	381,390	709,028
1924 .....	8	700,010	66	125,727	6,500	423,419	733,720
1925 .....	8	1,118,649	83	153,148	14,113	446,721	959,512
1926 .....	6	701,676	55	109,810	4,746	388,288	626,071
1927 .....	7	693,371	54	110,000	4,614	316,391	548,971
1928 .....	9	720,196	67	119,346	7,204	350,656	673,780
1929 .....	10	1,373,192	95	168,839	8,699	572,757	1,024,134
1930 .....	13	1,256,399	104	186,773	8,861	492,550	977,494
1931 .....	12	847,725	64	104,677	7,481	264,319	570,219
1932 .....	7	593,484	58	82,870	7,003	207,916	337,433
1933 .....	10	626,968	77	100,715	7,000	270,791	464,544
1934 .....	9	570,545	81	104,427	6,837	309,523	551,856
1935 .....	13	695,409	85	106,549	7,625	453,898	774,444
1936 .....	13	576,106	84	116,807	5,313	336,737	629,382
1937 .....	13	520,687	90	120,260	5,127	407,908	752,060
1938 .....	12	523,870	89	122,294	4,284	425,959	881,736
1939 .....	11	596,256	91	153,917	5,129	543,394	1,084,279

Table 40 - PRINCIPAL STATISTICS OF THE LUBRICATING OILS AND GREASES INDUSTRY, BY PROVINCES, 1938 and 1939

Province	No. of plants	Capital employed	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
<u>1938</u>							
Ontario .....	8	418,816	65	86,490	1,764	374,053	763,660
Quebec .....	3)	105,054	24	35,804	2,520	51,906	118,076
British Columbia ...	1)						
CANADA .....	12	523,870	89	122,294	4,284	425,959	881,736
<u>1939</u>							
Ontario .....	7	489,603	67	117,368	2,024	486,259	958,939
Quebec .....	3)	106,653	24	36,549	3,105	57,135	125,340
British Columbia ...	1)						
CANADA .....	11	596,256	91	153,917	5,129	543,394	1,084,279

Table 41 - CAPITAL EMPLOYED IN THE LUBRICATING OILS AND GREASES INDUSTRY, 1938 and 1939

Province	Value of lands, buildings, machinery and equipment	Inventory value of materials and finished products on hand and stocks in process	Operating capital (cash, bills receivable, etc.)	TOTAL CAPITAL EMPLOYED
<u>1938</u>				
Ontario .....	157,774	105,881	155,161	418,816
Other provinces ...	70,336	9,059	25,659	105,054
CANADA .....	228,110	114,940	180,820	523,870
<u>1939</u>				
Ontario .....	157,345	176,507	155,751	489,603
Other provinces ...	70,173	14,334	22,146	106,653
CANADA .....	227,518	190,841	177,897	596,256

Table 42 - EMPLOYEES, SALARIES and WAGES IN THE LUBRICATING OILS AND GREASES INDUSTRY, 1938 and 1939

Province	Average number of employees						Salaries	Wages	TOTAL SALARIES and WAGES
	On salaries		On wages		Male	Female			
	Male	Female	Male	Female		TOTAL			
<u>1938</u>									
Ontario .....	31	8	25	1	65		63,816	22,674	86,430
Other provinces .....	10	2	12	...	24		25,160	10,644	35,804
CANADA .....	41	10	37	1	80		88,976	33,318	122,294
<u>1939</u>									
Ontario .....	32	9	24	2	67		91,156	26,212	117,368
Other provinces .....	9	2	13	...	24		24,272	12,277	36,549
CANADA .....	41	11	37	2	91		115,428	38,489	153,917

Table 43 - NUMBER OF WAGE-EARNERS IN THE LUBRICATING OILS AND GREASES INDUSTRY, BY MONTHS, 1938 and 1939

Month	Ontario		Other Provinces		CANADA	
	1938	1939	1938	1939	1938	1939
January .....	30	26	8	14	38	40
February .....	29	25	8	14	37	39
March .....	26	25	10	14	36	39
April .....	29	25	12	11	41	36
May .....	25	24	20	12	45	36
June .....	26	25	14	16	40	41
July .....	26	26	14	15	40	41
August .....	25	27	12	12	37	39
September .....	28	28	13	15	41	43
October .....	25	31	13	14	38	45
November .....	26	27	13	14	39	41
December .....	26	27	12	15	38	42
AVERAGE .....	26	26	12	13	38	39

