

1931.

NEW ZEALAND.

DEPARTMENT OF INDUSTRIES AND COMMERCE.

MOTOR-SPIRIT

(REPORT ON INVESTIGATION REGARDING DISTRIBUTION AND PRICES OF).

Presented to both Houses of the General Assembly by Leave.

REPORT.

The Hon. the Minister of Industries and Commerce.

6th October, 1931.

IN accordance with instructions received from the Right Hon. the Prime Minister, the Department has made investigation into the purchase price overseas of motor-spirit, and expenses incurred in importing and distributing through marketing channels in New Zealand.

The undermentioned companies import the greatest proportion of motor-spirit used in New Zealand: The Shell Co. of New Zealand, Ltd.; Vacuum Oil Co. Proprietary, Ltd.; Atlantic Union Oil Co., Ltd.; the Texas Co. (Australasia), Ltd.

The imports of these companies are confined almost exclusively to bulk shipments by tanker ships.

In addition to the above companies, there are approximately forty other importers of motor-spirit, who import in drums of 40 to 44 gallons and cases containing 8 gallons.

The major oil companies are all foreign corporations, not registered in New Zealand, and are associated with corporations having world-wide ramifications. The Shell Co. is a branch of the Royal Dutch Shell group, and the Vacuum Oil Co. is allied to the Standard Oil Corporation of the United States of America. Three of these companies operating in New Zealand are essentially controlled from Australian offices.

All the companies approached readily supplied the information that was requested and generally facilitated the work of the inquiry. The original invoices and other shipping documents were requested and made available for the inspection of an officer of the Department, together with statistical and other returns provided for the companies' head offices.

In the case of the Vacuum Oil Co. the general manager for New Zealand stated that no accounts are kept at the New Zealand head office. All returns are forwarded to the head office in Australia and are made up on a basis which covers the two countries jointly, and no separate working accounts are, it is stated, kept for New Zealand. Information has been obtained from the Commonwealth head office but the particulars are inadequate for the Department to arrive at any satisfactory conclusion regarding the accuracy of the various figures as a true indication of the costs incurred in the importation and distribution of motor-spirit by the New Zealand branch of the company.

The Shell Co. of New Zealand, Ltd., is registered in England with a capital of £1,000,000. The assets of the company, however, total over £2,000,000, and it is reasonable to assume that the very large sum shown under the item "Sundry trade creditors and loans" in the 1929 balance-sheet includes a substantial amount in the nature of semipermanent advances from an associated company. This company keeps in New Zealand only branch records, and statements to their head office in London comprise accounts current and statistical returns. The financial accounts of the New Zealand branch are compiled by the London head office, and as a consequence considerable delay ensues in obtaining the annual figures for the New Zealand branch. The latest annual figures available to the Department are those for the year ended 31st December, 1929. It is quite impossible from an examination of the annual accounts which have been investigated by the Department to obtain the necessary information in order to determine and verify the various costs of importation and the items of expenditure which are associated with the distribution of motor-spirit. To illustrate the difficulty experienced, the purchases of motor-spirit are recorded in quantity only in the New Zealand books, and for stocktaking purposes quantities only of oil and other products are shown; the importing expenses, such as duty and other landing charges, storage costs, &c., are, however, shown in returns of stock forwarded to the London head office. It follows, therefore, that the London head office fixes the cost of motor-spirit into the New Zealand harbour for stock-valuation purposes. As the value of stock at the beginning and ending of the period materially affects the trading results, it is obvious that correct information on this point is essential before offering criticism, which can be of any value, of items appearing in the trading and profit and loss accounts.

The original invoices and statements of distribution expenses were available, and these were useful for the purpose of the investigation. The statements in the report relating to this company are, in a large measure, based on the above information.

The head offices in New Zealand of the Atlantic Union Oil Co. and the Texas Co. (Australasia), Ltd., keep complete records which were suitable for the Department's purposes. These companies, however, do not compile their trading accounts in the form generally adopted by other commercial interests. While the information available no doubt adequately fills the requirements of these companies, the records in some respects did not disclose the information particularly desired by the Department. The costs incurred in purchase and importation of motor-spirit were clearly disclosed. Some items, however, in the cost of distribution within the Dominion were not readily ascertainable, particularly by reason of the absence of separate accounts for various expenses.

IMPORTS OF MOTOR-SPIRIT.

The imports of motor-spirit for the past four years were as under:—

Year ending 31st December,				Total Imperial Gallons imported.	Total Value.
					£
1927	..	..	..	48,042,640	2,005,983
1928	..	..	..	54,540,416	1,655,451
1929	..	..	..	62,448,092	2,130,835
1930	..	..	..	68,309,672	2,090,542

Statement A attached to this report shows the importation of motor-spirit for the past sixteen years. It will be noted that imports have increased in quantity from 7,125,493 gallons in 1915 to 68,309,672 gallons in 1930, the corresponding value being £395,848 in 1915 and £2,090,542 in 1930. The import value is based on the invoiced f.o.b. price plus 10 per cent. The greatest proportion of imports is from the United States of America, followed by the Dutch East Indies as the second-largest supplier. In this connection it is noted that the imports from the East are increasing in proportion to total imports. In 1916 the imports from this source totalled 1,448,314 gallons, of a value of £106,209, which increased in 1930 to 19,674,621 gallons and £523,525. In 1916 the percentage of total gallons was 15.9; in 1930 the percentage had increased to 28.8.

