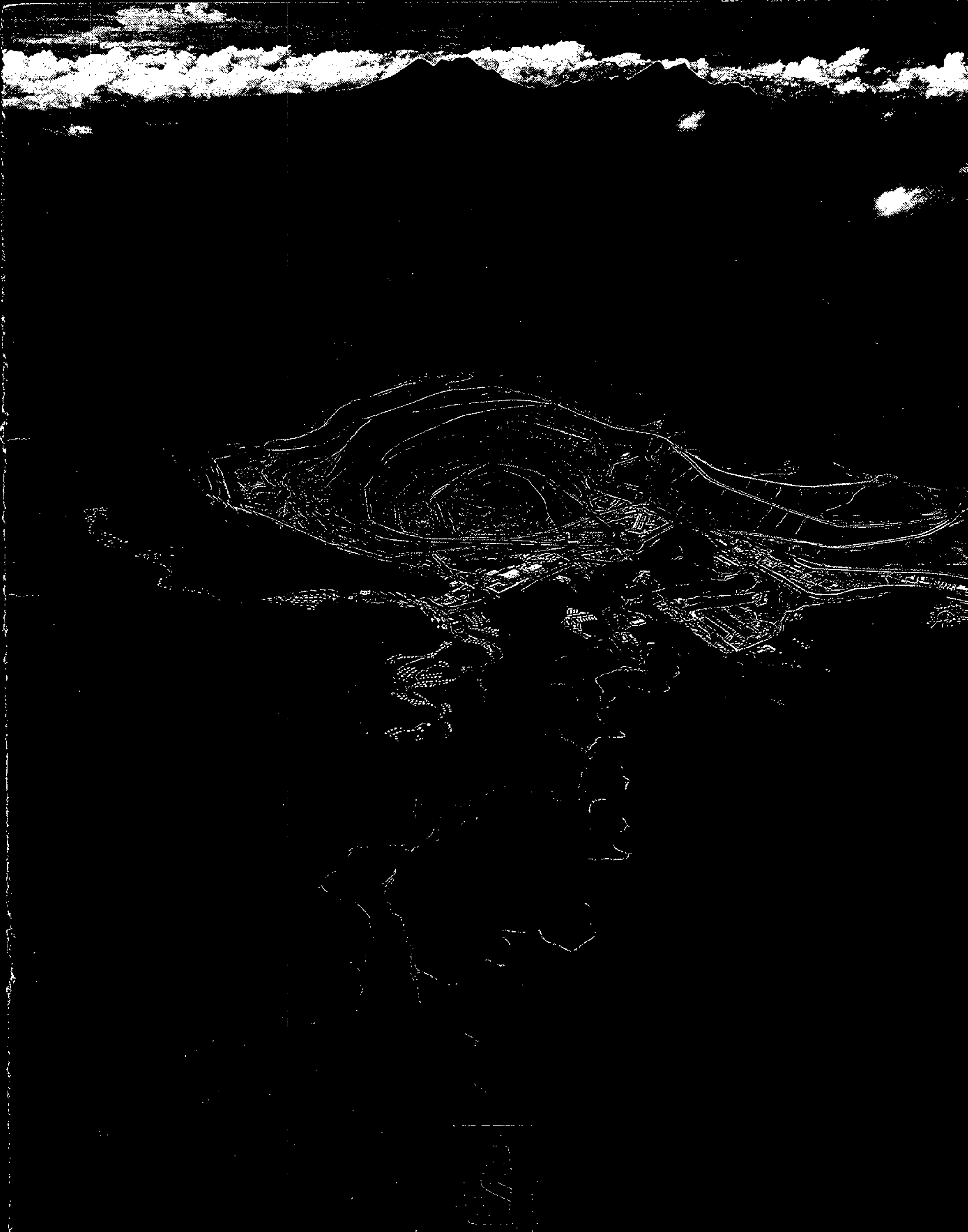


Bougainville Copper Limited Annual Report 1983

Bougainville Copper Limited

D/1280

1983 Annual Report

Notice of Meeting

The Annual General Meeting of Bougainville Copper Limited will be held at 10.00 a.m. on Wednesday, 18th April, 1984 in the Panguna Cinema, North Solomons Province, Papua New Guinea.

A separate Notice of Meeting is enclosed. All shareholders are cordially invited to attend.

Directors

D. C. Vernon (Chairman)
Sir Frank Espie, O.B.E.
R. H. Harding
P. W. Quodling
J. T. Ralph
W. D. Searson

Officers

P. W. Quodling
(Managing Director)
J. L. Auna
(Executive Manager – Personnel)
R. J. Cornelius
(Executive Manager – Concentrator)
J. B. Holt
(Executive Manager – Mine)
V. P. McCartin
(Executive Manager – Support Services)
R. N. Prideaux
(Executive Manager – Commercial)
J. M. Tynan
(Executive Manager – Technical Services)
A. W. Patterson
(Secretary)

Contents

Bougainville Copper Limited operates a large open pit mine and processing facility at Panguna on the Island of Bougainville in the North Solomons Province of Papua New Guinea. It produces concentrate containing copper, gold and silver which is sold primarily under long term contracts to smelters in Asia and Europe.

During 1983 the Company mined 81.0 million tonnes of material. Of this, 47.7 million tonnes of ore was treated to produce 636 932 tonnes of copper concentrate. This concentrate contained 183 191 tonnes of copper, 18 002 kilograms of gold and 47 414 kilograms of silver and had a gross sales value of K454.6 million (of which copper and gold contributed 52% and 46% respectively).

The mine commenced commercial production in 1972 and since start up has produced concentrate containing 2.1 million tonnes of copper, 223 222 kilograms of gold and 523 692 kilograms of silver. This production had a value of K3.1 billion which represents over 50% of the country's exports over that period. During this time contributions to the Government in the form of dividends, taxes and royalties totalled K623 million which represents approximately 18% of internally generated Government revenue. Further, the Company's presence on Bougainville Island has promoted the development of significant local business enterprises to provide goods and services required for the mining operation and for the island's residents.

The Company makes a substantial contribution to the country's workforce as it employs approximately 3800 persons, of whom 80% are Papua New Guinea citizens. Company training programmes have resulted in considerable progress in the localisation of the Company's employees and have significantly added to the number of skilled workers to the Papua New Guinea workforce.

The mine is located about 600 metres above sea level in rugged terrain. Equipment and processes used in the production of concentrate follow conventional lines, although the operation is unusual in the very large tonnage of material treated. This is necessary because of the low grade of the deposit. The end product, copper concentrate, is pumped 27 kilometres through a 15 centimetre diameter pipeline from the mine site to the Company's port at Anewa Bay.

Bougainville Copper Limited is owned 53.6% by CRA Limited. The Papua New Guinea Government and its nominee The Investment Corporation of Papua New Guinea own 20.2% while the remaining 26.2% of the share capital is held by public shareholders.

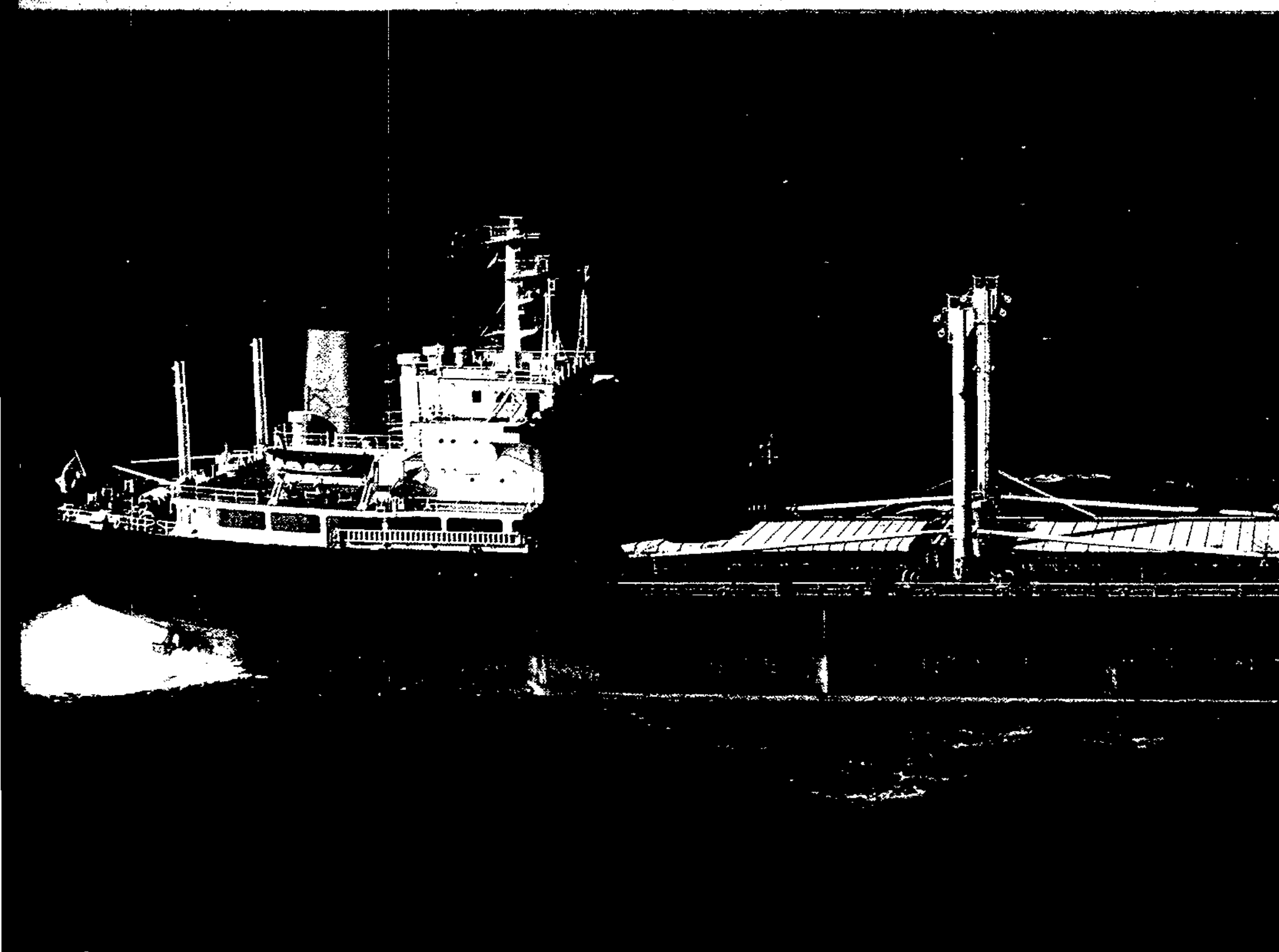
Bougainville Copper Limited
(Incorporated in Papua New Guinea)
Registered Office:
Panguna, Province of North Solomons, Papua New Guinea.
Principal Registered Office in Australia:
55 Collins Street, Melbourne.
Telephone (03) 658 3333.
Share Registers:
Victoria: 84 Flinders Lane, Melbourne.
Telephone (03) 654 4899.
A.C.T.: Level 4, 24 Marcus Clarke Street, Canberra City.
P.N.G.: Panguna, Province of North Solomons.
United Kingdom: c/o Central Registration Limited, 1 Redcliff Street, Bristol.

Stock Exchanges:
Listed on the principal exchanges in all Australian states and New Zealand.
Auditors:
Coopers & Lybrand.
Bankers:
Bank of America NT & SA.
Commonwealth Trading Bank of Australia.
Papua New Guinea Banking Corporation.
Solicitors:
Arthur Robinson & Co.
Gadens.

Year in Brief

		1983	1982
Concentrate production	(tonnes)	636 932	598 634
containing copper	(tonnes)	183 191	170 004
gold	(kilograms)	18 002	17 528
silver	(kilograms)	47 414	43 153
Net sales revenue	(K'000)	389 870	281 217
Net earnings after tax	(K'000)	54 660	11 210
Earnings per share	(toea)	13.6	2.8
Shareholders' funds	(K'000)	590 944	588 422
Return on shareholders' funds	(per cent)	9.3	1.9
Gross dividends	(K'000)	52 138	10 027
per one kina share	(toea)	13.0	2.5
Depreciation	(K'000)	47 024	44 211
Government royalties	(K'000)	4 738	3 522
Taxation	(K'000)	46 963	17 261
Number of employees at 31 December		3 809	3 930

Concentrate vessel Bougainville Maru arriving at Anewa Bay, Bougainville.



January:
First month to exceed 4 million tonnes ore milled.

February:
Crew 3 in crusher operations passed 11 years with no lost time accidents. Gold price reached peak for year of US$510/oz.

March:
Kina devalued following devaluation of Australian dollar.

April:
Mainframe computer upgraded to improve speed and capacity.

May:
Copper price reached peak for year of US82c/lb.

June:
Half yearly earnings were K32.8 million. Interim dividend of 5 t/share declared.

