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GENERAL REVIEW OF THE YEAR

1.1 INTRODUCTION

During 1991, the Guyana Geology and Mines Commission successfully continued its programme to spearhead the rebuilding of the Guyana Mining Industry. It was clear that the fillip needed by the industry was scientific and technical data to inform sound policy decisions. The Commission's team of professionals, including Mining Engineers, Geologists, and Technicians, were active in the field and in the office assessing and analysing mineral industry information and its applicability to Guyana. The results of this professional decision making are evident in the continuing improvement in gold, diamond, and semi-precious stone production and integrated involvement of the small and large scale mining companies in the industry. The expansion of the Guyana Mining Industry cannot be gainsaid as the 100% increase in acreage under licence together with the approximately US\$60m investment in the gold sector by local and foreign operators are two clear indications of progress.

This unprecedented rapid expansion posed problems for the Commission as the growth of the industry tore the already weakened institutional fabric of the GGMC. During 1991 therefore, priority was given to improving the legislative, administrative and structural framework by the promulgation of the new Mining Act on 15th July, 1991; amendments to Mining Regulations; expansion of the electronic data processing capabilities; increased number of staff on training; and the acquisition of more field equipment and vehicles. By the end of the year the Commission was better equipped to provide greater leadership and support to the mineral sector and it is anticipated that the industry's performance in 1992 will surpass that of 1991.

1.2 OMAI GOLD MINE

Development ahead of schedule, socio-economic benefits accrue to local communities

The commencement of construction of the Omai mine and processing facilities on the left bank of the Essequibo River was the highlight of the year. Omai Gold Mines Ltd. was incorporated on 15th August, 1991 and a Mineral Agreement was signed on 16th August, 1991 by the Government, Golden Star and Cambior. The Mining Licence was issued by the Guyana Geology and Mines Commission to come into effect on 16th August, 1991.

Proven and probable mineable reserves are currently estimated as 45 million tons at 0.048 oz (gold)/ton. The gold is mostly associated with small quartz-carbonate stringers in an intrusive quartz-diorite body and volcanic country rock, together with alluvial sediments created by the erosion of the sarolitic material.

By 31st December, 1991 construction was in progress for the establishment of the open pit operations and mine equipment and machinery were already on site. The mine is expected to produce on average approximately 255,000 ounces of gold annually during the first three years and a total of 1.987 million ounces over the ten year life of the operations. Since July 1991 approximately US\$41 million was expended and the remainder of the US\$150 million capital investment will be utilised in 1992.

The mine development operations have contributed greatly to the local economy in terms of employment opportunities. At December 1991, the workforce consisted of some four hundred (400) employees, of which more than 80 percent were Guyanese. As the project progressed, the number of persons employed increased to an average of six hundred and fifty (650) during the production stage. The Company is committed to employing an increasingly higher proportion of Guyanese at all levels of its operations.

The mine's multiplier effect has already been felt through the improvement to the Mabura Hill Road, the erection of work facilities in the Linden area; the hiring of employees from the Linden and Georgetown communities; the purchase of goods and services from those communities; and improvement of the image of Guyana as a country in which foreign investment in the mining sector is welcomed. The development work including erection of equipment is generally ahead of schedule and it is anticipated that production will commence ahead of the scheduled date which is the first quarter of 1993.

The company has found Guyanese workers and contractors to be generally acceptable and the company has expressed satisfaction regarding the arrangements to operate here in Guyana.

1.3 EXPLORATION - GOLD AND DIAMONDS

Mahdia Gold Property - Golden Star Resources Ltd. completes Feasibility Study.

On 31st May, 1991 Golden Star Resources Ltd. filed with the Guyana Geology and Mines Commission a technical and economic feasibility study together with an Environmental Impact Statement for the conduct of mining operations in the Mahdia area. The company had conducted exploration over the Potaro, Mahdia deposits since 1987. The feasibility study stated total proven and possible reserves as approximately 13.0 million cu. m. at 456mg/m³ with a gold content of 190,583 oz. Mining would be conducted in the initial

stages by a dredge to a floating washing plant and by tractor-assisted slurrying operation with a gravel pump to a mobile treatment plant. Mine life is estimated at six and a half years, capital investment is estimated at US\$13.4 million and annual mine production is estimated as 30,676 oz of raw gold.

1.4 MINING COMPANIES STEP UP FIELD ACTIVITIES IN 1991

Increase level of Exploration at Prospecting Licence Properties

By the end of 1991 there were seventeen Prospecting Licences (PL's) in existence for exploration for gold and precious stones and applications for fifteen more licences were being processed. Three of the seventeen licences in existence were held by Guyanese. The seventeen licences cover an area of approximately 200,000 acres which was under active exploration during 1991, a slight increase in acreage over 1990. The exploration activity, however, was substantially greater with sustained effort particularly at the Dension/South American Goldfields (SAG) Aurora gold property, the Golden Star Resources Ltd. Mazaruni diamonds project, the Romanex Marudi Mountain gold property and the Arnik gold property, which is held by local company Goldfield Enterprises. The estimated investment in drilling, line cutting, geophysical and geochemical surveys and other exploration activity was approximately US\$9.0 million for the gold and diamond sector. Reserves were estimated at approximately 800,000 tonnes of ore indicated and an inferred ore grading of approximately 5.0 g/tonne Au. Dension Mines indicated that the reserves outlined appeared to be uneconomic and expressed its intention of scaling down its shareholding in the property.

1.5 MINERAL PRODUCTION 1991

Improved performance by the local operators, together with good weather conditions and a good investment climate have contributed to higher gold and diamond production levels in most areas, and a good level of exploration activity by local miners, using the Banka drill. There was significant investment in the bauxite industry, and crushed stone, clays, kaolin, sand, talc and amethyst were produced on a small scale.

Gold and Diamond - record declarations, and expansion of the sector achieved.

Gold declaration in 1991 was 59,296 ounces, about 53% above the 38,716 ounces produced in 1990. It was the second consecutive year that the gold declaration figure surpassed the official target. There was a concomitant increase in silver recovered from the gold amalgam (which has an estimated 5% silver content) during processing. This silver production amounted to approximately 2,400 ounces.

Diamond declaration of 21,909 carats was 47% above that of 1990 and the highest since 1977, when 24,640 carats were declared. Increases in diamond declaration have led to increases in diamond exports. Exports amounted to 18,037 carats (82% of declared production) greatly surpassing the 1991 export target of 10,000 carats. It is estimated that sixty percent of the production could be classified as gemstone quality and forty percent as industrial grade.

At December 31, 1991 a total of 290,328 acres of land were held, by small scale miners under 10,291 existing land and river claims. In addition, a total of 29,759 acres were held under Mining Licences for gold and diamonds.

Compared with 1990 the total number of claims registered increased by 40%. Fifty-one percent (51%) more land claims were held than in 1990, with a corresponding 32% increase in river claims, indicating a decided trend towards the acquisition of land claims. In 1990, land claims were 69% of all claims: in 1991 they represented 72% of all claims. Land claims accounted for 202,428 acres (134,228 acres in 1991) and river claims 87,900 acres (66,540 acres in 1991) for a combined total of 290,328 acres (200,828 acres in 1991), being mined for gold and precious stones by small miners.

In 1991, a total of 2,576 Prospecting Permits (small scale) and 7,952 Mining Privileges were granted by the Commission, and 147 new dredges were registered. The latter represented a total new investment of approximately G\$621 million in the gold and diamond mining sector by local operators.

1.6 BAUXITE

Production at Linden, Kwakwani and Aroaima

As in 1990, 931,152 acres were held under bauxite Prospecting Licences and 6,188,482 acres under bauxite Mining Leases. Boskalis International N.V. was contracted by Aroaima Bauxite Company to remove overburden from the Aroaima North Mine by dredging. Aroaima Bauxite Company invested approximately US\$10 million in additional operating equipment and made further improvements to the infrastructure of the mine site. The barge contractor added two barges to the ore transportation fleet.

In 1991 mine production of bauxite at Guymine's Linden and Kwakwani operations and at the Aroaima mine (which came on stream in 1990) was 1,786,200 tonnes; 1,123,610 and 870,309 tonnes respectively, a total of 3,780,119 tonnes. Linden operations produced 715,601 tonnes of final product and Berbice (Kwakwani) operations produced 630,125 tonnes, to give a total of 1,345,726 tonnes of final product produced by GUYMINE, comprising 359,700 tonnes of calcined bauxite and 986,026 tonnes of dried metal grade bauxite.

Quarry Products - Crushed Stone

Toolsie Persaud Limited and Baracara Quarries quarried stone from the Bartica area, primarily for use as land fill, for road construction, sea defense works and as aggregate for concrete. Crushed stone production in 1991 was approximately 55,000 tons. The GNS Teperu-Itabu quarry remained closed during 1991.

Clay, Sand, Talc - minor production

During 1991, GUYNEC extracted approximately 2,200 tons of clay for the production of bricks. Kaolin was mined on a small scale for the ceramic industry. This included 200 tons of Topira Kaolin mined by CERAMIN Limited and exported to Trinidad for use in the ceramic industry. CERAMIN also exported 120 tons of silica sand to Trinidad to be used in ceramic manufacture.

Silica sand was produced for local use in concrete production, in construction, as a land fill and for foundation stabilisation. This sand is generally of high glass-making quality. Approximately 15 tons of soapstone was excavated by the Guyana Geology and Mines Commission from the Kauramenbu deposit in the Northwest district, for carrying out experiments to determine its suitability for the local paint and ceramic industries and for use as a carving stone for sculpture.

Amethyst and other semi-precious stones

Recorded production of amethyst was approximately 5,000 lbs. extracted from the Aishalton area in the Rupununi. Reportedly, small quantities of agate, rose quartz, and green quartz were excavated from the Lethem and Aishalton areas in the Rupununi.

