

COLONY OF TRINIDAD AND TOBAGO



**ADMINISTRATION REPORT OF THE  
PETROLEUM DEPARTMENT  
FOR THE YEAR 1953**

## ADMINISTRATION REPORT OF THE PETROLEUM DEPARTMENT, 1953

HONOURABLE COLONIAL SECRETARY,

I have the honour to submit for the information of His Excellency the Governor, the following Report on the Petroleum and Asphalt Industries of the Colony for the year 1953.

The Report is set out in the sections, tables, appendices and maps as detailed below.

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## SECTION I—ACTIVITIES OF THE OIL INDUSTRY

## DRILLING

1. An average of twenty-seven (27) drilling rigs were in operation during the year. Although this was one less than in 1952, the total footage drilled was 917,894 feet, giving an average of 2,515 feet per day. This is a substantial increase on the performance last year, when the total footage was 736,535 feet—a daily average of 2,112 feet.

2. Two hundred and twenty-three (223) new wells were started during the year as compared with 187 new wells in 1952—an increase of 19 per cent. Completions increased from 182 in 1952 to 224 in 1953.

3. Thirteen (13) wells were abandoned while drilling, all being dry holes. The aggregate depth of these abandoned wells was 62,335 feet representing 6.8 per cent. of the total annual footage: the corresponding percentage for 1952 was 3.8 per cent.

4. Statistics relative to drilling are given in Table I, Items 14-21 inclusive: the total footage drilled (Item 18) and the average depth per completed well (Item 21) are shown in graph form for a number of years in Appendix "C". A monthly analysis of drilling activity in 1953 is given in Table II.

## EXPLORATION AND IMPORTANT EXPLORATORY, OUTSTEP AND DEEP EXPLOITATION WELLS

5. Seismograph surveying continued actively in 1953. In the Siparia district seven lines were run in which the following four (4) companies were interested—Trinidad Petroleum Development Company, Ltd., United British Oilfields of Trinidad Ltd., Apex (Trinidad) Oilfields Ltd., and Premier Consolidated Oilfields Ltd.—the latter two companies participating in one or two lines only. Trinidad Petroleum Development Co., Ltd., ran three lines in the Moruga-Bouffe district and with part participation by Apex (Trinidad) Oilfields Ltd., four lines in the Palo Seco and Erin districts. Seismic surveys in the Ortoire district were completed by United British Oilfields of Trinidad Ltd., and a seismic survey was carried out by Trinidad Northern Areas Limited in the Charuma district. Trinidad Leaseholds Ltd. carried out seismic surveys over their Singuineau, Kapur Ridge, Mayaro, Guayaguayare and Morne Diable holdings, the total footage surveyed being approximately 190,000 feet covering about 4,000 acres. Seismic surveying of the Northern Basin was continued by Dominion Oil Limited and at the end of the year two land parties were operating: this Company completed a detailed marine seismic survey of the northern part of the Gulf of Paria and made reconnaissance seismic survey of the marine area under licence to them off the East Coast. Other type exploratory surveys included auger holes surveys carried out by Dominion Oil Limited over a wide area in the Northern Basin and Nariva districts, and this company also drilled a total of about 35,000 feet in a number of test holes to obtain shallow structural information in the Northern Basin.

6. At paragraph 9 of the 1952 Report, reference was made to the discovery of a development of the Herrera sands at a shallow depth by United British Oilfields of Trinidad Ltd. in their Balata East No. 1. At the end of the year twelve wells had been drilled or were drilling in this area and three of these were dry holes. Comprehensive testing with small production offtake only was carried out on the other wells, and the construction of a 32-mile pipeline was considered justified and commenced: it is expected that this will be completed by the middle of 1954.

7. In Table IX, a list is given of important exploratory and deep exploitation wells which were being drilled during the year, and the location of each is shown on the map at Appendix "H" in this report. Three of these wells were abandoned as dry holes during the year.

The post-war expenditure for all drilling wells in this classification is shown in the following table:—

	EXPENDITURE ON IMPORTANT EXPLORATORY OUTSTEP AND DEEP EXPLOITATION WELLS		
	<i>For the period 1st January, 1945– 31st December, 1952</i>	<i>For the year 1953</i>	<i>Total at 31st December, 1953</i>
(a) Cost of drilling wells including depreciation ... ..	\$38,324,000	\$7,840,000	\$46,164,000
(b) Investment in capital equipment ... ..	9,223,000	404,000	9,627,000
	<u>\$47,547,000</u>	<u>\$8,244,000</u>	<u>\$55,791,000</u>
(c) <i>Less</i> Depreciation on capital equipment ... ..	3,733,000	1,385,000	5,118,000
(d) TOTAL OUTLAY ... ..	<u>\$43,814,000</u>	<u>\$6,859,000</u>	<u>\$50,673,000</u>

## PRODUCTION OF CRUDE OIL

8. The total production of crude oil for the year was 22,345,923 barrels, a record for the Colony. This represents an increase of over 5 per cent. on the figure for the previous year.

9. The average daily production per producing well (Table I, Item 25) was the same as that of the previous year at 24.1 barrels per day. A slight improvement will be noted (*see* Table III) in the average daily production per flowing well, which rose from 47.3 barrels per day in 1952 to

49.8 barrels per day in 1953. The percentage of salt water in the total fluid produced increased slightly to an average of 18.7 per cent. as compared to 17.2 per cent. in 1952: the salt water production is shown in graph form in Appendix "F".

10. Statistics relative to crude oil production are shown under Items Nos. 1 and 22-27 inclusive in Table I: Items 1 and 25 are reproduced in graph form in Appendix "A". In Table III, a detailed monthly breakdown of production methods is given, and the annual productions contributed by the principal producing methods are graphed as a percentage of the total production in Appendix "B".

11. The gas injection experiment of Trinidad Leaseholds Limited at Forest Reserve, which has been carried on for the past five years, was maintained. Gas was injected at an average rate of 6.2 million cubic feet per day and an appreciable build-up in reservoir pressure has been noted. No definite data are yet available as to the effect of gas injection on the ultimate recovery of these reservoirs, but the results to date have shown a great complexity of reservoir conditions. These complexities are, however, partly offset by the thick sands involved and the combination of steep dip and low viscosity. It is expected that the projects will successfully mature.

12. On the Guayaguayare beach field of Trinidad Leaseholds Limited, a water flood project was put into operation during the year. Approximately 500 barrels per day of salt water from a neighbouring well are being injected into two wells at a depth of about 1,900 feet and close to the oil-water contact in the sand. By the end of the year a total of 12,838 barrels of water had been injected without any noticeable effect on the up-flank producing wells. Preparations were being made to increase the injection rate to 2,500 barrels per day using sea water.

13. Gravel packing as a method of combating sand entry was experimented with on several fields in Trinidad in the early '30s. Trinidad Leaseholds Limited have recently done considerable research in this direction and, during 1953, introduced gravel packing as a routine completion method in their Forest Reserve field. Nineteen newly drilled wells were equipped with liners and the annulus between the liner and the perforated casing was filled with graded beach gravel using a fluid placement technique. Three other wells were successfully repaired by this technique and became commercial producers; previously oil could only be won by repeated and expensive clean out operations.

#### REFINING

14. As in 1952, five (5) permits to refine oil were issued under the Oil Mining and Refining Ordinance, three of these being for small topping plants operated respectively by Apex (Trinidad) Oilfields Limited, Brighton Terminal Limited and Trinidad Petroleum Development Company Limited.

15. Refinery input (Table I, Item 13) reached a new record of 37,446,038 barrels, an increase of nearly 4 per cent. over 1952. Of this total 9,754,461 barrels were processed by United British Oilfields of Trinidad Limited at Point Fortin and 27,504,553 barrels by Trinidad Leaseholds Limited at Pointe-a-Pierre. Brighton Terminal Limited processed 179,856 barrels and 7,168 barrels were treated in field topping plants.

#### PETRO-CHEMICALS

16. In December, 1953, a new Company, Trinidad Leaseholds Chemicals Limited was formed for the purpose of manufacturing petroleum chemicals. This subsidiary company rents and operates certain plants owned by Trinidad Leaseholds Limited, two of which were specially constructed during the year; one of these is for the manufacture of granulated sulphur which will be used largely for the production of sulphuric acid, while the other is for the manufacture of di-isobutylene for the plastics industry. In addition, another plant (originally constructed in 1938 when it was the first built outside the U.S.A. to make iso-octane) was modified to produce propylene tetramer for use in the manufacture of soapless detergents. This Chemical Company had made initial shipments of all these products by the end of the year, e.g., the first shipment of granulated sulphur amounted to 800 long tons.

It is hoped that the petroleum-chemical industry will develop in Trinidad on the same lines as it has done in the U.S.A. where it now supplies 25 per cent. of that country's entire chemical consumption.

#### NATURAL GASOLINE RECOVERY PLANTS

17. During the year the two existing plants continued in operation; a new plant, under construction in 1952 by Trinidad Leaseholds Limited, was completed in April, 1953 and operated for the remainder of the year. The following table gives some data on the performance of these plants:—

Company	Location	Type of Plant	Average Daily Throughput Million C. Ft.		Recovery in gals/1000 c.f.		Total Recovery Bbls. 1953
			1952	1953	1952	1953	
Apex	Fyzabad	Charcoal	10.4	10.6	1.04	1.06	117,008
T.P.D.	Santa Flora	Oil Absorption	9.9	11.5	0.80	0.78	93,501
T.L.L.	Forest Reserve	do.	—	6.0*	—	0.73	34,493*
	All Plants		20.3	28.1*	0.92	0.87	245,002

\* From April, 1953.

Compression gasoline was obtained independently of these plants by Trinidad Leaseholds Limited at Guayaguayare and Forest Reserve: the total recovery was 19,150 barrels in 1953.

#### NATURAL GAS

18. Details of the production and utilization of natural gas in 1952 and 1953 are given in Table IV. The production increased by approximately 10 per cent. over that for 1952 and this is mainly due to the 5 per cent. increase in crude oil production and to an increase in the proportion of flowing crude oil production. There are no significant changes in the pattern of its utilization.

#### TRANSPORT AND STORAGE

19. No major additions were made during the year to the main pipeline systems. Storage capacity totalled 10.5 million barrels at the end of the year, approximately the same as at the end of 1952.

#### IMPORTS AND EXPORTS OF PETROLEUM AND ITS PRODUCTS

20. Crude Oil imported into the Colony for refining and re-export totalled 16,696,300 barrels: this is practically the same as in 1952. Table I, Item 8 gives the quantities for ten years. 142,895 barrels of Tucupita fuel oil were imported and processed mainly for flux oil used in conditioning Lake Asphalt for export.

21. Imports of Tucupita fuel oil by Brighton Terminal Limited for transshipment and bunkering amounted to 2,435,139 barrels: this compares with 3,240,976 barrels in 1952.

22. Trinidad Leaseholds Limited continued to export crude oil to Canada, and the quantity exported was 1,998,507 barrels. This is 8.4 per cent. higher than in 1952 when 1,843,995 barrels were exported, mainly by Trinidad Leaseholds Limited, but in part by Antilles Petroleum Company (Trinidad) Limited (Table I, Item 11).

23. Total exports of petroleum and its products (from both local and foreign crudes) increased by 4.1 per cent. rising from 34,778,000 barrels to 36,220,888 barrels. Details of exports and imports are given in Table V.

#### THE ASPHALT INDUSTRY

24. The following tables show the quantity of natural asphalt extracted from the Pitch Lake and the quantity of derived products exported or sold locally:—

		Tons	
		1953	1952
Extracted by Works and Hydraulics for local use	...	46,359	48,304
Extracted by Company	... ..	96,884	122,291
		<u>143,342</u>	<u>170,595</u>

#### DERIVED PRODUCTS MANUFACTURED BY COMPANY

<i>Exported :</i>					
Crude	...	...	...	—	—
Dried Asphalt	...	...	...	44,376	48,332
Asphalt Cement	...	...	...	44,406	77,831
				<u>88,782</u>	<u>126,163</u>
<i>Local Sales :</i>					
Crude	...	...	...	4	5
Dried Asphalt	...	...	...	153	21
Asphalt Cement	...	...	...	238	109
				<u>395</u>	<u>135</u>

## SECTION II—THE OIL INDUSTRY IN RELATION TO THE LOCAL ECONOMY

#### LOCAL EXPENDITURE

25. The annual local outgoings of the Industry in 1953 amounted to 79.6 million dollars, an increase of 2 million dollars over the 1952 figure. Of this large amount 25.6 million dollars were paid in revenue to various Government Departments, while no less than 54 million dollars were paid out locally in wages, purchases and other expenditure. Details of contributions to revenue and to local expenditure are shown in Tables VI and VII.

#### TAXATION OF THE INDUSTRY

26. The importance of the Oil Industry in the economy of the Colony is clearly brought out in the following table, which shows the contributions of the industry under each Head of Revenue listed in the Colony's Estimates. Contributions to the revenues of the Port Services, and Railway and Telegraph are shown separately in order to conform to the present form of presenting the Colony's Estimates; revenues from these two services were, however, included in the Colony's

total revenue in past years, and for ease of comparison with these past years, are so included in Table VI—which is set up to show pure taxation as distinct from payments to Government Departments in return for various services:—

CONTRIBUTIONS BY THE OIL INDUSTRY TO THE REVENUE OF THE COLONY IN 1953

Revenue Head in Colony's Estimates	Revenue Received \$	Oil Industry's Contribution \$	Percentage Contribution by Oil Industry
<b>ORDINARY REVENUE :</b>			
1. Customs and Excise ... ..	21,280,427	1,332,707	6.3
2. Licences and Internal Revenue not otherwise classified	3,344,892	118,741	3.6
3. Taxes on Income ... ..	26,922,775	15,574,972	57.9
4. Fees and Payments for specific purposes ... ..	782,654	35,258	4.5
5. County Council ... ..	908,302	228,180	25.1
6. Reimbursements ... ..	2,927,538	32,644	1.1
7. Earnings of Government Departments ... ..	499,949	9,436	1.9
8. Post Office ... ..	1,358,656	45,613	3.4
9. Rent of Government property ... ..	266,567	10,320	3.9
10. Interest ... ..	942,351	—	0.0
11. Miscellaneous ... ..	198,885	39,592	19.9
12. Port Services ( <i>see below</i> ) ... ..	—	—	—
13. Forests, Lands and Petroleum ... ..	7,426,309	7,152,369	96.3
<b>TOTAL ORDINARY REVENUE ... ..</b>	<b>66,856,303</b>	<b>24,579,832</b>	<b>36.8</b>
<b>EXTRAORDINARY REVENUE :</b>			
14. Land Sales ... ..	11,845	—	0.0
15. Loans to Public Bodies ... ..	66,080	—	0.0
16. Emergency Taxation ... ..	—	—	—
17. Grants under Colonial Development and Welfare Act ...	1,134,865	—	0.0
18. Extraordinary ... ..	28,588	—	0.0
<b>TOTAL AS PER COLONY'S FINANCIAL STATEMENT, 1953 ... ..</b>	<b>68,100,681</b>	<b>24,597,832</b>	<b>36.1</b>

In addition to the contributions shown in the above Table, the Oil Industry's contributions to Government Operated Services were:—

Revenue Head in Colony's Estimates	Revenue Received \$	Oil Industry's Contribution \$	Percentage Contribution by Oil Industry
A. Port Services ... ..	5,013,496	891,786	17.8
B. Railway and Telegraph ... ..	1,421,687	119,097	8.4

27. Reference to Table VI indicates that there was little change in the overall contribution of the industry in 1953 as compared to 1952. Changes in the amounts contributed under the various heads of Income were comparatively small, the largest being a decrease of 8.9 per cent. in Income Tax. Although the gross income of the industry was somewhat higher in 1953 than in 1952 due to a larger production and to slightly higher average prices for products this increase was more than offset by a substantial increase in local outgoings other than direct taxation.

