TRINIDAD AND TOBAGO.

Council Paper No. 88 of 1916.

MINES DEPARTMENT.

Administration Report of the Inspector of Mines for the nine months ended 31st December, 1915.

> Laid before the Legislative Council on the 26th May, 1916.

Previous Council Paper No.

Registered No. of Correspondence relating to the subject-M.P. No. 3412/1916.

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1916.

MINES DEPARTMENT.

Administration Report of the Inspector of Mines for the nine months ended 31st December, 1915.

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M.P. No. 3413/16.

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 nine months ended 31st December, 1915.

OFFICIAL DUTIES.

2. The only change in the staff has been the addition of the post of 3rd Clerk which was found necessary owing to the increase of clerical work in the Department. Mr. G. E. Robinson was appointed to this post on 1st April, 1915, but I regret to say only-held it for a few weeks as this promising young Officer's career was cut short by an illness which terminated fatally on the 20th May. Mr. Robinson was succeeded by Mr. F. O. Rooks, promoted from the post of Assistant Clerk, Public Works Department. On the 1st October last Mr. Rooks was granted leave for the purpose of joining His Majesty's Forces in England, and Mr. E. Lamy was appointed to act for him as from 16th November, 1915.

LEAVE.

3. No officer of the Department has been on leave of absence from the Colony during the period under review.

4. The following was the expenditure :--

Personal Emoluments :--

Other

Inspector of Mines	•••				£	600	0	0 ·
Deputy-Inspector			•••		•••	330	19	71
2nd Assistant Inspector			•••	,	• • •	202	10	0
Draughtsman and Tracer				સ		108	15,	_0 _
Expert Adviser	•••		2 18 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19 1. 19		•••	150		0
Clerical Assistance	्र • • •		***			306	11	2
Porter and Messenger						2 8	2	6
					£	,726	18	3 1
· Charges :						3 05	3	5
Travell ing Expenses Expenses of Surveys	•••	- * * *	•••	•		25	6	5 1 1
	***	•••	• • •		•••	μo	5	4
Instruments and Appliar	lces	••• **	•••			40		-
Contingencies		14.845 1	4. *** 14	٠.	•••	42	9	$11\frac{1}{2}$
Total	≤ ••••	• • قي	•••		£2	,100	3	$1\frac{1}{2}$

LEGISLATION.

5. Two new Ordinances were passed one for the prevention of accidents due to the use of boilers and machinery in factorize and other places, and the other to amend and consolidate the law relating to the carriage, storage and use of Petroleum.

Amendment Ordinances amending the Mines Regulation Ordinances, the Petroleum (Pipe Lines) Ordinance, 1911, and the Petroleum Spirit and Petroleum Oil Excise Ordinance, 1914, ware also passed.

Regulations under the Mines Regulation Ordinances (No. 13 of 1907, No. 37 of 1909 and No. 9 of 1912) were made by the Governor in Executive Council on the 7th October, 1915, and those previously in force were revoked.

Regulations under Section 28 of the Petroleum Ordinance, No. 20 of 1915, were made by the Governor in Executive Council on the 9th of September, 1915.

WORK UNDER THE MINES, BORINGS AND QUARRIES ORDINANCES.

6. MANJAK.—This is the only mineral for which actual mining operations are carried on, and, as before, there were two companies engaged in winning the mineral during the period under review.

The Trinidad Tarouba Oil Development Company continued operations during the early part of the period and then temporarily closed down. A considerable quantity of Manjak was won whilst operations were in progress.

The Trinidad Manjak, Limited, continued operations during the whole of the period at their Mines in Montserrat and have won a fair quantity of the mineral.

The Mines have been regularly inspected by the Officers of the Department and the provisions of the Ordinances as well as the Regulations have been found to have been satisfactorily carried out.

7. PETROLEUM.—During the nine months under review the amount of drilling done was somewhat less in proportion than for the twelve months ended 31st March, 1915, although it compares very favourably with the number of feet drilled during the year ended 31st March, 1914.

The following are the figures :--

	e	months mded 1st, 1914.	12 month ended March 31st, 1	ended
Priv a te Lands	26,54	6 feet.	19,516 feet	t. 21,324 feet.
Crown Lands	15,38	7 ,,	38,453 ,,	18,729 ,,
Totals	41,93	3 feet.	57,969 fee	et. 40,053 feet.

