

TRINIDAD AND TOBAGO.

Council Paper No. 60 of 1936.

MINES.

**Administration Report of the Acting Inspector of Mines
for the year 1935.**

*Laid before the Legislative Council on the
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1936.
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HON. ACTING COLONIAL SECRETARY,

I have the honour to submit, for the information of His Excellency the Acting Governor, the following report on the working of the Mines Department for the year 1935.

2. The production of 11,671,224 barrels of crude oil during 1935 is the highest recorded in the Colony since the inception of its petroleum industry. Of this production 7,544,427 barrels were obtained from lands the oil rights of which are in the Crown at 22.97 barrels per foot drilled, and 4,126,797 barrels from private lands at 38.29 barrels per foot drilled. The total 1935 production was obtained at the rate of 27 barrels per foot drilled.

The year 1935 was also marked by the highest monthly production of 1,087,884 barrels of crude oil.

The quantity of petroleum products exported shows an increase over 1934 and is the highest on record, the figures being as follows :—

1934—	9,981,774 barrels valued at	....	....	....	\$14,056,128
1935—	10,993,540 do.	....	....	....	\$13,321,708

It will be noted that the value of petroleum products exported is less than in 1934 although the exports were greater. This difference is due in the first instance to a slight decrease in the price of oil fuel and, secondly, to an adjustment in the declared Customs value of other petroleum products.

The table hereunder, based on the Customs returns, is a comparative statement of the average price for the years 1934 and 1935 of petroleum and its products :—

Petroleum and Products Exported.	Average declared value (per barrel) for years	
	1934	1935
	Crude Oil	\$0.82	$0.84
Fuel Oil	1.08	0.88
Petrol	2.26	2.08
Kerosene	5.58	3.72
Lubricating Oil	10.35	7.34
Road Oil	2.91	2.87

3. Petroleum and its products still formed the largest part of the Colony's exports in 1935, the value being approximately three times that of the products of the next most important of its industries, viz., sugar (including molasses and rum). Of the total exports petroleum and its products and asphalt formed 63.33 per cent.

The value of the exports of the leading staple products of the Colony during 1935 is shown in the following table :—

	Value.	Percentage of total.
Petroleum and its products	\$13,321,708	58.53
Sugar, Molasses and Rum	4,693,241	20.62
Cocoa	2,530,622	11.11
Asphalt	1,092,982	4.80
Fruits and Fruit Products	351,597	1.54
Coconuts, Copra and Coconut Oil	241,991	1.06
Bitters	134,668	.59
Coffee	87,792	.39
Other Exports not enumerated	310,098	1.36
	\$22,764,699	100.00

4. There is little of interest to note regarding the construction of new works.

5. REFINERIES.—The capacity of the six main refineries operating in the Colony is now 2,366,300 tons per annum. This includes two Dubbs Cracking plants. Two Edeleanu petroleum distillate refining plants, three Gas Absorption plants and one Gas Adsorption plant for the recovery of gasoline from natural gas were operated in the Colony.

Twelve permits for the refining of oil were issued during the year under the Oil Mining and Refining Ordinance, Cap. 143 and 11,148,285 barrels of crude oil were refined during the period under review.

DEEP WATER LOADING PIERS. —Four deep water piers are in use with facilities for the delivery of petroleum and its products in cargo lots, bunkers, and also for supplying water to vessels. Means are also provided for bunkering vessels in the Harbour of Port-of-Spain. No new piers were erected during 1935.

PIPELINES. —Approximately 159 miles of main pipelines have been laid in the Colony. These do not include the usual field and gathering lines on the various fields.

During the year under review five permits under the Pipelines Ordinance No. 29 of 1933 were issued ; this brings the grand total number of permits issued to 174.

OIL STORAGE CAPACITY. —The total main tank storage capacity is approximately 4,085,000 barrels (35 Imperial Gallons) exclusive of the flow tanks connected to the wells, crude oil settling tanks, and oil fuel feed tanks to boilers.

6. The following table shows the number of feet drilled and the quantity of oil produced during 1935 as compared with the years 1933 and 1934 :—

	YEAR ENDED 31ST DECEMBER, 1933.		YEAR ENDED 31ST DECEMBER, 1934.		YEAR ENDED 31ST DECEMBER, 1935.	
	<i>Feet drilled.</i>	<i>Oil won brls. 35 gals.</i>	<i>Feet drilled.</i>	<i>Oil won brls. 35 gals.</i>	<i>Feet drilled.</i>	<i>Oil won brls. 35 gals.</i>
Crown Oil Rights	173,496	5,290,743	256,455	6,391,544	328,510	7,544,427
Private Lands	62,206	4,270,610	95,328	4,502,819	107,789	4,126,797
	<u>235,702</u>	<u>9,561,353</u>	<u>351,783</u>	<u>10,894,363</u>	<u>436,299</u>	<u>11,671,224</u>

During the year 1935 the footage drilled in the Colony was 436,299 feet surpassing the previous record of 372,530 feet drilled in 1930, and it might also be mentioned that the deepest well 7,354 feet in the Colony was drilled.

7. During the period 1st January to 31st December, 1935, one hundred and thirty-nine new wells were commenced of which 101 were on lands the oil rights of which are owned by the Crown and 38 were drilled on private lands the oil rights of which are in the surface owner. This brings the total number of wells drilled to the end of 1935 to 2,245 of which 1,440 are on lands the oil rights of which are in the Crown and 805 are on private lands. Of the wells commenced during the year 118 were completed as producers and four as water wells.

8. The number of firms engaged in the mining of oil at the close of the year was 14 as against 13 at the end of 1934.

9. ROYALTY. —The royalty paid to the Government in 1935 in respect of crude oil won from lands the oil rights of which are owned by the Government amounted to \$505,278.46 as compared with \$416,923.51 in 1934 and has exceeded all previous records.

10. WAYLEAVES. —The revenue collected under this head was wholly in respect of oil pumped along the public roads of the Colony and amounted to \$1,421.59 as compared with \$1,741.37 for the previous year.

11. FEES. —Fees charged for pipelines crossing the Trinidad Government Railway and public roads amounted to \$2,217.60.

12. LEASES AND LICENCES. —During the year under review 17 mining leases were granted bringing the total number of mining leases and licences granted to 34 made up as follows :—

Mining Leases.	Prospecting Licences. †	Exploration Licences. ‡	AREA.					
			Crown.			Alienated.		
			A.	R.	P.	A.	R.	P.
18	..	..	29,066	3	38	..	..	..
4	..	..	..	..	..	4,512	2	25
8*	..	..	76,061	3	32	7,453	0	32
	1	..	1,755	0	00	..	..	..
	2	..	..	..	..	993	2	20
	..	1	107,109	0	00	..	..	..
30	3	1	213,992	3	30	12,959	1	37

*Composite Mining Leases of Crown and Alienated Lands.

†The Prospecting Licences will shortly be converted into mining leases.

‡Exploration Licences are not granted over Alienated Lands with Crown oil rights.

13. RETURNS.—The various returns required to be submitted by the oil companies under the various Ordinances and Regulations in respect of their operations have been regularly received in the Department, where, after being checked, they have been filed with the records of the Department.

14. A considerably large number of inspections have been carried out by the Department in connection with the various operations taking place on the fields. It affords me pleasure to state that the Managers have readily co-operated with the Department in endeavouring to carry out the provisions of the Ordinances and Regulations.

15. LEGISLATION.—The Drilling Regulations were amended by the addition of two sub-clauses which were added to Regulation No. 18 and approved by the Legislative Council.

A new set of Regulations governing the erection of oil tanks were passed by the Governor in Executive Council.

SAN FERNANDO BRANCH OF THE DEPARTMENT.

16. A report by the Petroleum Technologist on the working of his branch is enclosed as Appendix " B ".

PREVENTION OF ACCIDENTS ORDINANCE, CAP. 157.

17. During the period under review 173 factories in Trinidad and Tobago were worked. These factories entailed a large number of inspections by officers of the Department. The recommendations made for ensuring the safety of the workmen employed have been readily accepted and carried out by the Managers of the various factories.

QUARRIES.

18. The number of quarries worked during the past year was 86, the same as 1934. From inspections that have been made they have, in most cases, been found to have been worked in a careful manner but, with few exceptions, they are relatively unimportant.

PETROLEUM ORDINANCE, CAP. 145.

19. The premises where dangerous petroleum products are stored have been carefully inspected, and it is satisfactory to note that all possible care has been taken to ensure safety. The revenue derived from licences issued to sell petroleum products during 1935 amounted to \$2,220.00. During the year 577 licences were issued for the storage and sale of petroleum and its products.

APPENDICES.

20. Appendix " A " shows the list of oil companies operating in the Colony during the year 1935.

21. Appendix " B " is the Report on the working of the Petroleum Office, San Fernando.

22. In Appendix " C " will be found the daily average number of persons employed in oilfields and quarries and the quantity and value of minerals obtained during the period under review.

