Council Paper No. 45 of 1917.

MINES DEPARTMENT.

Report of the Inspector of Mines for the year 1916.

Laid before the Legislative Council on the 13th April, 1917.

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M.P. No. 2171/1917.

26th March, 1917.

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 ended 31st December, 1916.

OFFICIAL DUTIES.

2. There has been no change in the staff of the Department during the year.

LEAVE.

3. Mr. A. P. Catherall, Deputy Inspector of Mines, was absent on leave from the Colony from 30th August to 25th November. During that time his duties were performed by Mr. N. P court, 2nd Assistant Inspector of Mines.

LEGISLATION.

4. No further legislation in connection with the Department was enacted during the year.

WORK UNDER THE MINES BORINGS AND QUARRIES ORDINANCES.

- 5. Manjak.—Mining for this mineral was suspended during 1916.
- 6. Petroleum.—During the year the number of feet drilled shewed a satisfactory increase proportionately to the drilling done during the nine months covered by my last Administration Report, and a slight increase over the number of feet drilled during the twelve months ended March 31st 1915.

The figures are as follows:—

	12 months ended March 31st, 1915.	9 months ended December 31st, 1915.	12 months ended December 31st, 1916.
Private Lands	19,516 feet.	21,324 feet.	27,555 feet.
Crown Lands	38,453 ,,	18,729 ,,	30,835 ,,
Totals	57,969 feet.	40,053 feet.	58,390 feet.
		——————————————————————————————————————	

The number of wells drilled during the year was 47 (27 on Crown and 20 on Private Lands), and Oil was struck in 34 of these. The total number of wells drilled in the Colony to 31st December, 1916, is 325, of which 161 are on Crown Lands. The quantity of Oil extracted during the past year amounted to 32,475,695 Imperial gallons, which compares favourably with the quantity (23,489,362 gallons) obtained during the nine months ended 31st December, 1915.

- 7. The number of Oil Companies engaged in the winning of Oil at the close of the year remained the same as in December, 1915, viz. 10.
- 8. The Trinidad, Leaseholds, Limited, confined their drilling operations to Crown Lands leased by them in the Morne L'Enfer Forest Reserve. Additional wells were drilled to maintain and increase the production of crude oil. The various works under construction at the time of my last report have been completed. The pipe-line from the Morne L'Enfer Forest Reserve has been in operation, and large quantities of oil were pumped through it to the Company's Shipping Depôt at Pointe-à-Pierre. A great deal of work was done at this Depôt—the island jetty was completed, and a number of ships have been alongside to receive cargoes of Oil. Three large storage tanks have been completed, and a number of small ones are in course of erection. At the time of writing a Refinery to treat the Crude Oil from Fyzabad is nearing completion.

At Guayaguayare the Company's Geological Staff have been engaged on a careful examination of the large area under Lease to them.

