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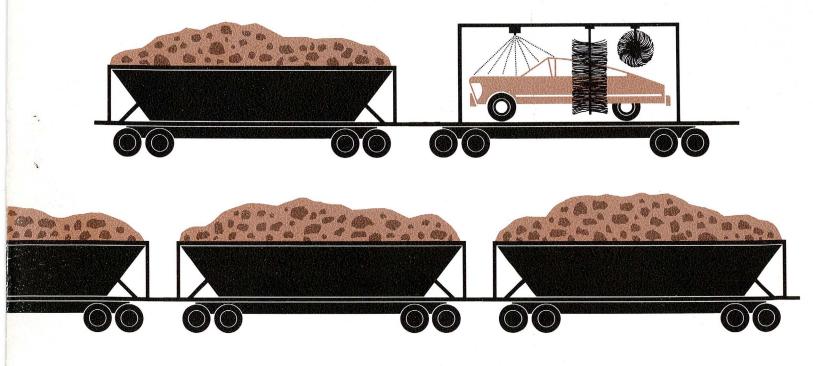
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## ANNUAL REPORT 1968 BAGDAD COPPER CORPORATION

8





### Financial Summary

	1968	1967
Sales	\$21,210,839	\$17,816,563
Net Income	\$ 3,398,039	\$ 2,532,107
Depreciation	\$ 820,825	\$ 724,506
Capital Expenditures	\$ 1,384,000	\$ 1,162,000
Year End Current Ratio	4.2:1	4.1:1
Year End Net Worth	\$20,713,851	\$17,526,272
Shares Outstanding, Year End	1,351,365	1,329,692*
Net Income per Share	\$ 2.51	\$ 1.90*
Copper Production - Pounds	36,476,000	36,749,000
Year End Inventory of Copper - Pounds	2,404,000	5,224,000
Average Copper Price per Pound	41.9c	41.6c
*Adjusted for 5% stock dividend paid December 10, 1968		

#### COLOR POSTCARDS

- 1. Mine and Mill
- 2. Acid Plant, Refinery, and Leach Plant
- 3. Mine and Mill
- 4. Townsite

# prus Boddad file **Expansion and** Reclamation (Two Ends of the Cyprus **Bagdad Copper Story**)

In Arizona's Eureka mining district, an expansion project raised Cyprus Bagdad's copper ore production 700 percent. Meanwhile, the firm is pioneering revegetation techniques to remove signs of old operations.

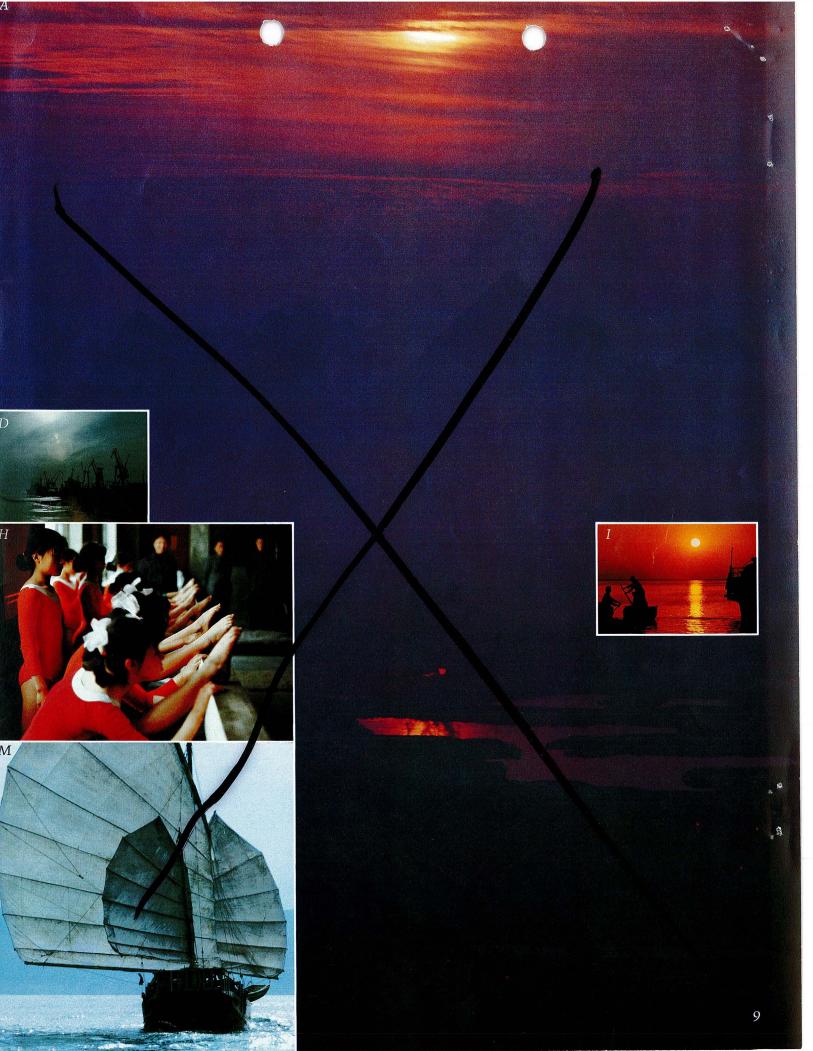
Giant trucks thunder past, quaking the ground as they gain momentum for the long, arduous climb ahead. Slowly they snake their way up the sides of the great pit. End to end they traverse the steep access roads, moving ponderously under heavy loads of copper ore.

