CANADA

DEPARTMENT OF MINES

HON, T. A. CRERAR, MINISTER

CHARLES CAMSELL, DEPUTY MINISTER

MINES BRANCH

JOHN MCLEISH, DIRECTOR

Petroleum Fuels in Canada

Deliveries for Consumption

Calendar Year

1934

PREPARED BY

John M. Casey

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



Dept. Mines & Technical Surveys MINES BRANCH DET 7 1966 OTTAWA, CANADA

OTTAWA J. O. PATENAUDE, I.S.O. PRINTER TO THE KING'S MOST EXCELLENT MAJESTY 1936

Price, 10 cents

No. 772

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TABLES

			PAGE
Table	I:	Petroleum Fuels Marketed in 1934 and 1933: classes, weights, coal equivalents (Summary)	1
Table	II:	Petroleum Fuels Marketed, by Provinces (Summary)	$\hat{2}$
		FUEL OIL	
		Deliveries-	
Table		Annual Deliveries: by provinces; by origin. Inventories	4
Table	IV:	Annual Deliveries for specific uses	5
Chart	:	4-part, showing cumulative and relative Deliveries of fuel:	6
		Categories of use-	
Table	V:	 Deliveries for DOMESTIC HEATING:	7, 8
		(c) Summary, by provinces, and percentages of total deliveries.	
Table	VI:	Deliveries for INDUSTRIAL HEATING and for POWER, including amounts consumed by Railways and Distributors for	
		Industrial Heating	9
Table		Deliveries of oil-heavier than 42° A.P.Ifor TRACTORS	10
		Deliveries of oil-heavier than 47° A.P.Ifor TRACTORS	11
Table		Deliveries of fuel oil to RAILWAYS, excepting fuel for vessels	12
Table		Specific Consumptions by RAILWAYS of Canada	13
Table		Deliveries for BUNKERING purposes	14
Table	XII:	Deliveries for RAIL and WATER TRANSPORTATIONS	15
		KEROSENE	
Table	XIII:	Annual Deliveries: by provinces; by origin. Inventories	17
Table	XIV:	Deliveries for specific uses	18
		GASOLINE	
Table	$\mathbf{x}\mathbf{v}$	Total Sales of Gasoline (and Motor Fuel):	19

Table	XV:	Total Sales of Gasoline (and Motor Fuel):	- 19
		(a) Portions upon which Tax was Refunded (not used for	
		Motoring); and	
		(b) Portions for Motoring Purposes (by difference).	

PETROLEUM COKE

Table	xv1.	Patrolaum	Coke Sold and	Used for fuel	purposes	20
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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.

During the calendar year 1934, deliveries of petroleum products for fuel purposes amounted to 996, or, including the 54 consumed in refineries, to 1,050 million Imperial gallons, consisting of 479 of fuel oil, 36 of kerosene, and 535 of gasoline; over 56 thousand short tons of petroleum coke were also delivered (and consumed in refineries) for fuel.

The weight of these various volumes of fuel can only be estimated in the absence of precise information regarding the specific gravity of the numerous grades of oil under each class. Assuming specific gravity ratings of 0.933 for fuel oil, 0.810 for kerosene, and 0.738 for gasoline, there were about 2.23 million short tons of fuel oil, 0.15 million tons of kerosene, and 1.97 million tons of gasoline delivered for fuel during 1934.

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 class of products is equivalent to the latter in the following amounts: fuel oil, to 3.25; kerosene, to 0.23; gasoline, to 3.03; and coke, to 0.07 million short tons, an aggregate of over six and a half million tons of coal.

The following comparative summaries show: (1) the gallonages of petroleum fuels marketed in Canada during the calendar years 1934 and 1933, together with their estimated weights and coal equivalents; and (2) the amounts distributed in each of the provinces.

TABLE 1

Petroleum Fuels Marketed in Canada, by Classes (Units: Millions of gallons and of short tons)

	Cale	endar Year	1934	Calendar Year 1933			
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 Kerosene Gasoline Coke	535	2·23 0·15 1·97 0·06	3 · 25 0 · 23 3 · 03 0 · 07	†424 42 484	1.98 0.17 1.79 0.08	2.89 0.26 2.75 0.09	
Total	†1,050	4.41	6.58	†950	4.02	5.99	

fIncludes refinery consumptions: of 54 in 1934, and 56 in 1933.

*Rates o	f conve	rsio	n—													
		Sp	ecific		Degree		W	eight			Gravity	range	of eacl	ı clas	8	
		gra	avity		A.P.I.			0	Specifi						A.P.I.	
Fuel	l oil	at	0.933	or	20.0°	or	9.331	b./gal.	1.000+	to	0.818	or	10°—	to 41°	⁹ Fuel oil	I
					43·2°			14	0.816	to	0.793	or	42°	to 47°	^o Keroser	10
Gas	oline	at	0.738	or	60 • 0°	or	7.38	"	0.760	\mathbf{to}	0.680	or	55°	to 77°	' Gasoline	e
	Thad	aare	AP	T	rofors to	+ha	roadi	na on tha	Baum6 anor		anoviter	agola	adapt	dha	the Ame	

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.

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TABLE II

Petroleum Fuels Marketed in Canada, by Provinces

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 $\hat{40}$

501

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347

41 54

68

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36.2

Nil

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2.4

56.4

0.4

2.2

61.5

Nil

18.1

Nil

82.2

0.4

10.0

67.4

16.0

93.8

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(Million Imperial gallons—Calendar years)										
Province	Fuel oil †	Kerosene	Gasoline‡ (motor fuel)	Total †	Per cent	Coke††				

 $\frac{11}{33}$

123

85

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136

425

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131

368

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 $2\overline{2}$

116

69

5

9

13

151

389

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9

1934 N.B. and P.E.I..... Nova Scotia.....

Quebec..... Ontario.....

Manitoba.....

Saskatchewan..... Alberta and N.W.T..... B.C. and Yukon.....

1933 N.B. and P.E.I.....

Ontario..... Manitoba..... Saskatohewan.....

Alberta..... British Columbia.....

1932

N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Manitoba.

Saskatchewan.....

Alberta..... British Columbia.....

Total.....

Alberta

Total.....

Per cent.....

Total.....

Per cent.....

100 Per cent..... 41 б 54 1931 80.2 Total..... 399 52 556 1,007 5 100 Per cent..... 40 65 1930 1,052 Total..... 425 45 58240 100 Per cent..... 4 56

†Data exclude 54 of fuel oil consumed in oil refineries during 1934, 56 in 1933, 53 in 1932, 55 in 1931, and 59 in 1930. ††Thousand short tons of petroleum coke fuel. ‡Gasoline data are quoted from the Dominion Bureau of Statistics' annual reports on The Highway and Motor Vehicle in Canada.