- 9. The Trinidad Lake Petroleum Company, Limited, have continued operations on their private lands at Brighton. A production has been maintained from the old wells, and several new wells have been drilled. Practically the whole of the prduction has been exported to the United States of America.
- 10. The United British Oilfields of Trinidad, Limited, are now working under Lease the Crown Lands formerly held by the Trinidad Oilfields, Limited. Additional lands at and near the Morne L'Enfer Reserve, formerly held under Prospecting Licence, have also been incorporated in this Lease. Work has been chiefly confined to the Private Lands and to the Crown Lands formerly held by the Parry Syndicate. Several wells have been drilled on the latter area, and a large production of crude oil obtained.
- 11. The United British West Indies Petroleum Syndicate, Limited, continued drilling on the areas originally licensed to Messers. J. G. Rust and Dreyfus, and wells were also sunk on lands originally applied for by Mr. C. C. Stollmeyer. The work on these lands has so far been confined to the drilling of test wells. Oil has not vet been obtained in any of them in paying quantities. The Refinery which was erected by this Company at Point Fortin, has been transferred to the United British Refineries, Limited, a subsidiary Company formed for the purpose of refining and marketing the production of the United British West Indies Petroleum Syndicate, Limited, and the United British Oilfields of Trinidad, Limited. This Refinery has been operated during the period under review, and various qualities of refined products, including oil fuel to Admiralty Specification, have been obtained.
- 12. The negotiations respecting the lease to be issued to the Trinidad Central Oilfields, It ded, have continued during the year, and the Company are, therefore, still operating on their lown Lands in the Montserrat Ward under Prospecting Licence. Drilling has progressed steadily during the period under review, a number of the wells drilled have been capped, whilst the production from the rest has been refined-petrol, kerosene, lubricating and fuel oils being produced. A can-making plant has been installed, and petrol and kerosene are now available in convenient packages for customers. A storage installation has been crected by this Company near the sea at Claxton's Bay, and connected by a submarine pipe-line to a loading berth approximately one mile out to sea. The Company is now engaged in laying a pipe-line from their Oilfields at Tabaquite to their Storage Tanks at Claxton's Bay—a distance of approximately seventeen miles.
- 13. Only a small amount of drilling was done by the Trinidad Oil and Transport Company, Limited, on their private lands at Barrackpore, as sufficient oil for their needs was obtained from the existing wells. Small additions to their Refinery have been carried out. This Refinery was operated during the whole of the year, and the products (petrol, kerosene and fuel oil) were disposed of locally. The Trinidad Leaseholds, Limited, have arranged to purchase a part of this Company's production, and have laid a six-inch pipe-line from the Refinery at Barrackpore to connect with their main pipe-line running from the field at Fyzabad to Pointe-à-Pierre.
- 14. The Petroleum Development Company, Limited, have continued operations upon the Crown Lands in the Morne L'Enfer Forest Reserve which they hold under lease. The work has been almost entirely confined to the production of oil which is pumped over to Brighton, and need of by the Trinidad Lake Petroleum Company, Limited.
- 15. Mr. C. C. Stollmeyer has done a small amount of drilling on his Perseverance Estate at Guapo, and small quanties of oil have also been won.
- 16. The Trinidad United Oilfields, Limited, have continued drilling shallow wells upon the Crown Lands which they hold under Lease at Palo Seco, and have been successful in obtaining a small production of oil. A small refinery has been erected in which the output of crude oil is treated and petrol obtained.
- 17. No further drilling has been done by the Trinidad Oil Leases, Limited. The existing wells have yielded small quantities of oil which has been disposed of locally. This Company is now known as the T. O. P., Limited.
- 18. A well was drilled by Mr. E. Bowen on his private lands in the Guapo Ward, but operations were discontinued before oil was struck.
- 19. No work has been done by any of the following Companies during the year;—The Cruse Syndicate, Limited; The Oil Concessions of Mayaro (Trinidad), Limited; The Trinidad-Tarouba Oil Development Company; The Trinidad Silverstream Oilfields, Limited; and the Icacos (Trinidad) Development Company, Limited.
- 20. The amount of Royalty earned during the period was £7,765, of which £384 were in respect of Prospecting Licences, £7,348 in respect of Leases, and £33 in respect of oil extracted from a well drilled in error by the Trinidad Lake Petroleum Company, Limited, on Crown Lands.

- 21. This Department is also responsible for the assessment of the way-leave payable in respect of pipe-lines laid along the Trinidad Government Railway and along the Public Roads of the Colony. During the past year £256 became due for oil piped along the Railway, and £115 for oil piped along Roads. In addition £2 were charged for crossing the foreshore in two places.
- 22. The Companies have regularly submitted the various returns in respect of drilling work, and the extraction and disposal of the oil. These, after being checked, have been filed with the records in the Office.
- 23. Inspections.—The usual routine inspections have been made by the Officers of the Department, and in nearly all cases the Ordinances and Regulations have been found to have been satisfactorily carried out. In no case was it found necessary to institute proceedings for breaches, as a warning was considered sufficient. A considerable number of additional inspections in connection with Accidents, Royalty, Way-leave, Refineries, Pipe-lines, etc., have had to be made.
- 24. Leases and Licences.—A Lease dated 4th December, 1915, over some 5,986 acres of Crown Lands, the greater part of which was formerly held under Lease by the Trinidad Oilfields, Limited, was issued to the United British Oilfields of Trinidad, Limited.

