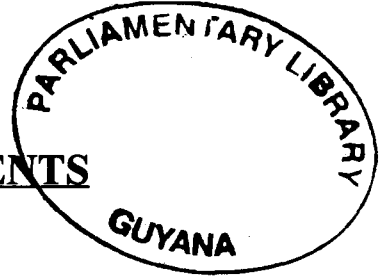


TABLE OF CONTENTS



	Pages
1. GEOLOGICAL SERVICES DIVISION	1
The Aranka Black Pearl Project	1
The Mid-Mazaruni Diamond Project	1
The Foreign Mining Companies	2
The Petrological Laboratory	11
The Chemical Laboratory	12
2. MINES DIVISION	15
Mines Production Section	15
Mines Inspectorate Section	19
3. ADMINISTRATIVE DIVISION	21
Personnel & Industrial Relations Section	21
Information & Publication Section	30
Services Department	36
4. FINANCE DIVISION	38

FINANCIAL STATEMENT FOR 1988

1988 ANNUAL REPORT

1. THE GEOLOGICAL SERVICES DIVISION

The year Nineteen Hundred and Eighty-Eight (1988) saw good and bad trends as far as this section is concerned. There was increased activity in gold exploration by foreign companies with a total of 9 companies holding 18 Exclusive Permissions. On the other hand there was a rapid decimation of the professional geological and field staff with the resignation of R. Elliott, R. Swiecki, R. Ragnanan and G. Nieuenkirk.

Effectively, the section was reduced to two active field geologists for most of the year. However, the prospecting and palaeo geomorphological features in the mid-Mazaruni basin for potential diamondiferous deposits and an updated evaluation of the Aranka black pearl deposit were undertaken. The final technical report of the Arawakai Feldspar deposit was completed.

1.1 THE ARANKA BLACK PEARL PROJECT - C. RAMBALI

Goethite, a hydrous iron oxide ($\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$) occurs abundantly at a few localities in Guyana. The results of experiments done on the potryoidal form of goethite were successful; the 'pearls' when polished appeared having a silvery, shining, metallic lustre, and with its form, were suitable for outing in silver or gold and worn as jewellery.

The 'black pearls' in the Aranka area are judged the best in terms of sphericity and colour, as a result an expedition to map and evaluate the possible reserves was necessary, since only a few collection trips to the area were done in the past.

Aranka can be reached by boat or a small aircraft; the location of the deposits is accessible along an old tractor road that undulates from the alluvial flats, and follows the watershed for about three and one half miles.

Twelve deposits were prospected and mapped and a total of 14,805.86 tonnes of 'pearls' was estimated.

1.2 THE MID-MAZARUNI DIAMOND PROJECT - PHASE 11

With the assistance of aerial photographs, relief maps, forest types and indicator minerals, it was possible to differentiate between the terraces which occur at 75, 90 and 135 m levels.

The Lower Terrace (75 m level) is character by morabukea forest (*Mora Gongrijpii*), with tourmaline (carbon) as the main indicator mineral. The Middle Terrace is forested with wallaba (*Eperya Falcata*) and the Higher Terrace with clump wallaba (*Dicymbe Altsonii*). The indicator mineral on the latter two of these terraces is rutile ('tin') which is very rounded and may have been derived on weathering of the sandstone and conglomerates from the Roraima Formation which comprise the plateau above.

Approximately three grains of gold per cubic meter was recovered from pits on the alluvial flats although this figure could be improved upon with more sophisticated recovery techniques now available. In addition, pits dug in the alluvial flats by Kurupung Placer Co. Limited (1950) have yielded 0.25 carats of diamonds per cubic yard. However, more work should be done to determine the viability of the alluvial flats.

The Lower Terrace is a "bedrock terrace" without any alluvium, and as such it is not diamondiferous. A thin layer of "catchcow" (10 - 25 cm) is found midway within the gravel horizon the Middle Terrace. The thickness of this gravel varies from 1.0 - 1.5 m. It is reported that 25 - 30 carats of diamonds were recovered from pits (48 m²) along the trail south of Eping Landing, whereas pits of a similar size at Strong Hope Creek (Upper Eping River) yielded 50 - 60 carats of coarser diamonds 3/8 and 8 carats. It is claimed that a diamond weighing 23 carats was found in this same area. The Middle Terrace is estimated to yield 27 x 10⁶ cubic meters of gravel. Heavy rainfall prevented detailed prospecting of the Higher Terrace, but two miners have been concentrating their operations for several years on one spot only. This is enough evidence that their operations are viable. From the aerial photographs, it is projected that this terrace would yield 35 x 10⁶ cubic meters of gravel.

Deposition, concentration and habit of occurrence of diamonds are very erratic in an alluvial deposit. As such, it was difficult to obtain reliable data. However, in the Eping River, porknockers have only worked isolated areas near creeks where water is readily available and providing the gravel is not deeper than 3.0 - 4.0 meters.

Many creeks and the terraces are still left to be explored. With the use of indicator minerals, forest types and the combined use of aerial photographs and relief maps, it is possible to delineate large areas which could be exploited economically.

1.3 THE FOREIGN MINING COMPANIES

Nine (9) foreign mining companies - (viz. Homestake Limited, South American Goldfields Limited, Dension Mines Limited, Eastern Caribbean Mining Development Limited, Golden Star Resources, Paranapanema, S.N.C., Placer Dome and Overseas Platinum Corporation) had in 1988, exploration rights to a total of eighteen (18) Exclusive Permissions with gold as the principal mineral of interest.

Paranapanema (Brazil)

This company holds an Exclusive Permission located in the Tassawini area, Barama River. This is the fourth year of exploration by the company on this property and diamond drilling continued throughout the year and representing the main activity for the year.

The Mid-Mazaruni Diamond Project - Phase 1

Aerial photographs of the mid Mazaruni from Merume to Kamakusa were re-examined and, along with Milner's interpretation of the mid Mazaruni Basin (1974) potential diamond deposits were identified for exploration. Four types of target have been classified, as follows:-

Existing Drainage - Creek traverses were carried out in the existing second order streams (Arapai, Kamakusa, Iru and Mazanapa) discharging into the right bank of the Mazaruni River. The channel floor for the most part, is covered with medium-grained, clean quartz sand. The scarcity of black sand is conspicuous, hence it could be concluded that the streams were specifically worked for diamonds.

Alluvial traps - The areas above and below the dykes cross-cutting the Kamakusa and Mazanapa Rivers were prospected by means of pits. A large formation of diamondiferous gravel is situated below remnants of these dykes cross-cutting the drainage pattern.

Palaeo channels - Pitting and river bank exposures along the flats of the Mazaruni and Merume Rivers, have demonstrated that these flats are underlain by a ferruginous cemented gravel (catchow). Above and below this horizon, are found unconsolidated gravels. The average thickness being 40 to 80 cm of diamondiferous gravel with a significant amount of gold. The average thickness of the overburden is 12 to 15 mm.

High terraces - Two lines were out to reach high terraces; one for 5.5 km from Kamakusa head, trending 260° and the other for 7.2km, trending 205° from Mazanapa-Merume junction. Along the 260° line, six pits were dug and five pits along the 205° line. Only white angular quartz gravel was uncovered without any indicators for diamonds.

Alluvial flats of the Mazaruni and Merume Rivers have the volumes of diamondiferous gravels which will indicate a subsequent grade evaluation. On the other hand, the gravel distribution in the high terraces is erratic and represent intermediate stage of concentration (low grade). It must be emphasized that any diamondiferous gravel deposit in the Upper Merume are very highly restricted and there is no terrace development as in the lower valley of the Merume.

The Tassawini Mine is located in Barama - Mazaruni Super-group metasediments consisting of schist (now altered and is yellowish); a carbonaceous - siliceous rock (the mineralised layer; metasilites and conglomerates). The mineralized zone is always carbonaceous and siliceous and associated arsenopyrite and tourmaline. The rocks occur as a general synform.

Work done during the year included trenching in proximity to the open cuts and were shown to be anomalous in gold values from the soil geochemistry programme; rock sampling of the open cuts and adjacent areas; sampling of the tailing in the Tassawini Creek; and diamond drilling - a total of 7,957.53 meters of drilling has so far been completed.

'Measured Reserves' are put at 1,965,349 tonnes with an average grade of 2.18 gm Au/t; 'Indicated Reserves' are estimated at 193,196 tonnes at an average grade of 1.39 gm Au/t and 'Inferred Reserves' are put at 162,000 tonnes grading 1.25 gm/tonne.

Golden Star Resources Limited (GSRL)

Golden Star Resources Limited is a Canadian junior mining company with head office in Edmonton, Alberta, Canada and has rights to six properties in Guyana, viz, Baramita, Million Mountain, Arakaka, Winter's Mine, Eagle Mountain, and Tiger Creek, This company also has an interest in the Omai property.

Baramita

The company relinquished this property at the end of the year after conducting geochemical soil sampling, augering, and pitting since 1985.

Two major anomalies were revealed from the geochemical sampling programme at Millionaire and Old World Prospects. The Millionaire Prospect consists of several discontinuous lenticular zones with values above 0.50 g/tonne with auger drill indicated reserves of 375,00 T at 1.65 g/t to a depth of 30 m² but the pitting and trenching show a potential of 575,000 T at 1.22 g Au/tonne. The Old World Prospect shows 275,000 tonnes of material at 1.23 g Au/tonne and up to 15 m depth.

Arakaka

This property was also relinquished by the company at year end. During the year GSRL effected their phase 111 programme to define the extent of the gold mineralisation shown in the anomalies obtained from the previous two phases of exploration. This was done by infill auger drilling, detailed geological mapping, channel sampling of pits and trenches, and exploratory diamond drilling of the saprolite.

Five diamond drill holes, totaling 752 metres were sunk in order to intersect the E-W trending quartz veins associated with high gold values in the Rodrigues pit area. One hold,

ARD-2 encountered mineralisation averaging 3.10 G Au/tonne over 10m length. Hole ARD-5 was located so as to test the northern anomaly adjacent to the 'pit' and gave an average value of 1.48 g Au/T over 48 m of saprolite.

Au in-fill auger hold programme was undertaken near the ARD-2 and ARD-5 drill hole sites. Twenty six holes were sunk, totaling 322m.

At the end of the year GSRL concluded the results of the evaluation programme showing that the overall tonnage potential of the Arakaka property is too small and the company does not consider it of economic interest.

Winter's Mine

The following field work was undertaken at the Winter's Mine (Appaparu) Exclusive Permission property by GSRL.

- Reconnaissance geochemical survey with 1 meter auger holes at 50m intervals on cross-lines spaced.
- 500m apart. A total of 1,533 samples were taken.
- 274 auger drill holes, totaling 967 meters, on a 25 - 50 m spaced grid.
- Channel sampling of pits and trenches in the Winter's Mine area. Three pits and one trench were excavated.
- Geological Mapping and Geophysical Survey. The area consists of sheared and folded greenstone rocks with NE trend. Hornblende schists, chlorite schists and metamorphosed acid - intermediate volcanics and metasediments are the main rock types. Fine to medium-grained dolerite dykes and sills out the greenstones. Small outcrops of gabbro and diorite were also mapped.

The mineralisation appear to be related to a stock work of fracture-filling quartz veins and stringers with a prevalent NE trend.

A ground magnetic survey and a total count radiometric survey were conducted but with inconclusive results.

GSRL considered that the results of this preliminary survey is not encouraging enough to warrant further exploration. The property was, therefore, relinquished at the end of the year.

Million Mountain

No exploration was carried out on this property during the year and it was eventually relinquished at year end.

The Mahdia Property

GSRL holds two contiguous Exclusive Permits in the Mahdia area and were named 'Eagle Mountain' and 'Tiger Creek' EP, respectively. They are explored out of a common camp situated near the Mahdia Airstrip.

During 1988, the so-called 'Mahdia Property' was subjected to geologic and topographic surveys, soil geochemistry, re-logging and re-sampling of old drill cores, geophysical surveys, trenching, pitting and bulk testing.

Work done included 281 km of cut lines; 10,954 soil samples taken by screw-type auger up to 1m; deep augering to 15m; pitting by a loader/backhoe to obtain bulk samples to be treated by a Denver Gold Saver; semi-detailed geological mapping at a scale of 1:2500; geophysical surveys using EM(VLF), magnetometry and a total count radiometric survey. In addition, 2840m of cores of the area available at the GGMC were re-logged and re-sampled.