FUEL OIL

DELIVERIES

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 also, when necessary, to apportion the total amounts reported to their separate usages.

For the generation of heat or power, all grades of hydrocarbons from gaseous to solid are burnt as fuel, but in the trade the term "fuel oil" is restricted to the heavier liquids so used, which although safe as regards fire or explosion, are sufficiently fluid for flow under conditions of use. Tentative standard specifications of the various grades of fuel oil in commercial use are not based on specific gravity, but for the purpose of this report, it is desirable to group under the generic term "fuel oil" all grades of petroleum or its products used as fuel that are heavier than 42° A.P.I. Oils under this heading are described in the trade as "heavy", "medium", or "light" oils, and delivered largely for steam-raising, power, and for heating purposes. Residual, bunker, and Diesel grades are included with the heavy oils; medium oils consist mostly of furnace and semi-Diesel grades; while 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 re-refined or not are excluded from the table.

Kerosene or "refined oil of petroleum" consists of the white or amber grades ranging between 42° and 47° A.P.I., and generally sold for small heating and lighting, or for use in the heavier type of automotive or other internal combusion engine. For the purpose of this report, this term includes distillate oils falling within this range. Gasoline, or otherwisenamed light gravity fuel, comprises all grades having 55° A.P.I. or lighter as their gravity limit, and is sold extensively for light automotive and aerial work.

A summary statement follows, showing deliveries of fuel oil in the provinces during each of the past three years as reported by distributors and importers. Over 86 per cent of the 1934 total was processed in Canadian refineries, the remainder consisting of imported fuel oil. This table is amplified in Table IV, which records the portions delivered to a category of consumers for specific purposes. In 1934, domestic heating contributed 26 per cent of the total; industrial heating and power 23 per cent; tractor fuel, over 5 per cent; and fuel for rail and water transportations, over 46 per cent.

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TABLE III

Comparative Summary of Fuel Oil Deliveries, by Provinces

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

Area	Product of Canadian refineries	Product of foreign refineries (importa- tions)	Total fuel oil delivered †		lespective arcentage of total	es	Inventory December 31
1934							
N.B. and P.E.I Nova Scotia Quebec. Ontario Manitoba. Saskatchewan Alta. (and N.W.T.). B.C. (and Yukon).	$\begin{array}{c} 10,841,573\\32,993,611\\114,026,526\\83,669,761\\8,544,927\\10,314,479\\15,608,174\\91,444,403\end{array}$	$\begin{array}{r} 340,360\\ Nil\\ 9,203,682\\ 1,454,105\\ 131,308\\ 328,060\\ 919,128\\ 44,970,549\end{array}$	$\begin{array}{c} 11,181,933\\ 32,993,611\\ 123,320,208\\ 85,123,866\\ 8,676,235\\ 10,642,539\\ 16,527,302\\ 136,414,952 \end{array}$	2.6 7.8 26.8 19.7 2.0 2.4 3.7 21.5	0.1 Nil 2.2 0.3 0.1 0.2 10.6	$\begin{array}{c} 2.7\\ 7.8\\ 29.0\\ 20.0\\ 2.0\\ 2.5\\ 3.9\\ 32.1\end{array}$	$1,395,213\\9,482,628\\45,273,821\\63,407,457\\810,035\\3,394,052\\2,109,176\\20,887,740$
Total	367,443,454	57,437,192	424,880,646	86.5	13.5	100.0	146,760,122
1933	[
N.B. and P.E.I Nova Scotia Quebec Ontario Manitoba Saskatchewan Alta. (and N.W.T.). B.C. (and Yukon)	5,444,288 23,281,226 92,117,908 65,782,165 6,325,556 9,839,330 9,832,587 88,608,346	$\begin{array}{r} 700,051\\ 51,900\\ 18,558,693\\ 4,025,970\\ 5,572\\ 52,000\\ 929,981\\ 43,071,570\end{array}$	6,144,339 23,333,126 110,676,601 69,808,135 6,331,128 9,891,330 10,762,568 131,679,916	1.5 6.3 25.0 17.8 1.7 2.7 2.7 2.7 24.0	0.2 5.0 1.2 0.2 11.7	$ \begin{array}{r} 1.7\\ 6.3\\ 30.0\\ 19.0\\ 1.7\\ 2.7\\ 2.9\\ 35.7 \end{array} $	$\begin{array}{c} 2,854,555\\ 10,233,812\\ 35,255,086\\ 40,138,561\\ 893,083\\ 3,042,684\\ 2,392,502\\ 16,737,040 \end{array}$
Total	301,231,406	67,395,737	368,627,143	81.7	18.3	100.0	111,547,323
1932							
N.B. and P.E.I Nova Scotia Quebec Ontario Manitoba. Saskatchewan Alta. (and N.W.T.). B.C. (and Yukon).	63,374,257 5,122,165 9,288,255	$\begin{array}{r} 729,704\\ 1,010,829\\ 21,736,303\\ 5,345,414\\ 60,161\\ 59,651\\ 344,895\\ 49,268,881\end{array}$	$\begin{array}{r} 4,041,726\\ 21,634,392\\ 116,927,372\\ 68,719,671\\ 5,182,326\\ 9,347,906\\ 13,400,114\\ 151,952,941\\ \end{array}$	$\begin{array}{c} 0.8 \\ 5.8 \\ 24.2 \\ 16.8 \\ 1.3 \\ 2.4 \\ 3.4 \\ 26.1 \end{array}$	0.2 0.3 5.6 1.3 0.1 12.7	$ \begin{array}{r} 1 \cdot 0 \\ 5 \cdot 6 \\ 29 \cdot 8 \\ 17 \cdot 6 \\ 1 \cdot 3 \\ 2 \cdot 4 \\ 3 \cdot 5 \\ 38 \cdot 8 \end{array} $	$\begin{array}{r} 1,931,781\\ 5,807,805\\ 21,637,619\\ 36,261,955\\ 359,862\\ 1,584,713\\ 1,433,724\\ 14,196,154 \end{array}$
Total	310,850,610	78,555,838	389,406,418	79 ·8	20.2	100.0	83,213,613
1931							
Total	329,532,490	69,881,184	399,413,674	82.5	17.5	100.0	91,433,877
1930							
Total	351,848,440	72,978,500	424,826,940	82.8	17.2	100.0	83,391,753

Fuel oil of all grades heavier than 42° A.P.I. processed from petroleum. Inventory at refineries, warehouses, jobbers' and large consumers' storages. †Data exclude 54,374,000 gallons in 1934; 56,343,000 gallons in 1933; 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.

