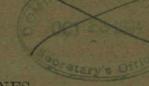
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# CANADA

## DEPARTMENT OF MINES

HON W. A. GORDON, MINISTER CHARLES CAMSELL, DEPUTY MINISTER

### MINES BRANCH

JOHN McLEISH, DIRECTOR

# Petroleum Fuels in Canada

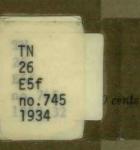
**Deliveries for Consumption** 

Calendar Years 1930-1931-1932

PREPARED BY

John M. Casey

(Issued by the Mines Branch, Department of Mines, in Co-operation with the Dominion Fuel Board.)





OTTAWA J. O. PATENAUDE PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

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### PETROLEUM FUELS

For some years the Mines Branch has been collecting information regarding the deliveries of fuel oil, kerosene, and petroleum coke in Canada, in order to ascertain what amounts of these commodities were being delivered to be used as fuel for steam-raising, for heating, and for power purposes, as distinguished from the amounts delivered for other miscellaneous purposes.

Deliveries of petroleum products for fuel purposes during the calendar year 1932 amounted to 938, or, including the 53 consumed in refineries, to 991 million Imperial gallons, consisting of 442 of fuel oil, 45 of kerosene, and 504 of gasoline; about 94 thousand short tons of petroleum

coke were also delivered (and consumed in refineries) for fuel.

The weight of these various volumes of oil can only be estimated in the absence of precise information regarding the specific gravity of the numerous grades of fuel under each class. Assuming gravity ratings of 0.933 for fuel oil, 0.810 for kerosene, 0.742 for gasoline, about 2.06million short tons of fuel oil, 0.18 million tons of kerosene, and 1.87 million tons of gasoline were delivered for fuel during 1932.

Disregarding the question whether or not these be replaceable by coal, on the basis of the relative calorific values of petroleum products and of coal, it is estimated that the total heat value of each group of products is equivalent to the latter in the following amounts: fuel oil, to 3.01; kero-

sene, to 0.28; and gasoline, to 2.87 million short tons.

The following comparative summaries show: (1) the gallonages of petroleum fuels marketed in Canada during the calendar years 1931 and 1932, together with their estimated weights and coal equivalents; and (2) the amounts distributed in each of the provinces.

TABLE I Petroleum Fuels marketed in Canada, by Classes (Units: Millions of gallons and of short tons.)

	<u> </u>	· ·				· · · · · · · · · · · · · · · · · · ·		
	Cal	Calendar Year 1932			Calendar Year 1931			
Class	Imperial gallons	Rated weight, *tons	Rated heat values (in coal), **tons	Imperial gallons	Rated weight, *tons	Rated heat values (in coal), **tons		
Fuel oil	†442 45 504	2·06 0·18 1·87 0·09	3·01 0·28 2·87 0·10	†454 52 556	2·12 0·12 2·06 0·08	3·10 0·32 3·17 0·09		
Total	†991	4.20	6.26	†1,062	4.47	6.68		

*Rates of conver-	sion—	Gravity lim	its of above grades—				
Specific Or :	Degree A.P.I.	Speci	fic Gravity	Deg	ree A.P.I.		
0.933	20·0°		eavier) to 0.818		avier) to 41°	fuel oil	
0.810	43 · 2°	0.816	to 0.793	42°	to 47°	kerosene	
0.742	59·5°	0.760	to 0.680	55°	to 77°	gasoline	

The degree A.P.I. refers to the reading on the Baumé specific gravity scale adopted by the American Petroleum Institute and widely used in the oil trade.

\*\*Rates of conversion—Calorific values, in B.T.U.'s per pound, are rated as follows: fuel oil at 19,000, kerosene and gasoline at 20,000, coal at 13,000, and petroleum coke at 15,000. † Includes refinery consumptions: 53 in 1932, and ahout 55 in 1931. ‡From Dominion Bureau of Statistics' reports on "The Highway and Motor Vehicle in Canada."

TABLE II

Petroleum Fuels marketed in Canada, by Provinces

(Million Imperial gallons-Calendar years.)