23. A statement of the oil produced and exported is shown in Appendix " D ".

24. Appendix " E " shows the amount of oil refined year by year.

25. Appendix " F " consists of a series of charts depicting in graphic form the progress made in various industries during the past few years.

26. Appendix " G " shows the relation of mineral exports to agricultural exports.

STAFF.

27. It affords me pleasure to record the very willing and loyal assistance I have received from the members of the staff.

NELSON BETANCOURT,
Acting Inspector of Mines.

5th May, 1936.

APPENDIX A.

No.	Companies	Nature of tenure of lands on which operations took place.		Disposal of Oil.			Remarks.
✓ 1	Trinidad Leaseholds, Ltd.	Crown Oil Rights under lease	Fyzabad, Barrackpore and Guayaguayare	Pumped to the Company's Refinery at Pointe-a-Pierre and there refined			The Trinidad Leaseholds, Ltd., is the most important company in the Colony from the point of view of marketing and refining, and is second only to the Apex (Trinidad) Oilfields, Ltd., in respect of production. The bulk of the Company's production still continues to be obtained from its holdings in the Fyzabad area where there has been a considerable increase in development with a resultant increase of production. In the Guayaguayare field there has been an increase of drilling, and the production has almost been doubled. The production from the Barrackpore area has declined somewhat.
		Private Lands	Fyzabad and Barrackpore	Most of the refined products are exported in bulk			
✓ 2	United British Oilfields of Trinidad, Ltd. . . .	Crown Lands under lease	Morne L'Enfer Forest Reserve	Pumped to the Company's Refinery at Point Fortin and there refined			Development of the Parry Lands field in the Morne L'Enfer Reserve has continued during the year and the footage drilled has been considerably reduced. The production has been maintained at much the same level as last year. The production in the Morne L'Enfer Reserve formerly operated by the Petroleum Development Company has been nearly doubled. The production at Point Fortin has been greatly increased.
		Private Lands	Point Fortin	Most of the refined products are exported in bulk			
✓ 3	Trinidad Central Oilfields, Ltd. . . .	Crown Lands under lease	Tabaquite, Guapo and Lizard Springs	Pumped from Tabaquite and Lizard Springs refined, sold locally and exported; that from the Cruse Field is sold to the Trinidad Leaseholds, Ltd.			The operations of this Company at Tabaquite and Lizard Springs were on a small scale and the production has more or less been maintained. In the Cruse Field, Guapo, there has been a reduction in footage drilled but the production has considerably increased.
✓ 4	Trinidad Lake Petroleum Co., Ltd.	Private Lands	Brighton	Refined	.. ..	Producing only. The Company's private lands have been taken over by the Antilles Petroleum Company (Trinidad) Ltd., in December, 1935.	
5	Apex (Trinidad) Oilfields, Ltd.	Crown Oil Rights under lease and prospecting licence and private lands	Fyzabad and Siparia	Crude Oil sold to the Trinidad Leaseholds, Ltd., casing head petroleum spirit sold to the United British Oilfields of Trinidad, Ltd.			This Company is the largest producer in the Colony. Drilling was slightly increased during the year but the production was somewhat less than in 1934.

APPENDIX A.—Continued.

No.	Companies.	Nature of tenure of lands on which operations took place.	Disposal of Oil.	Remarks.	
✓ 6	Kern Trinidad Oilfields, Ltd. . . .	Crown Lands under lease Private Lands	La Brea . . . Guapo and Roussillac	Some of the production is refined, some exported and some sold to the Trinidad Leaseholds, Ltd., Trinidad Oil Fields Operating Co., Ltd., and United British Oilfields of Trinidad, Ltd.	There was a considerable increase of footage by this Company. The production from this area has also been considerably increased.
7	Trinidad Investments, Ltd.	Private Lands	Fyzabad . . .	Sold to Trinidad Leaseholds, Ltd.	Drilling was carried out in 1935 with a considerable increase in production.
8	Trinidad Petroleum Development Co., Ltd.	Crown Oil Rights under lease and prospecting licence Private Lands	Palo Seco . . . Palo Seco and Naparima	Sold to the United British Oilfields of Trinidad, Ltd.	The Company's operations have been chiefly confined to the Palo Seco District where the footage drilled has greatly increased. The production also has considerably increased.
9	Palo Seco Oilfields (C. C. Stollmeyer)	Crown Lands under lease	Palo Seco . . .	Sold to Trinidad Leaseholds, Ltd. . .	A small amount of drilling has been undertaken. The production has slightly decreased.
✓ 10	Trinidad Oil Fields Operating Co., Ltd. . .	Crown Lands under lease Private Lands	San Francique, Fyzabad, San Francique and Palo Seco	Refined	Production has increased slightly and footage has slightly decreased.
11	New Dome Oilfields, Ltd.	Private Lands	Fyzabad . . .	Sold to Kern Trinidad Oilfields, Ltd.	No drilling was done and the production was less than during the previous year.
12	Siparia Trinidad Oilfields, Ltd.	Crown Lands under prospecting licence	Palo Seco . . .	Sold to Trinidad Leaseholds, Ltd., and the Trinidad Petroleum Development Co., Ltd.	No drilling was carried out but the production has increased.
13	Petroleum Options (1925) Ltd.	Private Lands	San Francique . . .	Sold to Trinidad Leaseholds, Ltd.	The footage drilled has been doubled and an increase in production realised.
✓ 14	Coldan Co., Ltd.	Private Lands	Fyzabad . . .	Refined	Small amount of footage drilled and production obtained.

APPENDIX B.

HONOURABLE INSPECTOR OF MINES (ACTING).

The production of crude oil in 1935 reached a new record figure of 11,671,224 barrels, or an increase of 7.13 per cent. over 1934. Footage drilled also attained a new high peak of 436,299 feet. This is about 24 per cent. greater than in 1934, and just over 17 per cent. more than in 1930, the previous highest year.

An analysis of the 1934 and 1935 figures is shown below :—

	1934			1935		
	<i>Production.</i>	<i>Feet drilled.</i>	<i>Average production per well.</i>	<i>Production</i>	<i>Feet drilled.</i>	<i>Average production per well.</i>
Crown	4,586,366	167,952	853	5,288,943	185,788	987
Alienated	1,805,178	88,503	987	2,255,484	142,722	1,111
Private	4,502,819	95,328	1,146	4,126,797	107,789	958

During the period under review one hundred and thirty-nine wells were started, and are accounted for as follows :—

	<i>Crown.</i>	<i>Alienated.</i>	<i>Private.</i>
Started in 1935	55	46	38
Unfinished at end of 1934	17	6	7
Drilling in 1935	72	52	45
Completed as Producers	47	36	35
Completed as Water Wells	...	4	...
Officially abandoned	1	5	...
Unfinished at end of 1935	24	7	10
<i>Old wells abandoned in 1935</i>	4	2	5
Re-completed in 1935	13	1	3

At the end of 1935 the total number of wells started in the Colony was 2,245.

The number of producing wells per month increased from 915 in January to 1,024 in November, falling back to 1,017 in December. The average number of producers per month was 974, as shown in the following comparative table :—

	1932	1933	1934	1935
Wells flowing	215	231	222	235
Wells pumping	469	443	465	466
Wells bailing or swabbing	81	124	140	146
Wells air or gas lift	15	29	70	105
Wells plunger lift	...	...	...	8
Wells displacement pumping	6	9	9	14
	786	836	906	974

The steady increase in the use of air or gas lift from 1932 is to be noted.

Of the producing areas Fyzabad was again the largest giving 55.125 per cent. of the total.

At the end of the year the deepest well in the Colony was 7,354 feet deep. There were 88 wells of 4,000 feet or more; 20 over 5,000 feet; 7 over 6,000 feet; and 3 over 7,000 feet deep.

There were 31 reportable accidents during the year, three of which were fatal. Of these accidents 21 were either due to carelessness on the part of the workmen involved, or were unavoidable. No oilfield fires occurred during the year.

Towards the end of the year quebracho came into more general use as an agent for reducing the viscosity of heavy mineral laden drilling mud also more vibrating screens were used on wells for cleaning the mud. A formation tester has been introduced as well as a strata sampler.

New Oil Tank Regulations (1935) were brought into force on the 19th September, 1935, for the greater safety of men employed thereon.

For the last three years experiments have been carried on by one Company with replacing gas both in high pressure and low pressure zones but up to date no definite results are available.

Inspections of safety measures at drilling and producing wells carried out during routine visits to the fields.

The following tables are attached :—

No. 1 showing the monthly drilling and production figures for 1935.

No. 2 showing the number of wells started and footage drilled since the commencement of the industry in 1867.

No. 3 showing the annual production since returns were first sent to the Government in 1908.

No. 4 showing the number of wells started annually and the status of these wells at the end of the year.