28. Customs Import Duties (Item 1, Table VI) paid by the oil industry showed a small decrease of 1.1 per cent. falling from \$1,204,736 in 1952 to \$1,191,346 in 1953, the total value of the industry's imports falling by 1.9 per cent.

29. Reference to Item 7 of Table VII shows that there was a substantial drop of over 31 per cent. or nearly two million dollars in the value of the industry's imports from the United States of America while the value of its imports from the United Kingdom and other sources both increased by about \$600,000.

30. The total royalties collected by the Accountant General in 1953 in respect of the period 1st July, 1952 to 30th June, 1953 on crude oil, &c. (i.e., including casing head petroleum spirit and minimum royalties) and on gas sold amounted to \$7,029,255 an increase of 3.4 per cent. over the collections in respect of the previous twelve months. Further details of the various changes in production and values causing this increase are shown in the Table at paragraph 42.

LOCAL DISBURSEMENTS

31. Other than contributions to Government revenues, the annual expenditure of the oil industry in the Colony was \$53,993,792 (Items 2-5 inclusive in Table VII). This amount was 5.7 per cent. greater than the corresponding amount for 1952 (\$51,205,385).

32. Payments to employees (Table VII, Item 2) increased by nearly 18 per cent. for the second year in succession. This increase was due partly to the increase in Wages and other benefits granted in August, 1952, having been effective for the whole of 1953 as compared to only a little over four months in 1952, and partly to a rise in the average daily number of registered employees (15,647 as compared to 15,218 in 1952).

33. Both payments to Contractors and Local Purchases of Materials showed only trivial changes as compared to the previous year but the group "Other Local Expenditure" which includes Rents, Private Royalties, Legal Fees, &c., fell by 12 per cent.

#### EXPORTS OF PETROLEUM AND ITS PRODUCTS

34. The total values of petroleum and its products exported during 1952 and 1953 based on Customs and Excise Department figures are:—

	1952	1953
Crude Oil and Products ... ..	\$170,532,239	\$188,255,575
Petroleum <del>and</del> Bitumen ... ..	4,958,271	6,093,337
<b>TOTALS</b> ... ..	<b>\$175,490,510</b>	<b>\$194,348,912</b>

35. The value of the leading staple products exported from the Colony during 1952 and 1953 is shown in the following Table:—

	1952 Value	1953 Value	Percentage of Total
	\$	\$	
1. Petroleum ... ..	170,532,239	188,255,575	74.93
2. Petroleum Bitumen ... ..	4,958,271	6,093,337	2.43
3. Asphalt and its products ... ..	5,980,848	4,103,319	1.63
4. Cocoa ... ..	8,237,147	11,720,936	4.66
5. Sugar, Molasses and Rum ... ..	20,889,530	27,167,495	10.81
6. Coconuts, Coconut Oil, &c. ... ..	2,173,950	799,175	.32
7. Coffee ... ..	1,467,731	1,840,509	.73
8. Bitters ... ..	726,217	681,238	.27
9. Fresh Fruits, Fruit Juices, &c. ... ..	2,050,688	3,704,123	1.48
10. All others ... ..	6,315,004	6,892,492	2.74
<b>TOTALS</b> ... ..	<b>223,331,445</b>	<b>251,258,199</b>	<b>100.00</b>

36. The value given for Item 1 above includes the value of products obtained from imported crude and is therefore not on a strictly comparable basis with the export values given for the other products which are wholly of local origin. The value of each of the more important products exported annually is shown in Appendix "E", graphed as a percentage of the total annual value of the Colony's exports. The value of the products obtained from imported crude is shown on this graph which indicates clearly the importance of imported crudes in the local refining business.

37. Harbour Dues on petroleum cargoes (14 cents per ton) increased by 7.4 per cent. from \$753,598 to \$809,507. This increase was mainly due to the increase in crude oil production.

#### ADJUSTMENTS TO WAGE RATES

38. There were no Cost of Living Bonus additions to wages during the year. The Bonus has remained at 1½ cents per hour since the 1st July, 1952, when the last addition of ½ cent per hour was made at an index figure of 106 consequent on the Index of Retail Prices rising to 106.6 in that month. During the year 1953 the Index of Retail Prices fluctuated between a maximum of 107.9 in May and a minimum of 106.2 in January of that year.

### SECTION III—ADMINISTRATION

#### ROYALTY ASSESSMENT

39. There was no change in the method of evaluating crude oil for royalty assessment on the production of leases issued under the Land (Oil Mining) Regulations (*see* paragraph 50 of Report for 1952) nor in the methods used for field sampling (*see* paragraphs 60-72 of Report for 1951). Crude Oil taken as royalty in kind under the terms of the old type leases also continues to be similarly evaluated and sampled.

40. The data used to evaluate crude oil for assessment on the 1934-Type leases and for sale to the Lessees on the old type leases are as follows:—

PRODUCT	AVERAGE PRICE IN B.W.I. CURRENCY PER BARREL OF 34.9726 IMPERIAL GALLONS FOR THE HALF-YEAR PERIOD ENDED			
	31st December, 1953	30th June, 1953	31st December, 1952	30th June, 1952
	\$	\$	\$	\$
Bunker C Grade Fuel ... ..	3,160,901	2,650,026	2,623,117	3,008,663
No. 2 Fuel ... ..	5,917,844	5,744,127	5,776,370	5,776,634
43-47 D.I. Gas Oil ... ..	6,029,484	5,797,056	5,776,370	5,776,634
48-52 D.I. Gas Oil ... ..	6,105,534	5,886,097	5,866,625	5,866,894
53-57 D.I. Gas Oil ... ..	6,195,236	5,972,665	5,956,881	5,957,154
70-72 Oct. M. Leaded Motor Gasolene ... ..	7,350,627	7,178,674	7,220,462	7,220,792
Average Middle Rate for sight drafts on New York premium in B.W.I. cents per \$1.00 U.S. ... ..	70.859,511	70.543,923	71.915,761	71.923,626
Value of Tetra Ethyl Lead in B.W.I. cents per millilitre ... ..	0.457,791	0.457,791	0.405,494	0.405,529

It will be noticed from the above Table that prices of all products used in the evaluation of crude rose during the second half of the year, Bunker C. Grade Fuel more than regaining the fall in price that it suffered during 1952.

41. The average value of all Crown royalty Crude Oil assessed and taken in kind, as calculated from the above data, was as follows:—

For the half-year period ended 30th June, 1952	...	...	\$3.79 per barrel
For the half-year period ended 31st December, 1952	...	...	\$3.57 per barrel
For the half-year period ended 30th June, 1953	...	...	\$3.62 per barrel
For the half-year period ended 31st December, 1953	...	...	\$3.96 per barrel

42. Total royalties (including oil taken in kind and sold to the lessees) assessed in 1953 in respect of the period 1st July, 1952 to 30th June, 1953, on crude oil and casing head petroleum spirit produced, on gas sold and for dead rent (minimum royalty on non-productive leases) amounted to \$7,019,485.98 as compared to \$6,711,615.97 assessed for the previous twelve months. This increase of \$307,870.01 is the net result of various changes in the production and value of crude oil and other items as tabulated below:—

	INCREASES			DECREASES		
	Production Bbls.	Value \$ per bbl.	Revenue \$	Production Bbls.	Value \$ per bbl.	Revenue \$
<b>CRUDE OIL :</b>						
Old-type Mining Leases	...	—	—	24,688	0.1722	217,679
1934-type Mining Leases	...	1,088,210	140,366	—	0.2927	—
<b>OTHER ITEMS :</b>						
Gas Sold	...	—	—	—	—	4,573
C.H.P.S.	...	0.0474	3,138	5,800	—	—
Dead Rents	...	—	386,618	—	—	—
<b>REVENUE TOTALS</b>	...	—	530,122	—	—	222,252
<b>BALANCE NET INCREASE...</b>						<b>\$307,870</b>

43. The following Table summarises the data relating to royalty assessment of crude oil produced on leases issued under the Land (Oil Mining) Regulations. The free-of-royalty concession is restricted to certain oil used in drilling and production operation only.

Period	BARRELS AS PER STATISTICAL RECORDS			Actual quantity valued (1) barrels	Average value per barrel \$ B.W.I.	Revenue \$ B.W.I.
	Gross Production	Free of Royalty	Net Production			
<b>1951</b>						
January-June	4,001,595	12,631	3,988,964	3,989,554	3.97.59	1,586,220.96
July-December	4,270,513	14,747	4,255,766	4,256,352	3.96.16	1,686,187.81*
<b>1952</b>						
January-June	4,369,352	16,987	4,352,365	4,352,922	3.83.56	1,669,608.60
July-December	4,771,920	17,865	4,754,255	4,754,785	3.59.49	1,709,287.83
<b>1953</b>						
January-June	4,966,620	24,445	4,942,175	4,942,699	3.61.52	1,786,874.85
July-December	5,343,848	34,304	5,309,544	5,310,040	3.98.42	2,115,625.21

\* Amended figure from 1951 Report.

#### OLD TYPE LEASES

44. Ten per cent. of the crude oil produced on these leases is taken as royalty in kind and is sold back to the lessees. Certain fuel used in drilling, producing and refining is allowed free of royalty.



The following Table shows the total sales of royalty oil by half-yearly periods for 1951, 1952 and 1953:—

Period	BARRELS AS PER STATISTICAL RECORDS			Actual quantity sold (1) barrels	Average value per barrel \$ B.W.I.	Revenue \$ B.W.I.
	Gross Production	Free of Royalty	Net Production			
<b>1951</b>						
January-June ...	4,012,983	71,677	3,941,306	394,253	3.65.63	1,441,114.80
July-December ...	3,976,915	69,130	3,907,785	390,890	3.70.83	1,449,538.10
<b>1952</b>						
January-June ...	3,739,997	69,092	3,670,905	367,196	3.69.96	1,358,475.43
July-December ...	3,763,606	82,300	3,681,306	368,244	3.48.99	1,285,151.61
<b>1953</b>						
January-June ...	3,751,105	100,734	3,650,371	365,154	3.57.43	1,305,182.61
July-December ...	3,684,864	95,379	3,589,485	359,063	3.89.52	1,398,627.45

FOOTNOTE: (1) Royalty oil sold on old-type leases or valued for royalty on the 1934 type leases is calculated at 34.9726 Imperial gallons per barrel.

Statistical volumes of gross production F.O.R. &c., include some volumes reported at 34.973 Imperial Gallons per barrel and some at 35 Imperial Gallons per barrel.

Note : Details of sales, prices and analyses of Government royalty crude sold back to the lessees are shown in Table X.

45. In addition to the above royalties on crude oil, the following Table shows the amounts assessed on natural gas sold, casing head petroleum spirit recovered and minimum royalties paid on leases with small or no production:—

Period	NATURAL GAS SOLD		C.H.P.S. RECOVERY		Minimum Royalties \$
	Volume (M.C. Ft.)	Royalty \$	Volume (Imp. Gals.)	Royalty \$	
<i>Old Type Leases :</i>					
<b>1951</b>					
January-June ...	16,224	331.08	183,444	2,035.30	2,034.24
July-December ...	43,619	876.98	167,391	2,373.76	1,998.96
<b>1952</b>					
January-June ...	37,256	745.12	171,462	2,568.36	2,000.40
July-December ...	50,264	1,005.28	79,633	1,646.27	2,047.20
<b>1953</b>					
January-June ...	66,218	1,324.36	16,577	3,402.69	2,205.60
July-December ...	142,618	2,852.36	44,520	9,357.34	2,263.20
<i>1934 Type Leases :</i>					
<b>1951</b>					
January-June ...	1,540,138	44,635.14	1,992,245	36,687.20	201,351.69
July-December ...	1,680,436	49,300.82	2,059,424	38,005.63	185,984.42*
<b>1952</b>					
January-June ...	1,271,405	34,501.54	2,163,933	42,700.01	186,750.03
July-December ...	1,493,192	40,834.37	2,147,243	42,359.42	456,662.40**
<b>1953</b>					
January-June ...	1,485,859	37,686.70	2,115,760	41,377.99	302,436.80
July-December ...	2,011,035	40,655.72	2,366,602	47,489.47	298,786.96

\* Amended from 1951 Report.

\*\* Amended from 1952 Report.

46. The total royalty assessed during 1953 in respect of the two half-yearly royalty periods ended respectively on 31st December, 1952, and 30th June, 1953, was \$7,019,485.98 being the sum of the separate items of revenue shown for those two periods in the preceding three tables. The amount collected by the Accountant General during the year in respect of royalties was \$7,029,255.42, the reconciliation between the two figures being as follows:—

Amount collected by the Accountant General ...		\$7,029,255.42
<i>Less :</i>		
Minimum Rentals paid in advance:—		
Trinidad Leaseholds Limited ...	\$100,070.53	
Trinidad Petroleum Development Co., Ltd. ...	23,800.00	
Amount overpaid on Mining Lease—		
Reg. No. 4286/37 ...	30.04	
Amount paid on Mining Lease 3478/45 ...	2,688.55	
Amount paid on Mining Lease 4432/37 ...	1.24	126,590.36
		<u>\$6,902,665.06</u>

	Brought forward	...	\$6,902,665.06
<i>Add:</i>			
Amount due on Mining Lease 2039/53	...	\$ 60.94	
Amount due on Mining Lease 3478/45	...	6,862.36	
Amount due on Mining Lease 6353/53	...	7,900.00	
Minimum Rentals paid in advance (in 1952)—			
Trinidad Leaseholds Limited	...	99,178.55	
Trinidad Petroleum Development Co., Ltd.	...	2,819.07	116,820.92
Amount assessed	...		<u>\$7,019,485.98</u>

#### LOCAL SALES OF PETROLEUM PRODUCTS

47. There was no change in the local retail price of either gasoline or kerosene during the year, which remained at 43 cents per Imperial Gallon and 26 cents per Imperial Gallon respectively. Increases in the marketing expenses of both products occurred. These were due to increases in wage rates and to adjustment of salaries. There was also some fluctuation in local refinery prices which vary in accordance with Gulf Export prices. These changes were taken care of by the Stabilization Fund which stood at \$63,986.23 on the 31st December, 1953.