The pit itself is immense, three-quarters of a mile wide, a mile and a half long and 1,200 feet deep. Like gigantic ants, the trucks busily transport the ore from the pit to the ore conveyor at Cyprus Bagdad's newly expanded mine in Arizona.

Fluor Mining and Metals (Fluor M&M), in a joint venture with another contractor, provided engineering and procurement for the \$240 million expansion project, and boosted mine production from 6,000 tons of copper ore a day, to 40,000 tons, daily - a 700 percent increase in the mine's capacity.

The ambitious program was completed in three years, with Fluor contributing more than 370,000 hours to engineering, procurement and overall joint-venture management. The project was brought on line under budget in September 1977, four months ahead of schedule.

Pete DeVasto, Fluor M&M's Engineering Project Manager, recalls, "In late 1976, the job was progressing well. Every indication showed that if large equipment, like massive grinding mills and 4,000-



horsepower motors could be expedited to improve delivery, the client would have an earlier start-up date."

After setting up an expediting program with the aid of the Fluor M&M Procurement Department, DeVasto was made responsible for coordinating the remaining expediting for the joint venture. Says DeVasto, "The personal effort — visiting the vendors, talking to the production supervisors and stressing the importance of getting equipment to the site as early as possible — really paid off. Also, much credit is due to Cyprus Bagdad for giving

The mine's history dates back nearly a century. The original claims were discovered in 1882. Today, the mine produces 40,000 tons of copper ore daily.

us a free hand in this effort. Cyprus Bagdad also devised the strategy of letting their people (who would be running the plant) assist in the actual construction and start-up, which also helped achieve an early completion."

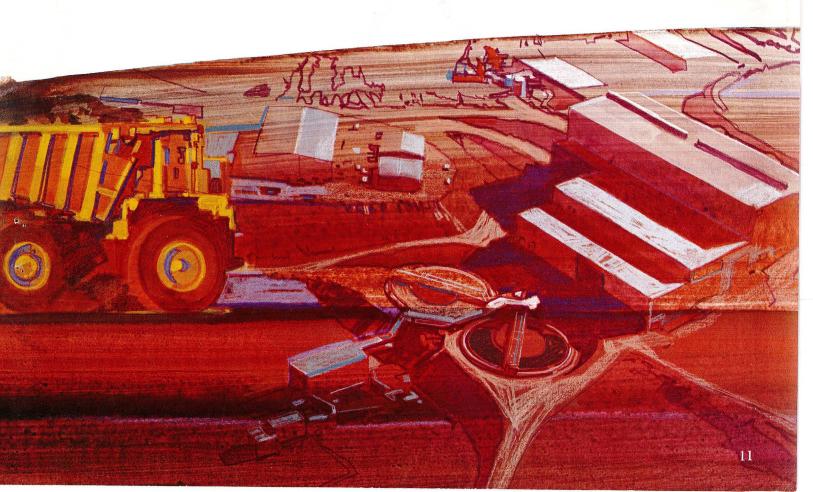
ILLUSTRATION/GEORGE BARTELL

Acording to R.C. Bogart, Vice President and General Manager of Cyprus Bagdad, "There were no major problems in bringing the new mill, ore conveyor system, tailings facility and expanded mining operations into production. It's one of the finest mining operations in the industry."

The huge open-pit mine is in the Eureka mining district, located about 65 miles west of Prescott. This arid, semidesert is a region of hot, dry winds and 115-degree temperatures. The mine's history dates back nearly a century. The original claims were discovered in 1882 and registered in 1889. Exploratory drilling as early as 1919 proved the existence of a vast orebody, and a 50-ton pilot plant was built on the site in the early 1920s. Bagdad Copper Corporation purchased the mine in 1927 and added a 200-ton mill in the 1930s.

The mine then saw activity only intermittently until World War II, when a Reconstruction Finance Corporation loan helped expand the mine to accommodate the war effort. Shortly after the war ended, an interest in the mine was sold and the underground operation was converted to an open-pit mine.

Fluor M&M's involvement in the expansion began in 1973. Cyprus Mines Corporation had merged with Bagdad Copper to form Cyprus Bagdad Copper Company. Fluor was called in to conduct a feasibility



study to determine if expansion of the existing mill would be advisable.

Test drilling showed that more than 303 million tons of copper-ore reserves lay within easy access. Bagdad approved the plan, and a joint venture was formed by Fluor M&M and Holmes and Narver, with Holmes and Narver engineering the primary crusher, overland ore-conveyor system, ancillary buildings, and a portion of the tailings facility. Fluor was responsible for procurement, engineering of stockpile reclaiming, the design of the mill with a new type of grinding circuit, and overall management of the joint venture. "People have come from all over the world to see the grinding circuit," says DeVasto. According to a visiting mine engineer, "It's one of the cleanest milling operations I've ever seen."

