** LM 58/4/7,107

BRITISH GUIANA

REPORT OF THE LANDS AND MINES DEPARTMENT - 1962

Lands and Mines Department, Georgetown, Demerara. 18th November, 1963.

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DEPARTMENT OF LANDS AND MINES,

Georgetown, Demerara,

18th November, 1963.

The Honourable Minister of Agriculture,
Forests and Lands.
& The Honourable Minister of Trade and
Industry.

Sirs,

I have the honour to submit the following report on the work of the Lands and Mines Department for the year 1962.

- 2. The Lands and Mines Department was established under the provisions of the Lands and Mines Ordinance Chapter 170, and is vested with the responsibility for the Administration of Crown and Colony Lands.
- Revenue collected during the year under review totalled \$1,131,729 as compared with \$997,078 in the previous year. This is the first occasion on which the revenue has exceeded one million dollars.
- 4. The following is a comparative statement of the revenue and expenditure for the preceding seven years:-

i eli anas Maza lo a	Revenue	Expenditure
1956	\$ 912,943	\$ 561,369
1957	922,484	7472,241
1958	799,325	563,231
1959	823,893	501,853
1960	674,805	731,961
1961	997,078	697,808
1962	1,131,729	623,622

Appendicies I & II 5. Details of revenue and expenditure for 1962 are given in Appendicies I and II to this report.

SECTION I

LANDS

CROWN LANDS

- the provisions of the Crown Lands Ordinance Chapter 175, and Crown Lands Regulations made thereunder. Until 1938, Crown Lands were alienated under Conditional Purchase Grant which provided, where the conditions were observed, that the areas so alienated became freehold property at the end of the conditional period of five years. Since the issue of these Grants were discontinued in 1938, crown lands are only sold in special circumstances.
- 7. Leases for the term of 99 years with a right of renewal for a further period of 99 years were issued until 1942 when the term was reduced to 21 years with 7 right of renewal for a similar period.
- 8. In 1960, the term, in respect of agricultural and cattle grazing leases, was further revised to 25 years renewable for further periods of 25 years and the conditions were improved to encourage beneficial occupation of the areas leased and to provide adequate security of tenure. In special circumstances, however, Licences of Occupancy or Leases may be issued under such terms and conditions as the Governor may think fit.

- 9. The Government has for the past few years been pursuing a policy aimed at promoting the development of lands which are not beneficially occupied. Landless persons are selected, who organise themselves into Co-operative Societies and are allocated large tracts of Crown lands for agricultural dairying purposes. Technical advice is afforded these Co-operative groups by Government in the provision of drainage and irrigation for the areas, and financial assistance, by way of loans at normal interest rates, is provided by the British Guiana Credit Corporation for the purchase of agricultural machinery and to assist with the cost of development.
- 10. The following acreages have been allocated to Co-operative groups:

1958	-	2575	acres
1959	-	4057	. "
1960	-	9259	. 11
1961		. 11,306	- 11
1962		11,945	- 11

11. Applications: During 1962, the total number of applications approved for various titles over Crown land was 487 as compared with 508 during the preceding year and embraces a total area of 34,080 acres as compared with 21,285 acres in the previous year.

Details of the various types of applications approved are found at Appendix III.

12. Issue of Titles: During the year under review, 319 titles for agricultural, grazing, residential and business purposes over a total of 51,706 acres of Crownland were issued. Of these 144 covering a total of 42,398 acres were re-issues of expired titles. In addition to this 17 permissions covering 533 square miles in the hinterland savannahs were renewed.

A comparative statement of titles issued during Appendix IV the years 1960 to 1962 is to be found at Appendix IV.

Appendix III

13. Working Party: The Working Party appointed in 1956 for the purpose of inspecting land holdings throughout the country and reporting on the development and utilisation thereof, continued this work during the year.

In November, 1961 the Chairman was instructed by the Honourable Minister for Agriculture, Forests and Lands to resurvey every holding at the Vergenoegen Land Settlement, check the occupation of each plot and list the settlers holdings. The Superintendent of the Settlement and most of his staff were withdrawn on the 6th January, 1962 and on the 8th January the Working Party comprising Mr. G.F. Messervy, Chairman, Mr. C.A. Cole, Member, and two surveyors moved in and set up headquarters at the Superintendent's house at Vergenoegen.

Preliminary work of checking each plot with the holder, for the purpose of establishing his rights and also to ensure that there was agreement on the common boundary between neighbours, was started immediately.

Subsequently every plot on the settlement was resurveyed and new boundary marks put down.

Including the plots controlled by the Agriculture Department the total number surveyed and the aggregate acres are as follows:-

Esta		No. of Flots	Acreage		
Vergenoegen	- East	64	502.30 Acres		
	- West	69	536.53 "		

Philadelphia

Estate	No. of Plots	Acreage
Philadelphia	54	527.01 Acres
Earnwell	168	697.77 "
Greenwich Park - East	116	532.49
" - West	78	582.80
	549	3,378.90 Acres

14. During the course of the survey the Party carried out checks to ascertain the extent of encroachment by settlers on the reserves laid out for Drainage and Ir. igation works which included information of the location and dimension of Khaliaans, Marais, etc., many of which may have to be removed. The data obtained will be of valuable assistance to the Drainage Board in the event that compensation is to be paid to the settlers. In addition the Party was required to settle disputes between the settlers and advise the settlers Committee and the Settlers on various matters in connection with the working of the Scheme; making out applications, etc.

The work was completed within the period of six months estimated and the plans and lists of every section and holding on the settlement were completed during 1962.

In the latter part of the year commencing from September, inspection of agricultural and grazing holdings in the Mahaicony, Mahaica, Boerasirie-Hubabu and Abary Rivers were carried out and a total of 143 tracts were examined, covering a total area of 10,335 acres.

The following table shows the inspections carried out during the last 4 years:

5	guritis, c	the last 4 years	o to a till						
		1959			1960		1961		1962
	COUNTY OF DEMERARA	No. of tracts	Acres	tracts	acres	tracts	Acres	tracts	Acres
0	TOTAL STRUCT STRUCT	and a magnetic region of	Arr St.						
	West Coast	1 1	500						
					TO THE PERSON NAMED IN	2	132	60	120
	West Bank	120	5,100	NO ESTABLISME			132	00	120
	East Bank	Durant of the state of the		beta to	TOTAL	Carte Till	Bring Torest	-	
	East Coast	176	43,777	19	6,944	2	539	-	-
	Mahaica River	403	34,175	Library-01	AL PARTIE	4	4,260	4	2,640
	Mahaicony River	16	9,086	11	1,612	24	8,966	63	7,075
100	Abary River	19	38,400	5	13,499	6	5,200	16	500
	1150119 1111/01		00,100		10,100		0,200		
	COUNTY OF FIGURESHEE								
	COUNTY OF ESSEQUIE								
	Essequibo Coast	2	500	237	27,225				-
	Essequibo River								
	Including Islands	16		11	870	10.71	-	i -	
	Mazaruni River	16	353						
	mazaruni niver	10 12	000						
	COUNTY OF BERBICE								
	West Coast	1 1	375	1120 0100	961	* 1 - 1			-
	Canje River	activity of the parent		. No post put		1	1,500		
	Turne Land	100	n gotte	are My M 4 4	1 Luzeffa	7			- the short bearings for the same
		Statement of the second of	teret b	Period Control					
	Part of the	754 1	.78,160	284	51,111	39	20,597	143	10,335
		bendeden bedere bendere bendette der den	ne handrament and a section from	-	the same the same that the same the sam	-	-		

Several spot inspections were carried out for settlement of disputes, adjusting occupation, etc.