Table 44 - FUEL AND ELECTRICITY USED IN THE LUBRICATING OILS AND GREASES INDUSTRY, 1938 and 1939

Kind	Unit of measure	1 9 3 8		1 9 3 9	
		Quantity	Cost at works	Quantity	Cost at works
		\$	\$		\$
Coal, anthracite .....	short ton	29	339	24	273
Coal, bituminous - Canadian .....	short ton	...	...	1	12
Imported .....	short ton	189	1,262	188	1,392
Coke .....	short ton	1	10	10	125
Gasoline .....	Imp.gal.	...	...	...	...
Wood .....	cord	59	512	73	630
Manufactured gas .....	M cu. ft.	190	226	200	215
Electricity purchased .....	K.W.H.	100,480	1,935	103,270	2,482
TOTAL .....	\$	...	4,284	...	5,129

Table 45 - POWER EQUIPMENT IN THE LUBRICATING OILS AND GREASES INDUSTRY, 1938 and 1939

	1 9 3 8	1 9 3 9		
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines .....	2	8	2	8
Total Primary (all in use) .....	2	8	2	8
Electric motors run by purchased power ...	25	133	24	131
TOTAL .....	27	141	26	139
Stationary boilers .....	1	8	2	18

Table 46 - MATERIALS USED IN THE LUBRICATING OILS AND GREASES INDUSTRY, 1938 and 1939

Material		1938		1939	
		Quantity	Cost at works	Quantity	Cost at works
Compounding stocks (mineral oils, animal oils, etc.) .....	Imp.gal.	1,137,619	249,411	...	360,623
Tallow and grease .....	pound	231,506	16,886	218,200	17,857
All other materials .....	\$	...	58,728	...	69,356
Shipping containers .....	\$	...	100,934	...	95,558
<b>TOTAL</b> .....	<b>\$</b>	<b>...</b>	<b>425,959</b>	<b>...</b>	<b>543,394</b>

Table 47 - PRODUCTS MADE IN THE LUBRICATING OILS AND GREASES INDUSTRY, 1938 and 1939

Product	Unit of measure	1938		1939	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
Greases, lubricating .....	pound	602,876	93,021	845,140	155,997
Oils, lubricating .....	gal.	1,091,652	679,188	1,360,759	796,872
Soaps and soap powders .....	pound	...	30,748	...	33,117
All other products .....	\$	...	78,779	...	98,295
<b>TOTAL</b> .....	<b>\$</b>	<b>...</b>	<b>881,736</b>	<b>...</b>	<b>1,084,279</b>

Table 48 - FREIGHT MOVEMENT IN PETROLEUM PRODUCTS - REVENUE FREIGHT CARRIED BY CANADIAN RAILWAYS, 1939

Commodities	FREIGHT ORIGINATED			FREIGHT TERMINATED			EXPORT IMPORT via Rail	
	Loaded	Received from	Unloaded	at sta-	Delivered	at sta-		
	at stations	foreign connections	Destined to	:TOTAL	tions	to foreign		
within the province	Canadian	Foreign	within the province	connections	within the connections	Column:Column	Column:Column	
	points	points			provinces		1-5 : 5-1	
	1	2	3	4	5	6	7	8
<u>Prince Edward Island</u> -								
Crude petroleum .....	...	...	...	...	...	...	...	...
Asphalt .....	101	...	...	101	7,505	...	...	7,404
Gasoline .....	1,297	...	...	1,297	10,444	...	...	9,147
Other petroleum products	314	...	...	314	4,333	...	...	4,019
<u>Nova Scotia</u> -								
Crude petroleum .....	...	...	...	...	...	...	...	...
Asphalt .....	37,773	...	...	37,773	9,104	...	28,669	...
Gasoline .....	99,894	54	...	99,948	77,644	146	22,250	...
Other petroleum products	34,770	394	...	35,164	32,856	297	1,914	...
<u>New Brunswick</u> -								
Crude petroleum .....	...	...	...	...	99	...	...	99
Asphalt .....	832	...	...	832	28,995	21	...	28,163
Gasoline .....	43,598	27	7,021	50,646	60,255	2,946	...	16,657
Other petroleum products	9,323	1,143	1,895	12,361	20,485	1,252	...	11,162
<u>Quebec</u> -								
Crude petroleum .....	441	...	...	441	304	25	137	...
Asphalt .....	92,184	1,187	424	93,795	55,703	649	36,481	...
Gasoline .....	295,470	10,416	17,204	323,090	272,806	4,742	22,664	...
Other petroleum products	131,610	24,945	12,773	169,328	165,493	4,159	...	33,883
<u>Ontario</u> -								
Crude petroleum .....	16,398	12,404	1,370	30,172	22,739	1,429	...	6,341
Asphalt .....	70,099	5,472	15,694	91,265	100,200	15,171	...	30,101
Gasoline .....	598,601	34,264	30,636	663,501	568,347	33,151	30,254	...
Other petroleum products	275,398	75,655	82,274	433,337	272,260	84,226	3,138	...

