

**PETROLEUM DEPARTMENT**

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**ANNUAL  
ADMINISTRATION  
REPORT FOR  
THE YEAR  
1958**

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**TRINIDAD AND TOBAGO**

**PETROLEUM DEPARTMENT**



**ANNUAL**

**ADMINISTRATION**

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**THE YEAR**

**1958**

## ADMINISTRATION REPORT OF THE PETROLEUM DEPARTMENT, 1958

HONOURABLE MINISTER OF INDUSTRY, COMMERCE, TOURISM AND EXTERNAL COMMUNICATIONS,

I have the honour to submit the following report on the Oil and Asphalt Industries of the Territory for the year 1958.

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## THE OIL INDUSTRY

The year 1958 was one of considerable progress for the Oil Industry in Trinidad. For the first time in its history the average daily production exceeded 100,000 barrels per day, the total production for the year showing an increase of 9.7 per cent. compared to that for 1957. The more important statistics for the year are given in Table I with previous years shown for comparison.

2. The production of crude oil in 1958 amounted to 37.35 million barrels an increase of over 3 million barrels as compared to 1957. All companies showed increases in production with the exception of Shell and Trinidad Central Oilfields Limited both of whom produced about 10 per cent. less than in the previous year. The drop in Shell's production was temporary only and a matter of company policy while the decline in Trinidad Oilfields Limited production was due to a curtailed drilling programme, the company drilling only 2 wells during the year.

3. The greater part of increased production came from outstep drilling from existing fields but recompletions and the twenty-five secondary recovery projects in operation from the Soldado marine field showed a most satisfactory increase.

In December, 1957 marine production accounted for only 31 thousand barrels or 1 per cent. of the Island's production whereas in December, 1958 the marine areas produced 280 thousand barrels or 8 per cent. of the Island's production. In the Soldado field 11 wells were completed during the year.

4. The daily average production for all producing wells again increased being 32.6 barrels as compared to 30.6 in 1957. This was largely accounted for by new wells being somewhat more prolific than those drilled in the previous year, the average producing rate for flowing wells being 73.6 barrels per day as compared to 69.0 barrels per day in 1957. Wells on artificial lift also showed an improvement from an average of 15.0 to 15.5 barrels per day due to better performance of gas lift wells.

5. Statistics relative to crude oil will be found in Table I, items 1-5 and 22-27 while a detailed monthly analysis by production methods is given in Table III. A similar breakdown by companies appears in Table IIIA. Appendix "A" shows annual crude oil production by years while Appendix "B" shows the proportion of annual production contributed by each of the three principal methods of production. Information on secondary recovery will be found in paragraphs 32 to 35 and appended table.

6. Drilling rigs in continuous operation during the year averaged 32 as compared to 29 in 1957. Texaco maintained the largest number with 11, while Trinidad Petroleum Development had 7 rigs. Apex ran 4 strings and Shell 3 strings continuously during the year. The remaining 7 strings were operated by contractors.

7. Rig performance dropped slightly being an average of 117 feet drilled per rig per day for an annual total of 1,365,129 feet, whereas in 1957 an average of 123 feet drilled per rig per day was attained. The slight drop was due to difficulties with marine wells.

8. The average depth of completed wells, 4,604 feet, was 10 per cent. more than the average for 1957 (4,151 feet). The success ratio improved being 88 per cent., only 7.6 per cent. of all footage drilled being non-productive (12.7 per cent. in 1957). Of the 295 wells completed during the year 52 or 18 per cent. were regarded as exploratory or outstep. Of these 52 wells, 17 were "wild cats" three of which were completed as small producers. No new fields of significance were discovered during 1958.

9. The following Table shows a breakdown of drilling activities in 1958 :-

				<i>Wells completed in 1958</i>				
				<i>Oil</i>	<i>Gas</i>	<i>Dry</i>	<i>Total</i>	<i>Per Cent. Successful</i>
Exploratory Tests	(a)	Marine	...	2	—	3	5	40.0
	(b)	Land	...	27	—	20	47	57.4
Development Wells	(a)	Marine	...	12	—	—	12	100.0
	(b)	Land	...	215	—	12	227	94.7
				256	—	35	291	88.0
Suspended	...	...	...	—	—	—	3	—
Injection Well	...	...	...	—	—	—	1	—
<b>TOTAL NUMBER OF WELLS DRILLED</b>				...	...	...	295	

A monthly analysis of drilling wells will be found in Table II while the annual footage drilled by years is given in Appendix "C".

10. There was considerable activity in marine drilling during the year. The Offshore Drilling Company were operating a drilling ship for Dominion Oil Limited, using the method developed by the C.U.S.S. group of Companies in which drilling operations were conducted through a 10-foot diameter well in the centre of the ship, blowout preventers and completion fittings being located on the sea floor. Trinidad Northern Areas were drilling at Soldado from fixed steel platforms which were erected by driving piles through the hollow legs of a prefabricated steel jacket. In August, 1958 this company started drilling from a mobile Delong barge fitted with four retractable 220-foot long 10-foot diameter steel spud legs up which the entire barge can be jacked to a sufficient height above the water to be clear of waves and swells. Towards the end of the year Texaco started to drill from a platform about a mile offshore from Brighton. This was constructed from pre-stressed concrete piles and was designed to accommodate 36 wells.

#### MOVEMENT OF CRUDE OIL AND PRODUCTS

11. Details of Crude Oil movement and product disposed are given in detail in Table V. These can be summarised as follows :—

<i>Crude Oil Balance</i>			
<i>Availability</i>	<i>Million Barrels</i>	<i>Disposal</i>	<i>Million Barrels</i>
Stock on 31st December, 1957 ...	1.62	Exports ... ..	2.10
Production 37.59		Local Consumption ... ..	0.05
Less loss ... 0.17	37.42	Delivered to Refinery ... ..	60.26
Imports ... ..	25.53	Stock on 31st December, 1958 ... ..	2.16
	<u>64.57</u>		<u>64.57</u>
<i>Refined Products Balance</i>			
<i>Availability</i>	<i>Million Barrels</i>	<i>Disposal</i>	<i>Million Barrels</i>
Stock on 31st December, 1957 ...	3.86	Shipments ... ..	53.02
Imports ... ..	1.90	Bunkers ... ..	5.57
Crude delivered 60.26		Local Consumption ... ..	2.00
Less loss on Refining 1.22		Stocks on 31st December, 1958 ... ..	4.21
Products obtained ... ..	59.04		
	<u>64.80</u>		<u>64.80</u>

12. The import of Crude from South American countries, 19.68 million barrels, was practically unchanged from the figure for 1957. But 5.85 million barrels of Crude were imported from Saudi Arabia bringing the total import figure to 25.53 million barrels.

13. Refinery input at 60 million barrels was 20 per cent. higher than in 1957. This increase was achieved by re-organisation of existing refinery facilities without the help of any new additional plant. Substantial additions to the Pointe-a-Pierre Refinery were however being planned by Texaco.

#### CONTRIBUTION TO REVENUE AND LOCAL DISBURSEMENTS

14. Details of the disbursements of the local Oil Industry are given in Tables VI and VII. It will be noted that the total outgoings of the Industry increased by nearly 10 per cent. as compared to 1957. Taxes paid to Government increased by 26 per cent. to a total of \$57.7 million, representing 44 per cent. of the total revenue for 1958.

15. Income Tax accounted for \$36.8 million representing a tax rate of 40 per cent. on a chargeable income of \$92.0 million. Adding to this last figure the amount of \$20.9 million being the sum of taxes paid before arriving at the chargeable income, gives a sum of \$112.9 million for the gross profit shared between Government and the Industry. The approximate division of profit is shown below :—

	<i>Million \$</i>	<i>Million \$</i>
Chargeable Income ... ..	—	92.0
Tax deducted before arriving at Chargeable Income	—	—
Royalty on Oil and Gas ... 16.2		
Customs Dues ... .. 2.3		
Other Taxes, Charges, Fees, &c. 2.4	20.9	20.9
Income Tax at 40 per cent. of Chargeable Income	36.8	
Government takes 51 per cent. ... ..	57.7	—
Industry takes 49 per cent. ... ..	55.2	—
	<u>112.9</u>	<u>112.9</u>

16. In comparing the level of taxation of the local Oil Industry with that in other oil producing countries it must be borne in mind that the figures given in Tables VI and VII and above, cover the entire local industry including the refining of both indigenous and imported crude. In all countries where a 50 : 50 split of gross profits between Government and the Oil Industry is in effect refining is not included in the 50 : 50 formula. If refining is excluded from the Trinidad figures the profit split is more in Government's favour than the 51 : 49 division indicated above. The sum paid annually in private royalties, about \$2.3 million must also be brought into account when comparing the local taxation of oil with that of countries where all the production bears Government Royalty.

17. The following tables show the contributions of the Oil Industry under each Head of Revenue listed in the territory's Estimates. Contributions to the Revenue of the Port Services and also of the Railway and Telegraph are shown separately in order to conform to the present form of presenting the territory's Estimates. Revenues of these two services were included in the territory's total revenue in past years and for ease in comparison with past years are included in Table VI which is set up to show pure taxation as distinct from payments to Government Departments in return for various services.

CONTRIBUTION BY THE OIL INDUSTRY TO THE REVENUE OF TRINIDAD IN 1958

Revenue Head in the Territory's Estimates	Revenue Received	Contribution by Oil Industry	Percentage contributed by Oil Industry
	\$	\$	%
<i>Ordinary Revenue</i>			
1. Customs and Excise ... ..	36,257,485	2,538,305	7.00
2. Licences and Internal Revenue not otherwise classified ... ..	7,255,090	170,721	2.35
3. Taxes on Income ... ..	57,433,301	36,818,288	64.11
4. Fees and Payments for Specific Services ... ..	1,342,074	38,631	2.88
5. County Council ... ..	1,105,455	250,815	22.68
6. Reimbursements ... ..	2,646,298	82,042	3.10
7. Earnings of Government Departments ... ..	590,828	21,077	3.57
8. Post Office ... ..	2,167,531	53,011	2.45
9. Rent of Government Property ... ..	402,055	11,141	2.77
10. Interest ... ..	1,732,266	—	—
11. Miscellaneous ... ..	1,124,184	79,365	7.06
12. Forests, Lands and Petroleum ... ..	16,471,817	16,351,466	99.27
<b>TOTAL ORDINARY REVENUE ... ..</b>	<b>128,528,364</b>	<b>56,414,862</b>	<b>43.89</b>
<i>Extra Ordinary Revenue</i>			
13. Premia on Leases (formerly Land Sales) ... ..	38,760	—	—
14. Loans to Public Bodies ... ..	1,266,134	—	—
15. Grants under Colonial Development and Welfare Organization ... ..	188,704	—	—
16. Extraordinary ... ..	10,000	—	—
<b>Total as per Territory's Financial Statement, 1958 ... ..</b>	<b>130,031,962</b>	<b>56,414,862</b>	<b>43.38</b>
A. Port Services ... ..	8,826,030	1,588,350	18.00
B. Railway and Telegraph ... ..	1,076,084	129,403	12.02
	<b>\$139,934,076</b>	<b>58,132,615</b>	<b>41.54</b>

EXPORTS OF PETROLEUM AND ITS PRODUCTS

18. The value of Petroleum exports in 1958 was almost unchanged from that of the previous year, the increased volume exported being just offset by a drop in prices.

19. Table I (items 10-12), gives figures for the exports of Petroleum including the re-export of products obtained from imported crude, while Table V gives a detailed breakdown of refined products exported.

20. The following tabulation shows the contribution to the total value of the island's exports made by Petroleum and various agricultural products. The percentage value of these contributions have been graphed for a number of years in Appendix E.

Exports	% Increase or Decrease as compared to 1957	1958		1957	
		\$	%	\$	%
Petroleum (including products from imported Crude) ... ..	0.27	305,783,235	80.3	306,617,525	80.7
Petroleum Bitumen ... ..	53.4	2,366,121	0.6	5,079,173	0.4
Asphalt and its Products ... ..	5.2	2,838,345	0.7	2,698,492	0.7
Cocoa ... ..	50.4	12,745,489	3.4	8,474,522	2.2
Sugar, Molasses and Rum ... ..	2.8	32,082,148	8.4	31,216,938	8.2
Coconuts, Coconut Oil, &c. ... ..	48.1	567,868	0.2	1,181,134	0.3
Coffee ... ..	16.1	2,497,691	0.7	2,151,036	0.6
Bitters ... ..	4.5	932,802	0.2	892,651	0.2
Fresh Fruit and Juices ... ..	77.9	6,542,805	1.7	3,677,415	1.0
All others ... ..	19.2	14,576,573	3.8	18,033,631	4.3
<b>TOTALS ... ..</b>	<b>0.24</b>	<b>380,933,077</b>	<b>100.0</b>	<b>380,022,517</b>	<b>100.0</b>

## ROYALTY ASSESSMENT

21. The Royalty assessed on the crude oil, natural gasoline and natural gas produced in Crown Oil Mining leases for each half-yearly royalty period during 1956, 1957, and 1958 is shown on the following table :—

Source of Revenue	ASSESSMENT FOR HALF-YEARLY PERIOD ENDING					
	31.12.58	30.6.58	31.12.57	30.6.57	31.12.56	30.6.56
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Royalty on Natural Gas ...	69,828 42	61,967 51	60,383 21	59,029 14	71,129 55	49,160 07
Royalty on Natural Gasolene...	48,745 47	53,075 55	64,694 90	71,433 53	60,336 99	58,548 06
Minimum Rents not offset by Royalty on Crude Oil ...	664,052 17	696,627 49	586,919 89	582,229 63	302,298 09	528,502 94
Royalty on Crude Oil ...	7,503,327 20	6,970,439 58	7,479,805 49	7,251,605 19	5,462,344 84	4,877,501 51
Half-yearly Totals ...	8,285,953 26	7,782,110 13	8,191,803 49	7,964,297 49	5,896,095 47	5,513,712 58
Yearly Totals ...	16,068,063 39		16,868,098 98		11,409,808 05	
Assessment Totals ...	15,973,913 62		13,860,392 96			
Drawback claimed ...	—		—		—	

22. The volume upon which the above assessments were made were as follows :—

Substance Assessed for Royalty	Unit	HALF-YEARLY PERIOD ENDING					
		31.12.58	30.6.58	31.12.57	30.6.57	31.12.56	30.6.56
Natural Gas ...	M.C. Ft.	4,600,249	4,131,167	4,025,546	3,857,93	3,796,160	2,978,008
Natural Gasoline ...	Gals.	2,755,939	3,009,391	3,349,343	3,602,604	3,307,596	3,196,860
Crude Oil, Gross ...	Bbls.	16,812,003	15,440,174	14,919,396	13,591,721	12,142,112	11,129,530
Crude Oil used free of Royalty ...	Bbls.	52,652	49,866	49,505	51,357	40,652	92,842
Crude Oil, Net ...	Bbls.	16,759,351	15,390,308	14,869,891	13,540,364	12,101,460	11,036,688
Crude Oil, average Royalty value	\$/Bbls.	4.48	4.53	5.03	5.36	4.51	4.42

NOTE:—Statistical volumes of gross production, free of royalty, &c., are mainly reported at 34.9726 Imperial Gallons per barrel but include some volumes reported at 35 Imperial Gallons per barrel.  
Royalty quantities are all at 34.9726 Imperial Gallons per barrel.