TABLE IV

Fuel Oil Deliveries: Specific Uses, by Provinces

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

		ESTIC and NG heating	INDUSTRIAL	TRACTOR	RAILWAYS,	BUNKERING.	Total	Per cent
Area •	Number domestic cus- tomers	Quantity	(manufactur- ers') heating and for power	fuel oil, not lubricant	principally locomotive fuel	includes distributors' tankers	deliveries Imperial gallons	of yearly total
1934								
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Manitoba. Saskatchewan. Alberta (and N.W.T.). B.C. (and Yukon).	2,937 17,191 27,125 1,140 384 6	$\begin{array}{c} 2,804,467\\ 3,512,199\\ 44,480,361\\ 39,421,371\\ 2,235,340\\ 471,553\\ 263,114\\ 16,555,267\end{array}$	$\begin{array}{c} 4,243,495\\ 4,439,325\\ 14,992,237\\ 35,491,443\\ 2,056,429\\ 2,868,686\\ 584,903\\ 30,422,909 \end{array}$	Nil Nil 1,358,438 2,070,223 3,417,396 7,192,323 8,158,710 108,025	$\begin{array}{r} 1,606,542\\94,573\\1,157,892\\2,069,239\\965,952\\109,977\\7,423,412\\37,310,359\end{array}$	2, 527, 429 24, 947, 514 61, 331, 280 6, 071, 590 1, 118 Nil 97, 163 52, 018, 392	$\begin{array}{c} 11,181,933\\ 32,993,611\\ 123,320,208\\ 85,123,866\\ 8,676,235\\ 10,642,539\\ 16,527,302\\ 136,414,952 \end{array}$	2.7 7.8 29.0 20.0 2.5 3.9 32.1
Total, 1934	55,290	109,743,672	95,099,427	22,305,115	50,737,946	146,994,486	424,880,646	100.0
Total, 1933	53,221	99,796,758	83,657,518	12,670,942	43,489,378	129,012,547	368,627,143	
Total, 1932	36,978	77,557,558	82,235,631	12,590,275	56,991,888	160,031,096	389,406,448	
Total, 1931	32,435	73,250,256	108,819,912	3,593,256	57,745,933	156,004,317	399,413,674	•••••
Total, 1930		74,375,566	115,323,463	4,306,567	73,728,047	157,093,297	424,826,940	

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.

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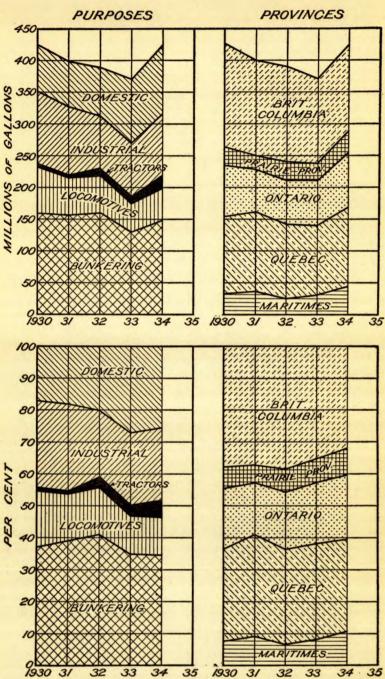


Figure 1. Chart showing actual and relative deliveries of fuel oil for specific purposes and by provinces, calendar years 1930 to 1934.

6

DOMESTIC HEATING

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 are shown in Table V below. 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 heating their own buildings. The number of domestic customers may be considered as an index of the minimum number of oil furnaces in use for this category of heating which accounted for about 26 per cent of the 1934 aggregate of all fuel oil deliveries. Details, by cities, are shown below.

TABLE V

Fuel Oil Delivered for Domestic Heating

(a) In Principal	l Cities—Calendar	Years
------------------	-------------------	-------

Principal cities	domest tomer cludes	nber tic cus- s* (in- s con- cts)	Imperial	Per cent of province total		
	1934	1933	1934	1933	1934	1933
Charlottetown, P.E.I., and St. John, N.B.	} 1,431	1,516	2,241,406	1,329,274	79·9	67•1
Halifax, N.S	1,869	2,159	2,999,541	1,513,007	85.4	79.7
Hull, P.Q	. 98	124	341,943	372,775	0.8	0.8
Montreal, P.Q	12,662	13,914	37,179,608	36, 320, 294	83.6	8 2 · 1
Quebec, P.Q	1,341	3,081	3,281,712	3,266,171	7.4	7.4
Sherbrooke, P.Q	226	256	511,487	502,839	1.2	1.1
Three Rivers, P.Q	363	384	428, 262	369,479	1.0	0.8
Hamilton, Ont	1,374	1,100	3,082,347	†1,508,238	7.8	4.7
London, Ont	1,321	1,341	1,969,328	1,740,417	5.0	5.4
Ottawa, Ont	1,975	1,885	4,447,614	3,964,563	11.3	12.4
Toronto, Ont	7,999	8,861	17,965,875	13,873,126	45.6	4 3 •4
Windsor district, Ont	173	263	290,220	411,705	0.8	1.5
Winnipeg, Man	1,102	1,017	2,017,355	2,037,599	90.2	97 · 0
Regina, Moose Jaw, and Sas- katoon, Sask.	1 918	287	397,922	661,287	84•4	85.5
Vancouver and New Westmin- ster, B.C.	2,857	2,861	11,957,956	11,431,447	72.2	72·3
Victoria, B.C	1,193	560	1,594,302	1,410,575	9.6	8.5
Total, above cities	36,303	39,609	90, 706, 878	80, 712, 796	‡8 2 •7	‡80•9
Total, all other places	18,987	13,612	13,637,650	14, 158, 513	12.4	14.8
Sub-Total	55,290	53,221	104,344,528	94,871,309	95 • 1	95•1

*Largely furnace oil-burners, including oil contracts for domestic heating; oil stoves and ranges omitted. †Understated; part of the Hamilton total was included with Toronto. ‡Per cent of sub-total.

TABLE V-Con.

Fuel Oil Delivered for Domestic Heating-Con.