48. Excise Duty (9 cents per imperial gallon) collected during the year on gasoline amounted to \$1,709,321; the total excisable sales being 18,992,460 gallons an increase of 9.5 per cent. compared to 1952. Local sales of kerosene (free of excise) amounted to 5,012,592 gallons an increase of 11.3 per cent. over the corresponding figure for 1952. Sales of aviation spirit (free of excise) fell by 24.4 per cent. from 3,507,278 gallons to 2,649,808 gallons in 1953. This was due to the decreased requirements of Pan-American World Airways who altered both their schedule and the type of aircraft fueling at Piarco during the year.

#### ACCIDENTS

49. During the year 68 serious accidents were reported to the Department. Two of these occurred on drilling rigs and were fatal, 33 others were on drilling or production rigs, while 33 were in other departments of the Industry.

50. The Safety Departments of the larger Companies are constantly on the watch for practices and defective equipment. Safety competitions between various departments, special instruction classes and propaganda have resulted in the accident rate of the local industry being comparable with that of the United States of America. The accident rate in the local refineries is especially satisfactory.

#### LEGISLATION

51. The Land (Oil Mining) (Amendment) Regulations, 1953, were published as a supplement to the *Royal Gazette* of 5th February, 1953. These Regulations repealed and replaced Schedule II to the Land (Oil Mining) Regulations, 1934, and describe the method of assessing the royalties payable under the terms of Crown Oil Mining Leases. The method of assessment in respect of crude oil was described in paragraph 50 of the Administration Report of this Department for 1952.

52. The Customs Amendment Ordinance 1951/53 was published early in the year and made provision for exemption from payment of customs duty on specified goods and for specified periods. The amendment contained special provisions relating to past importations. This had become necessary since it appeared that the powers conferred on the Governor in Council by section 10 of the Ordinance were inadequate to grant the type of permit to import free of customs duty which conditions in the petroleum industry had made it desirable to issue. The situation was adjusted by adding two new subsections to section 49 of the Customs Ordinance. Subsection 49B (a) legalised permits already issued but provided that their effectiveness be deemed to terminate on the 20th February, 1953: subsection 49B (b) provided that, subject to a resolution by the Legislative Council exempting any class of goods from the payment of customs duty, then any permit previously issued to import such class of goods without payment of custom duty would be deemed to be a licence to import such goods effective from the 20th February, 1953.

53. Amendment to the Schedules of import duties was made by resolution of the Legislative Council on the 20th February, 1953 (*see* Supplement to the *Royal Gazette*, Vol. 122, No. 20, dated 19th March, 1953, Government Notice No. 60). By this amendment *inter alia*, exemptions from import duties of customs were approved up to the 31st December, 1953:—

- i. in respect of crude petroleum, partly refined petroleum, petroleum products and catalyst materials imported for the purpose of refining or blending or re-export.
- ii. in respect of foreign petroleum and petroleum products imported for storage and re-export.

54. By virtue of section 49B (b) of the amending Ordinance, this resolution gave effect from the 20th February, 1953, for the unexpired portion of their respective periods and subject to their respective conditions, to the following permits which had been previously issued:—

1. To Trinidad Leaseholds Limited from the 1st January, 1949, for 25 years, licence to import crude oil and/or charging stocks and/or blending stocks for processing or for re-exporting or for its own account in such quantities as will in any particular time be necessary to maintain the refinery at full capacity.
2. To Brighton Terminal Limited from the 3rd November, 1950, for 25 years, licence to import:—
  - (a) crude and/or topped crude and/or fuel oil not exceeding 300,000 barrels per month for refining and re-export.
  - (b) 400,000 barrels per month of heavy residium for transshipment on behalf of Texas Company.
  - (c) up to 28,000 barrels per month of cutter oil (if not available locally) for blending with the above residium to reduce viscosity.

3. To United British Oilfields of Trinidad Limited from 6th March, 1951 for 10 years, licence to import such quantities of foreign crude as may from time to time become available and to re-export refined products equivalent in quality and quantity derived from the imported crude.

55. By the Aid to Pioneer Industries (Manufacture of Industrial Chemicals) Order, 1953, made by the Governor in Council under section 3 (1) of The Aid to Pioneer Industries Ordinance, 1950, the manufacture of industrial chemicals was declared to be a pioneer industry for the purposes of this Ordinance (*see* Gazette Notice No. 201 dated 10th December, 1953). This Order will be of benefit to Trinidad Leaseholds Chemicals Limited who during the year rented certain plant from Trinidad Leaseholds Limited and started making shipments to the United Kingdom of Sulphur, Naphthenic Oil Residues, Prophylene Tetramer and Di-iso-butylene.

## OIL MINING LEASES AND LICENCES

### LAND LEASES

56. Leasing activity was well maintained during 1953. Over 119,000 acres of crown oil rights being included in the thirteen (13) new principal leases and nine (9) supplemental leases registered during the year. Surrenders were quite trivial amounting to only 466 acres of which 380 acres were re-applied for. Leases were being processed at the end of the year to cover a further 92,230 acres while exploration licences had been granted, but not issued covering 73,403 acres. Nearly all crown oil rights South of the Eastern Main Road except those over land required for public purposes are now under lease or exploration licence.

### MARINE AREAS

57. Marine Licences were issued over the areas granted last year amounting to 605,561 acres. Exploitation by deviated wells from shore line locations continued during the year. United British Oilfields of Trinidad Limited commenced assembling a sub-structure at Point Fortin for the foundations of Trinidad Northern Areas' first marine well to be located about thirteen miles from Point Fortin and five miles from Soldado Rock.

The Gulf of Paria Mixed Boundary Commission met in Port-of-Spain twice during the year. The Venezuelan delegates, Drs. V. Lopez, E. Duarte and Rohl being guests of the Trinidad Government on both occasions.

During the first visit extending from April 7th-15th the location and erection of certain survey marks on the Venezuelan coast was decided upon and arrangements were finalised for the British delegation to undertake the work of clearing the sites and erecting these marks. This work was commenced during May and completed in November. Two survey monuments being placed in elevated positions on the Paria Peninsula and three at High Water Mark along the coast south-east of Padernales.

The Commission met again from December 9th-17th when they completed their work and signed reports for submission to their respective Governments. The United British Oilfields of Trinidad Limited very kindly arranged a flight in their private aeroplane for three members of the Mixed Commission in order that the survey marks might be inspected from the air. On the occasion of both visits of the Venezuelan Delegates, the Trinidad Government had the pleasure of entertaining Dr. Luis Cordero who represented the Venezuelan Ministry for Mines and Hydrocarbons.

58. A summary of leasing activity during the year is shown in the following paragraph, and is followed by details of individual leases and licences issued, surrendered and outstanding. Changes in Companies holdings are shown in Table VIII.

59. Summary of leasing activity during 1953:—

	No. of Leases or Licences	CROWN OIL RIGHTS—ACREAGE					
		Private Surface			Crown Surface		
		A.	R.	P.	A.	R.	P.
Principal Leases at 31st December, 1952	96	75,185	3	06½	160,892	3	14
Principal Leases issued during 1953	13	14,197	2	07	100,662	2	29
Supplemental leases issued during 1953	—	4,557	2	05	259	2	31
	109	93,940	3	18½	261,815	0	34
Surrendered during 1953	3	160	2	05	306	2	22
Principal Leases as at 31st December, 1953	106	93,780	1	13½	261,508	2	12
Exploration Licences at 31st December, 1952	1				839	2	06
Exploration Licences issued during 1953	5				24,739	1	25½
	6				25,578	3	31½
Terminated during 1953 T.N.A. 8867/51	1				839	2	06
Exploration Licences as at 31st December, 1953	5				24,739	1	25½
Submarine Licences as at 31st December, 1952	3				401,304	0	00
Submarine Licences issued during 1953	5				608,261	0	00
	8				1,009,565	0	00
Surrendered during 1953	2				18,304	0	00
Submarine Licences as at 31st December, 1953	6				991,261	0	00

60. Details of the leasing summary in the preceding paragraph are given in the following Tables:—

*Crown Oil Mining Leases Registered during 1953:—*

Mining Leases	No.	Locality	CROWN OIL RIGHTS—ACREAGE					
			Private Surface			Crown Surface		
			A.	R.	P.	A.	R.	P.
<b>(A) PRINCIPAL LEASES :—</b>								
Apex Reg. No. 1404/53 ...	—	Fyzabad ...	302	2	36	—	—	—
2039/53 ...	2	Fyzabad ...	123	2	19	258	3	00
Dominion Reg. No. 837/53 ...	1	Nariva ...	—	—	—	39,858	0	00
T.N.A. Reg. No. 11781/53 ...	—	Central Range ...	—	—	—	6,704	0	00
11890/53 ...	2	Central Range ...	12,213	3	39	268	3	04
T.L.L. Reg. No. 7228/53 ...	1	Moruga ...	289	2	34	1,505	3	39
T.P.D. Reg. No. 9307/53 ...	—	Pointe-a-Pierre ...	—	—	—	63	2	01
Reg. No. 9308/53 ...	—	Savana Grande ...	999	0	20	219	2	34
Reg. No. 9309/53 ...	—	Palo Seco ...	—	—	—	77	2	35
Reg. No. 9310/53 ...	—	Central Range ...	—	—	—	5,664	0	00
Reg. No. 9311/53 ...	—	Erin ...	157	0	15	—	—	—
Reg. No. 9810/53 ...	6	Moruga ...	111	1	04	51	1	16
U.B.O.T. Reg. No. 1403/53 ...	1	Ortoire ...	—	—	—	45,990	3	20
<b>Total</b> ...	<b>13</b>		<b>14,197</b>	<b>2</b>	<b>07</b>	<b>100,662</b>	<b>2</b>	<b>29</b>
<b>(B) SUPPLEMENTAL LEASES :—</b>								
T.L.L. Reg. No. 8640/53 ...	—	...	A.	R.	P.	A.	R.	P.
sup. to No. 4286/37 ...	—	...	16	2	30	—	—	—
Reg. No. 10463/53 ...	—	...	—	—	—	—	—	—
sup. to No. 1115/26 ...	2	...	4	3	39	—	—	—
T.P.D. Reg. No. 9306/53 ...	—	...	—	—	—	—	—	—
sup. to No. 3450/35 ...	1	...	57	3	17	10	0	03
U.B.O.T. Reg. No. 799/53 ...	—	...	—	—	—	—	—	—
sup. to No. 2412/37 ...	—	...	—	—	—	33	2	28
Reg. No. 1634/53 ...	—	...	—	—	—	—	—	—
sup. to No. 2580/38 ...	—	...	875	2	04	—	—	—
Reg. No. 3826/53 ...	—	...	—	—	—	—	—	—
sup. to No. 2580/38 ...	—	...	8	1	09	—	—	—
Reg. No. 4566/53 ...	—	...	—	—	—	—	—	—
sup. to No. 5547/38 ...	—	...	375	0	36	—	—	—
Reg. No. 4991/53 ...	—	...	—	—	—	—	—	—
sup. to No. 3942/52 ...	—	...	—	—	—	216	0	00
Reg. No. 11432/53 ...	—	...	—	—	—	—	—	—
sup. to No. 2580/38 ...	6	...	3,218	3	30	—	—	—
<b>Total</b> ...	<b>9</b>		<b>4,557</b>	<b>2</b>	<b>05</b>	<b>259</b>	<b>2</b>	<b>31</b>
<b>(C) SURRENDERED LEASES :—</b>								
Apex Reg. No. 2353/22 Lapsed ...	—	...	64	2	38	9	1	37
Reg. No. 653/27 by ...	—	...	—	—	—	—	—	—
No. 2037/53 ...	—	...	58	3	21	—	—	—
Reg. No. 421/30 by ...	—	...	—	—	—	—	—	—
No. 2038/53 ...	3	...	—	—	—	249	1	03
T.P.D. Reg. No. 4866/52 ...	—	...	—	—	—	—	—	—
(Part by 9312/53) ...	—	...	36	3	26	—	—	—
Reg. No. 6764/52 ...	—	...	—	—	—	—	—	—
(Part by 9313/53) ...	—	...	—	—	—	47	3	22
<b>Total</b> ...	<b>3</b>		<b>160</b>	<b>2</b>	<b>05</b>	<b>306</b>	<b>2</b>	<b>22</b>

*Exploration Licences issued during 1953:—*

	No.	CROWN OIL RIGHTS		
		Crown Surface		
		A.	R.	P.
Apex Reg. 3027/53 ...	1	3,752	0	19
Dominion Reg. No. 11309/53 ...	1	12,924	0	00
T.N.A. Reg. No. 11508/53 ...	1	1,788	0	37
T.P.D. Reg. No. 9326/53 ...	1	4,713	0	09½
T.L.L. Reg. No. 10459/53 ...	1	1,562	0	00
	<b>5</b>	<b>24,739</b>	<b>1</b>	<b>25½</b>
<b>TERMINATED :—</b>				
T.N.A. Reg. No. 8867/51 ...	1	839	2	06

## Submarine Licences issued during 1953:—

	No.	CROWN OIL RIGHTS		
		Crown Surface		
		A.	R.	P.
*Antilles: Reg. No. 2701/53 (includes reissue over 12544A) ...	1	15,344	0	00
*K.T.O.: Reg. No. 11551/53 ...	1	5,760	0	00
Dominion: Reg. No. 500/53 ...	1	131,000	0	00
T.N.A.: Reg. No. 1038/53 ...	1	231,157	0	00
T.P.D.: Reg. No. 6353/53 ...	1	225,000	0	00
	5	608,261	0	00
SURRENDERED :—				
Antilles: Reg. No. 2335/50 by 2702/53 ...	1	12,544	0	00
K.T.O.: Reg. No. 3490/50 by 11550/53 ...	1	5,760	0	00
	2	18,304	0	00

\* Re-issues of areas incorrectly defined in the original licences which were surrendered.