23. The data used to evaluate crude oil for crown royalty assessment for each of the last five half-yearly royalty periods together with the royalty rate on casing head petroleum spirit for each of these periods are shown in the following table :—

PRODUCT	AVERAGE PRICE IN B.W.I. CURRENCY PER BARREL OF 34.9726 IMPERIAL GALLONS FOR THE HALF-YEAR PERIOD ENDED				
	31.12.58	30.6.58	31.12.57	30.6.57	31.12.56
Bunker "C" Grade Fuel ...	\$ 3,609,697	\$ 3,914,554	\$ 4,406,645	\$ 4,693,006	\$ 3,746,951
No. 2 Fuel ...	6,218,034	5,965,277	6,532,492	7,243,772	6,367,476
43-47 D.I. Gas Oil ...	6,307,526	6,058,299	6,622,717	7,325,556	6,400,921
48-52 D.I. Gas Oil ...	6,397,397	6,147,857	6,712,942	7,414,320	6,489,946
53-57 D.I. Gas Oil ...	6,485,802	6,237,415	6,803,167	7,503,084	6,579,953
70-72 Oct. M. Leaded Motor Gas ...	6,628,911	6,431,376	7,086,592	7,284,664	6,751,608
Average Middle Rate for sight drafts on New York. Premiums in B.W.I. cents per \$1.00 U.S. ...	71.181,522	70.587,293	71.857,337	71.924,585	72.381,250
Value of Tetra-Ethyl Lead in B.W.I. cents per Millilitre ...	.449,219	0.443,456	0.432,255	0.429,451	0.428,892
Royalty in B.W.I. cents per gallon on Casing Head Petroleum Spirit ...	1.912,706	1.956,618	2.058,014	2.087,597	1.915,212

The half-yearly volumes of products to which the above average prices for 1958 were applied respectively in calculating royalty on crude oil will be found in Table X.

## LOCAL SALES OF PETROLEUM PRODUCTS

24. Excisable sales of gasoline during 1958 amounted to 27,413,622 gallons an increase of 5 per cent. compared to 1957. Sales of bottled propane increased by 20 per cent. over the 1957 figure to a total of 3,135,403 lb. on which excise duty at  $\frac{3}{4}$  cent per lb. yielded \$23,515.

## 25. ACCIDENT STATISTICS, 1958

COMPANY	DRILLING AND PRODUCTION			OTHER DEPARTMENTS*			Total No. of Accidents
	Non-Serious	Serious	Fatal	Non-Serious	Serious	Fatal	
Antilles ... ..	9	—	1	6	—	2	18
Apex ... ..	41	6	—	35	7	—	89
P.C.O.L. ... ..	—	—	—	2	—	—	2
Texaco ... ..	54	13	—	35	4	—	106
K.T.O. ... ..	14	1	—	5	1	—	21
S.T.L. ... ..	34	7	—	66	3	1	111
T.P.D. ... ..	62	9	—	96	3	1	171
T.N.A. ... ..	2	1	—	1	1	2	7
TOTAL ... ..	216	37	1	246	19	6	525

\*Excluding Refineries, Electrical, Machine and General Field Workshops and Power Stations.

26. The total number of accidents reported to this Department in 1958 was 525 which compares with 408 in 1957. This is a reversal of the trend over the past four years in which the yearly rate showed a tendency to diminish rather than increase.

27. There were six fatalities during the year four of which were associated with Marine Operations. Of these two were due to equipment failure and the other two to accidental drownings. Two fatalities occurred on land. One resulted from premature discharge of a perforating gun which was being run into a well, the other arose from a gas fire in Boodoosingh Village following the blowout of a nearby drilling well. A boy was burnt to death.

28. All fatal accidents were thoroughly investigated by the Department and certain recommendations made.

## LEGISLATION

29. The Land (Oil Mining) (Amendment) Regulations, 1958 came into operation on 20th February, see Government Notice No. 33, published in the Supplement of the *Royal Gazette*, Vol. 127, No. 20, dated 20th February, 1958. These Regulations amended the standard forms of crown oil mining lease by deleting the provision for a reduced rate of royalty on gas sold for re-pressuring oil sands.

30. The Land (Oil Mining) (Amendment No. 2) Regulations, 1958 came into operation on 27th March, see Government Notice No. 58, published in the Supplement to the *Royal Gazette*, Vol. 127, No. 34 dated 27th March, 1958. These Regulations amended regulation 28 of the Land (Oil Mining) Regulations by providing that the Governor, acting in his discretion, might waive the requirement that an oil mining lease or part of an oil mining lease to be surrendered must first be surveyed.

31. The Oil Impost Rating Order, 1958 made by the Governor in Council under sections 7 and 9 of the Petroleum Department and Conservation Board Ordinance was published as Government Notice No. 127 see Supplement to the *Royal Gazette*, Vol. 127, No. 89, dated 28th August, 1958. The order provided for an oil impost payable in respect of oil won and footage drilled for oil during the twelve months ended on the 31st December, 1957, at the rate of .12400 of a cent for each barrel of oil won and at the rate of one-half of a cent for each foot drilled for oil.

## CROWN OIL MINING LEASES AND LICENCES

32. There was little leasing activity during the year, only two new leases being issued. The total acreage of crown oilrights under lease decreased from 1,559,758 acres at the 31st December, 1957 to 1,364,585 acres at the 31st December, 1958. This drop was almost wholly accounted for by area surrendered by Dominion Oil Limited in the Northern half of the island.

33. The Antilles Petroleum Company (Trinidad) Limited assigned all its crown oil mining leases to Texaco Trinidad Inc. by Deed No. 12638/58 effective 26th June, 1958. Antilles also surrendered its marine licence the area covered by the licence being re-leased to Texaco Trinidad Inc.

34. 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 and surrendered. Changes in Company holdings are shown in Table VIII.



## SUMMARY OF LEASING ACTIVITY DURING 1958

	No. of Lease or Licence	CROWN OIL RIGHTS—ACREAGE					
		Private Surface			Crown Surface		
		A.	R.	P.	A.	R.	P.
Principal Leases at 31st December, 1957 ...	122	116,913	1	10½	421,601	2	31½
Principal Leases issued in 1958 ...	*2	1,655	0	36	—	3	36
Supplemental Leases issued in 1958 ...	—	125	3	23	44	1	38
Area surrendered in 1958 ...	124	118,694	1	29½	421,647	0	25½
	6	15,396	0	02	85,928	2	21½
Leases at 1st January, 1959 ...	118	103,298	1	27½	335,718	2	21½
Submarine Licences at 31st December, 1957 ...	7				1,021,243	0	00
Submarine Licences issued during 1958 ...	1				15,344	0	00
Submarine Licences surrendered in 1958 ...	8				1,036,587	0	00
	2				111,014	0	00
Submarine Licences at 1st January, 1959 ...	6				925,573	0	00
Exploration Licences at 31st December, 1957 ...							
Exploration Licences issued in 1958 ...							
Exploration Licences at 1st January, 1959 ...							
<b>TOTAL ACREAGE LEASED ...</b>		<b>103,298</b>	<b>1</b>	<b>27½</b>	<b>1,261,286</b>	<b>1</b>	<b>39½</b>

\*Includes 1 lease with commencing date 1st July 1958, but not registered in 1958.

Details of the leasing summary in the preceding paragraph are given in the following tables :—

## Crown Oil Mining Leases registered during 1958

Mining Leases	No.	Locality	CROWN OIL RIGHTS—ACREAGE					
			Private Surface			Crown Surface		
			A.	R.	P.	A.	R.	P.
(A) PRINCIPAL LEASES :								
D.O.L. Reg. No. 8580/58	—		32	2	24	0	3	36
(not yet registered) ...	2		1,622	2	12	—	—	—
	2		1,655	0	36	—	3	36
(B) SUPPLEMENTAL LEASES :								
D.O.L. Reg. No. 8581/58	1		52	2	33	—	—	—
Suppl. to 6765/56	—		73	0	30	37	3	14
T.P.D. 5288/58	2		—	—	—	6	2	24
5290/58	—		—	—	—	—	—	—
<b>TOTAL ...</b>	<b>3</b>		<b>125</b>	<b>3</b>	<b>23</b>	<b>44</b>	<b>1</b>	<b>38</b>
(C) SURRENDERED LEASES :								
D.O.L. Reg. No. 837/53	—	Cocal and Turure	—	—	—	357	0	0
13378/55 (S)	—	do.	—	—	—	7	1	25
9094/54	—	Tacarigua, Cunupia and Arima	745	2	07	—	—	—
8301/54	—	San Raphael	—	—	—	63	3	34
10638/54	—	do.	—	—	—	1,363	0	00
5104/57 (S)	—	—	—	—	—	22	2	03
10696/54	—	Manzanilla and Tamana	316	1	39	—	—	—
10725/54	—	Cunupia and San Raphael	1,102	0	15	23	2	05
1698/55	—	St. Ann's	6	0	33	—	—	—
2627/55	—	Turure, Manzanilla, Pointe-a-Pierre, &c.	12,658	0	03	—	—	—
11762/55 (S)	—	do.	24	2	08	—	—	—
8358/57 (S)	—	do.	101	3	15	—	—	—
15224/56 (S)	—	do.	39	1	12	—	—	—
8357/58	—	Chaguanas and Cunupia, &c.	—	—	—	64	0	09
12008/55	—	Cunupia	—	—	—	104	3	31
308/56	—	Waller Field, &c.	—	—	—	13,500	1	08
1760/56	—	Arima	168	3	29	54	2	01
6765/56	—	Chaguanas and Montserrat	40	1	36	10	0	00
963/57	—	Turure and Manzanilla	190	2	05	88	0	10
6959/57	—	St. Ann's and Tacarigua	—	—	—	158	0	24
9015/57	—	St. Ann's, Cunupia, &c.	—	—	—	54,511	0	14
12737/57	—	Turure	—	—	—	10,600	0	00
<b>TOTAL ...</b>			<b>15,396</b>	<b>0</b>	<b>02</b>	<b>85,928</b>	<b>2</b>	<b>04</b>

Submarine Licences issued during 1958 :

	<i>Crown Oilrights Crown Surface</i>		
	A.	R.	P.
Submarine Licences issued during 1958 :			
Texaco 13160/58 ... ..	15,344	0	00
Submarine Licences surrendered during 1958 :			
D.O.L.— 4056/52 (part) ... ..	44,700	0	00
D.O.L.— 500/53 (part) ... ..	27,640	0	00
D.O.L.—15221/56 ... ..	23,330	0	00
Antilles 2701/55 ... ..	15,344	0	00
<b>TOTAL</b> ... ..	<b>111,014</b>	<b>0</b>	<b>00</b>
Exploration Licences issued during 1958 ... ..	—	—	—
Exploration Licences surrendered during 1958 ... ..	—	—	—

#### SUMMARY OF LEASED OIL AREAS

<i>Crown Oil Rights :</i>	A.	R.	P.
1. Principal Leases issued as at 1st January, 1959 (Private Surface) ...	103,298	1	27½
2. Principal Leases issued as at 1st January, 1959 (Crown Surface) ...	335,713	1	39½
3. Exploration Licences issued as at 1st January, 1959 ...	—	—	—
4. Marine Licences issued as at January, 1959 ... ..	925,573	0	00
5. Acreage under Lease and Licence ... ..	1,364,584	3	27
<i>Private Oilrights :</i>			
6. Private Oil Rights under Lease as at 1st January, 1959 ... ..	160,777	2	09
7. Total acreage of Oil Lands ... ..	1,525,362	1	36

#### STAFF

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

W. N. FOSTER  
*Petroleum Technologist*

Petroleum Department,  
Trinidad.

## A SUMMARY OF SECONDARY RECOVERY OPERATIONS IN TRINIDAD DURING 1958

BY O. O. FERNANDES

36. There were twenty-five Secondary Recovery Projects in operation at the year end. Of these, twenty were of the Gas-injection type, and the remaining five water-flood. The total area known to be under active Secondary Recovery influence was estimated at approximately sixteen hundred acres.

37. During the year a total of 10,652,505 M.S.C.F. of natural gas was re-injected into the gas injection units for a crude oil yield of 2,764,484 barrels. Corresponding figures for the previous year amounted to 9,529,414 M.S.C.F. of gas for 2,168,851 barrels of crude oil.

38. In the water-flooding operations, 2,325,402 barrels of water were pumped into the reservoirs and 336,626 barrels of crude oil recovered. In 1957, a total injection of 1,758,461 barrels of water yielded 155,546 barrels of oil.

39. The total crude oil recovered from all Secondary Recovery projects was 3,101,110 barrels or 8.3 per cent. of the Island's total production. Secondary Recovery Operations accounted for 6.8 per cent. of the Islands' production in the previous year. A detailed tabulation of the individual projects with their pertinent injection and production characteristics is appended.