July:
Largest single concentrate shipment of 37 637 dry metric tonnes sent to Europe. Record monthly tonnage of 98 551 dry metric tonnes was shipped.

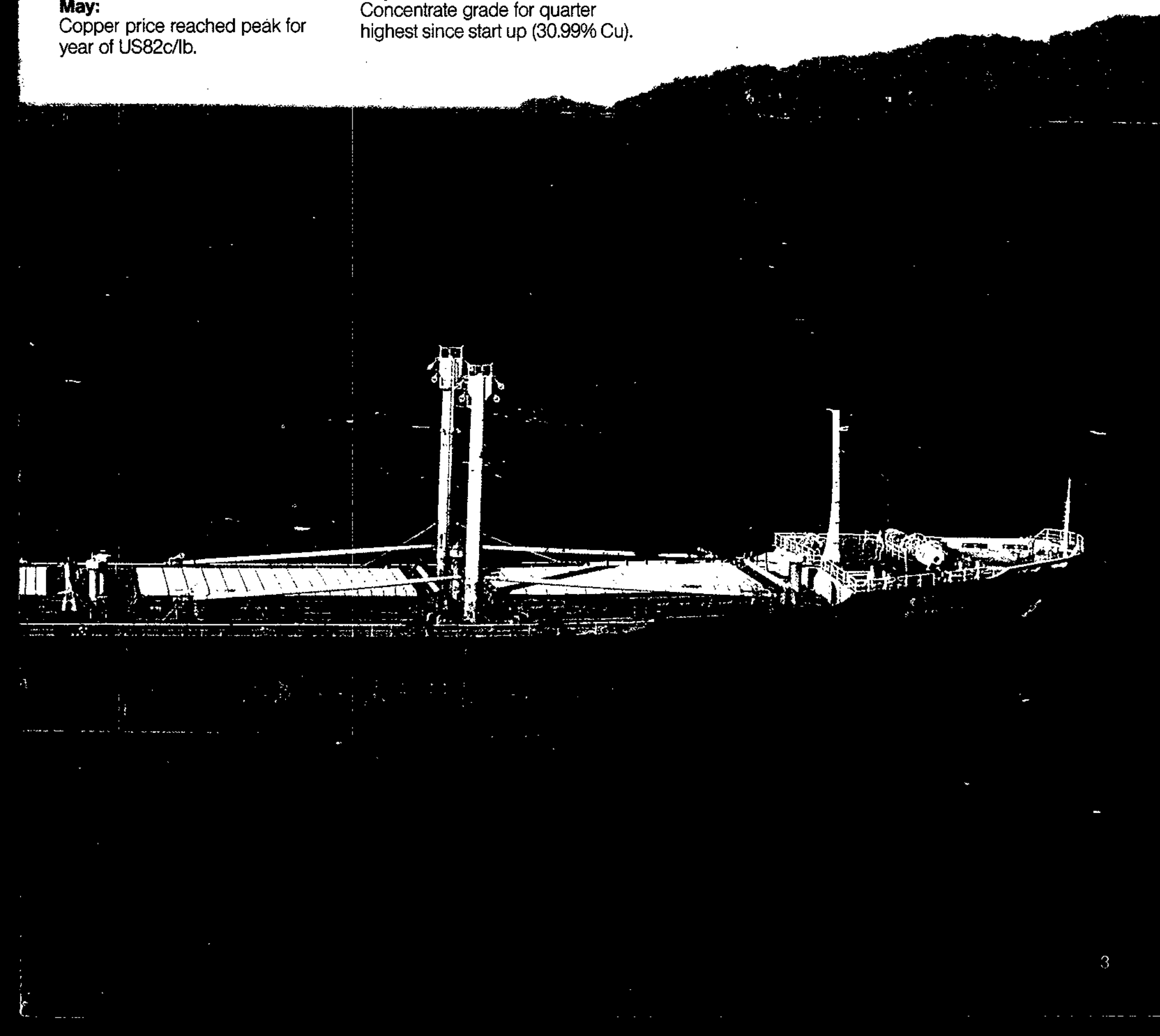
August:
Government announced 1.5% cut in company tax and 2% increase in dividend withholding tax.

September:
Concentrate grade for quarter highest since start up (30.99% Cu).

October:
Gold price fell below US$400 level.

November:
Lime Purchase Agreement signed with Bougainville Limestone Mining Pty. Ltd. Tailings water reclamation scheme approved.

December:
Production for year was 636 932 tonnes of copper concentrate. Average copper price for year of US72c/lb. Net earnings for the year were K54.6 million.



D. C. Vernon,
Chairman.

Chairman's Statement

The Company's net earnings for 1983 were K54.6 million an increase of K43.4 million over the 1982 year. While this represents an encouraging result when the copper industry is operating at depressed levels, the return on shareholders' funds of 9.3% remains inadequate.

The past year has seen the western economies emerging from the most severe recession since the Great Depression of the 1930's. The recovery commenced in the consumer goods sector and housing industry in the United States of America but to date has resulted in only slow growth in those areas of capital goods where copper is used more intensively. Consequently world copper inventory levels remain high. The average copper price for 1983 was US72c/lb compared with US67c/lb for 1982, but averaged only US64c/lb for December. Any significant improvement in the copper price is dependent upon increased demand or further reductions in the world's copper supply with a consequent reduction in inventory levels.

The commissioning of the eleventh and twelfth ball mills during 1982 made a significant impact on the earnings for 1983. Milling capacity increased to 130 000 tonnes per day with a resultant improvement in copper production. This expansion in capacity will assist in partially offsetting the effect of declining ore grades over the coming years.

The subject of the feature article in this annual report is "Declining Ore Grades". This characteristic of the Panguna deposit has been referred to in annual reports from time to time and it is hoped this article will provide a better understanding of why ore grades will decline and what measures are being taken to offset this decline. Careful planning will be required to ensure that copper production levels are maintained to fulfil long term sales agreements, allow a flexible marketing strategy and secure the economic viability of the operation.

During the year the Company has continued its drive to contain costs with the result that only a modest increase in the unit cost of concentrate produced has occurred. In times when the development of large scale low grade deposits is being deferred and other operations have ceased production, Bougainville Copper Limited has established itself as an efficient cost competitive operation.

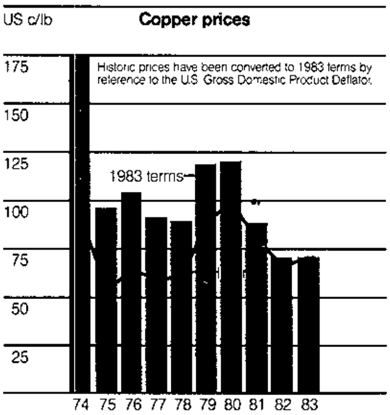
On 8th March, 1983, the kina was devalued by 5.5% against a weighted average of currencies in response to a devaluation of the Australian dollar. As all sales proceeds are receivable in US dollars the devaluation resulted in increases in sales revenue. The beneficial impact of the devaluation was partly eroded by increases in some operating costs, interest, and exchange losses on borrowings.

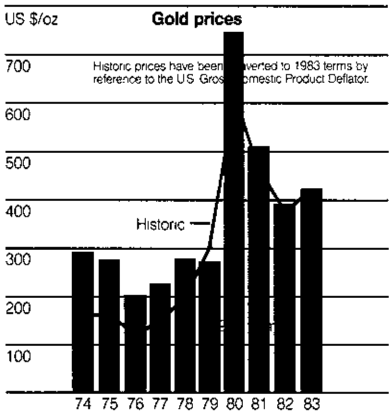
The improvement in cash flows has enabled a net reduction of US$93.5 million in loans over the year. With the sensitivity of cash flows to metal prices the US$225 million Revolving Credit Facilities and US$90 million Standby Facilities provide the required flexibility within the Company's financing reserve.

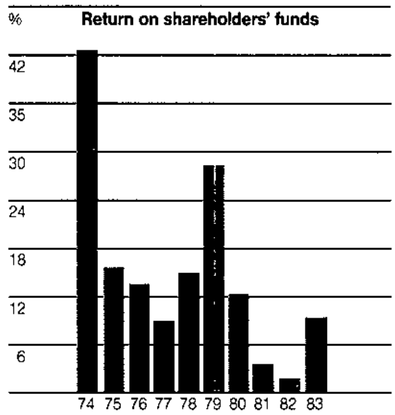
The Company paid an interim dividend in November of five toea per share. The Directors have declared a final dividend of eight toea per one kina share. The total dividend of thirteen toea per share represents approximately 95% of the Company's net earnings for 1983.

The outlook for 1984 remains uncertain. The coupling of increases in supply with low demand levels provides little prospect for a substantial improvement in copper prices. In addition, copper is coming under an increasing challenge from fibre optics, aluminium and a trend towards minimising raw material use in manufacturing. To maintain the momentum of the economic recovery it will be necessary for increased capital investment to occur during 1984. This may result in some increased demand for copper. However, the current large world stocks must be reduced substantially before any durable price increases can be expected. Gold will remain a significant contributor to the Company's earnings. It will again be necessary during 1984 for the Company to continue its drive to contain costs to remain competitive in world markets. The economic advantages of large scale operation places the Company in a position to take full advantage of any upturn in metal prices.

During 1983 the economy of Papua New Guinea was under continuing pressure with the prices of major export commodities remaining depressed. Consumption







and investment expenditure, apart from the development of the Ok Tedi mine, were at low levels.

In June a new Australian Aid Agreement was announced under which Papua New Guinea will receive an additional K45 million to the end of the 1985/86 fiscal year. This new agreement ties the level of aid to the contributions Bougainville Copper makes to the Papua New Guinea economy.

In August the Government announced a series of measures designed to provide mild stimulus to the private sector. These measures included a reduction in the corporate income tax rate from 36½% to 35% in respect of income derived on or after 1st January, 1983 and an increase in the rate of dividend withholding tax from 15% to 17% from 8th August, 1983.

As a means of stimulating the economy within the North Solomons Province, the Company has been looking for opportunities to assist the development of new business ventures which provide a basis for local participation, and which are economically attractive. It is hoped such ventures will be of long-term benefit to the Province and Papua New Guinea, and will also develop business expertise and confidence in the community.

One such venture, Bougainville Limestone Mining Pty Ltd, was formed with Bougainville Development Corporation (a provincial Government-owned organisation) and the local landowners as majority shareholders. Bougainville Limestone's mine at Manetai together with its K4 million treatment plant will provide all of Bougainville Copper Limited's requirements for hydrated lime as a flotation reagent. Operation should commence in the latter part of 1984. This plant will provide an import replacement of approximately K1.3 million per annum at current price levels.

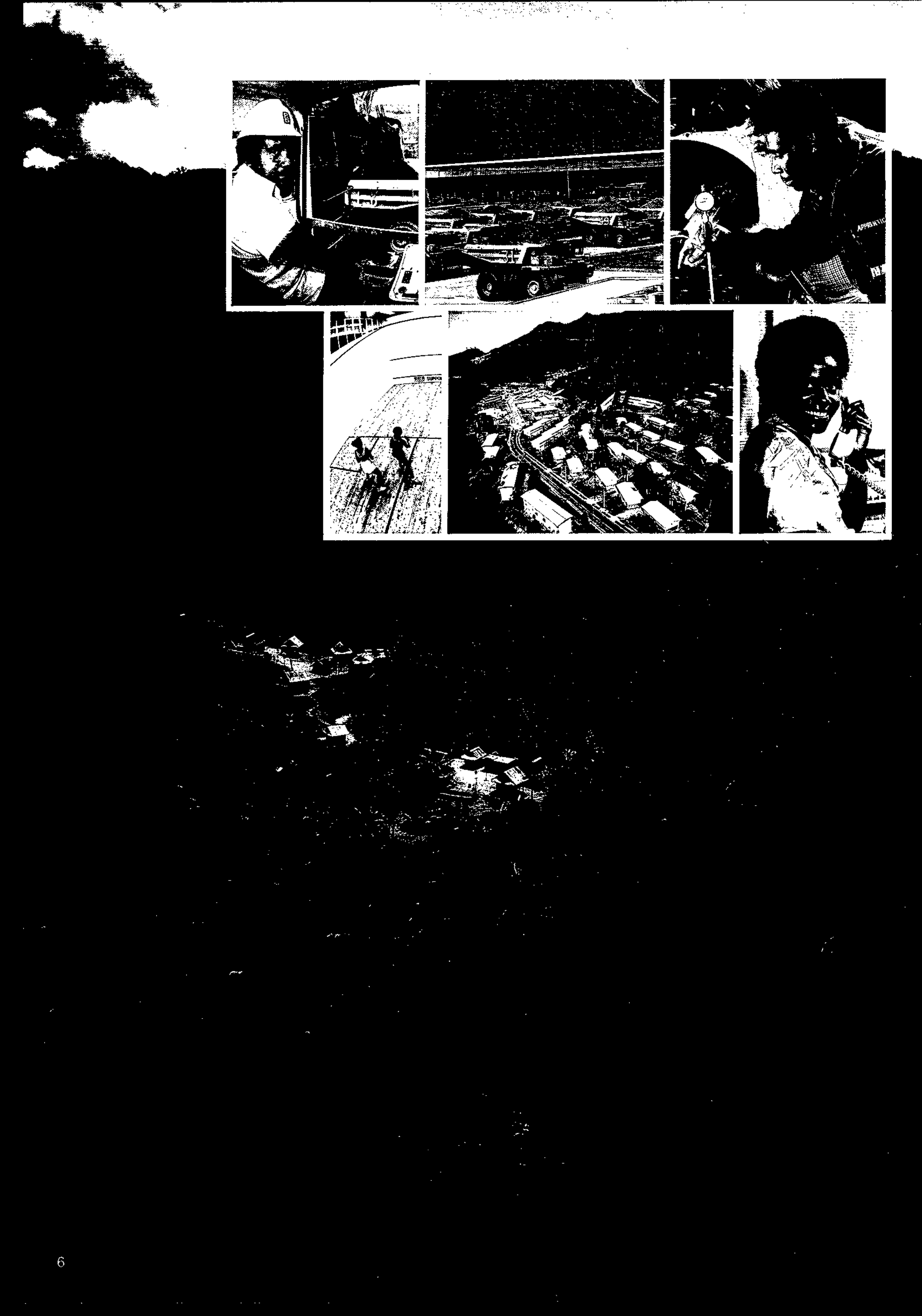
The hydro-electric potential of the Laluai River presents another potential venture, in which the Company is joining with the National and Provincial Governments and Bougainville Development Corporation to sponsor a pre-feasibility study. This six-month study in 1984 will examine a range of options including the present concept of a run-of-river scheme with a small dam on the Laluai about 25 kilometres south-east of the mine, together with a tunnel and power station near the coast. Peak capacity may be about 80 megawatts. Bougainville Copper Limited would take all power produced, reducing the need to produce relatively expensive power in its oil-fired thermal station.