· Province	.Fuel oil	Kerosene	Gasoline‡	: /Total	Per cent	Cokett
<sub>"</sub> 1932						
N.B. and P.E.I	4 22 116 69 5 9 13 151	2 2 5 8 6 13 7	16 19 91 237 26 34 41 40	22 43 212 314 37 56 61 193	2 5 23 34 4 6 6 20	10.0 67.4 16.0
Total	†389	45	504	†938		∵ <b>93</b> ∙8
Per cent	41	б	54		100	
1931						
N.B. and P.E.I. Nova-Scotia. Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia.	8 28 126 66 5 5 11 150	2 6 12 6 11 11 2	19 21 98 250 30 49 44 45	29 51 230 328 41 65 66 197	3 5 23 32 4 6 7 20	18.4 40.8 20.0
Total	†399	52	556	†1,007		: 80 - 2
Per cent	40	. 5	55		→ ::100	<u></u>
1930		· .				
N.B. and P.E.I.  Nova Scotia. Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia.	11 21 122 80 6 7 16 162	2 2 6 13 5 8 7 2	19 19 89 243 36 77 52 47	32 42 217 336 47 92 75 211	3 4 21 32 4 9 7 20	Not complete
Total	: 425	45	582	†1,052		
Per cent	40	4	56		100	

<sup>†</sup>Excludes 53 of fuel oil consumed in oil refineries in 1932, 55 in 1931, and 59 in 1930. ††Thousand short tons. †Data on gasoline are quoted from the Dominion Bureau of Statistics' reports on "The Highway and Motor Vehicle in Canada".

#### FUEL OIL

The data on petroleum fuels under the headings of fuel oil, kerosene, and coke were prepared from reports submitted to the Mines Branch by firms engaged in the oil trade, namely: refiners' marketing departments, oil brokers and jobbers, and also from information received from known importers and consumers of similar products from abroad. Care was taken to avoid possible gallonage duplication, and, in the case of fuel oil, to apportion the amounts reported when necessary.

The term "fuel oil" is used broadly to mean any grade of oil processed from petroleum and of a specific gravity ranging between 5° to about 42° A.P.I. Oils under this title are described in the trade as heavy, medium, or light oils, and delivered largely for steam-raising, power, and heating. With the heavy oils are included the residual, bunker, and Diesel grades; medium oils consist mostly of furnace grades and semi-Diesels; the light oils also include gas-oil, distillate, stove and range grades. In so far as they have been reported, these last three were not always sharply defined from kerosene. Discard and waste oils within this range, whether reclaimed or not, and liquid by-products of coal are excluded from the tables.

Kerosene or "refined oil of petroleum" consists of the white or amber grades, of gravities ranging between 42° and 47° A.P.I., and is generally sold for small heating and lighting, or for use in the heavier type of automotive or other internal combustion engine. Gasoline comprises those grades having 55° A.P.I. or lighter as their gravity, and is sold extensively for light automotive and aerial work. The data for the Prairies exclude such Alberta crude naphthas and light crudes, which, as obtained direct from the wells, might also fall within these three group ranges.

Table III is a summary statement showing deliveries of fuel oil in the provinces during the past three years as reported by distributors and importers. Approximately 80 per cent of the 1932 total consisted of fuel oil from petroleum processed in Canadian refineries, the remainder being imported. This table is amplified in Table IV, which records the portions delivered to a category of consumers for specific purposes. In 1932, domestic heating accounted for 20 per cent of the total, industrial heating 21 per cent, tractor fuel 3 per cent, and locomotive and bunker fuel for about 56 per cent. It may be further noted that over 86 million gallons, 22 per cent of the aggregate, were delivered that year in equipment owned by 475 oil jobbers.

TABLE III

#### Comparative Summary of Fuel Oil Deliveries, by Provinces

(Prepared from distributors' and importers' reports-Calendar years.)