While the greater proportion of spirit used in the Dominion is imported by the major oil companies, the aggregate importations of sundry importers previously referred to is not a negligible proportion of the total importations. This is set out in the following table showing the total importations of the major oil companies and the importations of all other importers, together with percentage of total quantity imported:—

Year ending 31st December,			Total Imports.	Imports by Major Oil Companies.	Percentage of Total Imports.	Imports by all other Importers.	Percentage of Total Imports.
			Imp. gal.	Imp. gal.		Imp. gal.	
1928	..	..	54,540,416	46,687,928	85.61	7,852,488	14.39
1929	..	..	62,448,092	52,673,900	84.34	9,774,192	15.66
1930	..	..	68,309,672	58,971,488	86.33	9,338,184	13.67

The above table shows that approximately 14 per cent. of total importations of motor-spirit are brought into the Dominion and sold by commercial interests other than the four main oil companies. These independent importers drew supplies from the United States, where under the present circumstances there is extreme pressure to sell and where motor-spirit may be bought at prices which have been affected by over-production. Supplies may be secured from independent refiners, and advantage taken of fluctuating market conditions based upon the sale of quantities in excess of domestic and ascertained export requirements of the major oil interests. In consequence, it is evident that the four main companies in New Zealand are not without competition from traders who apparently draw supplies from independent operators overseas.

Prior to 1927 shipments of motor-spirit to New Zealand were, in the main, contained in cases of two 4-gallon tins. The first shipment in bulk arrived in New Zealand in 1927. As the importation of motor-spirit in bulk has distinct costing advantages over shipments obtained in drums and cases, it follows that the importations are being increasingly confined to bulk shipments. This is shown by the following table setting out the imports for 1929 and 1930 in bulk, cases, and drums:—

				1929.		1930.	
				Imperial Gallons.	Percentage of Total.	Imperial Gallons.	Percentage of Total.
Bulk	..	..	..	49,289,472	78.92	56,151,021	82.20
Cases	..	..	..	10,289,781	16.48	8,308,353	12.16
Drums	..	..	..	2,868,839	4.60	3,850,298	5.64
				62,448,092	100.00	68,309,672	100.00

The latest import figures available are for the eight months ended 31st August, 1931, and the following table is submitted showing a comparison with the same period of 1930 :—

	Bulk.		Cases.		Drums.	
	Imperial Gallons.	Percentage of Total.	Imperial Gallons.	Percentage of Total.	Imperial Gallons.	Percentage of Total.
Eight months ended 31st August, 1930	35,953,878	80·31	6,063,215	13·54	2,754,141	6·15
Eight months ended 31st August, 1931	35,689,891	85·32	3,136,403	7·5	3,004,007	7·18
Increase .. .. .	..	..	..	..	249,866	..
Decrease	263,987	..	2,926,812	..	..	..
Total imports, eight months ending—				Imperial Gallons.		
31st August, 1930 .. .. .	..	..	..	..	44,771,234	
31st August, 1931 .. .. .	..	..	..	..	41,830,301	
Decrease .. .. .	..	..	..	..	2,940,933	

F.O.B. PURCHASE PRICE.

As the original invoices of three of the major companies were available in the New Zealand head offices, these were produced for the inspection of the Department. In each case supplies were obtained from an associated company in the country of production. Comparisons have been made between published prices which appear in the *National Petroleum News*, issued at Cleveland, Ohio, U.S.A., and the prices invoiced to the New Zealand companies by the allied selling organizations overseas for bulk shipments during the past two years. The invoice-prices to the New Zealand companies are in excess of those appearing in the publication as the market prices at the dates of invoices.

The prices at which the supplies to one company are invoiced are fixed at the beginning of each quarter by the associated supplying company overseas.

In making these comparisons the Department has selected the Gulf Coast bulk market prices as a basis, and quotes as an authority for selecting this export market the statement made by the Anglo-American, Anglo-Persian, and Shell Mex Oil Companies in their statement on oil-prices submitted to the House of Commons in March, 1929. This report (on page 4) states,—

“The Gulf of Mexico may therefore be said to constitute the ‘centre of gravity’ of the world’s petroleum trade, and in consequence the prices ruling there represent the basis of world values for petroleum products.”

Quoting from an independent source of information, it is stated,—

“The published Gulf export prices are generally accepted as a reliable indication of the market value of bulk gasoline in cargo lots for both export and domestic consumption. Bulk prices quoted on the Pacific Coast are said to be based upon Gulf export prices; if for export, the Coast’s geographical position may allow a slight margin over Gulf prices for shipments to the Orient, but this may be offset by the position and ownership of tankers; if for the eastern States of U.S.A., the Coast’s prices must compete with those of the Gulf.”

The *National Petroleum News* makes the following reference to “Pacific Coast export market” prices :—

“Pacific export market prices for gasoline and kerosene in cargo lots apply only on goods for coastwise shipment. Gasoline and kerosene prices for shipment to foreign ports are determined as follows: Difference in freight between U.S. Gulf to European Continent and California to European Continent—this difference plus 0·125c. for handling, deducted from prices posted at U.S. Gulf by the Export Petroleum Association, Incorporated, will determine prices seaboard Los Angeles.”

In regard to the reliability of prices appearing in the *National Petroleum News*, the Department is informed that these quotations are obtained from Platts Oilgram, which is considered the recognized authority for petroleum product prices. The Petroleum Section of the Minerals Division of the United States Department of Commerce in Washington has expressed the opinion that “the *National Petroleum News* is one of the most outstanding and reliable trade journals,” and that “the gasoline and kerosene prices which it publishes are as reasonably accurate as may be obtained.”

QUALITY OF MOTOR-SPIRIT SHIPPED TO NEW ZEALAND.

It has been stated that the quality of the motor-spirit used in New Zealand is of a grade higher than that generally used in the United States of America. There appears to be considerable difference of opinion as to the extent to which this statement is correct. Some importers contend that motor-spirit exported to New Zealand is a more refined (and consequently a more expensive) product than

other brands of similar specification. It has been stated on reliable authority that at one period a certain brand exported to New Zealand cost less and was sold at a lower price than the United States motor grade. The various grades of gasoline appear to be determined principally by their end or final boiling-point, and it seems to be the general opinion that the published Gulf export quotations fairly represent the difference in values of the various grades.