Both the National and Provincial Governments recognise the desirability of further exploration in order to quantify the potential of the island's mineral resources. Furthermore, the attitudes of landowners to development are taking a more positive direction. However, differences still occur in the aspirations of the respective parties for their share of benefits. Resolution of these differences is a pre-requisite to the Company undertaking further exploration outside the special mining lease.

Mr N. R. Agonia retired from the Board during the year. He served as an alternate Director from 1975 to 1977 and as Government nominee on the Board from 1977 to 1983. During this period he made a significant contribution to the successful operation of the Company. His position on the Board has been filled by Mr W. D. Searson, who succeeded Mr Agonia as Secretary for the Department of Minerals and Energy.

1983 has been a year of recovery. The results that have been achieved are due in no small part to the continued support and enthusiasm of our employees. The Directors express their thanks to all Company employees for their efforts over the past year.

D. C. Vernon
Chairman
23rd February, 1984.



P. W. Quodling, Managing Director.

Review of Operations

Production:

Production statistics were as follows:

	Year Ended 31/12/83	Year Ended 31/12/82
Material mined (millions of tonnes)		
Ore	47.7	41.7
Waste	33.3	34.5
Waste/Ore ratio	0.70/1	0.83/1
Ore grade		
Copper (per cent)	0.46	0.47
Gold (grams/tonne)	0.55	0.60
Silver (grams/tonne)	1.42	1.48
Concentrate produced (dry tonnes)	636 932	598 634
Concentrate grade		
Copper (per cent)	28.8	28.4
Gold (grams/tonne)	28.3	29.3
Silver (grams/tonne)	74.4	72.1
Contained metal in concentrate		
Copper (tonnes)	183 191	170 004
Gold (kilograms)	18 002	17 528
Silver (kilograms)	47 414	43 153

Mine:

A total of 47.7 million tonnes of ore and 33.3 million tonnes of waste was mined during the year. Grades declined marginally with the copper headgrade being 0.46% and the gold headgrade being 0.55 grams/tonne. A more significant decline is anticipated in 1984.

Ore production was greater than in 1982. However, the required waste stripping ratio to maintain ore availability was less than in 1982 so that total mine production remained within the capacity of the current mining equipment fleet.

Ore production was mainly from the lower benches with minor amounts from the upper benches on the north-eastern and southern walls of the pit. In 1984, ore production will be split equally between the upper benches on the northern wall and the bottom of the pit, with a minor amount being mined from the upper benches on the south wall.

Waste stripping in 1983 was from the upper benches of the north-eastern and southern sides of the pit. Stripping in this area will be completed in 1984 and stripping will then recommence on the eastern side.

The high levels of availability and performance of major mining equipment were maintained during the year.

Concreting of the floor of the pit gravity drainage tunnel is in progress. Problems were encountered with the initial methods to vertically connect the tunnel with the pit floor. These were due to the unpredictable poor ground conditions. After a review of methods available, shaft drilling of these connections is now in progress.

Concentrator:

The Concentrator processed a record 47.7 million tonnes of ore compared with 41.7 million tonnes in 1982 following the commissioning of the eleventh and twelfth ball mills.

Concentrate production for 1983 at 636 932 tonnes containing 183 191 tonnes of copper, 18 002 kilograms of gold and 47 414 kilograms of silver was higher than for 1982 due to the increased throughput. This high level of concentrate production is not expected to be maintained in future because of the planned decline in the grade of the ore to be treated.

The cleaner flotation upgrade works, commenced in 1982, were satisfactorily commissioned during the first half of 1983. Metallurgical performance has improved and it is expected that acceptably high concentrate grades will be able to be maintained in future despite the adverse influence of the declining ore grades. To some extent this decline in ore grade will be offset by an additional ball mill (No. 13) which is to be installed in 1985.

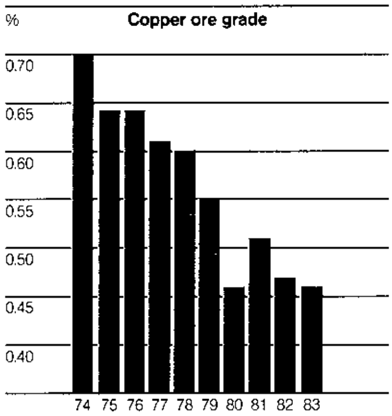
Work has commenced on providing a facility to reclaim a major portion of the process water currently discarded with the flotation tailings. This undertaking which involves the installation of four 24.5 metre diameter high capacity thickeners is expected to be commissioned by the second half of 1985. It will overcome water shortages, reduce water supply costs and assure water availability for possible future expansions.

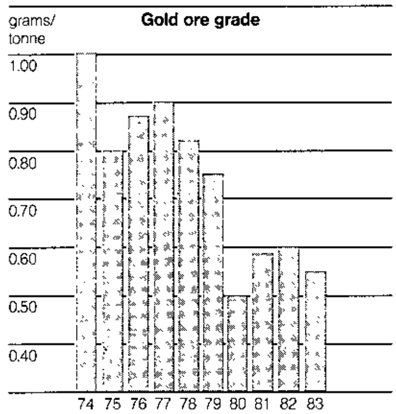
Infrastructure:

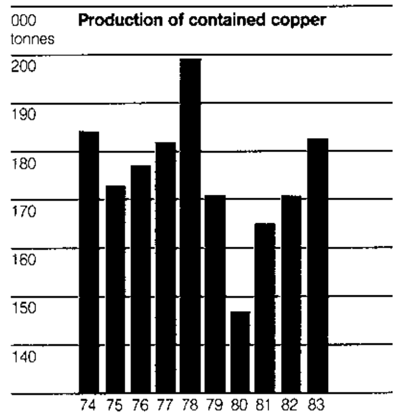
The two industrial gas turbines installed in 1982 were commissioned early in the year and have been used to prevent production loss during maintenance on the steam turbines. Power system load peaks have exceeded 128 megawatts during the year.

Construction commenced on additional housing and the Concentrator laboratory and office facilities were upgraded. Work on the effect of tailings disposal on the river system continued and included the diversion of Kuneka Creek along the lease boundaries.

The Company's mainframe computer was upgraded to take advantage of new technology and to accommodate additional load as data processing systems were further developed. Plans were also completed to improve the standard of the building in which the computer installation is located.







A decision was made to build a new single men's mess facility at Loloho as the first stage of a complete rebuild of this complex. Design for the accommodation units is well advanced and construction is planned to start in 1984. On completion the 900 man camp will have a minimum life of twenty years. Advantage is being taken of the natural character of the Loloho area in the designs.

A major occupational health programme was implemented in 1983. As part of this programme 15% of the workforce was given a comprehensive medical examination. The programme will be continued and it is intended that 100% of personnel will be examined in a two year period.

The health examination was done in conjunction with a plant occupational hygiene survey conducted by the Concentrator environmental group. Bougainville Copper Limited is the first company in Papua New Guinea to undertake such a comprehensive study.

The incidence of crime in the community has been significantly lower than the national average for urban centres and this is attributed to the continued use of the Company's mobile patrols together with the use of the Police mobile squads, when trends indicate an increase in incidents.

Operating Costs:

Total operating costs were 9.9% higher than in 1982. Contributing factors were a 14% increase in ore milled, increased price levels and increased maintenance due to the deferral programme in 1981 and 1982.

Fuel is now the largest single cost item accounting for 26% of total operating costs. Labour cost increases were offset by a reduction in manning levels.

The unit cost of concentrate produced increased by 5%.

Marketing:

Sales during 1983 totalled 636 051 dry tonnes of concentrate containing 182 474 tonnes of copper, 17 908 kilograms of gold and 47 277 kilograms of silver. This was the highest level of sales since 1978 and reflects the increased production from the eleventh and twelfth ball mills commissioned in 1982. Concentrate was delivered under long term contracts to buyers in Japan, West Germany and Spain. In addition a number of shipments were made to buyers in China and South Korea.

Despite the depressed state of the copper metal market, demand for the Company's concentrate remains high. Not only is it a favoured product with smelters, but also there has been a serious shortage of concentrate as distinct from metal. The major causes were buyer concern to secure material for 1984 and 1985 in the face of new smelters and smelter expansions, and mine production cutbacks and closures particularly in North America.

Under the influence of an improvement in economic activity in the United States the copper price slowly strengthened in the first half of 1983. Having commenced the year at US68c/lb the price peaked at US82c/lb in May. Prices then traded in the US70c-80c/lb range until September. They then fell sharply to the year's low of US61c/lb in November. High stocks and high levels of refined production are depressing the market. The annual average price in 1983 was US72c/lb, compared with US67c/lb in 1982.

During 1983 gold and silver prices were largely influenced by increased production, falling rates of inflation and lower interest rates. These factors combined to reduce investment demand for both gold and silver. This in turn has had a depressing influence on prices. Political and economic crises appear not to have the impact on prices they once had.