Table 48 - FREIGHT MOVEMENT IN PETROLEUM PRODUCTS - REVENUE FREIGHT CARRIED BY CANADIAN RAILWAYS, 1939  
(Concluded)

Commodities	FREIGHT ORIGINATED				FREIGHT TERMINATED			
	Loaded : at stations : within the province :	Received from : foreign connections : Canadian points	Destined to : Foreign points	TOTAL	Unloaded : at stations : to foreign : within the connections:	Delivered : to foreign : via Rail Column : Column	EXPORT IMPORT	
	1	2	3	4	5	6	7	8
<u>Manitoba -</u>								
Crude petroleum .....	1,186	39,264	...	40,450	69,737	...	...	68,551
Asphalt .....	1,086	166	...	1,252	15,422	...	...	14,336
Gasoline .....	2,033	11,270	...	13,303	144,533	...	...	142,500
Other petroleum products	11,374	13,083	...	24,457	87,399	...	...	76,025
<u>Saskatchewan -</u>								
Crude petroleum .....	47	3,999	...	4,046	454,424	...	...	454,377
Asphalt .....	12,728	1,975	...	14,703	3,333	...	9,395	...
Gasoline .....	100,923	2,160	...	103,083	106,562	...	...	5,639
Other petroleum products	42,288	3,620	390	46,298	42,752	...	...	464
<u>Alberta -</u>								
Crude petroleum .....	457,661	26,898	...	484,559	11,747	...	445,914	...
Asphalt .....	17,475	...	...	17,475	17,941	...	...	466
Gasoline .....	126,481	18,493	...	144,974	99,762	...	26,719	...
Other petroleum products	27,807	883	...	28,690	39,553	...	...	11,746
<u>British Columbia -</u>								
Crude petroleum .....	...	...	...	...	...	...	...	...
Asphalt .....	16,128	712	1,260	18,100	18,057	1,299	...	1,929
Gasoline .....	54,377	1,220	733	56,330	61,428	760	...	7,051
Other petroleum products	40,653	2,994	341	43,988	41,323	1,034	...	670

NOTE - ASPHALT includes NATURAL and BY-PRODUCT PETROLEUM.

Table 49 - IMPORTS INTO CANADA and EXPORTS OF PETROLEUM, ASPHALT AND THEIR PRODUCTS, 1938 and 1939

Tariff Item Number	Item	Unit of measure	1 9 3 8		1 9 3 9	
			Quantity	Value	Quantity	Value
<b>(a) IMPORTS</b>						
7151-Oil, imported by miners or mining companies or concerns, for use in the concentration of ores of metals in their own concentrating establishments .....	gal.		69,593	33,485	48,395	27,416
7153-Crude petroleum not subjected to any other process than natural weathering and removal of foreign matter and water when imported by oil refiners to be refined in their own factories, .8155 specific gravity (42.0° A.P.I.) or heavier at 60° Fahrenheit .....	M gal.		1,226,340	40,971,668	1,292,469	39,411,230
7157-Crude petroleum not subjected to any other process than natural weathering and removal of foreign matter or water, when imported by oil refiners to be refined in their own factory, lighter than .8155 specific gravity (42.0° A.P.I.) at 60° Fahrenheit .....	gal.		1,750,735	78,558	5,191,284	213,658
7158-Crude petroleum, n.o.p. ....	gal.		469,574	17,153	658,882	24,890
7156-Fuel oil, ex-warehoused for ships' stores .....	gal.		31,198,446	866,359	41,057,202	975,164