Five anomalous zones were identified (300 ppb Au was used as the threshold value) - these are Minnehaha, Green's Mine, Dickman's Hill Prosperity and Unity Creek Prospects. More detailed evaluation works are planned for these anomalous zones in the new year.

Omai

This property is owned jointly by GSRL and Placer Dome Limited of Canada - the latter being the operating company. In 1988 diamond drilling continued throughout the year with a total of five rigs operating. Petrographic studies of drill core suggest that the intrusive complex that forms the rock hosting the mineralisation was originally a diorite that was metamorphosed to quartz diorite in the central part of the stock and hornblende diorite in the peripheral regions at its contacts with the meta-andesite country rock. Updated geological models based on the new cores show prominent and complex faulting of the ore body.

By year-end a total of 5,833.78 meters were drilled and this represents 97% of the scheduled drilling programme. Ore reserves as calculated by indicator kriging are put at 23,550,000 tonnes grading 7.7 g/t at a cut-off of 1 g/t.

1.4 **S.N.C INC.**

In 1987 SNC Inc. was granted an Exclusive Permission to explore for gold in the Groete Creek area; the property was subsequently assigned to SUD Exploration Inc. of Canada with SNC retained to undertake the exploration programme.

Primary mineralisation is stratabound and consists of disseminated pyrite and chalcopyrite in sediments. Existing drilling information indicate that the primary geological reserves are in the order of five million tonnes grading 1.4 g Au/t. An initial saprolite evaluation programme by auger sampling to 6m. Samples were taken at 2m intervals on a grid spacing varying from 200m x 50m and narrowed in places to 100m x 10m. The results of this sampling programme give an estimated saprolite reserve of 460,000 tons with an average grade of 1.6 g Au/t.

1.5 **Eastern Caribbean Mining Development Company (ECMDL) of Australia**

In February of 1988, ECMDL was granted an Exclusive Permission to conduct geological exploration for gold in the Marudi Mountain Deposit.

During the year, 50km of traverse lines were cut and surveyed; 1,039 soil samples were collected at 50m intervals and analysed for gold; 472 rock chip samples (1.5 kg each) was collected and analysed; 66 samples were collected from fresh rock and saprolite exposure from the Mazoa Hill prospect; a total of 232 m of trenching were completed across the Mazoa Hill and Marudi Mountain anomalies and over 50km of grid lines were geophysically surveyed using a Scintrex MP2 Portable Precision Magnetometer. Reading were taken at 10m intervals.

Geologically, Marudi Mountain area lie in an enclave of Lower Proterozoic, amphibolite-grade metasediments of the Kwitaro Group. The principal outcropping horizon consists of a complexly-folded, quartz-magnetite-haematite schist (qmhs); isoclinal folding followed by two open-folding episodes can be discerned by careful field observation.

The gold mineralisation is considered to be associated with silicification and hydrothermal alteration preferentially located in the enclosures of the late stage folds contained in the 'qmhs'.

1.6 **Homestake International Minerals Ltd (USA)**

Homestake (in partnership with South American Goldfields Limited of Canada) acquired three Exclusive Permissions in June, 1988, in the Peter's Mine, Dazier Creek and Akaiwong areas, respectively, and the early phases of exploration commenced during the latter part of the year.

Peter's Mine

General mobilisation and camp set up were completed and 30 line miles of soil survey were attempted. Geological mapping revealed a N-S structure trend spanning the entire length of the property (the 'Mango Trend').

On the basis of the geological information a drill hole PM 88 - 1 was sunk to 883' (inclined at 60° at Azimuth 130°) and penetrating a metavolcanic/metasedimentary sequence of rocks. Core recovery was 96.9%. Two main mineralised zones were encountered at 431' - 457' (this is a mineralised brecciated zone with quartz veining) and 504' - 519' (quartz feldspar veining with up to 2% pyrite) and some phyllite). The saprolite horizon has a thickness of 263'.

Dazier Creek

A 6000' x 2000' grid was geochemically sampled. Three 'geological' pits were dug, logged and sampled. Quartz veining is present in certain parts of the property.

There is evidence that suggest a possible palaeo-channel of the Tiger River but the auger holes and sample pits did not encounter any shallow palaeo channels.

Akaiwong

A heli-pad and campsite were built and 10 line miles of geochemical samples were completed. There is a marked lack of laterite development except in a small kaolin weathered zone where 12 - 16" of pisoliths were encountered.

Strong evidence of sulphide (pyrite and chalcopyrite) disseminated within a quartz, feldspar porphyritic intrusive or rhyolitic crystal tuff is present.

1.7 **Denison Mines Limited (Canada)**

Denison Mines Limited (in partnership with South American Goldfields) acquired four properties (Kaburi, Aurora, Quartz Hill and Five Star) at year end. Purchase and shipping of equipment and supplies from North America and recruitment of field and Georgetown office staff were undertaken during the short time available in 1988.

1.8 Overseas Platinum Corporation (OPC) (Canada)

This company conducted geological work in the El Dorado Exclusive Permission prospect (in partnership with Kaburi Development Company of Guyana. In addition, some detailed geological work was done on Tract 'T' Mining Lease (Hick's Mine) also licenced to the latter company.

Geologically, the Eldorado Prospect is underlain by Lower Proterozoic metasedimentary/metavolcanic rocks that have been intruded by granites of different ages (trans Amazonian and 'Younger' granites). The area was subjected to structured deformation in gold mineralisation associated with pyritic, quartz-carbonate veining. Gold has also been reported in silicified metavolcanics with quartz veining absent.

In 1988, Overseas Platinum Co. conducted an exploration programme consisting of grid establishment, geological mapping, magnetic and electromagnetic geophysical surveys, geochemical soil sampling, trenching, auger and core drilling.

Work done, included:

On the El Dorado E.P.

- o 82.9 line km of gridding
- o geophysical survey of the entire grid by VLF-EM and gradiometer/total field magnetics
- o geochemical soil sampling of part of the grid on 50m spacing in cross-lines
- o geological survey on a 1:5,000 scale of the entire grid.

On Tract 'T' (Hicks' Mine)

- o 13.44 km of grid line
- o VLF-EM and gradiometer/total field magnetic survey
- o Geology on a 1:5,000 scale of the entire grid
- o 964.05m, from 10 boreholes, of core drilling
- o 10 trenches
- o 28 auger drill holes.

1.9 Exploration and Conversion of Quartz in Venezuela

The area at Upata were visited from 21 - 28.5.88 where quartz boulders are heaped up and transported to a crushing and separation plant. These boulders are then transported to a plant operated by Fesilven at Puerto Ordaz where quartz and iron are fused to produce ferrosilicate for the steel industry.

1.10 **Golden Star Resources operations at Tiger River and Eagle Mountain.**

The operations of Golden Star Ltd. at Tiger River and Eagle Mountain (Potaro) were visited from 24 - 27.6.88. These two properties which are adjacent to each other comprise 26,680.80 acres.

A base line was cut at 17° west of north for 11.0 km (3,000 m N to 14,000 m N). This line which starts at the southern end of the Eagle Mountain property, passes through Mahdia Village and extends for approximately 1.5 km beyond the northern boundary of the Tiger River property. Cross lines spaced at 100 meters interval were cut at 253° between the base line and Mahdia River from 3,000 m to 10,500 m. Seventy five cross lines were cut averaging 1.5 km each and making a total of 112.5 km. All these lines were sampled at 25 meters interval and a depth of one meter each.

Lines were extended east of the base line for one km each from 10,000 m to 11,000 m. Towards the southern end (around 4,000 to 3,000 m), the base line encroaches on the slopes of Eagle Mountain and it is envisaged that only a few hundred meters of lines east of the base line in this area, would be sampled.

1.11 **Flat Rock Quarry**

Flat Rock Quarry in the lower Cuyuni River was inspected in July, 1988 and an assessment of feldspar content of the pegmatites was undertaken by pitting and drill hole data. Both Potash and Sodium feldspars are required for the ceramic industry and in order to differentiate, the rocks were cut, ground with a 400 abrasive, etched and stained with a saturated solution of Sodium Cobaltinitrite. From visual examination, Flat Rock 'A' and 'B' which are most easily accessible and which could be exploited almost immediately, would produce approximately 155,500 tons of pegmatite. The K-feldspar content is estimated to be 35% or 55,000 tons (approx.). There are also two outcrops on the Batavia-Okoro Road which are estimated to produce about 13,000 tons of pegmatite. The total tonnage however, could be considerably increased by drilling to the east, west and south of Flat Rock Quarry 'A' and 'B'.

1.12 **Mid Mazaruni Diamond Expedition**

By combining the use of aerial photographs and relief maps, it was possible to calculate the area covered by alluvial flats and also to differentiate between terraces at the various levels. This was supported by the use of heavy minerals and forest types which characterize the various terraces.

Terraces occur at the following levels:

1. 75 meters - Lower terrace
2. 90 meters - Middle terrace
3. 135 meters - Higher terrace

The lower terrace could be termed as 'bedrock terrace' since it is free from alluvium. Exploitation of the middle terrace and higher terrace was confined to a few isolated creeks where water is readily available. Exploitation of the terraces proper, was limited due to financial constraints - acquisition of pumps, excavators etc.

Much more work needs to be done to prove whether the alluvial flats could be worked economically. However, it is estimated that the middle terrace would yield a total of $27 \times 10^6 \text{ m}^3$ of gravel which is diamondiferous. Heavy rainfall curtailed prospecting of the higher terrace, is distinctive. Taking this into consideration, the projected quantity of gravel would be in the vicinity of $35 \times 10^6 \text{ m}^3$.

Deposition, concentration and habit of occurrence of diamonds are very erratic in an alluvial deposit. However, from information given by porknockers who are using 'pick and shovel', it is possible to find isolated areas in the creeks and on terraces with a large enough concentration of diamonds which could be exploited economically.

A pattern for differentiating the various terraces by means of heavy minerals and forest types has been established. This model could now be projected to differentiate the diamond bearing areas which could be prospected in greater detail.

1.13 The Petrological Laboratory

The Petrological Laboratory, with its facilities for mineral separation and identification, continued its services in the examination of geological samples for export for foreign mining companies that operated in Guyana. This service was an important function in the laboratory since more emphasis was directed to the exploration and mining of gold in the country.

Work Accomplished

The examination of geological samples for export, took the form of both visual and microscopic determinations in order to certify the request. During the year 1988, some 23,422 samples (soil, crushed rocks, etc.) were examined prior to being sent to the Customs and Excise Department, for clearance to be shipped overseas for analytical purposes.

During the months February - March, 1988, Cde C. Rambali accomplished a 5 week field assignment in the Aranka area - Cuyuni River. The purpose of the expedition was to delineate and evaluate the reserves of black pearls in the area. Twelve deposits were identified and a speculative total of 14,805.86 tonnes of black pearls was calculated.

In April, Cde Rambali left Guyana on a 4-month U.N Fellowship in Ottawa, Canada for specialised training in mineral separation and identification. His training involved the practical use of several pieces of equipment that, in his opinion, would be very useful in enhancing the works in the Petrological Laboratory. Cde Rambali returned to Guyana on the 6th August, 1988.

The Petrological Laboratory continued to co-operate with those outside the Commission. During Cde. S. Narain last months in the laboratory, he gave valuable assistance to a Research Assistant from the Institute of Applied Science and Technology in a mineralogical analyses of three (3) samples - Ground Sand, Feldspar and Kaolin. One student from North Georgetown Secondary School was assisted with rock and mineral specimens for a project for his C.X.C examination; also five (5) students from the University of Guyana were permitted to look, hold, make notes of rock specimens, as part of their course work.

In the Thin Section Laboratory, the equipment for making Thin Sections were assessed as unserviceable. As such, in the first half of the year, Cde Persaud, with assistance from the Lapidary was able to prepare 35 Thin Sections and 4 Polished Sections. A Petrological Size Cut-Off Saw and Grinder for the making of Thin Sections was received under the U.N.D.P Technical Programme, but this piece of equipment was not installed and made operative until September 1988, because it was received in two parts and at different dates. The equipment was first used to prepare 24 Thin Sections and 2 Polished Sections. Golden Star Resources Ltd were billed G\$1,920.00 for the making of 8 Thin Sections - the job was submitted by Carlos H. Bertoni - Chief Geologist.

1.14 Chemical Laboratories

The Chemical Laboratory of the Guyana Geology and Mines Commission (GGMC) is comprised of the following units:

- i) Wet Chemical (Main) Laboratory
- ii) Fire Assay Laboratory
- iii) Sample Preparation Laboratory
- iv) Spectrographic Laboratory
- v) Atomic Absorption Laboratory

Wet Chemical Laboratory

The refurbished fume hoods were located in this laboratory since early 1987. Their extraction system, however, is yet to be installed. Electrical work in this laboratory is outstanding.