Applications for issue of title continue to be "screened" by the Party before submittal to Government for consideration and applications for transfer of titles were similarly treated.

of Crown land, in the Alluvial Coastal Belt and lower riverain areas, has been empoldered and put under rice. Although the number of applications for land decreased during 1962 there was an increase in the number of applications from groups of farmers who are desirous of developing crown land on a co-operative basis. The utilisation of hitherto undeveloped Crown land for agricultural purposes is both difficult and costly. Government has however been encouraging the development by giving advice through the various technical departments. Loans are being made available by the British Guiana Credit Corporation, to these Societies, as well as to small farmers to assist in the development of their holdings.

Plans have been completed for the proposed Jackson and Moleson Empolders on the left bank of the Corentyne River and also the proposed Cattle Pasture in the rear of Elack Bush Polder Land Development Scheme. These Schemes, however, have not been implemented owing to the shortage of finances and allocation of land in these areas has not been possible.

During the year a time of Consultants from the United Nations began an examination of the Greater Canje Area. The implementation of Stage I of the Mahaica-Mahaicony-Abary Scheme had to be delayed further due to the lack of finances, but land within this project is still being allocated in conformity with the proposed works of the project and the recommended zoning for intensive agricultural and cattle grazing purposes.

COLONY LANDS

16. Administration: This Department administers all lands including those alienated for various purposes under the provisions of the Lands and Mines Ordinance Chapter 170. Where Government buildings have been erected on Colony Lands the Director of Public Works exercises control over such lands.

By Order in Council No. 91 of 1960 the Governor-in-Council Collegated, to the Minister charged with the responsibility for this department, the power to sanction the renting or sale of Colony land on terms and conditions determinated by the Governor-in-Council. Under special directions however, the Governor-in-Council directed that the powers delegated under Order-in-Council No. 91 of 1960 shall be exercised in respect of the renting of land only where the rent does not exceed \$50.00 per annum and in the case of the sale of land only where the selling price does not exceed \$1,000.00.

Properties acquired by Government during 1962.

County	Area	Description	Purchase Price
Demerara	35,811	Portion of Pln. Ruimveldt East Bank Demerara	\$25,067.70
do	•	South half of Lot 21 Stabrock, Georgetown	65,000.00
dΘ	0.3304	Lot "A" portion of Pln. Hope, East Coast Demerara	1.00
Berbice	4,609.0	Lesbeholden, Black Bush Polder.	Free Grant
do	367.187	Pln. Mara East Bank Berbice.	do

FORESTS

17. Administration: As fron 1st January, 1960 the collection of revenue from all forest products (except balata) extracted from the Crown Forests was taken over from this Department by the Forest Department which controls the Crown Forest.

This Department continues to administer forest activities over Crown land outside the boundaries of that portion of the Colony which was declared to be Crown Forest under the Crown Forest Ordinance.

Apendix V

A comparative statement of applications approved for wood-cutting and other forest titles for the years 1960 to 1962 is at Appendix V.

- 18. Balata: During the year 453,642 pounds of balata were produced as compared with 505,242 pounds produced the previous year.
- 19. Quarries: Quarrying operations continued on a moderate scale during the year on nine quarries situate on Crown lands and 24,511.26 tons of stone were produced. This was 33,094.76 tons less than 1961.
- 20. Seizures: No seizures were made during the year in respect of forest produce illegally removed from Crown land.

SECTION II

SURVEYS

21. During the year under review, 354 surveys were executed embracing a total area of about 12,146 acres. The number of outstanding surveys rose owing to the increased number of applications approved for Crown Lands for residential, agricultural and grazing purposes while the available survey staff were diverted to cope with more urgent survey work for Land Development Projects.

The comparative table below reviews the position during the past five years:

Jaco I Francisco	1958	1959	1960	1961	1962
Ripe for survey during the year	251	7 90	487	301	446
Total number to be executed	813	1,251	1,522	1,472	1,702
Number of surveys executed	352	261	351	216	354
Number of surveys outstanding	461 1	,035	1,171	1,256	1,348

Of the 354 surveys completed, 4 were executed with chain and compass and embraced an area of about 13,000 acres. The remaining 350 were precise surveys with Theodolite and 100 ft. Steel Band Chain a total of approximately 10,846 acres. The Working Party under the Chairmanship of Mr. G.F. Messervy supervised the resurvey and reallocation of land at Vergenoegen. 21 Mining Claims were varified during the year.

The ever increasing demand for copies of plans for the various development projects being carried out, such as Soil Surveys, Land Registration, Local Government reform and from the public continued to impose a heavy strain on the much overworked staff which is still well below full strength.

In addition to the normal duties, the staff of the Survey Section continued to render special services to other Government Departments and Agencies by preparing and compiling maps, tracings and prints to the estimated value of \$5,030.00.

Surveyors were engaged on surveys for the following Departments:-

its:-								0
(a)	Ministry (Land D					es -		Survey of Elack Bush Polder
(b)		11	u		11		•	Survey of Vergenoegen
(e)		11	11		. 11		•	Survey of Wauna/Yarikita Scheme
(a)	# 1	**			11			Survey of Pln. Kortberaad Zorg-en-Vlyt East Berbice.
(e)	Commissi	oner	of Ti	tle				Survey of Plns. Ross, Yeovil and Chester - W.C. Berbice.
(f)	n.	"	"	n	n		•	Survey of Plns. Britannia and Temple
(g)	ii.	"	" "	11				Survey of Pln. Arcadia
(h)	H.	11	n	11				Sub-division of a portion of railway lands at Rosignol
(i)	"6	n	11	11				Survey of Lot No. 8 or Inverness, West Coast, Berbice
(j)		11	n	11				Survey of Plns. Belle Vue to Pln. Wales - West Bank Demerara.
(k)		"		11			•	Survey of Two Brothers - Sarah's Rust, West Bank, Demerara.
(1)			of Ed Develop			.nd -	•	School <mark>Site La Grange,</mark> West Bank Demerara River.
(m)			11	. 11		".	•	School Site at Pln. Burma, East Coast,
(m)	cher Surve	eys	execute	e d d	uring	the year	r	Demerara. Survey of farm plots at Anna Regina, Reliance, and Bush Lot, Essequibo.
(0)								Survey of Crown Lands in rear of Plns. Sandvoort to Best Coffe Lands, Canje, Berbice.
(p)							-	Inspection of Lots 1 - 9 at Christianburg.
(q)							•	Inspection of occupation in the Boerasirie Empolder.
(r)							-	Survey of House Lots at Philadephia. /During •••

- 7 - 3 -

During the year, 421 plans of surveys executed by Sworn Land Surveyors were recorded exclusive of those for the issue of leases over Crown Land and Colony Land.

CARTOGRAPHIC SECTION

22. During 1962 the Cartographic Section was chiefly engaged on the preparation of cadastral plans for use in the Survey Section. Plans by various Covernment Surveyors of portions of Black Bush Polder were checked and corrected. They were then used in the compilation of a cadastral plan of the entire Black Bush Polder Settlements embracing an area of approximately 60 square miles. The compilation of a cadastral plan of the West Coast, Berbice area was started during the year and progress thereon is satisfactory.

No field work was possible by the Cartographic Section because, for the greater part of the year, the staff comprised only of the Acting Cartographer and the Senior Drawing Office Assistant.

