Council Paper No. 56 of 1931.

MINES DEPARTMENT.

Administration Report of the Inspector of Mines for the year 1930.

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1931.

MINES DEPARTMENT.

Administration Report of the Inspector of Mines for the year 1930.

Council Paper No. 56 of 1931.

M.P. No. 2562.

HONOURABLE COLONIAL SECRETARY,

- I have the honour to submit, for the information of His Excellency the Governor, the following report on the work of the Mines Department for the year 1930.
- 2. During the period under review the oil industry has been suffering from the economic conditions which prevail throughout the world, and, owing to overproduction in the United States of America and other countries, the price obtainable for petroleum products in the world's markets has been very low. It is gratifying to record that, in spite of the fact that the various operating companies have been suffering from the depressed financial conditions, the past year has been marked by an increase in the production of over 700,000 barrels more than that for 1929. I should state, however, that at the time of writing, owing to the continued fall in prices of petroleum products most of the companies have drastically curtailed their operations, and it appears improbable that, until market conditions improve, there will be any marked activity in the industry.

I have also to record that for the first time in the history of the Colony the value of the exports of petroleum and its products amounted to over 50 per cent. of the total domestic exports. The value of the exports of the leading staples of the Colony is shewn below:—

			,				Value.	Percentage of total.
Petroleum I	Products						2,790,695	52.05
Cocoa		• •	• •		• • •	• • •	1,136,056	21,19
Sugar, Mola				• •	•••		801,718	14.96
Asphalt							313,397	5.84
Coconuts, C	opra and (Coconut O	il				207,733	3.87
Bitters	• •				• •		38,065	.71
Coffee		• •					12,475	.23
Other expor	ts not enu	merated	• •	• •	• • ,		61,671	1.15
							5,361,810	100,00
								·

- 3. As it is to be expected, in view of current financial conditions, with few exceptions the period under review has not been marked by great activity in new construction work. The Trinidad Leaseholds, Ltd., which has been making large increases to the refining depot at Pointe-a-Pierre during the past few years completed the current construction programme shortly after the middle of the year and since then have not commenced any new works. The Apex (Trinidad) Oilfields, Ltd., have installed a plant for the recovery of casing head petroleum spirit from natural gas and at the time of writing this is working very satisfactorily. The West India Oil Company completed the construction of a pier at its refinery at Point D'Or. This pier is now being extended to allow ocean going vessels to load petroleum products in bulk. When this has been completed the old pier of the Trinidad Oil Fields Operating Company, Ltd., at La Brea will be abandoned.
- 4. The following table will show the number of feet drilled and the quantity of oil produced during 1930 as compared with the years 1928 and 1929:—

		4		J		_
		YEAR ENDED 31ST DECEMBER, 1928.		ENDED 31ST MBER, 1929.	YEAR ENDED 31ST DECEMBER, 1930.	
Crown Lands Private Lands	Feet drilled 130,630 114,010	Oil won Brls. of 35 galls. 4,141,816 3,542,634	Feet drilled. 211,024 96,310	Oil won Brls. of 35 galls. 4,621,567 4,094,085	Feet drilled. 254,116 118,414	Oil won Brls. of 35 galls. 5,260,366 4,158,541
	244,640	7,684,450	307,334	8,715,652	372,530	9,418,907

- 5. The total number of wells drilled in the Colony to 31st December, 1930, is 1,780 of which 1,121 are on Crown Lands. During the past year 163 wells were drilled of which 107 were on Crown Lands and 56 on private lands, an increase of 5 compared with 1929. In 121 of these wells oil was struck.
- 6. The number of concerns engaged in the winning of oil at the close of the year was 14, one less than at the end of 1929.
- 7. ROYALTY.—The royalty collected during the period under review was £77,260, an increase of £2,322 14s. 10d. as compared with 1929.
- 8. Wayleaves.—The revenue derived from wayleaves on oil pumped along the public roads of the Colony has shewn a slight increase but, as mentioned in my last report, the main trunk pipeline of the Trinidad Leaseholds, Ltd., is not now laid along the Trinidad Government Railway so no payments now accrue from this source. The revenue for the years 1929 and 1930 was as follows:—

- 9. FEES.—Fees charged for crossing the foreshore, the Railway and the public roads amounted to £297.
 - 10. Last year three leases and two licences were issued as follows:-

Mining Lease to Apex (Trinidad) Oilfields, Ltd., over 249 acres of Crown Lands—Reg. No. 421 of 1930.

Mining Lease to Venezuelan Consolidated Oilfields, Ltd., over 59 acres the surface of which was alienated subsequent to 30th January, 1902—Reg. No. 2438 of 1930.

Mining lease to Trinidad Petroleum Development Company, Ltd., over 323 acres of Crown Lands—Reg. No. 3178 of 1930.