Area	Product of Canadian refineries	Product of foreign refineries (importations)	Total fuel oil delivered		Respective percentages of total	
1932	Ir	nperial Gallons	1			
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Prairies. British Columbia.	3,312,022 20,623,563 94,291,069 63,374,257 27,465,639 101,784,060	729,704 1,010,829 21,736,303 5,345,414 464,707 49,268,881	4,041,726 21,634,392 116,027,372 68,719,671 27,930,346 151,052,941	0·8 5·3 24·2 16·3 7·1 26·1	0.2 0.3 5.6 1.3 0.1 12.7	1.0 5.6 29.8 17.6 7.2 38.8
Total	†310,850,610	78,555,838	†389,406,448	79.8	20.2	100.0
Inventory Dec. 31	81,896,724	8,364,859	90,261,583			
1931						
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Prairies. British Columbia.	8,452,443 27,516,470 104,421,926 60,281,042 19,602,390 109,258,219	62,178 Nil 21,810,513 6,064,986 1,557,980 40,385,527	8,514,621 27,516,470 126,232,439 66,346,028 21,160,370 149,643,746	2.1 6.9 26.1 15.1 4.9 27.4	Nil 5·5 1·5 0·4 10·1	2·1 6·9 31·6 16·6 5·3 37·5
Total	†329,532,490	69,881,184	†399,413,674	82.5	17.5	100.0
Inventory Dec. 31	84,749,814	6,684,063	*91,433,877			
1930						
N.B. and P.E.I	11,082,339 20,130,911 103,345,729 72,759,774 26,740,258 117,809,429	390,241 568,743 18,958,438 7,024,782 1,506,754 44,529,542	11,472,560 20,699,654 122,304,167 79,764,556 28,247,012 162,338,971	2.6 4.8 24.3 17.1 6.3 27.7	0·1 0·1 4·5 1·7 0·3 10·5	2.7 4.9 28.8 18.8 6.6 38.2
Total	†351,848,440	72,978,500	†421,826,910	82.8	17.2	100.0
Inventory Dec. 31	76, 103, 591	7,288,162	83,391,753			

Fuel oil of all grades between 5° and 42° A.P.I. and processed from petroleum. Inventory at refineries, warehouses and jobbers' storages.

†Excludes 53,459,000 gallons in 1932, 54,552,000 gallons in 1931, and 59,308,000 gallons in 1930, which were produced and used in Canadian refineries for fuel purposes.

\*Revised.

TABLE IV

Fuel Oil Deliveries, Specific Uses, by Provinces

(As reported by distributors and importers—Imperial gallons—Calendar years.)

Area		and Building eating Quantity	INDUSTRIAL (and manu- facturers') heating	TRACTOR fuel oil, not lubricant	RAILWAYS: principally locomotive and shop fuel	Bunkering, includes distributors' tankers	Total deliveries Imperial gallons	Per cent of total
1932	No.							
N.B. and P.E.I.  Nova Scotia.  Quebec.  Ontario  Prairies.  British Columbia.	663 16,016 *15,640 1,543	1,358,518 1,350,858 26,534,160 31,677,078 3,083,152 13,553,792	791,489 4,734,042 26,040,790 25,786,791 6,294,897 18,587,622	4,608 14,503 31,504 3,837,542 8,550,508 151,610	252,987 107,611 3,823,062 2,132,088 10,001,789 40,674,351	1,634,124 15,427,378 59,597,856 5,286,172 Nil 78,085,566	4,041,726 21,634,392 116,027,372 68,719,671 27,930,346 151,052,941	1.0 5.6 29.8 17.6 7.2 38.8
CanadianImported		64, 187, 783 13, 369, 775	68,849,081 13,386,550	10,682,763 1,907,512	56,908,160 83,728	110,222,823 49,808,273	310,850,610 78,555,838	79-8 20-2
<b>Total</b>	36,978	77,557,558 19·9	82,235,631 21·1	12,599,275 S·2	<b>56,991,888</b> 14.7	169,031,096 41·1	389,496,448	100.0
1931								
N.B. and P.E.I.  Nova Scotia.  Quebec.  Ontario.  Prairies.  British Columbia.	543 13,760 *14,116 1,548	$\begin{array}{c} 1,524,075\\ 1,090,544\\ 29,074,288\\ 27,928,086\\ 2,575,362\\ 11,057,901 \end{array}$	937,890 7,866,406 28,426,161 28,188,990 7,237,848 36,162,617	24,833 Nil Nil 276,978 3,291,445 Nil	61,891 3,632,361 1,427,334 1,356,775 8,055,715 43,211,857	5, 965, 932 14, 927, 159 67, 304, 656 8, 595, 199 Nil 59, 211, 371	8,514,621 27,516,470 126,232,439 66,346,028 21,160,370 149,643,746	2·1 6·9 31·6 16·6 5·3 37·5
CanadianImported		63,450,788 9,799,468	74, 114, 840 34, 705, 072	3, 132, 852 460, 404	57,737,540 8,393	131,096,470 24,907,847	329,532,499 69,881,184	82·5 17·5
Total	32,435	73,259,256 18·8	108,819,912 27·2	3,593,256 0·9	57,745,933 14·5	156,004,317 89·1	399,413,674	100.0