In addition to his other duties, the Acting Cartographer was appointed by His Excellency the Governor as Electoral Registrar for the No. 23 - Houston Electoral District. The revision extended over a period of about $2\frac{1}{2}$ months.

No contract for aerial photography was awarded during the year. However, aerial photography was taken by the Royal Air Force from September to December. A preliminary report indicates that the operation was reasonably successful.

The printing machine continued to give satisfactory service to various Government Departments as well as to members of the public.

Over 3,000 prints valued at \$4500 were made during the year.

SECTION III

MINES

GENERAL

Appendix VI

23. Concessions and Leases: Mining titles in existence during 1962 are shown at Appendix Vi.

Licences: 1210 claim licences and 194 river location licences were in existence at 31st December, 1962.

Appendix WII

Exclusive Permissions: Exclusive permissions in force during 1962 are listed in Appendix VII.

Prospecting Licences: 967 prospecting licences were issued during the year. No licences to prospect for radio-active minerals were issued during 1962.

Trading Licences: 111 licences to trade in gold and/or diamonds were issued, while 94 licences to purchase gold for the manufacture of jewellery were issued.

Mineral Production and Export: The quantity and value (f.o.b.) of minerals exported are kindly furnished by the Customs Department. The export figures shown below are provisional and relate to the period January to August, 1962.

Mineral	Quantity Prodúced	Quantity Exported	Value of Export \$ BWP
Gold (Troy ounces)	1,903		- 6
Diamonds (metric carats)	100,145	56,866	2,397,705
Bauxite (long tons)			
- calcined)	2,718,997 xX	262,493 ×	9,961,366
		074 070	10 701 170
- other		934,832	10,301,132
Alumina (long tons)	225,459	140,900	#14,993,183
Manganese (long tons)	271,103	128,123	3,712,889
			\$41,366,275
			fermen fer etterne den mellem etterne framen framen framen framen framen framen framen

Total value in 1961 - \$51,066,930

(# Total value of Export for Alumina in 1961 should read \$12,083,588) and not \$3,083,588.

m ex Mackenzie mm Total Production

- 24. Revenue: Revenue from mining amounted to \$948.023 which is \$114,946 more than for 1961, the increase being due to increased exports of bauxite and also increased Royalty on bauxite processed into Alumina and on Manganese.
- 25. Legislation: Ordinance No. 13 of 1962 The Mining (Amendment) Ordinance, 1962 amended Sections 14, 16, 19 and 20 of the Mining Ordinance to remove the need to obtain the approval of the Secretary of State for the granting of concessions, exclusive permission, or absolute grant, and of concession for an area larger than one thousand acres.

The amendment also stipulates that where ver in the Mining Regulations the approval of the Secretary of State was required, such approval shall no longer be required.

Section 90 of the Mining Ordinance was repealed and a new Section substituted therefor, providing that all sums of money collected under the Mining Ordinance and the Mining Regulations shall be paid into the Treasury for the use of the Colony.

(BILL 13/1962 (S)) (M.P.L.M. 58/16/2/89)

The Governor, on the 3rd day of February, 1962, delegated to the Minister of Trade and Industry the powers mentioned below:

Powers Delegated Enactment To approve of the issue of a Section 32 (1) licence to mine for gold, The Mining Ordinance silver, valuable minerals, Chapter 196. precious stones, etc. (i.e. a claim licence) (b) To approve of the transfer of a Section 35(4) claim licence. The Mining Ordinance Chapter 196. (c) To authorise the forfeiture of gold Section 86(3) silver, precious stones and substances The Mining Ordinance of a like nature seized by an officer, to Chapter 196. which no claim has been made or sustained within six months from the date of seizure. (d) To authorise the export of precious stones Regulation 201 other than through a bank. The Mining Regulations Chapter 196. (e) To authorise persons other than wholesale Section 10 (1) dealers to import explosives into the The Explosives Colony. Ordinance Chapter 346.

26. Closure of areas: No areas were closed to prospecting/mining due to the occurrence of significant mineral deposits of importance to the national interest.

The following creeks were reserved for drinking purposes; Karwassa creek, right bank Kiwiparu Creek, and a portion of Arakaparu creek, right bank Echilebar river, Rupununi district;

Those portions of Kiwiparu creek and Arakaparu creek previously reserved for drinking purposes, were de-reserved.

- 27. Seizures: No seizures were effected. There were 4 detentions of diamonds during 1962.
- 28. Sales on behalf of Amerindians: The Department continued to dispose of gold and diamonds won by Amerindians until an arrangement was madd with the Interior Department by which the Assistant District Commissioner, Mazaruni handles such sales through the Trade Store at Kamarang 2 ounces of gold and 399 carats of diamonds were sold in Georgetown for the year.
- 29. Labour: 3300 mining privileges and 57 registration certificates were issued. The average labour force employed directly

on mining was as follows:-

Mineral	Approximate number of Workers employed.	Approximate number of persons working on their own behalf.
Gold Diamonds Bauxite	20 - 4,000	100 4,000
Manganese	600	Des Description Descript
	4,620	4,100

30. Accidents: A classification of the 122 reportable accidents which occurred in connection with mining operations is given below:

Cause	Fatal	Serious Injury	Temporary Incapacity	Minor	Total
Electricity			1		1
Explosives				-	- 1
Machinery	-	4	7	8	19
Handling tools			1	6	7
Falling or struck	k				
by a falling body		4	13	29	47
Diving					-
Miscellaneous	2 HH	2	9	35	48
TO TAL		10	31	78	122

- # Owen Charles: employed by Demerara Bauxite Company Limited. A transmission line pole which he was assisting to plant got out of control and fell on him.
- was driving a railroad scooter when it crashed into a stationary ore train.
- Augustus Henry: employed by Rio Rupununi Mines Limited was working in an open pit at Marudi Mountain, Rupununi when there was a fall of earth.
- 31. Use of Explosives: Five blasting certificates were issued by the Commissioner of Lands and Mines.
- 32. Mine and Quarrying Inspections: Mr. C.S. Cole, Inspector of Mines, returned to the Colony at the end of April and thereafter spent 10 days in the field on inspections covering quarrying and mining operations. While on vacation leave Mr. Cole attended the United Nations Inter-Regional Seminar on Techniques of Petroleum Development held in New York from the 23rd January to 21st February, 1962.
- 33. Hydro-Electric Power Development: Tumatumari station continued on a care and maintenance basis.

Demerara Bauxite Company Limited continued routine measurements of river stage in the main rivers of the Colony.

34. Mining Disputes: Three complaints and four challenges under the Mining Regulations were filed during the year. Of these three complaints and three challenges were disposed of.

EXPLORATION

Appendix VIII

35. A total area of 5,697,233 acres were covered by exclusive permissions, details of which are given at Appendix VIII. No work was done in exclusive permissions not specifically referred to below.

BAUXITE

36. Demerara Eauxite Company Limited: completed exploration of the areas held under exclusive permissions Nos. 446 and 563 and abandoned them with effect from the 31st December, 1962.

Surface exploration and drilling continued in permissions 445, 500, 561, 564 and 588, the extent of the work done on all areas during 1962 being as follows:

Line Cutting 486 miles
Surveying 711 "
Roadmaking 60 "
Creek Traverses 18 "
Drilling 21,617 feet

The drilling programme was carried out with Solite type drills and diamond drills and 234 holes were drilled as shown below:

Diamond Drill 184
Empire Drill 24
Solite Drill 26
234

Of these holes:

7 intersected bauxite

bauxitic material with a high iron content bauxitic material with a high silica content aluminous clays laterite

The remaining holes encountered residual clays and material of no interest, while several of them were abandoned in sediments of the Berbice Formation (White Sand Series), in some cases at a depth of 333 feet the limit of the Solite drill.