Table 49 - IMPORTS INTO CANADA and EXPORTS OF PETROLEUM, ASPHALT AND THEIR PRODUCTS, 1938 and 1939  
 (Concluded)

Tariff Item Number	Item	Unit of measure	1 9 5 8		1 9 5 9	
			Quantity	Value	Quantity	Value
(a) <u>IMPORTS</u> (concluded)						
7162-Coal oil and kerosene lighter than .8236 specific gravity at 60° temperature, n.o.p.	gal.	4,723,576	325,217	6,518,685	457,224	
7163-Engine distillate .8017 specific gravity or heavier at 60° temperature	gal.	1,142,847	70,917	1,257,808	73,956	
7164-Gasoline lighter than .8236 specific gravity at 60° temperature	gal.	71,624,855	5,222,893	70,073,942	5,527,116	
7165-Natural casinghead, compression or absorption gasoline, lighter than .6690 specific gravity (80.0° A.P.I.) at 60° Fahrenheit, when imported by refiners of crude petroleum for blending with gasoline wholly produced in Canada	gal.	47,413,265	2,497,014	38,947,235	2,471,220	
7166-Lubricating oils, composed wholly or in part of petroleum, and costing less than 25 cents per gallon	gal.	13,020,226	1,897,246	13,474,618	2,070,674	
7167-Lubricating oils, n.o.p.	gal.	3,153,200	1,259,758	4,592,686	1,886,941	
7168-All other oils, n.o.p.	gal.	187,525	75,304	293,848	137,718	
7169-Products of petroleum, n.o.p., .8236 specific gravity (40.3° A.P.I.) or heavier at 60° Fahrenheit	gal.	20,075,353	684,548	18,903,258	674,810	
7181-Grease, axle	pound	5,588,079	311,550	7,719,447	428,080	
7182-Vaseline and all similar preparations of petroleum, for toilet, medicinal or other purposes	\$	...	233,267	...	324,506	
7183-Paraffin wax	pound	13,868,469	454,495	18,038,306	659,765	
7184-Paraffin wax candles	pound	186,525	34,895	213,308	37,091	
7185-Products of petroleum, n.o.p., lighter than .8236 specific gravity at 60° temperature	gal.	3,869,992	333,033	2,900,736	291,614	
7170-Petroleum oil, .8236 specific gravity or heavier at 60° temperature for use exclusively in the manufacture of petroleum white oils	gal.	292,539	30,344	...	...	
7186-Liquefied petroleum gases for heating, cooking or illuminating purposes when imported in containers	\$	...	12,150	...	13,206	
7141-Asphaltum or asphalt, solid or not	cwt.	296,125	193,513	234,136	198,096	
7143-Asphalt oil for paving purposes only	gal.	41,062	3,255	134,221	8,802	
Coke, petroleum	ton	81,384	628,963	147,505	962,537	
TOTAL - PETROLEUM, ASPHALT AND THEIR PRODUCTS	\$	...	56,235,585	...	56,875,714	
(b) <u>EXPORTS</u>						
Oil, petroleum, crude	gal.	1,125	57	336	17	
Oil, coal and kerosene, refined	gal.	767,763	77,585	614,139	67,267	
Oil, gasoline and naphtha	gal.	4,984,879	458,997	3,443,416	331,541	
Fuel oil	gal.	1,847,017	92,095	2,879,286	188,409	
Oil, mineral, n.o.p.	gal.	806,041	247,207	709,681	251,176	
Wax, mineral	cwt.	289	1,612	3,638	10,148	
Coke, petroleum	ton	11,370	248,300	7,396	190,802	
TOTAL - PETROLEUM AND ITS PRODUCTS	\$	...	1,125,853	...	1,039,360	
(c) <u>RE-EXPORTS</u>						
Petroleum and its products	gal.	...	13,138	...	12,145	
Petroleum coke	ton	14,038	294,575	28,208	660,443	
TOTAL - RE-EXPORTS	\$	...	307,713	...	672,588	