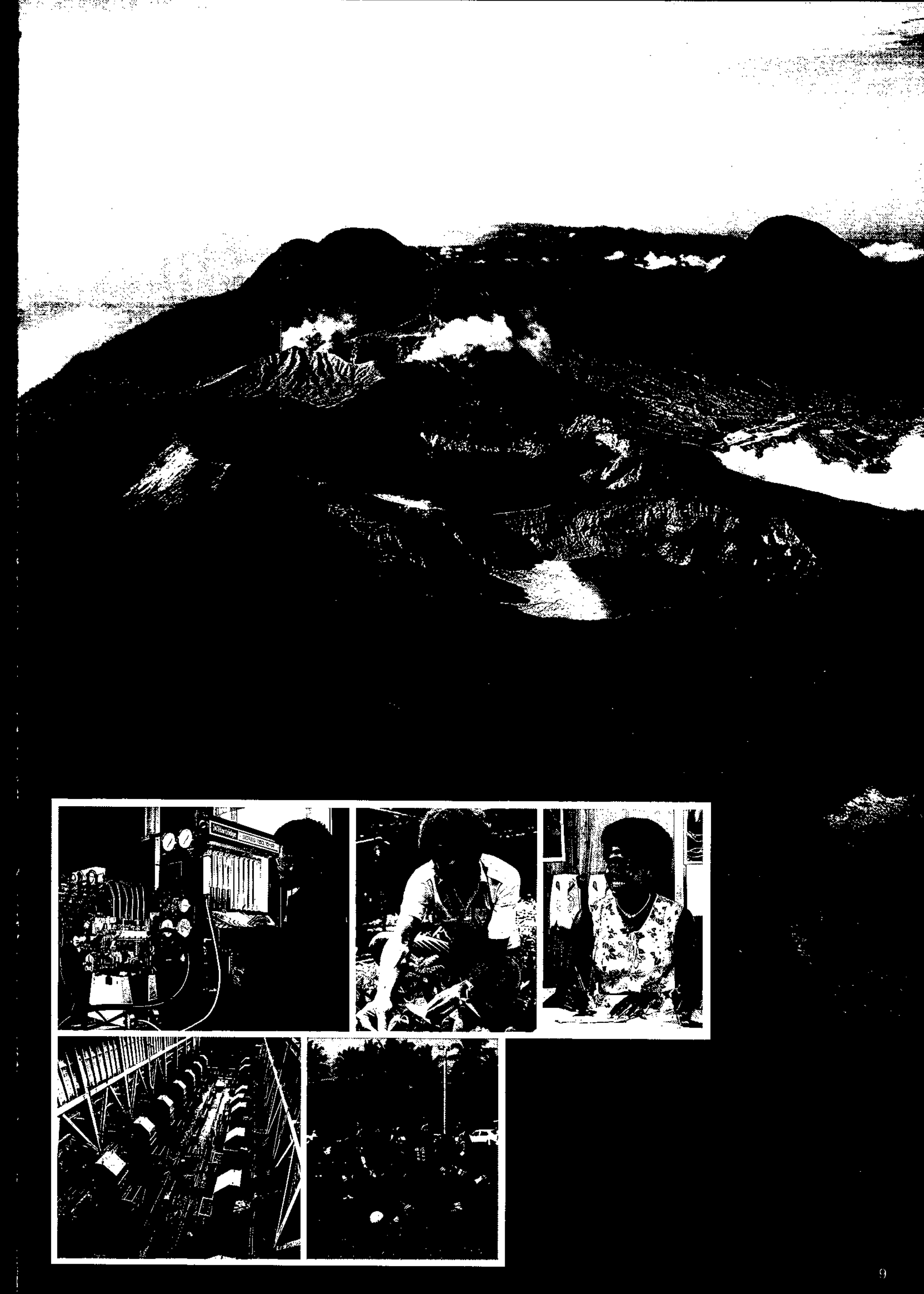
The gold price commenced the year at US$451/oz and rose quickly to the year's high of US$510/oz in February. By November the gold price had fallen to US$375/oz. The annual average price on the London Gold Market was US$424/oz compared with the 1982 average of US$376/oz.

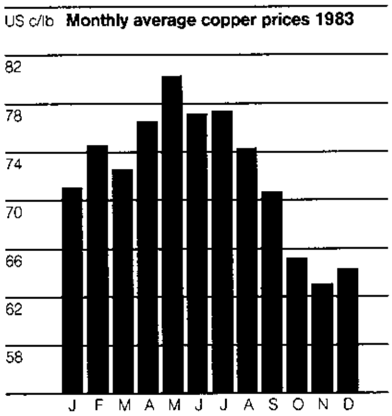
The silver price behaved in a similar pattern to gold. The annual average price was US$11.4/oz compared with US$7.9/oz, in 1982.

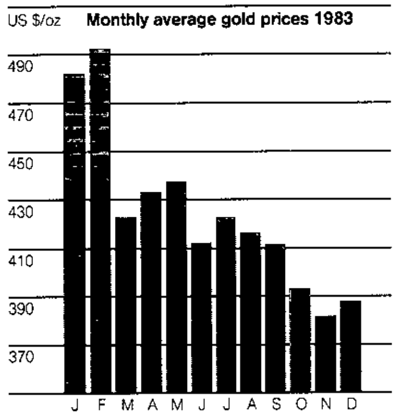
Finance:

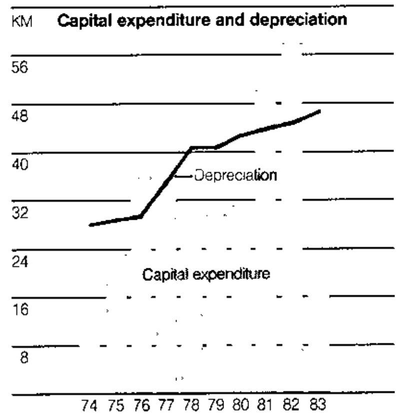
The continued recovery of metal prices in the first half of 1983 generated an inflow of funds sufficient to enable the Company to continue to reduce its loans and bolster the balances of cash held on interest earning deposits. Total borrowings at year end were K57 million (1982 K122 million) and cash balances were K35.4 million (1982 K8.3 million).

Total facilities available to the Company are a Revolving Credit Facility of US$225 million and Standby Credit Facilities of US$90 million. At year end US$35 million of these facilities had been drawn









down leaving a balance available of US$280 million.

In the international financial markets a great deal of uncertainty has prevailed, with exchange rates varying erratically. Overriding this, however, has been a strengthening of the U.S. dollar against other major currencies. Bougainville Copper has consequently incurred exchange losses on its U.S. dollar borrowings. The devaluation of the kina in March, in response to a 10% devaluation of the Australian dollar against the U.S. dollar contributed to the losses.

During 1983 interest rates paid by the Company remained stable. Total interest cost for the year was K9.0 million (1982 K16.1 million). The lower interest burden is attributable to lower levels of borrowing. Although the outlook for 1984 is uncertain there is unlikely to be any substantial increase in the interest rate burden either through increases in interest rates or increased borrowings.

Personnel:

At the end of 1983 the Company's total manpower was 3 809, of which 3 058 were Papua New Guinea citizens.

The Department of Labour and Employment approved the Company's three year Training and Localisation Programme submitted in accordance with the Employment of Non-Citizens Act 1981.

Continued emphasis is being placed on the development of Papua New Guinean employees in areas of greater responsibility within the Company. The staff development programme continued to expand and by the end of the year 480 employees had been brought under the programme.

The 1983 formal training efforts covered 1 082 employees. These consisted of 200 apprentices, 42 under-graduates and post-graduates and 158 post-trade tradesmen. 87 apprentices received their indentures in 1983. In addition 595 employees attended on-site and off-site supervisory and management courses.

During the year no time was lost through industrial stoppages.

Environmental:

Research continued into the long-term effects of tailings disposal on the environment. This involved studies of the geomorphological impacts in Empress Augusta Bay, and the environmental chemistry of the waste dumps, Jaba River and Empress Augusta Bay. The tailings disposal agreement review was postponed until more data is available.

Revegetation was carried out on final slopes of the pit and along the new Panguna – Jaba road. Dredging of a 25 hectare tailings plot continued and is nearing completion.

An active noise control and hearing conservation programme has been established. This involves the recording and analysis of an extensive number of noise dose levels, and audiograms have been taken and analysed.

Exploration:

Diamond drilling was continued to define extensions of the ore body around the periphery and at depth, beyond the limits of the present open pit design. These lower grade extensions will be taken into account in the on-going reassessment of long term mine planning.

The Company continues to hold prospecting authorities to surrounding areas. However, under the terms of the Bougainville Copper Agreement, exploration activity will not be undertaken without prior Government approval. Such approval, in turn, is dependent on the National and Provincial authorities reaching agreement on conditions of development.

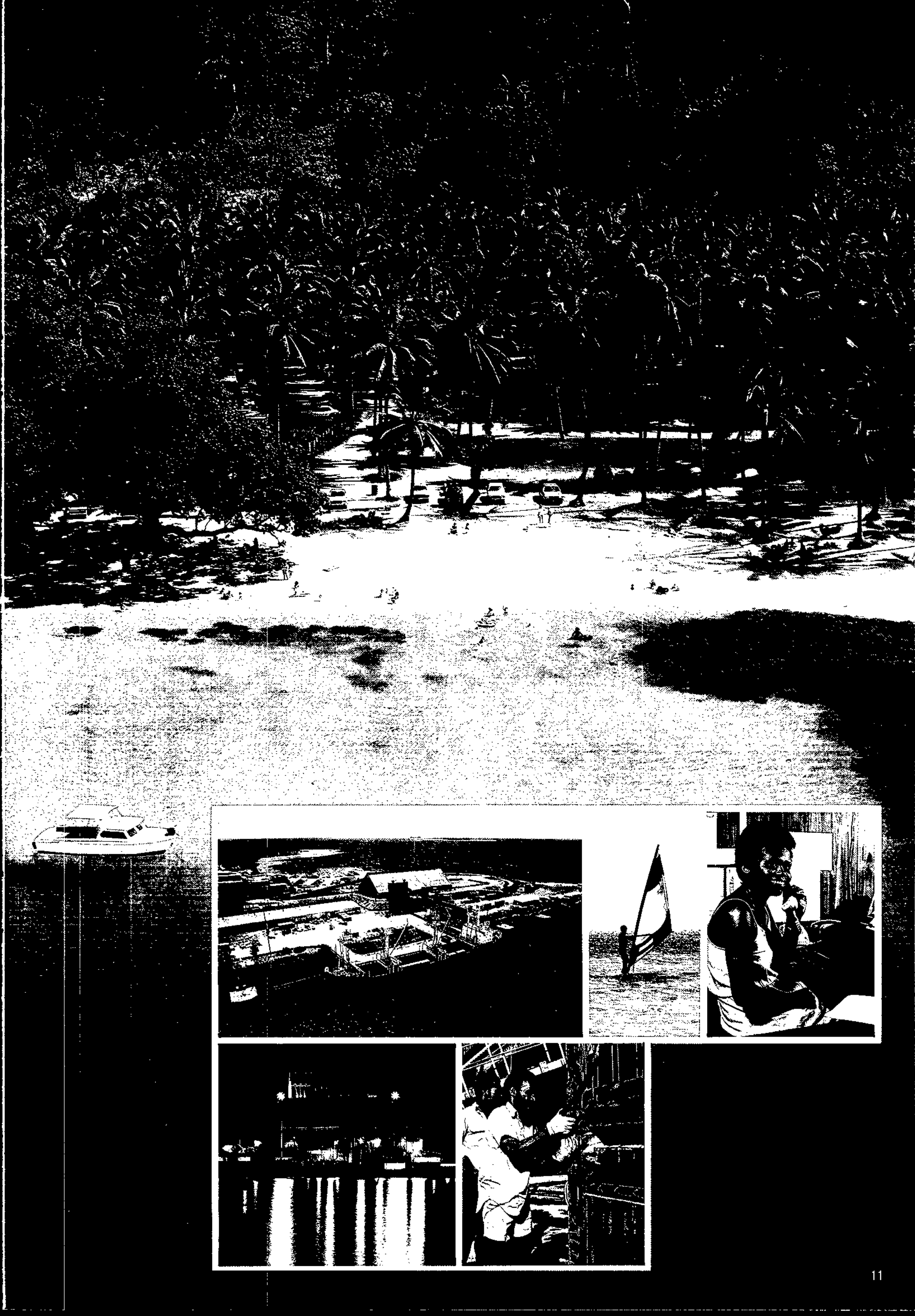
Capital Expenditure:

Capital expenditure for the year totalled K21.4 million.

Expenditure of a further K2.9 million was incurred on the pit drainage tunnel during the year, the total cost so far being K15.2 million. The Concentrator expansion, continuing on from the installation of two new ball mills, incurred additional expenditure of K4.6 million in 1983 bringing total expenditure to K49.8 million.

A dozer replacement programme was commenced during the year and expenditure to date is K3.9 million.

P. W. Quodling
Managing Director
23rd February, 1984.



Declining Ore Grades

Why they occur and how Bougainville Copper Limited copes with them

Characteristics of the Orebody:
The Panguna deposit is reasonably typical of the porphyry coppers of the Western Pacific. It is best described as being a large tonnage low grade copper deposit with significant gold and minor silver values. Large horizontal dimensions are a characteristic of these deposits and this enables them to be exploited by large scale mining methods.

The volcanic and intrusive rocks which form the deposit are highly fractured, and the copper sulphide minerals with associated gold and silver are mainly located in quartz veins and joints with some being disseminated in the rock mass.

Within the open pit area, there are a number of different rock types which are mineralised to varying degrees, and even within one rock type, there can be considerable variation in grade. Gold values show an approximate relationship with copper inasmuch as the higher gold grades tend to occur in areas where copper grades are also high, but there is no regular or uniform correlation between them.