Drilling below known bauxite horizons was undertaken in connection with the paleontological investigations being carried on by the Company.

Reynolds Metals Company Continued surface investigation in exclusive permissions Nos. 391, 431, 458, 557, 558, 559 and 560 and 597.

The following summary indicates the extent of the work done during 1962:

Number of holes drilled	319	
Footage drilled	68,085	
Number of samples taken	150	
Drilling lines cut and surveyed	131	miles
other lines cut and surveyed	12	n
Other surveys	34	th .
Road construction	43	11
Access road construction	18	H
Roads maintained	210	u
Bridges reconstructed	371	feet

Part of this programme was directed towards confirming the undulating nature of the Canje deposit. Poor material on the 'highs' and fair grade bauxite on the 'lows' were encountered, the latter being covered by some 200 to 250 feet of overburden.

On the Corentyne section two Solite drills were in operation throughout the entire year, assisted temporarily by a Mayhew 500 drill. A new exploration area, which blanklets the left and right banks of the Bissaruni river was opened up. Exploration has shown that ferro-bauxite was formed on dolerite dykes which are buried under 150 to 200 feet of sand.

Samples taken were shipped to Leiden University for a determination of their pollen content.

- 38. Harvey Aluminum of America abandoned all of their Exclusive Permissions during the first half of 1962 and discontinued further exploratory work for bauxite in British Guiana.
- 29. Petromina (B.G.) Ltd. continued exploratory work in exclusive permissions Nos. 575 and 604. The main areas of reconnaissance were the lower Mahdia River and trail, the Konawak trail and the Tiger River trail. The main masses of laterite were examined and compared with those drilled to the south and south-east of Mahdia airstrip. Particular attention was paid to creeks and to the margines of the White Sand deposits for bauxite or lateritic bauxite float.

It was established that much of the lower Mahdia River laterites overlie epidiorites. The extensive lateritic sheets were almost identical to those encountered south and south-east of the Mahdia airstrip.

The laterite found in the lower Mahdia river area has a higher alumina content than that found in the dark red laterites further south of the airstrip, east of Mahdia; the superficial hard vesicular crust is indicative of a high iron content.

MANGANESE

Manganese Mines Management Limited, acting on behalf of North-West Guiana Mining Company Limited, continued exploratory work in the area held under exclusive permission No. 603. As a result of the work done, 385,000 acres were abandoned with effect from the 1st July, 1962.

One of the Company's geologists spent six weeks in the United States of America on a course of instruction in the use of Induced Polarisation as geophysical method in the detection of Manganese Oxides.

Exploration for manganese by Induced Polarisation was first suggested after laboratory tests had shown that oxidised manganese ore was moderately conductive and could produce high frequency effects.

The first field tests in the application of Induced Polarisation for the detection of manganese oxides were carried out in Chana, and as a result of these tests it was decided to use the I.P. equipment as a geophysical tool for the detection of manganese oxides in Eritish Guiana.

PIPIANI AREA

The I.P. Exploration Party which visited Pipiani included a Company Geologist and two geophysical consultants. During the work, which was carried out in September, six I.P. lines were run at right angles to the ridge, with dipole distances of 100 feet (this gives a linear coverage of readings of up to 1,100 feet on the surface of the ground).

1097

These I.P. lines, which followed the original geological prospect lines of 1954, confirmed the earlier geological mapping.

MATTHEWS RIDGE AREA

Exploratory I.P. lines were also run at Matthews! Ridge outside the present mining area to probe the nature and depth of the continuations of the ore horizon.

The method has proved capable of distinguishing a manganese horizon from barren country rock. However, much remains to be done, notably in relating anomalies to grade and recovery factors, without which the true value of the method will remain unproven. This work continues and may later involve the use of drilling for its true evaluation.

Although not a cheap method of exploration, results to date indicate that the study should be completed.

GOLD

41. Carib Alluvials Limited was issued with exclusive permission No. 606. A brief preliminary reconnaissance in the Murawawe area was done during 1962.

DIAMONDS

42. No companies were engaged in exploring for diamonds.

OIL

43. No exploratory licences were in force during the year.

The application by Gulf States Land and Industries Incorporation for an Oil Exploration Licence over an off-shore area of 8,450 sq. miles is still under consideration by Government.

COLUMBITE

44. Columbium Corporation did no exploratory work during the year.

RADIO-ACTIVE MINERALS

45. No licences for radio-active minerals were in existence during 1962.

PRODUCTION AND DEVELOPMENT

BAUXITE

Appendix IX

- 46. Pauxite production for the last 5 years is shown in Appendix IX.
- 47. Bauxite production for 1962 was 2, 718,997 tons as compared with 2,373,615 tons for 1961, an increase of 345,382 tons.

The operating efficiency of the alumina plant improved continuously throughout the year. As a result, alumina production rose from 120,161 tons in 1961 to 208,042 tons in 1962, an increase of 87,881 tons.

48. The Demerara Bauxite Company Limited sold a total of 1,395,850 tons of bauxite during 1962 as compared with 1,282,809 tons in 1961, an increase of 113,041 tons. The sale of calcined products increased considerably. The total sales of these products amounted to 366,573 tons. The quantities of various grades were as follows:-

Metallic - 959,742 tons Chemical - 69,535 " Refractory - 219,164 " Abrasive - 147,409 " 1,395,850 tons

Note: Metallic and Chemical grades consist of dried bauxite.

Abrasive and Refractory grades consist of calcined bauxite.

This record production was made possible through the conversion in 1961 of one of the Company's kilms for calcining operations. A modern "parellel flow" drying kilm, measuring 130 feet long with a diameter of $11\frac{1}{2}$ feet, was put into operation at Mackenzie in June. The performance of this plant was exceptionally good, the design capacity being exceeded by over 39%. Kilm No. 1 which became excessively expensive to operate was dismantled late in the year.

The production per mine was as follows:-

Arrowcane 569,546 tons
Montgomery 358,841 tons
Maria Elizabeth 807,343 tons
Warababaru 3 474,690 tons
Hariwa 5,259 tons
Noitgedacht 30,410 tons
2,246,089 tons

A total of 9,884,800 cubic yards of overburden was removed.

In March a bucket wheel excavator for use on stripping operations in the Arrowcane mine was commissioned by the Minister of Trade and Industry. This machine, of West German manufacture, and capable of removing sand at the rate of 1,000 tons per hour, was purchased at a cost of approximately \$4 million.

Stripping operations were carried out in the main using the wheel excavator, one 480-W dragline, two 450-W draglines and two sand pumps. Small draglines, bulldozers and scraper units were used to assist in these operations.

In October the company took delivery of a De Havilland amphibious aircraft. The aircraft is used to supply exploration parties in the field and to fly supplies to the river gauging stations maintained by the Company. Some of the Company's business traffic between Mackenzie and Georgetown is also handled by the aircraft.

The total number of employees rose to 3,548 at the end of 1962, an increase of 134 as compared with 1961.

49. Reynolds Metals Company produced 472,908 tons of bauxite from Mombaka & Wong Mines.

Development work was carried out on Mining Leases Nos. 581 and 582.