You will notice that Tables 2 and 3 have had to be altered from 1923. This was necessitated by information being received here that certain land on which 11 wells were drilled was transferred from Crown to Alienated on the 9th September, 1925.

I should like to record that the Staffs of all operating Companies have continued to give me their assistance in carrying out my duties and I also wish to express my appreciation of the help given me by the Staff of this office since I was first appointed.

C. ERIK CAPITO,
Petroleum Technologist.

3rd April, 1936.

TABLE I.
DRILLING AND PRODUCTION RETURN FOR 1935.

Month.	New wells started.			New wells completed as Producers.			Recompleted as Producers.			New wells completed as dry, or uncommercial and abandoned; or for fresh water.			Wells abandoned.			Total wells started to date.	Footage drilled during month.	Production (barrels).	Flowing.			Pumping.			Bailing or swabbing.		Air or Gas Lift.			Plunger Lift.		Displacement pumps.			Total number of wells producing.			Grand Total.	Percentage wells producing to total wells drilled.							
	C	A	P	C	A	P	C	A	P	C	A	P	C	A	P				C	A	P	C	A	P	C	A	P	C	A	P	C	A	P	C	A	P	C			A	P					
Jan.	6	5	3	4	2	5					2		1	1		2,120	38,504	915,220	97	42	83	197	50	197	110	1	31	20	60	17		1		2	7	424	156	335	915	43.16						
Feb.	6	3	1	4	2	1							1	1		2,130	29,840	843,619	97	41	80	219	53	195	107	1	38	19	60	16		1		2	10	442	158	339	939	44.08						
Mar.	6	4	2	5	4	1	1						2			2,142	25,305	919,848	94	44	79	216	55	198	104	1	40	23	58	19		1		3	10	437	162	346	945	44.12						
April	3	2	4	1	2	1	2	1								2,151	36,063	899,946	97	39	79	216	54	194	105		38	26	62	21		1	2	3	12	444	159	346	949	44.12						
May	5	5	5	7	2	3	2				1				1	2,166	34,792	953,108	105	40	78	199	54	196	105	2	38	24	62	24		1	2	3	12	433	162	350	945	43.65						
June	4	5	4	6	5	3	1									2,179	40,764	972,904	106	43	78	197	51	201	109	3	41	20	63	24		1	2	3	12	432	164	358	954	43.80						
July	4	3	4	1	3	1	3							1		2,190	49,601	988,341	107	43	73	215	55	204	114	1	42	22	63	27		6	2	3	12	458	171	360	989	45.18						
Aug.	5	4	2	4	2	4		1								2,201	32,740	1,003,382	113	44	80	215	55	205	101	2	40	21	61	25	1	8	4	5	13	451	175	367	993	45.12						
Sept.	5	2	3	5	4	5	2									2,211	34,884	992,525	113	44	82	216	53	207	107	3	39	24	62	25		9	5	8	10	460	179	368	1,007	45.54						
Oct.	2	3	4	2	5	1							3			2,220	39,904	1,015,490	115	47	84	220	61	211	97	2	40	25	57	26		10	5	6	9	457	183	375	1,015	45.72						
Nov.	4	6	4	4	1	7	1	1					1	2		2,234	39,510	1,078,957	126	49	91	212	60	206	99	1	42	23	55	26		10	8	7	9	460	182	382	1,024	45.84						
Dec.	5	4	2	4	4	3	1				1		2	1		2,245	34,392	1,087,884	145	48	87	191	59	210	98		44	23	54	25	1	11	8	7	6	458	179	380	1,017	45.30						
Totals	55	46	38	47	36	35	13	1	3		4		5	7	5	2,245	436,299	11,671,224	110	44	Averages			81	209	55	202	105	1	40	22	60	23		5	3	Averages			4	10	446	169	359	974	
Grand Totals	139			118			17			4*			17			2,245	436,299	11,671,224	235			466			146		105			8		14			446	169	359	974	43.38							

6

*Water Wells.

C—Crown. A—Alienated. P—Private.

C. ERIK CAPITO,
Petroleum Technologist.

TABLE 2.
COLONY OF TRINIDAD.
Number of Wells started and Footage Drilled Annually.

YEAR.	WELLS STARTED.								FOOTAGE DRILLED.								YEARLY TOTALS.	CUMULATIVE.
	CROWN.		ALIENATED.		PRIVATE.		TOTALS.		CROWN.		ALIENATED.		PRIVATE.					
	Annual.	Cum.	Annual.	Cum.	Annual.	Cum.	Annual.	Cum.	Annual.	Cum.	Annual.	Cum.	Annual.	Cum.				
1867	—	—	—	—	1	1	1	1	—	—	—	—	964	964	964	964		
1900	—	—	—	—	1	2	1	2	—	—	—	—	600	1,564	600	1,564		
1902	1	1	—	—	2	4	3	5	600	600	—	—	1,315	2,879	1,915	3,479		
1903	1	2	—	—	—	4	1	6	1,172	1,772	—	—	1,060	3,939	2,232	5,711		
1904	1	3	—	—	—	4	1	7	860	2,632	—	—	—	3,939	860	6,571		
1905	—	3	—	—	—	4	—	7	—	2,632	4	—	—	3,989	—	6,571		
1906	1	4	—	—	2	6	3	10	1,104	3,736	—	—	1,499	5,438	2,603	9,174		
1907	1	5	—	—	2	8	3	13	798	4,534	—	—	1,563	7,001	2,361	11,535		
1908	—	5	—	—	4	12	4	17	—	4,534	—	—	2,352	9,353	2,352	13,887		
1909	—	5	—	—	6	18	6	23	—	4,534	—	—	5,362	14,715	5,362	19,249		
1910	5	10	—	—	7	25	12	35	3,771	8,305	—	—	4,319	19,034	8,090	27,339		
1911	8	18	—	—	38	63	46	81	4,902	13,207	—	—	34,010	53,044	38,912	66,251		
1912	10	28	—	—	35	96	45	126	6,839	20,046	—	—	32,881	85,925	39,720	105,971		
1913	25	53	—	—	18	114	43	169	13,813	33,859	—	—	26,388	112,313	40,201	146,172		
1914	50	103	—	—	16	132	66	235	35,146	69,005	—	—	23,283	135,596	58,429	204,601		
1915	31	134	—	—	19	151	50	285	29,208	98,213	—	—	25,652	161,248	54,860	259,461		
1916	28	162	—	—	20	171	48	333	30,866	129,079	—	—	28,035	189,283	58,901	318,362		
1917	38	200	—	—	6	177	44	377	41,227	170,306	—	—	9,557	198,840	50,784	369,146		
1918	38	238	—	—	4	181	42	419	47,700	218,006	—	—	6,796	205,636	54,496	423,642		
1919	39	277	—	—	13	194	52	471	49,741	267,747	—	—	16,769	222,405	66,510	490,152		
1920	44	321	1	1	23	217	68	539	53,002	320,749	1,665	1,665	24,009	246,414	78,676	568,828		
1921	49	370	4	5	32	249	85	624	71,318	392,067	2,896	4,561	44,631	291,045	118,845	687,673		
1922	68	438	4	9	19	268	91	715	88,299	480,366	8,701	13,262	39,463	330,508	136,463	824,136		
1923	70	508	5	14	33	301	108	823	79,907	560,273	7,060	20,322	58,805	389,313	145,772	969,908		
1924	67	575	8	22	35	336	110	933	90,141	650,414	6,190	26,512	55,197	444,510	151,528	1,121,436		
1925	46	621	16	38	37	373	99	1,032	86,904	737,318	18,446	44,958	63,543	508,053	168,893	1,290,329		
1926	69	690	13	51	46	419	128	1,160	109,234	846,552	18,732	63,690	72,691	580,744	200,657	1,490,986		
1927	73	763	13	64	73	492	159	1,319	101,920	948,472	17,288	80,978	122,465	703,209	241,673	1,732,659		
1928	43	806	32	96	64	556	139	1,458	71,481	1,019,953	58,842	139,820	112,863	816,072	243,186	1,975,845		
1929	52	858	59	155	48	604	159	1,617	92,590	1,112,543	118,583	258,403	96,309	912,381	307,482	2,283,327		
1930	76	934	31	186	56	660	163	1,780	170,389	1,282,932	85,561	343,964	116,706	1,029,087	372,656	2,655,983		
1931	9	943	25	211	26	686	60	1,840	42,972	1,325,904	95,410	439,374	80,260	1,109,347	218,642	2,874,625		
1932	21	964	20	231	20	706	61	1,901	44,568	1,370,472	67,162	506,536	61,557	1,170,904	173,287	3,047,912		
1933	36	1,000	22	253	23	729	81	1,982	85,946	1,456,418	87,550	594,086	62,206	1,323,110	235,702	3,283,614		
1934	56	1,056	30	283	38	767	124	2,106	167,952	1,624,370	88,503	682,589	95,328	1,328,438	351,783	3,635,397		
1935	55	1,111	46	329	38	805	139	2,245	185,788	1,810,158	142,722	825,311	107,789	1,436,227	436,299	4,071,696		
		1,111		329		805		2,245		1,810,158		825,311		1,436,227		4,071,696		

TABLE 3.
Yearly Trinidad Production.