DATA ON SECONDARY RECOVERY OPERATIONS IN TRINIDAD, 1958

Type of Injection Fluid	Operator	Field	Tertiary Epoch	Formation	Average depth to top of pay (feet)	Type and Pattern of Project	Area under Project influence (acres)	Date injection began	Average injection pressure (P.S.I.G.)	No. of Input Wells	No. of offtake Wells	Volume injected during 1958. Gas M.S.C.F. Water bbls.	Cumulative Volume of Fluid injected Gas M.S.C.F. Water bbls.	Oil production for 1958 (bbls.)
Natural Gas	Texaco	Forest Reserve	Miocene	U. Cruse	4,000	Repressuring	250	1945	2,000	6	28	4,223,054	27,994,366	989,416
Do.	do.	do.	do.	M. Cruse	5,000	do.	194	1948	2,000	4	18	2,339,227	10,404,586	294,692
Do.	do.	do.	do.	L. Forest	2,500	do.	148	1955	1,000	1	5	445,760	2,148,028	91,338
Do.	do.	do.	do.	U. Cruse	2,300	Press. Maint.	192	1956	2,000	2	7	586,298	1,363,628	363,221
Do.	do.	do.	do.	do.	4,400	do.	154	1956	2,000	2	15	1,424,720	3,998,914	406,004
Natural Gas	T.C.O.	Wilson	Miocene	U. Forest	2,000	Gas Sweep	7	1957	500	2	1	169,898	348,017	7,206
Natural Gas	Apex	Fyzabad	Miocene	U. Forest	1,715	Repressuring	65	1957	300	2	11	158,520	183,410	69,098
Do.	do.	do.	do.	do.	2,800	do.	63	1952	420	1	3	49,840	501,450	37,489
Do.	do.	do.	do.	U. Cruse	1,000	do.	58	1951	400	2	2	91,550	779,880	7,785
Do.	do.	do.	do.	U. Forest	2,680	do.	25	1958	100	1	5	10,090	10,090	5,845
Do.	do.	do.	do.	L. Cruse	2,550	do.	—	1958	425	1	—	1,910	1,910	—
Do.	do.	do.	do.	U. Cruse	2,700	do.	—	1958	390	1	—	6,110	6,110	—
Natural Gas	T.P.D.	Coora	Miocene	U. Cruse	3,650	Press. Maint.	60	1953	850	2	3	195,515	1,500,138	189,036
Do.	do.	do.	do.	do.	3,800	Repressuring	50	1954	1,200	2	6	241,845	980,870	166,333
Do.	do.	Quarry	Pliocene	M. L'Enfer	2,450	do.	60	1956	1,100	2	4	83,185	412,752	100,670
Do.	do.	do.	Miocene	Forest ' A '	3,500	do.	—	1958	320	1	—	92,570	92,570	—
Do.	do.	do.	Pliocene	M. L'Enfer	2,350	L. Pr. Sweep	20	1957	675	1	5	306,160	492,745	36,351
Do.	do.	Palo Seco	Miocene	L. Cruse	3,550	Repressuring	—	1957	2,400	1	—	179,649	187,049	—
Do.	do.	do.	do.	Forest ' A '	3,250	do.	—	1957	—	1	—	25,420	78,485	—
Natural Gas	S.T.L.	Penal	Miocene	U. Moruga	1,300	L. Pr. Sweep	—	1958	100	1	—	21,184	21,184	—
Sea Water	Texaco	Guayaguayare	Miocene	Gros Morne	1,900	Edgewater Line drive	29	1953	—	5	14	751,450	2,885,879	74,399
Do.	do.	do.	do.	do.	2,800	Edgewater Line drive	29	1957	—	3	18	379,658	411,728	93,604
Do.	do.	do.	do.	do.	2,950	Edgewater Line drive	25	1958	—	2	5	111,539	111,539	17,424
Field Connate Water	do.	Forest Reserve	do.	L. Forest	1,140	5—Spot	12	1956	—	11	9	643,134	1,065,548	70,349
Field Connate Water	T.P.D.	Palo Seco	Miocene	U. Cruse	3,200	End-to-End Sweep	131	1956	900/1,200	4	11	439,621	1,148,889	80,850

ABBREVIATIONS : P.S.I.G. ... Pounds per square inch gauge ;  
M.S.C.F. ... 1,000 standard cubic feet ;  
U, ... Upper ;  
M. ... Middle ;  
L. ... Lower ;  
Bbls. ... Barrels

**TABLE I**  
ANNUAL STATISTICS OF PRODUCTION, DRILLING, EXPORTS AND IMPORTS

ITEM	1958	Unit	1957	% Difference 1958/1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1940
<b>PRODUCTION</b>														
1. Crude Oil ... ..	37,355	1,000's bbls.	34,064	+ 9.7	28,929	24,896	23,629	22,346	21,258	20,843	20,632	20,617	20,142	22,128
2. Natural Gasoline ... ..	231	do. ...	265	- 12.8	258	274	290	264	204	201	185	168	187	208
3. TOTAL CRUDE OIL AND NATURAL GASOLINE ... ..	37,586	do. ...	34,329	+ 9.5	29,187	25,170	23,919	22,610	21,462	21,044	20,817	20,785	20,329	22,336
4. From Crown Oil Rights ... ..	32,252	do. ...	28,509	+ 13.1	23,462	20,119	18,902	17,899	16,782	16,397	16,300	16,288	15,541	16,717
5. From Private Oil Rights ... ..	5,103	do. ...	5,555	- 8.1	5,725	5,051	5,017	4,711	4,680	4,647	4,517	4,497	4,788	5,619
6. TOTAL IMPORTS ... ..	27,294	1,000's bbls.	20,155	+ 35.4	21,041	18,754	17,071	16,860	17,028	16,347	11,258	11,678	2,983	830
7. Imports of Refined Products (Total of Lub. Oil) ... ..	34	do. ...	29	+ 17.2	32*	35	36	21	32	36	23	25	40	—
8. Imports of Crude Oil for Refining ... ..	25,529	do. ...	19,509	+ 30.9	20,251	17,780	16,670	16,696	16,722	15,855	11,214	11,333	2,893	399
9. Imports of other Oils for Refining and Blending ... ..	1,731	do. ...	617	+ 180.6	758*	939	365	143	274	456	21	320	—	431
10. TOTAL EXPORTS ... ..	49,490	1,000's bbls.	50,254	- 1.5	47,697	39,824	36,954	36,220	34,778	34,359	29,150	29,745	20,432	20,173
11. Exports of Crude Oil ... ..	2,100	do. ...	3,273	- 35.8	4,002	2,866	3,398	1,999	1,844	1,918	2,194	2,037	2,663	228
12. Exports of Refined Products ... ..	47,390	do. ...	46,981	+ .9	43,695*	36,958	33,556	34,221	32,934	32,441	26,956	27,708	20,169	19,945
13. Runs to Still ... ..	60,256	1,000's bbls.	50,467	+ 19.4	44,825	40,147	36,918	37,446	36,041	35,160	29,813	29,617	22,713	22,060
14. Number of Wells started ... ..	298	As stated ...	321	- 7.2	263	225	202	223	187	144	149	146	124	283
15. TOTAL NUMBER OF DRILLING WELLS COMPLETED ... ..	295	As stated ...	314	- 6.0	262	215	202	224	182	140	144	144	108	276
16. Number of Drilling Wells completed as Oil Wells ... ..	256	do. ...	1282	- 9.2	224	191	189	211	177	131	136	130	104	264
17. Number of Drilling Wells abandoned while Drilling, &c. ....	35	do. ...	22	+ 59.1	38	24	13	13	5	9	8	14	4	12
18. TOTAL FOOTAGE DRILLED (ALL WELLS) ... ..	1,366,129	Feet ...	1,322,433	+ 3.2	1,110,745	987,567	911,242	917,894	736,535	664,887	659,565	630,209	533,209	1,021,287
19. Footage drilled on Crown Oil Rights ... ..	1,233,834	do. ...	1,071,207	+ 15.2	801,716	783,788	684,128	733,401	578,081	521,751	524,374	451,624	406,017	824,222
20. Footage drilled on Private Oil Rights ... ..	131,295	do. ...	251,276	- 47.7	309,029	203,779	227,114	164,493	158,504	143,136	135,191	178,585	127,192	197,065
21. Average depth of Completed Drilling Wells (Item 15) ...	4,604	Feet ...	4,151	+ 10.9	4,237	4,372	4,544	4,026	4,236	4,480	4,436	4,065	4,772	3,684
22. TOTAL NO. OF WELLS PRODUCING (Average during year) ...	3,141	As stated ...	3,048	+ 3.1	2,858	2,745	2,674	2,336	2,407	2,280	2,197	2,089	1,820	1,483
23. No. of Wells producing by flowing (Average during year) ...	922	do. ...	882	+ 4.5	797	718	692	639	594	584	594	616	615	530
24. No. of Wells producing by Artificial Lift (Average during year) ...	2,219	do. ...	2,166	+ 2.4	2,061	2,027	1,982	1,897	1,813	1,696	1,603	1,478	1,205	953
25. AVERAGE DAILY PRODUCTION DURING YEAR PER PRODUCING WELL ... ..	32.6	Barrels ...	30.6	+ 6.5	27.7	24.8	24.2	24.1	24.1	25.1	25.7	27.0	30.4	41.0
26. Average daily production during year per Flowing Well ...	78.6	Barrels ...	69.0	+ 6.7	60.7	55.2	51.0	49.8	47.3	48.5	50.2	51.9	55.0	79.0
27. Average daily production during year per Artificial Lift Well ...	15.5	do. ...	15.0	+ 3.3	14.9	14.1	14.8	15.5	16.6	17.0	16.6	16.6	17.9	19.7
28. TOTAL VALUE OF DOMESTIC EXPORTS ... ..	380,983	000\$ ...	380,022	+ .2	322,049	278,985	257,178	251,258	223,331	207,584	167,562	131,790	57,572	43,574
29. TOTAL VALUE OF PETROLEUM AND ITS PRODUCTS (In Item 28) ... ..	304,930	do. ...	311,741	- 2.2	261,792	212,584	193,240	194,359	175,490	161,859	129,183	99,166	41,521	33,650
30. TOTAL VALUE OF LAKE ASPHALT AND ITS PRODUCTS (In Item 28) ... ..	2,338	do. ...	2,698	+ 5.2	2,504	3,044	3,769	4,108	5,981	3,989	2,669	3,011	3,264	618
31. TOTAL NATURAL GAS PRODUCED ... ..	79,191	Millions of Cubic Feet	65,418	+ 21.1	51,742	40,860	38,404	34,597	31,503	31,725	32,312	32,237	27,170	30,173
32. Used as Fuel ... ..	23,403	do. ...	21,211	+ 10.3	21,586	17,590	18,179	17,677	16,870	16,616	16,771	17,270	14,192	13,801
33. Replaced in Formation ... ..	11,187	do. ...	9,490	+ 17.9	7,406	5,442	3,227	2,532	2,786	2,690	2,674	2,387	827	500
34. Losses, not Collected, Vented, &c. ... ..	44,601	do. ...	34,717	+ 23.5	22,750	17,828	17,038	14,388	11,847	12,519	12,867	12,630	12,151	15,872

†Includes 4 Injection Wells.

\*Amended figures.

TABLE II  
MONTHLY ANALYSIS OF DRILLING WELLS FOR YEAR 1958

MONTH	Average No. of Rigs Running	No. of new Wells Started	No. of Oil Wells Abandoned	No. of Oil Wells Recom-pleted	DRILLING WELLS COMPLETED DURING 1958										MONTHLY FOOTAGE DRILLED			Average Footage drilled per Rig per day		
					Completed as Oil Producers		Completed as Injection Wells		Abandoned while drilling				Left closed in after Drilling		Total No. of com-pletions	Crown Oilrights	Private Oilrights		Total	
					No.	Aggregate Depth : Feet	No.	Aggregate Depth : Feet	Dry Holes		Technical Causes		No.	Aggregate Depth : Feet						
									No.	Aggregate Depth : Feet	No.	Aggregate Depth : Feet			No.	Aggregate Depth : Feet				
JANUARY ...	31	18	7	20	14	62,792	—	—	—	—	1	7,739	—	—	15	108,096	10,925	119,021	3,839	124
FEBRUARY ...	32	22	—	18	18	87,144	—	—	3	27,072	1	7,718	—	—	22	80,231	8,816	89,047	3,180	99
MARCH ...	31	27	13	25	23	118,001	—	—	4	23,928	—	—	1	4,982	28	117,493	16,705	134,198	4,329	140
APRIL ...	32	25	—	13	19	87,784	—	—	2	13,121	—	—	—	—	21	110,863	11,322	122,185	4,073	127
MAY ...	33	23	7	26	20	99,346	—	—	4	21,595	—	—	1	3,443	25	103,436	13,659	117,095	3,777	114
JUNE ...	33	25	2	23	21	95,535	—	—	2	12,700	—	—	1	10,019	24	114,022	14,028	128,050	4,268	129
JULY ...	34	31	1	22	23	90,748	—	—	4	20,972	—	—	—	—	27	99,848	17,988	117,836	3,801	112
AUGUST ...	33	20	10	22	15	68,838	—	—	3	11,511	—	—	—	—	18	93,403	10,070	103,473	3,338	101
SEPTEMBER...	30	26	3	32	24	92,801	—	—	1	10,814	1	7,922	—	—	26	101,993	8,533	110,526	3,684	123
OCTOBER ...	30	25	12	11	33	137,335	1	1,950	1	10,929	—	—	—	—	35	102,001	4,958	106,959	3,450	115
NOVEMBER ...	31	32	3	25	25	97,318	—	—	4	17,060	—	—	—	—	29	106,006	7,577	113,583	3,786	122
DECEMBER ...	30	24	4	7	21	90,992	—	—	4	16,103	—	—	—	—	25	96,442	6,714	103,156	3,328	111
TOTALS AND AVERAGES 1958 ...	32	298	62	244	256	1,128,634	1	1,950	32	185,805	3	23,379	3	18,444	295	1,233,834	131,295	1,365,129	3,740	117
TOTALS AND AVERAGES 1957 ...	29	321	18	304	278	1,128,863	4	6,738	21	102,523	1	1,089	10	64,202	314	1,071,207	251,276	1,322,483	3,559	123
% DIFFER- ENCE 1958/ 1957 ...	+10.3	-7.2	+244.4	-19.7	-7.9	—	-75.0	—	+52.4	—	+200.0	—	-70.0	—	-6.1	+15.2	-47.7	+3.2	+5.1	-4.9

Average depth of Wells completed in 1958 = 4,604 feet  
Average depth of Wells completed in 1957 = 4,151 feet.