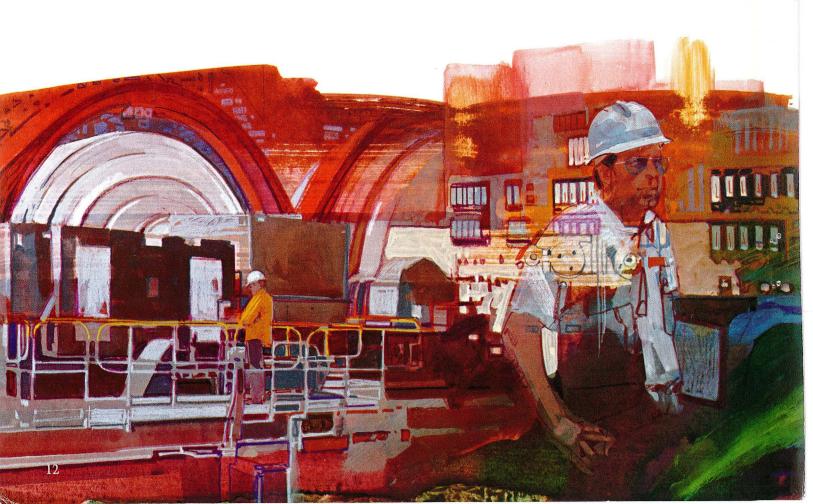
The expansion has increased personnel from about 525 to 750. In adition to the expansion, Cyprus Bagdad has installed a shopping center, 354 new condominiums, a 250-unit mobile home park, and an expanded recreational facility for employees and their families.

The mine is not only highly productive, it maintains a good environment as well.

Elective trucks, dust control and revegetation programs have prevented blighting of this desert region. Construction of a new tailings pond that recycles reclaimed water back to the mill not only saves water, it contributes to the overall efficiency of the operation.

A molybdenum disulfide plant is on line and can produce about 2,000,000 pounds of the metal-hardening byproduct a year. According to most mining operators, the extraction of moly concentrates has been a valuable asset in view of the cool copper market.

Representing the largest undertaking in the 62-year history of Cyprus Bagdad Mines Corporation, the expansion and modernization of Cyprus Bagdad mine has made it one of the industry's most technologically advanced mining and milling operations. A statement in the firm's annual report says, "Cyprus Bagdad will furnish enough material to permit operations well into the 21st Century." Says DeVasto, "The active exchange of ideas between the client and contractor resulted in the successful marriage of the latest engineering techniques, and the requirements of Cyprus Bagdad itself." **v** 



# ... and Reclamation

In a region that receives less than 10 inches of rainfall a year, on mine tailings devoid of nutrients, Cyprus agronomists developed a new strain of grass to enhance an ambitious revegetation program.

Three miles east of the new copper concentrator, 110 acres that once served as the tailings pond and waste disposal site for Cyprus Bagdad's "Old Mill" is covered with a new growth of grass. A voluntary revegetation program designed to minimize the effects of wind and water erosion, while maintaining the natural desert beauty, is restoring the land.

State reclamation laws are fast becoming more stringent, with tailings ponds and other disturbed areas receiving much environmental attention. The most recent of these, the Surface Mining Control and Reclamation Act (Public Law 95-89), was written specifically for areas impacted by coal mining, but will soon extend into the mining of metals and other minerals. The federal government will have regulatory responsibility until the individual states appoint their own agencies. However, once the state agencies are established, the Office of Surface Mining, Department of the Interior, will continue to monitor reclamation programs.

In mining operations, 100 percent recovery of metals and minerals is next to impossible. As a result, processed tailings consist mainly of a sandy, finelyground silica that can contain high concentrations of metals and soluble salts. Totally devoid of organic matter and nutrients, tailings are a poor soil substitute and require special treatment and techniques to support life.

Many of the United States' largest mines are located in the dry Southwest, where extreme temperatures and lack of abundant rainfall make revegetation a difficult task. Just how do you introduce vegetation to such a hostile environment? Over a period of eight years, extensive tests were conducted at Cyprus-Pima Mine and the University of Arizona at Tucson, where as little as 10 inches of rain fall a year.

While in residence as Cyprus-Pima's Chief Agronomist, Ken Ludeke experimented with over 5,000 different species of barley. He successfully initiated a program to change the chemical and physical properties of tailings material and even developed a new strain of grass to grow on mine tailings.

Just over two years old, the Cyprus Bagdad revegetation program has far exceeded expectations. Bill Thompson, Bagdad's Chief Engineer of Engineering and Construction, has been involved from the beginning, "The initial planting took about four months to complete and cost about \$1,500 an acre," he says. "Water isn't a problem, we primarily use sewage effluent and storm runoff to irrigate. We've been very lucky," he adds. "The first planting was supposed to be sacrificial, but now we're getting 90 percent natural reseeding."