Year.	Crown.	Accu- mulative Total.	Alienated.	Accu- mulative Total.	Private.	Accu- mulative Total.	Yearly Totals.	Grand Accumu- lative Total.
1908	—	—	—	—	37	37	37	37
1909	—	—	—	—	47,295	47,332	47,295	47,332
1910	55	55	—	—	105,023	152,355	105,078	152,410
1911	3,994	4,049	—	—	217,298	369,653	221,292	373,702
1912	9,104	13,153	—	—	476,801	846,454	485,905	859,607
1913	52,153	65,306	—	—	533,029	1,379,483	585,182	1,444,789
1914	512,299	577,605	—	—	480,917	1,860,400	993,216	2,438,005
1915	392,389	969,994	—	—	512,330	2,372,730	904,719	3,342,724
1916	478,815	1,448,809	—	—	449,060	2,821,790	927,875	4,270,599
1917	1,065,945	2,514,754	—	—	536,357	3,358,147	1,602,302	5,872,901
1918	1,588,805	4,103,559	—	—	493,115	3,851,262	2,081,920	7,954,821
1919	1,539,973	5,643,532	—	—	301,063	4,152,325	1,841,036	9,795,857
1920	1,758,039	7,401,571	—	—	325,071	4,477,396	2,083,110	11,878,967
1921	1,751,943	9,153,514	300	300	601,916	5,079,312	2,354,159	14,233,126
1922	1,534,796	10,688,310	147	447	909,727	5,989,039	2,444,670	16,677,796
1923	1,847,118	12,535,428	63,334	63,781	1,140,335	7,129,374	3,050,787	19,728,583
1924	1,410,737	14,946,165	76,467	140,248	1,570,856	8,700,230	4,058,066	23,786,643
1925	2,647,095	17,593,260	200,781	341,029	1,538,634	10,238,864	4,386,510	28,173,153
1926	2,630,100	20,223,360	310,953	651,982	2,030,426	12,269,290	4,971,479	33,144,632
1927	2,039,363	22,262,723	297,761	949,743	3,043,676	15,312,966	5,380,800	38,525,432
1928	2,652,981	24,915,704	1,470,333	2,420,076	3,561,273	18,874,239	7,684,587	46,210,019
1929	2,987,795	27,903,499	1,627,439	4,047,515	4,100,554	22,974,793	8,715,788	54,925,807
1930	3,429,030	31,332,529	1,831,338	5,878,853	4,158,589	27,133,382	9,418,957	64,344,764
1931	2,795,572	34,128,101	2,530,175	8,409,028	4,417,751	31,551,133	9,743,498	74,088,262
1932	3,200,083	37,328,184	2,410,813	10,819,841	4,515,225	36,066,358	10,126,121	84,214,383
1933	3,684,148	41,012,332	1,606,595	12,426,436	4,270,610	40,336,968	9,561,353	93,775,736
1934	4,586,366	45,598,698	1,805,178	14,231,614	4,502,819	44,839,787	10,894,363	104,670,099
1935	5,288,943	50,887,641	2,255,484	16,487,098	4,126,797	48,966,584	11,671,224	116,341,323

C. ERIK CAPITO,
Petroleum Technologist.

TABLE 4.

Table showing number of Wells started in each year and status of these Wells at 31st December, 1935.

YEAR.	WELLS STARTED.			PRODUCING.			IDLE.			ABANDONED.			UNFINISHED.			TOTALS.			
	C	A	P	C	A	P	C	A	P	C	A	P	C	A	P	Producing.	Idle.	Aban- doned.	Un- finished.
1867 ..	—	—	1									—	—	1		—	—	1	—
1900 ..	—	—	1									—	—	1		—	—	1	—
1902 ..	1	—	2									1	—	2		—	—	3	—
1903 ..	1	—	—									1	—	—		—	—	1	—
1904 ..	1	—	—									1	—	—		—	—	1	—
1905 ..	—	—	—									—	—	—		—	—	—	—
1906 ..	1	—	2									1	—	2		—	—	3	—
1907 ..	1	—	2									1	—	2		—	—	3	—
1908 ..	—	—	4	—	—	1	—	—	—	—	—	—	—	3		1	—	3	—
1909 ..	—	—	6	—	—	2	—	—	3	—	—	—	—	1		2	3	1	—
1910 ..	5	—	7	—	—	1	3	—	1	2	—	5				1	4	7	—
1911 ..	8	—	38	2	—	7	1	—	2	5	—	29				9	3	34	—
1912 ..	10	—	35	2	—	6	3	—	6	5	—	23				8	9	28	—
1913 ..	25	—	18	8	—	6	8	—	—	9	—	12				14	8	21	—
1914 ..	50	—	16	16	—	7	10	—	2	24	—	7				23	12	31	—
1915 ..	31	—	19	10	—	12	8	—	3	13	—	4				22	11	17	—
1916 ..	28	—	20	9	—	11	11	—	5	8	—	4				20	16	12	—
1917 ..	38	—	6	19	—	1	6	—	2	13	—	3				20	8	16	—
1918 ..	38	—	4	18	—	—	10	—	—	10	—	4				18	10	14	—
1919 ..	39	—	13	20	—	2	9	—	2	10	—	9				22	11	19	—
1920 ..	44	1	23	20	—	6	10	—	2	14	1	15				26	12	30	—
1921 ..	49	4	32	25	—	10	9	—	6	15	4	16				35	15	35	—
1922 ..	68	4	19	33	1	6	14	—	4	21	3	9				40	18	33	—
1923* ..	70	5	33	31	1	16	12	—	3	26	4	14	1	—	—	48	15	44	1
1924* ..	67	8	35	30	1	16	16	—	7	21	7	12	—	—	—	47	23	40	—
1925*† ..	46	16	37	24	5	16	10	—	7	12	11	14	—	—	—	45	17	37	—
1926 ..	69	13	46	27	3	26	20	2	9	22	8	11	—	—	—	56	31	41	—
1927 ..	73	13	73	26	6	35	22	4	16	25	3	22	—	—	—	67	42	50	—
1928 ..	43	32	64	22	26	42	11	4	13	10	2	9	—	—	—	90	28	21	—
1929 ..	52	59	48	23	36	34	11	16	5	16	7	9	2	—	—	93	32	32	2
1930 ..	76	31	56	48	19	35	13	7	6	13	5	14	2	—	1	102	26	32	3
1931 ..	9	25	26	6	21	19	—	2	2	2	2	5	1	—	—	46	4	9	1
1932 ..	21	20	20	17	15	14	—	4	3	4	—	3	—	1	—	46	7	7	1
1933 ..	36	22	23	21	17	19	5	5	1	7	—	3	3	—	—	57	11	10	3
1934 ..	56	30	38	47	28	36	—	—	—	7	2	1	2	—	1	111	—	10	3
1935 ..	55	46	38	41	36	30	—	1	—	1	3	—	13	6	8	107	1	4	27
Gand	1,111	329	805	545	215	416	222	45	110	320	62	269	24	7	10	†1,176	377	651	41
Totals ..	2,245			1,176			377			651			41			2,245			

* In 1923—1 Well started on Crown Lands which were subsequently Alienated.

* In 1924—4 Wells do. do. do.

* In 1925—3 Wells do. do. do.

† Three other wells started on Alienated Lands were previously shown as Crown and are now transferred to Alienated.

‡ Includes 6 Gas Wells, 8 Fresh Water Wells and 1 Salt Water Well.

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APPENDIX C.

Daily average number of persons employed in Oilfields and Quarries and the quantity and value of minerals obtained during the year ended 31st December, 1935.

Minerals.	Daily average number of persons employed.			Quantity.	Approximate Value.*
	Males.	Females.	Total.		
Oil	6,098	95	6,193	11,671,224 brls.	\$ 9,192,338 c. 20
Asphalt	616	1	617	111,077 tons†	333,231 00
Private Quarries (Limestone, Gravel, &c.) ..	710	172	882	248,725 tons	129,574 40
Government Quarries (Limestone, &c.) ..	250	68	318	58,048 tons	30,631 83

*The values in this column are those returned by owners and managers and represent the value at the place of production.

†In addition to this amount 23,501 tons were extracted from the Pitch Lake by the Public Works Department for use on the roads of the Colony.