TABLE III

ANALYSIS OF MONTHLY PRODUCTION FOR THE YEAR ENDED 31ST DECEMBER, 1958

All Crude Oil figures are for dry Oil—1 Barrel (bbl.)=34.9726 Imperial Gallons

MONTH	FLOWING				GAS/AIR LIFT				PUMPING				PLUNGER LIFT				OTHER METHODS				SALT WATER				BREAKDOWN OF TOTAL PRODUCTION													
	No. of Wells	Quantity Bbls.	% Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% Total Oil	Daily Average per Well Bbls.	No. of Wells	Quantity Bbls.	% Total Oil	Daily Average per Well Bbls.	No. of Wet Wells	Quantity Bbls.	% Total Fluid Produced	Daily Average per Wet Well	No. of Wells Produced	No. of Idle Wells	No. of Wells Abandoned (Total)	No. of Wells Drilling at end of month	Total No. of Wells Started	Daily Average per Producing Well	Total Oil Produced	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 ...	902	1,953,215	64.7	69.9	254	236,982	7.8	30.1	1,703	718,755	23.8	13.6	262	110,875	3.7	13.7	22	687	0.0	1.0	1,356	622,965	17.1	14.8	3,143	1,891	1,492	29	6,555	31.0	3,020,514	36.9	2,260	2,583,507	16.0	883	437,007	
February ...	888	1,792,514	64.5	71.3	239	223,310	8.0	33.3	1,708	654,536	23.6	13.7	275	106,734	3.8	13.9	24	961	0.0	1.4	1,331	557,983	16.7	13.5	3,134	1,918	1,496	29	6,577	31.7	2,778,055	37.8	2,242	2,370,643	16.3	892	407,412	
March ...	900	1,963,450	65.2	70.4	255	246,379	8.2	31.2	1,705	688,128	22.9	13.0	279	109,960	3.7	12.7	24	970	0.0	1.3	1,396	628,200	17.3	14.5	3,163	1,901	1,512	28	6,604	30.7	3,008,887	36.6	2,273	2,578,000	15.6	890	430,887	
April ...	903	1,964,099	66.0	72.5	254	245,228	8.2	32.2	1,649	661,603	22.2	13.4	272	104,282	3.5	12.8	11	550	0.1	1.7	1,349	584,350	16.4	14.4	3,089	1,994	1,514	32	6,629	32.1	2,975,762	38.2	2,245	2,575,889	15.8	844	399,873	
May ...	930	2,081,180	66.5	72.2	255	249,067	8.0	31.5	1,667	690,989	22.1	13.4	263	108,571	3.4	13.3	23	500	0.0	0.7	1,335	597,777	16.0	14.4	3,138	1,960	1,525	29	6,652	32.2	3,130,307	38.4	2,265	2,696,578	16.0	873	433,729	
June ...	925	2,037,466	66.6	73.4	265	250,260	8.2	31.5	1,653	664,401	21.7	13.4	271	105,346	3.4	13.0	14	582	0.1	1.4	1,327	580,903	16.0	14.6	3,128	1,989	1,529	31	6,677	32.6	3,058,055	37.4	2,275	2,635,557	16.0	853	422,498	
Production 1st Jan., 1958 to 30th June, 1958 Totals ...	—	11,791,924	—	—	—	1,451,226	—	—	—	4,078,412	—	—	—	645,768	—	—	—	4,250	—	—	—	3,572,198	—	—	—	—	—	—	—	—	17,971,580	—	—	15,440,174	—	—	2,531,406	
July ...	930	2,134,421	67.2	74.0	260	259,823	8.2	32.2	1,644	678,233	21.3	13.3	269	104,443	3.3	12.5	12	567	0.0	1.5	1,330	597,831	15.8	14.5	3,115	2,028	1,533	32	6,708	32.9	3,177,487	38.9	2,272	2,743,088	16.6	843	434,399	
August ...	925	2,129,025	66.2	74.2	271	285,095	8.9	33.9	1,640	697,111	12.6	13.7	268	105,173	3.3	12.7	26	681	0.0	0.8	1,316	597,831	15.8	14.5	3,115	2,028	1,533	32	6,708	32.9	3,177,487	38.9	2,272	2,743,088	16.6	843	434,399	
September ...	948	2,076,088	66.4	73.0	279	275,939	8.8	33.0	1,647	669,477	21.4	13.5	273	105,734	3.4	12.9	10	651	0.0	2.2	1,310	575,735	15.5	14.6	3,157	2,014	1,551	32	6,754	33.0	3,127,889	39.1	2,300	2,700,463	16.6	857	444,644	
October ...	937	2,159,072	66.6	74.3	290	295,298	9.1	32.8	1,640	677,426	20.9	13.3	271	110,854	3.4	13.2	18	815	0.0	1.4	1,317	588,963	15.4	14.4	3,156	2,034	1,564	25	6,779	33.2	3,243,465	39.3	2,309	2,812,427	16.4	847	431,038	
November ...	941	2,150,408	67.1	76.2	279	285,296	8.9	34.1	1,661	652,880	20.4	13.1	279	113,740	3.6	13.6	11	597	0.0	1.8	1,329	595,635	15.7	14.9	3,171	2,041	1,571	28	6,811	33.7	3,202,921	40.0	2,328	2,795,302	16.1	843	407,619	
December ...	934	2,329,352	68.2	80.5	285	297,630	8.7	33.7	1,654	671,529	19.7	13.1	281	115,230	3.4	13.2	17	891	0.0	1.7	1,349	649,843	16.0	15.5	3,171	2,057	1,578	29	6,835	34.7	3,414,632	41.4	2,328	2,988,282	16.3	843	426,350	
Production 1st July, 1958 to 31st Dec., 1958 Totals ...	—	12,978,366	—	—	—	1,699,081	—	—	—	4,046,656	—	—	—	655,174	—	—	—	4,202	—	—	—	3,616,390	—	—	—	—	—	—	—	—	19,383,479	—	—	16,812,003	—	—	2,571,476	
Year's Production Totals ...	—	24,770,290	—	—	—	3,150,307	—	—	—	8,125,068	—	—	—	1,300,942	—	—	—	8,452	—	—	—	7,188,588	—	—	—	—	—	—	—	—	37,355,059	—	—	32,252,177	—	—	5,102,882	
Daily Averages ...	—	67,864	—	73.6	—	8,631	—	32.4	—	22,261	—	13.4	—	3,564	—	13.1	—	23	—	1.4	—	19,695	—	14.7	—	—	—	—	—	32.6	102,343	38.7	—	88,362	16.3	—	13,981	
Average during year...	922	—	66.3	—	266	—	8.4	—	1,664	—	21.8	—	272	—	3.5	—	17	—	0.0	—	1,337	—	16.1	—	3,141	—	—	—	—	—	—	—	—	2,281	—	—	860	—

TABLE III  
ANALYSIS OF PRODUCTION FOR 1958 BY OPERATING COMPANIES  
(All Crude Oil quantity figures are for Dry Oil)

COMPANY	FLOWING		GAS/AIR LIFT		PUMPING		PLUNGER LIFT		OTHER METHODS		SALT WATER		% of Total Fluid Production Well	Daily Average per Wet Well	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	(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)						Daily Average per Prod. Well	No. of Wells	Production Barrels	Daily Average per Prod. Well	No. of Wells	Production Barrels
Antilles Petroleum Company (Trinidad) Limited (1)	91	1,510,463	24	38,733	66	78,419	—	—	2	404	95	171,690	9.5	5.0	183	24.4	1,628,019 ✓	50.5	75	1,382,190	6.2	108	245,829
Apex (Trinidad) Oilfields Limited ...	71	1,313,632	52	260,463	266	1,319,056	29	249,350	—	—	154	709,483	18.4	12.6	418	20.6	3,142,501 ✓	28.8	161	1,691,627	15.4	257	1,450,874
Dominion Oil Limited ...	1	1,852	—	—	—	—	—	—	—	—	1	27	1.4	0.2	1	15.2	1,852*	15.2	1	1,852	—	—	—
Kern Trinidad Oilfields Limited ...	96	869,906	—	—	103	273,356	—	—	—	—	29	162,017	12.4	15.3	199	15.7	1,143,262 ✓	20.3	59	437,386	13.7	141	705,876
Premier Consolidated Oilfields Limited ...	7	87,439	—	—	168	329,993	—	—	10	1,145	44	233,334	35.8	14.5	185	6.2	418,577 ✓	5.8	65	137,358	6.4	120	281,219
Shell Trinidad Limited ...	193	5,285,972	49	616,344	297	2,087,035	—	1,321	8	6,058	220	1,751,064	20.0	21.8	547	40.1	7,996,730 ✓	45.6	415	6,900,958	22.7	132	1,095,772
Trinidad Central Oilfields Limited ...	29	1,074,896	—	—	121	553,189	—	—	1	22	80	319,553	16.4	10.9	151	29.5	1,628,107 ✓	29.5	151	1,628,107	—	—	—
Trinidad Northern Areas Limited ...	20	1,981,074	—	2	—	—	—	—	—	—	4	68,884	3.4	47.2	20	271.4	1,981,076 ✓	271.4	20	1,981,076	—	—	—
Trinidad Petroleum Development Company Limited ...	160	2,662,098	90	1,203,064	36	171,425	243	1,050,271	—	—	127	1,262,693	19.9	27.2	529	26.3	5,086,858 ✓	27.1	500	4,937,966	14.1	29	148,892
Texaco Trinidad Incorporated (2) ...	299	9,982,958	62	1,031,701	639	3,312,595	—	—	—	823	631	2,509,843	14.9	10.9	1,000	39.3	14,828,077 ✓	41.3	872	13,153,657	25.1	128	1,174,420
<b>TOTAL ...</b>		<b>24,770,290</b>		<b>3,150,307</b>		<b>8,125,068</b>		<b>1,300,942</b>		<b>8,452</b>		<b>7,188,588</b>	<b>16.1</b>				<b>37,355,059</b>			<b>32,252,177</b>			<b>5,102,882</b>

(1) Production for first half year only.  
(2) Includes Antilles production for second half year.

\*Produced four months only.

Natural Gasoline Production—1958

COMPANY	CROWN OIL RIGHTS	PRIVATE OIL RIGHTS	TOTAL
	Barrels	Barrels	Barrels
Apex (Trinidad) Oilfields Limited ...	41,128	59,560	100,688
Texaco Trinidad Incorporated ...	4,975	—	4,975
Trinidad Petroleum Development Company Limited ...	122,772	2,955	125,727
<b>TOTAL ...</b>	<b>168,875</b>	<b>62,515</b>	<b>231,390</b>



TABLE IV

## PRODUCTION AND DISPOSAL OF NATURAL GAS

(All figures of gas production in thousands of cubic feet)

1958	Crude Oil Production (Barrels)	Average G.O.R. (c. ft./bbl.)	Natural Gas Production	NATURAL GAS DISPOSAL								NATURAL GAS RECOVERY			Inter-Oil Company Sales†
				Sales to Other Companies *	Replaced in Formation	Converted to C.H.P.S.	USED AS FUEL		Vented as Surplus	Pipeline Losses and unaccounted for	Not Collected	Natural Gas treated	Average Plant Recovery I.G./M.C.F.	Natural Gasoline Produced (Bbls.)	
							In Fields	At Refineries							
January ... ..	3,020,514	2,052	6,197,663	200,430	932,075	20,543	671,874	944,618	1,950,793	225,013	1,252,317	991,743	0.69	19,565	515,032
February ... ..	2,778,055	2,063	5,731,353	173,928	877,532	19,206	650,837	817,659	1,942,571	205,780	1,043,840	1,037,191	0.62	18,291	502,097
March ... ..	3,008,887	2,097	6,308,421	182,039	943,291	21,645	734,326	989,282	1,989,329	249,441	1,199,068	1,172,241	0.61	20,614	531,122
April ... ..	2,975,762	2,137	6,360,163	186,901	953,147	21,108	748,439	951,821	2,137,698	275,633	1,085,416	1,069,201	0.66	20,103	522,589
May ... ..	3,130,307	2,087	6,533,902	182,184	1,047,795	22,394	761,520	1,041,385	1,813,622	318,240	1,346,762	854,699	0.87	21,328	543,167
June ... ..	3,058,055	2,131	6,516,105	204,836	977,110	20,454	700,933	1,069,710	1,952,171	372,658	1,218,233	790,135	0.86	19,480	532,195
1st Half-Year Totals ...	17,971,580	2,095	37,647,607	1,130,318	5,730,950	125,350	4,267,929	5,814,475	11,786,184	1,646,765	7,145,636	5,915,210	0.71	119,381	3,146,202
July ... ..	3,177,487	2,132	6,774,803	232,134	908,514	20,702	679,484	1,136,529	1,921,809	411,582	1,464,049	801,520	0.84	19,176	535,690
August ... ..	3,217,085	2,109	6,784,399	236,315	970,654	20,639	612,852	1,131,534	1,907,735	381,001	1,523,669	809,610	0.85	19,656	554,679
September ... ..	3,127,889	2,162	6,762,992	231,944	907,859	19,310	602,641	1,103,613	1,934,761	481,122	1,481,742	746,890	0.86	18,390	533,739
October ... ..	3,243,465	2,196	7,128,128	217,250	961,568	19,202	680,965	1,118,830	1,954,965	503,387	1,671,961	757,945	0.84	18,288	524,083
November ... ..	3,202,921	2,149	6,883,218	227,632	870,378	18,622	636,803	1,148,315	1,989,382	488,218	1,503,868	746,335	0.83	17,735	596,954
December ... ..	3,414,632	2,111	7,209,624	246,387	837,212	19,703	652,748	1,294,036	2,123,490	452,004	1,584,044	791,460	0.83	18,765	669,061
2nd Half-Year Totals ...	19,383,479	2,143	41,543,164	1,391,662	5,456,185	118,178	3,865,493	6,932,857	11,832,142	2,717,314	9,229,333	4,653,760	0.84	112,010	3,414,208
YEAR'S TOTAL ... ..	37,355,059	2,120	79,190,771	2,521,980	11,187,135	243,528	8,133,422	12,747,332	23,618,326	4,364,079	16,374,969	10,568,970	0.77	231,391	6,560,406
PERCENTAGE DISPOSAL FOR YEAR ... ..	...	...	100.0%	3.1%	14.1%	0.3%	10.4%	16.1%	29.8%	5.5%	20.7%	...	...	...	...

\*Sales to the T.T.E.C., Trinidad Cement Limited and Trinidad Oilfields Service for use as fuel.

†These sales are included under the several Heads of Natural Gas Disposal.

TABLE V  
RETURN OF PRODUCTION STOCKS AND DISPOSAL OF PETROLEUM DURING THE YEAR ENDED 1958  
(All figures in Barrels)

	Crude and Process Oil	REFINED PRODUCTS													TOTAL (All Products)
		AVIATION SPIRIT		Motor Spirit	White Spirit	Burning Oil	Vapourising Oil	Gas and Diesel Oil	Fuel Oils (All Grades)	Lub. Oil and Greases	Bitumen	Other Finished Products	Liquified Petroleum Gas	Feed or Blending Stocks for Transfer	
		100 Octane	Other Grade												
1. OPENING STOCKS 1ST JANUARY, 1958 ... ..	1,624,699	22,161	150,703	1,164,113	3,917	51,418	204,789	776,827	967,386	506	33,695	82,613	981	404,315	3,863,424
2. CRUDE OIL PRODUCTION INCLUDING CASING HEAD PETROLEUM SPIRIT ... ..	37,586,449	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. IMPORTS :															
Venezuela ... ..	17,798,347	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Colombia ... ..	1,640,911	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Countries ... ..	6,089,656	—	—	173,613	—	2,522	—	1,697,828	30,158	—	—	727	—	—	1,904,848
TOTAL IMPORTS ... ..	25,528,914	—	—	173,613	—	2,522	—	1,697,828	30,158	—	—	727	—	—	1,904,848
4. RUN TO STILLs ... ..	60,255,937	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. PRODUCTION OBTAINED ... ..	—	481,657	2,894,659	10,500,864	57,439	1,089,341	1,984,944	12,476,661	25,475,602	2,026	246,359	3,736,211	28,456	61,823	59,036,062
6. CONSUMPTION :															
Trinidad and Tobago ... ..	46,392	—	—	778,816	848	267,816	—	298,763	440,974	2,058	2,371	166,297	18,410	11,822	1,988,175
Bunkers ... ..	—	70,823	109,071	—	—	—	—	2,964,279	8,057,045	—	—	—	—	—	11,201,218
Refinery Fuel ... ..	—	—	—	—	—	—	—	—	11,915	—	—	—	—	—	11,915
TOTAL CONSUMPTION ... ..	46,392	70,823	109,071	778,816	848	267,816	—	3,263,042	8,509,924	2,058	2,371	166,297	18,410	11,822	13,201,298
7. SHIPMENTS :															
Sterling Area ... ..	—	79,767	423,395	4,439,783	38,895	365,597	1,602,937	1,593,161	743,550	—	220,433	175,156	10,741	118,715	9,812,130
North America ... ..	2,100,154	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other American Countries ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Western Hemisphere ... ..	—	296,878	200,636	4,728,755	—	309,152	—	3,237,476	5,723,078	—	21,614	2,803,747	—	—	17,321,336
O.E.E. Countries ... ..	—	5,825	2,123,808	857,840	11,150	97,900	461,327	2,021,022	4,727,819	—	10,616	526,677	—	—	10,843,984
Rest of the World ... ..	—	9,153	4,662	23,541	—	7,611	—	3,701,308	5,591,483	—	—	74,872	—	—	9,412,630
TOTAL SHIPMENTS ... ..	2,100,154	391,623	2,752,501	10,049,919	50,045	780,260	2,064,264	10,552,967	16,785,930	—	252,663	3,580,452	10,741	118,715	47,390,080
8. CLOSING STOCKS 31ST DECEMBER, 1958 ... ..	2,164,545	41,372	183,790	1,009,875	10,463	95,205	125,469	1,135,307	1,177,292	474	25,020	72,802	286	335,601	4,212,956
9. BALANCE NOT SPECIFICALLY ACCOUNTED FOR ... ..	173,034	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Imports of Tucupita Fuel Oil for Transshipment amount to 1,896,083 barrels and are not included in the above return. These figures do not include movements of petroleum from the distributing companies.