Prospecting Licence to Apex (Trinidad) Oilfields, Ltd. over 264 acres the surface of which was alienated subsequent to 30th January, 1902—Reg. No. 1938 of 1930.

Exploration Licence to Trinidad Leaseholds, Ltd. over 775 acres of Crown Lands—Reg. No. 928 of 1930.

In addition to the above Prospecting Licence to Apex (Trinidad) Oilfields, Ltd., Reg. No. 4159 of 1928, was extended for two years from 1st September, 1929, by Deed Reg. No. 420 of 1930, and Prospecting Licences Nos. 2716 of 1928, 1186 of 1929 and 3916 of 1929 to Trinidad Petroleum Development Company, Ltd., were extended for six months from 31st July, 1930, by Deed Reg. No. 3177 of 1930 pending settlement of the new form of mining lease.

- 11. Returns.—The various oil companies have regularly forwarded to the Department the returns required to be submitted by them in respect of their operations. After being carefully checked these have been filed with the records of the Department.
- 12. 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 the Managers readily co-operate with this Department in endeavouring to carry out the provisions of the Ordinances and Regulations.
- 13. Legislation.—During the past year two Ordinances relating to the oil industry were passed, viz. :—
 - (a) The Oilfield Fires Control Ordinance, 1930.
 - (b) Water Control (Oil-bearing Sands) Ordinance 1930.

The former Ordinance is to empower the Government to enter upon an oilfield when danger to life or property occurs by uncontrolled fires or flows of oil and gas and when the operator does not take necessary steps for control. The latter Ordinance is to enable the Government to control the intrusion of water into oil-bearing sands when the operator is unable or unwilling to do so.

SAN FERNANDO BRANCH OF THE DEPARTMENT.

14. Mr. C. E. Capito, O.B.E., A.C.G.I., M.Inst.C.E., M.Inst.P.T., was appointed to the post of Petroleum Technologist *vice* Mr. C. A. P. Southwell resigned and arrived in the Colony on the 19th April last.

The contract of Mr. H. W. Reid, B.Sc., Assistant Petroleum Technologist, was renewed for a period of three years from the 10th September, 1930.

A report on the working of this branch by the Petroleum Technologist is enclosed at Appendix "B."

PREVENTION OF ACCIDENTS ORDINANCE, CAP. 157.

15. During the year 122 factories in Trinidad and three in Tobago were worked. From the inspections made I am pleased to be able to record that in most cases the provisions of the Ordinance were carefully observed.

QUARRIES.

16. The number of quarries worked during the period under review was 80 as compared with 74 during 1929. From the inspections made they were found in most cases to have been worked in a careful manner but, with few exceptions, they are relatively unimportant.

PETROLEUM ORDINANCE, CAP. 145.

17. 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. A number of up to date service stations for the supply of petrol and other requirements of motorists have been constructed in different localities in the Colony during the past year and the public are now very well served with regard to service of this character. In all 451 licences to store and sell petroleum products were issued during the year.

ASPHALT INDUSTRY ORDINANCE, CAP. 145.

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

APPENDICES.

- 19. Appendix "A" shows the list of oil companies operating in the Colony during the year 1930.
 - 20. Appendix "B"—Report on the working of the Petroleum Office.
- 21. 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.
- 22. A comparative statement of the oil produced, refined and exported is shown in Appendix "D."
- 23. Appendix "C" consists of a series of charts depicting in graphical form the progress made in various industries during the past few years.
- 24. Appendix "F" shows the relation of mineral exports to Agricultural Exports.

STAFF.

- 25. Mr. N. A. Brown, 2nd Clerk, was transferred to the Public Works Department as from the 1st June and was replaced by Mr. A. C. Francis-Lau, 3rd Clerk. Miss M. A. Jack was appointed to the vacant post of 3rd Clerk.
- Mr. M. W. Gilkes, Clerk Petroleum Office, was appointed to act as Government Shorthand Writer on the 7th April and Mr. C. Niles was appointed to act for Mr. Gilkes.

A. P. CATHERALL.
Inspector of Mines.

7th May, 1931.

APPENDIX A.