According to Ludeke, "Once grasses have stabilized and conditioned the soil, plants indigenous to the area can be reintroduced. It's the best way to control wind and water erosion with the minimum amount of irrigation and maintenance."

With 110 acres of Bagdad's former tailings pond "greening right up," plans to cultivate an additional 10 acres are set for this spring. When asked what they would like to do with the new-found greenery, Thompson chuckles, "Well, it only takes about 120 acres to build an 18-hole golf course." Fluor M&M has gathered individual nuggets of experience into a substantial mining and process engineering resource.

Resources that will fuel the future lie ground: coal and uranium to generate power; copper, iron and cement to build the plants. Extracting these resources while maintaining the delicate balance between economics and ecology is the challenge faced daily by Fluor Mining & Metals (Fluor M&M) and its clients in the mining industry.

At Fluor M&M, the core of this effort is Mining and Process Engineering, which last year was reorganized as a separate department with the charter to "come up with the best mining and metallurgical engineering group in our industry," says Frank Howald, Vice President in charge. This corps of professionals — some with long track records at Fluor M&M, others newly recruited — is adding a broad range of expertise to the engineering and construction techniques that have been proven in projects like the Cuajone Copper Mine, the largest copper mine completed by a single contractor.

With its specialists in mining, geology, geostatistics, underground and oper pit mining, mineral dressing, hydrometallurgy and pyrome allurgy, the mining and Process Engineering Department is involved in virtually every plase of service to clients from featibility studies to start-up of the mine and heal.

Howald comments, "Camphilosophy is that a mine is a system, not a group of segregated components. With that in mind, we've built up the capibility to work with the client at each stage of a project's evolution."

When the prine is still in the thicking stage, the task goes to the Feasibility Studies Group headed by Manager Chris Coulson In his 15 years of professiona experience, Coulson's duties have cov ered both the technical and financial aspeers of the mining industry. In the earliest stages of exploration; while the first drill cores are being taken, the Geostatistics Group goes into action. Headed by Harry Parker, one of the few American experts in this relatively new technique, the group applies the tools of statisticians to exploration.

"Right after the discovery," says Howald, "we are able to give the client assistance in planning the exploration and drilling activities. We can tell him where and how many holes he should drill to establish a high degree of probability that the orebody is there at a certain tonnage."

"When you figure that it costs upwards of \$10,000 to drill each hole," Parker adds, "you can see that we make a contribution if we can save the operator from drilling even shew holes."

G ostatistics also fits into Fluor M&M's synems approach to mining. Orebodies ary widely in the amount of useful mineral contained in the waste rock from one section of a mine to another. Designing processing facilities for the extremes of ore content is expensive.

Using geostatistics, though, the processing plant can be designed to handle average ore, allowing ore of varying composition to be mined from different areas of the deposit and blended to create a plant feed of average composition. Geostatistics helps determine in advance what areas should be mined in what sequence to get the desired ore.

These core samples are the first look an operator gets at his new mine. But it

# Fluor M&Ms Lode of Expertise

### Notes To Consolidated Financial Statements DECEMBER 31, 1968

#### NOTE 1 --- Principles of consolidation:

The consolidated financial statements include the accounts of the company's wholly-owned subsidiaries, Garland Steel Company and Bagdad Plastics Company after elimination of intercompany transactions and balances.

#### NOTE 2 - Inventories:

Inventories are comprised of the following:

	December 31	
	1968	<u>1967</u>
Copper products:	가 속 한 속 가 날 것 공 은 것 같다. 같	
Copper concentrates		\$ 534,598
Copper precipitates	\$ 170,041	96,749
Coper powder — in process	41,412	49,578
Copper powder — finished	419,765	126,294
Molybdenum concentrates	49,771	36,732
Steel products:		
Raw materials	507,910	494,184
Work in process	494,790	360,764
Finished goods	518,050	535,637
Plastic products:		
Raw materials	2,746	207
Work in process	5,646	8,188
	\$2,210,131	\$2,242,931

Copper inventories are generally stated at average cost. Steel and plastic materials are stated at first-in first-out costs. None are in excess of current market values. Inventory of the by-product molybdenum concentrates is priced at estimated realizable value.

#### NOTE 3 — Deferred charges and other assets:

Mine development costs are charged to expense as incurred, except for amounts deferred in prior years, which are amortized at \$324,704 per year.

Excess cost of stock of subsidiaries over book values of assets acquired has an indefinite life in the company's opinion, and consequently no amortization is required.

Patents and trademarks are amortized over lives to 1971; \$134,070 was charged to expense in 1968.

#### NOTE 4 --- Investments:

The company owned a 50% interest in Arizona Chemcopper Company, a joint venture organized to own a chemical process copper refinery; the venture was terminated during 1968 by withdrawal of the other party. Under the venture agreement Bagdad operated the refinery, and the venturers shared all profits or losses equally. The company's share of the losses in 1968 to the date of termination was \$226,096. Bagdad has continued to operate the refinery since termination and has absorbed losses of approximately \$60,000 in its operating accounts and depreciation of \$46,176 (one-half of the venture's total depreciation after termination) through December 31, 1968.