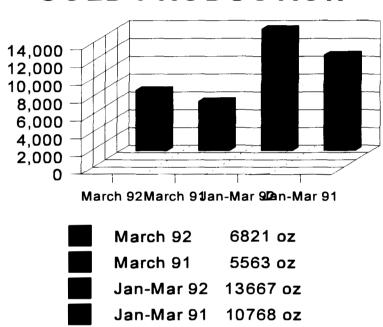
STATISTICAL UPDATE DIAMONDS EXPORTED IN MARCH 1992

NAME OF EXPORTER	NO.OF STONES	CARATS	ROYALTY G\$	VALUE US\$	DESTINATION
Kay's Ent. Ltd	26,115	2,892.25	431,665.24	235,000.00	Belgium
н	8	33.15	4,972.50	25,200.00	U.S.A
Enachu Traders	12	48.45	7,267.50	21,328.00	U.S.A

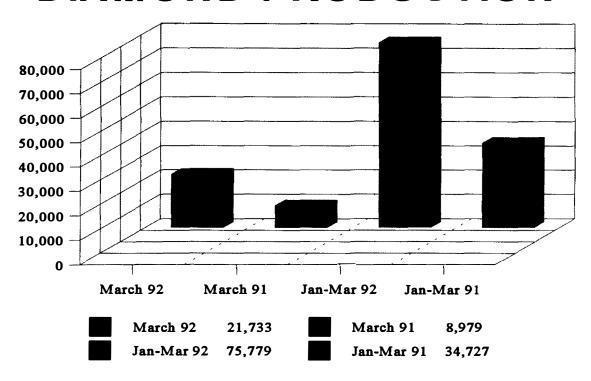
NAME OF EXPORTER	NO.OF STONES	CARATS	ROYALTY G\$	VALUE US\$	DESTINATION
Enachu Traders	4	3.11	466.50	300.00	U.S.A
Chan & Co.	7,011	1,200.00	177,182.50	120,000.00	U.S.A
Total	33,150	4,176.96	621,554.24	401,828.00	

COMPARATIVE GOLD & DIAMOND PRODUCTION

GOLD PRODUCTION



DIAMOND PRODUCTION



1.7 **DIVISIONAL REPORTS**

During 1991 the Commission was involved with -

- 1. The promotion of interest in mining and mineral of exploration and the development of the mineral potential of Guyana.
- 2. Advising on the economical exploitation, beneficiation, utilisation and marketing of the mineral resources of Guyana.
- 3. The exploration of mineral resources on lands using techniques of geology, geochemistry and remote sensing.

- 4. Research into optimum methods of exploiting and utilising mineral and mineral products of Guyana.
- 5. The enforcement of the conditions of mining and dredging leases, concessions, exclusive permissions, prospecting, and claim licences.
- 6. Collecting all rents, fees, levies, tools, and charges payable under the Mining Act.
- 7. Undertaking the collection, preparation, publication and distribution of statistics relating to minerals and mining.
- 8. Promotion of training in mineral exploration and mining by aiding educational institutions and providing scholarships.
- 9. Collection and generation of information for the purpose of promoting mineral exploration and mining and the dissemination of such information for use by the public.
- 10. Assisting in securing an adequate supply of minerals and mineral products for the nation.
- 11. Suggesting legislation for the regulation of the mining industry in the interest of health and safety, minimizing environmental damage and promotion of good mining practice.

The following Divisional Reports outline how these objectives were achieved:-

2. **GEOLOGICAL SERVICES DIVISION**

2.1 **INTRODUCTION**

The report covers in five (5) sections the main activities of the Field Section, Petrological Laboratory, Chemical Laboratory, E.P. Monitoring and Training Courses.

During the year 1991 four field exploration programmes were completed - the Upper Waini Project (gold, diamonds, columbite/tantalite and rutile), the Imbaimadai Alluvial Diamond project, the Linden Heavy Minerals, Clay and Lignite Reconnaissance Project and the Rockstone Clay Drilling Project.

2.2 FIELD SECTION

2.2.1 Imbaimadai Alluvial Diamond Project

Field investigation, constituting the second phase of the Imbaimadai Geomorphological Alluvial Diamond Investigation Project, was initiated during the last quarter of 1991, within the Imbaimadai/Upper Mazaruni area. Field work was undertaken in order to ground-check the presence and extent of geomorphic features outlined during phase One, which was a desk top geomorphological analysis of the project area. Exploration was also undertaken to determine geological characteristics and evaluate economic potential of the geomorphis features of interest.

In the area investigated, bed-rock geology is relatively monotonous within the area investigated. The lower part of the Mazaruni River bed-rock is represented by coarse, light-grey and purplish conglomeratic sand stones forming lenses or beds of irregular thickness and very often cross beds. In the upper part (up the Mazaruni River, on the main escarpment) coarse reddish polymictic conglomerates are dominant.

Eight (8) pits were dug totaling 15.3 metres in depth and thirty-six (36) samples of alluvial material were collected. The development of all important target geomorphological features outlined in this part of the Mazaruni River during the desk top study was proven in the field. The largest alluvial flats and alluvial terraces are developed along the Mazaruni River Valley (20km in length). In the area investigated, the alluvial deposits which consist of quartz sand and gravels, have an average thickness of 3 - 5m.

Miners reported a production of 6 ozs of gold per dredge per day from the area. Diamonds were not found during the field work and they are not reported to be mined within the area surveyed. The project will continue with a third phase in which field work will be extended up the Mazaruni between Karowreing and Partang Rivers and in the Karowreing and Partang Rivers.

2.2.2 The Upper Waini Project

The Upper Waini project was a continuation of the 1990 project to investigate reported occurrences of gold, diamonds, columbite/tantalite and rutile and to evaluate the mineral potential of the Arawapai Upper Waini area. Soil geochemistry, geological mapping and stream sediment concentrate sampling were undertaken. Soil sampling was conducted around anomalous sites detected during the field expedition. A total of nine (9) pits were dug - six (6) in the Maple Creek area and three (3) just off the White Sand Ridge; eighty-six

soil samples taken at ½ m depth were collected and seventy-five heavy mineral concentrates were collected from the Arawapai drainage basin.

Mineralogical examination of the heavy mineral concentrates show a preponderance of quartz, staurolite, hornblende and rutile, garnet, chromite and tourmaline were also common. The field work did not uncover diamonds in the area. Soil samples gave encouraging gold values ranging from 0.01ppm to 0.71ppm. (Au).

2.2.3 Linden Heavy Minerals, Clay and Lignite Reconnaissance Project

This project was jointly conducted by Guyana Geology and Mines Commission and GUYMINE to determine the gold and heavy mineral potential of the lignites, clay and sandstones in the rock sequence above the bauxite.

During the two (2) weeks of the exploration programme samples were taken from several lithological units from the following mines:- Yararibo, Kara-Kara, North East Kara-Kara, Dorabece, East Montgomery and Dacoura.

2.2.4 Rockstone Clay Drilling Project

The project area lies roughly sixteen miles from Linden along the Rockstone Road and about 900 feet east of the Ministry of Works and Hydraulics compound. Seven (7) vertical holes were drilled, spaced at 100 feet grid to check the lateral extent of the clay (reserves) and its suitability for the ceramic industry.

The total footage drilled is approximately 227 feet. The average overburden is 12.17 feet, the average thickness of clay is 15.9 feet and a total of 55 core samples were taken. The stratigraphical units consist of top soil and white silica sand mixed with organic material, pale grey to off-white clay bed, rust-brown to pinkish sandy clay. The clay bed seems to be within the White Sand series, since there is no evidence of bauxite below it. Based on results of chemical analyses, the clay seems to be uniform in nature. On availability of physical tests, this will be confirmed. The reserves may be placed in the category Probable "B" (124 tonnes) covered by Guyana Geology and Mines Commission's drilling infilled to GUYMINE's area extent.

An overall computation of reserves of both GUYMINE's and Guyana Geology and Mines Commission's drilling gave a reserve of 175.2 tonnes.

2.3 MINERALOGICAL/PETROLOGICAL LABORATORY

The Mineralogical, Petrological, and Thin Section Laboratories, with facilities for mineral separation, mineral identification, rock slabbing and polishing and preparation of thin sections of rocks for petrological examination and polish section for ore microscopy, continued services of examination of geological samples for in-house geological field projects and mineral processing projects, and for export by foreign mining companies operating in Guyana. The facilities and services of the Mineralogical/Petrological Laboratory were extended to miners, schools and the general public.

2.3.1 Work Accomplished

Details of analyses completed during 1991 are shown in the table which follows. Analyses of samples from in-house geological projects and certification of mineralogical samples prior to shipment by companies and individuals involved in exploration, by far constituted the majority of analyses done. No petrological or heavy mineral analyses could be attempted, since the petrological microscope and the magnetic separator were out of order. Mr. T. Persaud assisted with the examination of samples for export.

The Laboratory continued to give valuable assistance to miners and schools. Five students - two from St. Joseph's High School and three from Cyril Potter's College of Education, received small rock specimen samples for school projects. Minerals were identified for miners free of charge.

During the month of August, two groups of youths visited the Laboratory. One group consisted of six students, among them one visiting student from St. Kitts. The second group of fourteen Canadian youths, also visited the laboratory. On both occasions, Mr. Rambali gave a short talk on the methods of mineral separation and identification employed in the mineralogical laboratory.

The Mineralogical/Petrological Laboratory has always played an important role in supporting and complementing the geological work and research of the Geology and Mines Commission, and the mining industry.