(b) Additional Gallonage Used for Domestic Heating

Area	By Railway ing hotels, s	vs, for heat- tations, cars		rial Users, tic heating	By Distributors, for heating own buildings		
	1934	1933	1934	1933	1934	1933	
In Maritimes	23,835	23,100	7,280		7,123		
In Quebec	928,980	622, 105	450,276	383,818	471,473	254, 175	
In Ontario	359,387	118,285	225,182	160,072	141,751	224, 261	
In Prairies	218,400	218,365	154,851	175,701	7,519	5,882	
In British Columbia	1,372,088	1,500,060	911,522	1,240,618	119,477	1,007	
Sub-Total	2,902,690	2,479,915	1,749,111	1,960,209	747,343	485,325	
Per cent of domestic heating total	2.6	2•4	1.6	2.0	0.7	0.5	

Total Fuel Oil Delivered and Used for Domestic Heating

Агөа	1934	1933	1932	1931	1930
N.B. and P.E.I	2,804,467	1,979,990	1,358,518	1,524,075	1,306,787
Nova Scotia	3,512,199	1,899,192	1,350,858	1,090,544	1,418,952
Quebec	44,480,361	44,252,995	26,534,160	29,074,288	21,481,018
Ontario	39,421,371	31,972,187	31,677,078	27,928,086	33, 115, 158
Manitoba	2,235,340	2,101,609	2,150,865	1,604,054	2,151,602
Saskatchewan	471,553	773,844	760, 516	778,561	736,098
Alberta	263,114	281,511	171,771	192,747	982,973
British Columbia	16,555,267	16,535,430	13,553,792	11,057,901	13, 182, 978
Total, Domestic Heat- ing	109,743,672	99,796,758	77,557,558	73,250,256	74,375,566
Per cent of total Fuel Oil Deliveries	25.8	27 · 1	. 19:9	18 <i>•3</i>	17.5

Gallonnges used for Domestic Heating in 1932, 1931, and 1930 by railways, industrial users, and by distributors were not ascertained.

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INDUSTRIAL HEATING

The amount of fuel oil delivered for industrial and manufacturing consumption for fuel and power purposes is stated in Table VI. 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; 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 that area. The large amount reported for British Columbia is due to the low-cost requirements of this province's large offshore and metallurgical industries.

It may be observed that the amounts of fuel oil consumed during 1934 by important industrial and manufacturing concerns for purposes other than for industrial heating, were reported as follows: for domestic heating 1,749,111; for tractors 22,433; for locomotives 294,137; for bunkering 1,295,763; and for use as raw material 435,570 gallons. Oil jobbers likewise reported deliveries during the same year for accounts other than for domestic heating in the following amounts: for tractors 3,762,178; for industrial heating 4,571,382; and for bunkering 1,651,872 gallons. Consumption under boilers in Canadian railway shops amounted to about six million gallons, while distributors used on own accounts about threequarters of a million gallons for industrial heating.

Details of deliveries during the past few years for industrial and manufacturers' heating, and for power, are shown in the following statement.

TABLE VI

Fuel Oil Delivered for Industrial and Manufacturers' Heating, and for Power Purposes

Агеа	1934	1933	1932	1931	1930
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Manitoba Saskatchewan. Alberta. British Columbia.	4,439,325 14,992,237 35,491,443 2,056,429 2,868,686	714,2774,683,57116,045,34828,385,5581,409,0103,504,342580,45927,902,953	791,4894,734,04226,040,79025,786,7011,448,3954,311,297515,20518,587,622	$\begin{array}{r} 937,890\\7,866,406\\28,426,161\\28,188,090\\1,584,421\\3,970,954\\1,682,473\\36,162,617\end{array}$	$\begin{array}{r} 855,937\\ 5,647,2277\\ 24,587,946\\ 33,102,311\\ 2,569,479\\ 3,779,380\\ 1,833,750\\ 42,947,383\end{array}$
Total	95,099,427	83,657,518	82,235,631	108,819,912	115,323,463
Per cent of total Fuel Oil Deliveries		22.7	21.1	27.2	27 • 1

(Imperial gallons-Calendar years)

Data for 1932, 1931, and 1930 include amounts for other than industrial heating.

USE IN TRACTORS

The amount of fuel oil or distillate delivered during 1934 for fuelling tractor-engines was 22,305,000 gallons, an increase of 76 per cent over the previous year's gallonage, as shown in Table VII below. This total includes only petroleum oil grading to about 42° A.P.I., and excludes: lubricating oils; engine distillates ranging between 42° and 47° A.P.I., which are classified under Kerosene; and Turner Valley light crudes and natural naphthas.

Deliveries in the Prairie provinces showed a marked increase of $8\frac{1}{3}$ million gallons, or 80 per cent, and accounted for 18,768,000 gallons, or 84 per cent of the 1934 total, as compared with 10,426,000 gallons, or 82.2 per cent in 1933.

Deliveries of tractor fuel ranging between 42° approximately and 47° A.P.I. are shown, by provinces, in Table XIV, and amounted to 8,864,000 gallons in 1934, as against 15,579,000 gallons in 1933, a decrease of about 76 per cent. These data are summarized in the two following tables.

TABLE VII

Deliveries of Fuel Oil for Tractors

Агеа	1934	1933	1932	19 31	1930	
N.B. and P.E.I	Nil	25,932	4,608	24,833	Nil	
Nova Scotia	Nil	228,961	14,503	Nil	Nil	
Quebec	1,358,438	22, 242	31,504	Nil	646,763	
Ontario	2,070,223	1,644,991	3,837,542	276,978	472,867	
Manitoba	3,417,396	2,066,888	641,585	229, 282	32,279	
Saskatchewan	7,192,323	5,485,569	4, 156, 690	946,145	1,894,849	
Alberta	8,158,710	2,873,784	3,752,233	2,116,018	1,050,674	
British Columbia	108,025	322, 575	151,610	Nil	209,135	
Total	22,305,115	12,670,942	12,590,275	3,593,256	4,306,567	
Per cent of total Fuel Oil Deliveries	5.2	3.4	3.2	0.9	1.0	

(Processed oil heavier than 42° A.P.I. only) (Imperial gallons-Calendar years)

TABLE VIII

Tractor Fuel Delivered in the Prairies

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(Processed oil heavier than 47° A.P.I.) (Imperial gallons—Calendar years)

Area	Oils, heavier than 42° A.P.I. (from Table VII)	Oils, between 42° and 47° A.P.I. (from Table XIV)	Total Olls, heavier than 47° A.P.I.
1934			
Manitoba	3,417,396	2,133,278	5,550,674
Saskatchewan	7,192,323	2,760,988	9,953,311
Alberta	8,158,710	3,233,926	11,392,636
Total, Prairies (1)	18,768,429	8,128,192	26,896,621
Total, Canada (2)		8,864,482	31,179,597
Per cent (1) of (2)	84.1	91.7	86 • 3
1933			
Manitoba	2,066,888	1,402,019	3,468,907
Saskatchewan	5,485,569	6,339,377	11,824,946
Alberta	2,873,784	6,997,868	9,871,652
Total, Prairies (1)	10,426,241	14,739,264	25,165,595
Total, Canada (2)	12,670,942	15,578,634	28,249,576
Per cent (1) of (2)	82.2	94.6	89-1

There are no data available which show the amount of gasoline used annually for tractor purposes, though the amounts used for all purposes other than for motoring, are reported in Table XV, third section.