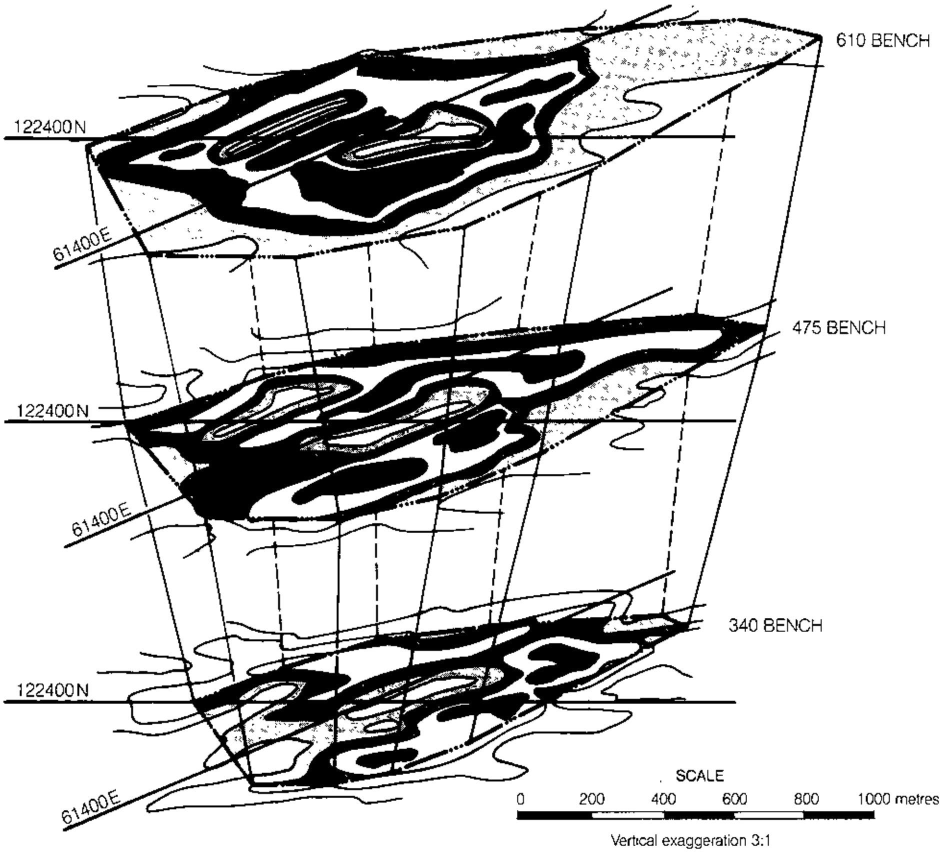
Subject to these variations in rock type and mineralisation, the grade of ore within the orebody decreases irregularly outwards towards the pit limits, and also decreases downwards in the lowermost third of the deposit.

Ore Reserves:
Prior to the commencement of mining, the ore reserves at Panguna were calculated to be 900 million tonnes containing 0.48% copper, 0.55 grams/ tonne gold and 1.5 grams/tonne silver. This grade is an average for the material which was to be mined as ore within a planned pit. Reserves and pit design have since been re-evaluated and are currently measured at 720 million tonnes containing 0.40% copper and 0.46 grams/tonne gold.

Mining Sequence & Ore Grades:
Mining commenced in 1972 with the excavation of high grade ore in the upper levels, particularly in Panguna Hill, a prominent ridge near the centre of the orebody containing exceptionally good values of both copper and gold. It was necessary for this area to be mined in the initial stages of the operation to allow development of the pit and access to ore at lower levels.

For the first few years, the grade of material mined generally exceeded 0.7% copper and 1.0 grams/tonne gold. The mining of this high grade section of the resource allowed a quick generation of cash flows which provided for repayment of the initial loans and further expansion.

As the pit expanded laterally and vertically, it took in an increasing proportion of lower grade material, with a resulting drop in head grades. This is a trend which will continue through to the early 1990s, after which a fairly consistent copper grade should be maintained, although gold grades may fluctuate considerably. To



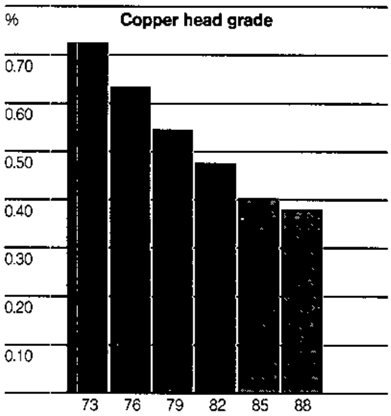
Schematic view of planned final pit, with copper grade contours.

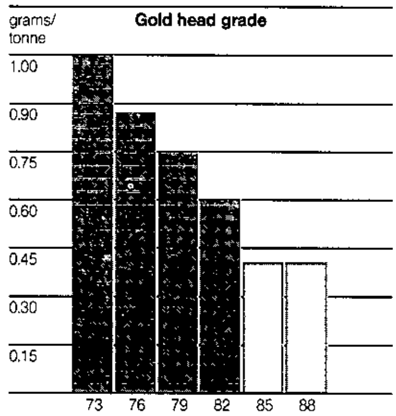
Copper grade contours are shown on three selected benches representing the upper, middle and lower sections of the ore body. Bench levels (610, 475 and 340) correspond approximately to height in metres above sea level. Outlines of the pit as it should appear when finally mined out are also shown. Benches above the 610 are truncated by the natural surface of the land, and have mostly been mined out; benches below the 340 extend to a level of 295 which is the planned bottom of the pit.

Although the pattern of mineralisation is similar from bench to bench, it can be seen that the centres of high grade copper on the 610 to 475 have mostly disappeared on the 340. Also, the irregular nature of mineralisation across the horizontal dimensions of the orebody is clearly shown.

LEGEND

- >1.0% Cu
- 0.8-1.0% Cu
- 0.6-0.8% Cu
- 0.4-0.6% Cu
- 0.3-0.4% Cu
- 0.2-0.3% Cu
- <0.2% Cu





some extent this decline in grades is counterbalanced by a decrease in the waste to ore ratio as external waste material is removed to access the orebody.

Offsetting Falling Ore Grades: The Company's philosophy has been to maintain copper production at generally steady levels. With falling grades, this has required increases in ore throughput. This increased throughput has helped the Company to restrain unit costs and safeguard its competitive position in the market place.

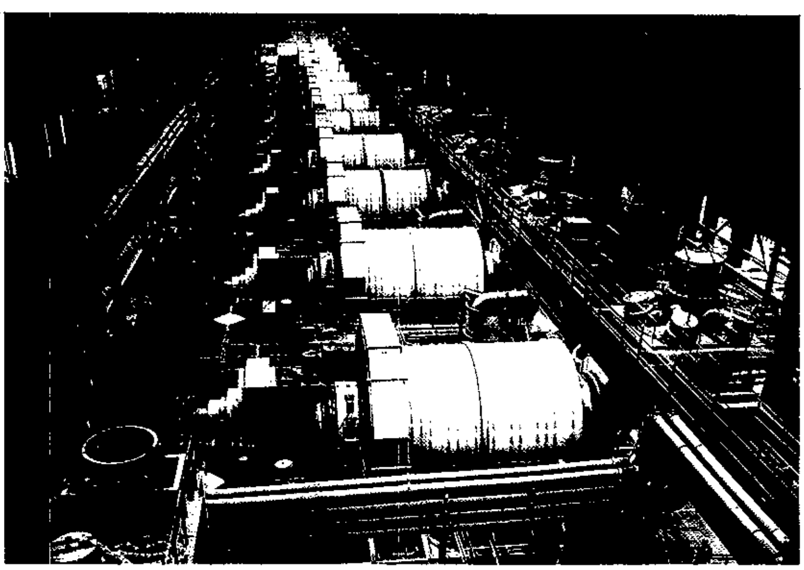
Unit costs can be reduced under the influence of economies of large scale operations and by finding more efficient ways of performing a particular operation.

In 1973 the Concentrator, with nine ball mills, was operating at a treatment rate of about 80 000 tonnes per day. This was increased by the addition of No. 10 mill in 1977 and mills Nos 11 and 12 in April and December of 1982. The last three mills installed were each 15% larger than the previous nine. Since 1976, the speeds of the ball mills have been progressively increased and the capacity of the crushers raised, so that overall throughput at the present time exceeds 130 000 tonnes per day, an increase of 63%.

An additional mill, No. 13, is planned and the prospect of further expansion is being investigated. The surrounding terrain will make it difficult to increase the number of ball mills to more than 15. The Company has also increased throughput in the secondary and tertiary crushers by installing larger units and increasing horsepower. This has negated the need for additional crusher lines to meet higher mine output.

Also in the Concentrator, a tailings water reclamation scheme is being installed which will reduce pumping costs and provide water for additional ball mills. Research has been going on for a number of years into finding economic methods of increasing copper and gold recoveries in the mill and recovering at least part of the gold presently being lost in tailings.

The original fleet of 95-tonne haul trucks reached the end of its economic life around 1976 and was progressively replaced with 155-tonne trucks. These have proven to have significantly better availabilities and be more efficient on a cost per tonne basis.



Concentrator ball mills.

Further increases in throughput may not require additional haul trucks, as waste removal, which is still a significant factor in mining costs, will continue to reduce relative to ore removal. In the latter years of mining, only small amounts of internal waste will have to be moved and the overall waste/ore ratio will fall from the present level of 0.7 to 0.2 in the 1990s. This is relatively low for the industry.

Haul truck costs including operating and maintenance form a major portion of mining costs and as the pit deepens, and haul distances and gradients increase these costs will increase. Two proposals are presently under consideration to reduce the impact of truck haulage costs:

- Inpit crushing and conveying of ore from benches below the primary crusher.
- Overhead electric truck trolley assist.

In addition an automated truck despatch system is being installed to improve operational efficiency.

Bougainville Copper is entirely dependent on imported fuel for running haul trucks and generating electricity to run mine and mill equipment. The Company is contributing to a pre-feasibility study for a local hydro-electric scheme which, if successful, could reduce power costs in the longer term.

The Future: Over the past two decades, many large tonnage low grade deposits with decreasing head grades have continued to be mined profitably as a result of technological advances in mining machinery and metallurgical techniques. Economies that can be effected through scale of operation have assisted many of these mines.

Although the present rate of return on investment is marginal, and therefore remains unsatisfactory, the Company is operating profitably and continues to be among the lowest net cost producers of copper in the world.

While future profit levels will depend upon fluctuations in metal prices, the Company will continue to review and adopt those factors of scale and efficiency which will maintain Bougainville Copper's place as one of the world's major copper and gold concentrate producers.

Value Added Statement

A country's economy is largely made up of the activities of employers and employees and the contribution they make to that economy is known as the Value Added.

The conventional earnings statement does not reflect the contribution that Bougainville Copper makes to Papua New Guinea's economy. This contribution to the country's Gross National Product is represented by the sales generated during the year less the cost of goods and services brought in from outside the Company.

The following statement shows the contribution made by the Company and its employees during the last two years. The total Value Added was distributed to employees, government, shareholders and lenders of capital, with part being retained for future use within the Company.

Value added	1983 K mill.	1982 K mill.
Sales made to external customers	389.9	281.2
Less: Materials and services brought in from outside the Company	183.2	143.1
	206.7	138.1
Add: Other income	3.0	1.9
Total Value Added available for distribution	209.7	140.0
Distribution		
Wages, salaries and benefits to EMPLOYEES	47.4	47.7
Taxation and royalties to GOVERNMENT	51.7	20.8
To PROVIDERS OF CAPITAL		
Dividends to shareholders	52.1	10.0
Interest to lenders	9.0	16.1
RETAINED in business to provide for asset replacement, expansion and protection of the Company and its employees in less favourable times.		
Depreciation	47.0	44.2
Retained earnings	2.5	1.2
Total Value Added distributed	209.7	140.0

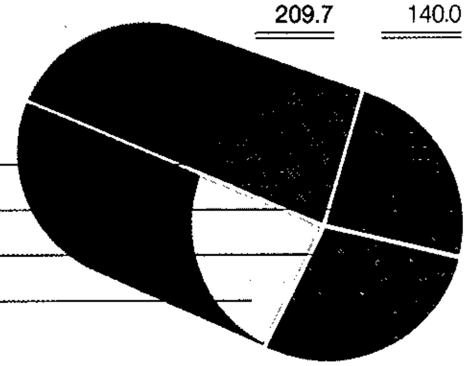
Distribution

Employees K47.4 m.

Government K51.7 m.

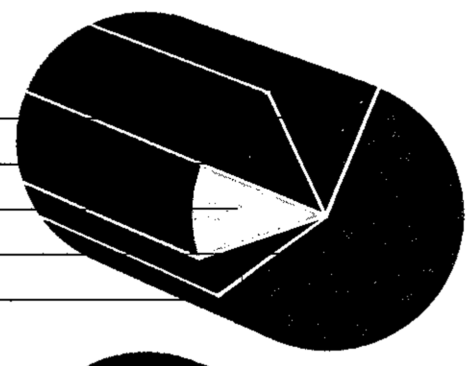
Providers of capital K61.1 m.

Retained in business K49.5 m.