Certificates of laboratory analysis of several companies were inspected, and showed some variation in the quality usually sold as first-grade spirit in New Zealand, while the analysis in some cases showed a higher grade than 375 end point (the highest grade published in the *National Petroleum News*). Other analysis showed an end point of 375 and lower.

What is known on the New Zealand market as second-grade spirit (with an end boiling-point of between 392 and 400 degrees) actually constitutes the major portion of the Dominion's imports from the United States of America.

FREIGHT RATES, BULK SHIPMENTS.

All the major oil companies' overseas organizations possess or are associated with subsidiary companies operating oil-carrying tankers, and the majority of shipments to the Dominion have been carried by tankers owned in the above manner. Other shipments have arrived in tankers chartered by the overseas exporting interests, who have added freight charges to the invoices for motor-spirit shipped to the New Zealand company. These freight charges do not necessarily represent the rate paid by the exporting corporation. Freight rates under usual trading-conditions fluctuate with the demand for tankers by oil-exporting interests. Freight rates for the period November, 1929, to 31st July, 1931, charged to the New Zealand branch by the associated exporting company have been consistently higher than market quotations for shipments of approximately the same distance as California to New Zealand.

The following table is submitted showing freight rates charged to the New Zealand company, and freight rates quoted on similar dates during the period under review:—

Gulf to Continental Port (<i>National Petroleum News</i>).		Charged to New Zealand Company.	
Date quoted.	Per Ton.	Invoice Date.	Per Ton.
1929.		1929.	
November 25th	30s.	November 27th	38s. 9d.
1930.		1930.	
January 20th	30s. to 32s.	January 16th	38s. 9d.
February 24th	50s.	February 26th	40s. 9d.
March 3rd	42s. 6d.	March 15th	52s.
April 14th	30s. to 32s. 6d.	April 9th	30s. 6d.
June 9th	25s.	June 13th	62s. 6d.
„ 9th	25s.	„ 18th	51s. 6d.
August 25th	13s.	August 31st	30s. 6d.
September 2nd	12s. to 13s.	September 5th	48s. 6d.
„ 8th	12s. to 13s.	„ 17th	39s.
„ 15th	12s. to 13s.	„ 28th	26s.
November 3rd	11s.	November 3rd	41s. 6d.
December 22nd	10s.	December 25th	41s. 6d.
„ 29th	10s.	„ 31st	20s. 6d.
1931.		1931.	
February 23rd	10s.	March 4th	28s. 4d.
March 2nd	10s.	„ 9th	39s.
April 13th	10s.	April 14th	30s. 6d.
June 29th	9s.	June 30th	35s. 6d.
July 6th	9s.	July 1st	30s. 6d.
		„ 31st	33s. 6d.

The Department has been advised that contracts for chartering are made some months in advance of loading date at terminal depot. As a consequence, it is not improbable that the rate of freight contracted for will be at variance with market quotations at time of shipment. The Department has inspected freight-charters agreements between New Zealand companies and the brokers acting on behalf of owners of tankers. One such contract, dated the 1st October, 1930, quoted a freight rate of 18s. 6d. per ton for one-port delivery and 1s. per ton for each additional port of discharge.

The Department was advised by cable on the 25th July, 1931, by the New Zealand Trade Commissioner at Toronto that tanker rates for shipment of motor-spirit from Pacific Coast to New Zealand were quoted at 18s. to 20s. per ton for one port of call and 1s. per ton for each additional port.

The *Petroleum Times* of April, 1930, quoted tanker rates, California to New Zealand, at 31s. per ton. In the October, 1930, issue of the same journal rates had fallen to 18s. 6d. per ton.

Under the heading "Depression in Oil-tanker Freights," the same journal (June issue, 1931) makes the following comments:—

"Business from the Gulf of Mexico has been very restricted, and owners have been forced to concede ridiculously low terms down to 9s. to the United Kingdom-Continent, comparing with 10s. 3d. ruling at the beginning of the year and 30s. 9d. in May, 1930, when the market even then was rapidly declining and rates were below the normal. Current terms to the French Atlantic, from the Gulf, are no better than 9s., which compares with 20s. 6d. in June last, whilst chartering in case oil has been at a standstill for a long while past.

"The outlook in this section of the chartering markets is very dubious and it will be a long time before any sustained improvement can be looked for either in freight rates or in the volume of business effected."

NOTE.—The freight per gallon varies according to the weight per gallon under the varying specific gravities of each grade and each shipment, but for general comparison the freight rate per gallon is based on 307 gallons to the ton for first-grade and 302 gallons for second-grade.

MARINE INSURANCE.

The usual underwriting rate on motor-spirit shipped in tankers from California to New Zealand is $\frac{1}{4}$ per cent. This rate is charged to three of the major oil companies by the exporting supply company. In the case of the other company a rate of over $\frac{1}{2}$ per cent. is debited to the New Zealand company, and it is suggested that this rate is fixed to return a definite underwriting profit to the export organization.

LANDING CHARGES.

Harbour Board rates on bulk shipments in the four main centres are as follows:—

	Per Ton of 250 Gallons.		Per Imperial Gallon.
	s.	d.	d.
Auckland	3	6	0.168
Wellington	3	6	0.168
	Per Ton of 300 Gallons.		
Lyttelton	1	6	0.06
Dunedin	5	0	0.2

Wharfage and other landing charges account for 0.138d. to 0.1849d. per Imperial gallon, an average cost of 0.1602d. for the four companies.

BANK EXCHANGE RATES.