Fire Assay Laboratory

This laboratory was functional for the first few months of the year. The Assay Furnace, spares and some consumables were transferred to Loring Laboratories (Guyana) Limited. Loring Laboratory subsequently borrowed the rest of our consumables in stock.

A replacement furnace has been purchased and is expected to be delivered early in 1989.

Sample Preparation Laboratory

The following equipment were transferred from this laboratory to Loring Laboratories.

- i) Siebtechnik Disc Mill (1)
- ii) Bico-Braun Pulverisers (2)
- iii) Jaw Crusher (1)

A second Siebtechnik Disc Mill was subsequently sent to Loring Laboratory in March to be repaired. This has not been completed up to the time of writing this report. A requisition is made for replacement sample preparation equipment.

Spectrographic Laboratory

A 1.5m Wadsworth Emission Spectrograph was identified for purchase from a laboratory in Colorado U.S.A. This was set up at the United States Geological Survey Facility in Colorado and found to be in good repair. Mr. H. Bharat - Chemist, was able to undergo some training in the use of this instrument. This spectrograph was subsequently shipped to Guyana.

Arrangements are being made to uplift same from the Timehri Airport Bond.

Some infra structural works to the laboratory were completed during the year. These include:

- 1. Erection of a new dividing wall
- 2. Painting of the new wall
- 3. Reflooring of part of the laboratory flooring

4. Repair of cupboards

There are, however, some outstanding work to be done specifically those that are necessary before the Spectrograph can be installed.

This laboratory is subjected to periodic flooding and this was particularly severe during December. The competent authority was notified about this.

The new 1.5 m Wadsworth Grating Spectrograph should enable us to perform a semi-quantitative scan for 35 elements on each sample.

Atomic Absorption Laboratory

This laboratory also experienced some flooding during the year. This was reduced during the latter part of the year.

The Atomic Absorption Spectrophotometer continues to function well except when there is no acetylene and this has been frequent.

A back-up Atomic Absorption Spectrophotometer has been requisitioned for this laboratory, as well as accessories to enable them to perform analyses for the hydride generating elements and mercury.

1.15 Sample Storage

The inadequacy of sample storage facilities at the Commission is indeed cause for alarm. Requests were made for additional storage but to date this has not materialised. To say more is to repeat in its entirety the sample storage segment of the 1987 Annual Report.

1.16 Services

Services to the laboratories were for the most part unreliable. Shortages of acetylene, tardiness or non-completion of electrical, carpentry and plumbing works affected laboratory work adversely.

1.17 Analytical Services

Professional services by the chemists were provided to the Guyana Police Force and Customs. This was mainly "raw gold analyses". However, for the new year we would be able to engage in some jewellery analyses.

Analytical services were also provided to external agencies like Institute of Applied Science and Technology (IAST), foreign mining companies and local miners.

2. **MINES DIVISION**

2.1 **MINES (PRODUCTION) SECTION**

Omai Drilling Project

Drilling continued at the Omai property with one drill operation during the first half of the year. The operations were plagued by mechanical downtime. Nevertheless, the following work was completed:

	Jan	Feb	Mar	Apr	May	June	July	Aug
B Drilling (m)	25.1	63.7	113.7	-	13	17.89	-	-
NQ Rock Drilling (m)	109.6	153.9	114.6	149.9	297.59	71.53	105.21	183.6

The value of the first quarter was \$1,419,372.00

The tardy arrival of items of equipment and materials requisitioned through the Commission's stores hindered the smooth and efficient functioning of the Project.

The hole was stopped at a depth of 593' 8" and cemented after a drill bit and reaming shell were burnt in the hole. This resulted from a lack of coolant (water) reaching the bit and shell, caused by a burst drill rod. Preparations, which lasted for three (3) days, were made for drilling to continue using "B" size equipment. The hole was cased and reamed until the end of August.

Research Projects

These projects were at various stages of development during the first half of the year. Field duties of R. Squires and the resignation of G. Haynes forced the suspension of their respective projects.

The dimension stone project was on stream with samples being prepared for testing and a field work scheduled for October-November, 1988.

The filter sands project was being reviewed to obtain more objective standards for evaluation of potential filter sands.

The theoretical analysis of the excavation and processing of river gravels was conducted during the period.

The Dimension Stone and Filter Sands Projects were taken a stage further during the month of August. The samples of dolomite, dolerite and grey granite were prepared according to A.S.T.M. standards for the following tests.

- a) Absorption and bulk specific gravity
- b) Modulus of rupture
- c) Comprehensive strength
- d) Abrasive resistance to foot traffic

Contracts with the Civil Engineering Laboratory at the University of Guyana and the Laboratory Testing Division of the Ministry of Works were established and formalized for the conduction of these tests.

Research continued into the design of a system for testing the friability of the fine sands used in the filtration processes at the Georgetown Sewerage and Water Commission. Towards this end a tour of the Water Works, with specific reference to the operation of the filter beds, was organized.

The research for these two (2) projects is currently being carried out by Cde. F. Farley, University of Guyana Fourth Year Civil Engineering student, presently on special attachment to the Mines Division. No further work was done on the other research projects.

Special Projects

The Dimension Stone project and the Filter Sands project continued under the direction of Cde. F. Farley, UG Fourth Year Civil Engineering student. Samples from Tumatumari and Teperu were prepared for testing by the Ministry of Works. This was to be prepared for marketing purposes. The procedures being followed are those recommended in a report by a Cuban Team on Dimension Stone in Guyana. Further laboratory test will be conducted to increase our knowledge base.

Contacts with the Civil Engineering Laboratory at the University of Guyana and the Laboratory Testing Division of the Ministry of Works were established and formalized for the conduction of these tests.

The friability test on the sand in use in the filters at the Shelter Belt was canceled by the Materials Laboratory after they discovered that they could not conduct the test according to the ASTM or BS specifications which we requested. An impact test has been scheduled as a substitute.

The design work on excavation and processing systems for river gravels continued during November with the acquisition of brochures on alluvial equipment available. Information on jigs, trommels and underwater gravel and jet pump systems have recently been added to our data base.

Work to evaluate the grade of dredge tailings using a Pro-pulse jig did not commence during November as was scheduled. Investigations have now been re-scheduled to January, 1989, when the overseas based sales representative for the Pro-pulse jig will be back in Guyana.

Proposals have been made for the study of a rapid alluvial sampling technique during 1989. Word is being awaited from equipment designers in the United States.

The position paper by J. O'Lall on The Alternative Energy Systems for Small Scale Mining operations outlined a method to develop a 50 KW system for use of dredges and land plants. Design indications are that this power capacity will be enough to handle the feed to the processing systems currently in use. Discussions with Mr. O'Lall will be restarted to outline a programme to examine the technical feasibility of his system.

Drilling

Arakaka

During the first two months of the year, diamond drilling was done at Arakaka, North West District for Golden Star Resources Ltd. Approximately one hundred and eighty-eight feet was drilled, and by the end of the first quarter, drilling was officially closed and the Guyana Geology and Mines Commission equipment was withdrawn.

Ministry of Transport

Drilling was held up after the first three weeks of drilling due to the resignation of the driller, and the unexpected departure of the mechanic. Further delays were due to late delivery of food supplies and the absence of the tug which was often withdrawn to do other jobs. No drilling was done in March and April because it became impossible to stabilise the pontoon after the winches broke.

Further delays resulted from the driller being injured at the hole located beneath the stelling at Goodman Freetown.

The activities for the period were as follows:

	JAN	FEB	MAR	APRIL	MAY	JUN
Footage (m)	27.95	43.05	--	2.8	10.05	55.86
S.P.T	21	31	--	3	14	39
Pistons Sample	4	6	--	--	4	3
Waiting Time (hrs)	29.75	45.5	170	232.5	140	2

The total value of work done was \$612,043.25 for the period.

Placer

Drilling continued at the Omai property with one drill operation during the period under review. The operations were plagued by mechanical downtime but the following work was completed:

	Jan	Feb	Mar	Apr	May	Jun
O/B Drilling (m)	25.1	63.7	113.7	--	13	17.89
NQ Rock Drilling	109.6	153.9	114.6	149.9	297.59	71.53

The value of this work was \$1,419,372.00

Dickman Hill

No major developments at or concerning Dickman Hill took place during the first half of the year. The exercise to transport the Commission's assets from Dickman Hill to Georgetown was completed in the first quarter.

Lapidary

Slabbing of agates designed for the export market continued, along with the polishing and faceting of agates for local sales. Agate slabs, faceted stones, paper weights, hand polished black pearls and slabbed granite were some of the items produced during the year.

The operations were restricted by the unavailability of spares and power outages. Income for the first half of the year was \$115,735.70 comprising sales of silver jewellery, cabochons and semi precious stones.

Preliminary agreement was reached for the sale of lapidary products to a West German firm on a three year contract worth US \$24,000 per year.

The lapidary building at West Ruimveldt was renovated during the first half of the year in order to adequately accommodate staff.

Electricity disruption and the unavailability of spares severely hampered the progress of work.

2.2 MINES (INSPECTORATE) SECTION

Prosecutor's Course

During the first half of the year, Senior Mines Officer Jack Morgan attended a prosecutor's course at Police Headquarters, Eve Leary for seven weeks. The Chief Mines Officer, assisted by Senior Mines Officer Jack Morgan, gave a lecture on the Mining Act.

Goldsmiths

Goldsmith shops were visited during the month of March. The purpose of the visits was to check on licences and sanitary conditions of the premises. Reports of these visits are on file.

Claims

There were nine hundred and ninety-one new claims during the first half of the year. The breakdown is as follows:

River Locations	-	230
Gold	-	252
Precious stones	-	160
Gold and Precious stones	-	<u>349</u>
		<u>991</u>

Production

Production for the period January - June is as follows:

Gold	-	10,953 ozs 11 dwt 10 gms
Diamonds	-	21,802 stones - 2287.5 carats

Dredge Registration

For the first half of the year, sixty-three dredges were registered.

State Reserves

There were three state mining reserves operative during the first half of the year. These were in districts 2 and 6. These are:-

- a. Akaiwana
- b. Konawaruk
- c. Appamaru

List of Publication

The list of existing claims up to 31st December, 1987, was compiled and published in the Official Gazette and was retailed at seventy-five dollars per copy.

Challenges and Complaints

There were seven (7) challenges filed with the Commission during the first half of the year. Of these, three were concluded.

In spite of institutional problems experienced by the client and labour problems experienced by the GGMC, the project was effectively managed to bring income in excess of what was budgeted for.

This project resulted in the training of D. Persaud, Mining Engineering Technician, in Foundation Test Work training of Mr. R. Austin in Drilling for Foundation Investigations and operating a drill from a floating platform.

3. **ADMINISTRATIVE DIVISION**

3.1 **Personnel & Industrial Relations Department**

Areas of responsibility are:-

1. Registry
2. Canteen
3. Security
4. Personnel & Industrial Relations

Registry

Performance in this section has shown a marked improvement this year, especially in the area of Records Management, where a high level of efficiency was maintained. The typing pool also performed satisfactorily and the quality and quantity of work produced were well above average. There, however, needs to be a greater commitment to the task by all concerned in the despatching of mails and routing of correspondences and files.

Canteen

The canteen recorded a deficit for the year. This was due mainly to the constant rise in the cost of food items and other essential requirements, although resources at hand could have been better employed for greater efficiency. The service offered to employees was fairly satisfactory and at very cheap prices. There has been a review of the Canteen's operations and measures have already been put in place to enhance its performance.

Security

This section performed satisfactorily and incidents of theft somewhat reduced. There was a high rate of staff turnover which hampered the work programme, but because of the dedication of most of the guards the situation remained under control.

Personnel and Industrial Relations

The Industrial Relations climate remained stable throughout the year. The Union had submitted proposals in relation to the revision and amendment of the Union Agreement with Management on the Conditions of Service governing employees of the Commission. However, the proposals were in some instances quite inadequate and the Union was requested to review the package.

A revised salary structure for the Commission was approved by the Minister of Finance and implemented in the month of July. Payments were made retroactive to August, 1987.

The Commission's Sports Club was reactivated. Presentation of Bursary Awards were made to three employees' children who were successful at the Secondary Schools' Proficiency Examination.