RAILWAYS

The net amount of fuel oil delivered by Canadian oil companies to railways operating lines in Canada, for purposes other than for bunkering, was approximately 51 million gallons. The figures for 1934 and 1933 exclude oil fuel actually consumed by the railways for hotel and station heating, shops' boilers, and other special uses such as weed-burning and dredging, which quantities have been assigned to other categories. The data for these years, therefore, represent fuel oil delivered largely for locomotive and rail motor-car account, whilst those shown for the previous years were not similarly apportioned.

The bulk of railway requirements was obtained from Canadian oil supply depots, less than four million gallons having been moved by the railways directly from United States bases during 1934.

TABLE IX

Deliveries* of Fuel Oil to Railways

(Excludes fuel oil supplied to steamships operated by railways)

(Imperial gallons-Calendar years)

Area	1934†	19 33†	1932	1931	1930
N.B. and P.E.I	1,606,542	1,872,148	252,987	61,891	68,841
Nova Scotia	94,573	91,898	107,611	3,632,361	78,591
Quebec	1,157,892	528,076	3,823,062	1,427,334	3,054,010
Ontario	2,069,239	1,536,686	2,132,088	1,356,775	1,512,867
Manitoba	965,952	663, 621	921,481	1,108,475	1,429,076
Saskatchewan	109,977	127,575	119,403	81,452	111,335
Alberta	7,423,412	7,026,814	8,960,905	6,865,788	11,675,517
British Columbia and Yukon	37, 310, 359	31,642,560	40,674,351	43,211,857	55,797,810
Total	50,737,946	43,489,378	56,991,888	57,745,933	73,728,047
Per cent of Fuel Oil Deliver- ies	11.9	11.8	14.7	14.5	17.5

*Oil deliveries for fuelling vessels—ownership may be vested, or not, in railways—are recorded in Table XI: "Deliveries for Bunkering Purposes".

†Data for 1934 and 1933 are adjusted to exclude gallonage not used for locomotive fuel, such as fuel for hotel heating, shop fuel, etc. Figures for other years not similarly adjusted.

In the previous table, the amounts of fuel oil accepted by railways from Canadian oil companies at delivery points within each of the provinces are recorded. As noted, these data do not include oil delivered directly to vessels for bunkering, such amounts being reported separately by the oil companies, regardless of the ownership of the vessels. Railways operating in Canada reported a total consumption of about 117 million gallons during each of the past two years, an amount equivalent respectively to 28 per cent and 32 per cent of the total fuel oil marketed by Canadian oil companies during 1934 and 1933. Steam and motorships operated by these railways, largely on international and coastal routes, consumed about 66 million gallons in 1934, locomotives about 42, shops' boilers $5\frac{1}{5}$, hotel and station heating about 3, and the remainder for a variety of special uses. Details are summarized below.

TABLE X

Fuel Oil Consumption by Canadian Railways

For heat- ng hotels, cars and stations	As fuel, under shops' boilers	Other miscel- laneous uses	Fuel, for locomo- tives, rail motors and for hostling	For opera- tion of steamships and motor- ships (Bunkering)	Total Fuel Oil	Per cent of total
23,835 928,980 359,387 218,400	$356,017 \\ 506,240 \\ 322,411 \\ 18,270$	175 1,260 1,766 Nil	Nil 6,475 230,201 2,719,752	12, 124, 665 18, 501, 525 548, 068 Nil	12,504,692 19,944,480 1,461,833 2,956,422	10 · 7 17 · 1 1 · 3 2 · 5
1,372,088	4,016,977	759,052	38,859,159	34,750,767	79,758,043	68.4
2,902,690	5,201,645	780,523	41,815,587	65,925,025	116,625,470	
2.5	4.4	0.7	35 · 9	56·5		100.0
$\begin{array}{c} 23,100\\ 622,105\\ 116,285\\ 218,365 \end{array}$	381,892 819,525 427,923 219,000	171,681 152,545 371,951 296,028	$186,614\\247,369\\391,796\\2,491,710$	9,921,978 22,784,125 217,675 Nil	10,685,265 24,625,669 1,525,630 3,225,103	9.1 21.1 1.3 2.8
1,500,060	3,656,759	877,278	37,759,712	32,877,902	76,671,711	65.7
2,479,915	5,505,099	1,869,483	41,077,201	65,801,680	116,733,378	
2.1	4.7	1.6	35.2	56·4		100.0
			•			
32,441 1,067,418 567,632 102,760	356,310 512,365 373,407 394,205	$156,388\\555,450\\545,540\\407,118$	Nil Nil 765,750 4,670,904	9,887,073 27,085,030 Nil Nil	10,432,212 29,220,263 2,252,329 5,574,987	8.3 23.2 1.8 4.4
1,465,787	4,061,090	1,887,116	38,445,218	32,628,108	78,487,319	62.3
3,236,038	5,697,377	3,551,612	43,881,872	69,600,211	125,967,110	
2.6	4.5	2.8	\$4.8	55.3		100.0
	23,835 928,980 359,387 218,400 1,372,088 2,902,690 2.55 23,100 622,105 116,285 218,365 1,500,060 2,479,915 2.1,365 1,500,060 2,479,915 2.1 32,441 1,067,418 567,632 102,760 1,465,787 3,236,038	23,835 356,017 928,980 506,240 359,387 322,411 218,400 18,270 1,372,088 4,016,977 2,902,690 5,201,645 2.5 4.4 23,835 218,000 16,225 219,525 116,225 219,000 1,500,060 3,656,759 2.479,915 5,505,099 2.1 4.7 32,441 356,310 1,007,418 512,365 547,632 373,407 102,760 394,205 1,465,787 4,061,090 3,236,038 5,697,377	ars and stations under shops' boilers miscel- laneous uses 23,835 928,980 5506,240 218,400 356,017 1,260 359,387 222,411 1,766 218,400 175 928,980 506,240 18,270 218,400 18,270 Nil 1,372,088 4,016,977 759,052 2,902,690 5,201,645 780,523 2-5 4.4 0.7 23,100 381,892 116,285 171,681 152,545 116,285 427,923 219,000 371,951 209,028 1,500,060 3,656,759 877,278 2,479,915 5,505,099 1,869,483 555,450 507,632 373,407 394,205 32,441 356,310 512,365 156,388 555,450 102,760 394,205 34,007,418 542,540 545,540 102,760 394,205 3,236,038 5,697,377 3,551,612	by heat- ig hotels, sars and stations As fuel, under shops' boilers Other miscel- laneous uses locomo- tives, rail motors and for hostling 23,835 928,980 356,017 506,240 175 1,260 Nil 230,201 23,835 928,980 356,017 506,240 1,260 6,475 359,387 322,411 1,766 230,201 218,400 18,270 Nil 2,719,752 2,372,088 4,016,977 759,052 38,859,159 2,902,690 5,201,645 780,523 41,815,587 2,5 4.4 0.7 35.9 23,100 381,892 171,681 186,614 622,105 819,525 152,545 247,369 116,285 219,000 296,028 2,491,710 1,500,060 3,656,759 877,278 37,759,712 2,479,915 5,505,099 1,869,483 41,077,201 2.1 4.7 1.6 36.2 32,441 356,310 156,388 Nil 1,007,418 512,365 555,450 Nil	bor heat- ig hotels, sars and stations As fuel, under shops' boilers Other miscel- laneous uses locomo- tives, rail uses tion of stamships and for hosting 23,835 356,017 175 Nil 1,260 12,124,665 928,980 506,240 1,260 6,475 23,835 322,411 1,766 230,201 218,400 18,270 Nil 2,719,752 2,902,690 5,201,645 780,523 41,815,587 2,902,690 5,201,645 780,523 41,815,587 2,902,690 5,201,645 780,523 41,815,587 2,902,690 5,201,645 780,523 41,815,587 2,902,105 819,525 152,645 247,309 218,365 219,000 296,028 2,491,710 1,500,060 3,656,759 877,278 37,759,712 32,877,902 2,479,915 5,505,099 1,869,483 41,077,201 65,801,680 2.1 4.7 1.6 35.2 56.4 3,067,632 373,407 545,540 Nil	or heat- ig hotels, ars and stationsAs fuel, under shops'Other miscel- laneous useslocomo- tives, rail and for hostlingtion of stamships and motors and for hostlingTotal fuel Oil23,835 928,980 559,987 218,400356,017 10,822,411175 1,260 6,475Nil 6,475 230,20112,124,665 18,501,525 18,501,525 18,501,525 18,501,525 18,501,525 18,501,525 18,501,525 18,501,52512,504,692 19,944,480 2,719,75223,805 218,40018,270 18,270Nil 11,766 2,719,75212,124,665 18,501,525 18,501,525 18,501,525 18,501,525 18,501,525 18,501,525 18,6432 2,719,75210,665,422 19,944,480 2,719,75223,100 223,100 224,625 223,100 218,365 218,365 219,000381,892 217,1651 391,796116,625,470 24,625,669 217,67523,100 218,365 219,000381,892 296,028 2,491,710171,681 391,796 391,79619,685,265 217,675 217,67523,100 218,365 219,0003,656,759 296,028377,278 2,491,7109,921,978 391,796 217,67510,685,265 24,625,669 217,675 33,225,1031,500,060 3,656,7593,656,310 373,407 545,540 102,760156,388 365,5450 765,750 765,750 765,750 765,750Nil 9,887,073 27,085,0300 27,085,0300 27,085,0300 <b< td=""></b<>