London bank buying rates, sight drafts on New Zealand, have been quoted as follows, the dates indicating when alteration in rate occurred:—

	s.	d.	
1929—21st December	60	0	per cent.
1930—31st January	70	0	per cent.
18th February	80	0	per cent.
19th March	90	0	per cent.
3rd April	122	6	per cent.
1931—14th January	£108	12s. 6d.	for £100 in London.
29th January	£111	2s. 6d.	for £100 in London.

(This latter rate had not altered at the 16th September, 1931.)

Drafts negotiated New York on New Zealand, during the above period have been quoted $\frac{1}{4}$ per cent. less than London on New Zealand.

On the basis of £111 2s. 6d. the present exchange rates for sight drafts London on New Zealand would cost, per imperial gallon, c.i.f., as indicated below:—

C.i.f. Price.	Exchange: Cost per Gallon.
d.	d.
6.5	0.723
7.0	0.778
7.5	0.834
8.0	0.890

CUSTOMS DUTY.

Customs duty has been levied and collected on motor-spirit at the following rates. The dates referred to indicate when alterations in rates became effective.

1927—8th November	4d. per imperial gallon and 1 per cent. primage.
1929—2nd August	4d. per imperial gallon and 2 per cent. primage.
1930—23rd July	6d. per imperial gallon and one-twentieth of duty payable (=6.3d.).

The duty shown on the statement below is the average duty paid over the period reviewed.

DUTY-PAID COST INTO TERMINAL STORAGE-TANK.

The table below includes the various costs involved in the importation and delivery to main seaboard terminals of first- and second-grade spirit of each of the four main companies. The figures of three companies are based on an average over the twelve months ending 31st December, 1930. The other company's figures are for twelve months ending 30th November, 1930.

	Company A.		Company B.		Company C.		Company D.	
	First Grade.	Second Grade.	First Grade.	Second Grade.	First Grade.	Second Grade.	First Grade.	Second Grade.
	d.	d.	d.	d.	d.	d.	d.	d.
Average f.o.b.	5-8567	5-146	5-365	4-874	5-4570	4-129	6-6170	6-3010
Inspection charge .. .. .	..	..	0-002	0-002	..	..	..	..
Tanker freight to New Zealand ..	1-6750	1-675	1-592	1-615	1-7940	1-815	1-4537	1-5010
Marine insurance	0-0390	0-039	0-017	0-016	0-0140	0-012	0-0176	0-0167
Evaporation and leakage	0-0750	0-068	0-035	0-033	0-3570	0-290	0-0824	0-0797
Exchange	0-4320	0-424	0-296	0-277	*	*	0-3165	0-3059
C.i.f. & e.	8-0777	7-352	7-307	6-817	7-6220	6-246	8-4872	8-2043
Duty (average twelve months) ..	5-0400	5-040	4-935	4-968	4-7040	4-704	4-66674	4-84675
Landing charges	0-1490	0-149	0-138	0-138	0-1849	0-1849	0-1689	0-1689
Duty paid at terminal	13-2667	12-541	12-380	11-923	12-5109	11-1349	13-32284	13-21995

* Funds not remitted being mainly invested in the Dominion in plant and equipment.

The figures in the above table, which have been obtained from records kept in the New Zealand offices of the major oil companies, are subject to the qualifications referred to elsewhere in this report, particularly in regard to such matters as the f.o.b. value of motor-spirit, freight rates, &c.

All the information in these tables, with the exception of that supplied by one company, has been verified by reference to original invoices and other documents submitted at the request of the Department.

DISTRIBUTION EXPENSES.

The accountancy methods employed by oil companies in New Zealand do not lend themselves to the extraction of annual totals of expense accounts as usually kept by commercial trading companies. The allocation of overhead expenses to any particular product is, of course, difficult, and the results obtained are necessarily arbitrary. The information obtained has been supplied at the request of the Department, and has involved considerable amount of work on the part of the oil companies, due to the fact that the details required had to be extracted from accounts kept on systems which do not readily disclose the particulars required.

One company has allocated overhead expenses on an estimated expenditure based on the experience of previous years, but no means of checking the accuracy of the method adopted are available to the New Zealand branch of the company.

In another case the marketing-expenses are those submitted in statements from the head office of the company overseas, and is based on a gallonage basis of all products. In support of this principle the management states: "It is impossible to say with any degree of accuracy how much of salaries, rents, rates, and other overhead expenses is applicable to any particular branch of our trading, and for this reason the only method which can be adopted, and which is adopted by this company, is to distribute our expenses over the various products on a sales gallonage basis, for the reason that, as a general rule, the marketing-expenses are governed by the volume of sales. The method of this company is to apportion our expenses on a gallonage basis. If it were possible to earmark the expenses of petrol as against any other product, they would tend to increase by reason of the fact that we have so much equipment, such as rail tank cars, tank wagons, filling-apparatus, the expenses of which are being averaged over the other products marketed by us which, strictly speaking, do not share in this particular class of expenditure."

The figures of one company are on an Australian and New Zealand average, and therefore cannot be accepted as truly representative of New Zealand business only. A great amount of intensive investigation would be necessary to reconstruct figures for the New Zealand section of the business.

In the case of another company a somewhat complicated method has been adopted in allocating distributing charges against particular products. As separate sales values of motor-spirit and other products were available, the total overhead expenses were apportioned by the Department on a sales basis with results which agree very closely with the figure shown by the company.

TRANSFER CHARGES, FREIGHTS, AND CARTAGES.

It is the policy of all the major companies to provide storage accommodation at the principal towns of the Dominion, which are termed depots. These depots are supplied from marine terminal-port tanks by rail tank wagons, and, in the case of one company, also by coastal steamer service.

