## Council Paper No. 29 of 1927.

# MINES DEPARTMENT.

Administration Report of the Inspector of Mines for the year 1926.

Laid before the Legislative Council on the 25th March, 1927.

rious Council Paper No. 65 of 1926.

Resistered No. of Correspondence relating to the subject-M.P. No. 2202/1927.

TRINIDAD:

PRINTED BY THE GOVERNMENT PRINTER, GOVERNMENT PRINTING OFFICE, PORT-OF-SPAIN.

1927.

[Price 3/2.]

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HONOURABLE COLONIAL SECRETARY,

I have the honour to submit, for His Excellency the Governor's information, the following report on the work of the Mines Department for the year 1926.

#### THE PETROLEUM INDUSTRY.

- 2. The year under review has been marked by an increase in activity in the industry. An energetic drilling programme has been carried out by the majority of the Companies in the already proven fields and, in addition, a considerable amount of prospecting work has been undertaken in new areas with promising results. In this connection I may mention that the Trinidad Leaseholds, Ltd., recommenced operations at Guayaguayare and the results obtained have led this Company to embark upon an extensive programme for the development of this area. The Trinidad Petroleum Development Co., Ltd. has drilled a number of wells in the Palo-Seco-Erin district and obtained a production of high grade oil. This latter Company has also brought into production a well in the Cedros district. In addition to the above, towards the close of the year the Trinidad Oilfields Operating Co., Ltd., a Company registered in Trinidad, but allied to American interests, commenced a very active drilling programme on private lands and at the time of writing has successfully obtained a considerable production.
  - 3. The quantity of oil won during the past year has been the largest yet known, there being a steady upward trend since the year 1920. The production was 584,964 barrels more than in 1925.
    - 4. There have been no new shipping or refining depots constructed during period under review. They remain the same as in my last report, viz.:—

Claxton Bay .... Trinidad Central Oilfields, Ltd.

Pointe-a-Pierre .... Trinidad Leaseholds, Ltd.

Brighton .... Trinidad Lake Petroleum Co., Ltd.

Point Fortin .... United British Refineries, Ltd.

The Trinidad Leaseholds, Ltd. has made very considerable additions to its refining depot at Pointe-a-Pierre by the addition of a Dubb's cracking plant for the treatment of fuel oil. At the close of the year it was nearly complete and at the time of writing had just been put into operation. A very considerable extension to the pier of the Trinidad Lake Asphalt Operating Co., Ltd. (with which is associated the Trinidad Lake Petroleum Co., Ltd.) at Brighton has been made.

5. As will be expected in view of the increased production, the exports of petroleum products have shown a large increase compared with last year, the figures being 139,500,000 gallons as against 126,000,000 for the year 1925.

The value of exports of petroleum products during the year under review was greatly in excess of the value of the products of any other industry and formed over 37 per cent. of the total exports of the Colony. The major portion of the export trade is in the form of fuel oil of which a large part is shipped to the Admiralty under contract.

The value of the exports of the leading staples  $\epsilon$  f the Colony and their relation to the total exports is shown in the following table:—

					Value £	Percentage of total.
Petroleum products	• •	••			1,871,851	37'4
Cocoa	• •		• •	• •	1,270,335	25.4
Sugar, Molasses and R	um	• •	••		1,028,493	20.6
Asphalt				٠.	451,967	g· a
Coconuts and Copra				• •	191,398	3.8
Other exports not enur	nerated				192,911	3.8
Total domestic exp	ports			••	5,006,955	100 per cent.

From the above it will be seen that the value of exports of petroleum products exceeded that of cocoa, which is the leading industry of the Colony, by over half a million sterling.