<u>GUYANA GEOLOGY AND MINES COMMISSION</u> <u>YEARLY REPORT - 1991 - JAN-DEC</u> <u>PETROLOGICAL LABORATORY</u>

Mth.	Sample Submitted	Location	Sample Type	No. Of Samples Received	No. Of Samples Complete d	Analysis Required	Analytical Method
Jan.	K. Persaud (Geologist) Total (Guyana) Oil Co.	Arawapai- Wai Waini River, N.W.D	Sieve & Batel Concen- trate D-4 Casing Rock Cone	57 1-14ft Sample	9 1-14ft Sample	Qualitative mineral characterisat ion Slabbing	Binocular microscope 24" Slab Saw
Feb.	K. Persaud (Geologist) Golden Star Resources Ltd.	Mahdia	(Continued mineral analysis on samples submitted in January) Soft Whitish Sandy Clay	One bulk sample in 33 steel drums	One bulk in 33 steel drums	(See above) For export	(See above) Visual & miroscopic
Mar.	K. Persaud (Geologist) Mineral Processing Unit - GGMC	H/Q	(Continued mineral analysis on samples submitted in Jan.)	l	1	(See above)	(See above) Visual & microscopic
Apr.	K. Persaud (Geologist) Golden Star Resources Ltd.	Omai/ Marudi Mtn/Aurora/ Akaiwong	(Continued mineral analysis on samples submitted in Jan.) 1. Lateritic Clay 2. Rocks 3. Sand, gravel & crushed rocks	18	21 11	(see above)	(See above) Visual & microscopic

cont'd

May	K. Persaud (Geologist)	Continued mineral analysison samples submitted			17	(See above)	(See above)
June	K. Persaud (Geologist)	Continued mineral analysison samples submitted			14	(See above)	(See above)
July	-	-	-	-	-	-	-
Aug.	Golden Star Resources Ltd.	Red Hill Loop	Rock core gravel	2	2	Examine for export	Visual & micro-
	2. Romanex (Guy)Expl. Ltd.	Marudi Mtn.	Saprolite, rock core, pulp, rocks	4	4	- do -	scopic
Sept.	Omai Gold Mines Ltd.	Omai	Aggregate rocks	4	4	cc	"
Oct.	Golden Star Resources Ltd.	Red Hill Loop and Saganang Maz. R.	Black Sand concentrates	270	270		cc
Nov.	Dr. R. Morton	-	Rocks	2 pails	2 pails	66	"
Dec.	Omai Gold Mines Ltd.	Omai	Saprolite	2 pails	2 pails	"	66

2.4 **CHEMICAL LABORATORY**

The Chemical Laboratory is sub-divided into the following five sections:-

- 1) Sample Preparation
- 2) Fire Assay
- 3) Wet Chemistry (main) Laboratory
- 4) Spectrographic Laboratory
- 5) Atomic Absorption Spectrophotometry (AAS) Laboratory

2.4.1 Work Done

In 1991, a total of 308 samples were submitted for analyses by Aqua Regia/MIBK/AAS; HF/AAS; Fire Assay/AAS; Spectrographic and Parting/Gravimetric, Silver Refining, Acid digestion/AAS and Specific gravity determination Techniques. Sample analyses were done for in-house projects, the Ministry of Health (silver recovery) and the Police Force (certification of gold), and for private companies - Goldfield Enterprise Mines Limited and Edgeworth Construction.

A table listing the analyses done in 1991 follows.

Geologist/ Other	Sample Type	Location	No. of samples	Test Required or Element Determined	Techniques	Remarks
K. Persaud	Soil	Waini	30	Au	Aqua regia/MIBK/AAS	Fire Assau/AAS was done on 4 of these samples
W. Woolford	Soap stone	Barama	8 aliquots	Si0 ₂ ,CaC0 ₃ ,MG0, Mn0, Fe ₂ 03	HF 'cold attack'/AAS	A report was prepared on this analysis
	Gravel	Guymine	2	Au,Ag Base Metals	Aqua Regia/MIBA/AAS Spectrographic Analysis	
K. Livan	Rock	Aranka	1	Complete chemical Analysis	HF 'cold attack' Geochemical Aqua Regia/AAS Spectrographic Analysis Fire Assay/AAS	
J. Ghamsam	Clay	Rockstone	53	1. Complete Chemical Analysis 2. Colour on Firing at 1100°C 3. Specific Gravity	1. L.O.I 2. HF 'cold attack'/AAS 3. Spectrographic Analysis 4. Firing at 1100°C 5. Specific Gravity Test on all samples	
S. Lowe	White Sand	Soesdyke	1	Specific Gravity	Specific Gravity Test	
	Dredge Tailings	Konararuk	1		Sieve Analysis Batel Concentration Amalgamation and Parting/AAS	
W. Woolford	Black Sand concent-rates	Konawaruk	2	Au, grain size analysis	Sieve Analysis Batel Concentration Amalgamation and Parting/Gravimetric	

Agency/ Representative	Sample Type	Location	Number/ Weight of Samples	Test Required or Determined	Technique	Cost)G\$)
Goldfield Ent. Mining Ltd.	Soil	Amik	177	Au	Fire Assay/AAS	\$207,720.00
Edgeworth Const.	Soil	Tiperu/Itabu	20	Au	Fire	\$ 26,746.80
	Rock		1		Assay/AAS	
Ministry of Health	Silver Sludge		I115 grams	Ag	Silver Refining Technique	\$ 6,741.00
Police Force	Articles of Jewellery		8	Karat & weight	Acid Test, specific gravity	
	Yellow Metal exhibits		3	Raw Gold	analysis Acid Digestion/ AAS	
	-					

2.4.2 UNDP Project GUY 85/003 - Support to the Chemical Laboratory

This project came to a conclusion at the end of the year, and as part of the closing exercises an inspection tour of the assets acquired through the funding provided for the project was conducted for officials representing the UNDP and the DIEC.

Earlier in the year the physical 1990 inventory of non-expendable supplies and equipment received through the UNDP Project was compiled for submission to the UNDP Technical Representative. At the end of the year 1991 several equipment which were to have been acquired through the Project were still outstanding.

Overall, it was assessed that the project achieved its objectives of building the Commission's capabilities for chemical analyses, refurbishing of the laboratories, and training of staff overseas and in-house.

2.4.3 Equipment and assessment for Accreditation by National Bureau of Standards

During 1991, the AAS, Spectrographic, Fire Assay, Sample Preparation and Wet Chemistry equipment performed creditably. However, one of two disc mill pulverisers for the Sample Preparation Section and one of the two AAS's remained inoperable

throughout the year, the former is in need of re-winding of the motor, and new transformers purchased for the AAS are yet to be installed.

Very early in the year the Chemical Laboratory received two visits from Technical Officers of the National Bureau of Standards, Mr. A. Trotman and Dr. Hope whose purpose of visit was to assess the capabilities of the laboratory in terms of testing of equipment, storage and waste disposal facilities with a view to establishment of bases for the accreditation of various laboratories throughout the country. The officers were provided with a list of the laboratory's testing facilities upon request.

2.4.4 **Duplicate Samples**

During 1991 only two sets of duplicate samples were received for storage from foreign companies. Omai Gold Mines Limited submitted one pail of ten (10) duplicate samples and Denison Mines Limited one hundred and fifty-nine (159) core boxes of duplicate drill core samples.

2.4.5 **Prospecting Licence Monitoring**

The Geological Services Division is associated with exploration done by mining companies. Our task is to evaluate their work programmes and budgets, monitor field programmes, budget and the agreements signed between the companies and the Government of Guyana.

Detailed evaluation and assessment of several reports presented by foreign mining companies were effected by geologists. These included reports on the Prospecting Licence properties at West Kaburi (Denison Mines) Eagle Mountain and Mid-Mazaruni (Golden Star Resources Limited); and the Homestake Properties, Peter's Mine, Akaiwong and Dazier Creek. Work programmes submitted by applicants for Exclusive Permissions/Prospecting Licences were also assessed.

VSO Geologist, Teresa Finerty and Geologist, Sherwood Lowe visited Golden Star's Red Hill Loop Prospecting Licence in the mid-Mazaruni area to monitor the company's diamond exploration operations, where large samples were excavated and processed.

Other areas monitored by Guyana Geology and Mines Commission's Geologists are:-

2.4.5.1 Aurora Prospecting Licence

The stated objective of the programme in 1991 on this property was to further define the extensive gold anomalies outlined in the previous year's programme to delineate reserves of gold - bearing ore, and to obtain a clearer understanding of the geology and style of gold mineralisation. The adopted exploration strategy was based on line cutting, deep augering, trenching geophysics (IP, ground and airborne-magnetometry, diamond drilling). Two hundred and sixty samples were taken.

2.4.5.2 West Kaburi Prospecting Licence

More sample data was collected. To this purpose 423 infill soil samples were taken over a grid at 50 metres intervals. Denison Mines indicated their intention to withdraw from this property.

2.4.5.3 Quartz Hill Prospecting Licence

The 1991 Work Programme on this property was designed to further define anomalies along the north flank of Quartz Hill as well as to extend the area coverage of the property through soil sampling.

The work programme included, soil sampling - (1907 soil samples), deep augering, geophysics and diamond drilling. VSO Geologist Miss T. Finerty submitted a report of the monitoring visit she made to South American Goldfields at Akaiwong, Cuyuni River and to Denison Mines property at Aurora.

2.4.5.4 Arnik Prospecting Licence

During the first quarter (1991) Goldfield Enterprise Mines Limited was unable to do any exploratory work in the area, since the drill rented from the Commission could not do the job. As an alternative exploration method, gold bearing gravels were investigated by means of prospection pits. A total of 88 pits were dug along 3,200 feet of creek course in the second quarter. The gravel thickness ranged from 3 inches to 3 feet when encountered, and this was batel tested for gold. Approximately 49 pits showed auriferous gravels.

In the third quarter twenty-two pits were dug and 500,000 square metres of area investigated bore gravel. Gravels obtained from abandoned pits contained an average of 5 to 1 - "eyes" Au per battel. Some pits contained two gravel horizons - the first approximately 3 feet deep and the other approximately 8 - 15 feet deep. Some gravel

occurred below a layer of running sand which impeded pit sampling. To verify that the gravel horizon/s extends under the sill a shaft was sunk but became very difficult to work as it sank deeper. Considerable amounts of quartz crystals were found within the Prospecting Licence area.