## 61. Applications for oil mining leases and licences outstanding at 31st December, 1953:—

	No.	Locality	CROWN OIL RIGHTS					
			Private Surface			Crown Surface		
			A.	R.	P.	A.	R.	P.
<b>A. Mining Leases :</b>								
<b>ANTILLES :</b>								
Reg. No. 416/54 ...	—	...	—	—	—	8,343	1	03
417/54 ...	2	...	—	—	—	10,218	1	06
<b>APEX :</b>								
L. & S. 1177/48 ...	—	Tamana ...	—	—	—	8,744	2	02
L. & S. 6/51 ...	—	do. ...	778	2	18	1,980	2	35
L. & S. 477/51 ...	3	do. ...	—	—	—	187	0	07
<b>DOMINION :</b>								
L. & S. 428/52 ...	—	Northern Basin ...	24,443	0	00	—	—	—
L. & S. 741/53 ...	—	Arima, Cunupia ...	746	0	00	—	—	—
L. & S. 108/53 ...	—	Turure and Cocal ...	1,240	3	37	—	—	—
L. & S. 555/53 ...	—	do. ...	140	2	01	—	—	—
L. & S. 590/53 ...	—	Cocal ...	19	1	35	113	1	05
L. & S. 836/53 ...	—	Cunupia and Turure ...	325	2	36	—	—	—
L. & S. 1232/53 ...	—	Charuma, Cocal and Ortoire ...	7,889	0	00	—	—	—
L. & S. 1332/53 ...	8	Cedros ...	104	3	37	80	0	00
<b>T.N.A. :</b>								
L. & S. 1209/49 ...	—	Charuma ...	—	—	—	7,602	3	21
L. & S. 808/47 ...	2	Naparima ...	—	—	—	839	2	06
<b>T.L.L. :</b>								
L. & S. 388/44 ...	—	Sangre Grande and Naparima ...	173	1	21	20	1	10
L. & S. 680/50 ...	—	Siparia ...	—	—	—	82	0	15
L. & S. 815/46 ...	—	Moruga ...	—	—	—	2,360	0	00
L. & S. 794/51 ...	—	Sangre Grande and Moruga ...	—	—	—	159	0	01
L. & S. 1058/52 ...	—	La Brea ...	16	3	34	4	1	33
L. & S. 450/53 ...	—	Moruga ...	42	3	07	67	1	34
L. & S. 1231/52 ...	—	Sangre Grande ...	35	1	16	17	2	05
L. & S. 1270/53 ...	8	Siparia and Moruga ...	95	1	20	128	1	35
<b>T.P.D. :</b>								
L. & S. 427/47 ...	—	Moruga ...	161	2	16½	—	—	—
L. & S. 322/48 ...	—	do. ...	1,350	0	32	120	1	17
L. & S. 815/51 ...	—	Montserrat and Charuma ...	—	—	—	20	0	03
L. & S. 789/51 ...	—	La Brea ...	—	—	—	46	1	39
L. & S. 1215/52 ...	—	Moruga ...	10	0	00	—	—	—
L. & S. 54/53 ...	—	Cedros ...	363	0	26	66	0	37
L. & S. 1045/49 ...	7	Central Range ...	29	2	05	—	—	—
<b>U.B.O.T. :</b>								
Reg. No. 286/54 ...	—	Ortoire ...	118	2	36	2,323	1	04
L. & S. 1184/49 ...	—	do. ...	—	—	—	2,880	0	00
Reg. No. 419/54 ...	3	Nariva ...	—	—	—	5,804	1	19
	33		38,085	1	17	52,209	2	17

	No.	Locality	CROWN OIL RIGHTS								
			Private Surface			Crown Surface					
			A.	R.	P.	A.	R.	P.			
<b>B. Supplemental Leases :</b>											
K.T.O. :											
L. & S.: 431/53	...	1	La Brea	...	...	8	0	23	1	0	23
DOMINION :											
L. & S.: 1332/53	...	1	Cocal	...	...	80	0	00	—	—	—
T.L.L. :											
L. & S.: 663/53	...	—	Sangre Grande	...	...	16	1	10	—	—	—
L. & S.: 1288/52	...	2	do.	...	...	—	—	—	3	1	26
T.P.D. :											
L. & S.: 1046/49	...	—	Siparia	...	...	11	3	34	31	3	35
L. & S.: 1200/53	...	2	Mairao	...	...	—	—	—	25	0	13
U.B.O.T. :											
L. & S.: 976/51	...	—	Otroire	...	...	—	—	—	24	2	36
L. & S.: 916/43	...	—	do.	...	...	—	—	—	569	1	34
L. & S.: 882/52	...	—	Cocal and Charuma	...	...	—	—	—	499	3	28
Reg. No. 418/54	...	—	Cocal	...	...	52	03	03	59	1	07
L. & S.: 61/53	...	—	Ortoire	...	...	—	—	—	300	0	00
L. & S.: 557/53	...	—	Nariya	...	...	—	—	—	42	0	00
L. & S.: 1236/53	...	—	Cocal and Charuma	...	...	—	—	—	82	1	22
L. & S.: 1207/53	...	8	do.	...	...	—	—	—	144	2	37
		14				169	0	30	1,784	0	21
<b>C. Exploration Licences :</b>											
APEX											
L. & S.: 950/51	...	1	Cedros and La Brea	...	...	—	—	—	461	0	00
DOMINION :											
L. & S.: 206/52	...	—	Northern Basin	...	...	—	—	—	64,031	0	00
L. & S.: 103/52	...	—	Cedros	...	...	—	—	—	1,708	3	12
L. & S.: 1219/52	...	—	Charuma, Cocal and Ortoire	...	...	—	—	—	5,456	0	00
L. & S.: 522/53	...	—	Montserrat	...	...	—	—	—	1,307	2	22
L. & S.: 907/53	...	5	St. Ann's	...	...	—	—	—	439	0	00
		6							73,403	1	34
<b>D. Marine Licences :</b>											
L. & S.: 9/52	...	—	P.O.S. Harbour	...	...	—	—	—	24,960	0	00
L. & S.: 967/53	...	—	South of Cedros	...	...	—	—	—	6,652	0	00
L. & S.: 9/52	...	3	On Treaty Boundary	...	...	—	—	—	9,000	0	00
T.P.D. :											
L. & S.: 1113/45	...	1	On Treaty Boundary	...	...	—	—	—	8,975	0	00
M.P. 65916	...	1	On Treaty Boundary	...	...	—	—	—	4,010	0	00
		5							53,597	0	00
<b>TOTAL OF ALL OUTSTANDING APPLICATIONS</b>											
		58				38,254	2	07	180,994	0	32

## 62. SUMMARY OF ALL LEASED OIL AREAS

<i>Crown Oil Rights :</i>	A.	R.	P.
Principal Leases issued as at 31st December, 1953 (Crown Surface) ...	261,508	2	12
Principal Leases issued as at 31st December, 1953 (Private Surface) ...	93,780	1	13½
Principal Leases granted but not issued prior to 31st December, 1953 (Crown Surface) ...	180,994	0	32
Principal Leases granted but not issued prior to 31st December, 1953 (Private Surface) ...	38,254	2	07
Exploration Licences issued as at 31st December, 1953 ...	24,739	1	25½
Marine Licences issued as at 31st December, 1953 ...	991,261	0	00
<i>Private Oil Rights :</i>			
Private oil rights under lease as at 31st December, 1953 ...	130,856	1	24
Total acreage of oil lands ...	1,721,394	1	34

## STAFF

63. In order to improve the efficiency of the Department all clerical work was centralised in the Port-of-Spain Office as from the 1st October, 1953, together with the technical records formerly kept at San Fernando. A small office is still maintained in San Fernando for the convenience of the technical staff of the Department.

The staff of the Department at 31st December, 1953, was as follows :—

W. N. FOSTER	...	...	Petroleum Technologist
I. S. RUTHERFORD	...	...	Assistant Petroleum Technologist
J. BURSLEM	...	...	2nd Assistant Petroleum Technologist
J. D. BACK	...	...	Inspecting Officer
G. M. COOLMAN	...	...	Chief Draughtsman
W. M. SAMLALSINGH	...	...	Senior Clerk
P. B. RAMROOP	...	...	1st Class Clerk
I. R. PHILLIPS	...	...	2nd Class Clerk
G. E. MOSE	...	...	2nd Class Clerk
J. CHARLES	...	...	2nd Class Clerk
E. A. MAULE	...	...	Stenographer
E. DOUGLAS	...	...	Messenger, Grade II
VACANT	...	...	Principal Officer
VACANT	...	...	Geologist

I have much pleasure in recording the very able and willing assistance I have received from the members of the staff.

W. N. FOSTER  
*Petroleum Technologist*

TABLE 1.  
ANNUAL STATISTICS OF PRODUCTION, DRILLING, EXPORTS AND IMPORTS

ITEM	Unit	1953	% difference 1953/52	1952	1951	1950	1949	1948	1947	1946	1945
<b>PRODUCTION</b>											
1 Crude Oil	1,000's bbls.	22,346	+ 5.1	21,258	20,843	20,632	20,617	20,107	20,433	20,142	21,000
2 Natural Gasoline	do.	264	+ 29.4	204	201	185	168	182	181	187	182
3 TOTAL CRUDE OIL AND NATURAL GAS	do.	22,610	+ 5.3	21,462	21,044	20,817	20,785	20,239	20,614	20,329	21,182
4 From Crown Oil rights	do.	17,899	+ 6.7	16,782	16,397	16,300	16,288	15,309	15,373	15,541	16,373
5 From Private Oil rights	do.	4,711	+ 0.7	4,680	4,647	4,517	4,497	4,980	5,241	4,788	4,304
6 TOTAL IMPORTS	1,000's bbls.	16,860	— 1.0	17,028	16,347	11,258	11,678	8,882	5,917	2,933	3,394
7 Imports of Refined Products	do.	21	— 34.4	32	36	23	25	22	21	40	409
8 Imports of Crude Oil for Refining	do.	16,896	— 0.2	16,722	15,855	11,214	11,333	8,840	5,896	2,893	2,119
9 Imports of Other Oils for Refining & Blending	do.	143	— 47.8	274	456	21	320	20	—	—	866
10 TOTAL EXPORTS	1,000's bbls.	36,220	+ 4.1	34,778	34,359	29,150	29,745	26,552	23,092	20,687	20,723
11 Exports of Crude Oil	do.	1,999	+ 8.4	1,844	1,918	2,194	2,037	1,706	881	263	—
12 Exports of Refined Products	do.	34,221	+ 3.9	32,934	32,441	26,956	27,708	24,846	22,211	20,424	20,723
13 Refinery Throughput (Crude and Natural Gas)	1,000's bbls.	37,446	+ 3.9	36,041	35,160	29,813	29,617	27,074	25,281	22,713	23,170
14 No. of Wells started	As stated	223	+ 19.3	187	144	149	146	145	162	124	110
15 TOTAL NUMBER OF DRILLING WELLS COMPLETED	As stated	224	+ 23.1	182	140	144	144	141	157	108	100
16 Number of drilling Wells completed as oil wells	do.	211	+ 19.2	177	131	136	130	134	141	104	95
17 Number of drilling Wells abandoned while drilling (Dry holes, &c.)	do.	13	+ 160.0	5	9	8	14	7	16	4	5
18 TOTAL FOOTAGE DRILLED (ALL WELLS)	Feet	917,894	+ 24.6	736,535	664,887	659,565	630,209	638,681	644,689	533,209	453,372
19 Footage drilled on Crown Oil Rights	do.	733,401	+ 26.9	573,031	521,751	524,374	451,624	489,987	446,798	406,017	345,071
20 Footage drilled on Private Oil Rights	do.	164,493	+ 3.8	158,504	143,136	135,191	178,585	148,694	197,891	127,192	108,301
21 Average depth of Completed Drilling Wells (Item 15)	Feet	4,206	— 1.9	4,286	4,481	4,436	4,065	4,259	4,155	4,772	4,586
22 TOTAL NUMBER OF WELLS PRODUCING (average during year)	As stated	2,536	+ 5.4	2,407	2,280	2,197	2,089	2,015	1,876	1,820	1,735
23 Number of Wells producing by flowing (average during year)	do.	639	+ 7.6	594	584	594	616	629	625	615	634
24 Number of Wells producing by Artificial Lift (average during year)	do.	1,897	+ 4.6	1,813	1,696	1,603	1,473	1,384	1,251	1,205	1,101
25 AVERAGE DAILY PRODUCTION DURING YEAR PER PRODUCING WELL	Barrels	24.1	0.0	24.1	25.1	25.7	27.0	27.3	30.0	30.4	33.3
26 Average daily production during year per flowing well	Barrels	49.8	+ 5.3	47.3	48.5	50.2	51.9	50.7	54.2	55.0	59.5
27 Average daily production during year per artificial well	do.	15.5	— 6.6	16.6	17.0	16.6	16.6	16.7	17.8	17.9	18.2
28 TOTAL VALUE OF DOMESTIC EXPORTS	000\$	251,258	+ 12.5	223,331	207,584	167,562	131,790	127,105	82,262	57,572	54,815
29 TOTAL VALUE OF PETROLEUM AND ITS PRODUCTS	do.	194,359	+ 10.8	175,480	161,859	129,183	99,166	96,287	63,050	48,046	44,685
30 TOTAL VALUE OF ASPHALT AND ITS PRODUCTS	do.	4,103	— 31.4	5,981	3,989	2,669	3,011	2,946	1,773	1,739	477
31 TOTAL NATURAL GAS PRODUCED	Millions of Cubic feet	34,597	+ 9.8	31,503	31,725	32,312	32,287	30,697	29,618	27,169	27,503
32 Used as Fuel	do.	17,677	+ 4.8	16,870	16,616	16,771	17,270	16,430	14,371	14,190	13,882
33 Replaced in Formation	do.	2,532	— 9.1	2,786	2,590	2,674	2,387	1,241	902	807	96
34 Losses, Not Collected, Vented, &c.	do.	14,388	+ 21.4	11,847	12,519	12,867	12,630	13,026	14,345	12,172	13,525



TABLE II—MONTHLY ANALYSIS OF DRILLING WELLS FOR THE YEAR 1953

MONTH	Average No. of Rigs Running	No. of New Wells Started	No. of Old Wells Abandoned	No. of Oil Wells Recompleted	DRILLING WELLS COMPLETED						MONTHLY FOOTAGE DRILLED			Average Footage drilled per day
					Completed as Oil Wells		Abandoned while drilling				Crown Oil Rights	Private Oil Rights	Total	
					No.	Aggregate Depth in Feet	Dry Holes		Technical Causes					
							No.	Aggregate Depth in Feet	No.	Aggregate Depth in Feet	No.	Aggregate Depth in Feet		
JANUARY	26	16	3	12	17	73,253	1	3,500	—	—	52,551	12,111	64,662	2,086
FEBRUARY	26	15	6	9	15	58,376	—	—	—	—	53,235	6,596	59,831	2,137
MARCH	26	20	8	13	19	83,330	3	10,684	—	—	65,160	18,348	83,508	2,694
APRIL	28	19	5	9	14	57,719	1	3,456	—	—	56,061	15,516	71,577	2,386
MAY	28	15	1	13	17	69,746	—	—	—	—	62,234	10,434	72,668	2,344
JUNE	26	20	3	6	13	58,376	1	6,936	—	—	56,922	17,527	74,449	2,482
JULY	28	15	4	9	12	48,746	1	4,600	—	—	63,154	15,404	78,558	2,534
AUGUST	28	22	0	20	20	81,508	1	5,532	—	—	72,228	10,401	82,629	2,665
SEPTEMBER	27	17	2	16	23	99,110	—	—	—	—	68,114	10,376	78,490	2,616
OCTOBER	27	22	6	19	23	95,671	2	5,003	—	—	67,628	18,489	86,117	2,778
NOVEMBER	27	21	3	10	17	72,554	—	—	—	—	73,045	11,408	84,453	2,815
DECEMBER	26	21	4	16	21	81,406	3	22,624	—	—	63,069	17,883	80,952	2,611
TOTALS AND AVERAGES	Average 27	223	45	152	211	879,795	13	62,335	—	—	753,401	164,493	917,894	Average 2,515

Average depth of drilling wells completed = 4,206 feet.