6. The following table will show the number of feet drilled and the quantity of oil produced during 1926 as compared with the years 1924 and 1925:—

		Year ended 31st December, 1924.		YEAR ENDED 31ST DECEMBER, 1925.		YEAR ENDED 31ST DECEMBER, 1926.	
	Fee <b>t</b> drilled.	Oil won Brls. of 35 galls.	Feet drilled.	Oil won Brls. of 35 galls.	Fee <b>t</b> drilled.	Oil won Brls. of 35 galls.	
Crown Lands	97,039	2,486,269	105,631	2,877,437	126,339	2,976,227	
Private Lands	54,853	1,570,343	63,522	1,509,070	73,739	1,995,243	
	151,892	4,056,612	169,153	4,386,507	20`,078	4,971,471	

- 7. The total number of wells drilled in the Colony to 31st December, 1926, is 1,154 of which 739 are on Crown lands. During the year under review 127 new wells were drilled, of which 81 were on Crown Lands and 46 on private lands, an increase of 28 compared with 1925. In 77 of these wells oil was struck.
- 8. The number of Companies engaged in the winning of oil at the close of the year was 17 as against 19 at the end of 1925.
- 9. ROYALTY.—The Royalty collected in respect of oil won from Crown Lands shewed a large increase over that during 1925, the figures being £54,950 3s. 3d. compared with £40,099 9s. 4d. during 1925. How rapidly the revenue from this source is increasing will be seen from Appendix D (1).
- 10. Wayleaves.—The revenue obtained from wayleaves in respect of pipe lines along the Trinidad Government Railway and the public roads of the Colony has also shown an increase. The amounts for the years 1925 and 1926 are as follows:—

	Trinidad Government Railway.	Roads.
1925	£7,736 2s. 6d.	£3,165 2s. 1d.
1926	£9,121 11s. 8d.	£3,704 5s. 7d.

11. FEES.—Fees charged for crossing the foreshore, the Railway and the public roads amounted to £61.

- 12. The following leases and licenses were issued during the year:—
  - Six leases over 70,879 acres of Crown Lands and 6,479 acres of lands the surface of which was alienated subsequent to 16th January, 1902.
  - Two prospecting licenses over 245 acres of Crown Lands and 248 acres of land the surface of which was alienated subsequent to 16th January, 1902.

Two exploration licenses over 31,922 acres of Crown Lands.

- 13. Returns.—The various returns required to be furnished by the oil companies have been regularly submitted and after being carefully checked filed with the records of the department.
- 14. Inspections.—A large number of inspections have been carried out by the Officers of the department in connection with the various operations taking place on the fields, and I have much pleasure in reporting that on the whole the Managers co-operate with this department in endeavouring to carry out the provisions of the Ordinances and Regulations.
- 15. Accidents.—The accidents which occurred during the period under review were with one exception such as are usually incident to mining operations of this nature and do not call for special comment. The exception mentioned was the worst that has happened in the history of the oil industry of the Colony and resulted from a well of the Petroleum Options, Ltd. becoming ignited whilst it was being drilled in. The Manager and four workmen were, I regret to say, so badly burnt that they succumbed to their injuries. Enquiries did not show that any breach of the Boring Regulations had been committed and the Coroner's verdict at the inquest held on the deceased was—"The deceased died from heart failure as the result of extensive burns occasioned by a fire and that no felony was committed."

### SAN FERNANDO BRANCH OF THE DEPARTMENT.

16. The work of this branch of the department has continued during the whole of the period under review. Up till the middle of the year the work was carried on by Messrs. F. M. Ziegler and C. A. P. Southwell. The former Officer completed his engagement (of three years duration) in August and Mr. Southwell, Government Geologist, was appointed to succeed him. This Officer's post as Government Geologist was not filled during the latter part of the year and has been abolished as from 1st January, 1927. In addition to the routine work of this branch, investigations into various problems regarding conservation in the petroleum industry are being undertaken as far as time and staff permit.

#### PREVENTION OF ACCIDENTS ORDINANCE, CAP. 157.

17. During the period under review 92 factories in Trinidad and 17 in Tobago were worked. A considerable number of inspections have been necessary to ensure that the types of safeguard best suited to prevent accidents in each particular part of the machinery are installed. That great care has been exercised at the inspections is proved by the fact that the number of accidents has been considerably reduced.