Table 50 - IMPORTS INTO CANADA OF PETROLEUM, ASPHALT AND THEIR PRODUCTS, BY PROVINCES, 1939

NOTE - For descriptions of tariff item numbers see Table 49

Province	No. 7141	No. 7142	No. 7151	No. 7153	No. 7154	No. 7156	No. 7157	No. 7158
	Cwt.	Imp.gal.	Imp.gal.	M Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.
Nova Scotia .....	49	...	138	143,296	...	8,640,224	...	...
New Brunswick .....	1,902	...	...	...	...	...	...	...
Quebec .....	45,521	...	...	543,396	...	4,413,579	4,964	10,688
Ontario .....	68,557	126,170	25,959	399,756	...	25,650	...	6,523
Manitoba .....	2,661	...	350	5,442	...	...	4,502,170	233,720
Saskatchewan .....	43,428	...	...	4,211	...	...	682,394	7,436
Alberta .....	87	8,051	...	4,044	...	...	1,756	393,800
British Columbia ...	73,929	...	21,868	192,324	...	27,977,749	...	6,715
Yukon .....	2	...	80	...	...	...	...	...
CANADA .....	234,136	134,221	48,395	1,292,469	...	41,057,202	5,191,284	658,882

	No. 7162	No. 7163	No. 7164	No. 7165	No. 7166	No. 7167	No. 7168
	Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.	Imp.gal.
Prince Edward Island	...	...	90	...	1,420	121	...
Nova Scotia .....	554	...	1,514,413	1,080,208	121,338	263,785	208
New Brunswick .....	41,094	...	72,320	...	235,272	60,175	2,417
Quebec .....	142,973	...	14,866,716	16,774,588	1,304,412	606,770	149,058
Ontario .....	343,790	62,317	30,846,231	4,392,554	6,403,249	2,118,219	116,784
Manitoba .....	277,654	33,439	424,217	1,740,720	2,756,282	215,328	754
Saskatchewan .....	244,830	116,210	1,811,561	230,882	630,352	172,102	163
Alberta .....	12,064	1,045,774	14,167,368	...	750,480	251,129	5,461
British Columbia ...	5,451,672	68	6,014,883	15,128,283	1,271,813	885,052	19,003
Yukon .....	4,074	...	356,143	...	...	20,405	...
CANADA .....	6,518,685	1,257,808	70,073,942	38,947,235	13,474,618	4,592,686	293,848

	No. 7189	No. 7181	No. 7182	No. 7183	No. 7184	No. 7185	No. 7186
	Imp.gal.	Lb.	\$	Lb.	Lb.	Imp.gal.	\$
Prince Edward Island	...	200	...	60,217	...	...	...
Nova Scotia .....	1,046,087	266,362	2,846	340,536	1,233	18,589	580
New Brunswick .....	6,966	39,144	1,385	1,667,480	729	1,340	...
Quebec .....	6,737,413	572,501	76,306	6,954,934	40,210	626,748	4,801
Ontario .....	3,283,685	3,819,122	190,325	7,177,933	96,094	1,817,526	5,342
Manitoba .....	73,249	288,367	32,247	294,485	9,321	75,500	...
Saskatchewan .....	65,492	619,479	...	1,941	579	86,716	...
Alberta .....	380,296	522,248	2,780	4,566	1,329	15,036	19
British Columbia ...	7,056,780	1,549,122	18,527	1,536,214	63,813	258,668	2,464
Yukon .....	253,300	42,602	...	...	...	813	...
CANADA .....	18,903,258	7,719,447	324,506	18,038,306	213,308	2,900,736	13,806