The company's investment in the venture has been reduced by its share of losses of the venture since inception.

#### NOTE 5 - Property, plant and equipment

	Balances a	
	Decem	iber 31
Description	<u>1968</u>	<u>1967</u>
Buildings, machinery and equipment:		
Copper Mine	\$12,656,302	\$11,754,818
Garland Steel	1,016,977	934,554
Bagdad Plastics	110,429	38,156
	13,783,708	12,727,528
Less accumulated depreciation	8,234,280	7,479,561
	5,549,428	5,247,967
Mining properties and land:		
Copper Mine	1,584,515	1,539,746
Garland Steel	259,166	227,660
	1,843,681	1,767,406
Less accumulated depreciation	1,313,878	1,307,801
	529,803	459,605
	\$ 6,079,231	\$ 5,707,572

Property, plant and equipment are included in the consolidated balance sheet on the basis of cost to the consolidated group either in cash or in capital stock of the parent company at par value.

Depreciation has been provided over the estimated useful lives of the respective assets on the straight-line method or on accelerated methods pravided by the Internal Revenue Code. Income taxes have been computed on the same basis.

Depreciation included in costs and expenses in the consolidated statement of income has been provided for the principal types of buildings, machinery and equipment as follows:

	Year	
Machinery and equipment	<u>1968</u> \$687,350	<u>1967</u> \$604,178
Buildings	100,460	92,984
Land improvements	33,015	27,344
실 수요 이 가지 않는 것이 가지 않는 것을 가지 하는 것이 같은 것이 같은 것이 있는 것이 있는 것이 같이 있다.	\$820,825	\$724,506

Depletion of \$6,077 has been provided on the cost of mining properties at .2895 cents per ton in 1968. Depletion for tax purposes has been computed on a statutory basis and differs from the amount recorded in the accounts.

#### NOTE 6 - Stock options and changes in paid-in capital:

The company has two stock option plans under which shares of capital stock are made available to officers and employees of the company and its subsidiaries. Options have been granted for all shares reserved for option under the 1963 plan. The status of the plans is as follows:

Shares under option	1963 plan	1967 plan	Total
Granted but unexercised, January 1, 1968	30,044	2,596	32,640
Increase for 5% stock dividend	445	128	573
Exercised	(21,140)		(21,140)
Granted but unexercised, December 31, 1968	9,349	2,724	12,073
Available for future option	s	23,526	23,526

All options exercised during the year were exercised at a price of \$4.27 and were issued from authorized but unissued capital stock. The 12,073 options outstanding, are all exercisable at a price of \$14.41 per share.

Changes in other paid-in capital are summarized as follows:

	Year	
	<u>1968</u>	1967
Balance beginning of year	\$1,854,790	\$1,854,861
Excess of amount received over par value of optioned shares sold	37,369	11,839
Premium paid on purchase of treasury stock		(11,910)
Excess of market value over par of share issued as stock dividend	s 1,340,892	
Balance end of year	\$3,233,051	\$1,854,790

NOTE 7 — Sales:

Sales are comprised of the following:

		Year
외와 영상왕이는 144 지금이다. 같은 신생한 것이라는 144 이다.	1968	1967
Basic metals:		
Copper products -		
Concentrates	\$ 8,843,670	\$ 6,482,683
Precipitates	3,480,528	2,827,066
Electrolytic copper (toll)	854,514	1,228,753
Copper powder	1,889,777	1,951,781
Molybdenum concentrates	933,313	838,346
Silver bullion	110,133	50,877
	\$16,111,935	\$13,379,506
Manufactured products:		
Steel	\$ 4,999,006	\$ 4,433,751
Plastic	99,898	3,306
	\$ 5,098,904	\$ 4,437,057

NOTE 8 — Retirement and profit sharing plans:

Retirement benefits for all eligible mine employees are provided under an employer funded plan established on April 1, 1965. The company's policy has been to fund pension costs accrued, including provision for amortization of past service costs over a period of ten years. The company paid and charged to expense \$135,000 for pension costs in 1968.

The actuarially computed value of employees' vested benefits under the plan exceeded the pension fund by approximately \$58,000 at December 31, 1968.

Garland Steel Company contributes to a trusteed employeremployee funded savings and profit sharing plan up to  $12\frac{1}{2}\%$ of its net income. The company's contribution of \$52,584 has been accrued at December 31, 1968.

#### NOTE 9 - Income taxes:

The provision for estimated income taxes is comprised of the following:

	Y	ear
	<u>1968</u>	1967
United States income taxes Less investment tax credit for the year	\$1,517,500 68,000	863,000 40,000
	1,449,500	823,000
Arizona income taxes	300,500	197,000
	\$1,750,000	\$1,020,000

Federal returns of Bagdad have been accepted through 1965 for Bagdad, and 1964 for Garland Steel.