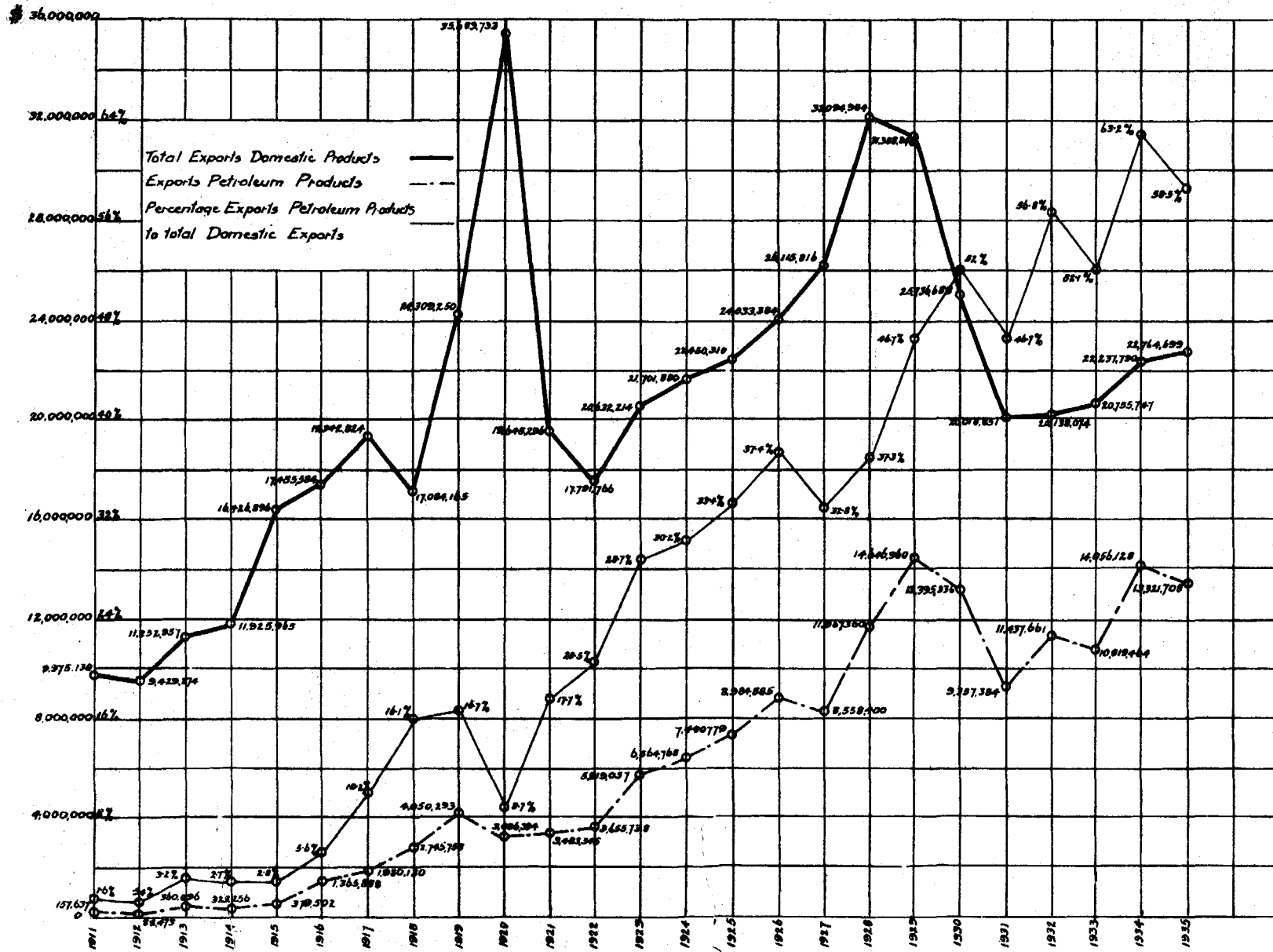
APPENDIX D.

Statement of Oil produced and exported year by year since the inception of the Petroleum Industry in the Colony.

Year.	Production in barrels.	Quantity of Crude oil and Refined oil exported in barrels.
1908	37	—
1909	47,295	46
1910	105,078	—
1911	221,292	219,582
1912	485,905	122,734
1913	585,182	387,719
1914	993,216	348,351
1915	904,719	408,188
1916	927,875	975,142
1917	1,602,302	1,079,369
1918	2,081,920	1,305,407
1919	1,841,036	1,406,264
1920	2,083,110	1,034,907
1921	2,354,159	1,223,346
1922	2,444,670	1,615,740
1923	3,050,787	2,432,470
1924	4,058,060	3,224,529
1925	4,386,510	3,606,608
1926	4,971,479	3,988,308
1927	5,380,800	4,456,770
1928	7,684,587	6,361,675
1929	8,715,788	8,243,023
1930	9,418,957	7,678,807
1931	9,743,498	8,964,303
1932	10,126,121	9,637,474
1933	9,561,353	8,909,298
1934	10,894,363	9,981,774
1935	11,671,224	10,993,540
	116,341,323	98,605,374

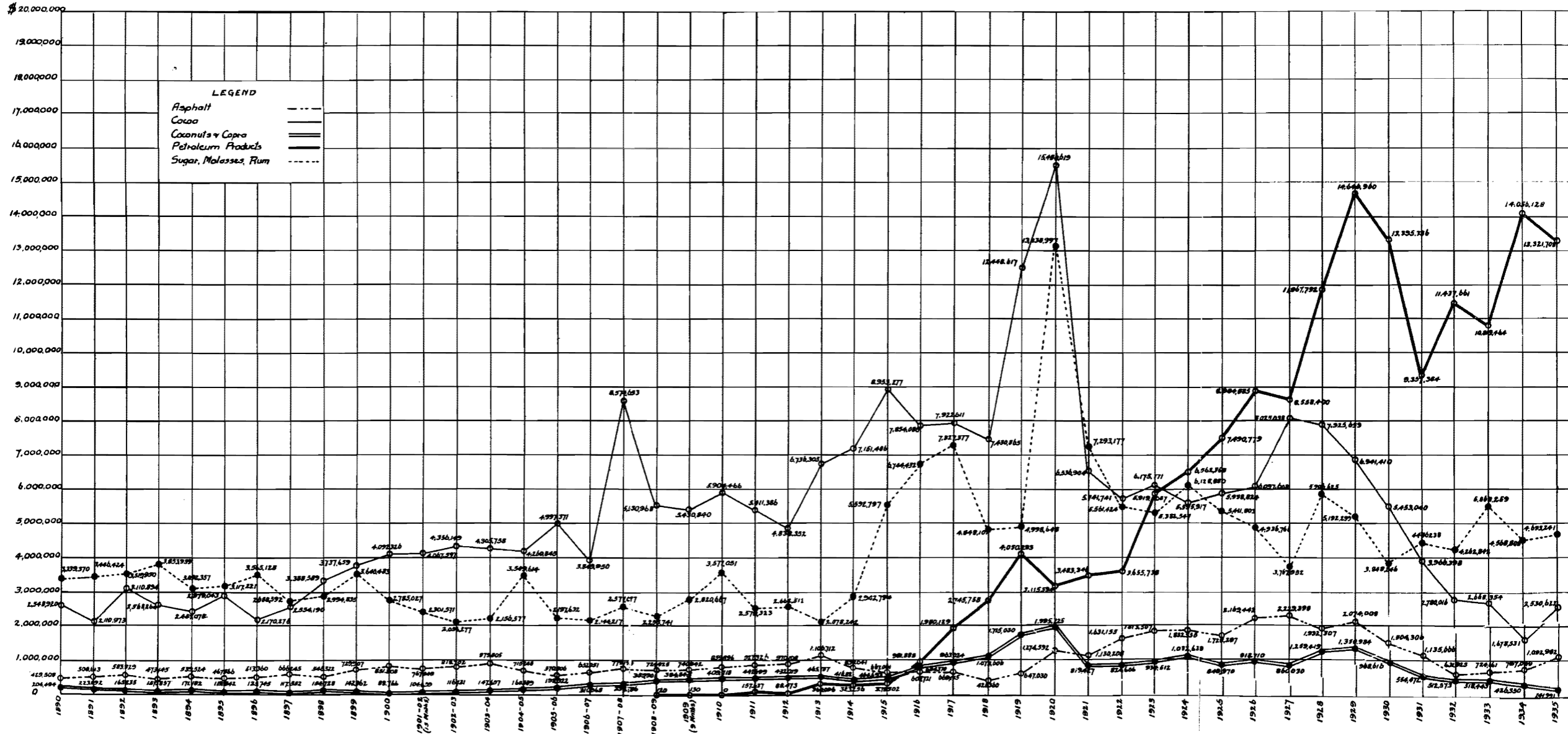
"A"
TRINIDAD AND TOBAGO

APPENDIX "F"