Events

A Workshop on Negotiating Mineral Agreements with Transnational Corporation and other mineral policy issues was sponsored by the United Nations Centre on Transnational Corporations (UNCTC) and the Commission and was held at Bidco Management Training Centre during the period 14th - 18th March, 1988. Participants were drawn from overseas - Antigua, Belize, Grenada, Jamaica, St. Kitts. Local participants include personnel from the Guyana Natural Resources Agency, Bank of Guyana, Office of the President, Gold and Diamond Miners' Association, Attorney General's Office, Inland Revenue Department, Ministry of Finance, Geologists and Engineers of the Commission.

Visits

Comrade Sat Narain, Senior Geologist, visited Venezuela at the invitation of the Venezuelan Energy Authorities to look at the process of Mining. This visit was made under the auspices of the Venezuela Joint Commission - Co-operation in the field of Quartz Mining.

Training

Comrade Jasper Layne, Chemist, was awarded a fellowship by the U.N.D.P and pursued a four (4) months practical training in Analytical Chemistry at the United Nations Geological Surveys Department in Denver, Colorado, U.S.A from February 1, 1988 to May 30, 1988.

A Workshop on the Negotiation of Mineral Development Agreement was held by the Guyana Geology and Mine Commission in conjunction with the United Nations Center on Transnational Corporations from March 14 to 19, 1988. The Commission was represented by most of the relevant senior personnel. There were also participants from several organisations in Guyana and the Caribbean.

Comrade W. Woolford, Manager (Mines), participated in a ten (10) weeks Management Training Programme at the University of Lulea, Sweden from April 4, 1988 to June 10, 1988.

A Training Workshop on National Information Systems on Transnational Corporations was held in Warsaw, Poland during the first week in May. This workshop was attended by Comrade Gertel Holder, Legal Officer.

Comrade Charles Rambali, Scientific Assistant, was selected to attend a four (4) months Training Programme in Mineralogy. This was sponsored by the United Nations Fellowship Award Institutional Support Programme and was held in Ottawa, Canada from April to August, 1988.

Comrade Haimchand Bharat, Chemist, was also awarded a fellowship by the U.N.D.P., and has pursued a four (4) months programme in Spectrochemistry at the United Nations Geological Survey in Denver, Colorado, U.S.A from May to September, 1988.

A two (2) days Financial Management Seminar which was sponsored by the South Georgetown Jaycees on May 27 - 28, 1988, was attended by Comrade F. Razack, Internal Auditor and Comrade R. Foster, Finance Manager.

Comrades Wendy Gray and Hazel Welch, Senior Accounts Clerk and Junior Personnel Clerk respectively, attended a two (2) day Seminar for Clerks which was conducted by the Georgetown Jaycees Women's Chapter in collaboration with the Institute of Adult and Continuing Education, University of Guyana on 25 and 26 March, 1988.

Comrade Gloria Barkoye, Librarian, attended a Workshop on "Periodical Control in Libraries" which was held by the Guyana Library Association from June 30 to July 1, 1988.

Comrade Jack Morgan, Senior Mines Officer, attended a Prosecutors Course which was held at the Felix Austin Police College from April 5, 1988 to May 20, 1988.

Comrade Richard Squires, Senior Mining Engineer II, attended a United Nations Interregional Seminar on Small Scale Mining in Developing Countries which was held in Aukara, Turkey from September 19 to 25, 1988.

Comrade Squires also proceeded on one (1) year's study leave in Geotechnical Engineering at Newcastle Upon Tyne, England.

Comrade Ashoek Alli, Technical Assistant, attended a three (3) months Supervisory Training Course at the Critchlow Labour College from August 30 to November 17 1988.

Two Senior Management Development Courses were conducted by the Consultative Association of Guyanese Industry Limited. The first was held from October 9, 1988 to October 14, 1988 and was attended by Comrade Rupert Foster.

Comrade Garfield Stuart attended the second course from October 23, 1988 to October 30th 1988.

A P P O I N T M E N T S

<u>Name</u>	<u>Designation</u>	<u>Effective Date</u>
G. Holder	Legal Officer	1988-02-01
R. Sweicki	Snr. Geologist I	1988-02-01
S. Durant	Welder	1988-03-01
C. Niles	Lab. Assistant	1988-03-28
M. Allen	Tradesman I	1988-03-28
J. Webster	Maintenance Assistant	1988-03-14
P. Morris	Office Assistant	1988-03-08
O. Wilson	Security Guard	1988-03-28
E. Archer	Trainee Geologist	1988-04-11
A. Logan	Security Guard	1988-05-16
J. Bascom	Lapidary Sales Attendant	1988-05-04
C. Glasgow	Tradesman I	1988-06-01
A. Moore	Binder I	1988-06-01
M. Sobers	Conf. Secretary	1988-06-20
M. Rutherford	Apprentice Draughtsman	1988-06-20
S. Dannett	Temp. Typist Clerk II	1988-04-25
T. Joseph	Apprentice Mechanic	1988-07-12
A. Williams	" "	1988-07-11
C. Frank	Clerk I	1988-07-26
A. Sheriff	Security Guard I	1988-07-27
K. Garraway	Field Asst. Trainee	1988-07-11
R. Ramkhellawan	Drill Foreman	1988-07-01
C. Adams	Drill Foreman	1988-07-01
C. Blackman	Snr. Electronics Tech.	1988-08-02
R. Roseman	Tradesman I	1988-08-15
S. Lamott	Tradesman I	1988-08-15
M. Samaroo	Trainee Geologist	1988-08-15
C. Matheson	Tradesman II	1988-08-29
A. Sargeant	Asst. Mines Officer	1988-08-02
R. Lacon	Expediter	1988-09-01
L. Moore	Tradesman II	1988-09-15
C. Exeter	Apprentice Mechanic	1988-09-21
S. Khan	Security Guard I	1988-08-31
L. Williams	Driver	1988-10-05
H. Reynolds	Driver	1988-10-19
W. Slowe	Photo Reproduction	1988-10-17
M. Inniss	Security Guard I	1988-10-18
E. Bourne	Security Guard I	1988-10-17
D. Mangra	Gardener	1988-10-11

A P P O I N T M E N T S cont'd

<u>Name</u>	<u>Designation</u>	<u>Effective Date</u>
R. Singh	Laboratory Assistant	1988-11-01
A. Gibbs	Clerk III (Accounts)	1988-11-01
C. Gaim	Clerk I	1988-12-01
A. Austin	Clerk I	1988-12-01
K. Garnett	Lapidary Attendant	1988-09-05
W. Tappin	Trainee Geologist	1988-12-01

Acting Appointments

Names	Designation	Acting Appointments	From	To
S. DeYounge	Ranger	Snr. Ranger	88.01.01	88.12.31
S. Edwards	Snr. Min. Eng. I	Man. (Mines)	88.04.01	88.06.13
J. Vieira	Asst. D/man	Snr. Asst. D/man	88.01.01	88.12.31
V. Chisholm	Tradesman III	Chief Mech.	88.05.05	88.09.04
K. Persaud	Snr. Geol. II	Man. (Geol. Ser.)	88.01.01	88.11.30
P. Warner	Acct. Clerk II	Acct. Clerk III	88.04.25	88.06.15
P. Agrippa	Clerk III	Chief Clerk	88.07.15	88.12.31
C. Frank	Clerk I	Clerk II	88.10.17	88.12.31
J. Bascom	Clerk I	Clerk II	88.10.17	88.12.31
S. Edwards	Snr. Min. Eng. I	Man. (Mines)	88.08.01	88.09.05
W. Woolford	Manager (Mines)	Commissioner	88.08.01	88.09.05
H. Moore	Expediter	Asst. Pur. Officer	88.06.30	88.12.31
K. Livan	Snr. Geol. II	Man. Geol. Ser.	88.12.01	88.12.31

Terminations

<u>Name</u>	<u>Designation</u>	<u>Effective Date</u>
T. Singh	Accounts Clerk II	88.01.29
S. Persaud	Mines Officer	88.02.29
B. O'Selmo	Driller	88.02.16
S. Kumar	Lab. Assistant	88.02.13
J. McIntyre	Maintenance Assistant	88.03.01
W. Scott	Security Guard I	88.03.20
H. Baird	Tradesman II	88.04.01

Terminations cont'd

<u>Name</u>	<u>Designation</u>	<u>Effective Date</u>
C. Blackman	Snr. Electronics Technician	88.04.12
L. Hughes	Welder	88.04.30
G. Nieuenkirk	Field Assistant	88.05.01
W. Noble	Driver	88.05.01
R. Narain	Snr. Photo Technician	88.05.10
D. Kellman	Apprentice Draughtsman	88.06.06
R. Elliott	Geologist	88.06.06
P. Lord	Asst. Purchasing Officer	88.06.30
C. Robinson	Mines Officer	88.08.01
A. Logan	Security Guard I	88.08.04
D. Mangra	Security Guard I	88.08.03
A. Sheriff	Security Guard I	88.08.13
C. Glasgow	Tradesman I	88.08.01
J. Greene	Lapidary Attendant	88.09.06
R. Springer	Security Guard I	88.09.01
E. Wilson	Security Guard I	88.09.01
G. Thom	Security Guard I	88.09.01
N. Musa	Driver to the Commissioner	88.09.08
L. Thomas	Laboratory Assistant	88.09.14
G. Persaud	Gardener	88.09.19
G. Singh	Technical Assistant I	88.10.10
L. Scott	Driver Mechanic	88-10-10
R. Ragnanan	Snr. Field Asst.	88-10-10
R. Swiecki	Snr. Geologist 1	88-11-30
N. Trefall	Diamond Valuer	88-22-30
E. Archer	Geologist Trainee	88-11-28
J. Young	Lapidary Attendant	88-11-23
B. Fontanelle	Lapidary Attendant	88-11-23
R. Roseman	Tradesman 1	88-12-07
S. Munroe	Tradesman 1	88-12-07
J. Webster	Maintenance Asst.	88-12-08
E. Bourne	Security Guard 1	88-12-01

Promotions

<u>Name</u>	<u>New Designation</u>	<u>Effective Date</u>
G. McFarlane	Chief Clerk	88-01-01
B. Telack	Chief Security Guard	88-01-01
A. Nelson	Security Guard 11	88-01-01
L. Butters	Snr. Mines Officer	88-01-01
G. Singh	Tech. Assistant 1	88-01-01
G. Boyce	Tradesman 11	88-01-01
P. Moore	Stores Clerk 111	88-01-01
R. Squires	Snr. Mining Engineer	88-01-01
T. St. Hill	Driver Mechanic	88-06-01
R. McPherson	Driver Mechanic	88-06-01
M. Benjamin	Tradesman 1	88-06-01
C. Harding	Stores Clerk 1	88-03-28
L. Garnett	Asst. Manager (P & I R)	88-01-01
G. Johnson	Driver Mechanic	88-08-01
R. McPherson	Driver Mechanic	88-06-01
M. Benjamin	Tradesman 1	88-06-01
R. Vieira	Field Assistant	88-07-01
J. Layne	Senior Chemist	88-07-01
C. Thompson	Analytical Officer 11	88-08-01
C. Rambali	" "	88-09-01

Staff List - December 1998

Chairman's Office

K. Bancroft
M. Austin
M. Rasheed

Canteen

G. Hughes
K. Hughes
J. Sandiford
D. Forris

Commissioner's Office

G. Walrond
J. Allen
M. Sobers

Legal Department

G. Holder
N. Newark

Personnel

L. Garnett
H. Welch
A. Vieira

Information & Documentation

I. Lowe
D. Farnum
D. Budhan
W. Slowe
R. Smith
F. Kerr
M. Rutherford
A. Moore

Registry

G. McFarlane
 J. Primo
 P. Morris
 M. King
 H. Gill
 L. Dhanraj
 P. Leitch
 A. Mitchell
 C. Aaron
 S. Darnet

Security

B. Telack
 L. Hinds
 A. Nelson
 A. Mohamed
 C. Daniels
 C. Joseph
 V. Walrond
 K. Mitchell
 S. Khan
 M. Iniss
 G. Maloney