No.	Companies.	Nature of tenure of lands on which operations took place.	Disposal of Oil.	Remarks.
I	Trinidad Leaseholds, Ltd	Crown lands under lease Fyzabad, Barrackpore Guayaguayare Fyzabad and Barrackpore	Pumped to the Company's refinery at Pointe-a-Pierre, and there refined. Most of the production is exported in bulk	in the Guayaguayare field there has been a
2	United British Oilfields of Trinidad, Ltd.	Crown lands under Point Fortin, Morne lease L'Enfer Reserve Private lands	Sold to United British Refineries, Ltd.	The production of the Parry Lands field of this Company has largely increased. Only a small production was obtained from the old Point Fortin field. The Los Bajos field was not worked.
3	Trinidad Central Oilfields, Ltd	Crown lands under Tabaquite, Guapo and lease Lizard Springs	Production from Tabaquite refined, sold locally and exported; that from Cruse area sold to Trinidad Leaseholds, Ltd.	The greater part of this Company's production has been obtained from the Cruse field at Guapo. There was a small increase in both drilling and production at the Lizard Springs field in the Guayaguayare district, but the production from this area has not been large. The producton from the old Tabaquite field has again declined.
4	Trinidad Lake Petroleum Company, Ltd	Private lands Brighton	The bulk of the production is exported to the United States of America.	Producing only.
5	Petroleum Development Company, Ltd.	Crown lands under Morne L'Enfer Forest lease Reserve and La Brea	Sold to Trinidad Lake Petroleum Company, Ltd.	An active programme was continued in the La Brea district with a result that there was an increase in both the footage drilled and oil won.
6	Apex (Trinidad) Oilfields, Ltd.	Crown lands under Fyzabad and Siparia. lease and prospecting licence and Private lands	Sold to Trinidad Leaseholds, Ltd.	This Company still remains the largest producer in the Colony. As compared with last year there was a considerable increase in both footage and production. A plant for the recovery of Casing Head Petroleum Spirit from natural gas was installed during the year and is now working very satisfactorily.

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APPENDIX A .- Continued.

No.	Companies.	Nature of tenure of lands on operations took place.	which Disposal of Oil.	Remarks.
7	Kern Trinidad Oilfields, Ltd	Crown lands under La Brea lease Private lands Guapo and l	Sold to United British Refineries, Ltd.	An active development programme of the propertie in the Guapo district continued during the whol of the year and an increased production resulted A number of wells were also drilled in the Rousilla area but the results were not as satisfactory a expected.
8	New (Oropuche) Trinidad Oilfields, Ltd.	Private lands Fyzabad	Sold to Trinidad Leaseholds, Ltd.	A subsidiary of the Trinidad Leaseholds, Ltd Drilling was continued during the early part of the year at Fyzabad; the production a compared with last year has declined.
Э	Trinidad Petroleum Development Company, Ltd.	Private lands Naparima, and Fyzal Crown lands under Palo Seco, lease and prospecting and Los F licence	bad is exported in the crude state Fyzabad the remainder of it is sold to	the production. Drilling was also commenced in
10	Venezuelan Consolidated Oilfields, Ltd.	Private lands - San Franciq Crown lands under prospecting licence Palo Seco	ique and and Trinidad Petroleum	This Company continued operating in the Palo Secand Fyzabad districts during the early part of the year. On the 15th of March the Palo Secand Fyzabad Dilfields, Ltd. The Crown Lands and part of the private holdings of the Company in the Fyzabad district were transferred to the Trinidad Oil Field Operating Company, Ltd., as from 1st August and the Company ceased active operations.
11	Palo Seco Oilfields (C. C. Stollmeyer)	Crown lands under Palo Seco lease	Sold locally	Drilling continued during the period under reviewand a small production was obtained.
12	Trinidad Oil Fields Operating Company, Ltd.	Private lands Fyzabad, S cique, Pal Aripero Crown lands Pointe D'Or Seco	o Seco and and Trinidad Leaseholds, Ltd.	This Company, the share capital of which is owned by the West India Oil Company, continued drilling on its various properties and a considerable increase in production has resulted. The refiner mentioned in the last Administration Report has been worked during the year and a pier to land machinery and ship products was constructed.
13	New Dome Oilfields, Ltd	Private lands Fyzabad	Sold to Trinidad Leaseholds, Ltd.	Drilling was continued during the year and a goo production obtained from the small plot of lan on which the operations were undertaken.
14	Siparia Trinidad Oilfields, Ltd	Crown lands under Palo Seco prospecting licence	Sold to Trinidad Leaseholds, Ltd. and Trinidad Petroleun Development, Company, Ltd.	This Company took over Crown lands formerly hel

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APPENDIX B.

HONOURABLE INSPECTOR OF MINES.

The year under review showed a further increase both in footage and production for the Colony, the figures being given in the General Report.

The outstanding features of the year were the development of the central portion of the Palo Seco structures and the locating of a high pressure good quality oilsand in the south west end of the Parry Lands structure. The development of the Point d'Or estate has been difficult due to the presence of sulphuretted hydrogen gas coupled with high pressures; only small producers have resulted. A geophysical survey is to be undertaken of this area before further development proceeds. At the time of writing this survey is in progress.

The greatest production again came from Fyzabad, with 63.5 per cent. of the total for the Colony divided amongst the Companies operating in that area.

During the year 163 new wells were started making a grand total for the Colony of 1,780, 38 wells. were abandoned for various reasons.