The number of Wells drilled during the nine months was 38 (21 on Crown and 17 on Private Lands) as against 65 during the twelve months ended 31st March, 1915, and 41 during the year ended 31st March, 1914. Oil was struck in 23 of the 38 Wells drilled. The total number of Wells drilled in the Colony to 31st December, 1915, is 277, of which 133 are on Crown Lands. The quantity of Oil extracted during the nine months ended 31st December, 1915, amounted to 23,489,362 Imperial Gallons as against 36,753,931 for the 12 months ended 31st March, 1915, and 22,523,060 for the 12 months ended 31st March, 1914.

8. On the 31st December, 1915, there were ten Oil Companies engaged in the winning of Oil, the same number as on the 31st March, 1915.

9. The Trinidad Leaseholds, Limited, have continued development work on the area of Crown Lands held by them under Lease in the Morne L'Enfer Forest Reserve. In addition to actual drilling work new Offices and Stores have been built and a well equipped Machine Shop is under construction. A small experimental refinery as well as a number of storage tanks have been erected. Since my last report was penned this Company has laid a 6-inch pipe line from the Morne L'Enfer Forest Reserve area to their shipping place at Pointe-à-Pierre—a distance of $26\frac{3}{4}$ miles. This line runs along the side of Public Roads as far as Peñal Railway Station and thence on Railway Lands alongside the Trinidad Government Railway. Two 3-inch branch lines for the conveyance of Oil Fuel have been laid from the main line to La Fortunée and Malgretoute Sugar Factories. At Pointe-à-Pierre extensive preparations have been made for the laying out of a Shipping and Refinery Depôt. An island jetty is now under construction to allow of the loading of tank vessels ; an 8-inch pipe line is being laid from this jetty to the storage tanks ; and at the time of writing two large storage tanks are nearing completion.

A well constructed metalled road has been laid into the Company's property at Pointe-à-Pierre from the Southern Main Road, as well as a siding from the Trinidad Government Railway" Several bungalows for the housing of the staff have been built-also the necessary Offices, Stores, etc.

Work on the Guayaguayare area was closed down early in April, 1915.

10. The Trinidad Lake Petroleum Company, Limited, have done additional drilling work on their private lands at Brighton, and have also extracted oil from the old wells. New wells have been drilled in the vicinity of the Pitch Lake and have proved successful.

11. In my last report I mentioned that the negotiations regarding the lease to be issued to the United British Oilfields of Trinidad, Limited, were nearing completion; they were completed toward the end of the period under review and the lease has now been forwarded to England for signature.

Development work has been continued both on Crown and Private Lands. Additional Wells have been drilled on the Crown Lands formerly held by the Parry Syndicate, Limited, under Prospecting License, and a pipe line has been laid from them to the storage tanks at Point Fortin.

12. The United British West Indies Petroleum Syndicate, Limited, continued drilling on the Well at San Fernando during a portion of the period under review, but, at the time of writing, the well is not completed. In addition to this, operations were commenced under Prospecting Licences on Crown Lands in two other localities. One well is being drilled on Lands formerly under Prospecting Licence to Mr. J. G. Rust, and the other on lands originally liccnsed to Mr. Dreyfus. So far oil in paying quantities has not been struck. The Refinery erected by this Company at Point Fortin has been operated during the period under review, and oil fuel which complies with the Admiralty Specification has been produced.

13. The Trinidad Central Oilfields, Limited, continue to hold a Prospecting Licence over the Crown Lands in the Montserrat district, but negotiations have been proceeding with regard to their taking up a lease over such portions of the land as are likely to prove oil bearing. During the nine months under review drilling has proceeded steadily, additional territory has been opened up, and considerable quantities of petrol and kerosene have been produced for local consumption and exportation.

14. The Trinidad Oil and Transport Company, Limited, have chiefly confined their attention to the production of oil from their private lands in the Barrackpore district. The Refinery has been enlarged, and practically the whole of the oil produced has been treated therein. Both the petrol and residue find a ready sale locally. No drilling has been done on the properties formerly held by the Consolidated Oilfields of Trinidad, Limited.

15. The Petroleum Development Company, Limited, took up a lease as from 1st July last over the Crown Lands in the Morne L'Enfer Reserve, which they formerly held under Prospecting Licence.