The delivery cost in servicing city and suburban retail distributors at terminal depots, together with transfer charges to country depots, is shown as 2-3503d. per gallon on total sales by one company, and 2-4411d. per gallon by another, in the two cases where the figures examined could be reasonably verified.

Motor-spirit at country towns is fixed at prices which cover transport charges, and the companies thereby recover a certain proportion of the above expenses. The additions to arrive at prices fixed for districts outside the main centres are termed "differentials," and are determined by the cost of freighting motor-spirit in small containers from main centres to selling-points in inland or coastal towns. While the actual freight costs are in many cases less than the "differentials" the total transportation and distribution expenses to inland points must be allowed for. It is impossible to segregate the expenses to different points and in respect of different commodities, and thus to judge accurately whether or not the "differentials" are more or less than adequate to cover the extra expenses involved in the inland distribution.

OVERHEAD EXPENSES.

The following classes of expenditure are included under this heading: Operating terminals and depots, maintenance of pumps and other equipment, depreciation, selling-expenses, advertising, management and office expenses, and miscellaneous expenses.

These expenses represent a cost to three of the companies of 5.5345d., 5.601d., and 6.0781d. per gallon. The more important items are salaries and wages, depreciation, advertising, and these are dealt with separately as follows:—

(1) Salaries and Wages (including Travellers).

The item "salaries" assumes a large proportion of expenses incurred by oil companies in distributing motor-spirit and other products. The method of accountancy employed by oil companies and statistical returns required by the head office of each company apparently necessitates the maintenance of large staffs in New Zealand. The following figures show the effect of this expense on the total cost of distribution per gallon:—

	d.
Company A	1.8428
Company C	2.627
Company D	1.406

(2) Depreciation.

It is the practice of all oil companies to provide depreciation at rates which appear to be more than sufficient to cover the estimated length of service or life of the plant or fixed asset. The cost of distribution is consequently increased by what appears to be an excessive charge under this heading. Expert engineering advice would be necessary in any attempt to determine accurately the proper allowances for depreciation.

The principal fixed assets employed by oil companies in the importation and distribution of motor-spirit in bulk are terminal tanks, pipe-lines, railway tank wagons, railway-sidings, kerbside and commercial pumps, automotive equipment, buildings.

The provision for depreciation apportioned on a sales basis to motor-spirit account for the following costs per gallon:—

	d.
Company A	0.881
Company B	0.860
Company C	1.1325
Company D	1.296

(3) Advertising.

The cost per gallon apportioned to sale of motor-spirit by three of the companies is—

	d.
Company A	0.17
Company C	1.026
Company D	0.38

(4) Other Overhead Expenses, including Income-tax.

The balance of overhead expenses comprise expenditure in connection with repairs and maintenance of terminal tanks, distributing equipment, general management and office expenses. These expenses account for—

	Per Gallon.
	d.
Company A	2.7072
Company C	1.2926
Company D	2.4525

STORAGE-TANK CAPACITY OF MAJOR OIL COMPANIES.

The total storage capacity of the major oil companies is 39,237,756 imperial gallons, the storage capacity of marine terminal tanks being 37,077,519 gallons, and country and other depots 2,160,237 gallons. On the basis of the imports of motor-spirit for the year ending 31st December, 1930, storage accommodation is available to supply the Dominion's requirements for seven months.

DISTRIBUTING FACILITIES.

With the advent of bulk shipment it became necessary to provide tank wagons and pumps for retail distribution. The companies had at the 31st May, 1931, installed throughout the Dominion a considerable number of pumps as mentioned hereunder. Pumps are supplied to retail sellers on the basis of £10 deposit and 10s. per annum as rent. The company maintains pumps in good working-order and repaints as required. Garage-proprietors and others who install their own pumps are allowed by the major oil companies a rebate of $\frac{1}{4}$ d. per gallon on the total gallonage sold through such pumps.

Company-owned pumps total 6,962; value, £923,010 17s. 8d.; per pump, £133; installed by reseller, 692; total pumps, 7,654.

In addition to the foregoing, a further relatively small number of pumps have been installed by importers other than the four major companies.

The total number of motor-vehicles registered in New Zealand at the 30th June, 1931, was 217,902, and comprised the following classes of vehicles:—

Motor-cars	..	..	..	..	..	152,170
Trucks	..	..	..	..	..	29,972
Motor-buses	..	..	..	..	..	1,234
Tractors	..	..	..	..	..	447
Other motor-vehicles	..	..	..	..	..	495
Motor-cycles	..	..	..	..	..	33,584
						<hr/>
						217,902

It will therefore be seen that on an average there is at least one pump to every twenty-nine motor-vehicles.

PLANT, EQUIPMENT, AND OTHER PROPERTY.

The total value of plant, equipment, and other fixed assets owned by the four companies including pumps stated above is recorded at £3,129,763.

Interest on this capital outlay at, say, 7 per cent., equals £219,083 per annum. This charge has not been taken into account in overhead expenses. In addition, of course, other large sums are invested or employed by the companies in the Dominion, particularly in the form of working capital and book debts.

The information submitted in the report up to the last section refers more particularly to the operations of the major oil companies. The f.o.b. invoice price, freight rates, and other costs associated with the importation of motor-spirit have been obtained, as previously stated, from the records kept by each company. The Department has, however, secured similar information from an independent source, and these details are submitted hereunder, subject to the qualifications regarding the f.o.b. values and freight rates referred to in clause 3 of the summary at the end of this report.

Cabled Quotation from New Zealand Trade Commissioner at Toronto on the 18th August, 1931, for 400-end-point Motor-spirit (equal to Second-grade Motor-spirit imported into New Zealand).