Owing to high pressures being encountered with the increasing depth of the wells, it has been necessary for a number of the operators to import larger and higher pressure boilers, pumps and fittings to deal with these pressures. Barytes is now in almost constant use with the circulating mud in these deeper wells

Frequent inspections of drilling and production machinery were carried out in conjunction with the ordinary routine duties of the Office. All companies have shown the greatest willingness to co-operate with this office in conservation and safety measures and in sending in good records.

During the period under review there were seven fatal accidents and only one oilfield fire of any magnitude.

On the 16th April, Mr. M. W. Gilkes, second class clerk in this office was appointed to act as Government Shorthand Writer vice Mr. J. W. Day.

Mr. C. Niles was appointed to act in Mr. Gilkes' post as from the 7th April, and this acting appointment continued to the end of the year.

Mr. C. E. Capito, o.B.E. A.C.G.I., M.Inst.C.E., M.Inst.P.T., was appointed to the post of Petroleum Technologist and arrived in the Colony on the 19th April.

C. ERIK CAPITO,

Petroleum Technologist.

23rd March, 1931.

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, 1930.

Minerals.	Daily averagenumber of persons employed		Total.	Quantity.	Approximate
Annerais.	Males.	Females.	Total.	Quantity.	Value.*
Oil	6,430	71	6,501	9,418,907 Barrels	£1,690,709
Asphalt	. 816	7	823	157,859 Tons	98,662
Private Quarries (Limestone, Gravel, &c.)	. 293	135	428	158,524 Tons	13,378
Government Quarries (Limestone, &c.)	. 386	117	503	97,338 Tons	14,344

^{*}N.B.—The values in this column are those returned by owners and managers and represent the value at the place of production.

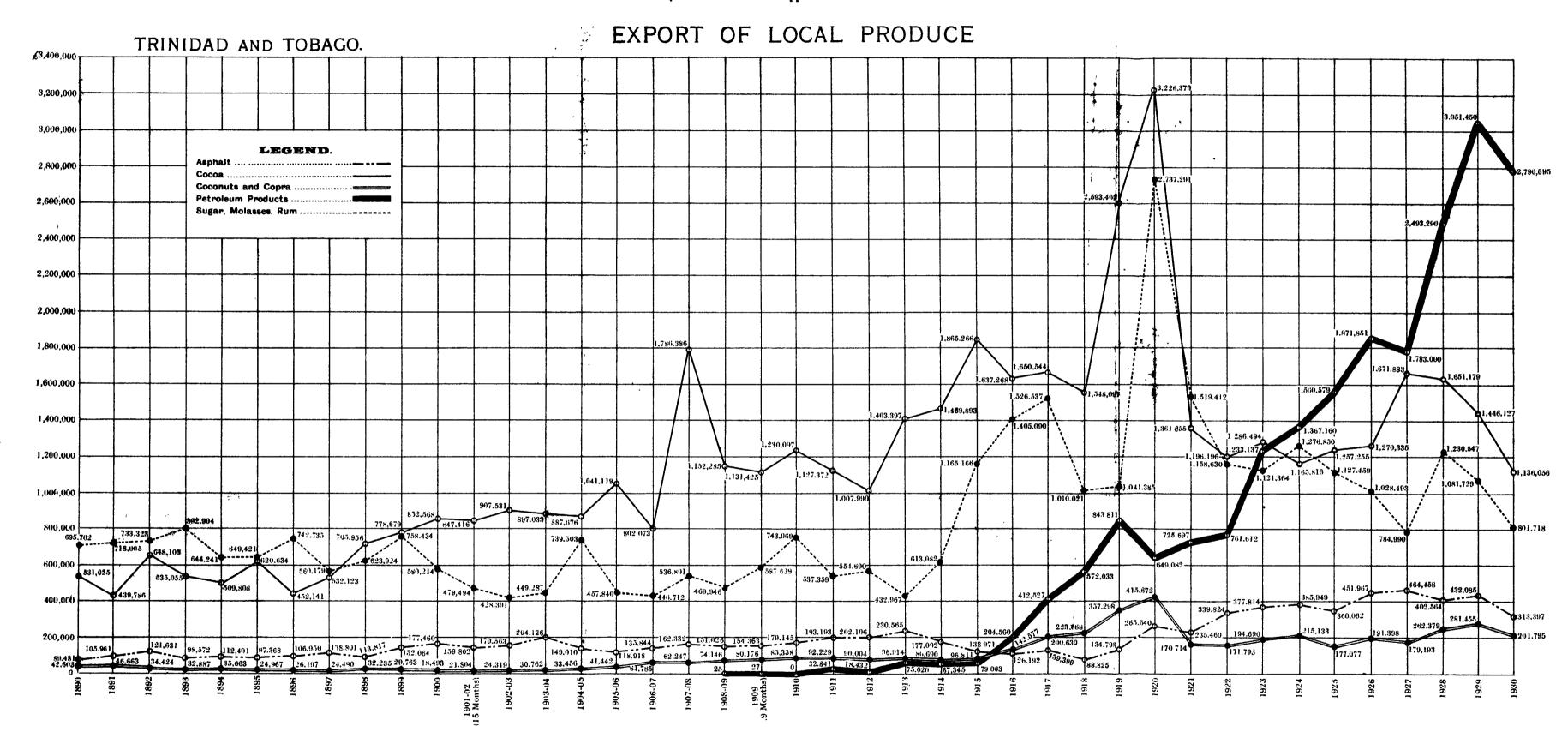
APPENDIX D.