TABLE VI

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

(Marketing Companies not included)

Item	Head or Sub-Head	1958	% difference 1958/57	1957	1956	1955	1954	1953	1952	1951	1950	1949
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<b>CROWN ROYALTIES, TAXATION, ETC.</b>											
1	Customs ... ..	2,354,974	+ 3.9	2,267,204	1,371,241	1,097,527	1,270,440	1,191,346	1,204,736	697,095	974,118	1,238,426
2	Excise Duty on Petroleum Spirit ... ..	183,331	+ 42.0	129,093	122,243	124,304	136,257	141,361	132,817	90,291	115,637	36,910
3	Land and Building Taxes ... ..	250,815	+ 19.5	209,973	203,086	200,413	199,263	228,180	113,301	100,526	101,203	84,754
4	Vehicles, Licences and Registration ... ..	170,721	+ 31.1	130,267	134,227	137,441	85,439	118,741	107,868	90,885	107,647	69,371
5	Taxes on Income ... ..	36,818,288	+ 33.1	27,666,940	19,630,291	18,827,104	14,692,510	15,574,972	17,091,094	13,715,292	8,704,846	13,292,777
6	Reimbursements—Petroleum Department ... ..	82,042	611.9*	11,525	50,025	50,546	40,613	32,644	27,750	30,287	32,151	24,611
7	Earnings of Government Departments ... ..	21,077	— 58.4	50,726	61,466	33,013	11,470	9,436	17,784	10,804	10,504	5,045
8	Sundries ... ..	79,365	+ 29.6	61,214	38,857	32,456	30,797	39,592	42,365	28,177	31,917	64,386
9	Royalty on Oil ... ..	16,101,883	+ 15.5	13,945,903	10,227,905	8,706,169	8,231,840	7,011,584	6,592,399	6,508,520	5,823,226	3,596,251
10	Royalty on Gas ... ..	111,748	+ 0.5	111,394	94,016	91,096	72,417	68,255	85,031	99,189	81,233	74,217
11	Forests—Sale of Timber ... ..	137,835	— 12.5	157,505	156,295	140,206	138,594	68,174	61,701	42,594	68,899	38,715
12	Exploration Licences ... ..	—	—	1,273	5,549	3,437	5,687	4,356	14,192	3,366	9,797	3,864
13	Harbour Dues on Crude Oil and Products ... ..	1,389,087	— 25.7	1,016,102	1,136,310	953,586	872,334	809,507	753,598	732,802	587,516	585,901
14	Sub-Totals Items 1-13 ... ..	57,701,166	+ 26.1	45,759,146	33,231,511	30,397,298	25,787,661	25,298,148	26,244,636	22,149,828	16,648,694	19,115,228
	<b>VARIOUS SERVICES</b>											
15	Wharves and Harbours (Rentals, &c.) ... ..	193,263	+ 11.4	93,102	74,846	58,347	92,493	82,279	74,499	37,029	27,182	26,350
16	Post Office ... ..	50,011	— 9.4	58,509	48,496	52,490	47,559	45,613	50,154	43,140	30,529	34,656
17	Rent of Government Property ... ..	11,141	— 37.3	17,774	15,287	16,811	12,175	10,320	10,732	9,523	5,588	11,151
18	Government Railway and Telegraph ... ..	129,403	— 7.9	140,469	112,900	104,698	125,726	119,097	165,312	151,930	137,501	115,539
19	Fees and Payments for Specific Services ... ..	38,631	— 14.7	44,988	47,215	23,742	29,578	35,258	29,609	22,600	26,146	12,308
20	Sub-Totals Items 15-19 ... ..	431,449	+ 21.6	354,842	298,744	256,088	305,531	292,567	330,306	264,222	226,946	200,004
21	GENERAL TOTAL ... ..	58,132,615	+ 26.1	46,113,988	33,530,255	30,653,386	26,093,192	25,590,715	26,574,942	22,414,050	16,875,640	19,315,232
A.	Total Revenue of Territory and Government Operated Services ... ..	130,031,962	+ 17.2	110,954,729	96,951,614	89,991,040	80,154,136	74,535,864	73,013,672	65,215,814	56,038,019	58,391,567
B.	Percentage of "A" contributed by the Oil Industry...	44.7	+ 7.7	41.5	34.6	34.1	32.6	34.3	36.4	34.4	30.1	33.1
C.	Percentage of "A" less Items 13, 15 and 18 contributed by the Oil Industry ... ..	47.0	+ 11.9	42.0	36.1	36.0	34.0	36.1	38.3	36.3	31.9	36.5
D.	Excise collected on Gasoline and Propane (including duty shown under Item 2 above ... ..	4,959,941	+ 108.3	2,381,018	2,186,203	1,985,082	1,891,322	1,714,221	1,560,225	1,454,567	1,367,860	2,394,109

\* This is a fictitious increase arising out of the fact that most of the 1957 Contributions was paid into the Treasury a year late.

TABLE VII

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

HEAD AND SUB-HEAD	1958	% difference 1957/58	1957	1956	1955	1954	1953	1952	1951	1950	1949
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>MONEYS EARNED AND PAYABLE IN THE TERRITORY</b>											
1. Total Contribution to Government Revenues (Item 21, Table VI) ... ..	58,132,615	+ 26.1	46,113,988	33,530,255	30,653,386	26,093,192	25,590,715	26,574,942	22,414,050	16,875,640	19,315,232
2. Payments to Employees* ... ..	41,450,305	+ 10.4	37,552,026	35,700,911	34,557,926	31,040,008	29,164,141	24,743,598	20,918,670	18,839,945	17,081,804
3. Payments to Contractors* ... ..	23,898,821	+ 40.0	17,069,310	13,042,638	10,643,977	9,465,908	7,439,632	7,604,548	7,527,758	6,125,164	4,488,089
4. Local Purchases of Materials ... ..	9,040,923	— 1.8	9,210,891	8,116,298	7,217,873	7,026,657	5,862,292	5,662,114	4,837,764	3,946,065	4,336,776
5. All other Local Expenditure (Rents, Private Royalties, &c.)	13,049,813	— 36.8	20,655,539	15,470,566	13,819,910	13,220,262	11,527,727	13,095,125	10,361,590	8,456,079	7,080,430
6. Sub-Total ... ..	145,572,477	+ 11.5	130,601,755	105,860,668	96,893,072	86,846,027	79,584,507	77,680,327	66,059,832	54,242,893	52,302,331
<b>OVERSEAS PURCHASES OF MATERIALS (C.I.F. VALUATION)</b>											
7. Importations from the United Kingdom ... ..	36,231,825	— 2.6	37,197,160	23,994,740	24,760,317	23,833,618	23,439,951	22,888,622	17,208,825	14,690,802	14,161,158
Canada ... ..	861,020	— 19.2	1,065,175	1,275,812	930,113	1,143,337	1,065,818	927,095	944,464	724,216	516,130
United States of America ... ..	6,201,404	+ 5.8	5,859,427	5,394,161	5,184,603	3,651,034	4,329,858	6,217,177	3,401,644	5,469,200	7,766,696
Other Sources ... ..	6,383,844	+ 106.6	3,090,064	2,008,580	425,181	1,594,177	2,032,287	1,432,977	773,214	947,512	1,012,427
8. SUB-TOTAL ... ..	49,678,093	+ 5.2	47,211,826	32,673,293	31,300,214	30,222,166	30,867,914	31,465,871	22,327,947	21,831,730	23,456,411
9. GENERAL TOTAL ... ..	195,250,570	+ 9.8	177,813,581	138,533,961	128,193,286	117,068,193	110,452,421	109,146,198	88,387,779	76,074,623	75,758,742

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

TABLE VIII

LIST OF OIL OPERATIONS IN TRINIDAD SHOWING THE AREA HELD UNDER MINING LEASE AND EXPLORATION LICENCES

Item	COMPANIES	LANDS HELD UNDER EXPLORATION LICENCE			OILRIGHTS HELD UNDER REGISTERED MINING LEASE OR MARINE LICENCE																				
		Crown Surface Crown Oilrights			Crown Surface Crown Oilrights			Private Surface Crown Oilrights			Private Surface Private Oilrights			Territorial Waters			High Seas Areas			TOTAL					
		A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.			
1	ANTILLES PETROLEUM COMPANY (TRINIDAD) LTD.																								
	Holdings as at 1.1.58 ...	—	—	—	18,855	2	10	5,968	0	35	22,713	3	39	15,344	0	00	—	—	—	—	—	—	62,881	3	04
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Holdings as at 31.12.58 ...	—	—	—	18,855	2	10	5,968	0	35	22,713	3	39	15,344	0	00	—	—	—	—	—	—	62,881	3	04	
2	APEX TRINIDAD OILFIELDS LIMITED																								
	Holdings as at 1.1.58 ...	—	—	—	31,324	2	10	22,313	2	00	9,591	0	35	—	—	—	—	—	—	—	—	—	63,229	1	05
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	915	3	04	—	—	—	—	—	—	—	—	—	915	3	04
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	11	3	14	—	—	—	—	—	—	—	—	—	11	3	14
Holdings as at 31.12.58 ...	—	—	—	31,324	2	10	22,313	2	00	10,495	0	25	—	—	—	—	—	—	—	—	—	64,133	0	35	
3	DOMINION OIL LIMITED																								
	Holdings as at 1.1.58 ...	—	—	—	143,963	1	11	29,804	1	16	119,788	0	00	191,330	0	00	352,652	0	00	—	—	—	837,537	2	27
	Holdings acquired during 1958 ...	—	—	—	0	3	36	1,707	3	29	—	—	—	—	—	—	—	—	—	—	—	—	1,708	3	25
	Holdings surrendered during 1958 ...	—	—	—	85,933	2	26	15,396	0	02	64,156	0	00	35,640	0	00	60,030	0	00	—	—	—	261,155	2	28
Holdings as at 31.12.58 ...	—	—	—	50,030	2	21	16,116	1	03	55,632	0	00	155,690	0	00	292,622	0	00	—	—	—	578,090	3	24	
4	JONES PETROLEUM COMPANY																								
	Holdings as at 1.1.58 ...	—	—	—	—	—	—	18	0	12	—	—	—	—	—	—	—	—	—	—	—	—	18	0	12
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Holdings as at 31.12.58 ...	—	—	—	—	—	—	18	0	12	—	—	—	—	—	—	—	—	—	—	—	—	18	0	12	
5	KERN TRINIDAD OILFIELDS LIMITED																								
	Holdings as at 1.1.58 ...	—	—	—	347	2	23	619	1	06	8,748	2	00	5,760	0	00	—	—	—	—	—	—	15,475	1	29
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Holdings as at 31.12.58 ...	—	—	—	347	2	23	619	1	06	8,748	2	00	5,760	0	00	—	—	—	—	—	—	15,475	1	29	
6	PREMIER CONSOLIDATED OILFIELDS LIMITED																								
	Holdings as at 1.1.58 ...	—	—	—	10,718	2	09	2,640	1	13	6,484	1	36	—	—	—	—	—	—	—	—	—	19,843	1	18
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	11	0	27	—	—	—	—	—	—	—	—	—	11	0	27
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Holdings as at 31.12.58 ...	—	—	—	10,718	2	09	2,640	1	13	6,495	2	23	—	—	—	—	—	—	—	—	—	19,854	2	05	

TABLE VIII—CONTINUED

LIST OF OIL OPERATIONS IN TRINIDAD SHOWING THE AREA HELD UNDER MINING LEASE AND EXPLORATION LICENCES—Continued

Item	COMPANIES	LAND HELD UNDER EXPLORATION LICENCE			OILRIGHTS HELD UNDER REGISTERED MINING LEASE OR MARINE LICENCE																				
		Crown Surface Crown Oilrights			Crown Surface Crown Oilrights			Crown Surface Crown Oilrights			Private Surface Private Oilrights			Territorial Waters			High Seas Areas			TOTAL					
		A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.	A.	R.	P.			
7	TIMOTHY ROODAL																								
	Holdings as at 1.1.58 ...	—	—	—	—	—	—	9	2	12	—	—	—	—	—	—	—	—	—	—	—	9	2	12	
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Holdings as at 31.12.58 ...	—	—	—	—	—	—	9	2	12	—	—	—	—	—	—	—	—	—	—	—	9	2	12	
8	TRINIDAD CENTRAL OILFIELDS																								
	Holdings as at 1.1.58 ...	—	—	—	6,996	2	31	—	—	—	35	2	00	—	—	—	—	—	—	—	—	7,032	0	31	
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Holdings as at 31.12.58 ...	—	—	—	6,996	2	31	—	—	—	35	2	00	—	—	—	—	—	—	—	—	7,032	0	31	
9	TRINIDAD NORTHERN AREAS LIMITED																								
	Holdings as at 1.1.58 ...	—	—	—	32	3	33	—	—	—	85	0	35	147,723	0	00	83,434	0	00	—	—	231,275	0	28	
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	85	0	35	—	—	—	—	—	—	—	—	85	0	35	
	Holdings as at 31.12.58 ...	—	—	—	32	3	33	—	—	—	—	—	—	147,723	0	00	83,434	0	00	—	—	231,189	3	33	
10	TEXACO TRINIDAD INCORPORATED																								
	Holdings as at 1.1.58 ...	—	—	—	106,093	1	33	*27,463	0	19	24,835	0	05	—	—	—	—	—	—	—	—	*9,126	0	32	
	Holdings acquired during 1958 ...	—	—	—	18,855	2	10	5,968	0	35	23,296	3	31	15,344	0	00	—	—	—	—	—	63,464	2	36	
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	351	2	18	—	—	—	—	—	—	—	—	351	2	18	
	Holdings as at 31.12.58 ...	—	—	—	124,949	0	05	33,431	1	14	47,780	1	18	15,344	0	00	—	—	—	—	—	*9,126	0	32	
11	TRINIDAD PETROLEUM DEVELOPMENT COMPANY LIMITED																								
	Holdings as at 1.1.58 ...	—	—	—	26,699	0	20½	10,708	1	35	20,955	3	01	134,000	0	00	91,000	0	00	—	—	283,363	1	16½	
	Holdings acquired during 1958 ...	—	—	—	44	1	38	73	0	30	130	3	33	—	—	—	—	—	—	—	—	248	2	21	
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Holdings as at 31.12.58 ...	—	—	—	26,743	2	18½	10,781	2	25	21,086	2	34	134,000	0	00	91,000	0	00	—	—	283,611	3	37½	
12	SHELL TRINIDAD LIMITED																								
	Holdings as at 1.1.58 ...	—	—	—	76,569	3	11	17,386	1	34½	*549	3	18	—	—	—	—	—	—	—	—	*549	3	18	
	Holdings acquired during 1958 ...	—	—	—	—	—	—	—	—	—	10,441	3	04	—	—	—	—	—	—	—	—	104,398	0	09½	
	Holdings surrendered during 1958 ...	—	—	—	—	—	—	—	—	—	71	1	36	—	—	—	—	—	—	—	—	71	1	36	
	Holdings as at 31.12.58 ...	—	—	—	76,569	3	11	17,386	1	34½	10,503	2	29	—	—	—	—	—	—	—	—	9	2	11	
											(1)	549	3	18								(1)	549	3	18

(1) Acreages held jointly by T.T.I. and S.T.L.