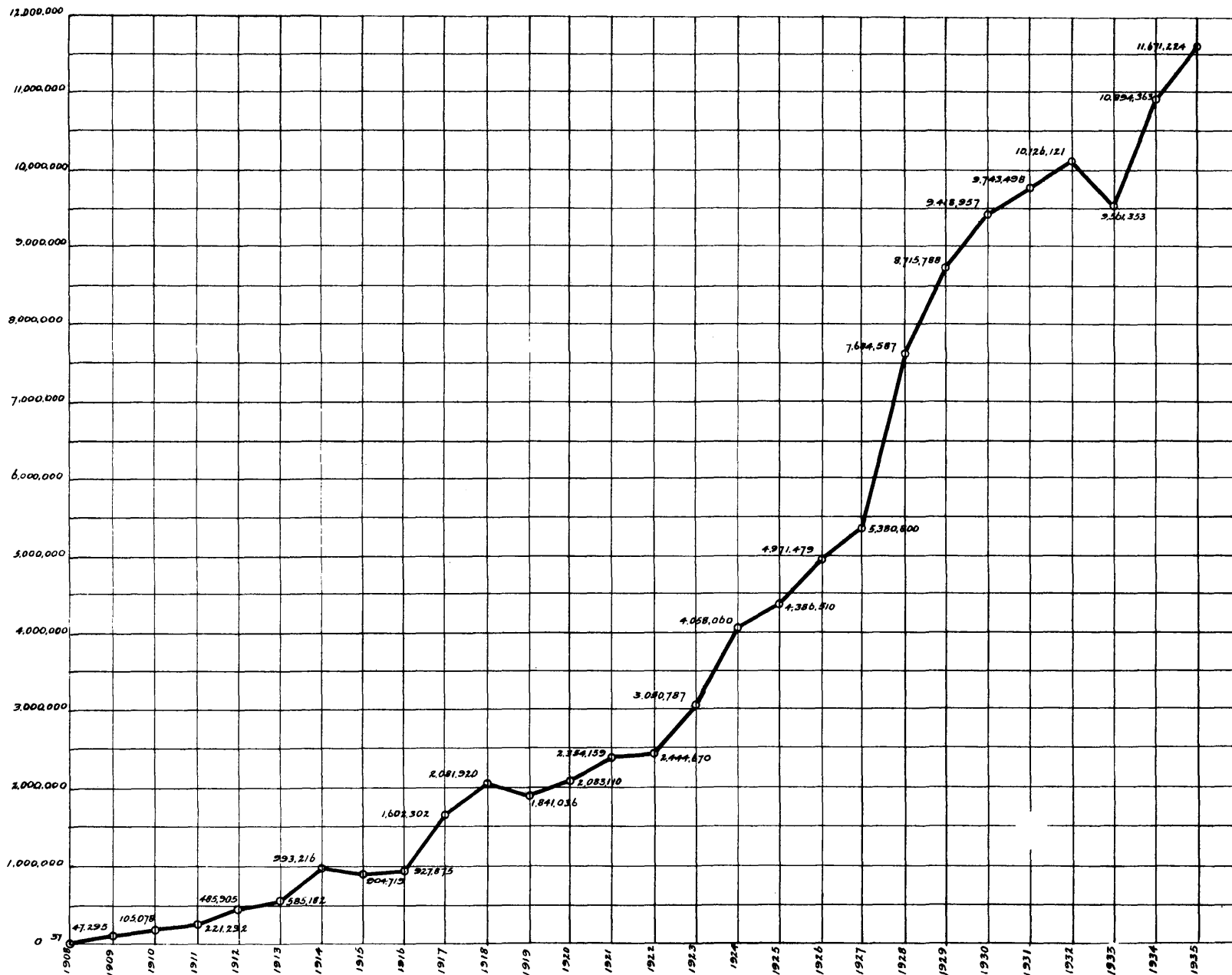
"B"

EXPORT OF LOCAL PRODUCE



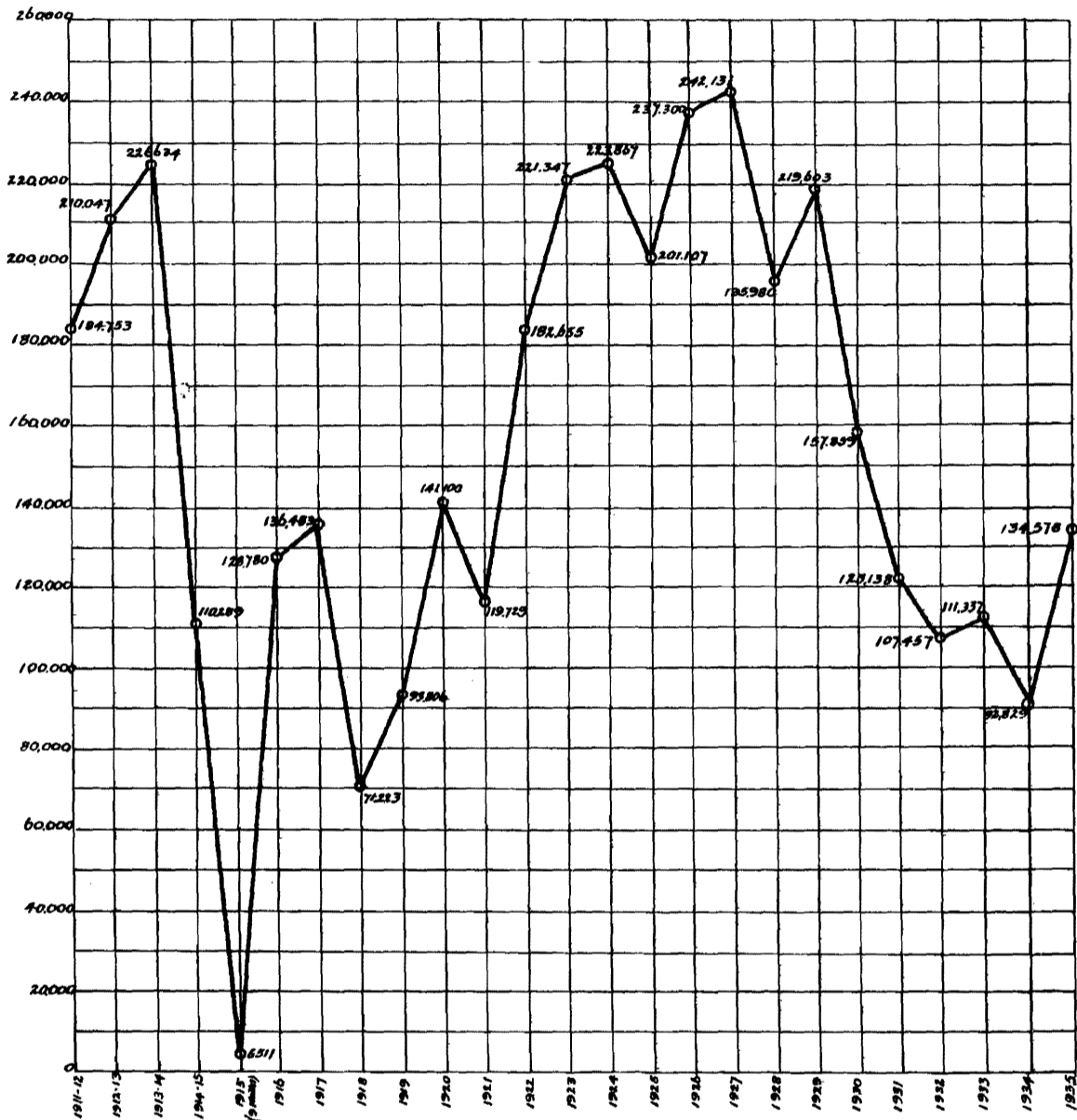
"C"