The Trinidad Leaseholds, Limited, selected the areas from their Exploration Licence which they desired to take up under Lease, and these were incorporated in the original lease by deed dated 14th July, 1916.

The Exploration Licence issued to the United British West Indies Petroleum Syndicate, Limited, over a small area at San Fernando, and which was extended for six months to 11th May, 1916, expired, and no renewal was asked for. An application from this Company for a Prospecting Licence in respect of a certain portion of the large area held by them under Exploration Licence was received. At the time of writing, however, the Company has submitted an application covering the whole of the areas they desire to take up under Prospecting Licence.

25. Quarries.—The various Quarries in the Colony have been regularly inspected by Officers of the Department, and there is little to report in this branch, as with the exception of a few Government Quarries, they are mostly unimportant. There were 61 Quarries worked during the year as against 60 during the period covered by my last report.

WORK UNDER THE PETROLEUM ORDINANCE, NO. 20 OF 1915.

26. Since the beginning of 1916 work under the Petroleum Ordinance has been in charge of this Department, and a large number of inspections have been undertaken in carrying out the provisions of the Ordinance. I am pleased to say that, on the whole, the utmost care is taken by the public in storing the various products of petroleum.

THE PREVENTION OF ACCIDENTS ORDINANCE, No. 13 OF 1915.

27. This Ordinance was brought into operation during the latter half of 1915; and during 1916, in addition to the Oil-fields, 79 factories were inspected in Trinidad and 16 in the Tobago Ward.

When the Ordinance was brought into force it was found that in a number of cases maching of a highly dangerous nature was entirely unprotected, rendering the employees extremely liable to accidents. I am pleased to record, however, that the fullest co-operation was accorded the Department by the Owners and Managers of the various Factories in carrying out the provisions of the Ordinance.

During the year seven minor, two serious and two fatal accidents were reported.

WORK UNDER THE ASPHALT INDUSTRY REGULATION ORDINANCE, No. 10 OF 1906.

- 28. There has been no digging of the village lots at La Brea during the period under review. This is due, I believe, to the lack of tonnage available for export owing to the War, and I understand that it is the intention of at least one owner to commence operations again as soon as normal conditions are restored.
- 29. Appendices.—The majority of the returns under the Ordinances from which the appendices to this report are prepared were obtained from the various parties without trouble.

Appendix A shows the average number of persons employed and the quantity and value of minerals obtained.

The list of Accidents is shewn in Appendix B; they are chiefly of a minor nature and are such as are incidental to all industrial operations.

The Borings and Quarries worked during the period are shewn in Appendix C.

- 30. GENERAL REMARKS.—Some of the smaller Companies are awaiting the close of the War to commence or extend operations, but the larger Companies have on the whole continued to make satisfactory progress—more especially as regards the Survey (Geological) and testing of Oil Lands. The production from many of the present producing Wells can be considerably increased, and now that the prospects of satisfactory sales have improved we may I think confidently anticipate a considerable increase in the Colony's Oil production. The total quantity of Oil and its products exported during the twelve months ended 31st December, 1916, exceeded 34,000,000 Imperial gallons. This compares very favourably with the quantity—slightly over 14,000,000 gallons—exported during the nine months ended 31st December, 1915. During the last nine months of 1916 five cargoes of Crude and Fuel Oil were shipped to the Admiralty.
- 31. STAFF.—Once again it affords me sincere pleasure to record my appreciation of the loyal and able assistance rendered by the several Members of the Staff.

26th March, 1917,

P. STEVENS, Inspector of Mines.

APPENDIX A.

Daily average number of persons employed and quantity and value of Minerals obtained from Mines, Oilfields, and Quarries, during the year ended 31st December, 1916.

Minerals.	Daily average nu of persons emplo		Total.	Quantity.	Approximate value.	
	Males.	Females.			£	
Oil	1,457	54	1,511	32,475,695 Imp. Gals.	132,256	
Asphalt	582		582	128,780 tons	83,889	
Private Quarries (Limestone, Gravel, &c.)	157	50	207	84,150 ,,	3,776	
Government Quarries (Limestone, &c.)	470	83	553	63,760 ,,	7,825	

Note.—The difference in value between metal won from Private Quarries and Government Quarries is that the former consists of both Limestone and Gravel whilst the latter is chiefly Limestone.