2.4.5.5 Akaiwong Prospecting Licence

The exploration programme was intended to pursue investigation of geochemical anomalies indicated by the property-wide 1m augering program and detailed work on the imperial grid with a view to determining diamond drilling targets. New lines were cut to and auger sampling done at 50m intervals to infill Homestake's 100 m - spaced sampling; infill sampling was also done on the baseline 5000E. In total, 181 samples were taken, logged and analysed for Au by Loring Laboratories. The Company reported that the results were discouraging.

Six trenches totaling 250m were completed to depths of 1m to 2m. Fifteen 10m spaced deep auger holes were turned at the bottom of the trench T91-02 at depths 4 to 15m. Sixty-eight auger samples and trench samples were analysed for Au.

Gold values ranged between 0.46g/t to 1.7g/t. Deep auger results were spotty and not encouraging except for one sample with 0.5g/t gold value over 1m.

2.4.6 Mazaruni Property - Golden Star Resources Limited

(Red Hill Loop, Eping, Saganang and Apaikwa Prospecting Licences)

Golden Star Resources Limited has not undertaken any independent valuation of the approximately 45 carats of diamonds recovered from the sampling programme.

A total of 29.4 grams of Au was recovered from samples on the Red Hill Loop grid.

There appears to be no correlation between Au recovery and the presence of diamonds as good diamond recoveries did not correspond with good gold recoveries. Recovery of Au from claimshell samples indicates that gold is present throughout the vertical sequence of gravels and sand.

The gold values obtained from both Red Hill Loop and Eping are not yet evaluated. Red Hill Loop property does not host potentially economic diamond grades. In the Apaikwa area gold values in the basal gravens are low although erratic values may occur in the bottom or flanks of deep scour pools.

2.4.7 Marudi Mountain Prospecting Licence (Romanex)

Diamond drilling was carried out at Mazoa Hill on the Marudi Mountain gold property for the definition of an orebody which can be mined by open pit methods, the calculation of geological reserves and providing data essential for the production of the Mazoa orebody and the Marudi property as a whole.

Drilling allowed excellent correlation of rock types and mineralisation and confirmed a step south-westerly, subvertical 'quartzite' unit which is associated with gold mineralisation. The holes drilled in the quartzite intersected significant gold mineralisation which was dispersed from the surface to the bottom of the holes, and visible gold was frequently seen kin the core.

Gold mineralisation was shown to extend to 150 metres below the surface and is expected to continue even deeper.

However, the mineralised quartzite is restricted in strike length, being cut off/displaced both to the NW and SE by faulting.

3. MINES DIVISION

3.1 **INTRODUCTION**

The Mines Division, which forms the technical, engineering and regulatory arm of the Guyana Geology and Mines Commission is headed by Manager (Mines) Acting, Sydney Edwards (Snr. Engineer 11) who is assisted by three (3) Senior Mining Engineers 1.

The staff of the Division is comprised of professional, technical and clerical personnel who serve in the following sections:-

- a) Inspectorate and Technical;
- b) Mineral Processing;
- c) Drilling; and
- d) Clerical

3.2 INSPECTORATE AND TECHNICAL SECTION

3.2.1 **ADMINISTRATION**

The philosophy of the division in its approach to the administration of the mining sector did not change in 1991. Less emphasis, however, was placed on surveillance and law enforcement while more efforts were directed to the giving of assistance and technical advise to the mining community. Mining stations in the various districts were not established until the last quarter of the year. The earlier period was used to observe the developments and trends of mining activities.

During the period January to October the various field and related activities were co-ordinated from the Head Office in Georgetown. The handling of disputes and verification exercises engaged the attention of the various Mines Officers during the period.

Two (2) mining stations were established in November, 1991. One (1) station was located at the north of the Kuribrong River, and the other at the mouth of the Potaro River.

During the period November to December, four (4) technicians from the Hydrometeorological Department of the Ministry of Agriculture conducted a series of measurement and sampling exercises at various locations in the Potaro, Essequibo and Konawaruk Rivers.

The measurements and sampling were undertaken at the request of the Guyana Geology and Mines Commission which assisted in co-ordinating the operation and providing logistical support.

During the Hydrometerological Survey, measurements of depths were taken at regular intervals along the width of the river, the rate of water flow was measured and water samples were collected. It is intended that data be compiled on the discharge rate and water quality at the time of the survey. This information will be used as a data base for the monitoring of future changes in the riverain environment.

3.2.2 Hinterland Visits

The handling of disputes and the carrying out of verification exercises entailed several trips to interior locations. Verifications recorded were in excess of fifty (50).

Allan Bunbury (Asst. Mines Officer) prosecuted in the various mining cases

which were heard at the Bartica Magistrate's Court. He made twelve (12) visits to Court during the period under review.

3.2.3 Court Matters

In January of 1991 the Guyana Geology and Mines Commission had one hundred and one (101) cases before the Bartica Magistrate's Court. These cases were prosecuted during the year. The situation at the end of 1991 was as follows:

- i) Eighteen (18) cases were settled out of Court. Compensation was paid in each case to the Guyana Geology and Mines Commission.
- ii) Nineteen (19) cases were withdrawn for various reasons. Insufficient evidence seemed to be the predominant reason.
- iii) Trial was completed on nineteen (19) cases. Eighteen (18) were successfully prosecuted.
- iv) Twenty-two (22) cases were continually being postponed throughout the year as compensation had commenced but was not completed.
- v) Four (4) cases were laid Sine-dic, since 1989 and remained that way.
- vi) During the year ten (10) new cases were filed.
- vii) Thirty-one (31) cases have been postponed for trial in 1992.

3.3 **INSPECTORATE**

The Inspectorate carried out its traditional activities of monitoring, giving of advice and reporting on events, and operational practices and safety methods being employed in some large gold mining and quarrying operations. Inspector Mr. Gordon Howell (SME) was assigned the responsibility for quarrying and large scale gold mining operations. He carried out tours and reported on the current state of the various operations. Mr. James Mingo (SME) was assigned the responsibility of inspecting and reporting on the bauxite operations at Linden and Berbice.

3.4 **INSPECTION OF QUARRIES**

Two (2) inspection tours of quarrying operations in the Bartica area were carried out by Senior Mining Engineer, Gordon Howell and Senior Mines Officer, George Best.

The quarries of St. Mary, Big Hope and Baracara were inspected during the period 21st September to 27th October, 1991. The information which was compiled during the tour was presented in reports under the following captions:

- i) Inspection of St. Mary's Quarry.
- ii) Inventory of Toolsie Persaud's Quarrying Equipment with emphasis towards operation at Big Hope.
- iii) Excavation of the Blasting Efficiency at St. Mary's Quarry and demonstration of the planning and execution of an efficient blast.
- iv) Inspection of the Baracara Quarry at Monkey Jump.

3.4.1 St. Mary's Quarry (21st to 27th October, 1991)

During inspection at St. Mary's quarry it was disclosed that no information was recorded on developmental or quarrying activities. No Quarry Plan was being implemented and work seemed to be conducted on an ad-hoc basis. It has been estimated, based on observations, that at the current production level, debushing and stripping have a lead time - twelve (12) months and six (6) months, respectively.

There were no reports of accidents and it was observed that workers were not equipped with safety gears. Enquiries revealed that safety gears were not available at the quarry.

Stone production figures indicated a monthly fluctuation in stone output varying between 10,280 tons and 765 tons. Production for the year was recorded at 61,213.02 tons.

After carrying out an inventory of equipment at the quarry site, it was estimated that the quarry has the potential to produce 216,000 tons of crushed stone annually.

The drilling and blasting operations at this quarry were poorly conducted for some time. Blasting (at this quarry) was plagued by numerous problems. The drilling and blasting activities had no technical input and supervisory personnel were not knowledgeable in blasting techniques. This situation resulted in the excessive and uneconomical use of explosives, poor fragmentation and a high incidence of secondary blasting. The inspectorate gave technical advice on safe and economical blasting practices and carried out a blasting demonstration to illustrate the result of proper blasting

practice.

During the demonstration blast the inspector retained the dimension for burden, spacing and blast hold depth. The blast holes which were of four inches (4") diameter were deck loaded with explosives. The quantity of explosives were determined by the selection of an appropriate power factor. It was normal practice at this quarry for the blasters to 'column load' the hole, that is, pack as much explosives into the hole, one on top of the other until the hole was filled.

The inspector employed the use of millisecond delay detonators to effect control of the firing sequence. This technique was employed so as to allow the explosion to commence near the face of the wall and continue inwards in the direction of the rock mass. The successful application of this method of blasting ensured proper throw and good fragmentation of rock.

The demonstration blast was a success in that it achieved good fragmentation, there was minimum fly rock and ground vibration, and a limited amount of explosives was consumed. The need for an organised training programme was recognised and a programme to address this situation has been scheduled for implementation in 1992.

3.4.2 **Big Hope Quarry**

This quarry is currently out of operation. The inspector could obtain no information to support the existence of an operational quarry plan for the year.

A survey of equipment was carried out by the inspector who concluded that machinery and equipment such as trucks, hydraulic shovel, tractor dozer, generator and possibly a crushing plant would be required before the quarry could commence production.

3.4.3 Baracara Quarry at Monkey Jump 2

The general condition of this quarry had improved since the last inspection, due to the acquisition of one (1) 966 E Caterpillar Front End Loader, one (1) Holmec 3" diameter drill rig and one (1) Atlas Copco Compressor.

The absence of a dozer was the major problem to the operation, since there were no debushing and stripping leads. Quarry operation was in progress on the northern bench, while the Quarry Manager was instructed to stop working on the western high face until the area was debushed and stripped to allow a bench operation consisting of three (3) lifts.

Central blasting was neglected at the quarry and a study to improve fragmentation may be required.

The crushing plant was in operation with four thousand (4,000) tons of crude rock (boulders) which has been ordered for local sea defense works.