\*This includes 57 acres, 2 roods, 06 perches in name of T.T.I. but held jointly by S.T.L. and T.T.I.

TABLE IX

## IMPORTANT EXPLORATION AND OUTSTEP WELLS DRILLED DURING 1958

Company	Field and Well No.		Total Depth (Feet)	Remarks	Map Reference Appendix I
Apex (Trinidad) Oilfields Limited	Fyzabad	642	8,742	L. Cruse. Southern extension of Synclinal field	G-2
	do.	647	8,212	L. Cruse. Northern exploitation of Synclinal field	G-2
	do.	652	8,305	L. Cruse. Outstep along strike east of W. 642	G-2
	do.	658	8,155	L. Cruse. Southern outstep from W. 652 Extension of Synclinal field to the South	G-2
	do.	659	3,526	L. Cruse. Northern outstep on North flank Anticline	G-2
	do.	661	3,732	L. Cruse. Northern outstep of North flank Anticline	G-2
	do.	662	3,570	Most Northerly outstep of North flank. All sands wet. Abandoned	G-2
	do.	663	7,260	South flank to L. Cruse. All sands wet; abandoned	G-2
Dominion Oil Limited	Colenso	3B	3,727	Nariva test—abandoned	L-5
	do.	3A	7,091	Nariva test—Small uncommercial reservoir	L-5
	do.	4	5,025	Nariva outstep—abandoned	L-5
	Couva Marine	1A	7,732	Oligocene test—abandoned	G-6
	Domoil High	1	2,535	Cretaceous test—abandoned	C-6
	South Saza	1	6,736	Nariva test abandoned	M-5
	North Brighton	1	10,814	Oligocene test—abandoned	F-4
	Freeport	3	10,929	Oligocene test—abandoned	I-7
Brickfield	1	5,008	Nariva test—abandoned	K-5	
Kern Trinidad Oilfields Limited	Guapo	C.F. 636	4,622	Nariva Sds. Successful coastal outstep North of the Guapo field	E-3
Premier Consolidated Oilfields Limited	Rock Dome	2X	8,135	Exploration of North flank of Southern Range in Karamat and Herrera—abandoned.	J-2
Shell Trinidad Limited	Penal	238	10,300	Herrera test; Sands wet—abandoned	G-2
	do.	239	10,586	Herrera test; Sands wet—abandoned	H-2
	do.	240	6,970	Herrera test; Sands wet—abandoned	H-2
	do.	241	7,208	Outstep well producing from Herrera Sds.	H-2
	Catshill	82	10,019	Karamat test—suspended	K-3
	do.	83	6,465	Abandoned in Silty Cruse—all sands wet	L-3
	do.	84	4,337	Abandoned in Silty Cruse—all sands wet	L-3
	do.	85	11,055	Abandoned in underthrust Karamat—all sands wet	K-3
	Inniss	9	4,474	Eastern outstep—producer	K-2
	Glod Trace	1	4,982	Suspended—no sand development	K-4
	Balata B.W.	4	6,486	Abandoned in Oligocene—no sand development	L-4
	do. B.W.	5	8,266	Small producer from Herrera Sands	L-4
	Point Fortin	F.E. 119	7,700	Good producer—proving N.W. deep Cruse extension of Grande Ravine Area	F-2

TABLE IX—CONTINUED

## IMPORTANT EXPLORATION AND OUSTED WELLS DRILLED DURING 1958—Continued

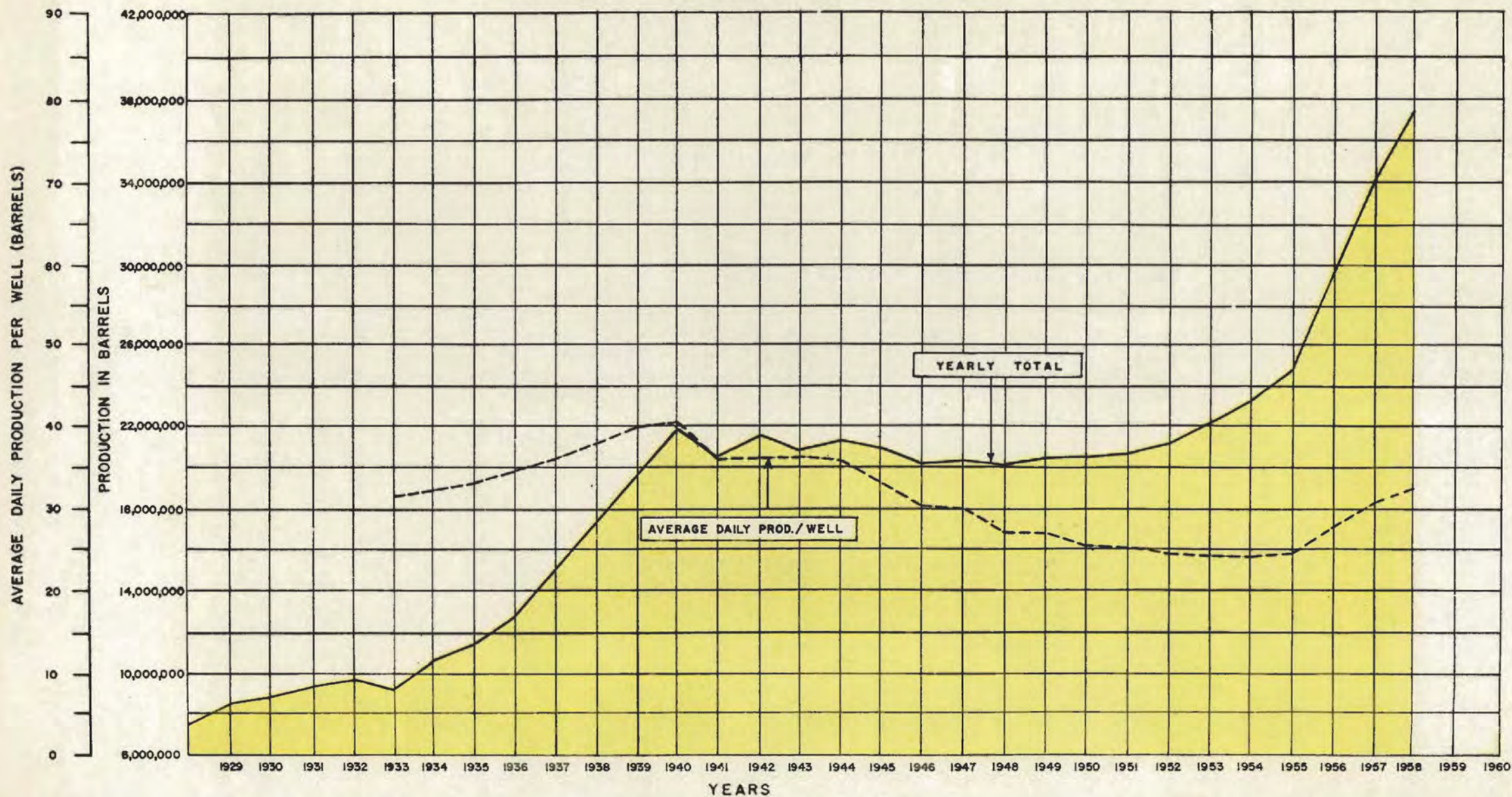
Company	Field and Well No.	Total Depth (Feet)	Remarks	Map Reference Appendix I
Texaco Trinidad Inc.	Guayaguayare ... 249	7,739 ...	Exploration of Lizard Springs anticline ; Sands wet—abandoned	M—2
	do. ... 249X	6,235 ...	Up dip deviation from W. 249 ; Sands wet—abandoned	M—2
	do. ... 263	3,777 ...	Cretaceous exploration midway between Beach and Goudron fields	M—2
	do. ... 265	7,963 ...	Exploration of South flank of Galeota anticline	N—2
	Barrackpore ... 372	10,263 ...	Eastward extension of Barrackpore field in Herrera	J—3
	Quinam ... 28	4,998 ...	Exploration of South flank of Southern range anticline. Sands wet abandoned	H—1
	Palo Seco ... 112	7,940 ...	Southerly Cruse outstep of Grande Ravine field	F—1
do. ... 113	8,000 ...	Westerly Cruse outstep of Grande Ravine field	F—2	
Trinidad Petroleum Development Company Limited	Palo Seco ... 418	11,788 ...	Herrera test South of Los Bajos fault ; abandoned—caving shales. Completed as outstep in Cruse	M—2
	do. ... 441	6,150 ...	L. Cruse outstep Producer	F—1
	Los Bajos ... 59	9,580 ...	Cruse test—wet ; completed in Forest Sands	F—2
	do. ... 60	11,147 ...	Unable to test in Herrera for mechanical reasons—now testing in Miocene	G—2
	do. ... 61	3,342 ...	L. Cruse outstep in East Los Bajos	G—2
	Quarry ... 204	7,600 ...	Tested poorly developed Cruse Sds. in North Quarry. Testing forest sands	G—2
	Coora ... 251	10,257 ...	Successful West Penal deep Herrera outstep in N.E. Coora Field	H—2
	do. ... 253	6,500 ...	L. Cruse outstep in the Central Coora Field	G—2
	Moruga North ... 56	3,900 ...	Tested unproductive Herrera Sds. in West end of Moruga North Field. Abandoned	J—2
	do. West ... 64	3,303 ...	S.W. outstep of Moruga West Field—productive in Herrera	I—2
	do. West ... 68	3,780 ...	N.E. outstep of Moruga West Field—Herrera wet. Abandoned	I—2
do. East ... 61	3,924 ...	L. Cruse outstep in Moruga East Field	L—2	
do. East ... 65	5,952 ...	L. Cruse S.E. outstep in Moruga East Field. Shallow prospects	L—2	
Trinidad Northern Areas Limited	Soldado ... 14	7,500 ...	Northern outstep of Soldado field	B—3
	do. ... 15	6,800 ...	Eastern outstep of Soldado field	B—2



**TABLE X**  
**SUMMARY OF CROWN (ROYALTY) CRUDE OIL ASSESSED OR SOLD WITH PRICES AND ANALYSES**  
*(For Half-Yearly Assessment Periods ended 30th June and 31st December, 1958)—1 Barrel=34.9726 L.G.*

COMPANY	Net Royalty on Production Bbls.	ROYALTY			SUB-DIVISION OF (ROYALTY) CRUDE INTO PRODUCTS AS PER R.I.E.I. ANALYSES										
		10% Assessed or taken in kind and sold to Producer Bbls.	Value \$ c.	Average Price per Barrel \$ c.	LIGHT FRACTIONS			GAS OILS			TOTAL GAS OILS			FUEL OIL	
					Quantity Bbls.	Percentage	Tetra Ethyl lead to blend to 70/72 Oct. Gasolene 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
<b>HALF-YEARLY ASSESSMENT PERIOD ENDED 30TH JUNE</b>															
Antilles Petroleum Company (Trinidad) Ltd	1,382,190	138,219	640,082 42	4 63	35,281	25.5	1,394,153	—	19,607	—	17,516	37,123	26.9	65,815	47.6
Apex (Trinidad) Oilfields Limited ...	871,943	87,194	387,925 05	4 45	11,645	13.3	55,915	—	—	—	27,250	27,260	31.3	48,289	55.4
Dominion Oil Limited ...	1,852	185	899 55	4 86	26	14.1	511	—	90	—	—	90	48.6	69	37.3
Kern Trinidad Oilfields Limited ...	213,432	21,344	90,554 74	3 77	1,733	8.1	35,090	331	—	—	—	331	1.6	19,280	90.3
Premier Consolidated Oilfields Limited ...	66,303	6,630	30,707 98	4 63	1,533	23.1	22,246	—	—	—	1,964	1,964	29.6	3,133	47.3
Estate of Timothy Roodal ...	2,093	209	877 87	4 20	5	2.4	—	—	—	—	65	65	31.1	139	66.5
Shell Trinidad Limited ...	3,524,962	352,496	1,645,164 30	4 67	75,950	21.5	2,475,024	68,036	29	37,122	4,742	109,935	31.2	166,611	47.3
Trinidad Central Oilfields Limited ...	814,306	81,431	373,123 29	4 56	21,605	26.5	505,391	—	3,473	—	15,298	18,771	23.1	41,053	50.4
Trinidad Northern Areas Limited ...	754,649	75,465	355,271 84	4 71	17,996	23.8	689,298	—	23,625	—	—	23,685	31.3	33,844	44.9
Trinidad Petroleum Development Company Limited ...	2,231,755	223,179	1,018,921 90	4 47	18,137	16.7	675,260	—	8,211	6,006	49,874	64,001	28.1	123,951	55.2
Texaco Trinidad Inc. ...	5,476,643	547,644	2,436,919 64	4 45	87,477	16.0	951,930	—	428	21,931	131,733	154,092	28.1	308,095	55.2
<b>TOTALS AND AVERAGES FOR FIRST HALF YEAR ...</b>	<b>15,390,138</b>	<b>1,539,016</b>	<b>6,970,439 58</b>	<b>4 53</b>	<b>291,388</b>	<b>18.9</b>	<b>6,805,316</b>	<b>68,367</b>	<b>55,463</b>	<b>65,083</b>	<b>248,432</b>	<b>437,347</b>	<b>28.4</b>	<b>210,281</b>	<b>58.7</b>
<b>HALF-YEARLY ASSESSMENT PERIOD ENDED 31ST DECEMBER</b>															
Antilles Petroleum Company (Trinidad) Ltd.					In Voluntary Liquidation as from 27th June, 1958. Now included under Texaco Trinidad Inc.										
Apex (Trinidad) Oilfields Limited ...	817,987	81,799	357,414 29	4 37	10,099	12.3	80,493	—	—	—	25,821	25,821	31.6	45,879	56.1
Dominion Oil Limited ...					No production obtained during the period.										
Kern Trinidad Oilfields Limited ...	223,954	22,395	78,909 31	3 52	1,715	7.7	33,753	290	—	—	—	290	1.3	20,390	91.0
Premier Consolidated Oilfields Limited ...	67,476	6,748	29,120 34	4 32	1,045	15.5	14,621	—	—	578	1,143	1,726	25.6	3,977	58.9
Estate of Timothy Roodal ...	1,436	149	607 39	4 08	4	2.7	—	—	—	—	46	46	30.9	99	66.4
Shell Trinidad Limited ...	3,338,455	333,845	1,537,320 59	4 60	60,463	20.5	2,046,804	60,187	9,076	32,547	216	103,026	30.6	163,356	48.9
Trinidad General Oilfields Limited ...	813,801	81,380	371,447 37	4 56	82,724	27.9	533,285	—	4,246	—	13,944	18,190	22.4	40,466	49.7
Trinidad Northern Areas Limited ...	1,226,427	122,643	572,874 09	4 67	31,434	25.6	1,377,437	—	—	35,173	—	35,173	28.7	56,016	45.7
Trinidad Petroleum Development Company Limited ...	2,636,163	263,616	1,172,032 01	4 45	48,801	18.5	955,020	—	—	20,209	53,201	73,410	27.9	141,405	53.6
Texaco Trinidad Inc. ...	7,633,602	763,360	3,383,610 61	4 43	142,080	13.6	2,425,745	—	22,656	19,826	164,067	208,549	27.1	414,731	54.3
<b>TOTALS AND AVERAGES FOR SECOND HALF YEAR ...</b>	<b>16,759,351</b>	<b>1,675,935</b>	<b>7,503,327 20</b>	<b>4 43</b>	<b>326,385</b>	<b>19.5</b>	<b>7,467,178</b>	<b>60,477</b>	<b>35,978</b>	<b>108,333</b>	<b>258,443</b>	<b>463,231</b>	<b>27.6</b>	<b>886,319</b>	<b>52.9</b>
<b>YEAR'S TOTALS AND AVERAGES ...</b>	<b>32,149,509</b>	<b>3,214,951</b>	<b>14,473,766 78</b>	<b>4 50</b>	<b>617,773</b>	<b>19.2</b>	<b>14,272,496</b>	<b>128,844</b>	<b>91,441</b>	<b>173,398</b>	<b>506,895</b>	<b>900,578</b>	<b>28.0</b>	<b>1,696,600</b>	<b>52.8</b>