APPENDIX B.

List of Accidents which occurred at Mines, Oilfields and Quarries, during the year ended 31st December, 1916, reported under Section 19 of Ordinance, No. 13 of 1907.

			No. of Accidents reported.					
Name of Mine, Oilfield or Quarry.	Date.		Minor.	Serious.	Fatal.	Total.		
Trinidad Leaseholds, Limited <	28th January, 18th April, 19th ., 6th May, 21st August, 7th September, 16th ., 4th October, 11th ., 12th ., 26th ., 3rd November, 13th December,	1916	1 1 1 1 1 1 1 1 1 1	 		1 1 1 1 1 1 1 1 1 1 1 1		
Perseverance Estate	14th February,	,,	1			1		
United British West Indies Petroleum Syndicate, Limited	16th May,	,,		1		1		
Eastern Quarries	26th July,	,,	3	•••	***	3		
Trinidad Central Oilfields, Limited	14th August 15th ,,	,,	4	 I	 	4 1		
Basilon Street Quarry	3rd October,	,,	1			1		
New Trinidad Lake Asphalt Co., Ltd	. 16th ,,	,,	* *		1	1		
		A PARTICULAR OF THE PARTICULAR	21	3	1	25		

APPENDIX C.—List of Mines, Oilfields and Quarries worked during the year ended 31st December, 1916.

No.	Name.	Situation.		0	wner and Ad	dress.			Manager.		Daily Average No. of persons employed.	Mineral worked.
	Mines.				•							
			Chas. F. St	tollmeyer, Po	rt-of-Spain		•••		Claude Phelps		123	Asphalt.
2	New Trinidad Lake Asphalt Company, Limited	Brighton	New Trinic	lad Lake Asp	halt Coy., Lt	d, Brighto	on, Trinidad		Wm. D. Fowler	٠	459	,•
	Oilfields.											
$\frac{1}{2}$	Trinidad Central Oilfields, Limited Trinidad Oil and Transport Coy.,	Tabaquite	Trinidad C	entral Oilfield	ls, Ltd., 79,	Bishopsgat	e, London, E	.C	H. P. Ingram		212.50	Oil.
	Limited	Barrackpore	Trinidad O	il & Transpor nited Oilfield	t Coy., Ltd.,	48, Canon	st., London,	E.C.	G. A. Peat	•••	$\begin{array}{c} 39 \\ 28.71 \end{array}$,,,
3	Trinidad United Oilfields, Limited	Palo Seco Guano	C C Stoll	nited Olineid never Port-o	s, Lu, rms	oury Cour	t, London, E	. O j	r. r. Cherry E. Pereira		8	,,
4 5	Perseverance Estate United British West Indies Petro-	San Fernando, Siparia and	United Br	itish West	Indies Petro	oleum Syr	ndicate, Lim	ited.	2 516,114		.,	,,
6	leum Syndicate, Limited United British Oilfields of Trini-	Moruga Point Fortin	32, Bis United Bri	hopsgate, Lo tish Oilfields	ndon, E.C. of Trinidad	Limited,	32, Bishops	gate,	F. J. Fleming		48	,,
7	dad, Limited Trinidad Leaseholds, Limited	Forest Reserve, near Fyza-	Londor Trinidad L	n, E.C easeholds, Lte	d., 1, London	Wall Buil	dings, Londo	on	H. S. Fuller		337 178	,,
8	Trinidad Leaseholds, Limited	Guavaguavare	,,	,	,	,,	,,		,,		68	ļ ,,
	Trinidad Leaseholds, Limited	Pointe à-Pierre	D , ,		,	."	. ,';		W. D. Fowler	•••	352	7.
10 11	Petroleum Development Coy., Ltd. Trinidad Lake Petroleum Coy.		Petroleum	Development	Company, L	ımıted, Br	ighton	•••	W. D. Fowler	•••	54	,,
11	Limited	•	Trinidad L	ake Petroleui	n Company.	Limited. F	Brighton			ارا	181	!
12	T.O.P., Limited	Point Ligoure	T.O.P., Lt	d., 18, Chacon	n street, Port	of-Spain		2	Mungo Thomas		101	,,
13	E. Bowen	- C	E. Bowen,	Town Hall, I	Port-of-Śpain			1	E. Lowen		$ar{4}$,,
	Quarries.											
1			Trinidad G	overnment, I	ort-of-Spain				District Officer		6	Limestone
2	T	. Santa Cruz	,,	,,	,,				,,		3	,,
3		Talparo	,,	,,	5.				,,		10.50	,,
4	Southern Central Road Quarry										2.00	, , , , , , , , , , , , , , , , , , ,
_		. Cedros		,,	,,		•••		,,	•••	$\overline{8.93}$	Porcellanite.
5		Siparia Erin	,,	,,	٠,	•••	•••		,,	• • • •	7	,,
9	r 1)		,,	•••	,,	***	•••		,,	••••	$rac{4}{3}$,,
4	Morichal	Morichal	,,	,,	;;	•••		• • •	,,	•••	ა 6	Limestone.
9		Mayo village	,,	.,,	,,	•••	•••		,,	. ***	7	
10		Guaracara village	,,	,,	,,		••		,,	•••	. 7	,,
11		Corosal road	,,	,,	,,		•••		**		10	,,
12		Tabaquite Nariva road		,,	,,		•••		,,		9	,,
$\overline{13}$		Tobago		,,	,,		•••		",		์ 5	Dead Rock.
14			ı	,,	,,		•••		,,		$\frac{3}{2}$.,
15		. ,,	,,	,,	,,				"		5	Limestone