On 16-Bissaruni, the western part of the deposit was redrilled to guide future stripping operations. More information was acquired on the thickness of overburden and on the distribution of the impurities. Drilling and sampling on a close spacing is of prime importance on t is type of deposit.

That section of deposit, bordering the Bissaruni river is completely contaminated with sands and clays because of stream action. Old creek chamnels on the deposit surface are filled with a mixture of bauxite pebbles and clays.

Close to the river the watertable intersects the deposit. Active silica, migrating downwards with percolating water, resilificates the bauxite and such planes of intersection. These are marked by massive greenish kaolin replacing the gibbsite. Cherty kaolin in higher parts show, that also there but to a minor extent, aggressive silica s ccessfully attached the gibbsite.

In order to satisfy scientific curiosity, samples of clays from the contaminated zone were handed to Mr. Wymstra, leiden University, to see whether the Bissarumi valley is Mio-Pliocene or very recently formed.

A few locations on the 14-Wikki deposit were check-drilled with a Mayhew 500 drill. This was merely done to compare the results from the old core drilling by Empire drill. Redrilling of a few additional locations is necessary to answer some open questions.

GOLD

ppendix X

50. Gold production for the past 5 years is shown at Appendix X .

Gold production was 1903 ounces as compared with 1702 ounces for 1961. No significance is attached to the increase of 201 ounces and no substantial increase in production is expected as long as production remains entirely dependent on small-scale surface washing operations by pork-knockers.

51. Production for 1962 was entirely due to the efford of individual operators, the chief production area again being the North West which returned 932 ounces, most of this coming from the upper Barima-Barama area. Cuyuni returned 490 ounces, most of which was won from the upper Cuyuni/Wenanu area close to the Venezuelan border.

The 2 dredging concessions held by B.G. Consolidated Gold-fields Limited in the Potaro remained on a care and maintenance basis throughout the year. An option for the purchase of the Company's properties was granted by the Manager/Receiver of the Company.

Operations by Earima Minerals Limited on dredging concession No. 494 at Arakaka in the North West produced only 7 ounces of gold.

R.G. Humphrey produced 4 ounces of gold from mining concession No. 605 situate on the left bank Kaburi.

Appendix XI

1100

DIAMONDS

- 52. Diamond production for the past 5 years is shown at Appendix XI.
- 53. Diamond production decreased from 112,680 carats in 1961 to 100,145 carats for 1962. The decrease of 12,535 is attributed to the decline in operations in the Ekreku River, Cuyuni.
- 54. Production was entirely due to the efforts of small-scale individual operators on land claims and river locations. Main producing areas were Eping Gorge (Mazaruni), East Kurupung (Mazaruni), Ekreku in the vicinity of Muruwawe landing and Potaro in the vicinity of Kaieteur Fall. The prolonged dry seasons prevailing during 1962 facilitated diving operations and many outfits worked on these rivers with good results. Production from the Cuyuni District dropped from 32,663 carats in 1961 to 7,313 carats in 1962.

B.G. Diamond Corporation Limited did no work on mining concession No. 467 in the Meamu.

No work was done on mining concession No. 231 held by the Estate of J.A. Eytle (deceased) in Tacouba creek (Mazarumi).

No work was done on mining concession No. 455 held by E.E. Winter who has applied for permission to transfer the concession.

MAN GANE SE

- 55. Manganese production rose from 212,126 tons in 1961 to 271,103 tons in 1962 an increase of 58,977 tons. Average manganese content of the ore shipped was 42%.
- 56. North West Guiana Mining Company Limited (through their Manager, Manganese Mines Management Limited) continued operations in the North West District.

Production of manganese ore at Matthews' Ridge totalled 271,103 tons; 264,708 tons were transferred from Matthews' Ridge to Port Kaituma and 232,877 tons were shipped from Port Kaituma.

Eight Aveling Barford 270 SL dump trucks were brought into service complementary to the Rusto Bucyrus 38 RB Diesel Shovels. Three Land Rovers and two Hudson dumpers were also put into service.

Areas east and west of those worked in 1961 were prepared and brought into production.

Two auxiliary reservoirs were constructed at the Washing Plant and detailed improvements were effected within the Plant.

During the year one self propelled barge, one harbour launch, and two general purpose launches were operated and an additional ore carrier was brought into service.

Some development work was carried out at Port Kaituma in connection with electrical supply, railway facilities and fuel storage facilities.

Further development of Fakera Village was carried out. The laying of water mains to all houses was completed and water filtration and chemical treatment plant was installed and brought into operation. The distribution of electricity was commenced and street lighting by means of sodium lamps was brought into operation. A new Mine Hospital, comprising male and female wards, an operating theatre, X-ray department, maternity unit, dispensary, laboratory and isolation block was completed and brought into operation at the

1

beginning of the year. A Nurse's Hostel has been constructed.

SECTION IV

STAFFING

57. Mr. A. Lee Own, Deputy Commissioner proceeded on pre-retirement lease on 1st May after completing more than 40 years of sterling service to the Department.

Consequent on Mr. Lee Own's retirement, the following acting appointment were made:

Mr. J.L. Yhap, Superintendent of Surveys to act as Deputy Commissioner

Mr. J.A. Sweetpam, Cartographer to act as Supt. of Surveys Mr. R. Jagernauth, Senior Surveyor to act as Cartographer

Mr. G.F. Messervy who was appointed Chairman of the Ad Hoc Working Farty in 1956, went into retirement on 1st October, after completing over 50 years service with Government, a record I believe unparalleled in Colonial Administration,

Mr. G.G. Greenidge, who was on secondment as lecturer in Land Surveying at the Government Technical Institute, was in May confirmed in that post.

Miss S. Fernandes, Senior Drawing Office Assistant, resigned, in October after 13 years service.

SICK LEAVE The total number of days off duty on account of ill health (as apart from vacation and casual leave) was as follows:

> Clerical Staff ... 403 days Technical Staff ...

This represents a decrease of 3072 days when compared with the previous year.

Vacation Leave: Below is appended a list of the officers who were on vacation leave during the year.

C.S. Cole Inspector of Mines D.M. Edghill Senior Surveyor O.E. Fung-Cn A.I. Kranenburg Class I Clerk L.O. Kailan A. Lee-Own M.E. Lee Surveyor G.F. Messervy Chairman, Working Party C.S. McLean Senior Surveyor E.M. Martin Messenger A.E. Neil W.C. Nichols Class I Clerk Class II Clerk Ist Jan. Surveyor Ist Oct. Ist May Ist Oct. Ist Dec. Ist May Ist Oct. Ist Dec. Ist May Ist Sept. Ist Sept. Ist Apr. Ist Nov. Ist Nov. Ist Apr. Ist Nov. Ist Apr. Ist Nov. Ist Jan. Ist Feb. Ist Jan. Ist Jan.	Name of Officer	icer Post	From	To	
W.A. Swain Surveyor lst Apr. 13th Nov. J.K. Sagar Class I Clerk lst Jan. 15th Mar.	C.S. Cole D.M. Edghill O.E. Fung-On A.I. Kranenburg L.O. Kailan A. Lee-Own M.E. Lee G.F. Messervy C.S. McLean E.M. Martin A.E. Neil W.C. Nichols E.R. Persaud M.A. Phang T. Shivkumar W.A. Swain	Inspector of Mines Senior Surveyor -do- burg Class I Clerk -do- D.C.L.M. Surveyor Onairman, Working Party Senior Surveyor Messenger Class II Clerk d Class I Clerk Surveyor surveyor Surveyor Surveyor	lst Jan. lst Jan. 3lst Mar. lst July 14th Aug. lst May lst Jan. lst Oct. 2nd July lst May lst Sept. lst Apr. lst Jan. lst Jan. lst Jan. lst Jan. lst Jan.	2nd May 25th June 9th Oct. 7th Oct I 14th Oct. 26th Oct. 19th Apr. 31st Dec. 31st Dec. 23rd July 28th Sept. 13th Nov. 13th Sept. 12th Feb. 8th June 13th Nov. 15th Mar.	men t
P.B. Woolford Surveyor lst Apr. 13th Nov. R.B. Ying Surveyor lst Jan. 21st Mar.					

in the funder staff arades. To them, I owe a second debt

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SENIOR STAFF AT 31st DECEMBER, 1962.