	Per Imperial Gallon.
	d.
F.o.b. cost $4\frac{1}{4}$ c., American gallon (at \$4.84 to £1)	.. .. 2.528
Tanker freight rate at 18s. per ton plus 1s. for each additional port— say, three ports—21s. per ton at 302 gallons per ton (see previous remarks relative to tanker freights)	.. .. 0.834
Marine insurance $\frac{1}{4}$ per cent.	.. .. 0.008
Exchange, $10\frac{1}{2}$ per cent., on New York	.. .. 0.399
	<hr/>
	3.769
Duty	.. .. 6.300
Wharfage and landing charges	.. .. 0.168
Leakage (say, 1 per cent.)	.. .. 0.037
	<hr/>
	10.274
	<hr/>

SUNDRY IMPORTERS.

Information was secured from ten of the leading independent firms. In almost every case purchases are made in cases and/or drums on a c.i.f. basis, and from information obtained it appears that the principal importers have been buying during the year ending the 31st March, 1931, at the following c.i.f. rates per imperial gallon:—

Importer.	Cases. d.	Drums. d.
A	.. .. 12.706	11.25
B	.. .. 12.927	10.891
C	.. .. 13.825	11.460
D	.. .. 13.875	11.500
E	.. .. 13.375	11.400
F	.. .. 13.300	..

The majority of importers of motor-spirit in cases and drums are established business houses engaged in other commercial enterprises, and the sale of motor-spirit is to some extent a side-line in order to secure the whole of the requirements of their clients. The companies referred to do not keep

separate trading accounts for motor-spirits, nor do they attempt to apportion overhead expenses to the purchase and sale of motor-spirit. There is no question, from information obtained, that were this done some of these companies would show a loss on this branch of their trading.

C.I.F. PRICES IN DRUMS AND CASES.

Information regarding c.i.f. prices of motor-spirit in first and second grades have been obtained from invoices of a number of independent importers. This information gives an index of the fall in prices during the period stated in respect of motor-spirit imported by this method :—

	First Grade.		Second Grade.	
	Cases.	Drums.	Cases.	Drums.
	Dollars.	Dollars.	Dollars.	Dollars.
1929.				
December 30th	2.47	11.69	2.35	11.03
1930.				
March 20th	2.32	10.86	2.20	10.20
March 28th	2.47	11.69	2.35	11.03
July 7th	2.32	10.86	..	..
August 30th	2.32	10.86	2.20	10.20
October 28th	2.16	9.98	2.04	9.32
1931.				
January 28th	2.16	9.98	2.04	9.32
February 24th	2.16	9.98	2.04	9.32
March 12th .. .. .	..	9.98	..	..
June 2nd	2.00	8.915	..	..
June 28th	1.80	8.28	..	..

Cases contain 8 imperial gallons, and drums 43½ imperial gallons.

The following table shows the duty paid, landed into store, cost of motor-spirit, and the selling-prices obtained by the several importers as at the 1st May, 1931 :—

Importing Company.	Cost into Store.		Basic Selling-price.	
	First Grade.	Second Grade.	First Grade.	Second Grade.
	s. d.	s. d.	s. d.	s. d.
A (cases)	1 9.47	1 8.72	1 10.4	1 9.75
B (cases)	1 11.50*	1 10.75*	1 11.75	1 10.75
(drums)	1 8.74*	1 6.75*	1 8.50	1 7.50
C (cases)	1 11.07	1 10.28	1 11.25	1 10.25
(drums)	1 8.40	1 7.55	1 11.25	1 10.25
D (cases)	1 10.25	1 9.47	1 11.25	1 10.25
(drums)	1 8.68	1 7.43	1 9	1 8
E (cases)	1 10.9	1 10.22	1 11.25	1 10.25
(drums)	1 7.50	1 6.75	1 8.5	1 7.75
F (drums)	1 7.77	..	1 9	..

* These figures include 1.6d. to provide for leakage, depreciation, salaries, &c.

The above figures show that the independent importers do not secure any very substantial margin of profit. In one or two instances above mentioned the margin must provide for the costs of what is virtually a retail distribution.

Importation of motor-spirit in bulk has many advantages from a cost point of view over imports in drums and cases. These may be briefly summarized as follows :—

- (1) Higher price for smaller quantity and filling.
- (2) Cost of container.
- (3) Extra freight charges. Motor-spirit in bulk is charged at 302 to 307 gallons per ton ; in cases, only 160 gallons ; drums, approximately, 150 gallons.
- (4) Extra store handling charges.
- (5) Increased amount of exchange due to (a) increased f.o.b. price, (b) cost of containers, (c) increased freight.
- (6) Increased wharfage rates. (See No. 3).

Omitting consideration of the f.o.b. value and exchange, both of which tend to be higher in the case of imports in drums as compared with bulk, the following figures are given to show the substantial

extra cost of importations in drums as compared with bulk importations, as represented by the records of one of the major companies :—

Cost per Imperial Gallon.	Independent Importer.	Oil Company (Bulk).	Difference.
	d.	d.	d.
Cost of drums	2.03	Nil	-2.03
Freight at 42s. per ton (average)	3.36	1.675	-1.685
Marine insurance.. .. .	0.03	0.039	+0.009
Leakage	0.032	0.075	+0.043
Wharfage (Wellington as basis)	0.400	0.168	-0.232
Totals	5.852	1.957	-3.895

TREND OF OVERSEAS SELLING-PRICES.

Published reports of overseas oil-producing companies show that, while the total production of crude oil for 1930 was well below that of 1929, prices fell considerably below the 1929 level and continue to decline steadily. This position is attributed, in a large measure, to the abnormal disparity between production and consumption of petroleum products. Gulf export prices for 375 end-point grade (averaged on prices published on the first of each month) in 1922 was 24.5d. per gallon. In 1926 the price had fallen to 16.5d.; 1928, to 13d.; and in 1929, to 6d. In January, 1930, the price was 6d., and dropped to 3.75d. in December; and further declines continued in 1931, the price in February being 3.6d., and at July the price had reached the low level of 2.05d. It is stated that the present prices of refined motor-spirit are even less than prices of crude oil.