APPENDIX C.-List of Mines, Oilfields and Quarries worked during the year ended 31st December, 1916.—Continued.

Т о.	Name.		Situation.			Owner and A	Address.			Manager.	Daily average No. of persons employed.	Mineral worked.
	Quarries.—Contd.											
16	Moruga		Princes Town	Trinidad	Government	, Port-of-Spair	13		D	istrict Officer	9	Sandstone.
17	Prisoners		F	j		,,,	***		St	npt, of Prisons	95	Limestone.
18	Carrera Island		C T 1 1	··· ,,	,,	,,	***		Н	. Daniel	144	١,,
9	Mount Hope		134 T 1		,1		***		J.	MeInroy	1 4	,,,
ŏ.	Eastern Quarries		F 4:11	,	,,	,,			. F	J. Horsford	157	
ì	Trinidad Governmen			; ,,	,,	,,			Ĥ	illary Aug. Sharpe		,,
2	Morne Diable	it itaniway .	Cl 17 1	,,	٠,	٠,			17	:	11	,,
			1 (1 (1 1) 1)	··· ,,	• •	٠,	***	• • •				,,,
3				., ,,	,,	• •	• •	• •		,,	00	,,
1	Plum		Plum Road	··· ,,	,,	,,	., .		••••]	,,	35	,,
5	Guaico Tamana		list and the second	,,	; ;	.,	***	***	• • • •	,,		,,
3	Cumuto			,,	,,	,,	***		!	,,		,,
7	Sanchuchu			' ,,	• • • • • • • • • • • • • • • • • • • •	,,			,	,,		,,,
3	Pointe Radix		Mayaro	i		• • • • • • • • • • • • • • • • • • • •	***			٠,	8	,,
)	La Pique		San Fernando	Canadian	Mission, San	Fernando			Ja	mes Bhoopsingh	. 1	Gravel.
)	Perseverance Estate		Guapo	C. C. Sto	llmeyer, Por	t-of-Spain			Е.	Percire	. 7	Sandstone.
	Woodford Farm Esta		St. Ann's	Rebecca	Bennett 20	Redford Lane	, Port-of-Spain		T	M. Thorne	.[4	Limestone.
,	Usine			Ste Mad	oloino Sucar	Company Lit	nited, England	• • • •		31 D	0	Gravel
	Trelawne		Tabaquite	F F Sto	ue Trelenne	Estate, Taba	miteu, migianu				0.50	Marl.
	Bandhoo			D. F. 1510	ne, reawne	Estate, 149a	idane	• • •			1 2,70	
			San Juan	Bandhoo,	oan suan					nwa Jaffar	4 4	Gravel.
	Plum		Manzanilla	Manzamii	la Local Roa	d Board, Sang	gre Grande			P William	. 4	Limestone
	Champ Fleurs		St. Joseph	F. J. Gra	nsaull, St. J	oseph			Le	eopold Brown	. 5	,,
	San Juan		San Juan	,,	,	,				,,	3 2	Gravel.
	St. Joseph No. 2		San Fernando	. J. J. Wa	ddell, San Fe	ernando			P.	P. Pickering	. 2	,,
	Glendale			H. R. Mo	Clean.				H.	. R. McClean	15	1