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TABLE IV—Concluded

#### Fuel Oil Deliveries, Specific Uses, by Provinces-Concluded

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

Aron		and Building	Industrial	TRACTOR	RALWAYS:	Bunkering,	Total deliveries	Per cent
Aica	Area  Domestic customers		(and manu- facturers') heating	fuel oil, not lubricant	locomotive and shop fuel	includes distributors' tankers	Imperial gallons	of total
1930		,	;	-				
N.B. and P.E.I Nova Scotia. Quebec. Ontario. Prairies. British Columbia.	Not	1,306,787 1,418,952 21,481,018 33,115,158 3,870,673 13,182,978	855,937 5,647,277 24,587,946 33,102,311 8,182,609 42,947,383	Nil Nil 646,763 472,867 2,977,802 209,135	68,841 78,591 3,054,010 1,512,867 13,215,928 55,797,810	9,241,015 13,554,834 72,534,430 11,561,353 Nil 50,201,665	11,472,580 20,699,654 122,304,167 79,764,556 28,247,012 162,338,971	2.7 4.9 28.8 18.8 6.6 38.2
Canadian Imported		65,177,278 9,198,288	80,096,658 35,226,795	4,014,973 291,594	73,653,440 74,607	128,906,081 28,187,216	351,848,440 72,978,500	82·8 17·2
Total		74,375,566 17·5	115,323,463 27·1	4,306,567 1.0	73,728,047	157,093,297 36·9	424,826,940	100-0

Amounts respectively recorded 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 and as required. Fuel oil of all grades between 5° and about 42° A.P.I. and processed from petroleum. \*Partially estimated.

#### EXPLANATORY REMARKS ON TABLE IV

The first two columns show the number of domestic heating customers and the gallonages supplied to them exclusively for household uses in ranges and stoves, or for heating their homes, residences, apartments, institutions, offices, or other public buildings. Also with the data are the portions reported by: railways, for heating stations, hotels, and cars; several industrial firms, for this class of heating; and distributors, for their own buildings. No information was obtained regarding oil discard or waste oil re-used either for domestic or industrial heating. The number of domestic customers may equally serve as an index of the minimum number of stoves, ranges, burners, and furnaces in use for this category of heating which accounts for about 20 per cent of the aggregate of all fuel oil delivered.

Distribution in Principal Cities. Most of the domestic heating delivery, 88 per cent of the Canadian total, was effected in the principal undermentioned cities of each province. During 1932, the approximate amounts that distributors reported were as follows (with number of users shown in brackets): Halifax 1,051,000 (493); St. John and Charlottetown 1,009,000 (432); Greater Montreal 22,346,000 (10,198), Quebec City 3,229,000 (1,716), Three Rivers 458,000 (704), these last three accounting for 26 million (and 12,620) of the 26½ million gallons (and 16,016) for the province of Quebec; Ottawa 4,134,000 (1,464), Greater Toronto 17,675,000 (7,386), Hamilton 1,460,000 (714), London 1,557,000 (1,355), Windsor and Walkerville 365,000 (53), which centres contributed 25 million (and 11,072) of the 31½ million gallons (and 15,640) for Ontario; Greater Winnipeg 2,087,000 (1,074); Regina, Moose Jaw, and Saskatoon 678,000 (334); only small amounts at Calgary and Edmonton; Vancouver and New Westminster 11,119,000 (1,979), and Victoria 1,752,000 (304). Quebec City and Hamilton gallonages are believed to be a little understated, and those of Montreal and Toronto slightly overstated.

The amount of fuel oil delivered for INDUSTRIAL and manufacturing consumption for fuel purposes is stated in column 3. Important users are the west coast pulp and paper mills; mills and plants for the production and tempering of steels, structural steel forms and steel goods; ore-reduction works, smelters and refineries for the recovery of base and precious metals; the heavy chemical, sugar refining, liquor distilling, and canning industries; electric power plants; sites under heavy constructional development; and in lesser degree to mining companies and factories of all kinds. Deliveries of gas-oil for reduction to gas-fuels are also included, as also all fuel oil used by oil companies importing but not refining fuel oil in Canada. The volume of deliveries in each area is determined largely by the number of the specified industries located within such area. The large amount reported for British Columbia is due to the requirements of this province's large offshore and metallurgical industries.