It also gives me pleasure to record the close co-operation between the various managers with this Department and that it has been only necessary to institute prosecutions on few occasions.

#### QUARRIES.

18. The number of quarries worked during the period under review was 82 as compared with 75 in 1925. From inspections which 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 in which the various products of petroleum are stored have been carefully inspected, and it is satisfactory to note that as a rule great care has been taken to ensure safety.

#### ASPHALT INDUSTRY ORDINANCE, CAP. 147.

20. No asphalt has been dug on the village lots at La Brea since 1914.

#### APPENDICES.

- 21. Appendix A shows the list of oil companies operating in the Colony during the year 1926.
- 22. In Appendix B 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 comparative statement of the oil produced, refined and exported is shown in Appendix C.
- 24. Appendix D consists of a series of charts depicting in graphical form the progress made in various industries during the past few years.
  - 25. Appendix E shows the relation of Mineral Exports to Agricultural Exports.

#### STAFF.

26. With the exception of the change mentioned in paragraph 16 above there has been no change in the personnel of the department.

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

A. P. CATHERALL,

8th March, 1927.

Inspector of Mines.

### APPENDIX A.

No.	Companies	Na e of tenure operations		Disposal of oil.	Remarks.
1	Trinidad Leaseholds, Ltd	lease.	Fyzabad, Barrackpore, Guayagnayare. Barrackp <b>o</b> re	Pumped to the Company's refinery at Pointe-a-Pierre, and there refined. Most of the production is exported in bulk.	The largest producing Company in the Colony. Large purchases of crude oil are made from other Companies and refined at Pointe-a-Pierre. The fields at Fyzabad and Barrackpore have been considerably extended. Drilling has been recommenced at Guayaguayare and preparations
2	United British Oilfields of Trinidad, Ltd	Crown lands under lease	Point Fortin, Morne L'Enfer Reserve, Los Bajos.	Sold to United British Refineries, Ltd.	commenced for an extensive drilling programme. A Dubb's cracking plant has been erected at Pointe-a-Pierre.  Drilling has been continued at Point Fortin, Parry Lands, and a small production continues to be obtained from the field at Los Bajos.
3	Trinidad Central Oilfields, Ltd	Private Lands Crown lands under lease	Point Fortin Tabaquite, Mayaro, Guapo	Exported	Wells have been drilled at Tabaquite, Guapo and Rio Claro, production being obtained from the two former fields. The production from the latter was so small that the whole field was abandoned.
4	Trinidad Lake Petroleum Company, Ltd	Private lands	Brighton	The bulk of the production is exported to the United States of America	
5	Petroleum Development Company, Ltd	Crown lands under	Morne L'Enfer	Sold to Trinidad Lake Petroleum	Drilling on Crown oil rights near the Pitch Lake
6	Apex (Trinidad) Oilfields, Ltd	lease Crown lands under lease and private lands		Company, Ltd. Sold to Trinidad Leaseholds, Ltd.	with very satisfactory results. Second largest producing Company in the Colony. The production has been largely increased compared with former years.
7	Kern Trinidad Oilfields, Ltd	Private lands	Guapo, Rousillac, La Brea	Sold to United British Refineries Ltd.	Development of Perseverance Estate. Guapo, continued during the whole of the year. Operations were continued on Crown Lands near Guapo. A satisfactory production was obtained.
8	General Petroleum Company of Trinidad, Ltd.	Private lands	Fyzabad, Penal and San Francique	Ltd.	Little work was done by this Company whose properties have now been acquired by the Trinidad Leaseholds, Ltd.
9	Trinidad Petroleum Development Company, Ltd.		Naparima, Palo Seco, Cedros. Palo Seco, Cedros, Guapo	Sold to Trinidad Leaseholds, Ltd.	The Company has carried on drilling operations at Cedros, Palo Seco and Guapo. Production has been successfully obtained in the two former districts.
10	Trinidad Freeholds, Ltd	Private lands	Fyzabad	Sold to Trinidad Leaseholds, Ltd.	During the course of the year the properties of the Company were acquired by the Trinidad Leaseholds, Ltd.
11	Petroleum Options, Ltd	Private lands	Fyzabad	Sold to Trinidad Leaseholds, Ltd,	Produced from two wells.
13	Trinidad Friendship Petroleum Company, Ltd. British Controlled Oilfields, Ltd	Private lands Crown lands under lease	Fyzabad Oropuche	Sold to Trinidad Leaseholds, Ltd. Sold to Trinidad Leaseholds, Ltd.	Drilled one well and produced from three. Drilling operations have been suspended for some time past and small production has been obtained from existing wells.
14	Trinidad Oil Producing and Refining Company	Private lands	Fyzabad	Sold locally	Producing only.
15 16	Ltd.  Transvaal and Rhodesian Estates, Ltd.  Collie's Palo Seco Oilfield	Private lands Crown lands under lease	1	Sold to United British Refineries,	Producing only. Lands formerly held by the Trinidad United Oilfields, Ltd. Two new wells sunk.
17	Trinidad Oil <b>f</b> ields Operating Company, Ltd		Fyzabad, Brighton and San Francique	Sold to United British Refineries,	This Company commenced a very active drilling programme towards the end of the year chiefly in new areas.