Commissioner Deputy Commissioner Superintendent of Surveys Cartographer Superintendent of Lands Inspector of Mines Senior Accounting Officer Mining Claims Officer Senior Lands Officer

Mr. T.C. Stibbs

Vacant . .

Mr. J.L. Yhap .. Mr. J.A. Sweetnam . .

Mr. J.E. Davis . .

Mr. C.S. Cole . .

Mr. S. Singh . .

Mr. W.C. Nichols (Acting) . . Mr. E.N. Singh (Acting)

It is with a sad heart and heavy hand that I write this epilogue to the last Annual Report of Lands and Mines Department, as it has been decided that as from the 1st January, 1963, the Department will cease to exist as a single entity. The Lands and Survey sections will be integrated as a division in the Ministry of Agriculture, Forests and Lands and the Mines section will become a division of the Ministry of Trade and Industry.

The Lands and Mines Department came into being in October, 1901 by the amalgamation of the Lands Department and the Department of Mines, and was formerly constituted under Chapter 170 of the Laws of British Guiana on 1st April, 1903.

During its 60 years of existence it has had 8 Commissioners namely:-

> 1st April, 1903 - 16th January, 1917. 1. F. Fowler

G.D. Bayley - 17th January, 1917 - 22nd June, 1927. J. Mullin - 23rd June, 1927 - 22nd March, 1937.

4. H.P. Christiani - 23rd November, 1937 - 25th April, 1939

5. F.R.H. Green - 26th April, 1939 - 1st June, 1946.

G.A.P. Moorhead - 28th July, 1946 - 8th March, 1950.

7. W. T. Lord - 9th March, 1950 - 23rd May, 1954.

8. T.C. Stibbs - 24th May, 1954 -

We are fortunate that we have a complete record of the 61. activities of the Department since its inception, and in turning through its pages we see the names of such stalwarts, as W.H. McTurk, E. Haynes, E.S.E. Parker, R.O.H. Spence, W. Cunningham, M.P. Hastings, L.S. Hohenkerk, J.A.P. Bowhill, A.J. Cheong, C.P. DeFreitas, L.P. Van Sertima, E.E. Winter, J. Brummel, G.F. Messervy, V. Roth, C.A. Cole, R.S. Kaufman, A. Lee-Own, and C.S. Spence and many others, to numerous to mention, all of whom have given many years of sterling service to the department and to the Colony of British Guiana, and I feel that it is appropriate in this last report that their names should again be recorded in order that their memory might not grow dim.

With the passing of the Lands and Mines Department, it has also been decided that certain posts should be re-designated amongst them being that of Warden a name which has been regarded as synonomous with law and order in the interior.

The holder of this post has; always been held with the highest esteem and regard by the 'pork-knocker' fraternity in the interior, someone, to whom they could turn in time of trouble for advice, and assistance and I feel that the name of Warden which is entrenched in their minds will long be used for years after it has ceeased to exist in the official report.

In conclusion I wish to place on record my grateful thanks to .1 allthose officers who have served in the department during my tenure as Commissioner, and especially to those senior officers who have loyally supported me, andwho have borne the grevious burden of attempting to keep the records of the department up-to-date in spite of severe shortage and most frequent changes in the staff, and in latter years the low calibre of the recruits in the junior staff grades. To them, I owe a special debt of gratitude. /64.

64. I regret the late submission of this report, but this has been due; to the ll weeks strike, which necessitated, that all work on the preparation of this report should cease in order that the skeleton staff available could concentrate on current work.

I have the honour to be, Sirs, Your obedient servant,

(SGD.) I.C. STIBBS.

COMMISSIONER OF LANDS AND MINES.

DETAILS OF REVENUE COLLECTED AS AT 31st DECEMBER, 1962.

	REMARKS			
And the fact that the fact tha	DE CEPASE	2,795,00	17.49	296.20 643.72 104.89
	INCREASE		1.00 11.00 8.90 484.76	89.42 4,233.02 54,15 34.00
	REVENUE COLLECTED IN 1961	4,789	28.36 57.30 947.27 22,980.32 44,230.15	356.05 4,120.00 6,53 14.00 5,009.68 10,804.82
	REVENUE COLLECTED IN 1962	1,994.00	20.87 1.00 39.86 66.20 1,432.03 21,854.15 57,727.16	445.47 8,353.02 60.73 48.00 4,713.48 10,161.10
	HEAD AND SUB-HEAD OF REVENUE	II EXCISE AND LICENCES 4. Licences Unspecified III INTERNAL REVENUE 5. Duty on Transports IV FINES, FEES OF COURT ETC.	SS. Fines and Seizures Boat Regulations S5. Affidavit Fees S4. Grown Costs Recovered 46. Sale of Official Publications VI RENTS Colony Lands Crown Lands VII FORESTS, LANDS & MINES	1 Fees 2 Licences Balata 2 Licences Woodcutting 3 Permissions 4 Royalty Timber 5 Royalty Miscellaneous

1155

B. LANDS						
1 Fees 2 Permissions 3 Miscellaneous 4 Royalty Stone	59,637,30 7,917,81 124.36 4,813.38	52,046.83 8,491.32 720.90 6,821.05	7,590,47	573.51 596.54 2,007.67		
C. MINES						
1 Fees	2,513.20	2,604.80		91.60	70 20 70	
2 Licences Prospecting 3 Licences Claim Gold	4,825,00	5,115,00		290.00	Agria Die	
		14,530,00	420.00	1,030,00	(Porknocker	(Porkhookers were jaterested in diamond mining)
	200,00	165,00	35.00	THE STREET STREET		, and many 9 .
7 Exclusive Permissions	913,92 70,140,17	1,023.84		109.92	fe i mai lag	Elod nowo to to to mondo innation
					for manganese &	
(REAL)	563,56	556,90	99-9	6 63	HO TION S	
9. Dredging Concessions	1,675.96	1,743,93		67.97		
l Registration Mining Labourers	817,672,62	704,433,61	113,239,01		Increased	Increased exports of bauxite.
	32,671.82	20,627.35	12,044,47	12.96	Demba paid	Demba paid rent in December.
X MIS CELLANEOUS					1962 for 1963.	963.
1 Sundries	5.72	110,69		104,97		
XI SALE OF LANDS AND HOUSES						
1 Crown Land	2,360,58	1	2 3 RO 5 B			
2 Colony Lands	654.03	991,60		337.57	Royalties	1962 1961
	1,131,729,15	997,078,36	154,109,45	19,458,66		75
		NETT TNCREASE	78848年 第134 650.79		Tb Manganese 559,8 C Bauxite 195,	559,881.46 445,611.78
					Stones	48.902.61 54.918.88
					et	
						817,672,62 704,433,61