#### NOTE 10 - Commitments:

As of September 30, 1968 the company entered into an agreement for the construction of a solvent extraction electrowinning plant at the present mine site. At present it is estimated that this plant will involve a capital expenditure of approximately \$5,000,000, The company has the right to cancel the agreement at any time and reimburse the contractor for costs incurred to the date of cancellation.

#### PRICE WATERHOUSE & CO. 222 North Central Phoenix, Arizona 85004

February 22, 1969

To the Board of Directors and Stockholders of Bagdad Copper Corporation

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income and retained earnings and of source and application of funds present fairly the consolidated financial position of Bagdad Copper Corporation and its subsidiaries at December 31, 1968 and the results of their operations and the supplementary information on funds for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

> Price Waterhouse La. PRICE WATERHOUSE & CO.



#### BAGDAD COPPER CORPORATION FIRST QUARTER REPORT 1972

Operations for the First Quarter of 1972 are summarized below. These results are consolidated but not audited.

	First Quarter 1972	First Quarter 1971
Sales	\$ 7,642,000	\$ 6,171,000
Estimated Income	\$ 1,374,000	\$ 1,086,000
Net Income per Share*	\$ 0.91	\$ 0.72
Mine Production - Pounds	9,715,000	10,293,000
Mine Sales - Pounds	11,677,000	8,978,000
Copper Price per Pound	50.1¢	49.8¢

\* Based on currently outstanding 1,507,548 shares

Sales of mined copper products during the first quarter were almost two million pounds more than production and were 2.7 million pounds more than the first quarter of last year. This enabled results this year to exceed last year. Inventory reduction during the first quarter was entirely from cathodes, and at the end of the quarter cathode inventory was still about one million pounds above normal. This excess was sold in April. Inventory of copper in concentrate form increased slightly during the first quarter to about 4.5 million pounds of contained copper. We have arranged to ship all of this to White Pine Copper Company on a schedule that will eliminate the inventory by yearend.

Markets for copper strengthened toward the end of the first quarter, and in March there was a price increase of two cents per pound. Economic conditions are improving, which will tend to keep copper markets firm. On the other hand, I do not believe conditions are present which will result in a rapid price increase. Present price is about 52 cents per pound. At the time base prices for economic control purposes were established, copper was selling at about 60 cents per pound, so that it is still substantially below its control price.

Costs this year are higher than last. Smelting charges were two or three cents per pound more in the first quarter than during last year's first quarter, and there has been a somewhat greater increase in costs at the Mine. I believe Mine costs are stabilizing to some extent, but we can probably expect additional increases in smelting charges. The full impact of these costs is not evident from the above table because inventory reduction during the first quarter was from cathode, which is our highest profit product.

So far this year the copper powder operation is ahead of the same period last year. It is still about breaking even, but prospects are for continued improvement.

The expansion program continues to look very attractive; particularly the portion at the Mine through production of concentrate. The specific smelting method to be used in the expansion must be determined before details of financing can be arranged.

Use of the WORCRA smelting process at Bagdad has the risk associated with use of a process with little commercial history. We are having a separate report prepared by an independent consultant to assess these risks in light of the Bagdad application. The alternative of a full scale joint venture smelter is no longer available because the strongest partner elected another course of action, and the remaining partners have insufficiant feed material at this time for a full scale smelter.

A search for custom smelting capacity is being conducted to determine it it is possible to secure this within Arizona. Arizona smelters are subject to pollution regulations of the Arizona Board of Health, which is considering issuing revised, less stringent regulations. If this is done, it may be possible to obtain custom smelting commitments from Arizona smelters. The outcome of this is quite uncertain, but should be clarified by the middle of the year. If we were to custom smelt, it reduces the capital requirement, which simplifies financing and would probably result in less or little dilution of equity.

We still anticipate making decisions on a schedule that will enable us to have the expansion on stream in 1975. However, if the smelting problem cannot be resolved by the middle of the year, this schedule could be in jeopardy.

Garland is going well, with profit to date this year approximately the same as for the same period in 1971. The economic recovery should benefit Garland for the rest of the year.

The Plastic operations were just barely in the black in the first quarter of 1972. This is the first quarter they have been profitable. Markets for valves continue to appear attractive. We will equip to do some of our own injection molding, but this will have little impact on results before next year.

A number of people have asked if there are any specific reasons for the recent rapid increase in the price of our stock. There are none that I know of except the results and the program outlined in our 1971 Annual Report. In addition, I believe some of the general pessimism about copper is disappearing, and the U.S. economy is improving. I can observe no pattern to the recent buying at least so far, and Noranda Mines Limited, one of our largest shareholders, has said it has not been making additional purchases.

Enclosed is a dividend check in the amount of 10 cents per share of stock, payable May 10 to stockholders of record April 10.



Phoenix, Arizona

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1972	1971
642,000 \$	6,171,000
374,000 \$	1,086,000
	0.72
715,000	10,293,000
	8,978,000
50.1¢	49.8¢
	374,000 \$ 0.91 \$ 715,000 677,000

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We still anticipate making decisions on a schedule that will enable us to have the expansion on stream in 1975. However, if the smelting problem cannot be resolved by the middle of the year, this schedule could be in jeopardy.