Under TRACTOR fuel are given the amounts of fuel oil grading to about 42° delivered for fueling tractor-engines. Oil distillate between 42° and 47° A.P.I. is omitted and included with kerosene. The data exclude all Turner Valley light crude and natural naphtha which are also suitable for use for this purpose. About 68 per cent of the total volume under this heading was delivered in the Prairie Provinces.

The quantities under RAILWAYS have been adjusted to exclude 3½ million gallons credited to Domestic Heating. The recorded balances, aggregating about 15 per cent of the total Canadian deliveries, consisted largely of fuel for locomotives, rail motor-cars, roundhouses, and shops. Fuel oil was also used for dredging, weed-burning and other special uses.

The amount of fuel oil supplied for BUNKERING purposes from oil-fueling stations within the areas was slightly over 160 million gallons, or 41 per cent of all fuel oil deliveries, and was mostly consumed outside of Canadian waters on the high seas, in steam and motor-ships operating on ocean, international and inland passenger and freight routes. Of the 1932 total, stations in British Columbia contributed 78, Quebec 60, and Nova Scotia 15½ million gallons.

Rail and water transportations absorbed the greater part of the Canadian deliveries of fuel oil, and accounted for 56 per cent of the total in 1932, 54 per cent in 1931; about 15 per cent of the fuel oil so used was actually consumed in Canada.

#### KEROSENE

The refined fractions of petroleum having specific gravities between 0.816 and 0.793, or between their 42° and 47° Baumé A.P.I. equivalents, are grouped under kerosene. Included with the figures are small amounts of distillate reported ranging within these limits.

Deliveries are shown in Table V, and in amount, were only one-eighth of the volume of fuel oil, or but one-twentieth of the aggregate of all petroleum fuels. In other words, out of every 100 gallons of fuel oil, kerosene, and gasoline delivered during the past two years, there were only 5 of kero-

sene as compared with 41 of fuel oil and 54 of gasoline.

Kerosene is an important and widely used substitute for gas and electricity where these are not available; a common domestic and camp fuel for cooking, heating, and lighting; a signal oil in lighthouses and along steel right-of-ways; a fuel for light water-craft on inland and coastal waters; a material for cleaning large industrial machinery and other objects; but the major field of usage and consumption is in power-farming as tractor fuel. The relative amounts delivered for heating, cooking, and lighting as contrasted with amounts delivered for tractors, engines, and for all other purposes, were not definitely known to all distributors. In this respect, many western jobbers handling up to 30,000 gallons each, advised that from 10 per cent to 15 per cent of the turnover was sold for cooking and lighting, and the balance for use in tractors.

Yearly returns submitted by individual distributors disclose gradual mutual displacements of distillate and kerosene, observable particularly in Quebec and in the Prairies. The change in the eastern provinces is probably due to the much improved type of small domestic burner, stove, or range now obtaining, the later models being designed for burning cheaper oil distillate as against refined kerosene, the common fuel of the older models.

In the Prairies, on the other hand, owing to the consumer's choice of tractor fuel and purchasing power, the volume of kerosene delivered was generally maintained, while amounts of other lighter distillates dropped considerably during the past two years.

The eastern distillate is rarely lighter than 0.8180 or 42° Baumé A.P.I., whether used for heating or in tractors. In the Prairies, the demand for oil fuels for heating is negligible, in marked contrast to the requirements for this purpose prevailing in the east. In the matter of oil fuels for tractors, the positions are reversed. The blended distillate used commonly in the west in tractors has, however, a gravity corresponding to that of gasoline, though some of the lighter kerosenes are suitably used.

The combined deliveries of kerosene and gasoline in the Prairies during 1932 amounted to 146, and in 1931 to 151 million gallons; of these, 45 and 28 million gallons, or 31 per cent and 18½ per cent, respectively, were

of kerosene.

Deliveries of kerosene in 1932 for all-purpose use in Canada were 45 million gallons, of which 20 million or 44 per cent was delivered by oil jobbers.