16. Mr. C. C. Stollmeyer has done very little work on his Perseverance Estate. It has been confined to a small amount of drilling and the extraction of small quantities of oil.

17. No work has been done by the Cruse Syndicate, Limited, since my last report. L

18. Work was closed down by the Oil Concessions of Mayaro (Trinidad), Limited, at the end of the last financial year, and since then nothing has been done.

19. No drilling has been done by the Trinidad Oil Leases, Limited, and nearly all the oil extracted from the wells already drilled has, I believe, been exported to the neighbouring Islands.

20. The Trinidad Tarouba Oil Development Company have, as previously reported, ceased operations since the outbreak of War. \smile

21. The Trinidad United Oilfields, Limited, took up a Lease over the Crown Lands formerly held by the Petroleum Options, Limited, as from the 1st March, 1915. A few shallow wells have been drilled, and the small quantity of oil extracted used for fuel purposes on the field.

22. No work has been done by either the Trinidad Silverstream Oilfields, Limited, or the Icacos (Trinidad) Development Company, Limited.

23: The amount of royalty earned during the period under review amounted to £4,430 7 5 of which £868 2 $9\frac{1}{2}$ was in respect of Prospecting Licences and £3,562 4 $7\frac{1}{2}$ in respect of Leases.

24. The various returns in respect of drilling work and the extraction and disposal of the oil have been received regularly from the Companies concerned, and, after being checked, have been filed with the records in the Office.

25. INSPECTIONS.—Regular inspections of the Oilfields have been made by the Officers of the Department, and in most cases the Ordinances and Regulations have been found to have been satisfactorily carried out. In other cases it was considered sufficient to warn the offenders without taking legal proceedings. In addition to the regular inspections it has been necessary to carry out a considerable number of inspections in connection with Royalty, Refineries, Pipe Lines, etc.

26. LEASES AND LICENCES.—Two leases were issued during the nine months—one to the Trinidad United Oilfields, Limited, as from the 1st March, 1915, in respect of 641 acres at Pa'o Seco which were originally held under Prospecting Licence by I. J. Bernstein (500 acres) and the Petroleum Options, Limited, (†441 acres); and the other to the Petroleum Development Company, Limited, as from the 1st July, 1915, in respect of 1,999 acres originally held by them under Prospecting Licence. No new licences were issued during the period, but several extensions vere granted.

The Exploration Licence issued to the Trinidad Leaseholds, Limited, was extended for six months from 27th November, 1915.

The Exploration Licence issued to the United British West Indies Petroleum Syndicate, Limited, over a small area at San Fernando was extended for six months from 12th November, 1915. Three applications from this Company for Prospecting Licences in respect of certain portions of the large area held by them under Exploration Licence were received and are receiving attention.

The time allowed to the Trinidad Grand River Oil Company, Limited, to take up their Prospecting Licence lapsed, and, therefore, the area of 2,319 acres reverted to the Crown.

27. QUARRIES.—My remarks on the subject of quarries in my last report still hold good. With the exception of a few of the Government Quarries they are mostly unimportant. There were 60 quarries worked during the period as against 71 during the previous financial year.

It was not found necessary to undertake any prosecutions in respect of quarry owners or managers.

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

28. As in previous years, digging has been confined to the village lots at La Brea.

During the period under review only one "Notice to commence" was received, and the number of levels taken was 210, which brings up the total number taken to date to 22,786.

Neither application for Certificate of Loss under Section 11 of the Ordinance, nor to dig by permit, under Section 9, was received.

29. APPENDICES. - I have pleasure in stating that most of the returns under the Ordinances from which the Appendices to this report are prepared have been obtained without trouble.

Appendix A shews 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 Mines, Borings and Quarries worked during the period are shewn in Appendix C.

30. GENERAL REMARKS.—As was to have been expected the War has seriously hampered the development of the Oil Industry. Several promising undertakings are awaiting its close so as to be able to raise the necessary capital. At one time the export of oil had practically ceased, but latterly I am pleased to say it has been resumed on a fairly extensive scale. Considerable quantities of Oil Fuel are used at Sugar factories as well as for many of the local industries. And the trade in Oil fuel for bunkering purposes is now rapidly on the increase.

31. STAFF.—I am very pleased to be again able to record my sincere appreciation of the loyal and capable assistance rendered by the several members of the Staff.