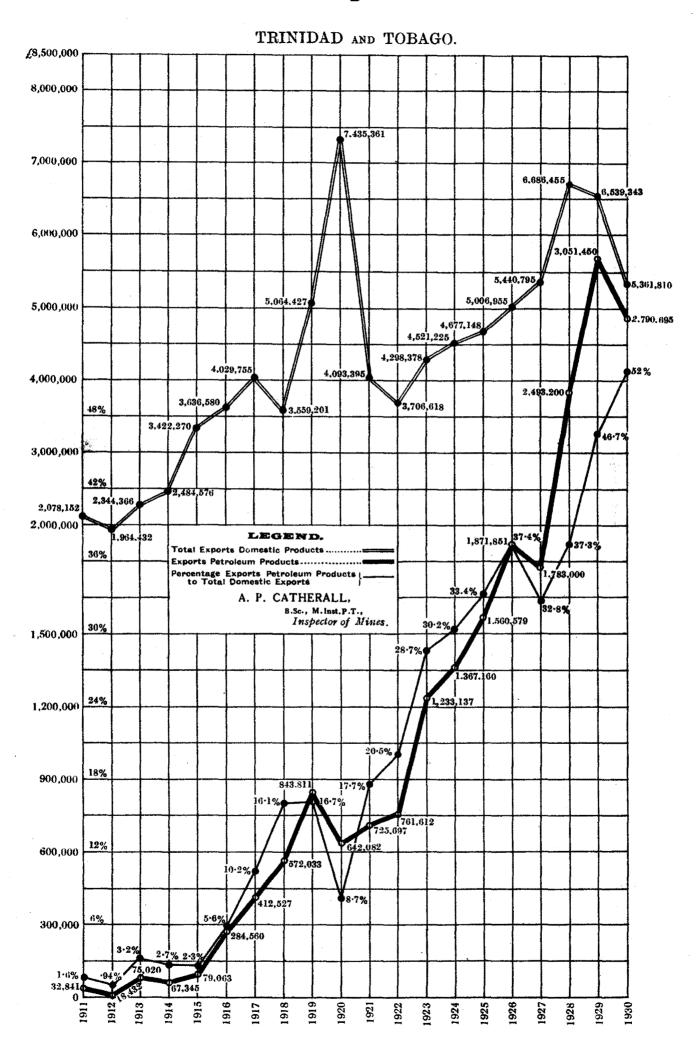
Comparative Statement of oil produced, refined and exported year by year since the inception of the Petroleum Industry in the Colony.

				Petroleum In	dustry in the Colony.		
	-			Production in barrels.	Quantity of Crude Oil in barrels.	refined	Quantity of Crude Oil and Refined Oil exported in barrels.
1905 to 31st	March	, 1910		10,541			
1910-1911	• •			225,112			
1911-1912		• •		285,307	Previous to 1912-1913	37,842	219,582
1912-1913				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 er	ided De	cember,	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	I,	149,943	1,406,264
1920			٠.	2,083,027	I,	395,487	1,034,907
1921	••			2,354,160		806,016	1,223,346
1922				2,444,752	1,8	820,018	1,615,740
1923			• •	3,050,872	2,	360,279	2,432,470
1924			• •	4,056,612	3,4	133,902	3,224,529
1925	••		• •	4,386,507	3,7	790,343	3,606,608
1926	••			4,971,471	3.7	786,876	3,988,308
1927	• •	••	• •	5,380,464	4.7	796,223	4,456,770
1928	••		••	7,684,450	6,7	725,383	6,361,675
1929	••	••	• •	8,715,652	7,€	542,726	8,243,023
1930	••	••		9,418,907	7.9	89,679	7,678,807
				64,289,507	49.5	598,305	50,118,939
			1				i .