TABLE V

Comparative Summary of Kerosene Deliveries, by Provinces

(Prepared from distributors' and importers' reports—Imperial gallons—Calendar years.)

Area	Product of Canadian refineries	Product of foreign refineries (importations)	Total kerosene delivered	Respective percentages of total		
1932					1	
N.B. and P.E.I.  Nova Scotia Quebec. Ontario. Manitoba Saskatchewan Alberta British Columbia	1, 987, 262 1, 695, 750 5, 313, 471 7, 124, 812 5, 682, 700 12, 808, 088 6, 923, 065 1, 265, 924	41, 135 6, 848 178, 695 1, 123, 256 37, 759 42, 148 377, 302	2,028,397 1,702,598 5,492,166 8,248,068 5,720,459 12,808,088 6,965,213 1,643,226	4.5 3.8 11.9 16.0 12.7 28.7 15.5 2.8	0·1 0·4 2·5 0·1 0·1 0·9	4.6 3.8 12.3 18.5 12.8 28.7 15.6 3.7
Total	42,801,072	1,897,143	44,608,215	95 · 9	4.1	100.0
1931						
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Manitoba. Saskatchewan Alberta. British Columbia.	1,803,284 1,692,525 5,558,600 10,224,515 5,990,852 10,483,530 11,184,511 1,288,145	78, 289 6, 685 792, 510 1, 784, 325 146, 188 87, 651 231, 255 362, 512	1,881,573 1,699,210 6,351,110 12,008,840 6,137,040 10,571,181 11,415,766 1,650,657	3.5 3.3 10.8 19.8 11.6 20.2 21.6 2.5	0·1 1·5 3·4 0·3 0·2 0·5 0·7	3.6 3.3 12.3 23.2 11.9 20.4 22.1 3.2
Total	48,225,962	3,489,415	51,715,377	93.3	6.7	100.0
1930						
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Manitoba Saskatchewan. Alberta. British Columbia.	2,120,047 2,075,259 4,926,489 11,062,182 5,173,669 7,572,183 6,903,109 1,074,065	195,834 2,186 672,528 2,209,080 262,151 102,554 127,890 891,002	2,315,881 2,077,445 5,599,017 13,271,262 5,435,820 7,674,737 7,030,999 1,965,067	4.7 4.6 10.8 24.4 11.4 16.7 15.2 2.4	0·4 	5·1 4·6 12·3 29·3 12·0 16·9 15·5
Total	40,907,003	4,463,225	45,370,228	90.2	9.8	100 · 0

#### TABLE VI

### Sales of ‡Gasoline (and Motor Fuel), Canada, by Provinces

(Gasoline or other named light-gravity, motor fuel—generally of, or from petroleum; the gravity limit in any year, in any province, is 0.8017, or 45° Baumé A.P.I.)

Area	Imperial g	Imperial gallons—Calendar years			Percentages of tot sales, Canada		
	1932	1931	1930	1932	1931	1930	
	Total Sold	for ALL Purp	oses				
N.B. and P.E.I. Nova Scotia.  Maritimes. Quebec. Ontario. Manitoba. Saskatchewan. Alberta.  Prairies. British Columbia.  Canada	16, 363, 747 19, 021, 209 35, 384, 956 91, 123, 040 236, 688, 727 26, 185, 160 33, 635, 929 41, 300, 236 101, 121, 326 39, 458, 159 503, 781, 207	249,543,831 30,307,724 49,449,699 43,478,465 125,285,888 45,369,473	17,932,803 19,367,349 57,300,162 88,681,459 305,829,114 33,468,467 76,630,024 50,744,600 160,843,091 37,865,180	3·2 3·8 7·0 18·1 47·0 5·2 6·7 8·2 20·1 7·8	3·4 3·8 7·2 17·5 44·9 5·4 8·9 8·0 22·3 8·1	2.8 3.1 5.8 14.1 48.6 5.8 12.1 8.6 6.6	
Por	rtions Sold fo	r Mororing	Purposes				
N.B. and P.E.I.  Nova Scotia.  Maritimes.  Quebec.  Ontario.  Manitoba.  Saskatchewan.  Alberta.  Prairies.  British Columbia.	15, 123, 491 18, 445, 130 83, 568, 621 84, 651, 891 219, 232, 700 21, 517, 430 21, 998, 369 30, 220, 478 78, 736, 277 31, 285, 539	16, 431, 642 18, 176, 943 34, 608, 585 91, 816, 749 235, 320, 078 22, 142, 728 26, 479, 689 24, 746, 025 73, 368, 442 36, 052, 087	16,549,728 17,518,709 34,068,487 83,231,068 239,058,108 21,627,672 31,248,449 35,789,985 88,666,106 34,530,673	3.0 3.6 6.6 16.8 43.5 4.3 4.4 6.0 14.7 6.2	3·0 3·3 6·3 16·5 40·5 4·0 4·7 4·4 13·1 6·5	2.6 2.7 5.8 13.2 37.9 3.4 5.6 5.7	
Dittish Columbia	,,						