Library

M. Hope
 G. Barkoye
 D. Bobb
 C. Ferdinand
 D. Bobb

Services

C. Teixeira J. Darlington
 R. Harte P. Garnett
 I. Thompson
 H. Jules
 C. Ralph
 Y. Dyer
 M. Forte

Information & Documentation cont'd

A. Fraser
 J. Vieira
 J. Grimmond
 L. Moe
 M. Collymore
 M. Mingo
 A. Phillips
 W. Sumner
 T. Moore

Carpenter Shop

V. Marks
 N. Barnes
 E. Crum Ewing
 W. Lord
 O. King
 G. Boyce
 G. Daniels
 T. Hemraj
 D. Mangra
 M. Allen

Geological Services

K. Livan
 K. Persaud
 J. Ghansam
 K. Sukhdeo
 J. Narine Singh
 V. Persaud
 R. Vieira
 B. Semple
 E. Tappin
 M. Samaroo

Chemistry Laboratory

J. Layne	A. Hosannah	N. Proffith
H. Bharat	R. Adams	P. King
C. Thompson	T. Duke	R. Singh

Electrical Workshop

J.Chance
 C. Nedd
 C. Blackman

Mechanic Workshop

L. Walrond
 M. Taylor
 R. McPherson
 G. Johnson
 V. Chisholm
 B. Moore
 M. Benjamin
 T. St Hill
 S. Durant
 L. Williams
 H. Reynolds

Petrological Laboratory

S. Narine
 C. Rambali
 T. Persaud
 C. Niles

Stores

C. Patterson
 P. Moore
 C. Harding
 N. D'Anjou
 M. Freeman
 G. Gasper

Internal Audit

F. Razack
 T. McKenzie

Other Minerals Unit

E. Hopkinson

Accounts

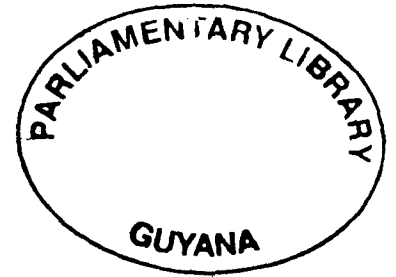
R. Foster
 A. Baird
 M. MacDonald
 L. Murray
 N. Bridgemohan
 C. Roberts
 H. Moore
 P. Warner
 G. France
 M. Meredith
 J. Carter
 S. Persaud
 W. Gray
 K. Nestor
 R. Lacon
 A. Gibbs

Mines

R. Austin
 G. Stuart
 S. Sookraj
 J. Mortley
 C. Matheson
 L. Moore
 W. Woolford
 S. Edwards
 R. Squires
 G. Best
 R. Glasgow
 C. Amos
 D. Persaud
 E. Henry

Lapidary

A. Alli
 G. Holland
 G. Taylor
 D. Baird
 C. Martin
 R. Best



S. Ghanie
 A. Beaton
 S. Montouth
 K. Garnett

Mines Administration

R. Henry	A. Sargeant
K. DeFlorimonte	G. Lord
J. Bascomb	J. Morgan
C. Frank	I. Smith
C. Gaim	L. Butters
A. Austin	H. Ramkhelawan
B. Ramsamujh	W. Alleyne
M. Wilson	M. Persaud
S. Dannett	T. Reid
D. Persaud	M. Persaud
P. Luke	G. Squires
D. Loy	P. Agrippa
S. DeYoung	H. Gilkes
K. Bradford	G. Smith
C. Bradford	D. Garraway
N. Bourne	

3.2 Information and Publication Department

General Review

New Geological Map - 1:1,000,000

Corrections were made to the colour-proof of the new Geological map of Guyana, and it was despatched to the U.N Publications Division in January for reproduction.

In August, 2717 colour-printed copies were received. The name "Konawaruk" as well as the relevant airstrip symbol and river name were found to be mis-located, and an "Errata Slip" was designed for addition to it. The selling price was fixed at \$200.00 per map. By year end 95 maps were sold and 22 issued free.

New Mineral Exploration Map 1:1,000,000

Major corrections to place names were made to the colour proof of the new Mineral Exploration Map and an updated overlay for roads and railways prepared. The corrections were despatched to U.N. Publications in March and in August, 2646 colour-printed copies arrived. They contained the same error as the Geological Map and measures were taken to make corrections by hand in suitable quantities. A selling price of \$150.00 was fixed and by year-end 117 were sold and 15 complimentary copies issued.

Bulletin 38

A significant production target was achieved with the reprinting of the text of 91 pages, the cover of the Bulletin and 36 of the illustrations of "**A Guide to Mineral Exploration in Guyana**". Processes included the redrafting of Figure 3 - which has been reproduced in

colour in the original edition. The Bindery did a good job with the assembly and finishing of the book. By year end 150 copies had been produced and delivered to the Library for sale at \$300.00 each.

Cartography

- a) Twenty seven (27) maps were draughted to illustrate geological project reports:
 - Omai Project (R.G Elliot) - 6 maps
 - Arawakai Pegmatite Investigation (J. Ghansam) - 6 maps and sections.
 - North Rupununi and South Savannah Project (R.G. Elliot) - 6 maps.
 - Aranka Black Pearl Survey (C. Rambali) - 1 map
 - Nine Mile Issano survey (K. Persaud) - 7 maps and diagrams.
 - Flat Rock Area, Cuyuni River (K. Sukhdeo) - 1 map
 - Quarries along Batavia - Oko Road (K. Sukhdeo) 1 map.
- b) Two (2) Block diagrams were re-drawn as illustrations for a cyclo-styled edition of the Potaro Goldfield Bulletin (#3). Revisions were made to sketch maps of Guyana showing structural lineaments, rainfall, mineralization localities etc; for illustrating technical papers.
- c) The aerial photograph stocks were enlarged by 4370 photographs - mostly duplicates of existing stock which had to be assorted and annotated and filed in labeled folders with relevant Index maps.
- d) A number of maps (Approx: 40) to show distribution of Exclusive Permission, Mining Permits, Closed Areas etc., were prepared, and descriptions of plots of land applied for as mining properties were done at the request of the Mines Division.
- e) Illustrations for Roraima Report (Keats) comprising 12 maps were revised and the scales modified for reduction to a more convenient size.

Exhibits and Displays

Artistic talents were applied to productions required by the organization including one item (tickets) for the Sports Club. In February, an appropriate banner was designed and prepared for display at the People's Parade.

In September, several maps were mounted, name tags lettered and a colourful poster painted for a Workshop conducted by Geological Services on the subject - 'Techniques for the Analysis of Geochemical Data for Geological Interpretation'. At a mini exhibition held by the Public Service Union at their Sports Club Complex, the Cartography Unit and Library mounted an exhibition displaying the new Geological and Mineral Exploration maps of Guyana along with selected samples of semi-precious stones and other economic minerals.

Hand-coloured geological 1⁰ Atlas Sheets were also displayed as well as selected literature.

An official Christmas card of attractive design was produced at year-end and a calendar in celebration of the organization's 10th Anniversary in 1989 was designed and processed.

In June, 36 copies of photographs for ID cards of staff members along with 36 cards were delivered to personnel.

Services to the Mining Community

Cartographic Information Services

Throughout the year the Cartographic Unit and Library registered an upsurge of interest and an increased demand for services from individuals and companies engaged in Mining. There were daily visits to the Drawing Office seeking to peruse map coverage and requisition diazo copies of maps, in particular the 1:50,000 topographic sheets. More details about distribution of diazo prints and topographic map sheets are given below.

<u>Diazo Prints:</u>	%	Qty	Jobs	
External	34	1050	285	
Internal	13	400	215	Library
	53	1630		Others
Total	3080	500		

Utilizing 12,475 sq. ft of paper.

Topographic Sheets - 1:50,000

	%	Qty
External	66	495
*Internal	34	260
Total		755

**Mines Division for plotting and monitoring of mining claims*

Library Services

Golden Star Resources Mining Corporation presented a collection of documents and

maps of Anaconda Mines and they were housed in the Library, which also accommodated and offered research facilities to an official from Cominco Mines in June.

A very significant increase in demand for publications became noticeable from June and as shown below, there was an increase in sales during the latter half of the year representing 238% sales in the first half.

	Total Sales	Sales to Overseas
	\$	\$
January to June	20,147.50	396.00
July-December	68,129.00	890.00

NOTE: Monthly sales varied from \$1,575.50 (March) to \$22,461 (Oct).

Partly accounting for the big increase was the availability in the second half of new publications viz:

- i) List of claims in existence Dec. 1987 - 97 sold July - December.
- ii) List of Claims Abandoned 1988-58 sold August - December.
- iii) New Geological Map - 95 sold August-December.
- iv) New Mineral Exploration Map - 117 sold August - December.

There was consistent interest by miners in the newly re-printed Bulletin 38 with an average of 6 copies sold per month compared with 3 copies of other Bulletins.

Printing Production Categories

Several printing processes producing hundreds of thousands of copies were in operation throughout the year. Diazo printing has already been mentioned. Photographic reproduction functions as a support for Cartography on the one hand (changing map scales and making copies of diagrams and aerial photographs) and on the other, as a stage of producing negatives and plates for photo-lithographic processing.

Photo - Lithographic Processing

Output from this process were:-

- i) Maps
- ii) Business Stationery - sheet (forms and book units)
- iii) Technical reports (Publications)
- iv) Cards

The illustrations for Bulletin 38 which were not reproduced the previous year (10 maps out of 36) were printed - 155 prints each.

Business Stationery - (a) Forms

Most forms consist of one sheet but 'Staff Appraisal Forms' and 'EP Application' forms have 8 pages. Varieties of forms were produced on demand to service several categories of operation viz:

- a) Production records, work requisitions, job sheets used in Cartography, the Lapidary and the Service Workshop - 8 varieties.
- b) Leave Application and Staff Appraisal forms (Personnel).
- c) Vouchers, Advance and Reimbursement forms for use in Accounting - 8 varieties.
- d) Administering of Field Section operations: contracts, field allowance, drill records, records of service - 8 varieties.
- e) For sale to claim holders and miners through the Accounts and Mines Division - 5 varieties.
- f) For use in Mining Administration - 10 varieties.
- g) Letterheads, memo forms, vehicle and compliment slips.

Stationery Books

These were also processed to serve various categories of operations:

- i) For sale to miners and claim holders - 2 varieties.
- ii) For use in mining administration - 4 varieties.
- iii) For accounting and stock-keeping - 6 varieties.
- iv) Special receipt/invoice books for Library, Lapidary - 3 varieties.
- v) For use in Chemical Lab. (Spectro-chemical Analysis)
- vi) Requisition and Delivery books (Cartography).
- vii) Books of time sheets (Accounts) - 3 varieties.
- viii) Monitoring Transportation-Log Books

Technical Reports

These were Bulletin 38 and Mineral Resources of Guyana (Booklist).

Cards

1. Filing cards - for maps, claims, files - varieties.
2. Invitation cards - 4 varieties.
- 3) Bin Cards, Stores Ledger Cards.

Litho printing production was much hampered by power blackouts. The printing press was checked in December and the pumps services by a Printing Engineer from Trinidad.

Photo-copying

The "Xerox" photo-copier was relinquished at the end of the hire contract period and a contract entered into with Laparkan for rental of a "Canon" copier capable of producing reduced and enlarged images with effect from 30th May, 1988.

In December, the Canon Copier developed a malfunction and the drum and cleaning unit were replaced.

Revenue Earning (Cash)

Projected Revenue

There are no returns available for income accruing from the sale of Mining Claim forms, "Dredge Operating" books etc. produced and delivered to Accounts and Mines for sale both at headquarters and in the interior. Projections are based on quantities delivered.

	Delivered	
\$36 per "Dredge Operating" book,	(x451)	
80 per "Daily Transaction" book	(x 6)	
\$1.50 per form	(x16,075)	
Projected revenue -		\$16,236.00 (Dredge Op. Books)
		480.00 (Daily Transaction)
		24,112.50 (Forms)

Total		\$40,828.50

Known Revenue

1.	From Diazo printing	\$30,816.00
2.	From Photo-copying	31,707.00
3.	From Sale of maps and reports	<u>88,778.00</u>
	Total	<u>\$192,129.50</u>

Expenditure

Library	
Rental of photo-copier	\$31,109.81
Stationery	31,109.81
Subscriptions to Chronicle Papers	4,355.55
Subscriptions to Official Gazette	2,132.00
Overseas periodical and Newsweek	<u>26,433.33</u>
	<u>\$95,830.69</u>

Cartography/Printing

Only a fractional part of the purchases projected for the year could be purchased because of foreign constraints. One Hundred and Sixty Thousand, Three Hundred and Ninety Four Dollars (\$160,394) worth of supplies were obtained from Brazil.

Problem Areas

The main problem areas were:-

1. Obtaining cartographic and printing supplies
2. Filling of vacancies in senior cartography/printing positions.
3. Inadequacy of stock-keeping expertise and accommodation.