No major or minor accidents were reported and the general appearance (hygiene etc.) looked good. The employees were no safety gear (safety boots and helmets).

No information was available on rock reserve and the Management is asking for assistance from the Commission to prepare an Operation Plan.

3.5 **INSPECTION OF THE BAUXITE MINES**

Two (2) tours of inspection were carried out by James Mingo (SME) of the bauxite operation at Linden and Berbice. Senior Mines Officer, George Best accompanied the inspector during the periods 11th to 22nd April, 1991 and 9th to 17th September, 1991. For the Linden operations, the mines of Dacoura, Kara-Kara, North East Kara-Kara, North Dorabece and East Montgomery were visited and reported on. Attention was directed to the current methods employed in mining and the practice and enforcement of safety measures.

At Berbice in the Kwakwani area the mines of Block 5, Twenty Four Green Creek, two (2) Monaka and eight Chimeri were inspected.

3.5.1 Linden operations - Dacoura Mine

At the time of the inspector's visit the mine was out of operation. The quantity of ore on stock pile was measured at 102,300 tonnes. The inspector did not observe exposed ore and indications were that mining was not planned for the remaining portion of the year.

3.5.2 Kara-Kara Mine

At the time of the inspector's visit mining was not in progress. It has been indicated that financial difficulty was the major problem resulting in the closure of the mine. The mine was scheduled to produce 110,000 tons of ore in 1991. During the first quarter only 30,000 tons had been produced.

3.5.3 North East Kara-Kara Mine

At the time of the inspector's visit mining was in progress at two (2) places. The mine was scheduled to produce 330,000 tons of ore during the first quarter. Recorded production of crude ore at the time of the inspection was 265,640 tons.

3.5.4 North Dorabece Mine

Production target for the first quarter was scheduled at 115,000 metric tons. Production at the end of February stood at 51,511 metric tons. At the time of the inspector's visit there were 49,700 metric tons on stock pile.

3.5.5 Berbice operations - Kwakwani

A production target of 148,000 tons of ore was scheduled for the first quarter. Production of 71,217 tons was recorded at the time of the inspector's visit. The equipment fleet was recorded as having three (3) off highway trucks, three (3) Scrapers, one (1) Backhoe and a 71RB Dragline.

3.5.6 Aroaima Mine

At the time of the inspector's visit a stripping operation was in progress. A fleet of scrapers belonging to the Green Mining Corporation carried out excavation to the north east and south of the existing mining area. Three (3) trucks and one (1) Backhoe carried out stripping activities at nights. During the day mining was carried out with the same equipment.

3.6 **TECHNICAL**

3.6.1 Edgeworth Construction International

Senior Mining Engineer, Gordon Howell was seconded for one (1) month to the overseas based construction firm, Edgeworth Construction International. Mr. Howell was required to provide technical service in the preparation of a Feasibility Study and Quarry Plan for the proposed operation of the Quarry Complex - Itabu and Teperu situated in the Bartica triangle area.

Edgeworth Construction International had been negotiating with the Government of Guyana since 1989 in an effort to acquire the quarry complex. The Feasibility Study

and Quarry Plan was an application requirement.

3.6.2 Commonwealth Secretariat

Inspector G. Howell and Snr. Mines Officer, G. Best accompanied Mr. R. Sagar of the Commonwealth Secretariat on a visit to two (2) mining operations in the Potaro area (Omai Gold Mines and W. Rambarran's operation). The visit commenced on 19th October and lasted for two (2) days.

Mr. Sagar's visit was primarily to observe the impact on mining on the local environment and the extent of technical and financial assistance that could be provided by the Commonwealth Secretariat.

3.6.3 World Wild Life Association

During the last quarter of the year officers from the World Wild Life Association visited Guyana under the auspices of the Government of Guyana and the World Wild Life Association. Sessions were held at the Forte Crest Hotel. These sessions were convened for the selection of a committee to manage the proposed Kaieteur National Park Project. This was a joint project being contemplated between the World Wild Life Association and the Government of Guyana. Gordon Howell was selected to attend the sessions. Mr. Howell who was a member of the selected committee also made a trip to Kaieteur as part of a field exercise associated with the project.

3.7 **DRILLING SECTION**

This section which is comprised of one (1) Project Officer, three (3) Drillers, one (1) Mechanic and two (2) Drilling Helpers carried out drilling at various locations during the course of the year.

Senior Mining Engineer Squires was responsibility for the drilling section.

3.7.1 Banka Drilling

In keeping with its policy of providing support services to the Mining Industry, the Commission made available for rental, four (4) Banka drills and drilling personnel for the year. The demand for Banka drills exceeded the Commission's ability to supply the equipment. The Commission had scheduled the acquisition of six (6) Banka drills for later in the year but by December the drills were not yet delivered.

3.7.2 **Diamond Core Drilling - 9 Mile Operation**

Early in the year Diamond core drilling commenced at 9 mile Issano - a gold bearing property held by Mr. P. Perreira. NQ core drilling was carried out to delineate a plunging auriferous quartz vein. The vein was successfully located and drilling was discontinued due to drill malfunction.

Drilling which was scheduled to recommence later in the year commenced in December. No actual drilling was done in December as repairs were completed just before the Christmas holidays. Drilling is scheduled to recommence early in the new year.

3.7.3 Diamond Core Drilling - Arnik

Diamond Core - NQ drilling by the Guyana Geology and Mines Commission commenced at Arnik in 1990. This contract drilling for Goldfield Enterprise Limited formed part of an exploration and sample recovery programme which attempted to qualify mineral (Gold) reserves on the Arnik property. Drilling which was scheduled for 1991 did not take place because of equipment unavailability and improper scheduling. It is unclear whether the Guyana Geology and Mines Commission will undertake drilling at this property in 1992.

3.7.4 Core Drilling - Rockstone Clay Project

Drilling operations under the management of J. Ghansam - Geologist, was conducted in the Rockstone area within the vicinity of the Ministry of Work's compound during the period August to September, 1991. Drilling was carried out for the purpose of recovering clay samples. The samples have been and are tested to determine their suitability for use in the manufacture of high quality ceramics.

Seven (7) holes totaling 330 feet were drilled on a 200 x 150 feet grid to recover 50 NQ Core samples at two (2) feet intervals. Grab samples totaling one hundred and fifty (150) were taken on a 50 x 20 feet grid over the exposed clay area.

3.8 MINERAL PROCESSING SECTION

During the first half of the year Mr. J. Bayah managed this section. During this period grade value determinations were carried out on tailing samples obtained from some dredging operations in the Essequibo River. The results indicated that

approximately 34 grams of gold could be extracted from one tonne of black sand concentrate received from tailings. The amalgamation process was used to collect this gold which had escaped the dredge recovery system. Observations seem to suggest that recovery of gold is a function of the grain size distribution of the sand.

During the latter part of the year the relocation of the Guyana Geology and Mines Commission's Mineral Processing Laboratory from Brickdam to I.A.S.T (Turkeyen) commenced. By the end of December most of the equipment was transferred to Turkeyen. Testing is scheduled to commence early in the new year.

3.9 **REGISTRY**

The Registry carried out its traditional activities of processing applications, selling licences and maintaining records. The various licences and the different amounts which were sold during the year are as follows:-

3.9.1 Goldsmith's Licence

Two hundred and fifty licences (250) were issued during the year. Ninety percent (90%) of the amount were renewals.

3.9.2. Dredge Registration

At the end of the year the Commission's register recorded 1056 dredges of sizes ranging from three (3) inches to fourteen (14) inches in existence. Two hundred and seventy (270) dredges were registered in 1991. Fifty-six (56) percent of these dredges were of sizes, three (3) inches to five (5) inches and were registered for land operations.

3.9.3 Trading Licences

One hundred and sixty-four (164) licences were issued during the year. About 15% were new applicants.

3.9.4 Gold Production

Gold production for the six (6) Mining Districts was recorded at 59,296 ozs.

3.9.5 **Diamond Production**

Diamond production for the six (6) Mining Districts for the period was recorded at 24,000 carats.

3.9.6 Statistics

Gold production showed a 69% increase when compared to the 1990 figures.

Diamond production for 1991 showed an increase of about 25% over 1990 production.

4. **ADMINISTRATIVE DIVISION**

The Administrative Division embraces all the service sections of the Commission, which gave support for the execution of the work programmes of the other sections.

In 1991, the Administrative Division comprised:

- a) The Personnel and Industrial Relations Section
- b) The Services Section
- c) The Information and Publication Section
- d) The Computer Section

4.1 PERSONNEL AND INDUSTRIAL RELATIONS SECTION

This section was responsible for Personnel Management and Administration and handled recruitment of staff, staff development, salaries and wages administration, and all other aspects of conditions of service and also the enforcement of personnel rules and regulations.

In keeping with the Commission's commitment to train staff, officers in all the Divisions, inclusive of professionals, sub-professionals and other levels of staff, underwent training in most of the disciplines relative to the functioning of the

Commission, such as Mining, Geology, Cartography, Accountancy, Management, Personnel and Industrial Relations, and Computer. Training was done both locally and overseas and a list of persons who received training is attached at Appendix 1.

Incentives of staff included for the first time, uniforms for all male staff and financial assistance to female staff for sewing their uniforms. Other benefits included the provision of field gear to field officers and the revision of subsistence and out-of-pocket allowances, field allowances and cash in lieu of ration, when this was not provided to officers residing in rural areas. The Commission continued to subsidize its canteen, thus making it possible for employees to be provided with low cost meals and snacks. The Commission was also in the fortunate position of being able to pay its employees 25% more than the mandatory 50% across-the-board increase in salary which was approved by the Government.

The Public Service Union revived its relationship with the Commission, and the branch within the Commission was re-activated. The Union made representation on behalf of a few employees in relation to disciplinary action taken against them by Management.

The Section recorded twenty-two (22) employments, eight (8) resignations and nine (9) dismissals/terminations.