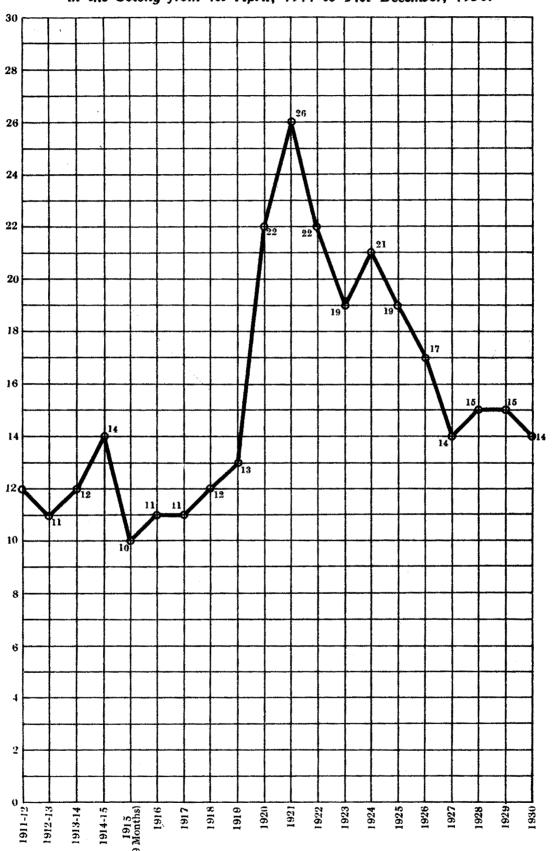
APPENDIX E.

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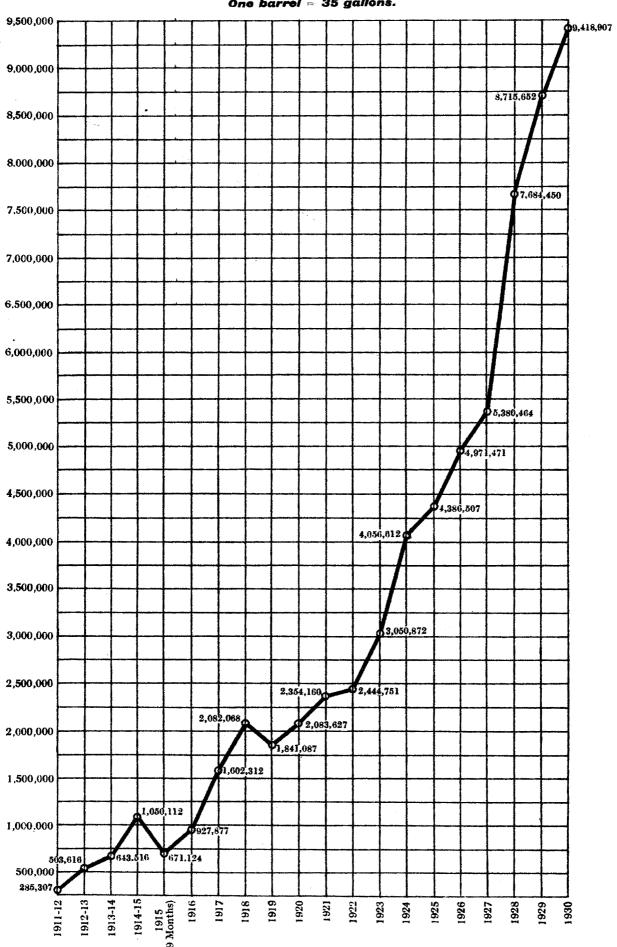
Curve showing the number of Oil Companies that have operated annually in the Colony from 1st April, 1911 to 31st December, 1930.



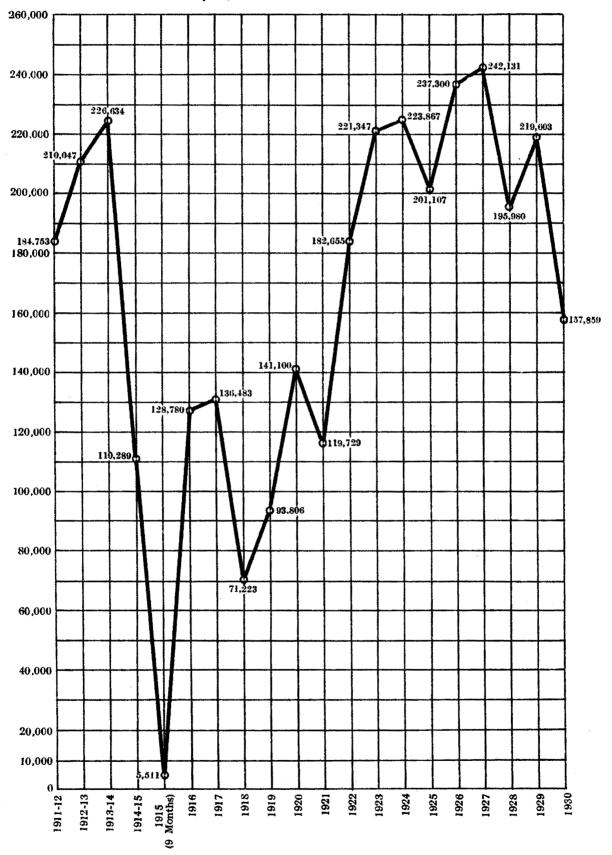
J.C.