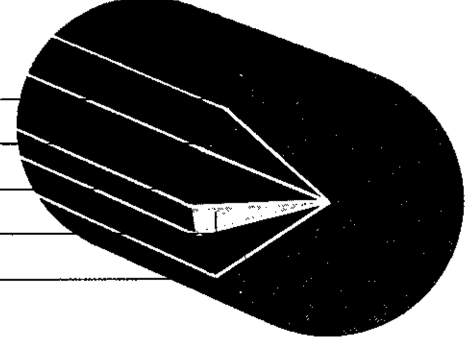


Funds Statement

Source of Funds	1983 K mill.	1982 K mill.
Net earnings	54.6	11.2
Depreciation	47.0	44.2
Provision for income tax	46.9	17.3
Loan drawdowns	238.1	85.8
Other	19.3	6.2
	405.9	164.7



Application of Funds		
Loan repayments	319.4	75.9
Capital expenditure	21.4	57.2
Dividends paid	30.1	12.0
Income tax paid	13.1	19.5
Increase in working capital	21.9	0.1
	405.9	164.7



Directors' Report

The Directors of Bougainville Copper Limited present their report on the audited financial statements of the Company and its subsidiaries for the year ended 31 December, 1983.

Directors:
The Directors of Bougainville Copper Limited at the date of this report are:
D. C. Vernon (Chairman)
Sir Frank Espie, O.B.E.
R. H. Harding
P. W. Quodling
J. T. Ralph
W. D. Searson

D. C. Vernon and W. D. Searson retire in accordance with the Company's Articles of Association and, being eligible, offer themselves for re-election.

Activities:
Bougainville Copper Limited has produced concentrate containing copper, gold and silver from a mine at Panguna, North Solomons Province, since 1972. The Company has two subsidiaries. Bougainville Copper Finance N.V. is incorporated in the Netherlands Antilles for fund raising purposes. BCL (Hong Kong) Limited arranges shipping contracts on behalf of the Company.

Net Earnings:
The net earnings of Bougainville Copper Limited and its subsidiaries for 1983 totalled K54 660 000 after providing K47 024 000 for depreciation and amortisation, K4 738 000 for royalties and K46 963 000 for income tax.

Taxation:
Taxation of K46 963 000 charged to earnings comprises K43 182 000 current tax and K3 781 000 future tax.

Subsidiaries:
No subsidiaries were disposed of during the year. No dividends were paid by Bougainville Copper Finance N.V. or BCL (Hong Kong) Limited.

Share Capital:
There was no change in the Company's capital structure during the year.

Exchange Fluctuations:
Exchange losses of K14 847 000 were realised on the repayment of United States and Australian dollar loans. Unrealised exchange losses on overseas borrowings were K2 058 000. In addition, exchange gains of K580 000 arose on the translation of overseas bank balances. All these gains and losses were included in 1983 earnings.

Long Term Loans:
Drawdowns of K238 084 000 were made during the year against long term loan arrangements. Repayments of K319 429 000 were made against existing loans, leaving a balance outstanding at the end of the year of K56 667 000.

Dividends:
An interim dividend of five toea per share was paid in November. A final dividend of eight toea per share has been declared and is payable on 3rd May, 1984. Withholding tax is deducted from dividends where required by the Chief Collector of Taxes.

Auditors:
The retiring Auditors, Coopers & Lybrand, being eligible, offer themselves for re-appointment.

Statutory Information:
In accordance with the provisions of Section 171 of the Companies Act (Chapter 146), the Directors state that:

1. In their opinion, the results of the group's operations in the year under review have not been materially affected by items of an abnormal character except as mentioned in this report.

2. In their opinion, the current assets will realise at least the value at which they are shown in the accounts and that the value is an amount that these current assets might reasonably be expected to realise in the ordinary course of business.

3. No circumstances have arisen which render adherence to the method of valuation of assets or liabilities misleading or inappropriate.

4. No contingent liabilities have arisen since the balance date of the group accounts, 31 December, 1983, and the date of this report, 23 February, 1984.

5. No contingent liabilities have become enforceable or are likely to become enforceable within twelve months from the date of this report which will materially affect the group in its ability to meet its obligations as and when they fall due.

Additional Information:
The Directors also state that:

1. They took reasonable steps before the statements of earnings and balance sheets were made out to ascertain what action had been taken so far as debts owing to the group were concerned, in relation to the writing off of bad debts and the making of provisions for doubtful debts and are satisfied that there were no bad debts and that a provision for doubtful debts of K43 000 was adequate.

2. They are not aware of any circumstances which would render the amounts written off for bad debts or the amount of the provision for doubtful debts inadequate to any substantial extent.

3. Since the end of the financial year, no charge on the assets of any of the companies in the group has arisen which secures the liability of any other person.

4. They are not aware of any circumstances not otherwise dealt with in this report or group accounts, which would render any amount stated in the group accounts misleading.

5. No item, transaction or event of a material and unusual nature has arisen in the interval between the end of the financial year and the date of this report, which, in the opinion of the Directors of Bougainville Copper Limited, is likely to substantially affect the results of the operations of the group in 1984.

Signed this 23rd day of February, 1984 in accordance with a resolution of the Directors of Bougainville Copper Limited.

D. C. Vernon
Chairman.

P. W. Quodling
Managing Director.

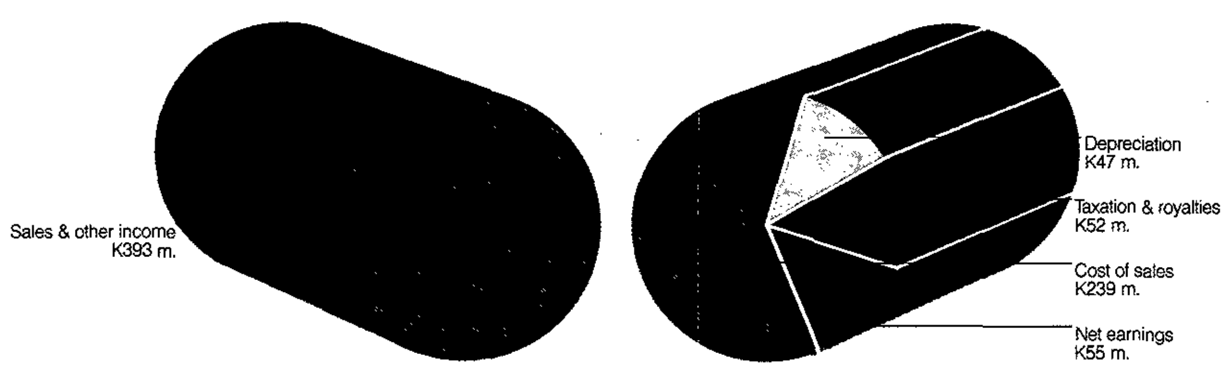
Statements of Earnings

year ended 31 December, 1983
Bougainville Copper Limited

	Notes	Consolidated 1983 K'000	Consolidated 1982 K'000	Bougainville Copper Limited 1983 K'000	Bougainville Copper Limited 1982 K'000
Income					
Net sales revenue		389 870	281 217	389 870	281 217
Other income (net)		2 989	1 959	2 989	1 959
		392 859	283 176	392 859	283 176
Costs and expenses					
Costs of sales, general and administration expenses		214 102	187 532	214 114	187 530
Depreciation and amortisation		47 024	44 211	47 024	44 211
Government royalties		4 738	3 522	4 738	3 522
Interest		9 047	16 141	9 047	16 141
		274 911	251 406	274 923	251 404
Net exchange losses	5	16 325	3 299	16 325	3 299
Earnings before taxation	2	101 623	28 471	101 611	28 473
Income tax	3	46 963	17 261	46 963	17 261
Net earnings for year		54 660	11 210	54 648	11 212
Add:					
Retained earnings brought forward		156 083	154 900	156 088	154 903
		210 743	166 110	210 736	166 115
Less:					
Ordinary dividends					
Interim paid		20 053	–	20 053	–
Final payable		32 085	10 027	32 085	10 027
		52 138	10 027	52 138	10 027
Retained earnings carried forward		158 605	156 083	158 598	156 088

All amounts are expressed in Papua New Guinea kina. Rounding to the nearest thousand kina has been adopted.
The notes commencing on page 18 form part of these accounts and are to be read in conjunction with them.

Simplified Earnings Statement



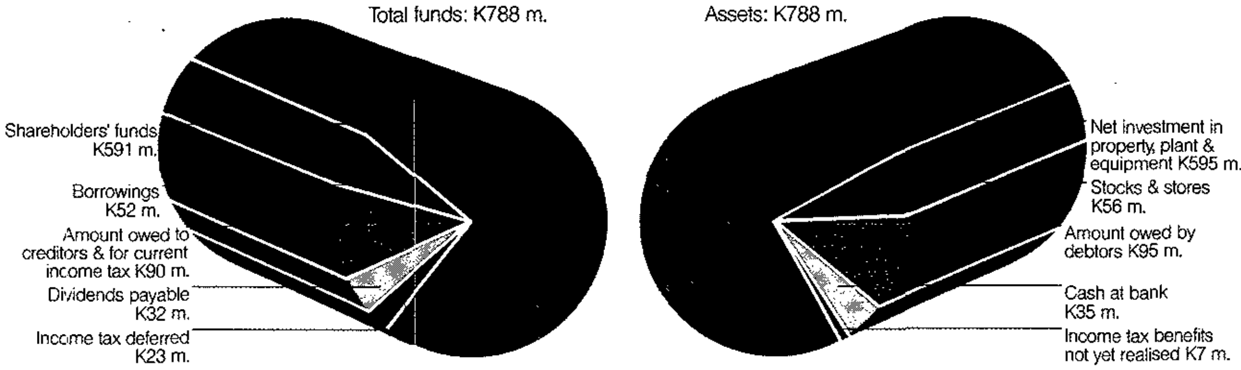
Balance Sheets

at 31 December, 1983
Bougainville Copper Limited

	Notes	Consolidated 1983 K'000	Consolidated 1982 K'000	Bougainville Copper Limited 1983 K'000	Bougainville Copper Limited 1982 K'000
Funds employed by the group:					
Shareholders' funds					
Paid up capital	4	401 063	401 063	401 063	401 063
Asset revaluation reserve		31 276	31 276	31 276	31 276
Retained earnings		158 605	156 083	158 598	156 088
		590 944	588 422	590 937	588 427
Exchange fluctuation	5	(4 723)	(5 387)	(4 723)	(5 387)
Non-current liabilities					
Deferred income tax liability	3	22 548	16 973	22 548	16 973
Loans	6	31 123	109 077	31 123	109 077
Provision for long service leave		5 277	5 019	5 277	5 019
		58 948	131 069	58 948	131 069
Current liabilities					
Loans	6	25 544	12 695	25 544	12 695
Creditors	7	45 158	37 566	45 148	37 559
Income tax		39 865	9 883	39 865	9 883
Dividends payable		32 085	10 027	32 085	10 027
		142 652	70 171	142 642	70 164
Total funds		787 821	784 275	787 804	784 273
These funds are represented by:					
Non-current assets					
Future income tax benefit	3	7 273	5 479	7 273	5 479
Investments	8	285	145	294	154
Property, plant and equipment	9	594 945	622 819	594 945	622 819
		602 503	628 443	602 512	628 452
Current assets					
Bank balances and short term deposits		35 376	8 320	35 108	8 309
Debtors for sale of concentrate		88 860	90 126	88 860	90 126
Other debtors	10	5 006	4 801	5 248	4 801
Stocks and stores	11	56 076	52 585	56 076	52 585
		185 318	155 832	185 292	155 821
Total assets		787 821	784 275	787 804	784 273
Commitments	13				
Contingent liabilities	14				

All amounts are expressed in Papua New Guinea kina. Rounding to the nearest thousand kina has been adopted.
The notes commencing on page 18 form part of these accounts and are to be read in conjunction with them.

Simplified Balance Sheet



Notes to the Accounts

These notes form part of the 1983 accounts and consolidated accounts of Bougainville Copper Limited and should be read in conjunction with them.

1. Statement of significant accounting policies

The principal accounting policies adopted in the preparation of the group accounts are stated to assist in a general understanding of the financial statements.

The policies generally comply with Papua New Guinea and Australian Accounting Standards and conform in all material respects with International Accounting Standards. They are consistent with those adopted in the previous year unless otherwise stated.

Cost Convention

The results of operations and financial position of the Company are accounted for under the historical cost convention, except that they reflect the revaluation in 1980 of certain major items of property, plant and equipment.

Depreciation and Amortisation

Depreciation and amortisation are determined by dividing the written down value of assets by their remaining useful life or twenty years whichever is the lesser. Depreciation commences in the month following commissioning ready for use.

Exploration Research and Development Expenditure

Expenditure on exploration within the mining lease, research and development is written off or provided against as incurred. Exploration has not been undertaken outside the mining lease.

Repairs and Maintenance

Expenditure on repairs and maintenance is charged against income as incurred.

Valuation of Stocks and Stores

Concentrate stocks are valued at the lower of direct production cost or net realisable value. Cost includes direct materials, services and overheads, but excludes depreciation and indirect overheads. Stores are valued at weighted average cost, excluding transportation costs, less an allowance for inventory writedown.