4.2 SERVICES SECTION

This Section comprised a Mechanical Workshop, a Carpentry Workshop and an Electrical Workshop. It provided transportation for the daily run of the Commission's business and for field projects executed by the Geological Services division and the Mines division. This section was also responsible for maintenance of the Commission's fleet of vehicles and other mechanical equipment, maintenance of the buildings and furnishings, and for maintaining power supply to the buildings and radio communication between the Commission and officers located at mining stations.

The successful completion of field projects depended to some degree on the quality of service provided by the section. Radio communication was not very efficient and an order was placed for the purchase of three (3) transmitting sets and accessories aimed at improving this service. Vehicles performed reasonably well over this reporting period.

George Henry Associates was engaged to present a plan and costing for the rehabilitation and extension of the Commission's buildings to provide adequate accommodation for staff and equipment. Unfortunately, by year-end the plan was not

available. The building programme was therefore contained to the upgrading (tiling) of our toilet facilities, repairs to buildings and furniture, the construction of new furniture and a minor amount of construction to improve accommodation in the Drawing Office.

4.3 **INFORMATION AND PUBLICATION**

This section was responsible for map information and production, printing (inclusive of maps, books and forms) some which were for internal use and others were for sale to the mining public, and maintenance of a library which served the Commission, the mining public and students. The Cartographic section provided service to the Geological Services division and Mines division of the Commission, in relation to the production of maps for projects. Verification and plotting of exclusive permissions were done for mining companies on request, and several resource package maps were also prepared. Diazo printing was done for use by the Commission, as well as for external customers. Work was done on the Geological Atlas Sheets for Roraima, Potaro and Omai.

Cde. Lenise Fredericks, a Cartographer employed by the University of Guyana, was hired by the Guyana Geology and Mines Commission with effect from February 6, 1991, on a part-time basis to manage and give technical guidance to the staff of the Cartographic Section. This was because there was not a suitable replacement from among the staff after the retirement of Cde. I. Lowe, (Assistant Manager), who is also a Cartographer.

Two Cartography training programmes commenced around the middle of the year. The advanced certificate programme, was run in collaboration with the University of Guyana, and successful participants will graduate at the University's 1992 Convocation. The elementary programme will qualify participants for admission to the next advanced certification programme.

The programme was conducted by Cdes. Fredericks and Lowe. The library serviced a reasonably large clientele.

4.4 **COMPUTER SECTION**

The computerization of records kept by the Mines division in relation to the mining industry in Guyana, comprised the major part of work done by the computer section. Some legal documents inclusive of contracts, mining licences, agreements etc. were created, edited and archived by the section.

APPENDIX 1

LOCAL TRAINING 1991

NAME	DESIGNATION	TRG.INSTITUTIO	ON TRG PROGRAMME
Colin Sparman	Mining Technician	University of Guyana	Degree in Mining
Euleen Van Lewin	-do-	- do -	- do -
Leslyn Garnett	Asst. Manager (P&IR)	- do -	BA in Management
June Allen	Confidential Secretary	- do -	- do -
Clyde Thompson	Analytical Officer 1	- do -	Bsc in AppliedChemistry
Abraham Baird	Accountant	- do -	BA in Accountancy
Merlyn Meredith	Asst. Accountant	- do -	Dip. in Accountancy
Wendy Gray	Snr Accounts (- do -
Arthur Gibbs	Asst. Store Keeper	- do -	- d o -
Horace Moore	Purchasing Clerk	G.T.I	Basic Cert. in Accountancy
Terrence McKenzie	Senior Storekeeper	- do -	- do -
Maria MacDonald	Accounts Clerk 11	- do -	- do -
Aubrey Sargeant	Mining Technician	- do -	Diploma in Mining
			Technician
Rickford Vieira	Snr Field Asst.	- do -	- do -
Gillian Lord	Conf. Secretary to the	Comm.	National Data Management
			Authority Computer Course
Sydney DeYoung	Senior Ranger	Ministry of Health	Tr. Course in Malaria
Oswald Williams	- do -	- do -	- do -
Danish Persaud	Ranger	- do -	- do -
Roxanne Luckie	Female Searcher	- do -	- do -
Keith Dyer	Office Assistant	P.S.M	Training Course for Office Assistant
Donna Minns	Typist Clerk 1	C.A.G.I	Creating the Right Image
Joan Mortley	Admin. Accts. Clerk	- do -	- do -
H. Ramkhellawan	Mines Officer	- do -	- do -
B. Ramsamujh	Clerk IV	- do -	- do -
C. Gaim	Clerk 11	- do -	- do -
M. Persaud	Mines Officer	- do -	- do -
R. Luckie	Female Searcher	- do -	- do -
C. Walcott	Clerk 1	- do -	- do -
B. Taylor	Typist Clerk 11	- do -	- do -

LOCAL TRAINING 1991 cont'd

NAME	DESIGNATION	TRG.INSTITUTION	TRG PROGRAMME
B. Hopkinson	Asst. Mines Officer	- do -	- do -
A. Mitchell	Telephonist	- do -	- do -
S. Persaud	Typist Clerk 111	- do -	- do -
C. Frank	Clerk 111	- do -	- do -
B. Griffith	Ranger	- do -	- do -
A. Mortley	Clerk 11	- do -	- do -
A. Bumbury	Mines Officer	- do -	- do -
S. DeYoung	Senior Ranger	- do -	- do -
H. Welch	Clerk 11	- do -	- do <i>-</i>
K. Hughes	Canteen Supervisor	- do -	- do -
S. Dannett	Typist Clerk 11	- do -	- do -
D. Budhan	Draughtsman 1	- do -	- do -
C. Ferdinand	Asst. Librarian 1	- do -	- do -

INTERNAL SEMINAR ON THE USE OF MICRO-COMPUTER IN GEOCHEMICAL DATA ANALYSIS ARRANGED UNDER THE GUYANA/VENEZUELA TECHNICAL CO-OPERATION AGREEMENT

Participants:

Karen Livan - Manager (Geological Services)Sydney Edwards - Manager (ag.) (Mines Division)

Kampta Persaud - Senior Geologist 11
Richard Squires - Senior Mining Engineer
Gordon Howell - Senior Mining Engineer

Sandrene Smith - Chemist Sherwood Lowe - Geologist

D. Miggins - Chemist (GNRA)

TRAINING PROGRAMME ON ENVIRONMENTAL GEOLOGY SPONSORED BY UNESCO/ROSTLAC

Participants for this Programme were selected from the GGMC, NARI, GAHEF, the University of Guyana and the MMA.

EXTERNAL TRAINING - 1991

NAMES	DESIGNATION	TRAINING INSTITUTION	TYPE OF TRAINING
Ronald Glasglow Garfield Stuart	Mining Technician - do -	Brock University Canada Camborne School of Mining	Degree in Geology Degree in Mining
Wilberforce Tappin	Geologist Trainee	Brock University Montreal, Canada	Degree in Geology
Sydney Edward	Manager Mines (ag)	Sweden	Training Course in Mining Tech.



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Office of the Auditor General
P.O. Box 1002
Georgetown, Guyana

28 June, 1996

AG:72/96

REPORT OF THE AUDITOR GENERAL
TO THE MINISTER
ON THE FINANCIAL STATEMENTS OF
THE GUYANA GEOLOGY AND MINES COMMISSION
FOR THE YEAR ENDED 31 DECEMBER 1991

I have audited the financial statements of the Guyana Geology and Mines Commission for the year ended 31 December 1991, as set out on pages 1 to 14, which have been prepared under the historical cost convention as modified by the revaluation of certain fixed assets and the accounting policies as set out on page 3.

Respective Responsibilities of Management and Auditors

Management is responsible for the preparation of the financial statements. It is my responsibility to form an independent opinion, based on my audit, on those statements and to report my opinion to you.

Basis of Opinion.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures on the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by Management as well as evaluating the overall financial statement presentation. I believe that my audit provides a reasonable basis for my opinion.

Disclaimer of Opinion Resulting from Insufficient Information.

As explained in Note 12, fixed assets have been stated in the accounts at a total cost or valuation of \$25,927,151. No physical verification to determine the existence and condition of these assets was ever done. As result, the completeness, accuracy and validity of this balance could not be satisfactorily ascertained.

Registry on 96-10-16 S

No stock count was carried out at 31 December 1991 and there were no practicable auditing procedures that could have been applied to confirm quantities and values. Further, adequate accounting records in relation to inventories have not keen kept. Accordingly, the information and explanations necessary to verify the existence and valuation of inventories stated at \$1,991,263 in the balance sheet at 31 December 1991, were not obtained.

A difference of \$9,139,640 was noted between the sundry debtors control balance of \$19,676,822 and the total of the individual debtors' accounts of \$10,537,182. In addition, several pages in the sundry debtors control account were missing. Further, no provision has been made for bad debts. As a result, the completeness, accuracy and validity of the balance of \$25,820,610 stated as sundry debtors could not be satisfactorily determined.

The completeness, accuracy and validity of the amount of \$1,755,052 stated as sundry creditors could not be determined since several pages in the general ledger sundry creditors control account were missing.

Details of Gaibank Line of Credit were not provided for audit, and there were no practicable alternative audit procedures that could have been applied. As a result, the accuracy and validity of the amount of \$1,861,639 stated as Gaibank Line of Credit at 31 December 1991 could not be satisfactorily verified.

Because of the significance of the matters referred to in the preceding paragraphs, I am unable to form an opinion whether the financial statements present fairly, in all material respects, the state of the Commission's affairs as at 31 December 1991 and the results of its operations for the year then ended.