TABLE III

ANALYSIS OF MONTHLY PRODUCTION FOR THE YEAR ENDED 31ST DECEMBER, 1953

All crude oil quantity figures are for dry oil—1 Barrel (bbl.)=34.9726 Imperial Gallons

MONTH	FLOWING				GAS/AIR/LIFT				PUMPING				PLUNGER LIFT				OTHER METHODS				SALT WATER				No. of Wells Produced	No. of Idle Wells	Total No. of Wells Abandoned	No. of Wells Drilling at end of month	Total No. of Wells Started	Daily Average per Producing Well	Total Oil Produced Bbls.	BREAKDOWN OF TOTAL PRODUCTION								
	No. of Wells	Quantity Bbls.	% of Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% of Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% of Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% of Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% of Total Fluid Produced	Daily Average per Well	No. of Wet Wells	Quantity Bbls.	% of Total Fluid Produced	Daily Average per Well								Crown			Private					
																																Daily Average per Prod. Well	No. of Wells	Quantity Produced Bbls.	Daily Average per Prod. Well	No. of Wells	Quantity Produced Bbls.			
January ...	607	932,393	50.1	49.5	121	116,256	6.2	31.0	1,448	703,735	37.8	15.7	236	105,083	5.6	14.4	60	2,576	0.3	1.4	896	403,709	17.8	14.5	2,472	1,315	966	24	4,777	24.3	1,860,043	27.5	1,713	1,459,619	17.0	759	400,424			
February ...	602	846,946	50.7	50.2	127	104,673	6.3	29.4	1,454	624,131	37.3	14.3	233	93,104	5.6	14.3	50	2,097	0.1	1.5	857	366,093	18.0	14.2	2,466	1,331	972	23	4,792	24.2	1,670,951	27.2	1,718	1,308,302	17.3	748	362,649			
March ...	634	982,841	51.9	50.0	120	115,254	6.1	31.0	1,458	687,442	36.3	15.2	233	104,503	5.5	14.5	57	2,426	0.2	1.4	977	465,697	19.7	15.4	2,502	1,305	982	22	4,811	24.4	1,892,466	27.8	1,743	1,499,839	16.7	759	392,627			
April ...	643	974,453	52.7	50.5	121	116,947	6.3	32.2	1,458	655,519	35.4	15.0	233	101,904	5.5	14.6	48	1,980	0.1	1.4	924	463,573	20.0	16.7	2,503	1,313	989	24	4,829	24.6	1,850,803	28.1	1,749	1,475,751	16.6	754	375,052			
May ...	644	991,893	51.6	49.7	122	125,948	6.6	33.3	1,481	695,662	36.2	15.2	232	105,541	5.5	14.7	55	2,020	0.1	1.2	969	453,937	19.1	15.1	2,534	1,299	990	21	4,844	24.5	1,921,064	27.9	1,760	1,523,104	16.6	774	397,960			
June ...	643	947,407	51.9	49.1	119	116,353	6.4	32.6	1,492	659,343	36.1	14.7	234	100,618	5.5	14.3	57	1,831	0.1	1.0	985	425,929	18.9	14.4	2,545	1,297	994	27	4,863	23.9	1,825,552	27.3	1,771	1,451,038	16.1	774	374,514			
Production 1st Jan. to 30th June, 1953 Totals	—	5,675,933	—	—	—	695,431	—	—	—	4,025,832	—	—	—	610,753	—	—	—	12,930	—	—	—	2,578,938	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,303,226	
July ...	643	970,134	51.7	48.7	158	118,201	6.3	24.1	1,484	678,796	36.2	14.8	245	108,493	5.8	14.3	32	1,431	—	1.4	943	431,093	18.7	21.8	2,562	1,289	999	27	4,877	23.6	1,877,055	27.0	1,727	1,489,856	15.9	785	387,199			
August ...	634	969,550	51.6	49.3	149	113,357	6.0	24.5	1,481	686,192	36.5	14.9	247	107,446	5.7	14.0	31	1,443	0.1	1.5	951	432,474	18.7	14.7	2,542	1,335	1,000	22	4,899	23.8	1,877,988	27.3	1,771	1,498,095	15.9	771	379,893			
September ...	648	963,828	52.5	49.6	133	101,627	5.5	25.5	1,492	671,040	36.5	15.0	247	100,030	5.4	13.5	33	1,400	0.1	1.4	917	431,385	19.0	15.7	2,553	1,341	1,002	20	4,916	24.0	1,837,925	27.4	1,785	1,465,557	16.2	768	372,368			
October ...	663	1,022,876	52.9	49.8	134	98,988	5.1	23.8	1,486	703,202	36.4	15.3	248	102,868	5.3	13.4	52	5,926	0.3	3.7	939	431,120	18.2	14.8	2,583	1,327	1,009	19	4,938	24.2	1,933,880	27.5	1,810	1,544,007	16.3	773	389,853			
November ...	654	1,000,567	53.9	51.0	138	92,816	4.9	22.6	1,496	671,026	35.8	14.9	247	101,973	5.4	13.8	43	9,024	0.6	7.0	994	404,422	17.7	13.6	2,578	1,350	1,012	18	4,958	24.2	1,875,406	27.6	1,808	1,496,928	18.4	770	378,478			
December ...	658	1,016,011	52.8	49.8	153	99,129	5.1	20.9	1,493	692,346	36.0	14.9	248	108,744	5.7	14.1	45	6,580	0.4	4.7	1,028	434,931	18.4	13.6	2,597	1,346	1,016	19	4,978	23.9	1,922,810	27.1	1,831	1,537,735	16.2	766	385,055			
Production 1st July to 31st Dec., 1953 Totals	—	5,942,966	—	—	—	624,118	—	—	—	4,102,602	—	—	—	629,554	—	—	—	25,804	—	—	—	2,565,425	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,292,846	
Year's Production Totals	—	11,618,899	—	—	—	1,319,549	—	—	—	8,128,434	—	—	—	1,240,307	—	—	—	38,734	—	—	—	5,144,363	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,596,072
Daily Averages	—	31,833	—	49.8	—	3,615	—	27.1	—	22,270	—	15.1	—	3,398	—	14.2	—	106	—	2.3	—	14,094	—	14.9	—	—	—	—	—	24.1	61,222	27.5	—	48,630	16.4	—	—	—	12,592	
Average during year	639	—	52.0	—	133	—	5.9	—	1,477	—	36.4	—	240	—	5.5	—	47	—	0.2	—	948	—	18.7	—	2,536	1321	—	—	—	—	—	—	—	1,770	—	—	—	—	—	—

## Natural Gasoline Production—1953

	Barrels
From Crown Oil Rights ...	149,338
From Private Oil Rights ...	114,814
<b>Total</b> ...	<b>264,152</b>

I. S. RUTHERFORD  
Assistant Petroleum Technologist

TABLE IIIA  
ANALYSIS OF PRODUCTION FOR 1953 BY OPERATING COMPANIES  
(All crude oil quantity figures are for dry oil)

NAME OF COMPANY	FLOWING		GAS/AIR LIFT		PUMPING		PLUNGER LIFT		OTHER METHODS		SALT WATER				Average No. of Wells Produced	Daily Average per Producing Well	Total Oil Produced Barrels	PRODUCTION FROM CROWN OIL RIGHTS			PRODUCTION FROM PRIVATE OIL RIGHTS		
	Average No. of Wells	Quantity Barrels	Average No. of Wells	Quantity Barrels	Average No. of Wells	Quantity Barrels	Average No. of Wells	Quantity Barrels	Average No. of Wells	Quantity Barrels	Average No. of Wet Wells	Quantity Barrels	% of Total Fluid Prod.	Daily Average per Wet Well				Daily Average per producing Well	No. of Wells	Production Barrels	Daily Average per producing Well	No. of Wells	Production Barrels
* Antilles Petroleum Company of Trinidad Limited ... ..	36	941,541	19	92,440	49	152,441	—	—	7	3,586	47	10,130	0.8	0.6	111	29.4	1,190,008	172.3	13	817,660	10.4	98	372,348
Apex (Trinidad) Oilfields Limited ... ..	66	1,091,753	43	447,595	210	1,293,672	18	116,446	4	27,306	140	626,648	17.4	12.3	343	23.8	2,976,672	32.4	129	1,526,407	18.7	212	1,450,265
Golding Petroleum Company ... ..	2	4,230	—	—	—	—	—	—	—	—	—	—	—	—	2	5.8	4,230	—	—	—	5.8	2	4,230
Kern Trinidad Oilfields Limited ... ..	52	661,355	—	—	103	339,409	—	—	—	—	28	128,811	11.4	12.6	155	17.7	1,000,764	33.1	39	470,737	12.5	116	530,027
Premier Consolidated Oilfields Limited ... ..	8	2,660	—	—	175	357,239	—	—	4	788	28	117,218	24.5	10.4	187	5.3	360,687	5.2	71	133,579	5.4	115	227,108
Siparia (Trinidad) Oilfields Limited ... ..	15	233,494	—	—	46	234,360	—	—	—	—	29	197,323	29.7	18.6	61	21.0	467,854	21.0	61	467,854	—	—	—
Trinidad Central Oilfields Limited ... ..	21	711,190	1	111	127	758,806	—	—	—	67	62	406,966	21.7	18.0	148	27.2	1,470,174	27.0	149	1,470,174	—	—	—
* Trinidad Leaseholds Limited ... ..	156	3,153,480	3	14,107	487	3,026,313	—	—	—	—	366	1,585,226	20.4	11.9	646	26.3	6,193,900	25.5	596	5,556,767	34.2	51	637,133
Trinidad Petroleum Development Company Limited ... ..	108	1,767,623	20	318,390	26	70,948	220	1,095,820	—	—	74	1,051,850	24.4	38.9	375	23.8	3,252,781	23.5	345	2,965,298	26.3	30	287,483
United British Oilfields of Trinidad Limited ... ..	175	3,051,573	47	446,906	253	1,895,346	2	28,041	32	6,987	174	1,020,191	15.8	16.1	509	29.2	5,428,853	32.4	367	4,341,375	21.0	142	1,087,478
TOTAL ... ..	639	11,618,899	133	1,319,549	1,477	8,128,434	240	1,240,307	47	38,734	948	5,144,363	18.7	14.9	2,536	24.1	22,345,923	27.5	1,770	17,749,851	16.4	766	4,596,072

Natural Gasoline Production—1953

COMPANY	CROWN OIL RIGHTS	PRIVATE OIL RIGHTS	TOTAL
	Barrels	Barrels	Barrels
Apex (Trinidad) Oilfields Limited ... ..	46,991	70,017	117,008
Trinidad Leaseholds Limited ... ..	17,470	36,173	53,643
Trinidad Petroleum Development Company Limited ... ..	84,877	8,624	93,501
TOTAL ... ..	149,338	114,814	264,152

TABLE IV  
 PRODUCTION AND DISPOSAL OF NATURAL GAS  
 (All figures in thousands of cubic feet)

1953	GAS PRODUCTION		GAS DISPOSAL				
	Gas Production	Inter Company Sales and Transfers	Used as Fuel	Replaced in formation	Losses and unaccounted for	Not collected	Vented as surplus
January ...	2,770,642	952,956	1,443,458	223,541	268,142	529,632	305,869
February ...	2,555,989	861,711	1,266,417	209,646	235,555	476,739	347,632
March ...	2,889,887	1,036,216	1,489,452	215,367	265,679	573,893	345,496
April ...	2,886,888	1,032,467	1,428,678	197,610	309,175	555,209	396,216
May ...	2,977,616	1,019,021	1,404,884	231,343	299,514	535,886	505,989
June ...	2,864,017	1,049,140	1,457,717	206,132	291,684	501,990	406,494
July ...	2,953,676	1,074,413	1,537,614	194,277	264,809	552,211	404,765
August ...	2,947,963	1,086,141	1,529,786	182,958	293,509	514,763	426,947
September ...	2,853,756	1,062,374	1,502,235	202,677	227,556	473,151	448,137
October ...	2,971,860	1,121,014	1,526,403	194,169	221,899	504,318	525,071
November ...	2,919,705	1,071,407	1,525,617	218,535	244,050	480,418	451,085
December ...	3,024,615	1,116,005	1,564,802	256,184	204,176	491,409	508,044
TOTALS ...	34,596,614	12,482,865	17,677,063	2,532,430	3,125,748	6,189,619	5,071,745
Percentage of Total ...	100	—	51.1	7.3	9.0	17.9	14.7

TABLE IVA  
 PRODUCTION AND DISPOSAL OF NATURAL GAS  
 (All figures in thousands of cubic feet).