3.3 Services Department

This Department is comprised of:-

- 1) Carpentry and Maintenance Workshop
- 2) Radio and Electronic Workshop
- 3) Mechanic Workshop and Transport

These sections provide common services to the various sections of the Commission including all field projects.

It was required to:-

- 1) Fabricate furniture and mining accessories, build, repair, plant and renovate furniture and buildings.
- 2) Repair and maintain communication equipment, electrical appliances, installation and electronic instruments.

- 3) Repair, rehabilitate and maintain all mechanical equipment and provide transport service in and around Georgetown and interior locations.

Carpentry and Maintenance Workshop

The Carpentry Workshop did extension work to the Mines Division Building during the first two months of the year, also repairs to the roof of the Main Stores were completed. There were minor works done viz; cupboard for Canteen, repairs to desks and a door for the Commissioner Secretary's Office, repairs to the Lapidary's Lunch Room and Guard Huts. Renovation work on the Lapidary building was completed in August. Another major work was started during this year - the extension of the Accounts building.

The Gold Board extension project could not have been completed because of minor constraints viz; the unavailability of cement, however, the section was able to start the foundation work for the building extension, but was subsequently stopped because of heavy rainfall.

A new face lift was given to the Admin. Building (Exterior), also the ceiling of the Drawing Office, roof of the Admin. Building and the Stores were painted. The Lapidary building at West Ruimveldt, Mines Building Extension, lower flat of the Field Section, the gents toilet and stairway of the Administrative Building were painted.

Radio and Electronic Workshop

This section carried out routine and general repairs to lights, fuses and motors within the various sections of the Commission. All the existing radio sets were serviced. Sets were installed in the compound, at Omai and Mid Mazaruni Project. Two freezers and one refrigerator were repaired, and a new water pump was installed.

The section did installation work of fluorescent lamps, points etc, in different sections of the Mines Division Building. Lamps were also installed/replaced in the Chemical Laboratory.

A new air conditioner was purchased and installed in the Boardroom. There were minor repairs in the Thin Laboratory Section and there was a general rewiring of the Lapidary Building in West Ruimveldt.

Mechanic Workshop and Transport

The section functioned satisfactorily during the year, even though spares were not easily attainable to effect the necessary repairs to the vehicles of the Commission. There was general servicing and repairs to vehicles PAA 7707, PCC 1031, PCC 1032, PBB 4918, GBB 9362, GBB 7019 (truck) PCC 7691. The new tray for the truck was acquired and installed. The section carried out various jobs of welding e.g drums etc. Bodywork was done on PCC

1032 and PBB 4918. During the early part of the year vehicles PBB 9993 and GBB 9362 undertook trips to the following locations viz. Berbice, Parika, Essequibo Coast, Bartica, Omai (Ya-Ya), Akaiwana, West Kaburi and Konawaruk. However, vehicle PBB 9993 was unfortunately involved in an accident in April. Repairs were carried out on the Bush Cutter, the Johnson Outboard Engine and a Honda generator. There were a few fabrication jobs done in the workshop e.g the fuel tank for GBB 7019, two jet pumps for the Mid-Mazaruni Project, exhaust silencer, grills for the Assay Laboratory (Gold Board), fifteen grills for the Lapidary Building (West Ruimveldt) and brackets for the Fire Extinguishers. Vehicle PCC 1031 was also involved in an accident in November, and repairs are being carried out to this vehicle and also on vehicle No. PCC 1032. Truck Charters were obtained during the year for officers etc. on various interior projects, also the verification exercise which started late in the year. Within Georgetown, the vehicles PBB 4918, GBB 9362, PCC 7691 were doing most of the routine transporting viz: banking, collecting ice, purchases etc. The truck GBB 7019 did transporting of the heavy items in and around Georgetown e.g removing equipment, etc to the new Lapidary building (West Ruimveldt) and uplifting rice and fuel for the Commission.

4. **FINANCE DIVISION**

Income

The Commission's receipts for 1988 totaled \$14.7 Million which when compared with a budgeted figure of \$18.3 Million gave a negative variance of \$.6 Million. We achieved 80.3% of our projected income.

A summary of receipts as per revenue head is tabled below.

Revenue Head	(\$000's) Budget	(000's) Actual	(000's) Variance	% of Total Income
Fees & Fines	1,435	1,424	(11)	9.7
Licences	1,467	1,418	(49)	9.6
Rent & Royalty	8,784	9,102	318	61.9
Leases & Concessions	1,318	1,240	(78)	8.4
Drilling	3,500	250	(3,250)	1.7
Lapidary Sales (L)	85	157	72	1.1
Lapidary Sales (F)	120	-	(120)	-
Canteen Sales	169	176	7	1.2
Others	1,398	944	(454)	6.4
	18,276	14,711	3,563	100%

From the above it could be seen that the major portion of receipts earned was from Rents and Royalties representing 61.9% of total income.

The graph at **Appendix A** indicated the trend of receipts for the year as compared with budget. Most of the revenue was earned in the month of June, whilst January the least amount of revenue was collected. Receipts averaged \$1.2 Million per month.

No funds were received from Central Government or other agencies to assist in financing any of our field projects.

Receipts for the year 1988 was \$2.1 Million less than the amount earned in 1987 (\$20.4 M).

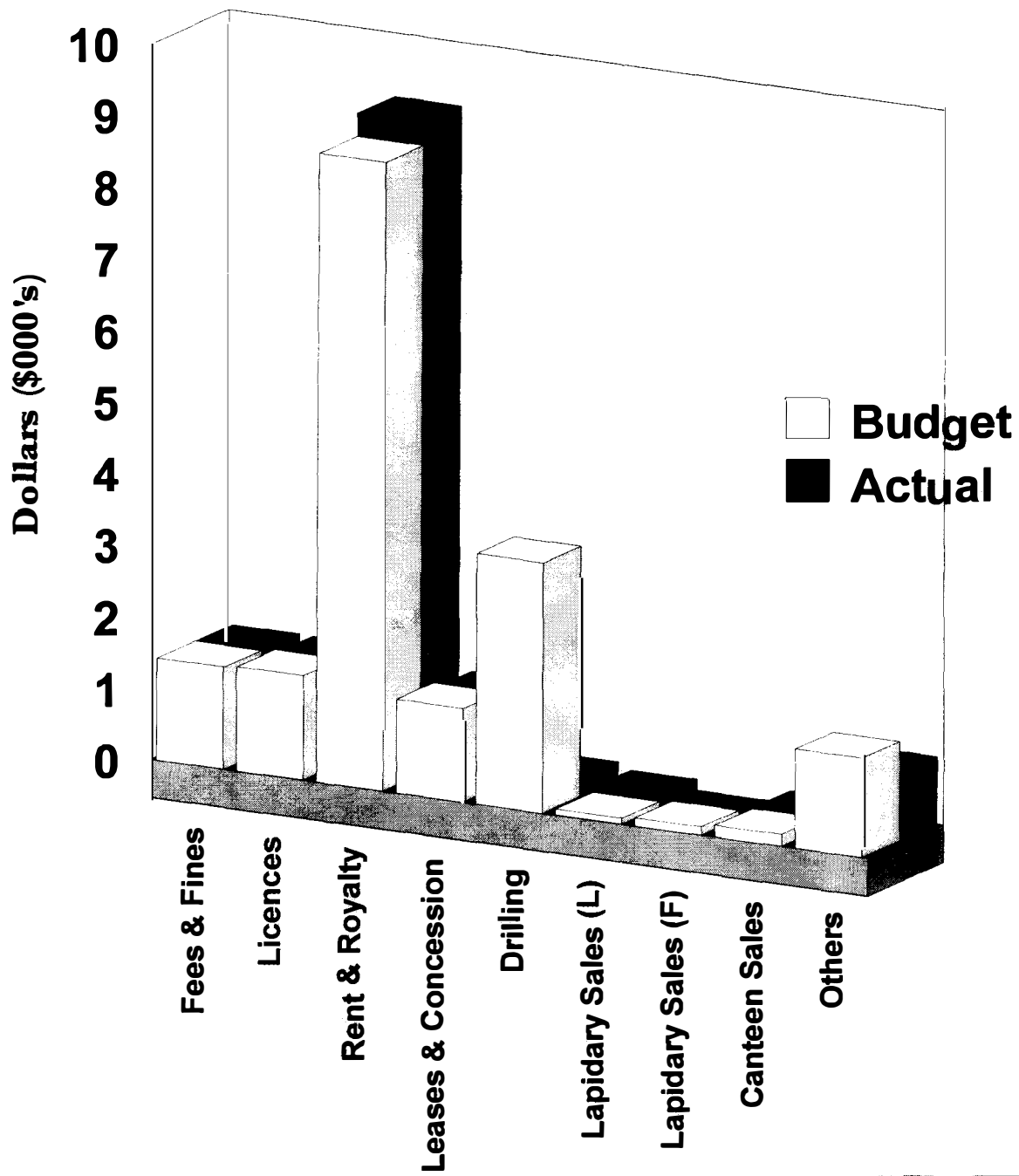
Please note, however, that the figures are unadjusted and that an amount equivalent to G\$1.9 M representing revenue from drilling contracts was deposited into an account controlled by the Bank of Guyana during the month of January, 1989.

Expenditure

The total expenses for 1988 was \$12.7 M which when compared with the budgeted figure of \$14.6 M gave a positive variance of \$1.9 M.

The year's expenditure reflected an increase of \$3.2 M over expenses incurred in 1987. A summary of expenses according to the various expense heads is presented hereunder.

Graph Showing Receipts for the Year against Budget values



Expense Heads	(\$000's) Budget	(\$000's) Actual	(\$000's) Variance	% of Total Expenses
Employment Costs	8,380	7,105	1,275	55.8
Ration & Supplies	773	809	(36)	6.4
Fuel & Lubricants	340	311	29	2.4
Transportation	536	664	(128)	5.3
Maintenance & Repairs	958	1,084	(126)	8.5
Supplies & Services	837	583	254	4.6
Research & Development	75	3	72	-
Diamond Drilling	180	-	180	-
Development, Support & Communication	3	-	3	-
Flatrock	400	-	400	-
Others	2,155	2,171	(16)	17
	14,637	12,730	1,907	100%

The graph at **Appendix B** indicate the trend of the Commission's expenses over the year with the greatest expenditure occurring in July and the least spending in January.

Profitability

The Commission recorded a surplus before depreciation of \$2.0M as against \$3.6M budgeted for the year. The surplus before depreciation for 1987 was \$7.3M.

The surplus for the year 1988 after depreciation was \$1.6M as compared with \$6.9M for 1987.