Garland is going well, with profit to date this year approximately the same as for the same period in 1971. The economic recovery should benefit Garland for the rest of the year.

The Plastic operations were just barely in the black in the first quarter of 1972. This is the first quarter they have been profitable. Markets for valves continue to appear attractive. We will equip to do some of our own injection molding, but this will have little impact on results before next year.

A number of people have asked if there are any specific reasons for the recent rapid increase in the price of our stock. There are none that I know of except the results and the program outlined in our 1971 Annual Report. In addition, I believe some of the general pessimism about copper is disappearing, and the U.S. economy is improving. I can observe no pattern to the recent buying at least so far, and Noranda Mines Limited, one of our largest shareholders, has said it has not been making additional purchases.

Enclosed is a dividend check in the amount of 10 cents per share of stock, payable May 10 to stockholders of record April 10.



Phoenix, Arizona

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#### BAGDAD COPPER CORPORATION FIRST HALF REPORT 1972

**Results for** the first six months of 1972 are shown below. Figures are consolidated but not audited.

	First Six Months 1972	First Six Months 1971
Sales Estimated Income	\$15,911,000 \$2,281,000	\$13,842,000 \$2,538,000
Net Income per Share*	\$ 1.51	\$ 1.68
Mine Production - Pounds	19,266,000	19,813,000
Mine Sales - Pounds	22,607,000	20,191,000
Copper Price per Pound	50.8¢	51.1¢
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\* Based on currently outstanding 1,514,010 shares

Sales for the first six months of 1972 were 15% greater than for the same period in 1971. The increase was due to sale of more mined copper products and increased sale of copper powder. Garland sales increased this year, but there were no car wash sales from Hurricane, so that total sales of manufactured products was lower this year than last.

Net income was lower this year because of higher costs at the Mine. Smelting and freight costs on concentrate copper were more than two cents per pound above the same period last year. Production and overhead costs increased and, when added to smelting and freight, there was an overall increase of about five cents per pound averaged over all copper. Copper powder for the first six months of this year experienced a cost decrease of between three and four cents per pound compared to the same period last year. Cost increases have been brought about by a number of factors. Pay scales in the mining and smelting industry

Cost increases have been brought about by a number of factors. Pay scales in the mining and smelting industry in Arizona have increased more than 15% during the past year. Pollution controls further increase smelter charges, and we can expect these to increase more. Costs of equipment and supplies are rising. In addition, the stripping ratio was greater during the first half of 1972 than it was in 1971.

Markets for copper have been calm during the first half of 1972. The primary producer price increased two cents per pound in March but fell back the same amount in June. It is now 50.6 cents per pound. The London Metal Exchange has recently been two to four cents per pound below primary producer price. Inventories in the hands of copper users are reported as not being high, so that with continued strength in the economy there could be increased consumption by fall, which could give some price strengthening. On the other hand, there is no shortage of productive capacity, so prices are not expected to increase appreciably.

During the first six months of 1972, inventory of mined copper products decreased 3.3 million pounds. Most of this was cathode and occurred during the first quarter. Cathode inventory is now at a level considered normal. We still have 3.6 million pounds of copper in inventory in concentrate form. We expect to move this during the second half of 1972 to the Copper Range Company smelter at White Pine, Michigan. Concentrate inventory did not decrease as much as expected during the first half due to operating difficulties at the ASARCO smelter, where we normally ship. Profit per pound of copper in concentrate form is less than in cathodes, so we cannot expect as much additional earnings from the inventory reduction in the second half as in the first. This is particularly true when shipping concentrates all the way to White Pine.

The program of expansion is a little behind schedule. The Board of Directors decided that adopting any of the new smelting techniques at this time involved excess risk and that the smelting decision should be postponed a year. However, it appears we will be able to postpone the smelting decision without delaying the Mine portion of the project. This can be done by arranging interim custom smelting for the first concentrates produced. Another mining company has offered to be helpful in this regard, but we need to carefully analyze costs of shipping to their smelter before making a final decision.

If the interim smelting is economically sound, then we would expect to start engineering on the Mine and Mill in September of this year, construction of the Mill would commence during the summer of 1973, and the expanded Mine and Mill would be on stream during the summer of 1975, which is approximately our original plan. Selection of the specific smelting method would be made during the summer of 1973, and the smelter would be in production early in 1976. This entire schedule is still subject to change, but is our best thinking at this time. Financing has not been arranged, and this also could delay the program, but we do have expressions of real interest from more than one financing source.

The expansion program continues to appear attractive, both economically and operationally, and will enable reduction of the increasing unit costs reported above.

Copper powder business continues to improve as the economy improves. Our inventory of finished copper powder is now at a level considered normal.

Sales and profit at Garland for the first six months of this year were both ahead of the same period last year, and this operation is currently very busy.

Plastics showed a comfortable before tax profit during the first six months this year, which compares to a significant loss for the same period last year. Additional improvement is expected, although it must be remembered that Plastics is a very small part of the total company.