Net Sales Revenue

Sales are recognised when the risk passes to the buyer which is usually at the time when the concentrate enters the ship's hold. The final sales value can only be determined from weights, assays, prices, exchange rates and treatment charges applying after each shipment has arrived at its destination. Realistic estimates based on world metal prices ruling up to year end are used for those shipments not due for final valuation until the following year. In addition, the estimated results of forward contracts existing at year end in relation to concentrates shipped are reflected in sales revenue. Variations in revenue arising from final pricing and outturn adjustments are recognised in the following year.

Taxation

Tax effect accounting procedures are followed. The current liability for income tax is based on estimated taxable income for the year. The components of this taxable income differ from those which make up the earnings before tax for the year and these differences are either permanent differences or timing differences. Permanent differences are disclosed in Note 3. Timing differences arise because some items of revenue and expenditure are recognised for tax purposes during periods which differ from the periods in which they are included in earnings before tax. The tax effect of these timing differences is classified as either deferred income tax liability or future income tax benefit in the balance sheets.

During the year the standard company income tax rate was reduced from 36½% to 35% effective 1st January, 1983. The income tax expense for the year includes the tax effect (K481 000) of this reduction on cumulative timing differences brought forward from the previous year.

Foreign Currency

Monetary assets and liabilities in foreign currencies are converted to Papua New Guinea currency at the rates of exchange ruling at balance date. All other overseas transactions are converted at the rates of exchange applying when they occurred. Unrealised exchange gains and losses on overseas borrowings are amortised over the period of the related borrowings, with the unamortised balance being reflected in the balance sheet under exchange fluctuation.

Subsidiaries

The Company has two wholly owned subsidiaries. Bougainville Copper Finance N.V. is incorporated in the Netherlands Antilles for fund raising purposes. BCL (Hong Kong) Limited arranges shipping contracts on behalf of the Company. These companies have been consolidated in accordance with conventional consolidation principles.

	Consolidated 1983 K'000	Consolidated 1982 K'000	Bougainville Copper Limited 1983 K'000	Bougainville Copper Limited 1982 K'000

2. Earnings before taxation

Earnings before taxation have been determined after allowing for the following income and expense items:

	1983	1982	1983	1982
Income:				
Interest on short term deposits	2 703	1 517	2 703	1 517
Dividends – received from non-related corporation	–	4	–	4
Expenses:				
Interest – on long term loan from subsidiary	–	–	1 214	1 204
– on long term loans and standby facilities	9 000	16 078	7 786	14 874
– other	47	63	47	63
Provision for doubtful debts in respect of other debtors	23	16	23	16
Bad debts in respect of other debtors	1	–	1	–
Depreciation – on buildings	17 297	16 414	17 297	16 414
– on plant, machinery and equipment	27 809	25 805	27 809	25 805
Amortisation – of mine property	1 770	1 771	1 770	1 771
– of borrowing expenses	148	221	148	221
Loss on disposal and retirement of fixed assets	1 940	1 325	1 940	1 325
Research and development expenditure	391	436	391	436
Directors' emoluments (Note 12)	8	8	8	8
Auditors' remuneration – auditing the accounts	86	86	86	85
– other services	31	11	31	11
(The auditors have received no other benefits)				

3. Taxation

(a) Taxation on earnings for the year comprises:

	1983	1982	1983	1982
Current	43 245	9 883	43 245	9 883
Future	4 056	8 006	4 056	8 006
	47 301	17 889	47 301	17 889
Adjustments relating to previous years:				
Current	(63)	(598)	(63)	(598)
Future (including effect of decrease in company income tax rate – refer Note 1)	(275)	(30)	(275)	(30)
	46 963	17 261	46 963	17 261

(b) The following reconciliation discloses the items which caused the charge for income tax in the statements of earnings to vary from the income tax prima facie payable on reported earnings:

	1983	1982	1983	1982
Income tax prima facie payable	35 568	10 392	35 564	10 392
Permanent differences				
– double deduction allowable	(350)	(942)	(350)	(942)
– non allowable depreciation	6 200	6 655	6 200	6 655
– net losses not deductible	5 887	1 333	5 887	1 333
– other	(4)	451	–	451
Adjustments relating to previous year	(338)	(628)	(338)	(628)
	46 963	17 261	46 963	17 261

(c)

Deferred income tax liability

	1983	1982	1983	1982
Balance 1 January	16 973	8 502	16 973	8 502
Transferred from current tax	–	16	–	16
Charged to earnings: current year	6 084	8 455	6 084	8 455
prior year adjustments including effect of tax rate change – refer Note 1	(509)	–	(509)	–
Balance 31 December	22 548	16 973	22 548	16 973

(d)

Future income tax benefit

	1983	1982	1983	1982
Balance 1 January	5 479	5 000	5 479	5 000
Credited to earnings: current year	2 028	449	2 028	449
prior year adjustments including effect of tax rate change – refer Note 1	(234)	30	(234)	30
Balance 31 December	7 273	5 479	7 273	5 479

The foregoing future income tax benefits will only be obtained when and if the Company earns future assessable income sufficient to enable these benefits to be realised.

4. Capital

The authorised capital of K425 000 000 consists of 425 000 000 ordinary shares of one kina each.
The issued capital of the Company is 401 062 500 ordinary shares of one kina each, fully paid.
No change in authorised or issued capital occurred during 1983.

	Consolidated 1983 K'000	Consolidated 1982 K'000	Bougainville Copper Limited 1983 K'000	Bougainville Copper Limited 1982 K'000

5. Exchange fluctuation

(a) The movements in exchange fluctuation accounts relating to overseas loan obligations were:

Balance of unrealised (losses)/gains 1 January	(5 387)	1 478	(5 387)	1 478
Decrease due to currency movements during the year	(16 241)	(10 743)	(16 241)	(10 743)
Net amount debited to earnings	16 905	3 878	16 905	3 878
Balance of unrealised (losses) 31 December	(4 723)	(5 387)	(4 723)	(5 387)

(b) The net exchange (losses)/gains reflected in earnings arise from:

Overseas borrowings	(16 905)	(3 878)	(16 905)	(3 878)
Overseas cash balances	580	579	580	579
Net exchange (losses)	(16 325)	(3 299)	(16 325)	(3 299)

6. Long term loans

(a) Total long term loans are repayable as follows:

within one year	25 544	12 695	25 544	12 695
later than one year	31 123	109 077	31 123	109 077
Total outstanding obligations	56 667	121 772	56 667	121 772

All loans were secured by a charge over 291 759 653 shares in the Company owned by CRA Limited, the Independent State of Papua New Guinea and The Investment Corporation of Papua New Guinea. The charge has now been released.

(b) The following are the individual loans which make up the total outstanding loan obligations:

Bank loans	Interest Rate 1983	Repayable				
Papua New Guinea Banking Corporation (kina)	11.00%	1984-85	4 000	6 000	4 000	6 000
Revolving Credit Facility – Consortium of 19 banks (US dollars)	10.69%	1987-91	21 964	86 265	21 964	86 265
Standby Credit Facilities – Bank of America (US dollars)	10.14%	1984	8 712	7 428	8 712	7 428
			34 676	99 693	34 676	99 693
Other loans						
E.F.I.C. crusher loan (Aust. dollars)	8.75%	1984	333	928	333	928
Bearer Notes due 1984 (US dollars)	8.75%	1984	13 062	12 588	–	–
Loan from subsidiary (US dollars)	8.75%	1984	–	–	13 062	12 588
John Brown Engineering (US dollars)	7.75%	1984-89	8 596	8 563	8 596	8 563
			21 991	22 079	21 991	22 079
Total outstanding obligations			56 667	121 772	56 667	121 772

7. Creditors

Related corporations:				
Subsidiary companies	–	–	764	756
Other	1 688	2 472	1 687	2 472
Trade creditors	28 954	21 511	28 190	20 757
Other current liabilities:				
Secured	1 162	2 178	1 158	2 172
Unsecured	13 354	11 405	13 349	11 402
Total	45 158	37 566	45 148	37 559

8. Investments

Unquoted shares at cost in:				
Subsidiary companies	–	–	9	9
Other companies	285	145	285	145
Total	285	145	294	154

9. Property, plant and equipment

(a) Mine development & buildings				
– at directors' 1980 valuation	294 209	294 808	294 209	294 808
Less accumulated depreciation	61 240	46 521	61 240	46 521
	232 969	248 287	232 969	248 287
– at cost	61 441	42 503	61 441	42 503
Less accumulated depreciation	5 951	3 492	5 951	3 492
	55 490	39 011	55 490	39 011
	288 459	287 298	288 459	287 298

	Consolidated 1983 K'000	Consolidated 1982 K'000	Bougainville Copper Limited 1983 K'000	Bougainville Copper Limited 1982 K'000
9. Property, plant and equipment continued				
(b) Plant, machinery & equipment				
– at directors' 1980 valuation	267 810	270 748	267 810	270 748
Less accumulated depreciation	78 543	59 993	78 543	59 993
	189 267	210 755	189 267	210 755
– at cost	97 247	70 162	97 247	70 162
Less accumulated depreciation	14 967	7 651	14 967	7 651
	82 280	62 511	82 280	62 511
	271 547	273 266	271 547	273 266
(c) Mine property				
– at cost	62 121	62 121	62 121	62 121
Less accumulated amortisation	33 811	32 041	33 811	32 041
	28 310	30 080	28 310	30 080
(d) Capitalised borrowing expenses				
– at cost	782	782	782	782
Less accumulated amortisation	369	221	369	221
	413	561	413	561
(e) Capitalised works in progress				
– at cost	6 216	31 614	6 216	31 614
Total – at cost or valuation	789 826	772 738	789 826	772 738
Less accumulated depreciation/amortisation	194 881	149 919	194 881	149 919
Net book value	594 945	622 819	594 945	622 819
10. Other debtors				
Related corporations	622	573	622	792
Other debtors and payments in advance	4 427	4 294	4 669	4 075
Provision for doubtful debts	(43)	(66)	(43)	(66)
Total	5 006	4 801	5 248	4 801
11. Stocks and stores				
Unshipped concentrate	5 616	5 027	5 616	5 027
Stores	50 460	47 558	50 460	47 558
Total	56 076	52 585	56 076	52 585

12. Directors' emoluments

The total of the emoluments received, or due and receivable (whether from the Company or from related corporations) by:	1983 Company K'000	1983 Related Corporations K'000	1982 Company K'000	1982 Related Corporations K'000
(a) Directors of the Company engaged in the full-time employment of the Company or its related corporations (including all bonuses and commissions received or receivable by them as employees but not including the amount received or receivable by them by way of fixed salary as employees), was	–	–	–	–
(b) other Directors of the Company, was	8	32	8	30

No commissions for subscribing for, or agreeing to procure subscriptions for any shares in or debentures of the Company or any related corporation, were received or are due and receivable by any Director.

13. Commitments

The commitments for capital expenditure not reflected in the financial statements total approximately K5 311 000 (1982 K4 070 000).
Lease commitments not reflected in the financial statements total approximately K8 078 000 (1982 K7 913 000).

14. Contingent liabilities

Bougainville Copper Limited has guaranteed the Bearer Notes issued by its subsidiary Bougainville Copper Finance N.V. K13 062 000 (1982 K12 588 000).
Bougainville Copper Limited is contractually obliged to reimburse Shell Papua New Guinea Pty Ltd for any retail sales tax payable by Shell on petroleum products sold to the Company. A claim for retail sales tax amounting to approximately K3 000 000 has been lodged by the North Solomons Provincial Government. However, the validity of the tax is being disputed by both Shell Papua New Guinea Pty Ltd and the Company.
Bougainville Copper Limited has guaranteed the performance of its subsidiary BCL (Hong Kong) Limited in its obligations under a lease agreement with Citicorp Commercial Finance (Hong Kong) Limited to a limit of K875 000.

15. Ultimate holding company

The ultimate holding company is The Rio Tinto-Zinc Corporation PLC (incorporated in England).

Declarations

Statement by Directors

In the opinion of the Directors of Bougainville Copper Limited the accompanying statements of earnings are drawn up so as to give a true and fair view of the results of the business of the Company and its subsidiaries for the period covered by the statements and the accompanying balance sheets are drawn up so as to exhibit a true and fair view of the state of affairs of the Company and its subsidiaries at the end of that period.

Signed at Panguna this 23rd day of February, 1984.
On behalf of the Board
D. C. VERNON
Chairman.
P. W. QUODLING
Managing Director.

Declaration by Secretary

I, Andrew Warrock Patterson, Secretary of Bougainville Copper Limited, do solemnly and sincerely declare that the accompanying balance sheets and statements of earnings of the Company and its subsidiaries are, to the best of my knowledge and belief, correct. And I make this solemn declaration by virtue of the Oaths, Affirmations and Statutory Declarations Act (Chapter 317), conscientiously believing the statements contained herein to be true in every particular.

Declared at Panguna this 23rd day of February, 1984.
A.W. PATTERSON
Secretary.
Before me:
M. S. LELA
Commissioner for Oaths.