DIRECTORY OF OPERATING PETROLEUM REFINERIES IN CANADA, 1939

Name of Company	Location of refinery	Crude oil capacity Bbl. per 24 hours	Type of refinery	Cracking		Plant Capacity Bbl. per 24 hours
				Type	Cracking Type	
<b>NOVA SCOTIA -</b>						
Imperial Oil Limited	Imperoyal	32,500	S - C	Combination two stage cracking unit		12,500
<b>NEW BRUNSWICK -</b>						
New Brunswick Gas & Oilfields Ltd.	Weldon	250	S	...		...
<b>QUEBEC -</b>						
British American Oil Co. Ltd.	Montreal East	12,000	S - C	Liquid and vapour phase		7,500
Imperial Oil Limited	Montreal	25,000	S - C	Tube and Tank		10,500
McColl-Frontenac Oil Co. Limited	Montreal East	20,000	S - C	2 Jenkins, 1 Kellogg and 1 own make		12,500
Shell Oil Company of Canada Ltd.	Montreal East	7,500	S - C	Dubbs Selective		5,500
<b>ONTARIO -</b>						
British American Oil Co. Limited	Toronto	6,000	S - C	Liquid and vapour phase		3,000
Canadian Oil Companies Limited	Petrolia	3,000	S - C	Liquid phase conventional cracking coil		1,000
Good Rich Refining Co. Ltd.	Port Credit	2,000	S - C	Dubbs		900
Imperial Oil Limited	Sarnia	29,000	S - C	Tube and Tank		20,000
McColl-Frontenac Oil Co. Limited	Toronto	4,500	S - C	2 Jenkins		2,800
<b>MANITOBA -</b>						
Anglo-Canadian Oils Ltd.	Brandon	750	S - C	Dubbs		500
Carman Oil Refinery Ltd.	Carman	250	S	...		...
North Star Oil Limited	St. Boniface	800	S	...		...
Radio Oil Refineries Ltd.	East Kildonan	500	S	...		...
Trump Oil Company Limited	Morris	250	S	...		...
<b>SASKATCHEWAN -</b>						
British American Oil Co. Limited	Moose Jaw	4,000	S - C	Liquid and vapour phase		2,000
Carrot River Oil Refineries Ltd.	Melfort	400	S	...		...
Consumers' Co-Operative Refineries Ltd.	Regina	500	S	...		...
Eston Refining Co. Ltd.	Eston	300	S	...		...
Hi-Way Refineries Limited	Moose Jaw	275	S	...		...
Hi-Way Refineries Limited	Saskatoon	275	S	...		...
Home Oil and Refining Co. Ltd.	Humboldt	420	S - C	(Type not stated)		100
Imperial Oil Limited	Regina	6,500	S - C	Tube and Tank		5,500
Northern Petroleum Corporation, Ltd.	Kamsack	200	S	...		...
Sterling Refineries Ltd.	Yorkton	750	S - C	Liquid phase		250
Natural Sodium Products Ltd.	Bishopric	1,000	S	...		...

DIRECTORY OF OPERATING PETROLEUM REFINERIES IN CANADA, 1939 (Concluded)

Name of Company	Location of refinery	Crude oil capacity Bbl. per 24 hours	Type of refinery	Cracking Type	Plant Capacity Bbl. per 24 hours
<u>ALBERTA -</u>					
Becker Refineries Ltd.	Royalties	500	S - C	(Not given)	300
British American Oil Co. Ltd.	Calgary	4,500	S - C	Liquid and vapour phase	2,250
Dina Oil & Refining Co. Ltd.	Dina	100	S	...	...
Fraser, J. W., Refining Co.	Wainwright	50	S	...	...
Gas and Oil Products, Ltd.	Hartell	3,000	S - C	Dubbs	500
Gold Standard Oils Ltd.	Wainwright	300	S	...	...
Huff Refinery Co. Ltd.	Lethbridge	500	S	...	...
Imperial Oil Ltd.	Calgary	7,500	S - C	Tube and tank	4,500
Lion Refining Company	Calgary	1,200	S	(Under construction)	...
Munro, J. R.	Hubalta	500	S	...	...
Oughton Bros.	Turner Valley	100	S	...	...
<u>BRITISH COLUMBIA -</u>					
Imperial Oil Limited	Loco	16,000	S - C	Tube and Tank	3,400
Shell Oil Company of British Columbia Ltd.	Vancouver	4,000	S	...	...
Standard Oil Company of British Columbia Ltd.	Burnaby	2,700	S	...	...
<u>NORTHWEST TERRITORIES -</u>					
Northwest Company Ltd.	Fort Norman	150	S	...	...