Creditors

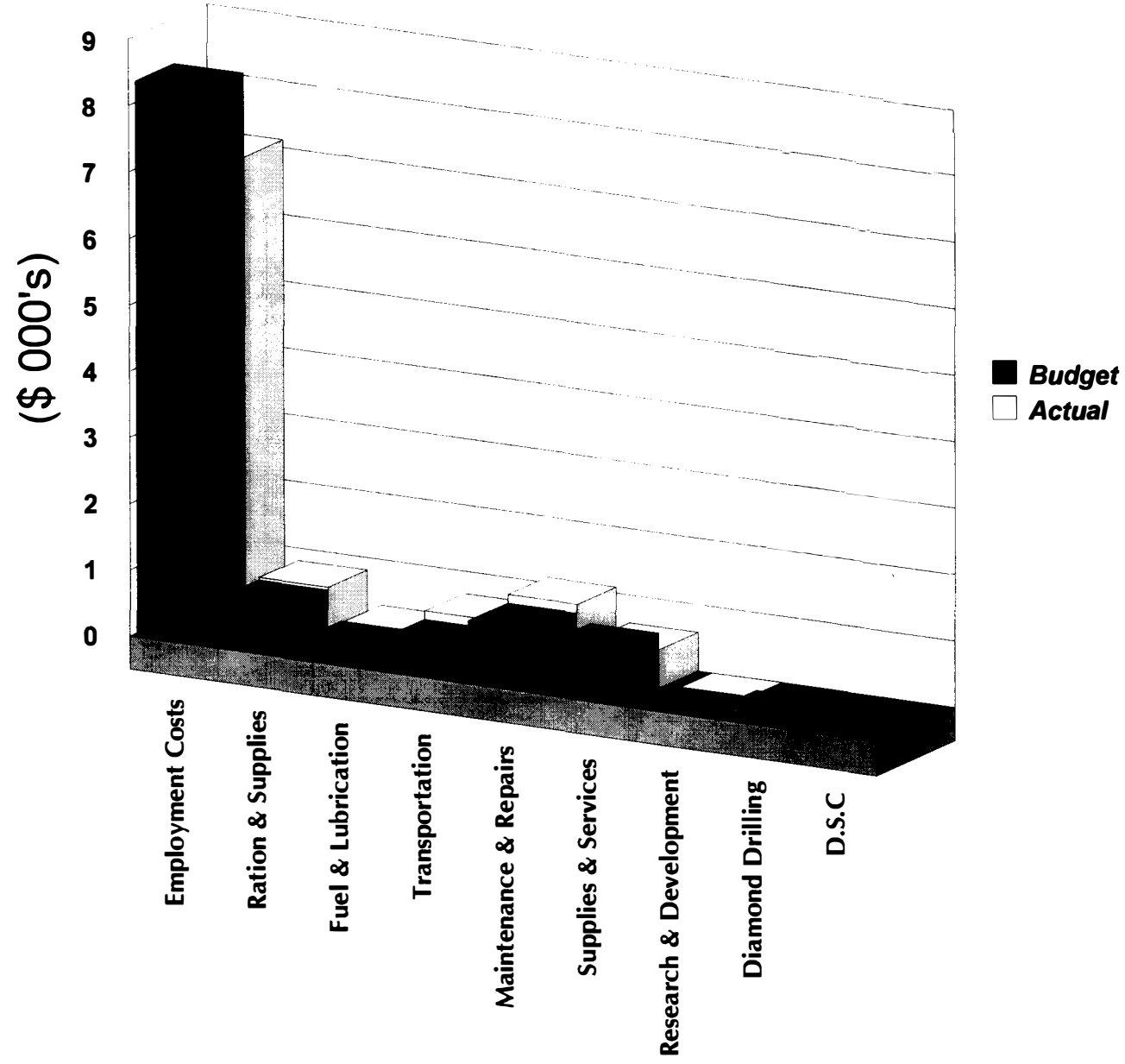
The Commission's accounts showed that at the end of 1988, our creditors amounted to \$1.184 M. The major liabilities were refundable deposits \$0.203M and the Accountant General \$0.970M.

Debtors

The staff debtor balances according to our records at 31st December 1988 totaled \$1.232M. The said balances were aged as follows:-

Appendix B

Graph Showing Expenses for the Year 1988



3 mths and under	Over 3 mths and under 6	Over 6 mths and under 9	Over 9 mths and under 12	Over 12 mths	Totaled
693	177	27	123	212	1,232

Throughout the year the system employed to deal with staff debtors proved to be too slow, not well co-ordinated and led to a build-up of balances in the staff debtor accounts.

Other Debtors

An amount of \$960,757 was outstanding at the end of December in respect of royalties on bauxite, stones, and drilling contracts.

Cash Position

The balance in the Commission's Cash Book at 31st December 1988 was \$3.5M and the balance at bank on the same date was \$3.2M. The balance on the I.D.R.C. Projects Account was \$0.857 at 31st December, 1988.

Investments

The Commission had investments totaling \$4.9M at 31st December 1988. Fixed deposits amounted to \$4.8M and Defense Bonds worth \$100,000 comprised the investment holdings.

Interest accrued to 31st December, 1988 totaled \$663,034.

General

a) *Staffing*

The undermentioned staff vacancies existed at the end of December 1988 which put considerable strain on the present operating staff. However, we were able to meet our deadlines consistently on a monthly basis.

The members of staff were made up as follow:-

Designation	Chart	Actual	Vacancies
Finance Manager	1	1	-
Senior Accountant	1	-	1
Accountant	1	1	-
Conf. Secretary	1	1	-
Asst. Accountant	2	2	-
Snr. Storekeeper	1	-	1
Storekeeper	1	1	-
Asst. Storekeeper	1	1	-
Clerk 1V	1	-	1
Asst. Purchasing Officer	1	0	1
Clerk 111	4	4	-
Expeditors	3	3	-
Clerk 1	1	1	-
Clerk 11	9	4	5
Stores Attendant	1	4	5
Stores Porter	2	1	1
	31	20	11

There were twenty members of the thirty-one positions on the establishment. It is recommended that where necessary, persons should be promoted to fill the existing vacancies or we seek to employ outside personnel to fill these vacancies.

b) Attendance

Attendance on the whole has been satisfactory. However, there are delinquent members of staff whose attendance will be strictly monitored in 1989. Disciplinary action will be enforced if necessary to ensure that they satisfy the required standards of punctuality and attendance for the department.

c) Training

This department's training needs were not adequately met during the year under review. We have one employee attending the Government Technical Institute's Accountancy programme and a few employees benefitted from short courses lasting from two days to one week.

It is recommended that the Commission sponsors more training courses for our accounting personnel to improve the skills within and the image of our division.

d) ***Final Accounts***

The Accounts Department undertook to complete the draft final accounts for the year 1982 to 1987 but failed to accomplish the task. Owing to pressure of routine work the overtime programme was neglected and the draft accounts for 1982 only was completed. However, it is our intention to have the draft final account for the years 1983 - 1988 completed during 1987 for submission to the auditors. A programme has been devised to accomplish same.

e) ***Stores Accounting System***

The division has failed to establish an inventory of the Commission's stores stock during 1988 as planned. However, a programme will be implemented in 1989 to have an inventory of all stores items and to review the entire store accounting system.

f) ***Asset Register***

During 1988, the division was unable to establish and maintain an accurate Asset Register. It is expected however, that such a register will be in place by the end of 1989.

g) ***Stores Services***

During the year 1988 the Stores Department serviced four projects, two expeditions and ten Mining Stations in addition to the normal services provided to the departments.

The main function of receiving and despatching goods was effectively carried out but it is envisaged that in the coming year improvements in the stores accounting system will eliminate some of the inconveniences experienced in 1988.

We were also concerned about the general attitude of field officers in their handling of stock items on loan for field trips. In most instances the officers take an inordinately long time to return the items after the end of their trips and when they do; they return these stock items in very poor condition. The major items of concern are tarpaulin, transistor radios, lanterns, sleeping accessories and cooking utensils.

h) ***Purchasing Department***

The Purchasing Department was mainly responsible for the Purchasing, Customs and Protocol duties of the Commission. This section was responsible for cash transactions amounting to approximately \$2.5M during 1988.

Members of this section showed great initiative to obtain a large quantity of items at very short notices under the prevailing economic conditions.

It was observed however, that some opportunities and time were lost due to the Commission

being unable to provide transportation facilities to the expediter.

It is strongly recommended that the Commission re-assigns a vehicle to the Finance Division for purchasing, customs, protocol and banking duties.



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Republic Of Guyana

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

AG:110/95

20 December 1995

**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 1988**

I have audited the financial statements of the Guyana Geology and Mines Commission for the year ended 31 December 1988 as set out on pages 1 to 13 attached hereto.

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.

As explained in Note 11, fixed assets have been stated in the accounts at a total cost or valuation of G\$6,405,822. No physical verification to determine the existence and condition of these assets was ever done. As a result, the completeness, accuracy and validity of this balance could not be satisfactorily ascertained.

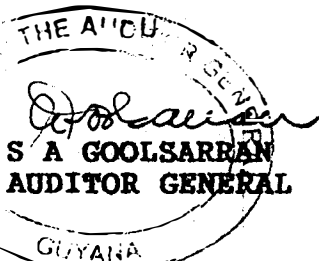
No stock count was carried out at 31 December 1988 and there were no practicable auditing procedures that could have been applied to confirm quantities and values. Further, adequate accounting records in relation to inventories have not been kept. Accordingly, the information and explanations necessary to verify the existence and valuation of inventories stated at G\$511,927 in the balance sheet at 31 December 1988, were not obtained.

A difference of \$466,691 was noted between the sundry debtors balance of \$4,355,363 and the total of the individual debtors' accounts. 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 \$4,355,363 stated as sundry debtors could not be determined.

The completeness, accuracy and validity of the amount of \$4,640,306 stated as sundry creditors could not be determined as a schedule of creditors was not produced and because several pages in the general ledger sundry creditors control account were missing.

Details of the Gaibank Line of Credit were not provided for audit, and there were no practicable alternative audit checks. As a result, the accuracy of the amount of \$1,543,728 stated as Gaibank Line of Credit at 31 December 1988 could not be satisfactorily verified.

Because of the significance of the matters referred to in the preceding paragraphs, I am unable to express an opinion as to whether the financial statements give a true and fair view of the state of the Commission's affairs at 31 December 1988 and the results of its operations for the year then ended.



THE AUDITOR GENERAL
S A GOOLSARRAN
AUDITOR GENERAL
GUYANA

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

1988 FINANCIAL STATEMENT

GUYANA GEOLOGY AND MINES COMMISSION
STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED 31 DECEMBER, 1988

<u>INCOME</u>	<u>NOTES</u>	<u>G\$</u>	<u>1988</u> <u>G\$</u>	<u>G\$</u>	<u>1987</u> <u>G\$</u>
ROYALTIES	2	8,794,541		9,540,899	
LICENCES	3	1,383,259		1,082,852	
FEES, FINES ETC	4	1,230,472		1,475,739	
CONCESSIONS	5	1,240,326		1,844,750	
PROJECT FUNDS	6	336,514		518,405	
OTHERS	7	<u>2,117,127</u>		<u>3,914,798</u>	
			15,102,239		18,377,443
 <u>EXPENDITURE:</u>					
EMPLOYMENT COSTS	8	7,623,201		5,646,412	
ADMINISTRATION	9	5,967,643		4,101,076	
TRAVELLING AND TRANSPORT	10	1,037,949		719,453	
DEPRECIATION		<u>453,365</u>		<u>343,461</u>	
			15,082,158		10,810,402
SURPLUS (DEFICIT):			<u>20,081</u>		<u>7,567,041</u>

STATEMENT OF ACCUMULATED SURPLUS (DEFICIT)

BAL. AT BEGINNING OF YEAR	8,556,975	989,934
SURPLUS (DEFICIT):	<u>20,081</u>	<u>7,567,041</u>
BAL. AT END OF YEAR	<u>8,577,056</u>	<u>8,556,975</u>

GUYANA GEOLOGY AND MINES COMMISSION

BALANCE SHEET AS AT 31 DECEMBER, 1988

	<u>NOTES</u>	<u>G\$</u>	<u>1988</u> <u>G\$</u>	<u>G\$</u>	<u>1987</u> <u>G\$</u>
FIXED ASSETS	11		4,477,056		3,197,188
CURRENT ASSETS:					
INVENTORIES	12	511,927		1,144,218	
SUNDRY DEBTORS	13	4,355,363		2,583,244	
CASH ON HAND AND IN BANK	14	6,381,908		3,982,119	
SHORT TERM INVESTMENT		<u>2,562,989</u>		<u>4,373,670</u>	
		<u>13,812,187</u>		<u>12,083,251</u>	
CURRENT LIABILITIES:					
SUNDRY CREDITORS	15	4,640,306		2,927,184	
DEFERRED INCOME		87,502		95,908	
ACCRUED EXPENSES	16	<u>780,326</u>		<u>905,754</u>	
		<u>5,508,134</u>		<u>3,928,846</u>	
			<u>8,304,053</u>		<u>8,154,405</u>
NET CURRENT ASSETS:			<u>12,781,109</u>		<u>11,351,593</u>
FINANCED BY:					
GOVT. OF GUYANA CAPITAL	17		2,374,825		2,374,825
NON DISTRIBUTABLE CAPITAL RESERVE			285,500		285,500
RESERVE FUND	18		<u>8,577,056</u>		<u>8,556,975</u>
SHAREHOLDERS' FUNDS			11,237,381		11,217,300
GAIBANK LINE OF CREDIT			<u>1,543,728</u>		<u>134,293</u>
			<u>12,781,109</u>		<u>11,351,593</u>


MEMBER


MEMBER

GUYANA GEOLOGY AND MINES COMMISSION

NOTES ON THE ACCOUNTS

1. **ACCOUNTING POLICIES**

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 - \$8,794,541

ROYALTIES:	-	GOLD	7,838,703
	-	BAUXITE	612,798
	-	PRECIOUS STONES	236,738
	-	STONES	58,775
	-	SAND	47,527
			<u>8,794,541</u>

NOTE 3 - LICENCES - \$1,383,259

LICENCES	-	OIL EXPLORATION	0
	-	PROSPECTING	73,631
	-	TRADING	148,000
	-	CLAIMS - P/STONES	22,310
	-	CLAIMS GOLD	28,070
	-	RIVER LOCATIONS	215,400
	-	GOLDSMITH	30,600
	-	DUPLICATE LICENCE	32
	-	DREDGE LICENCES	789,750
	-	MINING PRIVELEGES	75,466
			<u>1,383,259</u>