Portions Sold for All Other Purposes (Amounts on which Tax was Refunded) (Tractors, stationary engines for light or power, rail motor cars, air and water craft, industrial uses, etc.)

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N.B. and P.E.I	1,240,256	2,617,204	1,383,075	$0 \cdot 2$	0.5	0.2
Nova Scotia	576,079	3,012,994	1,848,640	0.2	0.6	0.3
Maritimes	1,816,335				1.1	0.5
Quebec		5,791,762	5,450,391	1.3	1.0	0.9
Ontario		24,223,753	66,771,006	3.5	$4 \cdot 4$	10.6
Manitoba	4,667,730	8, 164, 996	11,830,795	0.9	1.5	1.9
Saskatchewan	11,637,560				$4 \cdot 1$	7.2
Alberta	11,079,758	18,732,440	14,954,615	2.2	3.3	2.4
Prairies	27,385,048	49,867,446	72,166,985	5.4	8.9	11.5
British Columbia	8,172,620			1.6	1.7	0.5
Canada	61,306,179	94,839,545	150,964,604	12.2	17.1	24.0
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In each province there are regulations for taxation purposes regarding the sale of gasoline. As defined in the several Acts, any light-gravity fuel of any name, which may suitably be used in a motor (generally an automobile), is taxable within the meaning of the Act. The fuel may be a natural substance such as petroleum or natural gasoline, or benzol, or any one of their derivatives, either as blend or as a mixture. Provisions of the several Acts are not uniform as to gravity limits, and purpose-uses of the fuel.

Owing to the various amending regalations of each Act, in respect to fuel gravity as also to portion of fuel sold, but subject to refund, the yearly gallonages recorded for each province are not comparable and are more or less estimates. Moreover, these amounts exclude fuel ovading the tax levy. The data are quoted from the annual reports issued by the Dominion Bureau of Statistics, entitled The Highway and the Motor Vehicle.

#### PETROLEUM COKE

This hard, dull residue of distillation, apart from being an excellent fuel for which it is considerably used in domestic and industrial heating, is also a valued component of electric batteries, carbon lamps, crucibles, and other articles of manufacture. Coke known to have been used for this last purpose has been omitted from the following table, which records only the amounts sold or used for fuel.

The Ontario tonnage shown under domestic heating includes a large quantity of a patent fuel manufactured at Toronto, and marketed as "Petro-Blox." These are dry, machine-pressed, packaged blocks (each 3 by 3 by 4 inches and weighing about 2 pounds) compounded from crushed petroleum coke (between 90 and 95 per cent), binder, and water.

Tonnages reported under industrial heating were largely consumed for fuel in refineries.

TABLE VII
Petroleum Coke, Calendar Years, Short Tons

Area	Fuel for Domestic heating†	Fuel for Industrial heating‡	Total short tons	Inventory Dec. 31†
MaritimesQuebecOntarioWestern provinces	$\frac{568}{48,739}$	Nil 9,445 18,667 8,077	428 10,013 67,406 15,976	
CanadianImported	48,072 9,562	22, 913 13, 276	70,985 22,838	38,071 16,145
<b>Total 1932.</b> Total 1931	<b>57,634</b> 32,439	<b>36,189</b> 47,757	93,823 80,196	<b>54,216</b> 53,160

†As reported by coal dealers, distributors, and importers; inventory includes stocks at refineries. ‡Consisting mostly of amounts used by refiners as fuel.

TN CASEY, John M.
26 Petroleum fuels in
E5f Canada: deliveries for
no.745 consumption, calendar
years 1930-1931-1932.

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