The entire copper industry has been served with a subpoena from the Department of Justice to produce records on price, costs, and production. What the Department of Justice is specifically looking for has not been stated. Bagdad has been an independent producer and seller for its entire history, and for this reason we do not feel we will become involved in the details of any Justice Department investigations or lawsuits.

Enclosed is a dividend check in the amount of 10 cents per share of stock, payable August 10 to stockholders of record July 10.



Phoenix, Arizona

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#### BAGDAD COPPER CORPORATION FIRST QUARTER REPORT 1973

The merging of Bagdad into Cyprus Mines Corporation was considered at Stockholders Meetings of both companies held on May 1. At the Bagdad Meeting the vote was 1,269,076 in favor of merging and 209,432 against. This is 78.7% voting in favor out of the total 1,613,175 shares eligible to vote. At the Cyprus Meeting 83.0% voted in favor. Since a vote of two-thirds is required from each group of stockholders, the merger has now been approved.

Closing of the merger must await clearance from the Department of Justice and compliance with other closing conditions. It is anticipated all of these matters can be completed in time to close May 31 or before. The mechanics of exchanging Bagdad shares for Cyprus shares will take place following closing, and a letter in this regard will be sent by Cyprus about at time of closing.

Operations of Bagdad Copper Corporation for the First Quarter of 1973 are summarized below. These results are consolidated but not audited.

	First Quarter 1973	First Quarter 1972
Sales	\$ 7,963,000	\$ 7,642,000
Estimated Income	\$ 1,351,000	\$ 1,374,000
Net Income per Share*	\$ 0.84	\$ 0.85
Mine Production - Pounds	9,632,000	9,715,000
Mine Sales - Pounds	10,734,000	11,677,000
Copper Price per Pound	55.9¢	50.1¢

\* Based on currently outstanding 1,613,469 shares

Sales in the First Quarter of 1973 increased over the same period of 1972 primarily due to increased sales at the Mine resulting from higher copper price and greater production of molybdenum by-product. The favorable impact of the 5.8 cents per pound higher copper price to date in 1973 has been offset by the fact that nearly one million pounds less copper were sold in the First Quarter of this year than in the First Quarter of last year and, in addition, costs this year are higher than last year.

Inventories of copper products, including copper powder, were at minimum levels at the end of March 1973, so that future sales can not be expected to exceed production as they have during most of the past year. Mine production for the remainder of 1973 is expected to be at about the same rate as during the First Quarter, although it could be a trifle lower.

The expansion at Bagdad is awaiting completion of the merger with Cyprus. Cyprus has studied the Bagdad operation and expansion projections, and following closing of the merger, I do not expect much delay before concentrated efforts can begin on engineering for the expansion. Availability of the increased financial capability of Cyprus could increase the size of the expansion from the 30,000 tons per day that we had planned. In addition, the possibility of combining concentrates from Bagdad and those of other Cyprus' operations in Arizona could alter plans that we had developed for treatment of concentrates. I do not expect either of these considerations to result in significant delay of the project.

I expect this will be the last report that you will receive as Bagdad stockholders from me. I have enjoyed writing these over the years and found their preparation a stimulating experience. Cyprus has invited me to remain active as President of the Bagdad Division and also a member of their Board, so that, although I will not be communicating with you directly in the future, we will continue to have a strong mutual interest in our Cyprus investment. I am looking forward to my activity in Cyprus wherever it may lead. In addition, Mr. Frank L. Snell, who has been a key member of the Bagdad Board, will be joining the Cyprus Board.

Enclosed is a dividend check in the amount of 10 cents per share of Bagdad stock, payable May 10 to Bagdad stockholders of record April 10.

Phoenix, Arizona

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### Directors

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WALTER R. BIMSON GEORGE W. COLVILLE WILLIAM T. GARLAND DAVID C. LINCOLN JOSEPH T. MELCZER, JR. FRANK L. SNELL R. L. WEBB

Chairman of the Board The Valley National Bank of Arizona Phoenix, Arizona

Executive Vice President and General Manager, Bagdad Copper Corporation Bagdad, Arizona

President and General Manager Garland Steel Company Phoenix, Arizona

President of Bagdad Copper Corporation Phoenix, Arizona

Member of the law firm of Snell & Wilmer Phoenix, Arizona

Member of the law firm of Snell & Wilmer Phoenix, Arizona

Securities Broker Prescott, Arizona



Board of Directors in front of office at Mine. Left to right — R. L. Snell, J. T. Melczer, Jr., W. R. Bimson, W. T. Garland, G. W. Colville, D. C. Lincoln, and R. L. Webb.

### Officers

DAVID C. LINCOLN GEORGE W. COLVILLE ROBERT C. BOGART WILLIAM T. GARLAND FRANK L. SNELL BROOKS WILDER JERRY C. RYAN

President Executive Vice President and Treasurer Vice President Vice President Vice President Secretary Assistant Secretary

TRANSFER AGENTS

The Valley National Bank of Arizona Corporate Trust Division P. O. Box 71 — Phoenix, Arizona 85001 United States Corporation Company 15 Exchange Place — Jersey City, New Jersey 07302