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P. STEVENS, Inspector of Mines. Ĉ

17th May, 1916.

APPENDIX A.

Daily average number of persons employed and quantity and value of Minerals obtained from Mines, Oilfields. and Quarries, during the nine months ended 31st December, 1915.

MINERALS.				aily average number of persons employed.		Quantity.	Approximate value.		
			Males.	Females.			£ s. d.		
Manjak	••••		. 81	4	85	508 tons	1,917 10 0		
Oil	***		1,227	64	1,291	23,489,862 Imp.gals.	96,020 15 8 ¹ / ₂		
Asphalt	• • •	••• ••	. 61		61	5,511 tons	5,511 0 0		
Private Quari	ries (Limest	one, Gravel, &c.) 188	54	192	71,574·27 tons	$3,448$ 10 $11\frac{1}{2}$		
Government	Quarries (L	imestone, &c.)	. 377	78	455	<u>42,637.07</u> 1/5 211-34	5,061 8 4		

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 nine months ended 31st December, 1915, 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.			
Petroleum Development Con	npany, Limited	6th April, 1915			1	1			
Trini `ad Leaseholds, Limited	a }	26th " " 3rd October " 12th " " 24th " " 26th " " 26th " " 30th " " 2nd December, " " " 5th " " 15th " " 17th " "	1 1 1 1 2 1 1 1	···· ··· ··· ··· ··· ···	· · · · · · · · · · · · · · · · · · ·	1 1- 1 1 1 2 1 1 1 1			
Frinida l Lake Petroleum Cor	npany, Limited $\frac{f}{f}$	17th June, " 9th September, "	1 		 1	1 1			
Gordon Pits	••• •••	8th July, ,,	1	•••	•••	1			
Trinidad Central Oilfields, Li	mited	22nd September, "	•••	1	•••	1			
Eastern Quarries	••••	25th October, "	1	•••	***	1			
St. Joseph Quarry		5th November, ,, 28th December, ,,	1	 1	•••	1 1			
La Brea Asphalt Works	••• •••	3rd December, "	•••	•••	1	1			
			16	2	8				

No.	Name.	Situation.	Owner and Address.	Manager.	Daily average No. of persons employed.	Mineral Worked.
	Mines.					
		Savana Grande	Trinidad Manjak Limited, San Fernando Trinidad-Tarouba Oil Development Company, New York,	J. C. T. Raspass	$\frac{10}{24\text{-}77}$	Manjak.
2	Vistabella	San Fernando	U.S.A.	J. J. Waddell	2 1 11	÷ •
.3	La Brea Asphalt Works	La Brea		Claude Phelps	61	Asphalt.
	Oilfields.					
	Oitpletas.					
1	Trinidad United Oilfields,					
2	Limited Trinidad Central Oilfields,	Palo Seco	Trinidad United Oilfields Limited, Finsbury Court, London, E. C.	F. E. Cherry	18.45	Oil.
-44	Limited	Tabaquite	Trinidad Central Oilfields, Limited, 79, Bishopsgate,	H. P. Ingram	97.80	77
8	Trinidad Oil and Transport	-	London, E.C.	~ • • • •		
Ť.	Company, Limited	Barrackpore	Trinidad Oil and Transport Company, Limited, 48, Canon Street, London, E.C.	G. A. Peat	51	**
4	Perseverance Estate	Guapo	C. C. Stollmeyer, Port-of-Spain	E. Pereira	8	**
5	Petroleum Development Com-	- -	D. () Dealers and Commune The 'to I Deichten	TT T. T. I.	101	
-6	pany, Limited Trinidad Lake Petroleum		Petroleum Development Company, Limited, Brighton	W. D. Fowler	101	**
	Company, Limited	Brighton	Trinidad Lake Petroleum Company, Limited, Brighton	W. D. Fowler	174	**
7	United British West Indies	_				
	Petroleum Syndicate, Limited	San Fernando, Siparia and				
		Moruga	United British West Indies Petroleum Syndicate, Limited,	F. J. Fleming	33	**
-8	United British Oilfields of Trinidad, Limited	Point Fortin	32, Bishopsgate, London, E.C. United British Oilfields of Trinidad, Limited, 32, Bishops-	T I Flowing	299	
	Trinidad, Limited	Point Fortin	gate, London, E.C.	F. J. Fleming	299	••
9	Trinidad Leaseholds, Limited	Pointe-à-Pierre	Trinidad Leaseholds, Limited, 1, London Wall Buildings,	H. S. Fuller	280	**
10	Trinidad Leaseholds, Limited	Oronnaha	London, England and Port-of-Spain Trinidad Leaseholds, Limited, 1, London Wall Buildings,	H S Fullow	225	
10	Trindau Leasenoids, Linited	oropuene	London, England and Port-of-Spain	H. S. Fuller	220	**
11	Trinidad Leaseholds, Limited	Guayaguayare	Trinidad Leaseholds, Limited, 1, London Wall Buildings,			
12	Trinidad Oil Leases, Limited	Can da Villa	London, England and Port-of-Spain Trinidad Oil Leases, Limited, 6, Drapers Gardens, London	H. S. Fuller	$\frac{1.50}{2.40}$	**
1.41	Limitad On Leases, Limited	capace vine	Timuau on Leases, Emilieu, 6, Prapers' Gardens, Eondon	vernoii Collins	2 10	51
	Quarries.					
1	River Estate	Diego Martin	Trinidad Government, Port-of-Spain	District Officer	4	Limestone.
2	Cutucupano	Santa Cruz		,,	4	»»
		Talparo	,, ₂₂ 23	7, **	9.80	33
		Siparia Erín		,,	9·36 7·03	Porcellanite.
э	Buenos Ayres	r4rin	(₇ , ₂ , ₂ , ₂ , ₂ , ₂ , ₂ ,	,	1.09	**