(Imperial gallons-Calendar years)

BUNKERING

Fuel oil supplied during 1934 for Bunkering from oil-fuelling stations within each of the provinces amounted to about 147 million gallons, or about 35 per cent of the total Canadian deliveries for all purposes. Although this amount of fuel oil was largely consumed outside of Canadian waters in vessels operating on ocean and international passenger and freight routes, Quebec stations, however, supplied 61, British Columbia 52, and those in Nova Scotia 25 million gallons, these three provinces accounting for over 94 per cent of the aggregate.

The data include the gallonage used in oil distributors' tankers, and amounts definitely reported sold by jobbers for bunkering, as well as those specifically used by industrial consumers as boat fuel. Consumption in steam and motor ships of the Canadian railway systems, amounted to 66 million gallons, equivalent to 45 per cent of the bunker total.

The greater portion of the fuel oil delivered by oil companies for bunkering purposes is of a heavy quality, ranging between 11° A.P.I. and 18° A.P.I., or specific gravities of 0.993 and 0.947. Taking 15° A.P.I. (0.996) as an average, the 147 million gallons reported for this use would weigh 710 thousand short tons, and be the equivalent of slightly more than a million tons of coal.

TABLE XI

Fuel Oil Delivered and Used for Bunkering Purposes

Area	1934 1933		1932	1931	1930
<u></u>					
N.B. and P.E.I	2,527,429	1,551,992	1,634,124	5,965,932	9,241,015
Nova Scotia	24,947,514	16,429,504	15,427,378	14,927,159	13,554,834
Quebec	61,331,280	49,827,940	59,597,856	67,304,656	72, 534, 430
Ontario	6,071,590	6,268,713	5,286,172	8,595,199	11,561,353
Manitoba	1,118	Nil	†Nil	Nil	Nil
Saskatchewan	Nil	Nil	Nil	Nil	Nil
Alta. and N.W.T	97,163	Nil	Nil	Nil	Nil
British Columbia	52,018,392	54, 934, 398	78,085,566	59,211,371	50,201,665
Total	146,994,486	129,012,547	160,031,096	156,004,317	157,093,297
Per cent of total Fuel Oil Deliverics	3 4·6	35.0	41.1	8 9 · 1	<i>36•9</i>

(Imperial gallons-Calendar years)

†Delivered for consumption in Ontario.

RAIL AND WATER TRANSPORTATIONS

Fuel oil for the above transportation needs amounted to 198 million gallons in 1934, or $46 \cdot 5$ per cent of the total deliveries for all purposes. This was an increase of 25 million, or over 14 per cent of the 1933 gallonage. Of the total, British Columbia contributed 45 per cent, Quebec about 32 per cent, and Nova Scotia about 13 per cent. Details are shown in the following table.

TABLE XII

Fuel Oil Delivered for Rail and Water Transportations

Агеа	1934	1933	1932	1931	1930
N.B. and P.E.I	4,133,971	3,424,140	1,887,111	6,027,823	9,309,856
Nova Scotia	25,042,087	16,521,402	15,534,989	18,559,520	13,633,425
Quebec	62,489,172	50,356,016	63,420,918	68,731,990	75,588,440
Ontario	8,140,829	7,805,399	7,418,260	9,951,974	13,074,220
Manitoba	967,070	663,621	921,481	1,108,475	1,429,076
Saskatchewan	109,977	127,575	119,403	81,452	111,335
Alberta and N.W.T	7,520,575	7,026,814	8,960,905	6,865,788	11,675,517
British Columbia and Yukon	89, 328, 751	86,576,958	118, 759, 917	102, 423, 228	105, 999, 475
Total (1)	197,732,432	172,501,925	217,022,984	213,750,250	230,821,344
Total detiveries, all pur- poses (2)	424,880,646	368,627,143	389,406,448	399, 413, 674	424,826,940
Per cent (1) of (2)	46.5	46.8	55.8	53.6	54•4

(Tables IX and XI combined—Imperial gallons—Calendar years)

Data for 1930, 1931, and 1932 include amounts for domestic and industrial heating reported by Railways; amounts for these categories are excluded from the 1933 and 1934 figures.

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 all amounts of distillate oil within these limits, as determined from replies received.

