

MINISTRY OF AGRICULTURE AND NATURAL RESOURCES

REPORT ON THE GEOLOGICAL
SURVEY OF THE
GUYANA

Geological Survey Department

P.O. Box 11000

Georgetown, Guyana

1969

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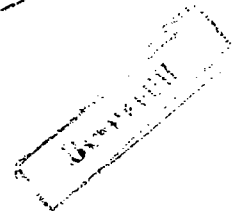
Oil Concessions
(Guyana)

GEOLOGICAL SURVEY DEPARTMENT
Ministry of Forests, Lands and Mines

ANNUAL REPORT 1968

P.O. Box 1028,
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GUYANA.

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GEOLOGICAL SURVEY DEPARTMENT

ANNUAL REPORT FOR 1968

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The quarry centre of Guyana is around the Bartica area. Small scale quarrying is also done in the Demerara and Corentyne Rivers, but these are only of local significance.

2. Hydro-power development at Tiboku

The Department continued to give geological advice on the appraisal of the site at Tiboku Falls on the Magaruni River as a potential for hydro-power development. During the first phase of the investigations, a geologist was seconded to the Project.

The Director of Geological Surveys continued to serve as a member of the Technical Co-ordinating Committee for the Tiboku Project.

3. Hydrometeorological Service

The Director of Geological Surveys continued to serve as Chairman of the Hydrometeorological Advisory Board.

IV. UNITED NATIONS - GUYANA MINERAL SURVEY PHASE II

Work under this project gained momentum during the year. The following internationally recruited staff were provided by United Nations:

Mr. Gerald Moorhead	-	Project Manager
Dr. A.K. Banerjee	-	Field Geologist
Mr. M.N. Fargher	-	- do -
Dr. S. Saha	-	Geophysicist
Dr. A.Z. Gedeon	-	Geochemist
Mr. D. Miller	-	Drilling Supervisor
Mr. H. Carey	-	- do -

At the request of the Guyana Government, Mr. M.N. Fargher was withdrawn from the Project in September.

Dr. A.Z. Gedeon completed a 6 month extension of his contract and departed from Guyana in November.

Mr. H. Carey left on the expiration of his contract in December.

Field activities under this Project have been described in the Summary of Field Work.

The helicopter services provided as a sub-contract to Foothills Aviation of Calgary proved to be of great assistance in the administration of field operations.

V. MINERAL DEVELOPMENT

BAUXITE

Demerara Bauxite Company

By the end of the year the effects of major expansion projects initiated in 1966 were beginning to show in increased production of dried and calcined bauxite. There was a slight decrease in the sales of alumina for the year. Sales for the year were as follows:-

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	<u>Sales (long tons)</u>	
	1967	1968
Dried metallurgical grade bauxite	946,720	1,020,954
Calcined bauxite	457,733	521,623
Alumina	282,521	267,298

Prospecting during the year was concentrated mainly in EP 445 and the Red Mud Pond. In EP 445 prospecting took the form of follow-up drilling on locations selected from geophysical surveys. A total of 89 holes totalling 26,969 feet were completed in this lease. In Red Mud Pond a total of 58 holes covering a footage of 16,622 were completed.

Four bucket wheel excavates of 150, 200, 200 and 600 litre capacities together with two 450-w draglines and three 480-w draglines, shipped a total of 15,727,100 cubic yards of overburden during the year. A total of 2,759,524 long tons of dried bauxite was produced during the year. Of this 1,029,156 long tons went into the production of dried metal grade bauxite; 528,402 long tons into various calcined grades; and the balance was converted to alumina.

Reynolds Metals

Reynolds Metals shipped a total of 905,017 long tons of dried bauxite from Everton during the year as compared with 861,147 long tons for 1967.

MANGANESE

During the latter half of the year the North West Guyana Mining Company announced its intention to cease its mining operations at Matthews Ridge by year end. The Company commenced mining operations there in 1961. Government concluded negotiations with the Company for acquisition of the assets in October and at year end the take over was completed.

The Company exported 128,694 long dried tons of manganese of average 37% grade for the year.

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The production of gold and diamond for the year is given below. The 1967 figures are also given for comparison.

<u>District</u>	<u>Diamond</u> <u>(Metric carats)</u>		<u>Gold</u> <u>(ozs, troy)</u>	
	<u>1967</u>	<u>1968</u>	<u>1967</u>	<u>1968</u>
Berbice	445.37	-	-	-
Potaro	11,161.72	11,648.51	224	163
Mazaruni	74,020.28	43,602.74	350	3,199
Cuyuni	5,897.95	4,864.76	472	297
North West	-	-	1,330	394
Rupununi	5,826.36	6,195.57	3	35
Total	97,351.68	66,311.58	2,379	4,088

The Production of diamond fell by 32% when compared with the previous year. This fall in the production came almost entirely from the Mazaruni District. The reason appears to be a significant shift of activity during the year from around Arawai to the Upper Mazaruni above, Imbaimadai which resulted in a lull in mining.

Gold production increased 72% over the 1967 figures. The increase came exclusively from the Mazaruni District and appears to reflect increased recovery of gold by suction dredges engaged in diamond mining in the district. There was a significant decrease in gold production from the North West District which has been the leading gold producing district for many years.

OIL

The oil sieve was relatively dormant during the year.

Continental Oil Company and Tenneco Guyana Inc., did no work in their 16,000 square miles prospecting lease.

During the year Guyana Shell Ltd made some modifications in the titles of their concessions. They now hold prospecting licences over 7,900 square miles of offshore area and nine 200 square mile blocks onshore. The only field activity by Shell during the year was the shooting additional seismics in OPL 211. This was carried out by Geophysical Service Incorporated of Dallas and was completed in two weeks.

In the Takutu Basin of Southern Guyana there was no activity during the year. Octogan Petroleum and Macmillan Ring Free applied for exploration concession over 2,600 square miles of this basin and while Government approved of the application early in the year the Companies had not taken up their licence at year end.