	GAS PRODUCTION		GAS DISPOSAL				
	Gas Production	Inter Company Sales and Transfers	Used as Fuel	Replaced in formation	Losses and unaccounted for	Not collected	Vented as surplus
January ...	2,671,340	902,435	1,403,328	244,906	112,359	428,106	482,641
February ...	2,587,693	870,034	1,294,094	209,686	170,976	337,603	575,334
March ...	2,658,943	927,353	1,440,963	225,956	145,939	421,603	424,482
April ...	2,558,830	920,123	1,398,854	222,394	127,454	406,224	403,904
May ...	2,604,680	935,278	1,440,533	239,911	111,788	394,818	417,630
June ...	2,566,831	954,032	1,361,707	249,696	130,679	458,208	366,541
July ...	2,701,198	1,050,638	1,458,501	233,179	173,602	425,438	410,478
August ...	2,727,842	1,018,880	1,461,949	246,786	185,715	436,885	396,507
September ...	2,608,557	967,663	1,443,500	233,494	157,896	455,462	318,205
October ...	2,581,606	878,902	1,369,602	239,648	176,593	442,862	352,901
November ...	2,556,088	911,941	1,368,276	223,747	176,759	491,867	295,439
December ...	2,679,225	950,765	1,429,048	216,220	98,135	441,433	494,389
TOTALS ...	31,502,833	11,288,044	16,870,355	2,785,623	1,767,895	5,140,509	4,938,451
Percentage of Total ...	100	—	53.6	8.8	5.6	16.3	15.7

TABLE V  
RETURN OF PRODUCTION, STOCKS AND DISPOSAL OF PETROLEUM DURING THE YEAR ENDED 1953  
(All figures in barrels)

	Crude and Process Oils	REFINED PRODUCTS													TOTAL (All Products)
		AVIATION SPIRIT		Motor Spirit	White Spirit	Burning Oil	Vapourising Oil	Gas and Diesel Oils	Fuel Oils (All Grades)	Lub. Oil and Greases	Bitumen	Other Finished Products	Liquified Petroleum Gas	Feed or Blending Stock for Transfer	
		100 Octane	Other Grades												
1. OPENING STOCKS 1ST JANUARY, 1953 ...	1,887,239	42,102	115,324	400,290	1,000	70,200	259,983	496,852	1,255,319	19,278	45,303	43,835	74	370,520	3,120,080
2. CRUDE OIL PRODUCTION INCLUDING CASING HEAD PETROLEUM SPIRIT ...	22,610,075	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. IMPORTS: Venezuela ...	15,020,776	—	—	—	—	—	—	—	*276,503	—	—	—	—	—	276,503
Colombia ...	1,038,534	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Countries ...	779,885	—	—	—	—	—	—	—	—	20,547	—	—	—	—	20,547
TOTAL IMPORTS ...	16,839,195	—	—	—	—	—	—	—	*276,503	20,547	—	—	—	—	297,050
4. RUNS TO STILLS ...	37,446,038	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. PRODUCTION OBTAINED ...	—	407,725	1,269,978	6,837,906	2,417	781,836	3,166,135	5,347,678	16,443,084	1,303	554,217	715,694	3,524	486,089	36,017,586
6. CONSUMPTION: Trinidad and Tobago ...	50,097	—	11	565,649	1,440	146,226	17	204,049	†486,929	24,923	10,138	191,551	3,493	10,235	1,644,661
Bunkers ...	—	42,801	31,379	—	—	—	—	2,193,116	8,304,136	—	—	—	—	—	10,571,432
Refinery Fuel ...	—	—	—	—	—	—	—	—	86,753	—	—	—	—	—	86,753
TOTAL CONSUMPTION ...	50,097	42,801	31,390	565,649	1,440	146,226	17	2,397,165	8,877,818	24,923	10,138	191,551	3,493	10,235	12,302,846
7. SHIPMENTS: Sterling Areas ...	—	254,797	2,09,777	4,320,937	—	347,266	2,883,937	1,722,647	3,408,632	2,690	291,353	358,681	—	79,060	13,879,777
North America ...	1,998,507	—	—	—	—	—	—	—	1,589,818	—	—	5,859	—	351,334	1,947,011
Other American Countries ...	—	—	—	—	—	—	—	—	29,312	—	15,659	—	—	—	44,971
Western Hemisphere ...	—	66,998	100,057	1,451,793	—	169,251	—	473,220	1,879,939	—	3,114	6	—	—	4,144,378
O.E.E.C. Countries ...	—	17,971	911,826	348,471	—	86,245	277,184	692,184	1,141,024	—	110,761	73,401	—	—	3,659,067
Rest of the World ...	—	—	—	—	—	—	—	49,776	88,080	—	113,355	1,037	—	—	252,248
TOTAL SHIPMENTS ...	1,998,507	339,766	1,221,660	6,121,201	—	602,762	3,161,121	2,937,827	8,136,805	†2,690	534,242	438,984	—	430,394	23,927,452
8. CLOSING STOCKS 31ST DECEMBER, 1953 ...	1,679,435	67,260	132,252	551,346	1,977	103,048	264,980	509,538	960,283	13,515	55,140	128,994	105	415,980	3,204,418
9. BALANCE NOT SPECIFICALLY ACCOUNTED FOR ...	162,432	—	—	—	—	—	—	—	—	—	—	—	—	—	—

\* Re-exported as Bunkers.

† Includes 123,068 Barrels Flux Oil used for conditioning Lake Asphalt for export.

‡ Includes 2,116 Barrels of Lubricating Oil re-exported.

TABLE VI

STATEMENT SHOWING CONTRIBUTIONS BY THE OIL INDUSTRY TO COLONY REVENUE AND GOVERNMENT OPERATED SERVICES

Item	HEAD OR SUB-HEAD	1953	% difference 1953/52	1952	1951	1950	1949	1948	1947	1946	1945	1944
	CROWN ROYALTIES, TAXATION, &c.	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Customs ... ..	1,191,346	— 1.1	1,204,736	697,095	974,118	1,238,426	778,276	650,525	370,193	636,035	709,372
2	Excise Duty on Petroleum Spirit ... ..	141,361	+ 6.4	132,817	90,291	115,637	36,910	—	—	—	—	—
3	Land and Building Taxes ... ..	228,180	+ 101.4	113,301	100,526	101,203	84,754	145,874	150,919	167,062	120,484	130,733
4	Vehicles, Licences and Registration ... ..	118,741	+ 10.1	107,868	90,885	107,647	69,371	—	—	—	—	—
5	Taxes on Income ... ..	15,574,972	— 8.9	17,091,094	13,715,292	8,704,846	13,292,777	7,441,508	3,552,074	2,720,744	3,076,581	2,666,052
6	Reimbursements—Petroleum Department ... ..	32,644	+ 17.6	27,750	30,287	32,151	24,611	30,071	23,884	16,808	21,839	19,176
7	Earnings of Government Departments ... ..	9,436	— 46.9	17,784	10,804	10,504	5,045	1,934	2,079	1,319	555	760
8	Sundries ... ..	39,592	— 6.5	42,365	28,177	31,917	64,386	5,204	13,190	7,658	10,351	15,472
9	Royalty on Oil ... ..	7,011,584	+ 6.4	6,592,399	6,508,520	5,823,226	3,596,251	4,030,076	1,976,989	1,287,917	1,428,160	1,351,531
10	Royalty on Gas ... ..	68,255	— 19.7	85,031	99,189	81,233	74,217	—	—	—	—	—
11	Forests—Sale of Timber ... ..	68,174	+ 10.5	61,701	42,594	68,899	38,715	43,693	37,924	22,667	23,849	19,569
12	Exploration Licences ... ..	4,356	— 69.3	14,192	3,366	9,797	3,864	15,222	13,956	21,031	10,757	16,060
13	Harbour Dues on Crude Oil and Products ... ..	809,507	+ 7.4	753,598	732,802	587,516	585,901	557,040	367,345	226,055	190,480	169,513
14	SUB-TOTALS Items 1-13 ... ..	25,298,148	— 3.6	26,244,636	22,149,828	16,648,694	19,115,228	13,048,898	6,788,885	4,851,454	5,519,091	5,098,238
	VARIOUS SERVICES											
15	Wharves and Harbours (Rentals, &c.) ... ..	82,279	+ 10.4	74,499	37,029	27,182	26,350	39,027	127,194	47,767	50,533	28,259
16	Post Office ... ..	45,613	— 9.1	50,154	43,140	30,529	34,656	25,061	28,066	25,405	19,424	19,166
17	Rent of Government Property ... ..	10,320	— 3.8	10,732	9,523	5,588	11,151	4,174	5,662	49,999	2,509	1,079
18	Government Railway and Telegraph ... ..	119,097	— 28.0	165,312	151,930	137,501	115,539	101,209	110,571	107,499	77,260	62,734
19	Fees and Payments for Specific Services ... ..	35,258	+ 19.1	29,609	22,600	26,146	12,308	9,294	16,261	11,060	10,331	8,009
20	SUB-TOTAL Items 15-19 ... ..	292,567	— 11.4	330,306	264,222	226,946	200,004	178,765	287,754	241,730	160,057	119,247
21	GENERAL TOTAL ... ..	25,590,715	— 3.7	26,574,942	22,414,050	16,875,640	19,315,232	13,227,663	7,076,639	5,093,184	5,679,148	5,217,485
	A—Total Revenue of Colony and Government Operated Services ... ..	74,535,864	+ 2.1	73,013,672	65,215,814	56,038,019	58,391,567	49,593,902	42,075,147	47,776,085	34,900,299	29,158,819
	B—Percentage of 'A' contributed by the Oil Industry	34.3	— 5.8	36.4	34.4	30.1	33.1	26.6	16.8	10.7*	16.3	17.9
	C—Percentage of 'A' less Items 13, 15 and 18 con- tributed by Oil Industry ... ..	36.1	— 5.7	38.3	36.3	31.9	36.5	27.7	17.4	11.2	17.5	—
	D—Excise collected on Petroleum Products (including duty shown under Item 1 above) ... ..	1,714,221	+ 9.9	1,560,225	1,454,567	1,367,860	2,394,109	2,381,909	2,135,938	1,762,496	1,491,779	1,255,876

\* Drop in percentage of total revenue contributed by Oil Industry in 1946 was due to total revenue of Colony being increased by re-payment by His Majesty's Treasury a loan of \$9,200,000.

TABLE VII

STATEMENT SHOWING THE AMOUNT OF MONEY DISBURSED IN THE COLONY AND ON OVERSEAS PURCHASES OF MATERIALS BY THE OIL INDUSTRY

	1953	% difference 1953/52	1952	1951	1950	1949	1948	1947	1946	1945	1944
<b>MONEYS EARNED OR PAYABLE IN THE COLONY</b>											
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1. Total Contribution to Government Revenues (Item 21, Table VI) ... ..	25,590,715	— 3.7	26,574,942	22,414,050	16,875,640	19,315,232	13,227,663	7,076,639	5,093,184	5,679,148	5,217,485
2. Payments to Employees * ... ..	29,164,141	+ 17.9	24,743,598	20,918,670	18,839,945	17,081,804	16,201,000	14,701,680	13,896,842	12,781,464	12,401,298
3. Payments to Contractors * ... ..	7,439,632	— 2.2	7,604,548	7,527,758	6,125,164	4,488,089	3,543,432	2,855,917	2,369,675	2,410,418	2,871,227
4. Local Purchases of Materials ... ..	5,862,292	+ 3.5	5,662,114	4,837,764	3,946,065	4,336,776	3,929,831	4,005,478	3,494,215	3,813,021	3,955,870
5. All other local expenditure (Rents, Private Royalties, &c.)	11,527,727	— 12.0	13,095,125	10,361,590	8,456,079	7,080,430	3,817,212	3,181,947	2,619,541	2,609,726	2,273,991
6. Sub-Total ... ..	79,584,507	+ 2.5	77,680,327	66,059,832	54,242,893	52,302,331	40,719,138	31,821,661	27,473,457	27,293,777	26,719,871
<b>OVERSEAS PURCHASES OF MATERIALS (C.I.F. VALUATION)</b>											
7. Importation from the United Kingdom ... ..	23,439,951	+ 2.4	22,888,622	17,208,625	14,690,802	14,161,158	8,515,146	6,822,090	4,425,954	1,438,971	1,019,965
Canada ... ..	1,065,818	+ 15.0	927,095	944,464	724,216	516,130					
United States of America ... ..	4,329,858	— 30.4	6,217,177	3,401,644	5,469,200	7,766,696	5,690,016	4,758,800	2,322,331	5,136,245	5,085,790
Other Sources ... ..	2,032,287	+ 41.8	1,432,977	773,214	947,512	1,012,427					
8. Sub-Total ... ..	30,867,914	— 1.9	31,465,871	22,327,947	21,831,730	23,456,411	14,205,162	11,580,890	6,748,285	6,575,216	6,105,755
9. GENERAL TOTAL ... ..	110,452,421	+ 1.2	109,146,198	88,387,779	76,074,623	75,758,742	54,924,300	43,402,551	34,221,742	33,868,993	32,825,626

\* These amounts include hidden contributions to the direct revenue of the Colony in the form of Customs Duties, Income Tax, Licences, &amp;c.





TABLE IX

## IMPORTANT EXPLORATION OR OUTSTEP WELLS AND DEEP EXPLOITATION WELLS DURING 1953

COMPANY	Well No.	Total Depth Feet	Remarks	Map Reference Appendix H
Antilles Petroleum Company (Trinidad) Limited	Pointe Ligoure ... ALS-2	7,488	Deviated on to Submarine Licence ; completed in upper zone owing to mechanical difficulties in bottom hole	D-6
Apex (Trinidad) Oilfields Limited	Fyzabad ... 537	14,889 (8,677 feet included in 1952 Report)	Deepest well in the Colony ; producer from the Cruse Sands	F-6
	do. ... 539	8,598 (5,687 feet included in 1952 Report)	Producer	F-6
	do. ... 544	8,136	Producer	F-6
	do. ... 549	8,262	Closed in, awaiting repair	F-6
	do. ... 553	7,435	Drilling in progress. Objective 8,600 feet approximately	F-6
Trinidad Central Oilfields Limited	Wilson ... 54	9,930 (9,698 feet included in 1952 Report)	Producer (Joint interest with T.L. Ltd.)	H-6
	do. ... 56	10,088	Producer (Joint interest with T.L. Ltd.)	H-6
	Balata ... BC-3	6,774	Producer—now water flooded	L-4
Trinidad Leaseholds Limited	Barrackpore ... 355	1,401	Drilling in progress. Objective 11,500 feet approximately	H-5
Trinidad Northern Areas Limited	Charuma ... 1	11,522	No reservoir rock encountered. Abandoned	J-3
Trinidad Petroleum Development Company Limited	Coora ... 193	9,550 (All included in 1952 Report)	Tests on lower horizons unsuccessful. Producer from upper zone only	F-7
	do. ... 195	9,920 (5,703 feet included in 1952 Report)	Small producer	F-7
	Moruga ... 2	13,008 (All included in 1952 Report)	Abandoned without test	I-6
	do. ... 3	11,448 (10,256 feet included in 1952 Report)	Producer from upper sands only	K-6
	do. ... 10	8,418	Producer from upper zone	K-6
United British Oilfields of Trinidad Limited	P. F. Central ... FC-177	8,512	Deep Test. Producing from upper zone	D-5
	do. ... FC-180	7,300	Closed in. Tested gas from upper zone	D-6
	P. F. West ... FW-231	7,600	Suspended	D-6
	do. ... FW-238	7,887	Small producer with high G.O.R.	D-6
	Penal ... P-195	10,015 (8,407 feet included in 1952 Report)	Main objective not present. Small producer from upper zone	G-6
	do. ... P-202	9,876	Producer	G-6
	do. ... P-207	10,071	Small producer from upper zone	H-6
	do. ... P-212	9,095	Drilling in progress—Objective 9,300 feet	G-6
	Cats Hill ... CO-3	9,095 (All included in 1952 Report)	Small producer from upper zone	K-5
	do. ... CO-4	8,536 (7,879 feet included in 1952 Report)	Small producer	J-5
	Balata West ... BW-1	7,398	Abandoned	K-4