Total Annual Production of Crude Oil in Barrels.

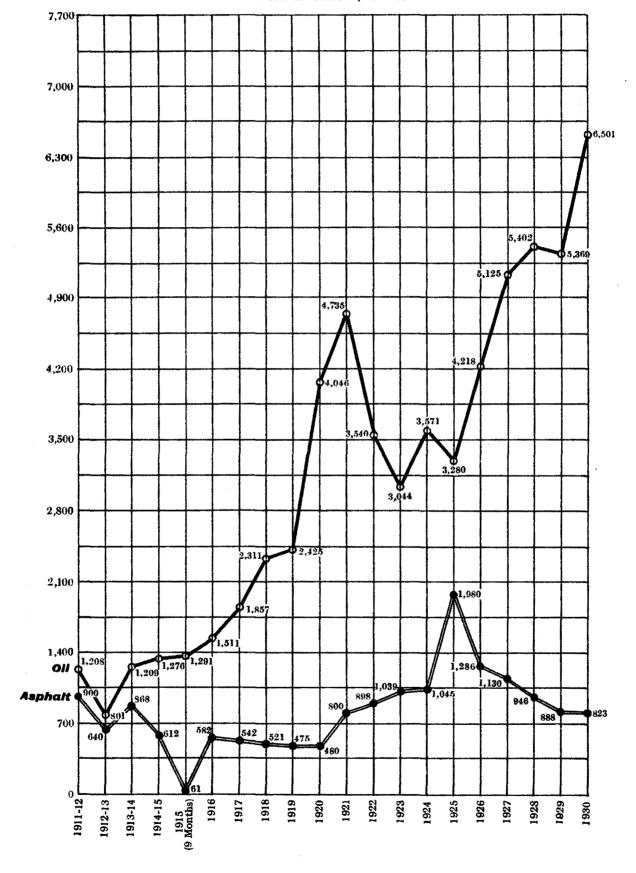
One barrel = 35 gallons.



Curve showing yearly output of Asphalt from the Colony in Tons, from 1st April, 1911 to 31st December. 1930.



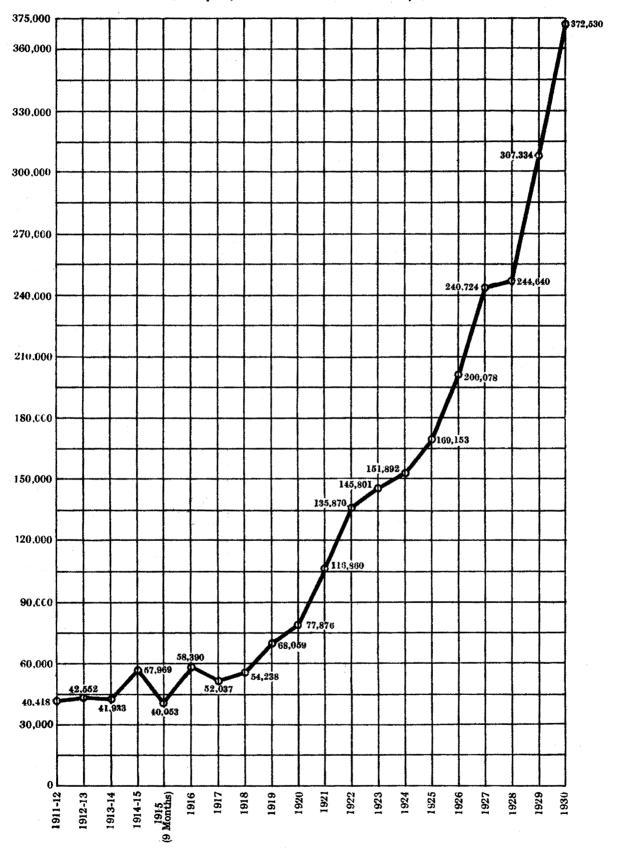
Curve showing comparison of daily average number of persons employed in the Oil and Asphalt Industries of the Colony from 1st April, 1911 to 31st December, 1930.