	Pointe-à-Pierre		Pointe-à-Pierre	Percy Gle	endenning. P	ort-of-Spain			1		10	Sandstone.
	Borough Council		Sau Fernando	Borough	Council, San	Fernanda	•••		Τ.	T 137. 3 1 11	1	Gravel.
	Circular Road			Dorougn	Council, then	1 Octionation	•••					1
	Verdun		,,	TTW	ldell, San Fe	,,1				,,	1	"
	St. Joseph No. 1		,,		men, san re	ernando	0 6		···	D D' 1 "	1 3	,,
			••• ,,	A. (1. II)	rewood and	P. P. Pickern	ng, San Fernanc	to		P. Pickering	1 2	,,
	Charles		,,	· · · Posty. On	аг <i>е</i> з, <u>115,</u> Т	ragarete_Road	l, Port-of-Spain			Lucas	1	,,
	La Coulée			⊤Heirs of	Mary Joaqui	n, San Ferner	ido			E. Oliviera	. 2	_ ,,
	Duke Street		Port-of-Spain	Virgina	Prime, 12 , D	nke Street, Po	ort-of-Spain		Cl	nas. Attwell	. 7	Limestone.
	St. Ami's		St. Ann's	F. Martin	a Campbell. 8	St. Ann's	.,-			orman Charles	. 6	, ,,
	Champs Elysees		Maraval	Poleska c	le Boissière,	Maraval			C.	Mohan	1 1 1	Sand & Gravel.
	Stanislaus		Laventille	J. T. Git	tens, Tra⊻ar	ete Road, Por	rt-of-Spain			ohn Lashley		Limestone.
	Irving Lane		Clifton Hill		,		-				T 7	
	Campo Street		(·			,,	,,		C	H. Gittens	1	,,
	Silver Mill					,,	,,	•••				Sand & Gravel.
	St. John Street		St. John St., Port-of-Spain	: ,,		,,	٠,	•••	"" _{T-}	hn Lashley	I	Limestone.
			Page Day Diron	٠,,		,,	,,	••	bio	· ·	00	
	Basilon Street		East Dry River	1531 111 11	D. 1 22	0,, 11	,, D . e ~	:			1	11
	Thomas Bay		Gasparee	Wellingt	on Park, 21,	Sandhurst Sti	reet, Port-of- ${ m S_I}$		<u>E</u> .	Seraphin		,,
7	F. J. Masson		Onaguaramas	Geo. Dra	nguet, Charle	otte Street, Po	ort-of-Spain			B. Masson		,,
3	Clifton Hill		St. Joseph Road	iJ. T. Gi	ttens, 25, Ph	illip Street, P	Port-of-Spain		J o	ohn Lashley		,,
)	Bourne Bay		Gasparee	. J. T. Git	tens, 25, Tra	garete Road,	,,		M	. Goveia	12	٠,
)	La Pena			., Mrs. B. 1	Blackman, 5.	Duke Street,	,,			ias. Mann	4	,,
	Aranguez Farm				H. Rapsey, M		,,,	•••		onald A. Boyack	22	Gravel.
		•••			rempacy, r	. E.C. E. C. D. C. E.	•••	•••	[COLUMN TO A COLUMN

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