S A GOOLSARRAN AUDITOR NEMERAL

OFFICE OF THE AUDITOR GENERAL 63, HIGH STREET KINGSTON GEORGETOWN GUYANA

FINANCIAL STATEMENT 1991

GUYANA GEOLOGY AND MINES COMMISSION STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR ENDED 31 DECEMBER, 1991

INCOME	<u>NOTES</u>	<u>G\$</u>	<u>1991</u> G \$	<u>G\$</u>	<u>1990</u> G\$
ROYALTIES LICENCES FEES, FINES ETC CONCESSIONS PROJECT FUNDS OTHERS	2 3 4 5 6 7	121,105,046 5,985,508 12,314,265 17,339,253 0 32,619,629	189,363,701	54,354,060 5,307,844 4,360,620 15,777,728 62,449 8,338,173	88,200,874
EXPENDITURE:					
EMPLOYMENT COSTS ADMINISTRATION TRAVELLING AND TRANSPORT DEPRECIATION	8 9 10	27,212,759 23,925,031 4,167,098 2,381,000		12,458,585 12,540,422 2,653,912 1,804,708	
SURPLUS/(DEFICIT): APPROPRIATION TO	. 44	2,301,000	57,685,888 131,677,813	<u>1,004,700</u> -	29,457,627 58,743,247
CONSOLIDATED FUND RETAINED SURPLUS/(I		=	50,000,000 81,677,813	_	0 58,743,247

STATEMENT OF ACCUMULATED SURPLUS (DEFICIT)

BAL. AT BEGINNING OF YEAR	84,222,346	25,479,099
RETAINED SURPLUS/(DEFICIT) FOR THE YEAR	81,677,813	<u>58,743,247</u>
BAL. AT END OF YEAR	165,900,159	84,222,346

GUYANA GEOLOGY AND MINES COMMISSION BALANCE SHEET AS AT 31 DECEMBER, 1991

	NOTES	<u>G</u> \$	<u>1991</u> G\$ G\$	1990 G\$
FIXED ASSETS	12		18,914,777	14,510,321
CURRENT ASSETS: INVENTORIES SUNDRY DEBTORS CASH ON HAND	13 14	1,991,263 25,820,610	1,713,79 16,340,71)
AND IN BANK SHORT TERM INVESTMENT LORING LAB. INVESTMEN	15 16 IT	17,207,511 110,151,212 8,505 155,179,101	28,346,610 28,728,022 8,500 75,137,64	2
CURRENT LIABILITIES: SUNDRY CREDITORS DEFERRED INCOME ACCRUED EXPENSES SUSPENSE ACCOUNT NET CURRENT ASSETS:	17 18	1,755,052 265,653 567,552 425,740 3,013,997	785,729 17,500 150,802 954,039 152,165,104 171,079,881	3 2
FINANCED BY: GOVT. OF GUYANA CAPITAL CAPITAL RESERVE ACCUMULATED S/PLUS SHAREHOLDERS' FUNDS GAIBANK LINE OF CREDIT	19 20		2,374,825 943,258 165,900,159 169,218,242 1,861,639 171,079,881	2,374,825 943,258 84,222,346 87,540,429 1,153,498 88,693,927

COMMISSIONER

GUYANA GEOLOGY AND MINES COMMISSION

NOTES ON THE ACCOUNTS

1. <u>ACCOUNTING POLICIES</u>

ACCOUNTING CONVENTION

- (a) The accounts have been prepared under the historical cost convention as modified for the valuation of certain fixed assets.
- (b) Depreciation

No depreciation is provided on freehold land.

Depreciation on other fixed assets is on the straight line method calculated at the rates specified below which are estimated to write off the assets over the terms of their useful lives as follows:-

Buildings - 2%

Scientific, field and mining equipment - 10% - 20%

Motor vehicles - 25%

Office furniture, fixtures and fittings. - 5% - 10%

(c) Inventories

These are valued at the lower of cost and net realisable value. Cost is arrived at using the first-in-first-out method.

NOTE 2 - ROYALTIES - \$121,105,046

ROYALTIES:	-	GOLD BAUXITE PRECIOUS STONES STONES SAND	118,202,967 630,073 1,870,037 316,885 85,084 121,105,046
NOTE 3 - LICENC	CES - S	<u>55,985,508</u>	
LICENCES	- - - - - -	OIL EXPLORATION PROSPECTING TRADING CLAIMS - P/STONES CLAIMS GOLD RIVER LOCATIONS GOLDSMITH DUPLICATE LICENCES DREDGE LICENCES MINING PRIVILEGES	0 121,956 2,071,950 101,595 133,629 575,480 131,800 25 2,735,700 113,373 5,985,508
NOTE 4 - FEES F	INES E	ETC - \$12,314,265	
801 802 803 804 805 806 836		FEES FORFEITURES TRIBUTES APP. FOR DREDGES REGISTRATION FEES TRAN. OF DREDGES DUTY ON TRANSFERS	859,914 0 11,303,642 19,615 24,810 7,270 99,014 12,314,265
NOTE 5 - CONCE	SSION	<u>IS - \$17,339,253</u>	
827 829 830 831 832	-	MINING CONCESSIONS CON. DREDGING CON. DUPLICATE MINING LEASES EXCL. PERMISSION	431,260 0 0 94,817 16,813,176 17,339,253
NOTE 6 - PROJE	CT FUI	NDS_	

CONT. FROM EXTERNAL AGENCY (UNDP)

842

. ____0

NOTE 7 - OTHERS - \$32,619,629

825	RENTS HOUSING	0
826	MINING EQUIPMENT	618,208
828	PROFESSIONAL SERVICES	56,200
834	REGISTRATION CERTIFICATE	380
838	INTEREST ON INVESTMENT	24,553,817
847	SALE OF LAPIDARY PRODUCT	97,407
848	SALE OF GOLD	0
849	SALE OF SILVER	9,518
850	SALE OF DIAMONDS	0
843	CAPITAL GAINS	0
837(b)	SALE OF OFFICIAL PUBLICATION	623,622
839	DISPOSAL OF ASSETS	0
871	DRILLING	155,865
873	CANTEEN SALES	916,675
874	SURCHARGE	10,358
840(b)	VERIFICATION OF CLAIMS	238,785
878	GAIN ON FOREIGN EXCHANGE	4,791,886
877	MINING CONTRACTS	108,000
		32,180,721
835	MISCELLANEOUS	438,908
		32,619,629

NOTE 8 - EMPLOYMENT COSTS - \$27,212,759

701	-	SALARIES	16,782,957
702	-	WAGES	203,870
703(a)	-	SALARIES OVERTIME	1,315,428
703(b)	-	COMMUTED OVERTIME	168,195
704	-	WAGES OVERTIME	0
705	-	STATION/BUSH ALLOWANCE	98,040
706	-	HOUSE ALLOWANCE	38,154
707	_	DUTY ALLOWANCE	3,500
708	-	SUBSISTENCE & TRAVELLING	598,064
709	_	RISK ALLOWANCE	37,113
710	-	CASH IN LIEU OF LEAVE	21,703
711	-	TRAVELLING ALLOWANCE	71,472
712	_	ENTERTAINMENT ALLOWANCE	3,700
714	-	PENSION SCHEME(EMPLOYERS CONTRIBUTION)	1,267,676
715	_	N.I.S. EMPLOYERS	500,687
717	-	LEAVE PASSAGE	1,638,232
718	-	RESPONSIBLITY ALLOWANCE	55,771
719	_	ACTING ALLOWANCE	436,166
721	-	TRAINING AND EDUCATION	536,924
720	-	UNIFORM AND SAFETY GEARS	1,333,159
771	-	GRATUITY AND SEVERANCE PAY	116,866
724	-	PERSONAL ALLOWANCE	1,885,082
716		DIRECTORS' EMOLUMENTS	100,000
			27,212,759

NOTE 9 - ADMIN EXPENSES - \$23.925.031

514 - LOOSE TOOLS & SUNDRY EQUIPMENT	0
722 - LUNCH & SNACKS	1,229,915
726 - FUEL LUBRICANTS - VEHICLES ETC.	3,576,916
727 - MAINTENANCE OF RADIO & COMM. EQUIP.	630
728 - MAINTENANCE OF ELECTRICAL EQUIP.	717,185
729 - MAINTENANCE OF VEHICLES	1,512,527
730 - MAINTENANCE OF CRAFT	71,903
733 - TELEPHONE, TELEX, CABLES	147,181
734 - ELECTRICITY	1,517,445
735 - RENTAL OF OFFICE EQUIPMENT	117,861
736 - MAINTENANCE OF OFFICE EQUIPMENT	307,851
737 - PRINTING & DUPLICATING	370,685
738 - MATERIALS & SUPPLIES - DRAWING OFFICE	59,347
739 - PROFESSIONAL&CONSULTANCY SERVICES	19,164
740 - AUDIT FEES	131,435
741 - OFFICE STATIONERY	1,784,966
742 - OFFICIAL PUBLICATION & NOTICES	307,828
743 - POSTAGE	7,935
745 - MAINTENANCE & REPAIRS TO BUILDINGS	764,166
746 - MAINTENANCE OF GROUNDS	2,700
747 - JANITORIAL & CLEANING	317,128
748 - CUSTODIAL SERVICE	38,399
749 - LEASES	139,050
751 - BURSARIES	97,000
752 - NATIONAL EVENTS	57,259
754 - DRUGS & MEDICAL SUPPLIES	234,183
755 - ASSAY LABORATORY SUPPLIES	0

756	-	CHEMICAL LABORATORY SUPPLIES	18,000
758	-	LAPIDARY LABORATORY SUPPLIES	0
759	-	INSURANCE OF ASSETS	43,520
760	-	BANK CHARGES	56,756
763	-	RATION	2,209,366
764	-	MISCELLANEOUS - OTHER EXPENSES	464,777
767	-	ADVERTISEMENT	26,610
769	-	DONATIONS - GIFTS, WREATHS, ETC.	75,564
770	_	MISCELLANEOUS	1,855,299
773	-	EXHIBITIONS & SALES	0
774	-	ENTERTAINMENT EXPENSE	652,761
776	-	STORAGE	217
778	-	FREIGHT & HANDLING CHARGES	57,980
779	-	LEGAL EXPENSES	60,025
782	-	WELFARE & SUNDRIES	1,562,713
783	-	REVENUE STAMPS	10,870
786	-	MATERIAL & SUPPLIES - COMPUTER	55,135
785	-	DEVELOPMENT, SUPPORT & COMMUNICATION	7,000
793	-	SPORTS CLUB	25,349
753	-	COMPENSATION TO MINERS	14,256
787	-	MAINTENANCE OF COMPUTER	25,160
780	-	STOCK LOSSES & OBSOLESCENCE	4,250
772	-	INCENTIVES	500
777	-	CUSTOMS & EXCISE DUTIES	35,874
781	-	AMMUNITION	93
791	-	LOSS ON FOREIGN EXCHANGE	1,691
794	-	WITHOLDING TAX	3,130,606
			23,925,031

NOTE 10 - TRANSPORT AND TRAVELLING - \$4,167,098

718 **OVERSEAS CONFERENCE & VISITS**

2,765,001 1,402,097 4,167,098 ROAD AIR AND OTHER TRANSPORTATION 722

NOTE 11 - CONSOLIDATED FUND - \$50,000,000

This amount represents a payment to the Consolidated Fund.