APPENDIX B.

Daily average number of persons employed in Oilfields and Quarries and the quantity and value of minerals obtained during the year ended 31st December, 1926.

Minerals.					age number employed.	Total.	Quantity.	Approximate
Minerals.			Males. Female		Iotal.	Quantity.	value. *	
Oil				4,157	61	4,218	4,971,471 Barrels.	£ 1,280,912
Asphalt		• •		1,270	16	1,286	237,300 Tons.	148,312
Private Qua Gravel,		imestone,		342	137	497	104,860 Tons.	13,367
Government stone,		es (Lime-	••	350	87	437	63,292 Tons.	9,609

<sup>\*</sup> N.B.—The values in this column are those returned by owners and managers, and represent the value at the place of production.

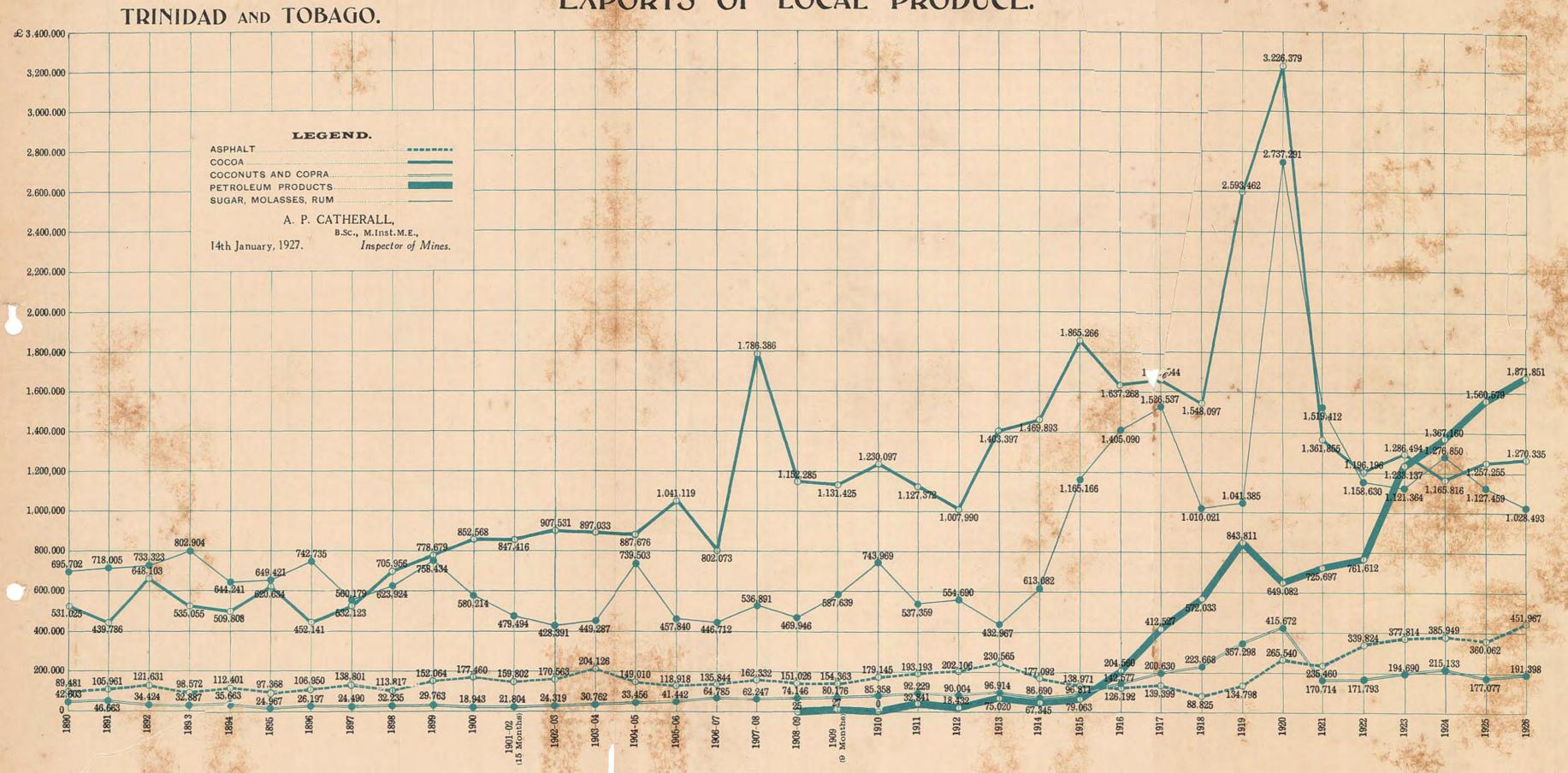
APPENDIX C.

Comparative statement of oil produced, refined and exported year by year since the inception of the Petroleum Industry in the Colony.

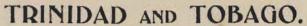
Year.				Production in barrels.	Quantity of Crude Oil refined in barrels.	Quantity of Crude oil and refined oil exported in barrels.
1905 to 31st	March, 1	910		10,541	••	
1910-1911		• •		125,112	••	
1911-1912				285,307	Previous to 1912 to 1913 37,842	219,582
1912-1913	• •		٠.	503,616	9,484	122,734
1913-1914	••			643,516	35,061	387,719
1914-1915				1,050,112	41,413	348,351
9 months end	led Decer	nber, 1915		671,125	58,437	408,188
1916	• •			927,877	107,822	975,142
1917				1,602,312	505,002	1,079,369
1918				2,082,068	2,106,369	1,305,407
1919				1,841,047	1,149,943	1,406,264
1920				2,083,027	1,395,487	1,034,907
1921				2,354,160	1,806,016	1,223,346
1922				2,444,752	1,820,018	1,615,740
1923				3,050,872	2,360,279	2,432,470
1924				4,056,612	3,433,902	3,224,529
1925			• •	4,386,507	3,790,343	3,606,608
1926	• •			4,971,471	3,786,876	3,988,308
			-	33,090,034	22,444,294	23,378,664