Report of the Auditors to the Members

We report on the accompanying balance sheets and statements of earnings of the Company and its subsidiaries set out on pages 16 to 21 which have been prepared under the cost convention described in note 1 and the consolidated funds statement.

In our opinion these balance sheets, statements of earnings and funds statement are properly drawn up in accordance with the provisions of the Companies Act (Chapter 146), and so as to give a true and fair view of the state of affairs of the Company and its subsidiaries as at 31st December, 1983, and the results for the year ended on that date.

In our opinion the accounting and other records, including registers, examined by us have been properly kept in accordance with the provisions of the Act.
COOPERS & LYBRAND
by B. J. Davies
Registered under the Accountants Registration and Practice Act (Chapter 89).
Arawa, 23rd February, 1984.

Shareholdings

Distribution of shares

As at 16th February, 1984: The issued shares of the Company were 401 062 500 fully paid one kina shares, each carrying one voting right.
The number of shareholders was 32 450.
The distribution of holdings of the issued shares was:

1- 1 000 shares	25 021
1 001- 5 000 shares	6 182
5 001-10 000 shares	730
10 001 shares and over	517
Total shareholders	32 450

87.66% of the total issued shares were held by the 20 largest shareholders.
The substantial shareholders were:
CRA Limited and its wholly-owned subsidiary C.R.A. Base Metals Pty. Limited – 214 887 966 shares (53.6%);
The Rio Tinto-Zinc Corporation PLC has an interest in the same shares through its wholly-owned subsidiaries (R.T.Z. Australian Holdings Pty Limited and Tinto Holdings Pty. Limited), interests in CRA Limited and C.R.A. Base Metals Pty. Limited.
The Independent State of Papua New Guinea, and The Investment Corporation of Papua New Guinea – 80 978 062 shares (20.2%).

Ten largest shareholders

The ten largest shareholders at 16th February, 1984, and the number of shares held by each were:

Name & Registered Address	Shares
CRA Limited, Melbourne, Vic.	210 788 514
The Independent State of Papua New Guinea	76 430 809
ANZ Nominees Limited, Melbourne, Vic.	20 936 576
National Nominees Limited, Melbourne, Vic.	12 516 857
The Investment Corporation of Papua New Guinea, Port Moresby, P.N.G.	4 547 253
C.R.A. Base Metals Pty. Limited, Melbourne, Vic.	4 099 452
The National Mutual Life Association of Australasia Limited, Melbourne, Vic.	4 095 759
Panguna Development Foundation Limited, Panguna, P.N.G.	3 600 000
Bank of New South Wales Nominees Pty. Ltd., Sydney, N.S.W.	2 950 709
Darling Nominees Pty. Ltd.	2 843 700
	342 809 629

Directors' interests

Directors' interests in the share capital of the Company and its related companies as at 21st January, 1984 were:

D. C. Vernon	No interests
Sir Frank Espie, O.B.E.	750 BCL shares 626 CRA shares
R. H. Harding	7 083 CRA shares 504 BCL shares 1 000 MKU shares 1 149 COM shares
P. W. Quodling	No interests
J. T. Ralph	171 BCL shares 690 CRA shares
W. D. Searson	3 500 BCL shares

Abbreviations:
BCL – Bougainville Copper Limited
CRA – CRA Limited
MKU – Mary Kathleen Uranium Limited
COM – Comalco Limited

Current Cost Accounting

The information presented in Historical Cost Accounts (HCA) can be misleading since full recognition is not given to the impact of price changes on the funds needed to maintain the assets employed by the Company. The need to remedy the defects in the traditional HCA accounts has focused attention on various proposals, one of which, Current Cost Accounting (CCA), is gaining international acceptance. The Company's earnings on an HCA basis are overstated in times of rising prices because of the failure to recognise the increased cost of replacing stocks and other assets required to maintain the business as a going concern. Therefore, under CCA principles, adjustments are made to measure the effect of specific price changes on the cost of services derived by the Company from use of its assets. However, because these assets have been financed partly by borrowing, a gearing adjustment is also necessary to arrive at the earnings, adjusted for specific price changes, which are attributable to shareholders. CCA is still largely in the experimental phase and further testing is required before a definitive system is established. However, the subjectivity that enters into the preparation of the CCA accounts is compensated for by increased realism and relevance of information presented in these financial statements. The Company prepares CCA statements in accordance with the Statement of Standard Accounting Practice No. 16, Current Cost Accounting, issued by the Accounting Standards Committee of the United Kingdom in March 1980.

Current Cost Statement of Earnings

Bougainville Copper Limited and Subsidiary Companies	1983 K'000	1982 K'000
Income	392 859	283 176
Costs and expenses excluding interest	265 864	235 265
Historical cost earnings before interest	126 995	47 911
Less:		
Current cost operating adjustments (refer below)	25 475	21 667
Current cost earnings from operations	101 520	26 244
Interest on net borrowing	9 047	16 141
	92 473	10 103
Net exchange losses	16 325	3 299
Current cost earnings before taxation	76 148	6 804
Income tax	46 963	17 261
Current cost (losses)/earnings attributable to entity	29 185	(10 457)
Add:		
Gearing adjustment	4 396	6 462
Current cost earnings attributable to shareholders	33 581	(3 995)
Add:		
Current cost retained earnings brought forward	113 861	127 883
	147 442	123 888
Less:		
Dividends	52 138	10 027
Current cost retained earnings carried forward	95 304	113 861

Current cost operating adjustments:

	1983 K'000	1982 K'000
Cost of sales	2 911	3 986
Monetary working capital	7 106	3 205
Working capital	10 017	7 191
Depreciation	15 246	13 115
Disposals of property, plant and equipment	212	1 361
Property, plant and equipment	15 458	14 476
	25 475	21 667

Current Cost Balance Sheet

	1983 K'000	1982 K'000
Funds employed by the group:		
Shareholders' funds		
Paid up capital	401 063	401 063
Current cost reserve	386 619	324 211
Retained earnings	95 304	113 861
	882 986	839 135
Exchange fluctuation	(4 723)	(5 387)
Non-current liabilities	58 948	131 069
Current liabilities	142 652	70 171
Total funds	1 079 863	1 034 988
These funds are represented by:		
Future income tax benefit	7 273	5 479
Investments	285	145
Property, plant and equipment	880 312	871 540
Stocks and stores	62 751	54 577
Other current assets	129 242	103 247
Total assets	1 079 863	1 034 988

Statistical Summary

Financial	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974
Earnings (K million)										
Net sales revenue and other income	**392.9**	283.2	296.4	338.7	343.1	225.1	205.3	208.9	193.1	292.6
Operating and other expenses	**228.1**	207.2	210.8	174.8	144.1	125.0	126.8	117.5	107.2	92.5
Depreciation	**47.0**	44.2	43.3	43.8	40.7	40.4	36.2	31.1	29.6	28.5
Earnings before taxation and exchange gains	**117.8**	31.8	42.3	120.1	158.3	59.7	42.3	60.3	56.3	171.6
Exchange gains/(losses)	**(16.3)**	(3.3)	1.1	2.6	3.5	10.3	(0.1)	1.3	2.3	9.5
Earnings before taxation	**101.5**	28.5	43.4	122.7	161.8	70.0	42.2	61.6	58.6	181.1
Taxation	**46.9**	17.3	20.6	51.2	77.9	22.0	13.7	20.3	12.4	66.5
Net earnings	**54.6**	11.2	22.8	71.5	83.9	48.0	28.5	41.3	46.2	114.6
Dividends	**52.1**	10.0	20.1	64.2	80.2	40.1	21.4	26.7	26.7	73.5
Earnings retained	**2.5**	1.2	2.7	7.3	3.7	7.9	7.1	14.6	19.5	41.1
Balance sheet (K million)										
Property, plant and equipment	**594.9**	622.8	611.2	610.8	325.4	340.1	352.2	350.4	346.0	352.2
Investments	**0.3**	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Current assets	**185.3**	155.9	148.7	148.4	201.0	125.8	137.1	136.0	129.5	205.6
Total assets	**780.5**	778.8	760.0	759.3	526.5	466.0	489.4	486.5	475.6	557.9
Shareholders' funds	**590.9**	588.4	587.2	584.5	294.5	317.5	309.7	302.5	287.9	268.4
Exchange fluctuation	**(4.7)**	(5.4)	1.5	5.1	5.4	9.0	14.6	9.0	11.5	19.1
Long term liabilities	**51.6**	125.6	80.1	25.7	36.2	42.1	53.3	101.7	106.8	121.1
Current liabilities	**142.7**	70.2	91.2	144.0	190.4	97.4	111.8	73.3	69.4	149.3
Funds employed	**780.5**	778.8	760.0	759.3	526.5	466.0	489.4	486.5	475.6	557.9

Production/Sales	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974
Mined										
Ore and waste removed (millions of tonnes)	**81.00**	76.22	77.56	79.76	75.97	79.05	70.79	58.54	56.40	56.00
Ore milled (millions of tonnes)	**47.73**	41.74	37.53	37.62	36.17	38.12	34.11	31.21	31.08	30.14
Ore grade										
Copper (per cent)	**0.46**	0.47	0.51	0.46	0.55	0.60	0.61	0.64	0.64	0.70
Gold (grams/tonne)	**0.55**	0.60	0.59	0.50	0.75	0.82	0.90	0.87	0.80	1.02
Silver (grams/tonne)	**1.42**	1.48	1.55	1.47	1.70	1.80	1.86	1.96	1.87	2.12
Produced										
Concentrate (thousands of dry tonnes)	**636.9**	598.6	576.4	510.4	584.7	658.6	615.6	596.8	595.5	640.8
Contained copper (thousands of dry tonnes)	**183.2**	170.0	165.4	146.8	170.8	198.6	182.3	176.5	172.5	184.1
Concentrate grade										
Copper (per cent)	**28.8**	28.4	28.7	28.8	29.2	30.2	29.6	29.6	28.9	28.7
Gold (grams/tonne)	**28.3**	29.3	29.2	27.5	33.7	35.5	36.3	33.9	30.5	32.0
Silver (grams/tonne)	**74.4**	72.1	73.5	72.2	76.3	79.8	77.1	76.1	71.0	72.0
Sales										
Total concentrate (thousands of dry tonnes)	**636.1**	599.6	596.2	494.4	586.5	640.9	614.8	605.8	586.9	665.7
Shipped to:										
W. Germany	**216.7**	217.1	206.0	163.7	187.6	206.8	198.3	223.2	243.5	221.4
Japan	**298.7**	279.7	296.9	269.4	328.2	326.7	337.1	256.4	250.7	343.2
Spain	**50.5**	53.3	64.7	41.0	49.0	62.1	47.0	58.2	72.2	57.4
Other	**70.2**	49.5	28.6	20.3	21.7	45.3	32.4	68.0	20.6	43.8
Values										
Gross concentrate sales value (before treatment and refining charges freight, etc.) (K million)	**454.6**	343.6	355.2	386.3	407.0	294.5	266.3	260.3	219.4	307.4
Contribution by:										
Copper (per cent)	**52**	51	54	51	60	64	66	74	69	74
Gold (per cent)	**46**	47	44	46	37	34	32	24	29	25
Silver (per cent)	**2**	2	2	3	3	2	2	2	2	1

Other	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974
Average metal prices										
L.M.E. copper (USc/lb)	**71.9**	67.1	79.0	99.2	89.8	61.9	59.3	63.6	55.9	93.3
London gold market (US$/oz.)	**423.5**	375.6	459.9	614.7	304.7	193.5	147.8	124.8	160.9	158.7
London silver market (US$/oz.)	**11.4**	7.9	10.5	21.0	11.0	5.4	4.6	4.4	4.4	4.7
Return on shareholders' funds (%)	**9.3**	1.9	3.9	12.2	28.5	15.1	9.2	13.7	16.0	42.7
Earnings per share (toea)*	**13.6**	2.8	5.7	17.8	20.9	12.0	7.1	10.3	11.5	28.6
Dividends in toea per fully paid share* (par value, one kina)	13.0	2.5	5.0	16.0	20.0	10.0	5.3	6.7	6.7	18.3
Bonus dividend in toea per fully paid share*	–	–	–	4.0	6.7	–	–	–	–	–
Number of shares issued at end of year (millions)	**401**	401	401	401	267	267	267	267	267	267
Number of shareholders at end of year	**32 834**	36 486	38 027	38 326	38 750	40 935	43 820	50 082	54 129	55 558
Debt/equity ratio	**0.10/1**	0.20/1	0.17/1	0.05/1	0.15/1	0.19/1	0.37/1	0.40/1	0.44/1	0.52/1
Work force at end of year										
Overseas	**751**	756	801	877	851	855	853	858	942	980
National	**3 058**	3 174	3 377	3 416	3-314	3 243	3 063	2 989	3 094	3 242

Note: * 1974 to 1979 figures are after adjustment for the 1980 capital reconstruction

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