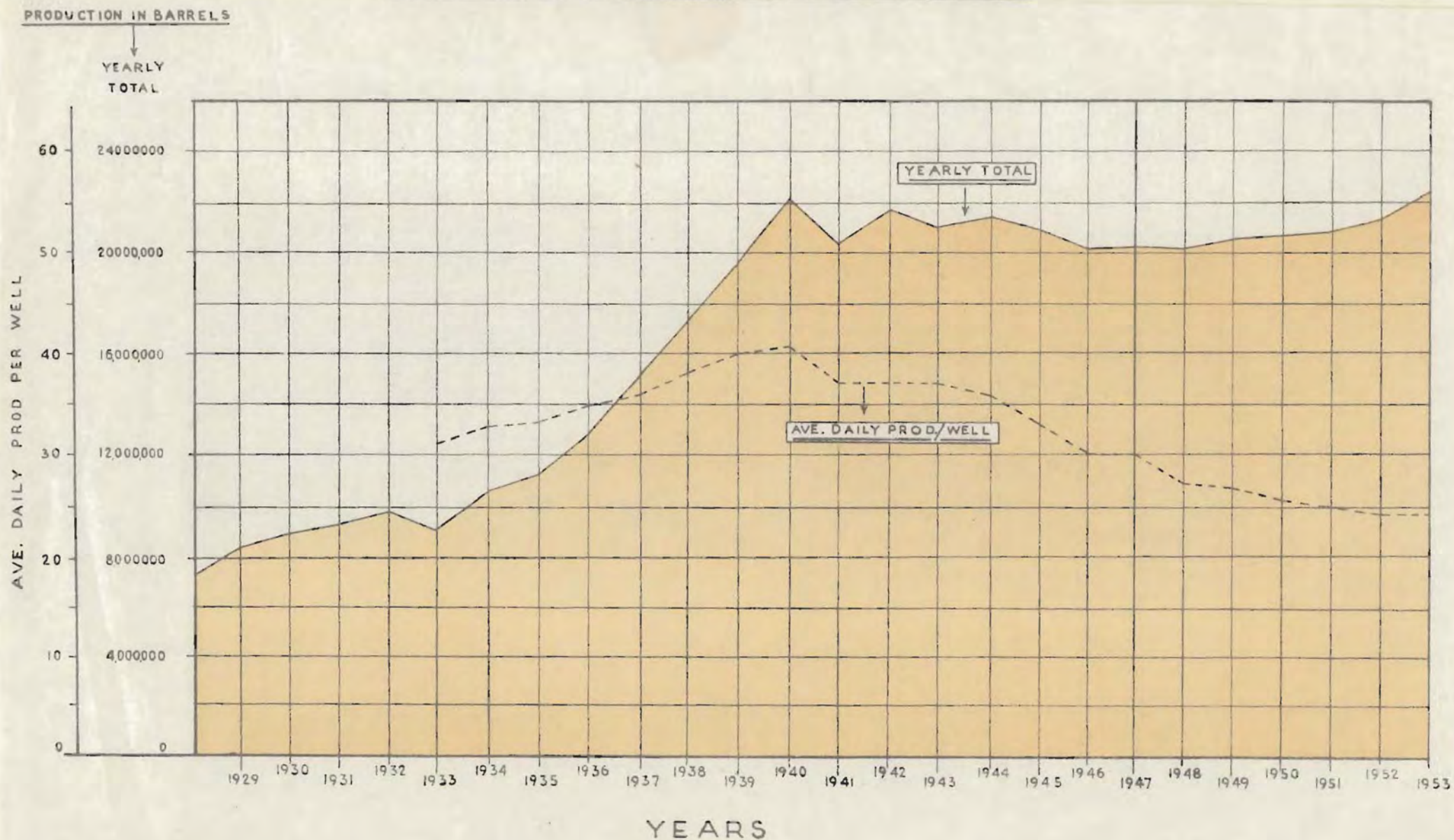
TABLE X  
SUMMARY OF OLD-TYPE MINING LEASES CRUDE OIL SALES, PRICES AND ANALYSES

1 barrel = 34.9726 Imperial Gallons (unless otherwise stated)

Half-yearly Assessment Periods		Nett Production Bbls.	ROYALTY			Sub-Division of (Royalty) Crude into Products as per R.L.E. Analyses											
			10 % taken in kind and sold to Producer Bbls.	Total Sale Price \$	Average Sale Price per Barrel \$	Light Fractions			GAS OILS				TOTAL GAS OILS		FUEL OIL		
						Quantity	Percentage	Tetra Ethyl lead to blend to 70/72 Oct. Gasoline Millilitres	53-57 D.I. Bbls.	48-52 D.I. Bbls.	43-47 D.I. Bbls.	No. 2 Fuel Bbls.	Quantity Bbls.	Percentage	Quantity Bbls.	Percentage	
1950	T.L.L. ... ..	2,300,278	230,027	855,670.07	3.72	28,405	—	435,744	—	—	4,774	59,867	64,641	—	136,981	—	
July-December	U.B.O.T. ... ..	1,614,531*	161,580	545,414.91	3.38	16,225	—	538,668	—	3,644	22,531	—	26,175	—	119,180	—	
	Apex ... ..	134,915	13,492	49,208.12	3.65	1,316	—	15,331	—	—	—	4,005	4,005	—	8,171	—	
	TOTALS AND AVERAGES	4,049,724	405,099	1,450,293.10	3.58	45,946	11.3	989,743	—	3,644	27,305	63,872	94,821	23.4	264,332	65.3	
	1951	T.L.L. ... ..	2,256,226	225,623	852,868.69	3.78	27,592	—	559,304	—	—	4,718	60,491	65,209	—	132,822	—
January-June	U.B.O.T. ... ..	1,545,204*	154,642	536,911.69	3.47	15,522	—	509,944	4,256	—	22,289	—	26,545	—	112,575	—	
	Apex ... ..	139,876	13,988	51,334.42	3.67	1,302	—	16,756	—	—	—	4,156	4,156	—	8,530	—	
	TOTALS AND AVERAGES	3,941,306	394,253	1,441,114.80	3.66	44,416	11.3	1,086,004	4,256	—	27,007	64,647	95,910	24.3	253,927	64.4	
	July-December	T.L.L. ... ..	2,314,435	231,442	893,998.66	3.86	28,457	—	607,546	—	—	4,883	61,818	66,701	—	136,284	—
January-June	U.B.O.T. ... ..	1,451,109*	145,224	502,084.35	3.46	13,778	—	394,102	3,999	—	—	21,653	25,652	—	105,794	—	
	Apex ... ..	142,241	14,224	53,455.09	3.76	1,326	—	9,470	—	—	—	4,104	4,104	—	8,794	—	
	TOTALS AND AVERAGES	3,907,785	390,890	1,449,538.10	3.71	43,561	11.1	1,011,118	3,999	—	4,883	87,575	96,457	24.7	250,872	64.2	
	1952	T.L.L. ... ..	2,214,357	221,437	855,782.95	3.86	26,486	—	416,977	—	—	5,331	57,903	63,234	—	131,717	—
January-June	U.B.O.T. ... ..	1,319,415*	132,045	450,741.22	3.41	14,915	—	382,925	—	3,488	14,012	126	17,626	—	99,504	—	
	Apex ... ..	137,133	13,714	51,951.26	3.79	1,319	—	12,452	—	—	—	3,995	3,995	—	8,400	—	
	TOTALS AND AVERAGES	3,670,905	367,196	1,358,475.43	3.70	42,720	11.6	812,354	—	3,488	19,343	62,024	84,855	23.1	239,621	65.3	
	July-December	T.L.L. ... ..	2,240,540	224,055	813,962.05	3.63	27,302	—	437,282	—	—	4,993	58,107	63,100	—	133,653	—
January-June	U.B.O.T. ... ..	1,440,766*	144,189	471,189.56	3.27	18,266	—	475,259	3,802	—	19,248	110	23,160	—	102,763	—	
	TOTALS AND AVERAGES	3,681,306	368,244	1,285,151.61	3.49	45,568	12.4	912,541	3,802	—	24,241	58,217	86,260	23.4	236,416	64.2	
	1953	T.L.L. ... ..	2,156,367	215,637	796,295.61	3.69	26,299	—	234,990	—	—	—	59,978	59,978	—	129,360	—
	January-June	U.B.O.T. ... ..	1,494,004	149,517	508,887.00	3.40	19,915	—	527,074	—	3,564	20,238	—	23,802	—	105,800	—
TOTALS AND AVERAGES		3,650,371	365,154	1,305,182.61	3.57	46,214	12.7	762,064	—	3,564	20,238	59,978	83,780	22.9	235,160	64.4	
July-December		T.L.L. ... ..	2,119,033	211,903	848,891.52	4.01	25,803	—	229,671	—	—	—	56,578	56,578	—	129,522	—
U.B.O.T. ... ..		1,470,452*	147,160	549,735.93	3.74	17,774	—	422,675	—	3,062	20,009	—	23,071	—	106,315	—	
TOTALS AND AVERAGES	3,589,485	359,063	1,398,627.45	3.90	43,577	12.1	652,346	—	3,062	20,009	56,578	79,649	22.2	235,837	65.7		

\* In these U.B.O.T. statistical figures, 1 barrel — 35 Imperial Gallons.