Deliveries during 1934 and previous years are shown in Table XIII, and in amount, were less than one-eleventh of the volume of fuel oil, or but one-twenty-fifth of the aggregate of all petroleum fuels. In other words, of every 100 gallons of fuel oil, kerosene, and gasoline delivered during 1934 and 1933, there were but 4 of kerosene as compared with 42 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; a compounding ingredient; but a major field of usage and consumption is as tractor fuel in power-farming.

Yearly returns submitted by individual distributors disclose gradual displacements of distillate and kerosene, observable particularly in Quebec and in the Prairies. The change from kerosene to distillate 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 the cheaper oil distillate as against refined kerosene, the common fuel of the older models.

In the Prairies, on the other hand, owing to consumer's choice between kerosene and distillate for tractor fuel, and his purchasing power, the volume of kerosene delivered is being generally maintained, whereas amounts of other lighter distillates have been decreasing during the past few years. During 1934, however, oils of the kerosene range, delivered for tractors, showed a drop of $6\frac{3}{4}$ million gallons, while oils of the fuel oil range delivered for tractors increased about $9\frac{3}{4}$ million gallons.

The distillate marketed in eastern Canada is rarely lighter than 0.8180 or 42° Baumé A.P.I., whether used for heating or in tractors. 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 also suitably used. 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 combined deliveries of kerosene and gasoline in the Prairies amounted to 126 million gallons in 1934, 118 in 1933, 126 in 1932, and 151 in 1931. Of these, kerosene contributed respectively 16, 21, 26, and 28 million gallons.

Deliveries of kerosene in 1934 for all-purpose uses in Canada were $36 \cdot 2$ million gallons, a drop of $5\frac{1}{2}$ million from 1933. About 24 million, or $66 \cdot 0$ per cent, was estimated as used for domestic heating, cooking,

and lighting purposes, $8\frac{4}{5}$ million gallons or $24 \cdot 5$ per cent for tractor fuel, and the remainder, $3\frac{2}{5}$ million gallons or $9 \cdot 5$ per cent, for other general uses. Details by provinces and by uses are shown in the two tables following.

TABLE XIII

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 (importa- tions)	Total kerosene delivered	Respective percentages of total		Inventory December 31		
				%	%	%		
1934								
N.B. and P.E.I Nova Scotia Quebea. Ontario. Manitoba. Saskatohewan. Alberta. British Columbia	$\begin{array}{c} 2,241,234\\ 2,170,990\\ 4,351,223\\ 7,724,829\\ 4,302,126\\ 5,622,625\\ 5,645,919\\ 1,153,254 \end{array}$	93,751 30,149 188,148 1,118,944 157,563 60,063 396,148 419,417	$\begin{array}{c} 2,334,985\\ 2,201,139\\ 5,039,371\\ 8,843,773\\ 4,459,689\\ 5,682,688\\ 6,042,067\\ 1,572,671\end{array}$	6.2 6.0 13.4 21.4 11.9 15.5 15.6 3.2	$\begin{array}{c} 0.8 \\ 0.1 \\ 0.5 \\ 3.1 \\ 0.4 \\ 0.2 \\ 1.1 \\ 1.1 \end{array}$	$\begin{array}{c} 6.5\\ 6.1\\ 13.9\\ 24.5\\ 12.3\\ 15.7\\ 16.7\\ 4.3\end{array}$	$\begin{array}{c} 923,000\\ 1,130,183\\ 3,405,513\\ 9,191,884\\ 650,551\\ 2,695,596\\ 2,362,127\\ 712,233\end{array}$	
Total, 1934	33,712,200	2,464,183	36,176,383	93.2 6.8 109.0		21,080,087		
1933								
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia.	$\begin{array}{c} 1,874,658\\ 1,547,780\\ 5,300,011\\ 9,751,373\\ 4,055,699\\ 8,442,633\\ 8,602,477\\ 1,133,924 \end{array}$	46, 987 7, 440 176, 369 486, 536 24, 866 Nil Nil 298, 155	$1,921,645 \\1,555,220 \\5,476,380 \\10,237,009 \\4,080,565 \\8,442,633 \\8,602,477 \\1,432,079 \\$	$\begin{array}{c} 4.5\\ 3.7\\ 12.7\\ 23.4\\ 9.7\\ 20.2\\ 20.2\\ 20.6\\ 2.7\end{array}$	0.1 0.4 1.1 0.1 Nil 0.8	4.6 3.7 13.1 24.5 9.8 20.2 20.6 3.5	$\begin{array}{r} 804,000\\ 1,316,692\\ 4,375,354\\ 8,164,861\\ 1,060,897\\ 2,257,371\\ 842,940\\ 952,108\end{array}$	
Total, 1933	40,708,555	1,040,353	41,748,908	97.5	2.5	100.0	19,774,223	
1932							1	
N.B. and P.E.I. Nova Scotia. Quebec. Ontario. Manitoba. Saskatohewan. Alberta. British Columbia.	$ \begin{array}{c} 1,695,750\\ 5,313,471\\ 7,124,812\\ 5,682,700\\ 12,808,088\\ 6,923,065 \end{array} $	41, 135 6, 848 178, 695 1, 123, 256 37, 759 Nil 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 2.5 0.1 Nil 0.1 0.9	$\begin{array}{r} 4.6\\ 3.8\\ 12.3\\ 18.5\\ 12.8\\ 28.7\\ 15.6\\ 3.7\end{array}$	$\begin{array}{r} 639,374\\ 1,419,917\\ 2,843,605\\ 5,423,038\\ 1,977,425\\ 1,524,654\\ 877,190\\ 1,079,976\end{array}$	
Total, 1932	42,801,072	1,807,143	44,608,215	95.9	4.1	100.0	15,785,179	
'Total, 1931	48,225,962	3,489,415	51,715,377	93.3	6.7	100.0		
Total, 1930	40,907,003	4,463,225	45,370,228					

TABLE XIV

Kerosene Deliveries: Specific Uses, by Provinces

(All oils ranging approximately between 42° and 47° A.P.I.)
(Imperial gallons-Calendar years)

nventory ecember 31
923,000
1, 130, 183
3, 405, 513
9,191,884
650,551
2, 695, 59 6
2,362,127
712,233
1,080,087
804,00 0
1,316, 6 92
4,375,354
8,164,861
1,060,897
• • · · ·
2,257,371
2,257,371
2, 257, 371 842, 940
2

†Not separately reported. ‡With tractor fuel. *Revised. ††Coal oil and long-time burning oil used principally for signals, lanterns, lamps, and other small lighting; the amounts shown are included in first column.

TABLE XV

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° A.P.I.)