First-grade motor-spirit imported in cases containing two 4-gallon tins (bought principally by independent importers) has declined from 1s. 3.19d. (December, 1929) to 11.25d. (June, 1931) per imperial gallon, c.i.f. main ports, New Zealand. The price of similar quality motor-spirit imported in drums containing approximately 44 imperial gallons has also fallen from 1s. 1.27d. to 9.41d. over the same period.

The Department received a cable from London on the 13th August, 1931, advising that the landed cost of motor-spirit in England was 2½d. per imperial gallon. On the 18th August a cable received from the Trade Commissioner at Toronto stated that the market quotation for 400 end-point (which is equal to the second-grade spirit commonly used in New Zealand) was 3½ to 4¼ cents per american gallon, f.o.b. tanker, Pacific Coast, or, expressed in British currency, 2.1d. to 2.5d. per imperial gallon.

WHOLESALE PRICE TO RESELLERS IN NEW ZEALAND.

The selling-prices of oil companies to resellers were reduced on the 10th August, 1931, by 1d. per gallon in both first and second grades, prices from that date being 1s. 9d. first grade and 1s. 8d. second grade in the main centres.

These prices are subject to 1d. per gallon cash discount for motor-spirit purchased from the 1st to the 15th of each month if paid by the end of that month. Purchases from the 16th to the end of the month are allowed 1d. per gallon discount if paid by the 15th of following month. A rebate of ½d. per gallon is also allowed on each gallon over 800 gallons sold through any pump for any one month, and in cases where the pump is privately owned a rebate of ½d. per gallon on all motor-spirit sold is allowed.

Owing to the present acute competition, brought about to a large extent by the excessive number of pumps, the reduced demand, and the many brands of motor-spirit on the market, it is doubtful whether the rebate of ½d. per gallon for quantities over 800 gallons is secured by many retailers.

Under these conditions the margin at present generally available between the wholesale price to retailers and the price to the public is not considered excessive. The necessity for this margin, however, is materially affected by quantities handled. The present nominal margin between wholesale and retail prices is, in the main centres, approximately 3d. per gallon.

COST AND SELLING PRICES, UNITED KINGDOM.

The following cable was received from the High Commissioner on the 13th August, 1931 :—

“ Advertised petrol prices in England, Wales, and south Scotland: Retail—No. 1, motoring grade, 1s. 2½d.; No. 3, commercial grade, 1s. 0½d. Wholesale, 1s. 1½d. and 11½d. per imperial gallon. Other parts of country slightly higher. Business done, however, with largest consumers at contract rates below these figures. Present landed cost about 2½d.; distributing cost, from 2d. to 3d. (these particulars are unofficial); duty, 6d. per gallon.”

Confirming this cable, the Department is informed that the landed cost of 2.5d. refers to the commercial grade of motor-spirit.

On the basis of this cable the following calculation is submitted :—

					Commercial Grade.	
					Per Gallon.	
					d.	
Landed cost	..	..	..	..	..	2.5
Customs duty	..	..	..	..	..	6.0
Distribution cost	..	..	..	..	..	2.5
					<hr/>	
					11.0	

Selling-prices at 13th August, 1931.

	Wholesale.		Retail.	
	Per Gallon.		Per Gallon.	
	s.	d.	s.	d.
No. 1, motoring grade	1	1·5	1	2·5
No. 3, commercial grade	0	11·5	1	0·5

The costs and prices in the United Kingdom are materially affected, firstly, by the large quantities handled, and, secondly, by keen competition, at present reported to be a feature of the oil trade in that territory.

COMPARISON OF COSTS, DUTY PAID, DELIVERED, AUSTRALIA AND NEW ZEALAND.

The following table shows comparative costs between the duty-paid delivered cost in Australia and New Zealand. The authority for the Australian figures is based on a report prepared by a Customs Investigating Officer and an Audit Inspector, submitted to the Commonwealth Parliament on the 22nd April, 1931. The reference is taken from page 11, schedule "C" of the above report.

	First Grade. (As at 7th November, 1930.)	First Grade. (Average Figures, Twelve Months to 31st December, 1930.)	
	Australia.	New Zealand.	
		A Company.	C Company.
	d.	d.	d.
F.o.b. cost	5·703	5·8567	5·4570
Overseas freight	2·296	1·6750	1·7940
Insurance	0·037	0·0390	0·0140
Evaporation and leakage	0·070	0·0750	0·3570
Exchange	0·729	0·4320	..
C.i.f. & e.	8·835	8·0777	7·6220
Customs duty	7·000	5·040	4·7040
Primage	0·250	..	..
Wharfage and landing charges	0·210	0·149	0·1849
Duty-paid cost	16·295	13·2667	12·5109
Distribution cost	7·661*	8·2463†	8·8354
	23·956	21·5130	21·3463

* Based on expenses, half-year, January to June, 1930. † Half-year ending 30th June, 1931.

NOTE.—New Zealand Customs duty shown above is the average rate paid over twelve months ending 31st December, 1930.