# ANNUAL CRUDE OIL PRODUCTION

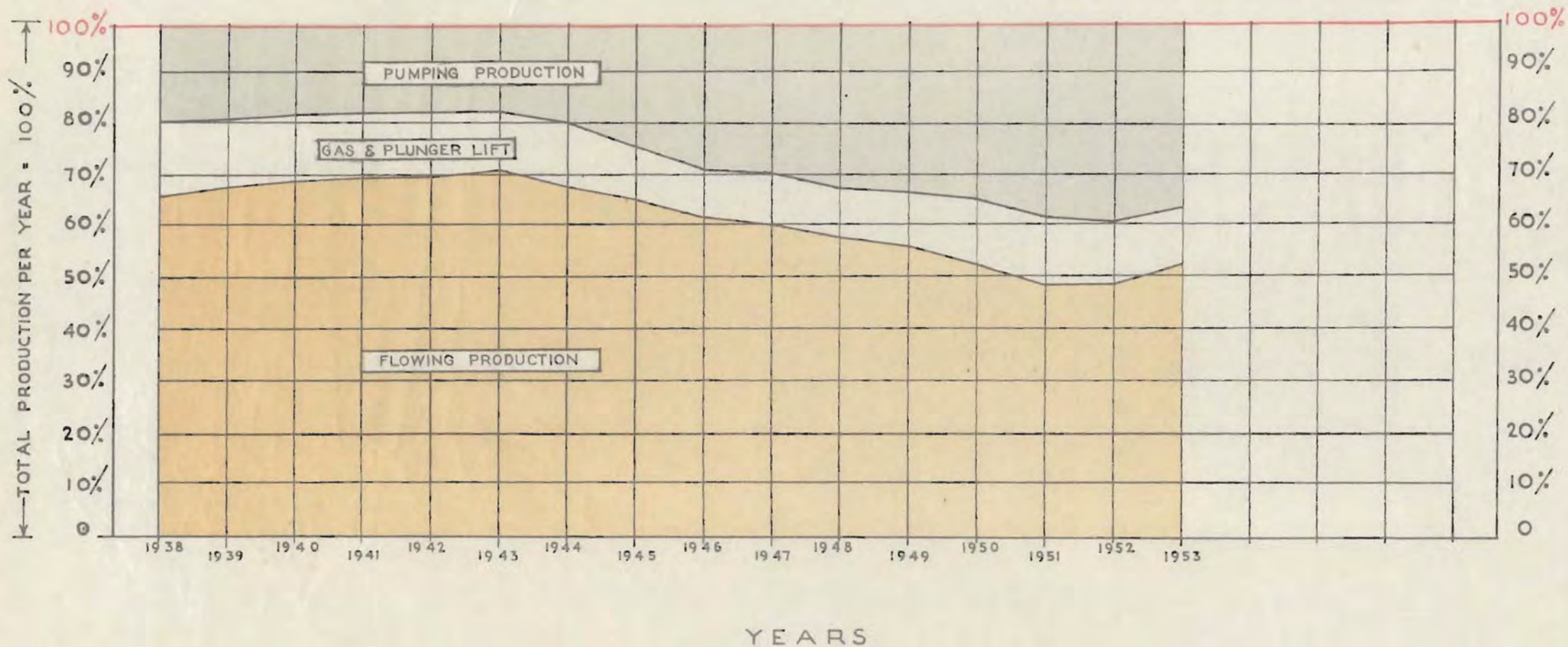


FOR FIGURES USED IN CONSTRUCTING GRAPH SEE TABLE I - ITEMS 1 AND 25 -



# CRUDE OIL PRODUCTION METHODS

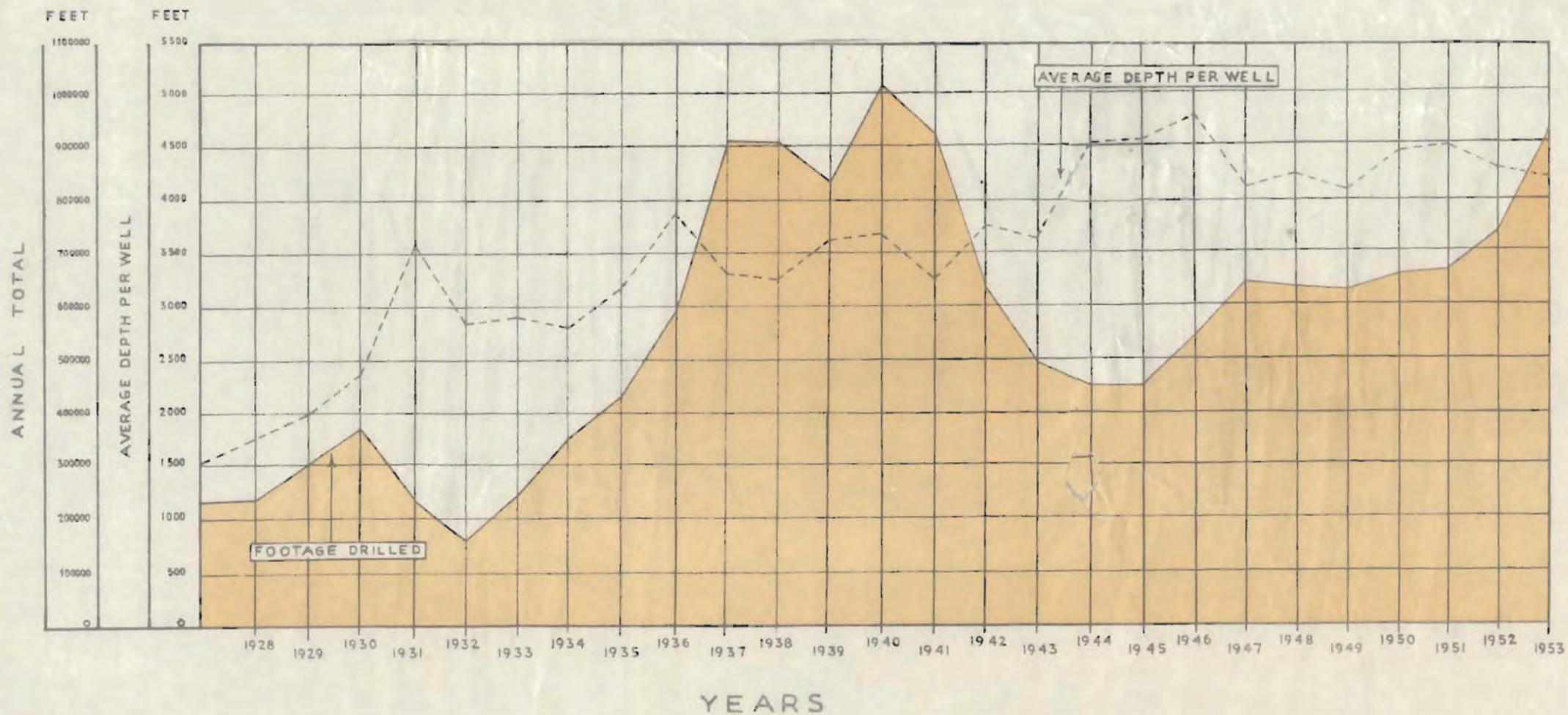
RELATIVE PROPORTIONS OF ANNUAL PRODUCTION (100%) OBTAINED BY THE THREE PRINCIPAL PRODUCING METHODS



SEE TABLE III FOR DETAILED FIGURES FOR 1953



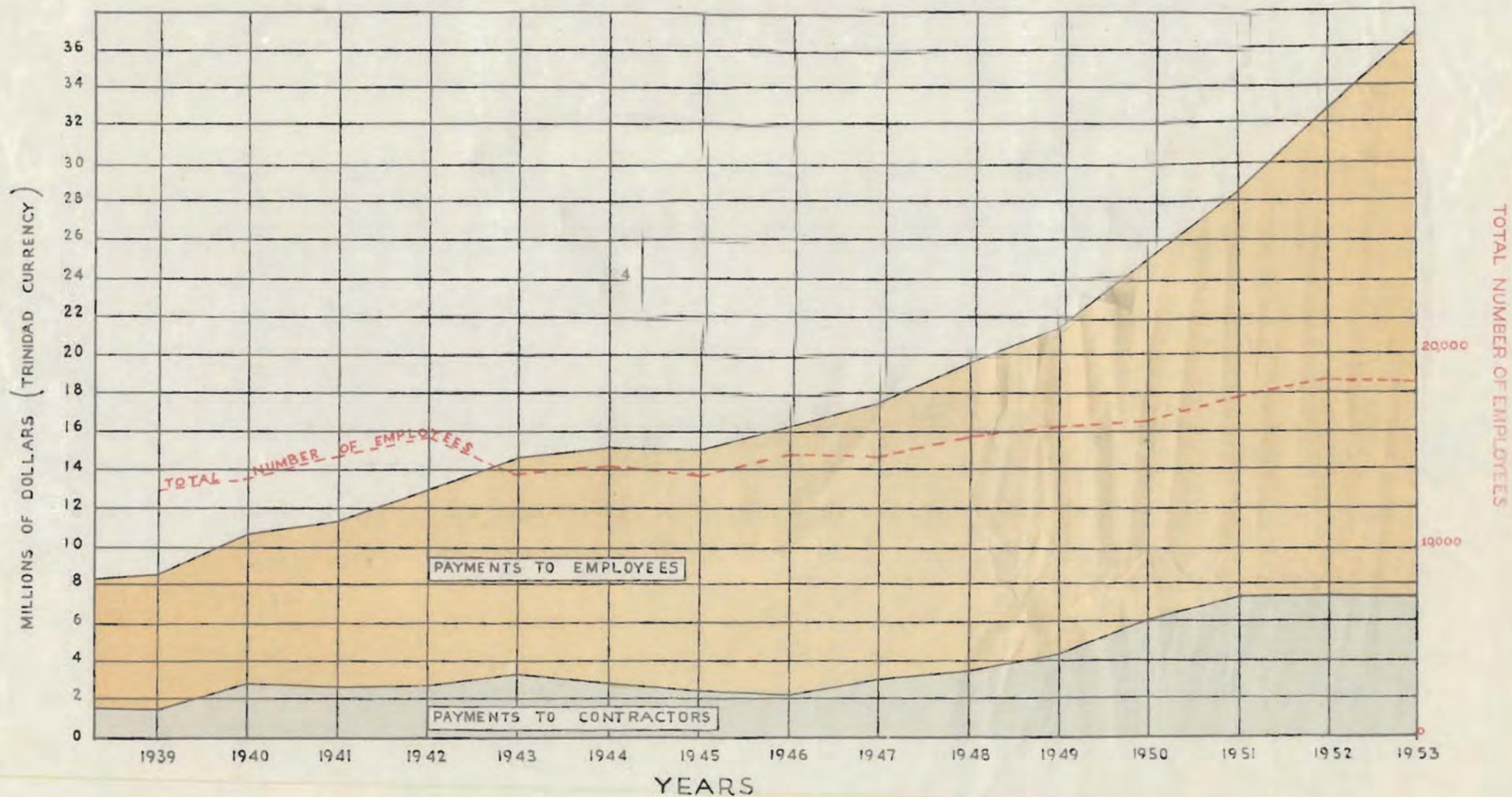
# ANNUAL DRILLING FOOTAGE



FOR FIGURES USED IN CONSTRUCTING GRAPH SEE TABLE 1 — ITEMS 18 AND 21 —



# OIL COMPANIES ANNUAL PAYMENTS TO CONTRACTORS AND EMPLOYEES

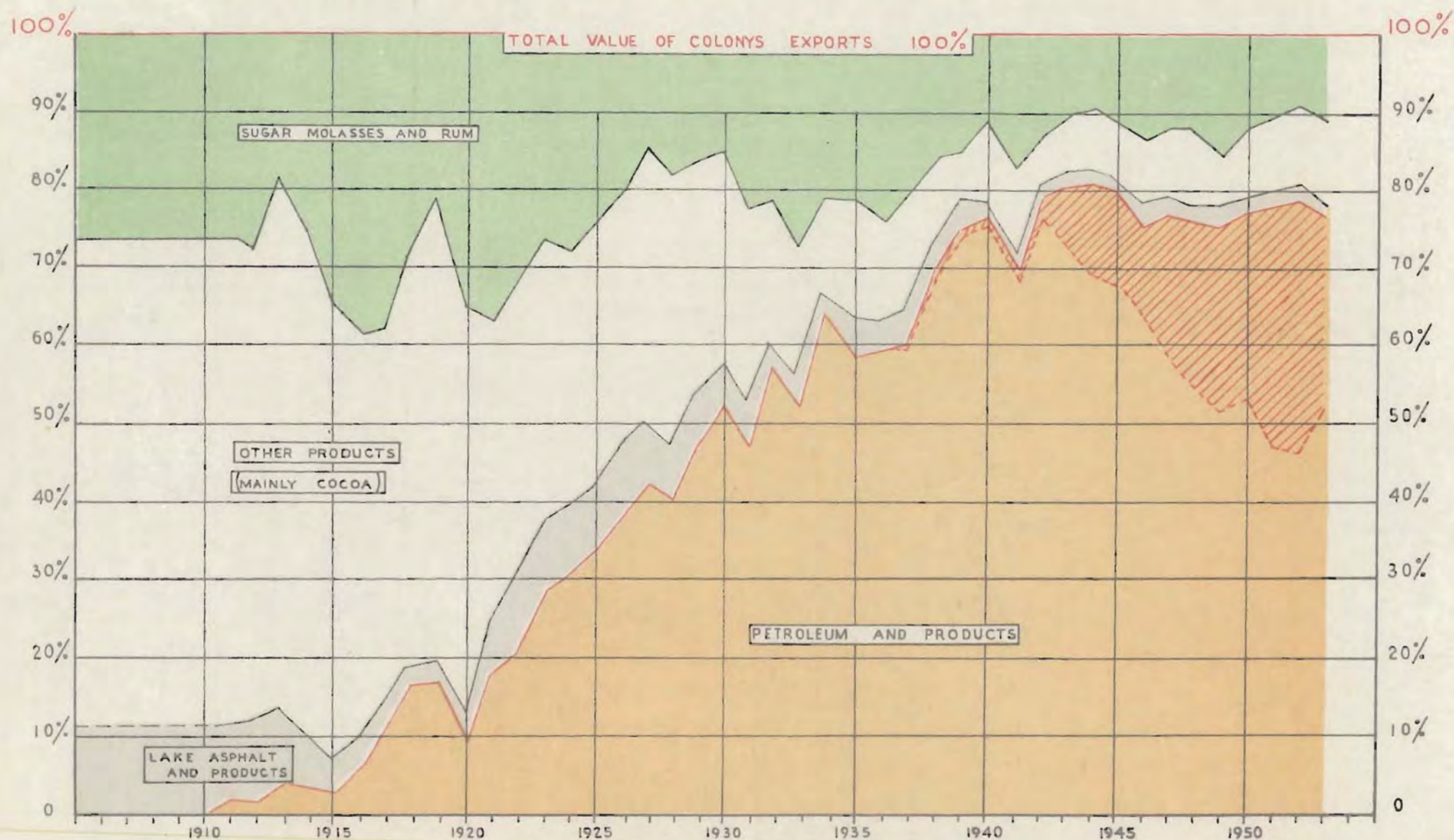


FOR FIGURES USED IN CONSTRUCTING GRAPH SEE TABLE VII ITEMS 2 AND 3

N.B. PAYMENTS TO CONTRACTORS ARE MAINLY WAGES



# PERCENTAGE DISTRIBUTION OF TOTAL VALUES OF COLONY'S EXPORTS

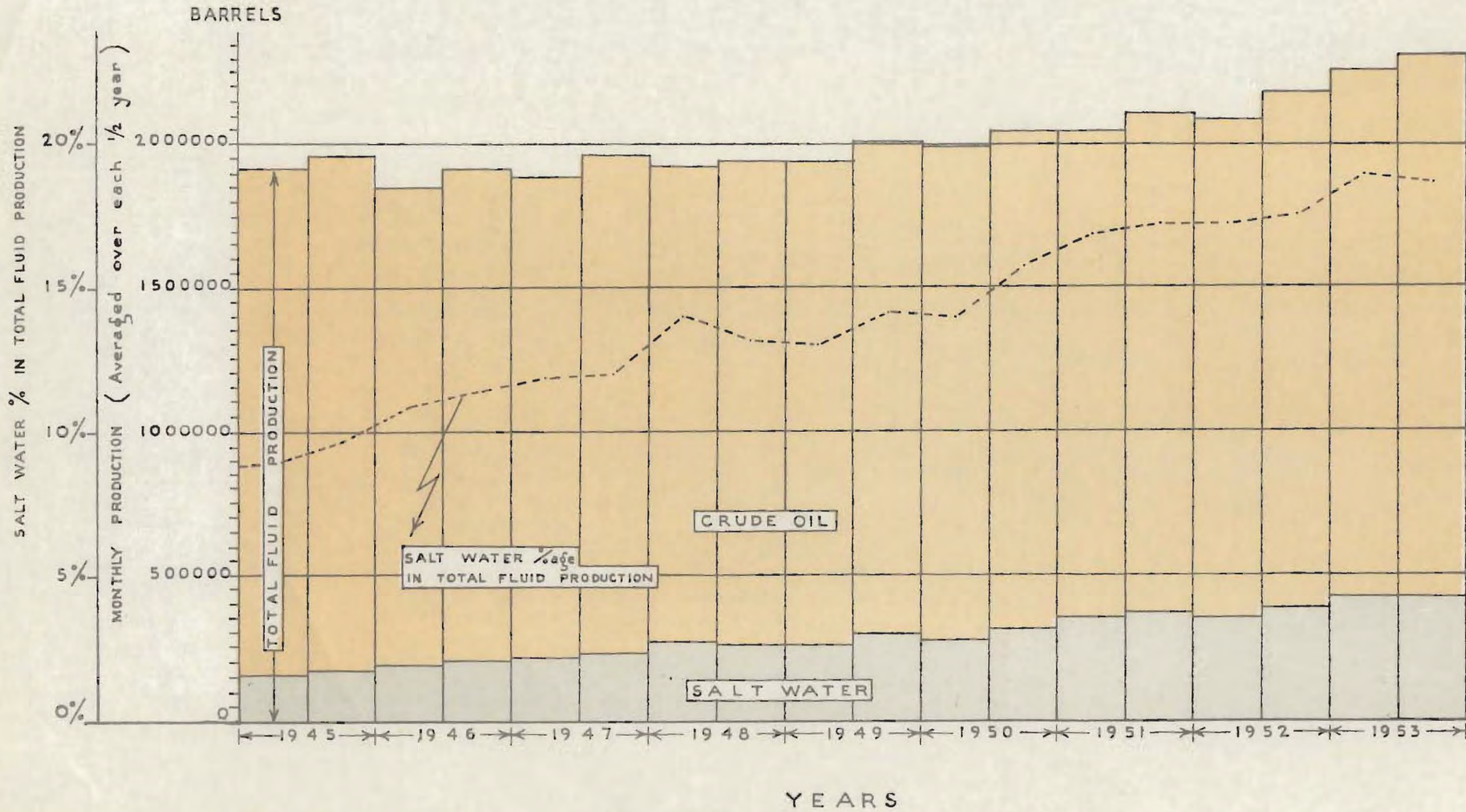


YEARS

FOR VALUES IN \$<sup>s</sup> SEE TABLE I - ITEMS 28, 29 AND 30  
 THE HATCHED AREA SHOWS THE VALUE OF IMPORTED CRUDE REFINED IN THE COLONY



# PRODUCTION OF SALT WATER



SEE TABLE III FOR 1953 FIGURES IN DETAIL



# CUMULATIVE PRODUCTION & FOOTAGE