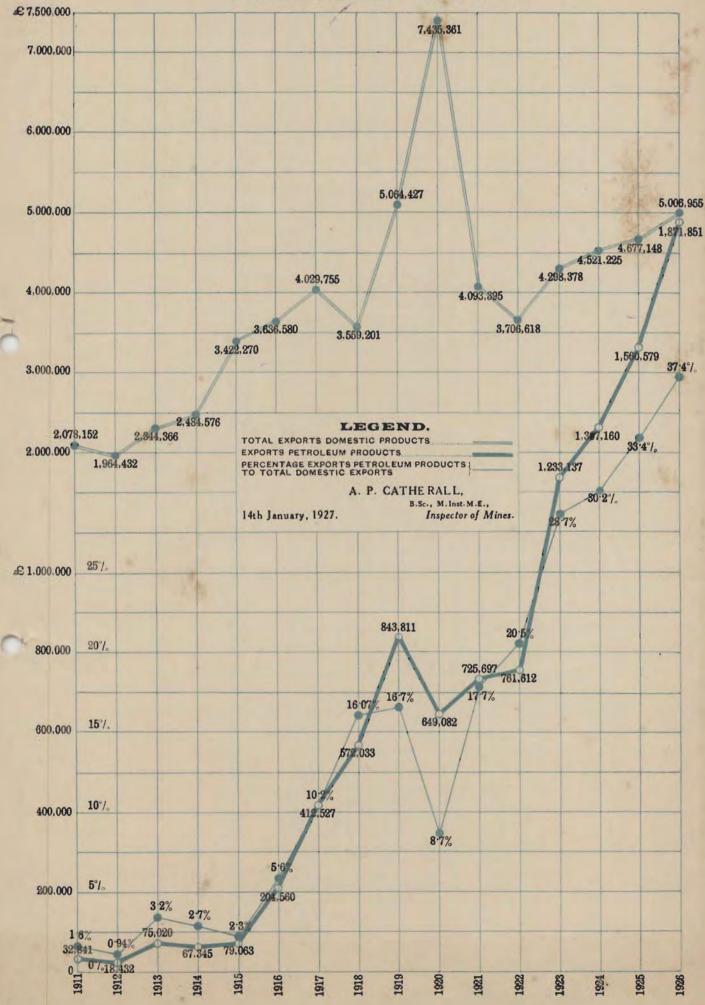
A

# EXPORTS OF LOCAL PRODUCE.



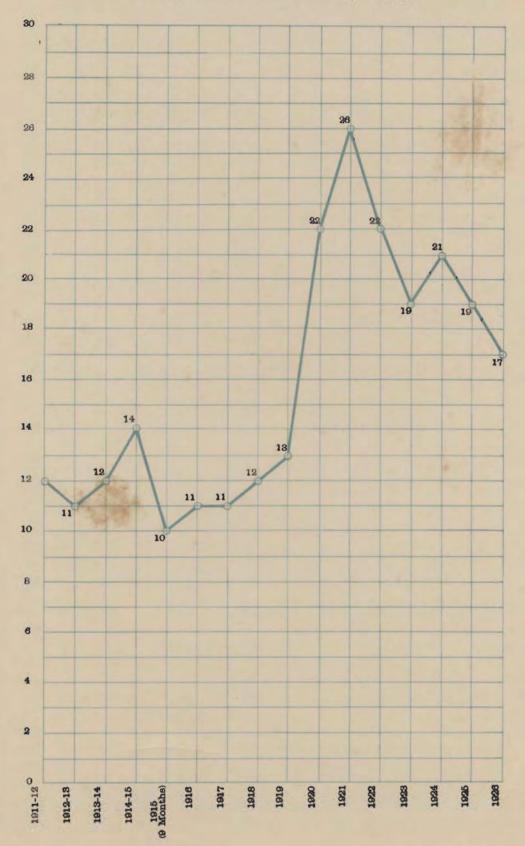
B





C

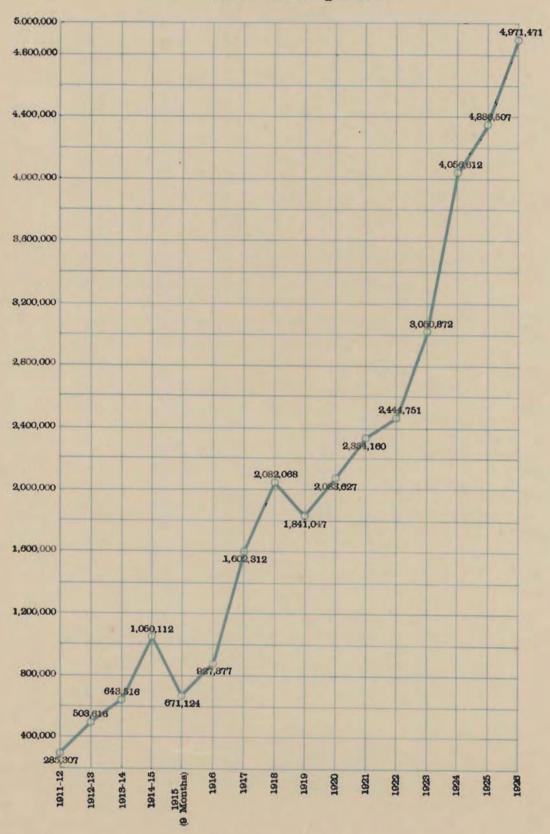
Curve showing the number of Oil Companies that have operated annually in the Colony from 1st April, 1911, to 31st December, 1926.