APPENDIX C.-List of Mines, Oilfields and Quarries worked during the nine months ended 31st December, 1915.

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APPENDIX C. List of Mines, Oilfield, and Quarries worked during the nine mor hs ended 31st December, 1915.—Contro.

io.	Name.	Situation.		C	wner and Add	lress.		Manager.	Daily average No. of persons employed.	Mineral Worke
	Quarries.—Contd.	Đ.								
6	La Ressource	Erin	Trini	dad Governmen	t. Port-of-Spain	a		District Officer .	6.95	Porcellanite.
		Tobago	,				**	.,, .		Dead Rock.
8	Grange Main Road	. Tobago	,		**		••			Limestone.
		Tobago			**					Dead Rock.
	Mayo	Mayo Village						71		Limestone.
1	Guaracara	Guaracara Village			**		•••			1
	Moriehal	Morichal	1 1		,,				ß	"
		Corosal Road	••• ,,		,,	***	•••	1 "	3	37
	Corosal	San Fernando	••• •		,,	•••	•••	1 "	10	33
	Morne Diable Southern Central Road, Quar		*** ,	· · · · ·	**	***	••	· · · ·	10	17
5	Southern Central Road, Quar	9	1						. 8.37	Porcellanite.
~	No. 1	Cedros	,	, ,,	••	•••	•••		10	
-	Moruga	Moruga	••• ,	, ,,	,,	•••	•••			Sandstone.
	Eastern Quarries	Laventille	••• ,	13	33	· ••		F. J. Horsford .		Limestone.
-	Carrera Island	. Carrera 1sland	···· ,	, ,,	11	- **		Albert H. Phillips		**
		. Laventiile	,	, , ,	**	***			49	••
0	Trinidad Government Railwa	y St. Joseph	,	, ,,	••	•••		Hillary Aug. Sharpe.		,,
1	Cumuto Road, 17th mile	. Sangre Ĝrande	,		"	• • •	•••	District Officer	. 14	.,,
2	Cunapo Southern Road, 13	h								
	mile		· ,.	,,,	,,		•••	., .,	. 4	.,
8	Guaico-Tamana Road, St	a.	,							
1	10th, 11th and 14th mile.			· · · ·		•••		,,	. 14	
4		** **	,		**					32
	D' (D 1.	**	1. 1		7 <i>7</i>				n	
		St. Joseph		77	**		•••	T 38 T	. 2	17
		- Carapiehaima		ow, Upper Cara	nichoima		4	TI TINIT		**
	Woodford Farm	St. Ann's	TT aina	of H. Furgurso	picinalina picinalina	Lano Balmor	***	1171 N.C. (711)	0	51
	Woodlord Parm	San Fernando	neur	adeleine Sugar	Company Lip	Lighte, Definition	10	O TO TO	0	Gravel.
			ste. 1	aadeleine ougar	Company Lin		iando	Benjamin Pandohie		
	Choroman	Upper Carapichaima	Unora	aman, Upper Ca aram, Todd's R	rapienamua	•••				Limestone.
		Chickland, Caparo	Unow	aram, Todus n		··· ···		Bagwandeen		*1
	Plum	Manzanilla	Manz	anilla Local Ro	ad Board, San	gre Grande	•••	A. P. William		
		12, Duke Street		nia Prime, 12, I			•••	Chas. Atwell		,,
4	St. Ann's	St. Ann's	L. Ve	erasammy, Bel	mont	••••	•••	Norman Charles	9	
		Guapo	C. C.	Stollmeyer, Por	rt-of-Spain	••• •••		E. Pereira		Oil Sand.
		Laventille	J. T.	Gittens, 25, Ph	illip Street, Po	rt-of-Spain	•••	J. Lashly		Limestone.
		Port-of-Spain		**	,,	5 5		yy 4-		,,
	Basilon Street	•• ,,		,,	,,	,, ···	•••	···	. 18	,,
9	Tennis Clas	Laventille			y.	73 ***			. 5	,,
	Campo Street	San Juan			**	39 ***	•••	C. H. Gittens	. 5	,,
-				**					8	
			∽ <u>∿i</u> - 1,39%.	en den son son s	s.					
		1		ee en state de la state de	her .			1		ł