Area	T	Thousands of Imperial gallons —Calendar years								••	Percen sale	tages o es, Can	f total ada	
	†1934	1933	1932	1931	1930	1934	1933	1932	1931	1930				
		To	tal Sold	for ALL	Purpose	s								
N.B. and P.E.I Nova Scotia Maritimes	16,280 20,003 <i>36,283</i>	15,093 18,635 <i>38,728</i>	16,365 19,021 <i>35,386</i>			3.8	3 • 1 3 • 8 <i>6 • 9</i>	3·3 3·8 7·1	3·4 3·8 7·2	3.3 3.3 <i>6.6</i>				
Quebec Ontario	93,512 252,976	87,077 228,416	$91,128\\233,945$	$97,609 \\ 250,416$			18·0 47·2	$18 \cdot 2 \\ 46 \cdot 7$	$17.5 \\ 45.0$	$15 \cdot 2 \\ 41 \cdot 8$				
Manitoba Saskatchewan Alberta Prairies	27,694 36,785 45,194 <i>109,673</i>	24,896 31,837 40,324 97,057	26,185 33,636 41,300 <i>101,121</i>	30, 308 49, 450 43, 478 <i>123, 236</i>	76,630	6.9 8.4	5.0 6.6 8.3 <i>19.9</i>	5.2 6.7 8.2 20.1	5.4 8.9 7.8 22.1	6·2 13·2 8·9 28·3				
British Columbia	42,338	38,689	39,458	45,369	47,183	7.9	8∙0	7.9	8.2	8.1				
Canada	534,782	484,967	501,038	556,869	582,339	100.0	100.0	100.0	100.0	100.0				
I	Portions &	Sold for	MOTOR	ING Pu	rposes (l	oy diffe	erence)							
N.B. and P.E.I Nova Scotia Maritimes	13,943 19,397 <i>38,340</i>	13,164 17,970 <i>81,184</i>	18,445	18,177	17,498	3.6			3 • 1 3 • 3 <i>6</i> • 4	3.1 3.0 6.1				
Quebec Ontario	88,224 239,500	80,511 214,397	84,652 217,593	91,817 226,192			$16.6 \\ 44.3$		$16.5 \\ 40.6$	$14.3 \\ 37.6$				
Manitoba Saskatchewan Alberta Prairies	25,999 27,016 32,525 <i>85,540</i>	21,825 19,241 27,278 68,344	21,998 30,220	26,479	31,248	5.0 6.1		4·3 4·4 6·0 14·7	4.0 4.8 4.4 13.2	4·2 5·4 6·3 <i>15·9</i>				

Portions Sold for ALL OTHER Purposes

36,052

6.1

87.4

6.3

88.0

6.5

83.2

5.3

79.2

6.1

89.6

30,773

461,038

(Amounts upon which Tax or part of the Tax was Refunded)

For tractors, stationary engines for light or power, rail motor cars,

air and water-craft, industrial uses, etc.

31,285

423,849 440,835 463,298

29,463

32,529

479,133

British Columbia...

Canada.....

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N.B. and P.E.I	2,337	1,929	1,240	1,357	1,266	0.4	0.4	0.3	0.3	0.2
Nova Scotia Maritimes	606	665	576	3,013	1,869	$0.2 \\ 0.6$	$0.1 \\ 0.5$	0.1	0.5	0.3
Maritimes	2,943	2,594	1,816	4,370	3,135	0.0	0.0	0.4	0.8	0.5
Quebec	5,288	6,566	6,476	5,792	5,382	1.0	$1 \cdot 4$	$1 \cdot 3$	1.0	0.9
Ontario	13,476	14,019	16,352	24,224	24,197	$2 \cdot 5$	2.9	3.3	4.4	4.2
Manitoba	1,695	3,071	4,668	8,165	11,841	0.3	0.6	0.9	1.4	2.0
Saskatchewan [‡]	9,769	12,596	11,638	22,971	45,382	1.9	$2 \cdot 6$	$2 \cdot 3$	4.1	7.8
Alberta	12,669	13,046	11,080	18,732	14,954	2.3	2.7	$2 \cdot 2$	3.4	2.6
Prairies	24,133	28,713	27,386	49,868	72, 177	4.5	$5 \cdot 9$	5.4	8.9	12.4
British Columbia	9,809	9, 226	8,173	9,317	16,410	1.8	1.9	$1 \cdot 6$	1.7	2.8
Canada	55,649	61,118	60,203	93,571	121,301	10.4	12.6	12.0	15.8	20.8

*These data are quoted from the Dominion Bureau of Statistics' annual reports on *The Highway and the Motor Vehicle in Canada*. The amounts recorded for each province were reported directly by the several provincial Tax departments to the Bureau, and are to be interpreted subject to the provisions effective each year in each province, particularly as to amounts sold, but subject to reiund. For this reason the yearly gallonages under each purpose-use are not comparable, and are more or less estimates. Moreover, they do not include motor fuel evading the Tax levy. TProvisional.

PETROLEUM COKE

This hard, dull residue of petroleum 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 in Canadian plants for this last purpose, and reported as 25,046 tons in 1934, has been omitted from the tonnages shown in the following table, which records only the amounts sold or used for fuel purposes. A considerable tonnage is also exported annually for use as a raw material.

The tonnage sold and used in Canada for fuel amounted to about 57,000 short tons during 1934, of which over 39,000 were sold for domestic heating, and about 18,000 for industrial heating largely as fuel in producers' refineries.

The Ontario total shown under DOMESTIC HEATING includes an important amount of a patent fuel manufactured at Toronto, and marketed as "*Petro-Blox*". These are dry, machine-pressed 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, and are usually sold in packages of six or eight blocks.

Coke reported under INDUSTRIAL HEATING was largely consumed as fuel in refineries.

Area	Fuel for Domestic heating†	Fuel for Industrial heating‡	Total short tons	Inventory Dec. 31†
1934 Maritimes Quebec. Ontario. Western provinces	302 711 32,936 5,251	Nil 907 3, 2 95 13,353	302 1,618 36,231 18,604	Nil 12,540 32,450 2,142
Canadian Imported	32,242 6,958	17,555 Nil	49,797 6,958	
Total, 1934	39,200	17,555	56,755	47,132
1933 Maritimes Quebec Ontario. Western provinces.	759 48,286 5,402	Nil 1,456 13,170 12,945	383 2,215 61,456 18,149	Nil 9,589 13,629 10,658
Canadian Imported	44,798 9,834	27,571 Nil	72,369 9,834	16,270 17,606
Total, 1933	54,632	27,571	82,203	*33,876
Total, 1932	57,634	36,189	93,823	42,023
Total, 1931	32,439	47,757	80,196	53,160

TABLE XVI Petroleum Coke, Calendar Years, Short Tons

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

622(21(06) 772, c.4 C212 Canada, mines branch reports. 772, petroleum fuels, 1934, c. 4. LOWE-MARTIN CO.-67-4026