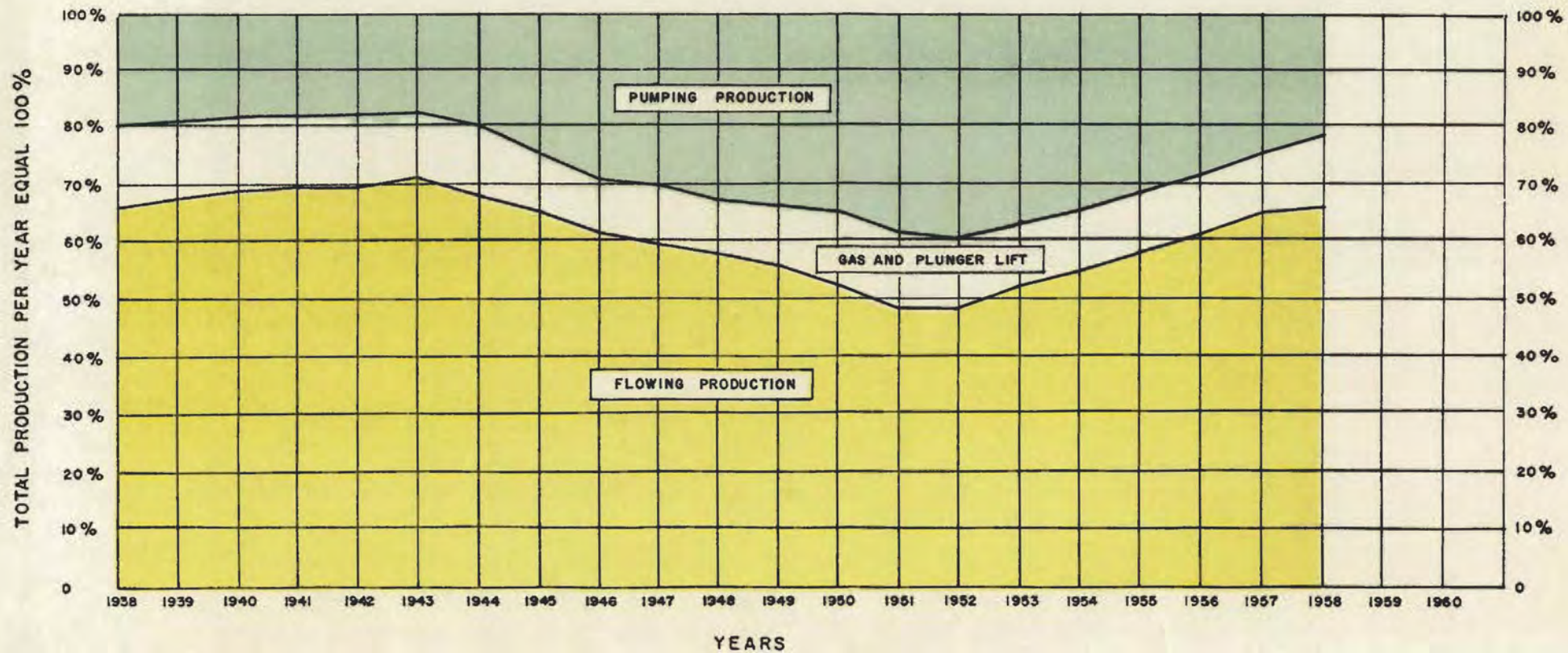
# ANNUAL CRUDE OIL PRODUCTION



For figures used in constructing graph see table 1 - Items 1 and 25

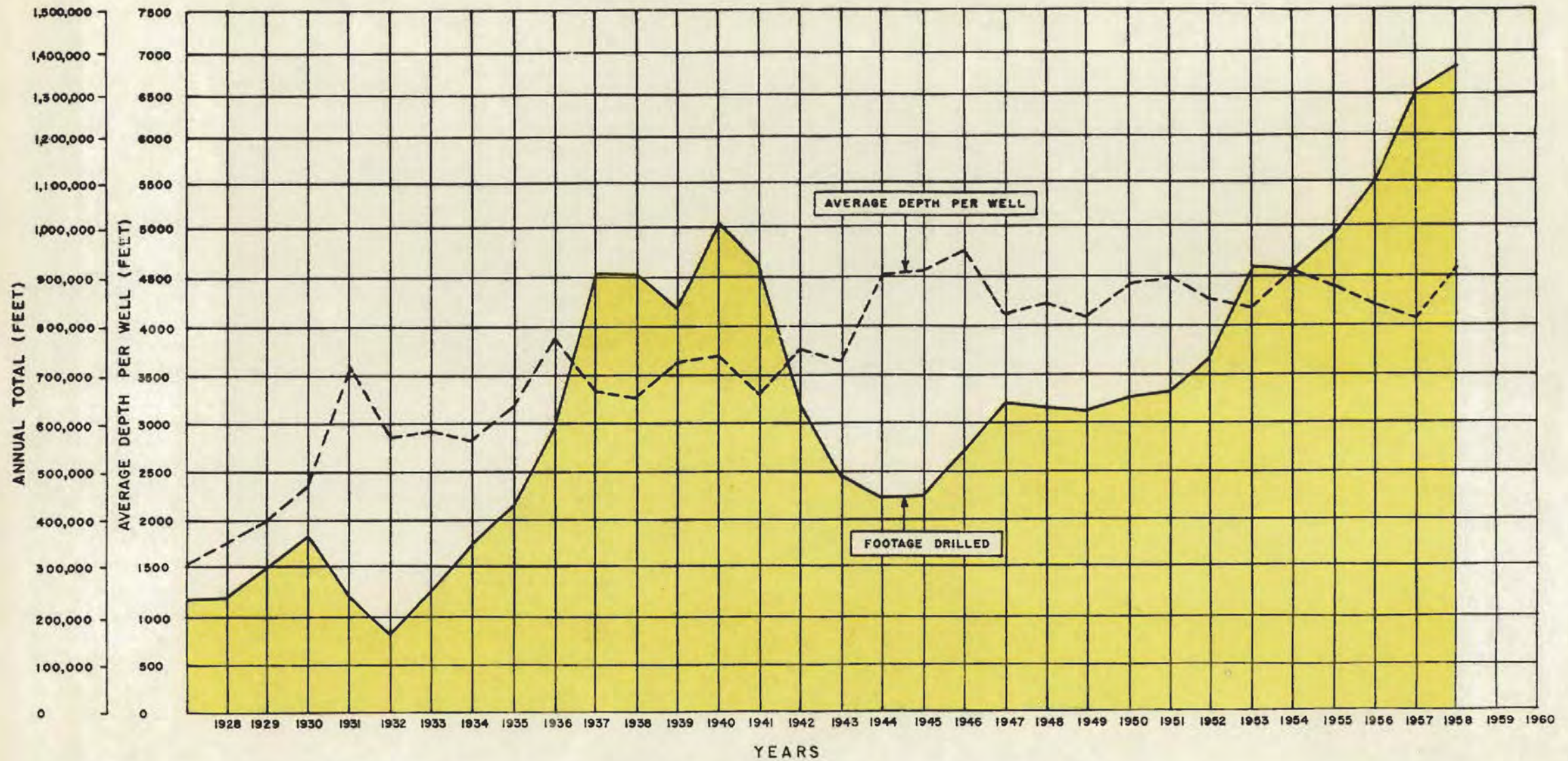
# CRUDE OIL PRODUCTION METHODS

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



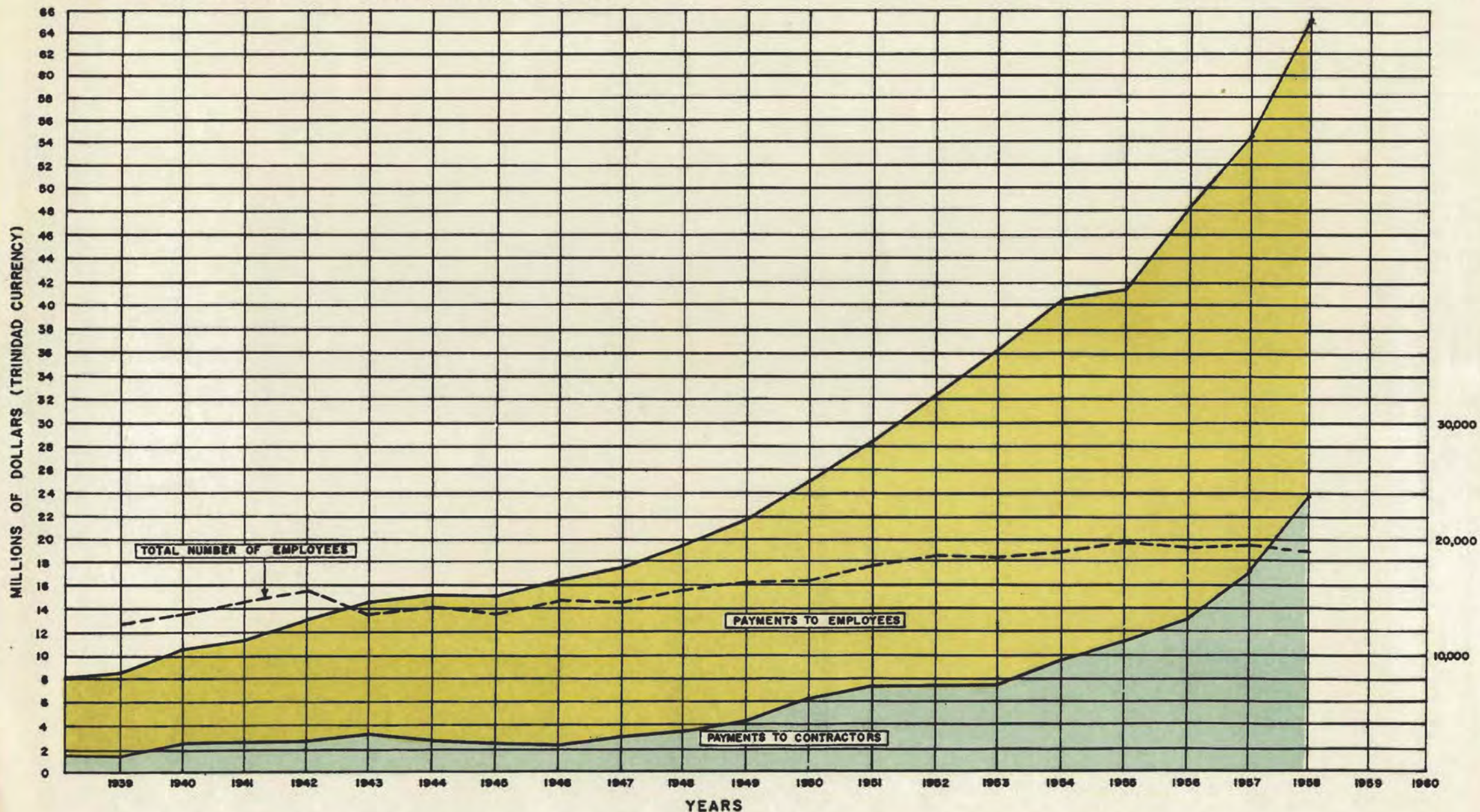
See table III for detailed figures for 1958