Expenditure	278,794.82 69,116.92 5,521.26 110,736.91 20,049.50 1,880.00	1,267.47 5,383.60 2,500.00 4,487.75	29,970.64	42,263.02 67,370.02 697,798.32
Excess		115,00	9,399.10	9,514,10
Savings	9,106.61 1,987.23 5,275.89 281.38 11,861.25 14,083.10	568.43	3 ,883,52	13,731.47 119,764.00 186,268.93
Actual Expenditure	305,492,39 61,218.77 9,724.11 118.62 108,138.75 21,652.90 1,782.40	1,451.57 1,451.57 5,799.13	19,399.10	26,268.53 236.00 623,622.17
Appropriation (including Supplementary Estimates)	314,599.00 63,206.00 15,000.00 400.00 120,000.00 35,736.00 3,500.00	1,300,00 2,000,00 500,00 4,500,00	10,000,00	40,000.00 120,000.00 800,377.00
Head of Service Appr Supp	1. Personal Emoluments 2. Transport and Travelling 3. Land and Water Transport 4. Revenue Protection 5. Labour and Rations for Labour 6. Materials, Equipment & Instru- ments 7. Miscellaneous 8. Surveys in Village and Country	9. Land Surveyors Examination 10. Uniforms 11. Fublication of Section of 12. Furchase of Engines 13. Furchase of Launch Hull 14. Furchase of Laund Rover	12. Refunds of Revenue 39. Grown Lands - Resumption of - Working Party - Expenses of IX Lands and Mines Development	1. Topographic Surveys and Training of Surveyors2. Aerial Photography (D 4512)

APPENDIX III

Comparative Statement of Approved Applications For Agricultural, Grazing and Business Furposes during for years 1960 - 1962.

	paragraph (manufactural contraction of the last of th							
Tools of the second	. 1	960		1961			962		
Leases	No.	Acreage	No	. Acreage	9	No.	Acr	eage	
Agricultural	323	7,308.9177	231	9,592.77	70	234	12.4	72.797	
Renewals	5	259.58	5	1.493.92		5		62.345	
Cattle Grazing									
(Chastal)	33	5,241.5420	23	1,638.00)	24	3.6	04.87	
Renewals	1	96.331	-			ī		25.	
Township & Trading	12	3.5610	7	.82	29	7		2.3478	1.7
Renewals	1	.263	1	.26		2		.526	
Missions & Mis-								.020	
cellaneous	5	103.7295	25	117.54	.9	4		40.573	
Renewals	1	.6099			*				
Permissions									
Agricultural	142	2,401.79	44	704.29		19	5/	62.4544	
Renewals	46	1,339.27	102	3,745.35		67		98.338	
Cattle Grazing				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			-,0.	70.000	
(Coastal)	17	3,117.00	12	1,385.00		13	3 25	29.330	7.7
Renewals	20	9,431.00	20	2,410.00		27	11,94		
Bartica-Potaro Road	3	13.00	3	58.5		1		0.	
Renewals	_	10.00	1	.25		i		.0.	
Agriculture in Mining			+,	•20				.0.	
Districts	24	94.78	8	45.75		19	1.5	3.5444	
Renewals	6	54.10	3	11.0		9		4.75	
Miscellaneous	26	04.10	1	1.72	2	27		4.15	
Renewals	31	304.34	3	80.	2	10	41	4.68	
Sublet	4	- 004.04	6	80.		6		4.00	
Renewals	11		13			11			
20119/428			TO	n parajusanja mpanapunkan kanjan majaranja na		, , , , , ,		-	-
TOTALS	711	29,769.81	508	21,285.19	Z	487	74.00	O FEEC	
	177	53,703,01	500	21,200.13	2	401	34,00	0.5556	
CATTLE GRAZING		L960		196			196	9	
(Interior Savannahs)	No.	Sq. Mile:	g.	No. of the last of	Miles		No.	Sq. Mile	
				110 8 50	Paragraphy (1)		140.0	od. mil	20
Leases				-	-			-	
Renewals	-			-	-		-	-	
Permissions	3	110		4	156		2	10	
Renewals	15	871.	71	12	510.14		17	533	
TOTALS	18	981.7	71	16	666.14		19	543	
Cattle-Grazing									
(Inter Savannahs)									
Leases									
Renewals	_								
Permissions	1	7.		1	6.				
Renewals	15	773.7	71	12	510.14		17	533	
		and the same of th			photos and the same harden				
TOTALS	16	880.7	71	13	516.14		17	533	
	Parket lands	and contact and property and property and the second secon	enhantent (setama)						

APPENDIX IV

Comparative Statement of Titles Issued for Agricultural Grazing and Business Furposes during the years 1960 - 1962.

GRANTS

1960
NO. Acreage
No. Acreage
No. Acreage
No. Acreage

GRANTS		1960		1961	THE RESERVE CONTRACTOR	1962
	NO.	Acreage	No.	Acreage	No.	Acreage
Provisional Free						
Conditional						
Absolute					2	13.299
					i i	100233
Leases and Licences						
Licences of Occupan	cy 3	564.84				
Renewals	-		1	100		
Cattle Grazing						
(Coastal)	5	446.050	3	428.03	2	109.78
Renewals	1	96.331			1	25
Agricultural						
Leases	134	2,709,182	59	1,597.44	79	1,873.883
Renewals	5	259.58	5	1,493.92	6	89.474
Township & Trading	2	•526	5	1.315	12	7.4932
Renewals	1	.263	1	.263	2	.526
Missions &						
Miscellaneous	2	11.029	2	41.335	1	3.197
	1	.6099	-		-	-
Permissions						
Agricultural	148	5,765.68	7 8	1,716.18	21	4,094.432
Renewals	46	1,339.27	102	3,745.35		1,398.338
Cattle Grazing						
(Coastal)	20	3,912.00	21	3,428.00	9	2,506
Renewals	20	9,431.00	20	2,410.00	27 4	0,745.
Bartica-Potaro						
Road	2	10.25	3	7.00	1	10.
Renewals	-		1	•25	1	10.
Agriculture in						
Mining Districts	9	297.00	7	65.27	24	207.20
Renewals	6	54.10	3	11.00	19	124.75
Miscellaneous	104	749.95	16	540.223	24	483.844
Renewals	31	304.34	3	80.00	10	4.68
Sublet	5		7			
Renewals	11		22		11	
	James Josephine Statember		dente bestendere (protessories passignites e passignites de la constant	enthemic hands in district outside and supplies to ender Advisor de Sendenda		lean family and produced produced from the second particular second formal family.

555 25,982.00 359 15,665.576 319 51,706.8962

APPENDIX V

Comparative Statement of Approved Applications for Woodcutting and other Forest Titles during the years 1960 -1962.

LEASES	No.	Acreage	No.	ol Acreage	No.	962 Acreage	
To cut wood Renewals	-			-		=	
LICENCES							
To cut wood(general) Renewals	15 73	1,900 37,712	4 54	775. 12,080.29	6 41	1,335 8,603	
To cut cedar-Crabwoo Renewals	od - -	Ī	Ī		-	1	
To cut mangrove bark Renewals			=	=	=	=	
To collect balata Renewals	11		84	=	40	=	
Permissions							
To cut scattered trees,	128		75		94		
Firewood, etc.	2		-		2		
Timber Path	2		-			- 1	
Renewals	2						
Depot Renewals	2 -			1	-	-	
To collect gums Renewals	-			-	-	_	
To collect tonka Bea	ns -		-	=		=	
To collect orchids Renewals	•		=	į	-		
To collect wild rubb Renewals	er -		-		-		>
TOTALS	235	39,612	217	12,855.29	186	9,938	

APPENDIX VI

MINING TITLES IN EXISTENCE DURING 1962.