Total Annual Production of Crude Oil in Barrels
One Barrel = 35 Imperial Gallons



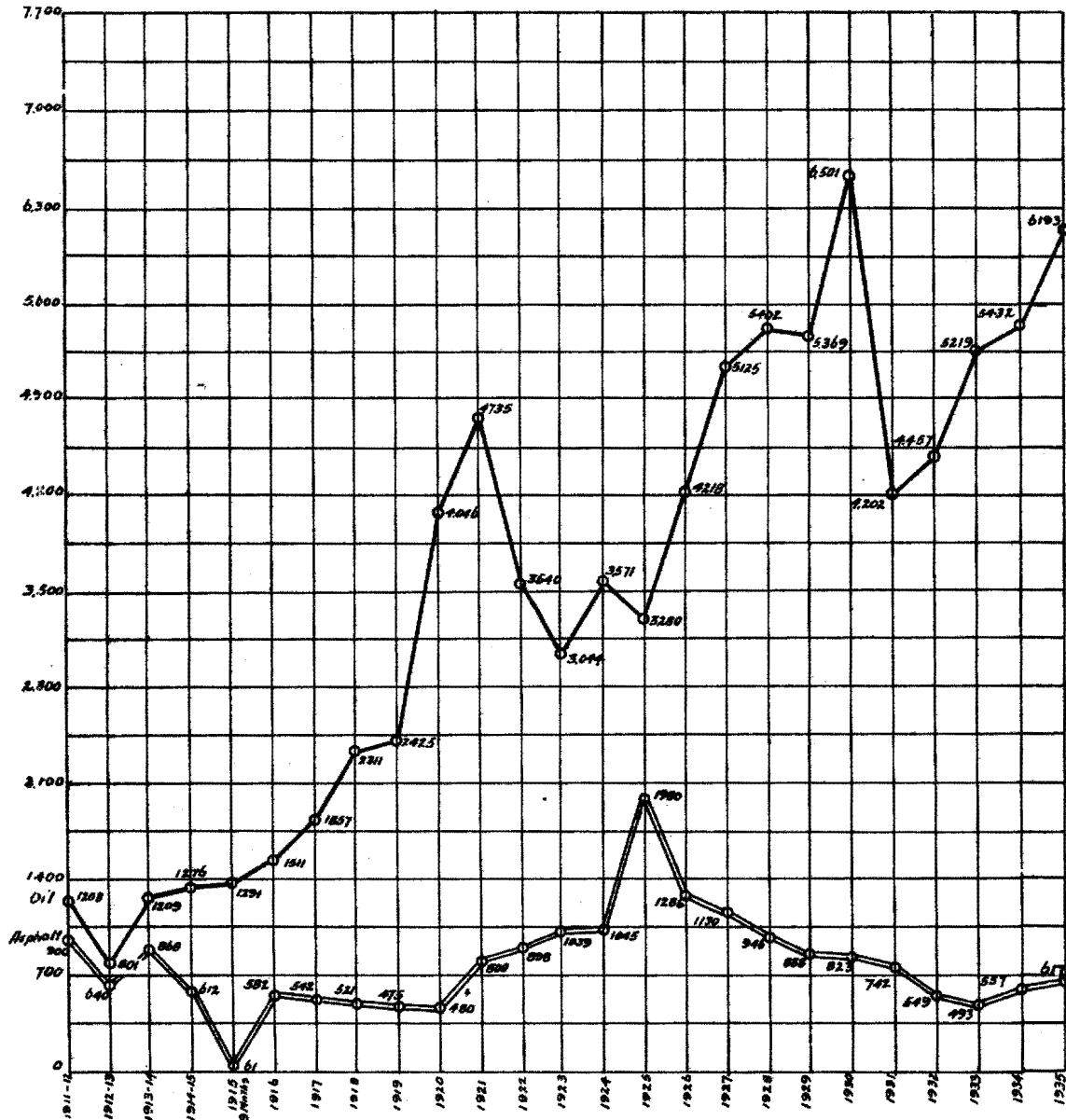
'D'

Curve showing yearly output of Asphalt from
The Colony in Tons from 1st. April 1911. to
31st. December 1935



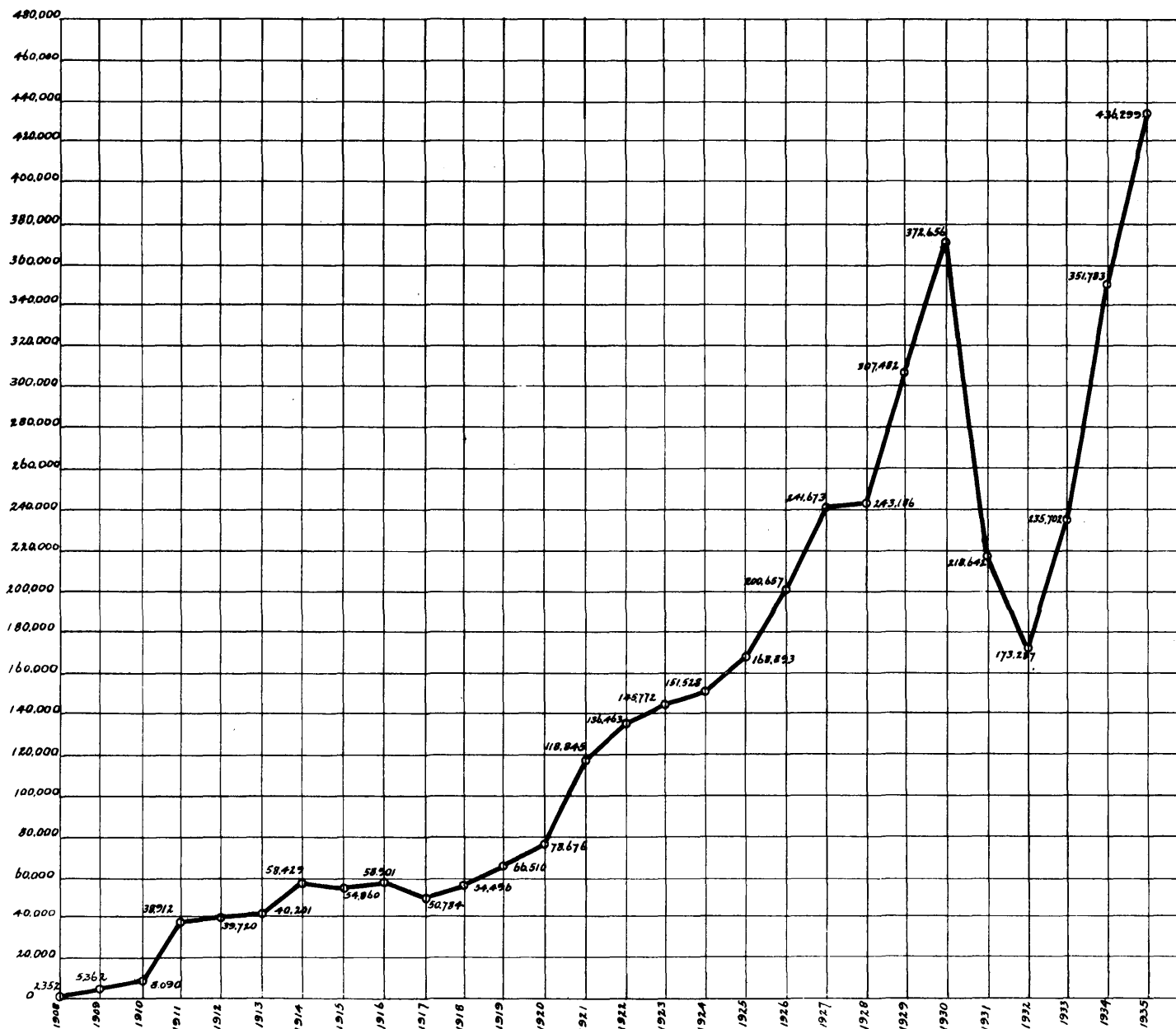
"E"

Curve showing comparison of daily average number of persons employed in the Oil and Asphalt Industries of the Colony from 1st April 1911 to 31st December 1935



"F"

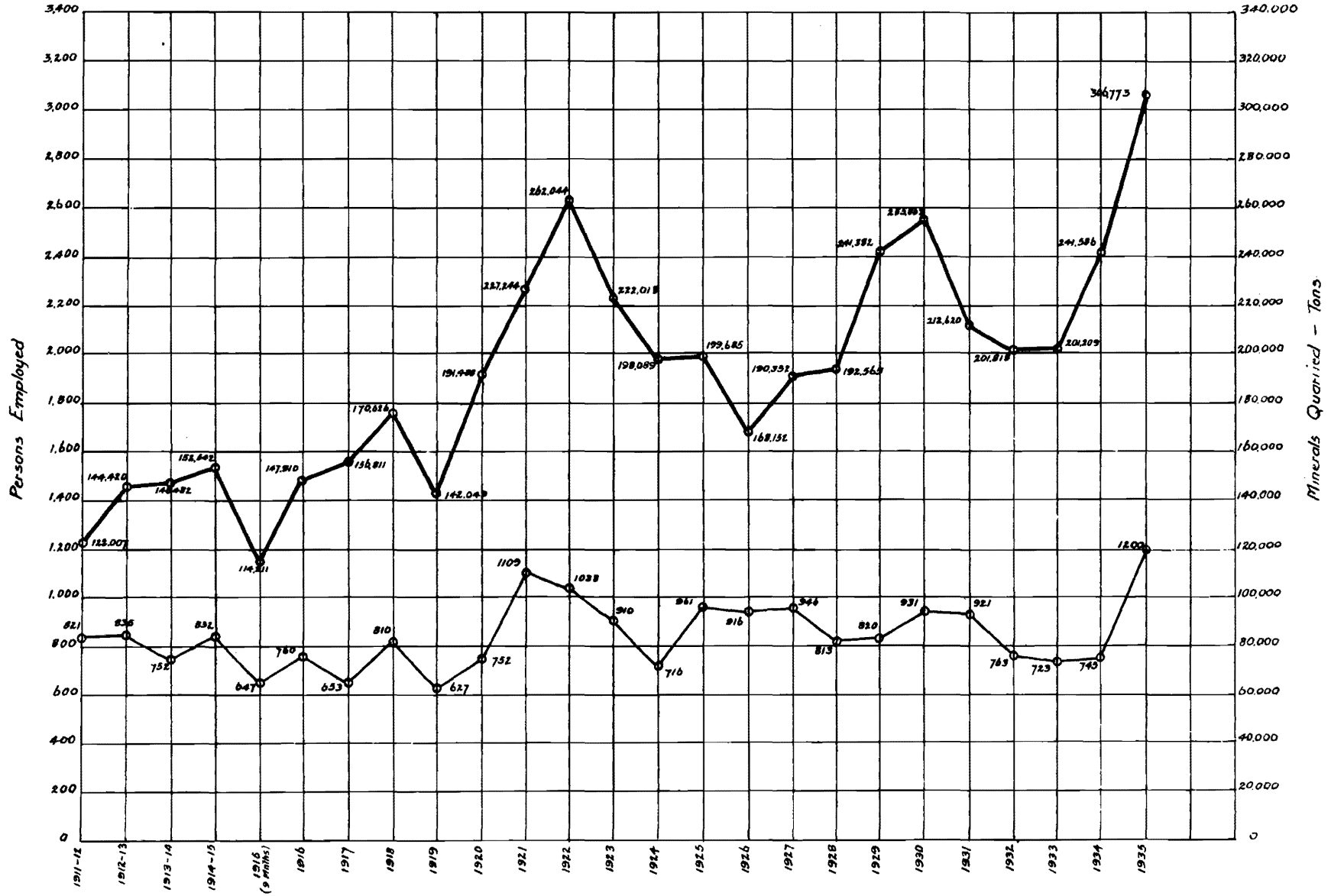
Total number of feet drilled annually
in the Colony