NOTE 4 - FEES, FINES, ETC - \$1,230,472

801		FEES	107,962
802		FORFEITURES	0
803		TRIBUTES	1,107,850
804		APP. FOR DREDGES	12,060
805		REGISTRATION FEES	1,900
806		TRAN. OF DREDGES	700
			<u>1,230,472</u>

NOTE 5 - CONCESSIONS - \$1,240,326

827	-	MINING CONCESSIONS	110,040
829	-	CON. DREDGING	0
830	-	CON. DUPLICATE	0
831	-	MINING LEASES	13,457
832	-	EXCL. PERMISSION	1,116,829
			<u>1,240,326</u>

NOTE 6 - PROJECT FUNDS - \$336,514

841	-	DICKMAN HILL PROJECT	0
842	-	CONT. FROM EXTERNAL	
		AGENCY (UNDP)	336,514
845	-	SUCTION DREDGE	0
846	-	REFINING OF GOLD	0
850	-	ECLIPSE FALLS	0
			<u>336,514</u>

NOTE 7 - OTHERS - \$2,117,127

826	RENTS HOUSING	0
827	MINING EQUIPMENT	0
828	PROFESSIONAL SERVICES	136,750
834	REGISTRATION CERTIFICATE	20
836	DUTY ON TRANSFERS	18,470
837(a)	SALE OF OFFICIAL PUBLICATION	146,267
838	INTEREST ON INVESTMENT	853,279
839	DISPOSAL OF ASSETS	864
840(b)	VERIFICATION OF CLAIMS	14,555
847	SALE OF LAPIDARY PRODUCT	157,376
871	DRILLING	284,144
873	CANTEEN SALES	177,751
874	SURCHARGE	<u>13,394</u>
		1,802,870
835	MISCELLANEOUS	<u>314,257</u>
		<u>2,117,127</u>

NOTE 8 - EMPLOYMENT COSTS - \$7,623,201

701	-	SALARIES	4,671,579
702	-	WAGES	390,934
703(a)	-	SALARIES OVERTIME	255,491
703(b)	-	COMMUTED OVERTIME	1,100
704	-	WAGES OVERTIME	234,153
705	-	STATION/BUSH ALLOWANCE	91,216
706	-	HOUSE ALLOWANCE	12,000
707	-	DUTY ALLOWANCE	14,780
708	-	SUBSISTENCE & TRAVELLING	351,647
709	-	RISK ALLOWANCE	7,731
710	-	CASH IN LIEU OF LEAVE	7,510
711	-	TRAVELLING ALLOWANCE	8,476
712	-	ENTERTAINMENT ALLOWANCE	6,238
713(a)	-	TELEPHONE ALLOWANCE	0
714	-	PENSION SCHEME	331,892
715	-	N.I.S. EMPLOYERS	91,235
716	-	DIRECTORS EMOLUMENT	14,300
717	-	LEAVE PASSAGE	143,919
718	-	RESPONSIBLE ALLOWANCE	30,340
719	-	ACTING ALLOWANCE	66,242
720	-	UNIFORM AND SAFETY GEARS	179,500
721	-	TRAINING AND EDUCATION	13,645
723	-	GROUP PERSONAL AUDIT	0
724	-	PERSONAL ALLOWANCE	685,229
751	-	BURSARIES	3,000
771	-	GRATUITY AND SEVERANCE PAY	11,044
			<u>7,623,201</u>

NOTE 9 - ADMIN EXPENSES - \$5,967,643

514	-	LOOSE TOOLS & SUNDRY EQUIPMENT	21,215
722	-	LUNCH & SNACKS	102,767
726	-	FUEL LUBRICANTS - VEHICLES ETC.	341,398
727	-	MAINTENANCE OF RADIO & COMM. EQUIP.	1,873
728	-	MAINTENANCE OF ELECTRICAL EQUIP.	121,929
729	-	MAINTENANCE OF VEHICLES	481,702
730	-	MAINTENANCE OF CRAFT	333,727
732	-	HIRE OF EQUIPMENT	22,412
733	-	TELEPHONE, TELEX, CABLES	152,129
734	-	ELECTRICITY	105,295
735	-	RENT OF OFFICE EQUIPMENT	34,230
736	-	MAINTENANCE OF OFFICE EQUIPMENT	80,859
737	-	PRINTING & DUPLICATING	3,458
738	-	MATERIALS & SUPPLIES - DRAWING OFFICE	181,566
739	-	PROFESSIONAL&CONSULTANCY SERVICES	73,840
740	-	AUDIT FEES	100,000
741	-	OFFICE STATIONERY	386,293
742	-	OFFICE PUBLICATION & NOTICE	87,613
743	-	POSTAGE	1,776
744	-	MICRO FILMING	896
745	-	MAINTENANCE & REPAIRS TO BUILDINGS	257,689
746	-	MAINTENANCE OF GROUNDS	102,757
747	-	JANITORY & CLEANING	34,745
748	-	CUSTODIAL SERVICE	7,975
749	-	LEASES, RENTAL & FARES	4,770
750	-	RATES & TAXES	0
752	-	NATIONAL EVENTS	7,914
753	-	COMPENSATION	1,250
754	-	DRUGS & MEDICAL SUPPLIES	117,265
755	-	ASSAY LABORATORY SUPPLIES	245
756	-	CHEMICAL LABORATORY SUPPLIES	2,159
757	-	PET LABORATORY SUPPLIES	990
758	-	LAPIDARY LABORATORY SUPPLIES	38,603
759	-	INSURANCE OF ASSETS	27,659
760	-	BANK CHARGES	2,982
761	-	REVENUE PROTECTION	0
763	-	RATION	878,711
764	-	MISCELLANEOUS - OTHER EXPENSES	832,586
765	-	ROYALTIES	0
766	-	JEWELLERY FOR LAPIDARY	6,045
767	-	ADVERTISEMENT	1,860
768	-	PURCHASE OF SILVER & SEMI P/S	0
769	-	DONATIONS - GIFTS, WREATHS, ETC.	4,540

770	-	MISCELLANEOUS	308,850
772	-	INCENTIVES	0
773	-	EXHIBITIONS & SALES	4,393
774	-	ENTERTAINMENT EXPENSE	64,060
775	-	INTEREST PAID	0
776	-	STORAGE	6,519
777	-	CUSTOMS & EXCISE	0
778	-	FREIGHT & HANDLING	21,959
779	-	LEGAL EXPENSES	325
780	-	STOCK LOSSES & OBSOLENCE	0
781	-	AMMUNITION	3,081
782	-	WELFARE & SUNDRIES	92,817
783	-	REVENUE STAMPS	872
784	-	UN VOLUNTEERS	499,000
790	-	CASH LOSS	0
791	-	LOSS ON FOREIGN EXCHANGE	44
			<u>5,967,643</u>

NOTE 10. - TRANSPORT AND TRAVELLING - \$1,037,949

731	-	OVERSEAS CONFERENCE & VISITS	105,574
725	-	ROAD AIR AND OTHER TRANSPORTATION	<u>932,375</u>
			<u>1,037,949</u>

NOTE 11 - FIXED ASSETS

	LAND & BLDGS.	MOTOR VEHICLES	OFF. FUR. FIX. AND FITTINGS	SCIENTIFIC FIELD AND MINING E/MENT	TOTAL
COST/VALUATION	G\$	G\$	G\$	G\$	G\$
At 1 January, 1988	1,329,944	365,438	461,543	2,515,664	4,672,589
Additions in 1988	175,441	203,488	324,311	1,029,993	1,733,233
Disposals	0	0	0	0	0
At 31 December, 1988	<u>1,505,385</u>	<u>568,926</u>	<u>785,854</u>	<u>3,545,657</u>	<u>6,405,822</u>

DEPRECIATION:

At 1 January, 1988	132,788	278,286	250,819	813,508	1,475,401
Charged for the year	19,472	70,481	53,518	309,894	453,365
Written back on disposal	0	0	0	0	0
At 31 December, 1988	<u>152,260</u>	<u>348,767</u>	<u>304,337</u>	<u>1,123,402</u>	<u>1,928,766</u>

NET BOOK VALUES:

At 31 December, 1988	<u>1,353,125</u>	<u>220,159</u>	<u>481,517</u>	<u>2,422,255</u>	<u>4,477,056</u>
	=====	=====	=====	=====	=====

NOTE 12 - INVENTORIES - \$511,927

603	-	STOCK OF DRILLS	0
608	-	STOCK OF GOLD	1,018
609	-	STOCK OF DIAMONDS	1,685
610	-	STOCK OF SILVER	0
611	-	STORES CONTROL ACCOUNT	<u>509,224</u>
			<u>511,927</u>

NOTE 13 - SUNDRY DEBTORS - \$4,355,363

601	-	SUNDRY DEBTORS CONTROL	4,279,206
602	-	DEPOSITS LODGED	2,880
613(a)	-	ACCOUNTS RECEIVABLE	68,242
613(b)	-	PREPAYMENTS	<u>5,035</u>
			<u>4,355,363</u>

NOTE 14 - CASH ON HAND AND BANK - \$6,381,908

605	BANK BALANCE (CASH)	5,363,351
606	PETTY CASH IMPREST	(31,051)
607(a)	SUB IMPREST A/C 212006199	40,557
	SUB IMPREST A/C 212007000	10,997
	SUB IMPREST A/C 212007001	39,982
	SUB IMPREST A/C 212005758	54,397
	SUB IMPREST A/C 203005024	98,158
	SUB IMPREST A/C 212006198	6,453
	SUB IMPREST A/C 203005125	(23,512)
607(b)	STAMP IMPREST	(3,749)
607(b)	STAMP IMPREST (CASHIER)	(264)
607(c)	ICE IMPREST	(1,663)
614	CANTEEN IMPREST	100
615	IDRC BANK ACCOUNT	<u>828,152</u>
		<u>6,381,908</u>

NOTE 15 - SUNDRY CREDITORS - \$4,640,306

401	-	SUNDRY CREDITORS CONTROL	3,562,320
	-	PROVISION FOR AUDITING	548,336
432	-	REFUNDABLE DEPOSIT	529,650
			<u>4,640,306</u>

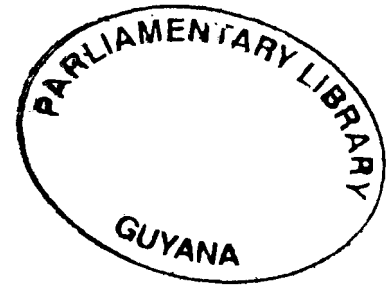
NOTE 16 - ACCRUED EXPENSES - \$780,326

402	-	ACCRUED SALARIES	(109,319)
403	-	ACCRUED WAGES	6,198
404	-	OTHER ACCRUED EXPENSES	75,369
405(a)	-	PAYE	82,986
405(b)	-	N.D.S.	(6,612)
406(a)	-	SALARIES PAYABLE	490,775
407	-	N.I.S PAYABLE	74,335
408	-	WAGES PAYABLE	(2,421)
409	-	LIFE INSURANCE	11,618
410(a)	-	DEPENDANTS FUND PAYABLE	2,393
410(b)	-	DEPENDANTS FUND MORTGAGE	(413)
411	-	PENSION FUND PAYABLE	53,945
412	-	UNION DUES	(5,170)
413	-	P.S.U. CREDIT UNION	21,906
414	-	RENT DUE AND PAYABLE	(159)
416	-	MORTGAGE FINANCE PAYABLE	825
417	-	MAGISTRATE COURT	0
418	-	DIRECTORS FEE	100
419	-	MISCELLANEOUS	2,436
420	-	GNCB TRUST MORTGAGE	300
421	-	ACTING ALLOWANCE	0
423	-	RISK ALLOWANCE	0
426	-	RESPONSIBLE ALLOWANCE	0
427	-	SUB. & TRAVELLING	3,594
428	-	HOUSE ALLOWANCE	0
429	-	PERSONAL ALLOWANCE	0
430	-	SPORTS CLUB	498
431	-	D.I.A. PAYABLE	63,476
433	-	WITHHOLDING TAX	13,666
			<u>780,326</u>

NOTE 17 - 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	<u>235,519</u>	<u>235,519</u>
	<u>2,374,825</u>	<u>2,374,825</u>



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 18 - 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.