D

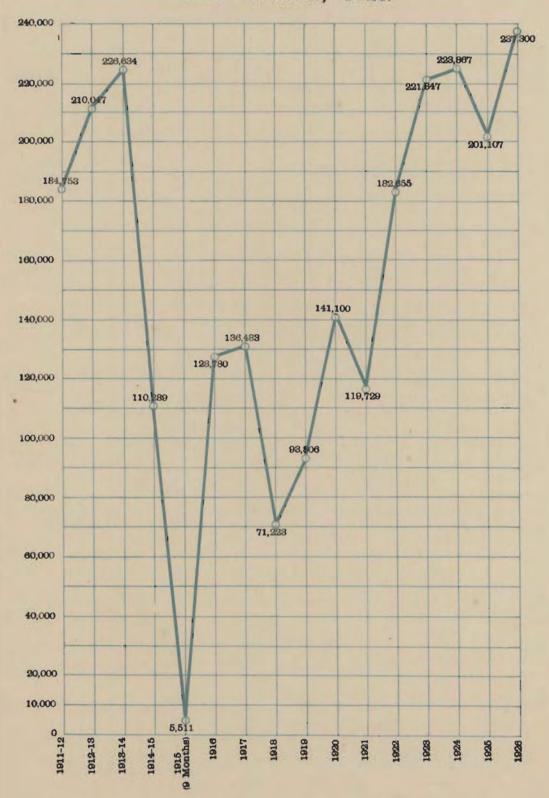
## TOTAL ANNUAL PRODUCTION OF CRUDE OIL IN BARRELS.

One barrel = 35 gallons.



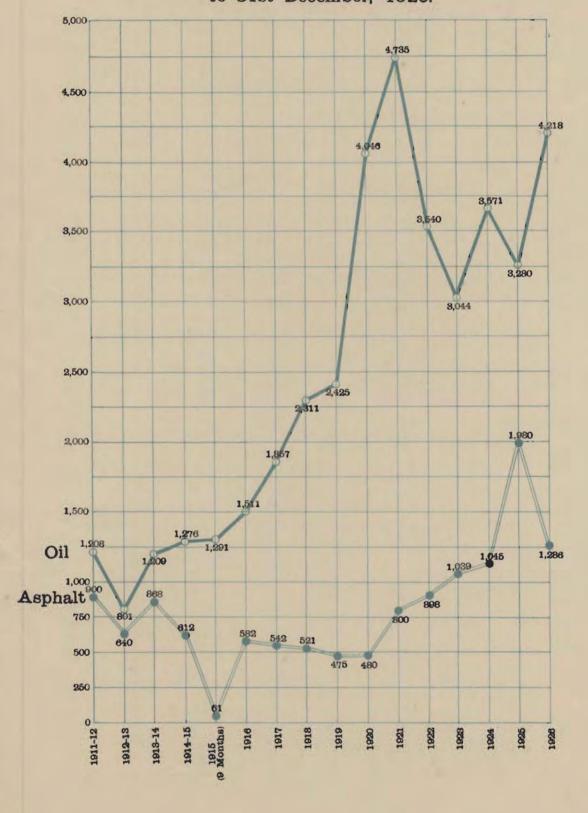
E

Curve showing yearly output of Asphalt from the Colony in Tons from 1st April, 1911, to 31st December, 1926.