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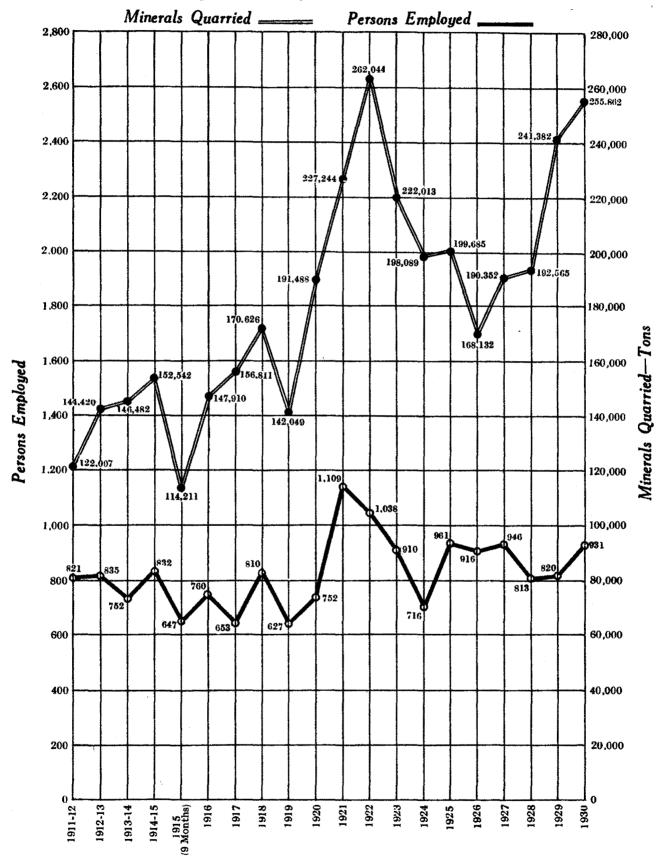
Curve showing yearly total number of feet drilled in the Colony from 1st April, 1911 to 31st December, 1930.

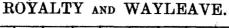


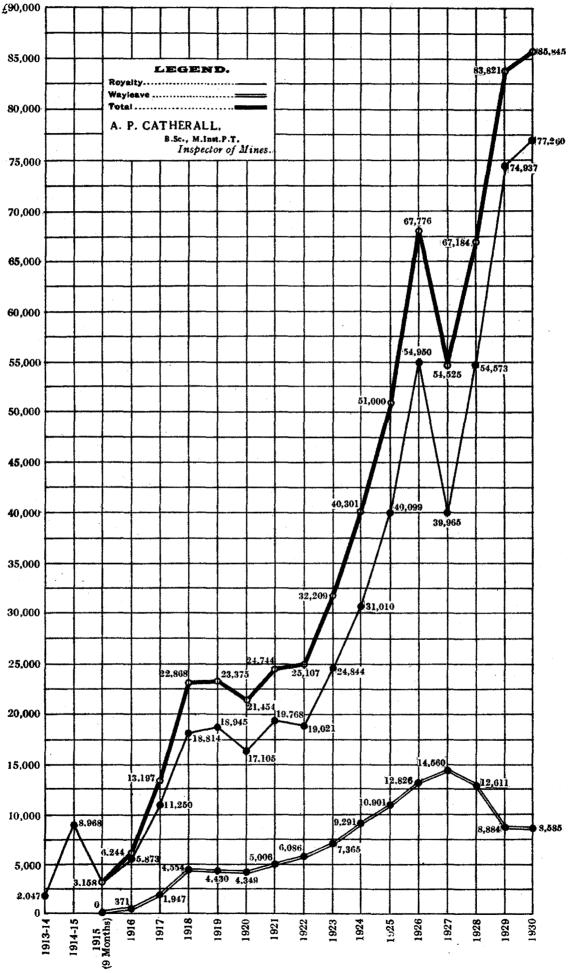
APPENDIX E.

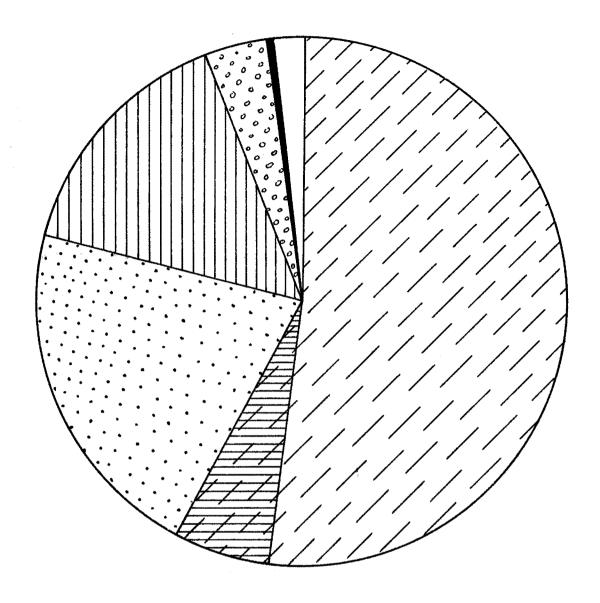
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Curve showing the yearly total quantity of Minerals quarried and a comparison of the daily average number of persons employed in Quarries in the Colony from 1st April, 1911 to 31st December, 1930.









1930

Mineral Exports		57.8°/°
Petroleum Products	52°/。	1111
Asphalt	5.8%	777
Agricultural and other	Exports	42.2°/°
Cocoa	21.5%	
Sugar, Molasses, Rum	15°/。	
Coconuts, Copra, Coconut	Oil 3.9°/6	00000
Coffee	·3°/ _o	
Other Exports	1.8%	