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ю.	Name.	Situation.	Owner and Address.	Manager.	Daily average No. of persons employed.	Mineral Worke
	Quarries.—Contd.					
41	Silver Mill	San Juan	J. T. Gittens, 25, Phillip Street, Port-of-Spain	C. H. Gittens .	2	Gravel.
2	La Pique	San Fernando	Canadian Presbyterian Mission, San Fernando	J. Bhoopsingh .	1	,,
3	St. John Street	Port-of-Spain	J. T. Gittens, 25, Phillip Street, Port-of-Spain	John Lashly .	5	Limestone.
4	Circular	San Fernando	Borough Council, San Fernando	J. J. Waddell .	. 1	Gravel.
5	La Coulée	••• ,,	Heirs of Mary Joaquin, San Fernando	F. E. Oliveira .	. 2	"
6	Hermitage	Claxton's Bay	Charles Stollmeyer, Port-of-Spain	P. P. Pickering .	6	Limestone.
7 ×	St. Joseph	San Fernando	A. W. Harewood and P. P. Pickering, San Fernando	P. P. Pickering .		Gravel.
9	Prizgar	Laventille	Samuel Mulrain, 22, New Street, Port-of-Spain	Samuel Mulrain .	6	Limestone.
9	Pointe-à-Pierre	Pointe-à-Pi er re	Hrs. of Taynes and Percy Glendinning, Port-of-Spain	Alexander Jamadar.	* 14	Sandstone.
0	Glendale	San Fernando	H. R. McLean, San Fernando	H. R. McLean .		Gravel.
1	La Pena	Clifton Hill	Mrs. B. Blackman, 5, Duke Street	Chas. Mann .	. 4	Limestone.
2	San Juan	San Juan	F. J. Gransaull, St. Joseph	Leopold Brown .	3	Gravel.
8	Champ Fleurs	Champs Fleurs	••• ,, ,, ,, •••	···· ,, ,, ,, ··	5	Limestone.
1	Lovell	Laventille	J. T. Gittens, 25, Phillip Street, Port-of-Spain	John Lashly .		
5	Charles	San Fernando	Louis Charles, 33, Chacon Street	C. Lucas	1	Gravel.
6	Les Champs El yse es	Maravəl	P. de Boissière, Maraval	C. Mohan .	12	Sand and Grave
7	Aranjuez Estate	San Juan 🤹	M. H. Rapsey, Maraval	J. H. Rapsey .	18	Gravel.
3	Rassule	Carapichaima	Rassule, Carapichaina	S. H. David .	2	,,
)	Borough Council	San Fernando	Borough Council, San Fernando	J. J. Waddell .	1	Marl.
)	Havering Estate	Cumuto	W. H. Carpenter, Cumuto		. õ	Limestone.

APPENDIX C.-List of Mines, Oilfields and Quarries worked during the nine months ended 31st December, 1915.-CONTR.

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