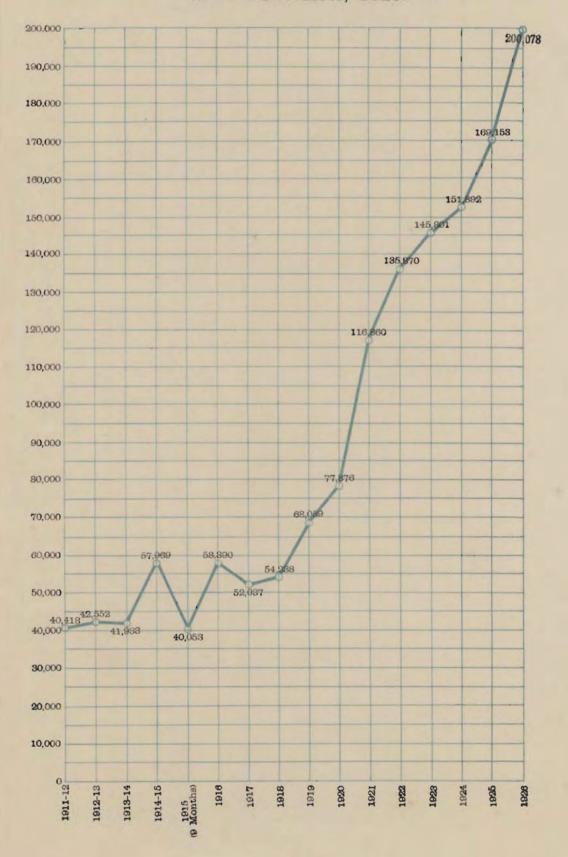
F

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, 1926.

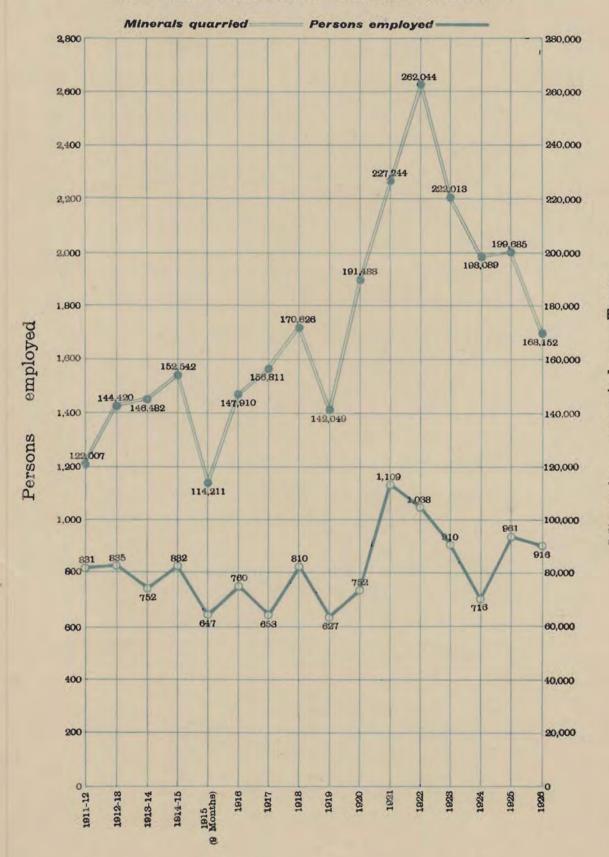


G

Curve showing yearly total number of feet drilled in the Colony from 1st April, 1911, to 31st December, 1926.



Curve 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, 1926.



Minerals quarried - Tons

1