To explore for	Buxi te	do.	, ob	• 000	• op	do.	do.	do.	do.	•op	•op	do.	opo-		Manganese and associated	Precious stones.
Area (Acres)	1,835	4,385	5,842	1,795	19,133	4,164	1,623	467	940	2,421	,111	4,402	110		38,149	920
Location	D.E. F and G. Christianburg, Wismar	Blocks A, B, C, D and E, left bank Demerara River		Both banks Demerara River	Left bank Demerara River Blocks 30 to 35. Demerara/Berbice Watershed	Left bank Kwakwani River, right bank Berbice River	Manaka creek, right bank Berbice River	Block III Chimeri, right bank Berbice River	Right bank Manaka creek, right bank Berbice River	Right Bank Berbice River	do.	do	•op	MINING LEASE - MANGANESE	Matthews Ridge, North West District	MINING CONCESSION Tacouba creek, right bank Kurupung River, right bank Mazaruni River
Сомрану	Demerara Bauxite Company Limited	• op	do. do.	op.	000 P	Reynolds Metals Company	do	•op	do.	do.	do.	do.	do.		North West Guiana Mining Company Limited	J.A. Eytle
No.	199	069	591 592	593	594 596	364	460	544	578	579	580	581	582		518	231

APPENDIX VI (Cont'd.)

To explore for		Frecious stones		61d and precious stones		Gold	Gold, silver, valuable minerals and precious stones.	Gold, silver and valuable	minerals.	
Area	(401 68)	1,150		3,499		2,797	986	2,587		
Location	MENTAL CONTRACTOR	Tappa creek, left bank Muribang, right bank Fotaro River Left bank Kaburi, right bank Mazaruni	DREDGING CONCESSION	Potaro River from mouth to Tumatumari Falls	Portion of Monawaruk River from Bucket creek	Portion of Mean River	River	Both banks Arakaka creek, right bank Barima River		
Company	- 578 E G	R.G. Humphrey	,	fields Ltd.	• 0 0	B.C. Diamond Mining Cor-	Poration Ltd.	Earima Minerals Ltd.		
No.	455	605	440	503		467	. 494	H DH		

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APPEND IX VII

EX CLUSIVE PERMISSIONS IN FORCE DURING 1962

To explore for	Gold do•	Gold, precious stones and valuable minerals do. do. Gold and Precious stones		Bauxite do	, do	do.	ර්ගිම .	, do do	, do	do.	oop	من ماري	g ç	do.
Area (Acres)	1,200	4,300 9,000 6,130 7,680		29,167 255,820 8,448	291,272	175,600	387,200	150,000	600,000	316,250	120,000	35,000	224,000	228,200
Location	EXCLUSIVE PERMISSIONS - GOLD & DIAMONDS Bed of Tiger River Bed of portion of Potaro River Mandia River 500 feet holy Head of the state of the sta	do Right bank Wanamu	EX CLUS IVE PERMISSIONS - BAUX ITE	Left bank Berbice River in the Ituni area Portion of the Demerara/Berbice watershed Portion of the Berbice/ Corentyne watershed	Left bank Demerara River Right Bank Demerara River	Both banks Cuyuni River	Left bank Demerara River	between Essequibo and Demerara Rivers Between Mazaruni and Essequibo Rivers	Left bank Essequibo River Kwakwani, right bank Berbice River		Left bank Corentyne River	Between the Demerara and Berbice Rivers	Between the Berbice and Corentyne Rivers Left bank Corentyne River opposite the	mouth of the Assipoya River
Company	B.G. Consolidated Coldfields Ltd. do. do.	do. do. Carib Alluvials Limited		Demerara bauxite Company Ltd. do.	, do 0, do 0	, • op	do.	Petromina (B.G.) Ltd.	Reynolds Metals Company	do.	do.	₫ 0•	do.	
OM	345 355 585	586 587 606	377	445 446 500	513	563 564	565 588	575	391	458	558	559	597	

	To explore for		Columbite/Tantalite do. Columbite	Columbite/Tantalite	Manganese	
	Area	(Acres)	23,100 6,200 18,700	77.000 ° 6.11	1,160,000	
	Loca tion		EXCLUSIVE PERMISSIONS - COLUMBITE Left bank Mazaruni River Right Bank Puruni River do. Between Oxvuni and Mazarımi Rivers	EXCLUSIVE PERMISS ION - MANGANESE	Between Barama and Amakura Rivers	
productions has been consistent and the contract and cont	Company		Columbium Corporation do.	North West Guiana Wining	Company Ltd.	
	No.		508 515 524 556	603		

1173

APPEND IX VIII

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Areas held for exploration/mining at 31st December, 1962.

Acres	103,501	2,169	699 6				5,697,233	5,812,772
					4,339,123	30,810	167,300	TOTAL
Number	17	· w	4		20	9 -	14	
		ssion	cession	mission:	recious Stones and	Valuable Minerals	ce/Tantalite	
	1. Mining Lease	Mining Concession	3. Dredging Concession	4. Exclusive Permission	(a) Bauxite (b) Gold, Precious	(c) Manganes	(d) Columbite/Tanta	
	1.	2.	3.	4.				

APPENDIX IX

EAUXITE PRODUCTION - 1958 to 1962.

1962	2,246,089	472,908	2,718,997
1961	1,982,650	390,965	2,373,615
1960	2,231,940	239,250	2,471,190
1959	1,511,077	163,339	1,674,416
1958	1,397,340	188,539	1,585,879
Producing Company	Demerara Buxite Co. Ltd.	Revnolds Metals Company	TOTAL

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APPENDIX X

GOLD PRODUCTION - 1958 to 1962. (Bullion Ounces)

	as or	1959	1960	19 61	1962	
DISTRICTS	0001					
					1	1
Berbice						
	13,824	1,359	321	299	127	1
rotaro			Ç.	GUG	350	
Mazarımi	94	126	160	202		
	G C E	078	571	340	490	
Cuvuni	200.2		The state of the s	Annual Profession Committee of the Commi		
100	1 247	914	1,205	833	932	
North West	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		000	00	4	
By purnua i	23	70	106	07		
	002 41	3.447	2,364	1,702	1,903	
TOTAL	00011					

DIAMOND PRODUCTION - 1958 to 1962.

(METRIC CARATS)

	1112	1 101 9000 00	01000000	00,000.11	TOTAL (Metric Carats)
100.145.40	112,679,95	707 003 02	07 862 69	72 000 73	
1,507.46	1,665.46	2,384.26	4,190.09	5,544,11	Rupun i
17.97		11.30	34.27		North West
7,515,18	32,663,15	13,929,92	£,247.39	4,399,41	Cuyuni
72,651.59	68,899.82	81,526,08	46,773.51	17,528.20	Mazaruni
18,638,77	9,448,95	5,152.36	5,061.79	55,818,99	Potaro
16,43	2,57	ı	21.44	•	Berbice
1962	1961	1960	1959	1958	DISTRI CTS
ray hans i bassing in brassing in particular description is described in the	المائدة والمائدة والم	أ ومراكز المراجع المرا	()		

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