NOTE 12 - FIXED ASSETS

	LAND & BLDGS.	MOTOR VEHICLES	OFF. FUR. FIX. AND FITTINGS	SCIENTIFIC FIELD AND MINING E/MENT	TOTAL
COST/VALUATION At 1 January, 1991	G\$ 2,014,382	G\$ 4,168,551	G\$ 3,167,564	G\$ 9,791,197	G\$ 19,141,694
Additions in 1991	331,076	5,128,347	0	1,326,034	6,785,457
Disposals At 31 December, 1991	2,345,458		<u>0</u> 3,167,564	0 11,117,231	0 25,927,151
<u>DEPRECIATION:</u> At 1 January, 1991	204,113	1,169,095	697,488	2,560,677	4,631,373
Charged for the year	33,269	1,194,585	303,439	849,708	2,381,001
Written back on disposals At 31 December, 1991	237,382	0 2,363,680	0 1,000,927	0 3,410,385	7,012,374
NET BOOK VALUES:					*.
At 31 December, 1991	2,108,076	6,933,218	2,166,637	7,706,846	18,914,777
At 31 December, 1990	1,810,270	2,999,456 =======	2,470,076	7,230,520 ===	14,510,322

NOTE 13 - INVENTORIES - \$1.991.263

608	-	STOCK OF GOLD	1,018
609	-	STOCK OF DIAMONDS	0
611	-	STOCK - STORES LUMBER etc.	1,990,245
			1,991,263

NOTE 14 - SUNDRY DEBTORS - \$25.820.610

601	-	SUNDRY DEBTORS CONTROL	19,676,822
602	-	DEPOSITS LODGED	2,880
613(b)	-	PREPAYMENTS	10,052
613(a)	-	ACCOUNTS RECEIVABLE	6,130,856
• •			25,820,610

NOTE 15 - CASH ON HAND AND BANK - \$17,207,511

604	CASH IN HAND	0
605	BANK BALANCE (CASH)	16,949,693
606	PETTY CASH IMPREST	25,446
607(a)	SUB IMPREST A/C 212006199	8,628
	SUB IMPREST A/C 212007000	30,549
	SUB IMPREST A/C 212007001	6,513
	SUB IMPREST A/C 212005758	29,650
	SUB IMPREST A/C 203005024	29,835
	SUB IMPREST A/C 212006198	29,705
	SUB IMPREST A/C 212007044	29,422
	SUB IMPREST A/C 212007002	10,606
607(b)	STAMP IMPREST	72
607(c)	STAMP IMPREST (CASHIER)	1,581
607(d)	ICE IMPREST	(1,291)
614	CANTEEN IMPREST	100
615	IDRC BANK ACCOUNT	0
620	HINTERLAND RD. PROJECT	57,002
		17,207,511

NOTE 16 - SHORT TERM INVESTMENT - \$110,151,212

NOTE 16 - SHORT TERM INVESTMENT - \$110,151,212		
	G \$	G \$
OPENING BALANCE		28,728,002
NEW INVESTMENTS:-		
FIXED DEPOSIT CERTIFICATE NO. 100849 D.D. 91-05-17	20,000,000	
FIXED DEPOSIT CERTIFICATE NO. 956169 D.D. 91-07-10	15,000,000	
FIXED DEPOSIT CERTIFICATE NO. 100516 D.D. 91-02-01	25,000,000	
		60,000,000
		88,728,002
REINVESTMENT OF PRINCIPAL & INTEREST ON F/D ACCTS.:		
FIXED DEPOSIT CERTIFICATE NO. 92908 D.D. 89-04-21	486,759	
FIXED DEPOSIT CERTIFICATE NO. 92909 D.D. 89-04-21	486,751	
FIXED DEPOSIT CERTIFICATE NO. 92910 D.D. 89-04-21	486,751	
FIXED DEPOSIT CERTIFICATE NO. 92911 D.D. 89-04-21	487,001	
FIXED DEPOSIT CERTIFICATE NO. 92912 D.D. 89-04-21	145,910	
FIXED DEPOSIT CERTIFICATE NO. 93181 D.D. 89-07-20	427,061	
FIXED DEPOSIT CERTIFICATE NO. 93182 D.D. 89-07-20	443,930	
FIXED DEPOSIT CERTIFICATE NO. 93183 D.D. 90-07-20	443,930	
FIXED DEPOSIT CERTIFICATE NO. 100001 D.D. 90-07-20	660,319	
FIXED DEPOSIT CERTIFICATE NO. 100002 D.D. 90-07-20	660,319	
FIXED DEPOSIT CERTIFICATE NO. 100003 D.D. 90-07-20	330,159	
FIXED DEPOSIT CERTIFICATE NO. 100004 D.D. 90-07-20	330,164	
FIXED DEPOSIT CERTIFICATE NO. 019233 D.D. 90-07-12	522,472	
FIXED DEPOSIT CERTIFICATE NO. 100301 D.D. 90-11-14	1,221,986	
FIXED DEPOSIT CERTIFICATE NO. 100326 D.D. 90-11-21	1,326,547	
FIXED DEPOSIT CERTIFICATE NO. 100073 D.D. 90-08-22	310,928	
FIXED DEPOSIT CERTIFICATE NO. 100074 D.D. 90-08-22	621,857	
FIXED DEPOSIT CERTIFICATE NO. 100075 D.D. 90-08-22	621,857	
FIXED DEPOSIT CERTIFICATE NO. 100516 D.D. 91-02-01	6,071,314	
FIXED DEPOSIT CERTIFICATE NO. 100849 D.D. 91-05-17	3,425,071	
FIXED DEPOSIT CERTIFICATE NO. 95616 D.D. 91-07-10	1,912,124	
	.,0.2,.2	21,423,210
		110,151,212
		<u> </u>

NOTE 17 - SUNDRY CREDITORS - \$1.755.052

401(a) SUNDRY CREDITORS CONTROL 767,146 848,336 139,570 401(b) PROVISION FOR AUDITING 432 REFUNDABLE DEPOSIT 1,755,052

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GUYANA

NOTE 18 - ACCRUED EXPENSES - \$567,552

402	-	ACCRUED SALARIES	(126,872)
403		ACCRUED WAGES	(2,630)
404	-	OTHER ACCRUED EXPENSES	96,714
405(b)	-	PAYE	78,093
405(a)	-	N.D.S.	(7,987)
406(a)	-	SALARIES PAYABLE	(290,950)
407	-	N.I.S PAYABLE	153,591
408		WAGES PAYABLE	(949)
409	-	LIFE INSURANCE	21,942
410(a)	-	DEPENDANTS FUND PAYABLE	7,750
410(b)	~	DEPENDANTS FUND MORTGAGE	(413)
411	-	PENSION FUND PAYABLE	179,127
412	-	UNION DUES	3,390
413	-	P.S.U. CREDIT UNION	36,021
414	-	RENT DUE AND PAYABLE	397
416	-	MORTGAGE FINANCE PAYABLE	825
417	-	MAGISTRATE COURT	0
418	-	DIRECTORS FEE	0
419	-	MISCELLANEOUS	21,319
420	-	GNCB TRUST MORTGAGE	1,534
421	-	ACTING ALLOWANCE	0
423	-	RISK ALLOWANCE	(450)
424	-	ACCRUED LEAVE PASSAGE	14,061
425	-	DUTY ALLOWANCE PAYABLE	, 0
426	-	RESPONSIBLE ALLOWANCE	0
427	-	SUB. & TRAVELLING	(48,885)
428	-	HOUSE ALLOWANCE	(1,798)
429	-	PERSONAL ALLOWANCE) O
430	-	SPORTS CLUB	1,298
431(a)	-	D.I.A. PAYABLE	(8,825)
431(b)	-	H.I.A. PAYABLE	800
433	-	WITHOLDING TAX	440,449
			567,552

NOTE 19 - GOVT. OF GUYANA CAPITAL - \$2,374,825

This comprised as follows:-

	<u> 1984</u>	<u> 1983</u>
Assets less liabilities at 1/8/79	2,139,306	2,139,306
Other expenditure	235,519	235,519
	2,374,825	2,374,825

The Commission came into existence on 1/8/79 by an order enacted through the Geology and Mines Commission Act 1979.

According to Section 35(1) and (2) of the Act, for the assets and liabilities vested at 1/8/79 the Commission shall issue to the Government debentures or debenture stock of such nominal value and bearing such interest rates and repayment dates as may be agreed upon between the Minister responsible for finance and the Commission.

The debenture stock has not been issued to the Government and the repayment terms and interest rates have not yet been agreed.

NOTE 20 - RESERVE FUND:

The Guyana Geology and Mines Commission Act 1979 Section 20 (1) provides that the Commission shall maintain a reserve fund and shall, out of the net surplus of each year, transfer to that fund a sum equal to not less than such sum as may be fixed by the Minister.