COMPARISON OF SELLING-PRICES IN MAIN CENTRES, AUSTRALIA AND NEW ZEALAND.*

	First Grade.		Second Grade.		Duty.
	Wholesale.	Retail.	Wholesale.	Retail.	
<i>Australia.</i>					
1929.	s. d.	s. d.	s. d.	s. d.	
May 1st	1 6	1 9	1 4	1 7	3d.
„ 25th	1 6	1 9	1 5	1 8	3d.
December 14th	1 6	1 9	1 5	1 8	4d.
1930.					
October 2nd	1 4·85	1 7·85	1 3·85	1 6·85	7·15d. approx.
1931.					
April 10th	1 3·76	1 6·76	1 2·76	1 5·76	7·24d. „
<i>New Zealand.</i>					
1929.	s. d.	s. d.	s. d.	s. d.	
May 1st	1 4	1 7	1 3	1 6	4d. and 2 per cent.
„ 25th	1 4	1 7	1 3	1 6	..
1930.					
August 1st	1 3·7	1 6·7	1 3·7	1 5·7	6·3d.
„ 28th	1 2·7	1 5·7	1 1·7	1 4·7	6·3d.
November 1st	1 2·7	1 5·7	1 1·7	1 4·7	6·3d.
1931.					
August 10th	1 1·7	1 4·7	1 0·7	1 3·7	6·3d.

* Prices quoted for both countries are duty-free for comparison purposes, and rebates for quantities are not taken into account.

New Zealand retail selling-prices are nominal ruling prices, but supplies are obtainable in main centres at lower prices.

COMMENTS.

The following general comments are submitted :—

- (1) The major oil companies are all foreign owned and controlled, and branches of world-wide organizations.
- (2) The accounts kept by the companies do not readily lend themselves to the extraction of the information necessarily required by the Department in this investigation.
- (3) Owing to financial interlocking of producing and refining oil interests, it is difficult to verify the f.o.b. costs shown on the companies' invoices. There are indications that prices are fixed by the exporting organization at a rate in excess of the market price at the date of shipment. To what extent the invoiced price is justified, having in view the cost of production and refining, is a matter on which the Department cannot, with the information available, express any definite opinion. This comment is also applicable to freight rates, as each major oil company is associated with a company owning or operating a tanker shipping service.
- (4) The major oil companies, as branches of larger organizations, compile trading, financial, and statistical data for use of their respective head offices. This involves a considerable amount of clerical labour and expenses which would not be required in the case of a locally owned and controlled oil-importing company. The expense involved under present conditions increases the cost of distribution in New Zealand.
- (5) The marked spread between c.i.f.e. duty-paid cost and ultimate selling-price is due to the following circumstances :—
 - (a) The competition for business between the oil companies and the resultant overcapitalization of the system of distribution, exemplified by excessive terminal and other tank storage accommodation, excess number of pumps, and other distributing plant.
 - (b) An excessive number of retail distributors.
 - (c) Heavy provision for depreciation. This is common to all the major oil companies. The object of the policy adopted appears to be to write down the capital assets of the companies as rapidly as possible.
 - (d) Extensive advertising conducted on a scale which it is suggested is a distinct burden in view of the constant demand for a commodity which probably does not vary in quality to any appreciable degree as between the comparable products handled by each competing unit.
- (6) The major oil companies act in agreement in regard to wholesale selling-prices and terms of sale, and, while there is keen competition for trade, there appears to be no wholesale competition on price as between the major oil companies. The fixation of a uniform price by common agreement is, of course, an alternative to the fixation of a uniform price by force of competition. The circumstances are such that differing price-levels could not be maintained, and uniformity of price must necessarily be a feature of the trade. The main point of importance is the fact that the prices fixed by general agreement between the companies are presumably reasonably satisfactory to each and every company, irrespective of the proportion of total requirements of the market secured by the different companies.
- (7) The investigation has drawn attention to the desirability of some statutory obligation on foreign owned and controlled companies to keep adequate records that will readily disclose the financial results of the trading operations of such companies in New Zealand.

The results of the investigation show that the spread between the landed duty-paid cost and final cost to the user is mainly absorbed in distribution expenses. On the part of the major oil companies a substantial proportion is absorbed in overhead and general office expenses, and it is these heavy expenses, in a large measure, that have made possible the operations of the independent oil importers. At the same time, it must be recognized in any comparison that the major oil companies provide a distribution service over the whole of the Dominion.

The fundamental advantages of bulk importation appear to a considerable degree to have been lost by the heavy costs of internal distribution resultant, in the main, from competitive oversupply of distributive facilities and organization.

There has, of course, been a recent reduction of 1d. per gallon in wholesale selling-prices, due essentially, no doubt, to the reductions in values at points of origin. The present overseas cost now represents only a small proportion of the total duty-paid cost to retail distributors.

G. W. CLINKARD, Secretary.

STATEMENT A.
IMPORTS OF MOTOR-SPIRIT.

Year ending 31st De- cember,	Total Imperial Gallons imported.	Total Value.	Duty.	Imports from East Indies.	Value.
		£			£
1915 ..	7,126,493	395,848	Free	..	..
1916 ..	9,115,122	537,470	..	1,448,314	106,209
1917 ..	8,190,604	579,586	..	1,009,600	84,742
1918 ..	10,692,291	826,074	..	485,000	49,538
1919 ..	8,839,279	775,036	..	732,824	90,775
1920 ..	17,852,503	1,830,019	..	1,074,464	138,995
1921 ..	18,973,742	2,011,412	..	1,718,400	222,731
1922 ..	16,516,280	1,693,388	..	4,916,372	557,178
1923 ..	20,217,077	1,608,440	..	4,156,164	333,900
1924 ..	28,888,138	2,213,189	..	6,057,366	505,079
1925 ..	33,257,617	2,349,477	..	5,728,259	409,133
1926 ..	48,675,851	2,890,609	..	10,440,674	558,723
1927 ..	48,042,640	2,005,983	4d. gal.	11,841,133	420,111
1928 ..	54,540,416	1,655,451	4d. "	8,604,189	220,573
1929 ..	62,448,092	2,130,835	4d. "	17,670,207	523,944
1930 ..	68,309,672	2,090,542	6·3d. gal.	19,674,621	523,525

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