# ANNUAL DRILLING FOOTAGE



For figures used in constructing graph see table 1 - Items 18 and 21

# OIL COMPANIES ANNUAL PAYMENTS TO CONTRACTORS AND EMPLOYEES



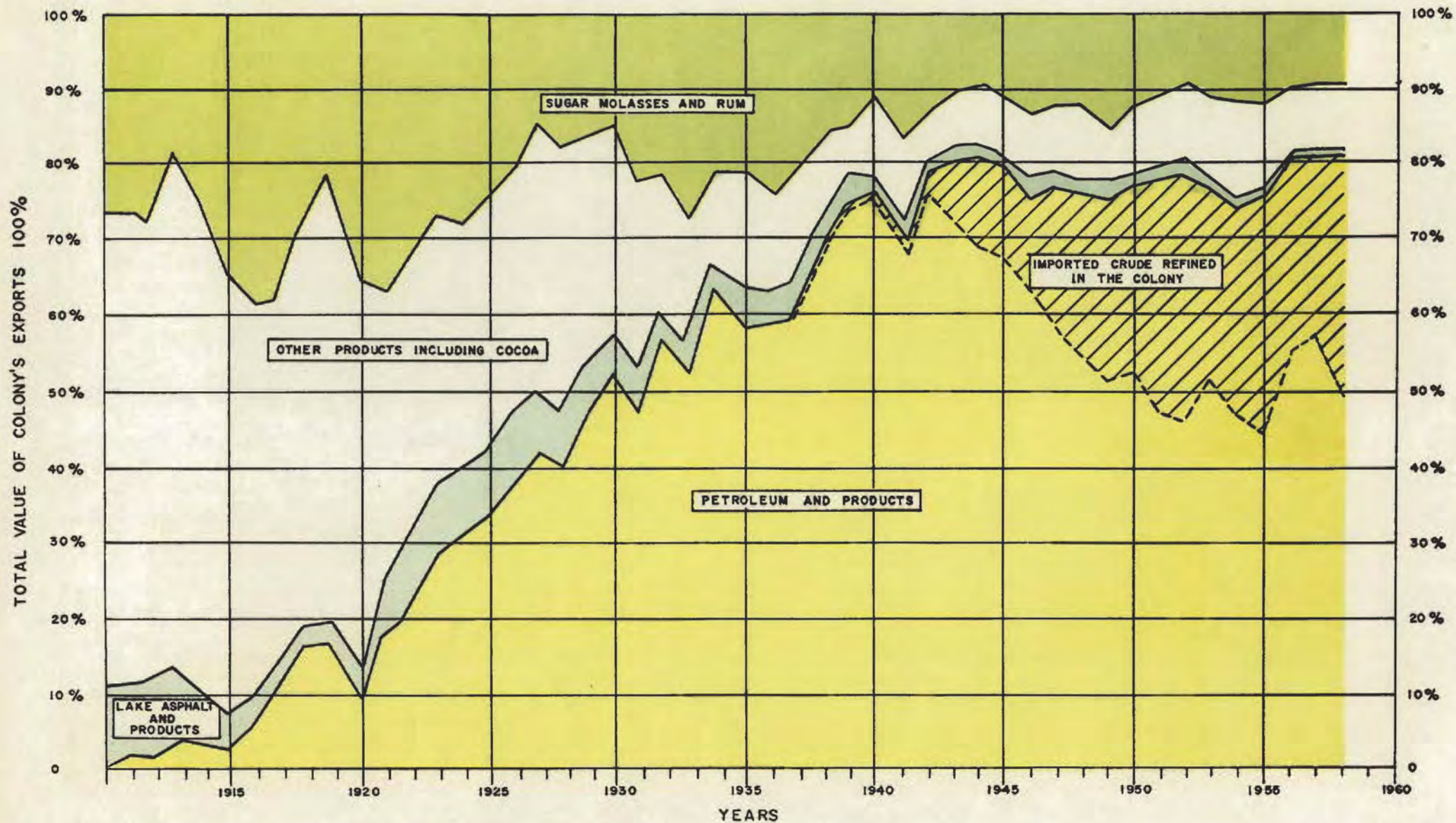
For figures used in constructing graph see table 7 Items 2 and 3. N.B. Payments to contractors are mainly wages

TOTAL NUMBER OF EMPLOYEES

APPENDIX

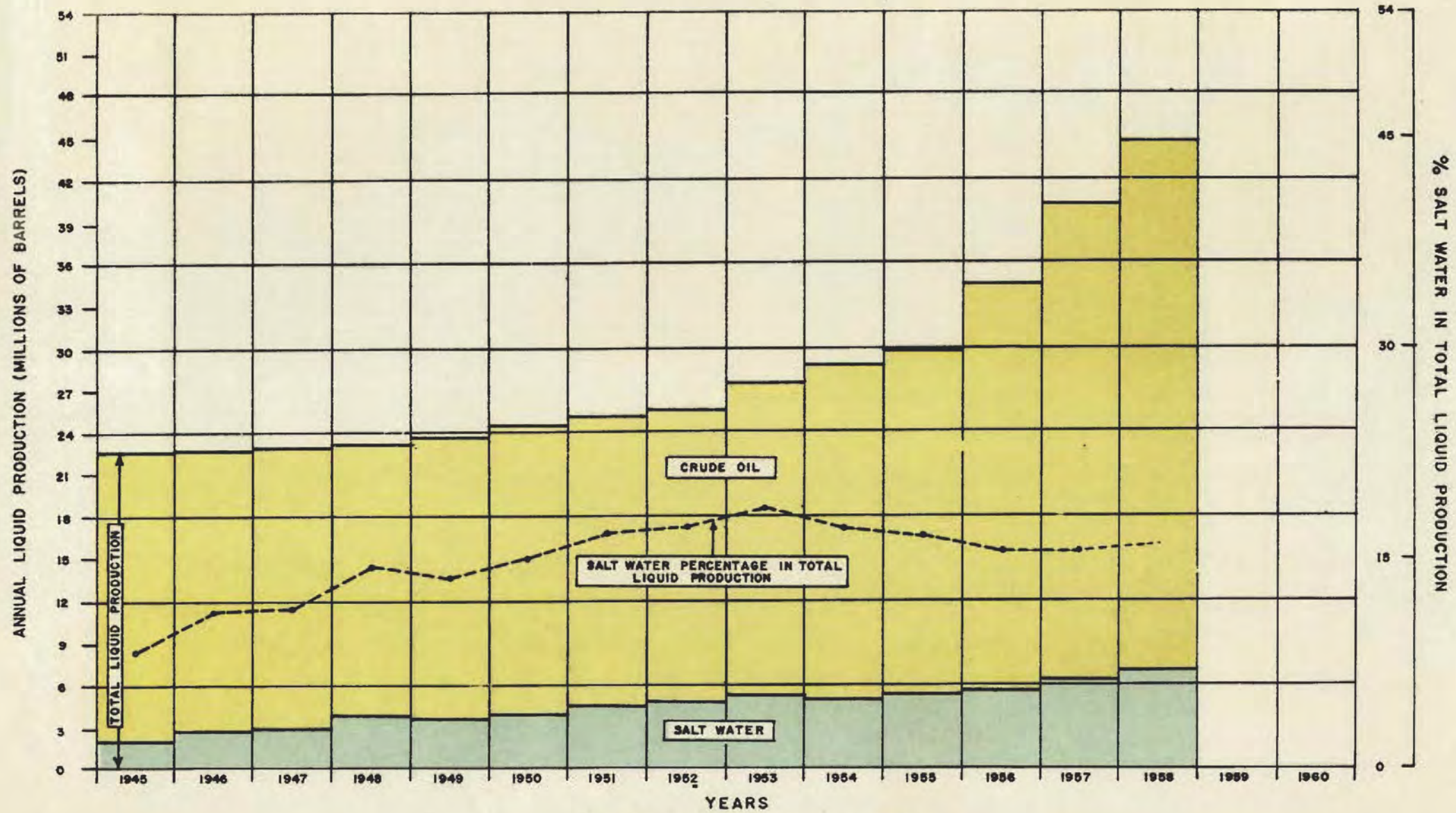
D

# PERCENTAGE DISTRIBUTION OF TOTAL VALUES OF COLONY'S EXPORTS



For values in dollars see table 1-Items 28, 29 and 30

# PRODUCTION OF SALT WATER



See table III for 1958 figures in detail

# CUMULATIVE PRODUCTION & FOOTAGE FOR TRINIDAD

*& comparable data for Venezuela for period 1956-1958.*

*FOR TRINIDAD*

*FOR VENEZUELA*

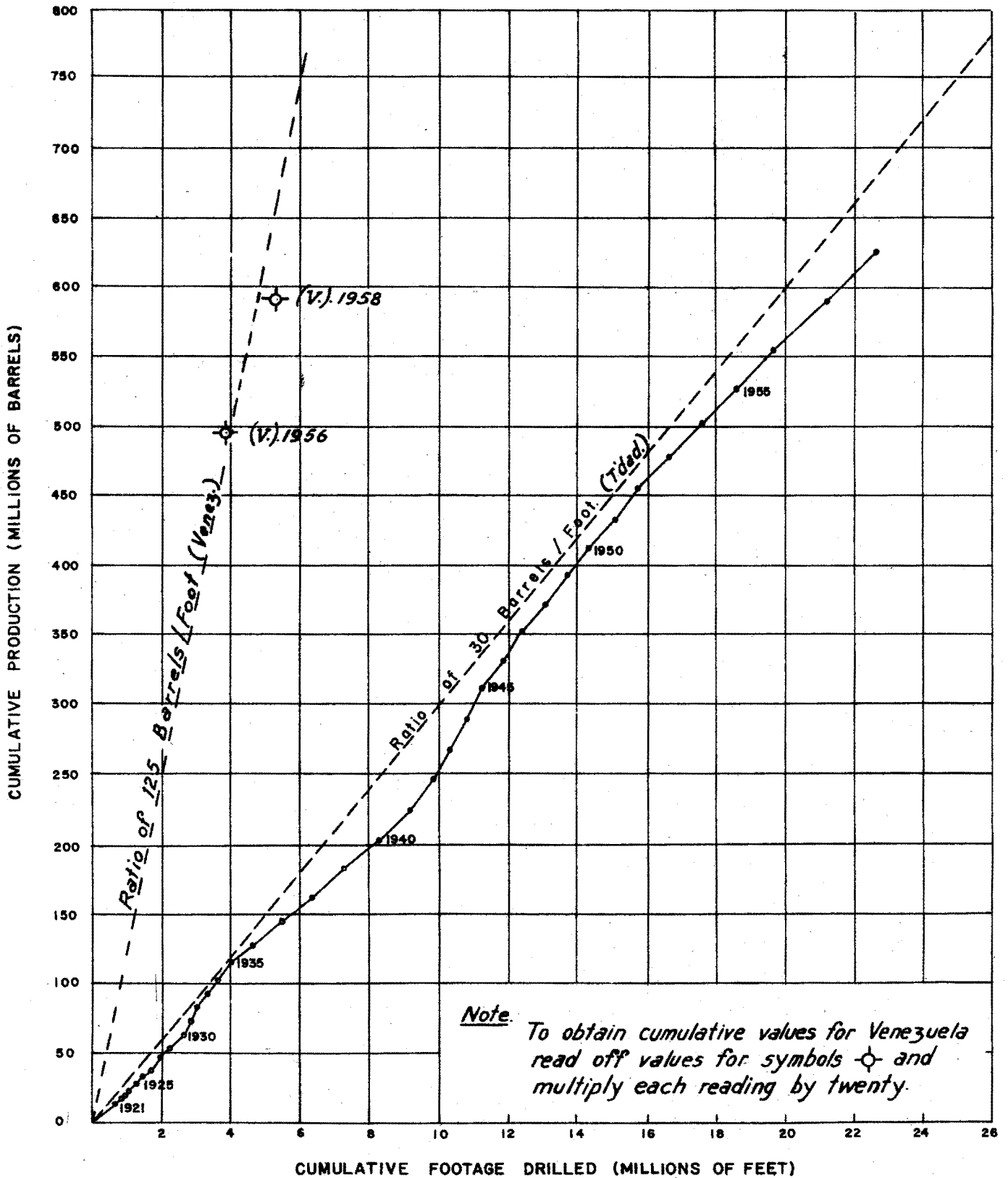
TO 31st DECEMBER 1958

Cumulative Production 626,907,477 bbls.

Cumulative Production 11,812,643,148 bbls.

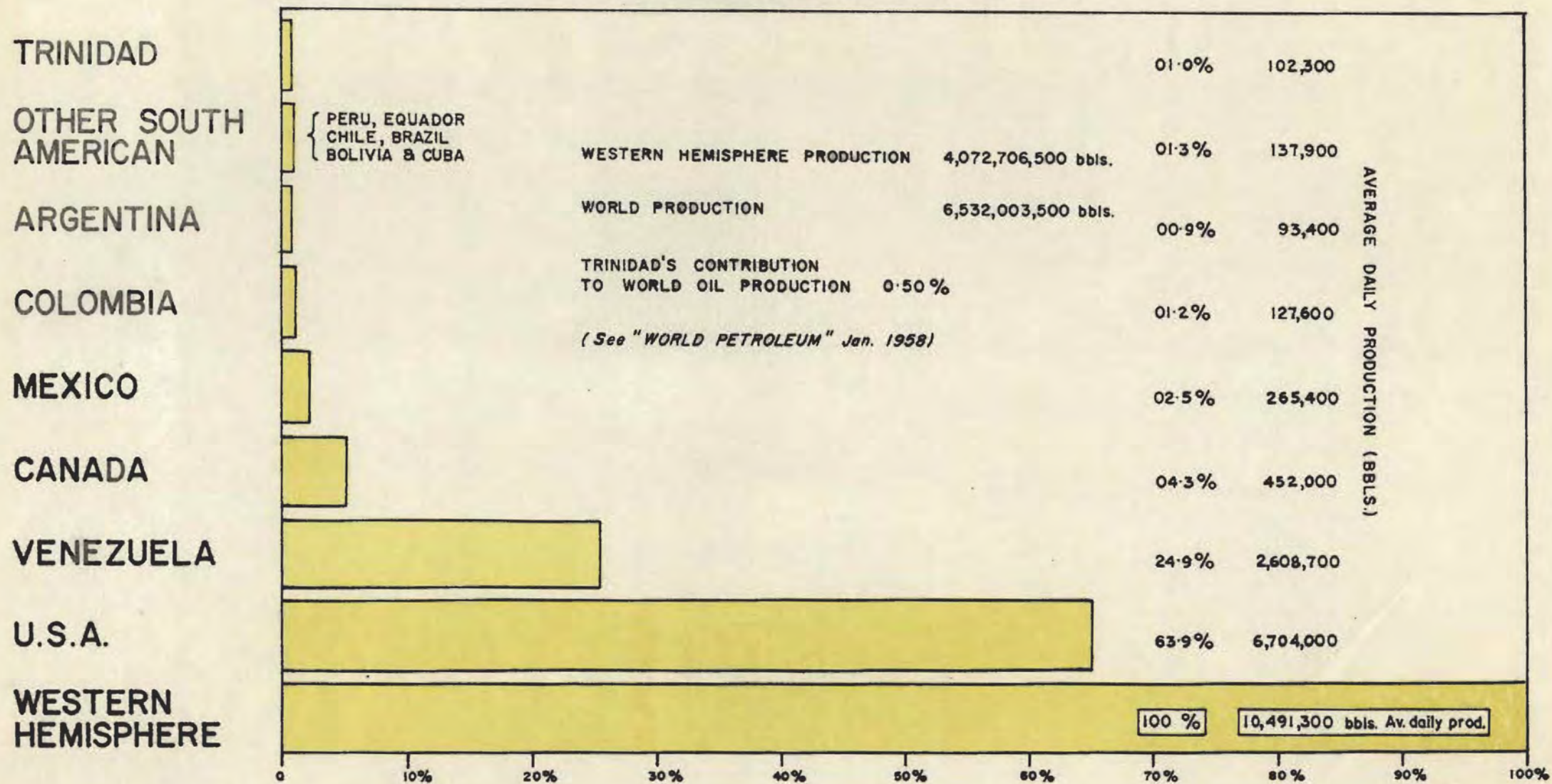
Cumulative Footage Drilled 22,398,883 ft.

Cumulative Footage Drilled 104,624,452 ft.





# TRINIDAD'S CONTRIBUTION TO WESTERN HEMISPHERE OIL PRODUCTION IN 1958



GOVERNMENT PRINTING OFFICE, TRINIDAD, W.I.—1960

[Price 50c.]

Trinidad—A. 20/60

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