"G"

Chart showing the yearly total quantity of Minerals quarried and a comparison of the daily average number of persons employed in quarries in the Colony from 1st. April 1911 to 31st. December 1935

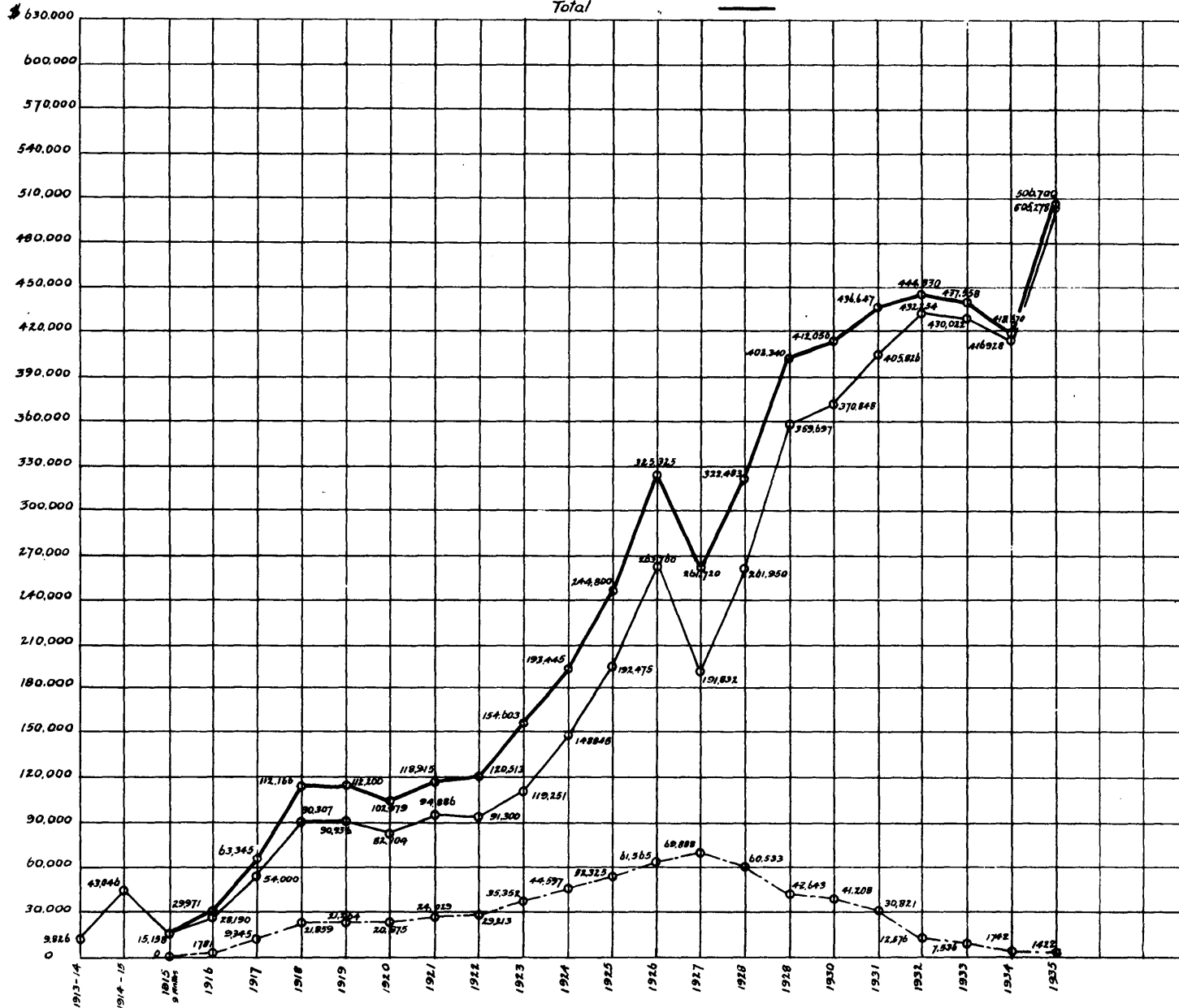
Minerals quarried — Persons employed —



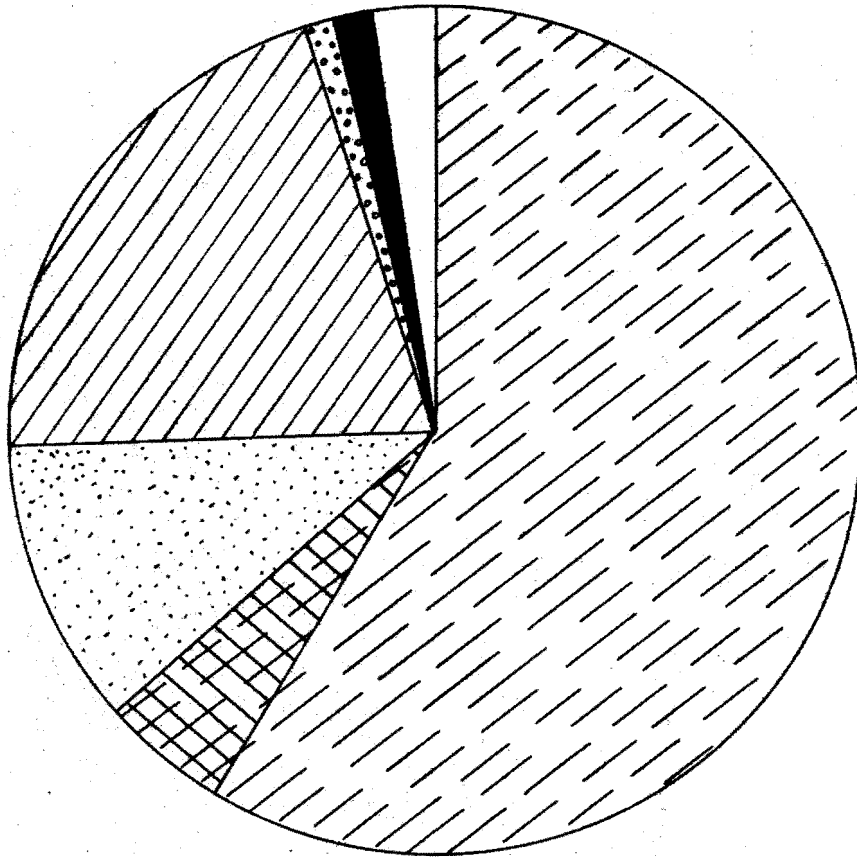
H







ROYALTY AND WAYLEAVE

Royalty shown Thus ———
Wayleave - - - - -
Total ———



APPENDIX "G"



<u>Mineral Exports</u>	63.3%	
Petroleum Products	58.5%	
Asphalt	4.8%	
<u>Agricultural and other Exports</u>	36.7%	
Cocoa	11.1%	
Sugar, Molasses, Rum	20.6%	
Coconuts, Copra, Coconut Oil	1.1%	
Fruit & Fruit Products	1.5%	
Other Exports	2.4%	