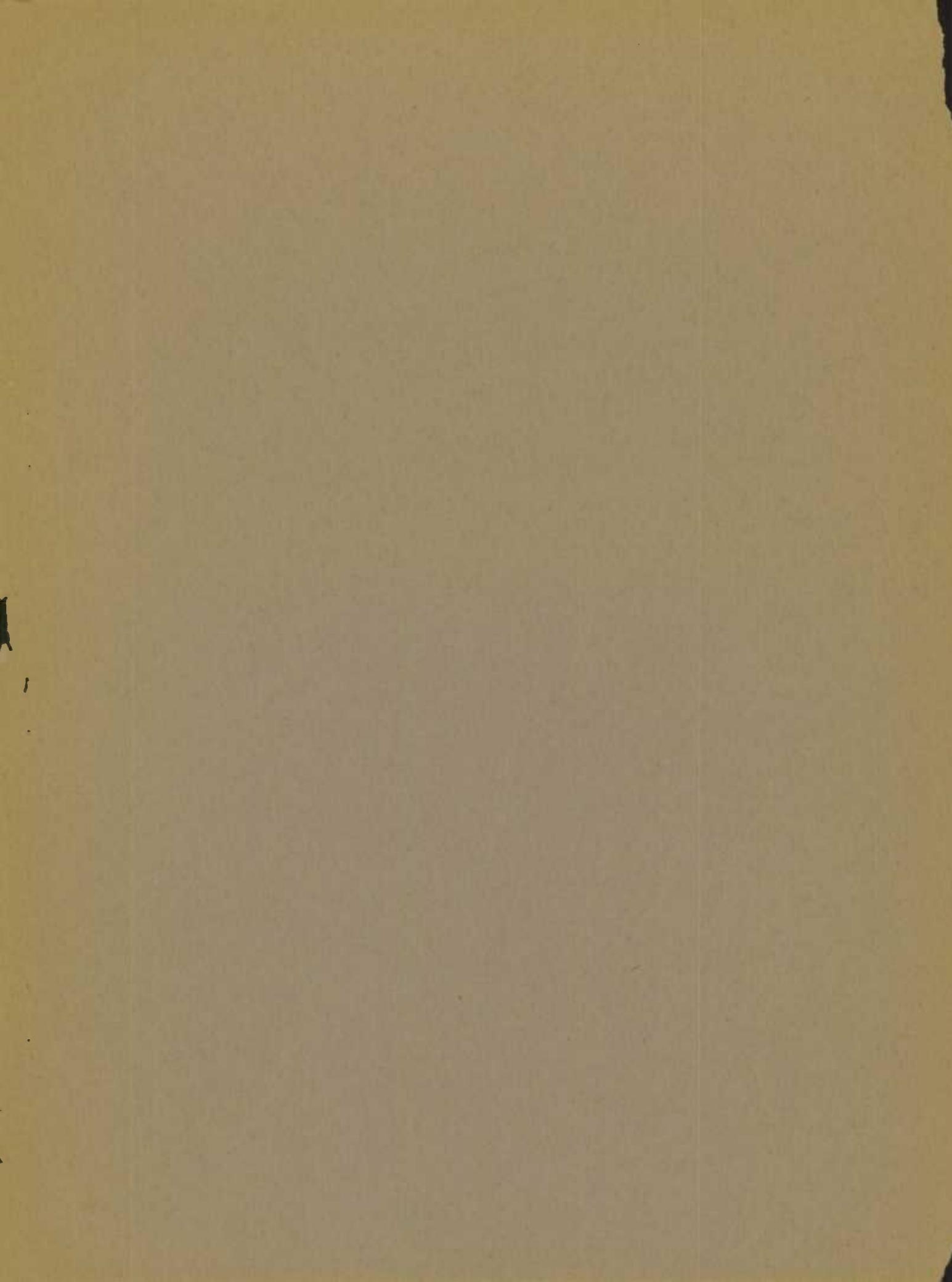
S - Skimming

C - Cracking

150,020

DIRECTORY OF PLANTS ENGAGED IN THE COMPOUNDING OF LUBRICATING OILS AND GREASES IN CANADA, 1939

Name of Company	Location of Plant
<u>QUEBEC -</u>	
Chapman, L. L. & W. H.	Champlain St., Gatineau Point
Economic Products Ltd.	6508 Durocher Avenue, Outremont
Union Products	1150 Conway Street, Montreal
<u>ONTARIO -</u>	
Campbell Grease Company	414 Eastern Avenue, Toronto
Hollingshead, R. M., Co. of Canada, Ltd.	Bowmanville
Houghton, E. F., & Co. of Canada, Ltd.	185 Dufferin Street, Toronto
Kendall Refining Company of Canada, Ltd.	35 Fraser Avenue, Toronto
Ontario Lubricating Co. Ltd.	120 Chatham Street, Hamilton
Ontario Gasoline & Oil Ltd.	45 Dickens Avenue, Toronto
Tide Water Oil Co. of Canada, Ltd.	201 Weston Road S., Toronto
<u>BRITISH COLUMBIA -</u>	
Canada Grease Works Ltd.	280 East 6th Avenue, Vancouver



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